Analytical Resources, LLC
Analytical Chemists and Consultants

06 July 2023

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

RE: AOC5 MR Phase 1

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

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

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

Associated Work Order(s)	Associated SDG ID(s)
23A0249	N/A

Susan Dunnihoo

Digitally signed by Susan Dunnihoo
Date: 2023.07.06 12:16:54 -07'00'

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

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

Analytical Resources, LLC

Susan Dunnihoo, Director, Client Services

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

ACCREDITED IN ACCORDANCE WITH nelac
Cert# 100006-012

23A0249

1 of 1

CHAIN-OF-CUSTODY/TEST REQUEST FORM

№ 4210

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

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

Shipping Date: 1/12/23
Airbill Number:
Turnaround requested: Std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required)								Comments / Instructions [Jar tag number(s)]
					PCBs	SIMS SVOCs	TOC/TS	SIMS Metals	D/F	Archive	Arsenic	cPAHs	
1/12/23	0908	LDW23-SC1082	4	sediment	X	X	X	X	NA	X	—	—	
	0838	LDW23-SC1083	4		X	X	X	X	NA	X	—	—	
	1021	LDW23-SC1018	4		X	X	X	X	NA	X	—	—	
	~~1050~~ 947	LDW23-SC1084	4		X	X	X	X	NA	X	—	—	
	1128	LDW23-SC1025	4		X	X	X	X	NA	X	—	—	
	1255	LDW23-SC1033	3		X	—	X	—	—	X	—	—	
	1232	LDW23-IT1034	4		X	—	X	—	NA	X	X	X	
	~~16~~ 1335	LDW23-SC1024	4		X	X	X	X	NA	X	—	—	
	1415	LDW23-SC1040	3		X	—	X	—	—	X	—	—	
	1450	LDW23-SC1030	3		X	—	X	—	—	X	—	—	
1/12/23	1523	LDW23-SC1020	4	Sediment	X	X	X	X	NA	X	—	—	~~AV~~ 1/12/23
		Total Number of Containers	41	Purchase Order / Statement of Work #	APJ-110222-AOCS-ARL								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Amara Vandervort	Print name: Phillip	Print name:	
Signature: Amara Vandervort	Company: AA	Signature:	Company:
Company: Windward	Date/Time: 1/12/23 16:38	Company:	
Date/Time: 1/12/23 1638		Date/Time:	Date/Time:

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

Wind Ward environmental LLC

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

206.378.1364

To be completed by Laboratory upon sample receipt:

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

RE: 23A0249 - Sample SC1082

Amara Vandervort <amarav@windwardenv.com>

Fri 1/20/2023 3:23 PM

To: Sue Dunnihoo <limsadm@arilabs.com>
Cc: Brandi Quinlisk <brandiq@windwardenv.com>;Ali Judkins <ajudkins@anchorqea.com>;Anastasia Barr <anastasiab@windwardenv.com>

Please also update the ID for the sample from 1/12 to be LDW23-SC1082X please. It will remain an archive sample. Thanks!

From: Amara Vandervort
Sent: Friday, January 20, 2023 1:32 PM
To: Suzanne Replinger <SuzanneR@windwardenv.com>; Sue Dunnihoo <limsadm@arilabs.com>; Anastasia Barr <anastasiab@windwardenv.com>
Cc: Brandi Quinlisk <brandiq@windwardenv.com>; Ali Judkins <ajudkins@anchorqea.com>
Subject: RE: 23A0249 - Sample SC1082

Hello,

We were able to resample this location. Please analyze and report the sample collected on 1/19 and archive the 1/12 sample in this work order.

Thank you!

Amara Vandervort
Associate
Direct line: 206-812-5415
E-mail: amarav@windwardenv.com | www.windwardenv.com
200 First Avenue West, Suite 500 | Seattle, WA 98119

From: Suzanne Replinger <SuzanneR@windwardenv.com>
Sent: Wednesday, January 18, 2023 10:57 AM
To: Sue Dunnihoo <limsadm@arilabs.com>; Anastasia Barr <anastasiab@windwardenv.com>
Cc: Amara Vandervort <amarav@windwardenv.com>; Brandi Quinlisk <brandiq@windwardenv.com>; Ali Judkins <ajudkins@anchorqea.com>
Subject: RE: 23A0249 - Sample SC1082

Perfect – thank you!

From: Sue Dunnihoo <limsadm@arilabs.com>
Sent: Wednesday, January 18, 2023 9:36 AM
To: Anastasia Barr <anastasiab@windwardenv.com>
Cc: Amara Vandervort <amarav@windwardenv.com>; Brandi Quinlisk <brandiq@windwardenv.com>; Suzanne

Replinger <SuzanneR@windwardenv.com>; Ali Judkins <ajudkins@anchorqea.com>
Subject: Re: 23A0249 - Sample SC1082

They've run solids and looks like TOC is in the works. I'll cancel.

I will be out of the office early afternoon Thursday, Jan 19th.

*** NOTE - TATs are running 3 to 6 weeks depending on analysis ***

Susan D. Dunnihoo

She/her/hers

Analytical Resources, LLC

(206) 695-6207 office

sue.dunnihoo@arilabs.com

www.arilabs.com

From: Anastasia Barr <anastasiab@windwardenv.com>
Sent: Wednesday, January 18, 2023 9:32 AM
To: Sue Dunnihoo <limsadm@arilabs.com>
Cc: Amara Vandervort <amarav@windwardenv.com>; Brandi Quinlisk <brandiq@windwardenv.com>; Suzanne Replinger <SuzanneR@windwardenv.com>; Ali Judkins <ajudkins@anchorqea.com>
Subject: 23A0249 - Sample SC1082

Good morning Sue,

Has any analysis been run for sample SC1082. We would like to put this sample on hold.

Thank you,

Anastasia Barr
Database Manager
Direct: (206) 812-5444
E-mail: anastasiab@windwardenv.com | www.windwardenv.com

How was your customer experience?
Please take our 5 minute Online Customer Survey

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Resources, LLC

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Cooler Receipt Form

ARI Client: Anchor QEA/Windward Project Name: LDW AOC5 NR Phase 1

COC No(s): 4210 NA Delivered by: Fed-Ex UPS Courier Hand Delivered Other:_____

Assigned ARI Job No: 23A0249 Tracking No: _____ NA

Preliminary Examination Phase:

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

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

Time 16:55 2.6 4.4 ____ ____ ____ ____

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: IR009708

Cooler Accepted by: PIB Date: 11/2/23 Time: 16:38

Complete custody forms and attach all shipping documents

Log-In Phase:

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

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

Samples Logged by: [signature] Date: 11/3/23 Time: 8:12 Labels checked by: TCS

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

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

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Re: 23A0249 - Sample SC1082

Sue Dunnihoo <limsadm@arilabs.com>
Wed 1/18/2023 9:35 AM

To: Anastasia Barr <anastasiab@windwardenv.com>
Cc: Amara Vandervort <amarav@windwardenv.com>;Brandi Quinlisk <brandiq@windwardenv.com>;Suzanne Replinger <SuzanneR@windwardenv.com>;Ali Judkins <ajudkins@anchorqea.com>

They've run solids and looks like TOC is in the works. I'll cancel.

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*** NOTE - TATs are running 3 to 6 weeks depending on analysis ****

Susan D. Dunnihoo
She/her/hers

Analytical Resources, LLC

(206) 695-6207 office
sue.dunnihoo@arilabs.com

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From: Anastasia Barr <anastasiab@windwardenv.com>
Sent: Wednesday, January 18, 2023 9:32 AM
To: Sue Dunnihoo <limsadm@arilabs.com>
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Subject: 23A0249 - Sample SC1082

Good morning Sue,

Has any analysis been run for sample SC1082. We would like to put this sample on hold.

Thank you,

Anastasia Barr
Database Manager
Direct: (206) 812-5444
E-mail: anastasiab@windwardenv.com | www.windwardenv.com

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle, WA 98101	Project Manager: Ali Judkins	07/06/2023 11:30

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Matrix	Date Sampled	Date Received
23A0249-01	LDW23-SC1082X	Solid	01/12/23 09:08	01/12/23 16:38
23A0249-02	LDW23-SC1083	Solid	01/12/23 08:38	01/12/23 16:38
23A0249-03	LDW23-SC1018	Solid	01/12/23 10:21	01/12/23 16:38
23A0249-04	LDW23-SC1084	Solid	01/12/23 09:47	01/12/23 16:38
23A0249-05	LDW23-SC1025	Solid	01/12/23 11:28	01/12/23 16:38
23A0249-06	LDW23-SC1033	Solid	01/12/23 12:55	01/12/23 16:38
23A0249-07	LDW23-IT1034	Solid	01/12/23 12:32	01/12/23 16:38
23A0249-08	LDW23-SC1024	Solid	01/12/23 13:35	01/12/23 16:38
23A0249-09	LDW23-SC1040	Solid	01/12/23 14:15	01/12/23 16:38
23A0249-10	LDW23-SC1030	Solid	01/12/23 14:50	01/12/23 16:38
23A0249-11	LDW23-SC1020	Solid	01/12/23 15:23	01/12/23 16:38

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	06-Jul-2023 11:30

Case Narrative

Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Work Order: 23A0249

Sample receipt

Samples as listed on the preceding page were received 12-Jan-2023 16:38 under ARI work order 23A0249. For details regarding sample receipt, please refer to the Cooler Receipt Form. Samples were frozen on receipt to preserve holding times.

On 01/20/2023, the analyses for LDW23-SC1082 were cancelled and the sample ID modified, per the enclosed ROC.

Semivolatiles - EPA Method SW8270E

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

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

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

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

The blank spike duplicate (BSD/LCSD) spike recoveries for acenaphthylene and pyrene were low of control limits. The relative percent difference (RPD) were within control limits.

The batch BLA0673 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries of pyrene were low of advisory control limits, The relative percent difference (RPD) were within advisory control limits, reported under work order 23A0295.

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

Semivolatiles - EPA Method SW8270E-SIM

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

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

Internal standard areas were within limits.

The surrogate percent recoveries were high of control limits for d14-p-terphenyl were high of control limits where flagged on the summary sheet.

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

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

The batch BLA0673 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits. The relative percent difference (RPD) for 2,4-dimethylphenol was high of advisory control limits and flagged on the summary sheet, reported under work order 23A0295.

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	06-Jul-2023 11:30

Case Narrative

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

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

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

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recovery for d14-dibenzo(a,h)anthracene in was high of control limits in the blank and SRM, flagged on the summary sheet.

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

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

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

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

Pesticides - EPA Method SW8081B (Hexachlorobenzene)

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

Initial and continuing calibrations were within method requirements.

Internal standard areas for hexabromobiphenyl (HBB) were low of limits in some analyses. As the target compound is quantitated against the 1-bromo-2-nitrobenzene, no corrective action was taken.

The surrogate percent recoveries were within control limits.

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

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

The batch BLA0672 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits, reported under work order 23A0295.

Several results for tetrachloro-m-xylene have been "P1"-flagged, indicating a greater than 40% difference between the results on the two analytical columns, attributed to interference from the matrix.

PCB Aroclors - EPA Method SW8082A

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

Decachlorobiphenyl (DCBP) was outside limits high in SKL0048-SCV6 and outside limits low in SLB0148-CCV5. As these values are not used for quantitation, no corrective action was taken.

Aroclor 1248 was low of control limits on the ZB5 column for SLB0148-CCV1, SLB0148-CCV7 and SLB0148-CCVD. Aroclor

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	06-Jul-2023 11:30

Case Narrative

1260 was low of control limits on the ZB5 column for SLB0148-CCV4, SLB0148-CCV6 and SLB0148-CCVE. Aroclor 1254 was low of control limits on the ZB5 column for SLB0148-CCVB. Results have been reported from the ZB35 column as primary.

Hexabromobiphenyl (HBB) failed low in several analyses on the ZB5 column. Results have been reported from the ZB35 column as primary.

The surrogate percent recoveries were within control limits.

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

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

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

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

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

Total Metals - EPA Method 6020B

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

Initial and continuing calibrations were within method requirements for reported analytes. Brackets affected by failing standards in sequence SLD0260 were rerun in sequence SLD0292. The IFA for chromium 52 was high in both brackets.

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

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

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

The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries for silver were low of advisory control limits. The relative percent difference (RPD) were within advisory control limits. The post spike had acceptable recovery.

The analyst noted noisy or slightly noisy analytes in the run log.

Total Mercury - EPA Method 7471B

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

Initial and continuing calibrations were within method requirements.

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

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

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

The matrix spike (MS) percent recovery was high of advisory limits. The matrix spike duplicate (MSD) relative percent difference (RPD) was within advisory control limits. The duplicate (DUP) relative percent difference (RPD) was high advisory

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	06-Jul-2023 11:30

Case Narrative

control limits. The post spike had an acceptable recovery.

Wet Chemistry (Total Organic Carbon and Total Solids)

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

Initial and continuing calibrations were within method requirements.

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

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

The batch BLA0360 matrix spike (MS) percent recoveries were within advisory control limits. The duplicate (DUP) relative percent difference (RPD) was outside of advisory control limits and flagged on the summary sheet, reported under work order 23A0207.

Revised 07/06/2023: Corrected GC00032 calibration date. Corrected typo for SIM-SVOC calibration from GB00019 to GC00019. Corrected PCB calibration reference.

QUALIFIERS AND NOTES

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

LDW23-SC1083

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-02 A	SDG:	23A0249
Sampled:	01/12/23 08:38	Prepared:	01/30/23 14:02	File ID:	NT1003032318.D
% Solids:	61.90	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 04:34
Batch:	BLA0673	Sequence:	SLC0162	Initial/Final:	16.85 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00019
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	8.5	J	4.2	19.2
106-44-5	4-Methylphenol	1	8.4	J	7.1	19.2
91-20-3	Naphthalene	1	8.1	J	4.1	19.2
91-57-6	2-Methylnaphthalene	1	9.4	J	4.3	19.2
208-96-8	Acenaphthylene	1	19.2	U	6.0	19.2
131-11-3	Dimethylphthalate	1	19.2	U	4.2	19.2
83-32-9	Acenaphthene	1	5.2	J	5.0	19.2
132-64-9	Dibenzofuran	1	19.2	U	13.5	19.2
86-73-7	Fluorene	1	19.2	U	14.0	19.2
85-01-8	Phenanthrene	1	26.6		8.4	19.2
120-12-7	Anthracene	1	7.7	J	6.9	19.2
206-44-0	Fluoranthene	1	30.0		5.8	19.2
129-00-0	Pyrene	1	34.8		5.4	19.2
85-68-7	Butylbenzylphthalate	1	19.2	U	9.0	19.2
56-55-3	Benzo(a)anthracene	1	12.9	J	5.7	19.2
218-01-9	Chrysene	1	16.1	J	5.8	19.2
117-81-7	bis(2-Ethylhexyl)phthalate	1	47.9	U	5.2	47.9
	Benzofluoranthenes, Total	1	19.5	J	9.6	38.4
50-32-8	Benzo(a)pyrene	1	19.2	U	4.1	19.2
193-39-5	Indeno(1,2,3-cd)pyrene	1	19.2	U	14.0	19.2
53-70-3	Dibenzo(a,h)anthracene	1	19.2	U	16.5	19.2
191-24-2	Benzo(g,h,i)perylene	1	19.2	U	13.0	19.2

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	719.07	484	67.2	27 - 120	
Phenol-d5	719.07	548	76.2	29 - 120	
2-Chlorophenol-d4	719.07	536	74.5	31 - 120	
1,2-Dichlorobenzene-d4	479.38	313	65.2	32 - 120	
Nitrobenzene-d5	479.38	384	80.0	30 - 120	
2-Fluorobiphenyl	479.38	406	84.8	35 - 120	

LDW23-SC1083

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

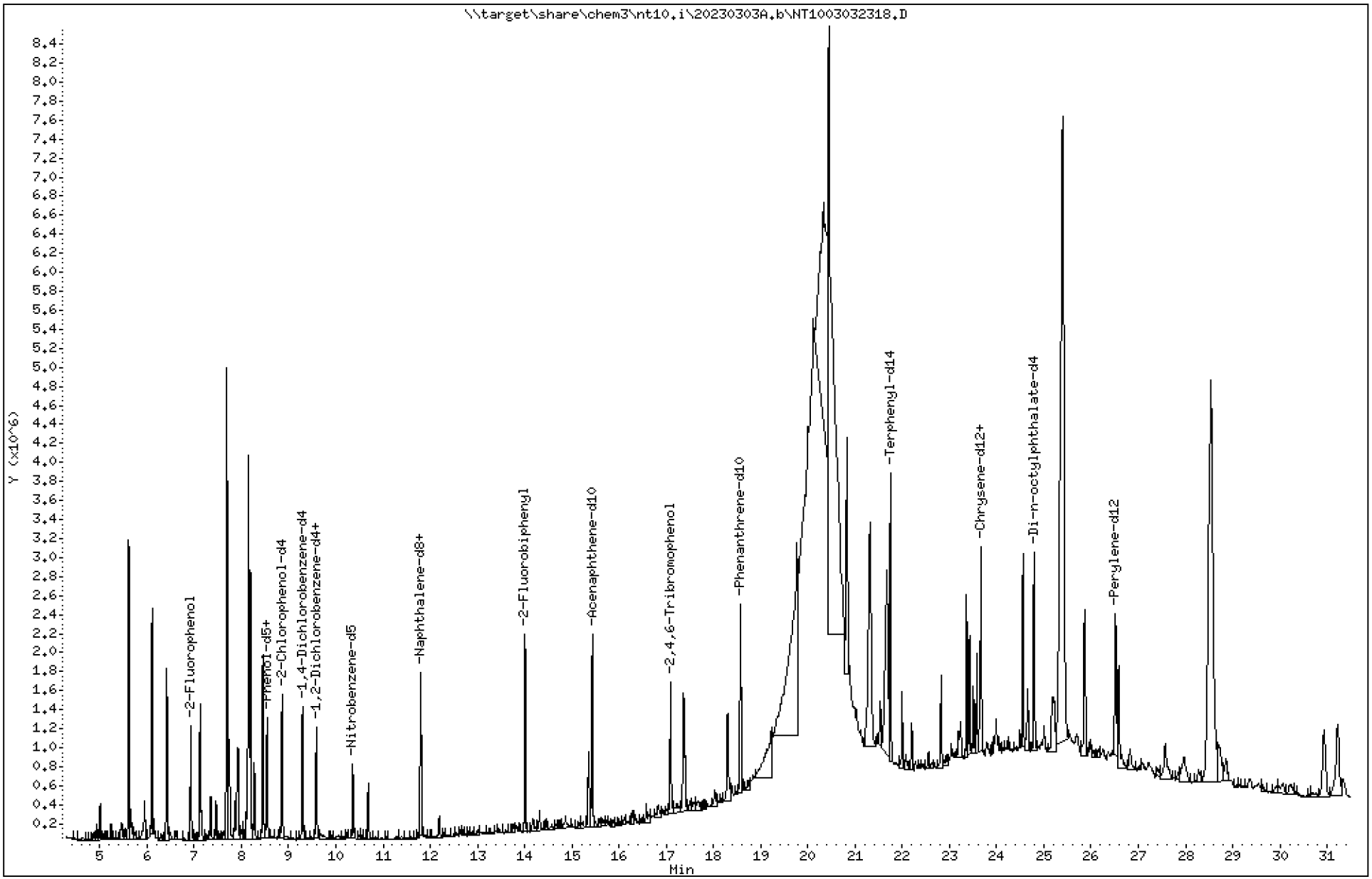
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-02 A	SDG:	23A0249
Sampled:	01/12/23 08:38	Prepared:	01/30/23 14:02	File ID:	NT1003032318.D
% Solids:	61.90	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 04:34
Batch:	BLA0673	Sequence:	SLC0162	Initial/Final:	16.85 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00019
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	719.07	512	71.1	24 - 134	
p-Terphenyl-d14	479.38	464	96.9	37 - 120	

Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032318.D
Date : 04-MAR-2023 04:34
Client ID:
Sample Info: 23A0249-02
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032318.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

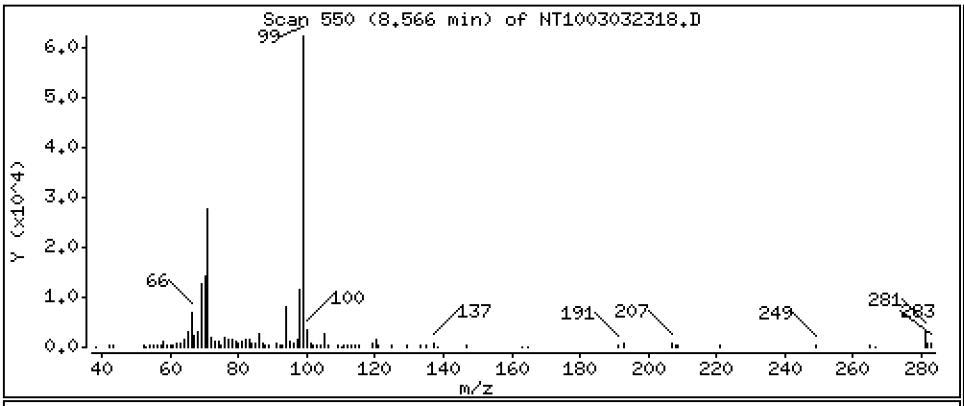
Operator: VTS

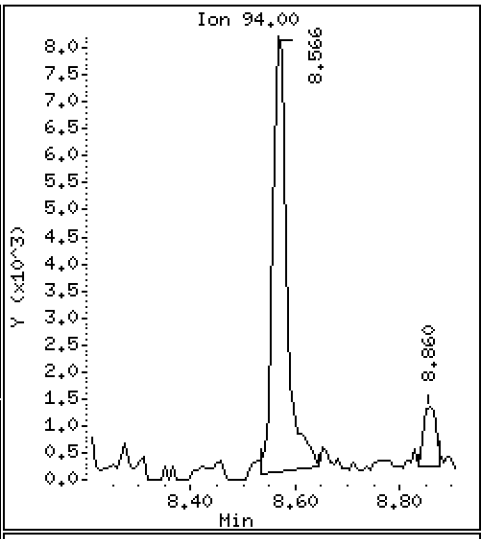
Column phase: ZB-5msi

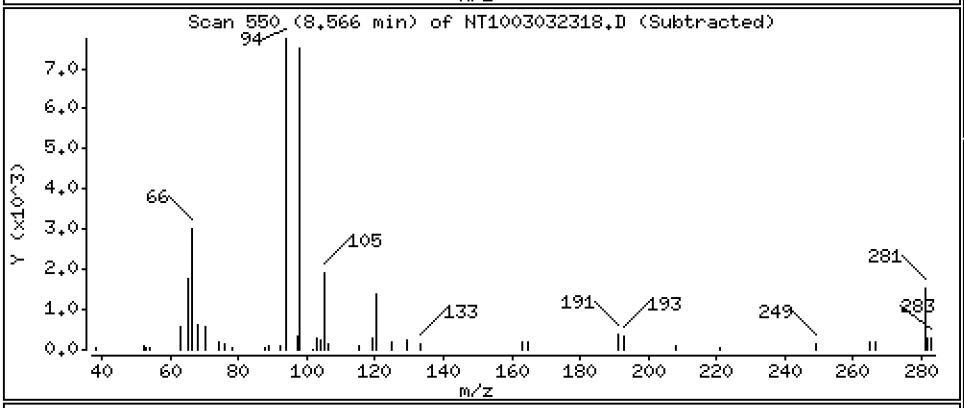
Column diameter: 0.25

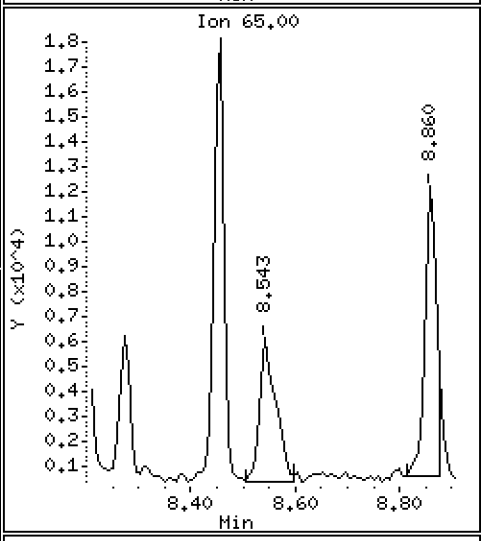
3 Phenol

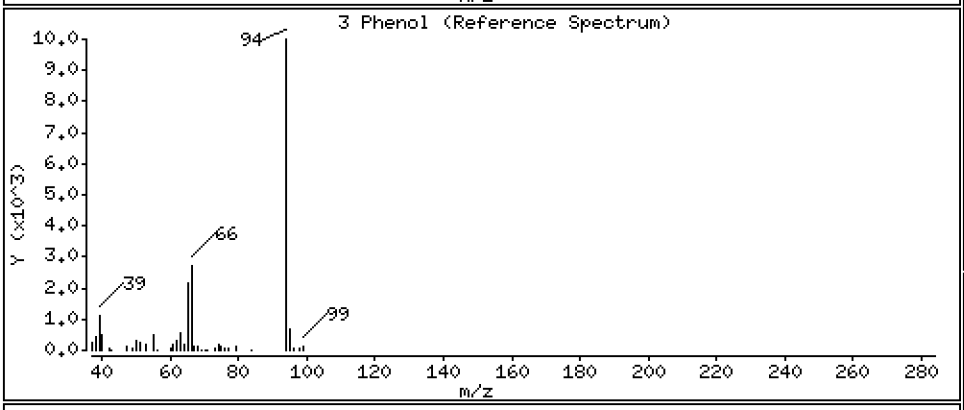
Concentration: 0.08829 ug/ml

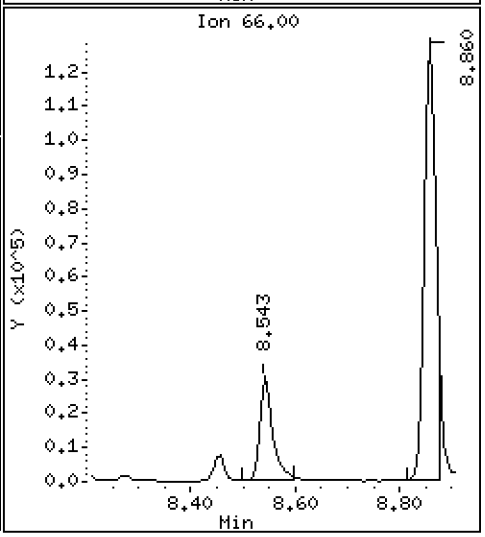


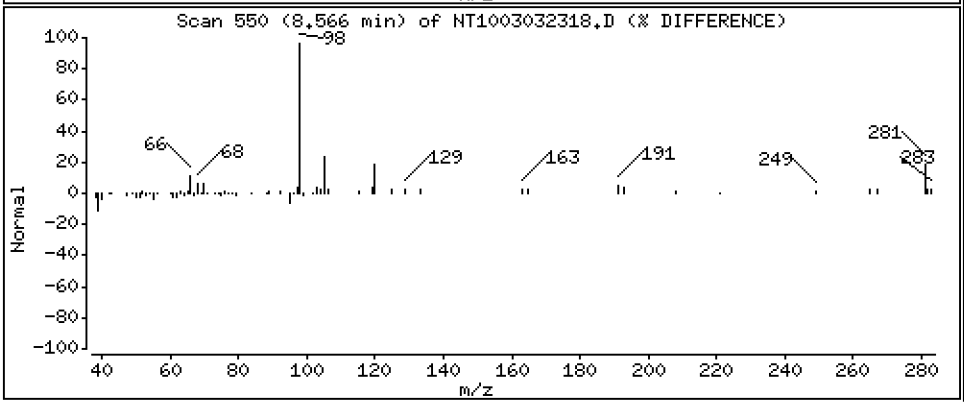












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

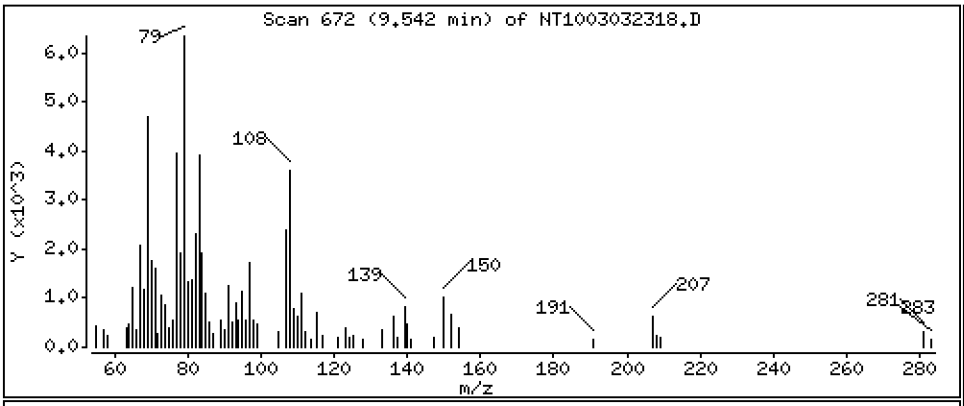
Operator: VTS

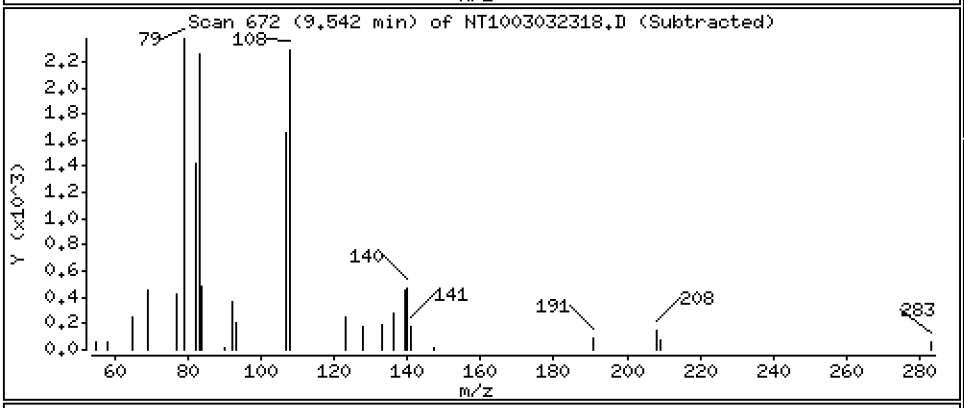
Column phase: ZB-5msi

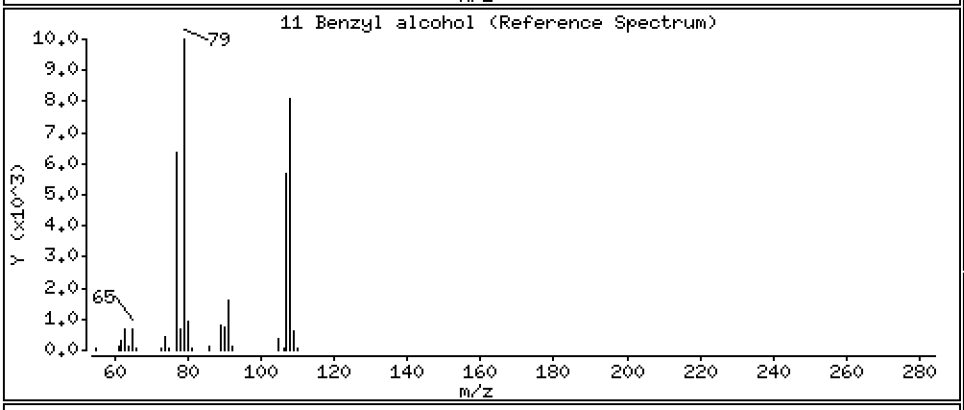
Column diameter: 0.25

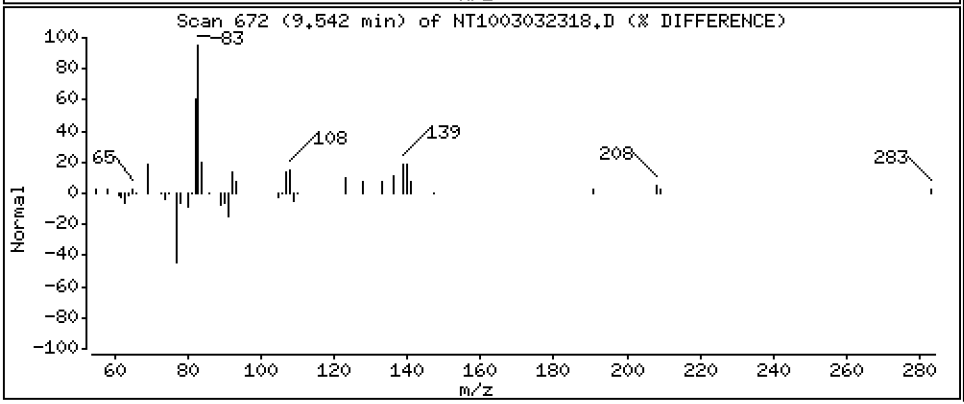
11 Benzyl alcohol

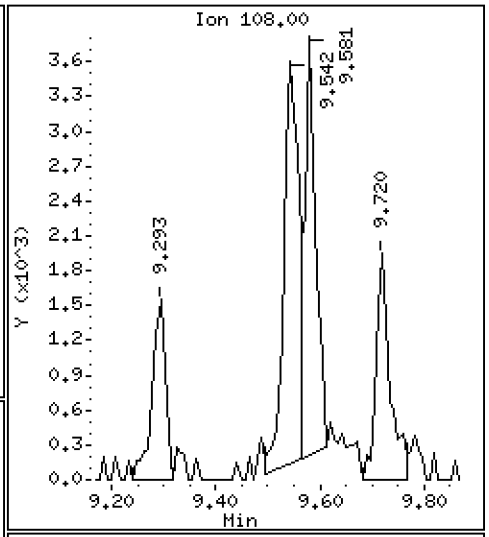
Concentration: 0.08625 ug/ml

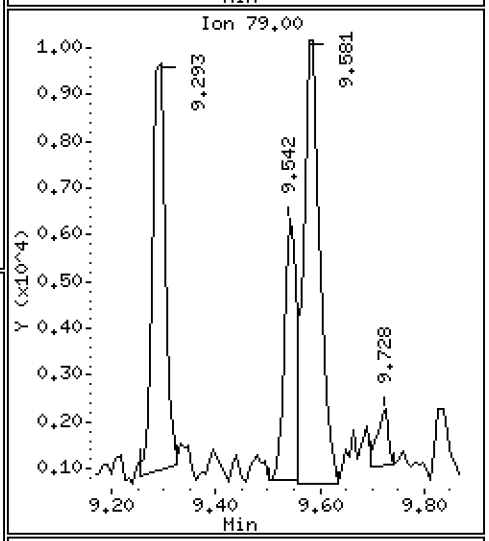


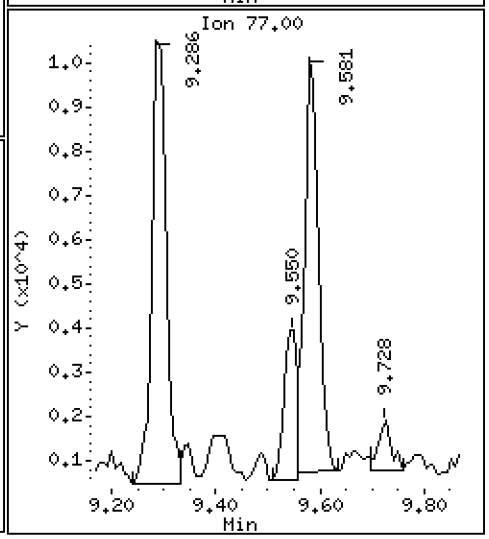












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

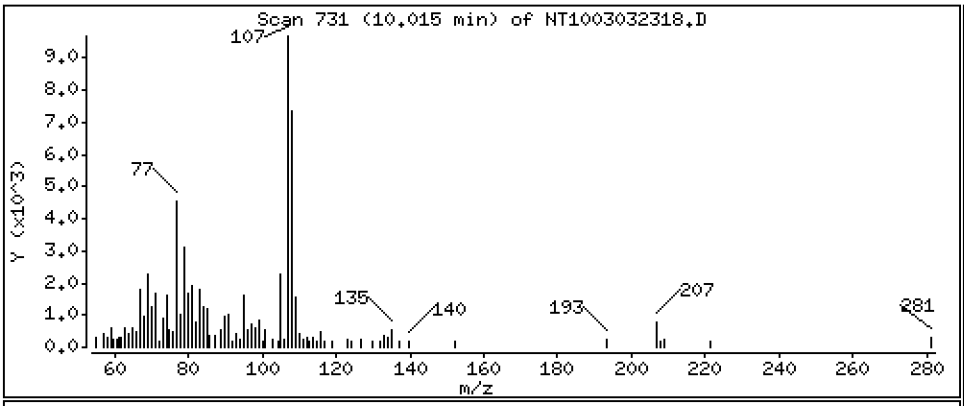
Operator: VTS

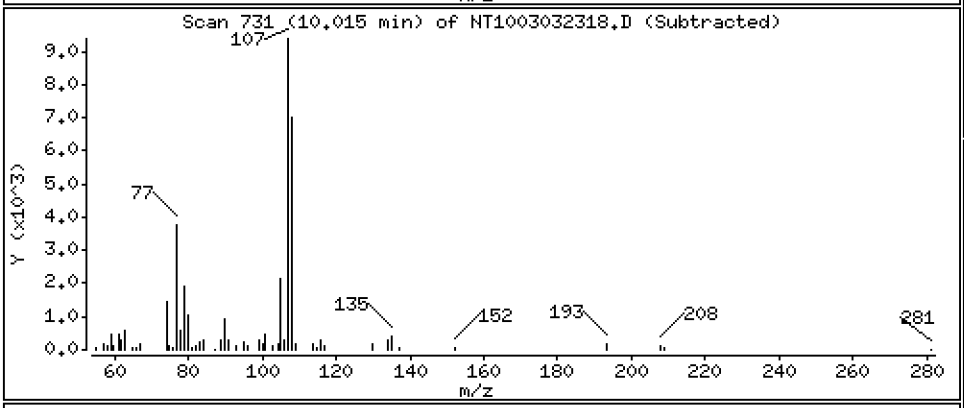
Column phase: ZB-5msi

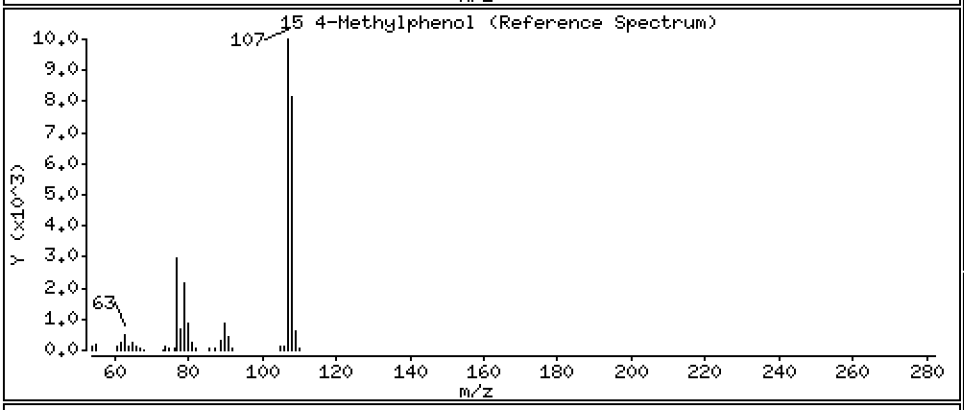
Column diameter: 0.25

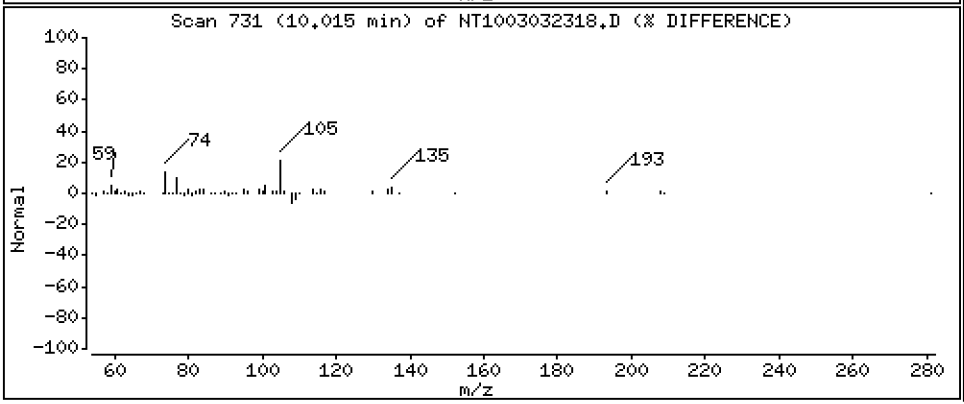
15 4-Methylphenol

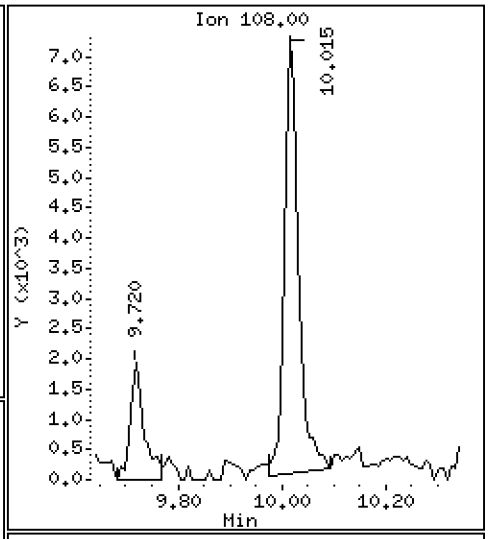
Concentration: 0.08781 ug/ml

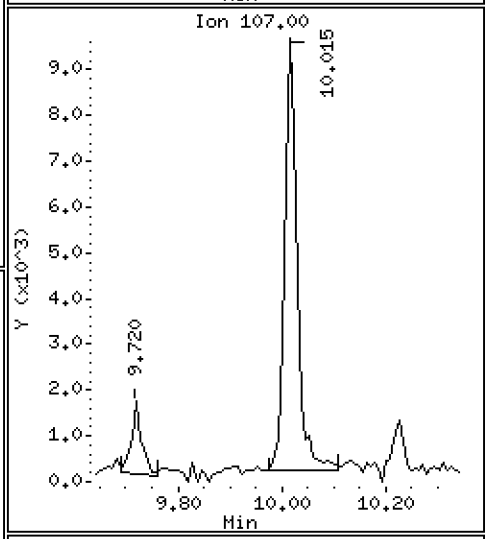


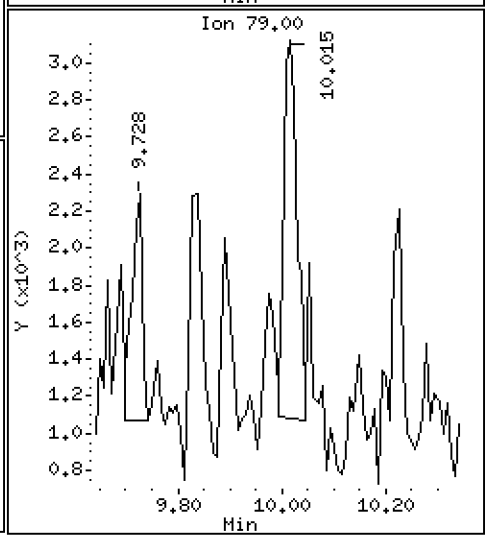












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

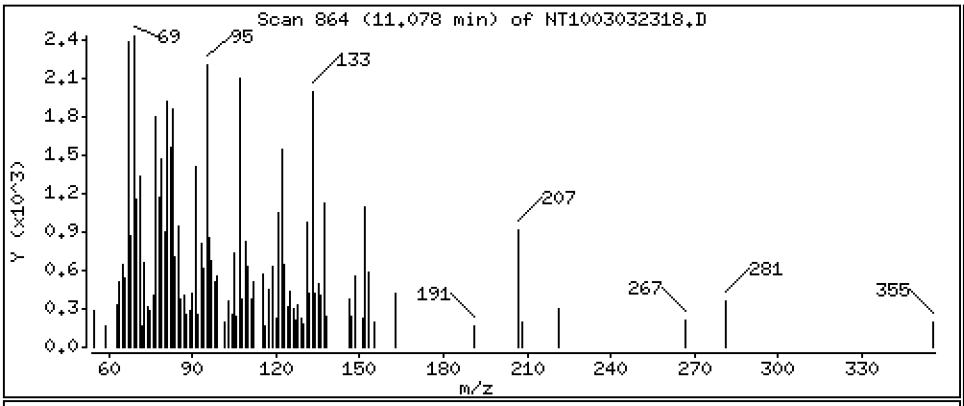
Operator: VTS

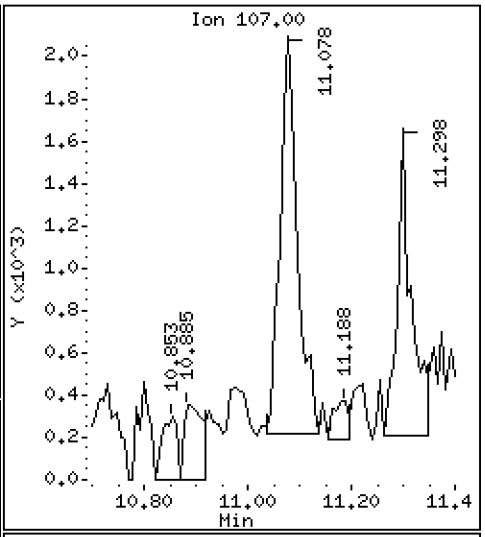
Column phase: ZB-5msi

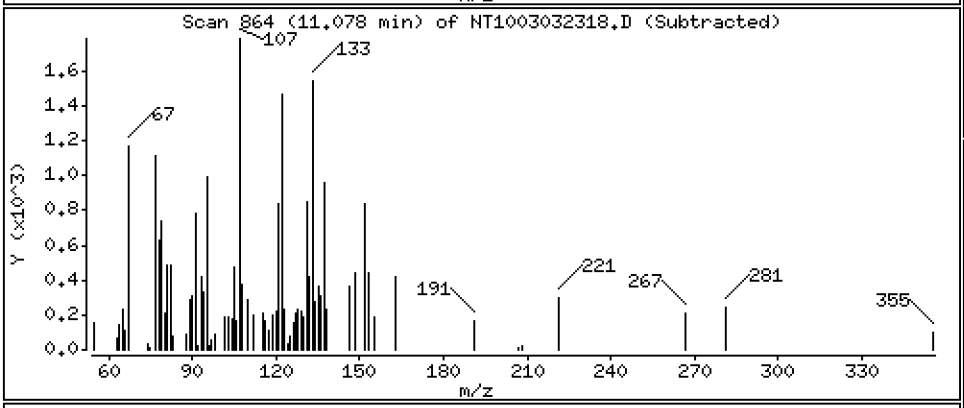
Column diameter: 0.25

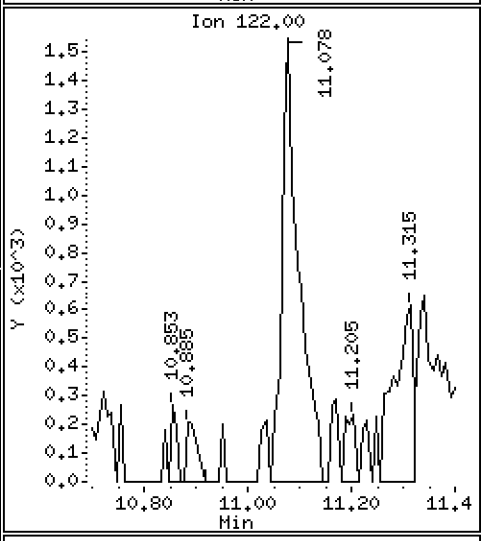
22 2,4-Dimethylphenol

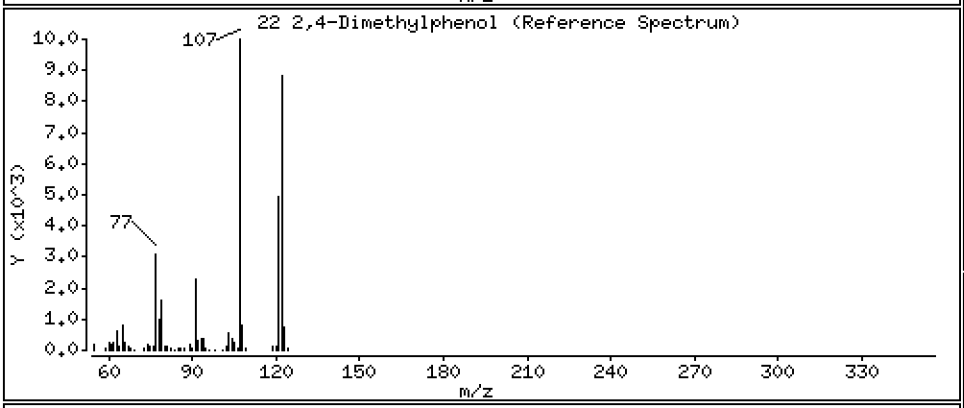
Concentration: 0.03294 ug/ml

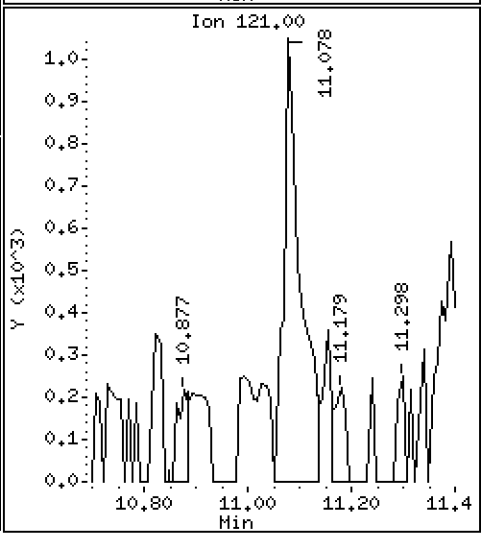


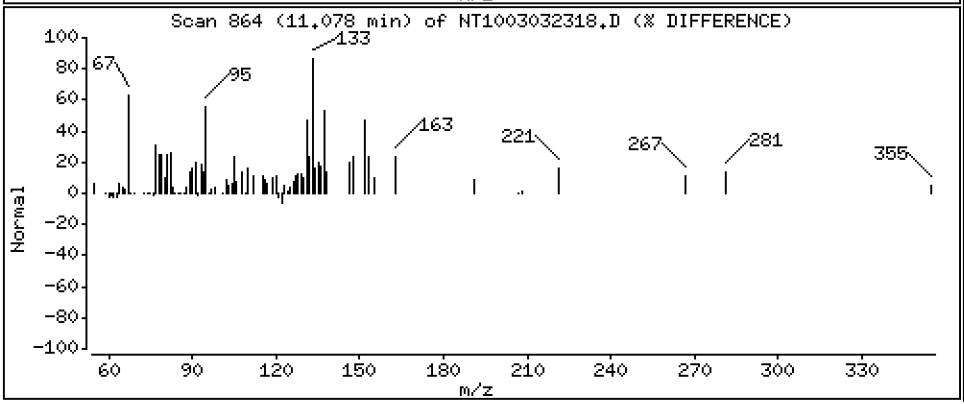












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

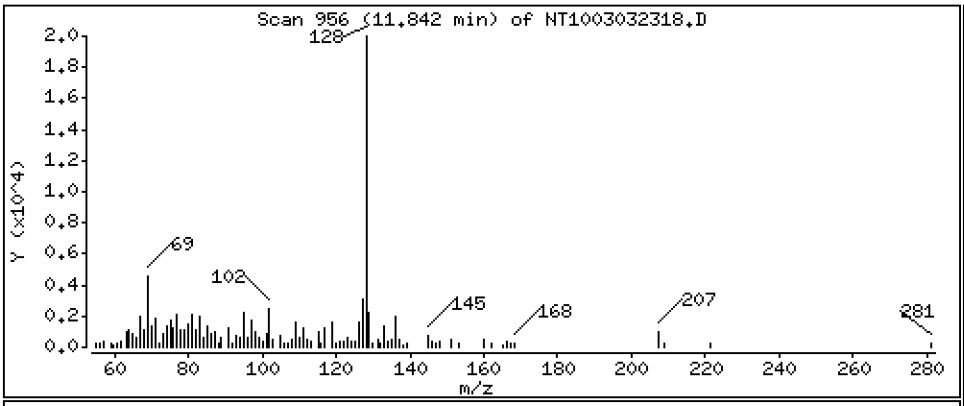
Operator: VTS

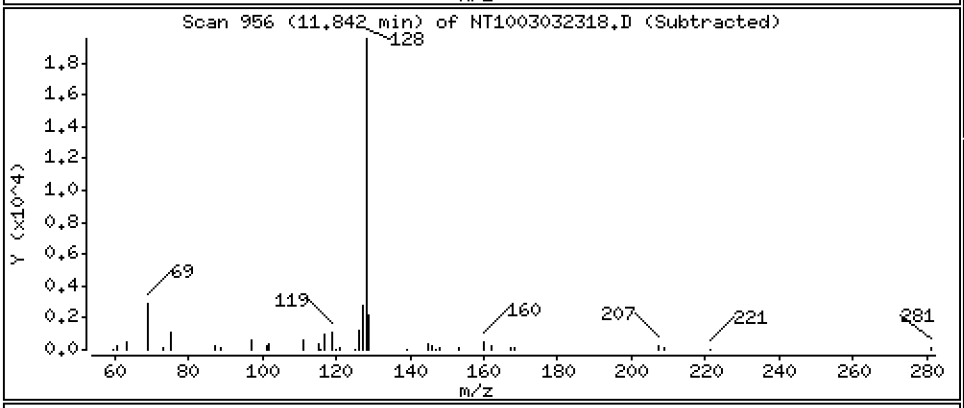
Column phase: ZB-5msi

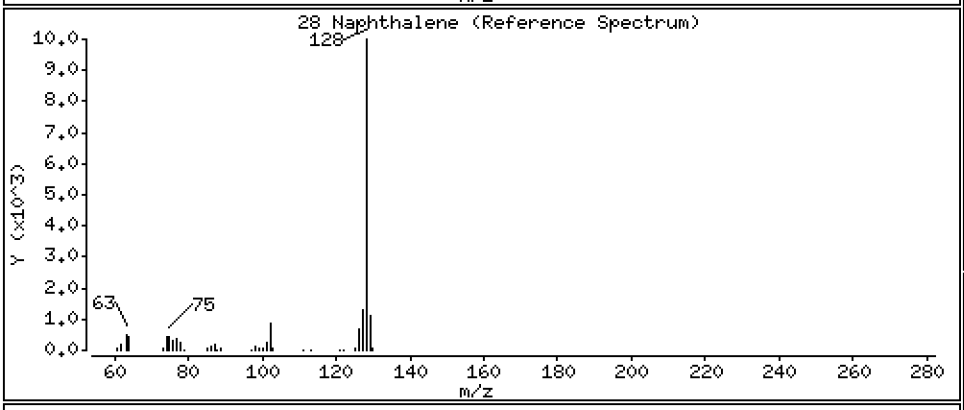
Column diameter: 0.25

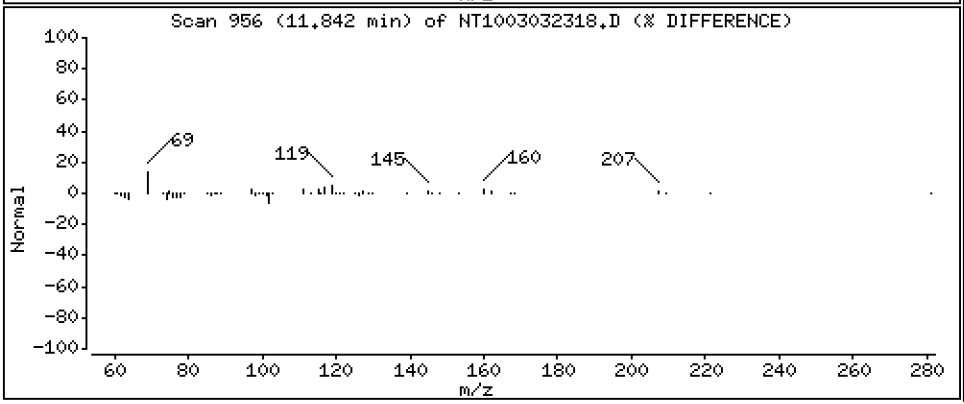
28 Naphthalene

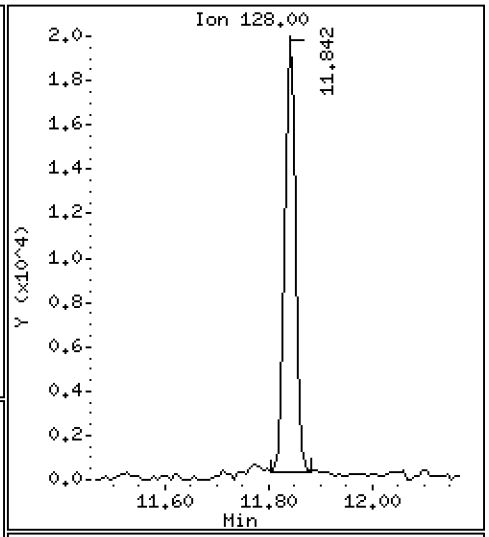
Concentration: 0.08442 ug/ml

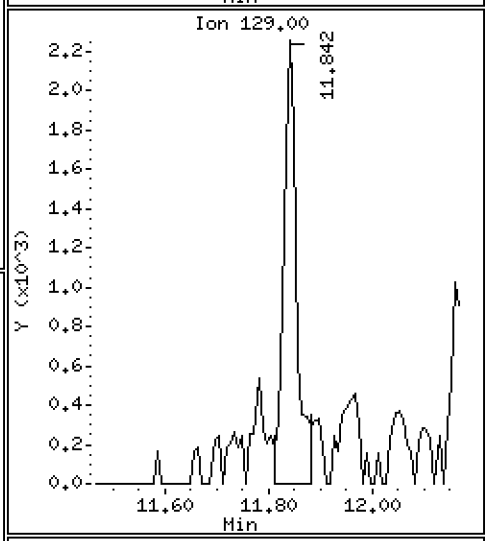


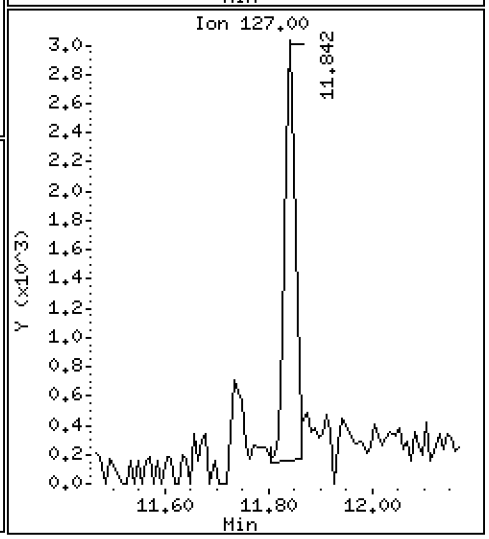












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

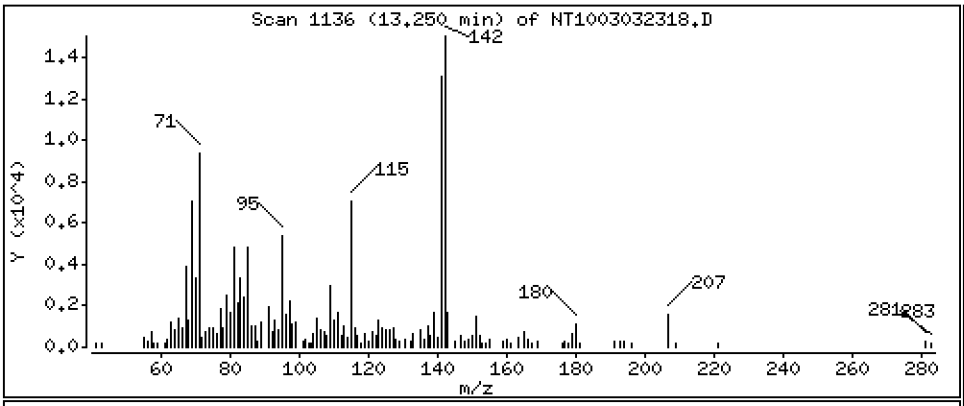
Operator: VTS

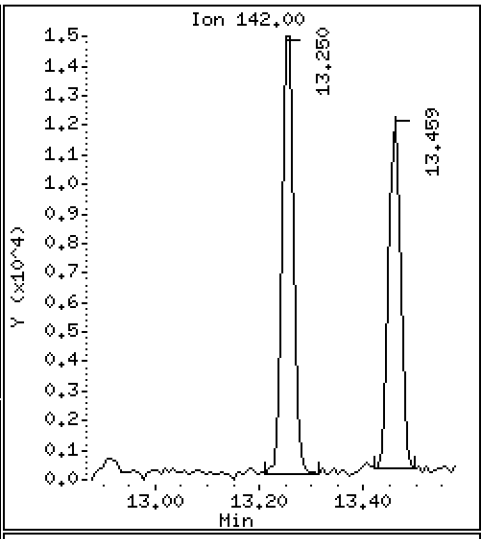
Column phase: ZB-5msi

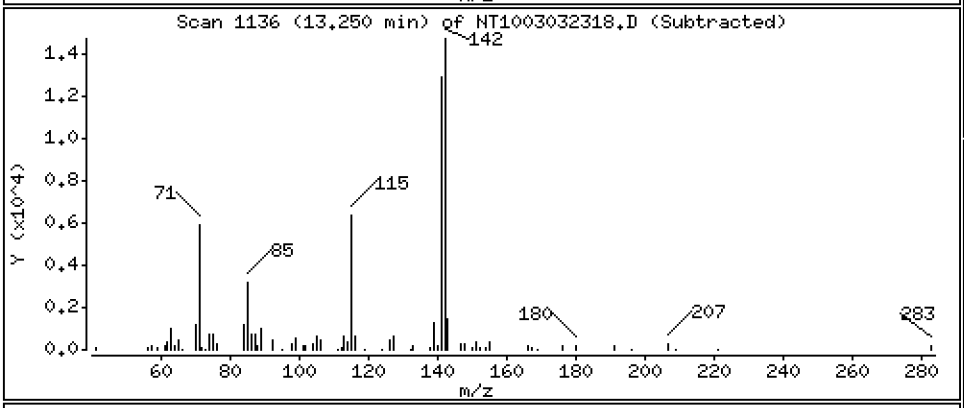
Column diameter: 0.25

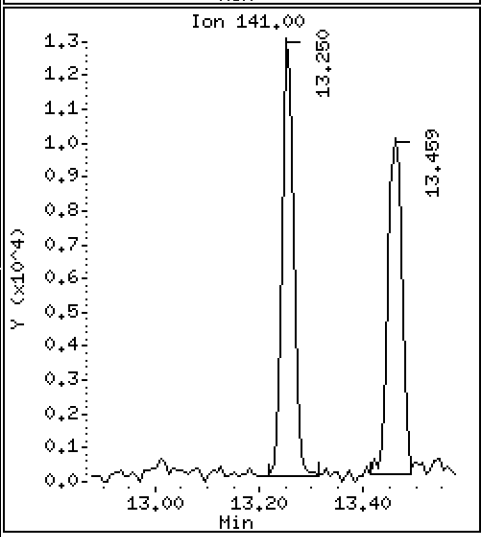
32 2-Methylnaphthalene

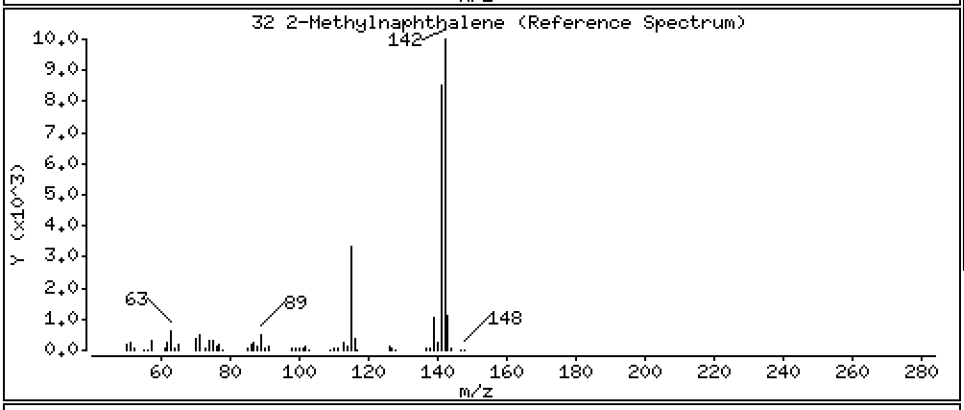
Concentration: 0.09855 ug/ml

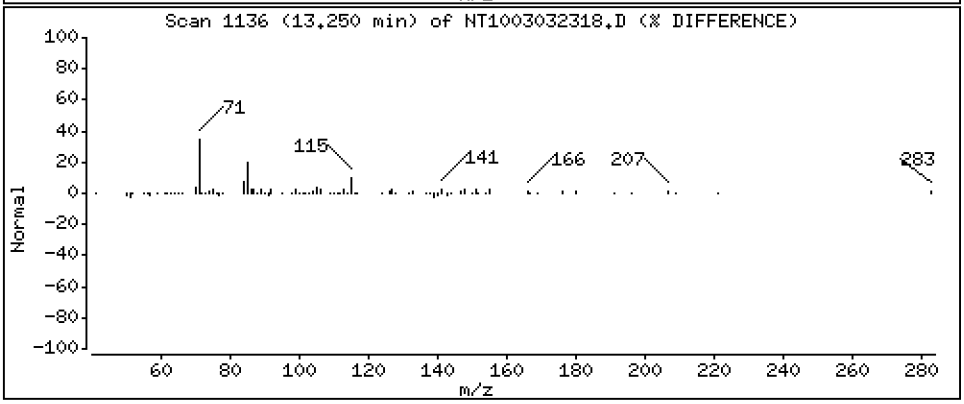












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

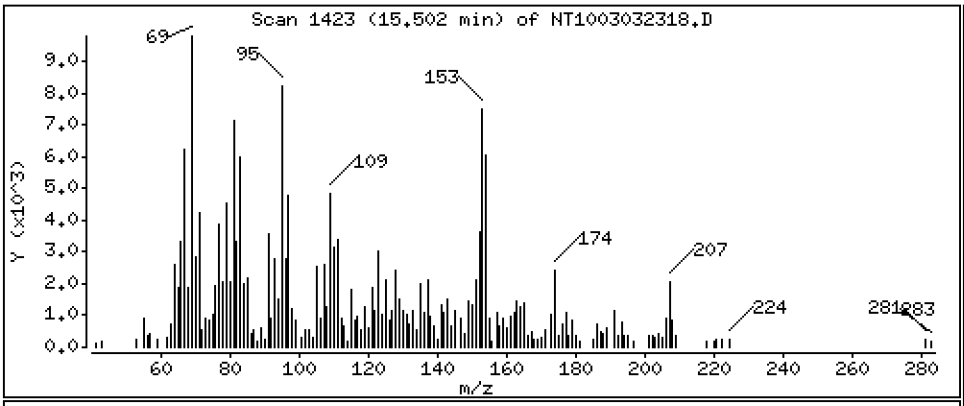
Operator: VTS

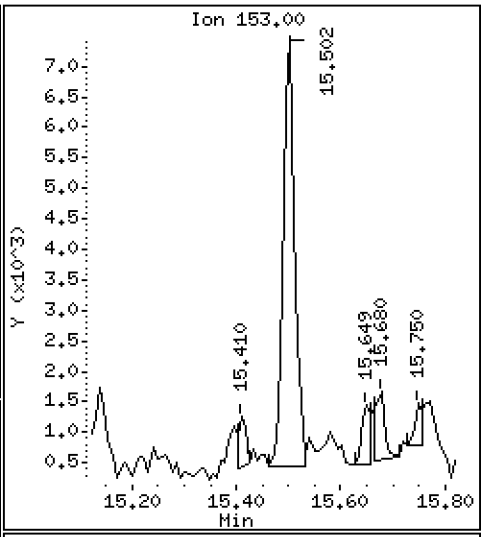
Column phase: ZB-5msi

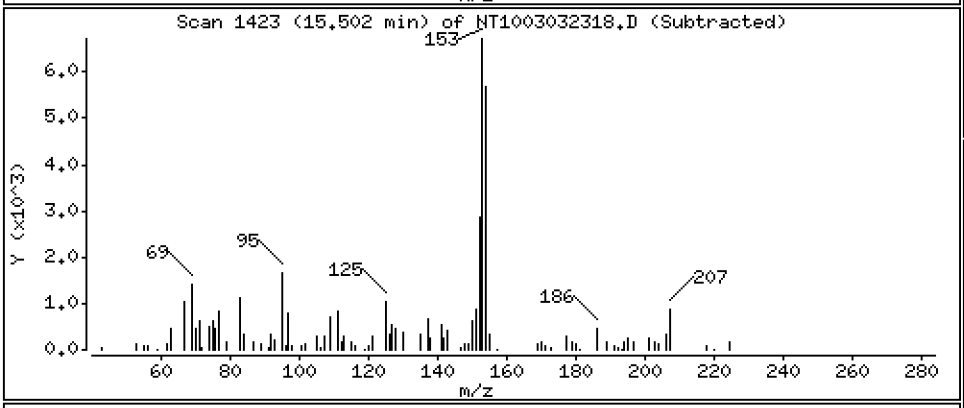
Column diameter: 0.25

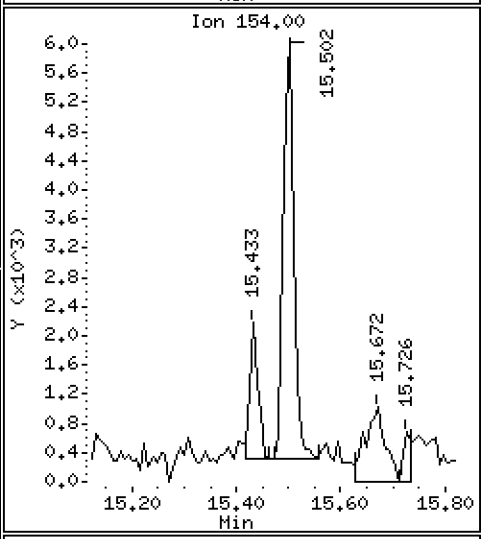
44 Acenaphthene

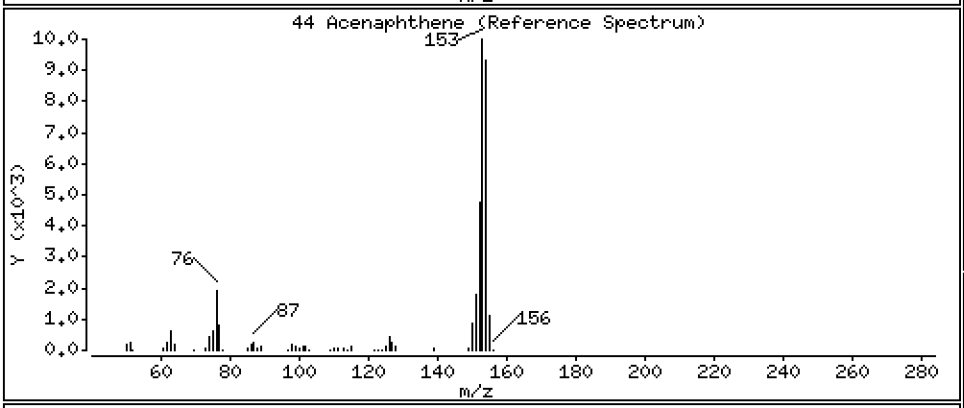
Concentration: 0.05467 ug/ml

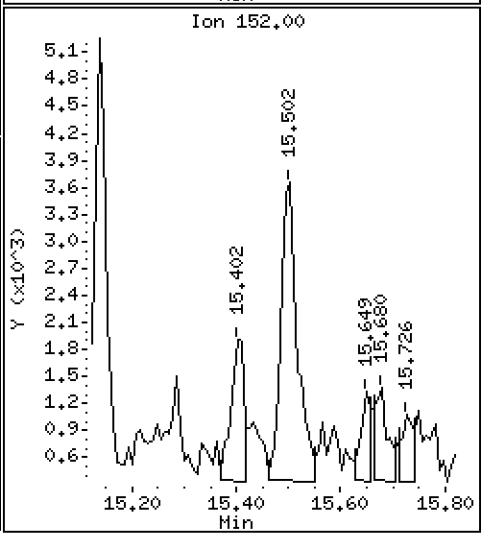


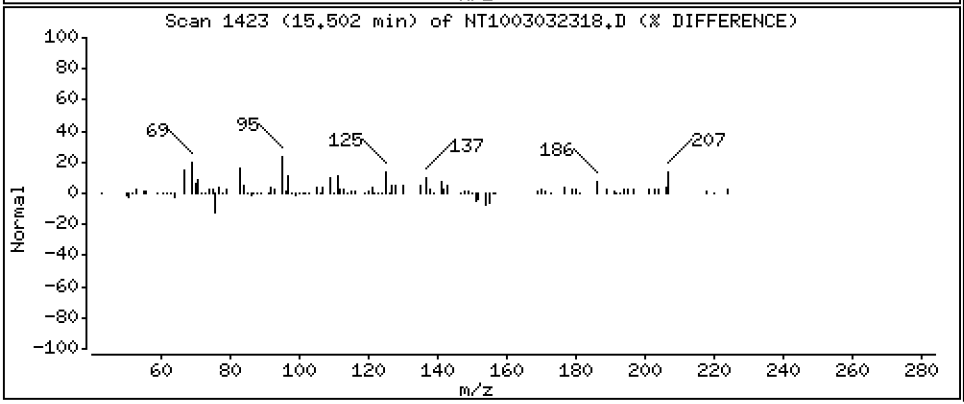












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

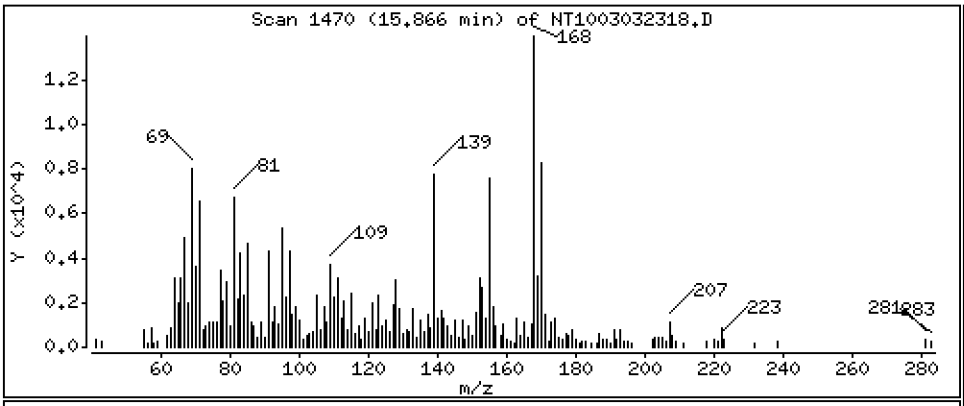
Operator: VTS

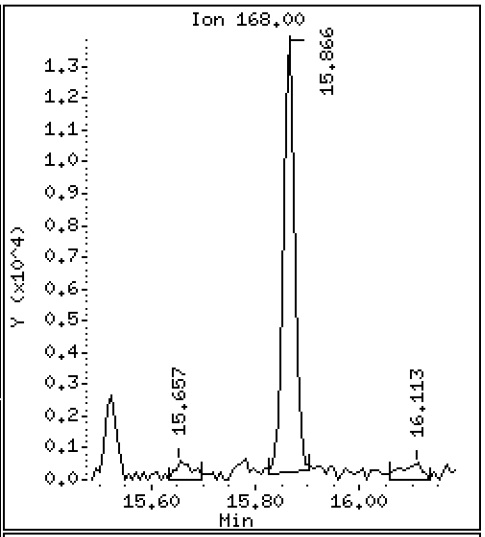
Column phase: ZB-5msi

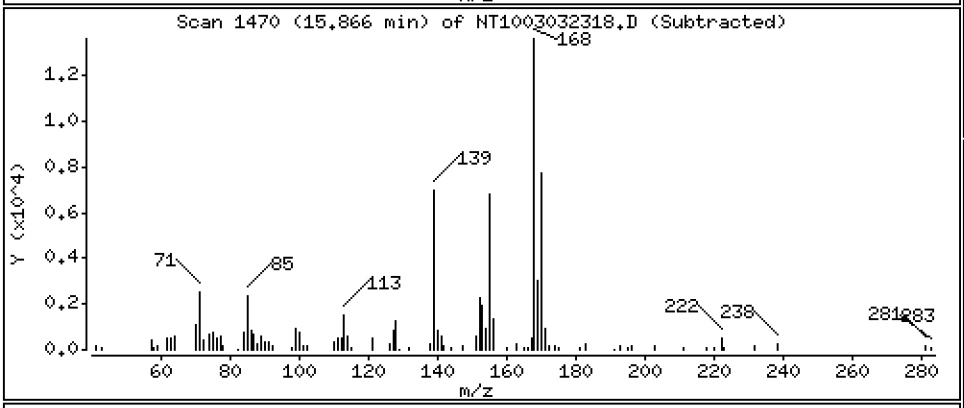
Column diameter: 0.25

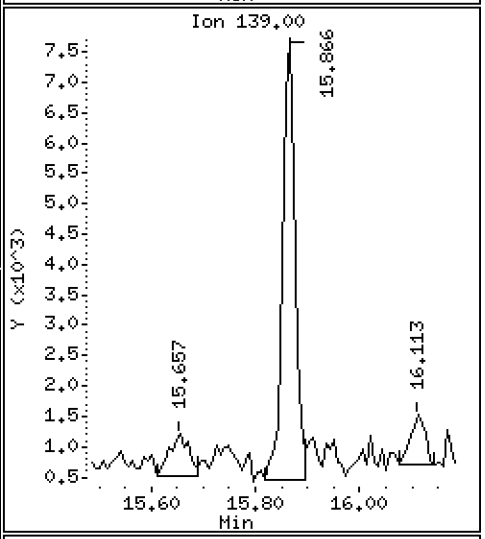
46 Dibenzofuran

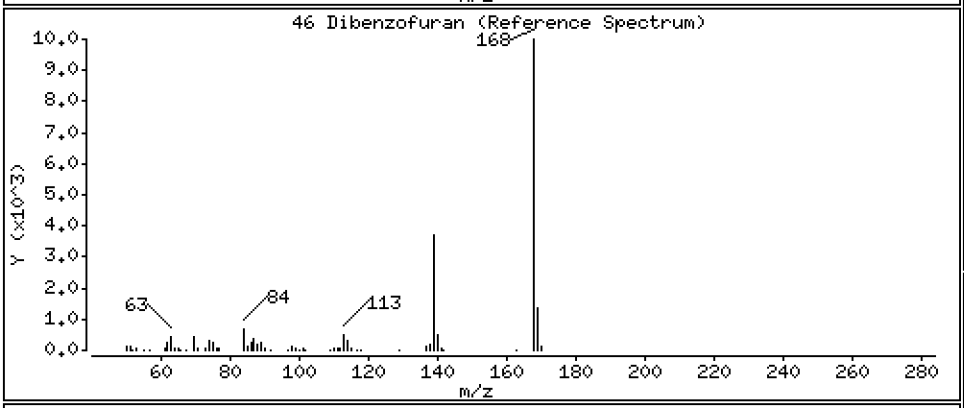
Concentration: 0.07057 ug/ml

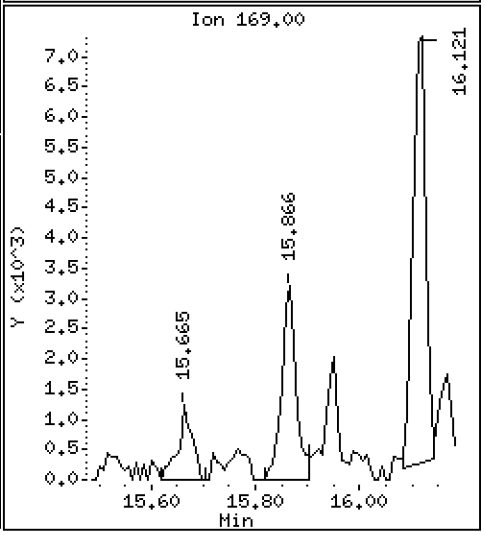


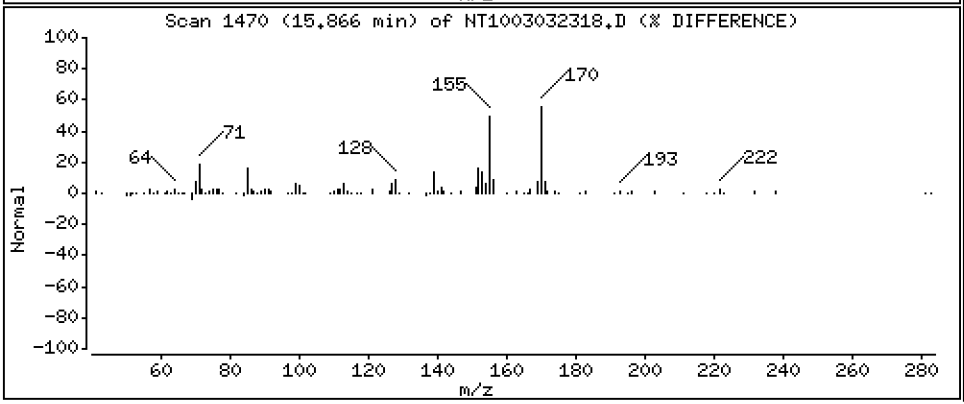












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032318.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

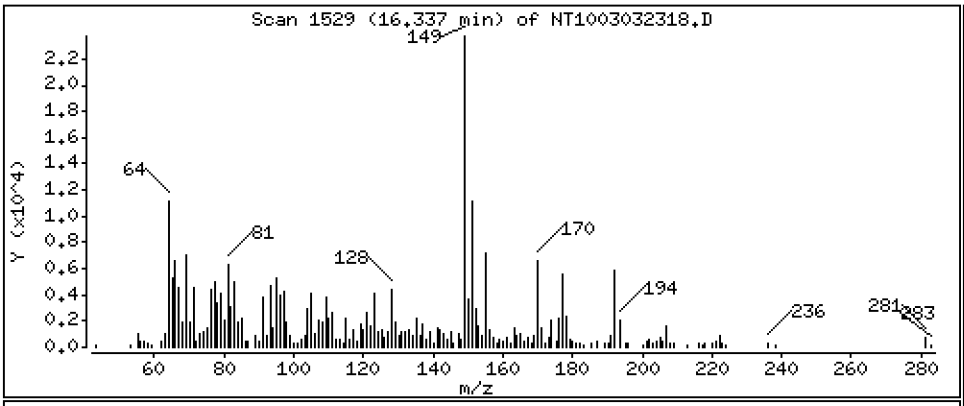
Operator: VTS

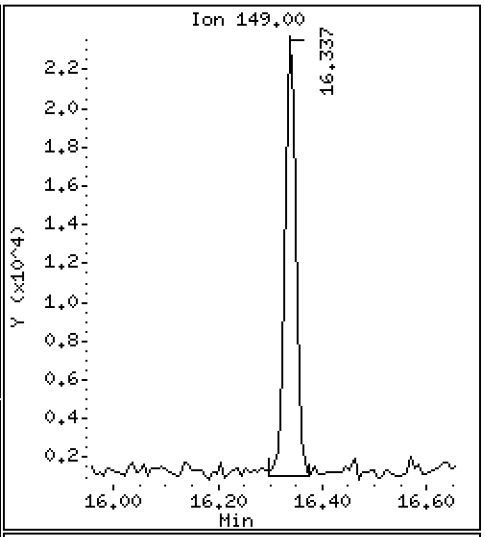
Column phase: ZB-5msi

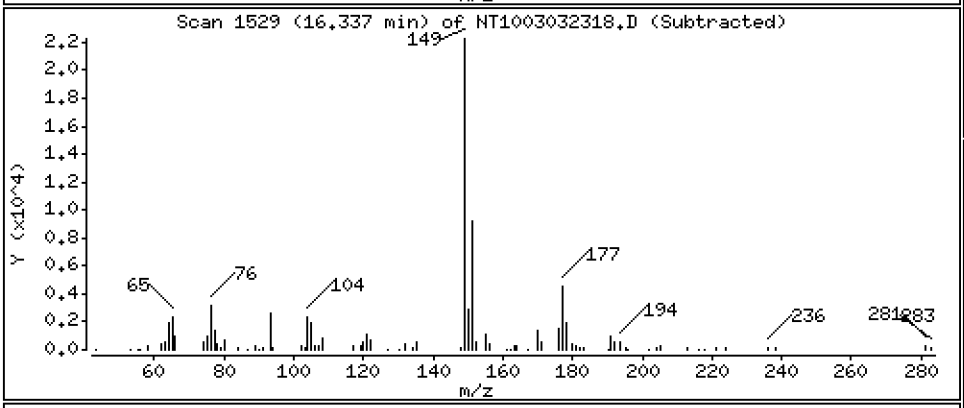
Column diameter: 0.25

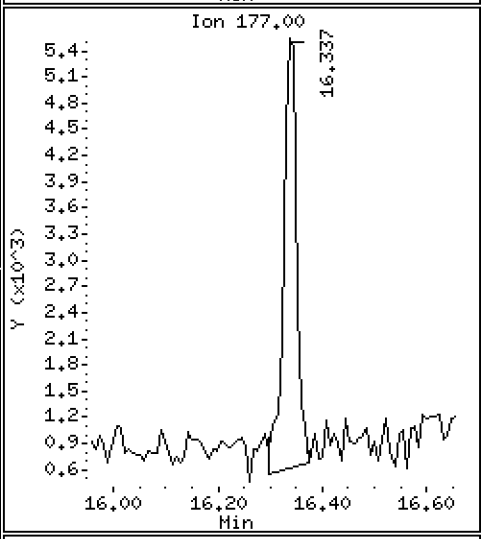
50 Diethylphthalate

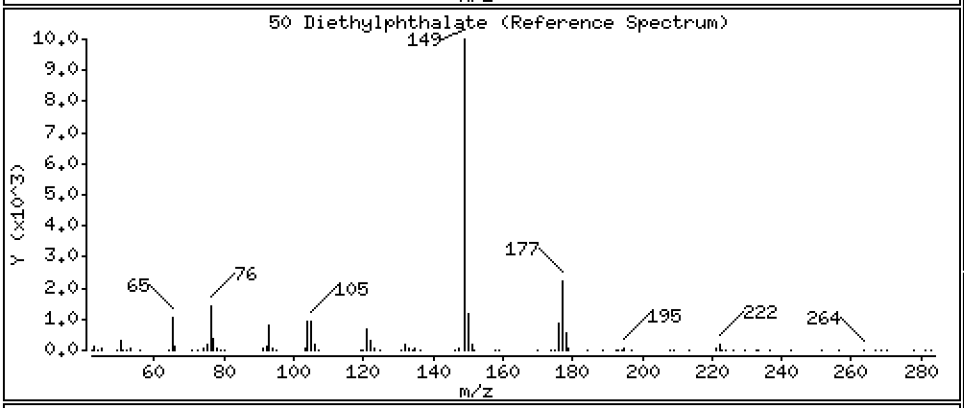
Concentration: 0.1447 ug/ml

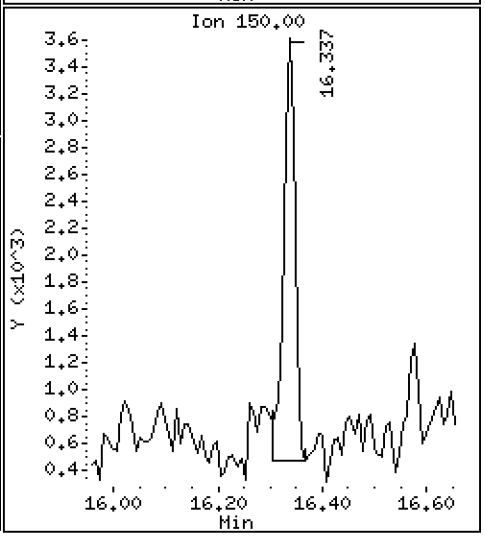


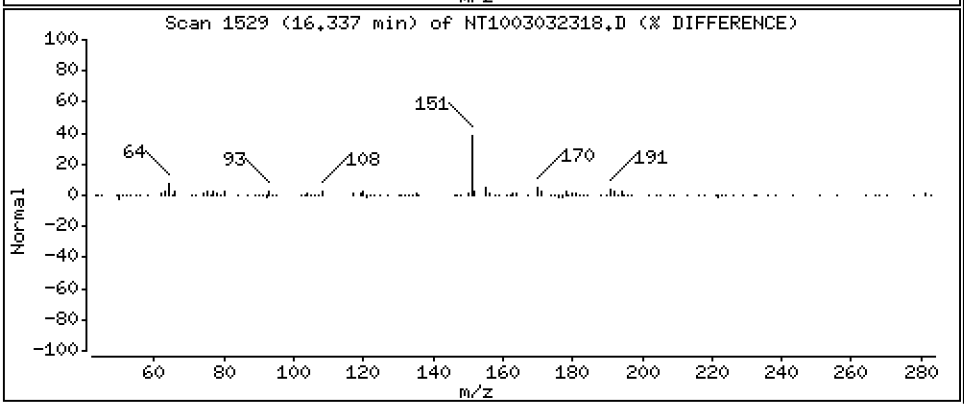












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

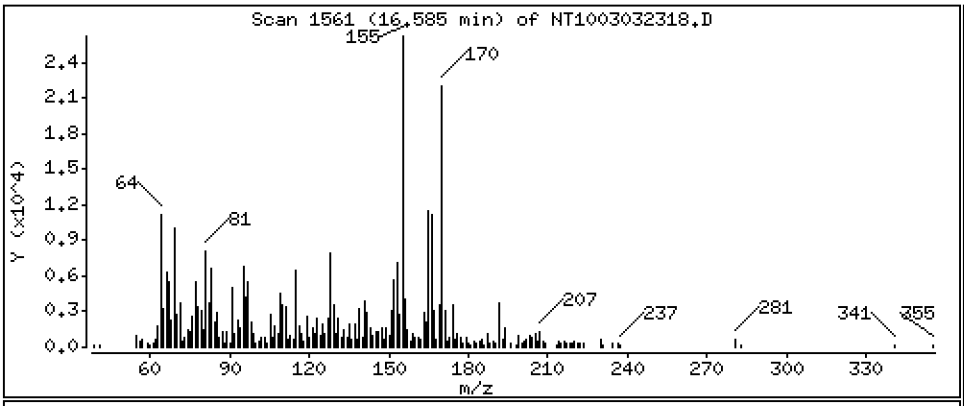
Operator: VTS

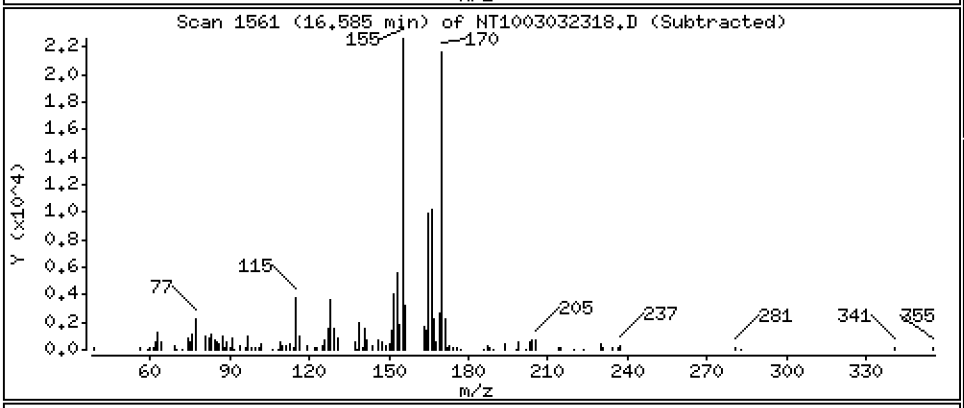
Column phase: ZB-5msi

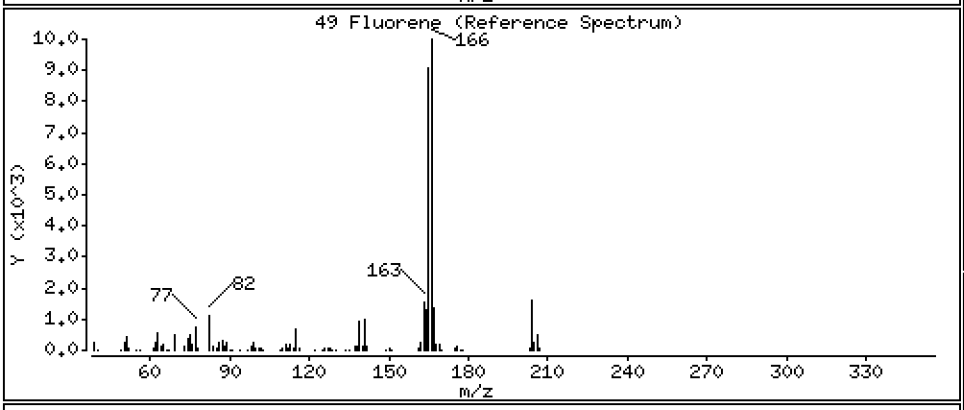
Column diameter: 0.25

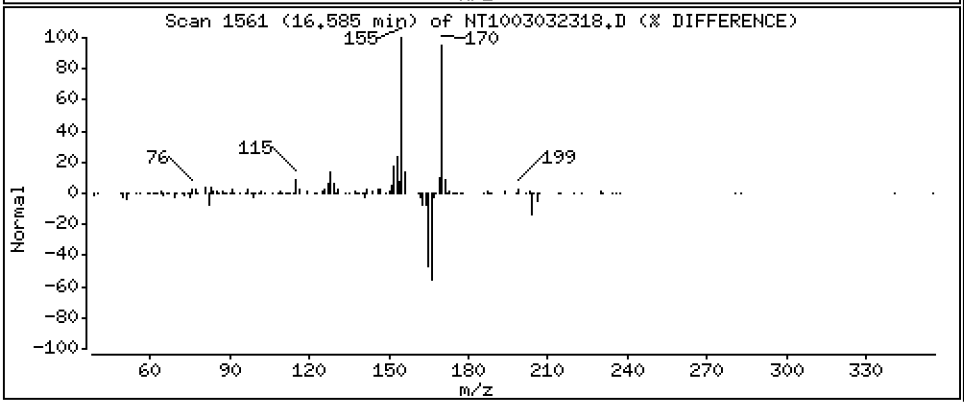
49 Fluorene

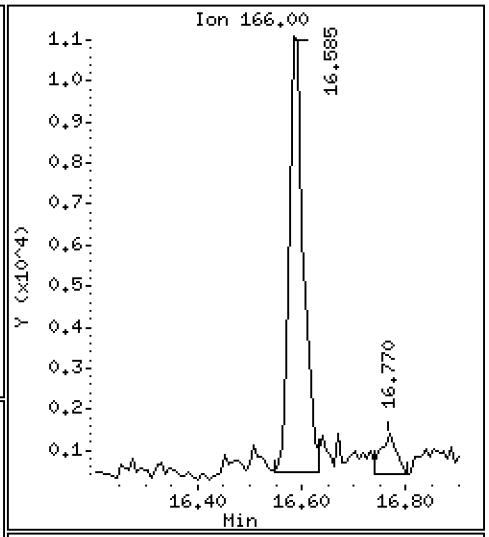
Concentration: 0.08513 ug/ml

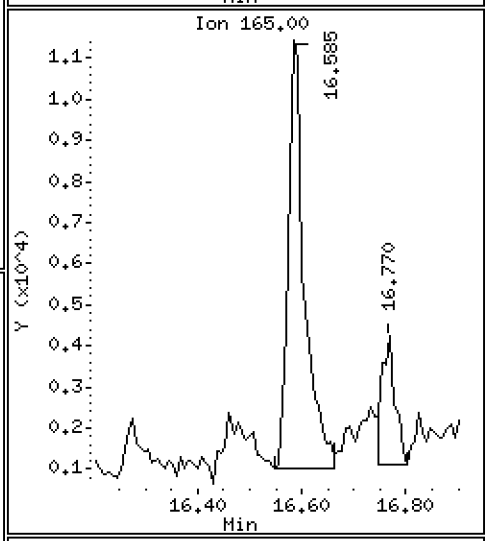


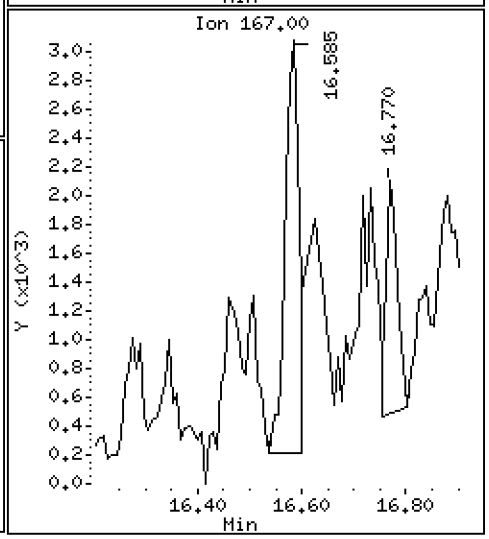












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

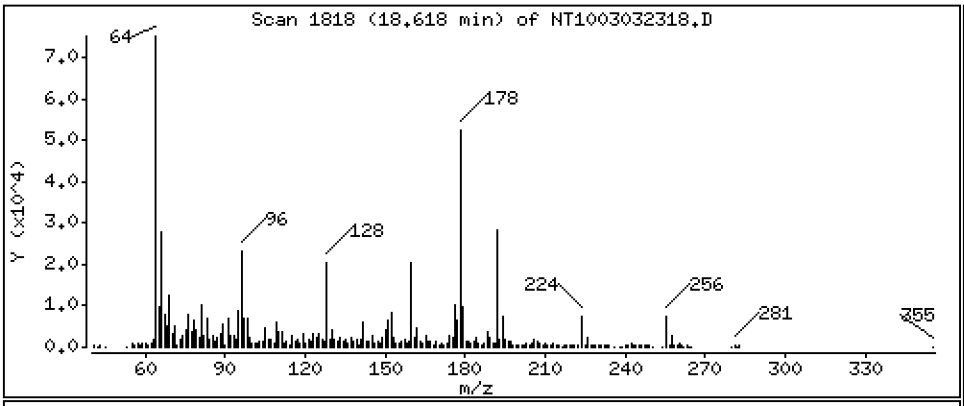
Operator: VTS

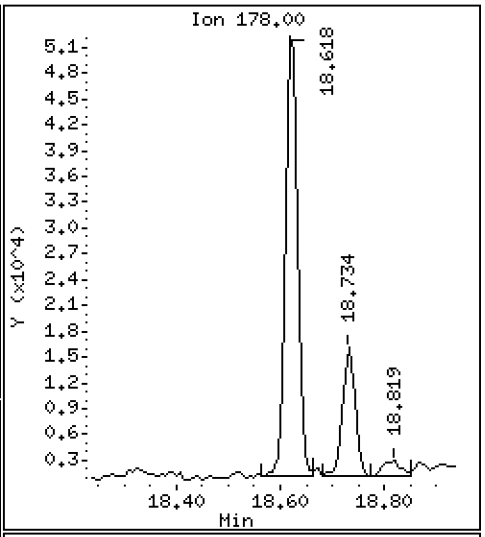
Column phase: ZB-5msi

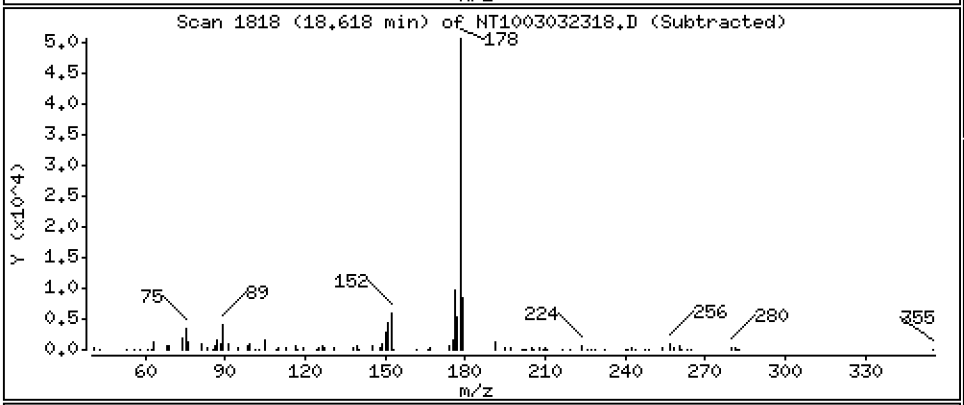
Column diameter: 0.25

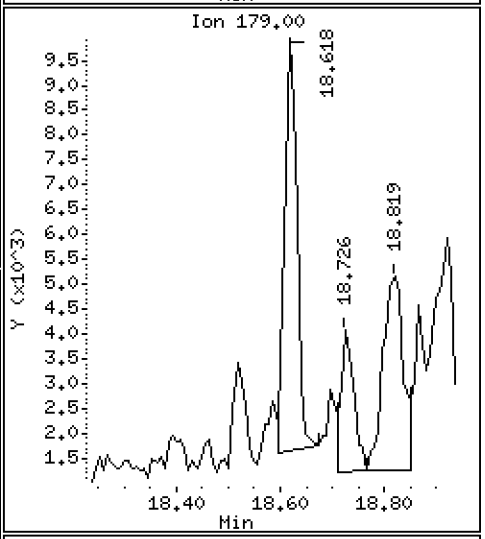
60 Phenanthrene

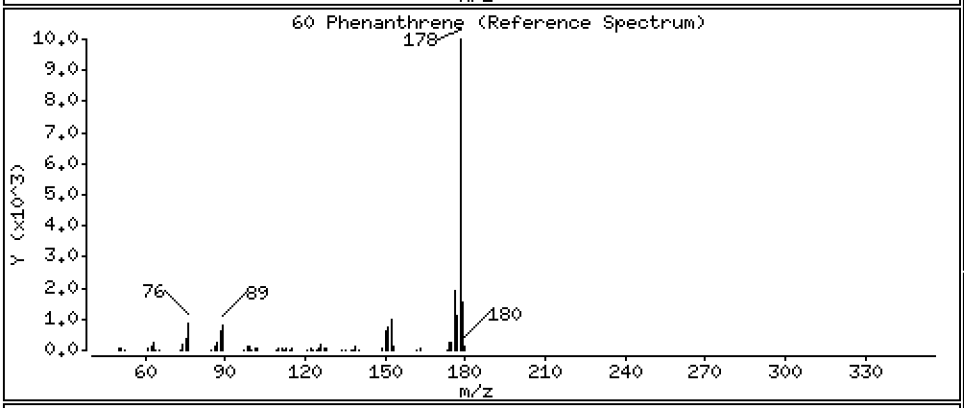
Concentration: 0.2773 ug/ml

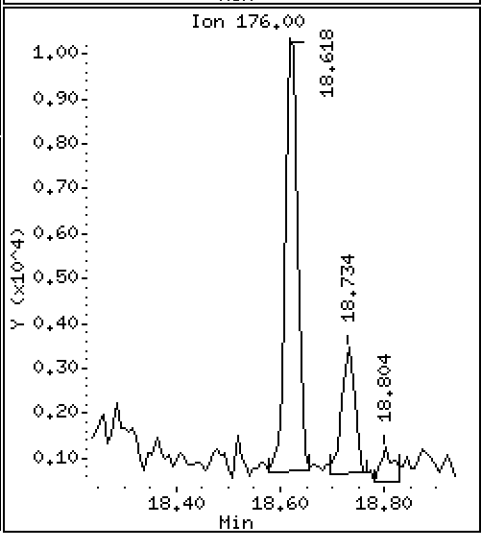


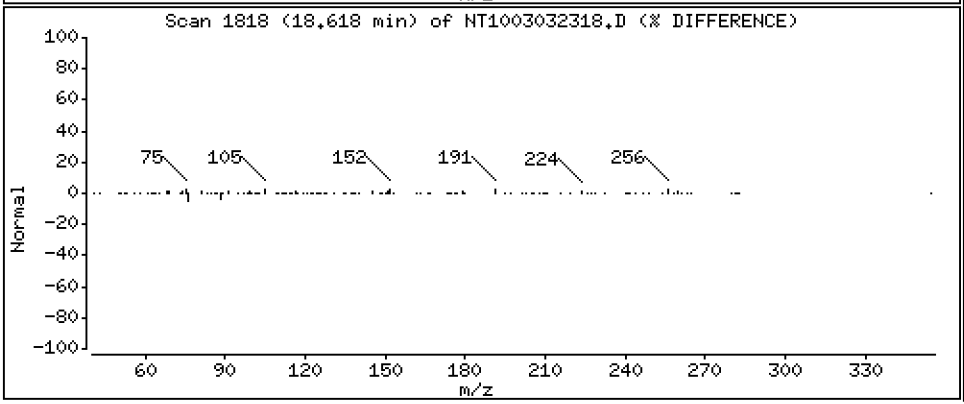












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

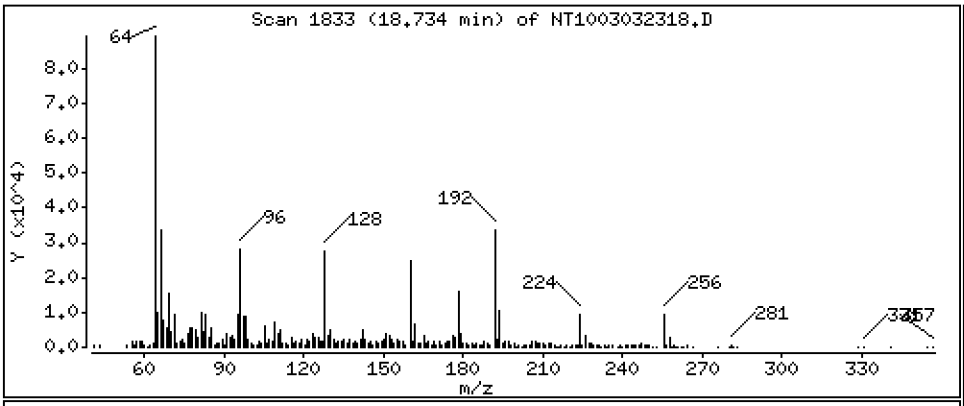
Operator: VTS

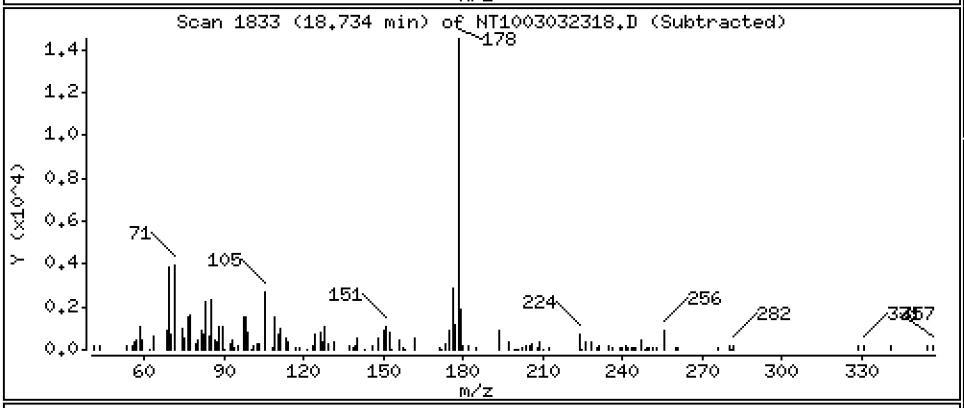
Column phase: ZB-5msi

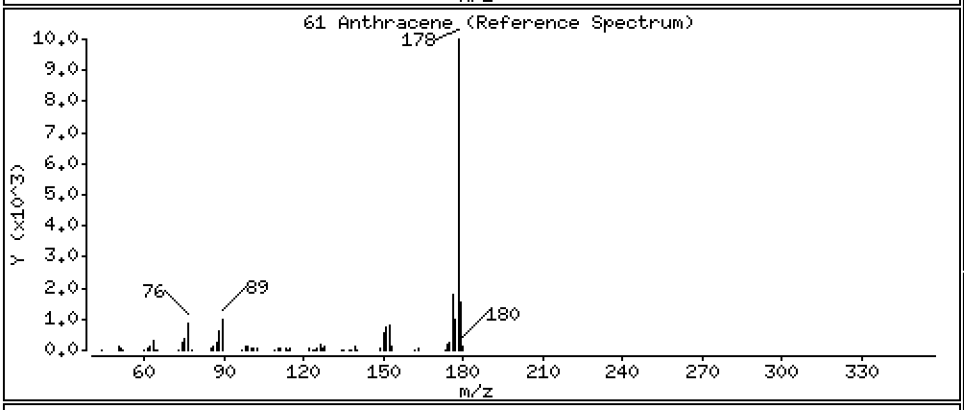
Column diameter: 0.25

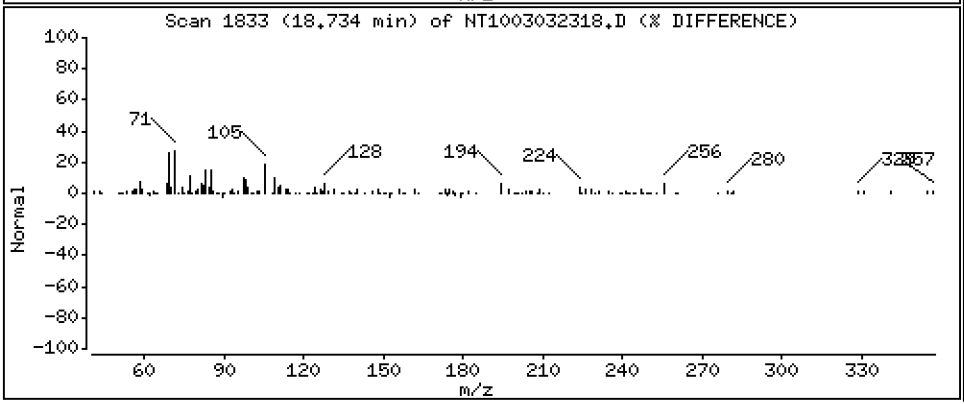
61 Anthracene

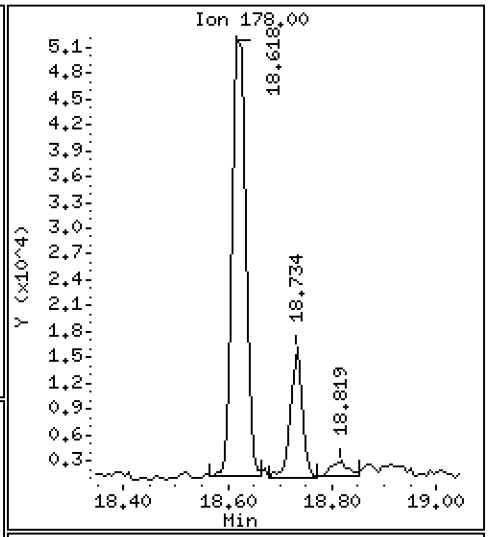
Concentration: 0.07988 ug/ml

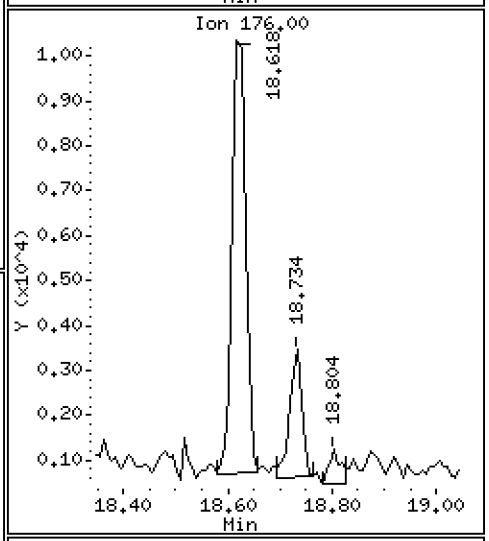


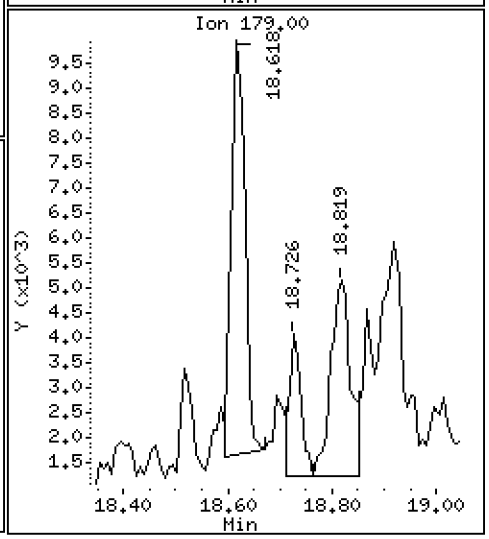












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

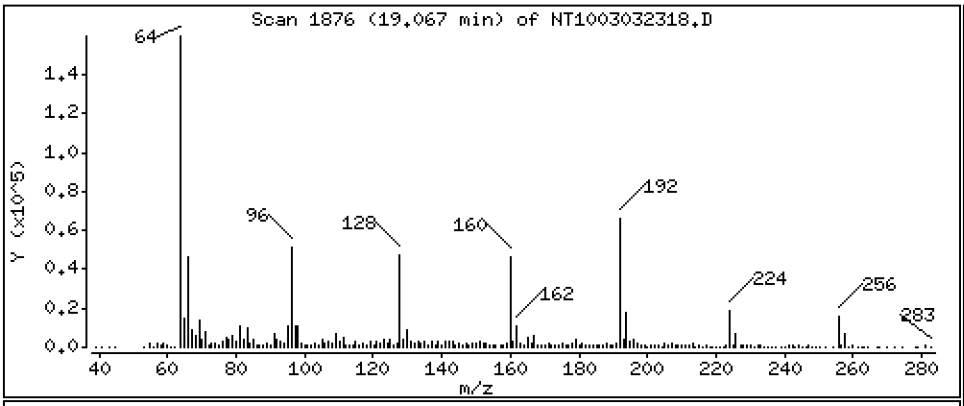
Operator: VTS

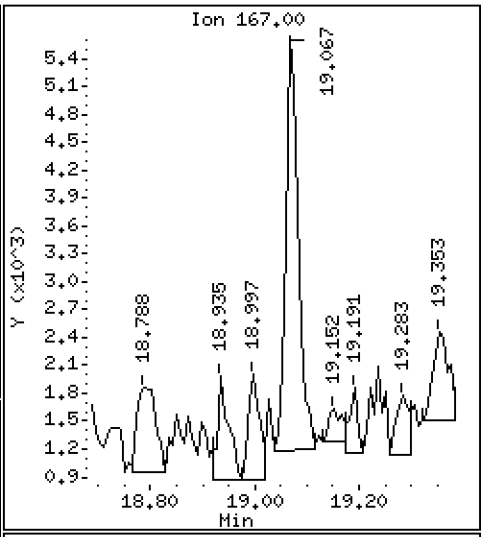
Column phase: ZB-5msi

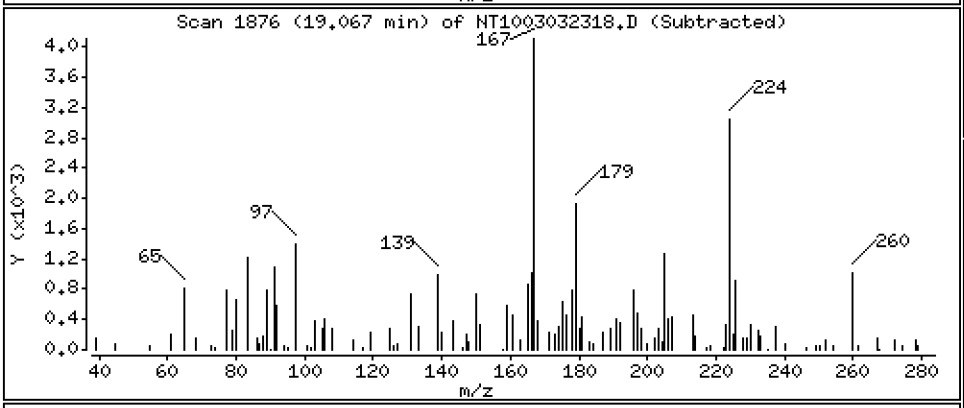
Column diameter: 0.25

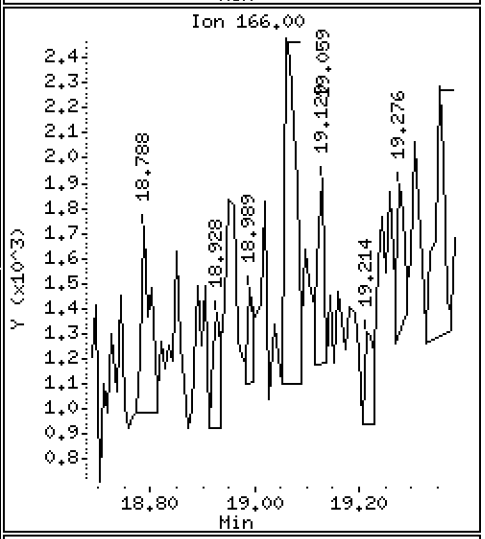
62 Carbazole

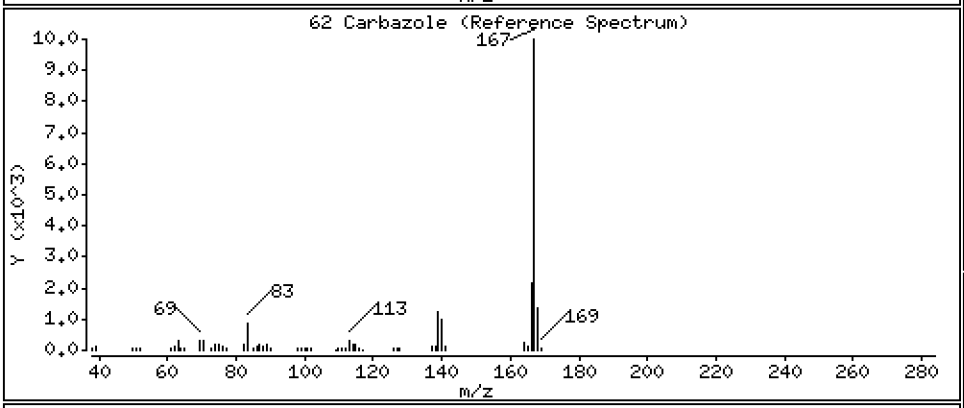
Concentration: 0.02777 ug/ml

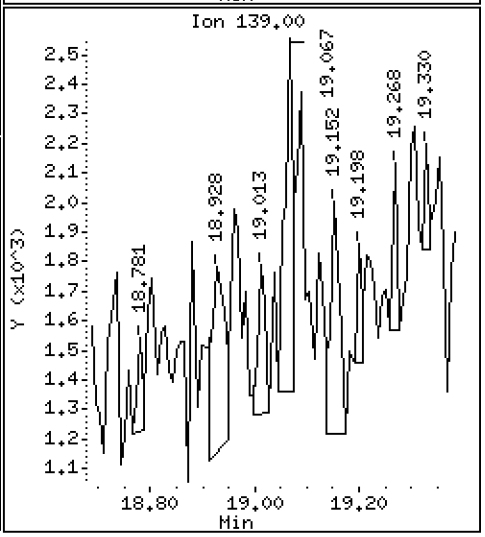


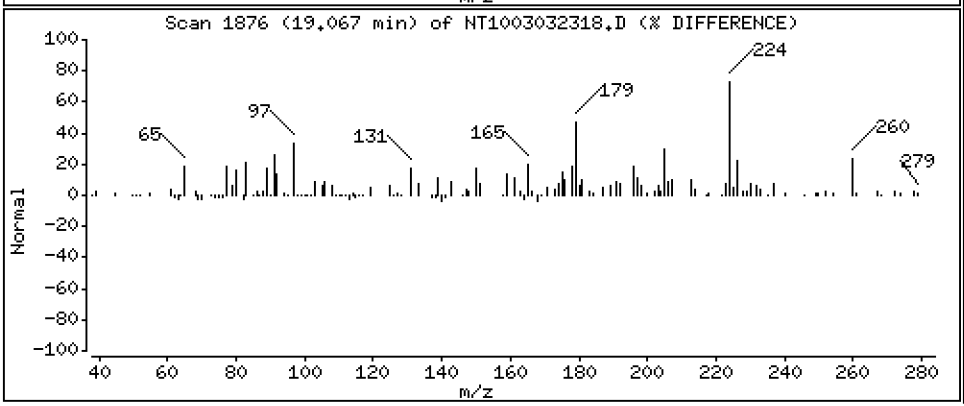












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

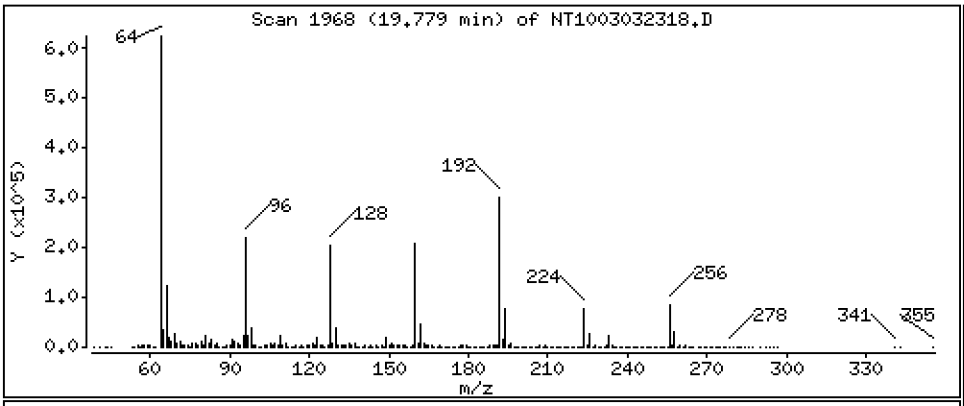
Operator: VTS

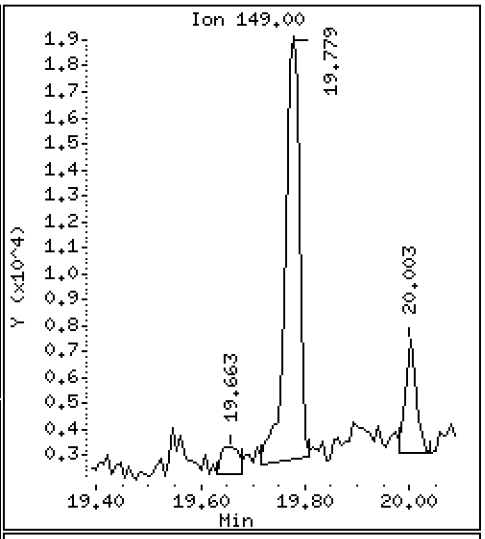
Column phase: ZB-5msi

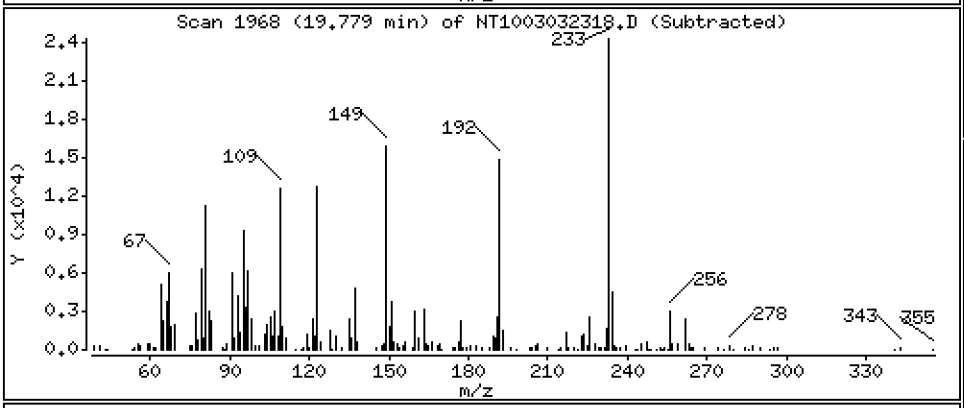
Column diameter: 0.25

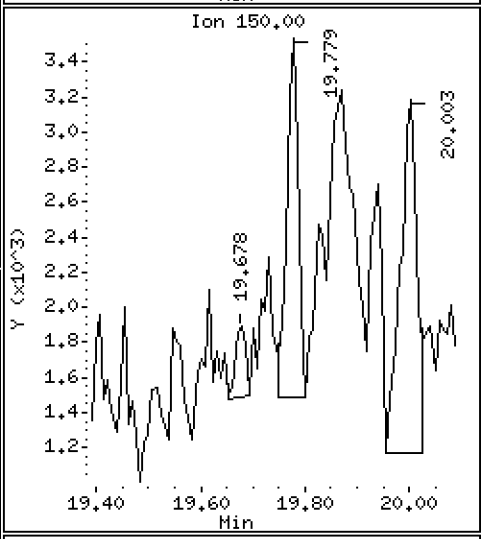
63 Di-n-butylphthalate

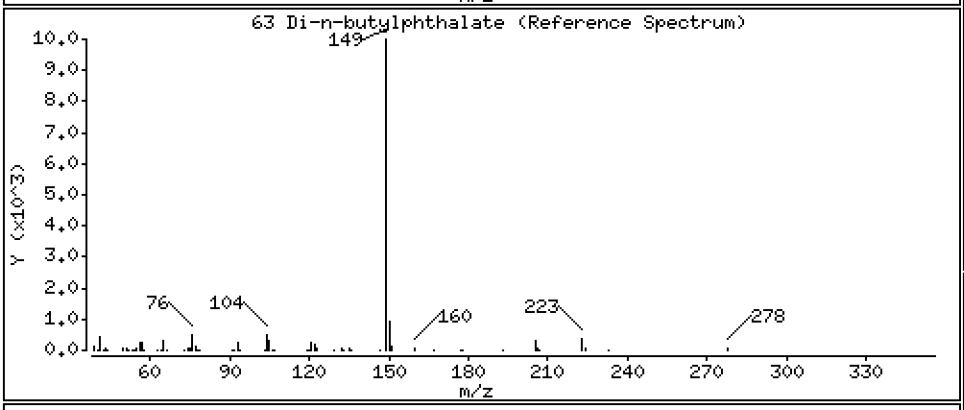
Concentration: 0.08629 ug/ml

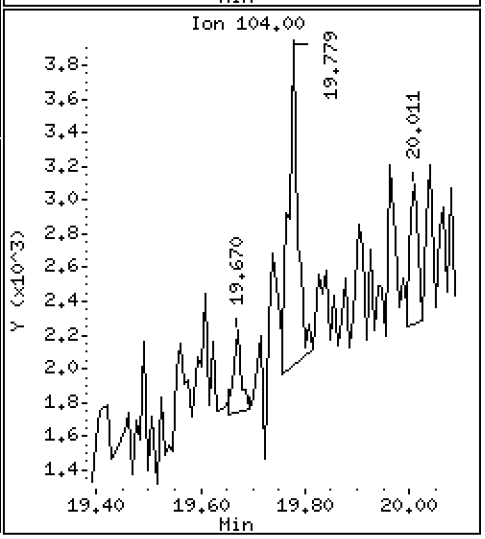


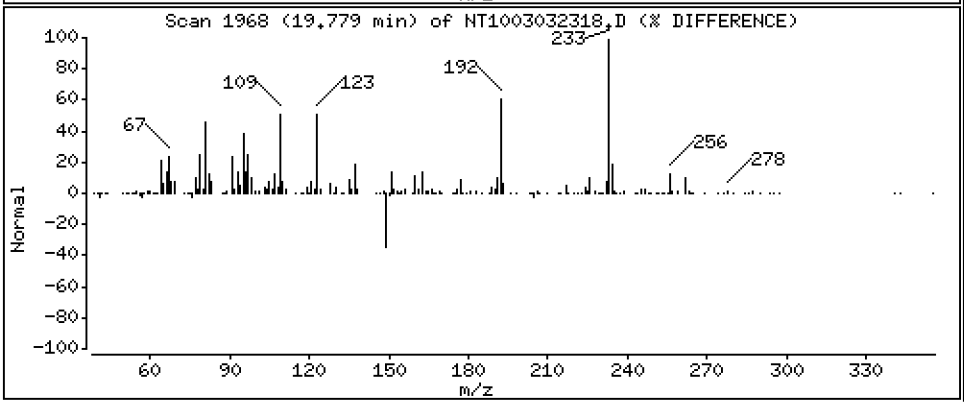












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

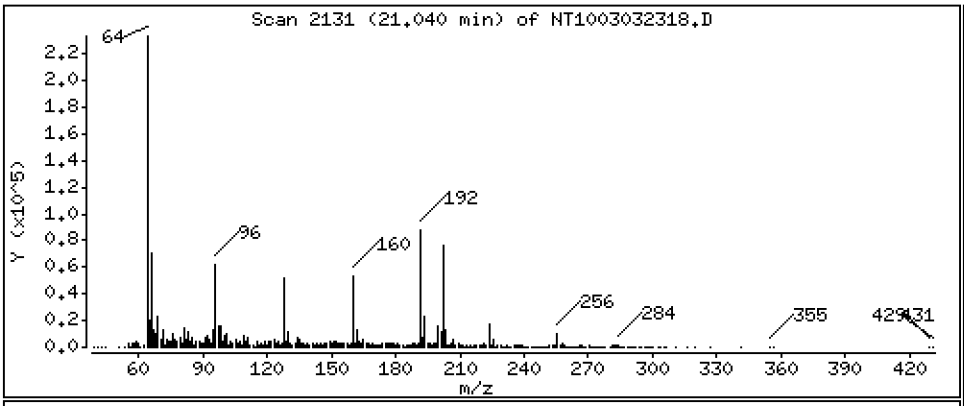
Operator: VTS

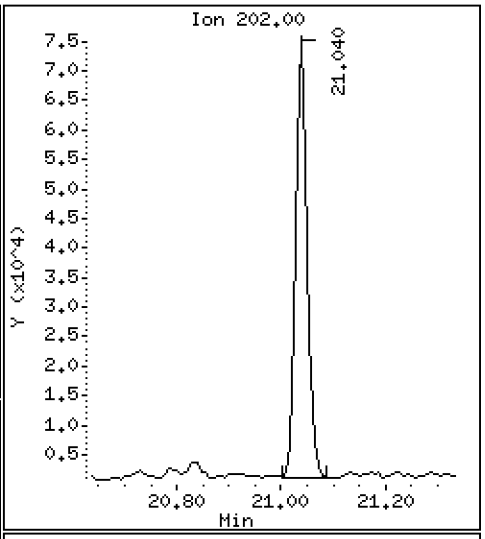
Column phase: ZB-5msi

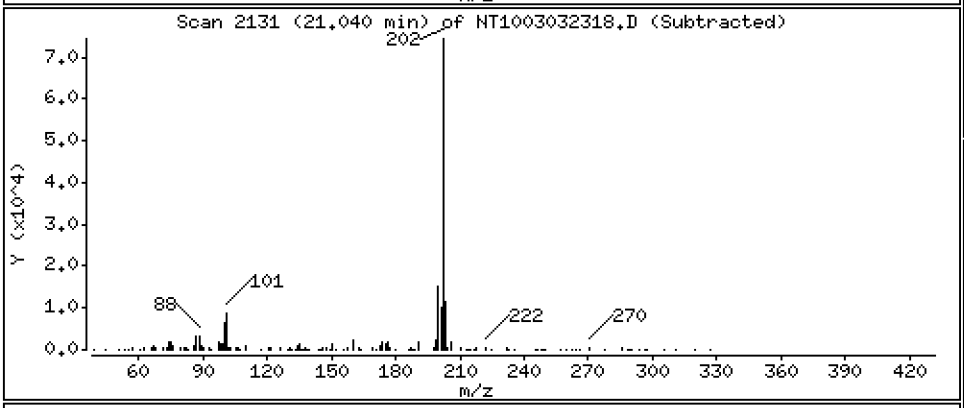
Column diameter: 0.25

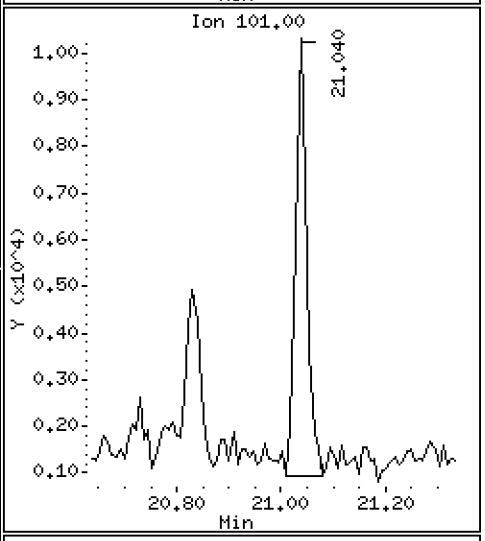
64 Fluoranthene

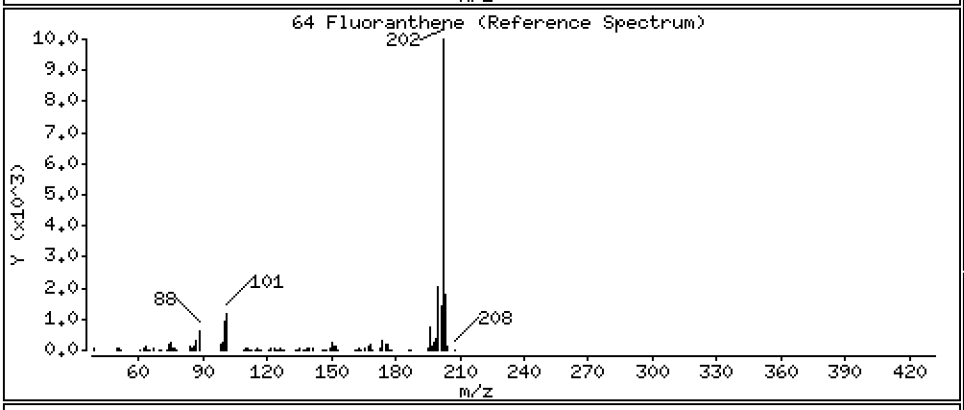
Concentration: 0.3125 ug/ml

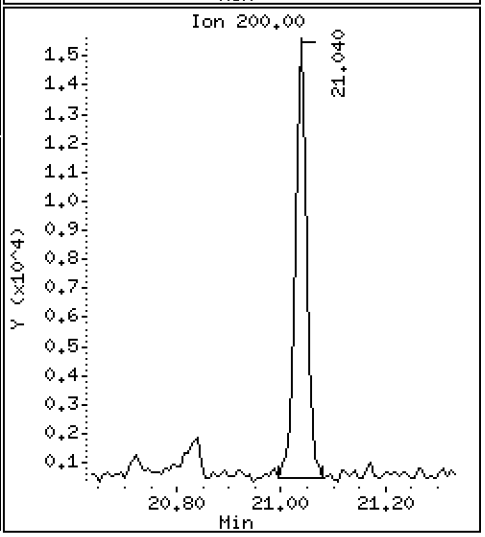


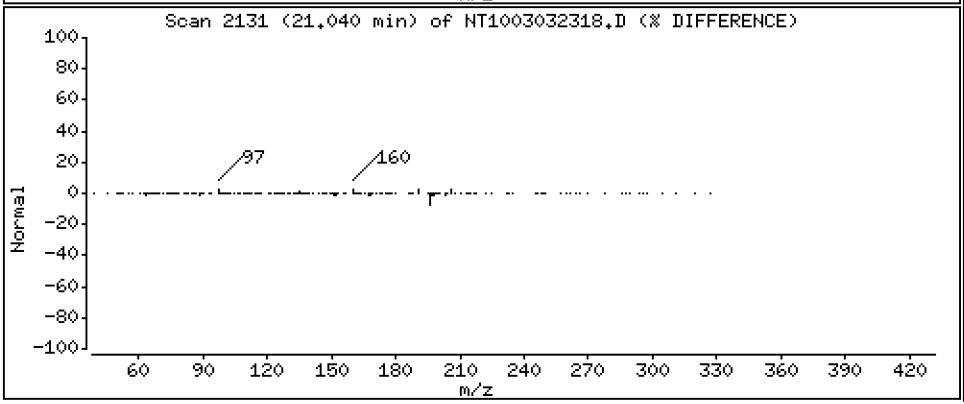












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032318.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

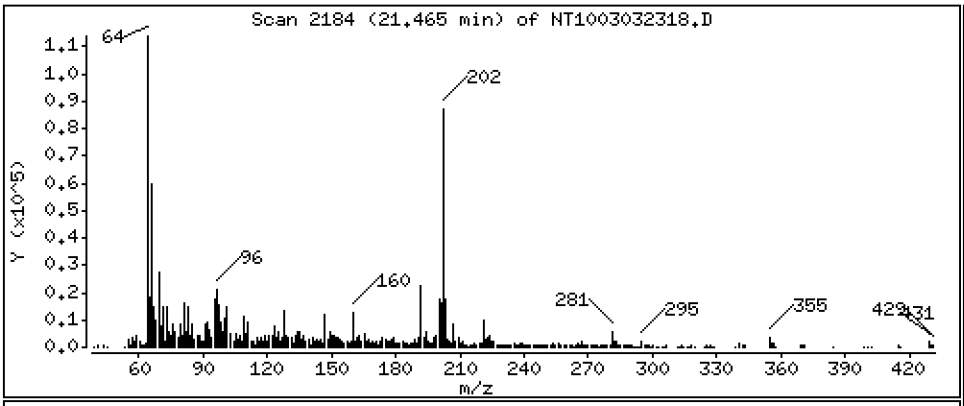
Operator: VTS

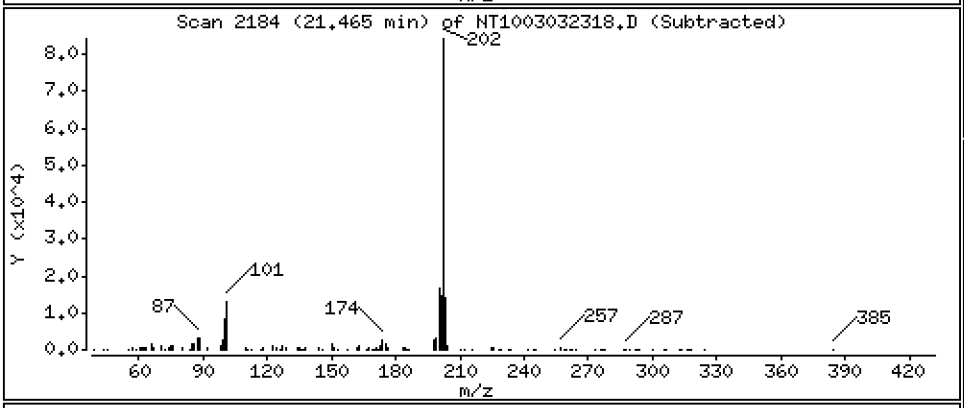
Column phase: ZB-5msi

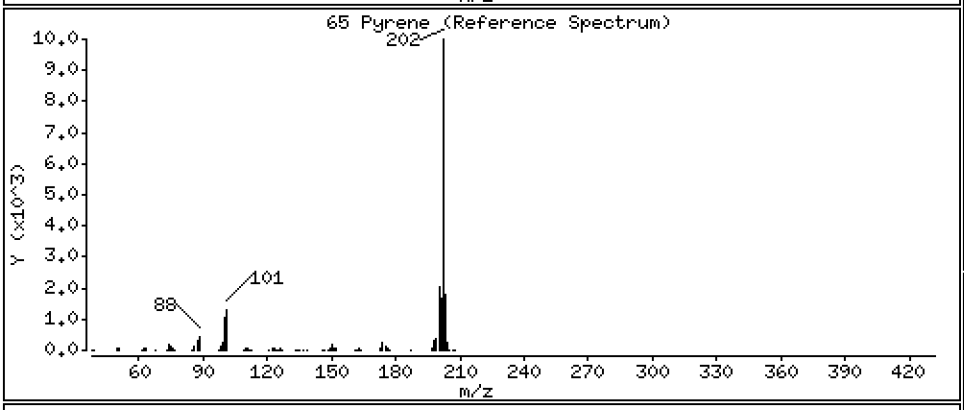
Column diameter: 0.25

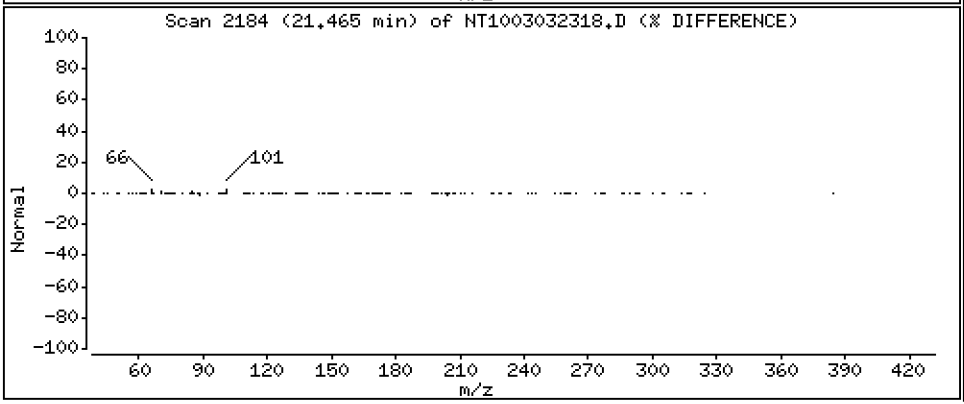
65 Pyrene

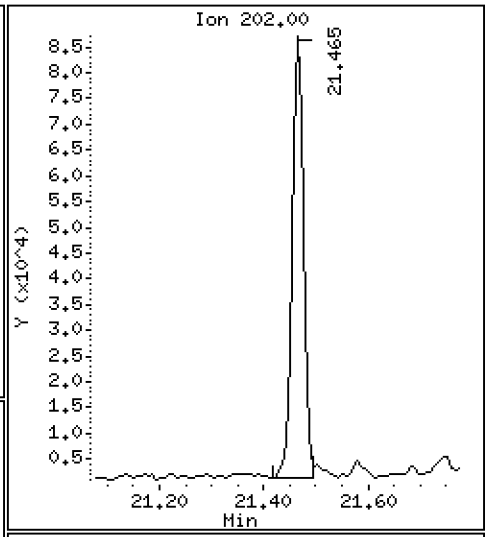
Concentration: 0.3632 ug/ml

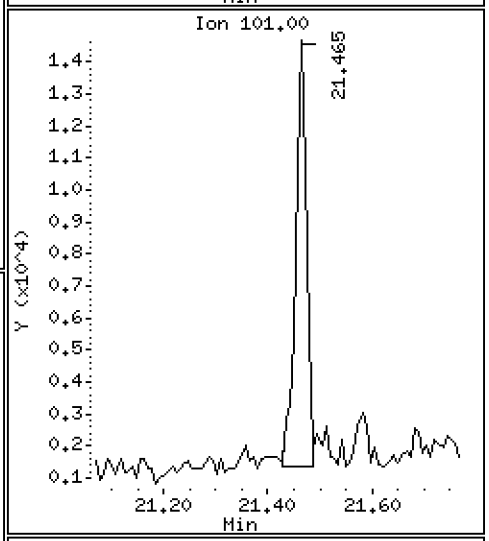


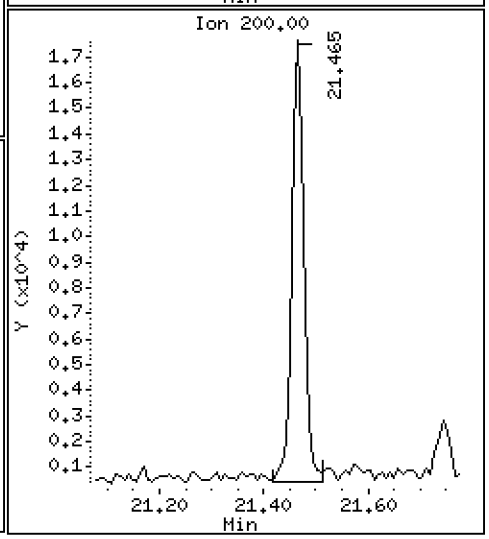












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

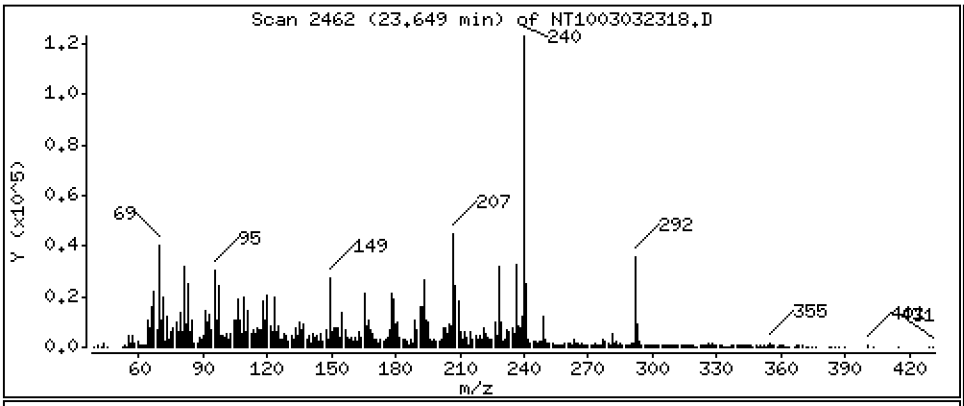
Operator: VTS

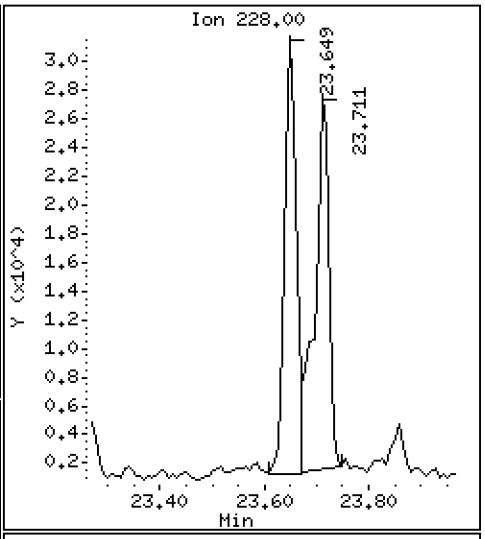
Column phase: ZB-5msi

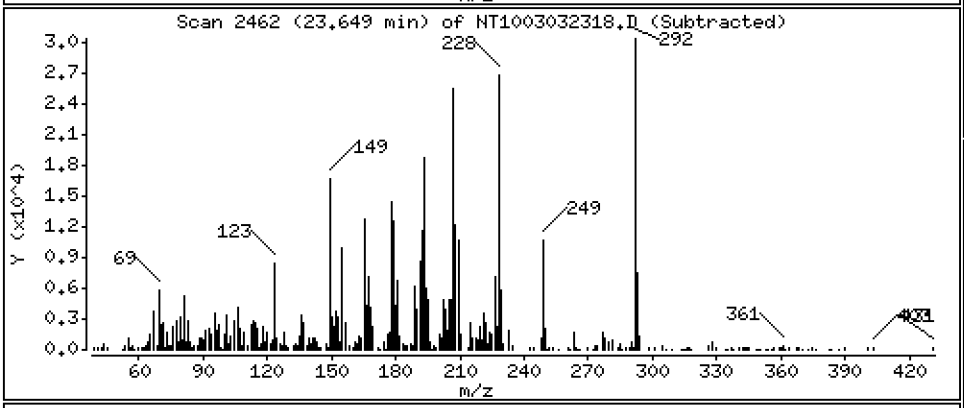
Column diameter: 0.25

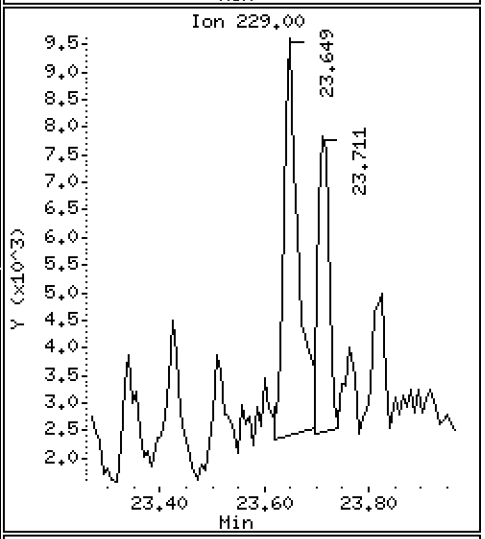
68 Benzo(a)anthracene

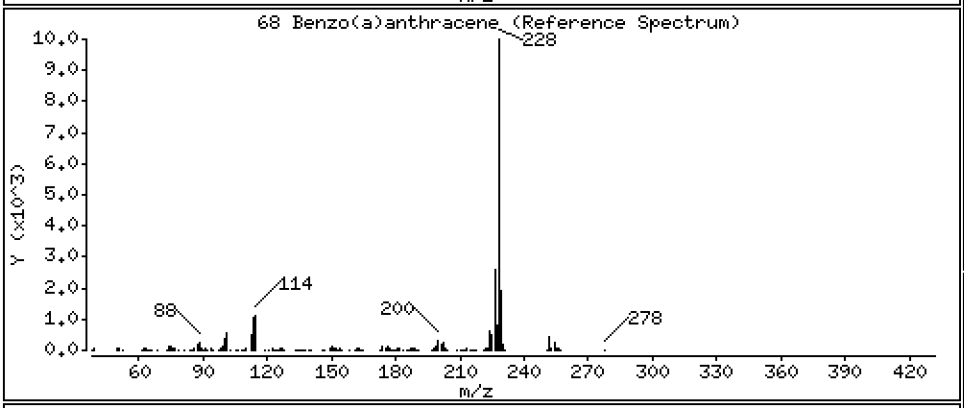
Concentration: 0.1349 ug/ml

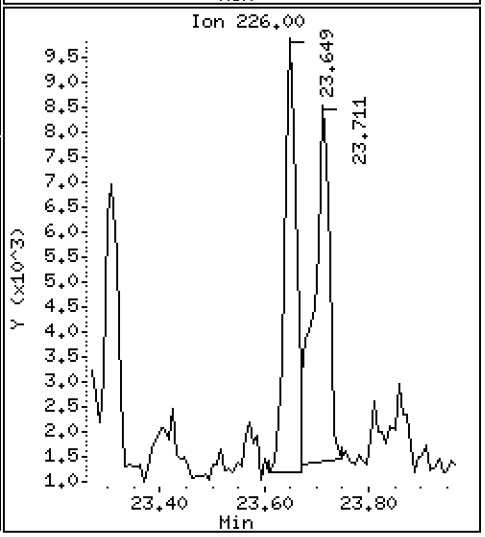


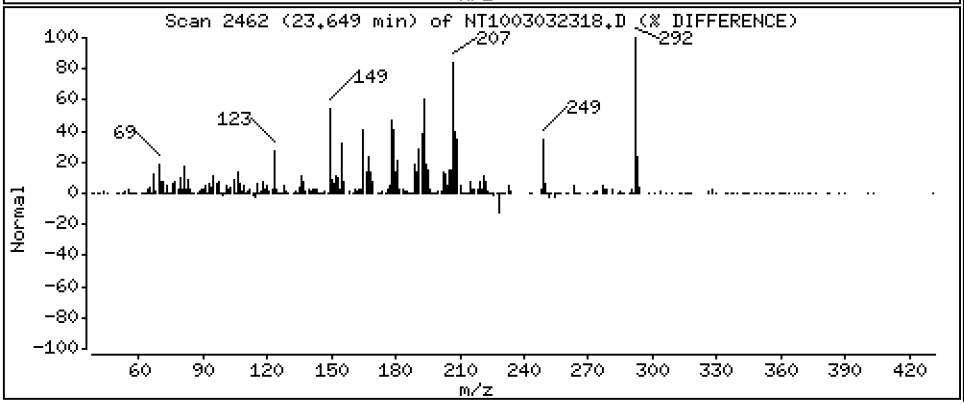












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

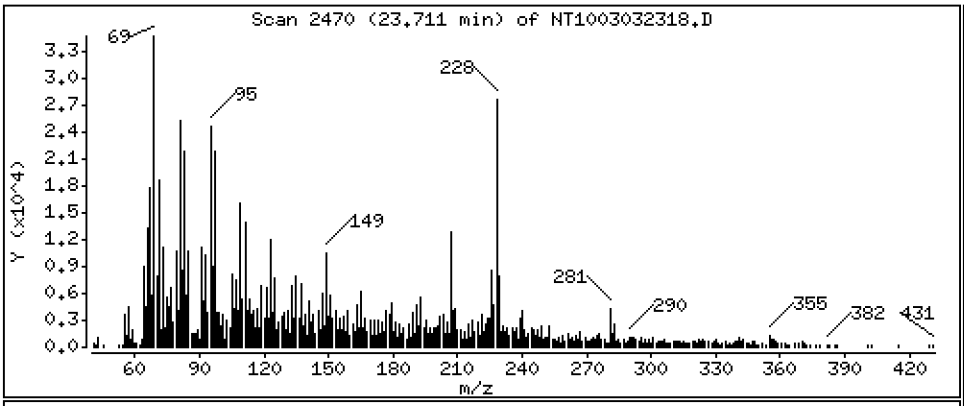
Operator: VTS

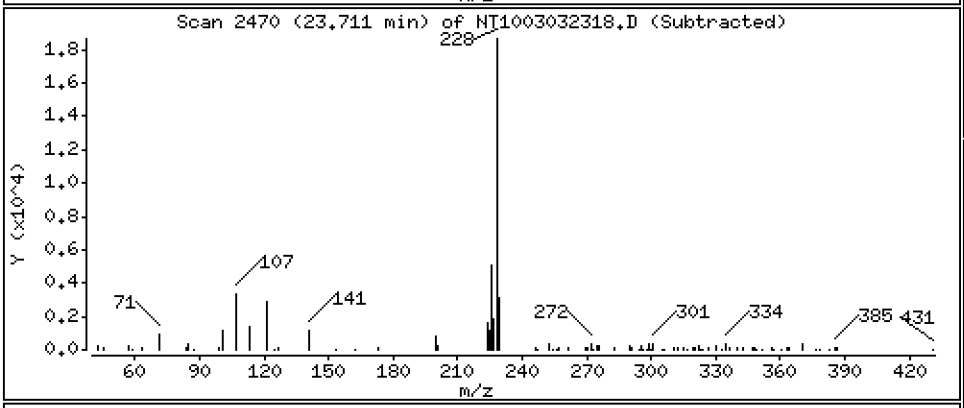
Column phase: ZB-5msi

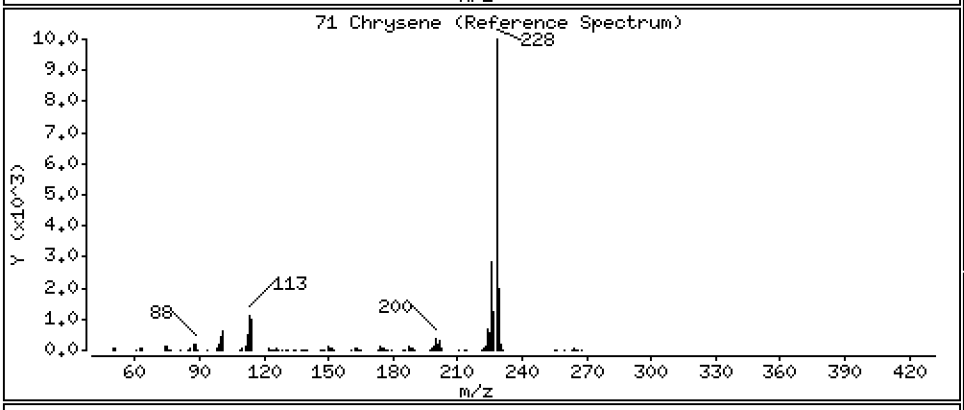
Column diameter: 0.25

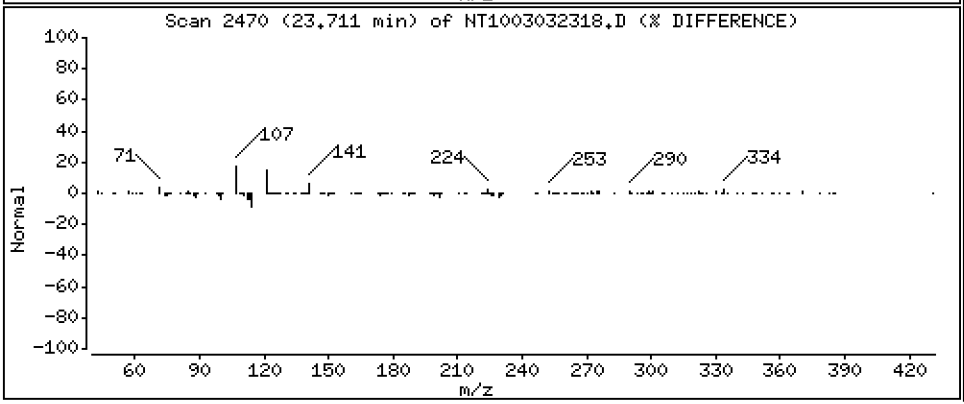
71 Chrysene

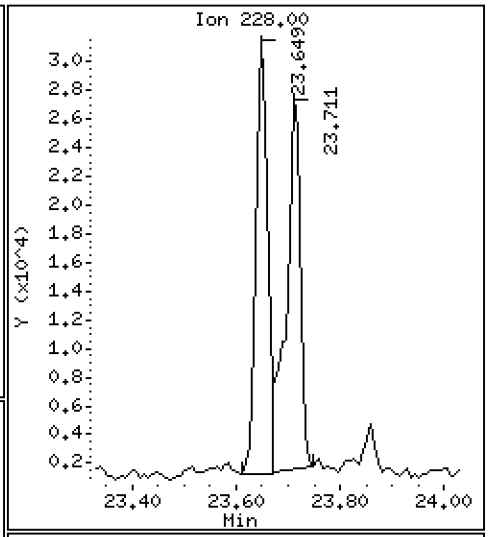
Concentration: 0.1679 ug/ml

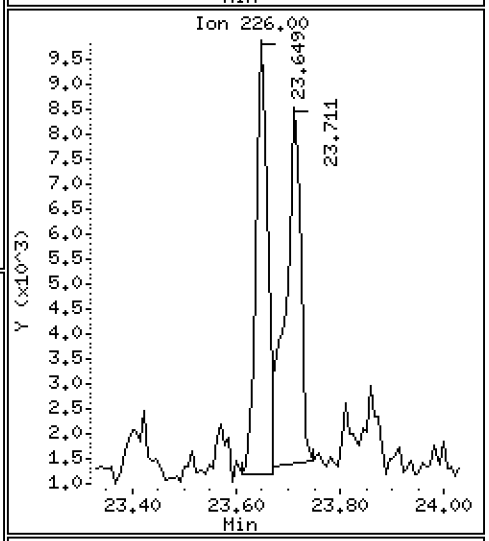


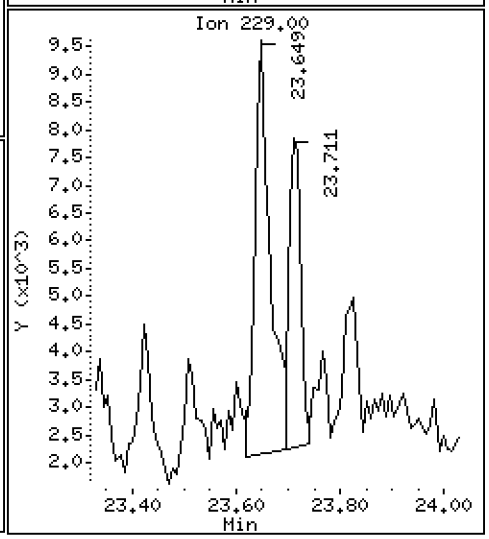












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

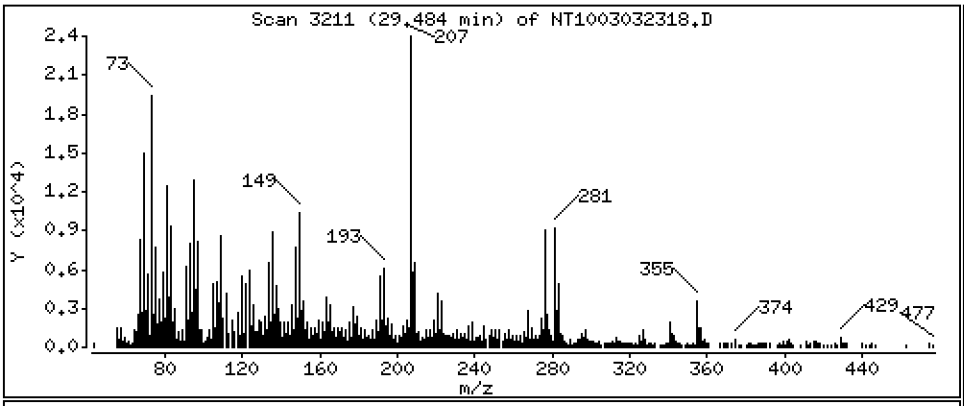
Operator: VTS

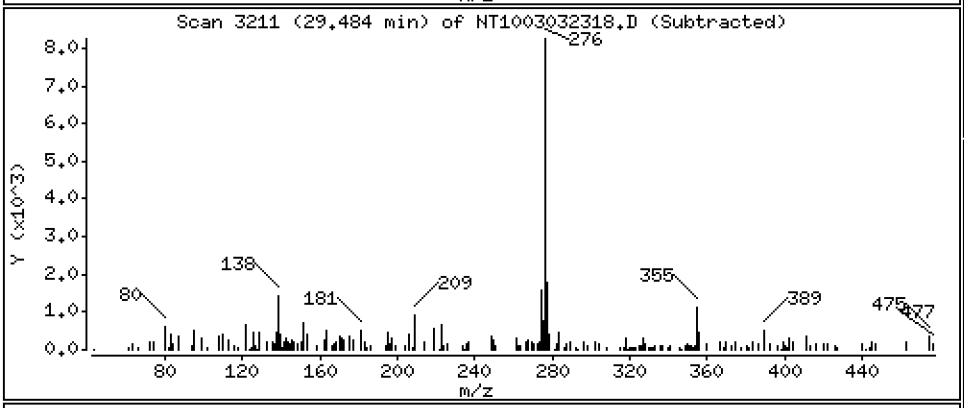
Column phase: ZB-5msi

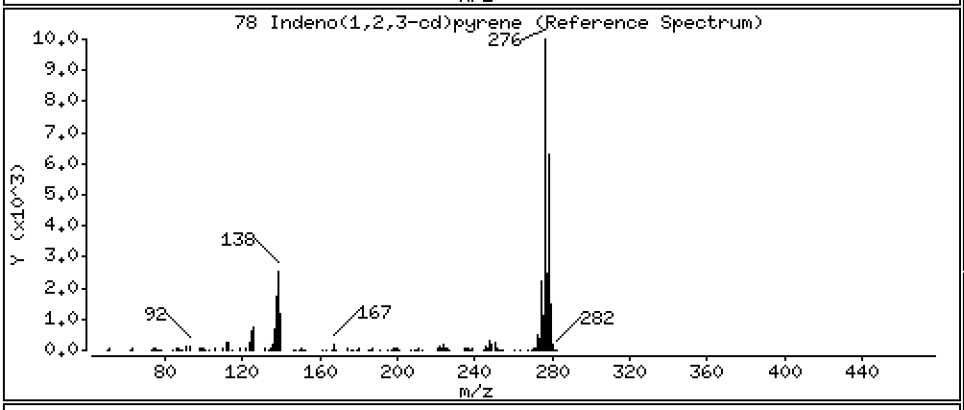
Column diameter: 0.25

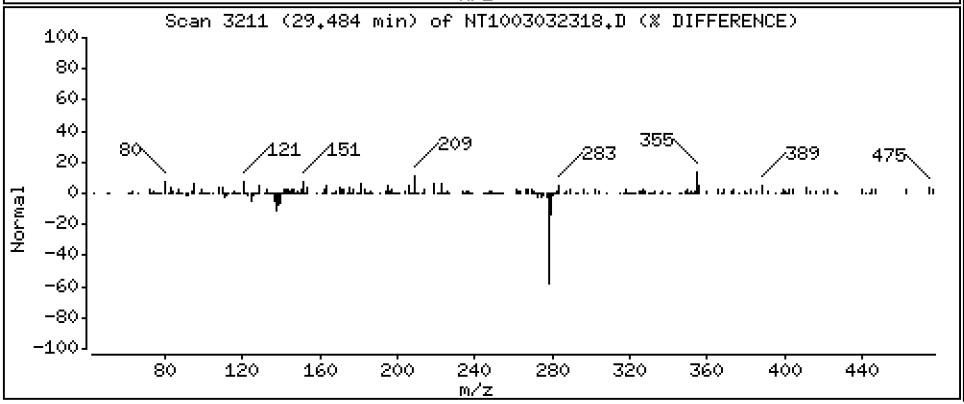
78 Indeno(1,2,3-cd)pyrene

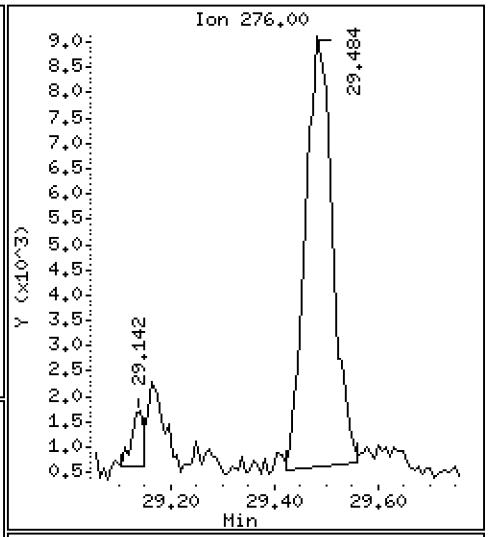
Concentration: 0.06410 ug/ml

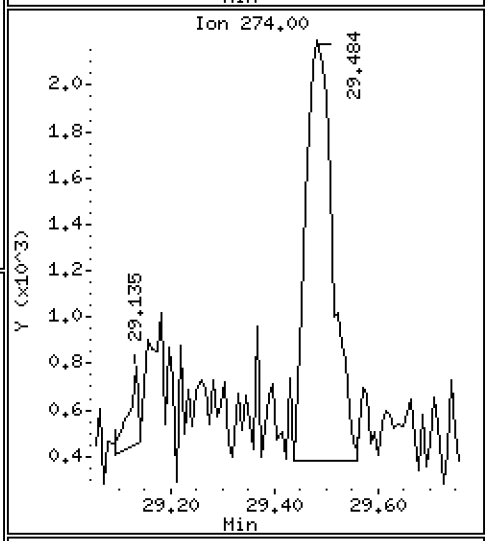


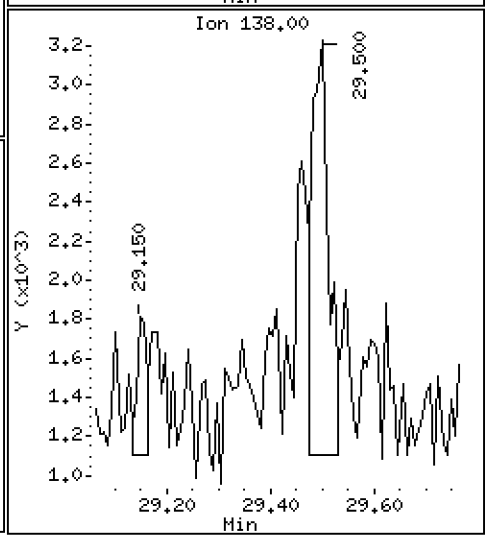












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

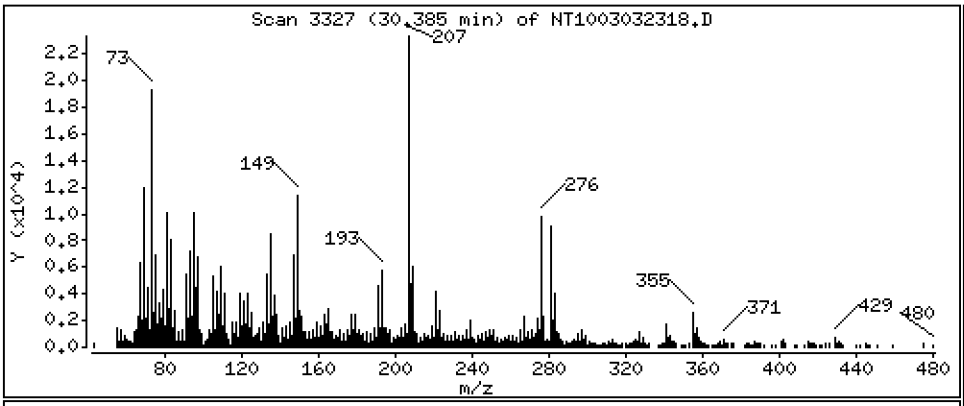
Operator: VTS

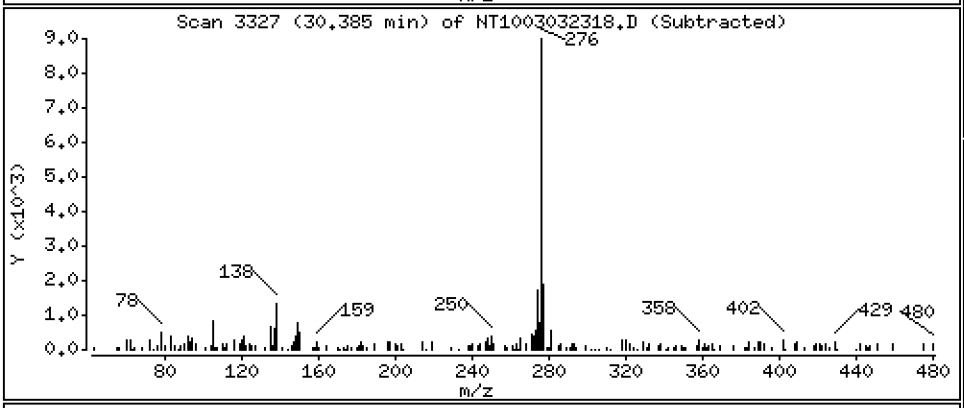
Column phase: ZB-5msi

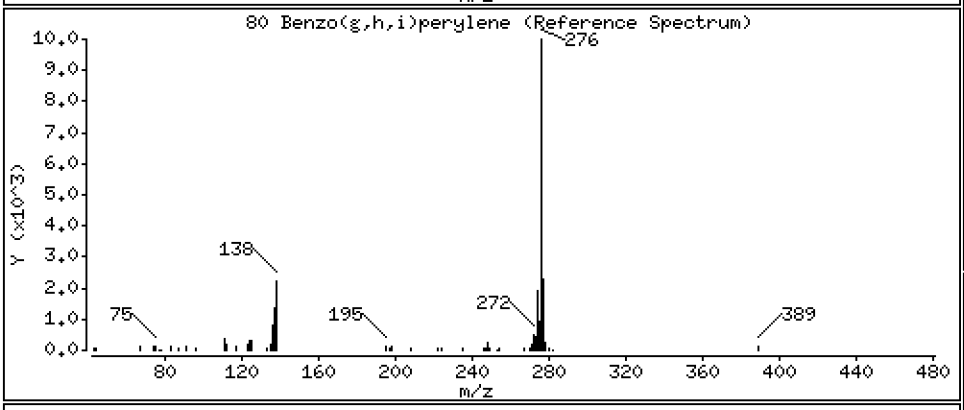
Column diameter: 0.25

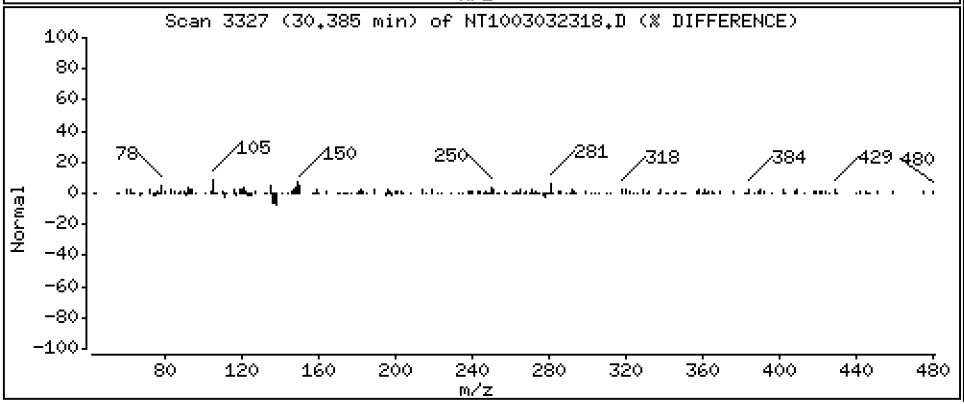
80 Benzo(g,h,i)perylene

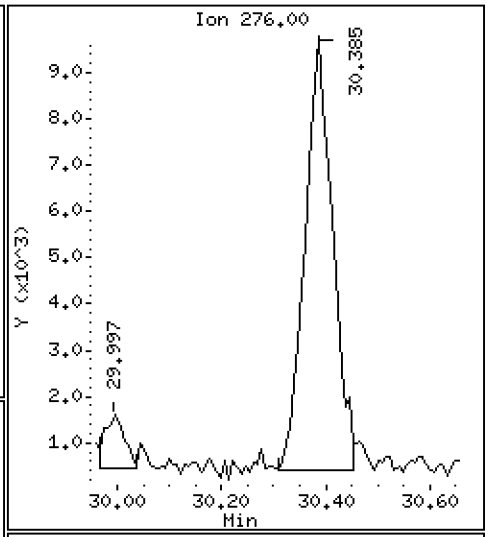
Concentration: 0.08989 ug/ml

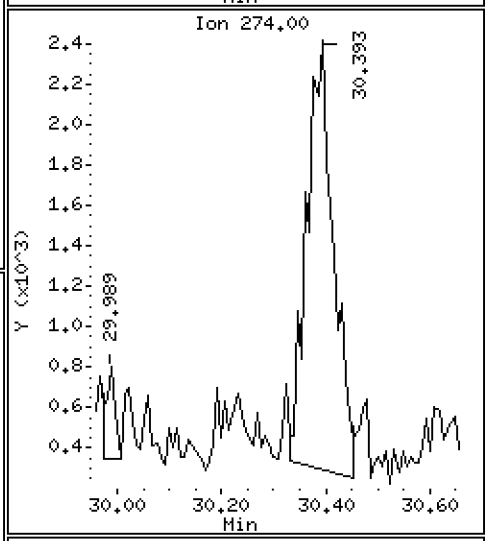


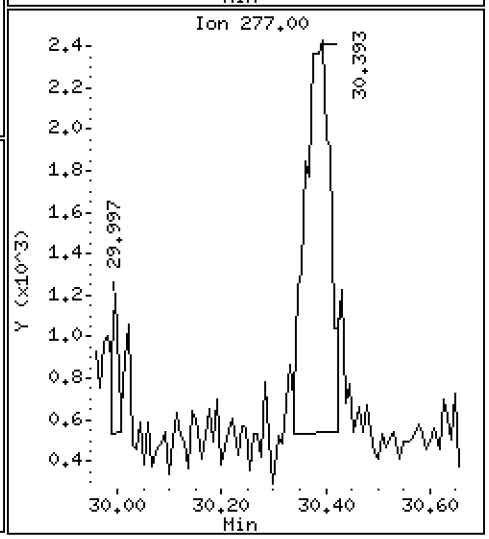












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

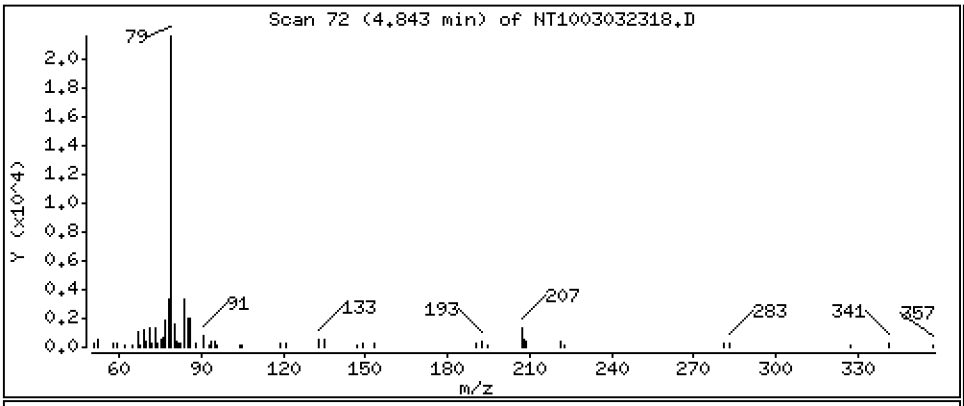
Operator: VTS

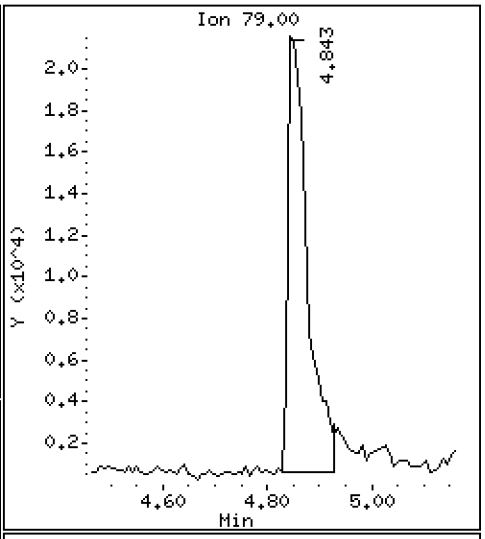
Column phase: ZB-5msi

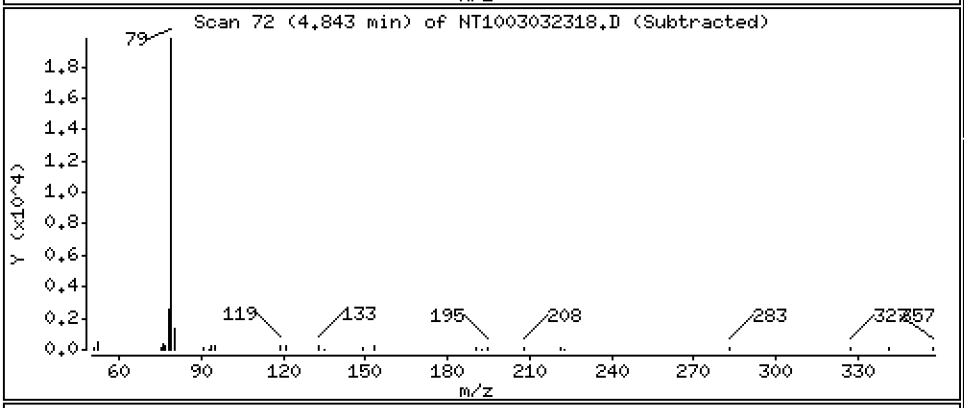
Column diameter: 0.25

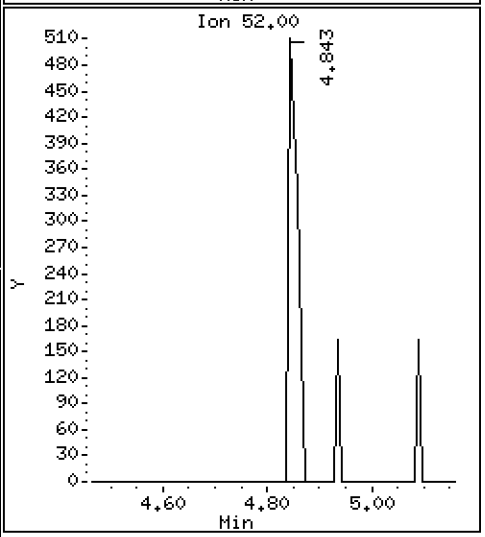
103 Pyridine

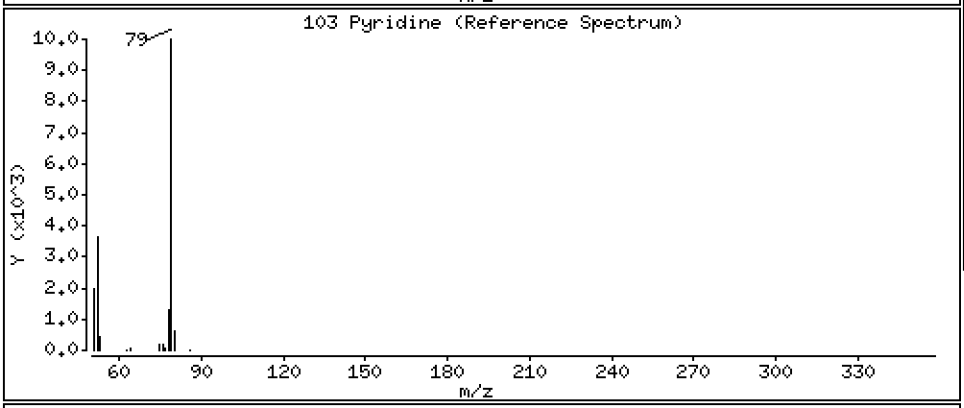
Concentration: 0.3681 ug/ml

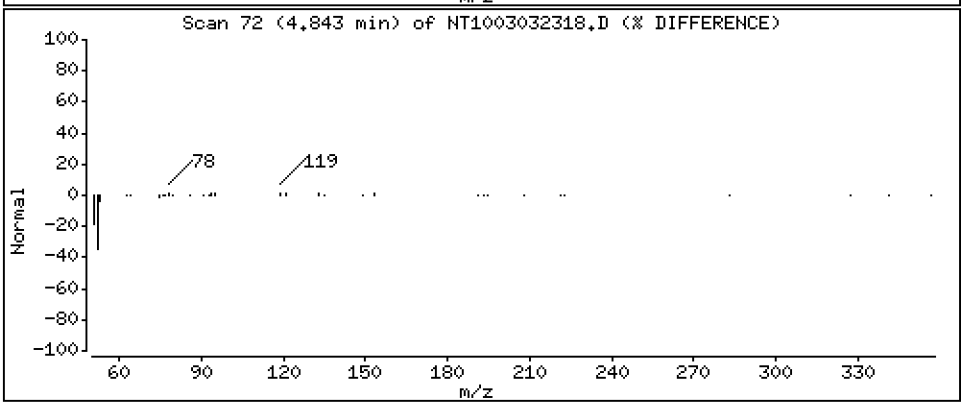












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032318.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

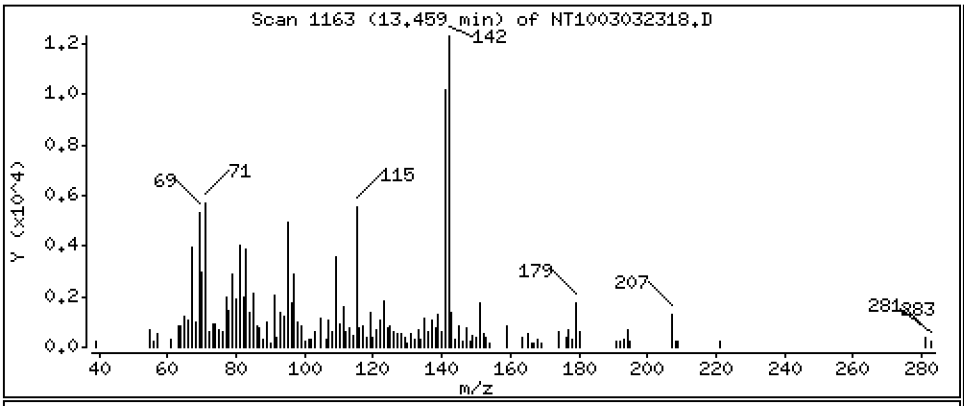
Operator: VTS

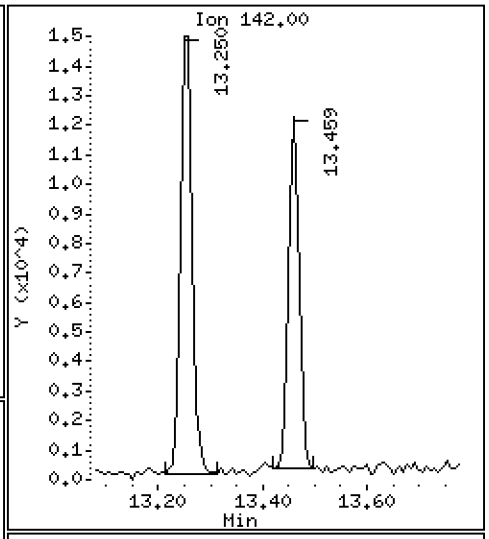
Column phase: ZB-5msi

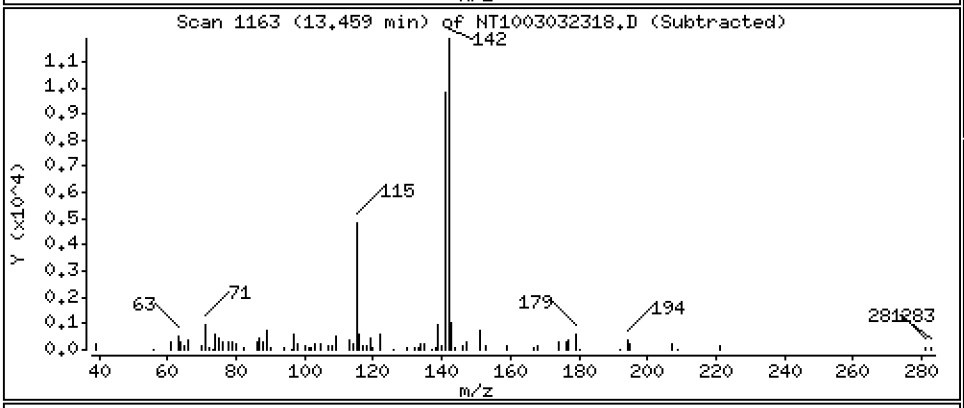
Column diameter: 0.25

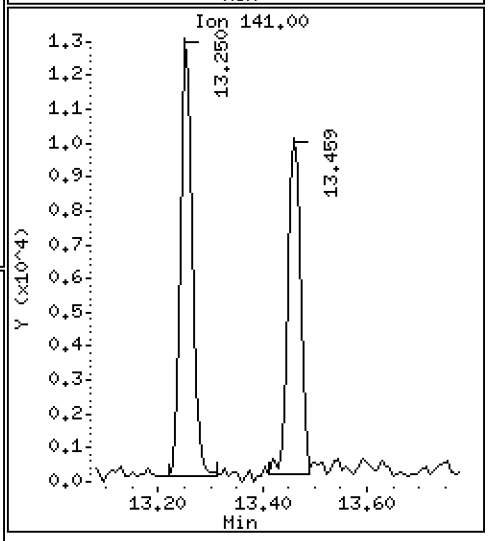
105 1-methylnaphthalene

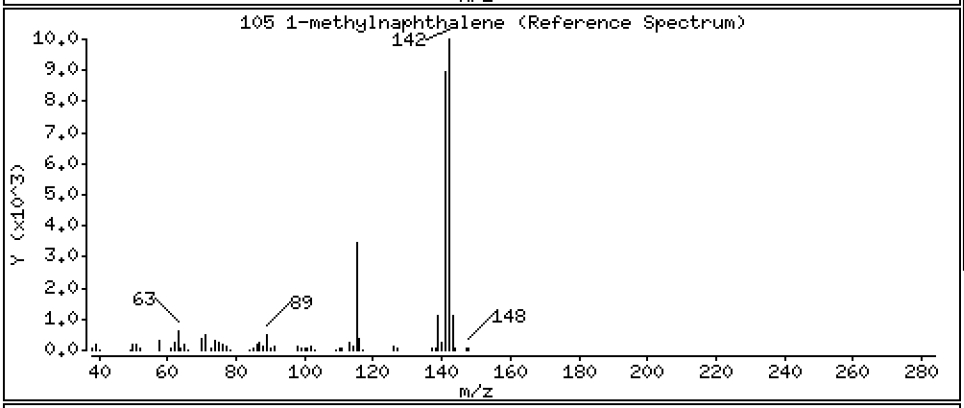
Concentration: 0.08064 ug/ml

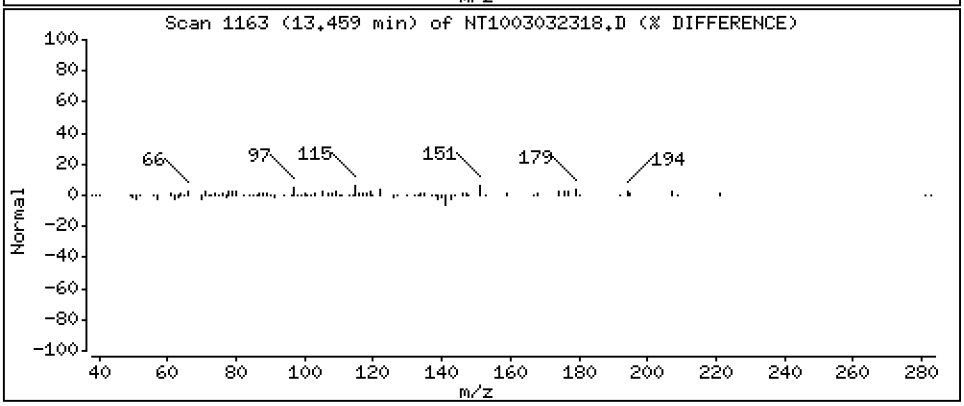












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032318.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

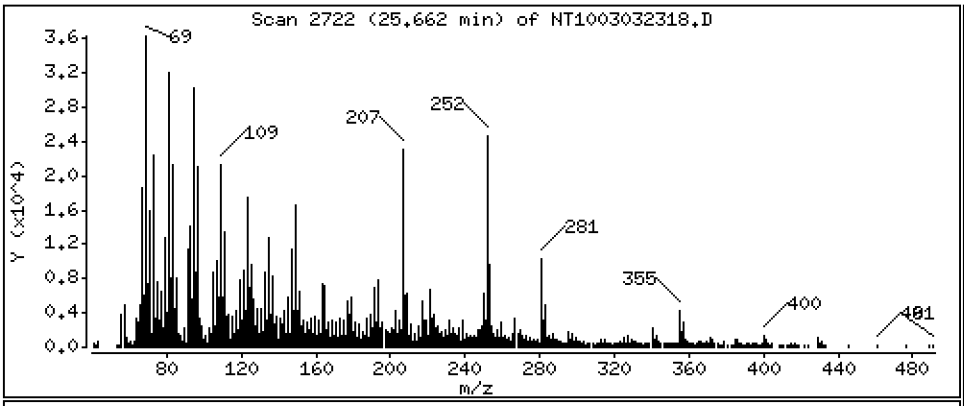
Operator: VTS

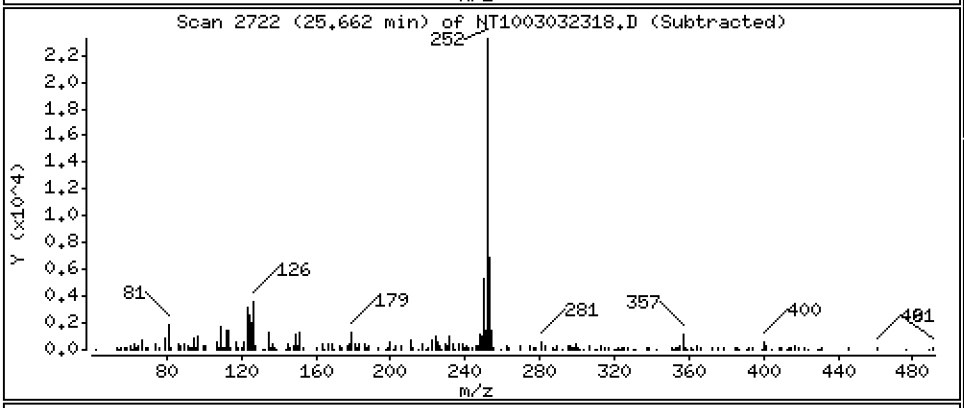
Column phase: ZB-5msi

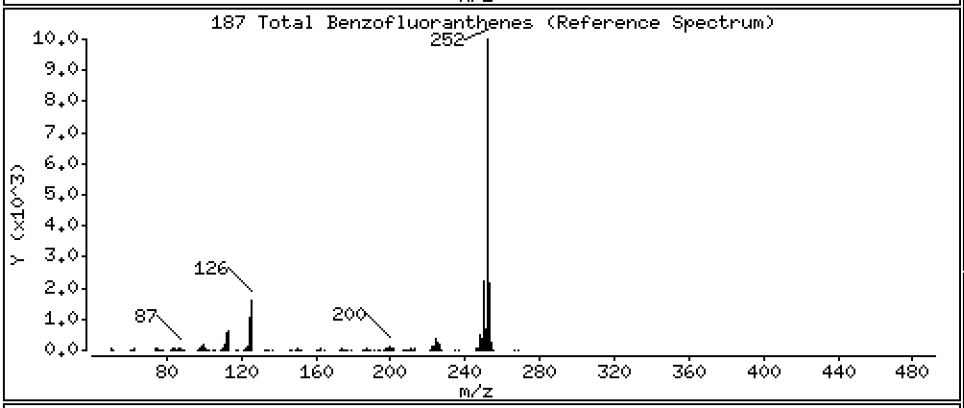
Column diameter: 0.25

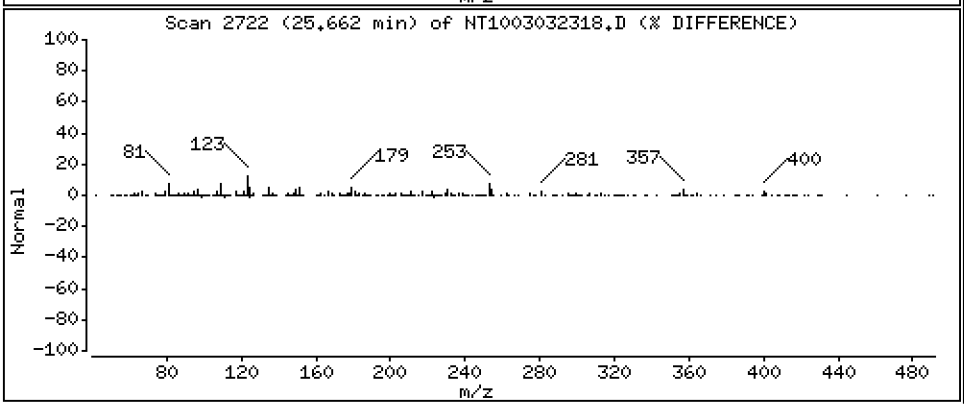
187 Total Benzofluoranthenes

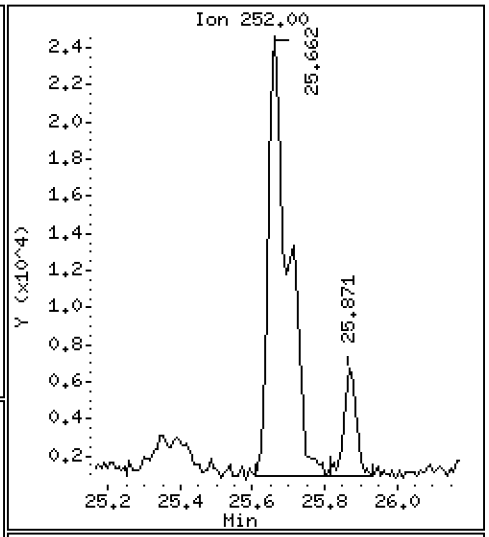
Concentration: 0.2031 ug/ml

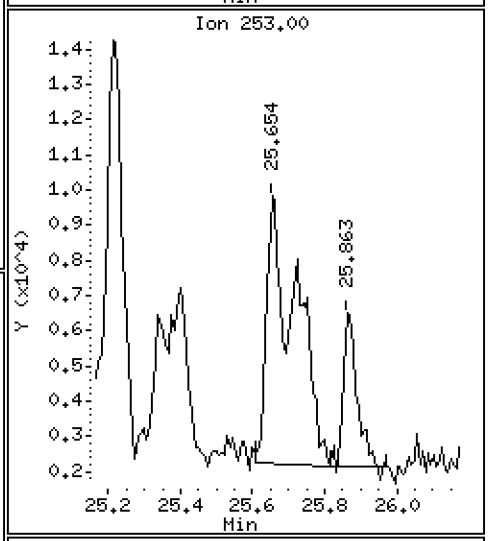


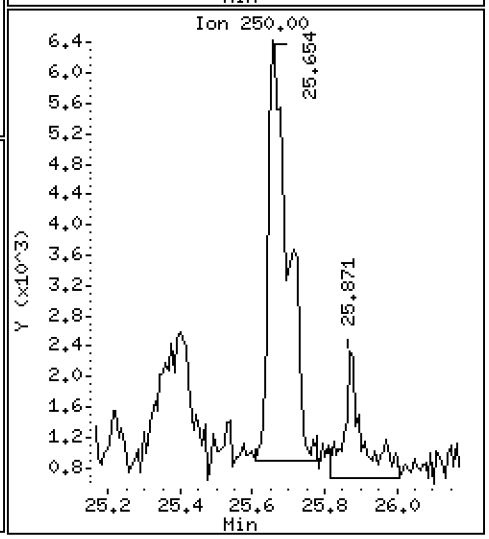












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230303A.b\NT1003032318.D
Lab Smp Id: 23A0249-02
Inj Date : 04-MAR-2023 04:34
Operator : VTS Inst ID: nt10.i
Smp Info : 23A0249-02
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Meth Date : 26-Apr-2023 10:41 van Quant Type: ISTD
Cal Date : 01-MAR-2023 18:37 Cal File: NT1003012306.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/ml)
$	1 2-Fluorophenol	112	6.928	6.920	(0.745)	677102	5.04322	5.043
$	2 Phenol-d5	99	8.543	8.535	(0.919)	890262	5.71141	5.711
	3 Phenol	94	8.566	8.558	(0.922)	14632	0.08829	0.08829
$	5 2-Chlorophenol-d4	132	8.859	8.852	(0.953)	742900	5.58622	5.586
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	9.293	9.278	(1.000)	426726	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.580	9.572	(1.031)	324127	3.26220	3.262
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	9.541	9.518	(1.027)	7327	0.08625	0.08625
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	10.015	9.992	(1.078)	14141	0.08781	0.08781
$	18 Nitrobenzene-d5	82	10.356	10.341	(0.878)	595833	4.00247	4.002
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	11.077	11.052	(0.939)	4397	0.03294	0.03294
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.795	11.772	(1.000)	1356145	4.00000	
	28 Naphthalene	128	11.842	11.819	(1.004)	29386	0.08442	0.08442
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	13.250	13.227	(1.123)	24233	0.09855	0.09855
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	14.008	13.978	(0.908)	1070485	4.23796	4.238
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	15.432	15.401	(1.000)	708178	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.502	15.471	(1.004)	11271	0.05467	0.05467
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	15.865	15.834	(1.028)	21595	0.07057	0.07057
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	16.337	16.306	(1.059)	35049	0.14466	0.1447
	49 Fluorene	166	16.584	16.554	(1.075)	21674	0.08513	0.08513
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	17.094	17.063	(1.108)	240751	5.33525	5.335
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.571	18.533	(1.000)	1225429	4.00000	
	60 Phenanthrene	178	18.618	18.587	(1.002)	86958	0.27728	0.2773
	61 Anthracene	178	18.734	18.695	(1.009)	24291	0.07988	0.07988
	62 Carbazole	167	19.066	19.035	(1.027)	7736	0.02777	0.02777
	63 Di-n-butylphthalate	149	19.778	19.739	(1.065)	32605	0.08629	0.08629
	64 Fluoranthene	202	21.039	20.985	(0.889)	115443	0.31251	0.3125
	65 Pyrene	202	21.465	21.426	(0.907)	136629	0.36323	0.3632
$	66 Terphenyl-d14	244	21.743	21.705	(0.919)	1474207	4.84363	4.844
	67 Butylbenzylphthalate	149	Compound Not Detected.					
	68 Benzo(a)anthracene	228	23.648	23.617	(0.999)	51079	0.13490	0.1349
*	69 Chrysene-d12	240	23.664	23.633	(1.000)	1073830	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.710	23.679	(1.002)	51477	0.16789	0.1679
	72 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
*	134 Di-n-octylphthalate-d4	153	24.786	24.748	(1.000)	1986957	4.00000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	Compound Not Detected.					
	75 Benzo(k)fluoranthene	252	Compound Not Detected.					
	76 Benzo(a)pyrene	252	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
* 77	Perylene-d12	264	26.521	26.459	(1.000)	1349748	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.484	29.406	(1.112)	30809	0.06410	0.06410
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	30.385	30.307	(1.146)	34440	0.08989	0.08989
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	4.843	4.812	(0.521)	56583	0.36811	0.3681
105	1-methylnaphthalene	142	13.459	13.428	(1.141)	17947	0.08064	0.08064
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
187	Total Benzofluoranthenes	252	25.661	25.669	(0.968)	89729	0.20308	0.2031
120	2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032318.D
Lab Smp Id: 23A0249-02
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:02
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	514090	257045	1028180	426726	-16.99
27 Naphthalene-d8	1833847	916924	3667694	1356145	-26.05
42 Acenaphthene-d10	935282	467641	1870564	708178	-24.28
59 Phenanthrene-d10	1597882	798941	3195764	1225429	-23.31
69 Chrysene-d12	1549718	774859	3099436	1073830	-30.71
134 Di-n-octylphthala	2731644	1365822	5463288	1986957	-27.26
77 Perylene-d12	1727703	863852	3455406	1349748	-21.88

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.29	0.17
27 Naphthalene-d8	11.77	11.27	12.27	11.80	0.20
42 Acenaphthene-d10	15.40	14.90	15.90	15.43	0.20
59 Phenanthrene-d10	18.53	18.03	19.03	18.57	0.21
69 Chrysene-d12	23.63	23.13	24.13	23.66	0.13
134 Di-n-octylphthala	24.75	24.25	25.25	24.79	0.16
77 Perylene-d12	26.46	25.96	26.96	26.52	0.23

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

REVIEW SUMMARY FOR FILE - NT1003032318.D

Lab ID: 23A0249-02
nt10.i, 20230303A.b\ABN.m,   04-MAR-2023 04:34

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1003032314ICV.D

On Column LOD for nt10.i, 20230303A.b\ABN.m, ICAL.sub = 0.0000

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

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1018

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-03 A	SDG:	23A0249
Sampled:	01/12/23 10:21	Prepared:	01/30/23 14:02	File ID:	NT1003032319.D
% Solids:	49.91	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 05:12
Batch:	BLA0673	Sequence:	SLC0162	Initial/Final:	20.63 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00019
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	199		4.3	19.4
106-44-5	4-Methylphenol	1	19.4	U	7.2	19.4
91-20-3	Naphthalene	1	5.6	J	4.1	19.4
91-57-6	2-Methylnaphthalene	1	19.4	U	4.4	19.4
208-96-8	Acenaphthylene	1	19.4	U	6.1	19.4
131-11-3	Dimethylphthalate	1	19.4	U	4.3	19.4
83-32-9	Acenaphthene	1	19.4	U	5.1	19.4
132-64-9	Dibenzofuran	1	19.4	U	13.7	19.4
86-73-7	Fluorene	1	19.4	U	14.2	19.4
85-01-8	Phenanthrene	1	23.8		8.5	19.4
120-12-7	Anthracene	1	11.4	J	7.0	19.4
206-44-0	Fluoranthene	1	54.1		5.9	19.4
129-00-0	Pyrene	1	67.6		5.5	19.4
85-68-7	Butylbenzylphthalate	1	19.4	U	9.1	19.4
56-55-3	Benzo(a)anthracene	1	33.6		5.8	19.4
218-01-9	Chrysene	1	54.3		5.9	19.4
117-81-7	bis(2-Ethylhexyl)phthalate	1	33.7	J	5.3	48.6
	Benzofluoranthenes, Total	1	73.6		9.7	38.8
50-32-8	Benzo(a)pyrene	1	33.5		4.1	19.4
193-39-5	Indeno(1,2,3-cd)pyrene	1	20.1		14.2	19.4
53-70-3	Dibenzo(a,h)anthracene	1	19.4	U	16.7	19.4
191-24-2	Benzo(g,h,i)perylene	1	27.3		13.2	19.4

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	728.41	527	72.3	27 - 120	
Phenol-d5	728.41	595	81.6	29 - 120	
2-Chlorophenol-d4	728.41	589	80.8	31 - 120	
1,2-Dichlorobenzene-d4	485.61	340	70.1	32 - 120	
Nitrobenzene-d5	485.61	413	85.1	30 - 120	
2-Fluorobiphenyl	485.61	446	91.8	35 - 120	

LDW23-SC1018

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

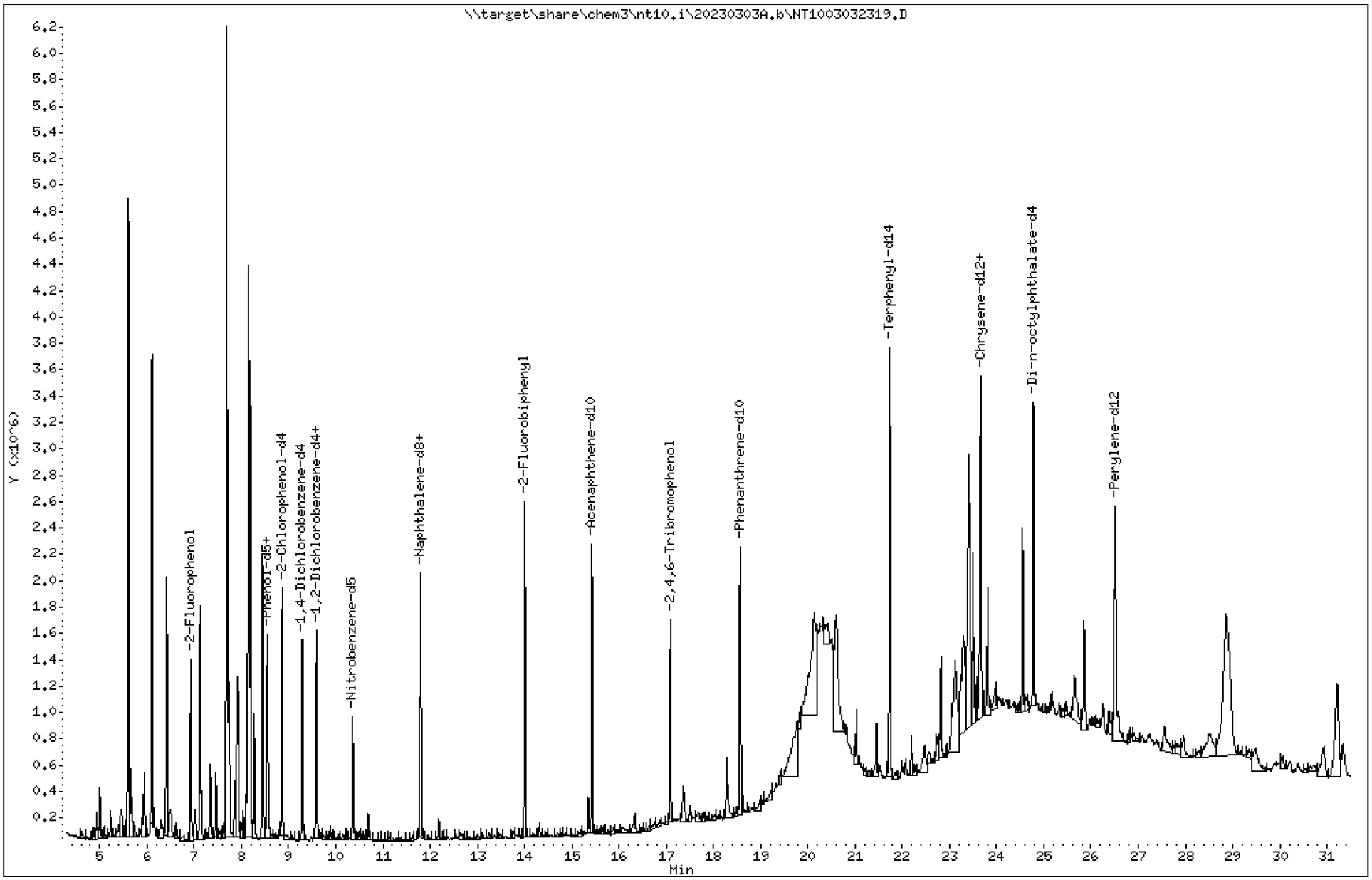
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-03 A	SDG:	23A0249
Sampled:	01/12/23 10:21	Prepared:	01/30/23 14:02	File ID:	NT1003032319.D
% Solids:	49.91	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 05:12
Batch:	BLA0673	Sequence:	SLC0162	Initial/Final:	20.63 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00019
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	728.41	536	73.6	24 - 134	
p-Terphenyl-d14	485.61	404	83.2	37 - 120	

Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032319.D
Date : 04-MAR-2023 05:12
Client ID:
Sample Info: 23A0249-03
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032319.D

Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

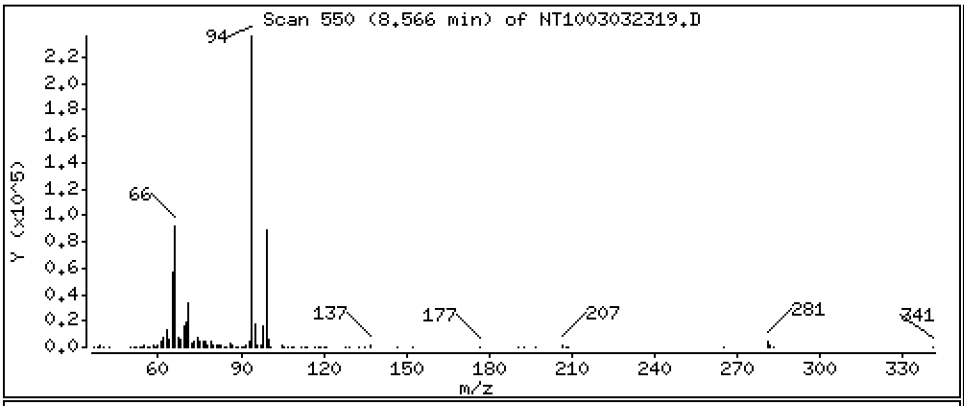
Operator: VTS

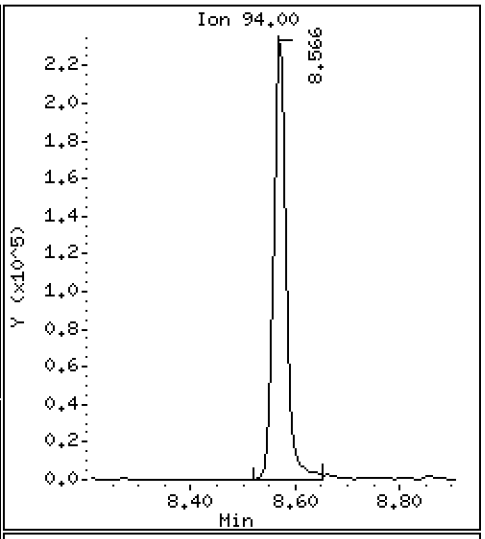
Column phase: ZB-5msi

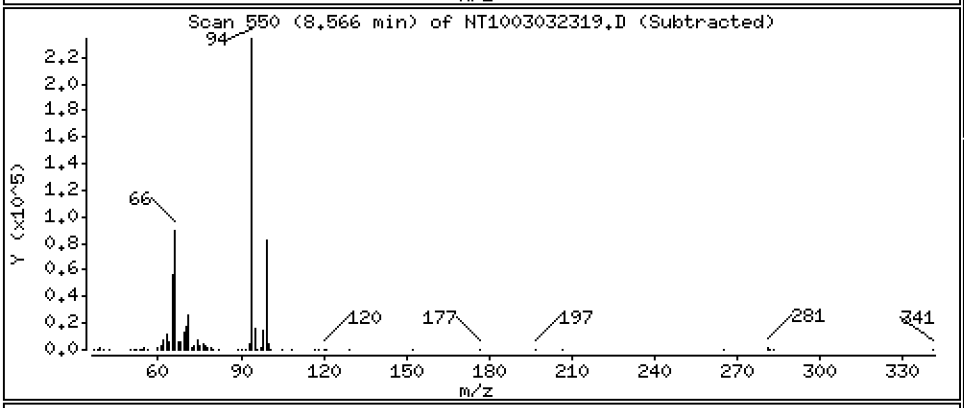
Column diameter: 0.25

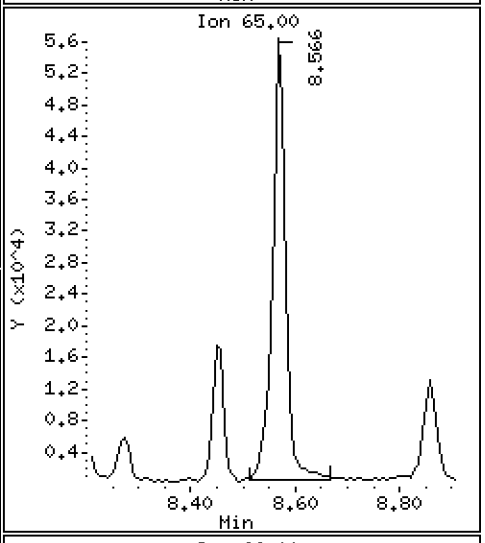
3 Phenol

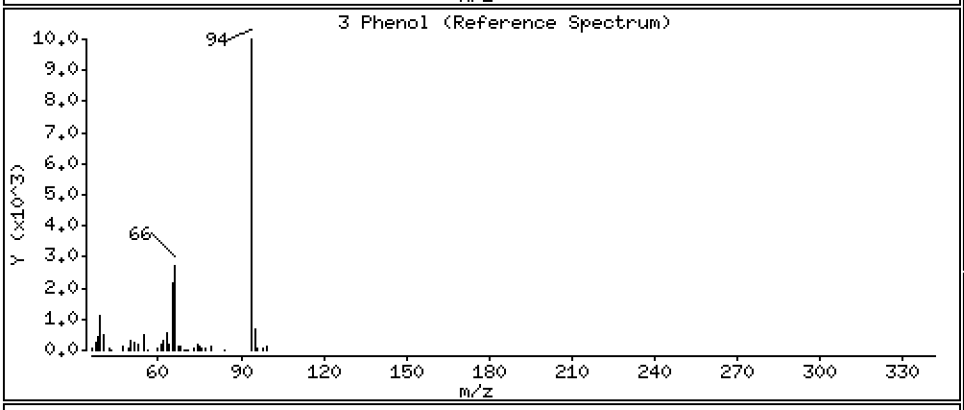
Concentration: 2.050 ug/ml

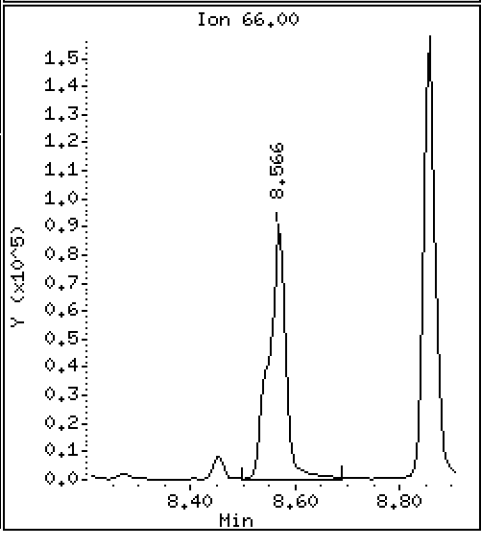


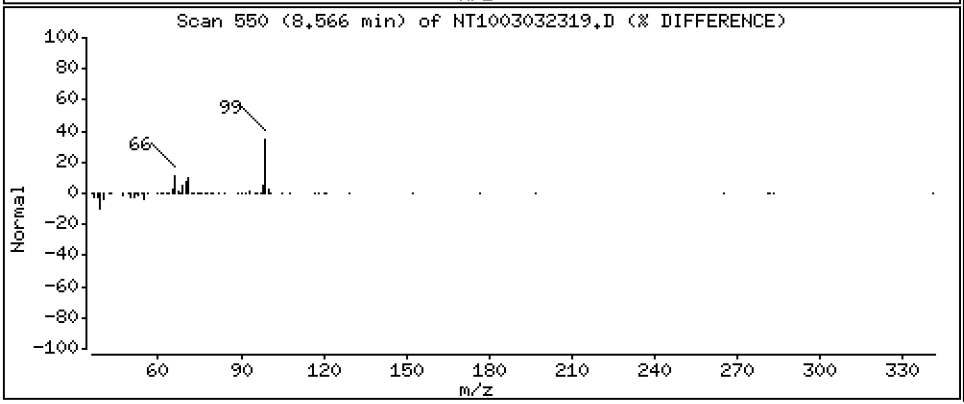












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

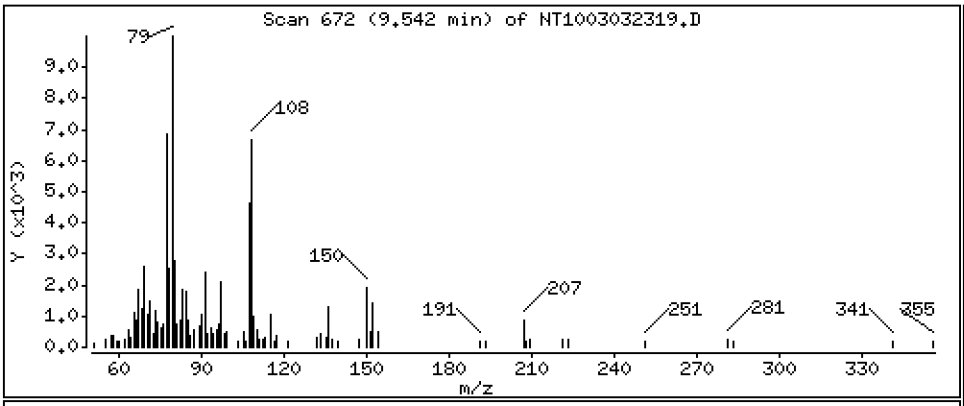
Operator: VTS

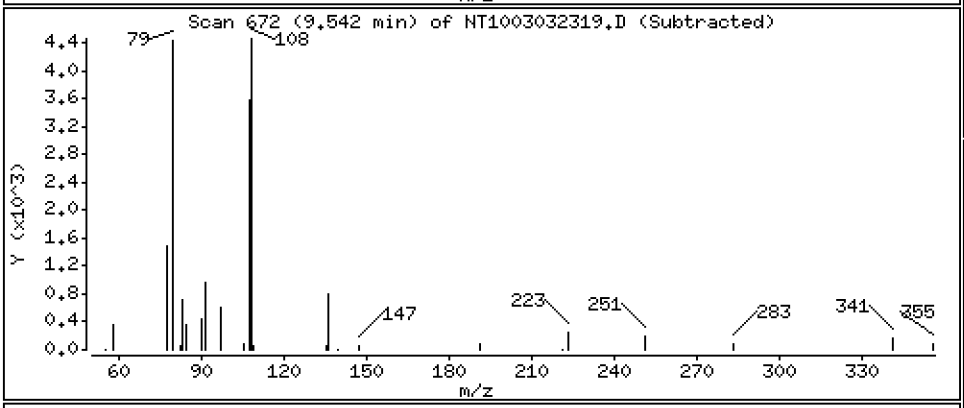
Column phase: ZB-5msi

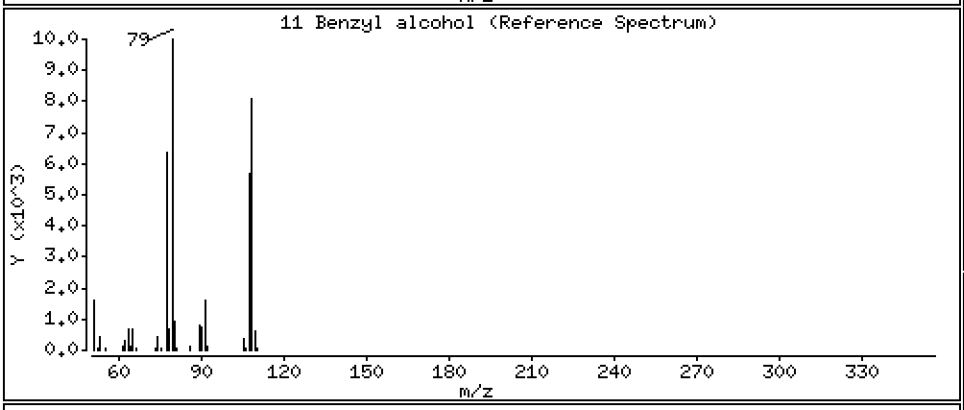
Column diameter: 0.25

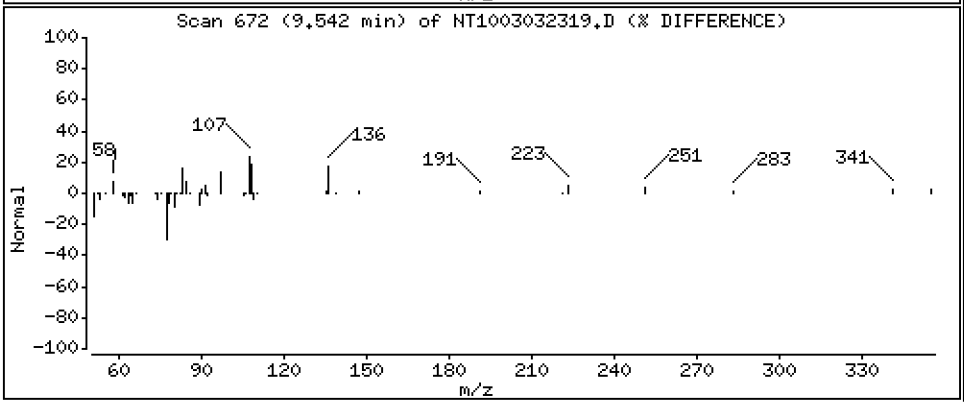
11 Benzyl alcohol

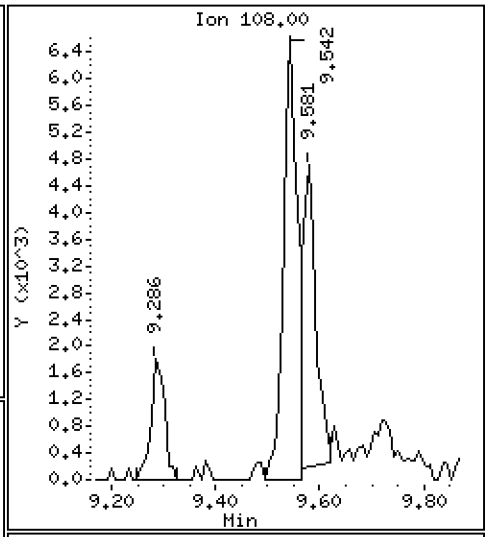
Concentration: 0.1325 ug/ml

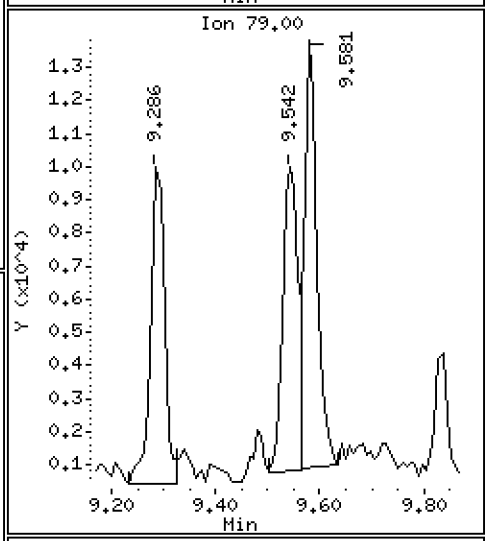


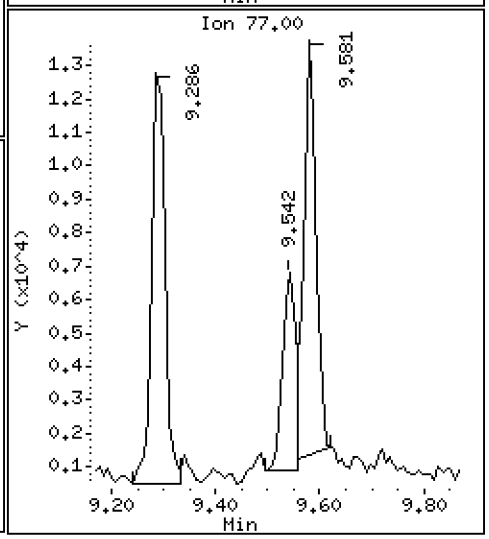












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

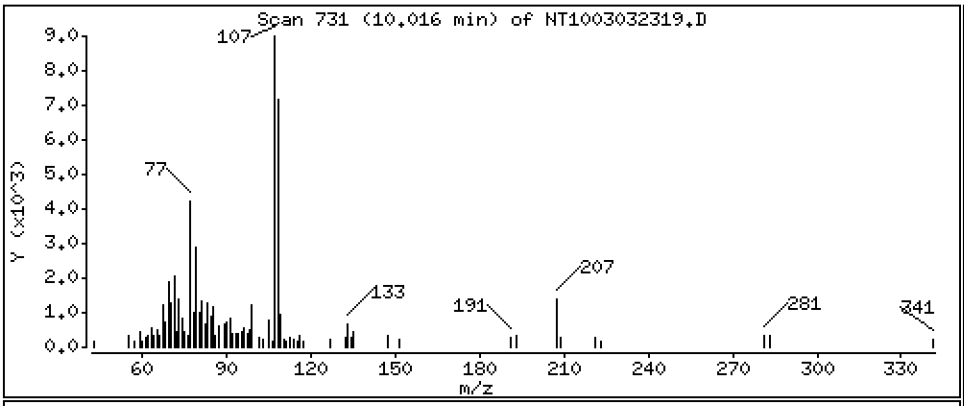
Operator: VTS

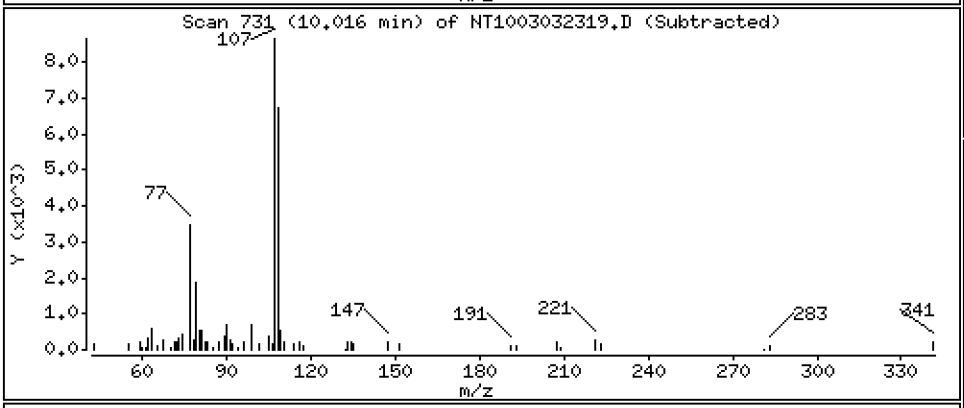
Column phase: ZB-5msi

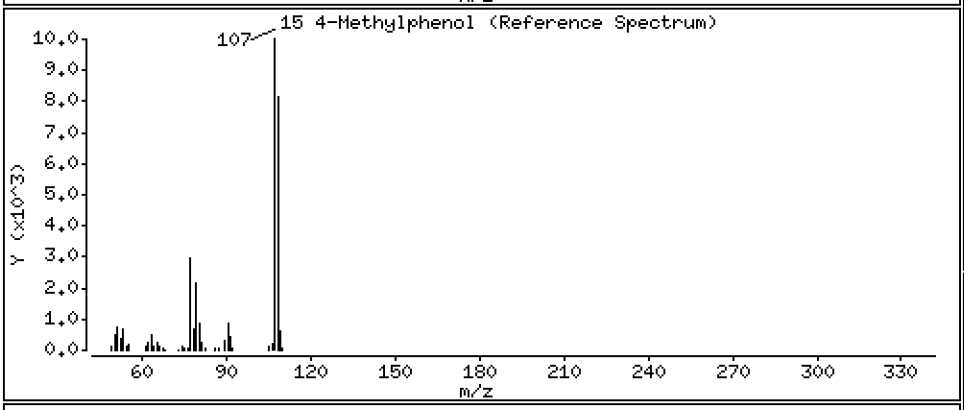
Column diameter: 0.25

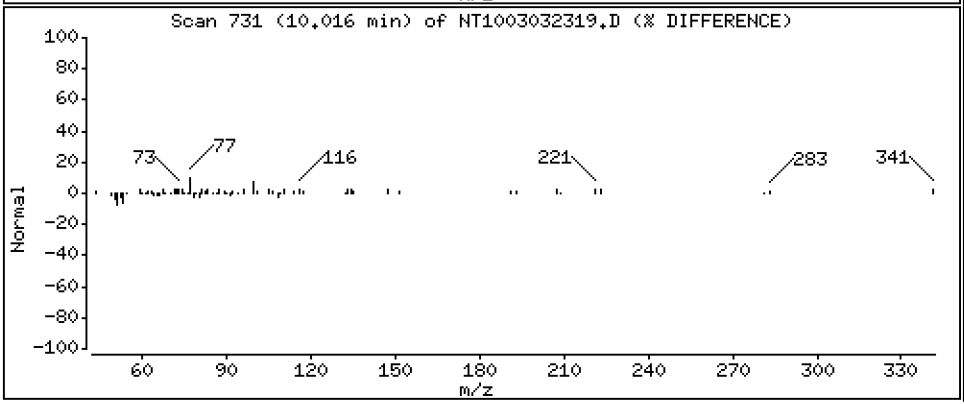
15 4-Methylphenol

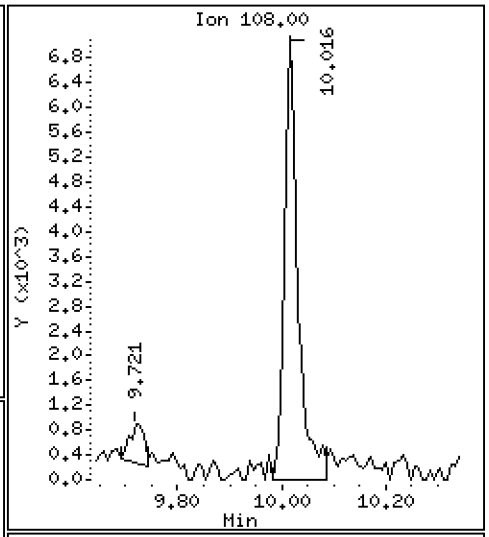
Concentration: 0.07161 ug/ml

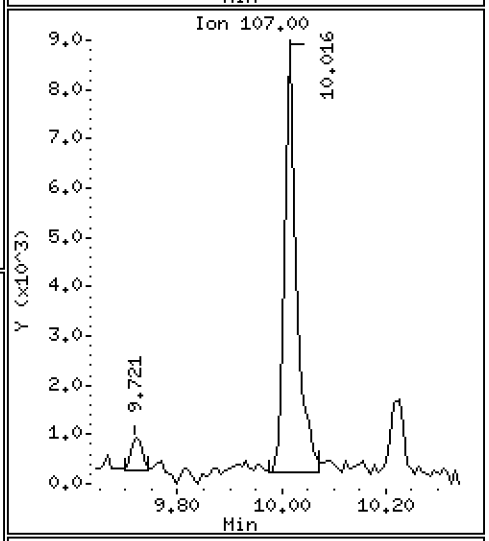


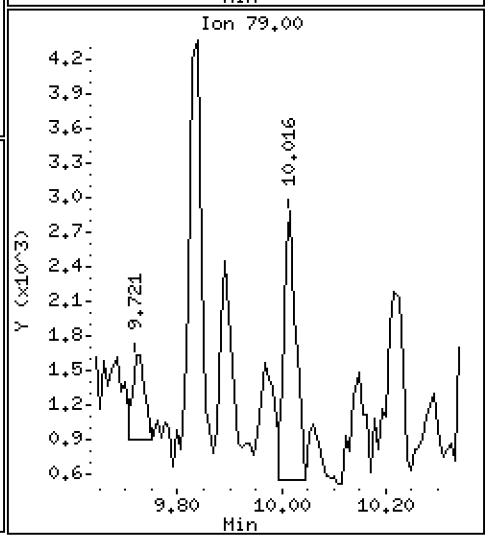












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

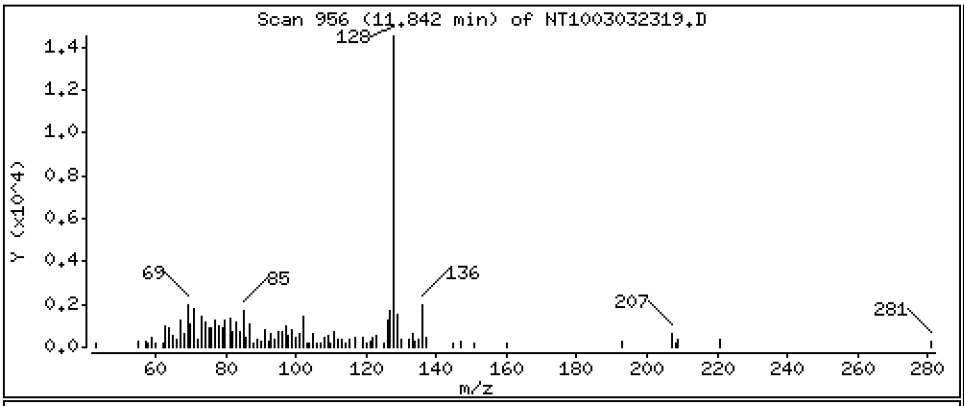
Operator: VTS

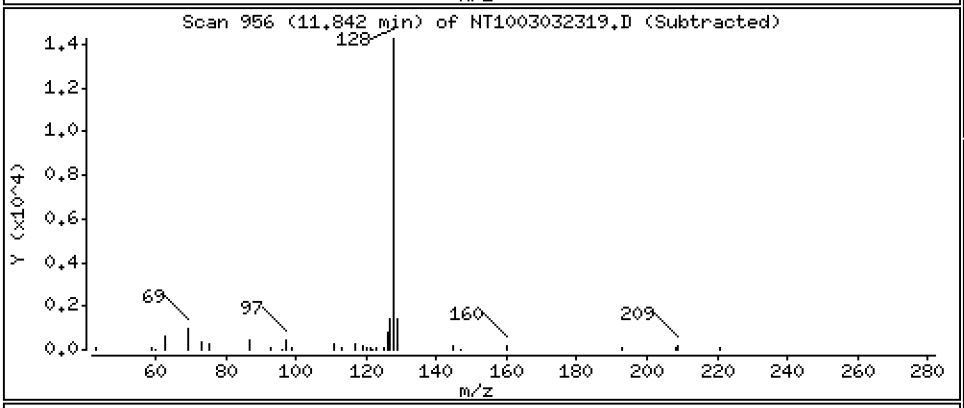
Column phase: ZB-5msi

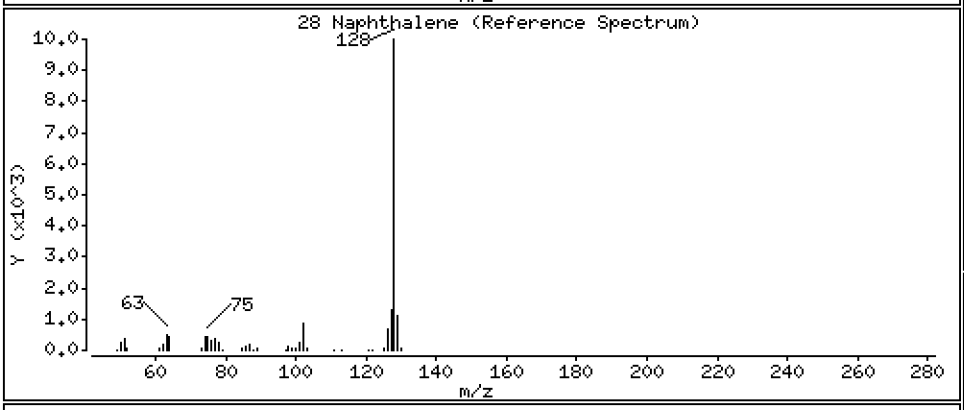
Column diameter: 0.25

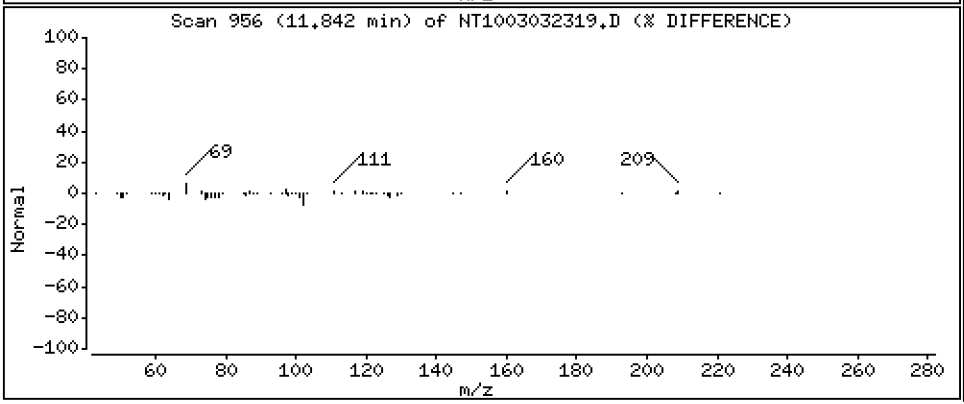
28 Naphthalene

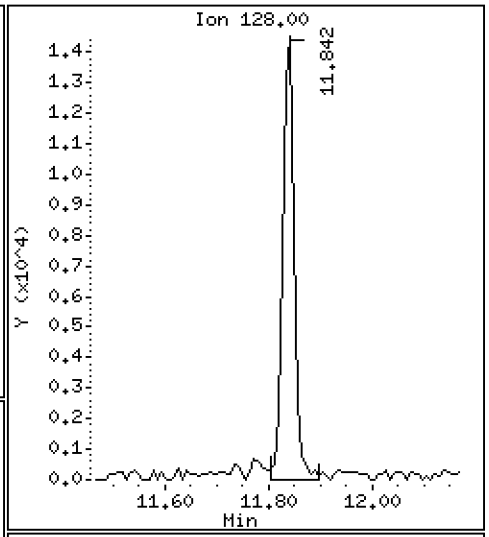
Concentration: 0.05734 ug/ml

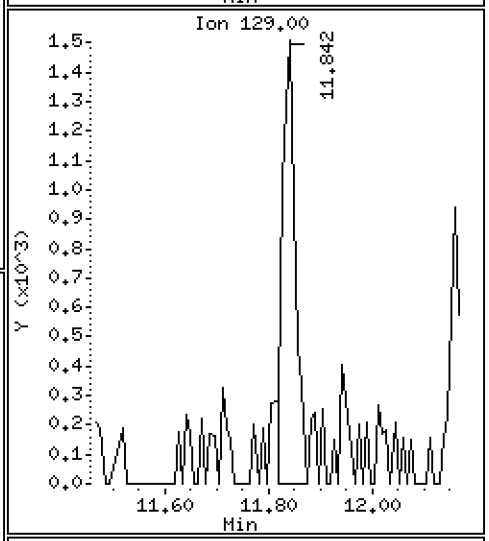


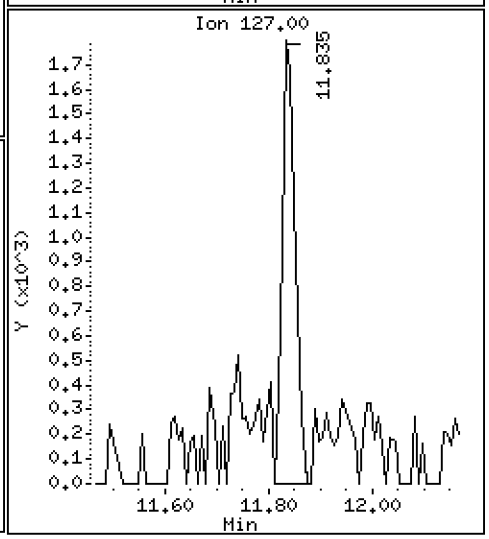












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

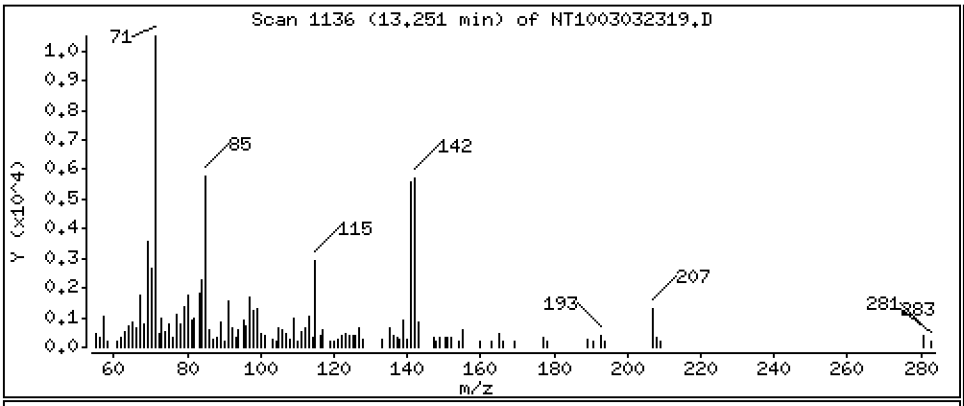
Operator: VTS

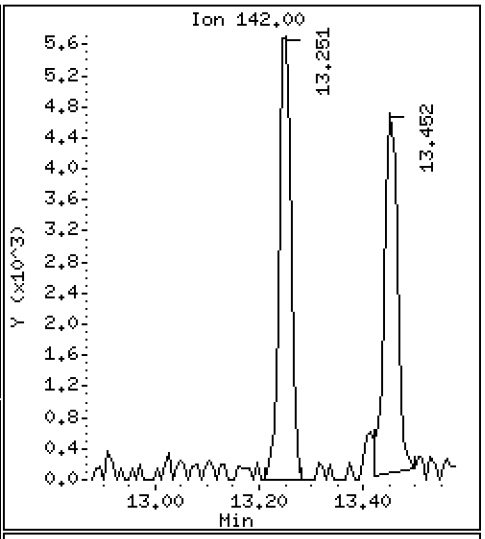
Column phase: ZB-5msi

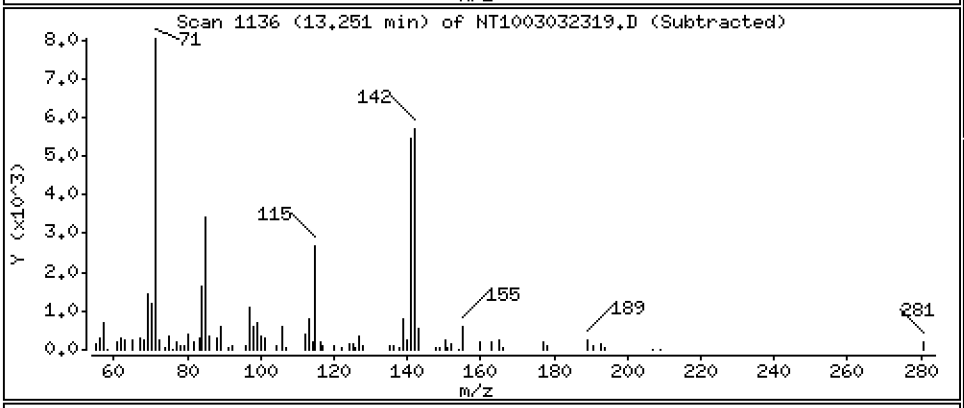
Column diameter: 0.25

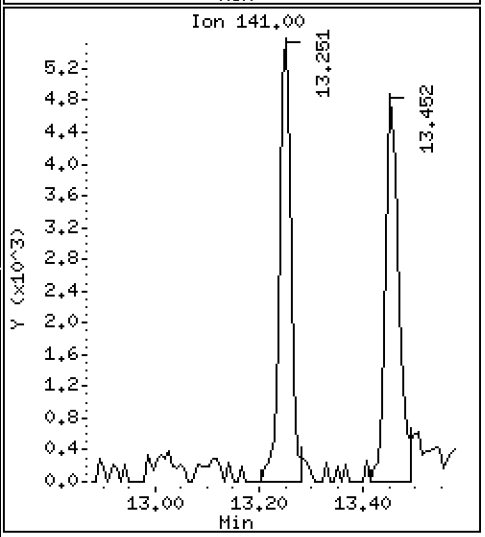
32 2-Methylnaphthalene

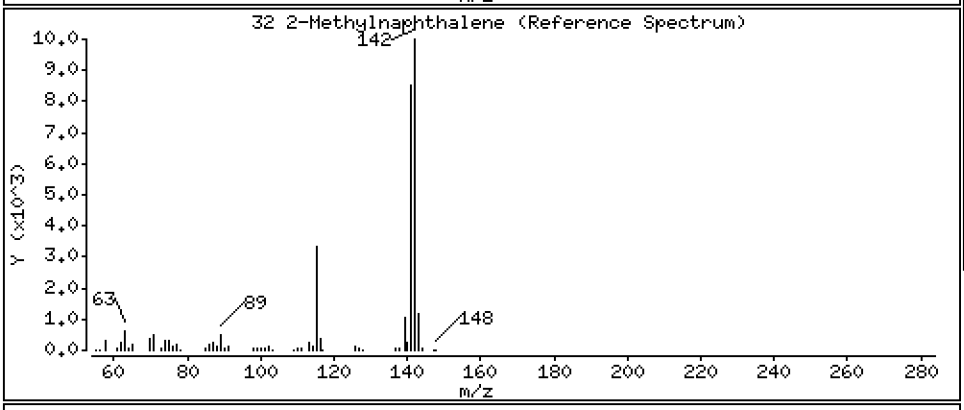
Concentration: 0.03300 ug/ml

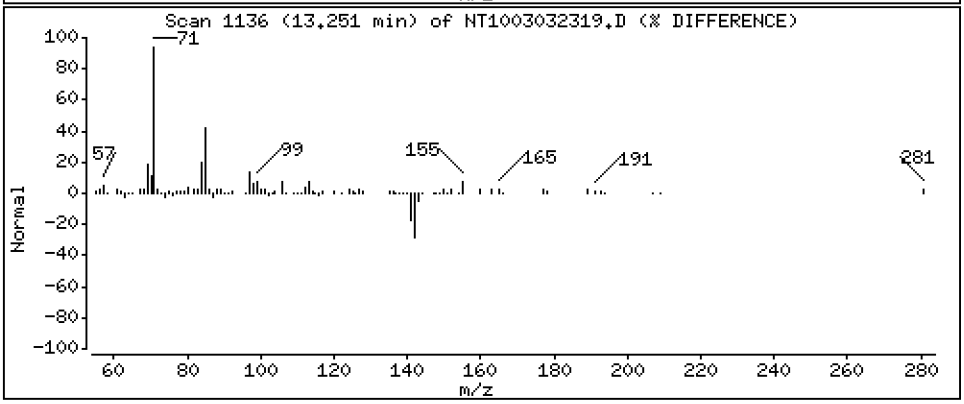












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

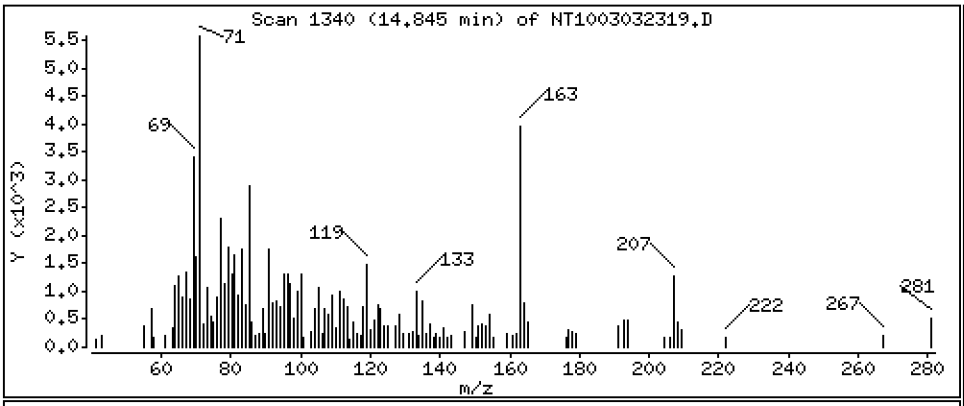
Operator: VTS

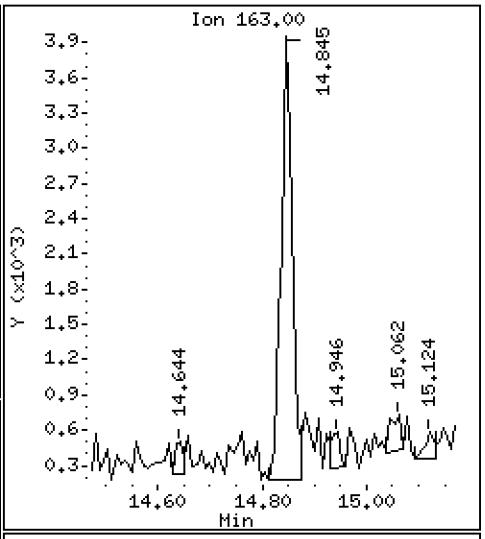
Column phase: ZB-5msi

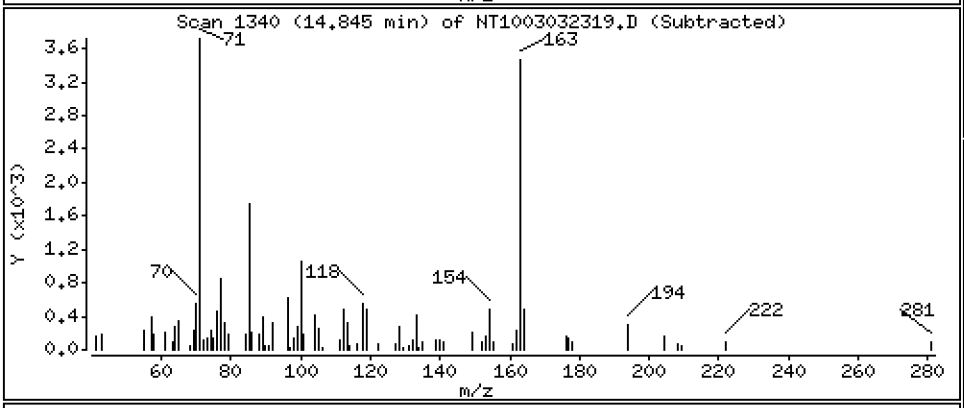
Column diameter: 0.25

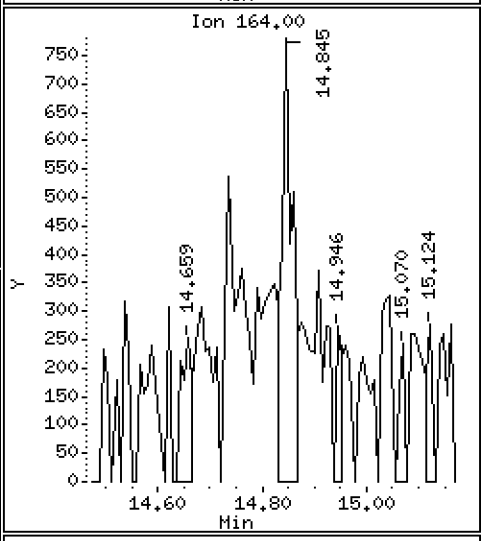
39 Dimethylphthalate

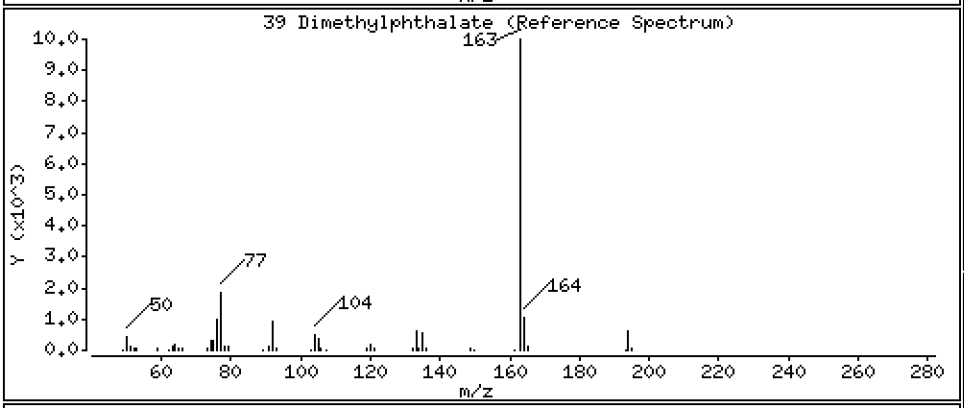
Concentration: 0.02199 ug/ml

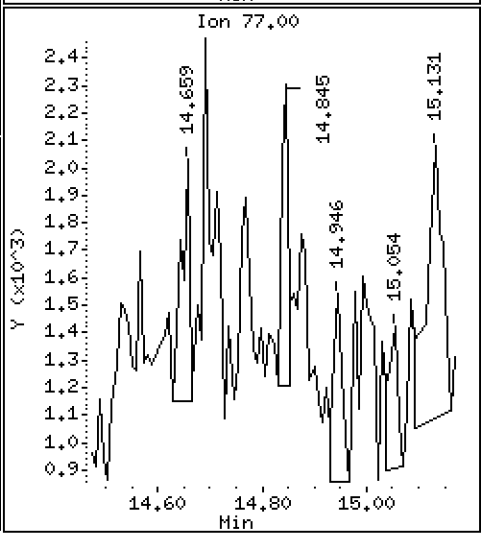


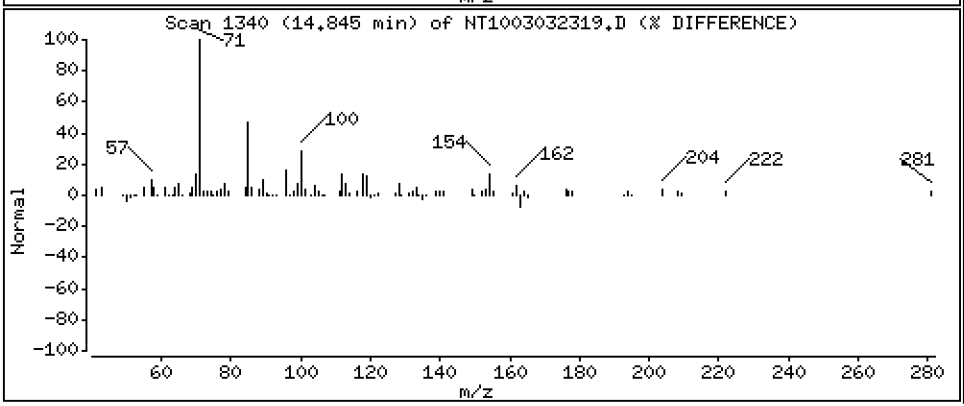












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

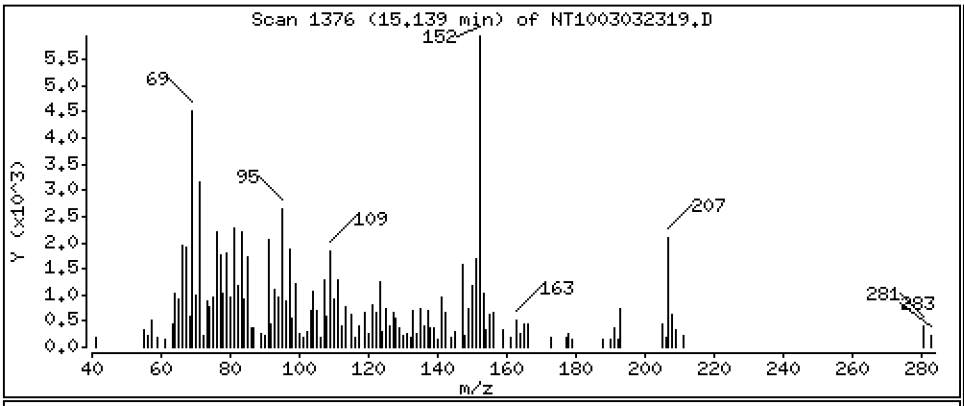
Operator: VTS

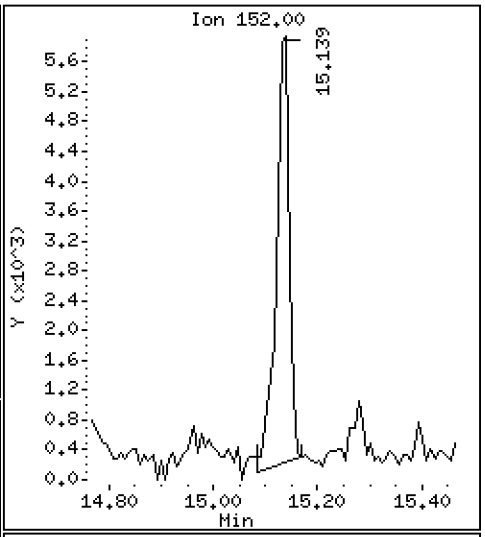
Column phase: ZB-5msi

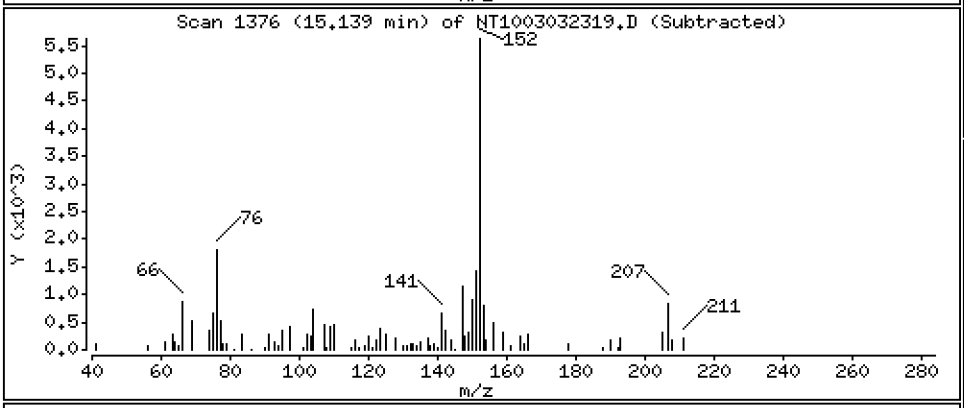
Column diameter: 0.25

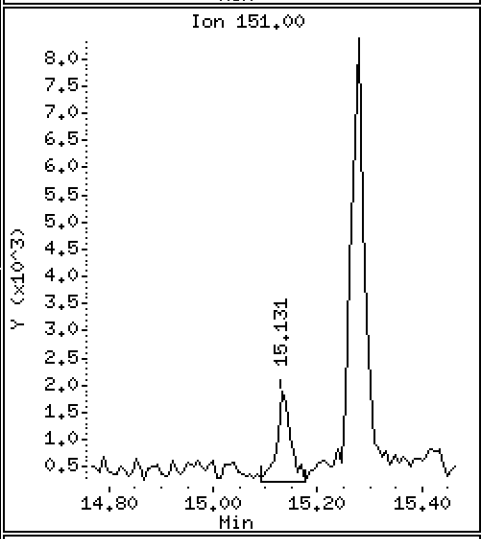
40 Acenaphthylene

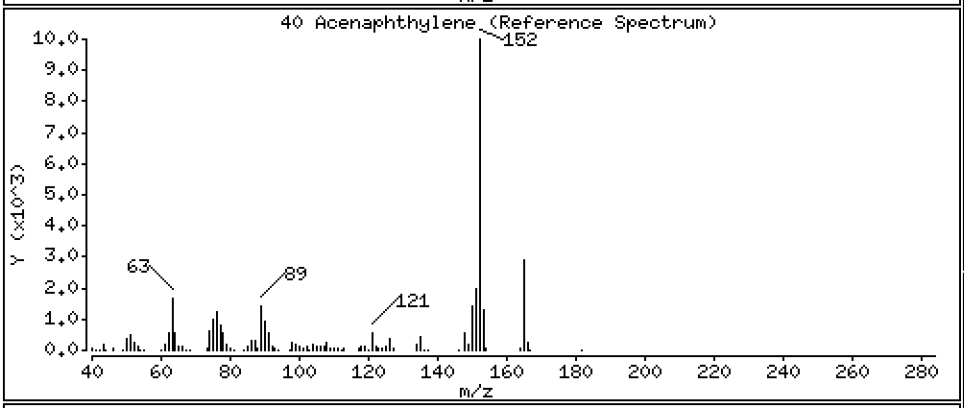
Concentration: 0.02935 ug/ml

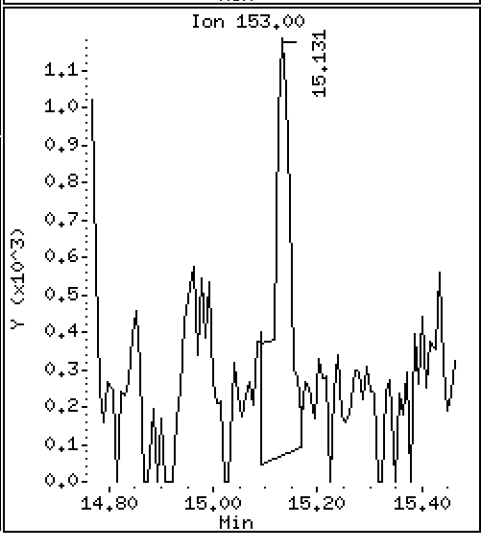


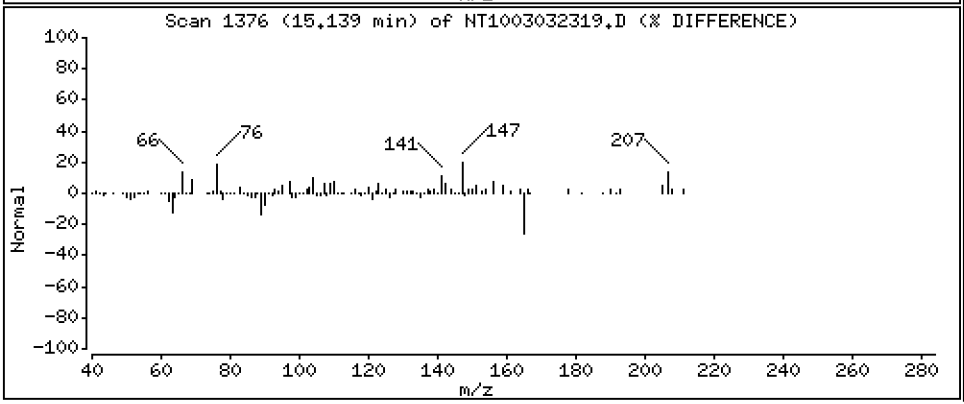












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

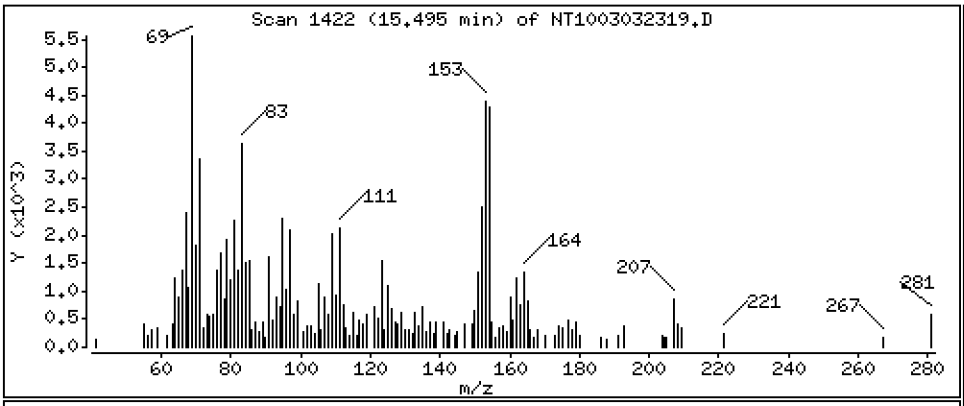
Operator: VTS

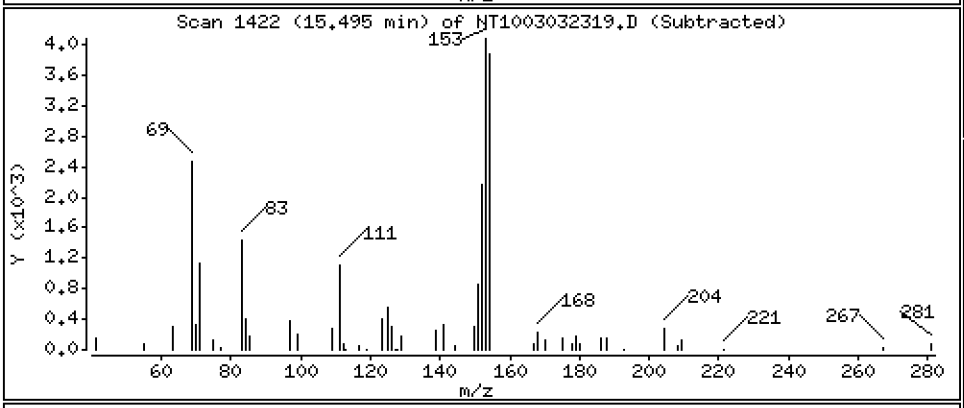
Column phase: ZB-5msi

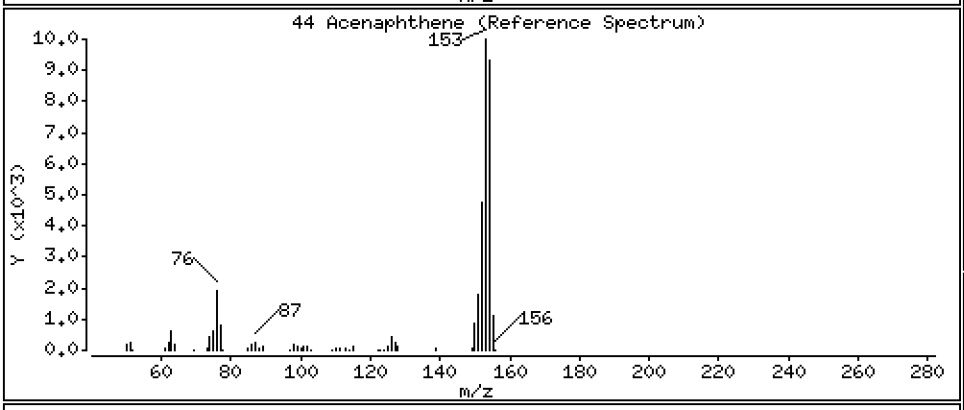
Column diameter: 0.25

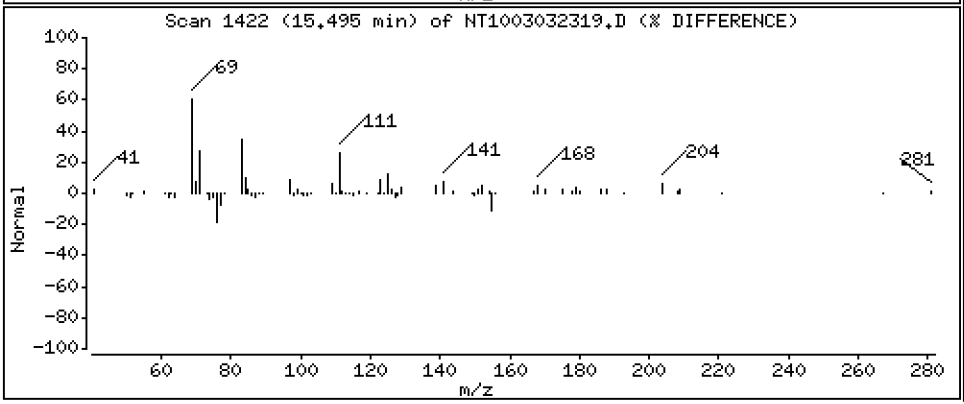
44 Acenaphthene

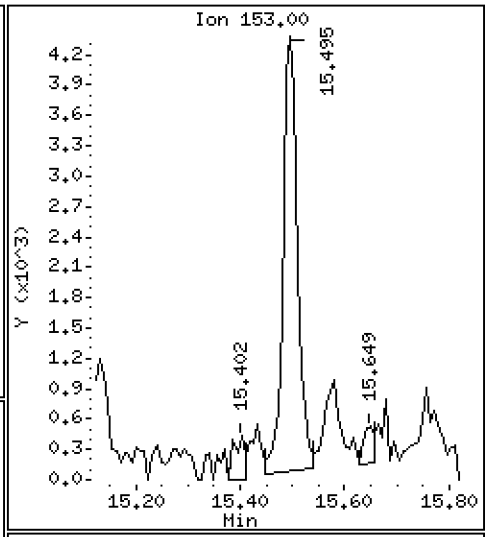
Concentration: 0.03566 ug/ml

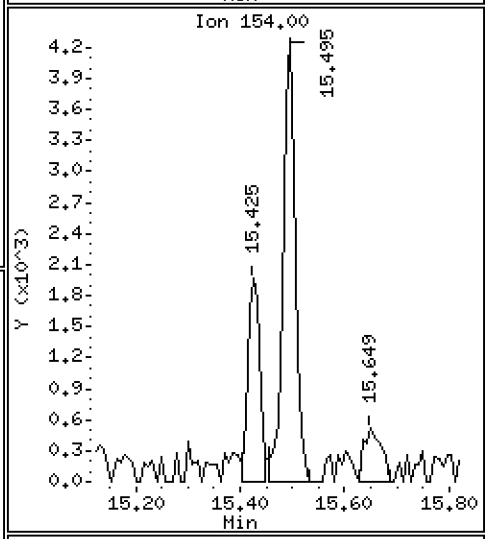


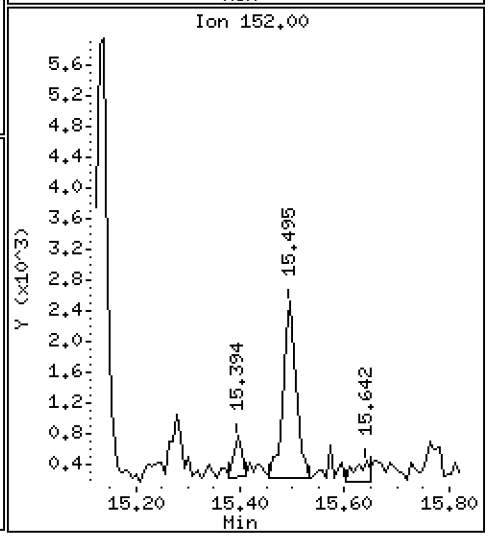












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

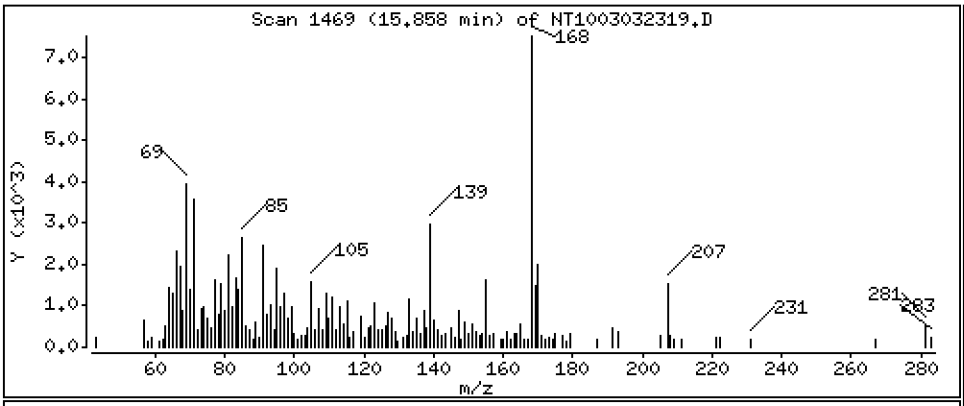
Operator: VTS

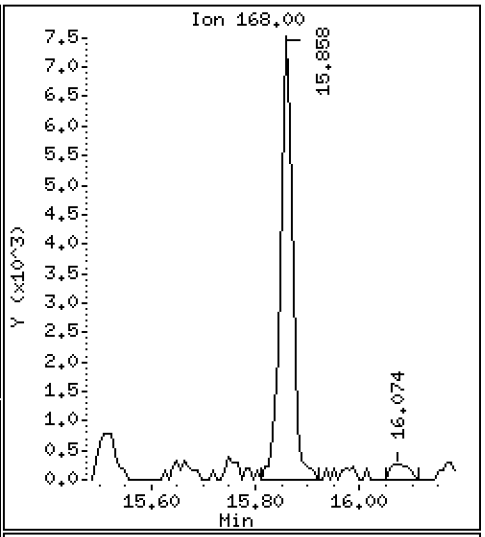
Column phase: ZB-5msi

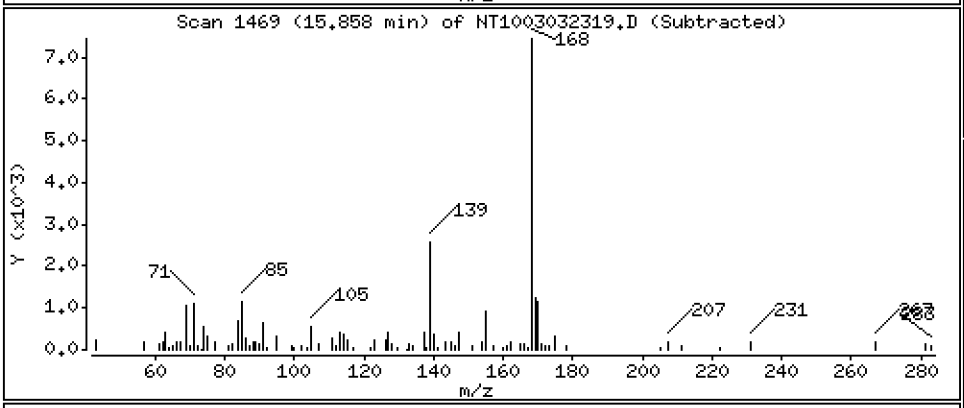
Column diameter: 0.25

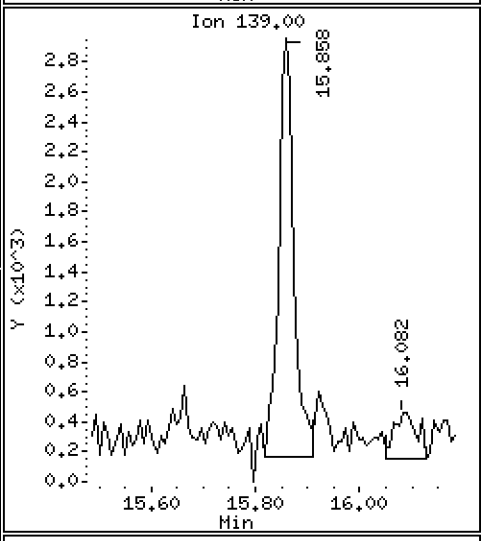
46 Dibenzofuran

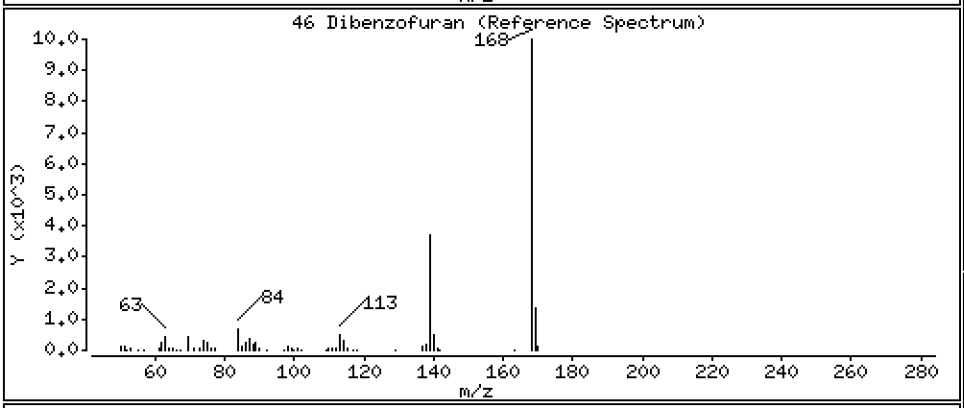
Concentration: 0.03508 ug/ml

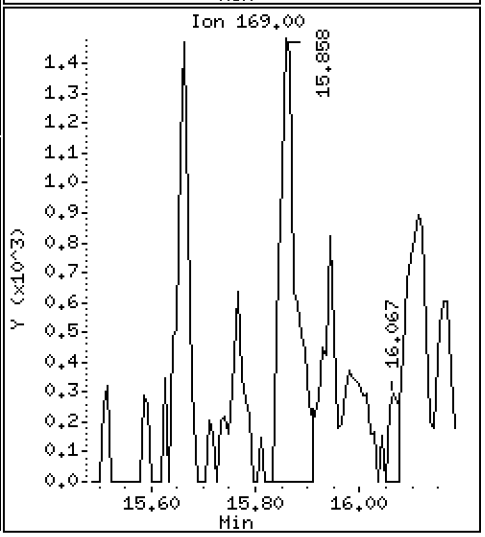


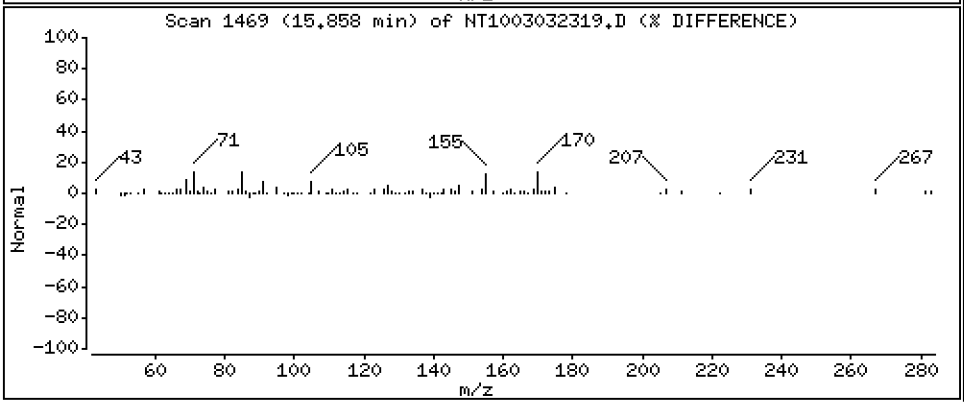












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

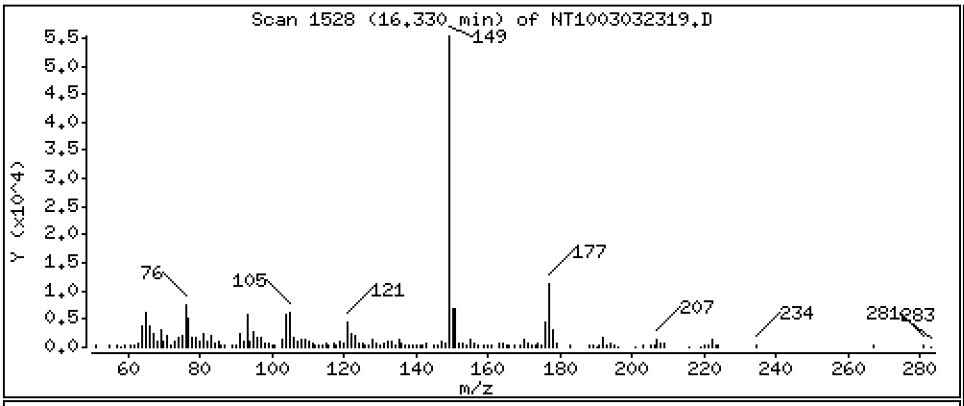
Operator: VTS

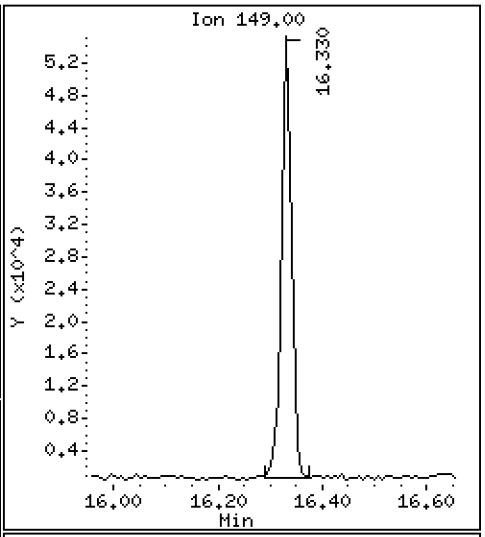
Column phase: ZB-5msi

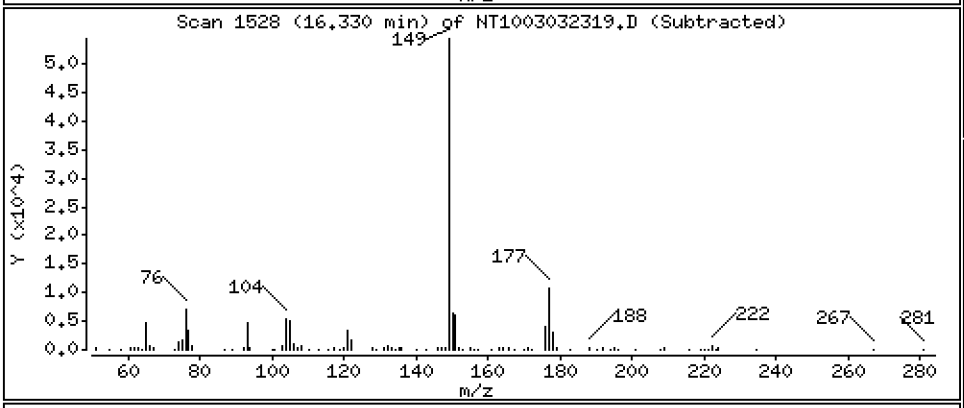
Column diameter: 0.25

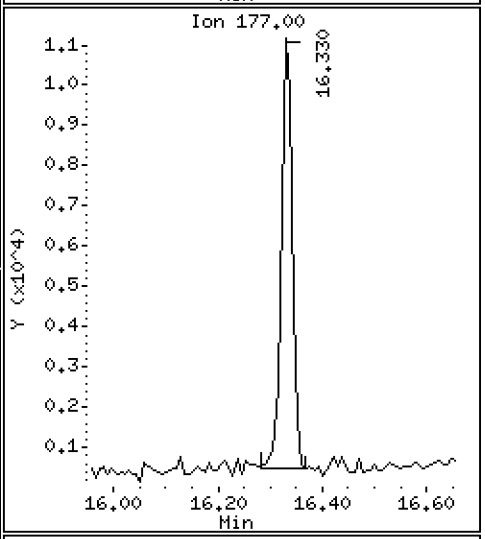
50 Diethylphthalate

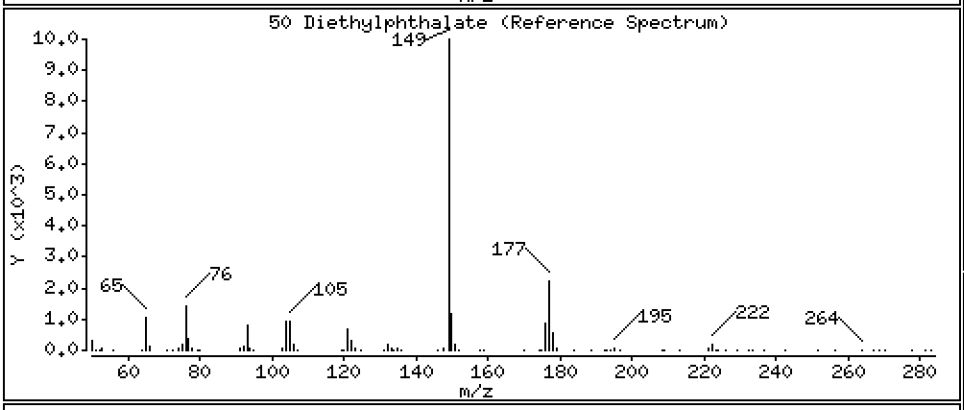
Concentration: 0.2698 ug/ml

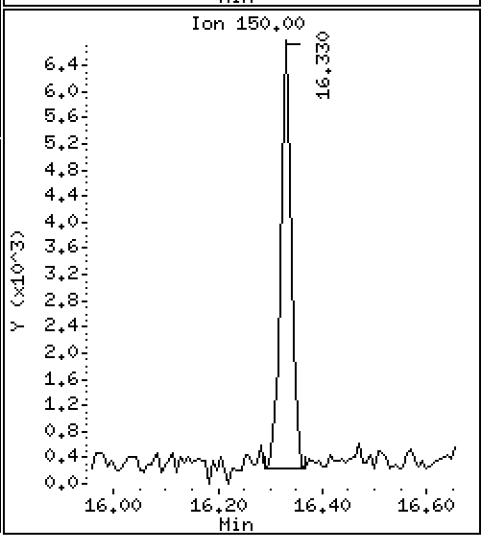


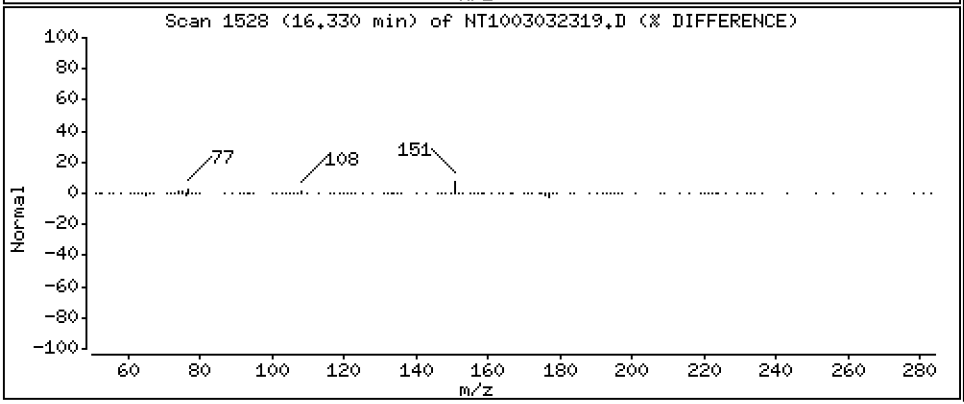












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

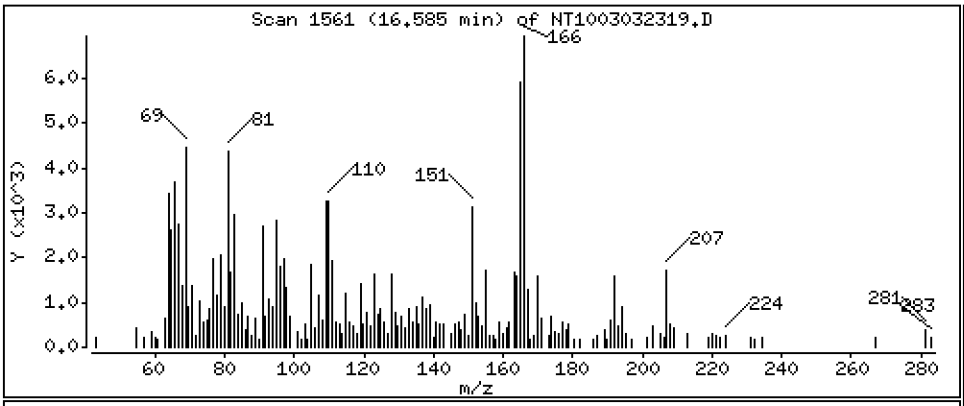
Operator: VTS

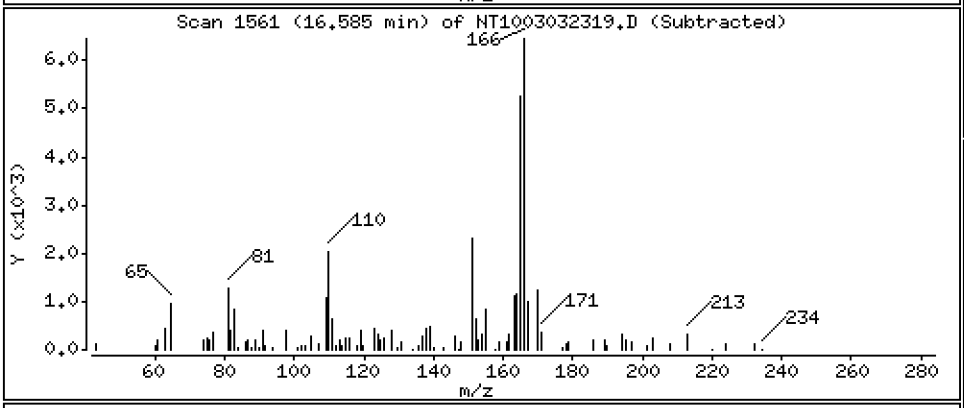
Column phase: ZB-5msi

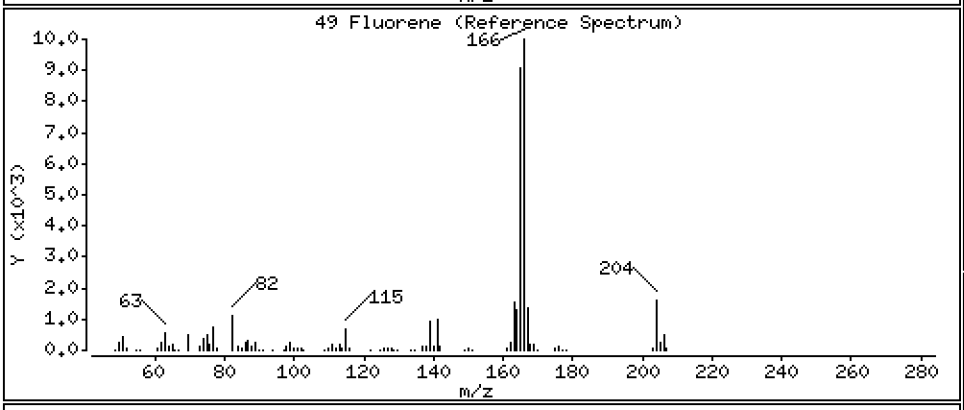
Column diameter: 0.25

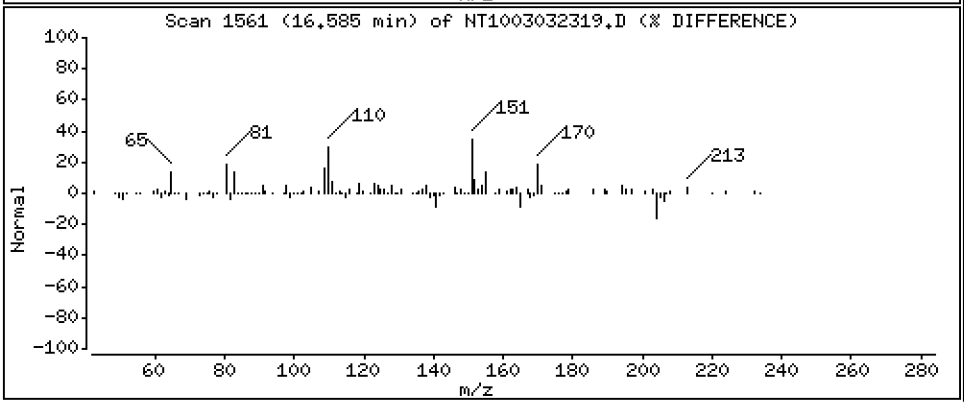
49 Fluorene

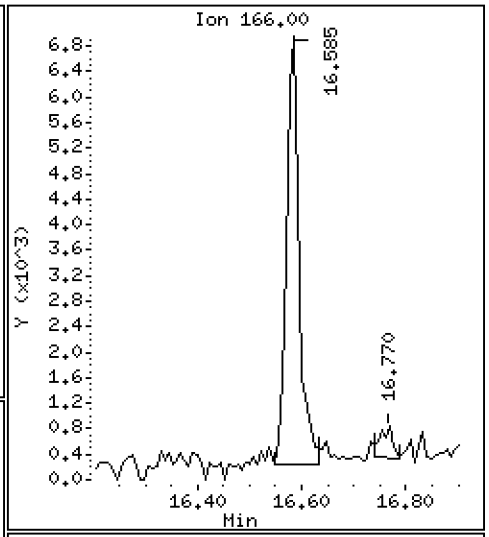
Concentration: 0.04515 ug/ml

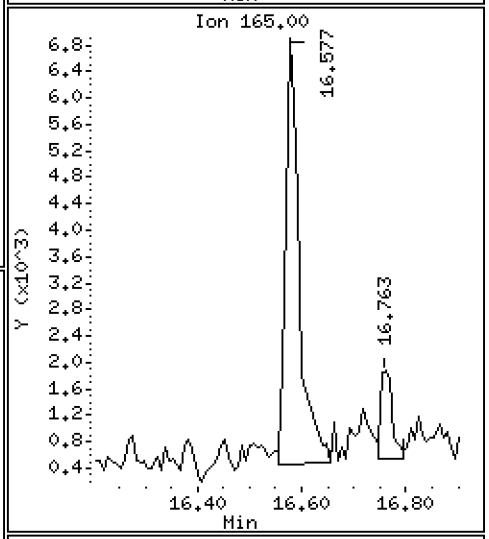


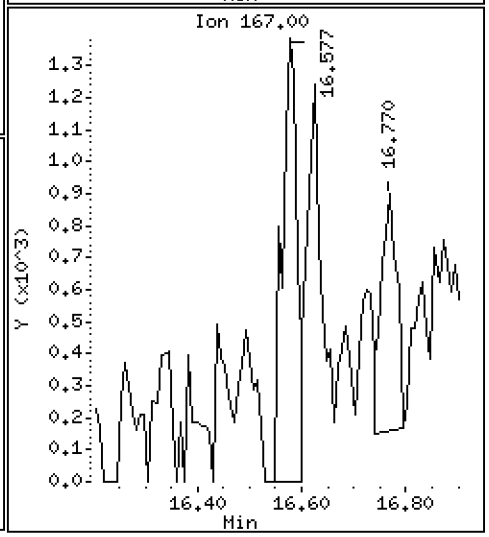












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

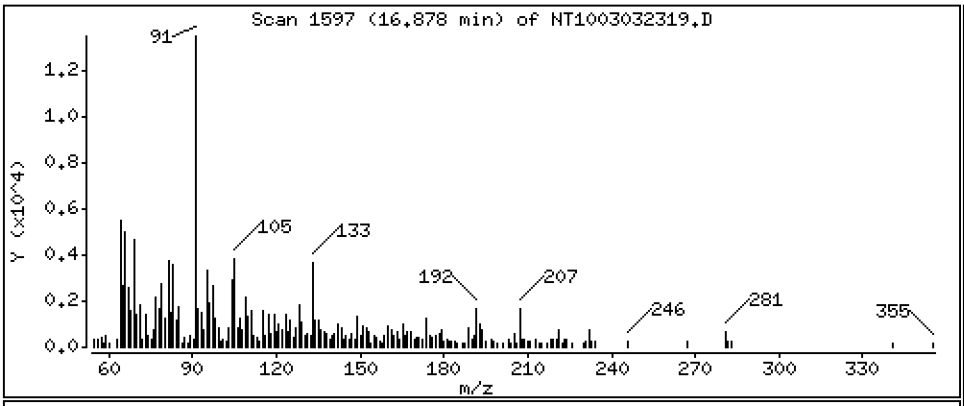
Operator: VTS

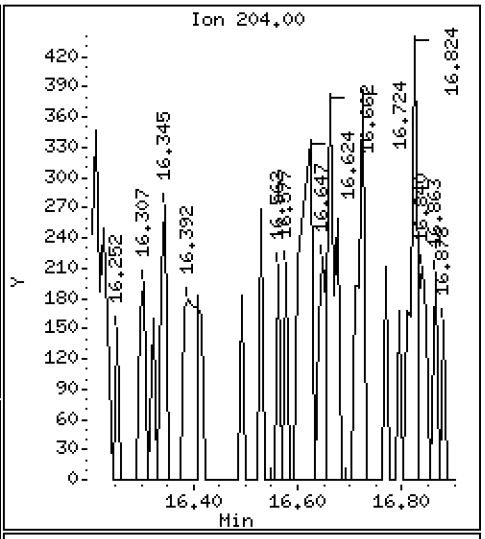
Column phase: ZB-5msi

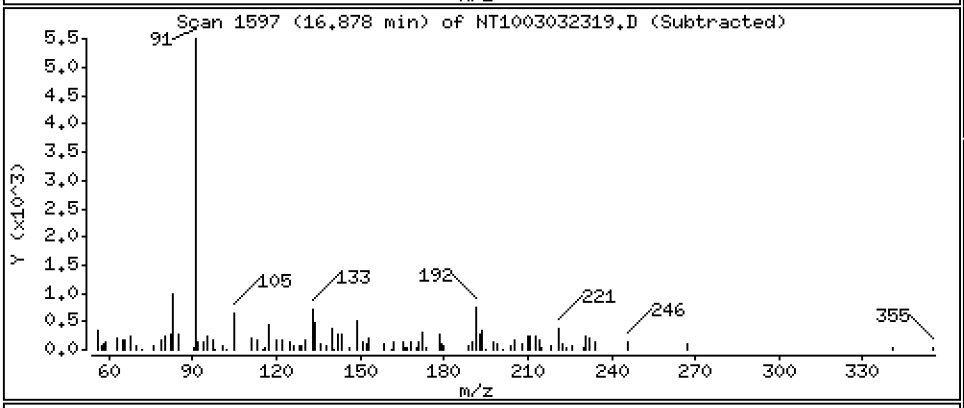
Column diameter: 0.25

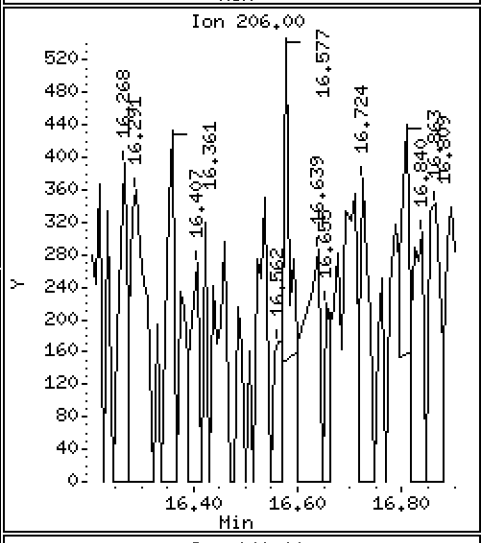
51 4-Chlorophenyl-phenylether

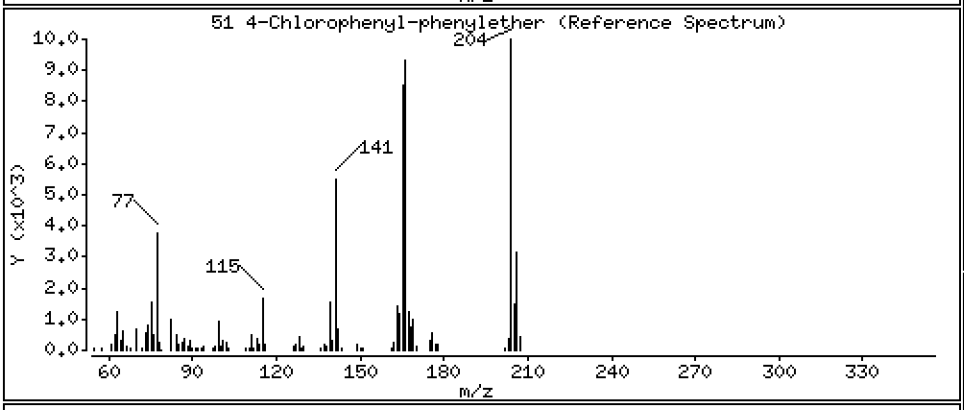
Concentration: 0.0005652 ug/ml

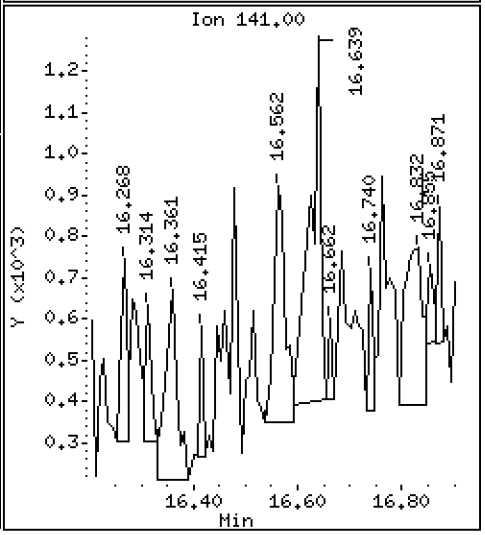


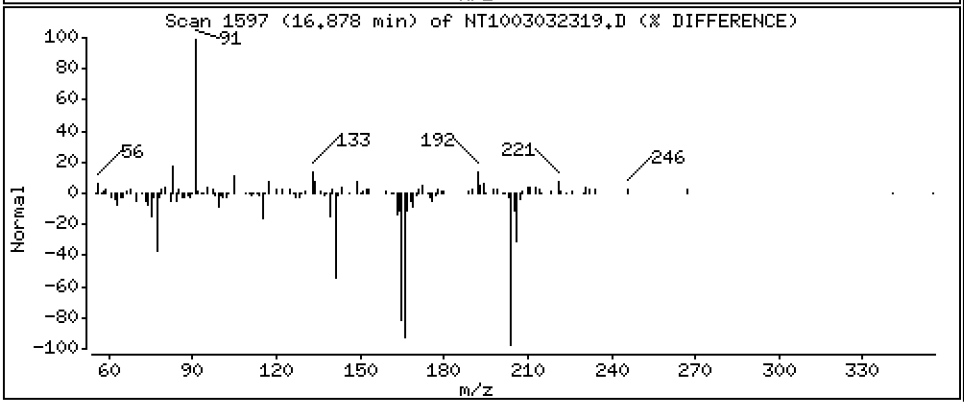












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

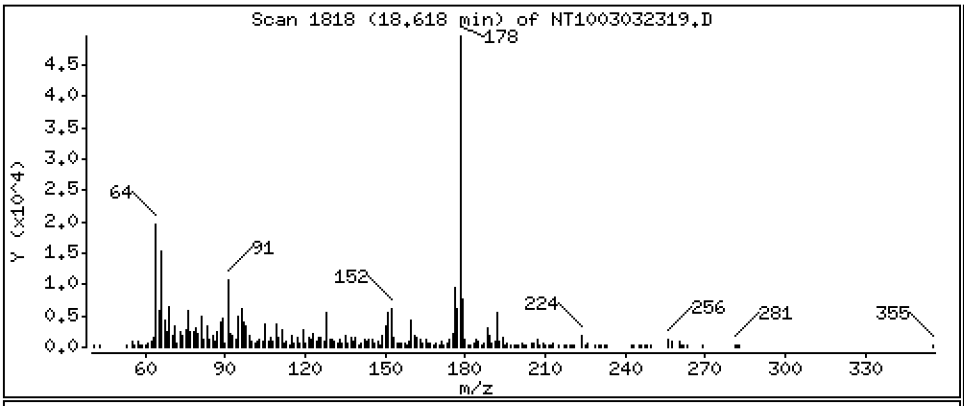
Operator: VTS

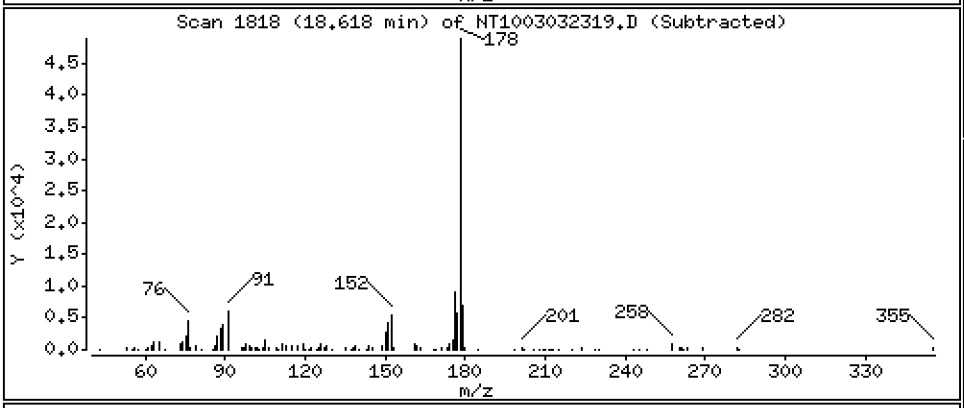
Column phase: ZB-5msi

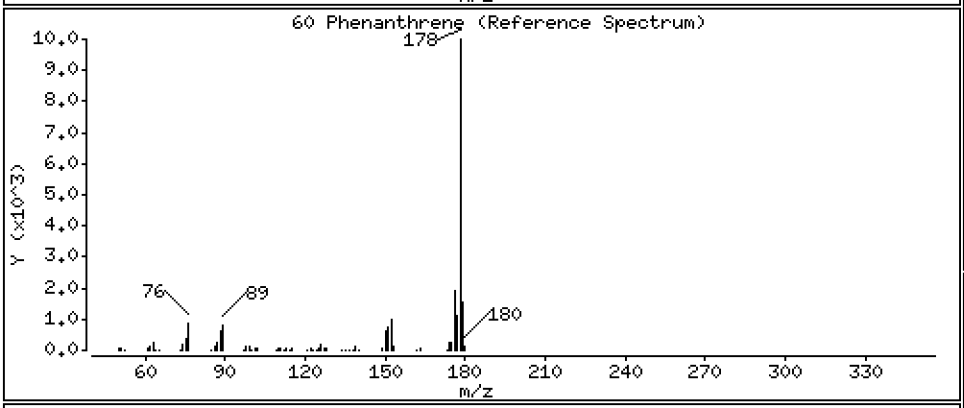
Column diameter: 0.25

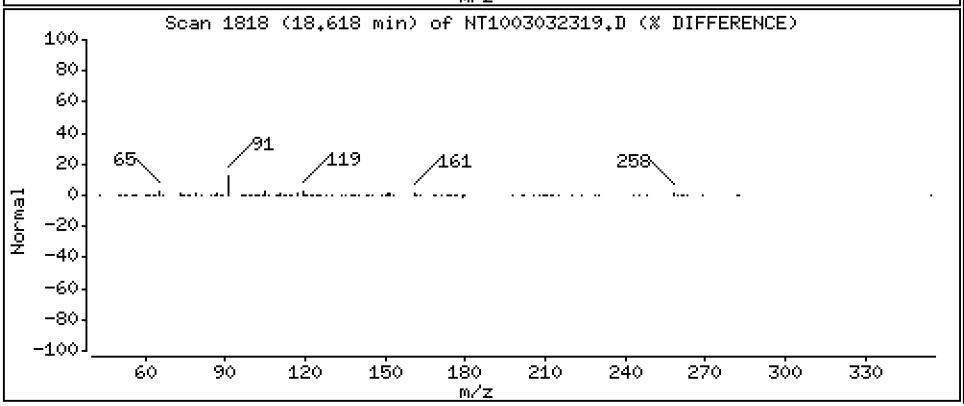
60 Phenanthrene

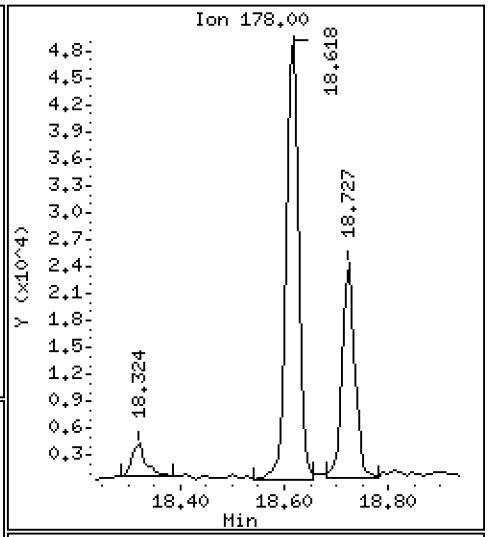
Concentration: 0.2449 ug/ml

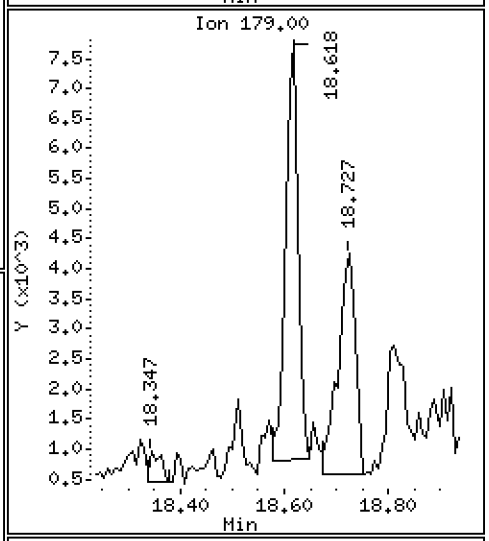


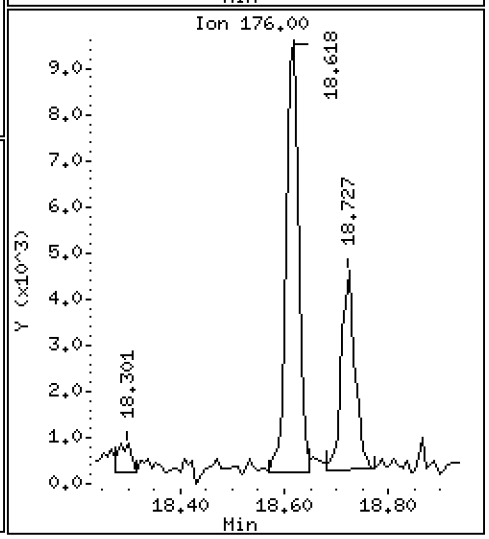












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

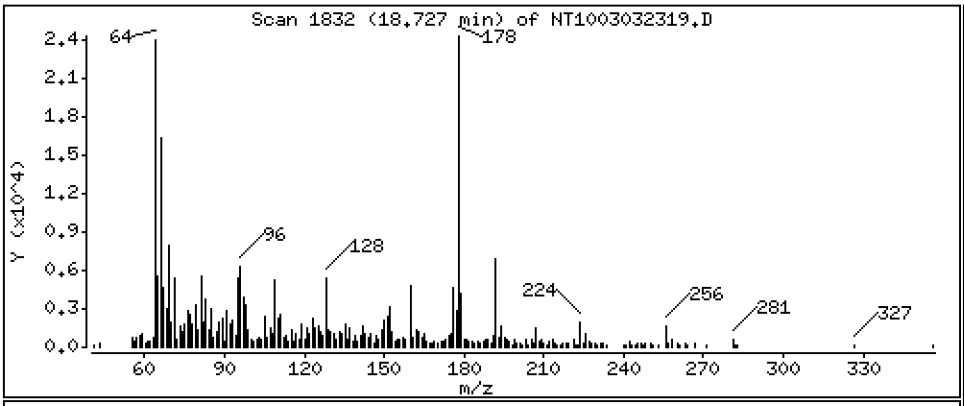
Operator: VTS

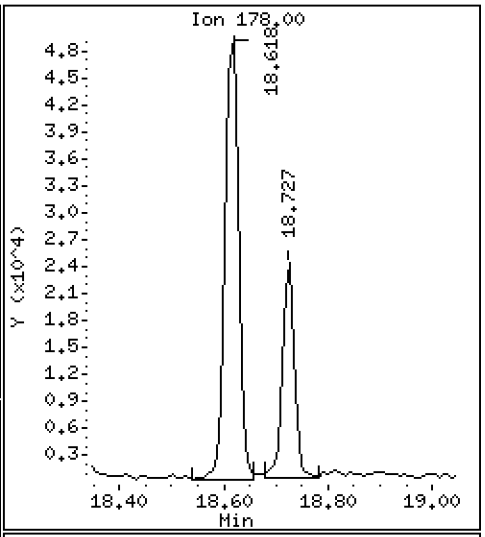
Column phase: ZB-5msi

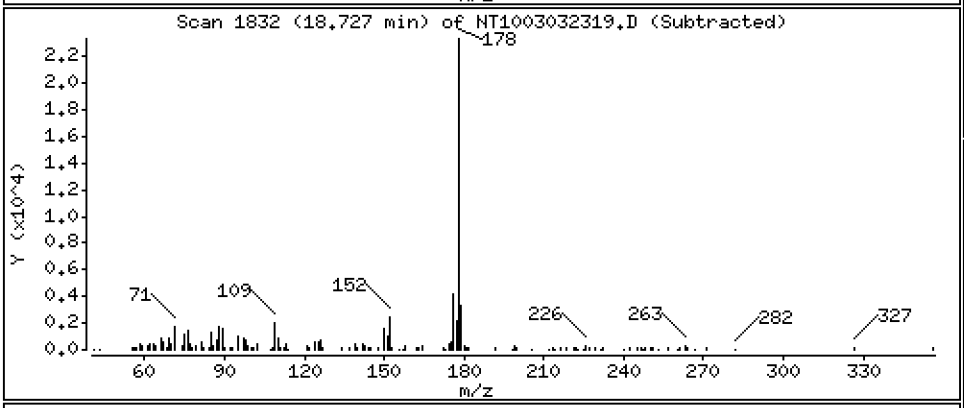
Column diameter: 0.25

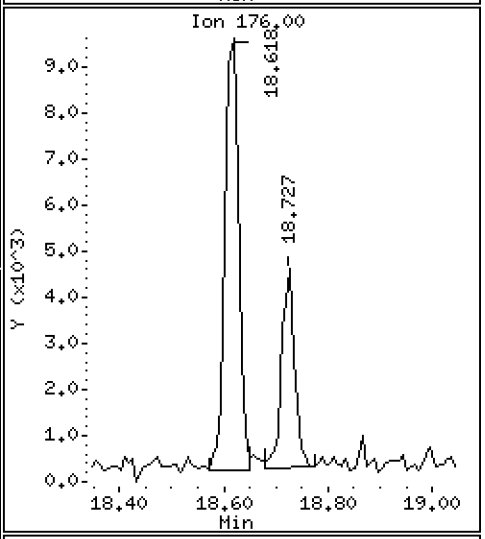
61 Anthracene

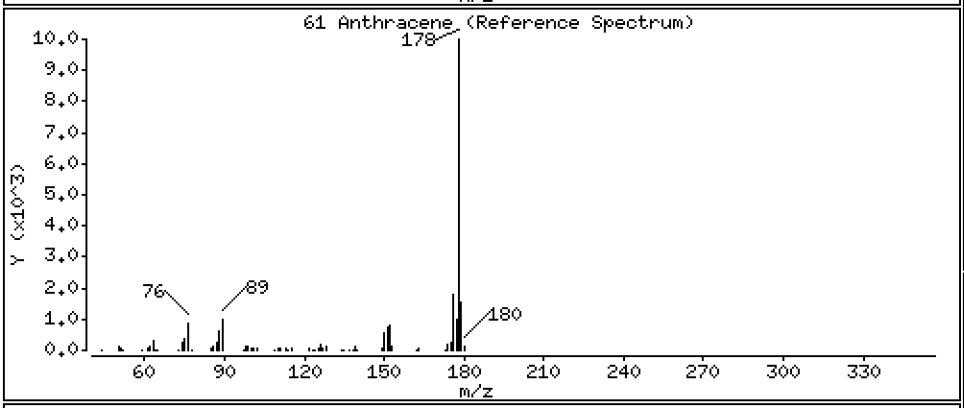
Concentration: 0.1179 ug/ml

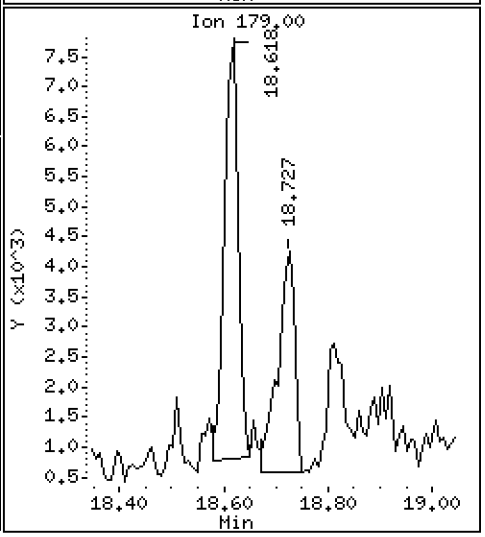


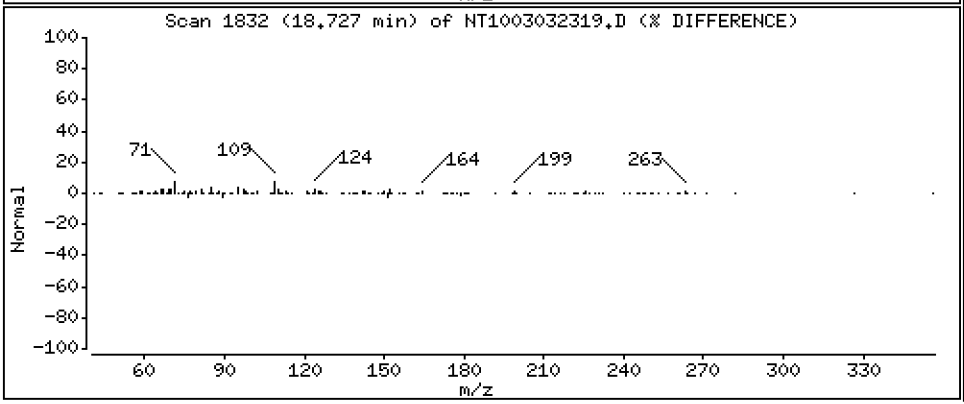












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

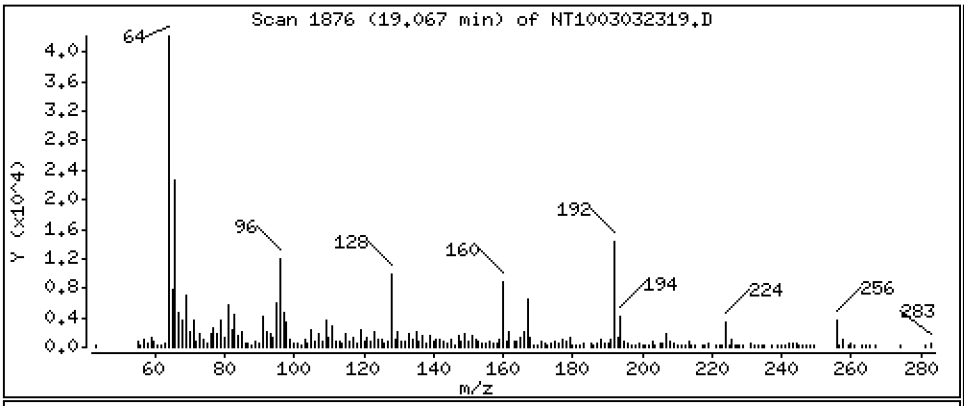
Operator: VTS

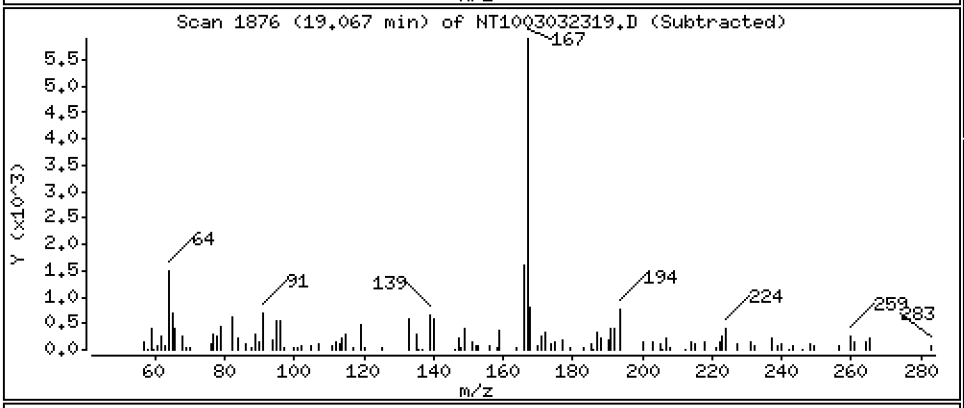
Column phase: ZB-5msi

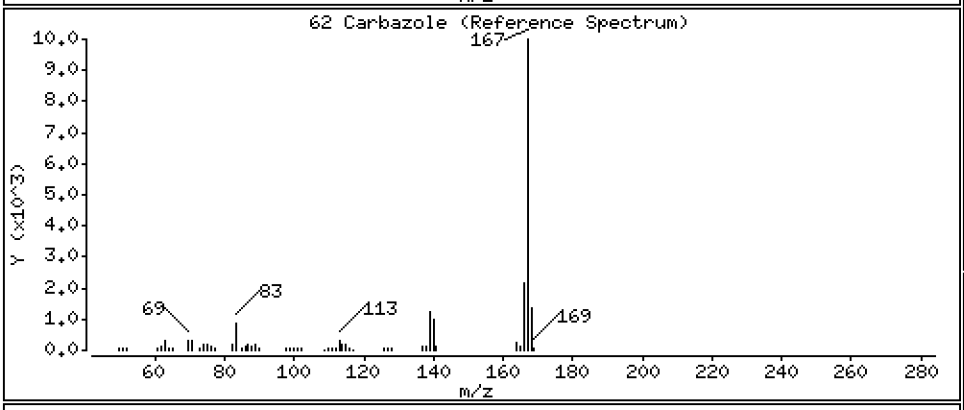
Column diameter: 0.25

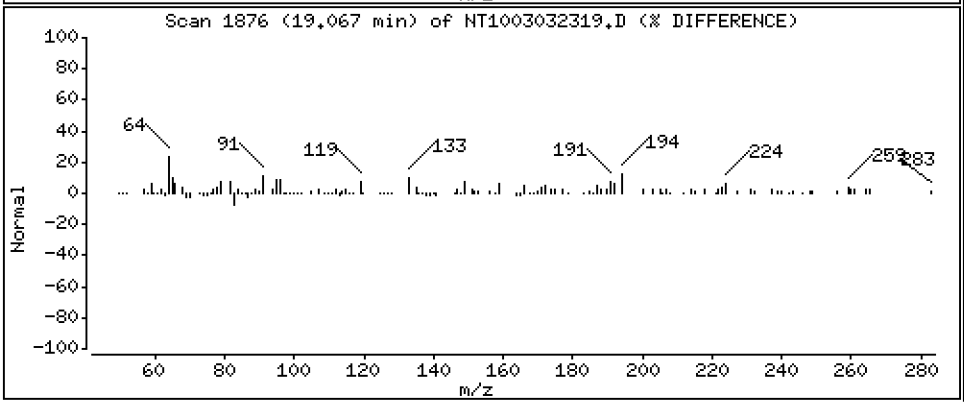
62 Carbazole

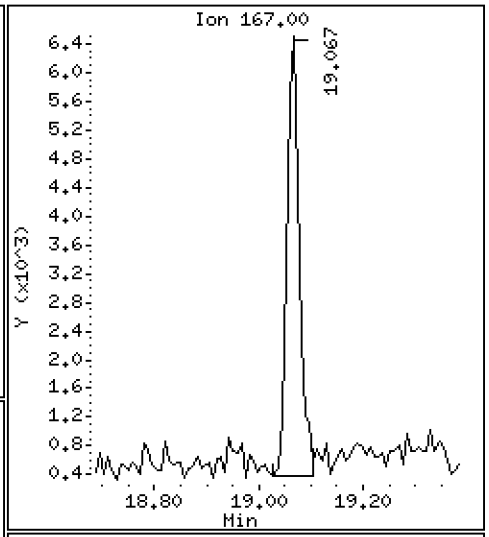
Concentration: 0.03439 ug/ml

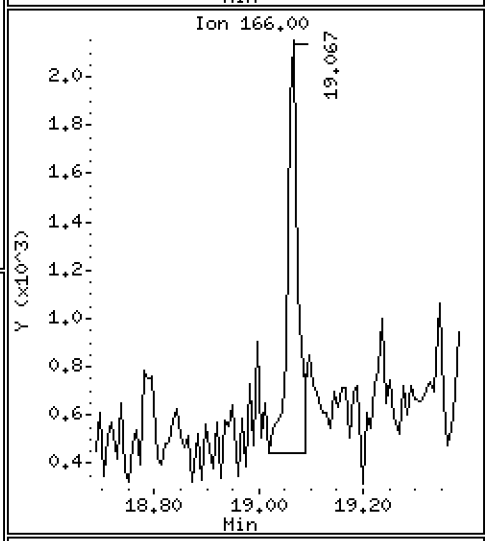


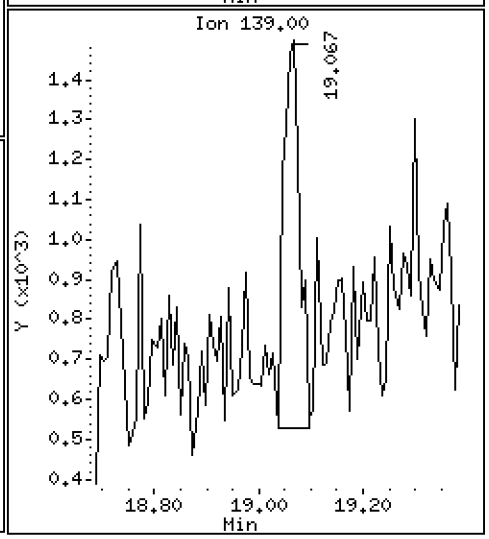












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032319.D

Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

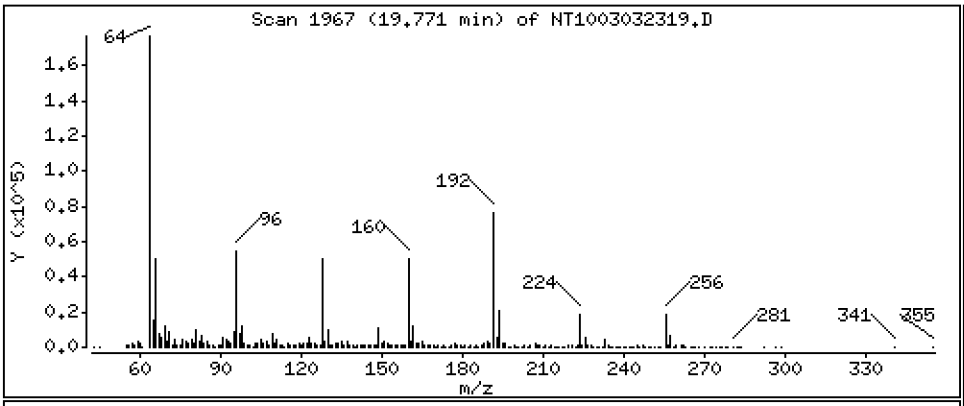
Operator: VTS

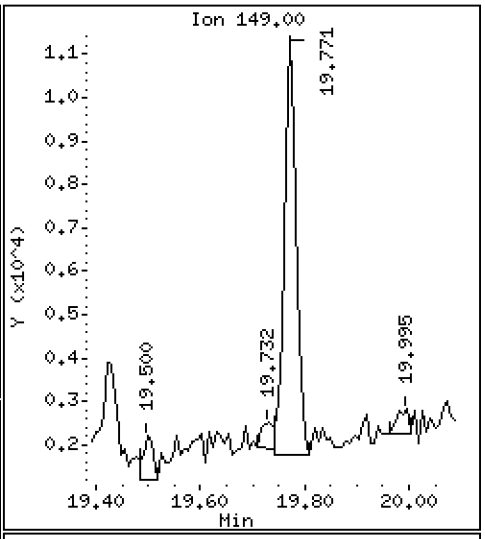
Column phase: ZB-5msi

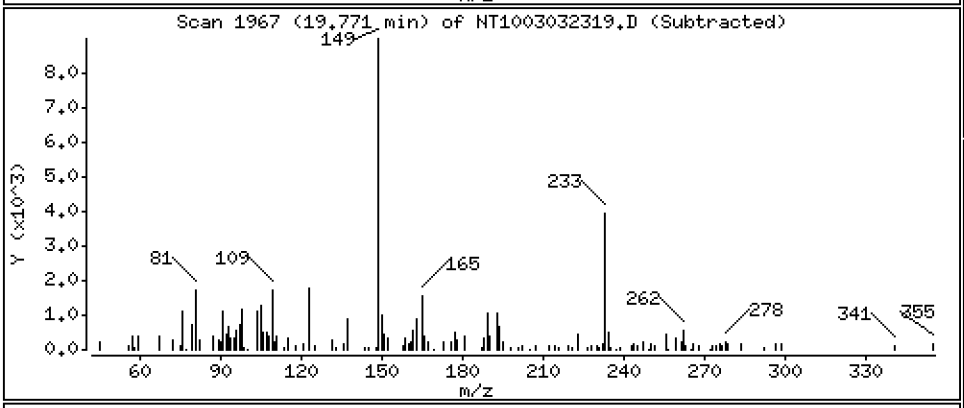
Column diameter: 0.25

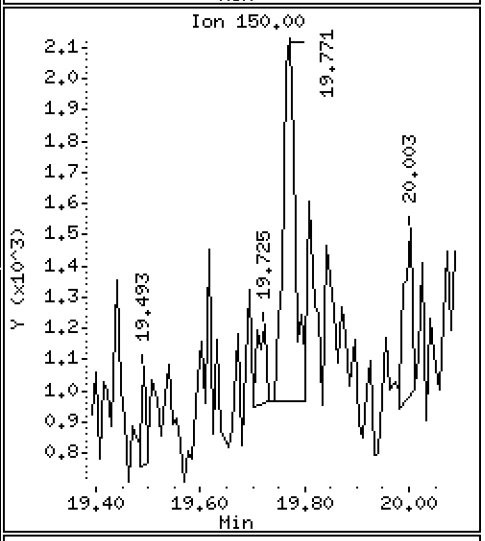
63 Di-n-butylphthalate

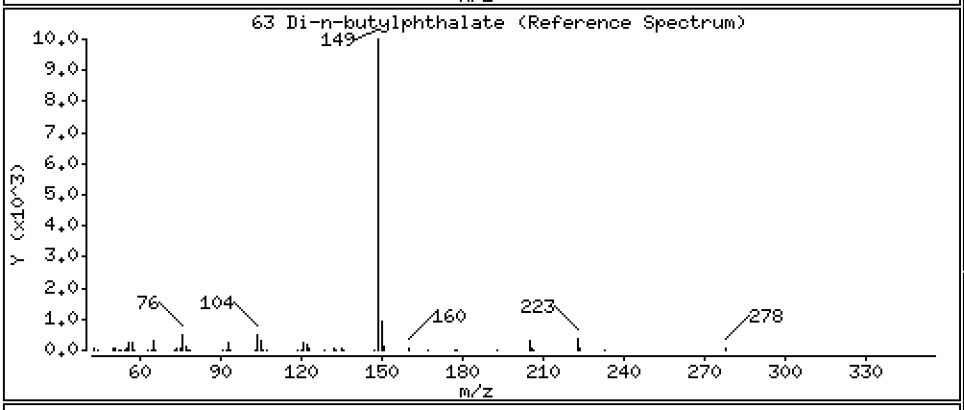
Concentration: 0.03797 ug/ml

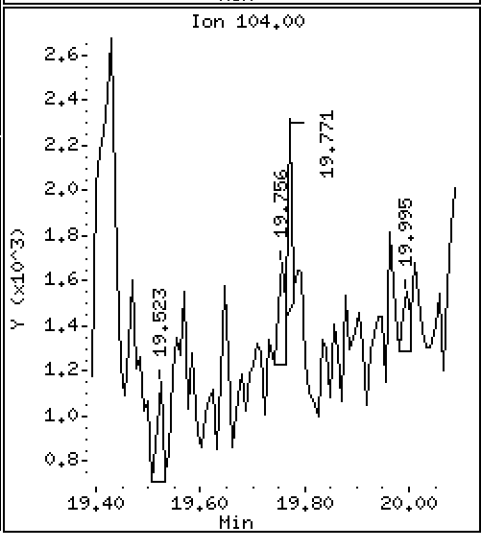


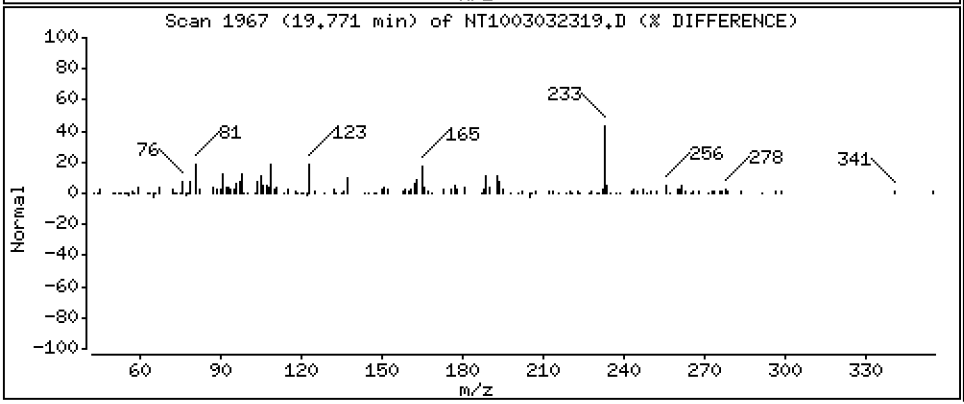












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

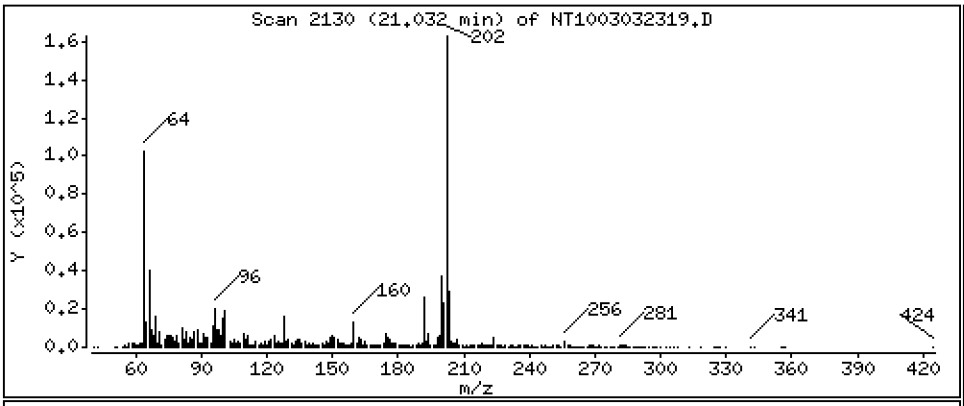
Operator: VTS

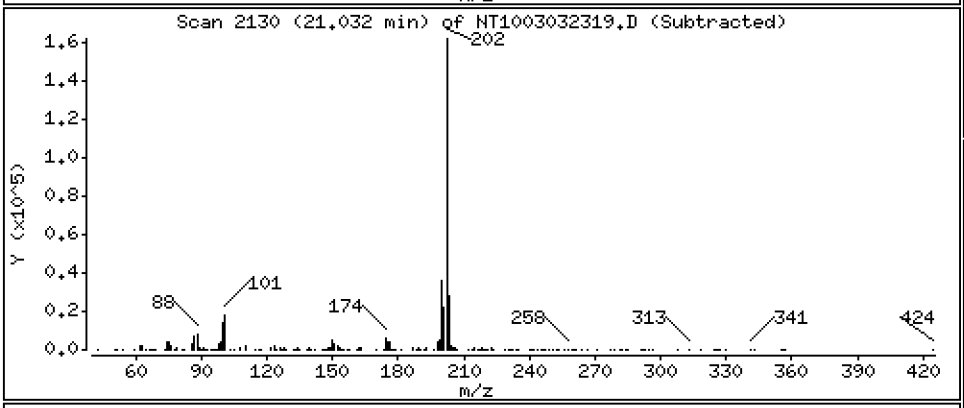
Column phase: ZB-5msi

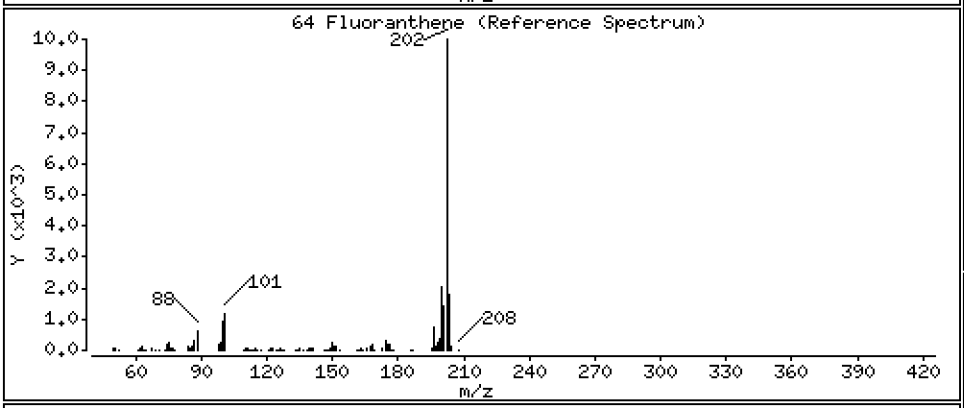
Column diameter: 0.25

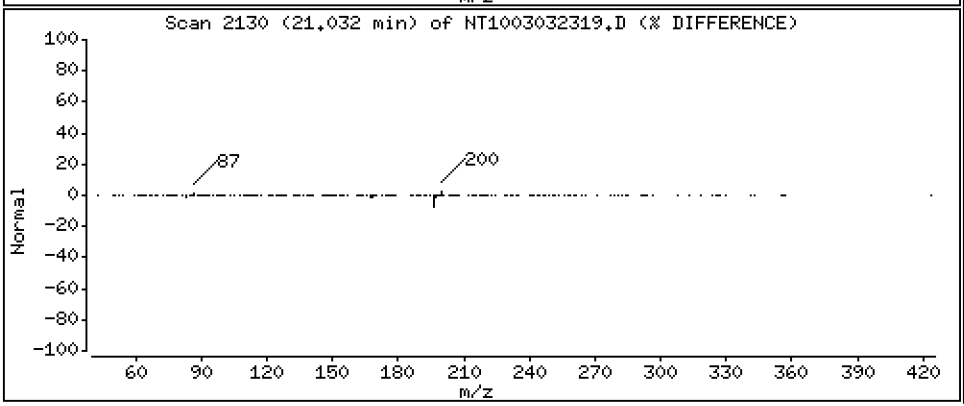
64 Fluoranthene

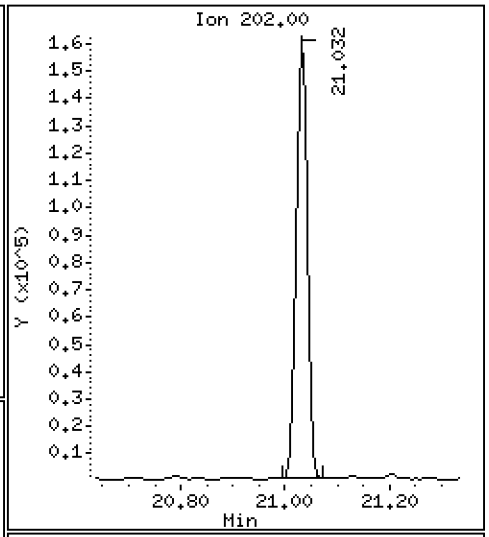
Concentration: 0.5569 ug/ml

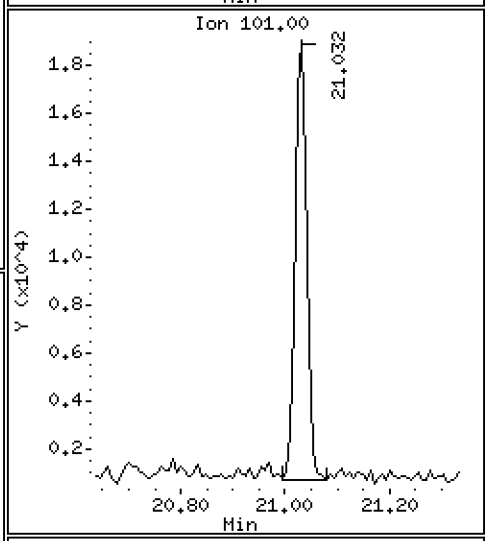


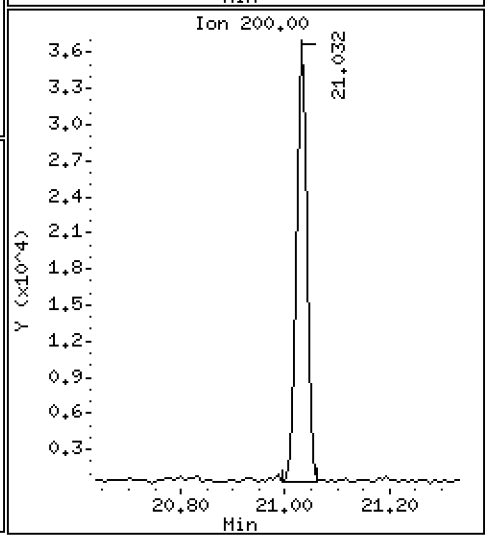












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

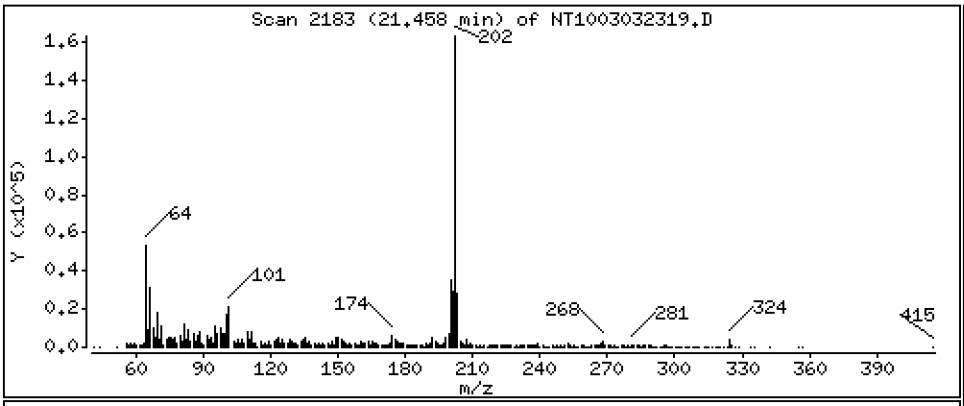
Operator: VTS

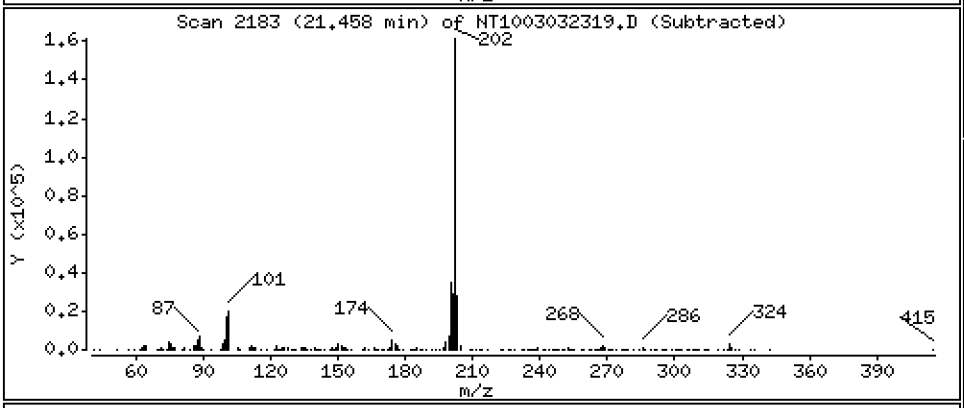
Column phase: ZB-5msi

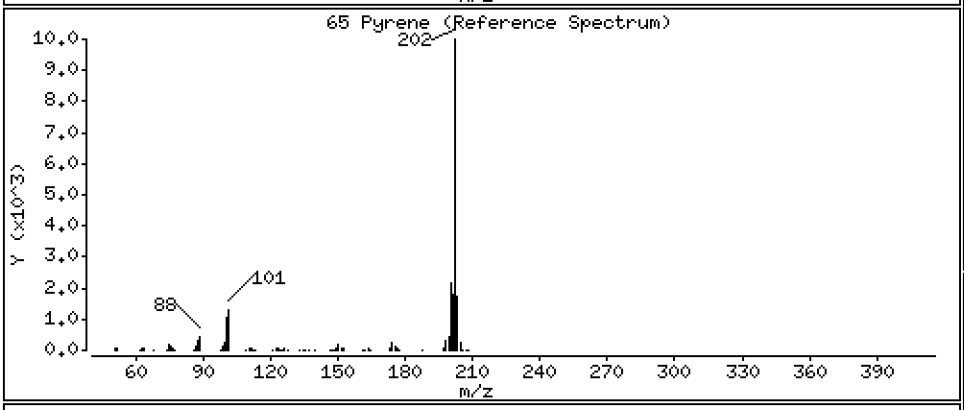
Column diameter: 0.25

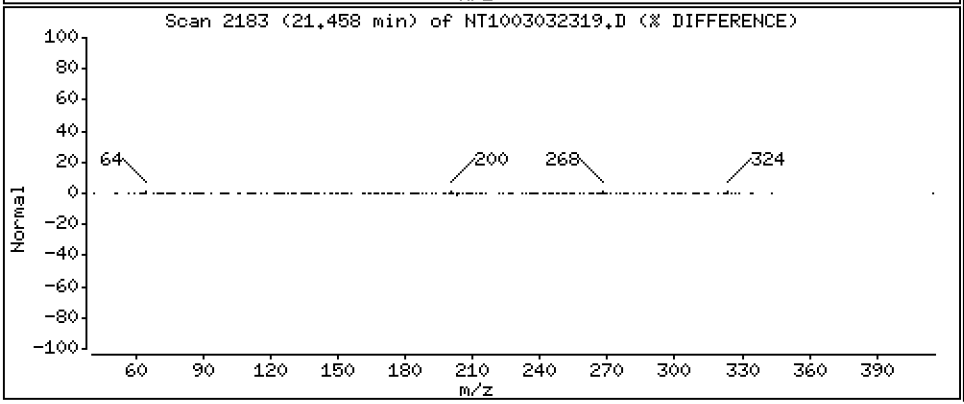
65 Pyrene

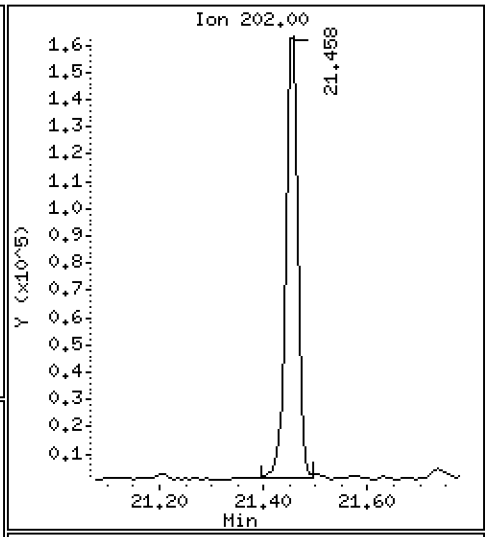
Concentration: 0.6964 ug/ml

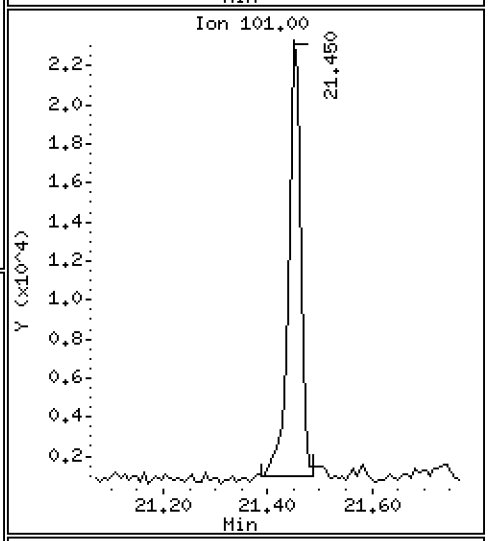


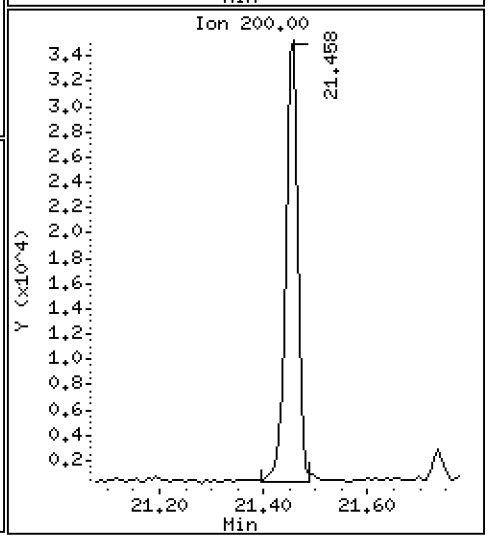












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

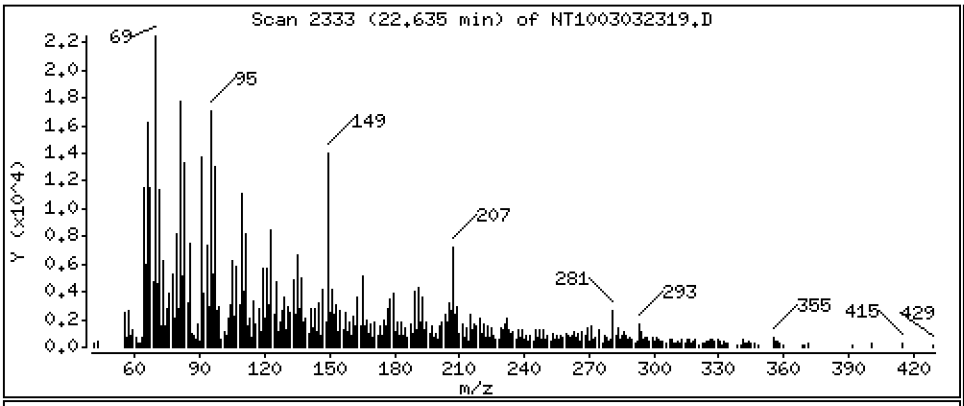
Operator: VTS

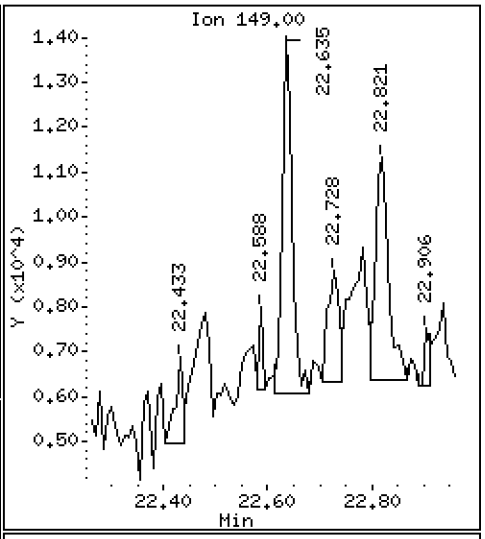
Column phase: ZB-5msi

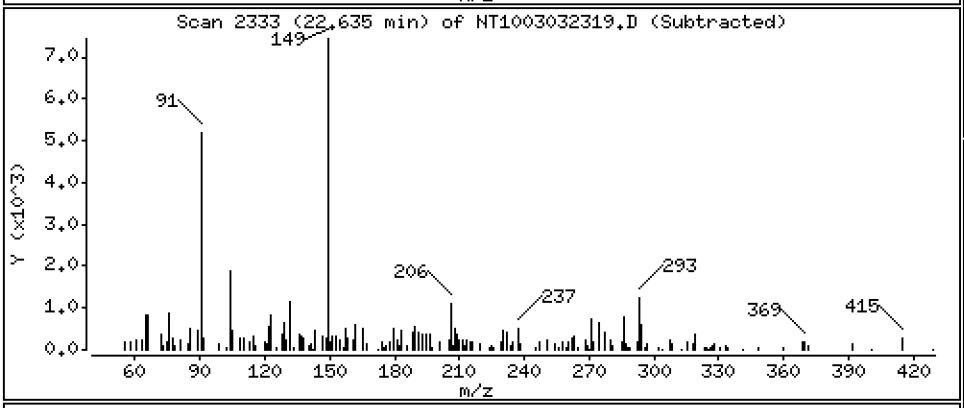
Column diameter: 0.25

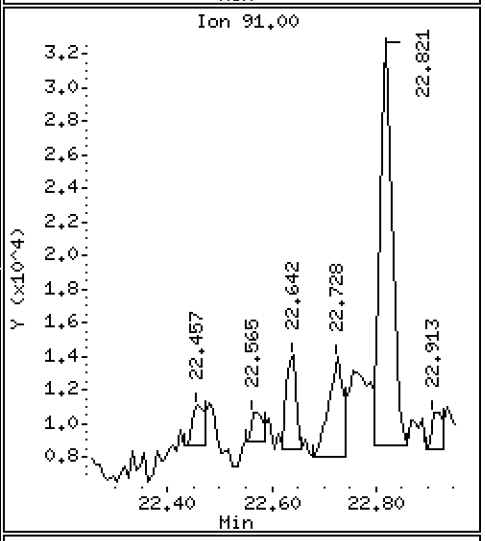
67 Butylbenzylphthalate

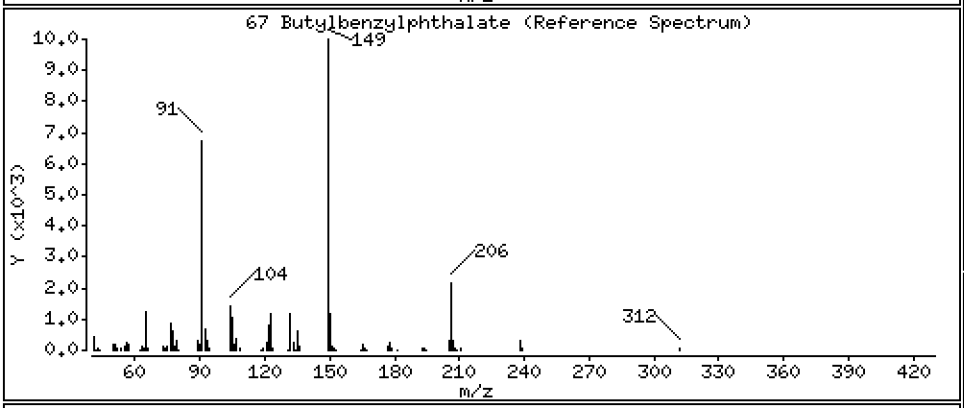
Concentration: 0.04408 ug/ml

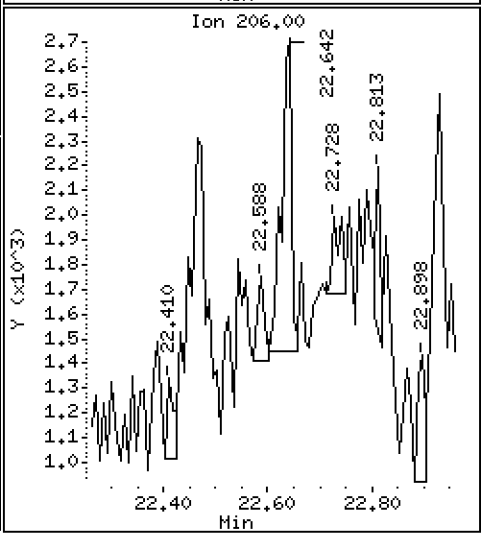


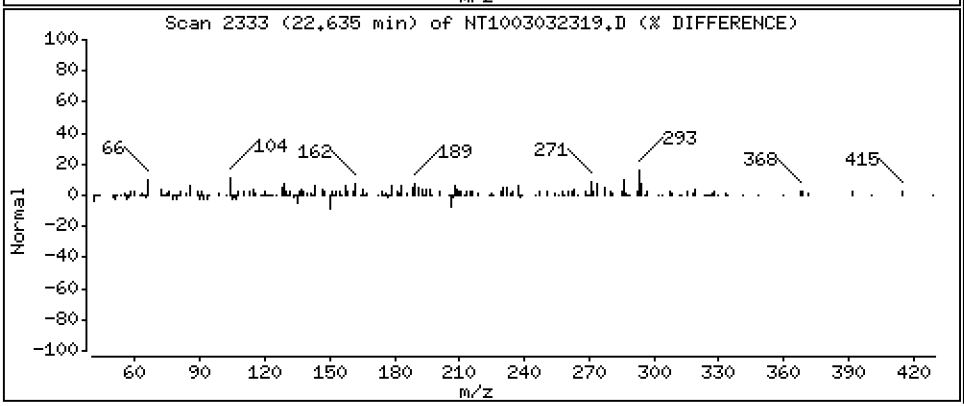












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

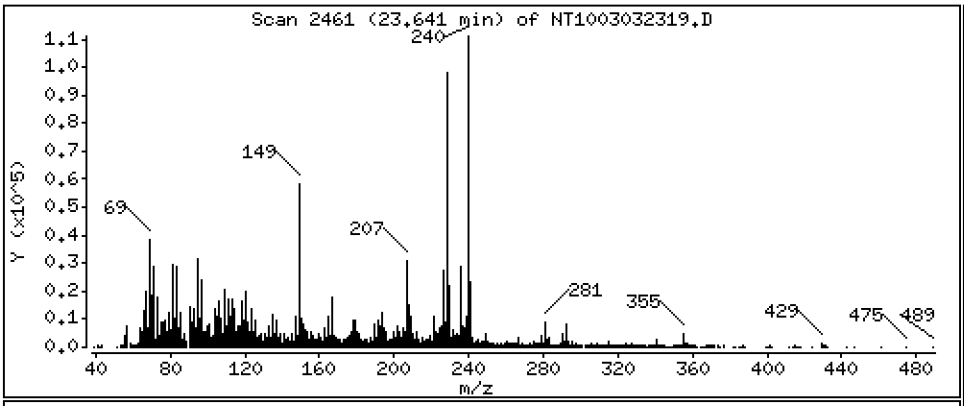
Operator: VTS

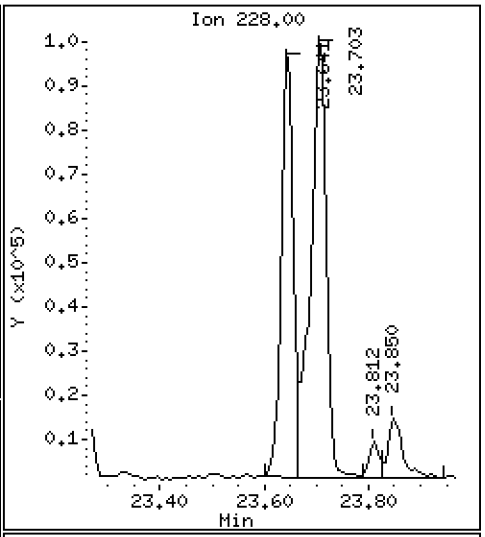
Column phase: ZB-5msi

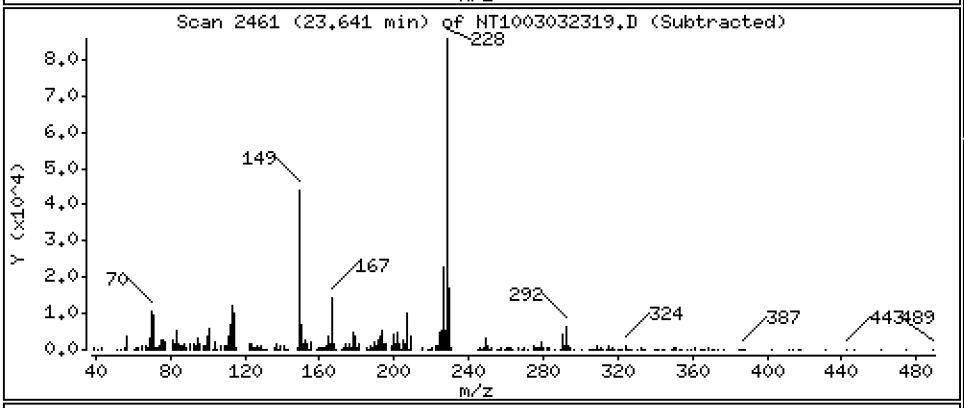
Column diameter: 0.25

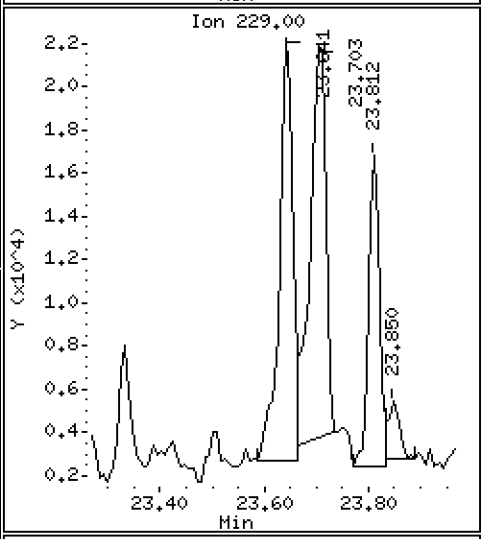
68 Benzo(a)anthracene

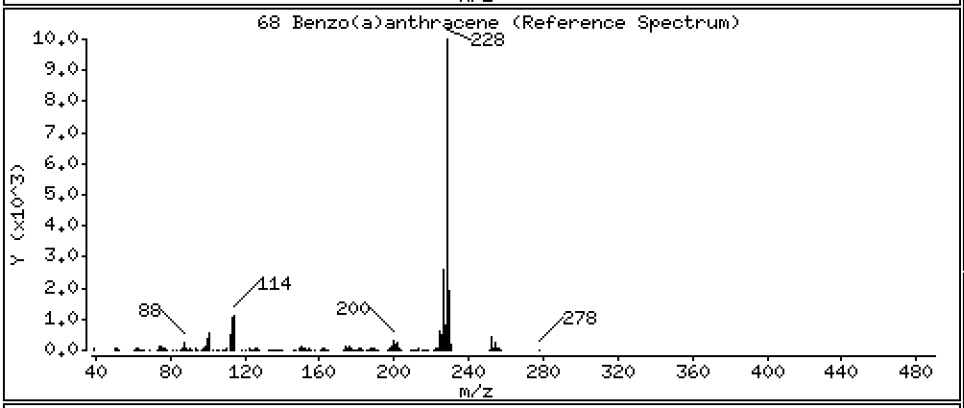
Concentration: 0.3463 ug/ml

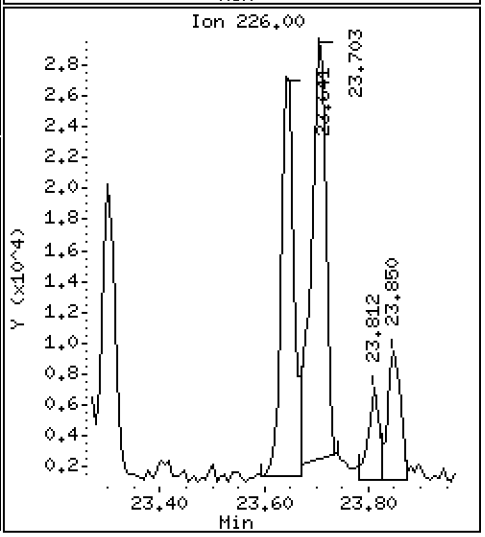


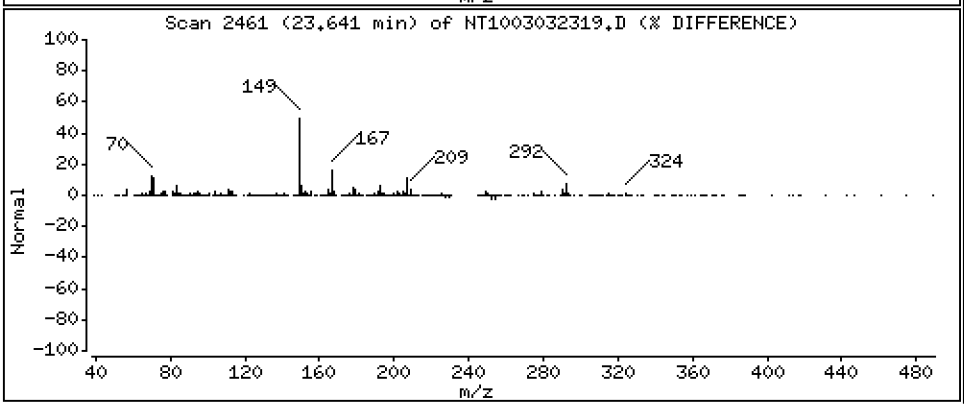












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

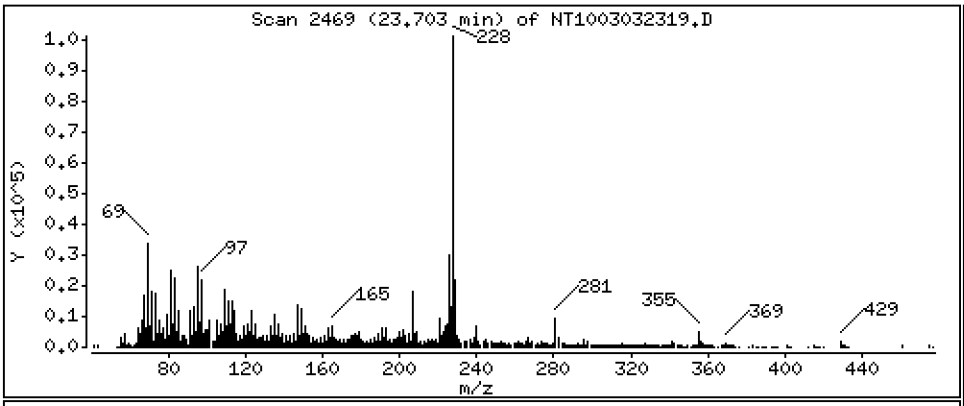
Operator: VTS

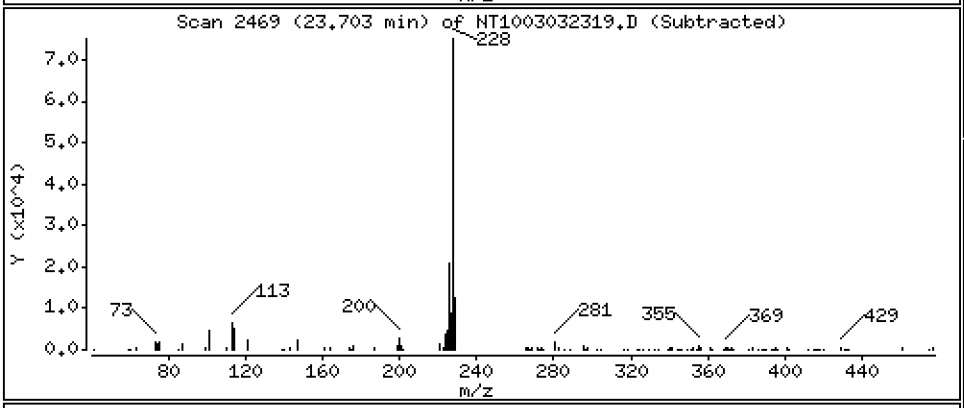
Column phase: ZB-5msi

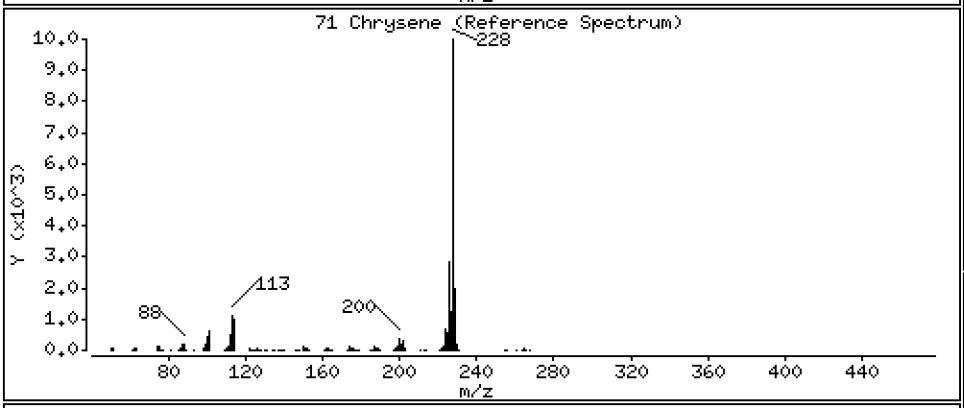
Column diameter: 0.25

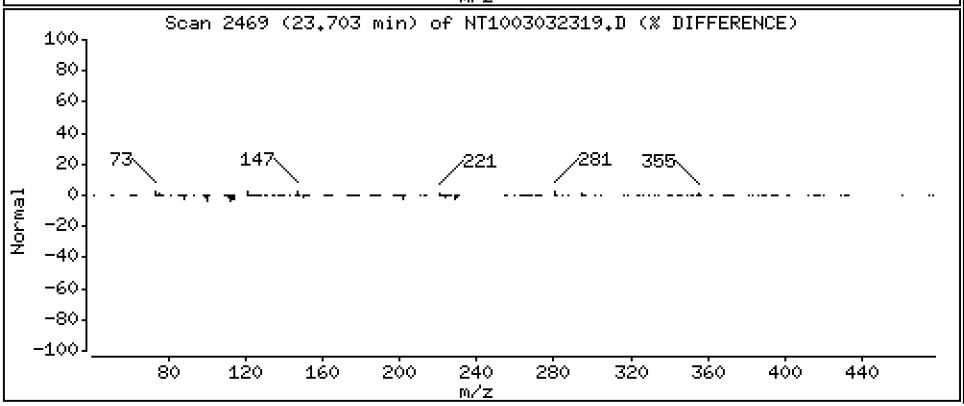
71 Chrysene

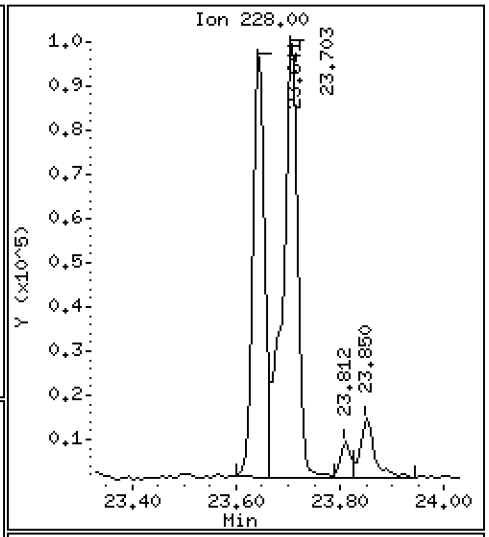
Concentration: 0.5588 ug/ml

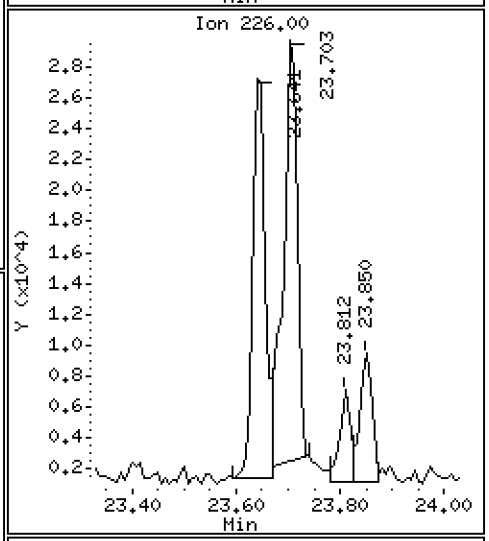


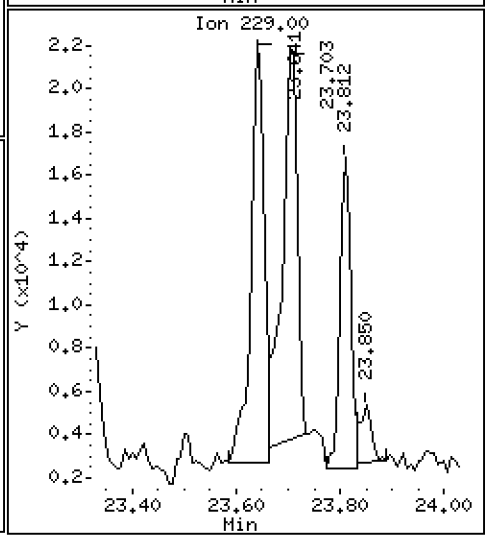












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

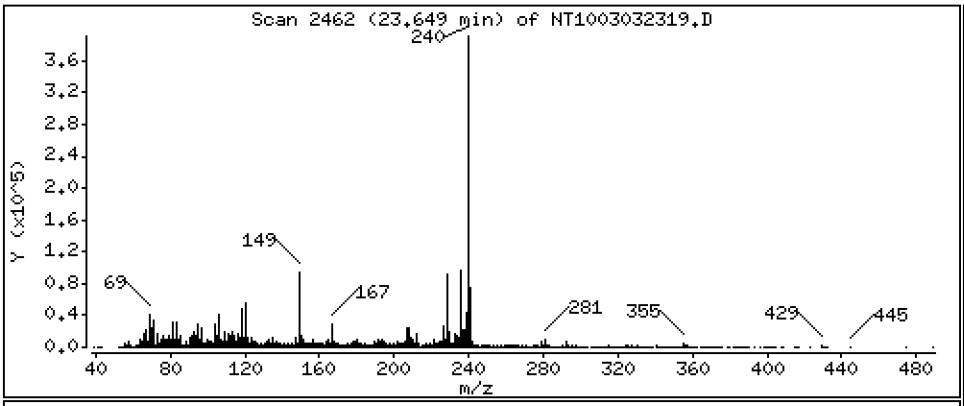
Operator: VTS

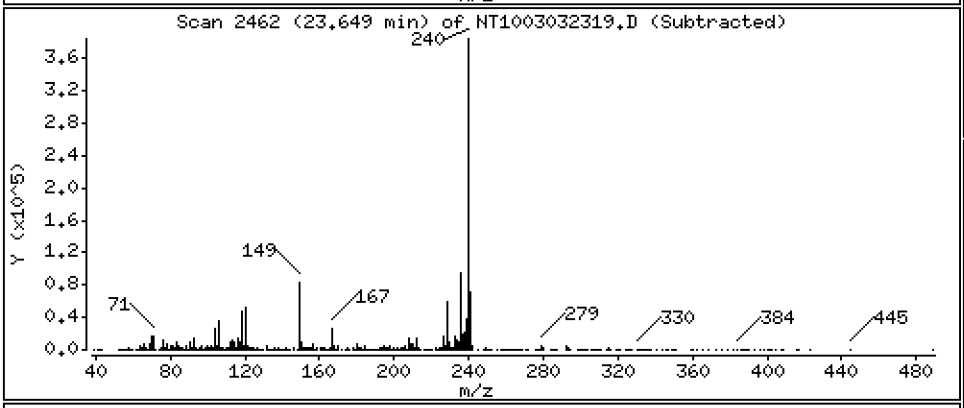
Column phase: ZB-5msi

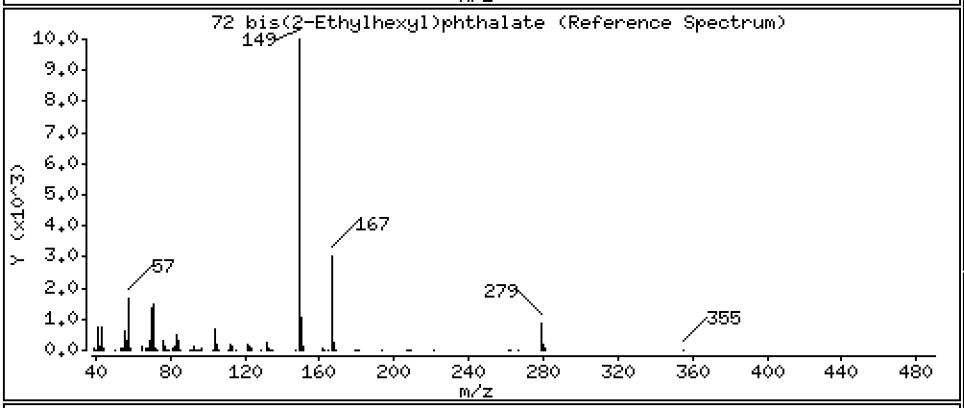
Column diameter: 0.25

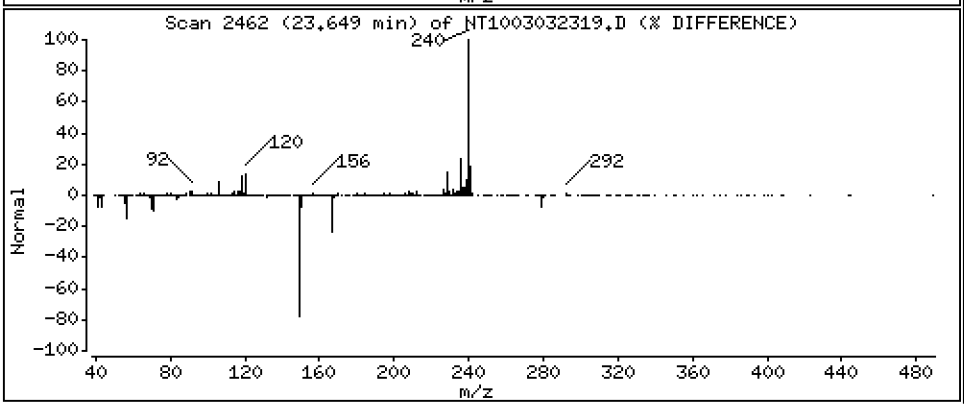
72 bis(2-Ethylhexyl)phthalate

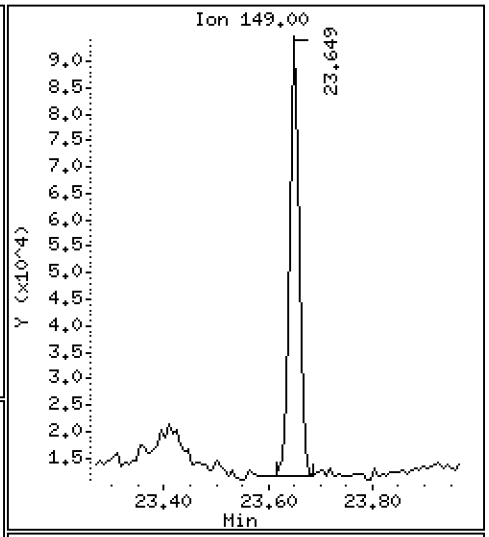
Concentration: 0.3470 ug/ml

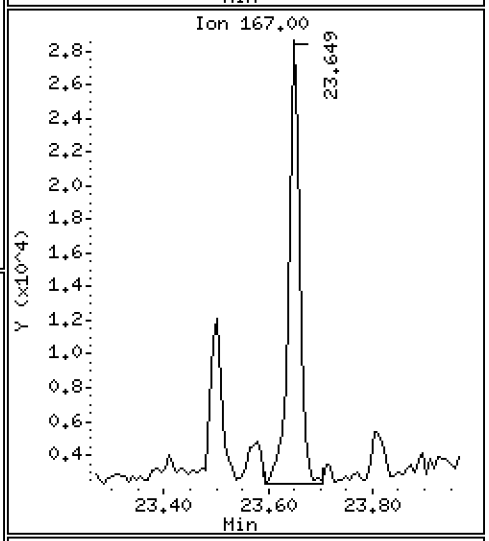


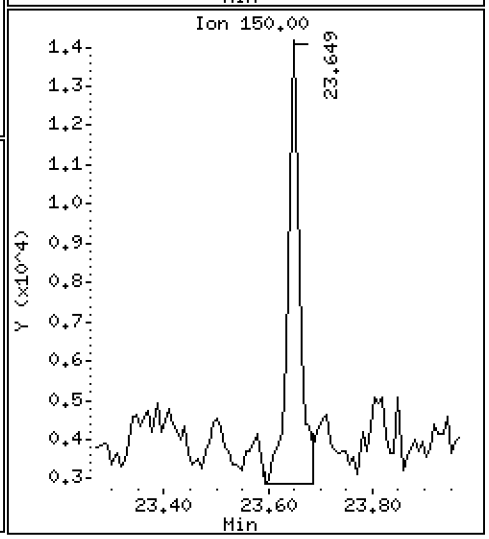












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

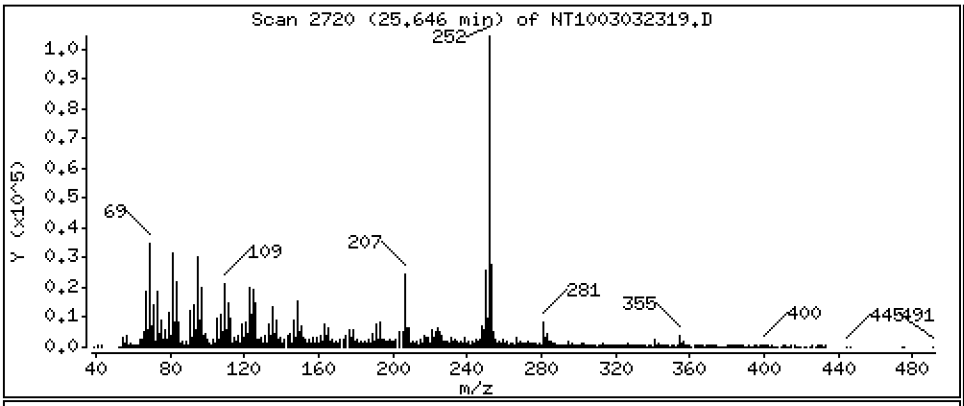
Operator: VTS

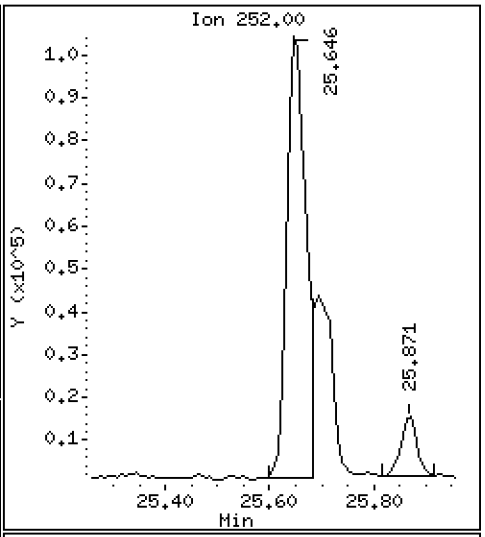
Column phase: ZB-5msi

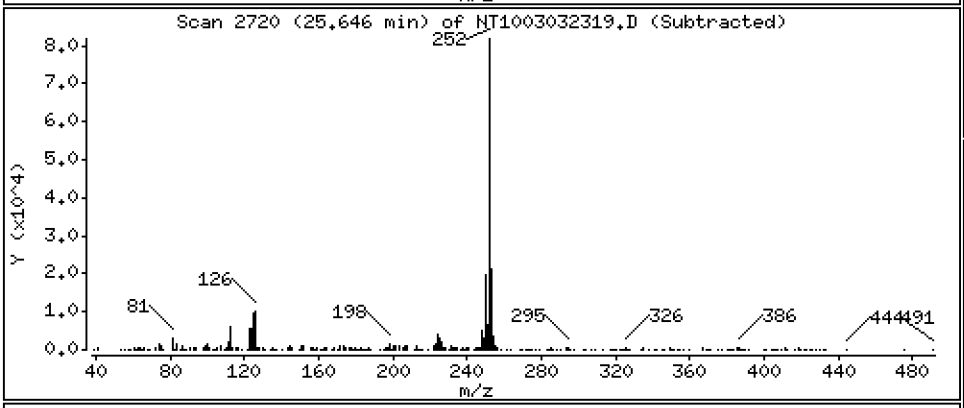
Column diameter: 0.25

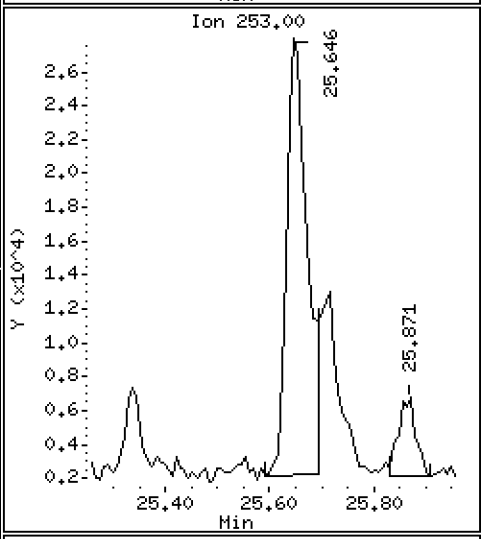
74 Benzo(b)fluoranthene

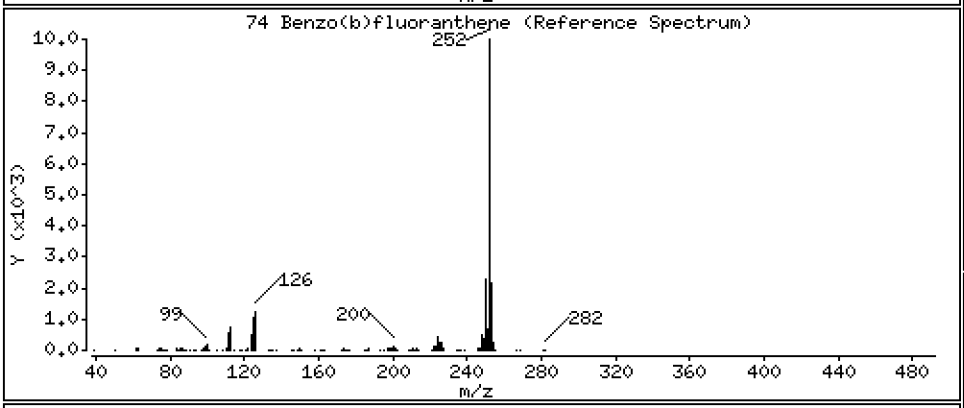
Concentration: 0.5606 ug/ml

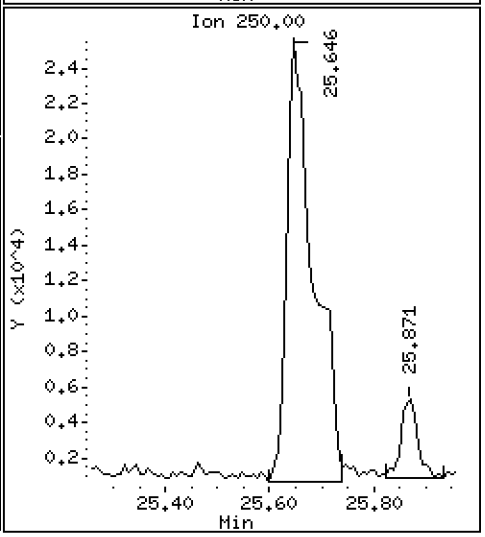


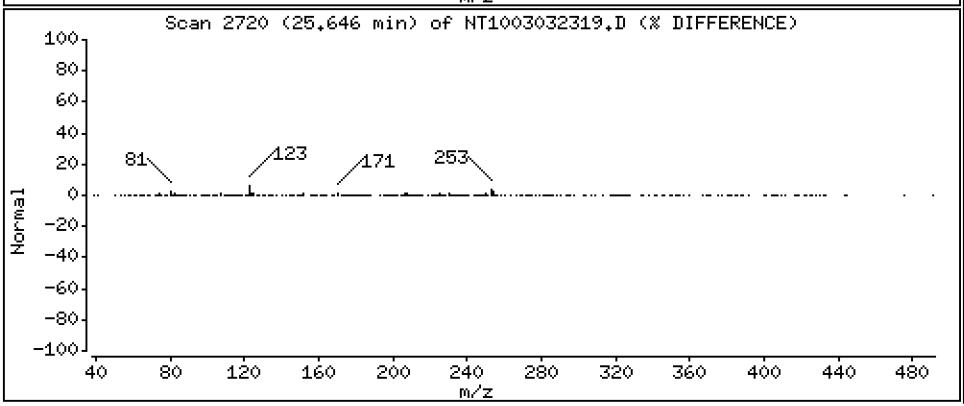












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

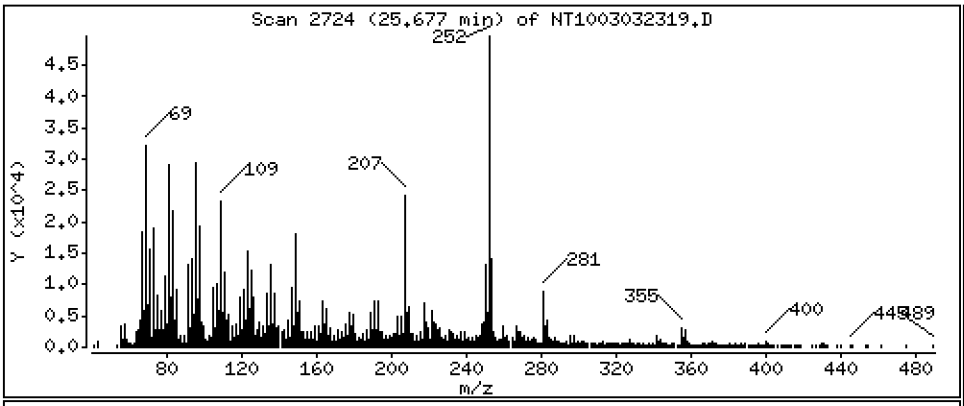
Operator: VTS

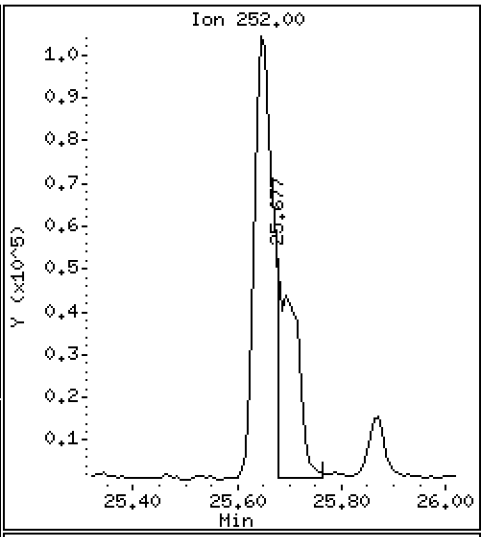
Column phase: ZB-5msi

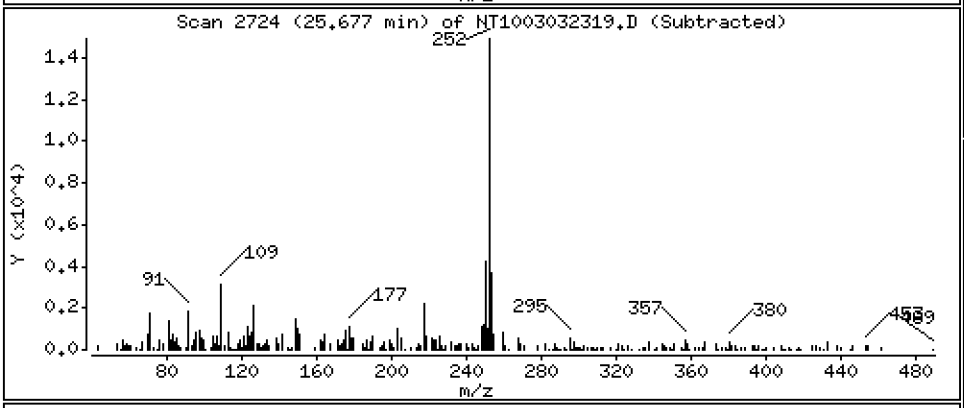
Column diameter: 0.25

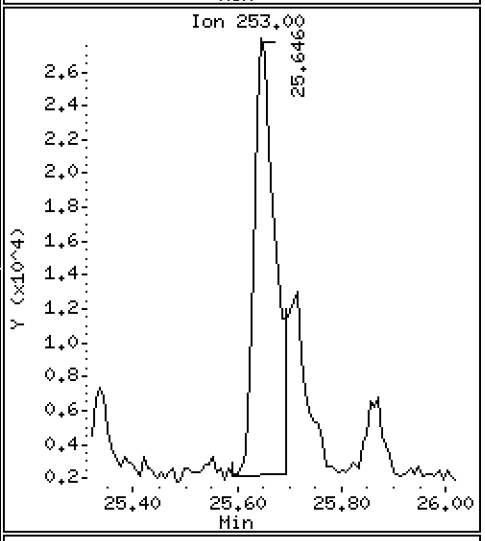
75 Benzo(k)fluoranthene

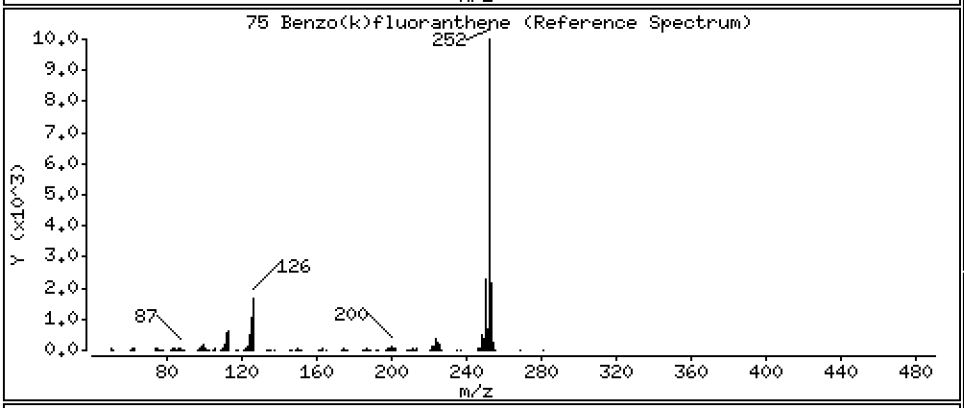
Concentration: 0.2451 ug/ml

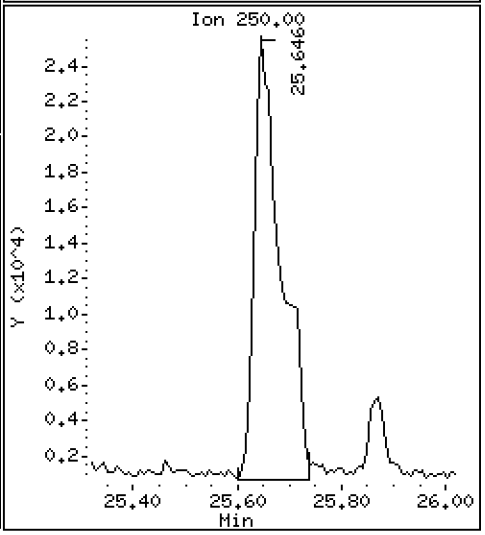


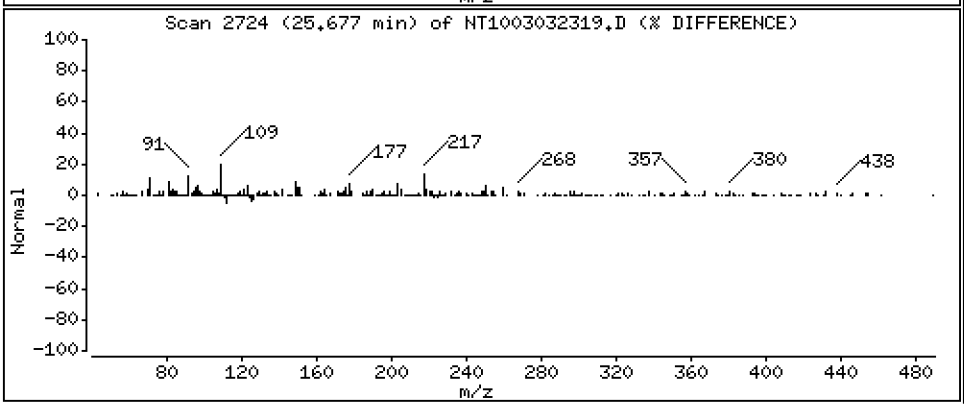












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

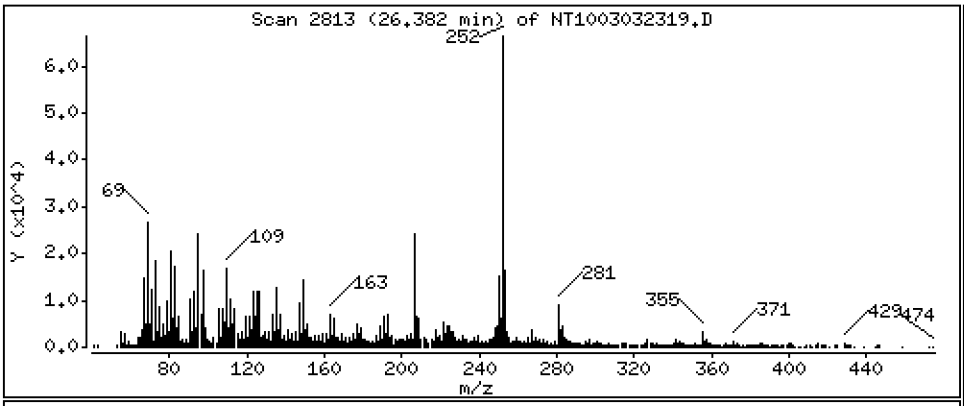
Operator: VTS

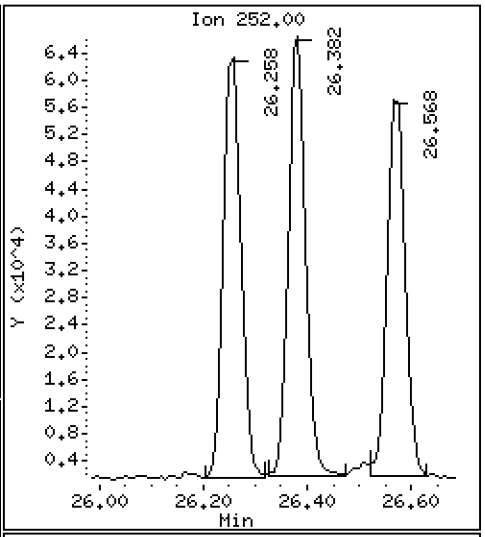
Column phase: ZB-5msi

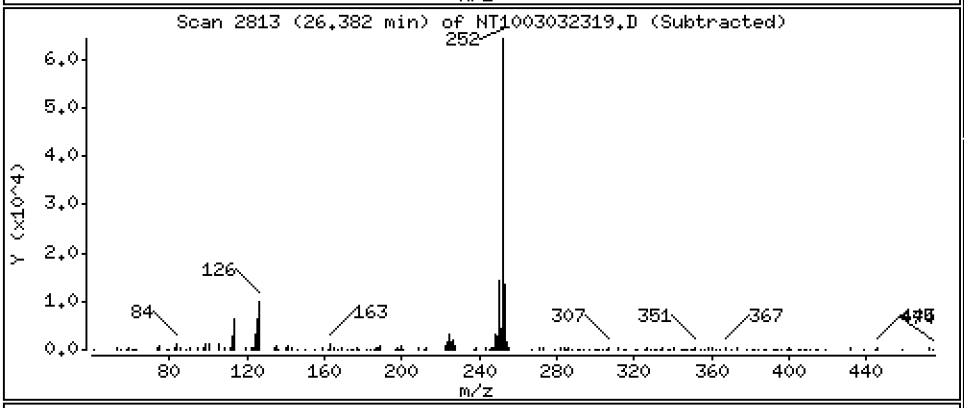
Column diameter: 0.25

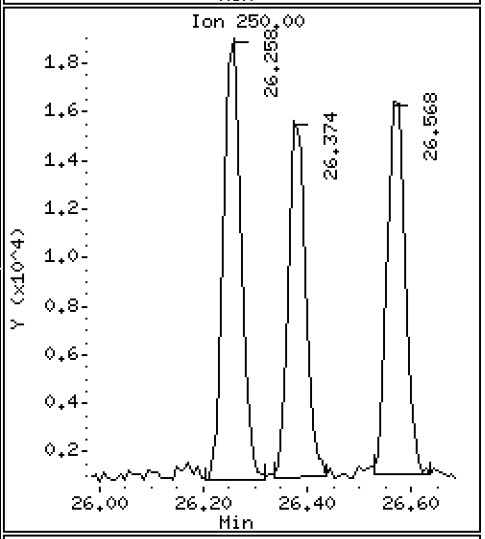
76 Benzo(a)pyrene

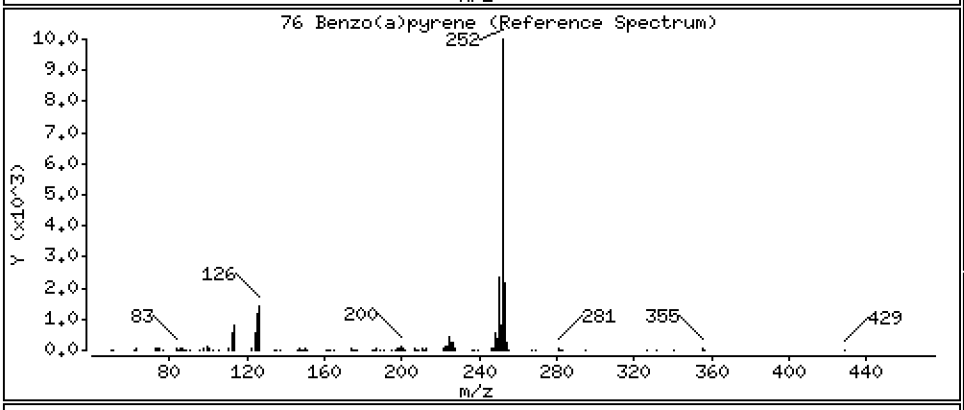
Concentration: 0.3444 ug/ml

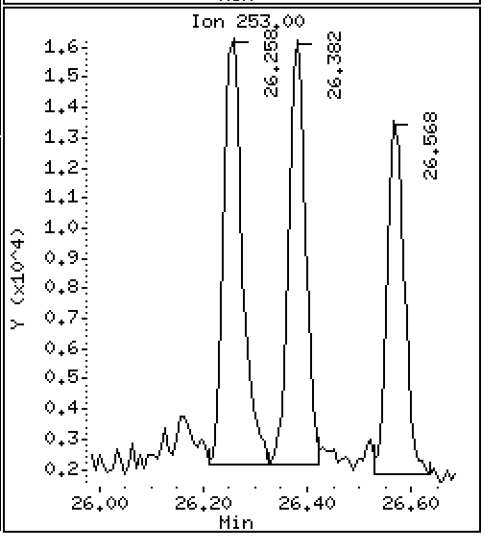


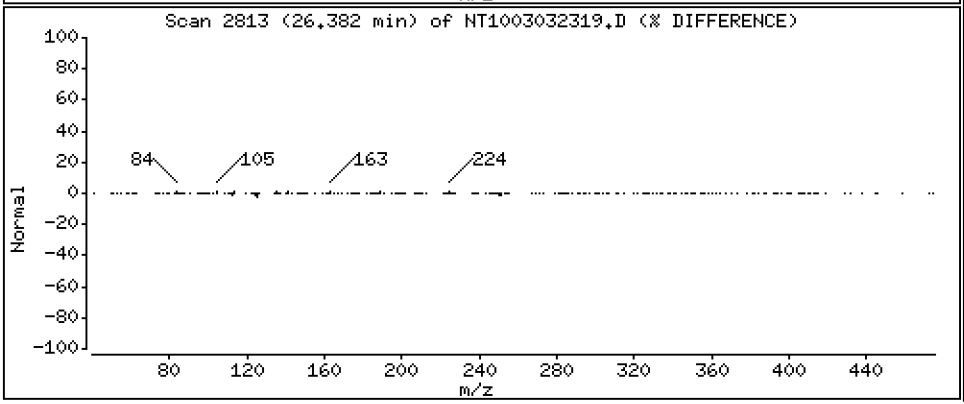












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

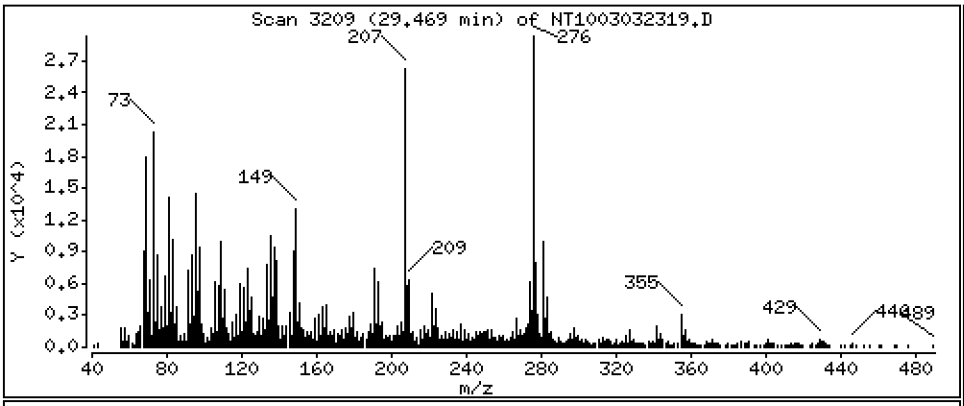
Operator: VTS

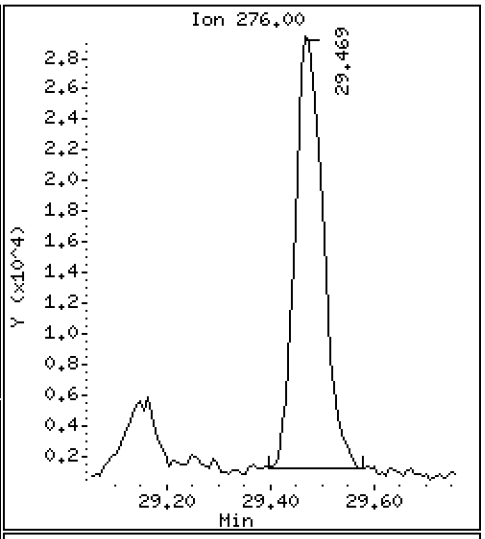
Column phase: ZB-5msi

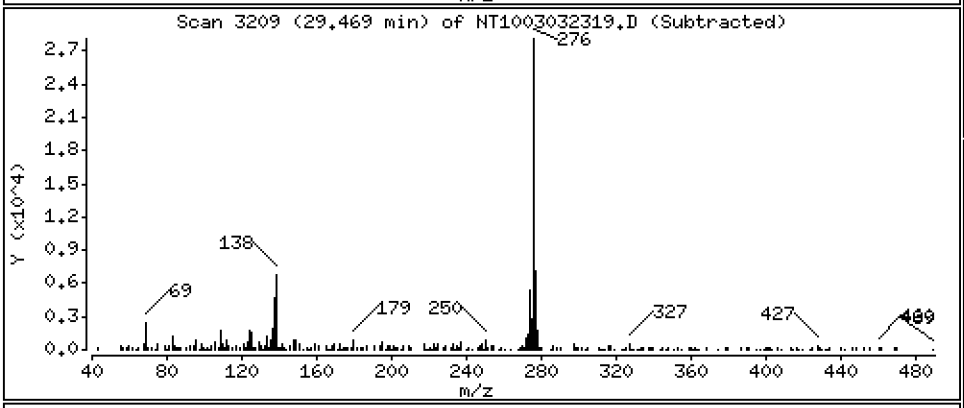
Column diameter: 0.25

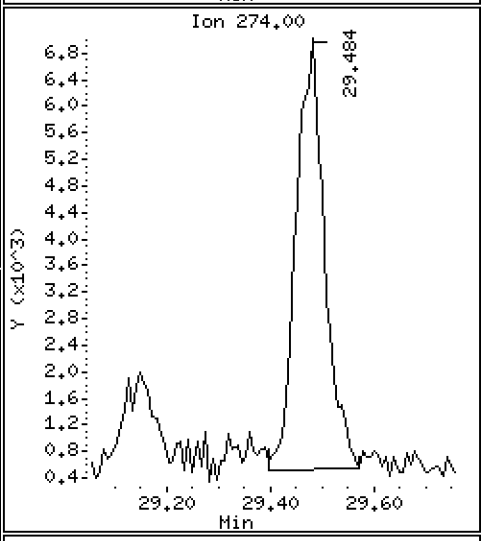
78 Indeno(1,2,3-cd)pyrene

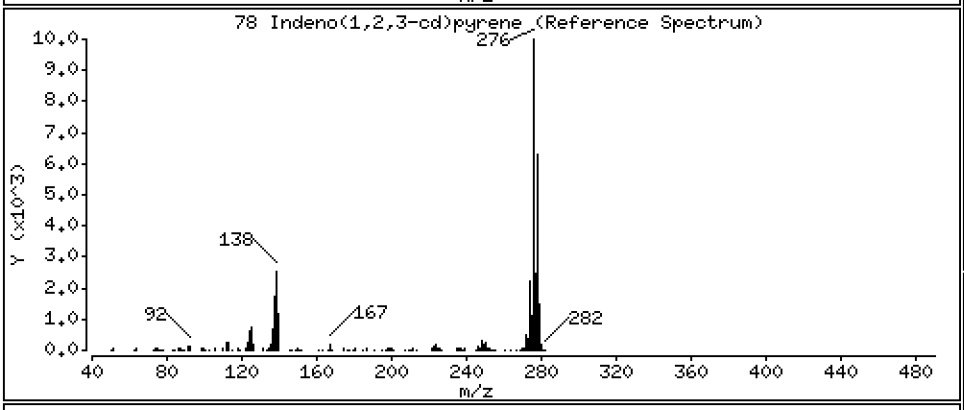
Concentration: 0.2067 ug/ml

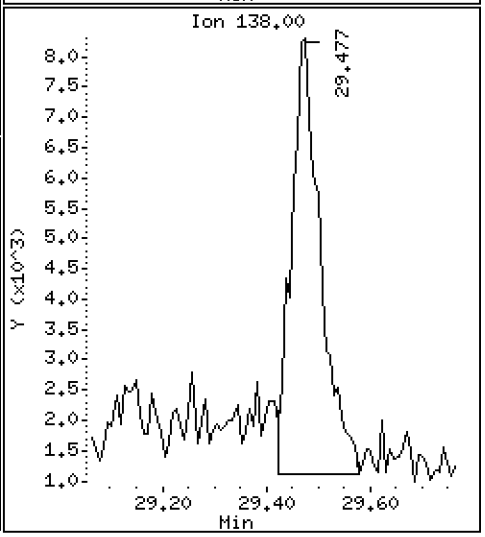


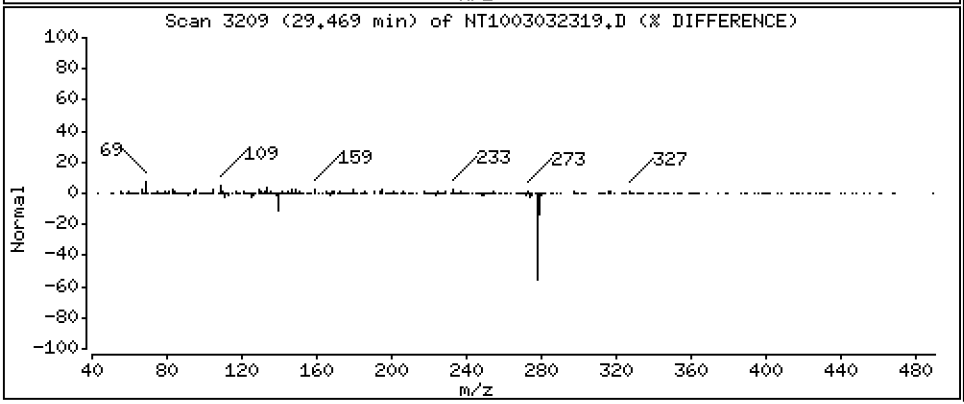












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

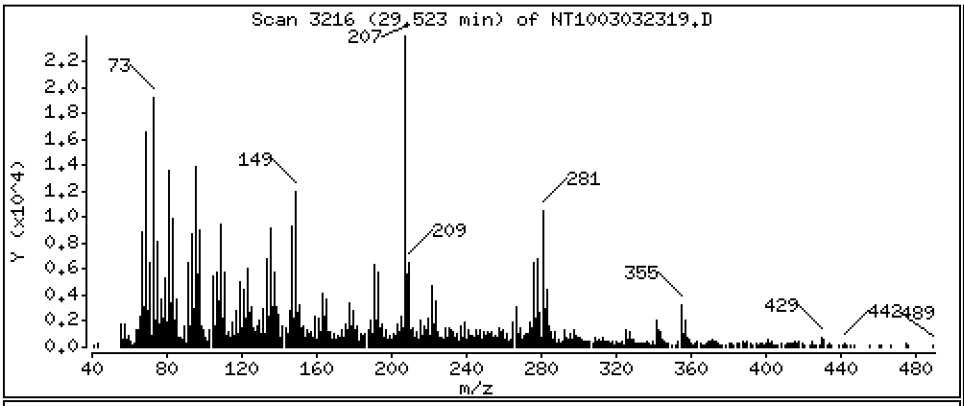
Operator: VTS

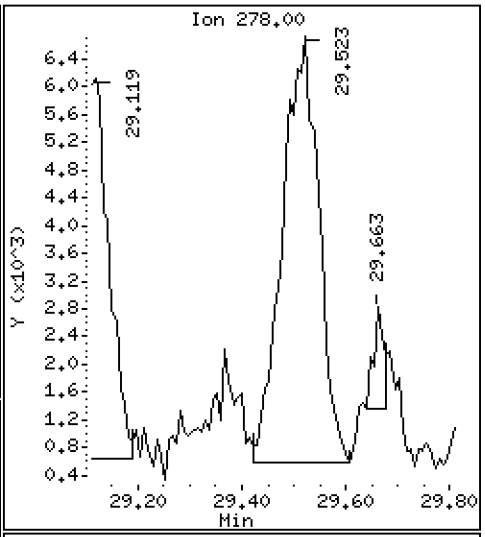
Column phase: ZB-5msi

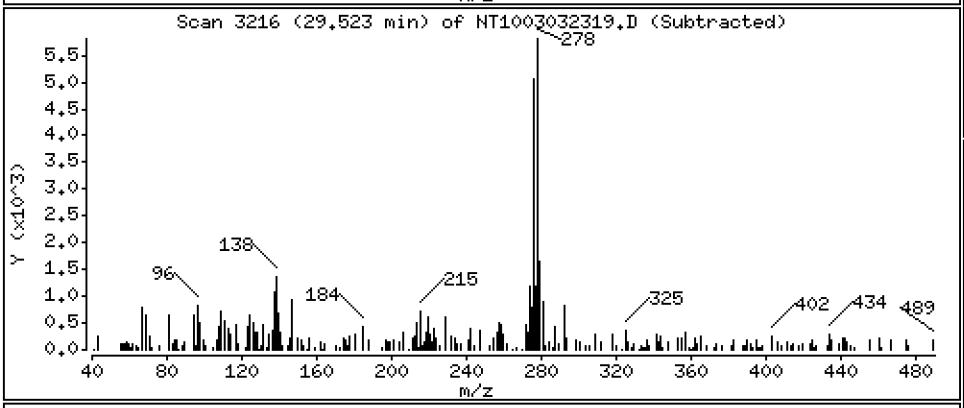
Column diameter: 0.25

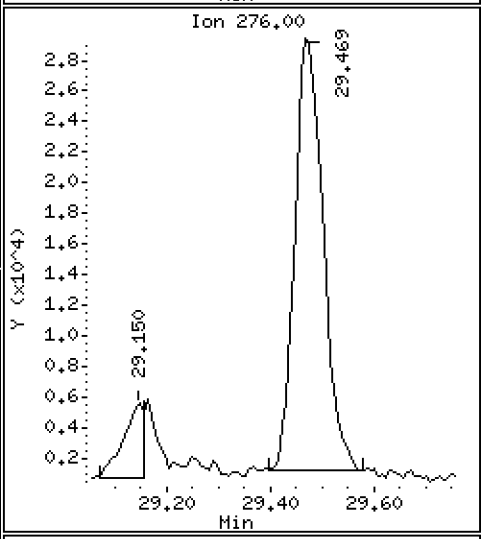
79 Dibenzo(a,h)anthracene

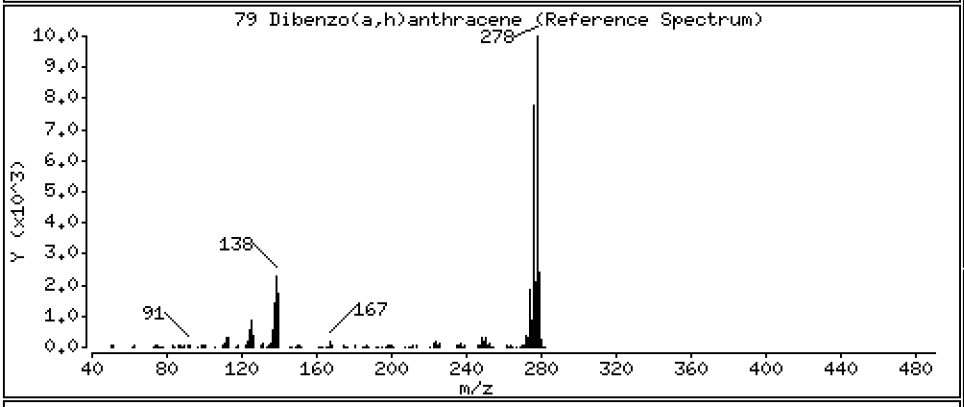
Concentration: 0.07612 ug/ml

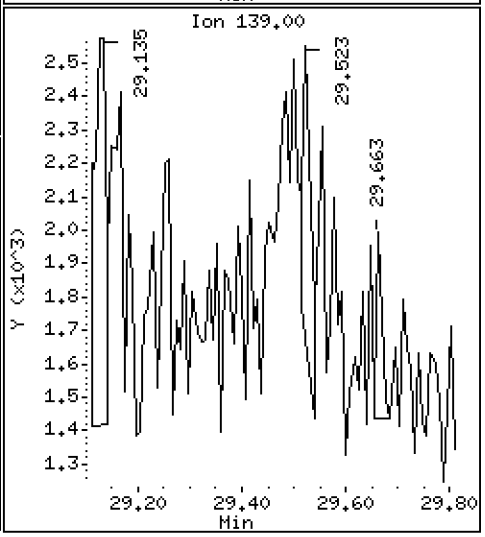


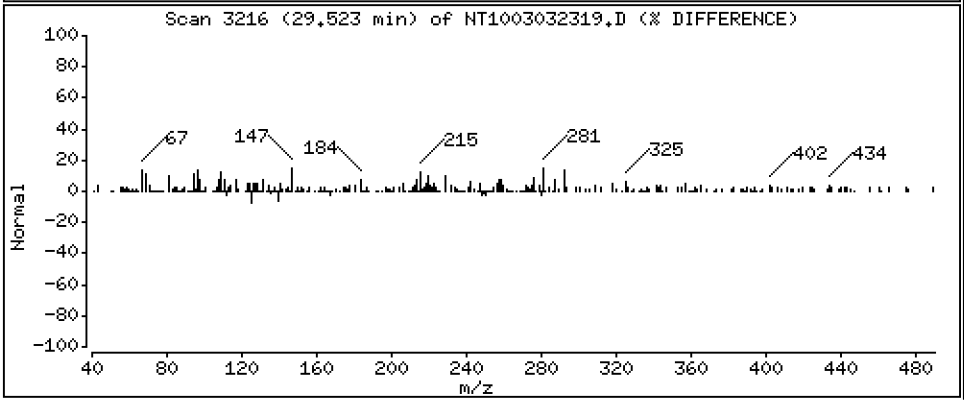












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

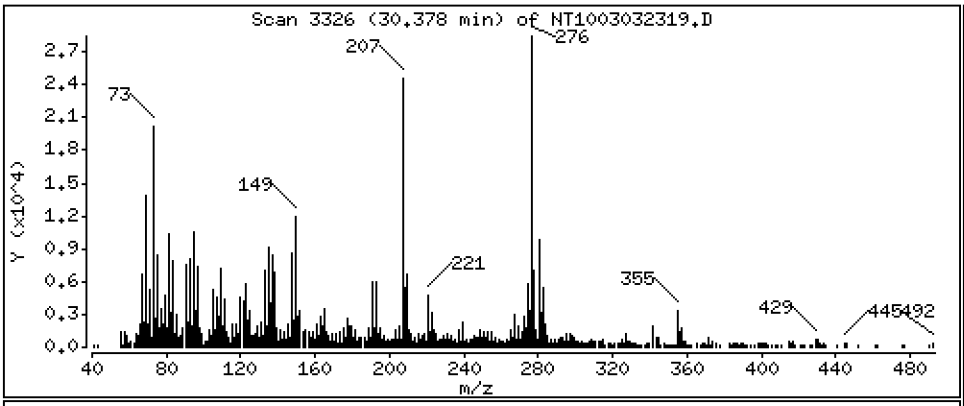
Operator: VTS

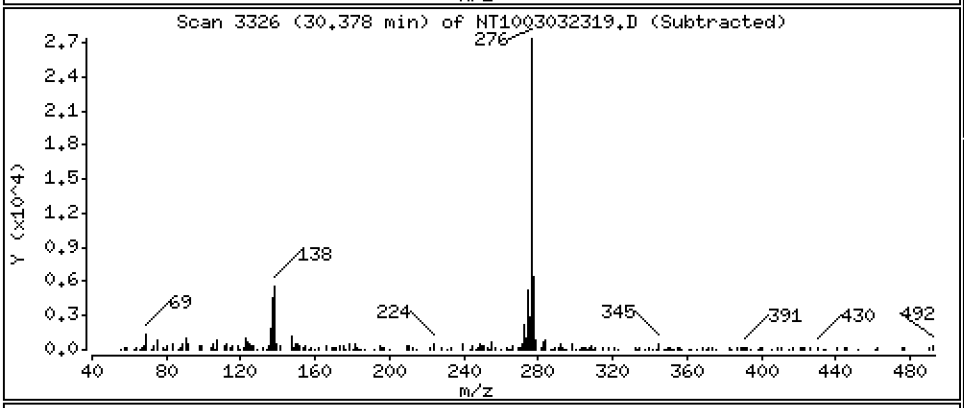
Column phase: ZB-5msi

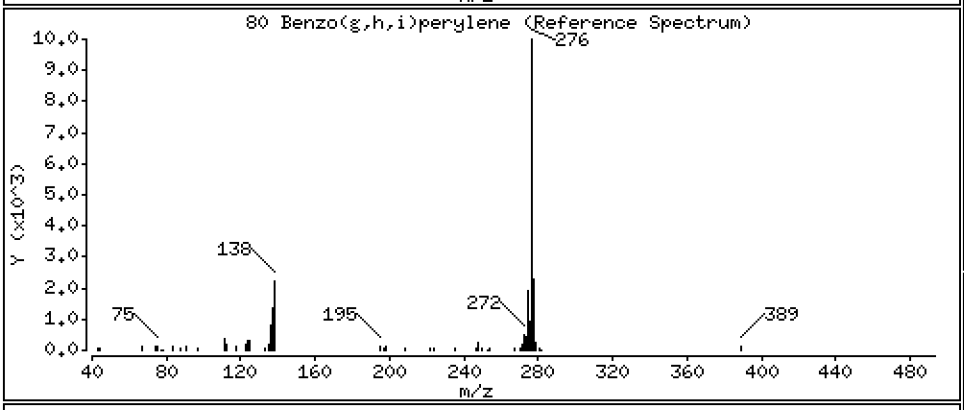
Column diameter: 0.25

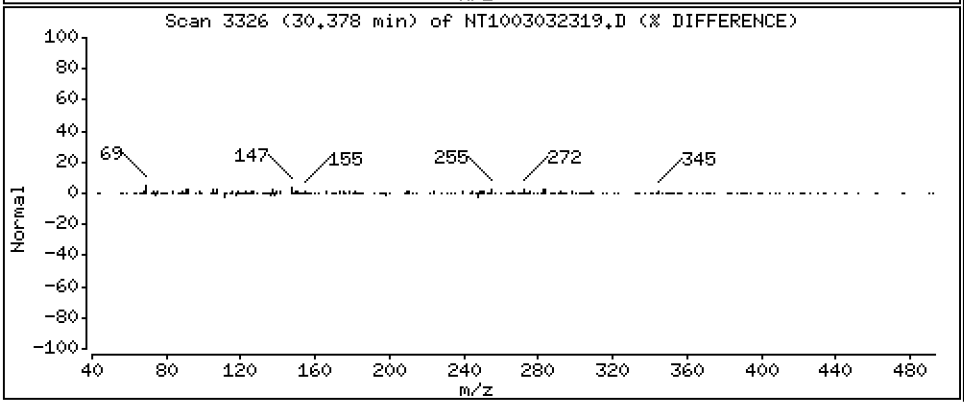
80 Benzo(g,h,i)perylene

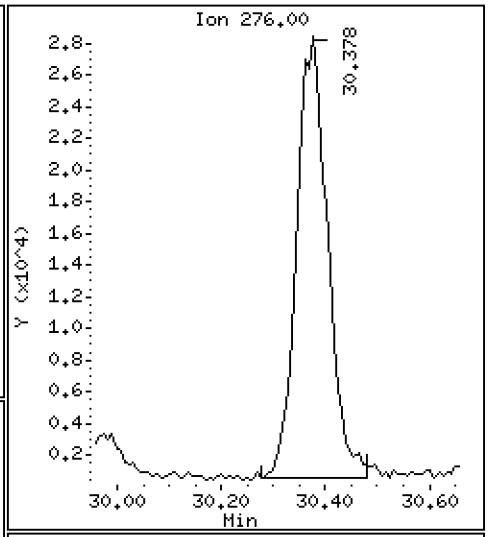
Concentration: 0.2809 ug/ml

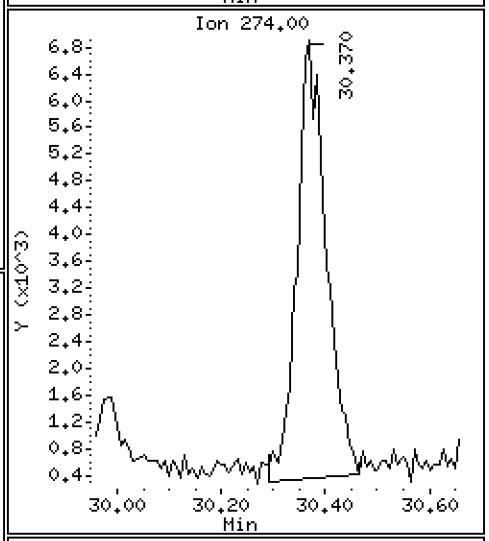


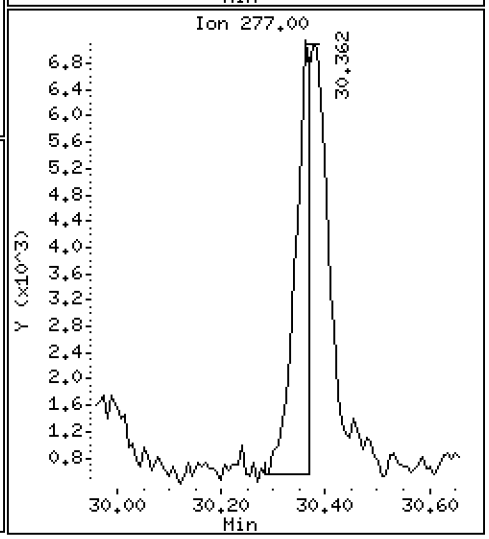












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

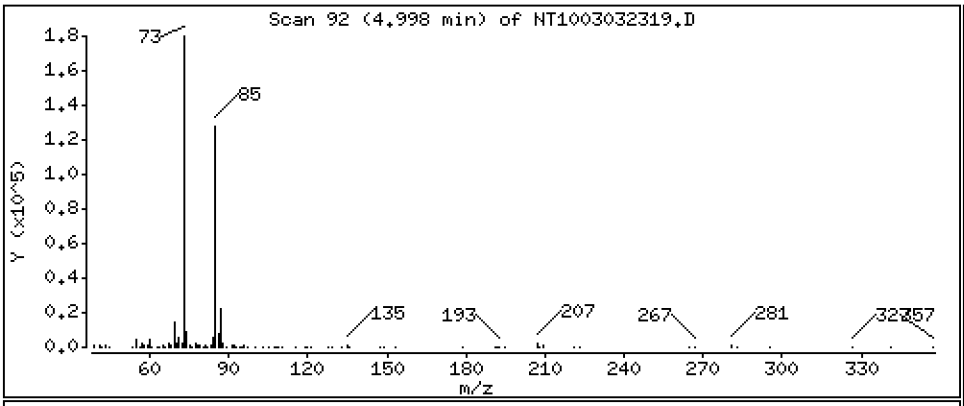
Operator: VTS

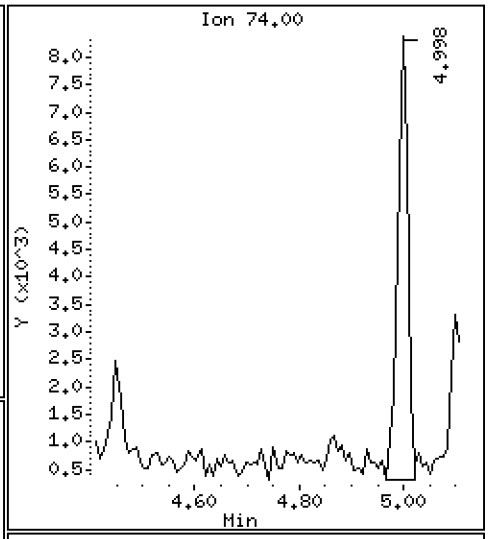
Column phase: ZB-5msi

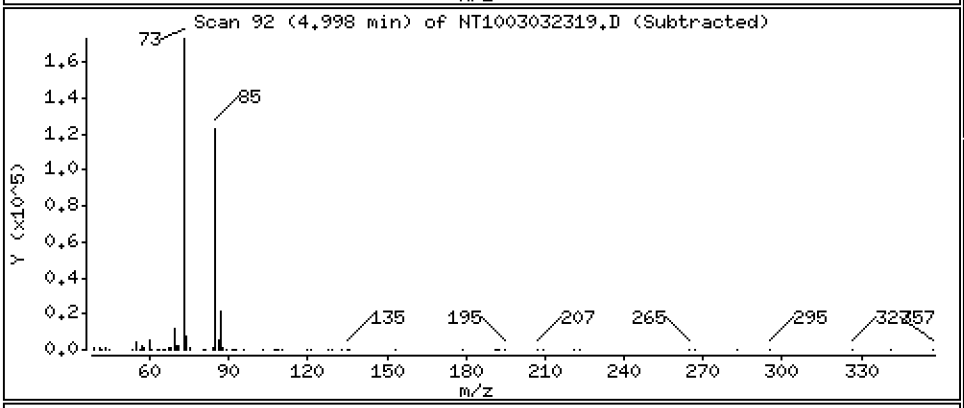
Column diameter: 0.25

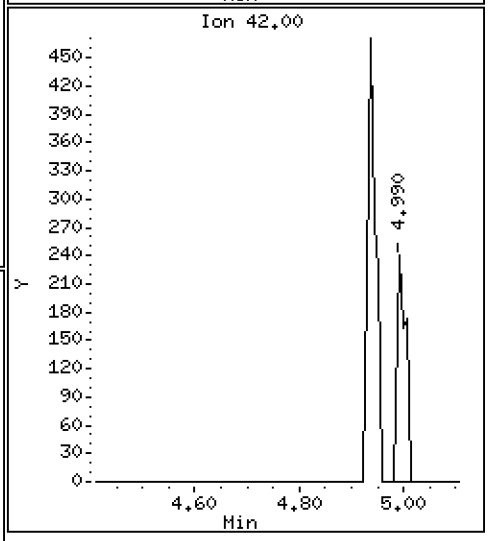
90 N-Nitrosodimethylamine

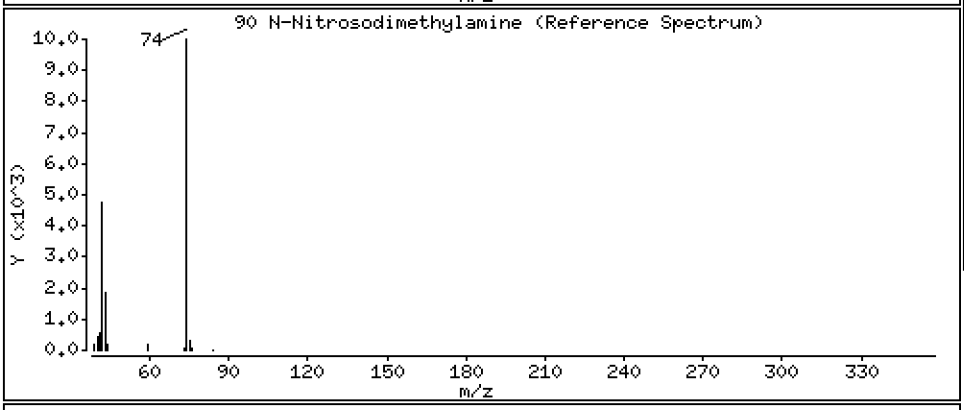
Concentration: 0.1090 ug/ml

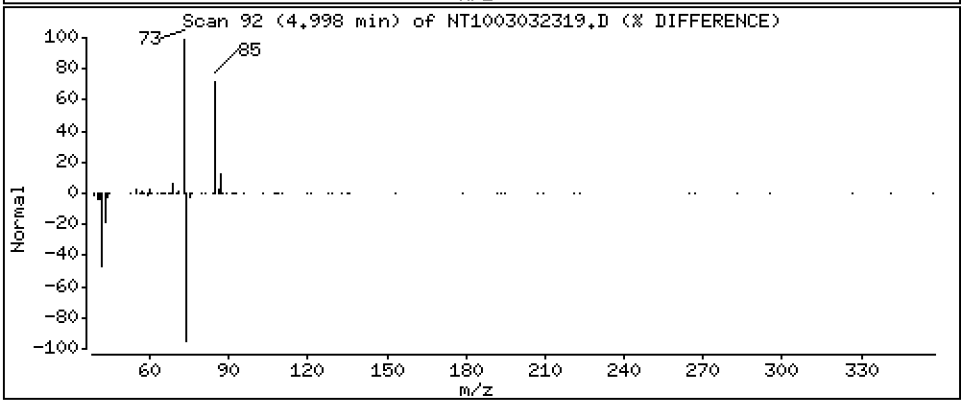












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

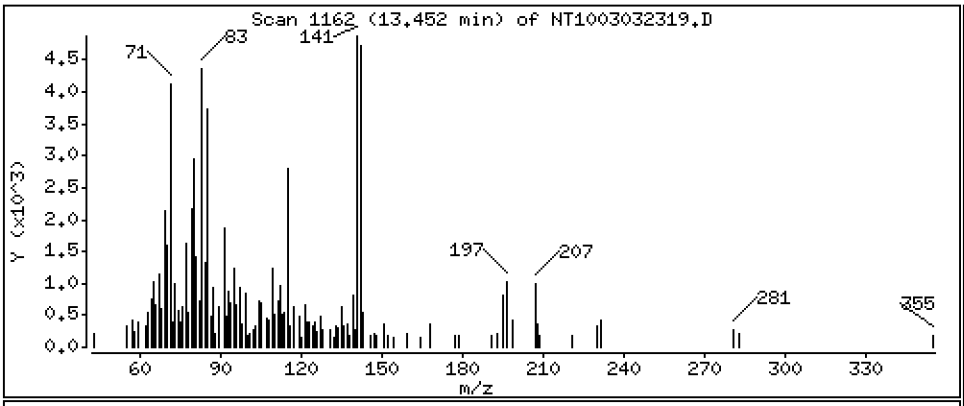
Operator: VTS

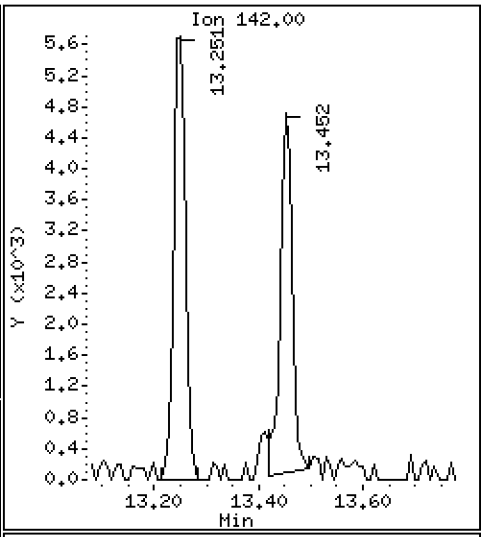
Column phase: ZB-5msi

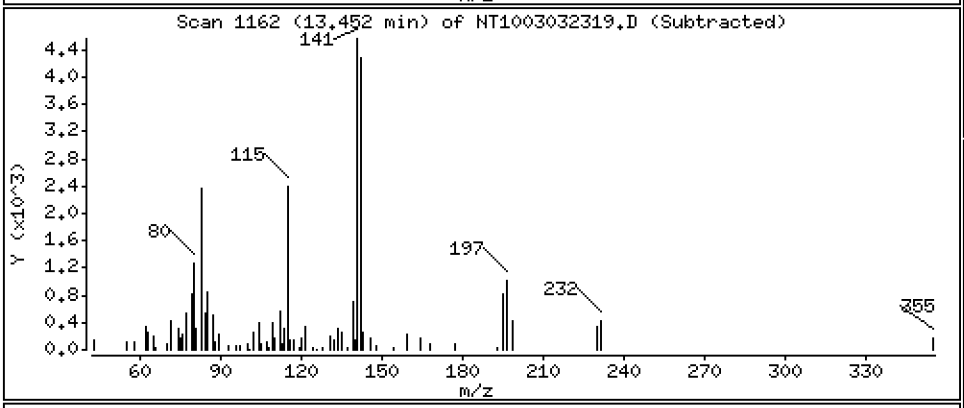
Column diameter: 0.25

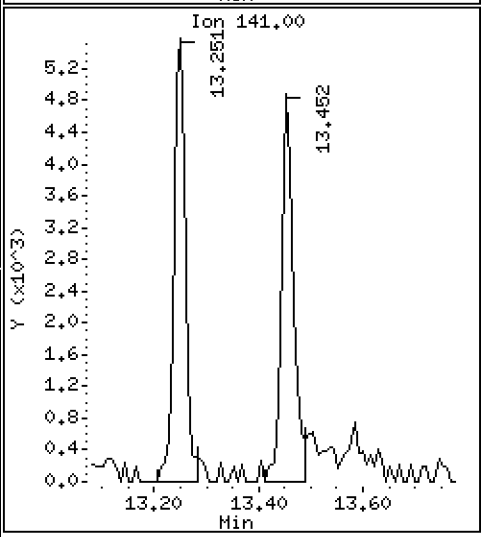
105 1-methylnaphthalene

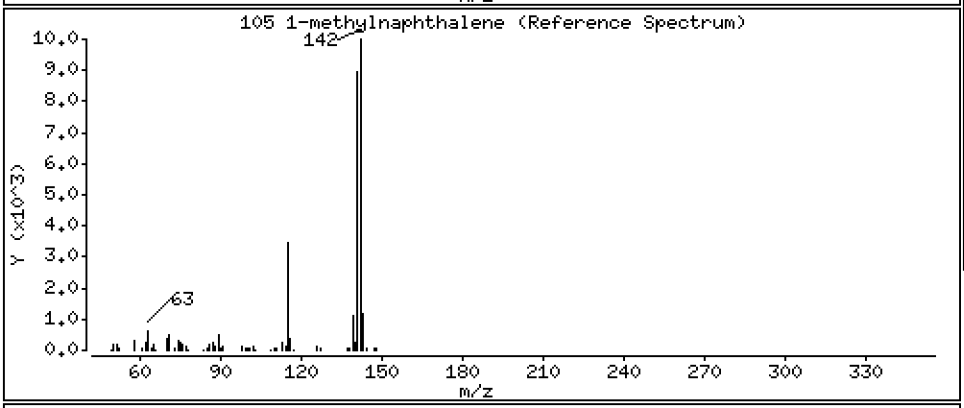
Concentration: 0.02980 ug/ml

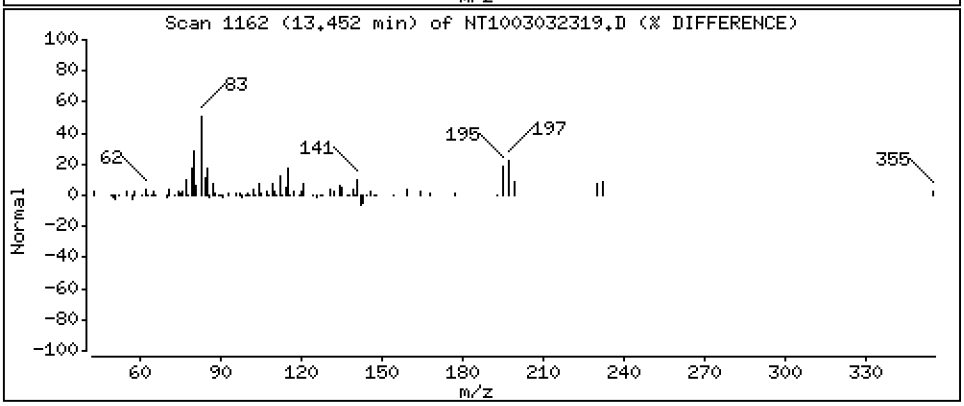












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

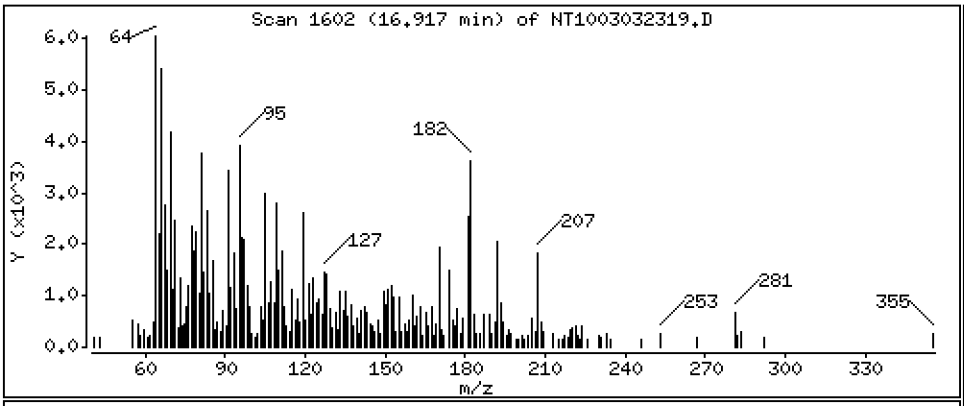
Operator: VTS

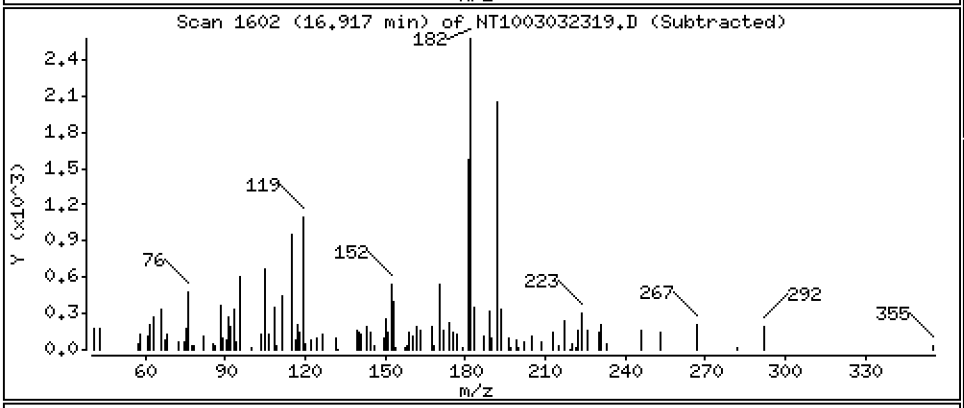
Column phase: ZB-5msi

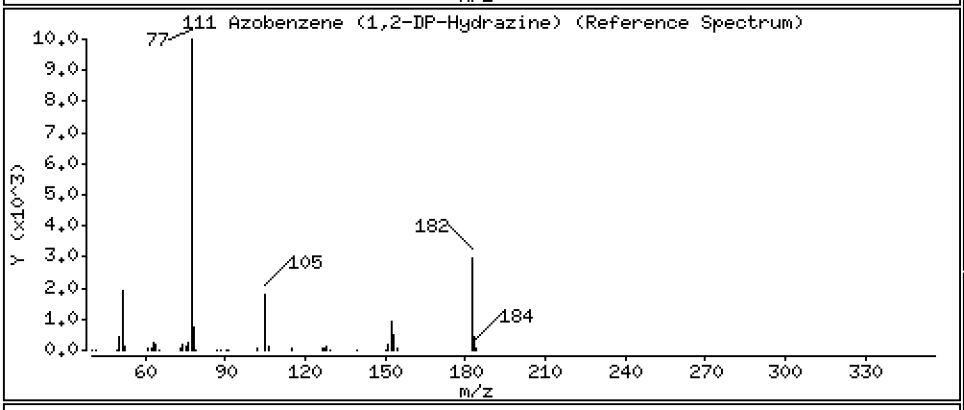
Column diameter: 0.25

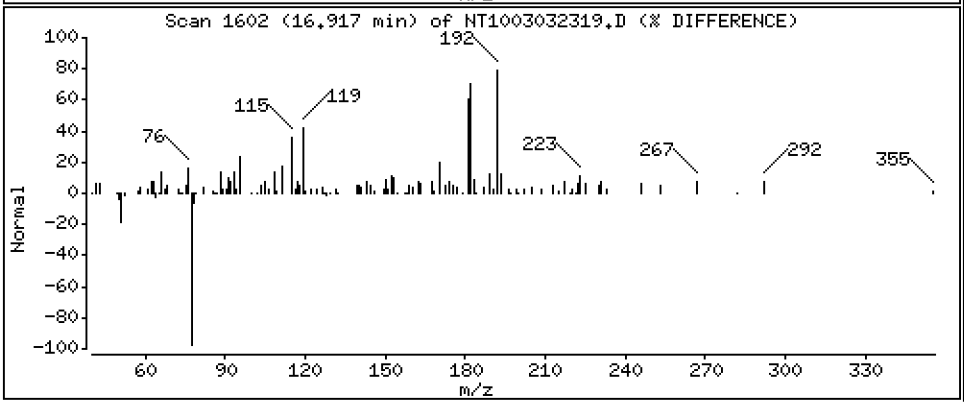
111 Azobenzene (1,2-DP-Hydrazine)

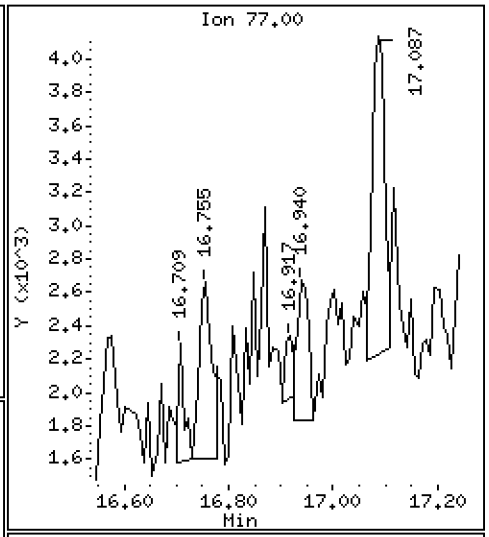
Concentration: 0.001070 ug/ml

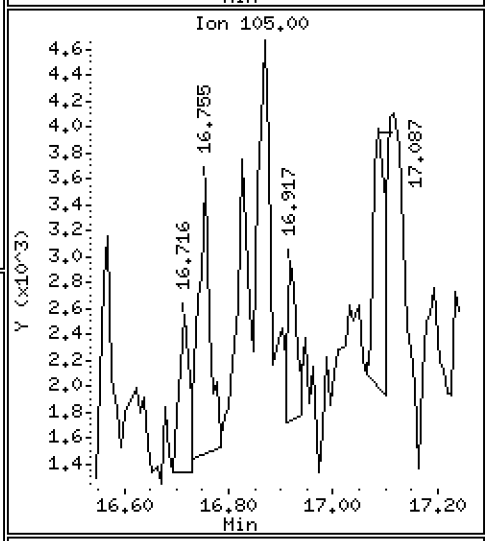


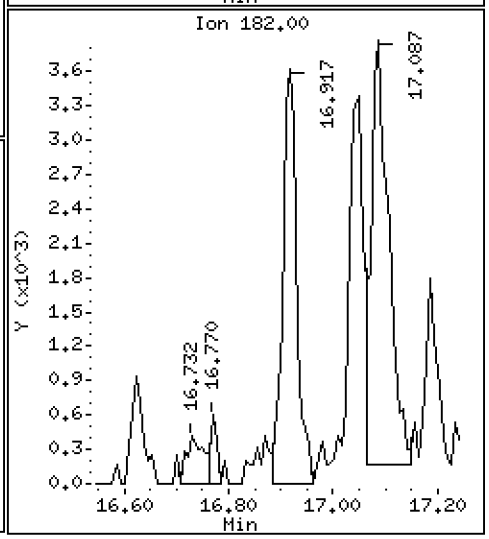












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032319.D

Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

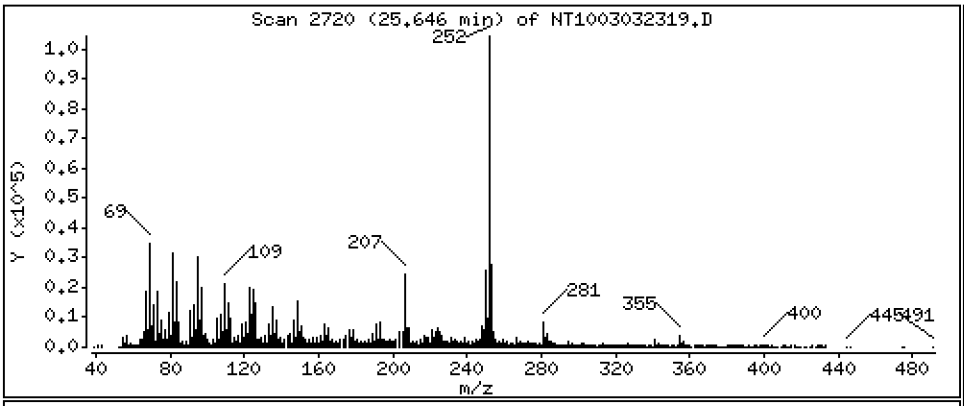
Operator: VTS

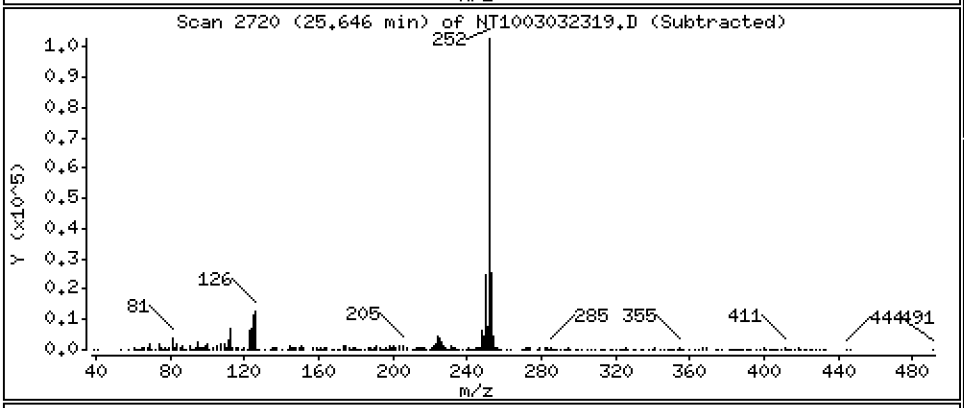
Column phase: ZB-5msi

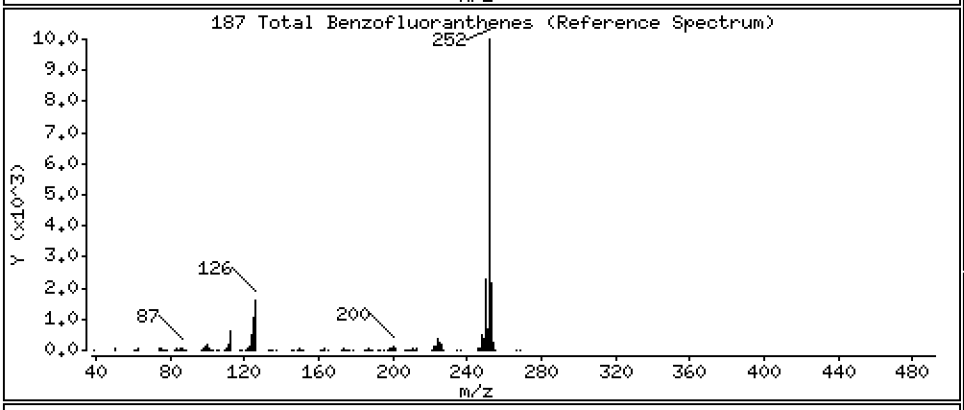
Column diameter: 0.25

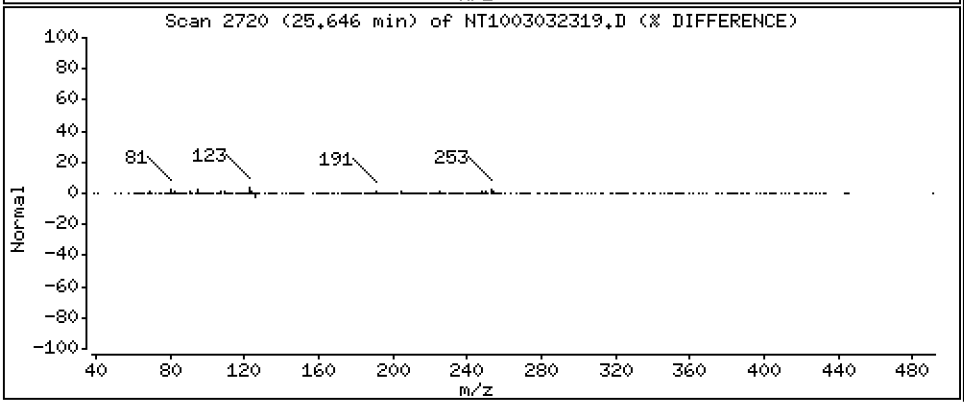
187 Total Benzofluoranthenes

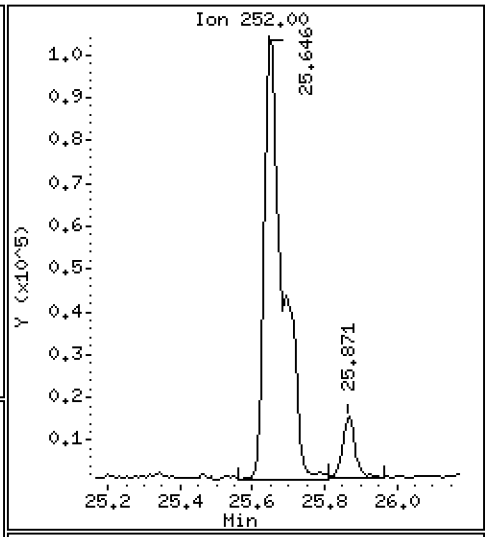
Concentration: 0.7582 ug/ml

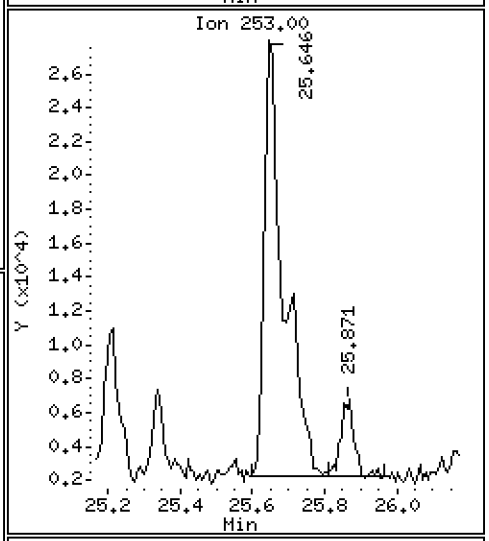


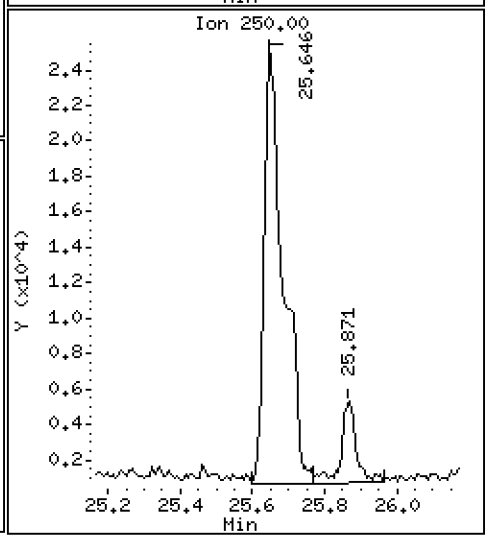












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230303A.b\NT1003032319.D
Lab Smp Id: 23A0249-03
Inj Date : 04-MAR-2023 05:12
Operator : VTS Inst ID: nt10.i
Smp Info : 23A0249-03
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Meth Date : 26-Apr-2023 10:41 van Quant Type: ISTD
Cal Date : 01-MAR-2023 18:37 Cal File: NT1003012306.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/ml)
$ 1	2-Fluorophenol	112	6.928	6.920	(0.745)	845932	5.42551	5.426
$ 2	Phenol-d5	99	8.543	8.535	(0.919)	1108133	6.12165	6.122
3	Phenol	94	8.566	8.558	(0.922)	394450	2.04953	2.050
$ 5	2-Chlorophenol-d4	132	8.859	8.852	(0.953)	936392	6.06313	6.063
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	9.293	9.278	(1.000)	495562	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	9.580	9.572	(1.031)	404244	3.50341	3.503
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	9.542	9.518	(1.027)	13073	0.13249	0.1325
14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	10.015	9.992	(1.078)	13392	0.07161	0.07161
$ 18	Nitrobenzene-d5	82	10.357	10.341	(0.878)	741489	4.25712	4.257
19	Nitrobenzene	77	Compound Not Detected.					
20	Isophorone	82	Compound Not Detected.					
21	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	Compound Not Detected.					
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.796	11.772	(1.000)	1586712	4.00000	
28	Naphthalene	128	11.842	11.819	(1.004)	23350	0.05734	0.05734
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	13.250	13.227	(1.123)	9495	0.03300	0.03300
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	14.009	13.978	(0.908)	1353684	4.59184	4.592
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	14.845	14.821	(0.962)	5870	0.02199	0.02199
40	Acenaphthylene	152	15.139	15.115	(0.981)	11711	0.02935	0.02935
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	15.425	15.401	(1.000)	826513	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	15.494	15.471	(1.004)	8580	0.03566	0.03566
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.858	15.834	(1.028)	12528	0.03508	0.03508
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	16.329	16.306	(1.059)	76280	0.26976	0.2698
49	Fluorene	166	16.585	16.554	(1.075)	13416	0.04515	0.04515
51	4-Chlorophenyl-phenylether	204	16.878	16.554	(1.094)	73	6e-004	0.0005652(H)
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	17.086	17.063	(1.108)	291014	5.51814	5.518
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	18.564	18.533	(1.000)	1367370	4.00000	
60	Phenanthrene	178	18.618	18.587	(1.003)	85695	0.24489	0.2449
61	Anthracene	178	18.726	18.695	(1.009)	39997	0.11787	0.1179
62	Carbazole	167	19.066	19.035	(1.027)	10689	0.03439	0.03439
63	Di-n-butylphthalate	149	19.771	19.739	(1.065)	16003	0.03797	0.03797
64	Fluoranthene	202	21.032	20.985	(0.889)	249924	0.55685	0.5569
65	Pyrene	202	21.457	21.426	(0.907)	318249	0.69638	0.6964
$ 66	Terphenyl-d14	244	21.736	21.705	(0.919)	1539145	4.16228	4.162
67	Butylbenzylphthalate	149	22.634	22.611	(0.956)	10851	0.04408	0.04408
68	Benzo(a)anthracene	228	23.641	23.617	(0.999)	159292	0.34627	0.3463
* 69	Chrysene-d12	240	23.664	23.633	(1.000)	1304659	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	23.703	23.679	(1.002)	208162	0.55881	0.5588
72	bis(2-Ethylhexyl)phthalate	149	23.648	23.617	(0.954)	110509	0.34697	0.3470
* 134	Di-n-octylphthalate-d4	153	24.779	24.748	(1.000)	2269043	4.00000	
73	Di-n-octylphthalate	149	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	25.646	25.607	(0.967)	280086	0.56061	0.5606
75	Benzo(k)fluoranthene	252	25.677	25.669	(0.968)	117517	0.24513	0.2451(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
76	Benzo(a)pyrene	252	26.382	26.335	(0.995)	153462	0.34443	0.3444
* 77	Perylene-d12	264	26.513	26.459	(1.000)	1458990	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.468	29.406	(1.111)	107530	0.20667	0.2067
79	Dibenzo(a,h)anthracene	278	29.523	29.460	(1.114)	29990	0.07612	0.07612
80	Benzo(g,h,i)perylene	276	30.377	30.307	(1.146)	116505	0.28086	0.2809
90	N-Nitrosodimethylamine	74	4.997	4.758	(0.538)	10971	0.10900	0.1090
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	13.451	13.428	(1.140)	7760	0.02980	0.02980
111	Azobenzene (1,2-DP-Hydrazine)	77	16.916	16.893	(1.097)	452	0.00107	0.001070
187	Total Benzofluoranthenes	252	25.646	25.669	(0.967)	363181	0.75817	0.7582
120	2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032319.D
Lab Smp Id: 23A0249-03
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:02

Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	514090	257045	1028180	495562	-3.60
27 Naphthalene-d8	1833847	916924	3667694	1586712	-13.48
42 Acenaphthene-d10	935282	467641	1870564	826513	-11.63
59 Phenanthrene-d10	1597882	798941	3195764	1367370	-14.43
69 Chrysene-d12	1549718	774859	3099436	1304659	-15.81
134 Di-n-octylphthala	2731644	1365822	5463288	2269043	-16.93
77 Perylene-d12	1727703	863852	3455406	1458990	-15.55

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.29	0.17
27 Naphthalene-d8	11.77	11.27	12.27	11.80	0.20
42 Acenaphthene-d10	15.40	14.90	15.90	15.43	0.15
59 Phenanthrene-d10	18.53	18.03	19.03	18.56	0.17
69 Chrysene-d12	23.63	23.13	24.13	23.66	0.13
134 Di-n-octylphthala	24.75	24.25	25.25	24.78	0.13
77 Perylene-d12	26.46	25.96	26.96	26.51	0.21

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

REVIEW SUMMARY FOR FILE - NT1003032319.D

Lab ID: 23A0249-03
nt10.i, 20230303A.b\ABN.m,   04-MAR-2023 05:12

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.094	1.075	0.0194	4-Chlorophenyl-phenylether
0.538	0.513	0.0249	N-Nitrosodimethylamine

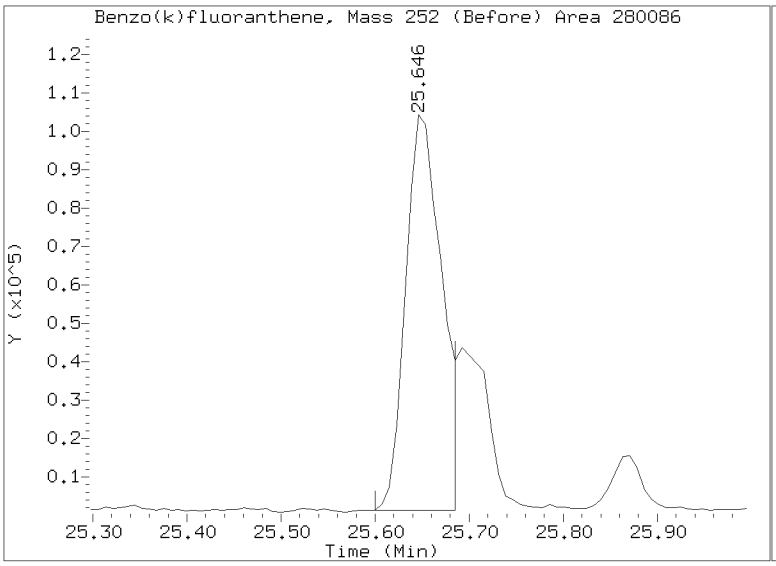
RRT check based on Ccal File: NT1003032314ICV.D

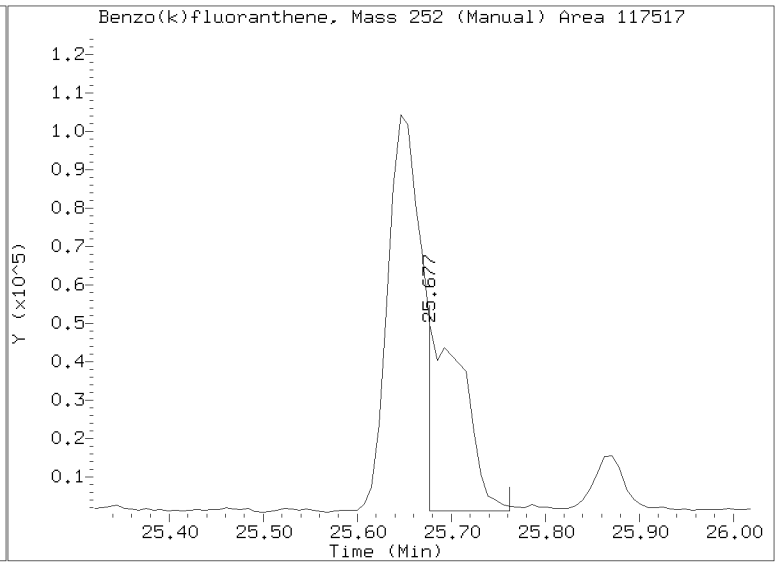
On Column LOD for nt10.i, 20230303A.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230303A.b/NT1003032319.D
Injection Date: 04-MAR-2023 05:12
Lab ID:23A0249-03 Client ID:
Report Date: 07/05/2023 11:29





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1084

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-04 A	SDG:	23A0249
Sampled:	01/12/23 09:47	Prepared:	01/30/23 14:02	File ID:	NT1003032320.D
% Solids:	53.88	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 05:50
Batch:	BLA0673	Sequence:	SLC0162	Initial/Final:	18.69 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00019
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	111		4.4	19.9
106-44-5	4-Methylphenol	1	19.9	U	7.3	19.9
91-20-3	Naphthalene	1	19.9	U	4.2	19.9
91-57-6	2-Methylnaphthalene	1	19.9	U	4.5	19.9
208-96-8	Acenaphthylene	1	19.9	U	6.2	19.9
131-11-3	Dimethylphthalate	1	19.9	U	4.4	19.9
83-32-9	Acenaphthene	1	19.9	U	5.2	19.9
132-64-9	Dibenzofuran	1	19.9	U	14.0	19.9
86-73-7	Fluorene	1	19.9	U	14.5	19.9
85-01-8	Phenanthrene	1	10.9	J	8.7	19.9
120-12-7	Anthracene	1	19.9	U	7.1	19.9
206-44-0	Fluoranthene	1	21.2		6.0	19.9
129-00-0	Pyrene	1	32.3		5.6	19.9
85-68-7	Butylbenzylphthalate	1	19.9	U	9.3	19.9
56-55-3	Benzo(a)anthracene	1	10.7	J	5.9	19.9
218-01-9	Chrysene	1	12.2	J	6.0	19.9
117-81-7	bis(2-Ethylhexyl)phthalate	1	23.2	J	5.4	49.7
	Benzofluoranthenes, Total	1	24.7	J	9.9	39.7
50-32-8	Benzo(a)pyrene	1	11.2	J	4.2	19.9
193-39-5	Indeno(1,2,3-cd)pyrene	1	19.9	U	14.5	19.9
53-70-3	Dibenzo(a,h)anthracene	1	19.9	U	17.1	19.9
191-24-2	Benzo(g,h,i)perylene	1	19.9	U	13.5	19.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	744.77	455	61.1	27 - 120	
Phenol-d5	744.77	469	62.9	29 - 120	
2-Chlorophenol-d4	744.77	520	69.9	31 - 120	
1,2-Dichlorobenzene-d4	496.52	307	61.8	32 - 120	
Nitrobenzene-d5	496.52	338	68.1	30 - 120	
2-Fluorobiphenyl	496.52	369	74.3	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1084

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

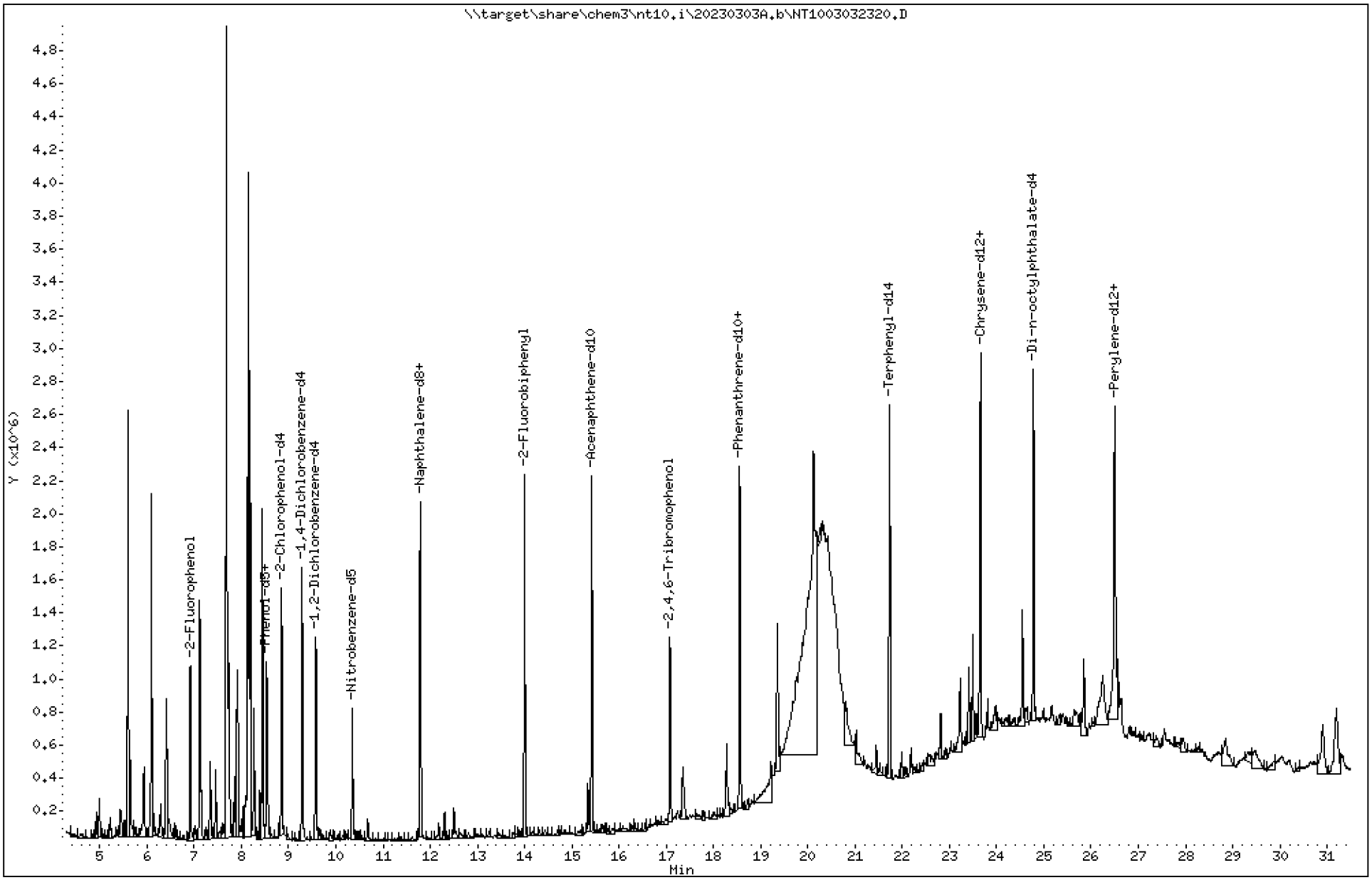
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-04 A	SDG:	23A0249
Sampled:	01/12/23 09:47	Prepared:	01/30/23 14:02	File ID:	NT1003032320.D
% Solids:	53.88	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 05:50
Batch:	BLA0673	Sequence:	SLC0162	Initial/Final:	18.69 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00019
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	744.77	407	54.7	24 - 134	
p-Terphenyl-d14	496.52	386	77.7	37 - 120	

Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032320.D
Date : 04-MAR-2023 05:50
Client ID:
Sample Info: 23A0249-04
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

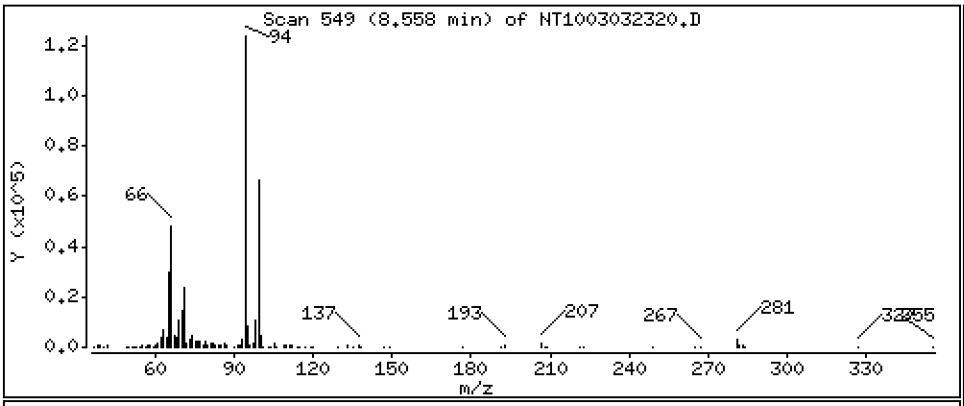
Operator: VTS

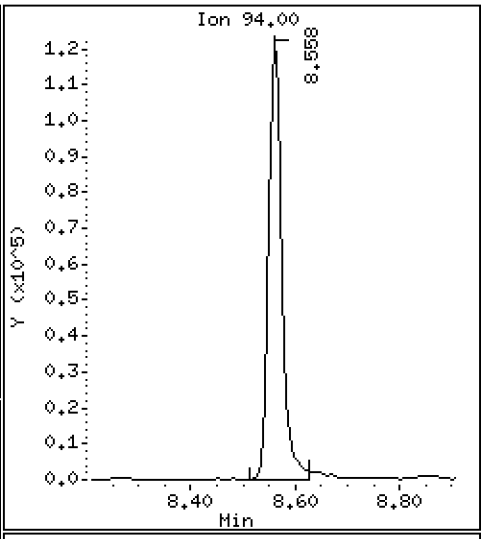
Column phase: ZB-5msi

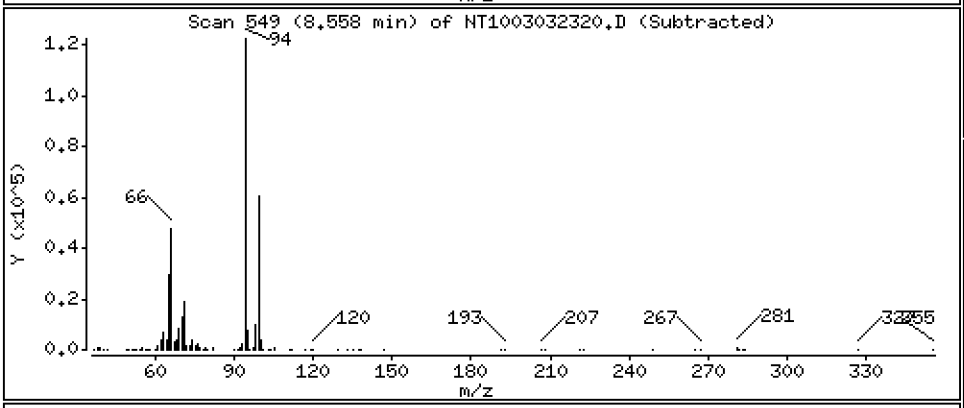
Column diameter: 0.25

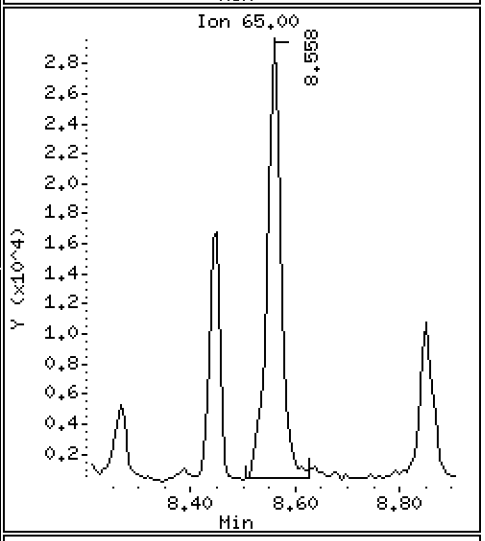
3 Phenol

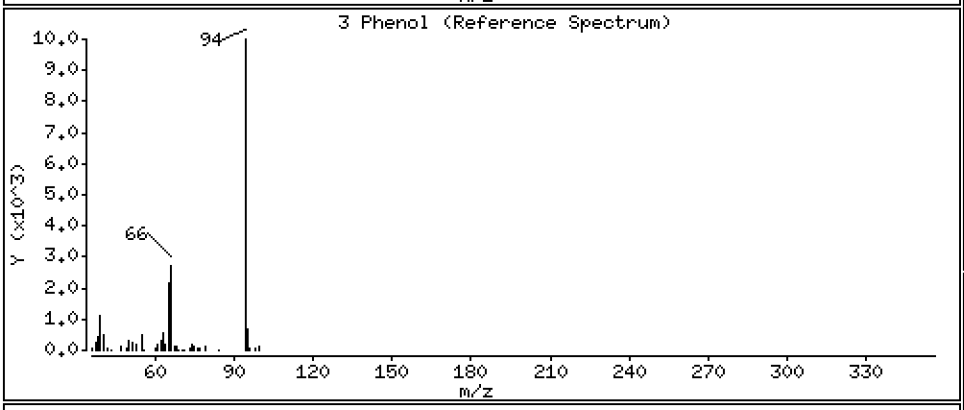
Concentration: 1.122 ug/ml

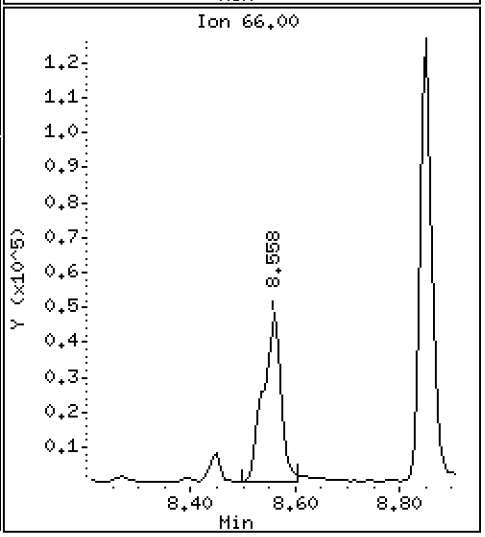


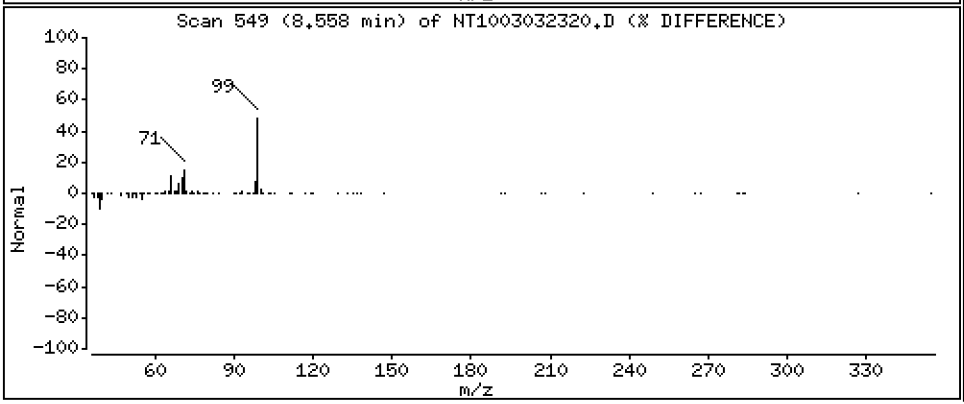












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

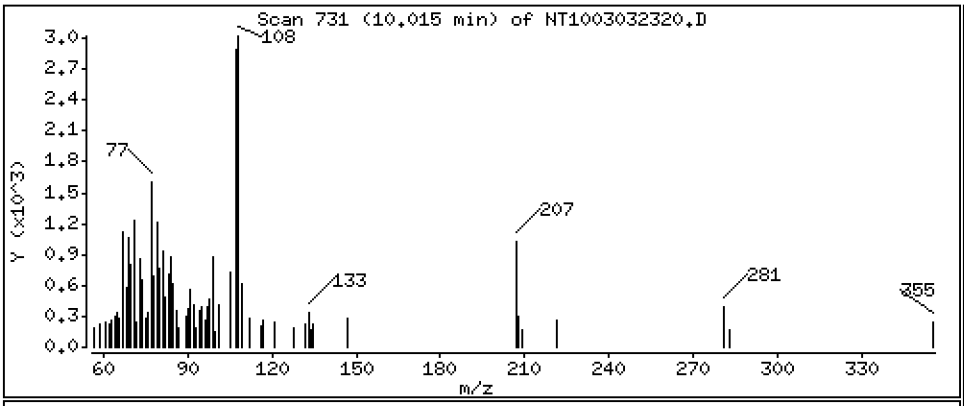
Operator: VTS

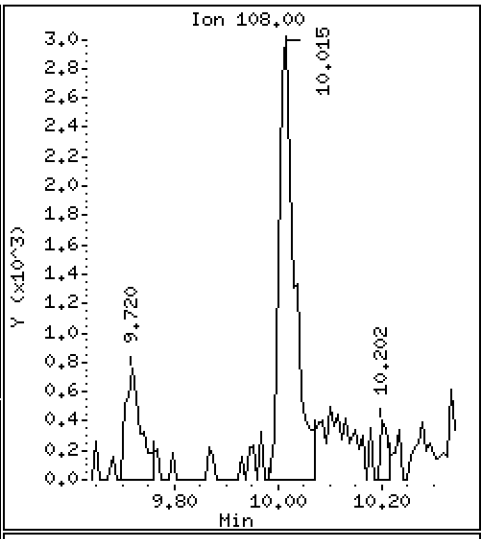
Column phase: ZB-5msi

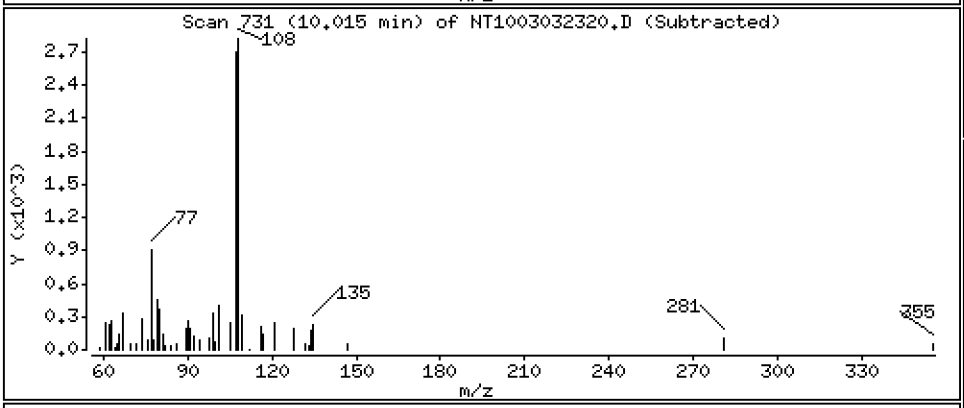
Column diameter: 0.25

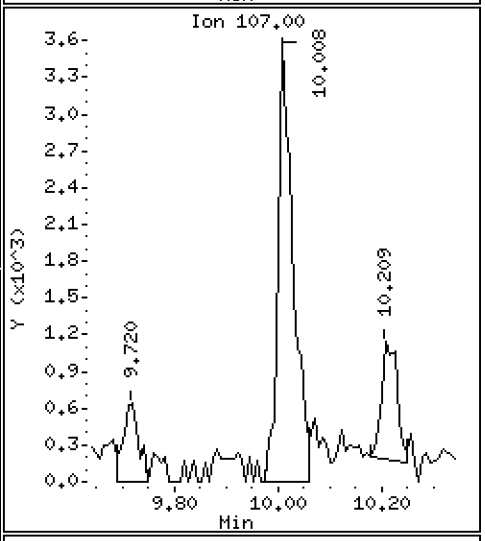
15 4-Methylphenol

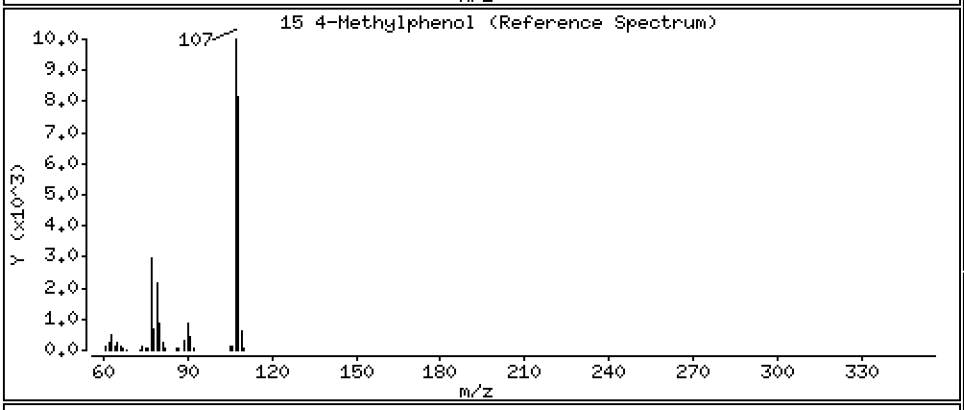
Concentration: 0.03660 ug/ml

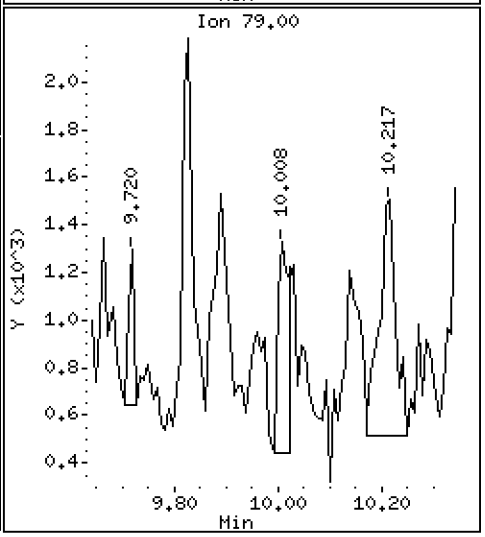


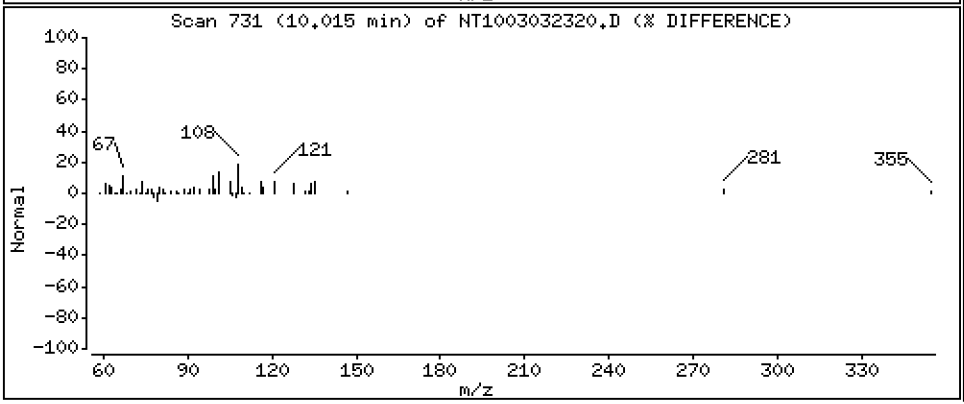












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

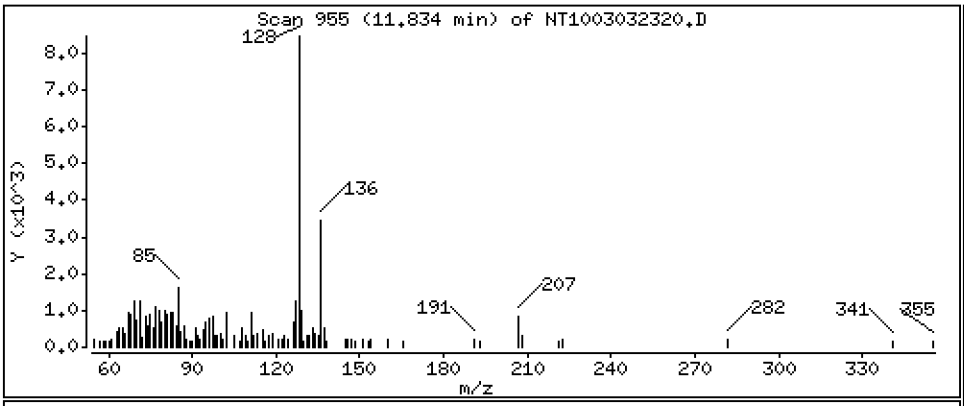
Operator: VTS

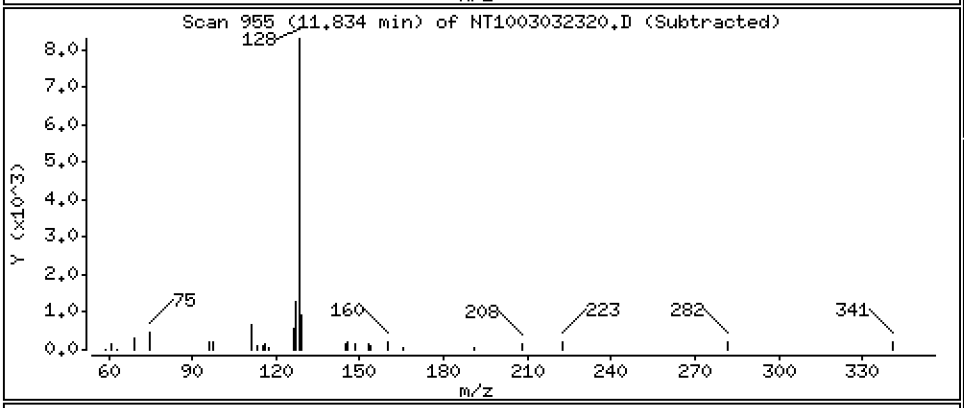
Column phase: ZB-5msi

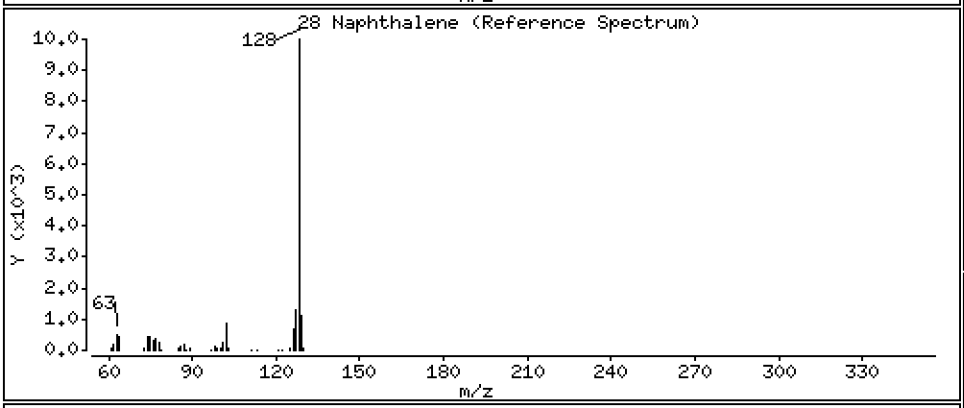
Column diameter: 0.25

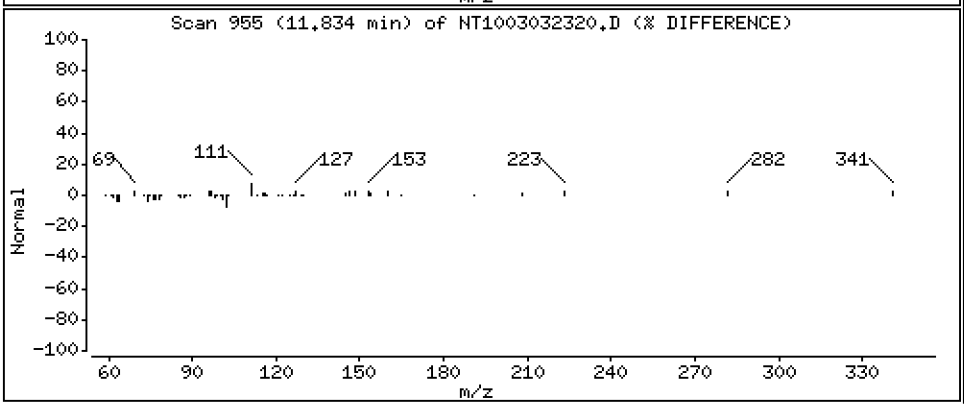
28 Naphthalene

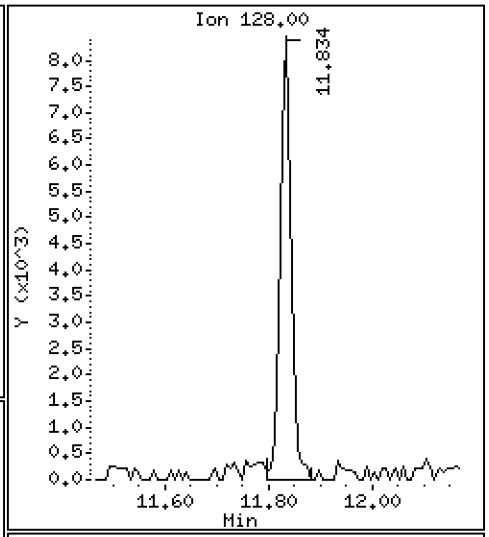
Concentration: 0.03125 ug/ml

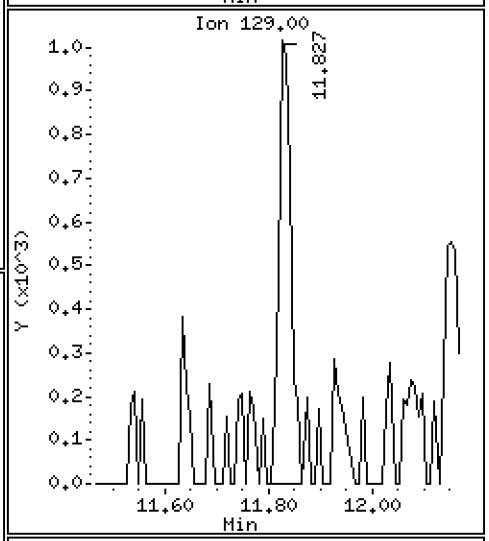


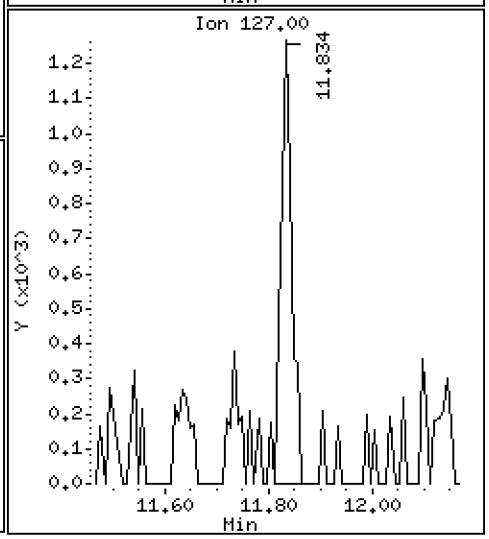












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

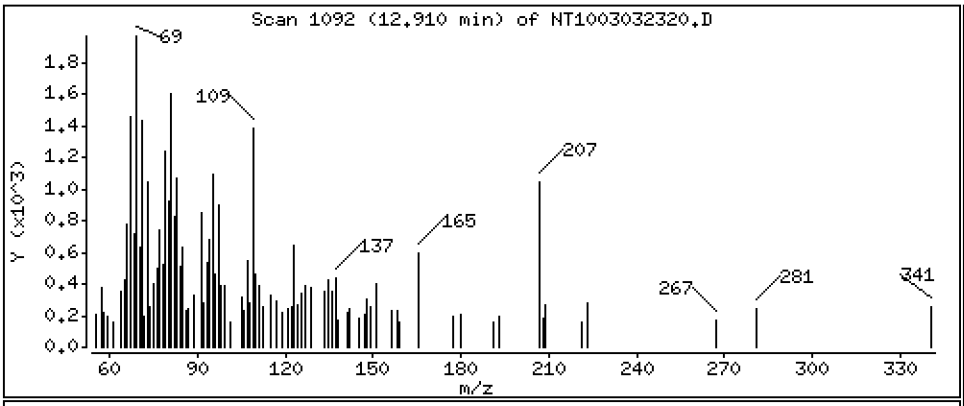
Operator: VTS

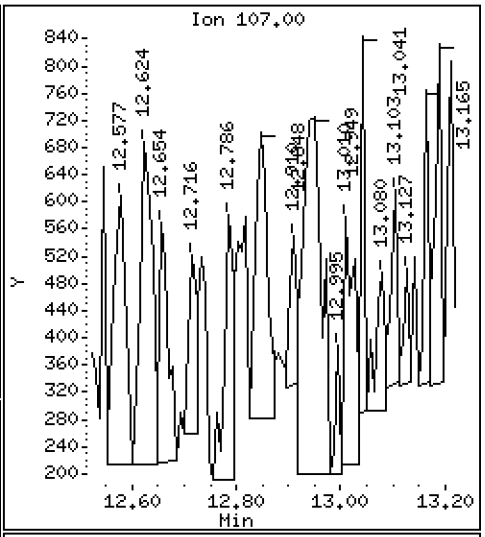
Column phase: ZB-5msi

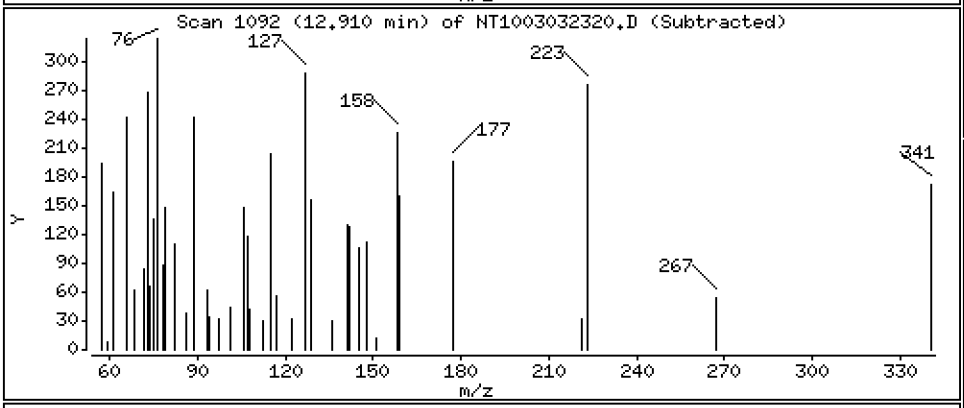
Column diameter: 0.25

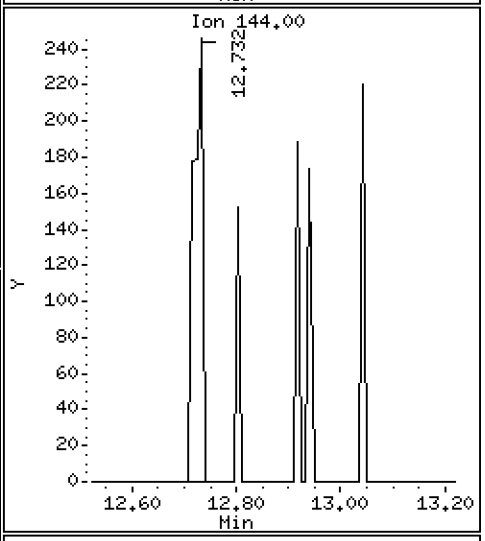
31 4-Chloro-3-methylphenol

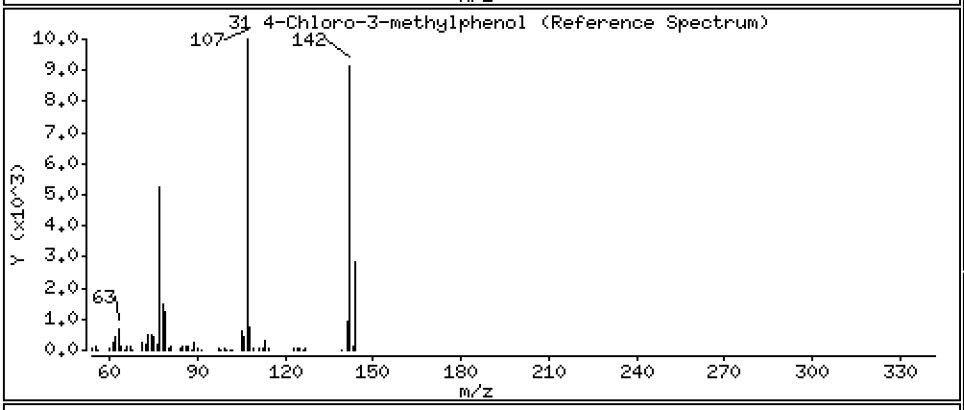
Concentration: 0.001768 ug/ml

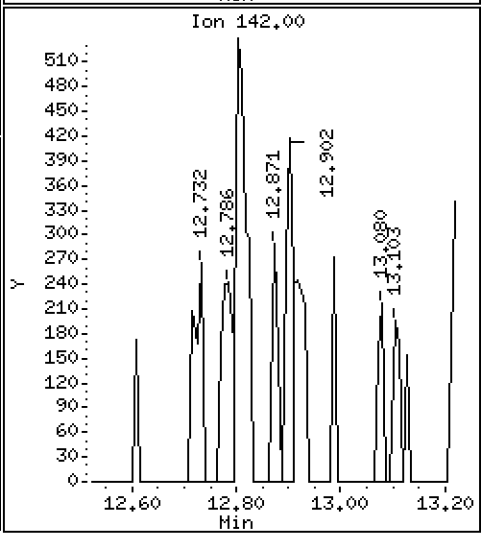


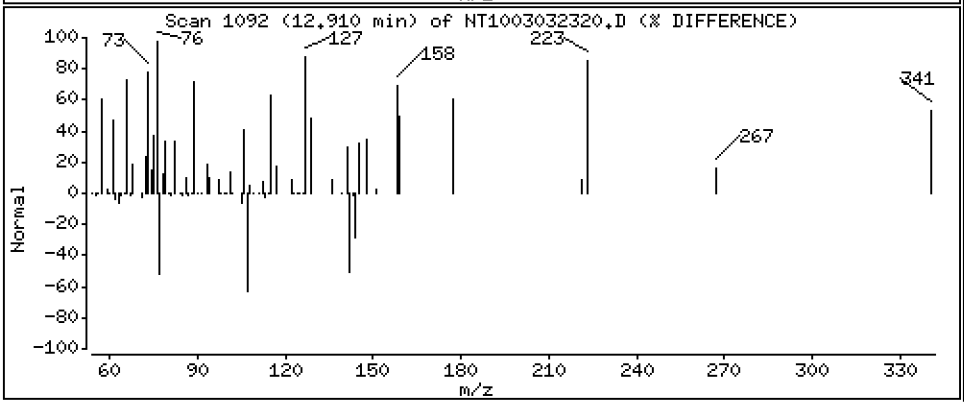












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

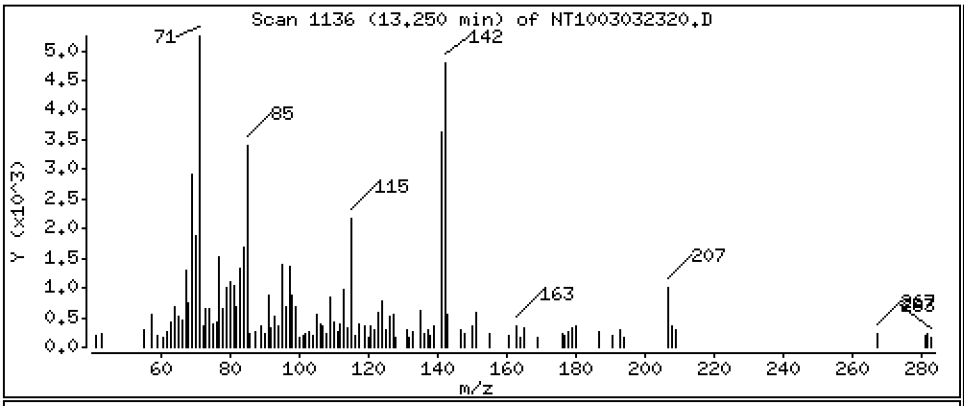
Operator: VTS

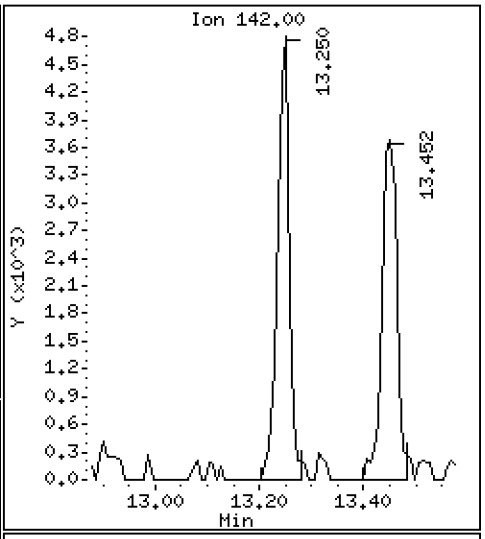
Column phase: ZB-5msi

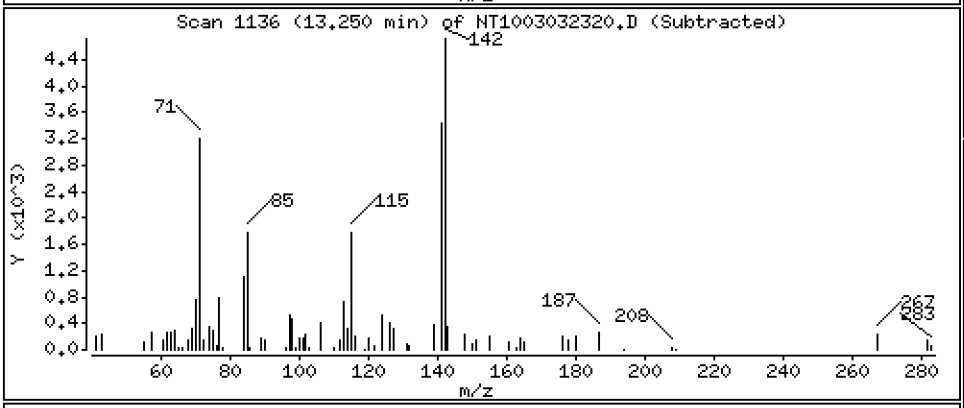
Column diameter: 0.25

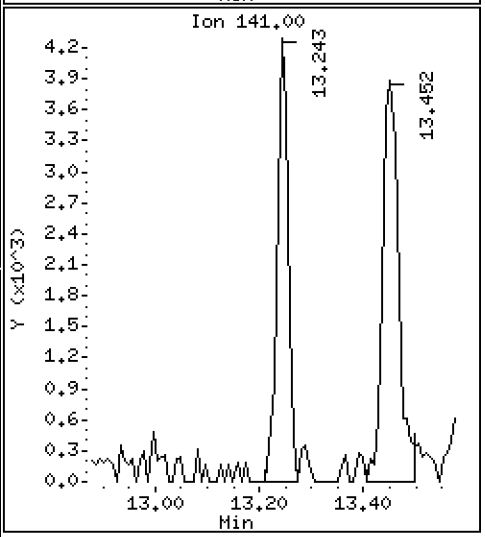
32 2-Methylnaphthalene

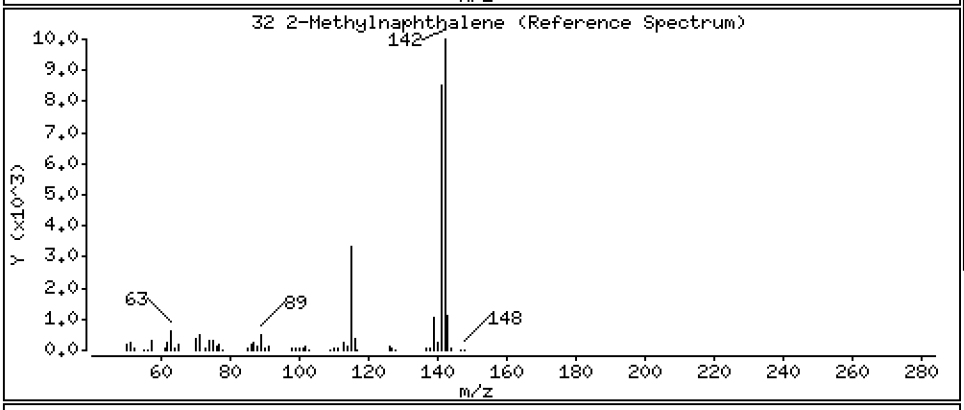
Concentration: 0.02639 ug/ml

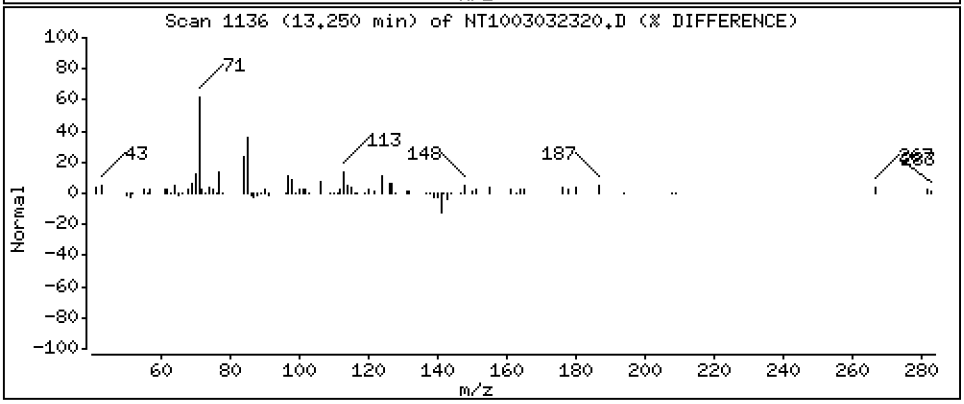












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

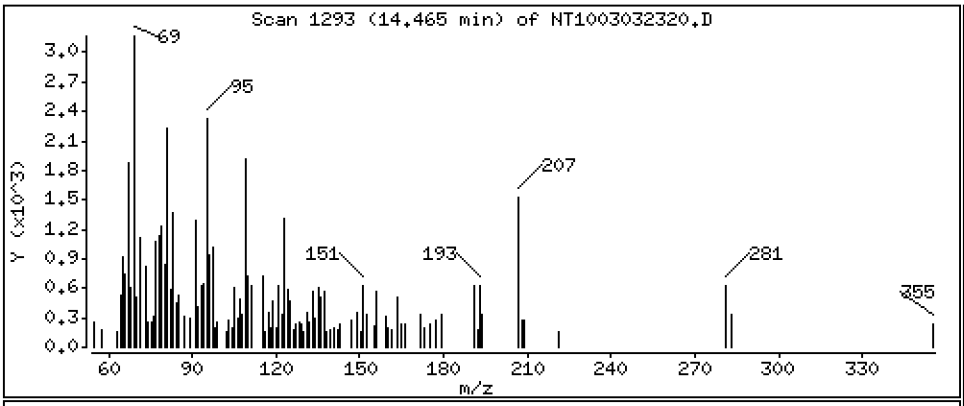
Operator: VTS

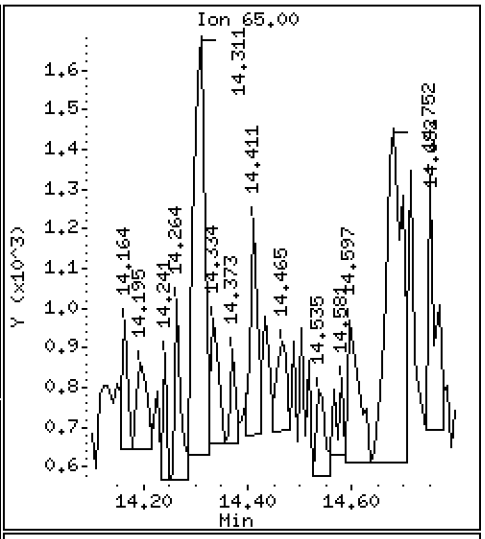
Column phase: ZB-5msi

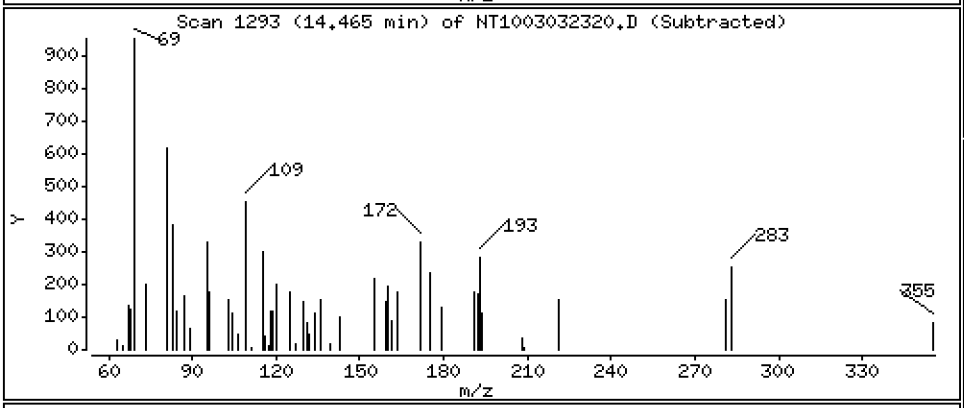
Column diameter: 0.25

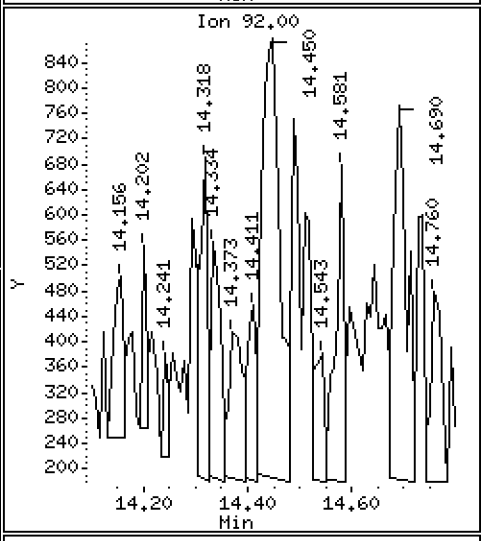
38 2-Nitroaniline

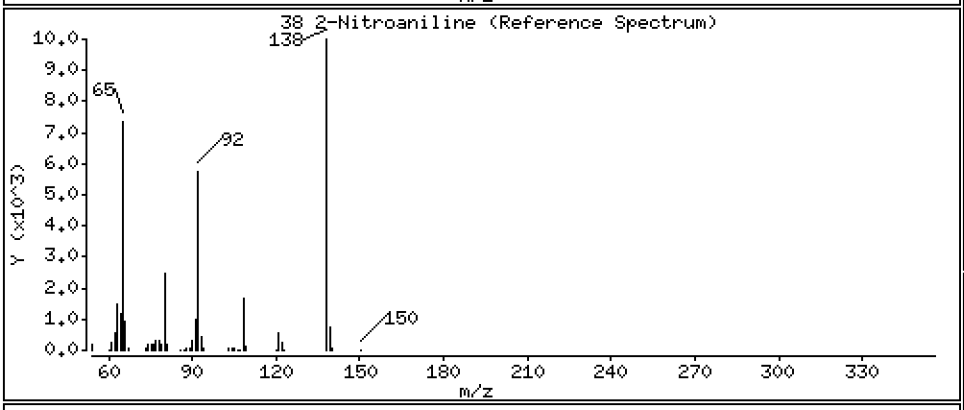
Concentration: 0.004791 ug/ml

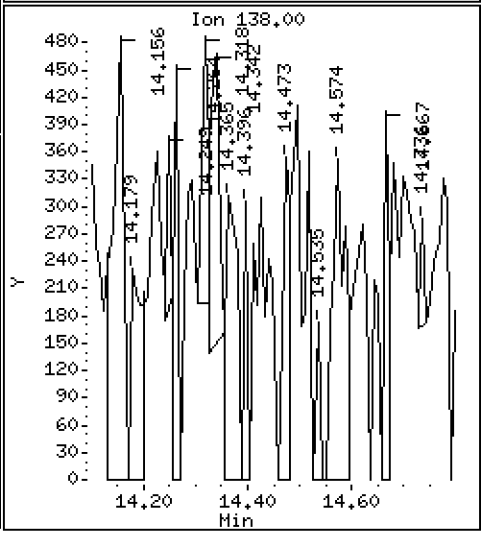


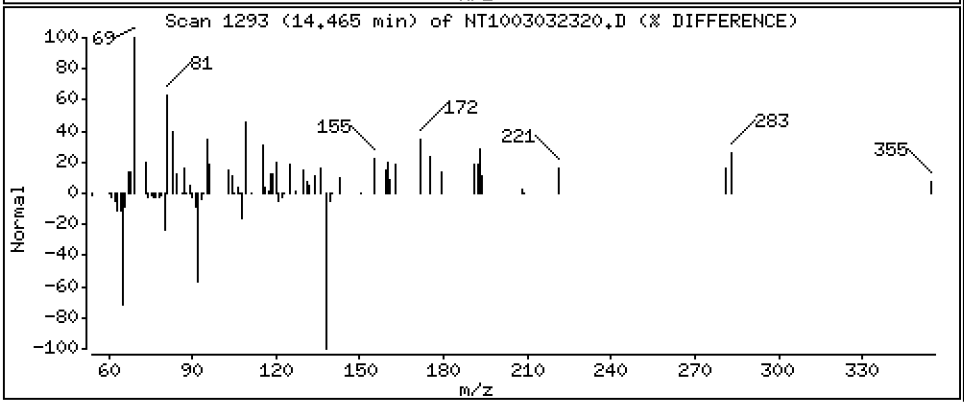












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

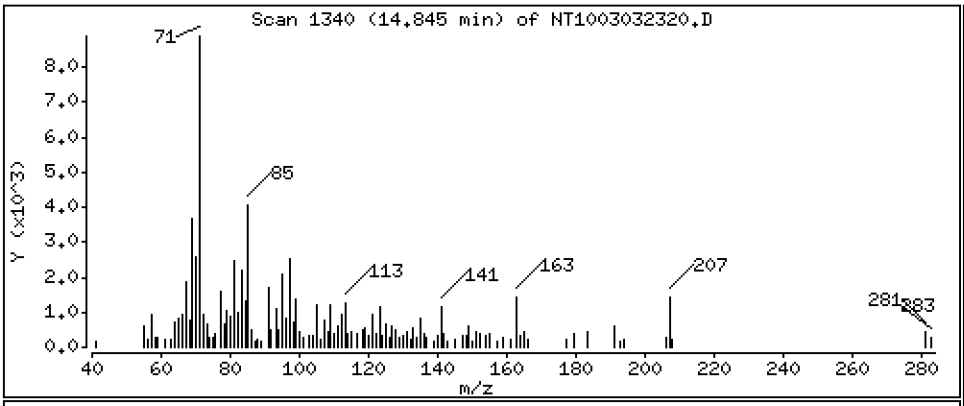
Operator: VTS

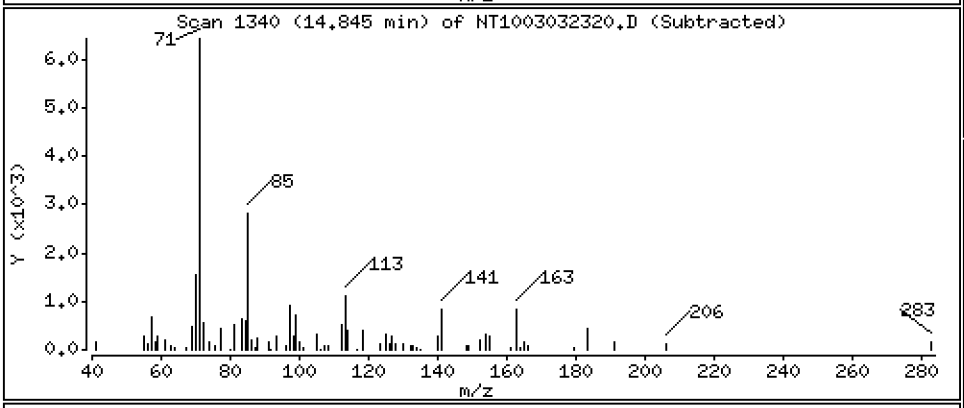
Column phase: ZB-5msi

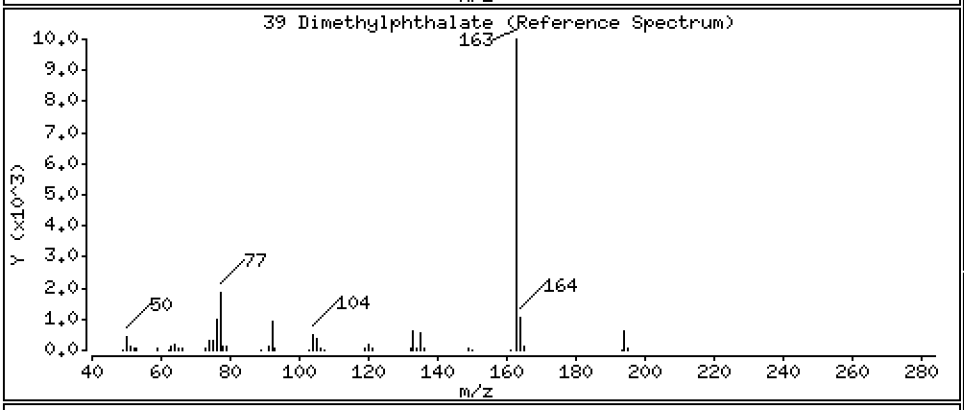
Column diameter: 0.25

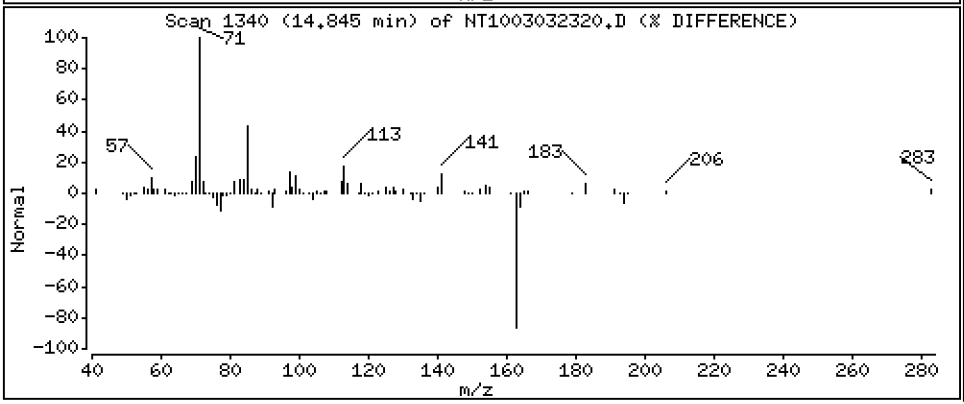
39 Dimethylphthalate

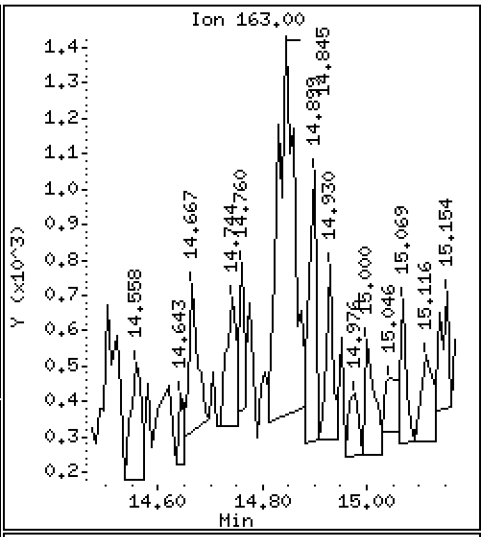
Concentration: 0.008968 ug/ml

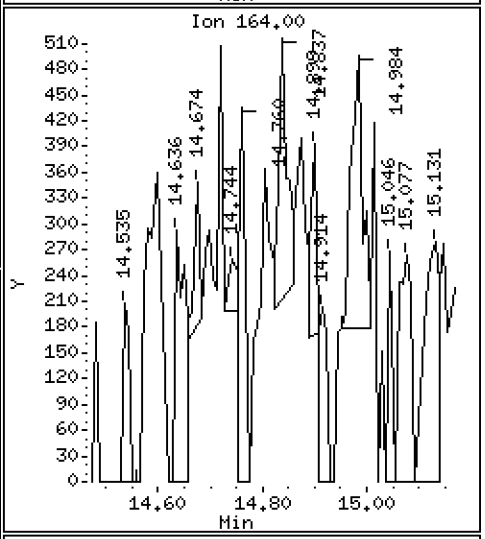


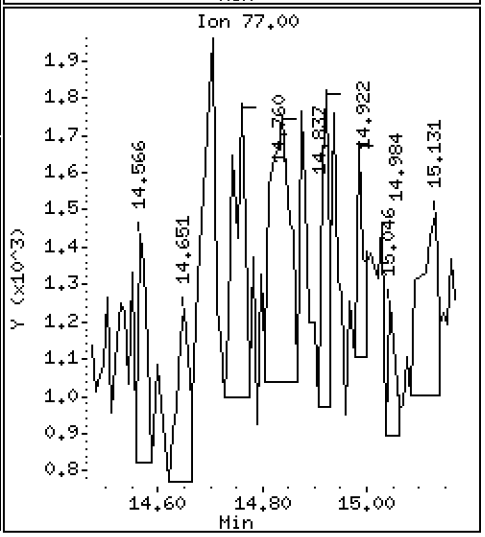












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

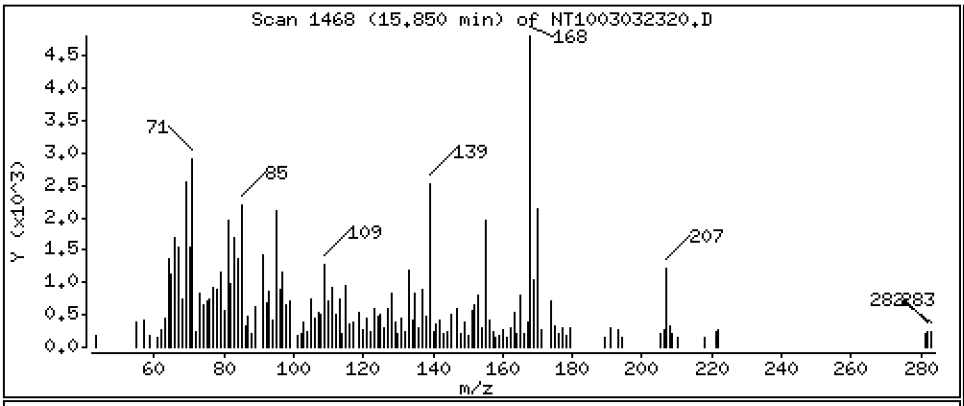
Operator: VTS

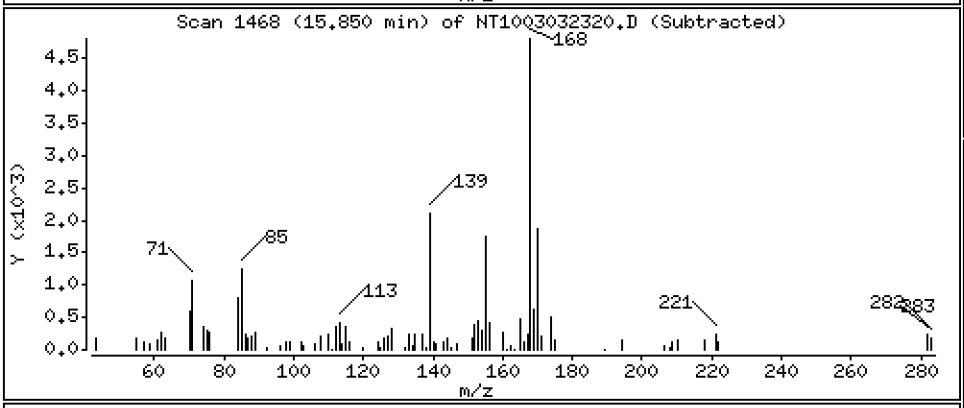
Column phase: ZB-5msi

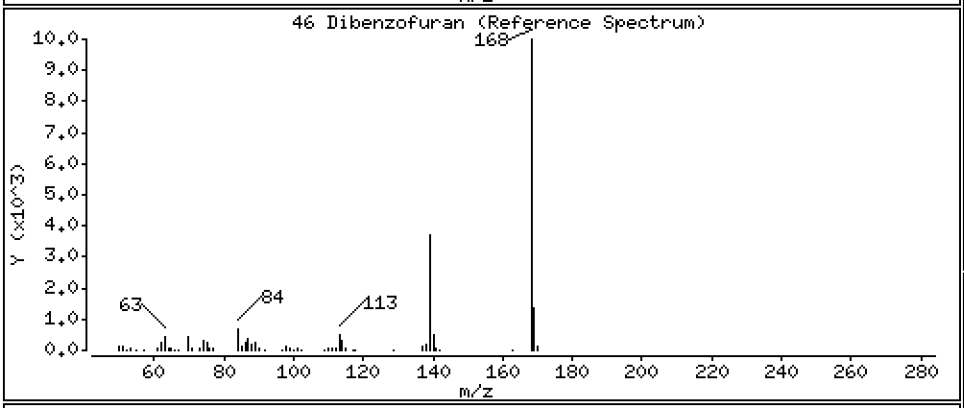
Column diameter: 0.25

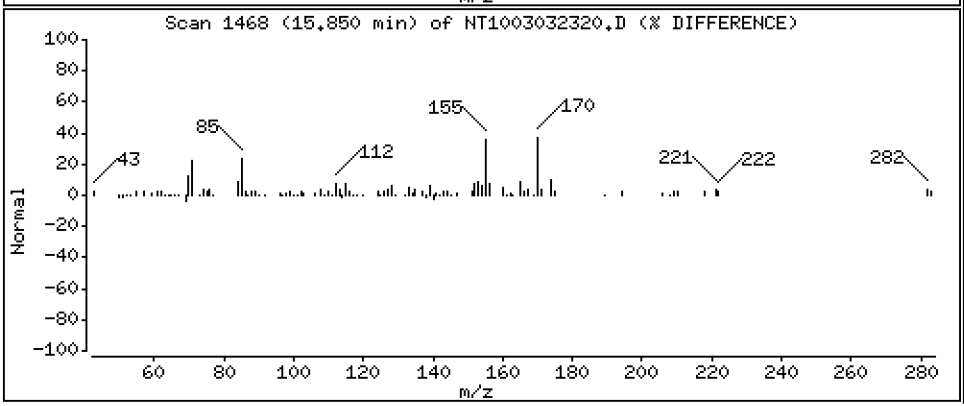
46 Dibenzofuran

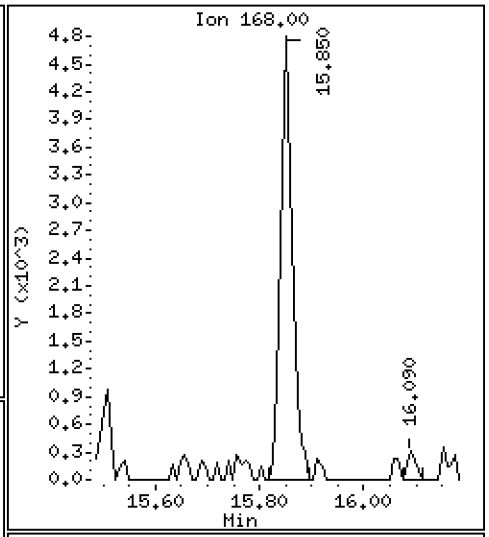
Concentration: 0.02074 ug/ml

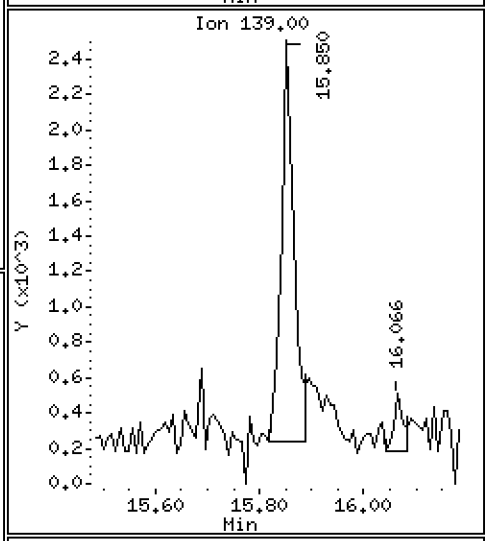


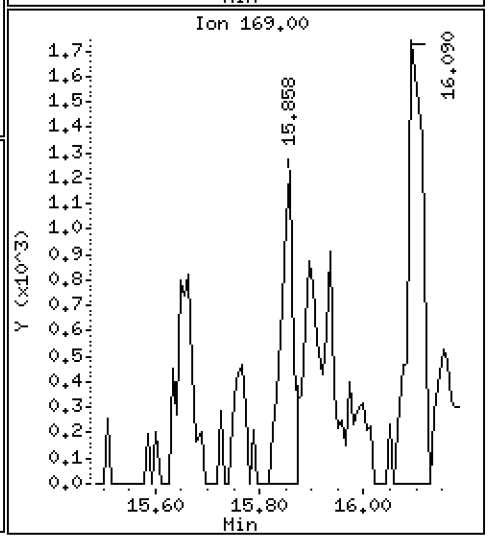












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

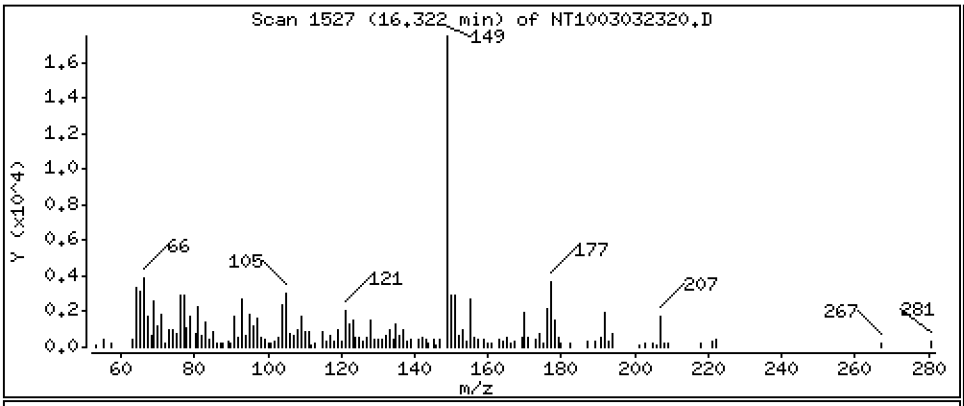
Operator: VTS

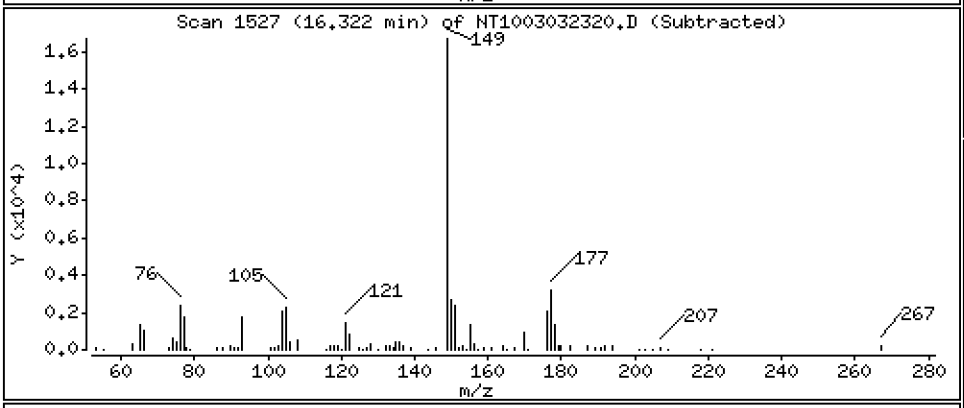
Column phase: ZB-5msi

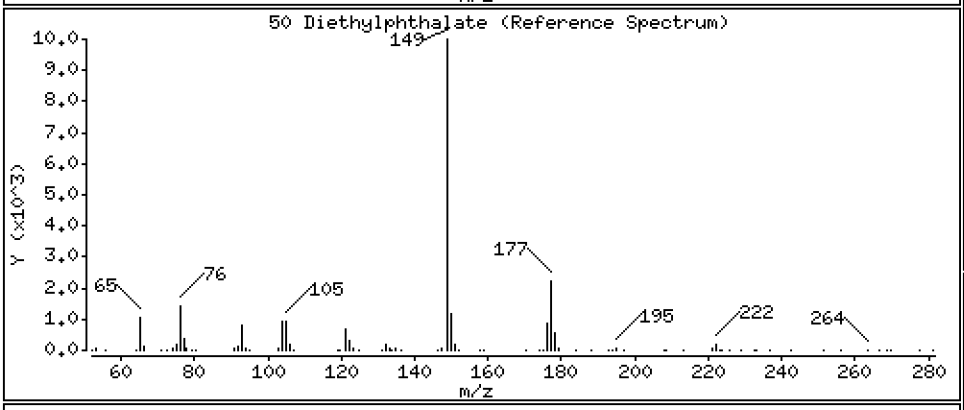
Column diameter: 0.25

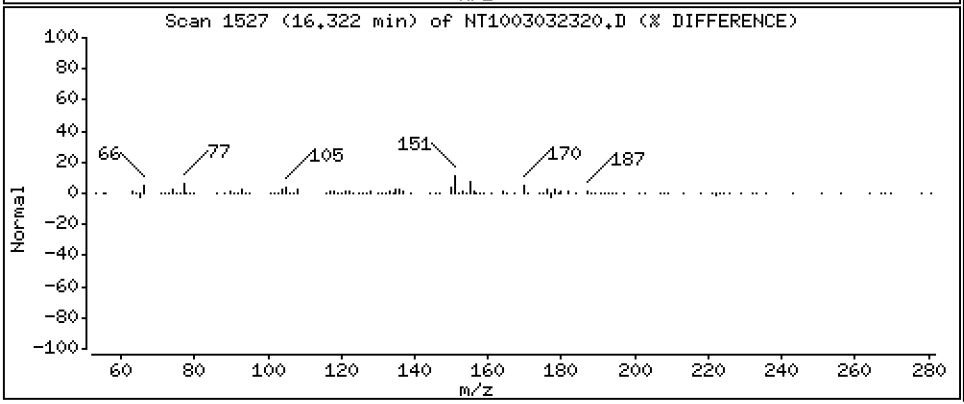
50 Diethylphthalate

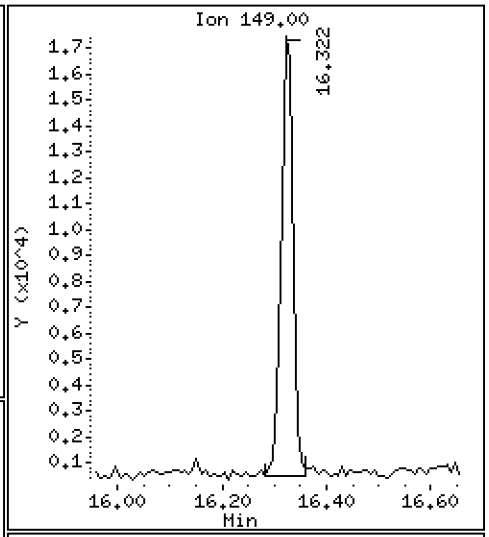
Concentration: 0.09378 ug/ml

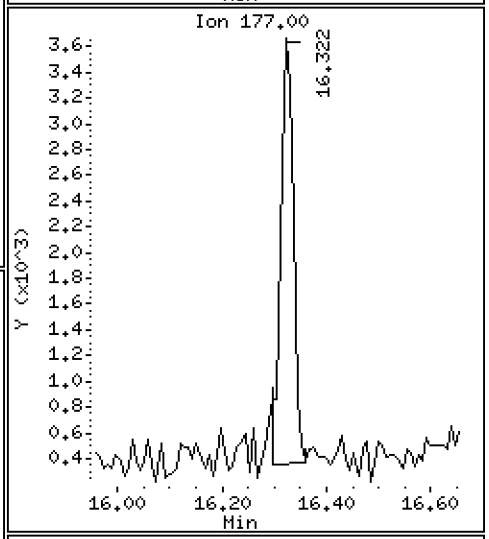


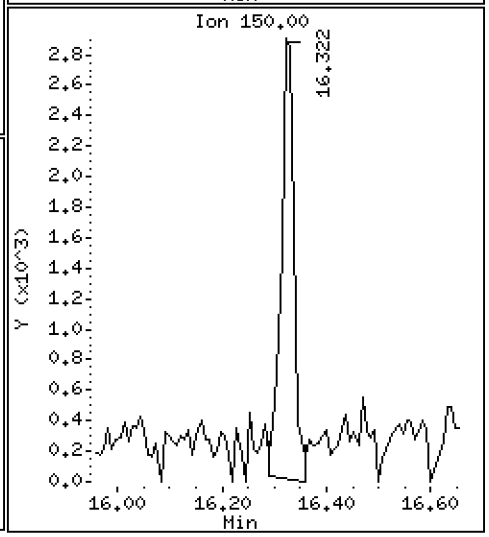












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

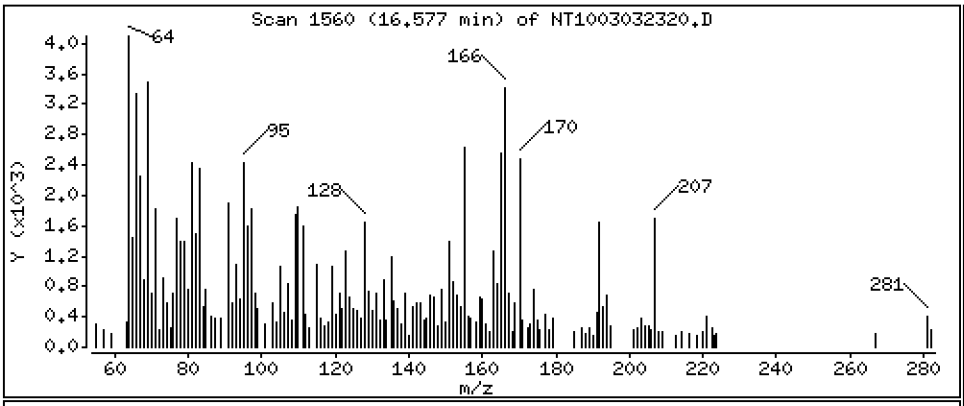
Operator: VTS

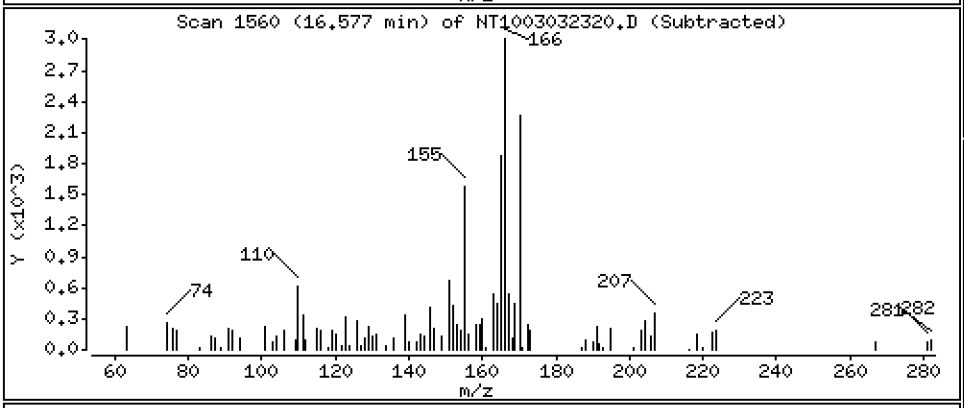
Column phase: ZB-5msi

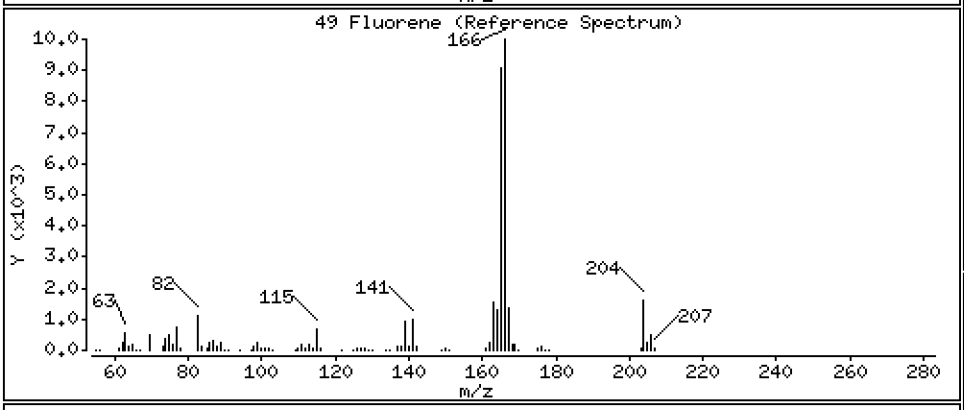
Column diameter: 0.25

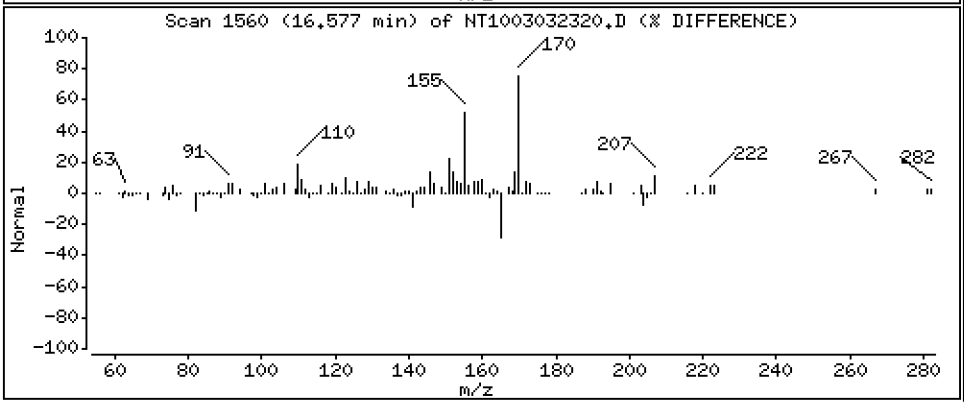
49 Fluorene

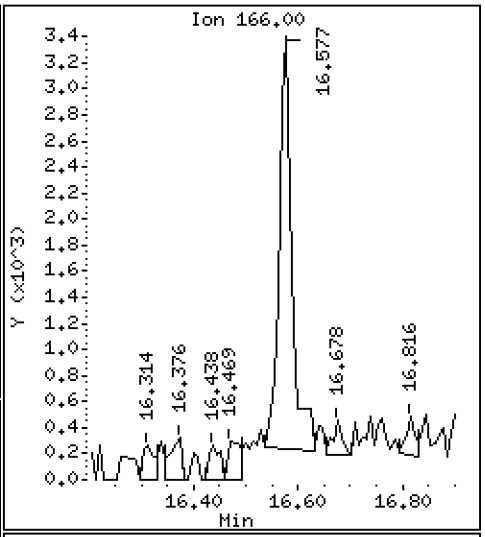
Concentration: 0.02096 ug/ml

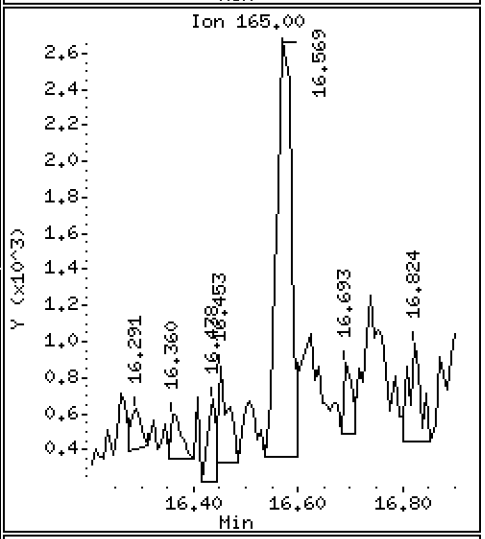


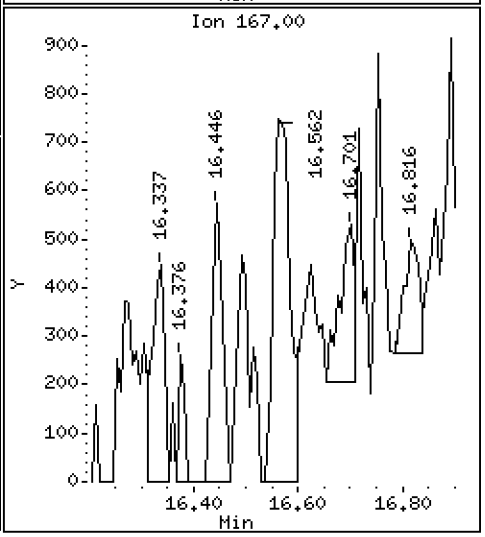












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

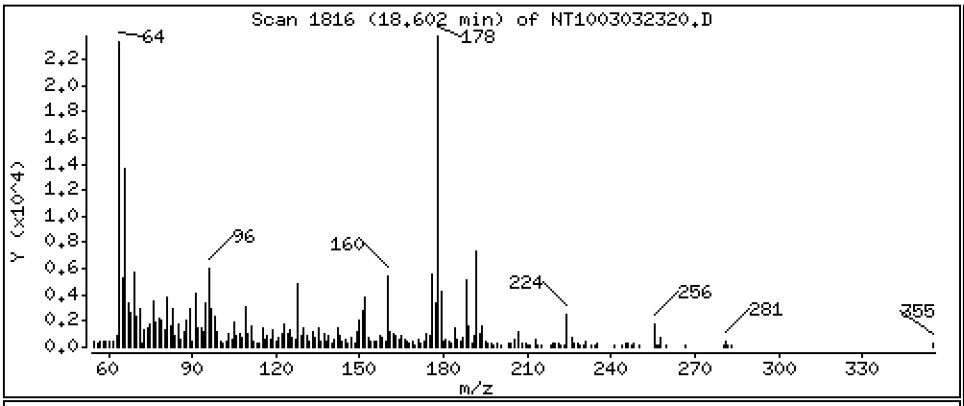
Operator: VTS

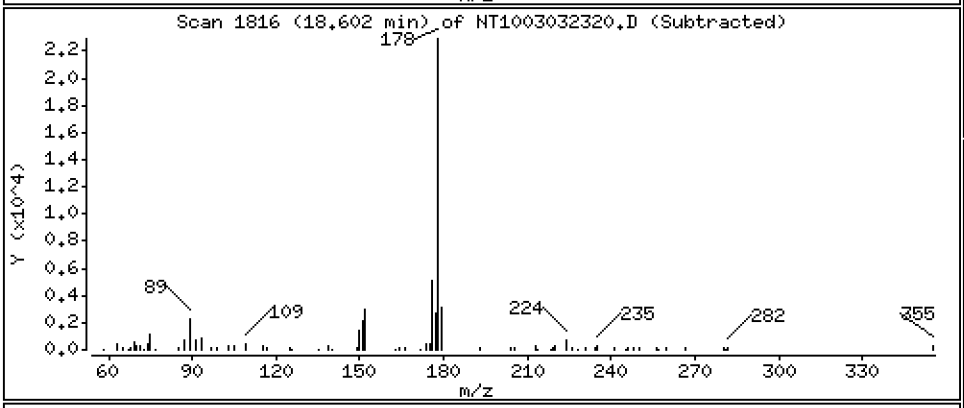
Column phase: ZB-5msi

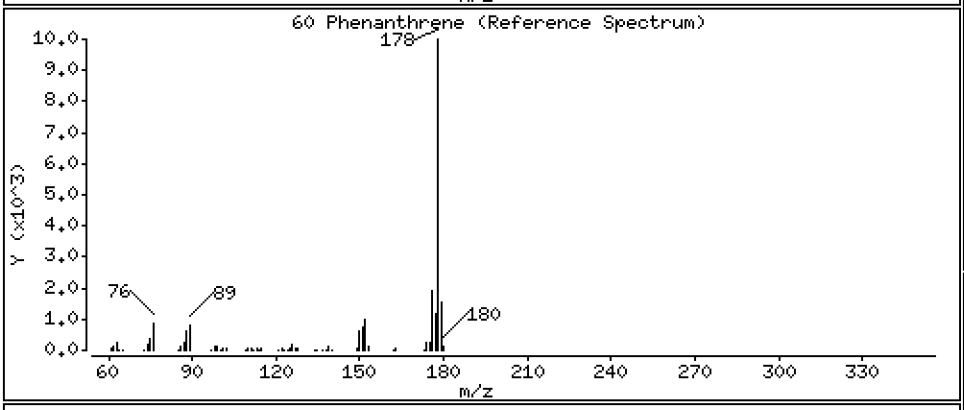
Column diameter: 0.25

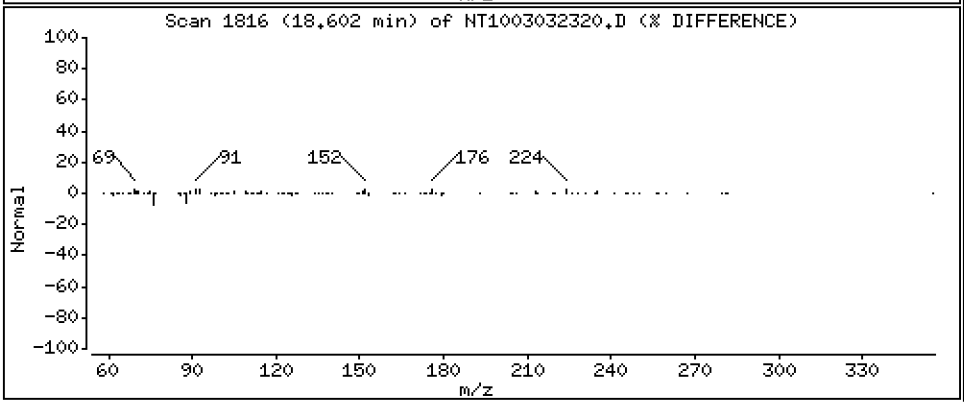
60 Phenanthrene

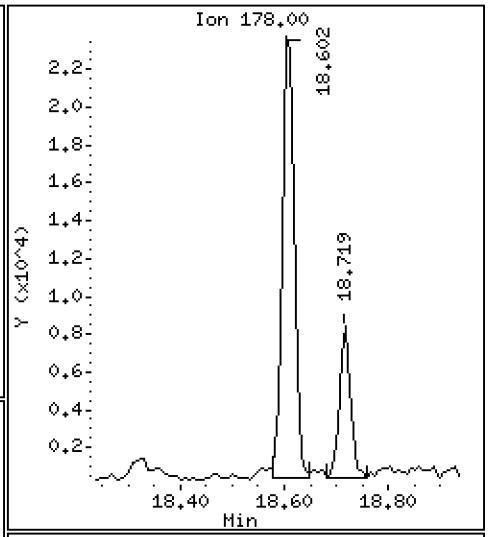
Concentration: 0.1102 ug/ml

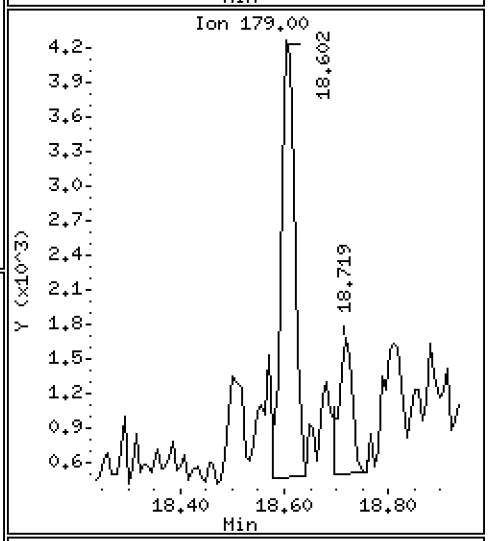


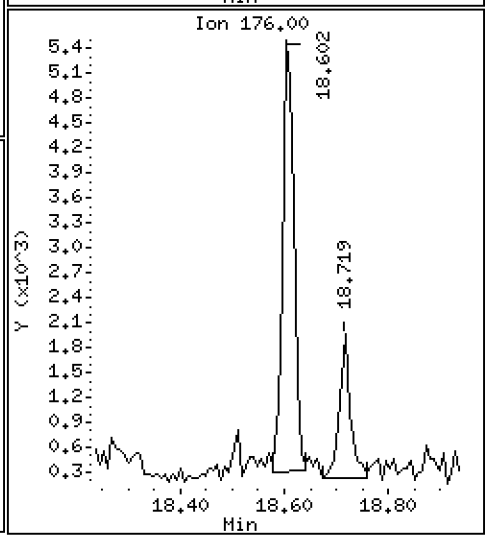












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

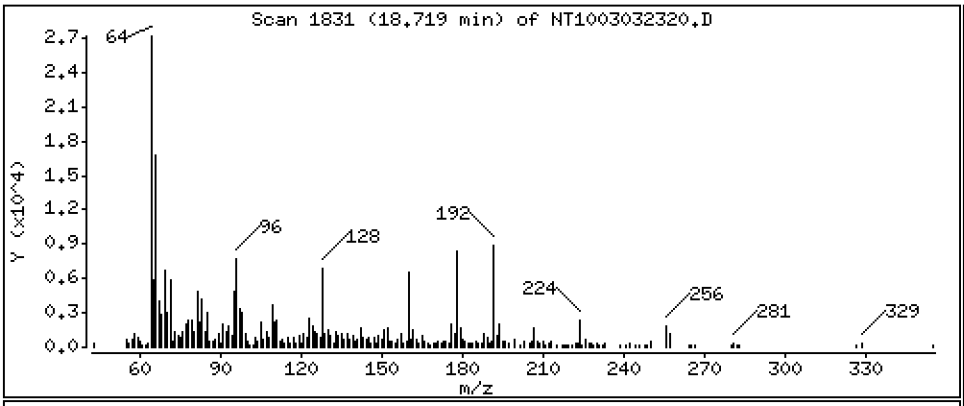
Operator: VTS

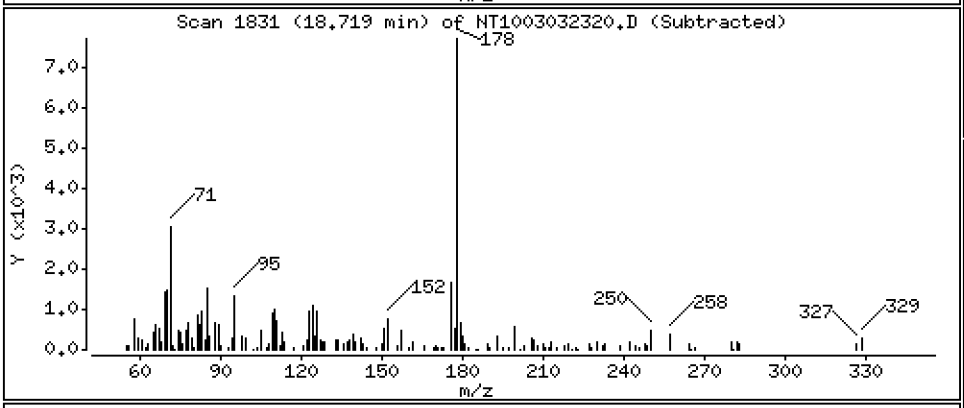
Column phase: ZB-5msi

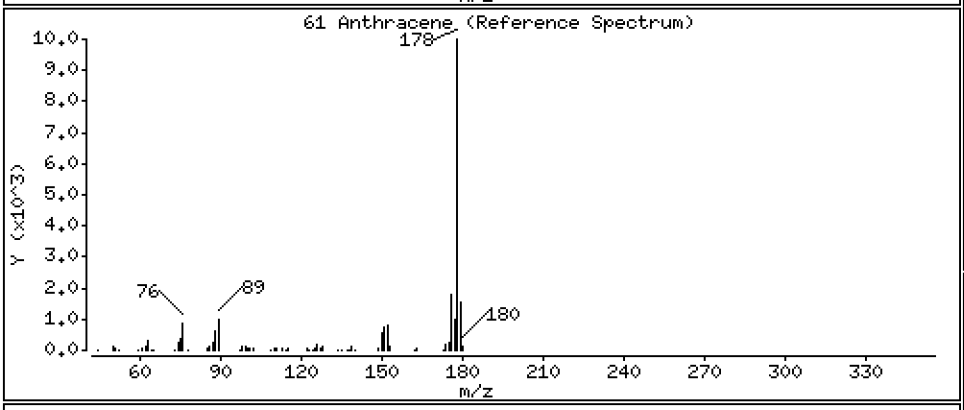
Column diameter: 0.25

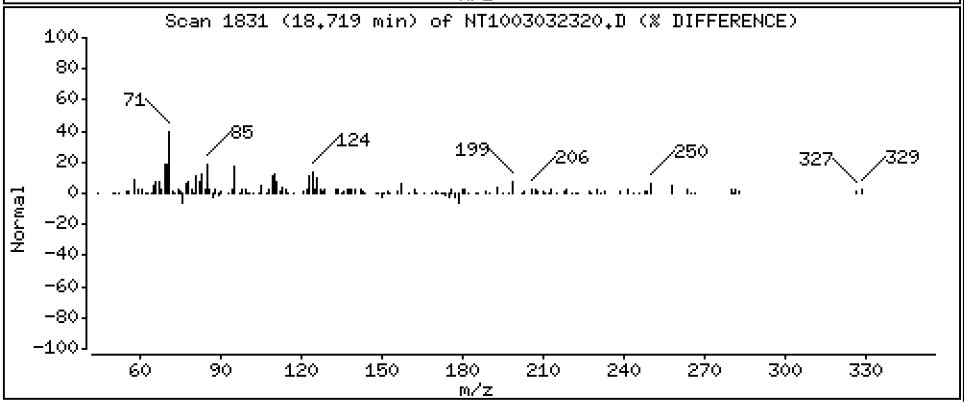
61 Anthracene

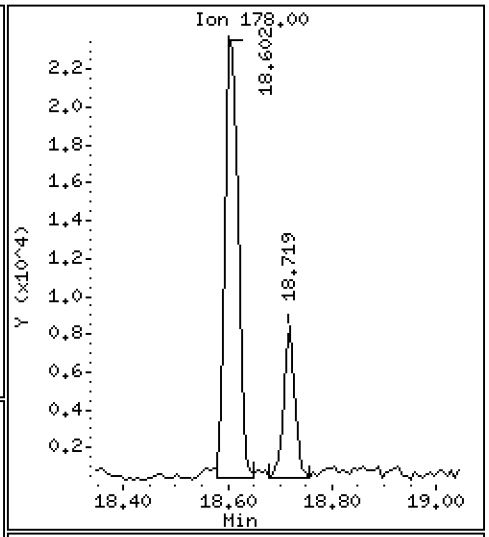
Concentration: 0.03526 ug/ml

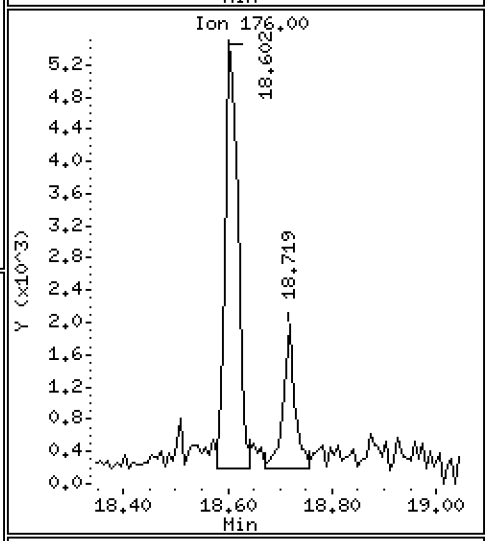


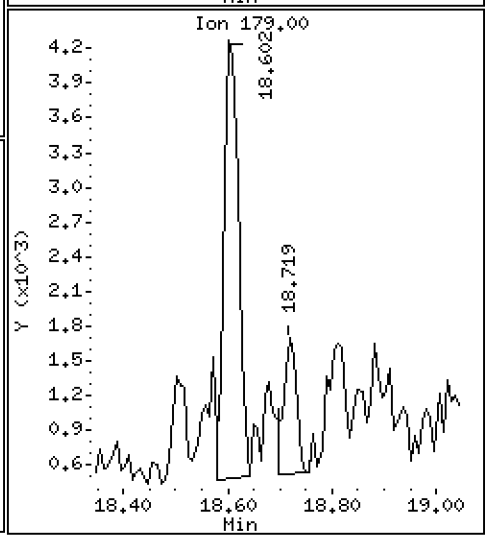












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

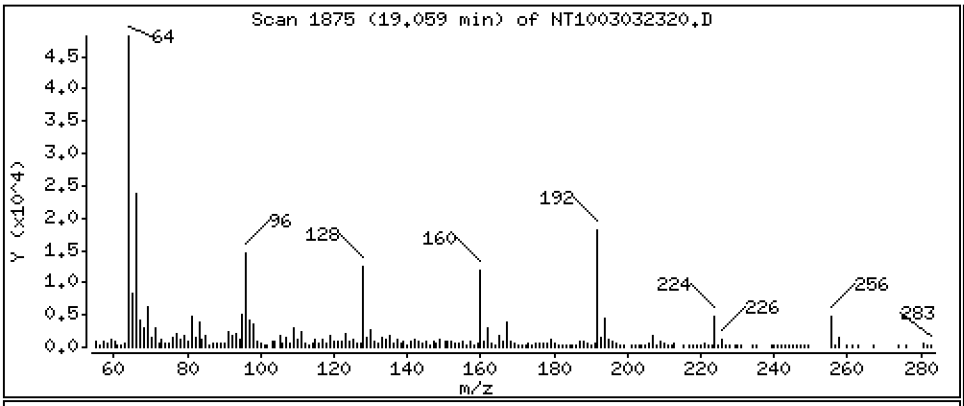
Operator: VTS

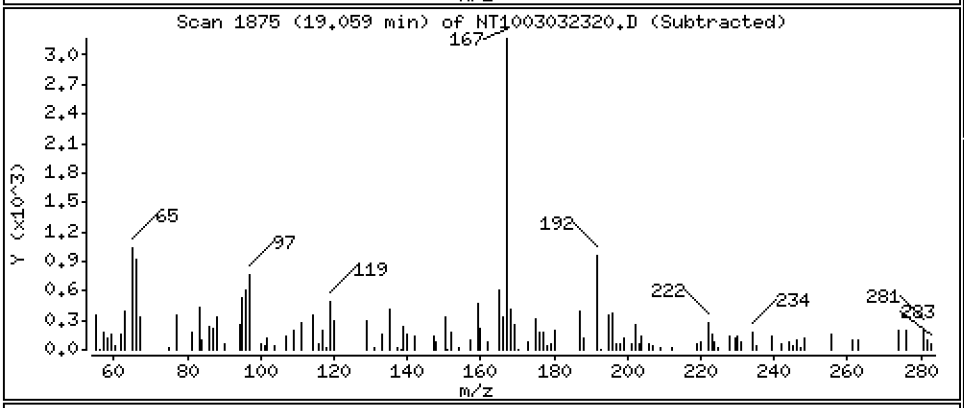
Column phase: ZB-5msi

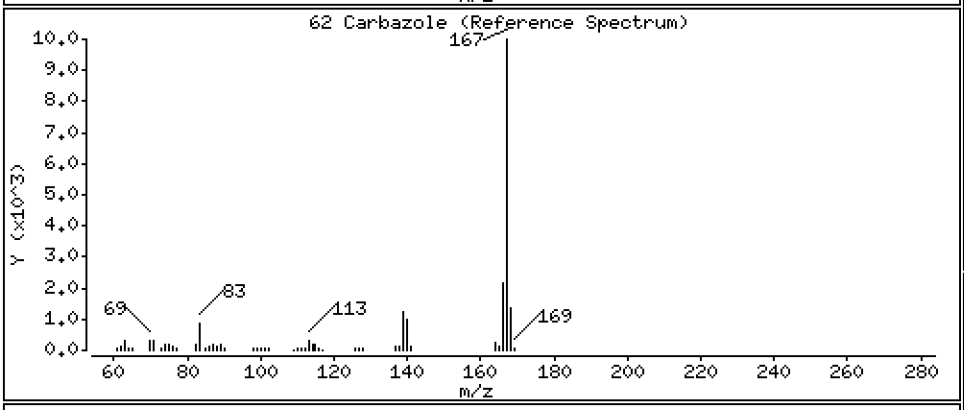
Column diameter: 0.25

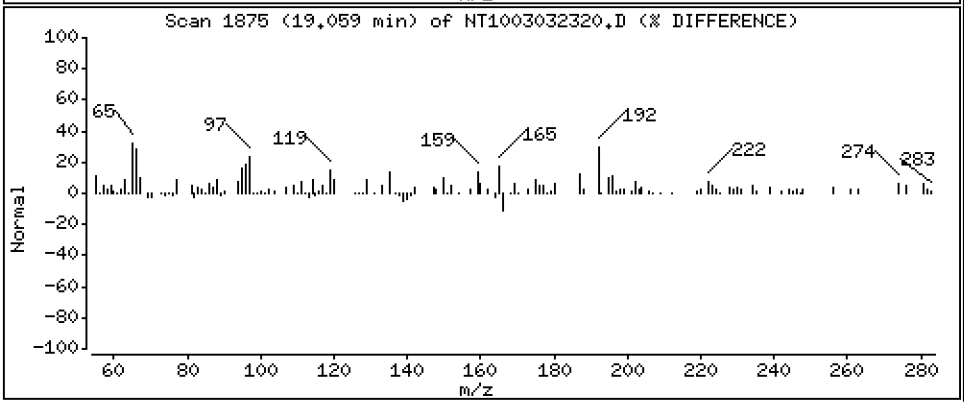
62 Carbazole

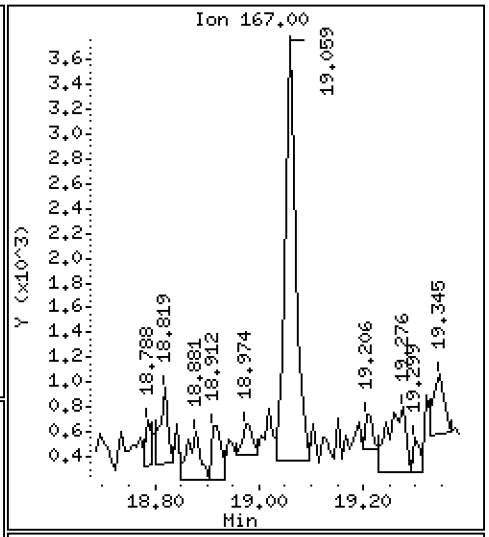
Concentration: 0.01585 ug/ml

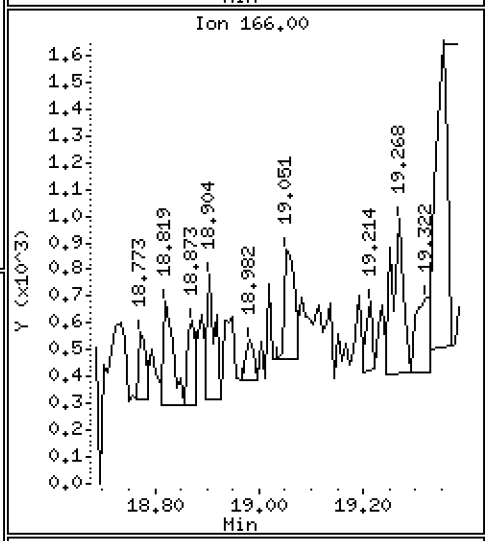


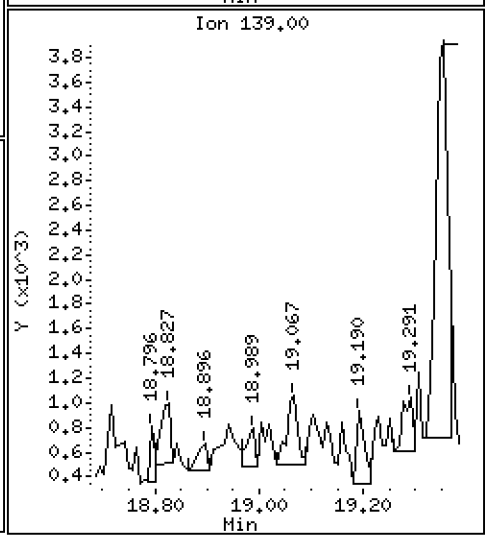












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032320.D

Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

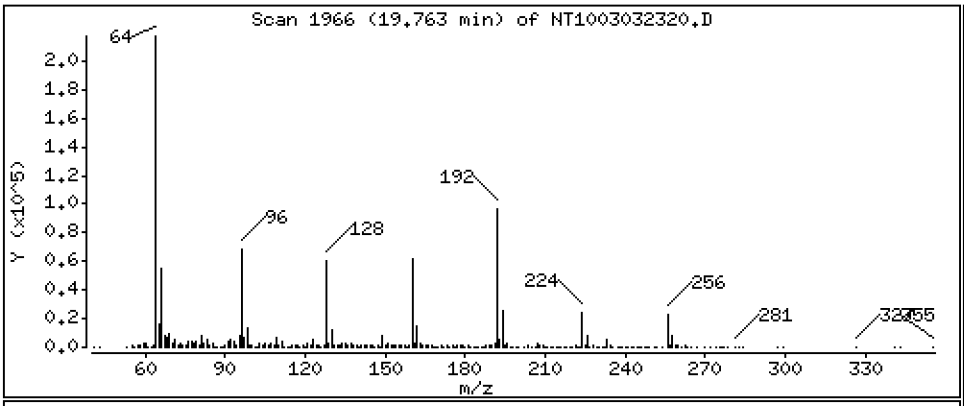
Operator: VTS

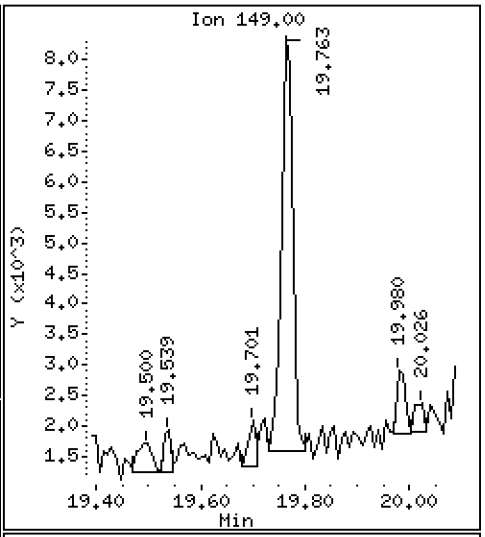
Column phase: ZB-5msi

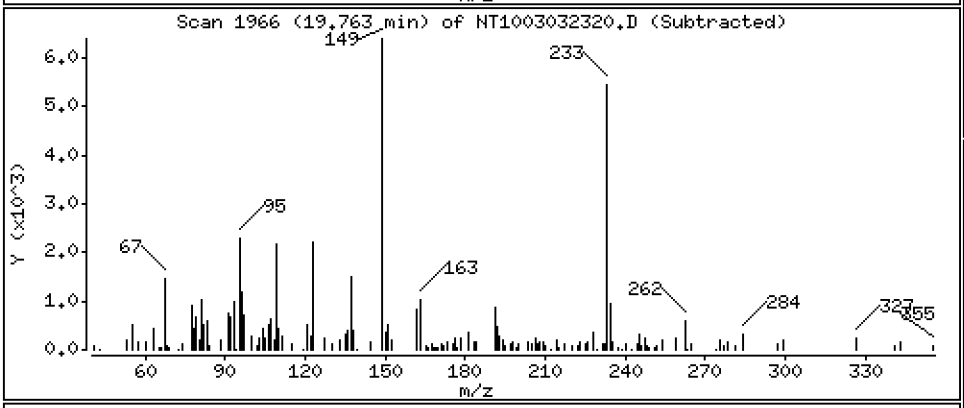
Column diameter: 0.25

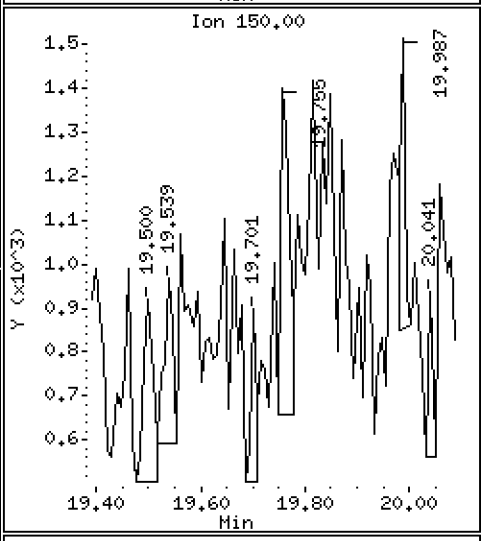
63 Di-n-butylphthalate

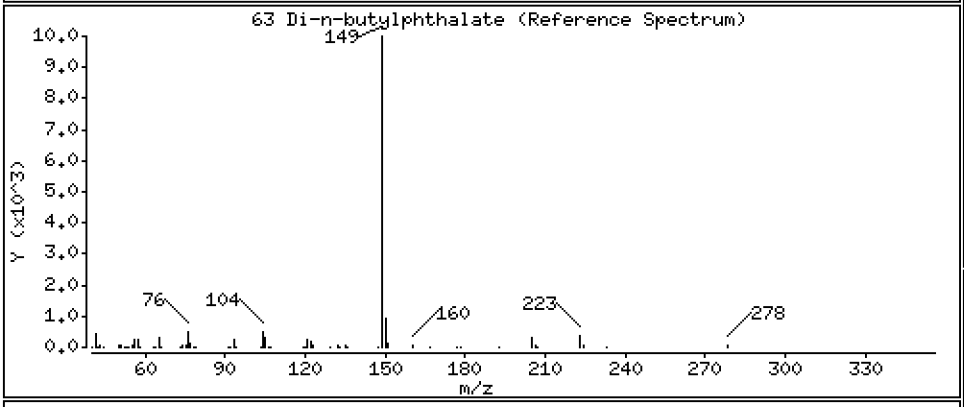
Concentration: 0.02521 ug/ml

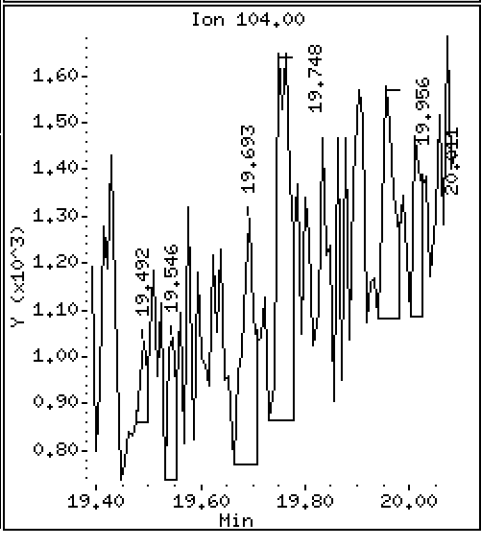


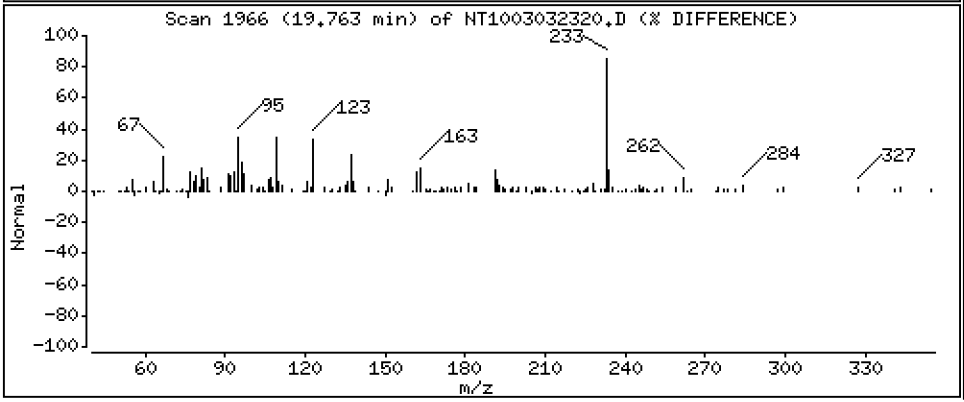












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

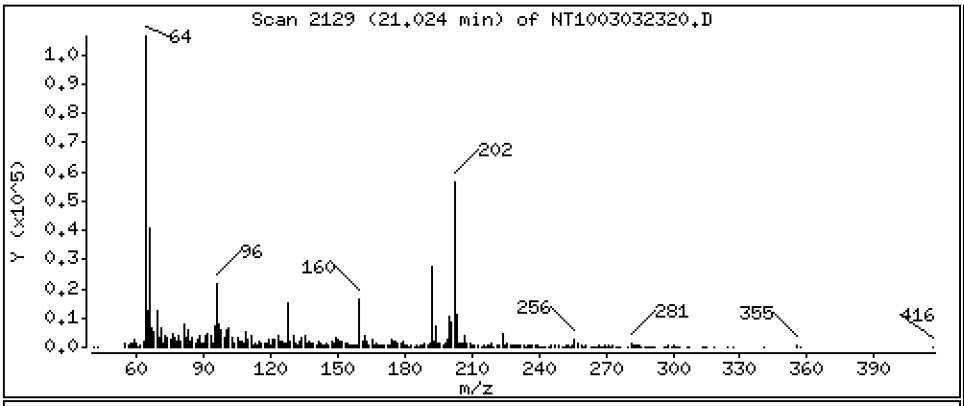
Operator: VTS

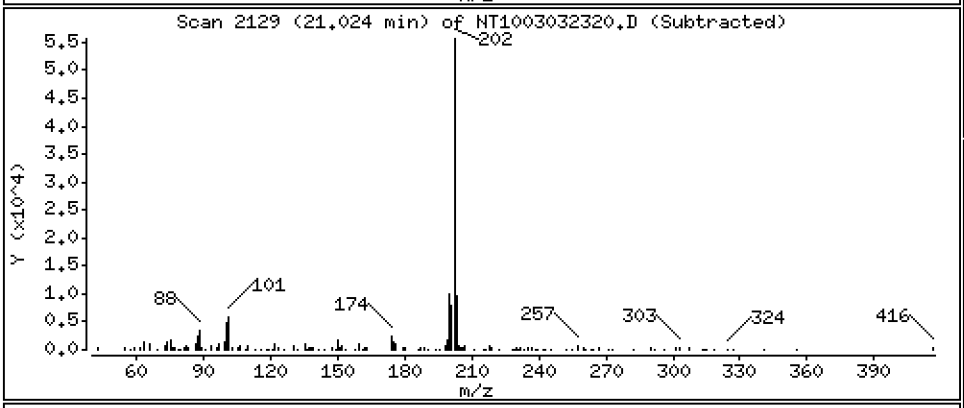
Column phase: ZB-5msi

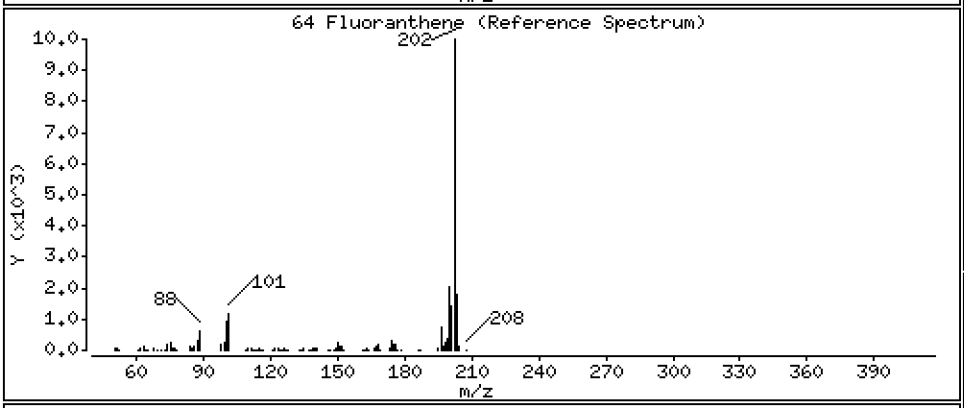
Column diameter: 0.25

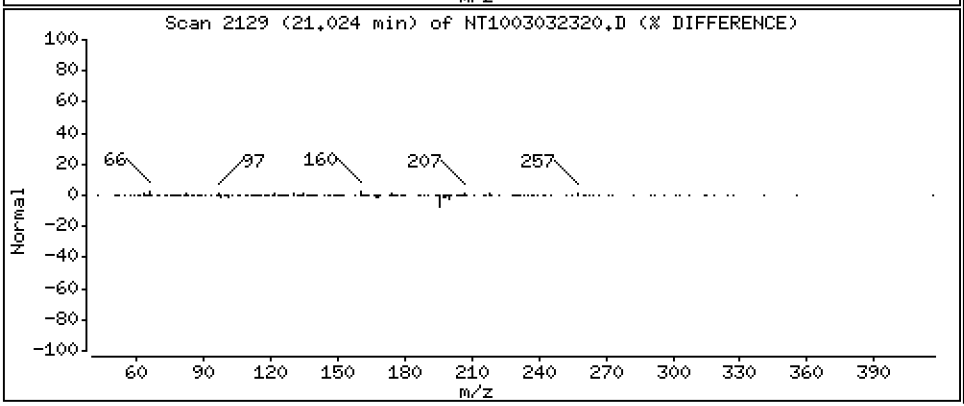
64 Fluoranthene

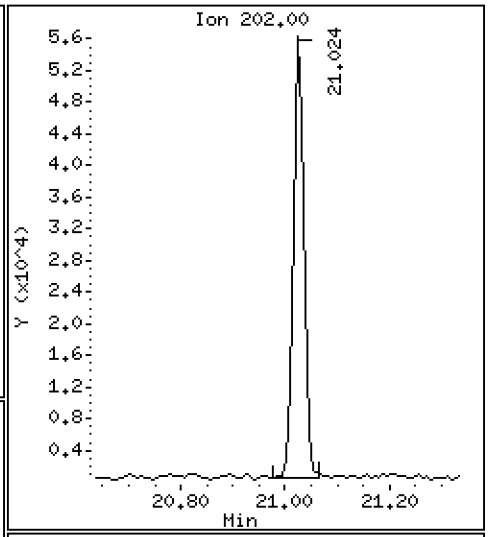
Concentration: 0.2136 ug/ml

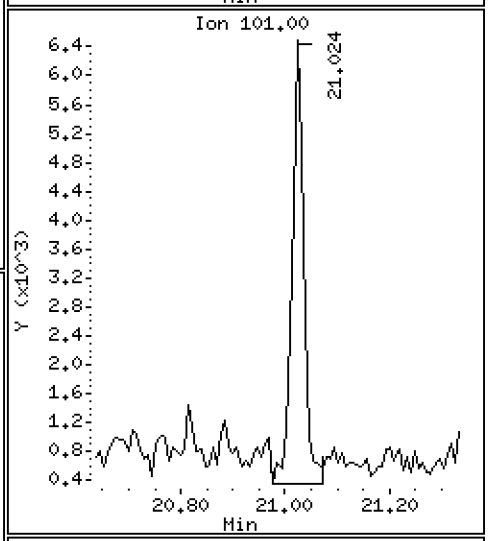


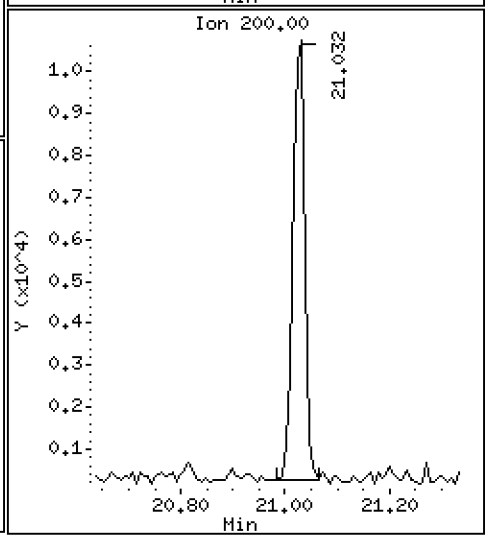












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

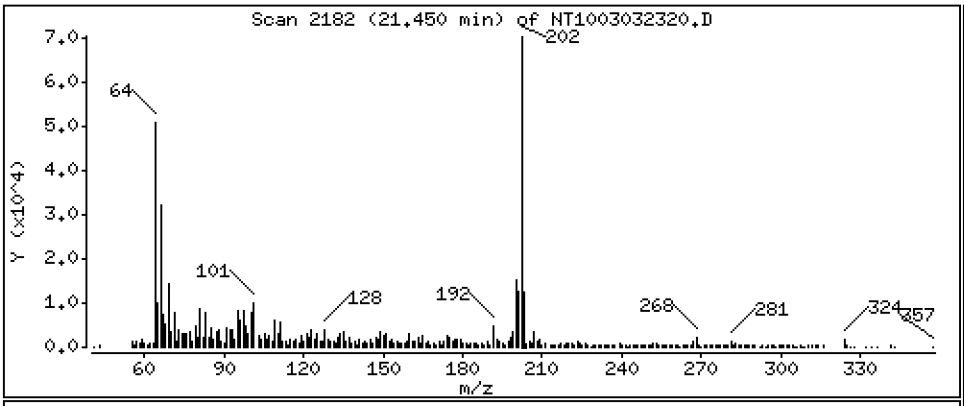
Operator: VTS

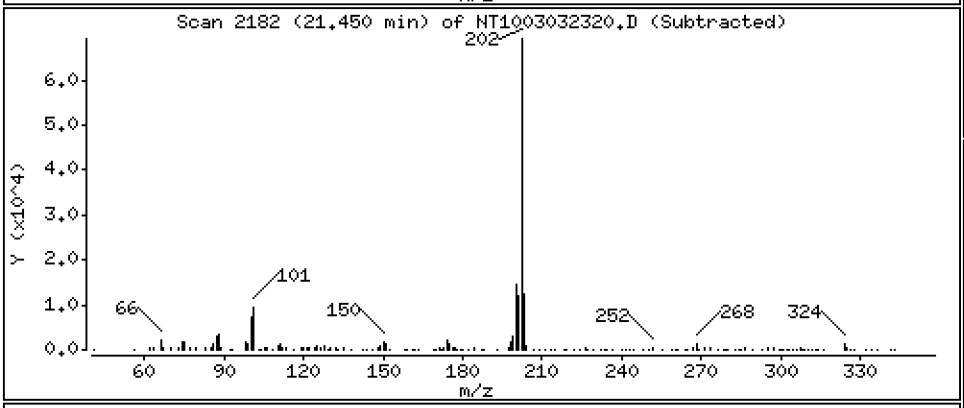
Column phase: ZB-5msi

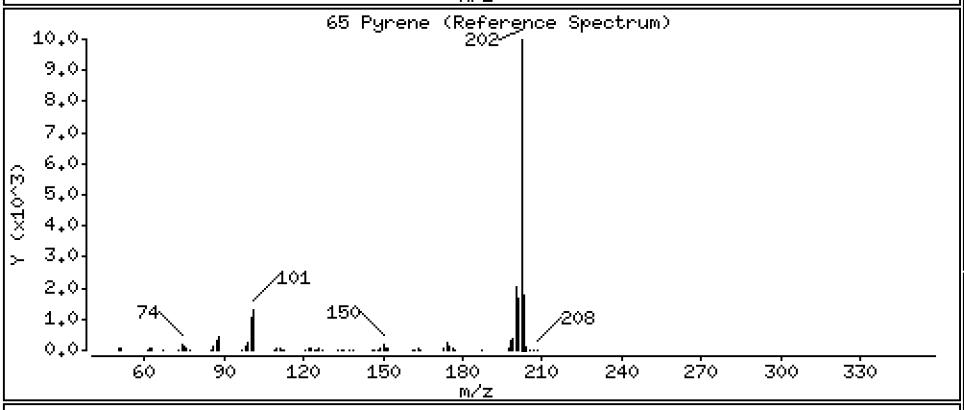
Column diameter: 0.25

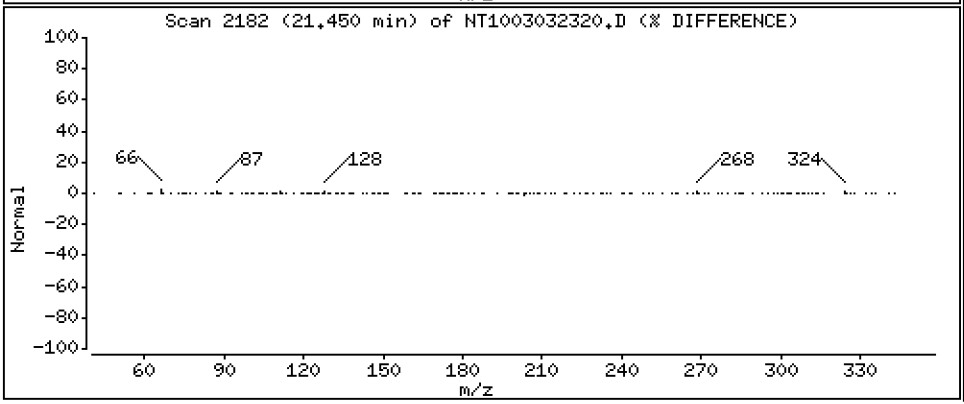
65 Pyrene

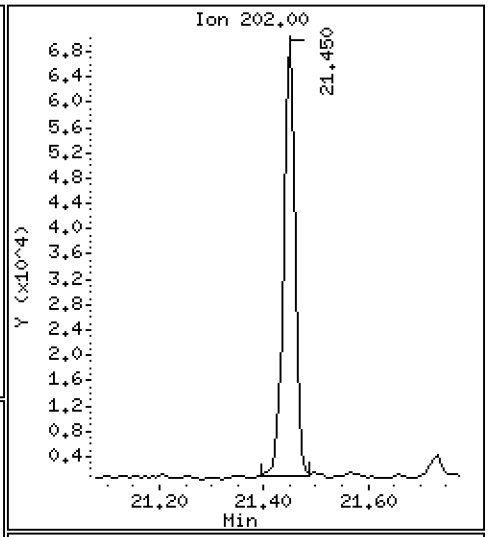
Concentration: 0.3256 ug/ml

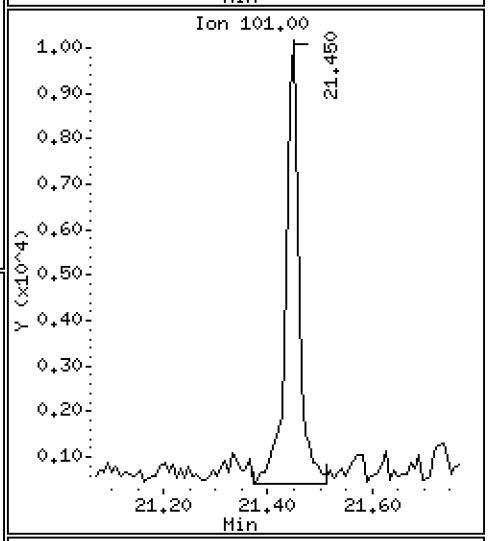


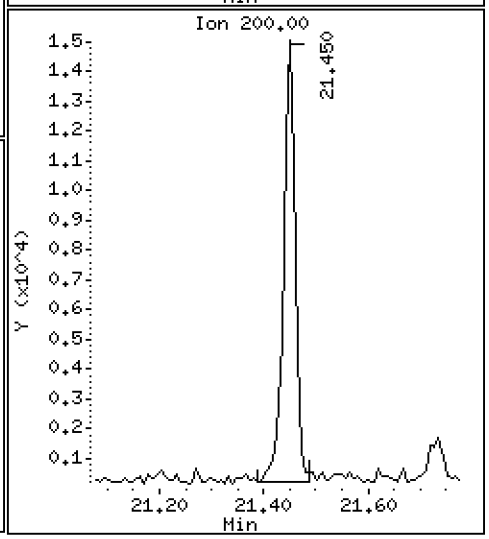












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

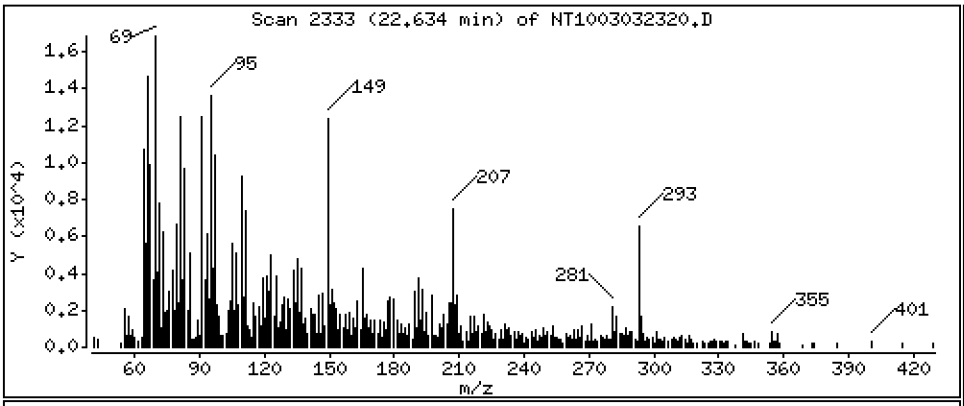
Operator: VTS

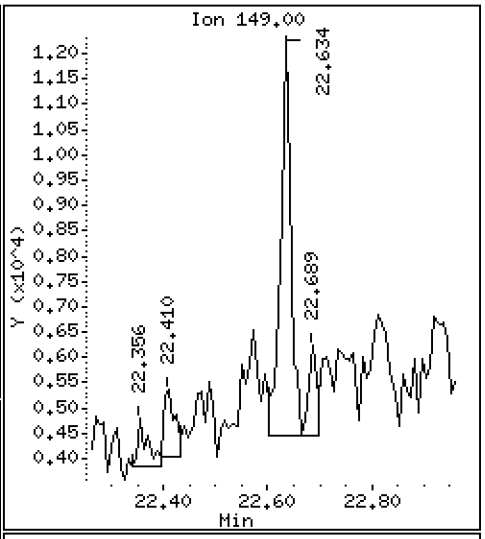
Column phase: ZB-5msi

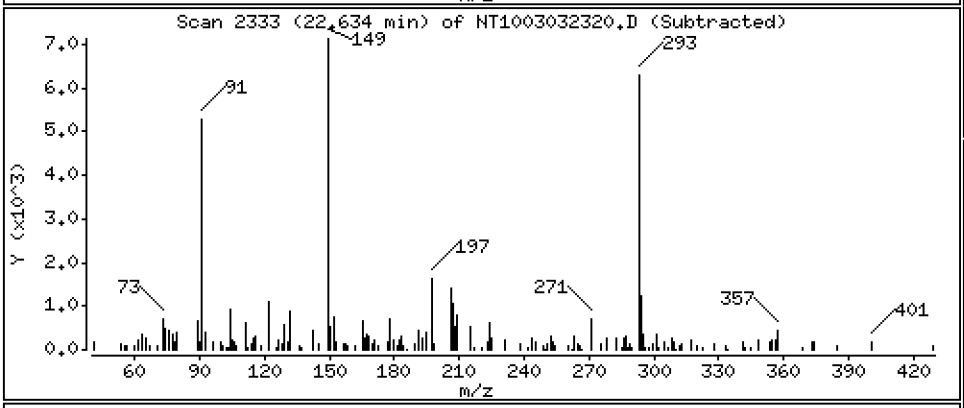
Column diameter: 0.25

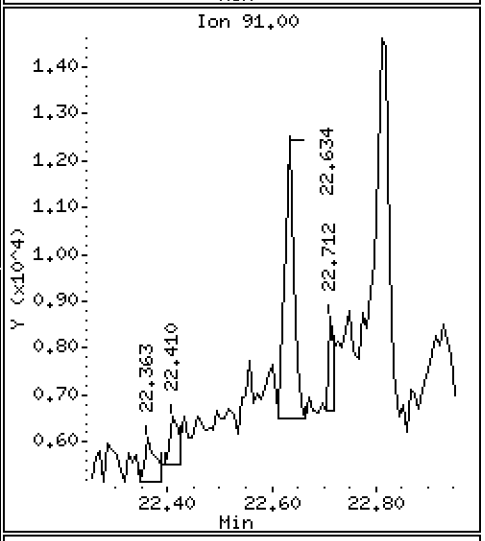
67 Butylbenzylphthalate

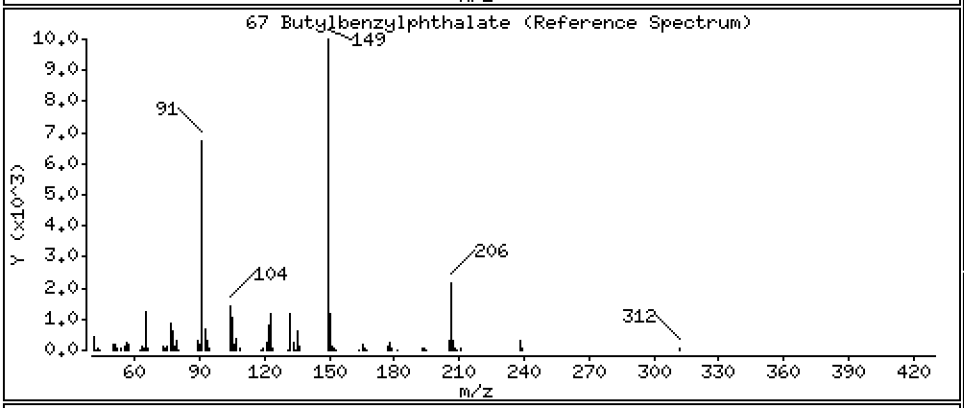
Concentration: 0.05300 ug/ml

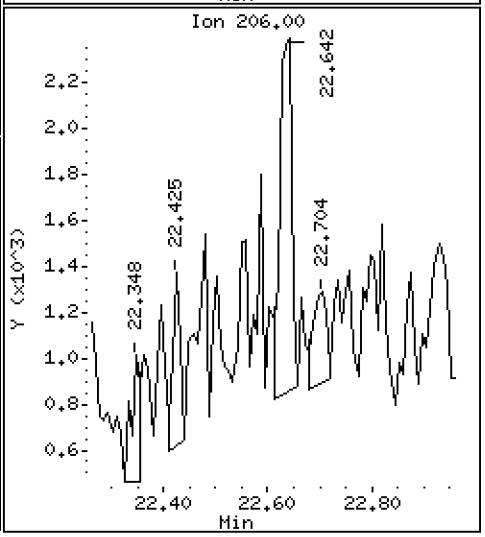


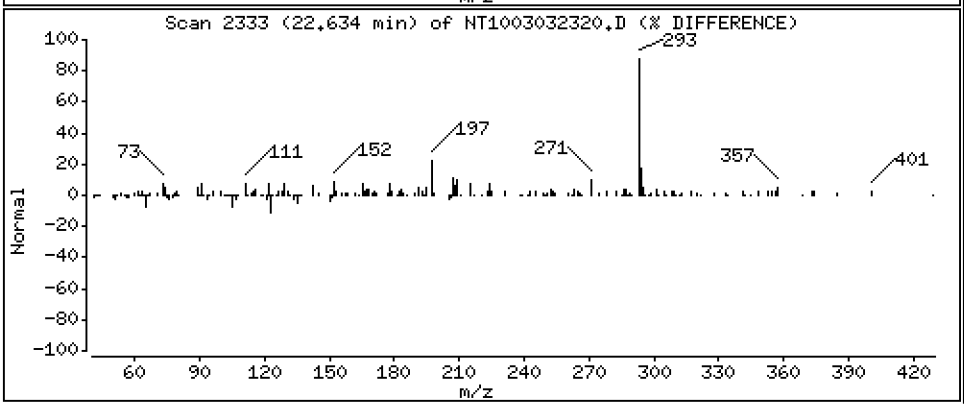












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

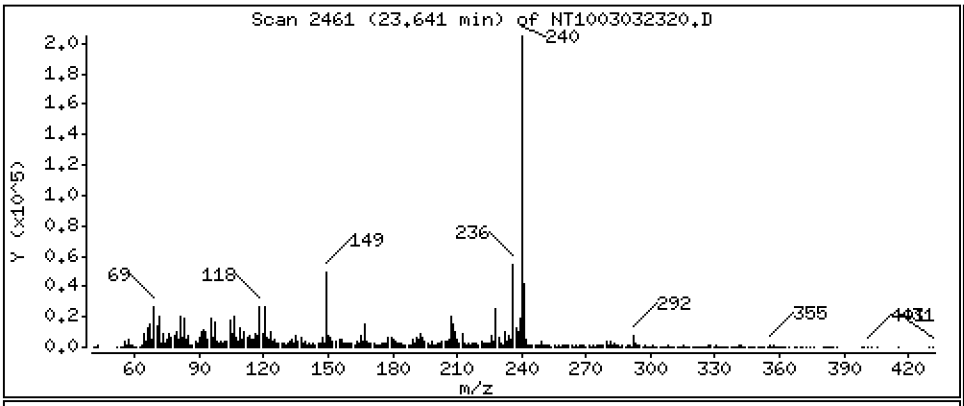
Operator: VTS

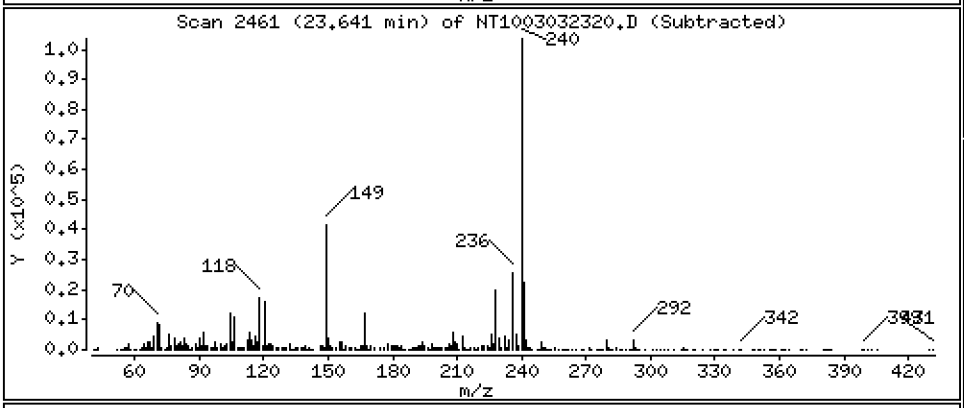
Column phase: ZB-5msi

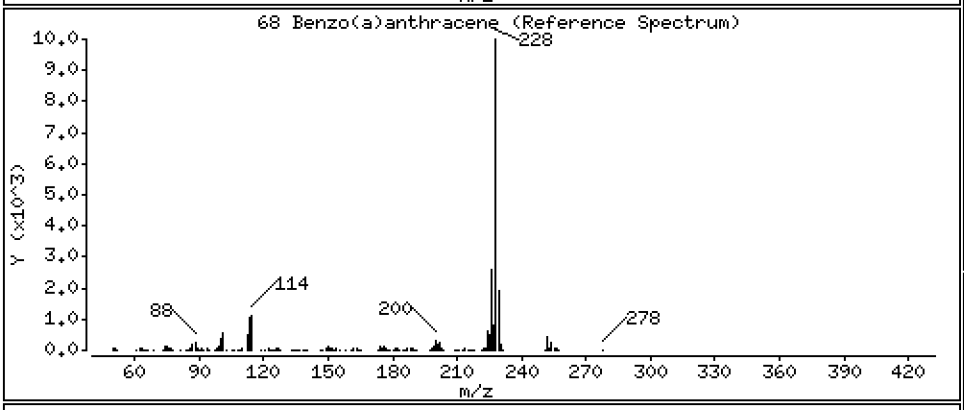
Column diameter: 0.25

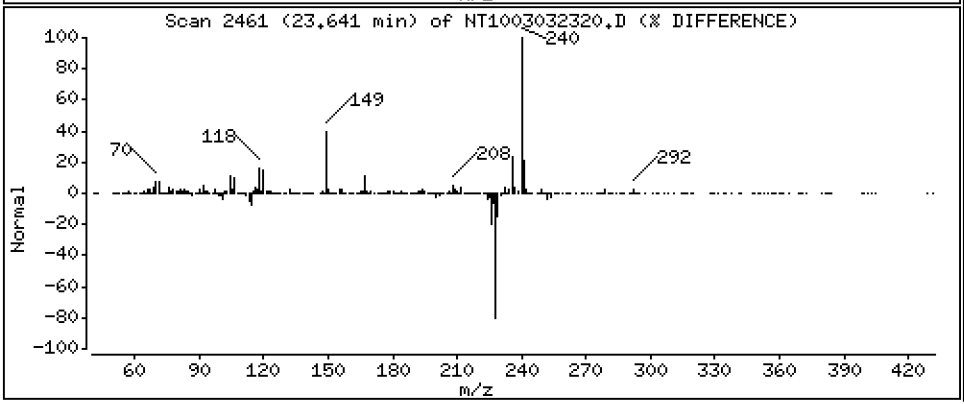
68 Benzo(a)anthracene

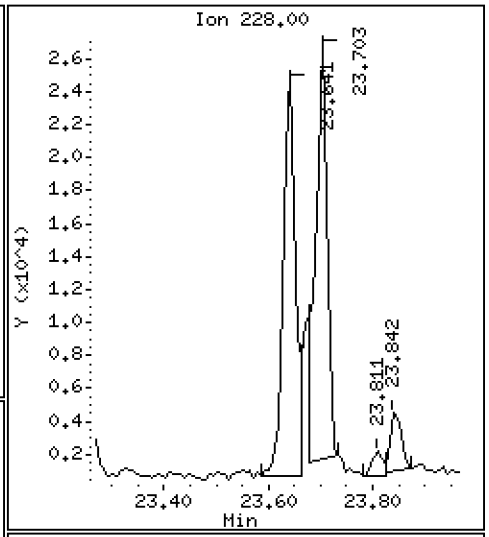
Concentration: 0.1074 ug/ml

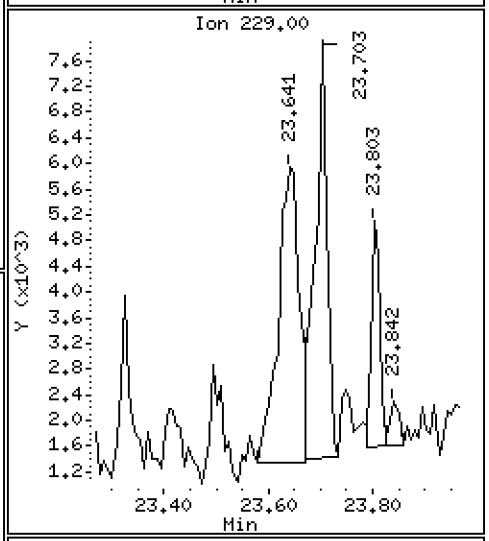


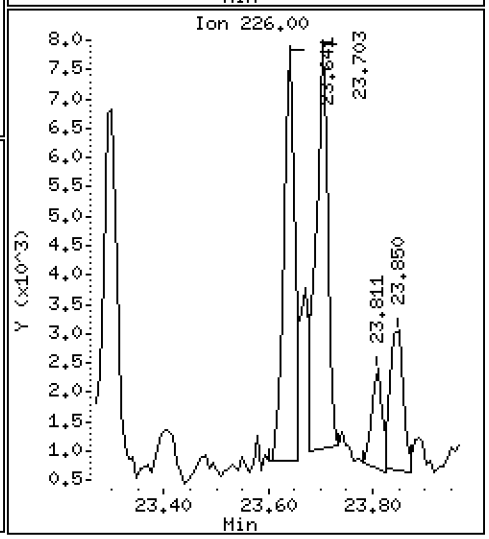












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

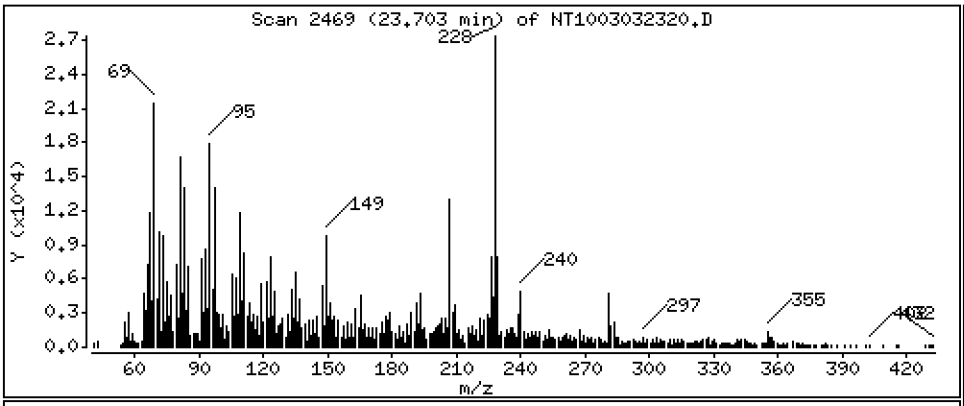
Operator: VTS

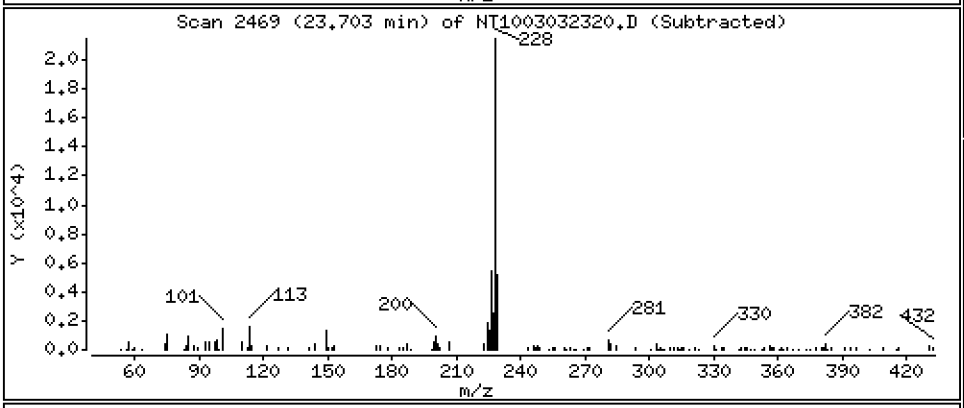
Column phase: ZB-5msi

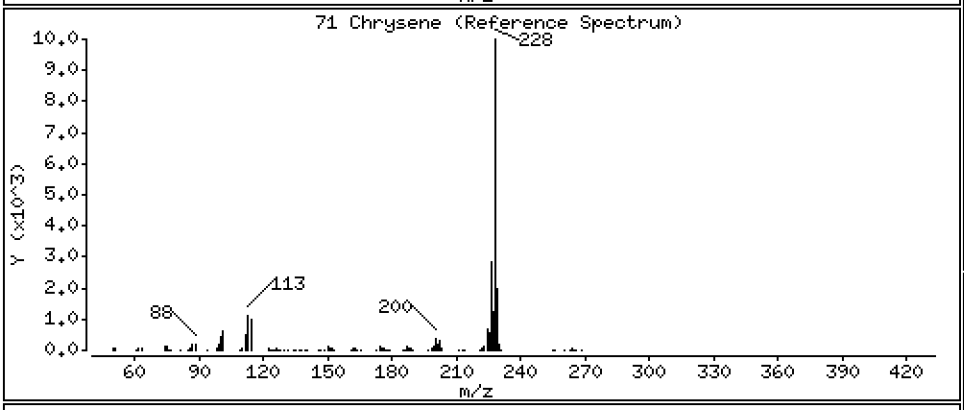
Column diameter: 0.25

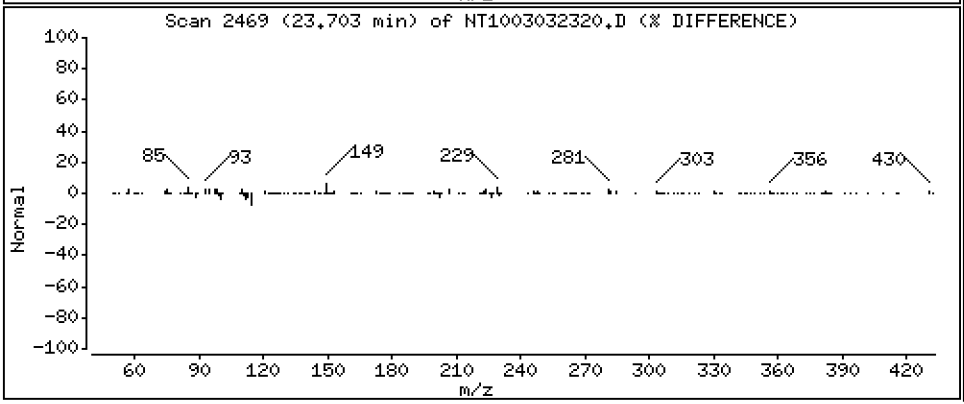
71 Chrysene

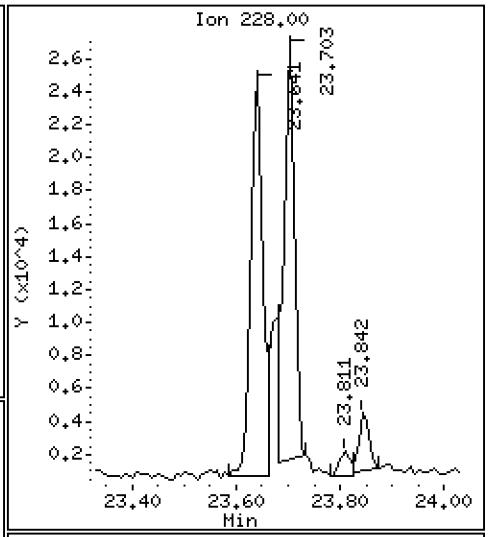
Concentration: 0.1226 ug/ml

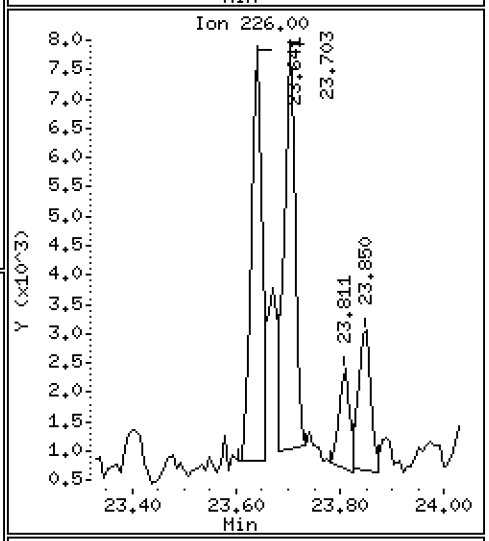


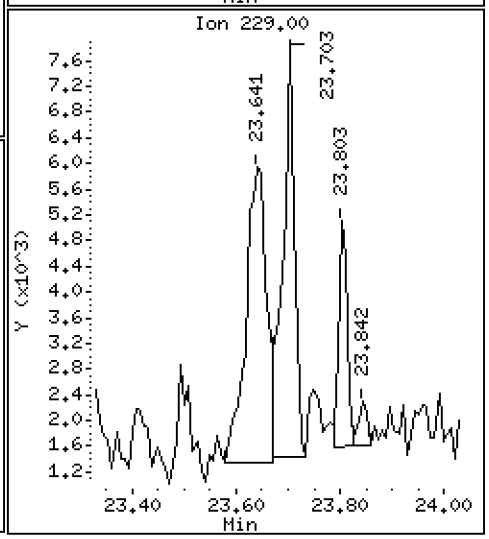












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

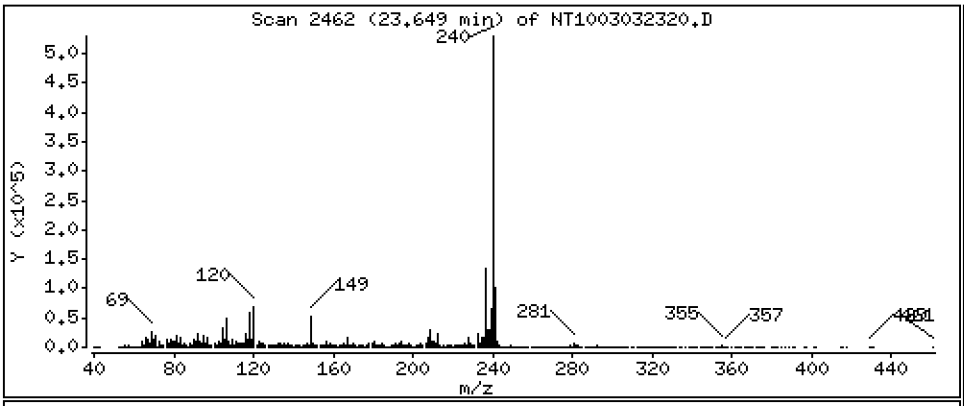
Operator: VTS

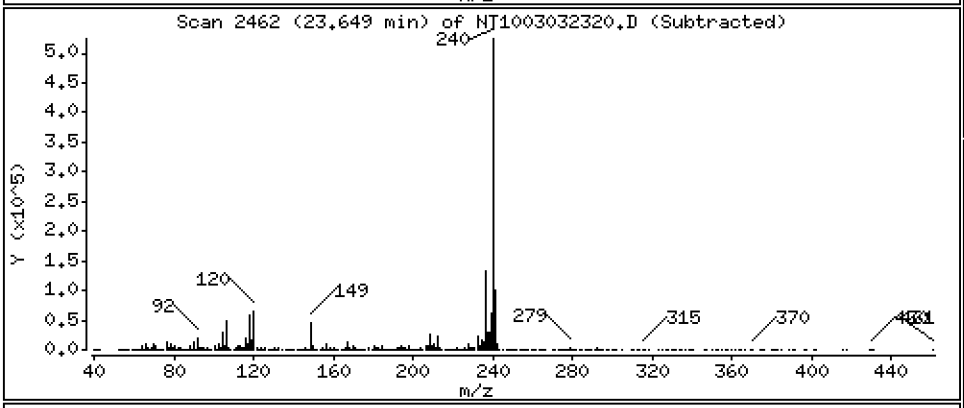
Column phase: ZB-5msi

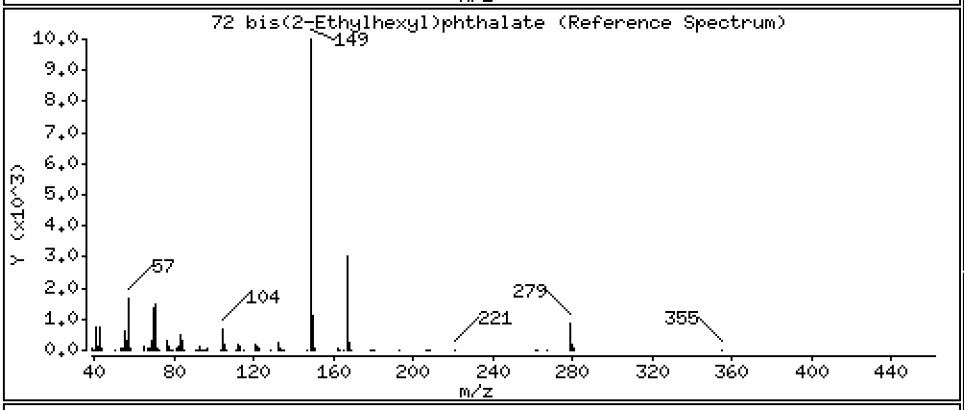
Column diameter: 0.25

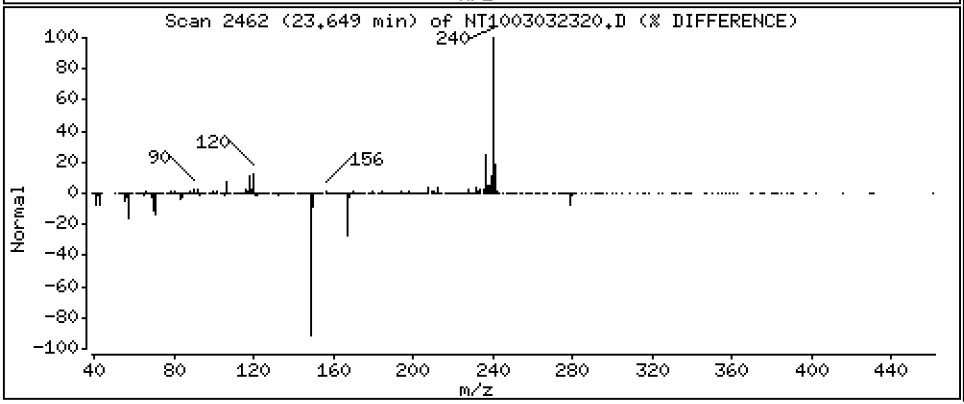
72 bis(2-Ethylhexyl)phthalate

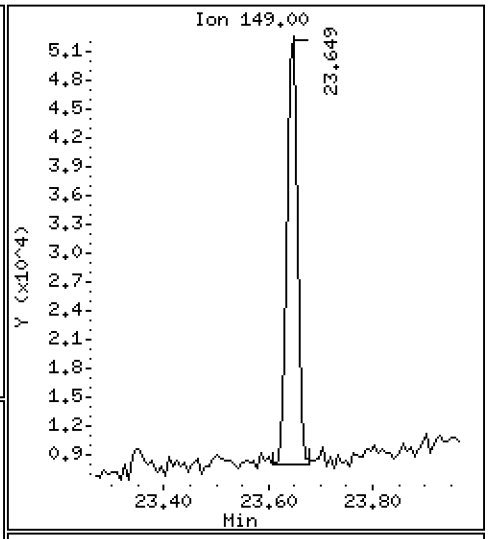
Concentration: 0.2341 ug/ml

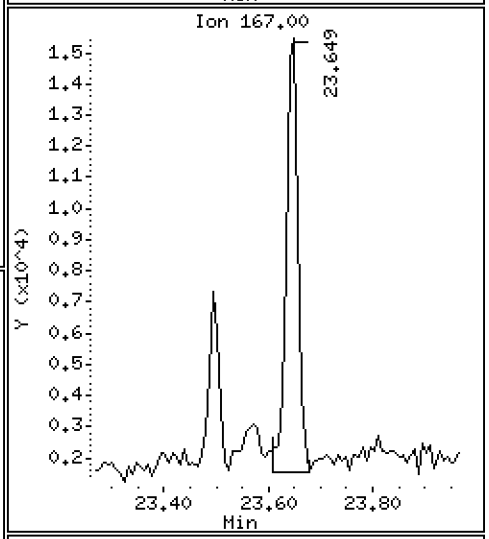


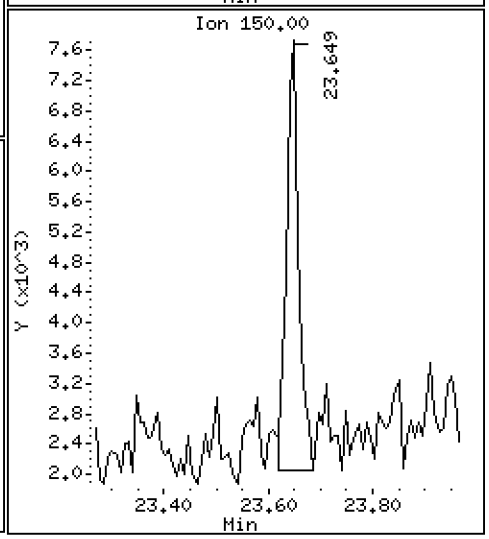












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

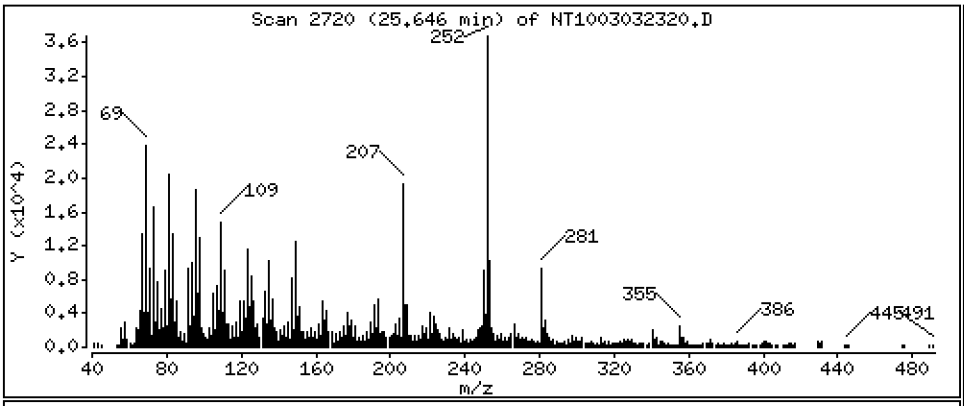
Operator: VTS

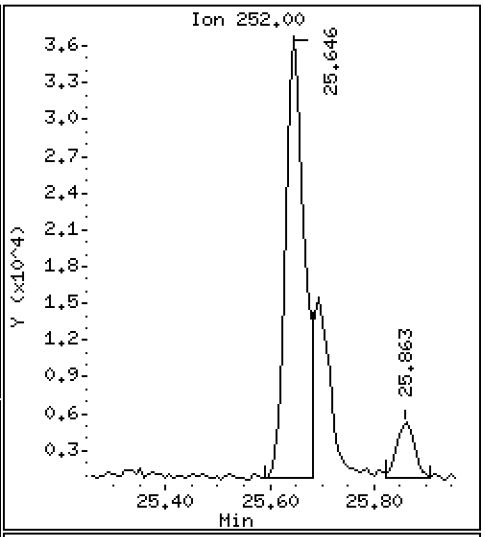
Column phase: ZB-5msi

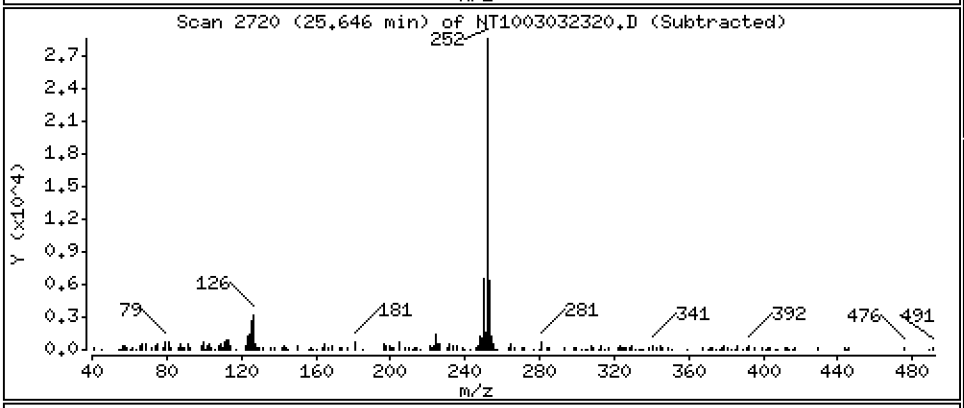
Column diameter: 0.25

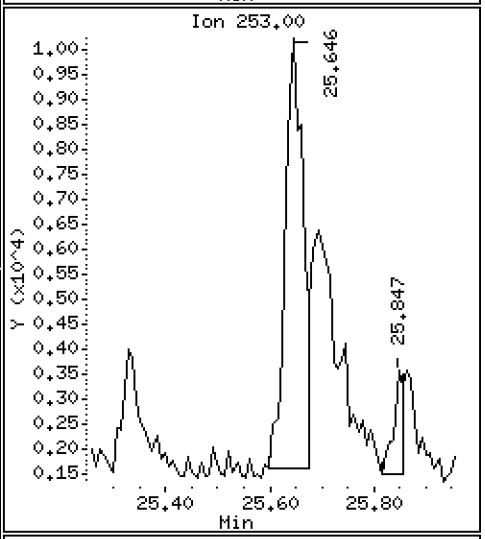
74 Benzo(b)fluoranthene

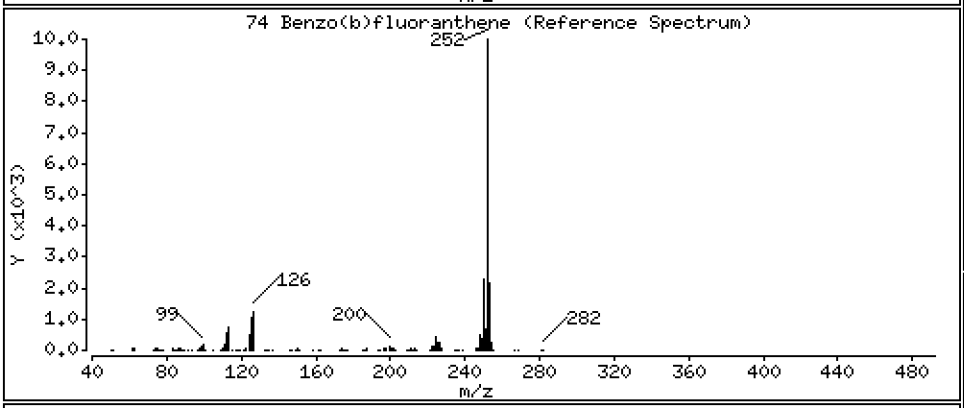
Concentration: 0.1890 ug/ml

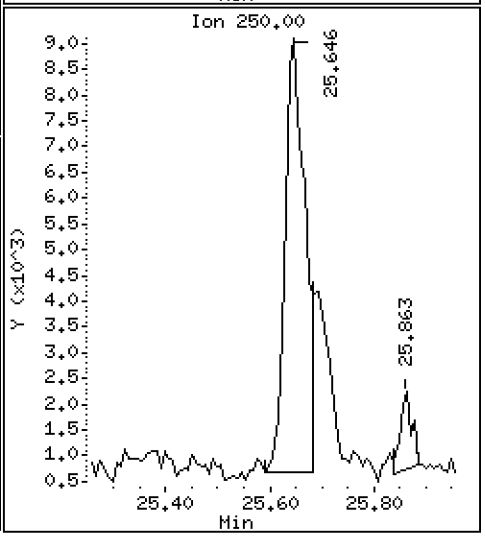


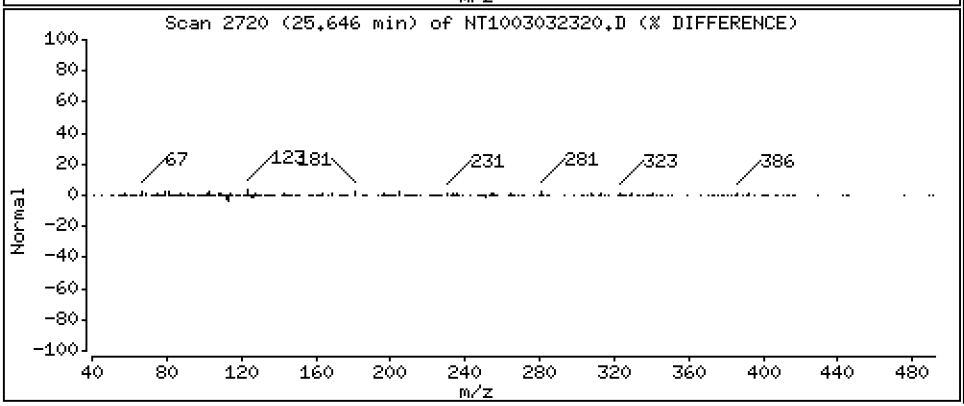












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

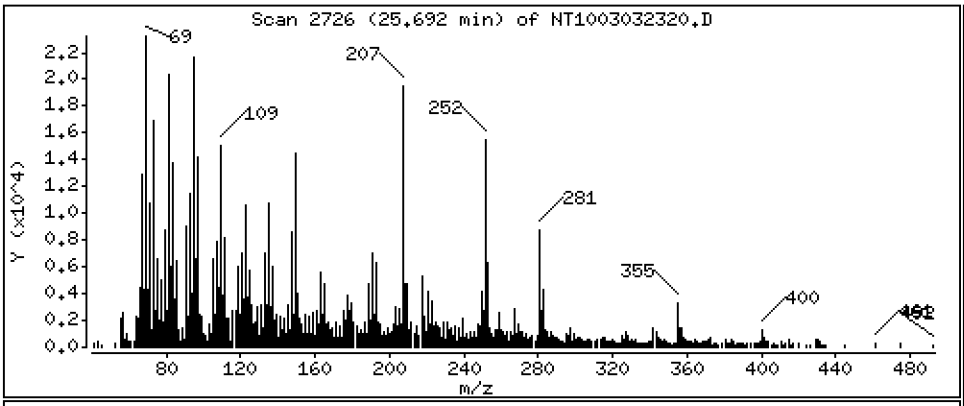
Operator: VTS

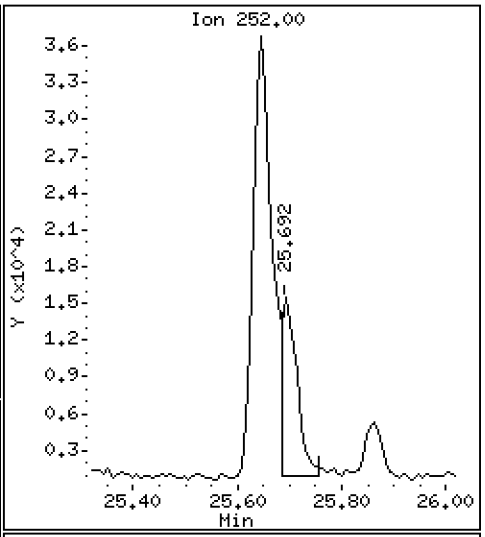
Column phase: ZB-5msi

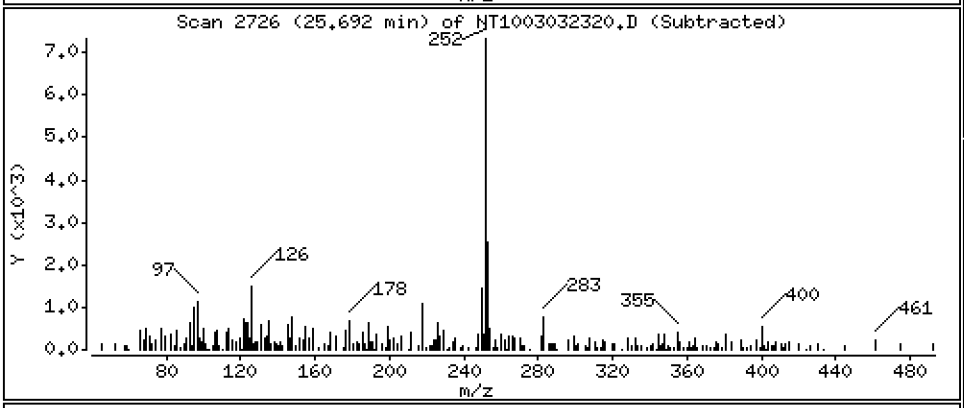
Column diameter: 0.25

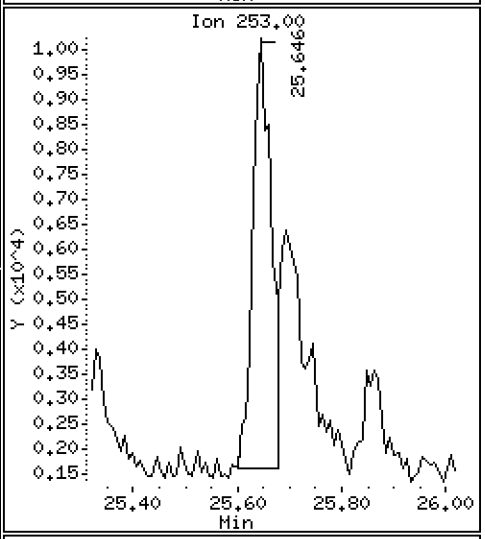
75 Benzo(k)fluoranthene

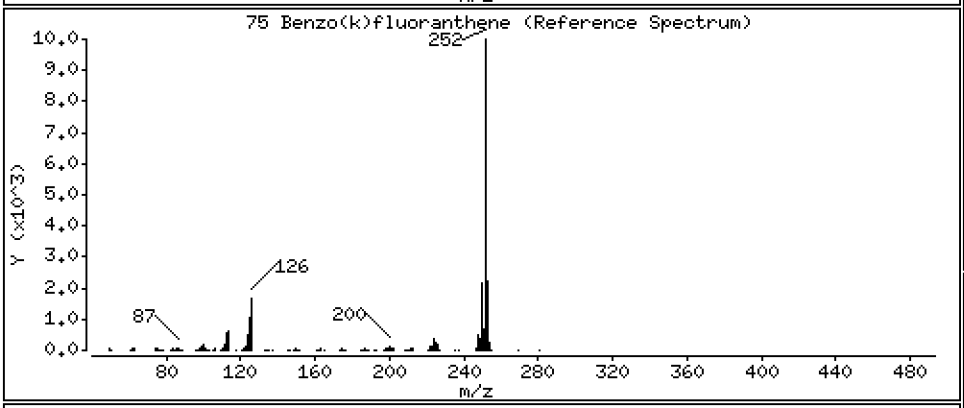
Concentration: 0.05547 ug/ml

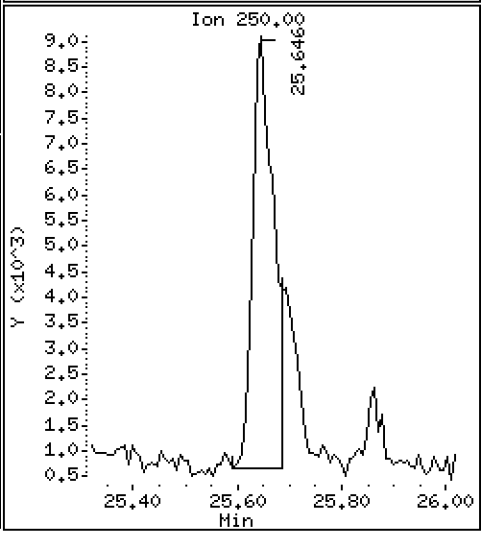


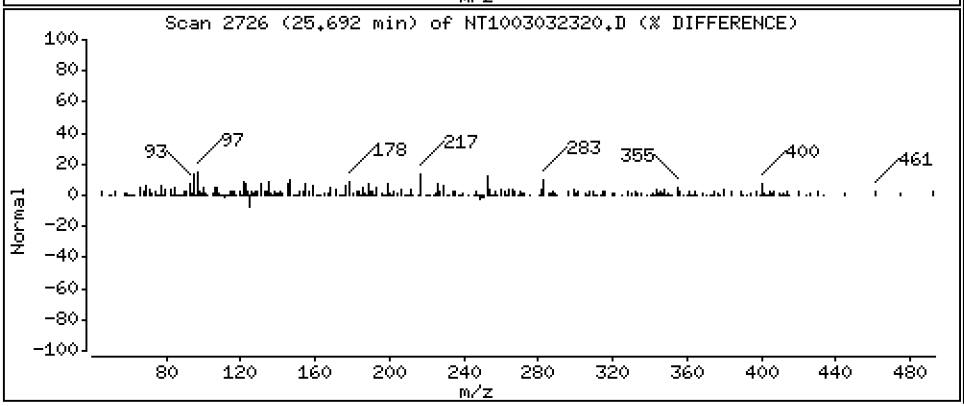












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

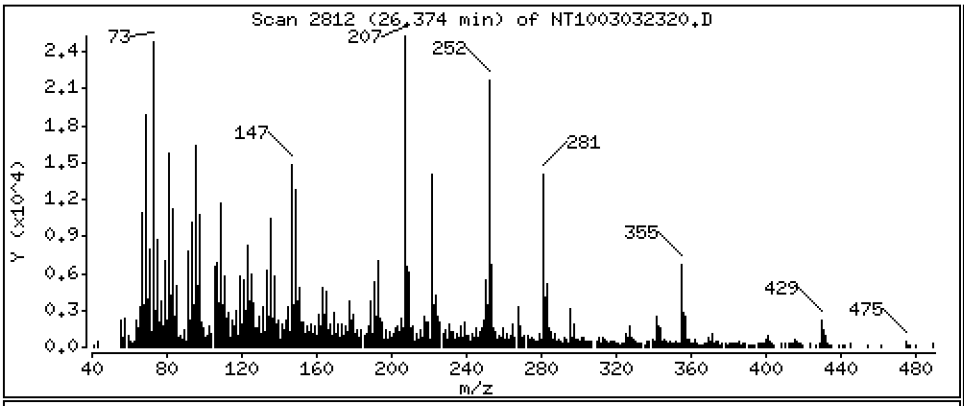
Operator: VTS

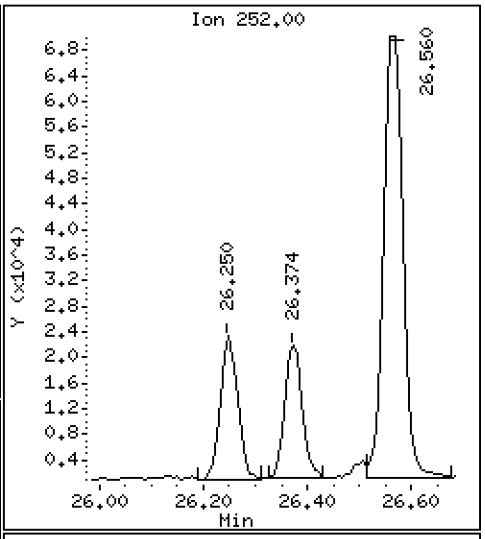
Column phase: ZB-5msi

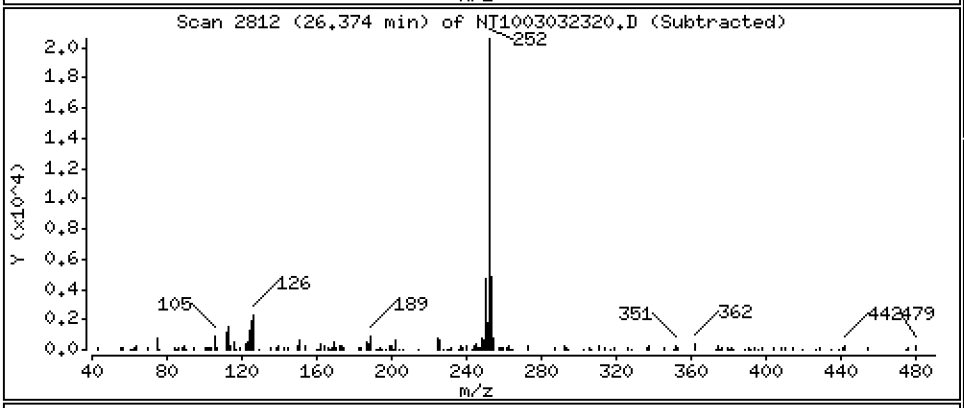
Column diameter: 0.25

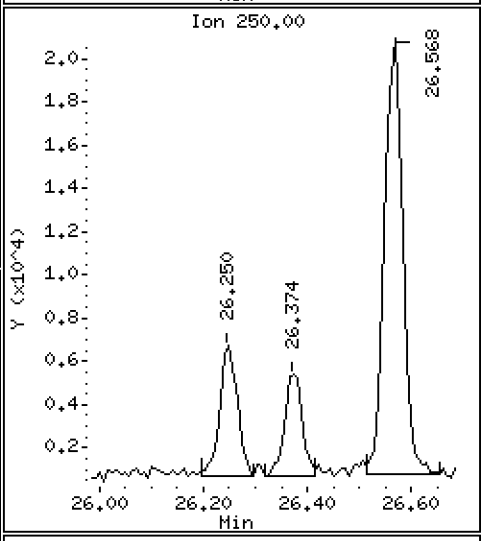
76 Benzo(a)pyrene

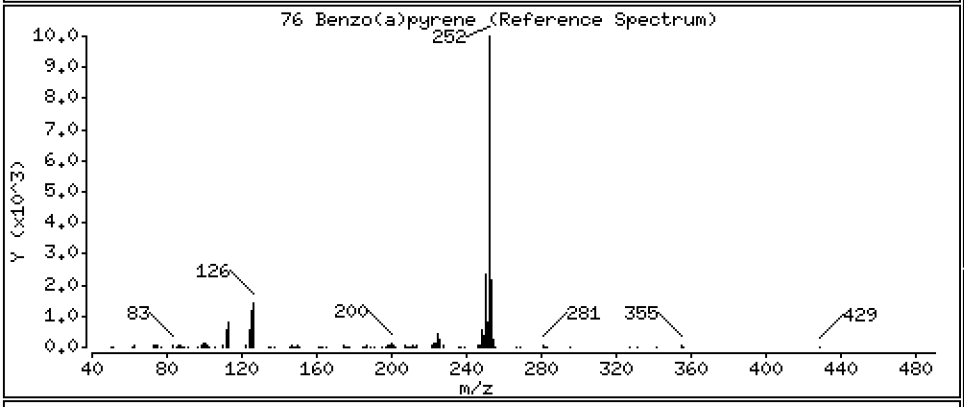
Concentration: 0.1132 ug/ml

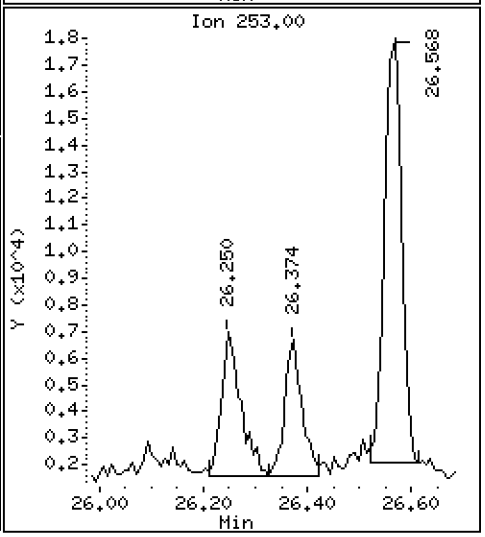


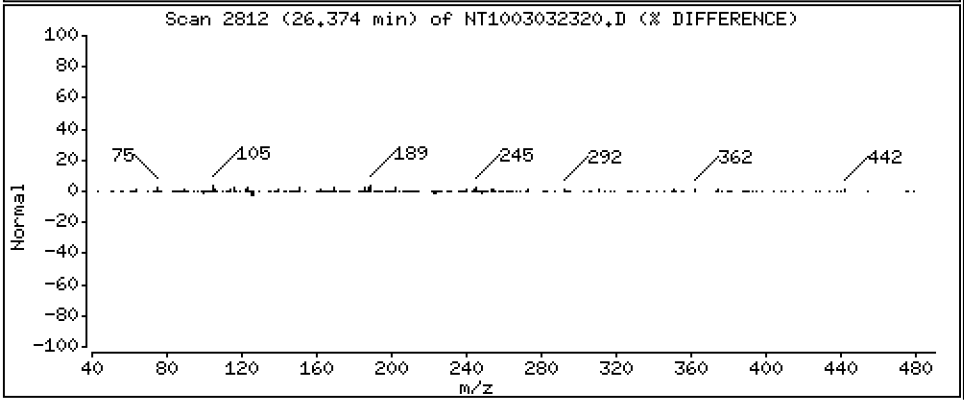












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

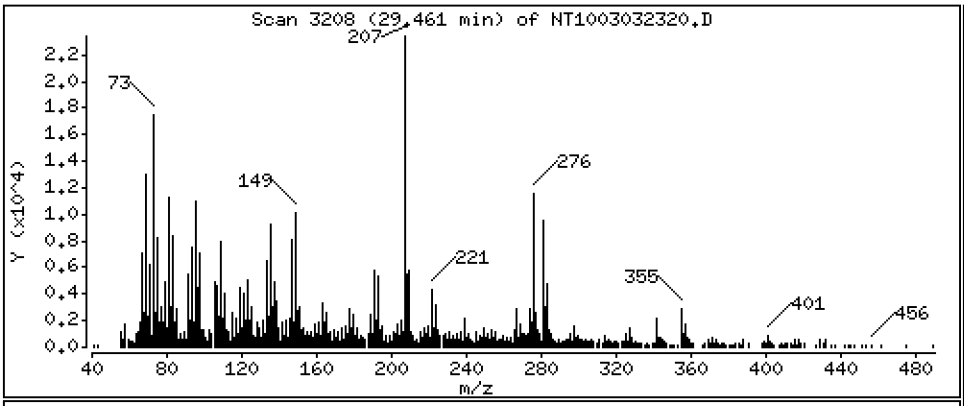
Operator: VTS

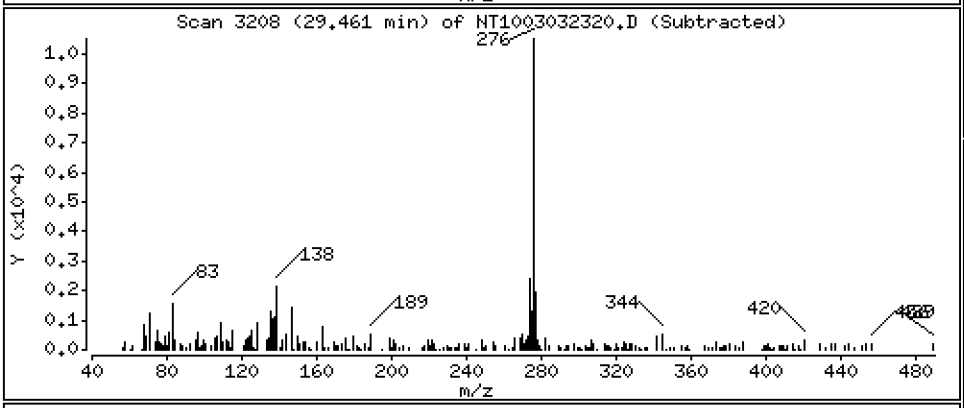
Column phase: ZB-5msi

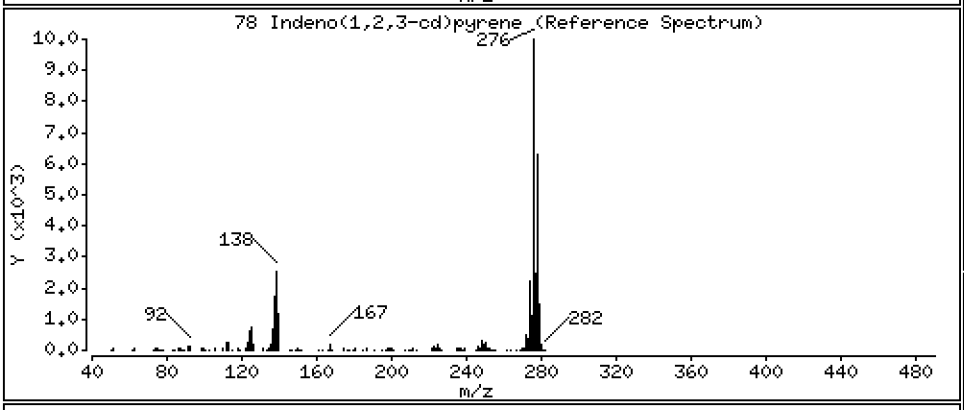
Column diameter: 0.25

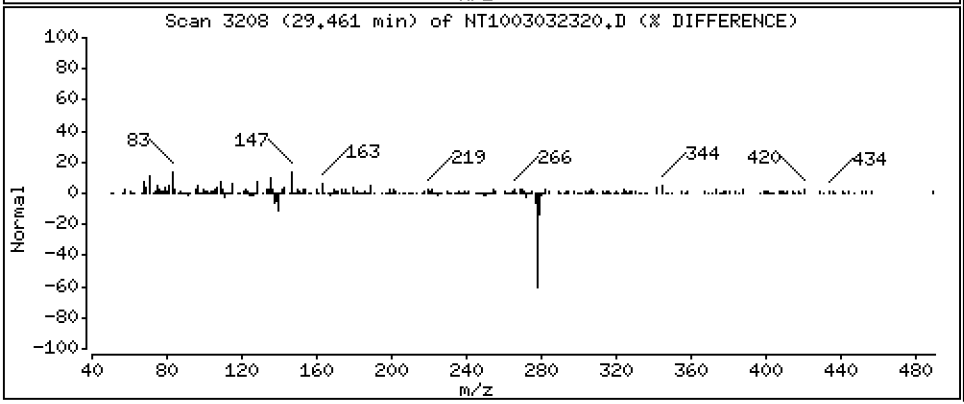
78 Indeno(1,2,3-cd)pyrene

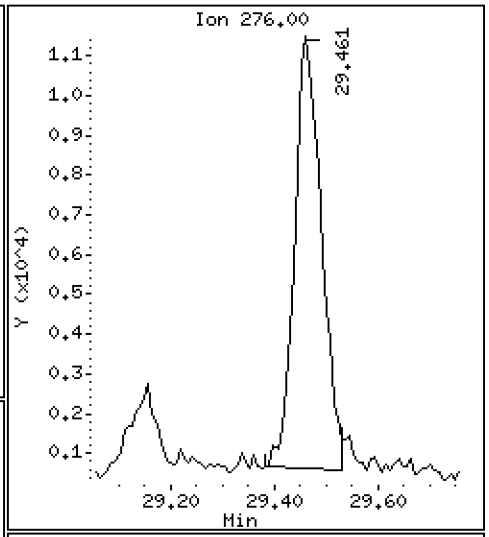
Concentration: 0.07407 ug/ml

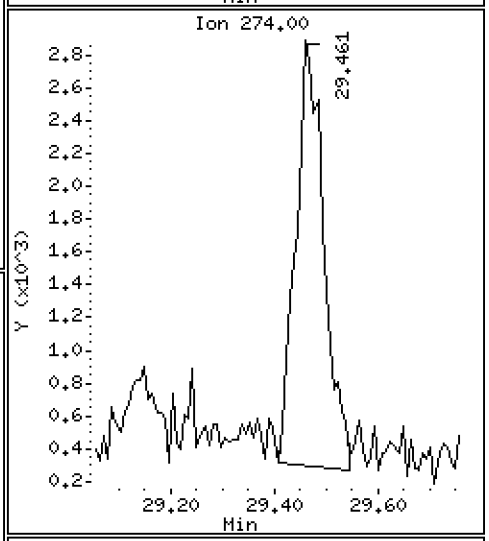


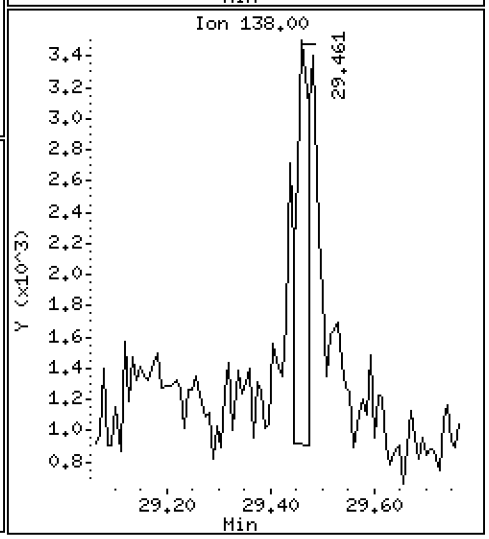












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

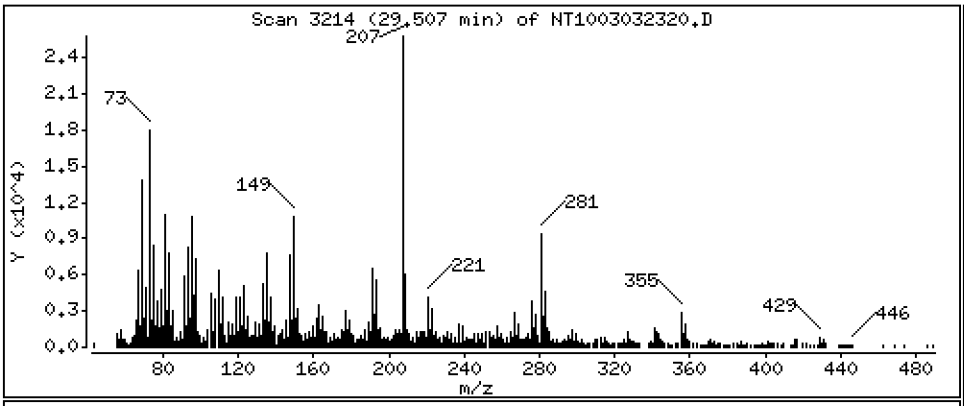
Operator: VTS

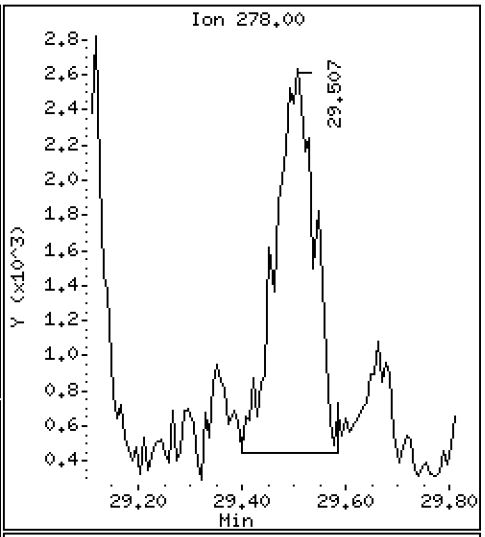
Column phase: ZB-5msi

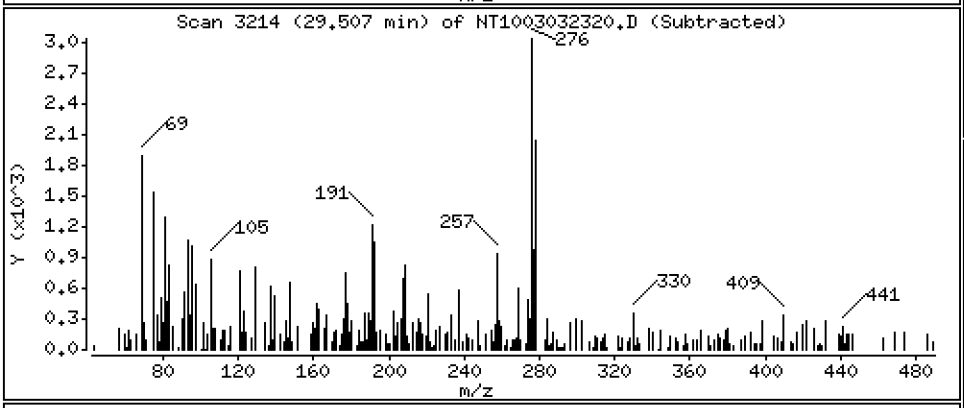
Column diameter: 0.25

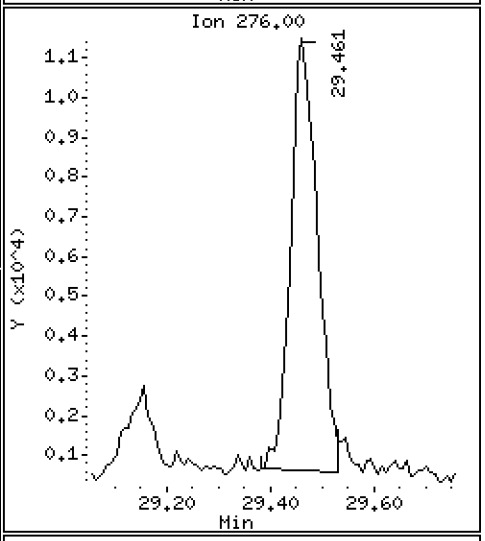
79 Dibenzo(a,h)anthracene

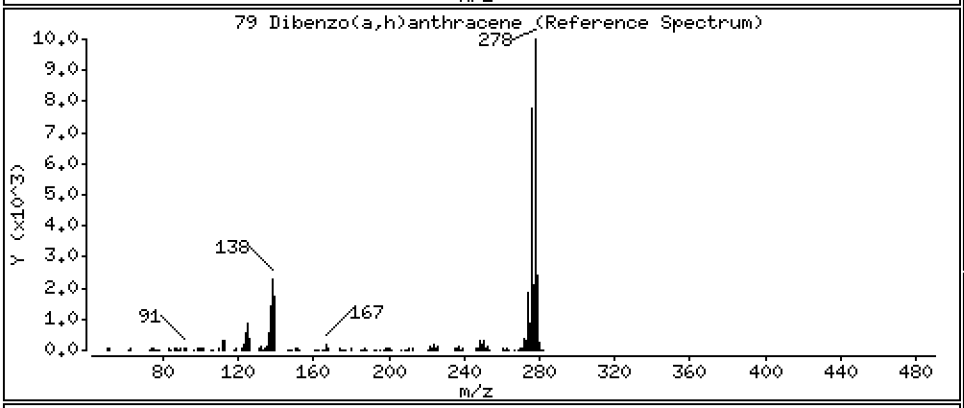
Concentration: 0.02890 ug/ml

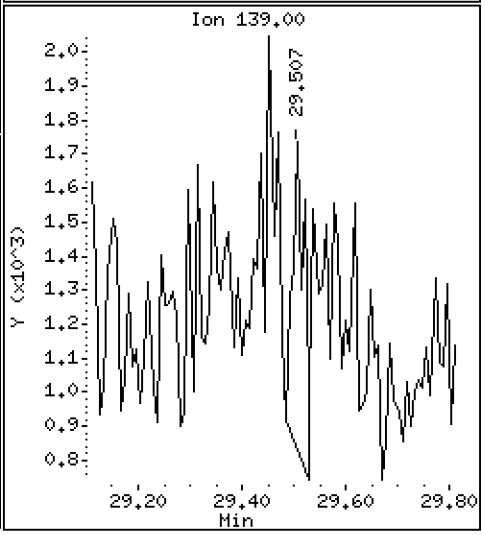


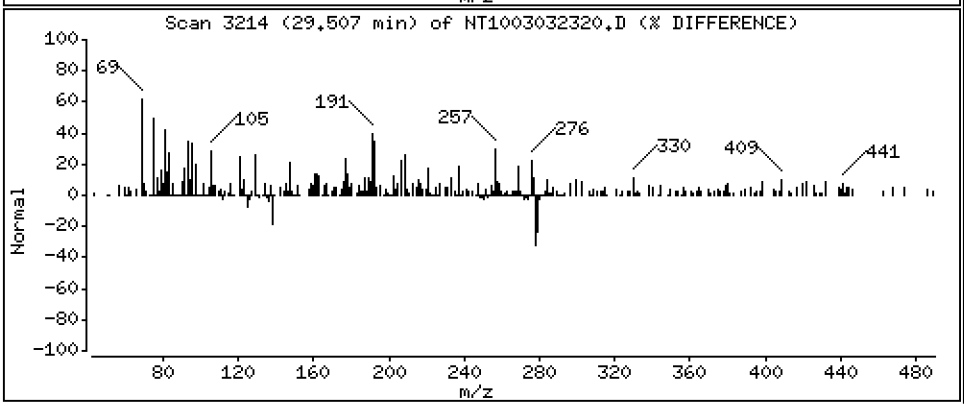












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

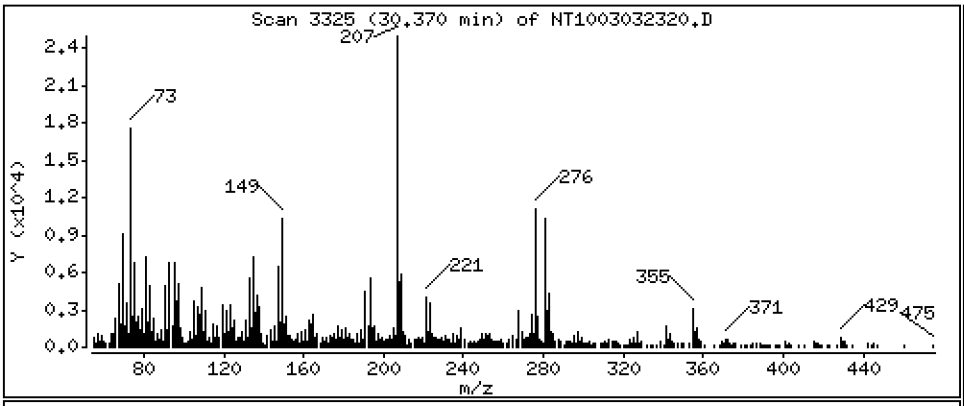
Operator: VTS

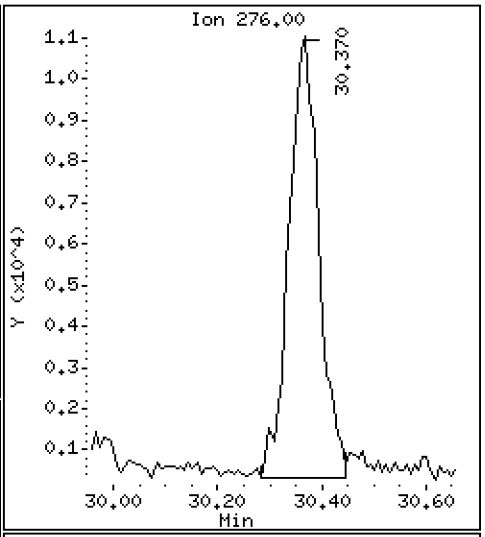
Column phase: ZB-5msi

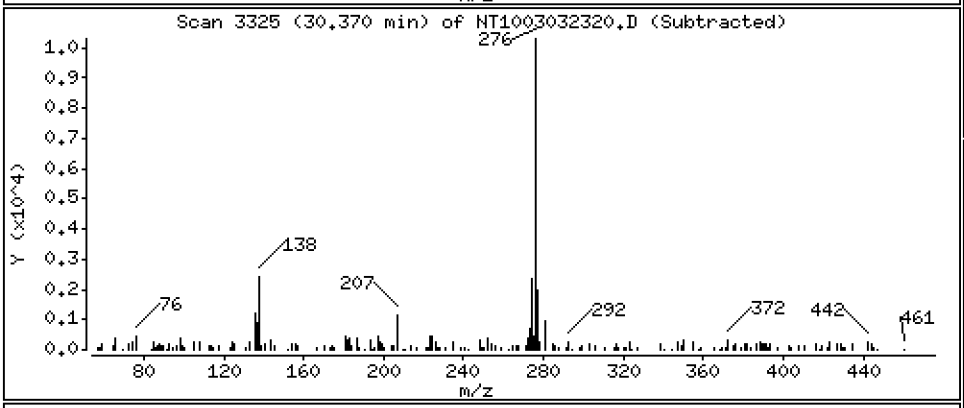
Column diameter: 0.25

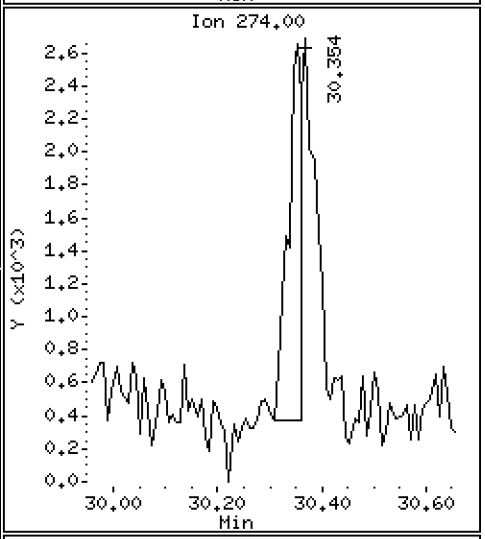
80 Benzo(g,h,i)perylene

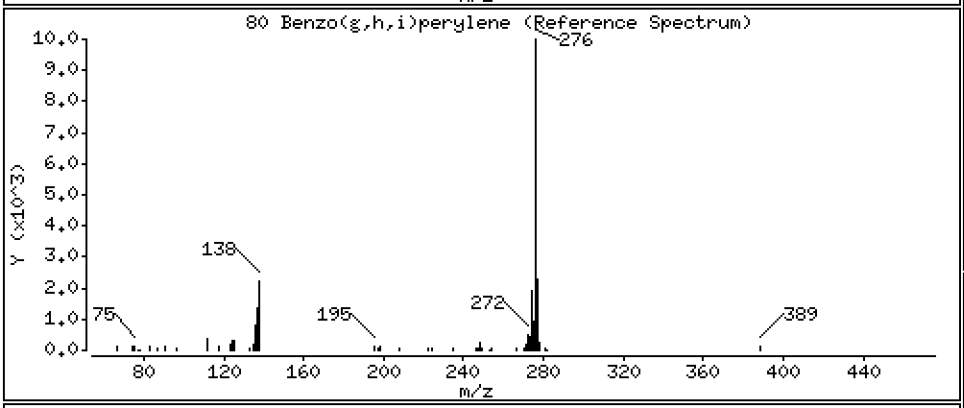
Concentration: 0.1018 ug/ml

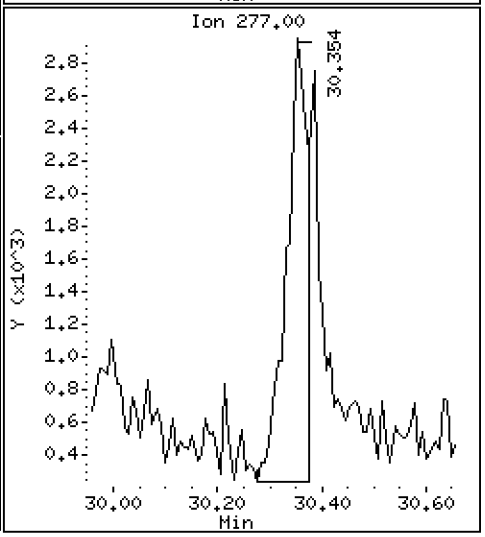


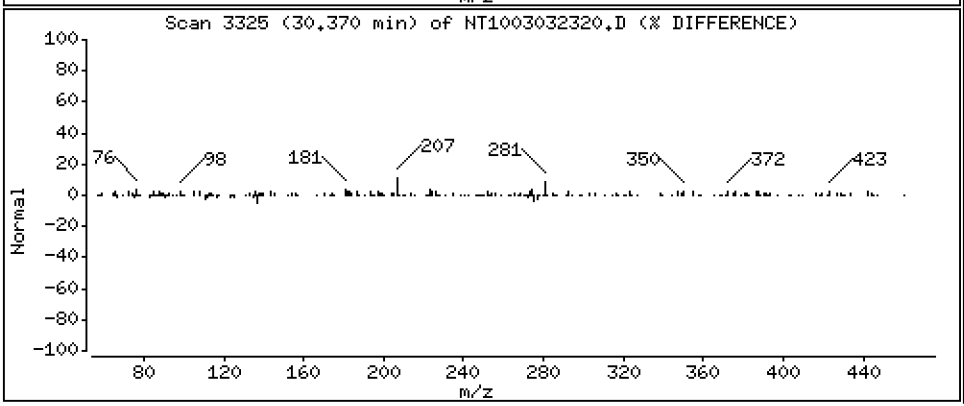












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

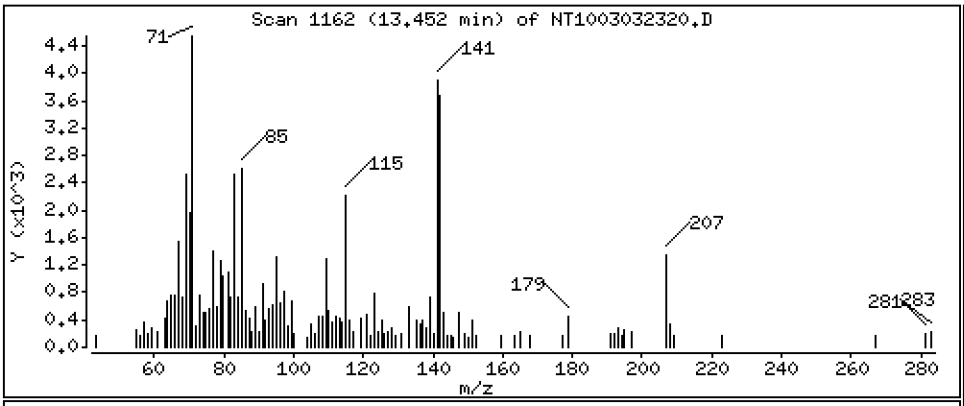
Operator: VTS

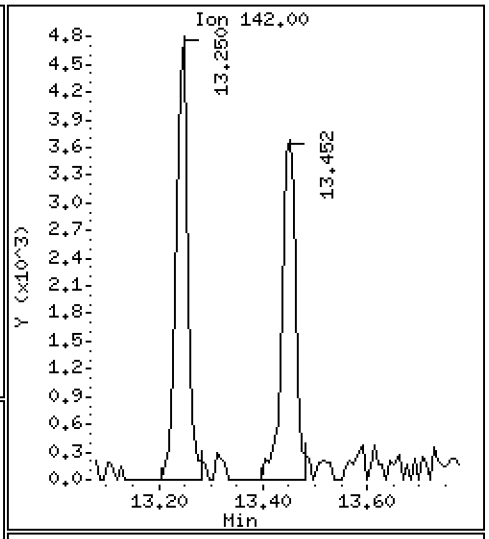
Column phase: ZB-5msi

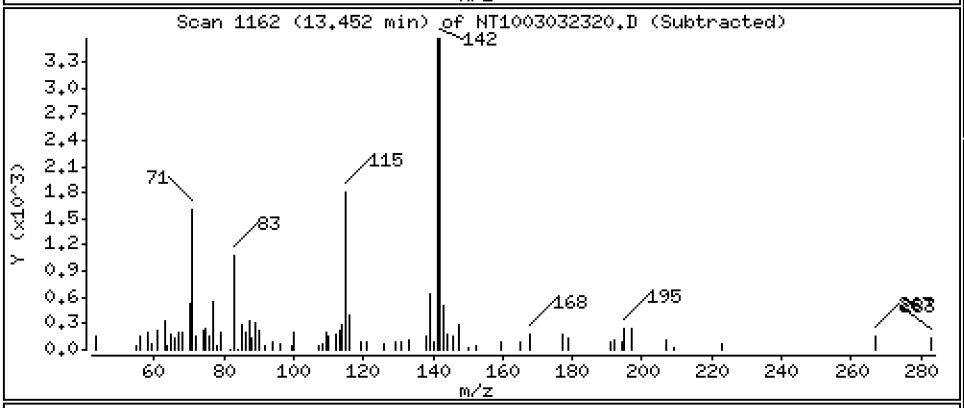
Column diameter: 0.25

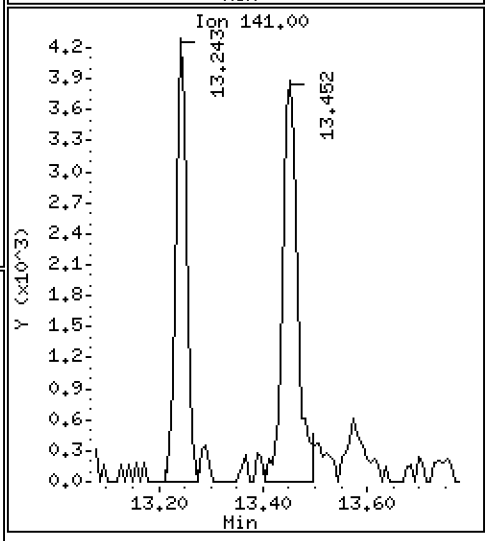
105 1-methylnaphthalene

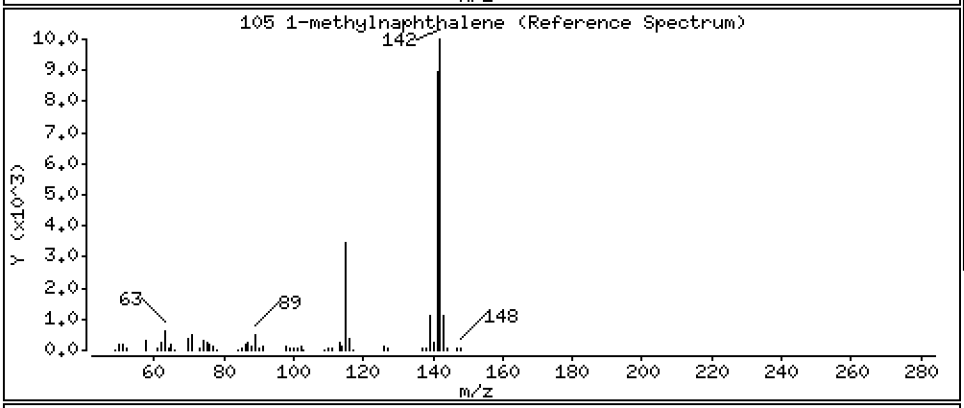
Concentration: 0.02660 ug/ml

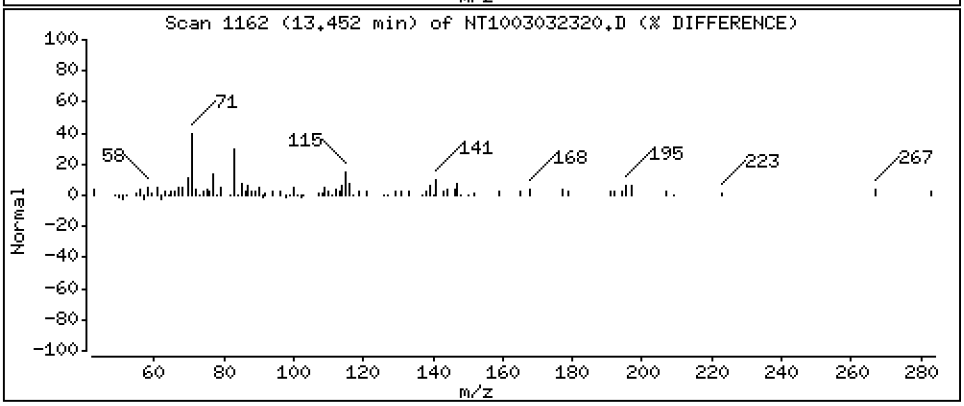












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032320.D

Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

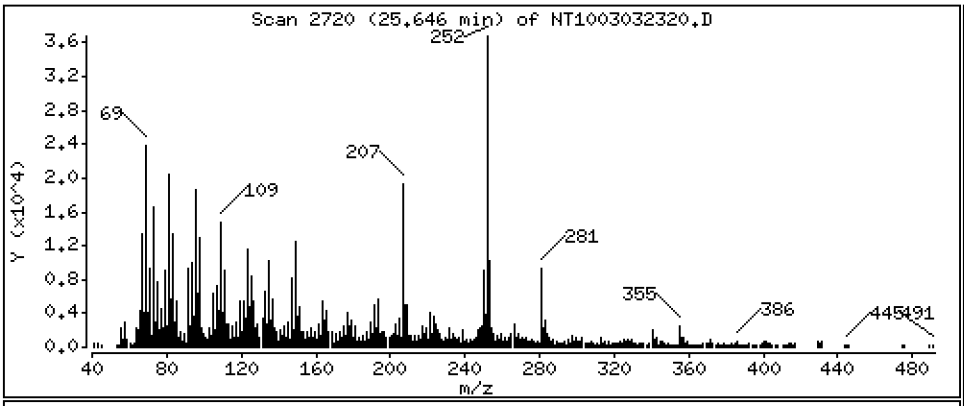
Operator: VTS

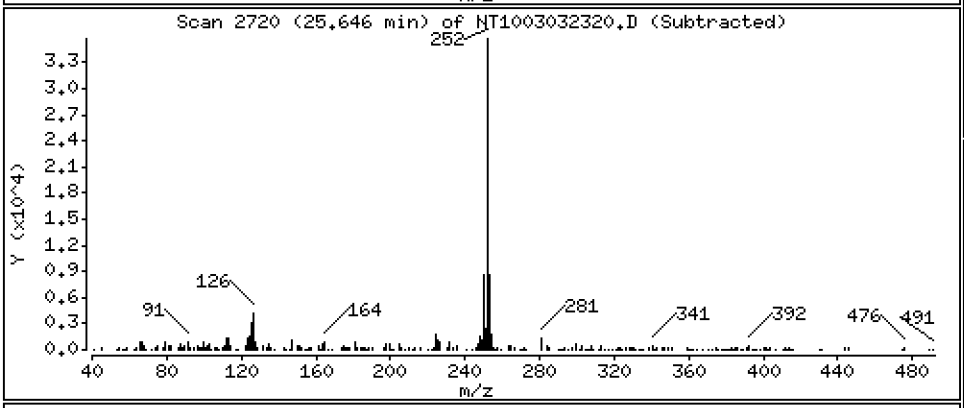
Column phase: ZB-5msi

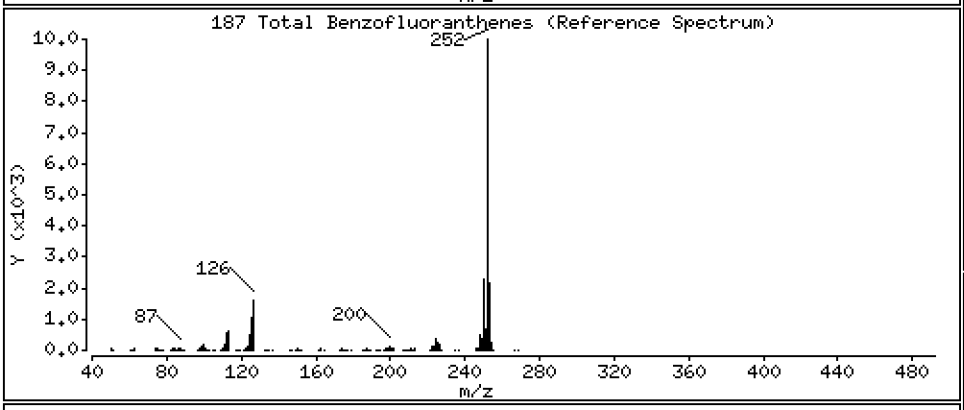
Column diameter: 0.25

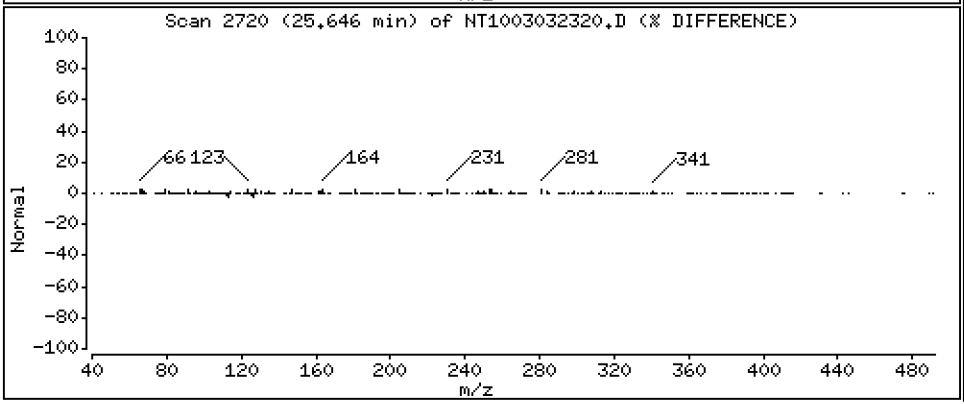
187 Total Benzofluoranthenes

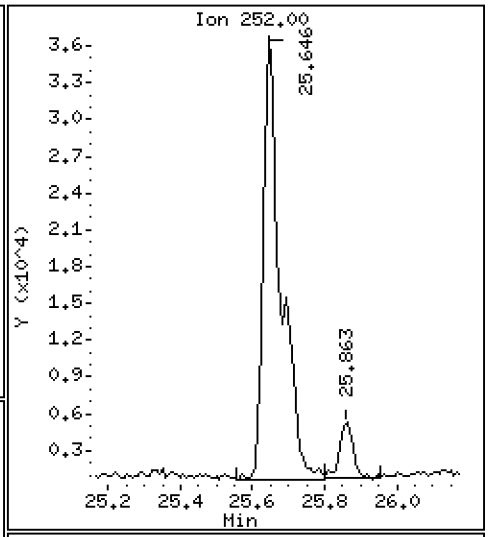
Concentration: 0.2490 ug/ml

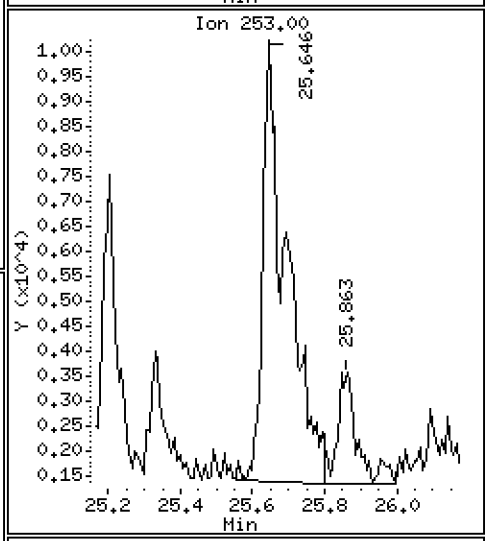


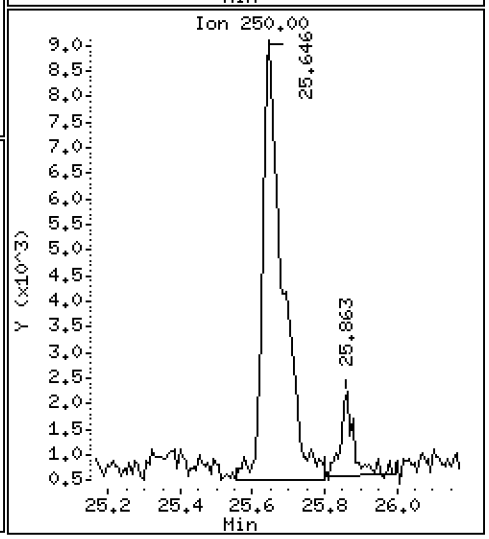












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230303A.b\NT1003032320.D
Lab Smp Id: 23A0249-04
Inj Date : 04-MAR-2023 05:50
Operator : VTS Inst ID: nt10.i
Smp Info : 23A0249-04
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Meth Date : 26-Apr-2023 10:41 van Quant Type: ISTD
Cal Date : 01-MAR-2023 18:37 Cal File: NT1003012306.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/ml)
$ 1	2-Fluorophenol	112	6.920	6.920	(0.745)	674550	4.58175	4.582
$ 2	Phenol-d5	99	8.535	8.535	(0.919)	806441	4.71803	4.718
3	Phenol	94	8.558	8.558	(0.922)	203873	1.12185	1.122
$ 5	2-Chlorophenol-d4	132	8.851	8.852	(0.953)	764284	5.24089	5.241
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	9.285	9.278	(1.000)	467936	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	9.572	9.572	(1.031)	336842	3.09161	3.092
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	10.015	9.992	(1.079)	6464	0.03660	0.03660
$ 18	Nitrobenzene-d5	82	10.348	10.341	(0.878)	606208	3.40443	3.404
19	Nitrobenzene	77	Compound Not Detected.					
20	Isophorone	82	Compound Not Detected.					
21	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	Compound Not Detected.					
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.788	11.772	(1.000)	1622132	4.00000	
28	Naphthalene	128	11.834	11.819	(1.004)	13010	0.03125	0.03125
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	12.909	12.871	(1.095)	234	0.00177	0.001768
32	2-Methylnaphthalene	142	13.250	13.227	(1.124)	7761	0.02639	0.02639
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	14.001	13.978	(0.908)	1109515	3.71342	3.713
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	14.465	14.450	(0.938)	307	0.00479	0.004791
39	Dimethylphthalate	163	14.844	14.821	(0.963)	2426	0.00897	0.008968
40	Acenaphthylene	152	Compound Not Detected.					
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	15.417	15.401	(1.000)	837679	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	Compound Not Detected.					
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.850	15.834	(1.028)	7505	0.02074	0.02074
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	16.321	16.306	(1.059)	26877	0.09378	0.09378
49	Fluorene	166	16.577	16.554	(1.075)	6312	0.02096	0.02096
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	17.078	17.063	(1.108)	216805	4.09933	4.099
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	18.556	18.533	(1.000)	1390077	4.00000	
60	Phenanthrene	178	18.602	18.587	(1.002)	39201	0.11019	0.1102
61	Anthracene	178	18.718	18.695	(1.009)	12164	0.03526	0.03526
62	Carbazole	167	19.058	19.035	(1.027)	5010	0.01585	0.01585
63	Di-n-butylphthalate	149	19.762	19.739	(1.065)	10801	0.02521	0.02521
64	Fluoranthene	202	21.024	20.985	(0.889)	82889	0.21358	0.2136
65	Pyrene	202	21.449	21.426	(0.907)	128688	0.32565	0.3256
$ 66	Terphenyl-d14	244	21.728	21.705	(0.918)	1241791	3.88361	3.884
67	Butylbenzylphthalate	149	22.634	22.611	(0.957)	11281	0.05300	0.05300
68	Benzo(a)anthracene	228	23.640	23.617	(0.999)	42734	0.10743	0.1074
* 69	Chrysene-d12	240	23.656	23.633	(1.000)	1128136	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	23.702	23.679	(1.002)	39495	0.12261	0.1226
72	bis(2-Ethylhexyl)phthalate	149	23.648	23.617	(0.954)	66693	0.23409	0.2341
* 134	Di-n-octylphthalate-d4	153	24.778	24.748	(1.000)	2031116	4.00000	
73	Di-n-octylphthalate	149	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	25.645	25.607	(0.968)	95680	0.18900	0.1890
75	Benzo(k)fluoranthene	252	25.692	25.669	(0.969)	26997	0.05547	0.05547(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
76	Benzo(a)pyrene	252	26.373	26.335	(0.995)	51183	0.11320	0.1132
* 77	Perylene-d12	264	26.505	26.459	(1.000)	1484111	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.460	29.406	(1.111)	39152	0.07407	0.07407
79	Dibenzo(a,h)anthracene	278	29.507	29.460	(1.113)	11576	0.02890	0.02890(M)
80	Benzo(g,h,i)perylene	276	30.369	30.307	(1.146)	42898	0.10182	0.1018
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	13.451	13.428	(1.141)	7082	0.02660	0.02660
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
187	Total Benzofluoranthenes	252	25.645	25.669	(0.968)	121022	0.24904	0.2490
120	2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032320.D
Lab Smp Id: 23A0249-04
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:02
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	514090	257045	1028180	467936	-8.98
27 Naphthalene-d8	1833847	916924	3667694	1622132	-11.54
42 Acenaphthene-d10	935282	467641	1870564	837679	-10.44
59 Phenanthrene-d10	1597882	798941	3195764	1390077	-13.01
69 Chrysene-d12	1549718	774859	3099436	1128136	-27.20
134 Di-n-octylphthala	2731644	1365822	5463288	2031116	-25.64
77 Perylene-d12	1727703	863852	3455406	1484111	-14.10

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.29	0.08
27 Naphthalene-d8	11.77	11.27	12.27	11.79	0.13
42 Acenaphthene-d10	15.40	14.90	15.90	15.42	0.10
59 Phenanthrene-d10	18.53	18.03	19.03	18.56	0.12
69 Chrysene-d12	23.63	23.13	24.13	23.66	0.10
134 Di-n-octylphthala	24.75	24.25	25.25	24.78	0.12
77 Perylene-d12	26.46	25.96	26.96	26.51	0.17

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

REVIEW SUMMARY FOR FILE - NT1003032320.D

Lab ID: 23A0249-04
nt10.i, 20230303A.b\ABN.m,   04-MAR-2023 05:50

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

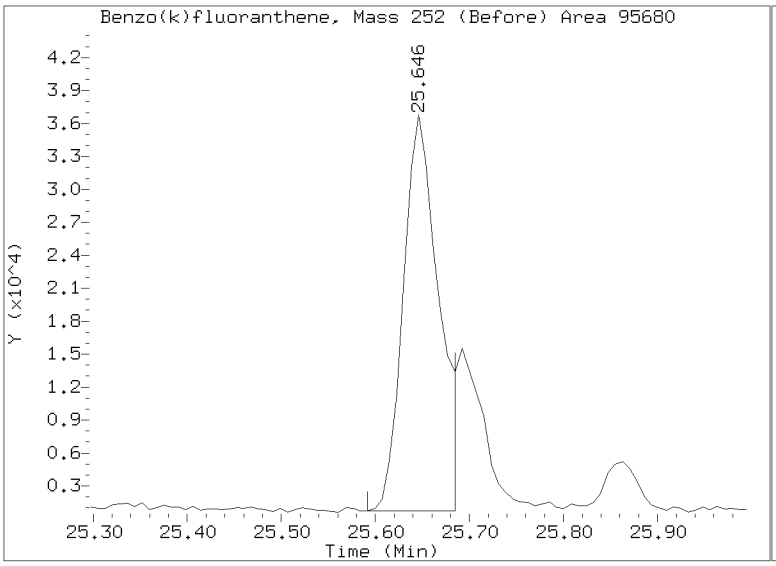
RRT check based on Ccal File: NT1003032314ICV.D

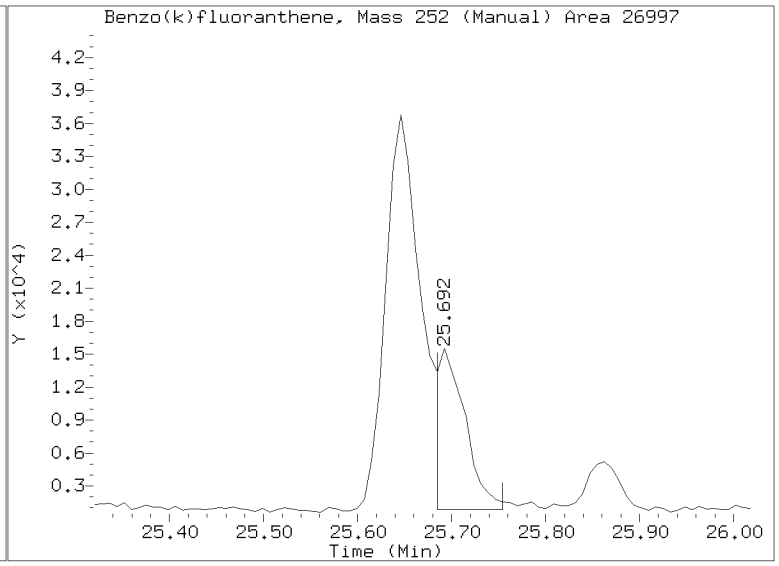
On Column LOD for nt10.i, 20230303A.b\ABN.m, ICAL.sub = 0.0000

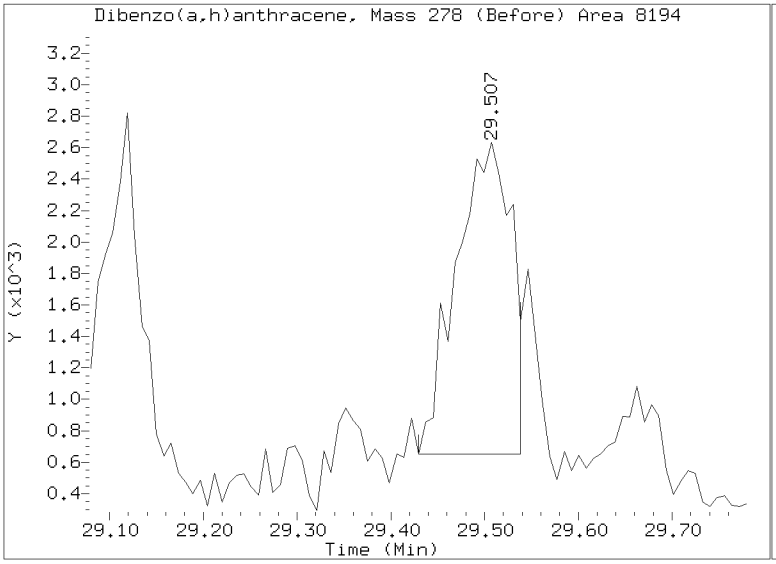
* Only compounds listed in the work order have been verified by the analyst *

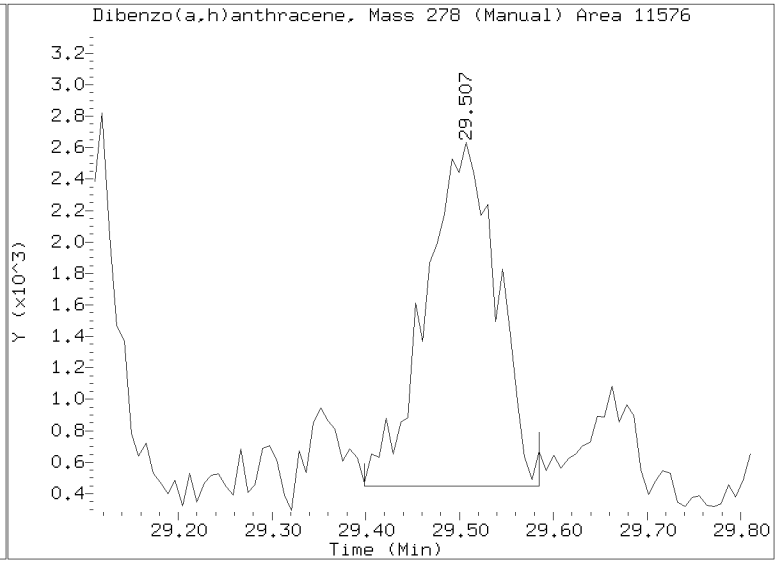
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230303A.b/NT1003032320.D
Injection Date: 04-MAR-2023 05:50
Lab ID:23A0249-04 Client ID:
Report Date: 07/05/2023 11:29









LDW23-SC1025

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-05 A	SDG:	23A0249
Sampled:	01/12/23 11:28	Prepared:	01/30/23 14:02	File ID:	NT1003032321.D
% Solids:	59.36	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 06:28
Batch:	BLA0673	Sequence:	SLC0162	Initial/Final:	17.5 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00019
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	36.5		4.2	19.3
106-44-5	4-Methylphenol	1	19.4		7.1	19.3
91-20-3	Naphthalene	1	14.8	J	4.1	19.3
91-57-6	2-Methylnaphthalene	1	19.3	U	4.3	19.3
208-96-8	Acenaphthylene	1	19.3	U	6.0	19.3
131-11-3	Dimethylphthalate	1	19.3	U	4.2	19.3
83-32-9	Acenaphthene	1	9.9	J	5.0	19.3
132-64-9	Dibenzofuran	1	19.3	U	13.6	19.3
86-73-7	Fluorene	1	19.3	U	14.0	19.3
85-01-8	Phenanthrene	1	60.6		8.4	19.3
120-12-7	Anthracene	1	24.4		6.9	19.3
206-44-0	Fluoranthene	1	127		5.9	19.3
129-00-0	Pyrene	1	283		5.5	19.3
85-68-7	Butylbenzylphthalate	1	19.3	U	9.1	19.3
56-55-3	Benzo(a)anthracene	1	59.5		5.7	19.3
218-01-9	Chrysene	1	92.3		5.8	19.3
117-81-7	bis(2-Ethylhexyl)phthalate	1	76.6		5.3	48.1
	Benzofluoranthenes, Total	1	164		9.6	38.5
50-32-8	Benzo(a)pyrene	1	77.6		4.1	19.3
193-39-5	Indeno(1,2,3-cd)pyrene	1	43.5		14.1	19.3
53-70-3	Dibenzo(a,h)anthracene	1	19.3	U	16.6	19.3
191-24-2	Benzo(g,h,i)perylene	1	56.7		13.1	19.3

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	721.99	495	68.5	27 - 120	
Phenol-d5	721.99	552	76.5	29 - 120	
2-Chlorophenol-d4	721.99	545	75.5	31 - 120	
1,2-Dichlorobenzene-d4	481.32	320	66.5	32 - 120	
Nitrobenzene-d5	481.32	376	78.2	30 - 120	
2-Fluorobiphenyl	481.32	428	88.9	35 - 120	

LDW23-SC1025

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-05 A	SDG:	23A0249
Sampled:	01/12/23 11:28	Prepared:	01/30/23 14:02	File ID:	NT1003032321.D
% Solids:	59.36	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 06:28
Batch:	BLA0673	Sequence:	SLC0162	Initial/Final:	17.5 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00019
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	721.99	570	78.9	24 - 134	
p-Terphenyl-d14	481.32	401	83.4	37 - 120	

Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032321.D

Page 1

Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

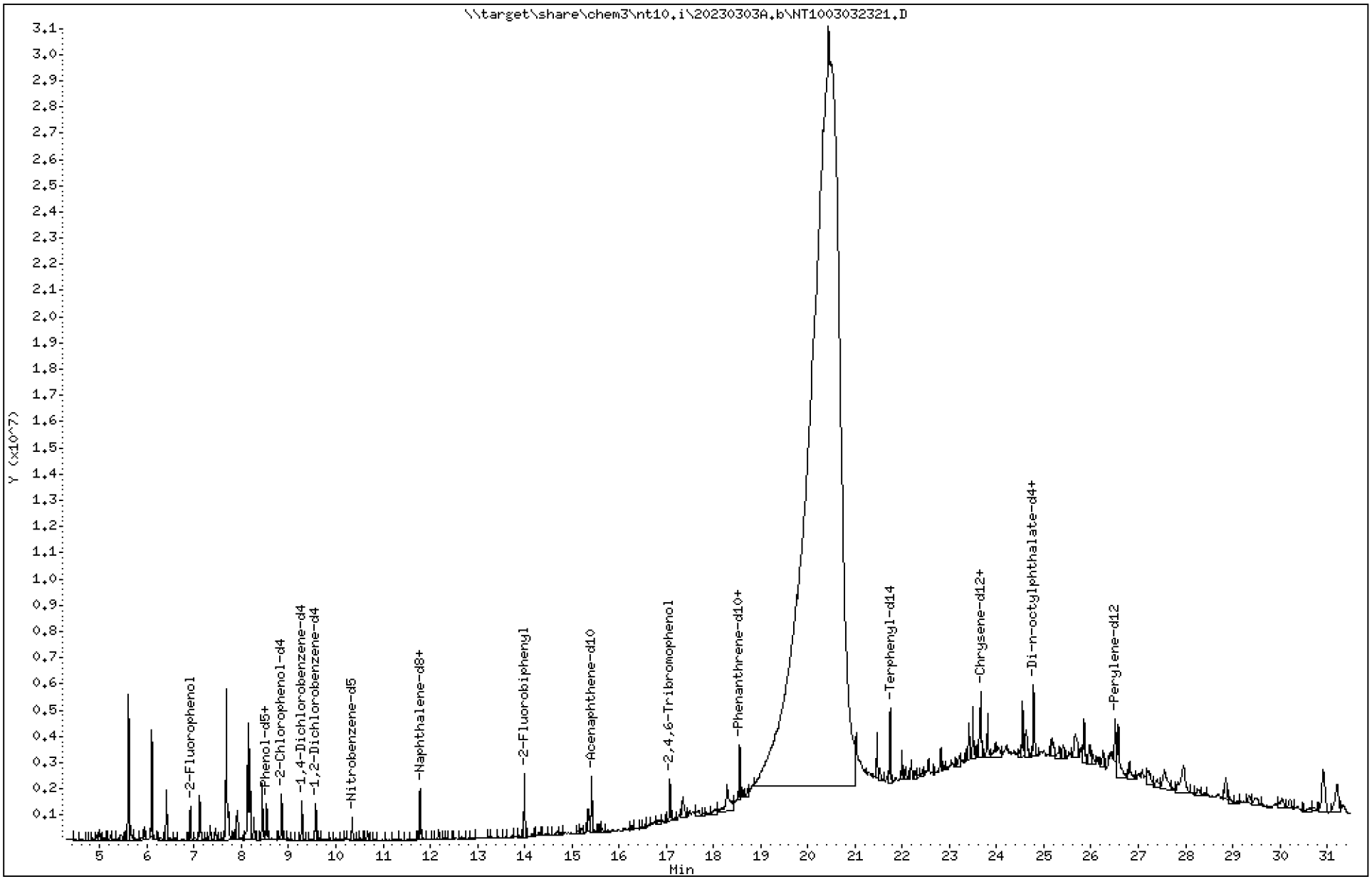
Sample Info: 23A0249-05

Volume Injected (uL): 1.0

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

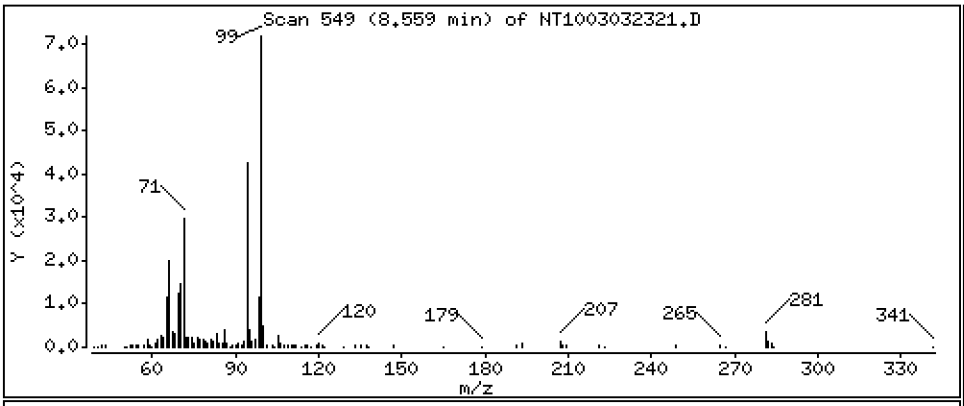
Operator: VTS

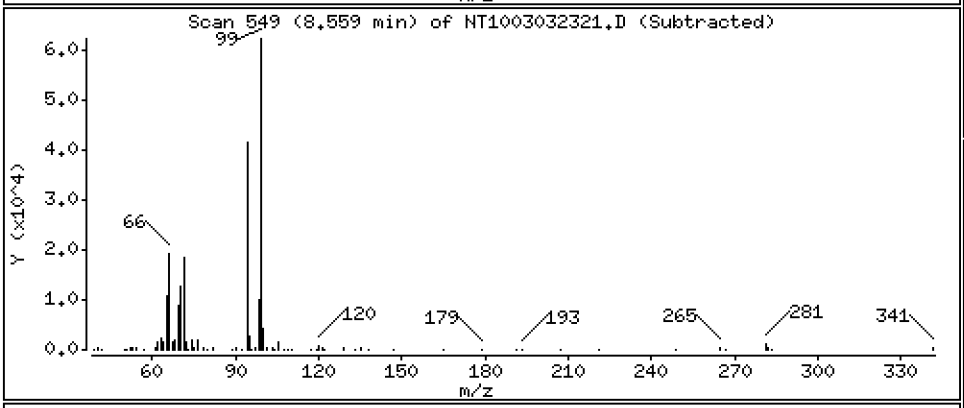
Column phase: ZB-5msi

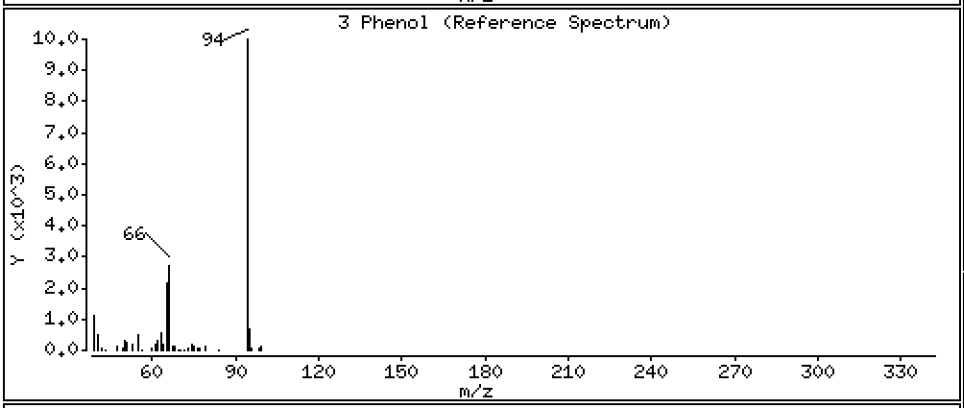
Column diameter: 0.25

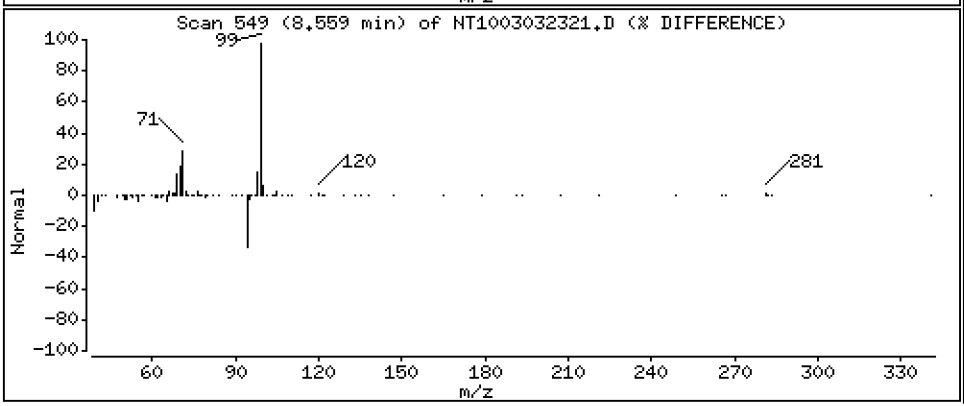
3 Phenol

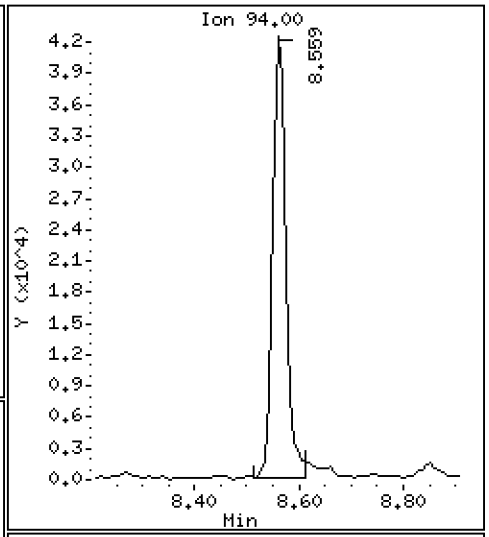
Concentration: 0.3787 ug/ml

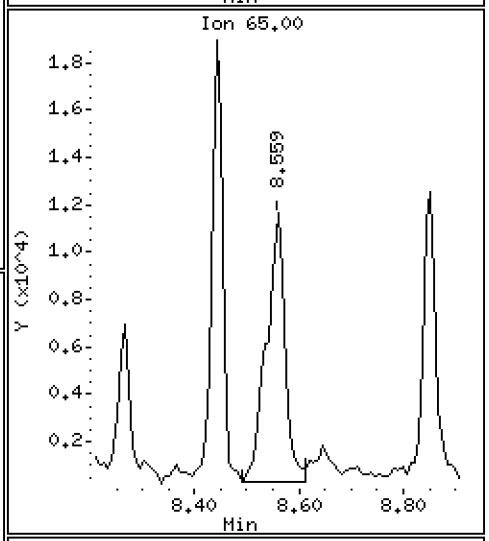


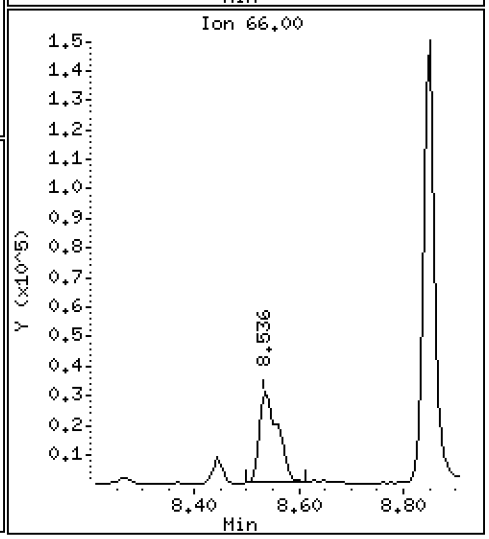












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

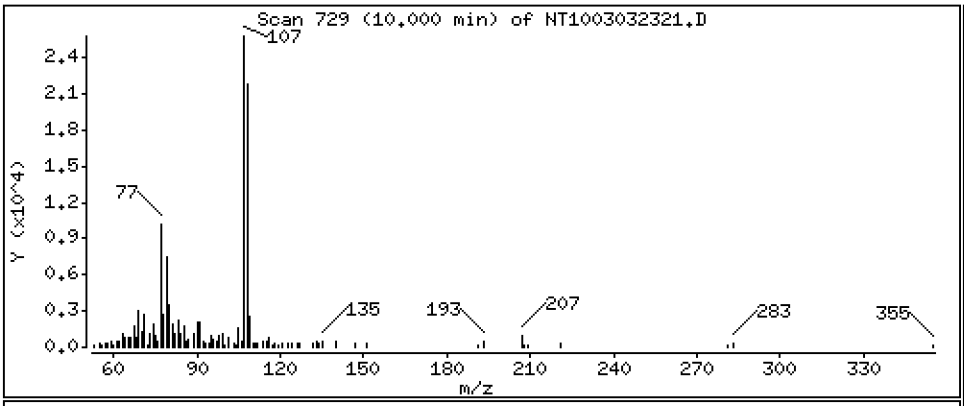
Operator: VTS

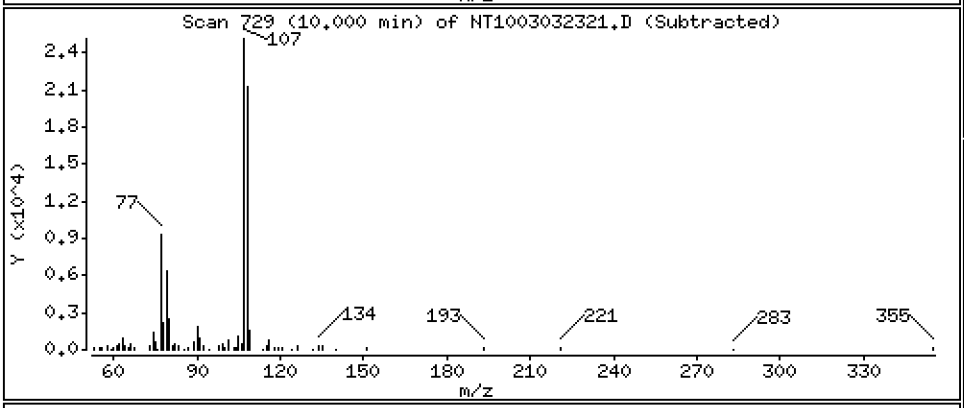
Column phase: ZB-5msi

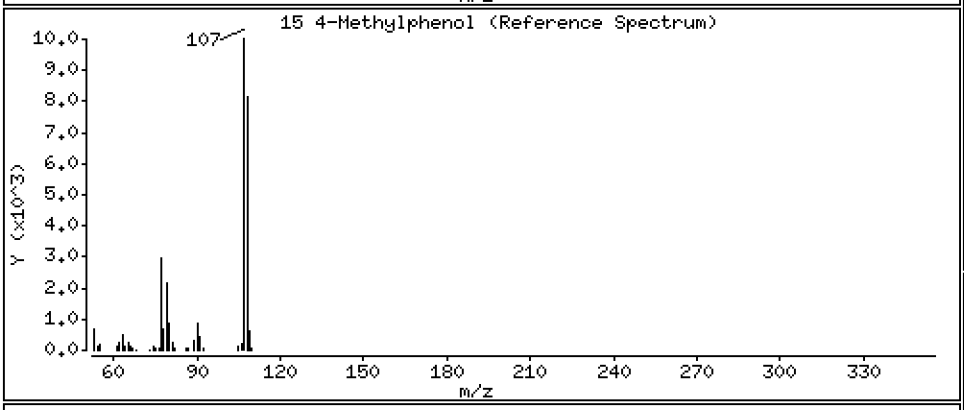
Column diameter: 0.25

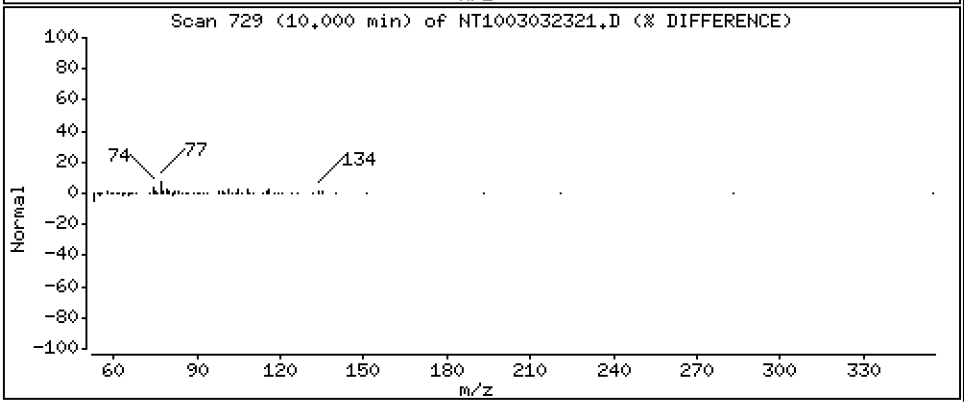
15 4-Methylphenol

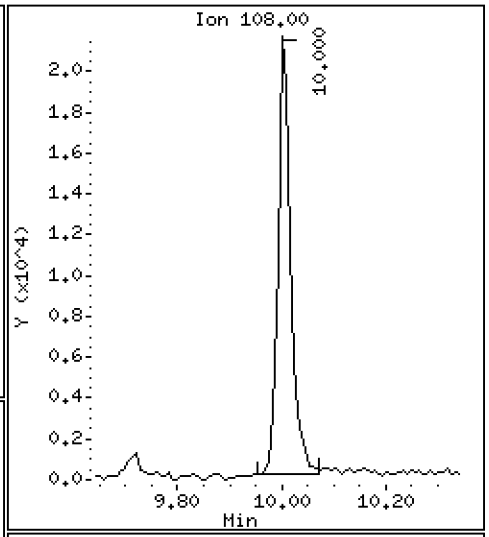
Concentration: 0.2014 ug/ml

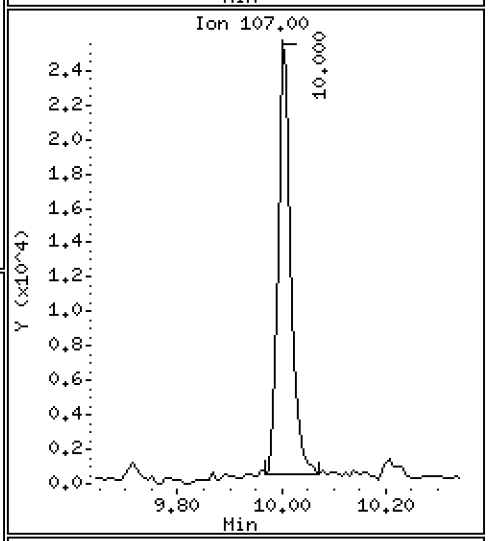


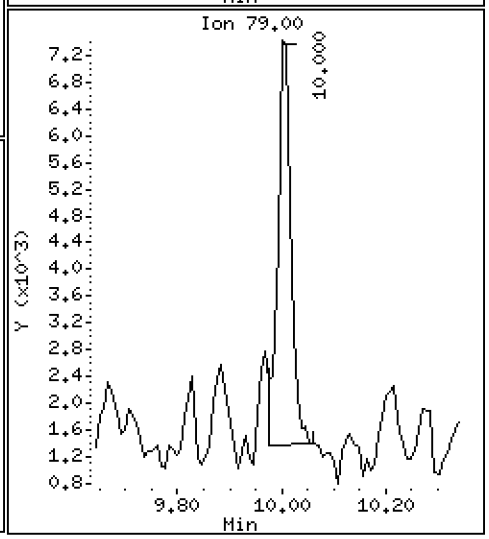












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

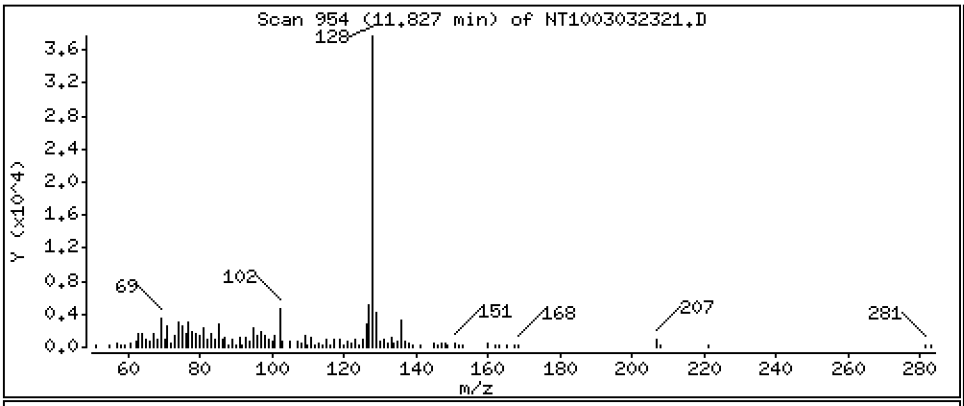
Operator: VTS

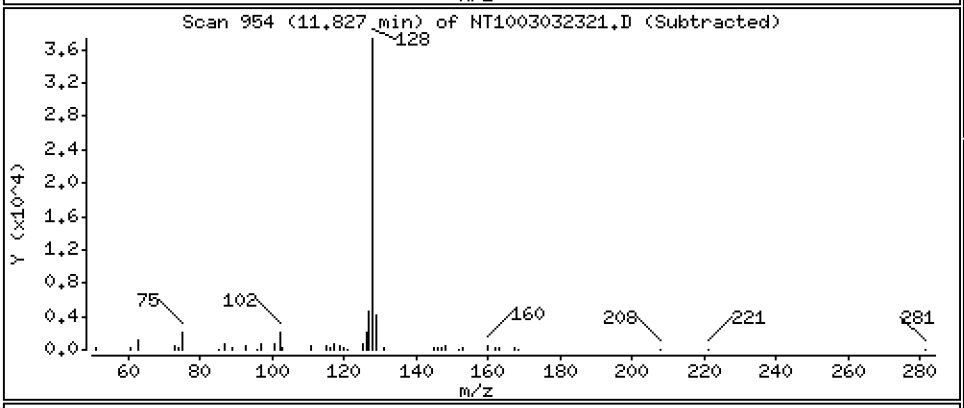
Column phase: ZB-5msi

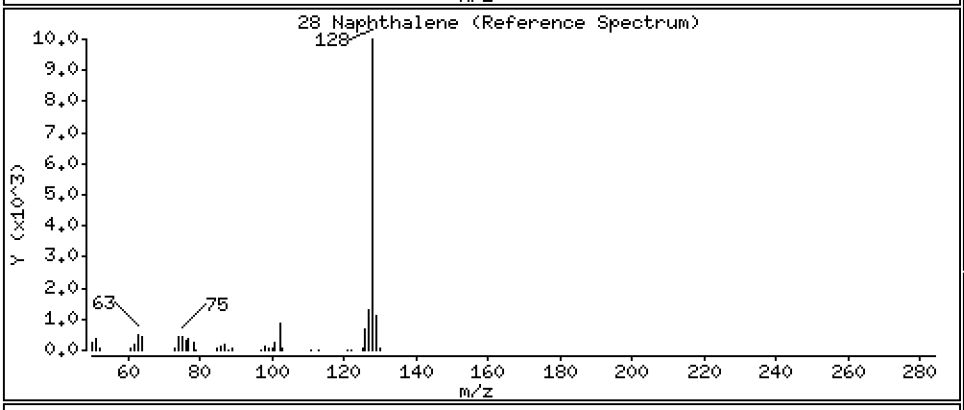
Column diameter: 0.25

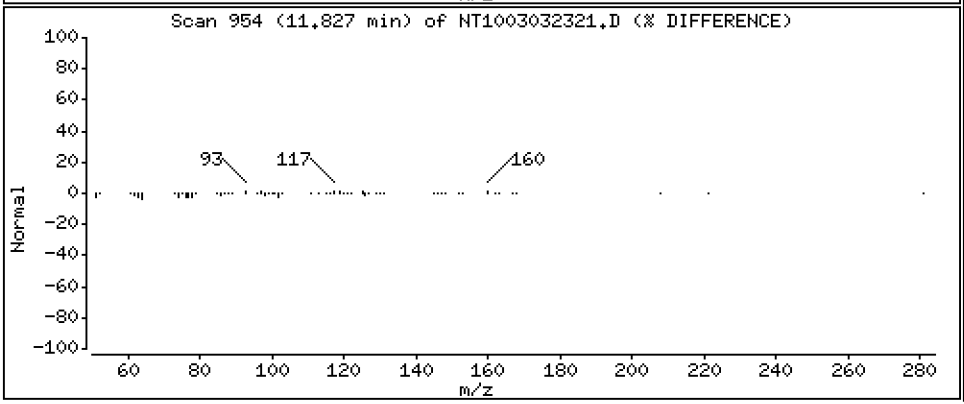
28 Naphthalene

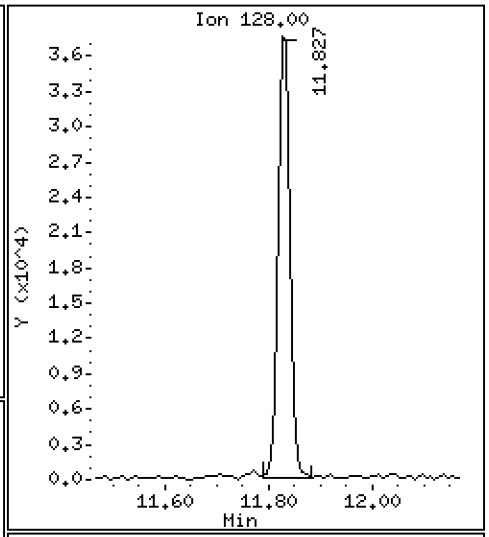
Concentration: 0.1542 ug/ml

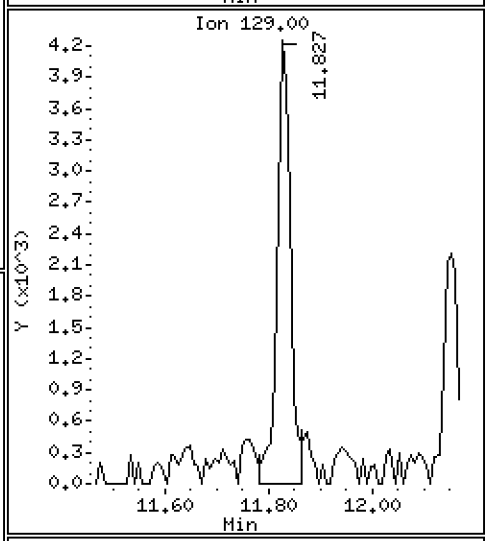


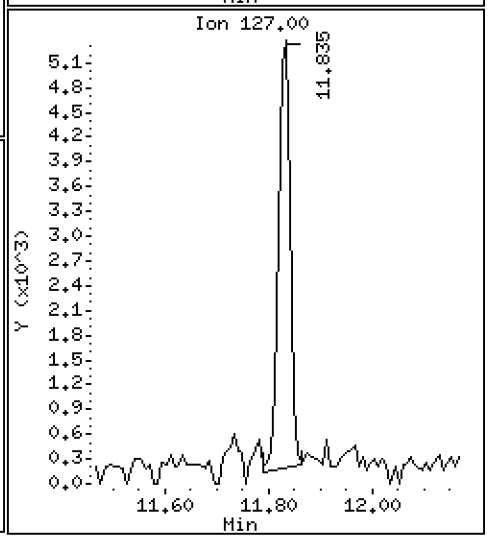












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

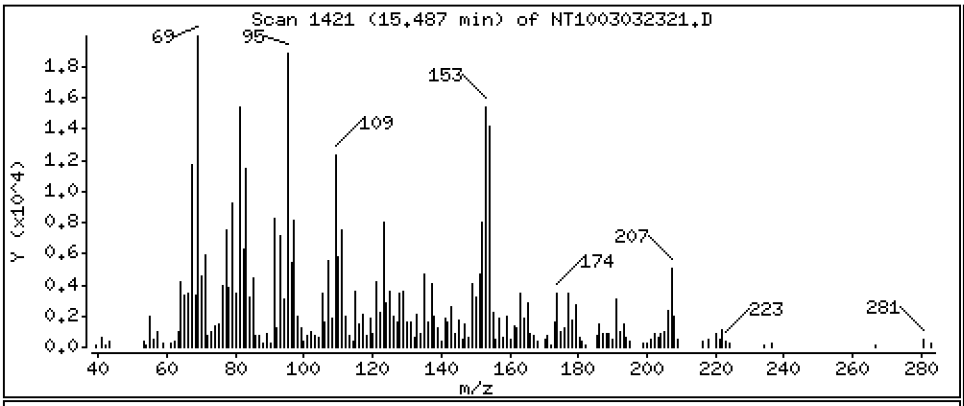
Operator: VTS

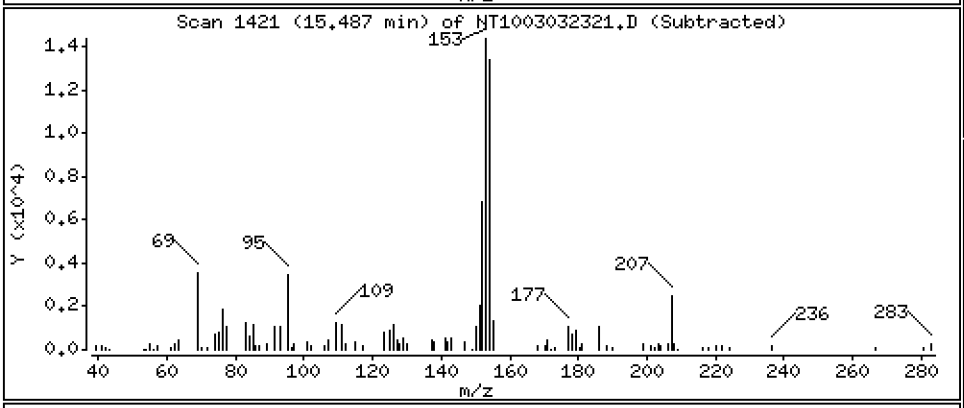
Column phase: ZB-5msi

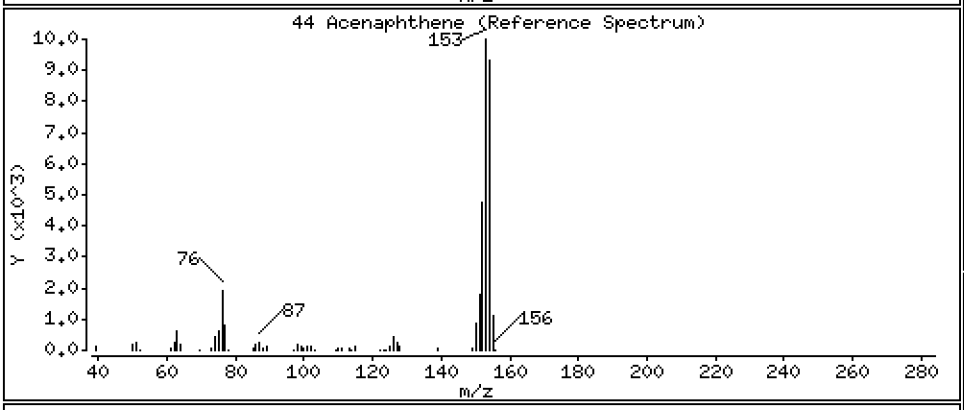
Column diameter: 0.25

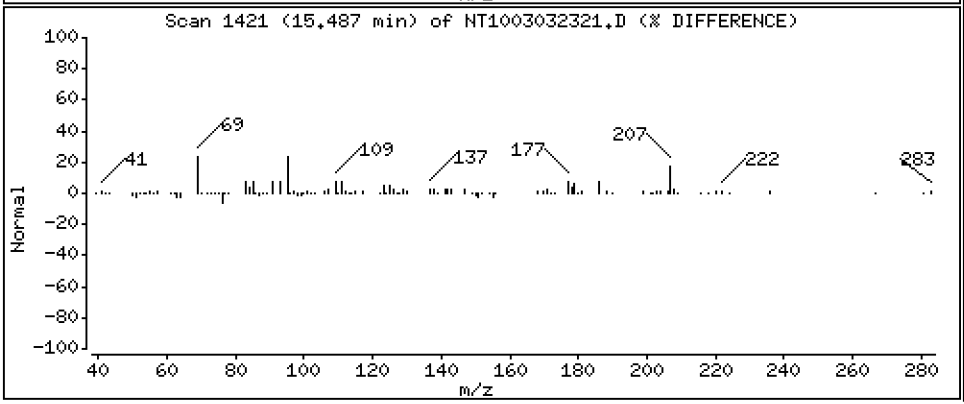
44 Acenaphthene

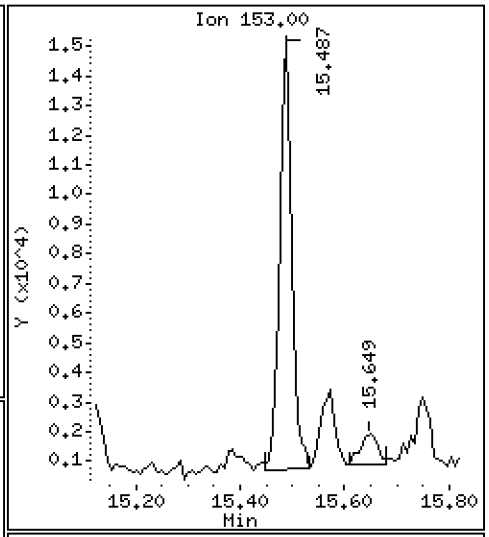
Concentration: 0.1030 ug/ml

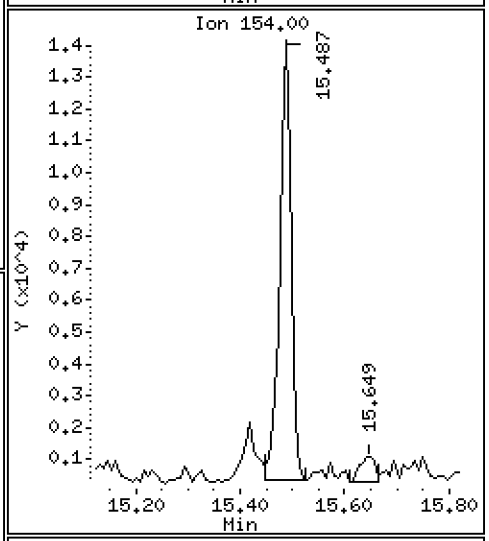


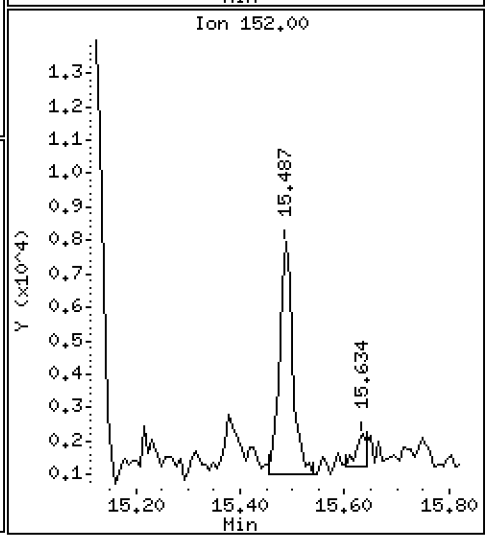












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

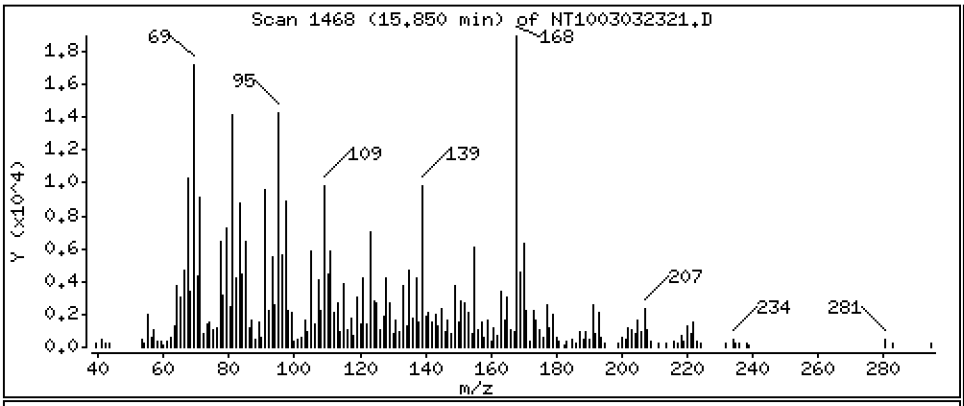
Operator: VTS

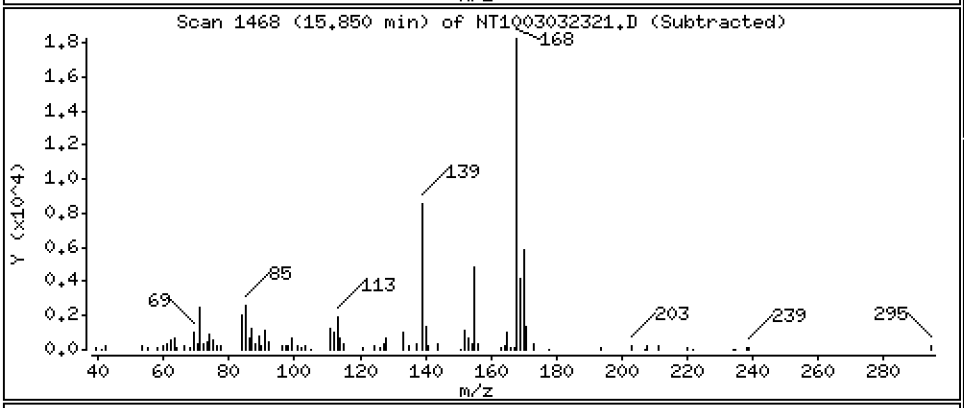
Column phase: ZB-5msi

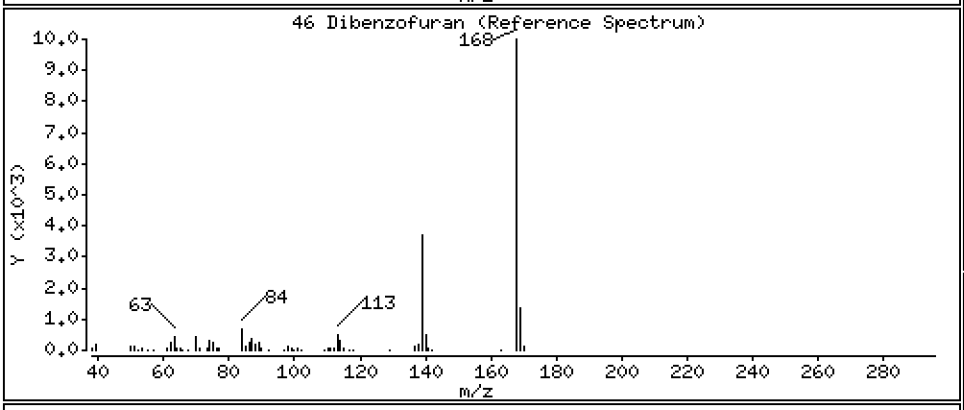
Column diameter: 0.25

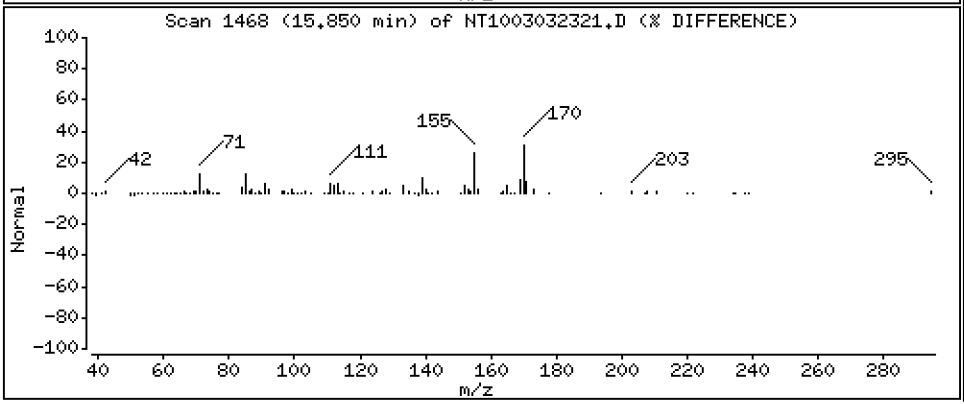
46 Dibenzofuran

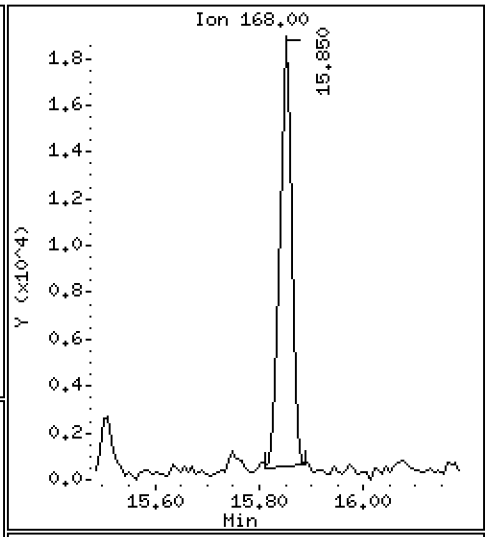
Concentration: 0.08204 ug/ml

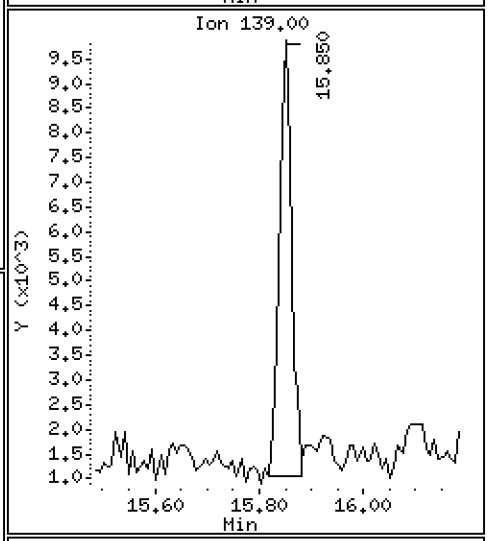


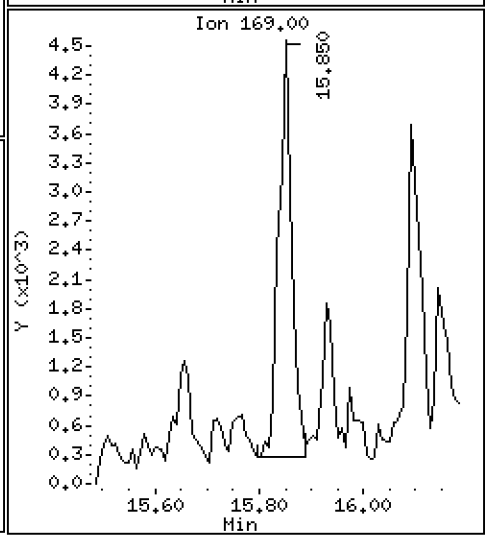












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

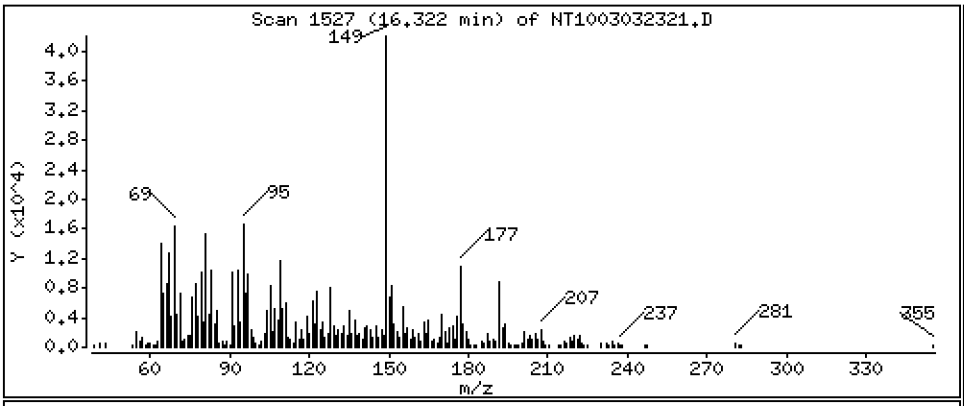
Operator: VTS

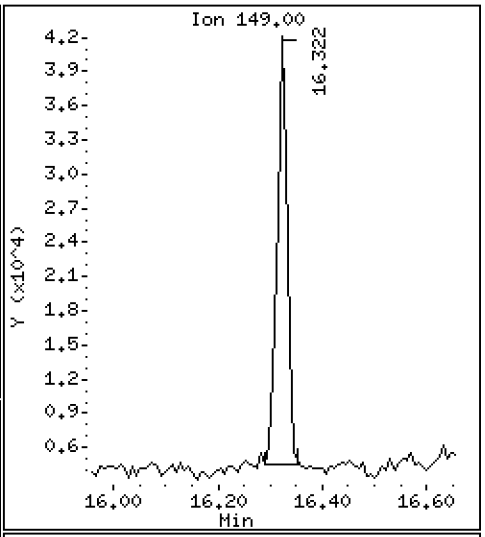
Column phase: ZB-5msi

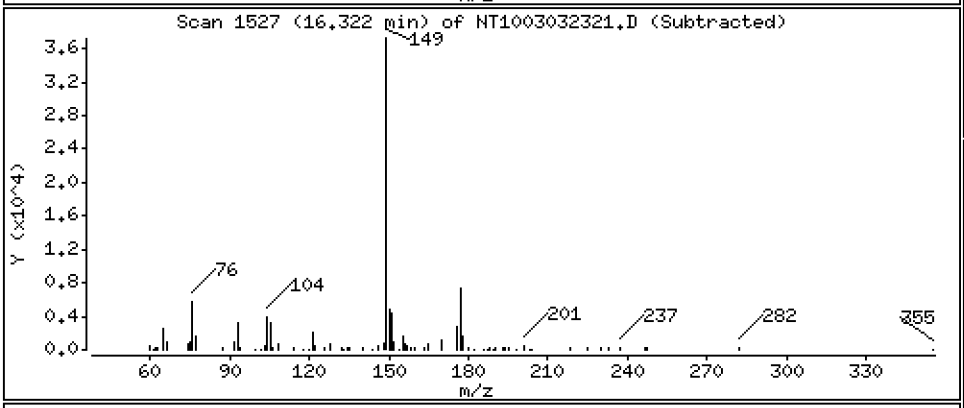
Column diameter: 0.25

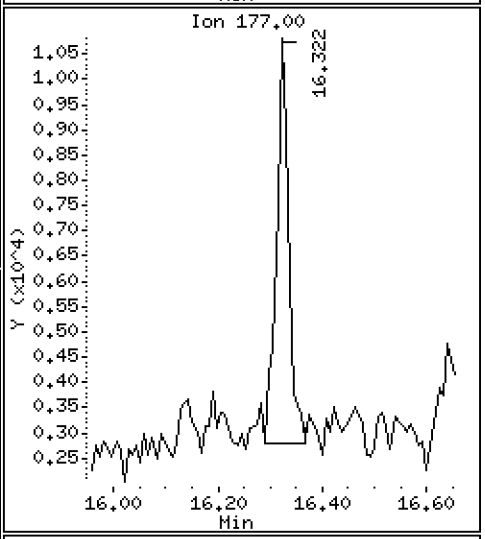
50 Diethylphthalate

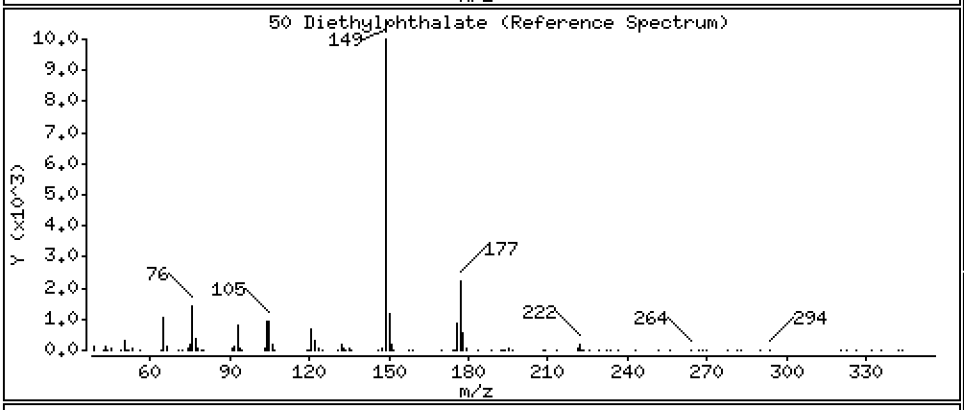
Concentration: 0.1832 ug/ml

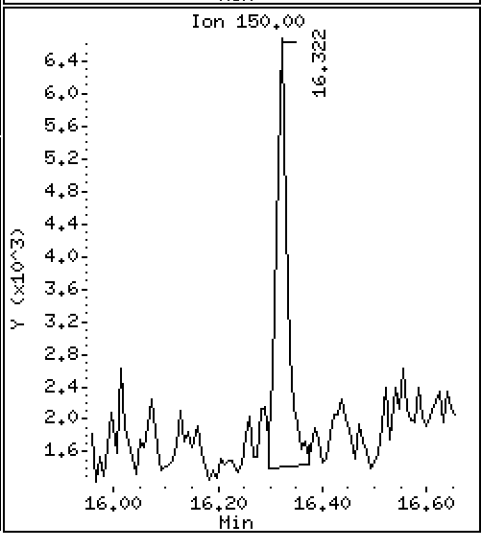


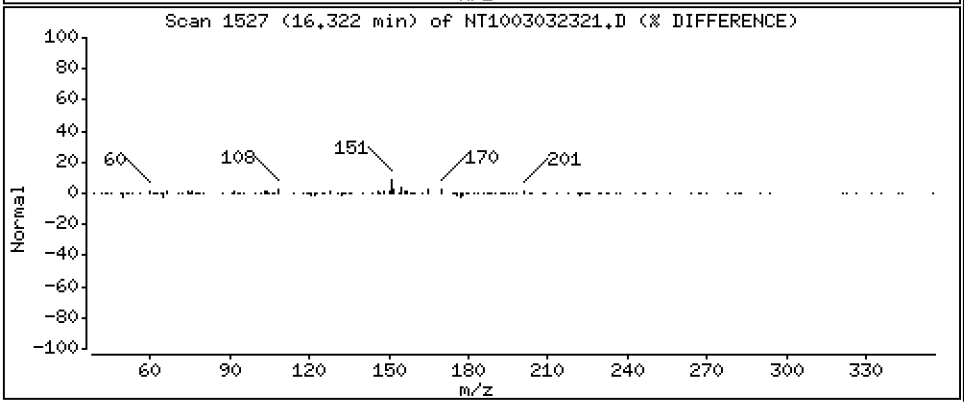












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

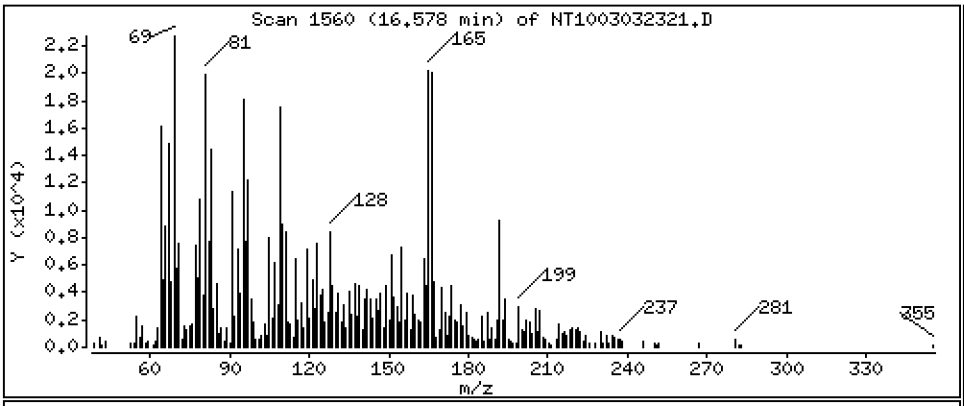
Operator: VTS

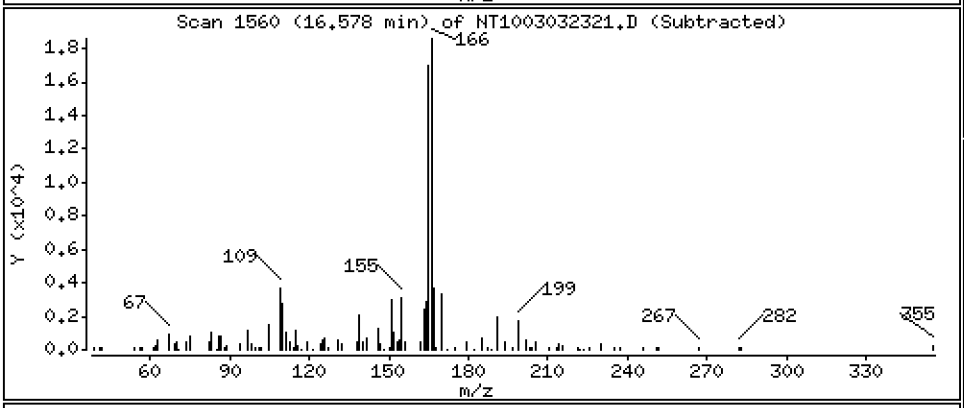
Column phase: ZB-5msi

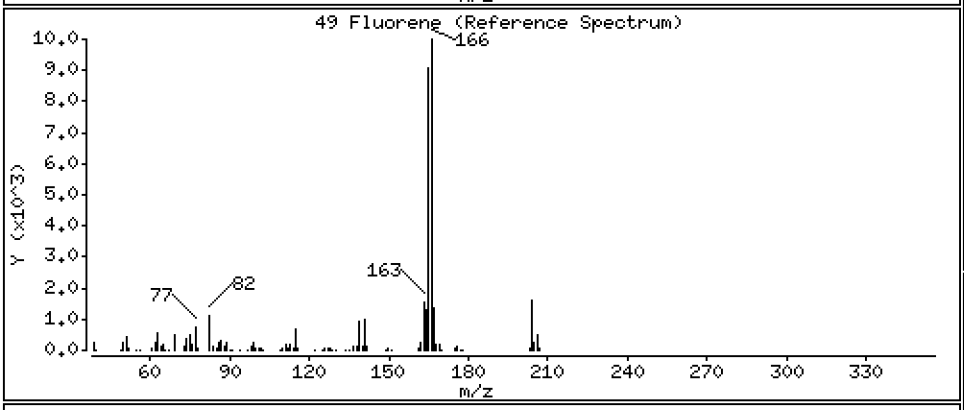
Column diameter: 0.25

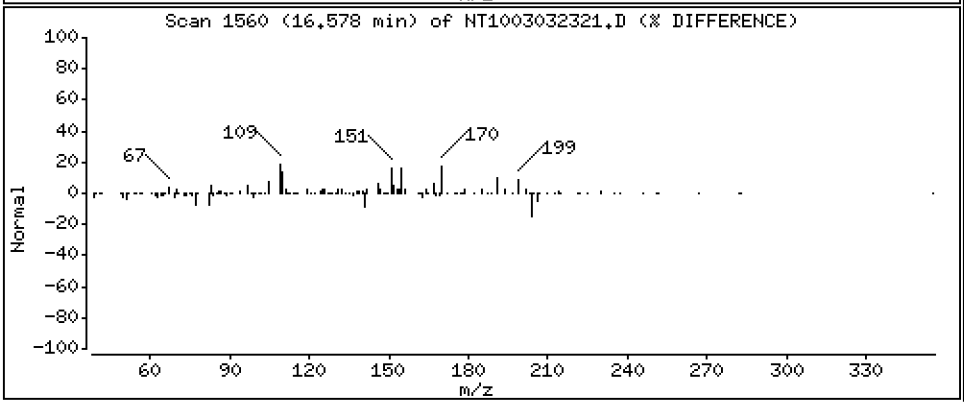
49 Fluorene

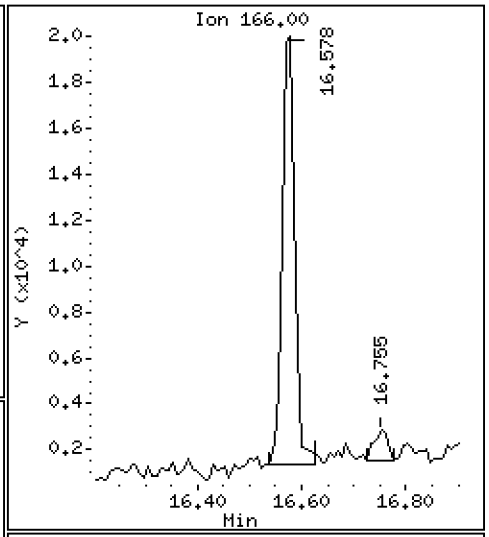
Concentration: 0.1366 ug/ml

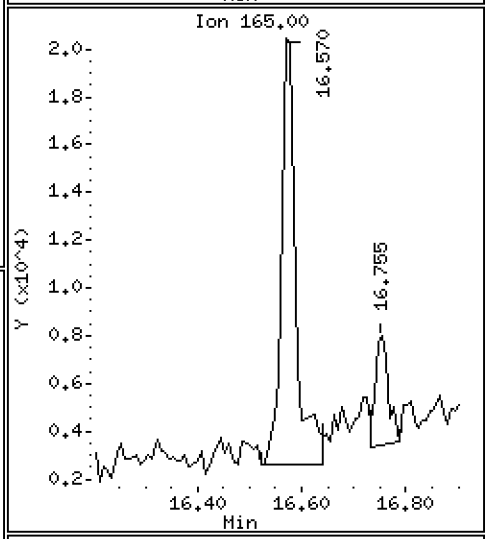


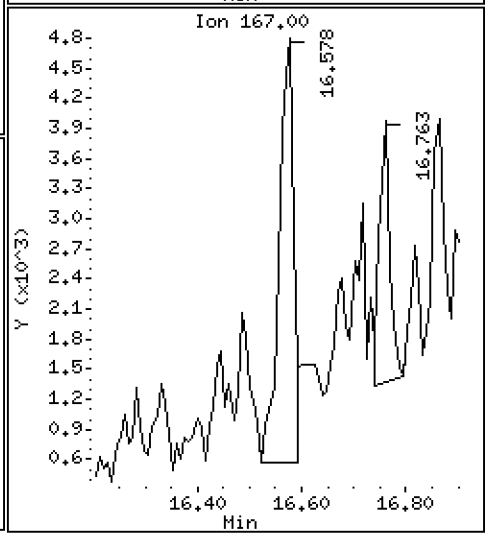












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032321.D

Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

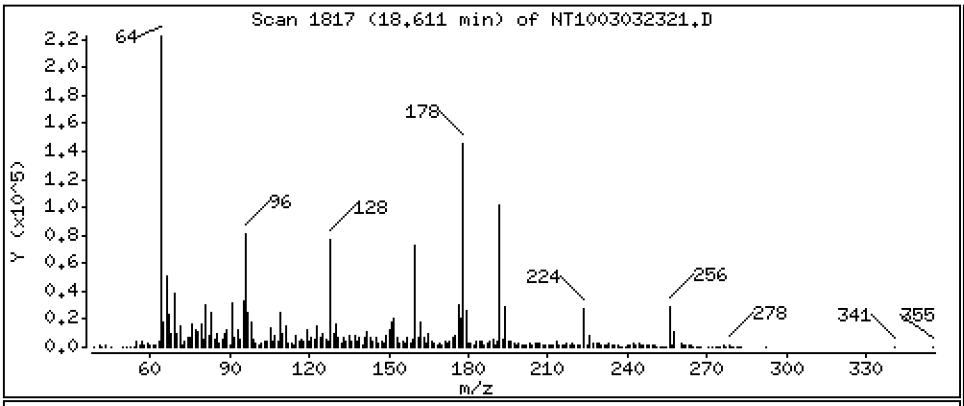
Operator: VTS

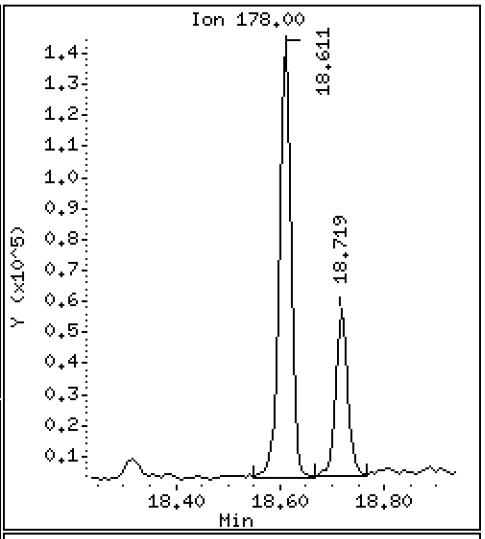
Column phase: ZB-5msi

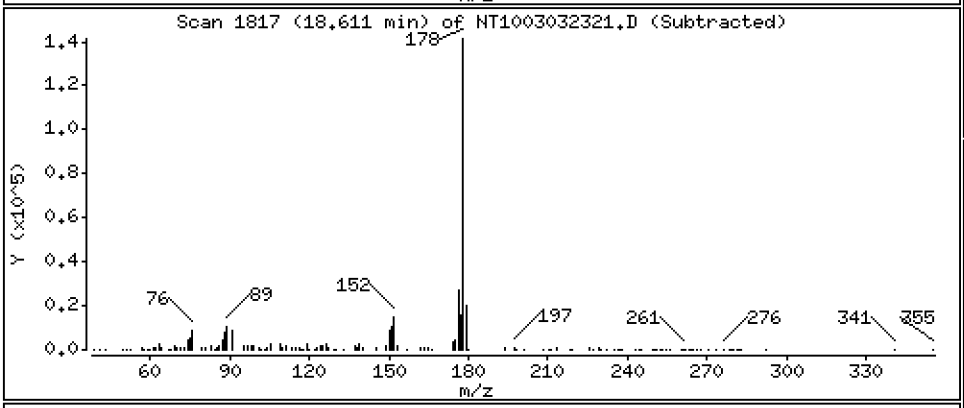
Column diameter: 0.25

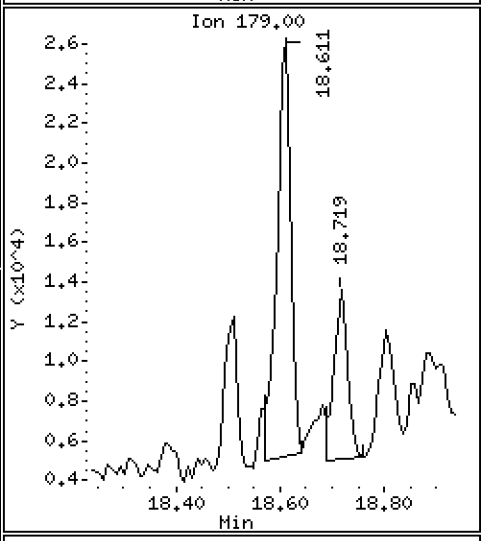
60 Phenanthrene

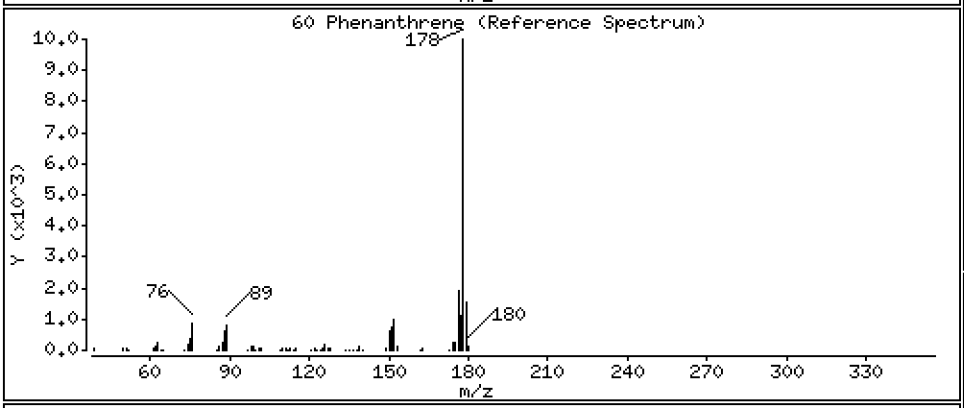
Concentration: 0.6295 ug/ml

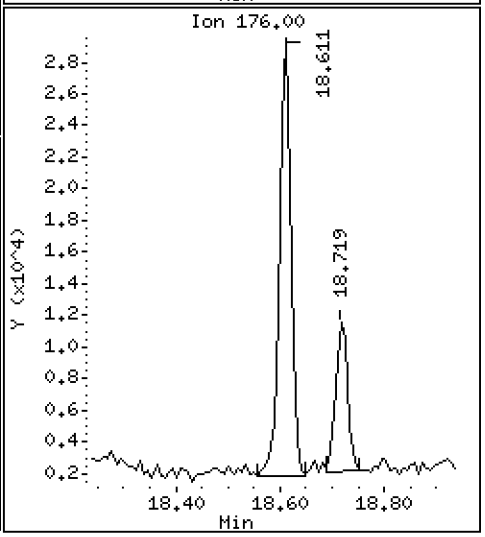


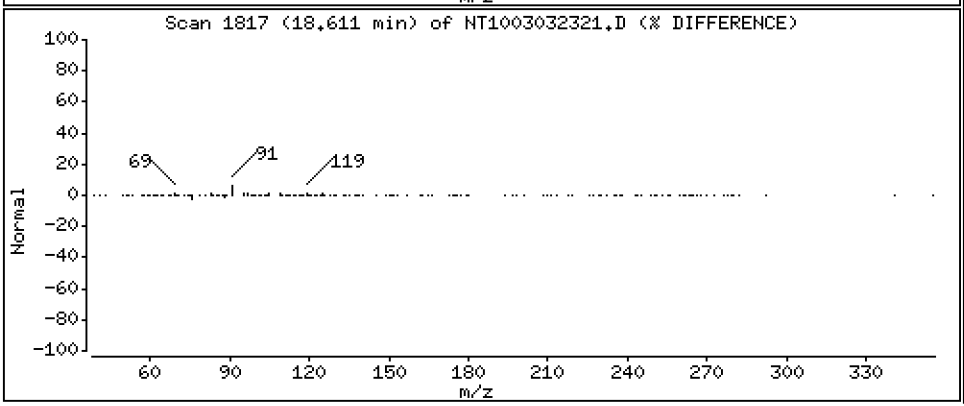












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

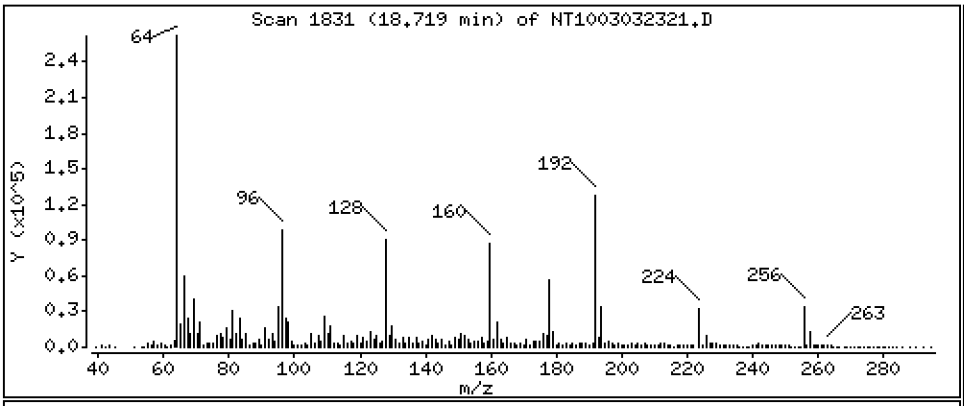
Operator: VTS

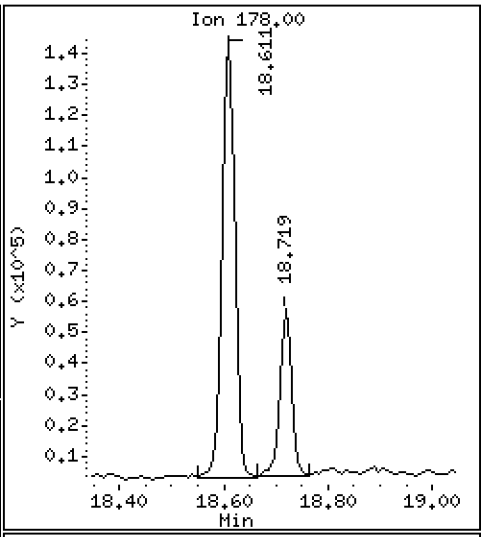
Column phase: ZB-5msi

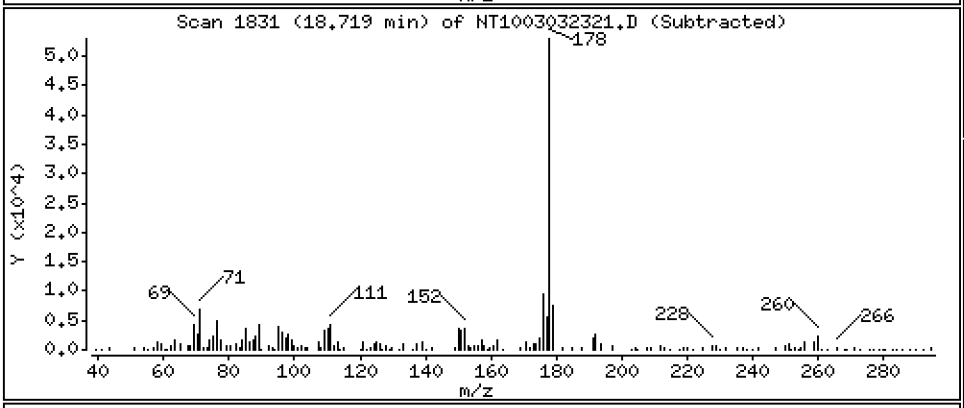
Column diameter: 0.25

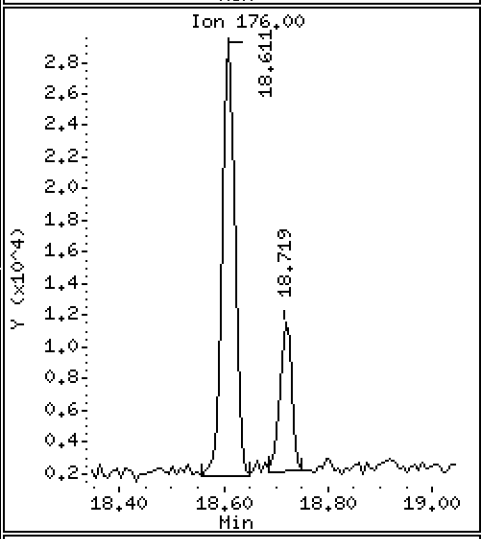
61 Anthracene

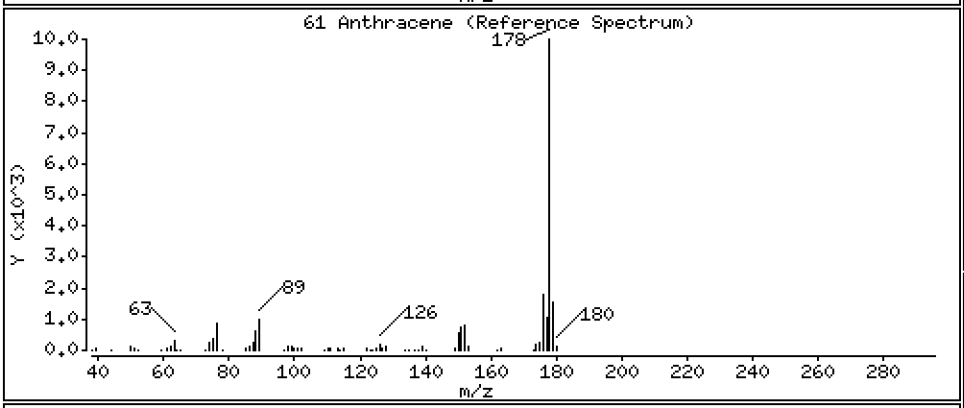
Concentration: 0.2530 ug/ml

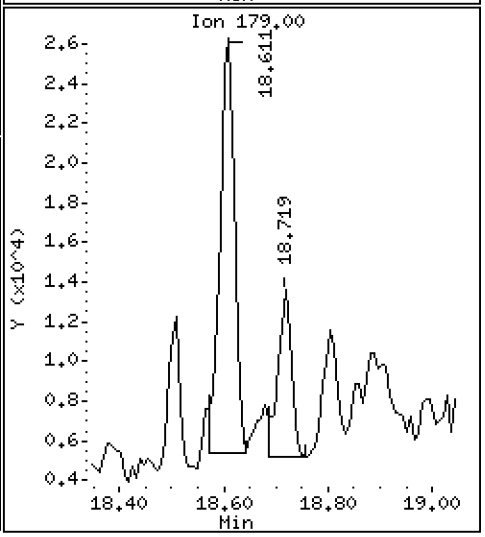


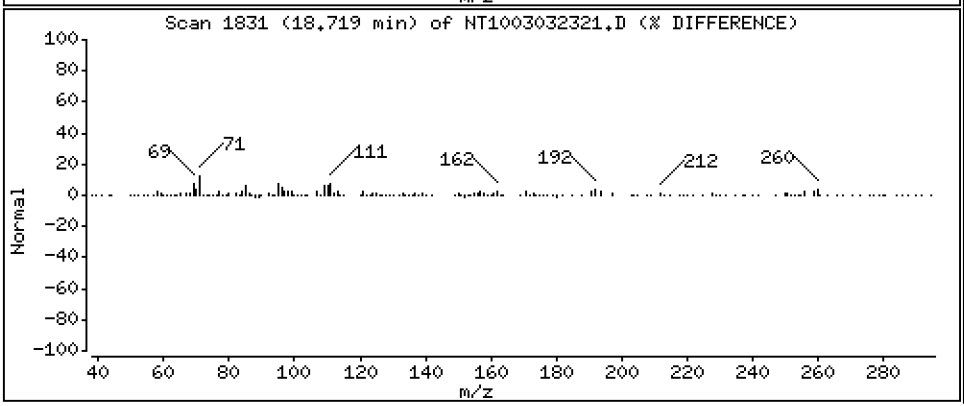












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

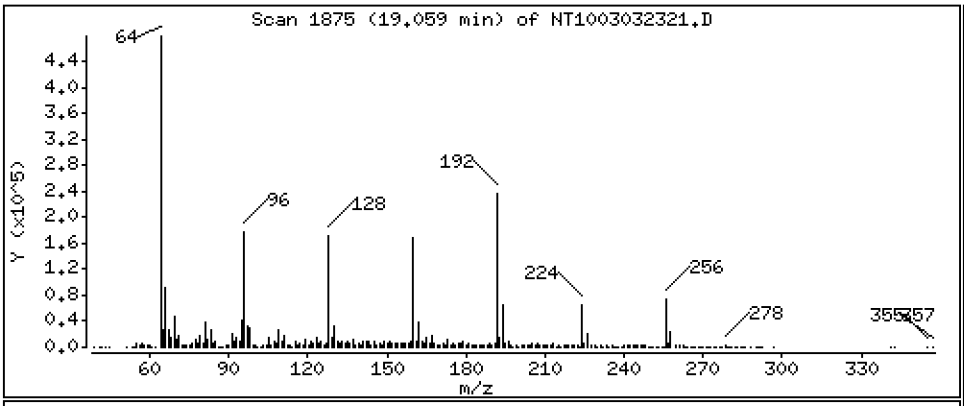
Operator: VTS

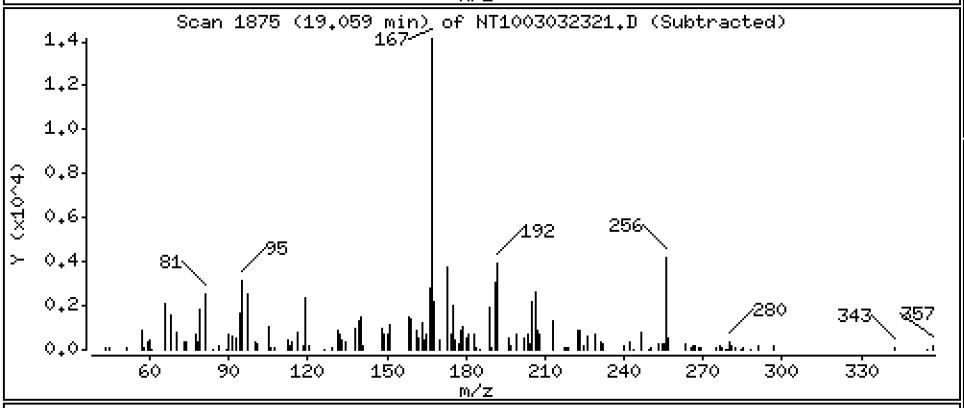
Column phase: ZB-5msi

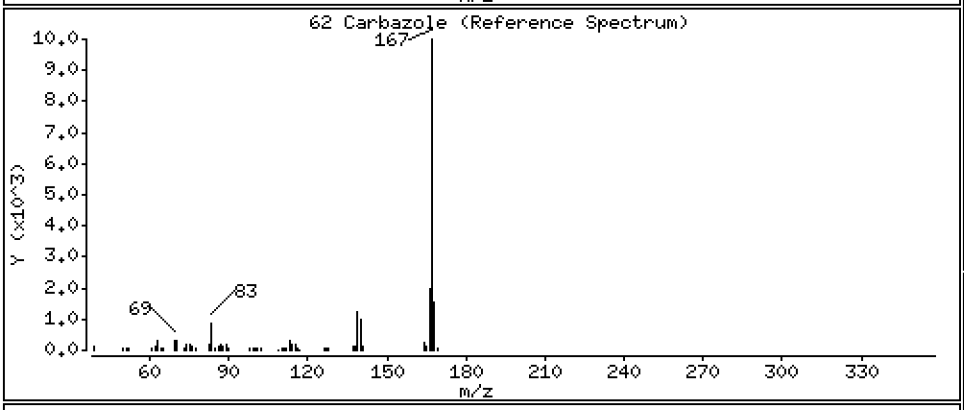
Column diameter: 0.25

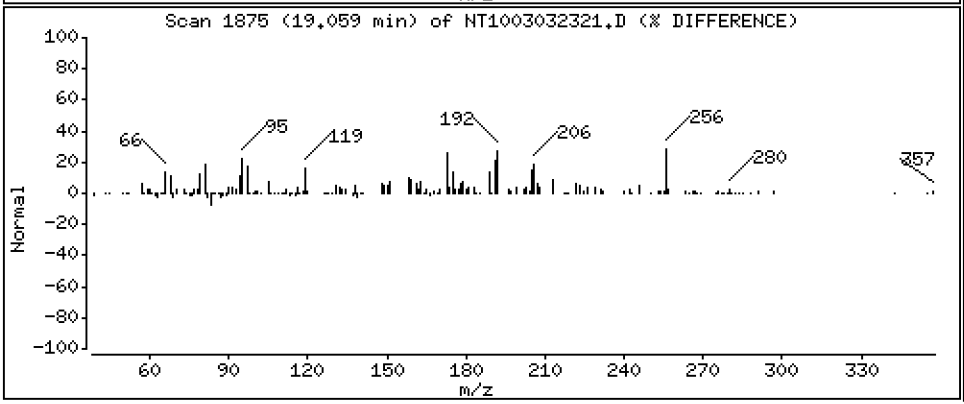
62 Carbazole

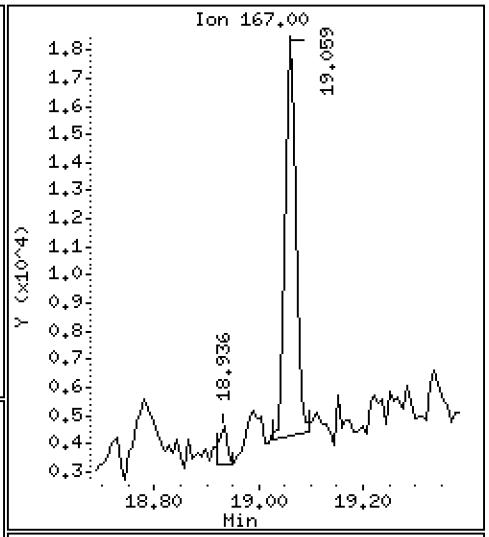
Concentration: 0.06642 ug/ml

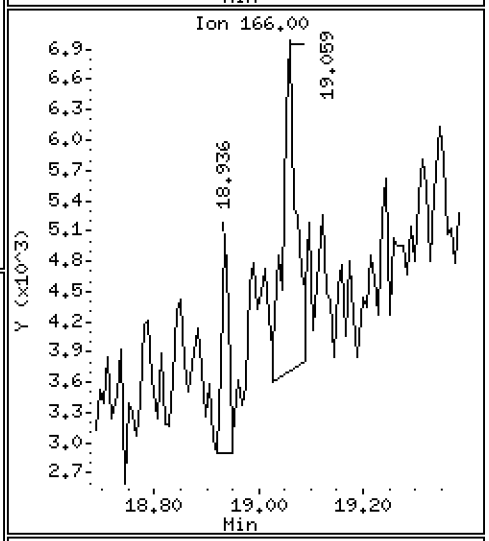


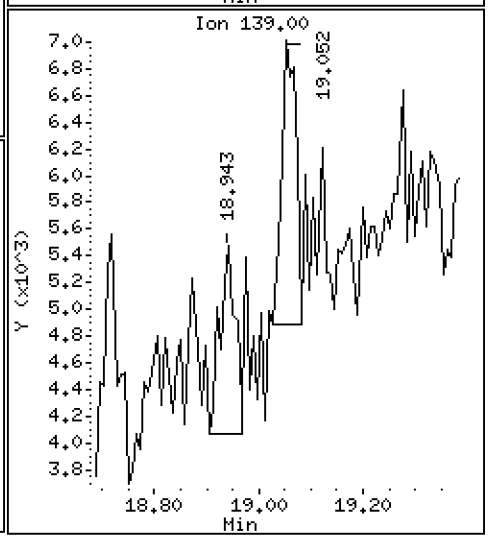












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

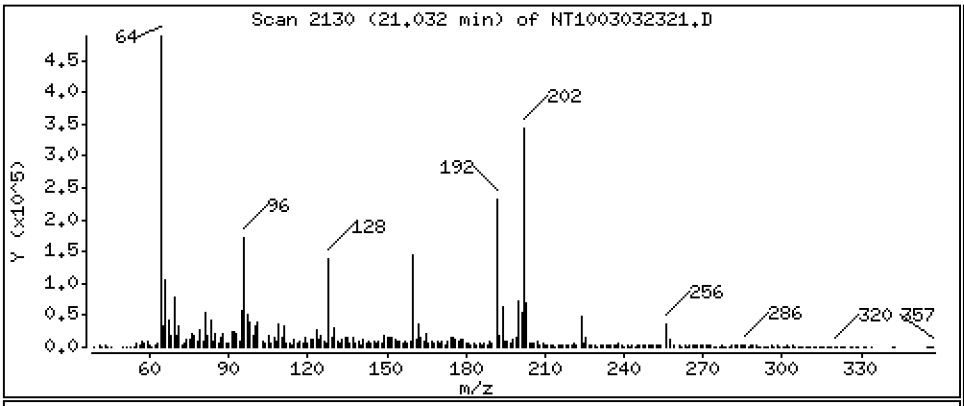
Operator: VTS

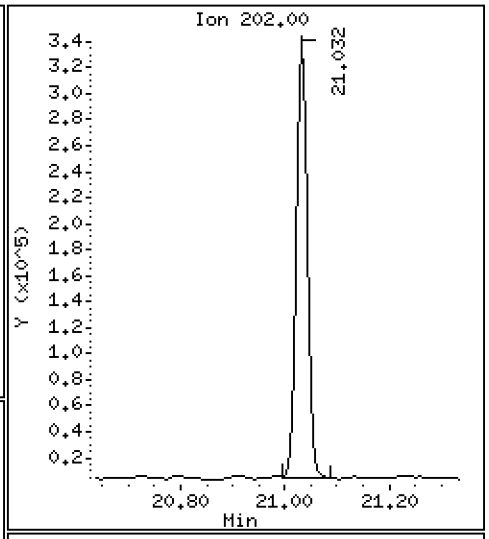
Column phase: ZB-5msi

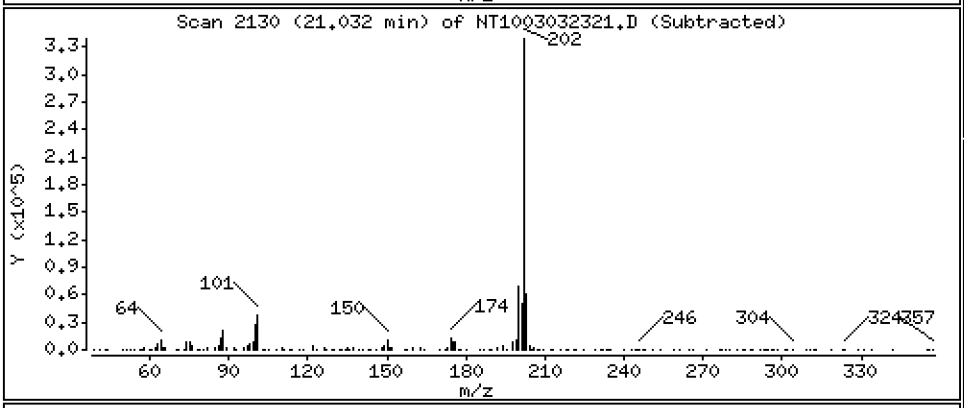
Column diameter: 0.25

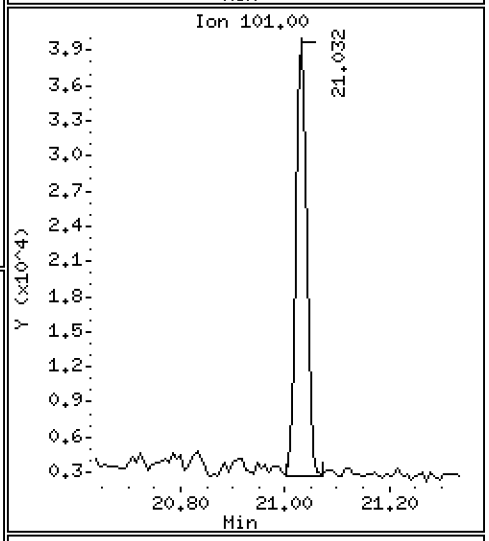
64 Fluoranthene

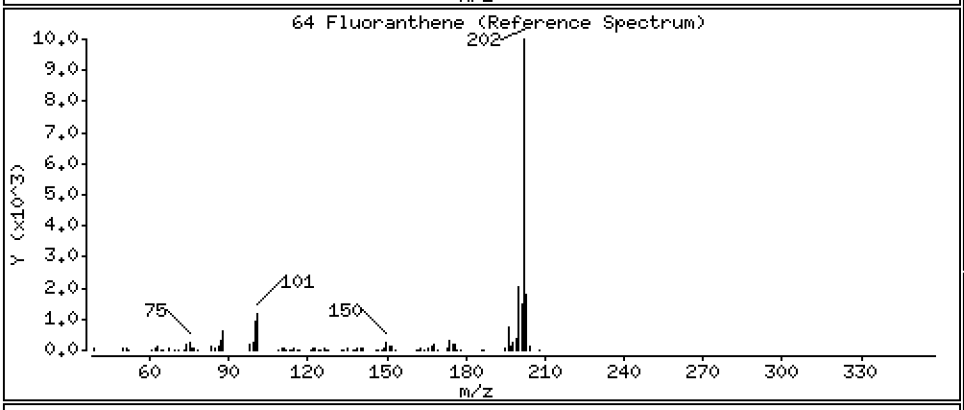
Concentration: 1.315 ug/ml

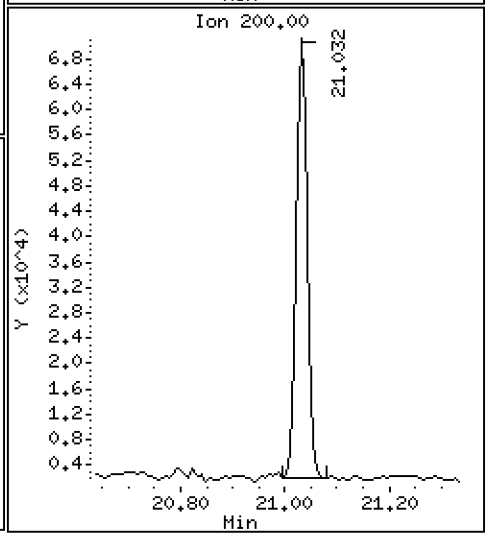


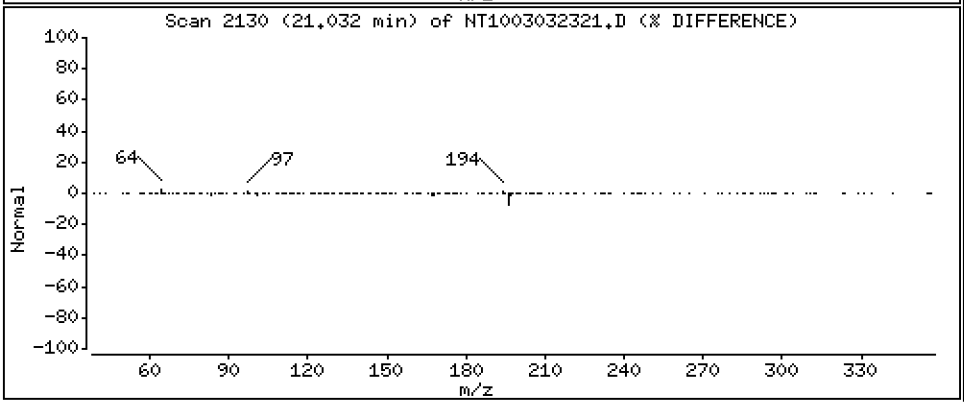












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

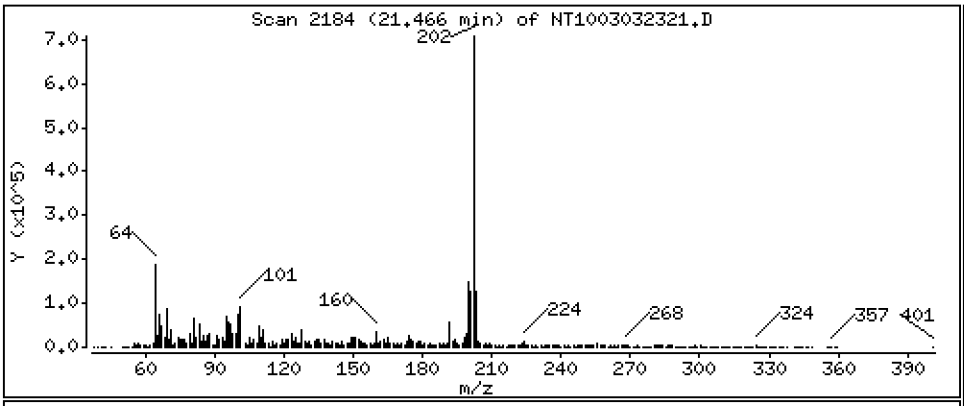
Operator: VTS

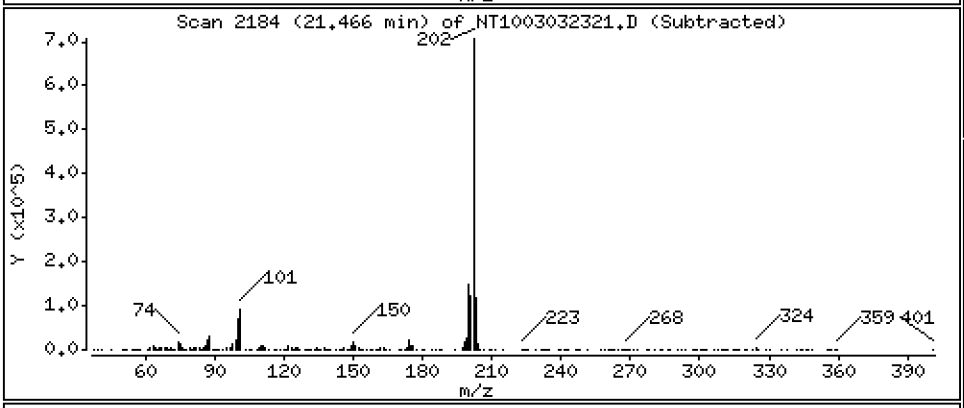
Column phase: ZB-5msi

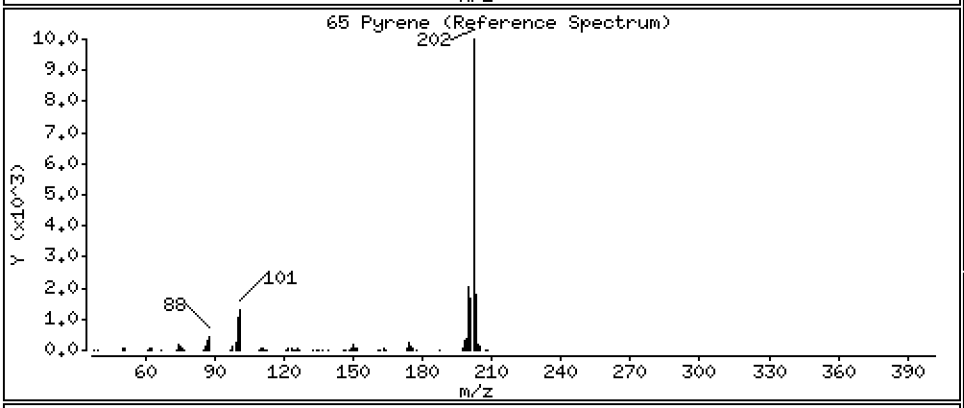
Column diameter: 0.25

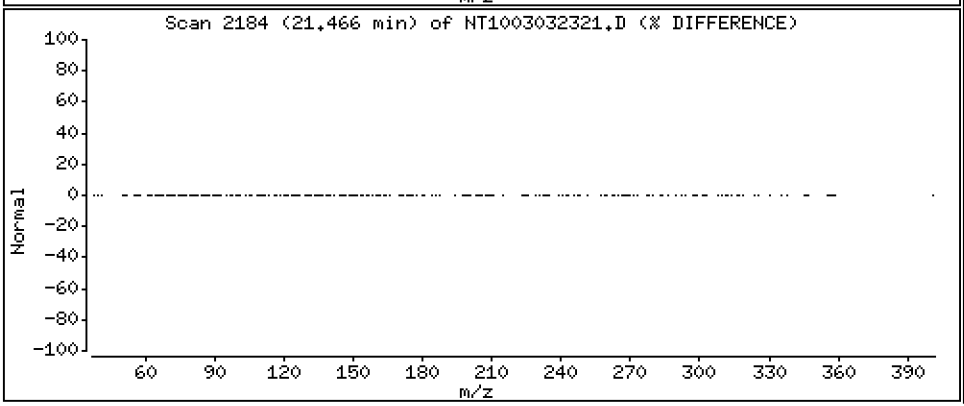
65 Pyrene

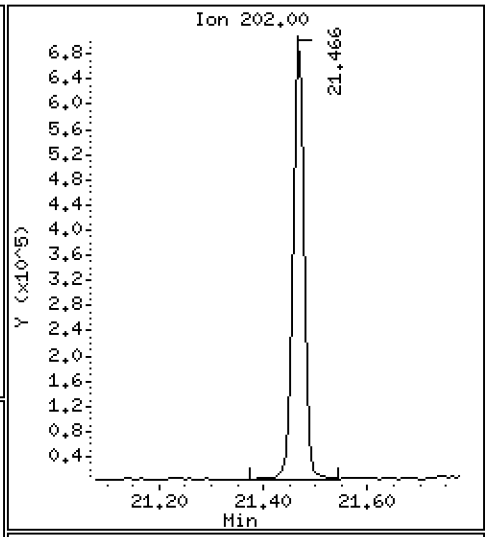
Concentration: 2.937 ug/ml

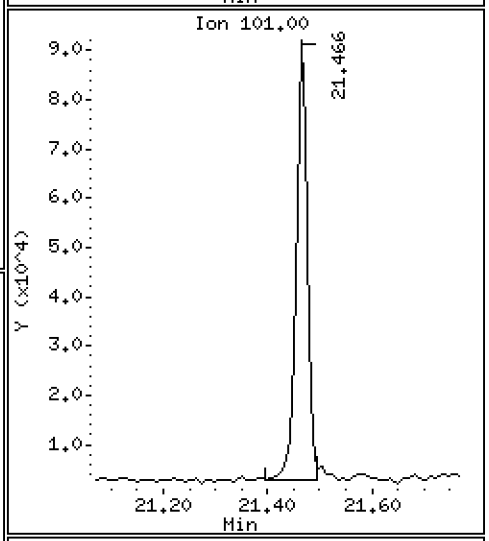


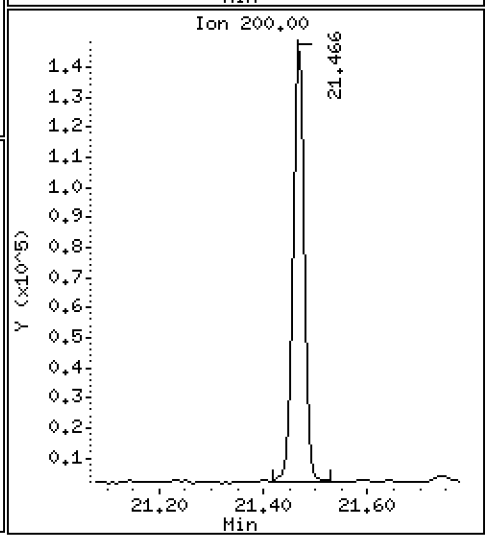












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

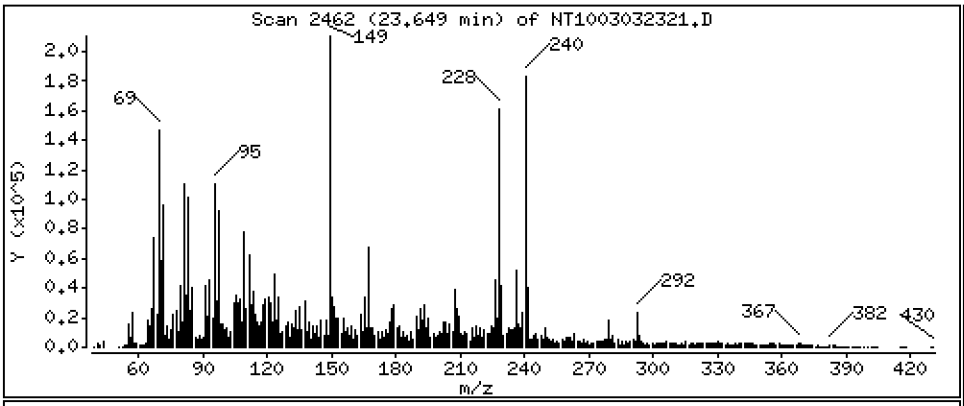
Operator: VTS

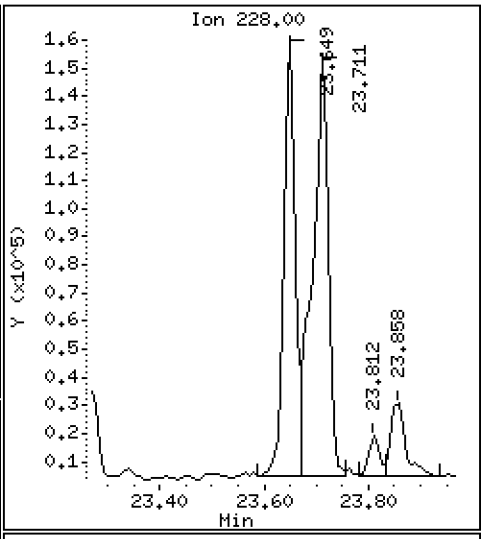
Column phase: ZB-5msi

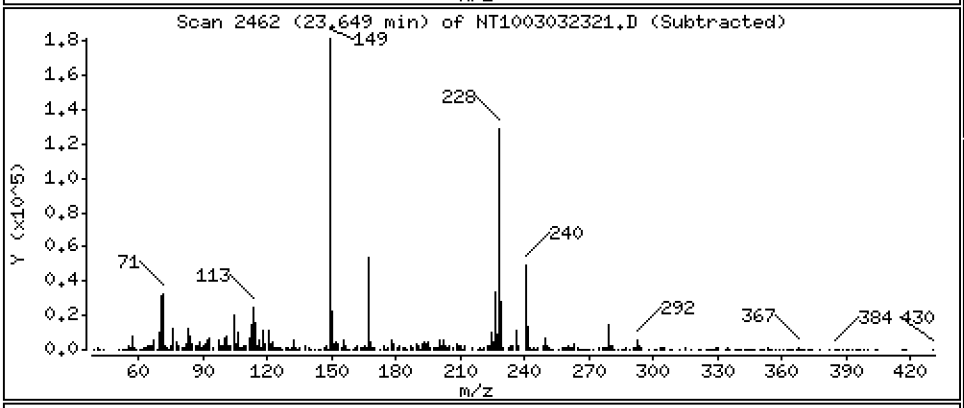
Column diameter: 0.25

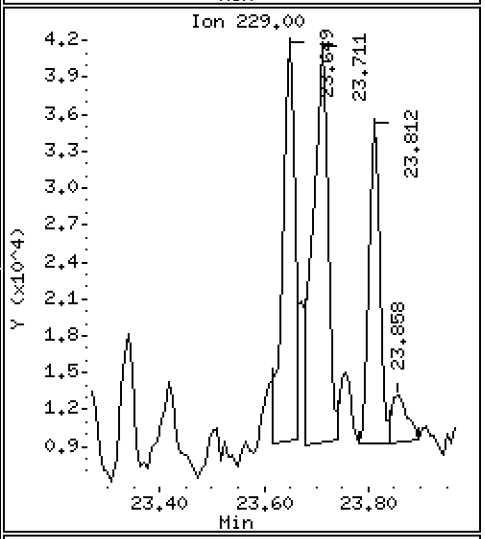
68 Benzo(a)anthracene

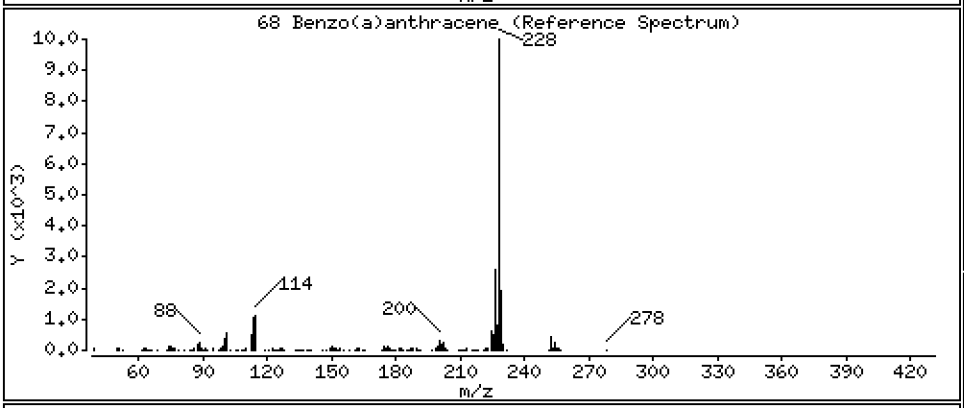
Concentration: 0.6181 ug/ml

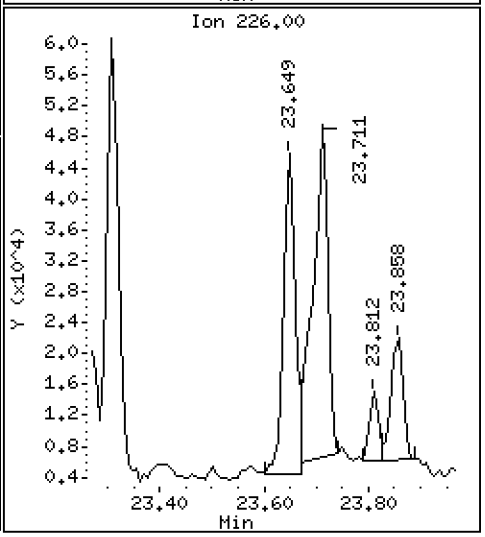


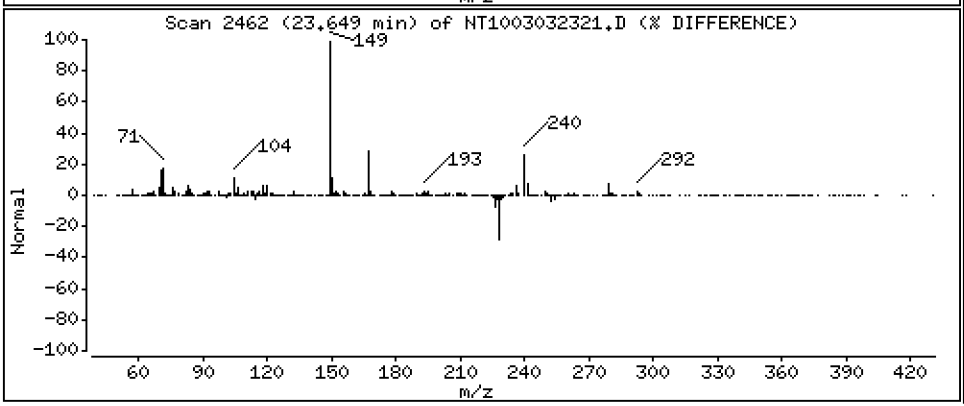












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

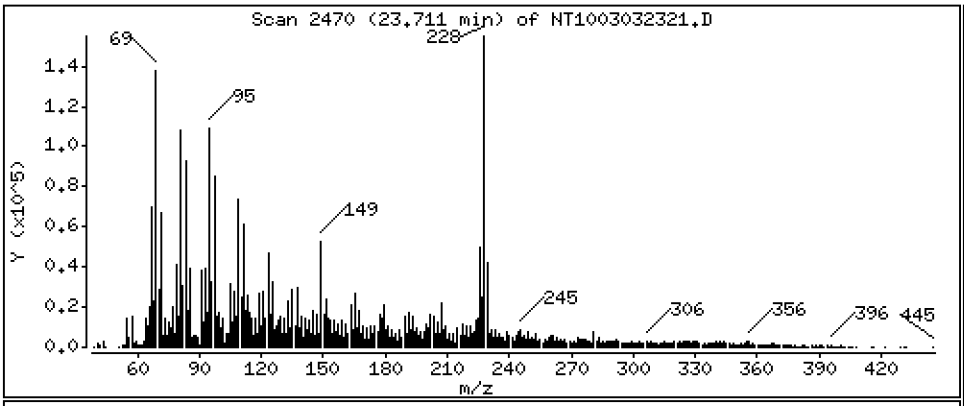
Operator: VTS

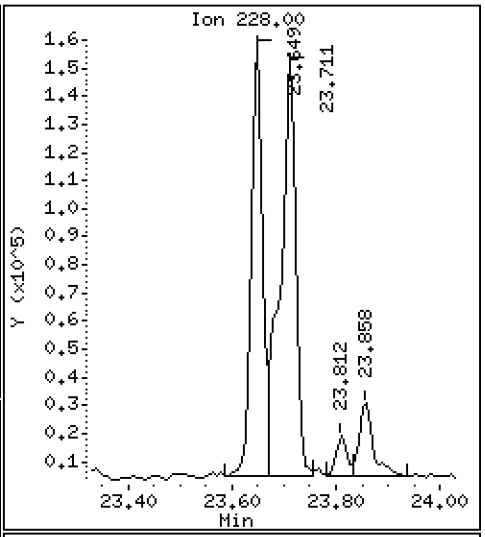
Column phase: ZB-5msi

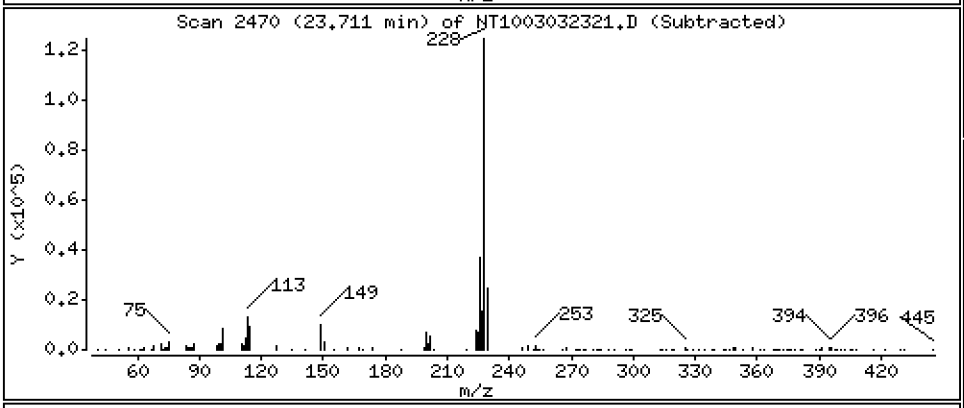
Column diameter: 0.25

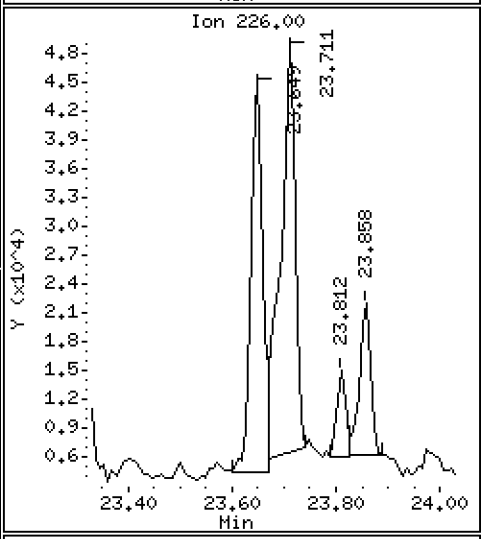
71 Chrysene

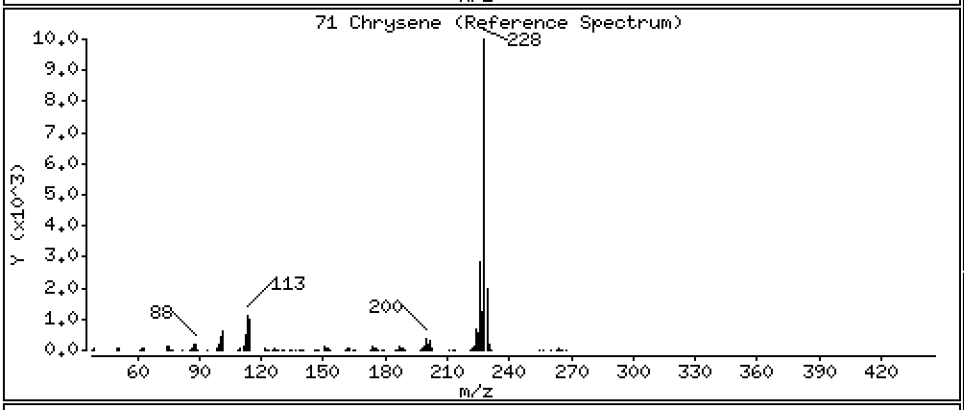
Concentration: 0.9586 ug/ml

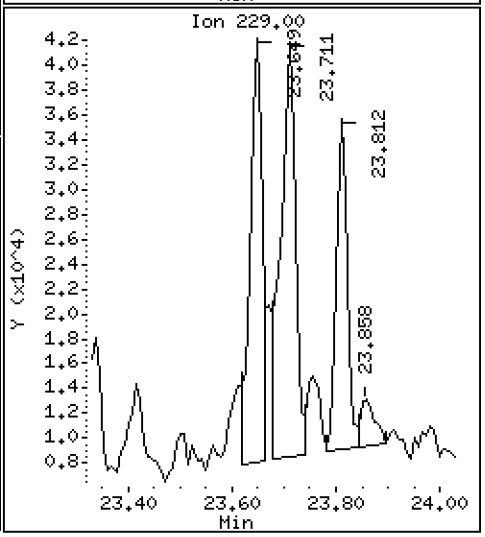


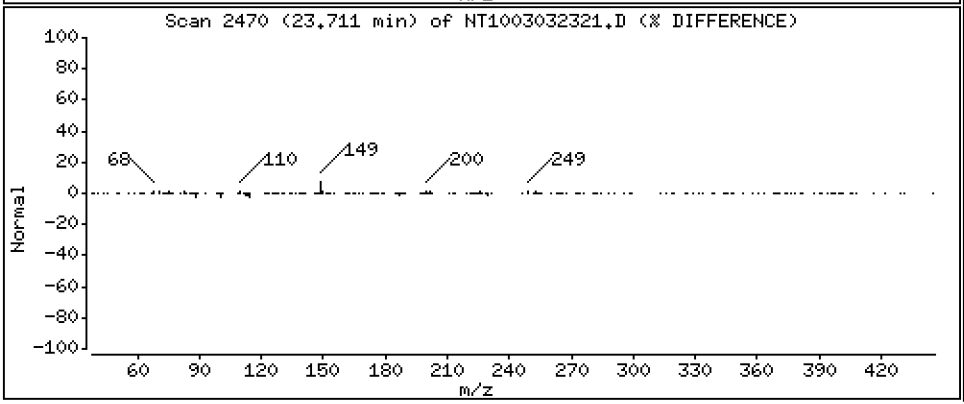












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

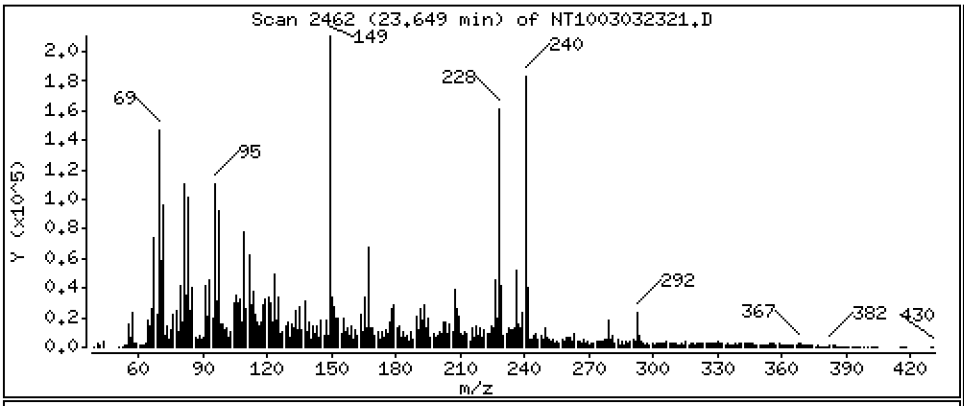
Operator: VTS

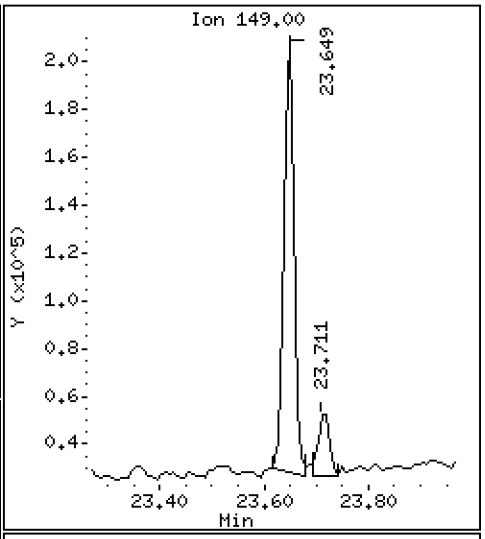
Column phase: ZB-5msi

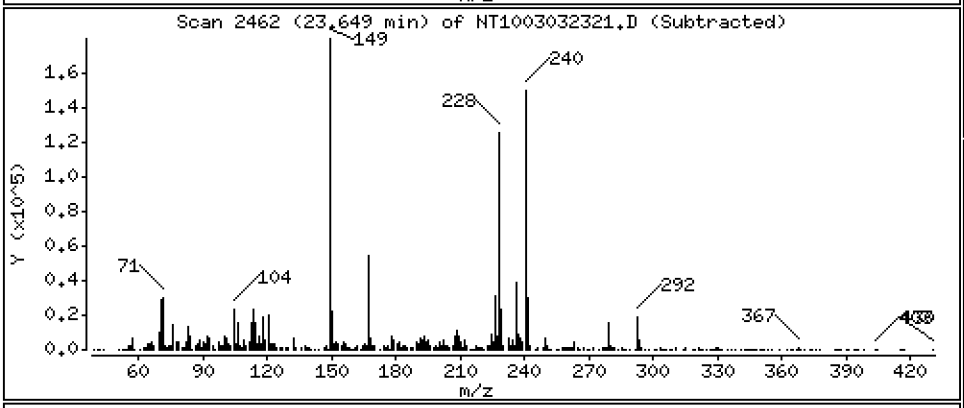
Column diameter: 0.25

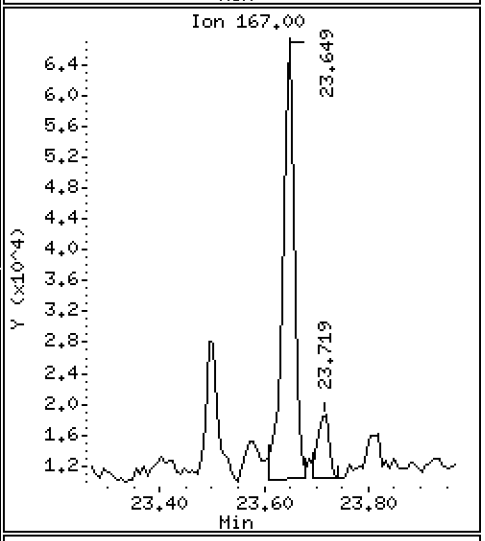
72 bis(2-Ethylhexyl)phthalate

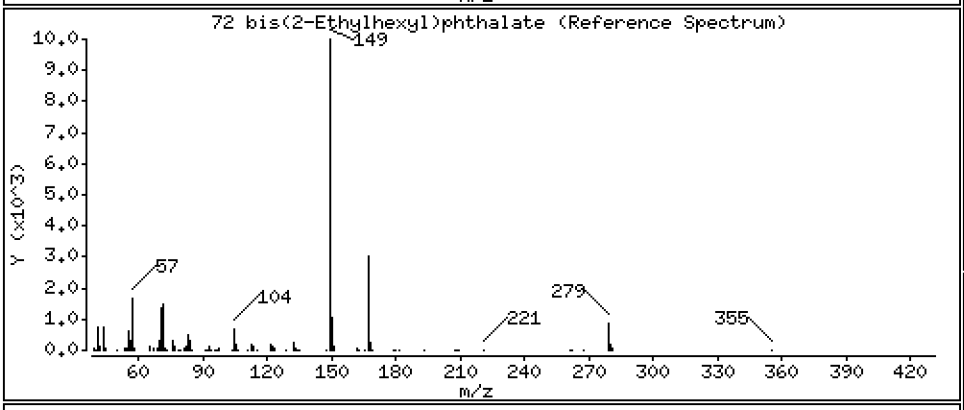
Concentration: 0.7961 ug/ml

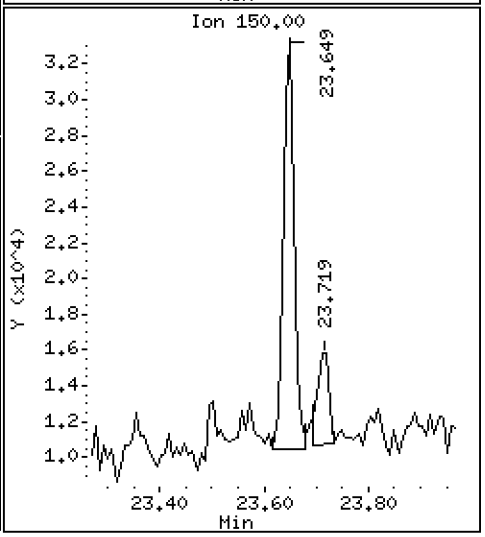


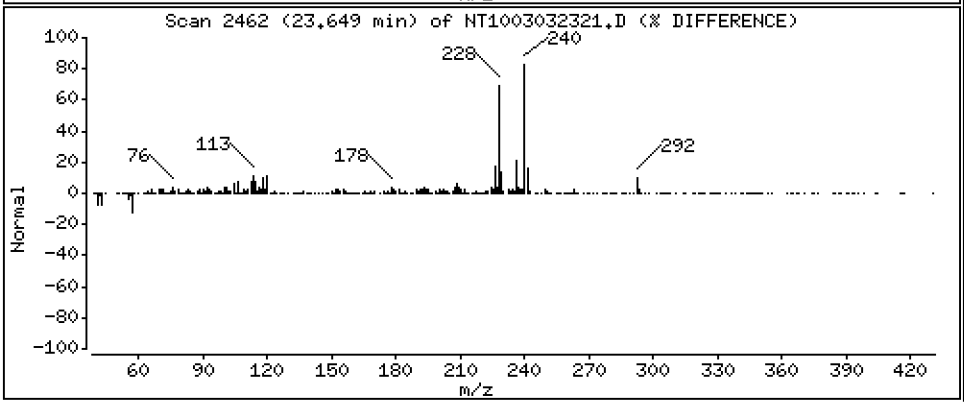












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

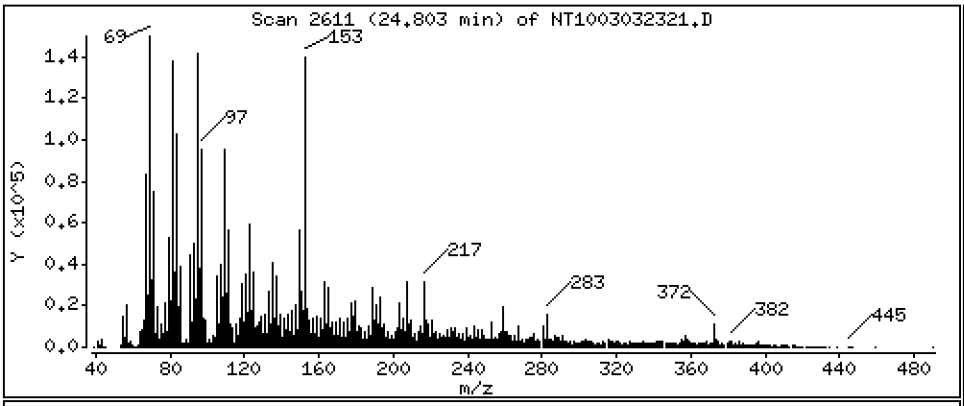
Operator: VTS

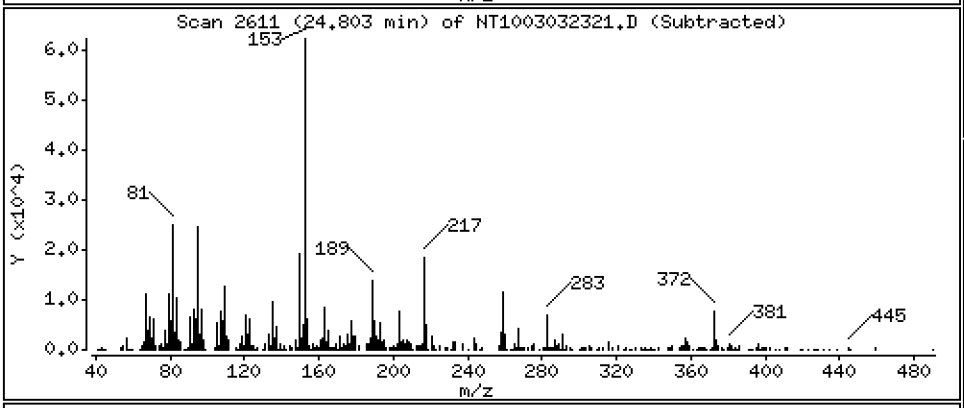
Column phase: ZB-5msi

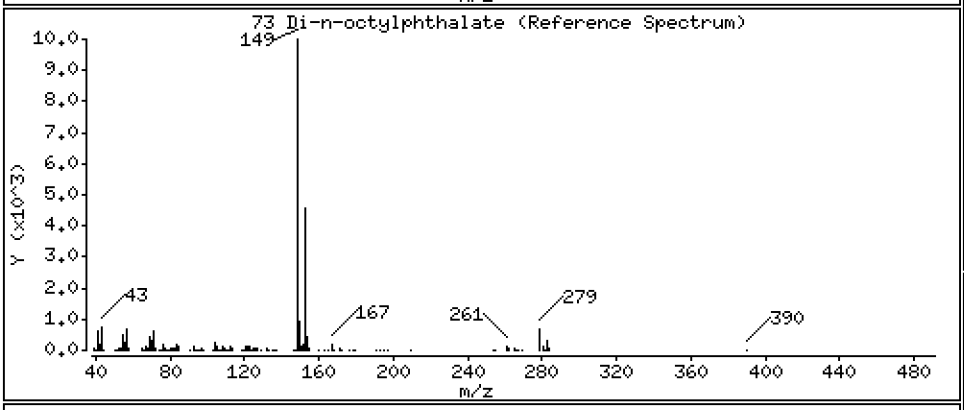
Column diameter: 0.25

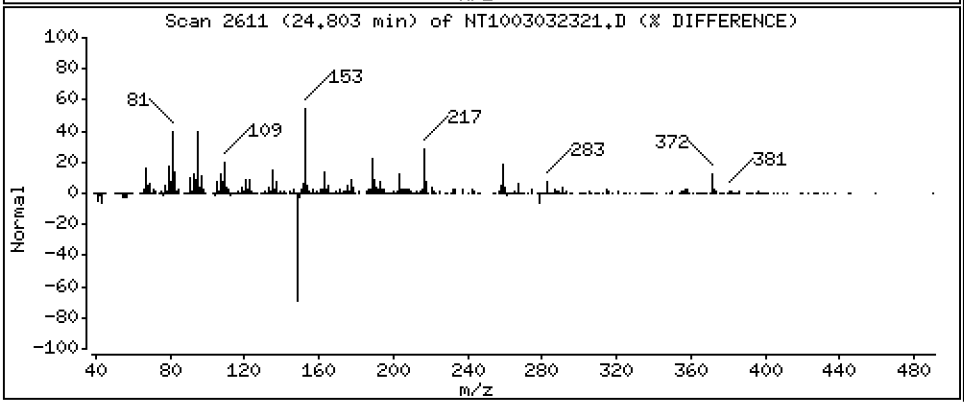
73 Di-n-octylphthalate

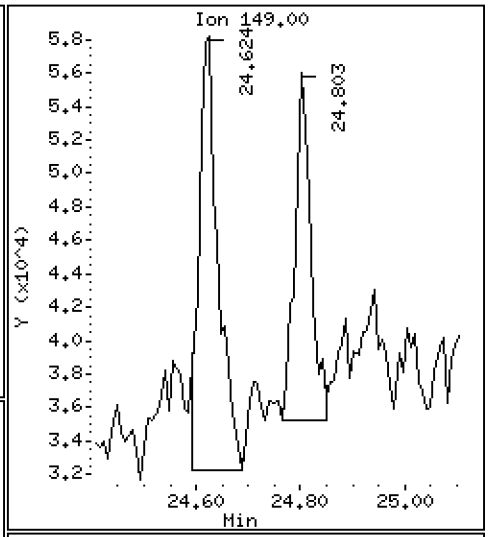
Concentration: 0.08977 ug/ml

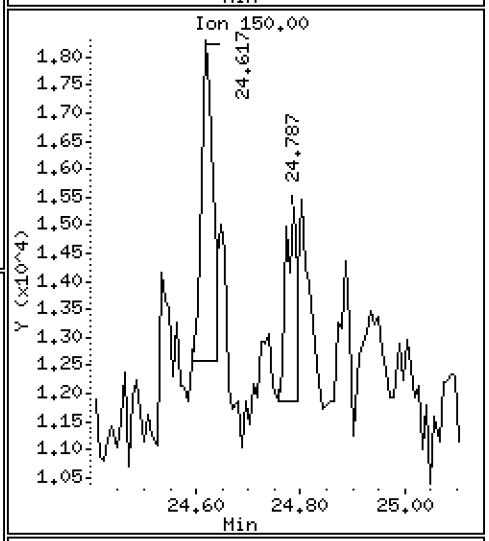


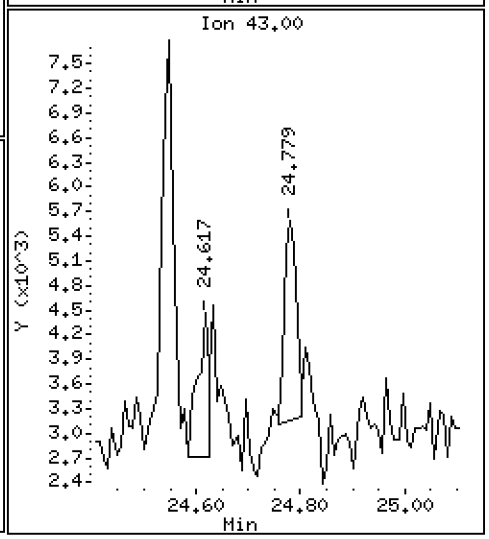












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

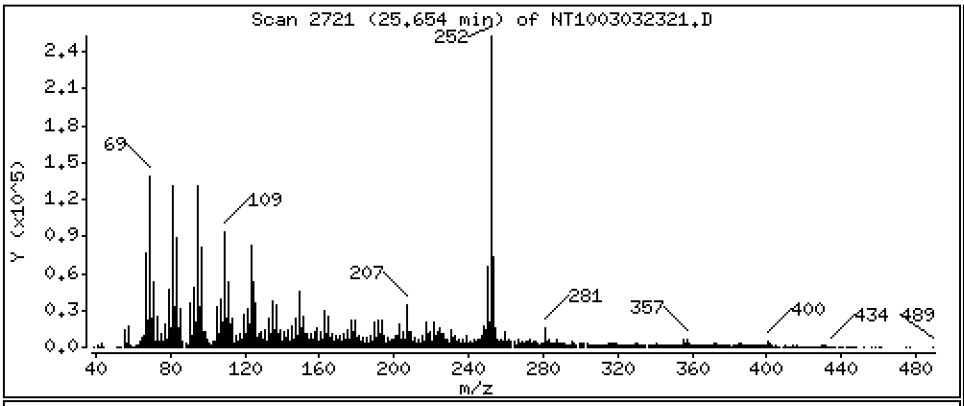
Operator: VTS

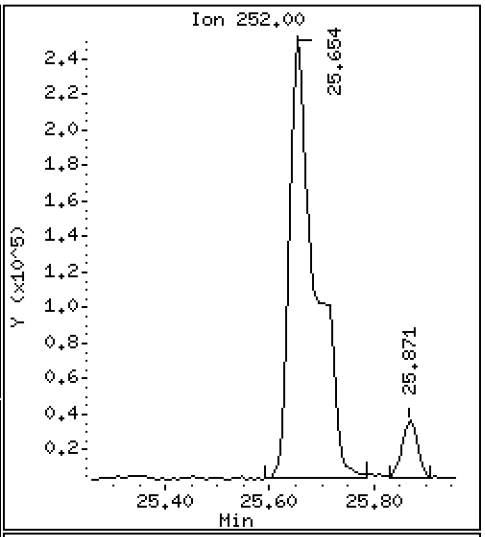
Column phase: ZB-5msi

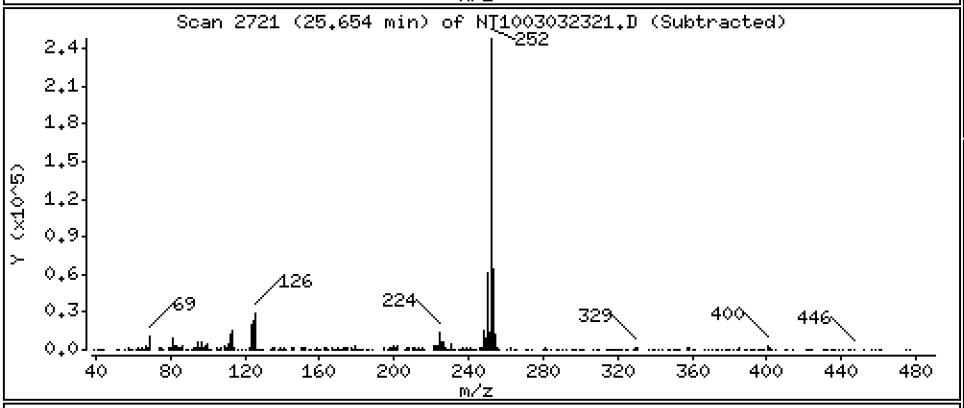
Column diameter: 0.25

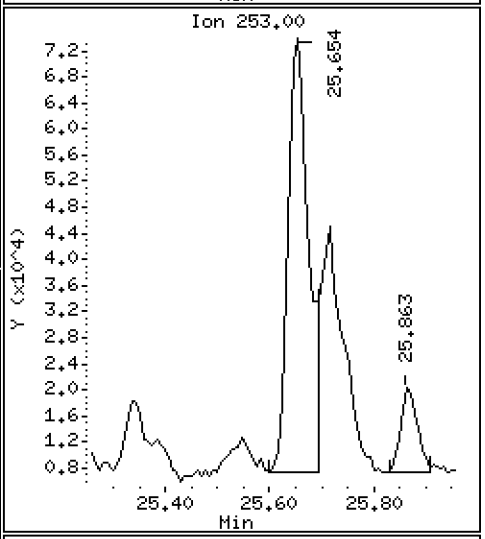
74 Benzo(b)fluoranthene

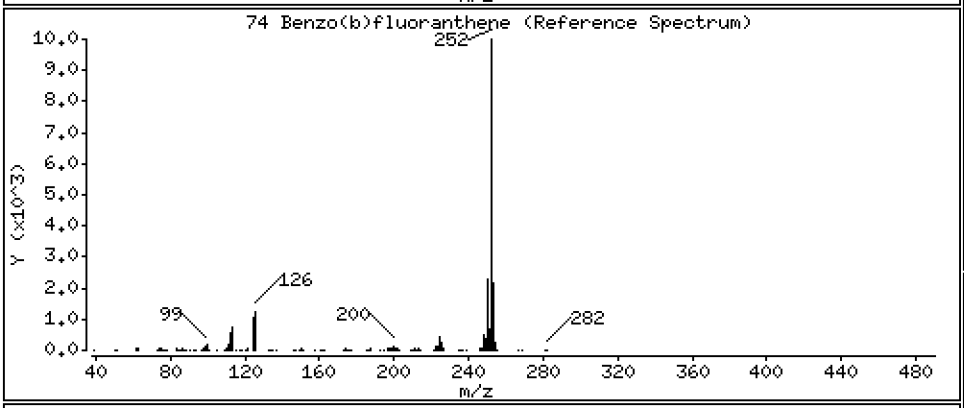
Concentration: 1.631 ug/ml

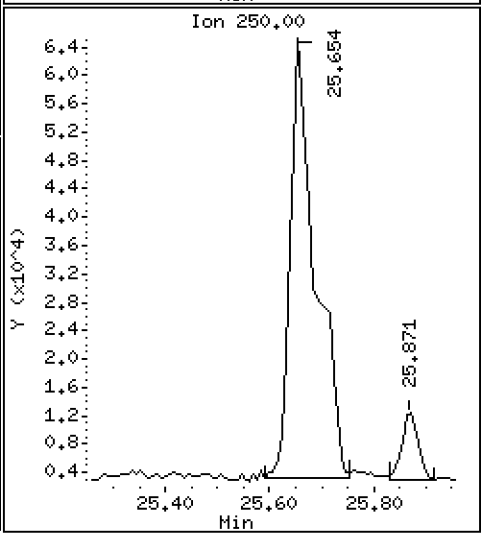


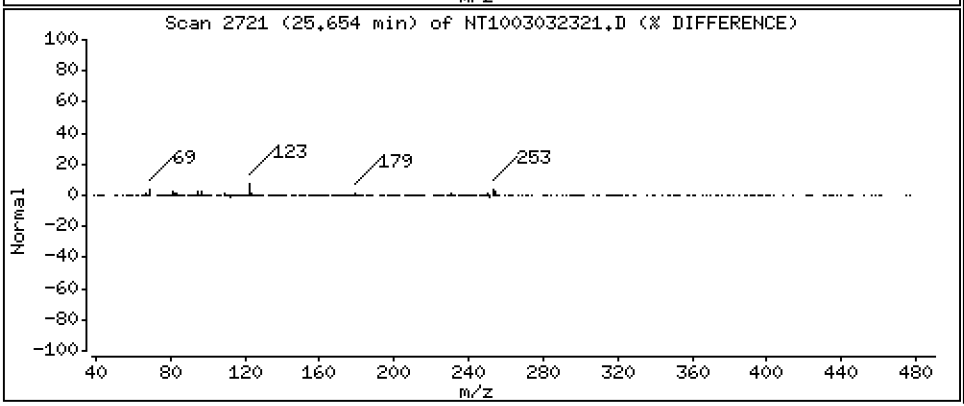












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

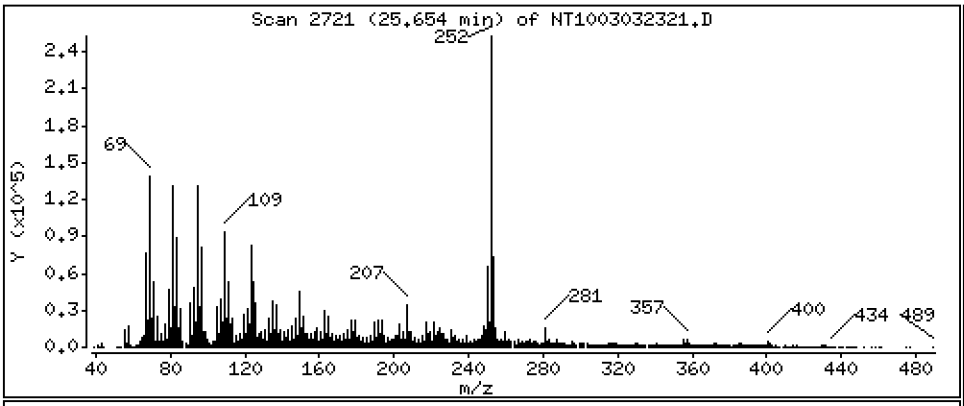
Operator: VTS

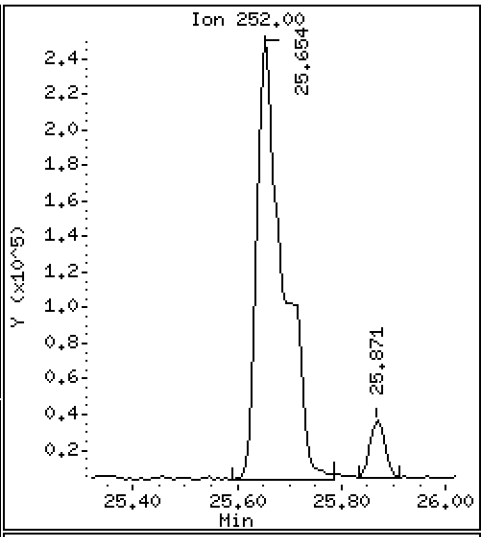
Column phase: ZB-5msi

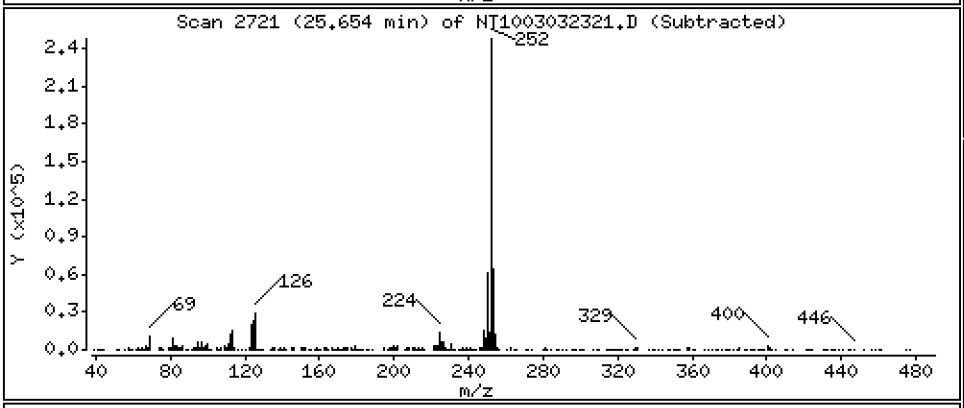
Column diameter: 0.25

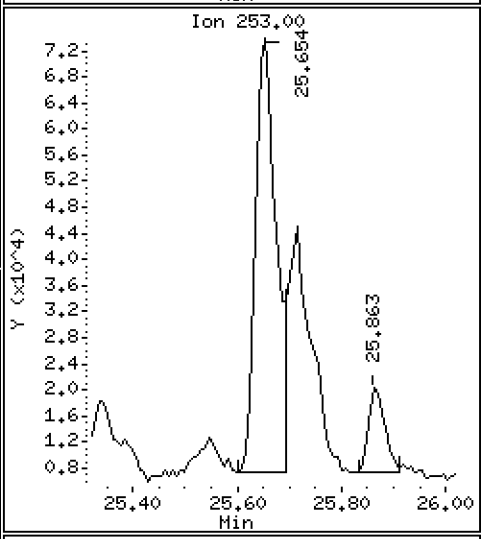
75 Benzo(k)fluoranthene

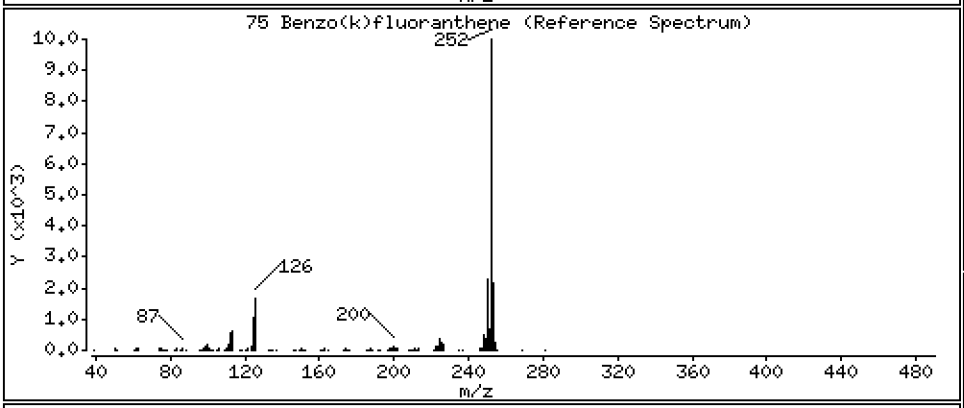
Concentration: 1.692 ug/ml

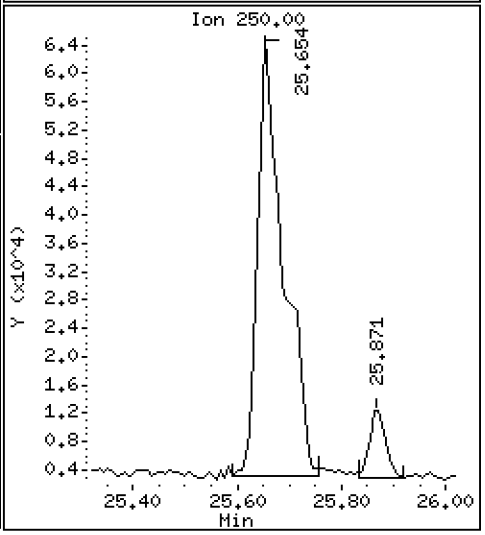


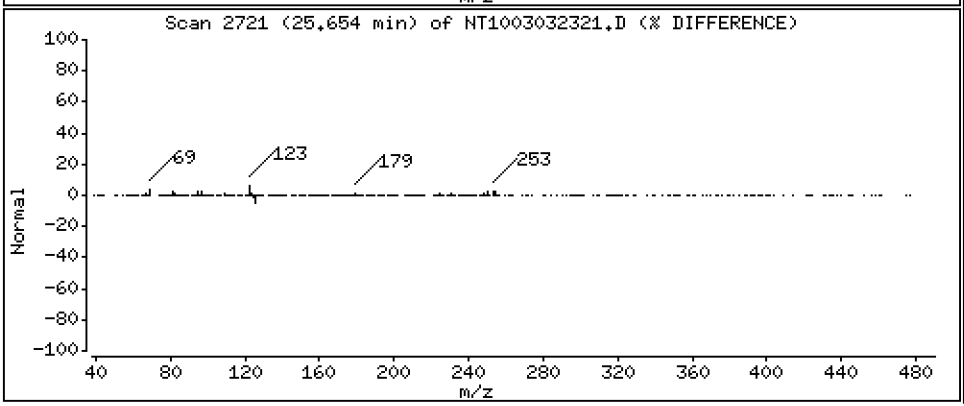












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

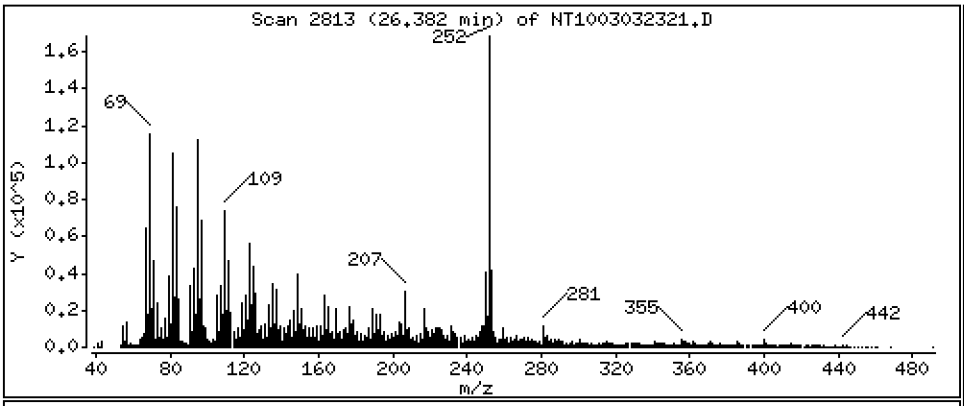
Operator: VTS

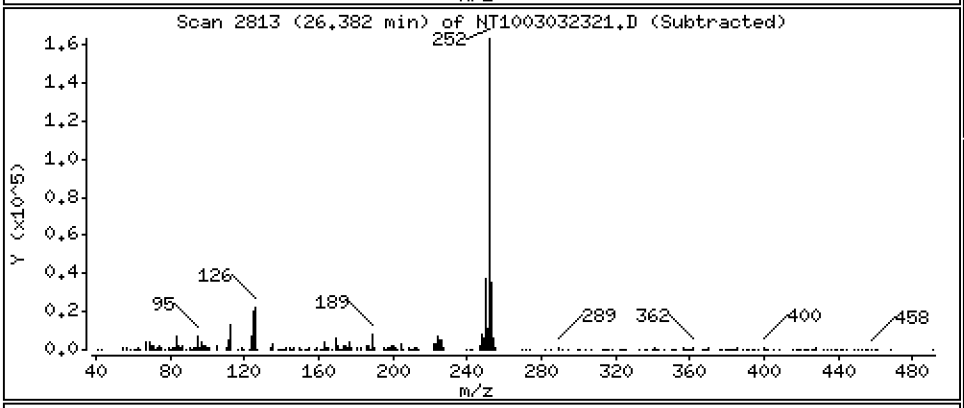
Column phase: ZB-5msi

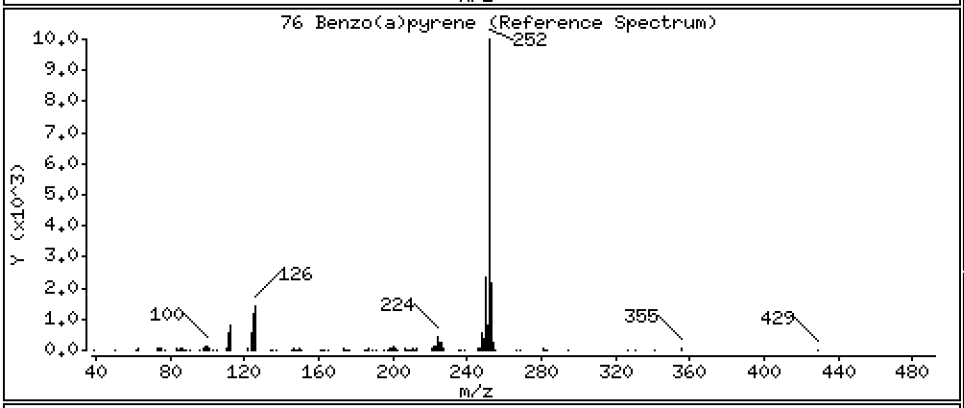
Column diameter: 0.25

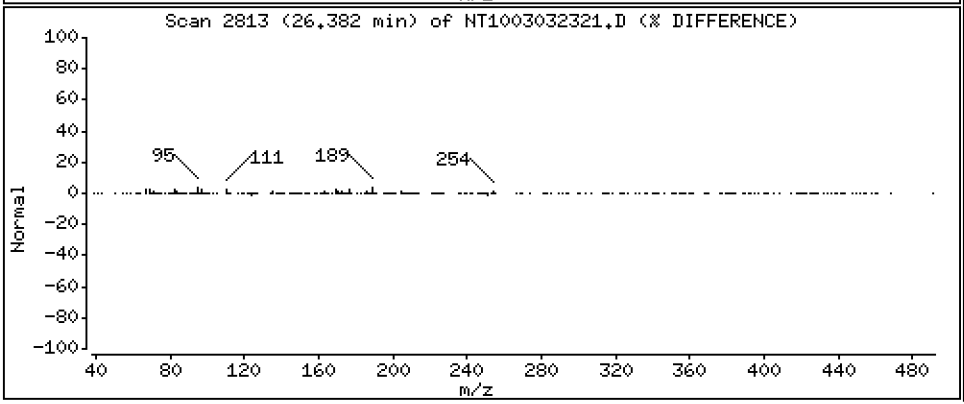
76 Benzo(a)pyrene

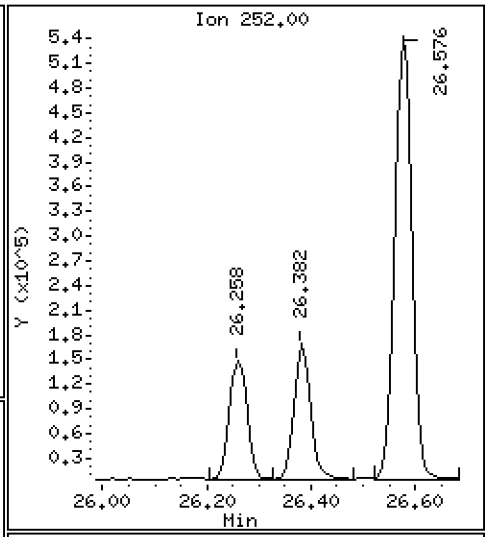
Concentration: 0.8057 ug/ml

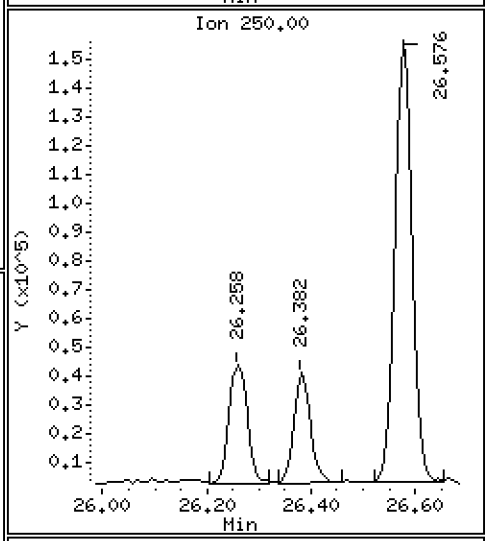


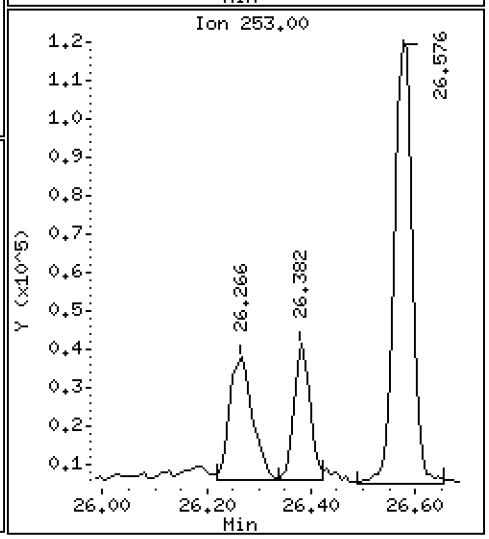












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

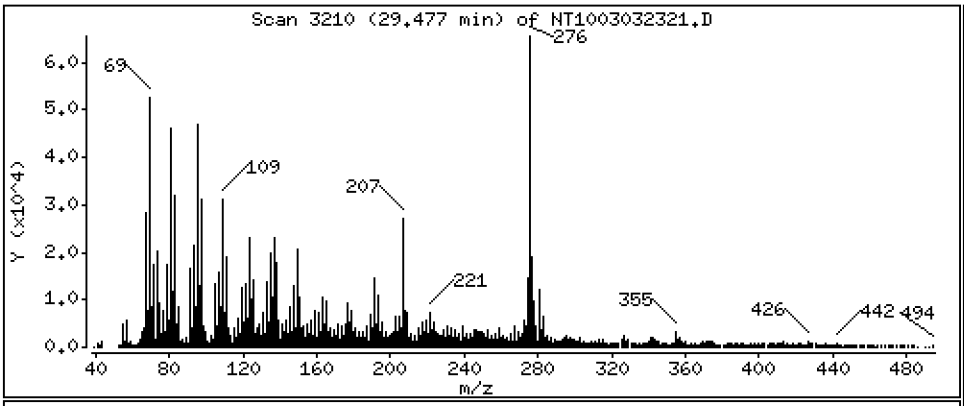
Operator: VTS

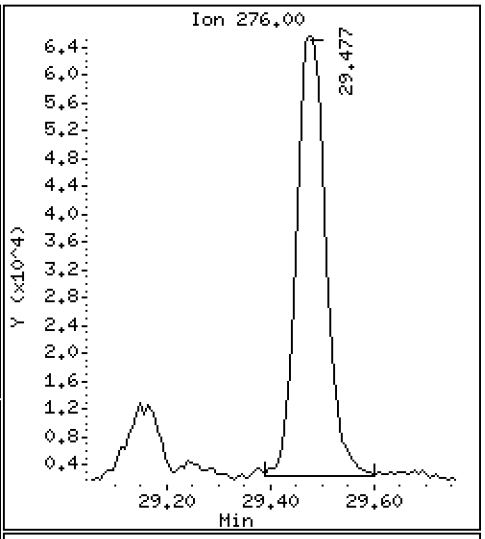
Column phase: ZB-5msi

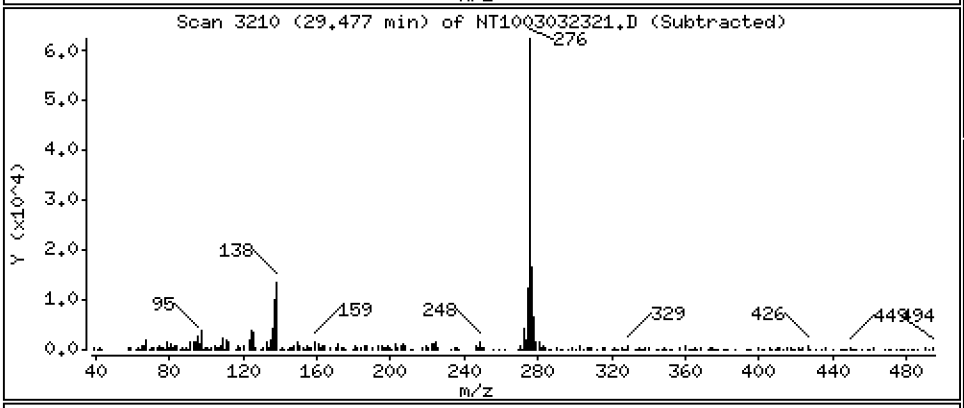
Column diameter: 0.25

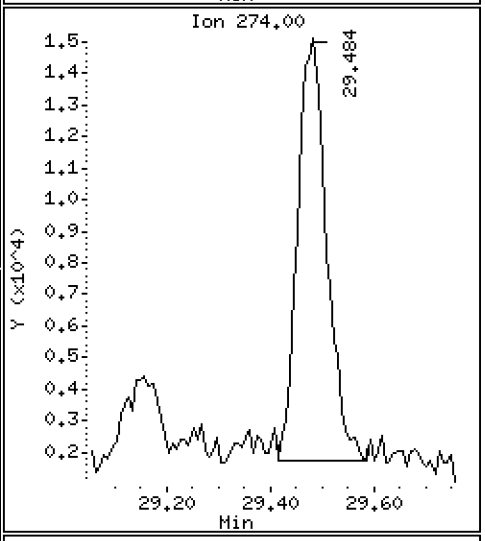
78 Indeno(1,2,3-cd)pyrene

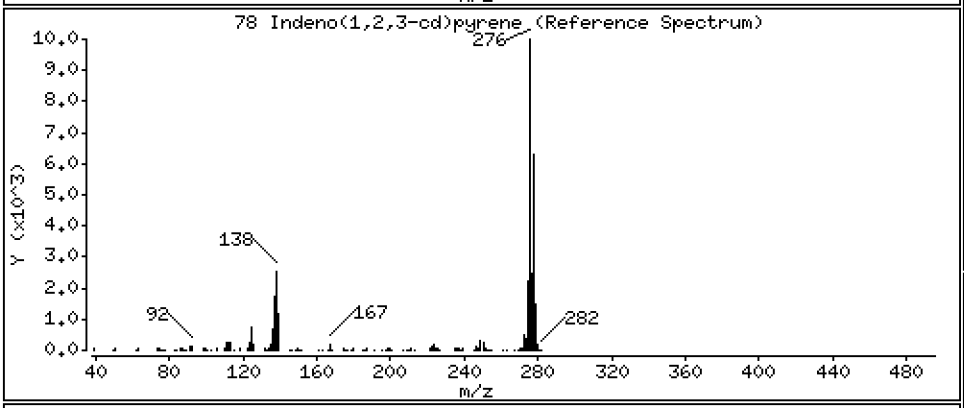
Concentration: 0.4516 ug/ml

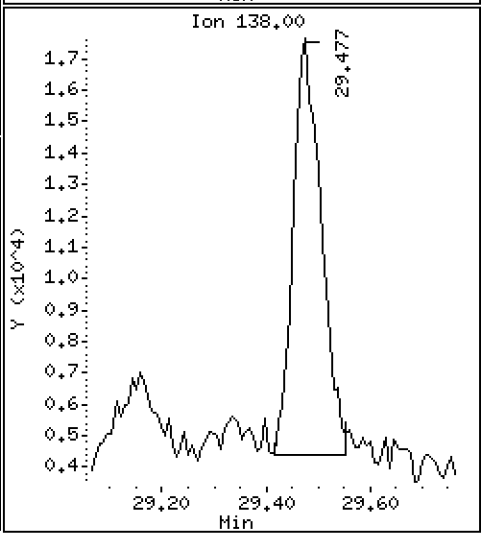


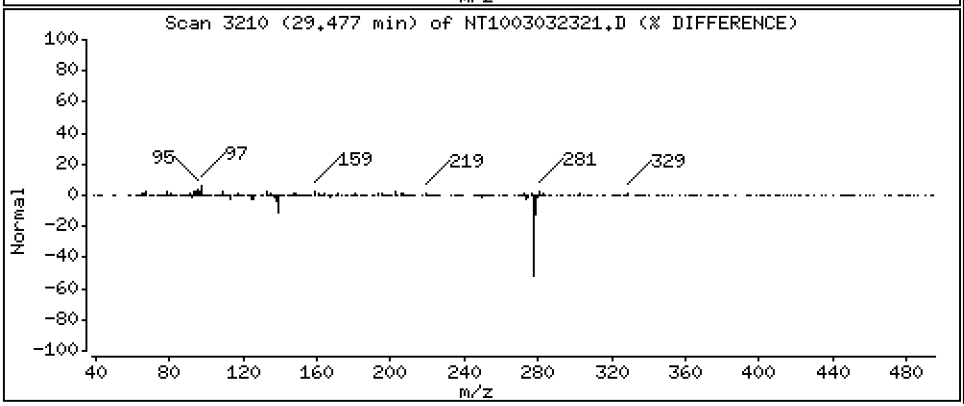












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

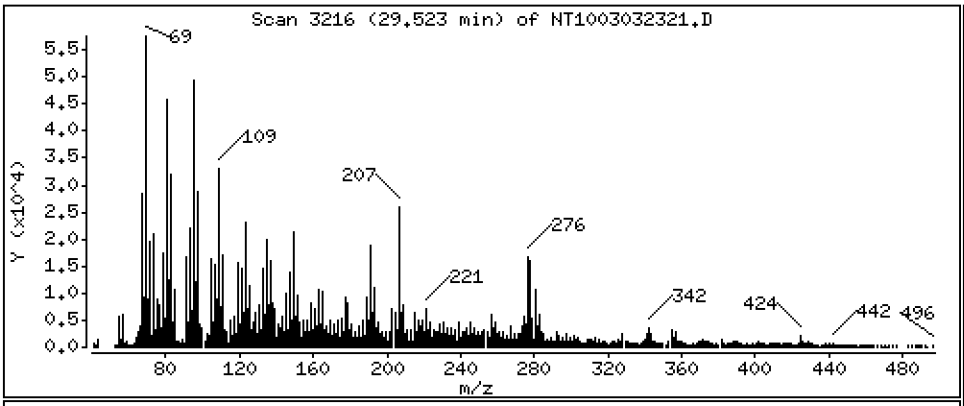
Operator: VTS

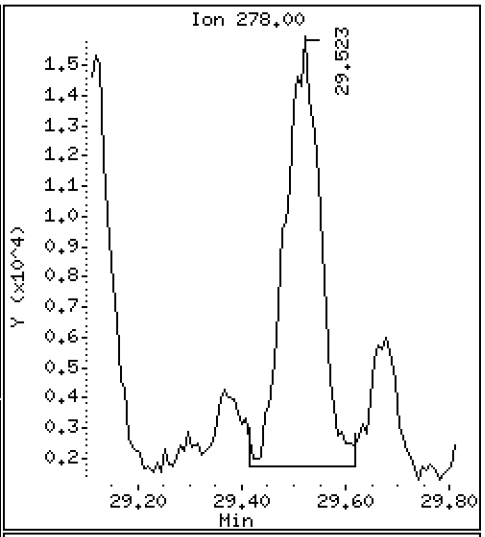
Column phase: ZB-5msi

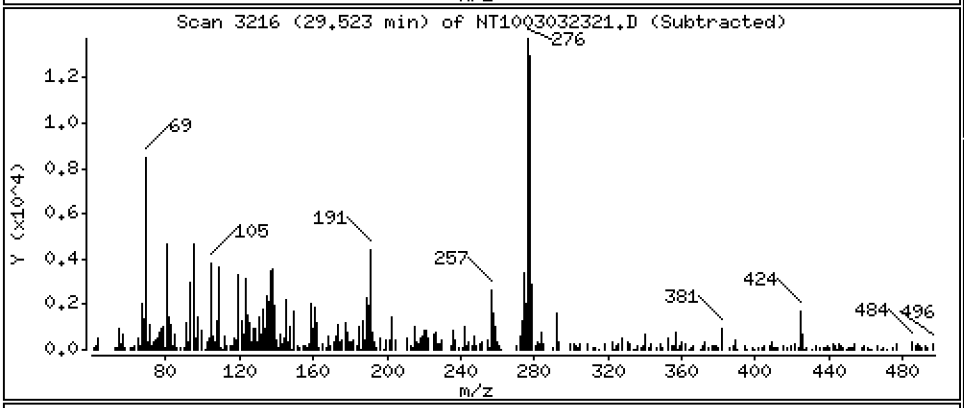
Column diameter: 0.25

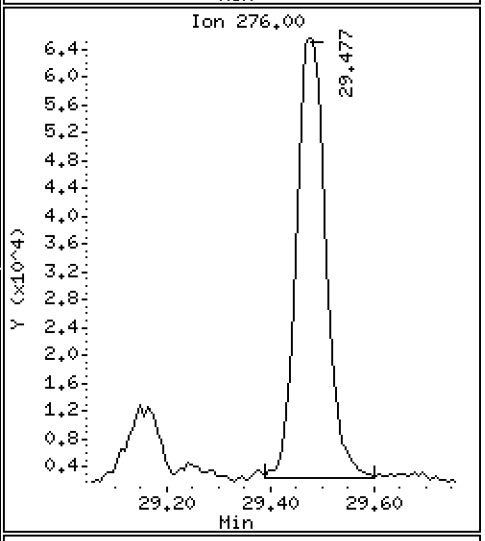
79 Dibenzo(a,h)anthracene

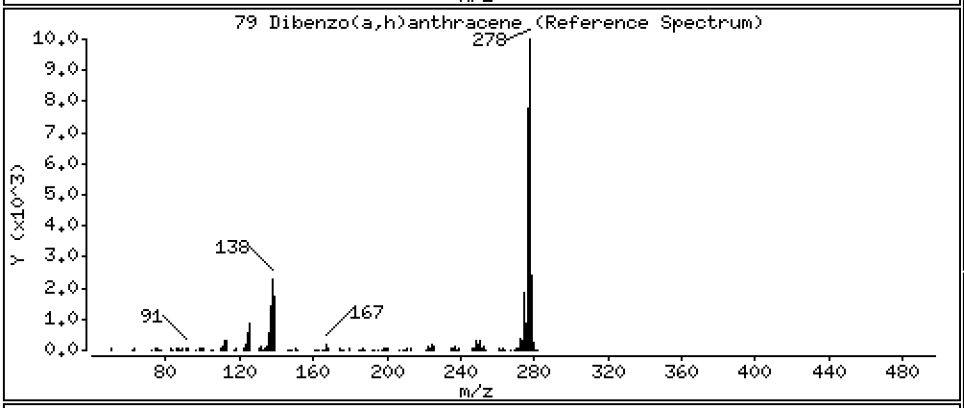
Concentration: 0.1635 ug/ml

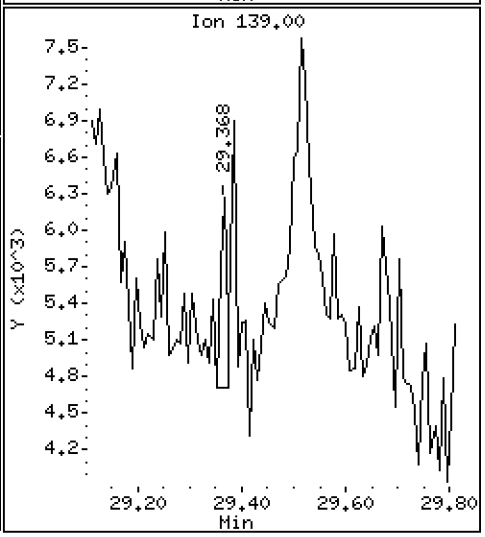


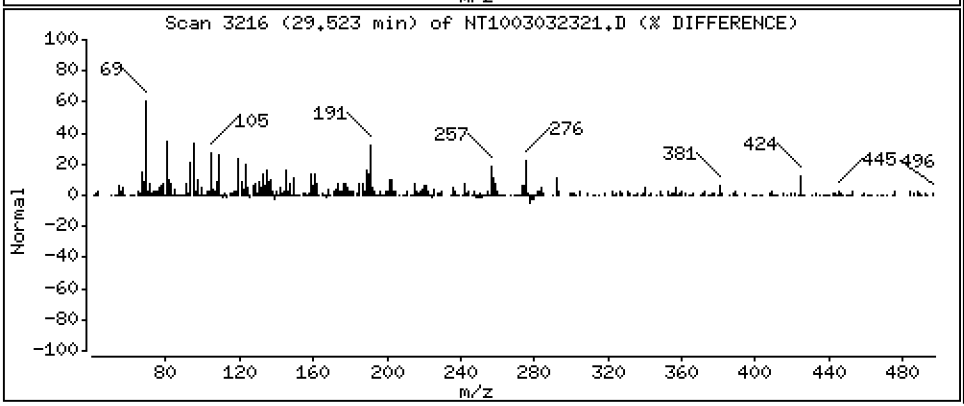












Date : 04-MAR-2023 06:28

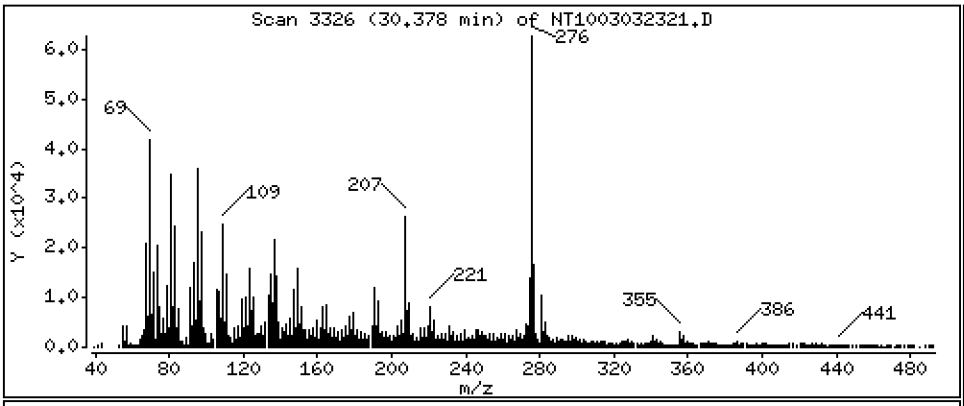
Client ID: Instrument: nt10.i

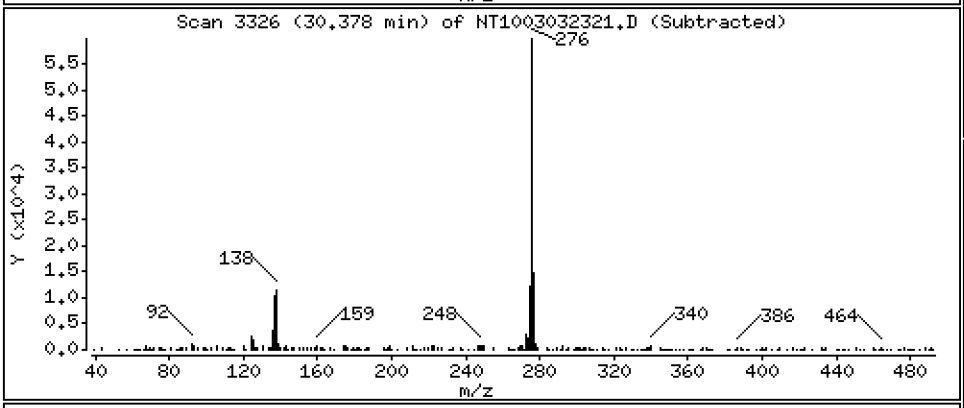
Sample Info: 23A0249-05

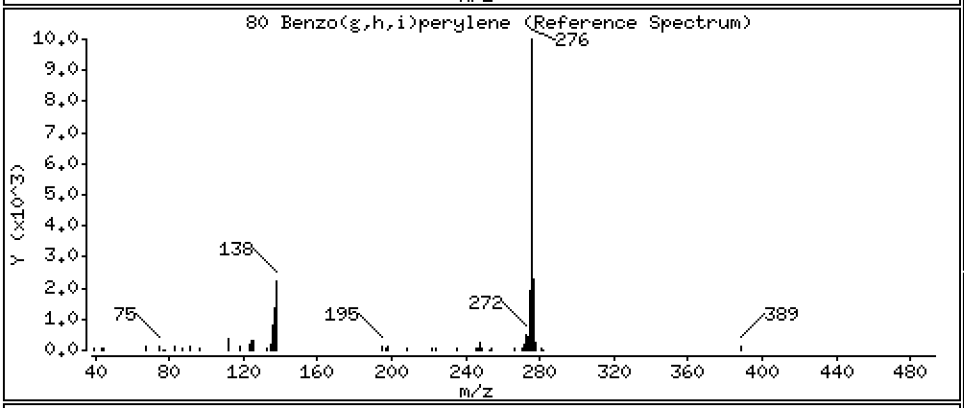
Volume Injected (uL): 1.0 Operator: VTS

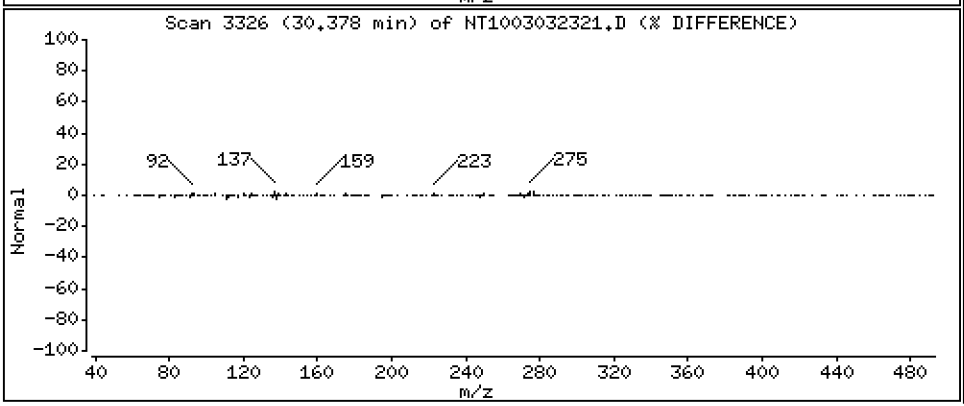
Column phase: ZB-5msi Column diameter: 0.25

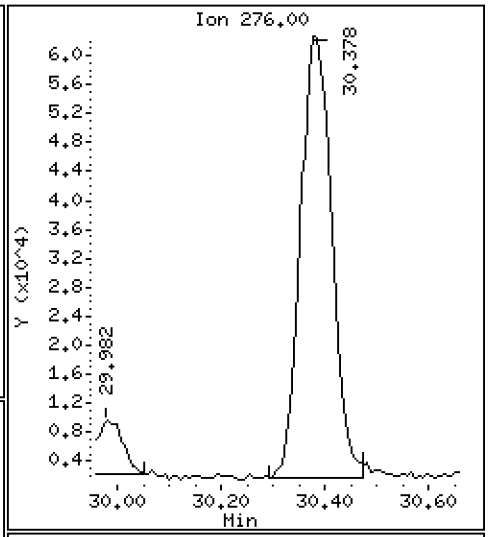
80 Benzo(g,h,i)perylene Concentration: 0.5887 ug/ml

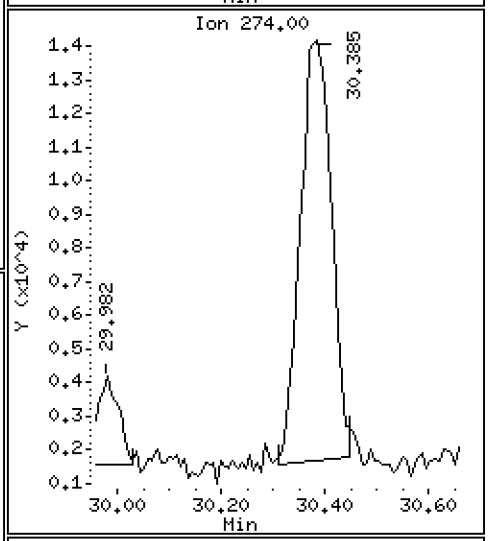


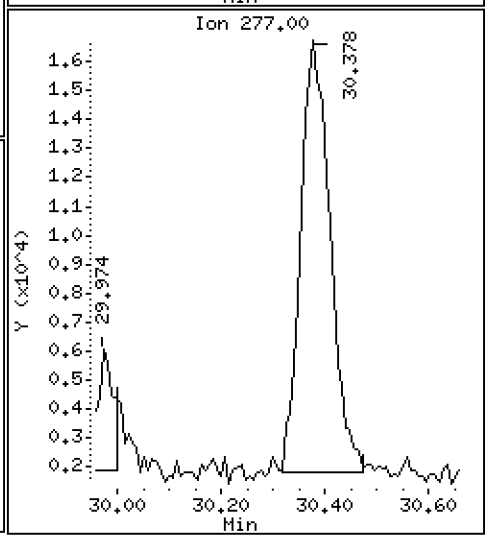












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

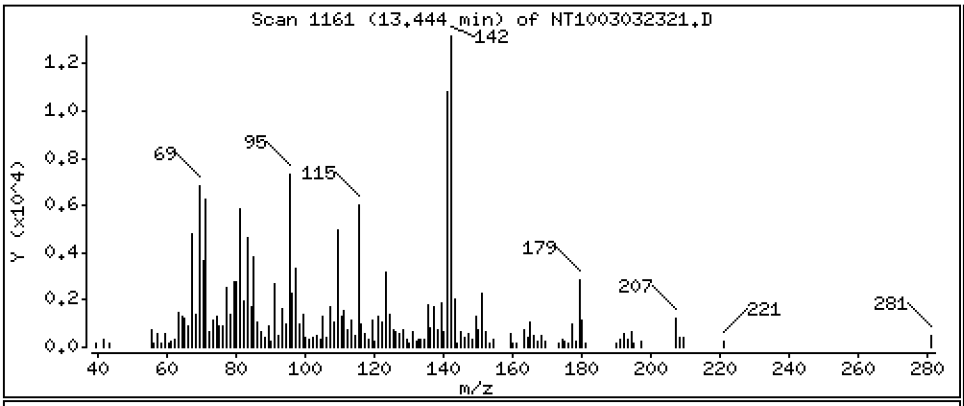
Operator: VTS

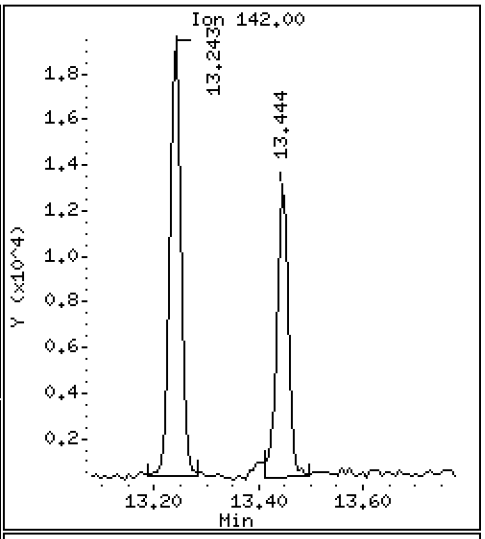
Column phase: ZB-5msi

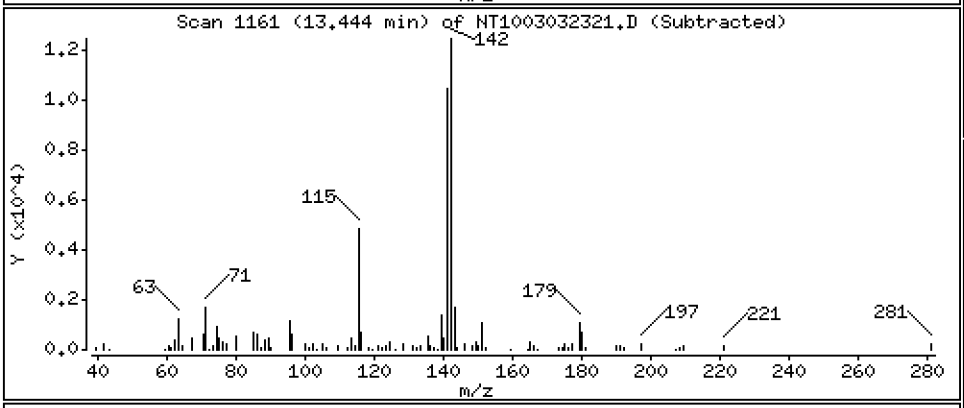
Column diameter: 0.25

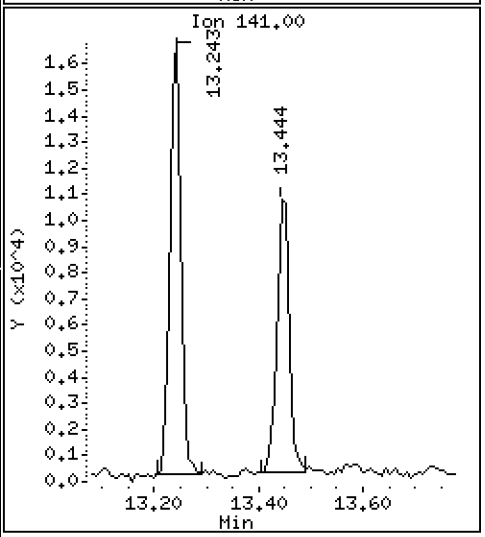
105 1-methylnaphthalene

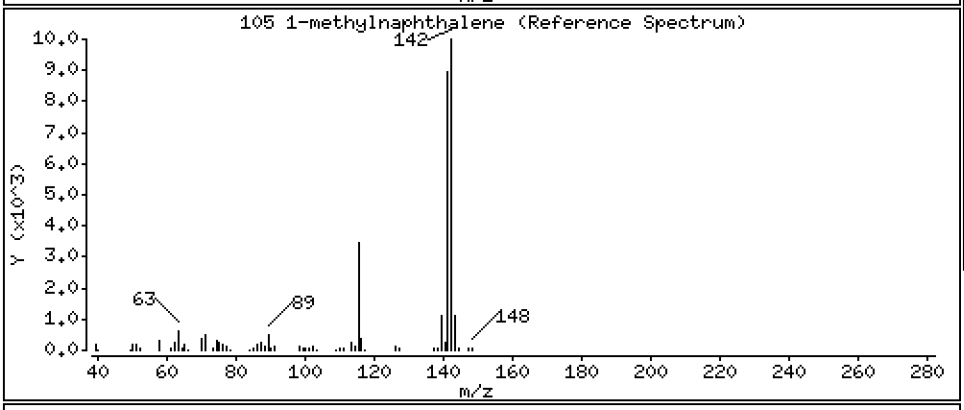
Concentration: 0.07898 ug/ml

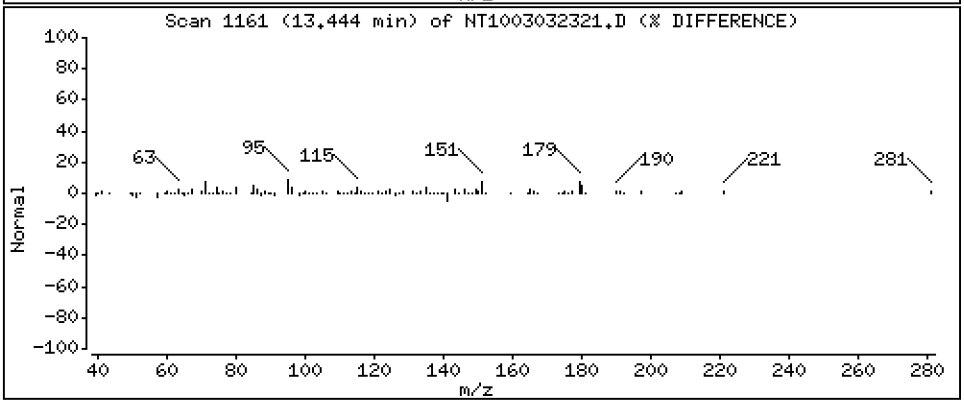












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

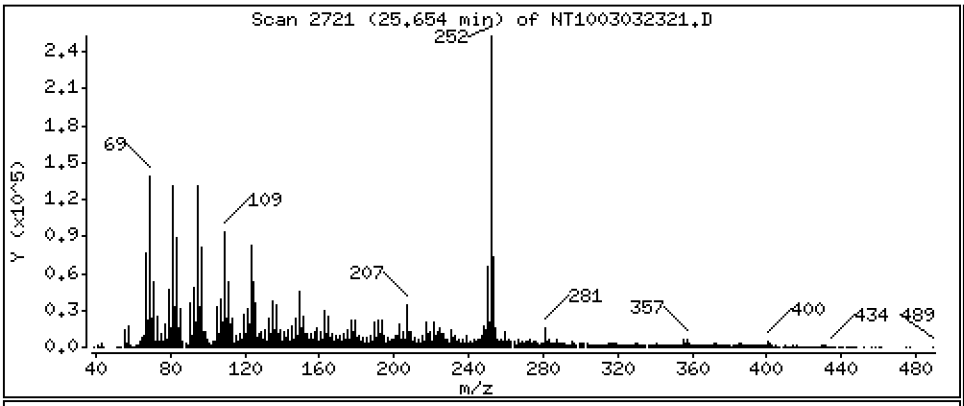
Operator: VTS

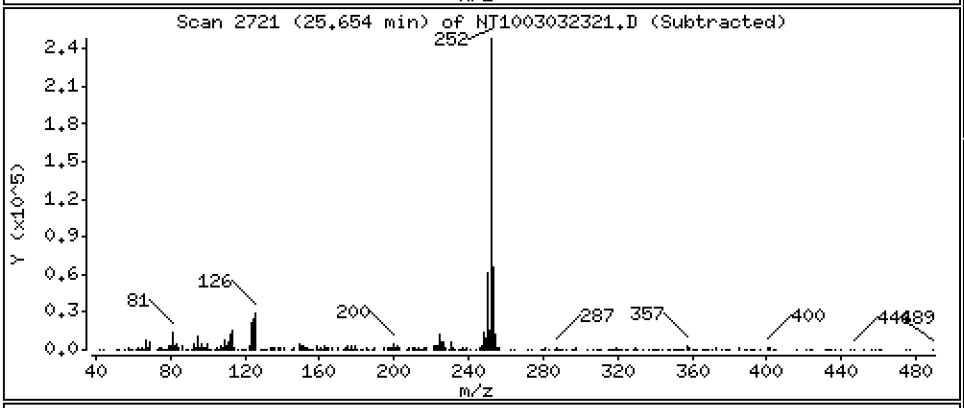
Column phase: ZB-5msi

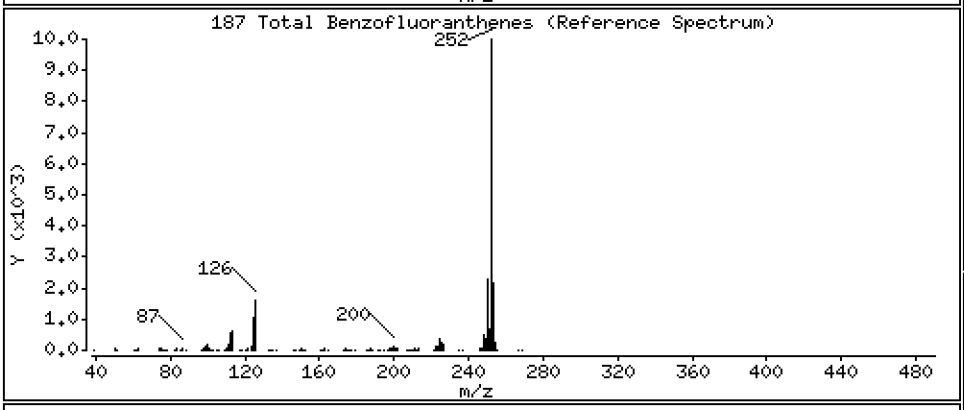
Column diameter: 0.25

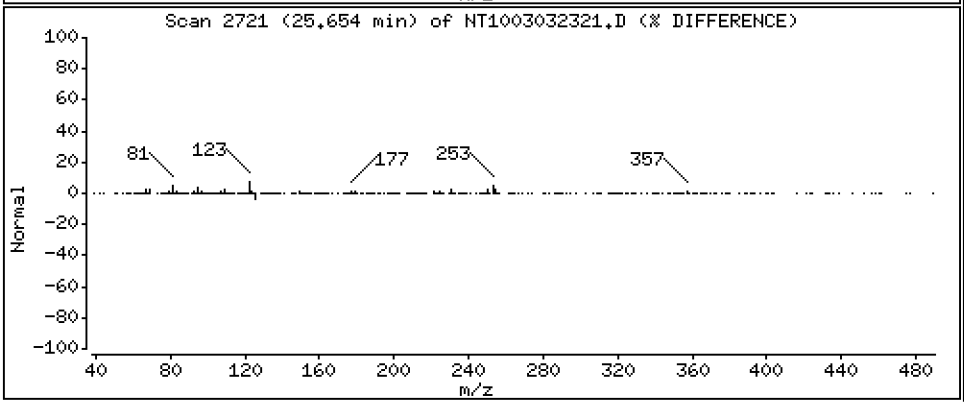
187 Total Benzofluoranthenes

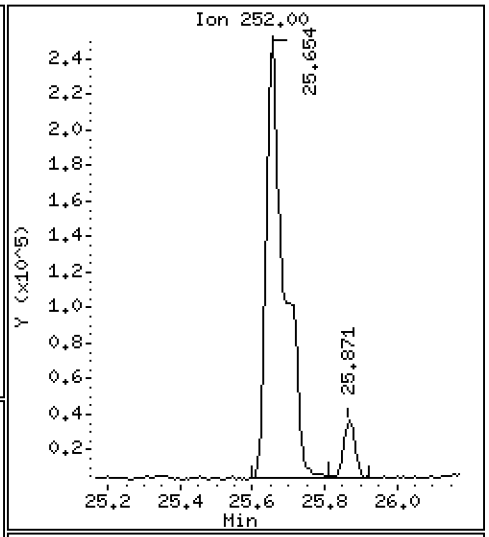
Concentration: 1.701 ug/ml

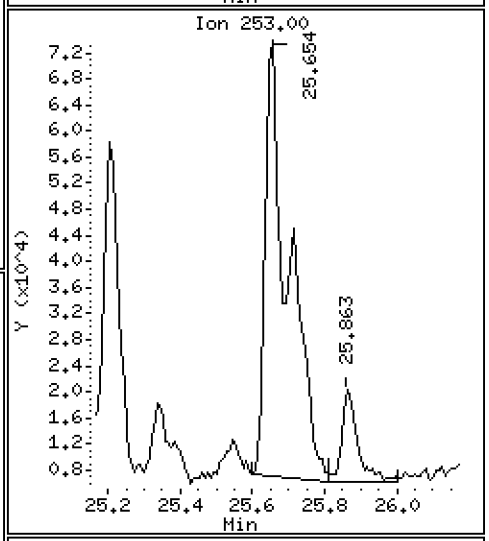


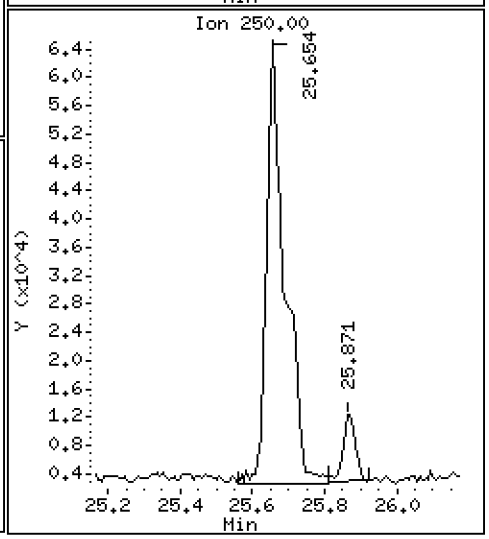












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230303A.b\NT1003032321.D
Lab Smp Id: 23A0249-05
Inj Date : 04-MAR-2023 06:28
Operator : VTS Inst ID: nt10.i
Smp Info : 23A0249-05
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Meth Date : 26-Apr-2023 10:41 van Quant Type: ISTD
Cal Date : 01-MAR-2023 18:37 Cal File: NT1003012306.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/ml)
$	1 2-Fluorophenol	112	6.920	6.920	(0.746)	778509	5.13707	5.137
$	2 Phenol-d5	99	8.535	8.535	(0.920)	1008896	5.73415	5.734
	3 Phenol	94	8.558	8.558	(0.922)	70832	0.37865	0.3787
$	5 2-Chlorophenol-d4	132	8.852	8.852	(0.954)	850230	5.66398	5.664
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	9.278	9.278	(1.000)	481672	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.573	9.572	(1.032)	372639	3.32263	3.323
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	10.000	9.992	(1.078)	36595	0.20138	0.2014
$	18 Nitrobenzene-d5	82	10.341	10.341	(0.877)	675319	3.90944	3.909
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	Compound Not Detected.					
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.788	11.772	(1.000)	1573632	4.00000	
28	Naphthalene	128	11.827	11.819	(1.003)	62297	0.15424	0.1542
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	Compound Not Detected.					
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	13.993	13.978	(0.908)	1264924	4.44675	4.447
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	Compound Not Detected.					
40	Acenaphthylene	152	Compound Not Detected.					
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	15.417	15.401	(1.000)	797519	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	15.487	15.471	(1.004)	23908	0.10297	0.1030
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.850	15.834	(1.028)	28271	0.08204	0.08204
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	16.322	16.306	(1.059)	49979	0.18317	0.1832
49	Fluorene	166	16.577	16.554	(1.075)	39162	0.13659	0.1366
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	17.078	17.063	(1.108)	302144	5.91937	5.919
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	18.556	18.533	(1.000)	1414757	4.00000	
60	Phenanthrene	178	18.610	18.587	(1.003)	227927	0.62952	0.6295
61	Anthracene	178	18.718	18.695	(1.009)	88831	0.25302	0.2530
62	Carbazole	167	19.059	19.035	(1.027)	21364	0.06642	0.06642
63	Di-n-butylphthalate	149	Compound Not Detected.					
64	Fluoranthene	202	21.032	20.985	(0.889)	523775	1.31480	1.315
65	Pyrene	202	21.465	21.426	(0.907)	1191473	2.93725	2.937
$ 66	Terphenyl-d14	244	21.744	21.705	(0.919)	1368303	4.16883	4.169
67	Butylbenzylphthalate	149	Compound Not Detected.					
68	Benzo(a)anthracene	228	23.649	23.617	(0.999)	252364	0.61805	0.6181
* 69	Chrysene-d12	240	23.664	23.633	(1.000)	1158020	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	23.710	23.679	(1.002)	316952	0.95860	0.9586
72	bis(2-Ethylhexyl)phthalate	149	23.649	23.617	(0.954)	254776	0.79609	0.7961
* 134	Di-n-octylphthalate-d4	153	24.779	24.748	(1.000)	2273670	4.00000	
73	Di-n-octylphthalate	149	24.802	24.755	(1.001)	45261	0.08977	0.08977
74	Benzo(b)fluoranthene	252	25.654	25.607	(0.968)	861320	1.63093	1.631
75	Benzo(k)fluoranthene	252	25.654	25.669	(0.968)	861320	1.69223	1.692

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
76	Benzo(a)pyrene	252	26.382	26.335	(0.995)	376964	0.80573	0.8057
* 77	Perylene-d12	264	26.513	26.459	(1.000)	1524634	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.476	29.406	(1.112)	246155	0.45160	0.4516
79	Dibenzo(a,h)anthracene	278	29.523	29.460	(1.114)	67366	0.16347	0.1635(M)
80	Benzo(g,h,i)perylene	276	30.377	30.307	(1.146)	255843	0.58867	0.5887
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	13.444	13.428	(1.140)	20398	0.07898	0.07898
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
187	Total Benzofluoranthenes	252	25.654	25.669	(0.968)	855638	1.70068	1.701
120	2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032321.D
Lab Smp Id: 23A0249-05
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:02
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	514090	257045	1028180	481672	-6.31
27 Naphthalene-d8	1833847	916924	3667694	1573632	-14.19
42 Acenaphthene-d10	935282	467641	1870564	797519	-14.73
59 Phenanthrene-d10	1597882	798941	3195764	1414757	-11.46
69 Chrysene-d12	1549718	774859	3099436	1158020	-25.28
134 Di-n-octylphthala	2731644	1365822	5463288	2273670	-16.77
77 Perylene-d12	1727703	863852	3455406	1524634	-11.75

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	0.00
27 Naphthalene-d8	11.77	11.27	12.27	11.79	0.13
42 Acenaphthene-d10	15.40	14.90	15.90	15.42	0.10
59 Phenanthrene-d10	18.53	18.03	19.03	18.56	0.13
69 Chrysene-d12	23.63	23.13	24.13	23.66	0.13
134 Di-n-octylphthala	24.75	24.25	25.25	24.78	0.13
77 Perylene-d12	26.46	25.96	26.96	26.51	0.21

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

REVIEW SUMMARY FOR FILE - NT1003032321.D

Lab ID: 23A0249-05
nt10.i, 20230303A.b\ABN.m,   04-MAR-2023 06:28

RT	CO-ELUTION COMPOUNDS
23.649	bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

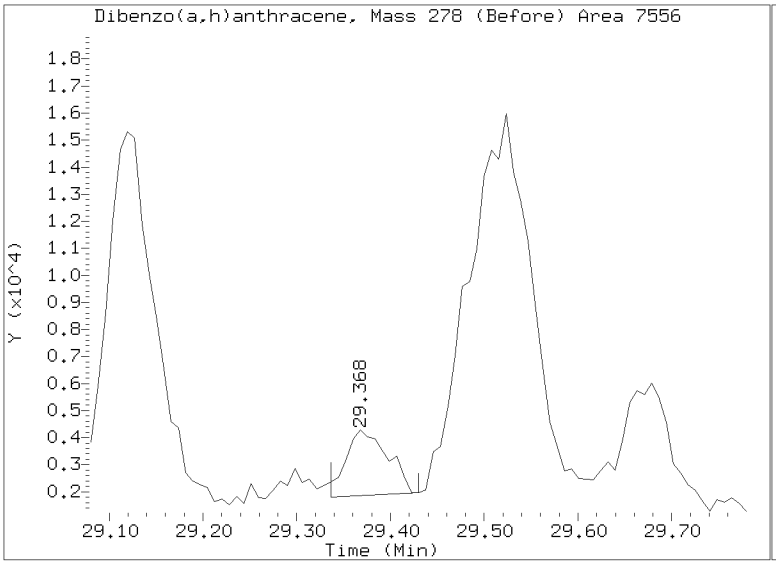
RRT check based on Ccal File: NT1003032314ICV.D

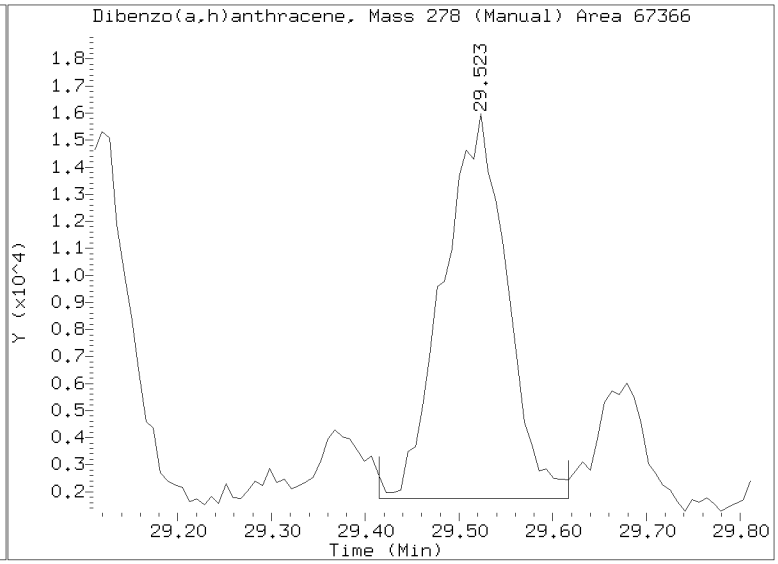
On Column LOD for nt10.i, 20230303A.b\ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230303A.b/NT1003032321.D
Injection Date: 04-MAR-2023 06:28
Lab ID:23A0249-05 Client ID:
Report Date: 07/05/2023 11:29





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1024

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-08 A	SDG:	23A0249
Sampled:	01/12/23 13:35	Prepared:	01/30/23 14:02	File ID:	NT1003032322.D
% Solids:	48.98	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 07:06
Batch:	BLA0673	Sequence:	SLC0162	Initial/Final:	21.16 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00019
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	179		4.2	19.3
106-44-5	4-Methylphenol	1	16.9	J	7.1	19.3
91-20-3	Naphthalene	1	184		4.1	19.3
91-57-6	2-Methylnaphthalene	1	53.5		4.4	19.3
208-96-8	Acenaphthylene	1	6.3	J	6.0	19.3
131-11-3	Dimethylphthalate	1	19.3	U	4.2	19.3
83-32-9	Acenaphthene	1	23.2		5.0	19.3
132-64-9	Dibenzofuran	1	19.3	U	13.6	19.3
86-73-7	Fluorene	1	16.5	J	14.1	19.3
85-01-8	Phenanthrene	1	75.2		8.4	19.3
120-12-7	Anthracene	1	23.6		6.9	19.3
206-44-0	Fluoranthene	1	101		5.9	19.3
129-00-0	Pyrene	1	161		5.5	19.3
85-68-7	Butylbenzylphthalate	1	19.3	U	9.1	19.3
56-55-3	Benzo(a)anthracene	1	59.9		5.8	19.3
218-01-9	Chrysene	1	102		5.8	19.3
117-81-7	bis(2-Ethylhexyl)phthalate	1	41.9	J	5.3	48.2
	Benzofluoranthenes, Total	1	151		9.6	38.6
50-32-8	Benzo(a)pyrene	1	68.1		4.1	19.3
193-39-5	Indeno(1,2,3-cd)pyrene	1	43.1		14.1	19.3
53-70-3	Dibenzo(a,h)anthracene	1	19.3	U	16.6	19.3
191-24-2	Benzo(g,h,i)perylene	1	57.5		13.1	19.3

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	723.65	539	74.5	27 - 120	
Phenol-d5	723.65	587	81.1	29 - 120	
2-Chlorophenol-d4	723.65	602	83.2	31 - 120	
1,2-Dichlorobenzene-d4	482.43	350	72.4	32 - 120	
Nitrobenzene-d5	482.43	388	80.5	30 - 120	
2-Fluorobiphenyl	482.43	417	86.4	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1024

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

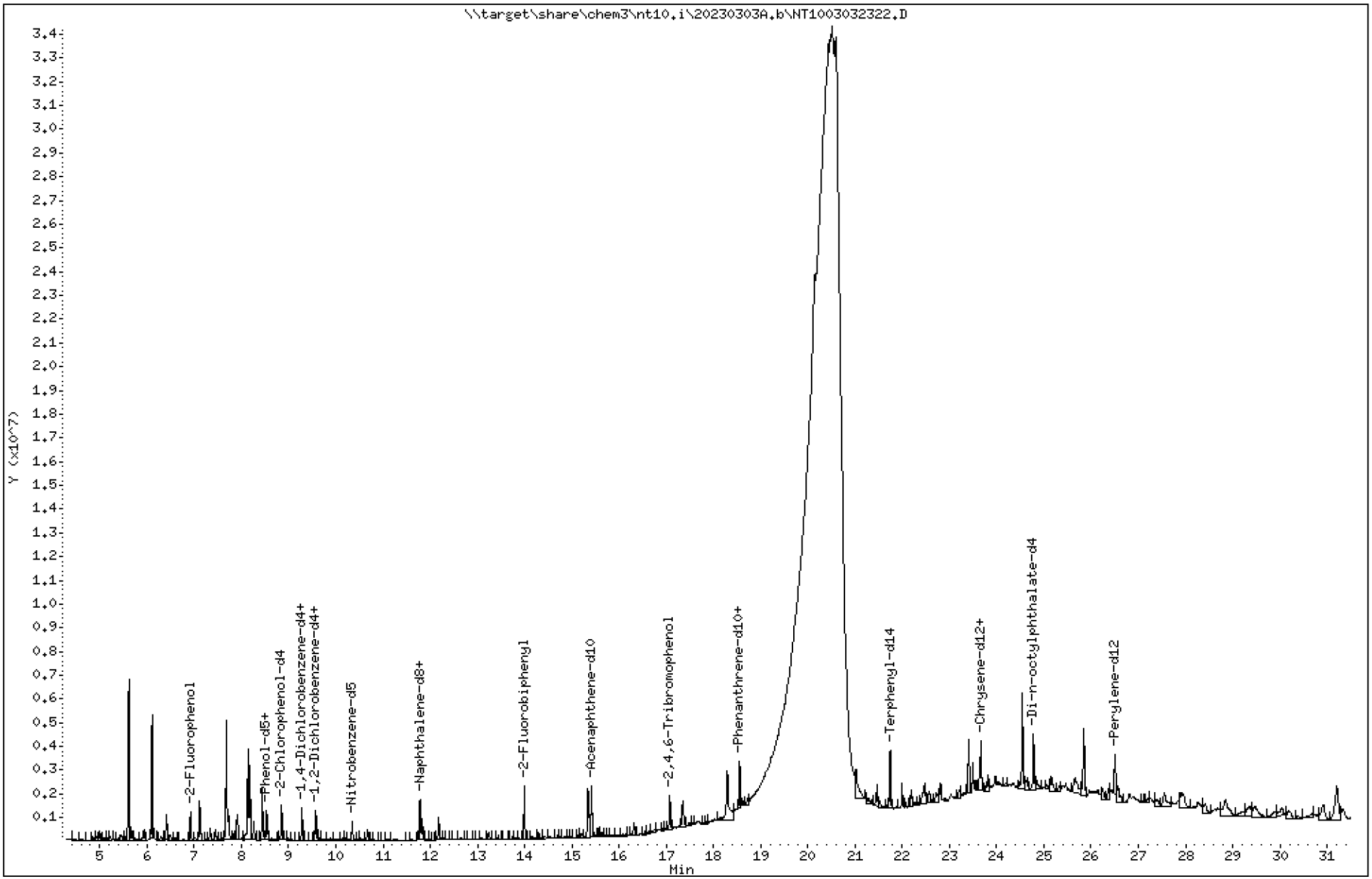
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-08 A	SDG:	23A0249
Sampled:	01/12/23 13:35	Prepared:	01/30/23 14:02	File ID:	NT1003032322.D
% Solids:	48.98	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 07:06
Batch:	BLA0673	Sequence:	SLC0162	Initial/Final:	21.16 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00019
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	723.65	572	79.0	24 - 134	
p-Terphenyl-d14	482.43	397	82.2	37 - 120	

Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032322.D
Date : 04-MAR-2023 07:06
Client ID:
Sample Info: 23A0249-08
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

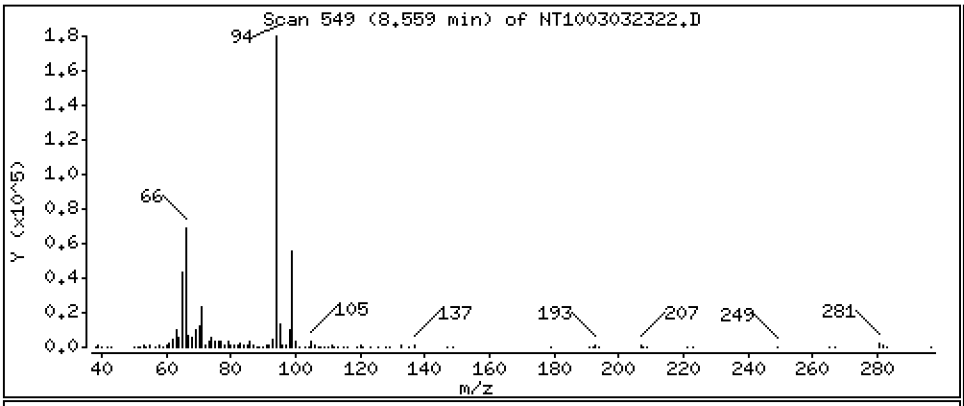
Operator: VTS

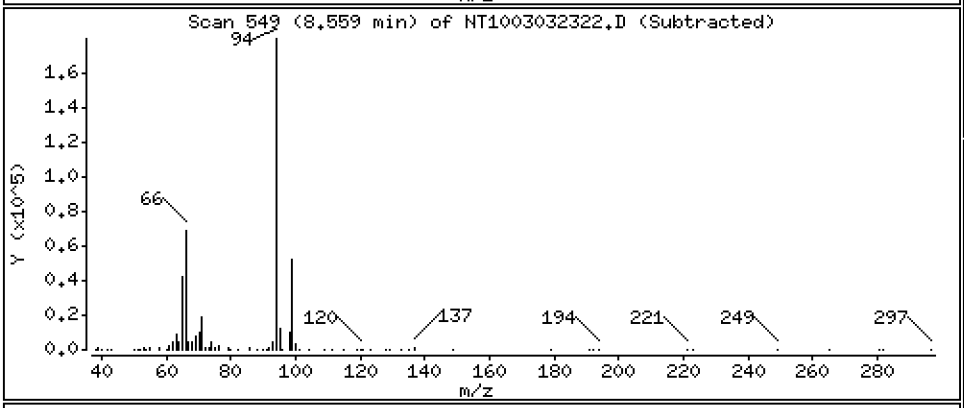
Column phase: ZB-5msi

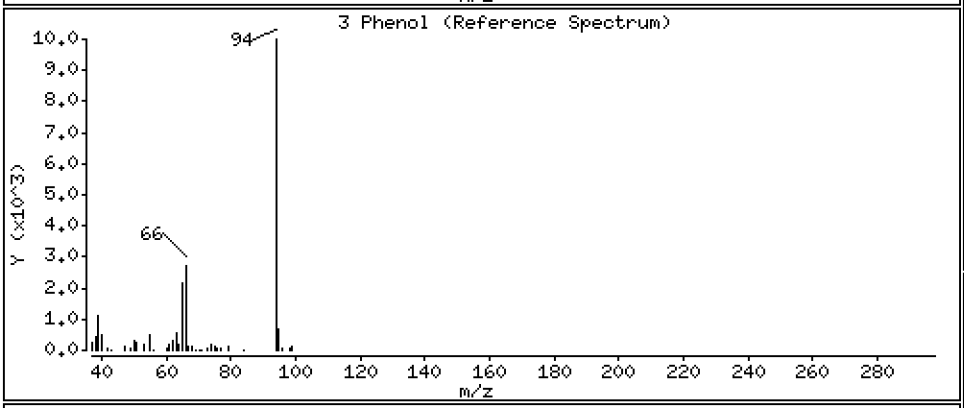
Column diameter: 0.25

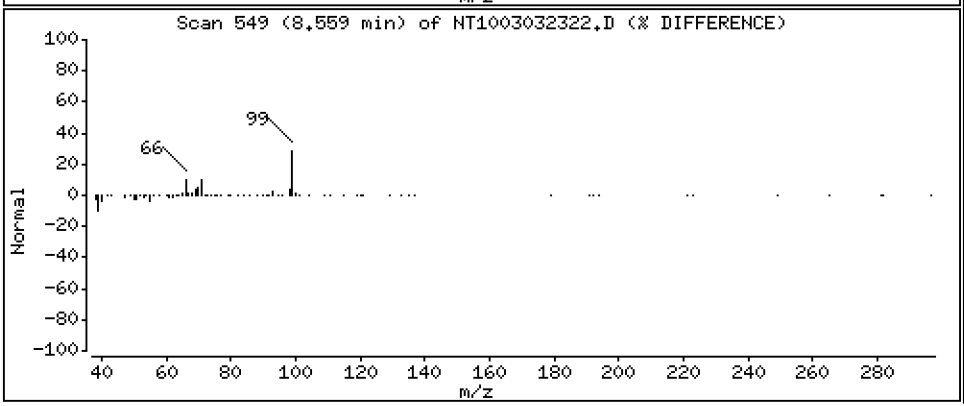
3 Phenol

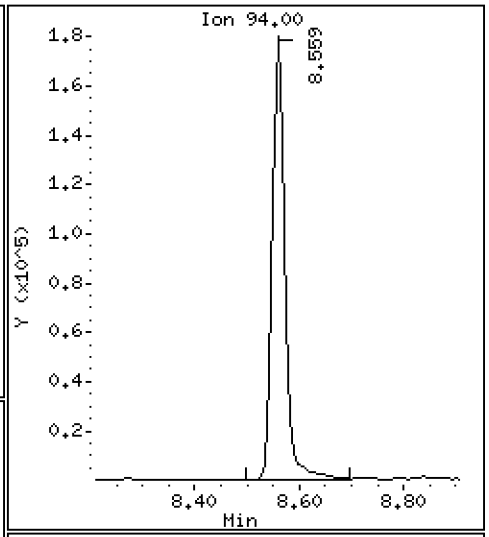
Concentration: 1.852 ug/ml

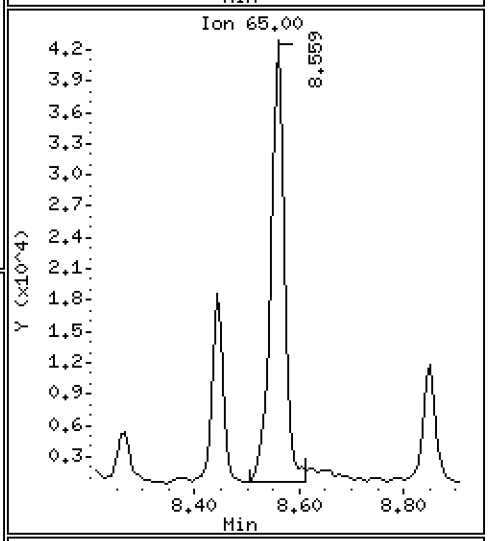


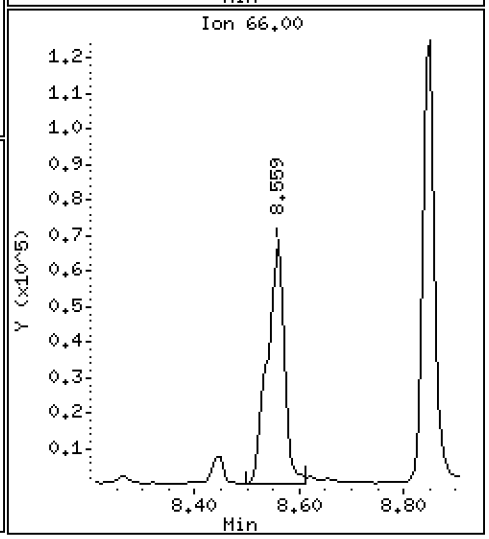












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

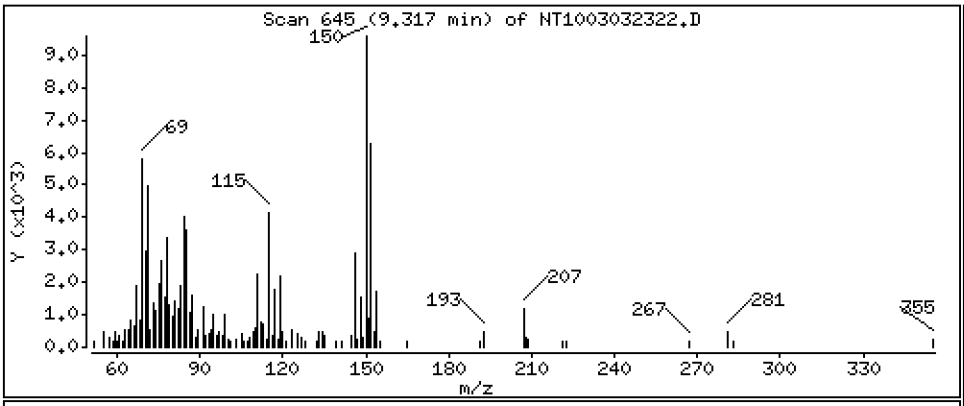
Operator: VTS

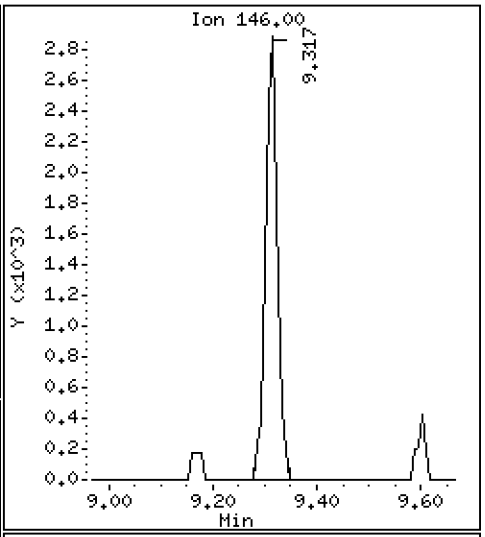
Column phase: ZB-5msi

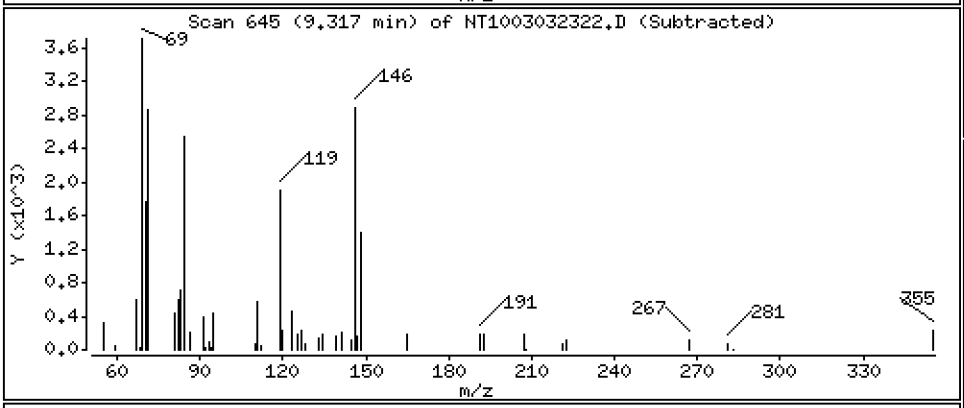
Column diameter: 0.25

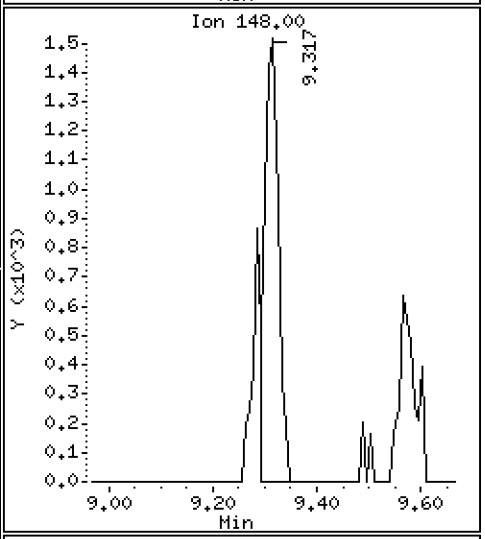
9 1,4-Dichlorobenzene

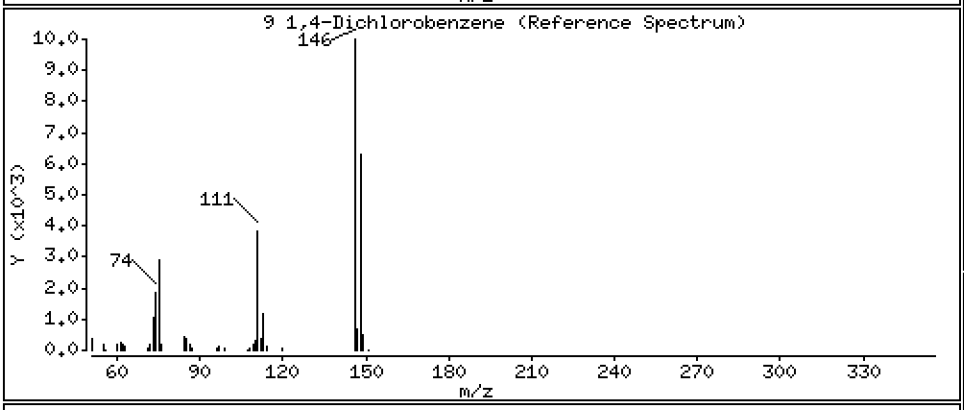
Concentration: 0.03045 ug/ml

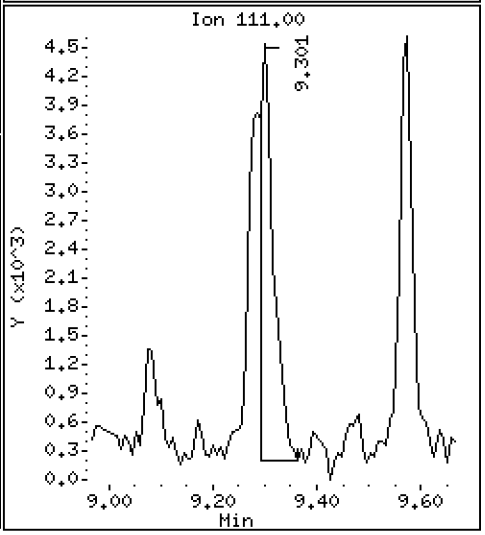


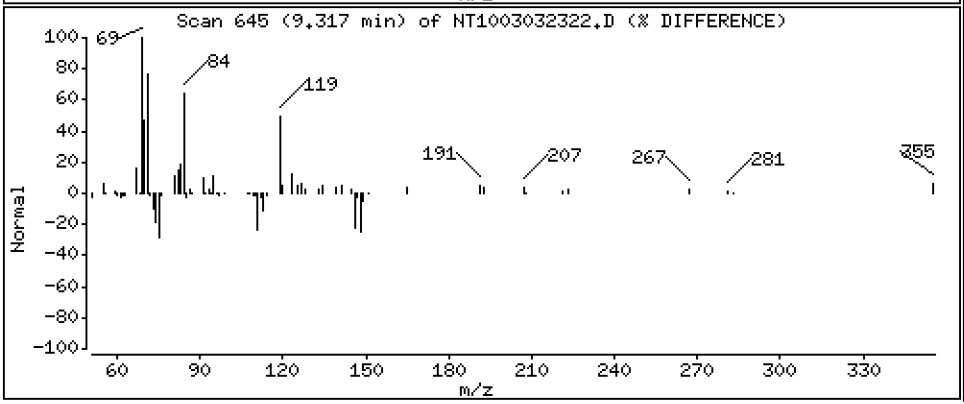












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

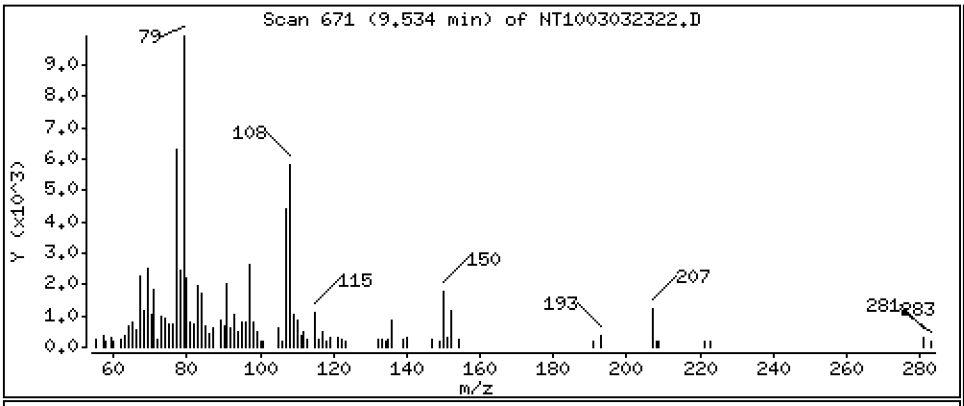
Operator: VTS

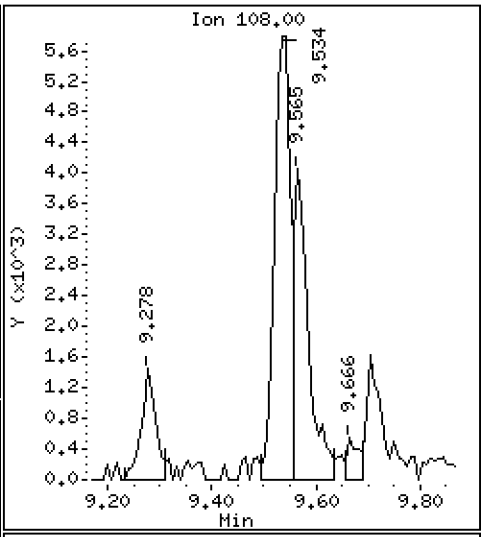
Column phase: ZB-5msi

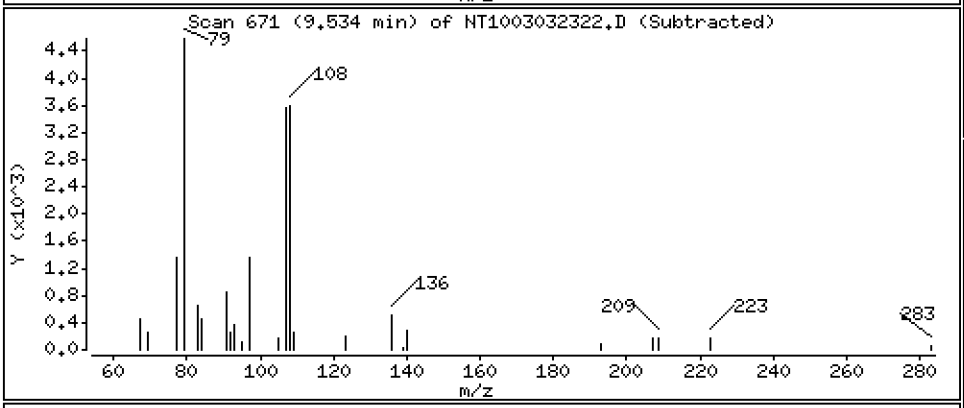
Column diameter: 0.25

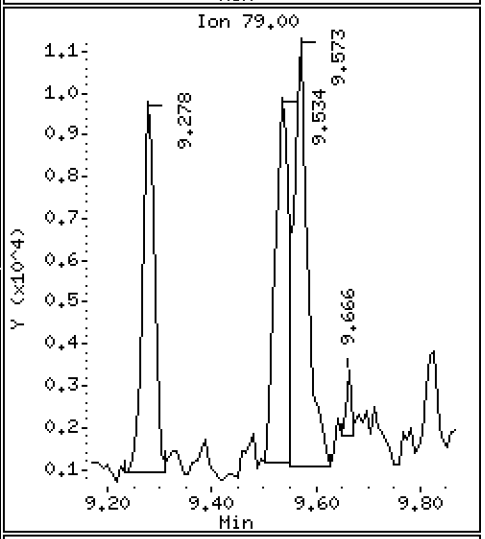
11 Benzyl alcohol

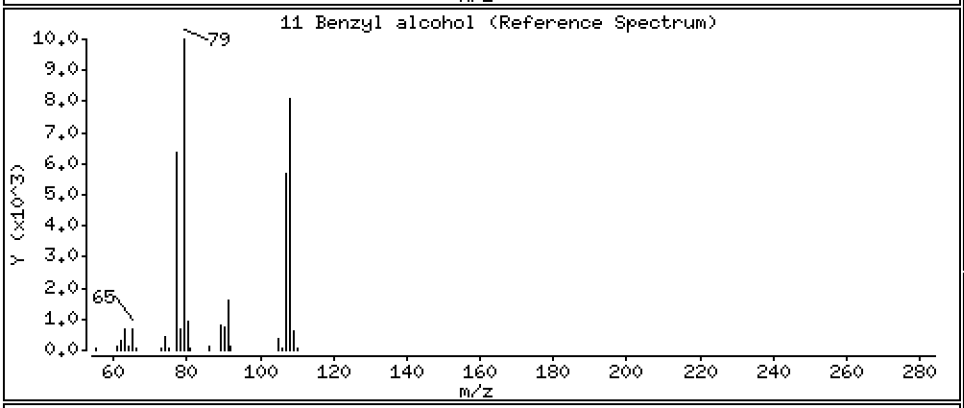
Concentration: 0.1615 ug/ml

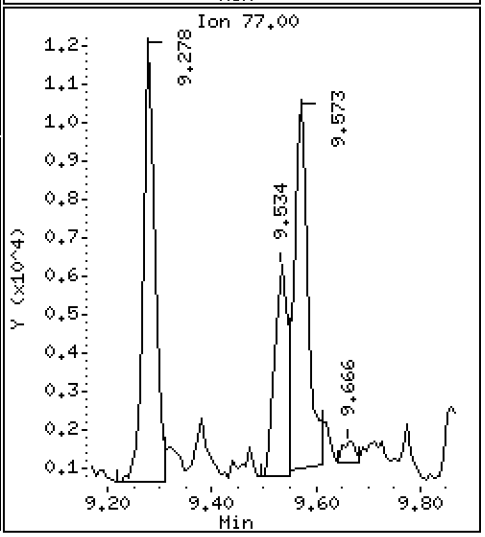


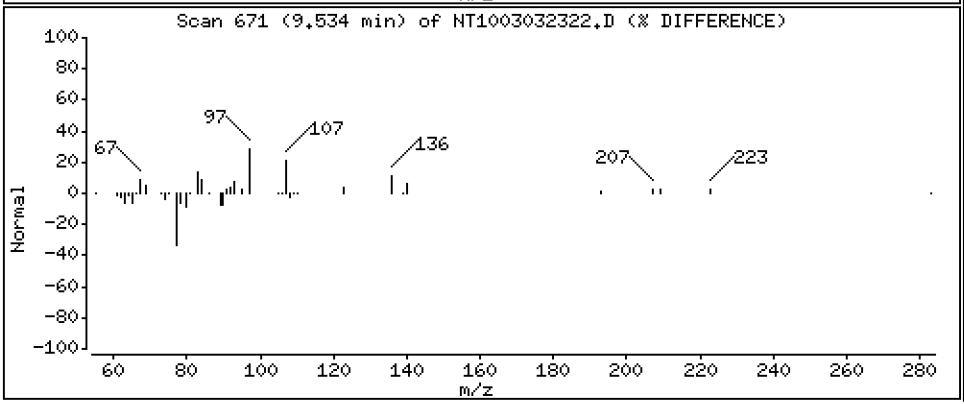












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

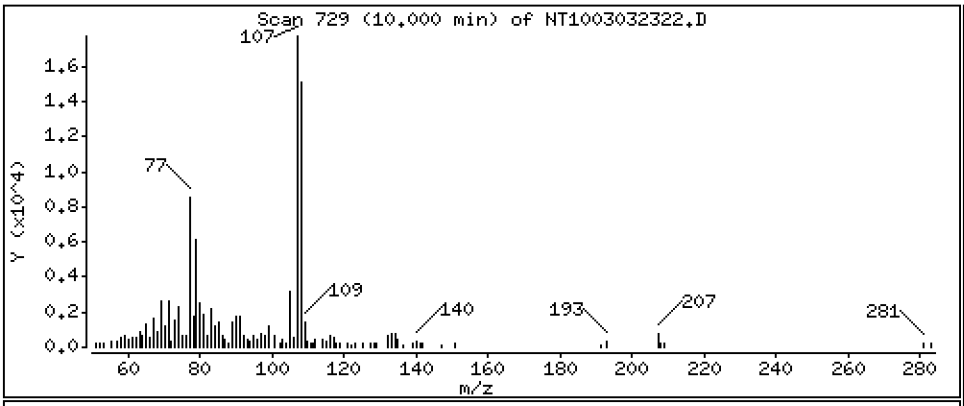
Operator: VTS

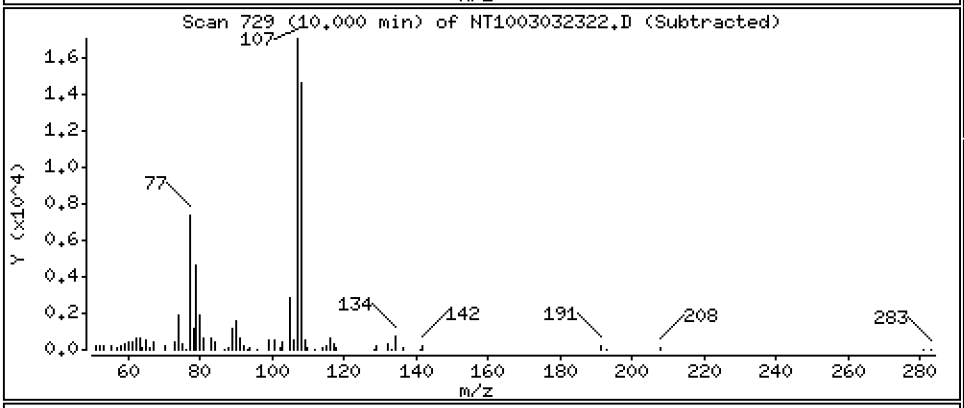
Column phase: ZB-5msi

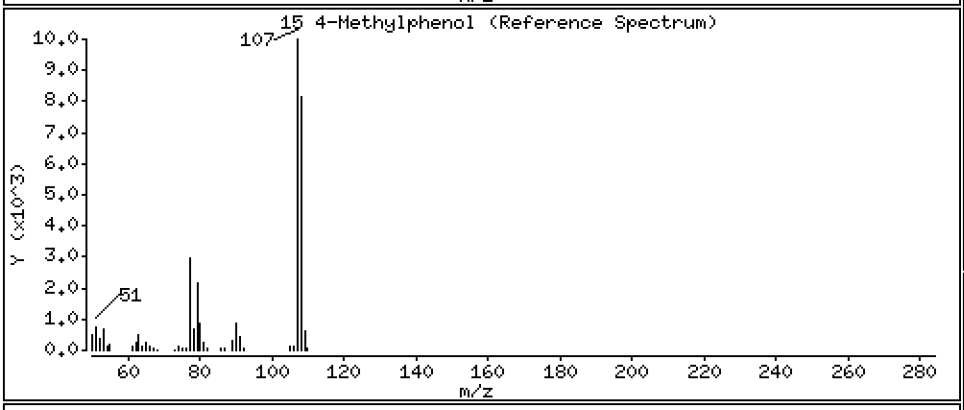
Column diameter: 0.25

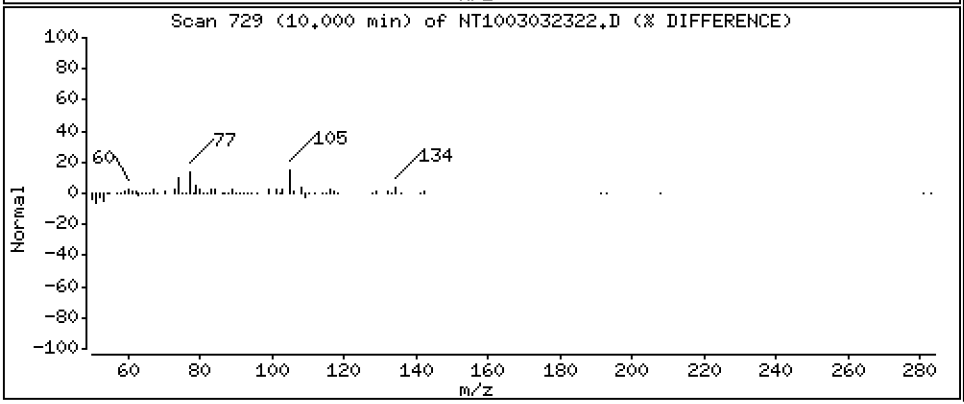
15 4-Methylphenol

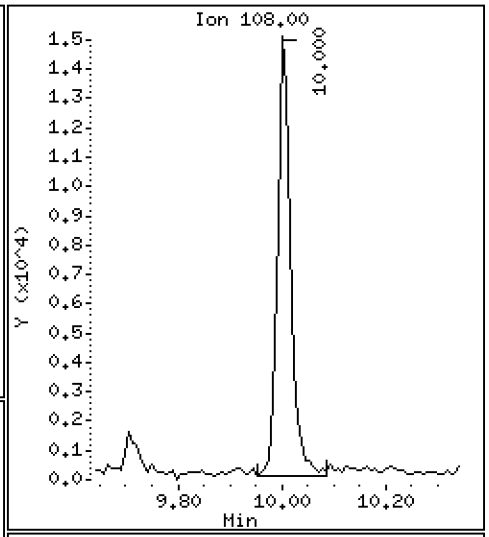
Concentration: 0.1751 ug/ml

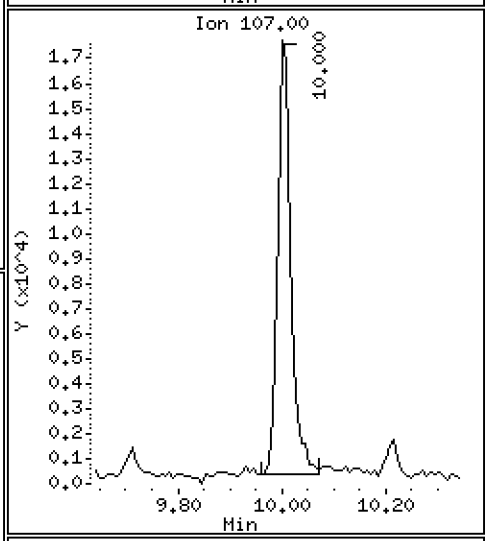


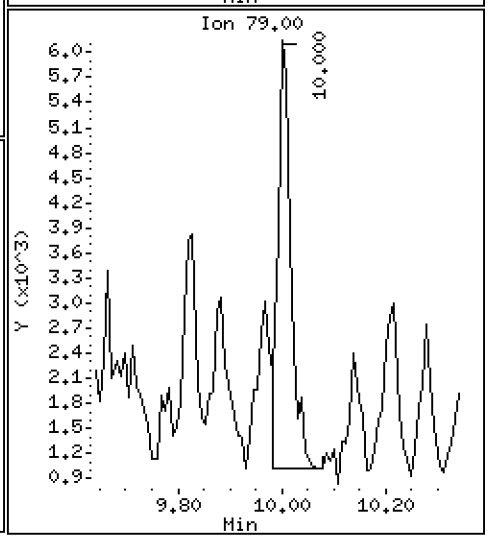












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

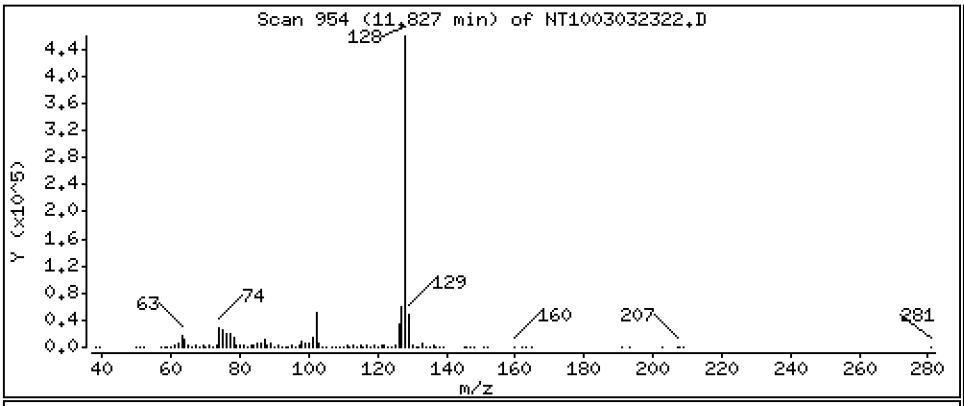
Operator: VTS

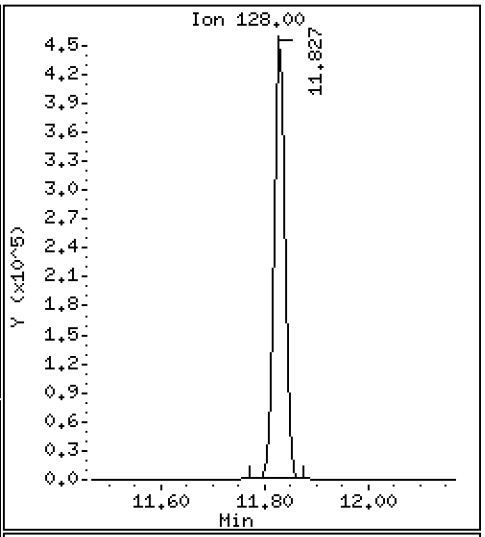
Column phase: ZB-5msi

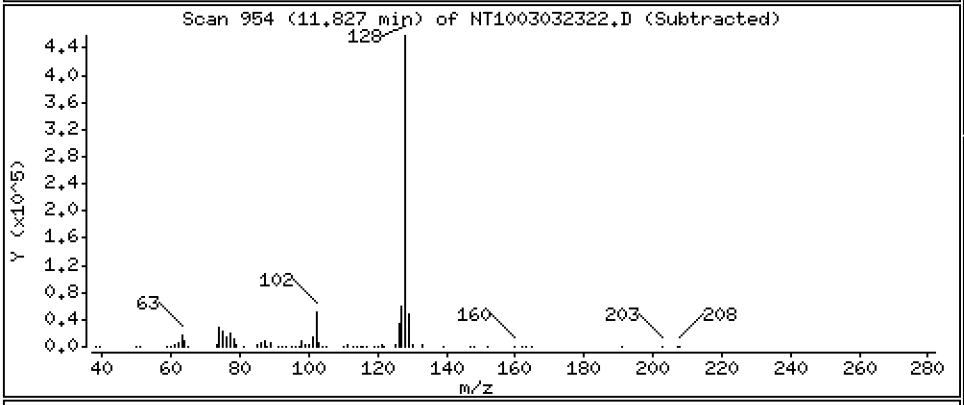
Column diameter: 0.25

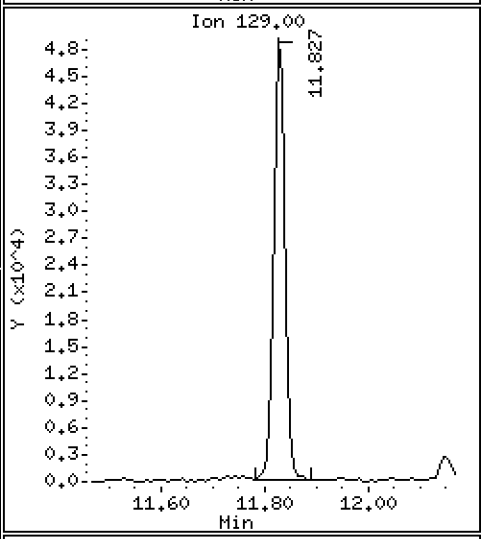
28 Naphthalene

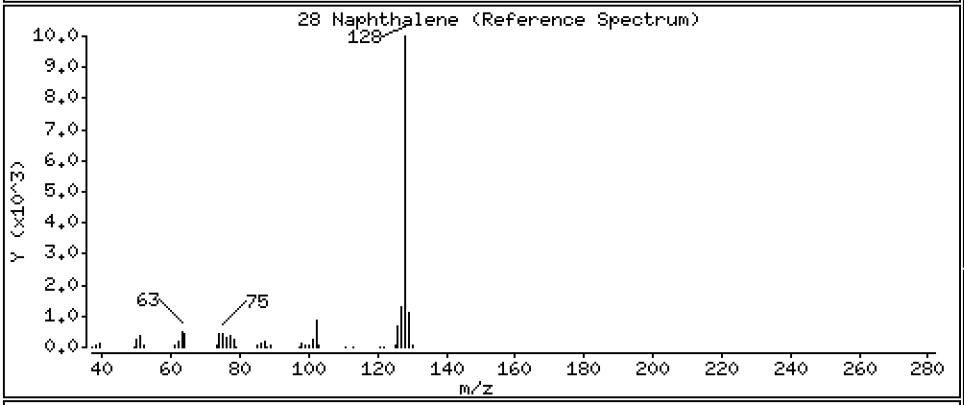
Concentration: 1.909 ug/ml

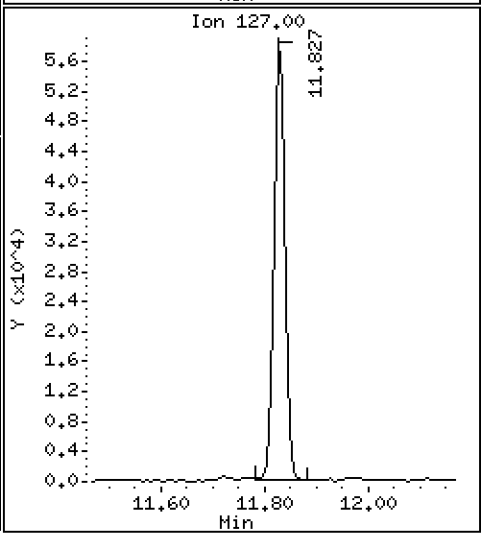


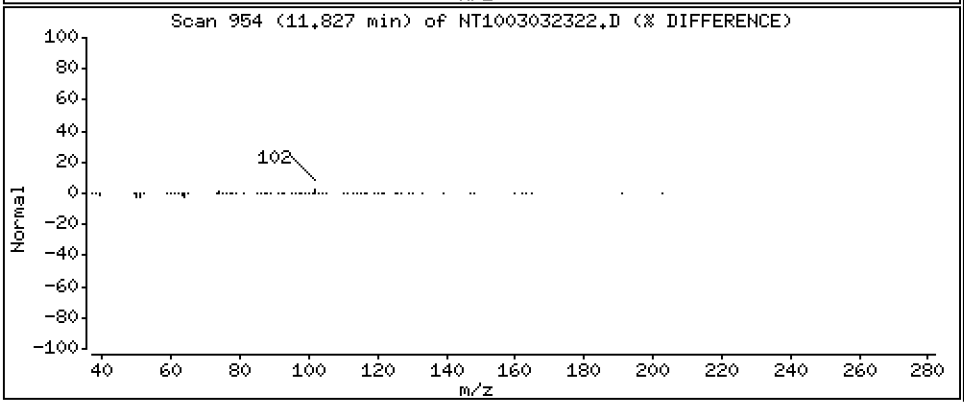












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032322.D

Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

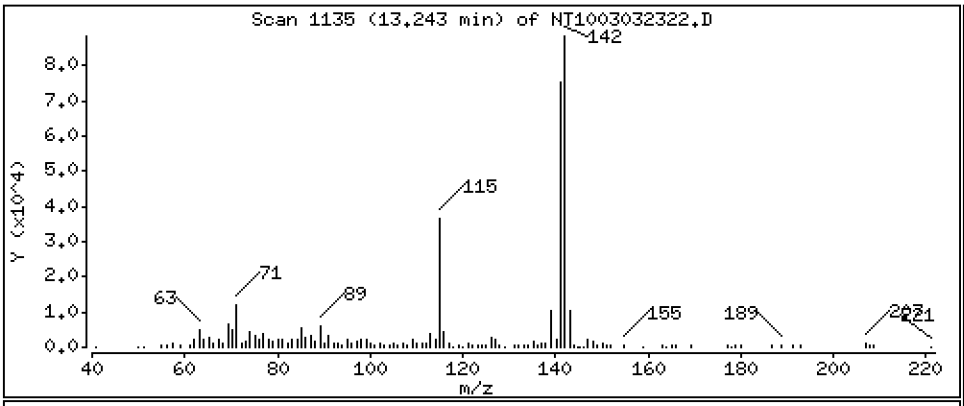
Operator: VTS

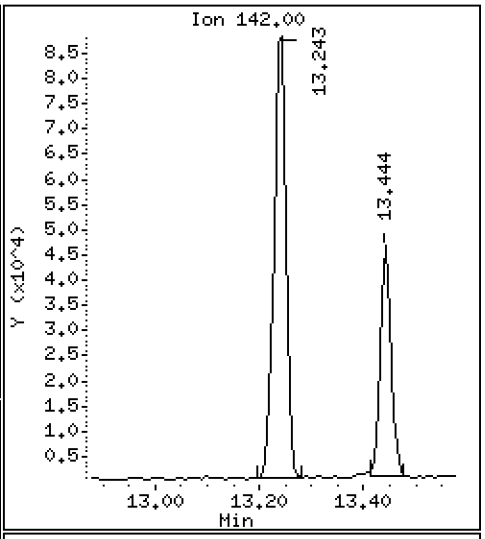
Column phase: ZB-5msi

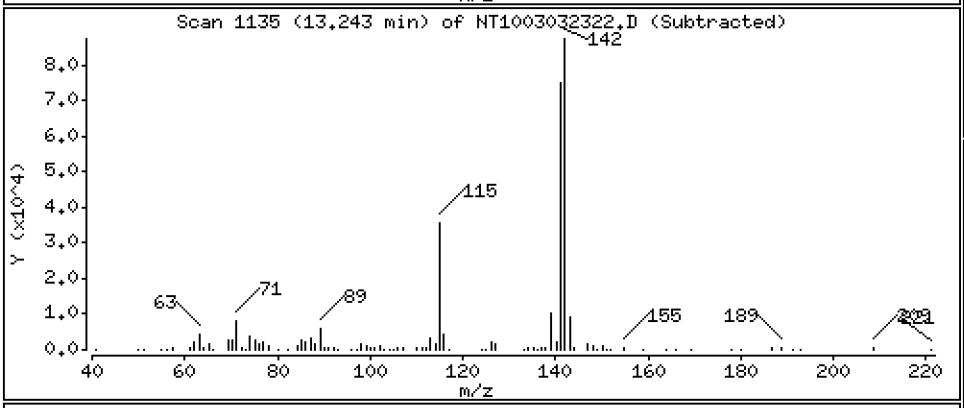
Column diameter: 0.25

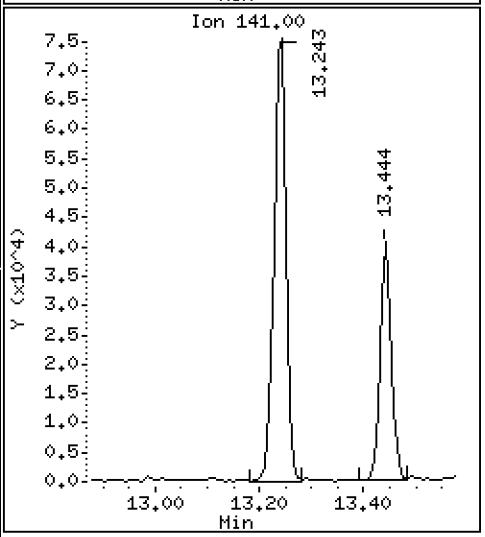
32 2-Methylnaphthalene

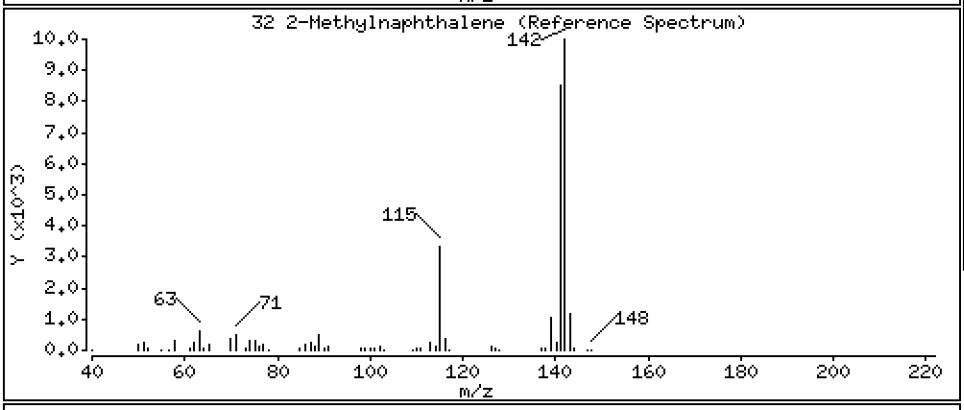
Concentration: 0.5550 ug/ml

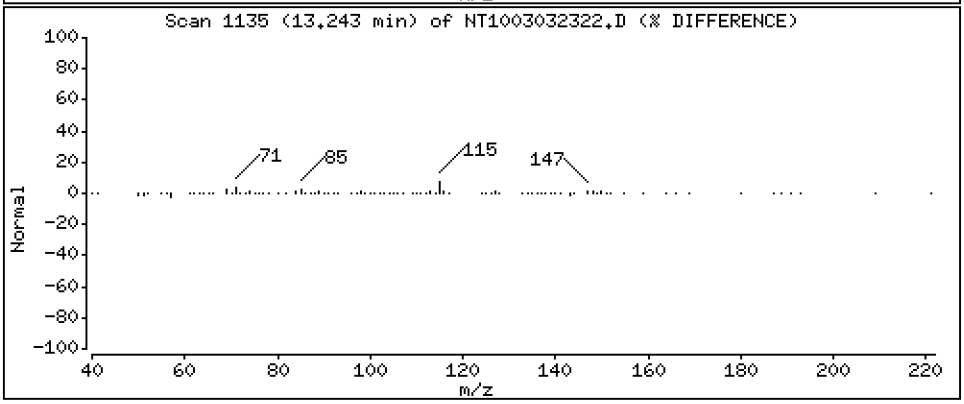












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

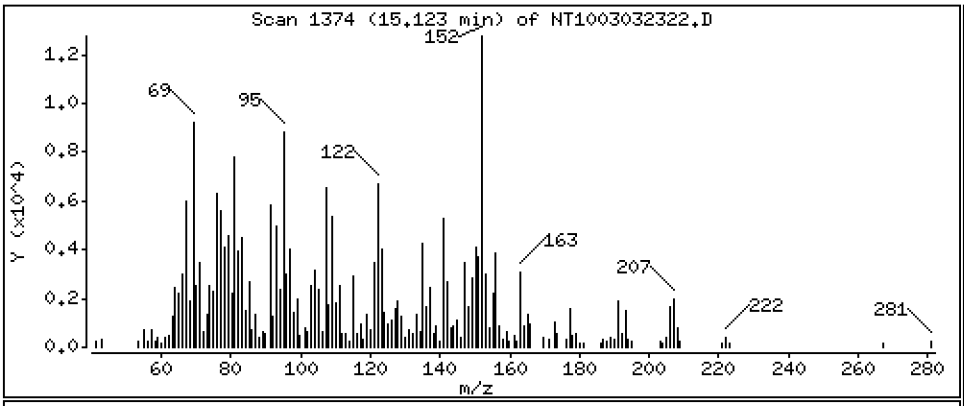
Operator: VTS

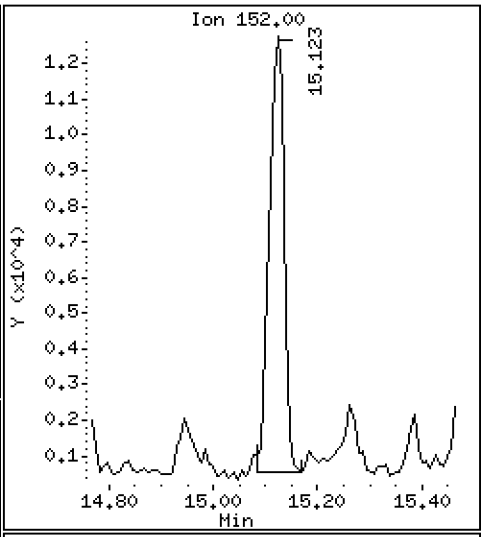
Column phase: ZB-5msi

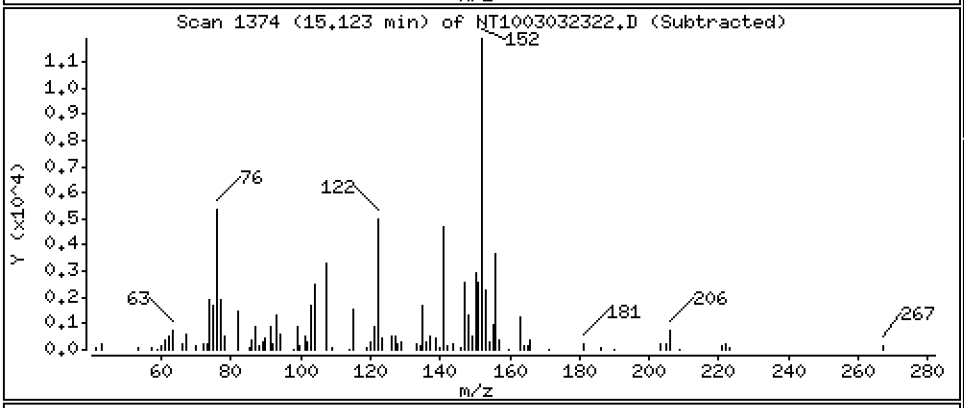
Column diameter: 0.25

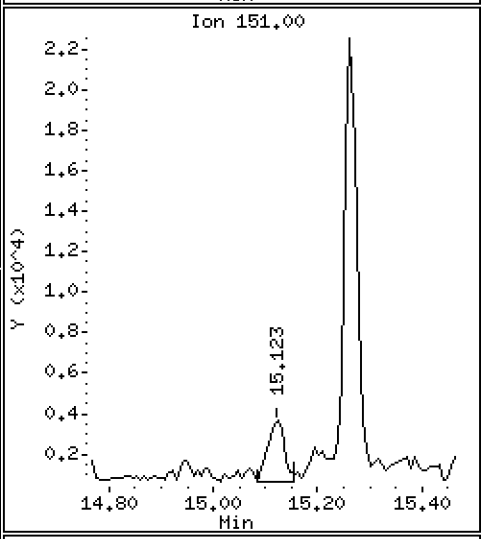
40 Acenaphthylene

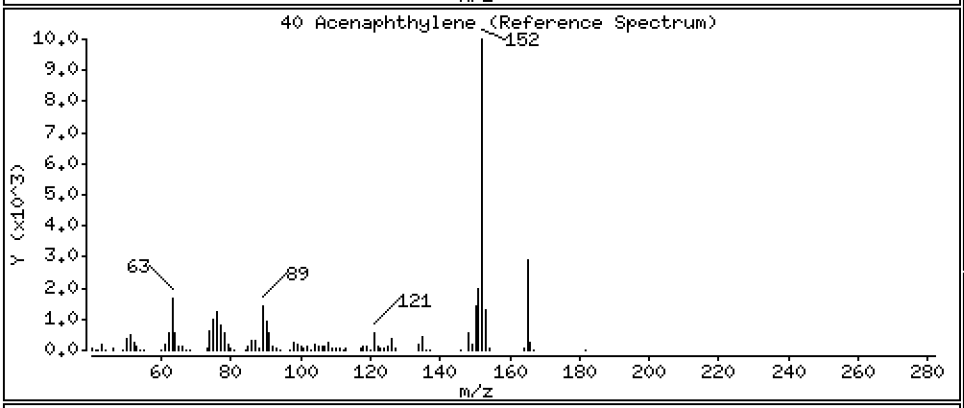
Concentration: 0.06521 ug/ml

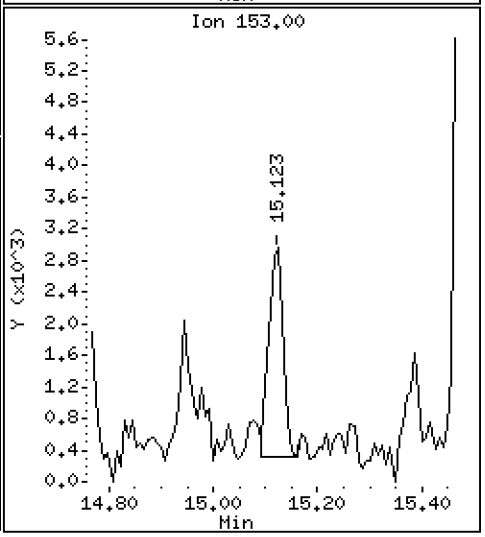


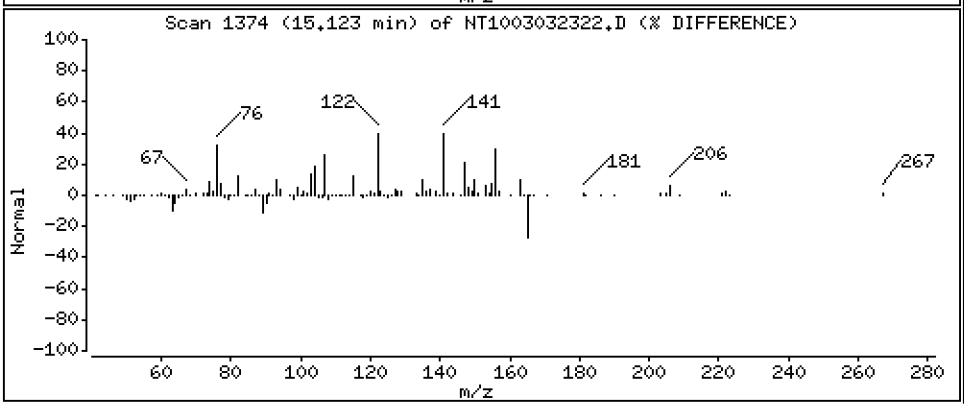












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

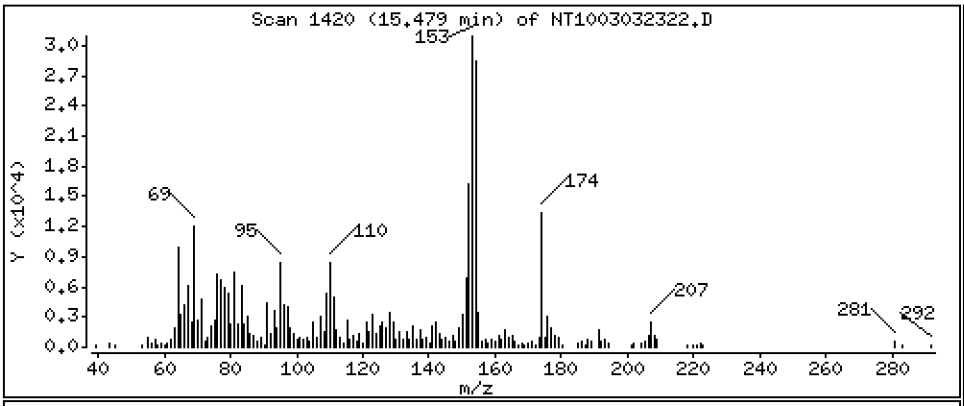
Operator: VTS

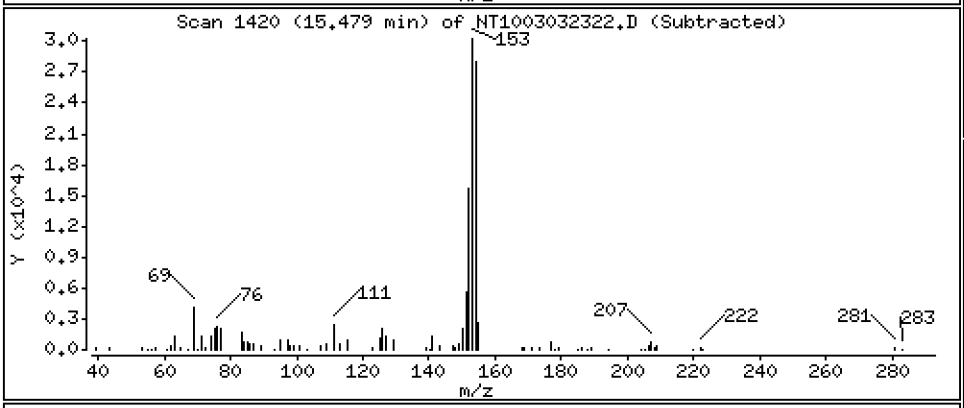
Column phase: ZB-5msi

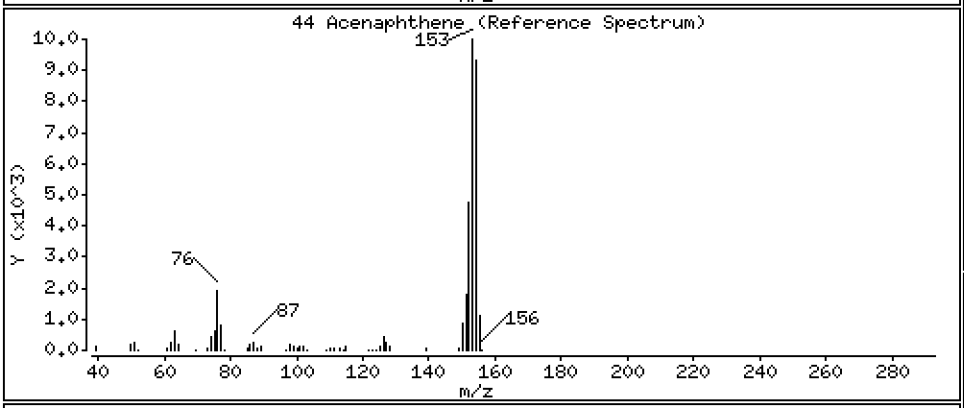
Column diameter: 0.25

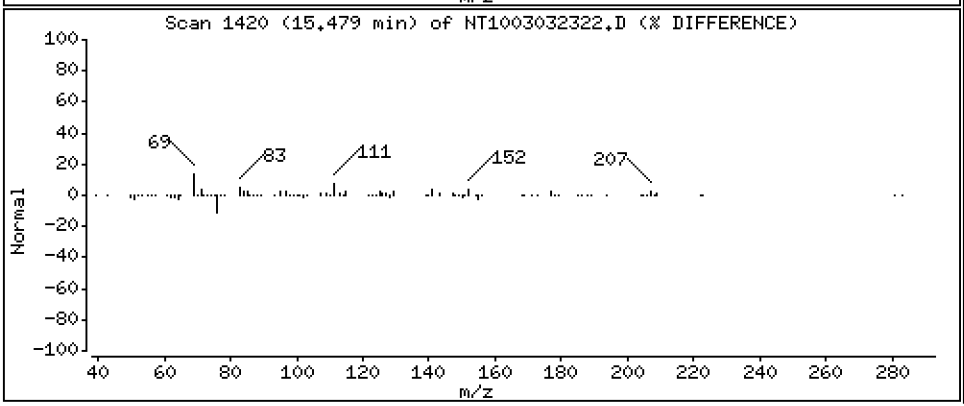
44 Acenaphthene

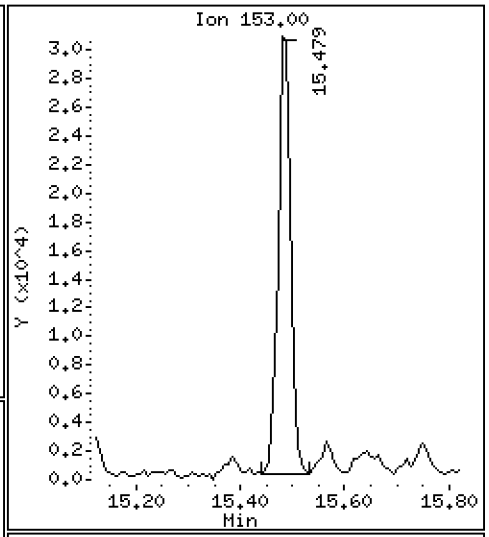
Concentration: 0.2405 ug/ml

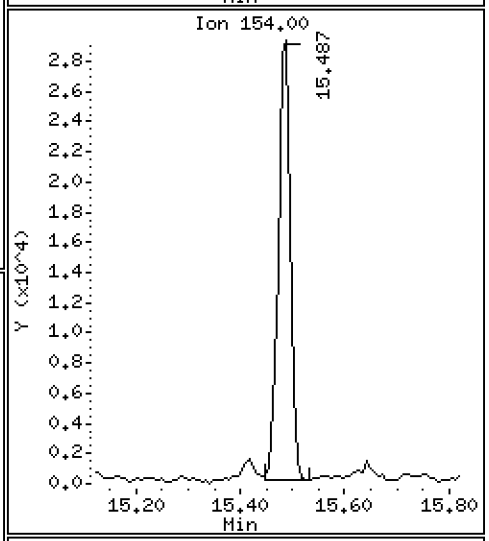


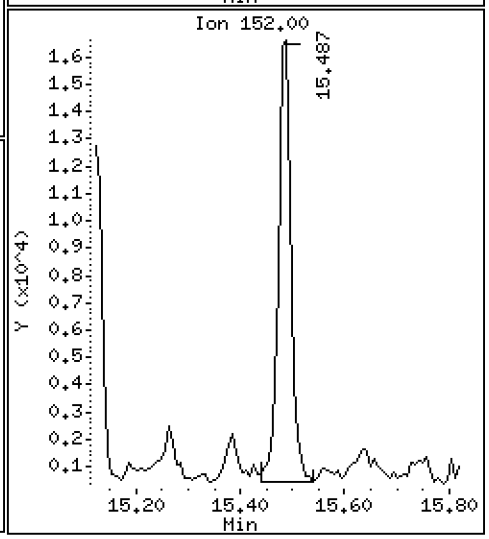












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

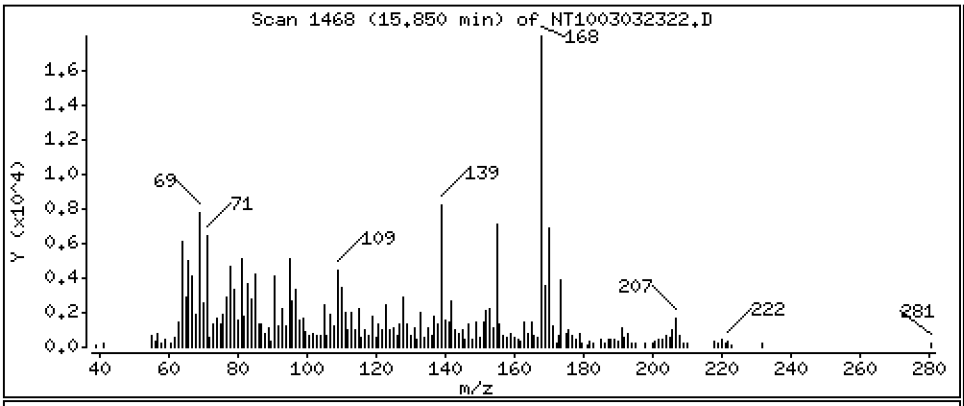
Operator: VTS

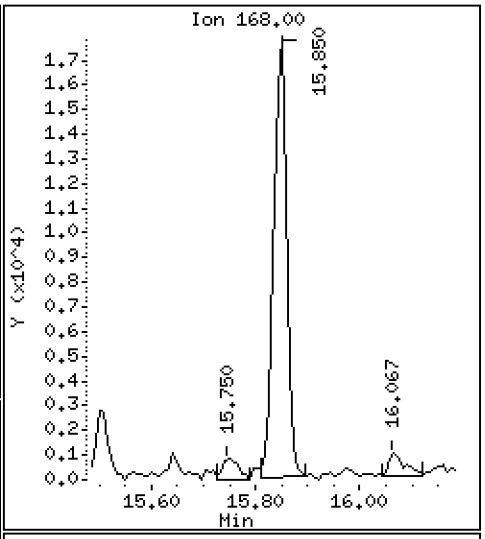
Column phase: ZB-5msi

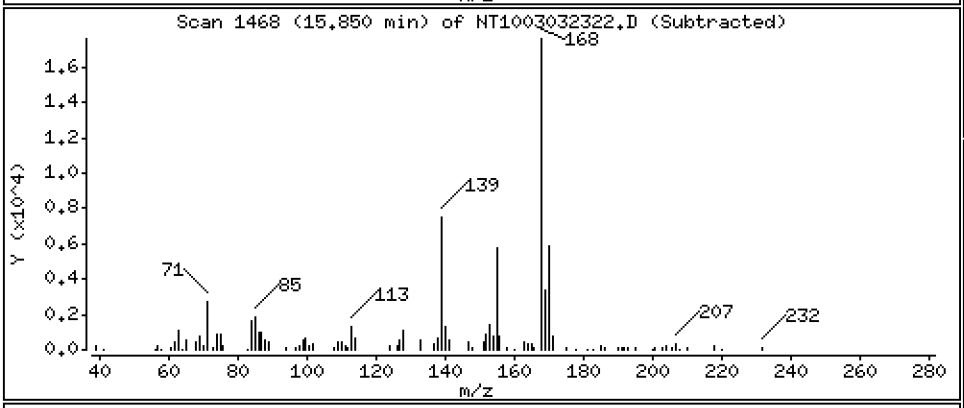
Column diameter: 0.25

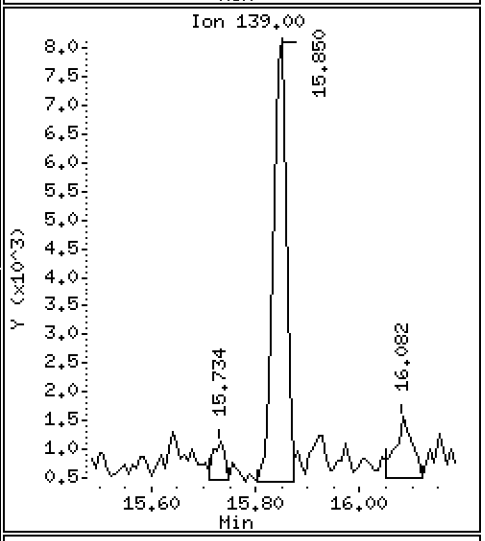
46 Dibenzofuran

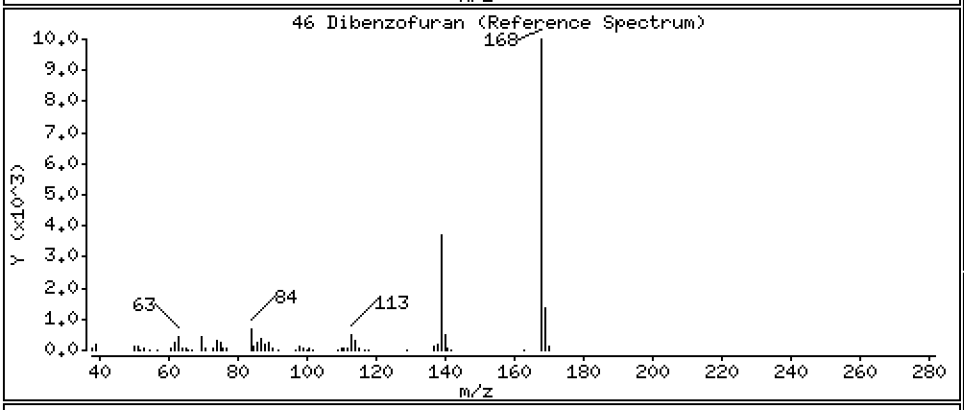
Concentration: 0.09299 ug/ml

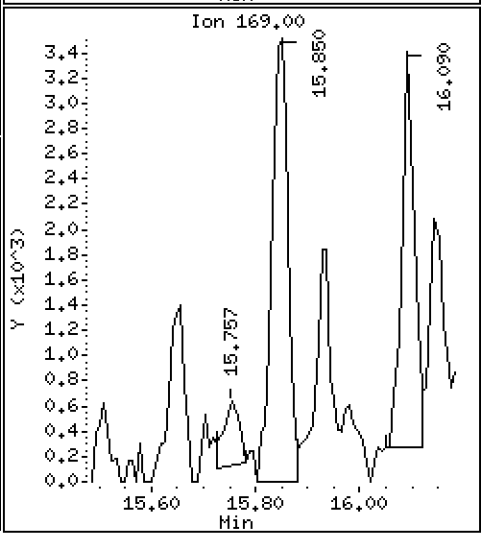


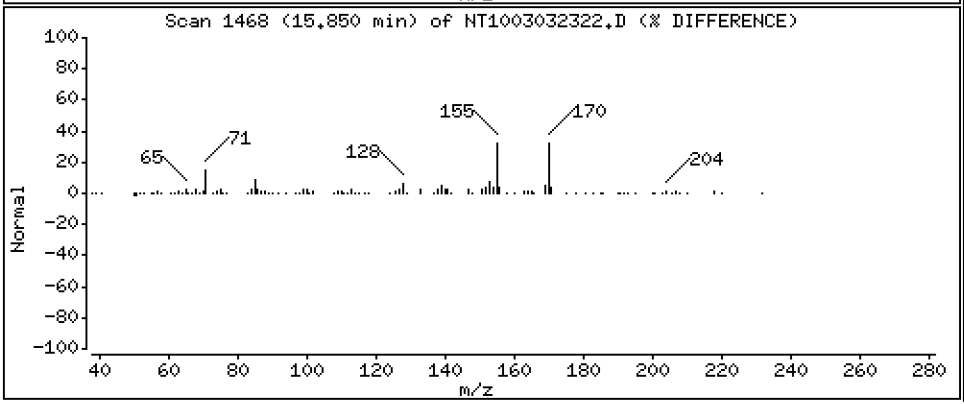












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

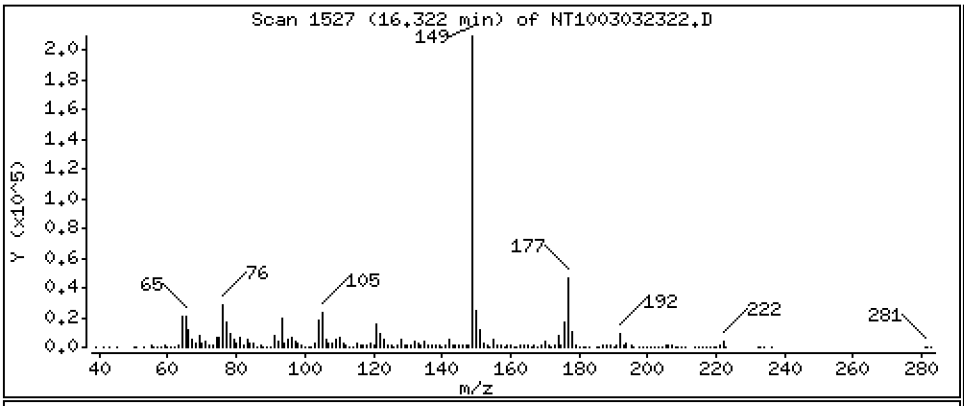
Operator: VTS

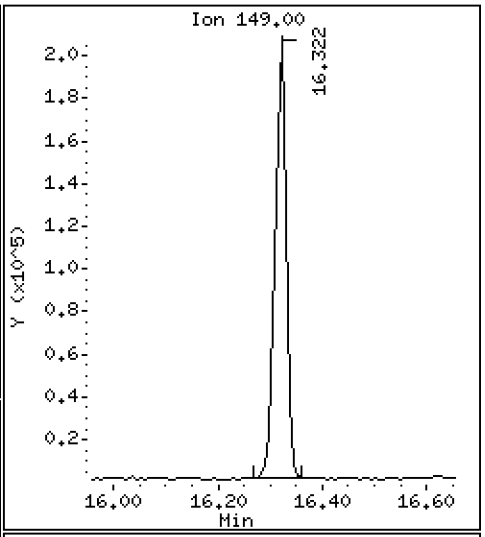
Column phase: ZB-5msi

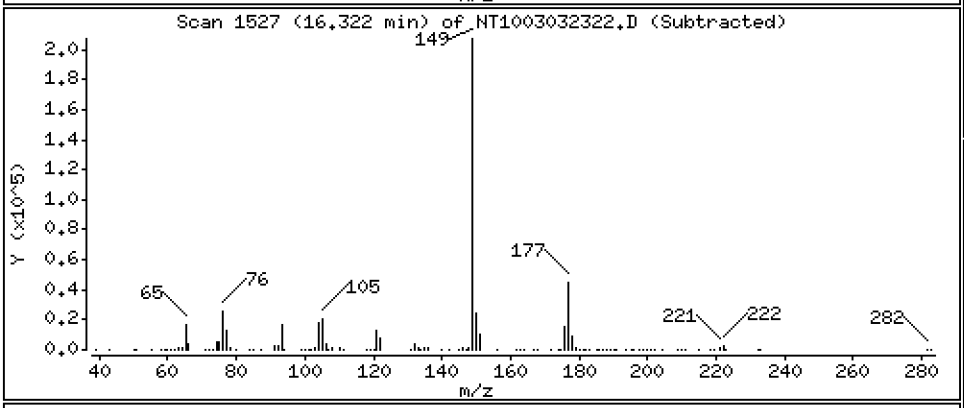
Column diameter: 0.25

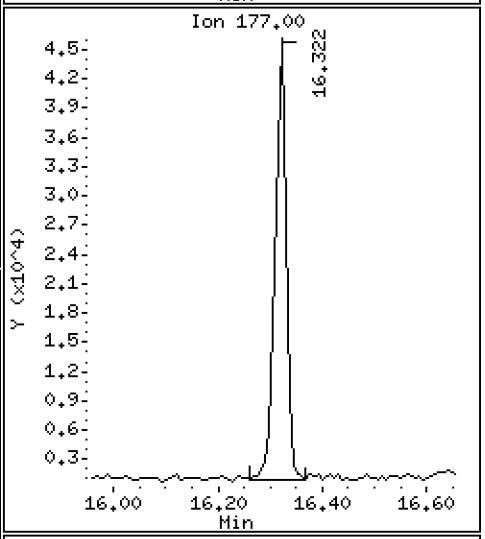
50 Diethylphthalate

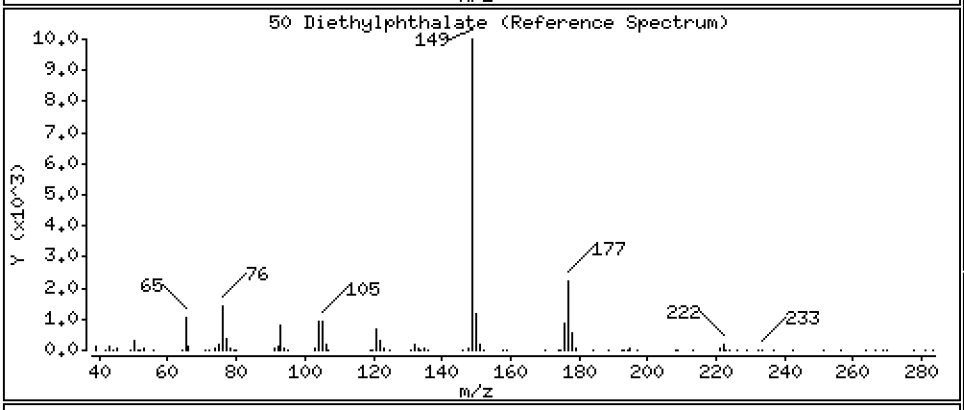
Concentration: 1.174 ug/ml

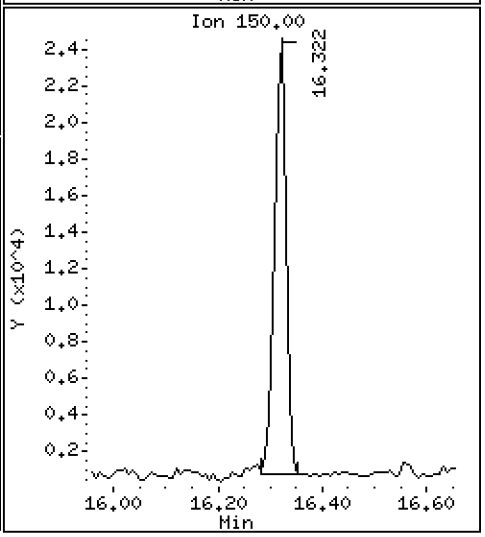


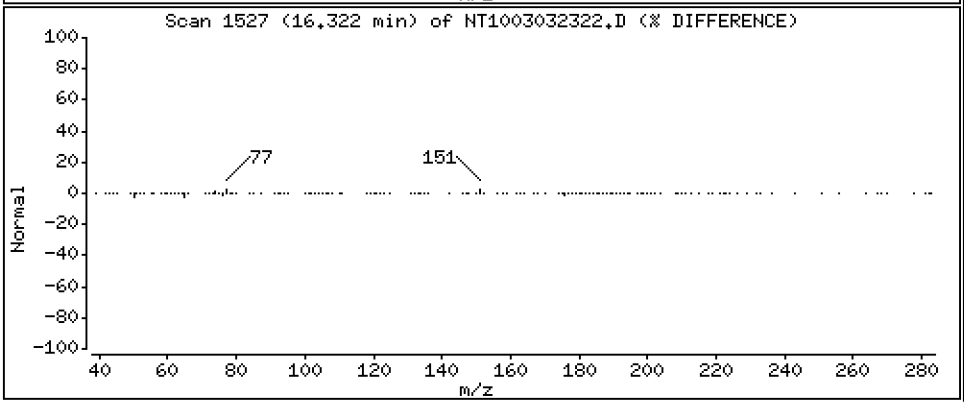












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

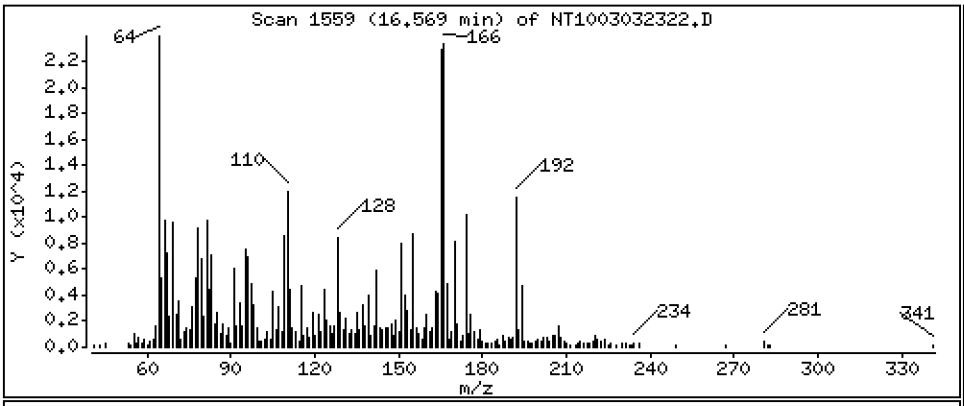
Operator: VTS

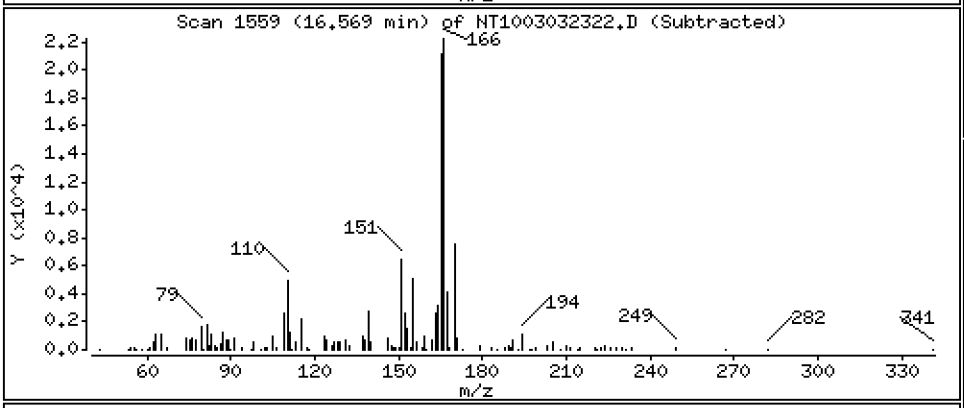
Column phase: ZB-5msi

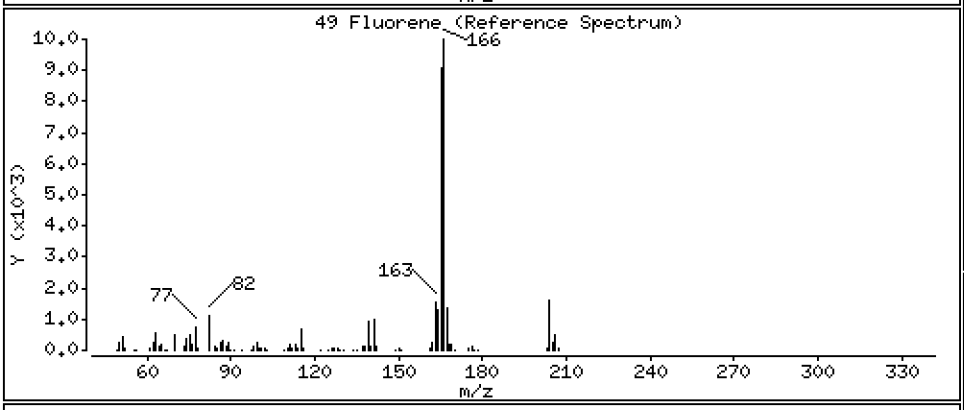
Column diameter: 0.25

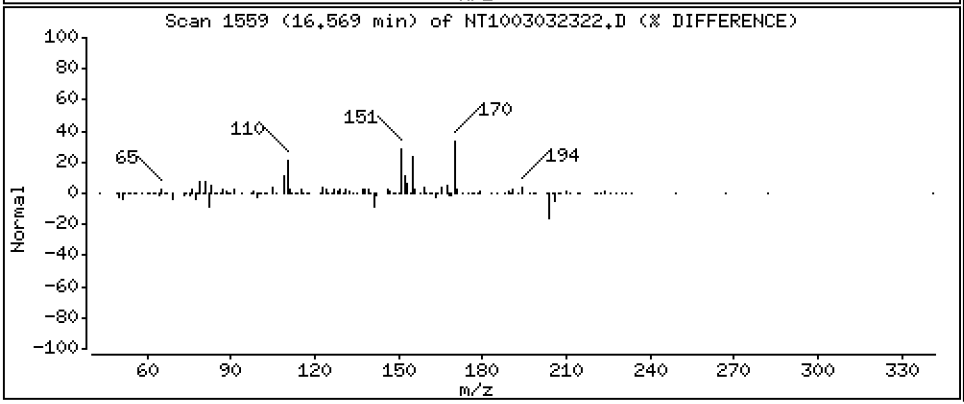
49 Fluorene

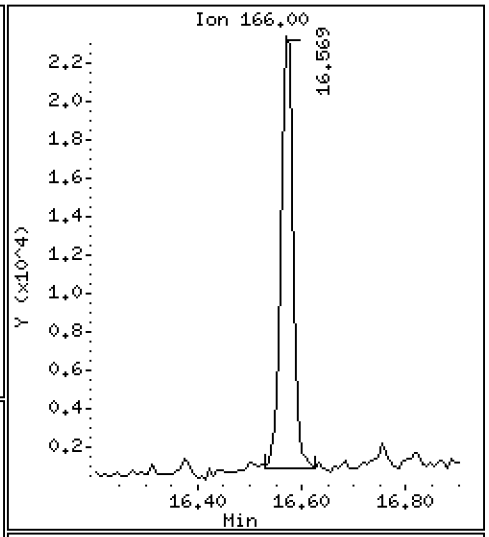
Concentration: 0.1715 ug/ml

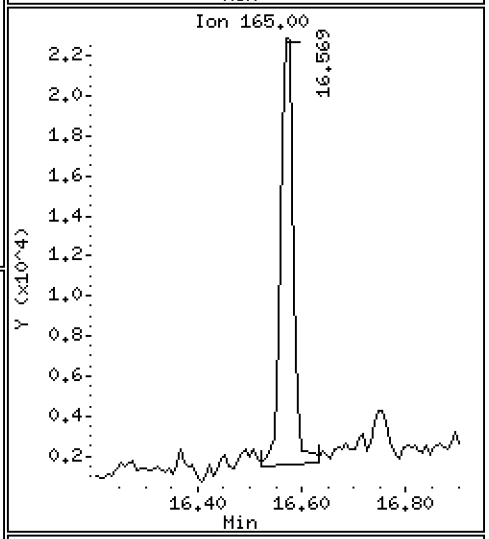


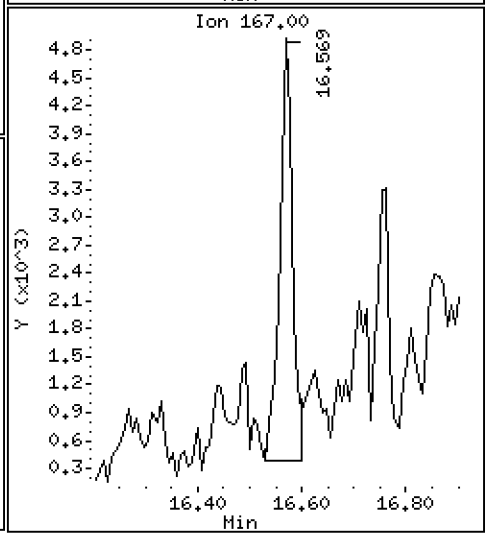












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

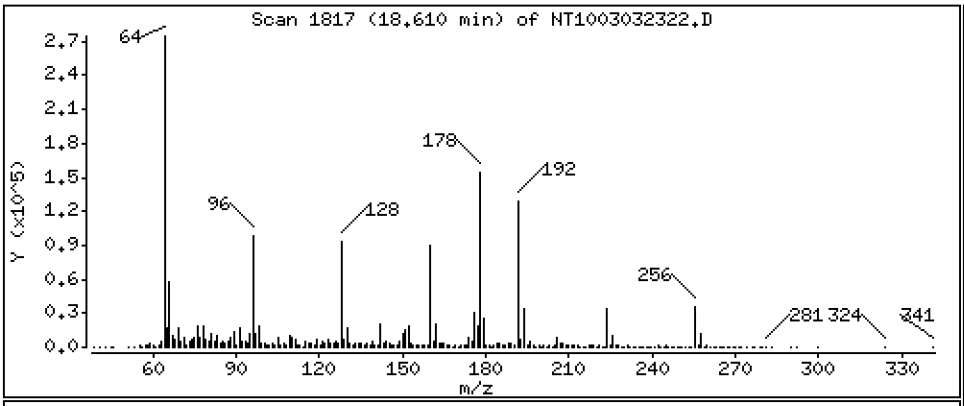
Operator: VTS

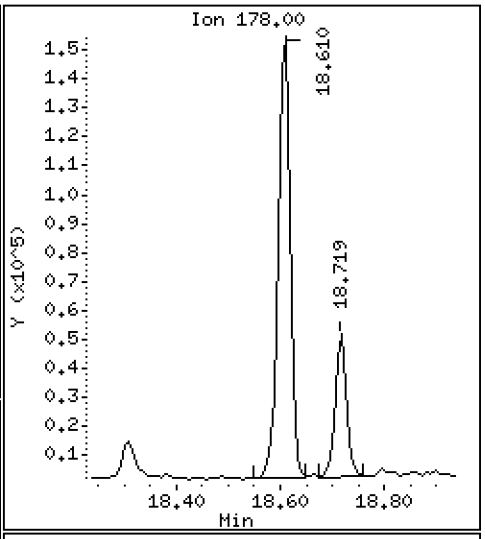
Column phase: ZB-5msi

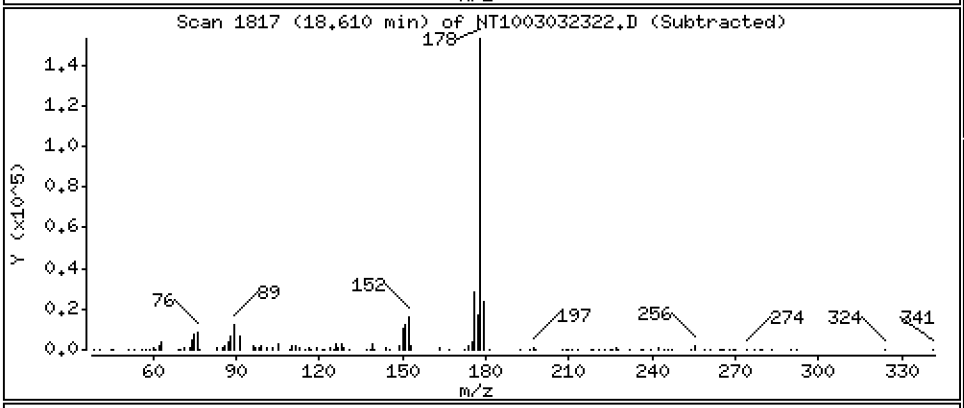
Column diameter: 0.25

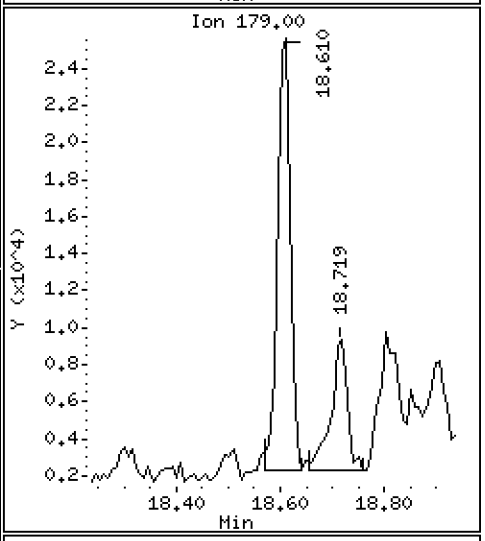
60 Phenanthrene

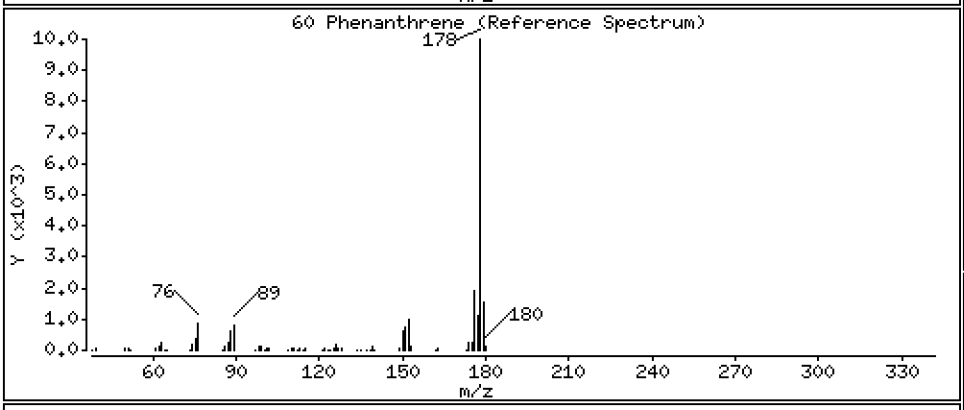
Concentration: 0.7794 ug/ml

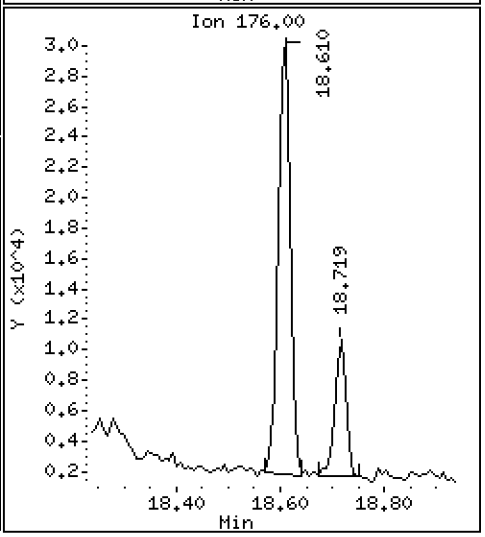


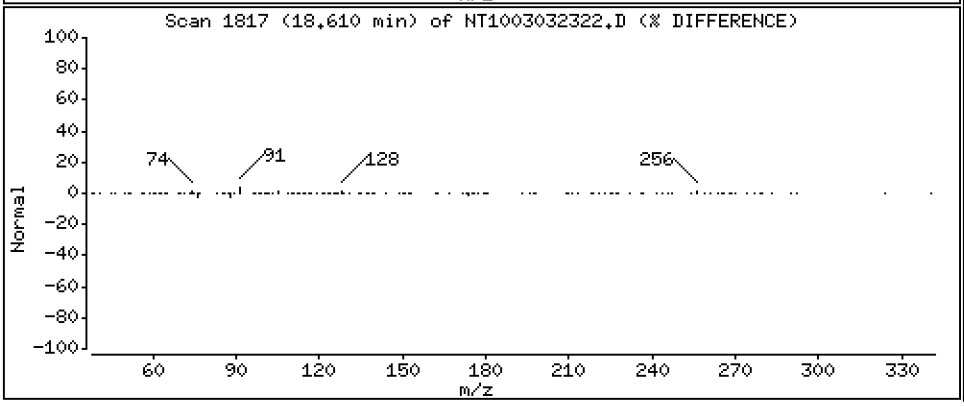












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

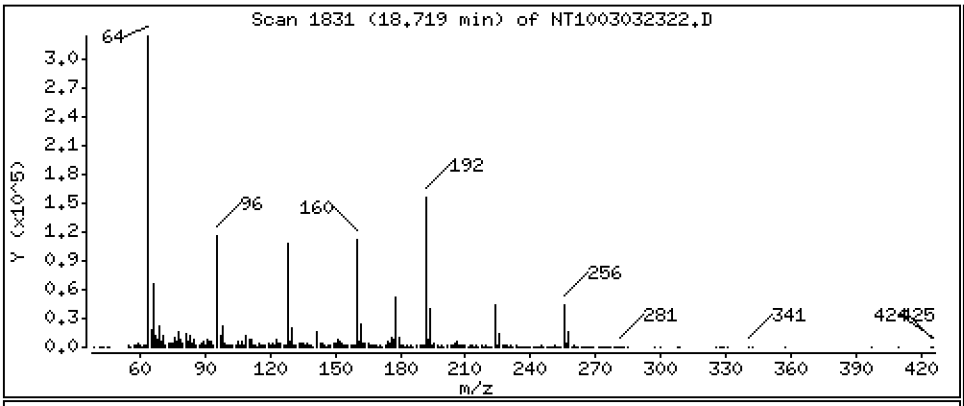
Operator: VTS

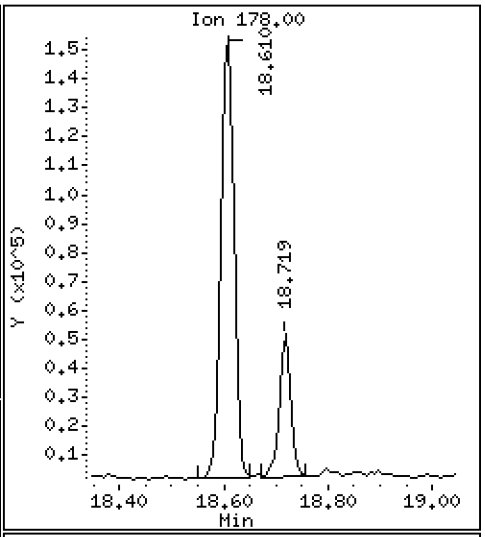
Column phase: ZB-5msi

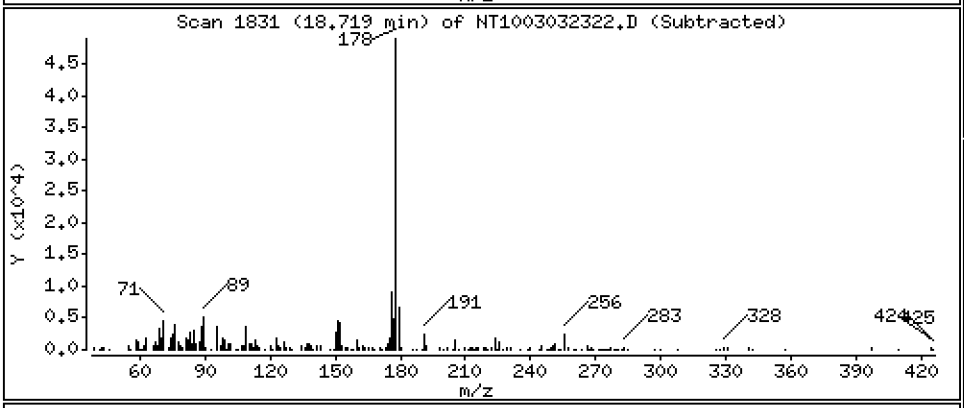
Column diameter: 0.25

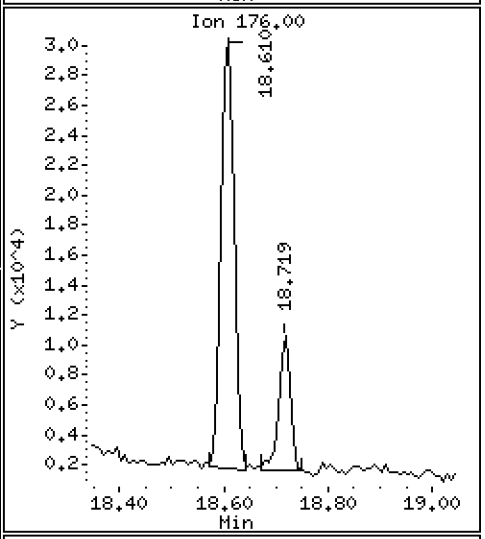
61 Anthracene

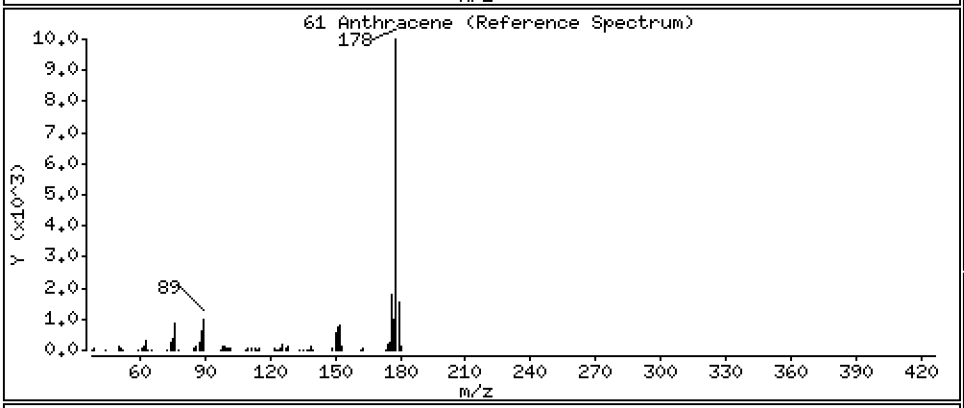
Concentration: 0.2443 ug/ml

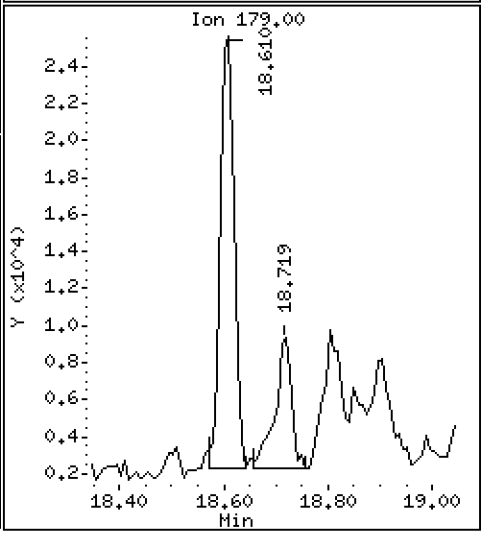


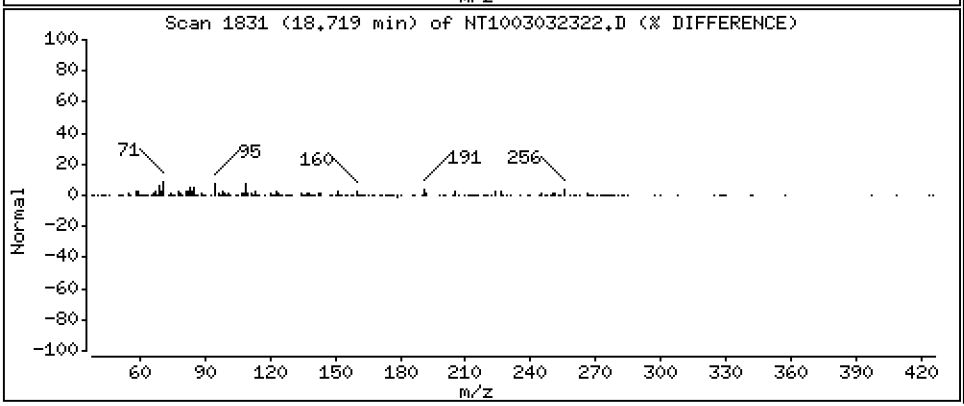












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032322.D

Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

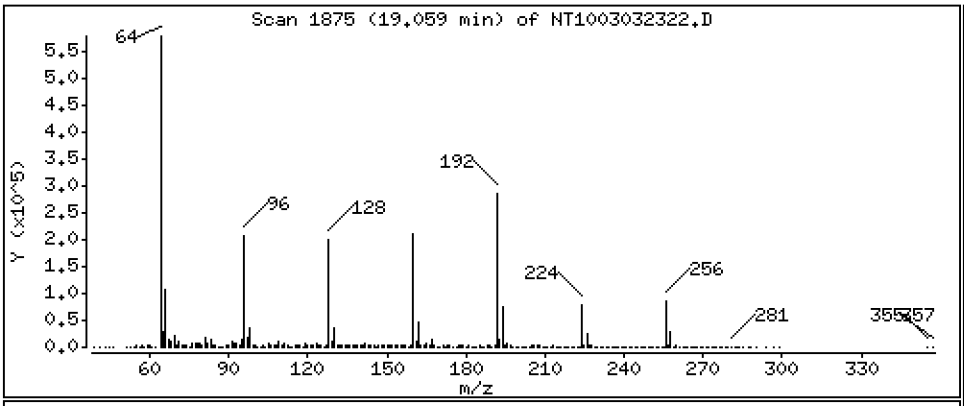
Operator: VTS

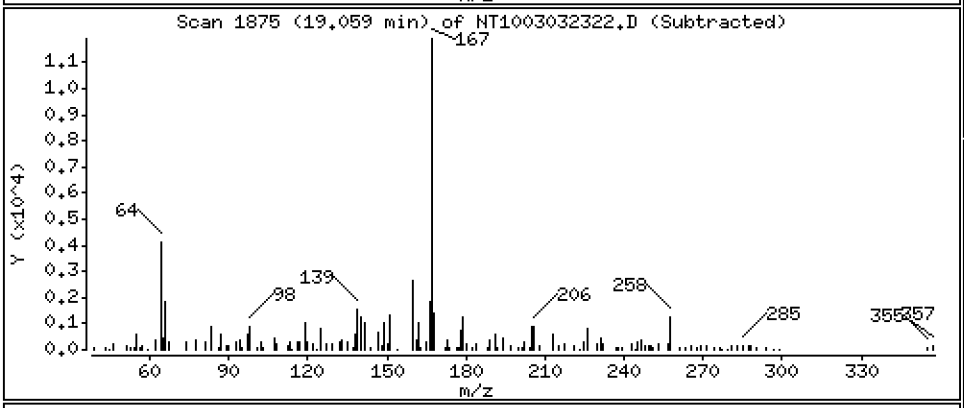
Column phase: ZB-5msi

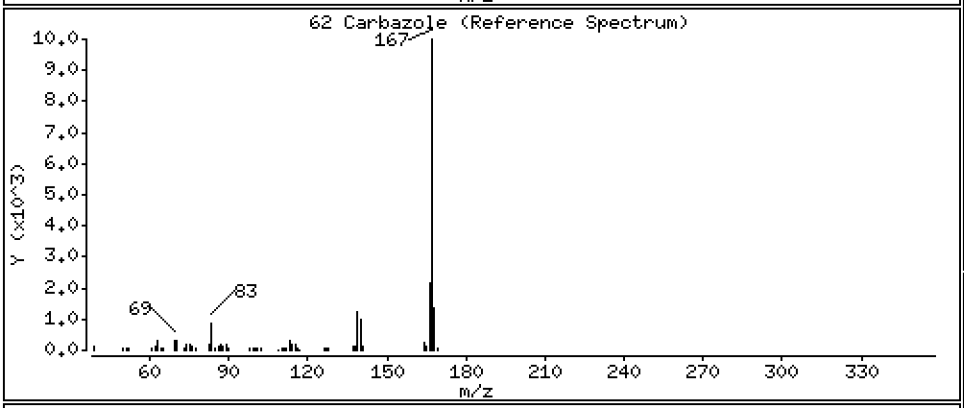
Column diameter: 0.25

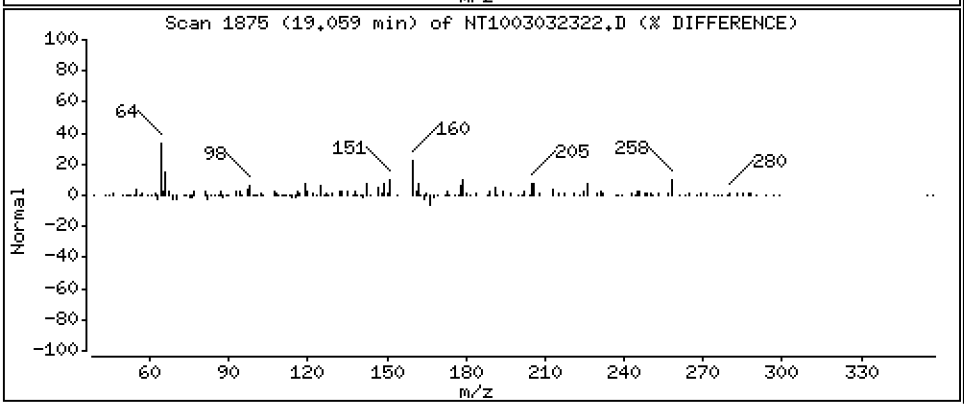
62 Carbazole

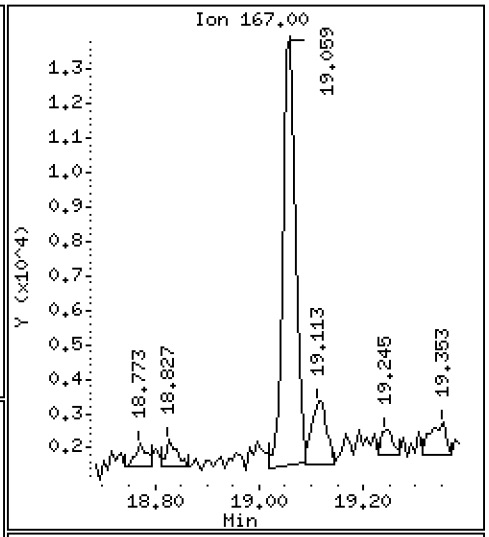
Concentration: 0.07465 ug/ml

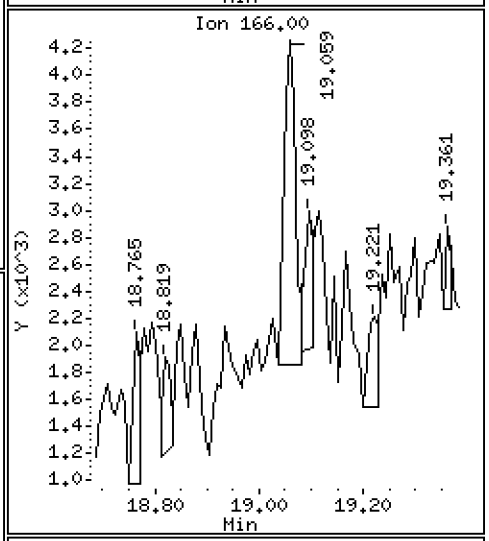


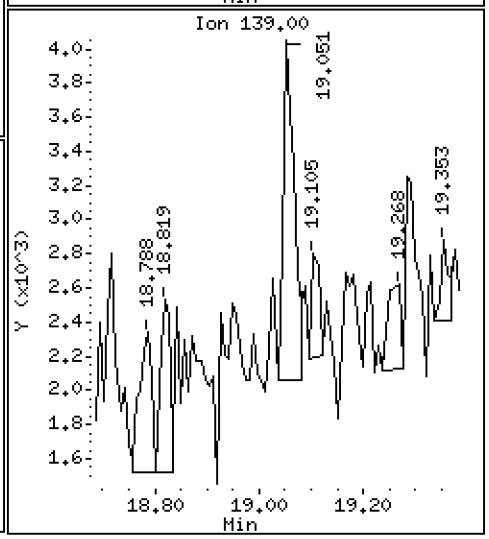












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

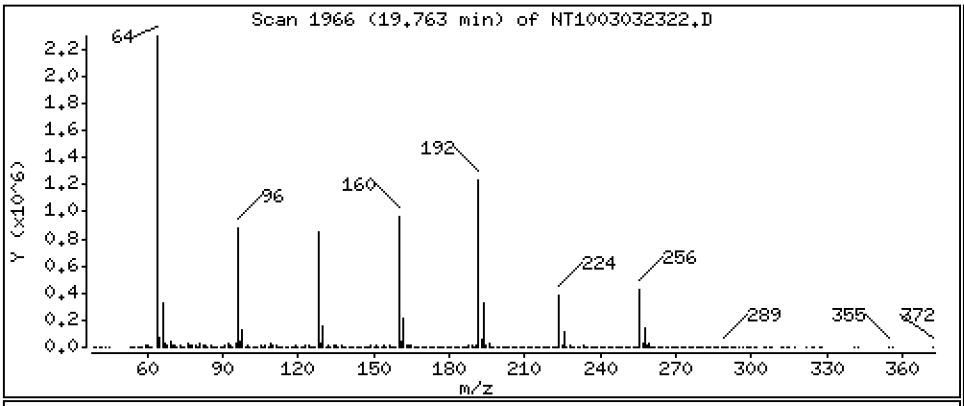
Operator: VTS

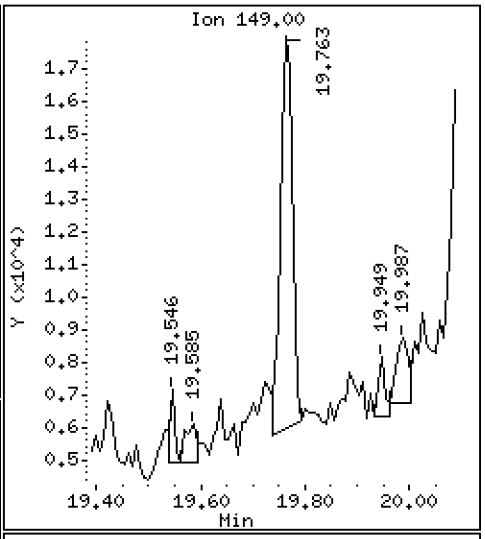
Column phase: ZB-5msi

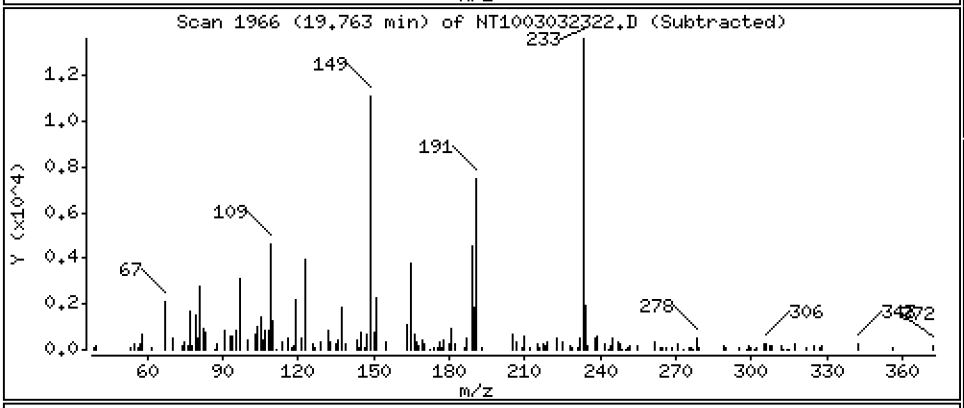
Column diameter: 0.25

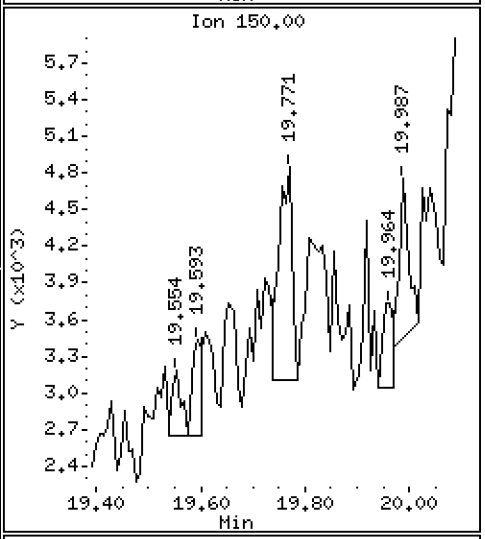
63 Di-n-butylphthalate

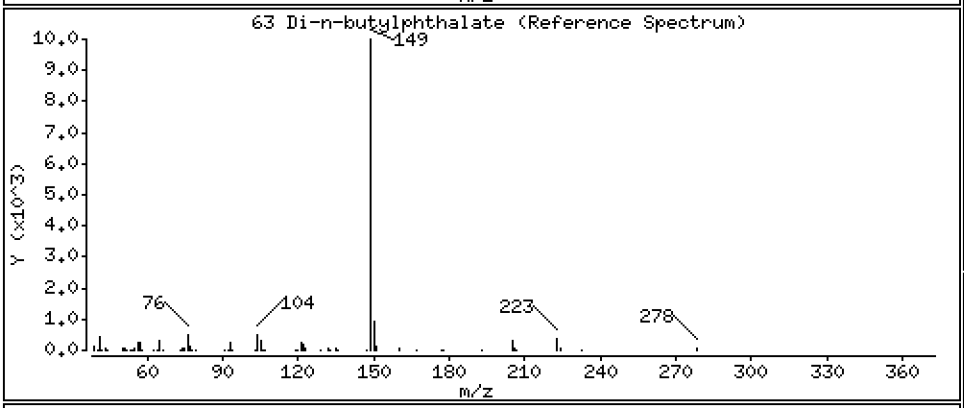
Concentration: 0.05049 ug/ml

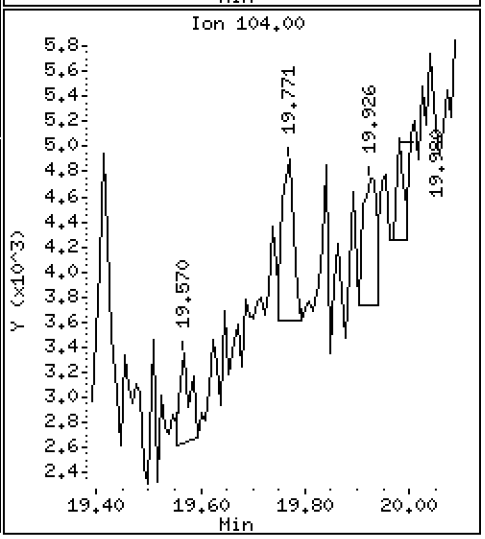


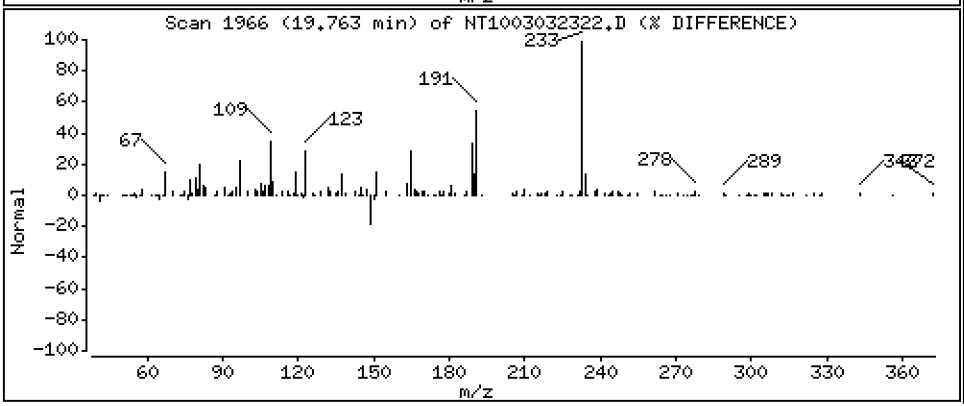












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

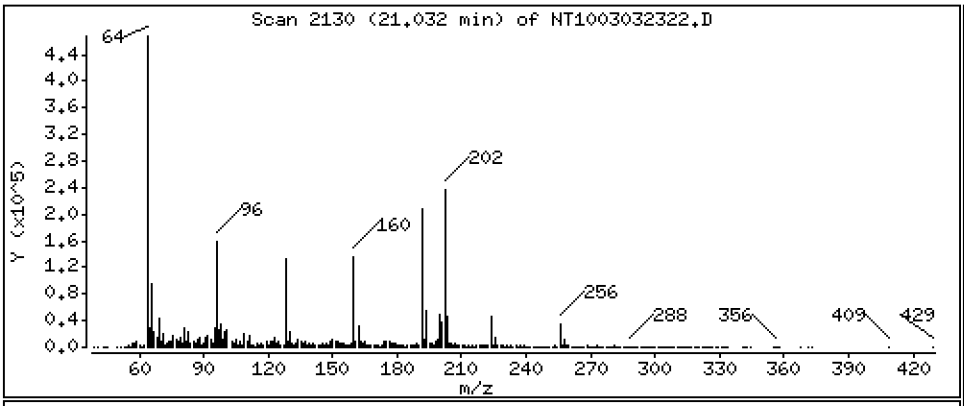
Operator: VTS

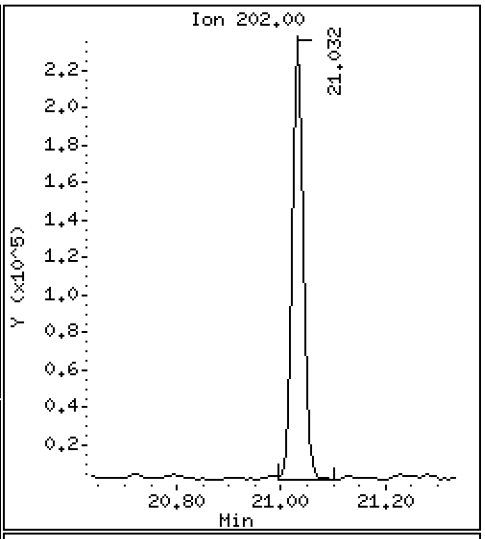
Column phase: ZB-5msi

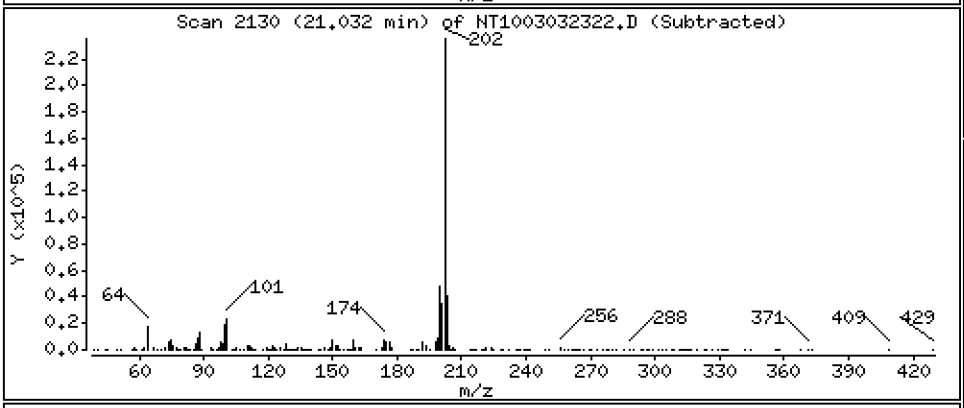
Column diameter: 0.25

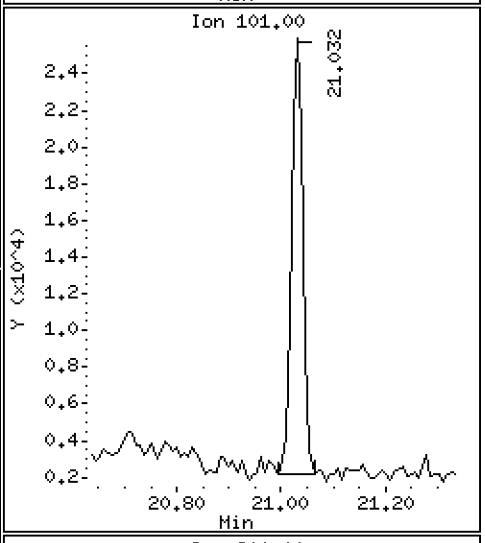
64 Fluoranthene

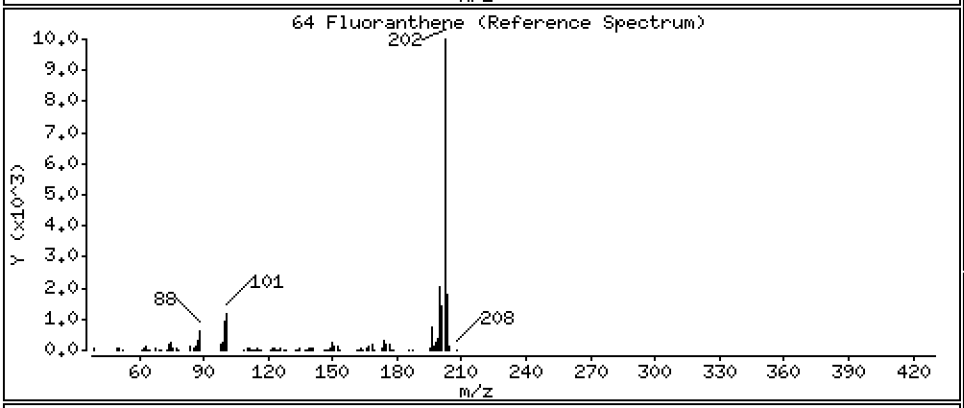
Concentration: 1.048 ug/ml

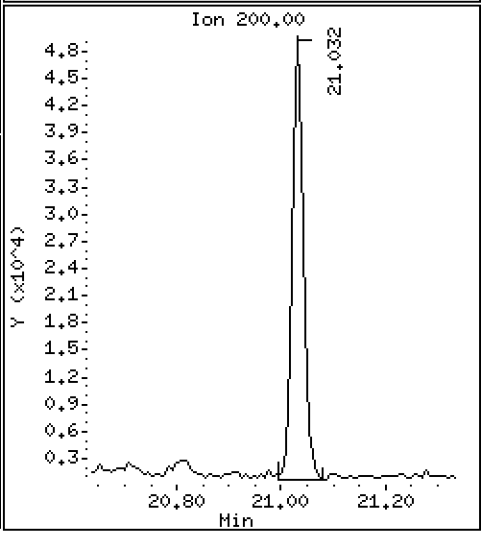


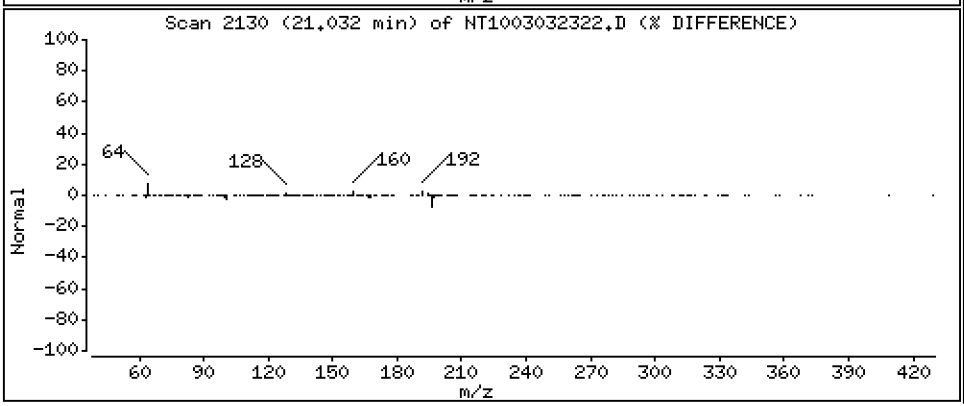












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

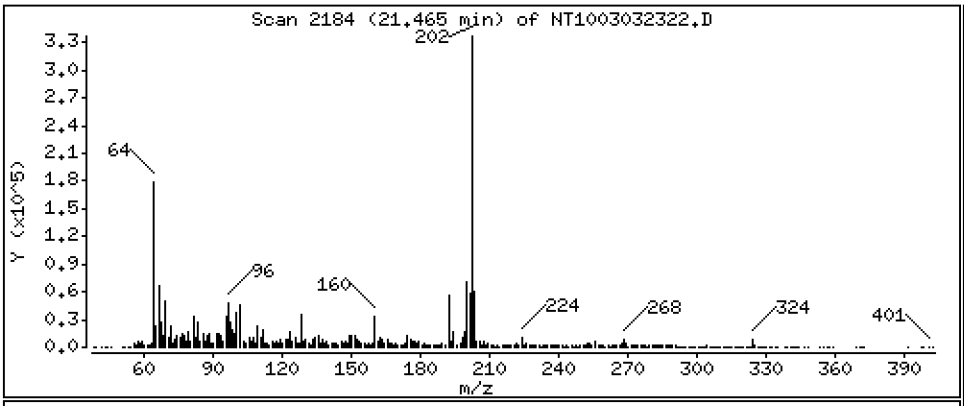
Operator: VTS

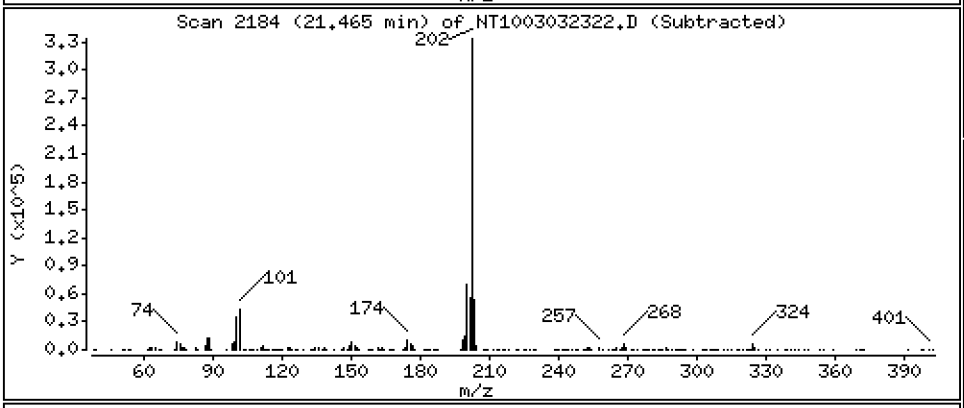
Column phase: ZB-5msi

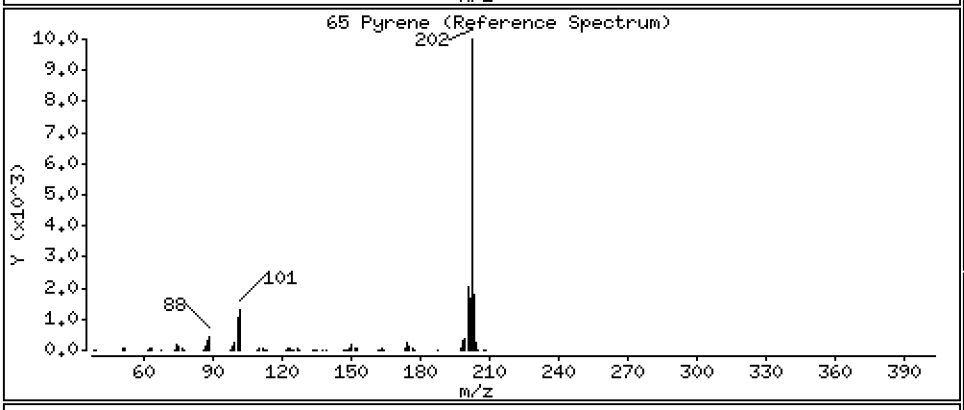
Column diameter: 0.25

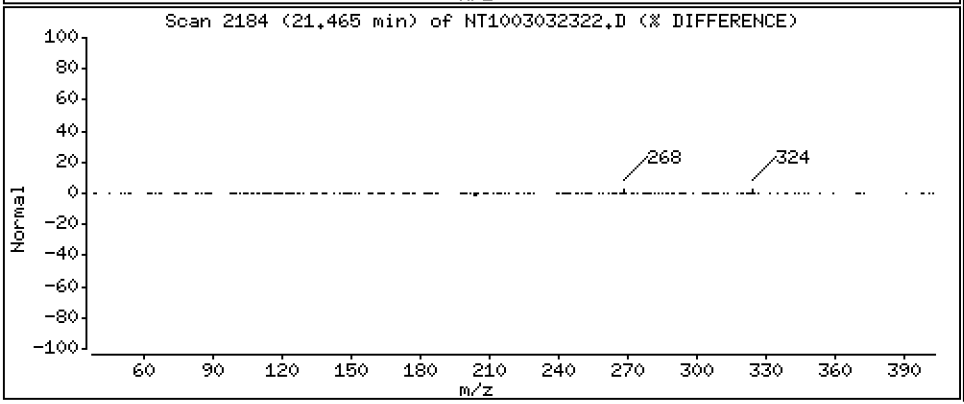
65 Pyrene

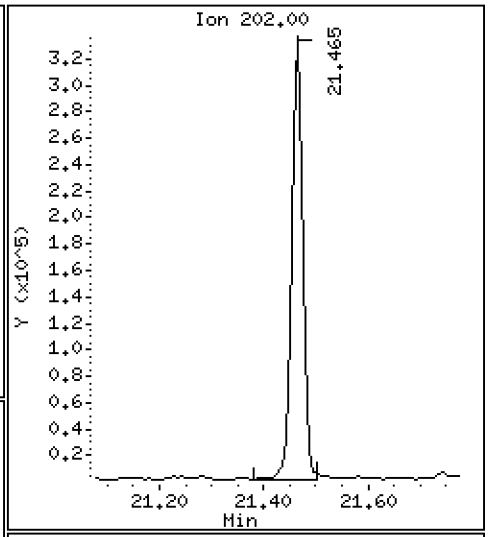
Concentration: 1.670 ug/ml

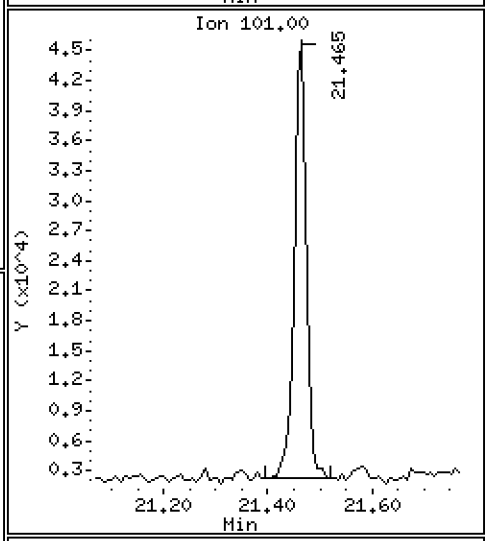


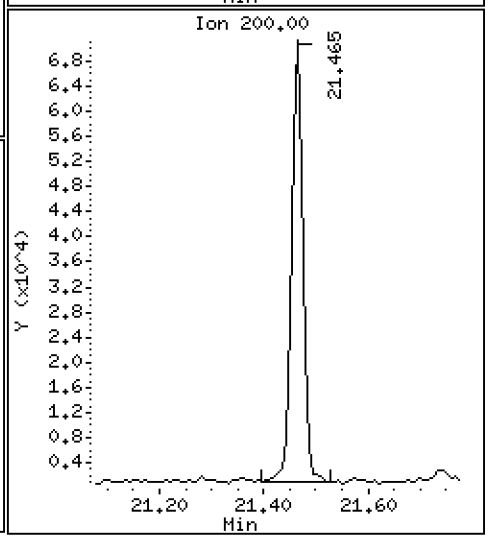












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

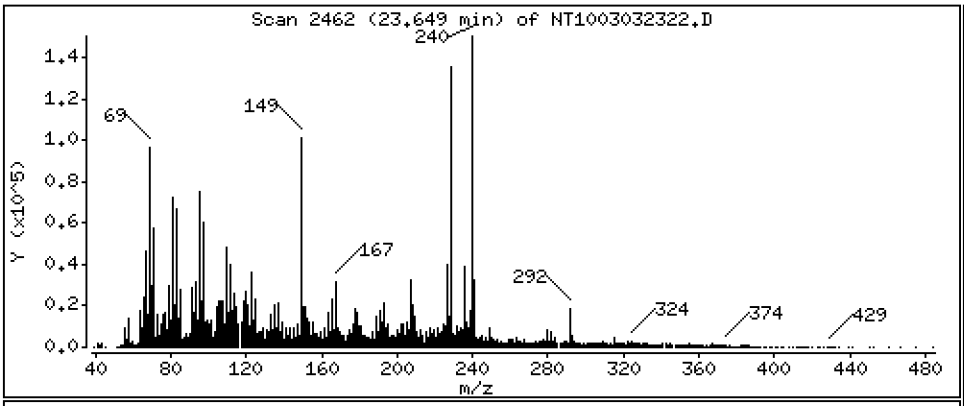
Operator: VTS

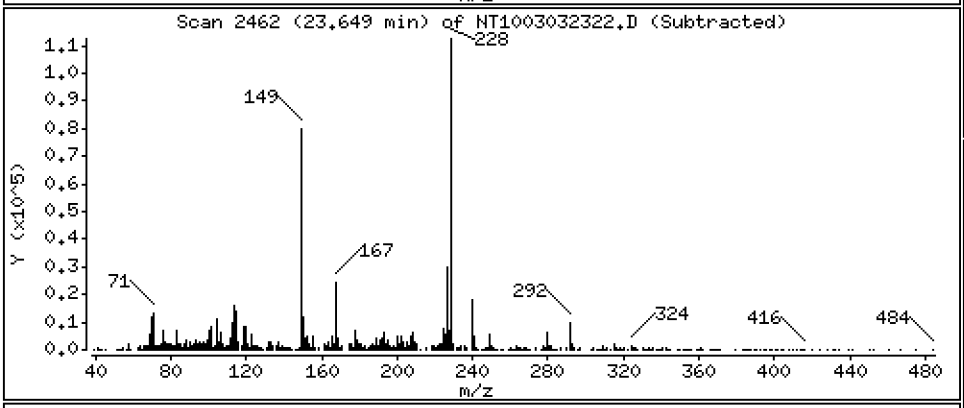
Column phase: ZB-5msi

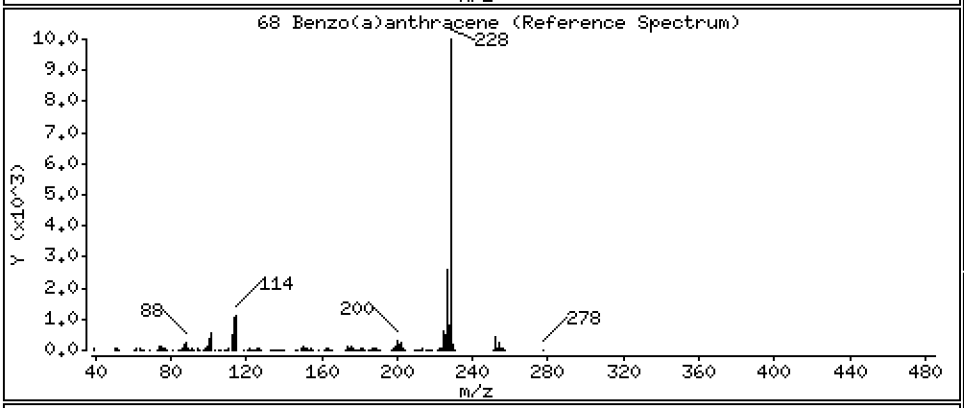
Column diameter: 0.25

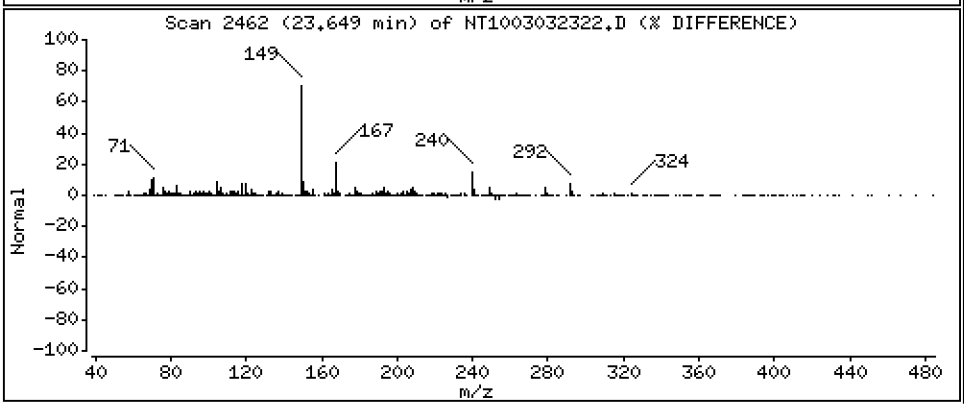
68 Benzo(a)anthracene

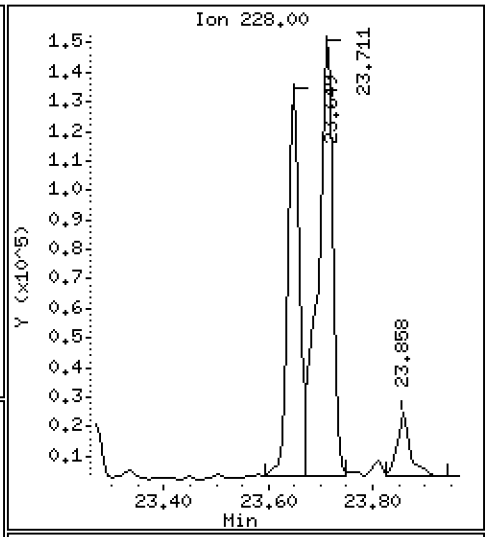
Concentration: 0.6213 ug/ml

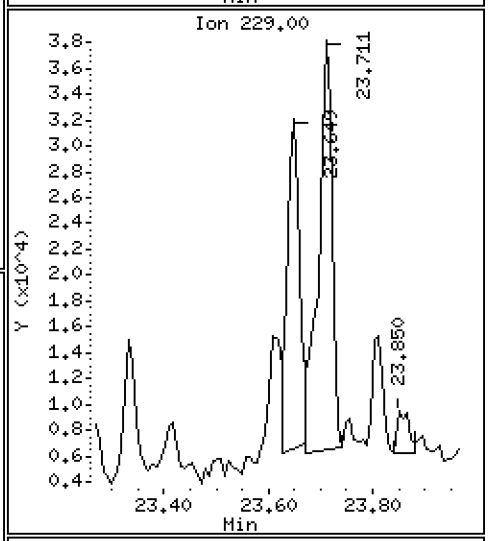


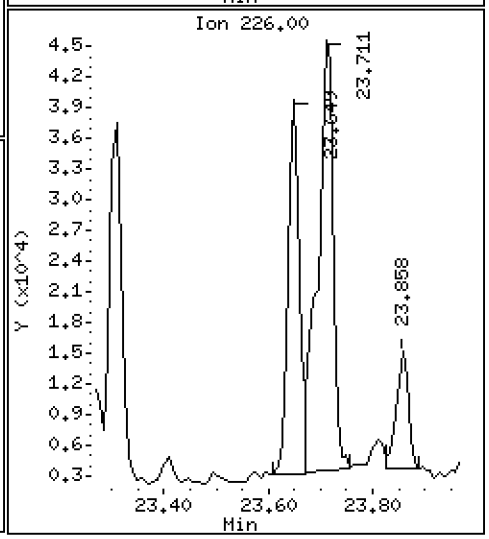












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

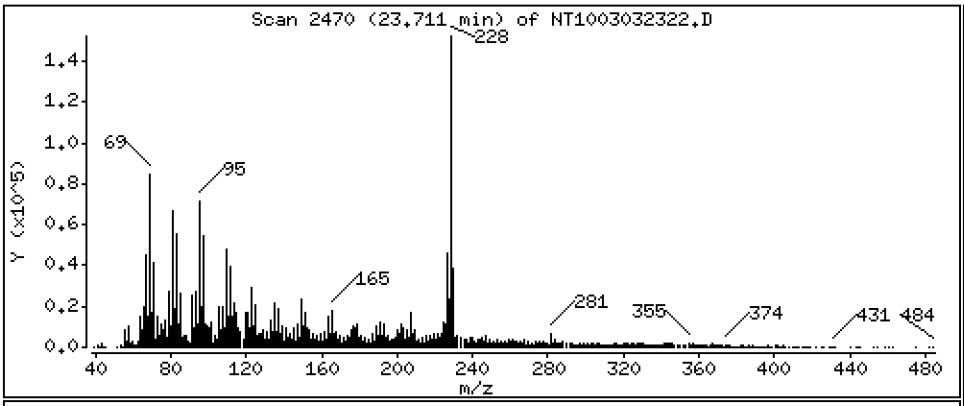
Operator: VTS

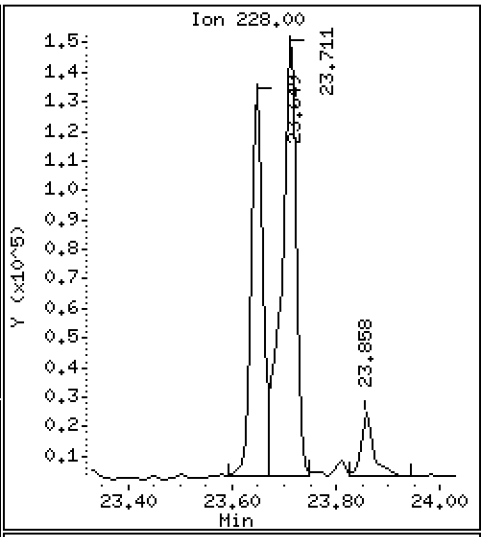
Column phase: ZB-5msi

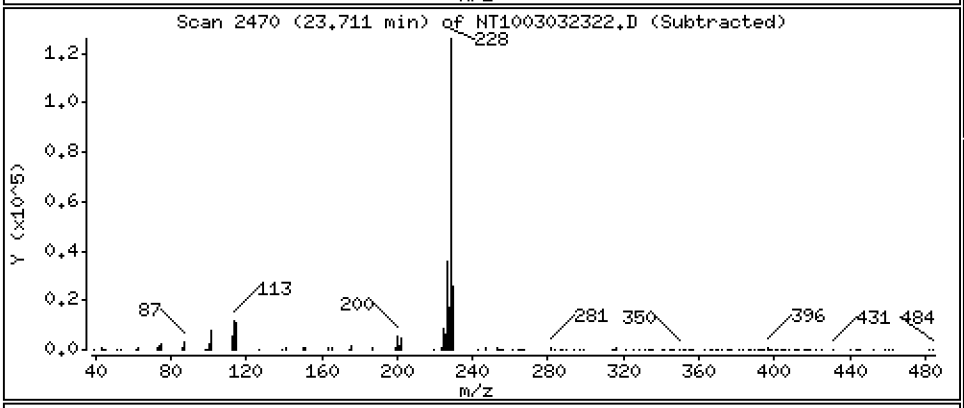
Column diameter: 0.25

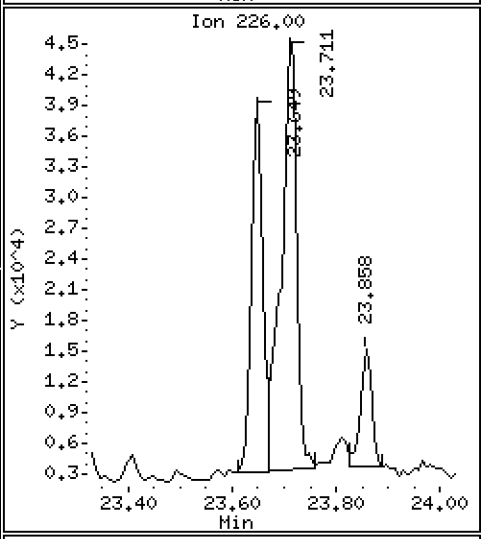
71 Chrysene

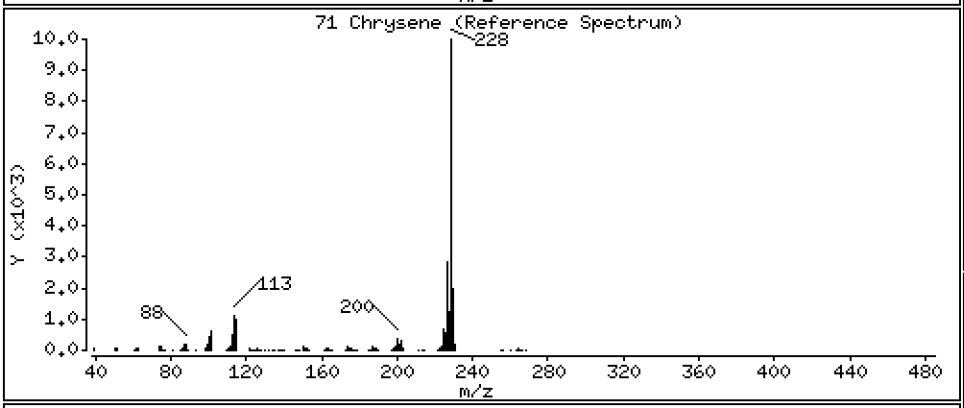
Concentration: 1.059 ug/ml

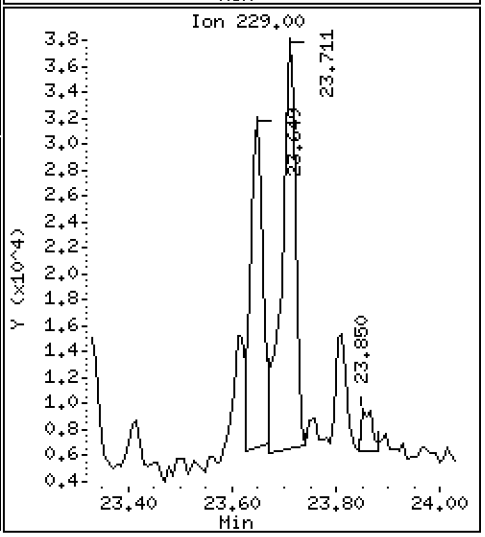


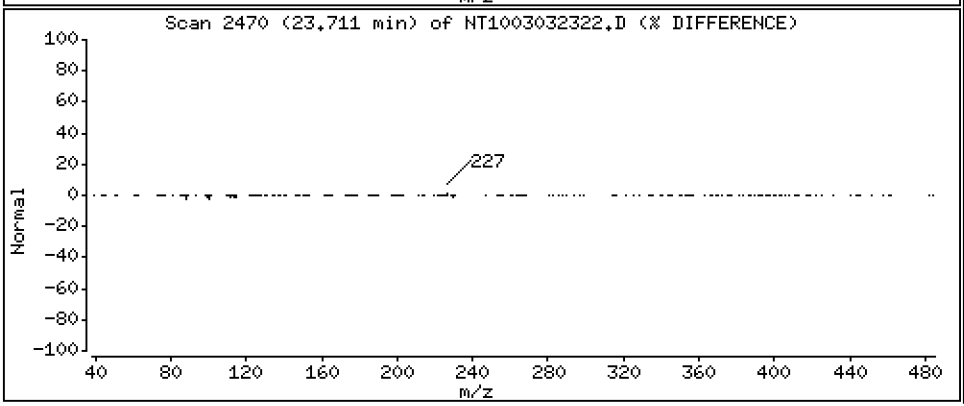












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

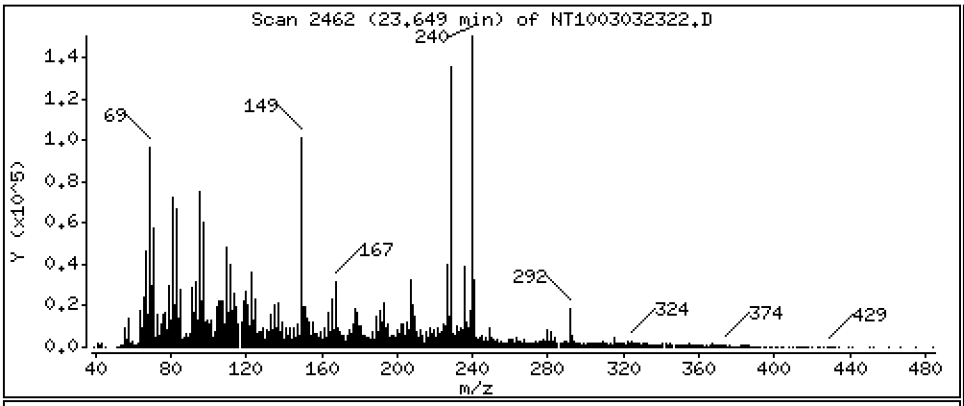
Operator: VTS

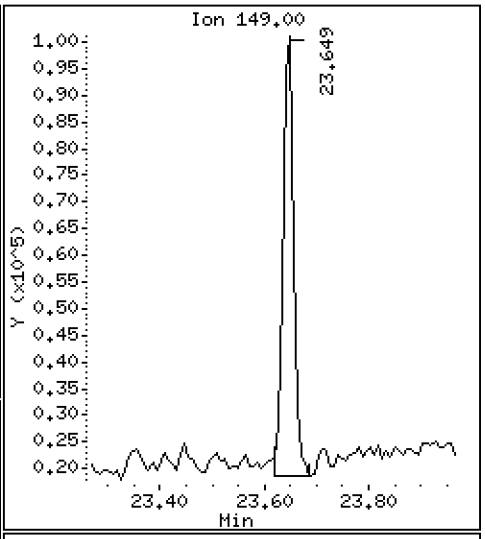
Column phase: ZB-5msi

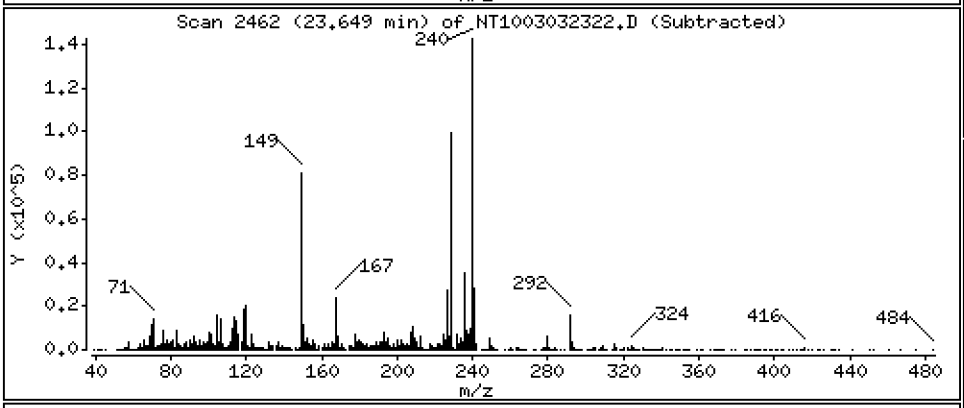
Column diameter: 0.25

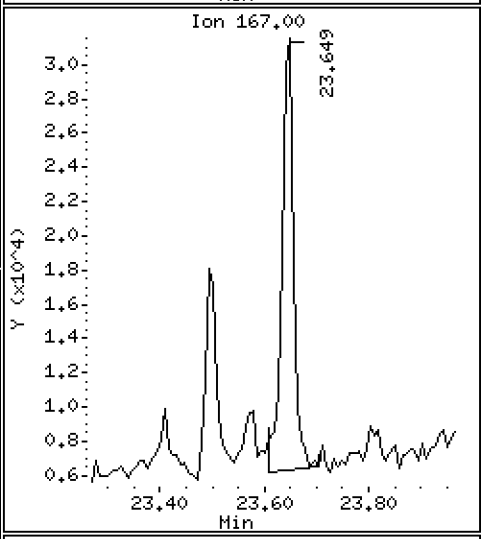
72 bis(2-Ethylhexyl)phthalate

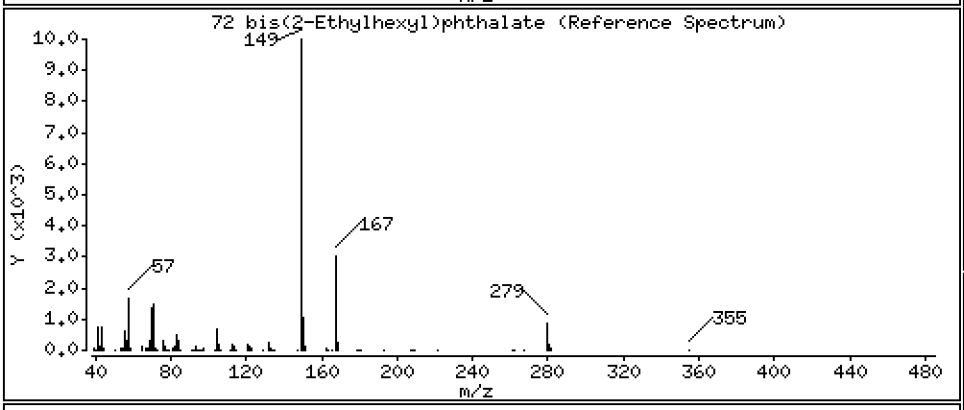
Concentration: 0.4344 ug/ml

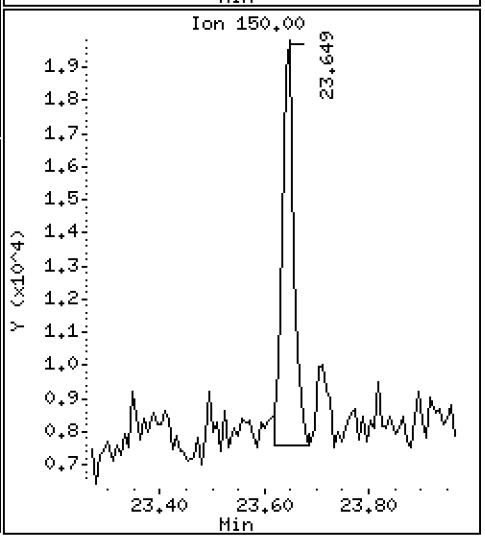


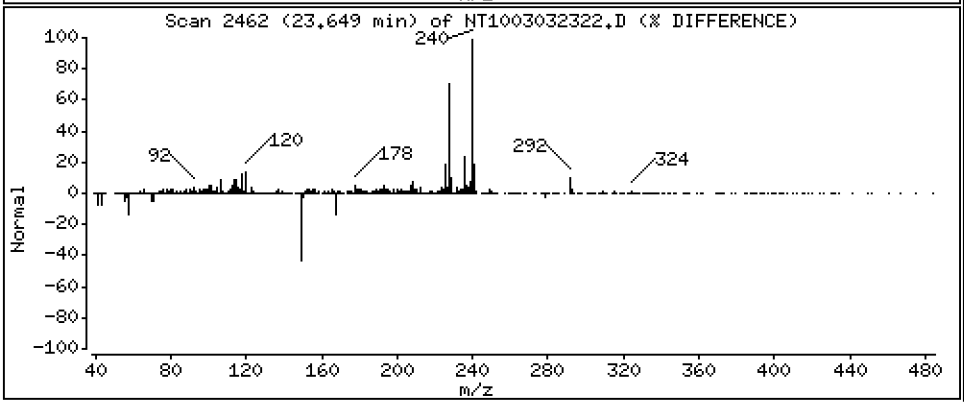












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

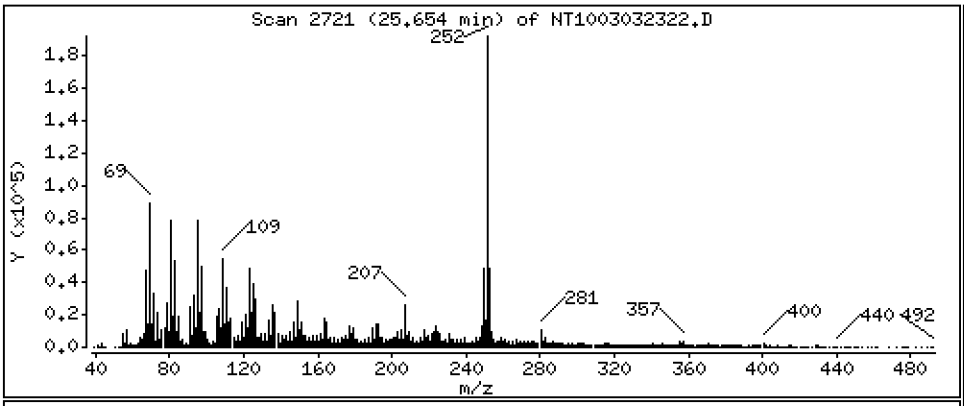
Operator: VTS

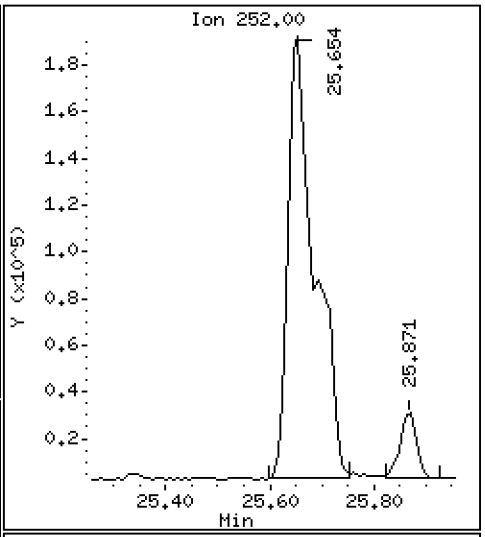
Column phase: ZB-5msi

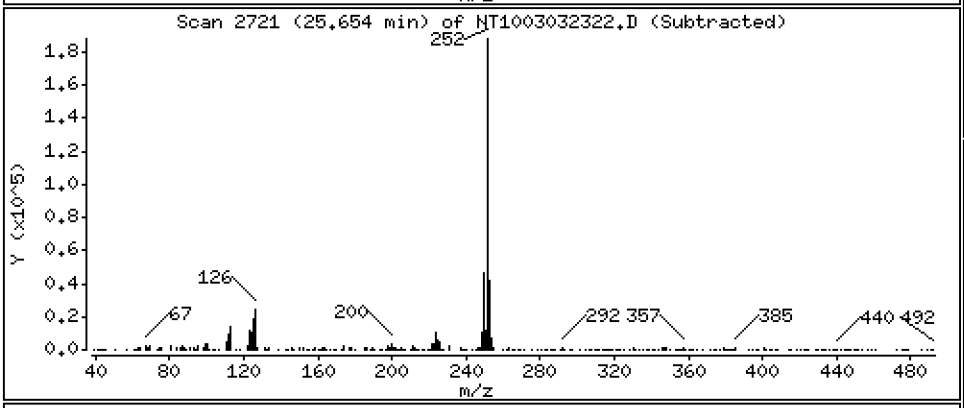
Column diameter: 0.25

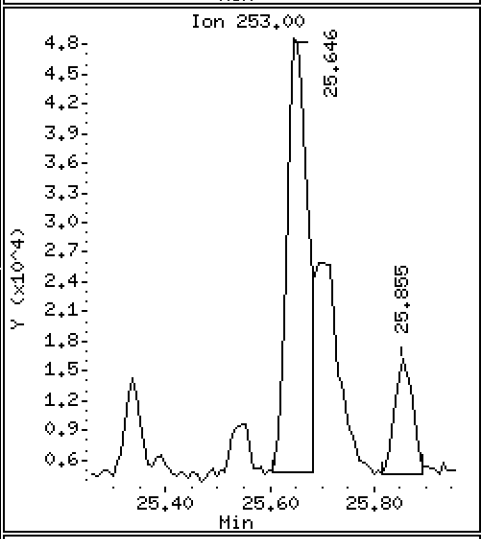
74 Benzo(b)fluoranthene

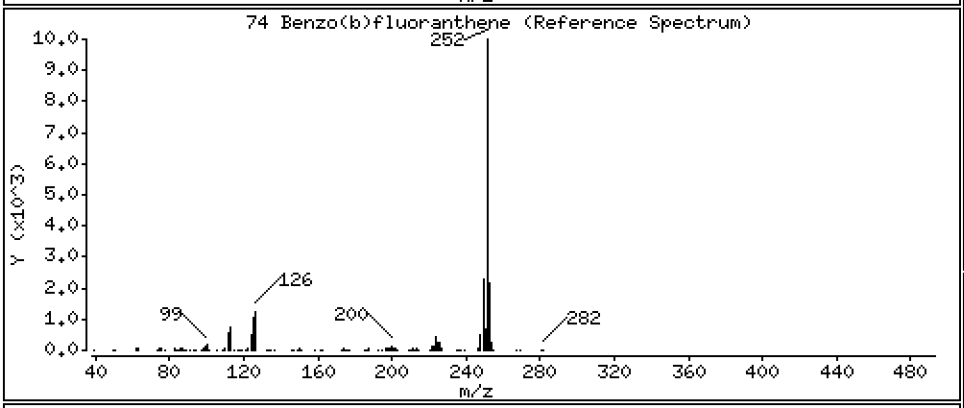
Concentration: 1.504 ug/ml

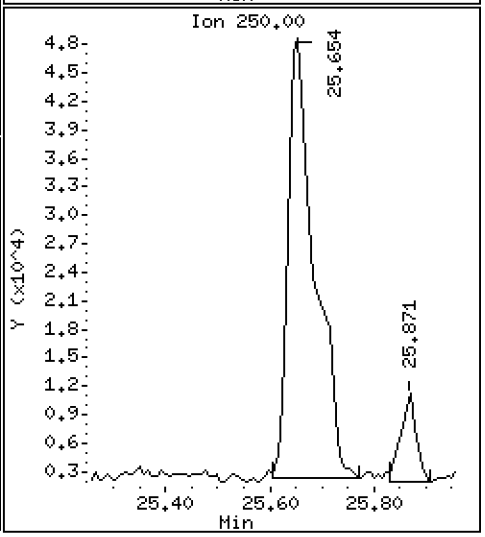


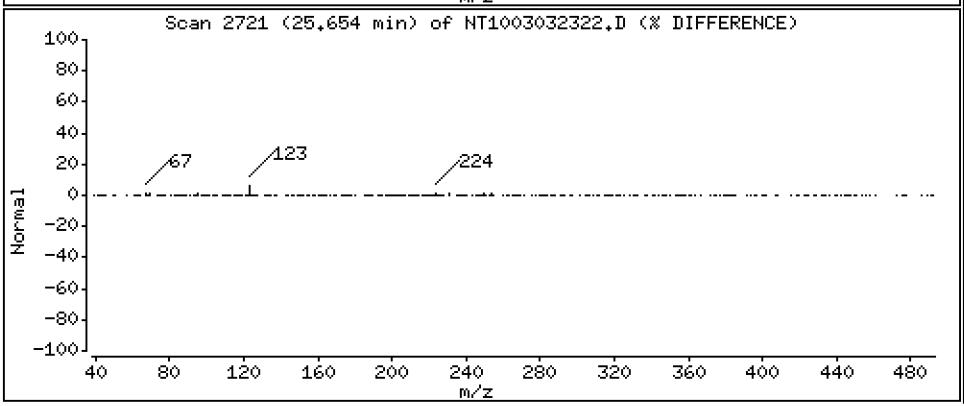












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

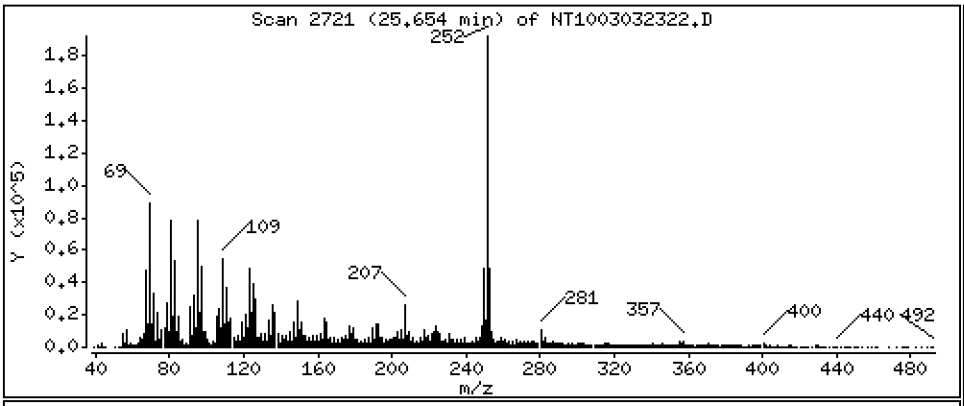
Operator: VTS

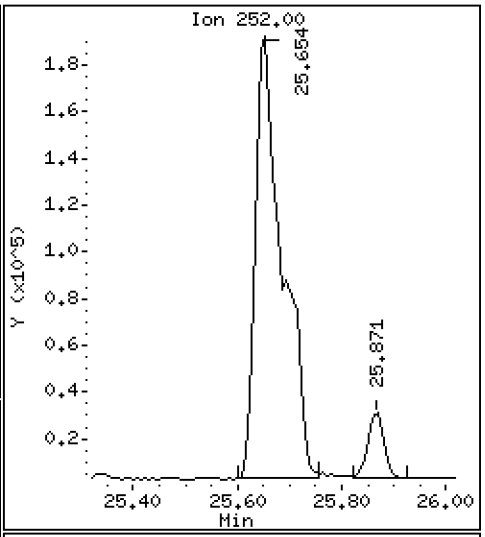
Column phase: ZB-5msi

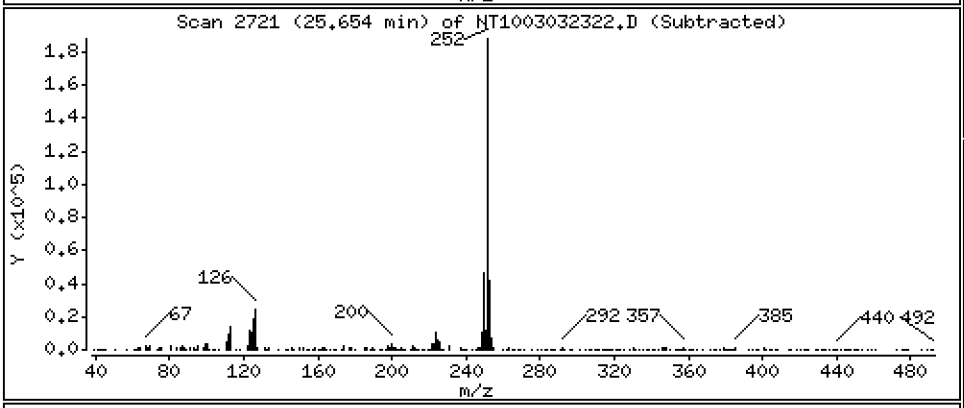
Column diameter: 0.25

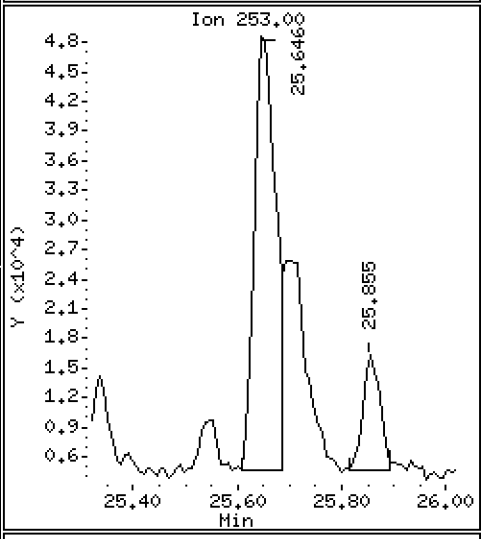
75 Benzo(k)fluoranthene

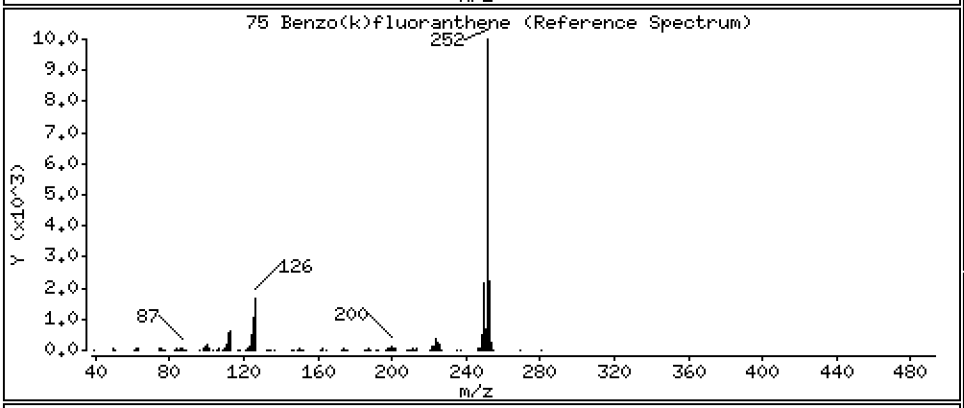
Concentration: 1.561 ug/ml

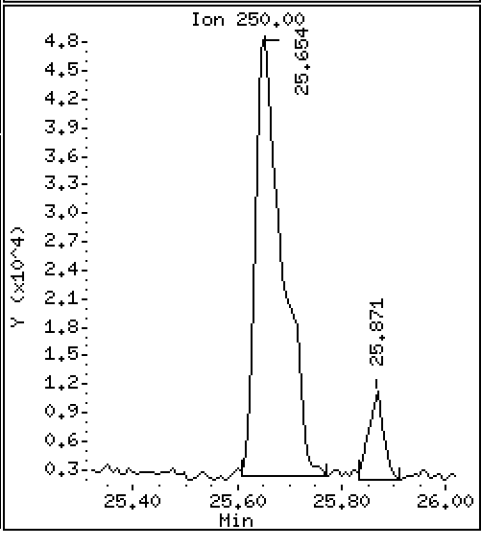


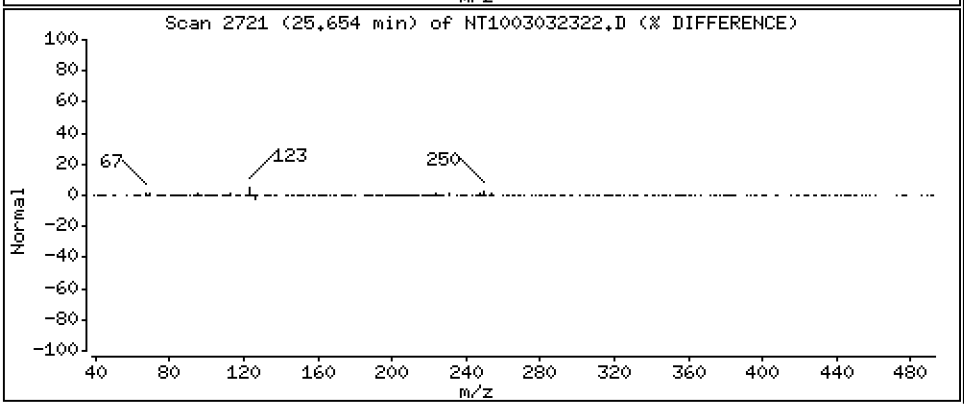












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

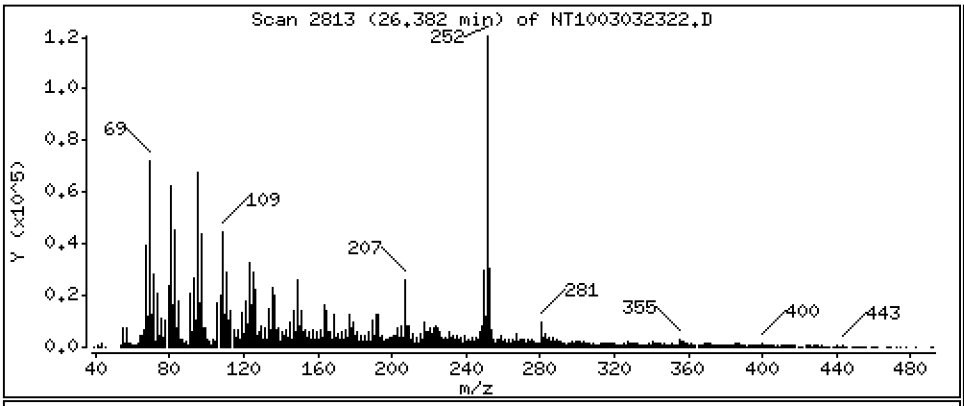
Operator: VTS

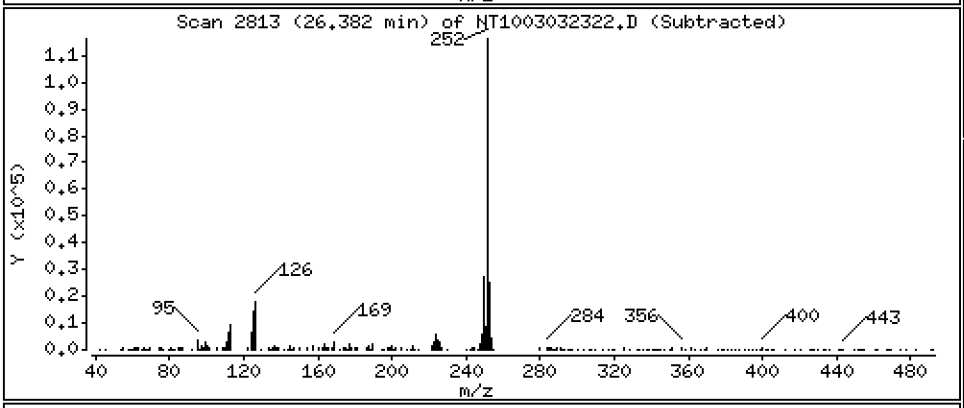
Column phase: ZB-5msi

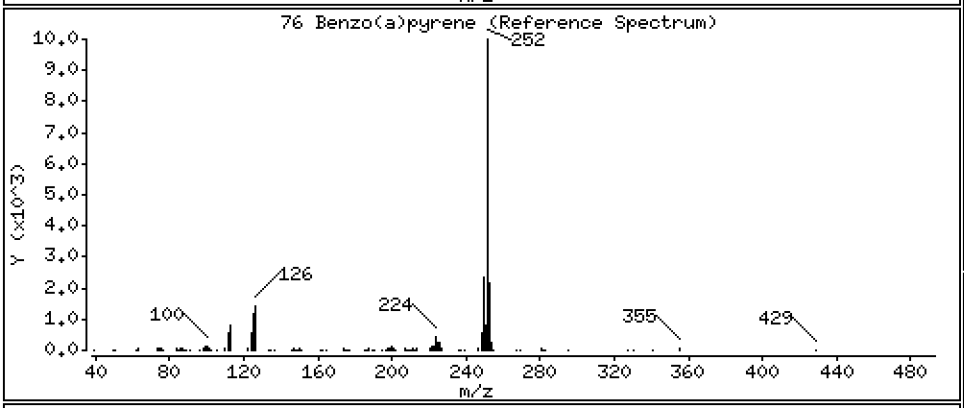
Column diameter: 0.25

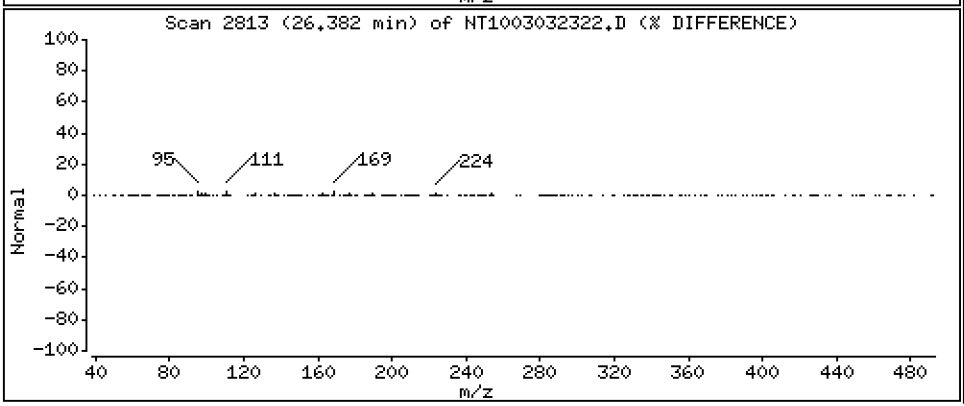
76 Benzo(a)pyrene

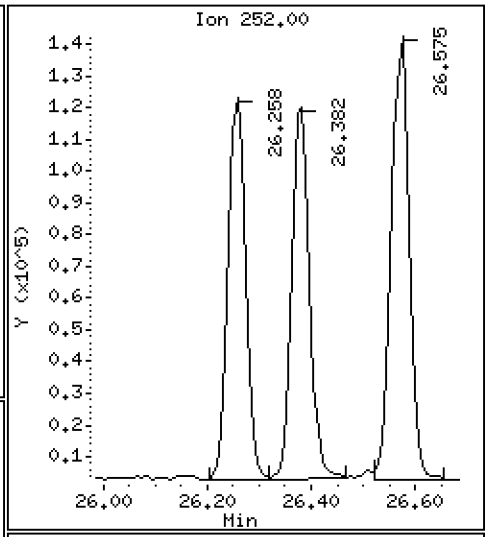
Concentration: 0.7058 ug/ml

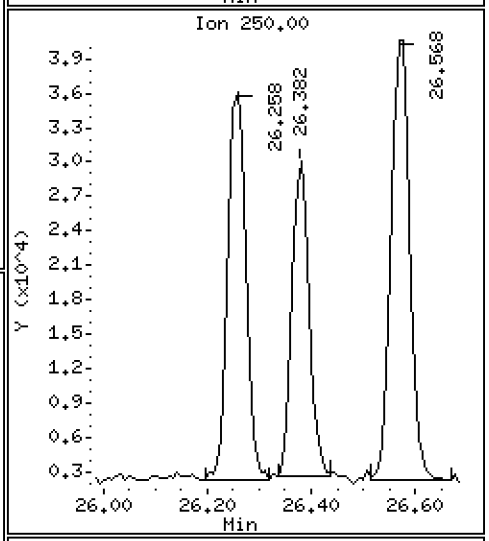


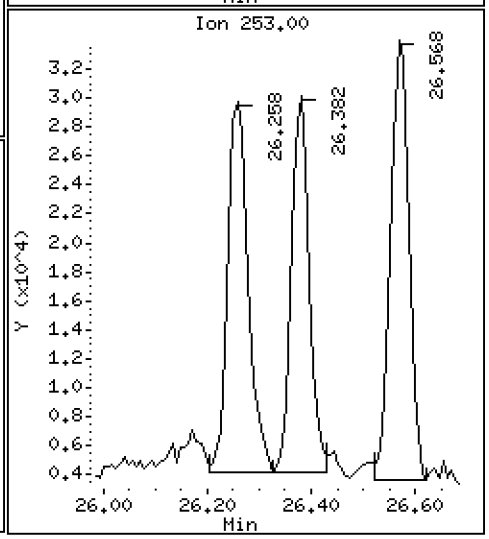












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

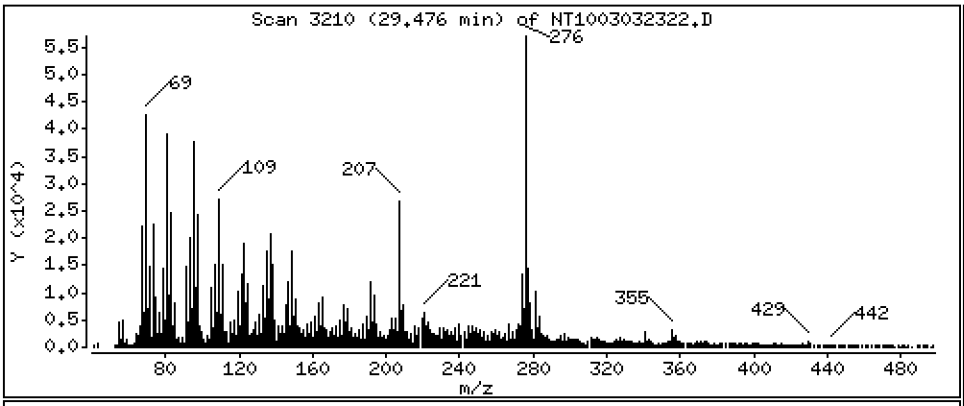
Operator: VTS

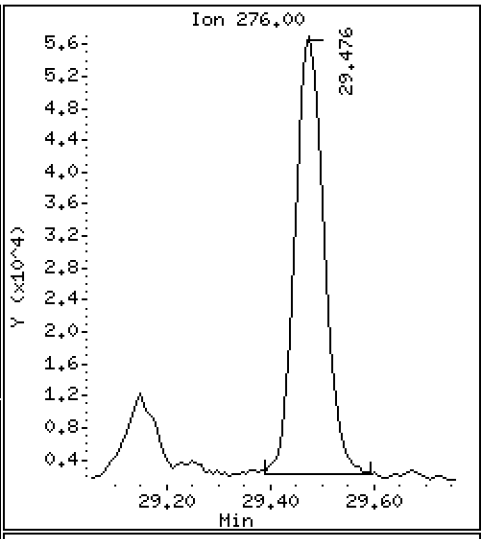
Column phase: ZB-5msi

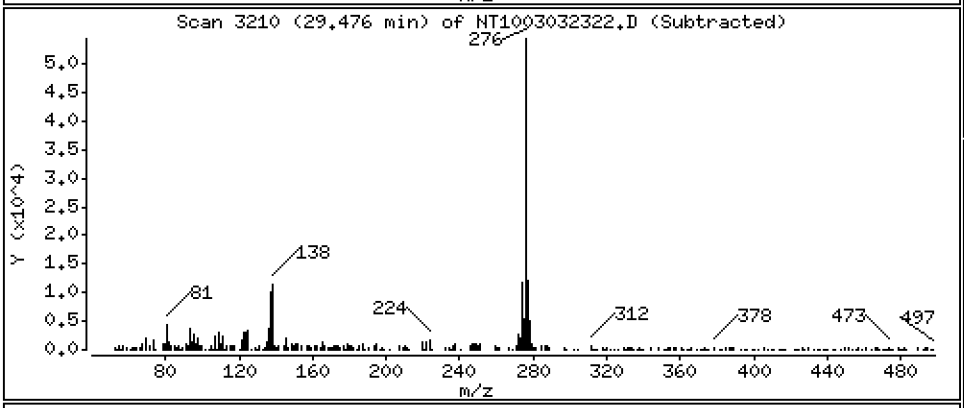
Column diameter: 0.25

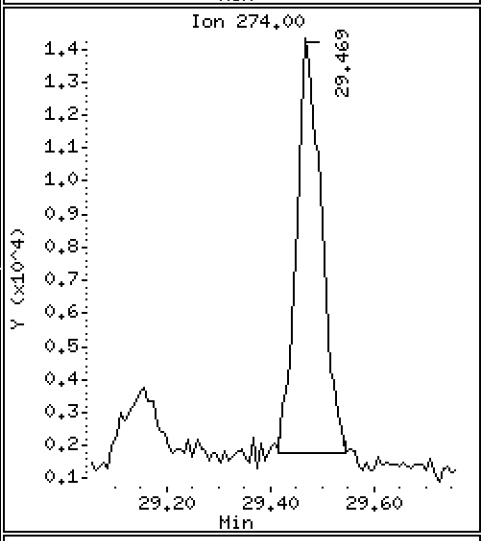
78 Indeno(1,2,3-cd)pyrene

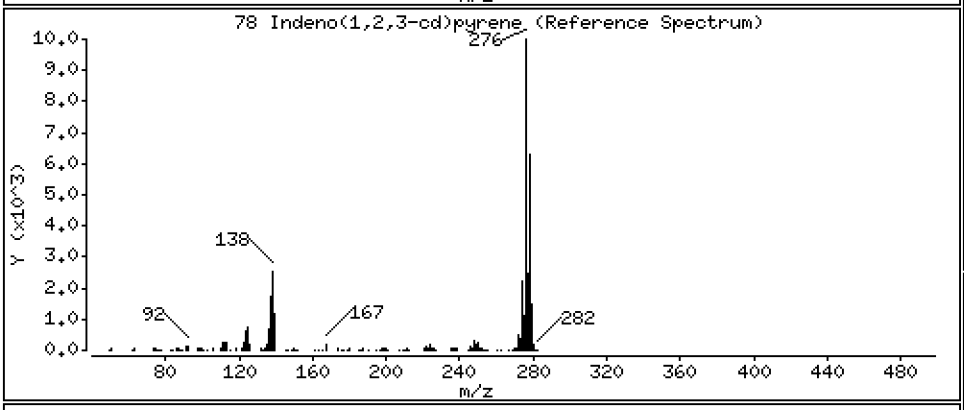
Concentration: 0.4470 ug/ml

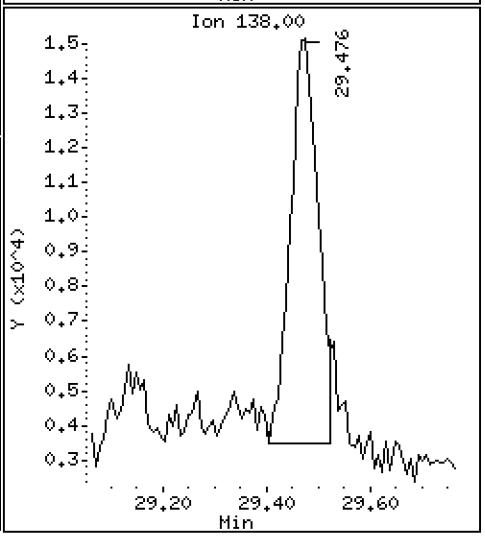


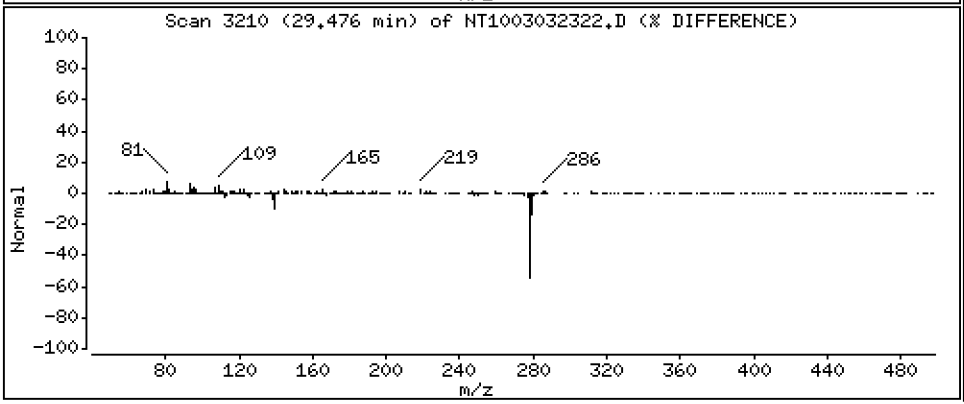












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

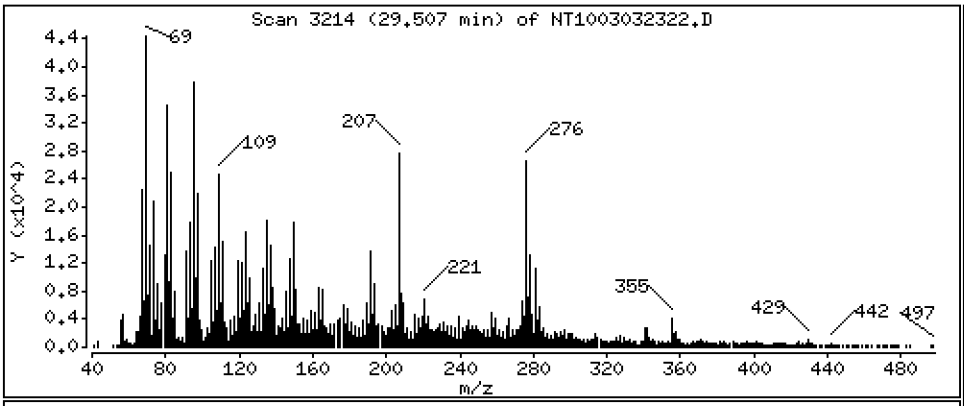
Operator: VTS

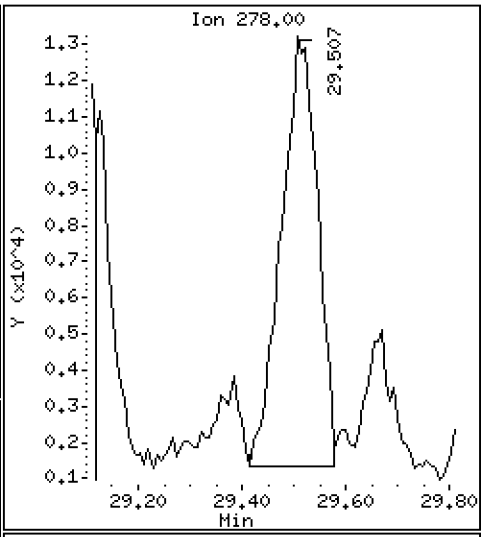
Column phase: ZB-5msi

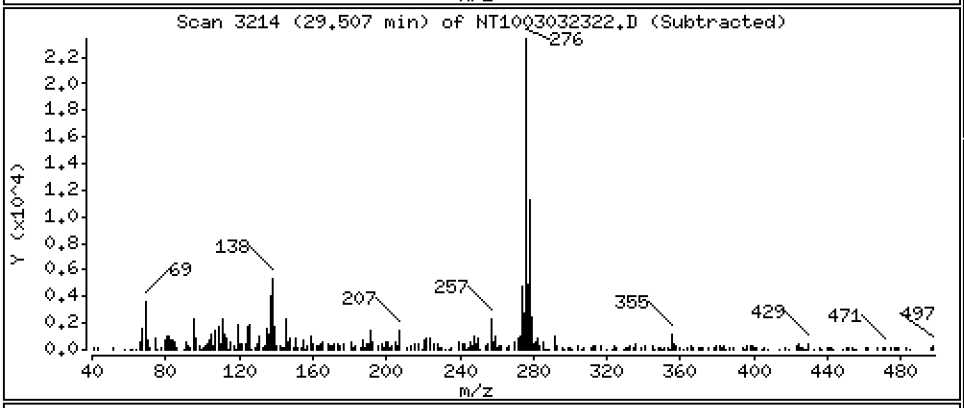
Column diameter: 0.25

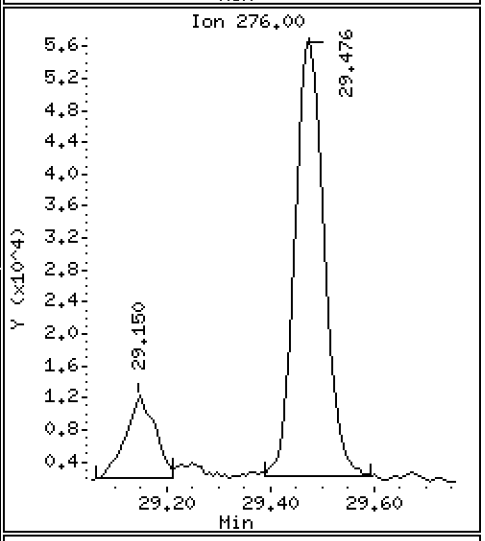
79 Dibenzo(a,h)anthracene

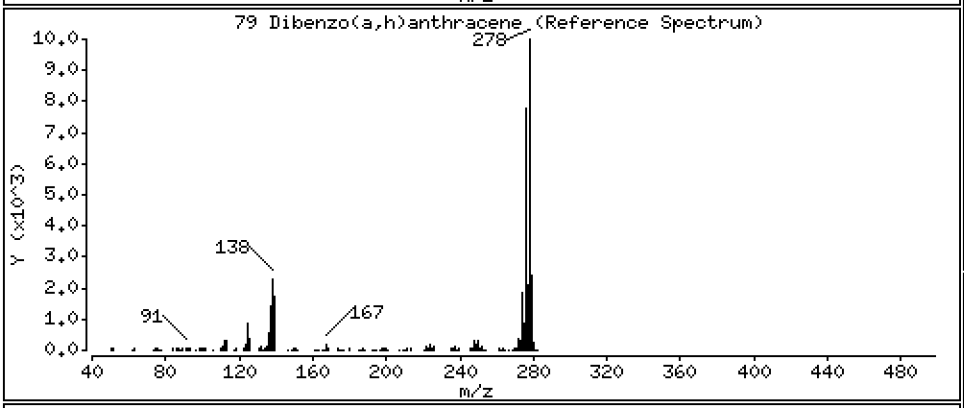
Concentration: 0.1617 ug/ml

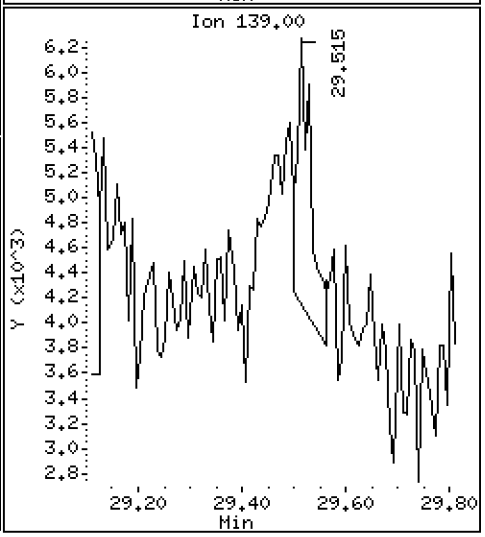


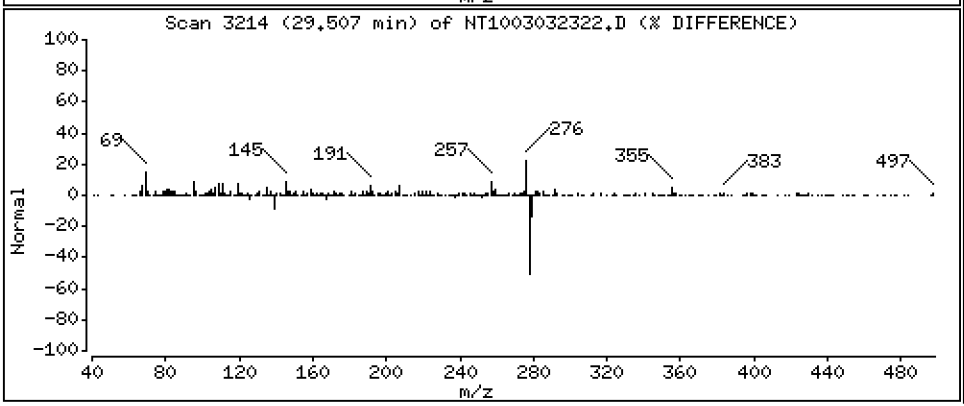












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

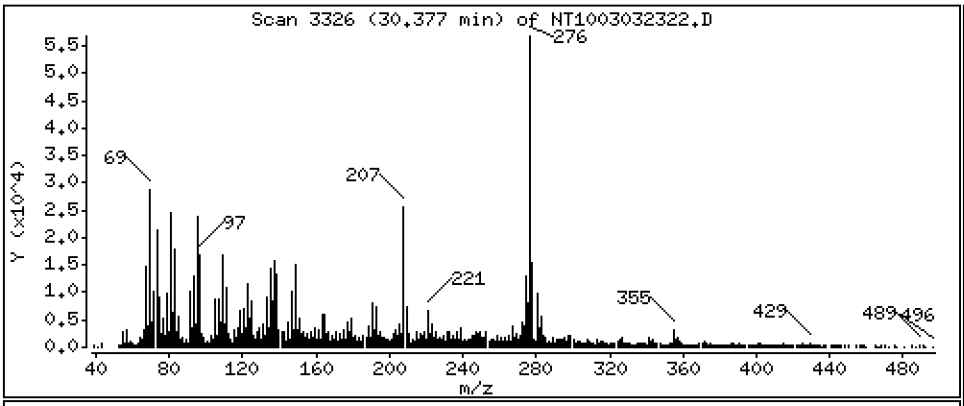
Operator: VTS

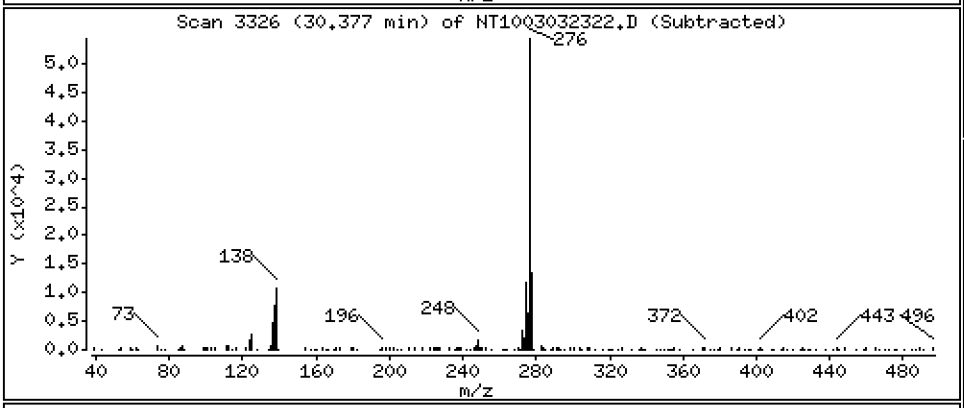
Column phase: ZB-5msi

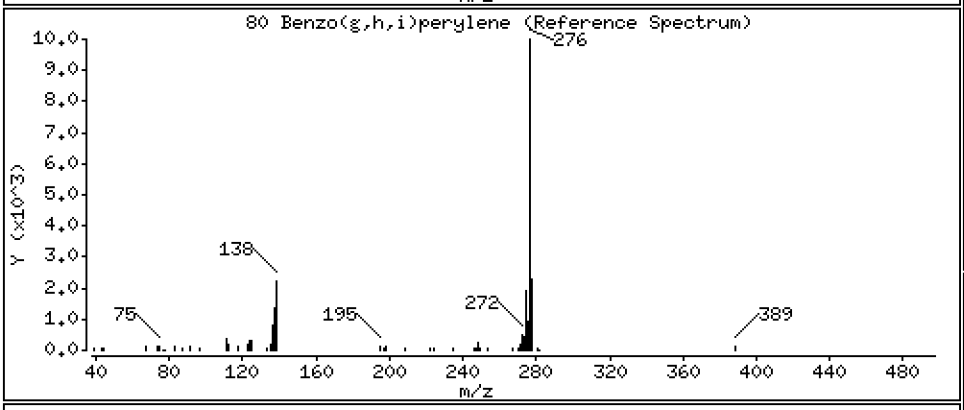
Column diameter: 0.25

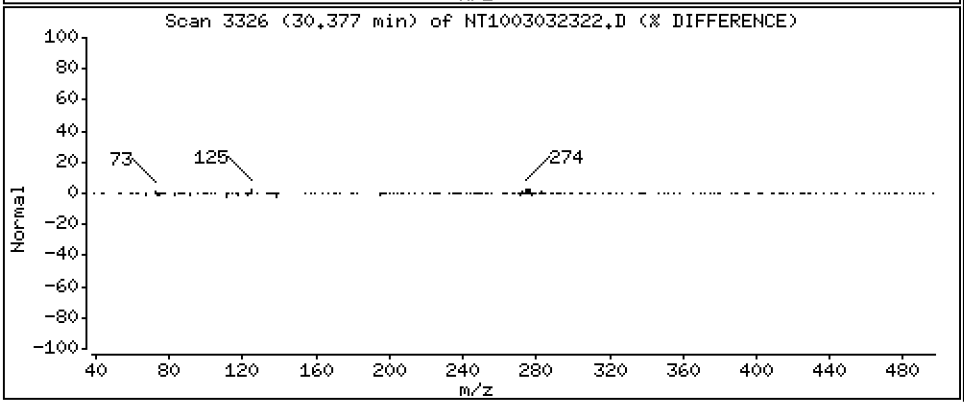
80 Benzo(g,h,i)perylene

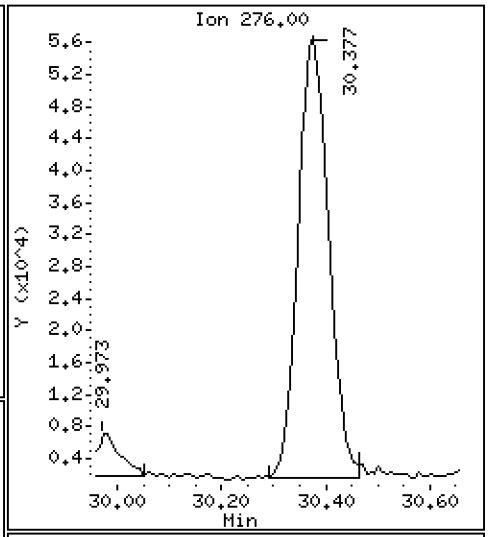
Concentration: 0.5961 ug/ml

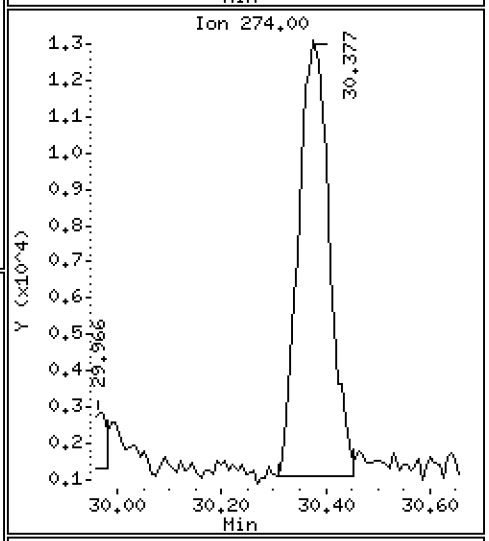


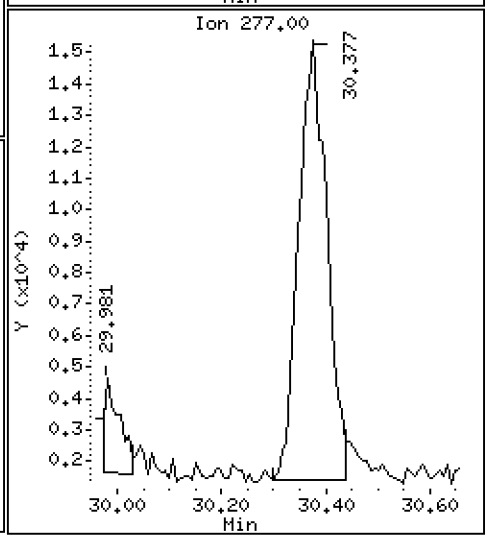












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

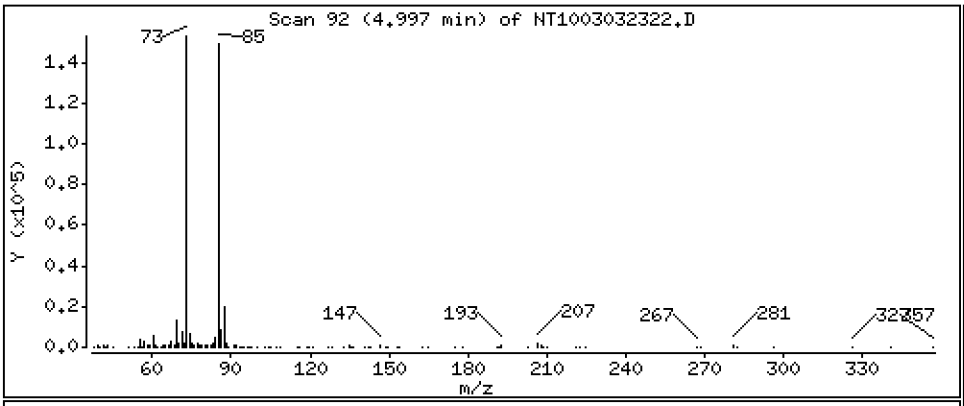
Operator: VTS

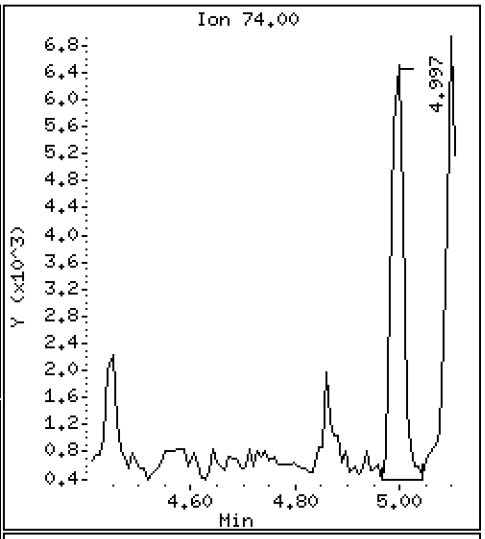
Column phase: ZB-5msi

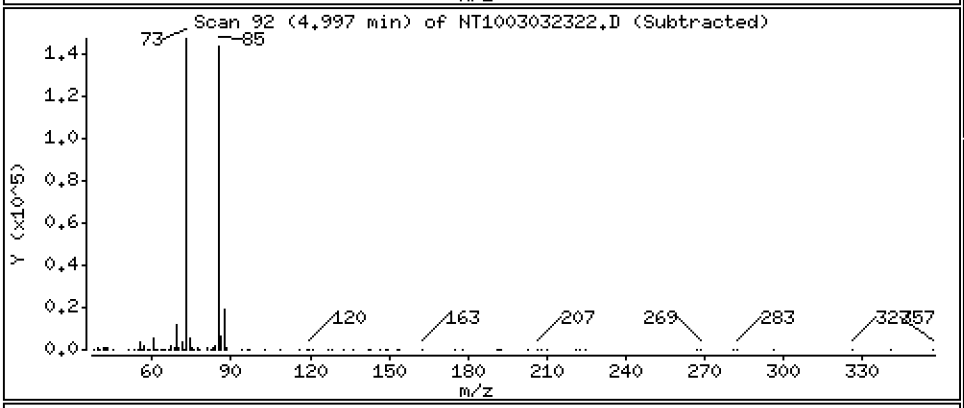
Column diameter: 0.25

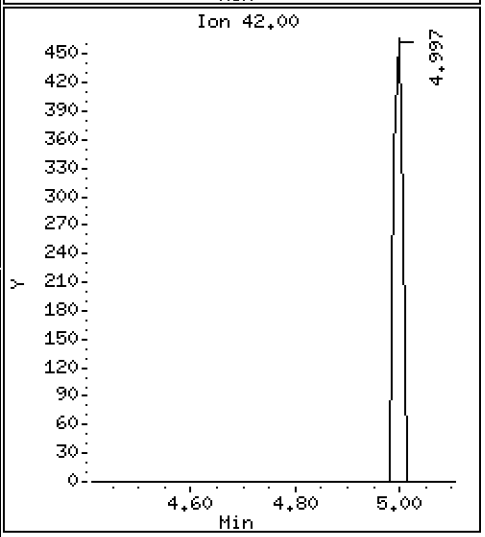
90 N-Nitrosodimethylamine

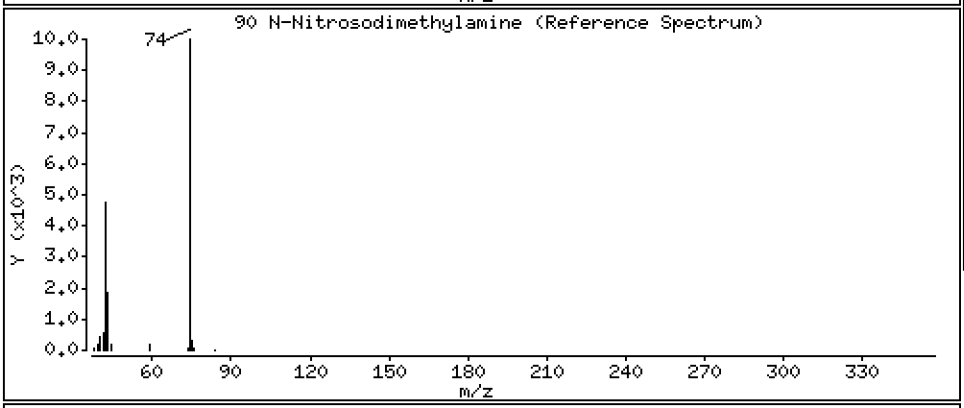
Concentration: 0.1160 ug/ml

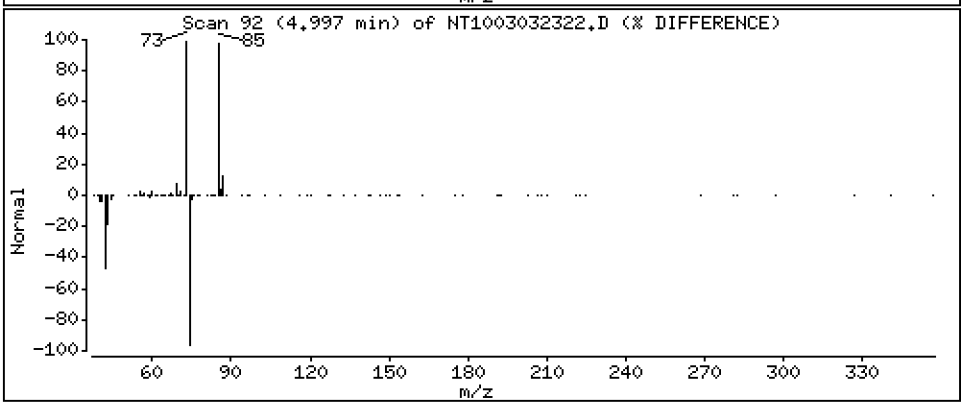












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032322.D

Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

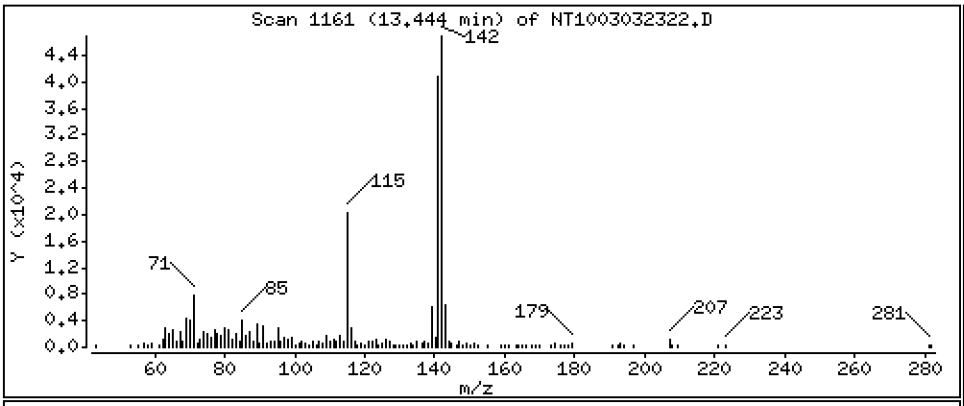
Operator: VTS

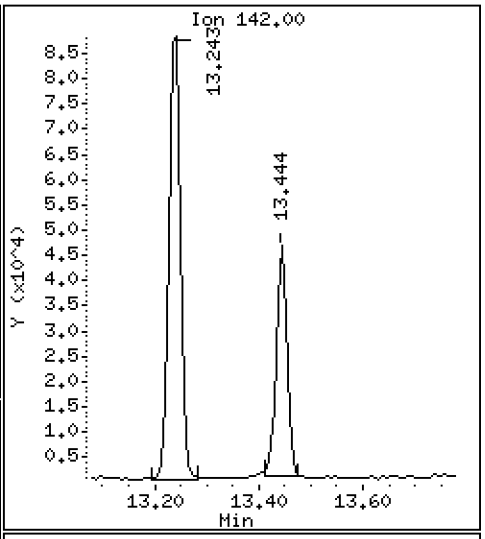
Column phase: ZB-5msi

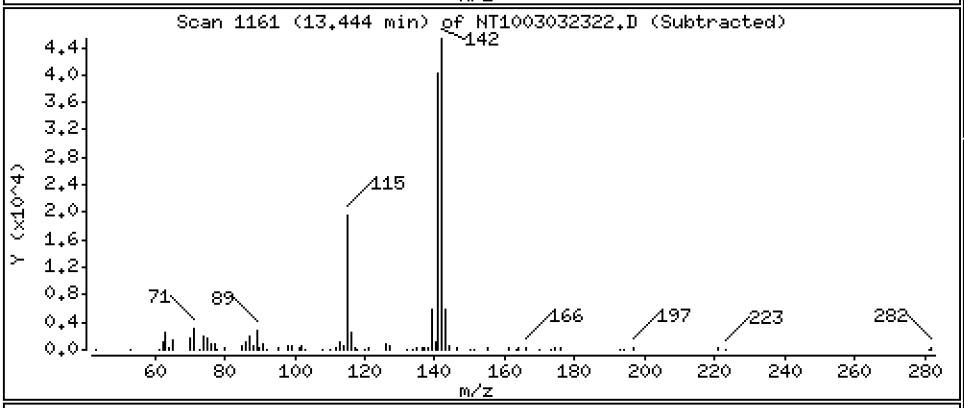
Column diameter: 0.25

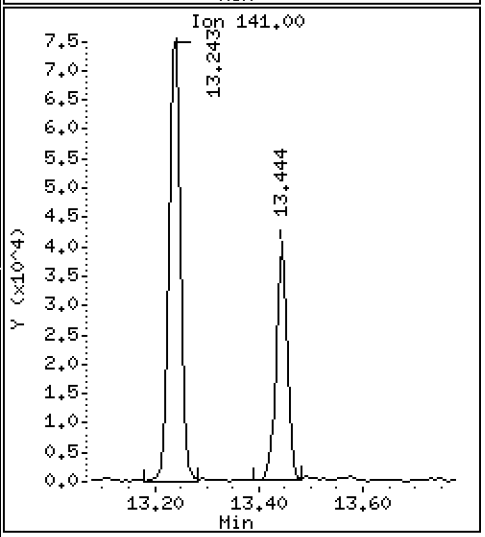
105 1-methylnaphthalene

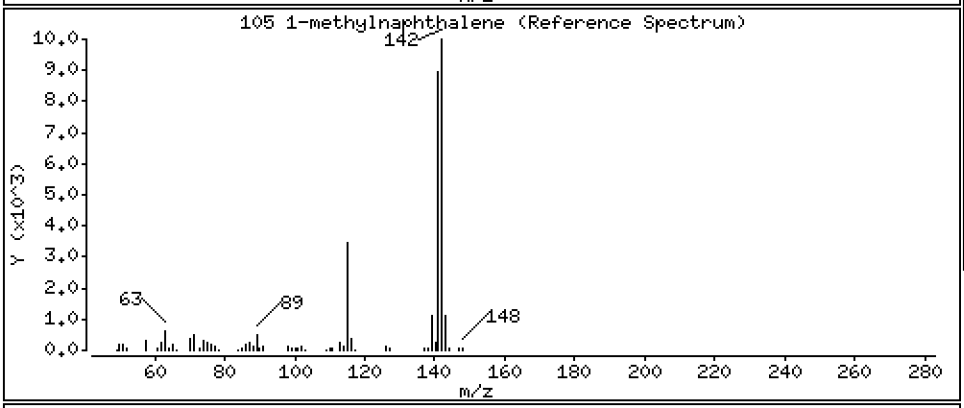
Concentration: 0.2889 ug/ml

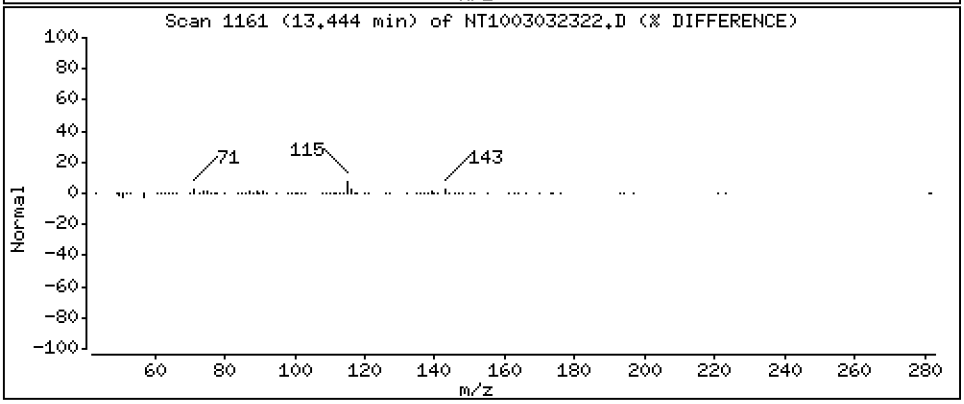












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032322.D

Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

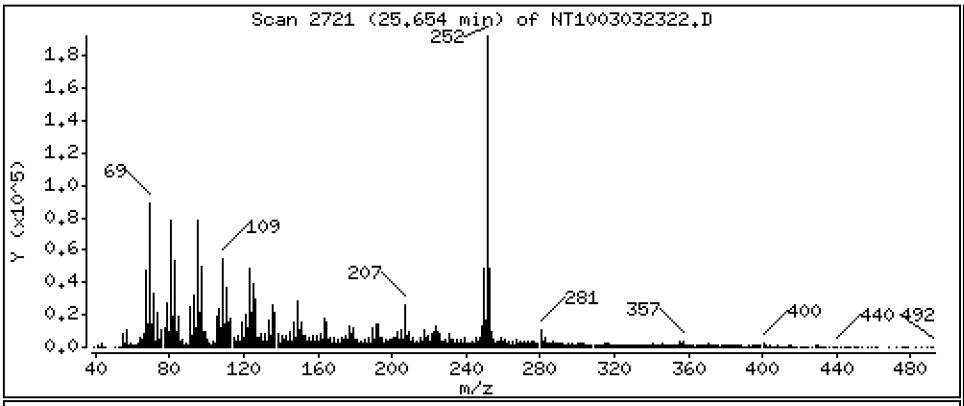
Operator: VTS

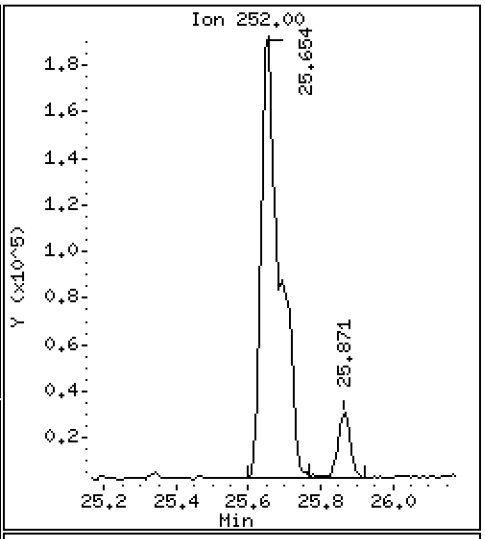
Column phase: ZB-5msi

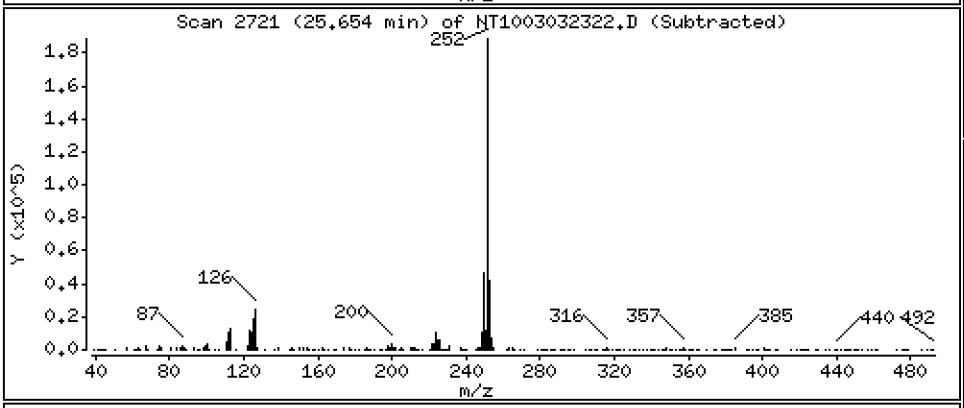
Column diameter: 0.25

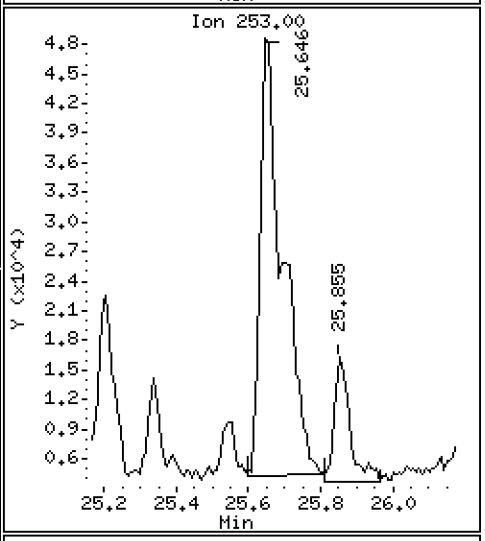
187 Total Benzofluoranthenes

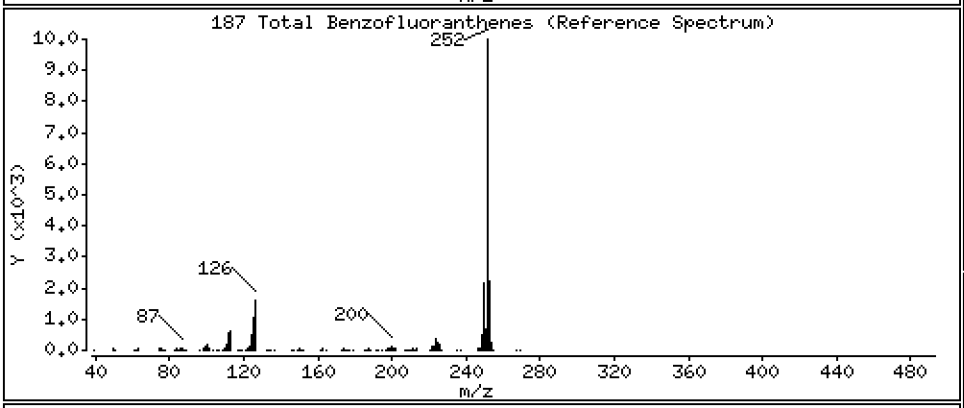
Concentration: 1.567 ug/ml

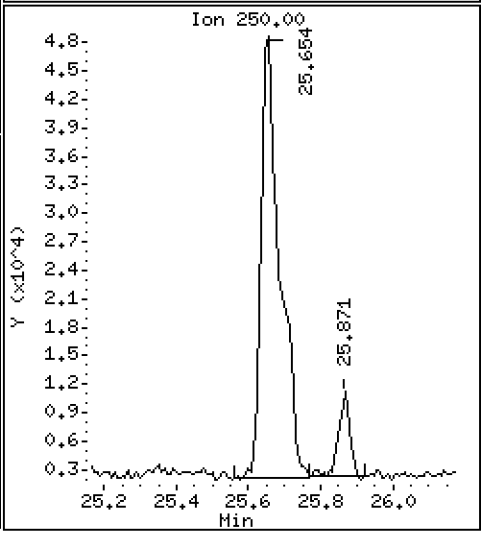


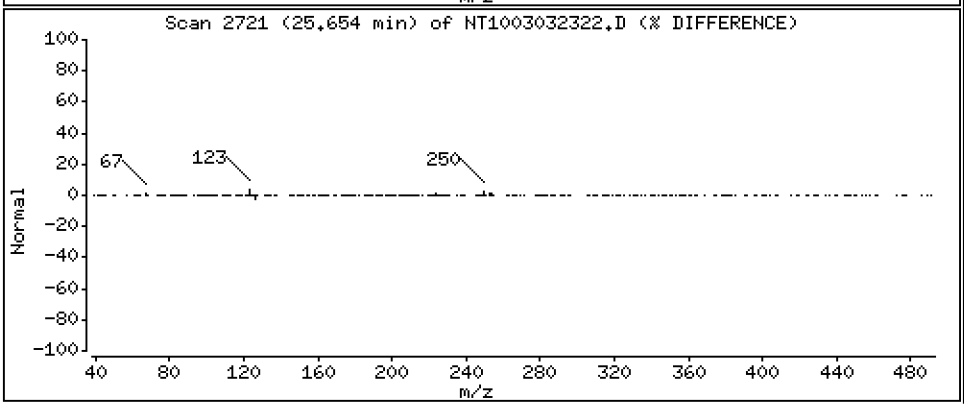












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230303A.b\NT1003032322.D
Lab Smp Id: 23A0249-08
Inj Date : 04-MAR-2023 07:06
Operator : VTS Inst ID: nt10.i
Smp Info : 23A0249-08
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Meth Date : 26-Apr-2023 10:41 van Quant Type: ISTD
Cal Date : 01-MAR-2023 18:37 Cal File: NT1003012306.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/ml)
$ 1	2-Fluorophenol	112	6.920	6.920	(0.746)	700441	5.58725	5.587
$ 2	Phenol-d5	99	8.535	8.535	(0.920)	885570	6.08443	6.084
3	Phenol	94	8.558	8.558	(0.922)	286558	1.85181	1.852
$ 5	2-Chlorophenol-d4	132	8.852	8.852	(0.954)	774687	6.23858	6.239
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	9.277	9.278	(1.000)	398453	4.00000	
9	1,4-Dichlorobenzene	146	9.316	9.316	(1.004)	4302	0.03045	0.03045
$ 10	1,2-Dichlorobenzene-d4	152	9.572	9.572	(1.032)	336058	3.62228	3.622
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	9.534	9.518	(1.028)	12818	0.16154	0.1615
14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	9.999	9.992	(1.078)	26323	0.17509	0.1751
$ 18	Nitrobenzene-d5	82	10.341	10.341	(0.877)	625394	4.02642	4.026
19	Nitrobenzene	77	Compound Not Detected.					
20	Isophorone	82	Compound Not Detected.					
21	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	Compound Not Detected.					
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.788	11.772	(1.000)	1414960	4.00000	
28	Naphthalene	128	11.826	11.819	(1.003)	693274	1.90896	1.909
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	13.242	13.227	(1.123)	142388	0.55499	0.5550
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	13.993	13.978	(0.908)	1135099	4.32053	4.321
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	Compound Not Detected.					
40	Acenaphthylene	152	15.123	15.115	(0.981)	23186	0.06521	0.06521
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	15.417	15.401	(1.000)	736573	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	15.479	15.471	(1.004)	51580	0.24053	0.2405
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.850	15.834	(1.028)	29595	0.09299	0.09299
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	16.321	16.306	(1.059)	295889	1.17417	1.174
49	Fluorene	166	16.569	16.554	(1.075)	45418	0.17152	0.1715
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	17.078	17.063	(1.108)	279457	5.92754	5.928
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	18.556	18.533	(1.000)	1282606	4.00000	
60	Phenanthrene	178	18.610	18.587	(1.003)	255834	0.77941	0.7794
61	Anthracene	178	18.718	18.695	(1.009)	77764	0.24432	0.2443
62	Carbazole	167	19.058	19.035	(1.027)	21768	0.07465	0.07465
63	Di-n-butylphthalate	149	19.763	19.739	(1.065)	19962	0.05049	0.05049
64	Fluoranthene	202	21.031	20.985	(0.889)	362967	1.04783	1.048
65	Pyrene	202	21.465	21.426	(0.907)	588937	1.66969	1.670
$ 66	Terphenyl-d14	244	21.743	21.705	(0.919)	1173195	4.11068	4.111
67	Butylbenzylphthalate	149	Compound Not Detected.					
68	Benzo(a)anthracene	228	23.648	23.617	(0.999)	220580	0.62126	0.6213
* 69	Chrysene-d12	240	23.664	23.633	(1.000)	1006944	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	23.710	23.679	(1.002)	304598	1.05945	1.059
72	bis(2-Ethylhexyl)phthalate	149	23.648	23.617	(0.954)	123875	0.43437	0.4344
* 134	Di-n-octylphthalate-d4	153	24.778	24.748	(1.000)	2030611	4.00000	
73	Di-n-octylphthalate	149	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	25.653	25.607	(0.968)	688469	1.50440	1.504
75	Benzo(k)fluoranthene	252	25.653	25.669	(0.968)	688469	1.56108	1.561

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
76	Benzo(a)pyrene	252	26.381	26.335	(0.995)	286233	0.70579	0.7058
* 77	Perylene-d12	264	26.513	26.459	(1.000)	1322990	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.476	29.406	(1.112)	211429	0.44703	0.4470
79	Dibenzo(a,h)anthracene	278	29.507	29.460	(1.113)	57833	0.16173	0.1617
80	Benzo(g,h,i)perylene	276	30.377	30.307	(1.146)	224821	0.59609	0.5961
90	N-Nitrosodimethylamine	74	4.997	4.758	(0.539)	9387	0.11599	0.1160
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	13.443	13.428	(1.140)	67093	0.28893	0.2889
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
187	Total Benzofluoranthenes	252	25.653	25.669	(0.968)	683469	1.56666	1.567
120	2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032322.D
Lab Smp Id: 23A0249-08
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:02
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	514090	257045	1028180	398453	-22.49
27 Naphthalene-d8	1833847	916924	3667694	1414960	-22.84
42 Acenaphthene-d10	935282	467641	1870564	736573	-21.25
59 Phenanthrene-d10	1597882	798941	3195764	1282606	-19.73
69 Chrysene-d12	1549718	774859	3099436	1006944	-35.02
134 Di-n-octylphthala	2731644	1365822	5463288	2030611	-25.66
77 Perylene-d12	1727703	863852	3455406	1322990	-23.42

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	-0.00
27 Naphthalene-d8	11.77	11.27	12.27	11.79	0.13
42 Acenaphthene-d10	15.40	14.90	15.90	15.42	0.10
59 Phenanthrene-d10	18.53	18.03	19.03	18.56	0.12
69 Chrysene-d12	23.63	23.13	24.13	23.66	0.13
134 Di-n-octylphthala	24.75	24.25	25.25	24.78	0.12
77 Perylene-d12	26.46	25.96	26.96	26.51	0.20

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

REVIEW SUMMARY FOR FILE - NT1003032322.D

Lab ID: 23A0249-08
nt10.i, 20230303A.b\ABN.m,   04-MAR-2023 07:06

RT	CO-ELUTION COMPOUNDS
23.649	bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.539	0.513	0.0258	N-Nitrosodimethylamine

RRT check based on Ccal File: NT1003032314ICV.D

On Column LOD for nt10.i, 20230303A.b\ABN.m, ICAL.sub = 0.0000

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

LDW23-SC1020

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-11 A	SDG:	23A0249
Sampled:	01/12/23 15:23	Prepared:	01/30/23 14:02	File ID:	NT1003032323.D
% Solids:	70.01	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 07:45
Batch:	BLA0673	Sequence:	SLC0162	Initial/Final:	14.57 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00019
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	5.5	J	4.3	19.6
106-44-5	4-Methylphenol	1	19.6	U	7.2	19.6
91-20-3	Naphthalene	1	19.6	U	4.2	19.6
91-57-6	2-Methylnaphthalene	1	19.6	U	4.4	19.6
208-96-8	Acenaphthylene	1	19.6	U	6.1	19.6
131-11-3	Dimethylphthalate	1	19.6	U	4.3	19.6
83-32-9	Acenaphthene	1	19.6	U	5.1	19.6
132-64-9	Dibenzofuran	1	19.6	U	13.8	19.6
86-73-7	Fluorene	1	19.6	U	14.3	19.6
85-01-8	Phenanthrene	1	19.6	U	8.5	19.6
120-12-7	Anthracene	1	19.6	U	7.0	19.6
206-44-0	Fluoranthene	1	19.6	U	6.0	19.6
129-00-0	Pyrene	1	19.6	U	5.6	19.6
85-68-7	Butylbenzylphthalate	1	19.6	U	9.2	19.6
56-55-3	Benzo(a)anthracene	1	19.6	U	5.8	19.6
218-01-9	Chrysene	1	19.6	U	5.9	19.6
117-81-7	bis(2-Ethylhexyl)phthalate	1	49.0	U	5.4	49.0
	Benzofluoranthenes, Total	1	39.2	U	9.8	39.2
50-32-8	Benzo(a)pyrene	1	19.6	U	4.1	19.6
193-39-5	Indeno(1,2,3-cd)pyrene	1	19.6	U	14.4	19.6
53-70-3	Dibenzo(a,h)anthracene	1	19.6	U	16.9	19.6
191-24-2	Benzo(g,h,i)perylene	1	19.6	U	13.3	19.6

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	735.26	422	57.4	27 - 120	
Phenol-d5	735.26	450	61.2	29 - 120	
2-Chlorophenol-d4	735.26	461	62.7	31 - 120	
1,2-Dichlorobenzene-d4	490.17	267	54.5	32 - 120	
Nitrobenzene-d5	490.17	303	61.9	30 - 120	
2-Fluorobiphenyl	490.17	323	65.8	35 - 120	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1020

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

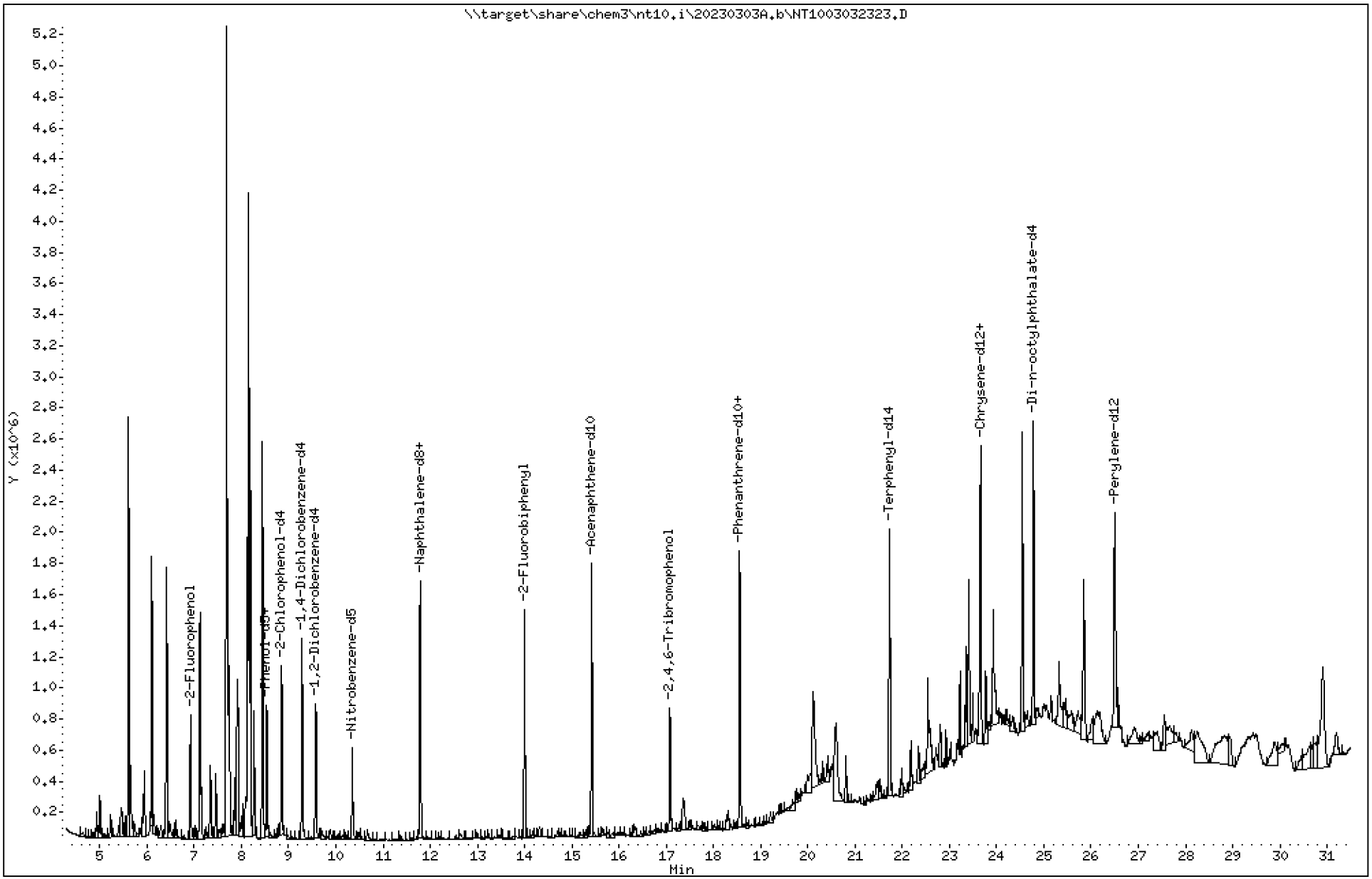
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-11 A	SDG:	23A0249
Sampled:	01/12/23 15:23	Prepared:	01/30/23 14:02	File ID:	NT1003032323.D
% Solids:	70.01	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 07:45
Batch:	BLA0673	Sequence:	SLC0162	Initial/Final:	14.57 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00019
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2,4,6-Tribromophenol	735.26	385	52.4	24 - 134	
p-Terphenyl-d14	490.17	320	65.2	37 - 120	

Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032323.D
Date : 04-MAR-2023 07:45
Client ID:
Sample Info: 23A0249-11
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

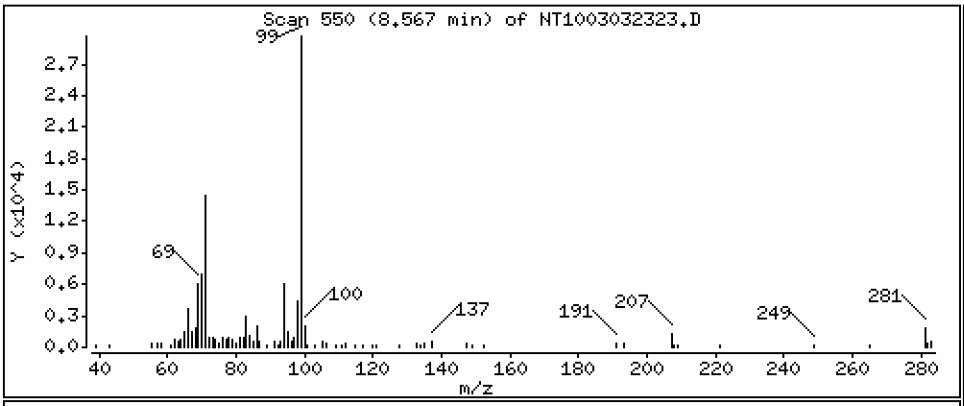
Operator: VTS

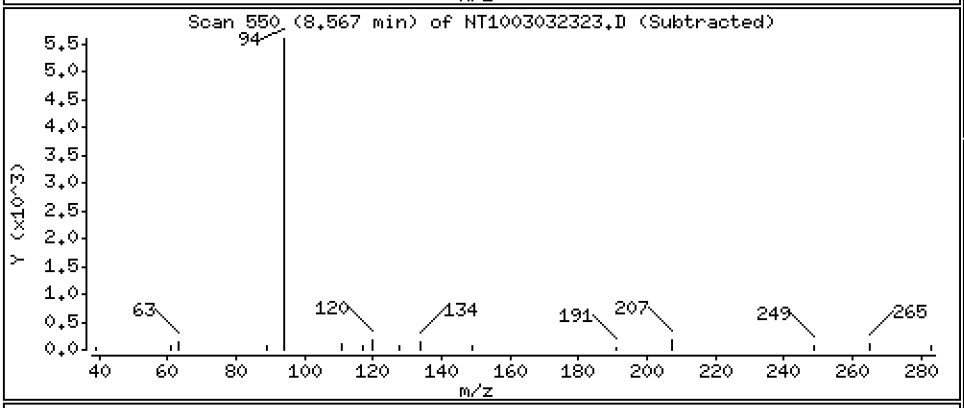
Column phase: ZB-5msi

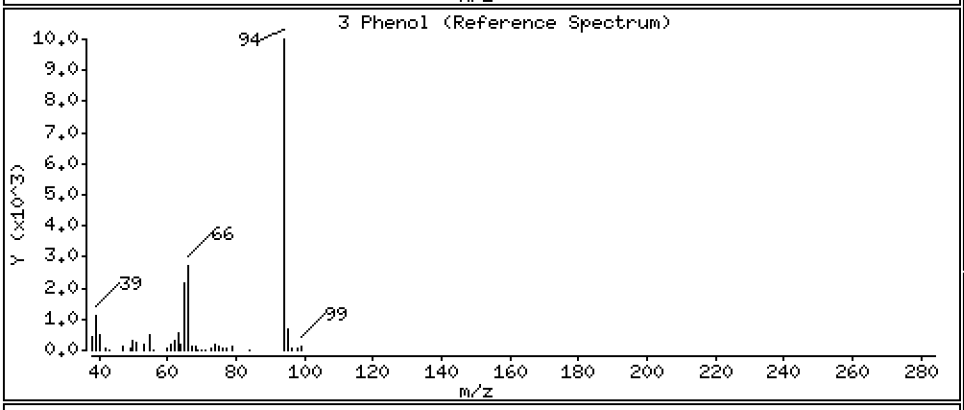
Column diameter: 0.25

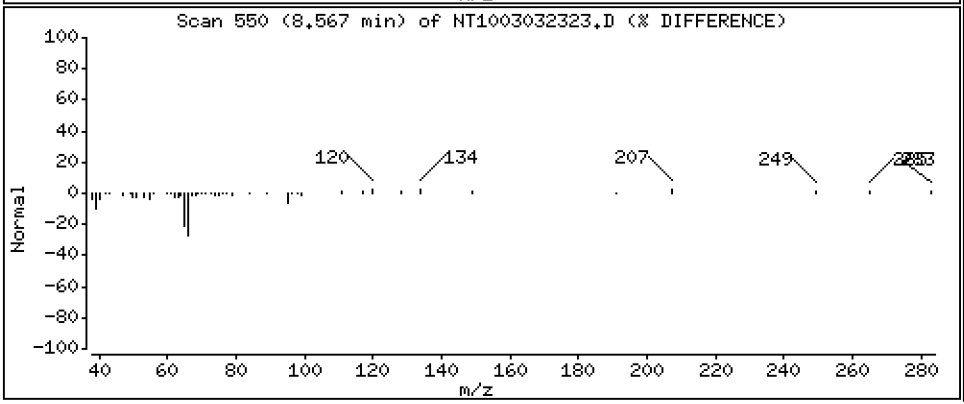
3 Phenol

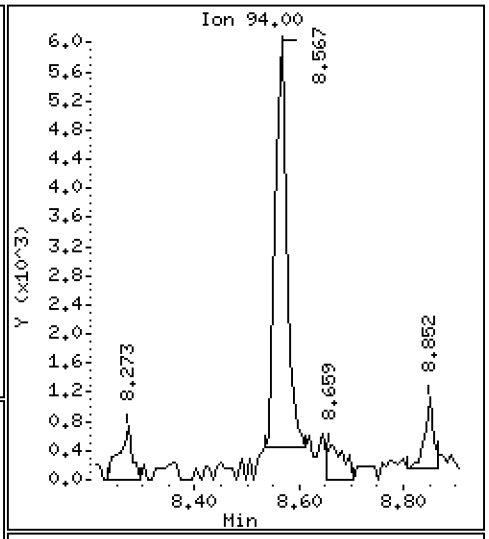
Concentration: 0.05613 ug/ml

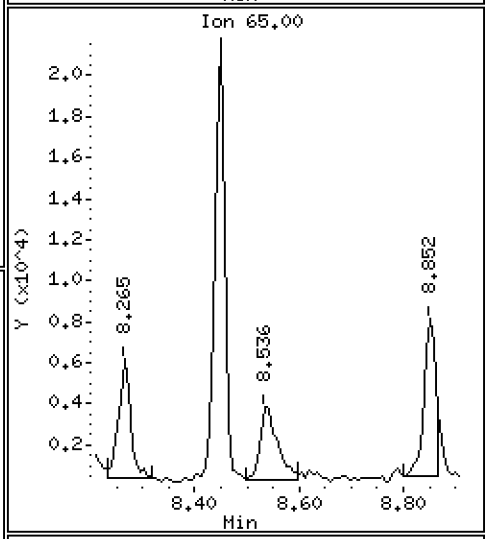


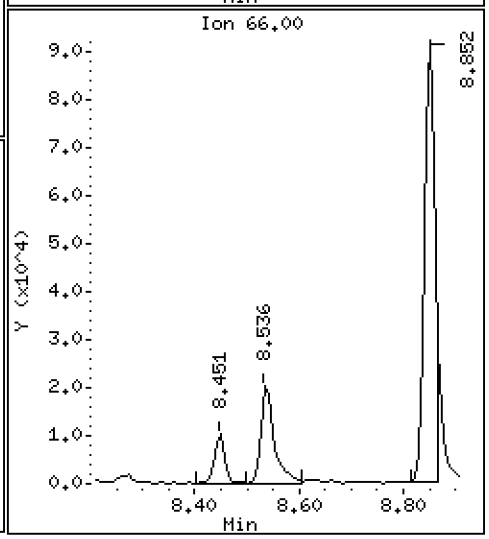












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

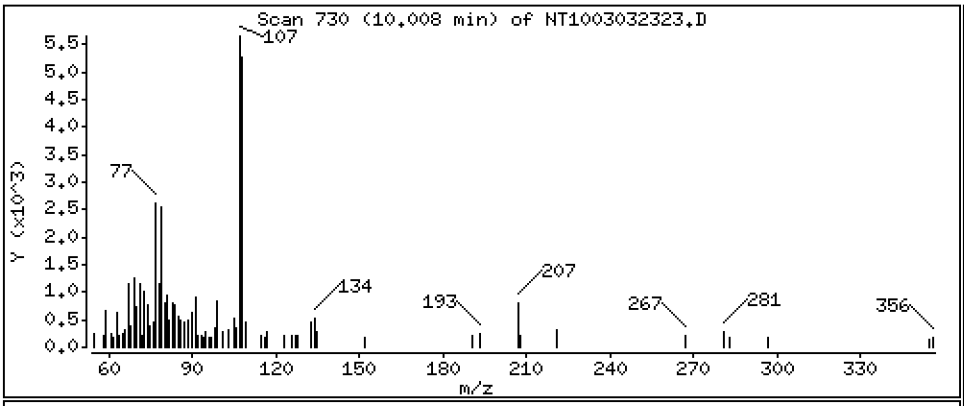
Operator: VTS

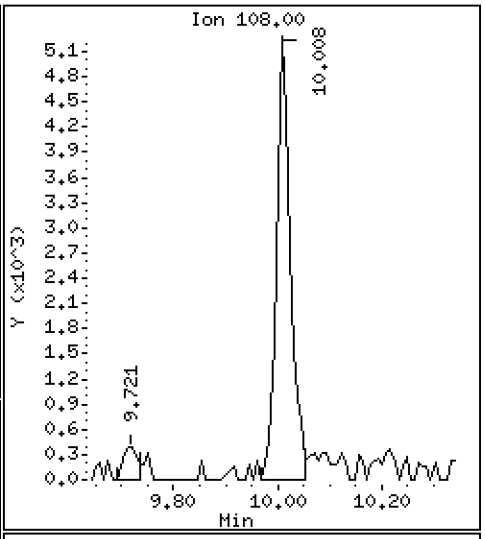
Column phase: ZB-5msi

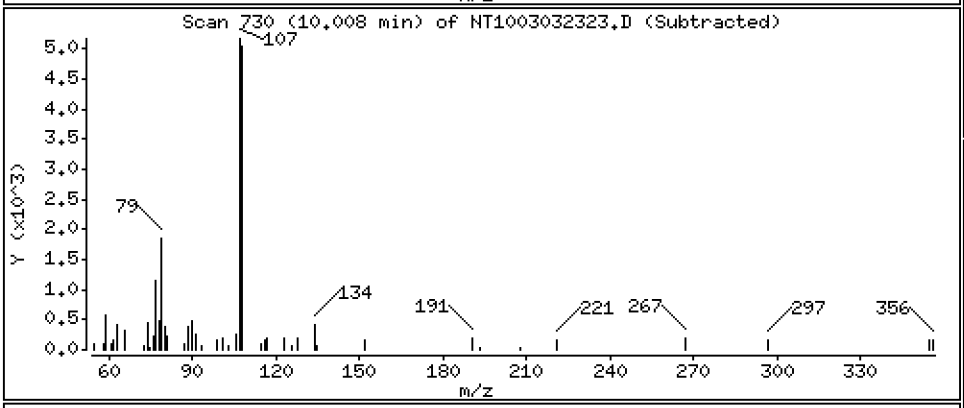
Column diameter: 0.25

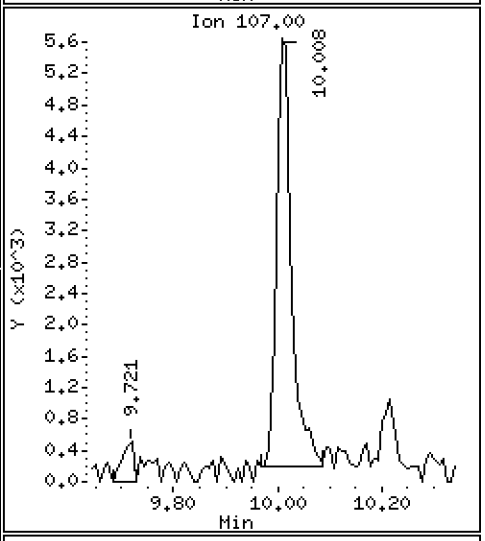
15 4-Methylphenol

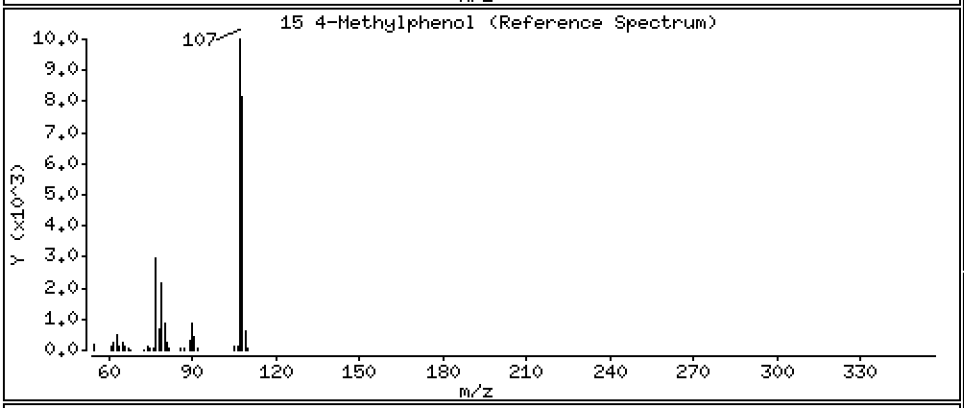
Concentration: 0.07204 ug/ml

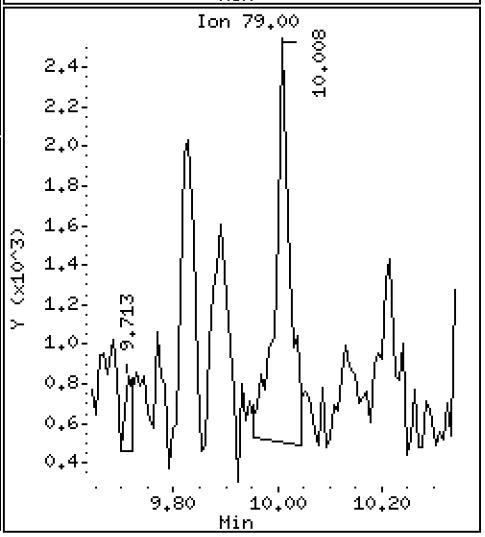


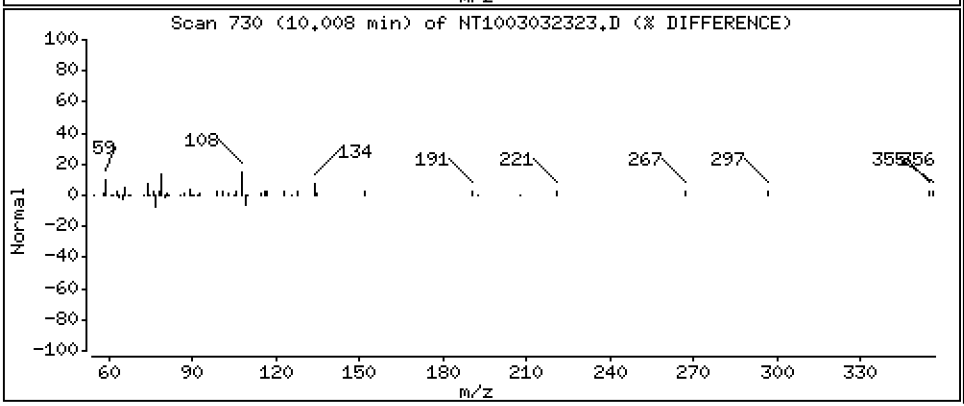












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032323.D

Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

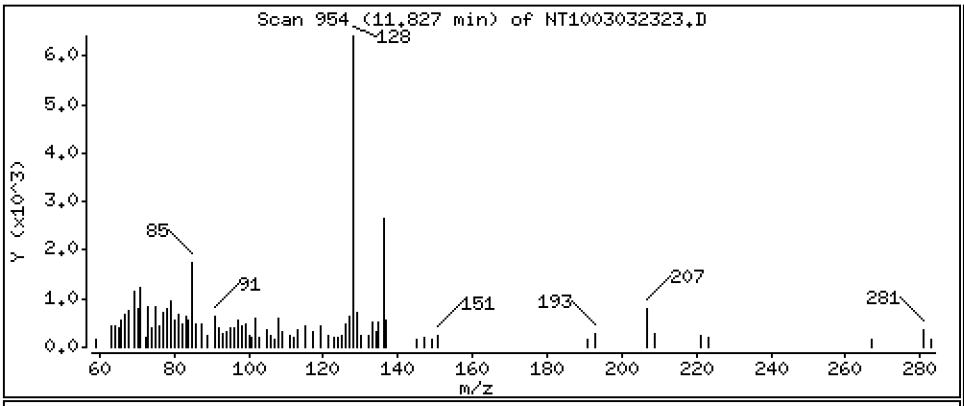
Operator: VTS

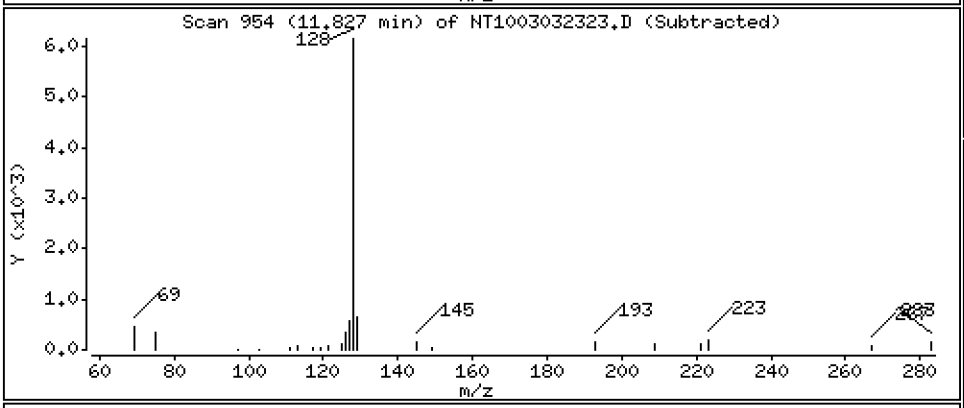
Column phase: ZB-5msi

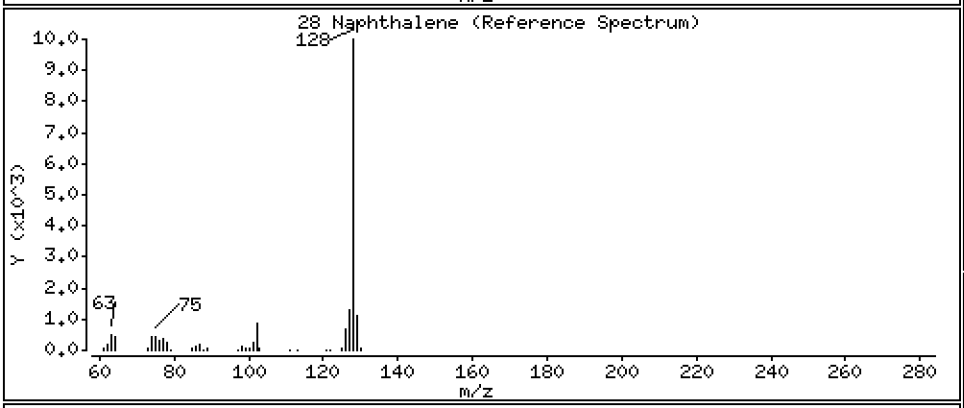
Column diameter: 0.25

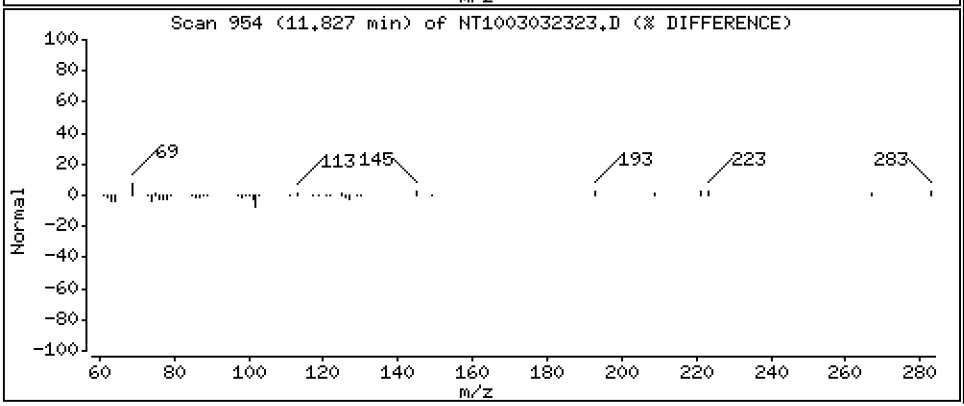
28 Naphthalene

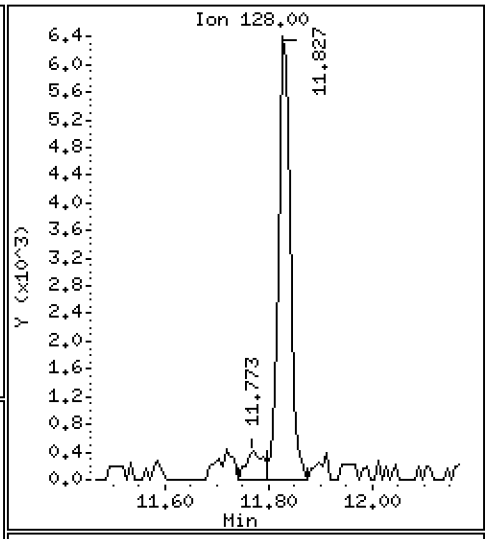
Concentration: 0.03197 ug/ml

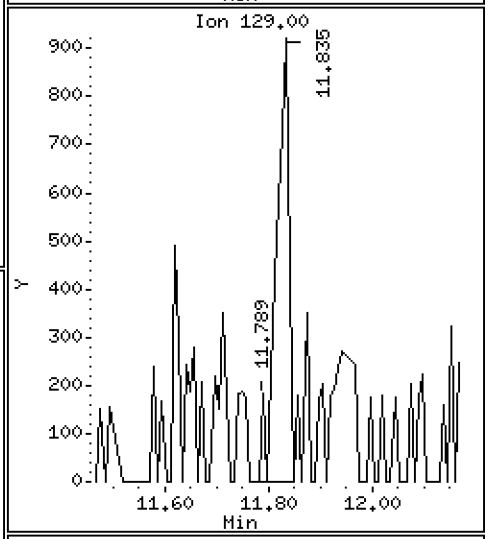


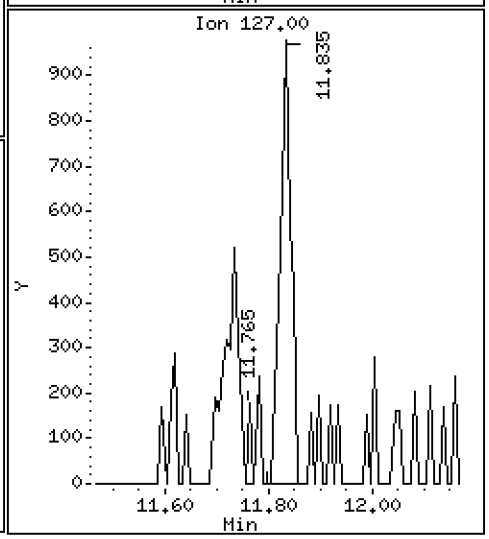












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

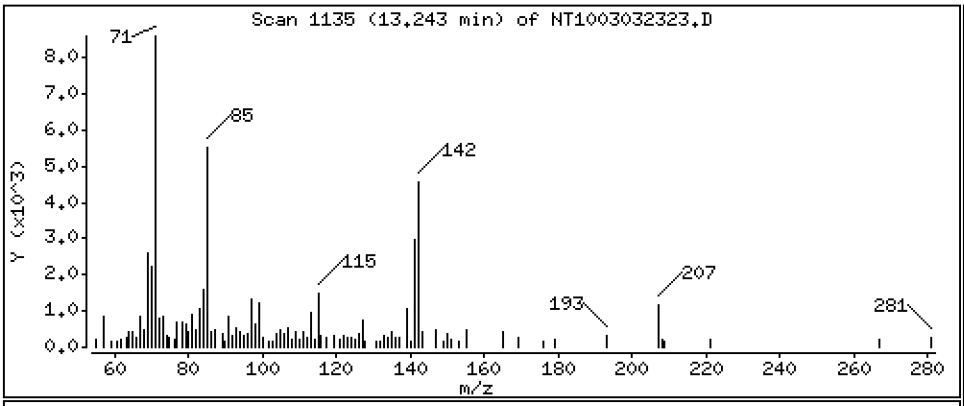
Operator: VTS

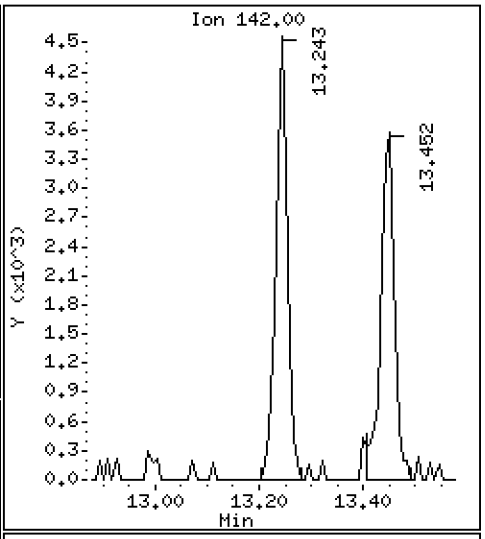
Column phase: ZB-5msi

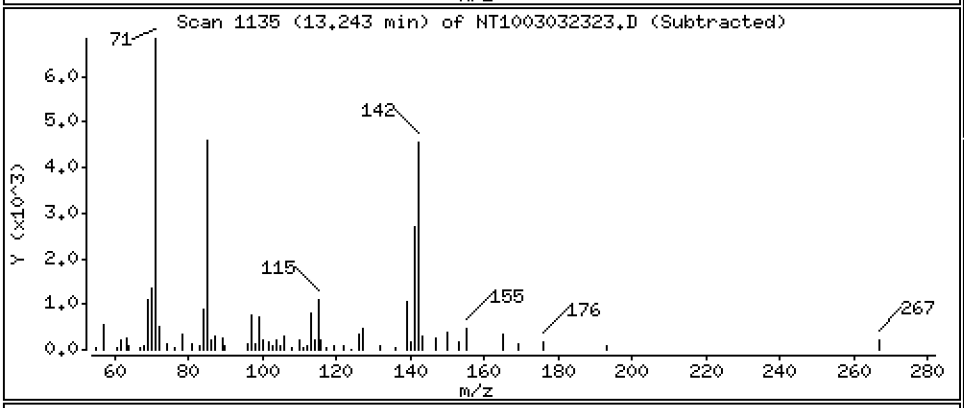
Column diameter: 0.25

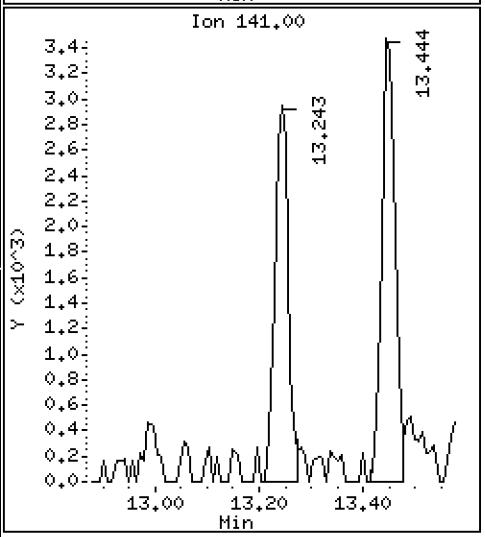
32 2-Methylnaphthalene

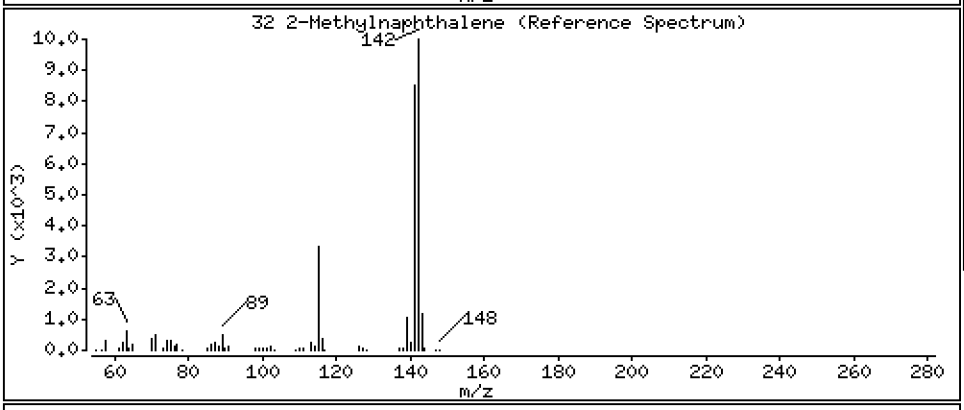
Concentration: 0.02991 ug/ml

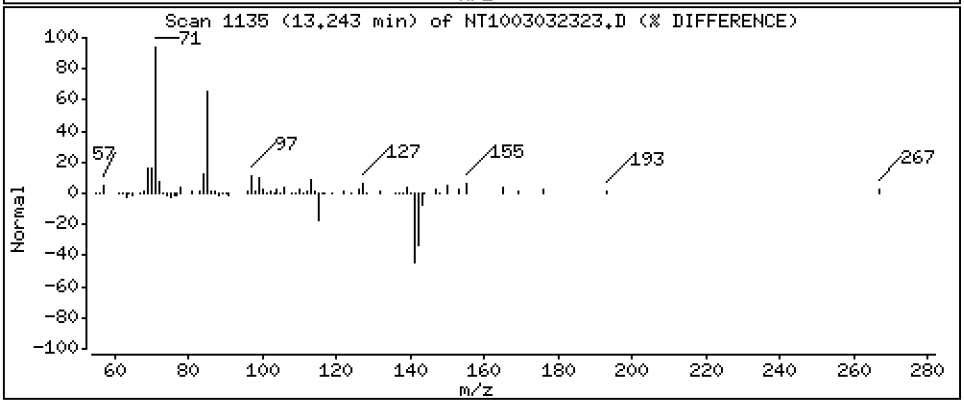












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

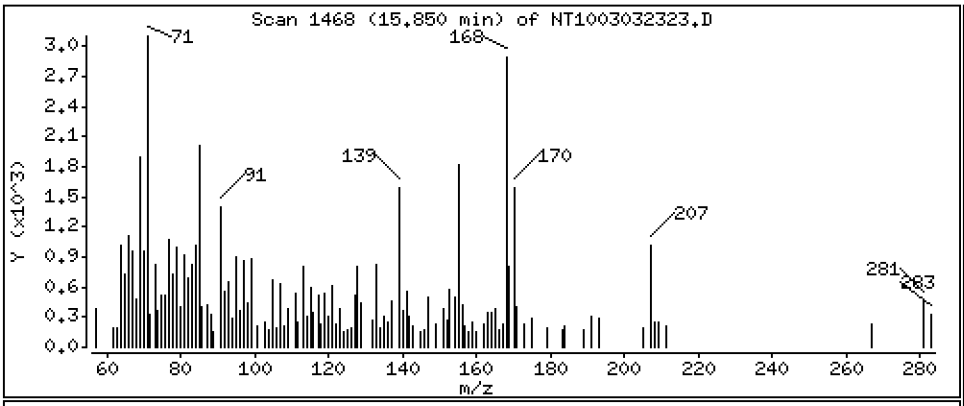
Operator: VTS

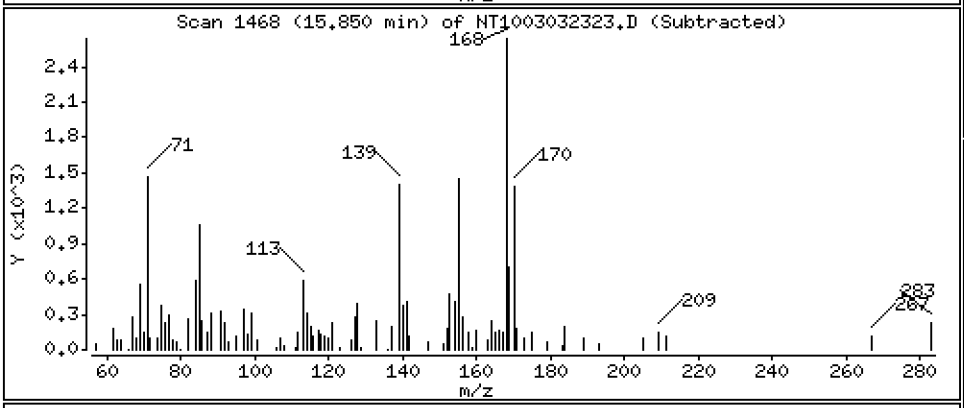
Column phase: ZB-5msi

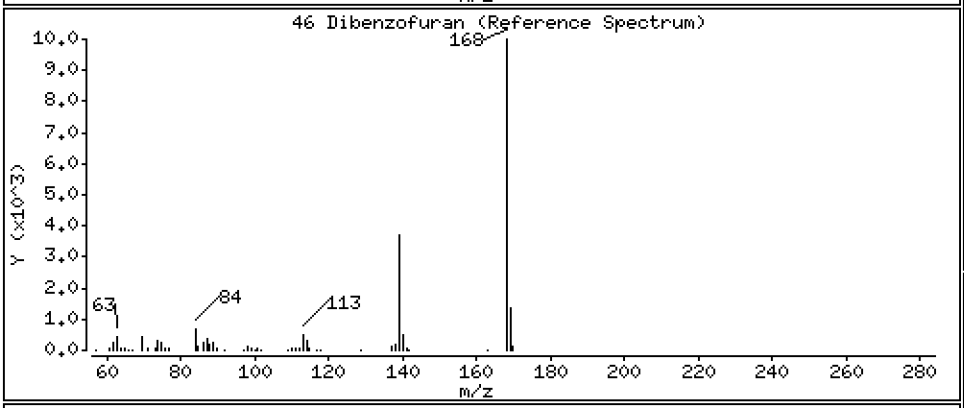
Column diameter: 0.25

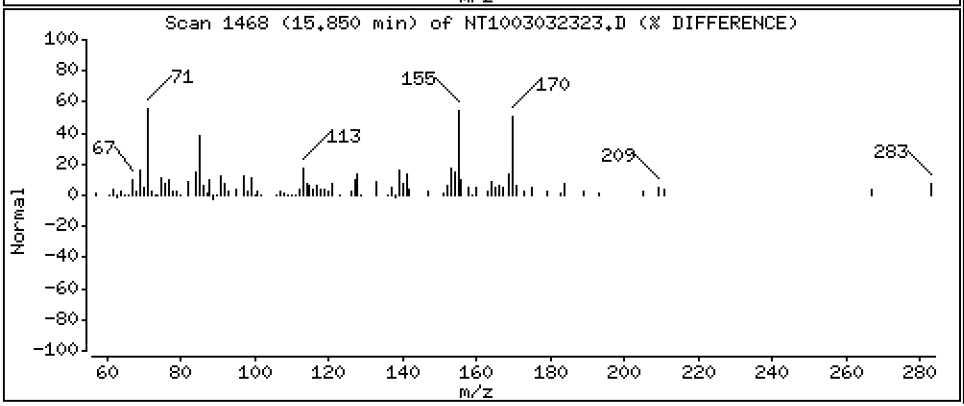
46 Dibenzofuran

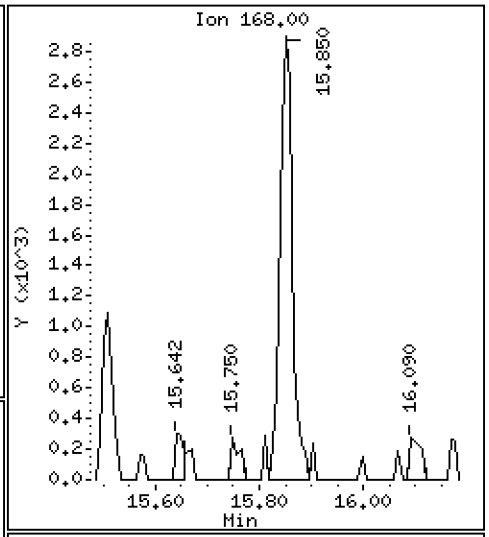
Concentration: 0.01638 ug/ml

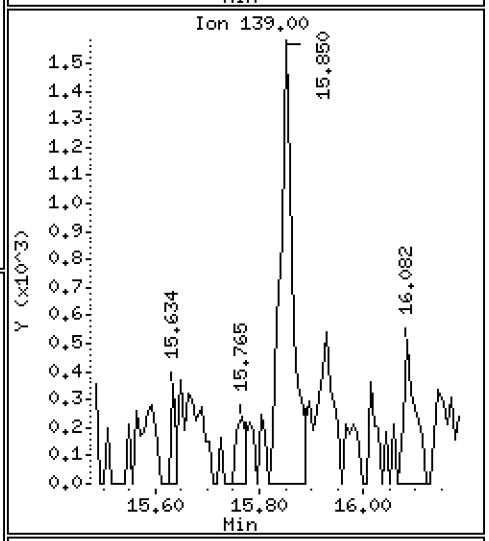


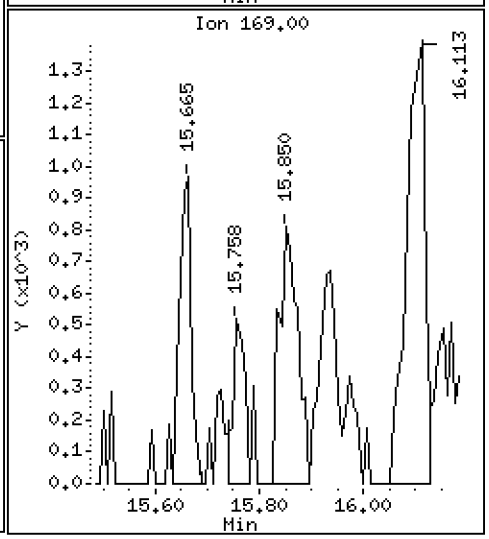












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

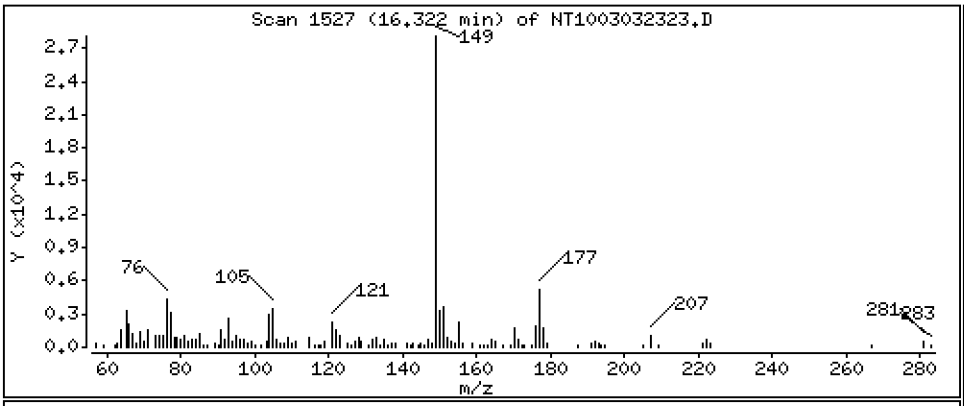
Operator: VTS

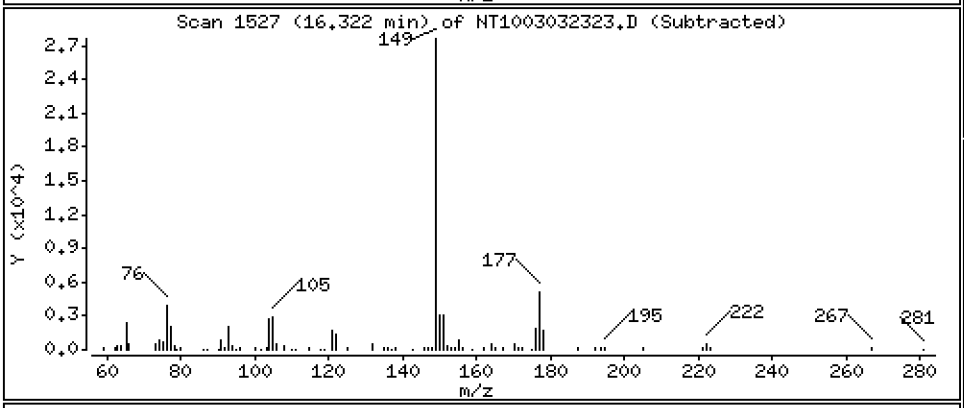
Column phase: ZB-5msi

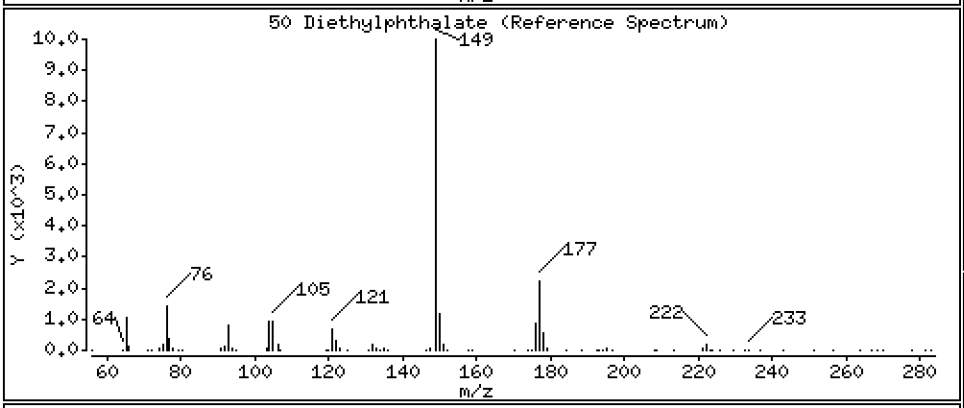
Column diameter: 0.25

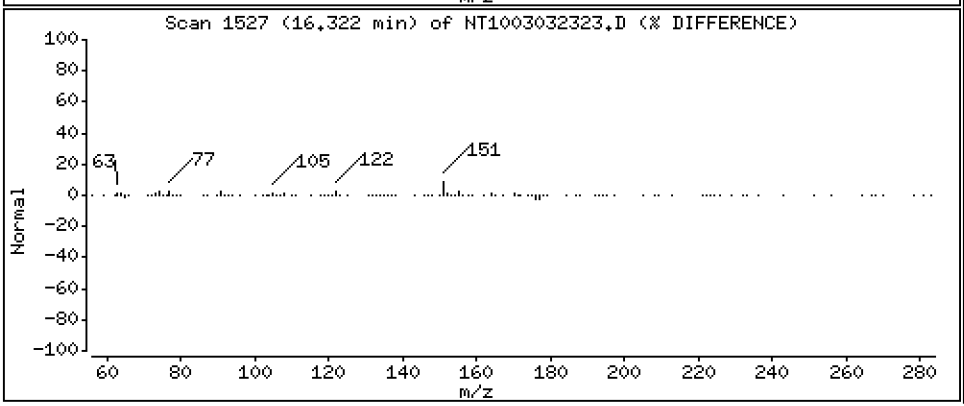
50 Diethylphthalate

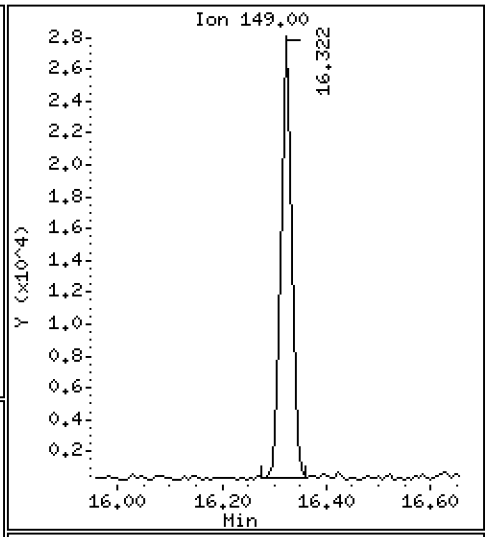
Concentration: 0.1702 ug/ml

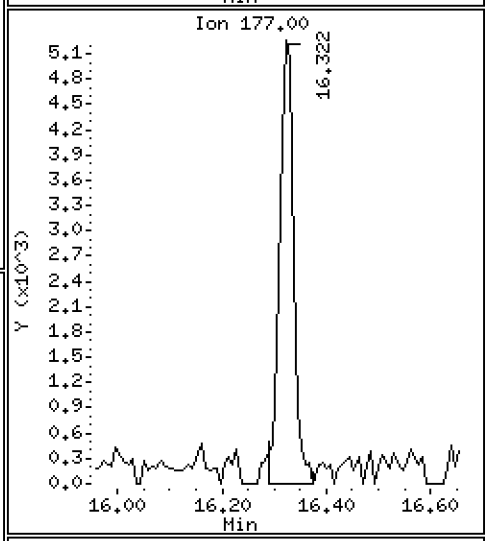


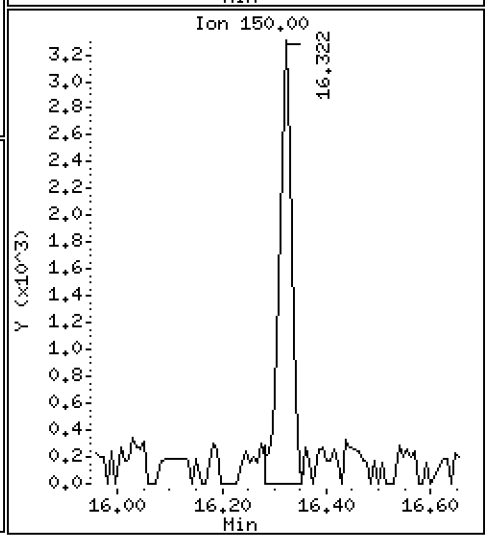












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032323.D

Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

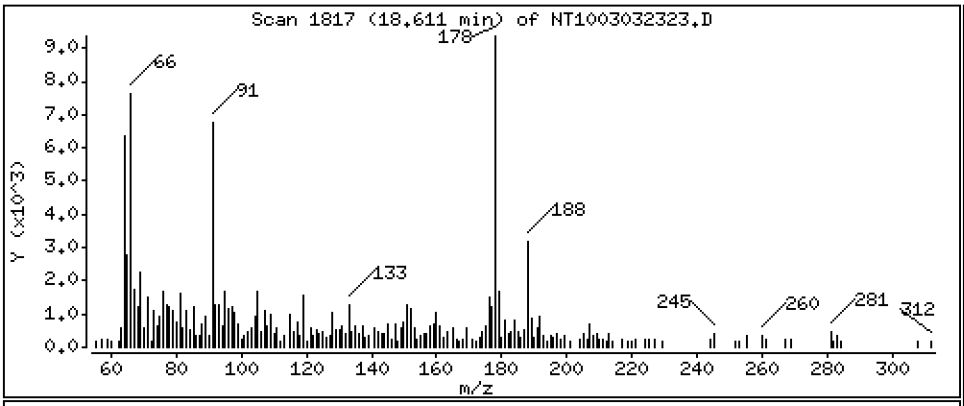
Operator: VTS

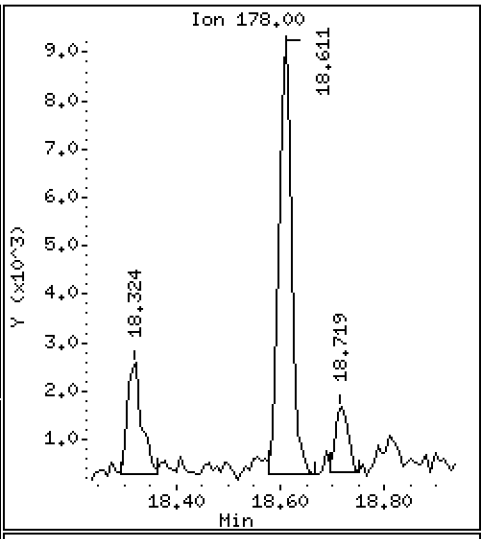
Column phase: ZB-5msi

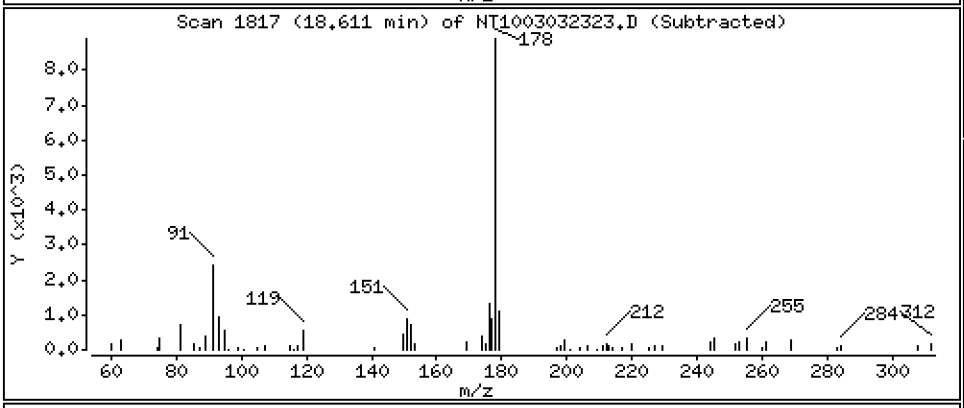
Column diameter: 0.25

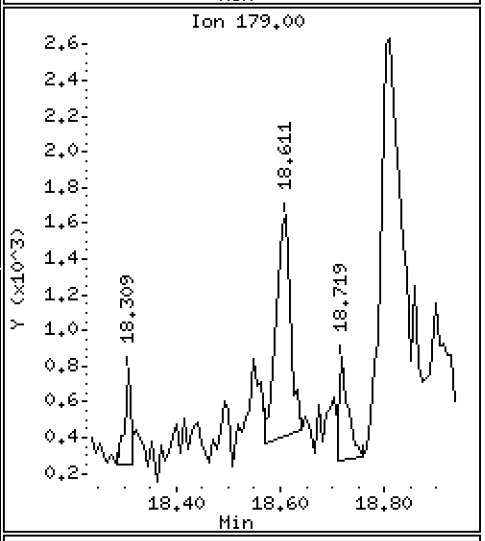
60 Phenanthrene

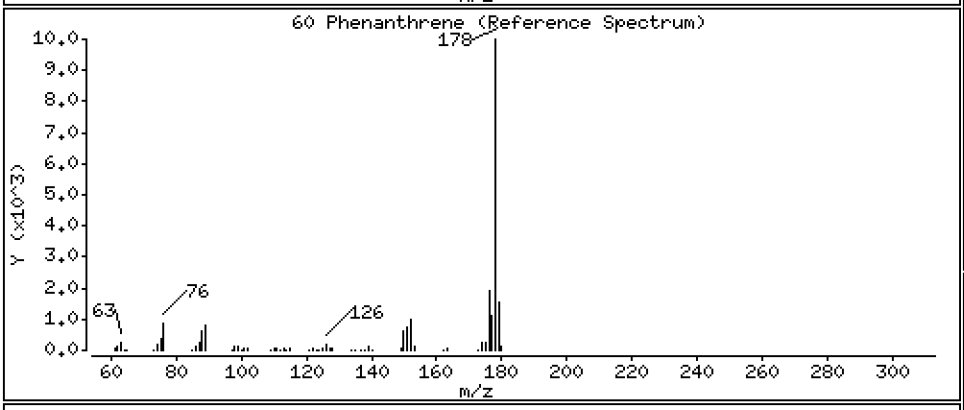
Concentration: 0.05342 ug/ml

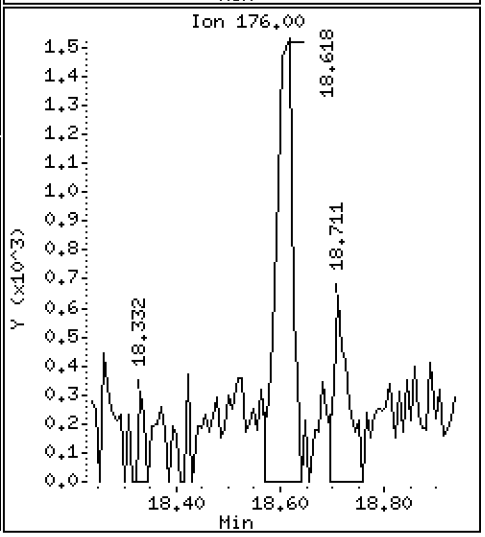


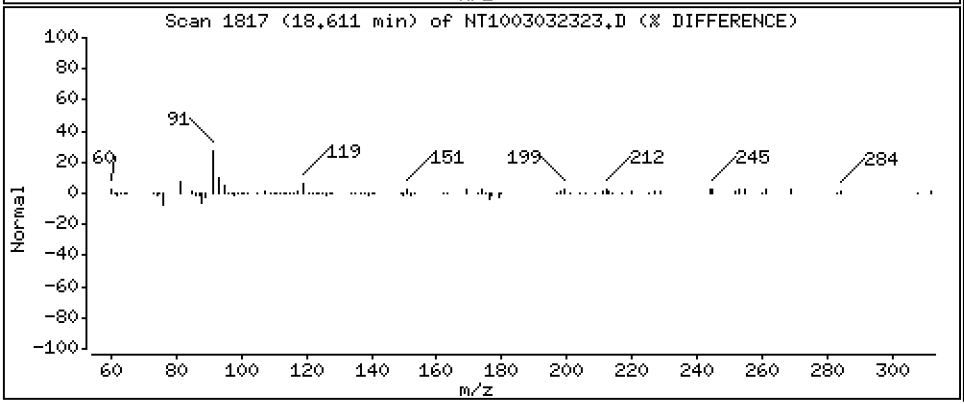












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032323.D

Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

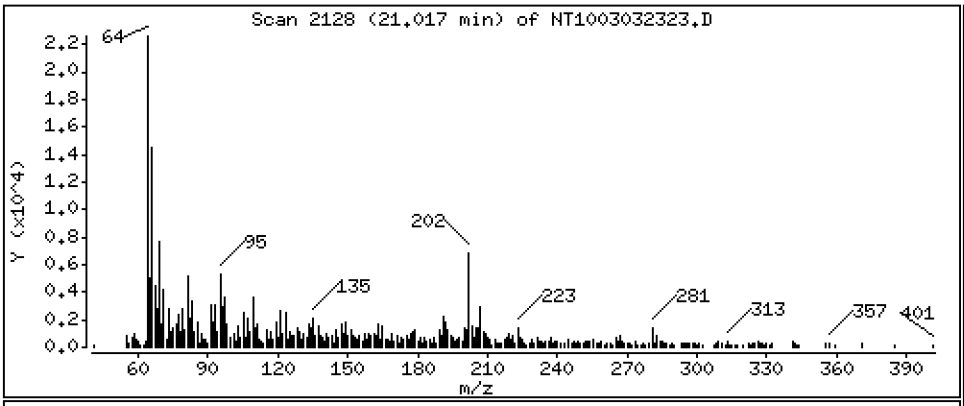
Operator: VTS

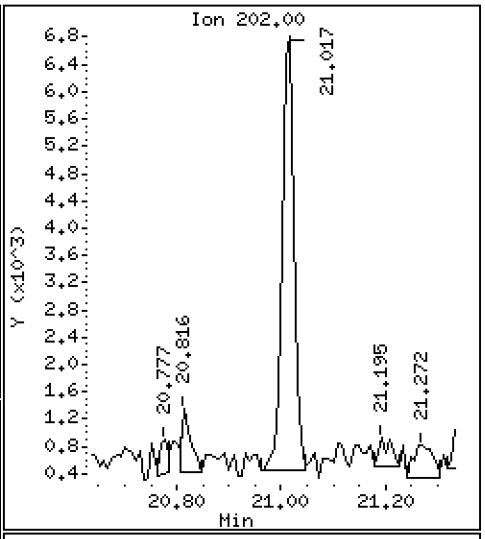
Column phase: ZB-5msi

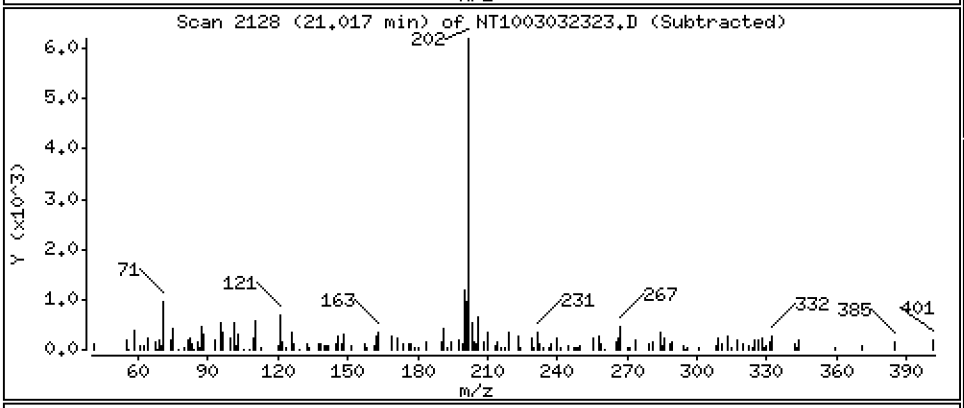
Column diameter: 0.25

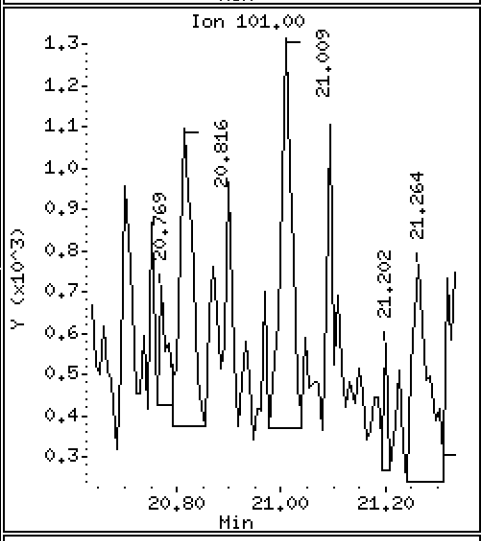
64 Fluoranthene

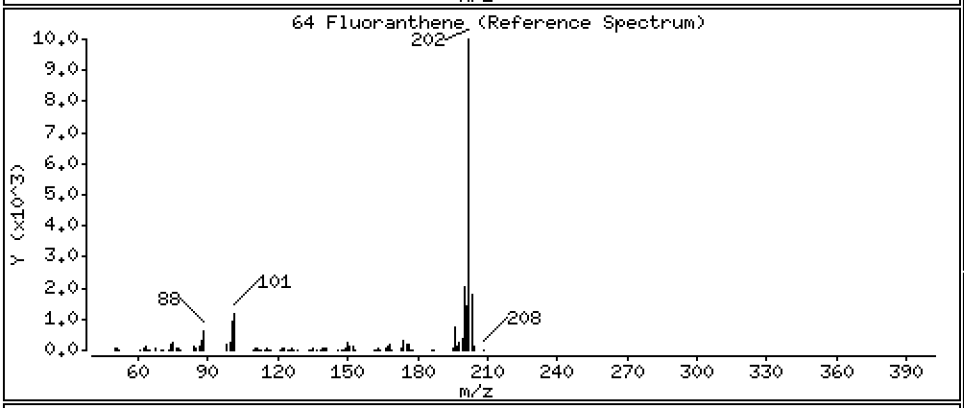
Concentration: 0.03159 ug/ml

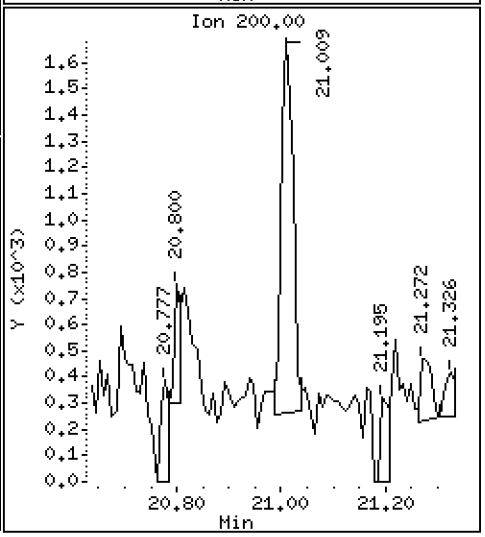


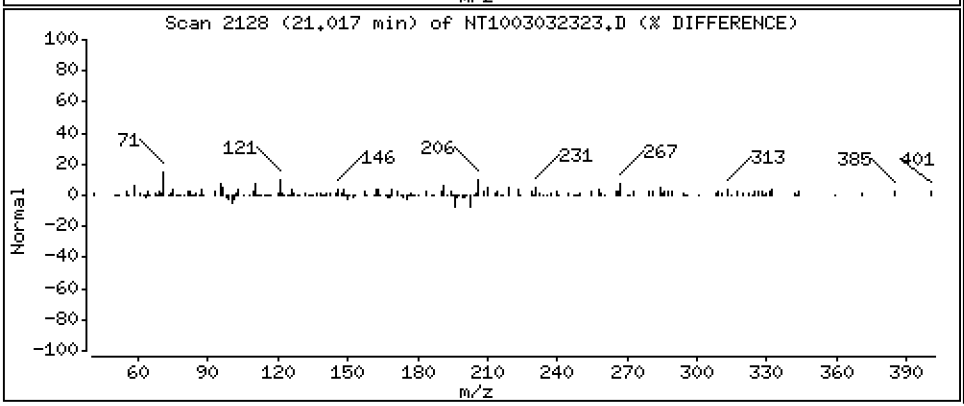












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

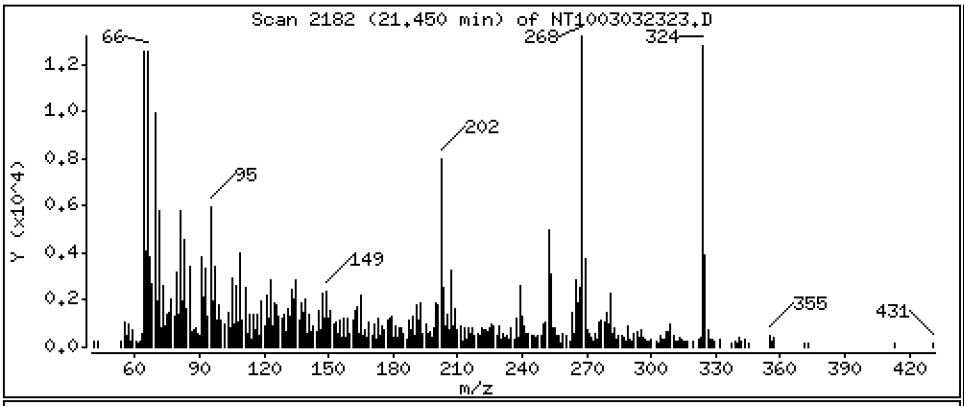
Operator: VTS

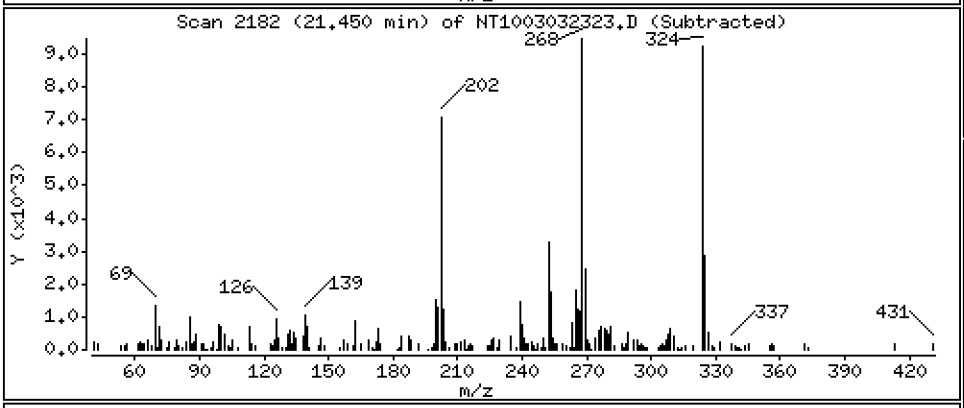
Column phase: ZB-5msi

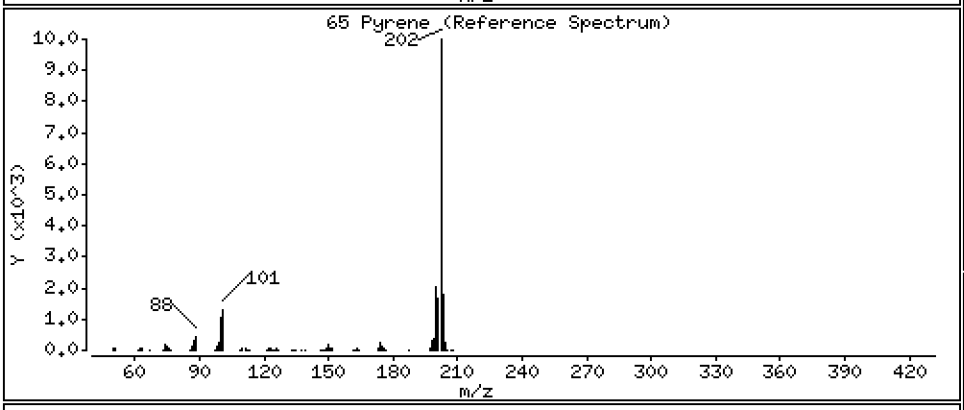
Column diameter: 0.25

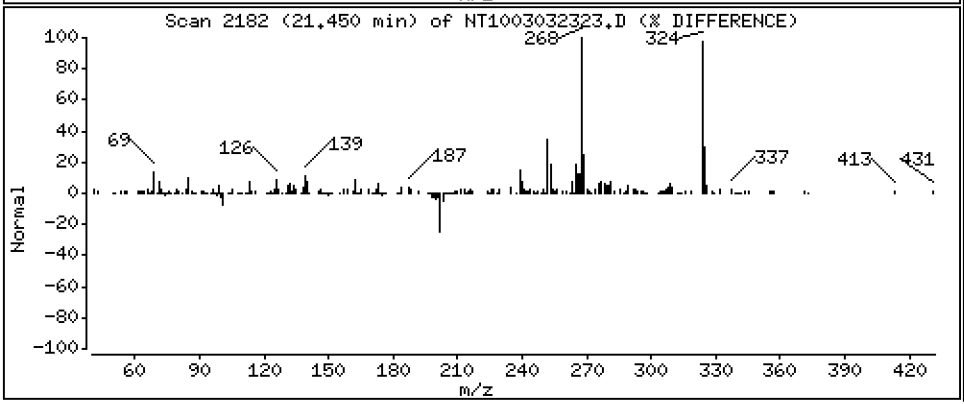
65 Pyrene

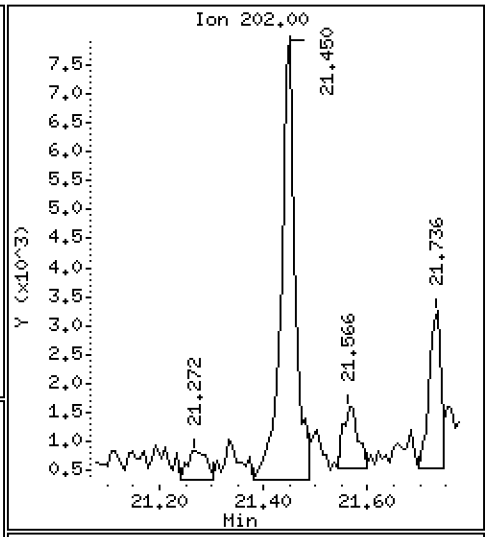
Concentration: 0.04755 ug/ml

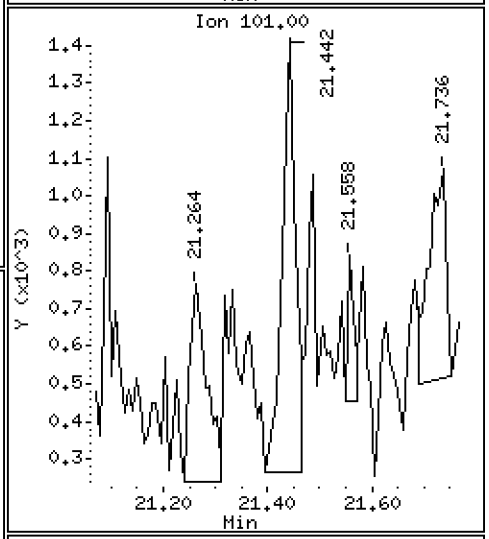


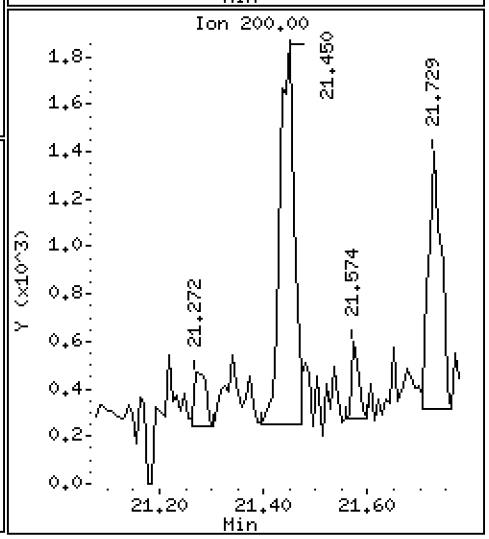












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

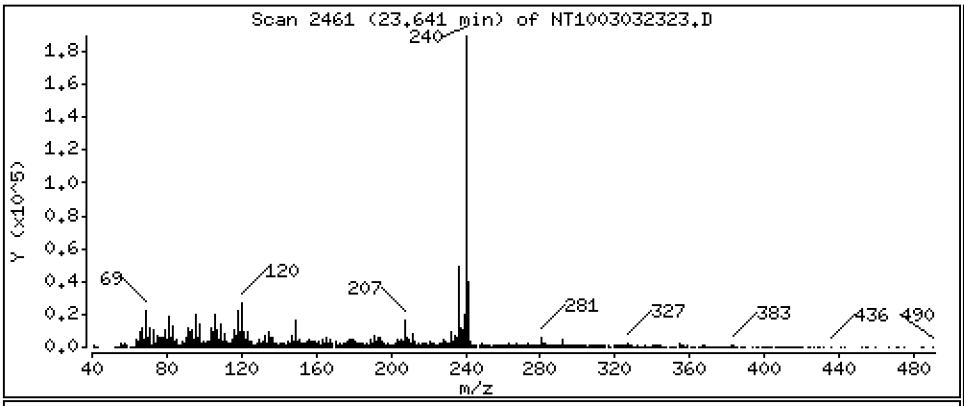
Operator: VTS

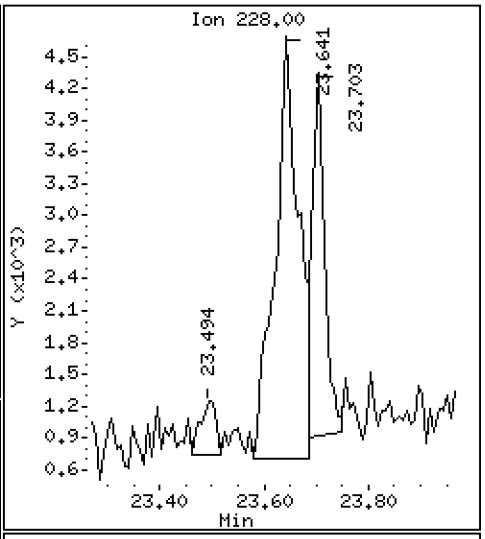
Column phase: ZB-5msi

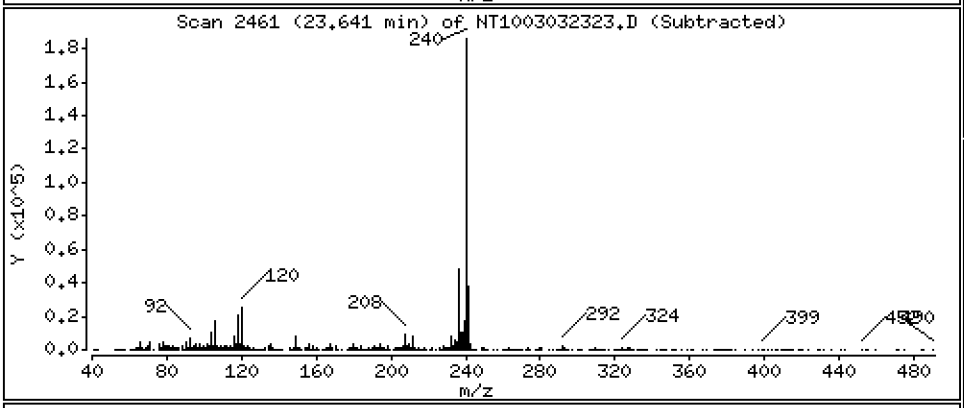
Column diameter: 0.25

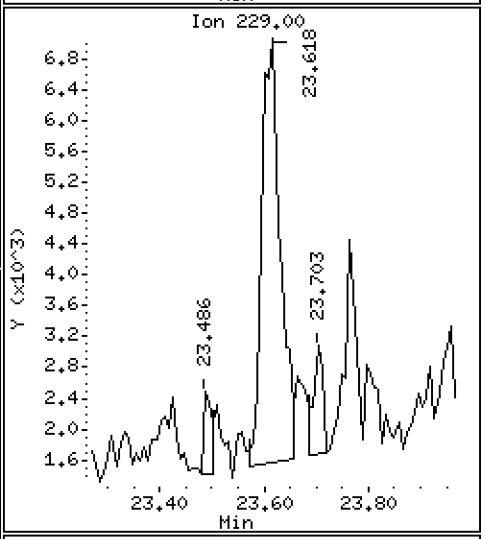
68 Benzo(a)anthracene

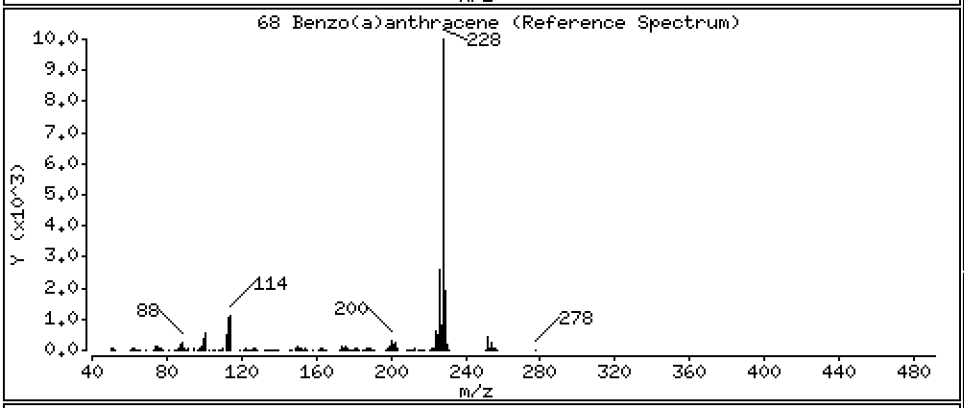
Concentration: 0.03813 ug/ml

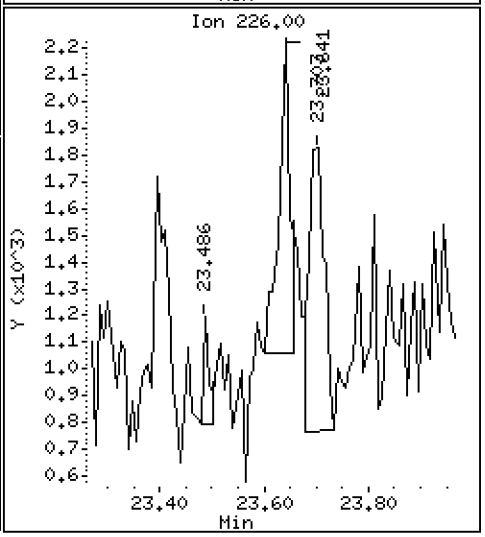


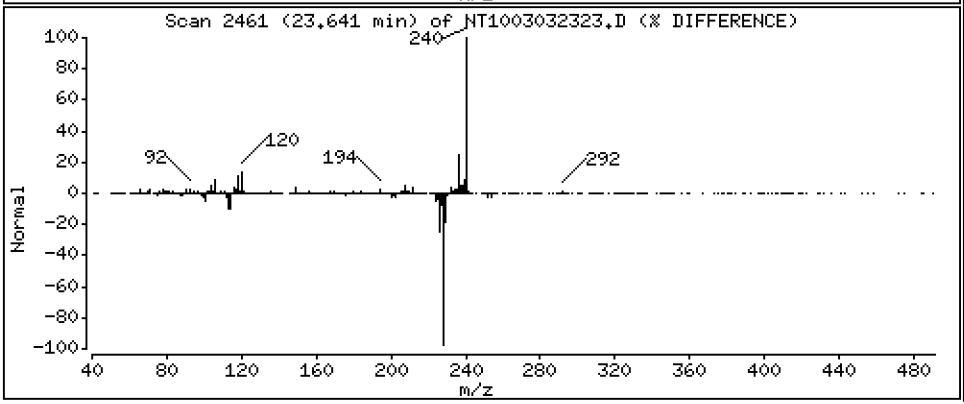












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

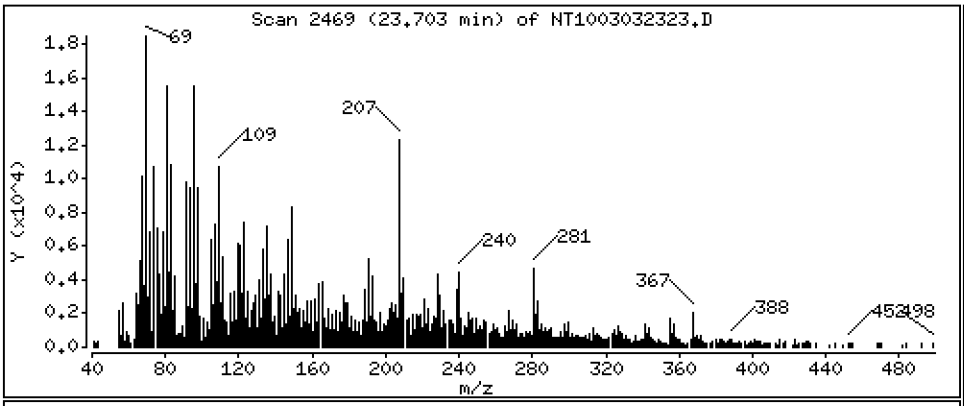
Operator: VTS

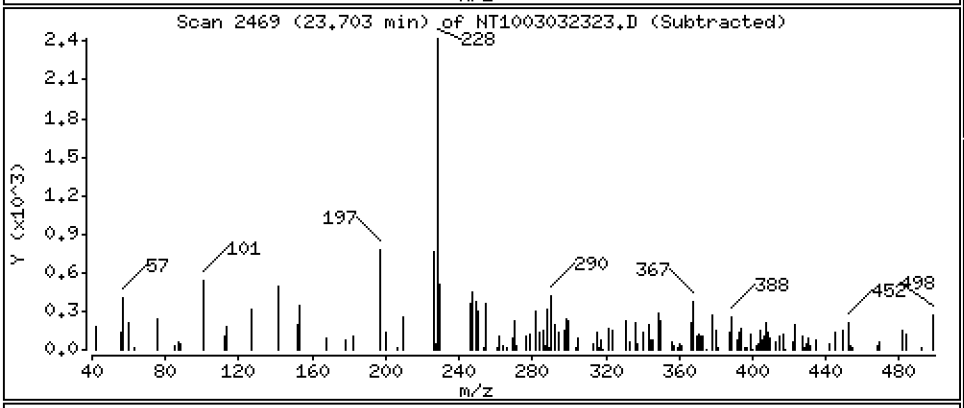
Column phase: ZB-5msi

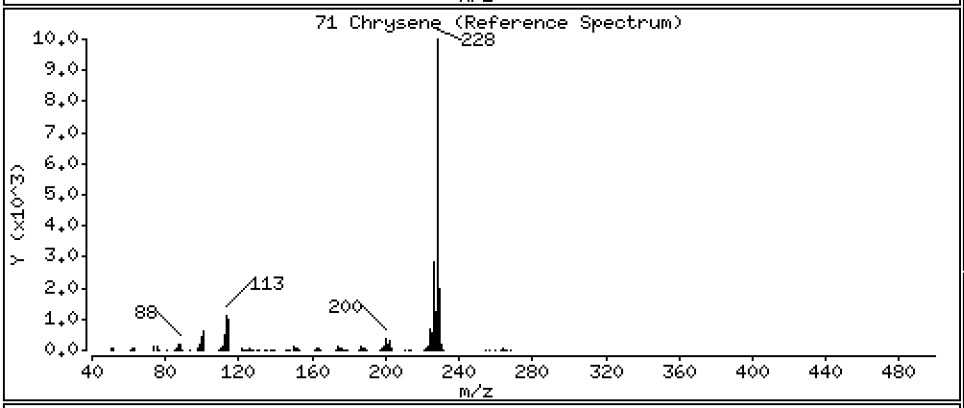
Column diameter: 0.25

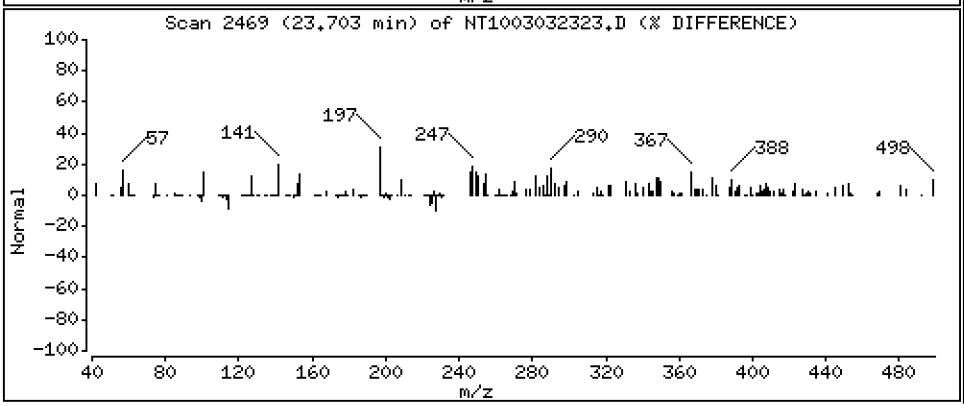
71 Chrysene

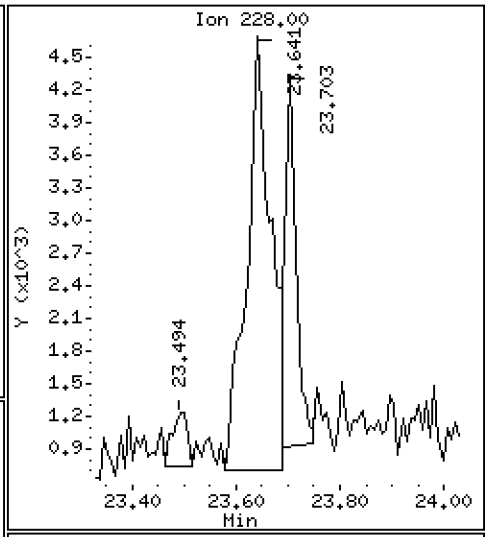
Concentration: 0.02027 ug/ml

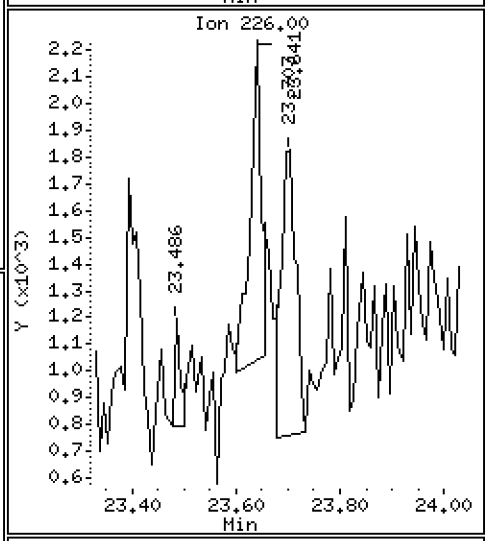


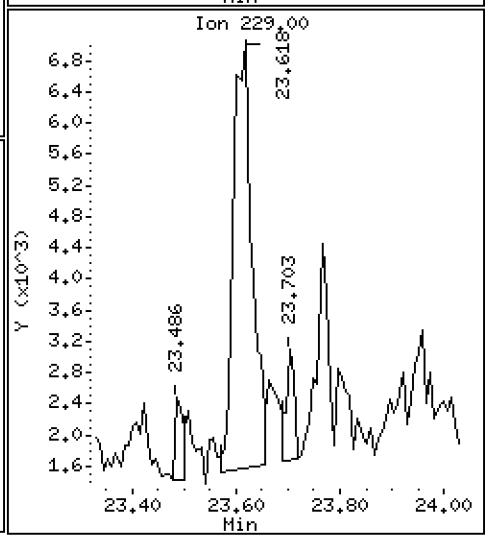












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

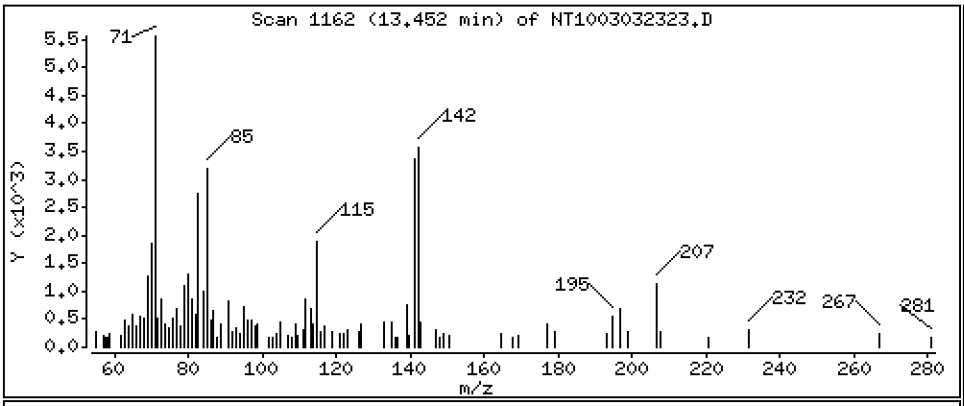
Operator: VTS

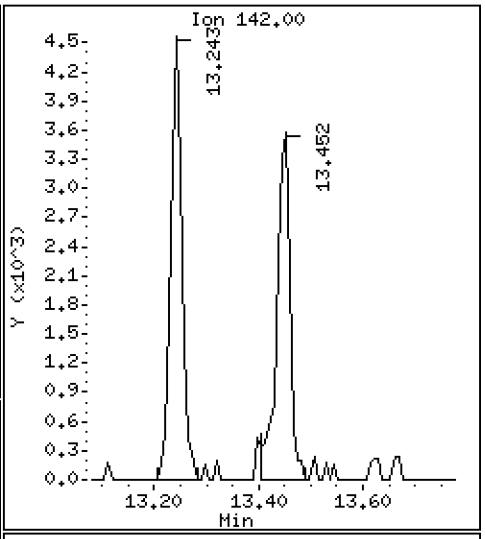
Column phase: ZB-5msi

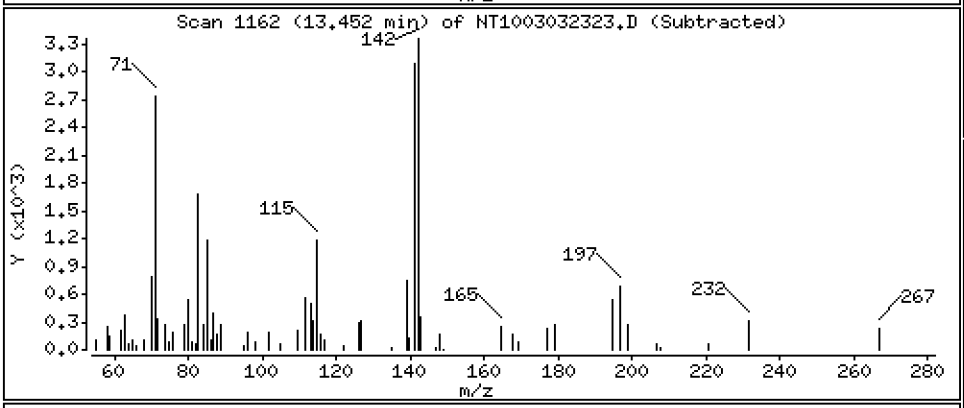
Column diameter: 0.25

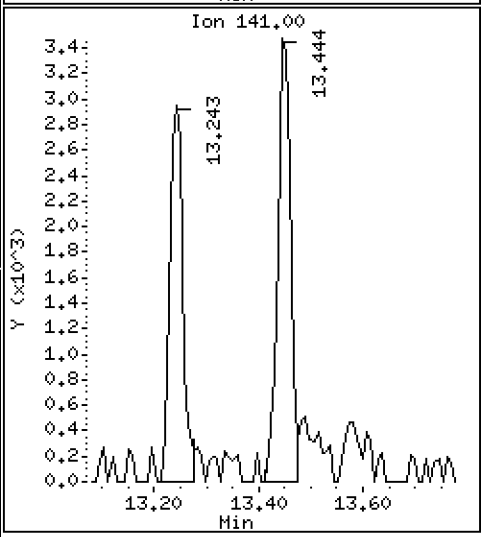
105 1-methylnaphthalene

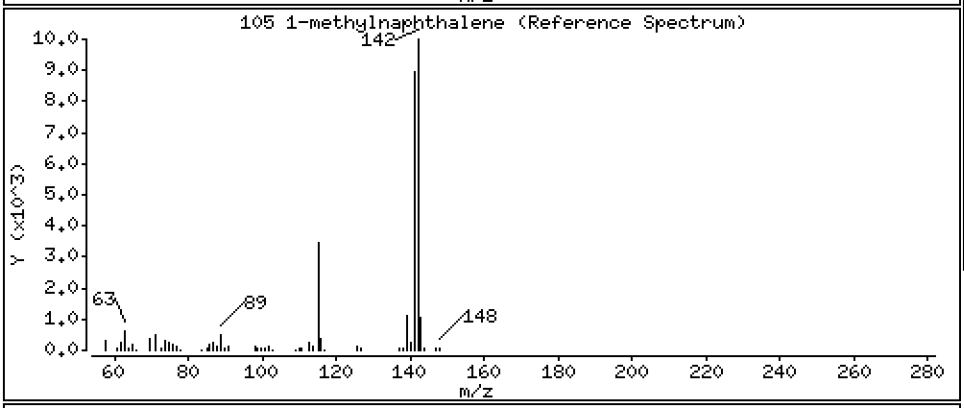
Concentration: 0.03073 ug/ml

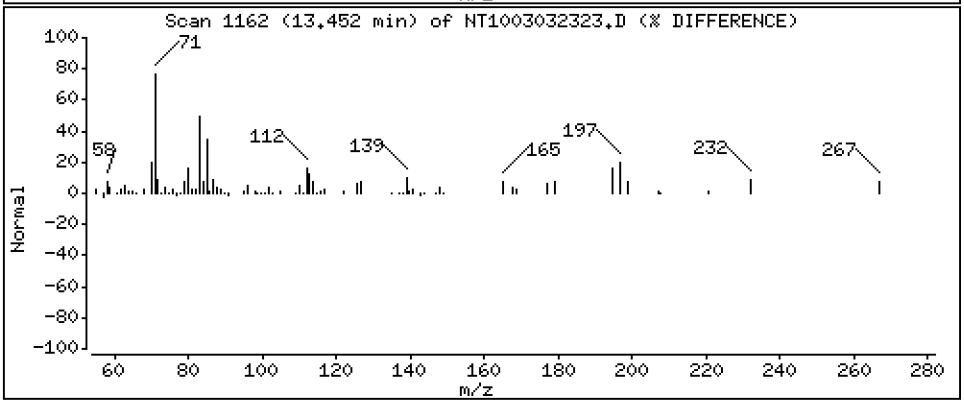












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230303A.b\NT1003032323.D
Lab Smp Id: 23A0249-11
Inj Date : 04-MAR-2023 07:45
Operator : VTS Inst ID: nt10.i
Smp Info : 23A0249-11
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Meth Date : 26-Apr-2023 10:41 van Quant Type: ISTD
Cal Date : 01-MAR-2023 18:37 Cal File: NT1003012306.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/ml)
$	1 2-Fluorophenol	112	6.920	6.920	(0.745)	502922	4.30266	4.303
$	2 Phenol-d5	99	8.535	8.535	(0.919)	623260	4.59279	4.593
	3 Phenol	94	8.566	8.558	(0.923)	8099	0.05613	0.05613
$	5 2-Chlorophenol-d4	132	8.852	8.852	(0.953)	544512	4.70303	4.703
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	9.285	9.278	(1.000)	371507	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.573	9.572	(1.031)	235568	2.72329	2.723
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	10.007	9.992	(1.078)	10100	0.07204	0.07204
$	18 Nitrobenzene-d5	82	10.349	10.341	(0.878)	445310	3.09457	3.095
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	Compound Not Detected.					
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.788	11.772	(1.000)	1310907	4.00000	
28	Naphthalene	128	11.827	11.819	(1.003)	10755	0.03197	0.03197
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	13.243	13.227	(1.123)	7109	0.02991	0.02991
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	14.001	13.978	(0.908)	788604	3.29133	3.291
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	Compound Not Detected.					
40	Acenaphthylene	152	Compound Not Detected.					
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	15.417	15.401	(1.000)	671749	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	Compound Not Detected.					
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	15.850	15.834	(1.028)	4753	0.01638	0.01638
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	16.322	16.306	(1.059)	39120	0.17022	0.1702
49	Fluorene	166	Compound Not Detected.					
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	17.078	17.063	(1.108)	166401	3.92838	3.928
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	18.556	18.533	(1.000)	1133532	4.00000	
60	Phenanthrene	178	18.610	18.587	(1.003)	15497	0.05342	0.05342
61	Anthracene	178	Compound Not Detected.					
62	Carbazole	167	Compound Not Detected.					
63	Di-n-butylphthalate	149	Compound Not Detected.					
64	Fluoranthene	202	21.016	20.985	(0.888)	10495	0.03159	0.03159
65	Pyrene	202	21.450	21.426	(0.907)	16088	0.04755	0.04755
$ 66	Terphenyl-d14	244	21.728	21.705	(0.919)	892958	3.26205	3.262
67	Butylbenzylphthalate	149	Compound Not Detected.					
68	Benzo(a)anthracene	228	23.641	23.617	(0.999)	12986	0.03813	0.03813
* 69	Chrysene-d12	240	23.656	23.633	(1.000)	965803	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	23.703	23.679	(1.002)	5589	0.02027	0.02027
72	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
* 134	Di-n-octylphthalate-d4	153	24.779	24.748	(1.000)	1814723	4.00000	
73	Di-n-octylphthalate	149	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	Compound Not Detected.					
75	Benzo(k)fluoranthene	252	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
76	Benzo(a)pyrene	252	Compound Not Detected.					
* 77	Perylene-d12	264	26.506	26.459	(1.000)	1244104	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	13.451	13.428	(1.141)	6611	0.03073	0.03073
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
187	Total Benzofluoranthenes	252	Compound Not Detected.					
120	2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032323.D
Lab Smp Id: 23A0249-11
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:02
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	514090	257045	1028180	371507	-27.74
27 Naphthalene-d8	1833847	916924	3667694	1310907	-28.52
42 Acenaphthene-d10	935282	467641	1870564	671749	-28.18
59 Phenanthrene-d10	1597882	798941	3195764	1133532	-29.06
69 Chrysene-d12	1549718	774859	3099436	965803	-37.68
134 Di-n-octylphthala	2731644	1365822	5463288	1814723	-33.57
77 Perylene-d12	1727703	863852	3455406	1244104	-27.99

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.29	0.09
27 Naphthalene-d8	11.77	11.27	12.27	11.79	0.13
42 Acenaphthene-d10	15.40	14.90	15.90	15.42	0.10
59 Phenanthrene-d10	18.53	18.03	19.03	18.56	0.13
69 Chrysene-d12	23.63	23.13	24.13	23.66	0.10
134 Di-n-octylphthala	24.75	24.25	25.25	24.78	0.13
77 Perylene-d12	26.46	25.96	26.96	26.51	0.18

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

REVIEW SUMMARY FOR FILE - NT1003032323.D

Lab ID: 23A0249-11
nt10.i, 20230303A.b\ABN.m,   04-MAR-2023 07:45

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1003032314ICV.D

On Column LOD for nt10.i, 20230303A.b\ABN.m, ICAL.sub = 0.0000

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

PREPARATION BATCH SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC SDG: 23A0249

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

Batch: BLA0673 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1083	23A0249-02	NT1003032318.D	01/30/23 14:02	
LDW23-SC1018	23A0249-03	NT1003032319.D	01/30/23 14:02	
LDW23-SC1084	23A0249-04	NT1003032320.D	01/30/23 14:02	
LDW23-SC1025	23A0249-05	NT1003032321.D	01/30/23 14:02	
LDW23-SC1024	23A0249-08	NT1003032322.D	01/30/23 14:02	
LDW23-SC1020	23A0249-11	NT1003032323.D	01/30/23 14:02	
Blank	BLA0673-BLK1	NT1003032306.D	01/30/23 14:02	
LCS	BLA0673-BS1	NT1003032307.D	01/30/23 14:02	
LCS Dup	BLA0673-BSD1	NT1003032308.D	01/30/23 14:02	
Reference	BLA0673-SRM1	NT1003032311.D	01/30/23 14:02	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0673

Prepared using: EPA 3546 (Microwave)

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

Matrix: Solid **Date Prepared:** 1/30/23 **Balance ID:** B139298002 **Set Up By:** CTO 1/27/23

WO Comments

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

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

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

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet)	Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0249-02 A	61.9	(16.16)	16.35	(1:1)	1mL	1	0.5	
23A0249-03 A	49.9	(20.04)	20.63	(1:1)	1mL	1	0.5	
23A0249-04 A	53.9	(18.56)	18.69	(1:1)	1mL	1	0.5	
23A0249-05 A	59.4	(16.85)	12.50	(1:1)	1mL	1	0.5	
23A0249-08 A	49.0	(20.42)	21.16	(1:1)	1mL	1	0.5	
23A0249-11 A	70.0	(14.28)	14.57	(1:1)	1mL	1	0.5	
23A0295-01 A	54.5	(18.36)	18.77	(1:1)	1mL	1	0.5	
23A0295-02 A	54.1	(18.50)	18.81	(1:1)	1mL	1	0.5	
23A0295-03 A	58.3	(17.14)	17.93	(1:1)	1mL	1	0.5	
23A0295-04 A	52.9	(18.90)	18.98	(1:1)	1mL	1	0.5	
23A0295-05 A	60.1	(16.63)	16.97	(1:1)	1mL	1	0.5	
23A0295-06 A	54.4	(18.40)	18.96	(1:1)	1mL	1	0.5	
23A0295-07 A	77.6	(12.89)	13.03	(1:1)	1mL	1	0.5	
23A0295-09 A	66.5	(15.03)	15.55	(1:1)	1mL	1	0.5	
23A0295-10 A	78.1	(12.81)	12.81	(1:1)	1mL	1	0.5	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet)	Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0673-BLK1	100.0	(10.00)	10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0673-BS1	100.0	(10.00)	10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0673-BSD1	100.0	(10.00)	10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0673-MS1	78.1	(12.81)	12.81	(1:1)	1mL	1	0.5	Use 23A0295-10
BLA0673-MSD1	78.1	(12.81)	12.81	(1:1)	1mL	1	0.5	Use 23A0295-10
BLA0673-SRM1	100.0	~~(10.00)~~ (1.00)	1.00	(1:1)	1mL	1	0.5	Use K003477

+1g DI WATER

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0673

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Client ID verified By	Date	Preparation Reviewed By	Date	Extraction Date and Time
R	1/30/23	LJ	2/1/23	01/29/23 07 14:02

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0673

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
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23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps	Reagents Used	
Microwave 1 (2) 3 CR 1/30 Analyst/Date	**Station/Reagent**	**Standard ID**
	Microwave **Analyst:** CR **Date:** 1/30/23	
	Anhydrous Sodium Sulfate	LC00759
	1:1 Methylene Chloride/Acetone	LC00281
	Methylene Chloride	LC000308
Pre-GPC KD **100°C** **Exchange to Hexane** **(add 10 mL to KD)** 0 2 4 (5) 6 KV/LD 02/07 Analyst/Date	Pre-Deactivated Glass Wool	LC000252
	Pre GPC KD **Analyst:** KV/LD **Date:** 02/07/23	
	Pre-Deactivated Glass Wool	N/A
	Anhydrous Sodium Sulfate	N/A
	Methylene Chloride	LC000308
TurboVap **Pre GPC** 1 2 3 (4) 5 SH 2/7/23 Analyst/Date	Hexane	K011373
	GPC Filter Prep **Analyst:** SH **Date:** 2/8/23	
Post GPC KD **80-85°C** 0 (2) 4 5 (6) LD/KV 2-9-23 Analyst/Date	Methylene Chloride	LC000808
	GPC **Analyst:** SH **Date:** 2/7/23	
	Methylene Chloride	LC000808
TurboVap 1 2 3 (4) 5 LJ 2/12/23 Analyst/Date	GPC Calibration File	CLA 86-GPC1
	Post GPC KD **Analyst:** LD/KV **Date:** 2-9-23	
	Methylene Chloride	LC000808
Water Wash LJ 2/12/23 Analyst/Date	**Vialing** **Analyst:** LJ **Date:** 2/12/23	
	Methylene Chloride	LC000308

Surrogates & Spike Standards Used

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

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0673

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

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

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Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SVOA Extraction Batch: BLA0673

Total Solids Batch: BLA0590 Work Order(s): 23A0249

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 02-11	CR 1/26/23
☒ Standing Water Decanted (Not shared)= 03-06, 08, 10	CR 1/26/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 02-11	CR 1/26/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y (N)	CR 1/26/23
☒ Multiple Jars Y (N)	CR 1/26/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: _____ Extraction Batch _____

Total Solids Batch: BLA0590 Work Order(s): 23A0249

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 02-11	CR 1/26/23
☒ Standing Water Decanted (Not shared)= 03-06, 08, 10	CR 1/26/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 02-11	CR 1/26/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☒ Other Notes/Comments= (Note problems, concerns, corrective actions).	
Unsure about Dual Seal's extract container. On GPC cleanup just left container as "A"	LS 2/12/23
☒ Share Samples Y (N)	CR 1/26/23
☒ Multiple Jars Y (N)	CR 1/26/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SVOA Extraction Batch BLA0673

Total Solids Batch: BLA0590 Work Order(s): 23A0295

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-10	CR 1/26/23
☒ Standing Water Decanted (Not shared)= 01,02,04,06,07	CR 1/26/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 01-10	CR 1/26/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	CR 1/26/23
☒ Multiple Jars Y / (N)	CR 1/26/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0095	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1024	23A0249-08	NT1003032322.D	02/12/2023	
LCS	BLA0673-BS1	NT1003032307.D	02/12/2023	
LCS Dup	BLA0673-BSD1	NT1003032308.D	02/12/2023	
Blank	BLA0673-BLK1	NT1003032306.D	02/12/2023	
LDW23-SC1025	23A0249-05	NT1003032321.D	02/12/2023	
LDW23-SC1020	23A0249-11	NT1003032323.D	02/12/2023	
Reference	BLA0673-SRM1	NT1003032311.D	02/12/2023	
LDW23-SC1084	23A0249-04	NT1003032320.D	02/12/2023	
LDW23-SC1083	23A0249-02	NT1003032318.D	02/12/2023	
LDW23-SC1018	23A0249-03	NT1003032319.D	02/12/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0095

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0086-GPC1** **Printed: 2/12/2023 10:24:02AM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0249-02	A	LDW23-SC1083	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0249-02	A	LDW23-SC1083	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0249-03	A	LDW23-SC1018	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0249-03	A	LDW23-SC1018	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0249-04	A	LDW23-SC1084	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0249-04	A	LDW23-SC1084	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0249-05	A	LDW23-SC1025	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0249-05	A	LDW23-SC1025	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0249-08	A	LDW23-SC1024	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0249-08	A	LDW23-SC1024	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0249-11	A	LDW23-SC1020	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0249-11	A	LDW23-SC1020	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-01	A	LDW23-SC1074	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-01	A	LDW23-SC1074	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-02	A	LDW23-SC1075	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-02	A	LDW23-SC1075	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-03	A	LDW23-SC1038B	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-03	A	LDW23-SC1038B	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-04	A	LDW23-SC1023B	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-04	A	LDW23-SC1023B	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-05	A	LDW23-SC1022A	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-05	A	LDW23-SC1022A	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	

CLEANUP BENCH SHEET

CLB0095

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0086-GPC1** **Printed: 2/12/2023 10:24:02AM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0295-06	A	LDW23-SC1017B	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-06	A	LDW23-SC1017B	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-07	A	LDW23-SC1019	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-07	A	LDW23-SC1019	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-09	A	LDW23-SC1026	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-09	A	LDW23-SC1026	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-10	A	LDW23-IT1041	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-10	A	LDW23-IT1041	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
BLA0673-BLK1	-	Blank	-	1	1	-	2/12/2023	LMJ	
BLA0673-BLK2	-	Blank	-	1	1	-	2/12/2023	LMJ	
BLA0673-BS1	-	LCS	-	1	1	-	2/12/2023	LMJ	
BLA0673-BS2	-	LCS	-	1	1	-	2/12/2023	LMJ	
BLA0673-BSD1	-	LCS Dup	-	1	1	-	2/12/2023	LMJ	
BLA0673-BSD2	-	LCS Dup	-	1	1	-	2/12/2023	LMJ	
BLA0673-MS1	-	Matrix Spike	-	1	1	-	2/12/2023	LMJ	
BLA0673-MS2	-	Matrix Spike	-	1	1	-	2/12/2023	LMJ	
BLA0673-MSD1	-	Matrix Spike Dup	-	1	1	-	2/12/2023	LMJ	
BLA0673-MSD2	-	Matrix Spike Dup	-	1	1	-	2/12/2023	LMJ	
BLA0673-SRM1	-	Reference	-	1	1	-	2/12/2023	LMJ	
BLA0673-SRM2	-	Reference	-	1	1	-	2/12/2023	LMJ	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8270E

Blank

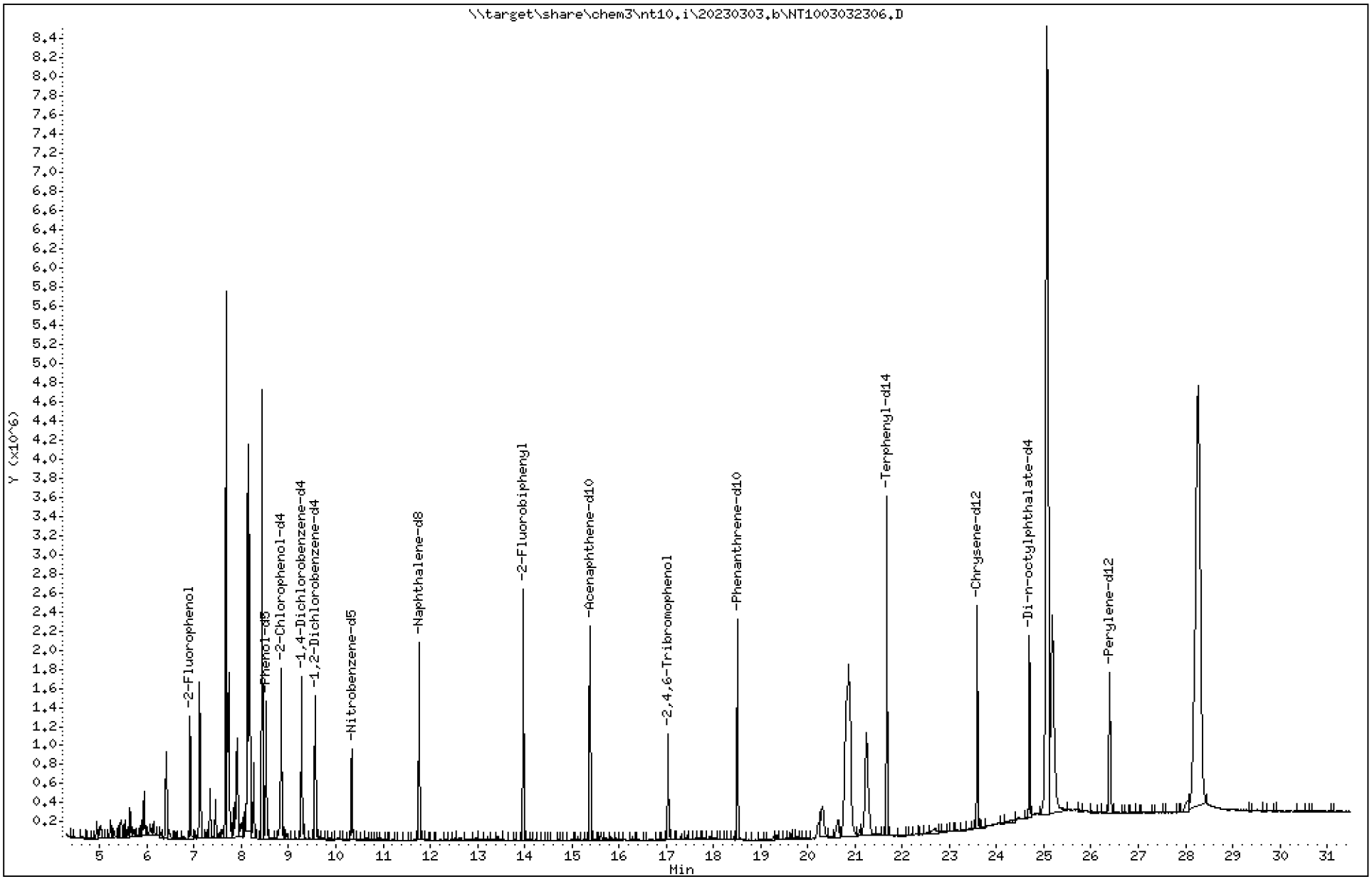
Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0673-BLK1	File ID:	NT1003032306.D
Sampled:	N/A	Prepared:	01/30/23 14:02	Analyzed:	03/03/23 20:59
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 1 mL
Batch:	BLA0673	Sequence:	SLC0161	Calibration:	GC00019
Instrument:	NT10	Column:	ZB-5MSi	Cleanups:	GPC

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

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	506	67.5	27 - 120	
Phenol-d5	750.00	588	78.4	29 - 120	
2-Chlorophenol-d4	750.00	592	78.9	31 - 120	
1,2-Dichlorobenzene-d4	500.00	376	75.2	32 - 120	
Nitrobenzene-d5	500.00	381	76.2	30 - 120	
2-Fluorobiphenyl	500.00	422	84.4	35 - 120	
2,4,6-Tribromophenol	750.00	384	51.2	24 - 134	
p-Terphenyl-d14	500.00	521	104	37 - 120	

Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032306.D
Date : 03-MAR-2023 20:59
Client ID:
Sample Info: BLA0673-BLK1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032306.D

Date : 03-MAR-2023 20:59

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BLK1

Volume Injected (uL): 1.0

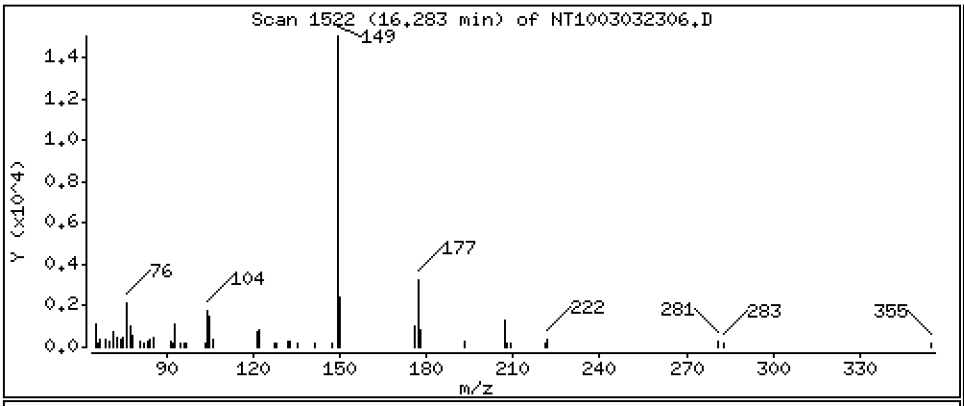
Operator: VTS

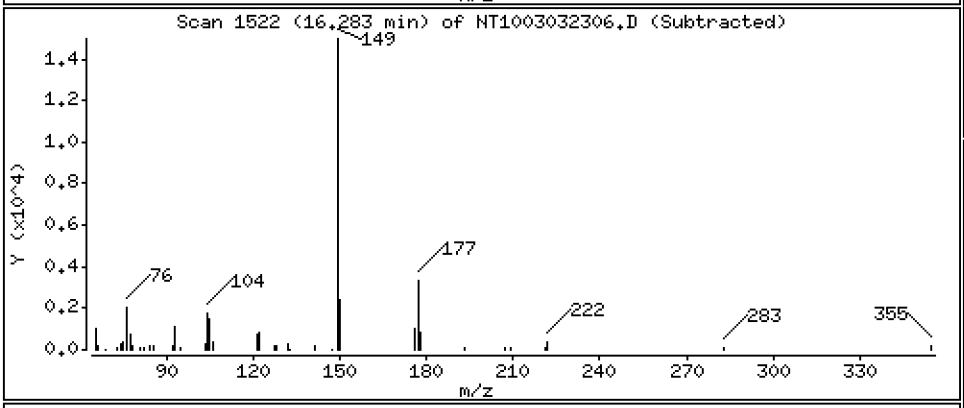
Column phase: ZB-5msi

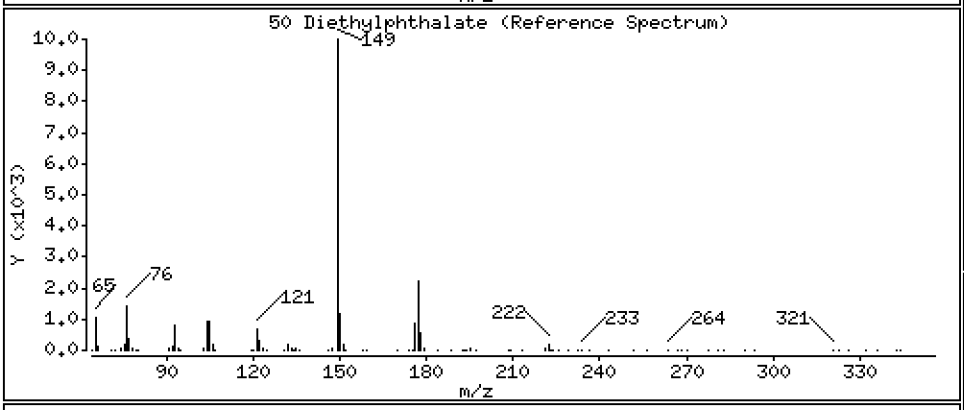
Column diameter: 0.25

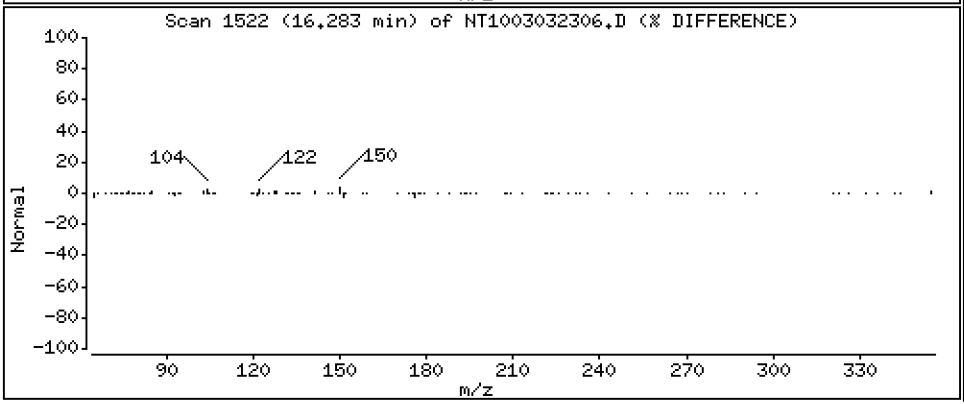
50 Diethylphthalate

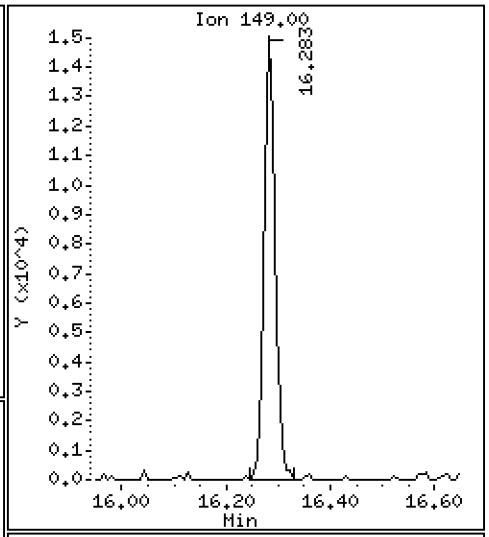
Concentration: 0.07668 ug/ml

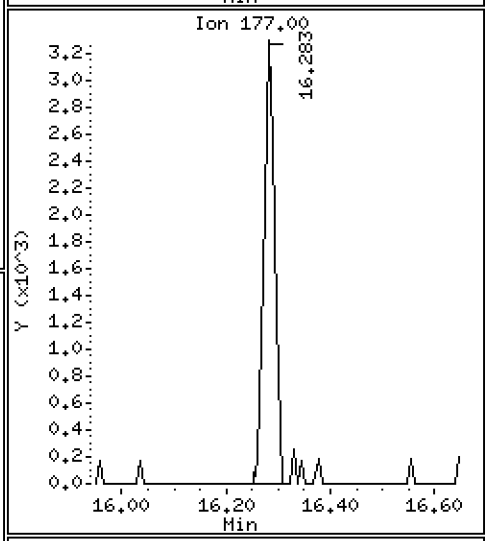


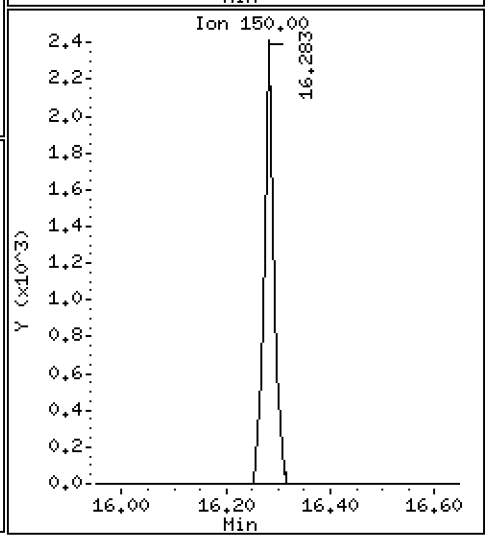












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230303.b\NT1003032306.D
Lab Smp Id: BLA0673-BLK1
Inj Date : 03-MAR-2023 20:59
Operator : VTS Inst ID: nt10.i
Smp Info : BLA0673-BLK1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230303.b\ABN.m
Meth Date : 05-Jul-2023 12:33 van Quant Type: ISTD
Cal Date : 01-MAR-2023 18:37 Cal File: NT1003012306.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/ml)
$ 1	2-Fluorophenol	112	6.912	6.912	(0.746)	737321	5.06022	5.060
$ 2	Phenol-d5	99	8.519	8.527	(0.919)	994633	5.87958	5.880
3	Phenol	94	Compound Not Detected.					
$ 5	2-Chlorophenol-d4	132	8.836	8.844	(0.953)	853895	5.91631	5.916
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	9.270	9.278	(1.000)	463117	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	9.565	9.565	(1.032)	405359	3.75919	3.759
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					
$ 18	Nitrobenzene-d5	82	10.333	10.333	(0.878)	689205	3.80913	3.809
19	Nitrobenzene	77	Compound Not Detected.					
20	Isophorone	82	Compound Not Detected.					
21	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	Compound Not Detected.					
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.765	11.772	(1.000)	1648284	4.00000	
28	Naphthalene	128	Compound Not Detected.					
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	Compound Not Detected.					
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					
34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$ 36	2-Fluorobiphenyl	172	13.970	13.978	(0.908)	1295521	4.22143	4.221
37	2-Chloronaphthalene	162	Compound Not Detected.					
38	2-Nitroaniline	65	Compound Not Detected.					
39	Dimethylphthalate	163	Compound Not Detected.					
40	Acenaphthylene	152	Compound Not Detected.					
41	2,6-Dinitrotoluene	165	Compound Not Detected.					
* 42	Acenaphthene-d10	164	15.386	15.394	(1.000)	860407	4.00000	
43	3-Nitroaniline	138	Compound Not Detected.					
44	Acenaphthene	153	Compound Not Detected.					
45	2,4-Dinitrophenol	184	Compound Not Detected.					
46	Dibenzofuran	168	Compound Not Detected.					
47	4-Nitrophenol	109	Compound Not Detected.					
48	2,4-Dinitrotoluene	165	Compound Not Detected.					
50	Diethylphthalate	149	16.283	16.298	(1.058)	22571	0.07668	0.07668
49	Fluorene	166	Compound Not Detected.					
51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
52	4-Nitroaniline	138	Compound Not Detected.					
53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$ 55	2,4,6-Tribromophenol	330	17.040	17.047	(1.107)	208318	3.84254	3.843
56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					
58	Pentachlorophenol	266	Compound Not Detected.					
* 59	Phenanthrene-d10	188	18.509	18.525	(1.000)	1438155	4.00000	
60	Phenanthrene	178	Compound Not Detected.					
61	Anthracene	178	Compound Not Detected.					
62	Carbazole	167	Compound Not Detected.					
63	Di-n-butylphthalate	149	Compound Not Detected.					
64	Fluoranthene	202	Compound Not Detected.					
65	Pyrene	202	Compound Not Detected.					
$ 66	Terphenyl-d14	244	21.674	21.689	(0.919)	1789295	5.21203	5.212
67	Butylbenzylphthalate	149	Compound Not Detected.					
68	Benzo(a)anthracene	228	Compound Not Detected.					
* 69	Chrysene-d12	240	23.586	23.617	(1.000)	1211221	4.00000	
70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
71	Chrysene	228	Compound Not Detected.					
72	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
* 134	Di-n-octylphthalate-d4	153	24.693	24.732	(1.000)	1669420	4.00000	
73	Di-n-octylphthalate	149	Compound Not Detected.					
74	Benzo(b)fluoranthene	252	Compound Not Detected.					
75	Benzo(k)fluoranthene	252	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
76	Benzo(a)pyrene	252	Compound Not Detected.					
* 77	Perylene-d12	264	26.397	26.443	(1.000)	1253955	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
90	N-Nitrosodimethylamine	74	Compound Not Detected.					
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	Compound Not Detected.					
105	1-methylnaphthalene	142	Compound Not Detected.					
111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
187	Total Benzofluoranthenes	252	Compound Not Detected.					
120	2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032306.D
Lab Smp Id: BLA0673-BLK1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230303.b\ABN.m
Misc Info:

Calibration Date: 03-MAR-2023
Calibration Time: 18:27

Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	505000	252500	1010000	463117	-8.29
27 Naphthalene-d8	1846542	923271	3693084	1648284	-10.74
42 Acenaphthene-d10	936949	468475	1873898	860407	-8.17
59 Phenanthrene-d10	1548373	774187	3096746	1438155	-7.12
69 Chrysene-d12	1352261	676131	2704522	1211221	-10.43
134 Di-n-octylphthala	2300648	1150324	4601296	1669420	-27.44
77 Perylene-d12	1445020	722510	2890040	1253955	-13.22

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.27	-0.08
27 Naphthalene-d8	11.77	11.27	12.27	11.77	-0.07
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	-0.05
59 Phenanthrene-d10	18.53	18.03	19.03	18.51	-0.08
69 Chrysene-d12	23.62	23.12	24.12	23.59	-0.13
134 Di-n-octylphthala	24.73	24.23	25.23	24.69	-0.16
77 Perylene-d12	26.44	25.94	26.94	26.40	-0.18

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

REVIEW SUMMARY FOR FILE - NT1003032306.D

Lab ID: BLA0673-BLK1
nt10.i, 20230303.b\ABN.m,   03-MAR-2023 20:59

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1003032302.D

On Column LOD for nt10.i, 20230303.b\ABN.m, ICAL.sub = 0.0000

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

LCS / LCS DUPLICATE RECOVERY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/03/23 21:37
Batch:	BLA0673	Laboratory ID:	BLA0673-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Phenol	500	427		85.4	34 - 120
4-Methylphenol	500	310		61.9	29 - 120
Naphthalene	500	392		78.4	43 - 120
2-Methylnaphthalene	500	384		76.8	43 - 120
Acenaphthylene	500	217		43.3	42 - 120
Dimethylphthalate	500	452		90.4	43 - 120
Acenaphthene	500	423		84.6	45 - 120
Dibenzofuran	500	408		81.6	43 - 120
Fluorene	500	494		98.8	45 - 120
Phenanthrene	500	455		90.9	49 - 120
Anthracene	500	391		78.1	45 - 120
Fluoranthene	500	439		87.7	53 - 145
Pyrene	500	315	Q	63.0	52 - 134
Butylbenzylphthalate	500	414		82.8	45 - 132
Benzo(a)anthracene	500	413		82.7	49 - 120
Chrysene	500	471		94.1	47 - 120
bis(2-Ethylhexyl)phthalate	500	287		57.3	34 - 130
Benzofluoranthenes, Total	1000	929		92.9	30 - 160
Benzo(a)pyrene	500	409		81.8	42 - 120
Indeno(1,2,3-cd)pyrene	500	496		99.2	42 - 163
Dibenzo(a,h)anthracene	500	541		108	30 - 133
Benzo(g,h,i)perylene	500	532		106	46 - 148

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	500	399		79.8	6.80	30	34 - 120
4-Methylphenol	500	306		61.3	1.04	30	29 - 120
Naphthalene	500	380		76.0	3.08	30	43 - 120
2-Methylnaphthalene	500	370		74.0	3.80	30	43 - 120
Acenaphthylene	500	202	*	40.4 *	7.07	30	42 - 120
Dimethylphthalate	500	456		91.2	0.844	30	43 - 120
Acenaphthene	500	423		84.5	0.0826	30	45 - 120

* Indicates values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8270E

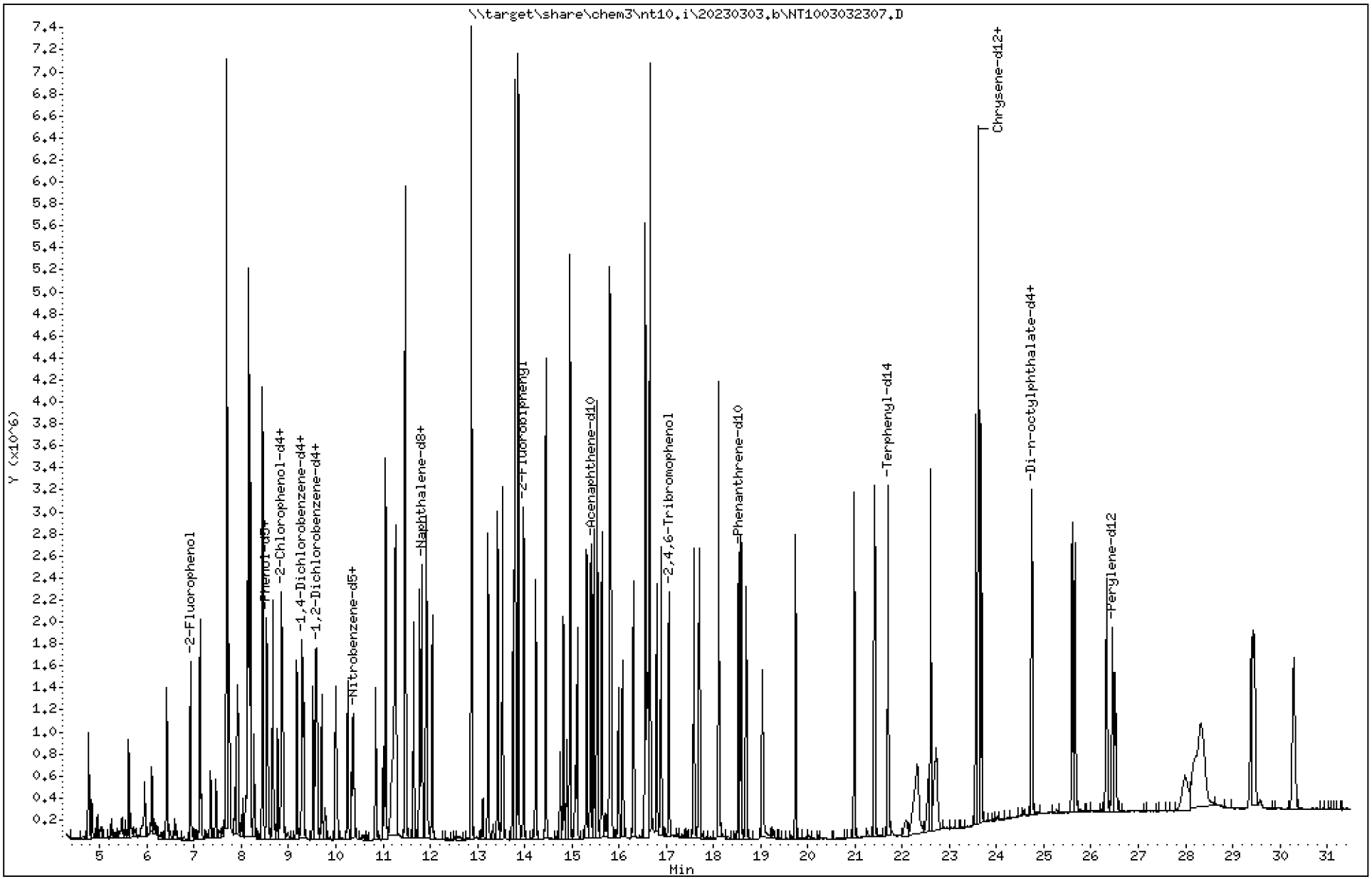
Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/03/23 22:15
Batch:	BLA0673	Laboratory ID:	BLA0673-BSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS Dup
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dibenzofuran	500	409		81.8	0.303	30	43 - 120
Fluorene	500	427		85.5	14.4	30	45 - 120
Phenanthrene	500	463		92.6	1.82	30	49 - 120
Anthracene	500	396		79.1	1.29	30	45 - 120
Fluoranthene	500	501		100	13.2	30	53 - 145
Pyrene	500	243	*, Q	48.5 *	25.9	30	52 - 134
Butylbenzylphthalate	500	412		82.4	0.433	30	45 - 132
Benzo(a)anthracene	500	427		85.4	3.20	30	49 - 120
Chrysene	500	481		96.1	2.11	30	47 - 120
bis(2-Ethylhexyl)phthalate	500	240		48.0	17.7	30	34 - 130
Benzofluoranthenes, Total	1000	888		88.8	4.50	30	30 - 160
Benzo(a)pyrene	500	400		80.0	2.20	30	42 - 120
Indeno(1,2,3-cd)pyrene	500	463		92.6	6.88	30	42 - 163
Dibenzo(a,h)anthracene	500	508		102	6.36	30	30 - 133
Benzo(g,h,i)perylene	500	492		98.5	7.66	30	46 - 148

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D
Date : 03-MAR-2023 21:37
Client ID:
Sample Info: BLA0673-BS1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

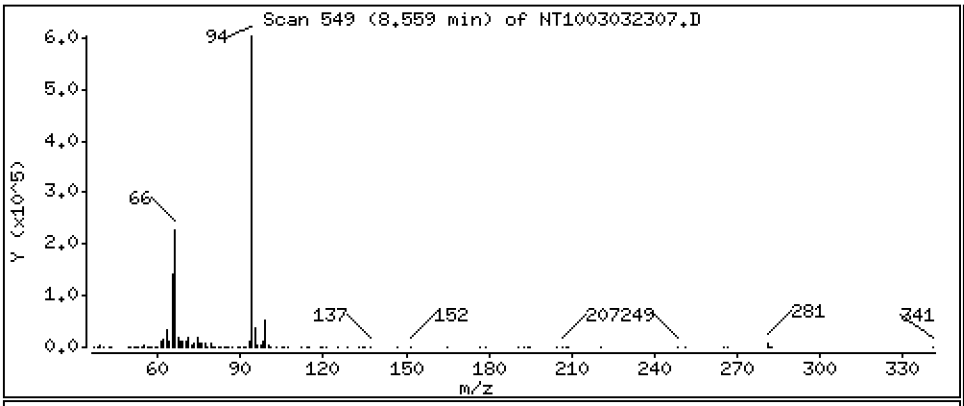
Operator: VTS

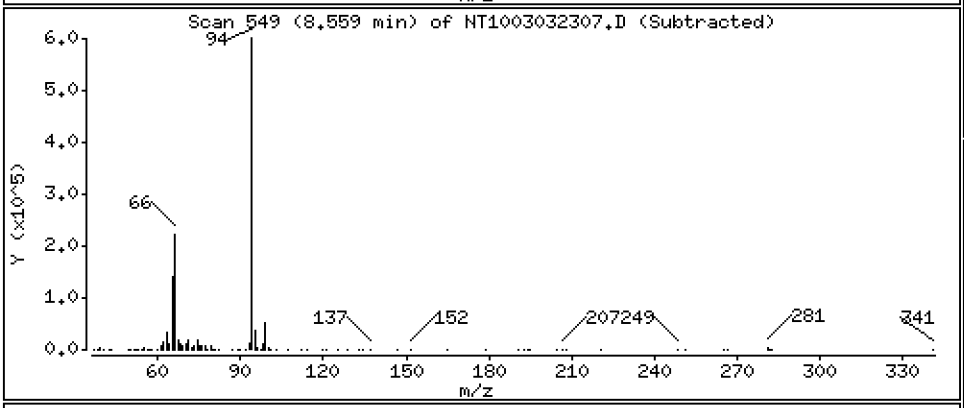
Column phase: ZB-5msi

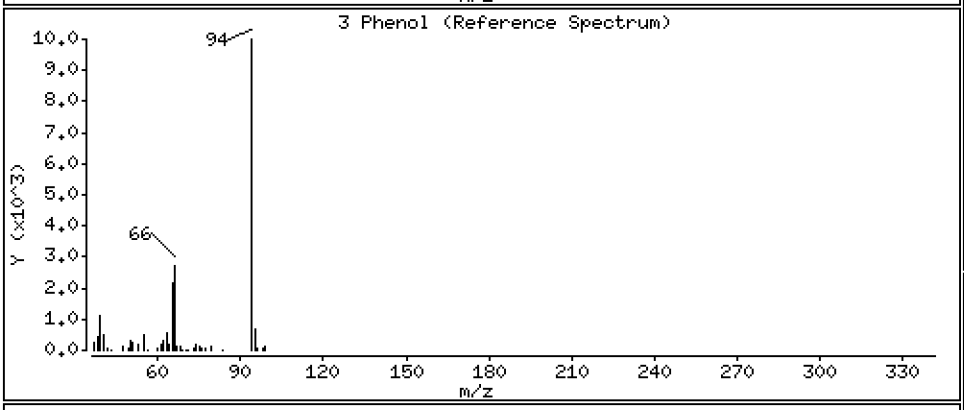
Column diameter: 0.25

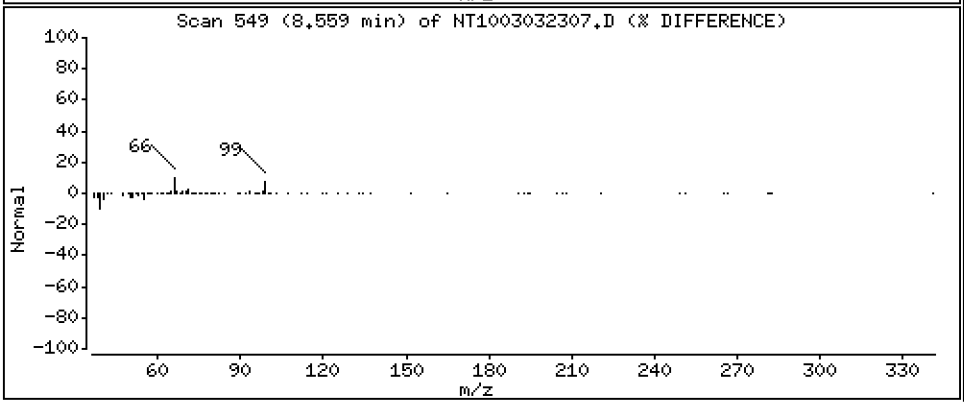
3 Phenol

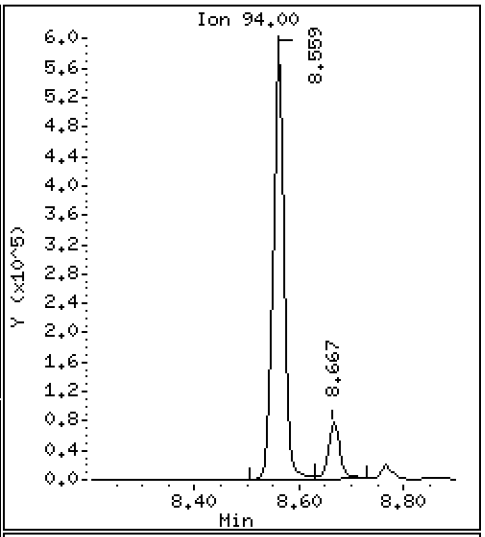
Concentration: 4.272 ug/ml

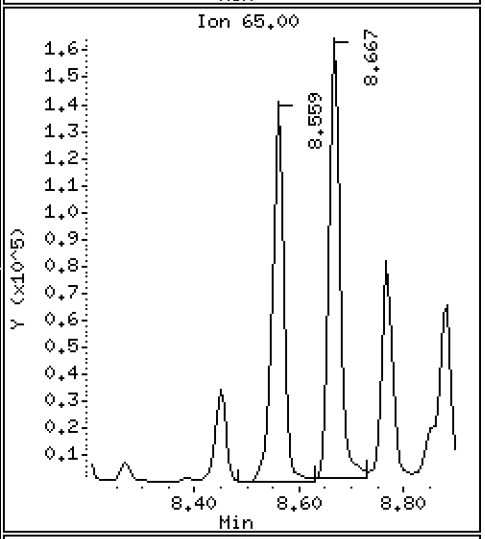


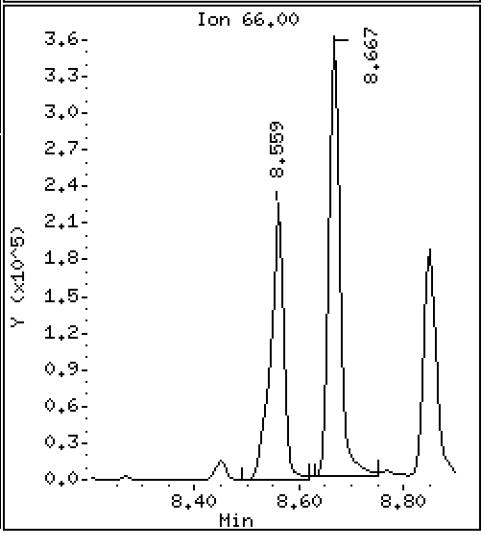












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

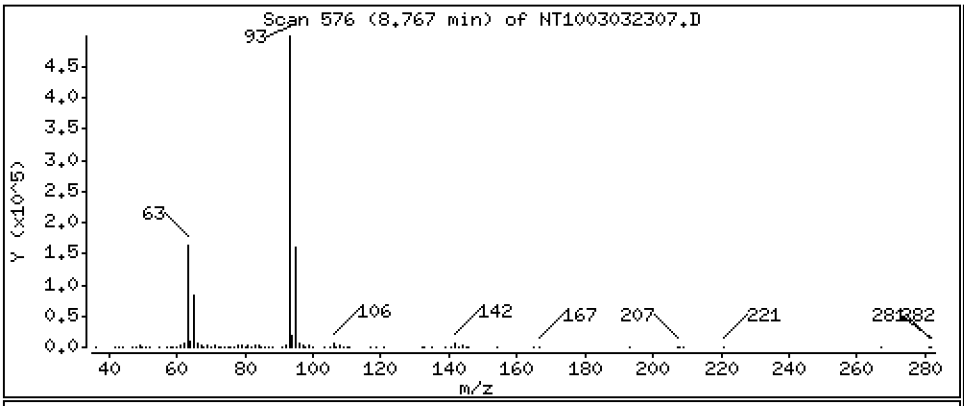
Operator: VTS

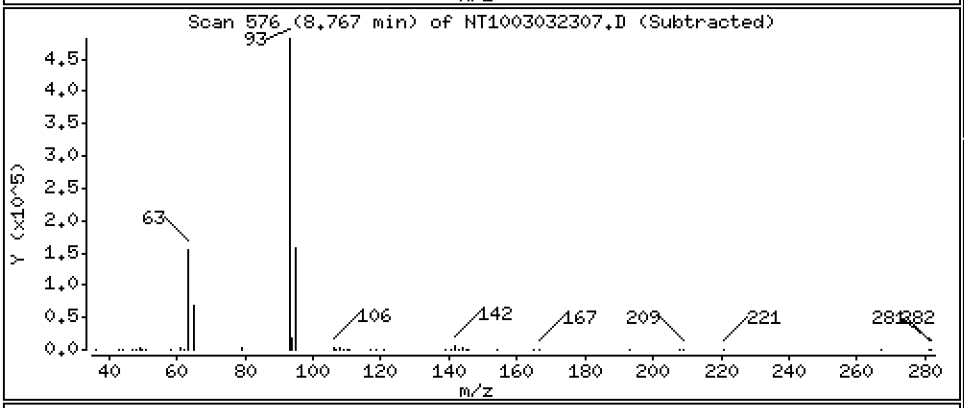
Column phase: ZB-5msi

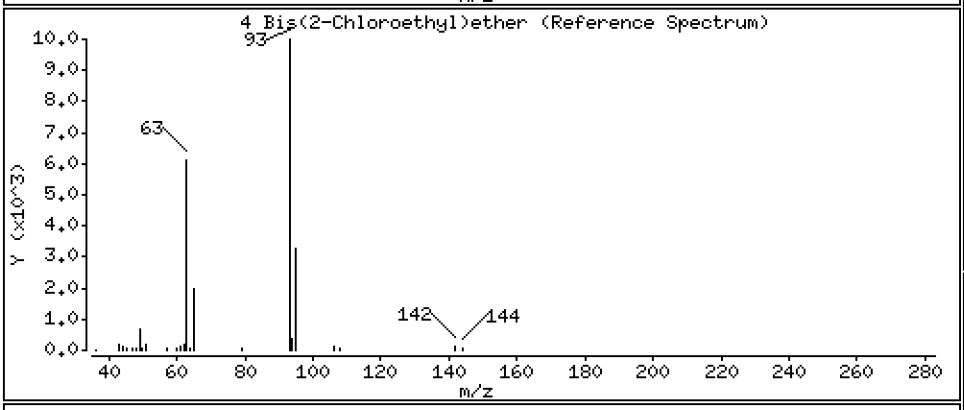
Column diameter: 0.25

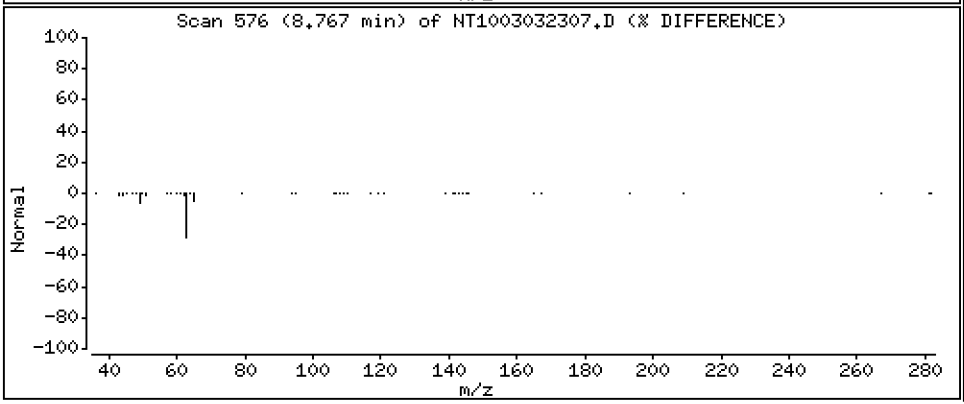
4 Bis(2-Chloroethyl)ether

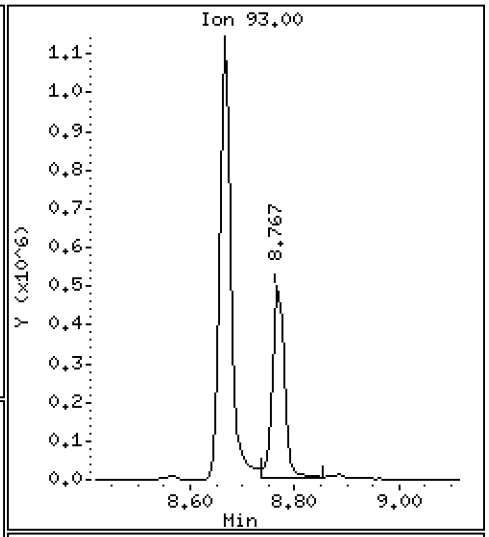
Concentration: 4.798 ug/ml

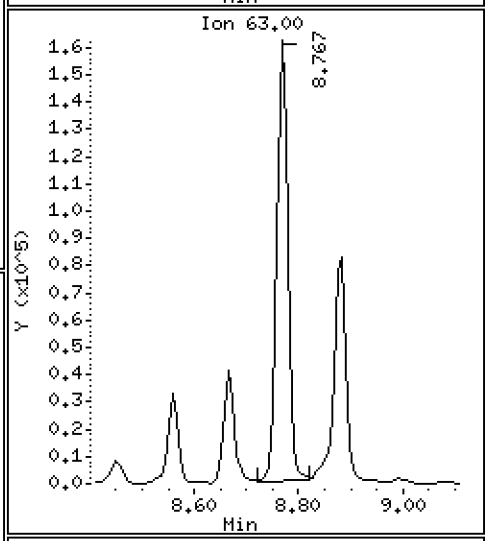


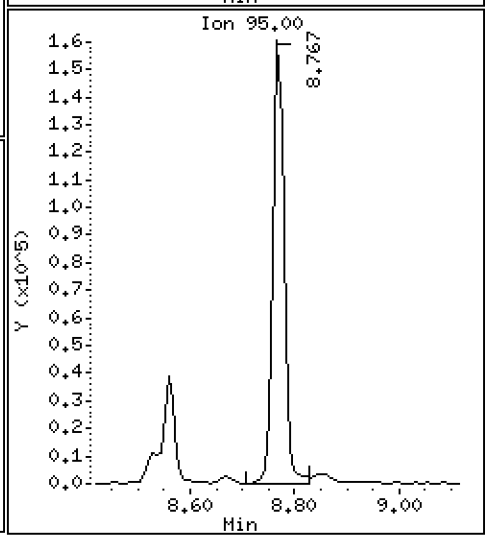












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

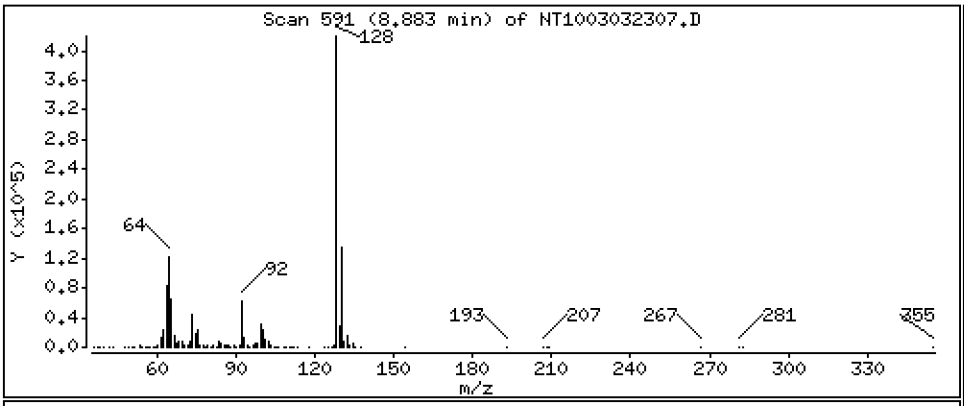
Operator: VTS

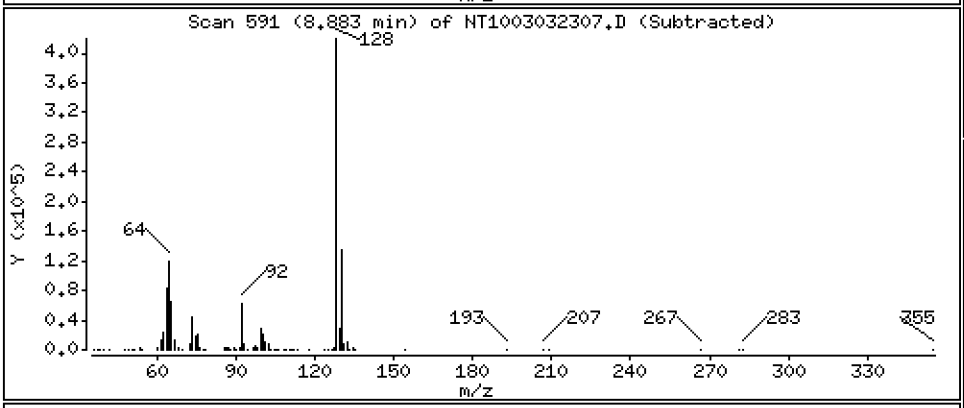
Column phase: ZB-5msi

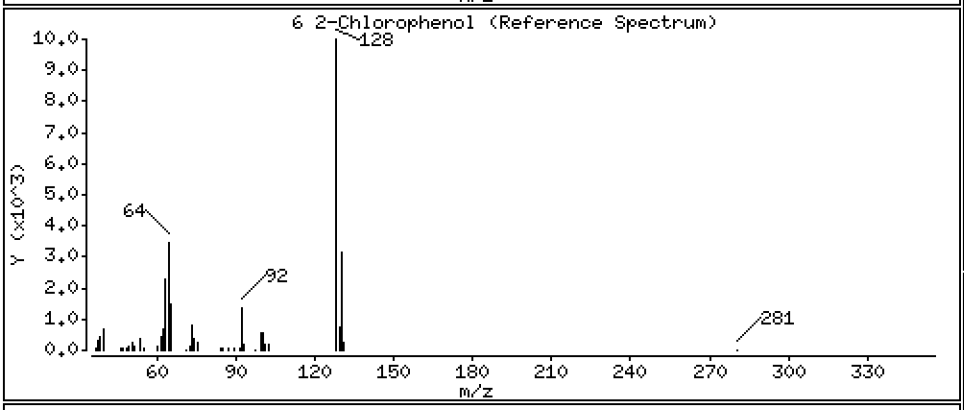
Column diameter: 0.25

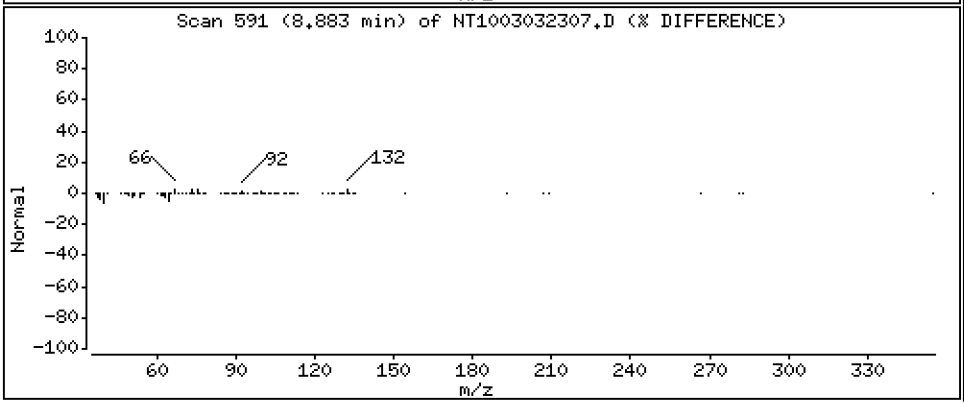
6 2-Chlorophenol

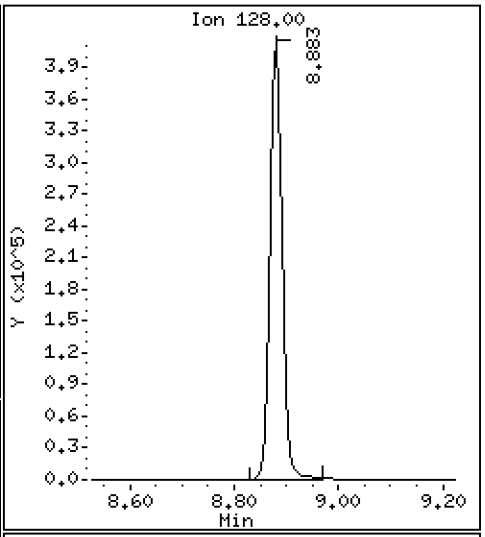
Concentration: 3.854 ug/ml

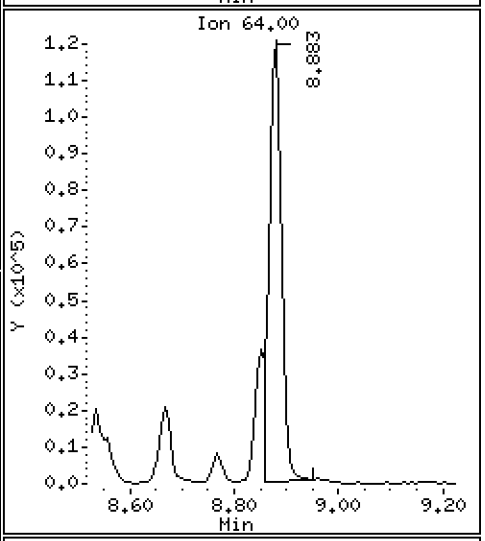


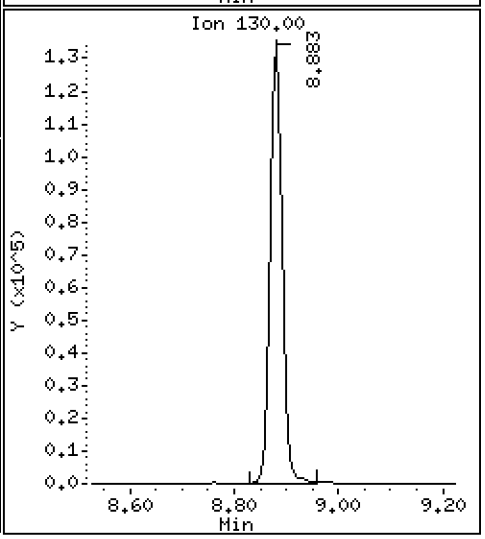












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

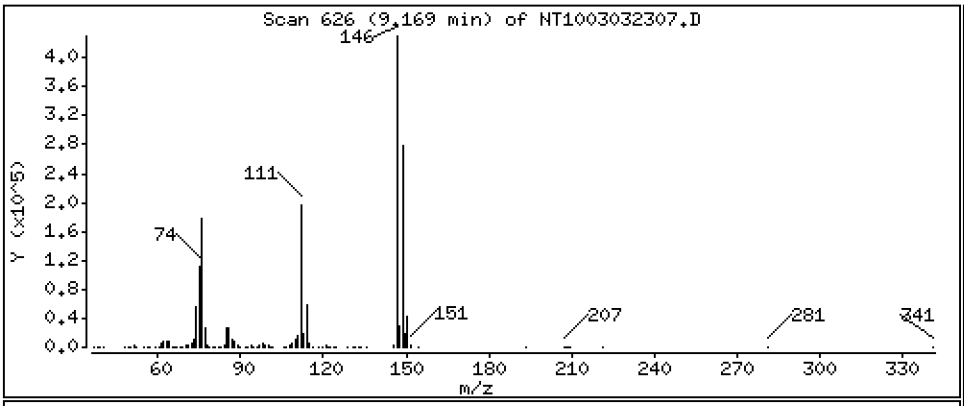
Operator: VTS

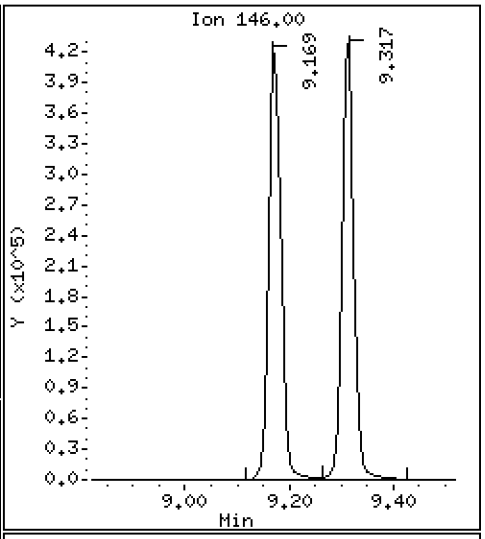
Column phase: ZB-5msi

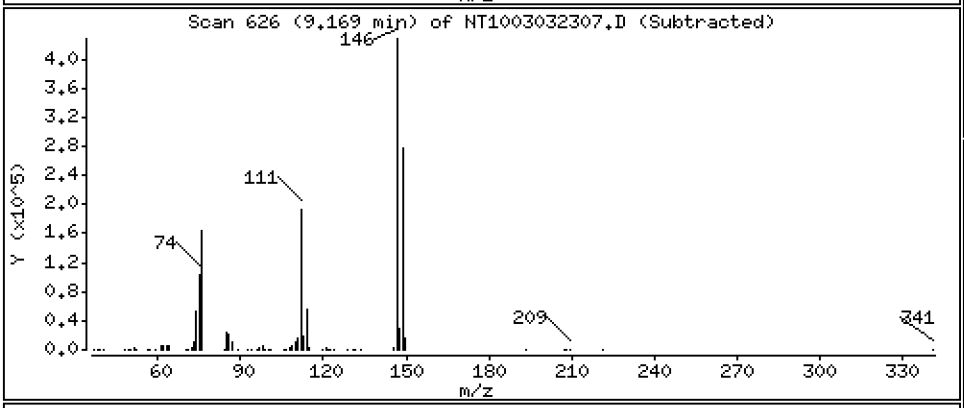
Column diameter: 0.25

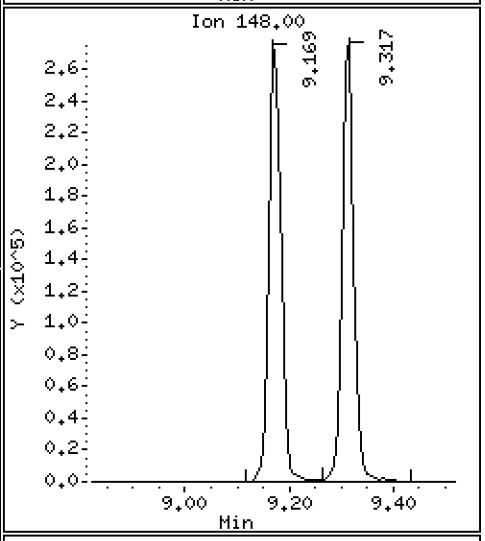
7 1,3-Dichlorobenzene

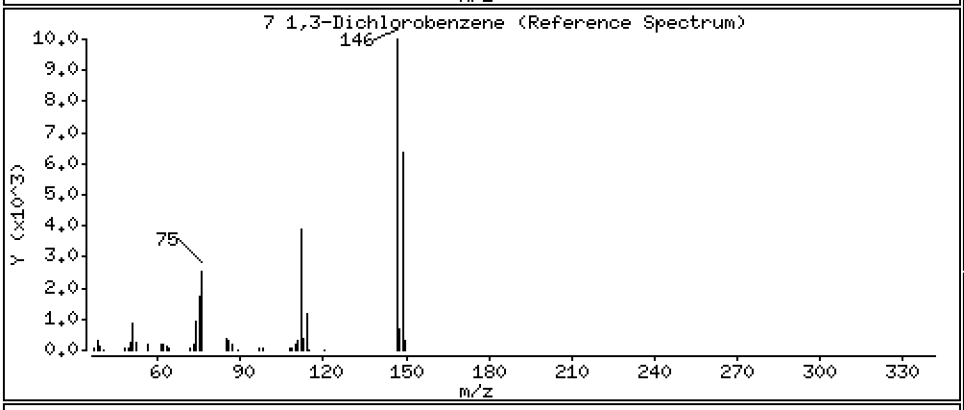
Concentration: 3.680 ug/ml

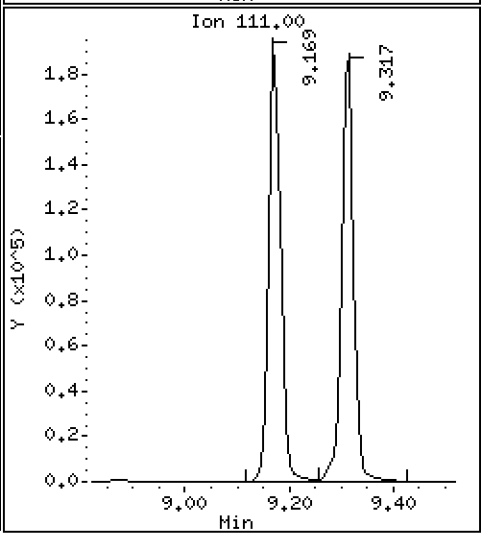


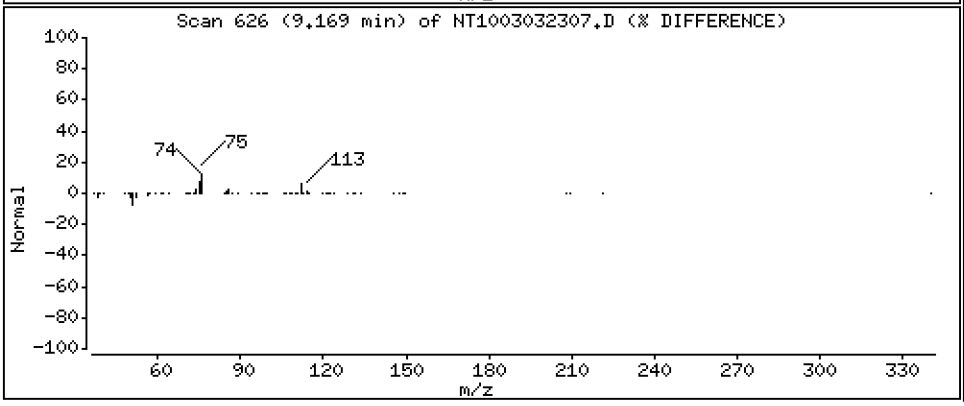












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

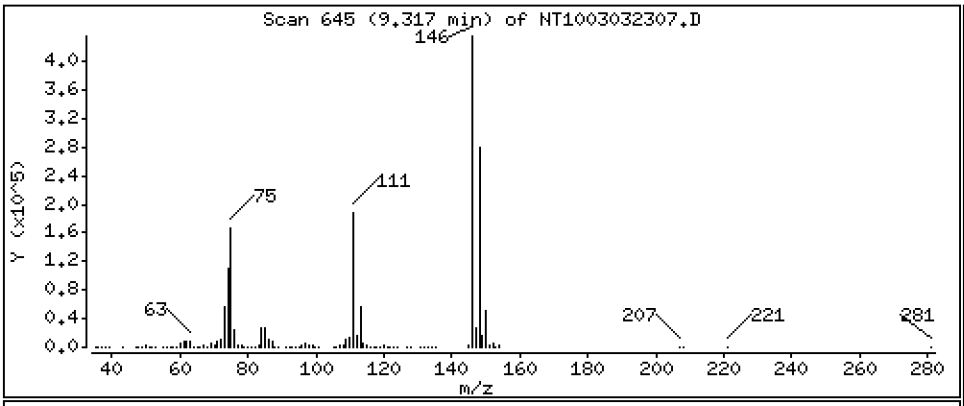
Operator: VTS

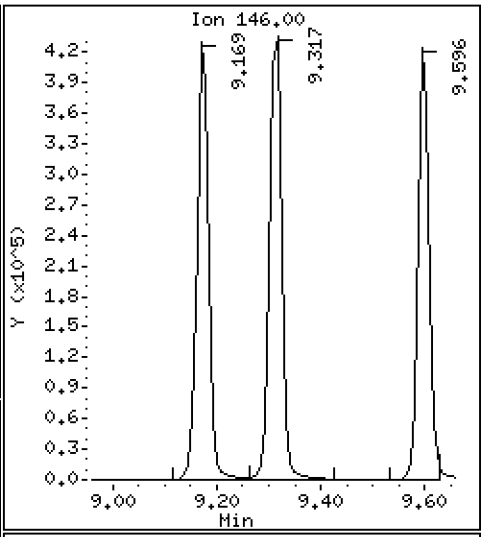
Column phase: ZB-5msi

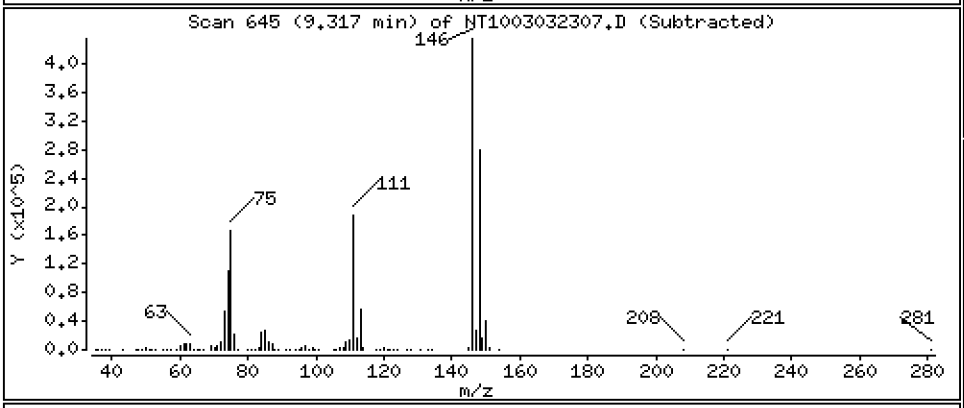
Column diameter: 0.25

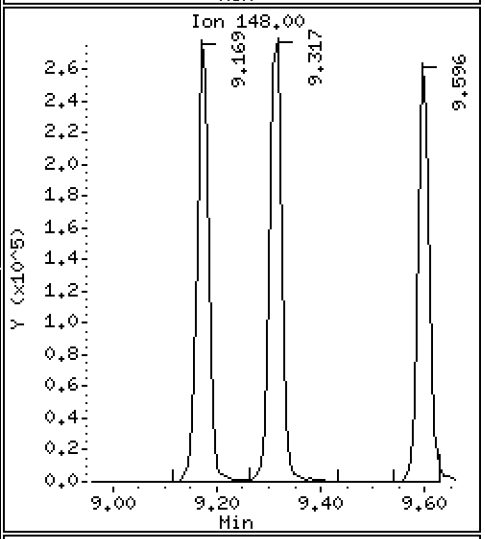
9 1,4-Dichlorobenzene

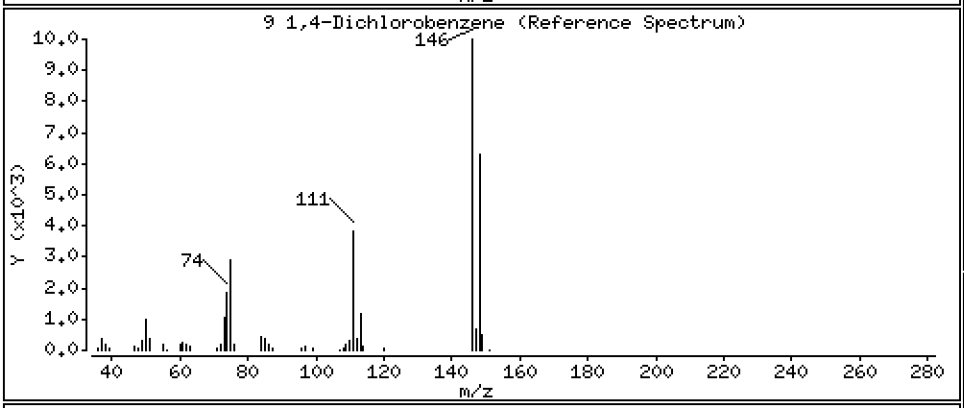
Concentration: 4.118 ug/ml

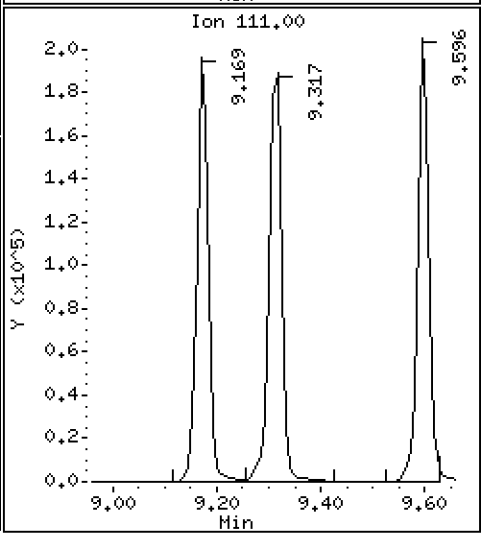


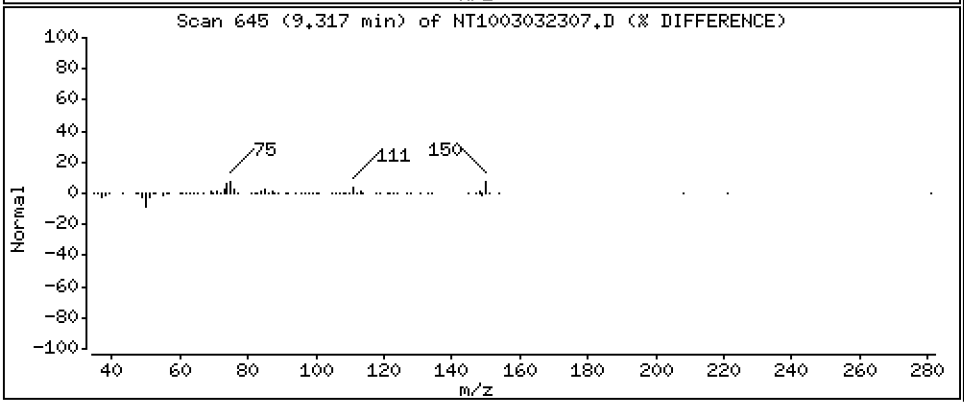












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

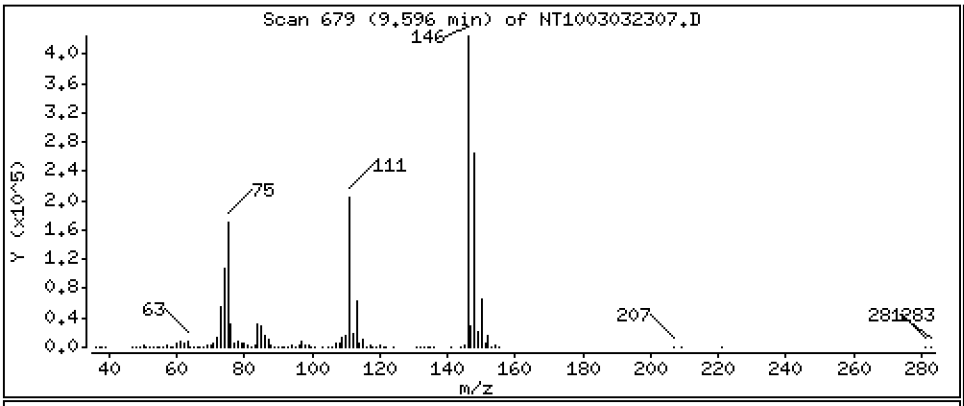
Operator: VTS

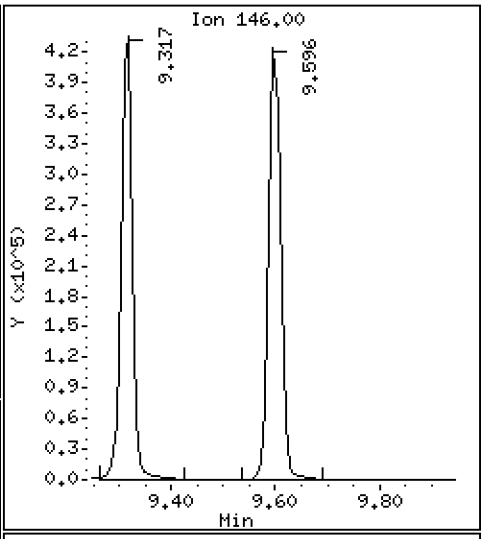
Column phase: ZB-5msi

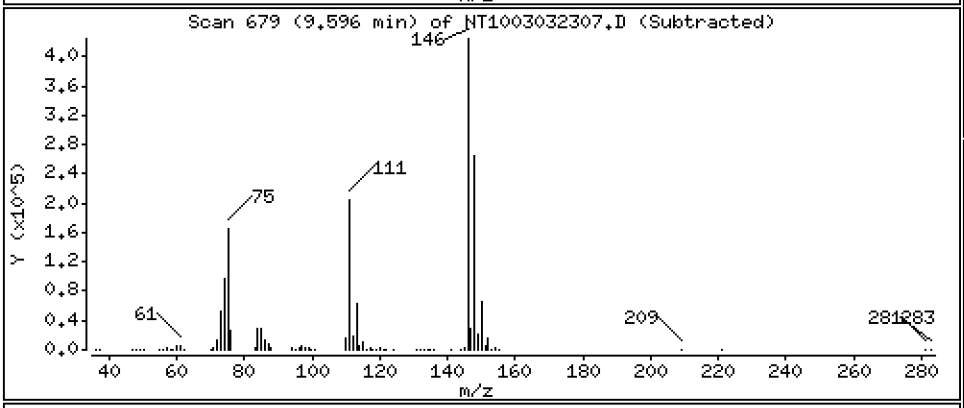
Column diameter: 0.25

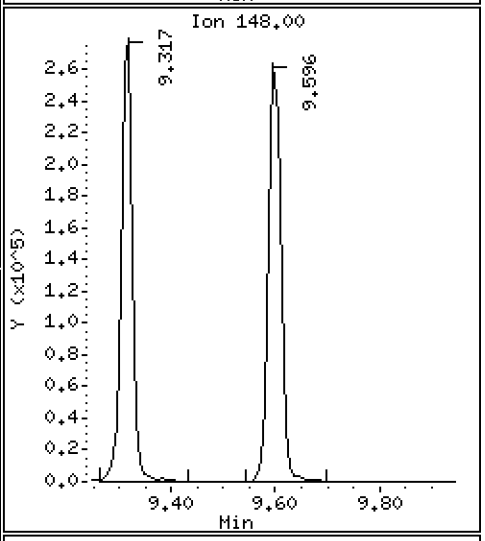
12 1,2-Dichlorobenzene

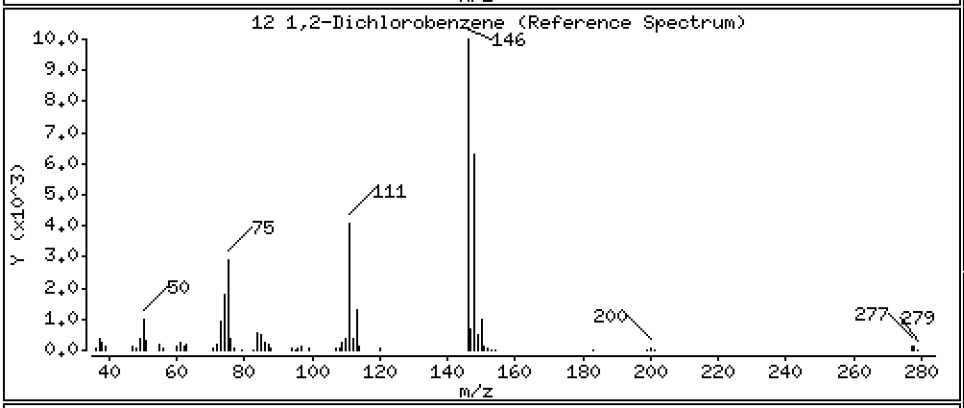
Concentration: 3.757 ug/ml

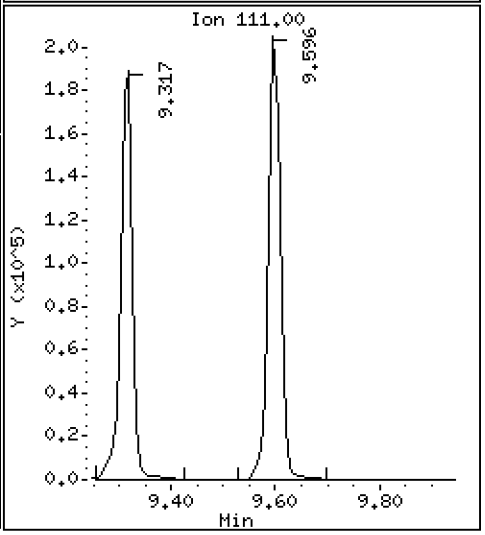


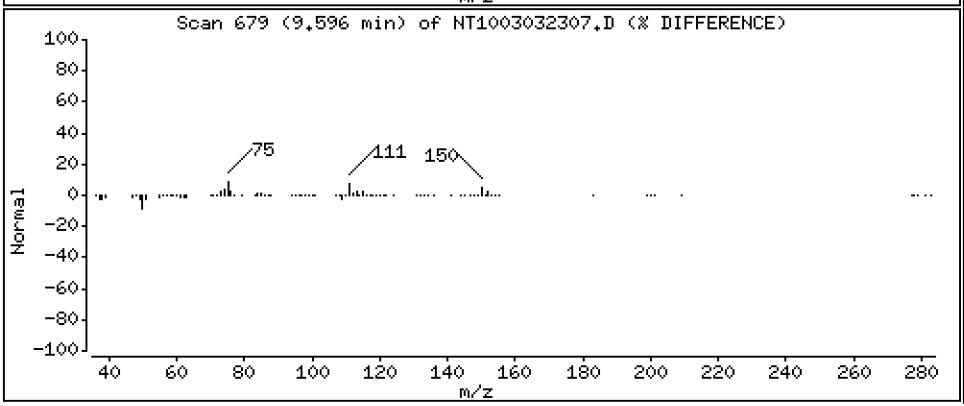












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

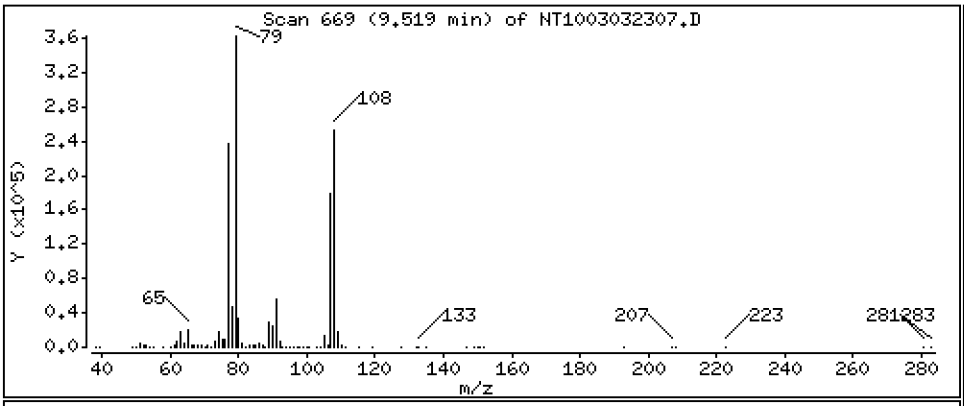
Operator: VTS

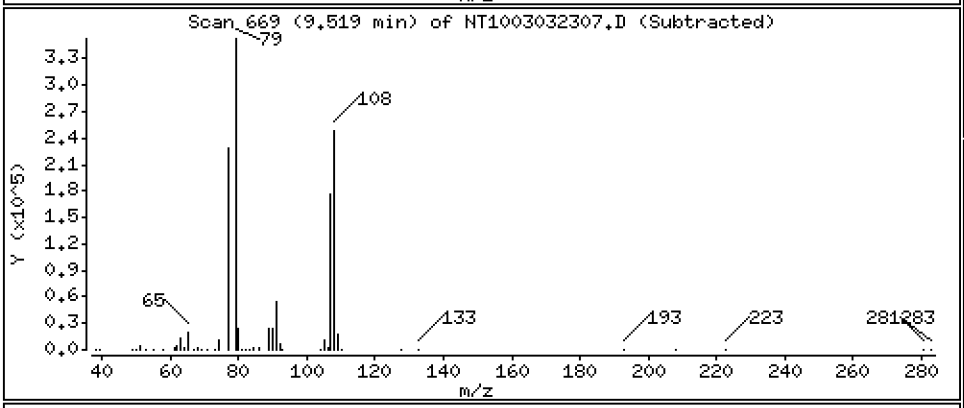
Column phase: ZB-5msi

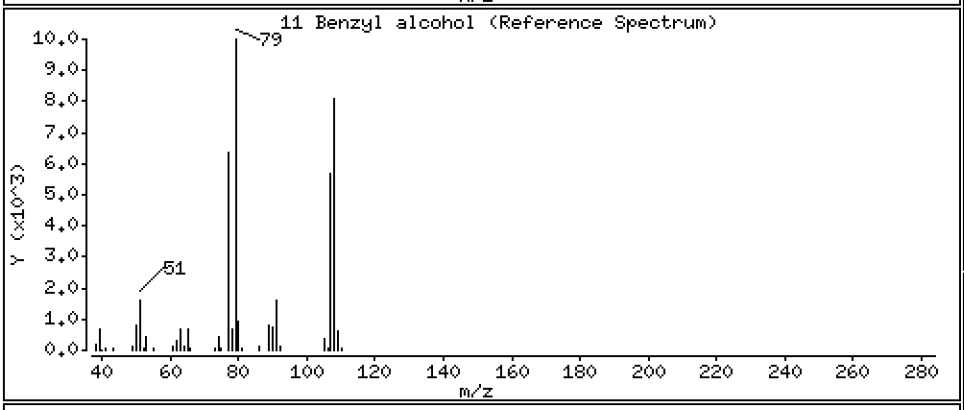
Column diameter: 0.25

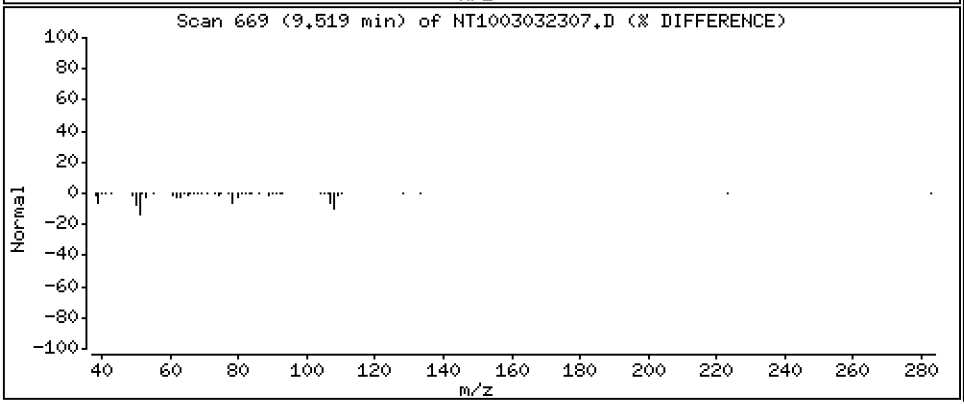
11 Benzyl alcohol

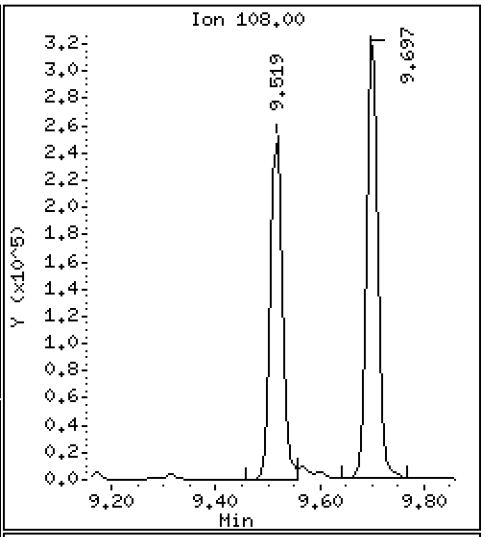
Concentration: 3.715 ug/ml

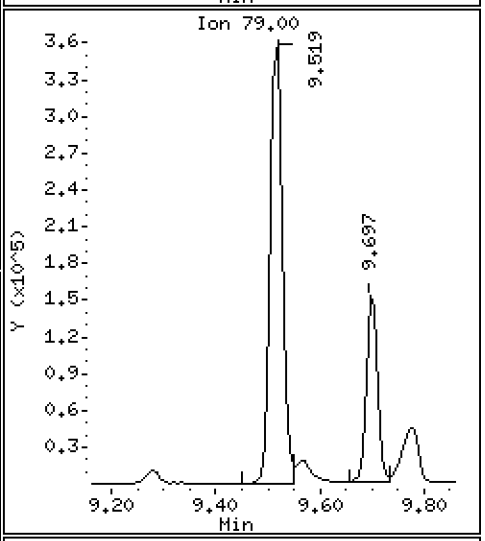


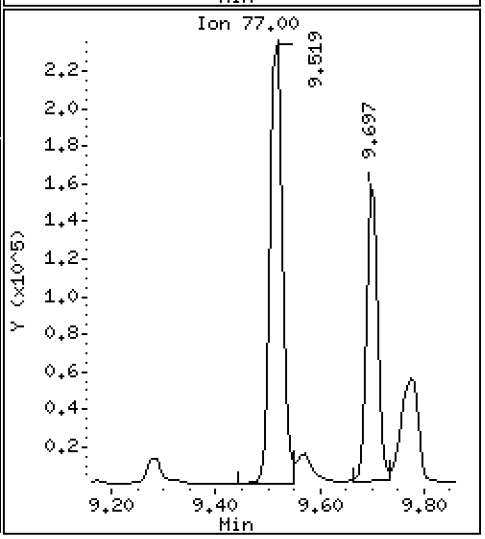












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

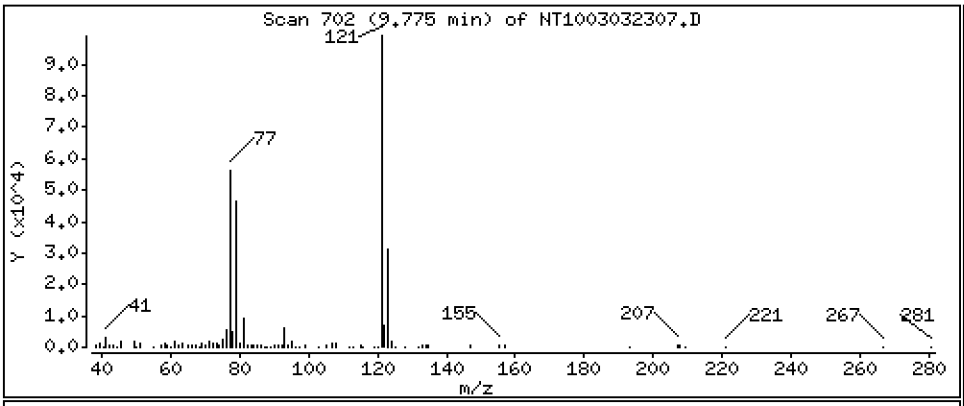
Operator: VTS

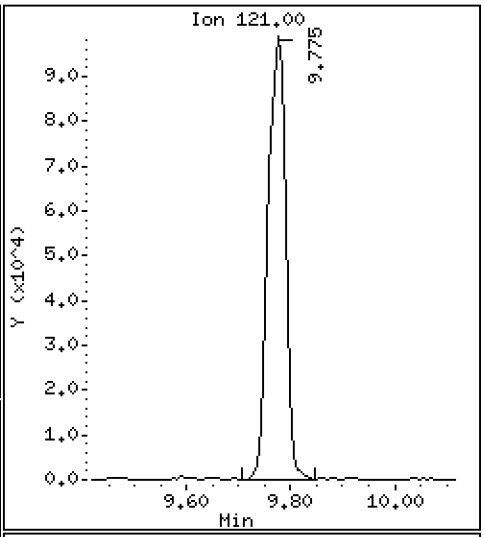
Column phase: ZB-5msi

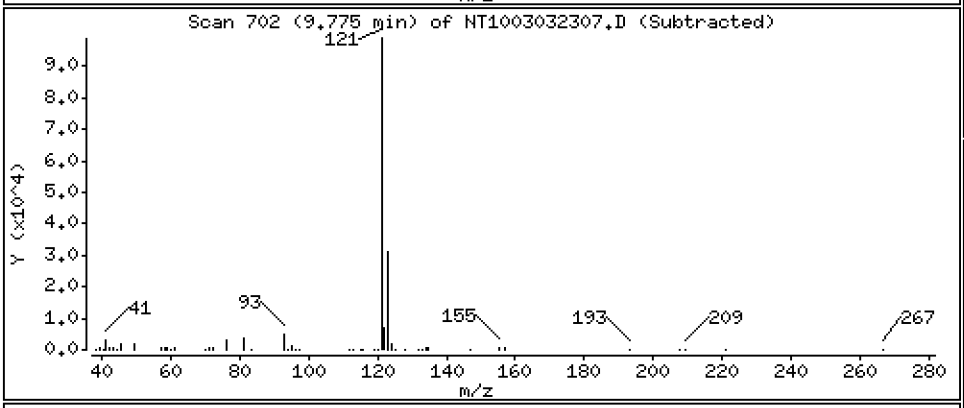
Column diameter: 0.25

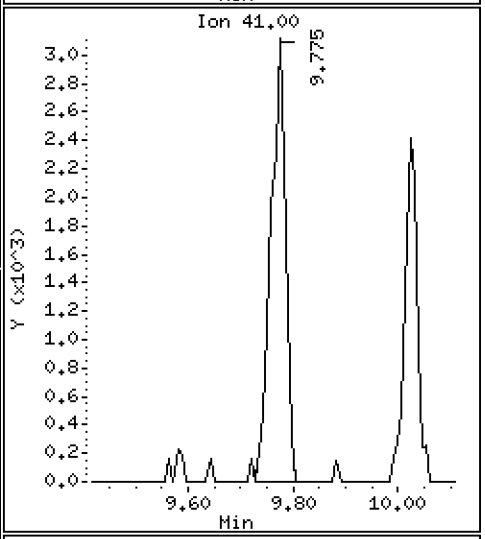
14 2,2'-oxybis(1-Chloropropane)

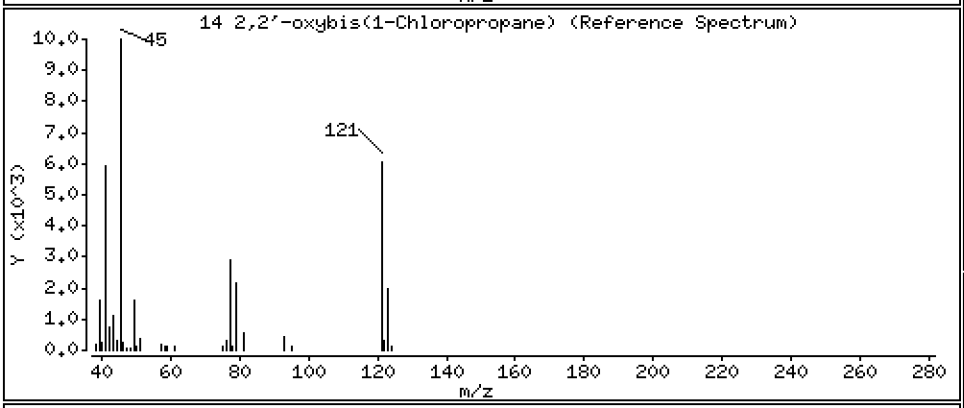
Concentration: 4.528 ug/ml

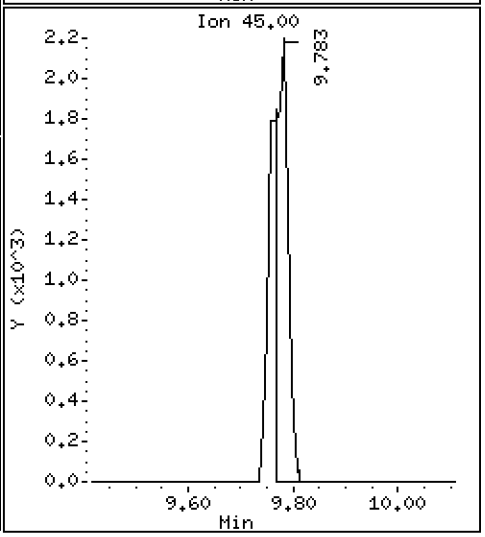


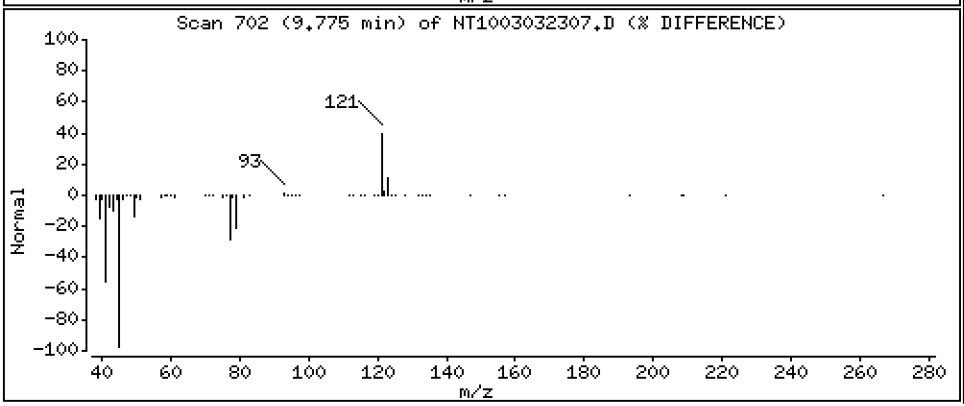












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

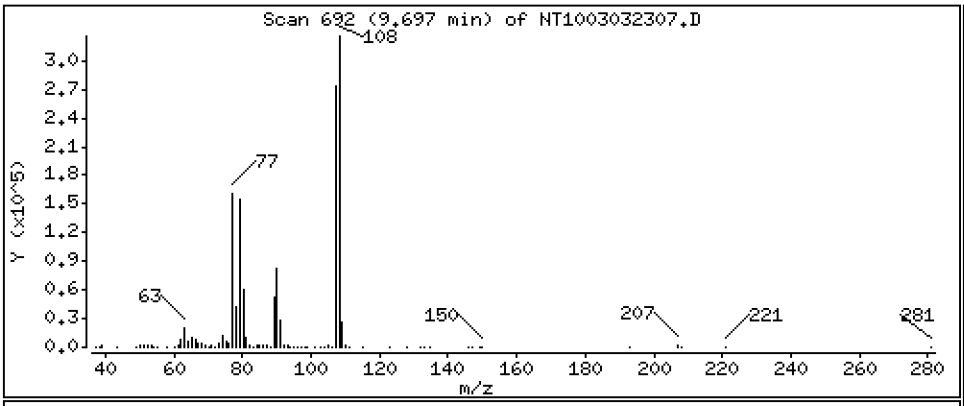
Operator: VTS

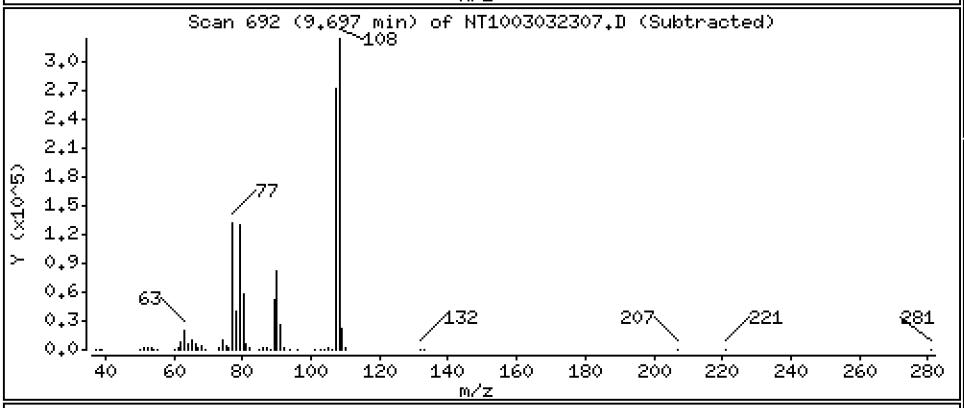
Column phase: ZB-5msi

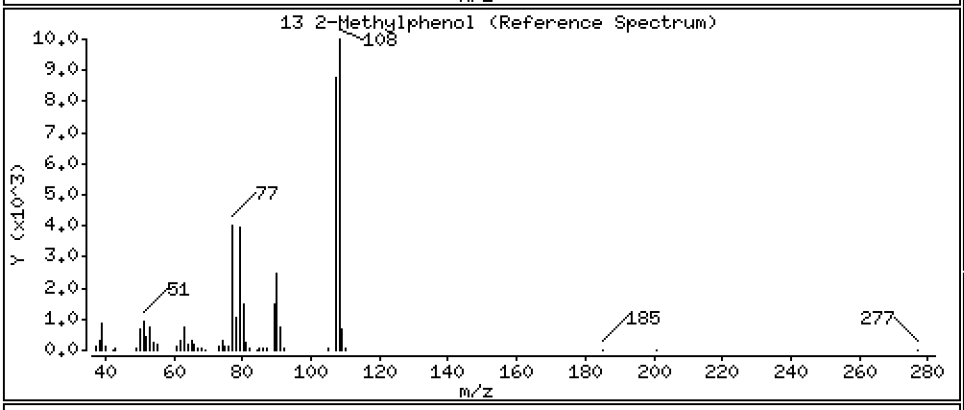
Column diameter: 0.25

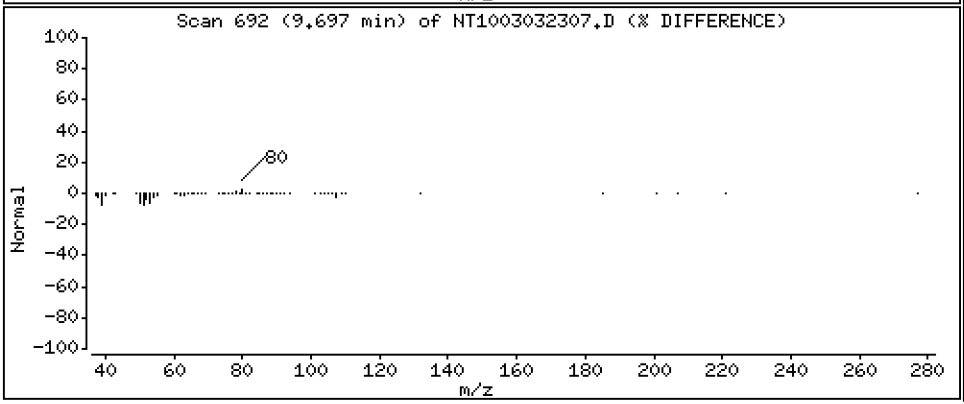
13 2-Methylphenol

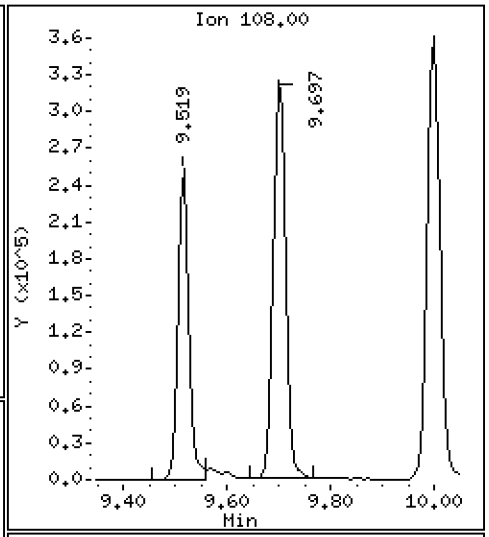
Concentration: 3.287 ug/ml

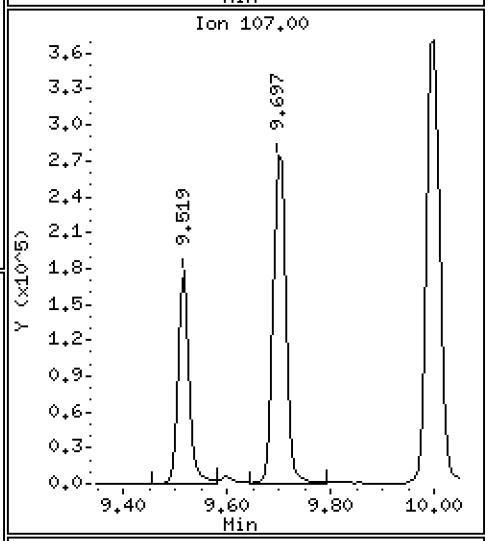


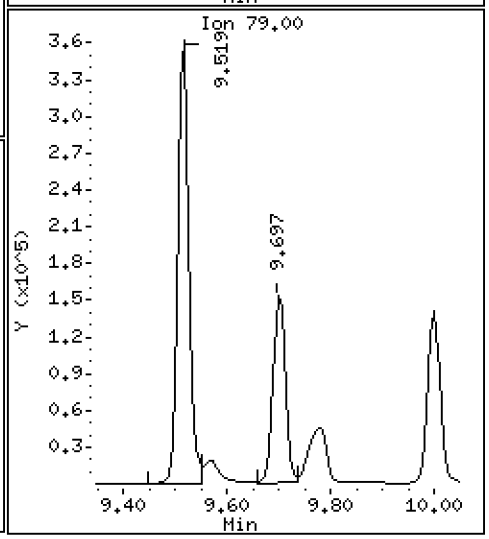












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

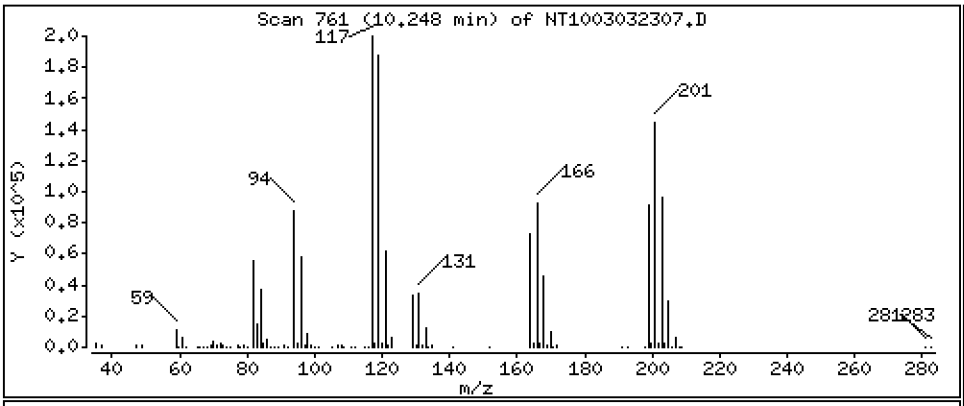
Operator: VTS

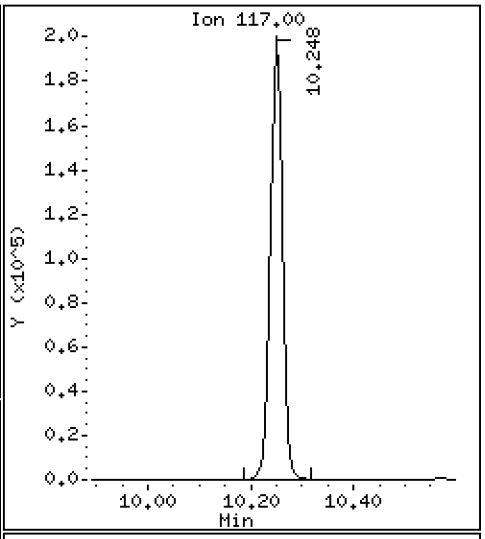
Column phase: ZB-5msi

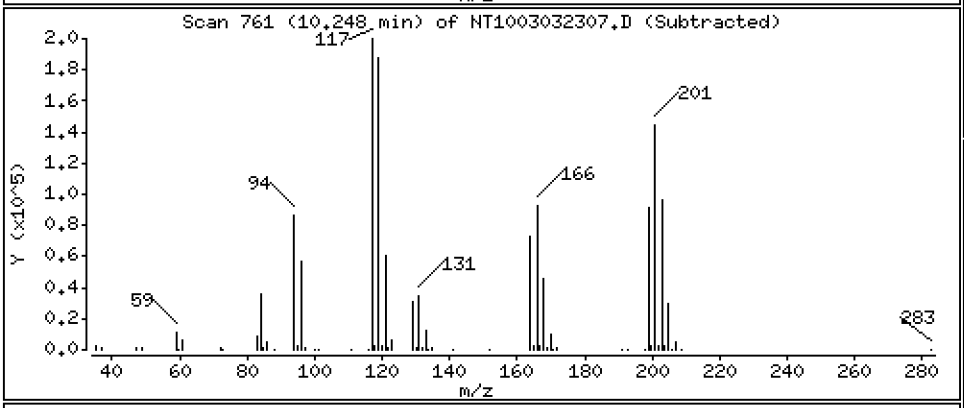
Column diameter: 0.25

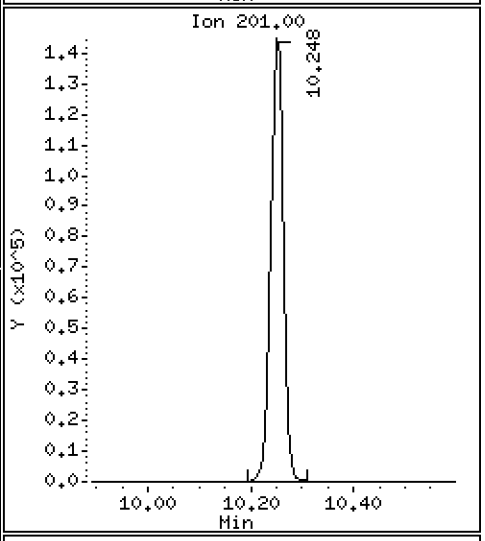
17 Hexachloroethane

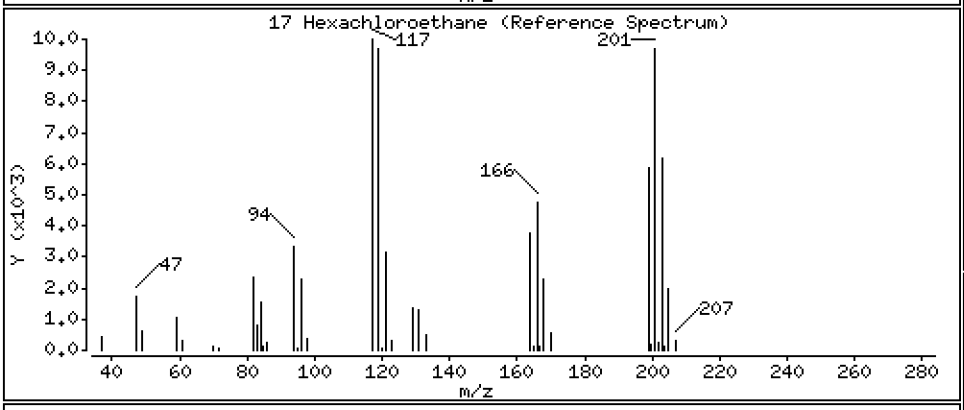
Concentration: 4.102 ug/ml

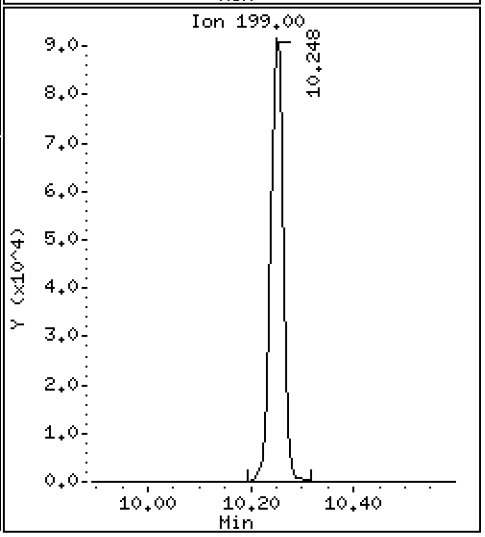


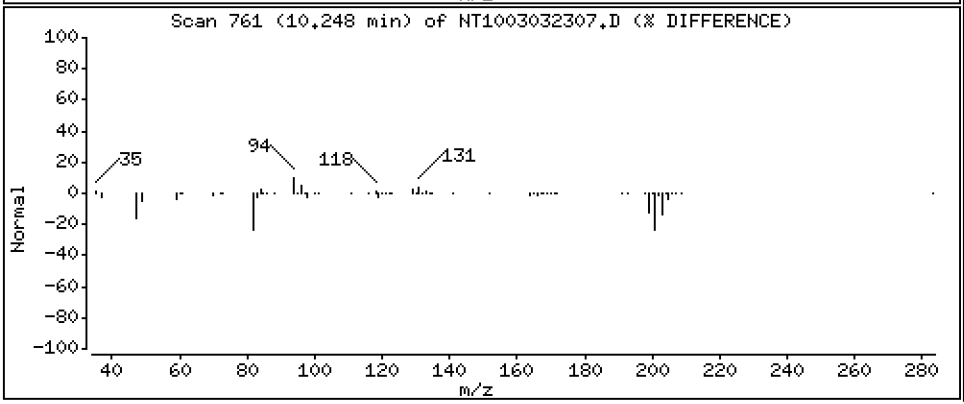












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

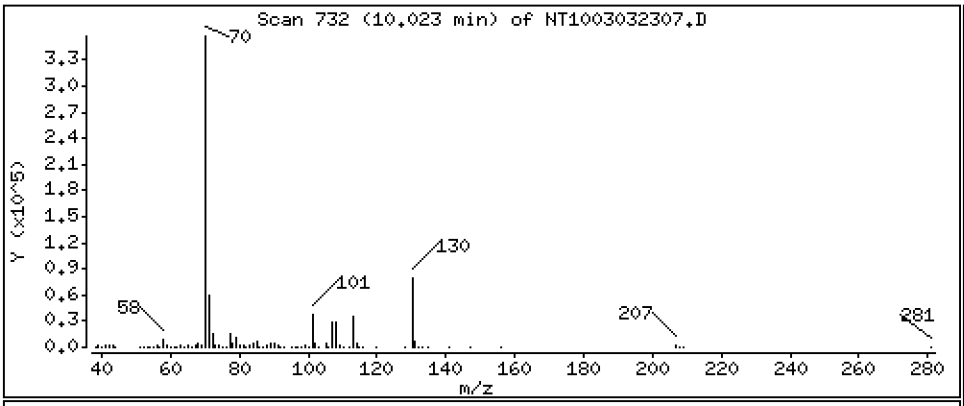
Operator: VTS

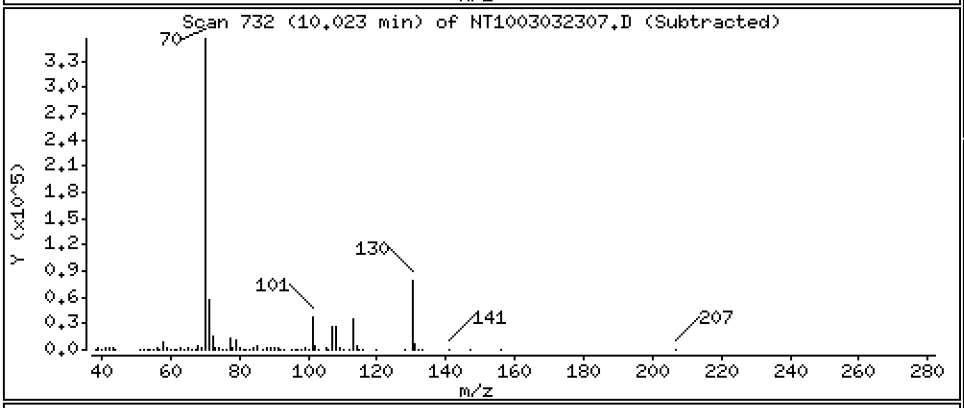
Column phase: ZB-5msi

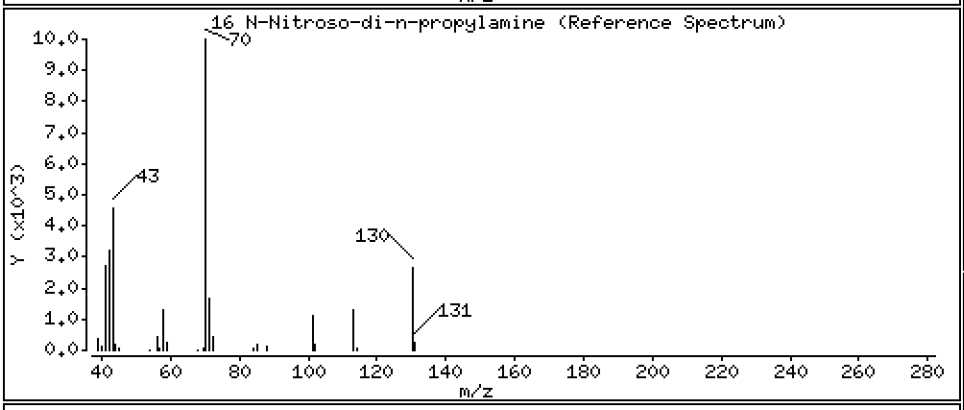
Column diameter: 0.25

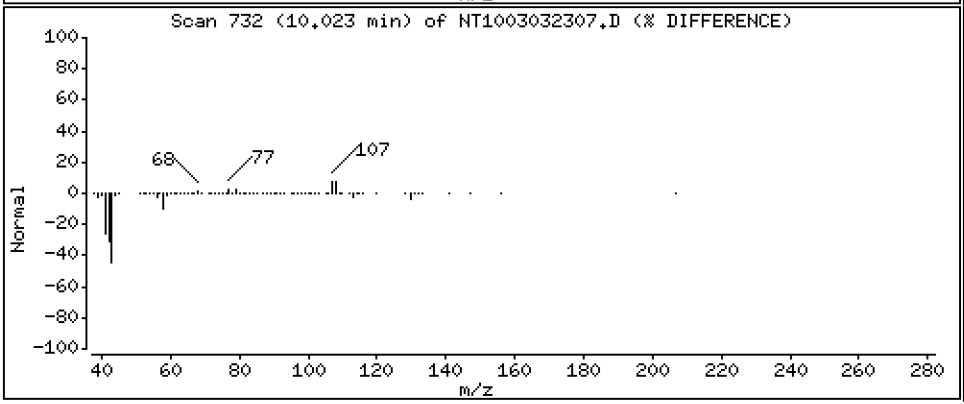
16 N-Nitroso-di-n-propylamine

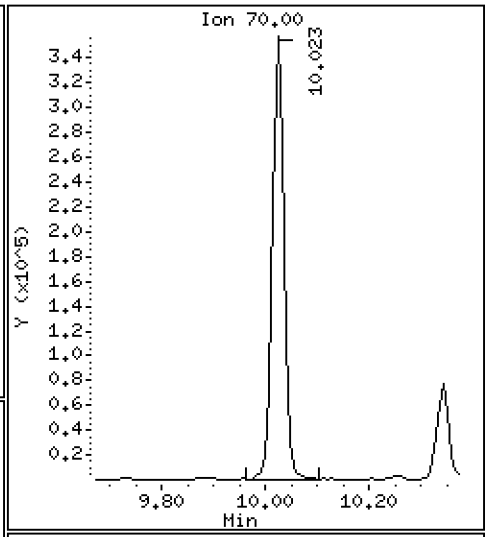
Concentration: 4.331 ug/ml

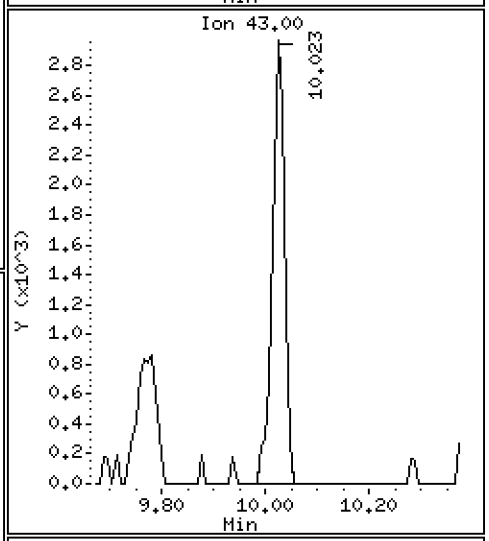


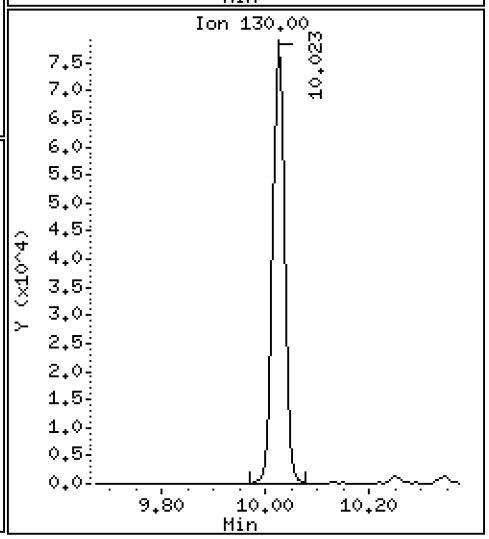












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

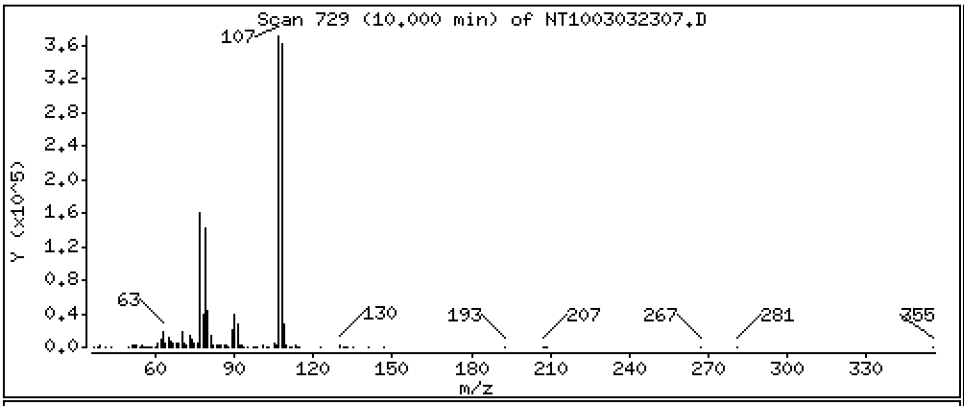
Operator: VTS

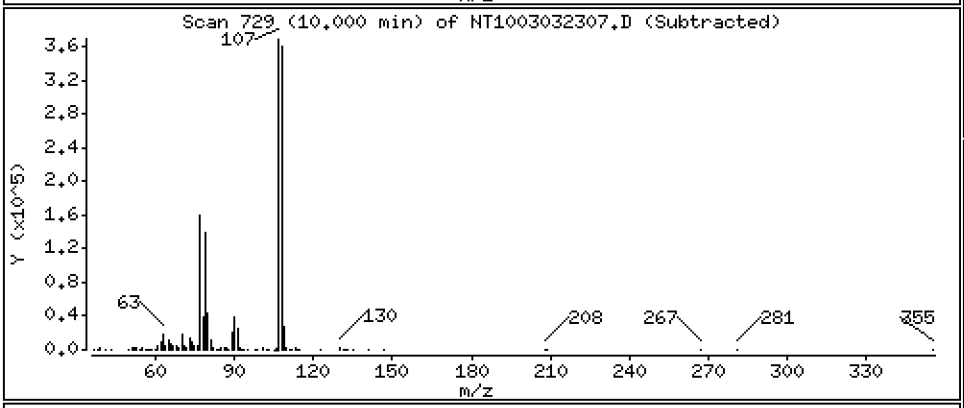
Column phase: ZB-5msi

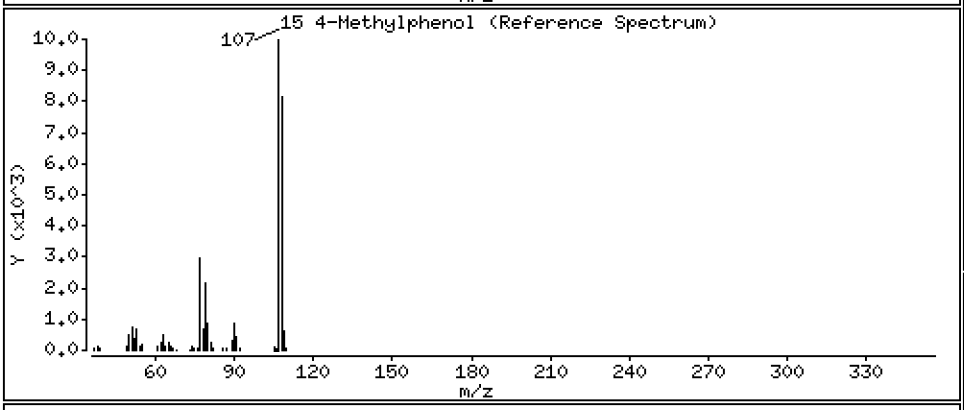
Column diameter: 0.25

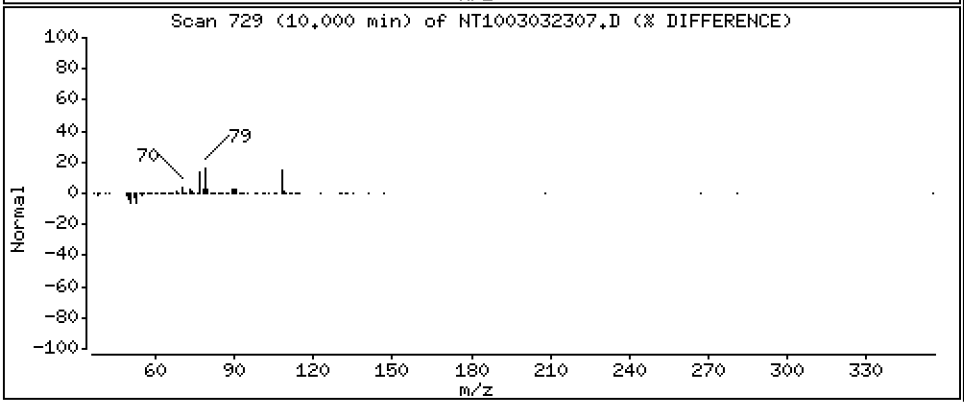
15 4-Methylphenol

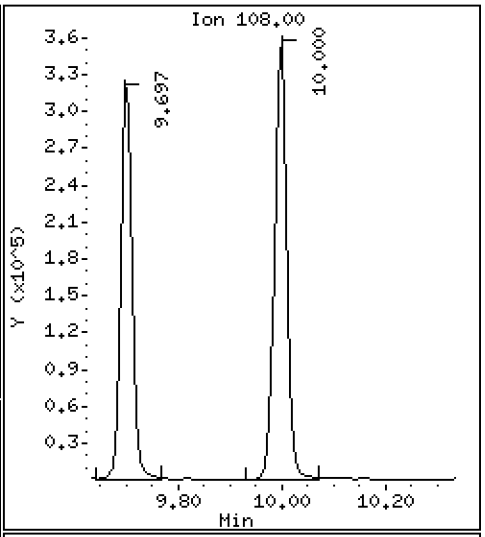
Concentration: 3.097 ug/ml

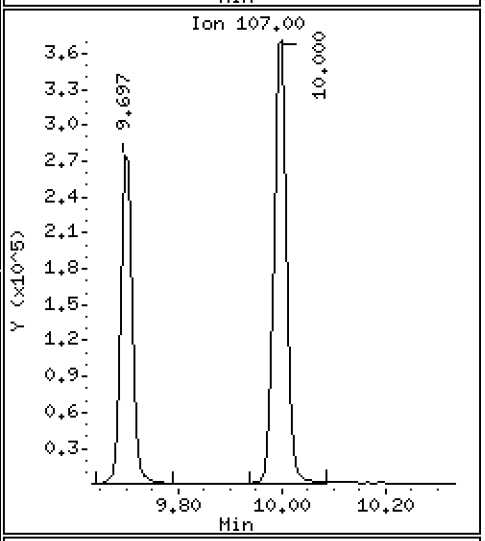


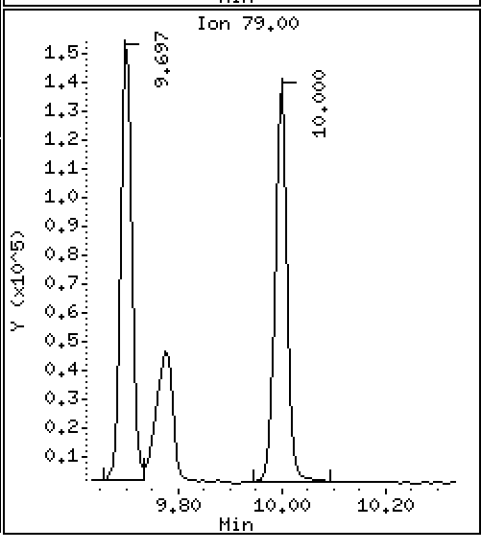












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

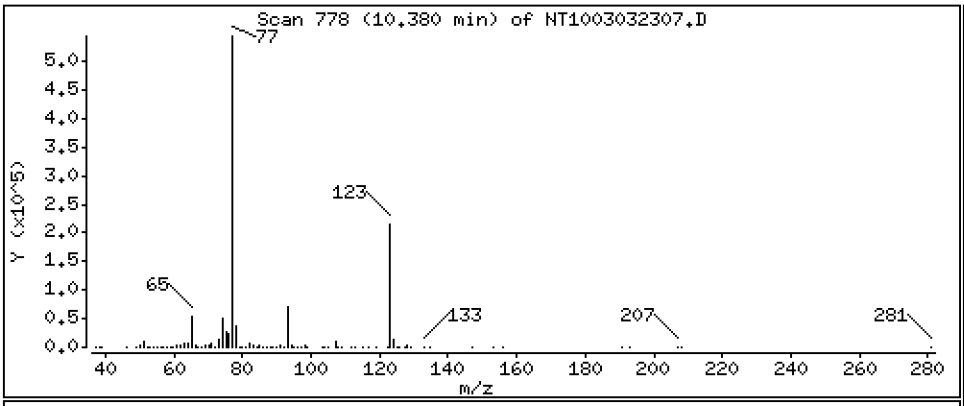
Operator: VTS

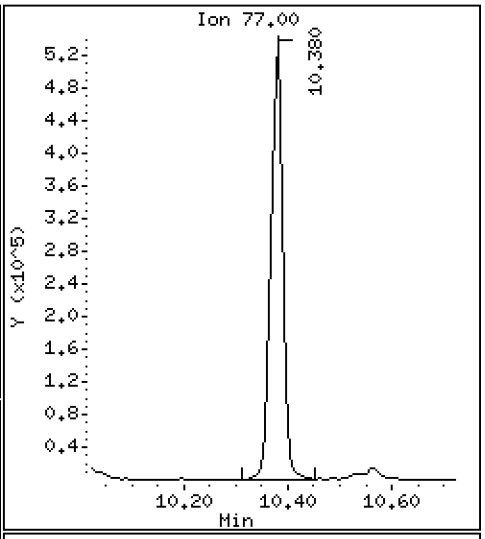
Column phase: ZB-5msi

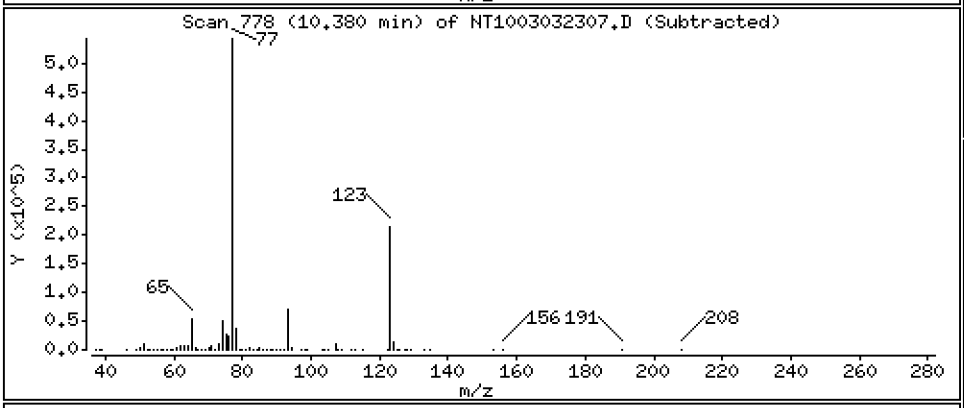
Column diameter: 0.25

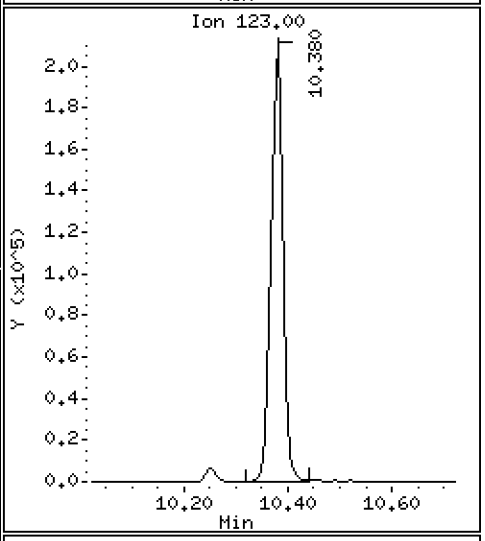
19 Nitrobenzene

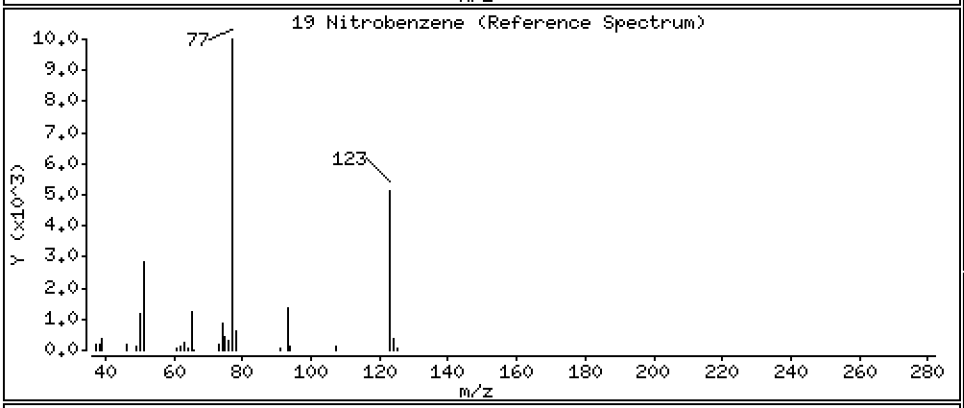
Concentration: 4.275 ug/ml

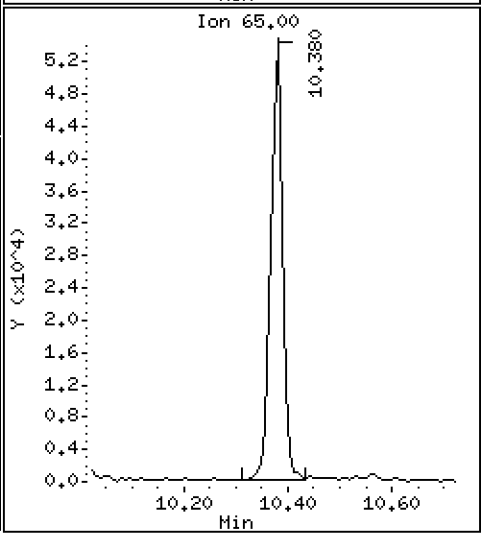


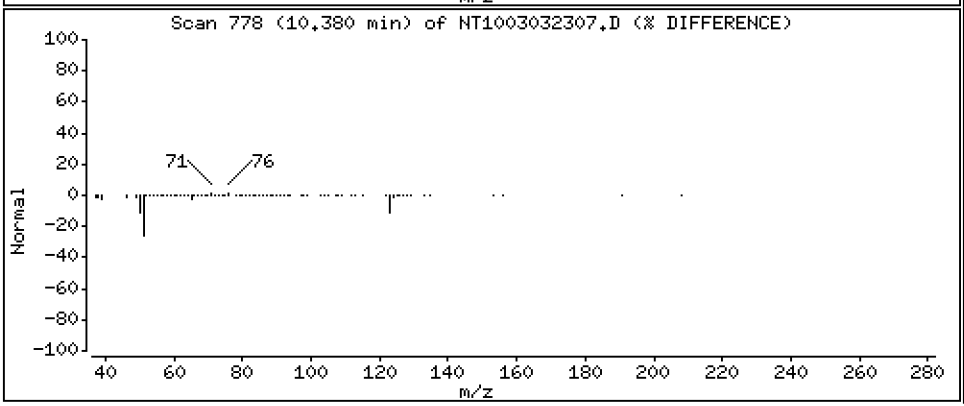












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

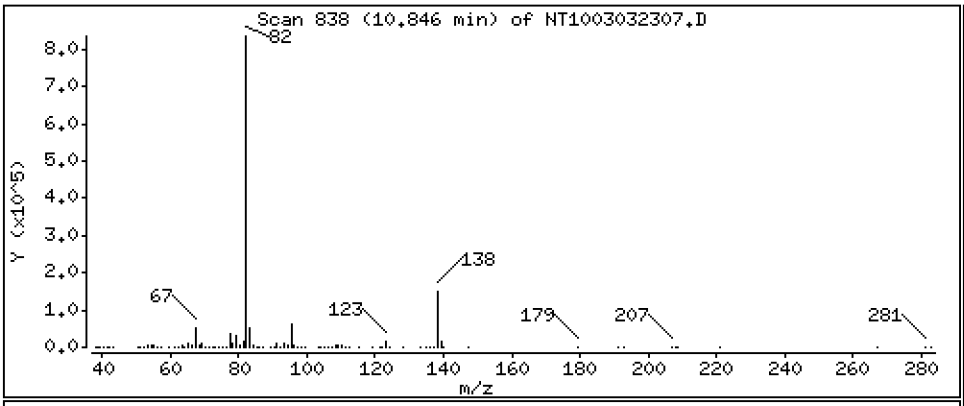
Operator: VTS

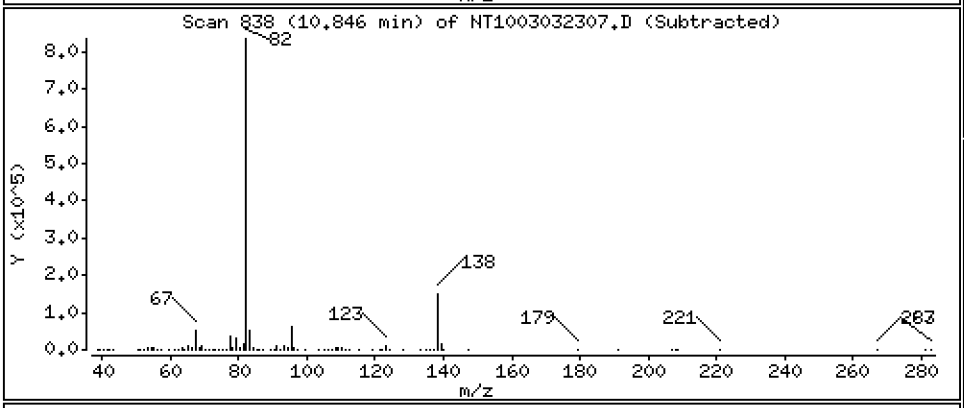
Column phase: ZB-5msi

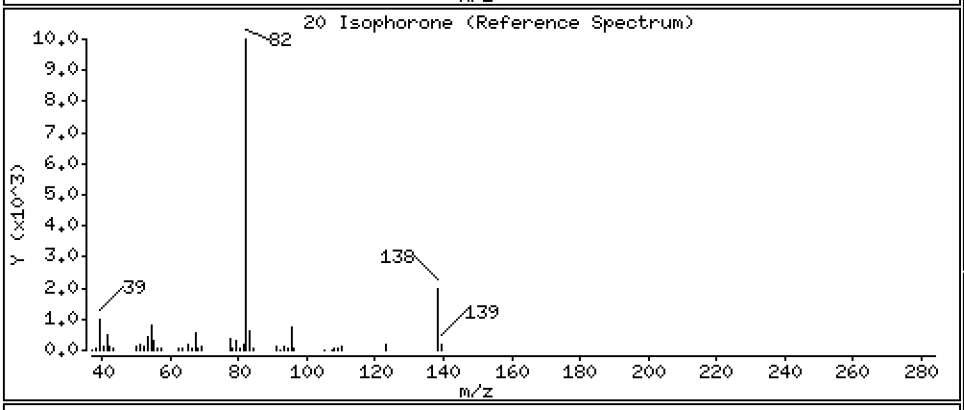
Column diameter: 0.25

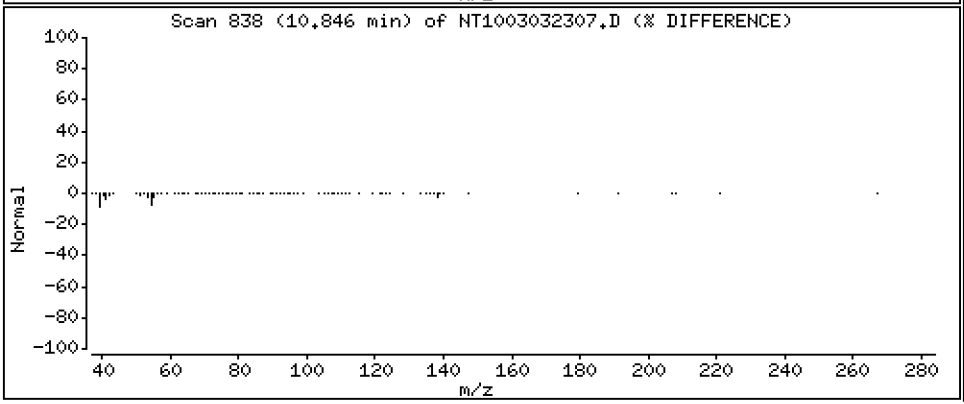
20 Isophorone

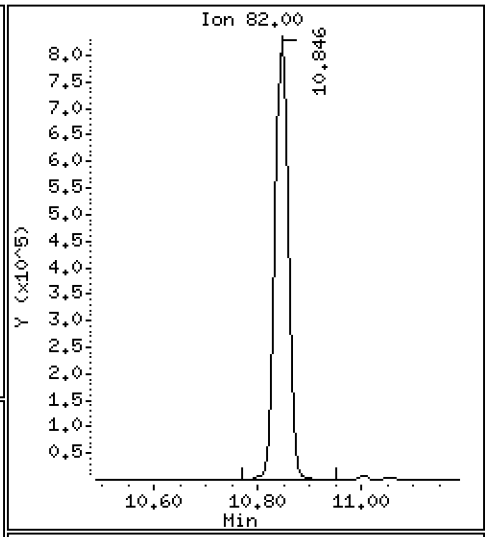
Concentration: 6.400 ug/ml

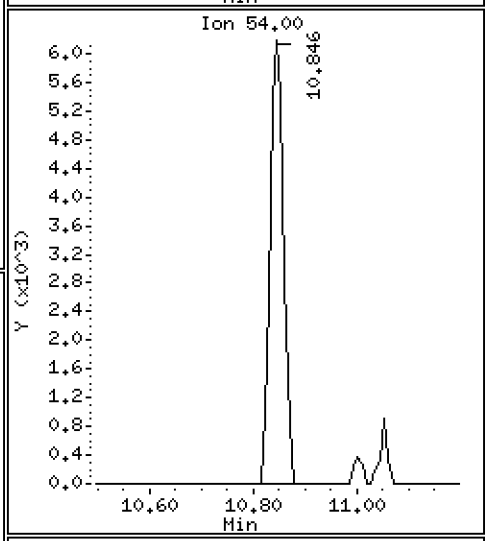


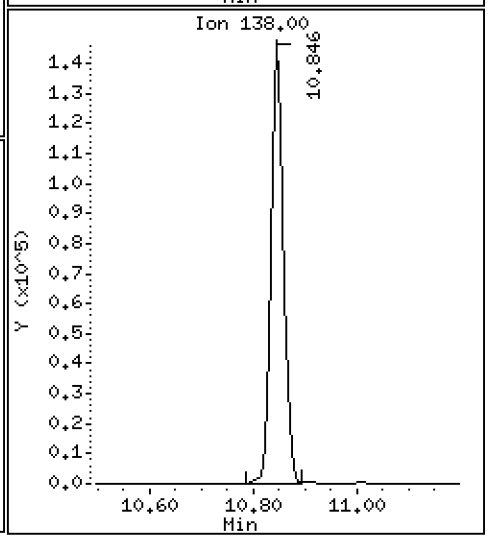












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

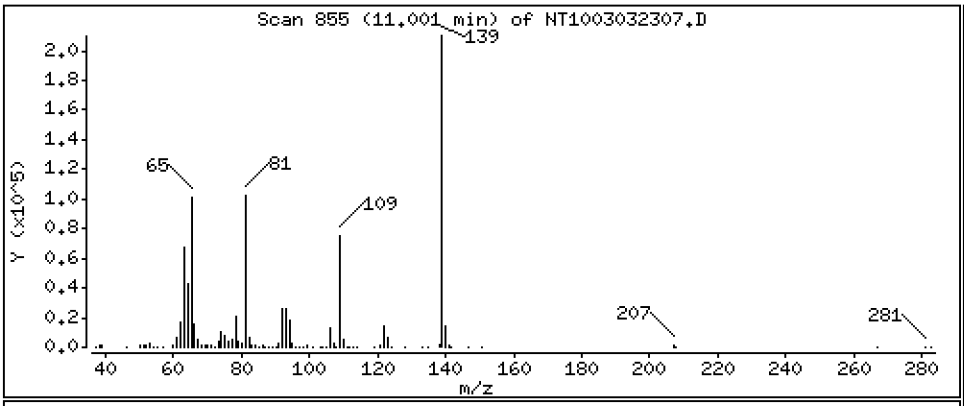
Operator: VTS

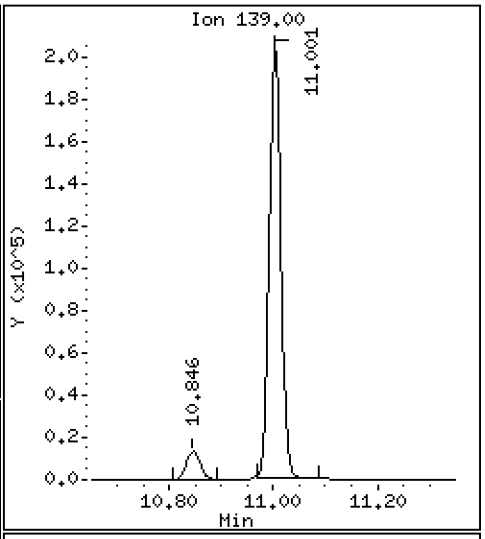
Column phase: ZB-5msi

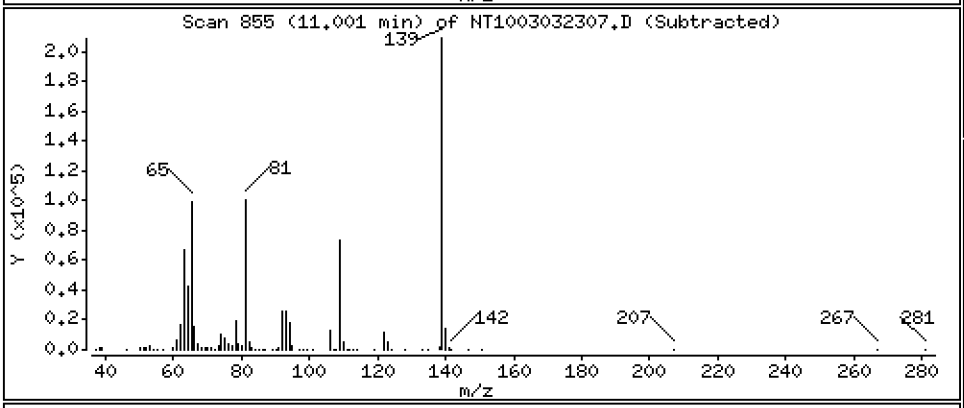
Column diameter: 0.25

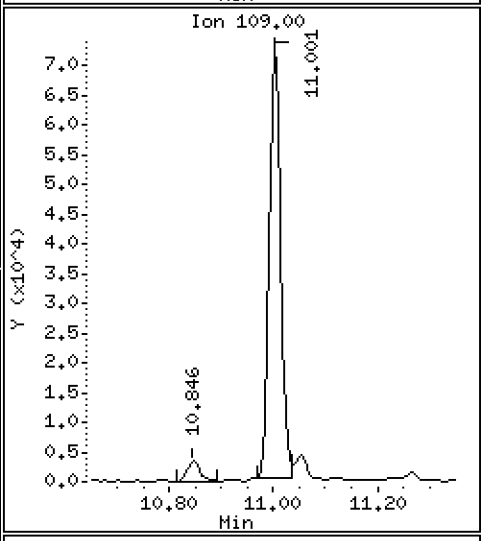
21 2-Nitrophenol

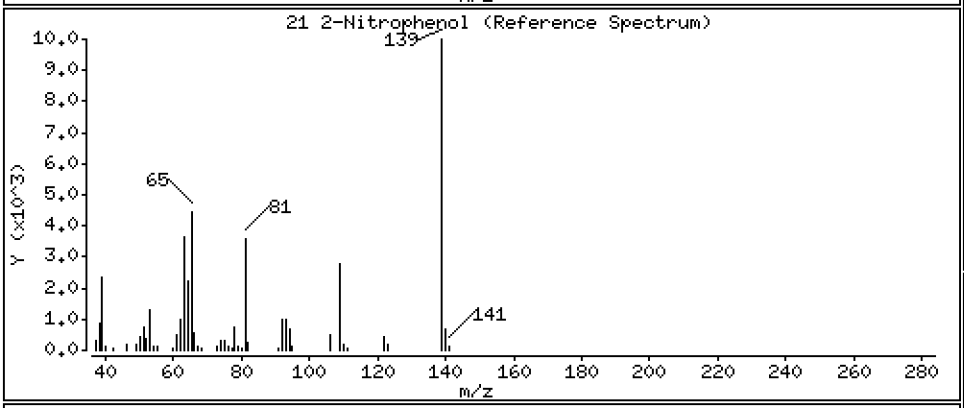
Concentration: 3.009 ug/ml

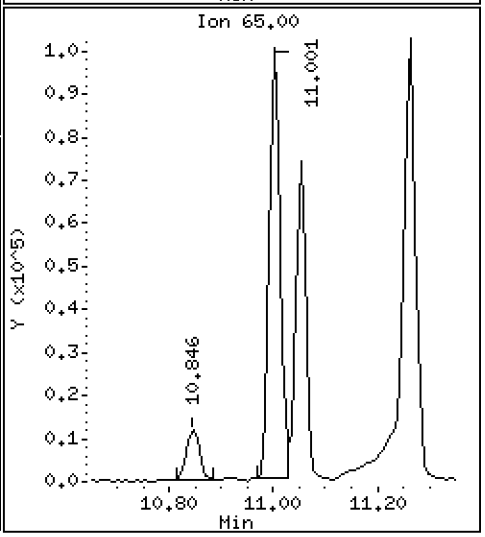


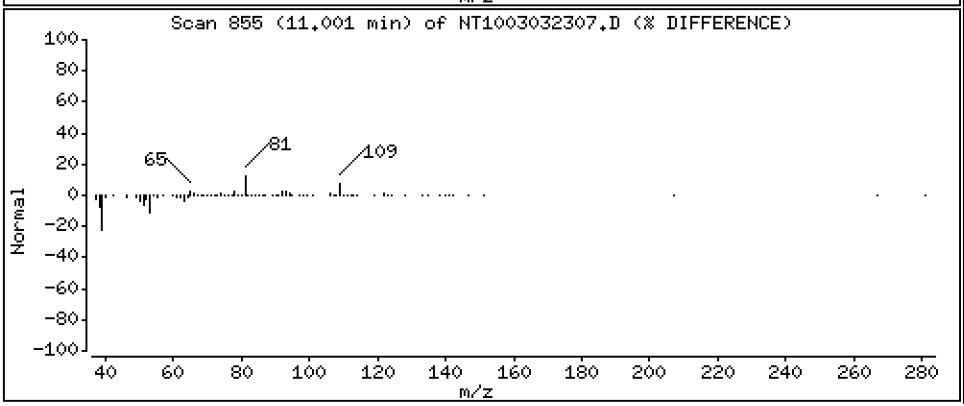












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

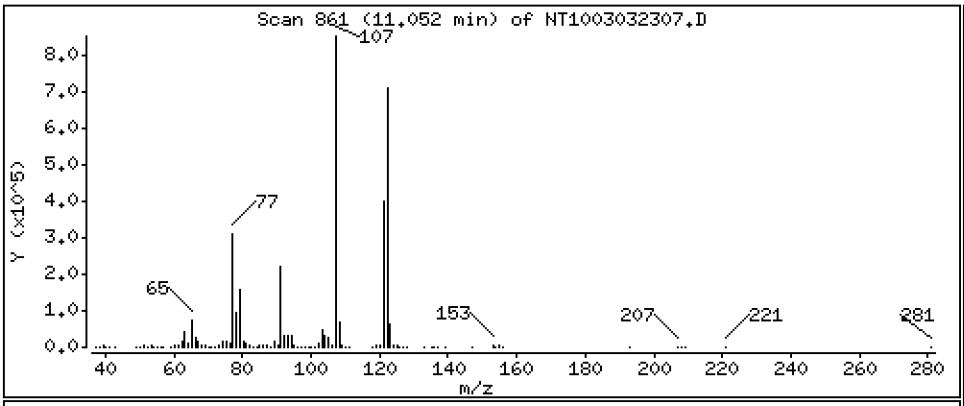
Operator: VTS

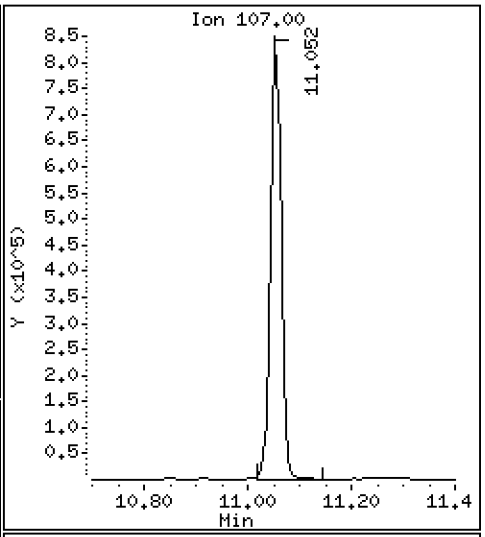
Column phase: ZB-5msi

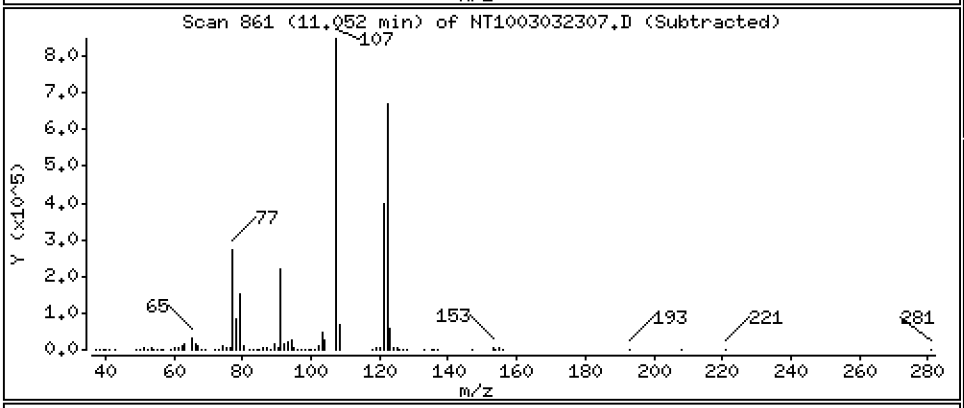
Column diameter: 0.25

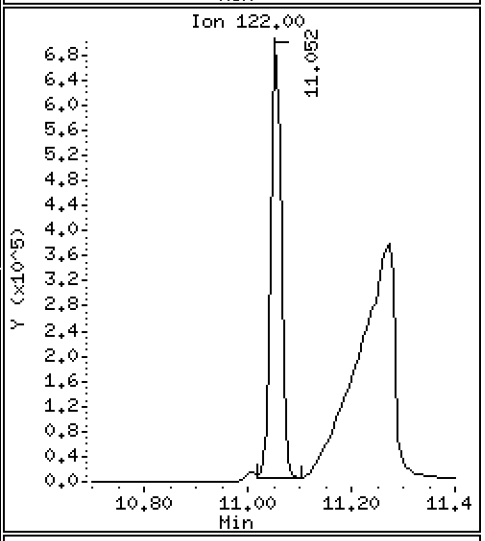
22 2,4-Dimethylphenol

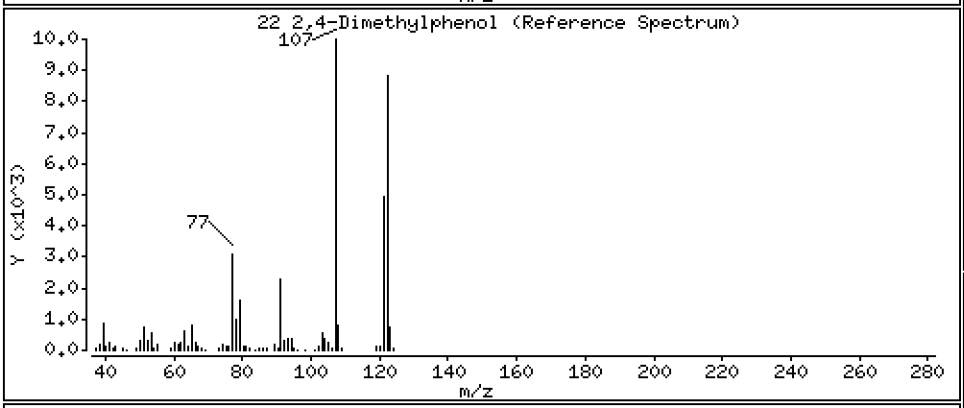
Concentration: 6.317 ug/ml

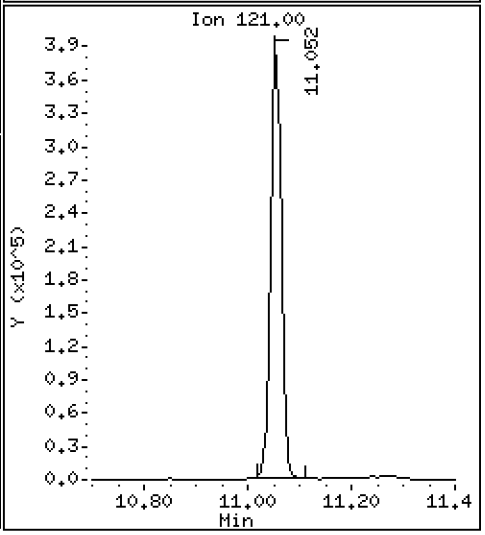


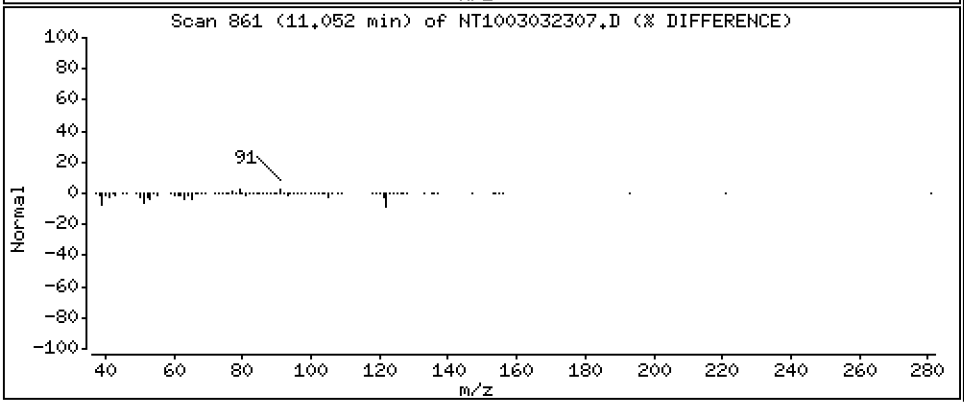












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

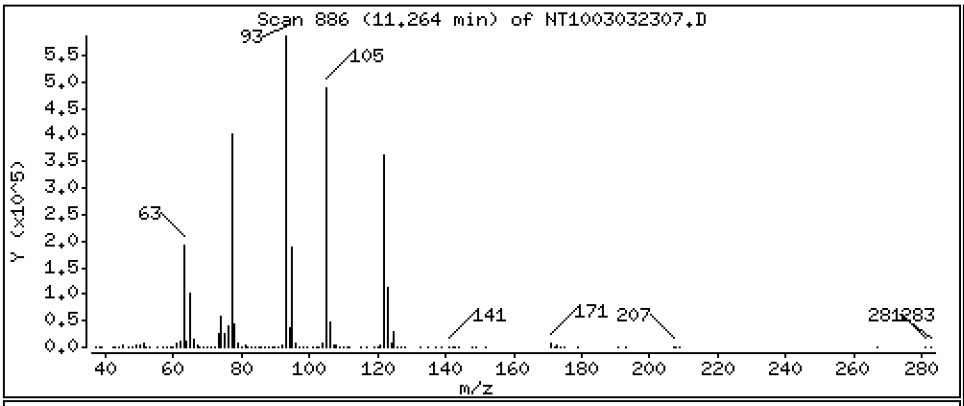
Operator: VTS

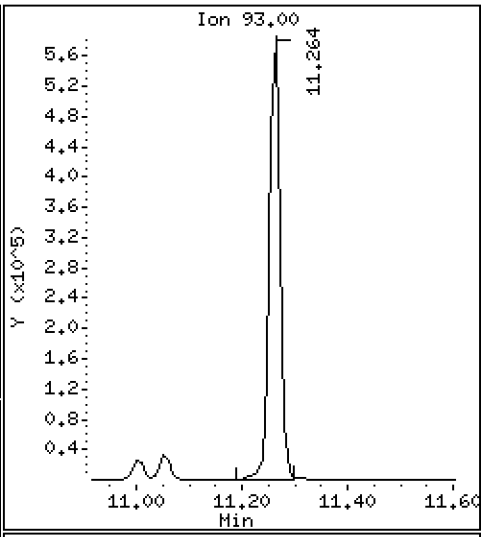
Column phase: ZB-5msi

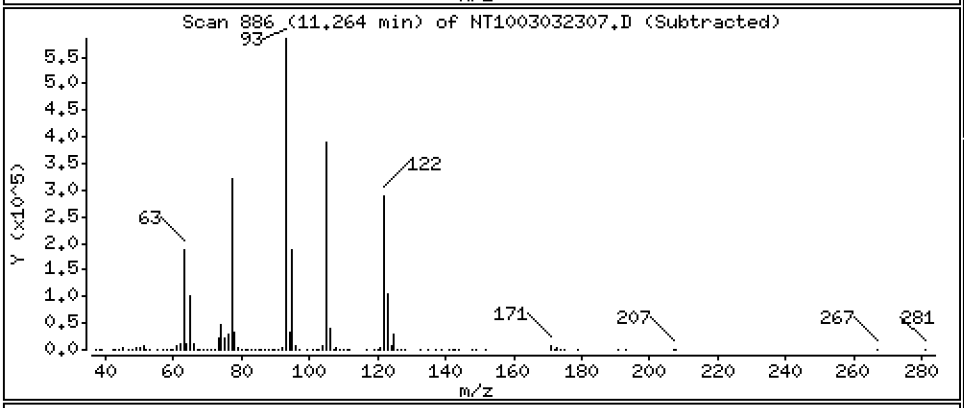
Column diameter: 0.25

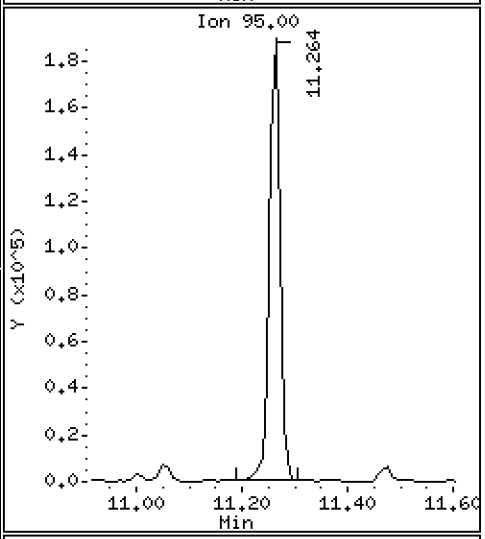
23 Bis(2-Chloroethoxy)methane

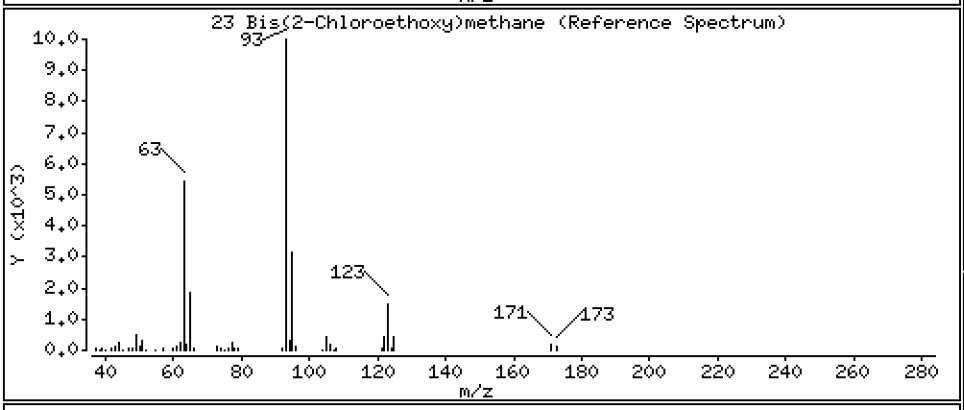
Concentration: 5.400 ug/ml

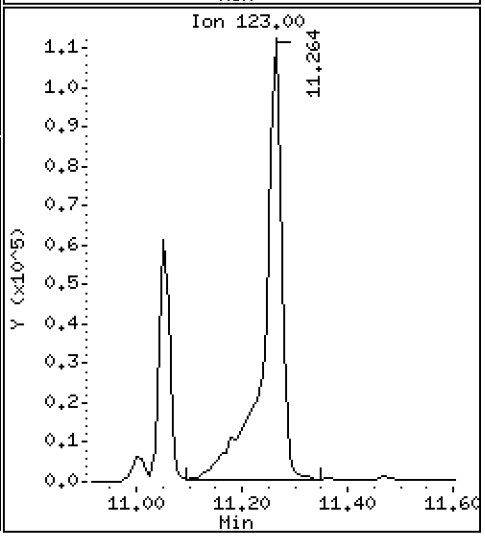


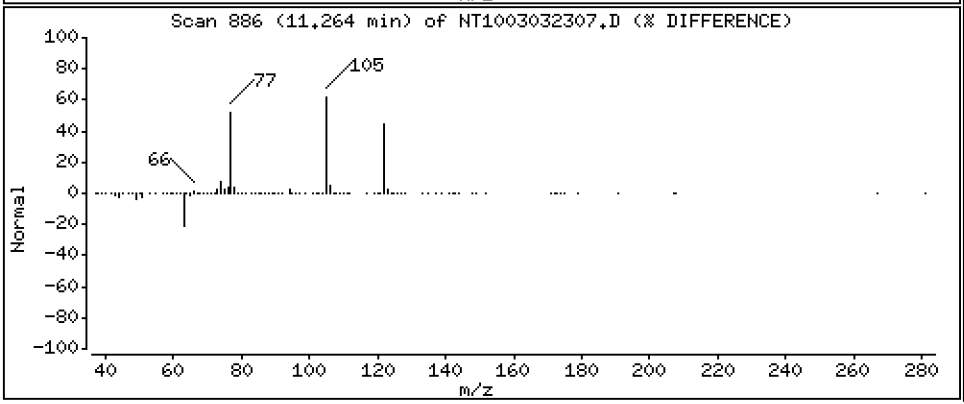












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

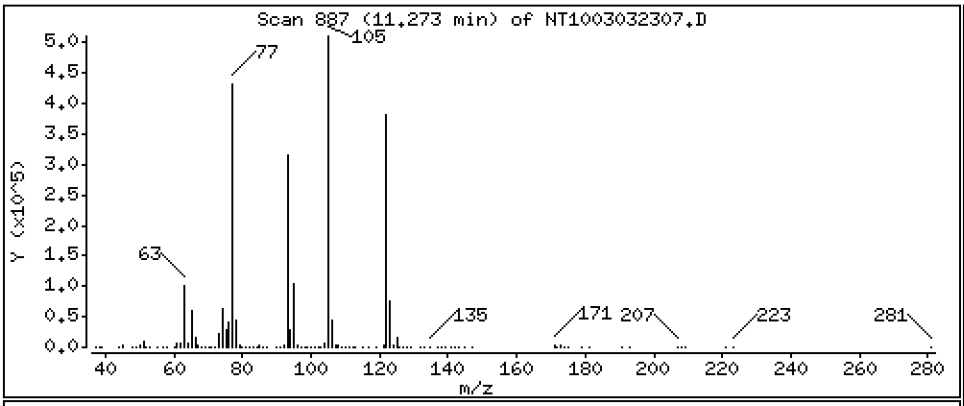
Operator: VTS

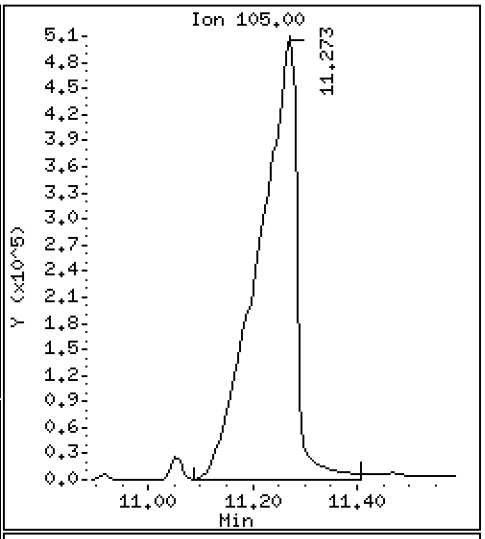
Column phase: ZB-5msi

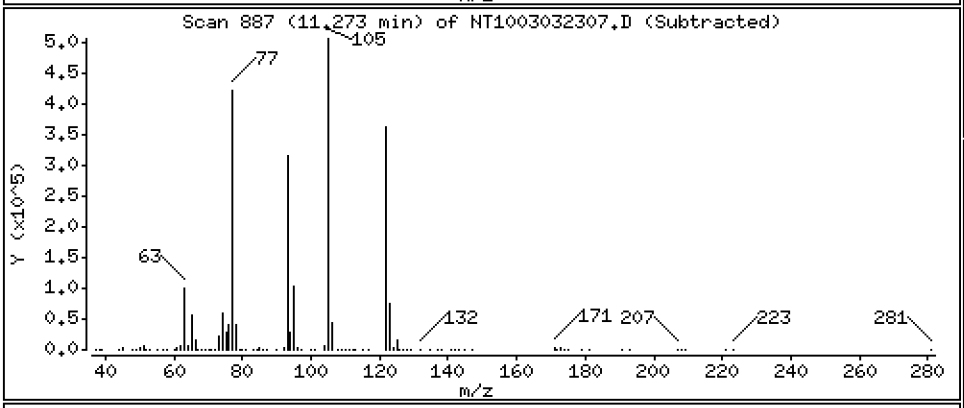
Column diameter: 0.25

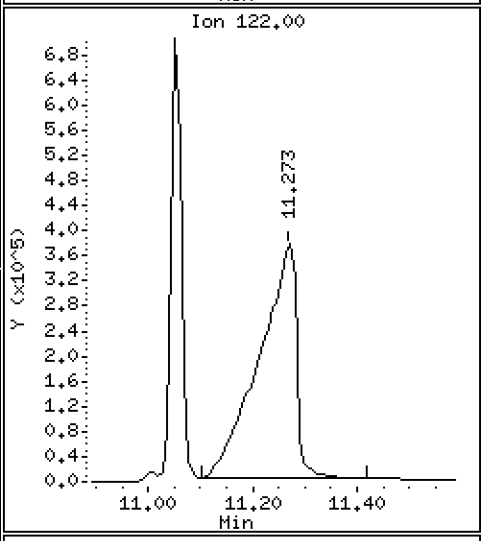
24 Benzoic acid

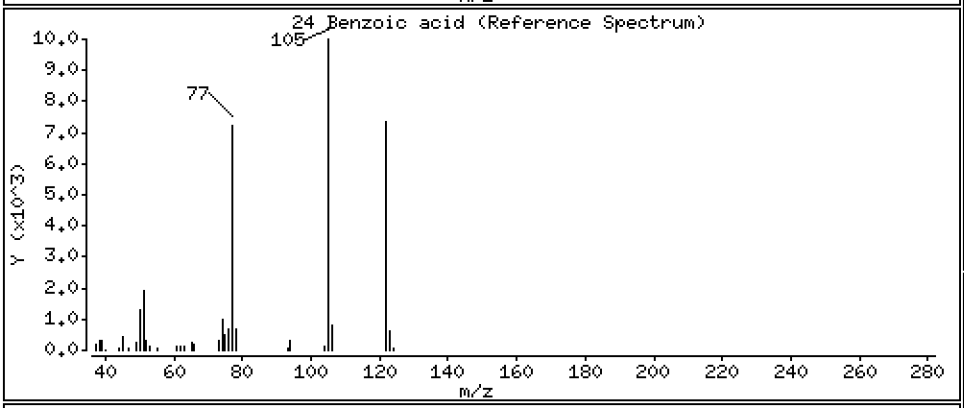
Concentration: 22.56 ug/ml

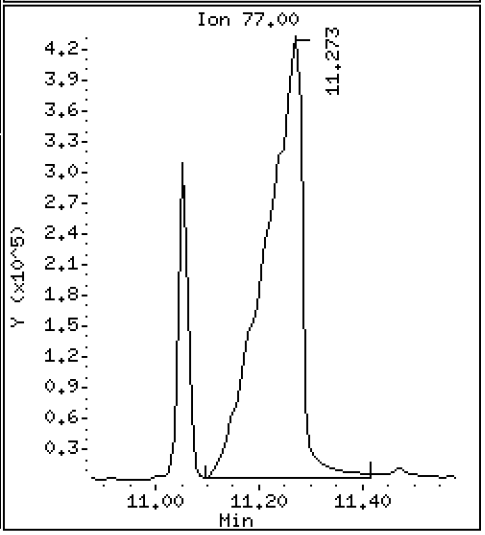


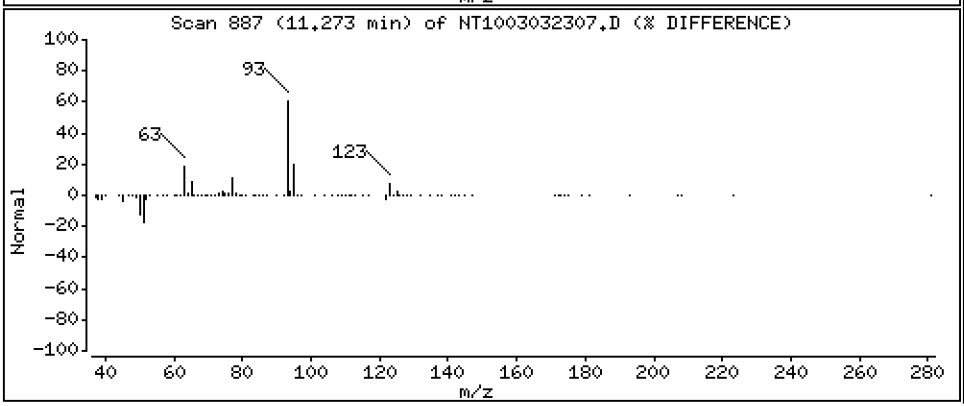












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

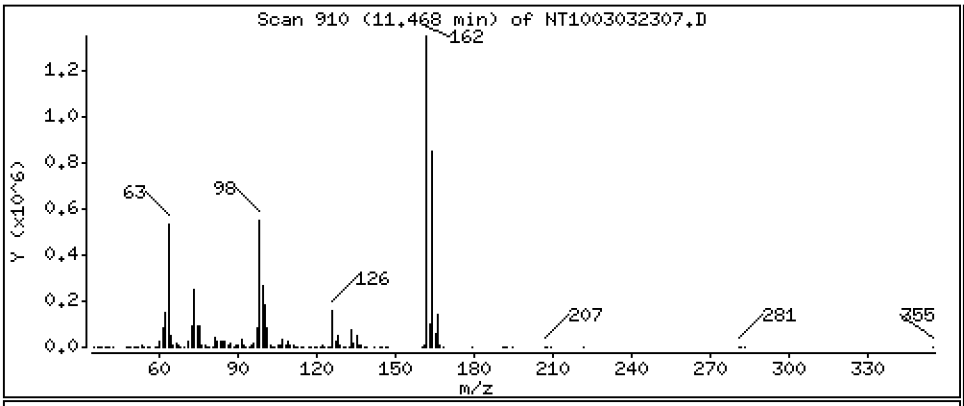
Operator: VTS

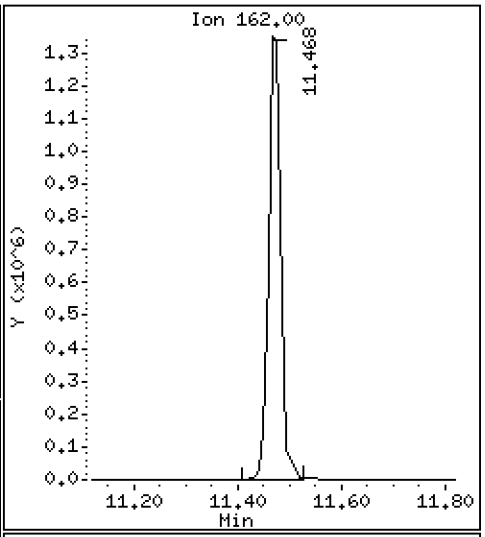
Column phase: ZB-5msi

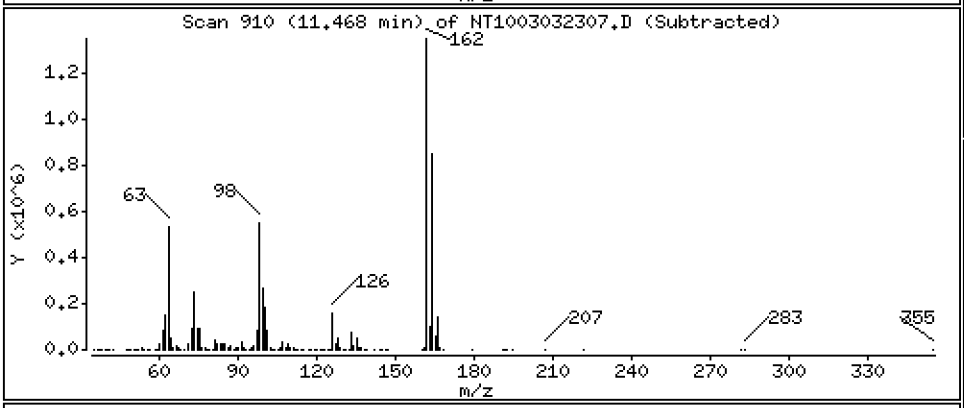
Column diameter: 0.25

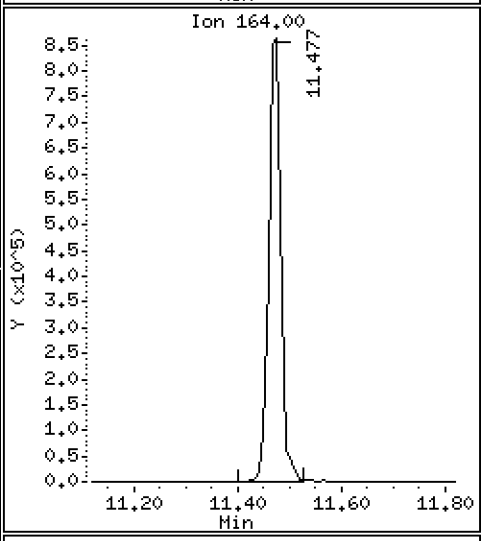
25 2,4-Dichlorophenol

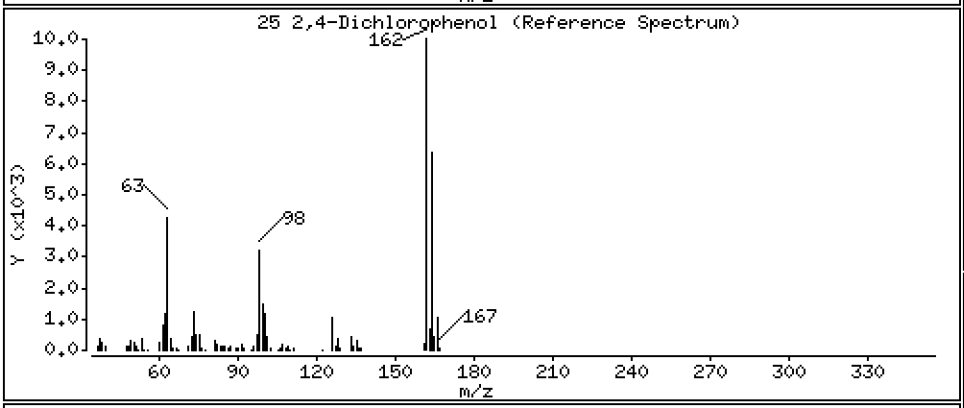
Concentration: 16.02 ug/ml

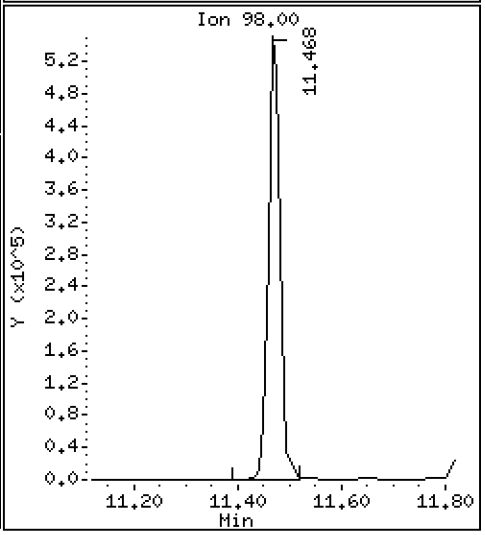


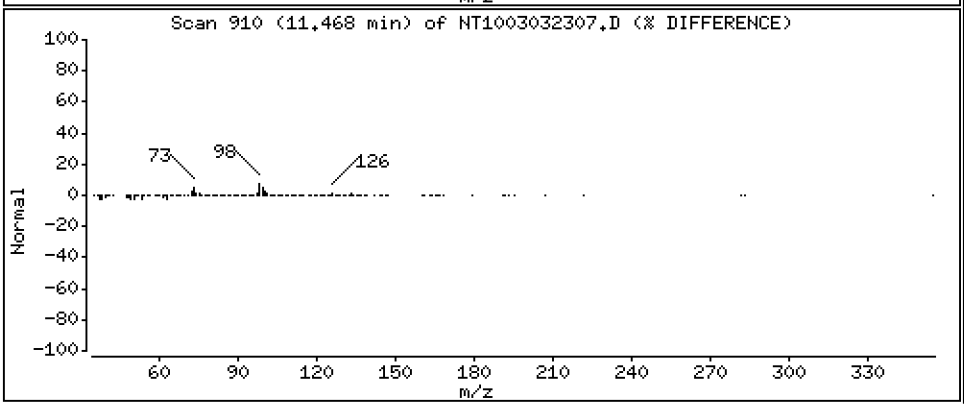












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

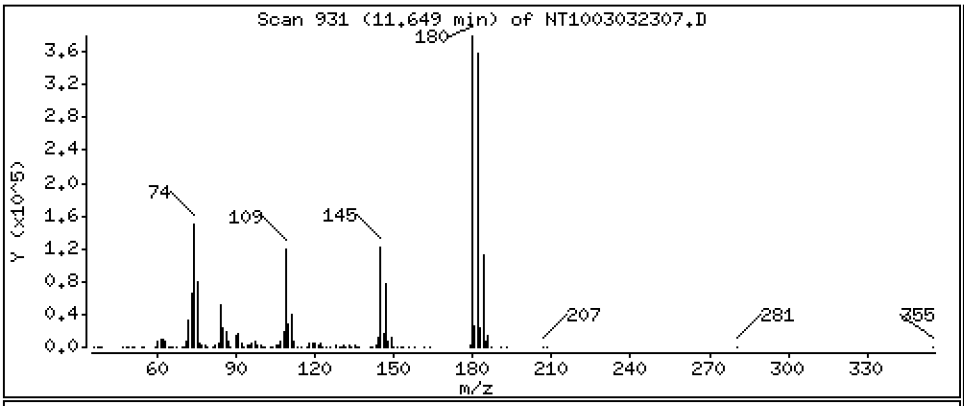
Operator: VTS

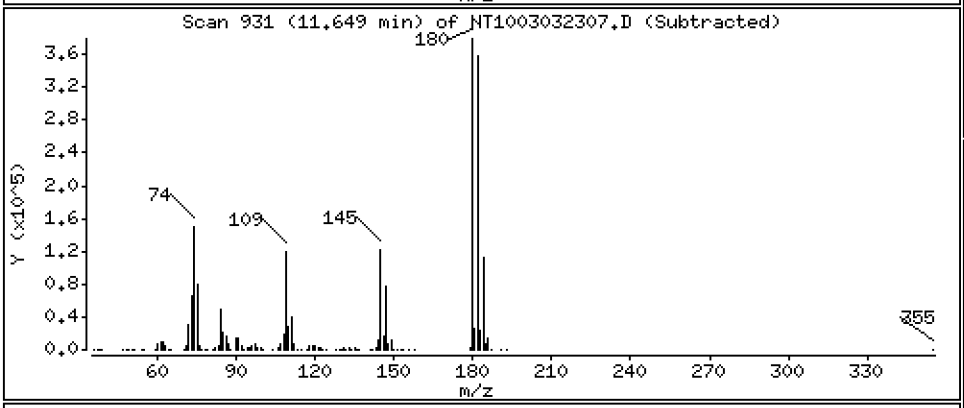
Column phase: ZB-5msi

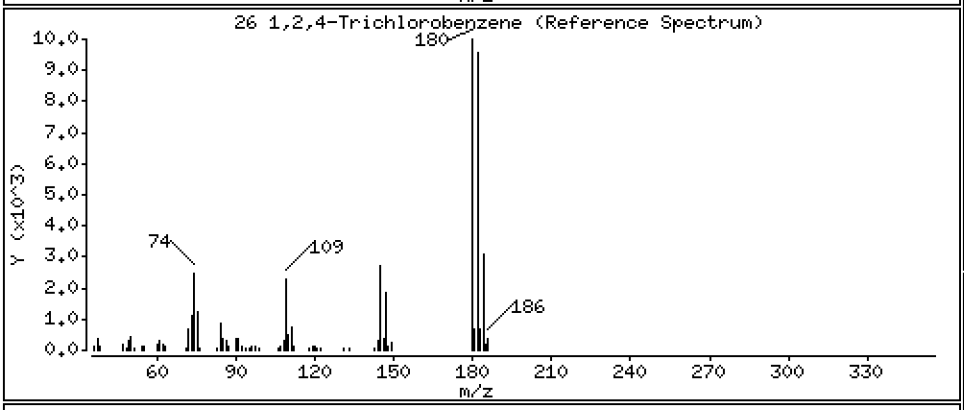
Column diameter: 0.25

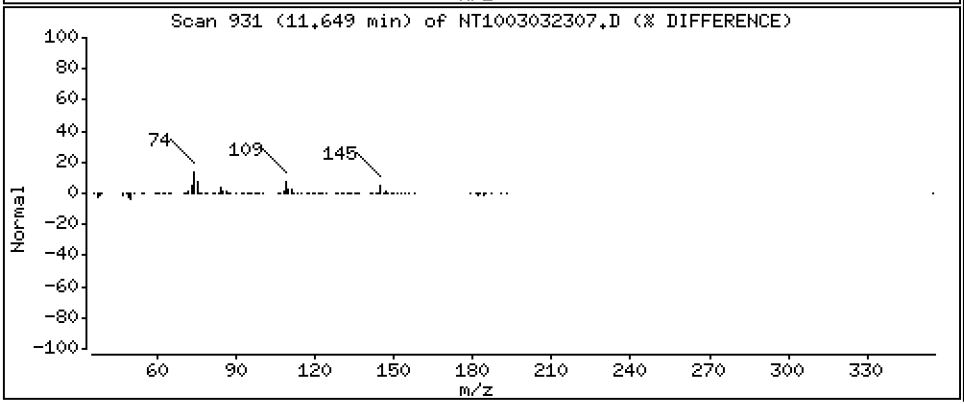
26 1,2,4-Trichlorobenzene

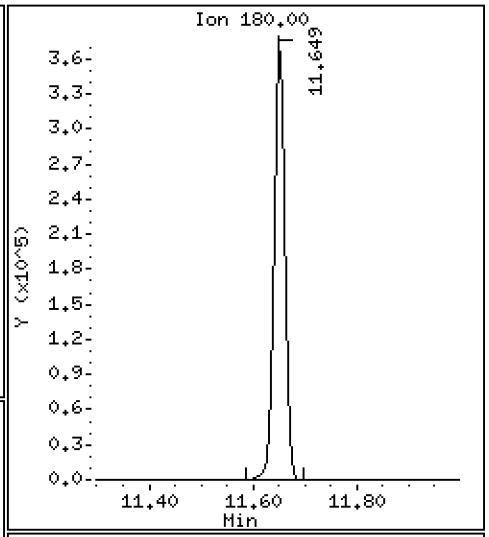
Concentration: 3.959 ug/ml

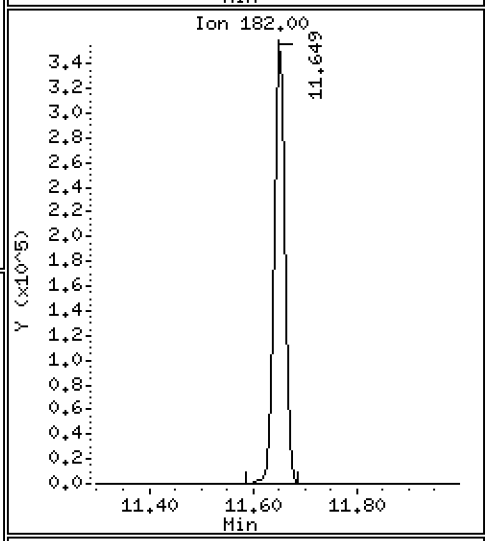


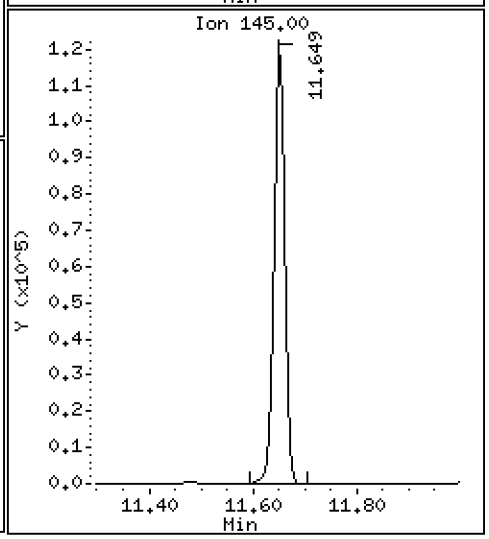












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

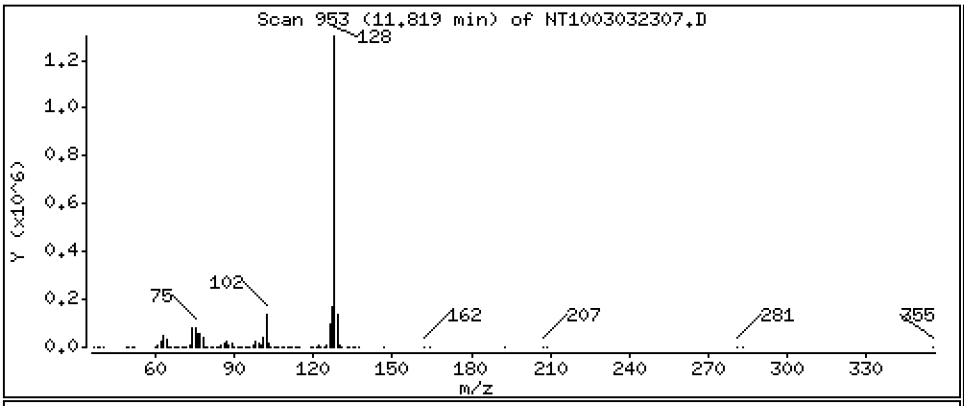
Operator: VTS

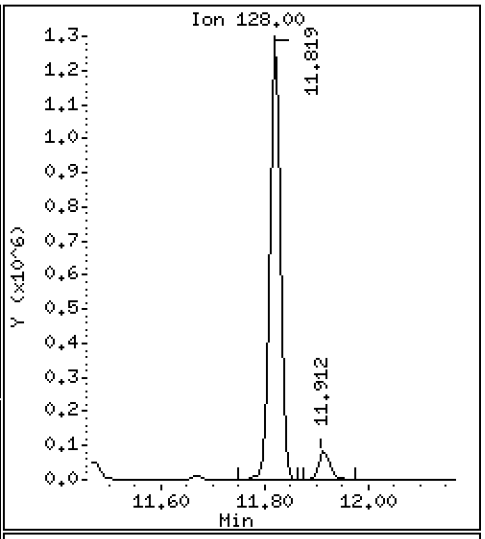
Column phase: ZB-5msi

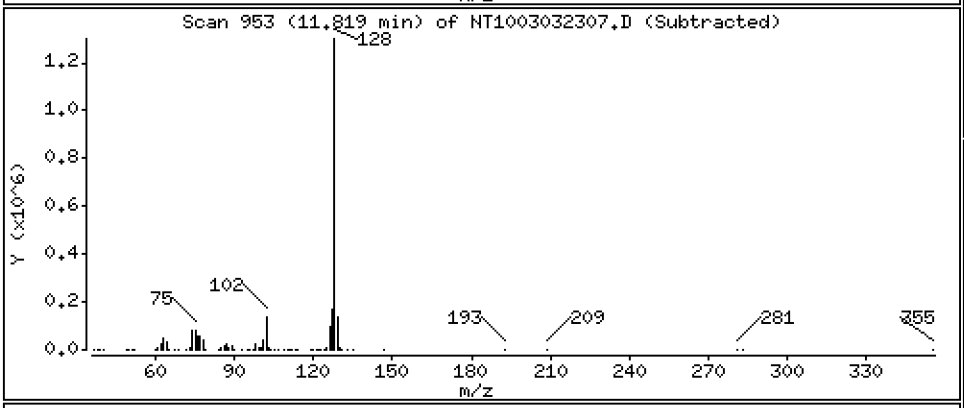
Column diameter: 0.25

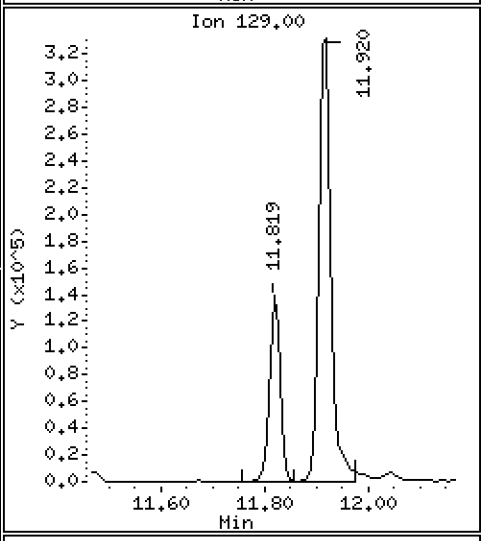
28 Naphthalene

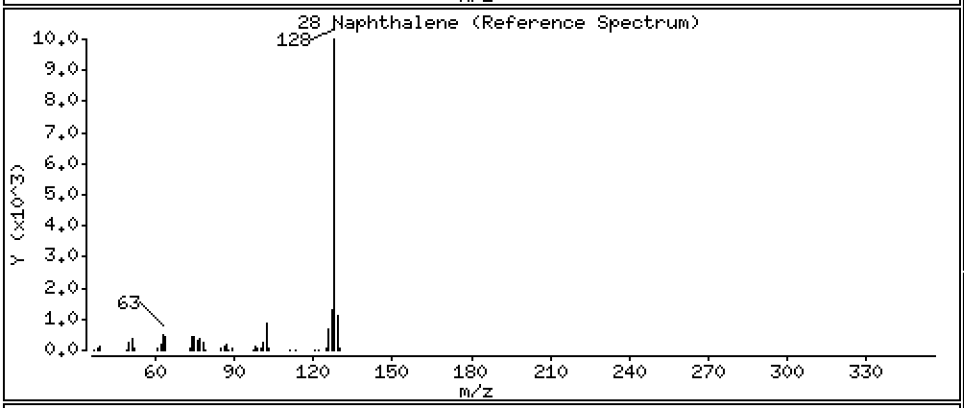
Concentration: 3.921 ug/ml

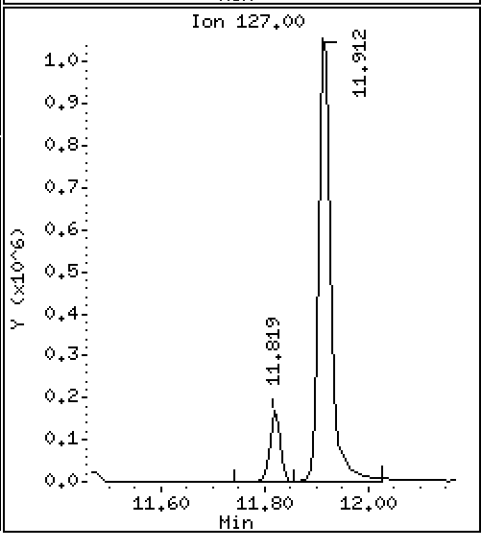


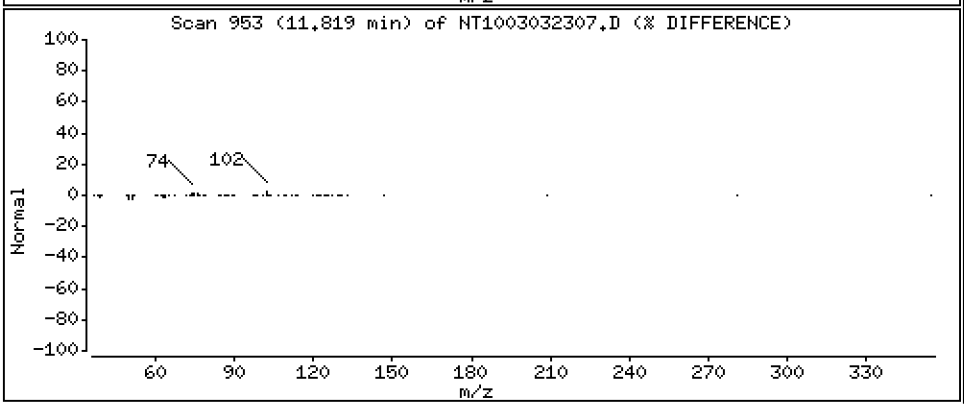












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

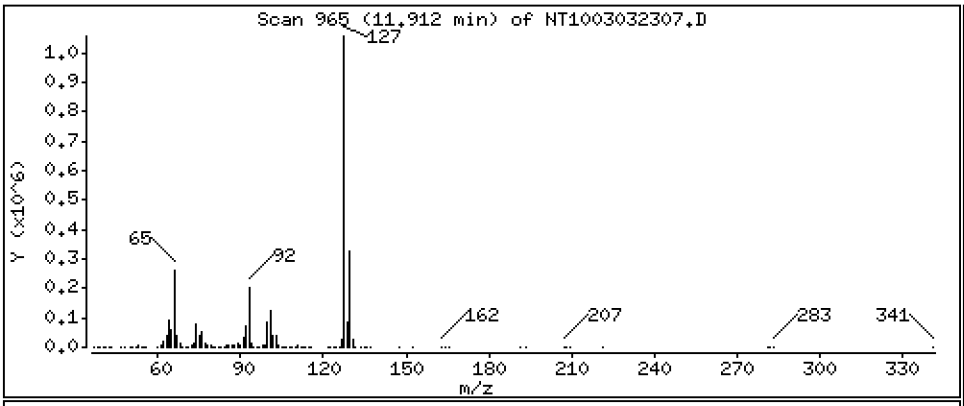
Operator: VTS

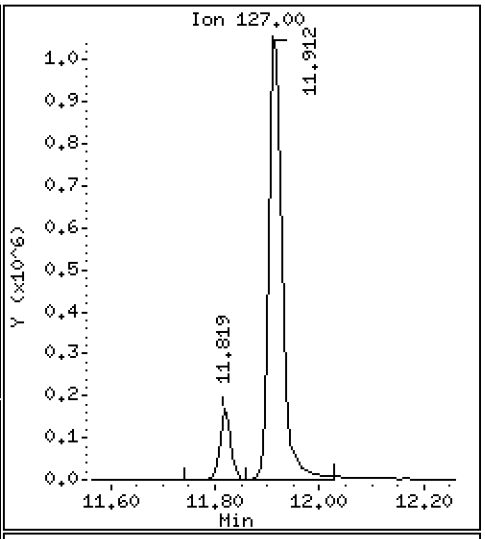
Column phase: ZB-5msi

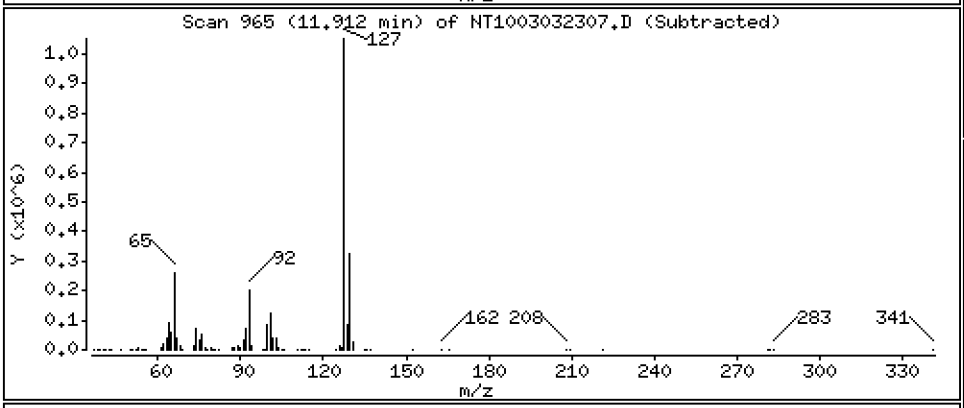
Column diameter: 0.25

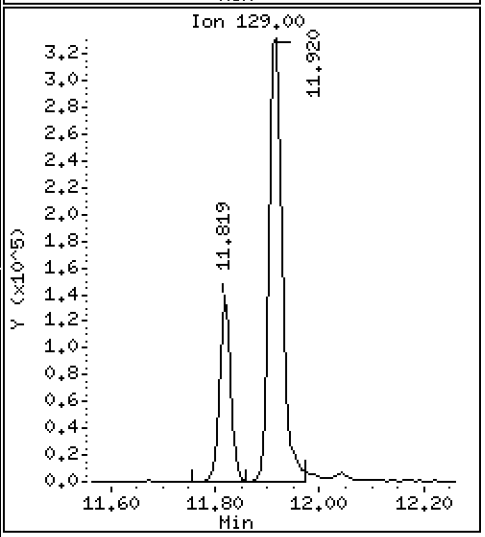
29 4-Chloroaniline

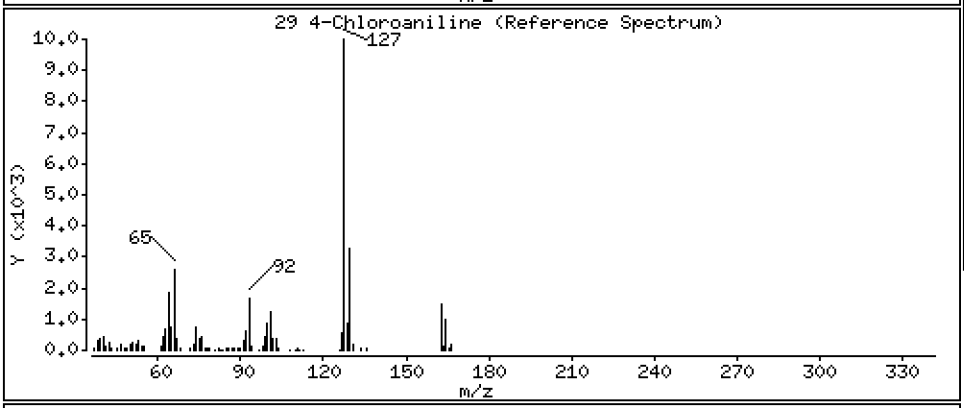
Concentration: 8.827 ug/ml

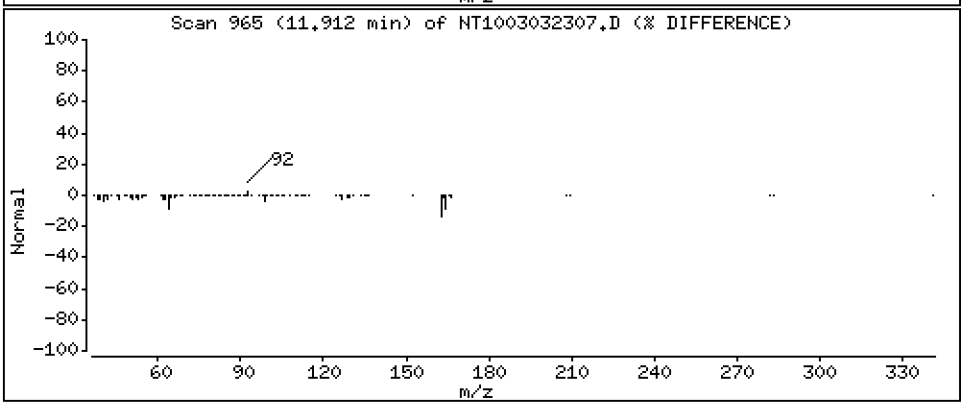












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

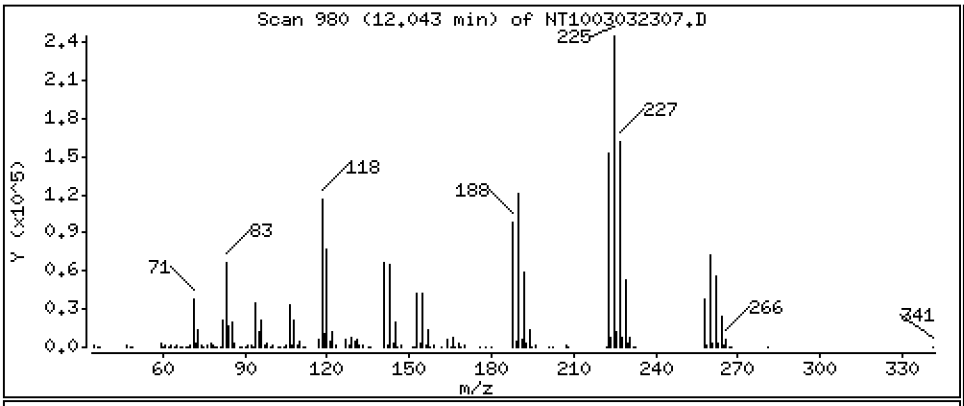
Operator: VTS

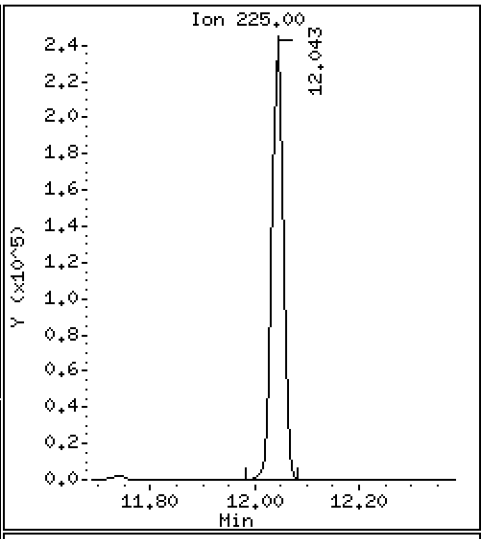
Column phase: ZB-5msi

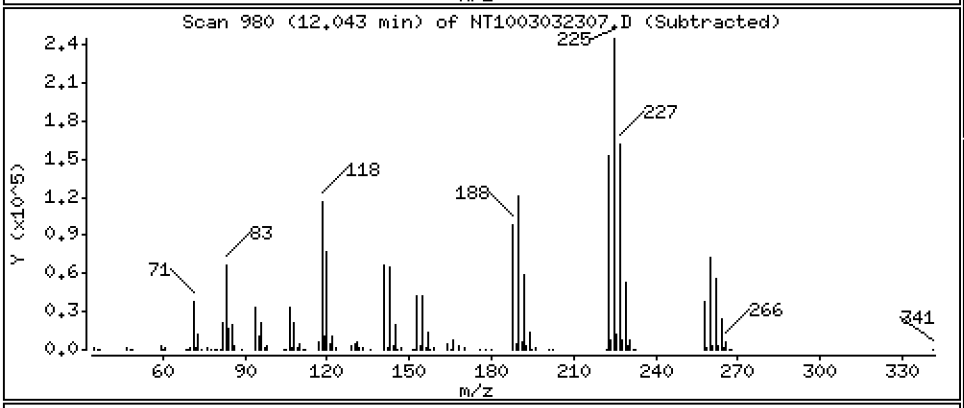
Column diameter: 0.25

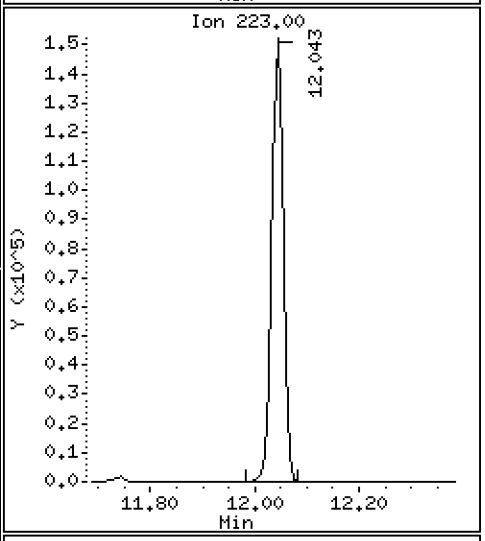
30 Hexachlorobutadiene

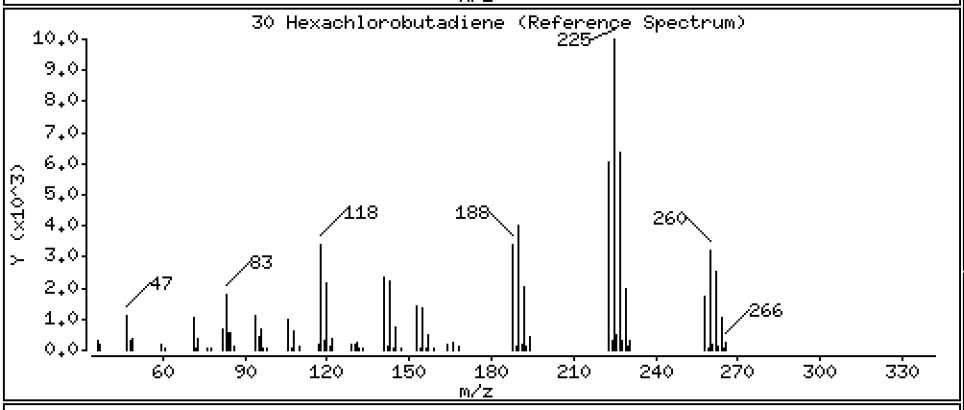
Concentration: 3.250 ug/ml

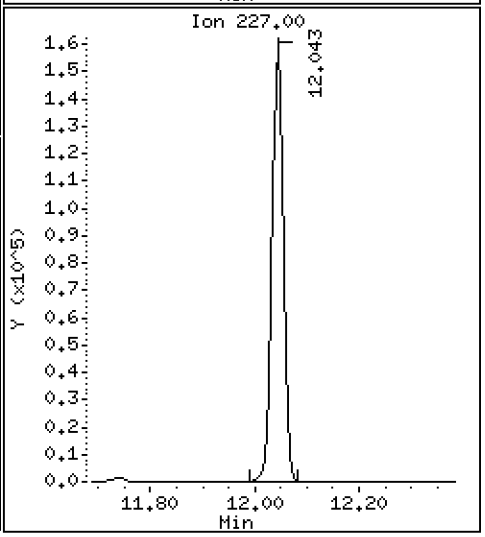


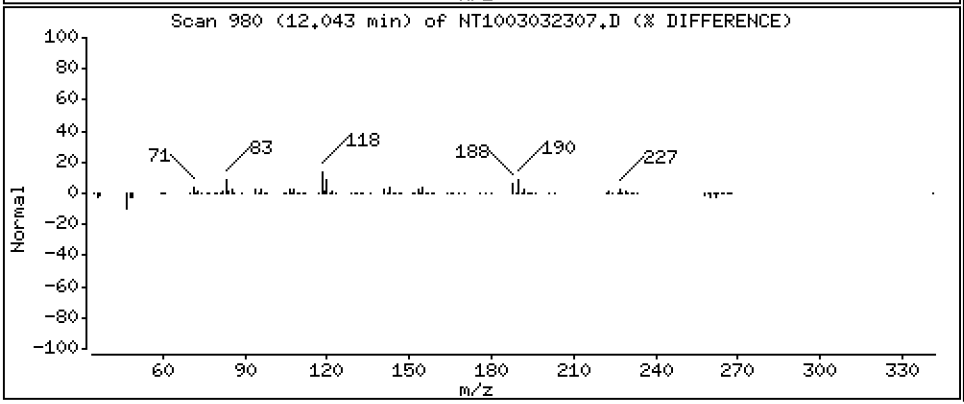












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

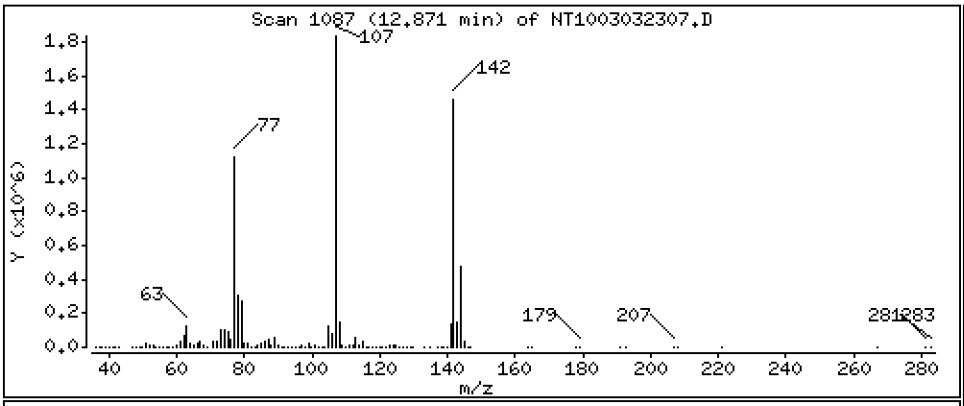
Operator: VTS

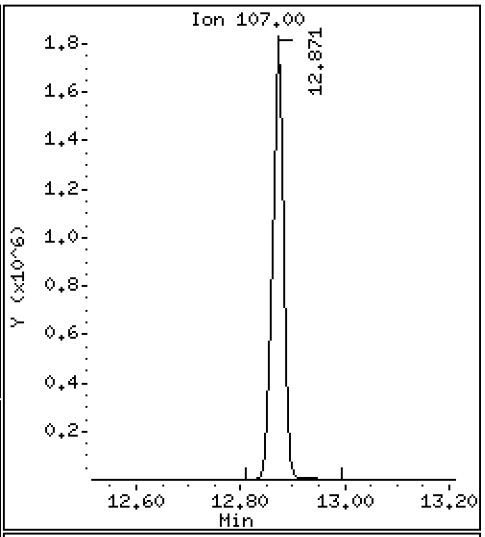
Column phase: ZB-5msi

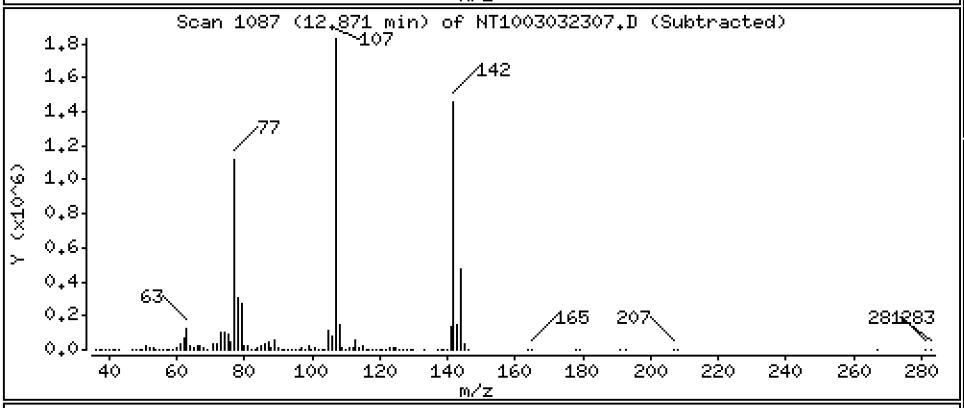
Column diameter: 0.25

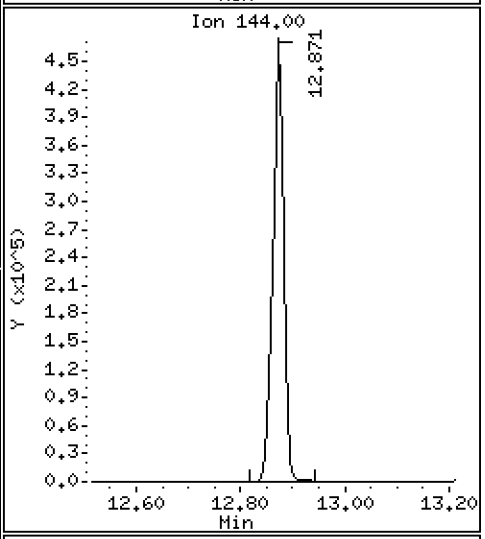
31 4-Chloro-3-methylphenol

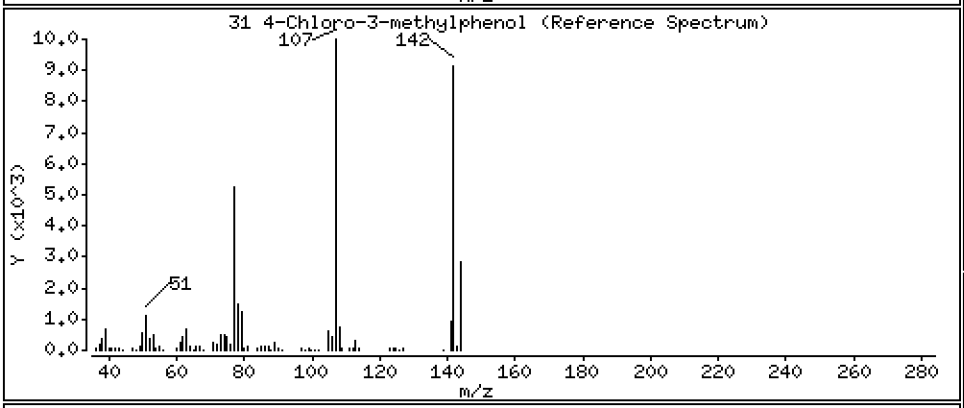
Concentration: 15.87 ug/ml

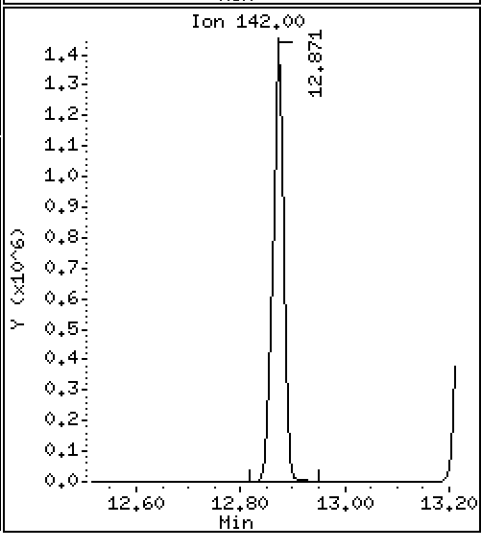


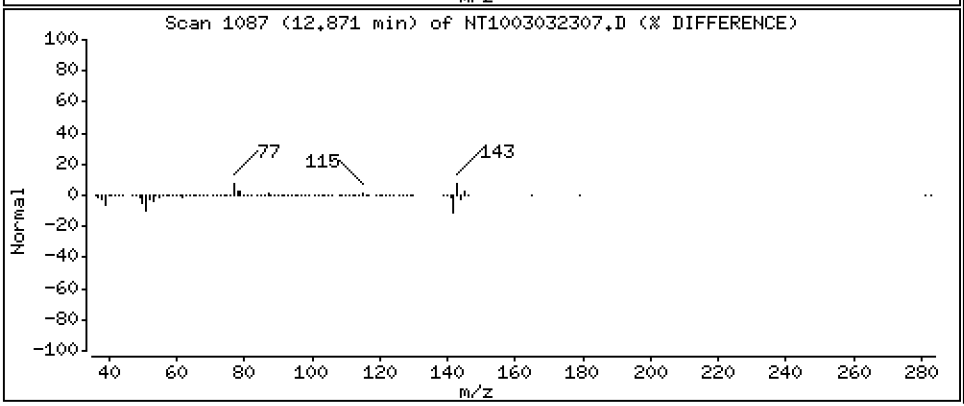












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

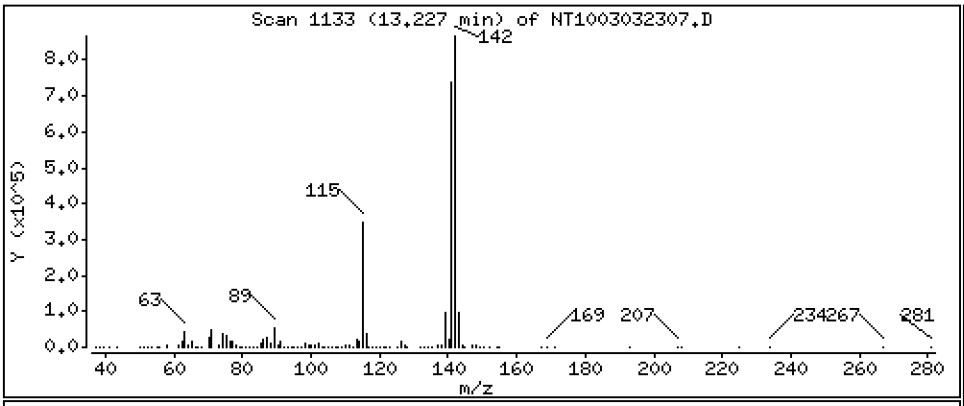
Operator: VTS

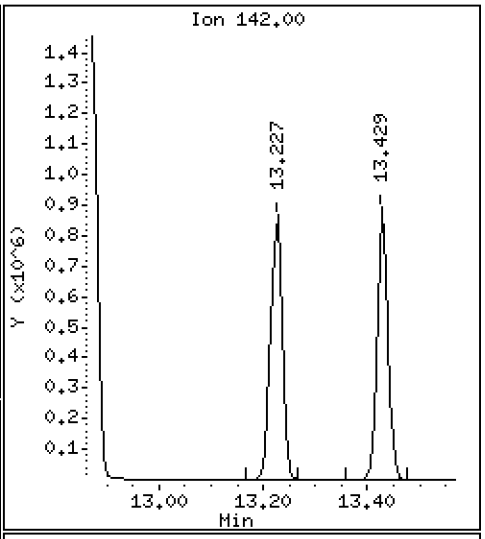
Column phase: ZB-5msi

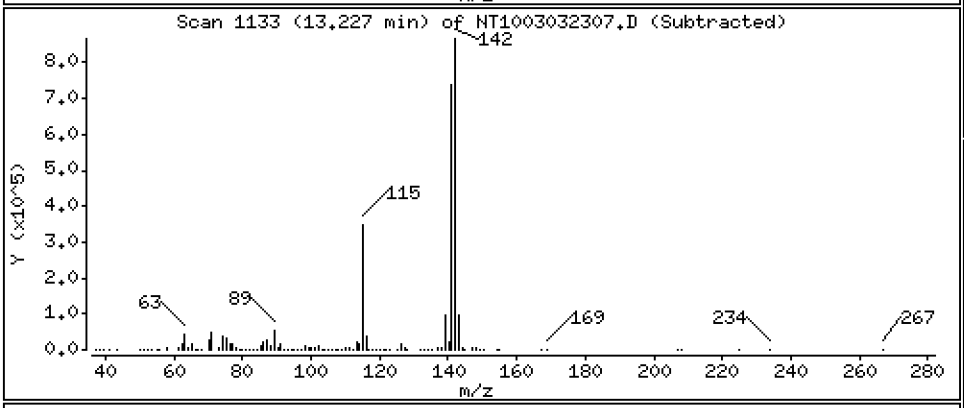
Column diameter: 0.25

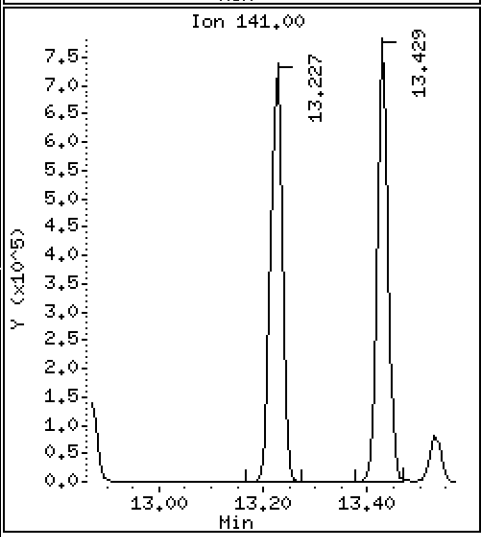
32 2-Methylnaphthalene

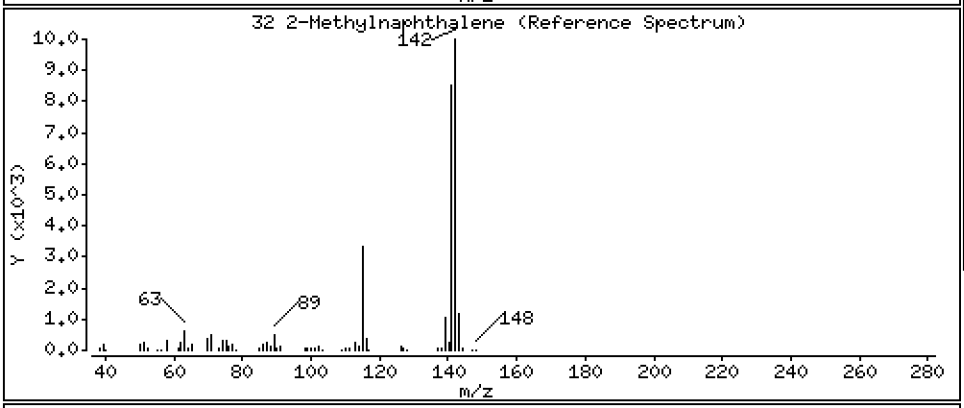
Concentration: 3.842 ug/ml

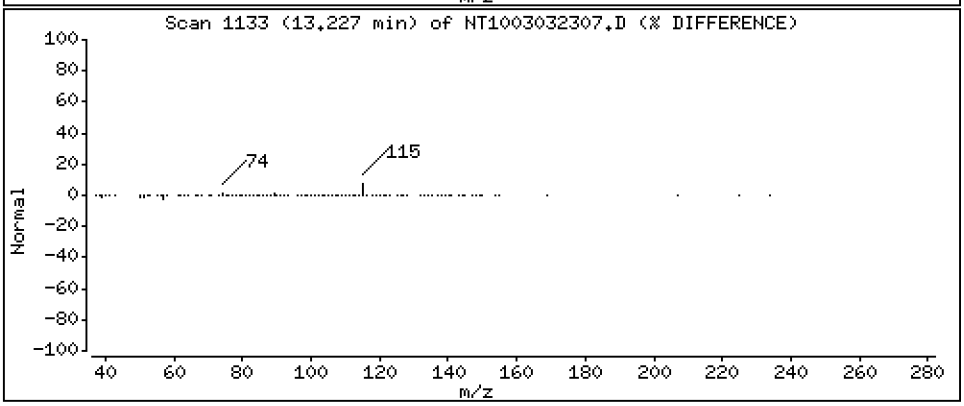












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

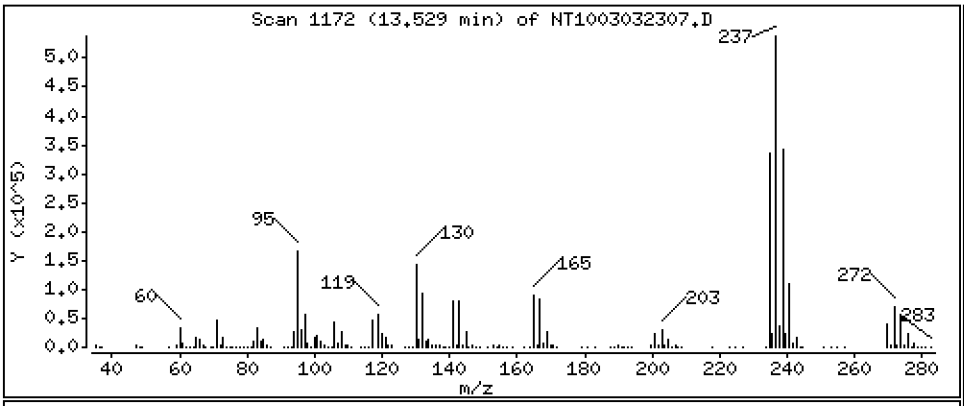
Operator: VTS

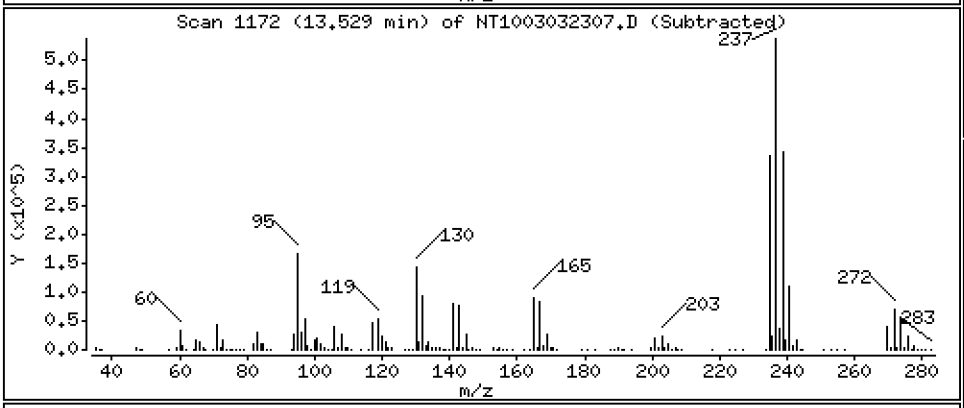
Column phase: ZB-5msi

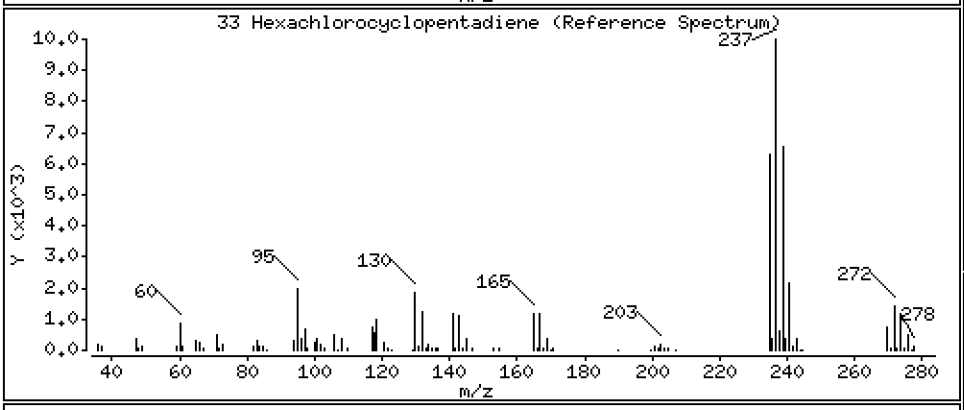
Column diameter: 0.25

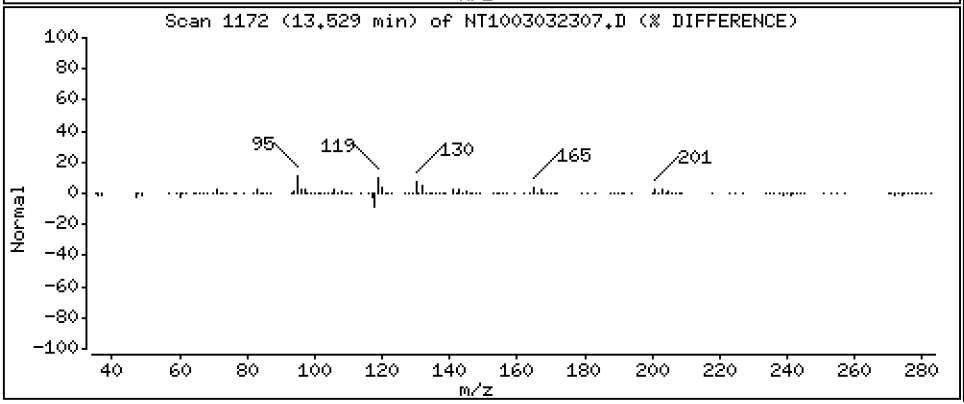
33 Hexachlorocyclopentadiene

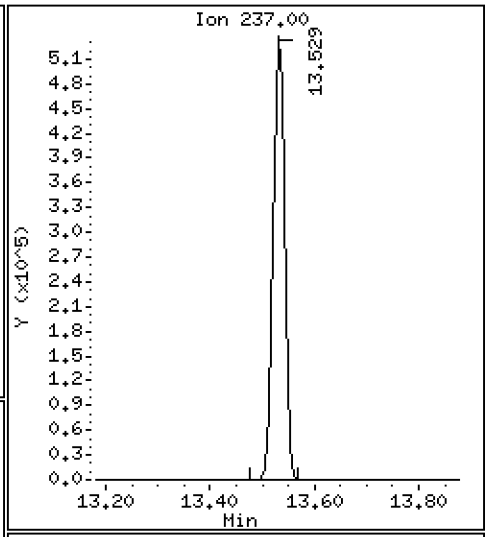
Concentration: 20.42 ug/ml

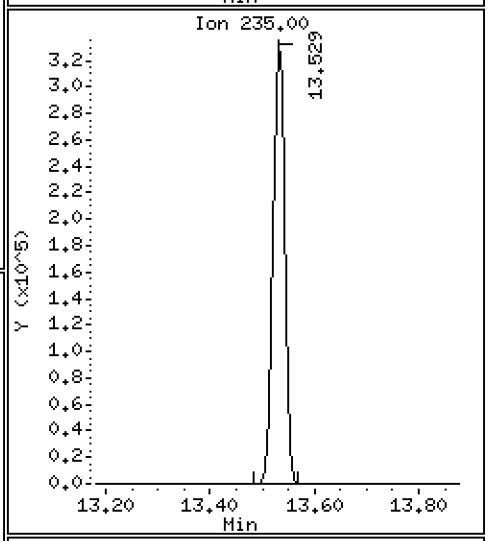


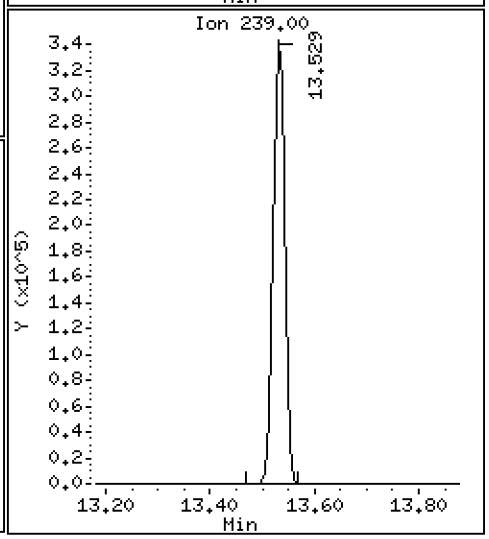












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

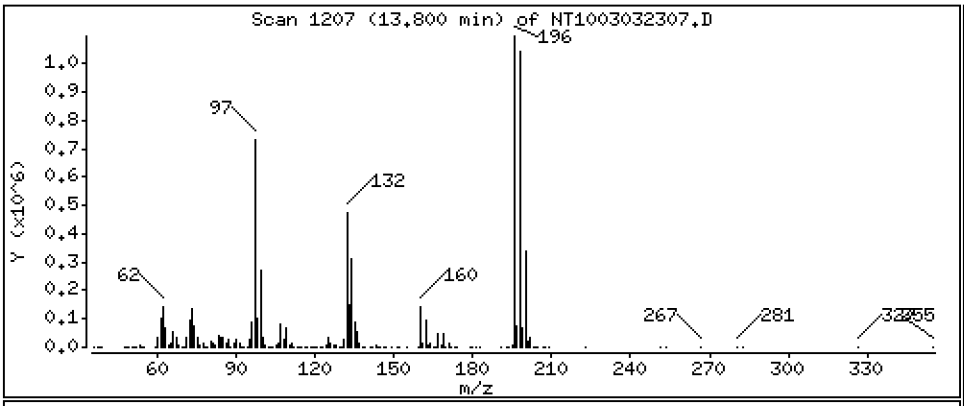
Operator: VTS

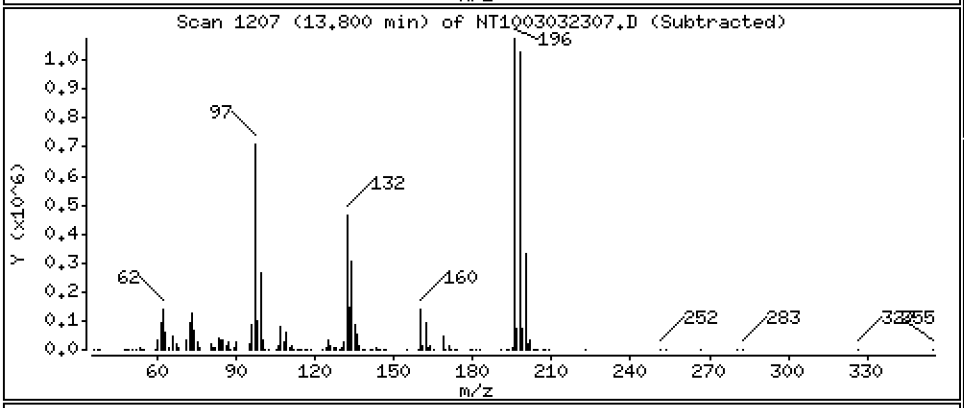
Column phase: ZB-5msi

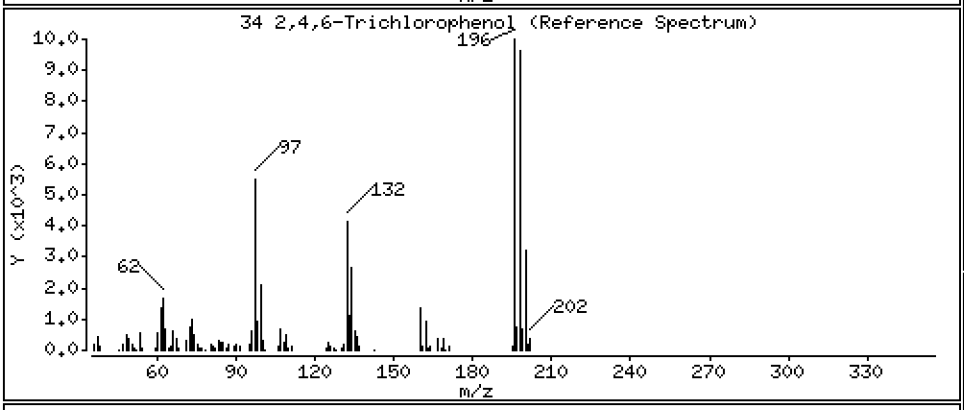
Column diameter: 0.25

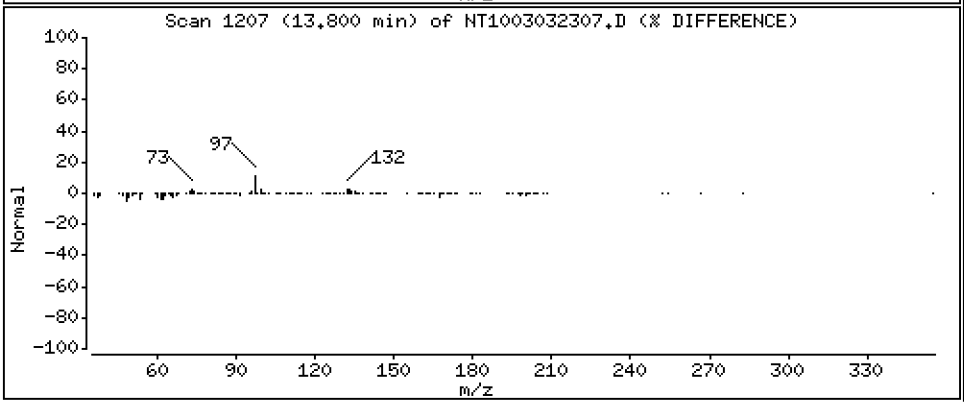
34 2,4,6-Trichlorophenol

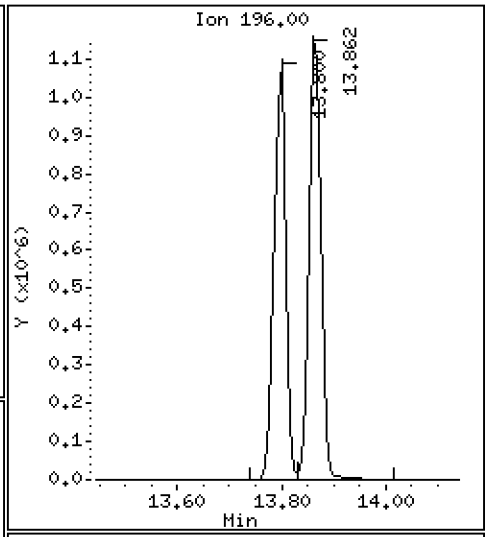
Concentration: 16.14 ug/ml

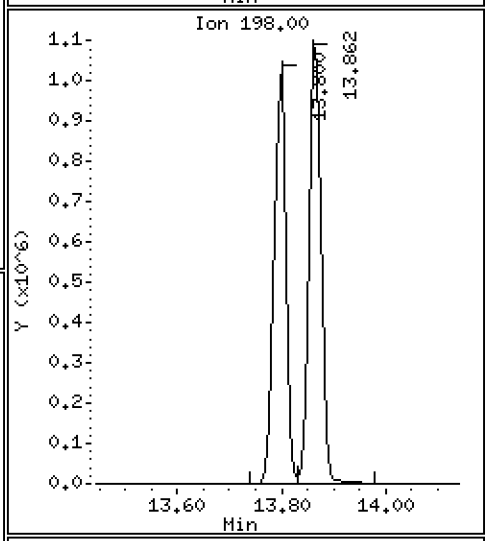


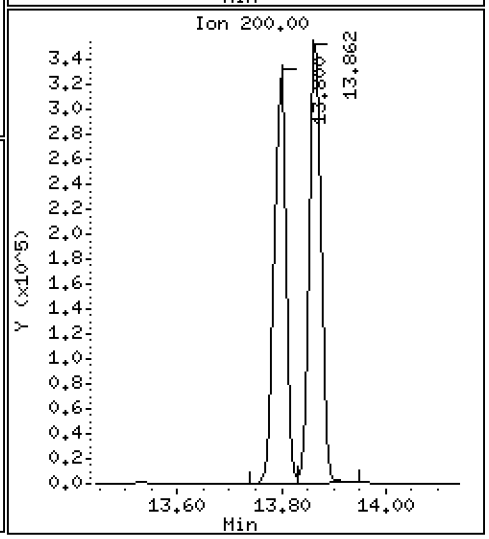












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

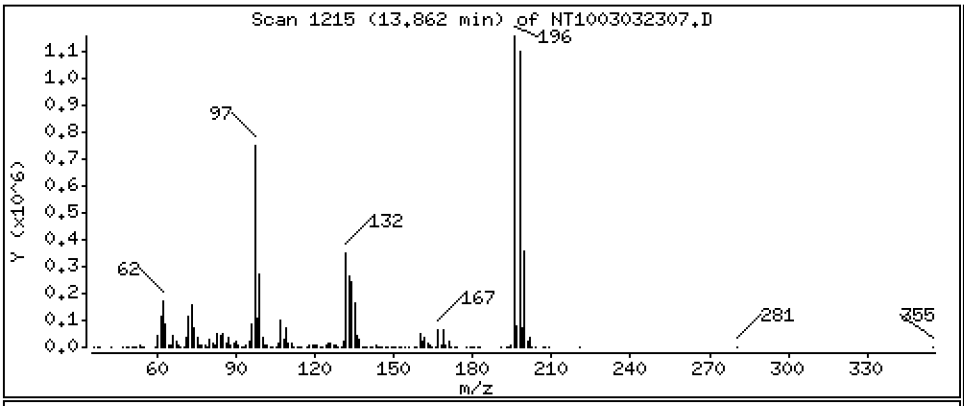
Operator: VTS

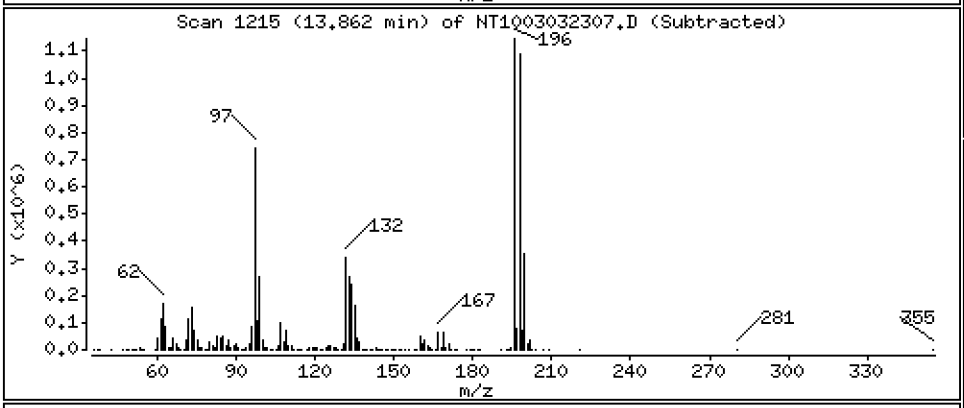
Column phase: ZB-5msi

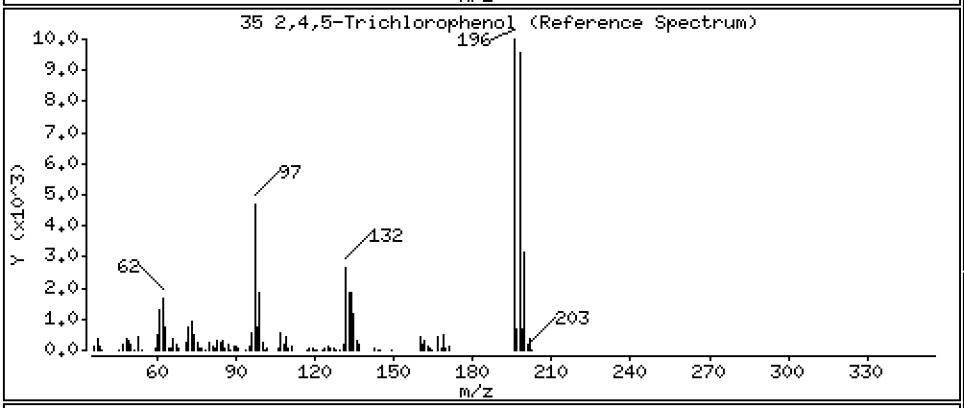
Column diameter: 0.25

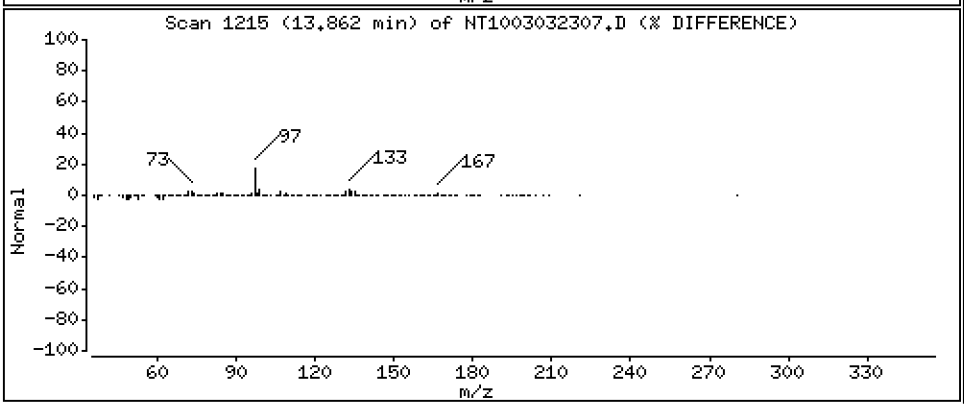
35 2,4,5-Trichlorophenol

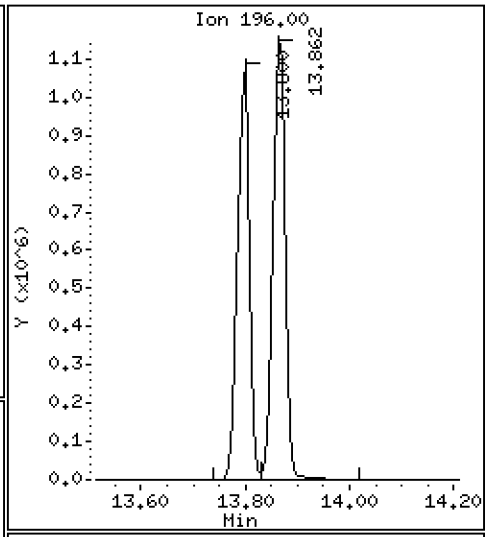
Concentration: 16.43 ug/ml

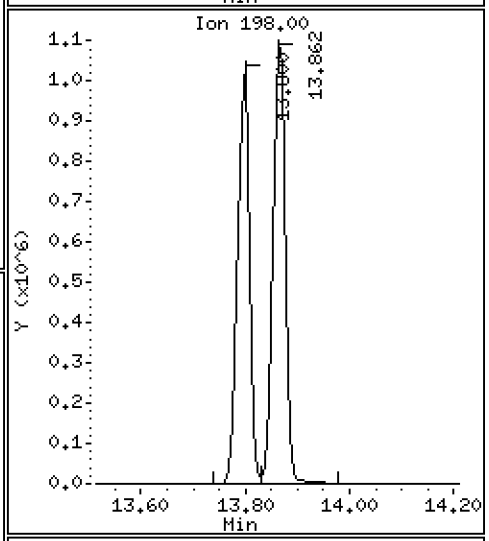


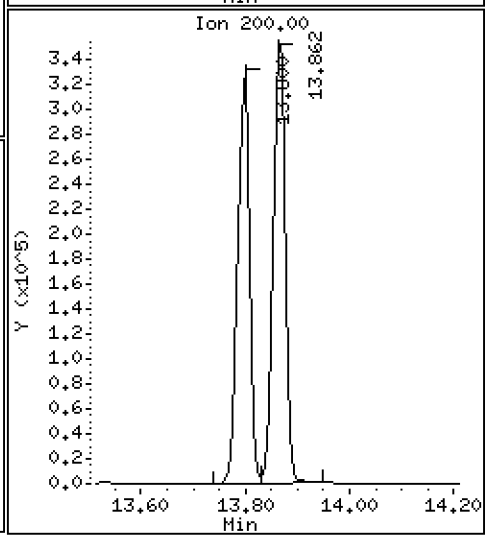












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

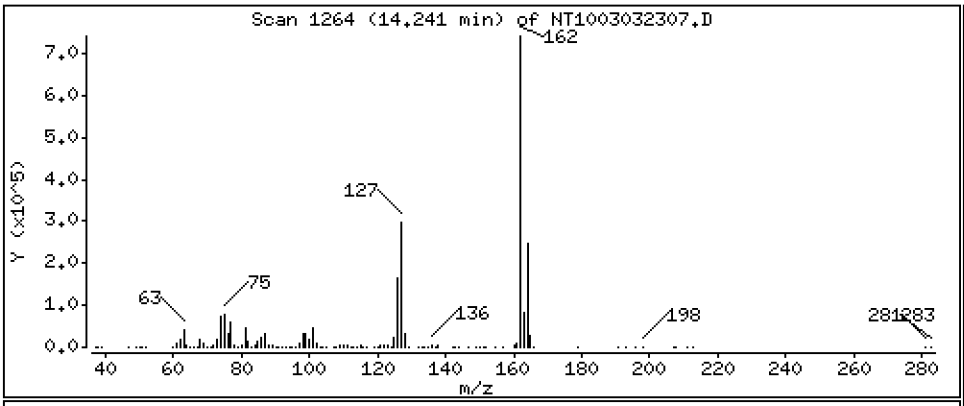
Operator: VTS

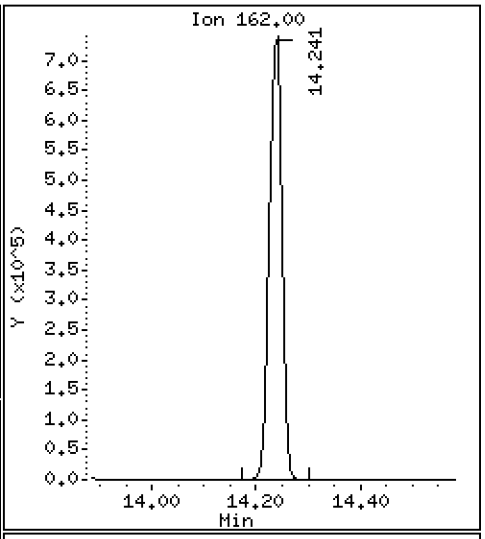
Column phase: ZB-5msi

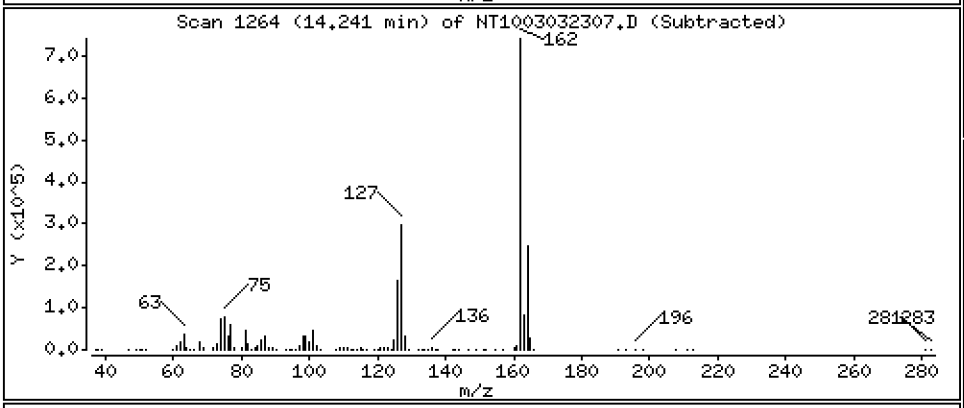
Column diameter: 0.25

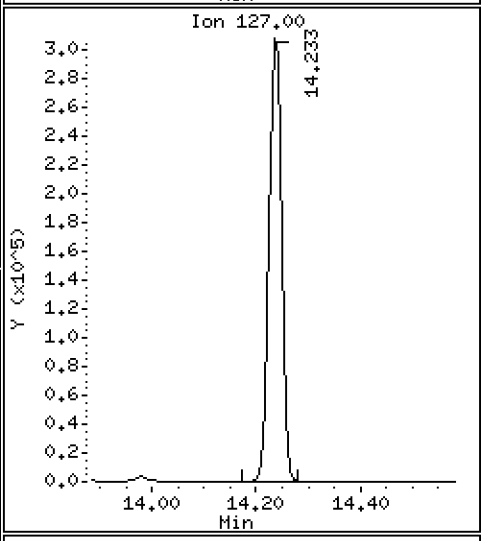
37 2-Chloronaphthalene

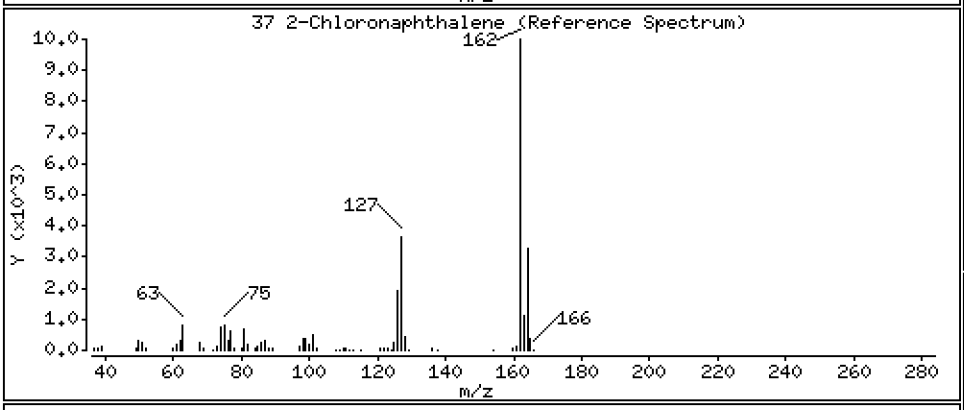
Concentration: 4.357 ug/ml

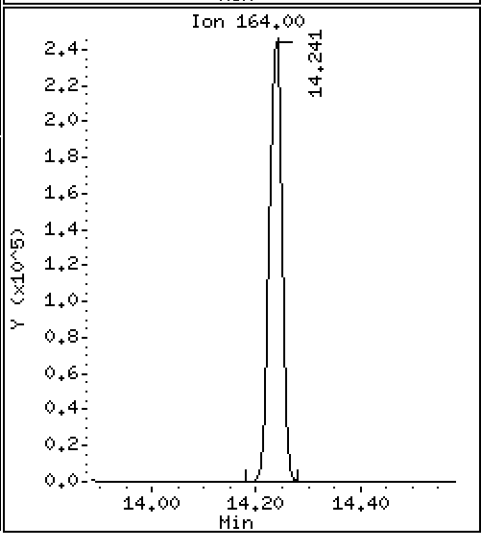


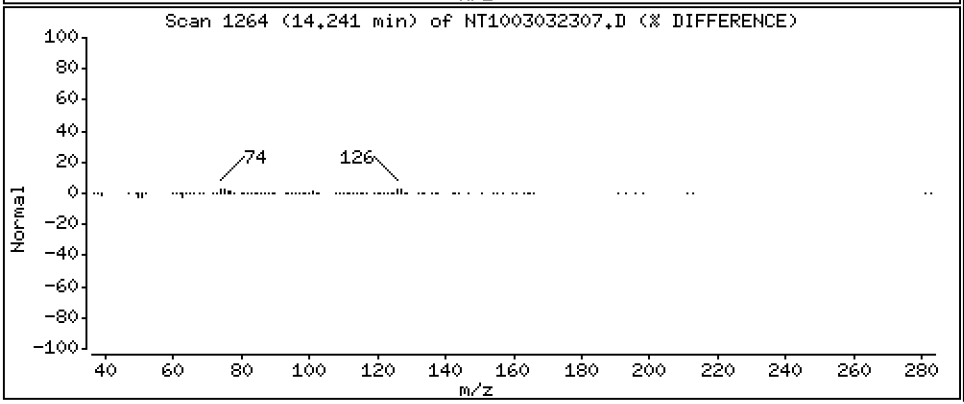












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

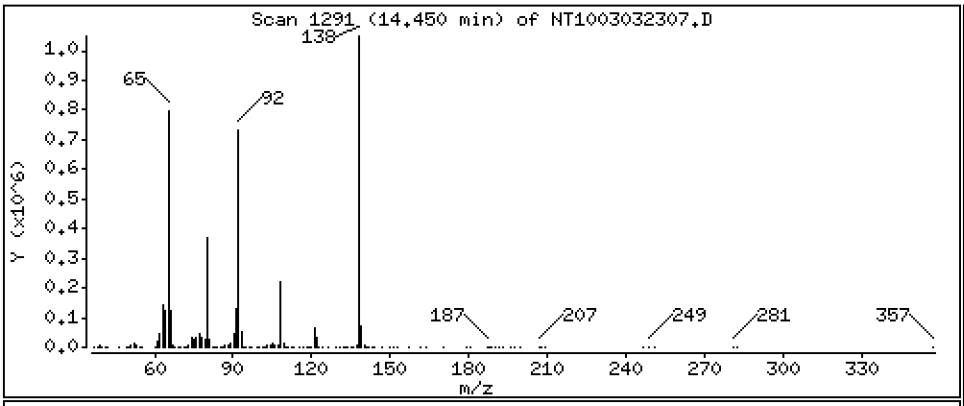
Operator: VTS

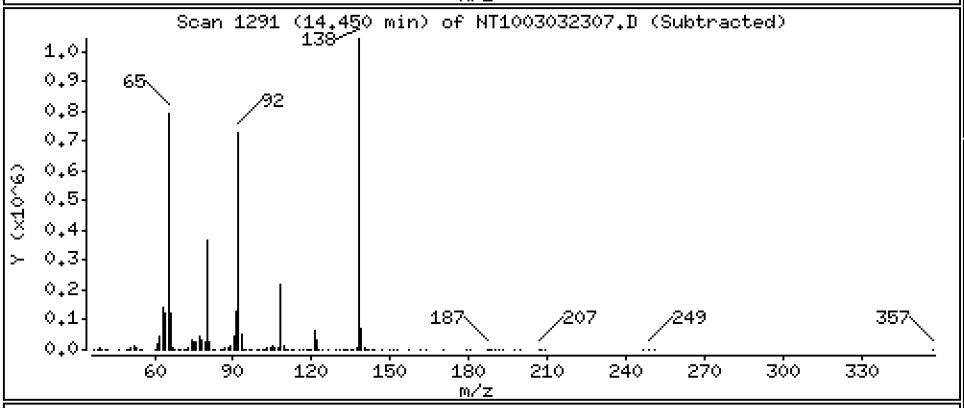
Column phase: ZB-5msi

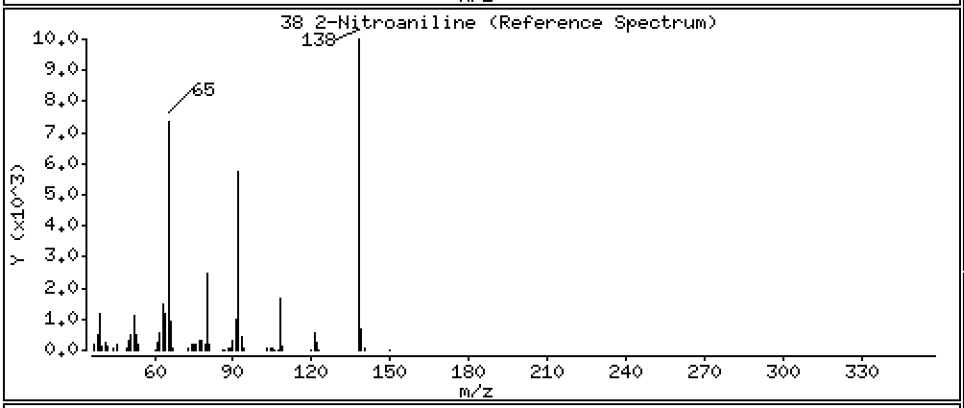
Column diameter: 0.25

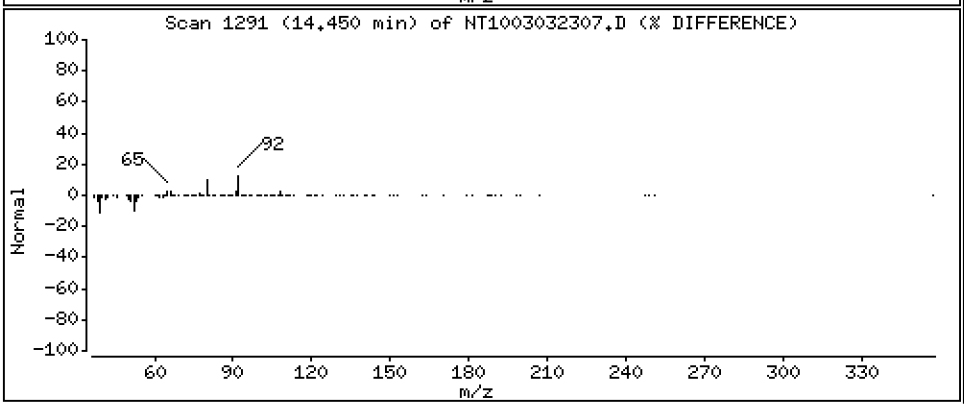
38 2-Nitroaniline

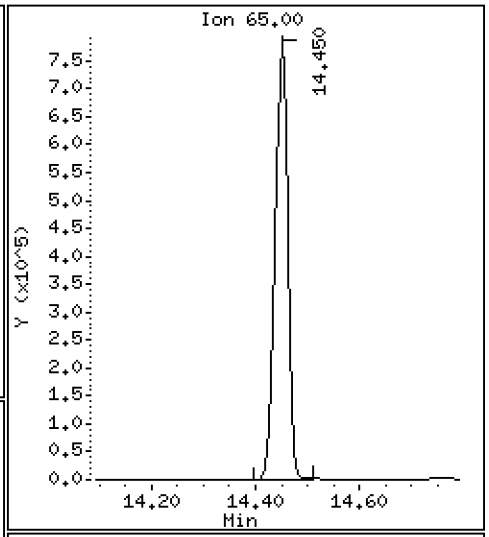
Concentration: 15.74 ug/ml

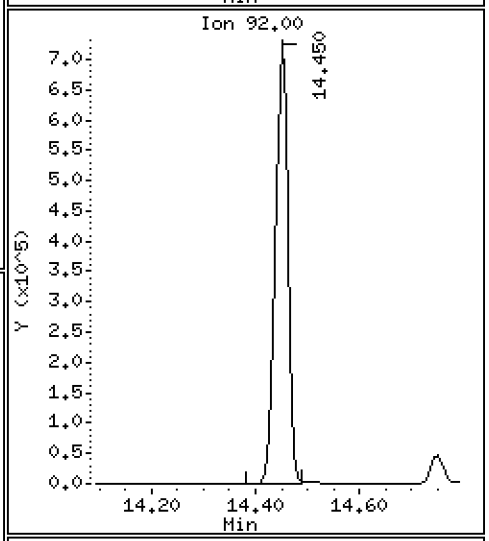


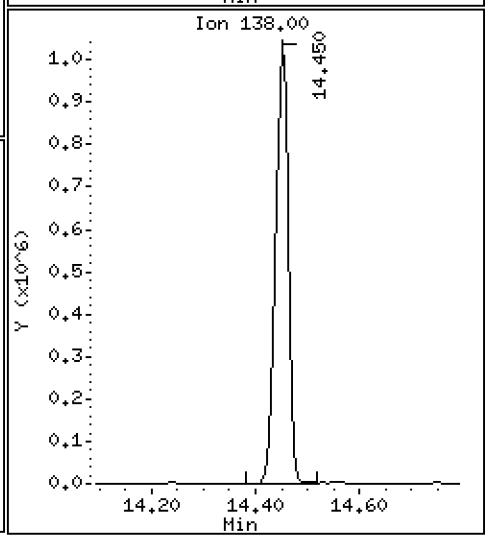












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

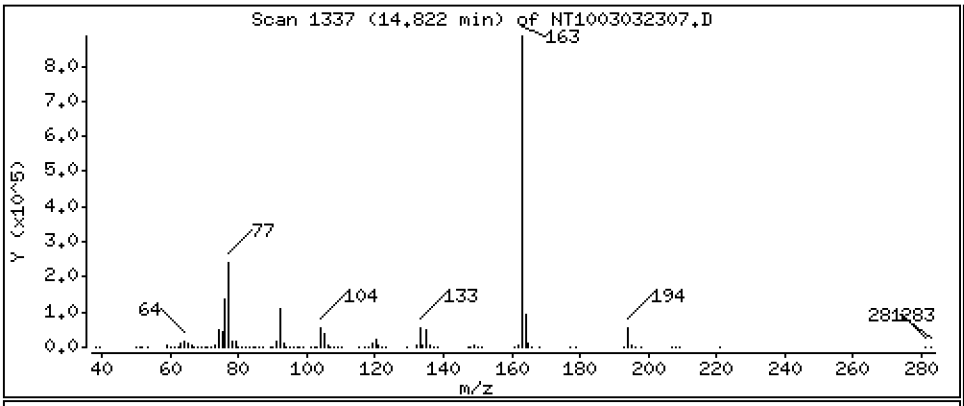
Operator: VTS

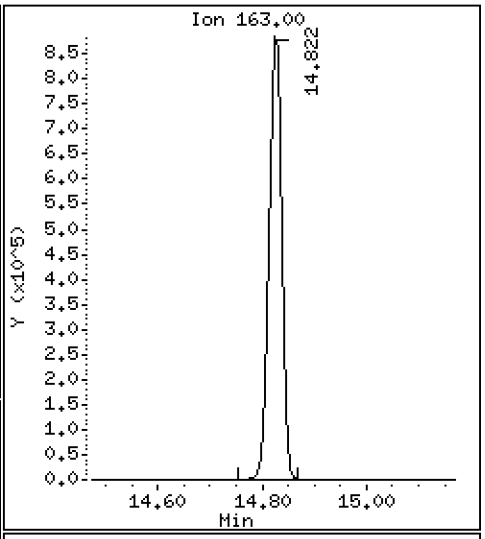
Column phase: ZB-5msi

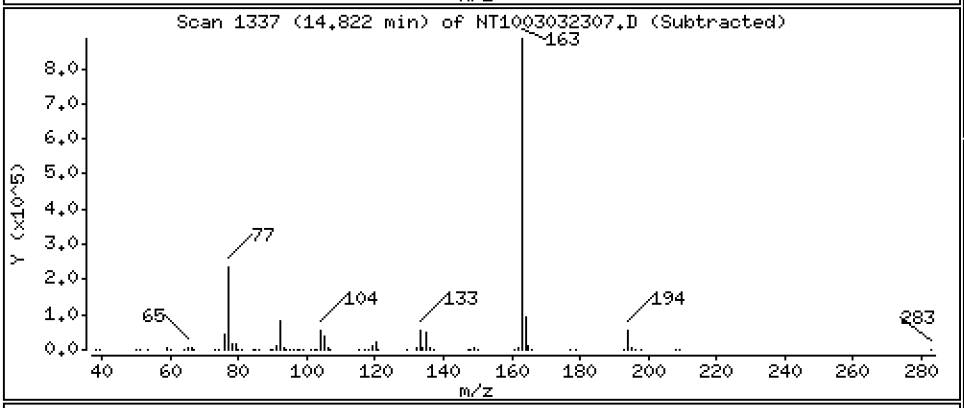
Column diameter: 0.25

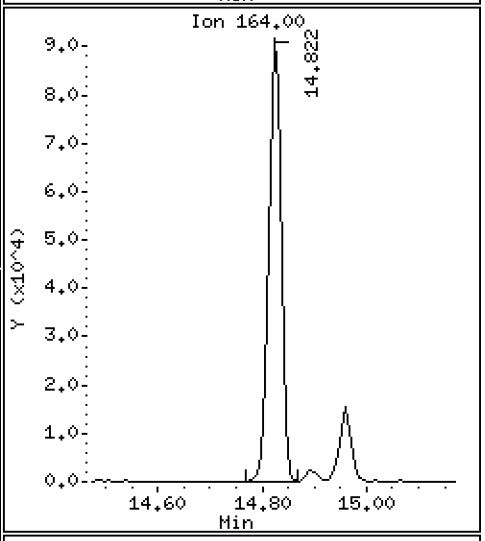
39 Dimethylphthalate

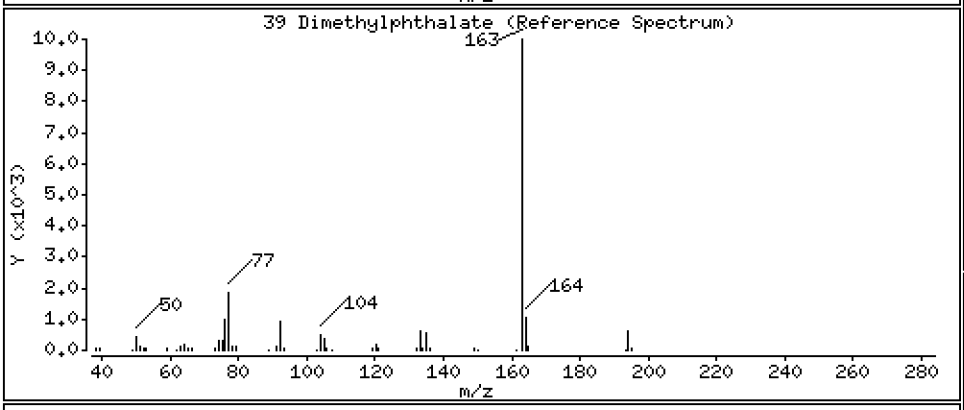
Concentration: 4.522 ug/ml

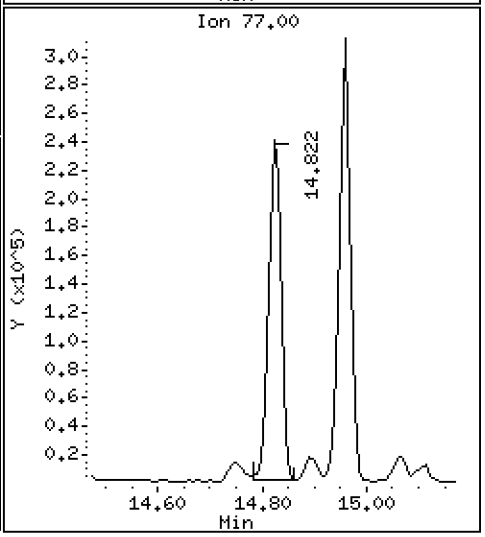


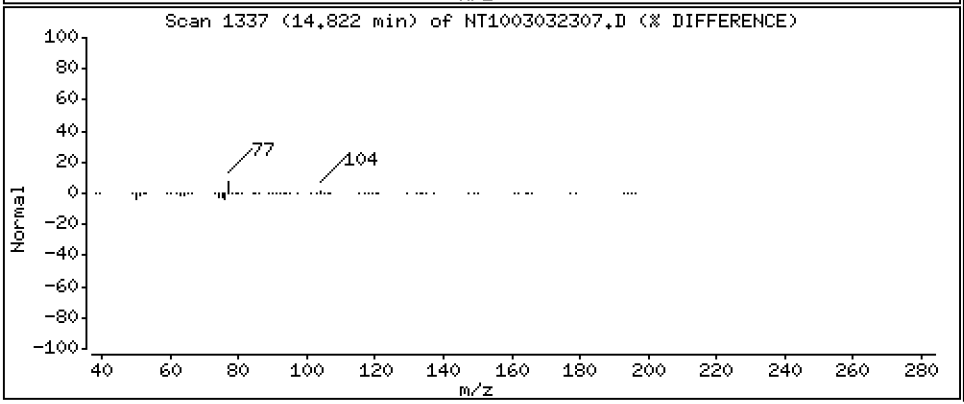












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

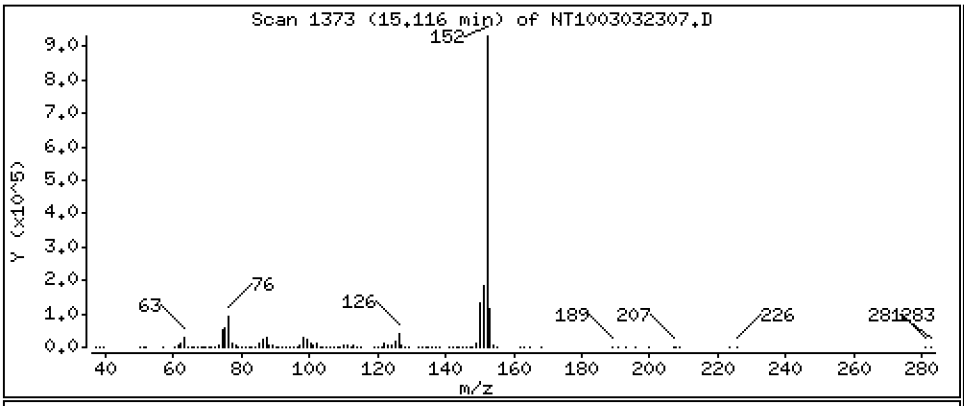
Operator: VTS

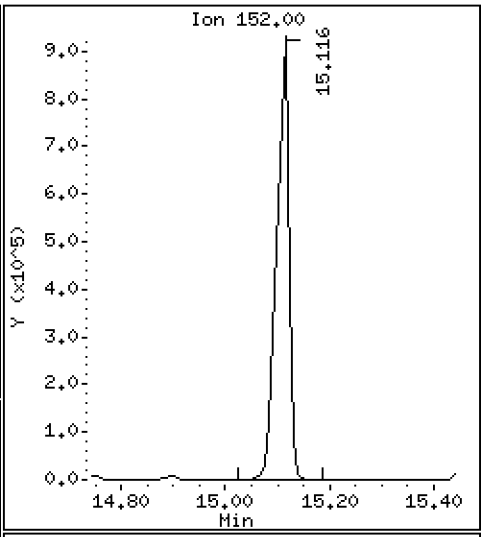
Column phase: ZB-5msi

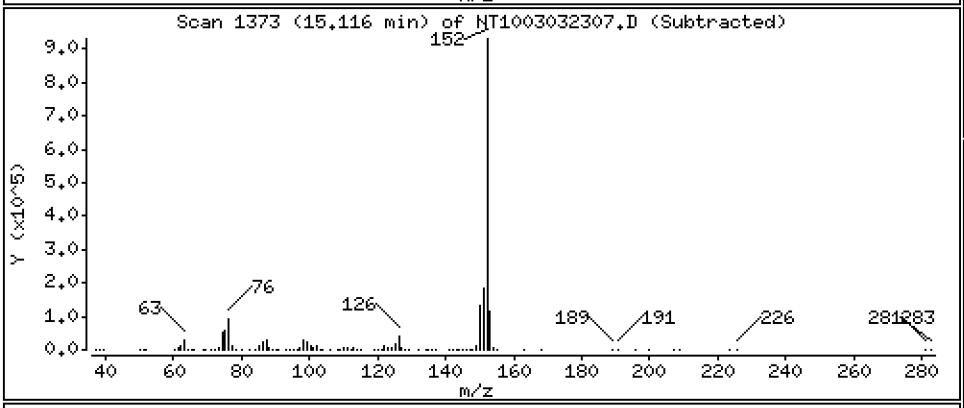
Column diameter: 0.25

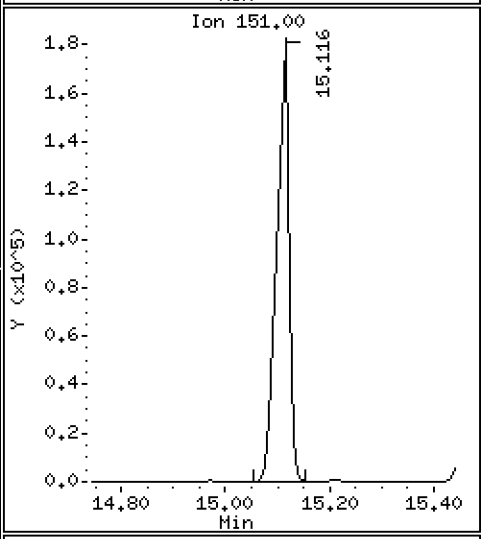
40 Acenaphthylene

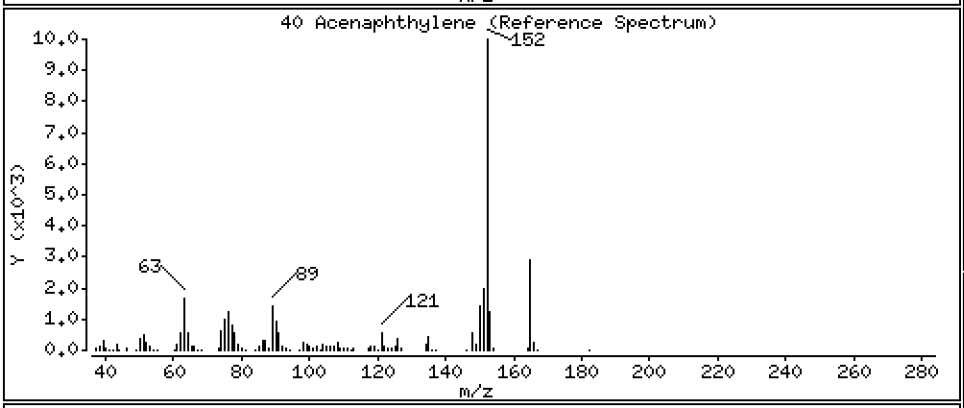
Concentration: 2.166 ug/ml

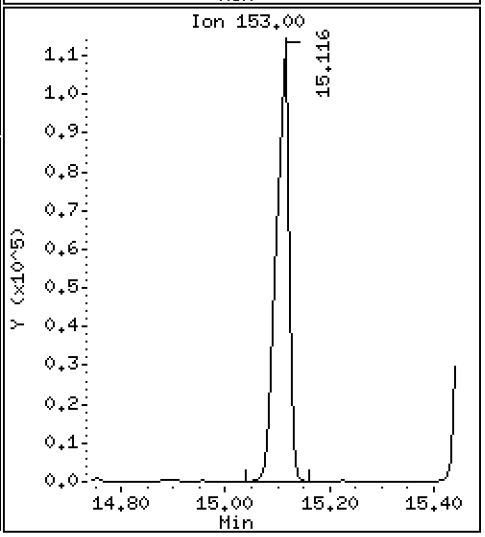


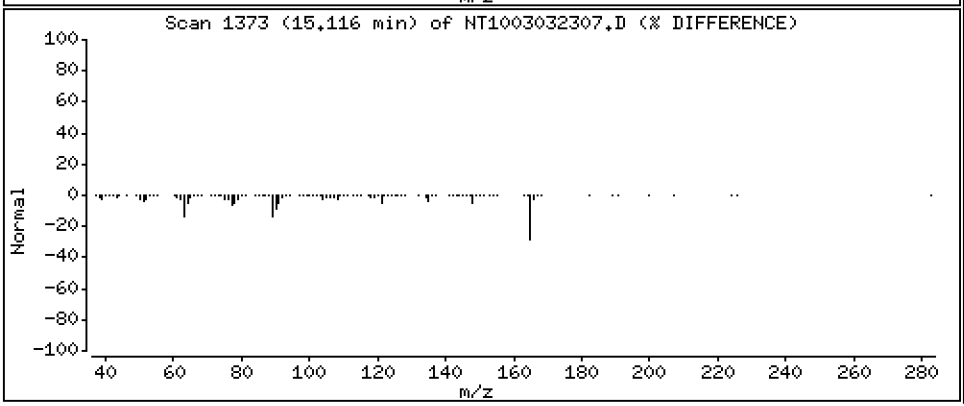












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

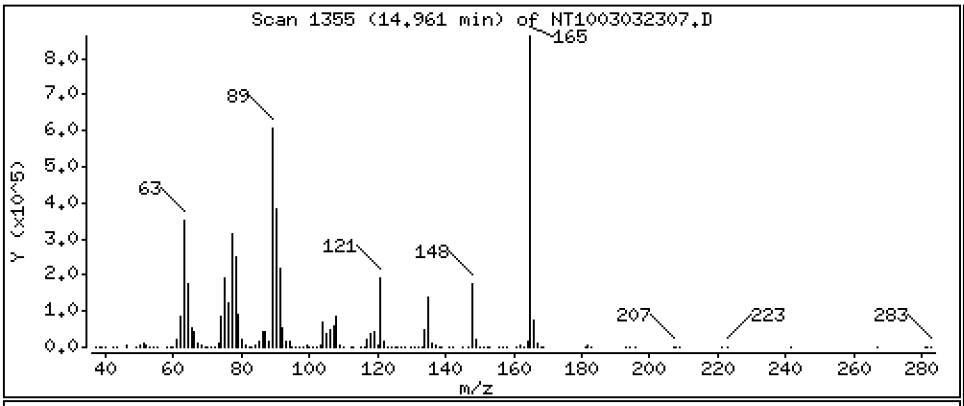
Operator: VTS

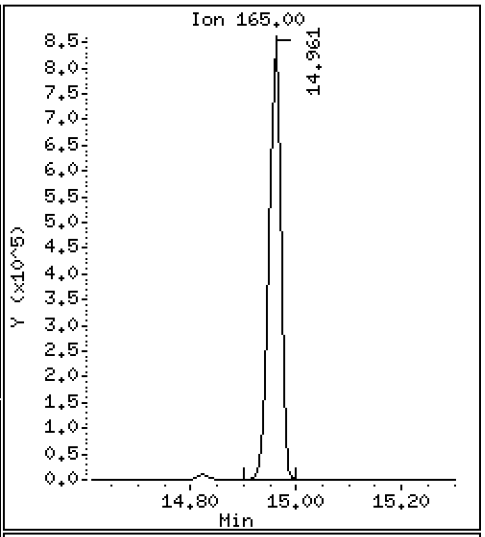
Column phase: ZB-5msi

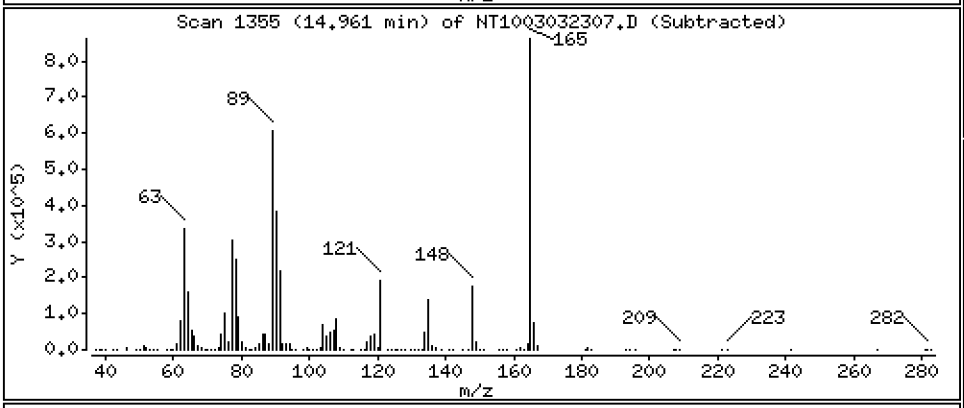
Column diameter: 0.25

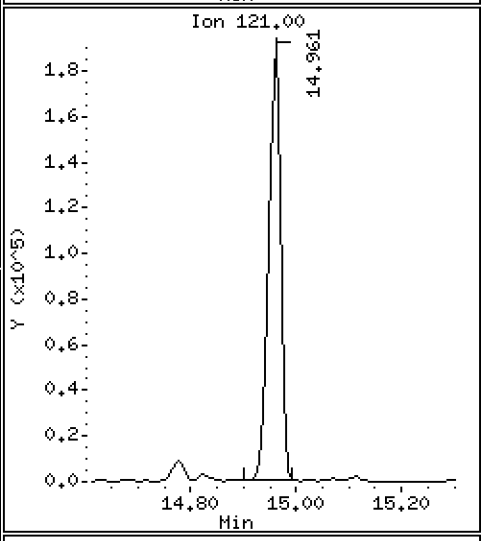
41 2,6-Dinitrotoluene

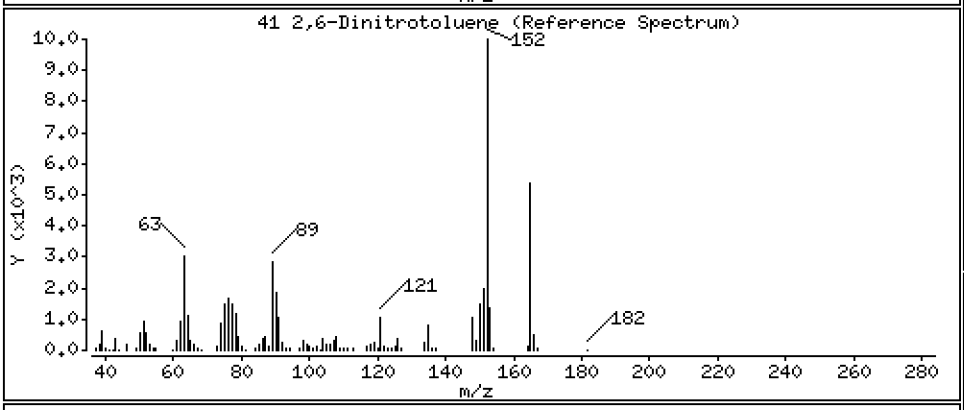
Concentration: 16.94 ug/ml

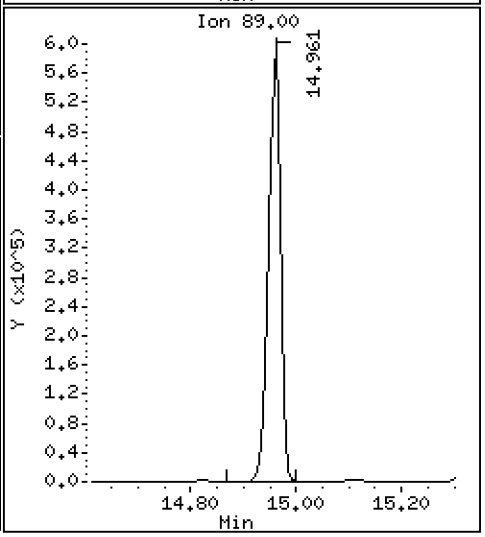


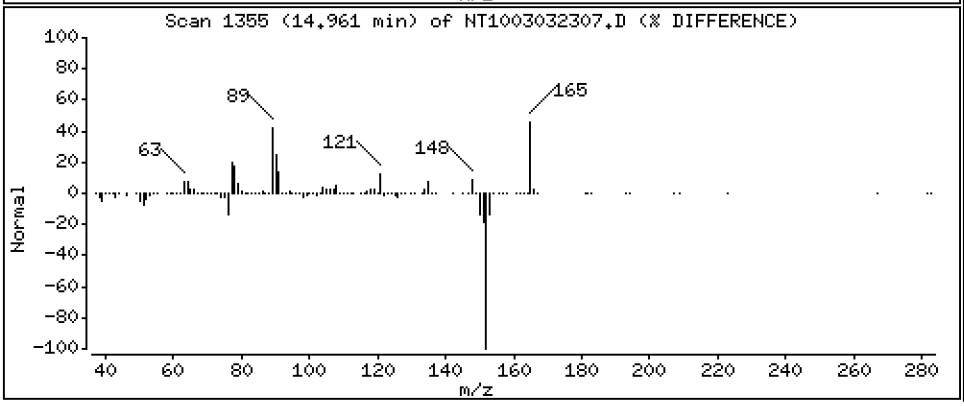












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

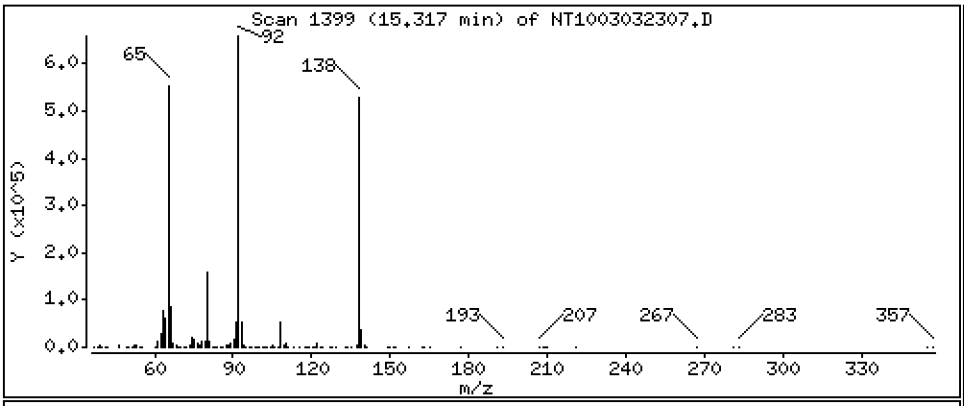
Operator: VTS

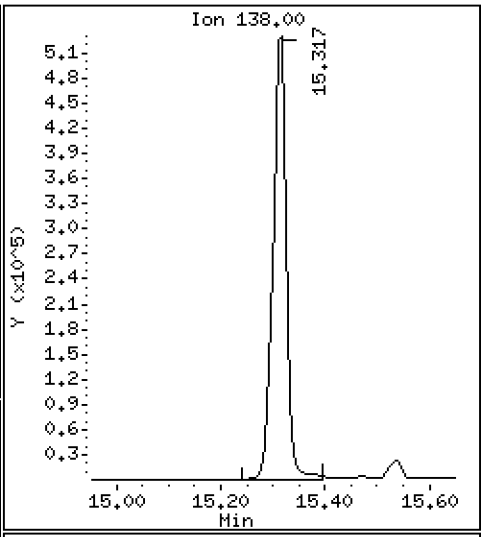
Column phase: ZB-5msi

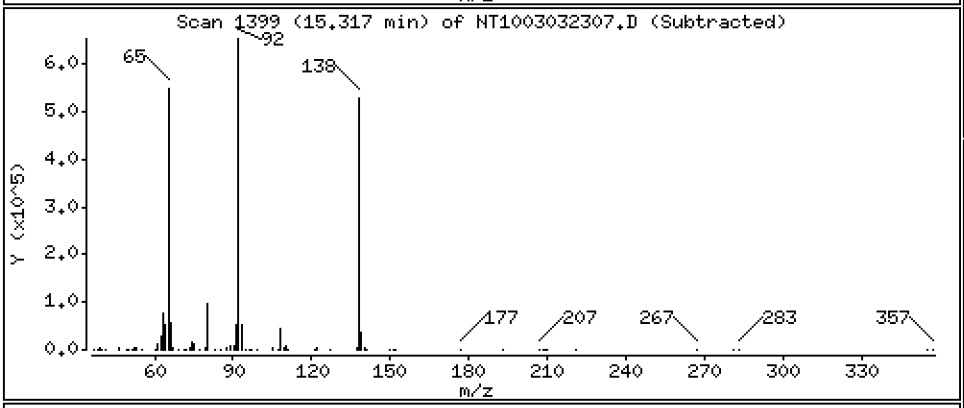
Column diameter: 0.25

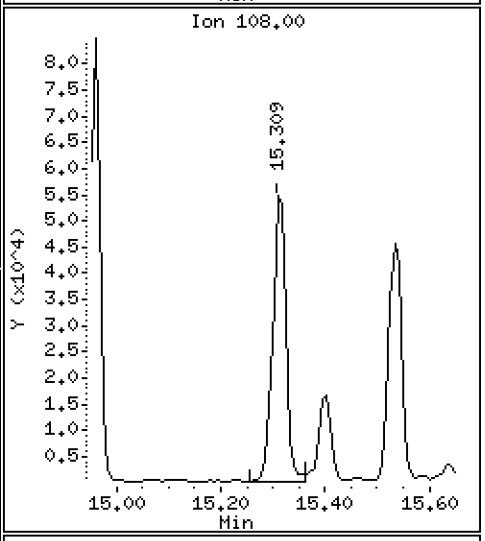
43 3-Nitroaniline

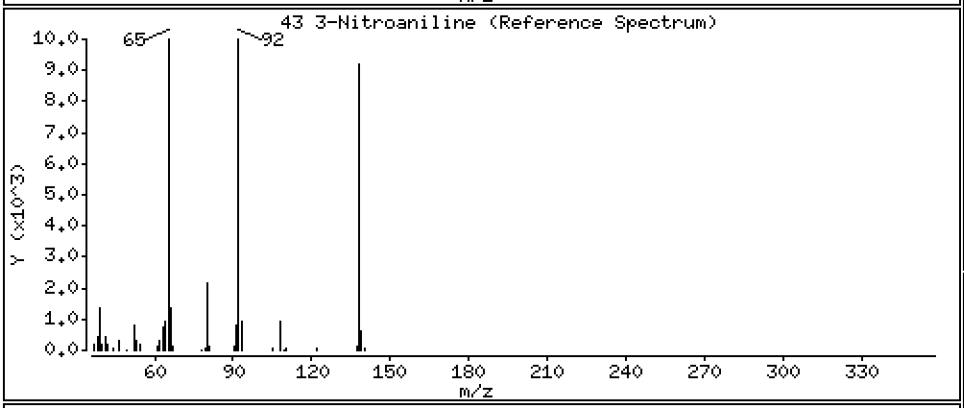
Concentration: 11.26 ug/ml

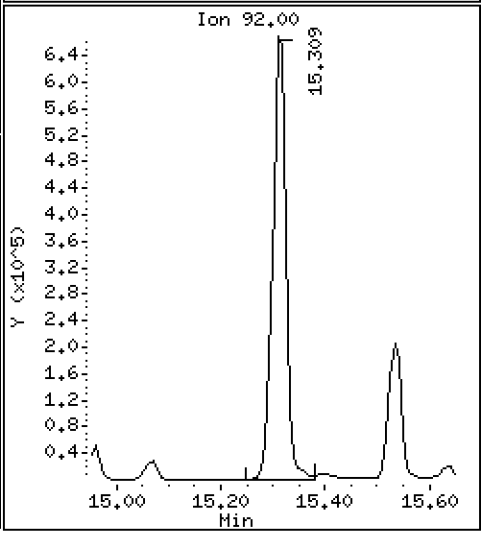


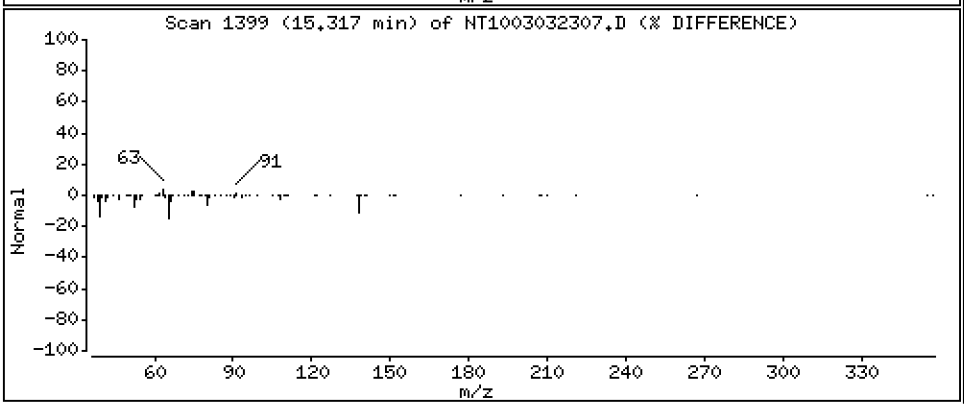












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

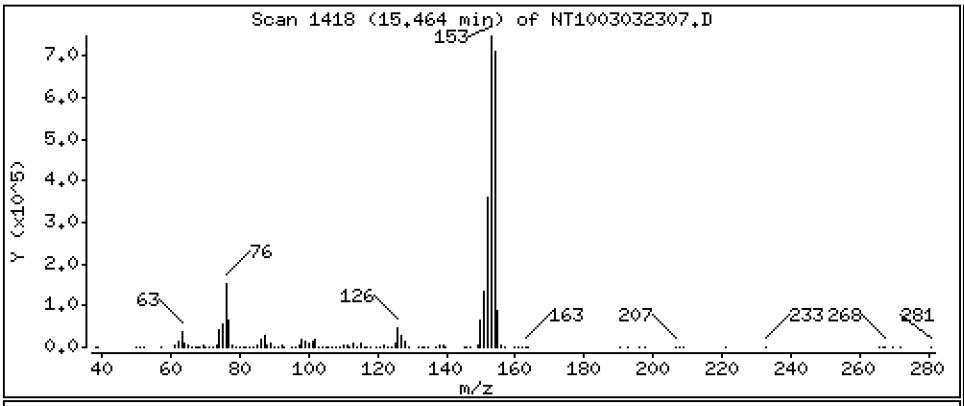
Operator: VTS

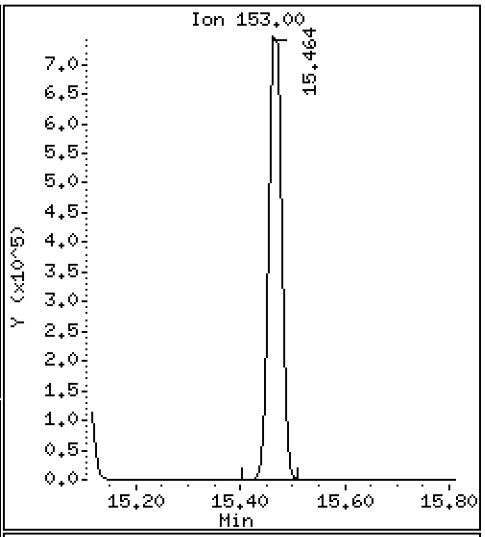
Column phase: ZB-5msi

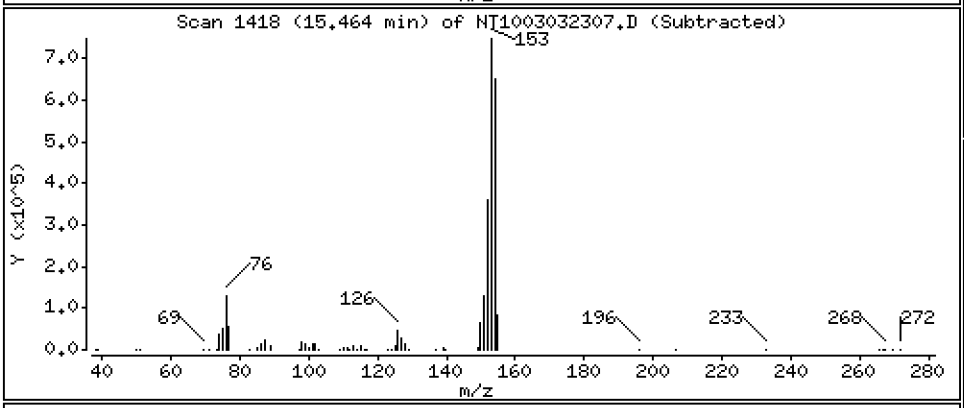
Column diameter: 0.25

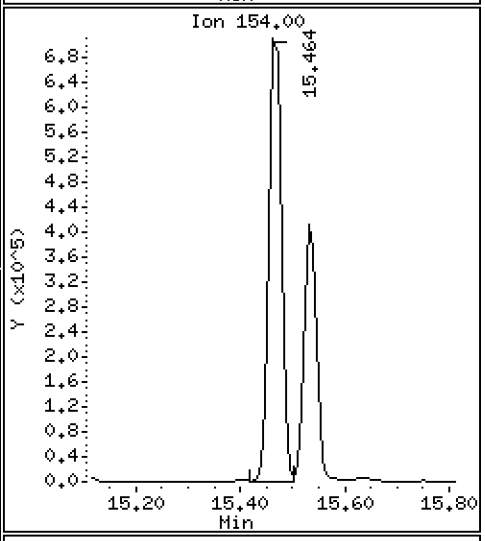
44 Acenaphthene

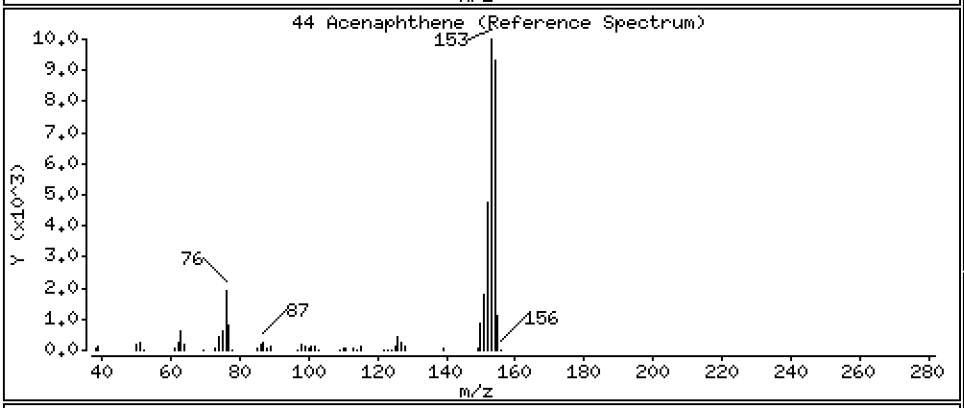
Concentration: 4.229 ug/ml

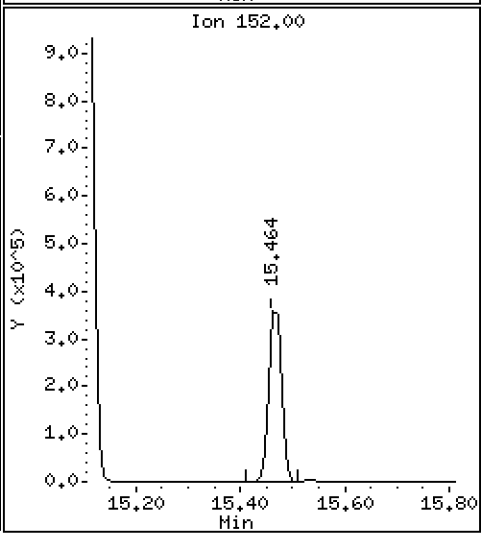


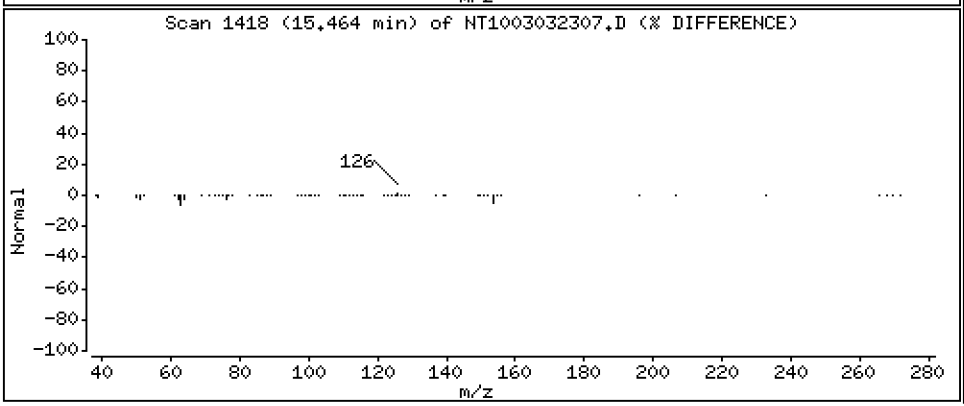












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

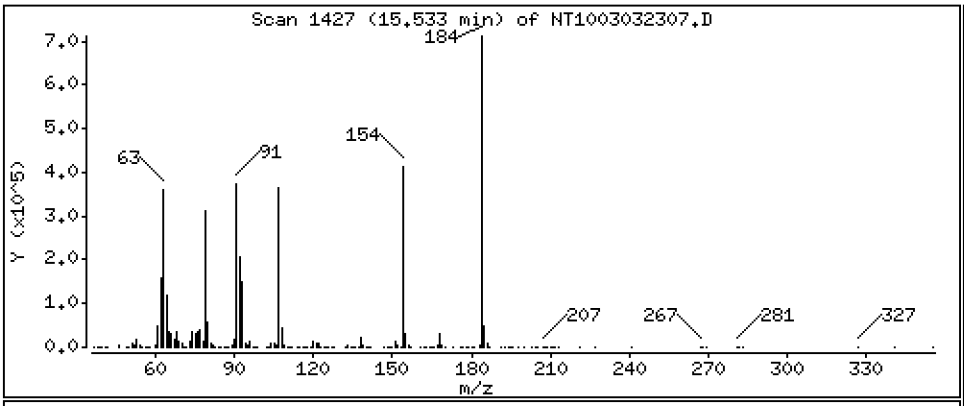
Operator: VTS

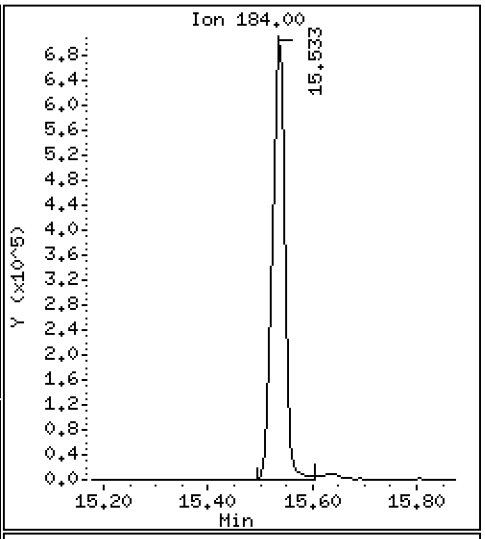
Column phase: ZB-5msi

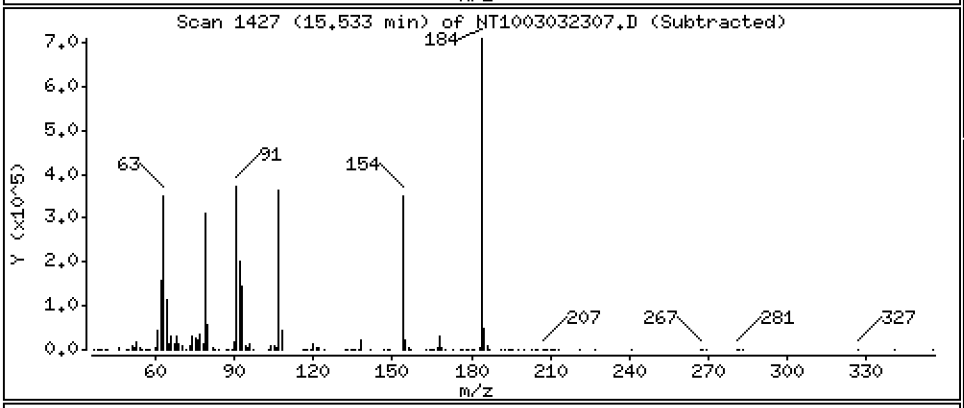
Column diameter: 0.25

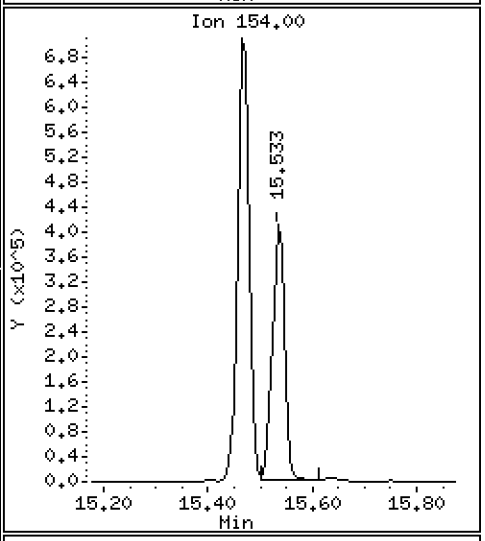
45 2,4-Dinitrophenol

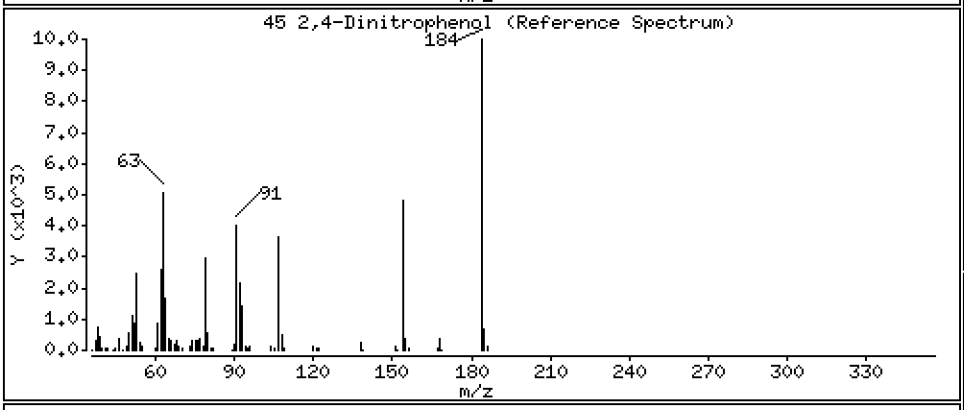
Concentration: 69.10 ug/ml

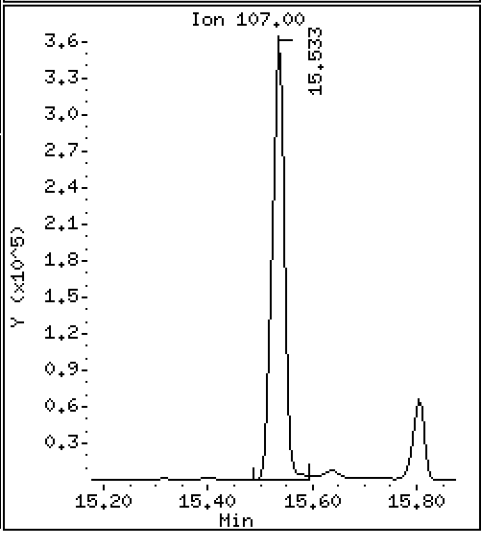


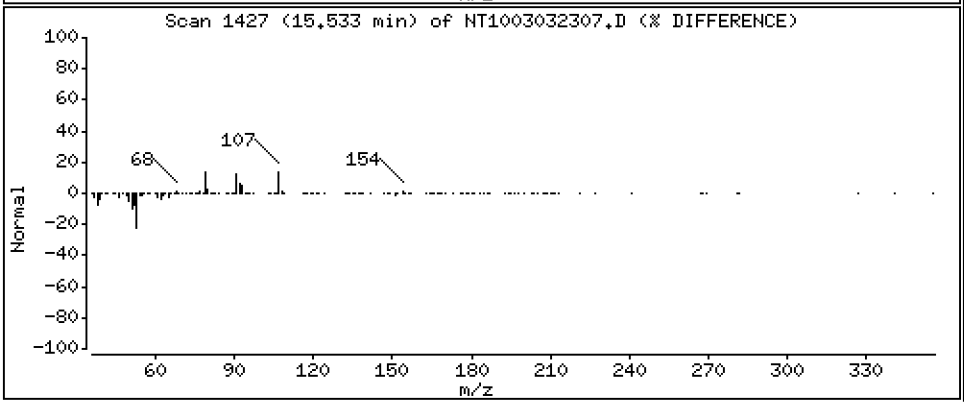












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

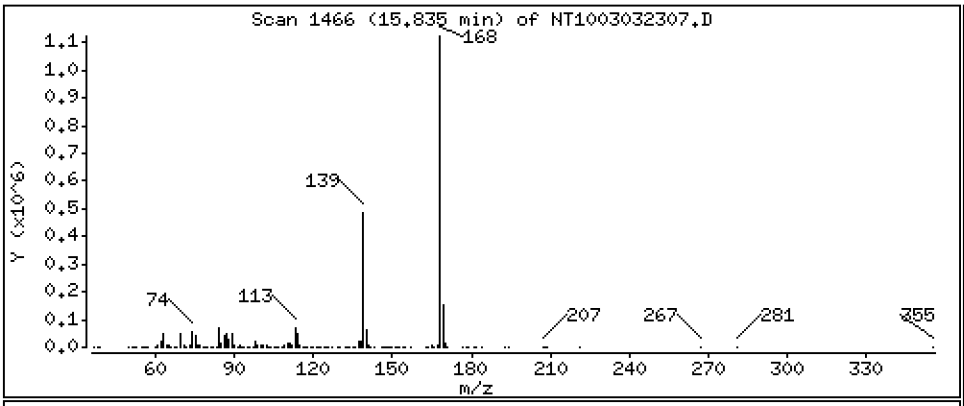
Operator: VTS

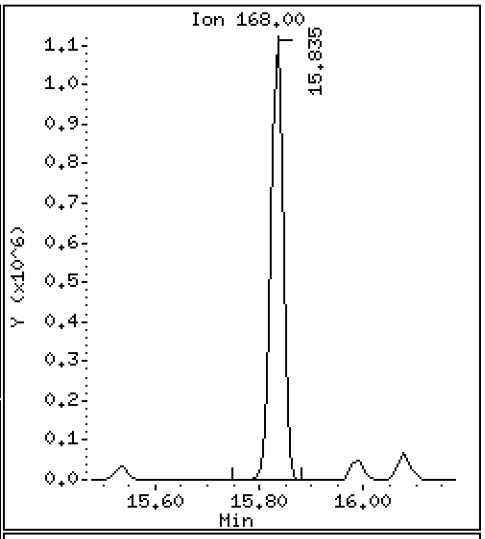
Column phase: ZB-5msi

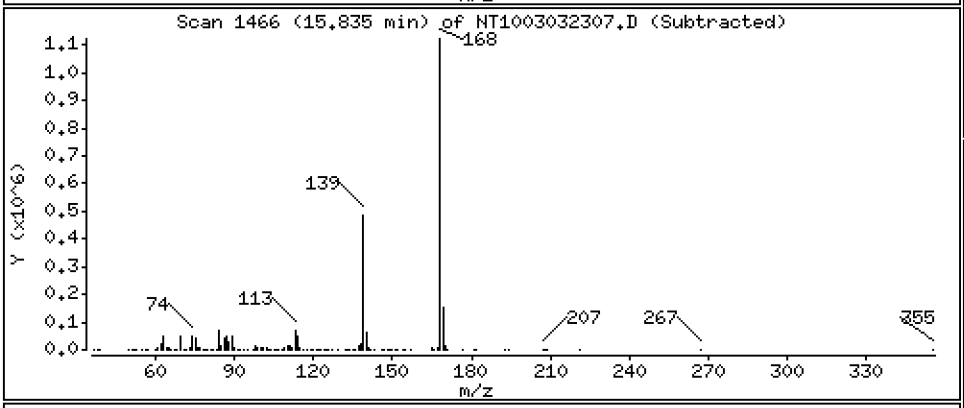
Column diameter: 0.25

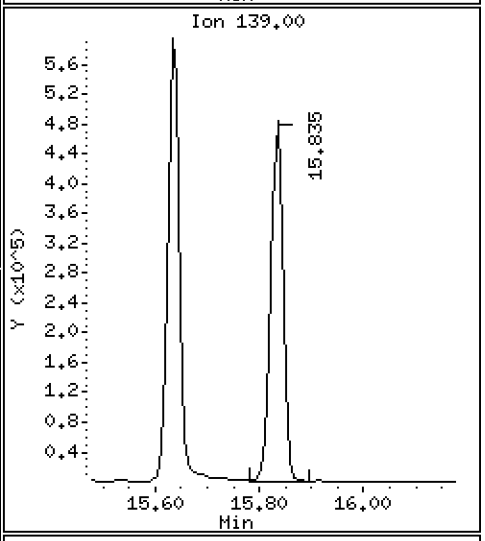
46 Dibenzofuran

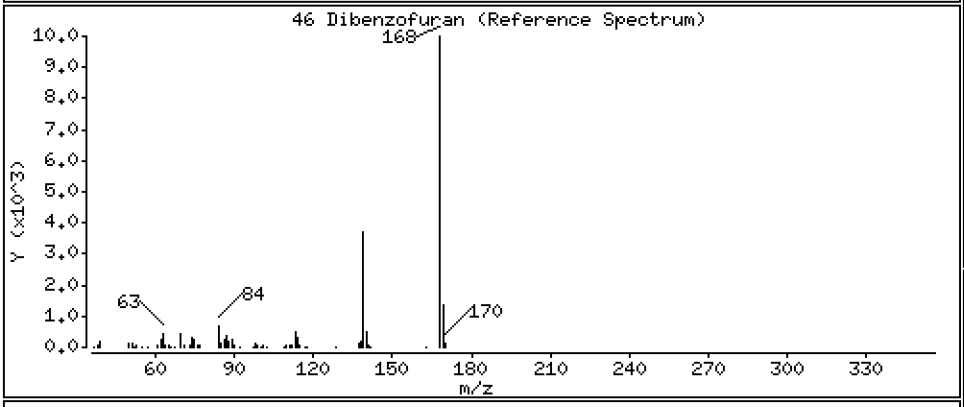
Concentration: 4.078 ug/ml

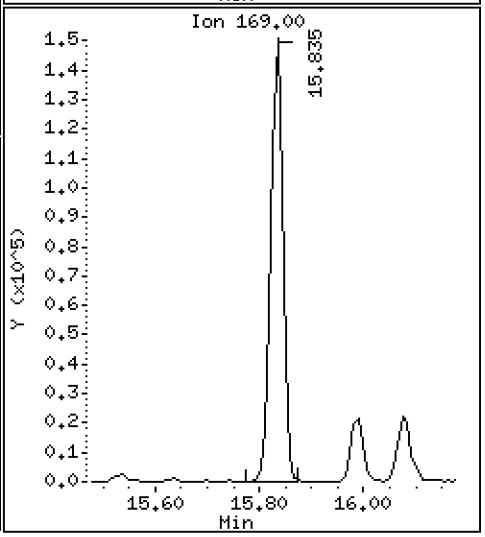


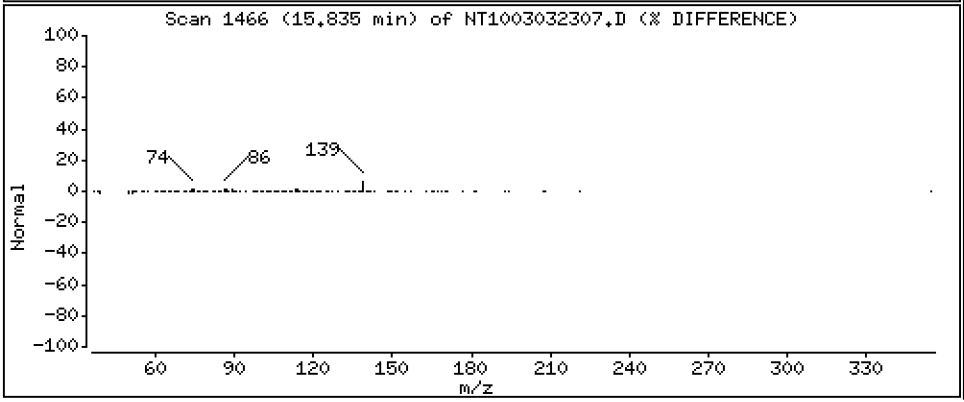












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

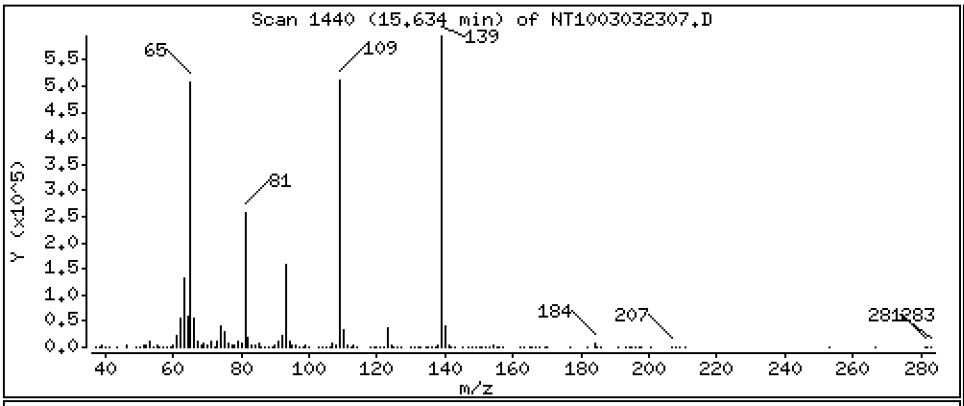
Operator: VTS

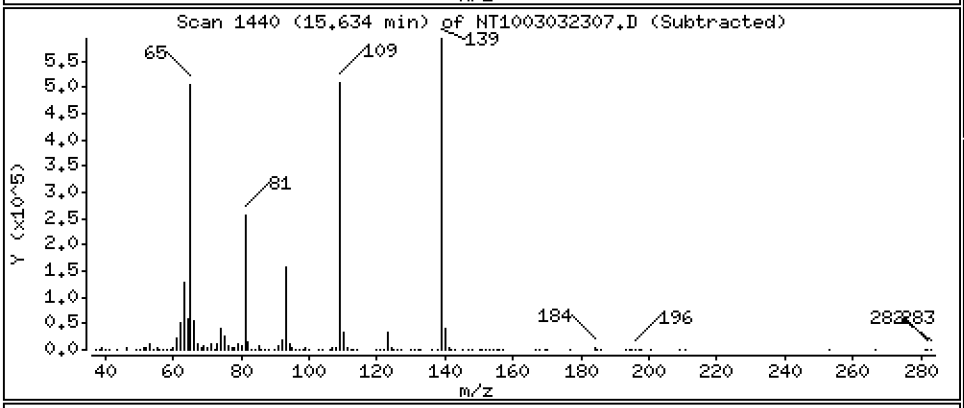
Column phase: ZB-5msi

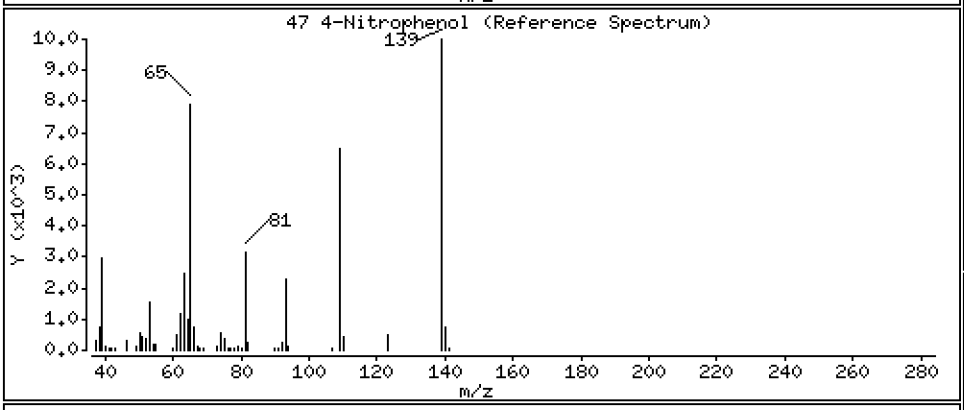
Column diameter: 0.25

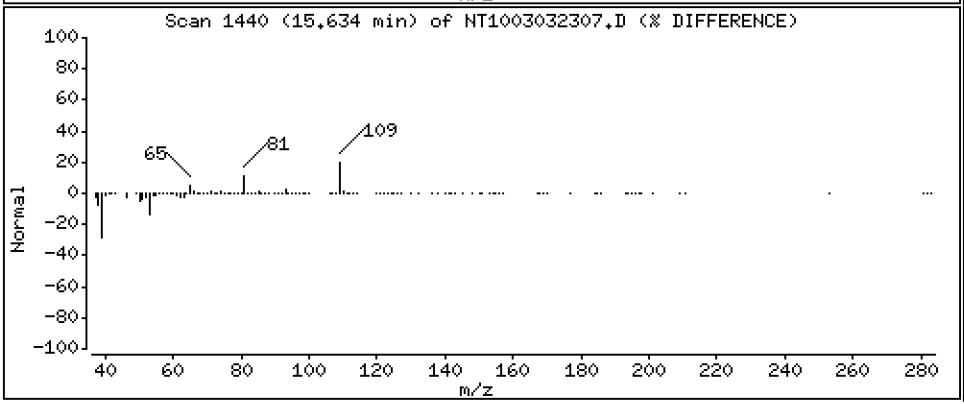
47 4-Nitrophenol

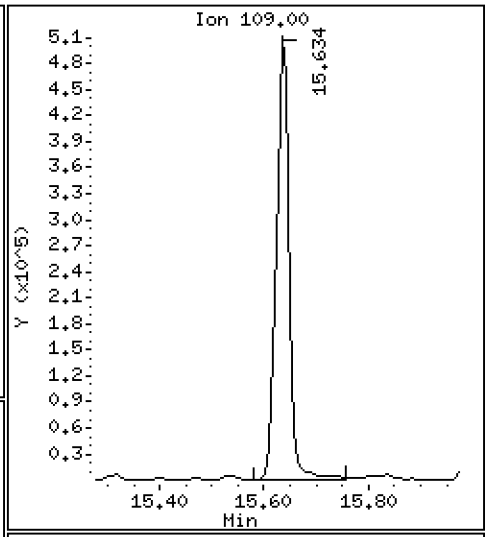
Concentration: 14.30 ug/ml

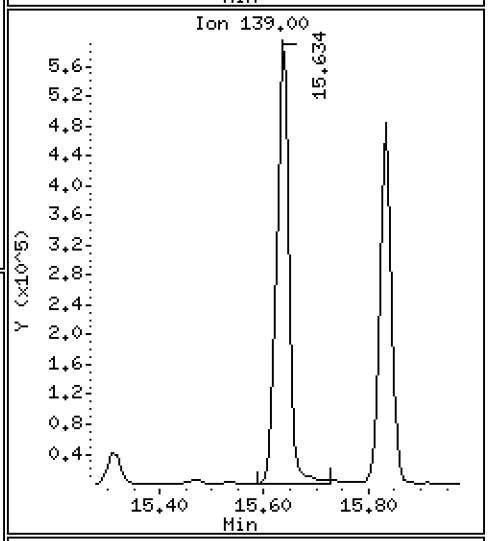


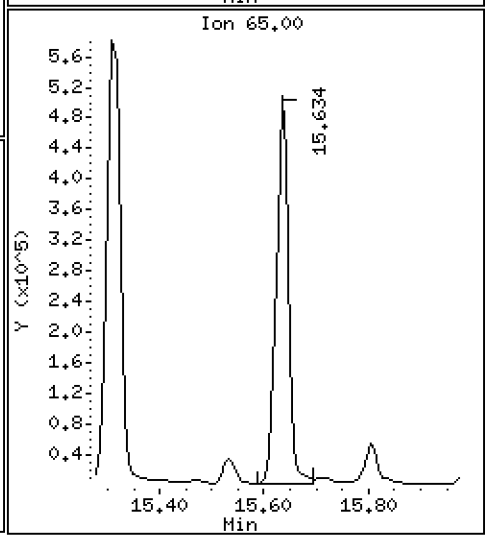












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

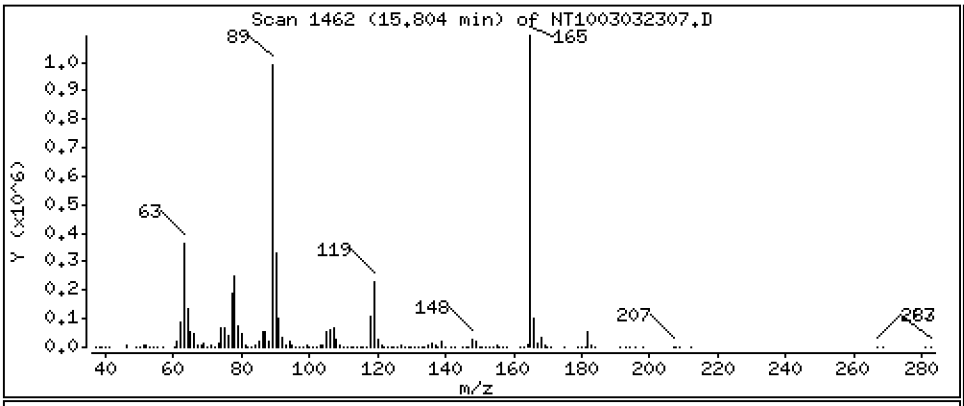
Operator: VTS

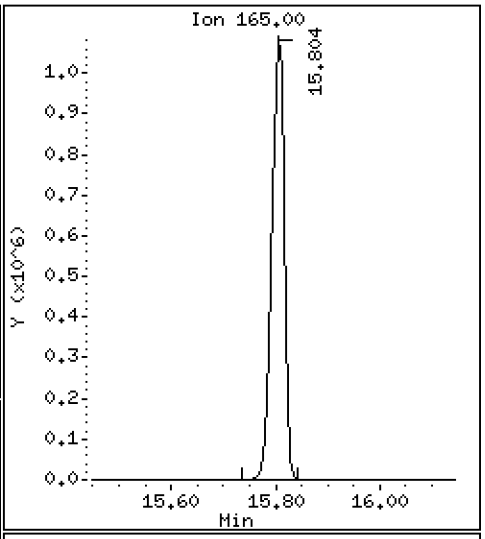
Column phase: ZB-5msi

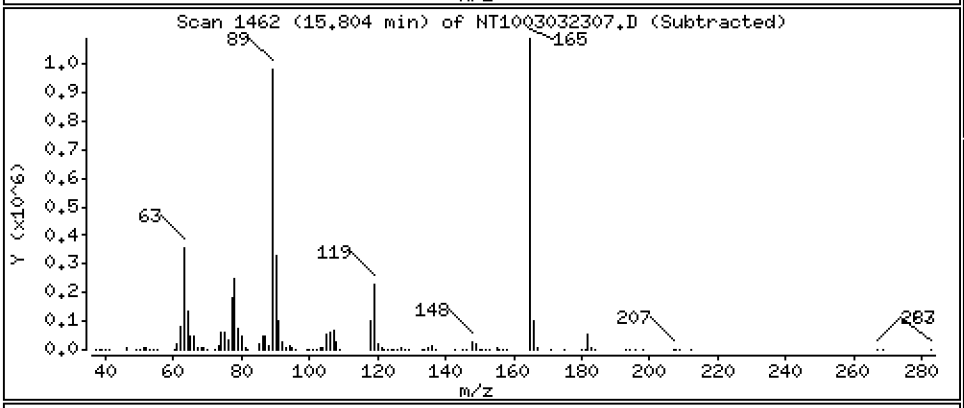
Column diameter: 0.25

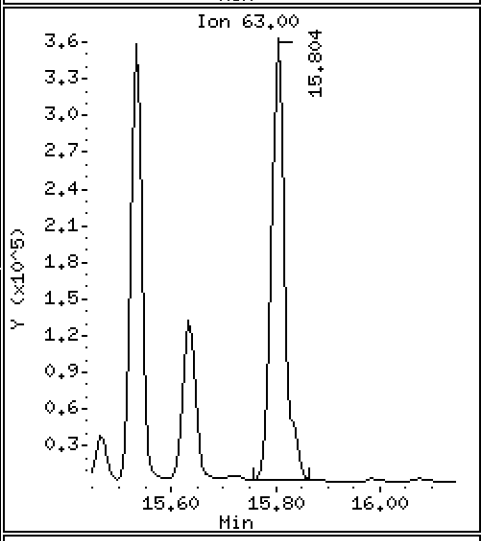
48 2,4-Dinitrotoluene

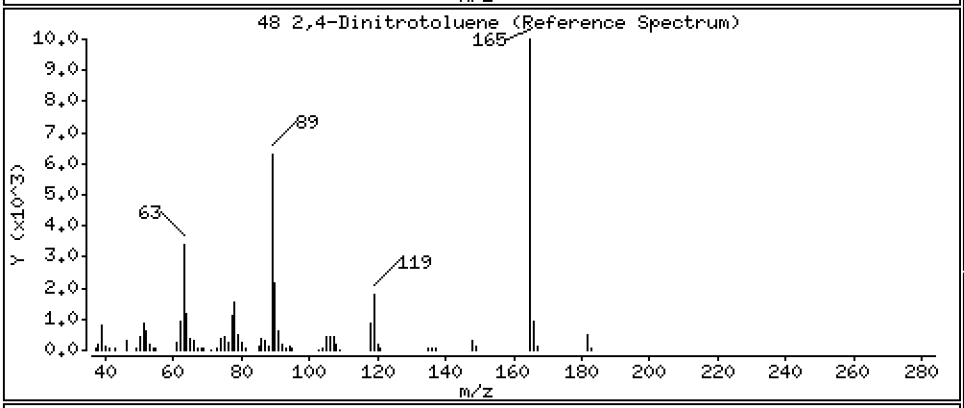
Concentration: 15.82 ug/ml

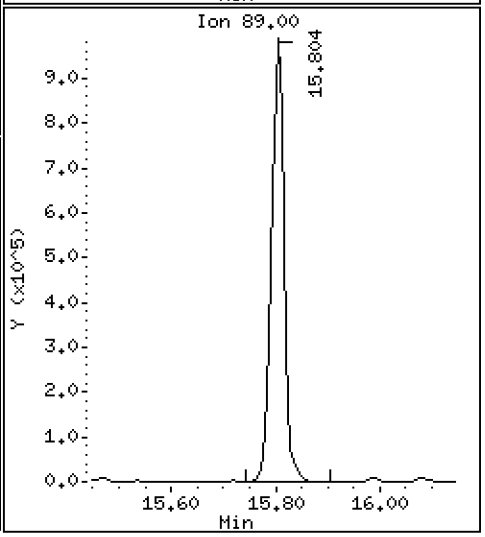


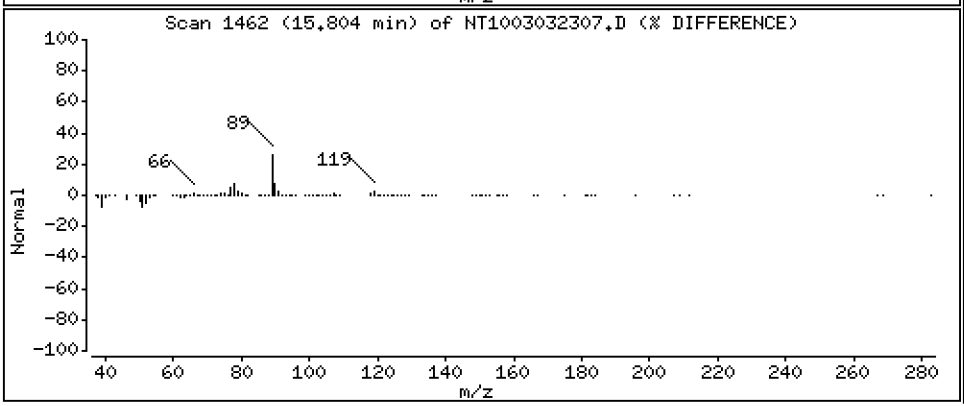












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

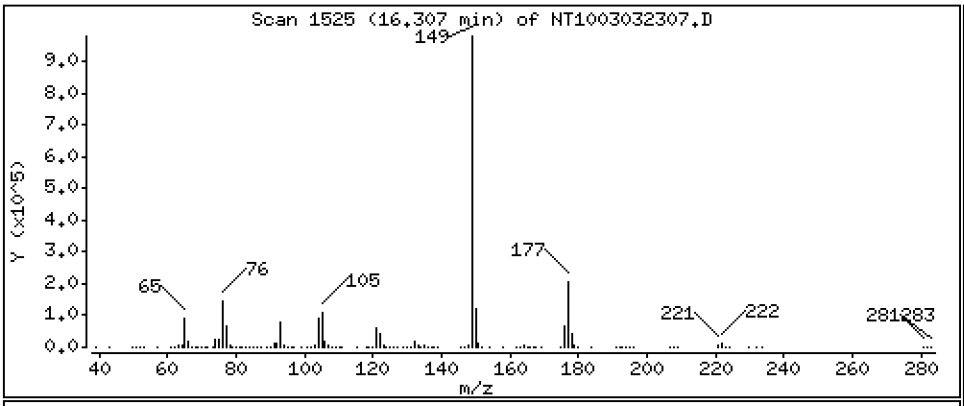
Operator: VTS

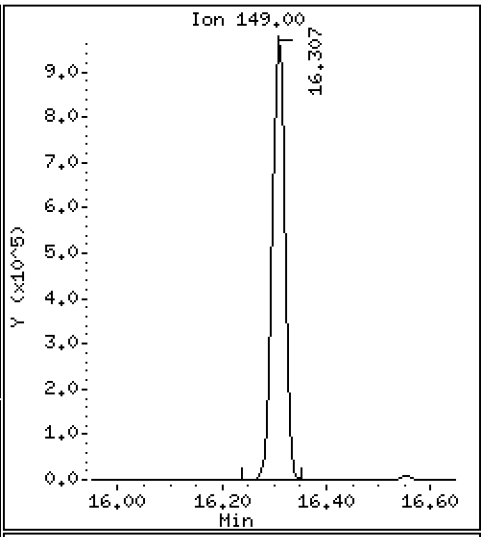
Column phase: ZB-5msi

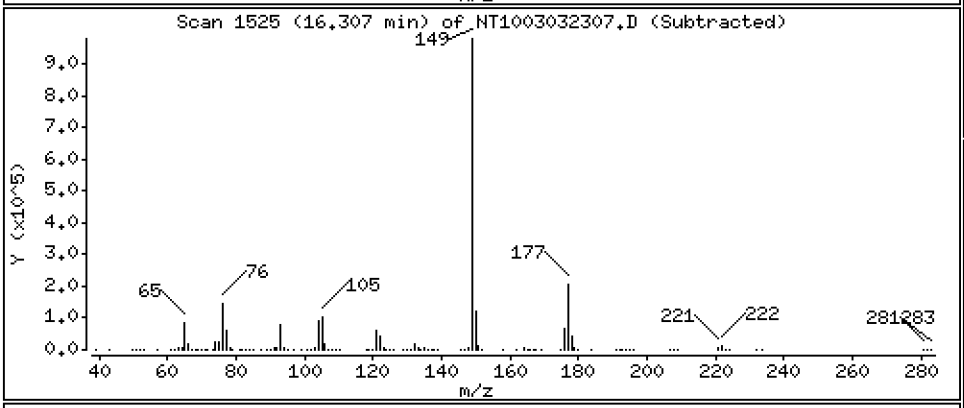
Column diameter: 0.25

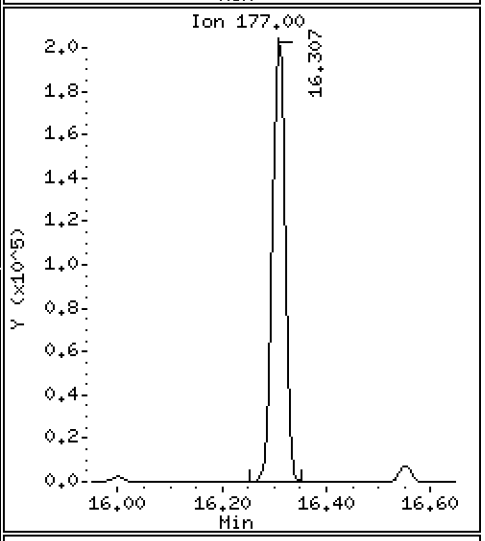
50 Diethylphthalate

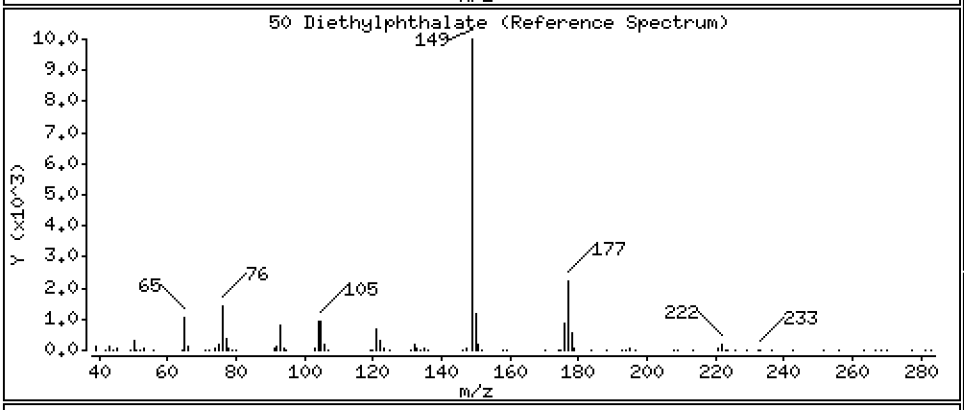
Concentration: 4.626 ug/ml

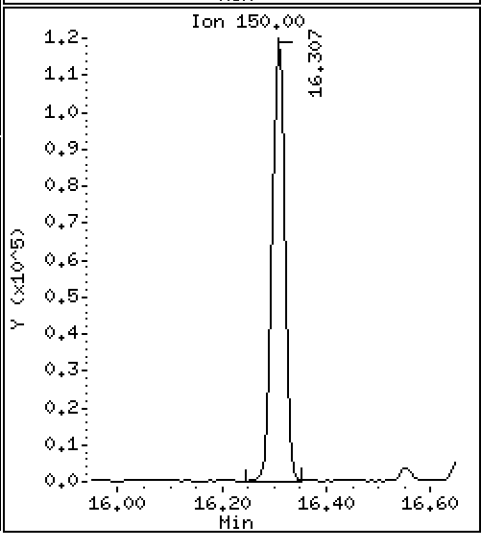


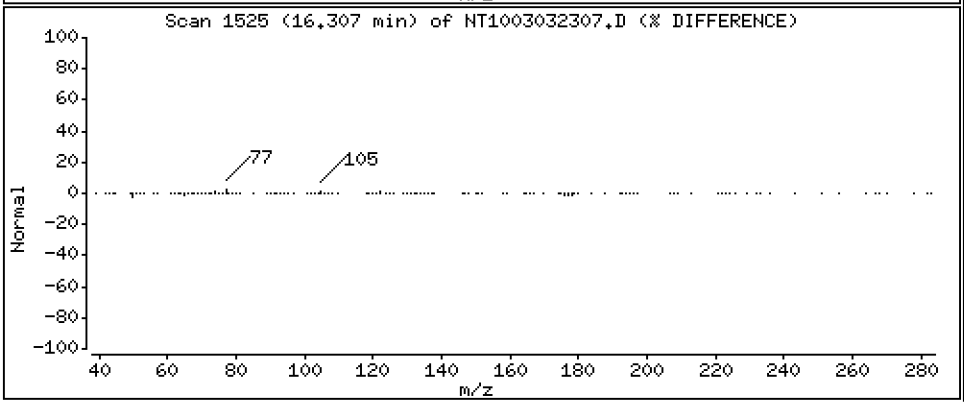












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

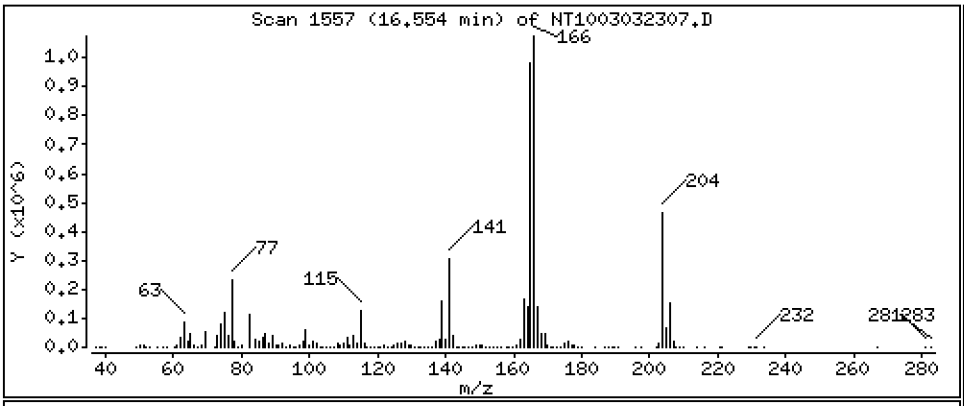
Operator: VTS

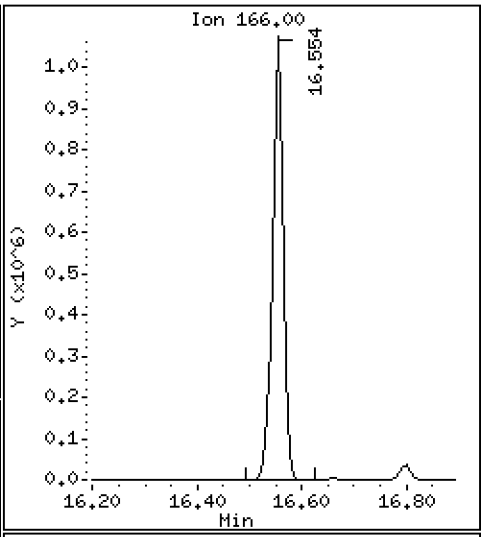
Column phase: ZB-5msi

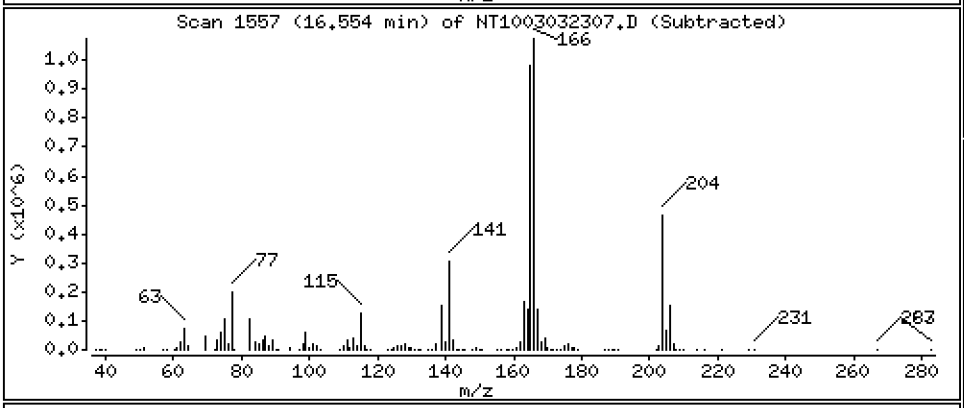
Column diameter: 0.25

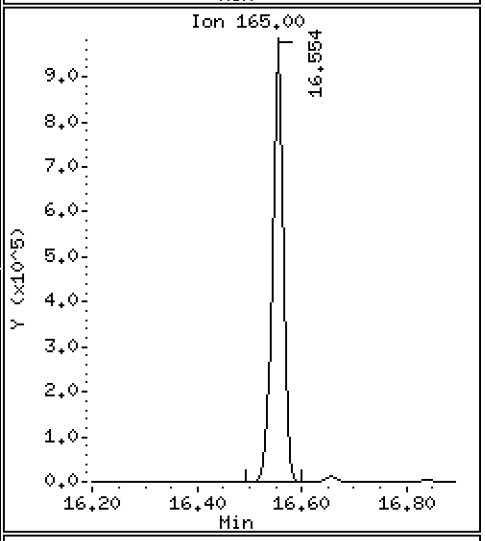
49 Fluorene

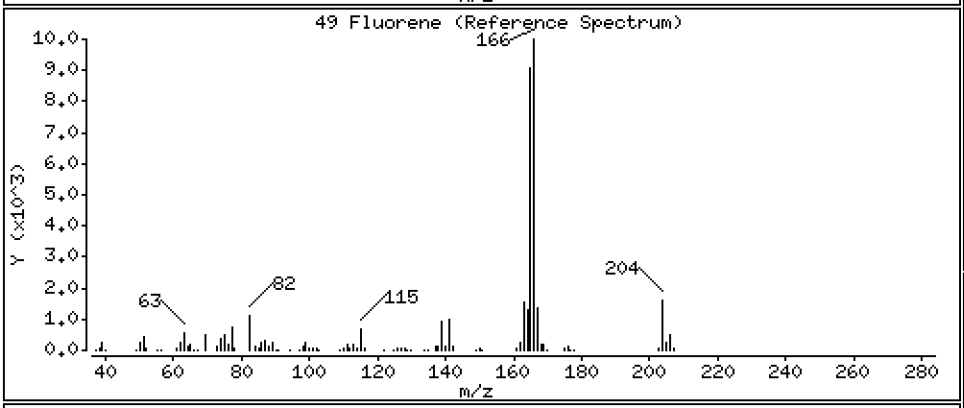
Concentration: 4.939 ug/ml

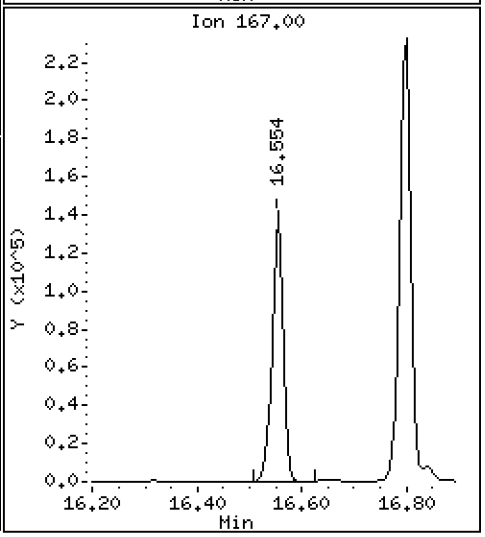


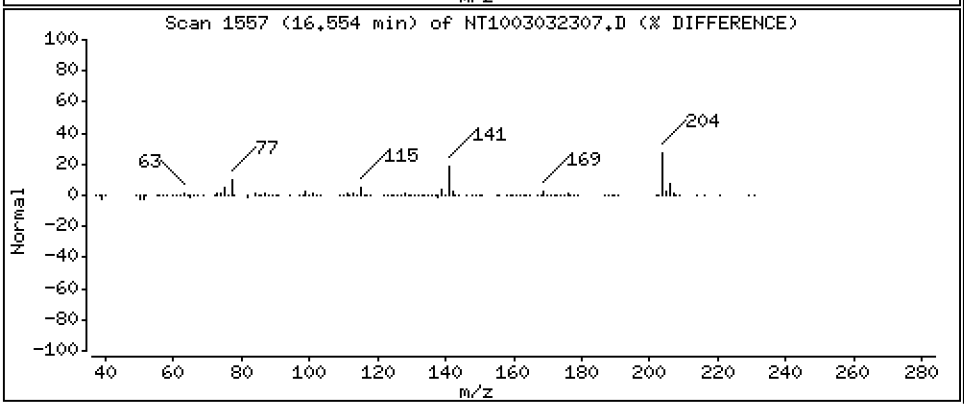












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

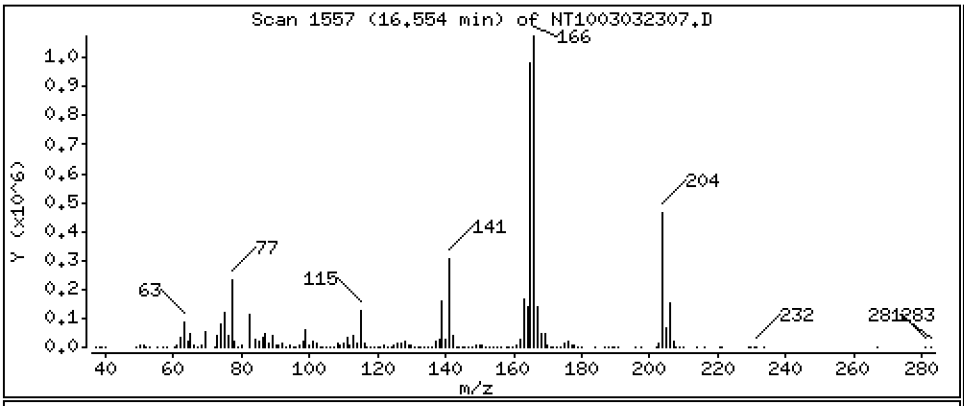
Operator: VTS

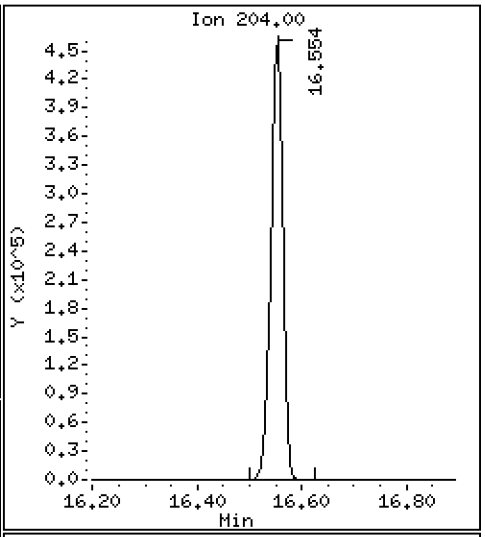
Column phase: ZB-5msi

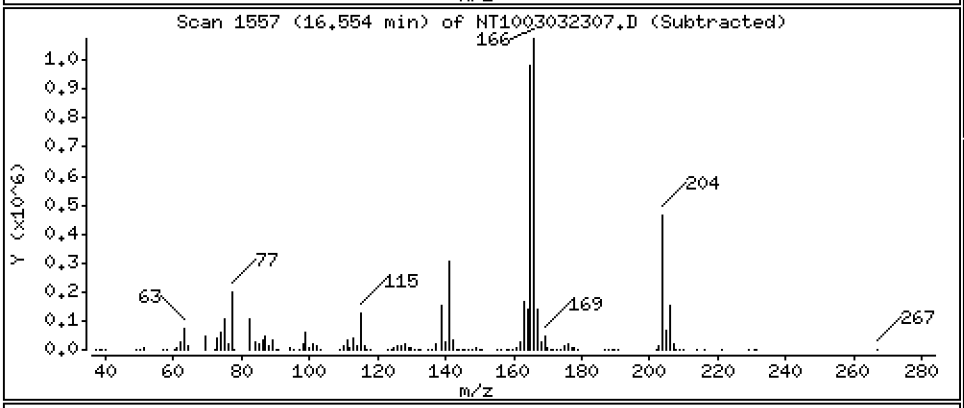
Column diameter: 0.25

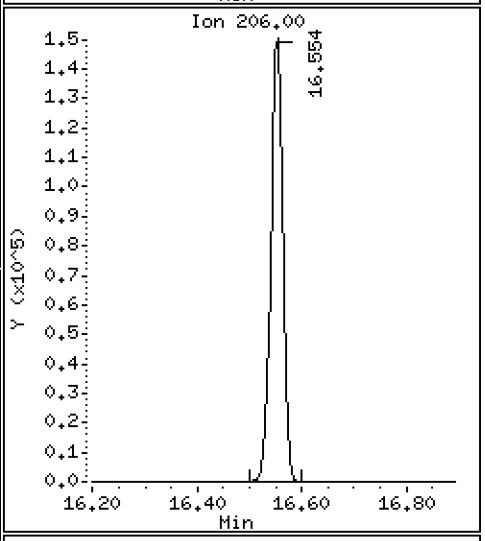
51 4-Chlorophenyl-phenylether

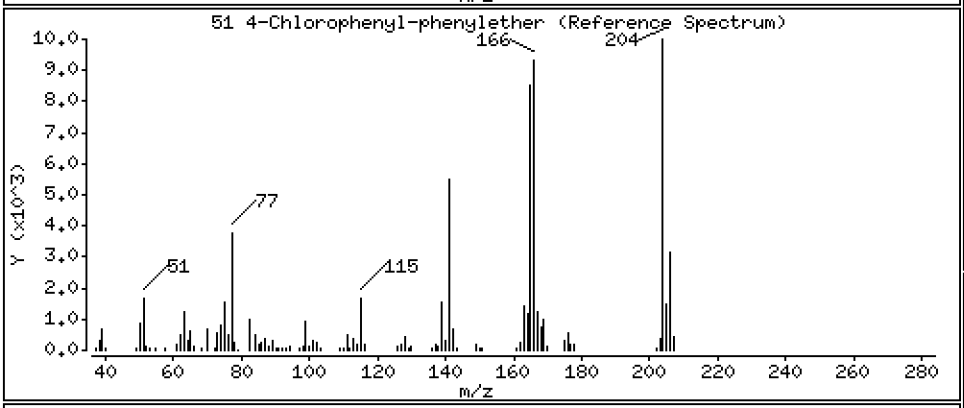
Concentration: 5.274 ug/ml

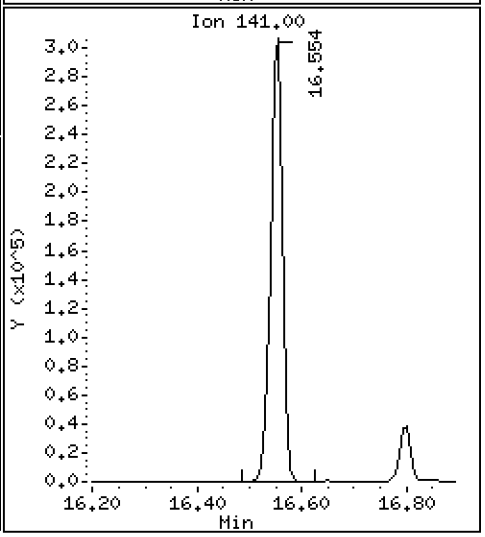


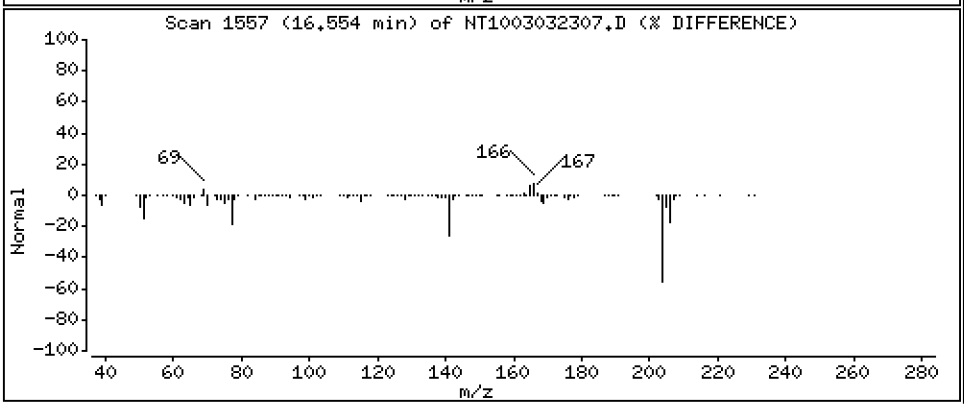












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

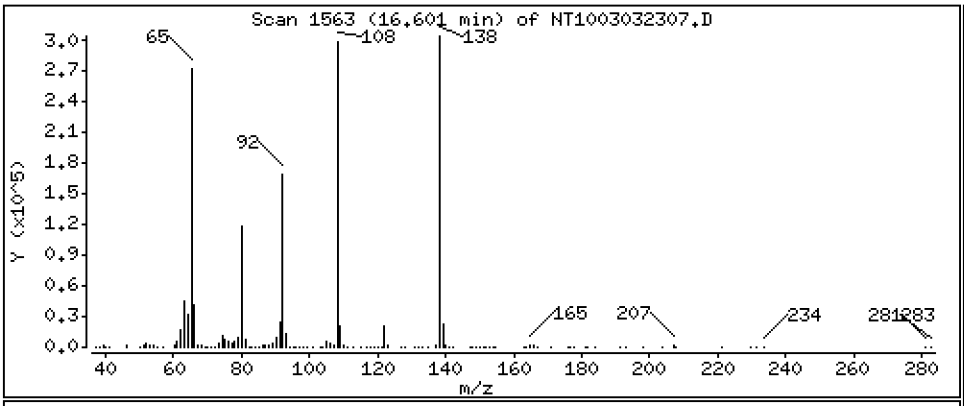
Operator: VTS

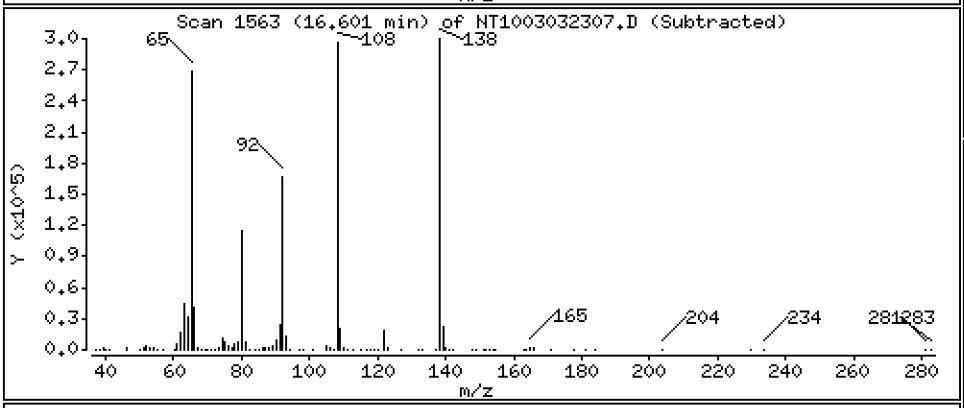
Column phase: ZB-5msi

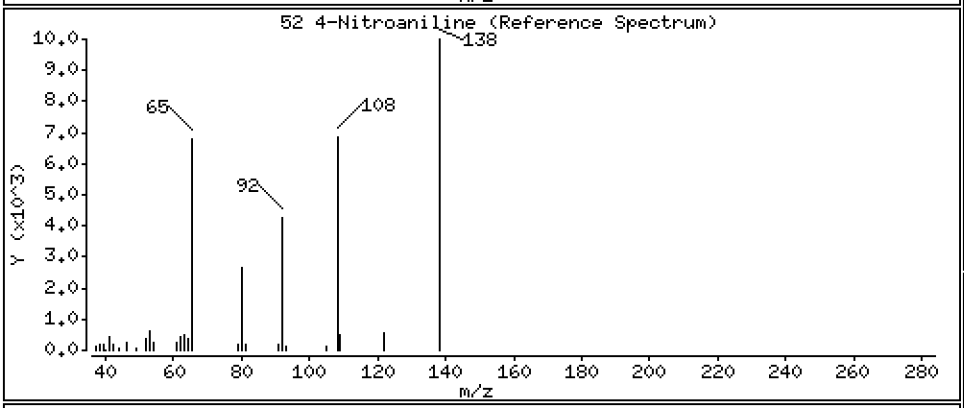
Column diameter: 0.25

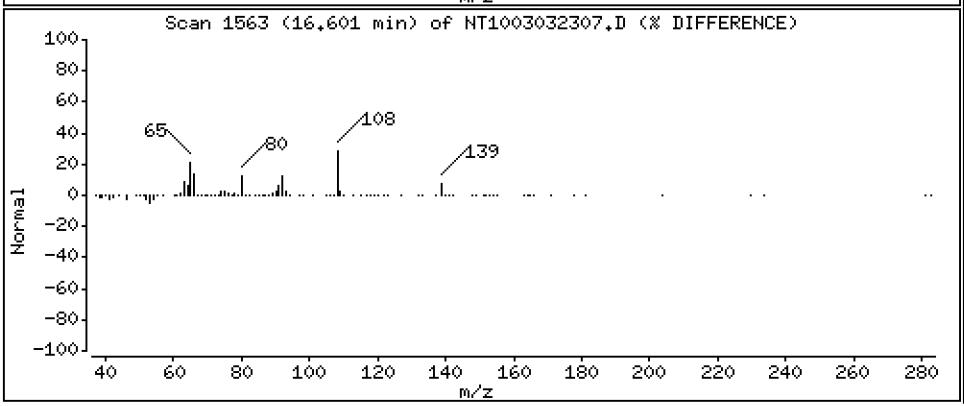
52 4-Nitroaniline

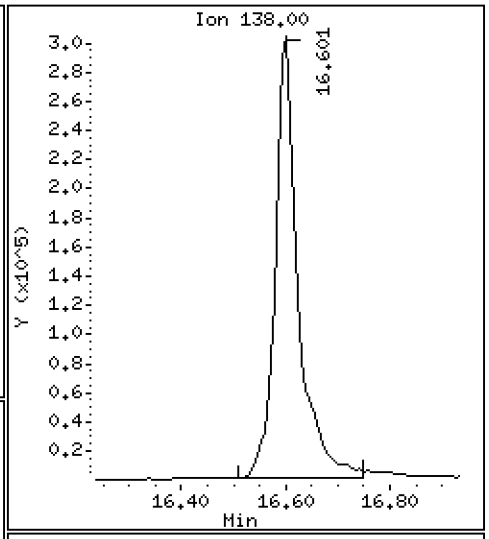
Concentration: 9.146 ug/ml

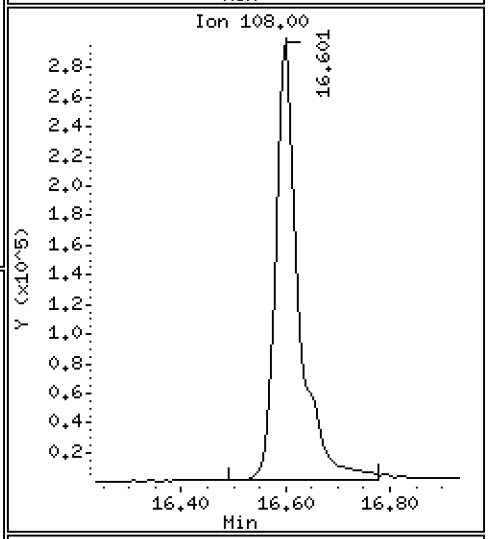


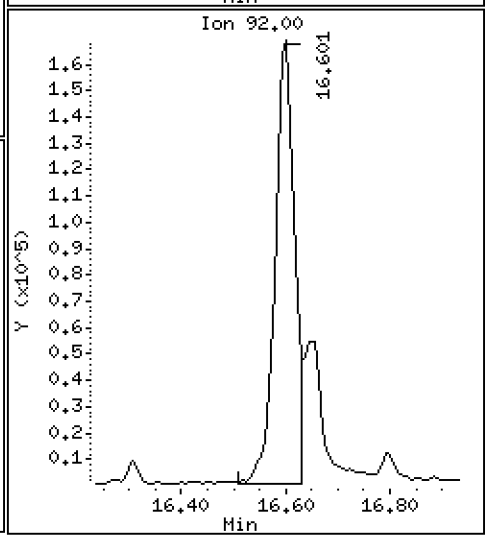












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

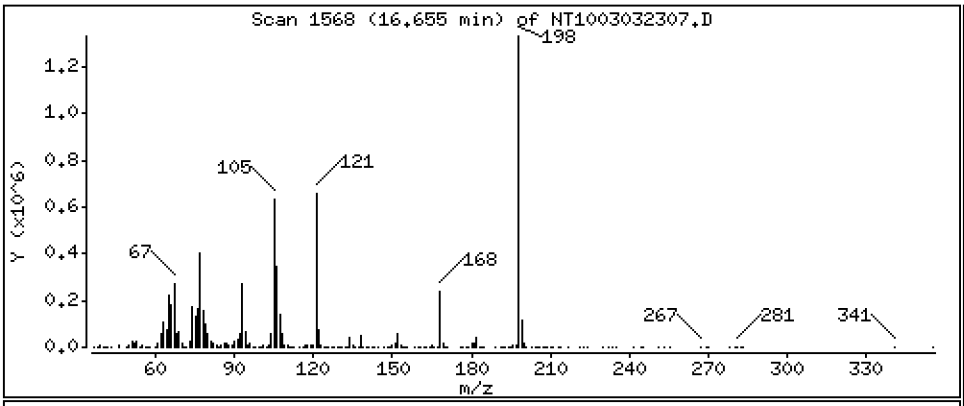
Operator: VTS

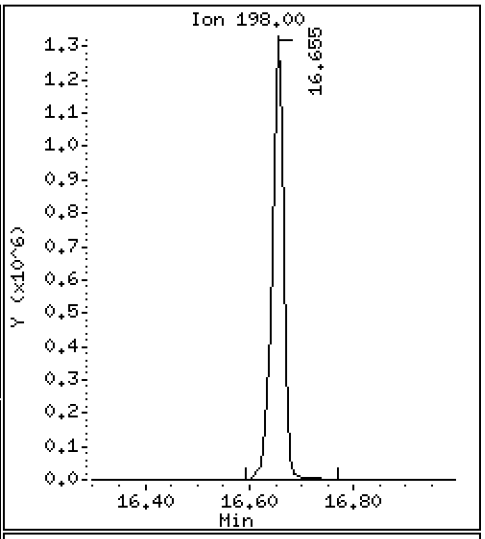
Column phase: ZB-5msi

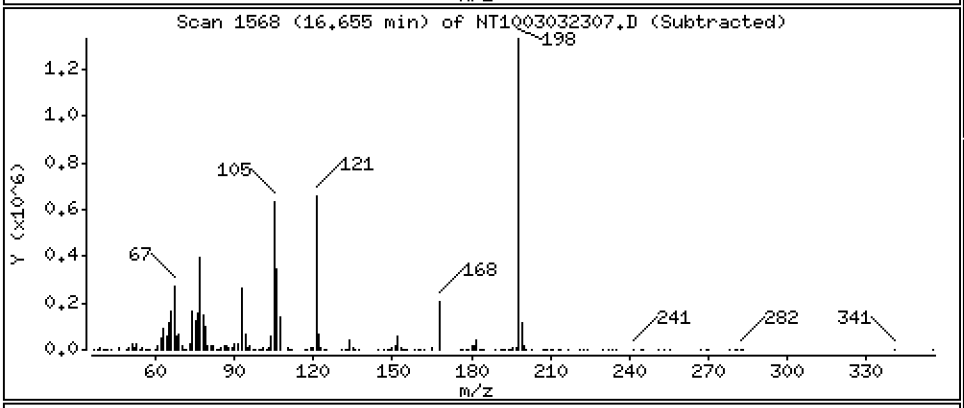
Column diameter: 0.25

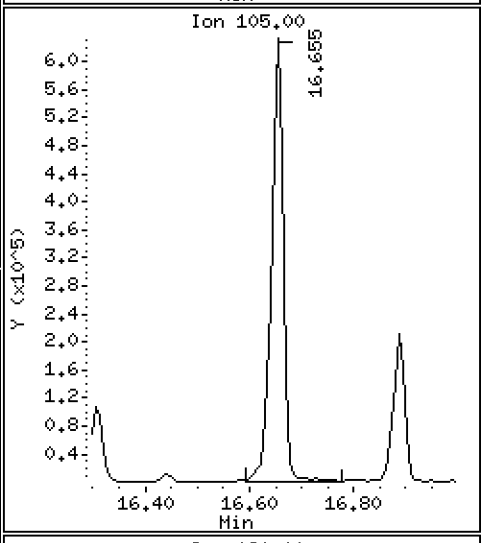
53 4,6-Dinitro-2-methylphenol

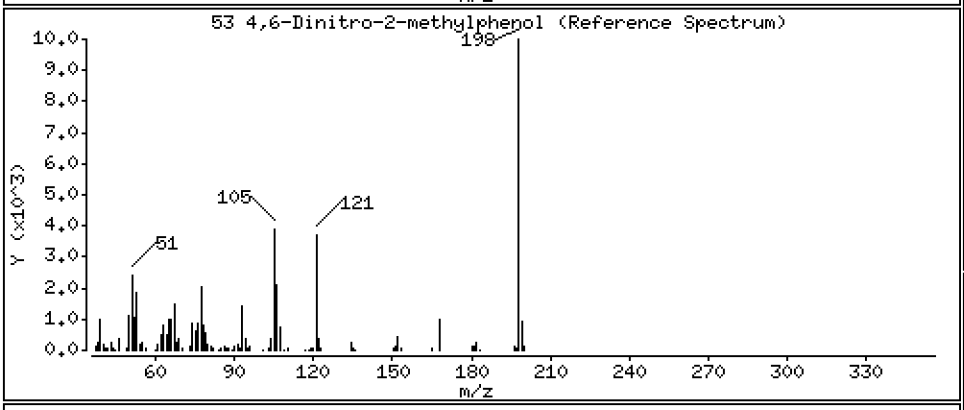
Concentration: 48.82 ug/ml

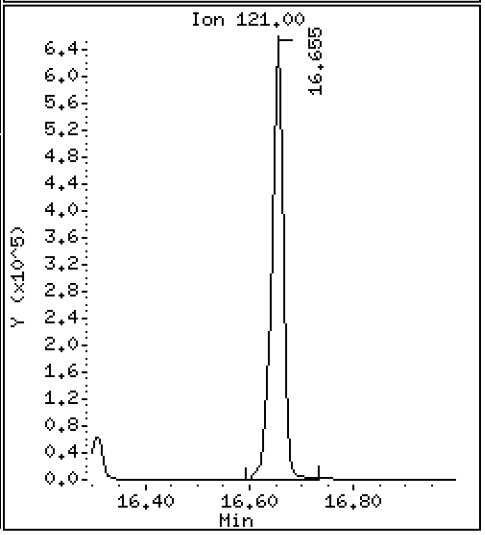


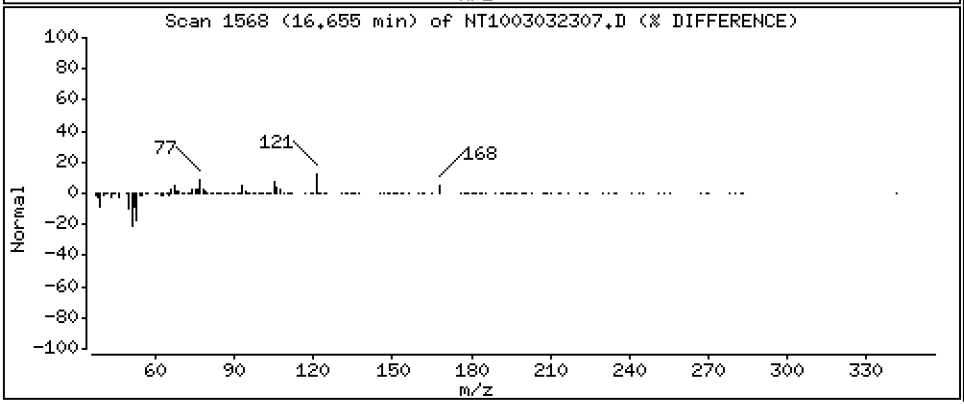












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

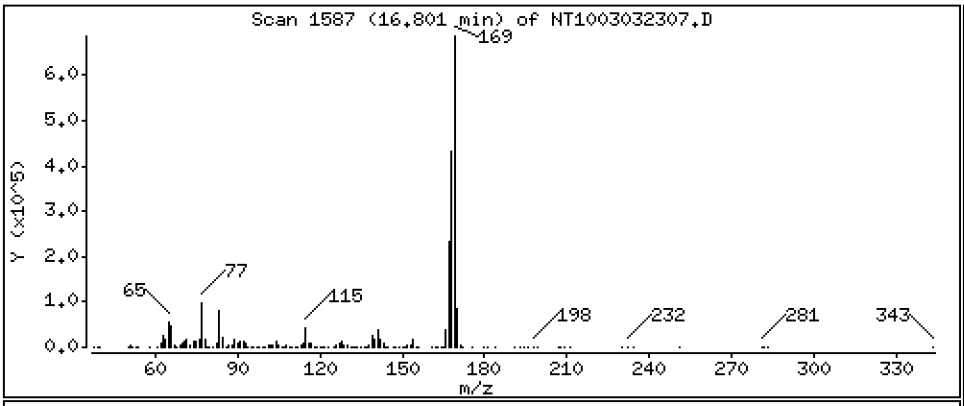
Operator: VTS

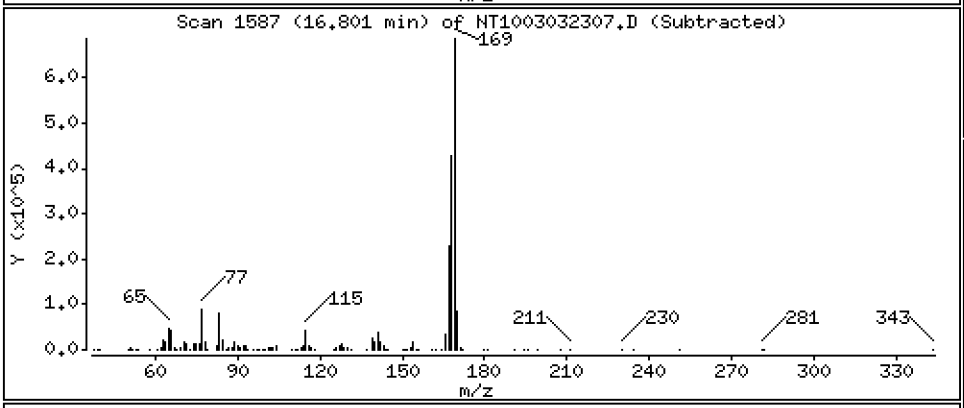
Column phase: ZB-5msi

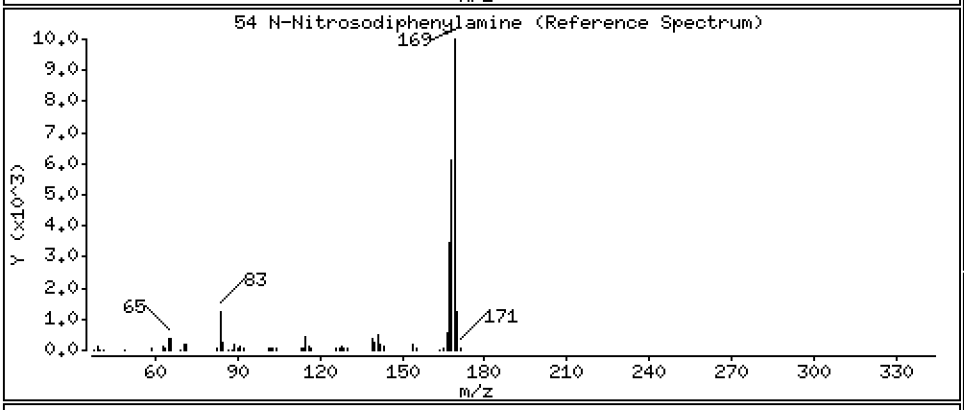
Column diameter: 0.25

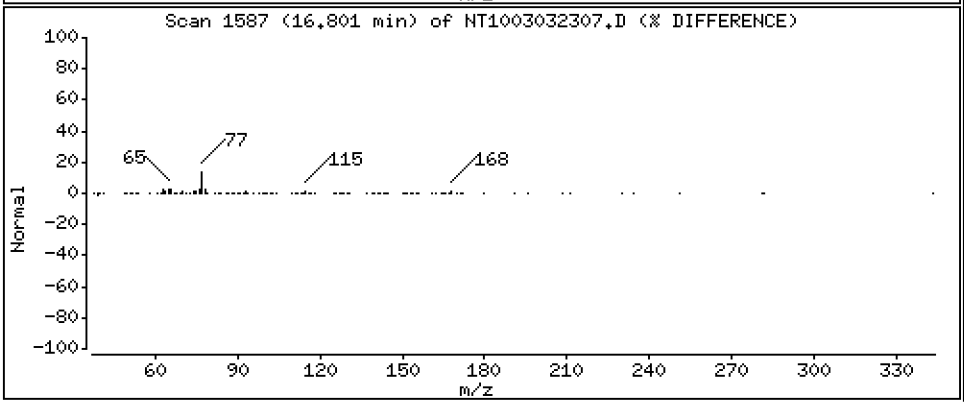
54 N-Nitrosodiphenylamine

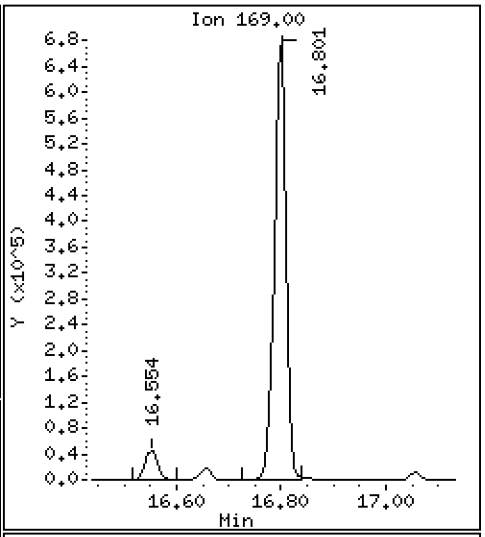
Concentration: 4.364 ug/ml

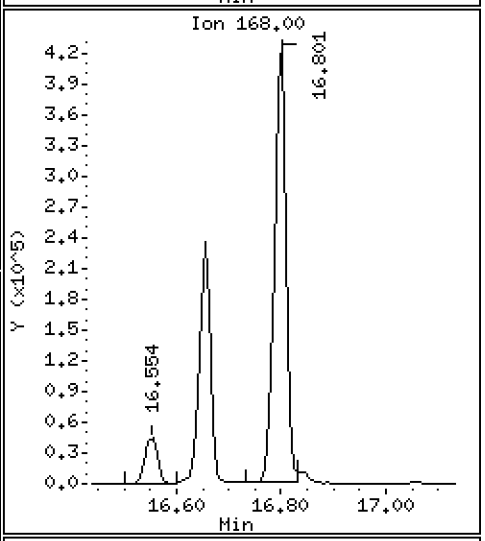


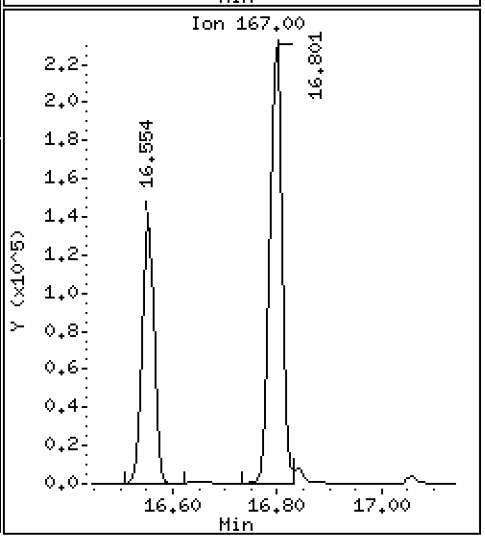












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

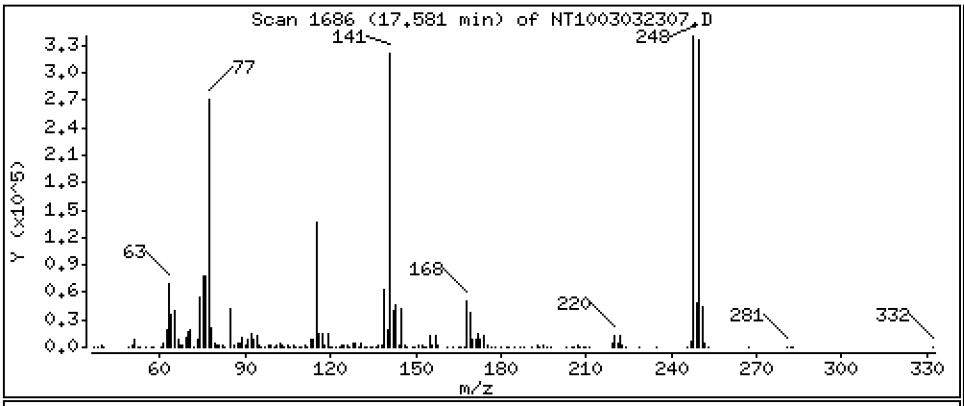
Operator: VTS

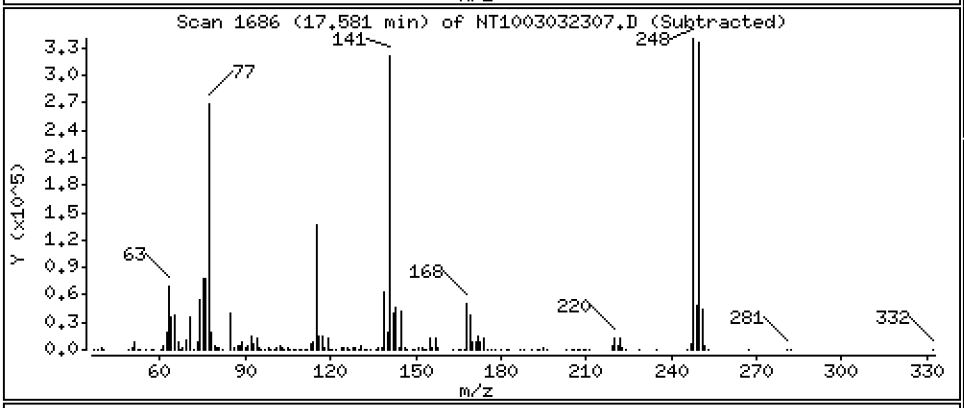
Column phase: ZB-5msi

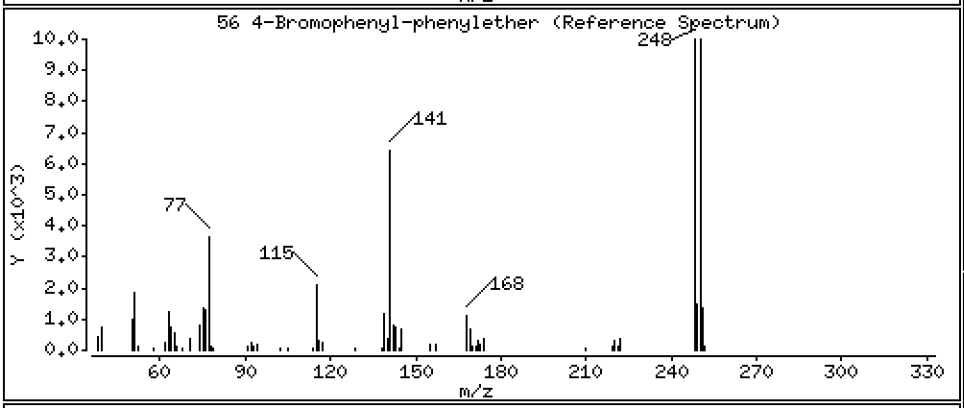
Column diameter: 0.25

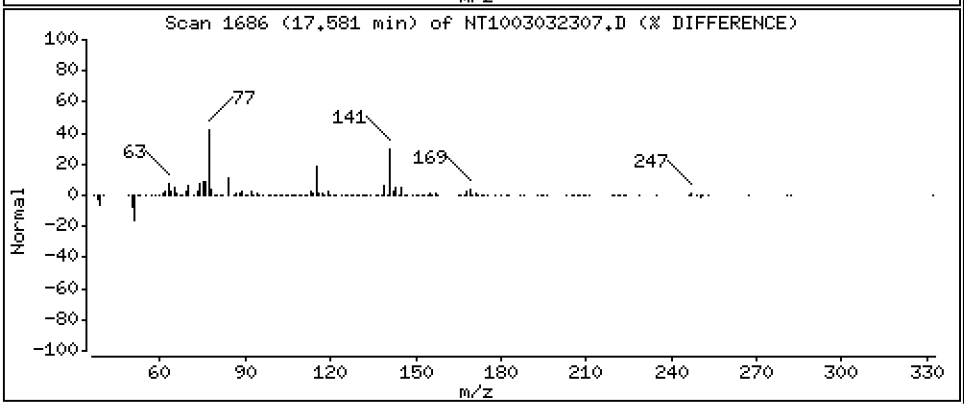
56 4-Bromophenyl-phenylether

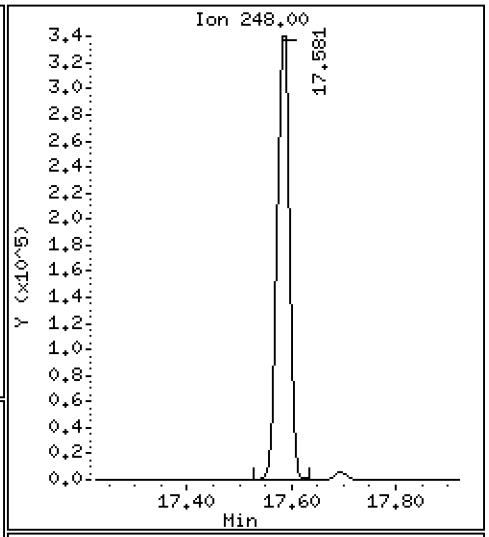
Concentration: 5.480 ug/ml

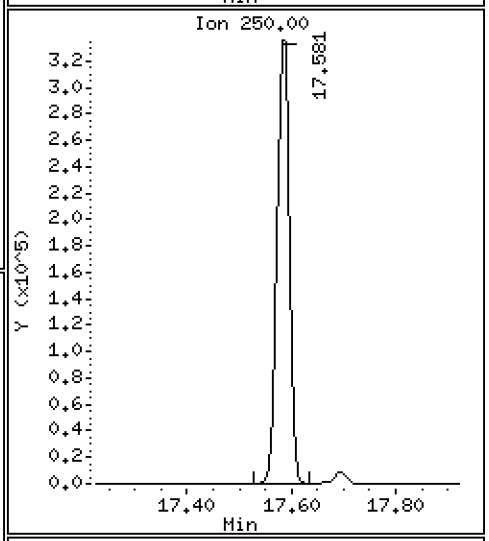


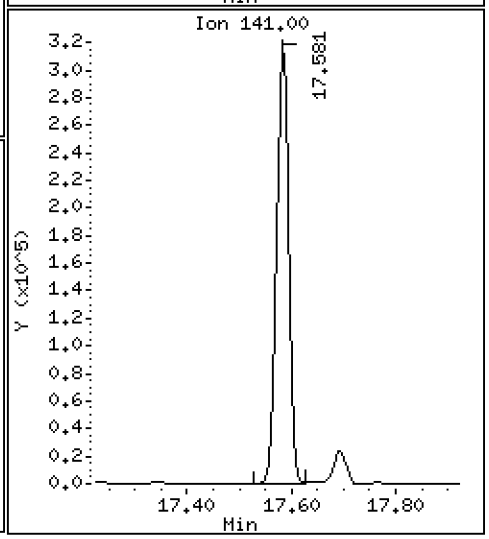












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

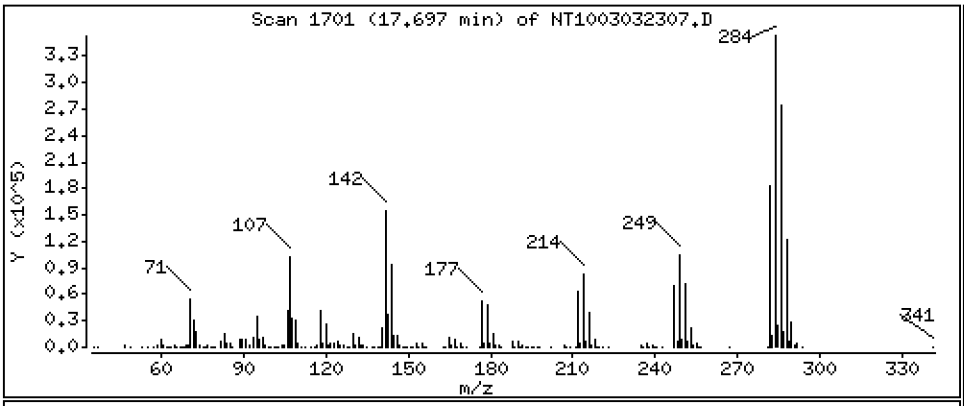
Operator: VTS

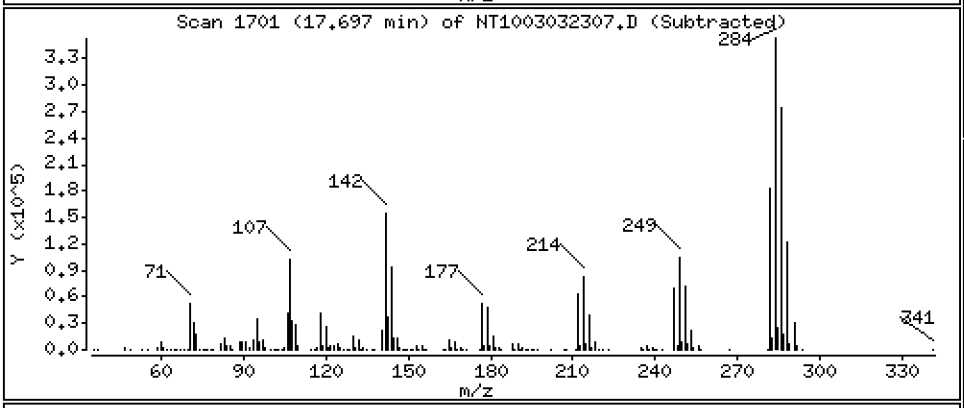
Column phase: ZB-5msi

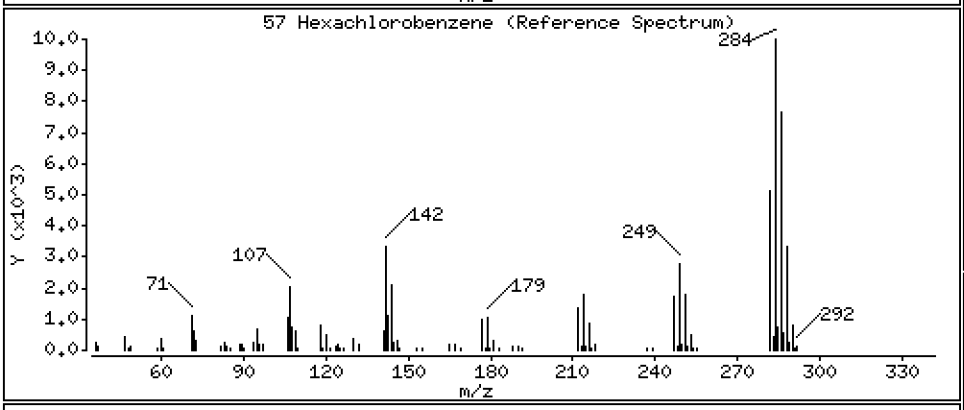
Column diameter: 0.25

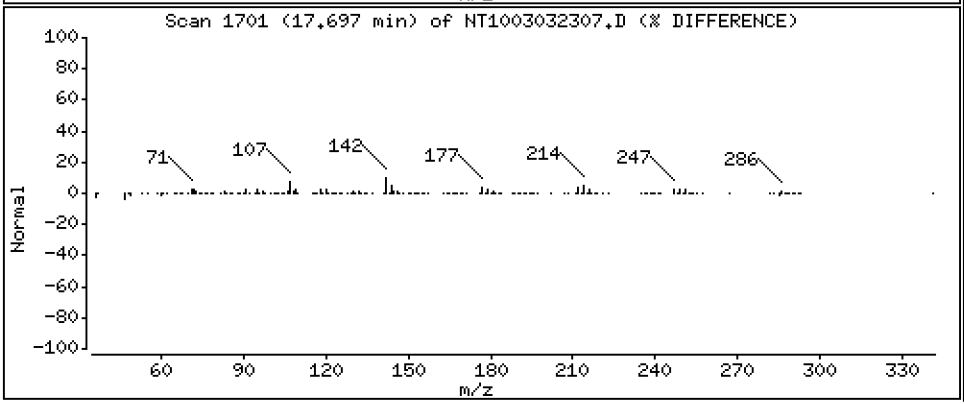
57 Hexachlorobenzene

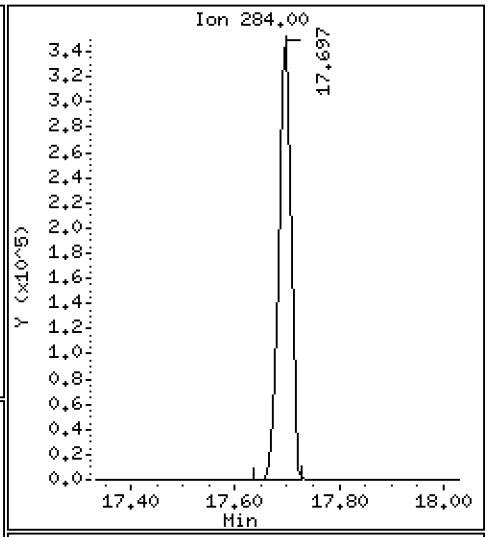
Concentration: 4.567 ug/ml

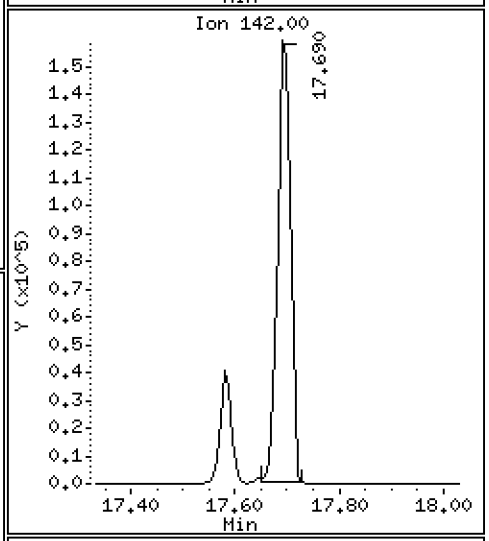


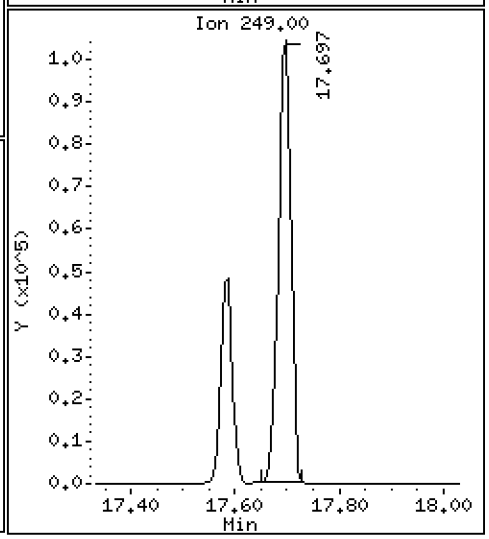












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

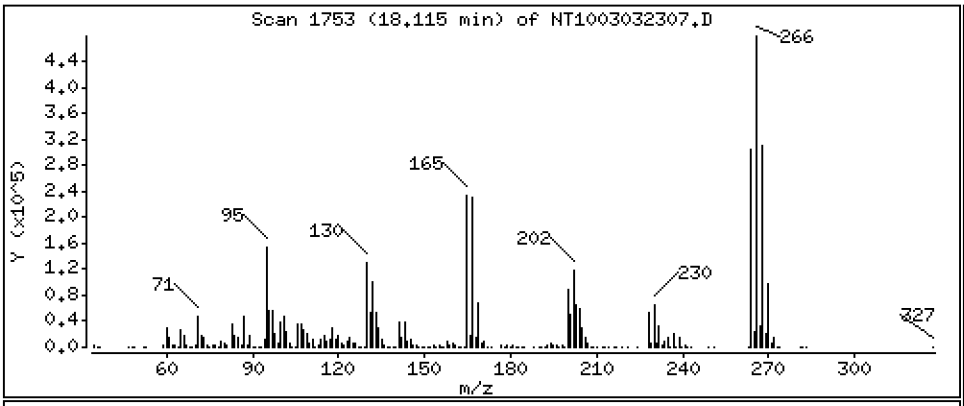
Operator: VTS

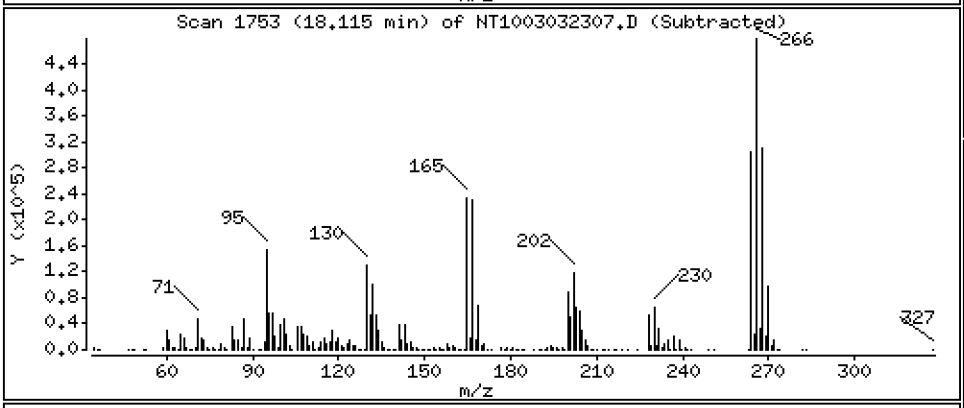
Column phase: ZB-5msi

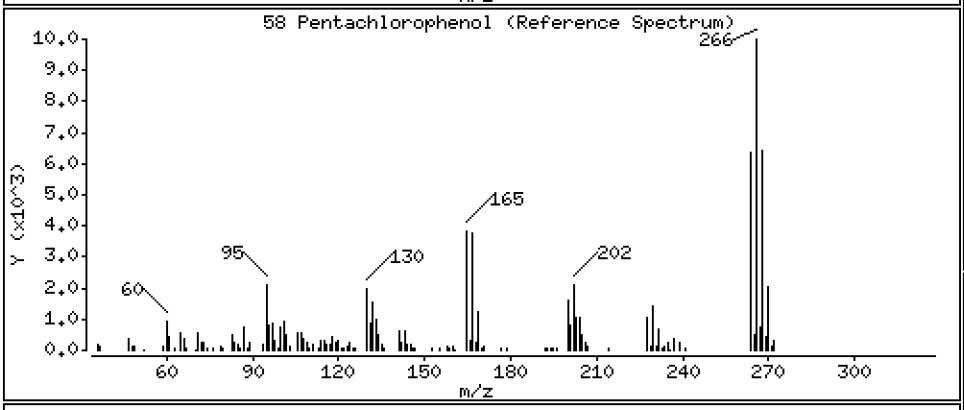
Column diameter: 0.25

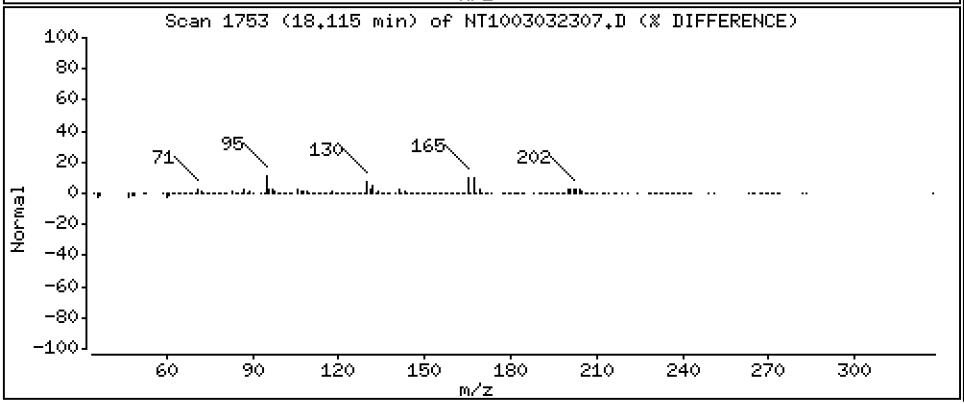
58 Pentachlorophenol

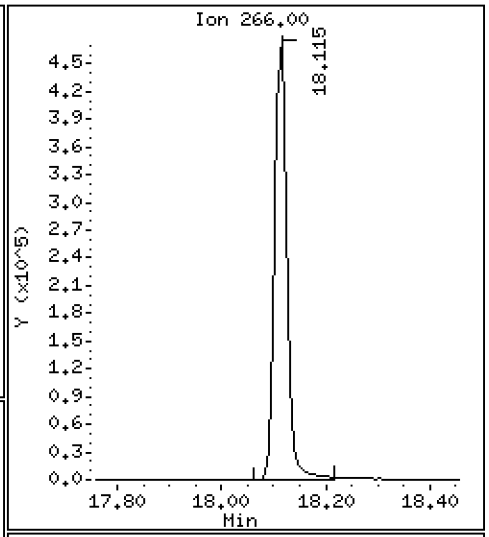
Concentration: 13.19 ug/ml

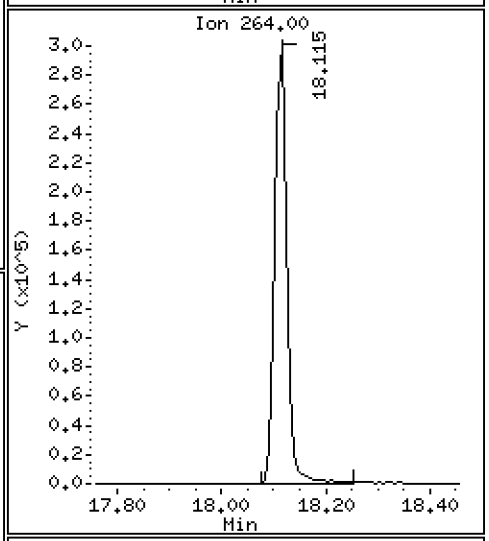


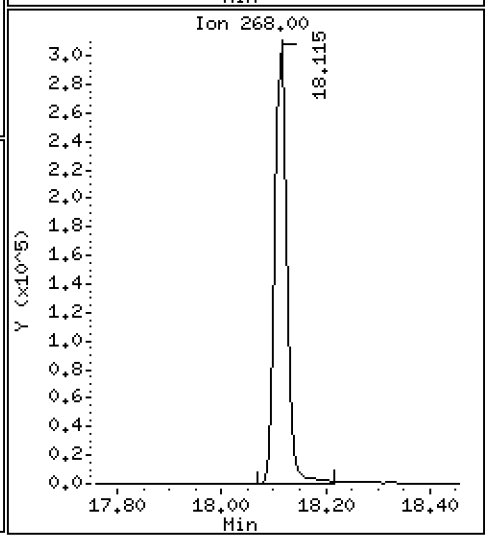












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

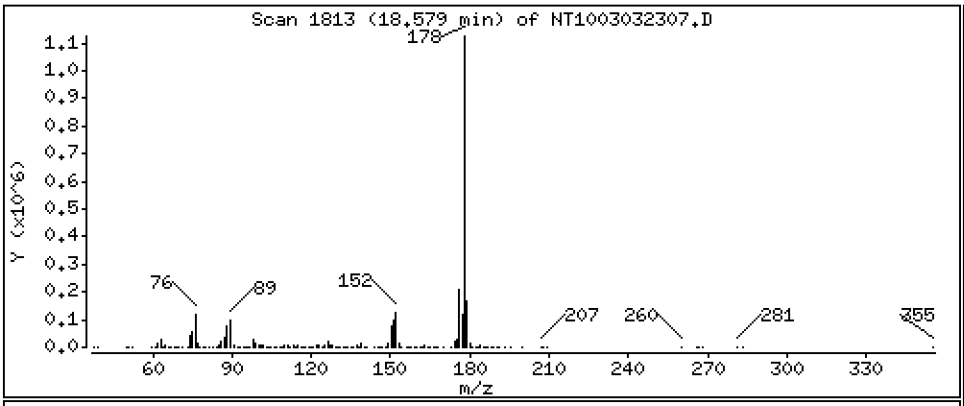
Operator: VTS

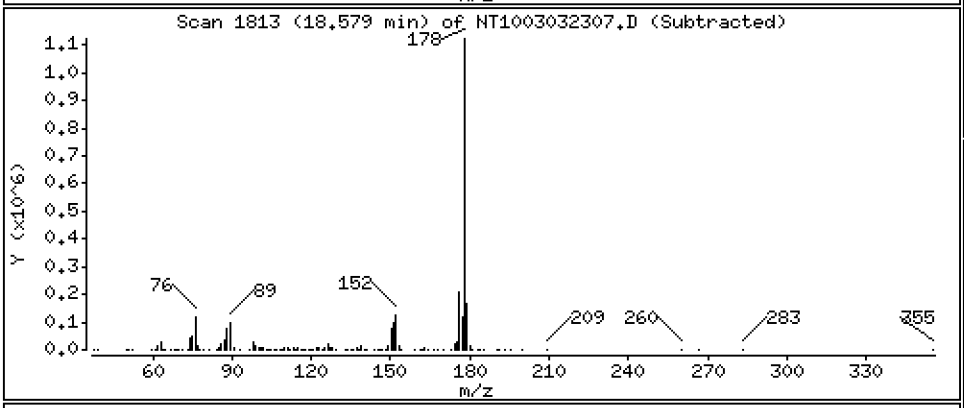
Column phase: ZB-5msi

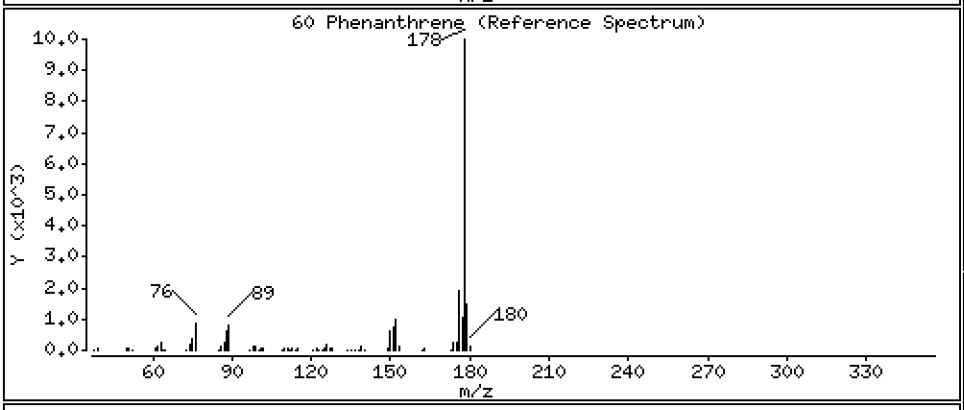
Column diameter: 0.25

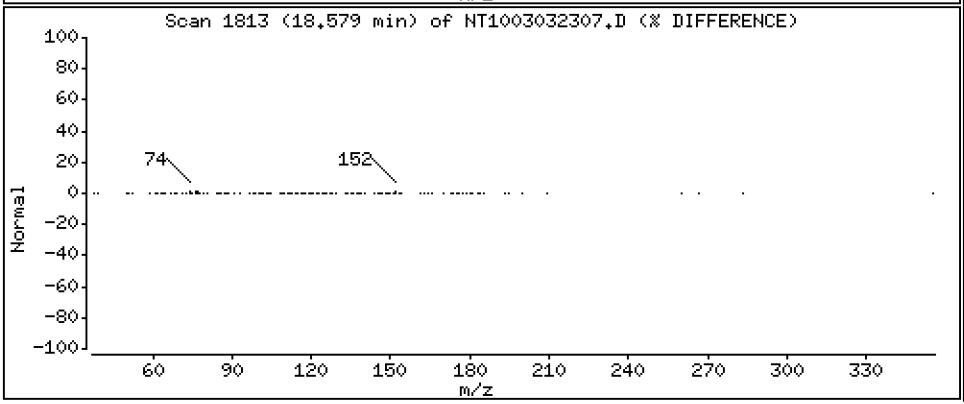
60 Phenanthrene

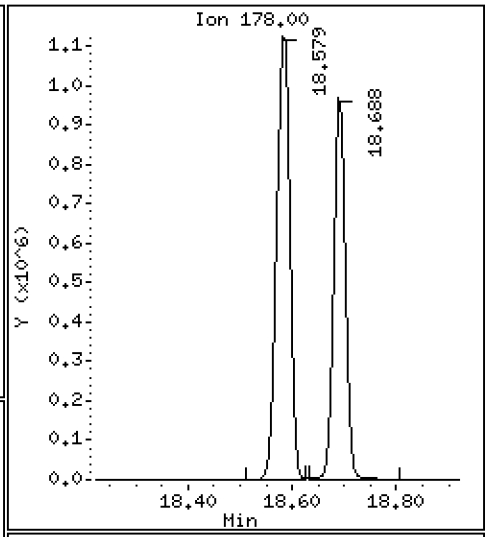
Concentration: 4.546 ug/ml

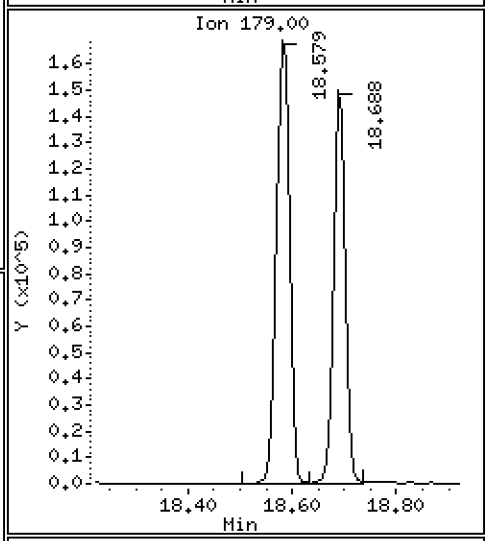


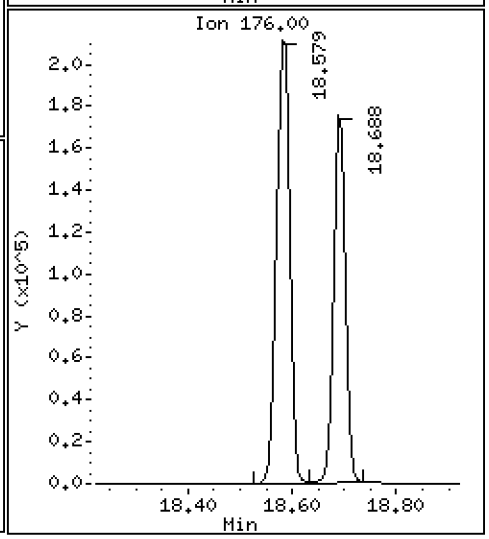












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

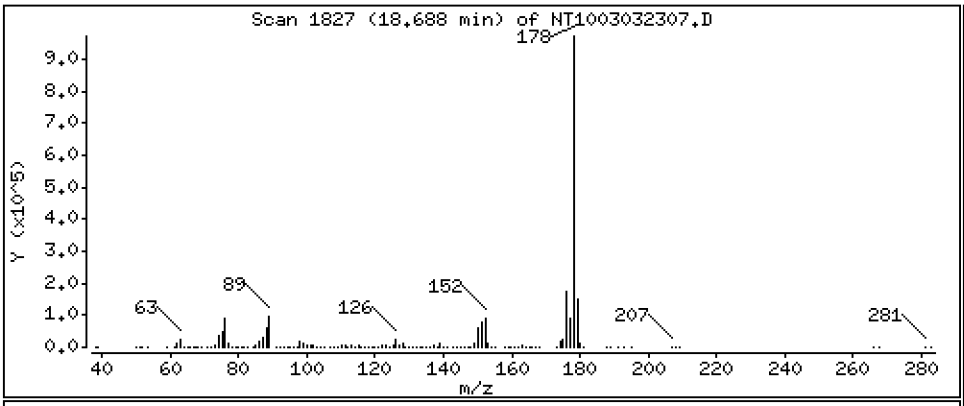
Operator: VTS

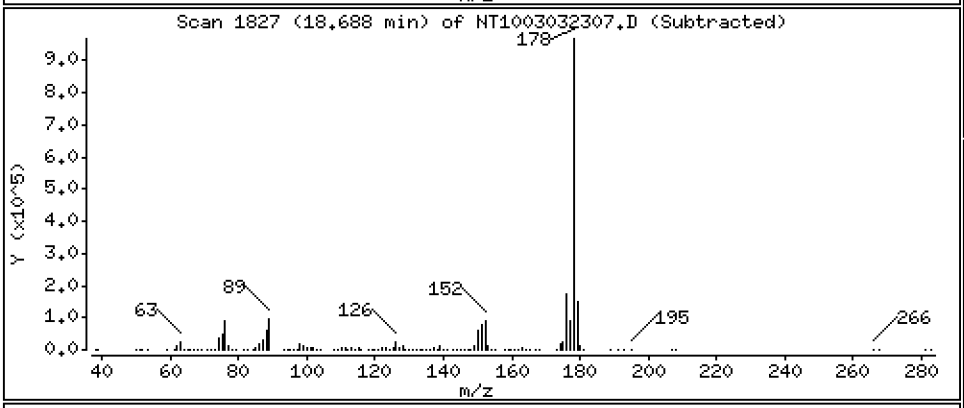
Column phase: ZB-5msi

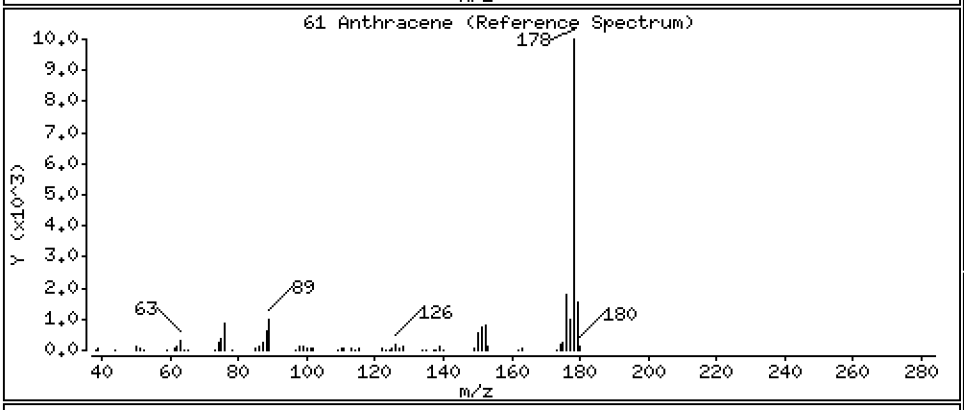
Column diameter: 0.25

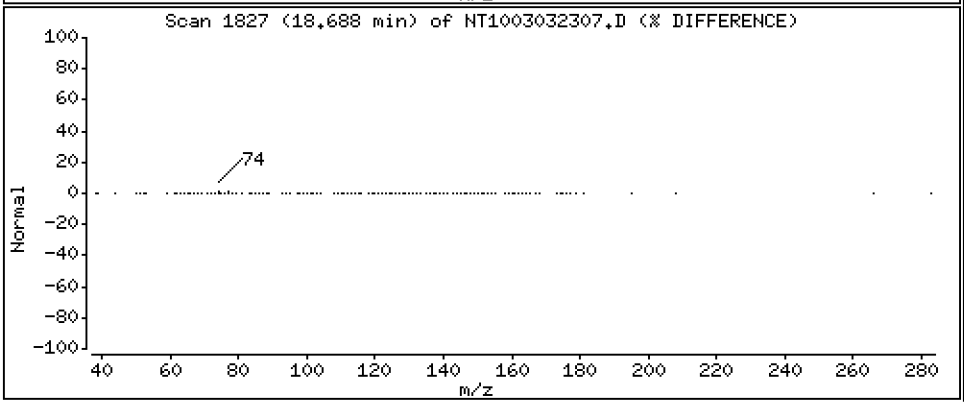
61 Anthracene

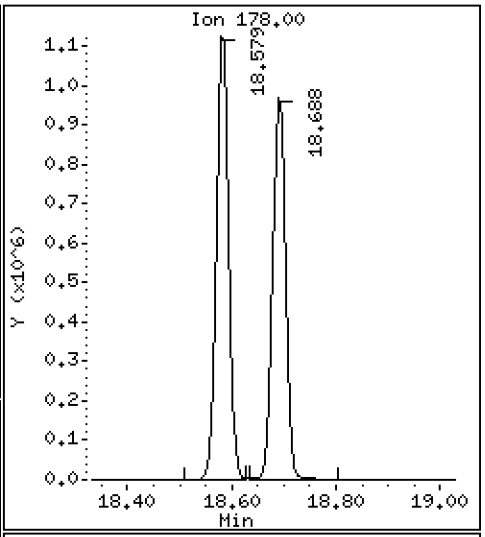
Concentration: 3.905 ug/ml

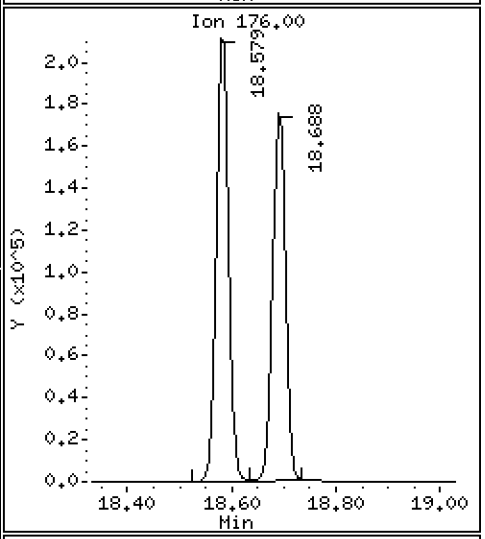


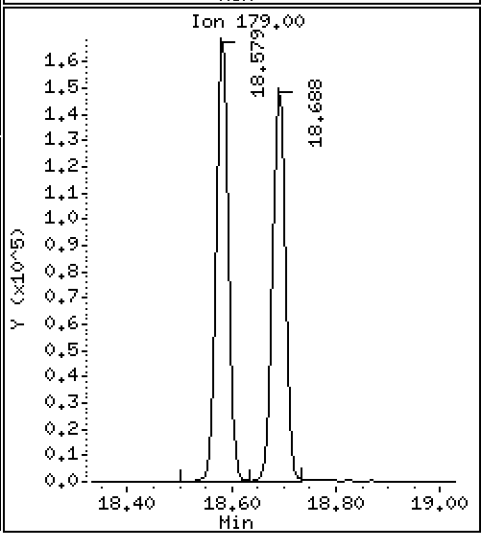












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

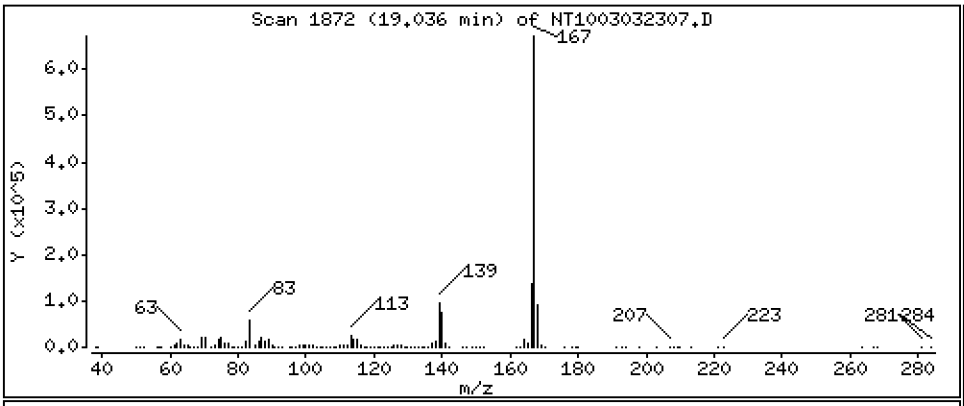
Operator: VTS

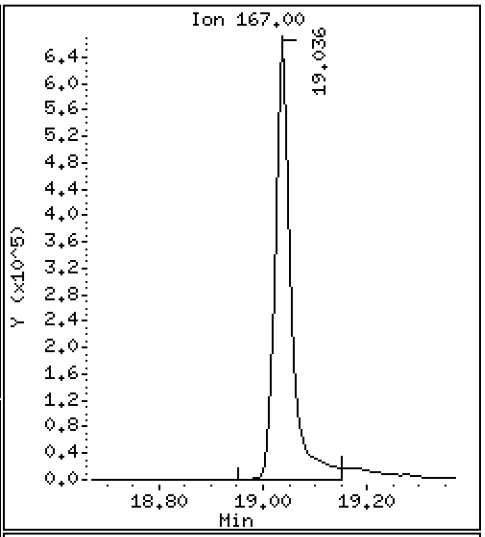
Column phase: ZB-5msi

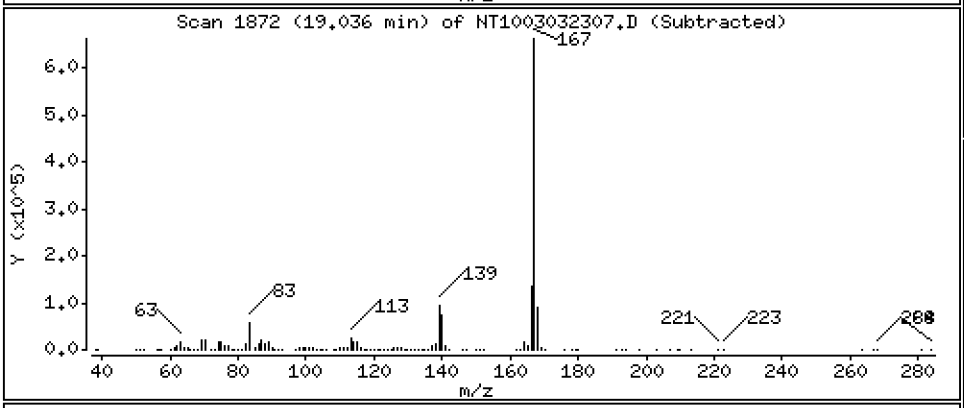
Column diameter: 0.25

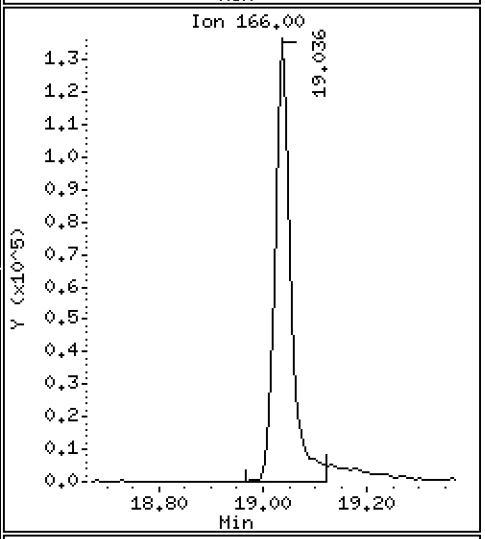
62 Carbazole

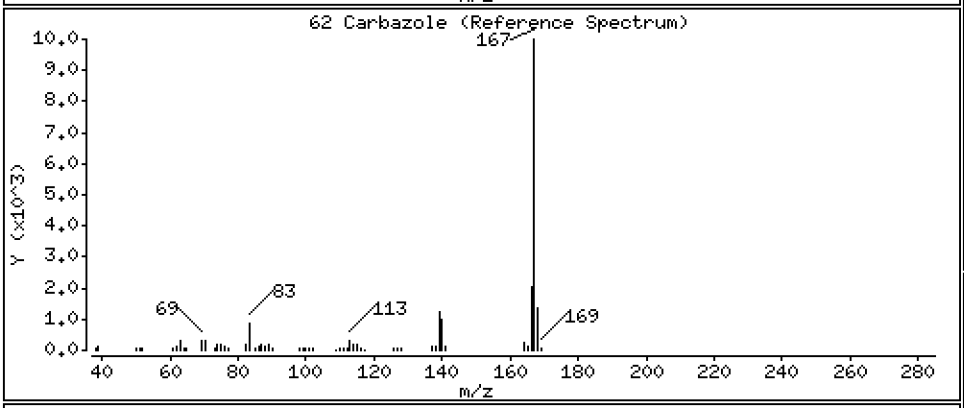
Concentration: 3.865 ug/ml

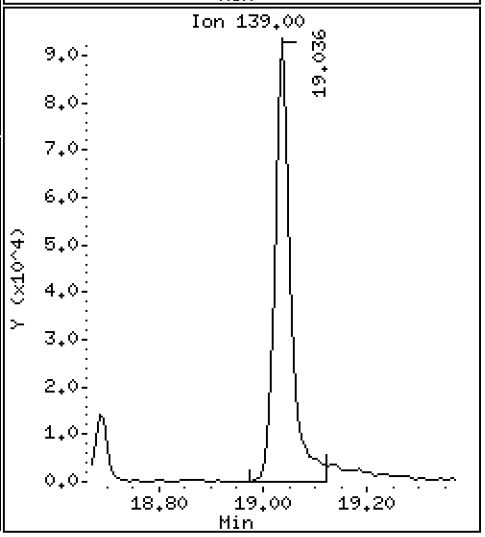


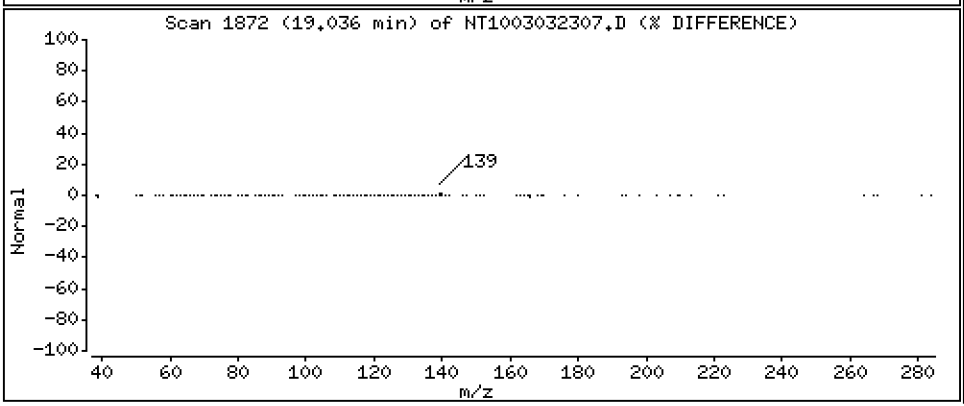












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

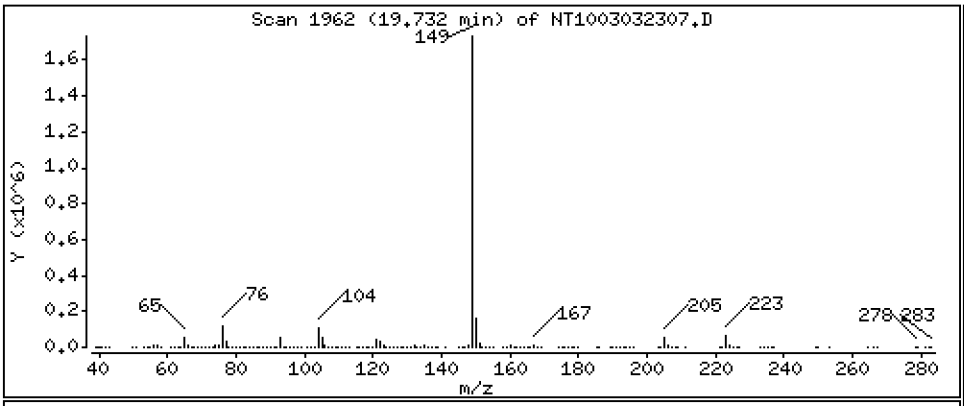
Operator: VTS

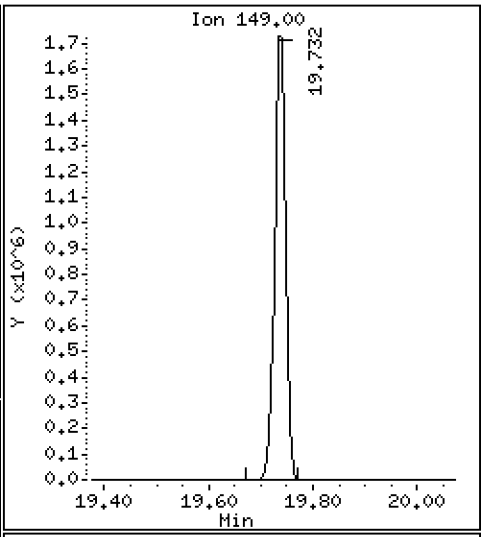
Column phase: ZB-5msi

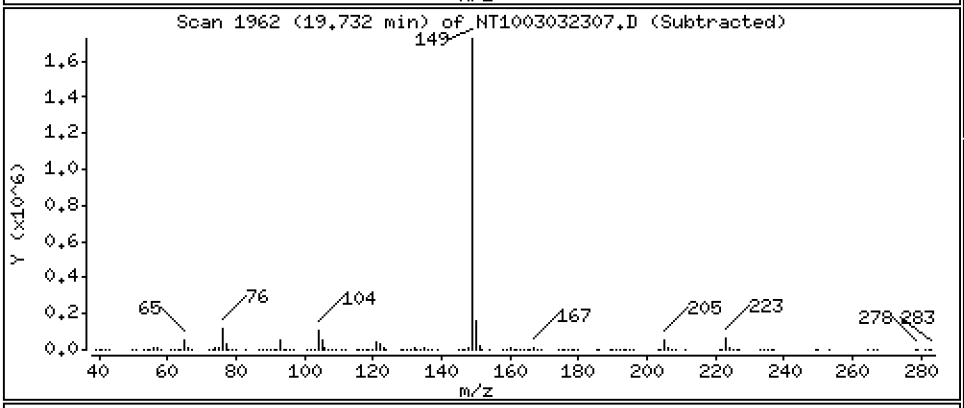
Column diameter: 0.25

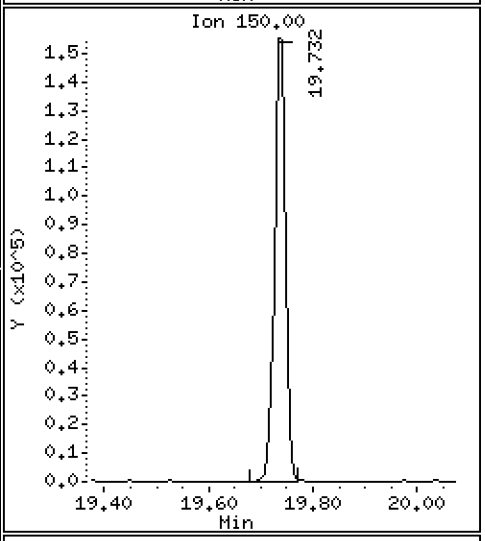
63 Di-n-butylphthalate

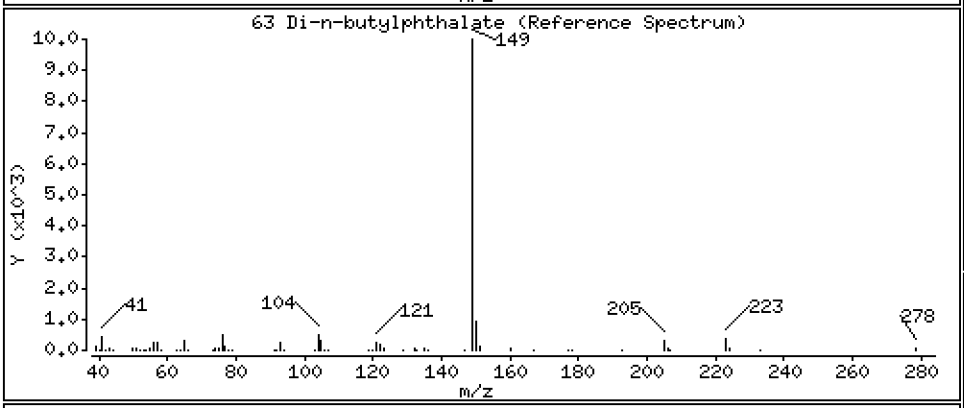
Concentration: 4.893 ug/ml

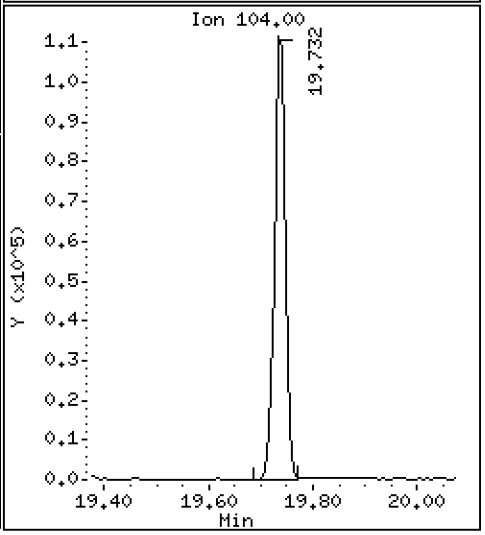


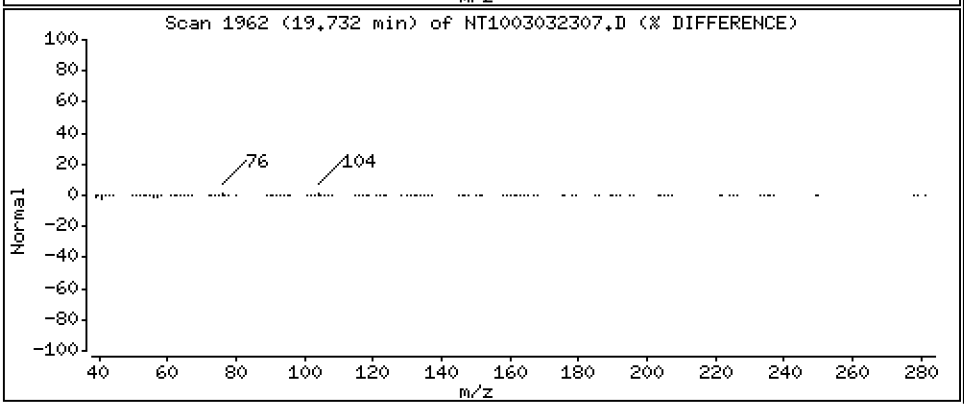












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

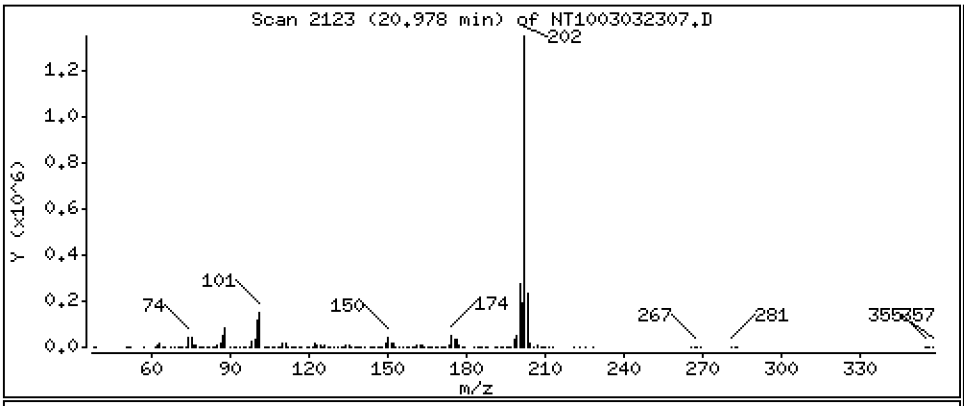
Operator: VTS

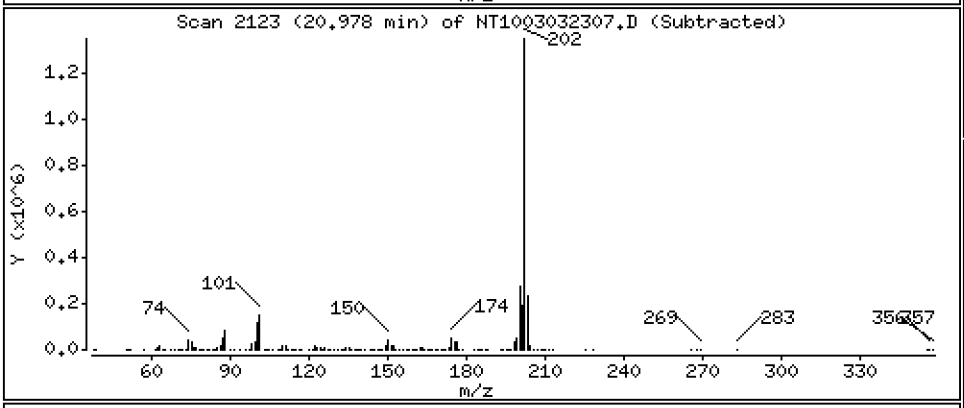
Column phase: ZB-5msi

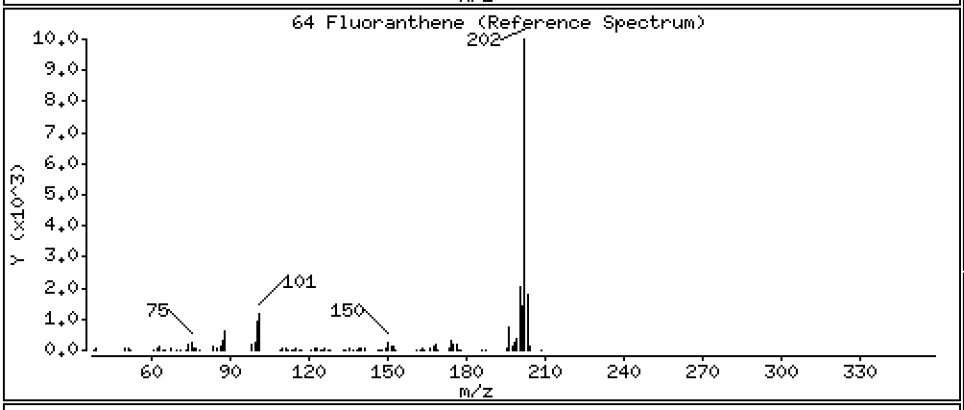
Column diameter: 0.25

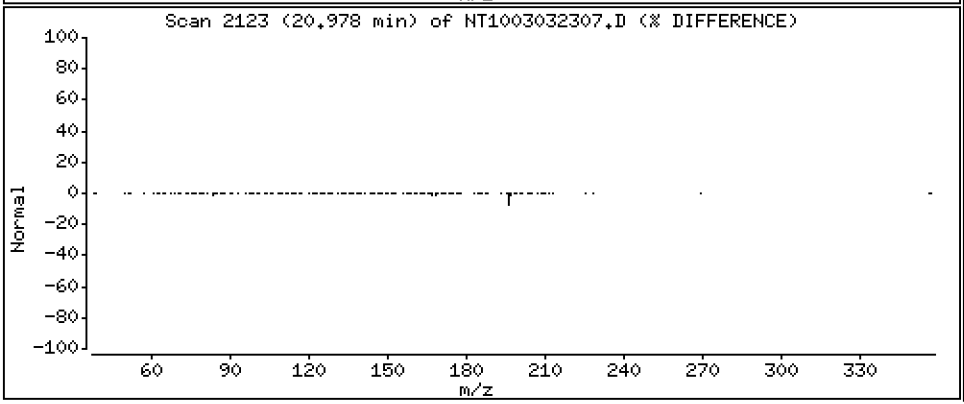
64 Fluoranthene

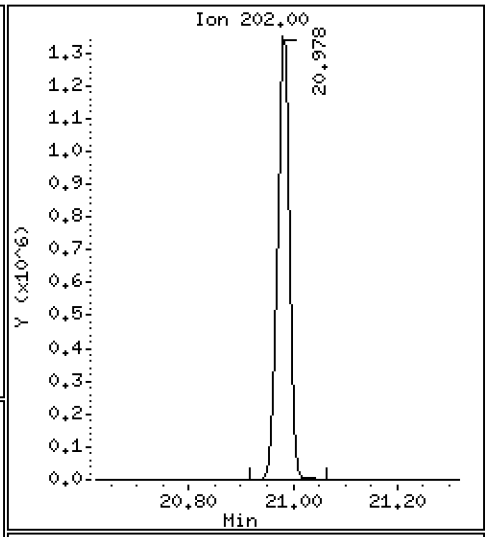
Concentration: 4.386 ug/ml

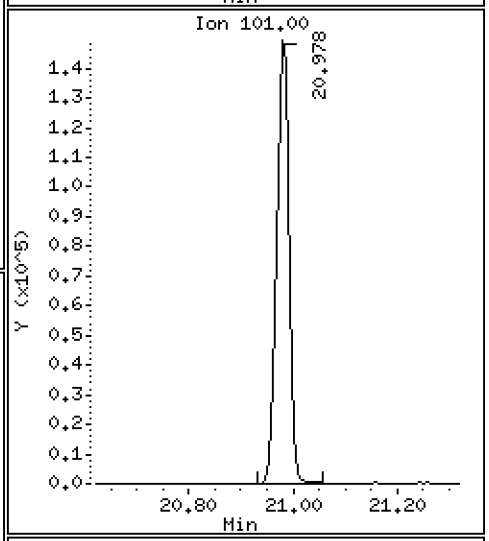


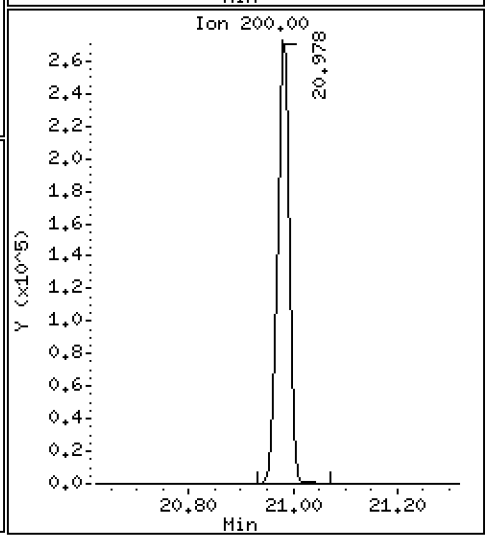












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

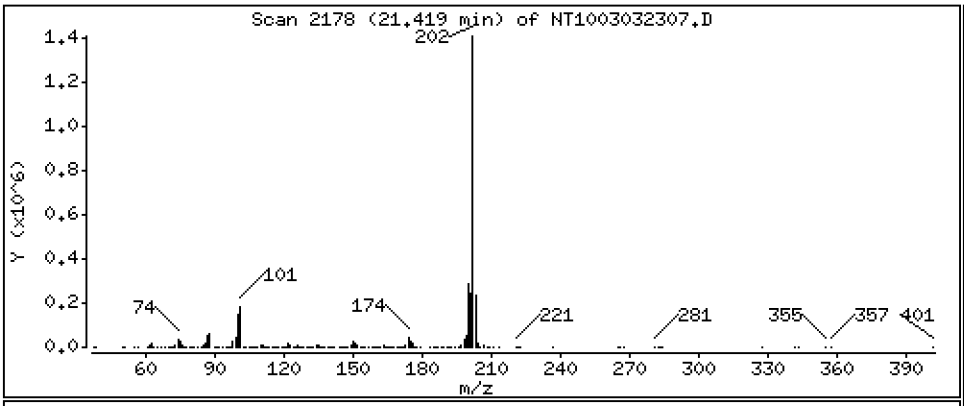
Operator: VTS

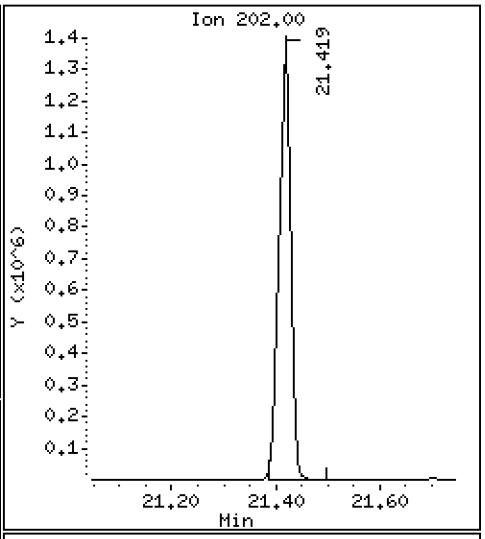
Column phase: ZB-5msi

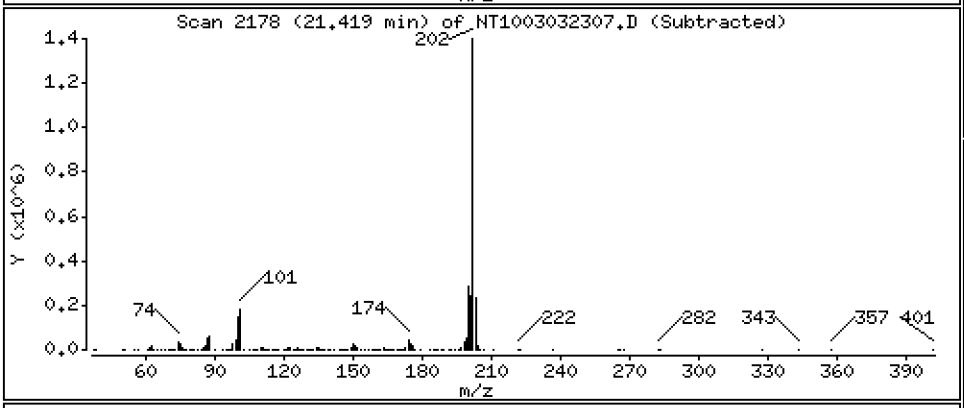
Column diameter: 0.25

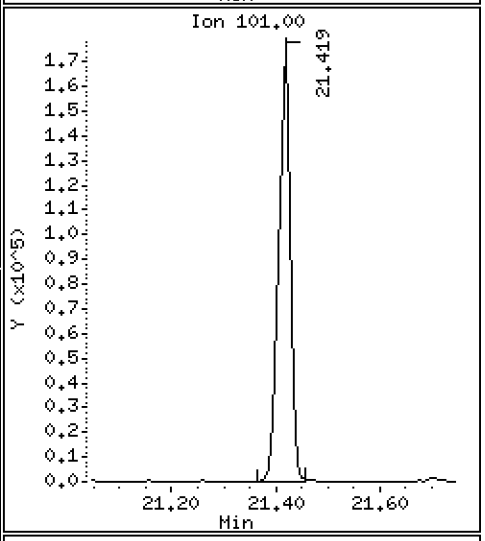
65 Pyrene

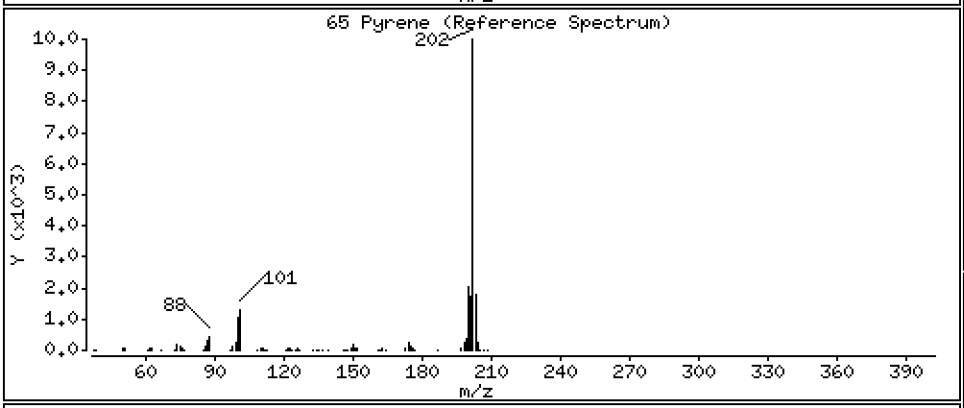
Concentration: 3.149 ug/ml

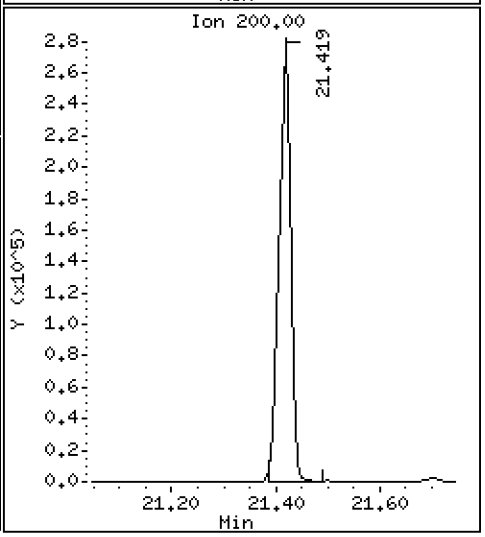


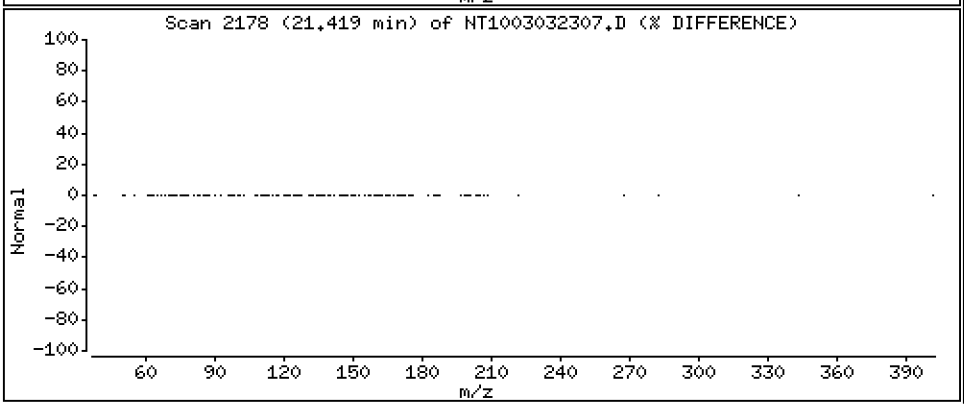












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

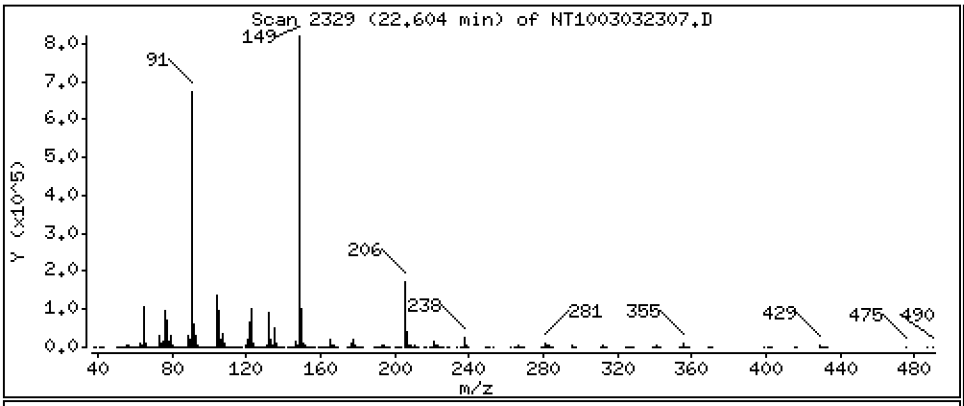
Operator: VTS

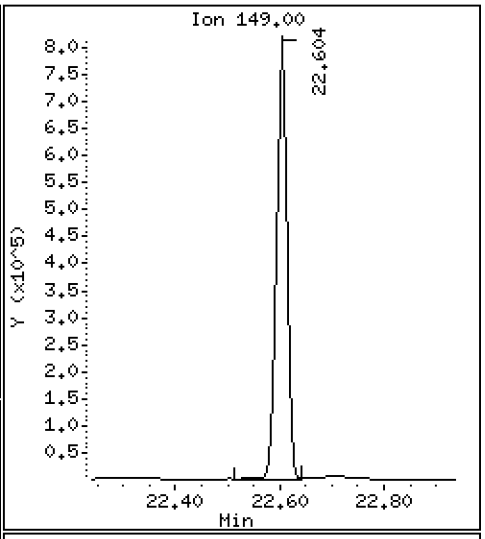
Column phase: ZB-5msi

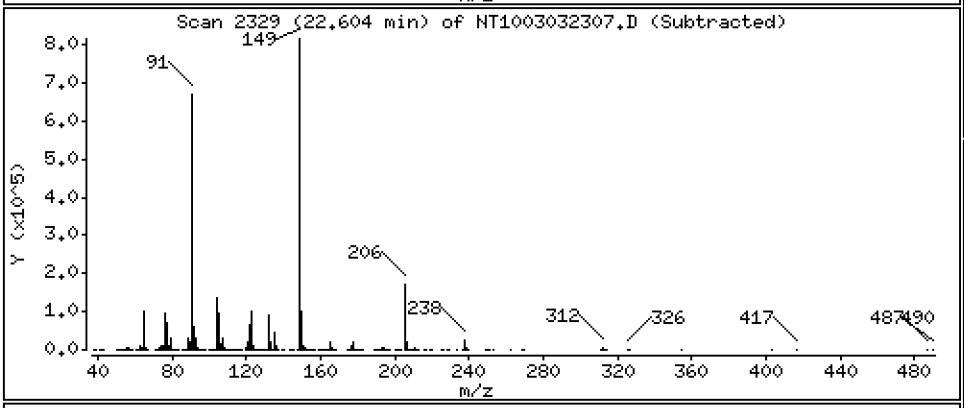
Column diameter: 0.25

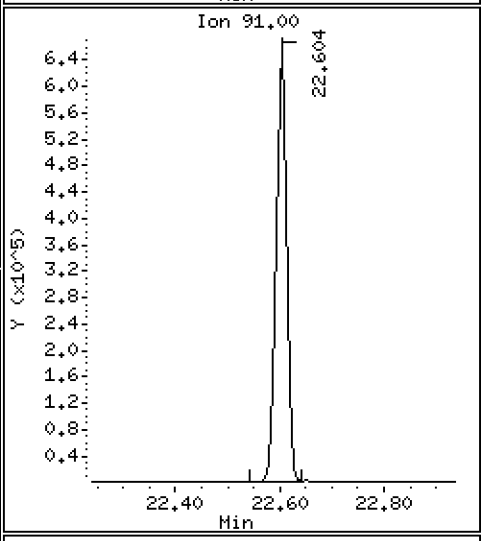
67 Butylbenzylphthalate

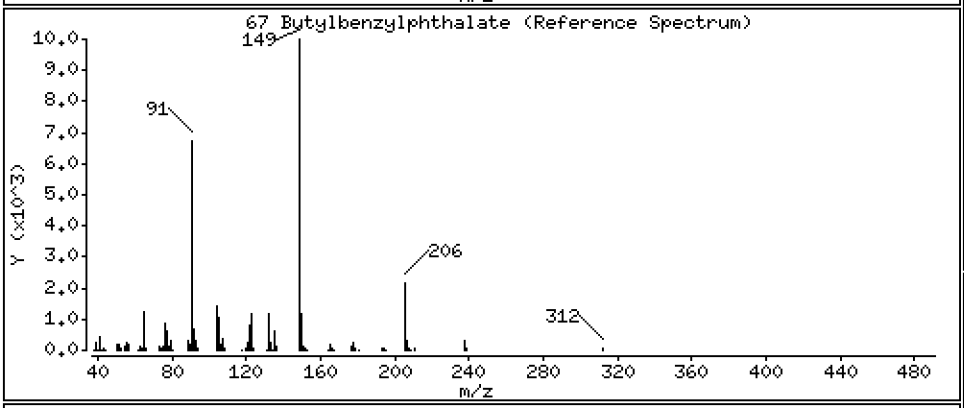
Concentration: 4.138 ug/ml

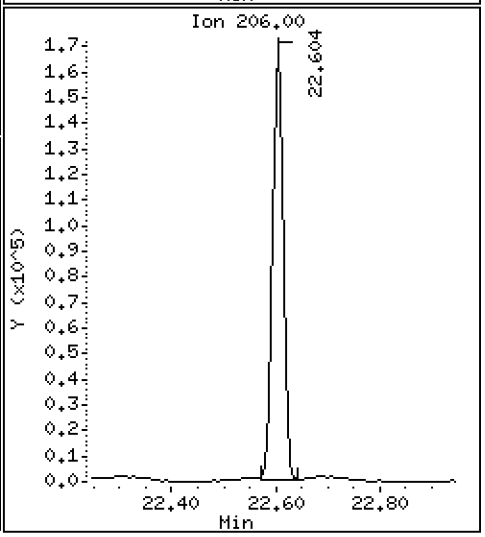


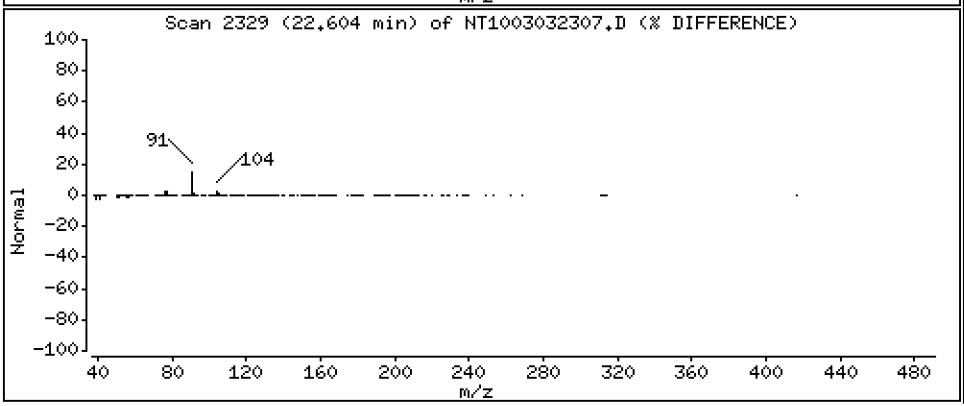












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

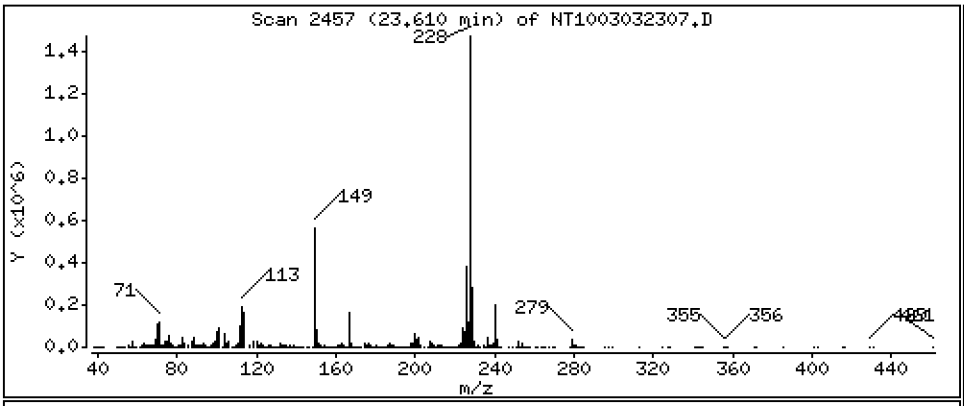
Operator: VTS

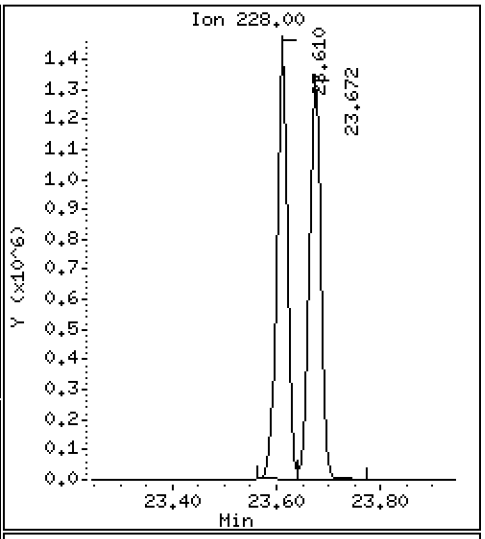
Column phase: ZB-5msi

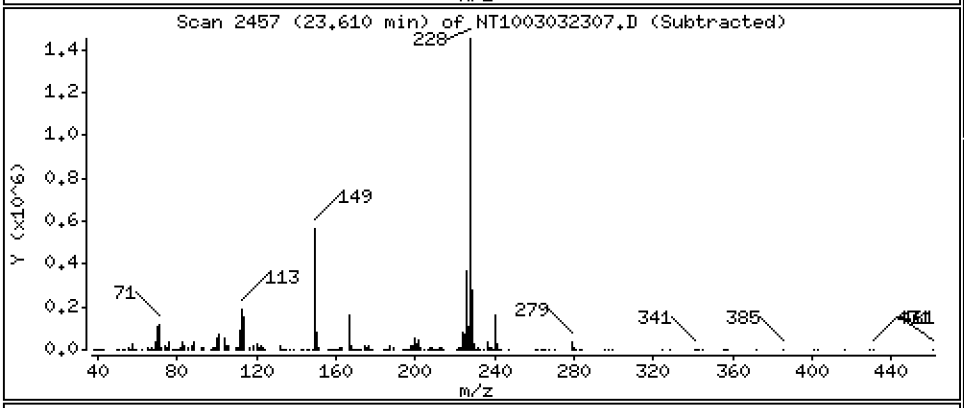
Column diameter: 0.25

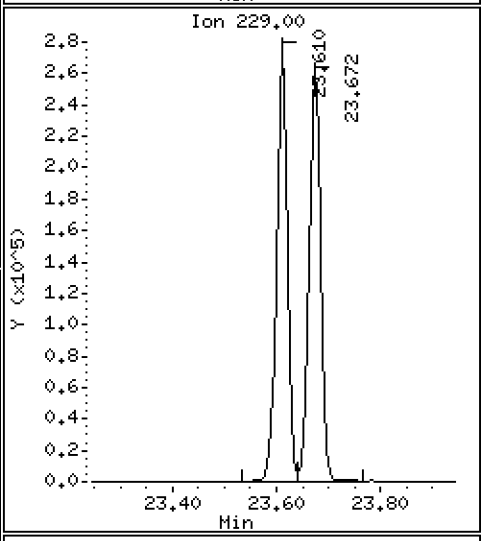
68 Benzo(a)anthracene

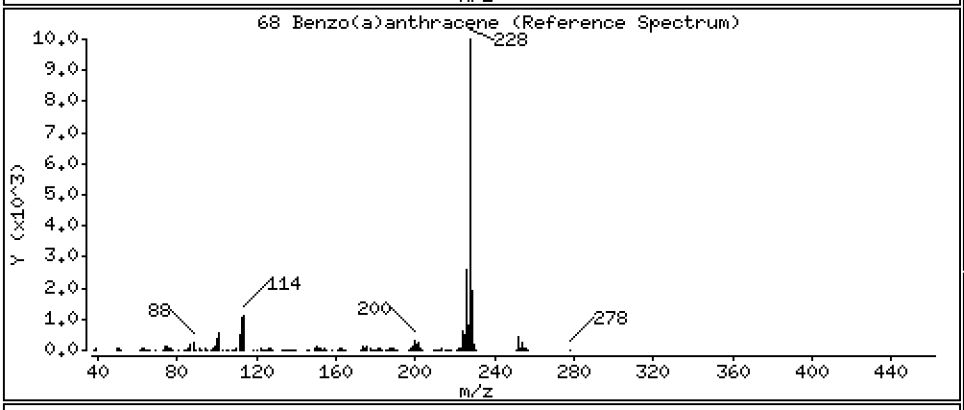
Concentration: 4.135 ug/ml

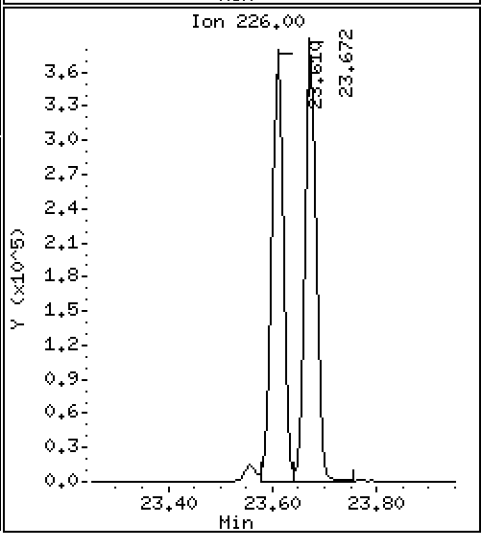


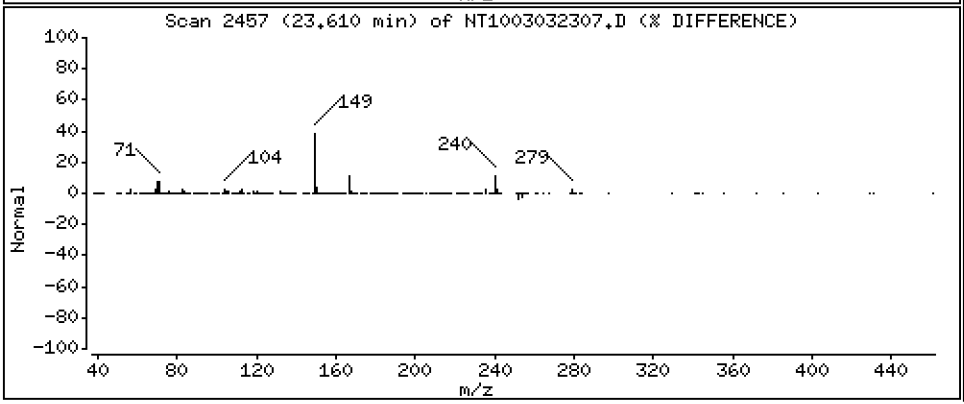












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

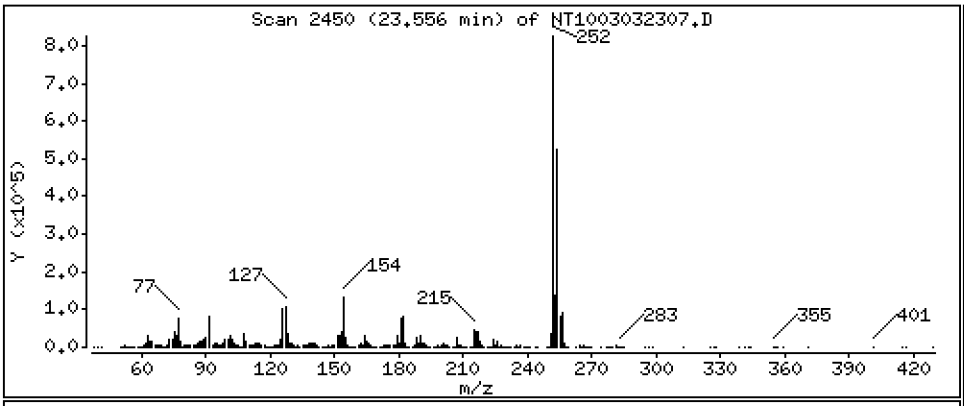
Operator: VTS

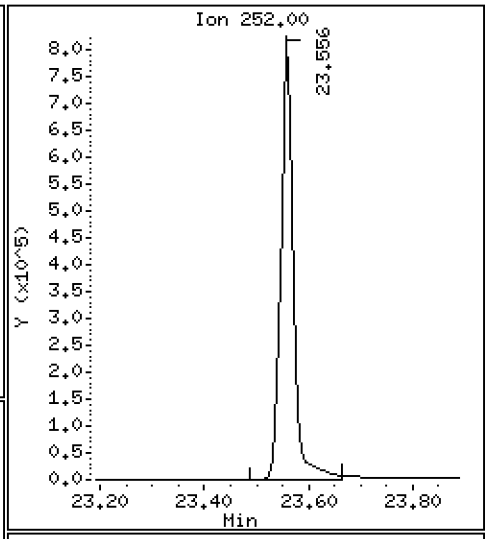
Column phase: ZB-5msi

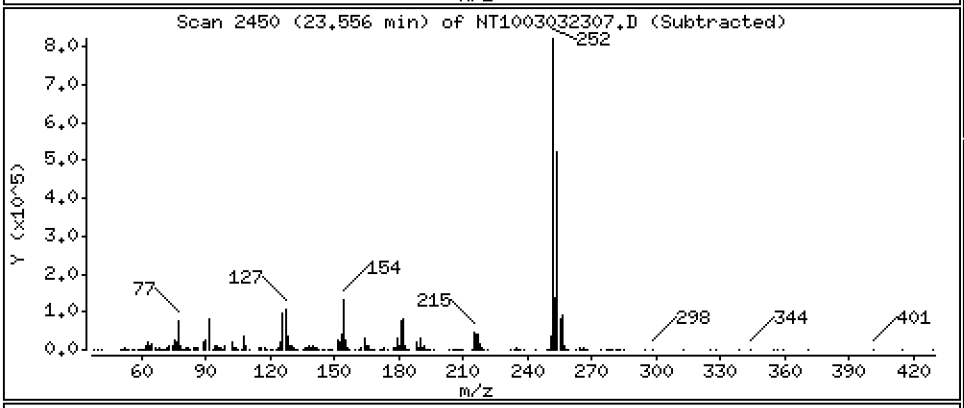
Column diameter: 0.25

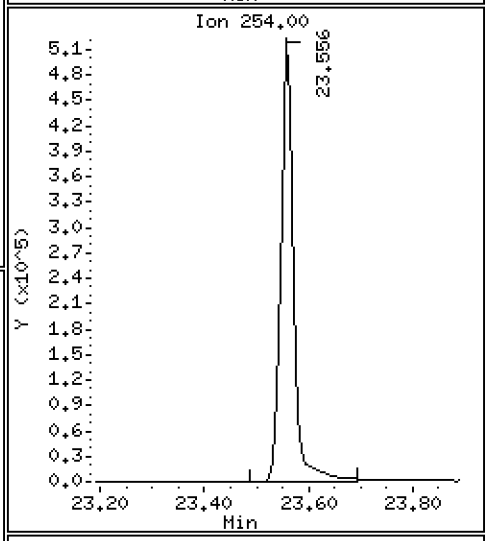
70 3,3'-Dichlorobenzidine

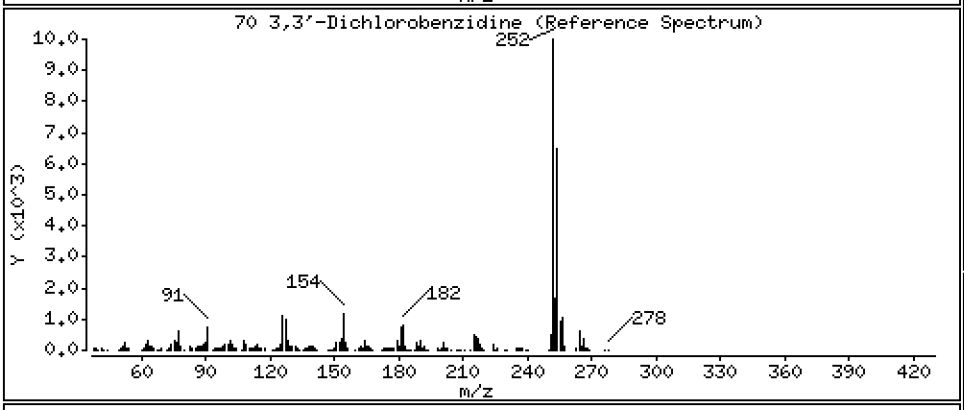
Concentration: 5.952 ug/ml

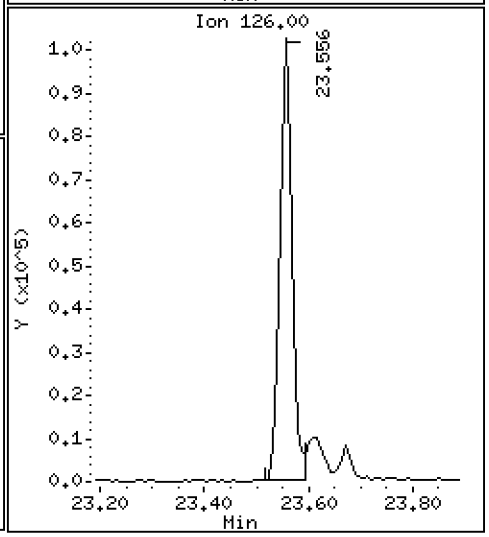


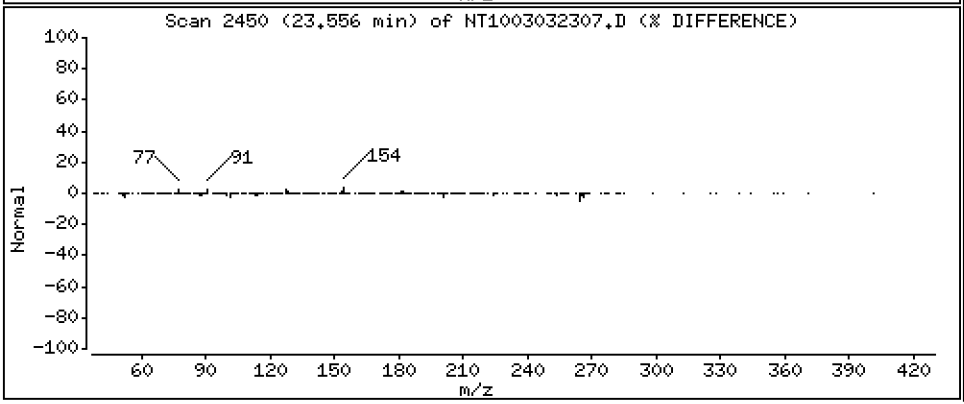












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

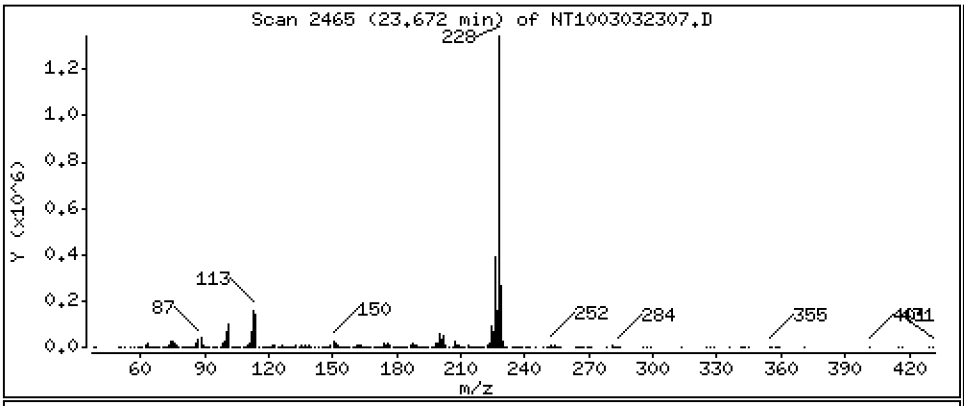
Operator: VTS

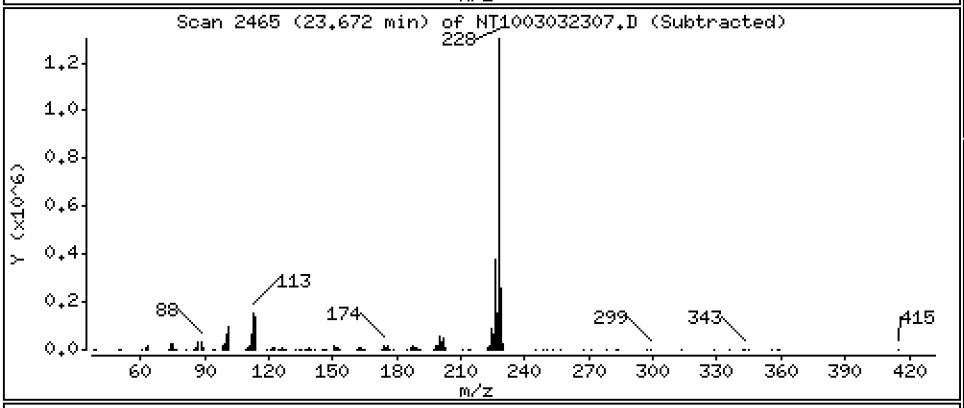
Column phase: ZB-5msi

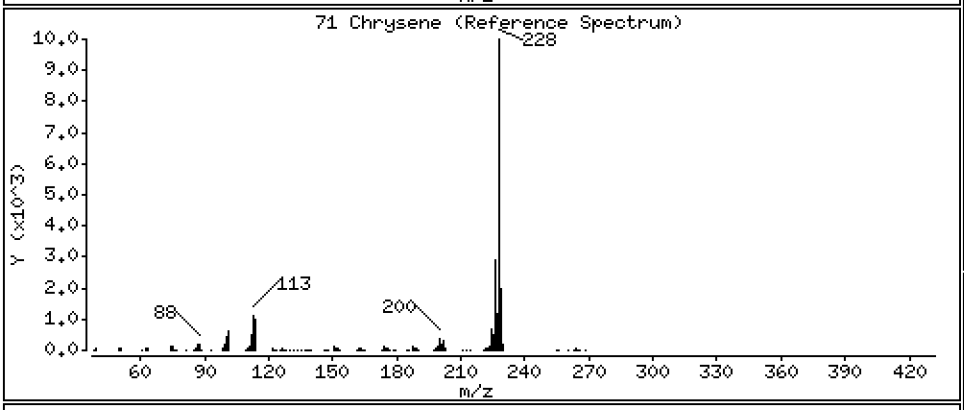
Column diameter: 0.25

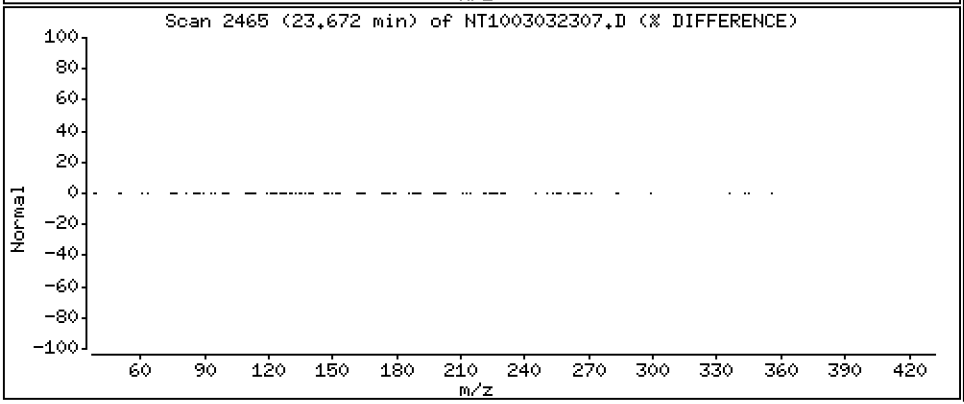
71 Chrysene

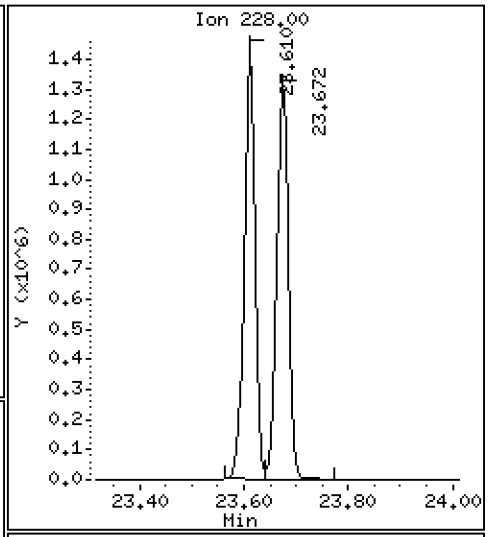
Concentration: 4.706 ug/ml

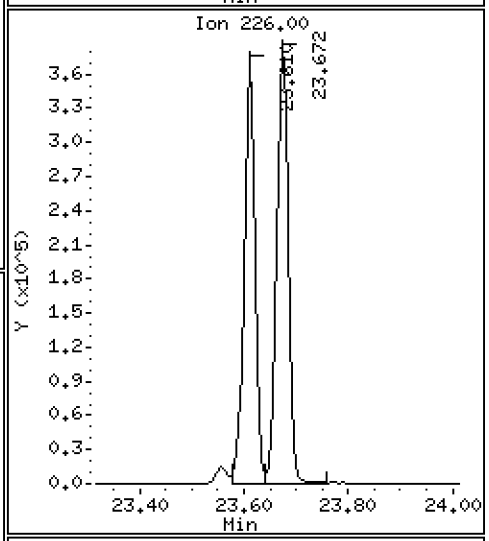


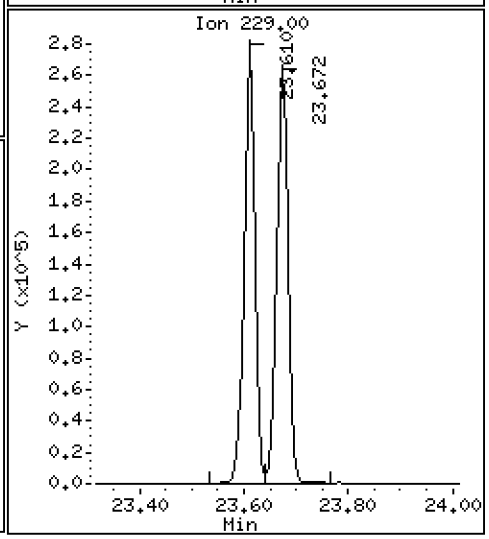












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

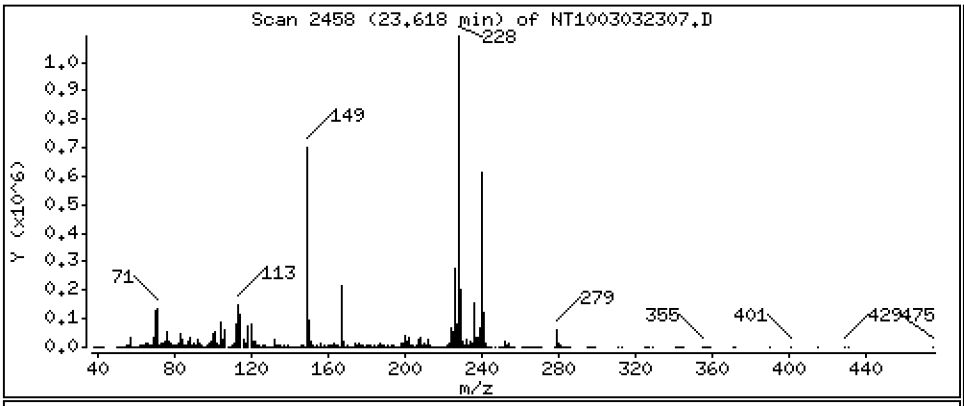
Operator: VTS

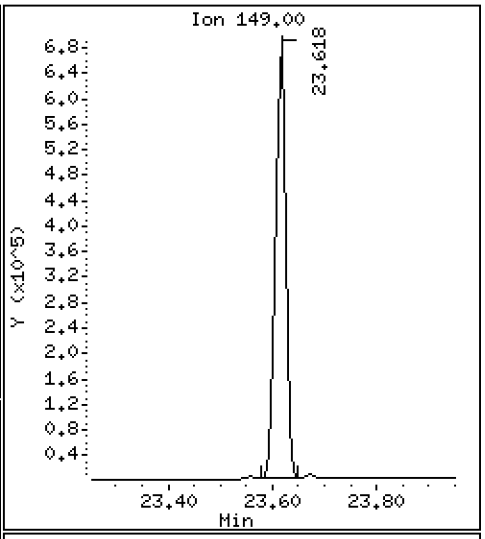
Column phase: ZB-5msi

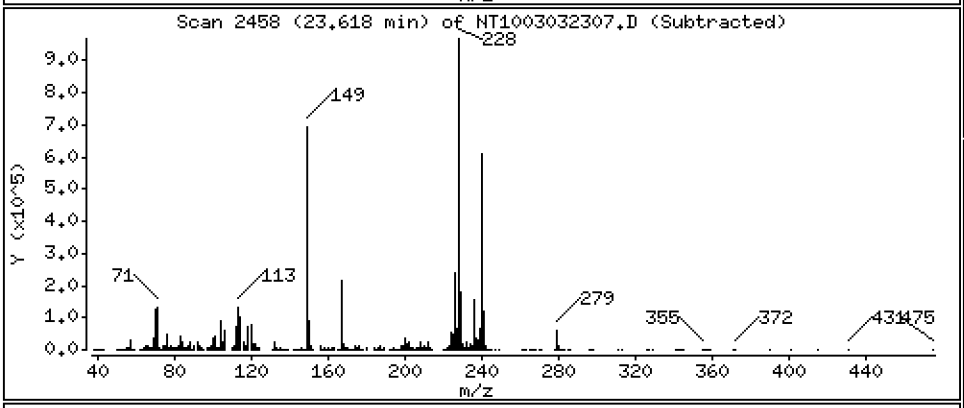
Column diameter: 0.25

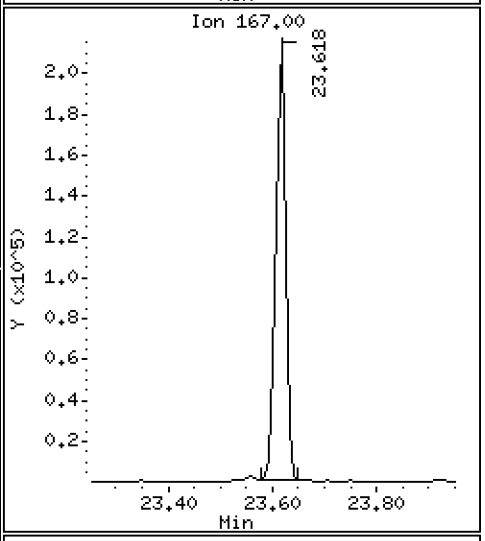
72 bis(2-Ethylhexyl)phthalate

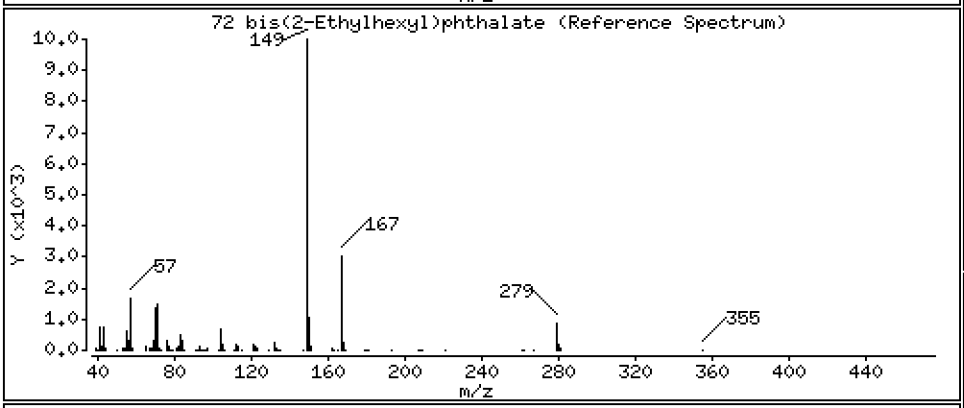
Concentration: 2.866 ug/ml

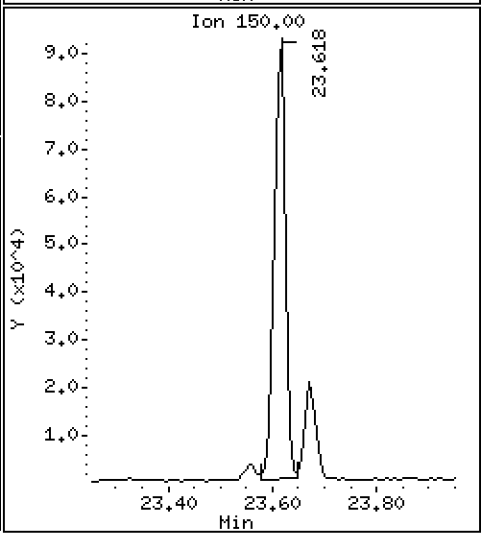


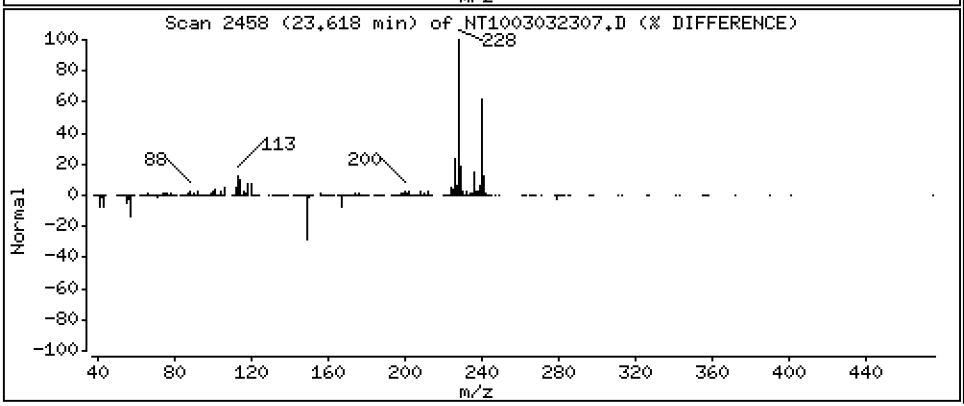












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

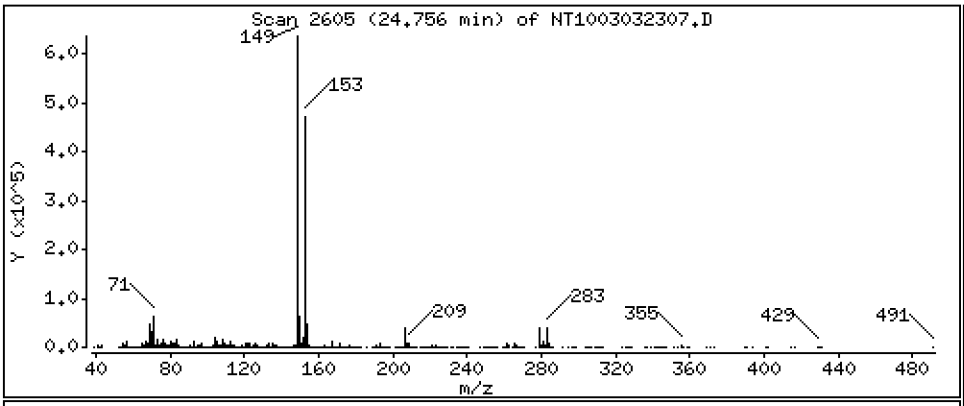
Operator: VTS

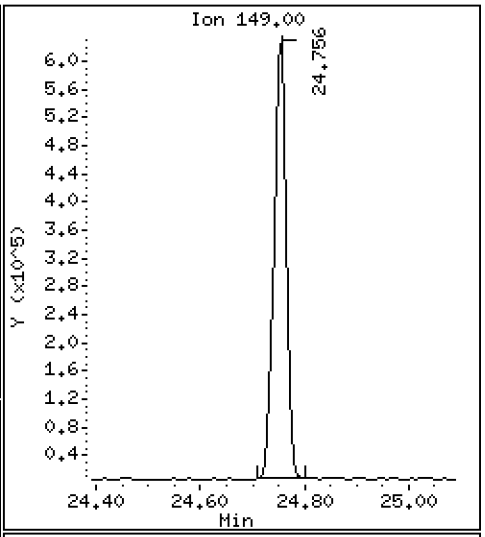
Column phase: ZB-5msi

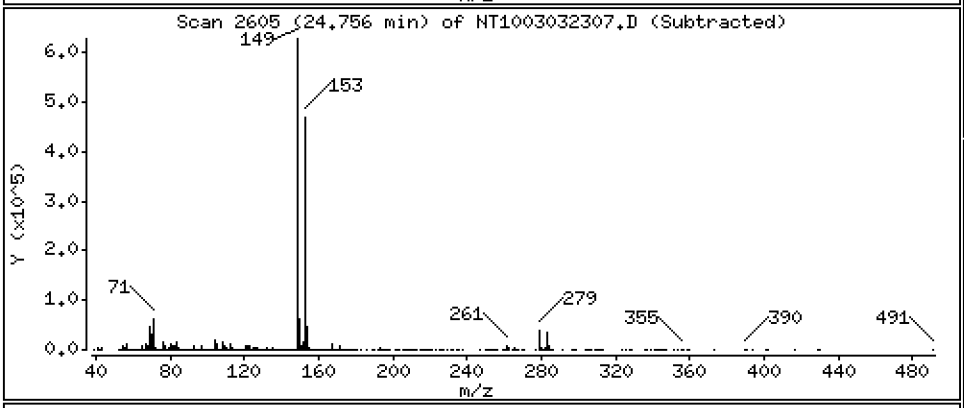
Column diameter: 0.25

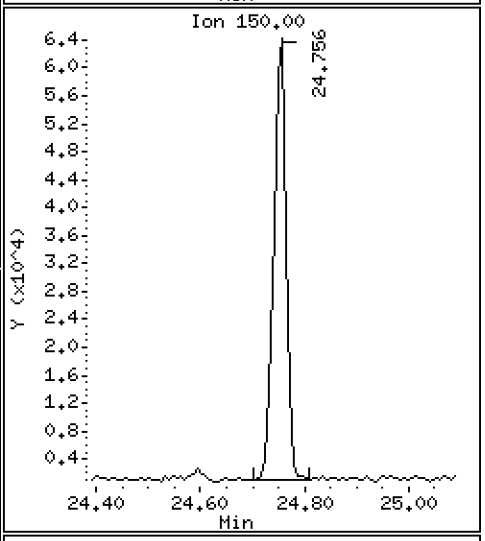
73 Di-n-octylphthalate

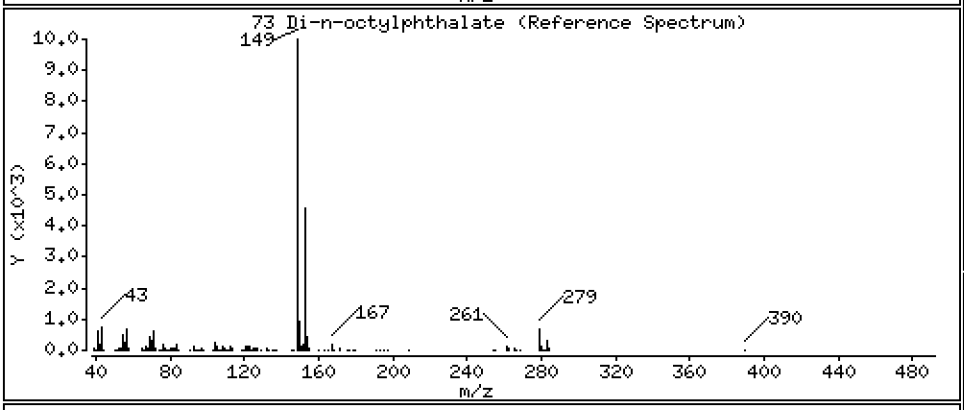
Concentration: 2.085 ug/ml

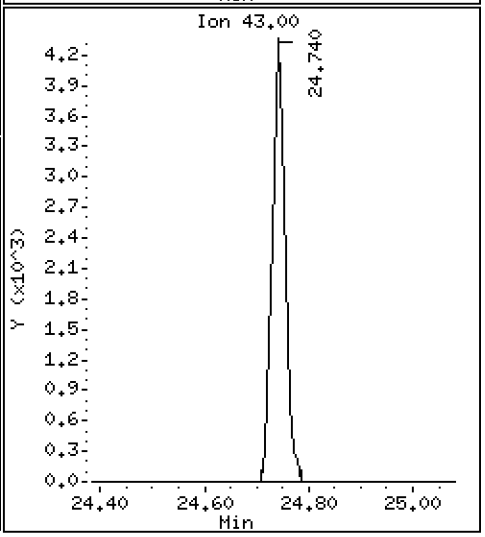


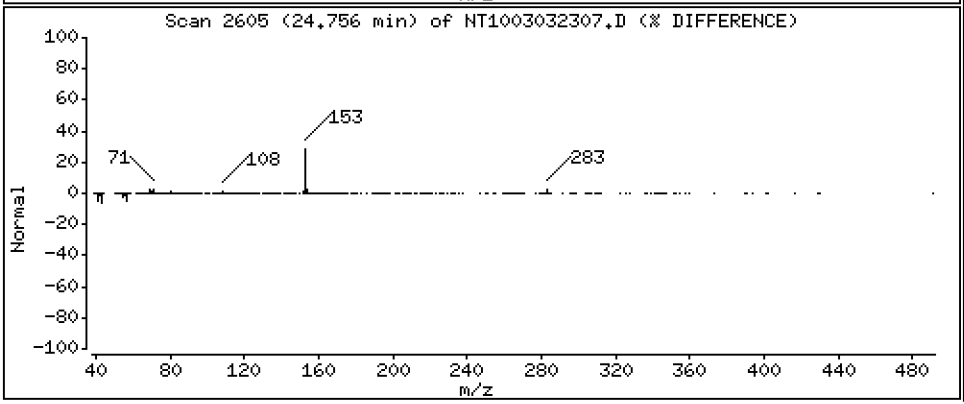












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

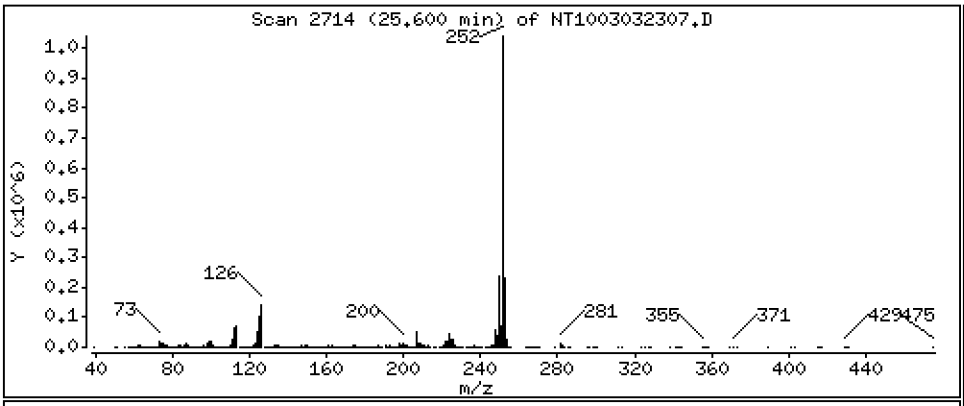
Operator: VTS

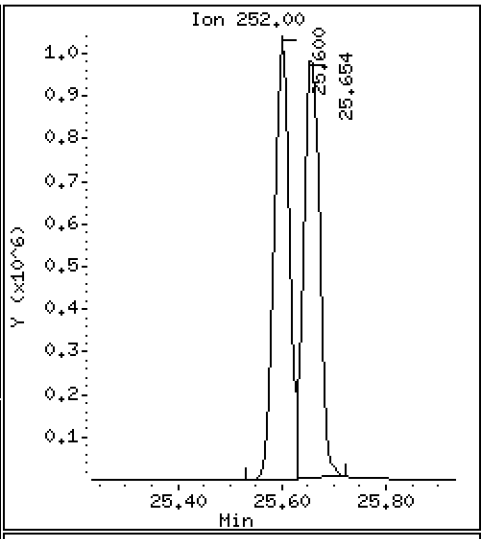
Column phase: ZB-5msi

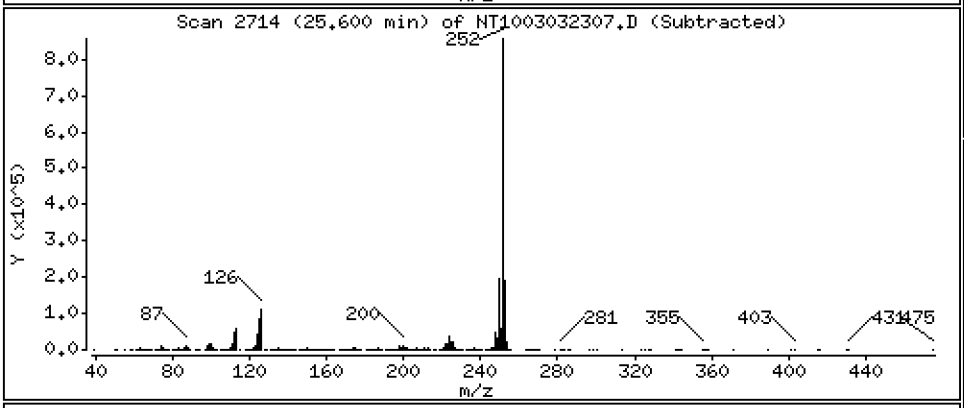
Column diameter: 0.25

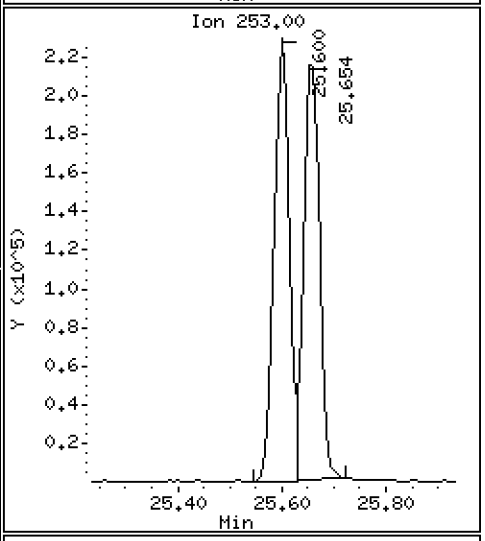
74 Benzo(b)fluoranthene

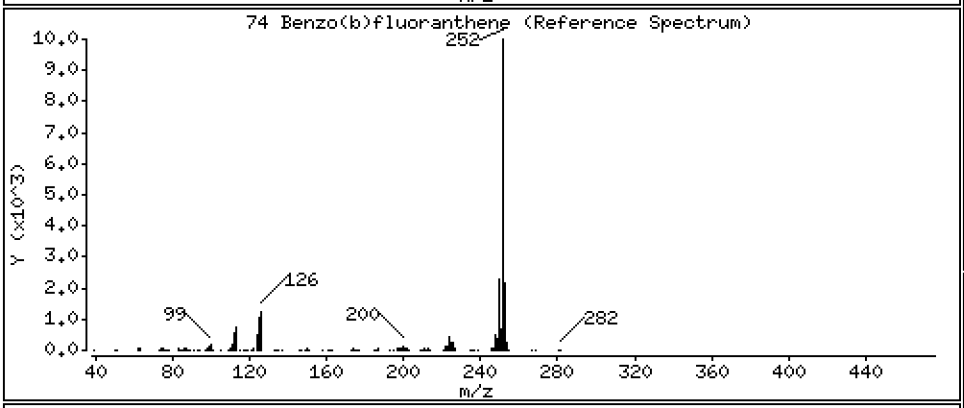
Concentration: 4.343 ug/ml

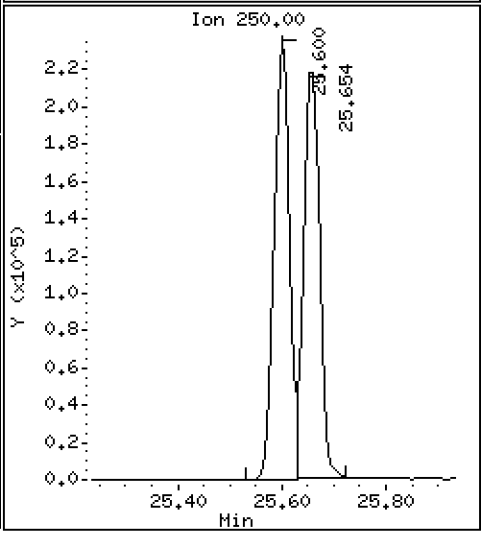


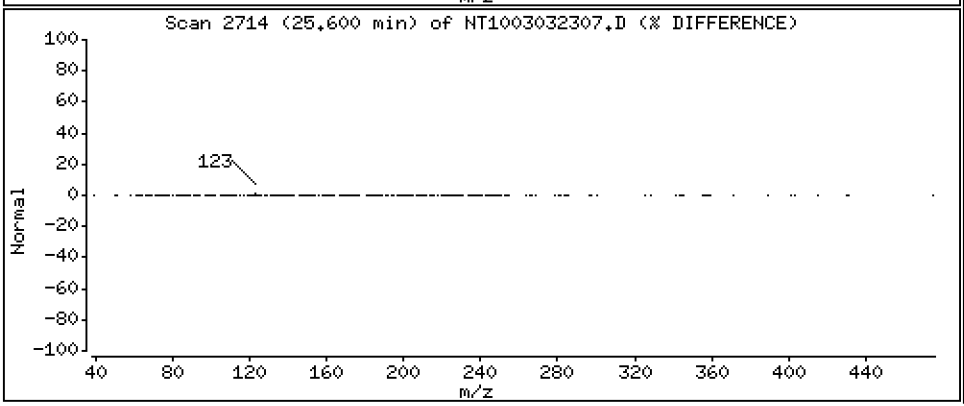












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

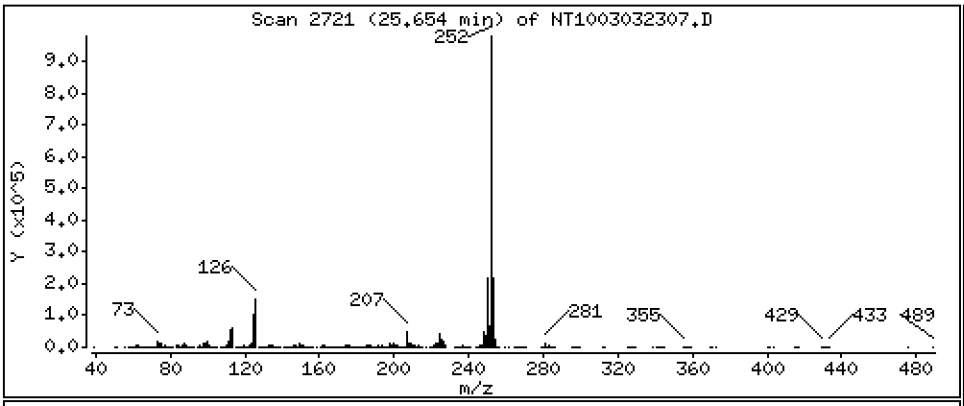
Operator: VTS

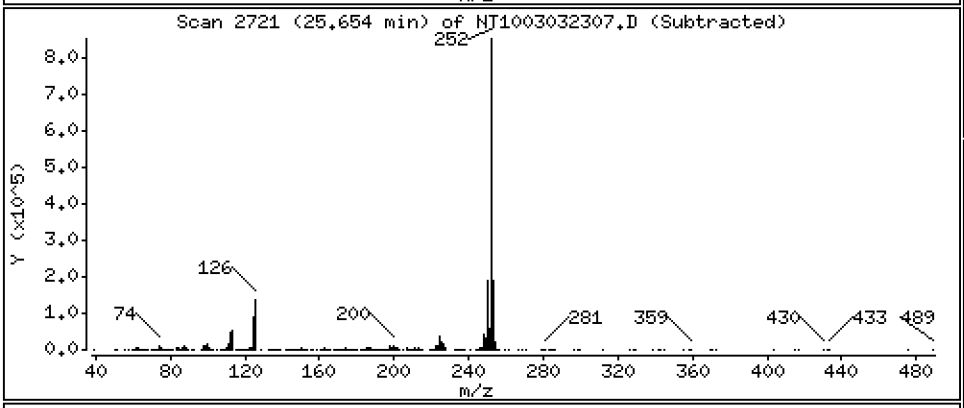
Column phase: ZB-5msi

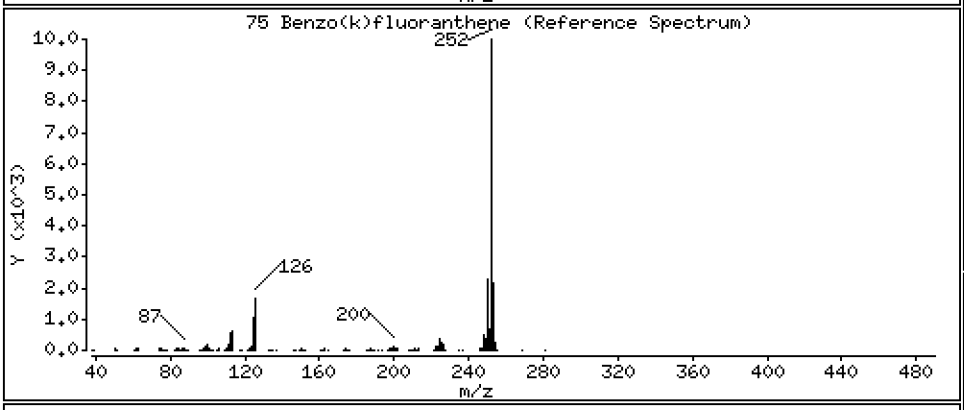
Column diameter: 0.25

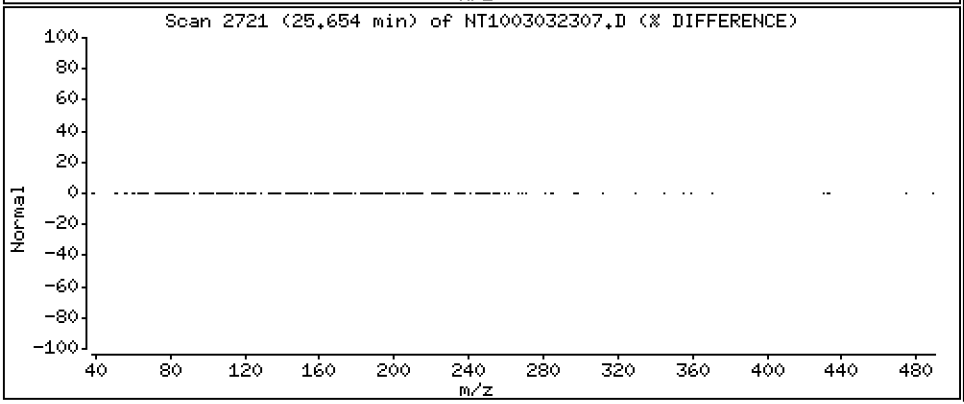
75 Benzo(k)fluoranthene

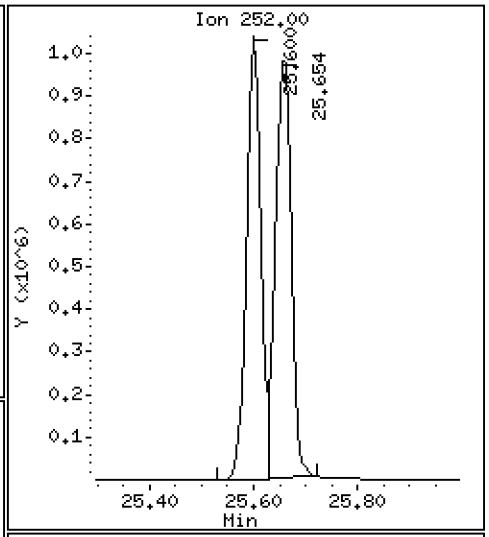
Concentration: 5.141 ug/ml

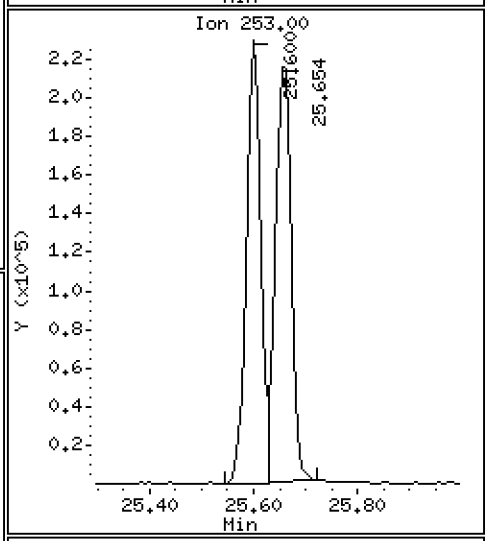


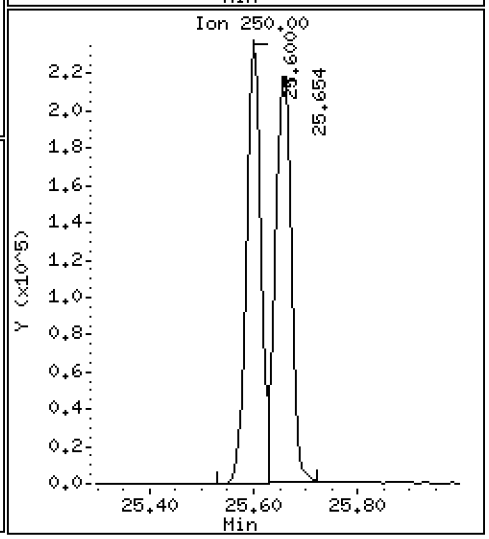












Date : 03-MAR-2023 21:37

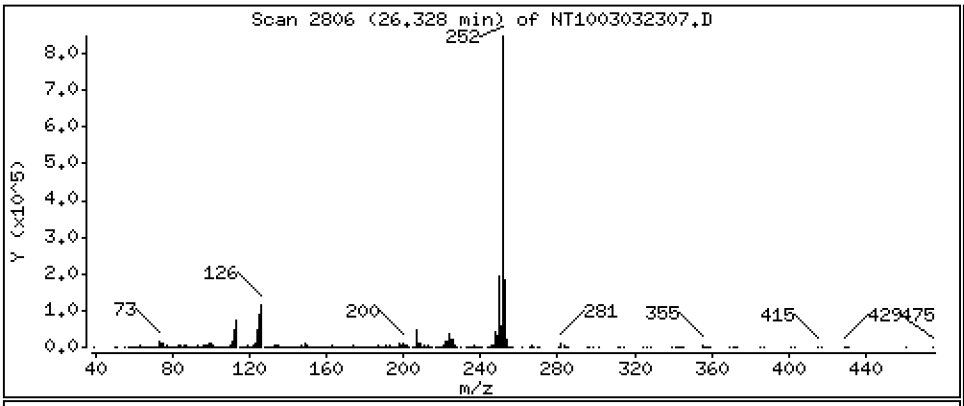
Client ID: Instrument: nt10.i

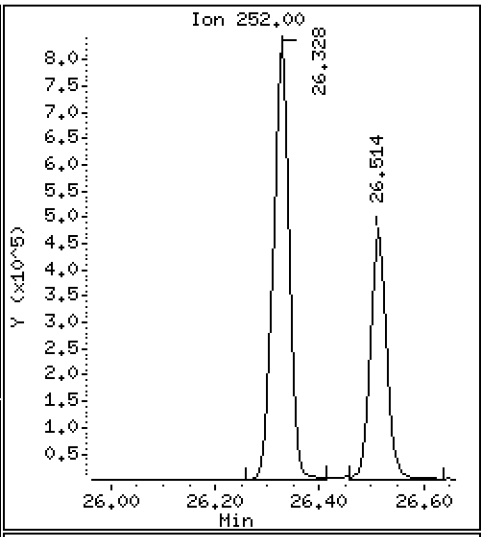
Sample Info: BLA0673-BS1

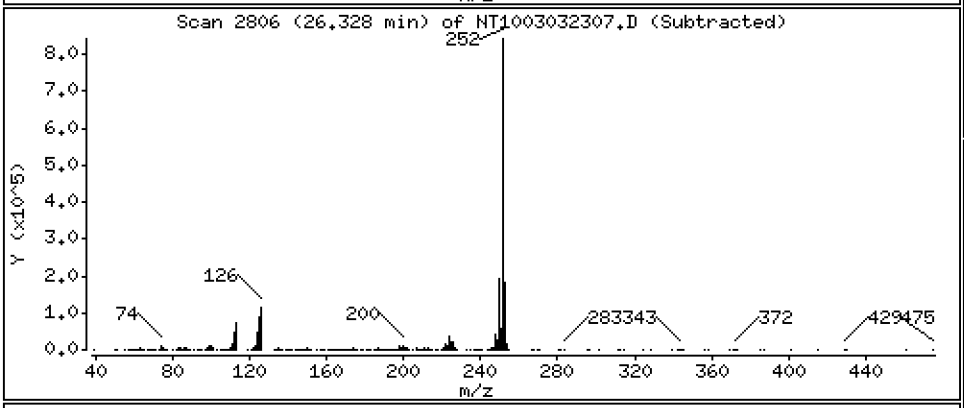
Volume Injected (uL): 1.0 Operator: VTS

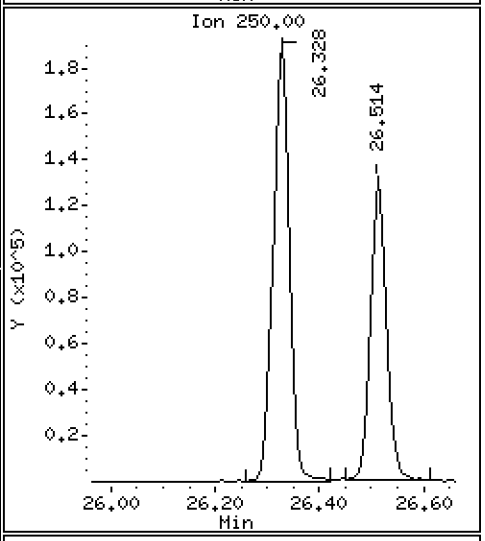
Column phase: ZB-5msi Column diameter: 0.25

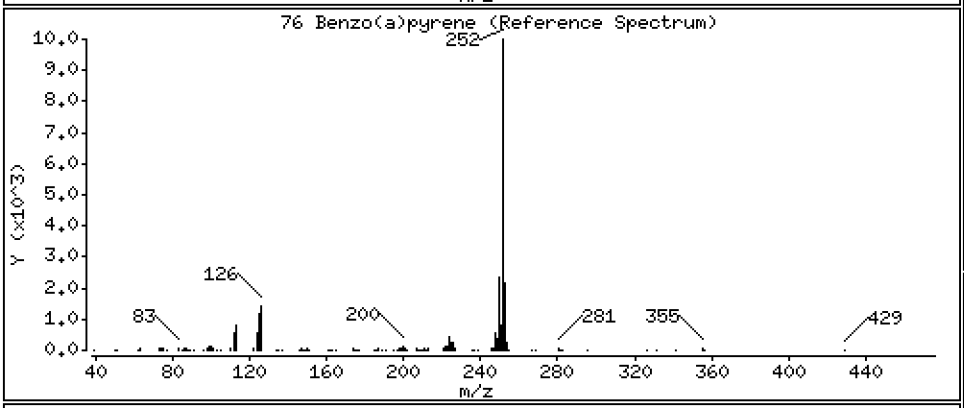
76 Benzo(a)pyrene Concentration: 4.088 ug/ml

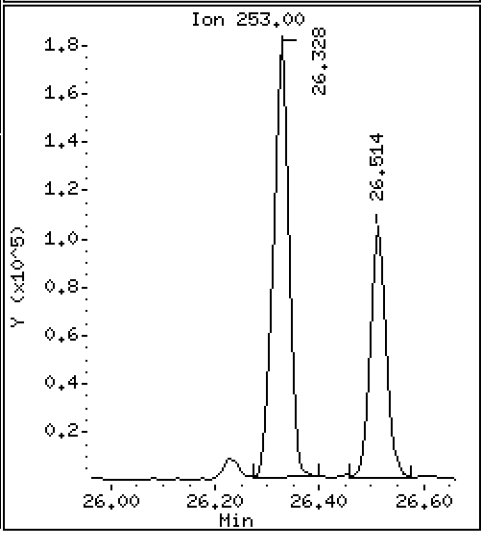


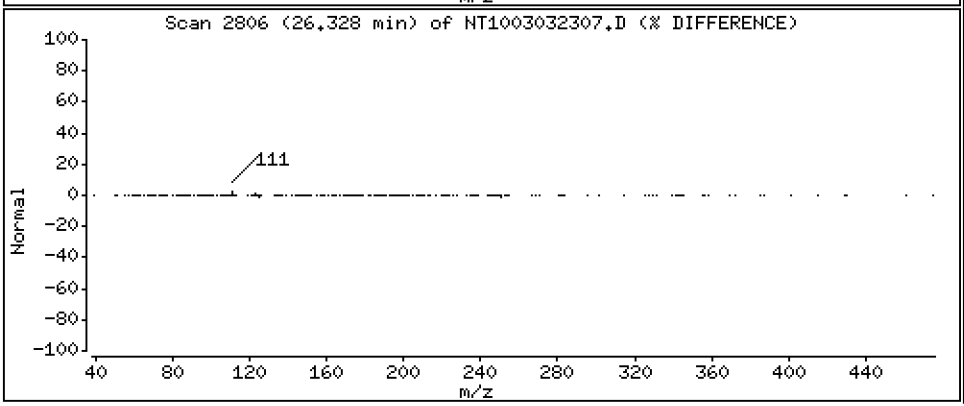












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

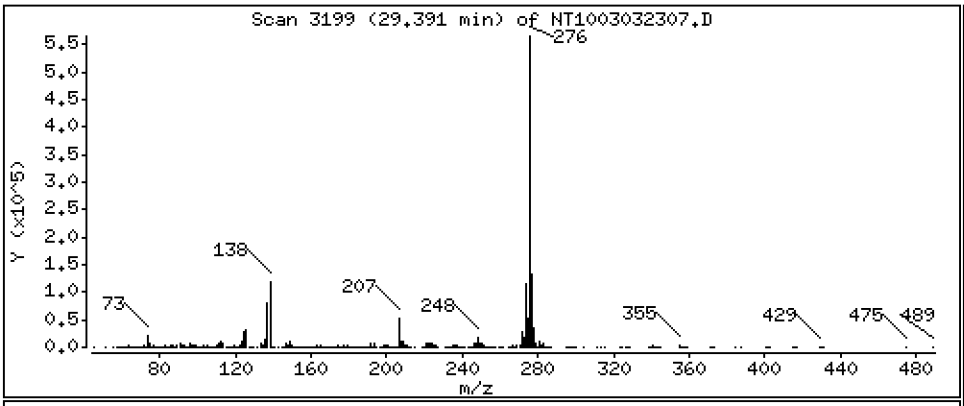
Operator: VTS

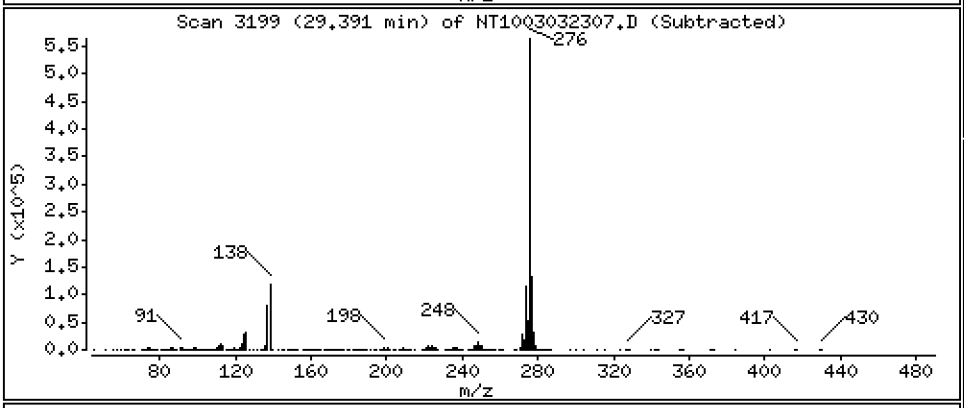
Column phase: ZB-5msi

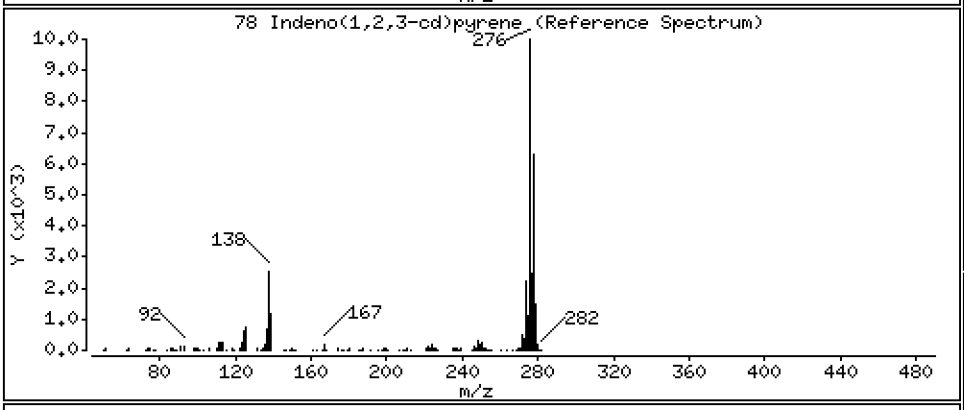
Column diameter: 0.25

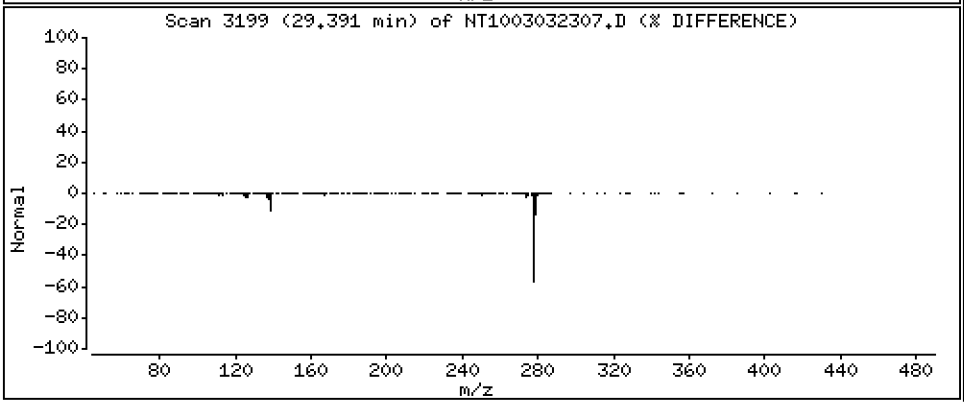
78 Indeno(1,2,3-cd)pyrene

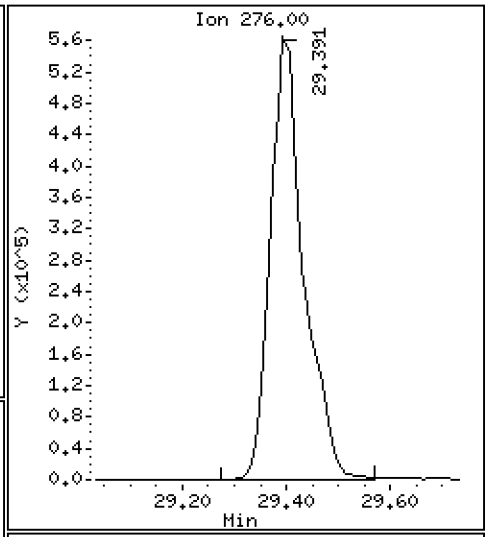
Concentration: 4.959 ug/ml

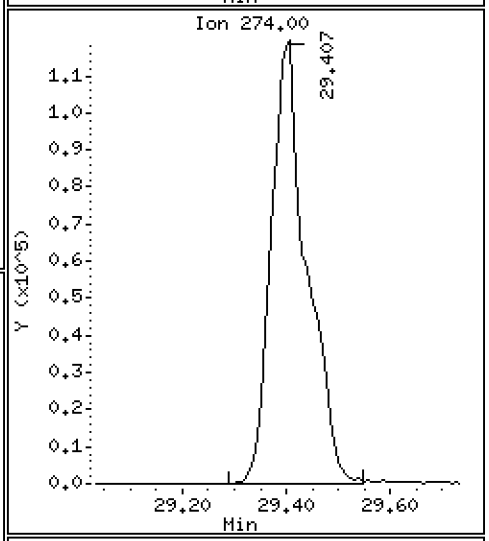


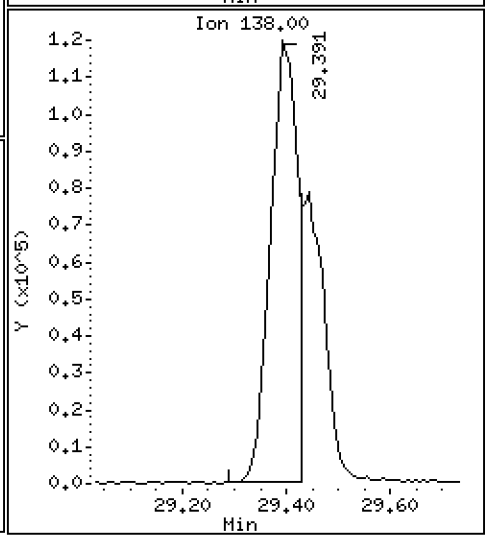












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

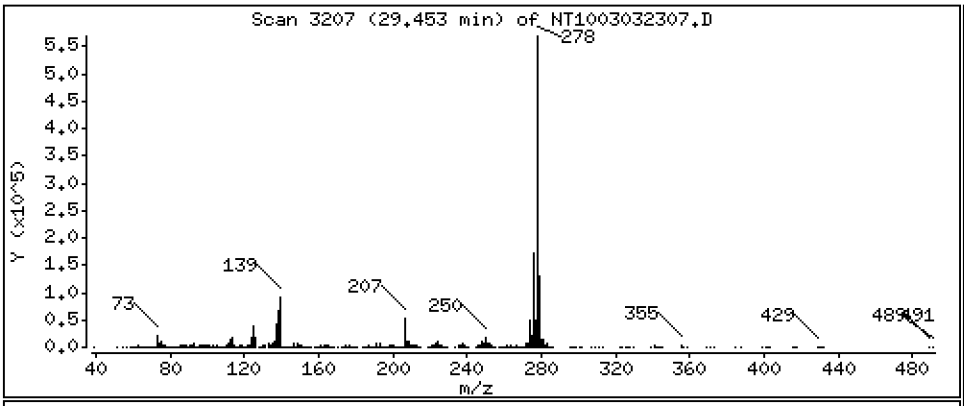
Operator: VTS

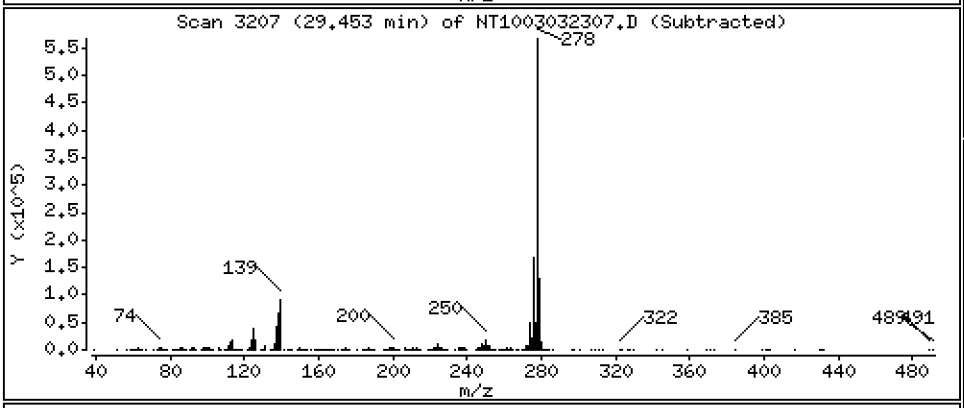
Column phase: ZB-5msi

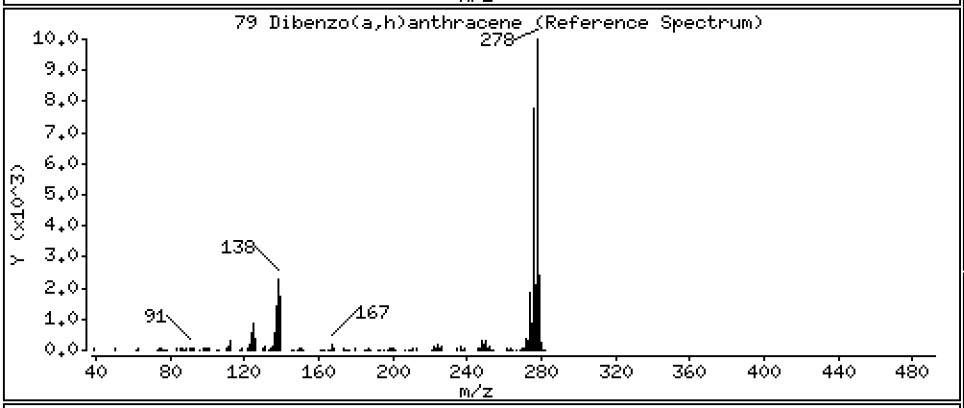
Column diameter: 0.25

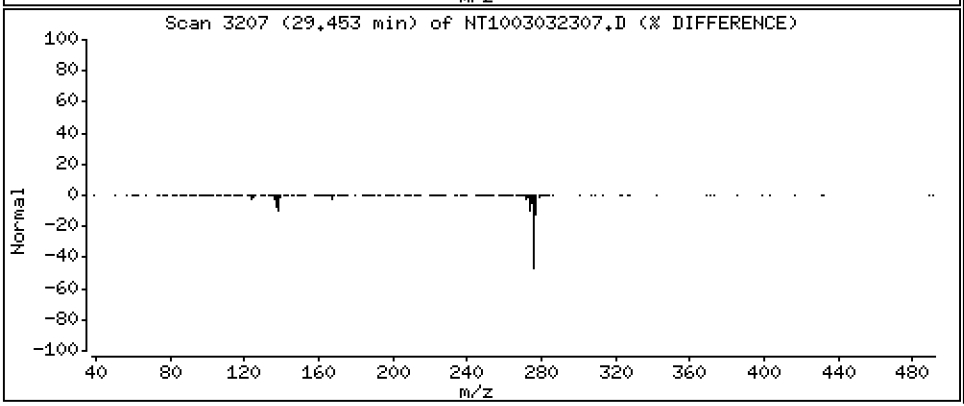
79 Dibenzo(a,h)anthracene

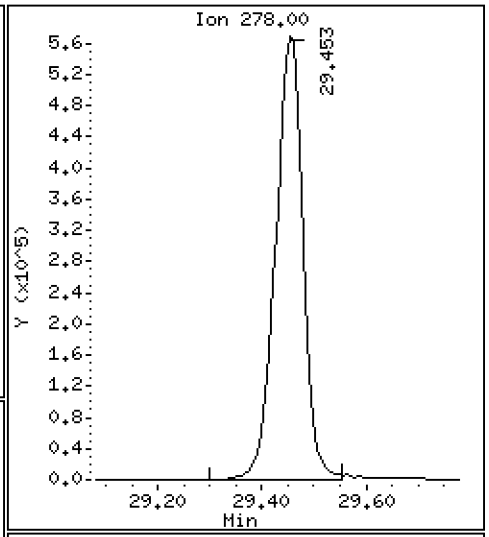
Concentration: 5.414 ug/ml

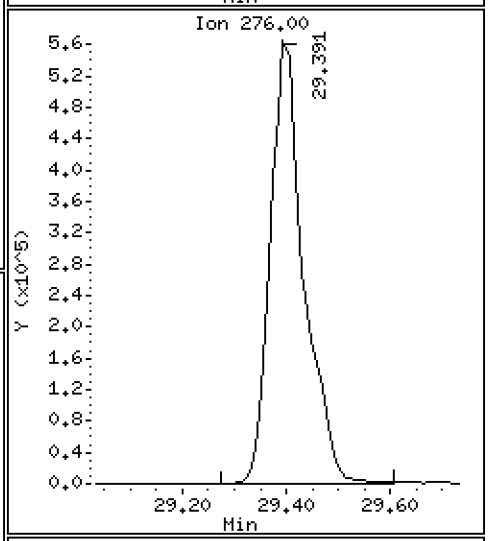


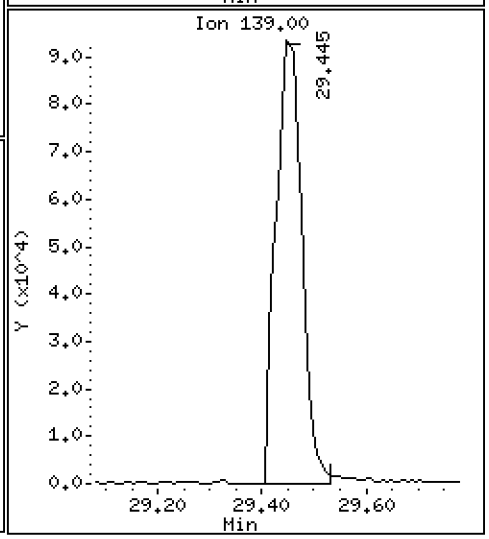












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

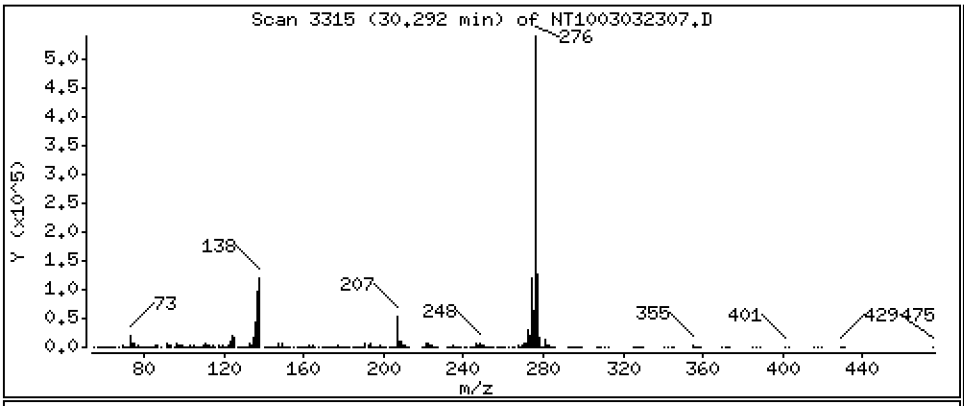
Operator: VTS

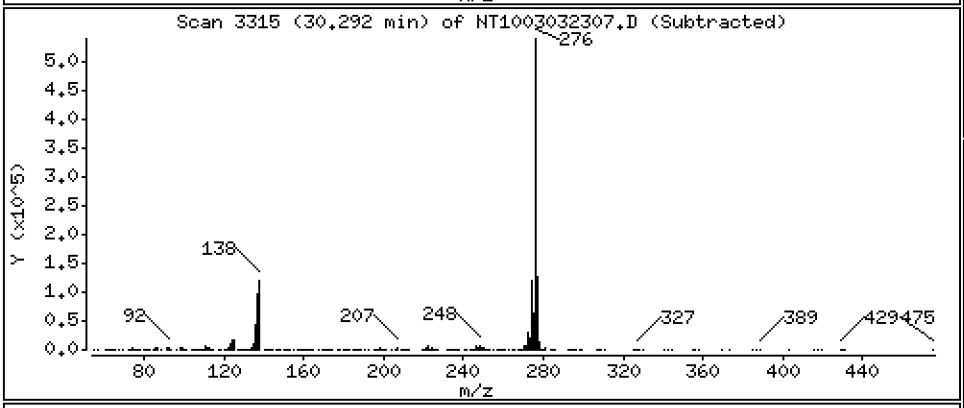
Column phase: ZB-5msi

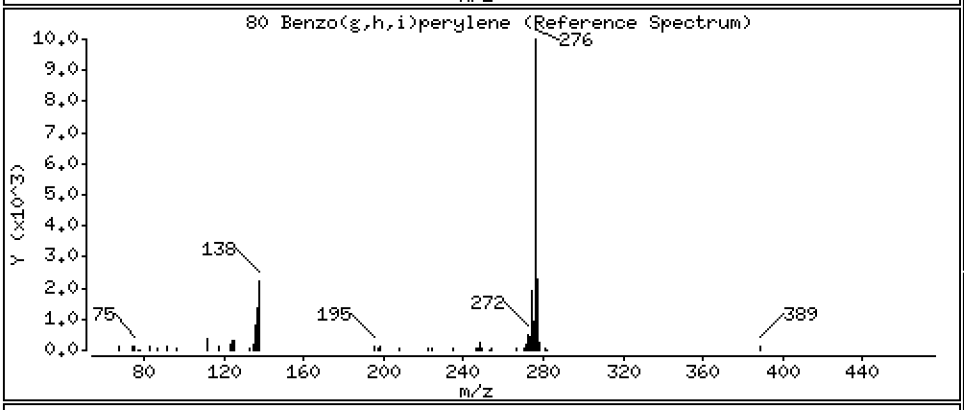
Column diameter: 0.25

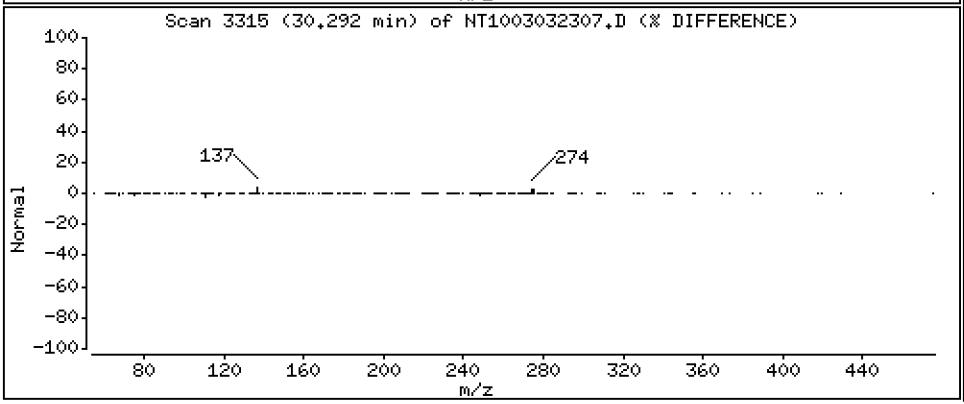
80 Benzo(g,h,i)perylene

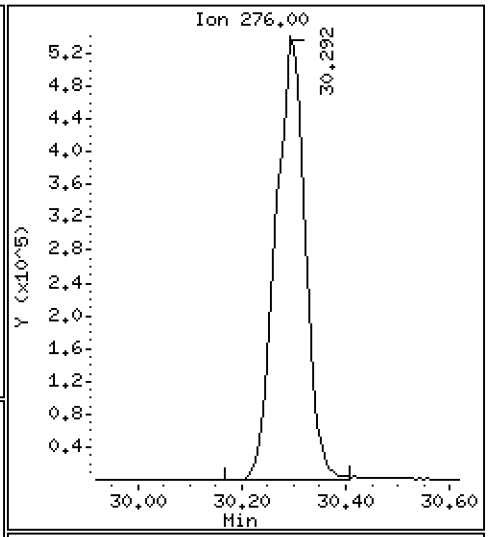
Concentration: 5.317 ug/ml

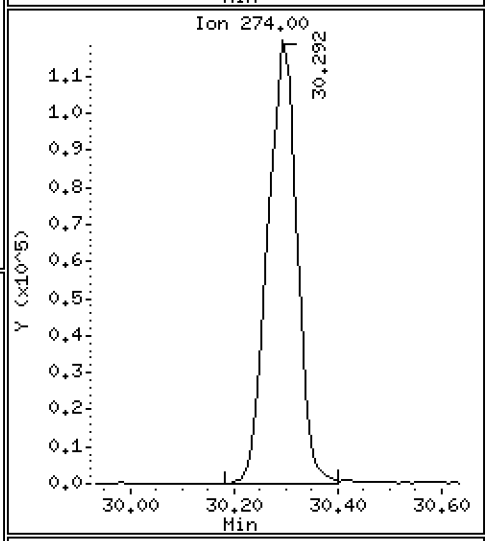


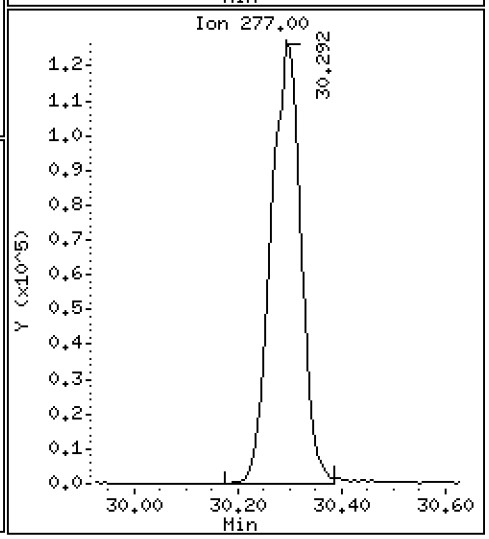












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

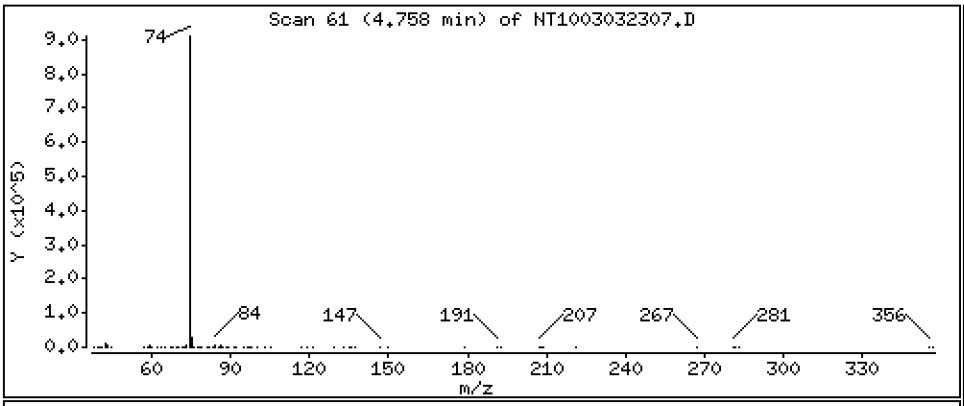
Operator: VTS

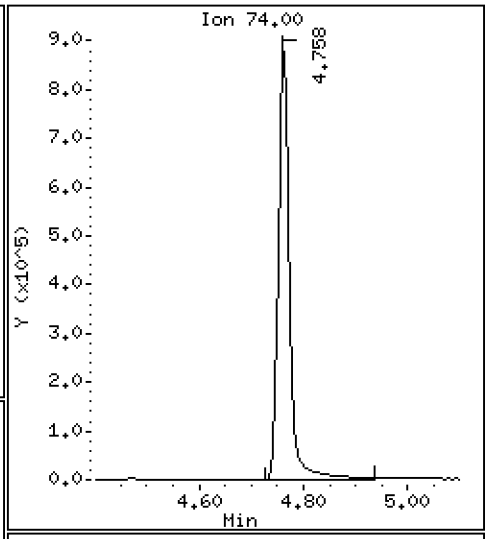
Column phase: ZB-5msi

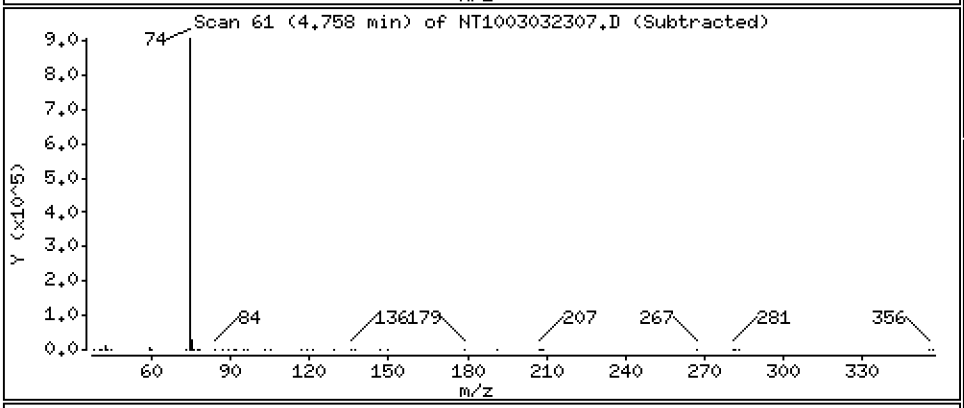
Column diameter: 0.25

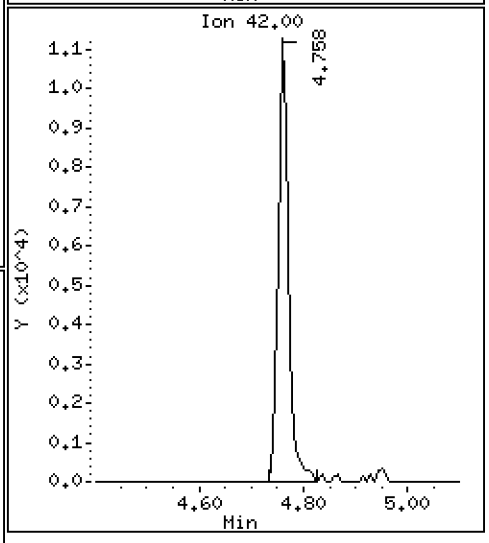
90 N-Nitrosodimethylamine

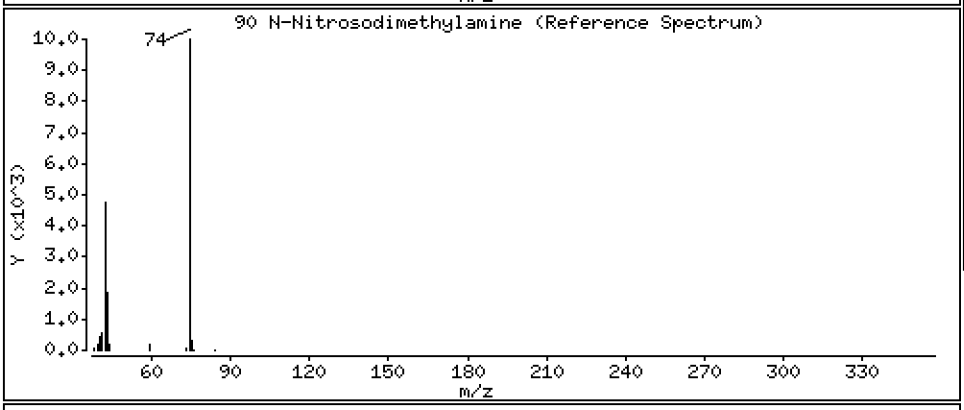
Concentration: 12.91 ug/ml

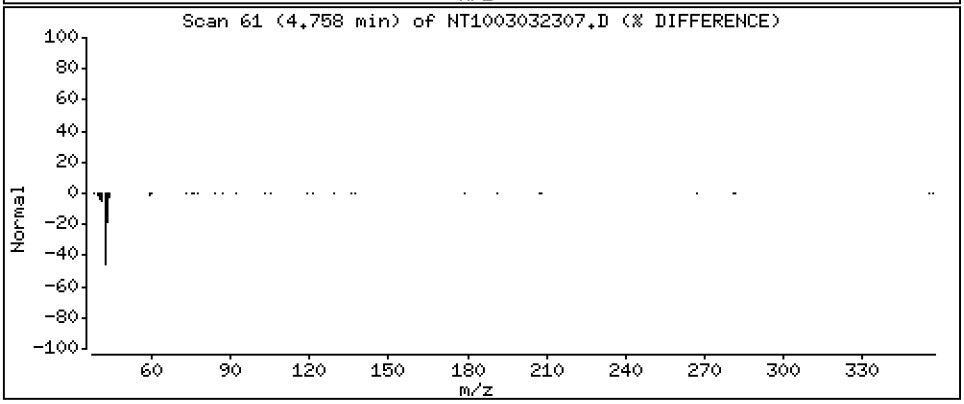












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

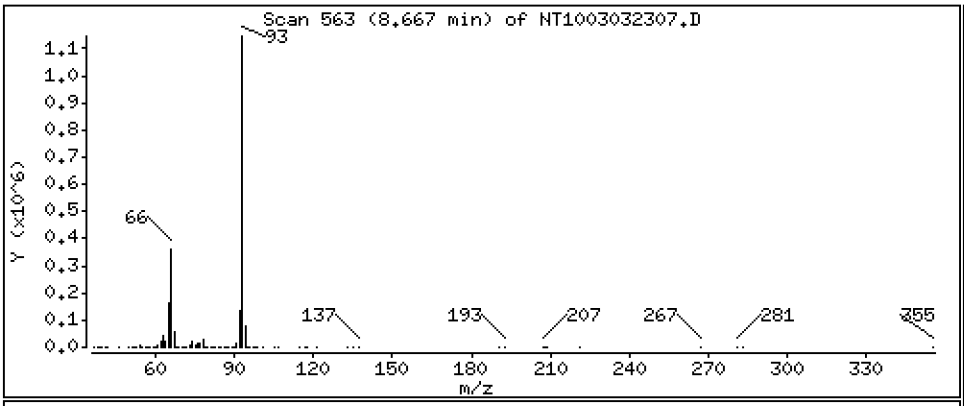
Operator: VTS

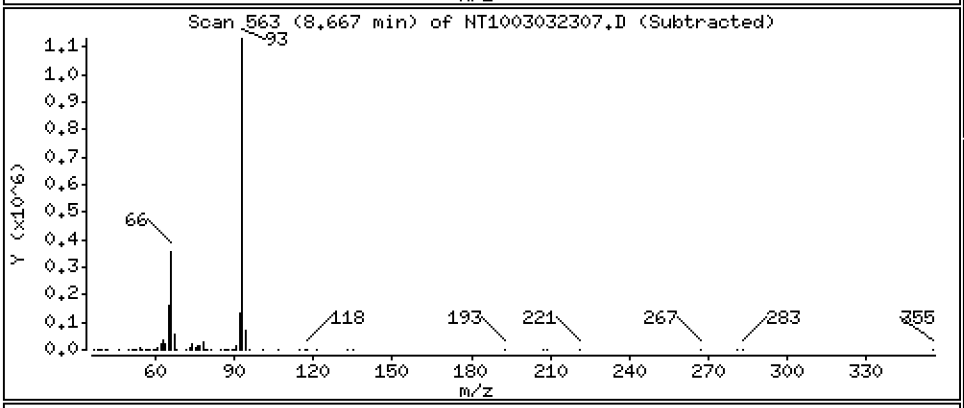
Column phase: ZB-5msi

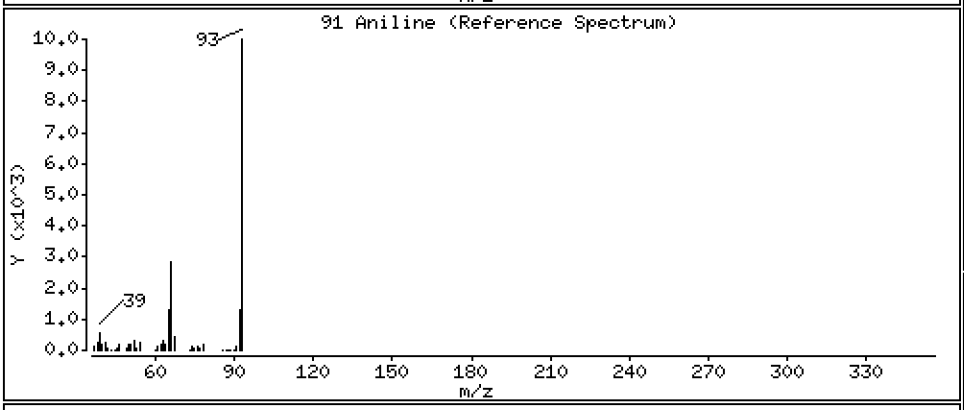
Column diameter: 0.25

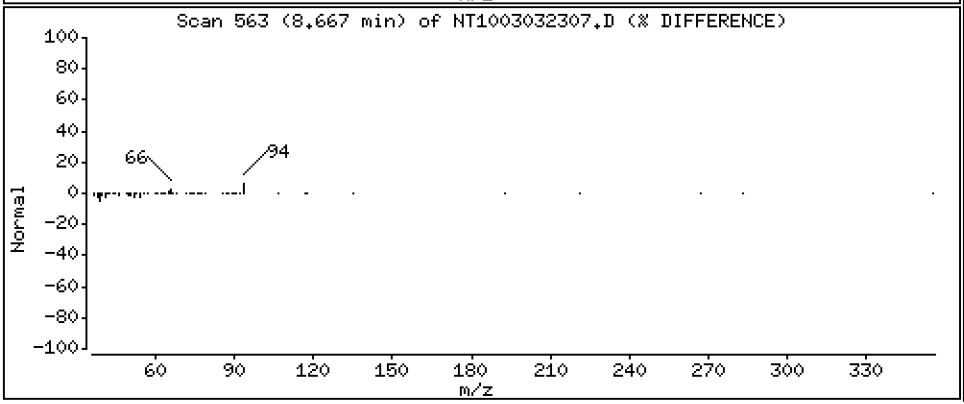
91 Aniline

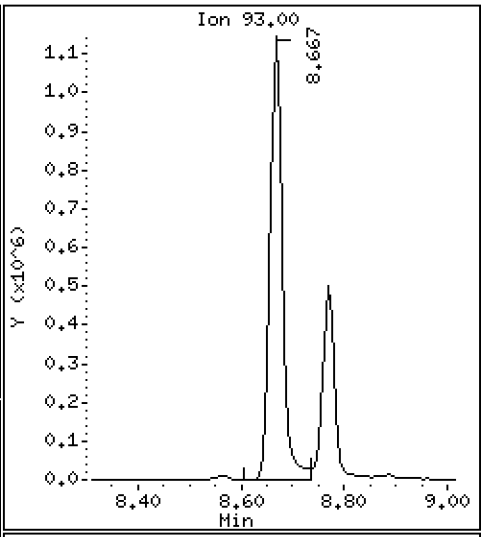
Concentration: 7.797 ug/ml

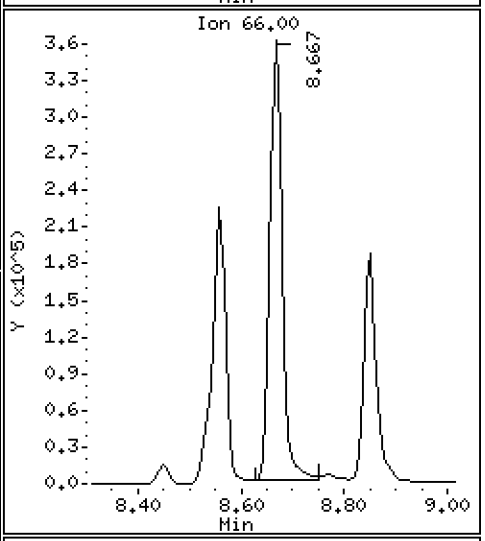


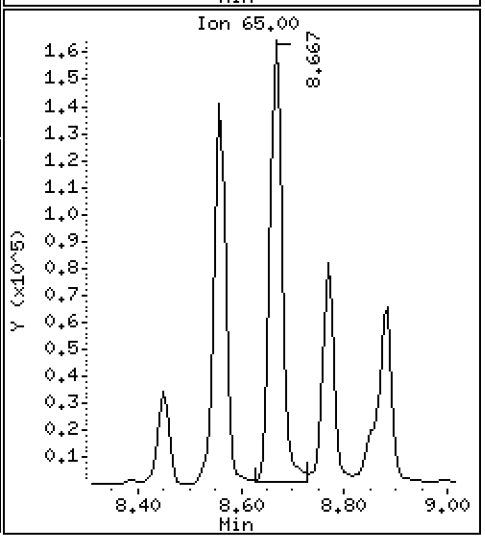












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

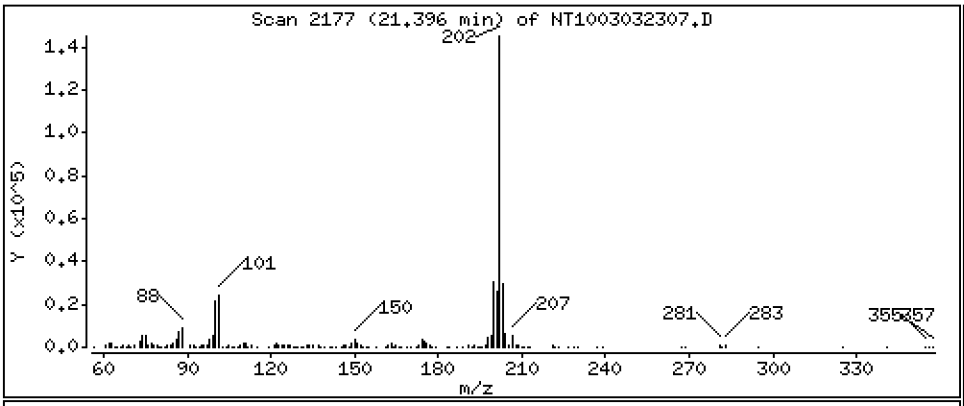
Operator: VTS

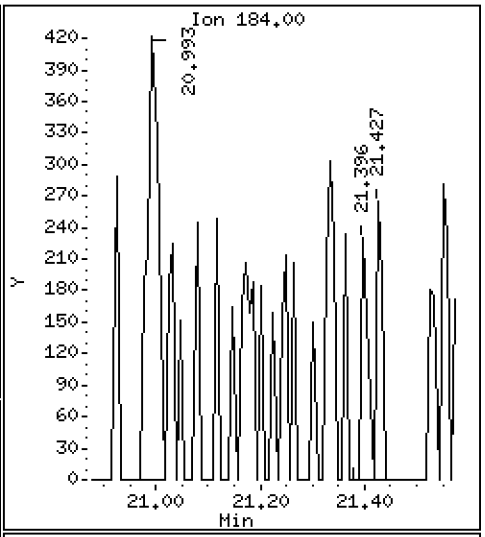
Column phase: ZB-5msi

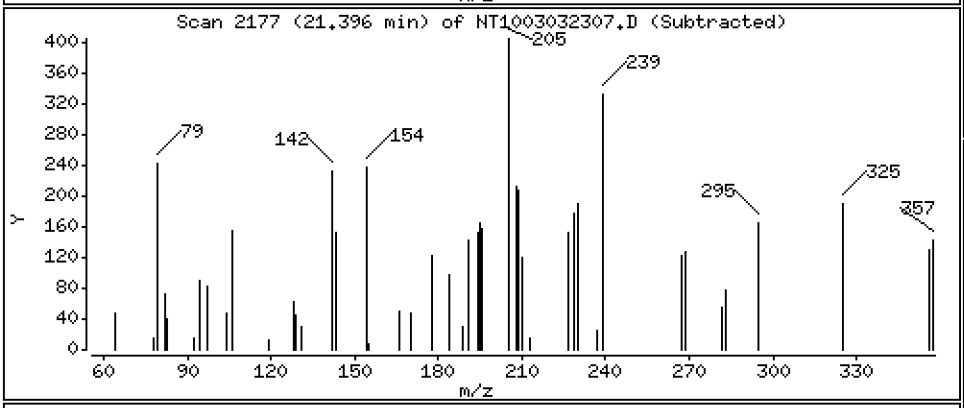
Column diameter: 0.25

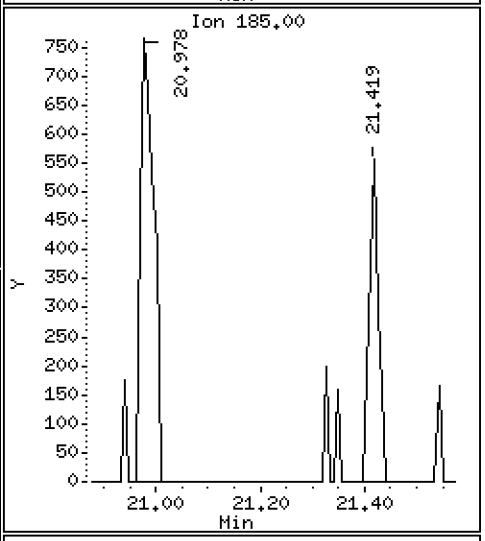
93 Benzidine

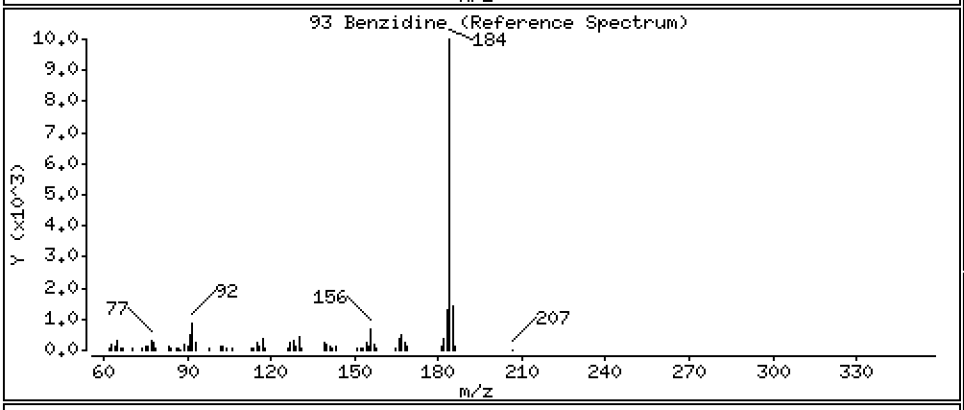
Concentration: 0.0008088 ug/ml

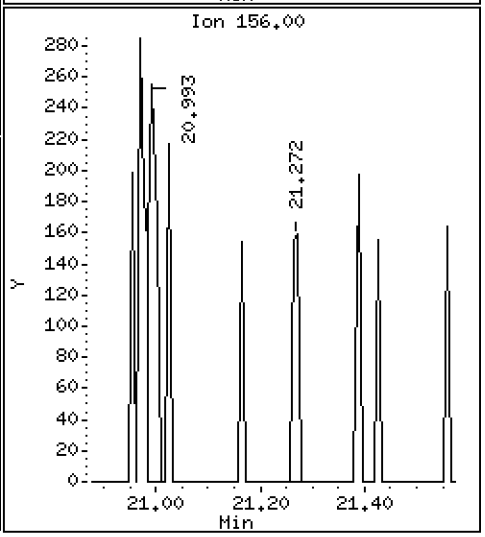


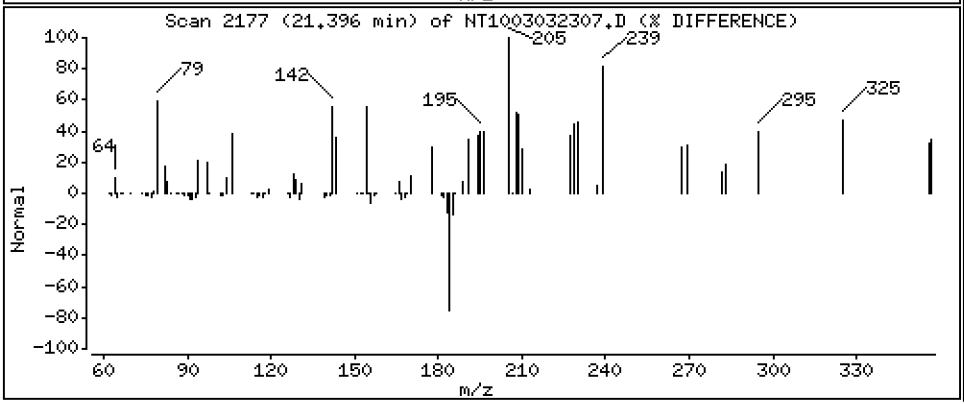












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

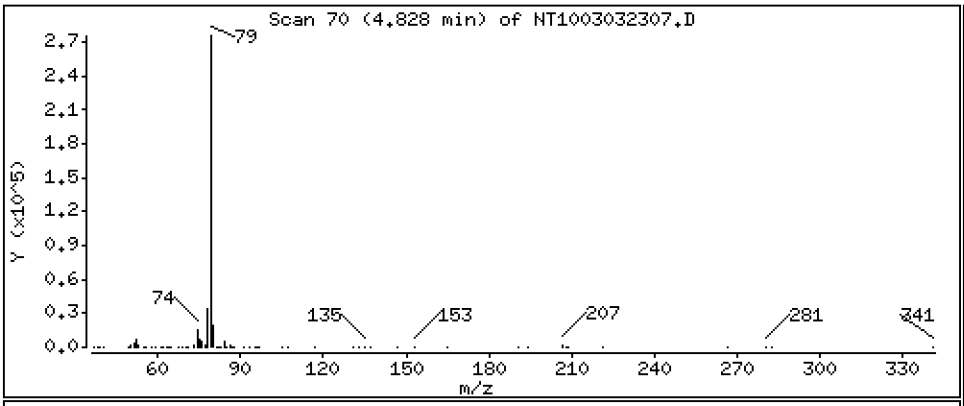
Operator: VTS

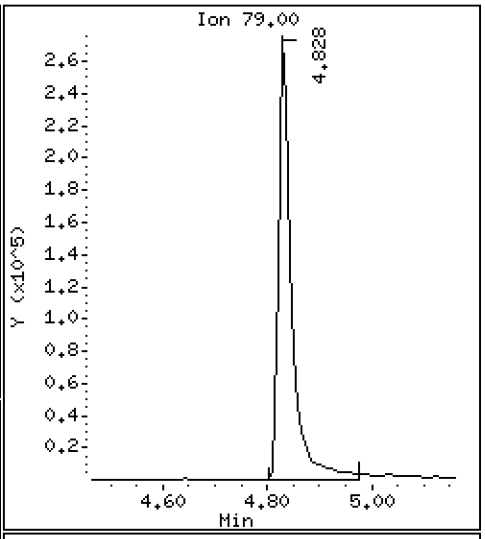
Column phase: ZB-5msi

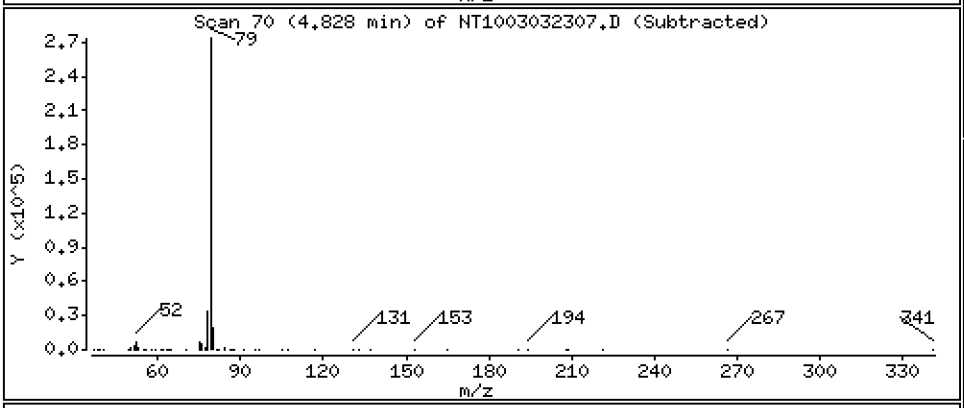
Column diameter: 0.25

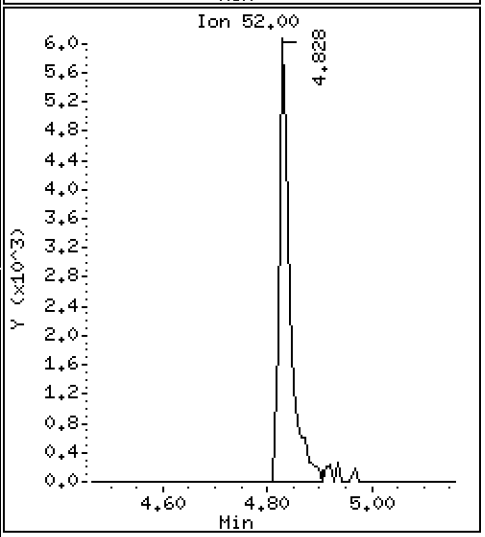
103 Pyridine

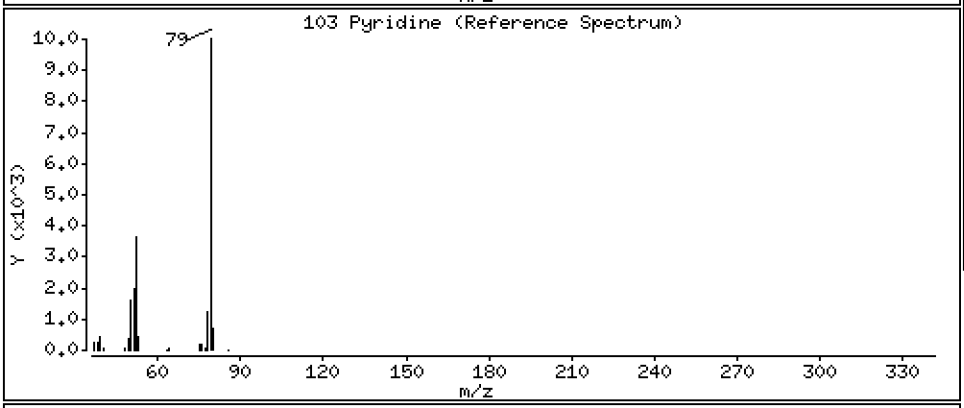
Concentration: 2.613 ug/ml

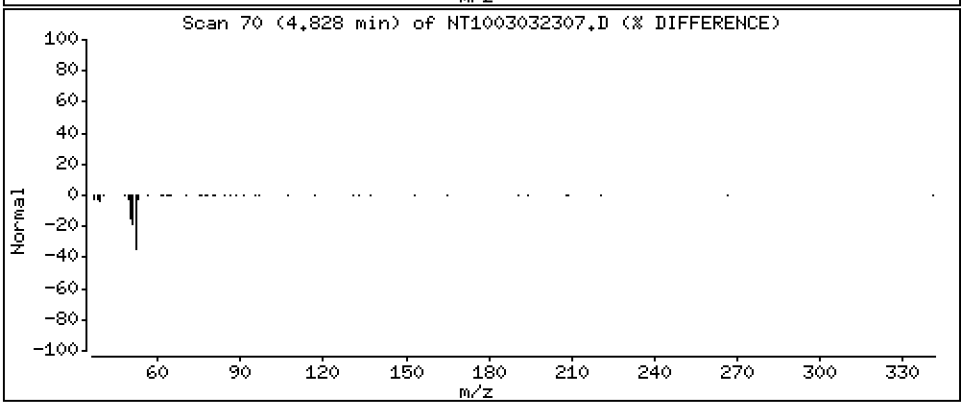












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

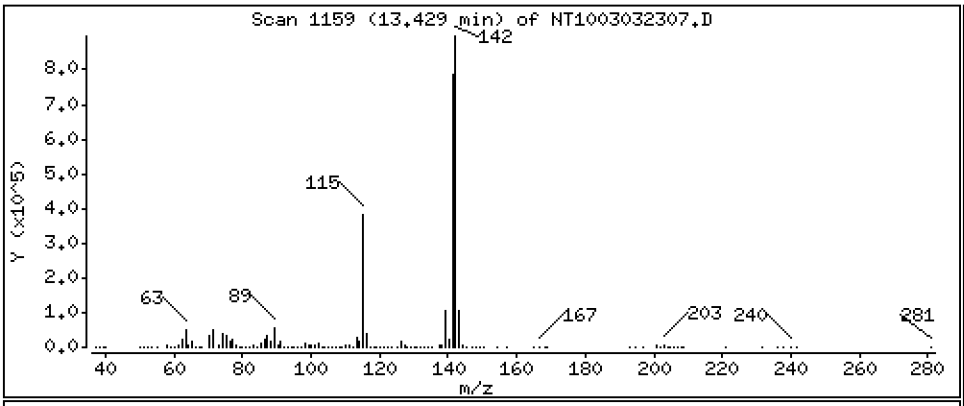
Operator: VTS

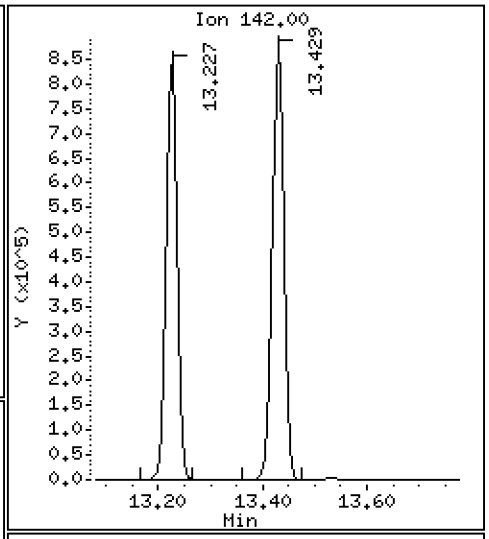
Column phase: ZB-5msi

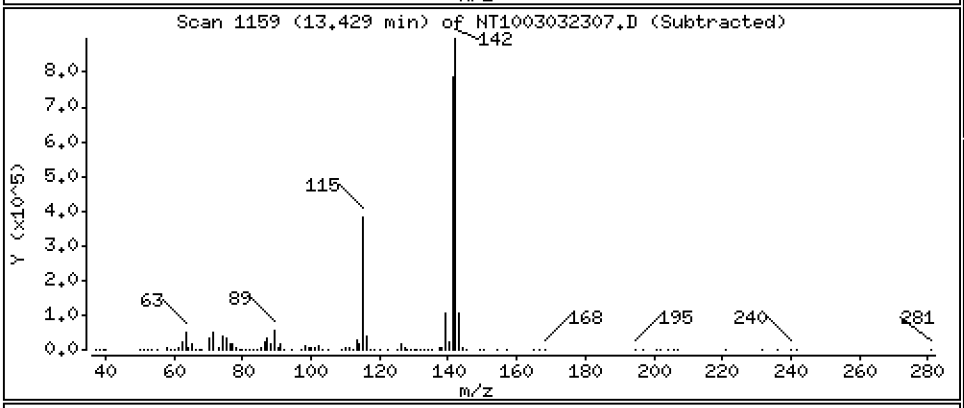
Column diameter: 0.25

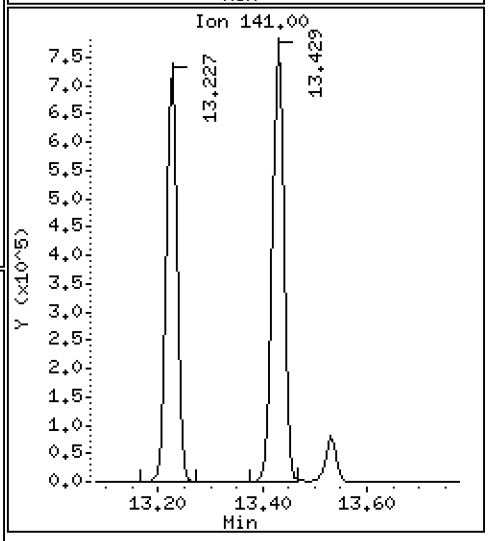
105 1-methylnaphthalene

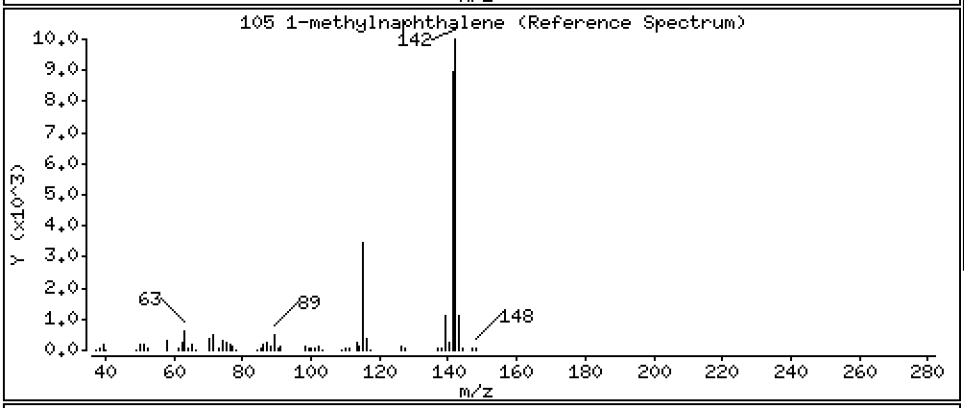
Concentration: 4.111 ug/ml

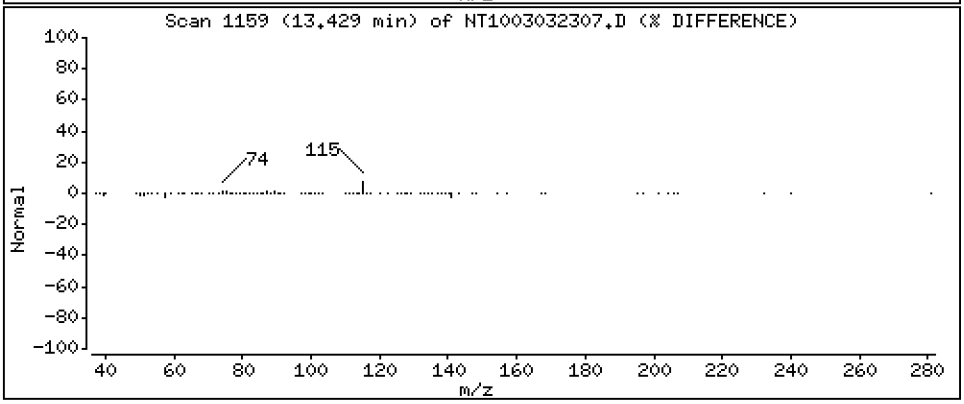












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

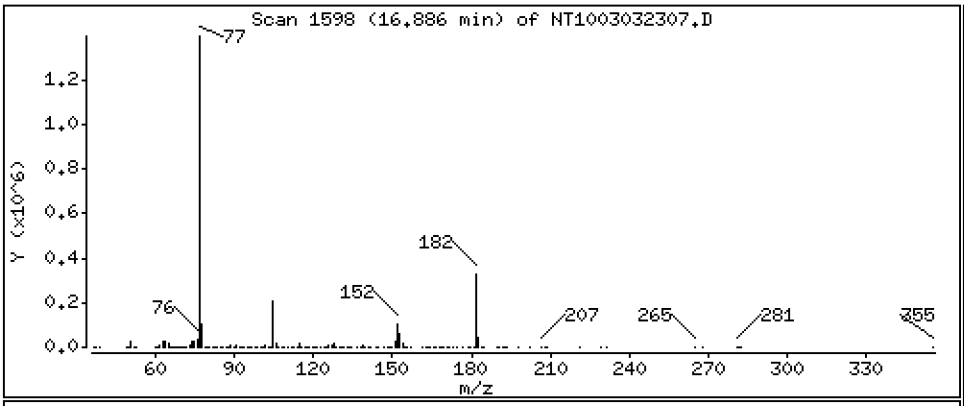
Operator: VTS

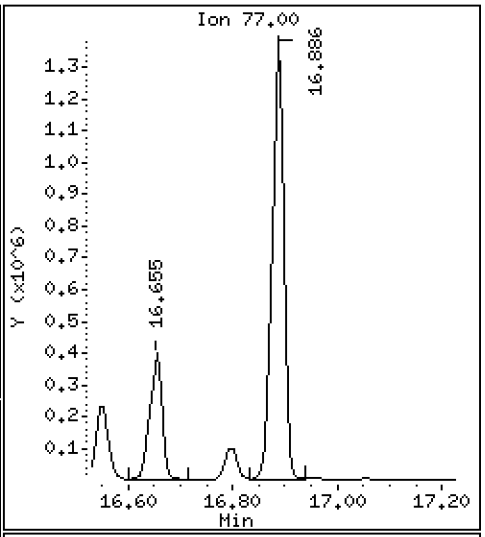
Column phase: ZB-5msi

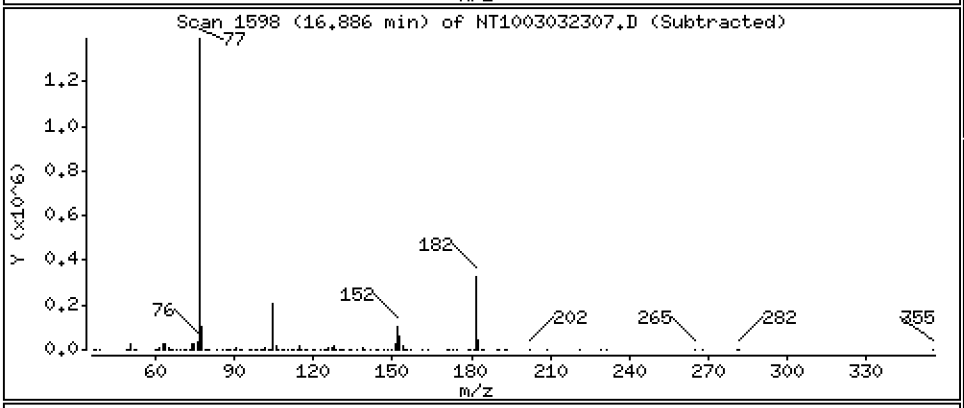
Column diameter: 0.25

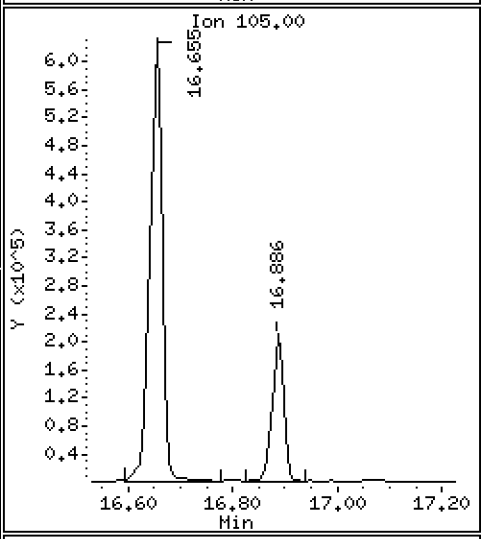
111 Azobenzene (1,2-DP-Hydrazine)

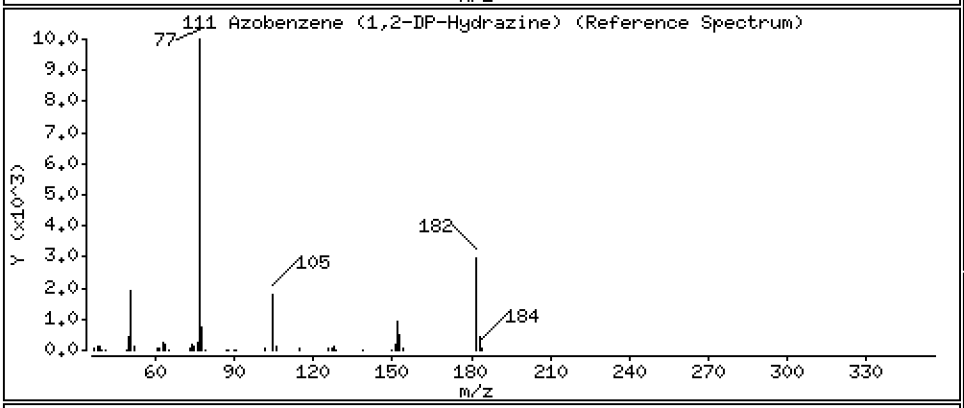
Concentration: 4.177 ug/ml

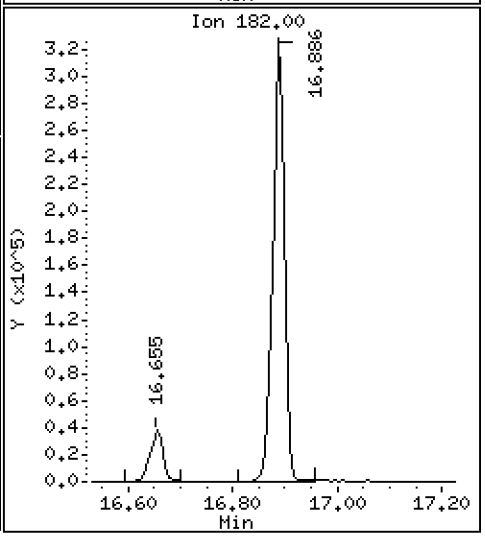


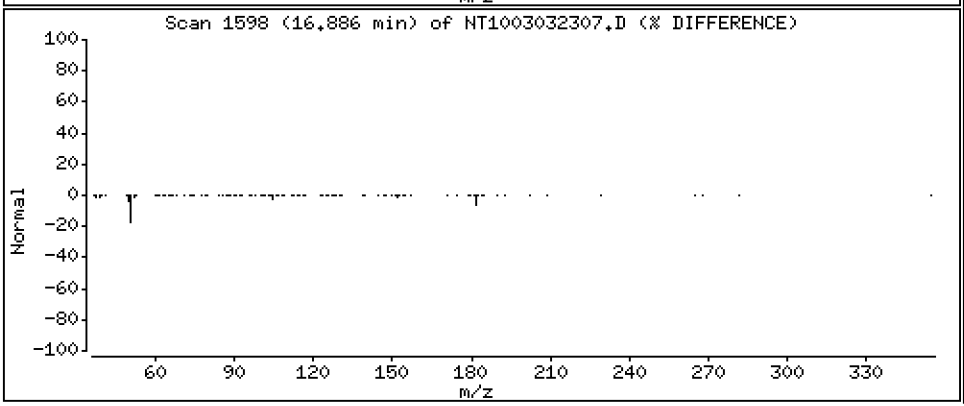












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

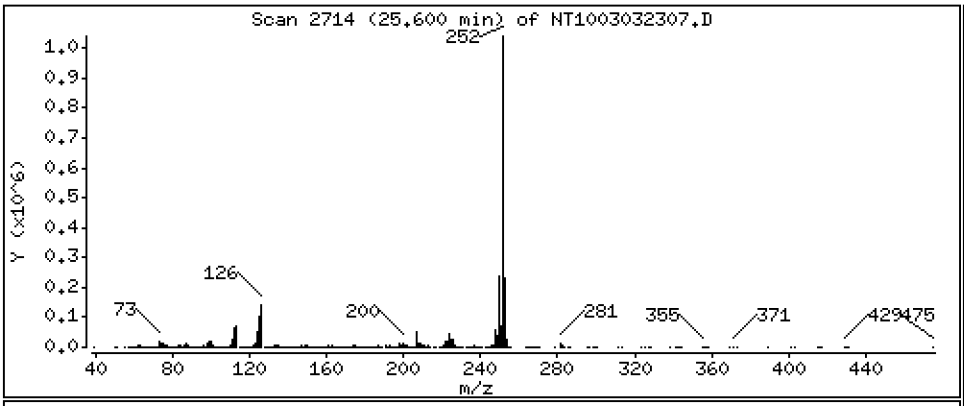
Operator: VTS

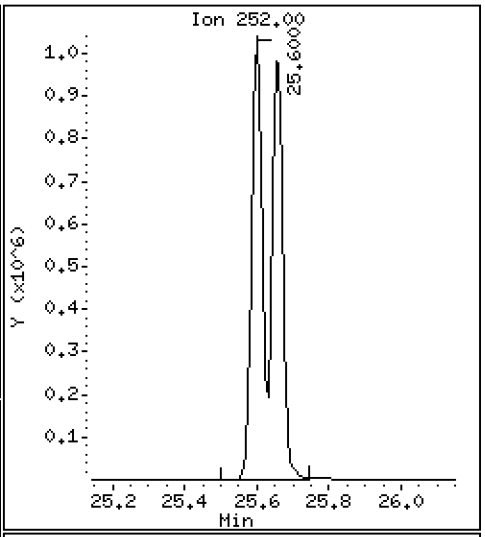
Column phase: ZB-5msi

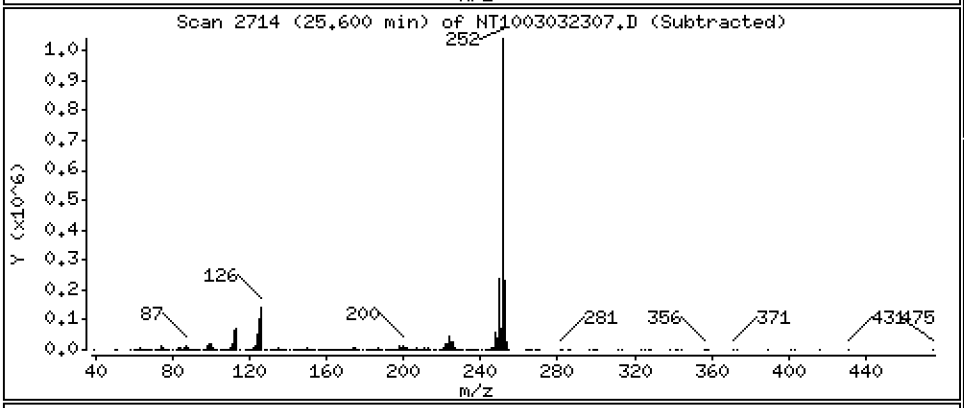
Column diameter: 0.25

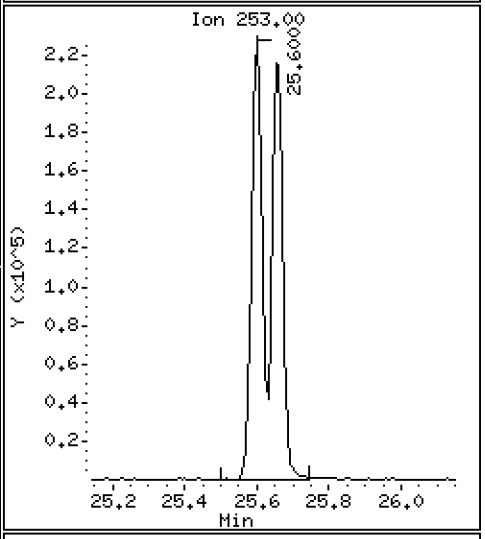
187 Total Benzofluoranthenes

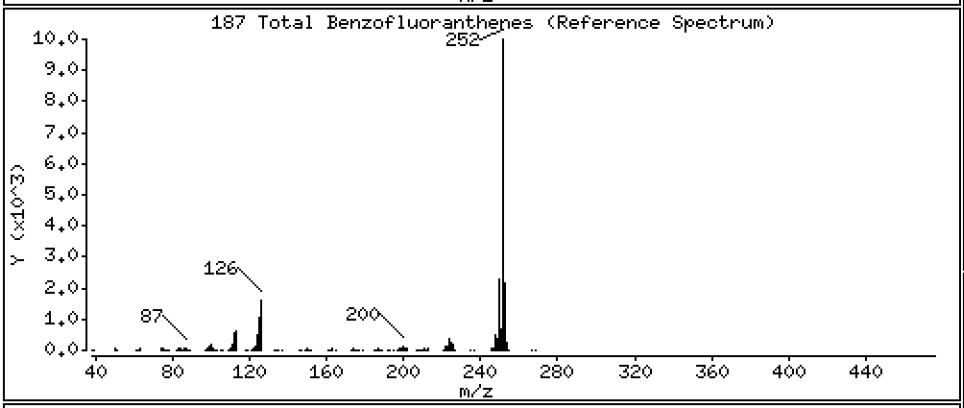
Concentration: 9.288 ug/ml

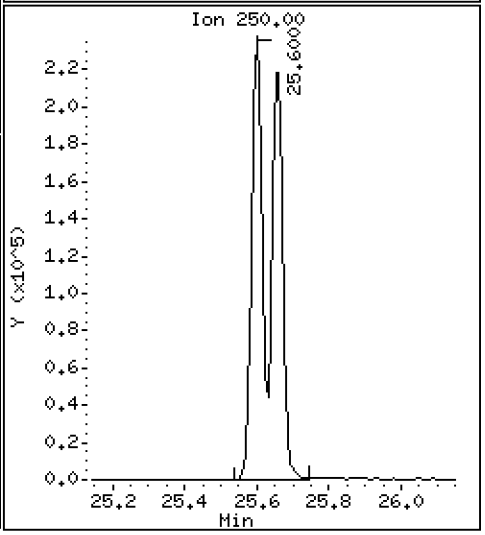


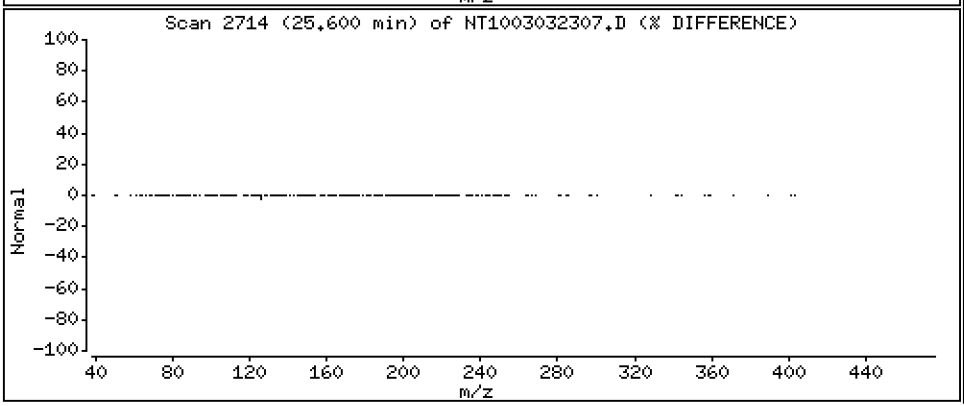












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

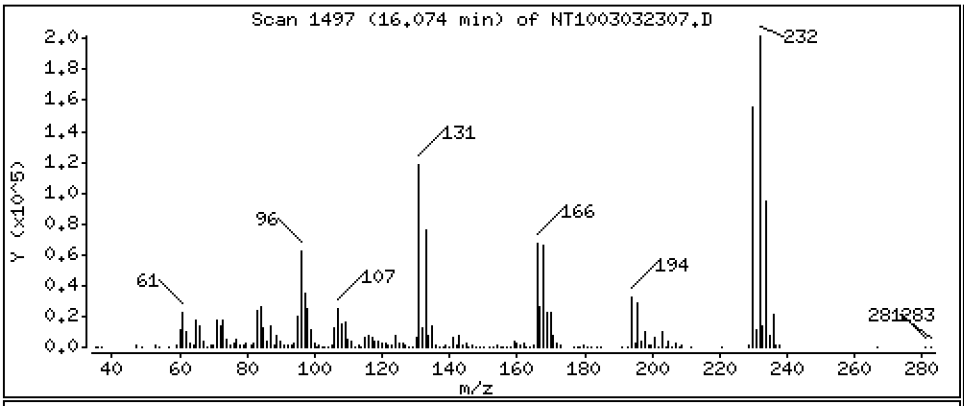
Operator: VTS

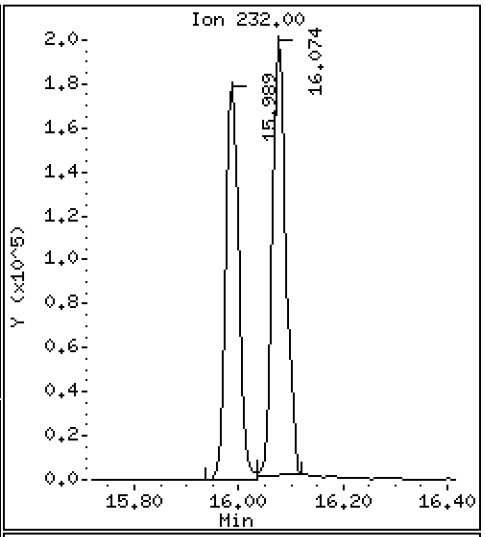
Column phase: ZB-5msi

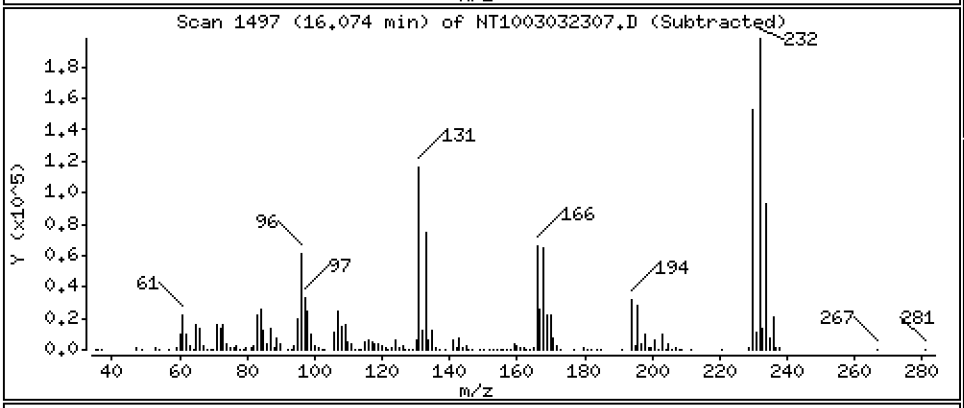
Column diameter: 0.25

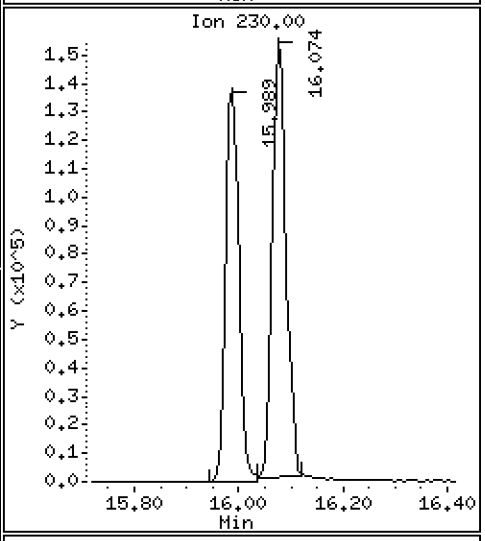
120 2,3,4,6-Tetrachlorophenol

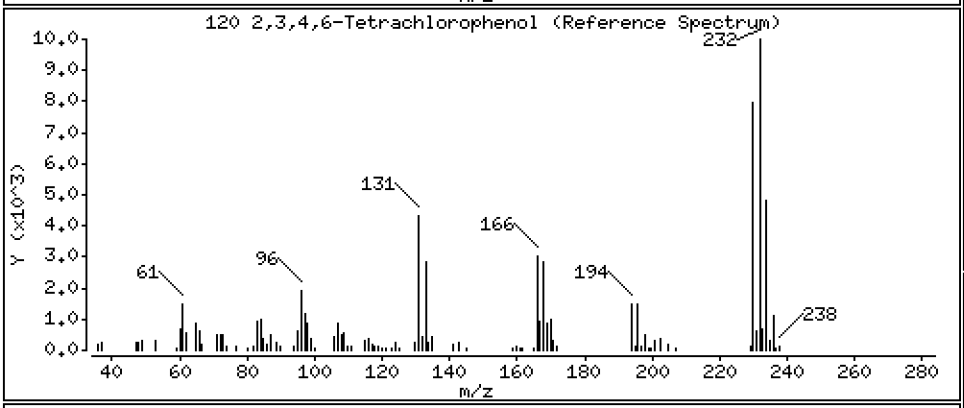
Concentration: 4.190 ug/ml

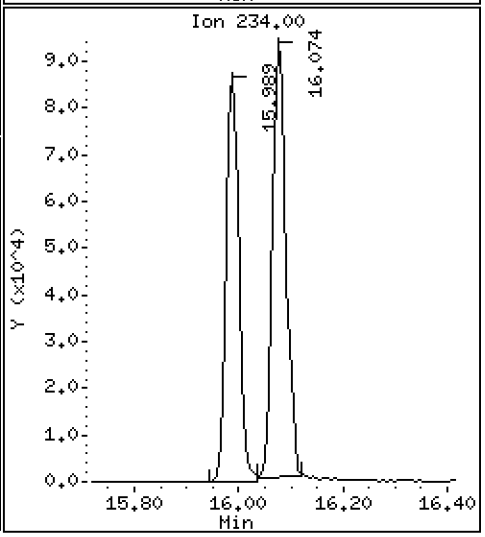


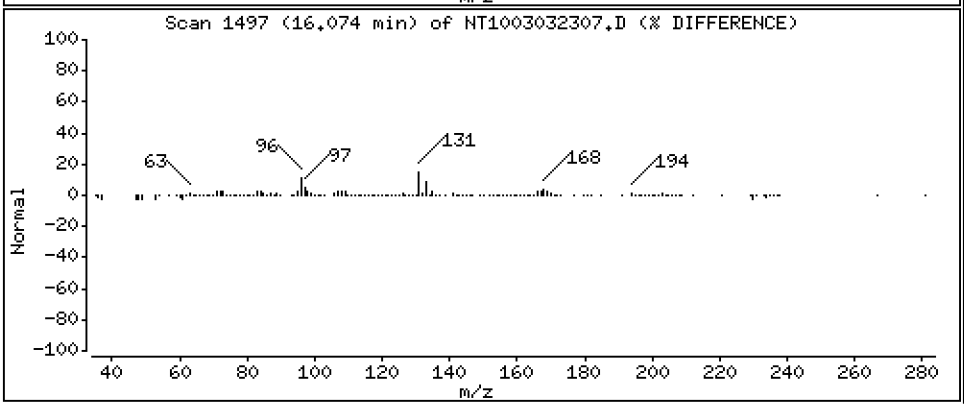












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230303.b\NT1003032307.D
Lab Smp Id: BLA0673-BS1
Inj Date : 03-MAR-2023 21:37
Operator : VTS Inst ID: nt10.i
Smp Info : BLA0673-BS1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230303.b\ABN.m
Meth Date : 05-Jul-2023 12:33 van Quant Type: ISTD
Cal Date : 01-MAR-2023 18:37 Cal File: NT1003012306.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/ml)
$	1 2-Fluorophenol	112	6.920	6.912	(0.746)	928455	5.77768	5.778
$	2 Phenol-d5	99	8.535	8.527	(0.920)	1272918	6.82282	6.823
	3 Phenol	94	8.558	8.550	(0.922)	847368	4.27190	4.272
$	5 2-Chlorophenol-d4	132	8.852	8.844	(0.954)	1007133	6.32722	6.327
	4 Bis(2-Chloroethyl)ether	93	8.767	8.767	(0.945)	727242	4.79784	4.798
	6 2-Chlorophenol	128	8.883	8.875	(0.957)	637234	3.85359	3.854
	7 1,3-Dichlorobenzene	146	9.169	9.169	(0.988)	670998	3.68040	3.680
*	8 1,4-Dichlorobenzene-d4	152	9.278	9.278	(1.000)	510753	4.00000	
	9 1,4-Dichlorobenzene	146	9.316	9.309	(1.004)	745732	4.11789	4.118
$	10 1,2-Dichlorobenzene-d4	152	9.572	9.565	(1.032)	432294	3.63507	3.635
	12 1,2-Dichlorobenzene	146	9.596	9.596	(1.034)	658504	3.75676	3.757
	11 Benzyl alcohol	108	9.518	9.510	(1.026)	384988	3.71474	3.715
	14 2,2'-oxybis(1-Chloropropane)	121	9.774	9.767	(1.054)	228840	4.52835	4.528
	13 2-Methylphenol	108	9.697	9.697	(1.045)	512684	3.28716	3.287
	17 Hexachloroethane	117	10.248	10.248	(1.105)	304906	4.10193	4.102
	16 N-Nitroso-di-n-propylamine	70	10.023	10.023	(1.080)	518409	4.33104	4.331
	15 4-Methylphenol	108	9.999	9.984	(1.078)	592440	3.09694	3.097
$	18 Nitrobenzene-d5	82	10.341	10.333	(0.878)	826792	3.99882	3.999
	19 Nitrobenzene	77	10.380	10.372	(0.882)	829135	4.27498	4.275
	20 Isophorone	82	10.845	10.838	(0.921)	1584410	6.39967	6.400
	21 2-Nitrophenol	139	11.001	11.001	(0.934)	317370	3.00919	3.009
	22 2,4-Dimethylphenol	107	11.052	11.052	(0.939)	1190081	6.31680	6.317

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
23	Bis(2-Chloroethoxy)methane	93	11.264	11.255	(0.957)	826238	5.40031	5.400
24	Benzoic acid	105	11.272	11.238	(0.958)	2613496	22.5567	22.56
25	2,4-Dichlorophenol	162	11.468	11.468	(0.974)	2447934	16.0201	16.02
26	1,2,4-Trichlorobenzene	180	11.649	11.649	(0.990)	565152	3.95927	3.959
* 27	Naphthalene-d8	136	11.772	11.772	(1.000)	1883535	4.00000	
28	Naphthalene	128	11.819	11.819	(1.004)	1895581	3.92108	3.921
29	4-Chloroaniline	127	11.911	11.911	(1.012)	1923568	8.82705	8.827
30	Hexachlorobutadiene	225	12.043	12.035	(1.023)	344503	3.25043	3.250
31	4-Chloro-3-methylphenol	107	12.871	12.863	(1.093)	2612545	15.8688	15.87
32	2-Methylnaphthalene	142	13.227	13.219	(1.124)	1312019	3.84167	3.842
33	Hexachlorocyclopentadiene	237	13.529	13.529	(0.878)	778234	20.4250	20.42
34	2,4,6-Trichlorophenol	196	13.800	13.792	(0.896)	1631706	16.1395	16.14
35	2,4,5-Trichlorophenol	196	13.861	13.861	(0.900)	1783115	16.4254	16.43
$ 36	2-Fluorobiphenyl	172	13.978	13.978	(0.908)	1499059	4.27043	4.270
37	2-Chloronaphthalene	162	14.241	14.233	(0.925)	1200776	4.35744	4.357
38	2-Nitroaniline	65	14.450	14.442	(0.938)	1254337	15.7401	15.74
39	Dimethylphthalate	163	14.821	14.821	(0.962)	1437315	4.52223	4.522
40	Acenaphthylene	152	15.115	15.092	(0.981)	1029078	2.16608	2.166
41	2,6-Dinitrotoluene	165	14.961	14.953	(0.971)	1252136	16.9413	16.94
* 42	Acenaphthene-d10	164	15.401	15.394	(1.000)	984162	4.00000	
43	3-Nitroaniline	138	15.316	15.301	(0.994)	935507	11.2581	11.26
44	Acenaphthene	153	15.463	15.463	(1.004)	1211799	4.22937	4.229
45	2,4-Dinitrophenol	184	15.533	15.525	(1.009)	1155665	69.1023	69.10
46	Dibenzofuran	168	15.834	15.827	(1.028)	1734062	4.07786	4.078
47	4-Nitrophenol	109	15.633	15.626	(1.015)	854917	14.3014	14.30
48	2,4-Dinitrotoluene	165	15.803	15.796	(1.026)	1705734	15.8237	15.82
50	Diethylphthalate	149	16.306	16.298	(1.059)	1557609	4.62606	4.626
49	Fluorene	166	16.554	16.546	(1.075)	1747374	4.93884	4.939
51	4-Chlorophenyl-phenylether	204	16.554	16.546	(1.075)	857890	5.27383	5.274
52	4-Nitroaniline	138	16.600	16.585	(1.078)	787977	9.14595	9.146
53	4,6-Dinitro-2-methylphenol	198	16.654	16.646	(0.899)	2264711	48.8190	48.82
54	N-Nitrosodiphenylamine	169	16.801	16.785	(0.907)	1056869	4.36375	4.364
$ 55	2,4,6-Tribromophenol	330	17.055	17.047	(1.107)	394121	6.24233	6.242
56	4-Bromophenyl-phenylether	248	17.581	17.573	(0.949)	537819	5.48035	5.480
57	Hexachlorobenzene	284	17.697	17.681	(0.955)	504726	4.56725	4.567
58	Pentachlorophenol	266	18.115	18.107	(0.977)	731701	13.1920	13.19
* 59	Phenanthrene-d10	188	18.533	18.525	(1.000)	1636921	4.00000	
60	Phenanthrene	178	18.579	18.571	(1.002)	1904526	4.54630	4.546
61	Anthracene	178	18.687	18.680	(1.008)	1586254	3.90500	3.905
62	Carbazole	167	19.035	19.020	(1.027)	1438469	3.86543	3.865
63	Di-n-butylphthalate	149	19.732	19.724	(1.065)	2559075	4.89338	4.893
64	Fluoranthene	202	20.977	20.970	(0.888)	2161802	4.38551	4.386
65	Pyrene	202	21.418	21.395	(0.907)	1580611	3.14899	3.149
$ 66	Terphenyl-d14	244	21.705	21.689	(0.919)	1757979	4.32848	4.328
67	Butylbenzylphthalate	149	22.603	22.588	(0.957)	1100832	4.13796	4.138
68	Benzo(a)anthracene	228	23.610	23.594	(0.999)	2089110	4.13475	4.135
* 69	Chrysene-d12	240	23.625	23.617	(1.000)	1432936	4.00000	
70	3,3'-Dichlorobenzidine	252	23.555	23.540	(0.997)	1348835	5.95200	5.952
71	Chrysene	228	23.672	23.664	(1.002)	1925453	4.70615	4.706
72	bis(2-Ethylhexyl)phthalate	149	23.617	23.602	(0.955)	905431	2.86580	2.866
* 134	Di-n-octylphthalate-d4	153	24.740	24.732	(1.000)	2215401	4.00000	
73	Di-n-octylphthalate	149	24.755	24.740	(1.001)	1024105	2.08461	2.085
74	Benzo(b)fluoranthene	252	25.599	25.584	(0.968)	2112651	4.34337	4.343(H)
75	Benzo(k)fluoranthene	252	25.653	25.646	(0.970)	2434909	5.14109	5.141

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
76	Benzo(a)pyrene	252	26.327	26.312	(0.995)	1771447	4.08779	4.088
* 77	Perylene-d12	264	26.451	26.443	(1.000)	1361351	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.391	29.383	(1.111)	2536854	4.95876	4.959
79	Dibenzo(a,h)anthracene	278	29.453	29.429	(1.113)	2127137	5.41414	5.414
80	Benzo(g,h,i)perylene	276	30.292	30.268	(1.145)	2153958	5.31685	5.317
90	N-Nitrosodimethylamine	74	4.758	4.750	(0.513)	1339660	12.9137	12.91
91	Aniline	93	8.666	8.659	(0.934)	1793144	7.79652	7.797
93	Benzidine	184	21.395	21.225	(0.906)	177	8e-004	0.0008088
103	Pyridine	79	4.827	4.812	(0.520)	480740	2.61301	2.613
105	1-methylnaphthalene	142	13.428	13.428	(1.141)	1270782	4.11109	4.111
111	Azobenzene (1,2-DP-Hydrazine)	77	16.885	16.878	(1.096)	2100249	4.17711	4.177
187	Total Benzofluoranthenes	252	25.599	25.646	(0.968)	4359815	9.28819	9.288
120	2,3,4,6-Tetrachlorophenol	232	16.074	16.066	(1.044)	362924	4.19016	4.190

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032307.D
Lab Smp Id: BLA0673-BS1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230303.b\ABN.m
Misc Info:

Calibration Date: 03-MAR-2023
Calibration Time: 18:27

Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	505000	252500	1010000	510753	1.14
27 Naphthalene-d8	1846542	923271	3693084	1883535	2.00
42 Acenaphthene-d10	936949	468475	1873898	984162	5.04
59 Phenanthrene-d10	1548373	774187	3096746	1636921	5.72
69 Chrysene-d12	1352261	676131	2704522	1432936	5.97
134 Di-n-octylphthala	2300648	1150324	4601296	2215401	-3.71
77 Perylene-d12	1445020	722510	2890040	1361351	-5.79

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	-0.00
27 Naphthalene-d8	11.77	11.27	12.27	11.77	-0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.40	0.05
59 Phenanthrene-d10	18.53	18.03	19.03	18.53	0.04
69 Chrysene-d12	23.62	23.12	24.12	23.63	0.03
134 Di-n-octylphthala	24.73	24.23	25.23	24.74	0.03
77 Perylene-d12	26.44	25.94	26.94	26.45	0.03

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

REVIEW SUMMARY FOR FILE - NT1003032307.D

Lab ID: BLA0673-BS1
nt10.i, 20230303.b\ABN.m,   03-MAR-2023 21:37

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.906	0.899	0.0069	Benzidine

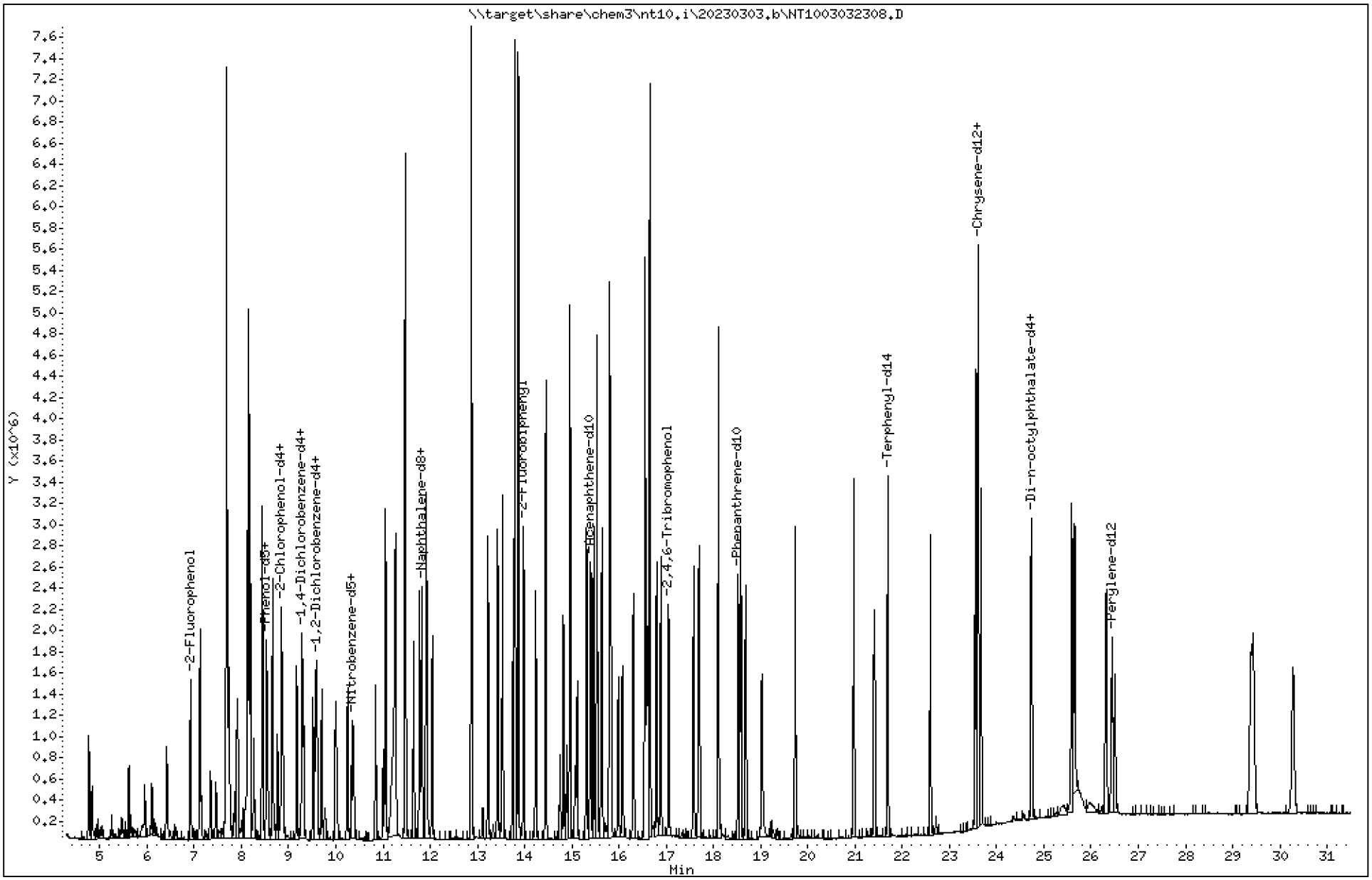
RRT check based on Ccal File: NT1003032302.D

On Column LOD for nt10.i, 20230303.b\ABN.m, ICAL.sub = 0.0000

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

Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D
Date : 03-MAR-2023 22:15
Client ID:
Sample Info: BLA0673-BSD1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

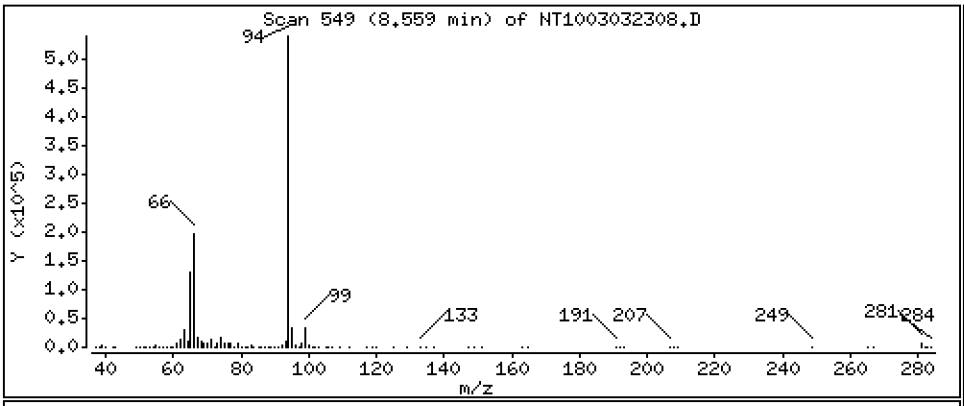
Operator: VTS

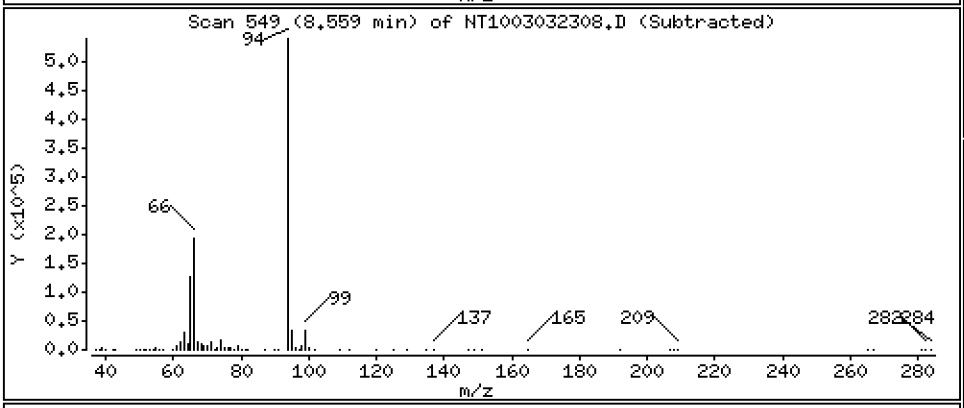
Column phase: ZB-5msi

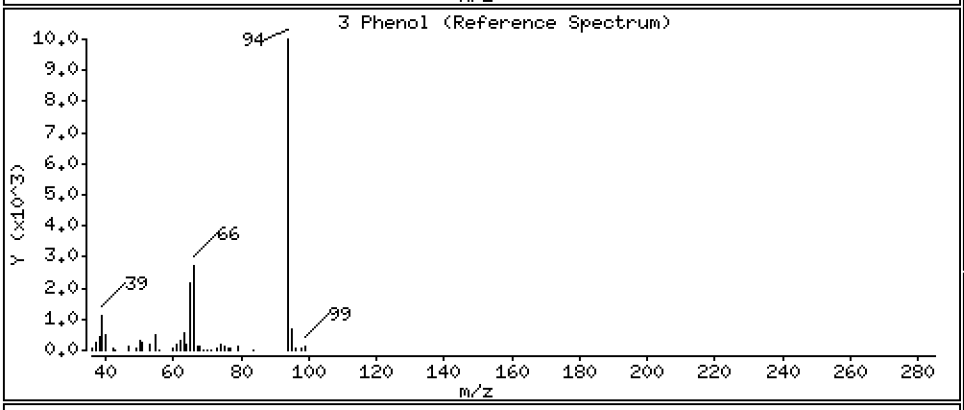
Column diameter: 0.25

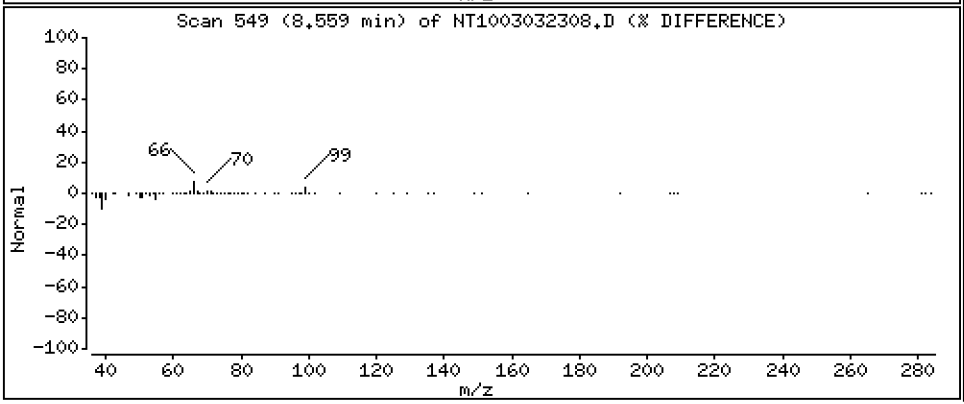
3 Phenol

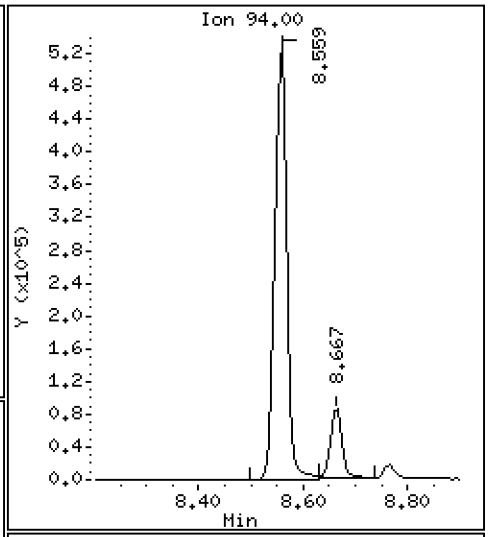
Concentration: 3.991 ug/ml

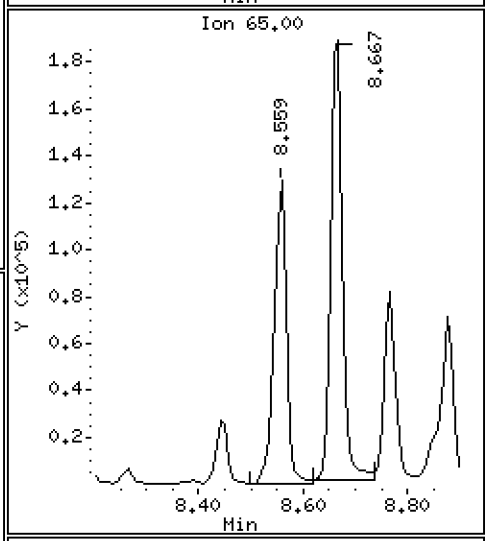


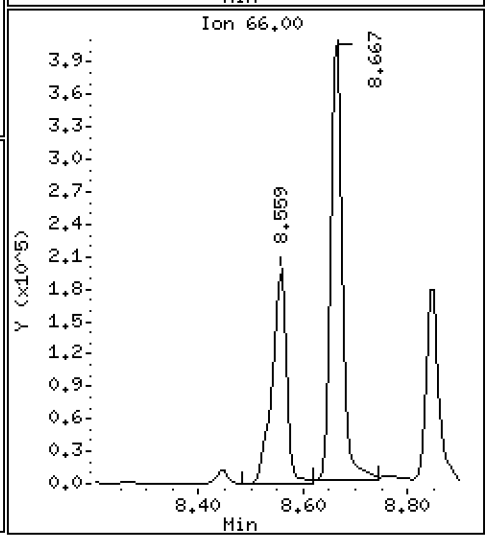












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

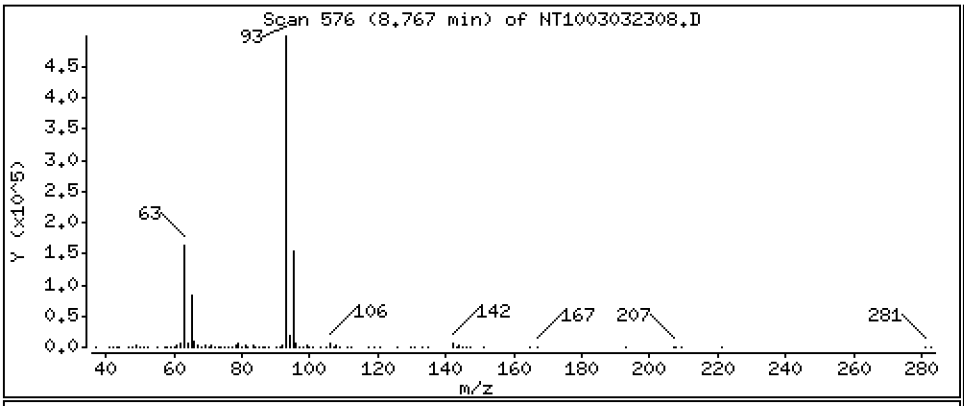
Operator: VTS

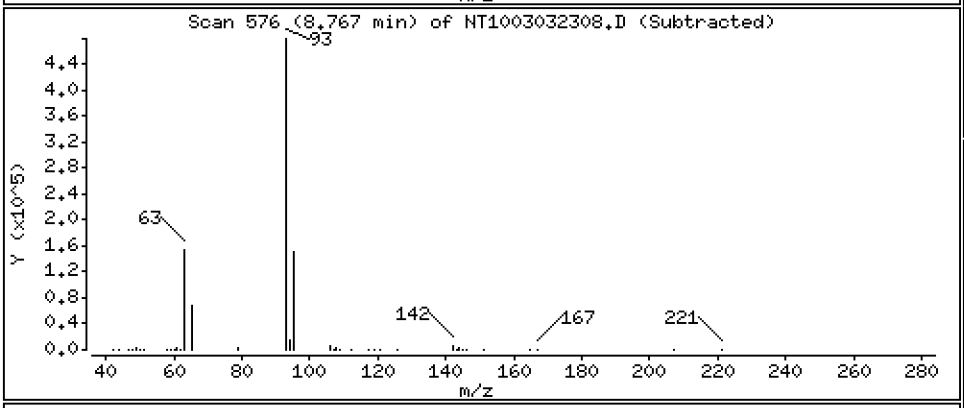
Column phase: ZB-5msi

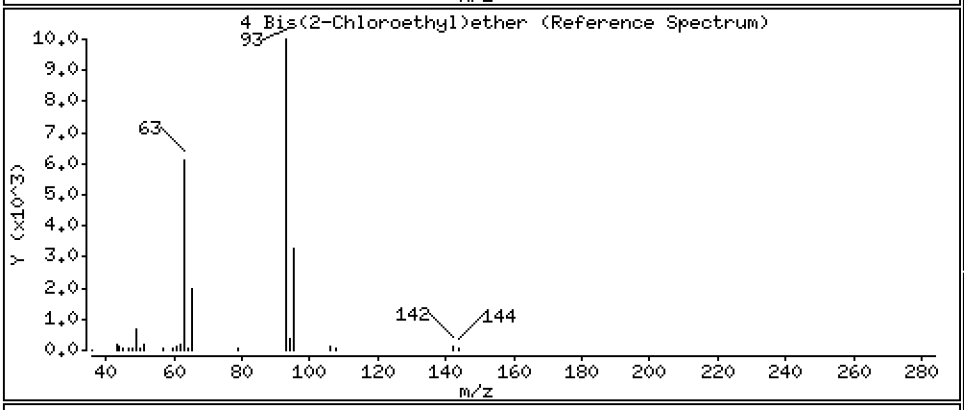
Column diameter: 0.25

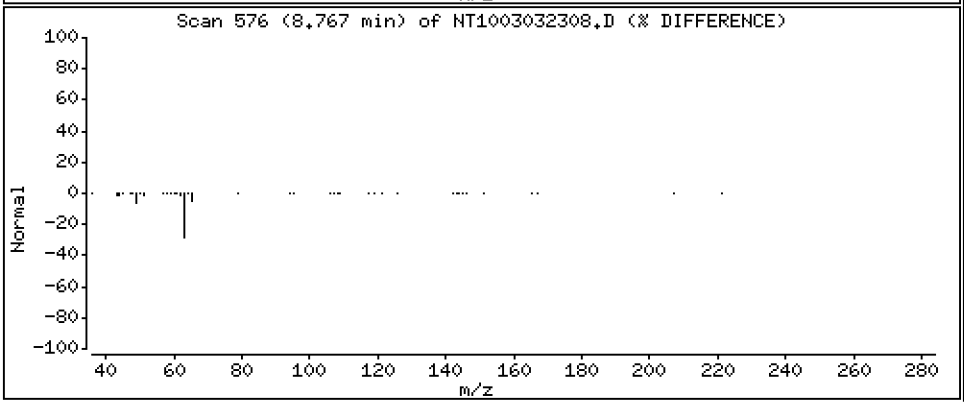
4 Bis(2-Chloroethyl)ether

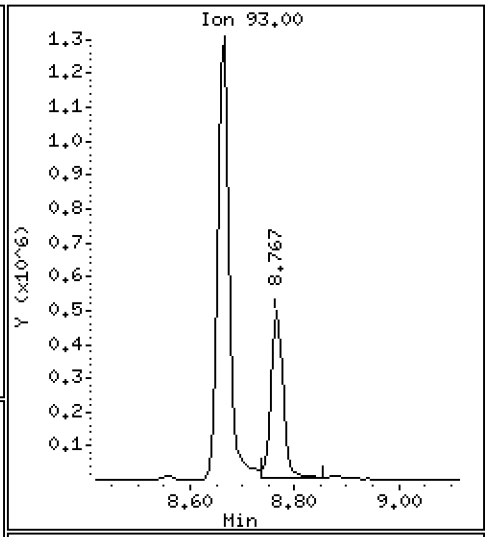
Concentration: 4.743 ug/ml

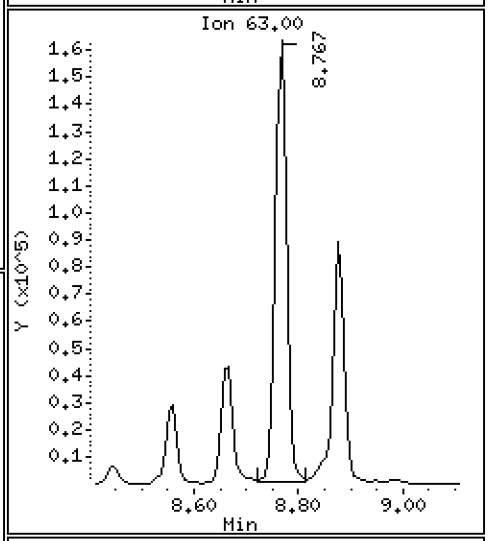


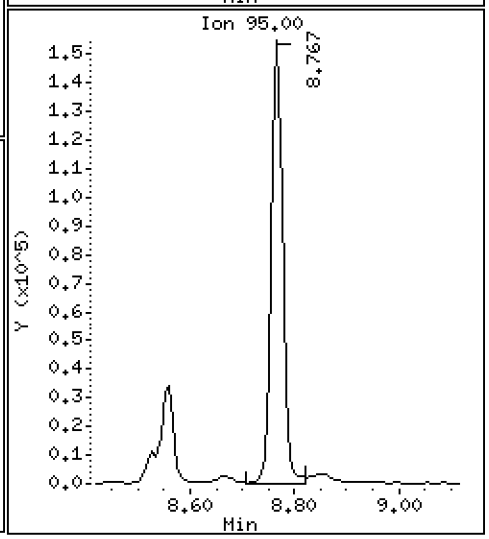












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

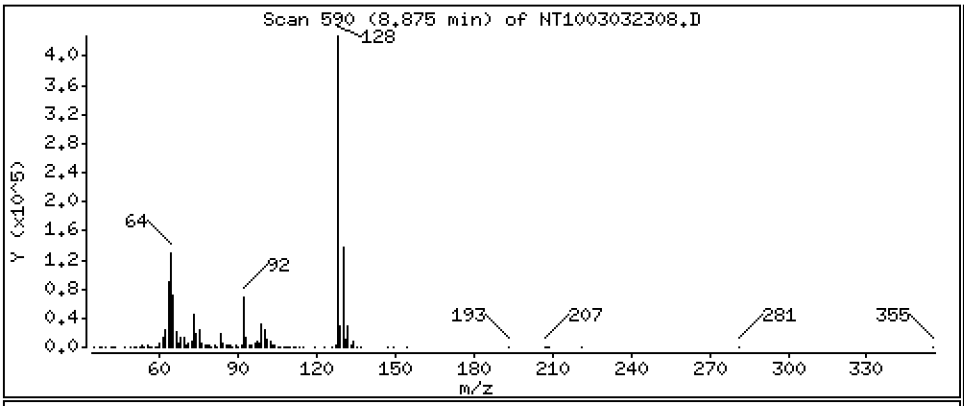
Operator: VTS

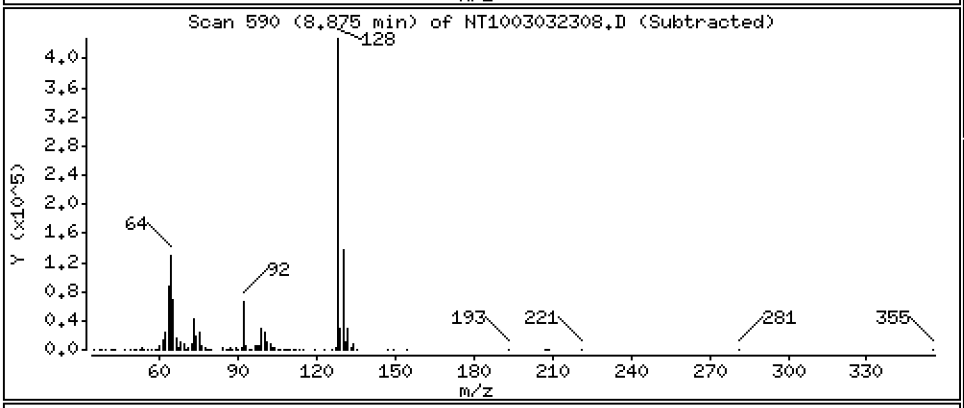
Column phase: ZB-5msi

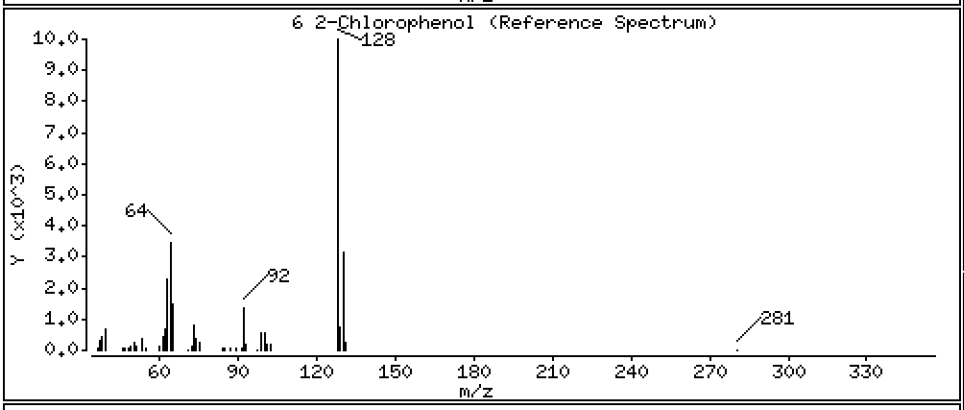
Column diameter: 0.25

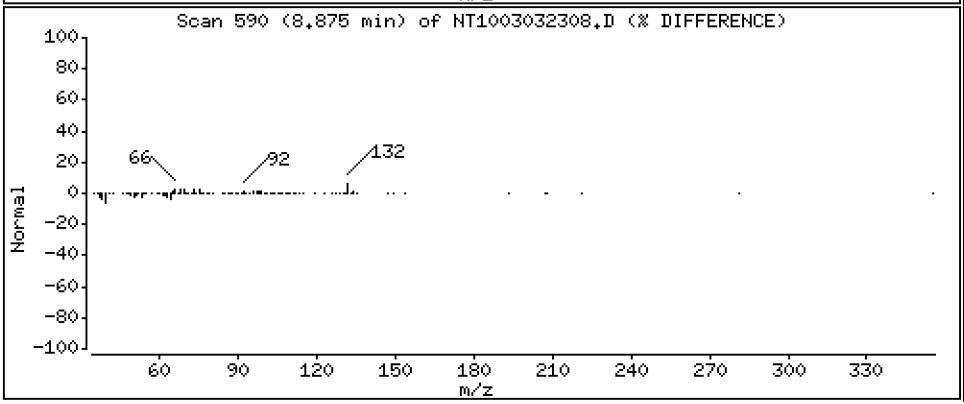
6 2-Chlorophenol

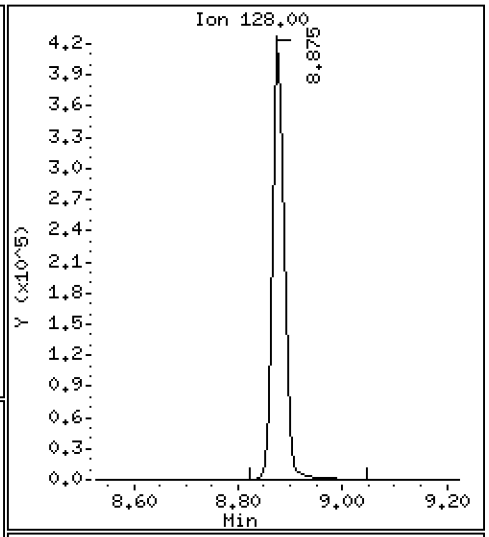
Concentration: 4.065 ug/ml

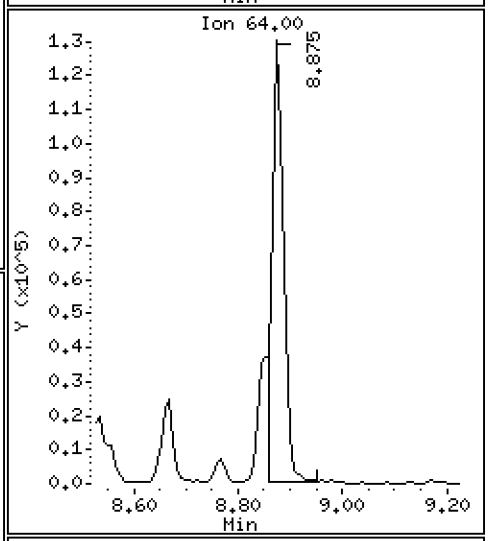


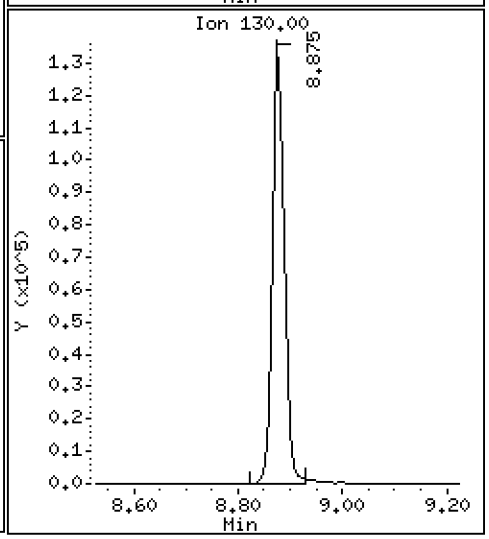












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

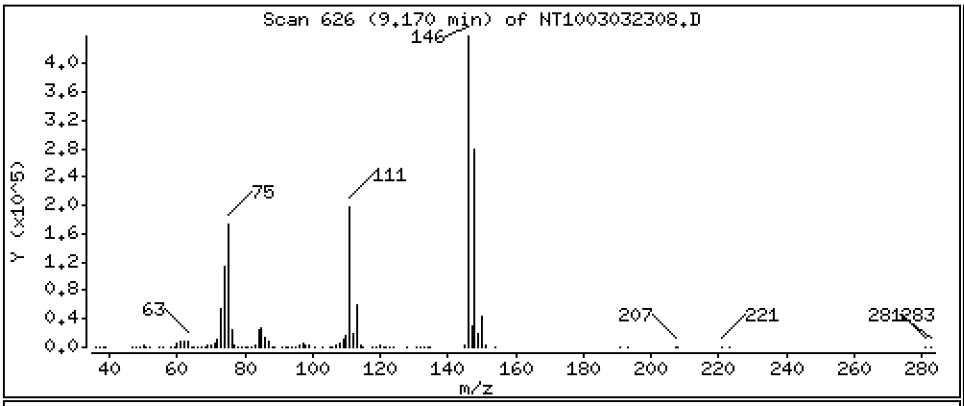
Operator: VTS

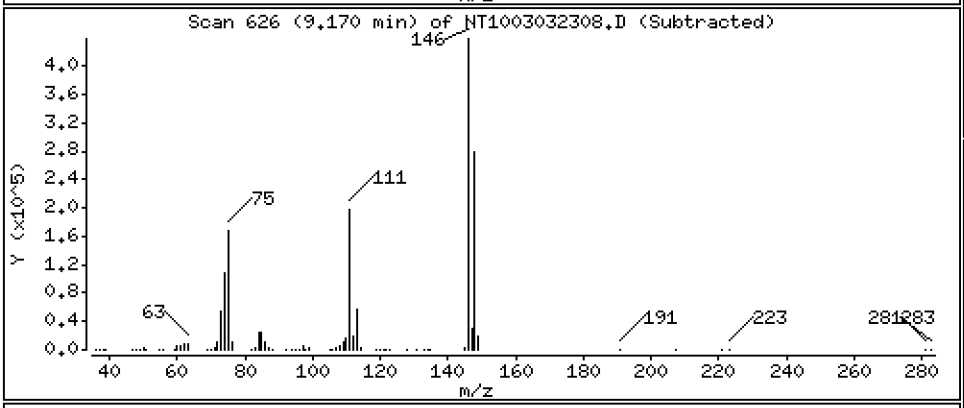
Column phase: ZB-5msi

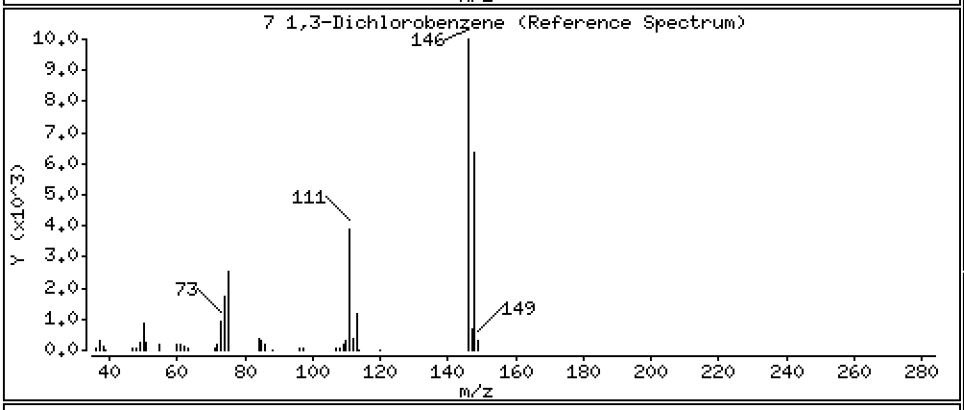
Column diameter: 0.25

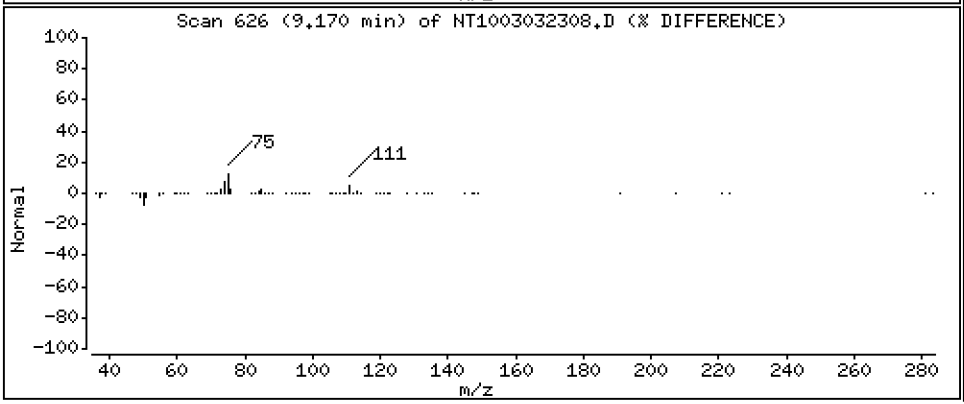
7 1,3-Dichlorobenzene

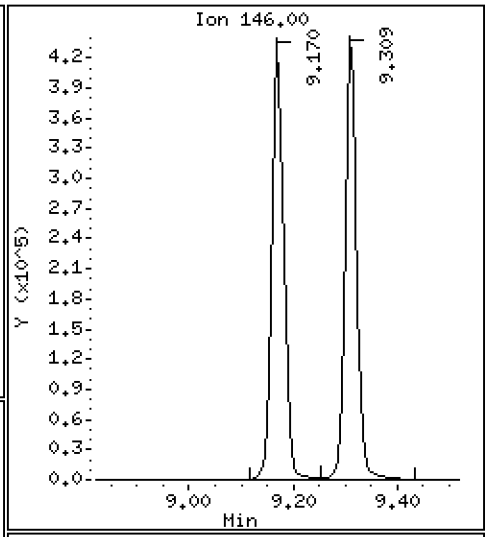
Concentration: 3.575 ug/ml

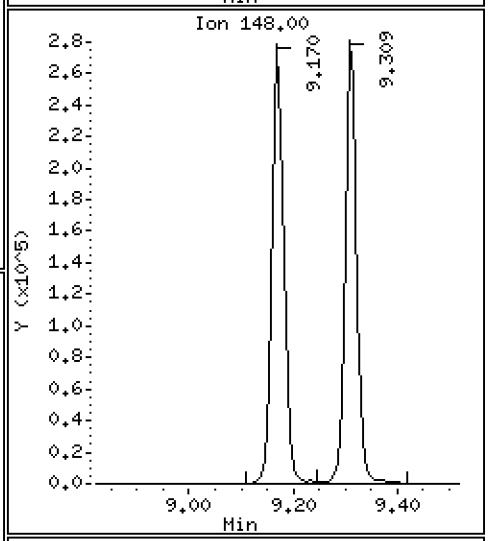


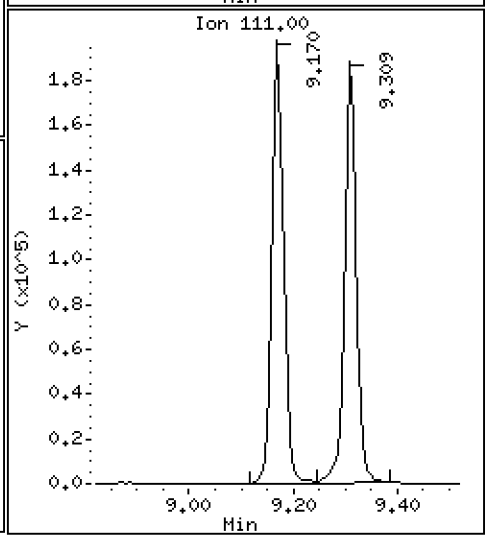












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

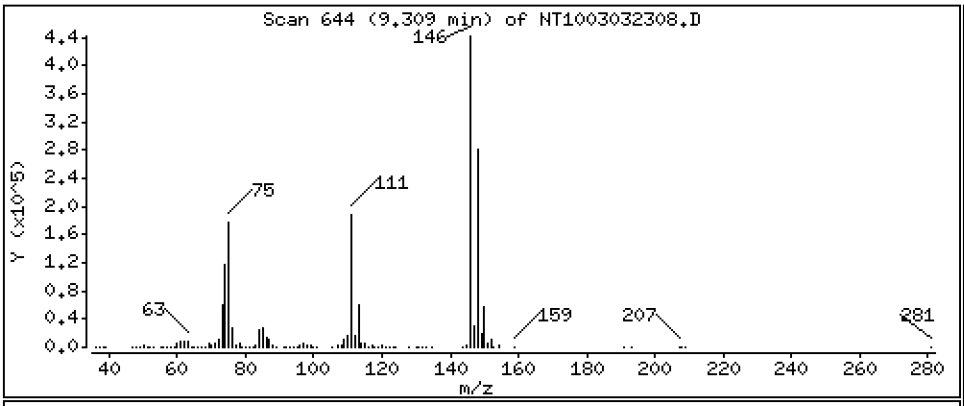
Operator: VTS

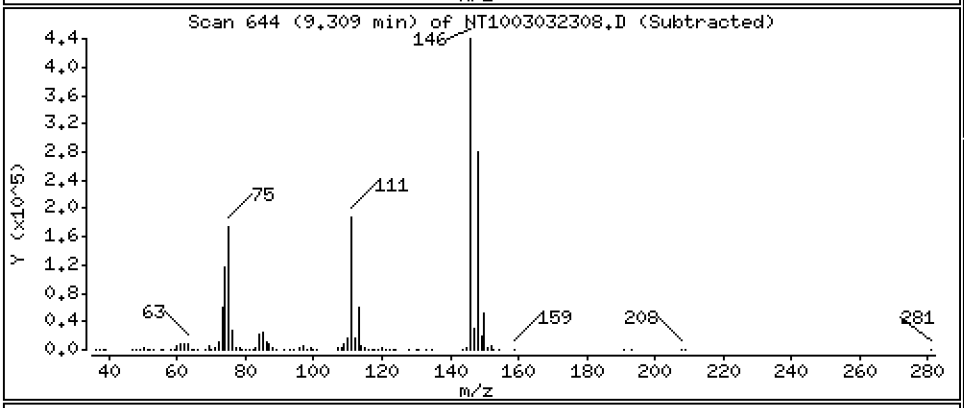
Column phase: ZB-5msi

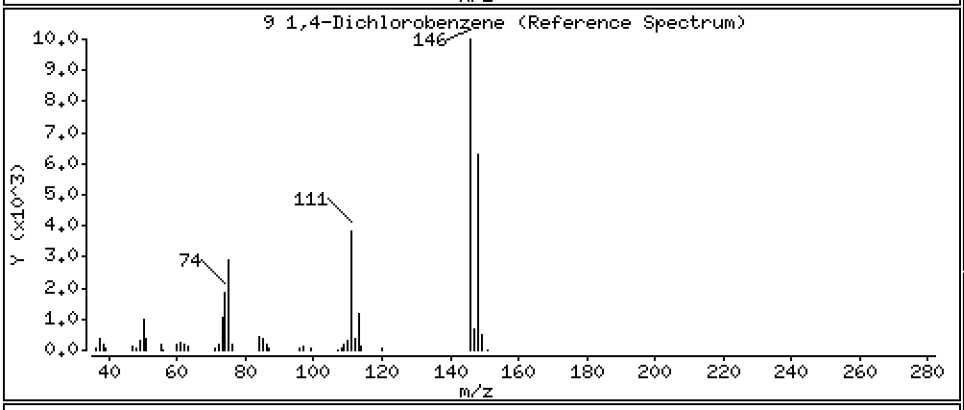
Column diameter: 0.25

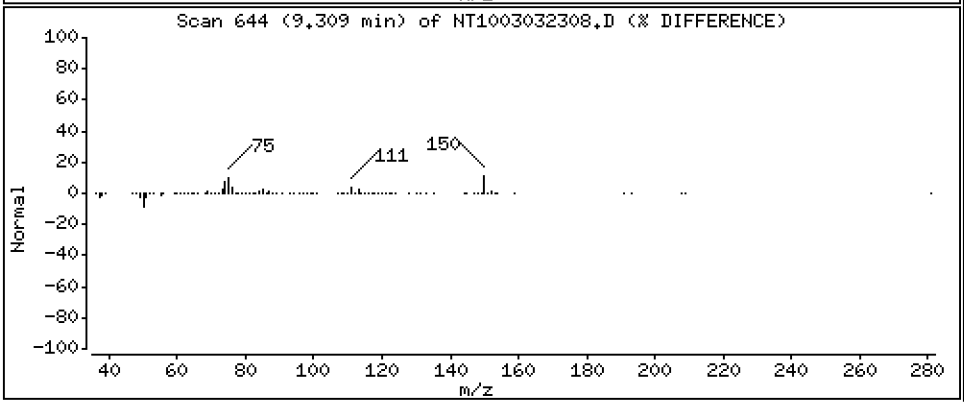
9 1,4-Dichlorobenzene

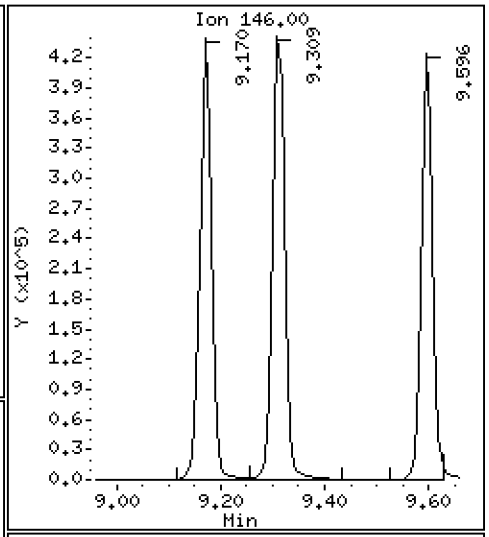
Concentration: 3.983 ug/ml

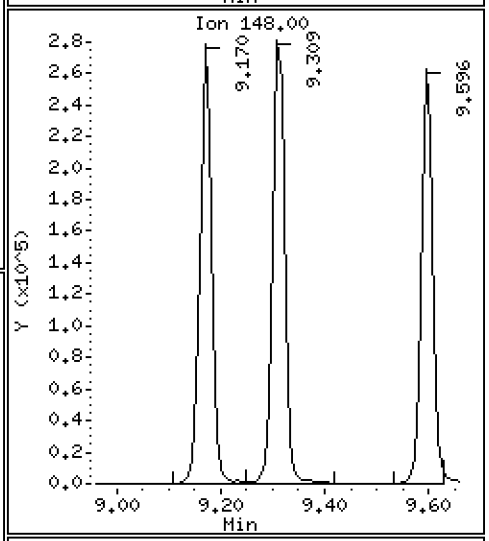


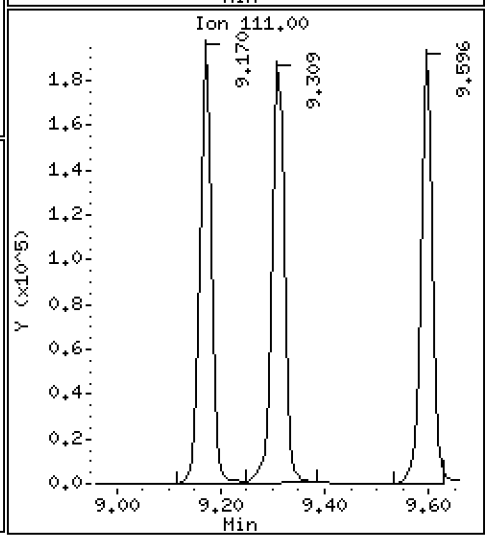












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

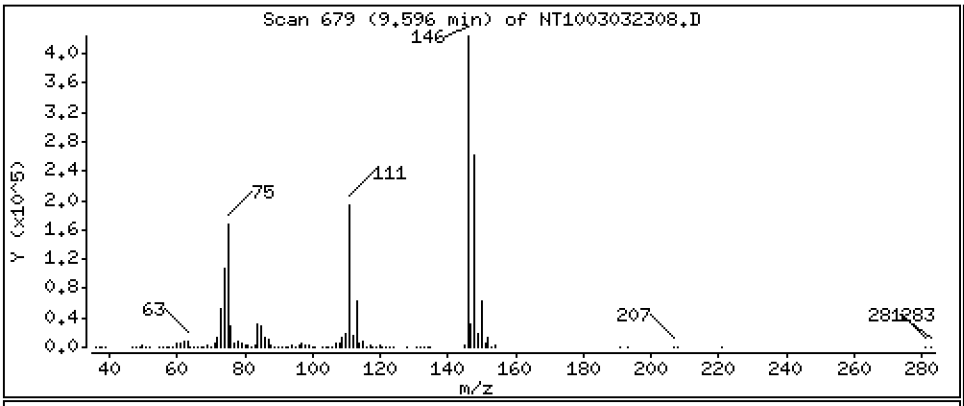
Operator: VTS

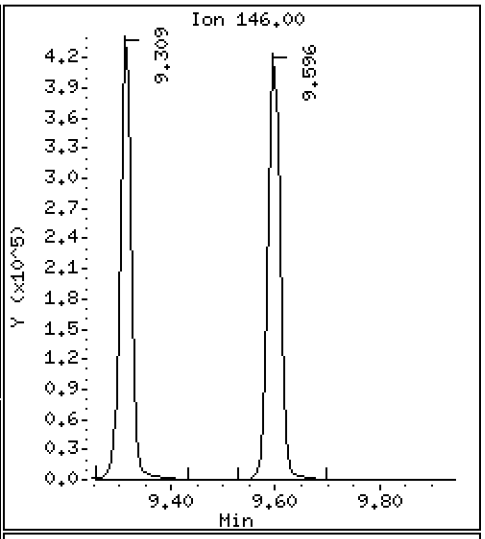
Column phase: ZB-5msi

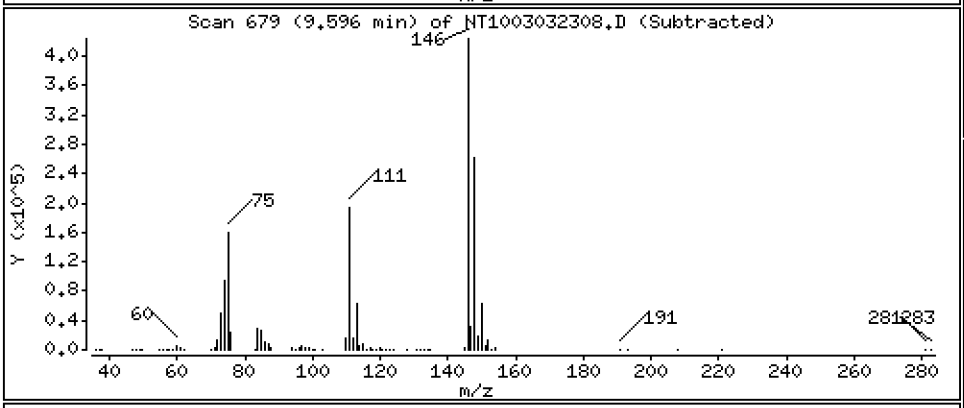
Column diameter: 0.25

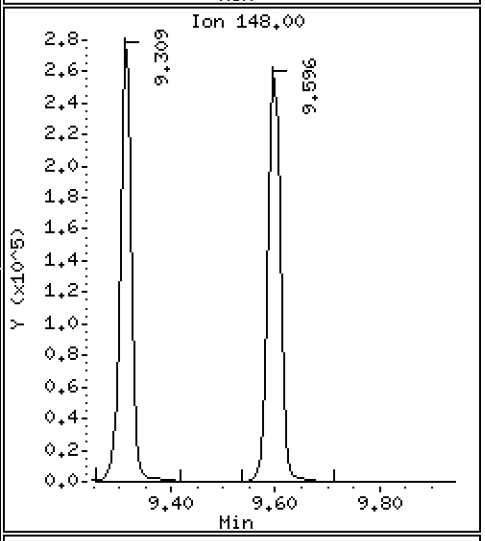
12 1,2-Dichlorobenzene

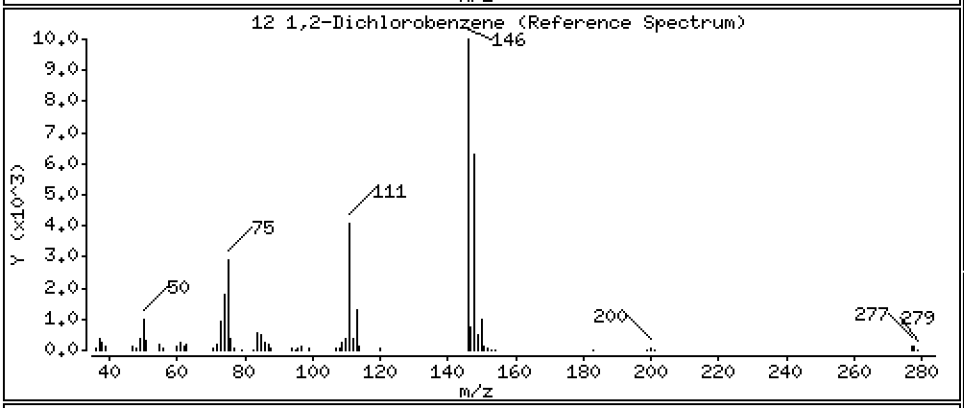
Concentration: 3.653 ug/ml

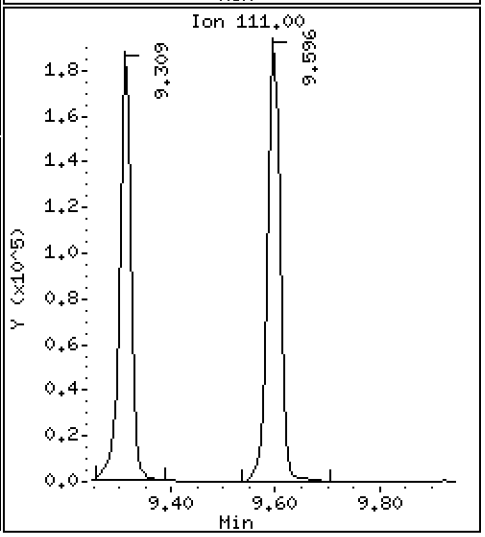


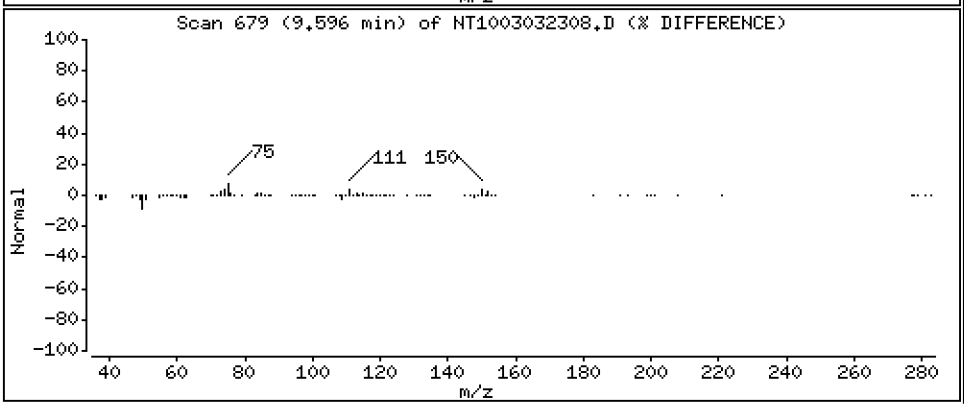












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

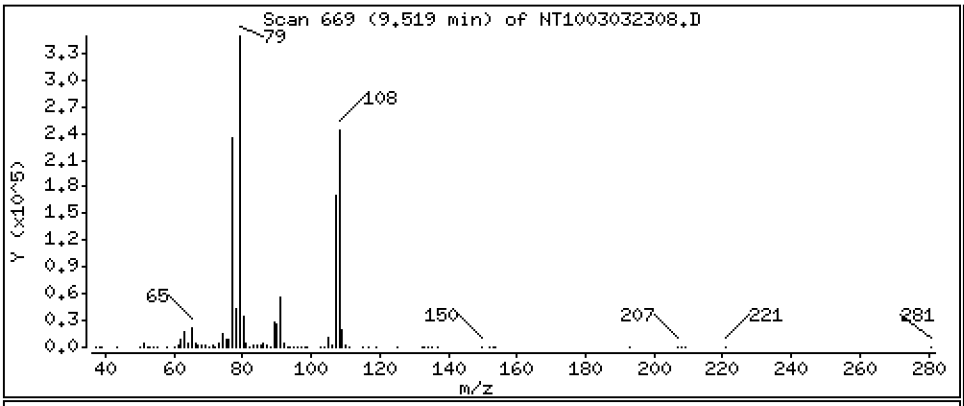
Operator: VTS

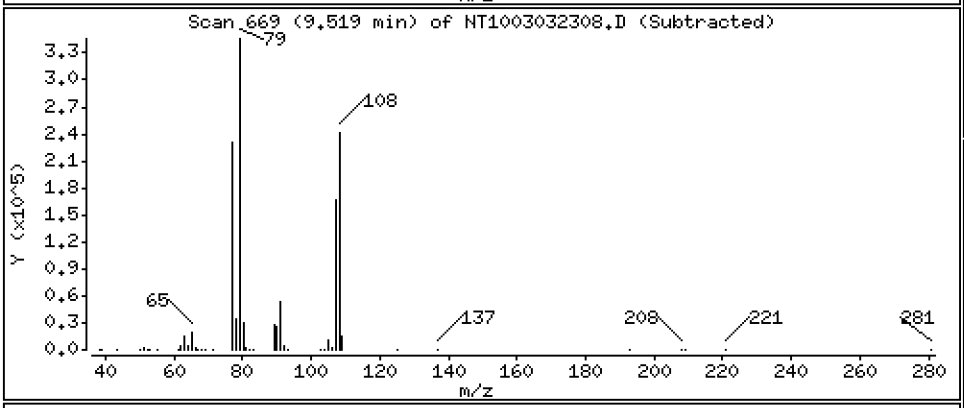
Column phase: ZB-5msi

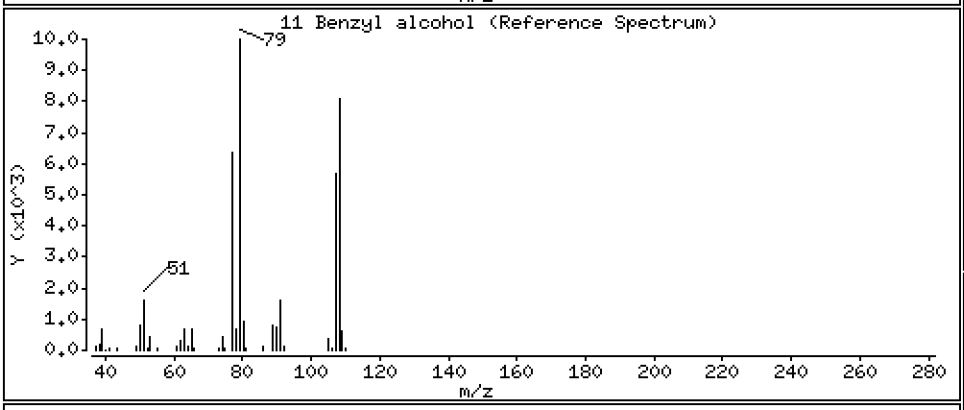
Column diameter: 0.25

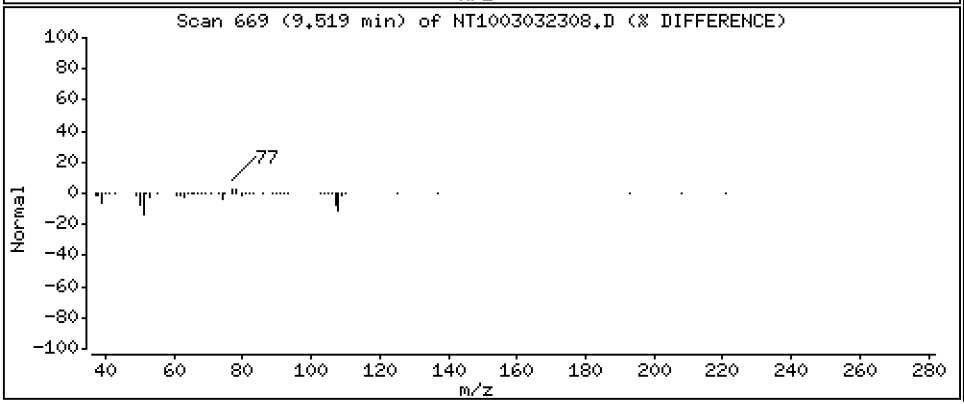
11 Benzyl alcohol

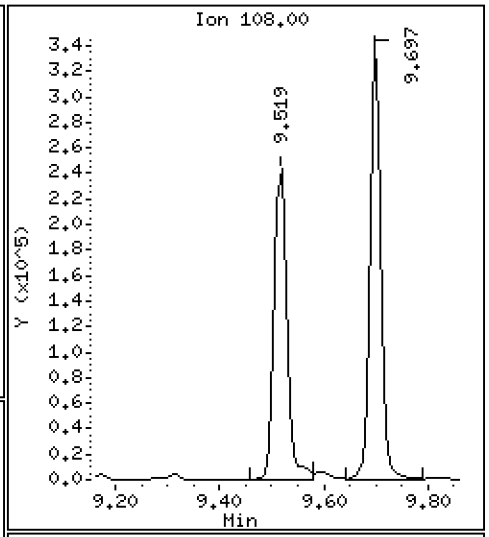
Concentration: 3.774 ug/ml

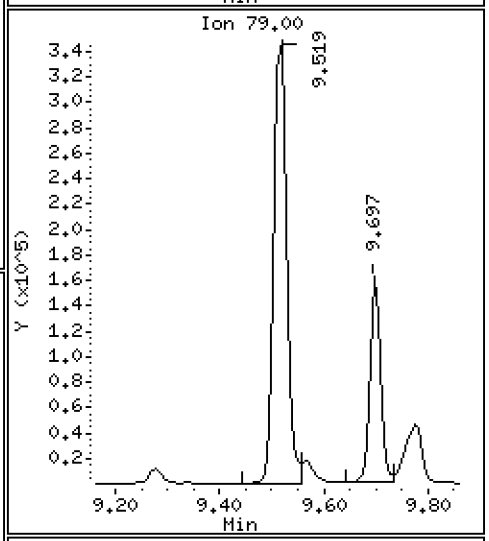


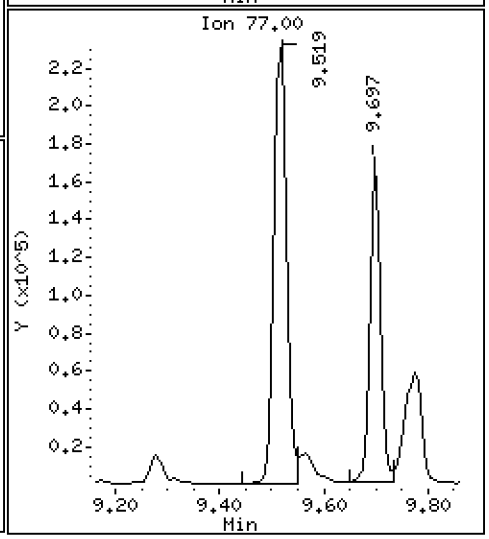












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

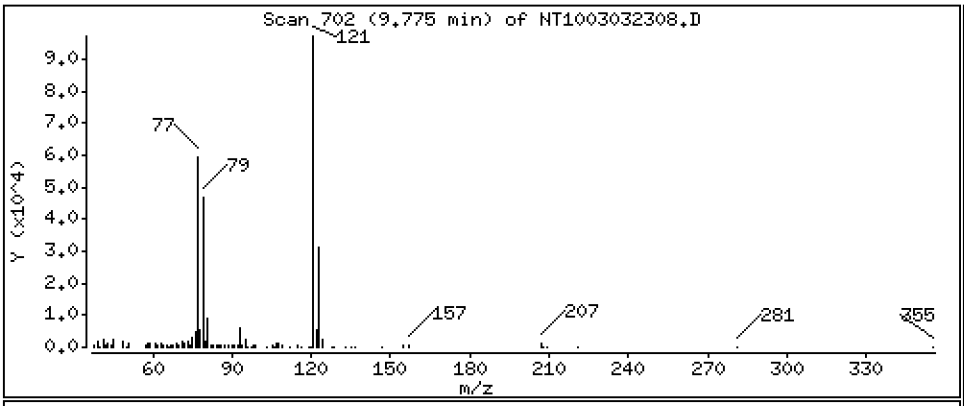
Operator: VTS

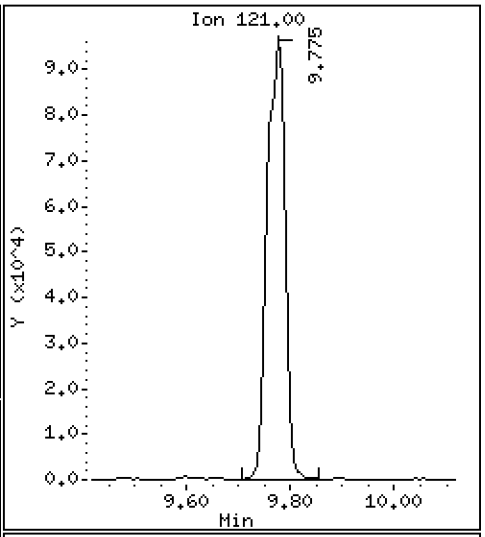
Column phase: ZB-5msi

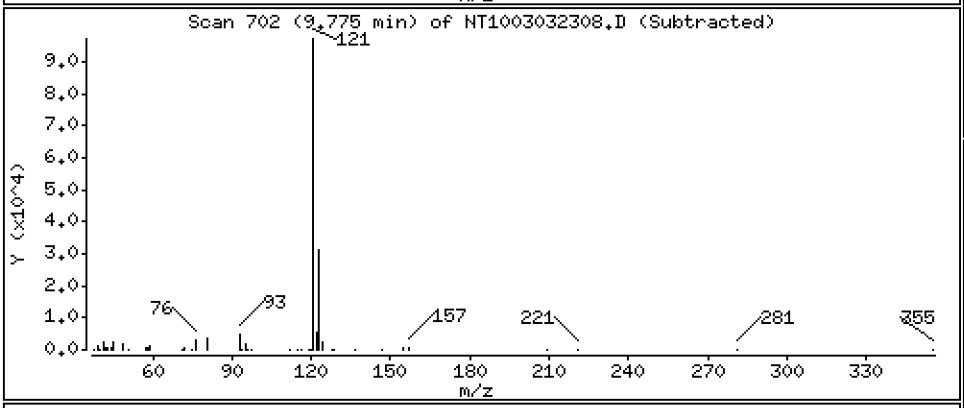
Column diameter: 0.25

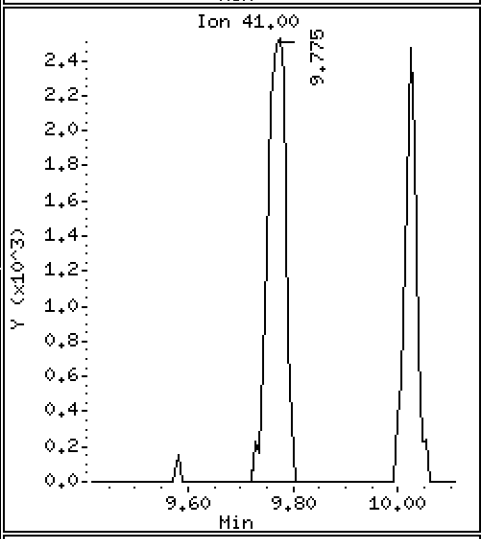
14 2,2'-oxybis(1-Chloropropane)

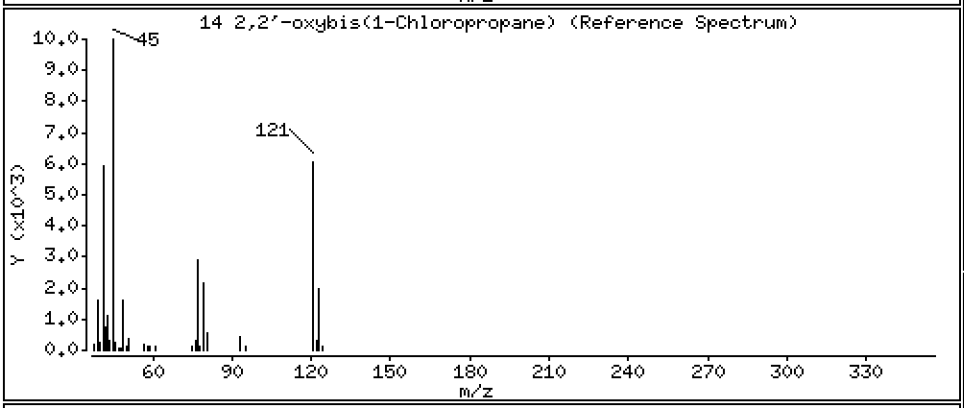
Concentration: 4.339 ug/ml

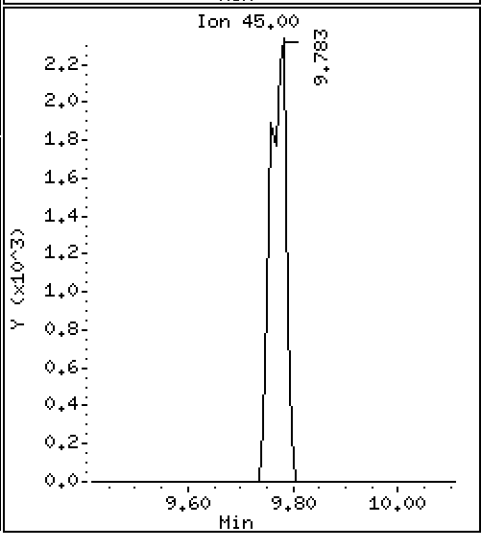


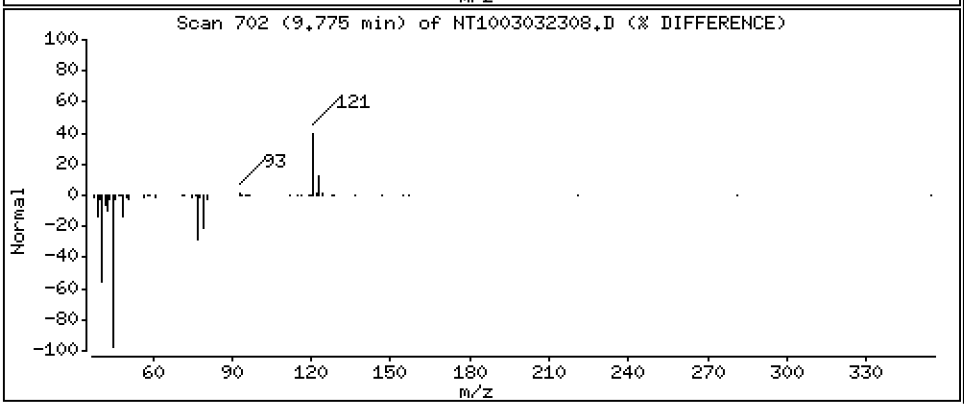












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

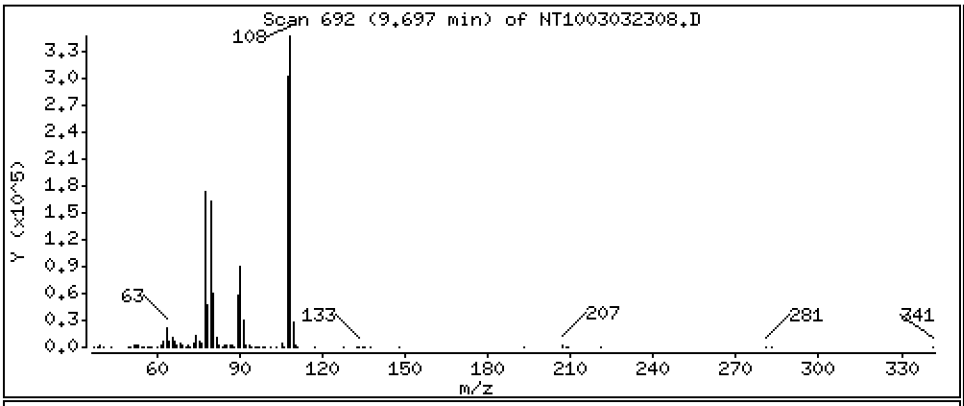
Operator: VTS

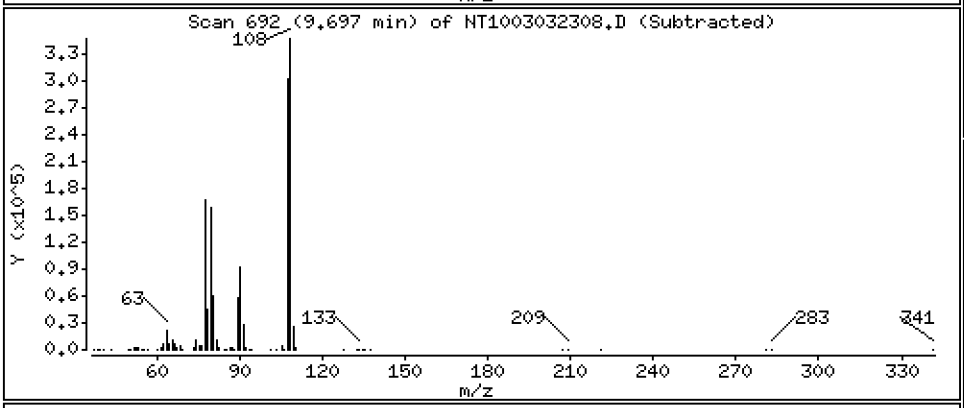
Column phase: ZB-5msi

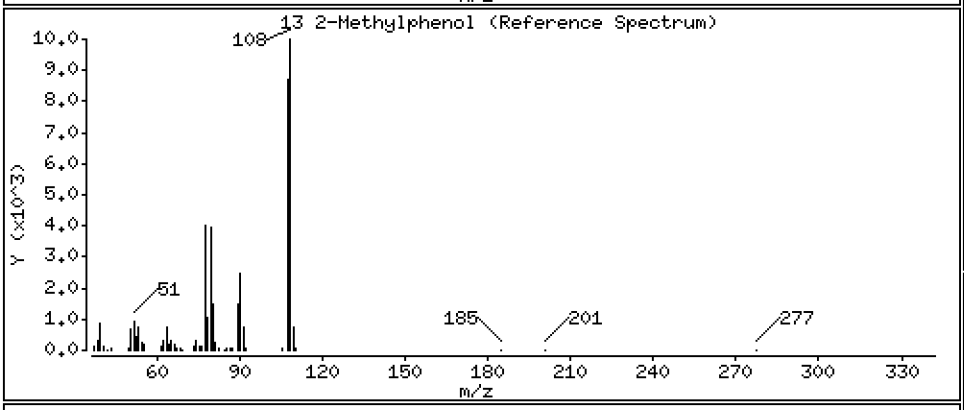
Column diameter: 0.25

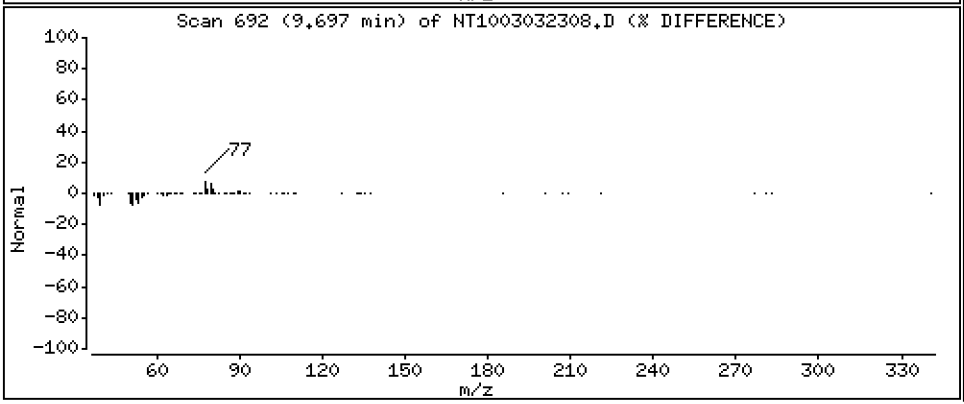
13 2-Methylphenol

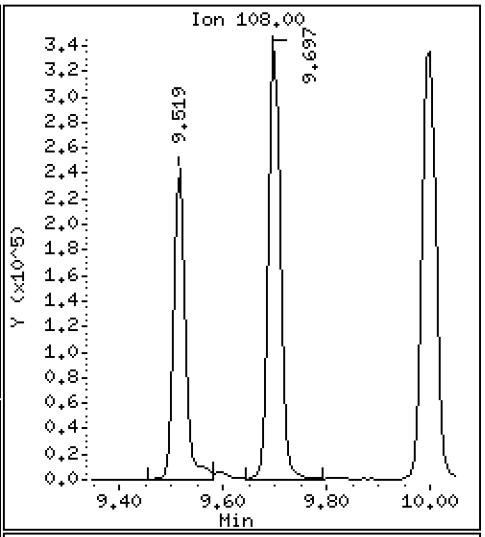
Concentration: 3.173 ug/ml

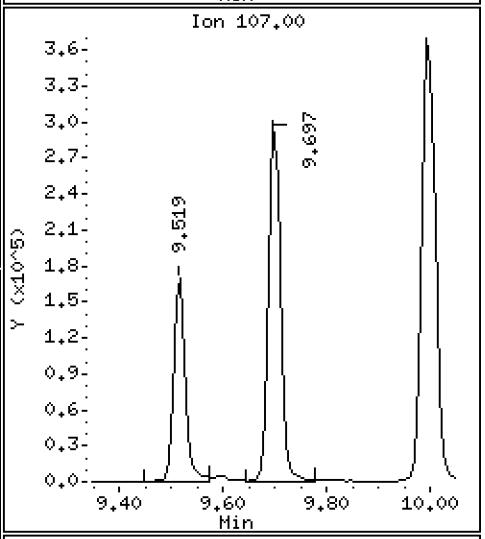


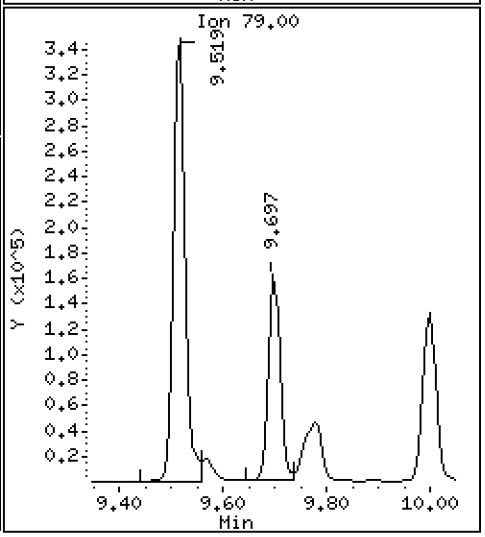












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

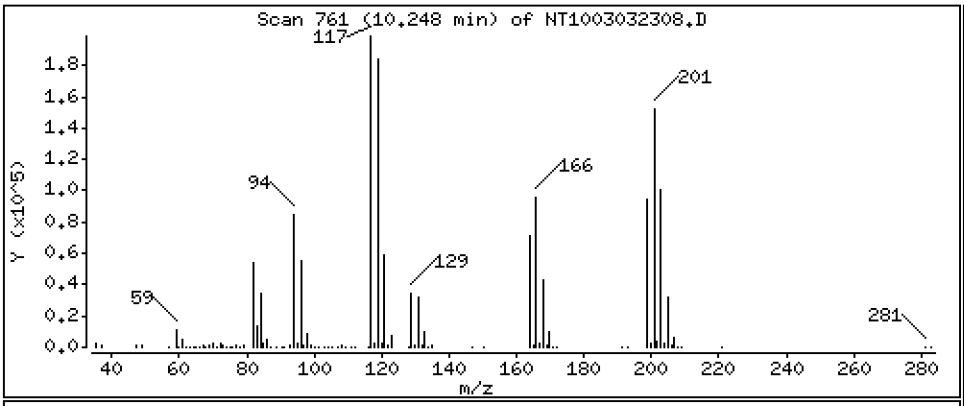
Operator: VTS

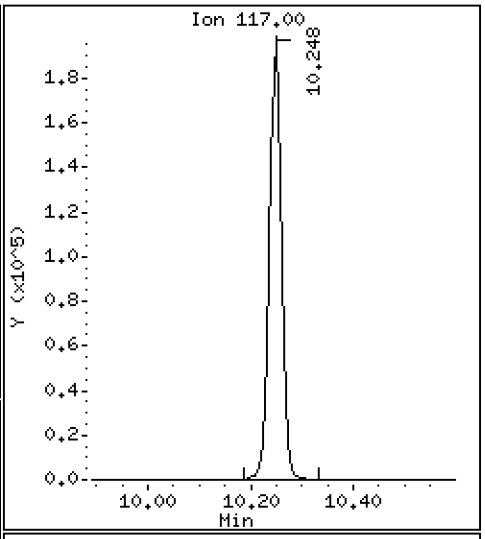
Column phase: ZB-5msi

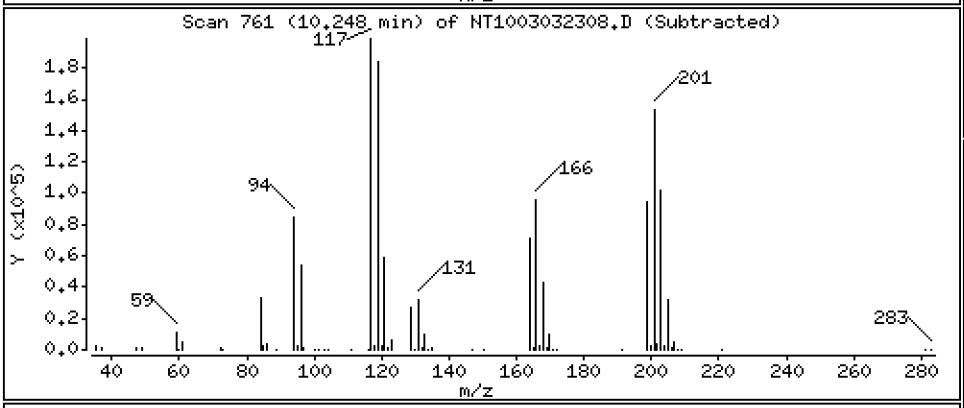
Column diameter: 0.25

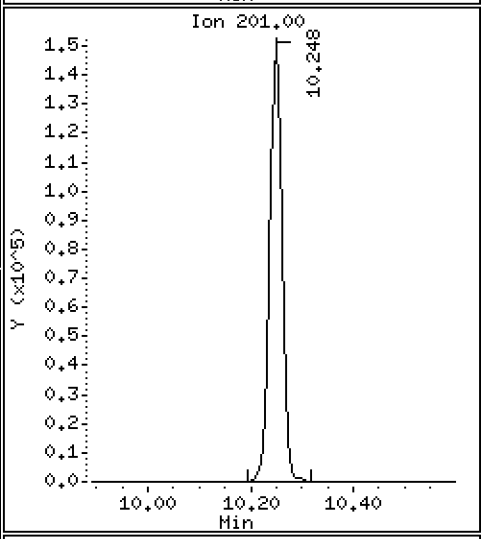
17 Hexachloroethane

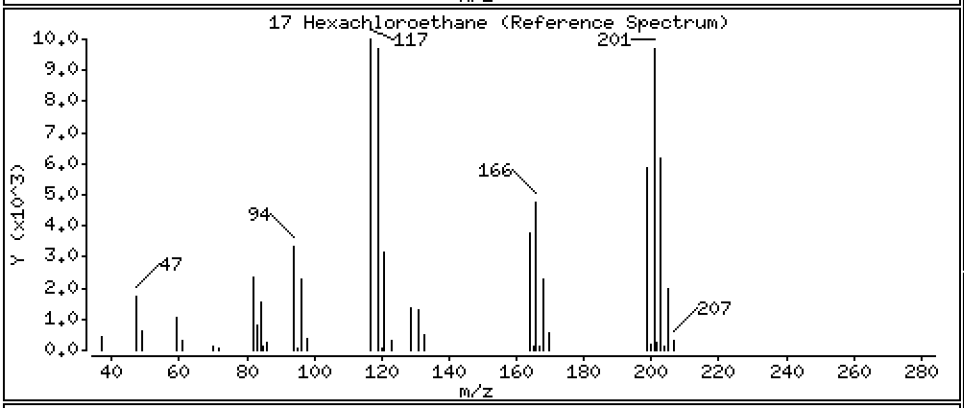
Concentration: 3.903 ug/ml

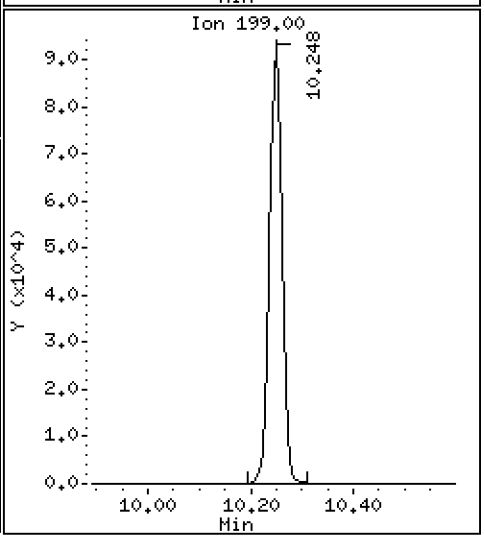


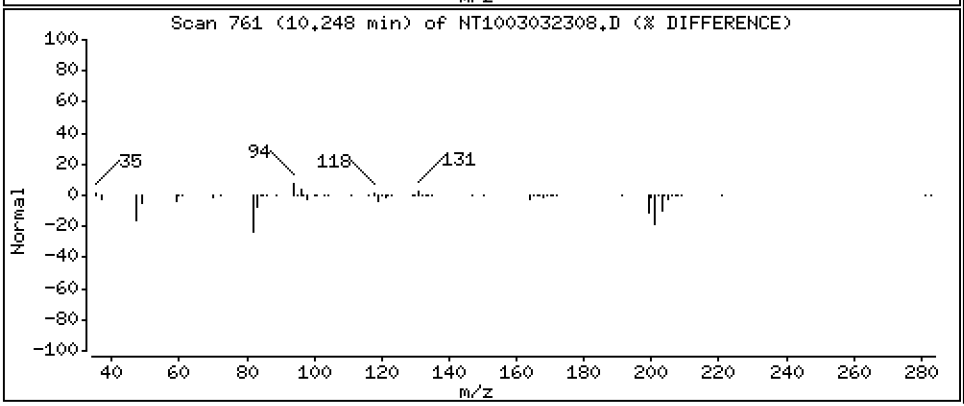












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

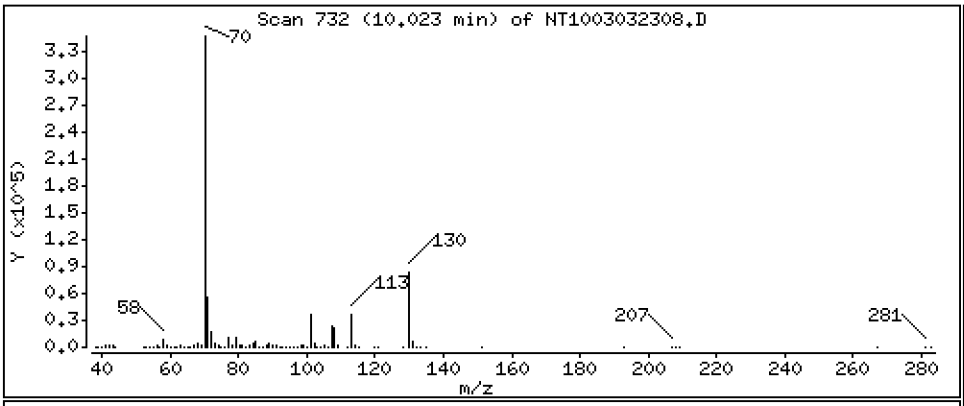
Operator: VTS

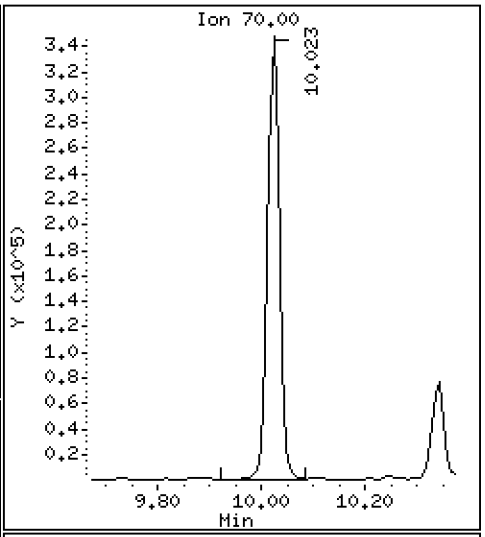
Column phase: ZB-5msi

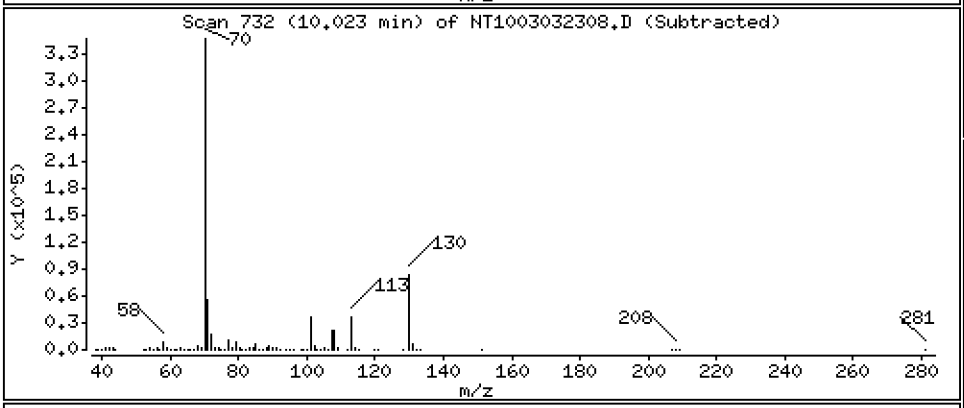
Column diameter: 0.25

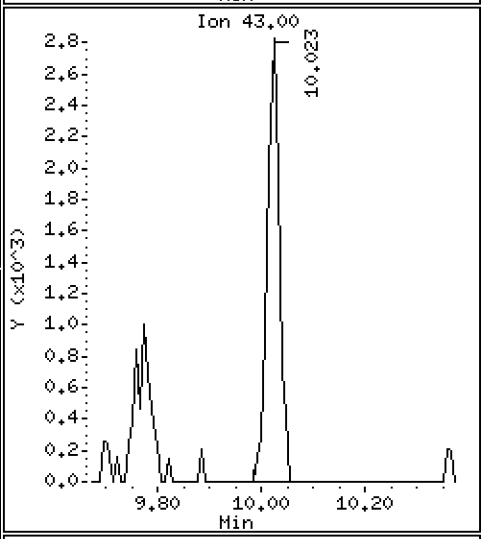
16 N-Nitroso-di-n-propylamine

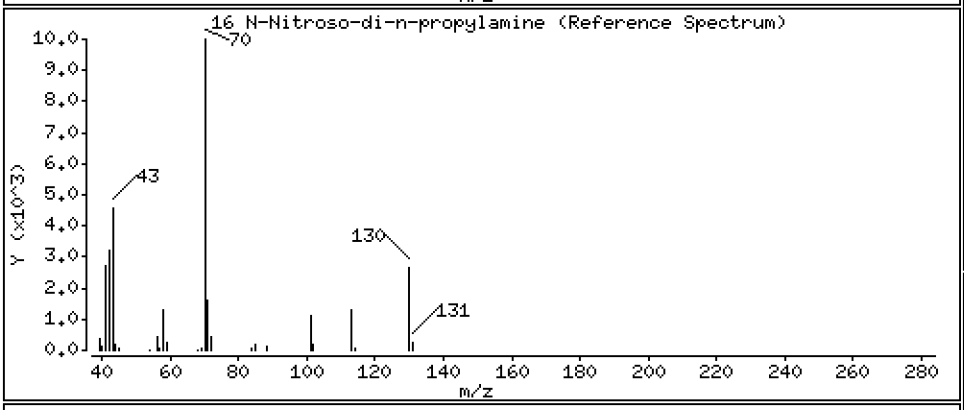
Concentration: 4.250 ug/ml

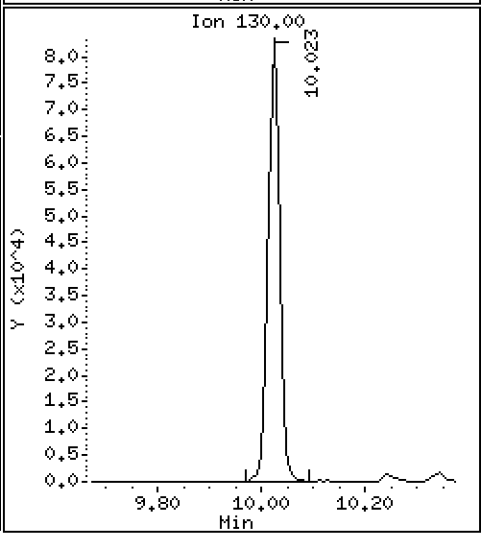


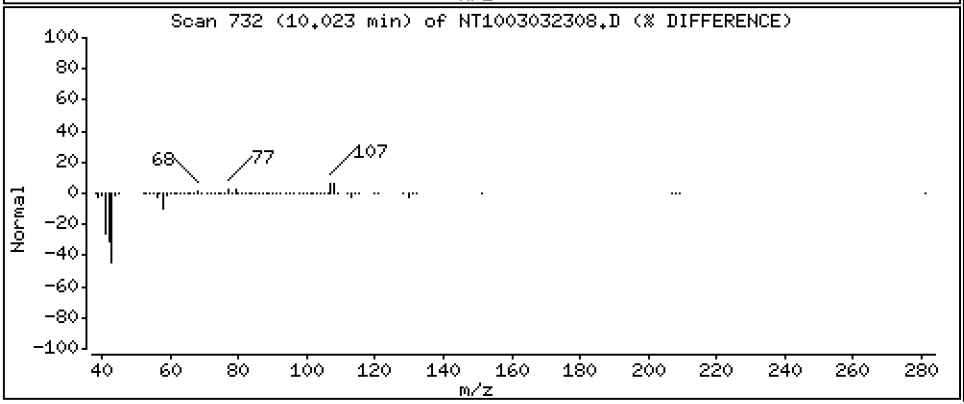












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

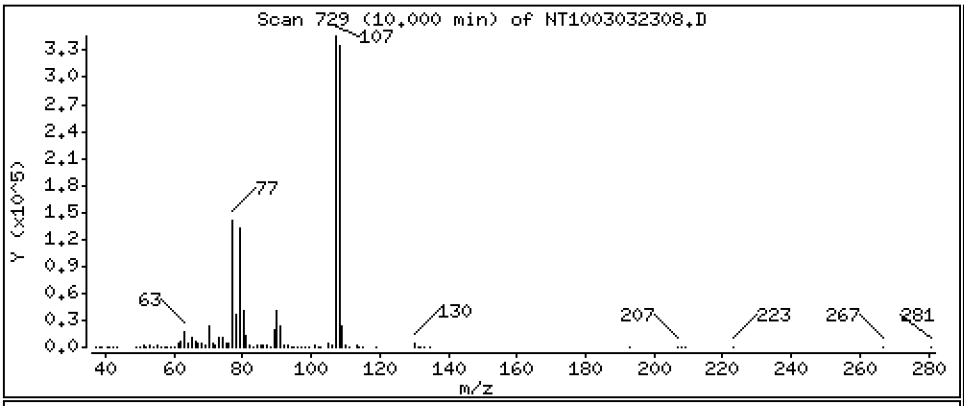
Operator: VTS

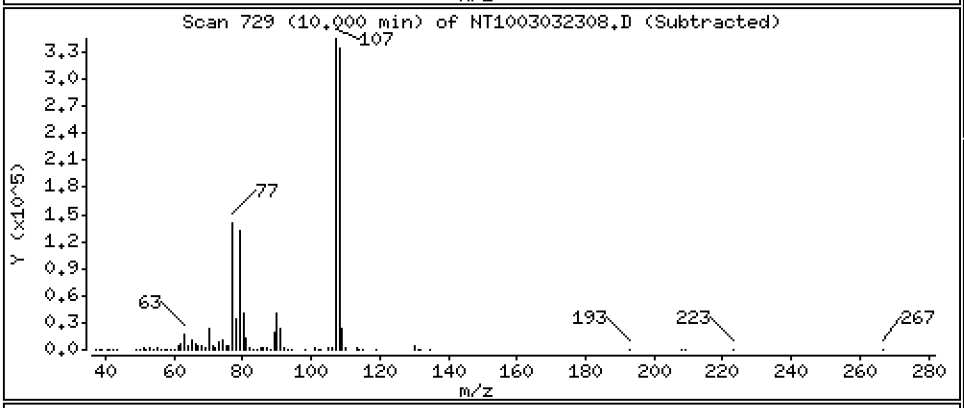
Column phase: ZB-5msi

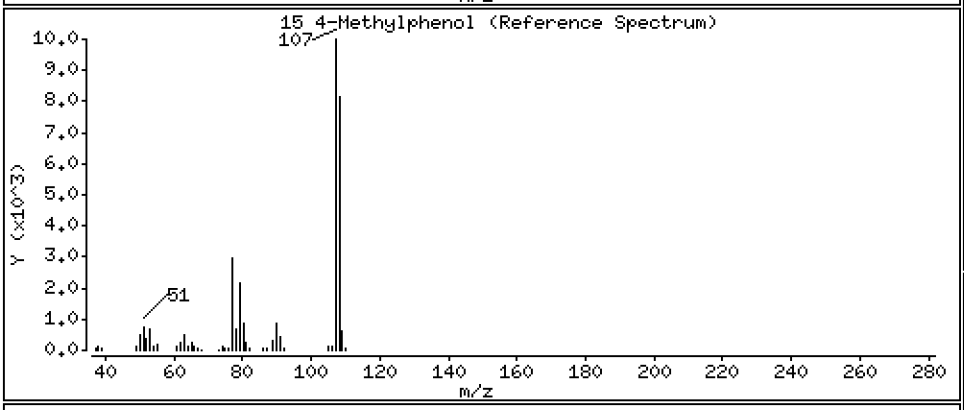
Column diameter: 0.25

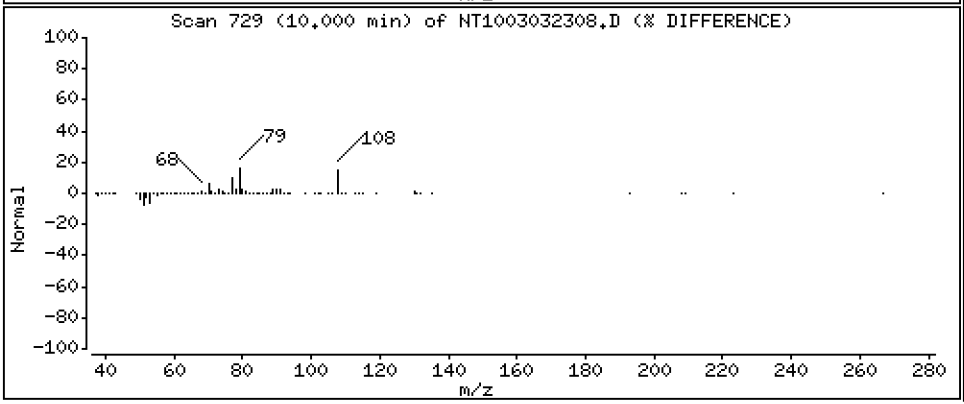
15 4-Methylphenol

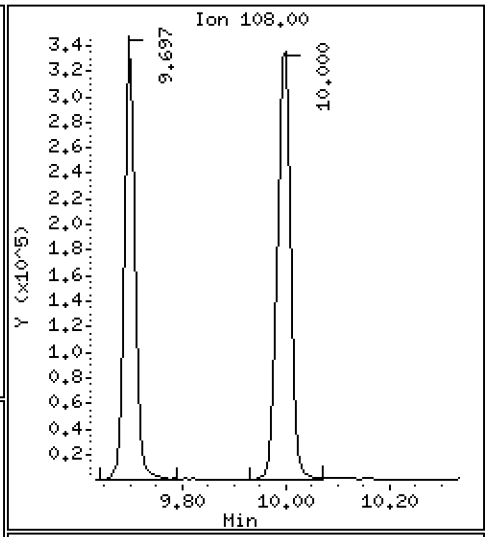
Concentration: 3.065 ug/ml

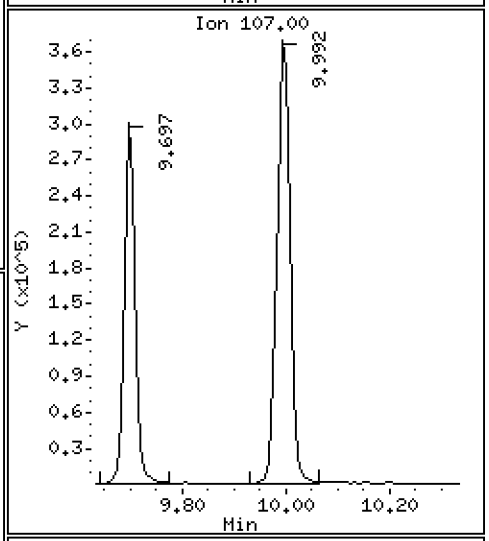


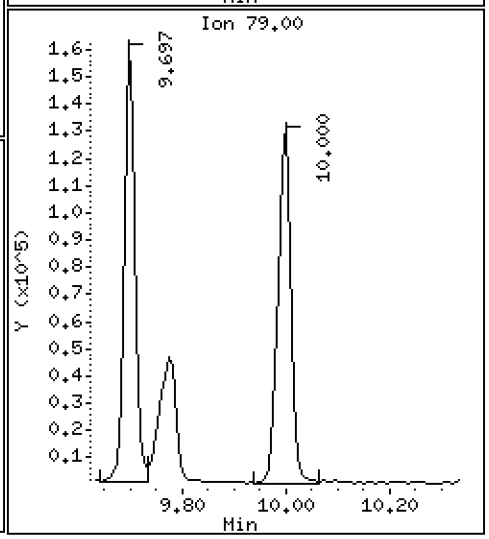












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

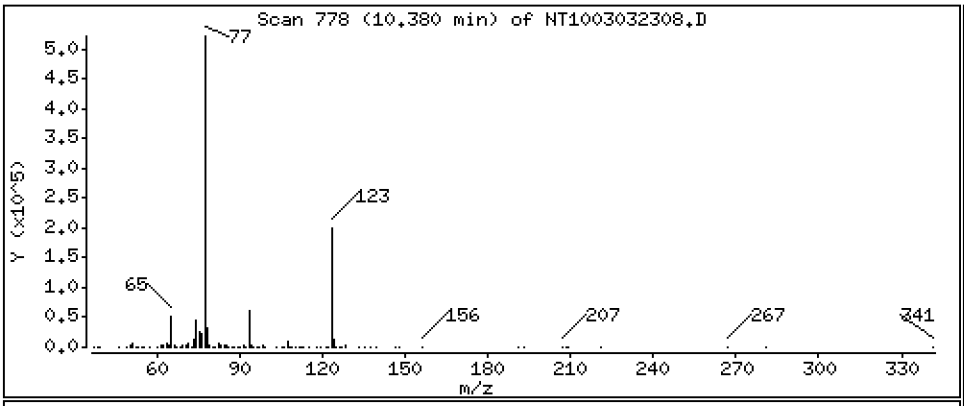
Operator: VTS

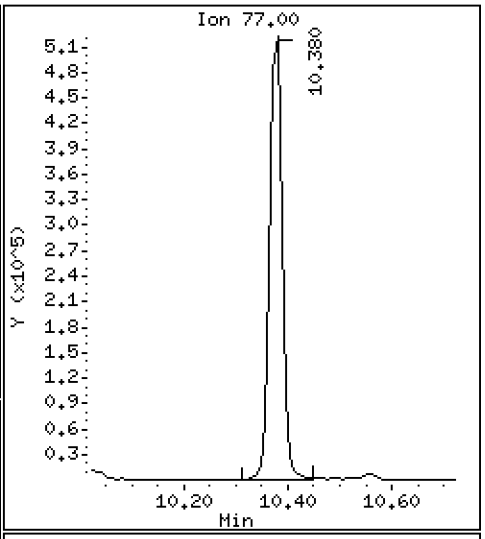
Column phase: ZB-5msi

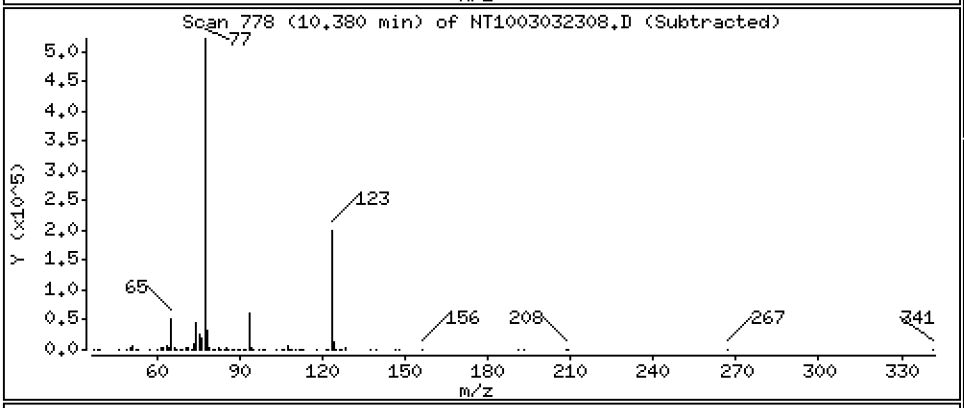
Column diameter: 0.25

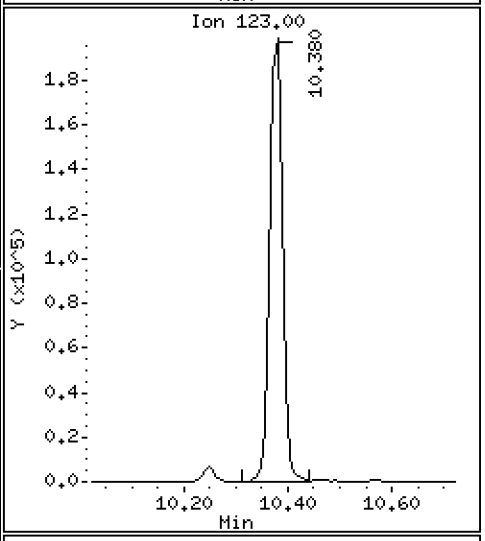
19 Nitrobenzene

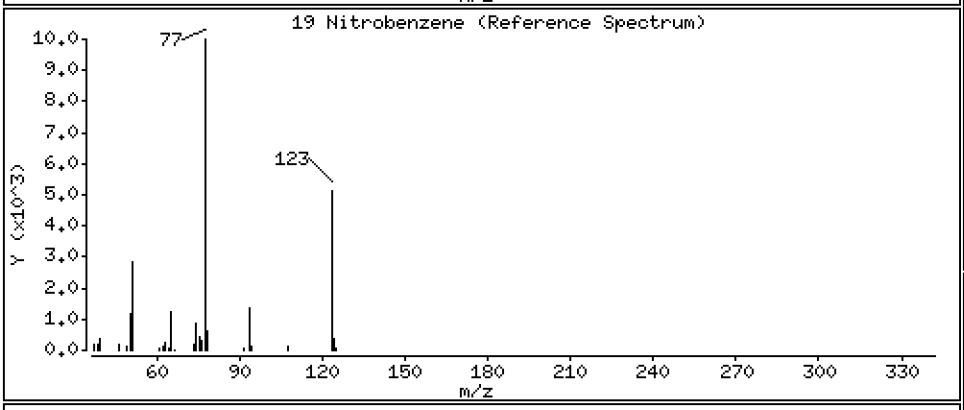
Concentration: 4.164 ug/ml

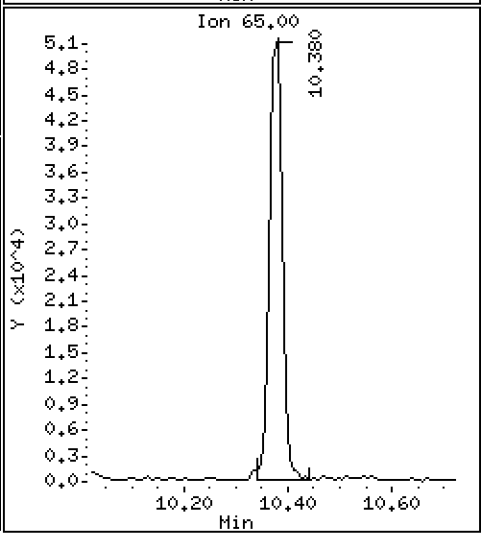


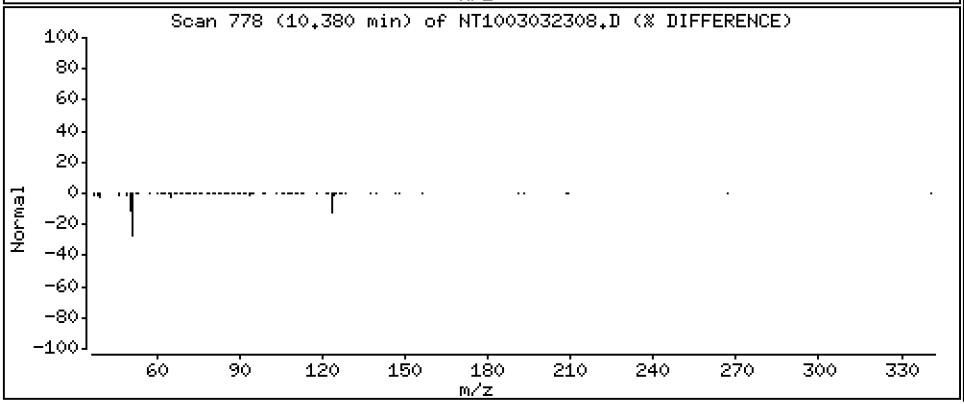












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

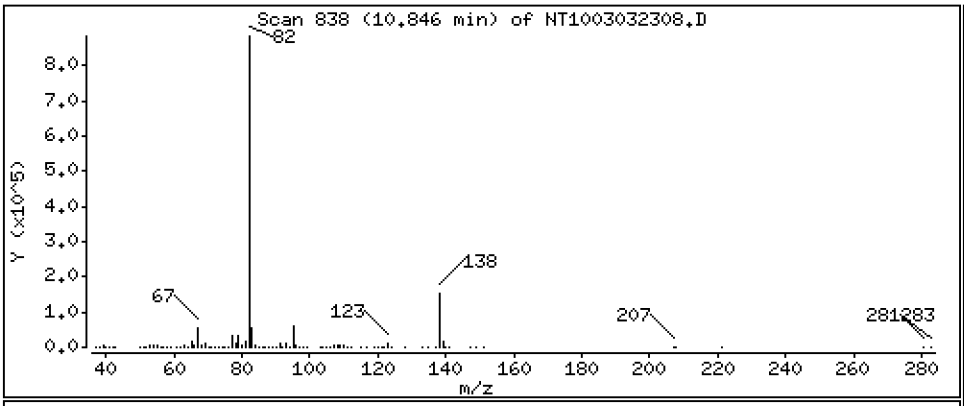
Operator: VTS

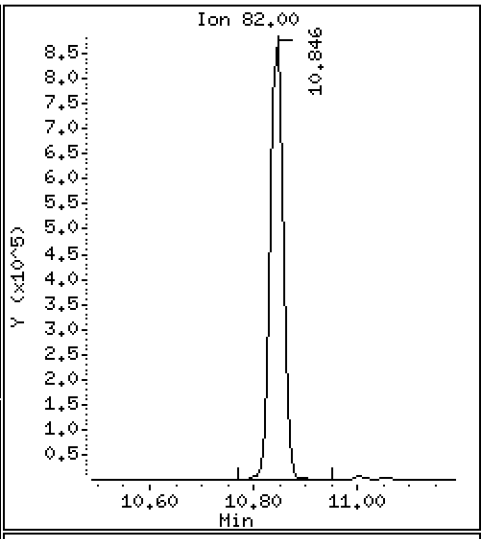
Column phase: ZB-5msi

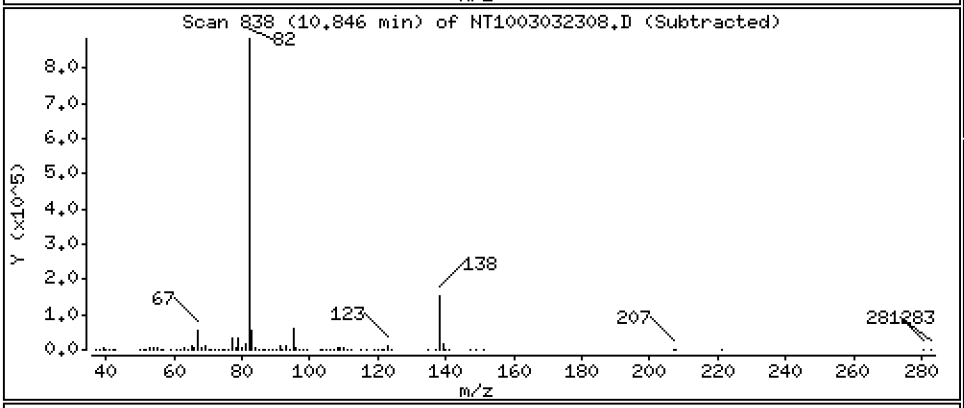
Column diameter: 0.25

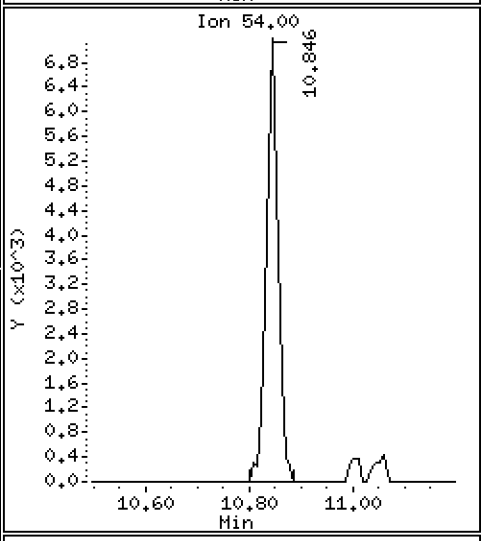
20 Isophorone

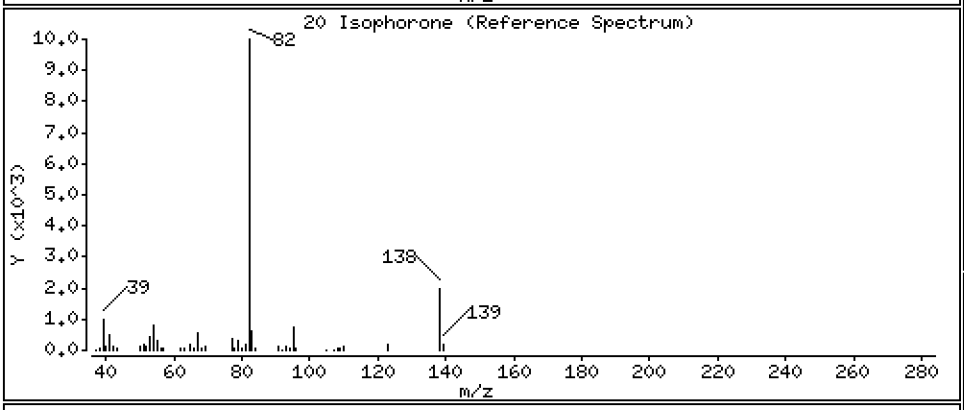
Concentration: 6.328 ug/ml

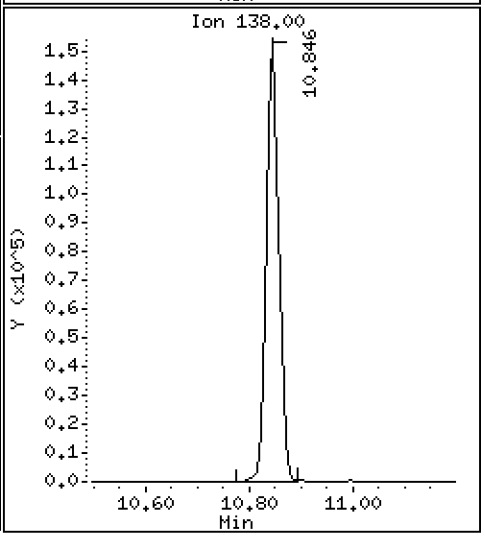


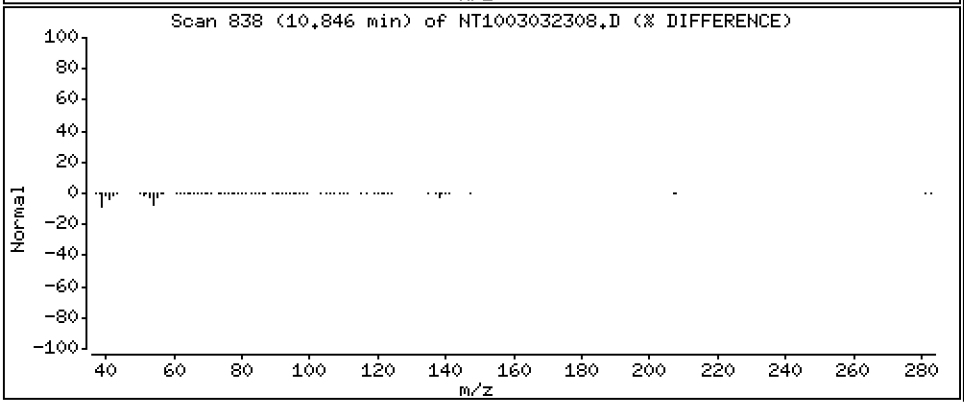












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

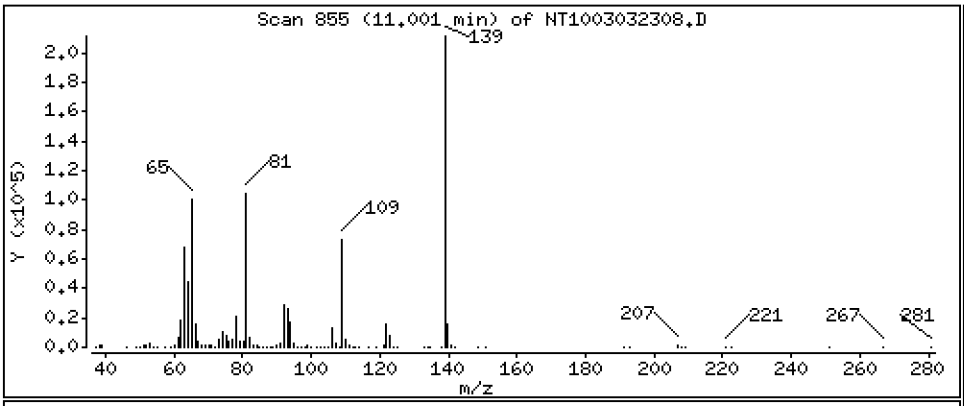
Operator: VTS

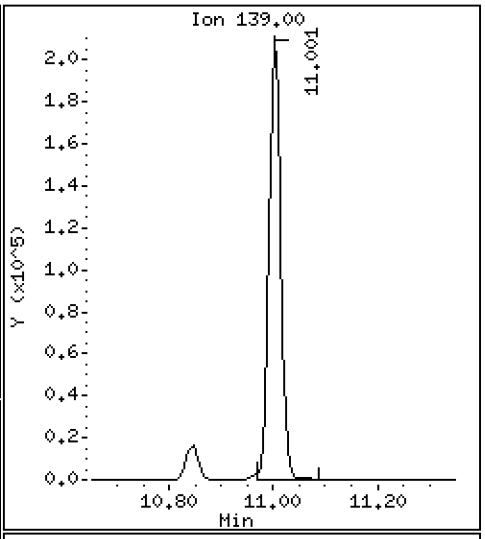
Column phase: ZB-5msi

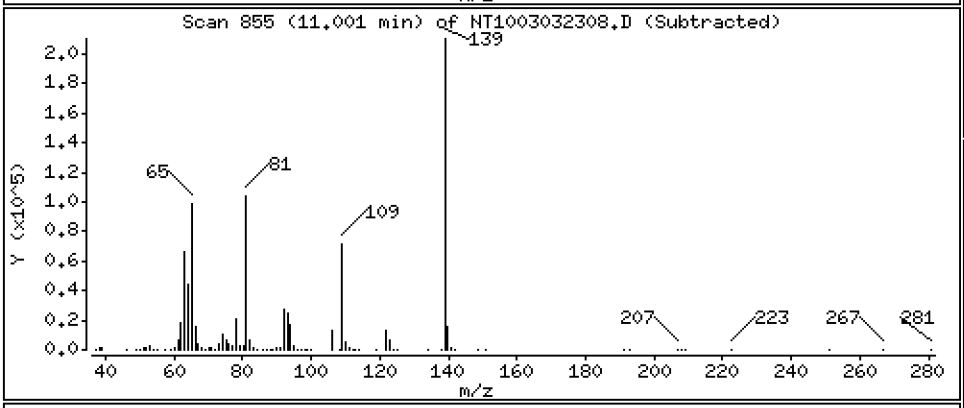
Column diameter: 0.25

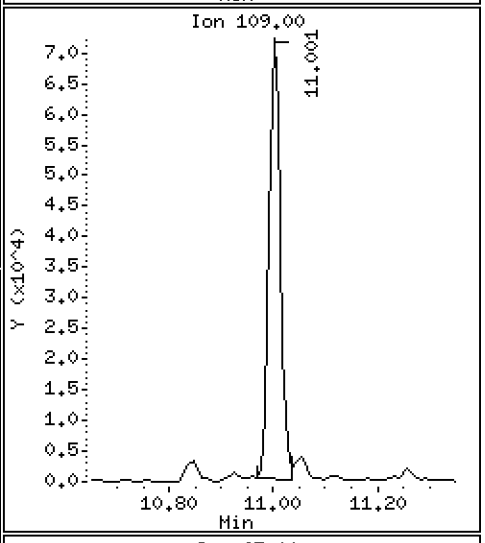
21 2-Nitrophenol

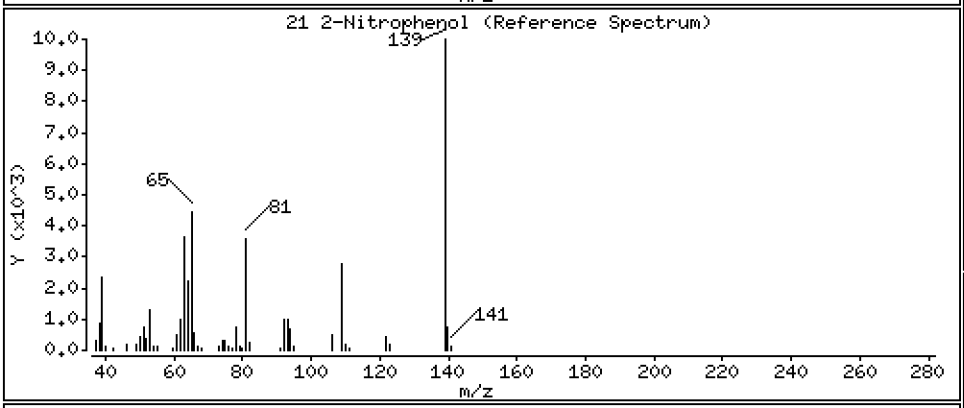
Concentration: 2.983 ug/ml

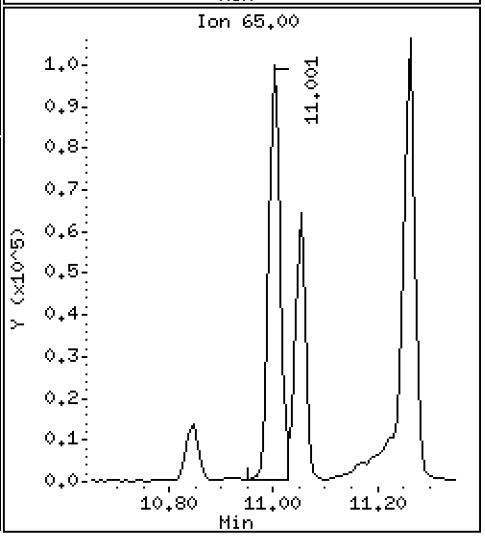


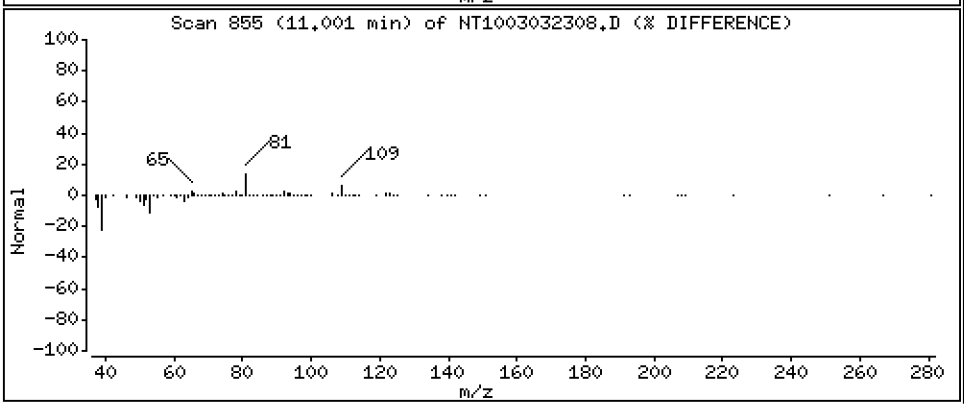












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

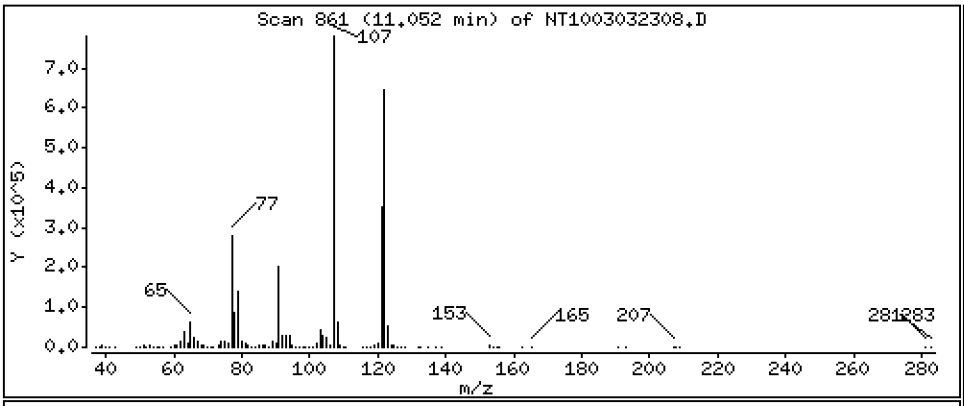
Operator: VTS

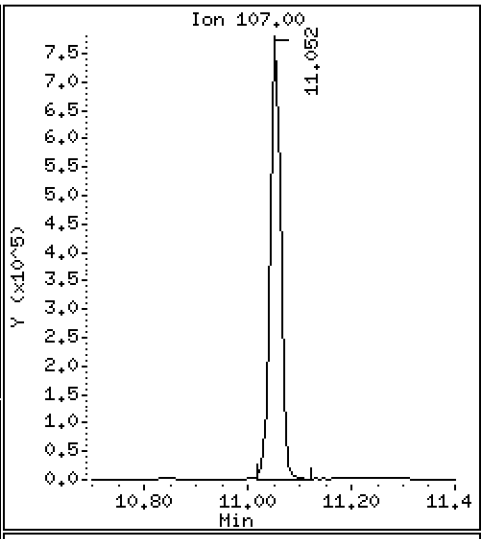
Column phase: ZB-5msi

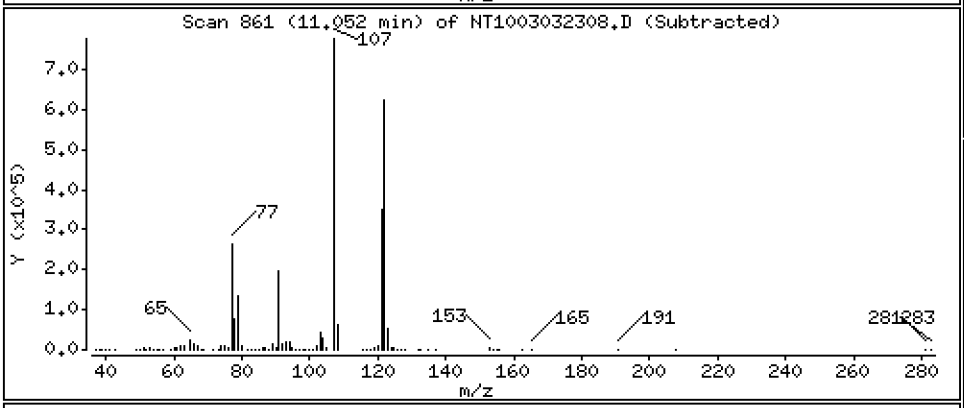
Column diameter: 0.25

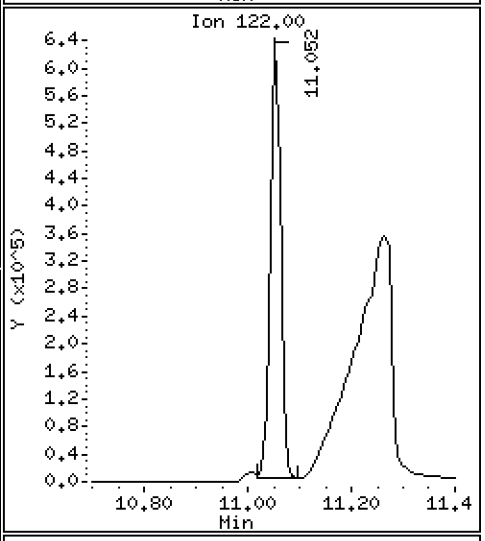
22 2,4-Dimethylphenol

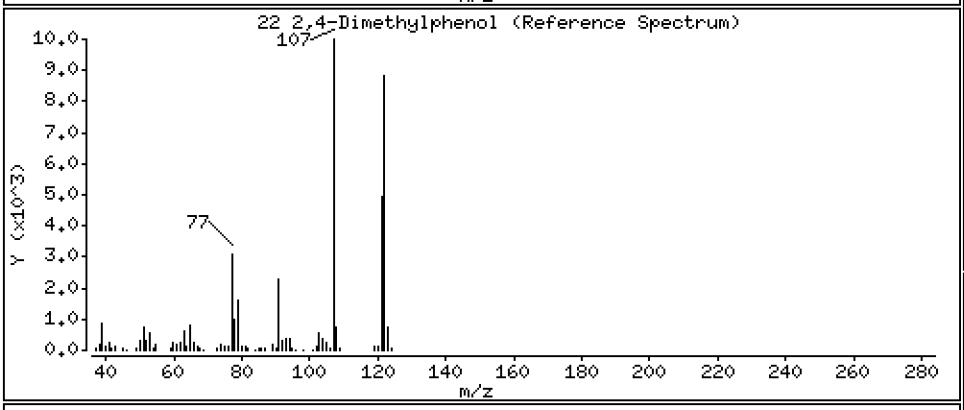
Concentration: 5.531 ug/ml

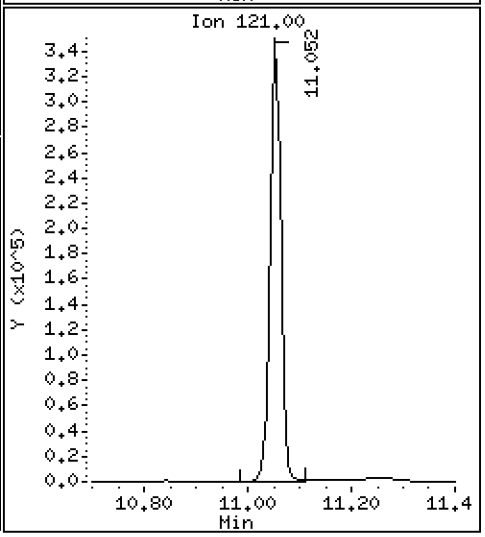


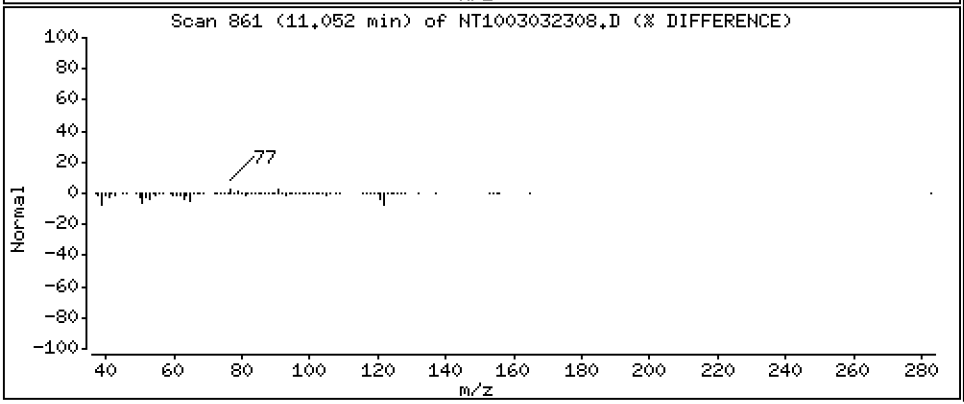












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

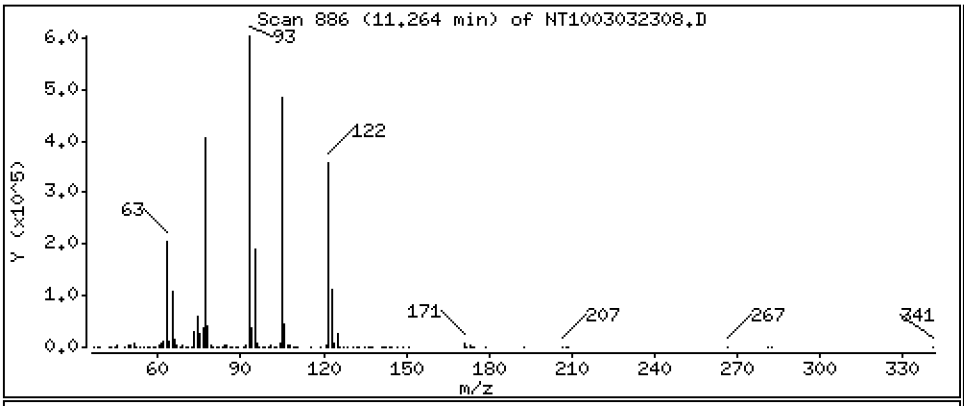
Operator: VTS

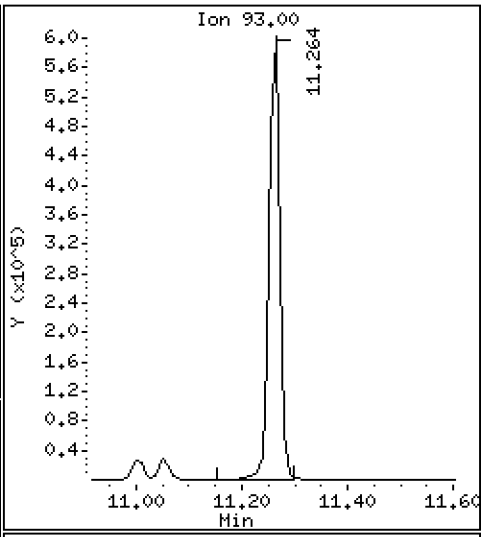
Column phase: ZB-5msi

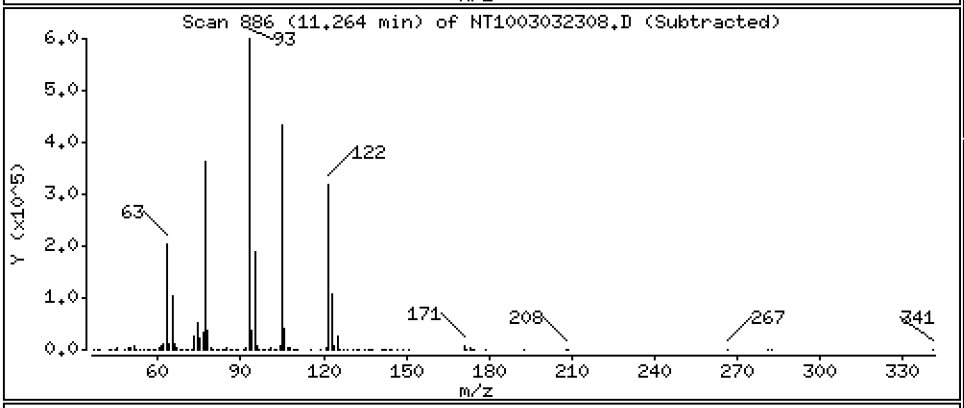
Column diameter: 0.25

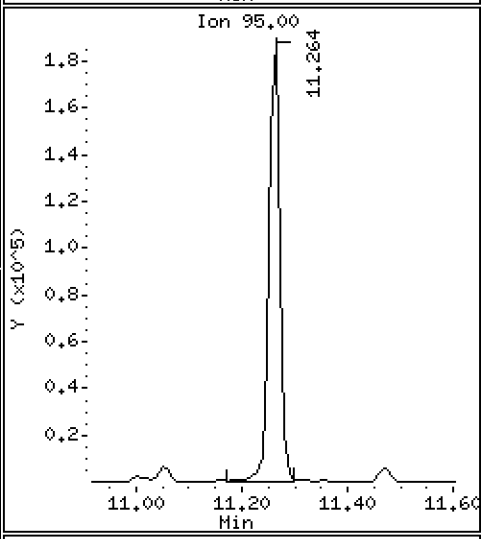
23 Bis(2-Chloroethoxy)methane

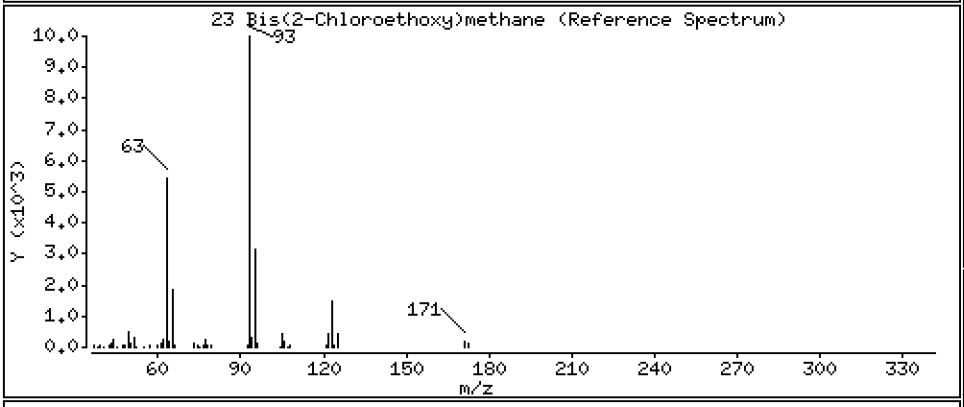
Concentration: 5.376 ug/ml

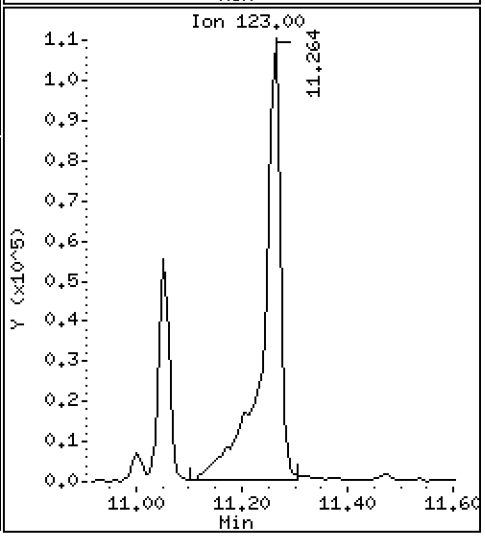


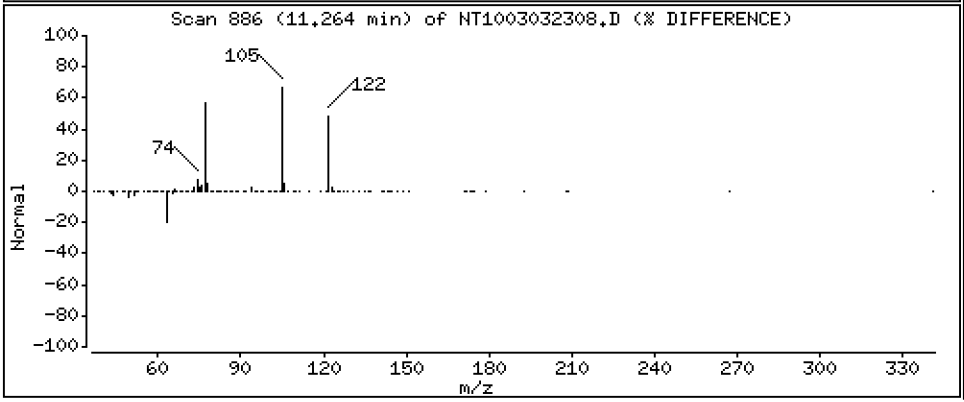












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

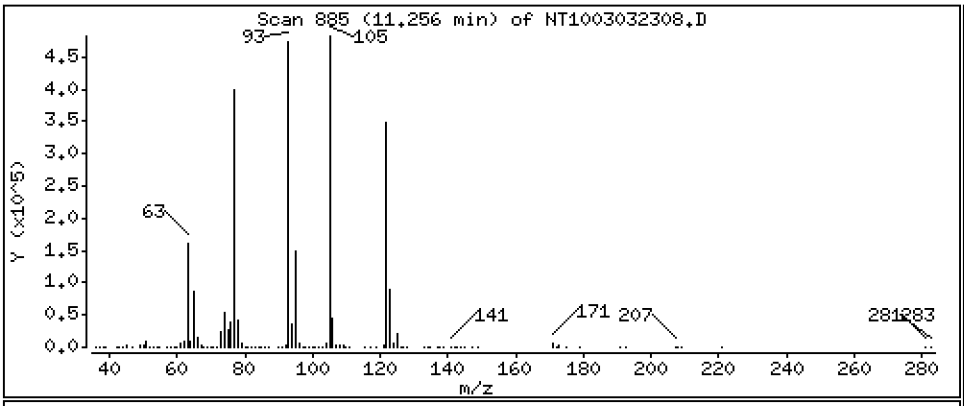
Operator: VTS

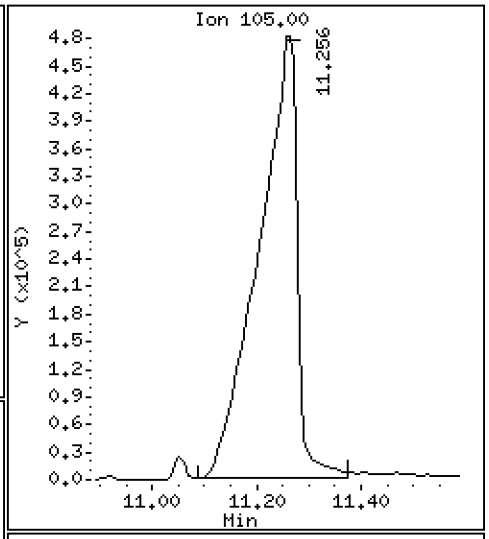
Column phase: ZB-5msi

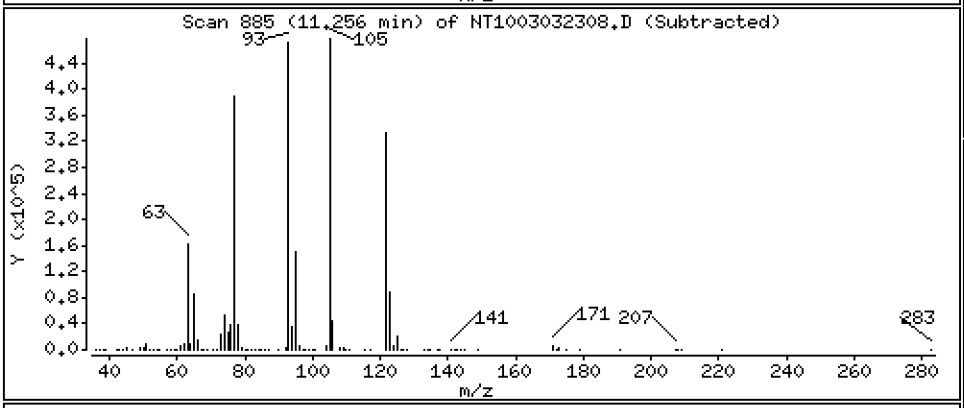
Column diameter: 0.25

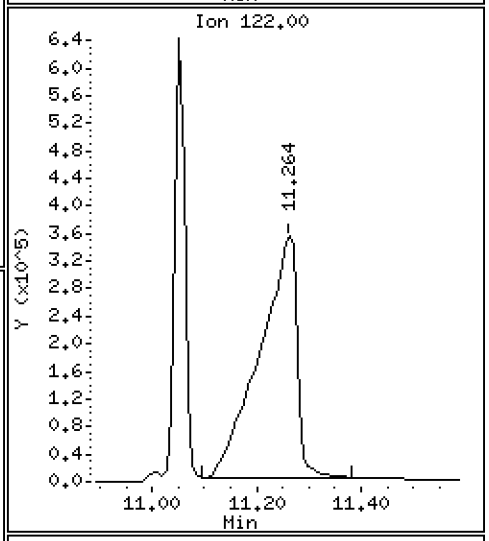
24 Benzoic acid

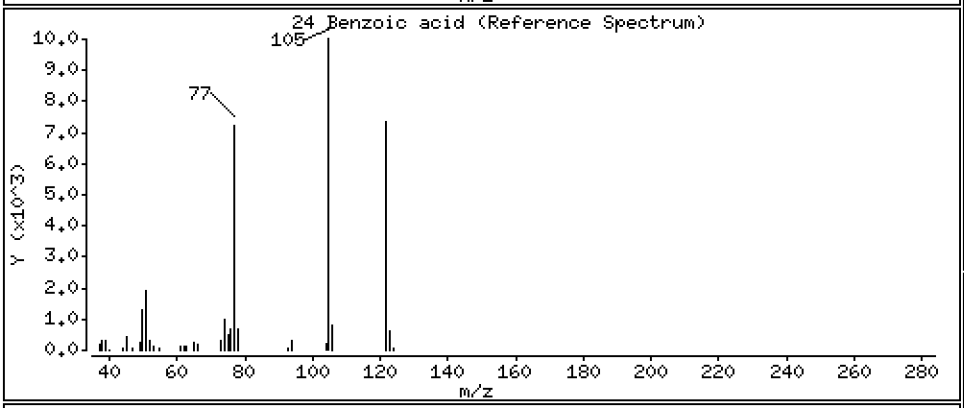
Concentration: 20.94 ug/ml

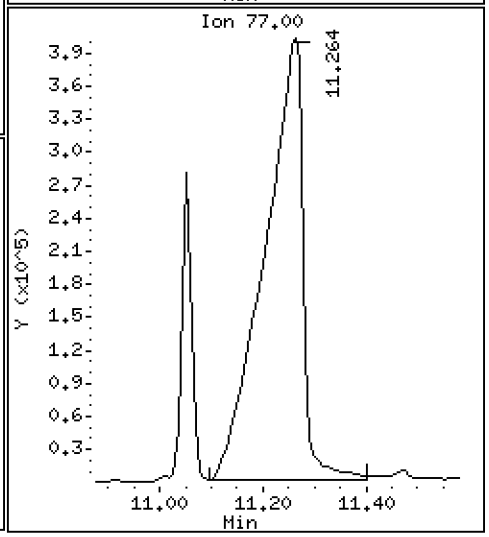


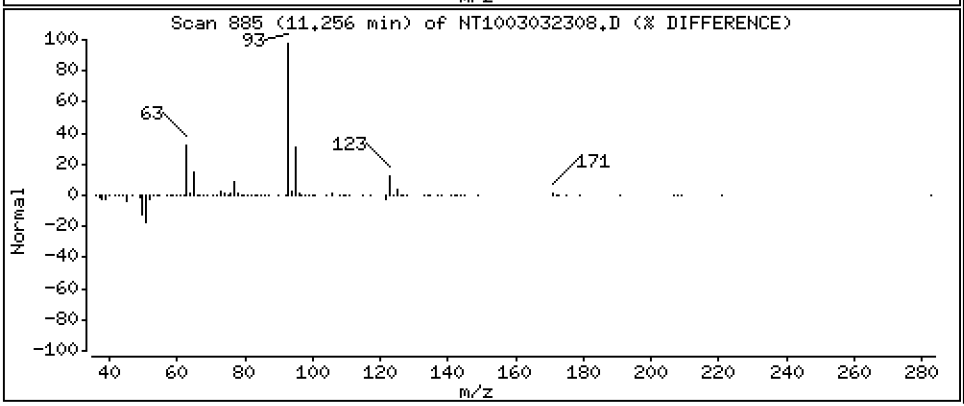












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

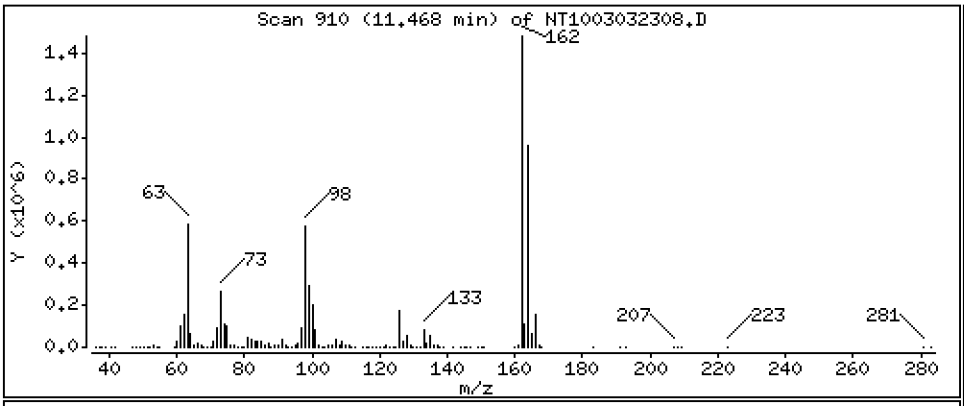
Operator: VTS

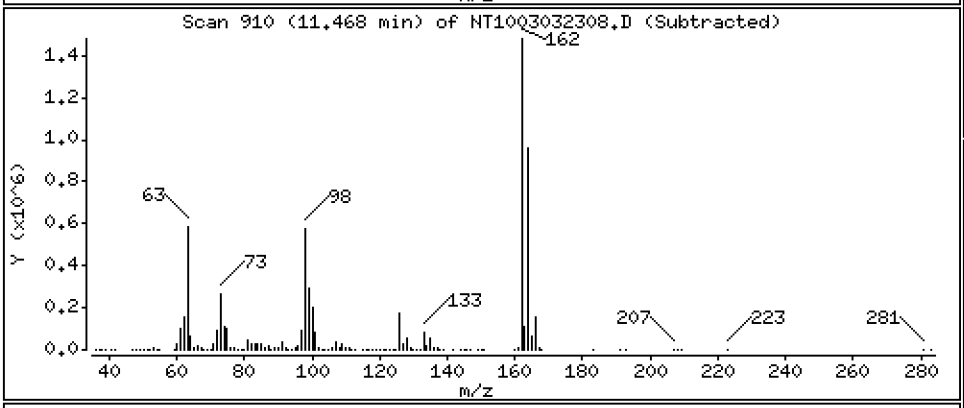
Column phase: ZB-5msi

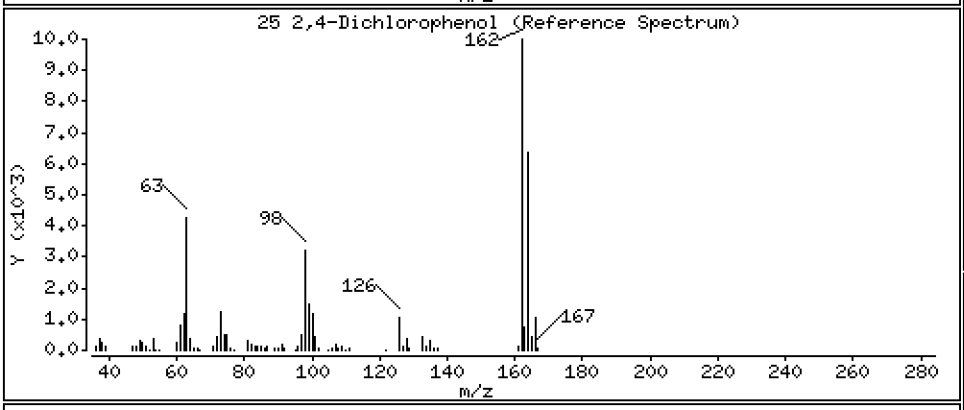
Column diameter: 0.25

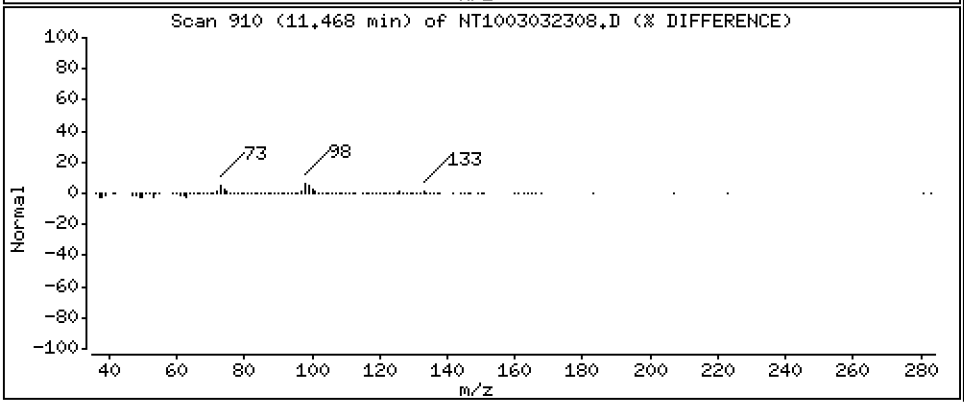
25 2,4-Dichlorophenol

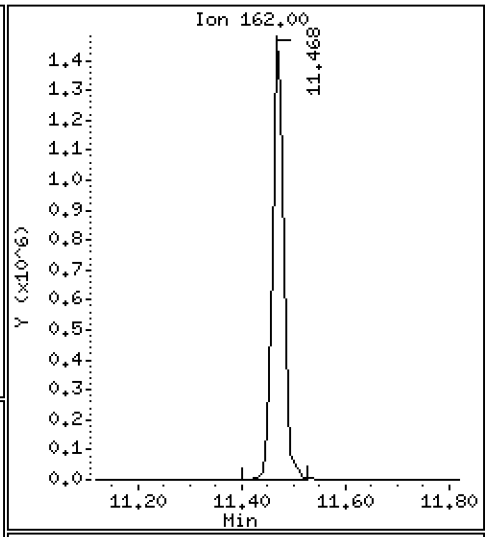
Concentration: 15.77 ug/ml

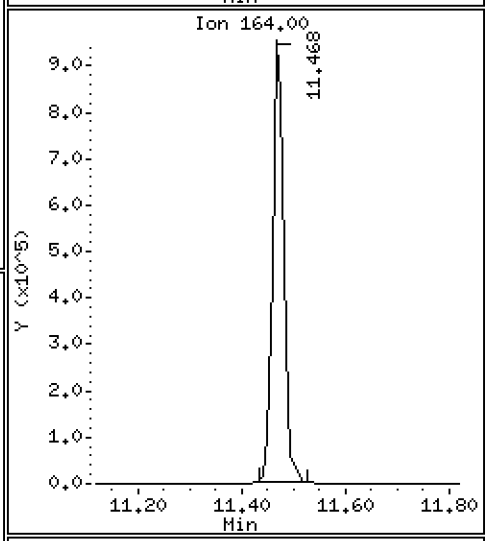


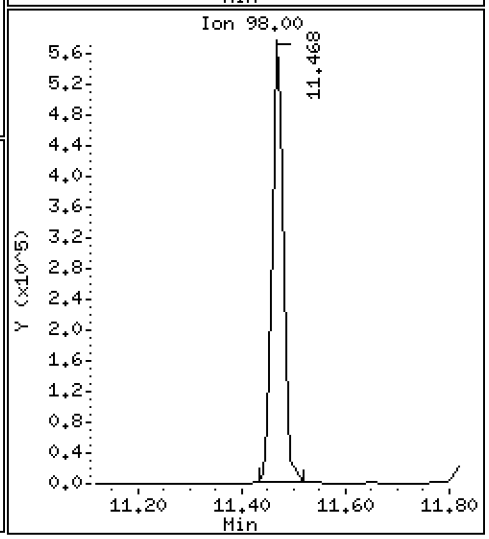












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

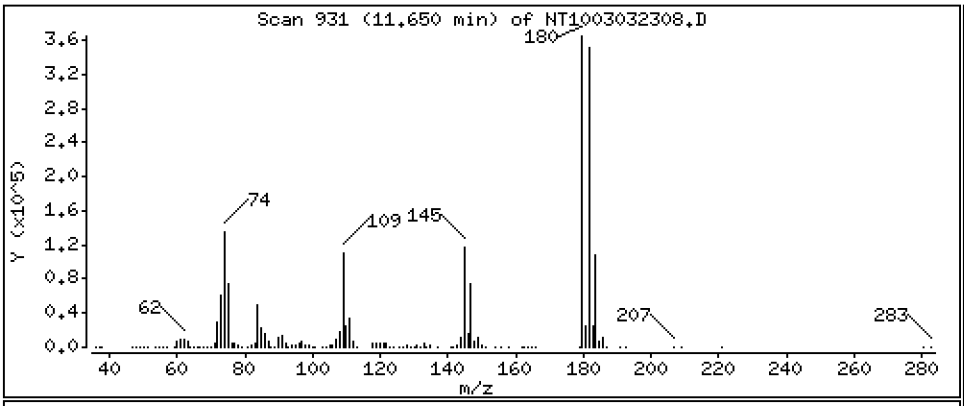
Operator: VTS

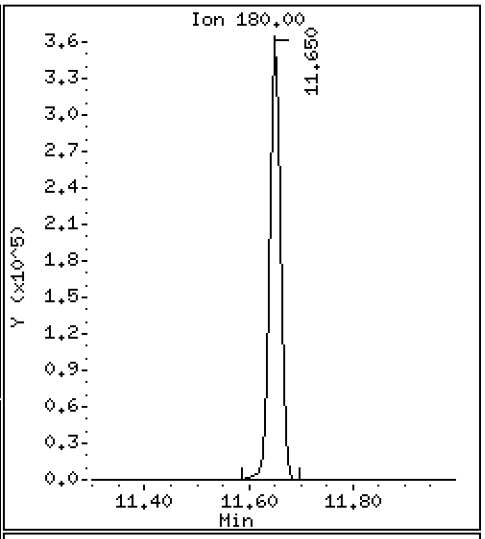
Column phase: ZB-5msi

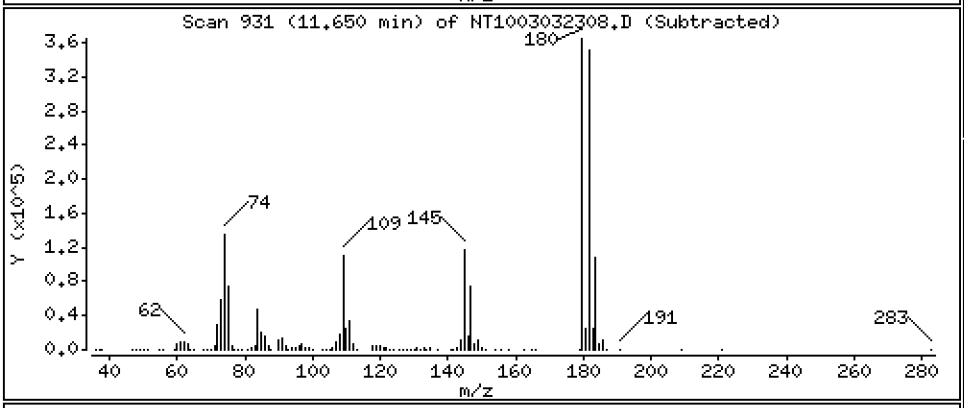
Column diameter: 0.25

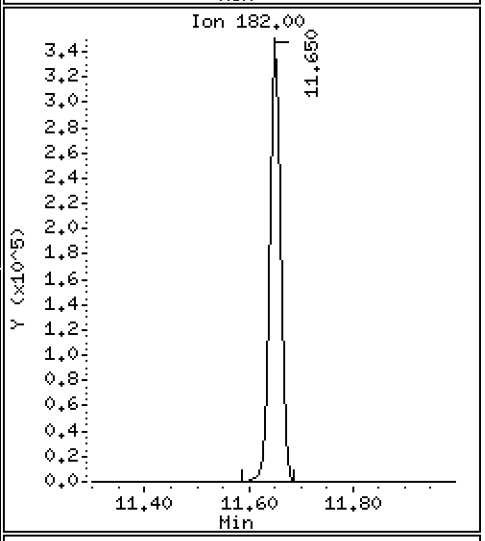
26 1,2,4-Trichlorobenzene

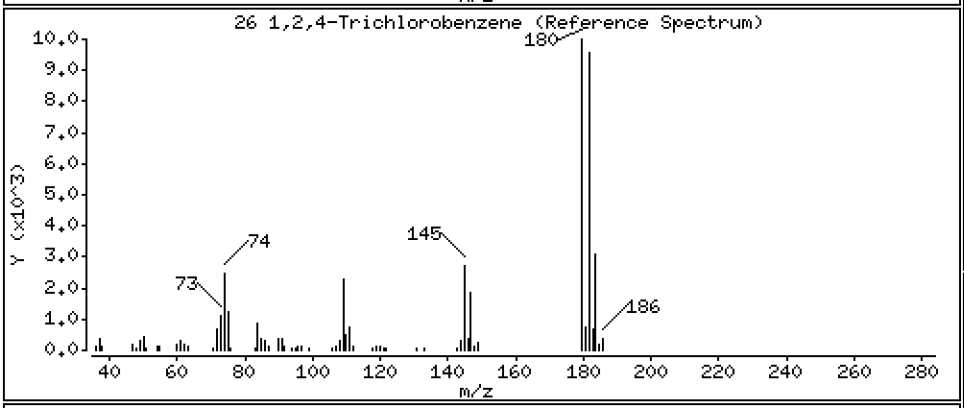
Concentration: 3.770 ug/ml

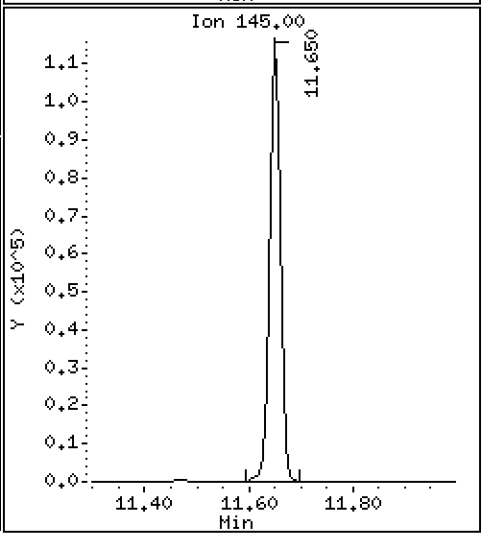


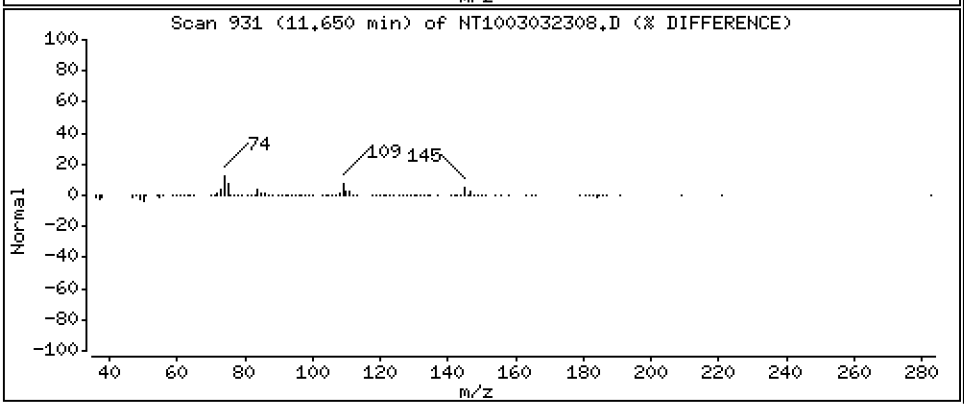












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

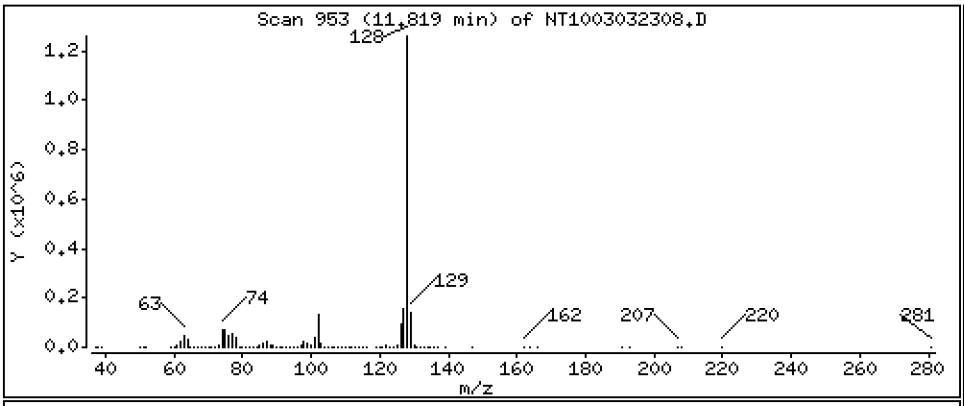
Operator: VTS

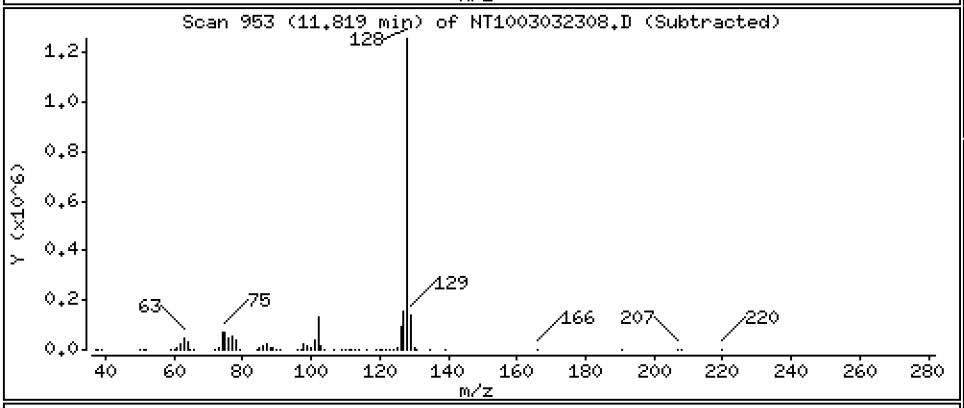
Column phase: ZB-5msi

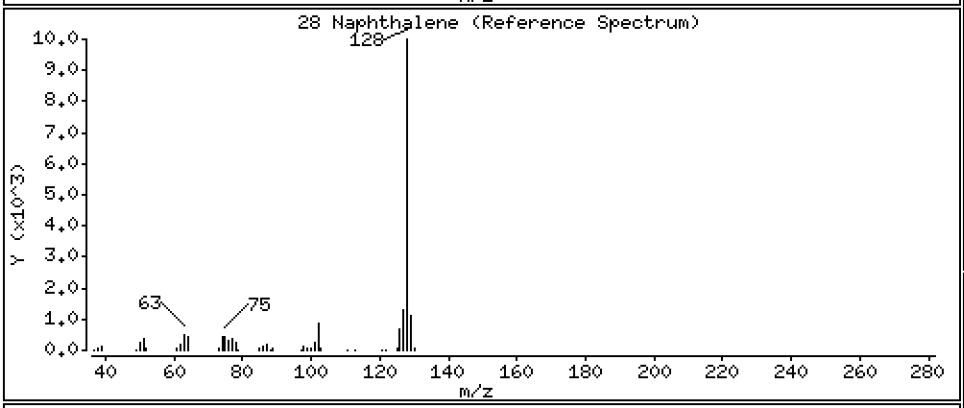
Column diameter: 0.25

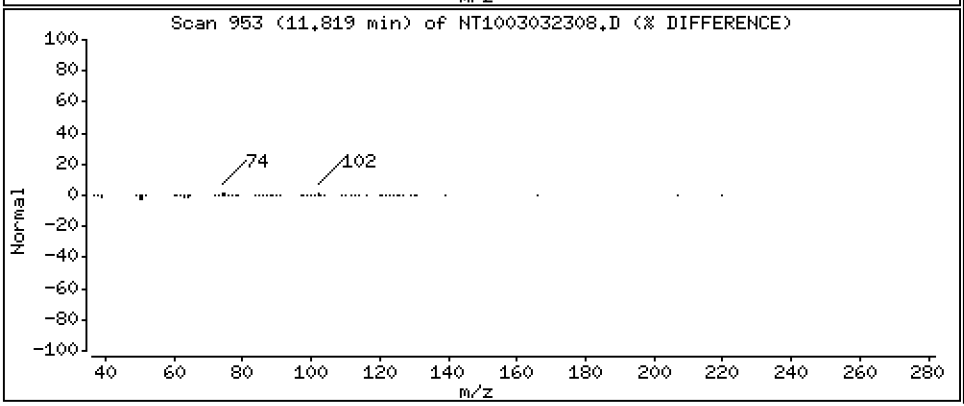
28 Naphthalene

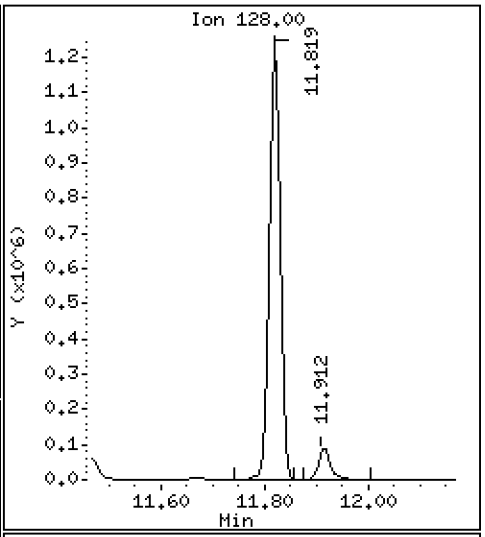
Concentration: 3.802 ug/ml

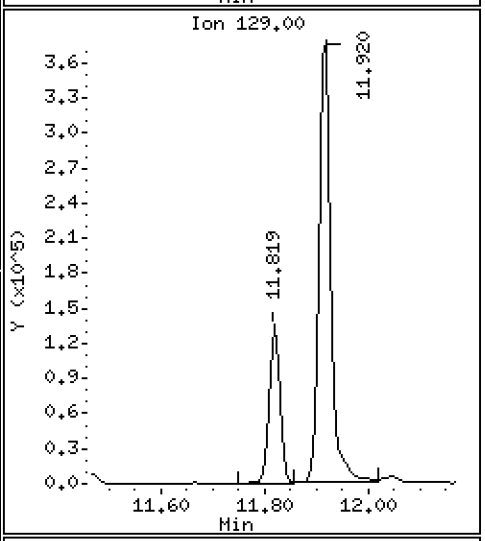


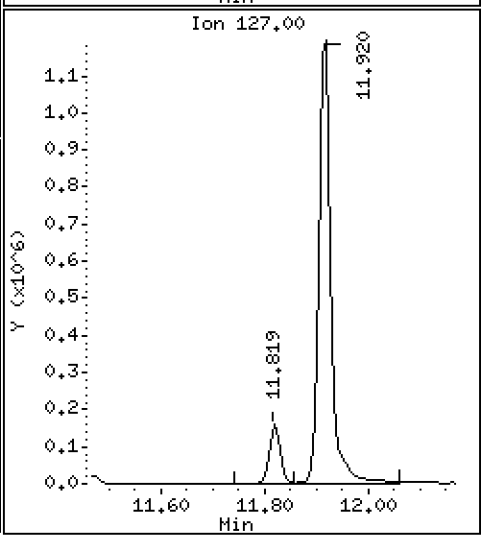












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

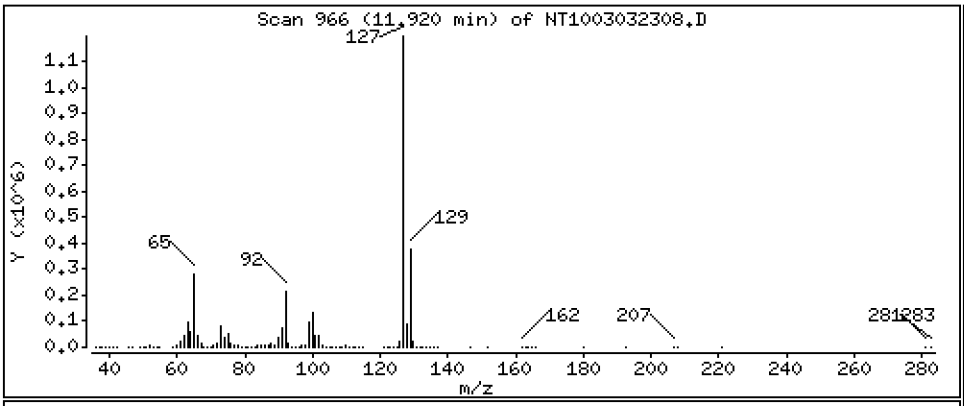
Operator: VTS

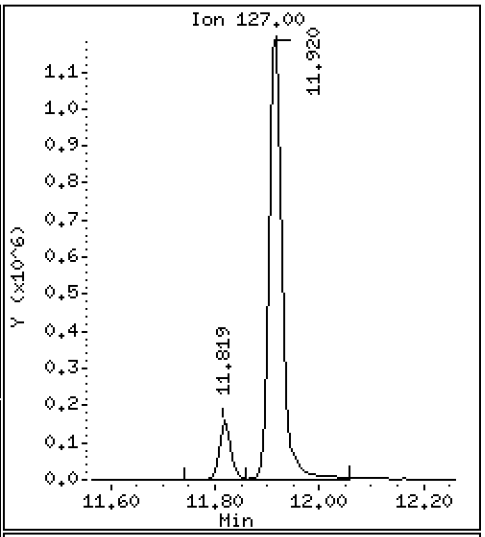
Column phase: ZB-5msi

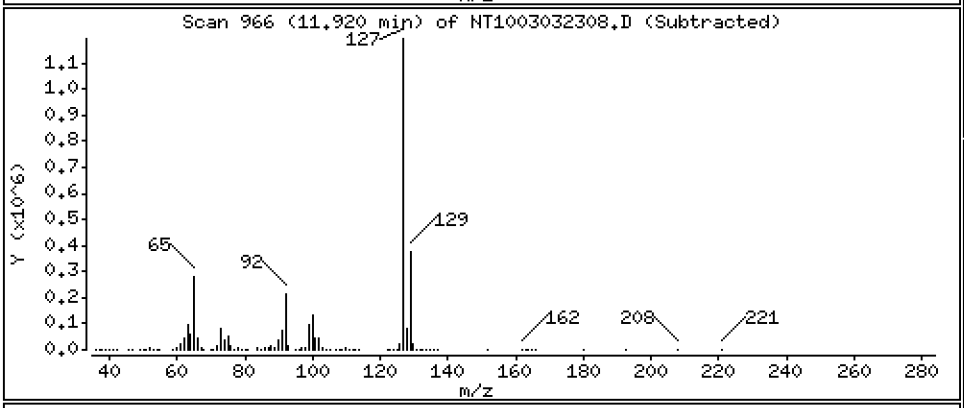
Column diameter: 0.25

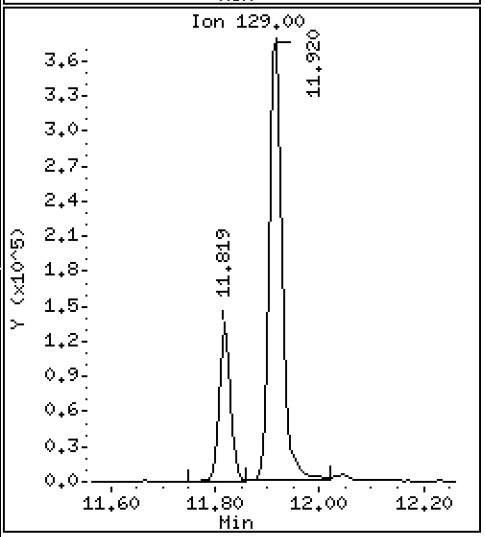
29 4-Chloroaniline

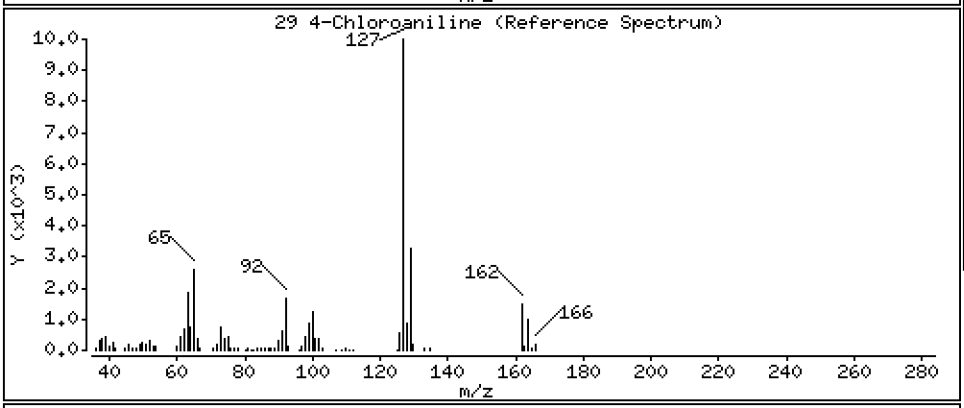
Concentration: 9.311 ug/ml

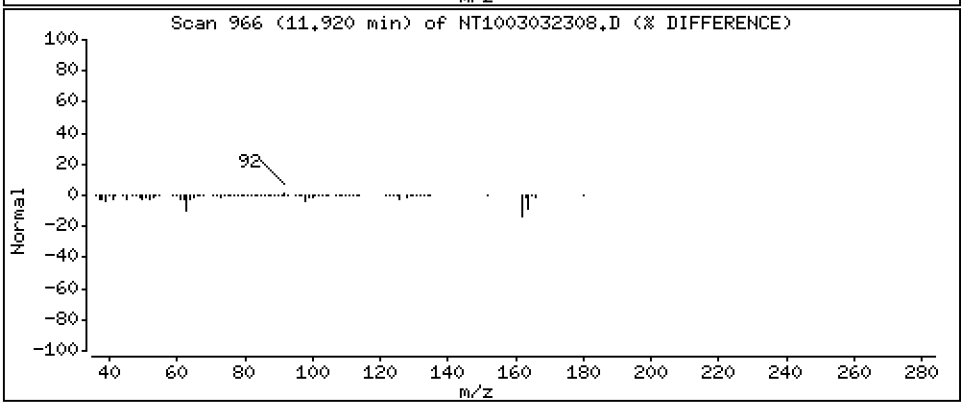












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

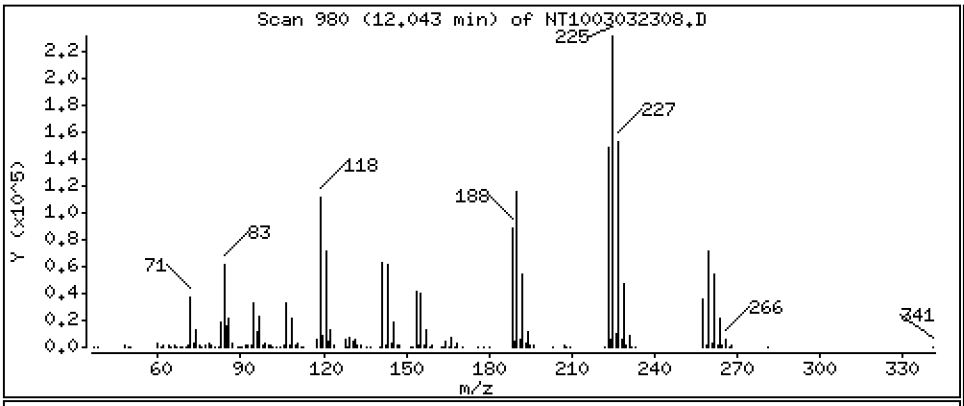
Operator: VTS

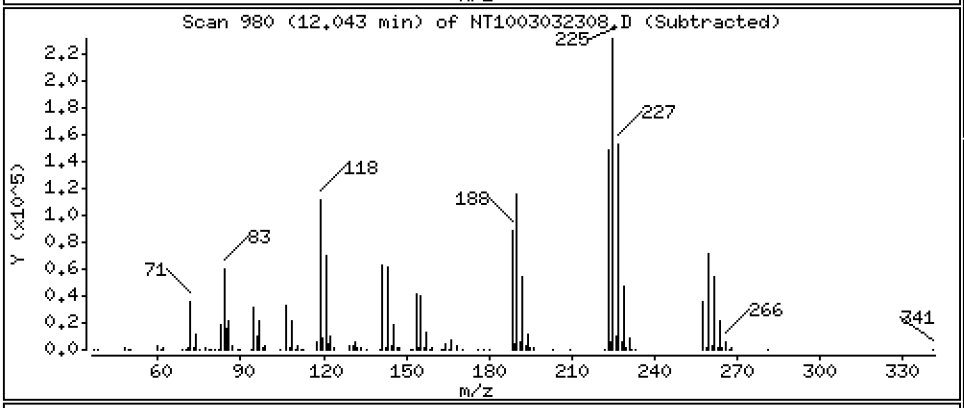
Column phase: ZB-5msi

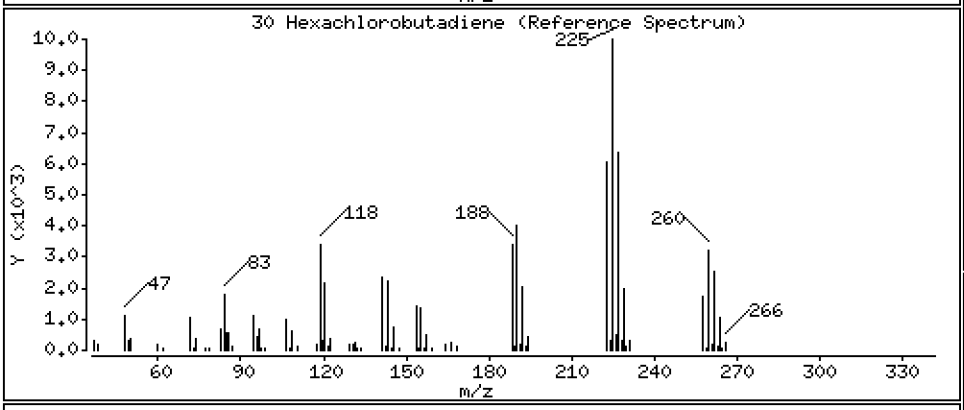
Column diameter: 0.25

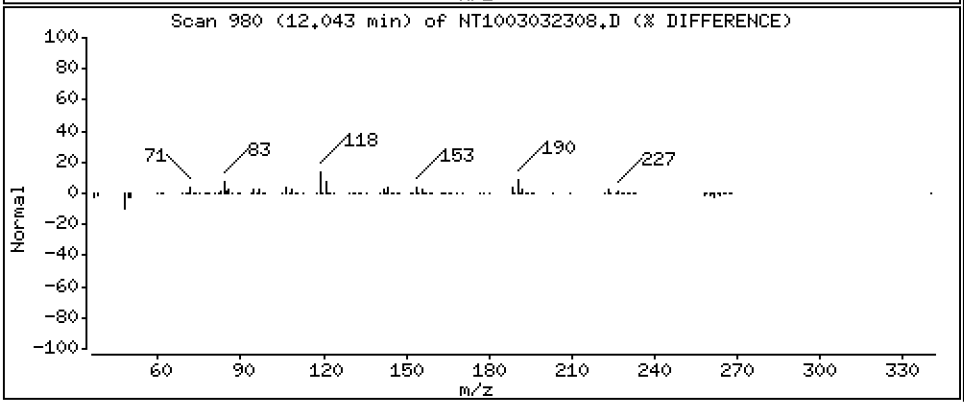
30 Hexachlorobutadiene

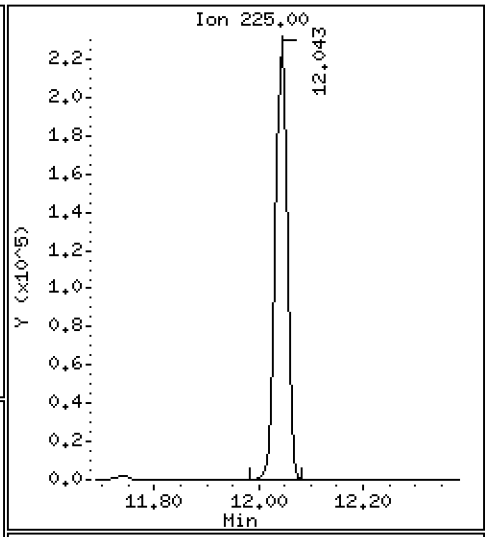
Concentration: 3.125 ug/ml

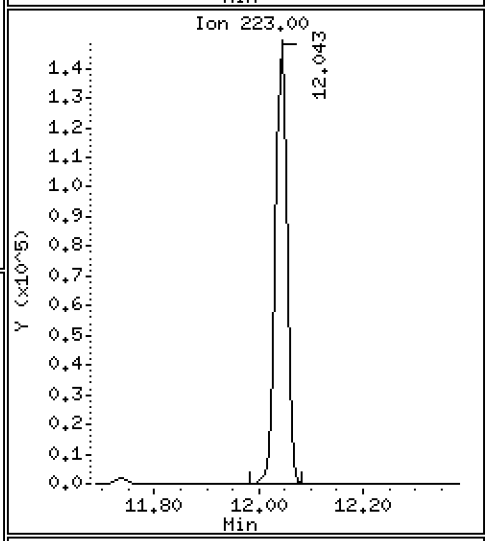


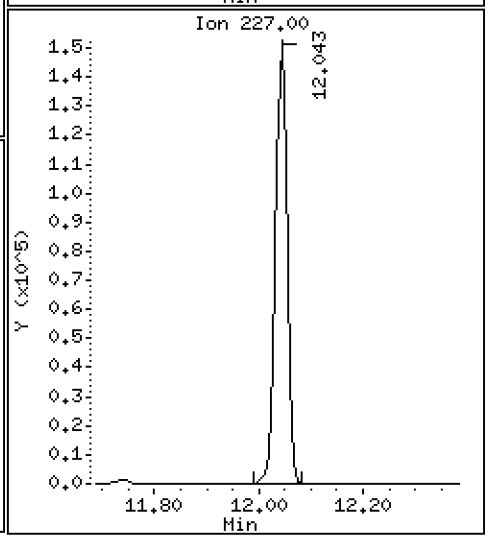












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

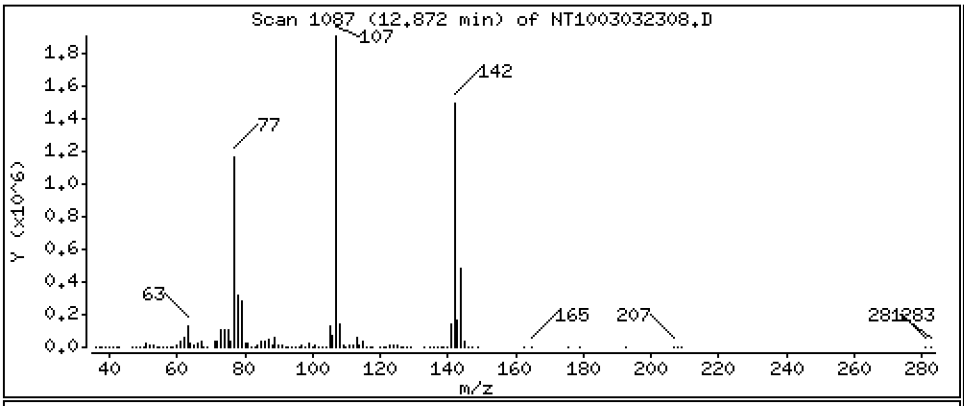
Operator: VTS

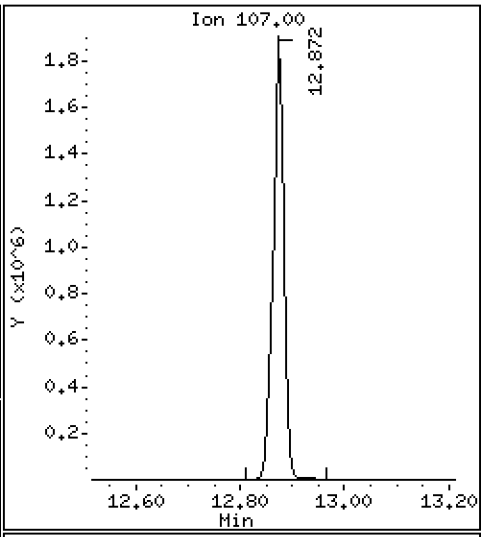
Column phase: ZB-5msi

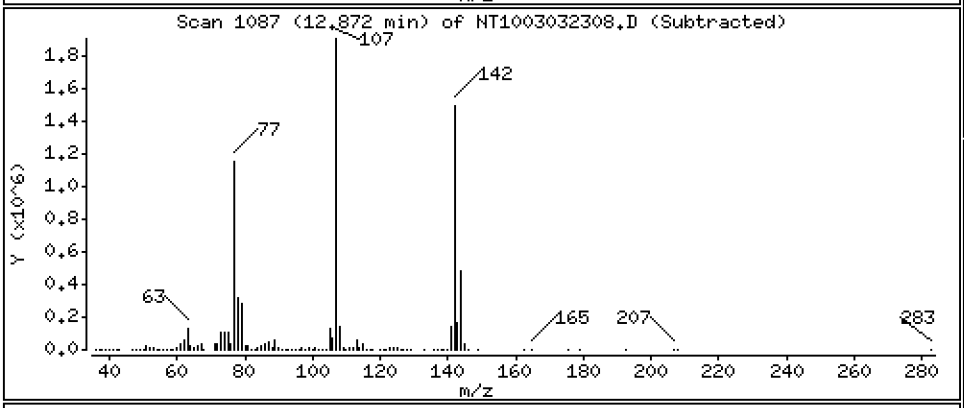
Column diameter: 0.25

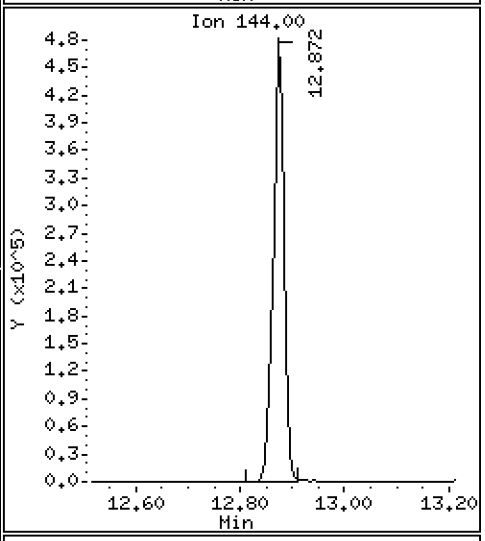
31 4-Chloro-3-methylphenol

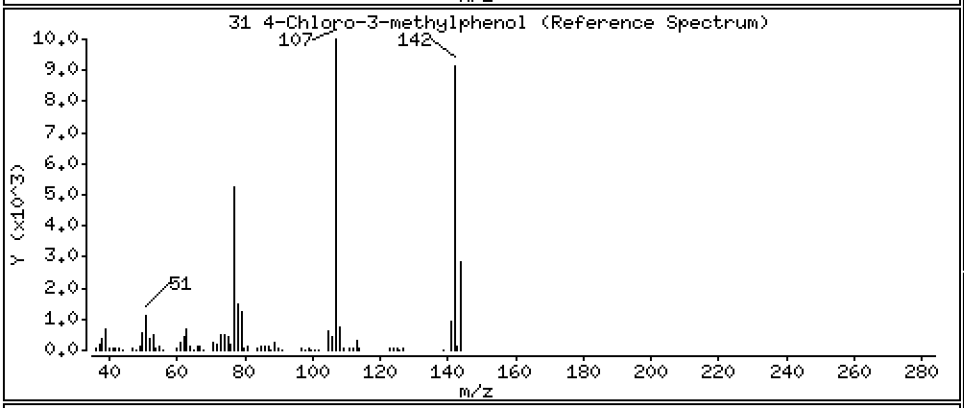
Concentration: 15.87 ug/ml

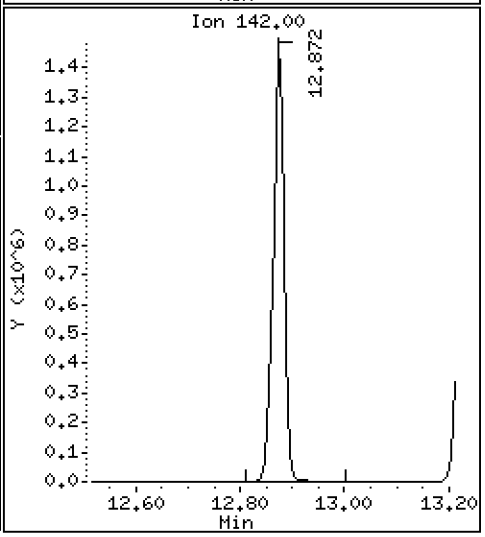


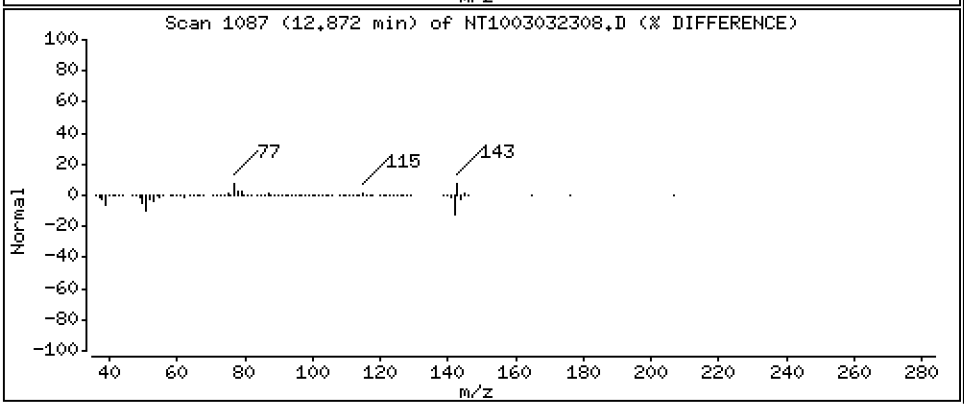












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

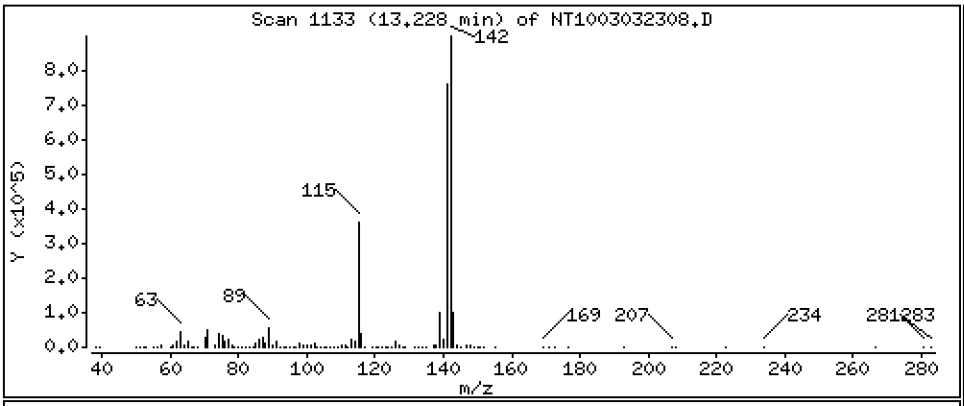
Operator: VTS

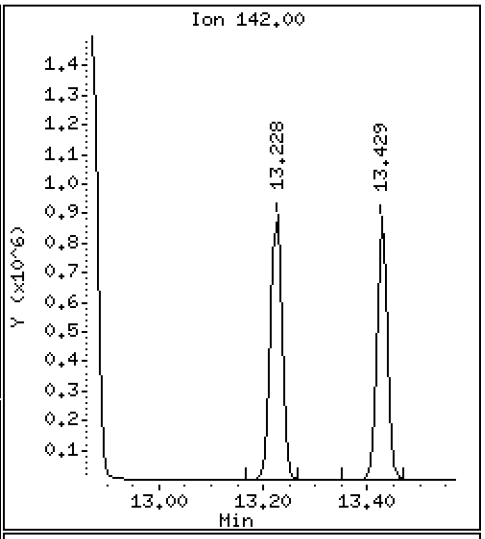
Column phase: ZB-5msi

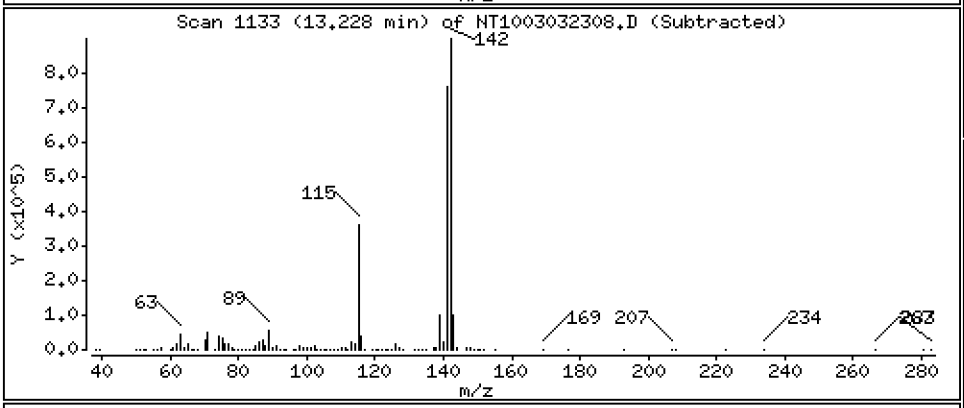
Column diameter: 0.25

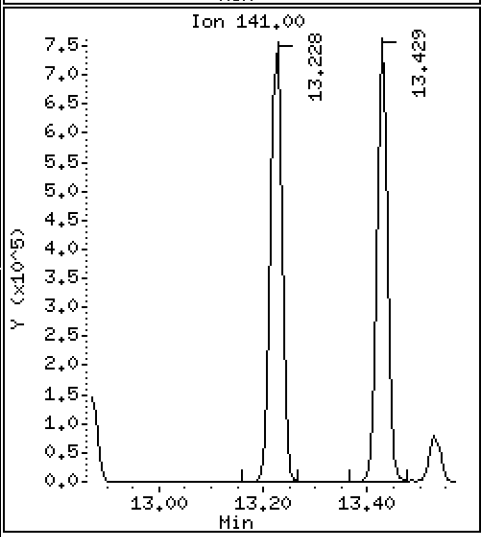
32 2-Methylnaphthalene

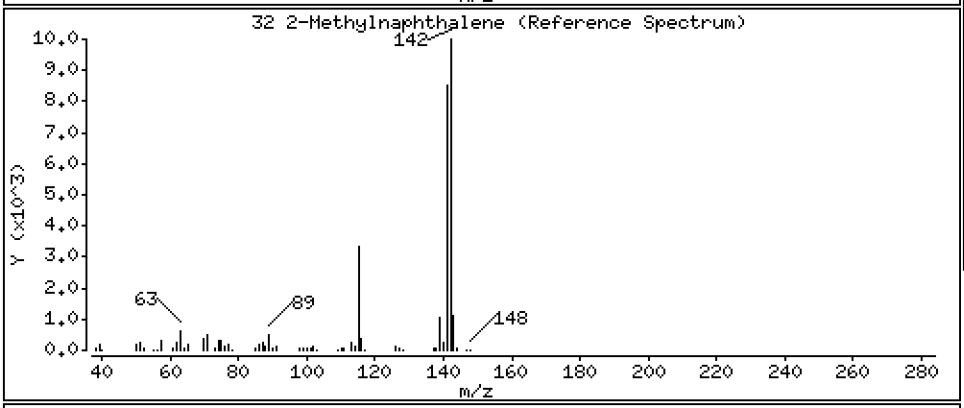
Concentration: 3.698 ug/ml

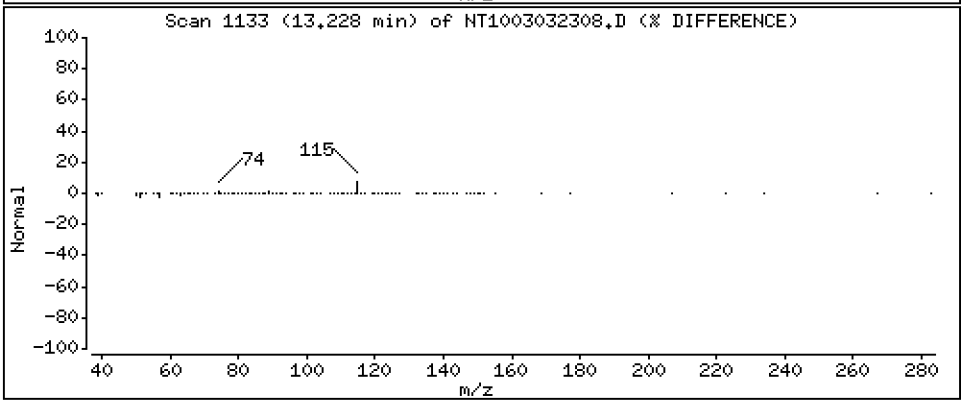












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

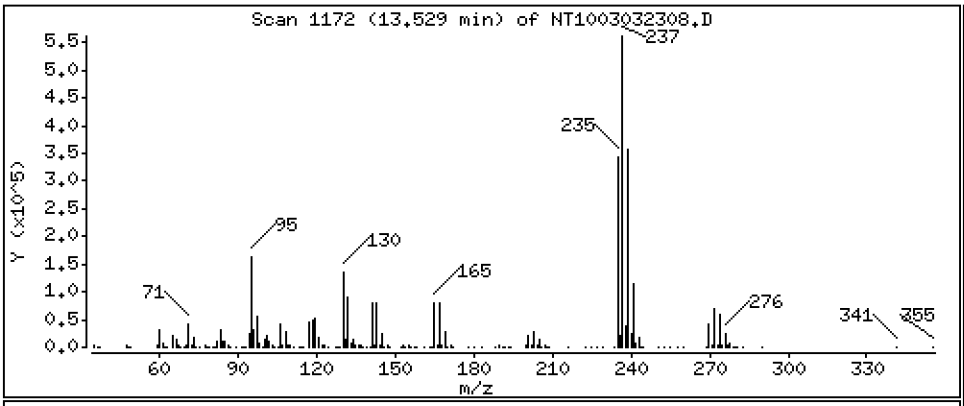
Operator: VTS

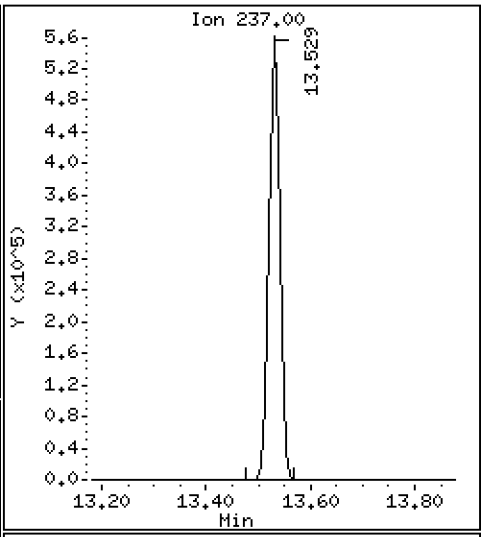
Column phase: ZB-5msi

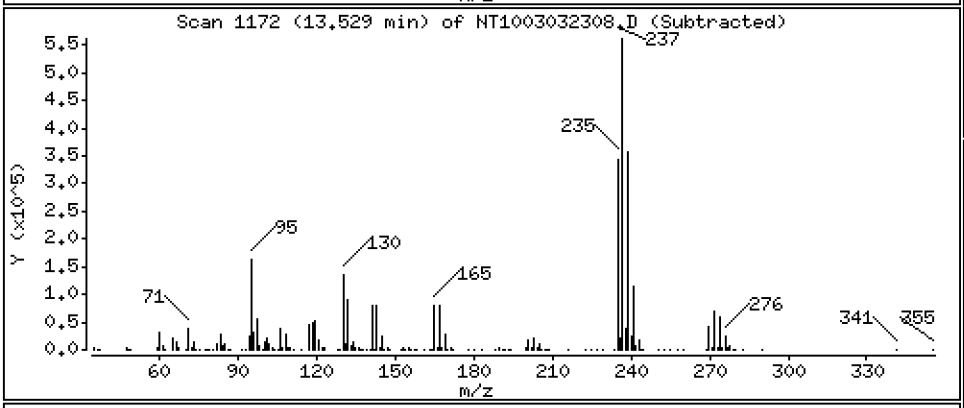
Column diameter: 0.25

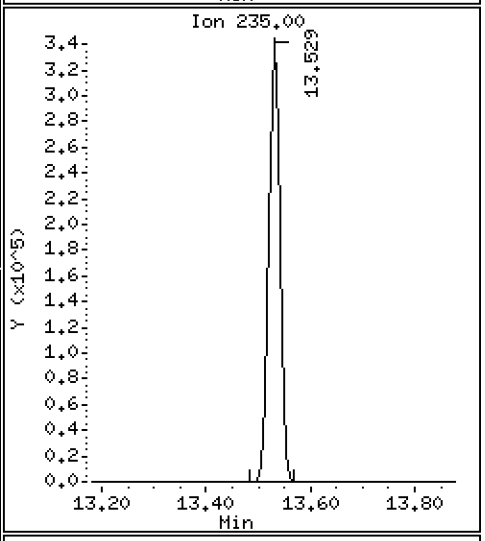
33 Hexachlorocyclopentadiene

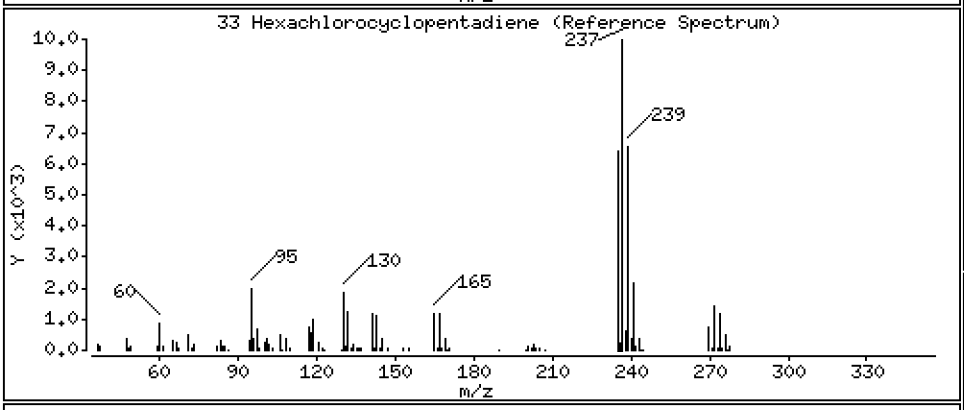
Concentration: 20.03 ug/ml

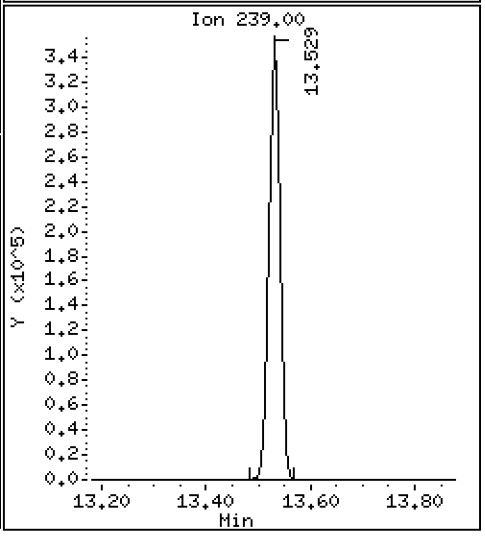


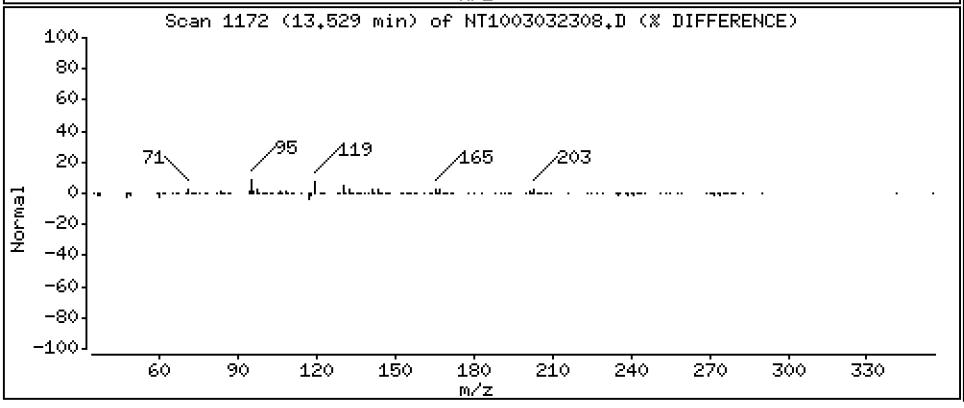












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

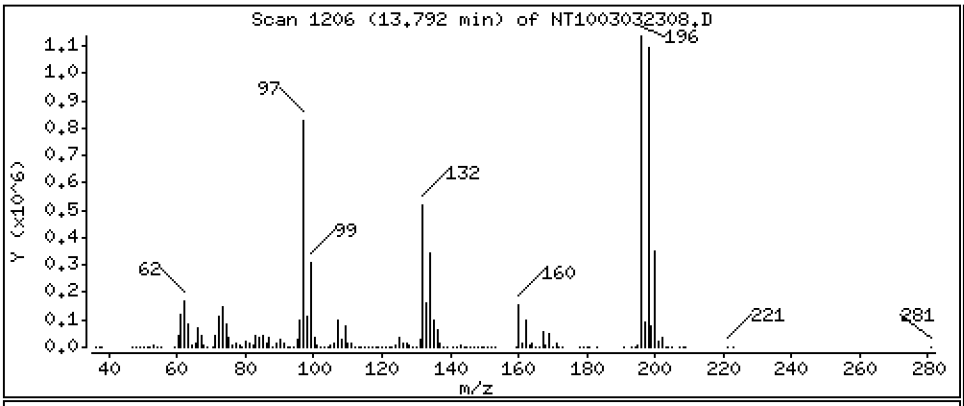
Operator: VTS

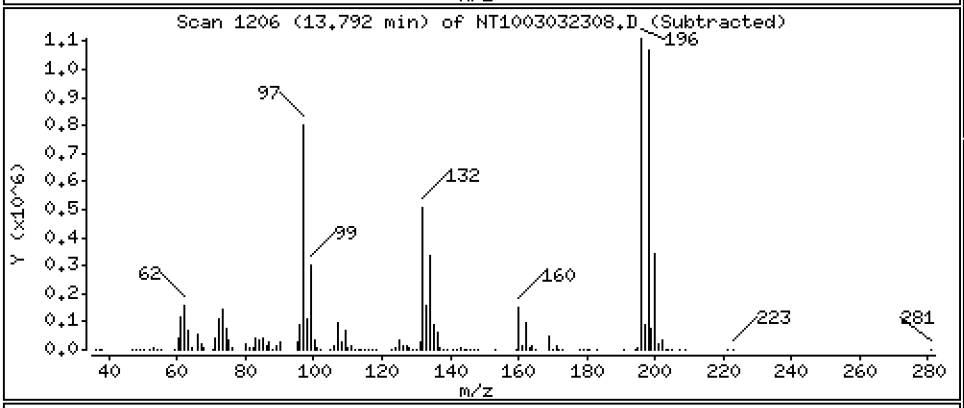
Column phase: ZB-5msi

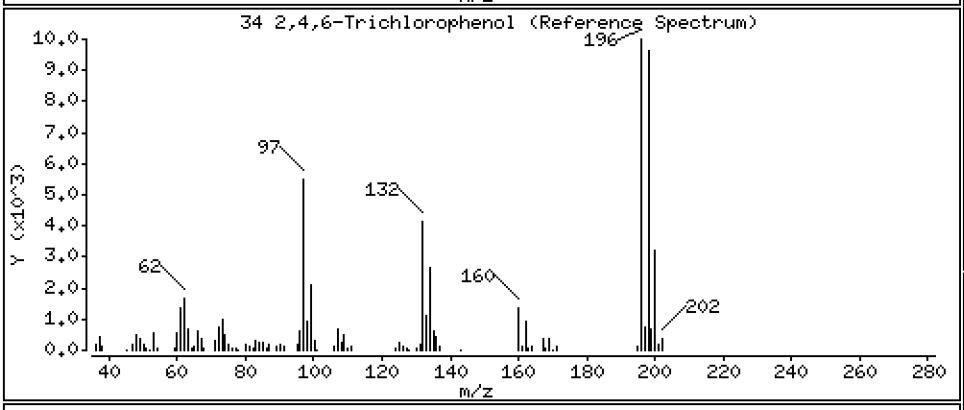
Column diameter: 0.25

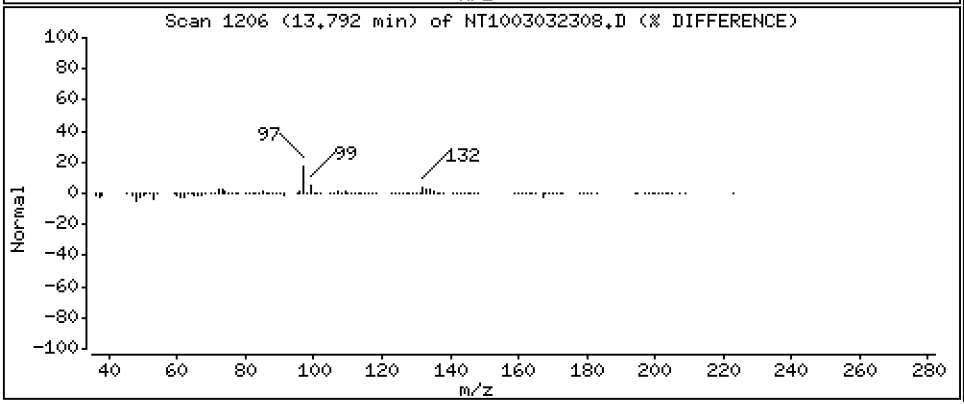
34 2,4,6-Trichlorophenol

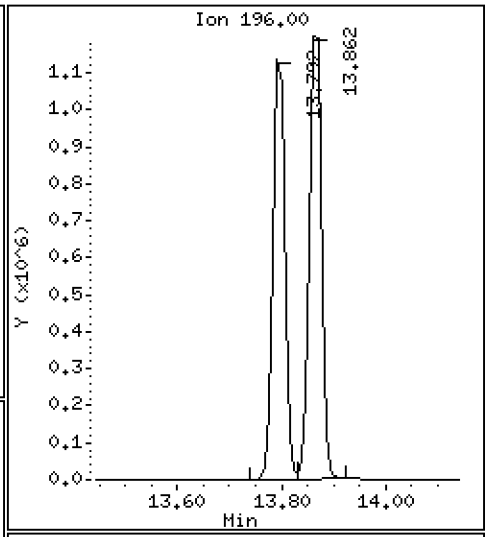
Concentration: 16.62 ug/ml

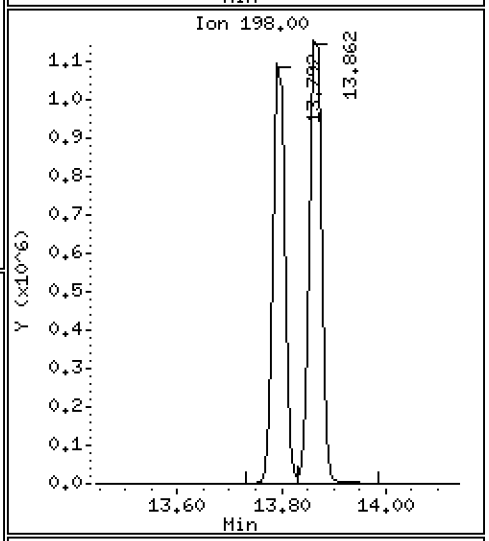


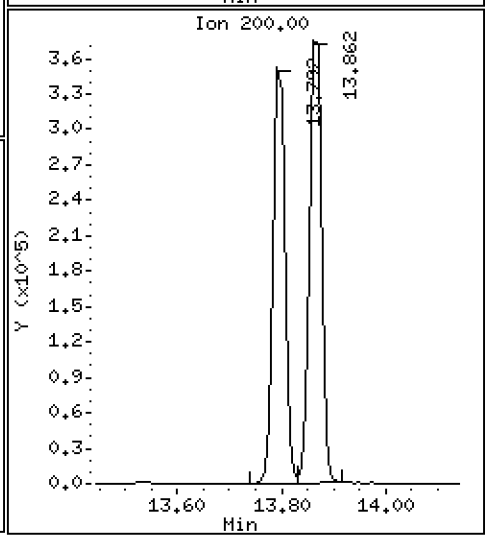












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

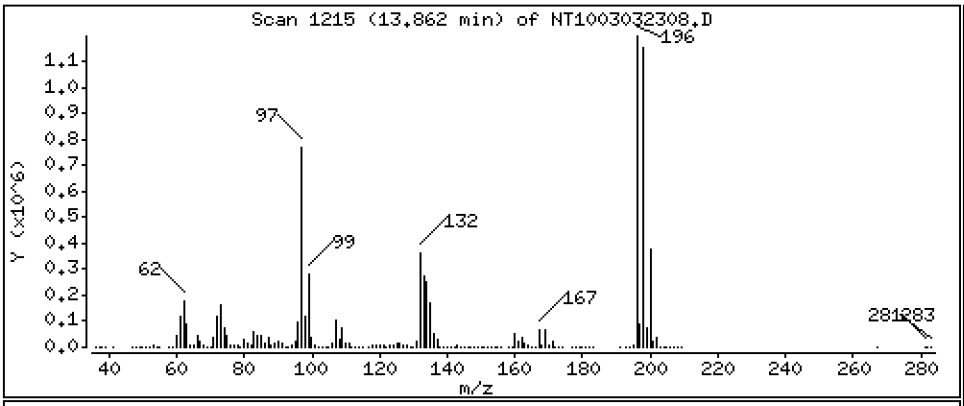
Operator: VTS

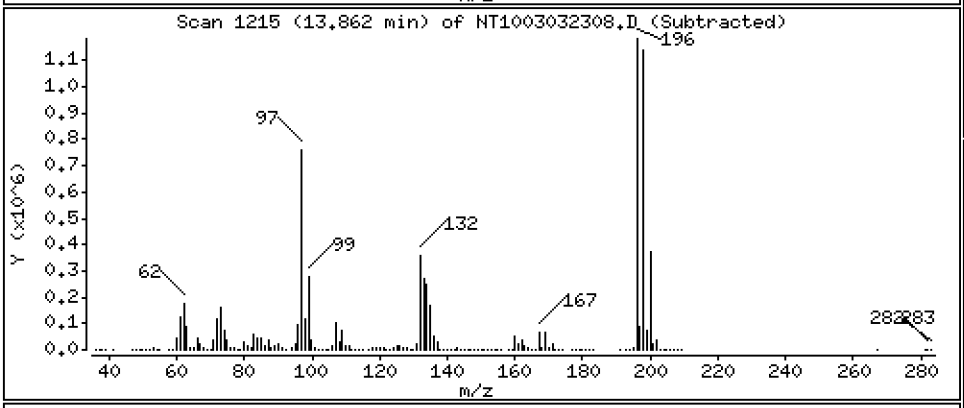
Column phase: ZB-5msi

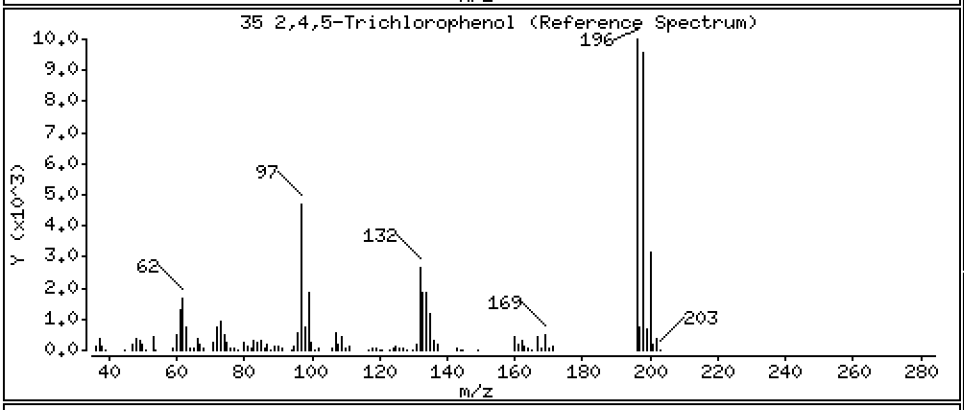
Column diameter: 0.25

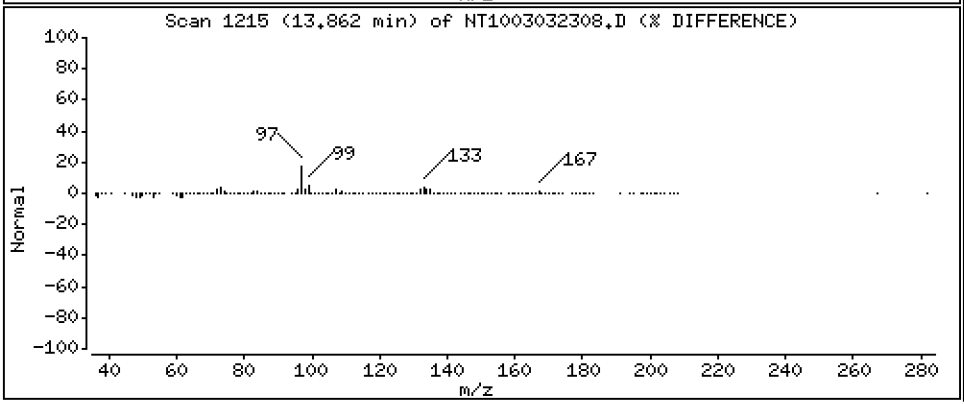
35 2,4,5-Trichlorophenol

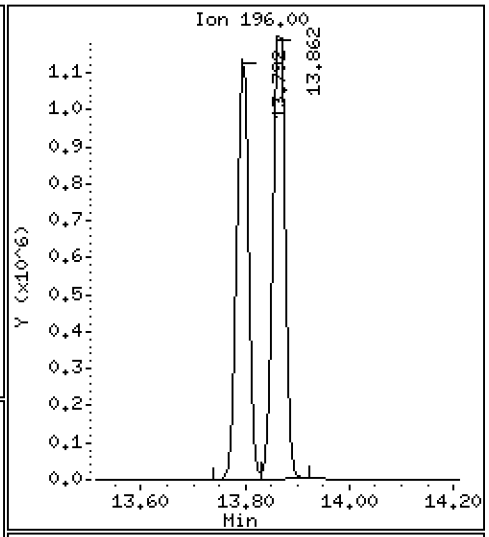
Concentration: 16.83 ug/ml

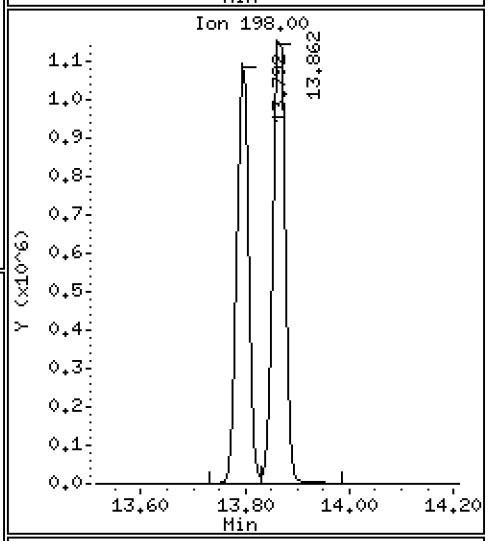


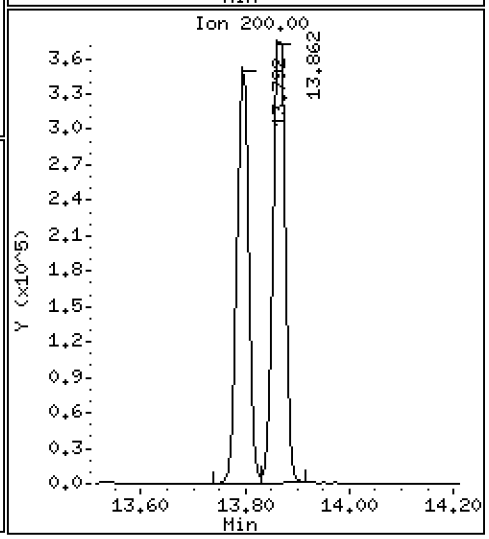












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

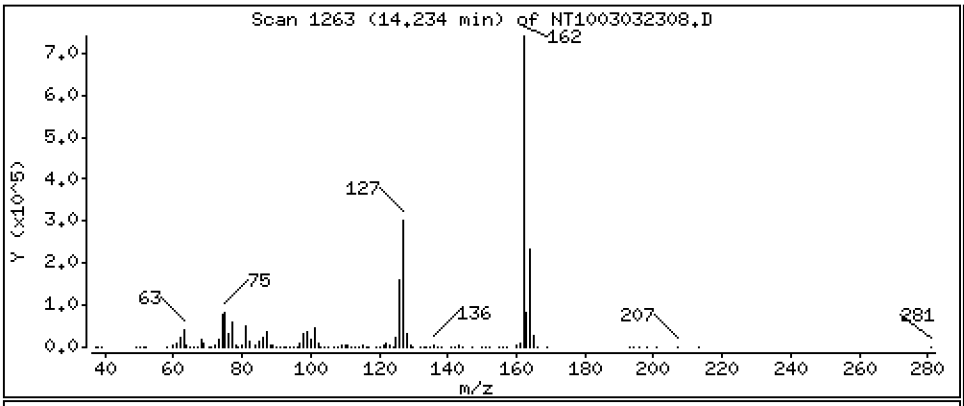
Operator: VTS

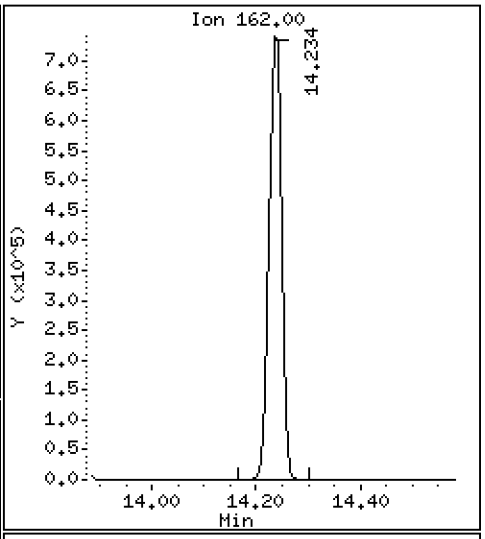
Column phase: ZB-5msi

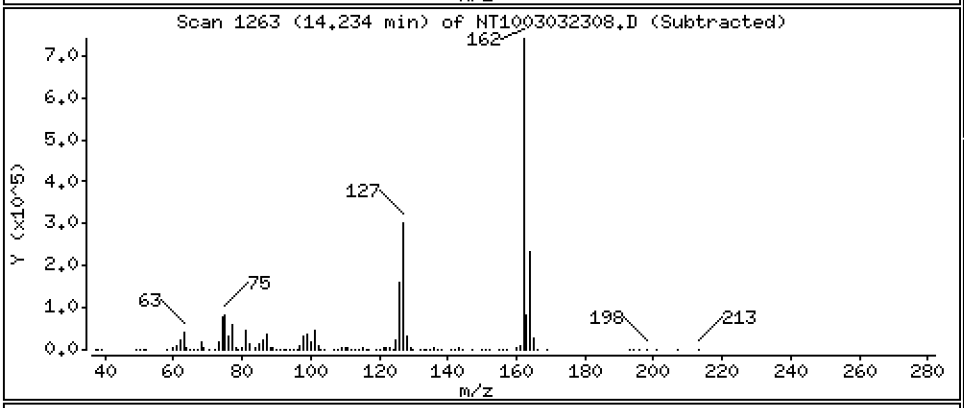
Column diameter: 0.25

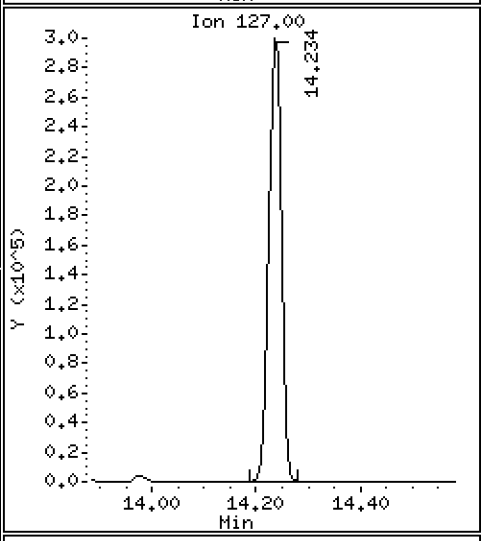
37 2-Chloronaphthalene

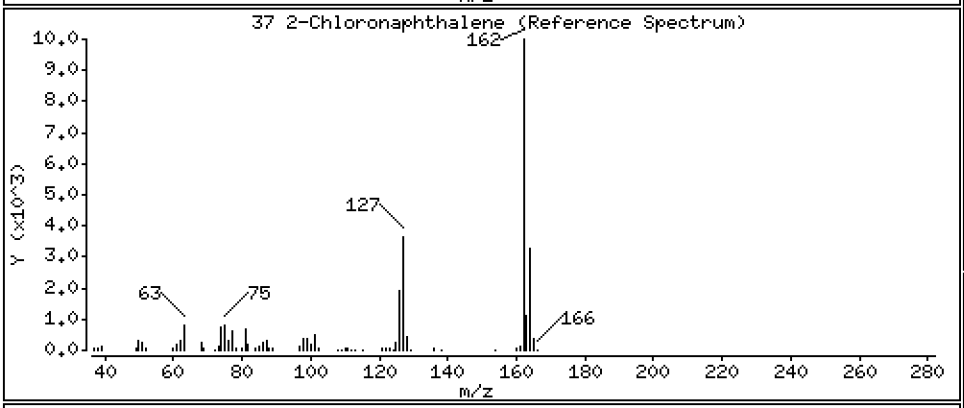
Concentration: 4.313 ug/ml

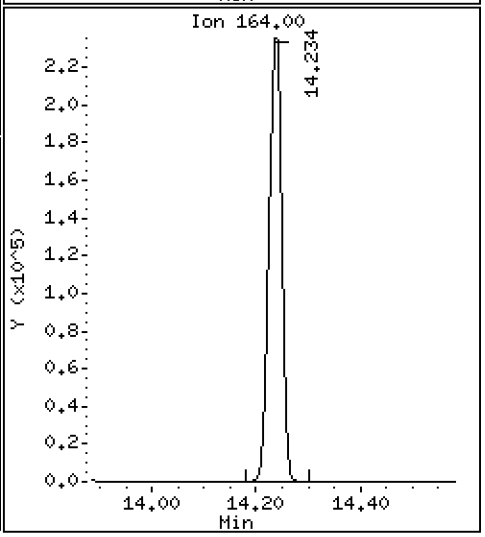


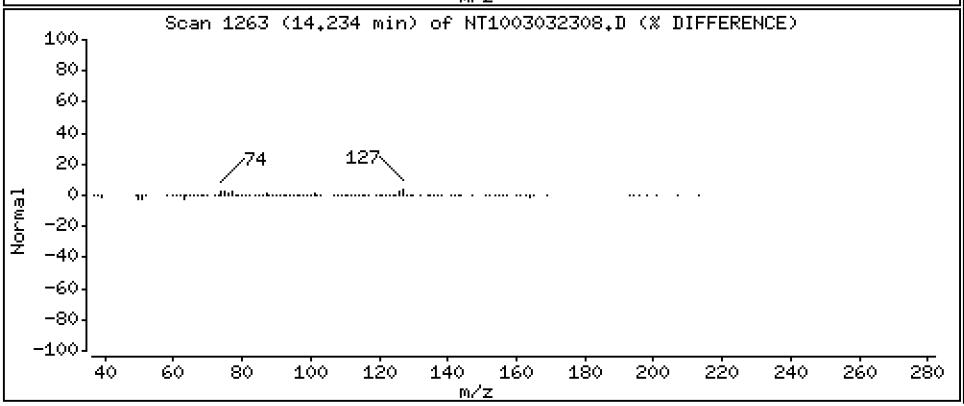












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

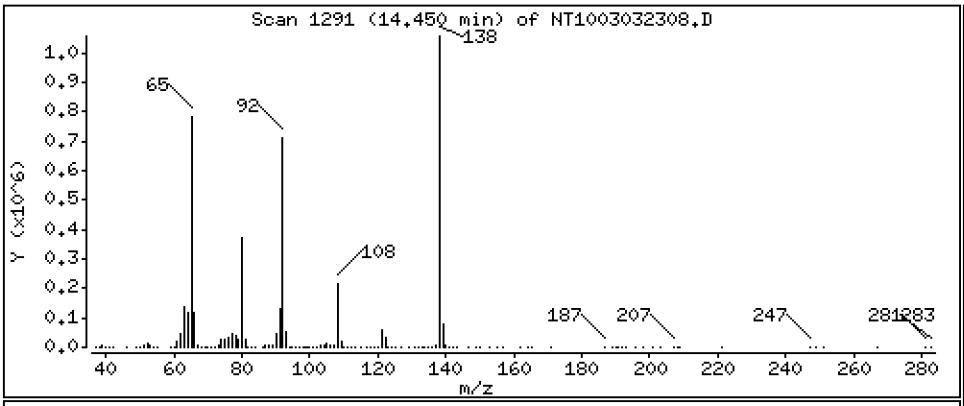
Operator: VTS

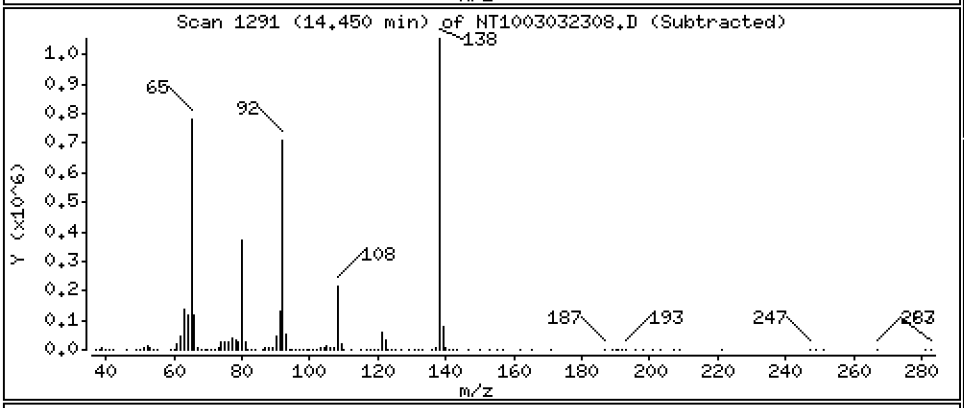
Column phase: ZB-5msi

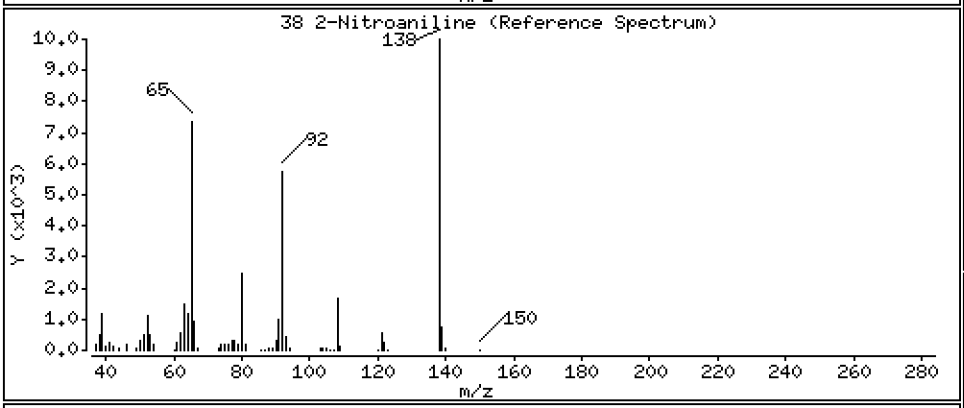
Column diameter: 0.25

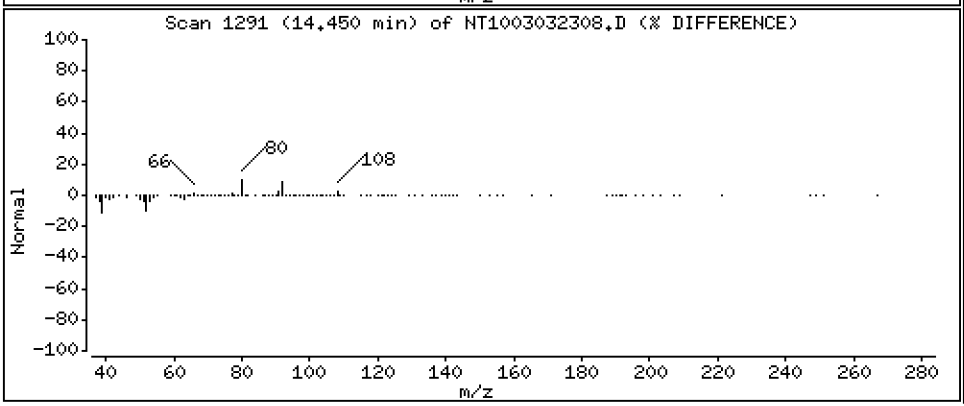
38 2-Nitroaniline

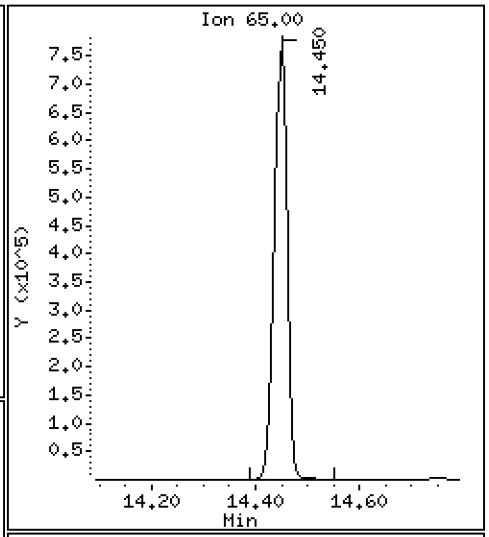
Concentration: 15.73 ug/ml

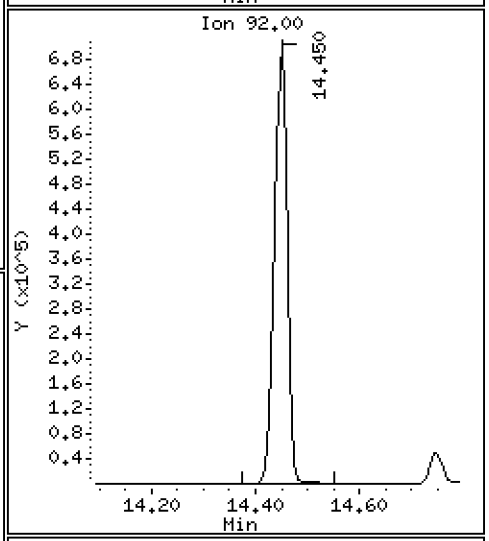


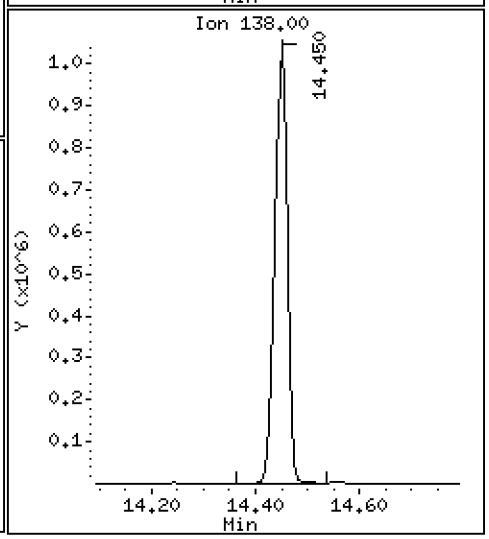












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

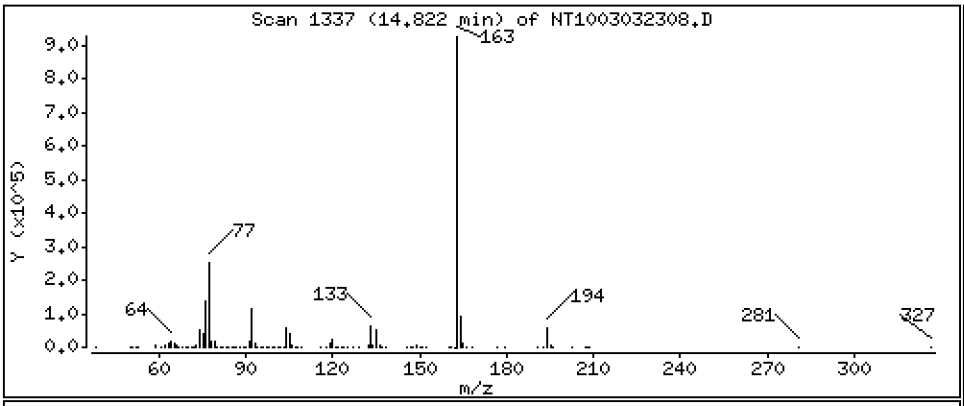
Operator: VTS

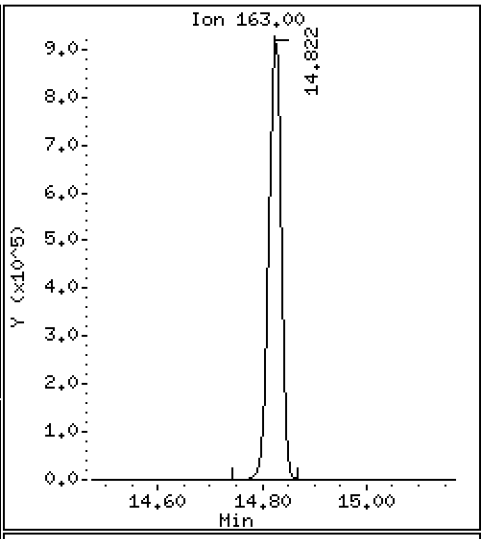
Column phase: ZB-5msi

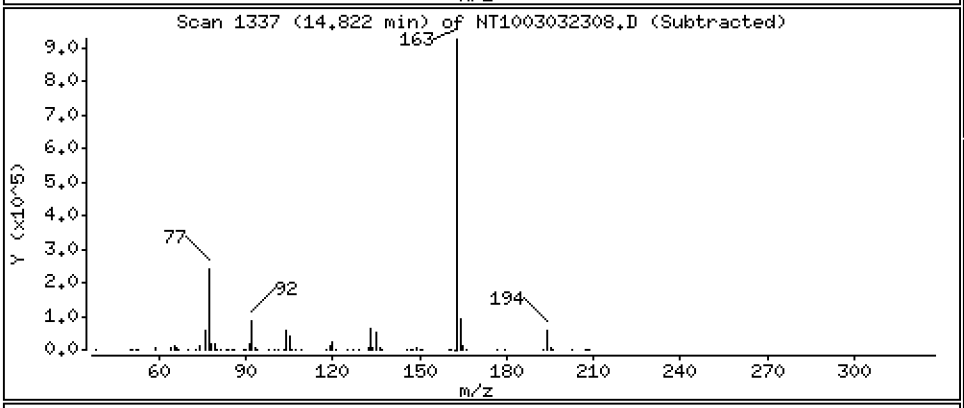
Column diameter: 0.25

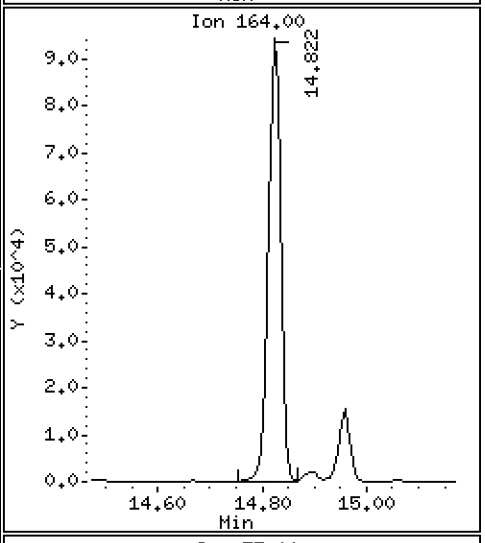
39 Dimethylphthalate

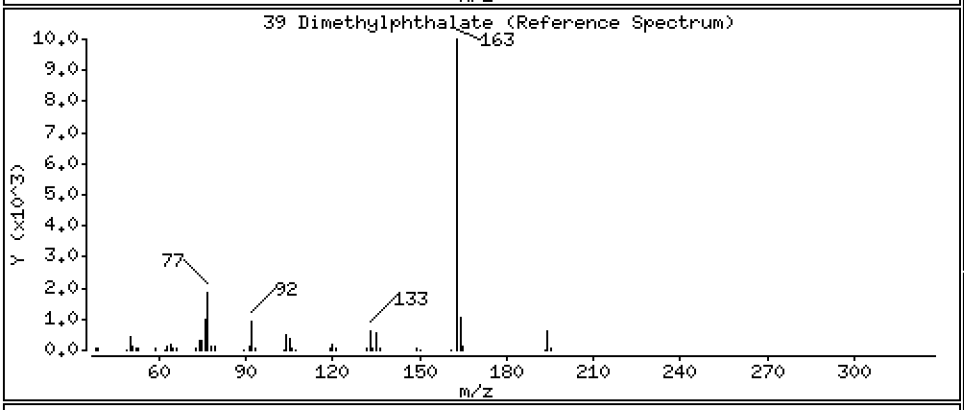
Concentration: 4.561 ug/ml

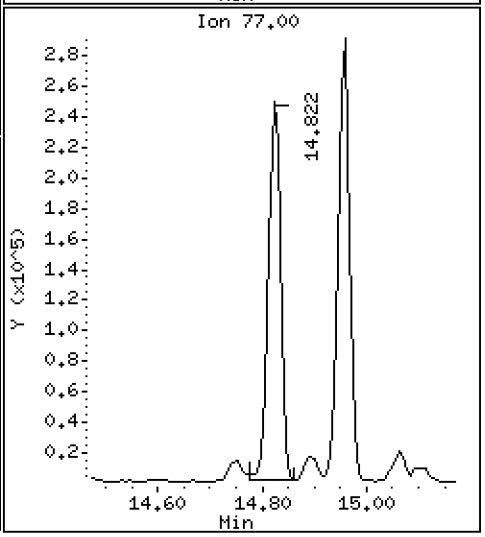


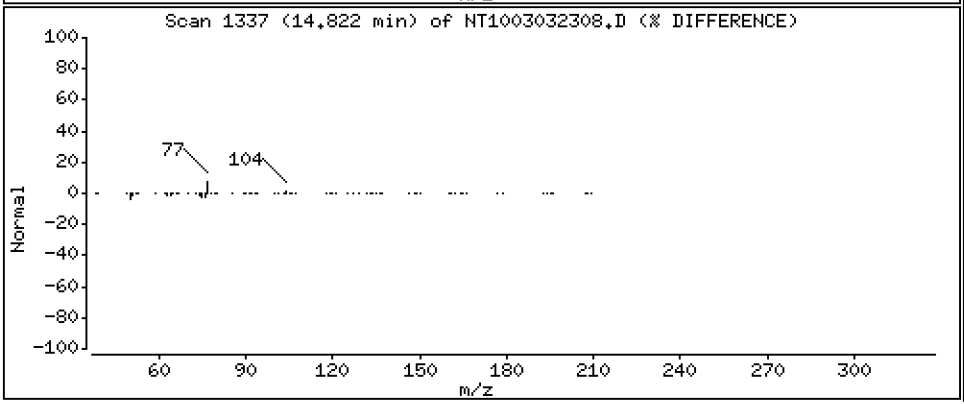












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

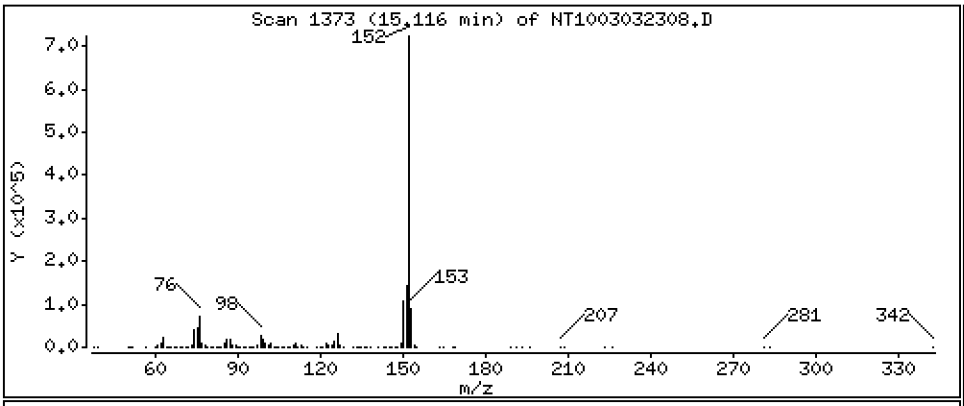
Operator: VTS

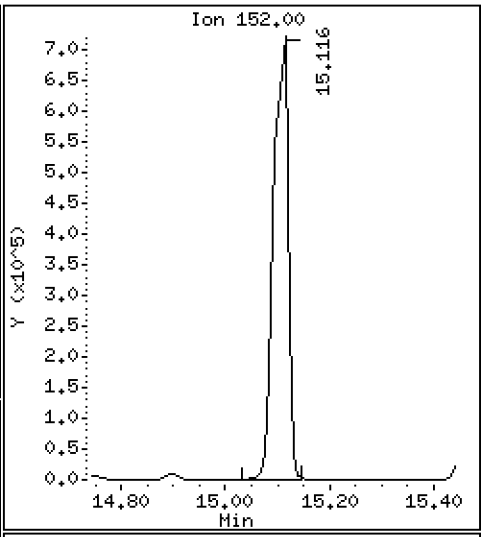
Column phase: ZB-5msi

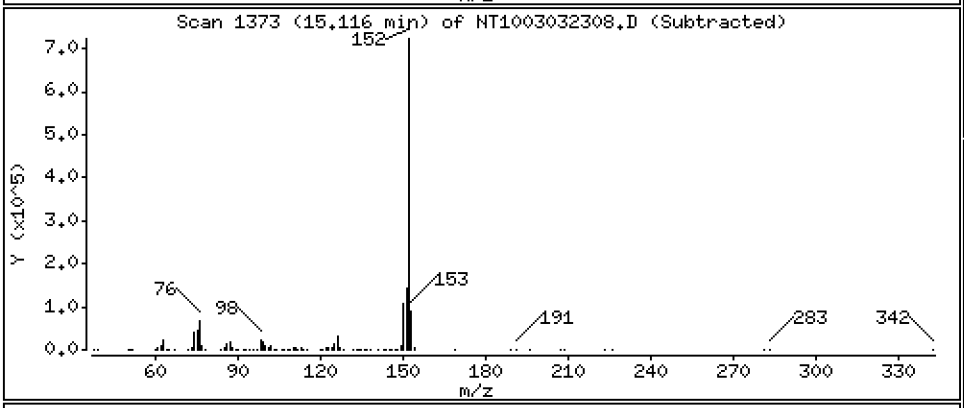
Column diameter: 0.25

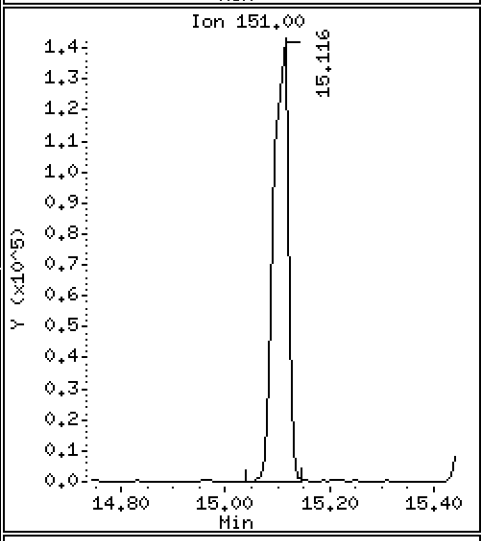
40 Acenaphthylene

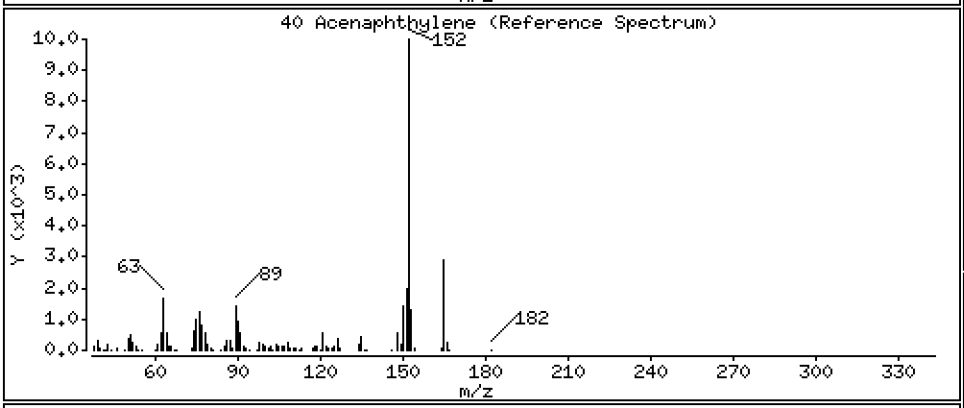
Concentration: 2.018 ug/ml

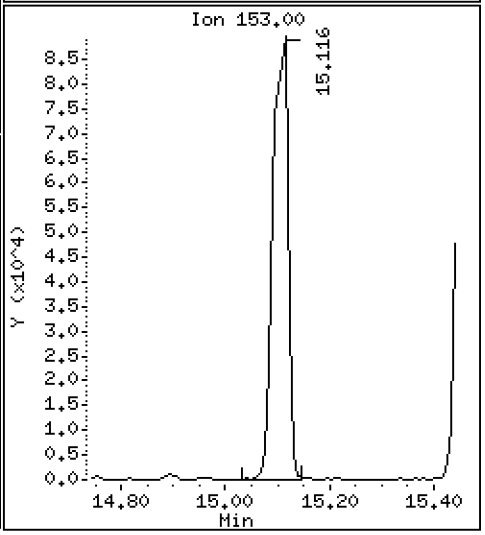


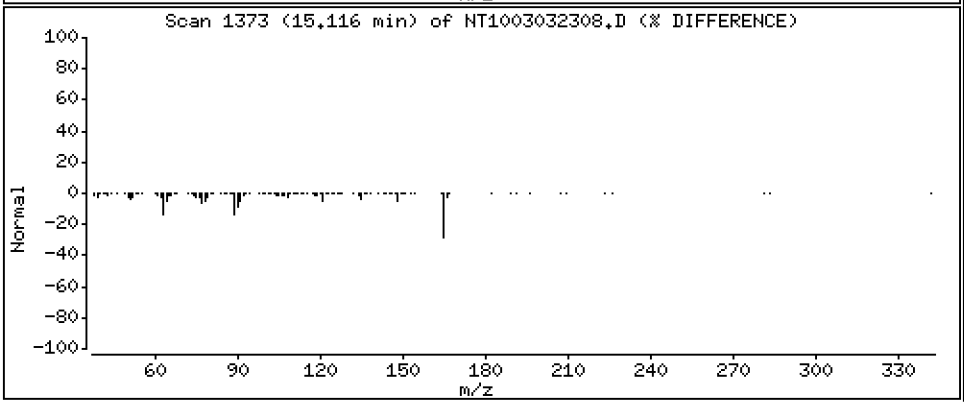












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

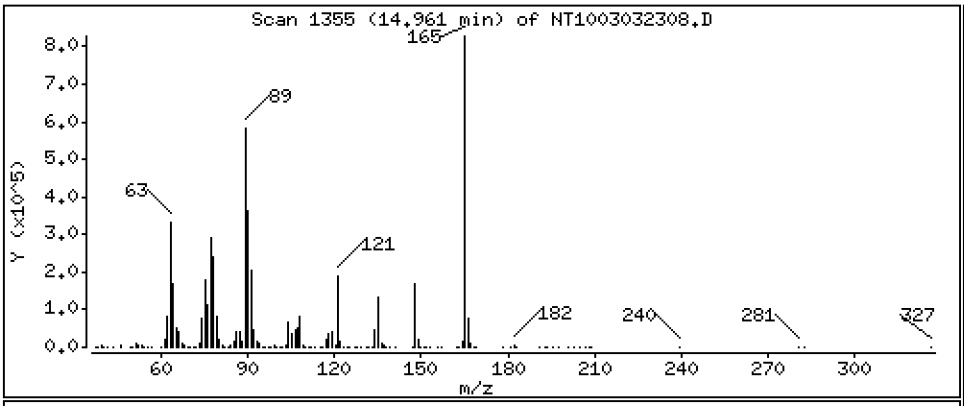
Operator: VTS

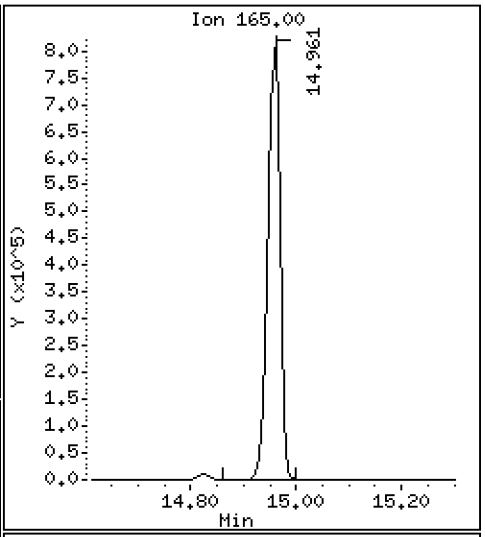
Column phase: ZB-5msi

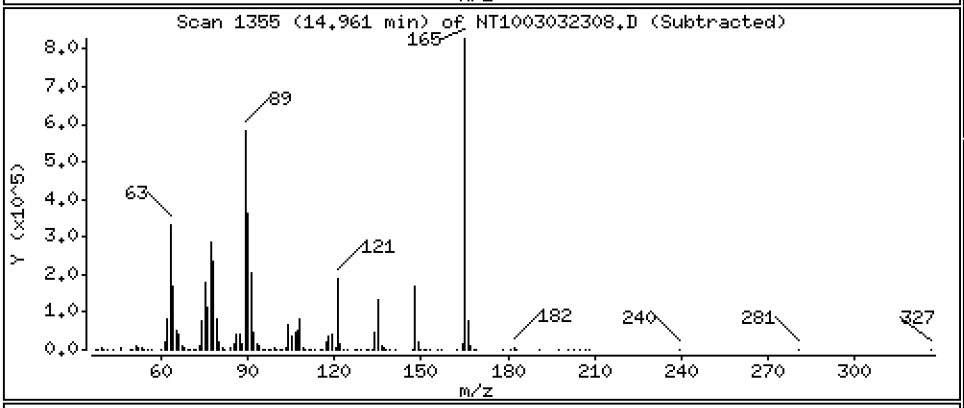
Column diameter: 0.25

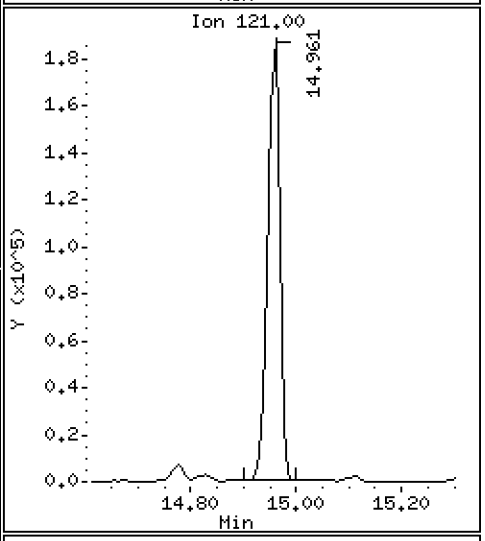
41 2,6-Dinitrotoluene

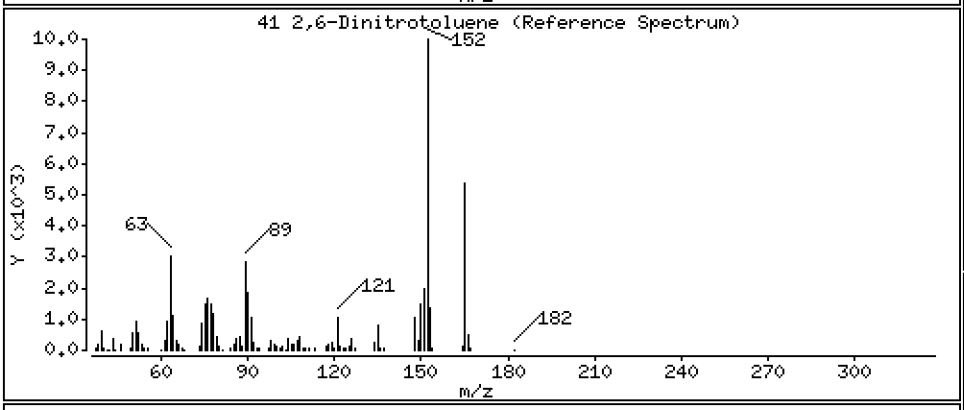
Concentration: 16.90 ug/ml

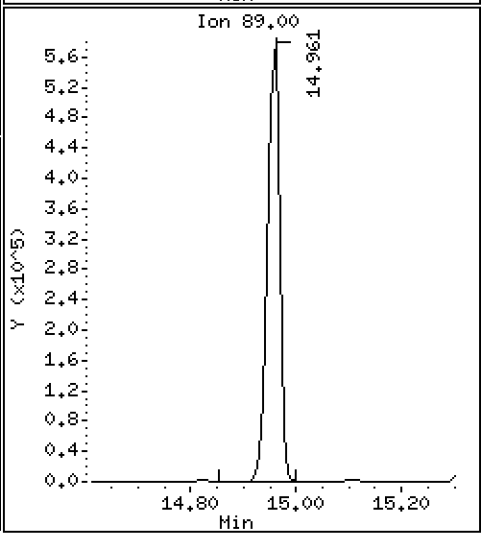


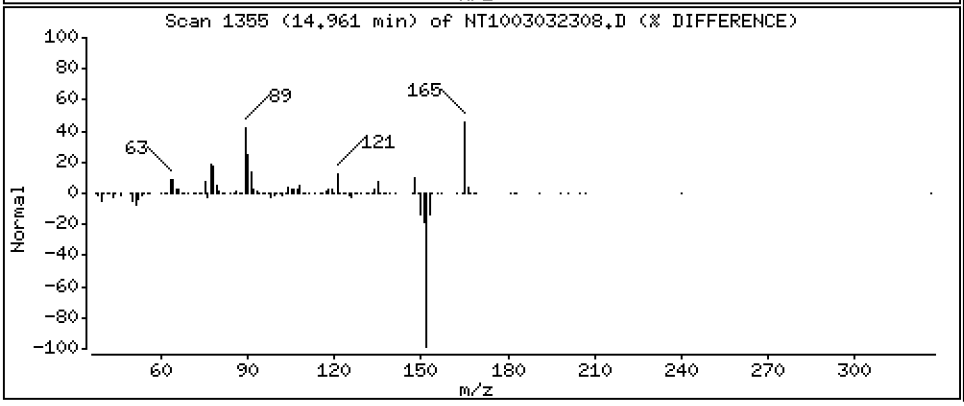












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

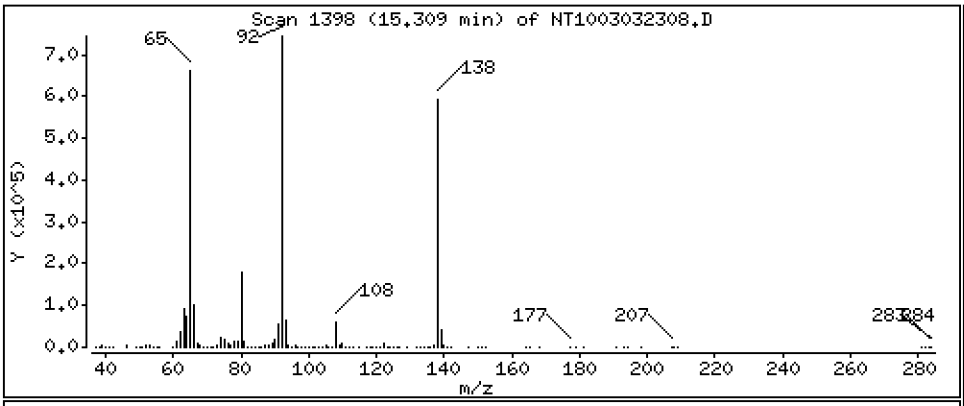
Operator: VTS

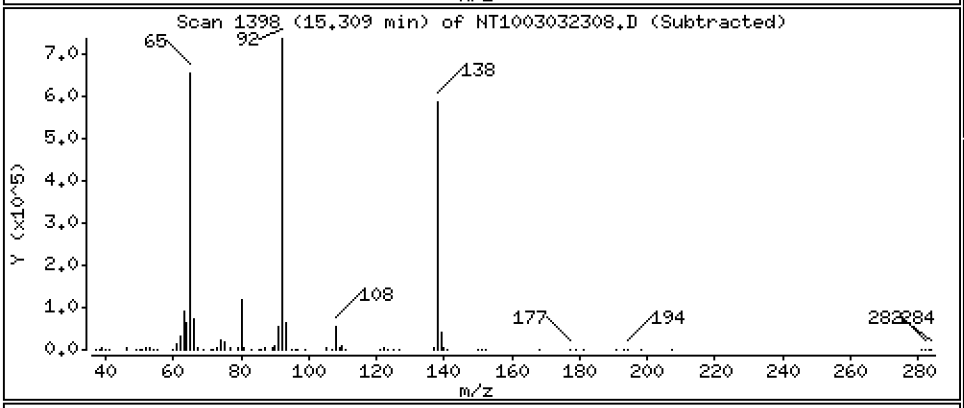
Column phase: ZB-5msi

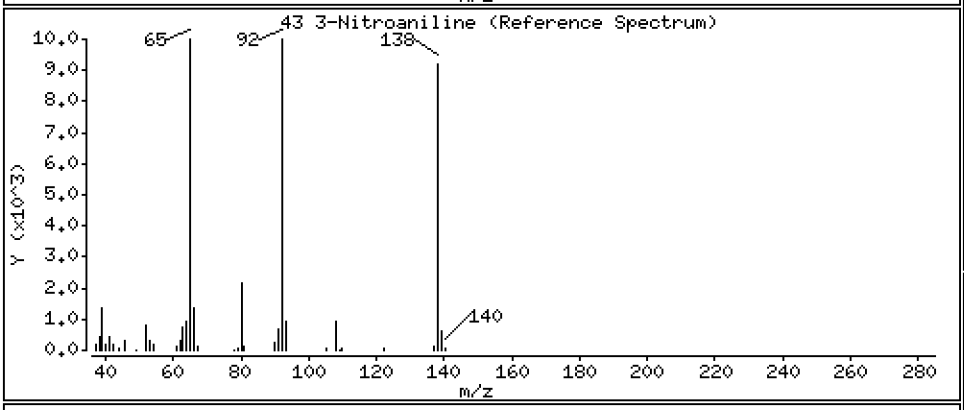
Column diameter: 0.25

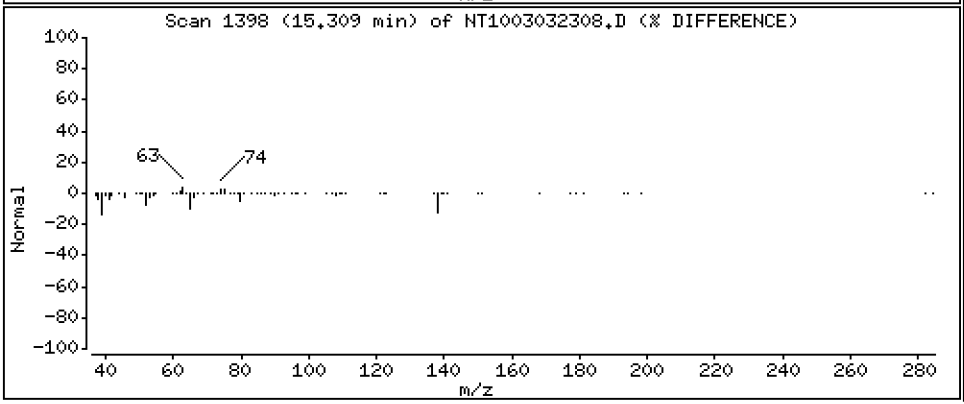
43 3-Nitroaniline

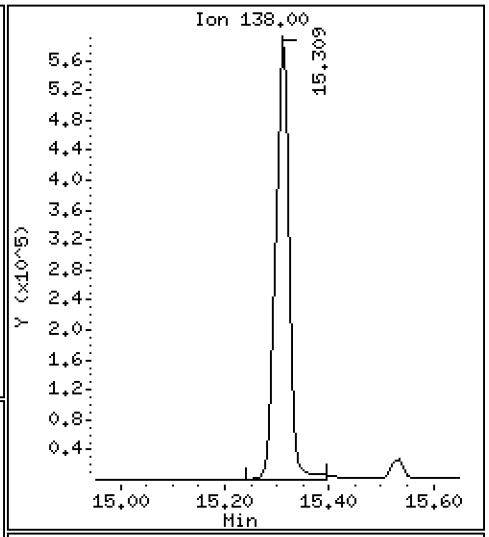
Concentration: 12.43 ug/ml

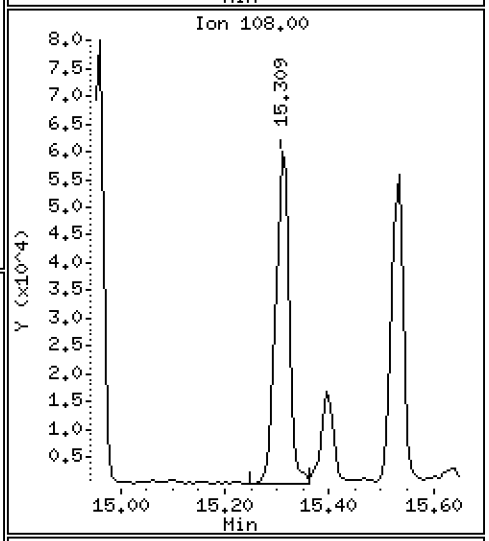


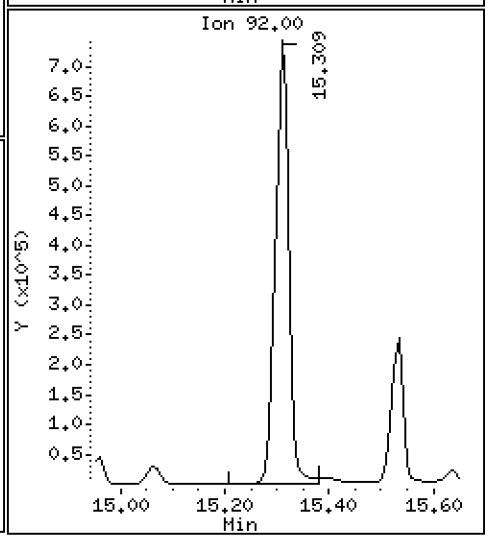












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

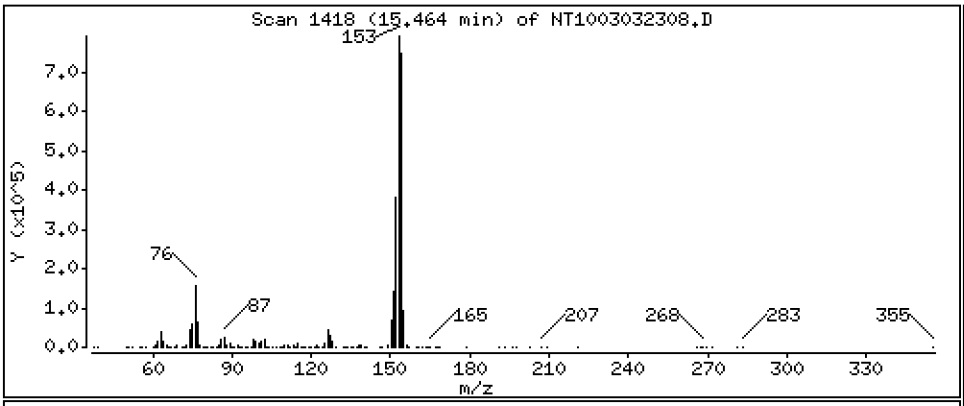
Operator: VTS

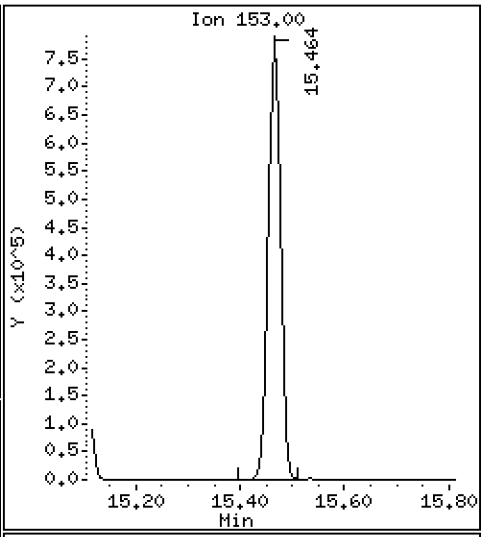
Column phase: ZB-5msi

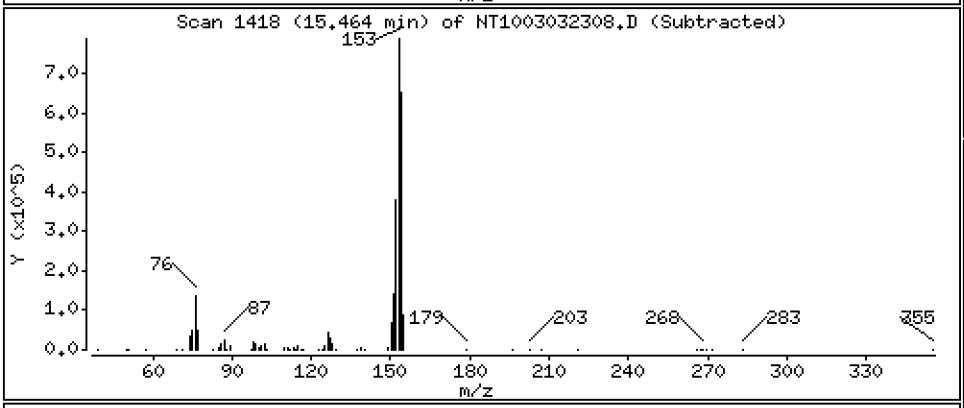
Column diameter: 0.25

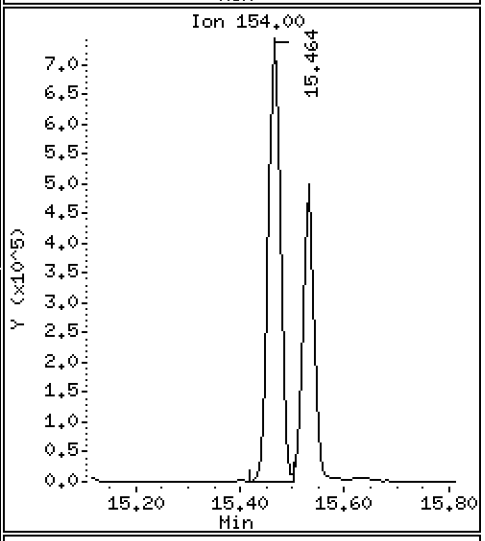
44 Acenaphthene

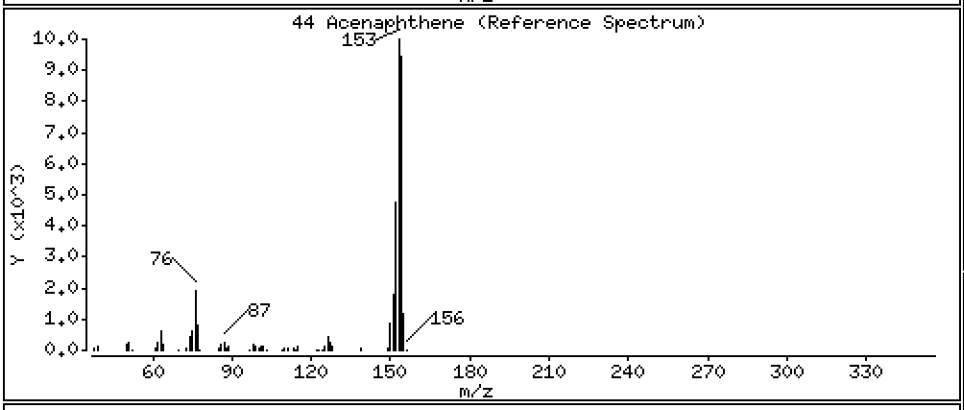
Concentration: 4.226 ug/ml

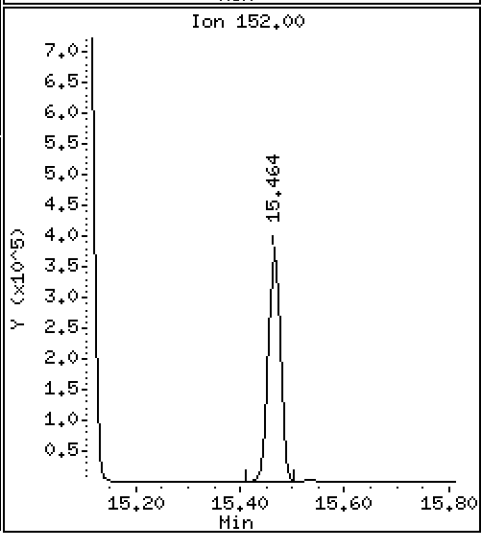


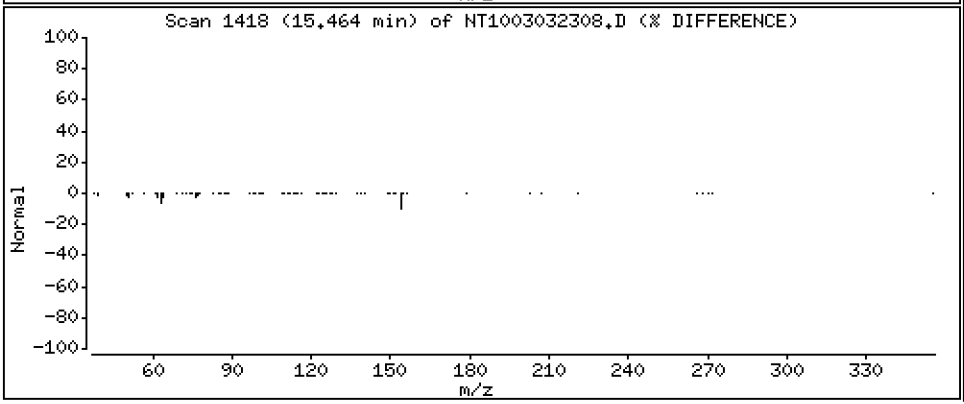












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

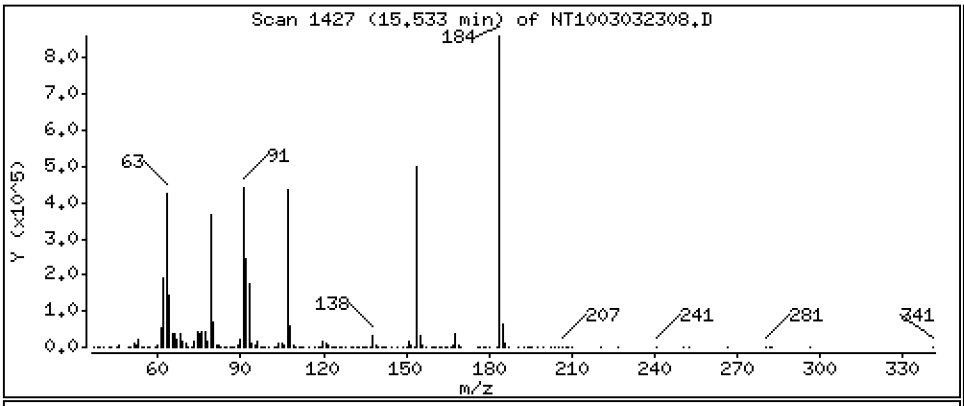
Operator: VTS

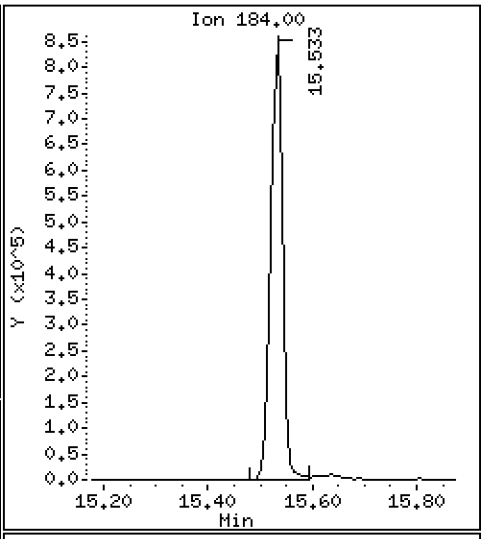
Column phase: ZB-5msi

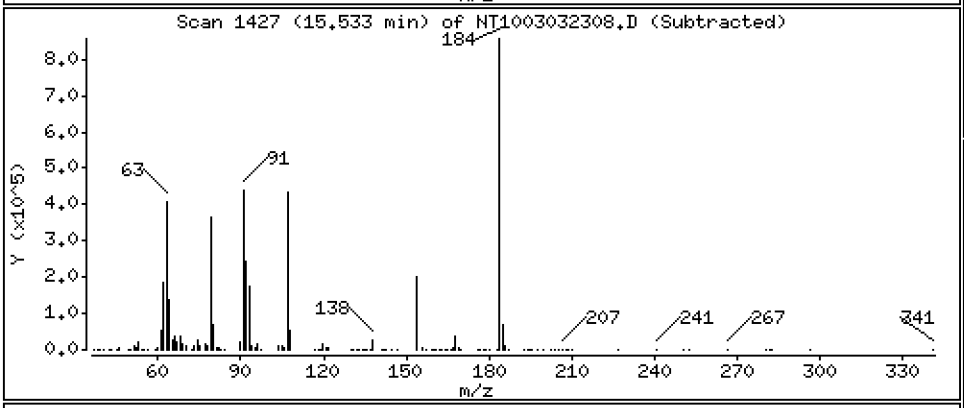
Column diameter: 0.25

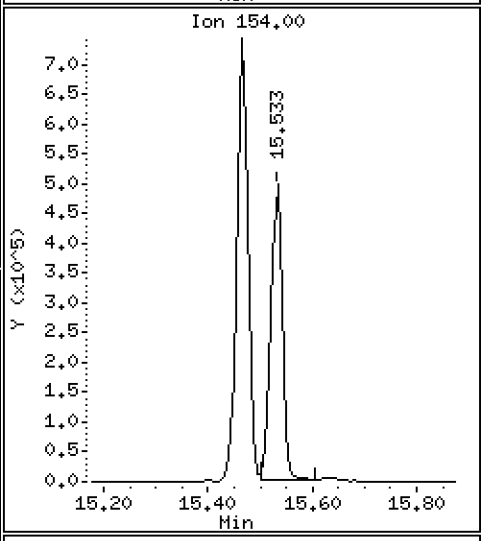
45 2,4-Dinitrophenol

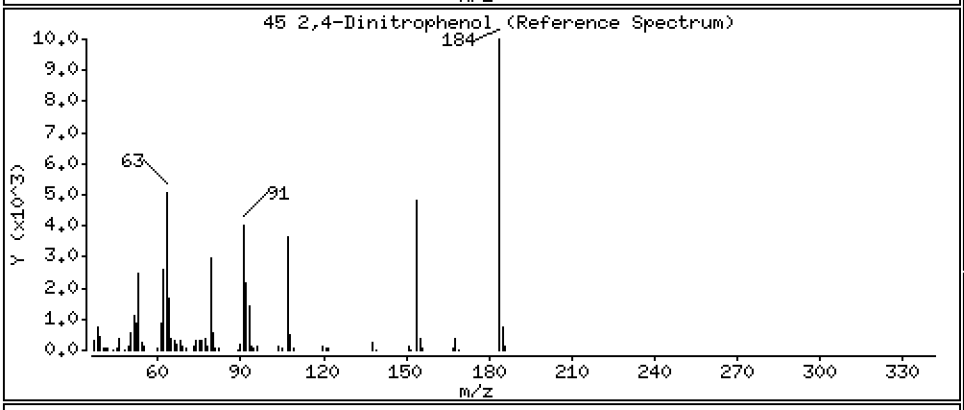
Concentration: 75.38 ug/ml

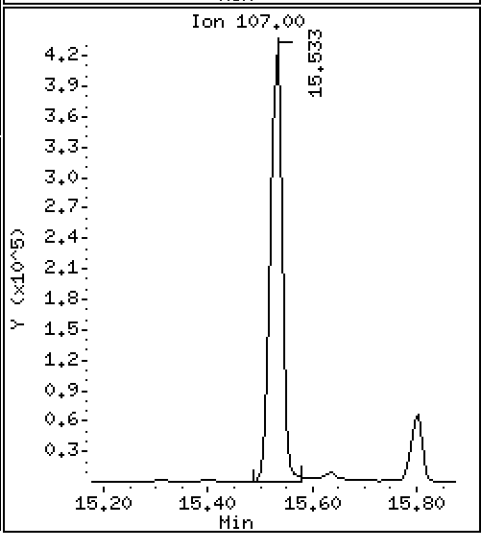


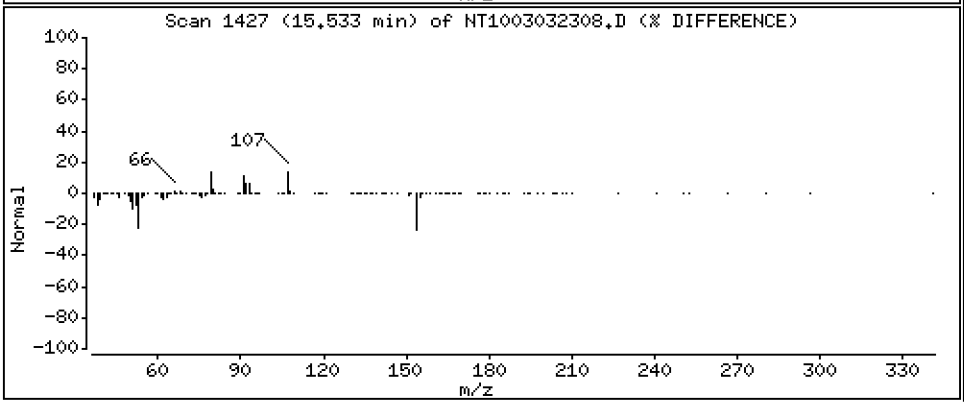












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

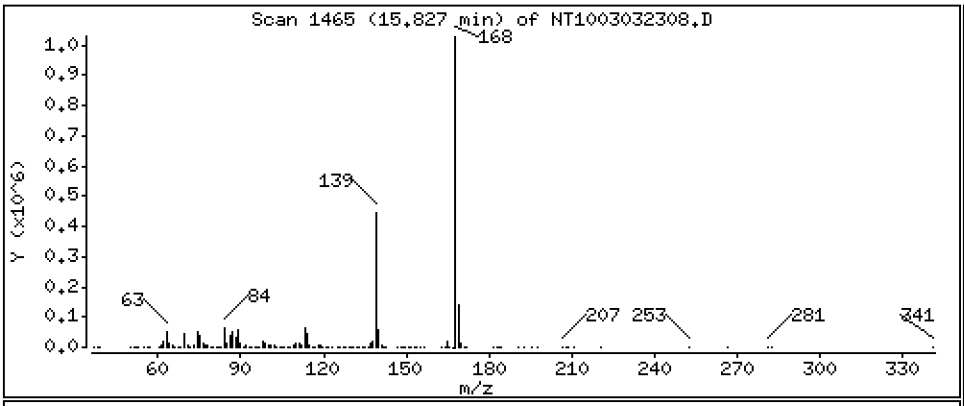
Operator: VTS

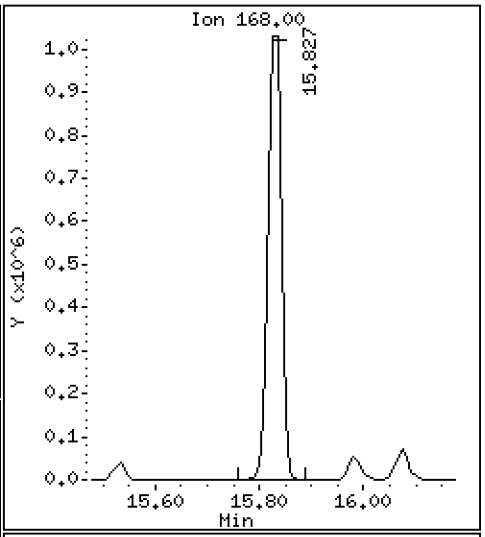
Column phase: ZB-5msi

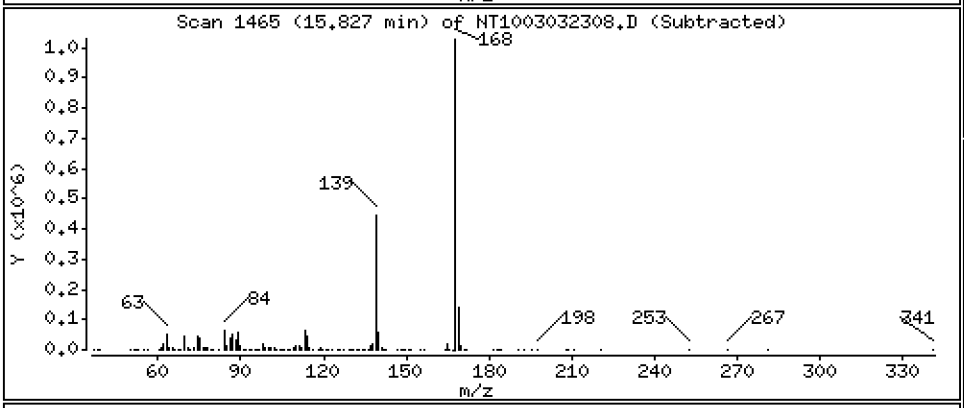
Column diameter: 0.25

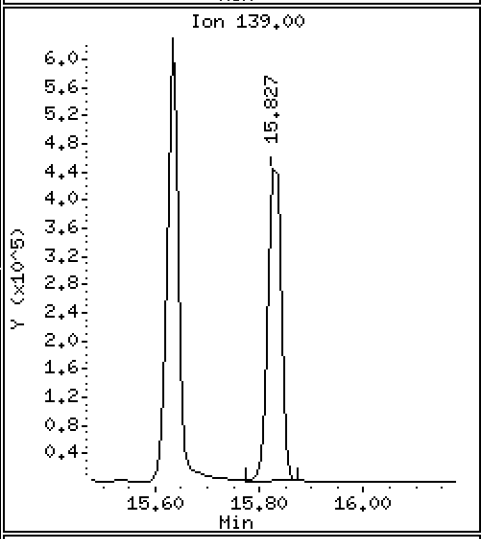
46 Dibenzofuran

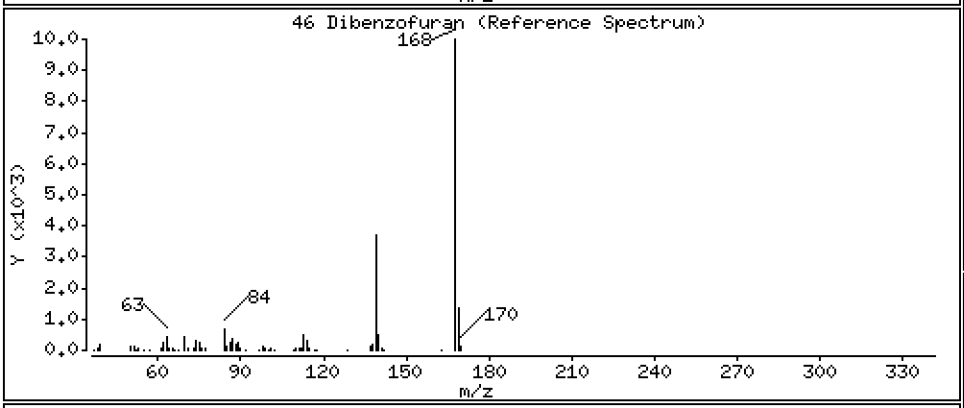
Concentration: 4.090 ug/ml

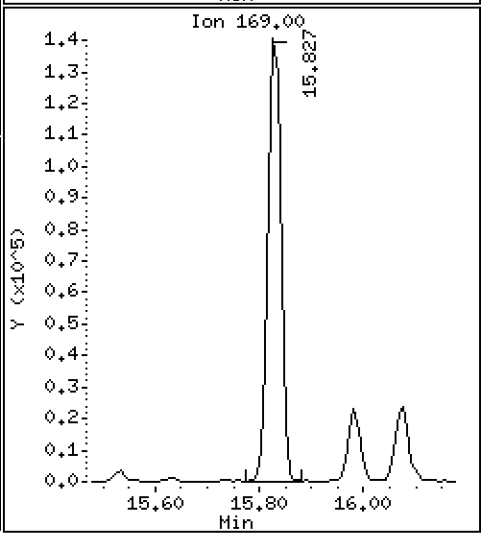


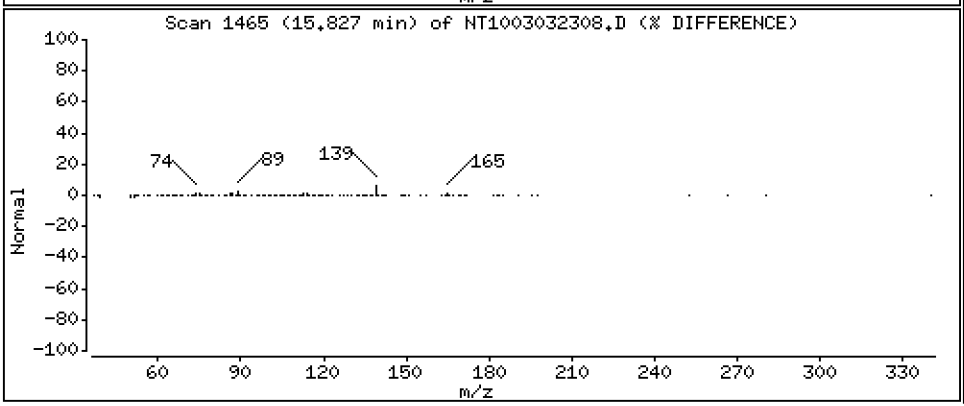












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

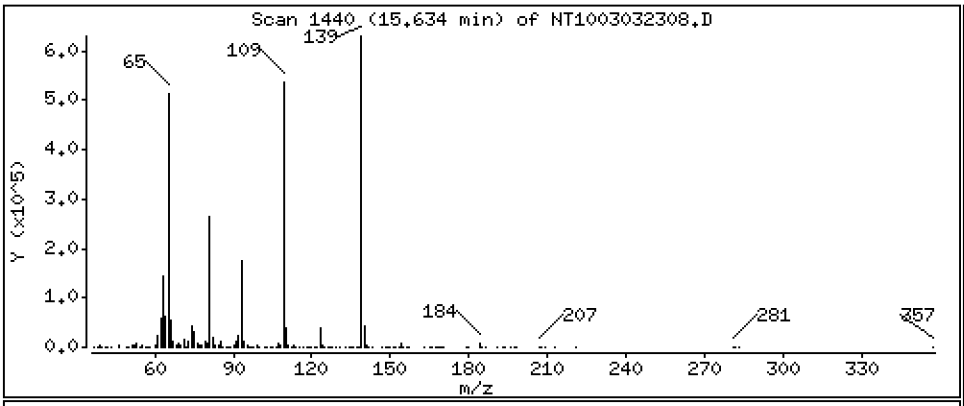
Operator: VTS

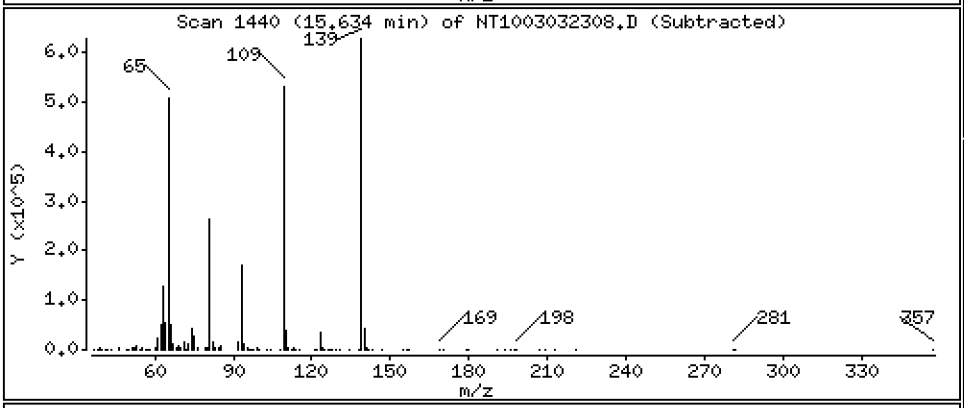
Column phase: ZB-5msi

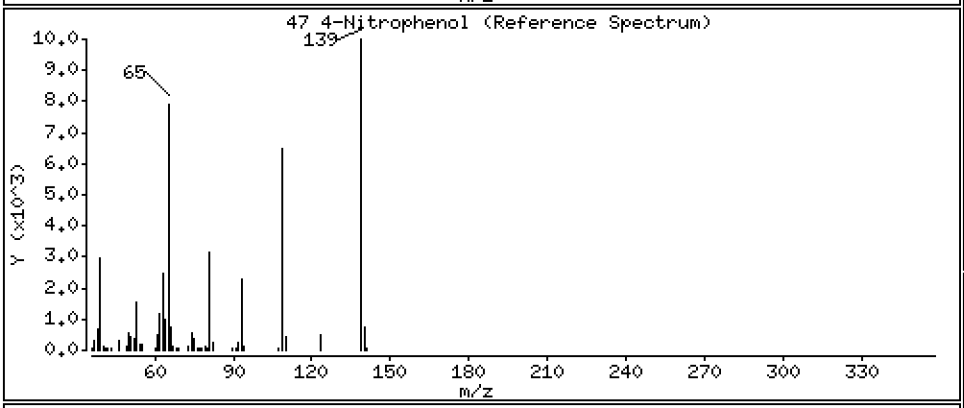
Column diameter: 0.25

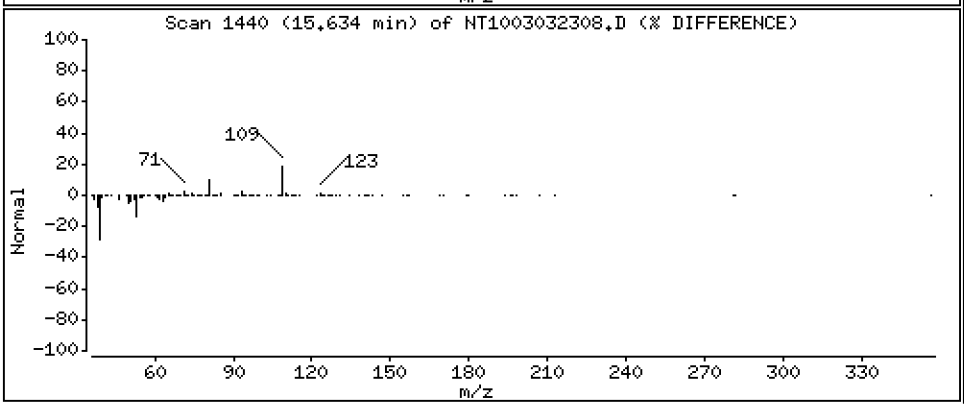
47 4-Nitrophenol

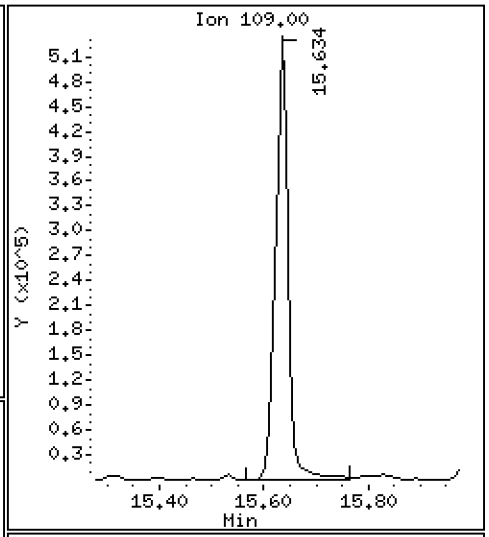
Concentration: 14.52 ug/ml

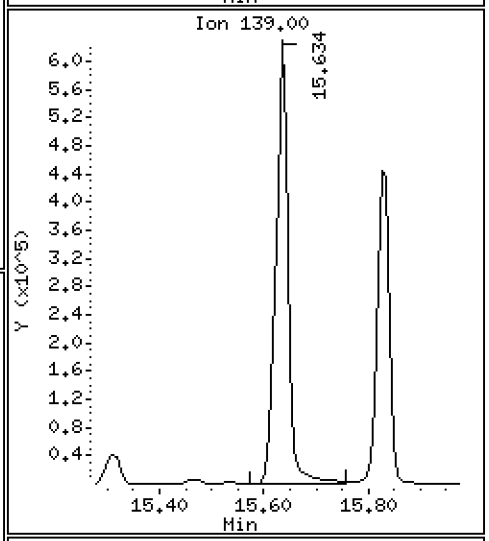


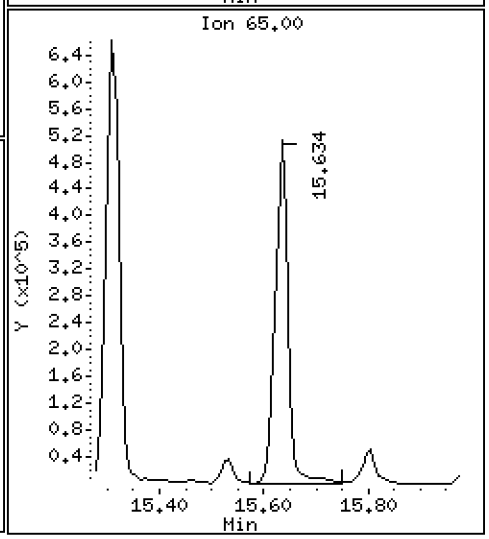












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

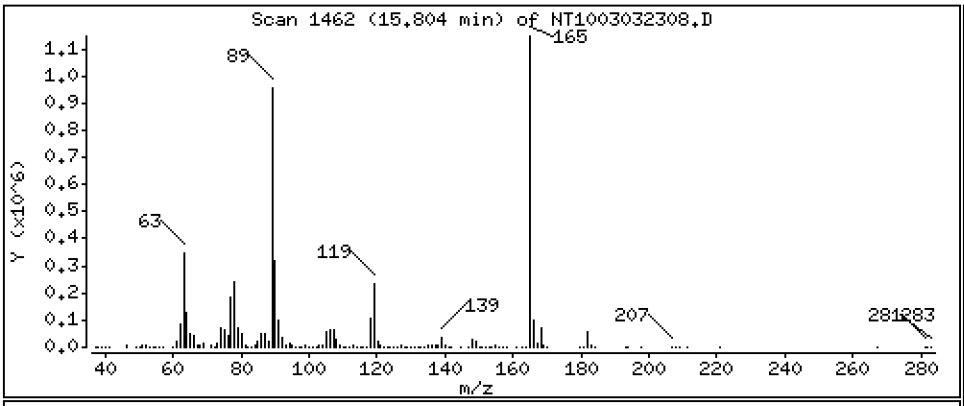
Operator: VTS

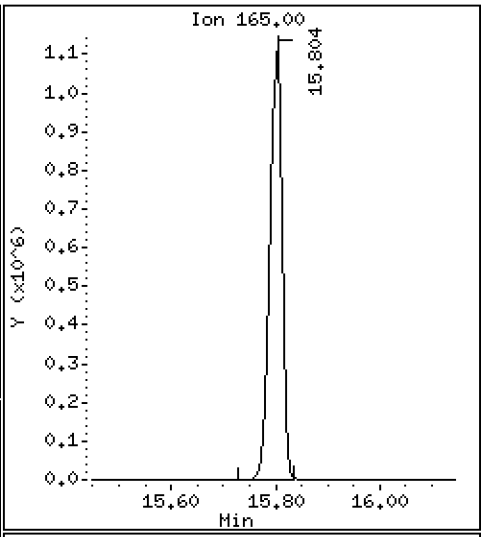
Column phase: ZB-5msi

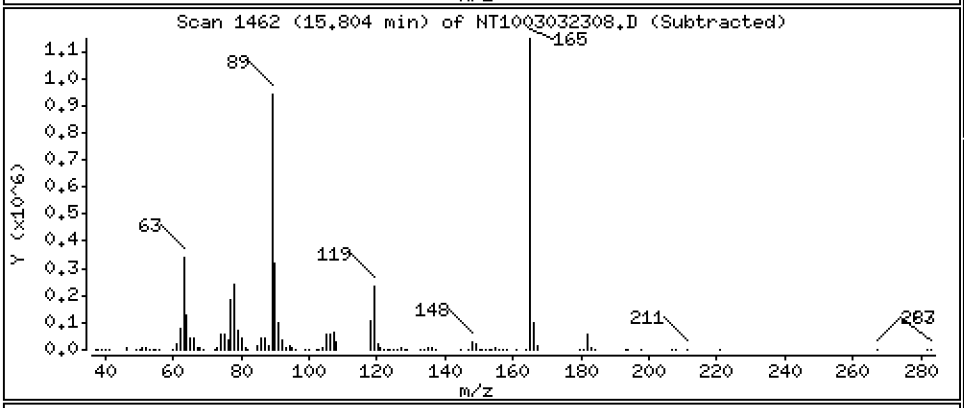
Column diameter: 0.25

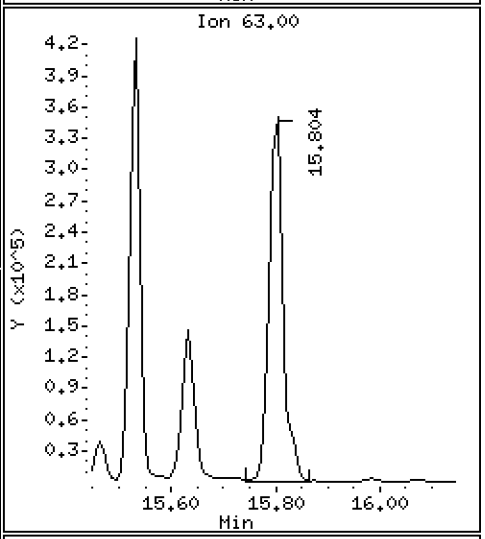
48 2,4-Dinitrotoluene

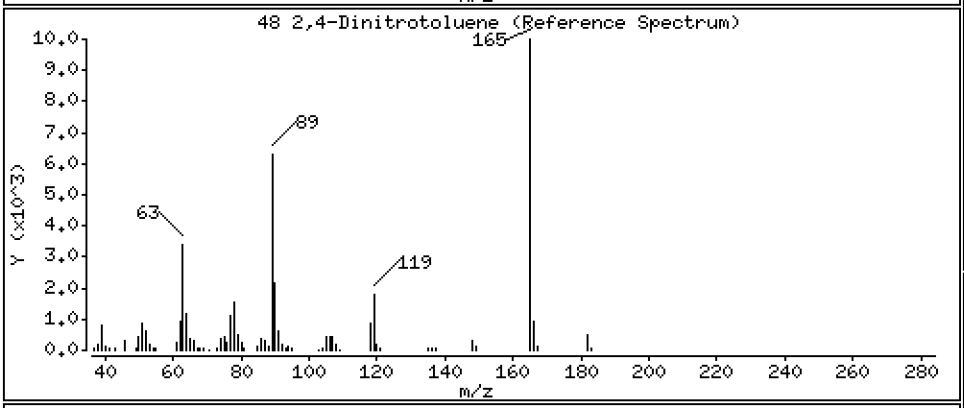
Concentration: 15.74 ug/ml

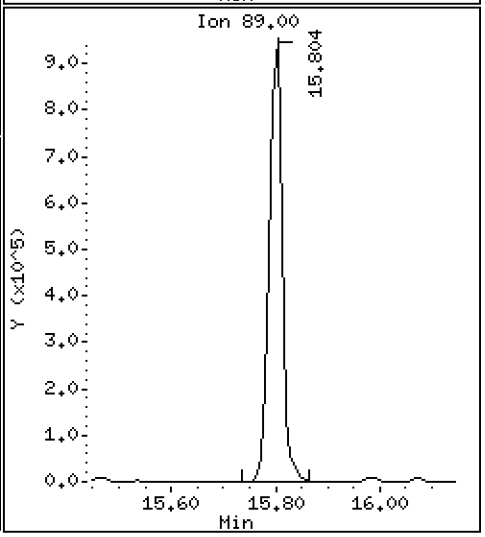


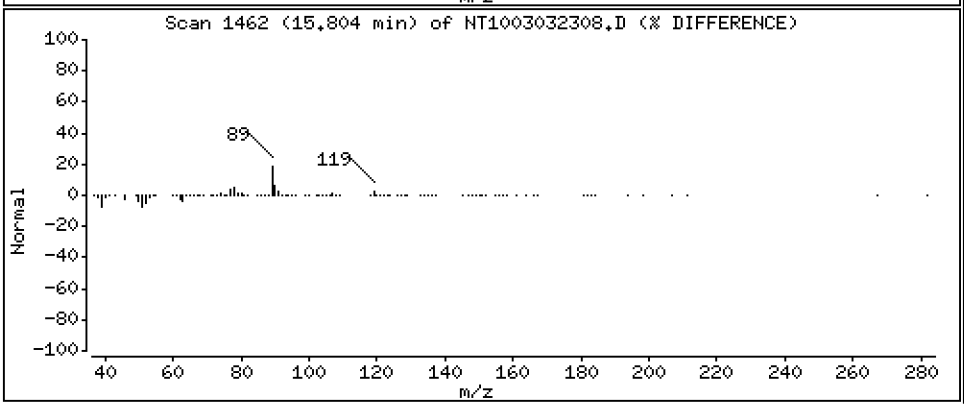












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

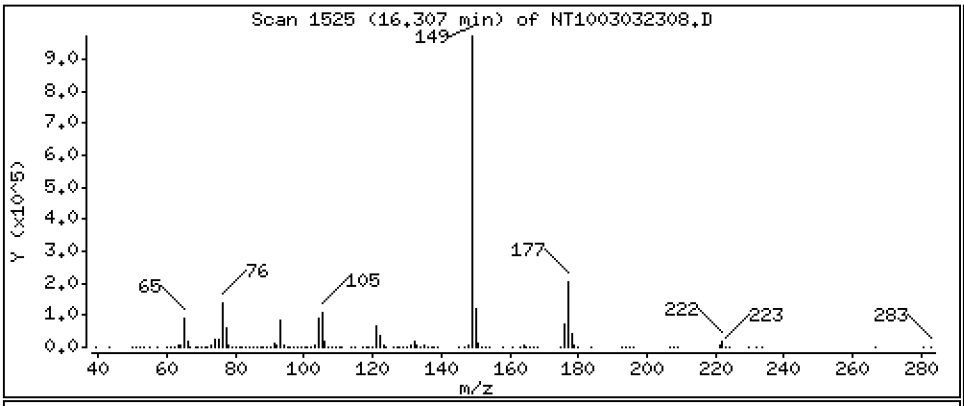
Operator: VTS

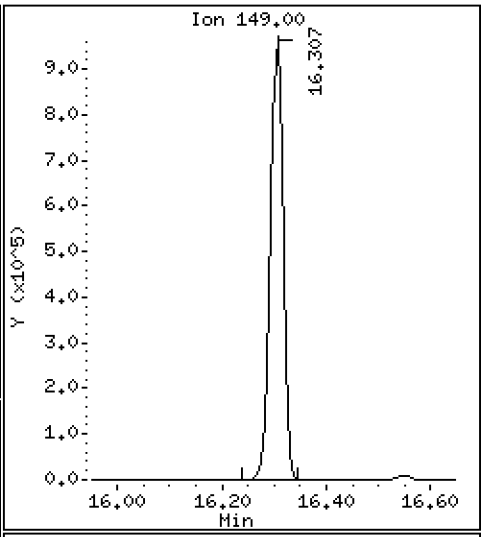
Column phase: ZB-5msi

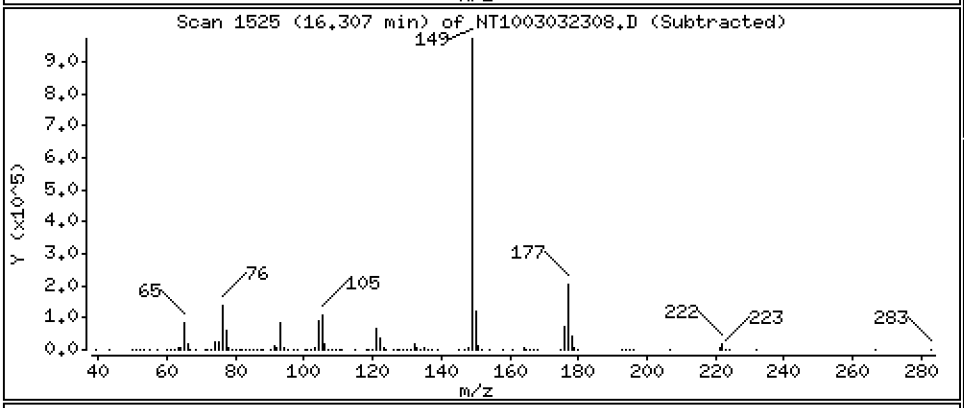
Column diameter: 0.25

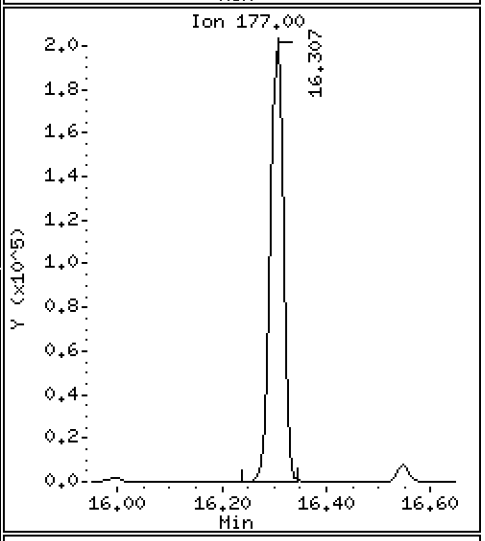
50 Diethylphthalate

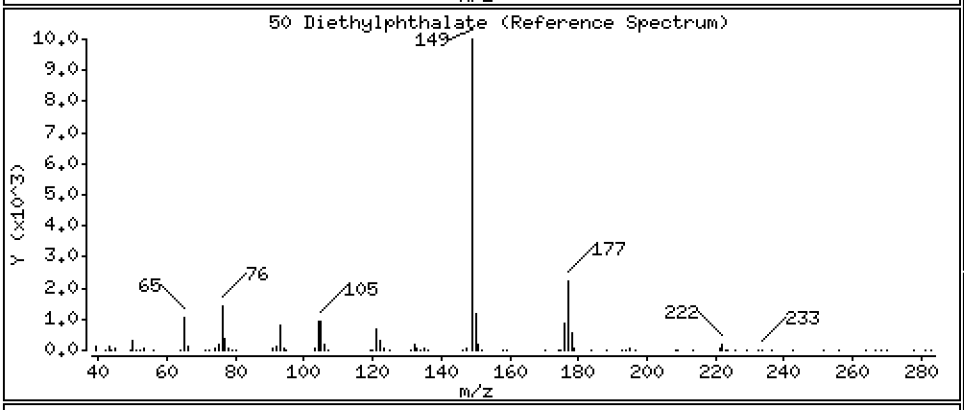
Concentration: 4.626 ug/ml

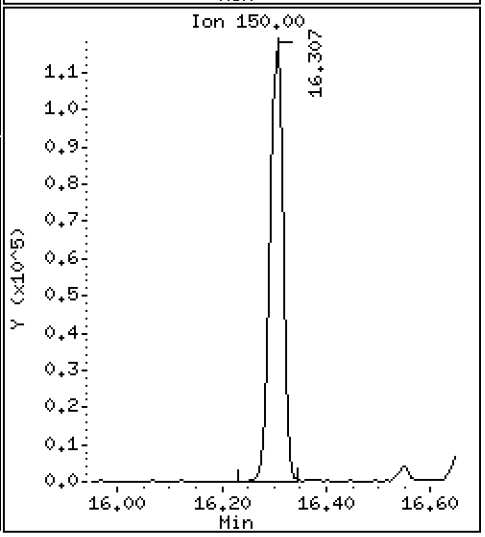


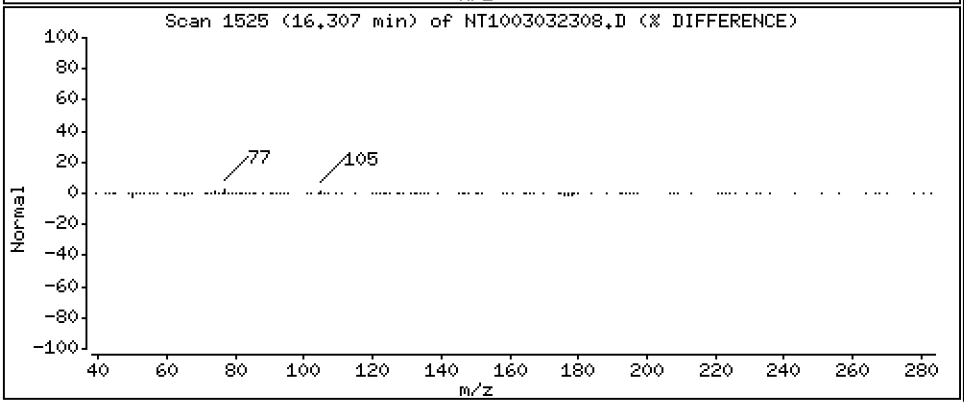












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

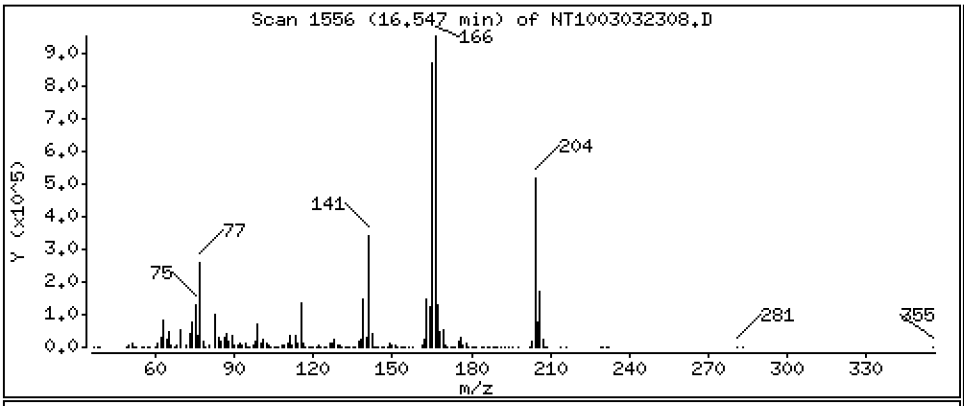
Operator: VTS

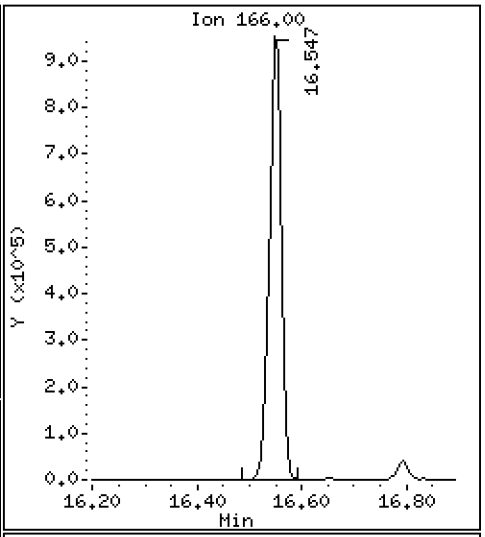
Column phase: ZB-5msi

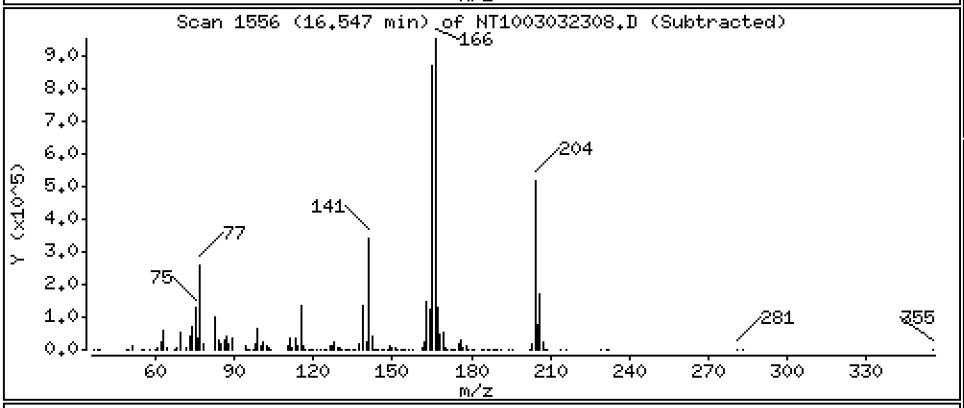
Column diameter: 0.25

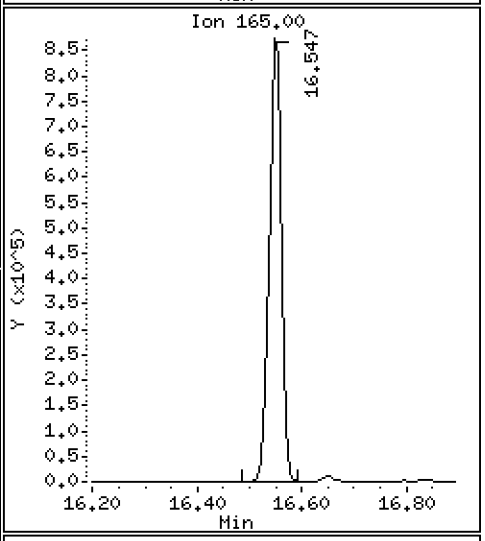
49 Fluorene

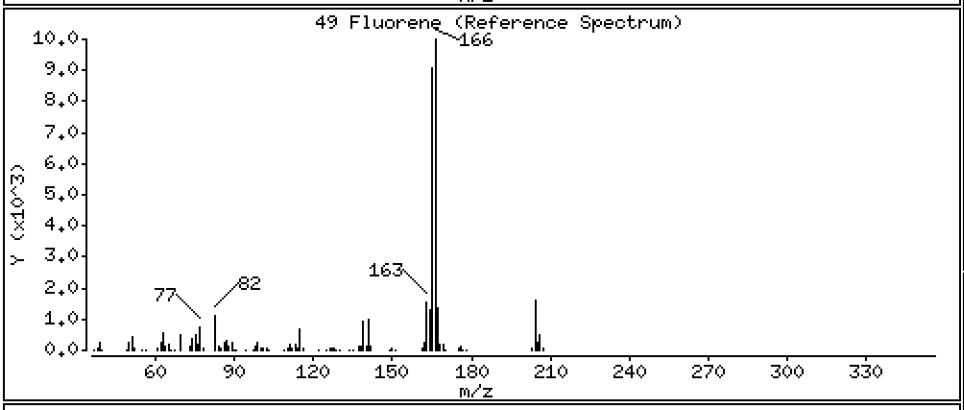
Concentration: 4.273 ug/ml

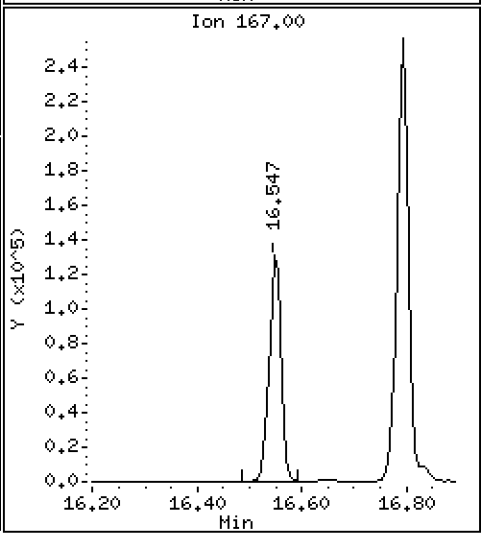


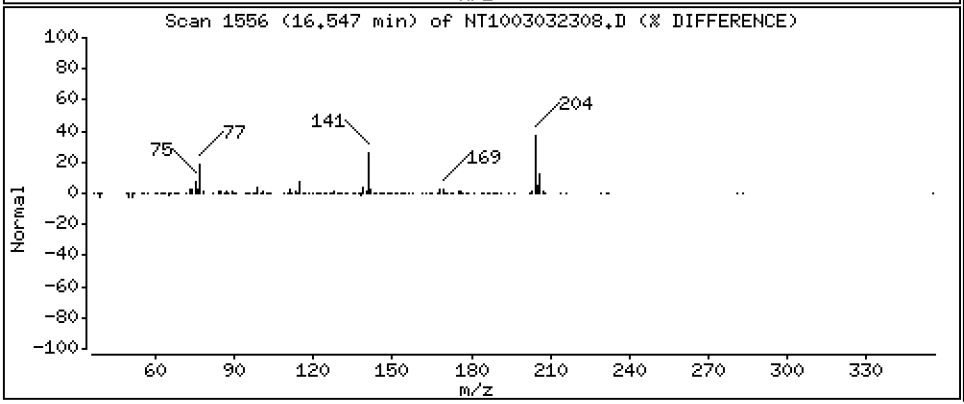












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

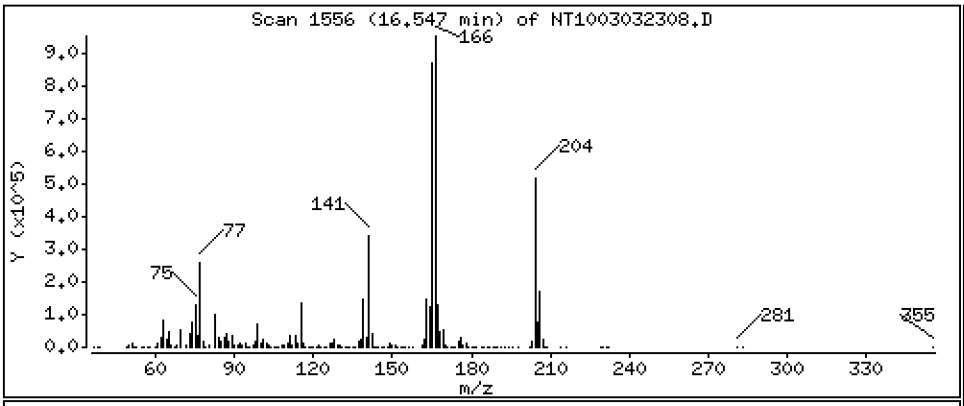
Operator: VTS

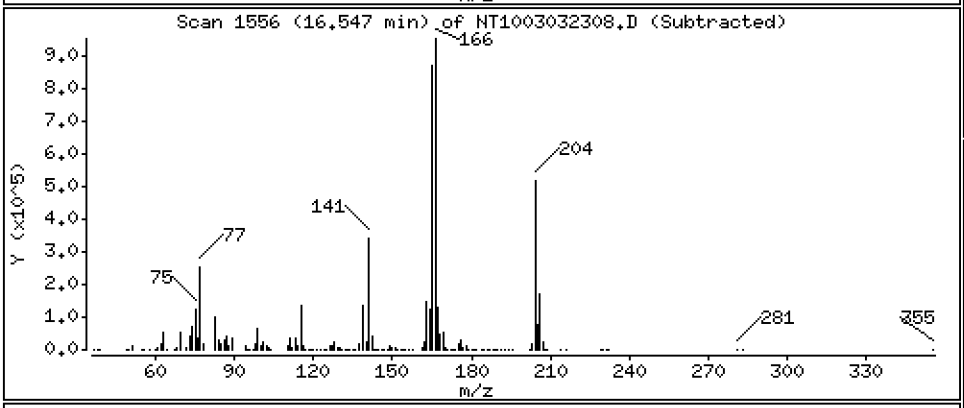
Column phase: ZB-5msi

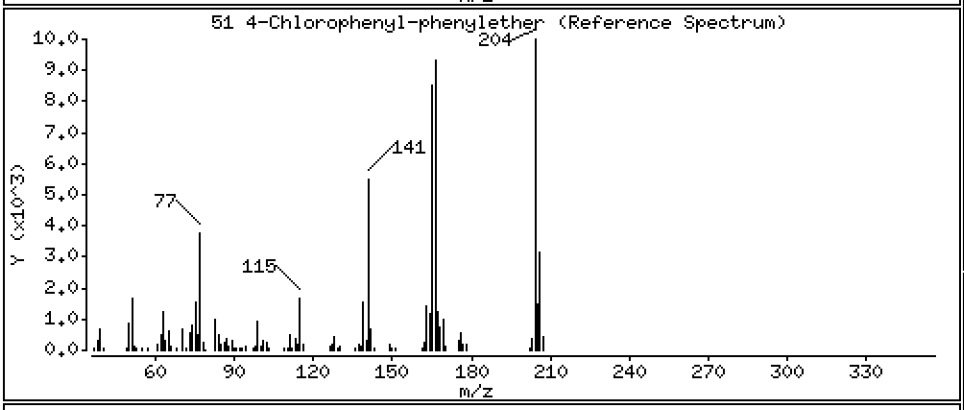
Column diameter: 0.25

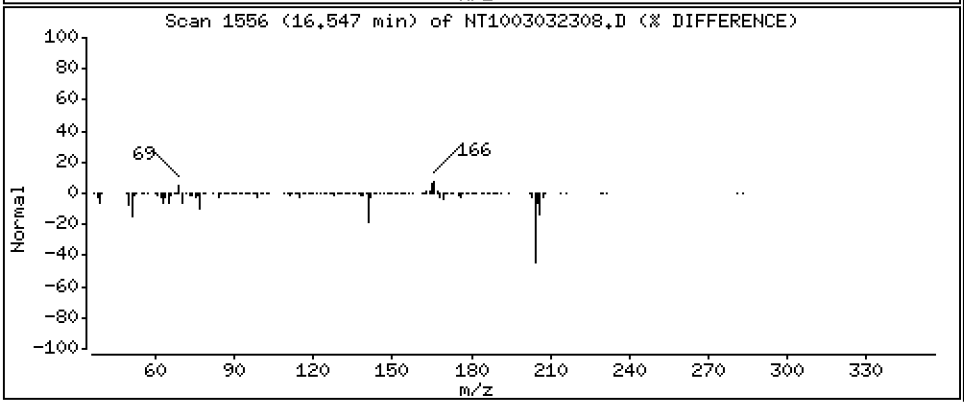
51 4-Chlorophenyl-phenylether

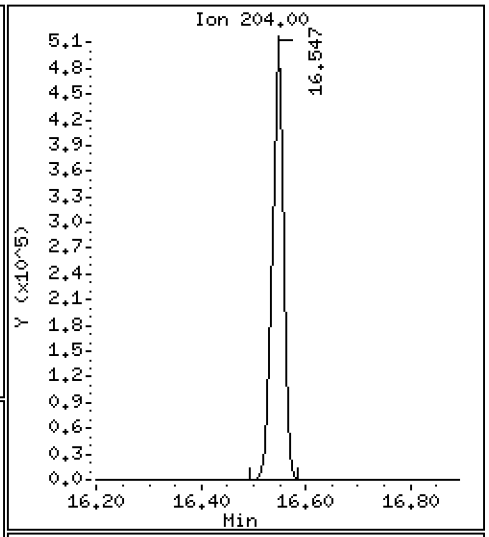
Concentration: 4.589 ug/ml

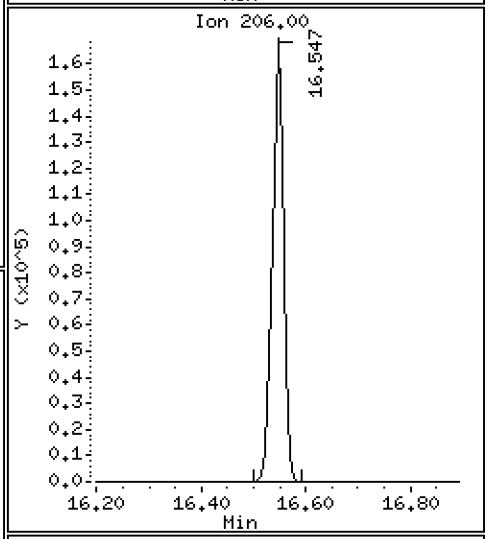


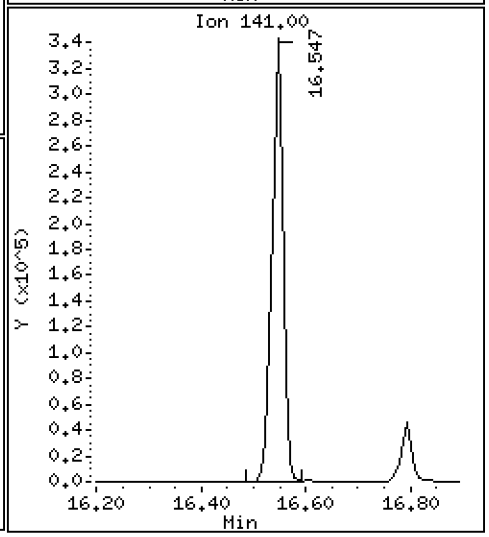












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

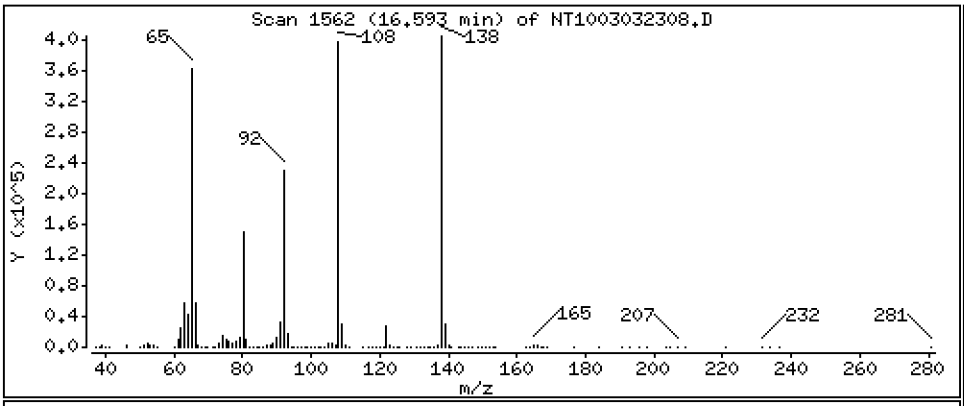
Operator: VTS

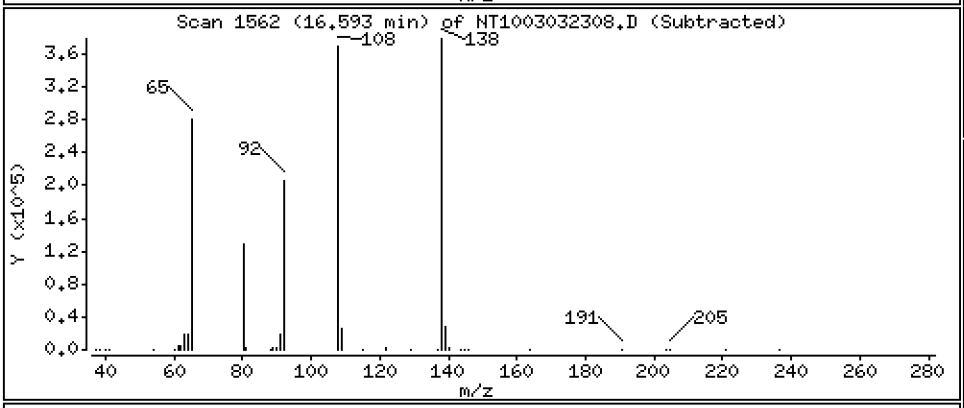
Column phase: ZB-5msi

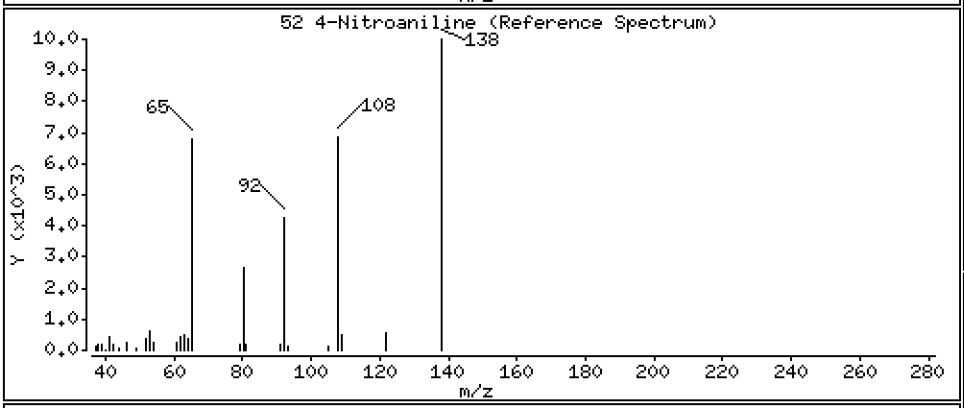
Column diameter: 0.25

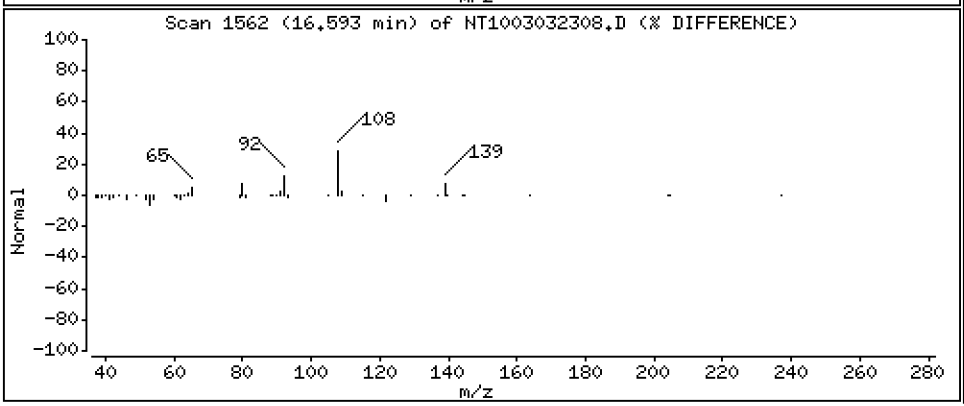
52 4-Nitroaniline

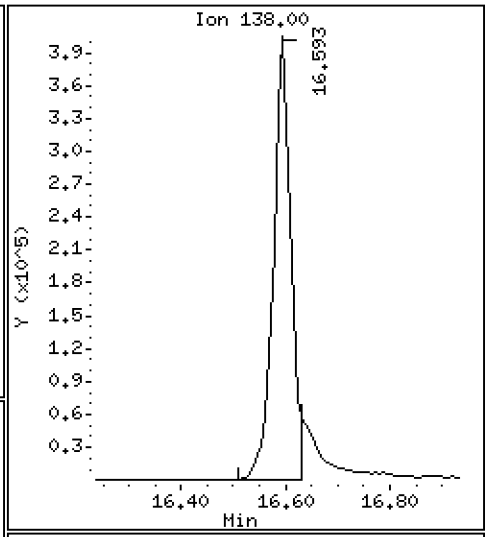
Concentration: 10.07 ug/ml

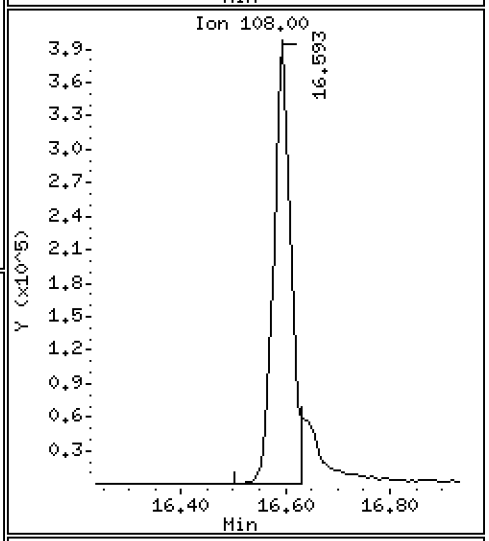


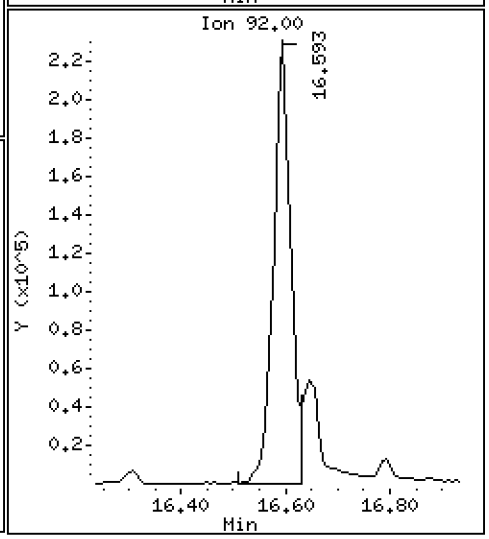












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

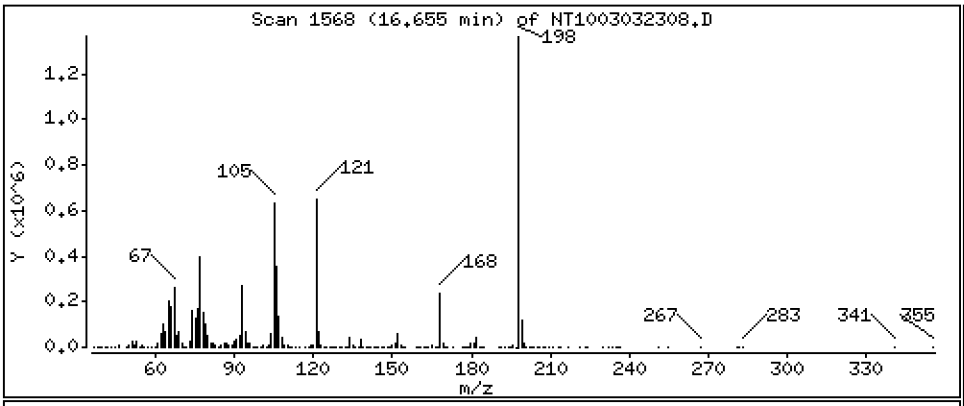
Operator: VTS

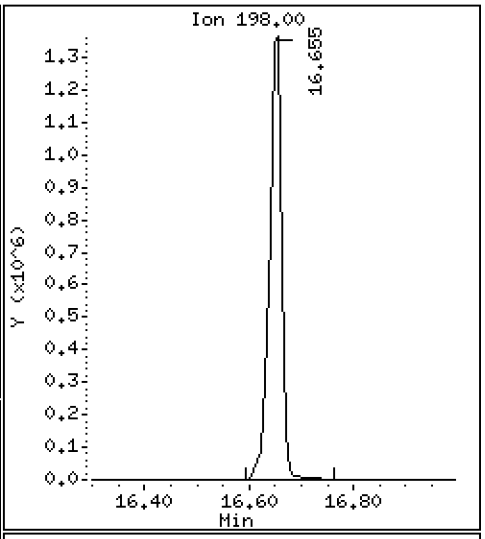
Column phase: ZB-5msi

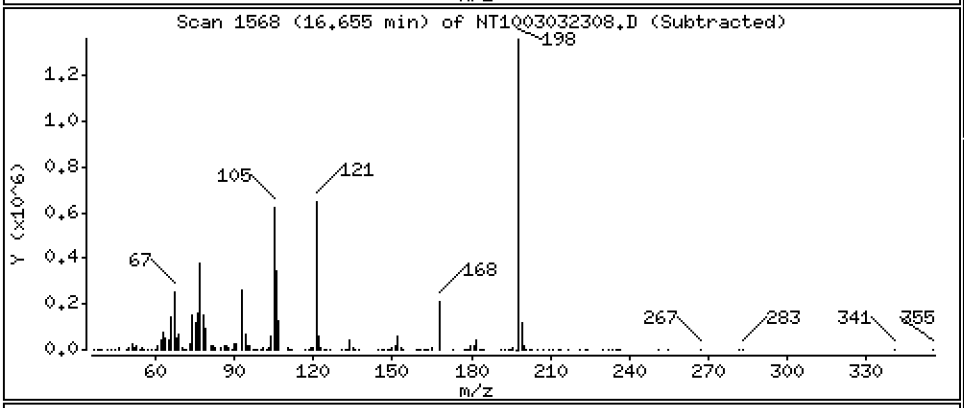
Column diameter: 0.25

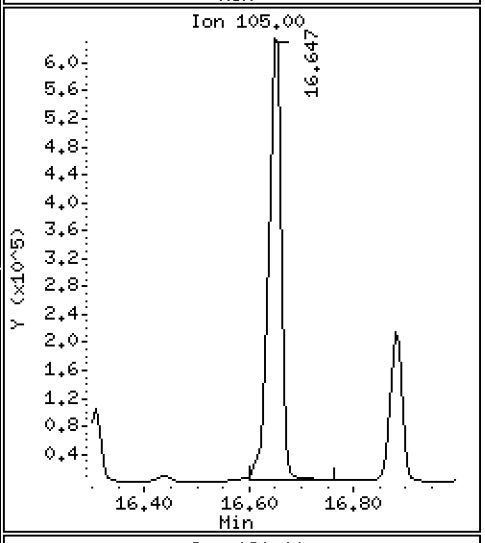
53 4,6-Dinitro-2-methylphenol

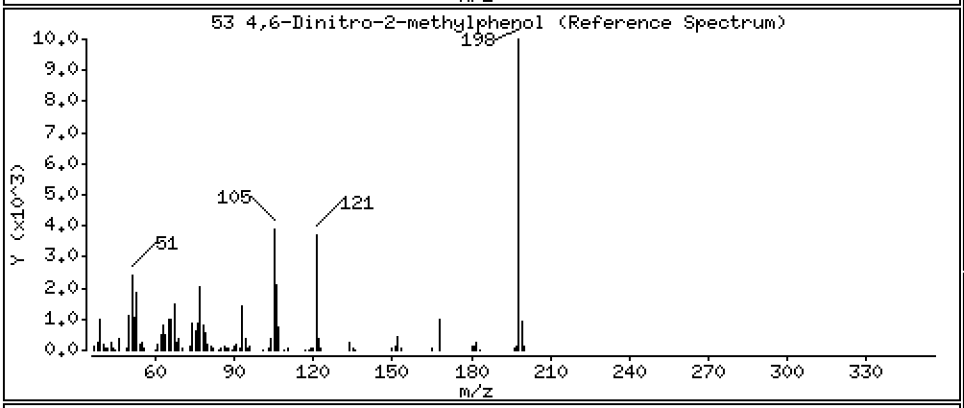
Concentration: 50.93 ug/ml

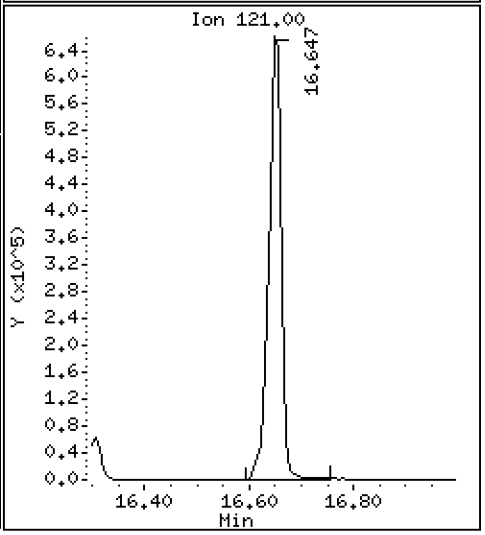


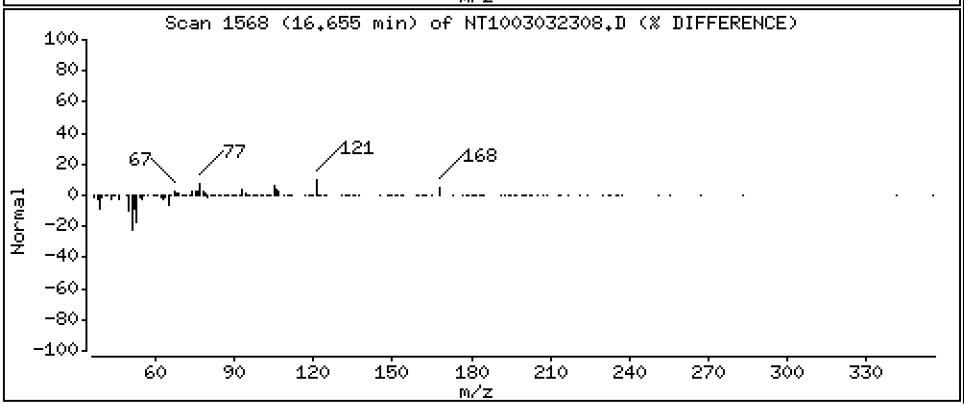












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

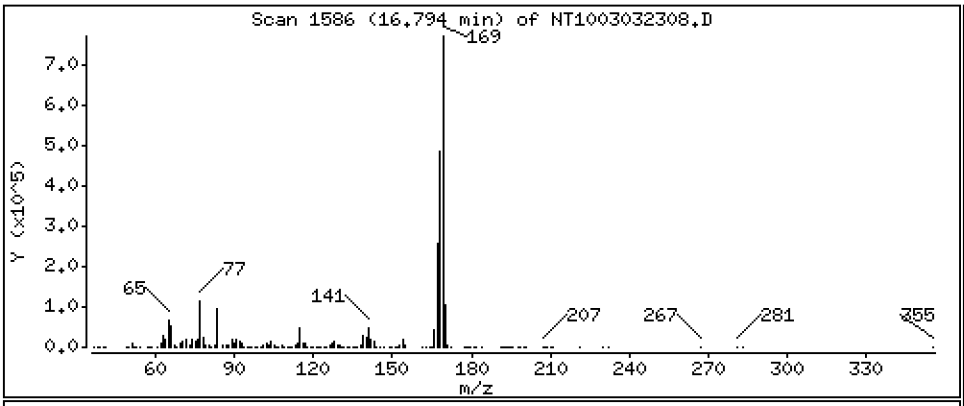
Operator: VTS

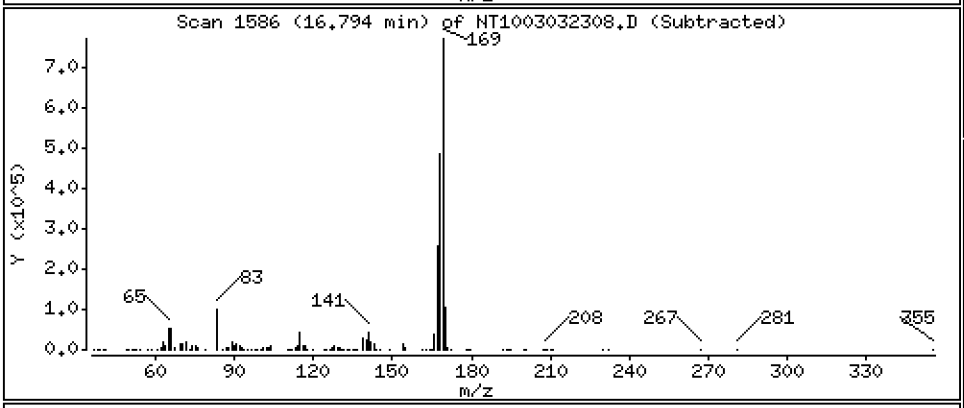
Column phase: ZB-5msi

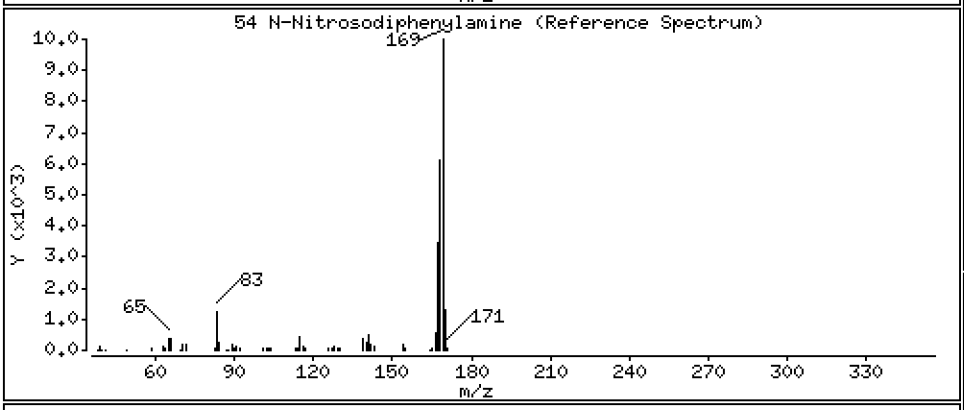
Column diameter: 0.25

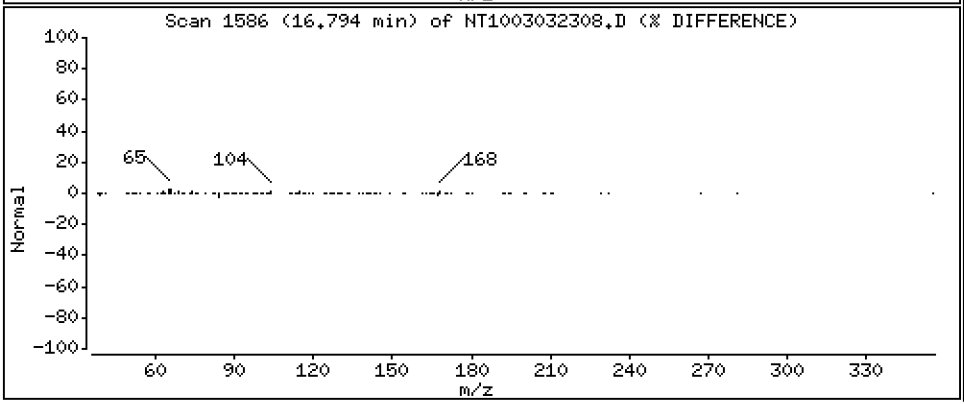
54 N-Nitrosodiphenylamine

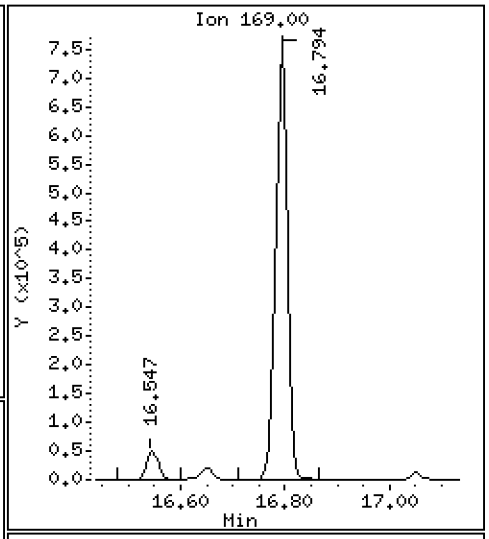
Concentration: 4.737 ug/ml

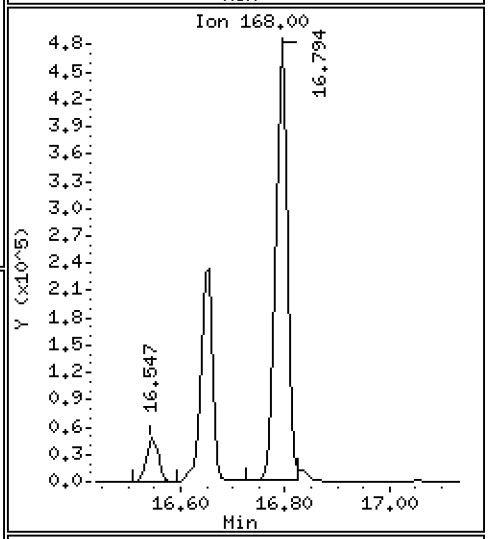


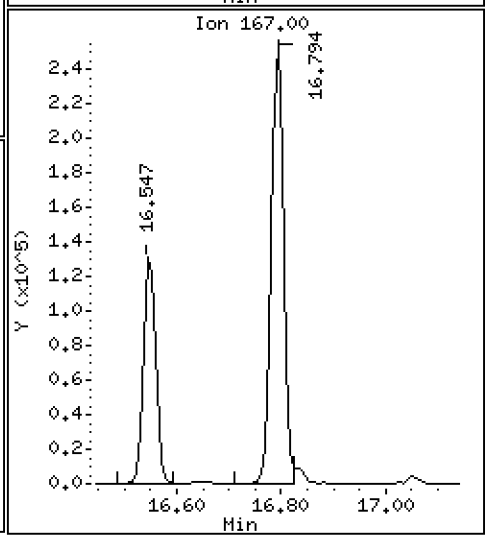












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

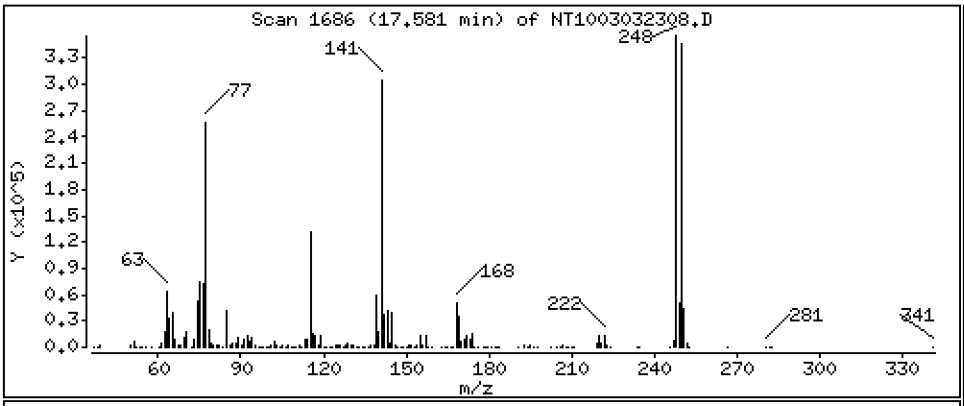
Operator: VTS

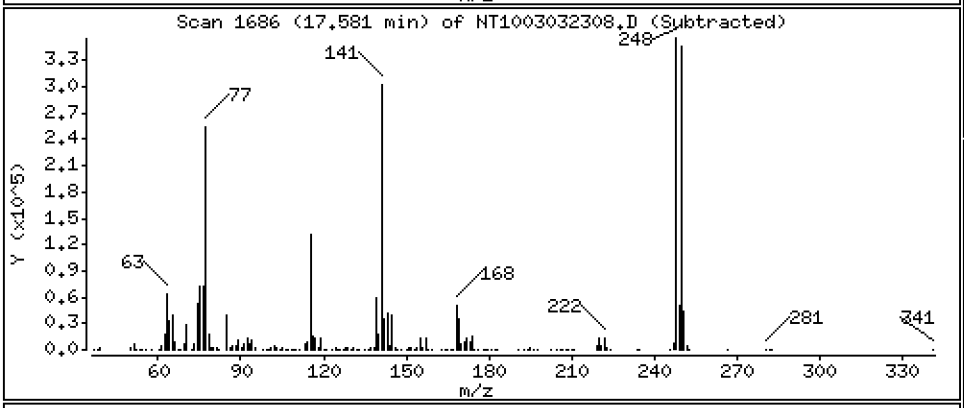
Column phase: ZB-5msi

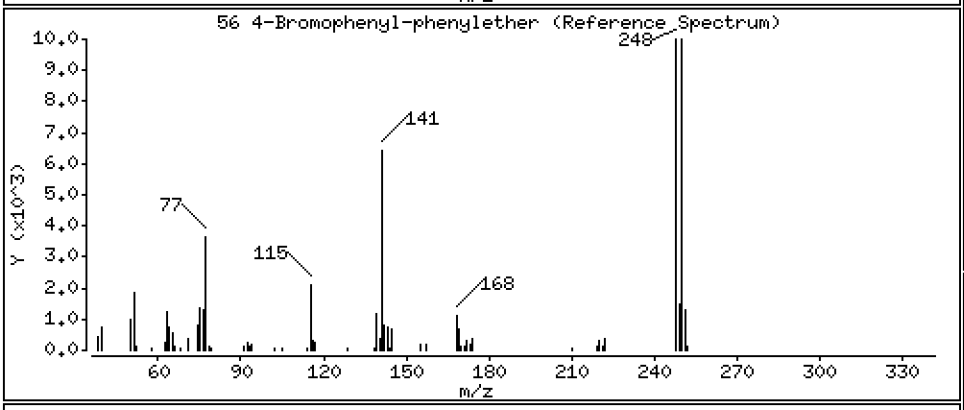
Column diameter: 0.25

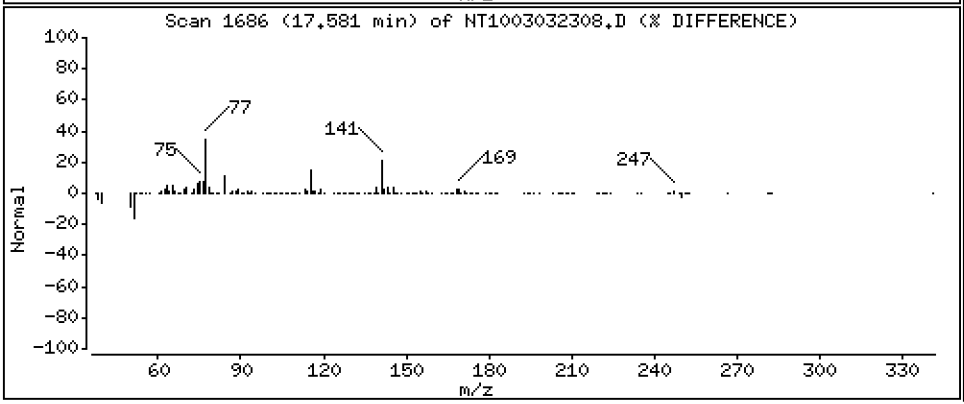
56 4-Bromophenyl-phenylether

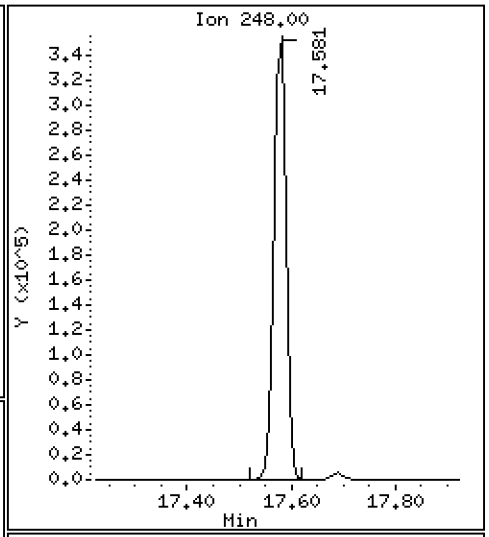
Concentration: 5.519 ug/ml

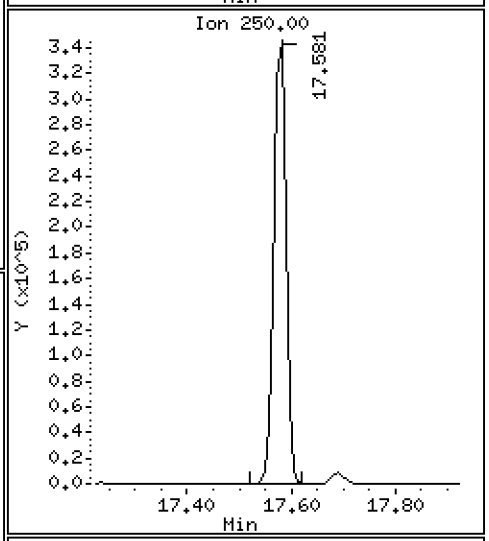


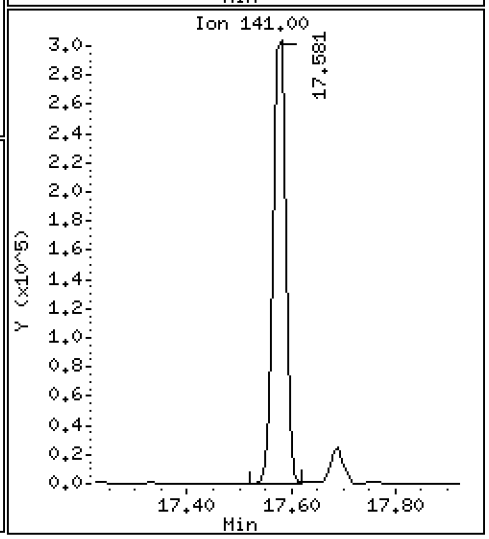












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

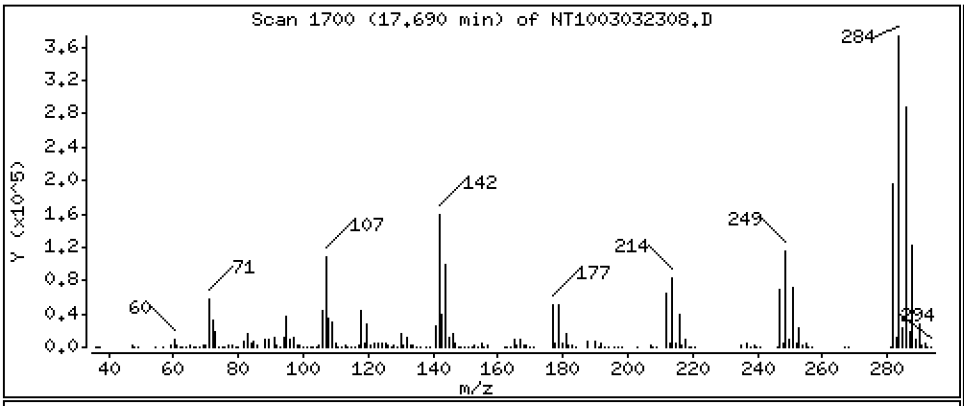
Operator: VTS

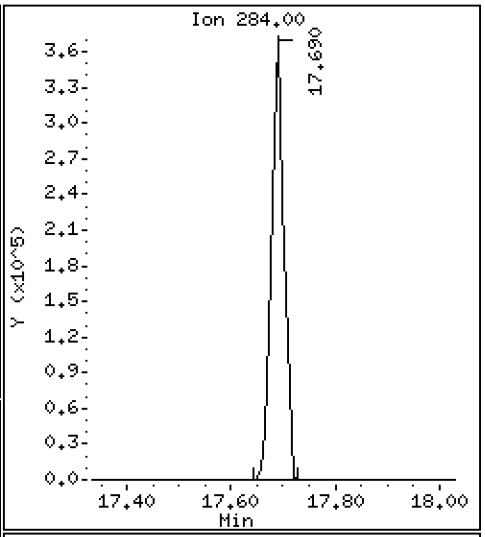
Column phase: ZB-5msi

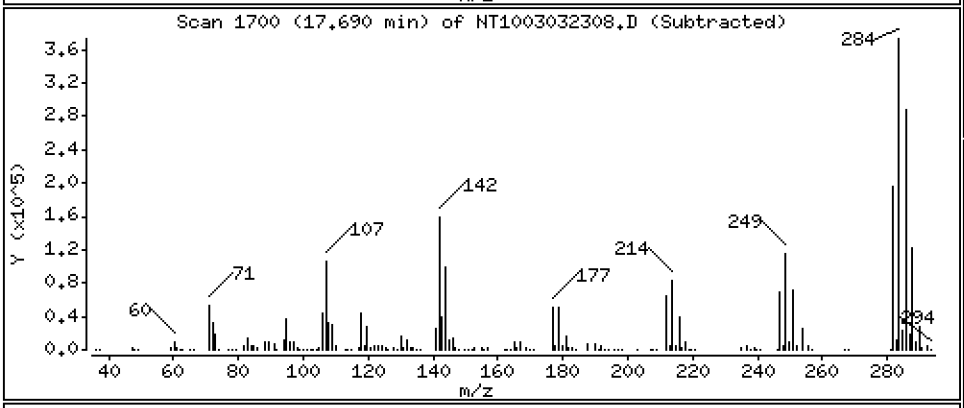
Column diameter: 0.25

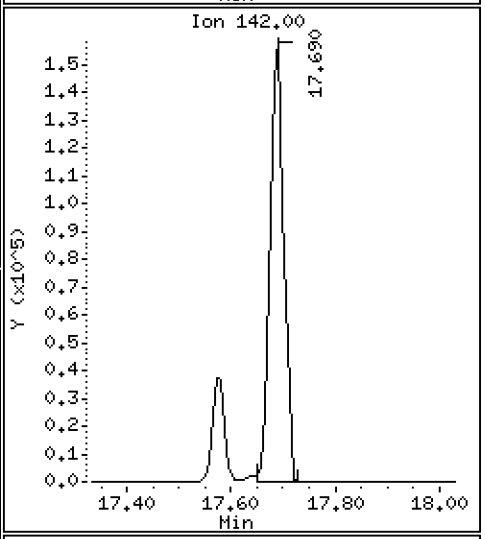
57 Hexachlorobenzene

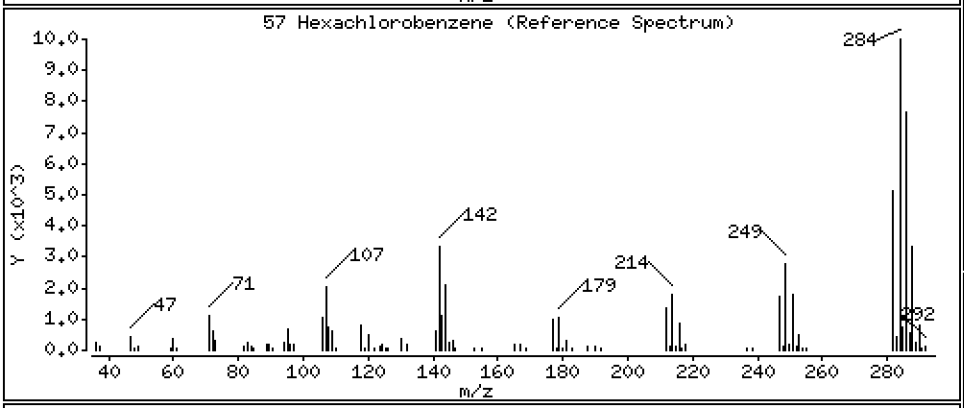
Concentration: 5.500 ug/ml

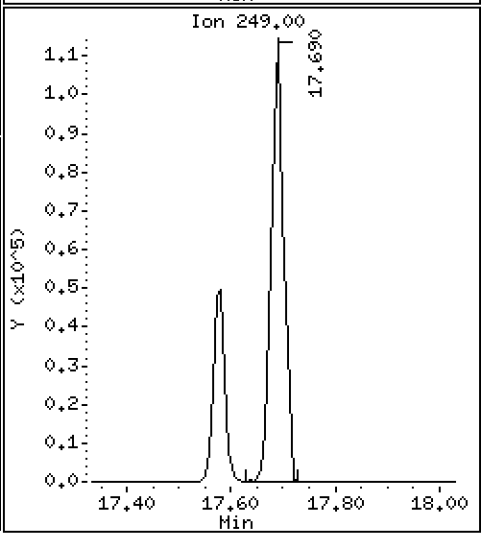


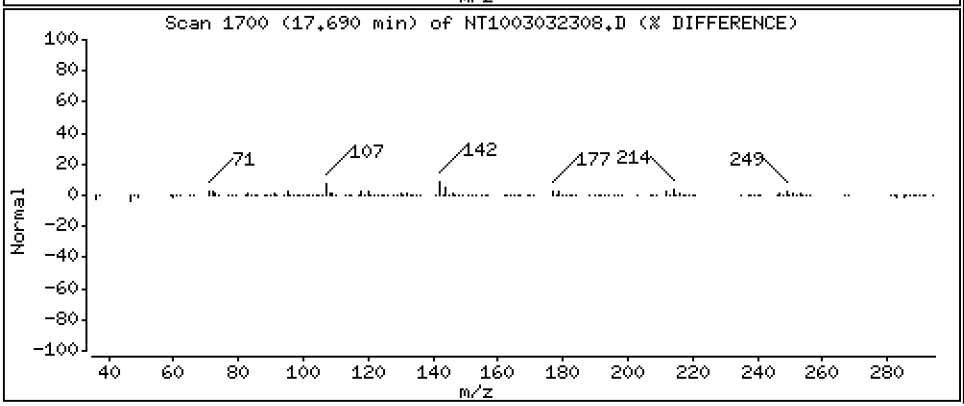












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

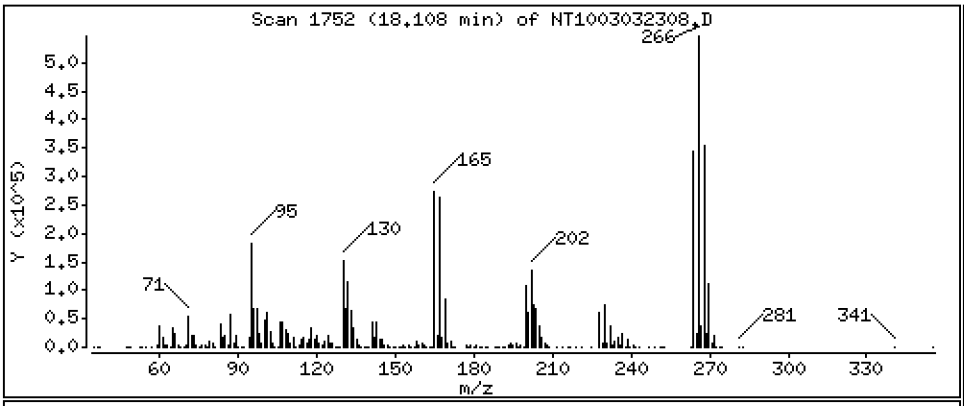
Operator: VTS

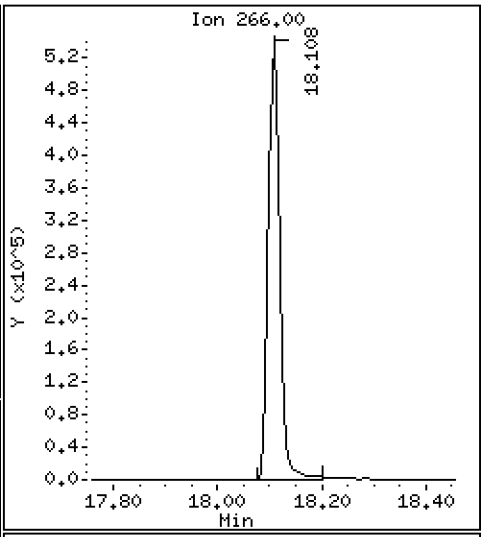
Column phase: ZB-5msi

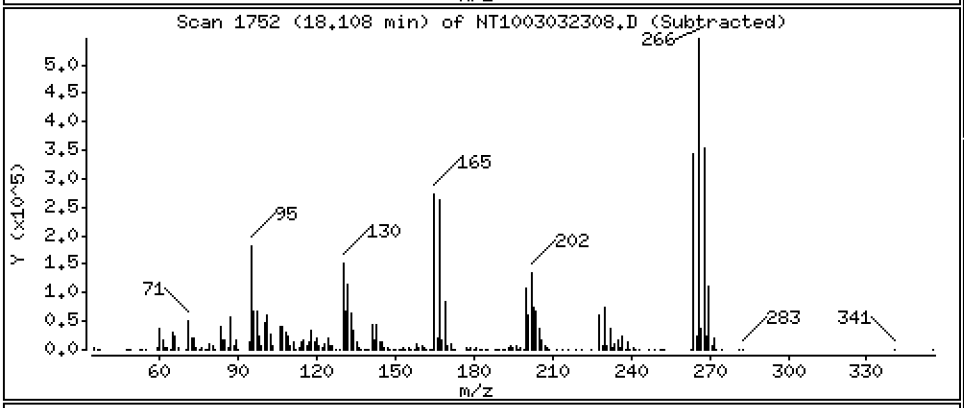
Column diameter: 0.25

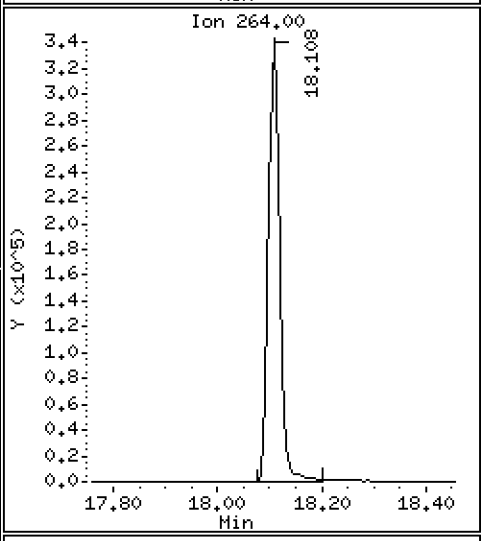
58 Pentachlorophenol

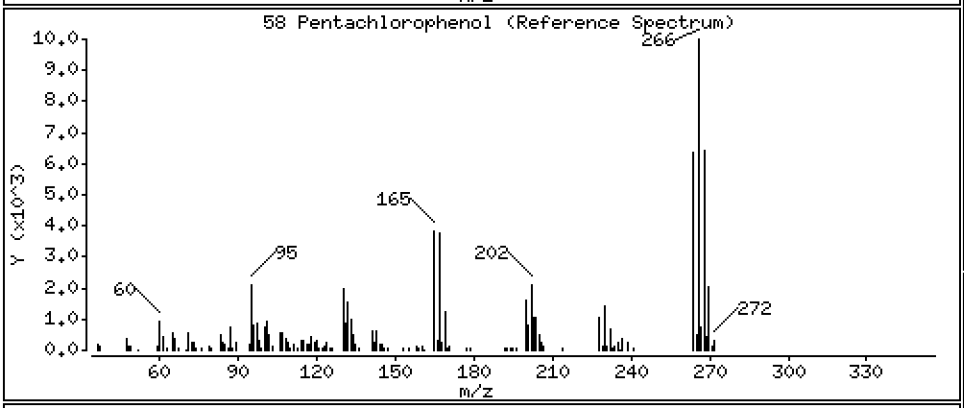
Concentration: 13.85 ug/ml

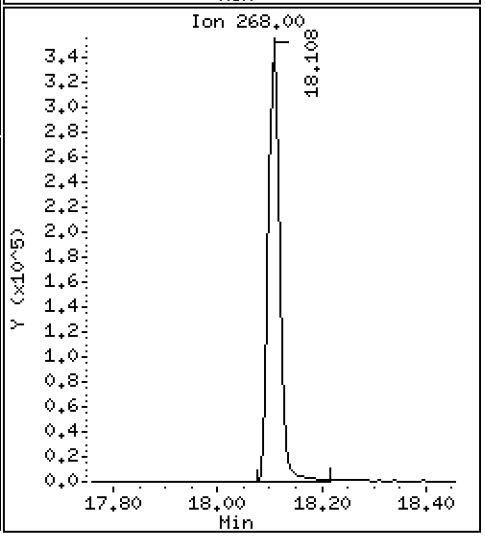


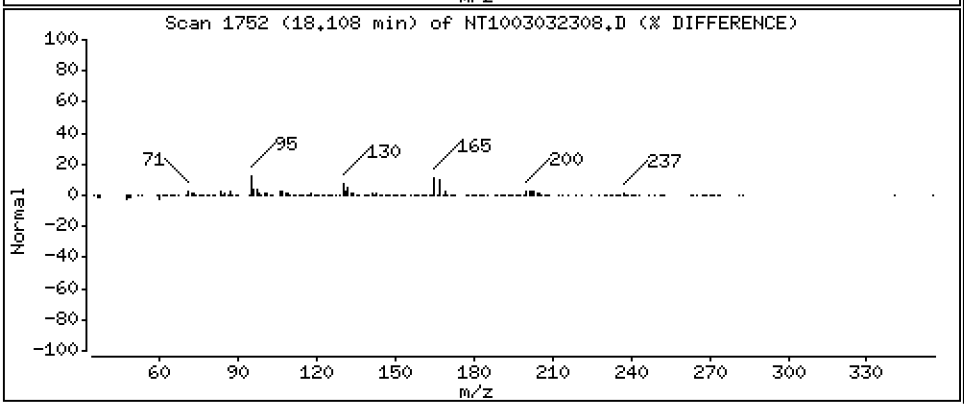












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

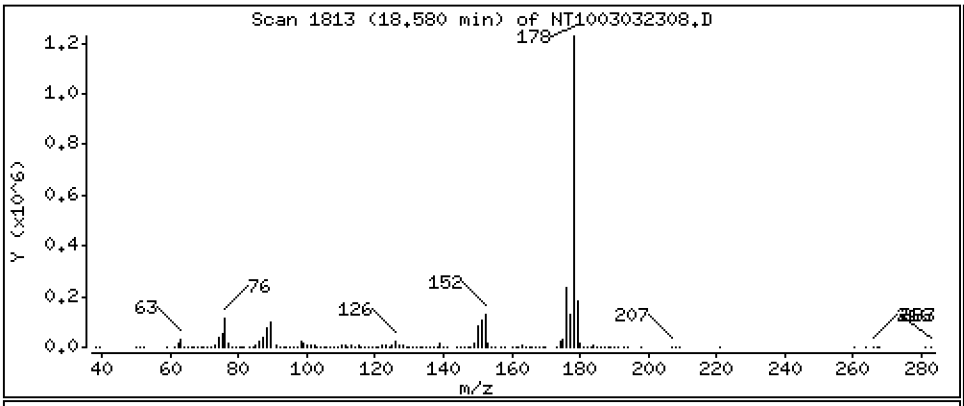
Operator: VTS

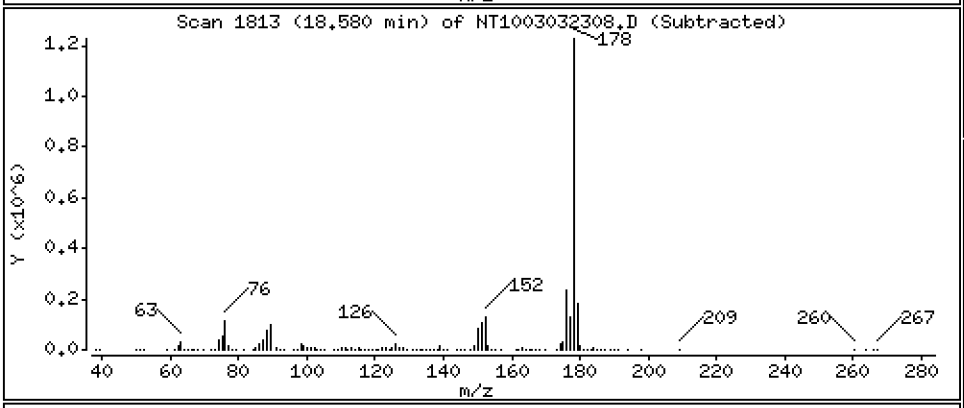
Column phase: ZB-5msi

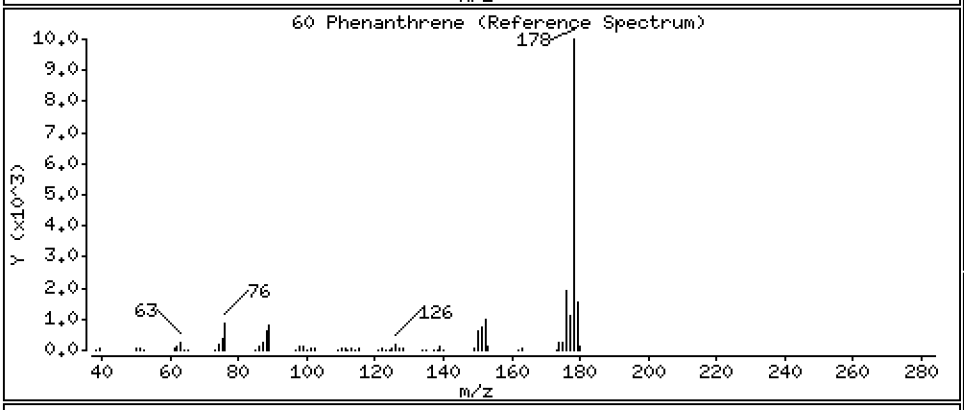
Column diameter: 0.25

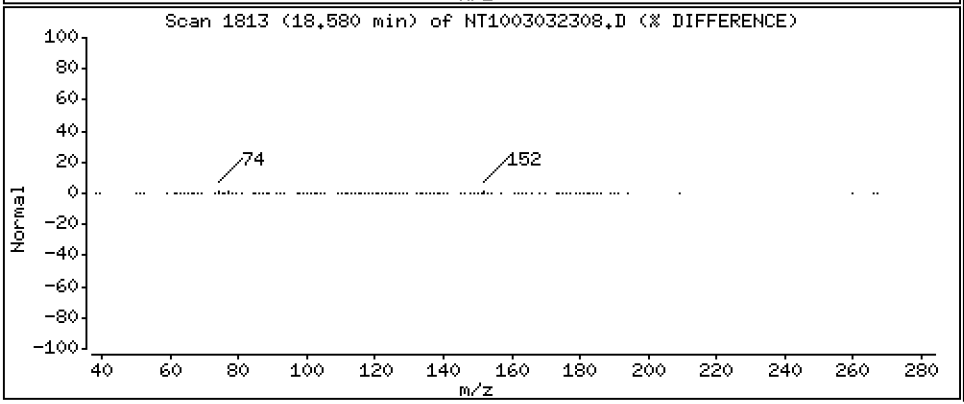
60 Phenanthrene

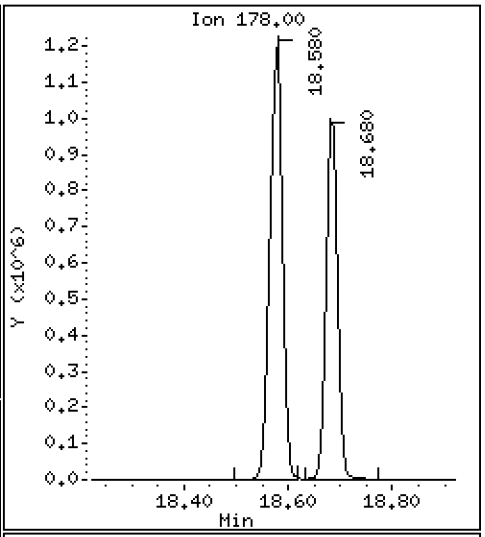
Concentration: 4.630 ug/ml

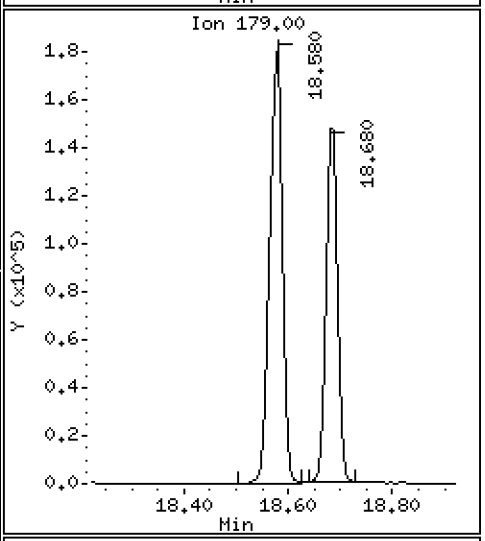


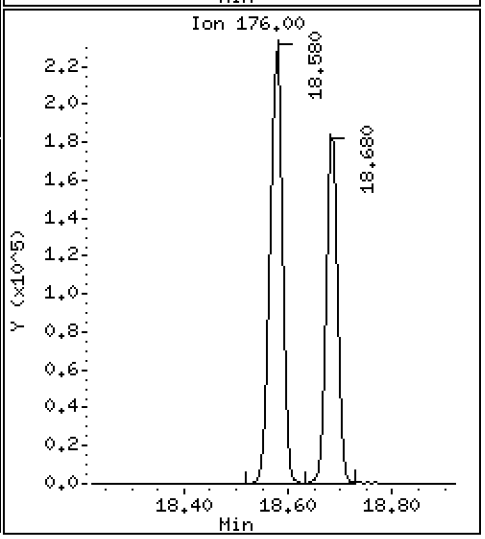












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

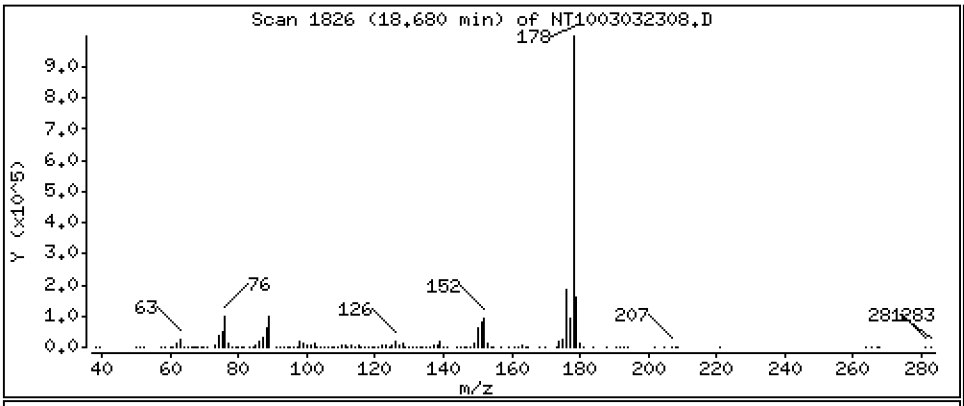
Operator: VTS

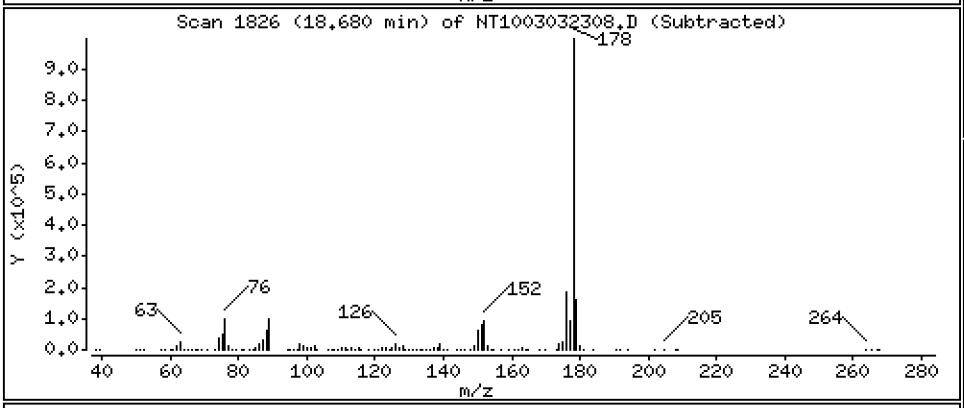
Column phase: ZB-5msi

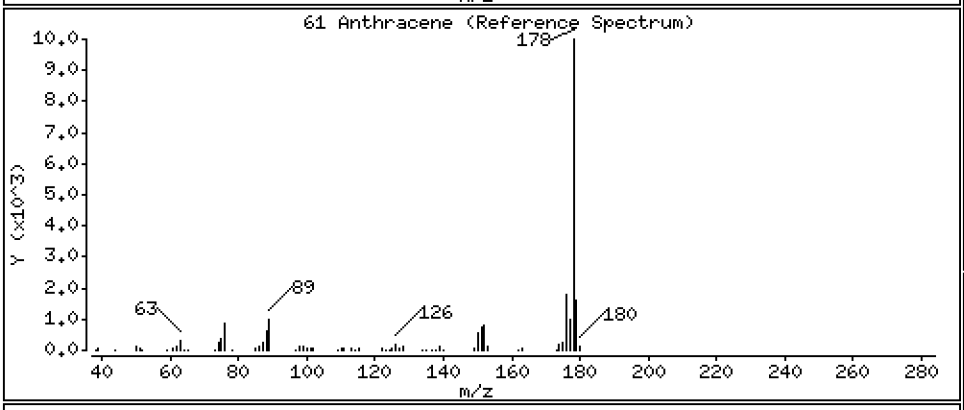
Column diameter: 0.25

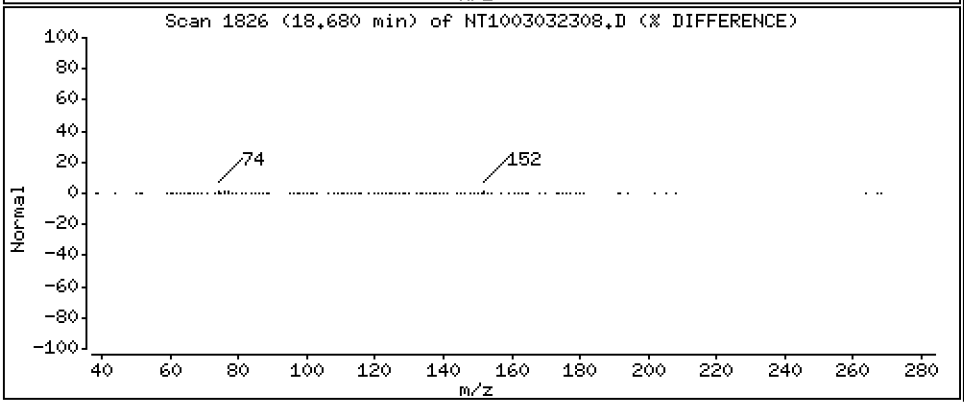
61 Anthracene

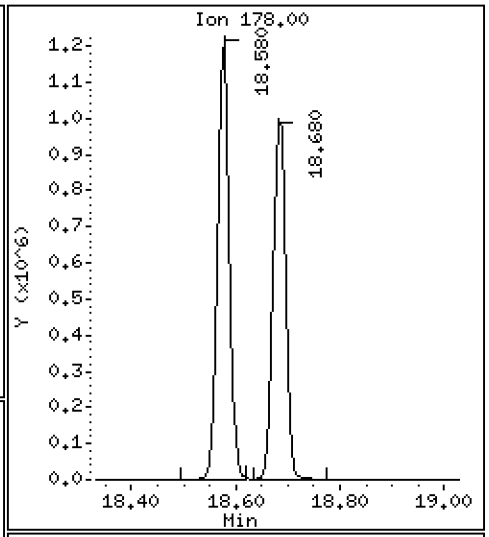
Concentration: 3.956 ug/ml

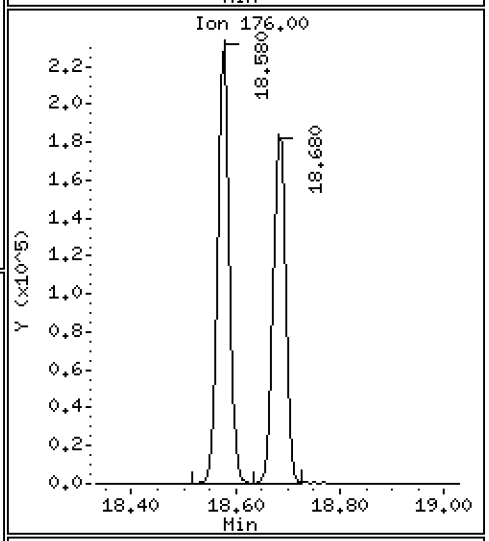


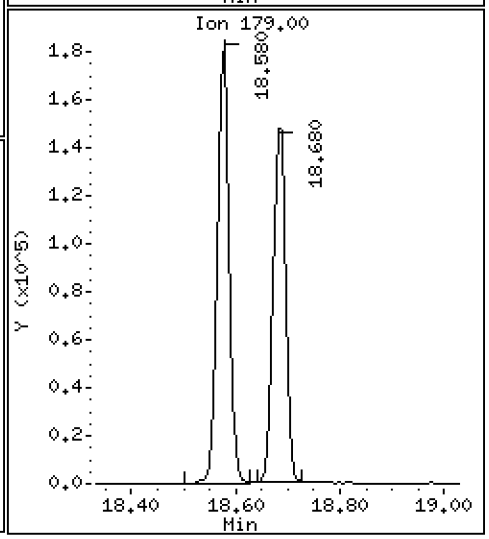












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

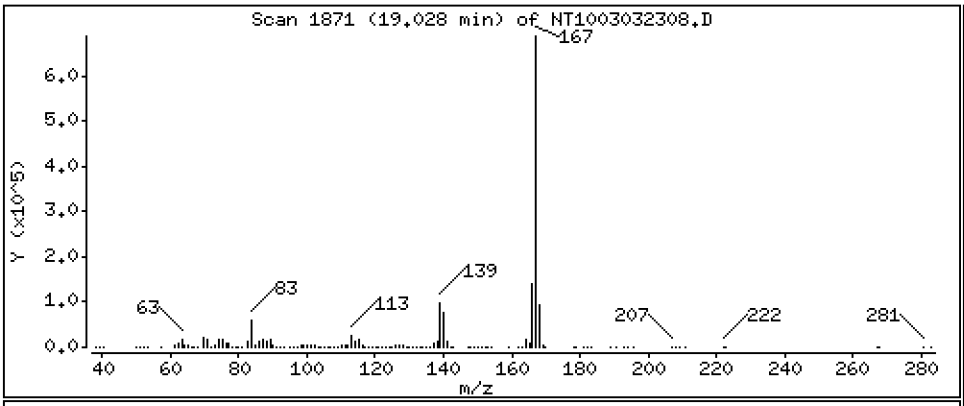
Operator: VTS

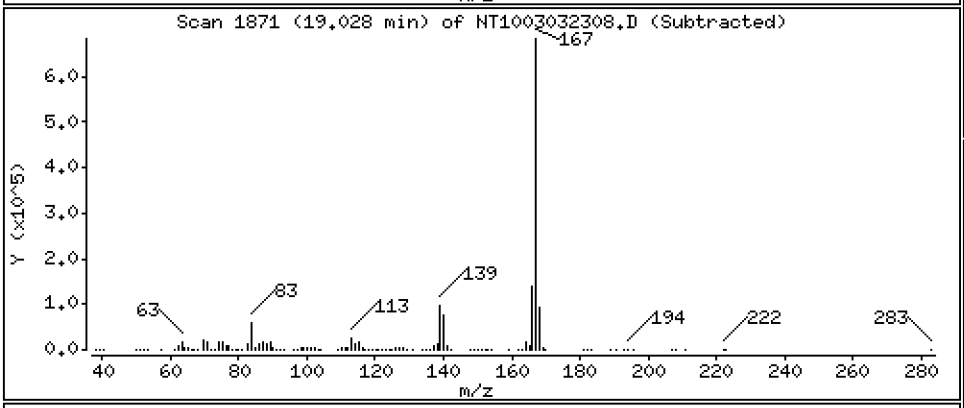
Column phase: ZB-5msi

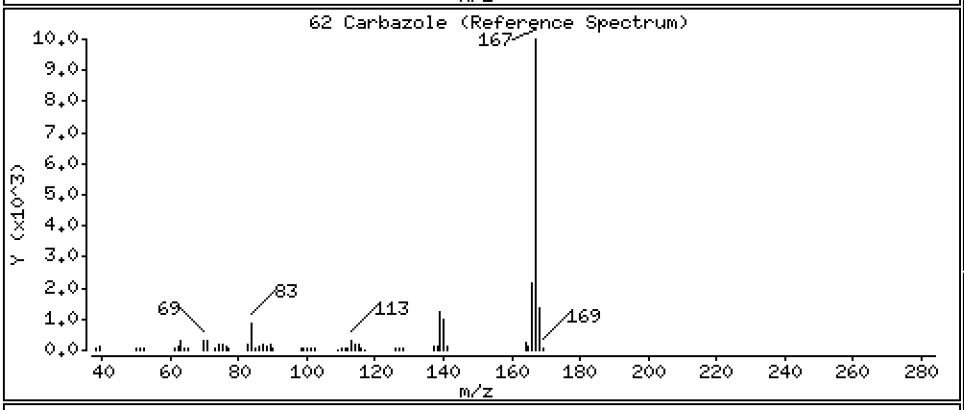
Column diameter: 0.25

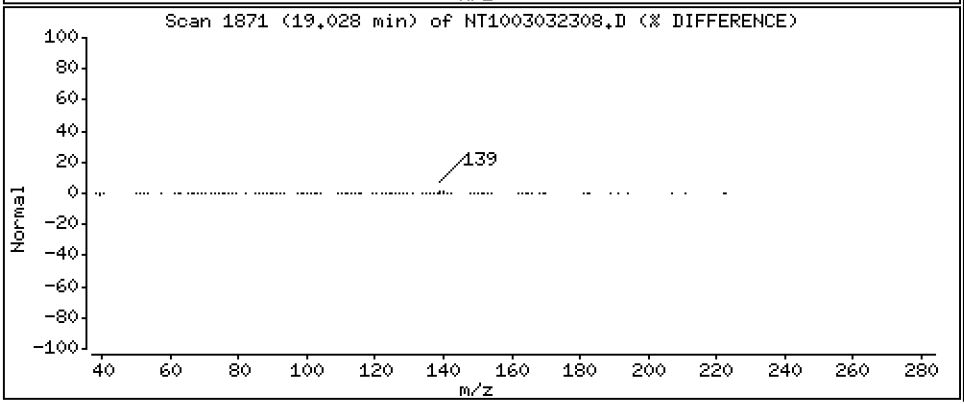
62 Carbazole

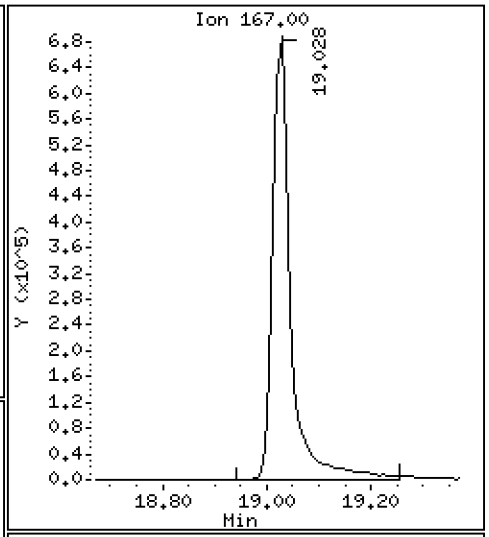
Concentration: 4.291 ug/ml

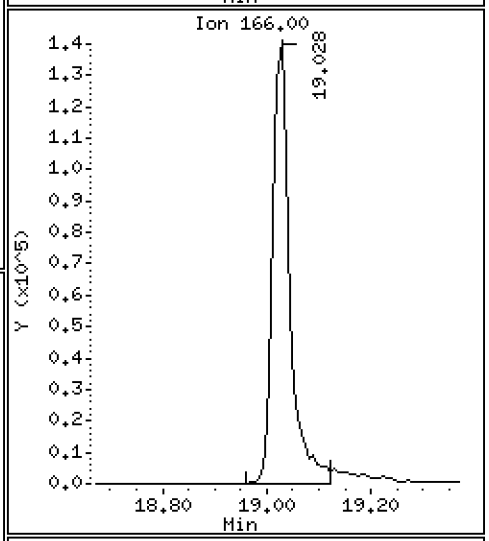


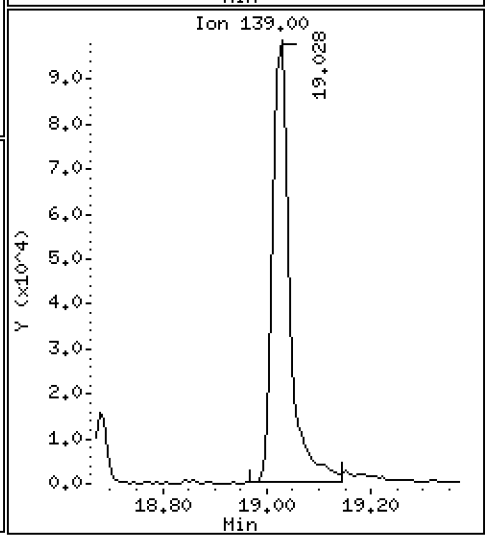












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

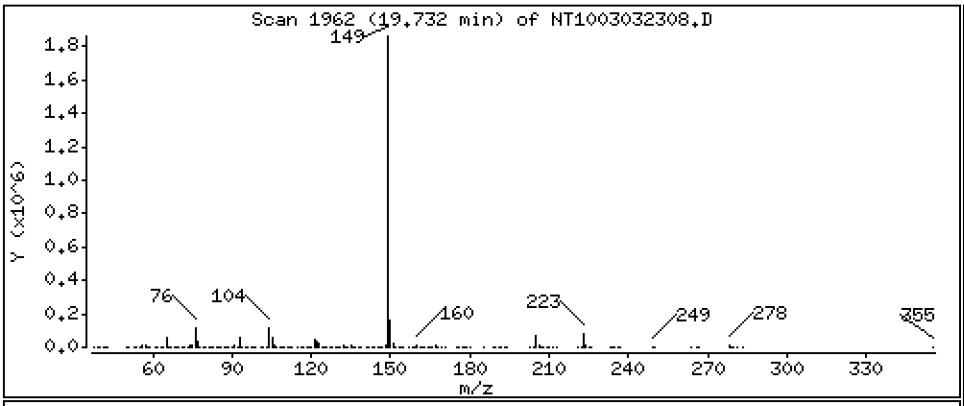
Operator: VTS

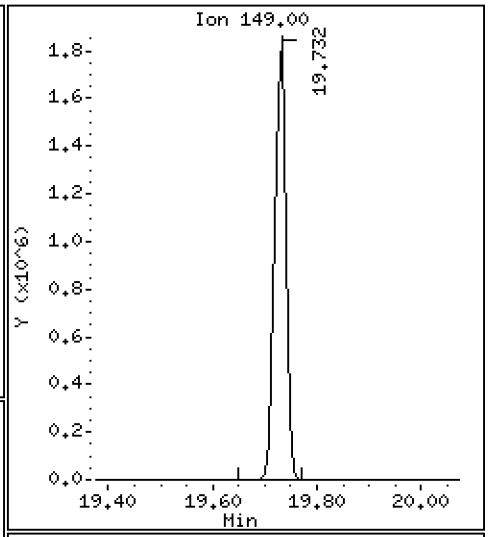
Column phase: ZB-5msi

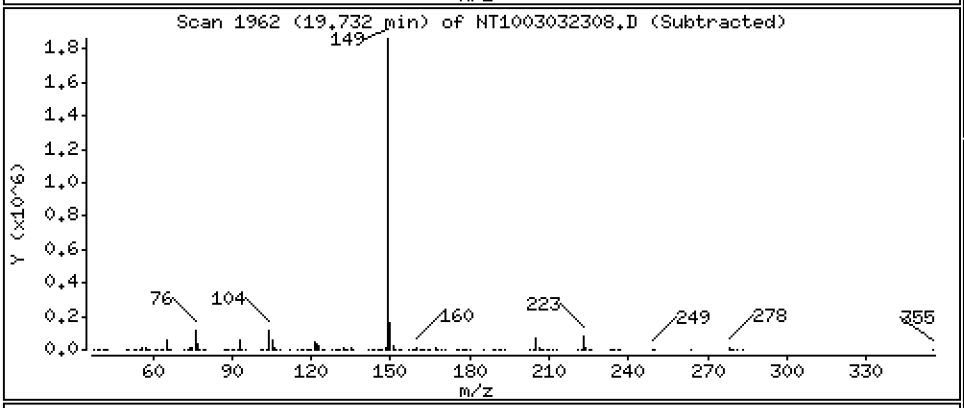
Column diameter: 0.25

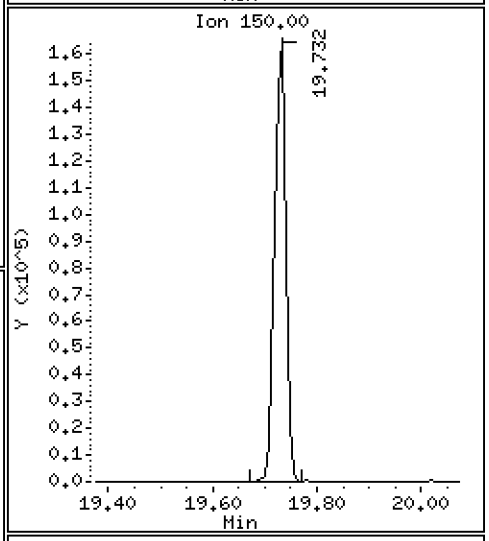
63 Di-n-butylphthalate

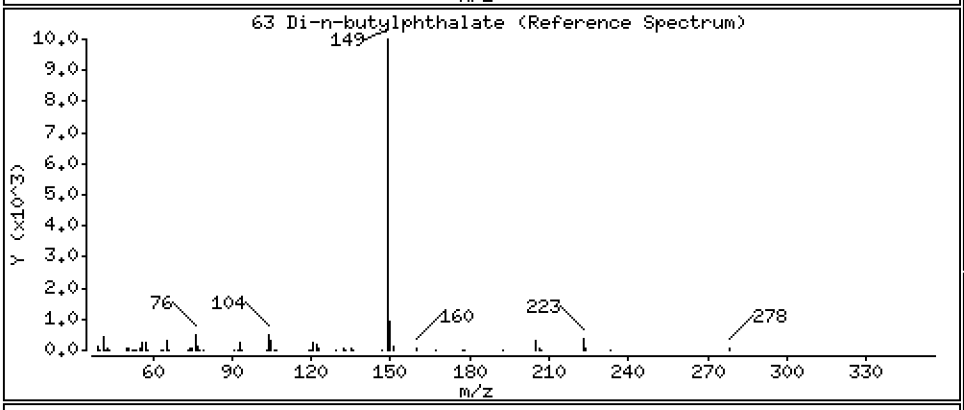
Concentration: 5.049 ug/ml

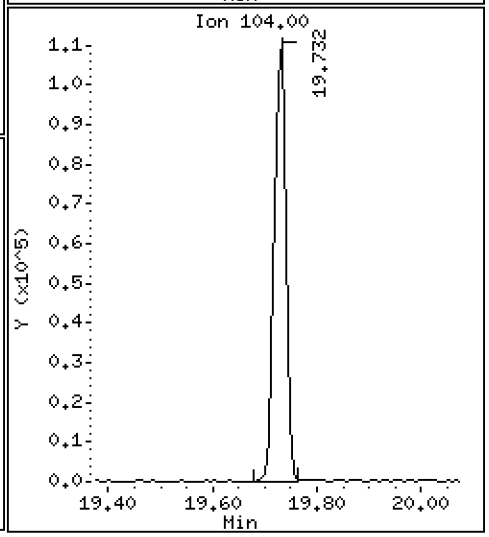


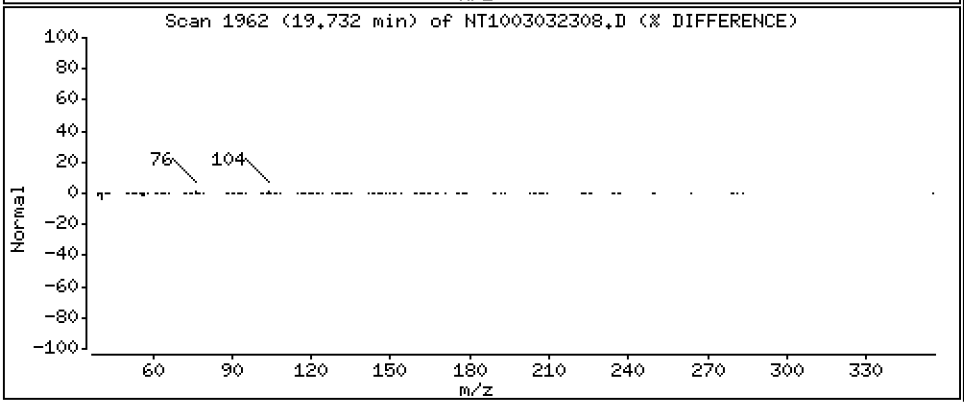












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

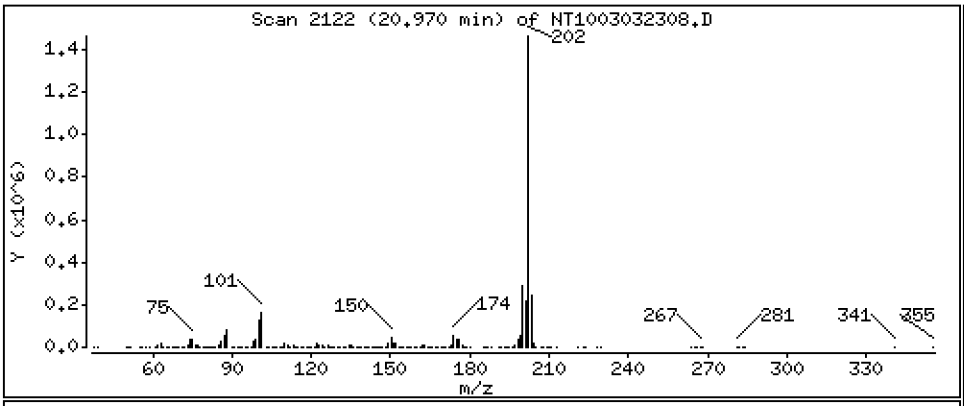
Operator: VTS

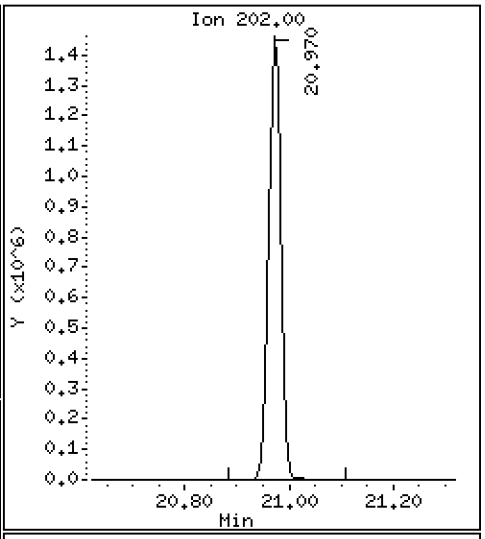
Column phase: ZB-5msi

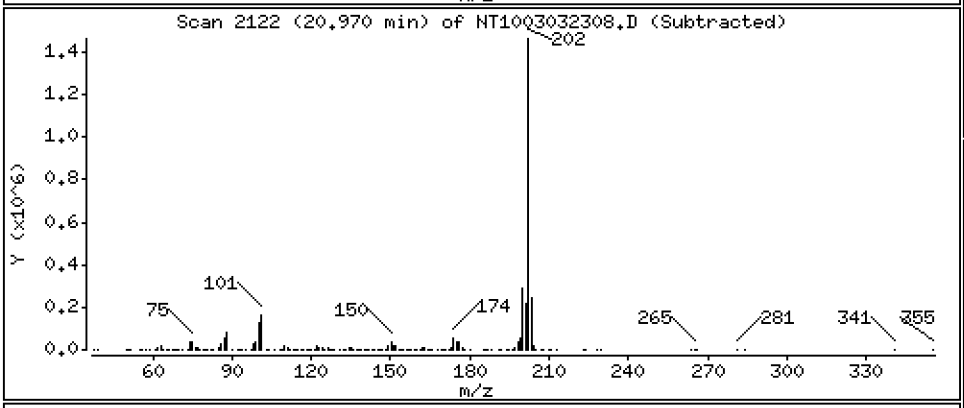
Column diameter: 0.25

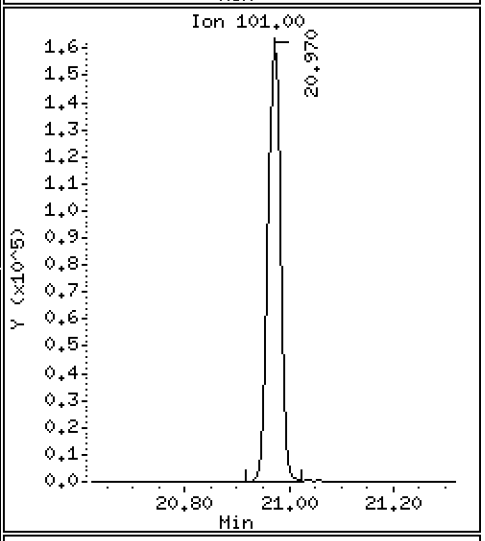
64 Fluoranthene

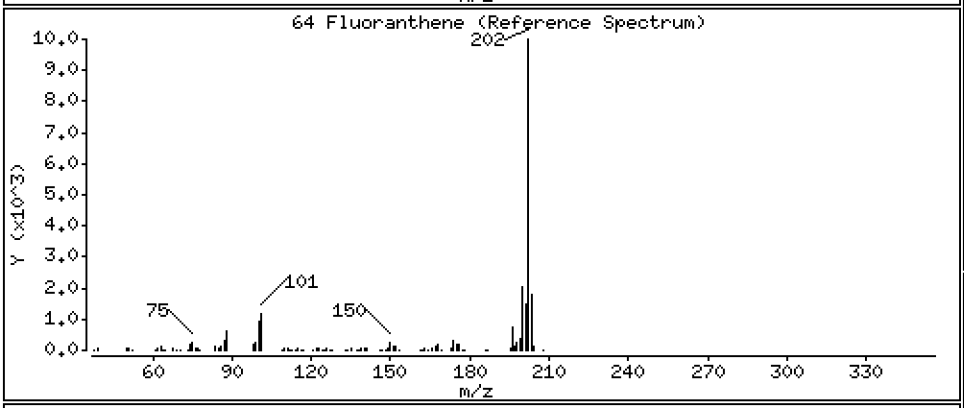
Concentration: 5.007 ug/ml

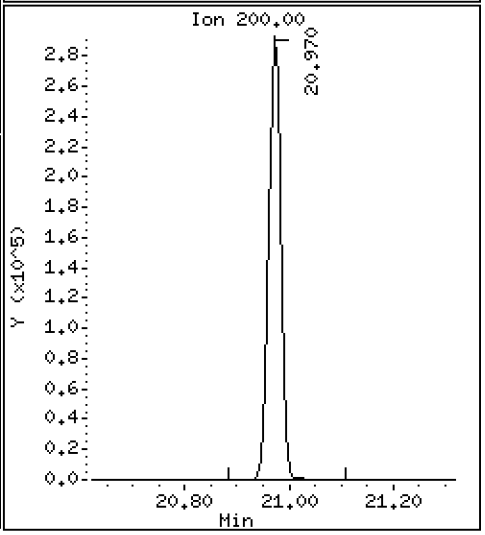


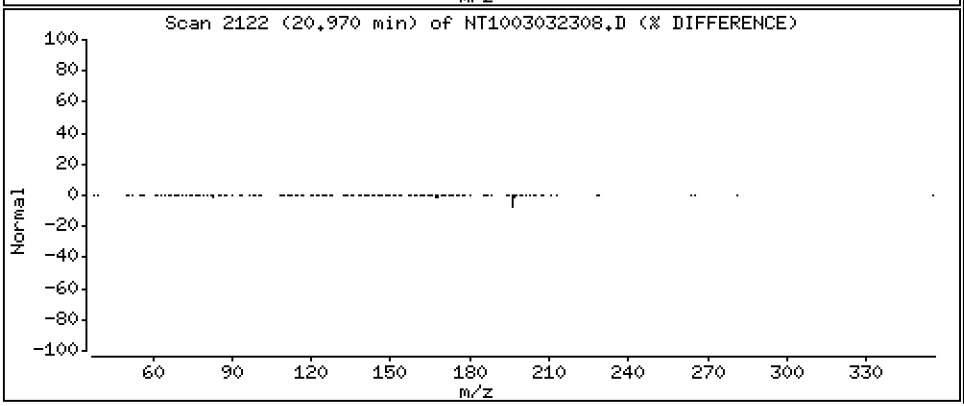












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

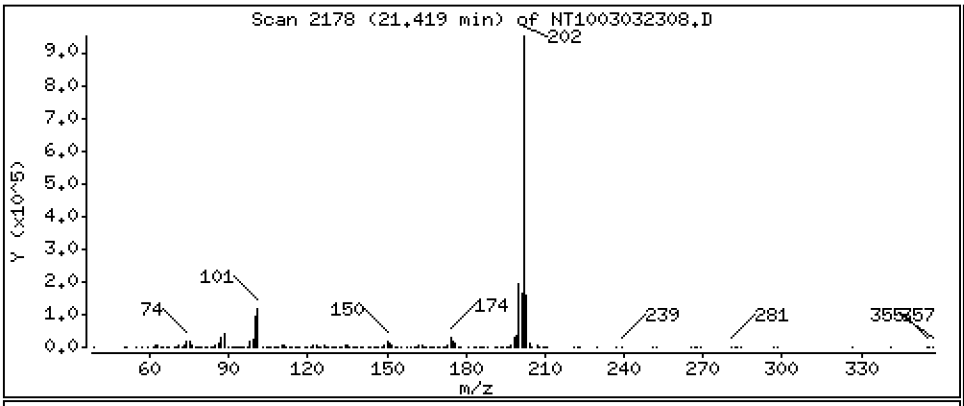
Operator: VTS

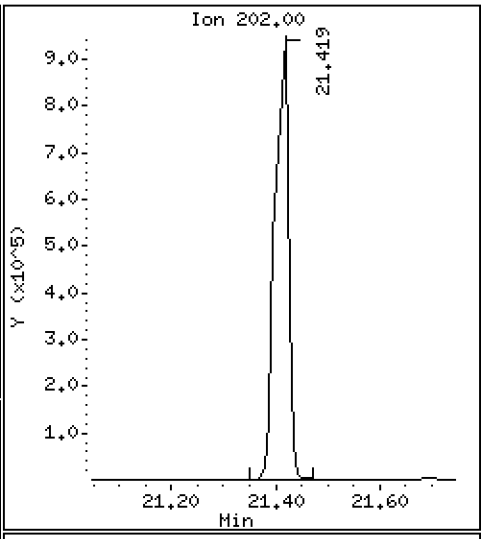
Column phase: ZB-5msi

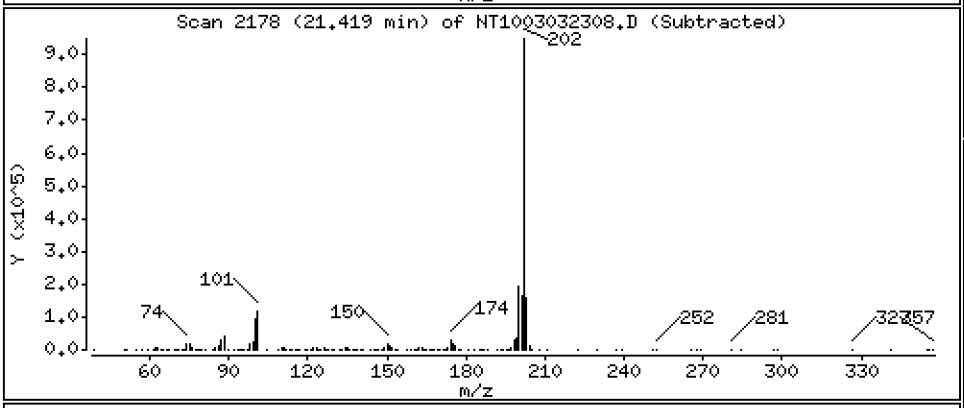
Column diameter: 0.25

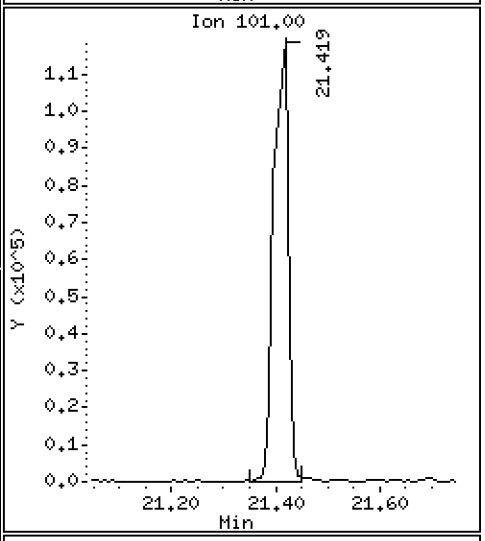
65 Pyrene

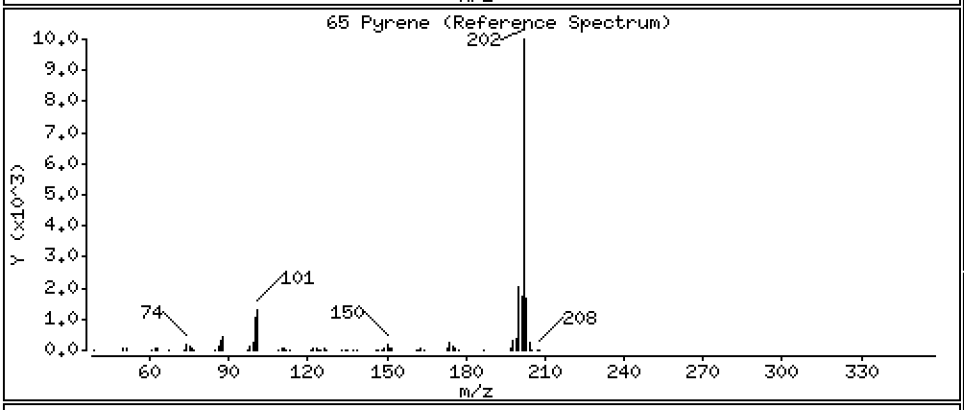
Concentration: 2.426 ug/ml

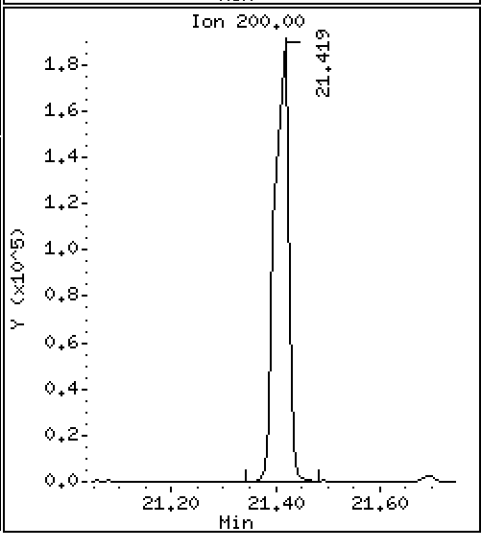


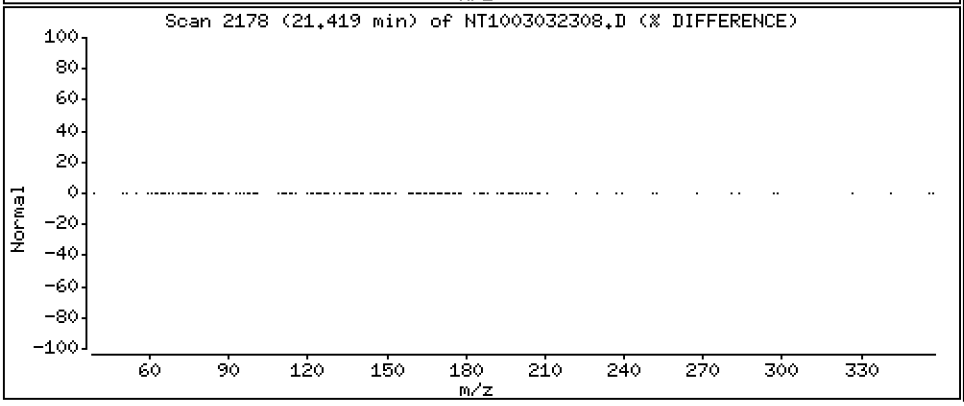












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

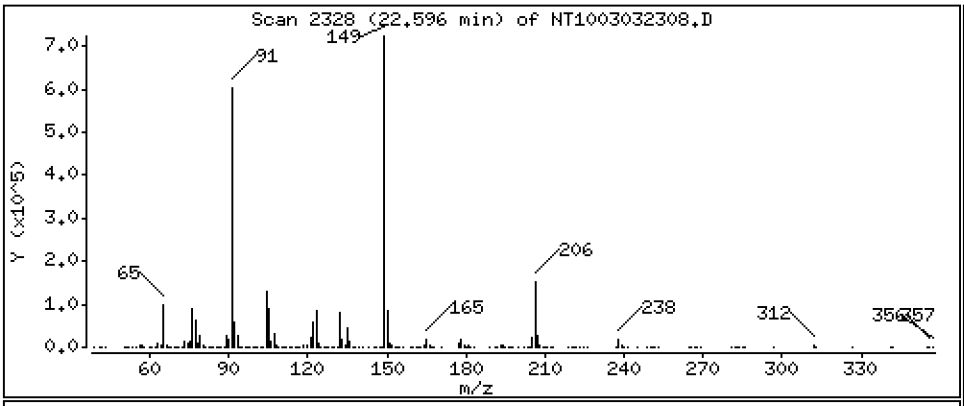
Operator: VTS

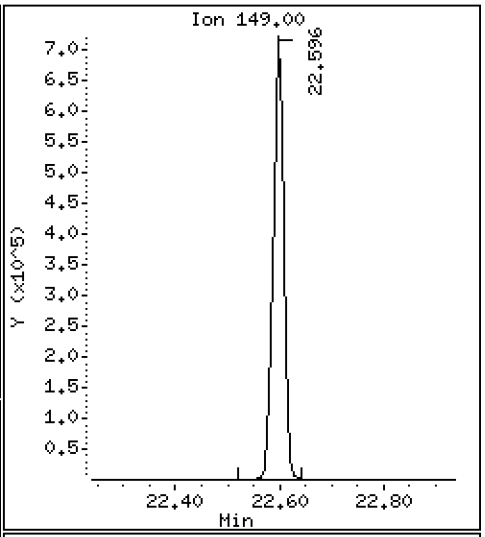
Column phase: ZB-5msi

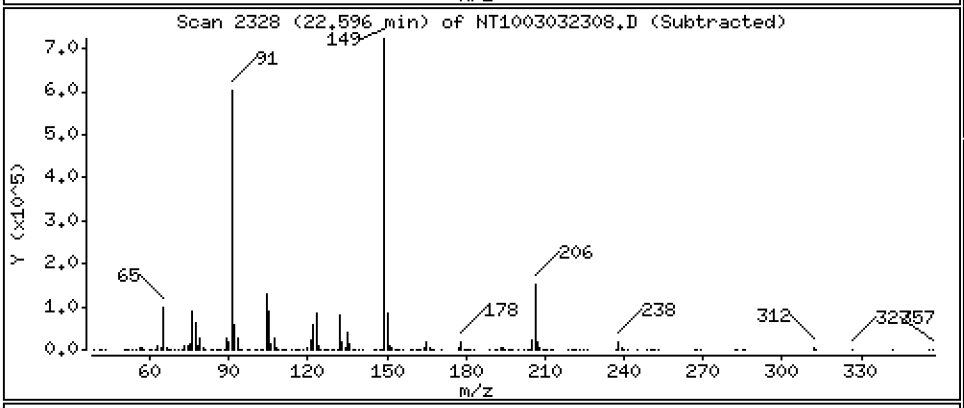
Column diameter: 0.25

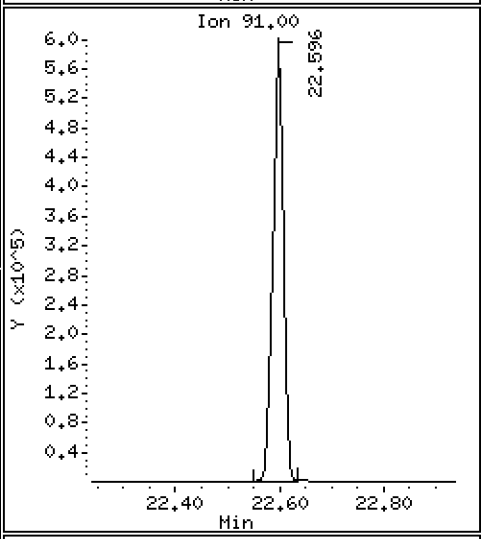
67 Butylbenzylphthalate

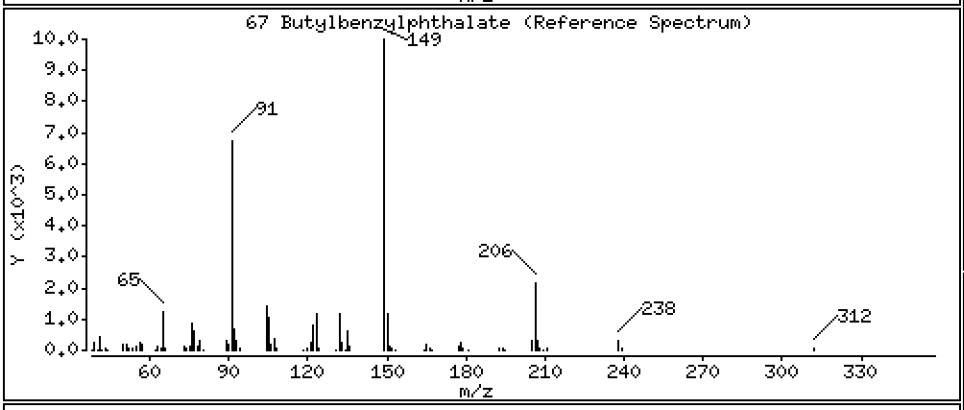
Concentration: 4.120 ug/ml

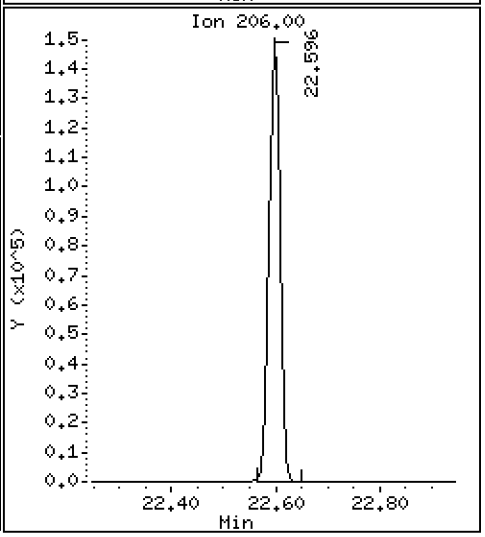


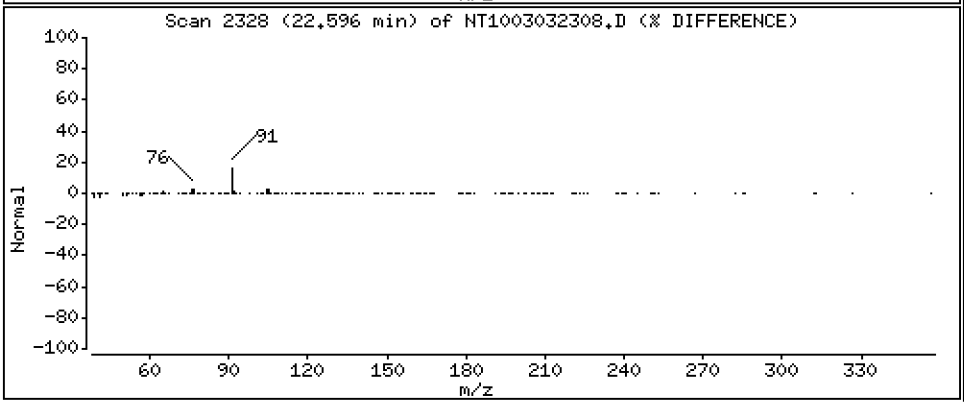












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

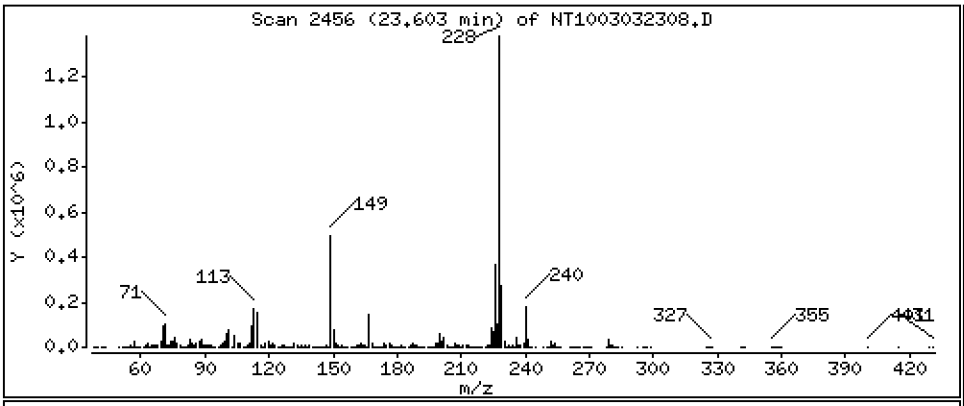
Operator: VTS

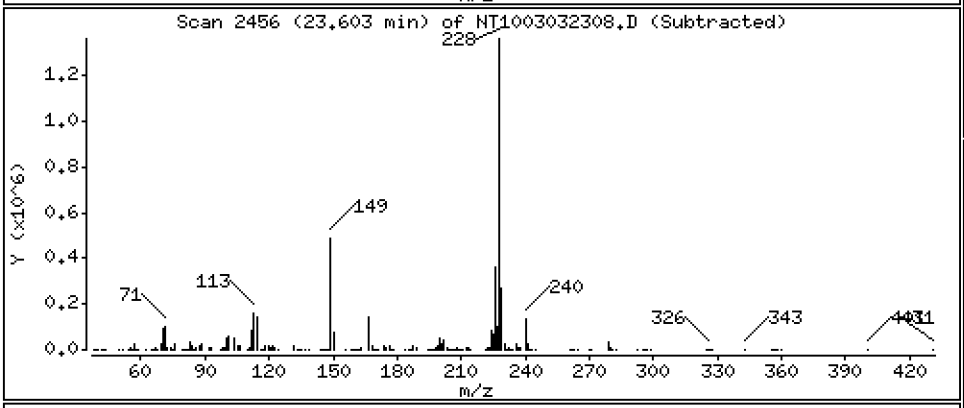
Column phase: ZB-5msi

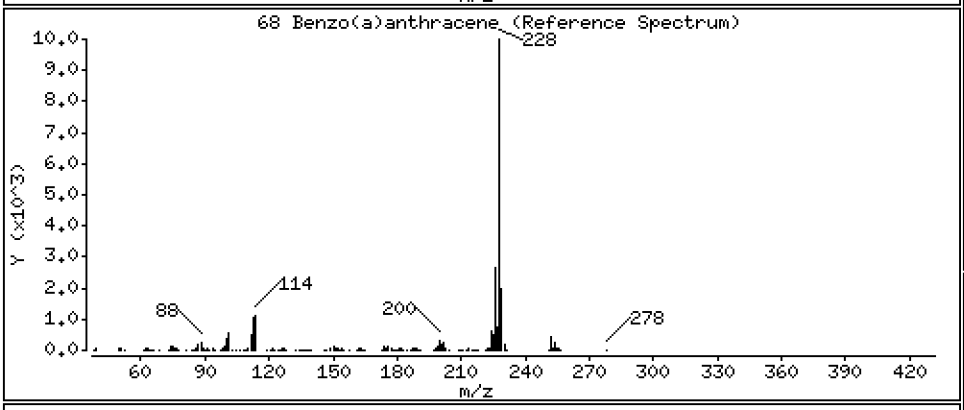
Column diameter: 0.25

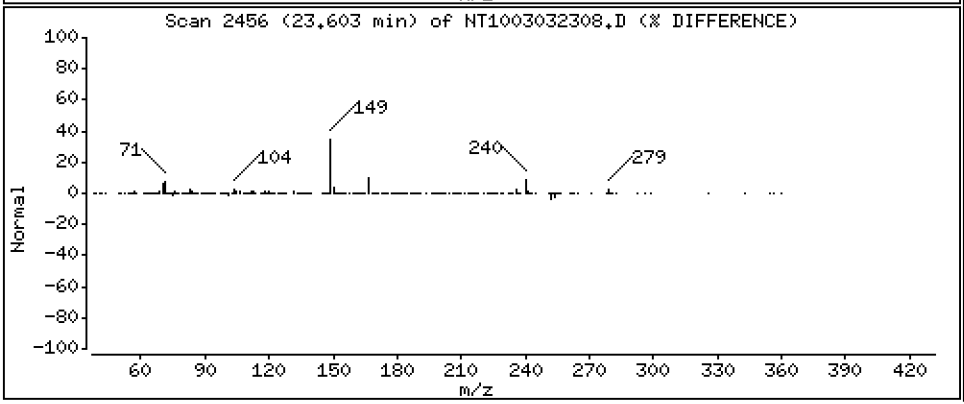
68 Benzo(a)anthracene

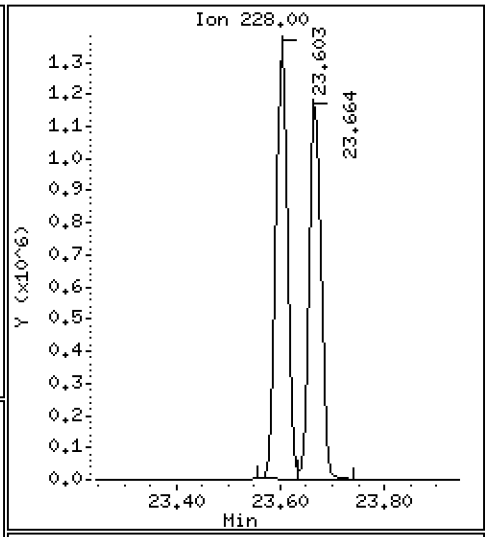
Concentration: 4.269 ug/ml

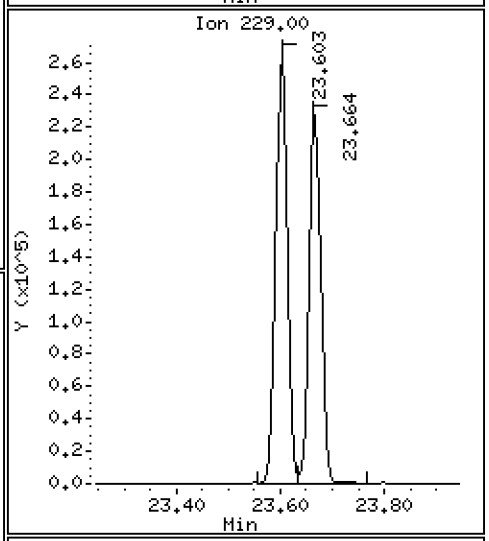


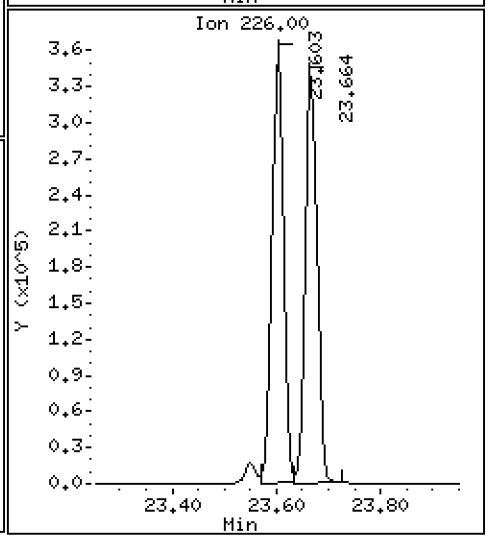












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

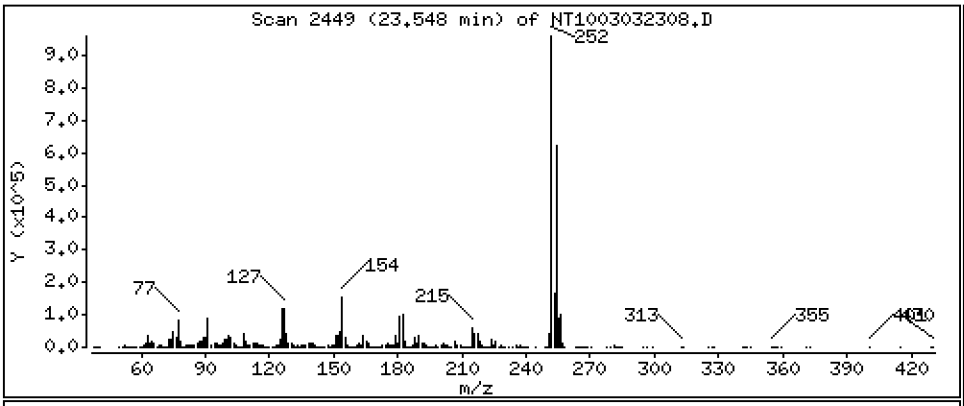
Operator: VTS

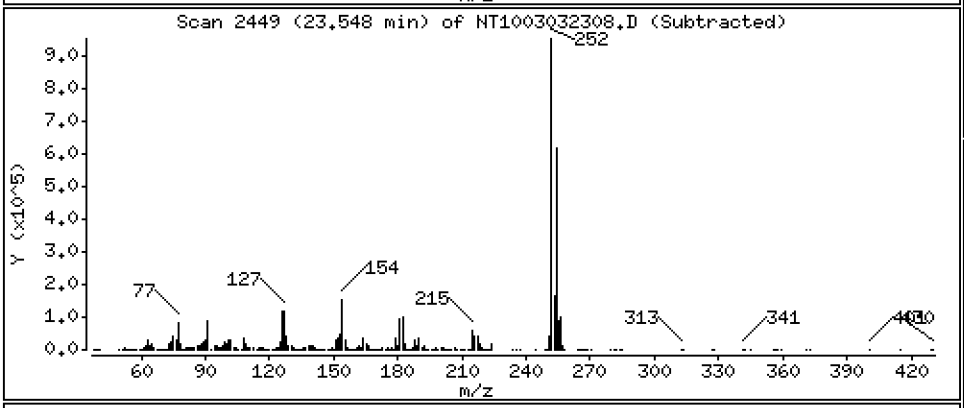
Column phase: ZB-5msi

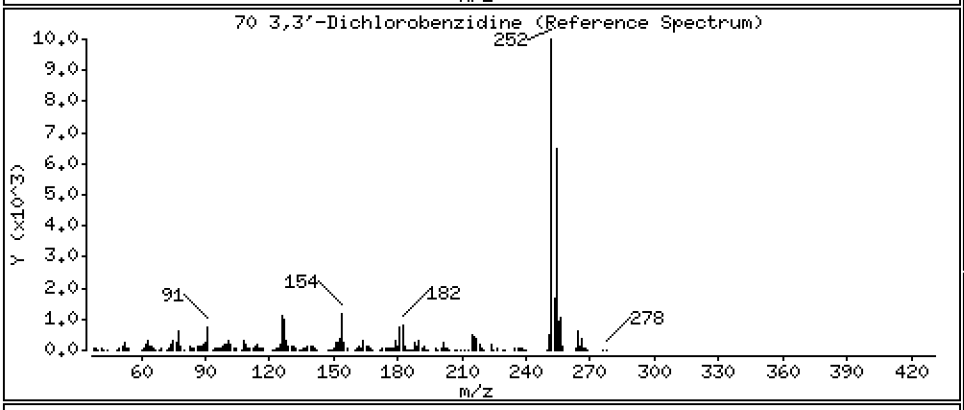
Column diameter: 0.25

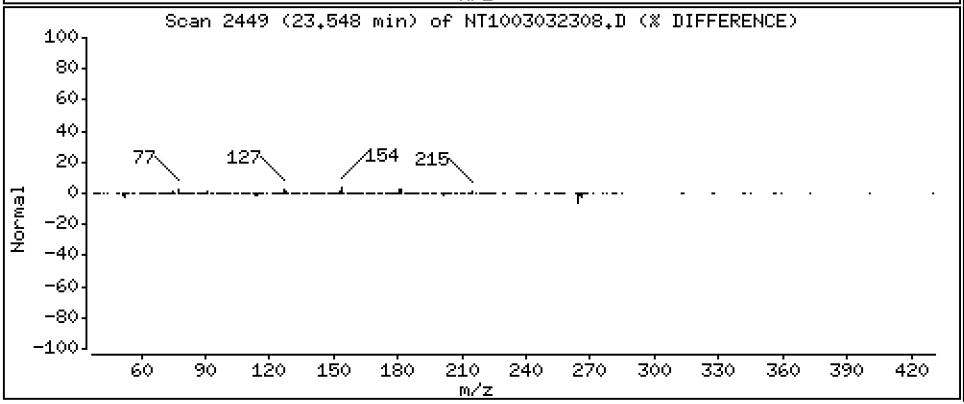
70 3,3'-Dichlorobenzidine

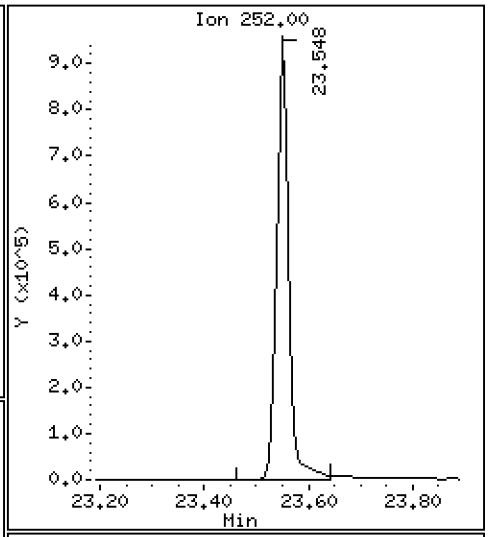
Concentration: 7.221 ug/ml

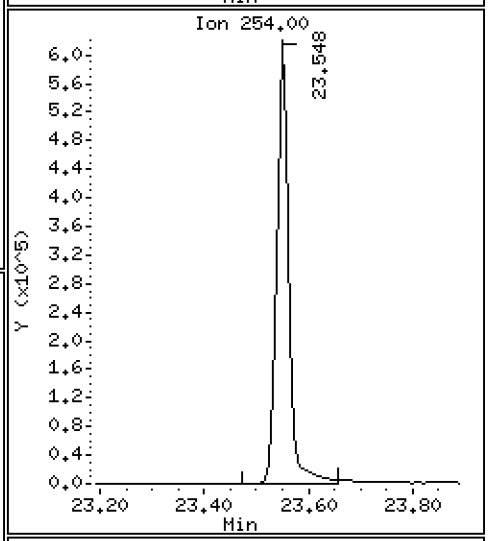


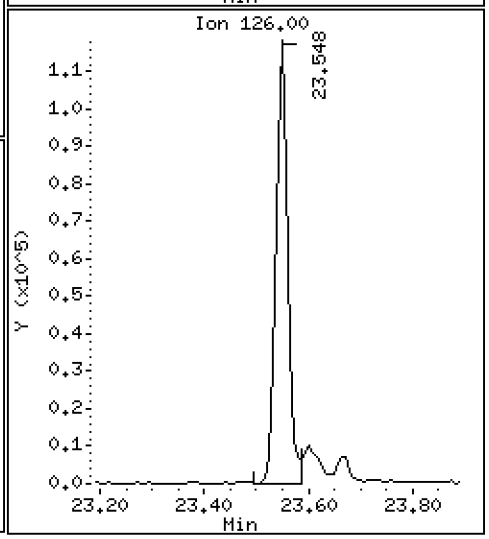












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

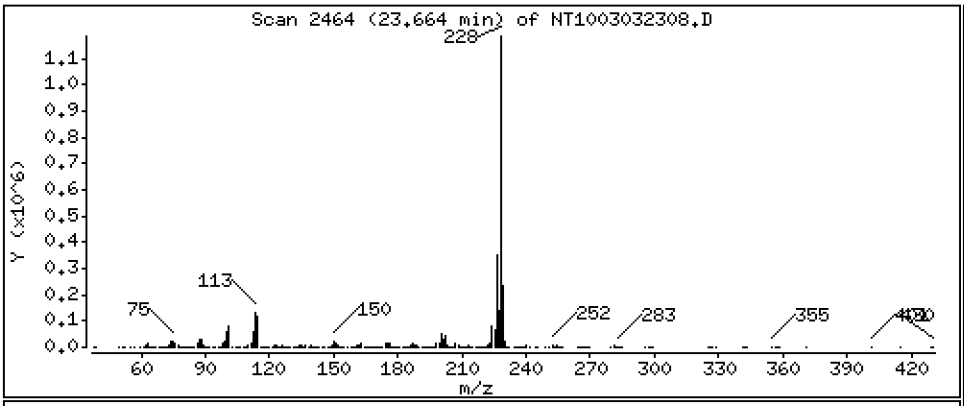
Operator: VTS

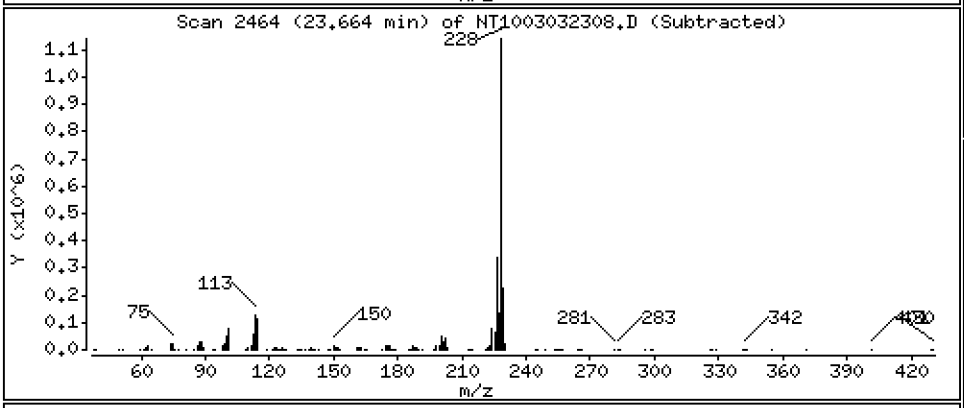
Column phase: ZB-5msi

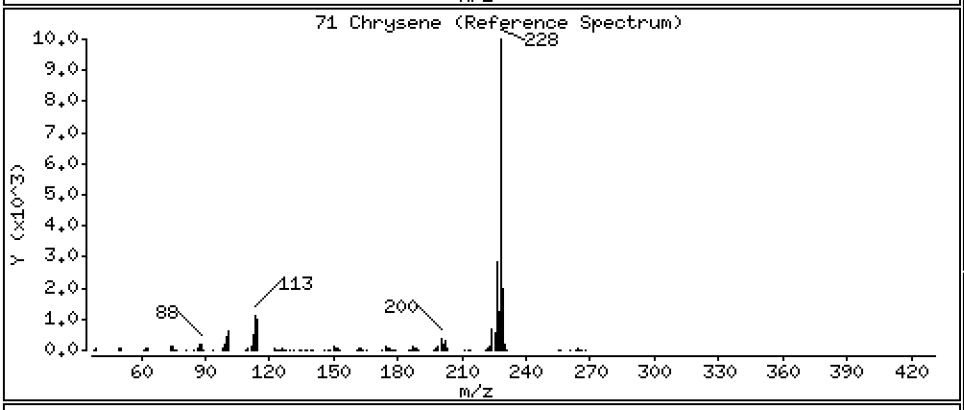
Column diameter: 0.25

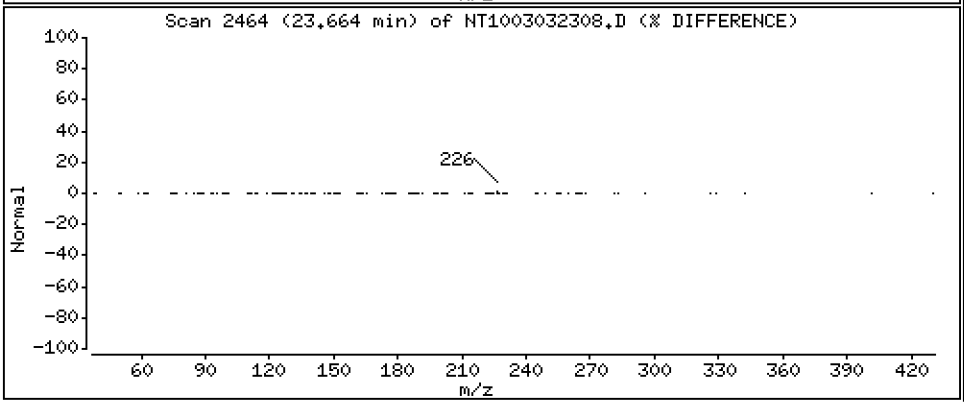
71 Chrysene

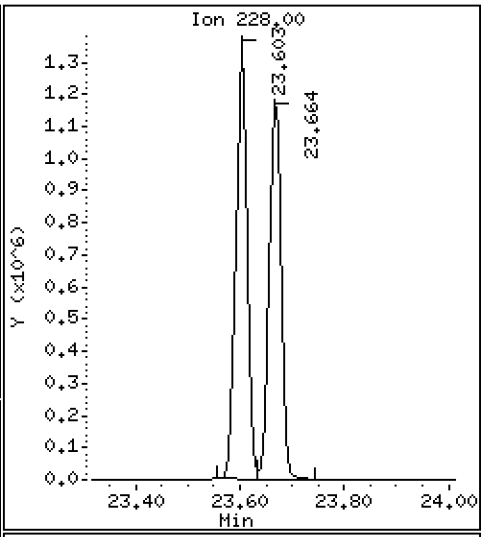
Concentration: 4.807 ug/ml

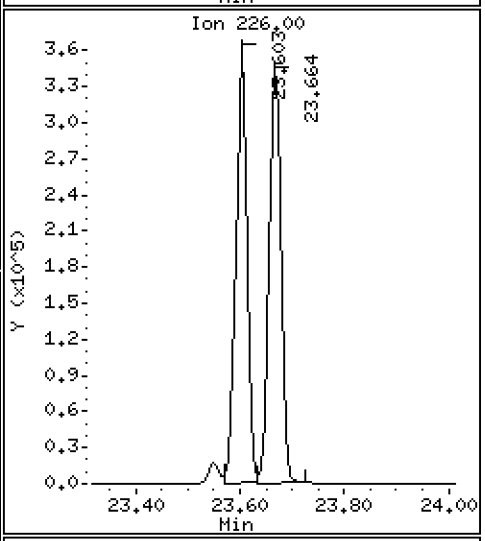


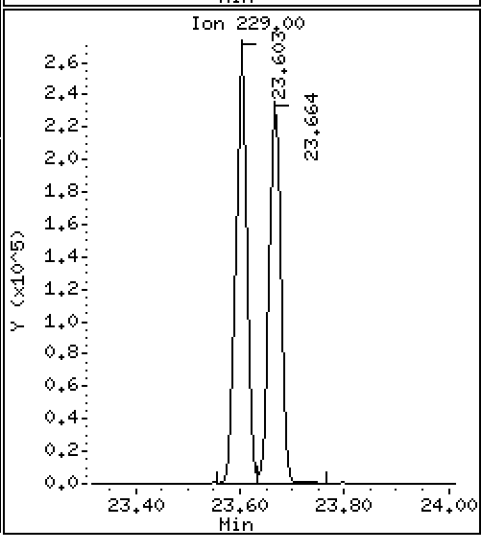












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

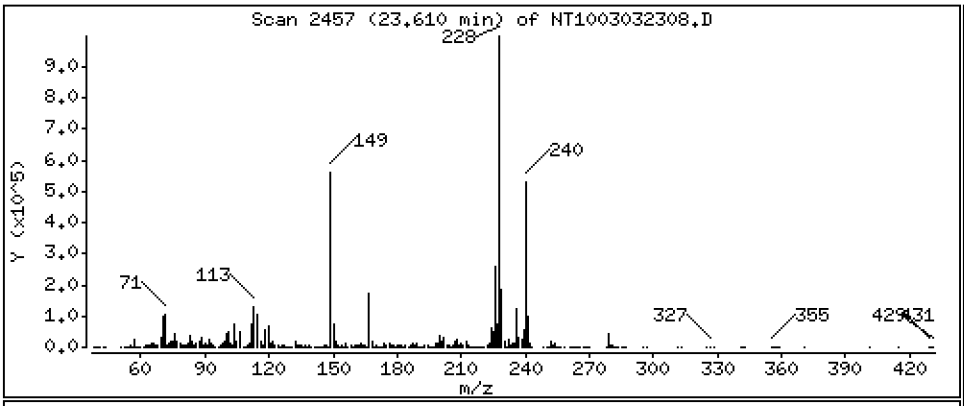
Operator: VTS

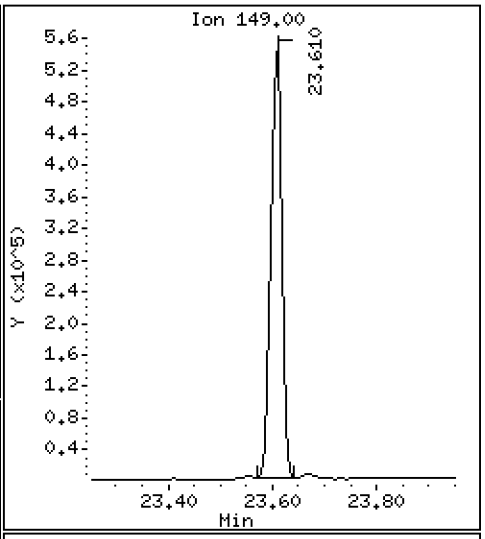
Column phase: ZB-5msi

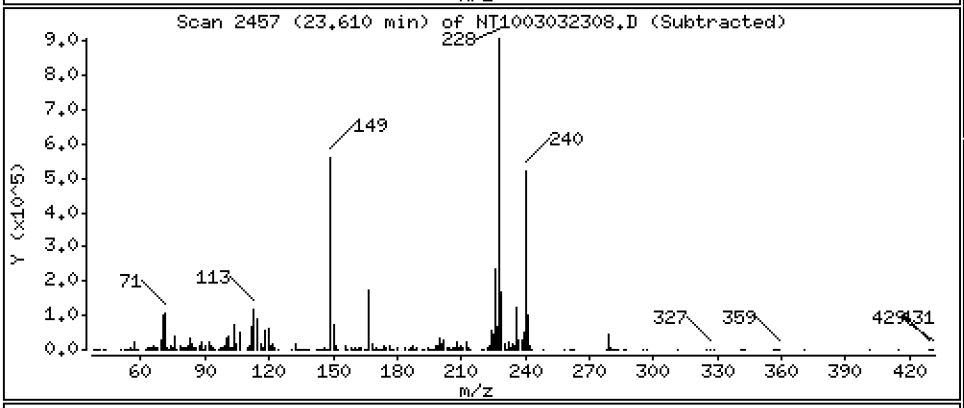
Column diameter: 0.25

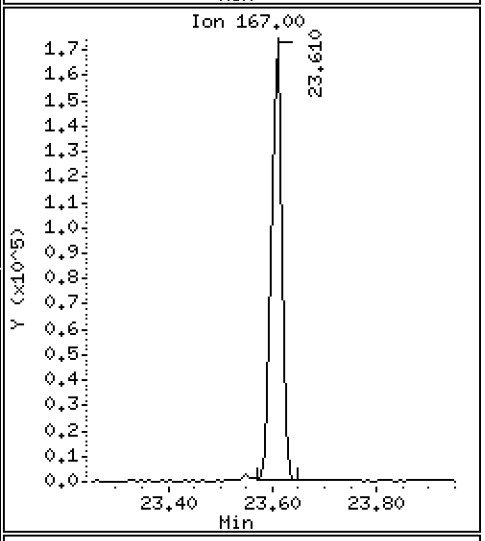
72 bis(2-Ethylhexyl)phthalate

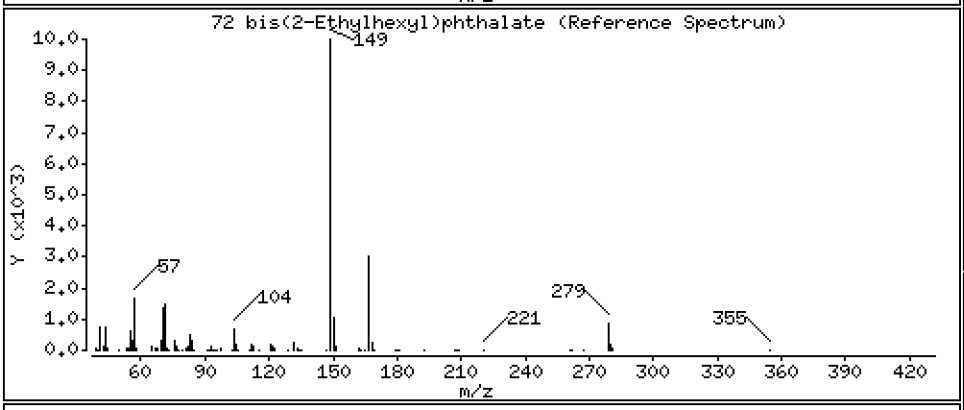
Concentration: 2.400 ug/ml

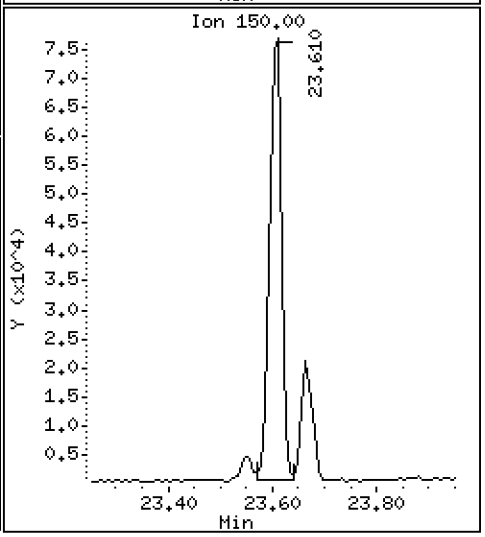


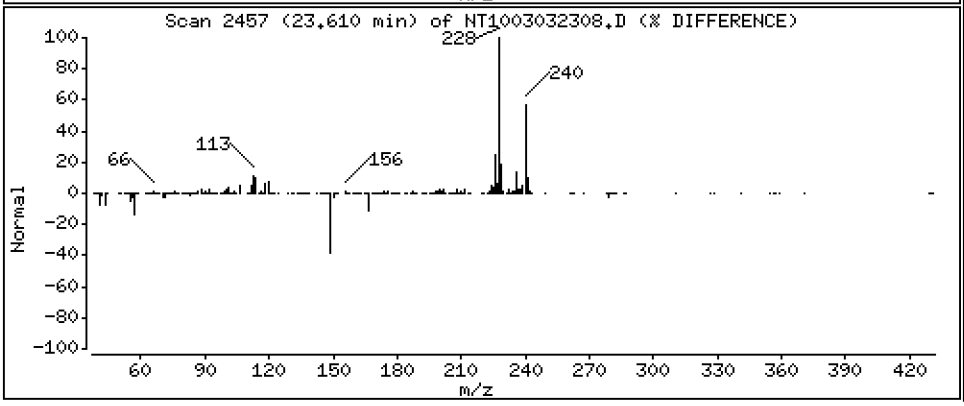












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

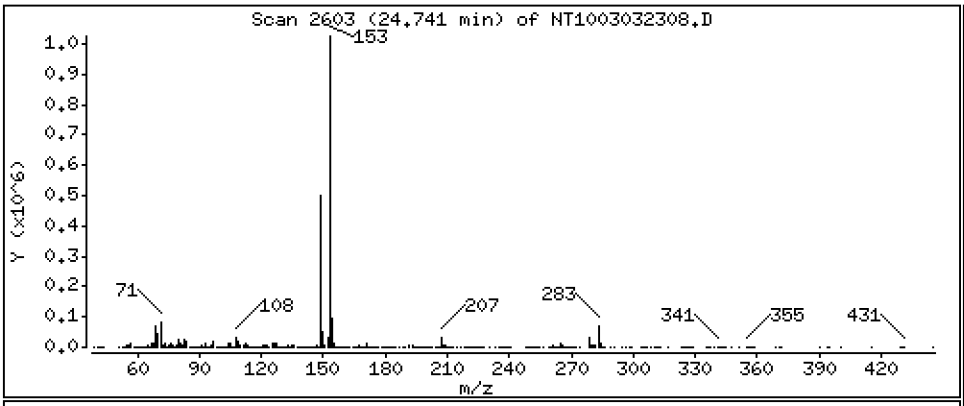
Operator: VTS

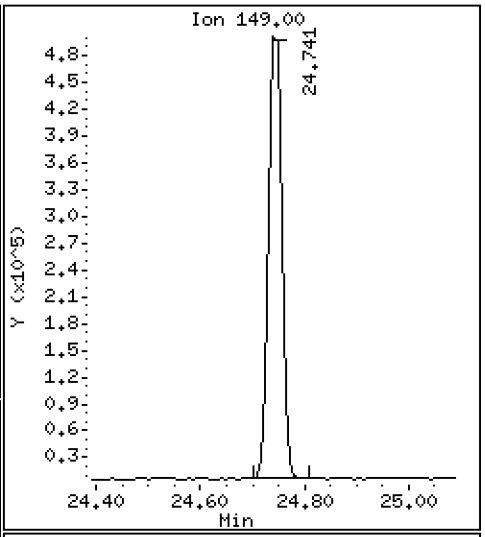
Column phase: ZB-5msi

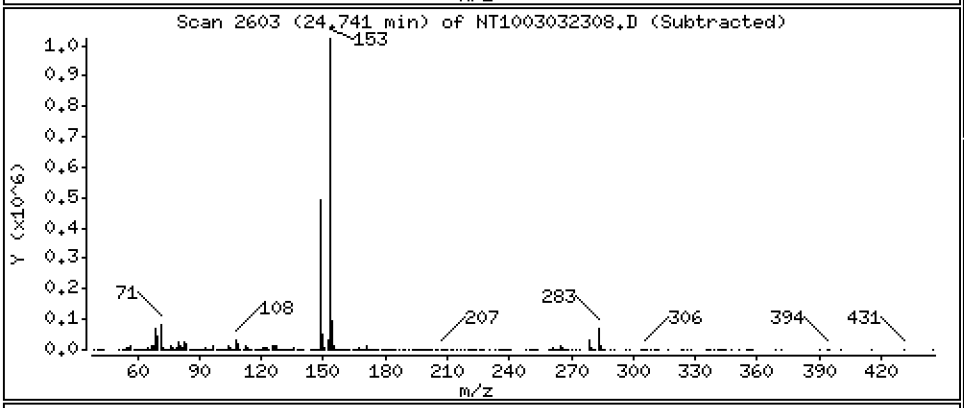
Column diameter: 0.25

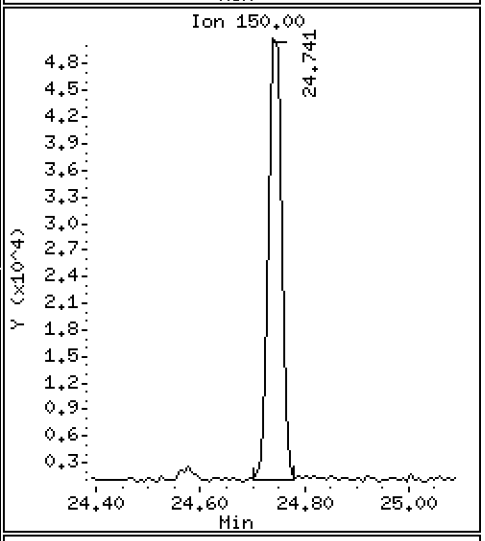
73 Di-n-octylphthalate

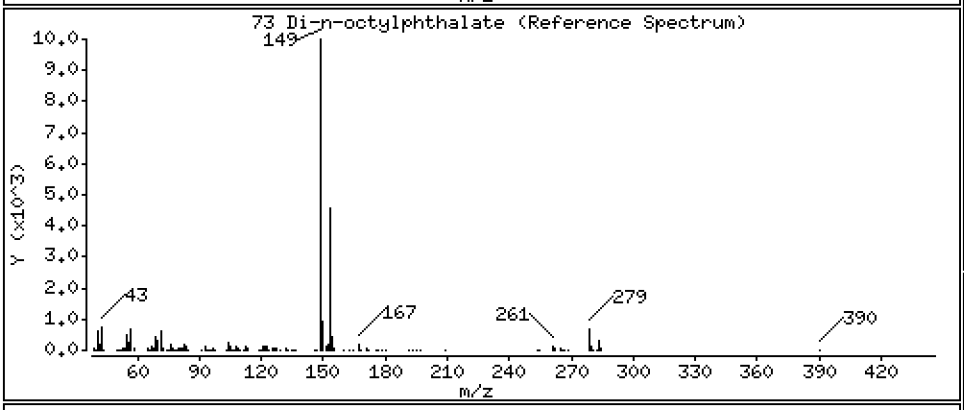
Concentration: 1.686 ug/ml

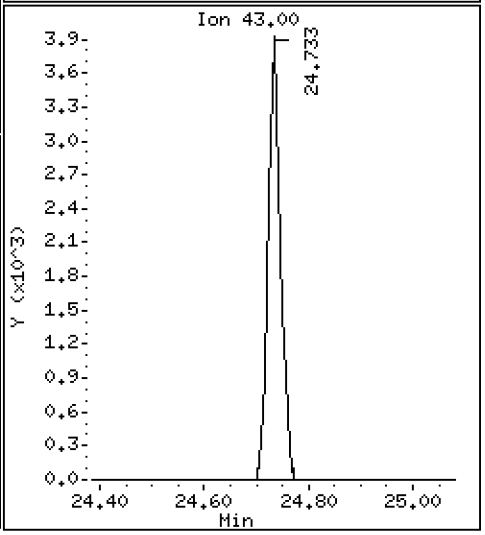


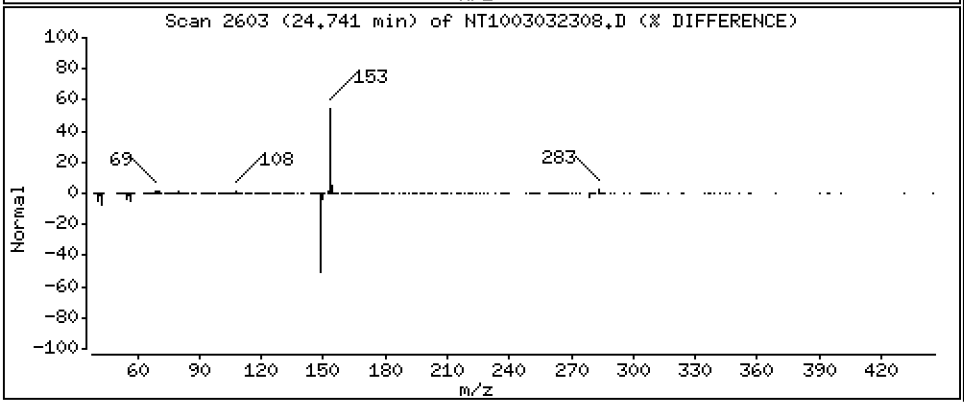












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

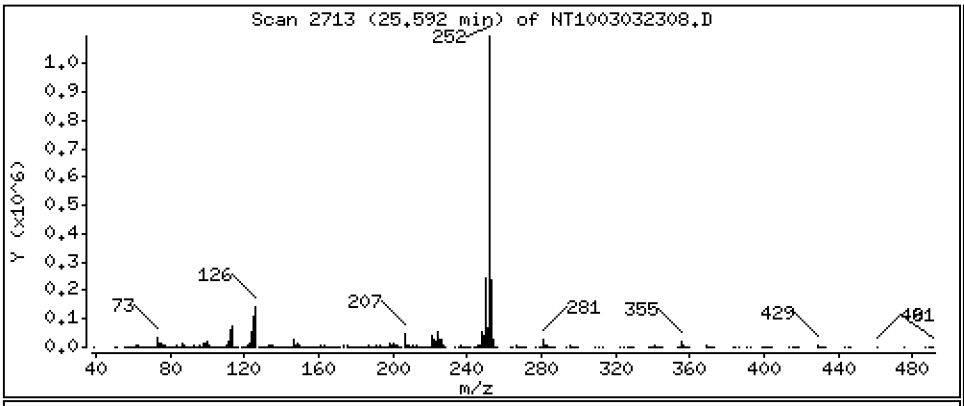
Operator: VTS

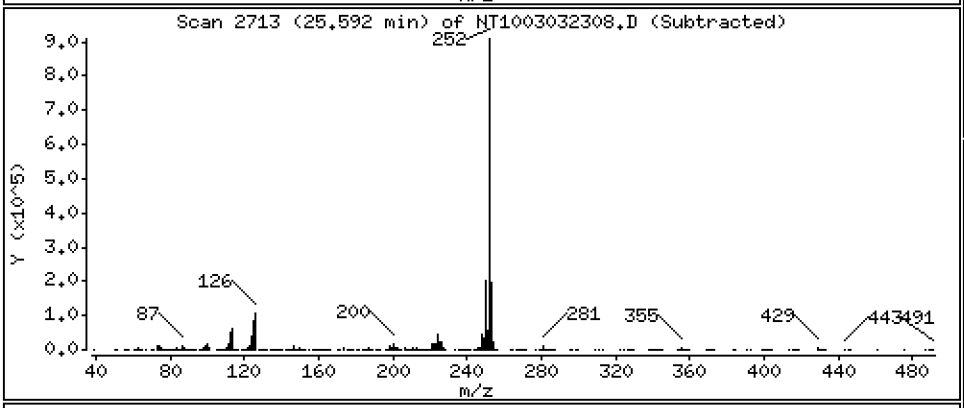
Column phase: ZB-5msi

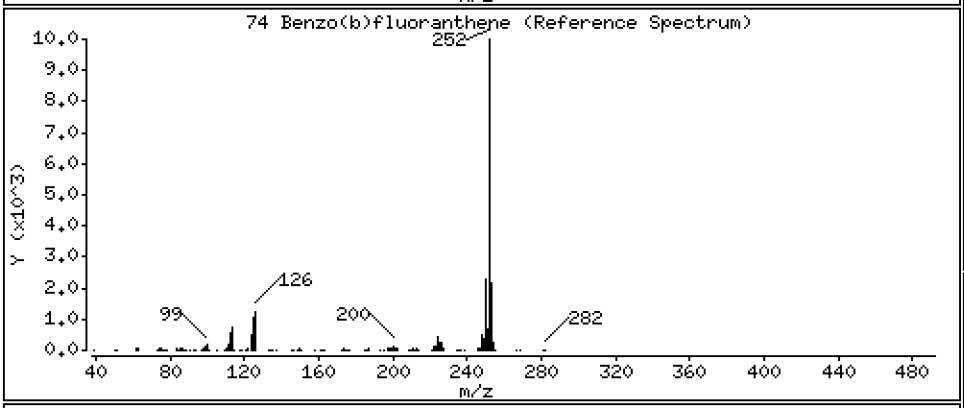
Column diameter: 0.25

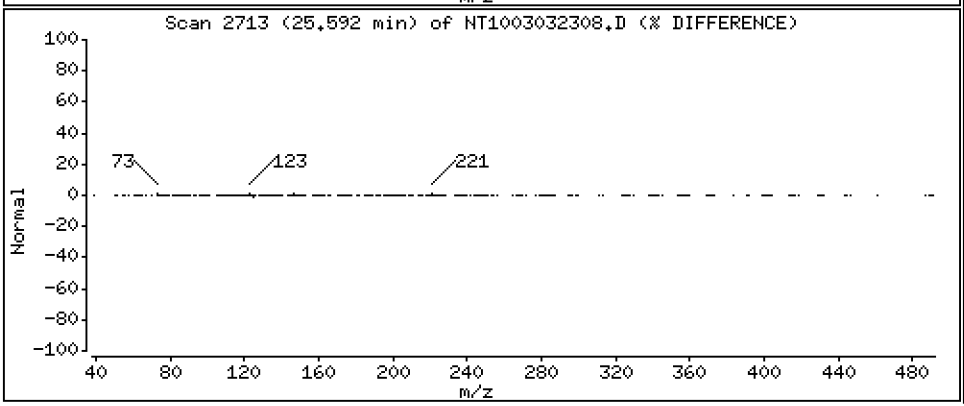
74 Benzo(b)fluoranthene

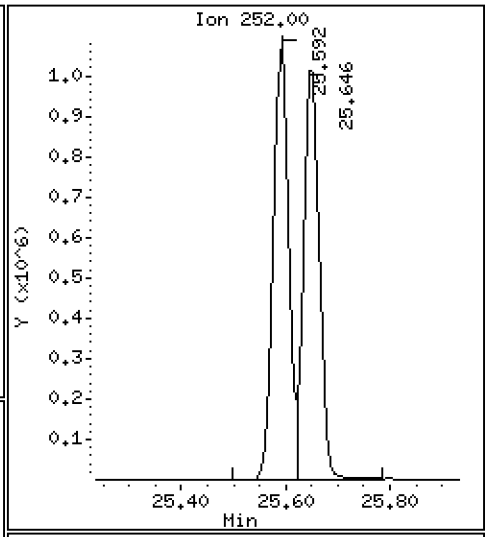
Concentration: 4.140 ug/ml

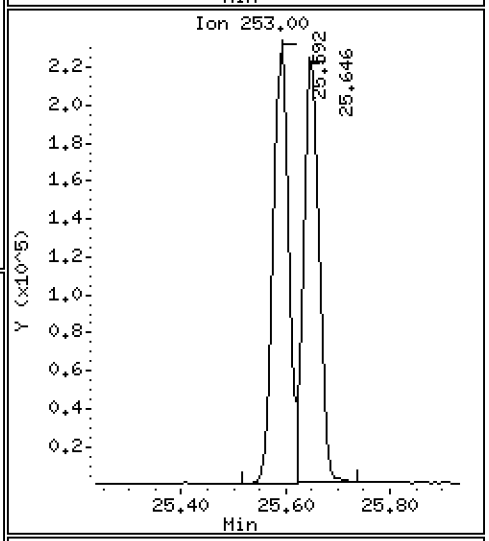


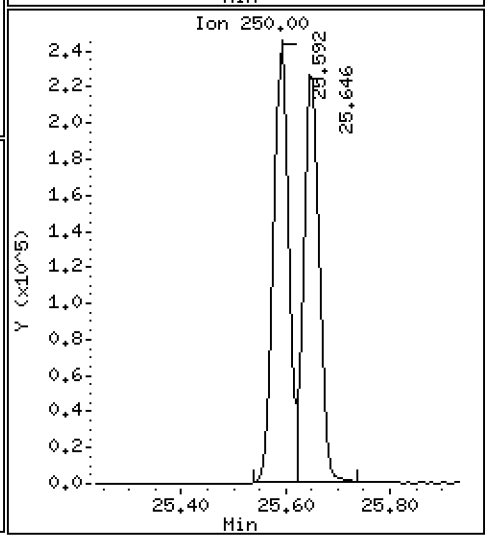












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

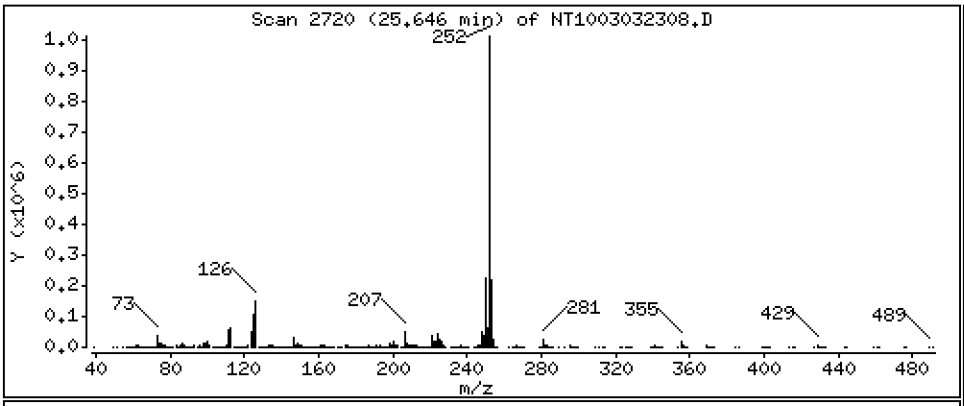
Operator: VTS

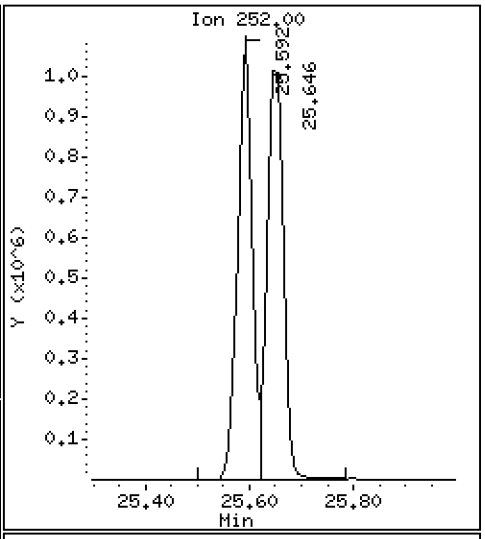
Column phase: ZB-5msi

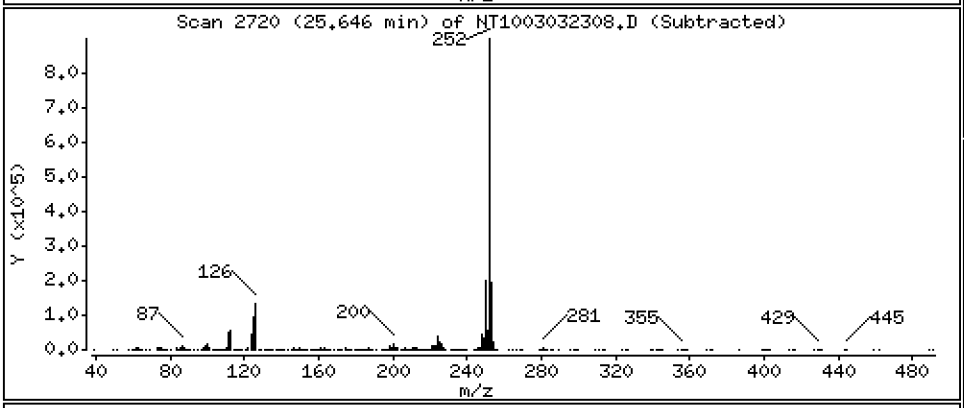
Column diameter: 0.25

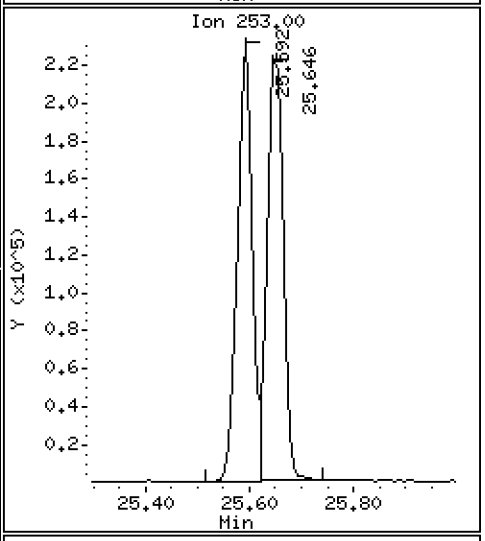
75 Benzo(k)fluoranthene

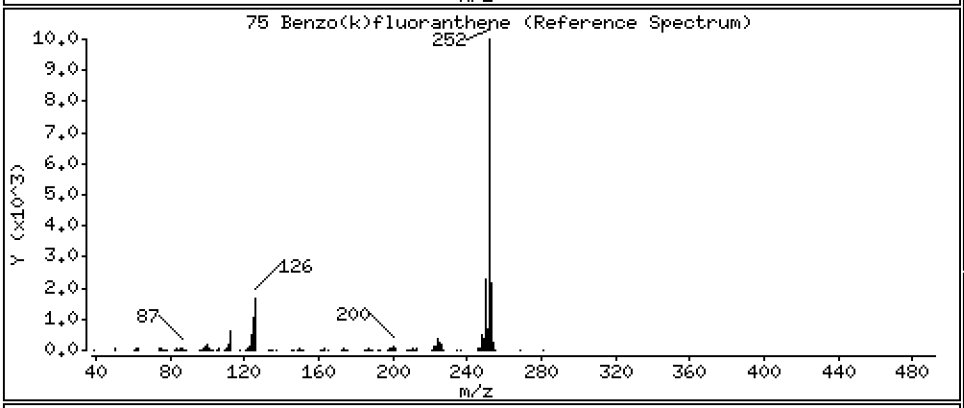
Concentration: 4.629 ug/ml

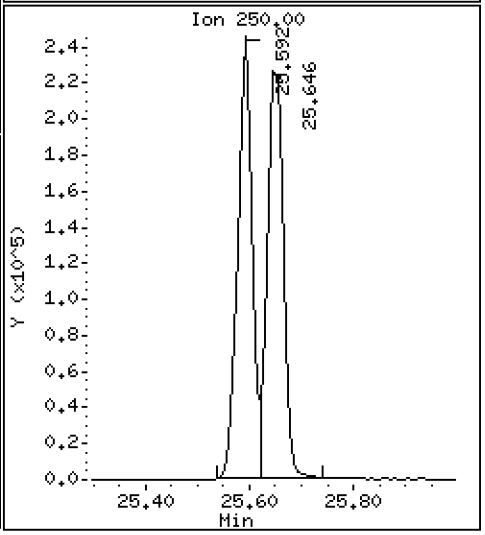


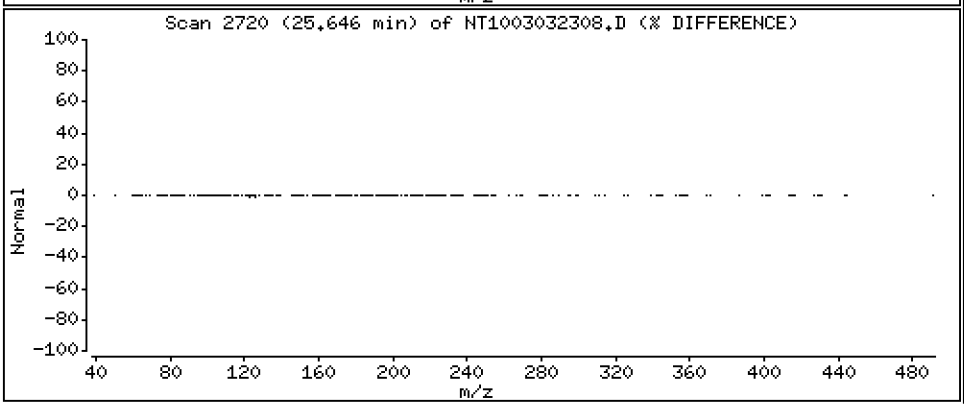












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

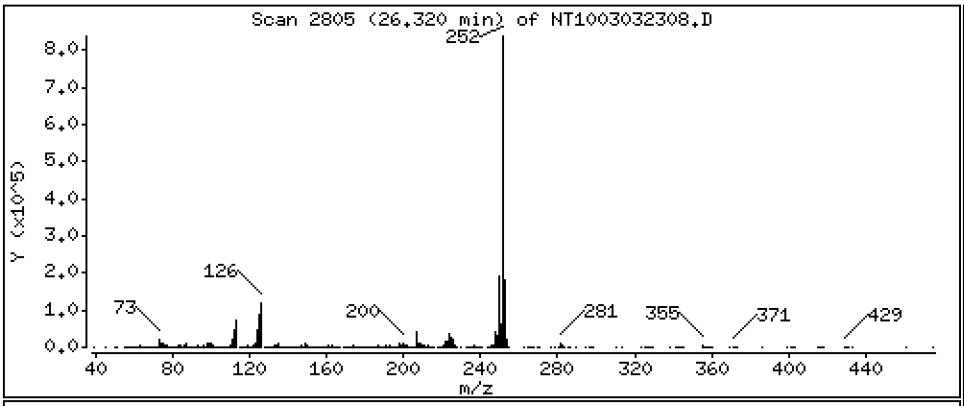
Operator: VTS

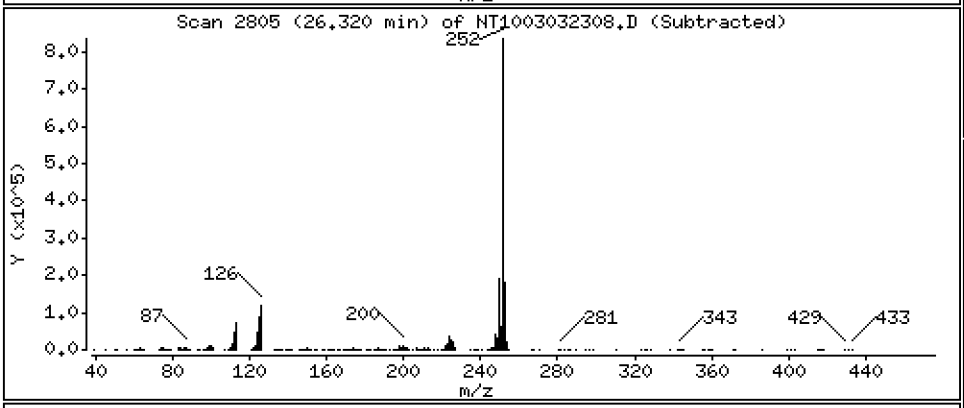
Column phase: ZB-5msi

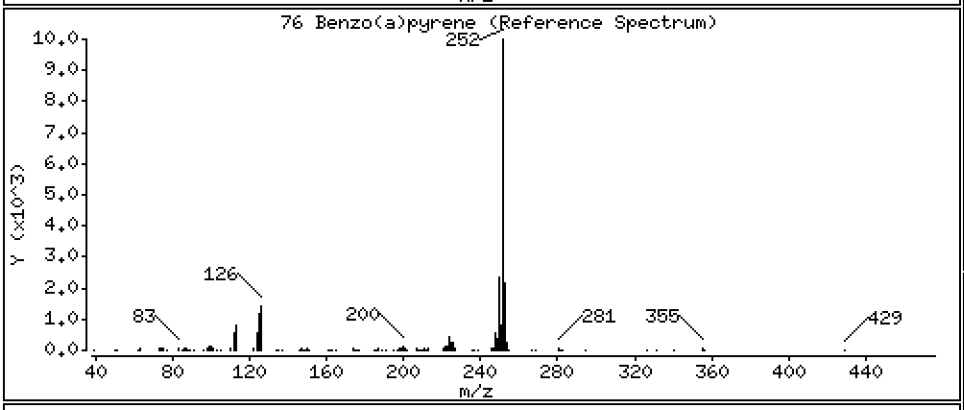
Column diameter: 0.25

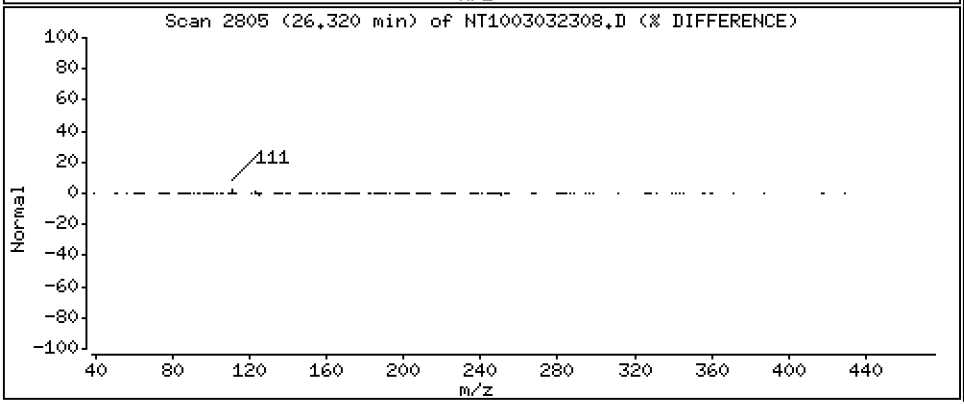
76 Benzo(a)pyrene

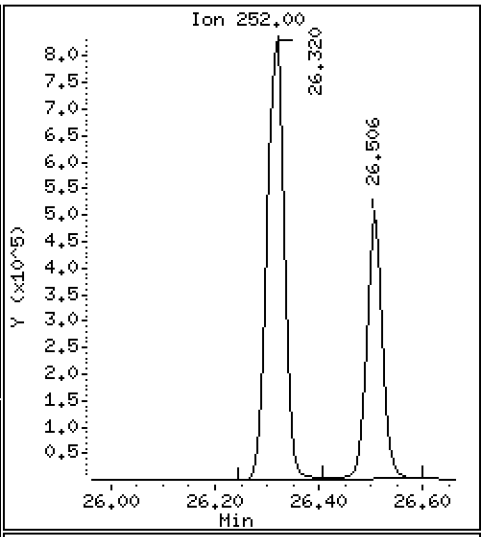
Concentration: 3.999 ug/ml

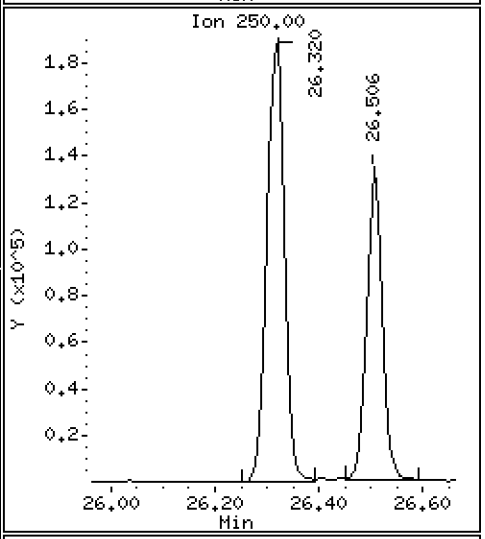


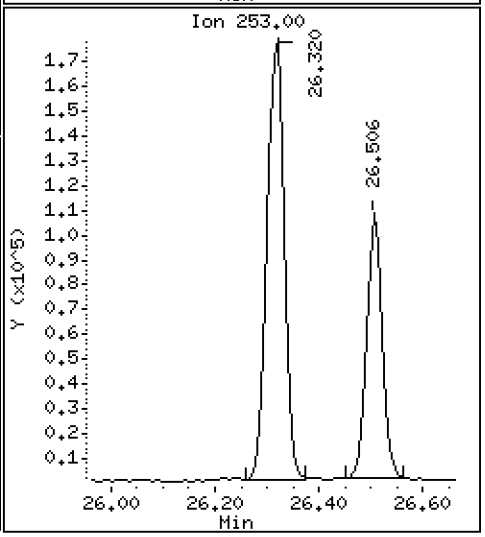












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

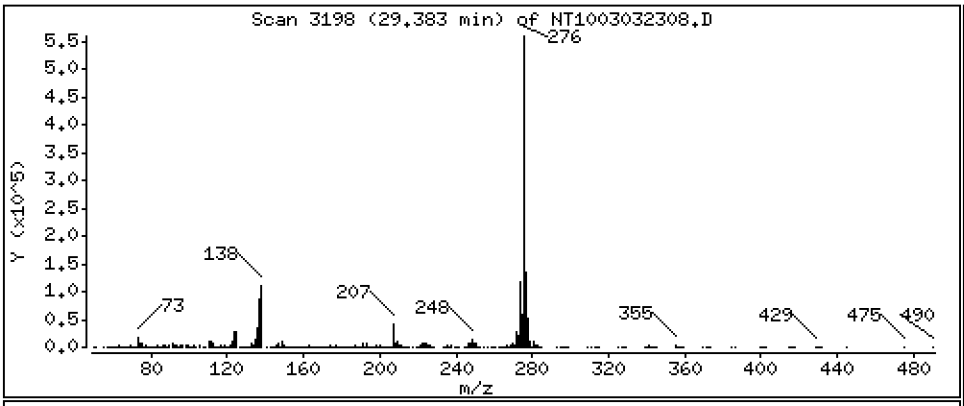
Operator: VTS

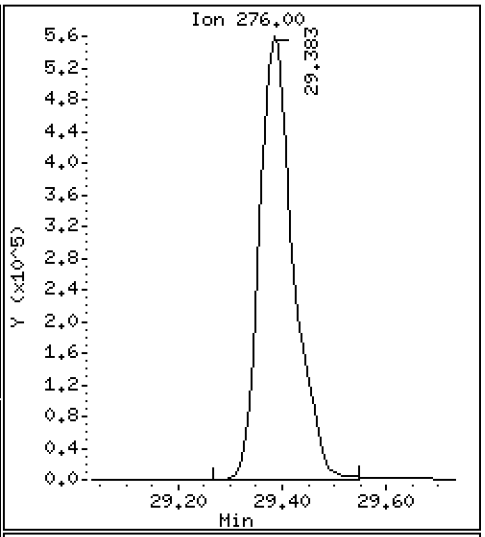
Column phase: ZB-5msi

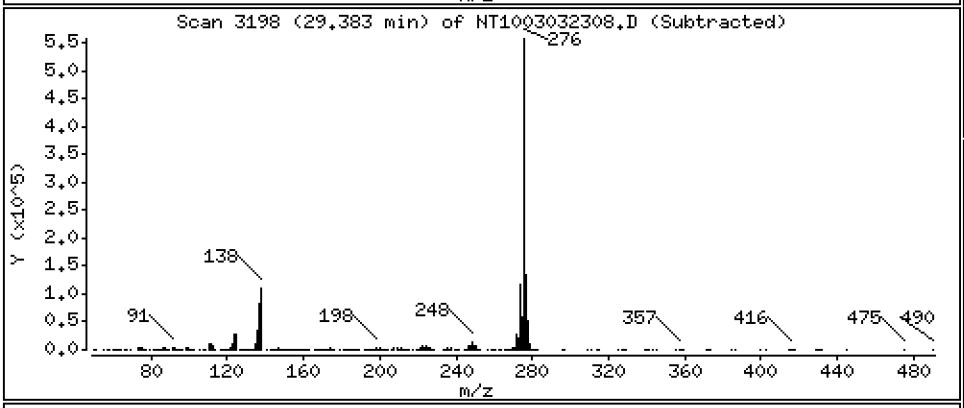
Column diameter: 0.25

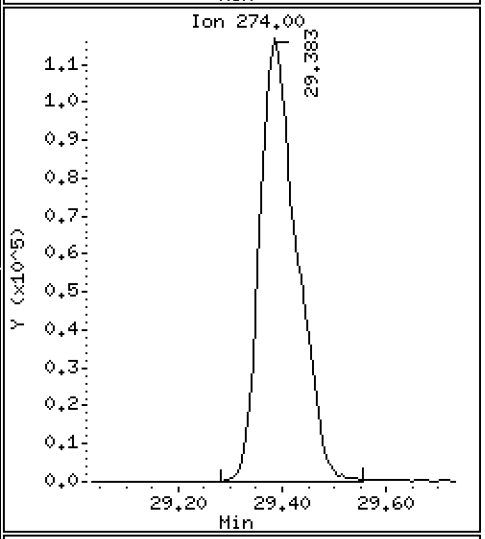
78 Indeno(1,2,3-cd)pyrene

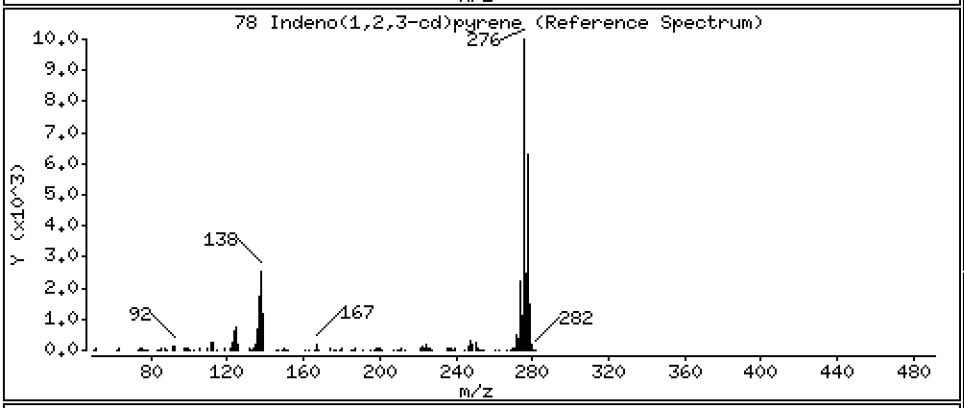
Concentration: 4.629 ug/ml

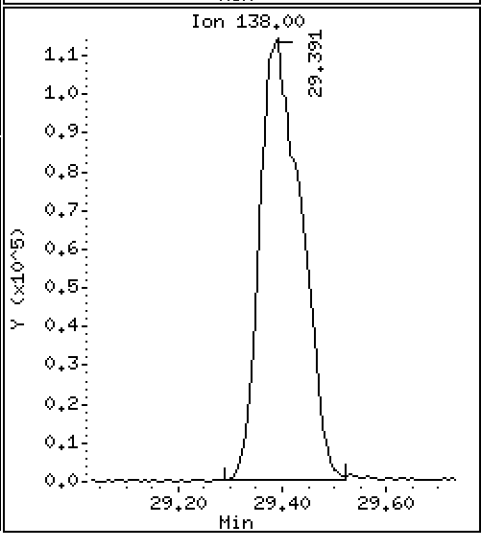


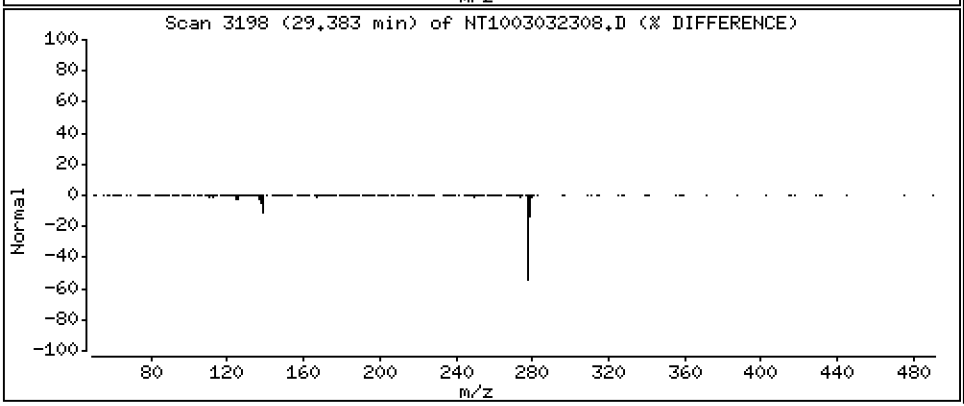












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

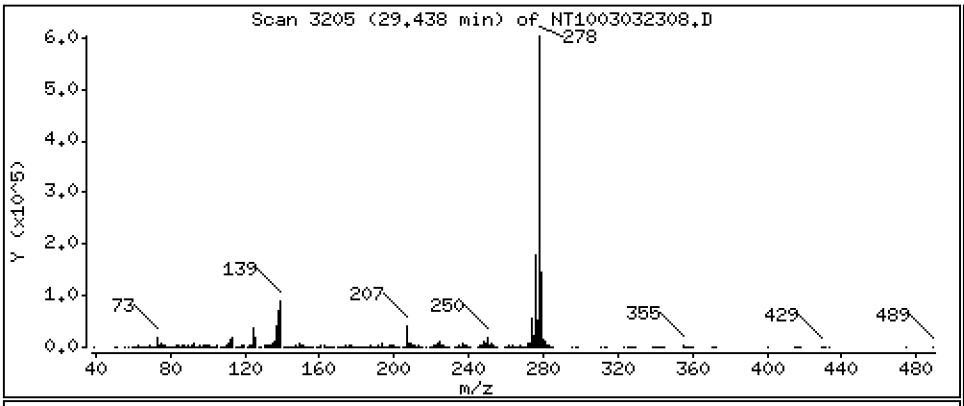
Operator: VTS

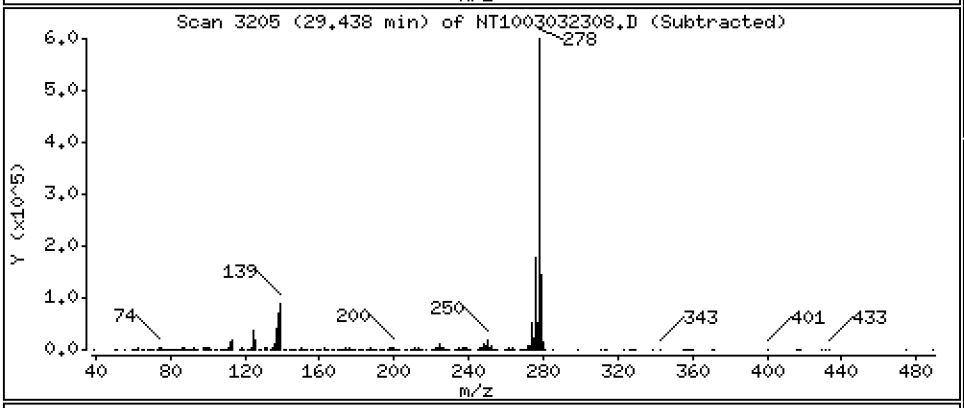
Column phase: ZB-5msi

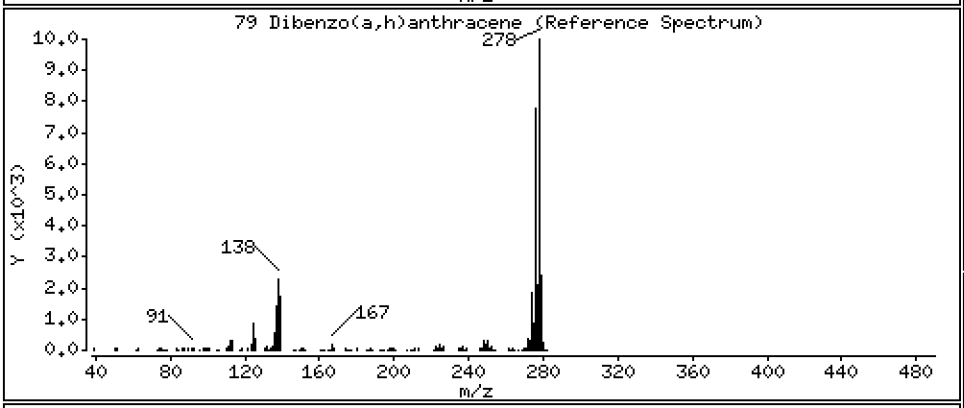
Column diameter: 0.25

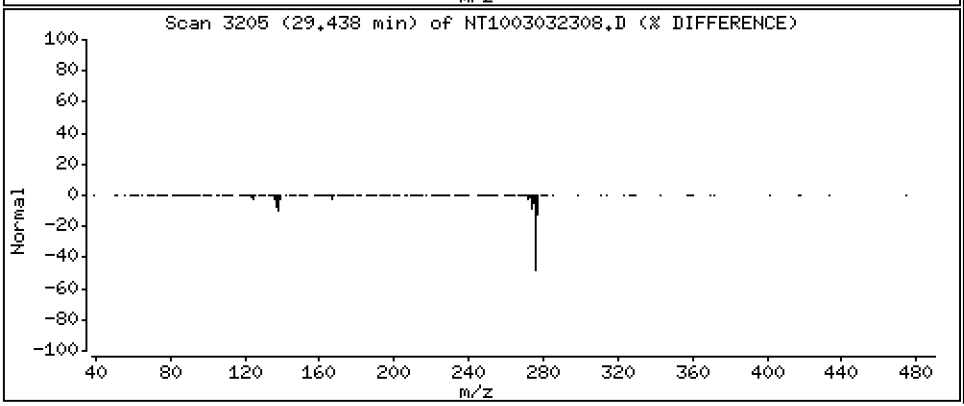
79 Dibenzo(a,h)anthracene

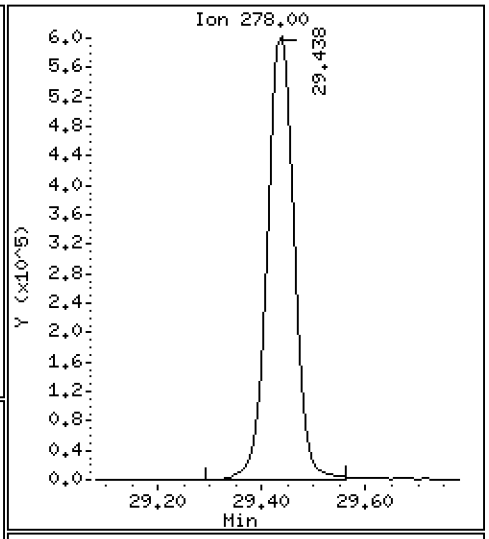
Concentration: 5.080 ug/ml

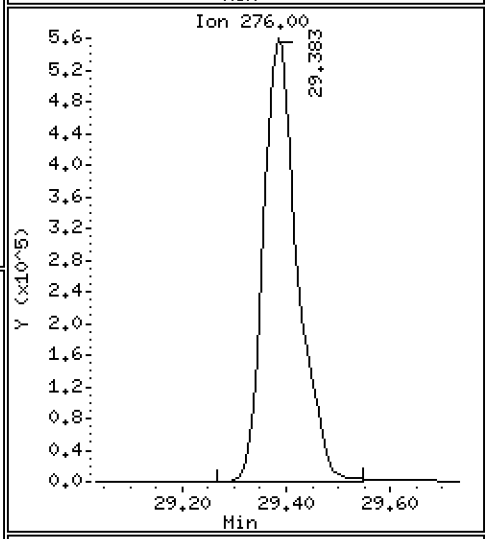


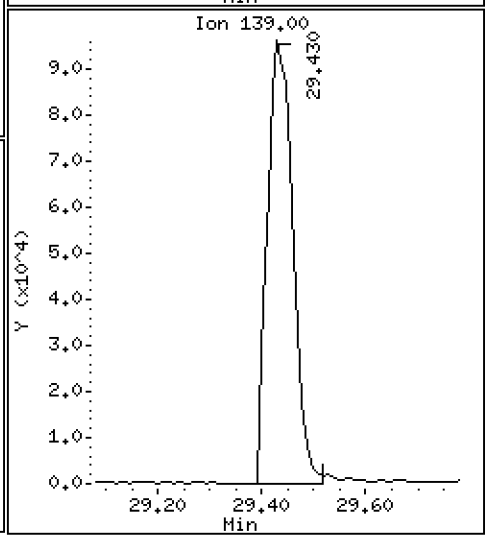












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

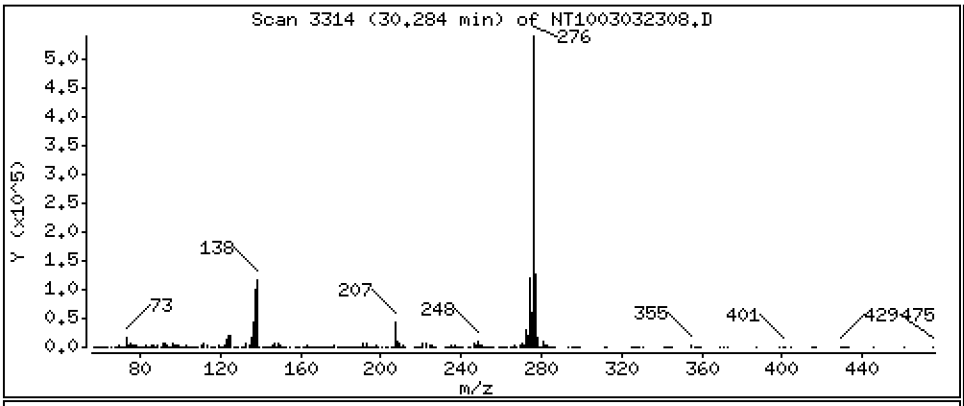
Operator: VTS

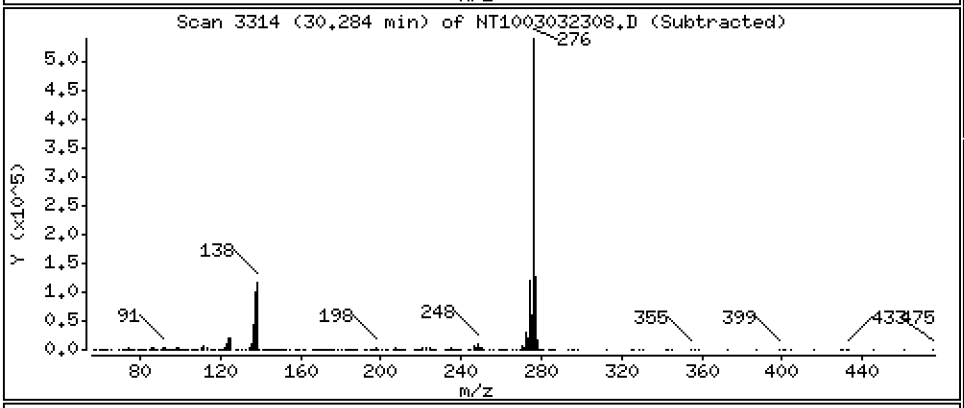
Column phase: ZB-5msi

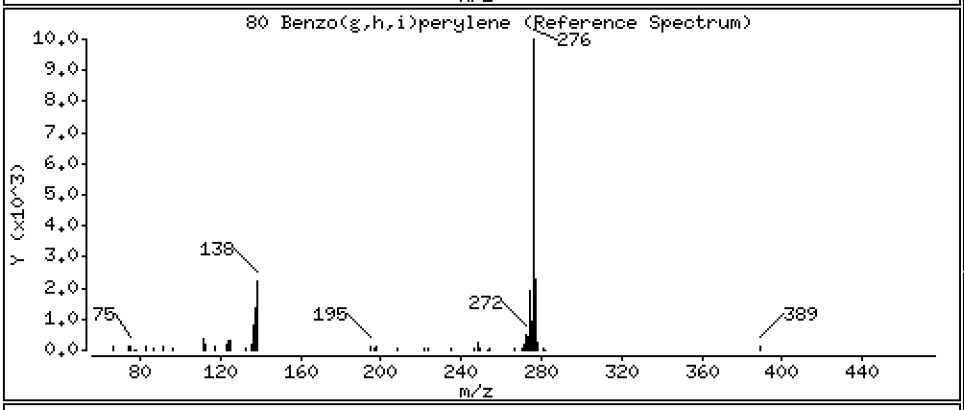
Column diameter: 0.25

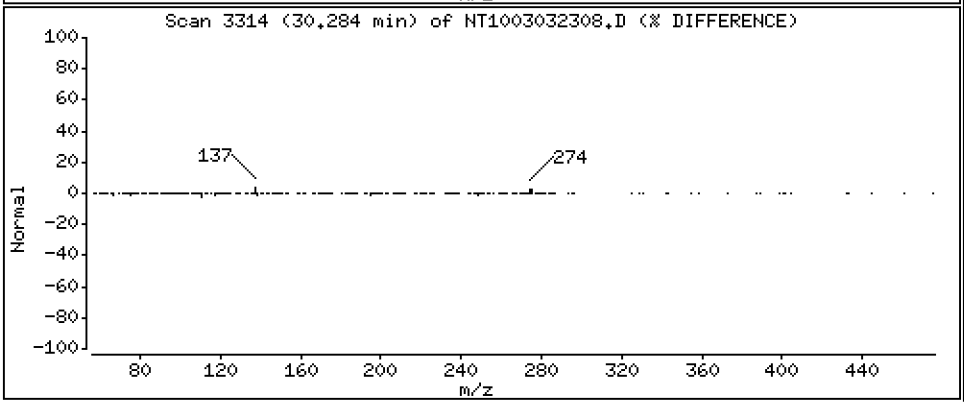
80 Benzo(g,h,i)perylene

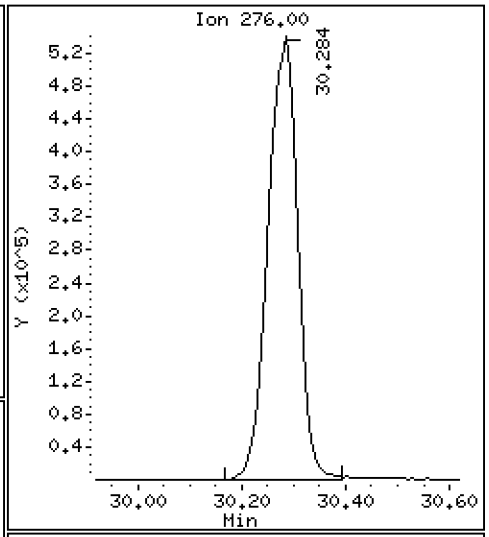
Concentration: 4.925 ug/ml

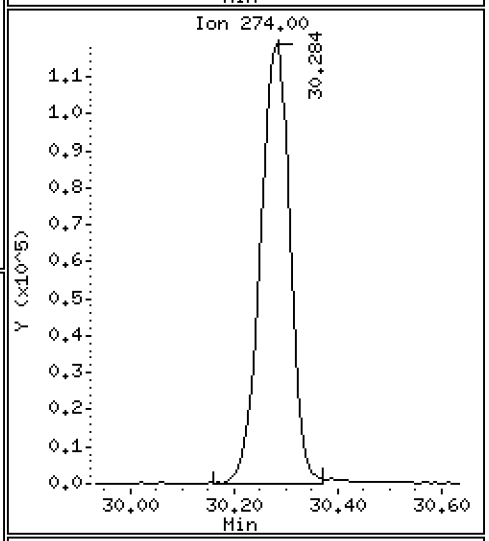


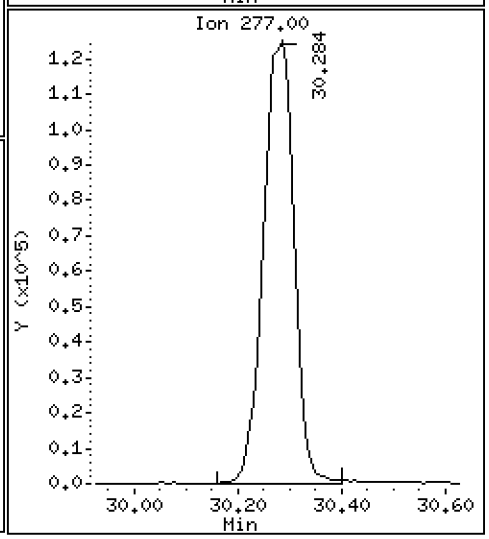












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

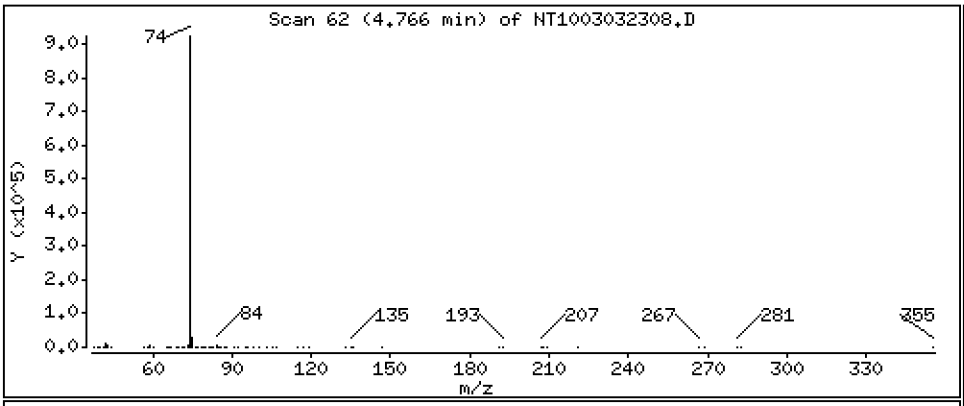
Operator: VTS

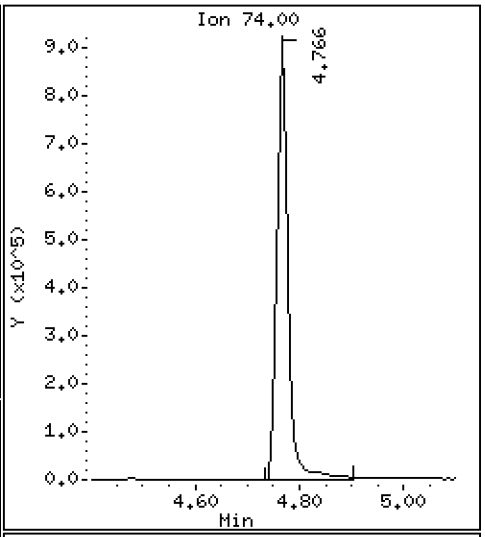
Column phase: ZB-5msi

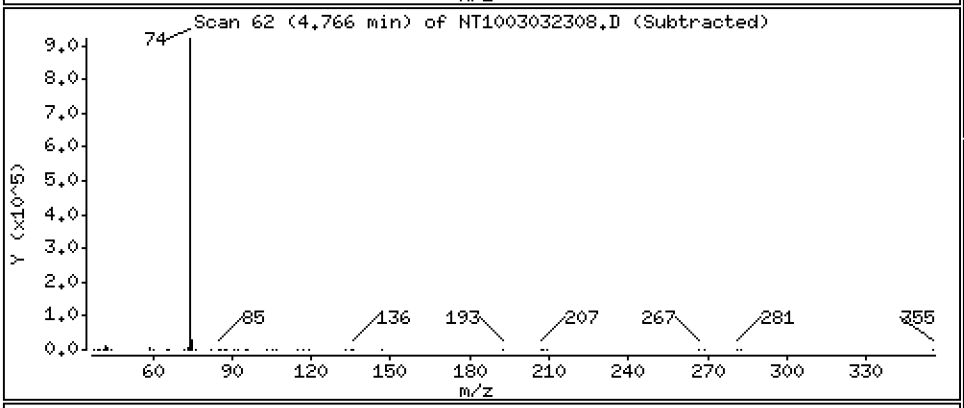
Column diameter: 0.25

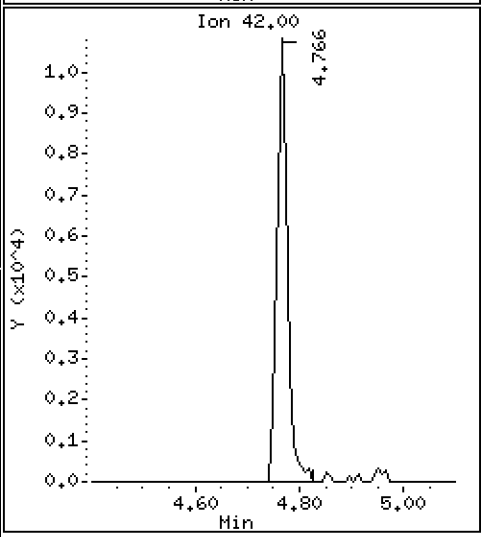
90 N-Nitrosodimethylamine

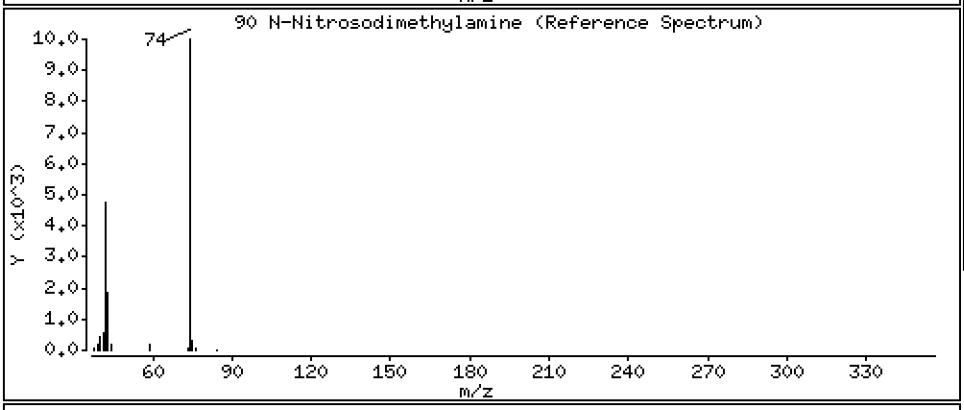
Concentration: 12.38 ug/ml

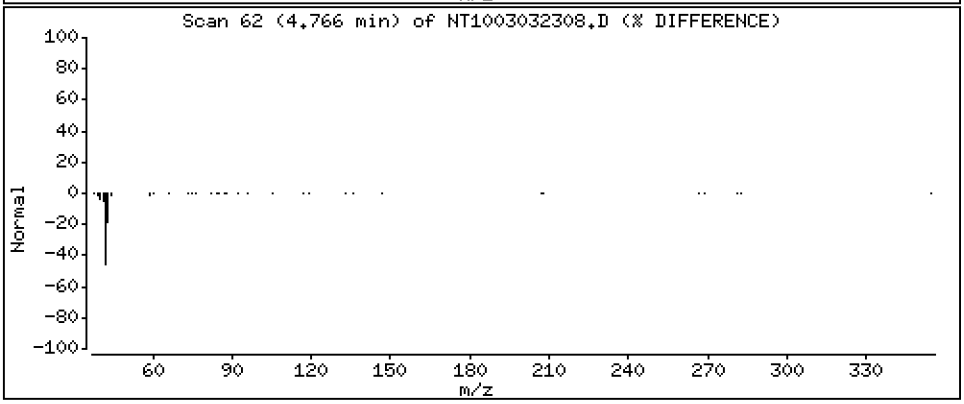












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

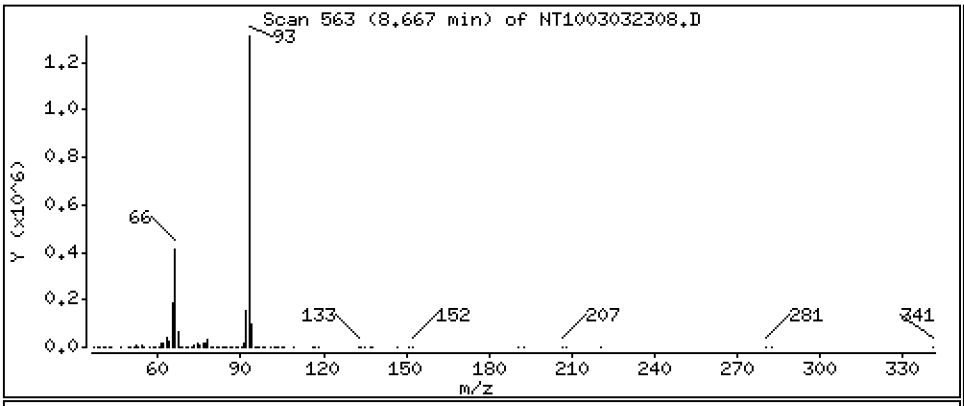
Operator: VTS

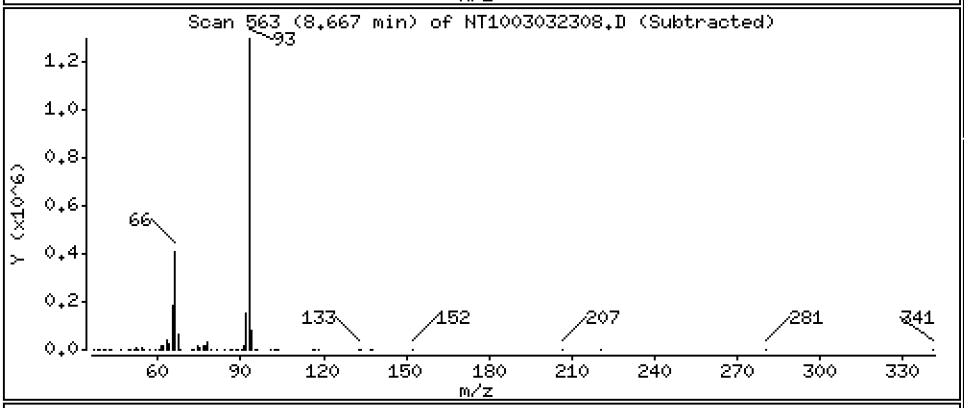
Column phase: ZB-5msi

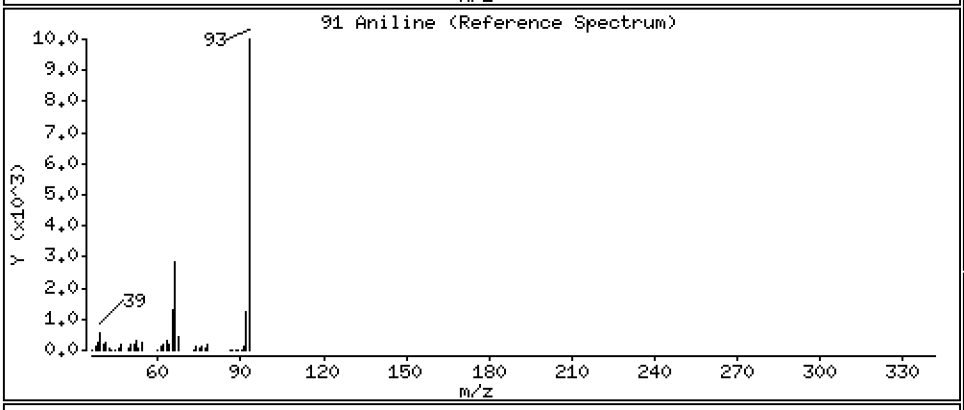
Column diameter: 0.25

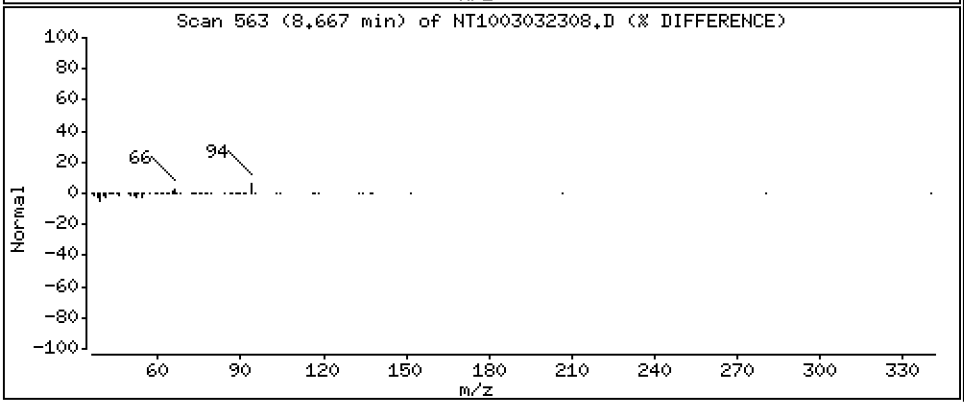
91 Aniline

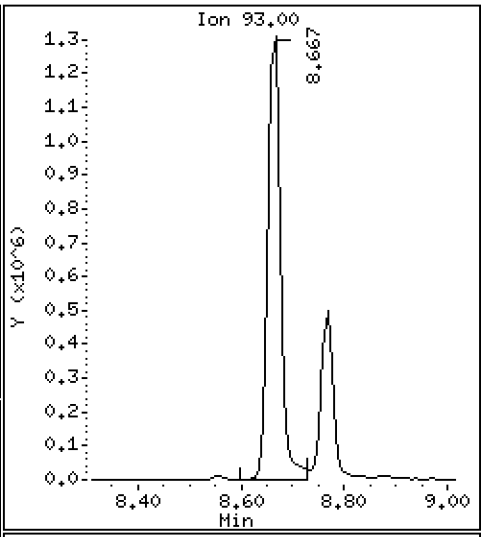
Concentration: 8.923 ug/ml

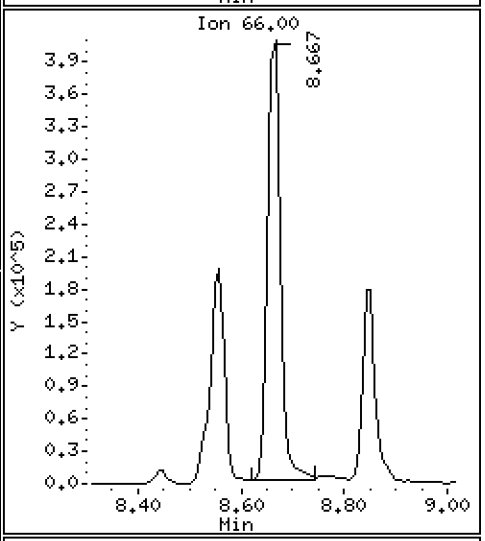


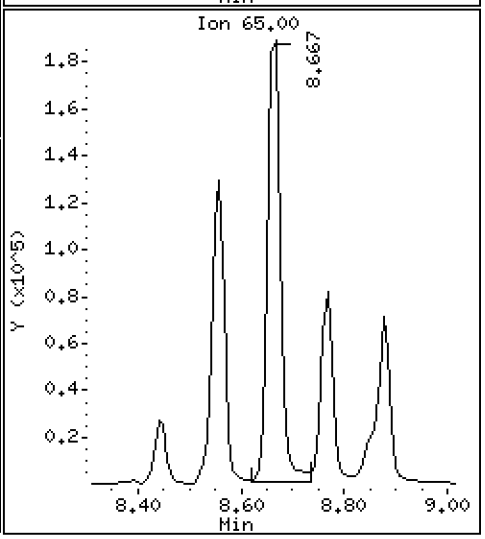












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

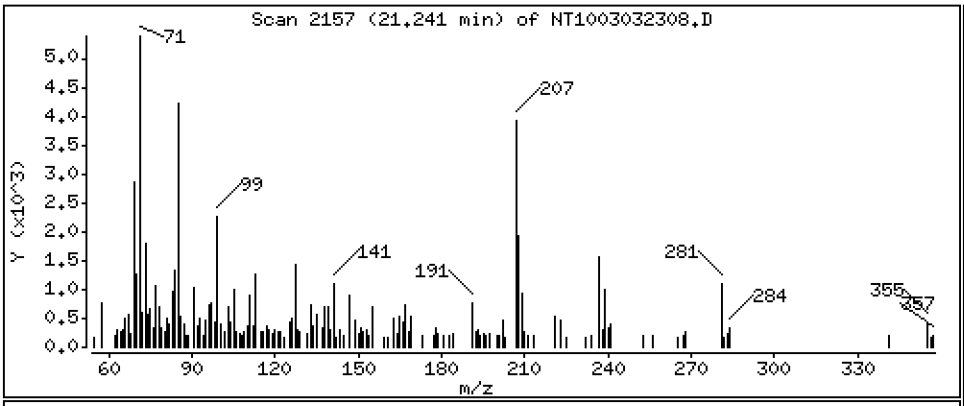
Operator: VTS

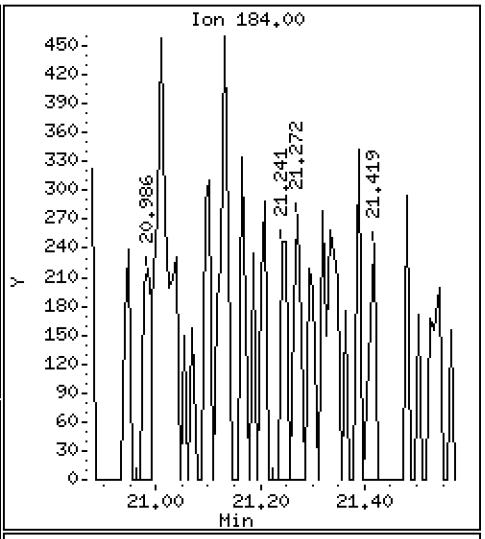
Column phase: ZB-5msi

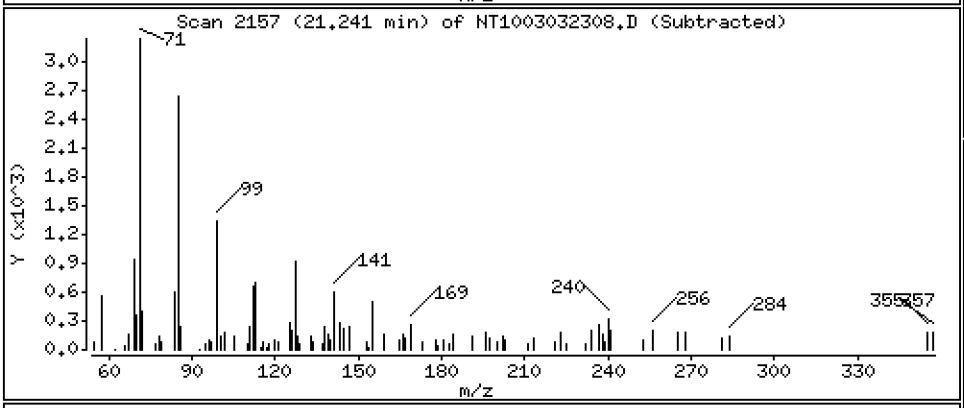
Column diameter: 0.25

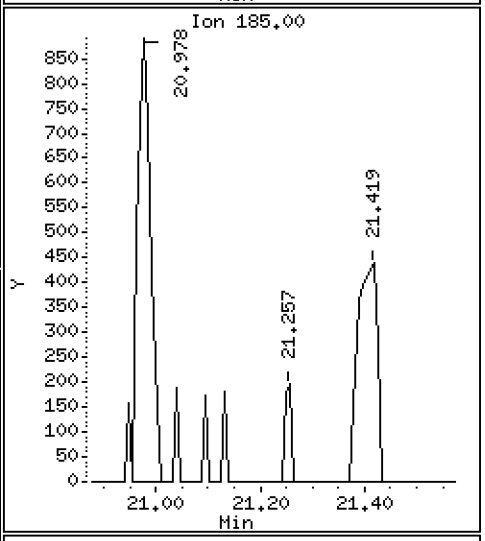
93 Benzidine

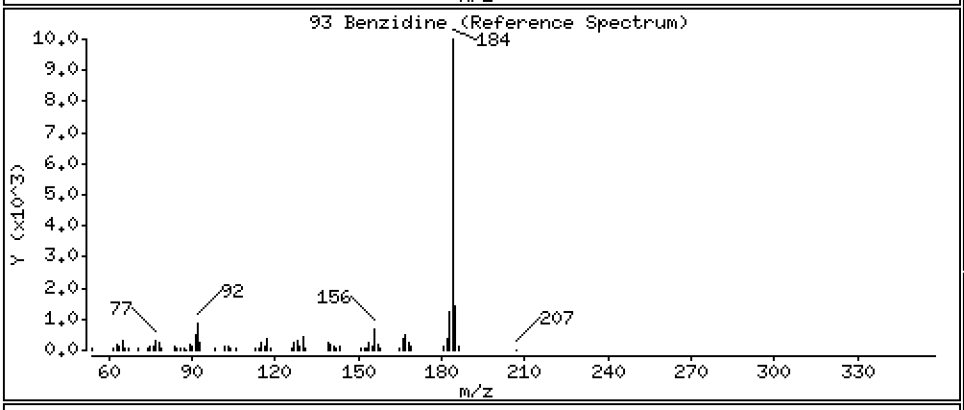
Concentration: 0.001146 ug/ml

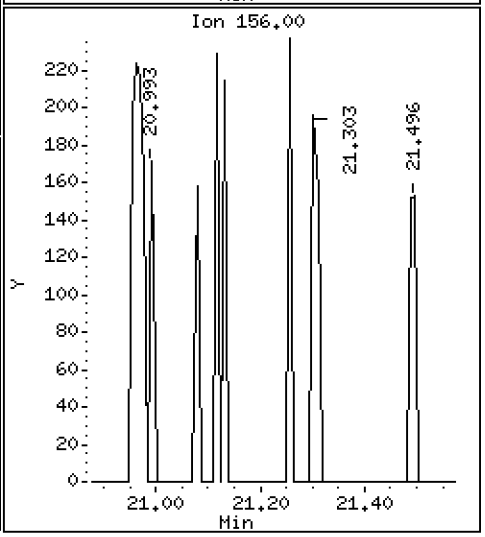


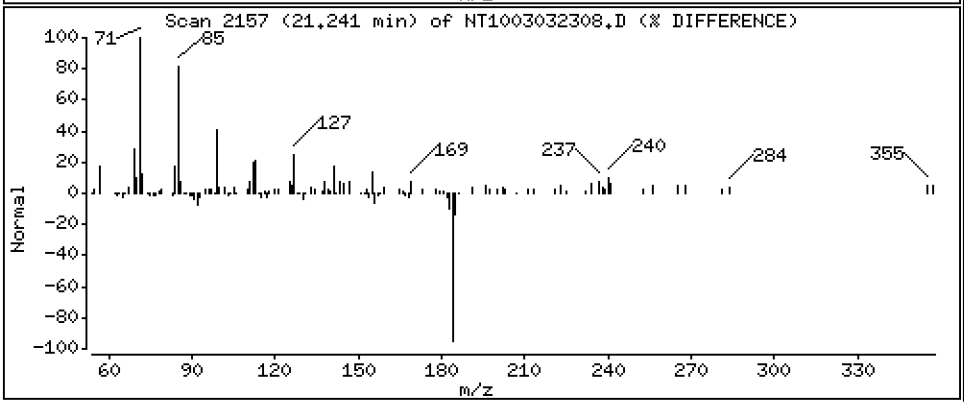












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

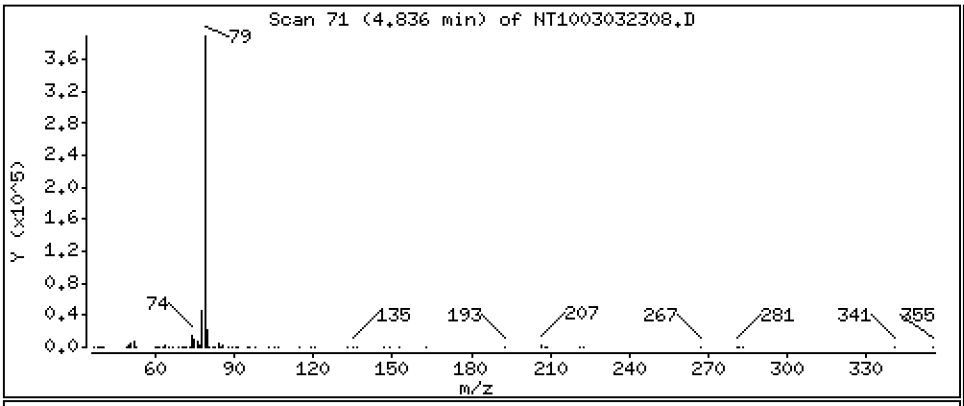
Operator: VTS

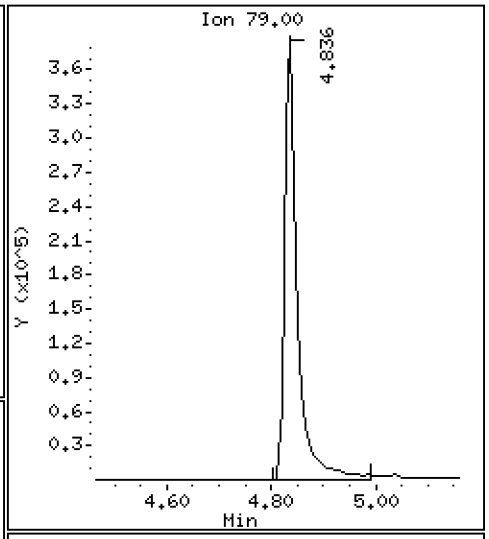
Column phase: ZB-5msi

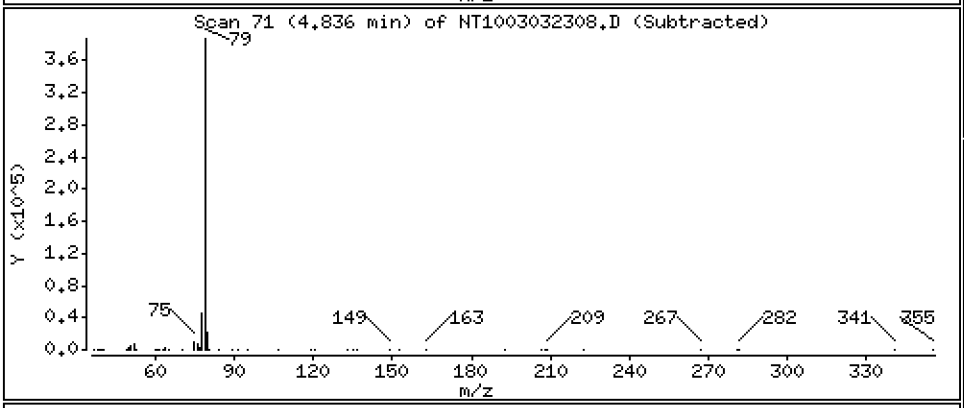
Column diameter: 0.25

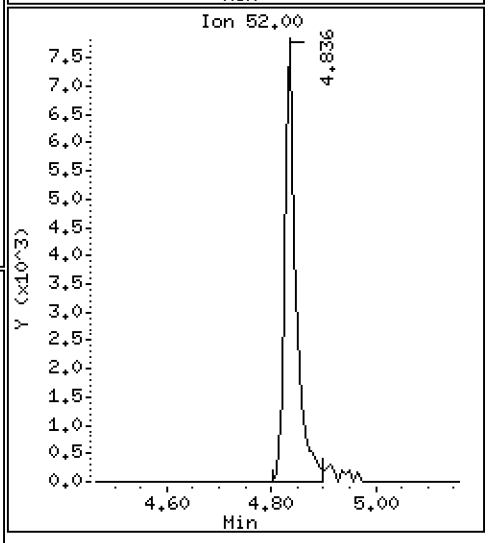
103 Pyridine

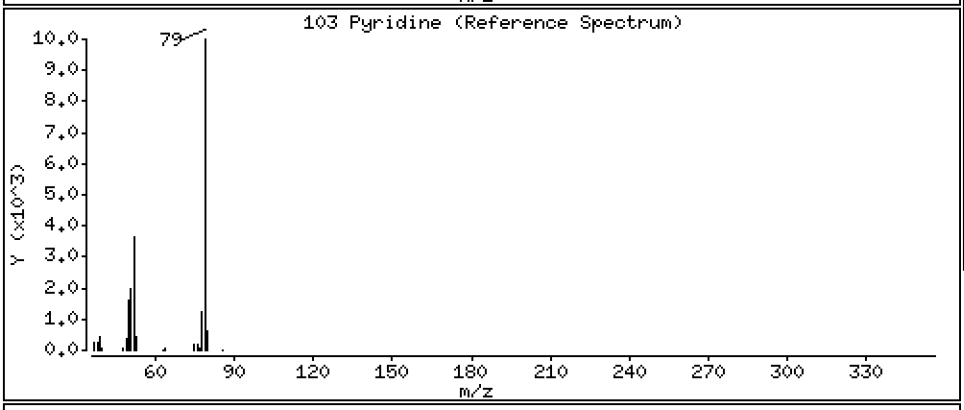
Concentration: 3.501 ug/ml

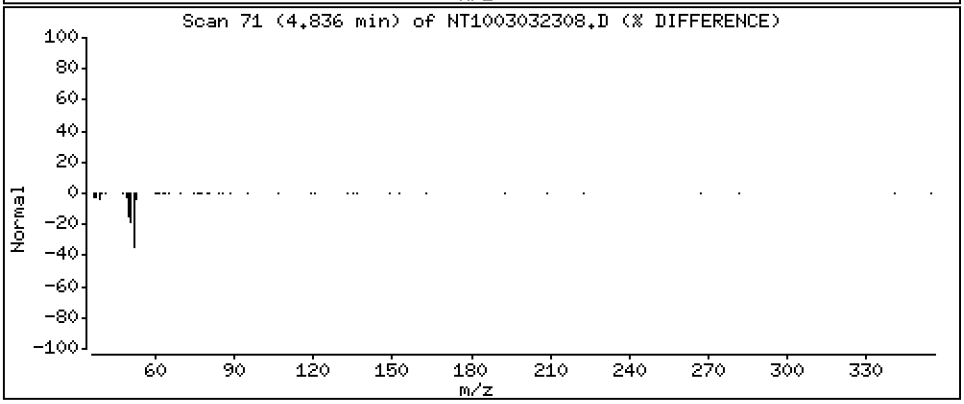












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

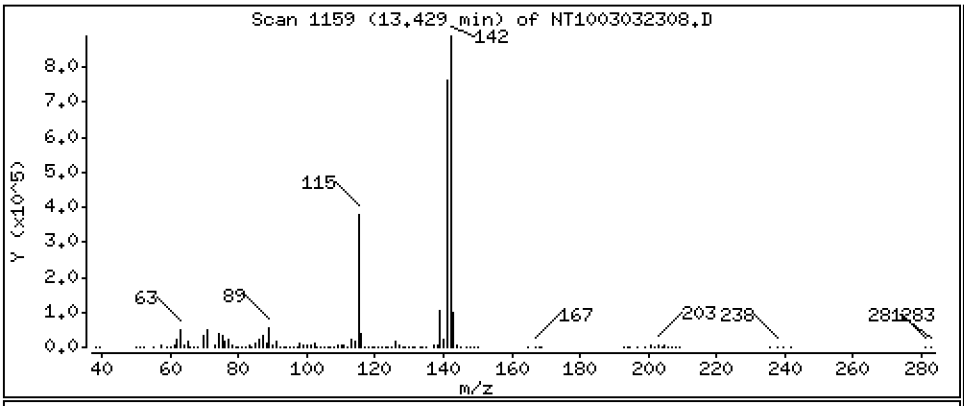
Operator: VTS

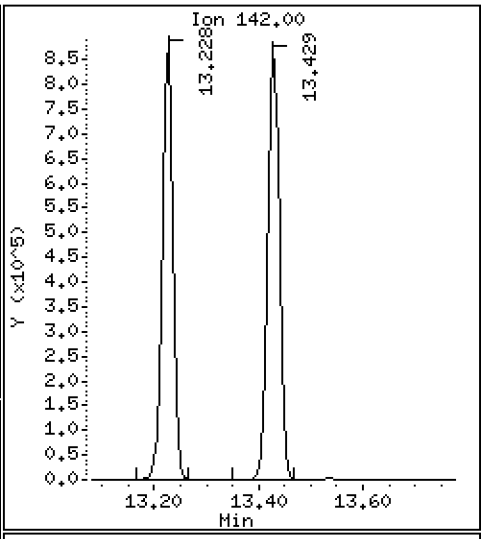
Column phase: ZB-5msi

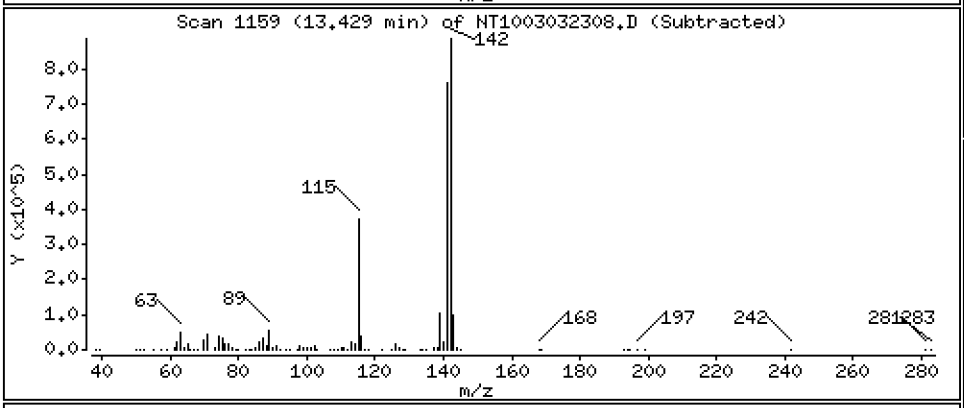
Column diameter: 0.25

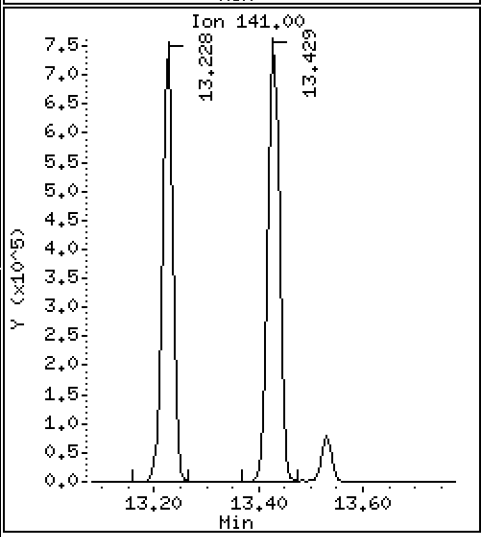
105 1-methylnaphthalene

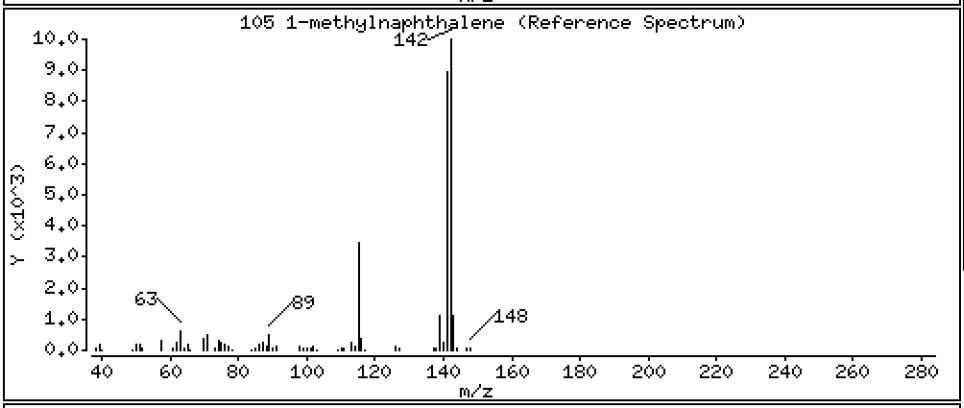
Concentration: 4.000 ug/ml

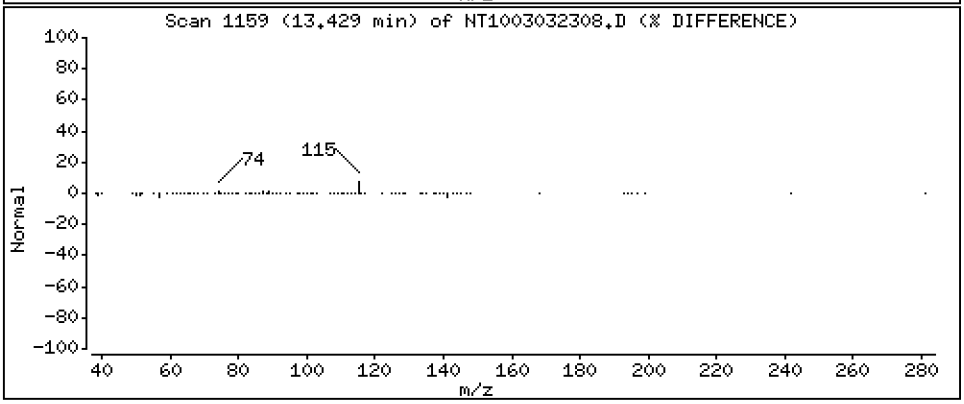












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

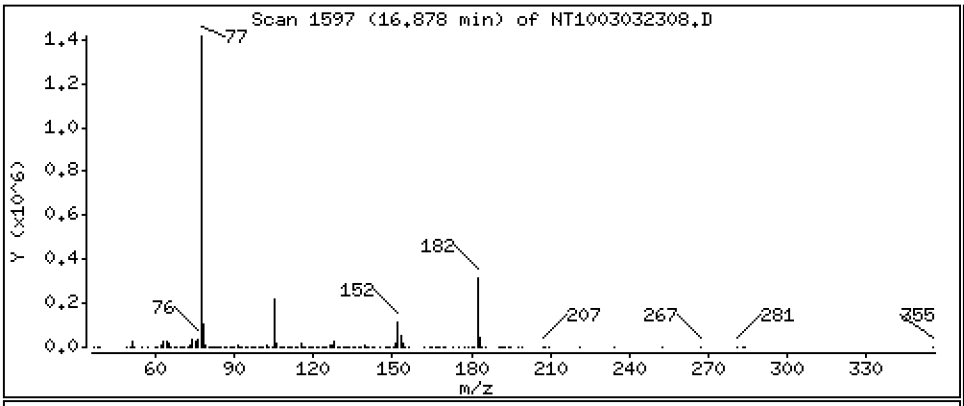
Operator: VTS

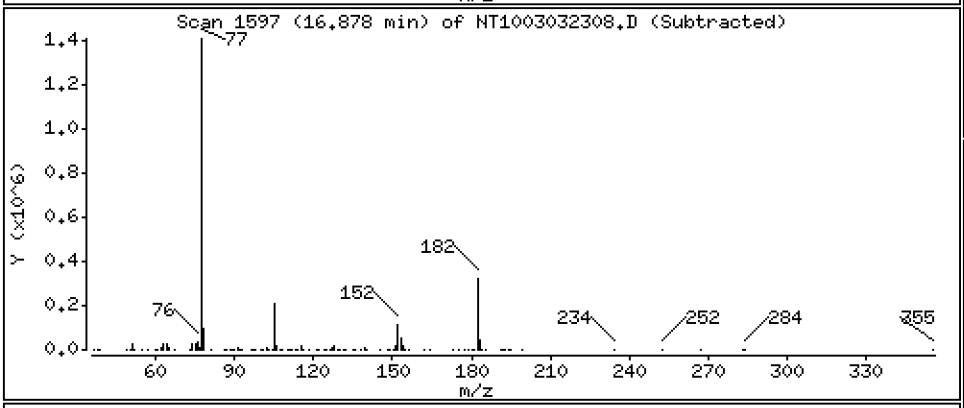
Column phase: ZB-5msi

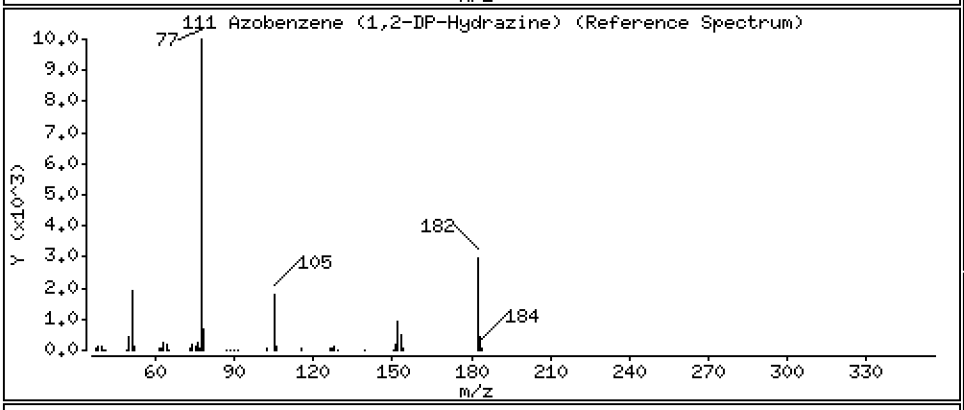
Column diameter: 0.25

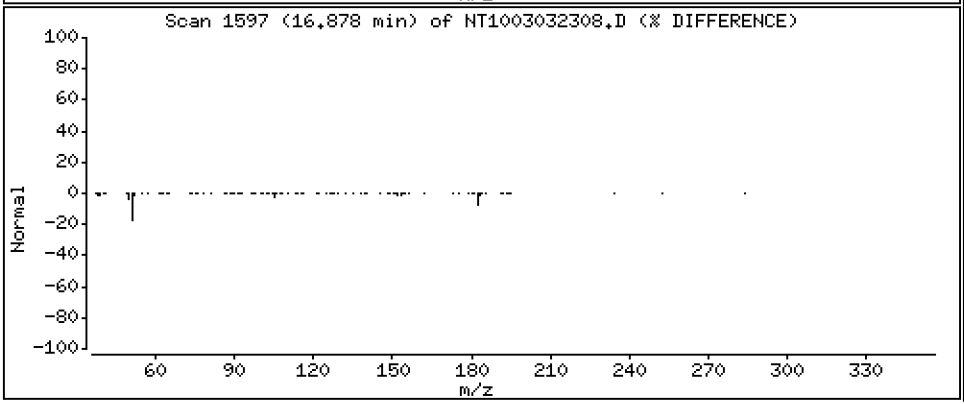
111 Azobenzene (1,2-DP-Hydrazine)

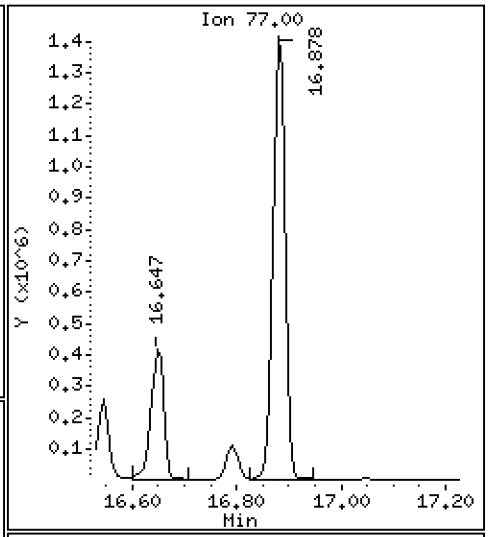
Concentration: 4.215 ug/ml

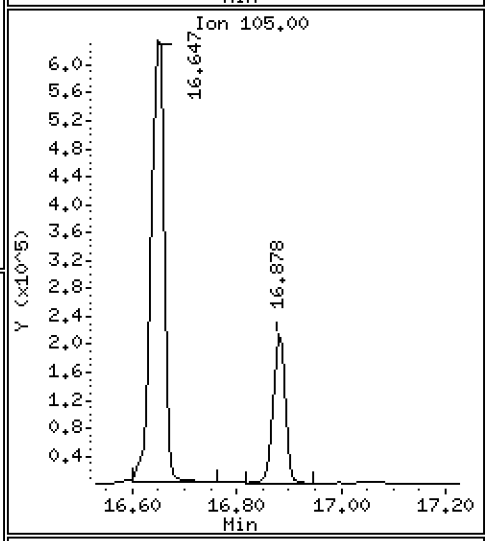


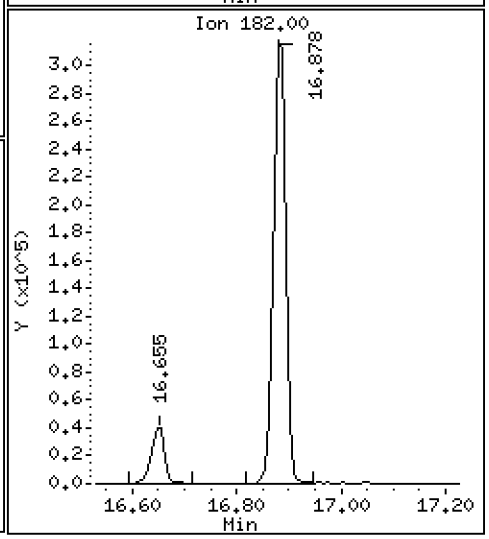












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

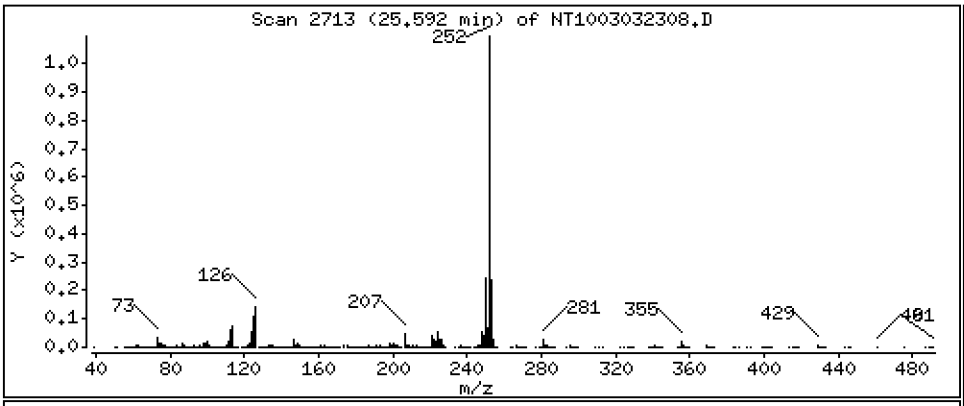
Operator: VTS

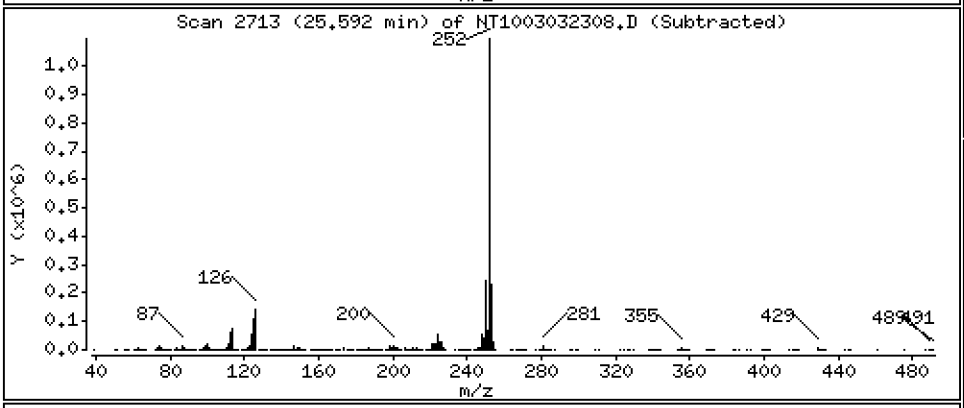
Column phase: ZB-5msi

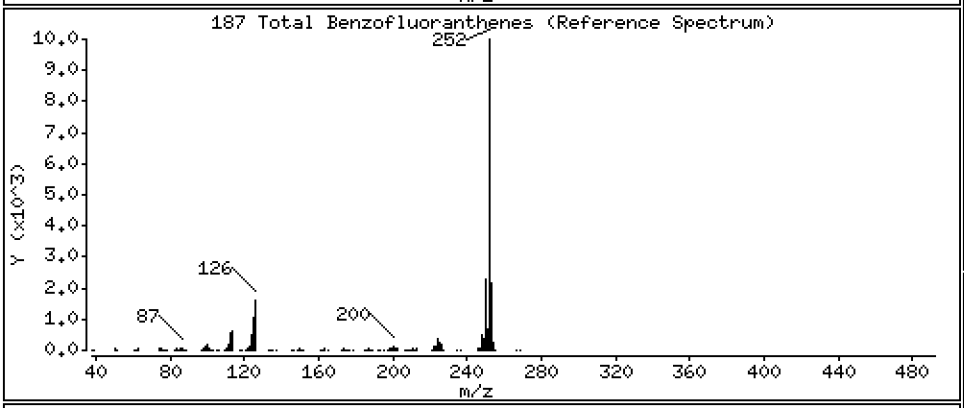
Column diameter: 0.25

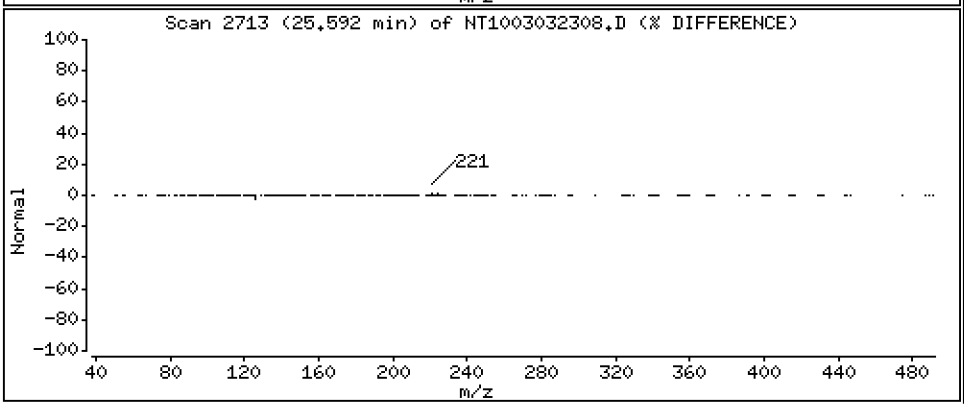
187 Total Benzofluoranthenes

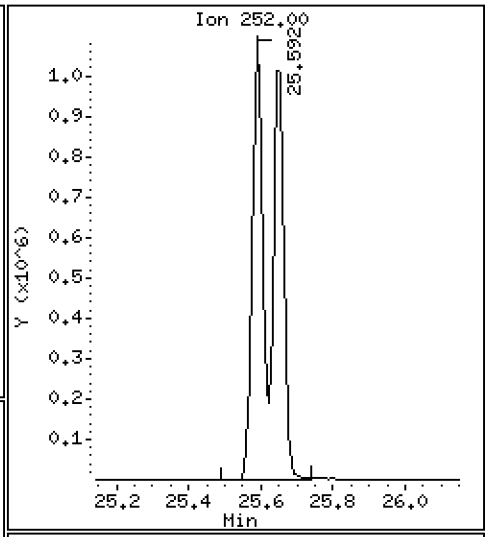
Concentration: 8.879 ug/ml

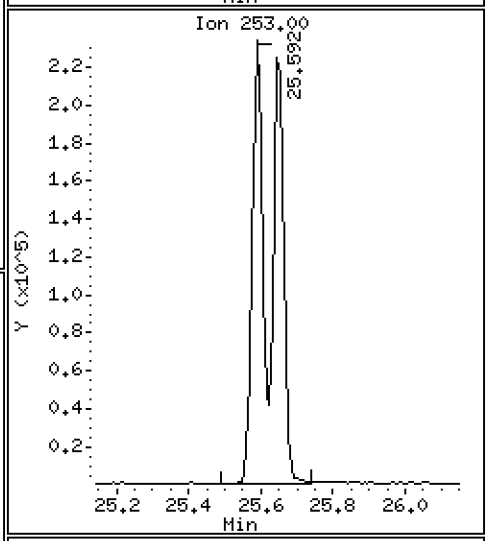


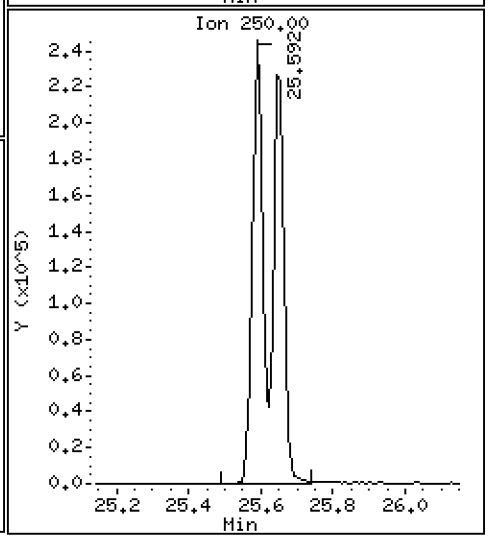












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

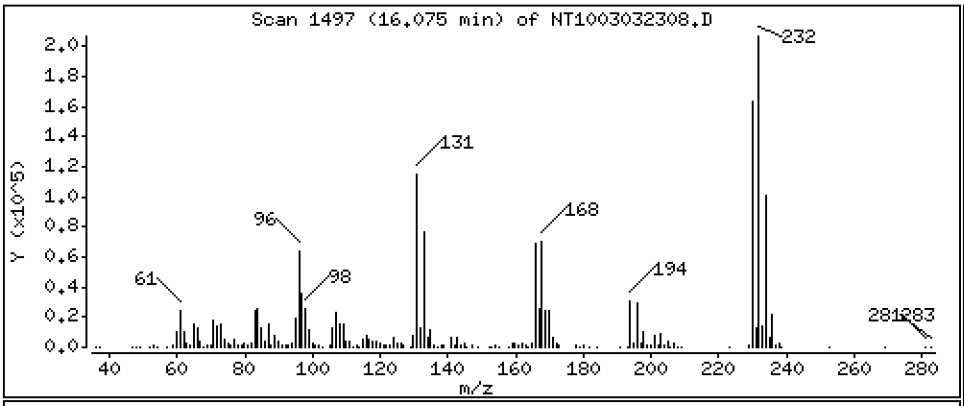
Operator: VTS

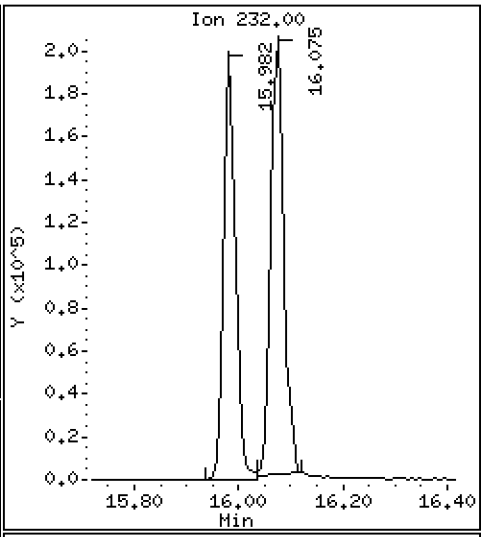
Column phase: ZB-5msi

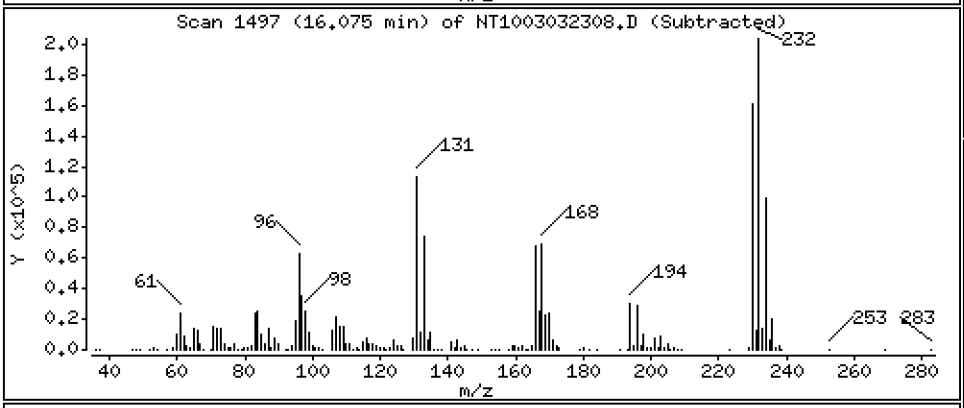
Column diameter: 0.25

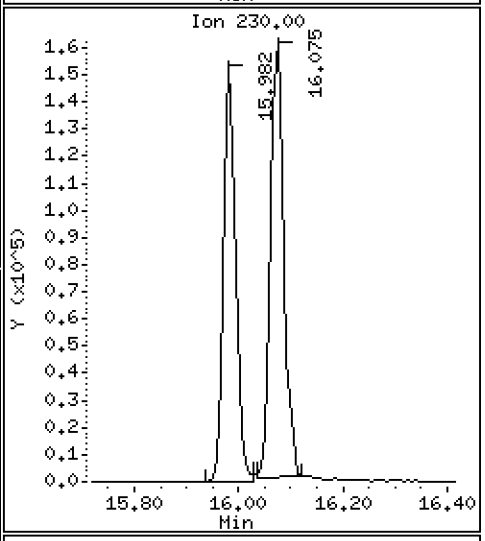
120 2,3,4,6-Tetrachlorophenol

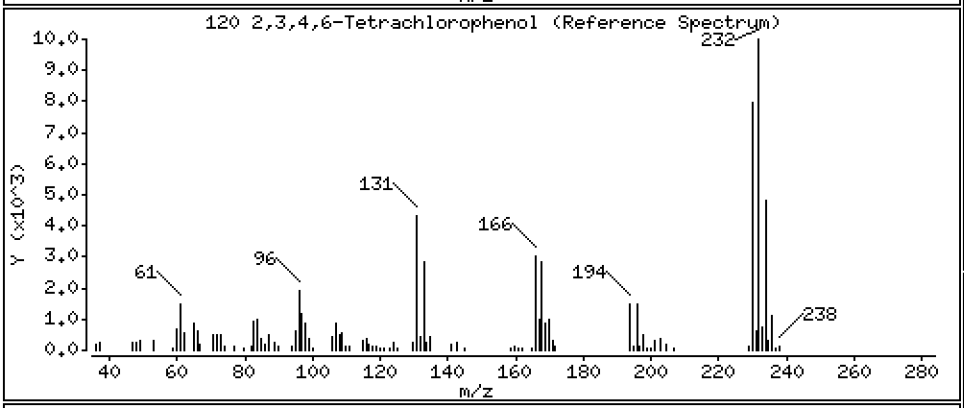
Concentration: 4.313 ug/ml

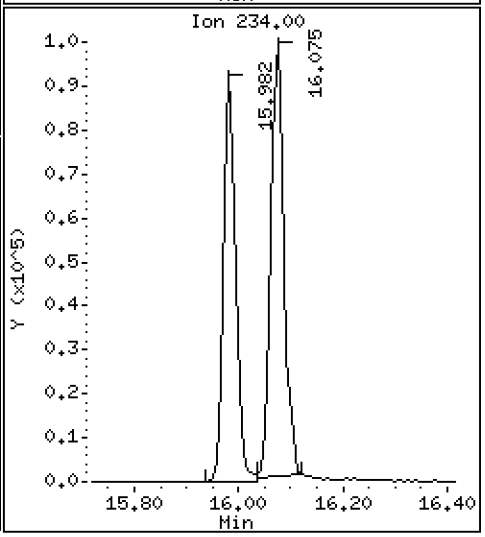


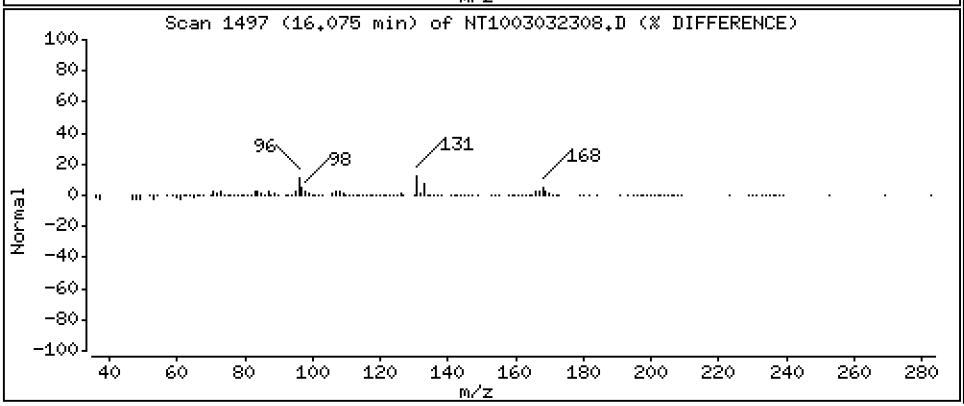












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230303.b\NT1003032308.D
Lab Smp Id: BLA0673-BSD1
Inj Date : 03-MAR-2023 22:15
Operator : VTS Inst ID: nt10.i
Smp Info : BLA0673-BSD1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230303.b\ABN.m
Meth Date : 05-Jul-2023 12:33 van Quant Type: ISTD
Cal Date : 01-MAR-2023 18:37 Cal File: NT1003012306.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/ml)
$	1 2-Fluorophenol	112	6.928	6.912	(0.747)	920634	5.54372	5.544
$	2 Phenol-d5	99	8.535	8.527	(0.920)	1279484	6.63621	6.636
	3 Phenol	94	8.558	8.550	(0.922)	818114	3.99103	3.991
$	5 2-Chlorophenol-d4	132	8.852	8.844	(0.954)	1023864	6.22429	6.224
	4 Bis(2-Chloroethyl)ether	93	8.767	8.767	(0.945)	742933	4.74284	4.743
	6 2-Chlorophenol	128	8.875	8.875	(0.957)	694691	4.06518	4.065
	7 1,3-Dichlorobenzene	146	9.169	9.169	(0.988)	673489	3.57459	3.575
*	8 1,4-Dichlorobenzene-d4	152	9.278	9.278	(1.000)	527824	4.00000	
	9 1,4-Dichlorobenzene	146	9.309	9.309	(1.003)	745435	3.98312	3.983
$	10 1,2-Dichlorobenzene-d4	152	9.565	9.565	(1.031)	433925	3.53078	3.531
	12 1,2-Dichlorobenzene	146	9.596	9.596	(1.034)	661651	3.65263	3.653
	11 Benzyl alcohol	108	9.518	9.510	(1.026)	404294	3.77365	3.774
	14 2,2'-oxybis(1-Chloropropane)	121	9.774	9.767	(1.054)	226586	4.33873	4.339
	13 2-Methylphenol	108	9.697	9.697	(1.045)	511108	3.17283	3.173
	17 Hexachloroethane	117	10.248	10.248	(1.105)	299779	3.90252	3.903
	16 N-Nitroso-di-n-propylamine	70	10.023	10.023	(1.080)	525662	4.24960	4.250
	15 4-Methylphenol	108	10.000	9.984	(1.078)	605946	3.06485	3.065
$	18 Nitrobenzene-d5	82	10.341	10.333	(0.878)	848506	3.98365	3.984
	19 Nitrobenzene	77	10.380	10.372	(0.882)	832053	4.16439	4.164
	20 Isophorone	82	10.845	10.838	(0.921)	1613836	6.32762	6.328
	21 2-Nitrophenol	139	11.001	11.001	(0.934)	324160	2.98304	2.983
	22 2,4-Dimethylphenol	107	11.052	11.052	(0.939)	1071183	5.53057	5.531

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
	23 Bis(2-Chloroethoxy)methane	93	11.264	11.255	(0.957)	847363	5.37619	5.376
	24 Benzoic acid	105	11.255	11.238	(0.956)	2489422	20.9430	20.94
	25 2,4-Dichlorophenol	162	11.468	11.468	(0.974)	2481127	15.7735	15.77
	26 1,2,4-Trichlorobenzene	180	11.649	11.649	(0.990)	553839	3.77021	3.770
*	27 Naphthalene-d8	136	11.773	11.772	(1.000)	1940361	4.00000	
	28 Naphthalene	128	11.819	11.819	(1.004)	1893482	3.80203	3.802
	29 4-Chloroaniline	127	11.919	11.911	(1.012)	2093888	9.31094	9.311
	30 Hexachlorobutadiene	225	12.043	12.035	(1.023)	341159	3.12461	3.125
	31 4-Chloro-3-methylphenol	107	12.871	12.863	(1.093)	2690733	15.8653	15.87
	32 2-Methylnaphthalene	142	13.227	13.219	(1.124)	1301137	3.69823	3.698
	33 Hexachlorocyclopentadiene	237	13.529	13.529	(0.879)	765680	20.0332	20.03
	34 2,4,6-Trichlorophenol	196	13.792	13.792	(0.896)	1697697	16.6240	16.62
	35 2,4,5-Trichlorophenol	196	13.862	13.861	(0.900)	1845366	16.8336	16.83
$	36 2-Fluorobiphenyl	172	13.978	13.978	(0.908)	1471490	4.16196	4.162
	37 2-Chloronaphthalene	162	14.233	14.233	(0.925)	1197141	4.31323	4.313
	38 2-Nitroaniline	65	14.450	14.442	(0.939)	1262820	15.7338	15.73
	39 Dimethylphthalate	163	14.821	14.821	(0.963)	1459929	4.56058	4.561
	40 Acenaphthylene	152	15.116	15.092	(0.982)	965725	2.01822	2.018
	41 2,6-Dinitrotoluene	165	14.961	14.953	(0.972)	1257798	16.8991	16.90
*	42 Acenaphthene-d10	164	15.394	15.394	(1.000)	991239	4.00000	
	43 3-Nitroaniline	138	15.309	15.301	(0.994)	1044320	12.4268	12.43
	44 Acenaphthene	153	15.463	15.463	(1.005)	1219508	4.22588	4.226
	45 2,4-Dinitrophenol	184	15.533	15.525	(1.009)	1269787	75.3841	75.38
	46 Dibenzofuran	168	15.827	15.827	(1.028)	1751834	4.09024	4.090
	47 4-Nitrophenol	109	15.633	15.626	(1.016)	875114	14.5161	14.52
	48 2,4-Dinitrotoluene	165	15.803	15.796	(1.027)	1708556	15.7425	15.74
	50 Diethylphthalate	149	16.306	16.298	(1.059)	1568893	4.62631	4.626
	49 Fluorene	166	16.546	16.546	(1.075)	1522785	4.27333	4.273
	51 4-Chlorophenyl-phenylether	204	16.546	16.546	(1.075)	745922	4.58875	4.589
	52 4-Nitroaniline	138	16.592	16.585	(1.078)	873617	10.0676	10.07
	53 4,6-Dinitro-2-methylphenol	198	16.654	16.646	(0.899)	2397113	50.9342	50.93
	54 N-Nitrosodiphenylamine	169	16.793	16.785	(0.907)	1149610	4.73660	4.737
$	55 2,4,6-Tribromophenol	330	17.047	17.047	(1.107)	381214	6.00570	6.006
	56 4-Bromophenyl-phenylether	248	17.581	17.573	(0.949)	542777	5.51913	5.519
	57 Hexachlorobenzene	284	17.689	17.681	(0.955)	609137	5.50036	5.500
	58 Pentachlorophenol	266	18.107	18.107	(0.977)	773599	13.8482	13.85
*	59 Phenanthrene-d10	188	18.525	18.525	(1.000)	1640403	4.00000	
	60 Phenanthrene	178	18.579	18.571	(1.003)	1943725	4.63002	4.630
	61 Anthracene	178	18.680	18.680	(1.008)	1610308	3.95580	3.956
	62 Carbazole	167	19.028	19.020	(1.027)	1600379	4.29138	4.291
	63 Di-n-butylphthalate	149	19.732	19.724	(1.065)	2649559	5.04948	5.049
	64 Fluoranthene	202	20.970	20.970	(0.888)	2253448	5.00694	5.007
	65 Pyrene	202	21.419	21.395	(0.907)	1111972	2.42639	2.426
$	66 Terphenyl-d14	244	21.697	21.689	(0.919)	1825371	4.92259	4.923
	67 Butylbenzylphthalate	149	22.595	22.588	(0.957)	1000805	4.12008	4.120
	68 Benzo(a)anthracene	228	23.602	23.594	(0.999)	1969380	4.26912	4.269
*	69 Chrysene-d12	240	23.617	23.617	(1.000)	1308296	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.548	23.540	(0.997)	1496596	7.22130	7.221
	71 Chrysene	228	23.664	23.664	(1.002)	1795548	4.80674	4.807
	72 bis(2-Ethylhexyl)phthalate	149	23.610	23.602	(0.955)	761961	2.39978	2.400
*	134 Di-n-octylphthalate-d4	153	24.732	24.732	(1.000)	2233087	4.00000	
	73 Di-n-octylphthalate	149	24.740	24.740	(1.000)	834858	1.68593	1.686
	74 Benzo(b)fluoranthene	252	25.592	25.584	(0.968)	2169869	4.13984	4.140(H)
	75 Benzo(k)fluoranthene	252	25.646	25.646	(0.970)	2353071	4.62924	4.629

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
76	Benzo(a)pyrene	252	26.320	26.312	(0.995)	1869895	3.99878	3.999
* 77	Perylene-d12	264	26.444	26.443	(1.000)	1470537	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.383	29.383	(1.111)	2547918	4.62872	4.629
79	Dibenzo(a,h)anthracene	278	29.437	29.429	(1.113)	2146166	5.08023	5.080
80	Benzo(g,h,i)perylene	276	30.284	30.268	(1.145)	2146873	4.92453	4.925
90	N-Nitrosodimethylamine	74	4.766	4.750	(0.514)	1326913	12.3771	12.38
91	Aniline	93	8.666	8.659	(0.934)	2120802	8.92294	8.923
93	Benzidine	184	21.241	21.225	(0.899)	229	0.00115	0.001146
103	Pyridine	79	4.835	4.812	(0.521)	665700	3.50132	3.501
105	1-methylnaphthalene	142	13.428	13.428	(1.141)	1273749	4.00001	4.000
111	Azobenzene (1,2-DP-Hydrazine)	77	16.878	16.878	(1.096)	2134564	4.21505	4.215
187	Total Benzofluoranthenes	252	25.592	25.646	(0.968)	4490785	8.87924	8.879
120	2,3,4,6-Tetrachlorophenol	232	16.074	16.066	(1.044)	376258	4.31309	4.313

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032308.D
Lab Smp Id: BLA0673-BSD1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230303.b\ABN.m
Misc Info:

Calibration Date: 03-MAR-2023
Calibration Time: 18:27

Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	505000	252500	1010000	527824	4.52
27 Naphthalene-d8	1846542	923271	3693084	1940361	5.08
42 Acenaphthene-d10	936949	468475	1873898	991239	5.79
59 Phenanthrene-d10	1548373	774187	3096746	1640403	5.94
69 Chrysene-d12	1352261	676131	2704522	1308296	-3.25
134 Di-n-octylphthala	2300648	1150324	4601296	2233087	-2.94
77 Perylene-d12	1445020	722510	2890040	1470537	1.77

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	0.00
27 Naphthalene-d8	11.77	11.27	12.27	11.77	0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	0.00
59 Phenanthrene-d10	18.53	18.03	19.03	18.53	0.00
69 Chrysene-d12	23.62	23.12	24.12	23.62	0.00
134 Di-n-octylphthala	24.73	24.23	25.23	24.73	0.00
77 Perylene-d12	26.44	25.94	26.94	26.44	0.00

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

REVIEW SUMMARY FOR FILE - NT1003032308.D

Lab ID: BLA0673-BSD1
nt10.i, 20230303.b\ABN.m,   03-MAR-2023 22:15

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: NT1003032302.D

On Column LOD for nt10.i, 20230303.b\ABN.m, ICAL.sub = 0.0000

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

Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0673-SRM1
Batch: BLA0673
Initial/Final: 1 g / 1 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 03/04/2023 0:08
Standard ID: K003477
Expires: 01/31/2024
Standard Lot#: CRM 143 (LRAC8918)
Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Phenol	2660.0	2630	43.9	200		99.0	26 - 174
4-Methylphenol	6617.0	5350	73.9	200		80.8	40 - 160
Naphthalene	4458.0	2740	42.4	200		61.5	25 - 175
Acenaphthylene	1948.0	890	62.4	200		45.7	37 - 167
Dimethylphthalate	4537.0	4530	43.9	200		99.8	41 - 159
Acenaphthene	5489.0	4920	52.2	200		89.6	41 - 159
Dibenzofuran	6130.0	5540	141	200		90.4	45 - 155
Fluorene	3724.0	3610	146	200		97.0	44 - 156
Phenanthrene	5052.0	4830	87.2	200		95.6	46 - 154
Anthracene	2866.0	2260	71.9	200		78.8	42 - 158
Fluoranthene	2497.0	2380	60.9	200		95.3	39 - 161
Pyrene	2964.0	2360	56.8	200	Q	79.6	38 - 162
Butylbenzylphthalate	3511.0	2880	94.1	200		82.1	36 - 164
Benzo(a)anthracene	5751.0	5150	59.6	200		89.5	49 - 151
Chrysene	1477.0	1380	60.6	200		93.5	45 - 155
bis(2-Ethylhexyl)phthalate	2905.0	1480	54.6	500		51.1	26 - 174
Benzofluoranthenes, Total	6534.0	5070	100	400		77.5	40 - 160
Benzo(a)pyrene	5902.0	4240	42.3	200		71.8	43 - 157
Indeno(1,2,3-cd)pyrene	3914.0	4000	147	200		102	22 - 178
Dibenzo(a,h)anthracene	3420.0	3930	172	200		115	37 - 163
Benzo(g,h,i)perylene	1380.0	1570	136	200		114	35 - 165

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032311.D

Page 1

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

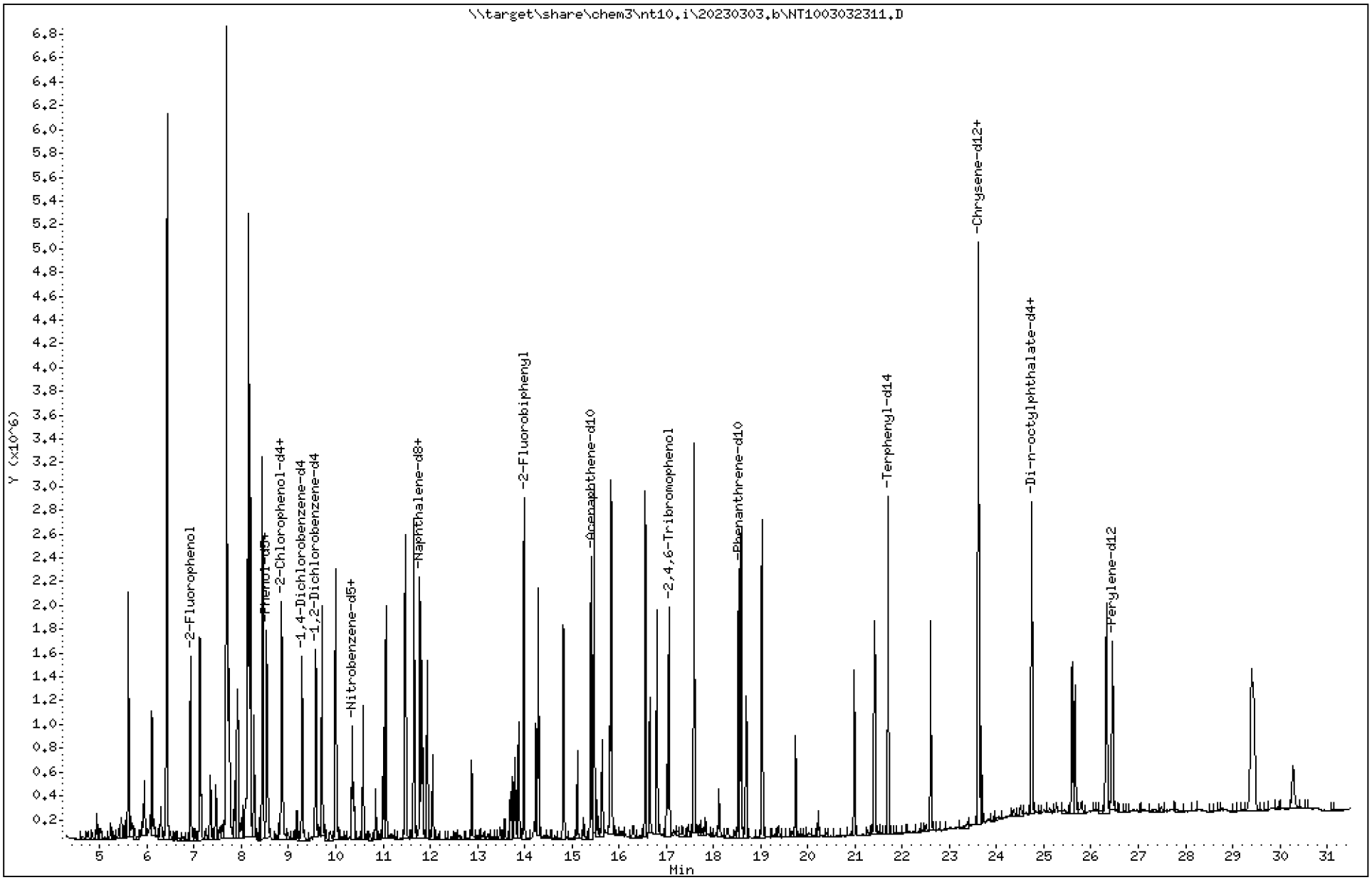
Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

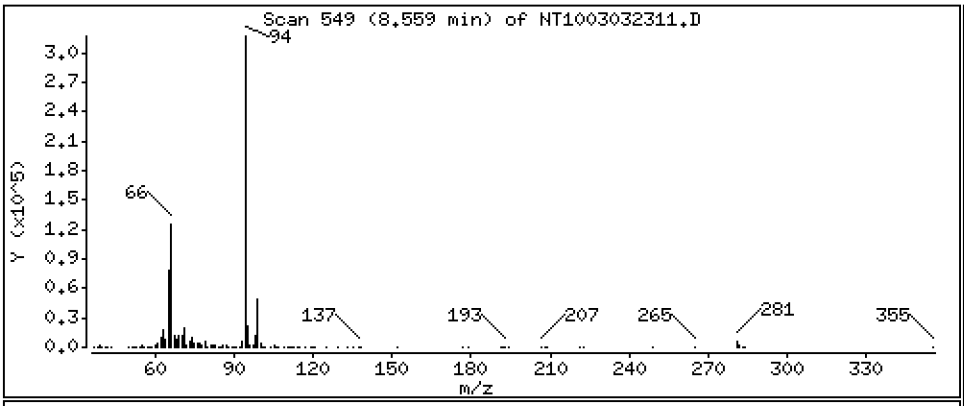
Operator: VTS

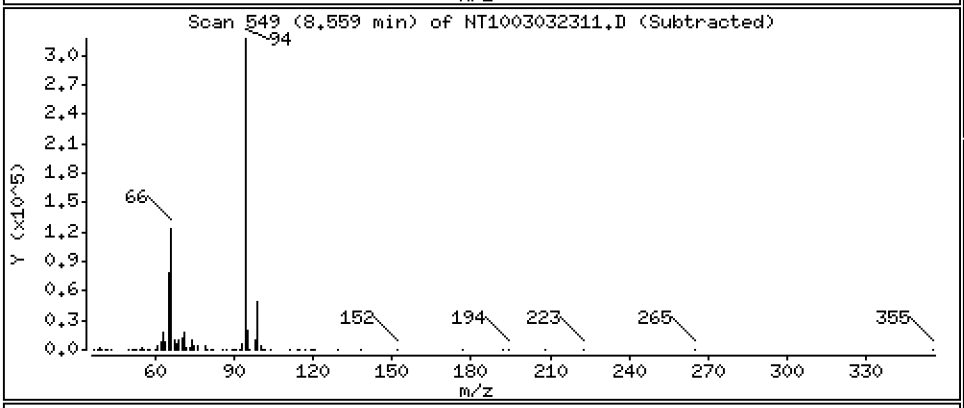
Column phase: ZB-5msi

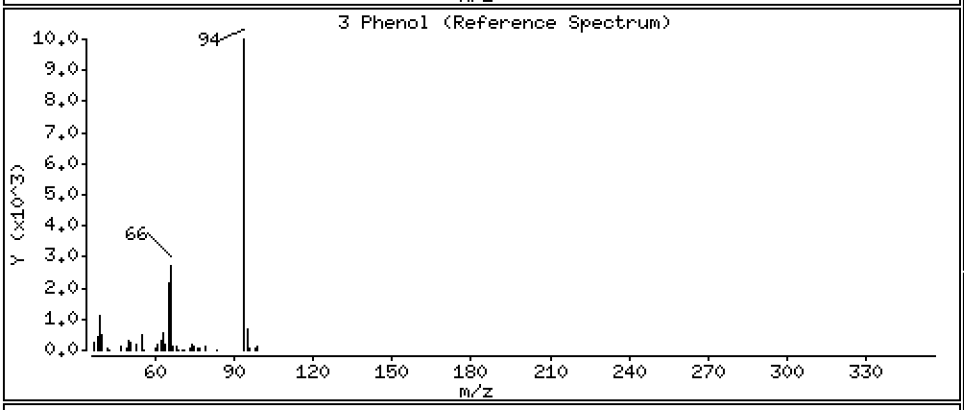
Column diameter: 0.25

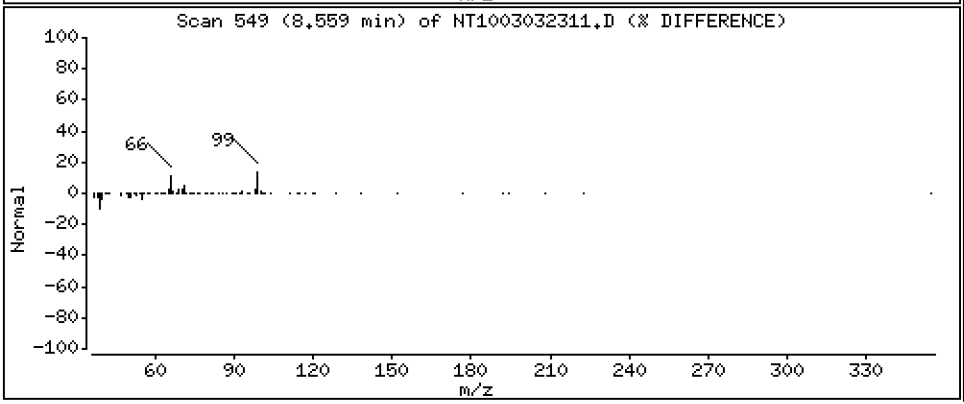
3 Phenol

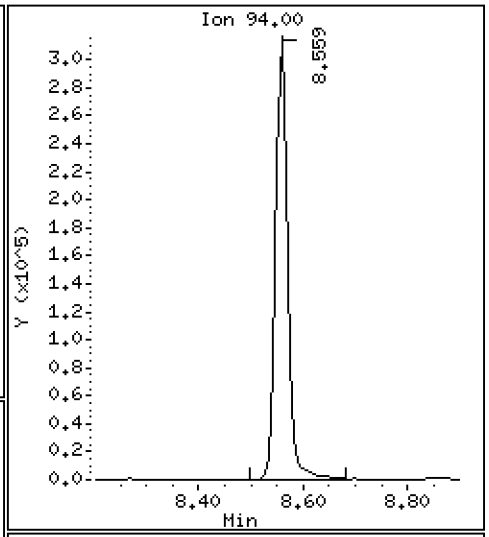
Concentration: 2.632 ug/ml

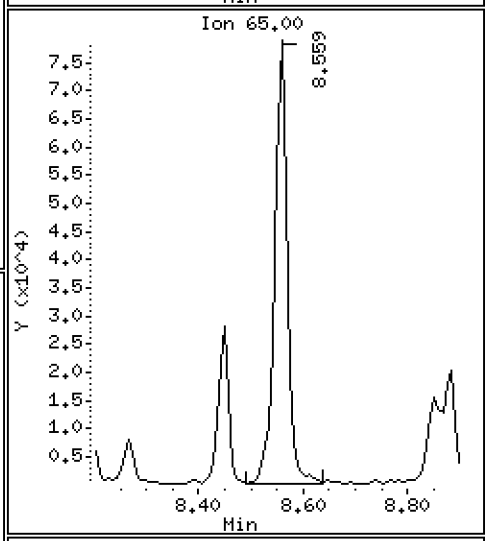


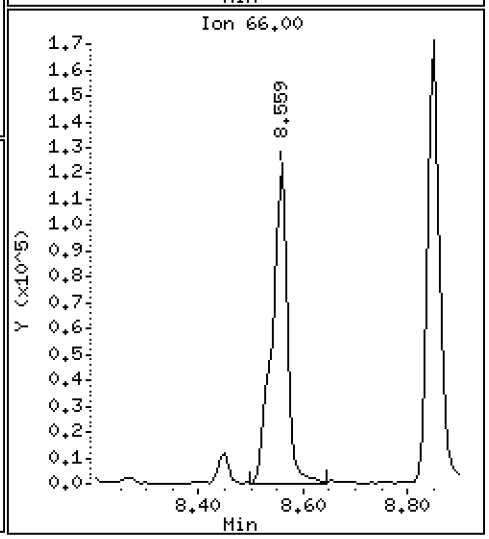












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

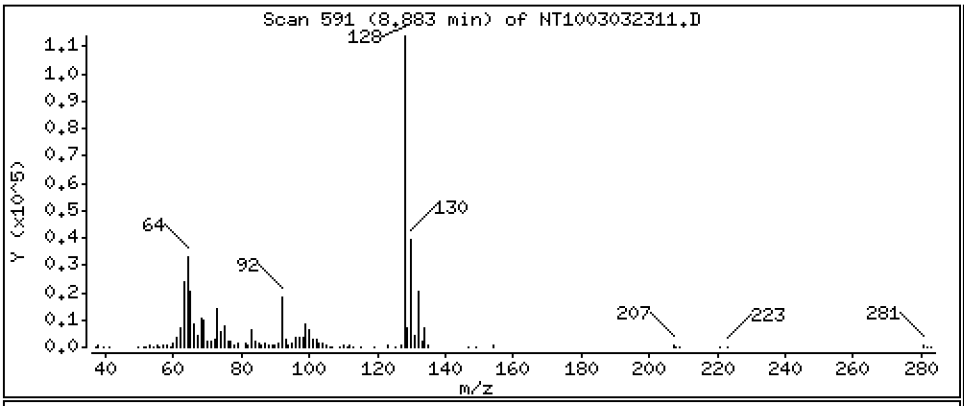
Operator: VTS

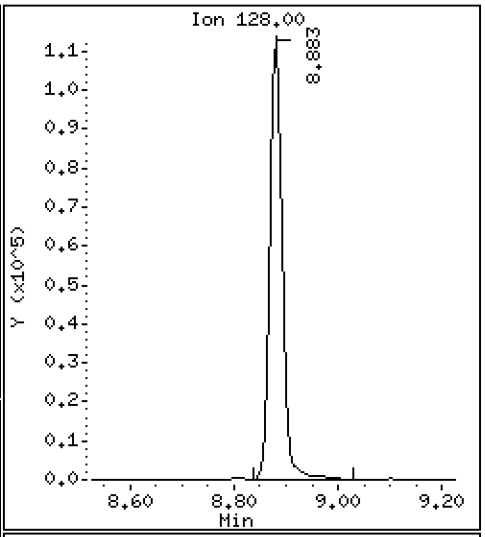
Column phase: ZB-5msi

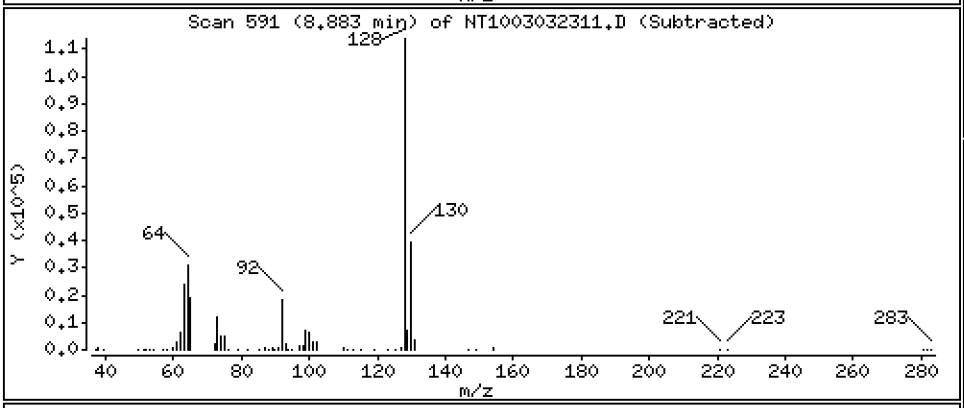
Column diameter: 0.25

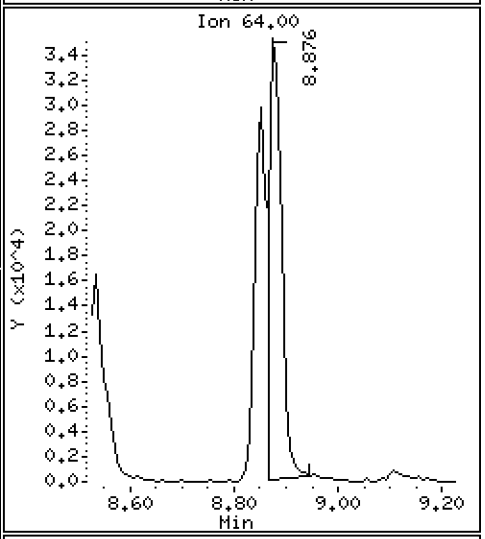
6 2-Chlorophenol

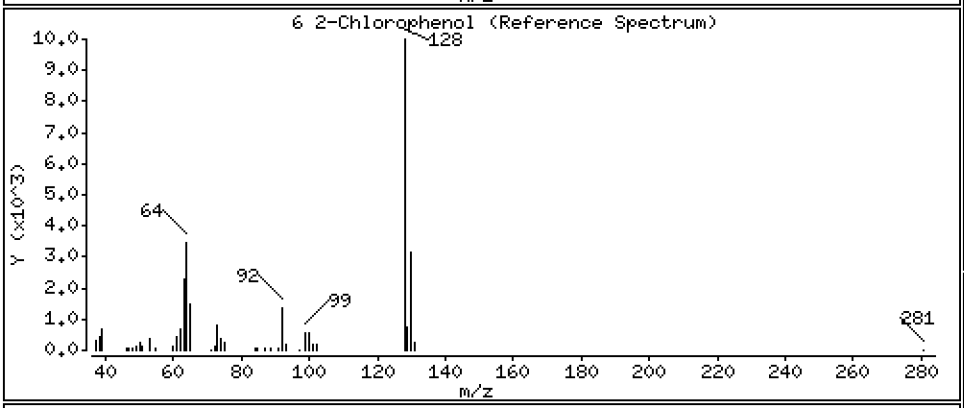
Concentration: 1.281 ug/ml

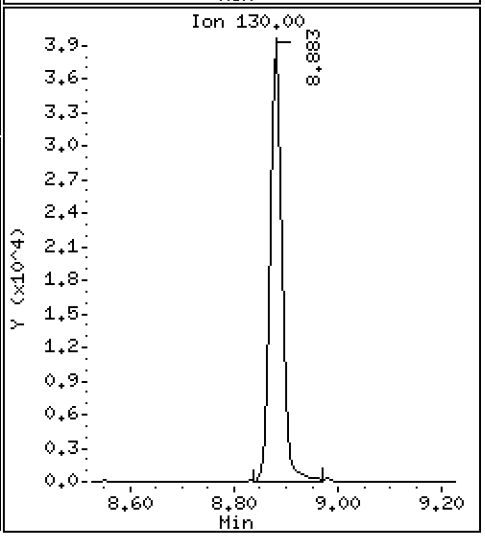


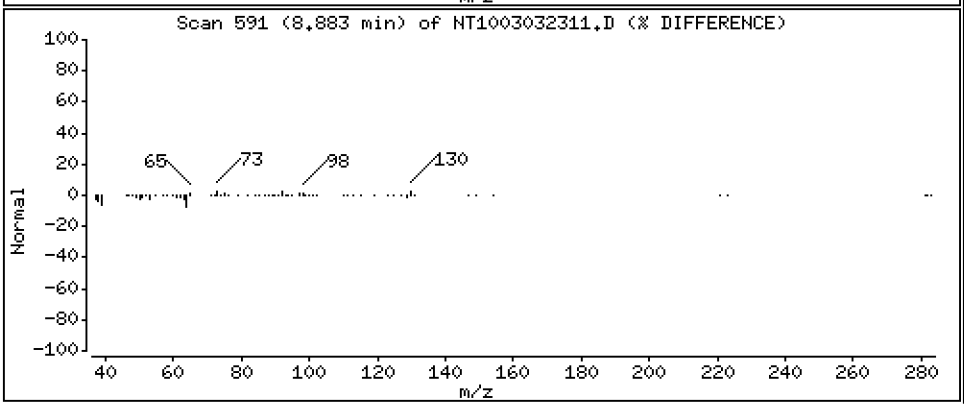












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

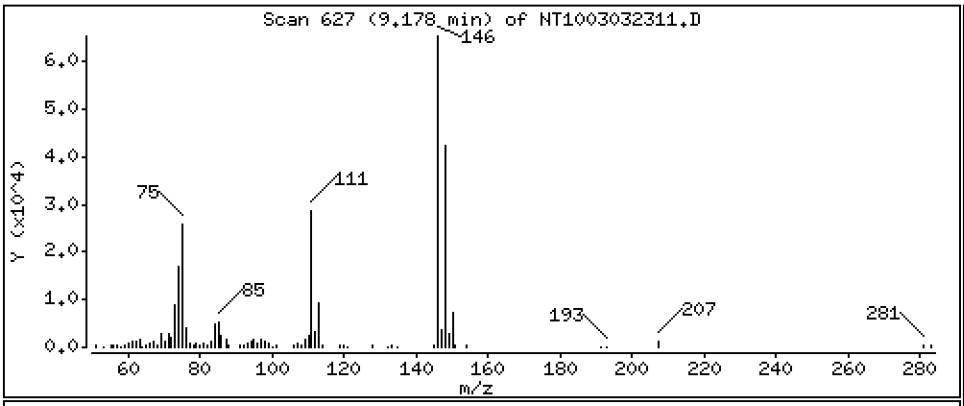
Operator: VTS

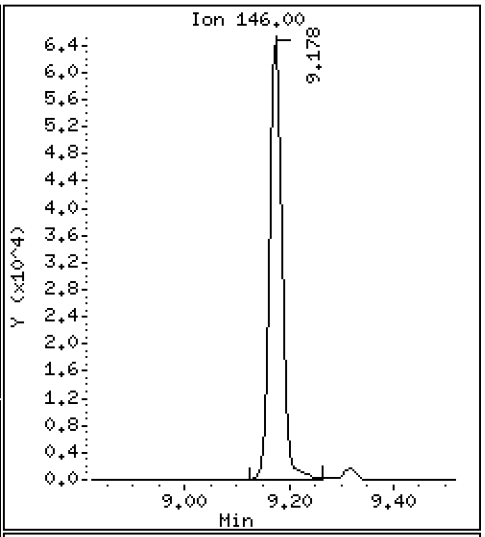
Column phase: ZB-5msi

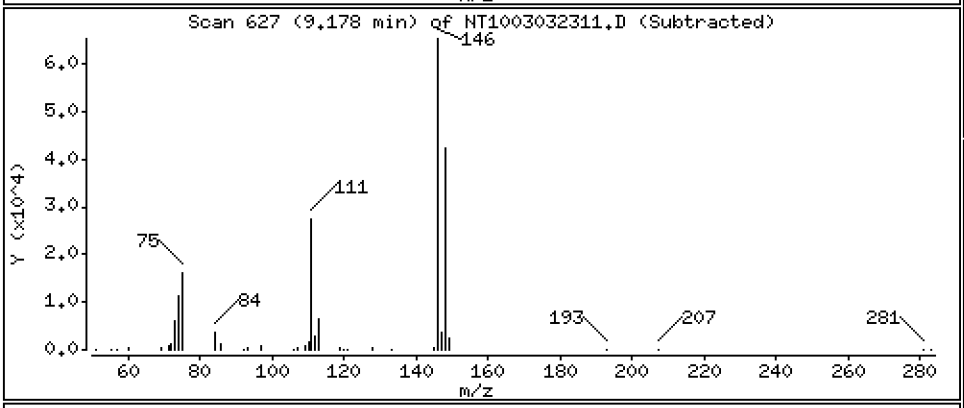
Column diameter: 0.25

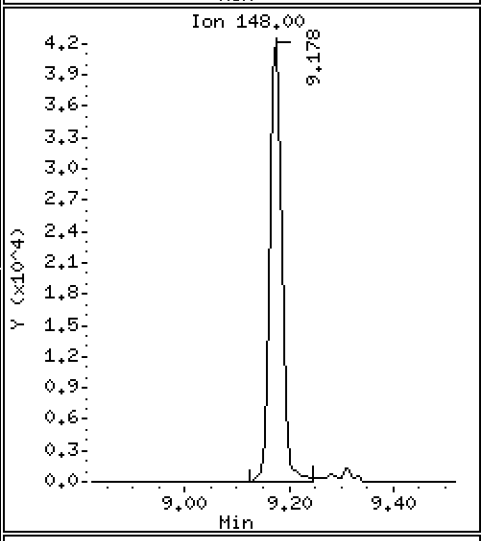
7 1,3-Dichlorobenzene

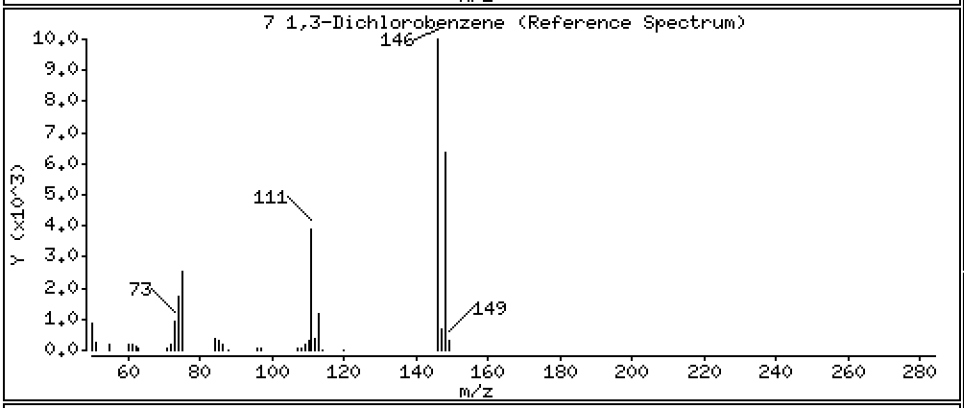
Concentration: 0.6156 ug/ml

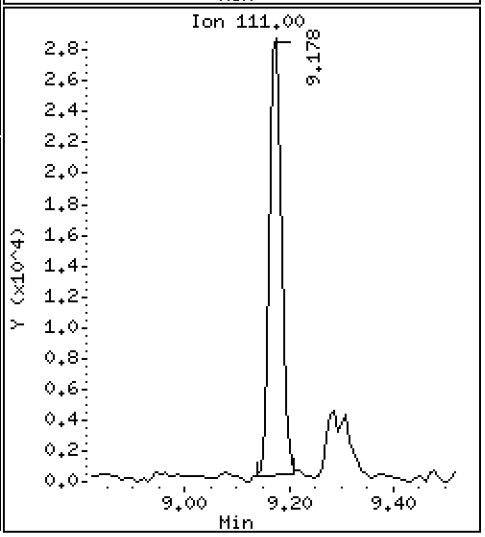


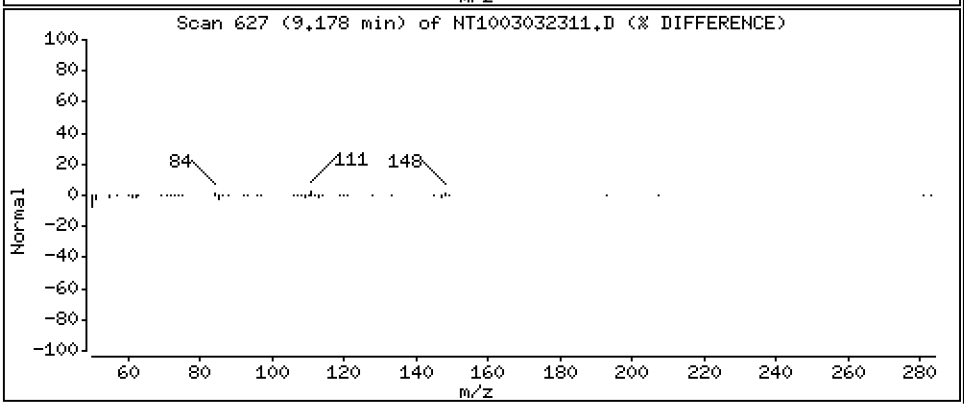












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

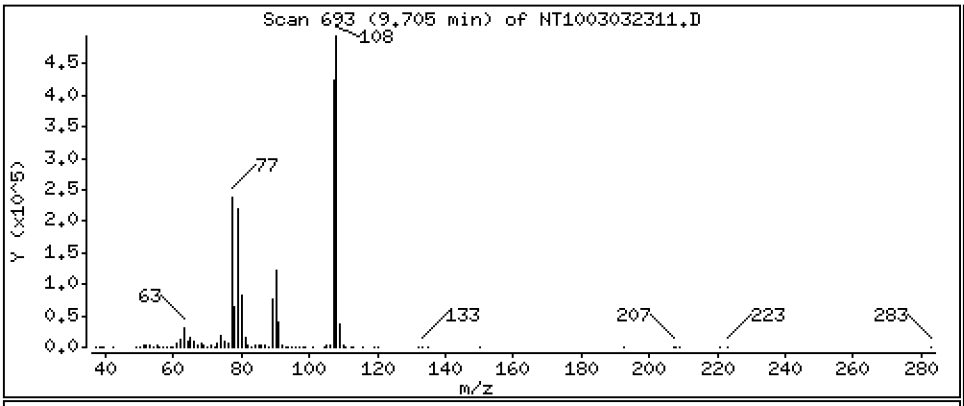
Operator: VTS

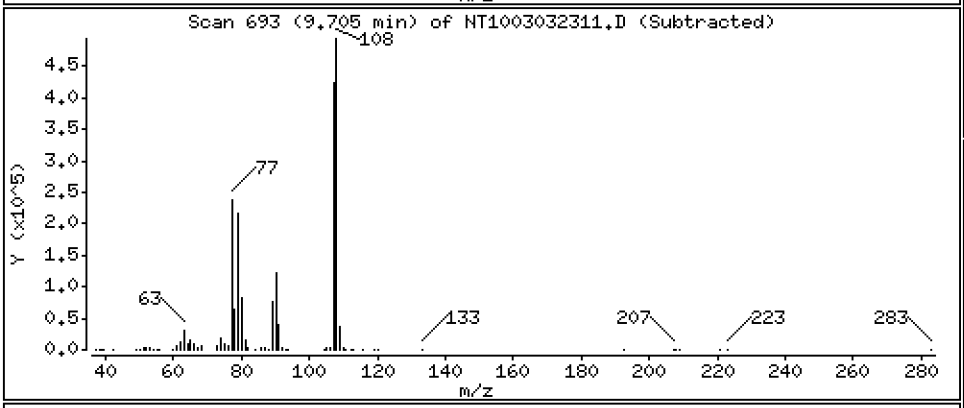
Column phase: ZB-5msi

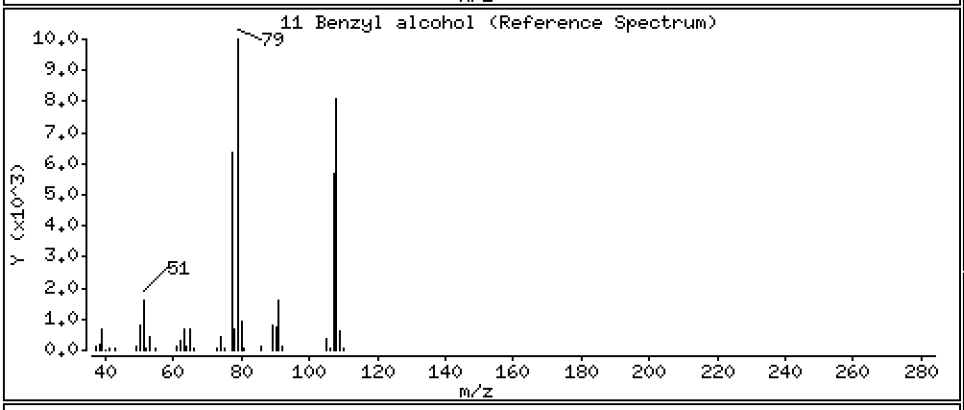
Column diameter: 0.25

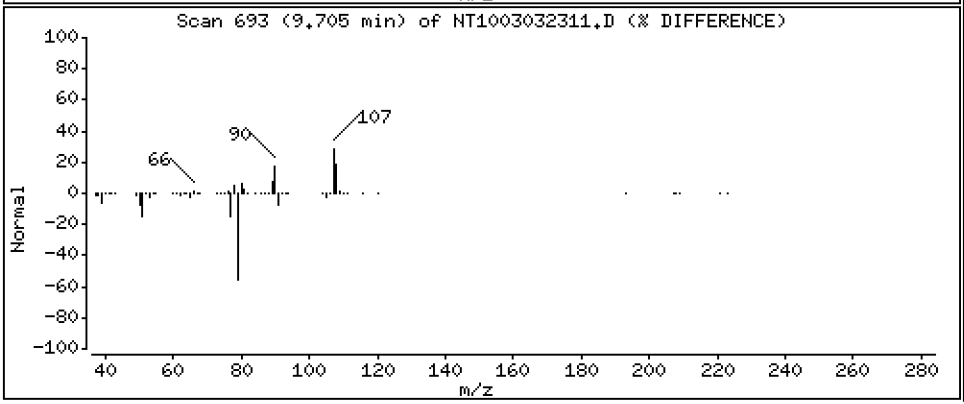
11 Benzyl alcohol

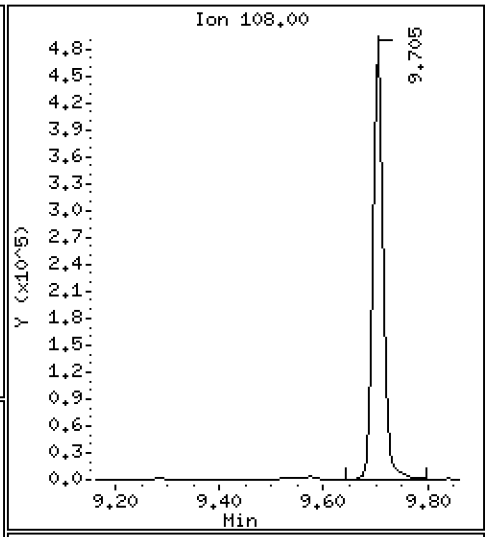
Concentration: 7.309 ug/ml

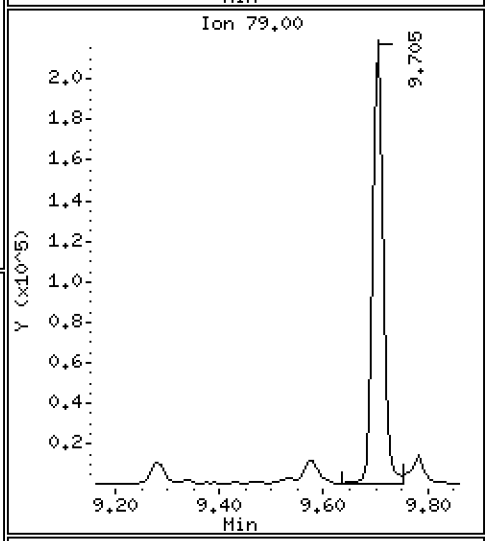


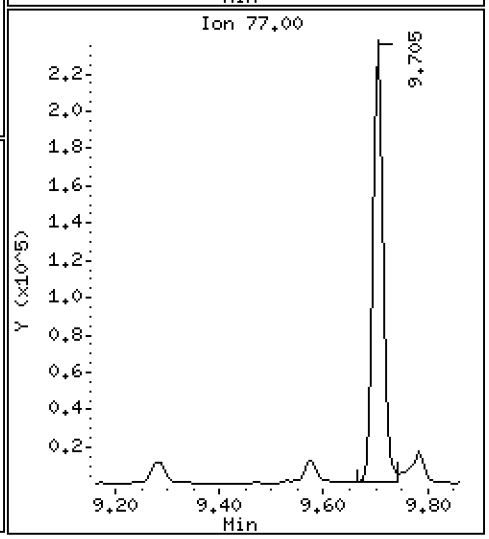












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

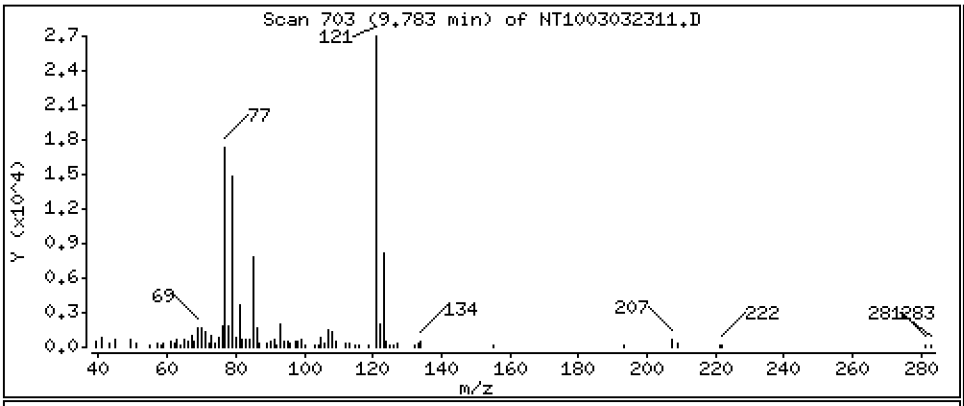
Operator: VTS

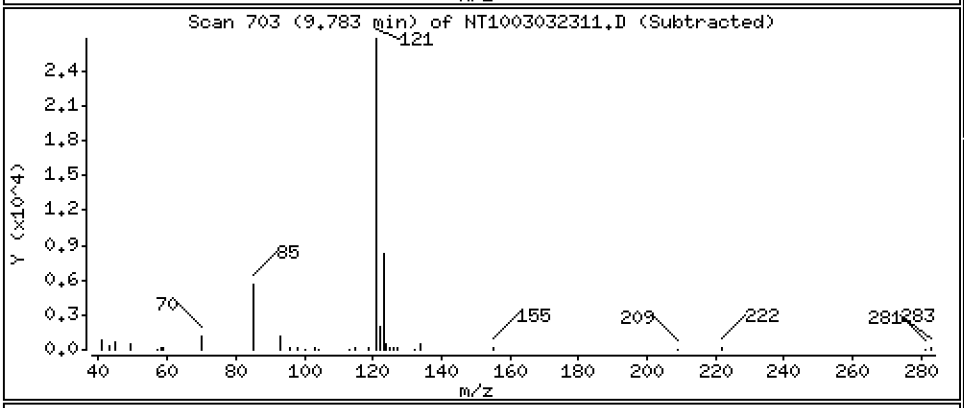
Column phase: ZB-5msi

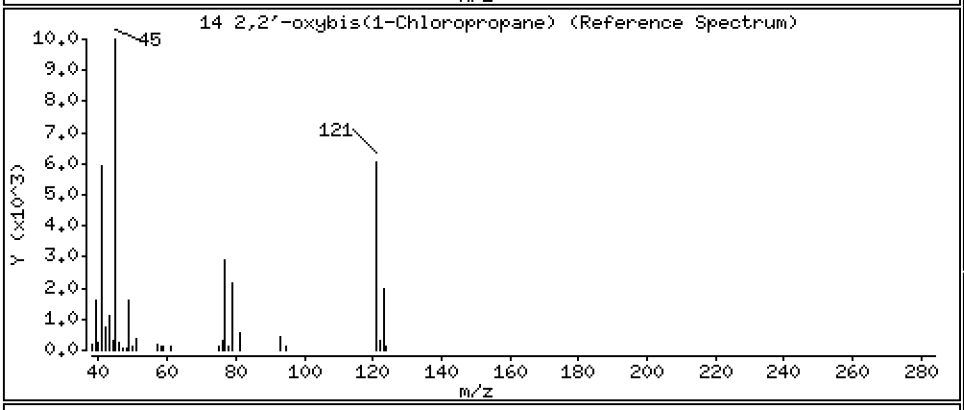
Column diameter: 0.25

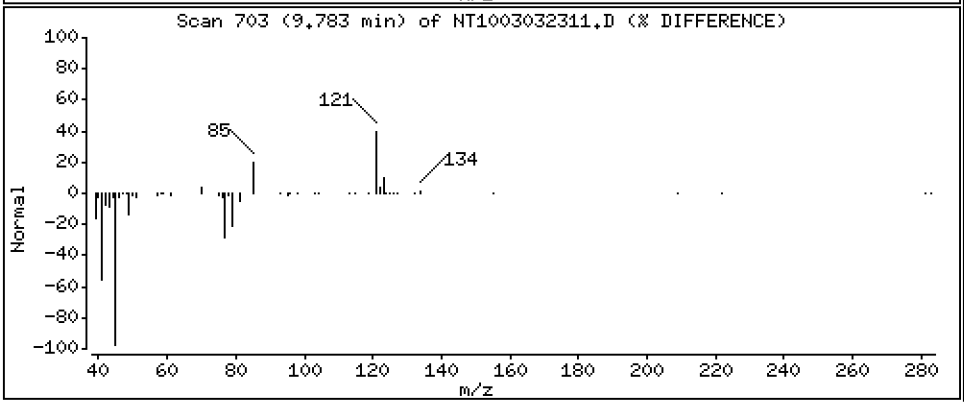
14 2,2'-oxybis(1-Chloropropane)

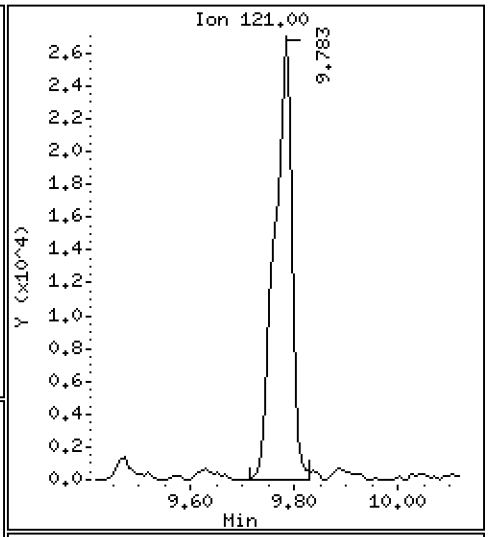
Concentration: 1.356 ug/ml

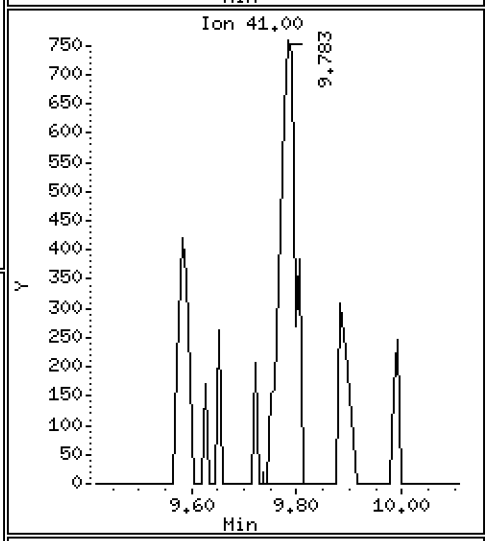


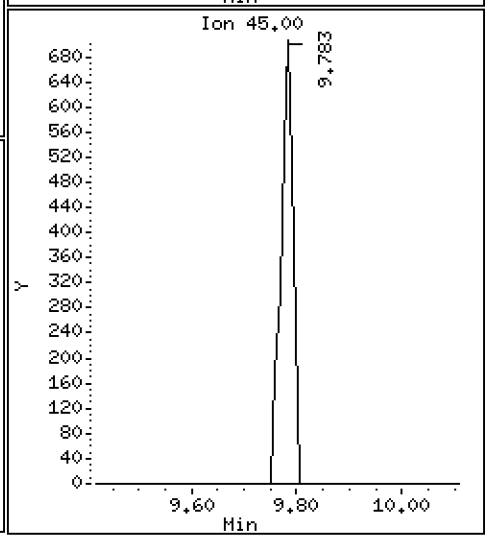












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

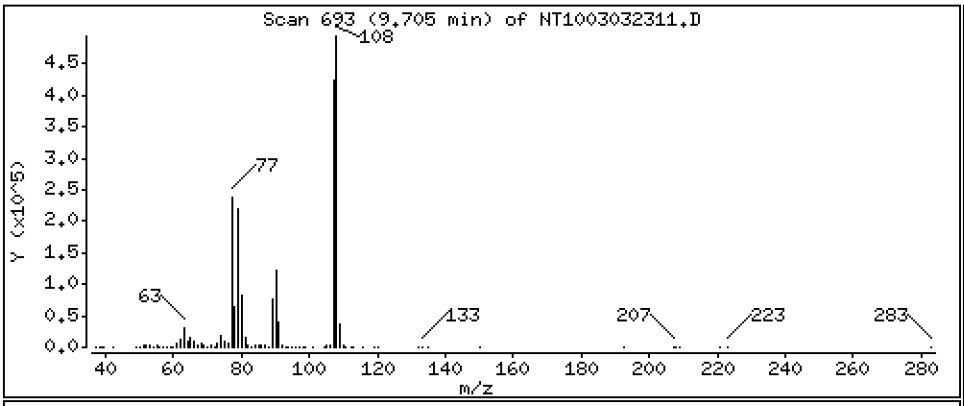
Operator: VTS

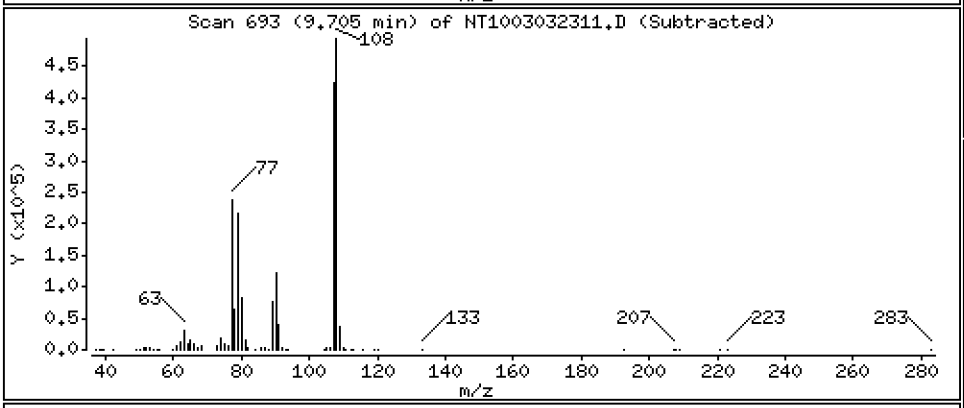
Column phase: ZB-5msi

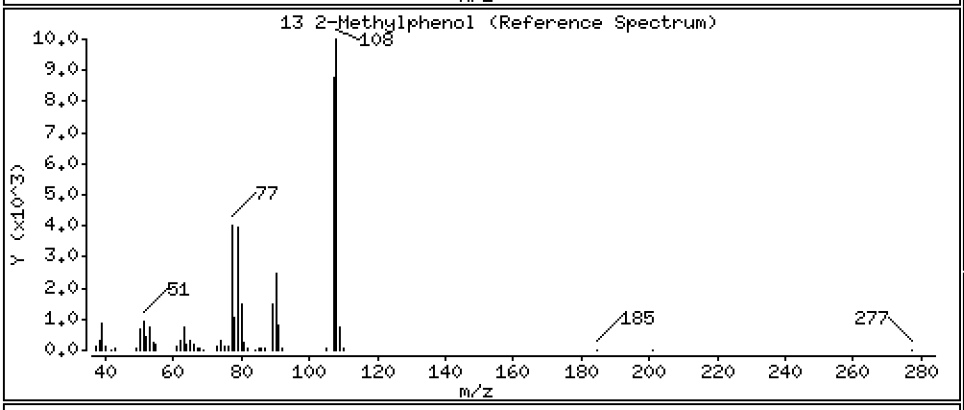
Column diameter: 0.25

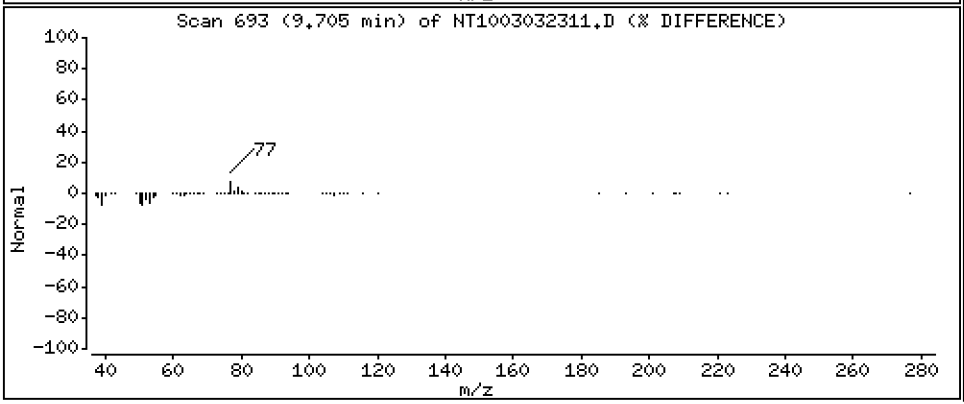
13 2-Methylphenol

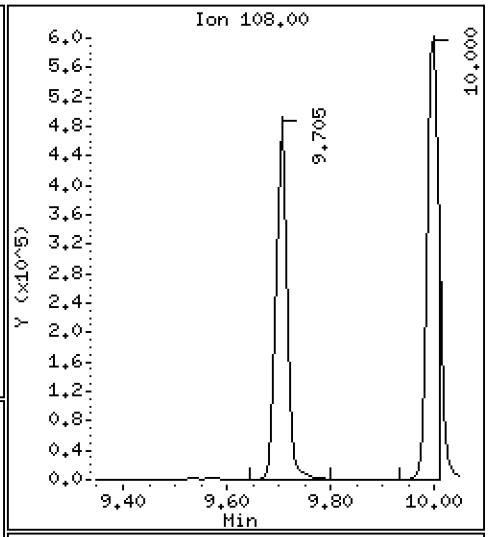
Concentration: 4.916 ug/ml

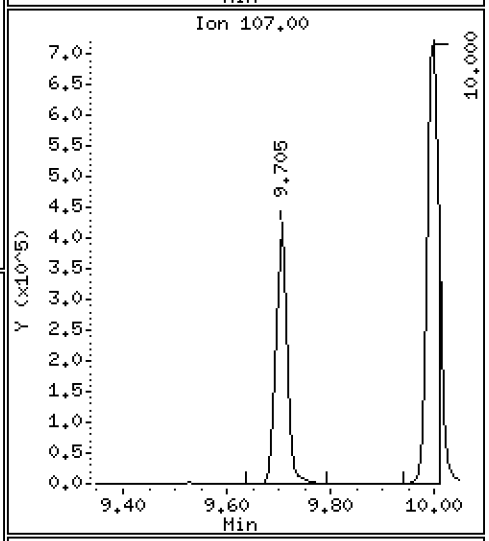


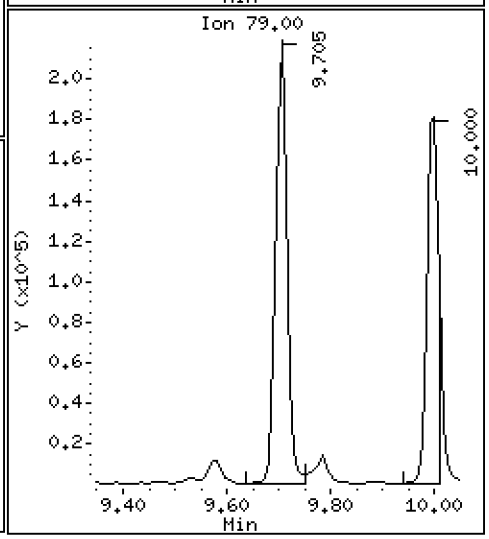












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

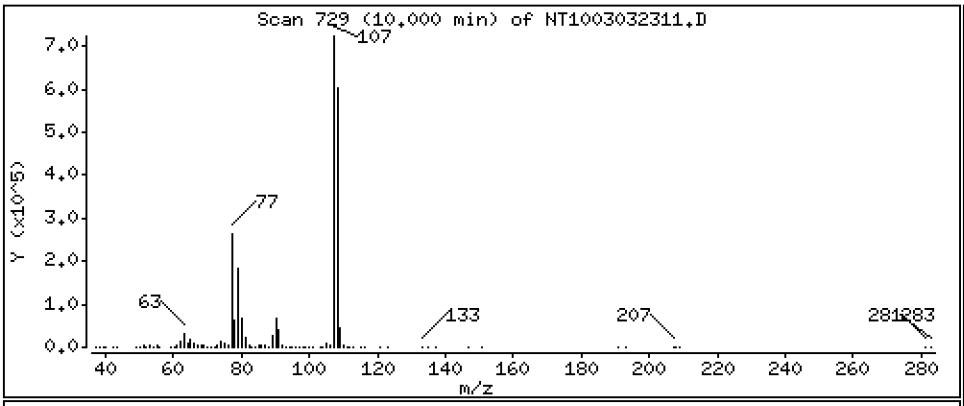
Operator: VTS

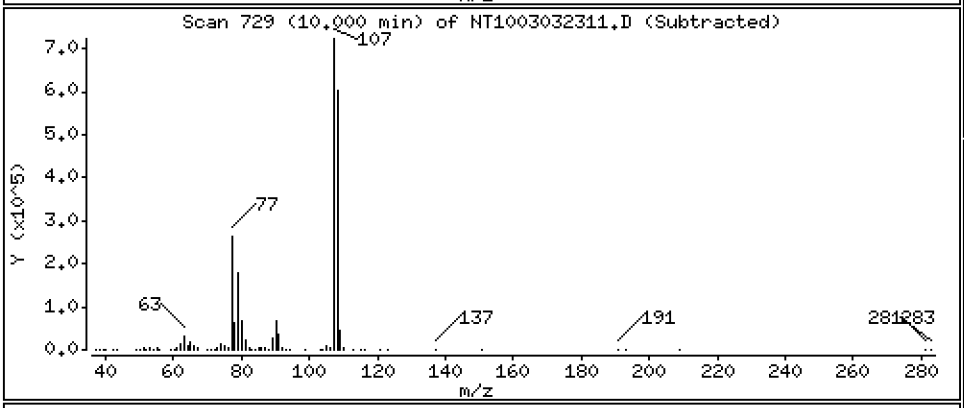
Column phase: ZB-5msi

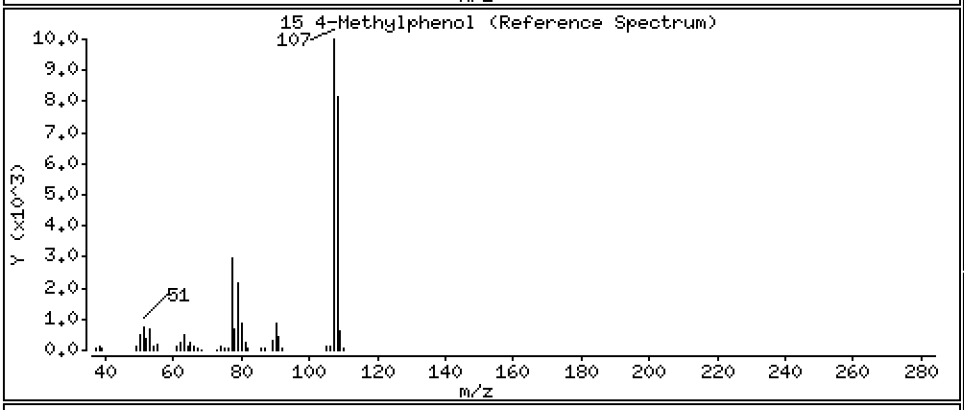
Column diameter: 0.25

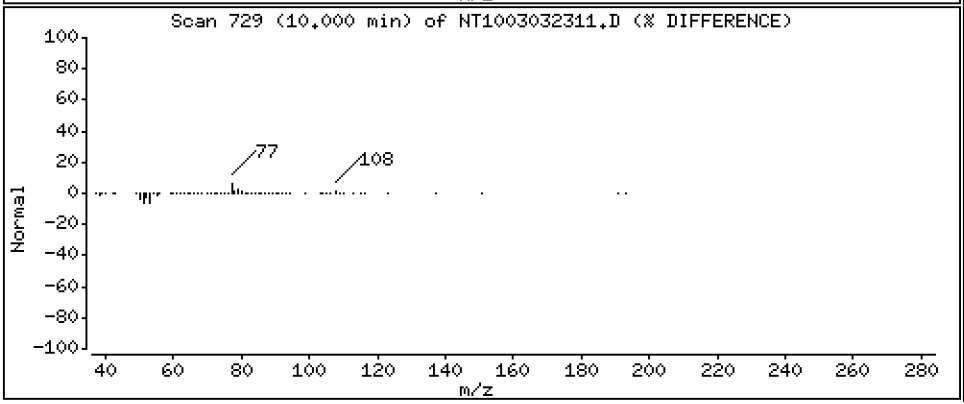
15 4-Methylphenol

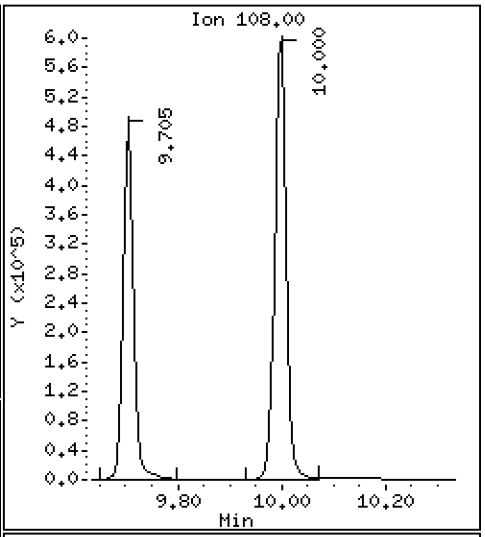
Concentration: 5.349 ug/ml

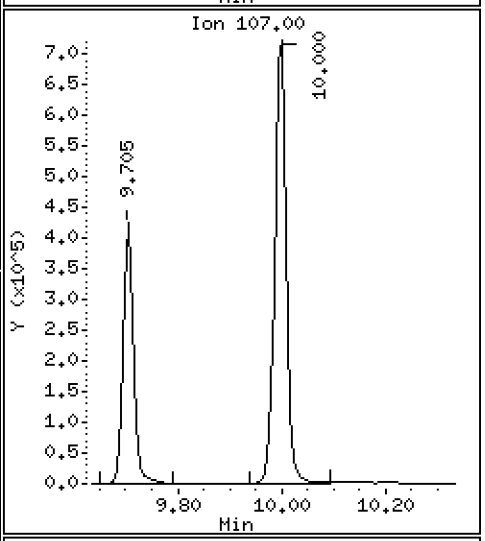


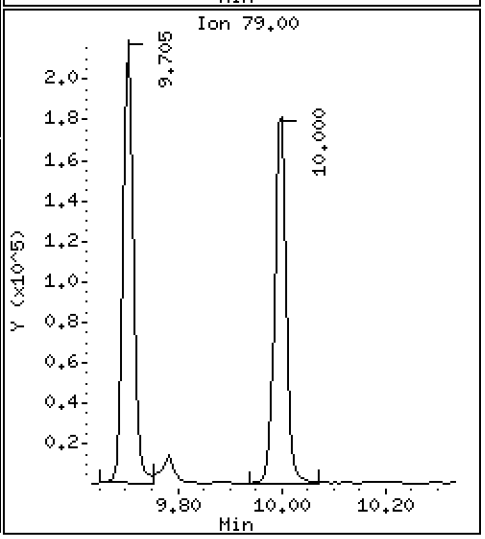












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

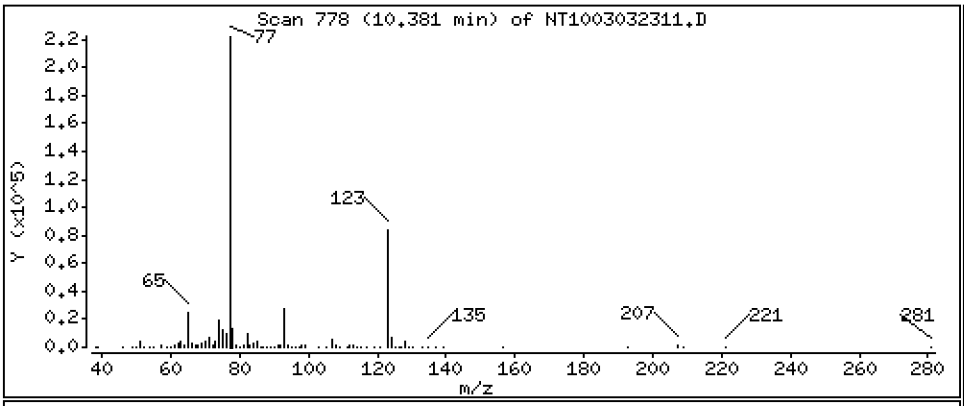
Operator: VTS

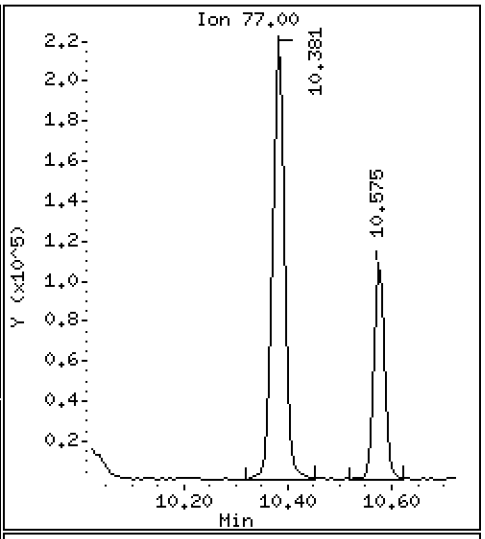
Column phase: ZB-5msi

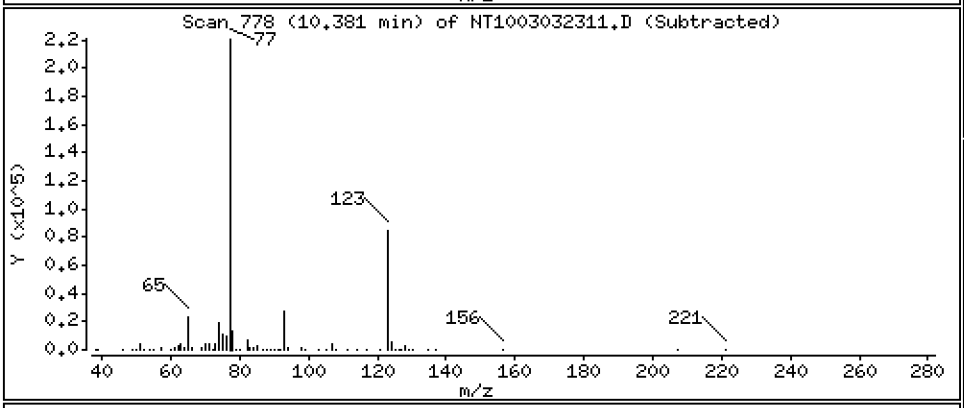
Column diameter: 0.25

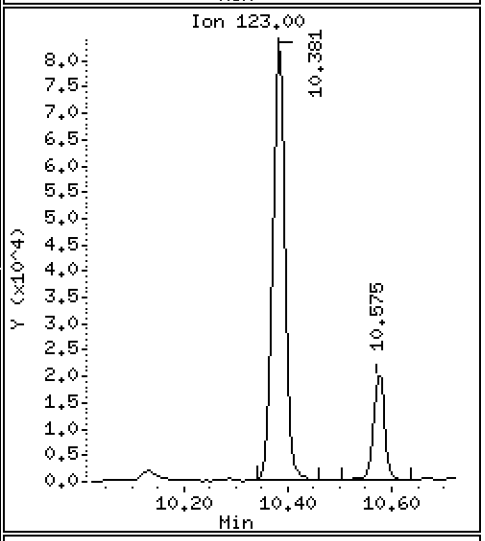
19 Nitrobenzene

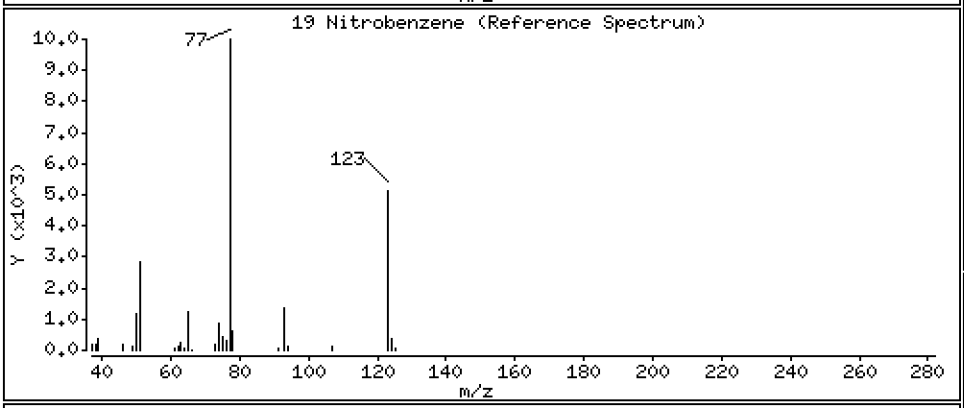
Concentration: 2.003 ug/ml

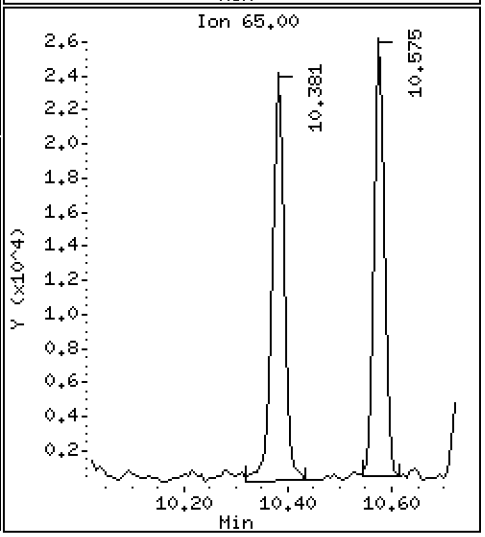


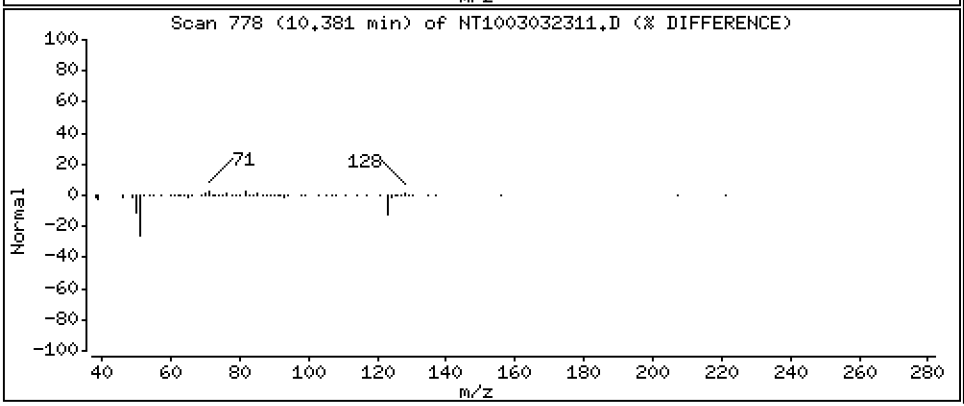












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032311.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

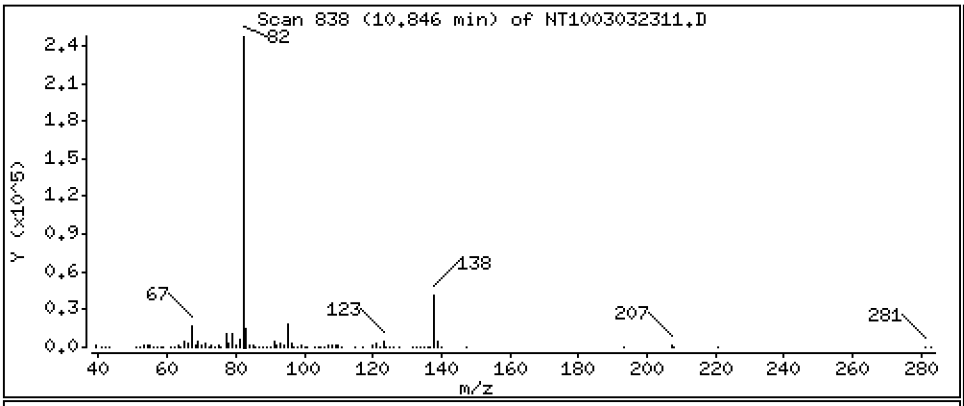
Operator: VTS

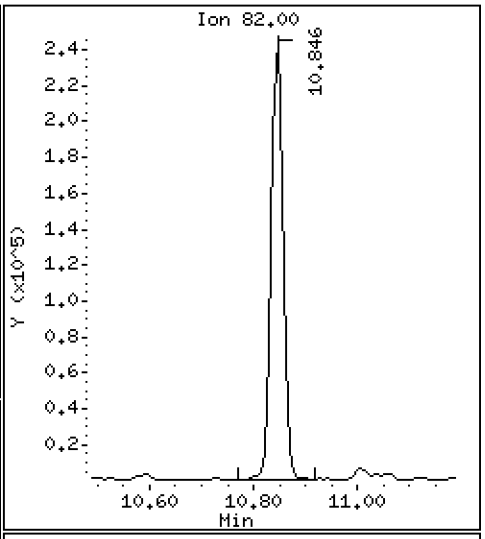
Column phase: ZB-5msi

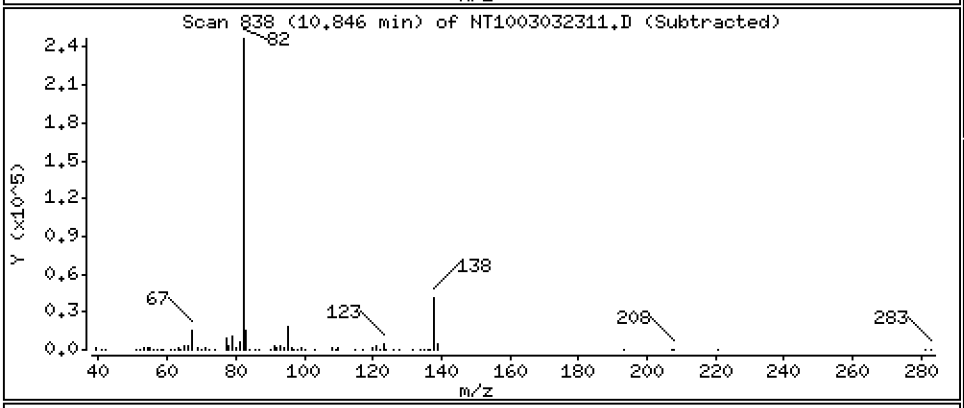
Column diameter: 0.25

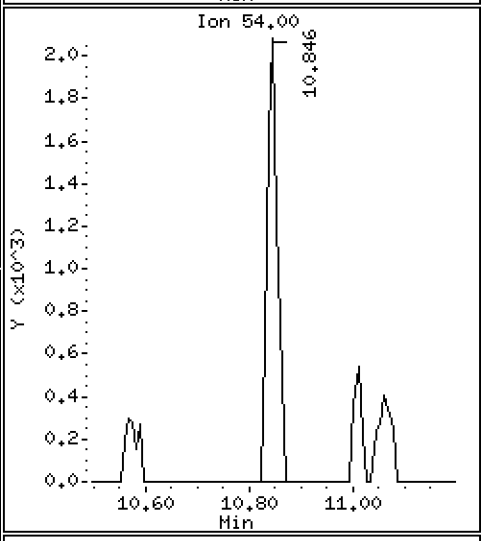
20 Isophorone

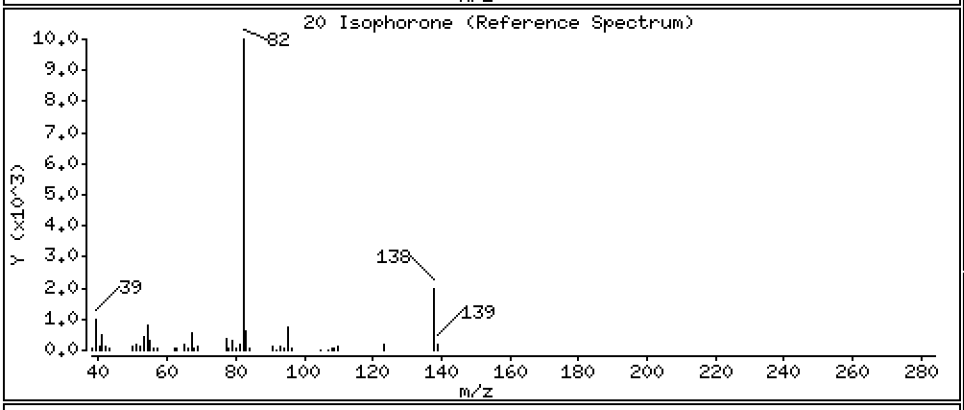
Concentration: 1.868 ug/ml

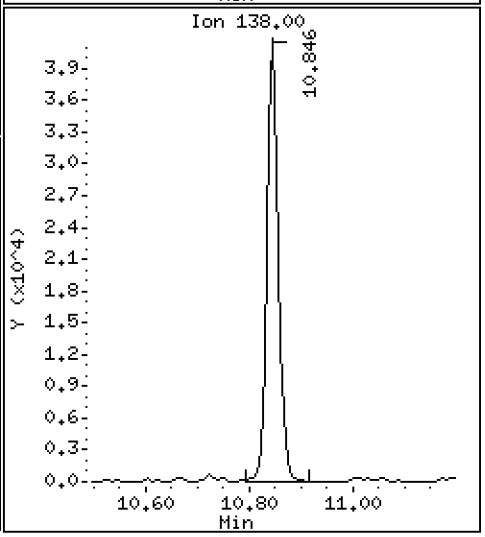


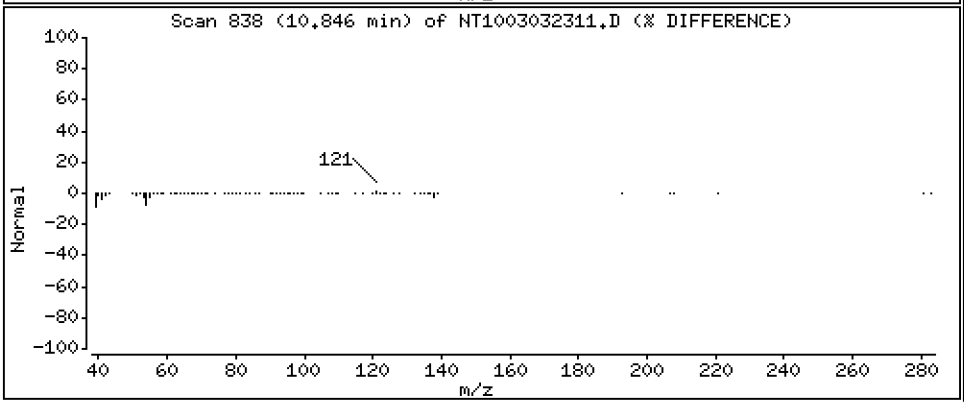












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

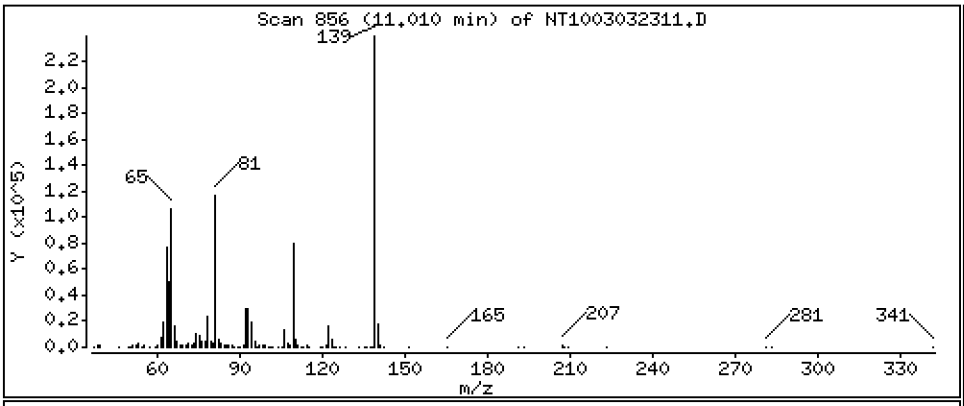
Operator: VTS

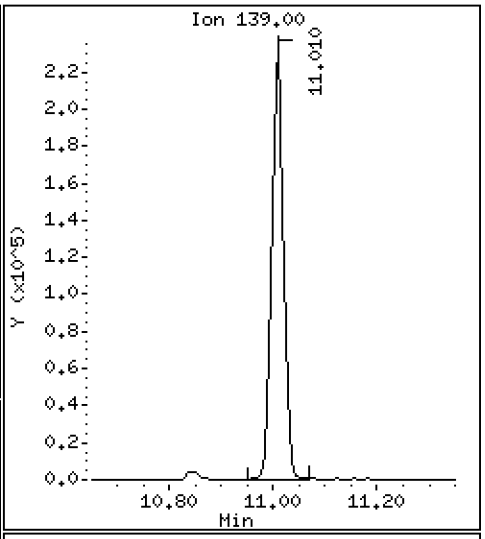
Column phase: ZB-5msi

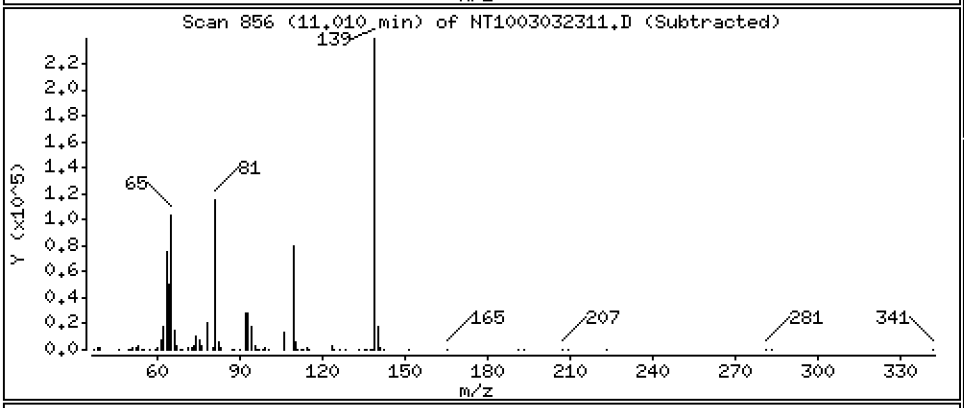
Column diameter: 0.25

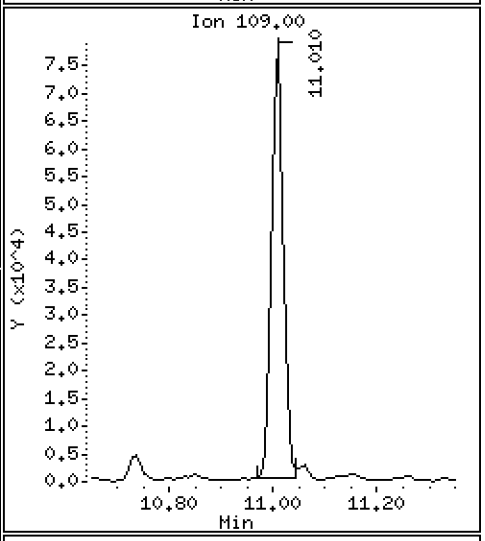
21 2-Nitrophenol

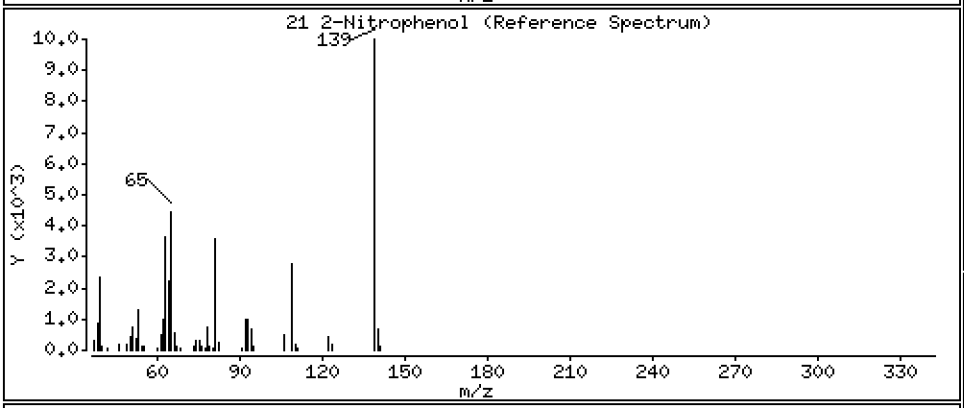
Concentration: 3.885 ug/ml

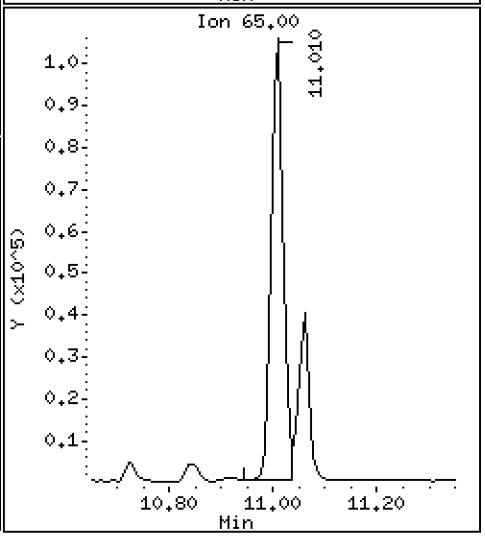


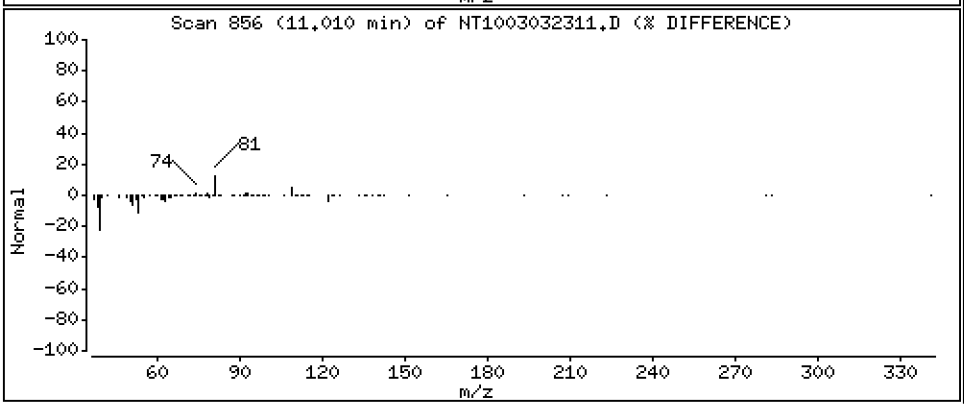












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

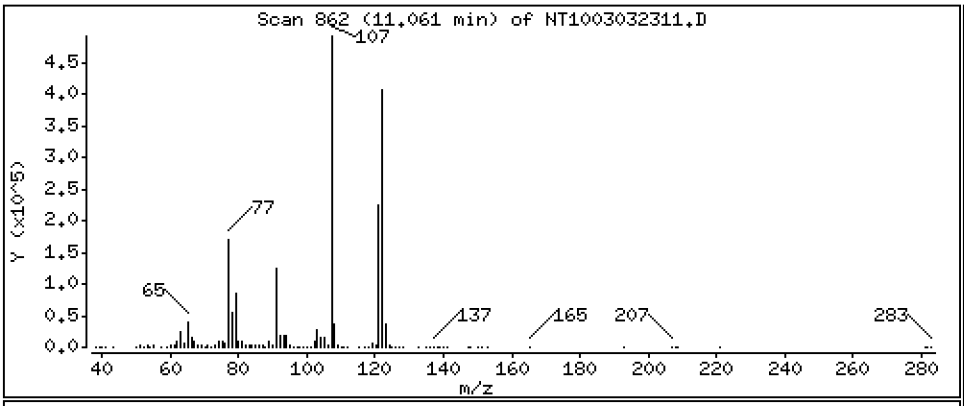
Operator: VTS

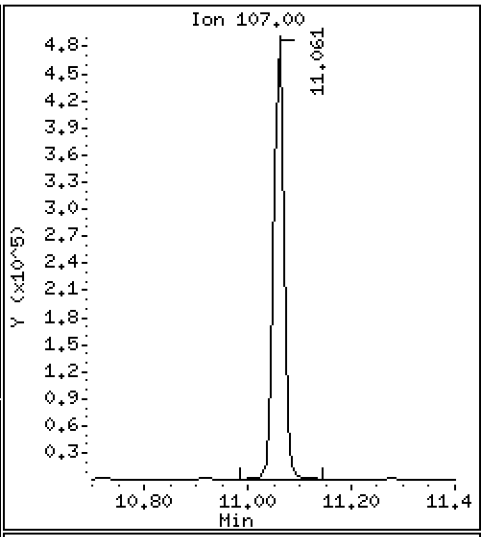
Column phase: ZB-5msi

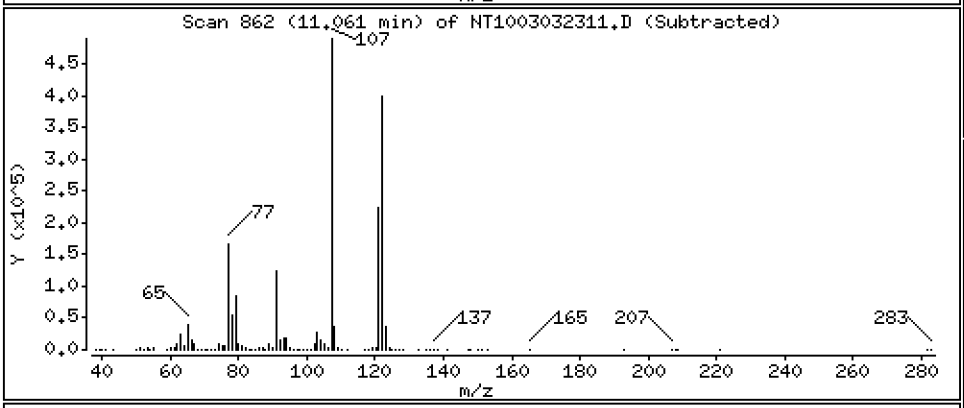
Column diameter: 0.25

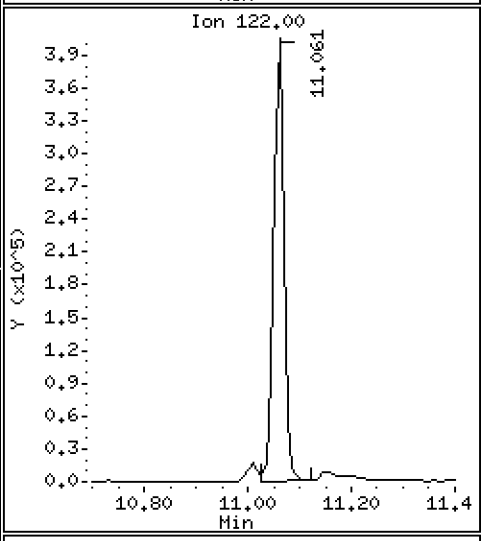
22 2,4-Dimethylphenol

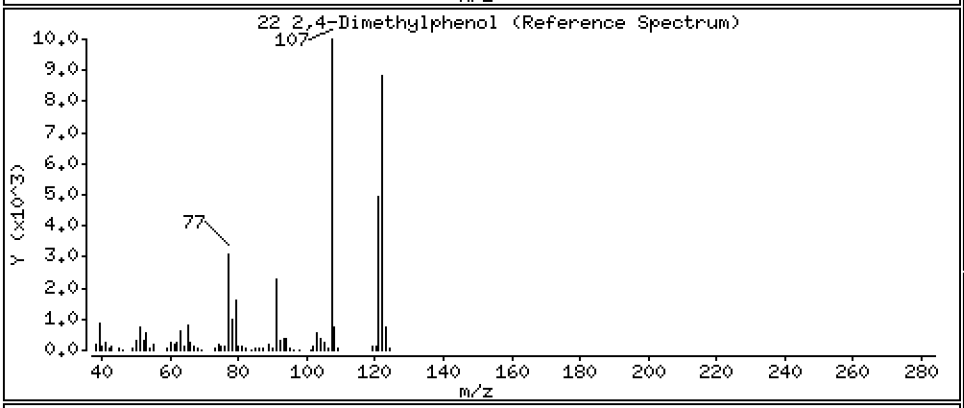
Concentration: 4.058 ug/ml

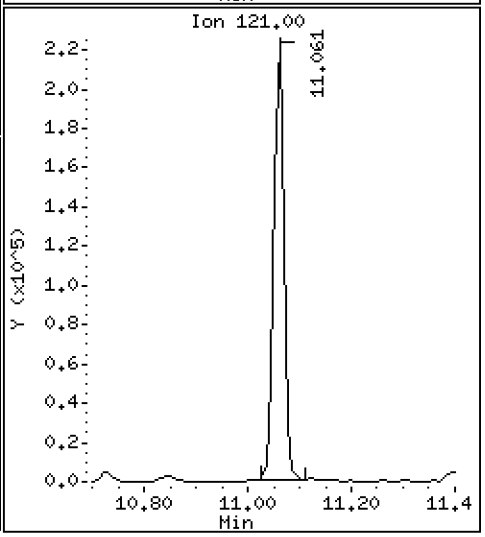


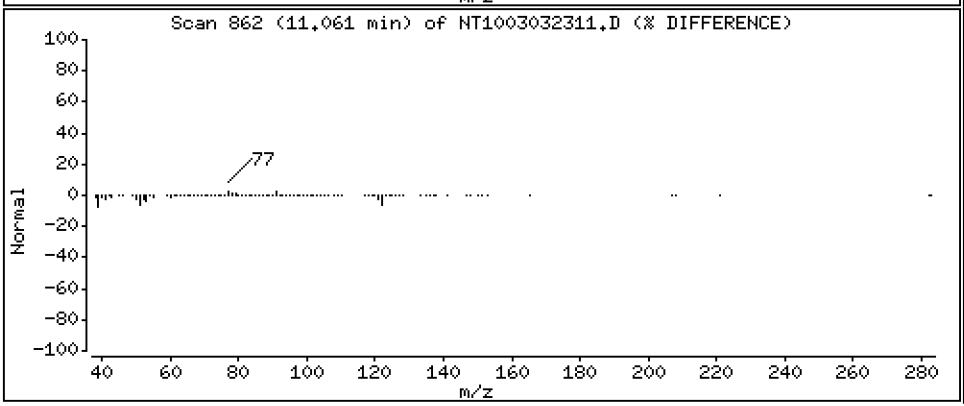












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

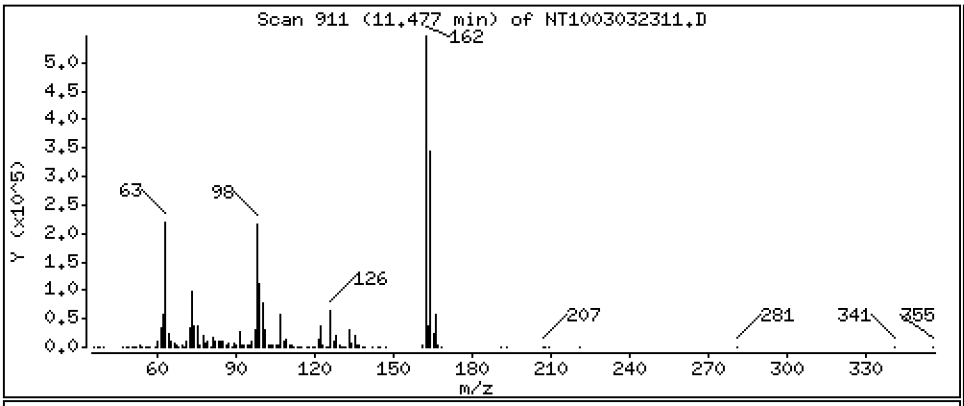
Operator: VTS

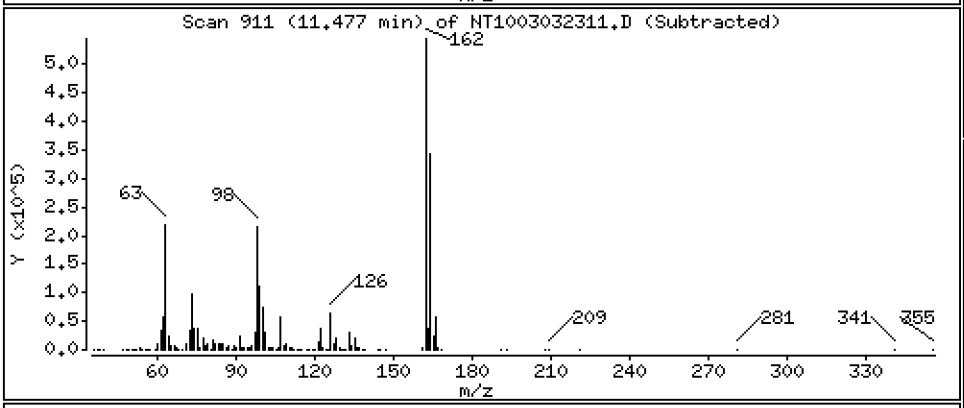
Column phase: ZB-5msi

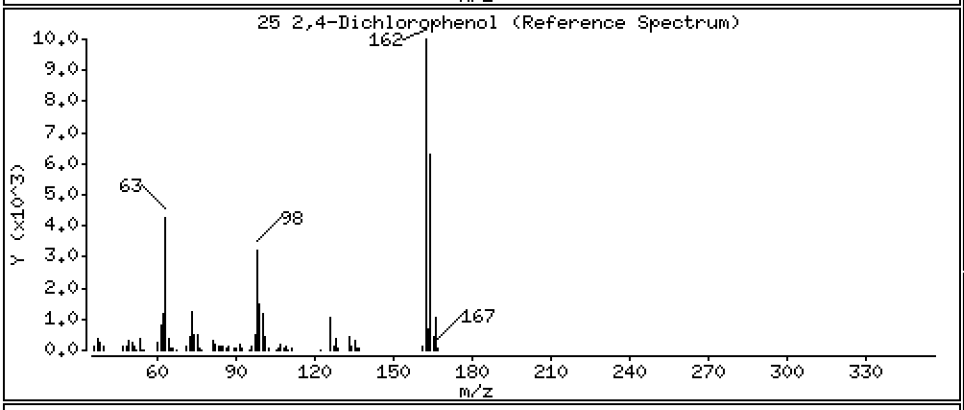
Column diameter: 0.25

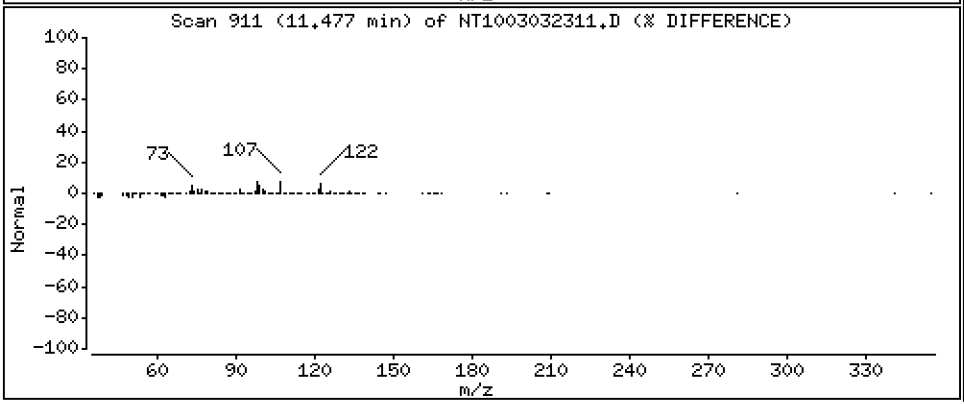
25 2,4-Dichlorophenol

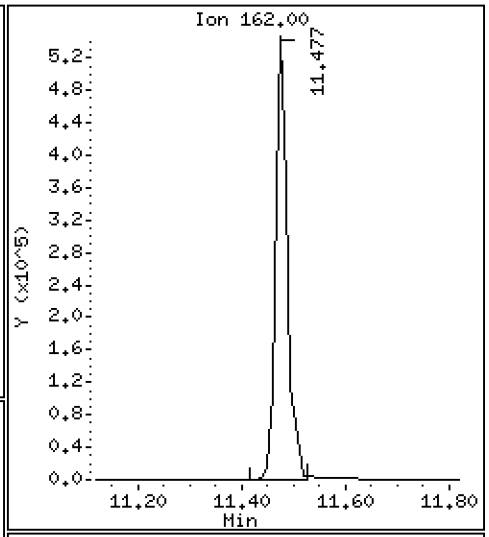
Concentration: 6.788 ug/ml

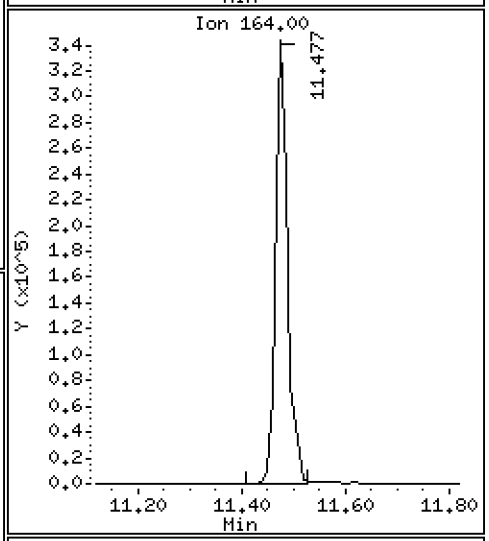


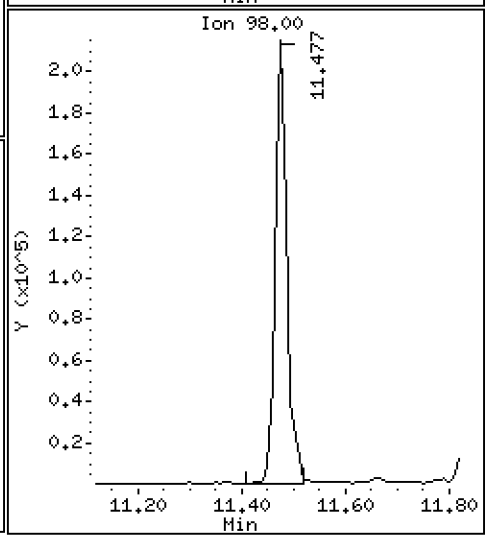












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

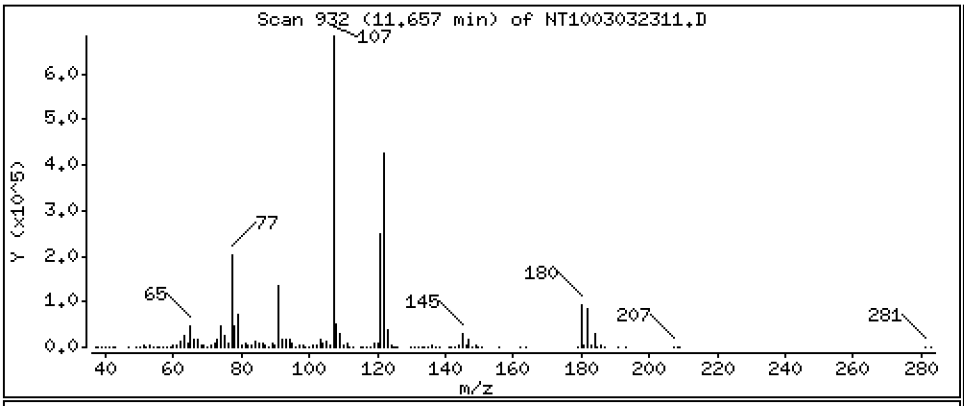
Operator: VTS

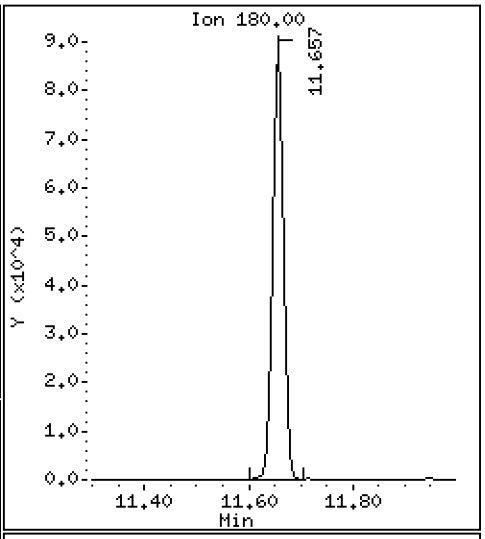
Column phase: ZB-5msi

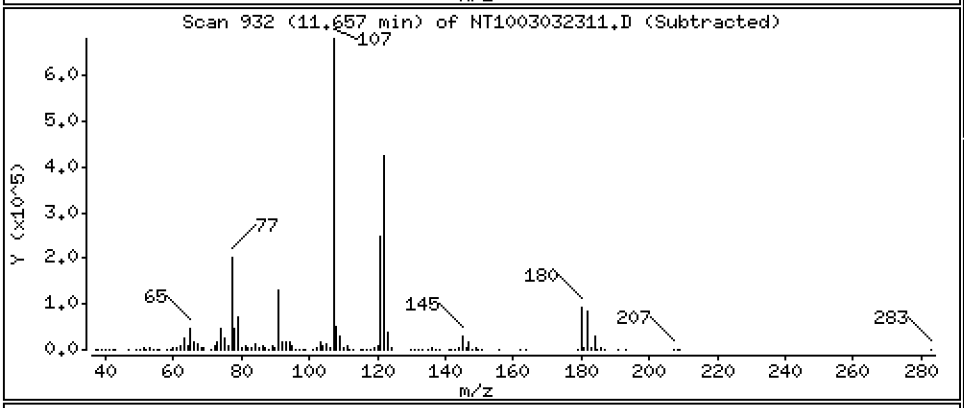
Column diameter: 0.25

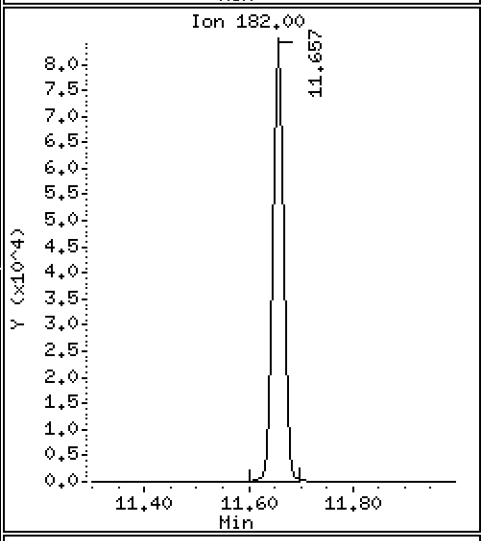
26 1,2,4-Trichlorobenzene

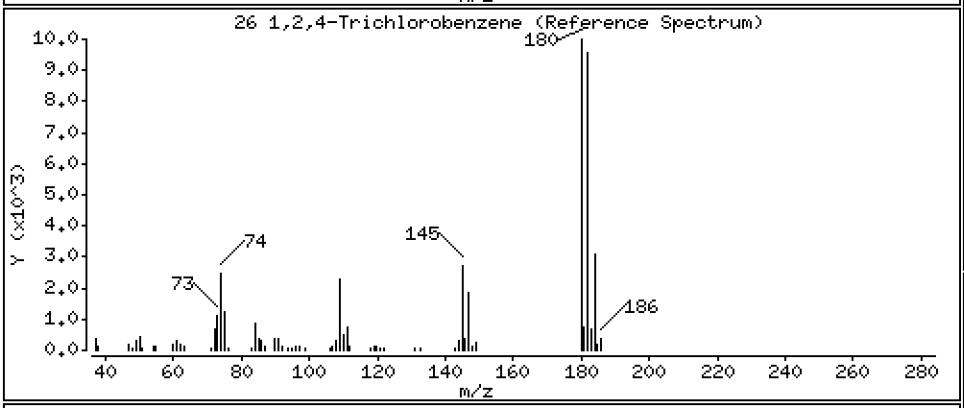
Concentration: 1.071 ug/ml

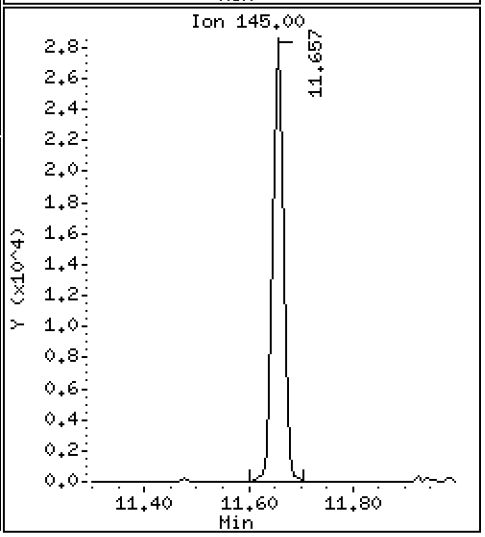


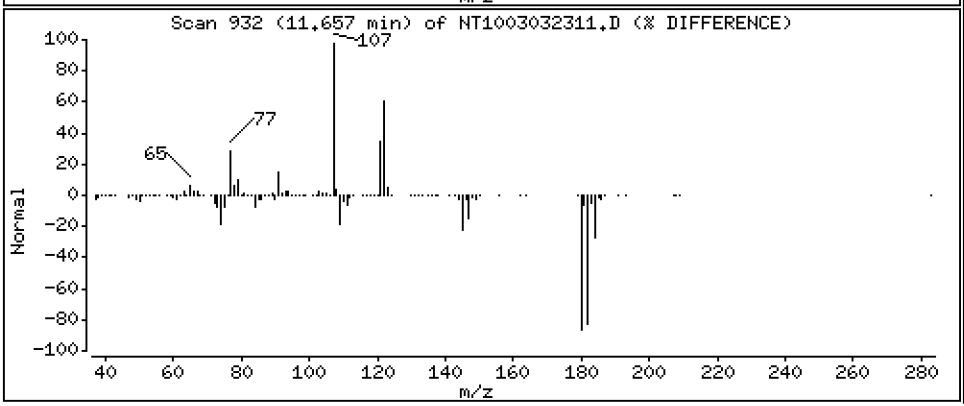












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

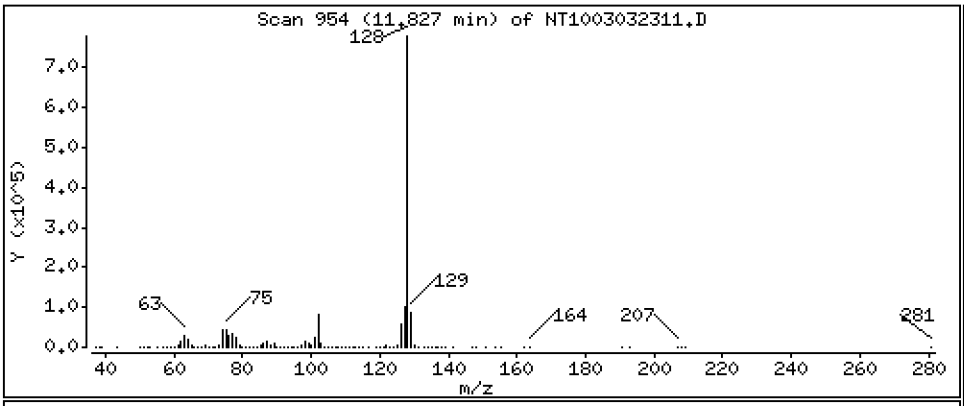
Operator: VTS

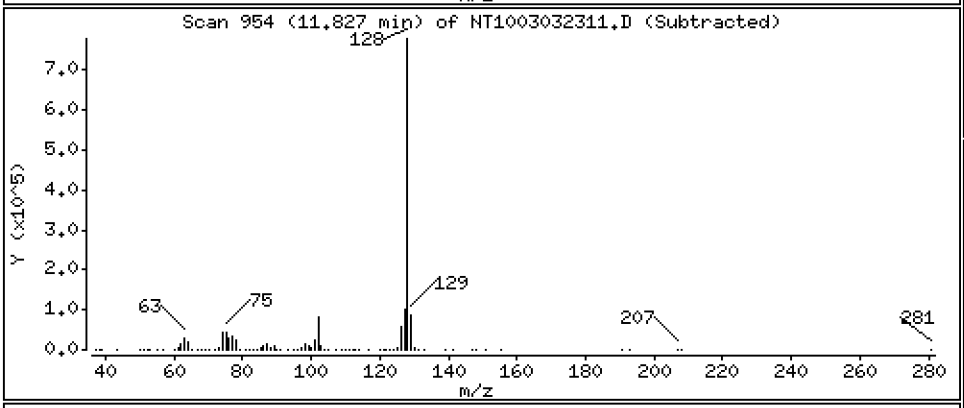
Column phase: ZB-5msi

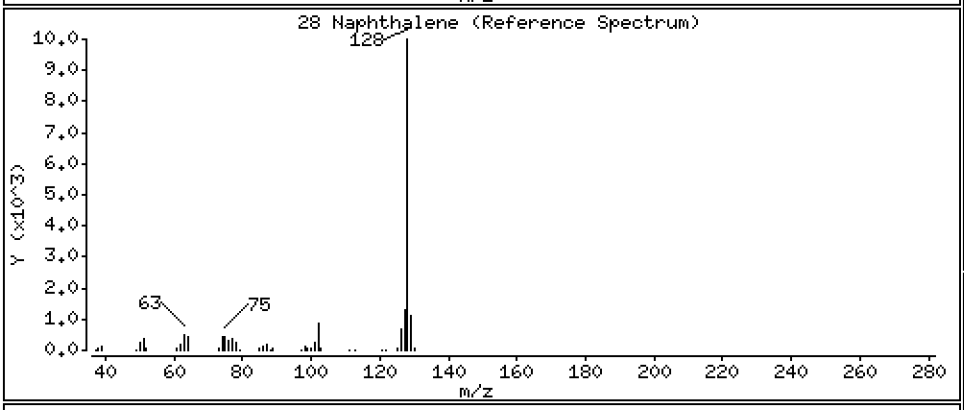
Column diameter: 0.25

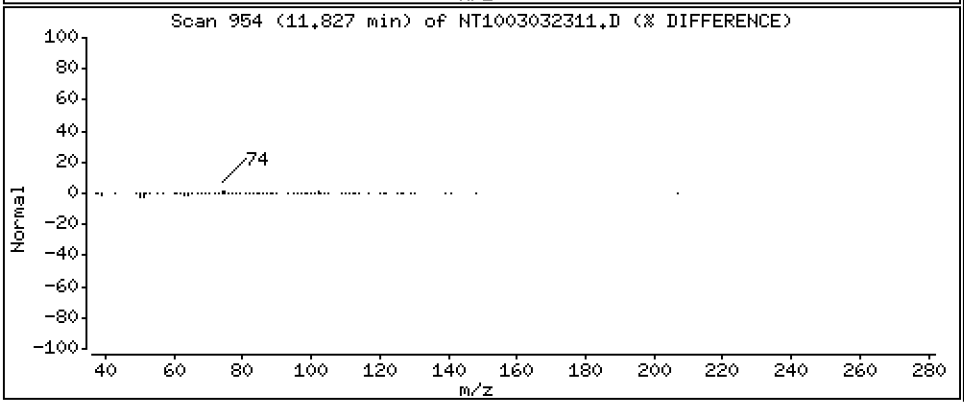
28 Naphthalene

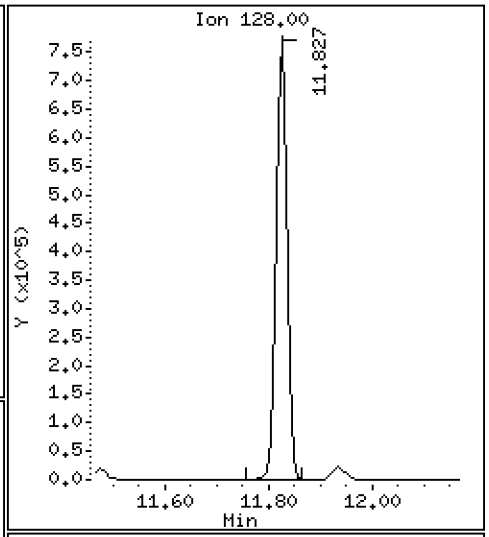
Concentration: 2.740 ug/ml

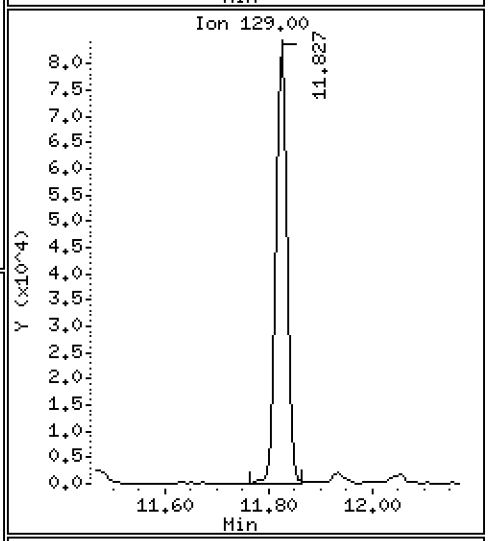


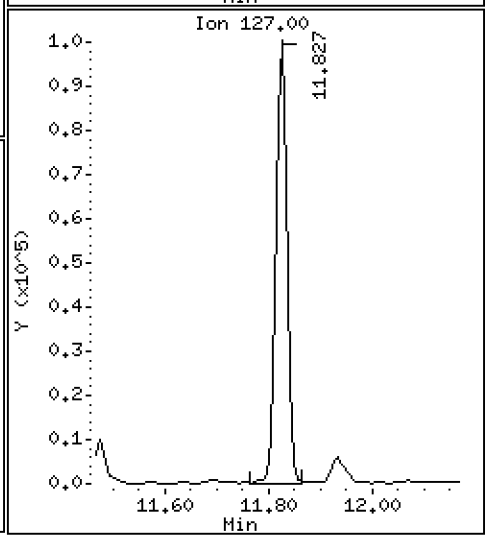












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

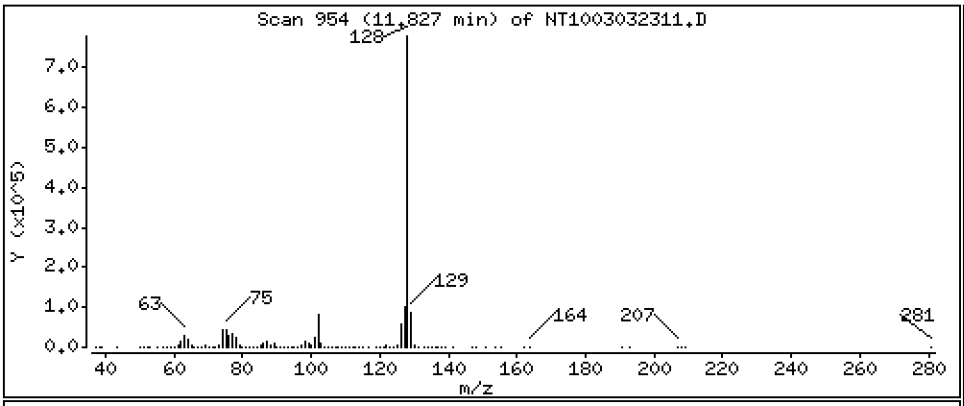
Operator: VTS

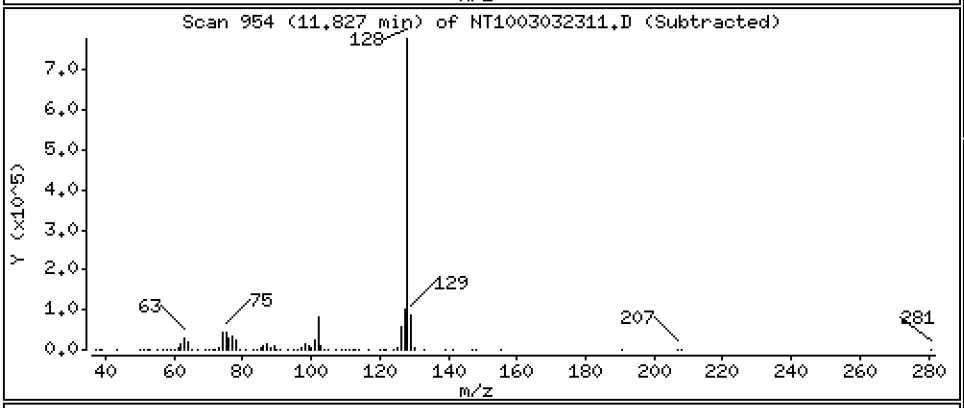
Column phase: ZB-5msi

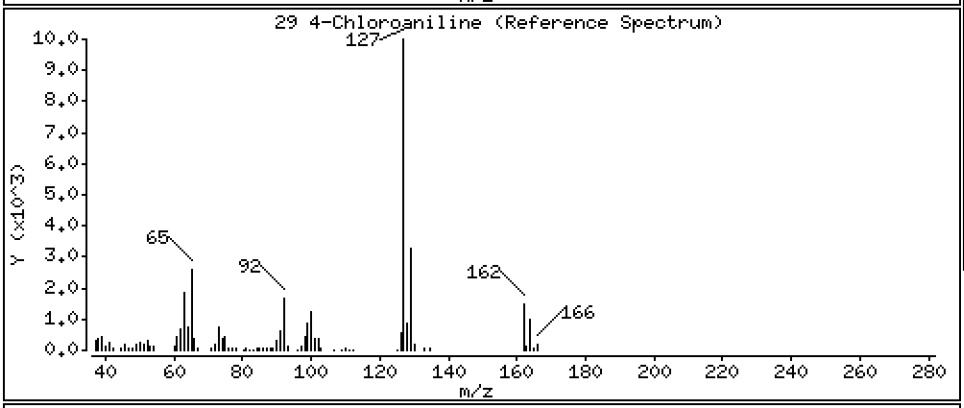
Column diameter: 0.25

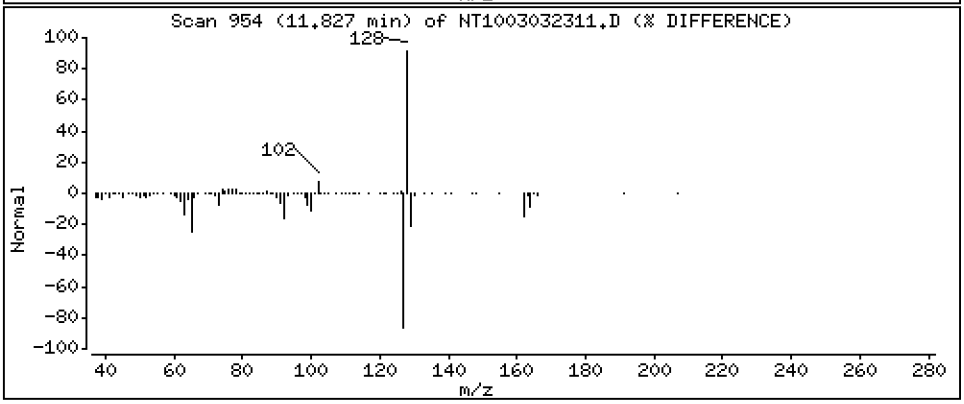
29 4-Chloroaniline

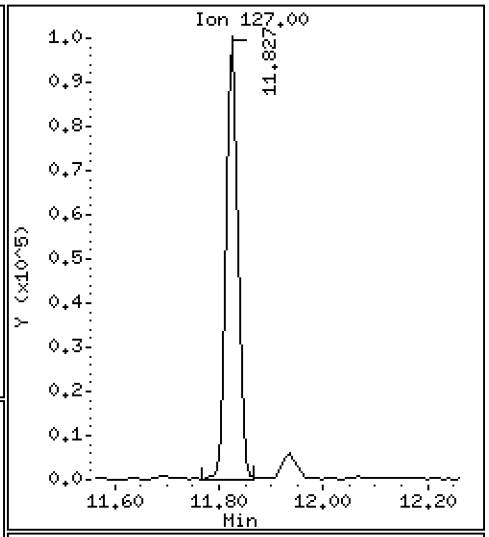
Concentration: 0.8163 ug/ml

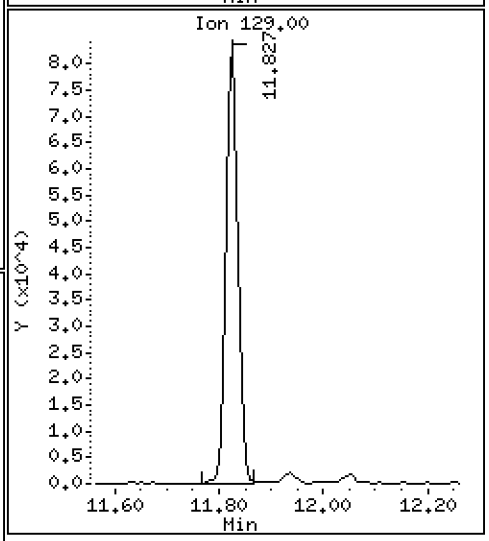












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032311.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

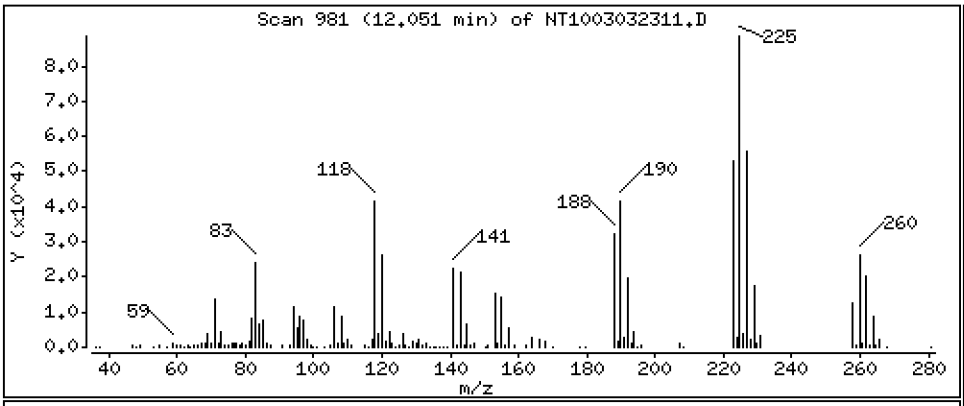
Operator: VTS

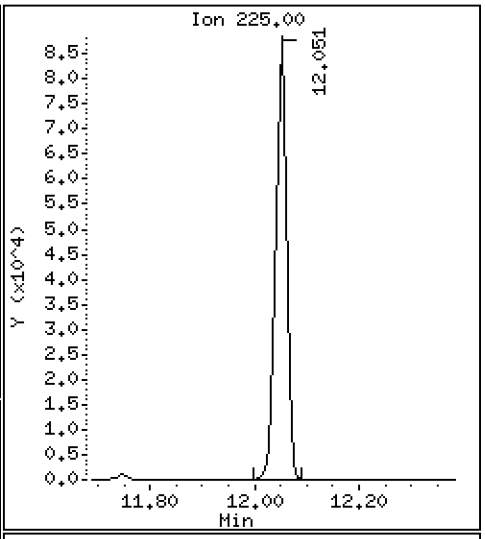
Column phase: ZB-5msi

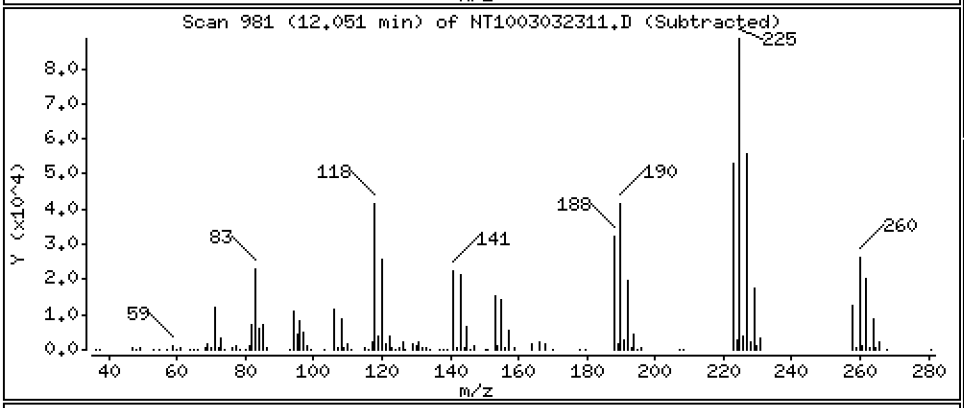
Column diameter: 0.25

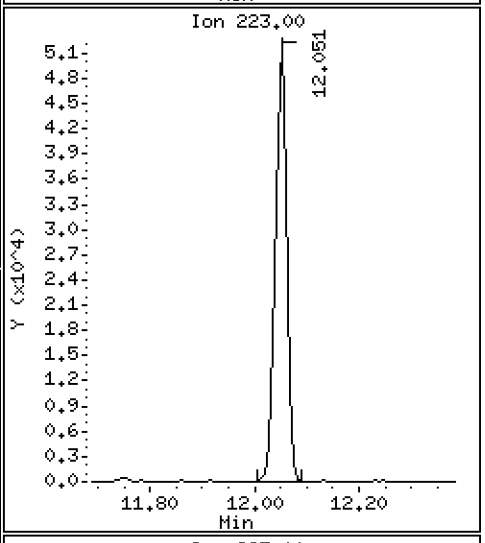
30 Hexachlorobutadiene

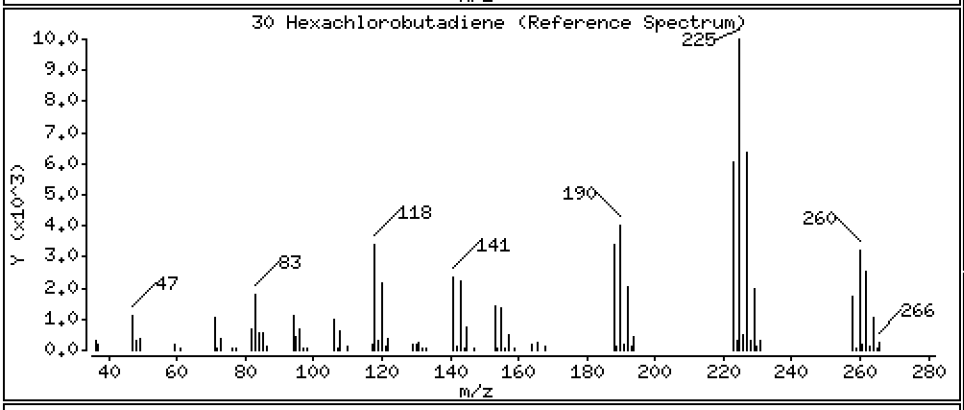
Concentration: 1.320 ug/ml

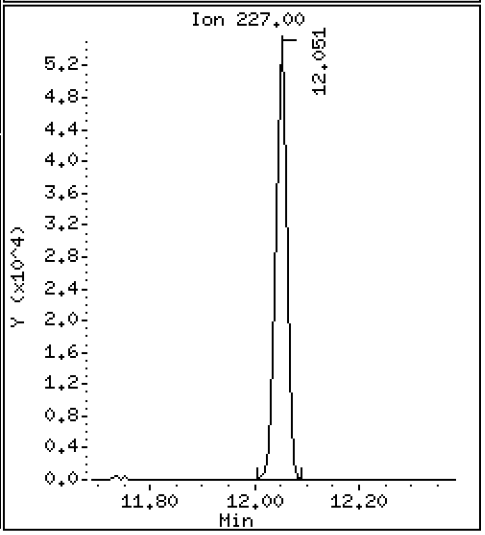


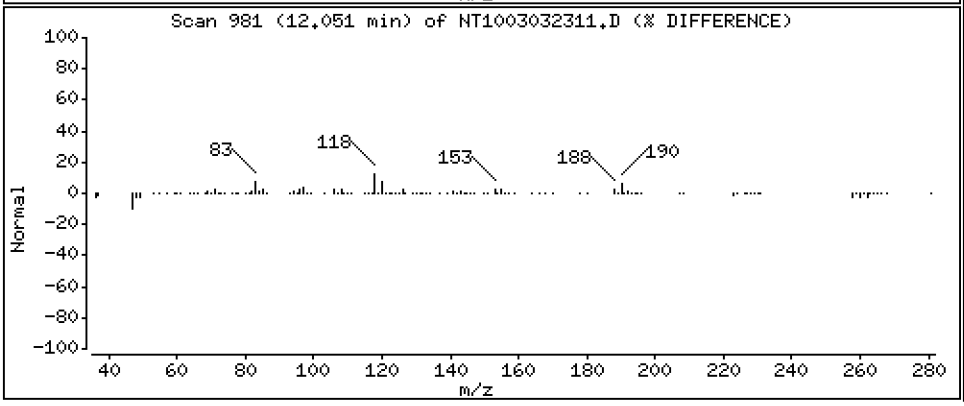












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032311.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

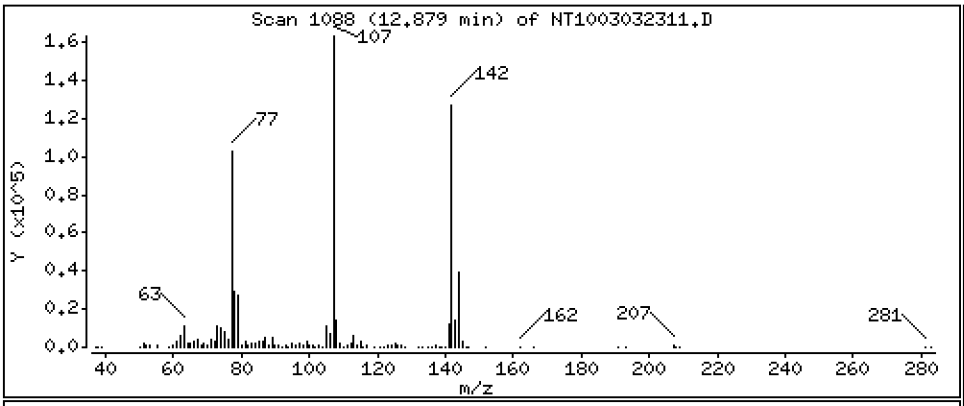
Operator: VTS

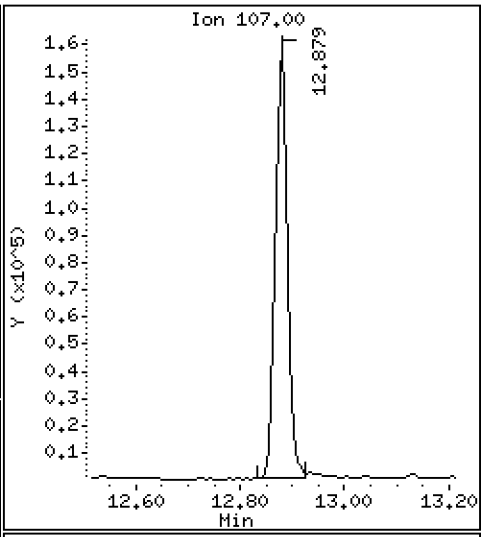
Column phase: ZB-5msi

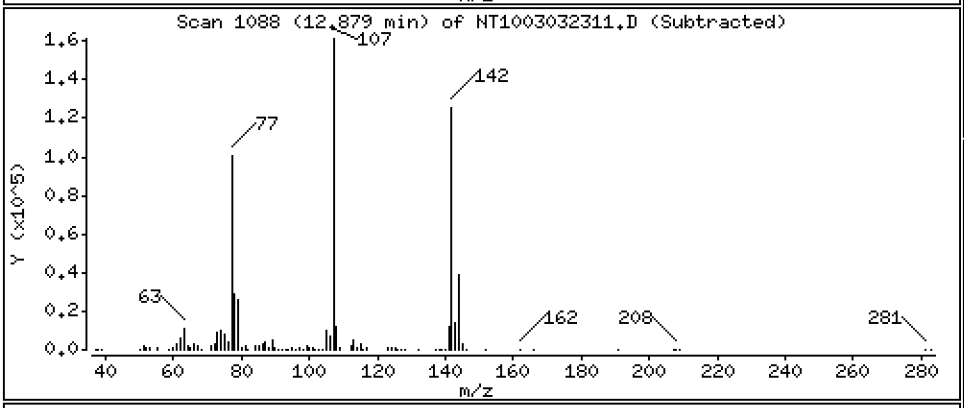
Column diameter: 0.25

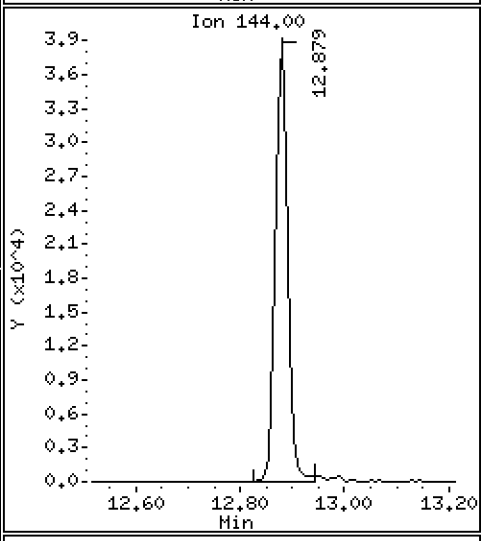
31 4-Chloro-3-methylphenol

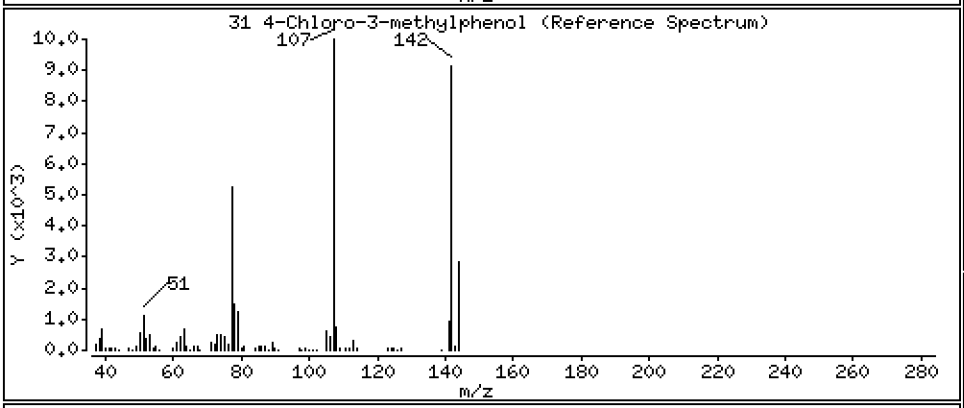
Concentration: 1.800 ug/ml

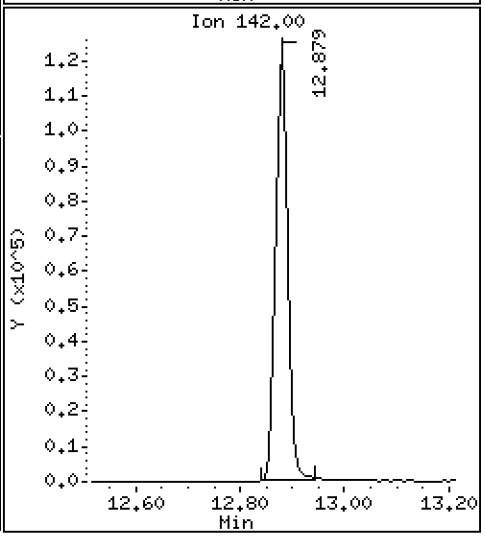


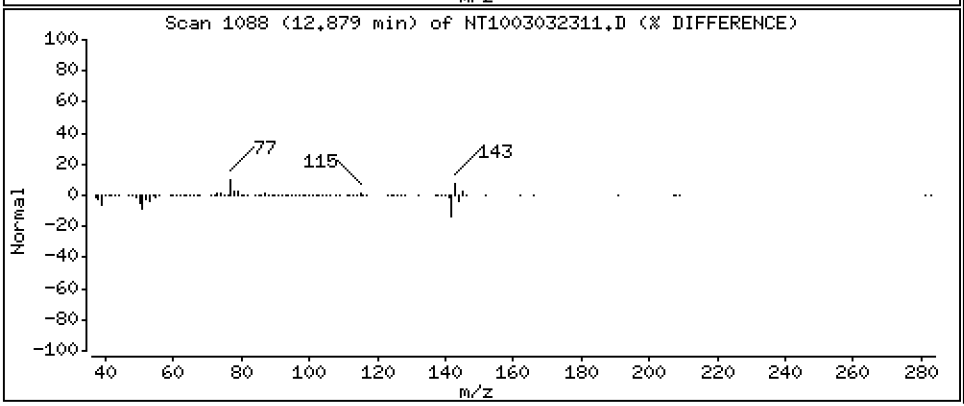












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

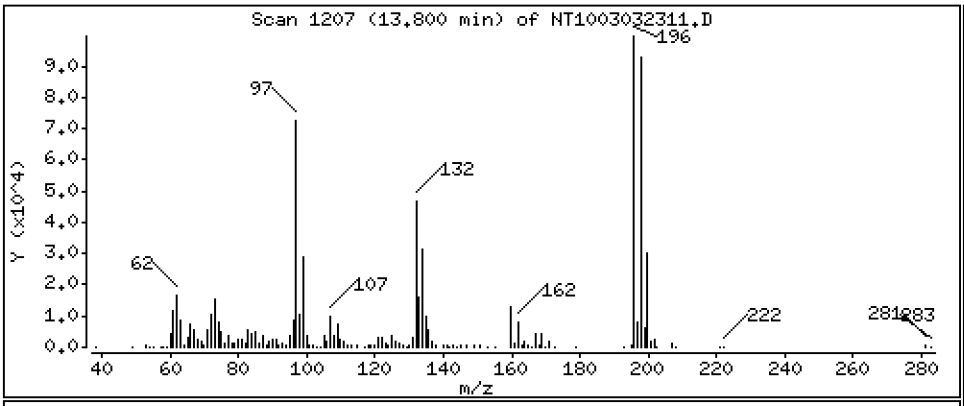
Operator: VTS

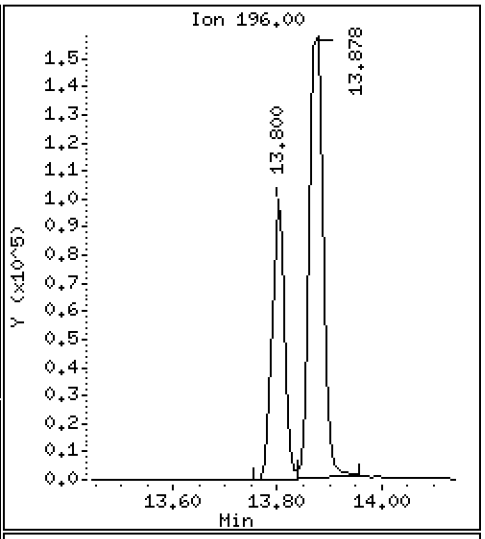
Column phase: ZB-5msi

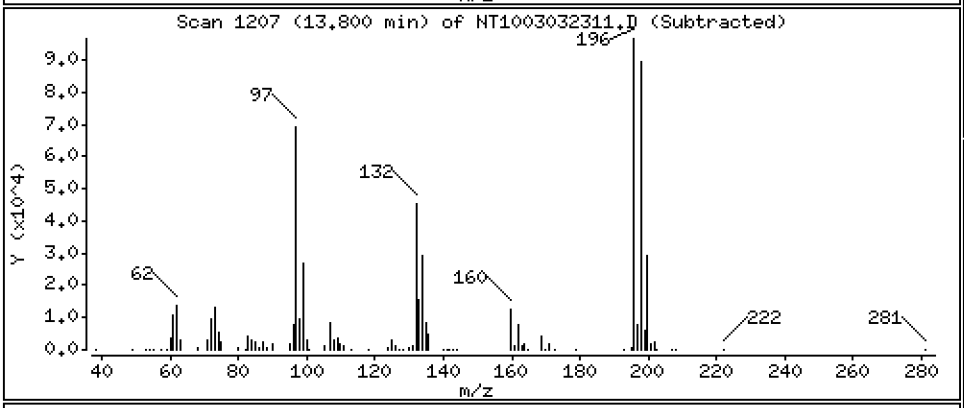
Column diameter: 0.25

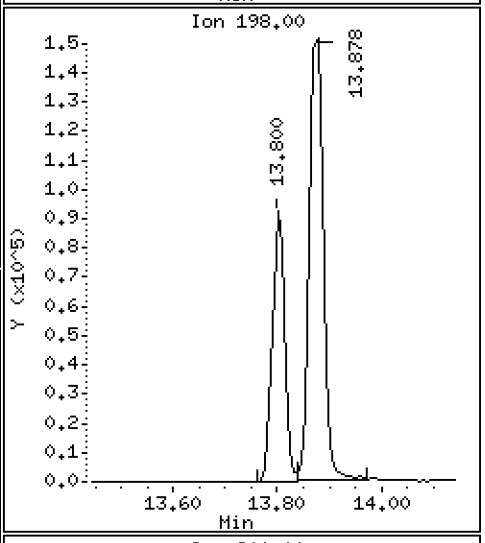
34 2,4,6-Trichlorophenol

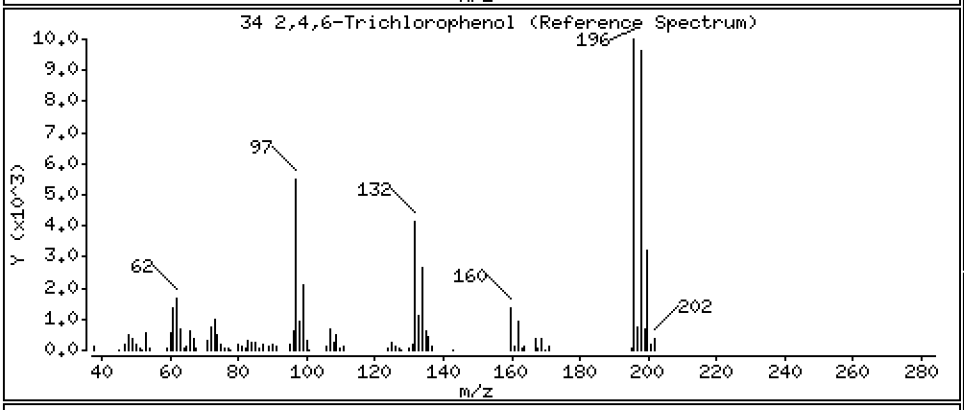
Concentration: 1.979 ug/ml

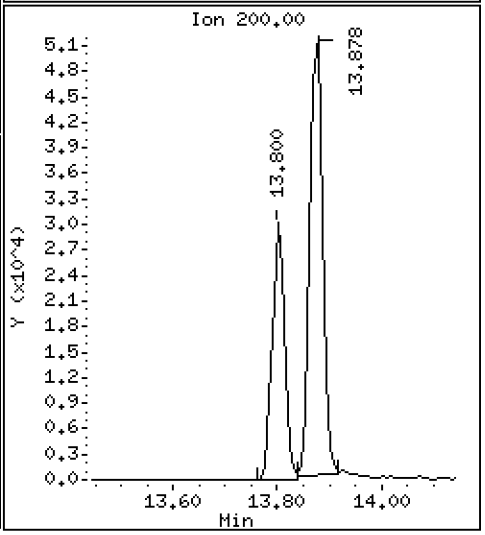


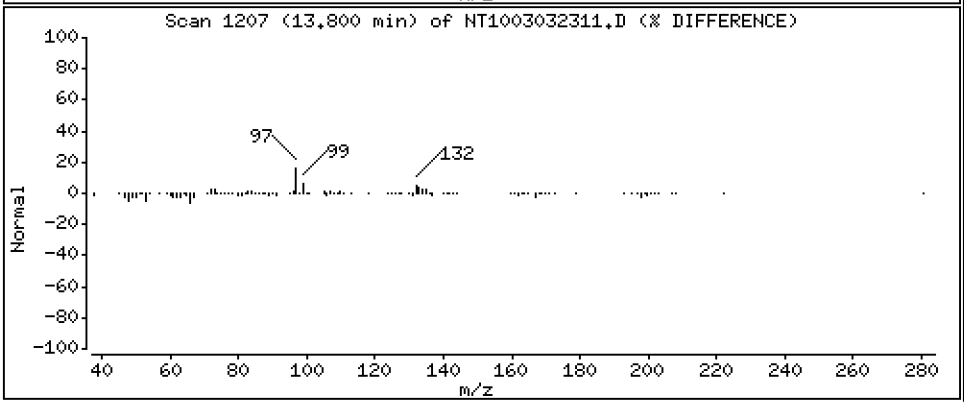












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

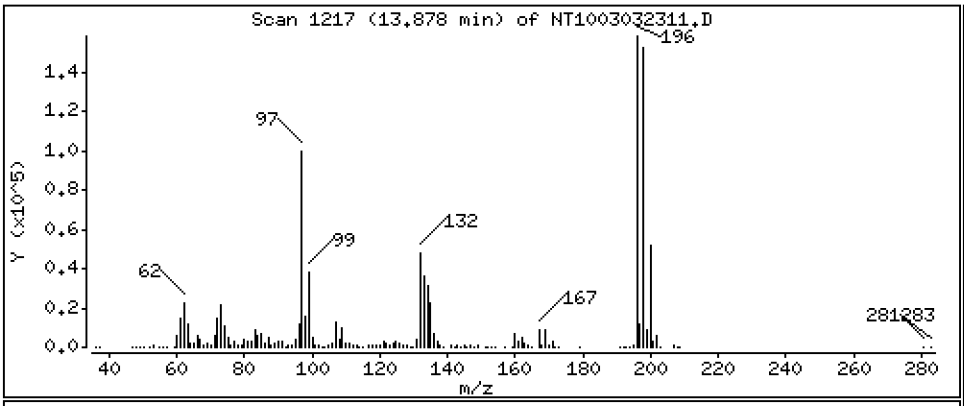
Operator: VTS

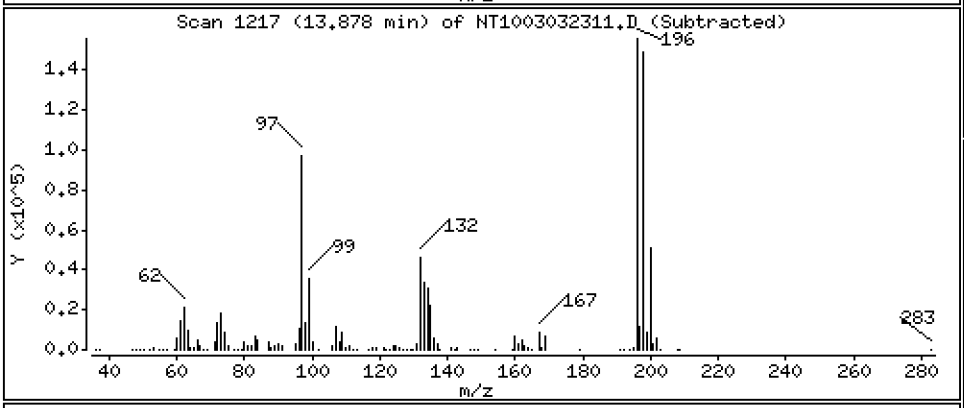
Column phase: ZB-5msi

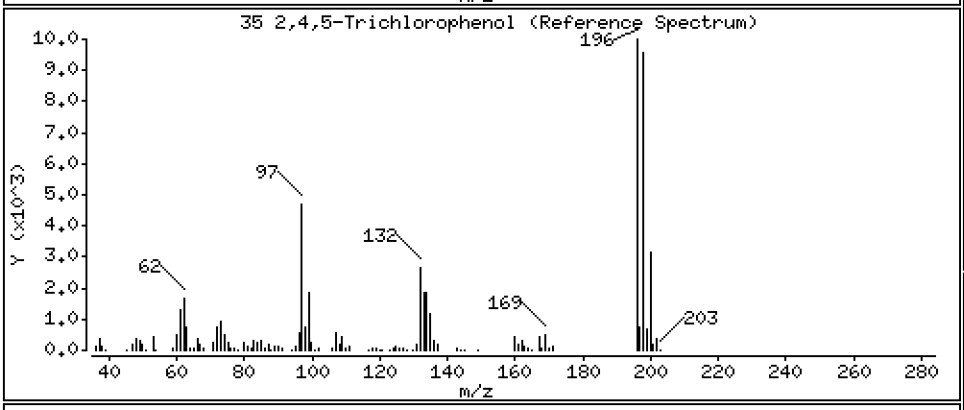
Column diameter: 0.25

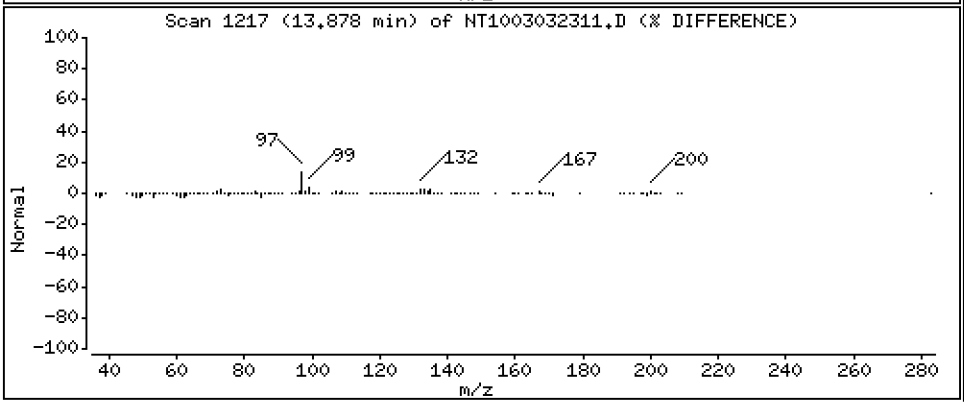
35 2,4,5-Trichlorophenol

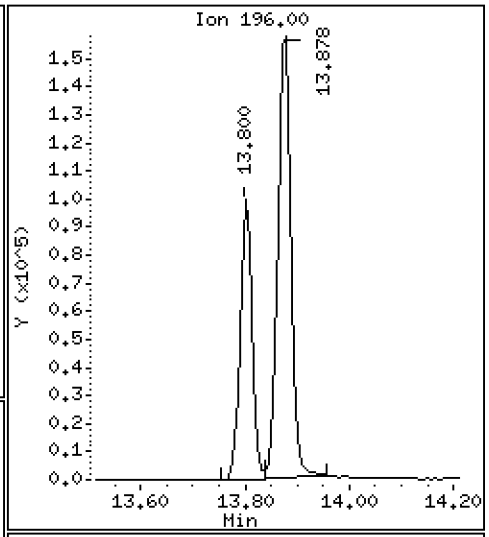
Concentration: 3.174 ug/ml

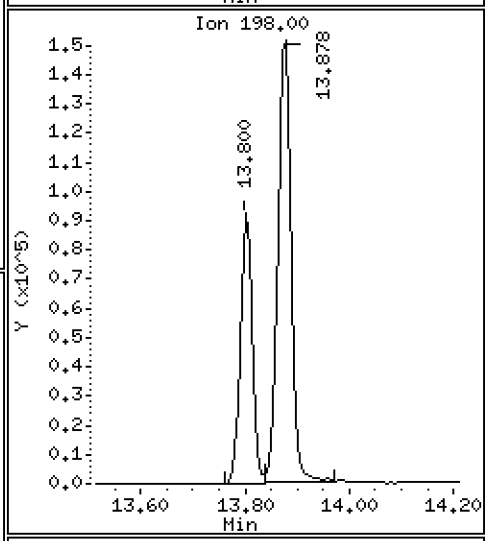


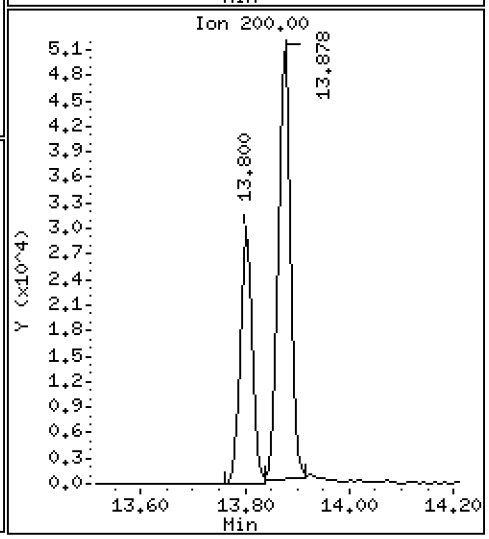












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

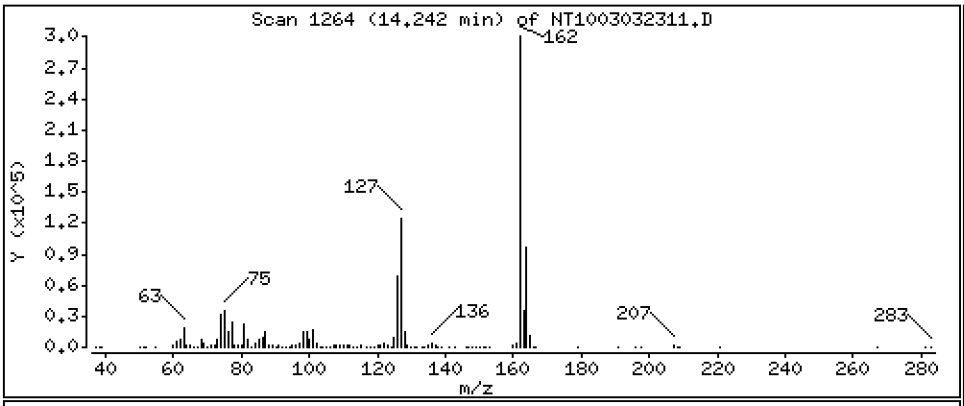
Operator: VTS

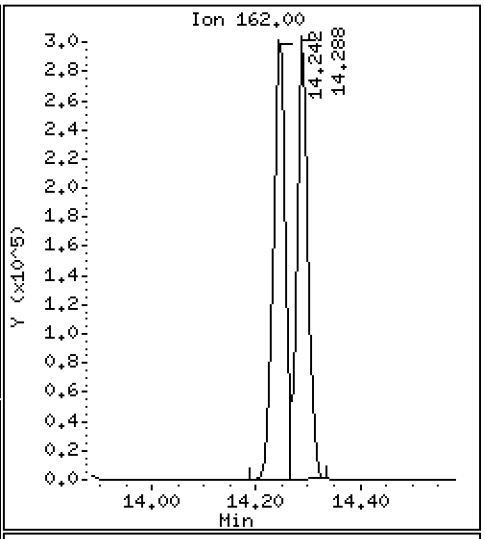
Column phase: ZB-5msi

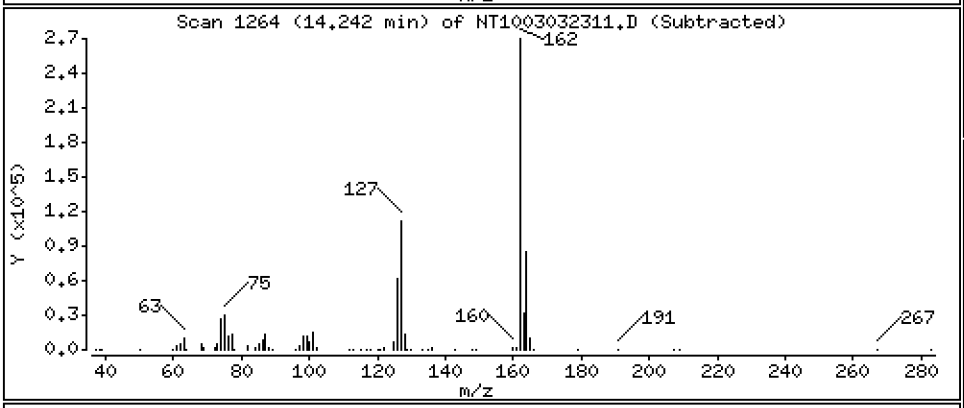
Column diameter: 0.25

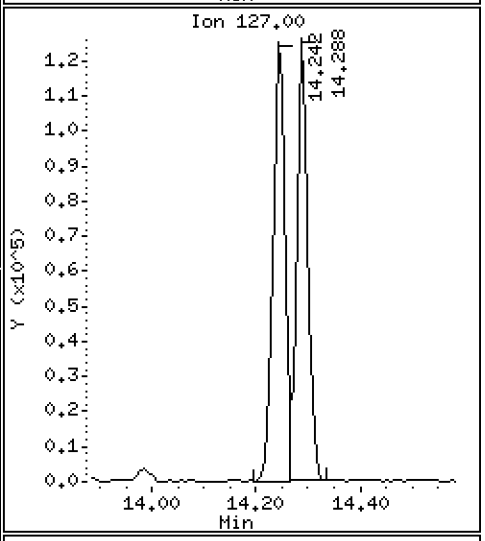
37 2-Chloronaphthalene

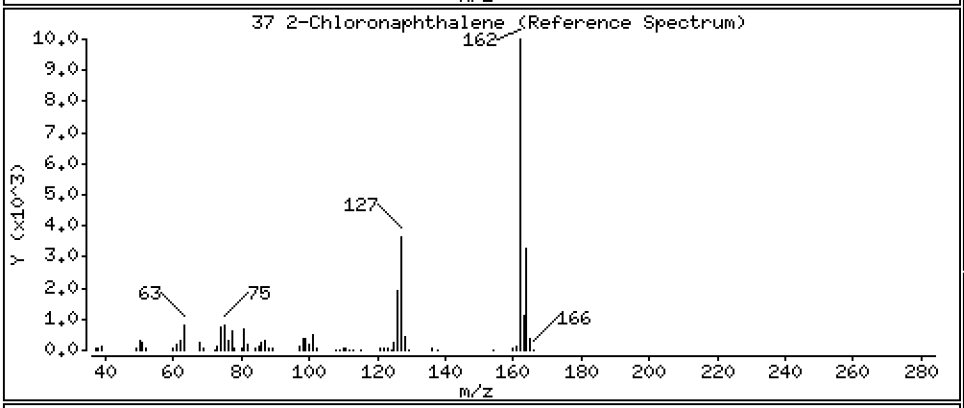
Concentration: 2.013 ug/ml

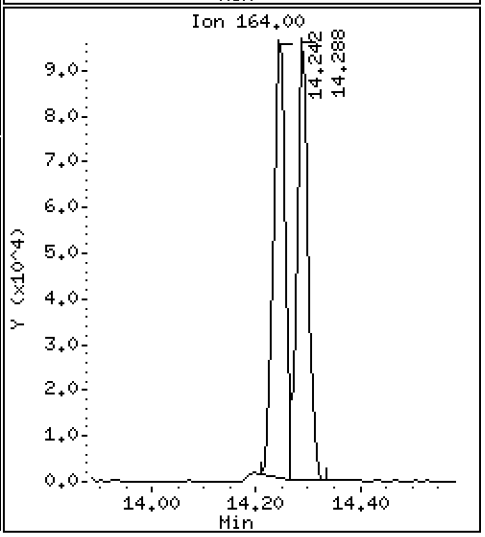


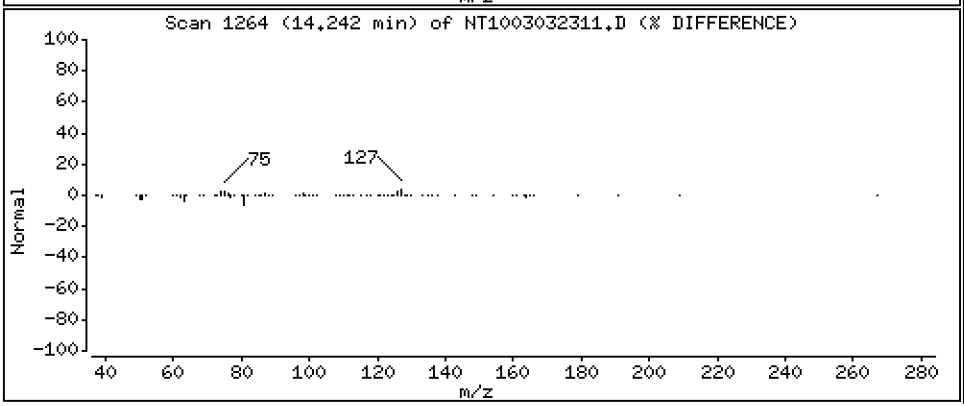












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

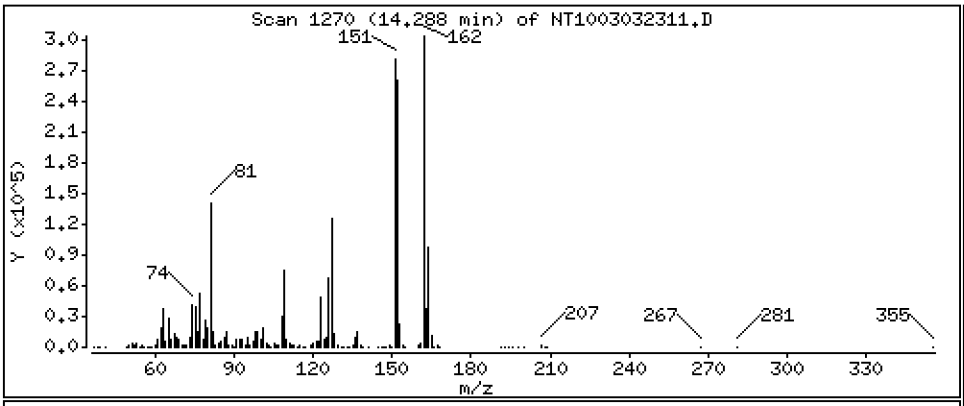
Operator: VTS

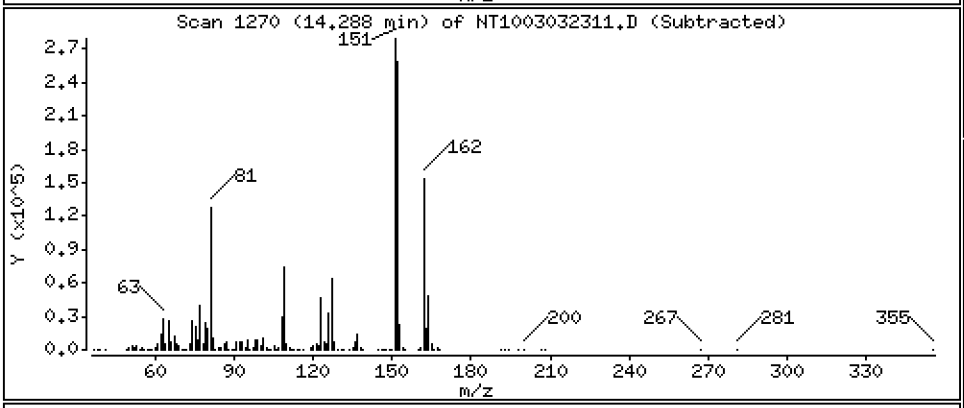
Column phase: ZB-5msi

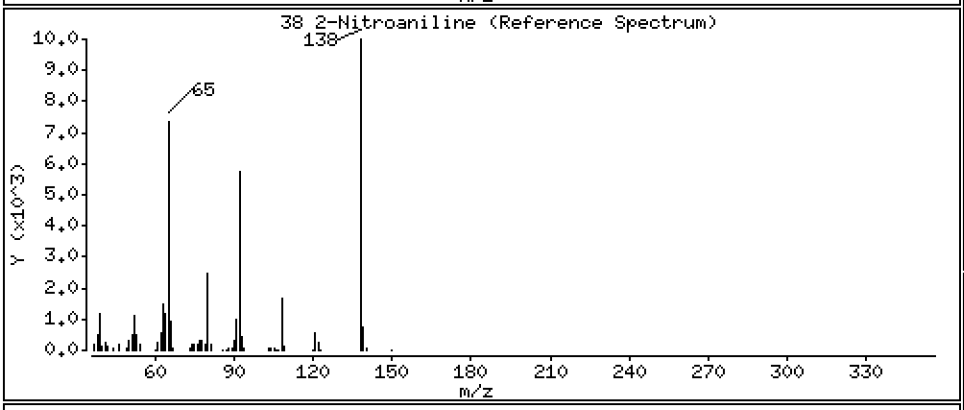
Column diameter: 0.25

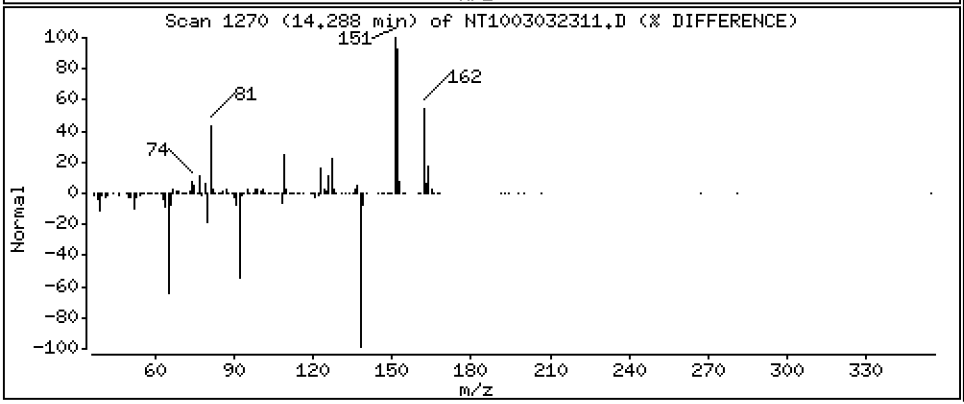
38 2-Nitroaniline

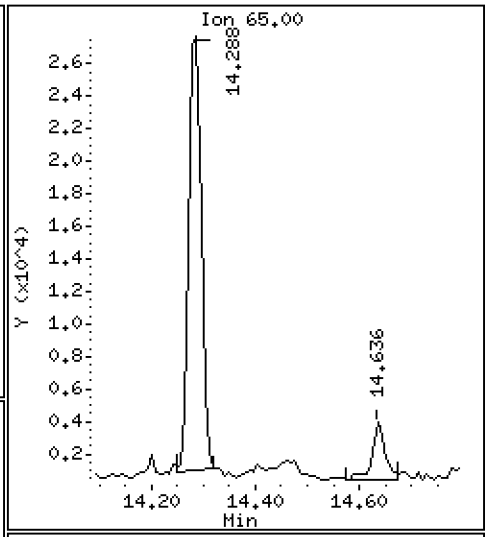
Concentration: 0.6564 ug/ml

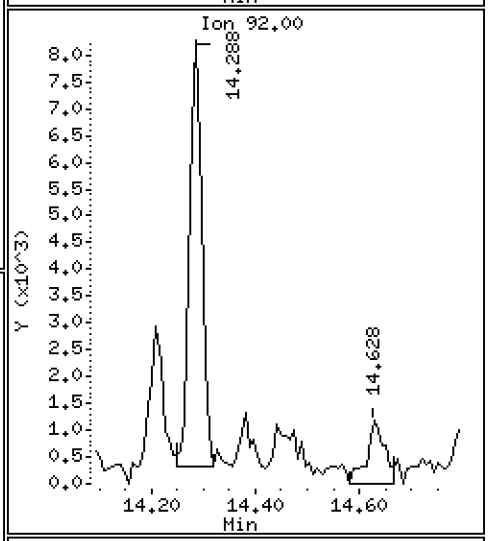


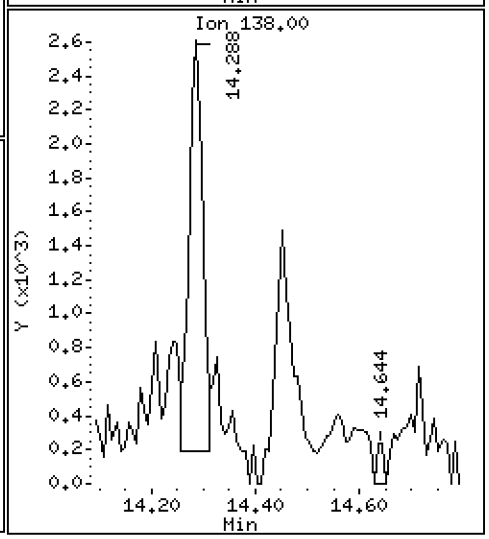












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

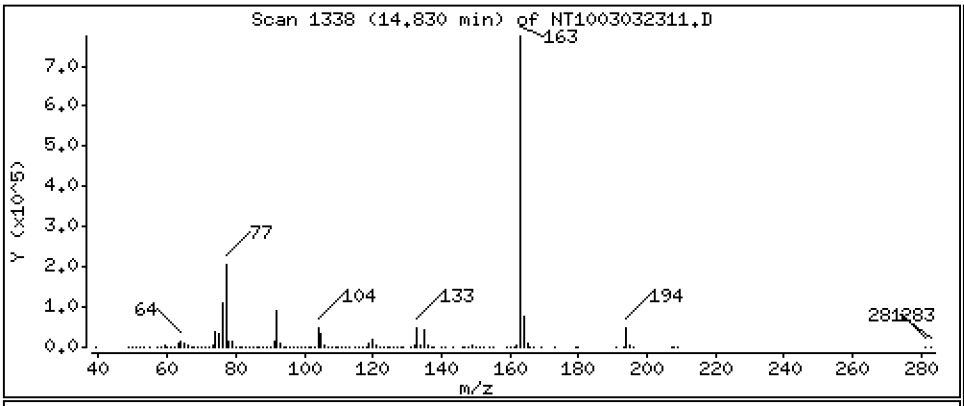
Operator: VTS

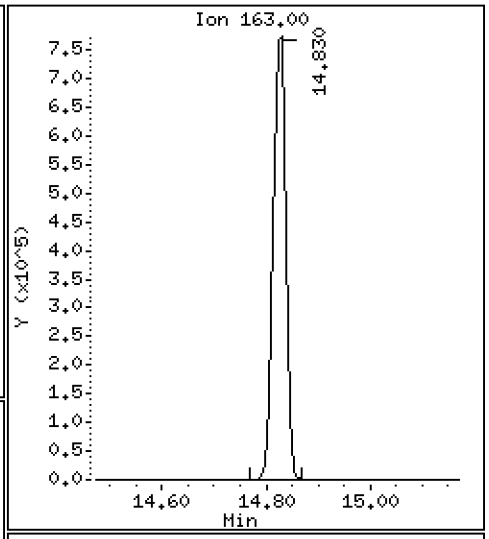
Column phase: ZB-5msi

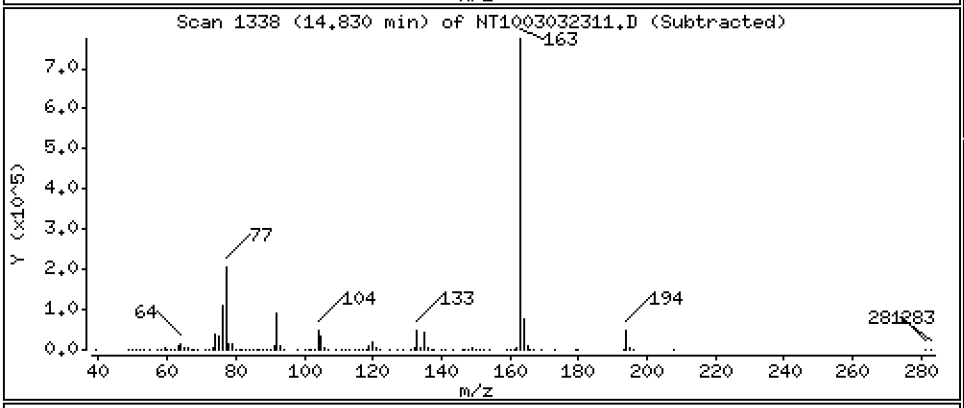
Column diameter: 0.25

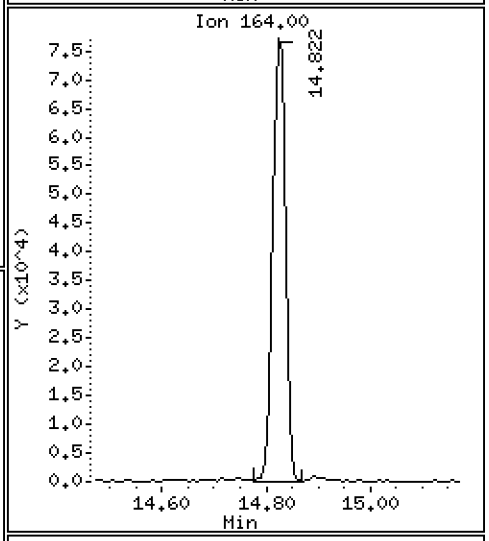
39 Dimethylphthalate

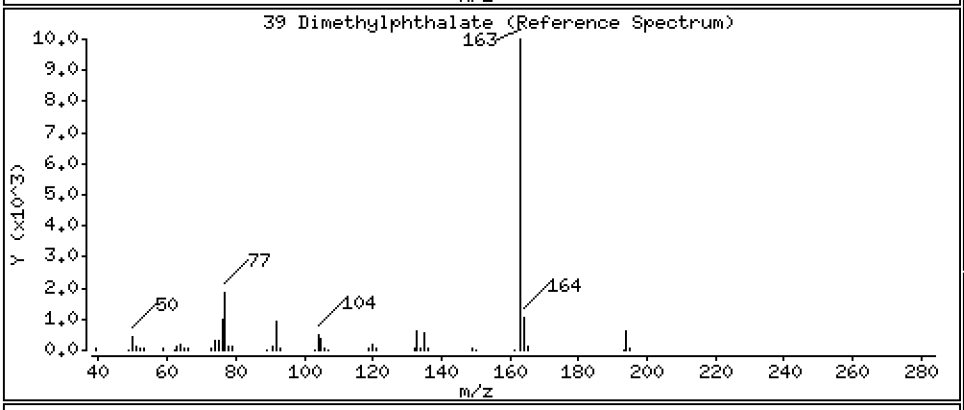
Concentration: 4.527 ug/ml

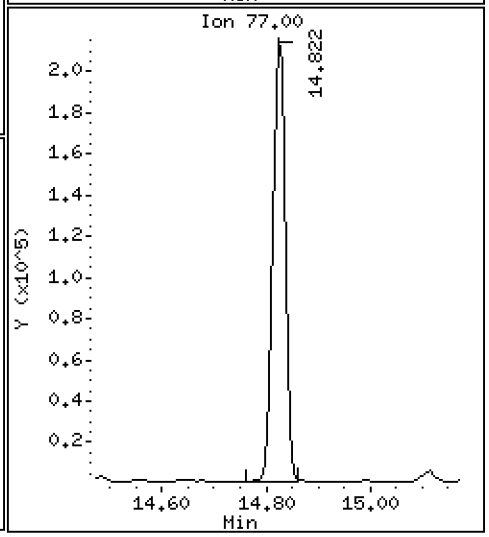


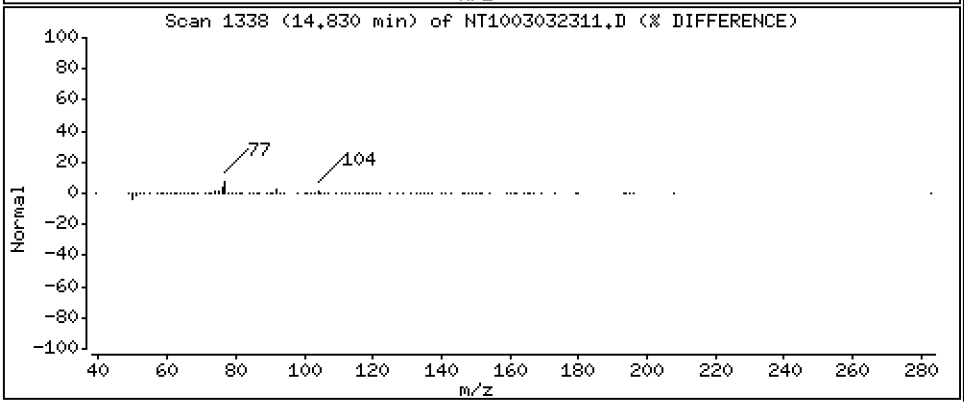












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

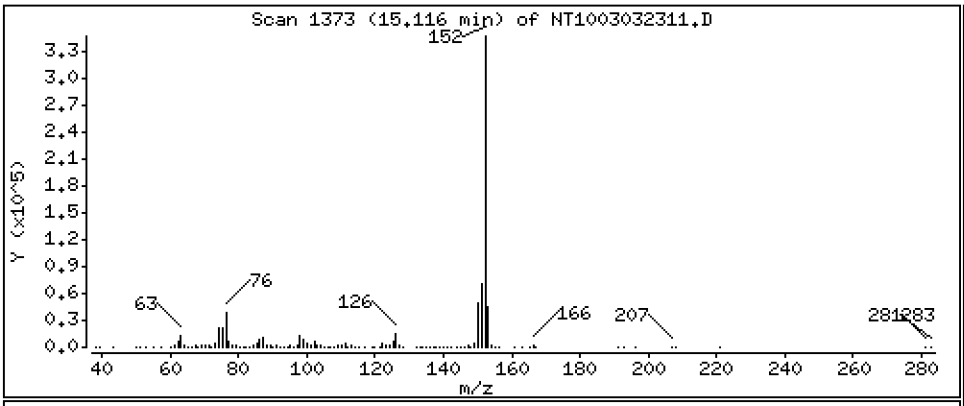
Operator: VTS

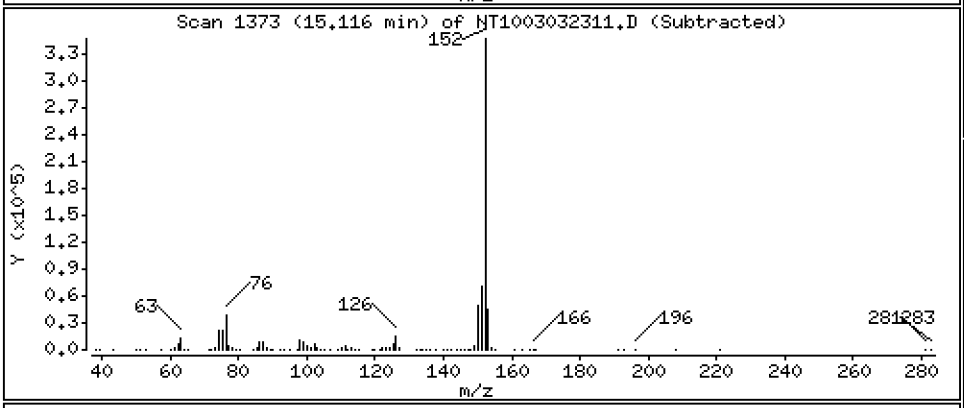
Column phase: ZB-5msi

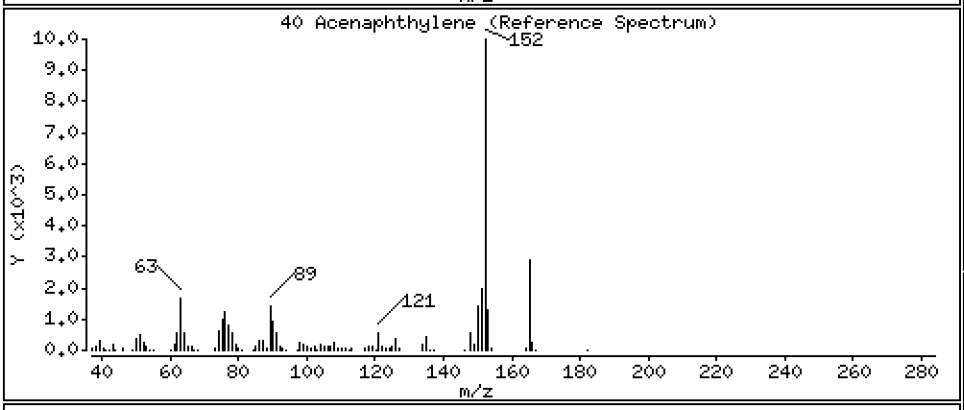
Column diameter: 0.25

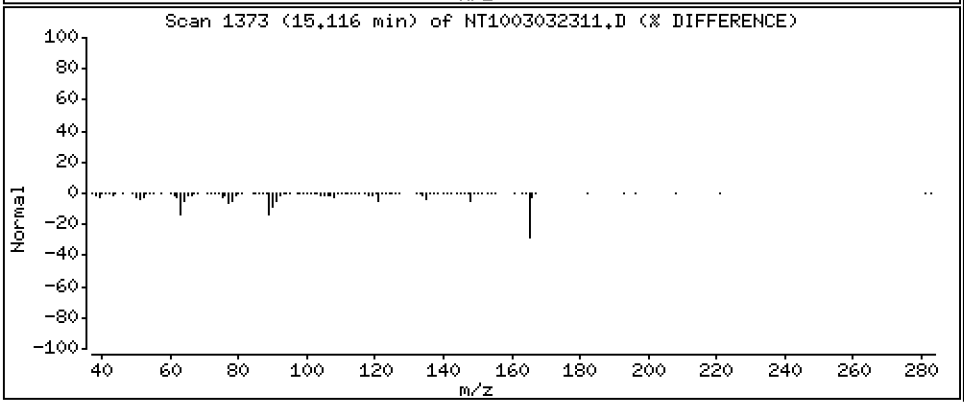
40 Acenaphthylene

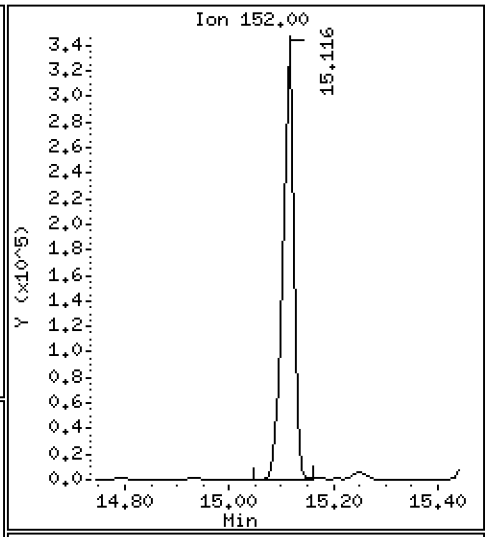
Concentration: 0.8895 ug/ml

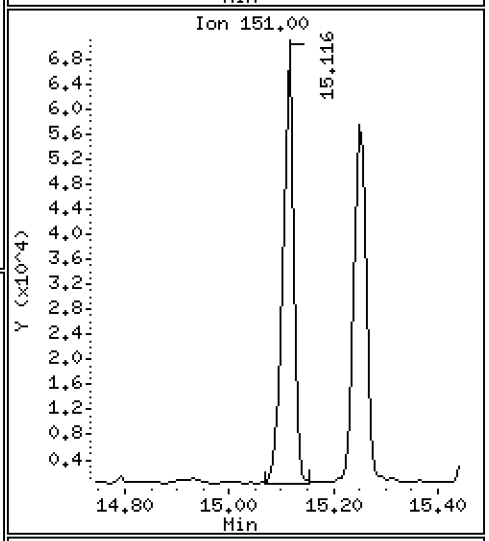


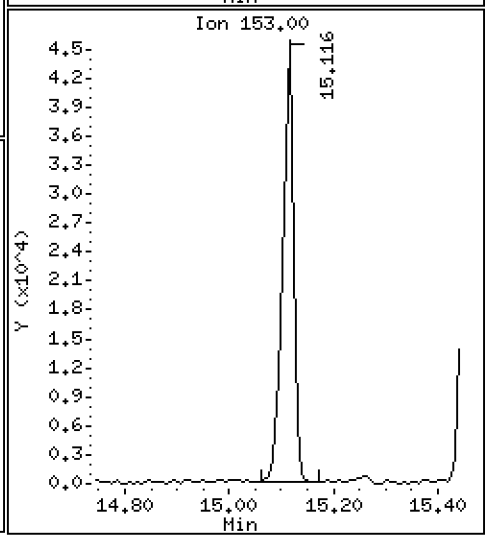












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

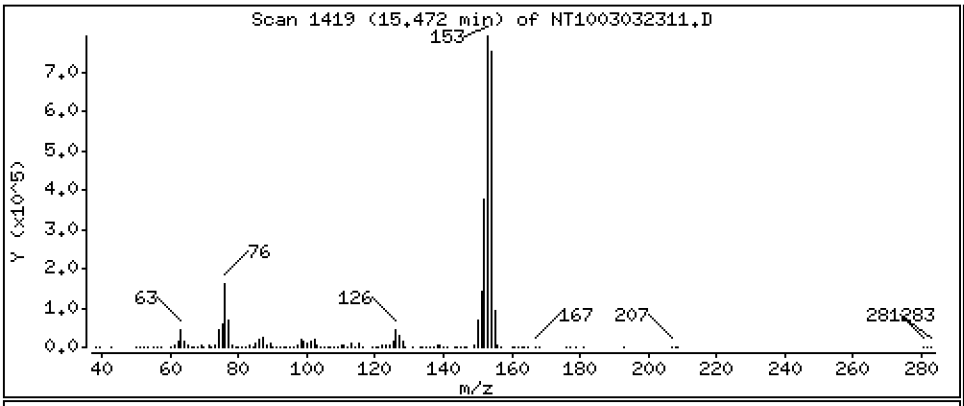
Operator: VTS

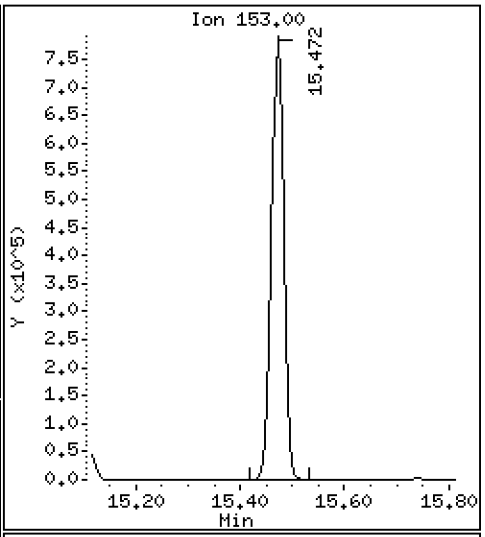
Column phase: ZB-5msi

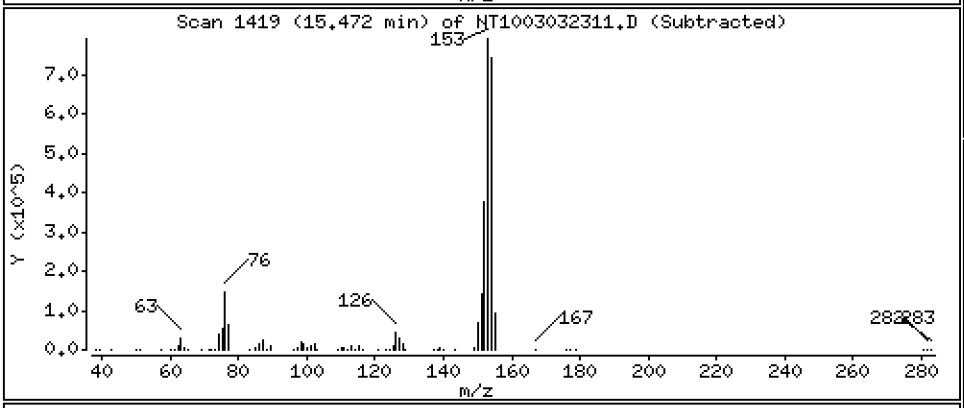
Column diameter: 0.25

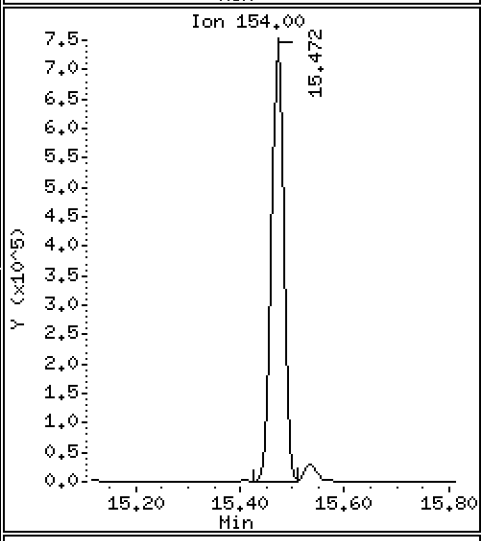
44 Acenaphthene

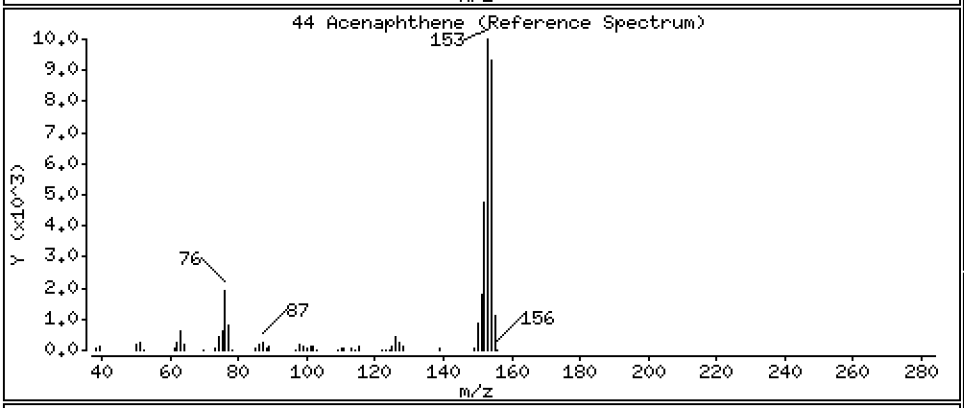
Concentration: 4.916 ug/ml

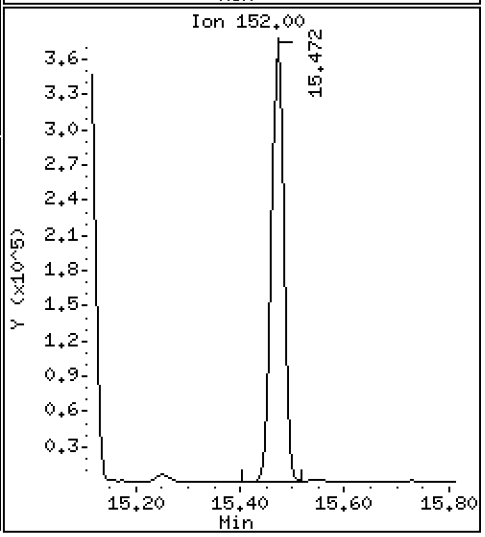


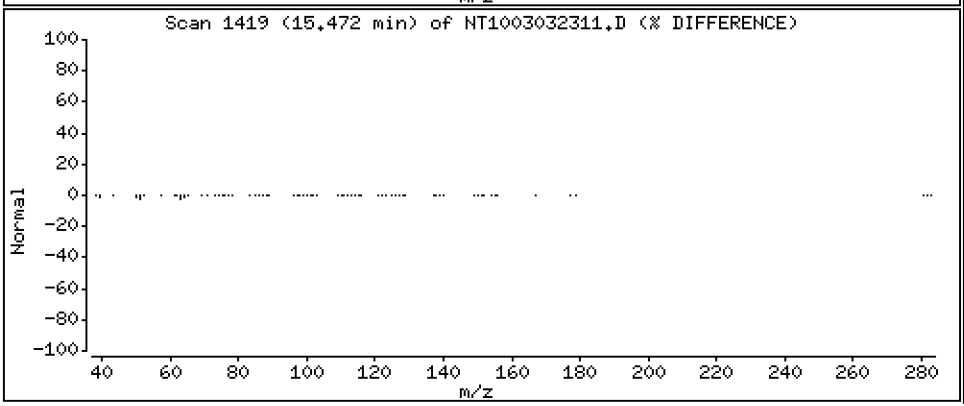












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

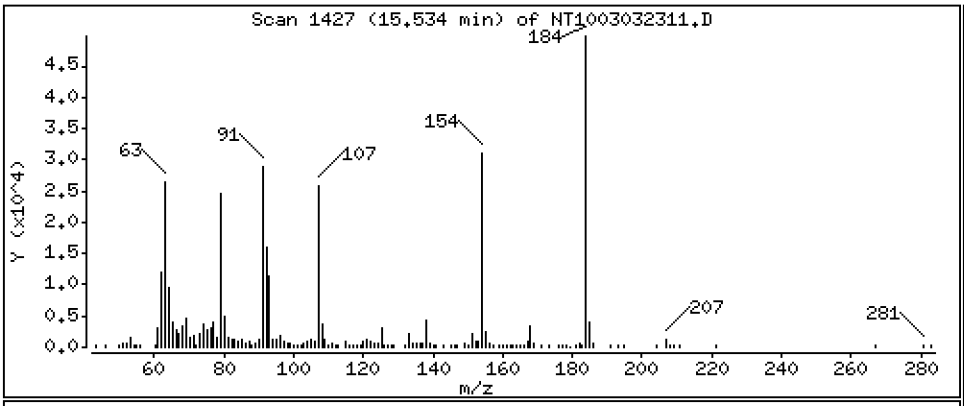
Operator: VTS

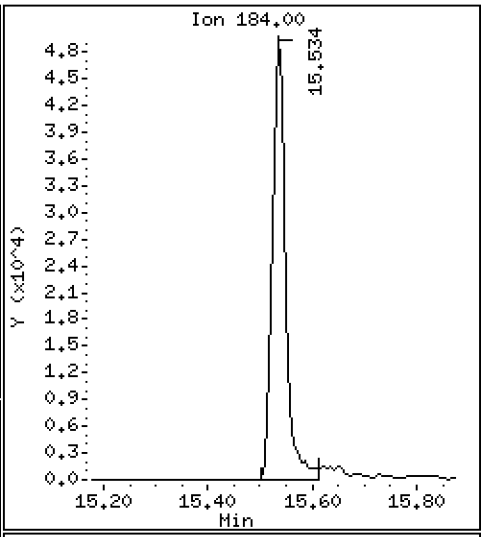
Column phase: ZB-5msi

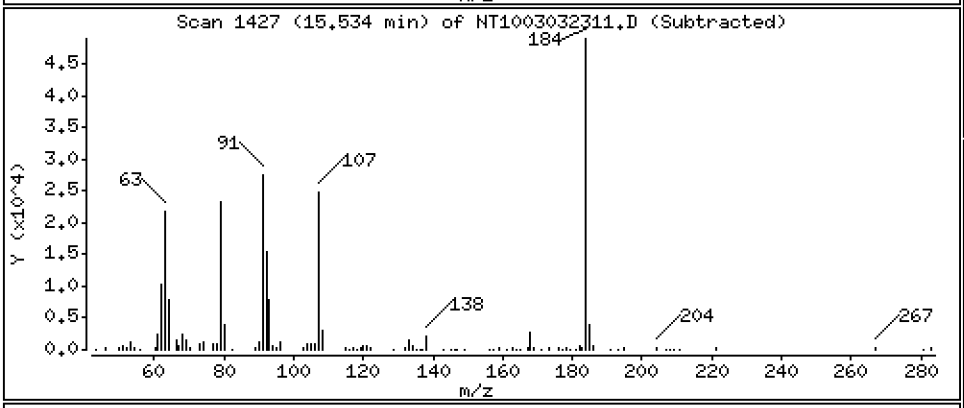
Column diameter: 0.25

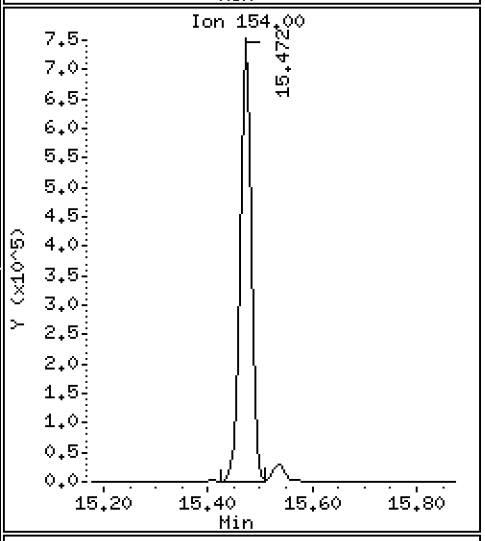
45 2,4-Dinitrophenol

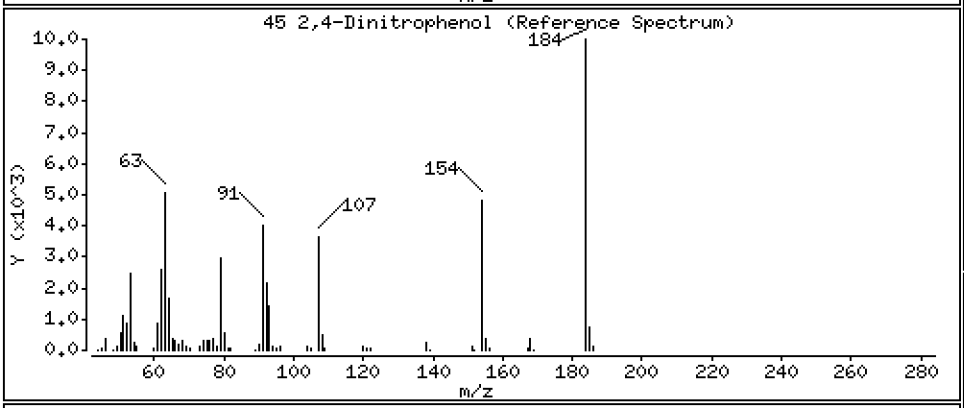
Concentration: 5.929 ug/ml

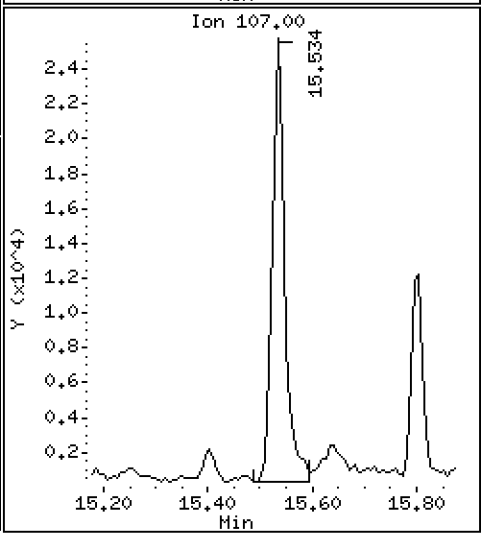


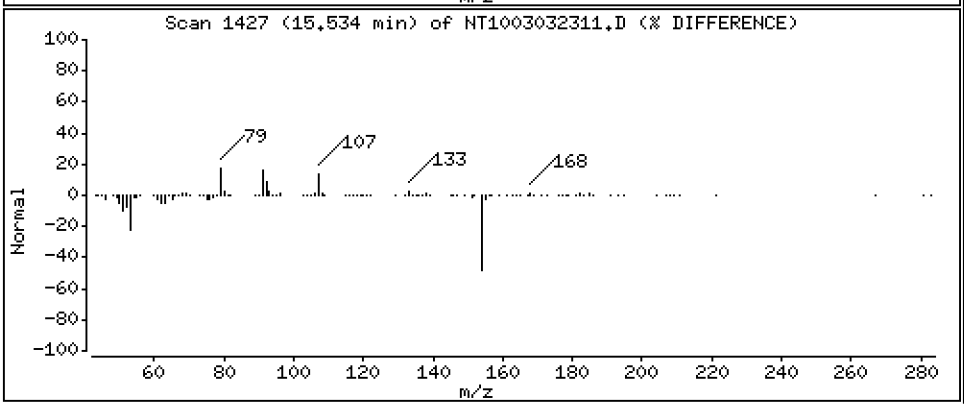












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

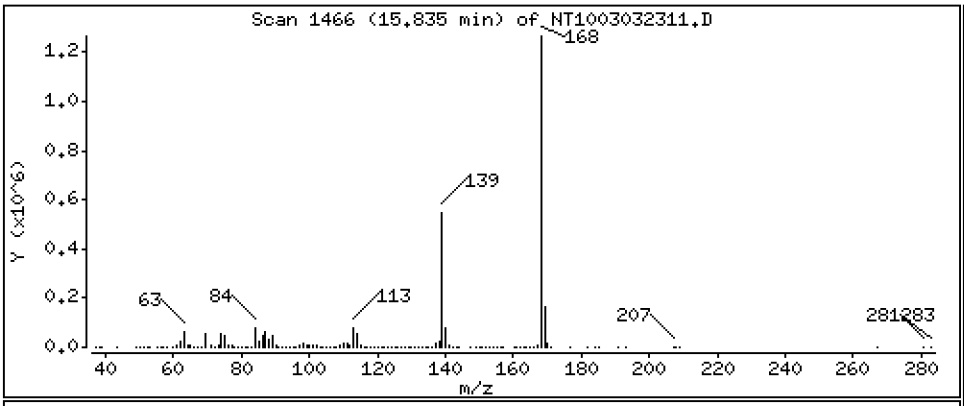
Operator: VTS

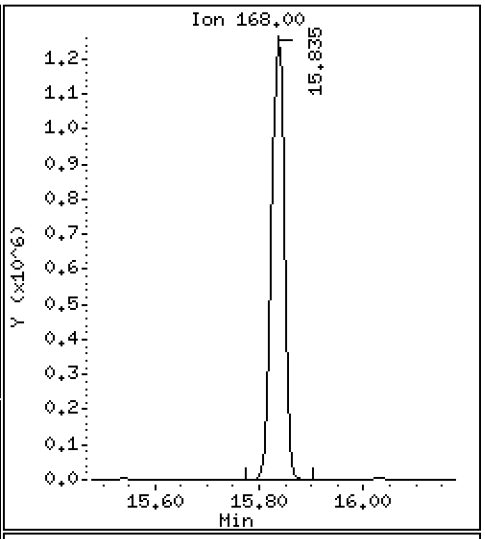
Column phase: ZB-5msi

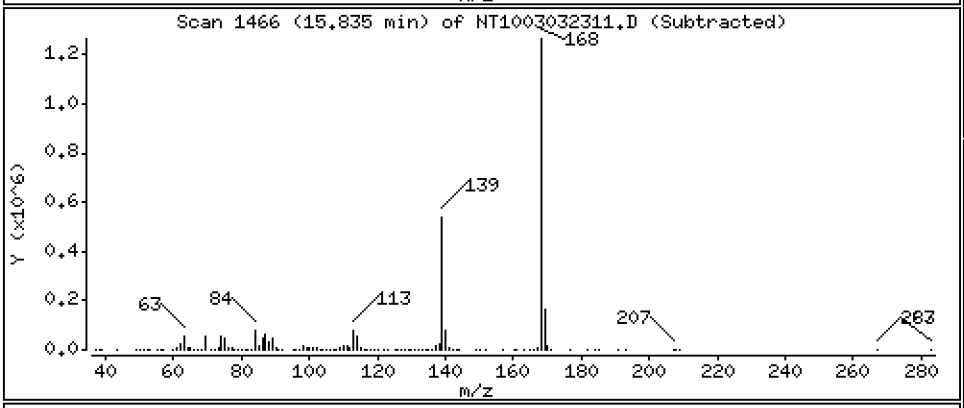
Column diameter: 0.25

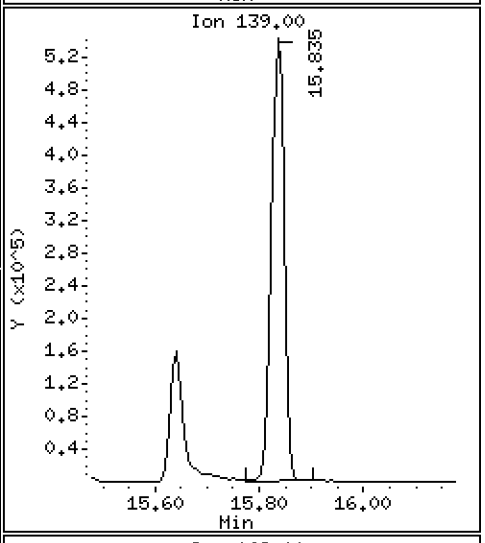
46 Dibenzofuran

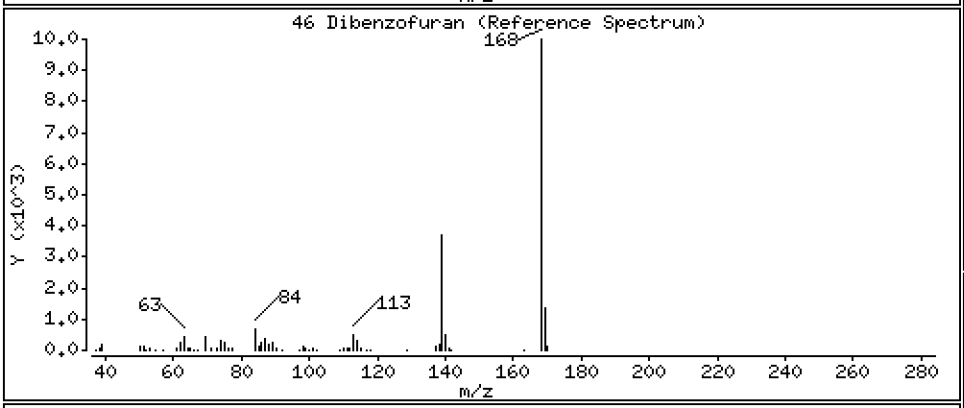
Concentration: 5.541 ug/ml

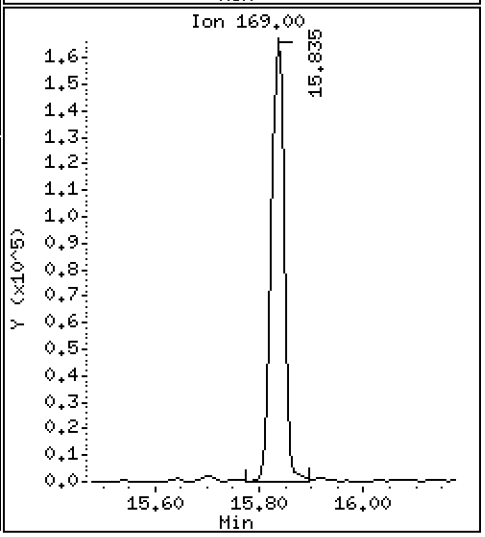


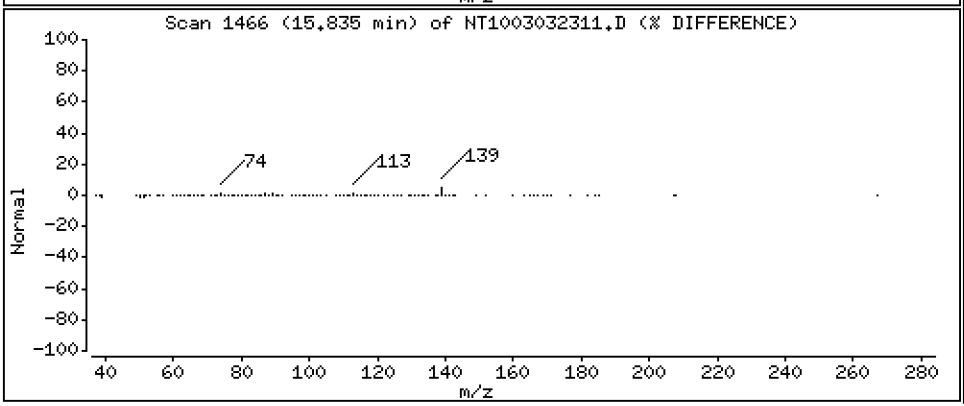












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

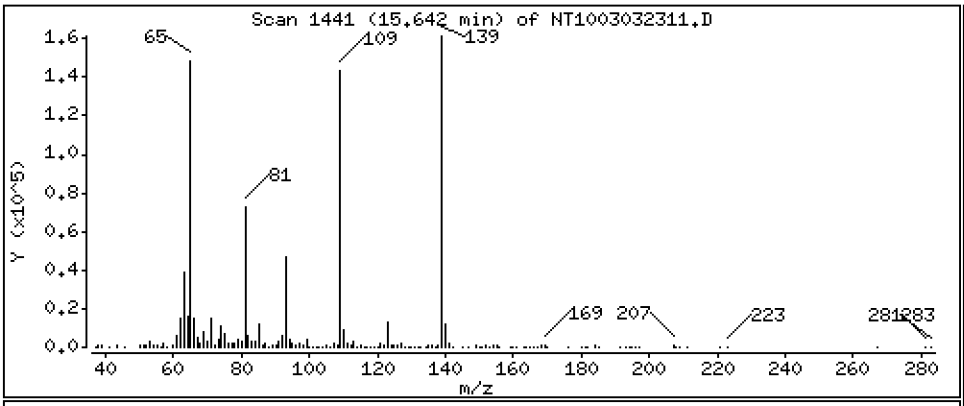
Operator: VTS

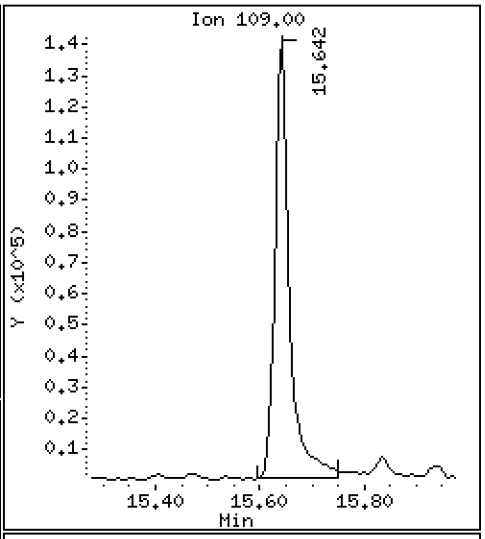
Column phase: ZB-5msi

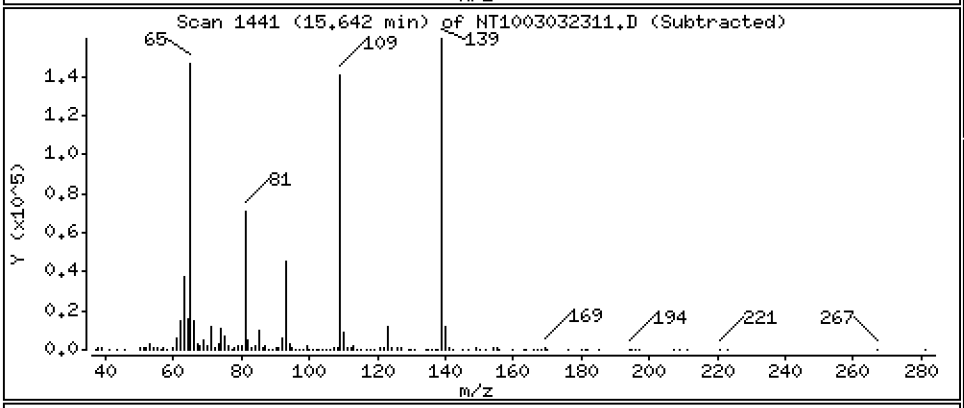
Column diameter: 0.25

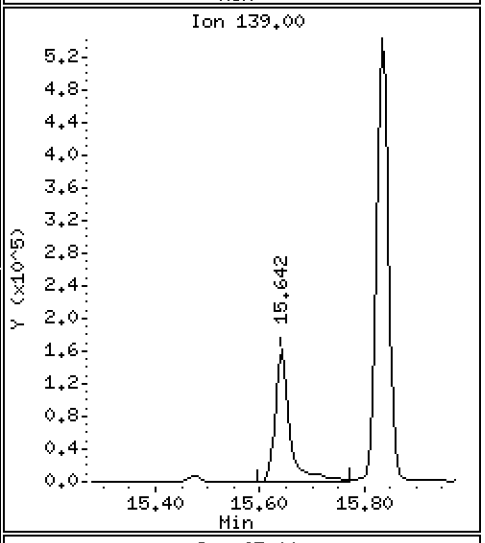
47 4-Nitrophenol

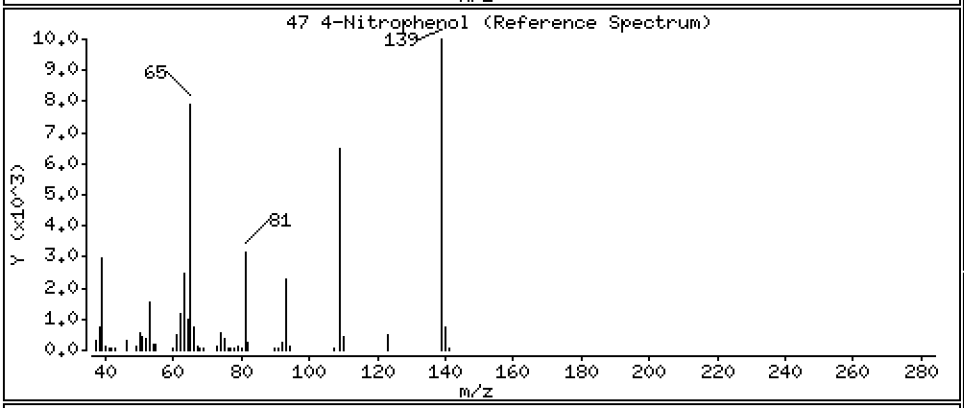
Concentration: 5.583 ug/ml

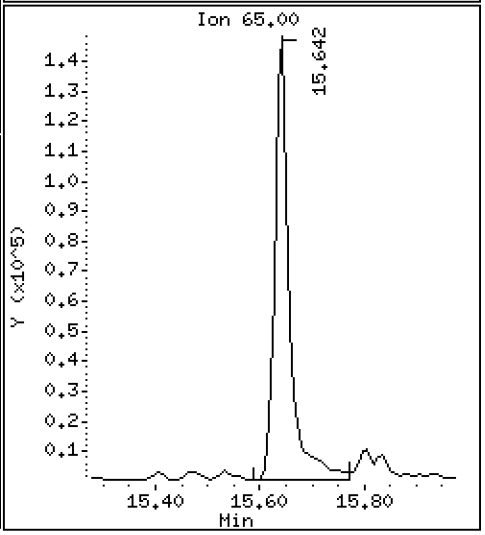


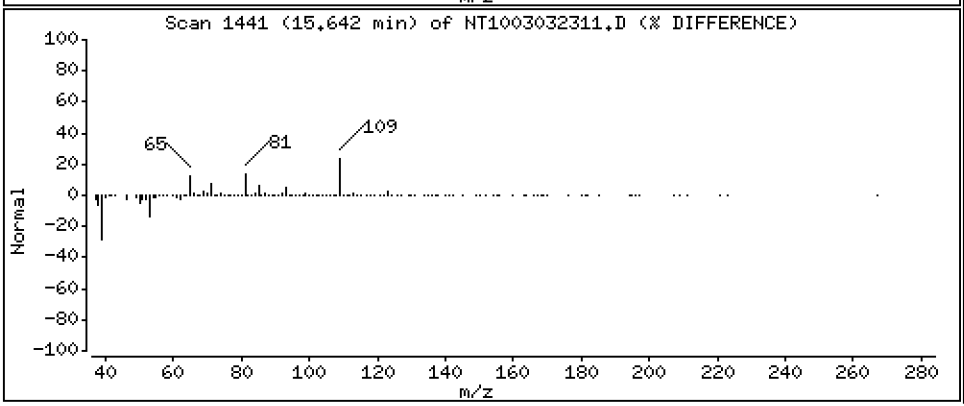












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

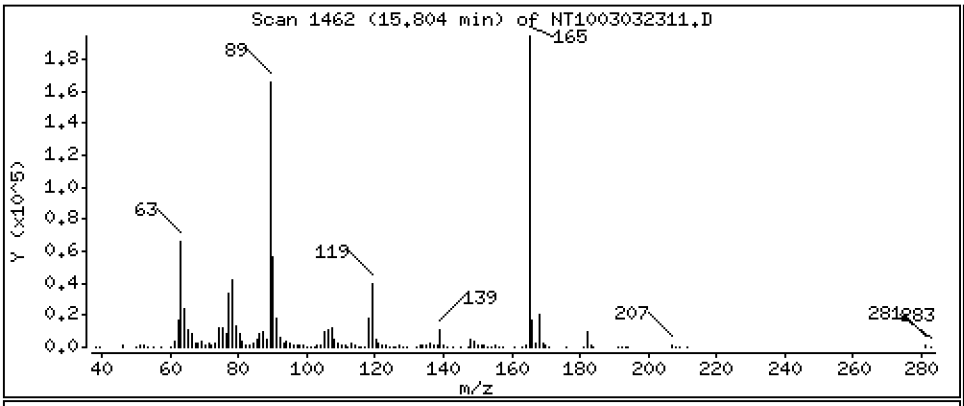
Operator: VTS

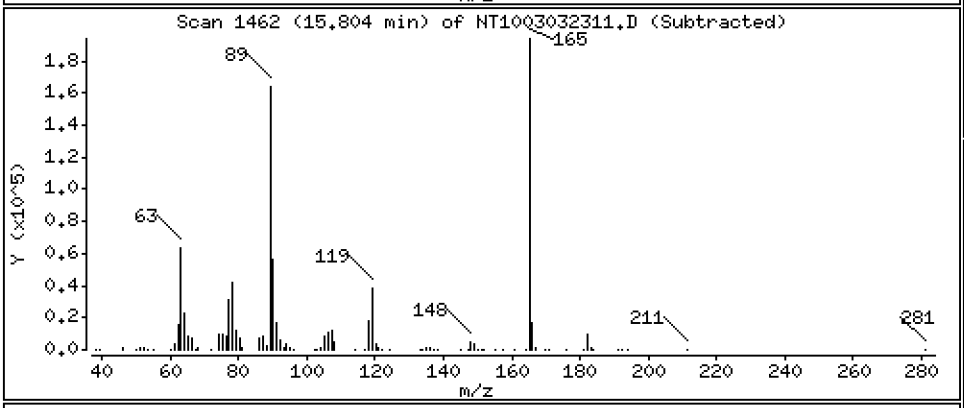
Column phase: ZB-5msi

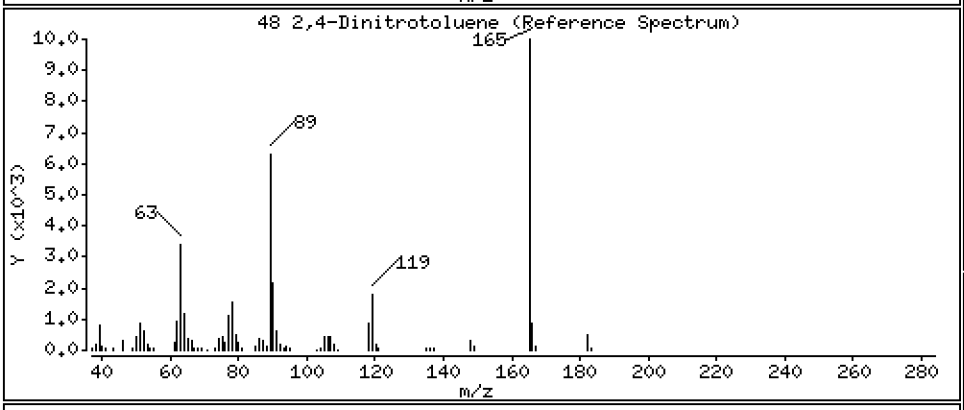
Column diameter: 0.25

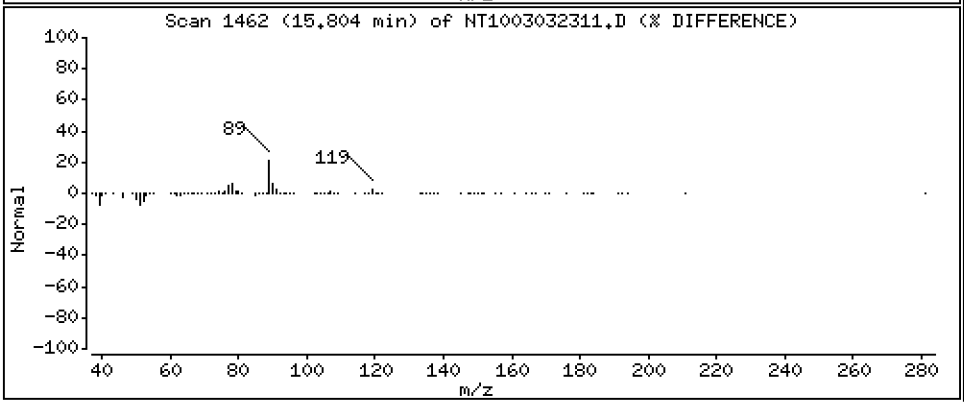
48 2,4-Dinitrotoluene

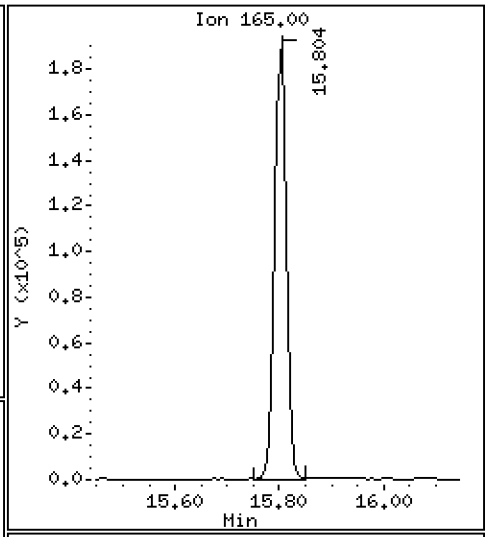
Concentration: 3.143 ug/ml

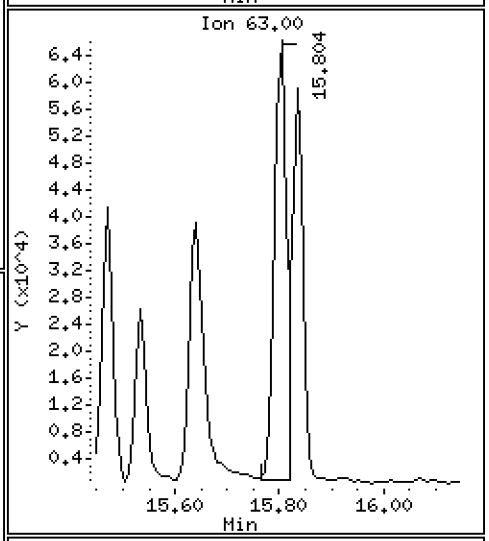


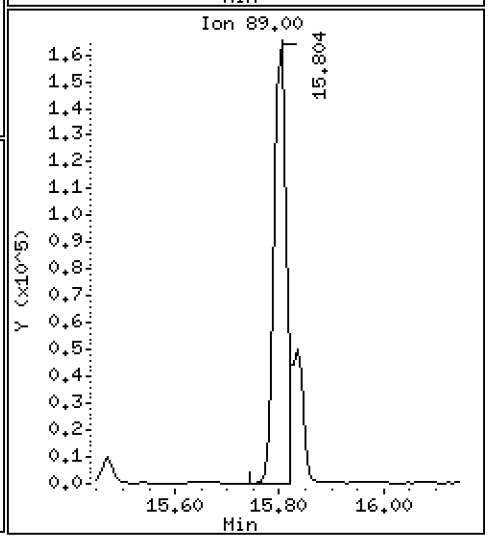












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

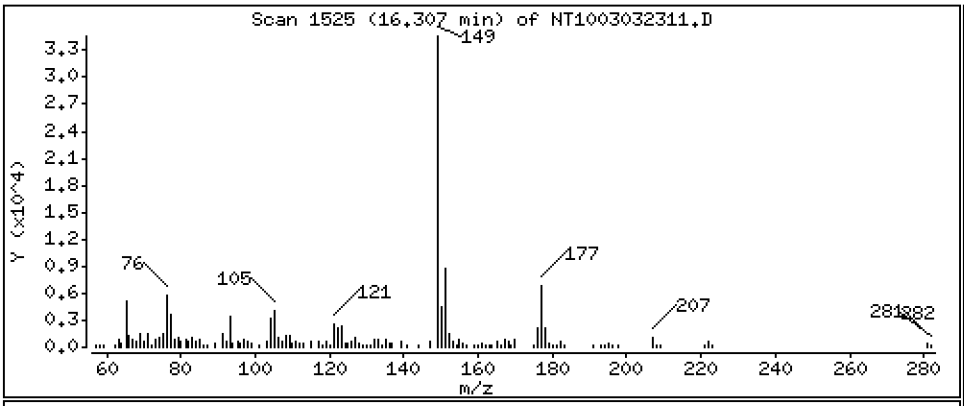
Operator: VTS

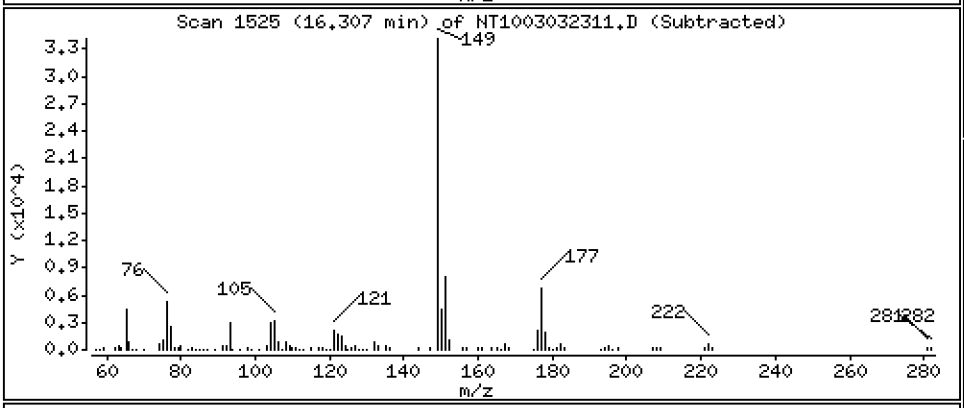
Column phase: ZB-5msi

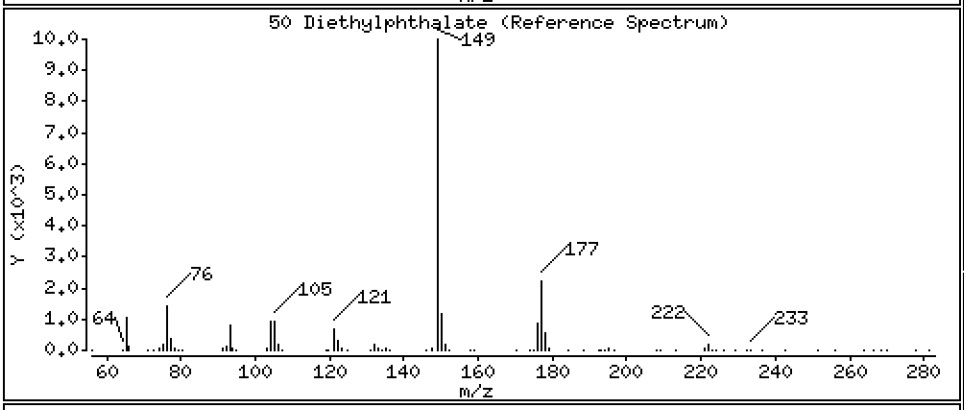
Column diameter: 0.25

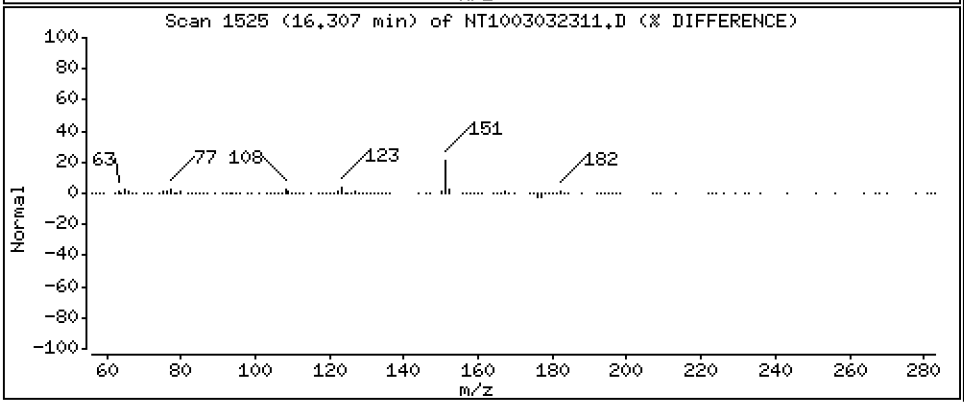
50 Diethylphthalate

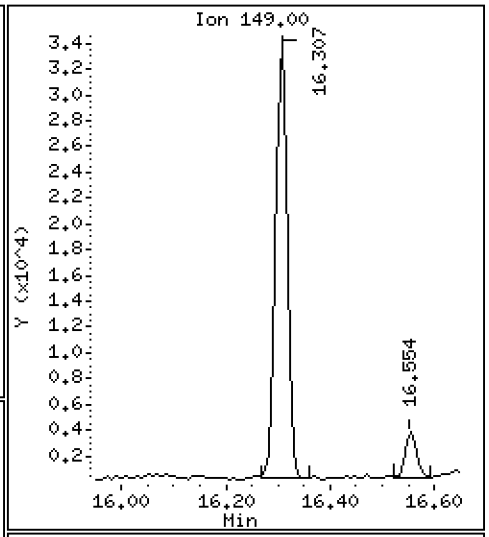
Concentration: 0.1701 ug/ml

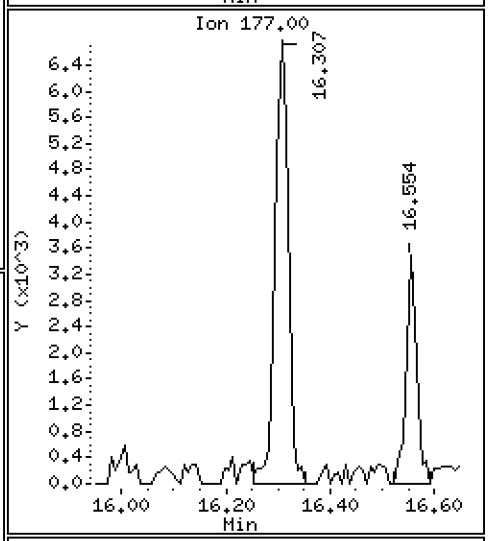


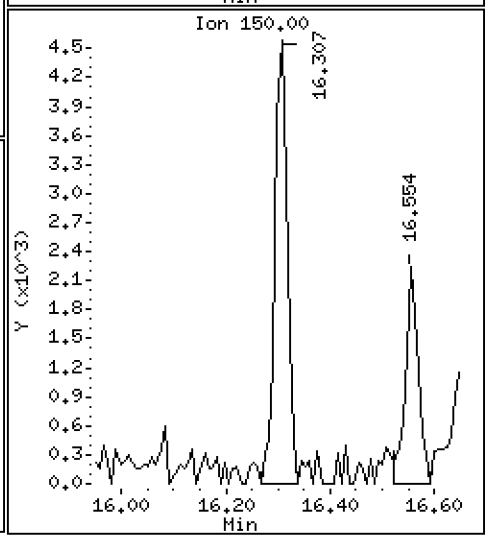












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

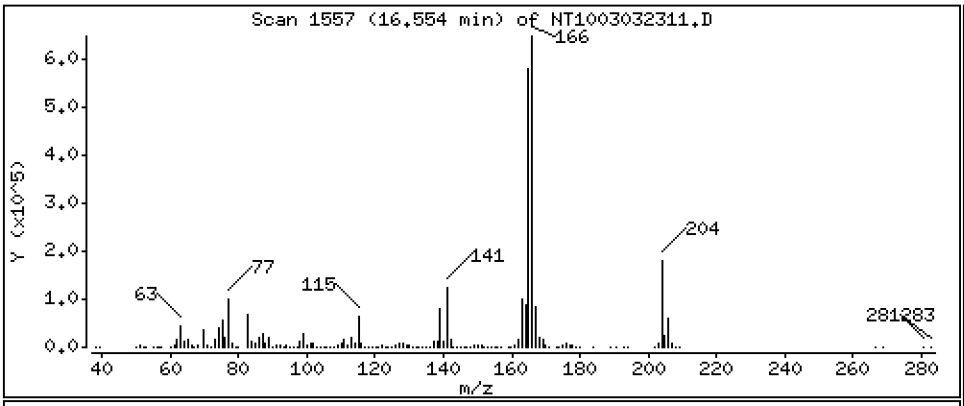
Operator: VTS

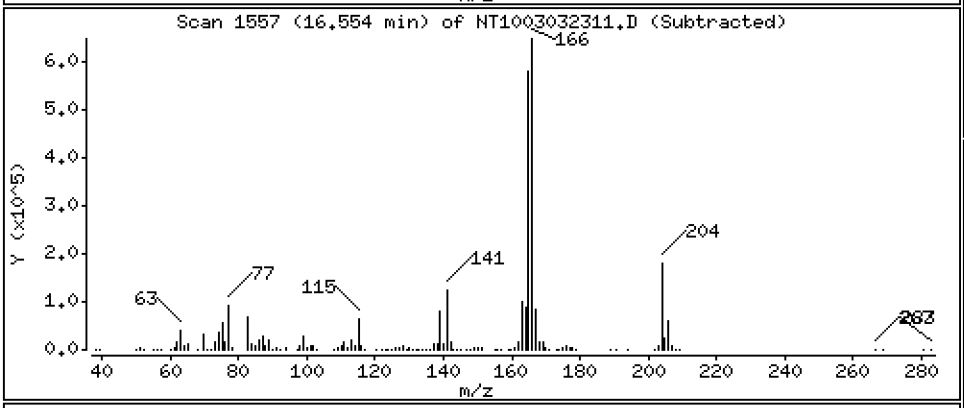
Column phase: ZB-5msi

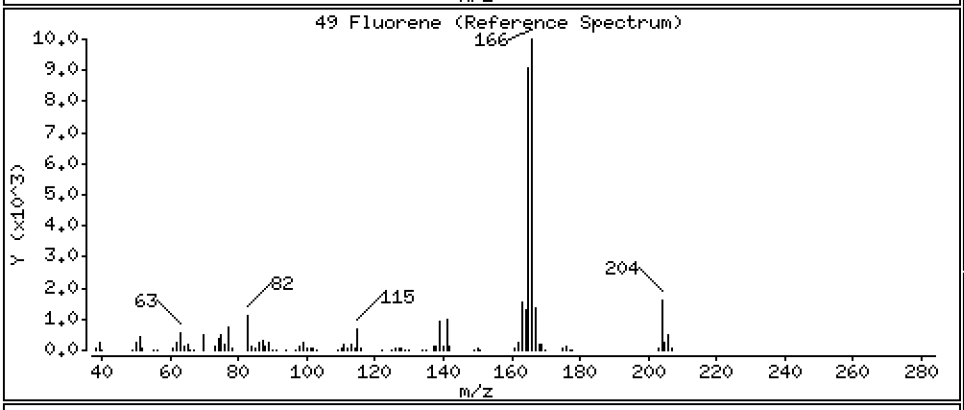
Column diameter: 0.25

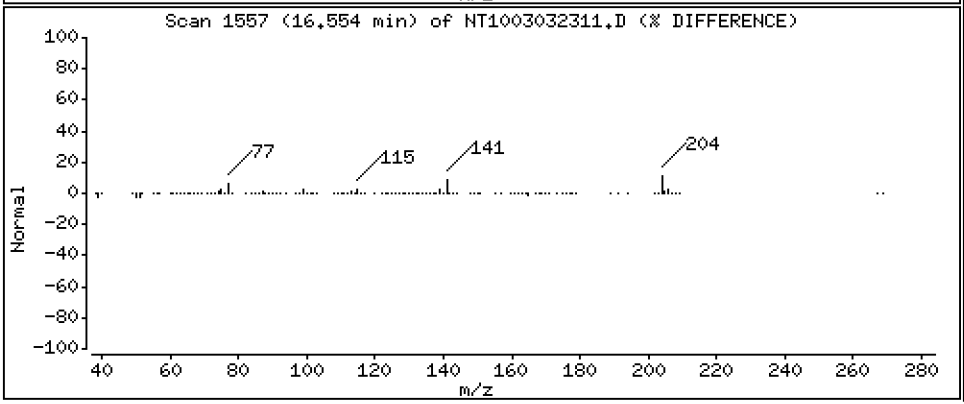
49 Fluorene

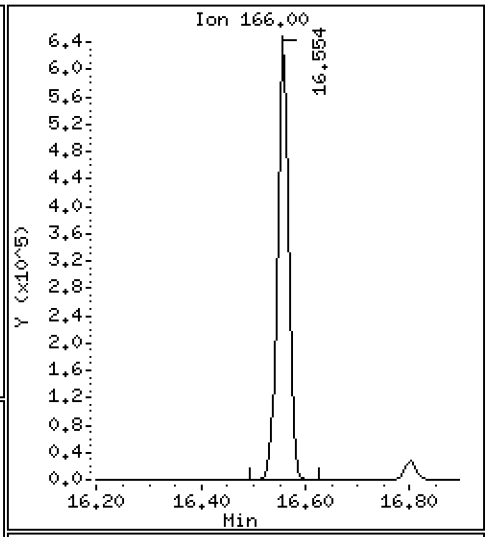
Concentration: 3.614 ug/ml

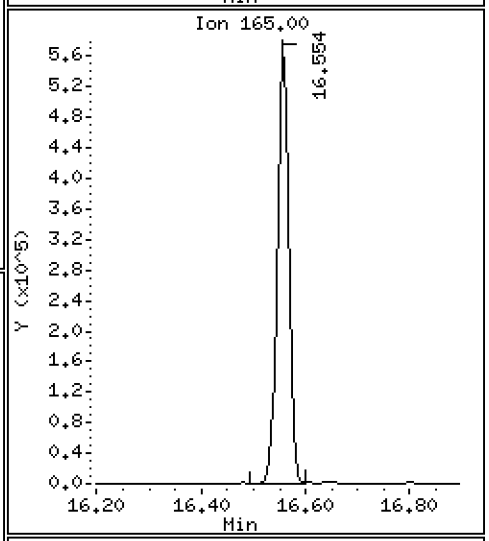


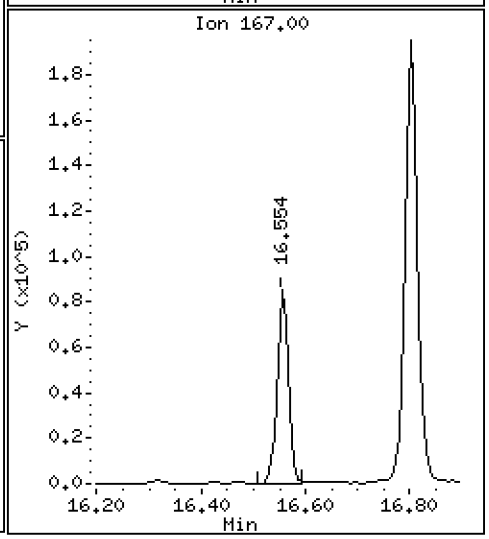












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032311.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

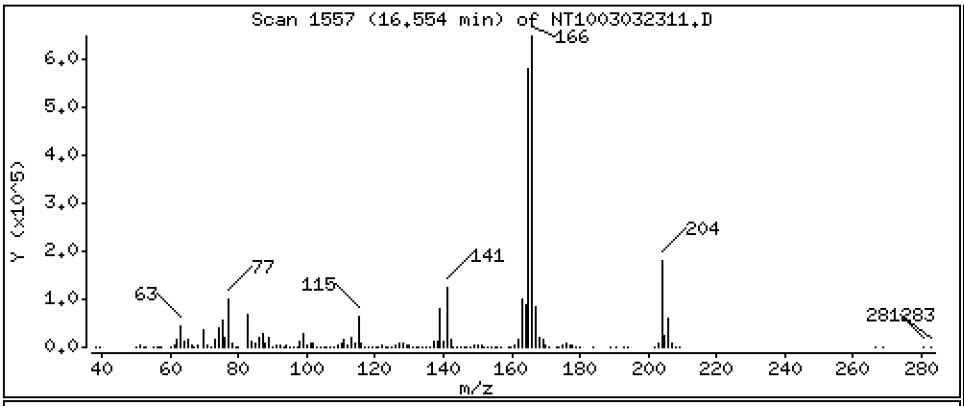
Operator: VTS

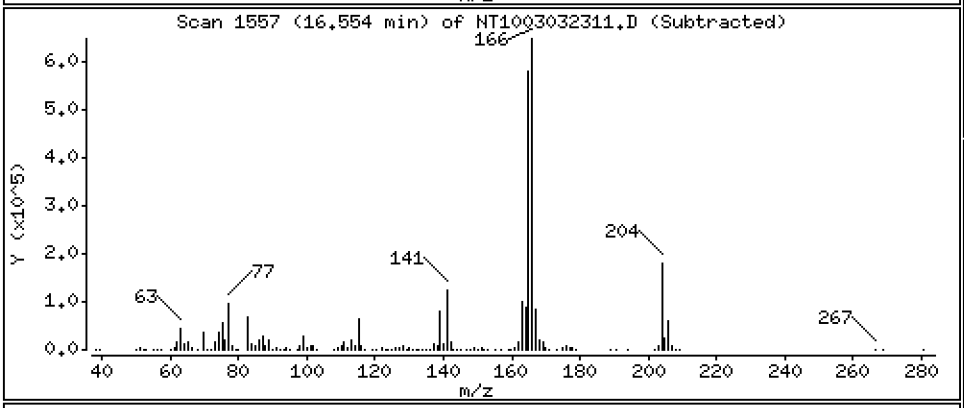
Column phase: ZB-5msi

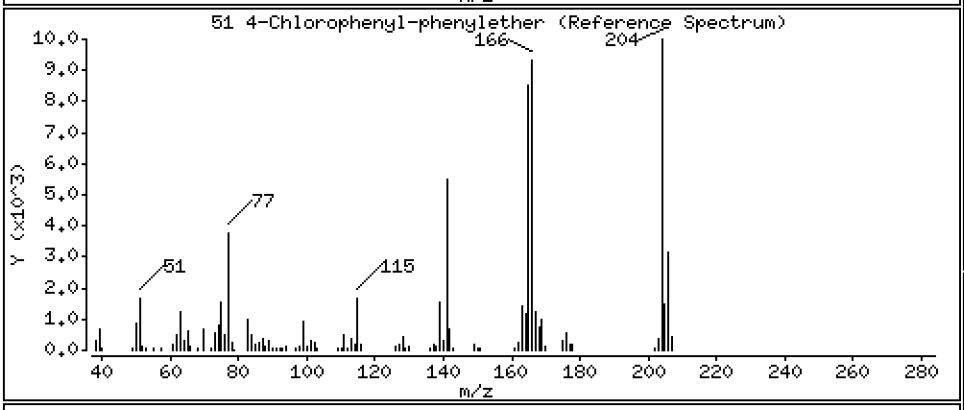
Column diameter: 0.25

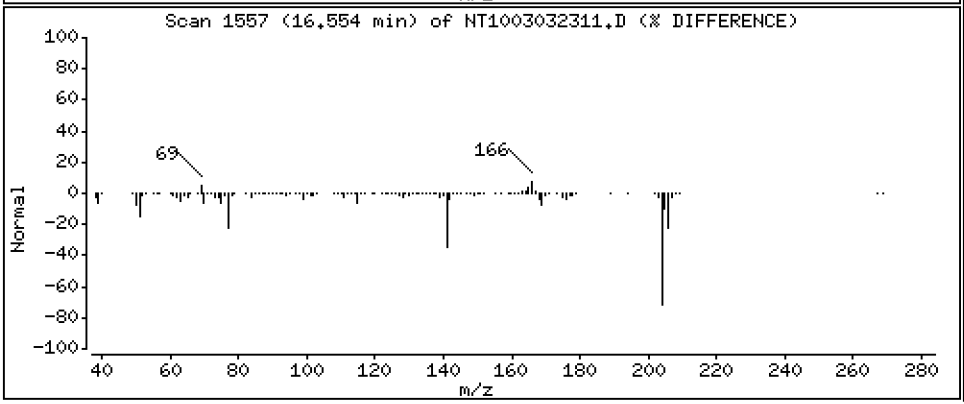
51 4-Chlorophenyl-phenylether

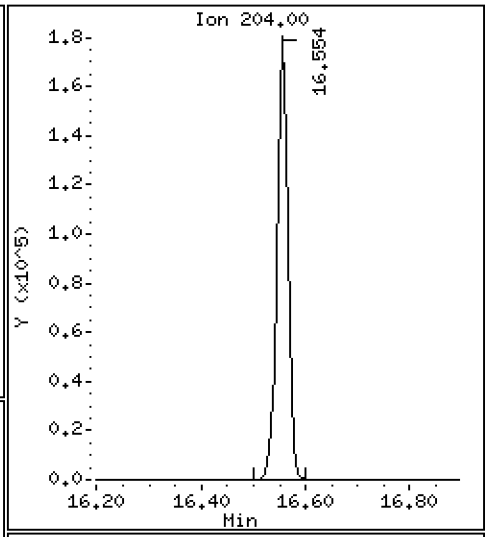
Concentration: 1.973 ug/ml

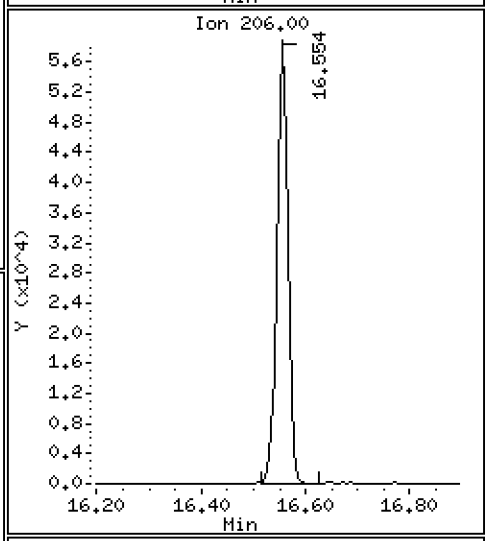


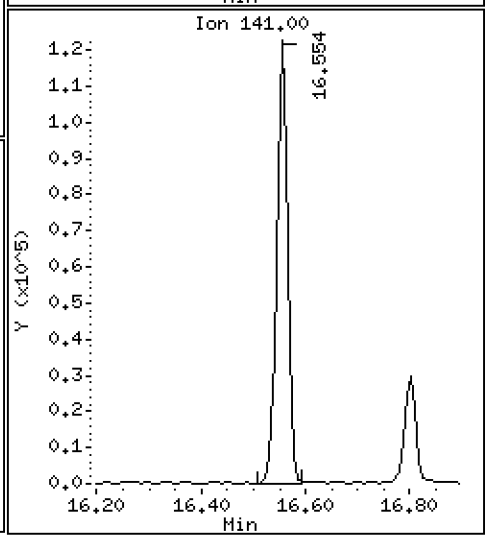












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

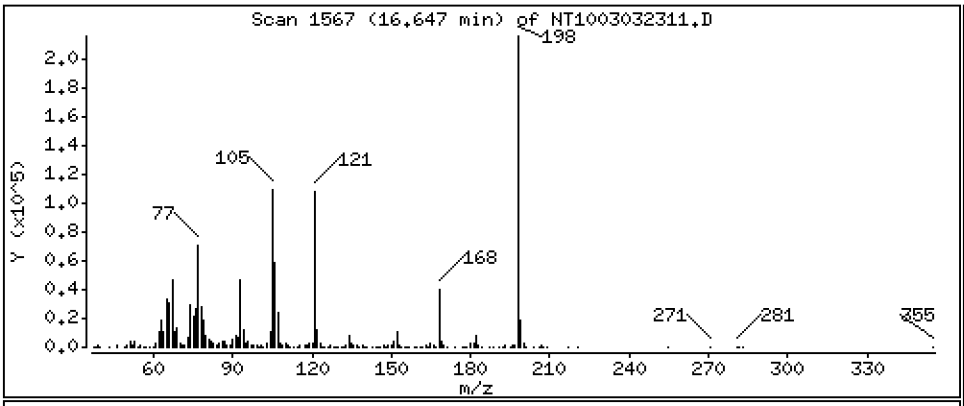
Operator: VTS

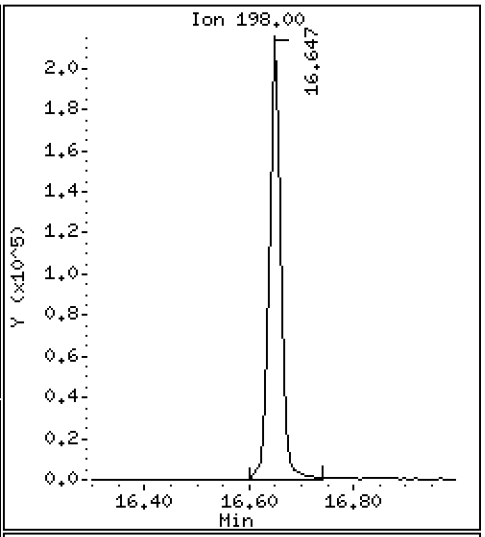
Column phase: ZB-5msi

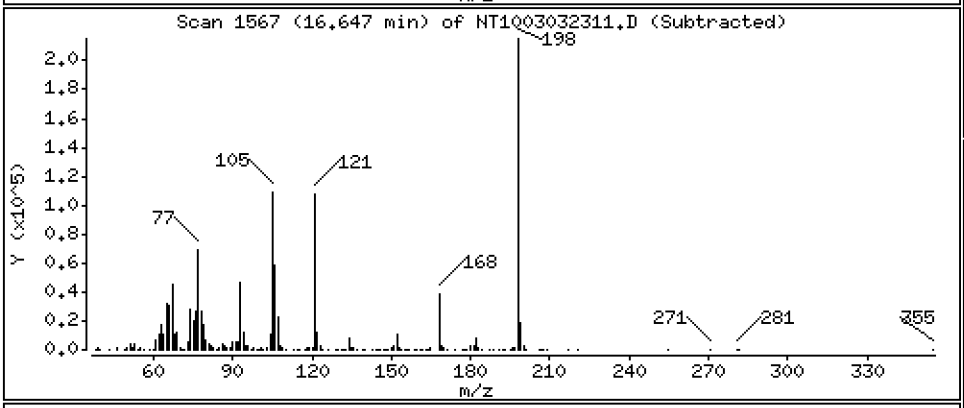
Column diameter: 0.25

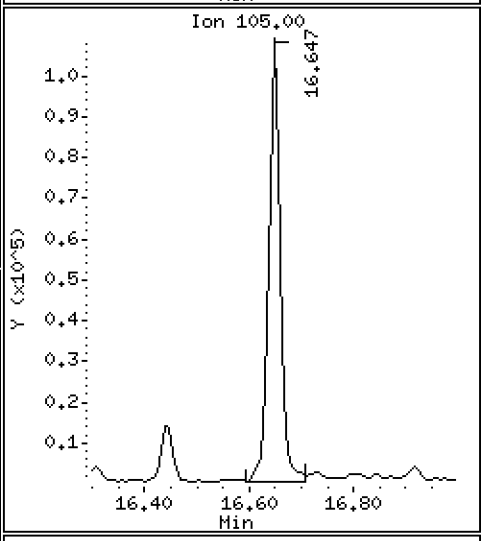
53 4,6-Dinitro-2-methylphenol

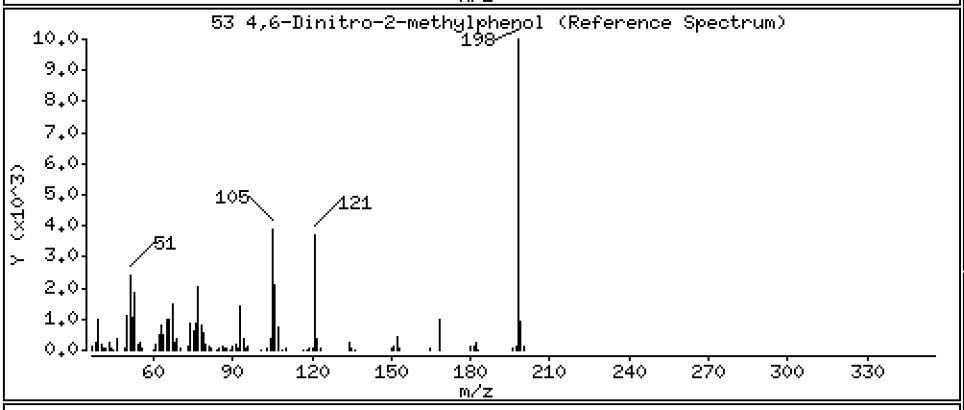
Concentration: 10.60 ug/ml

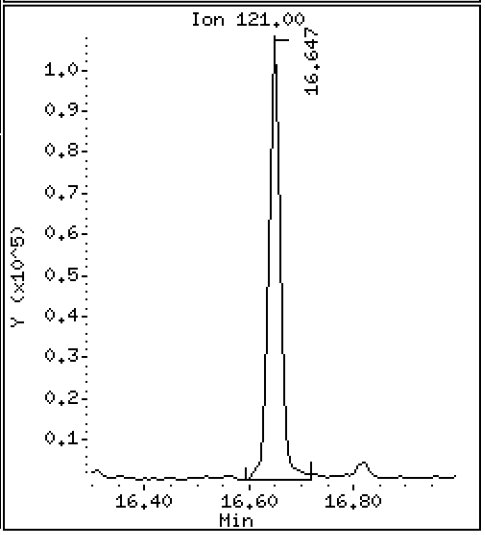


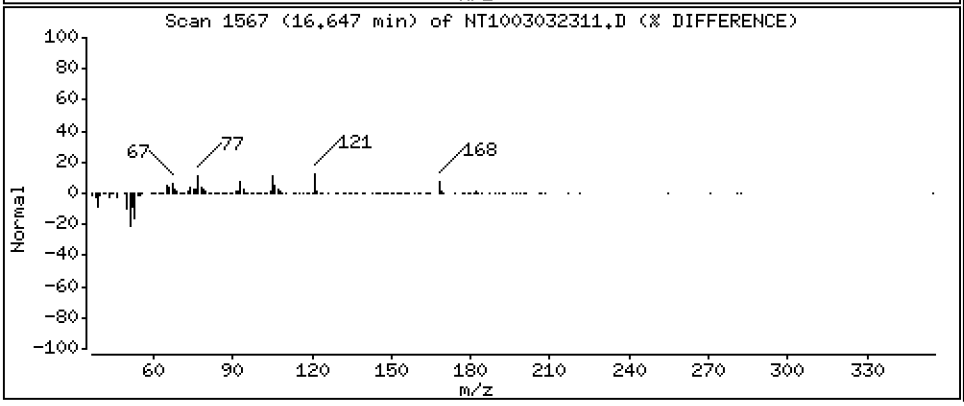












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

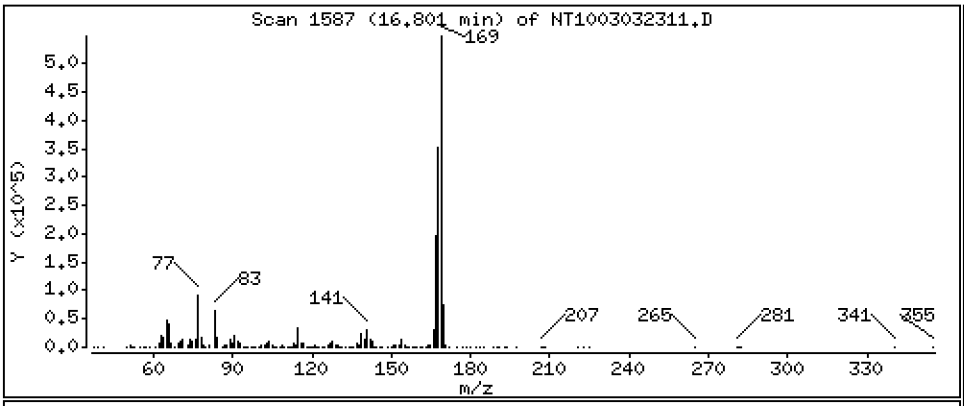
Operator: VTS

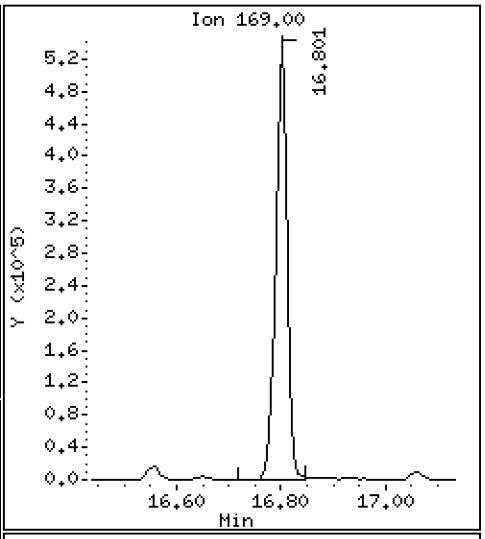
Column phase: ZB-5msi

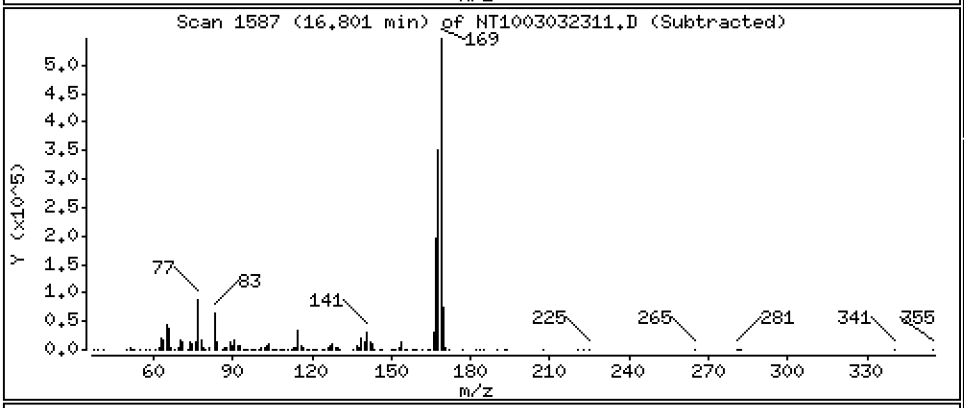
Column diameter: 0.25

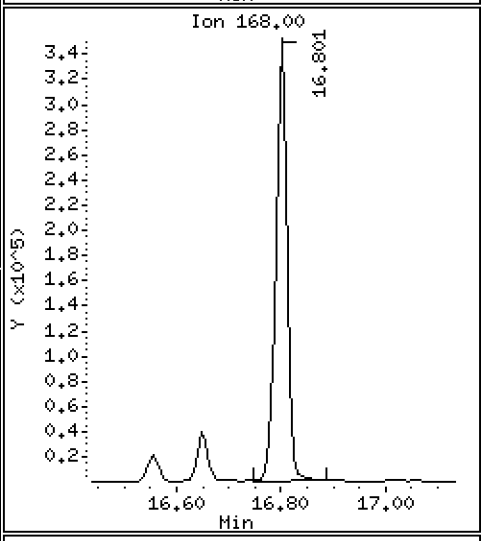
54 N-Nitrosodiphenylamine

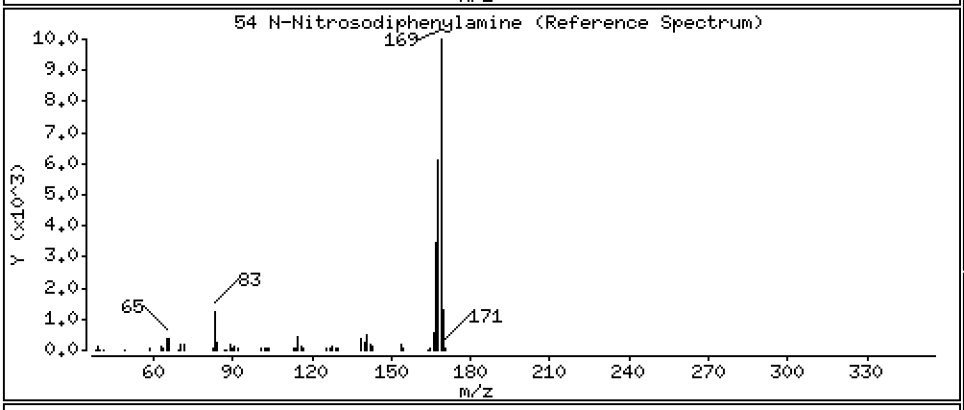
Concentration: 3.940 ug/ml

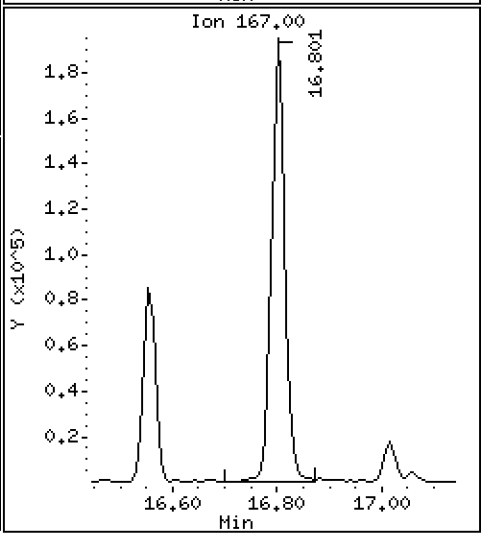


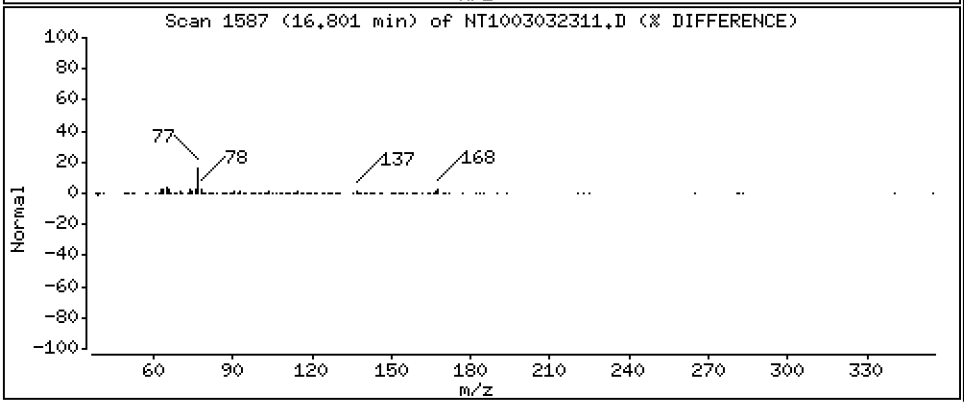












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

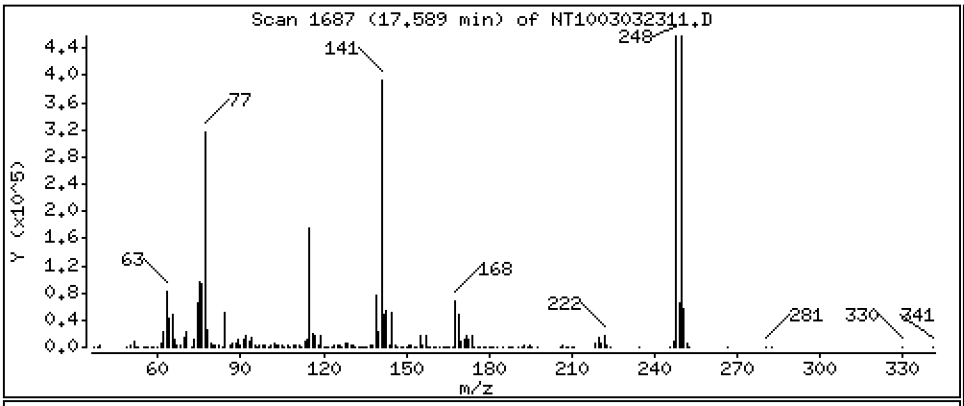
Operator: VTS

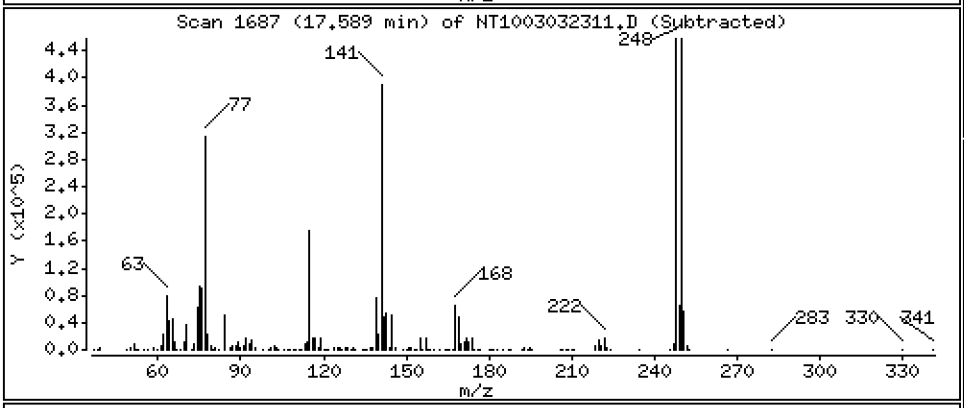
Column phase: ZB-5msi

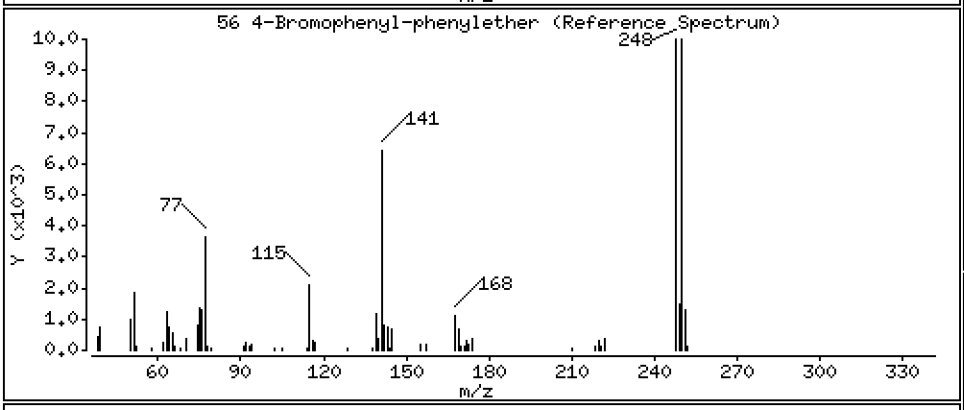
Column diameter: 0.25

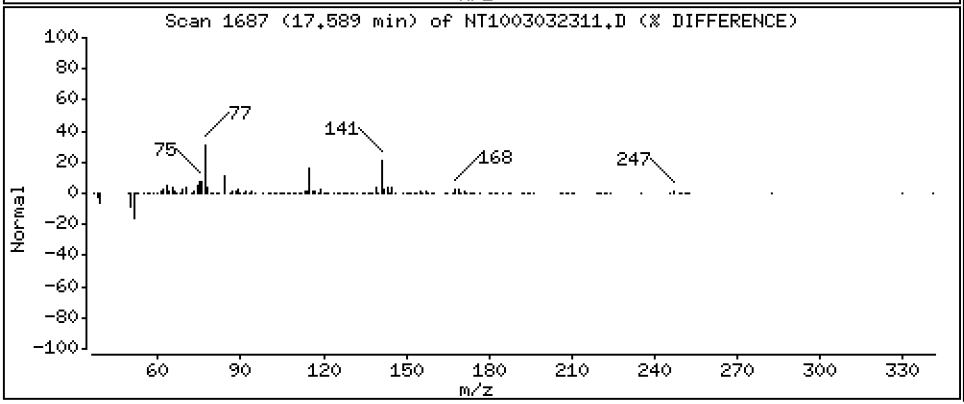
56 4-Bromophenyl-phenylether

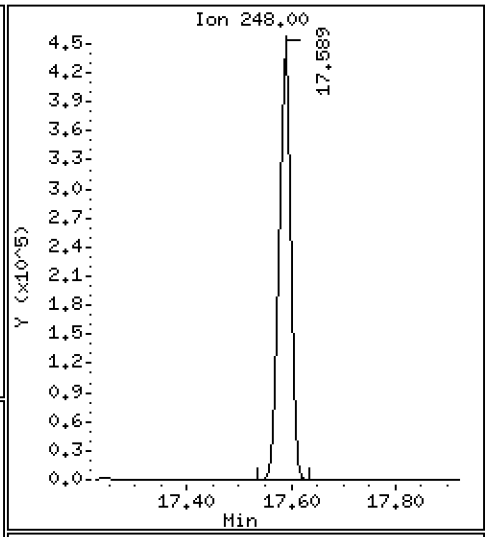
Concentration: 7.959 ug/ml

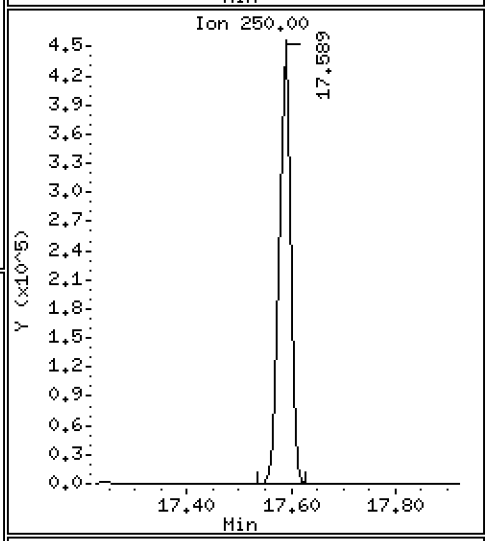


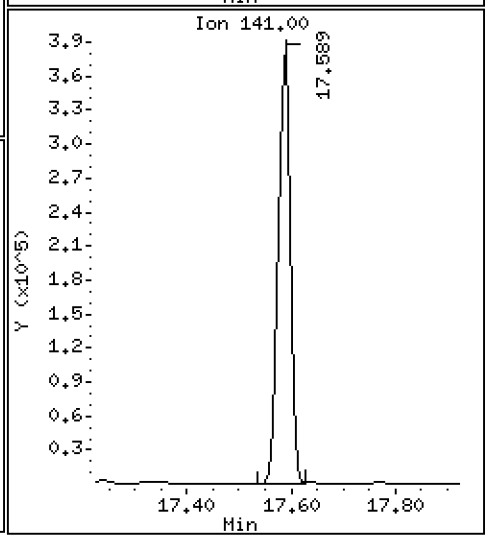












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

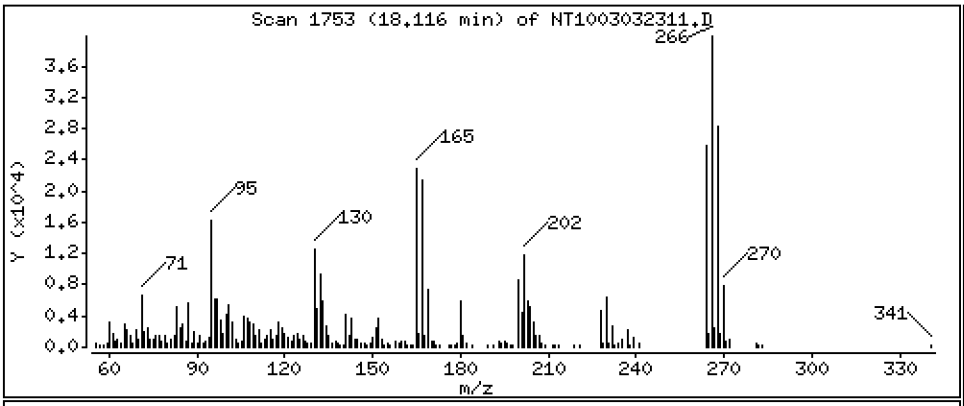
Operator: VTS

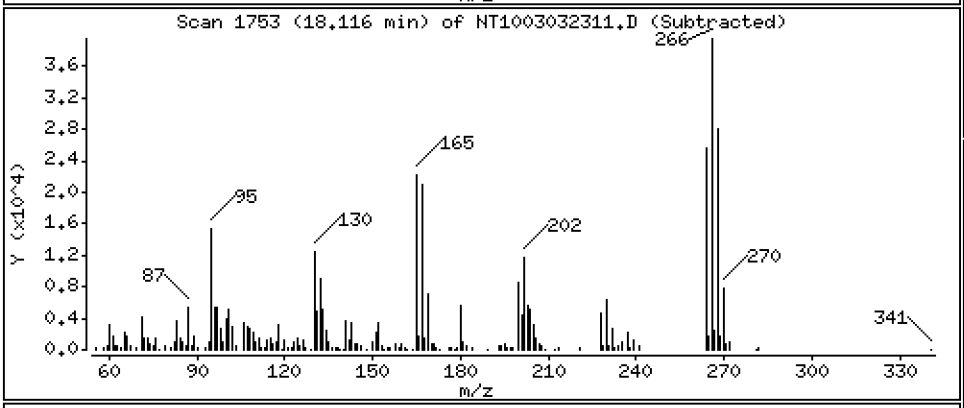
Column phase: ZB-5msi

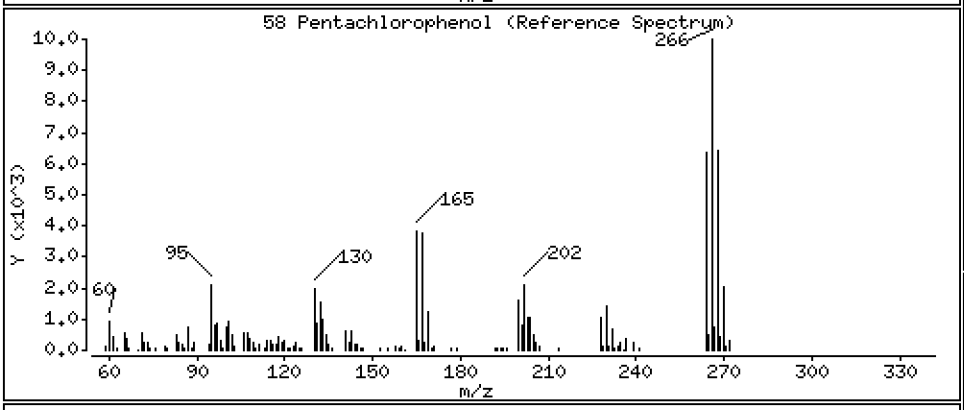
Column diameter: 0.25

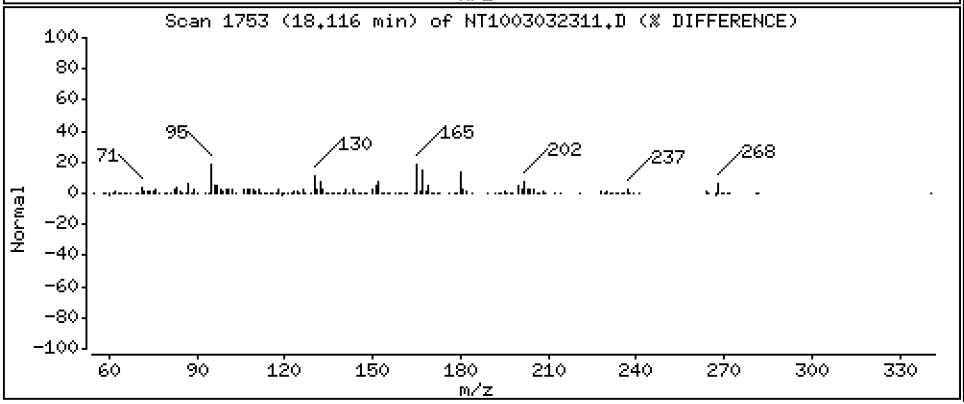
58 Pentachlorophenol

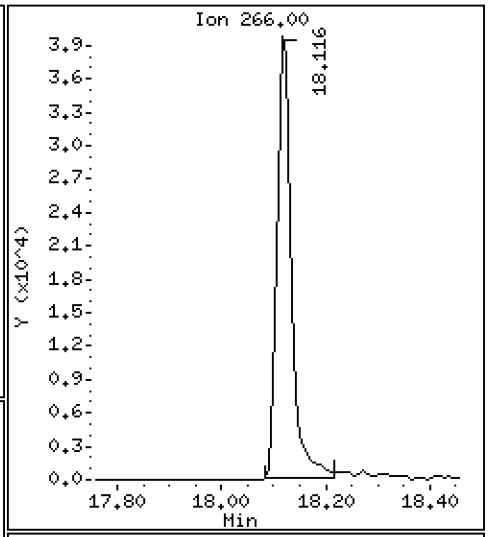
Concentration: 1.719 ug/ml

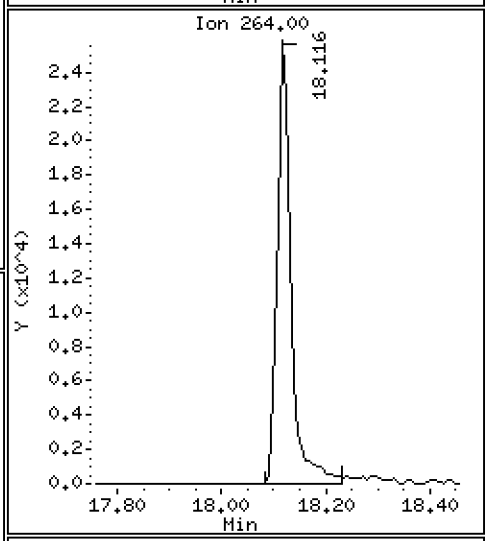


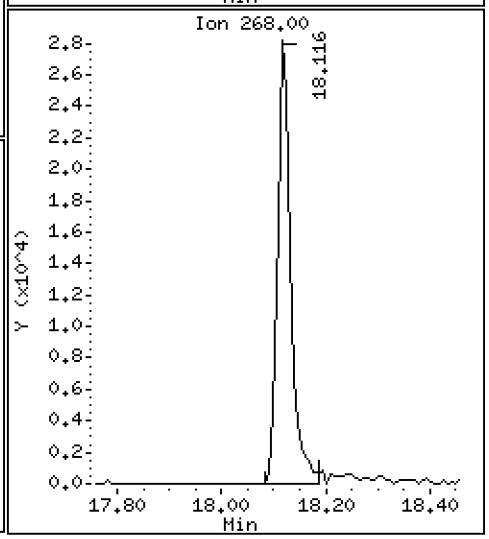












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

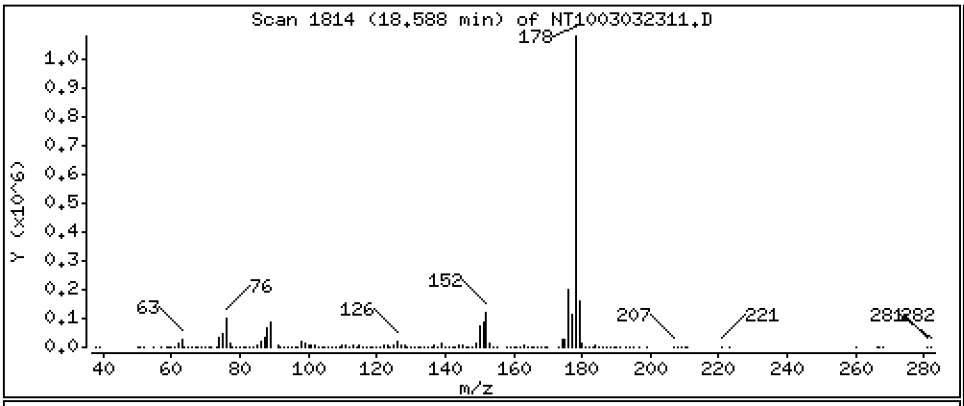
Operator: VTS

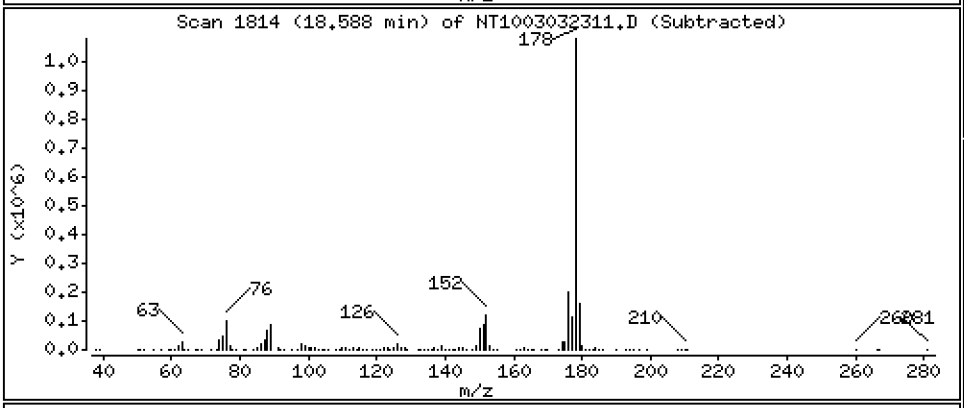
Column phase: ZB-5msi

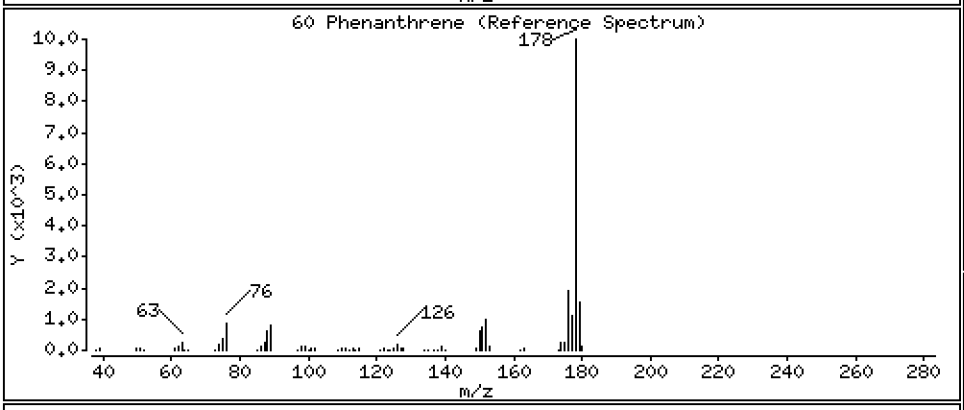
Column diameter: 0.25

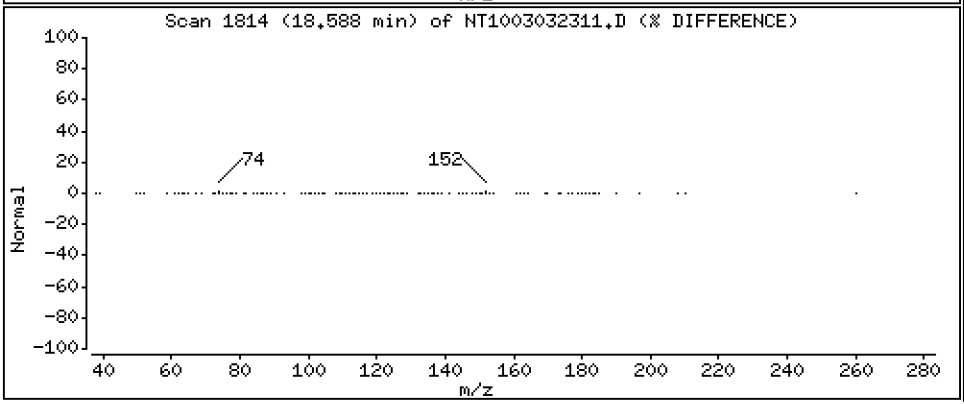
60 Phenanthrene

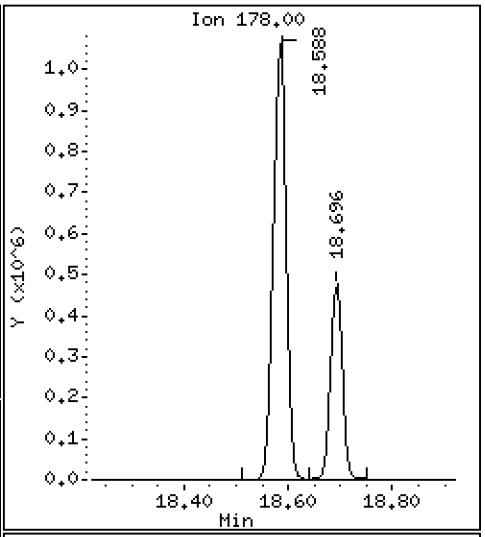
Concentration: 4.830 ug/ml

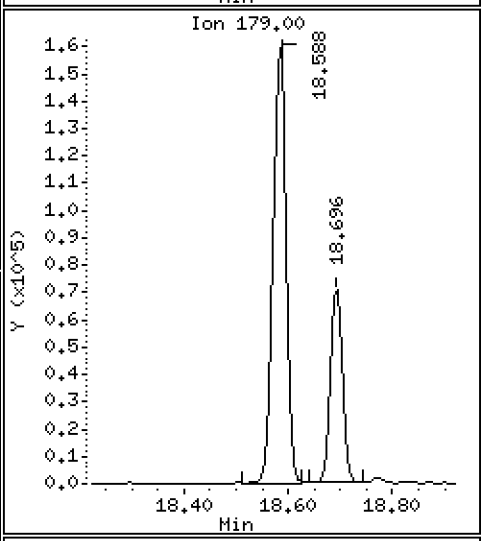


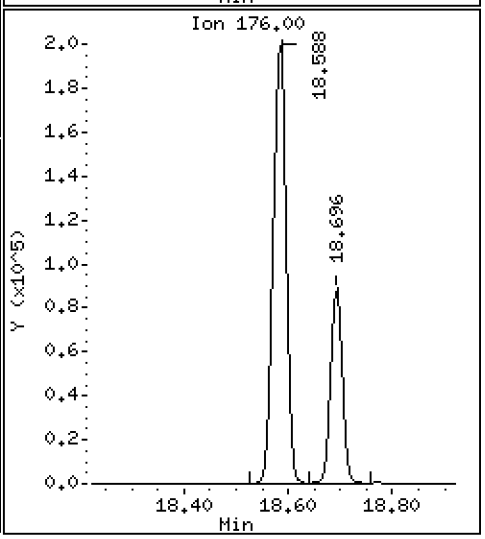












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

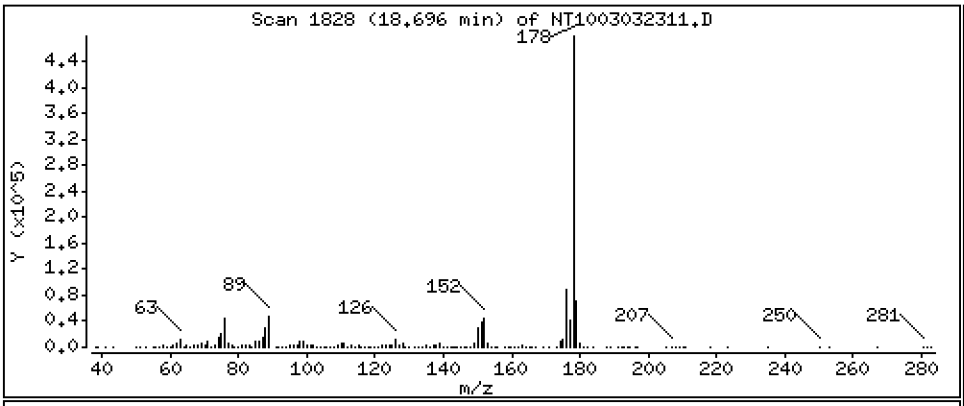
Operator: VTS

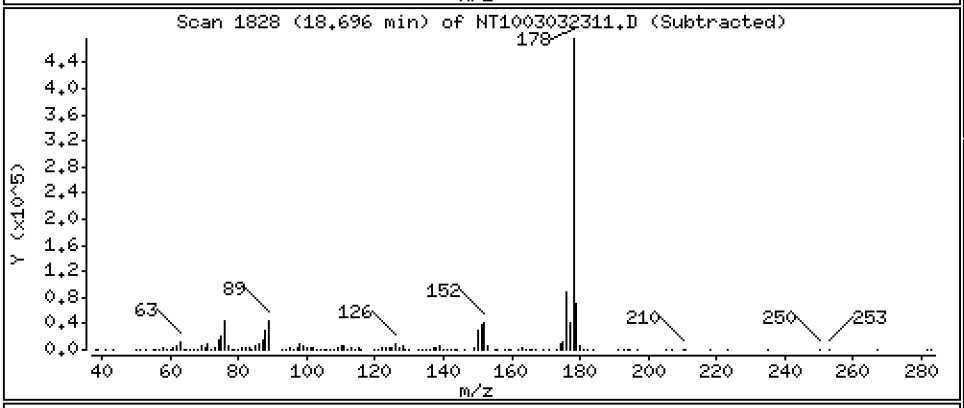
Column phase: ZB-5msi

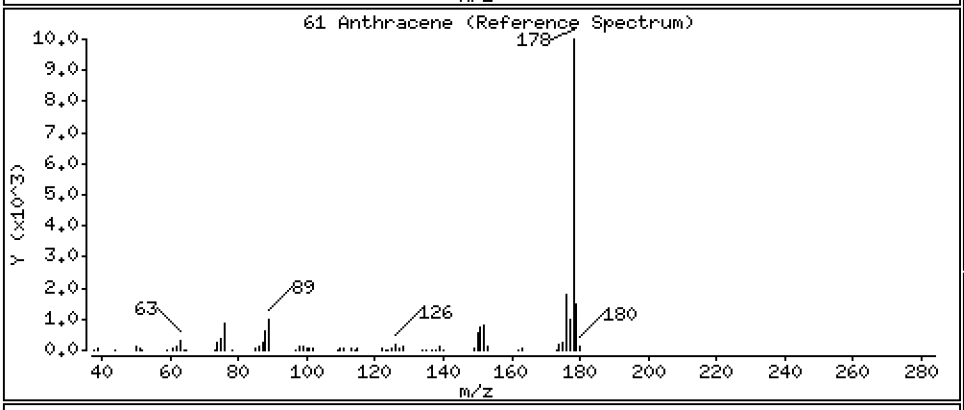
Column diameter: 0.25

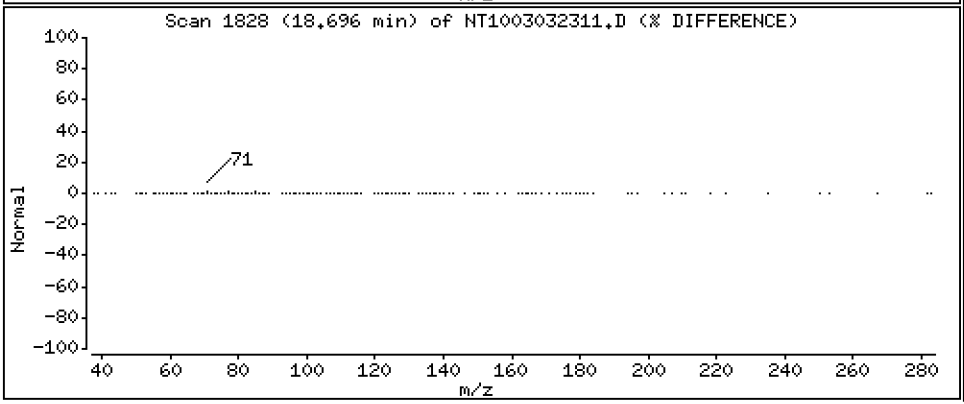
61 Anthracene

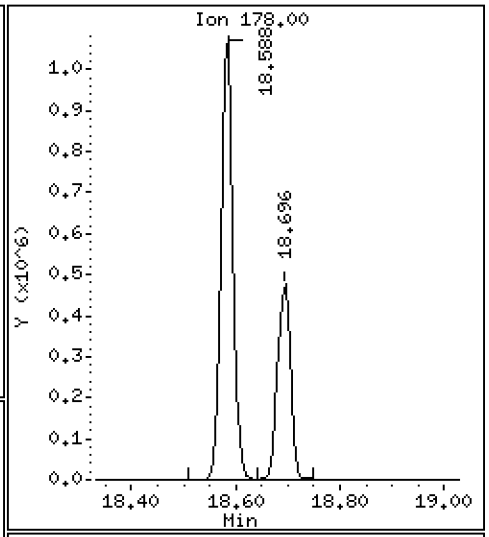
Concentration: 2.260 ug/ml

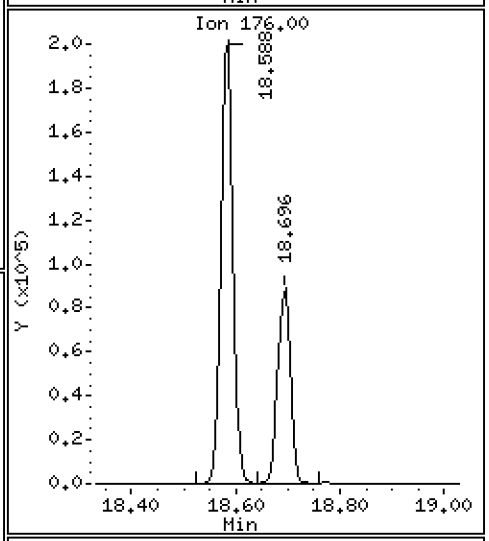


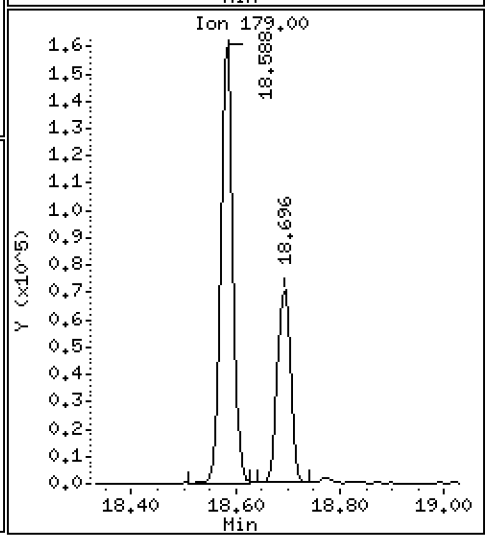












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032311.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

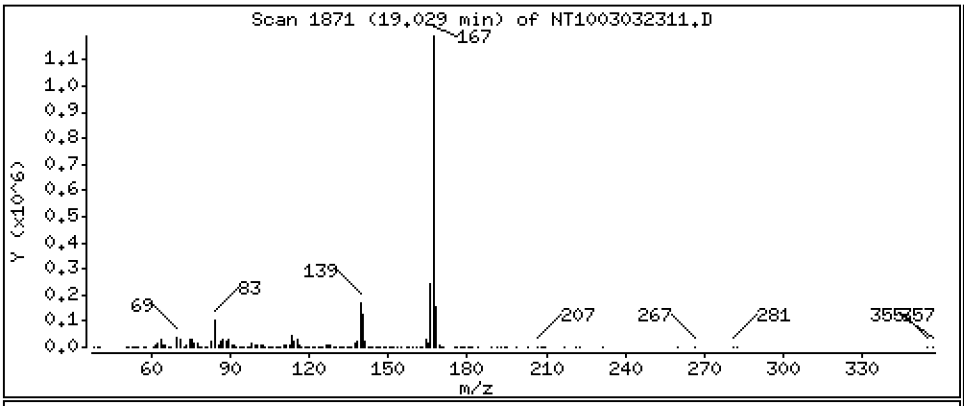
Operator: VTS

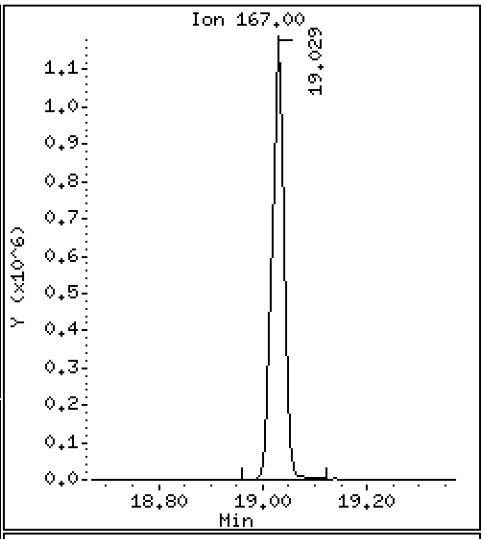
Column phase: ZB-5msi

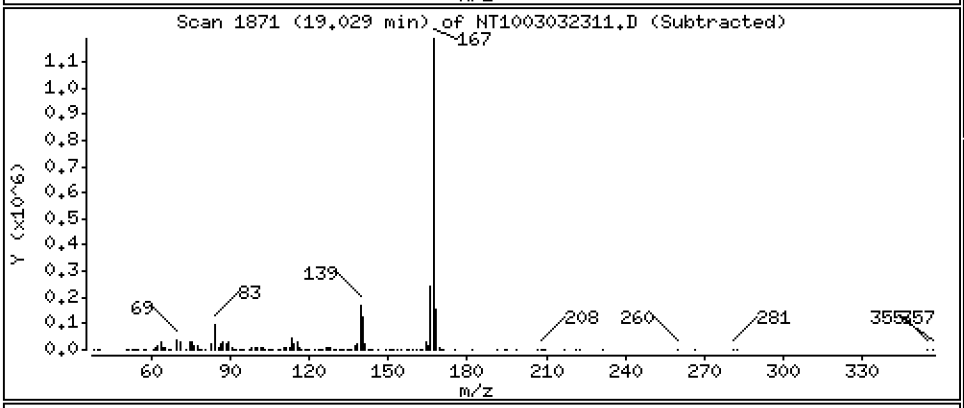
Column diameter: 0.25

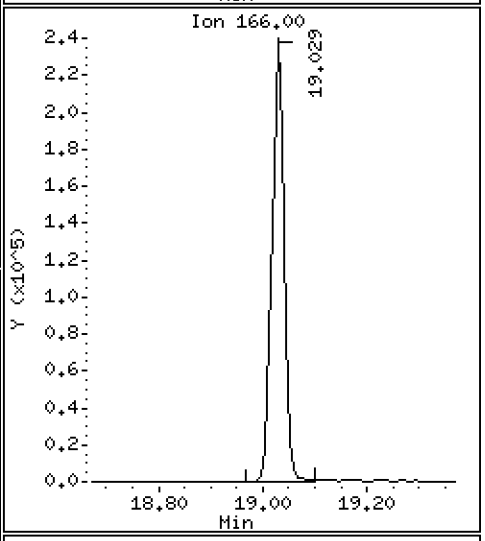
62 Carbazole

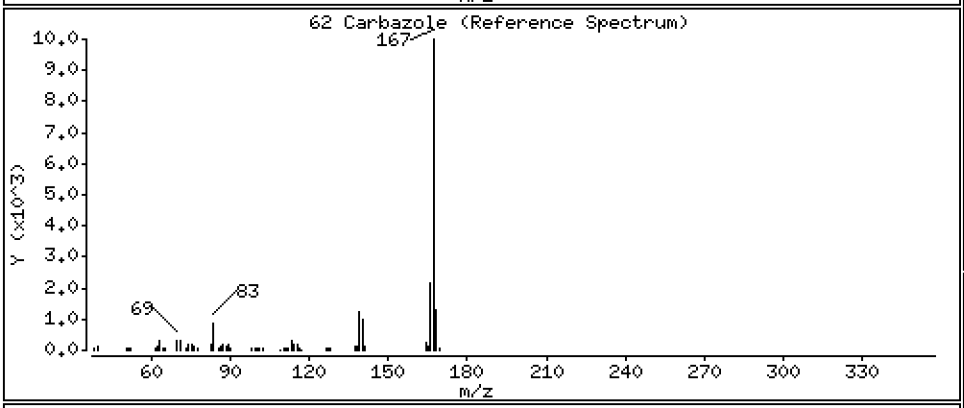
Concentration: 5.746 ug/ml

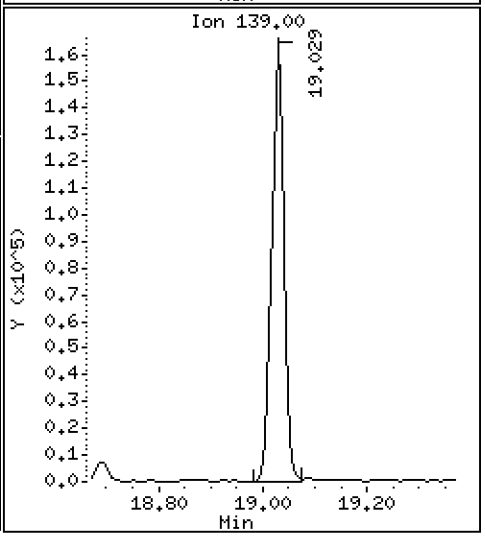


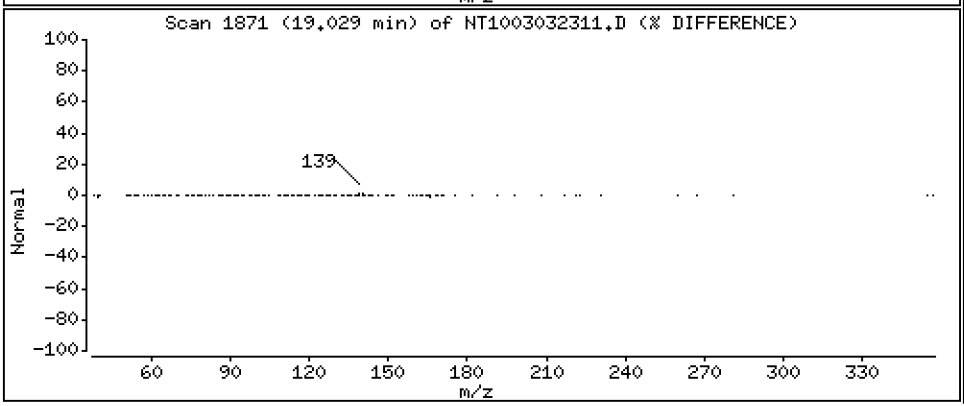












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032311.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

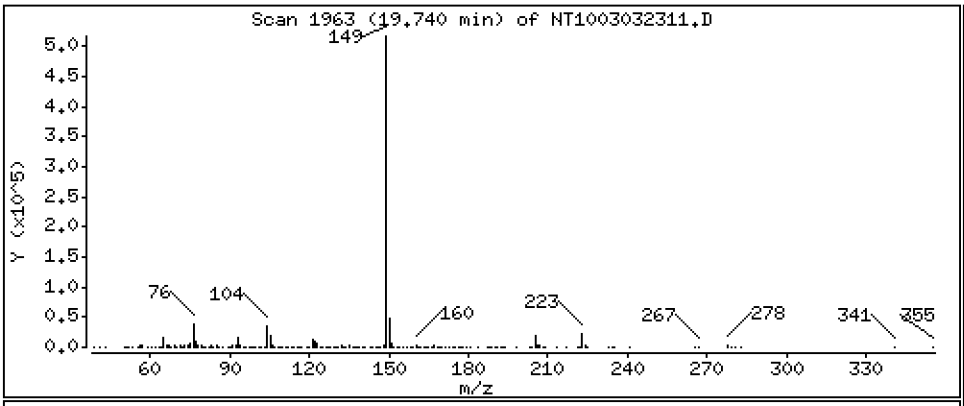
Operator: VTS

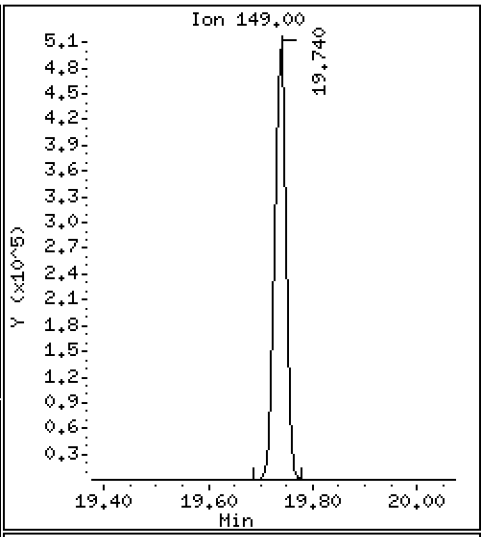
Column phase: ZB-5msi

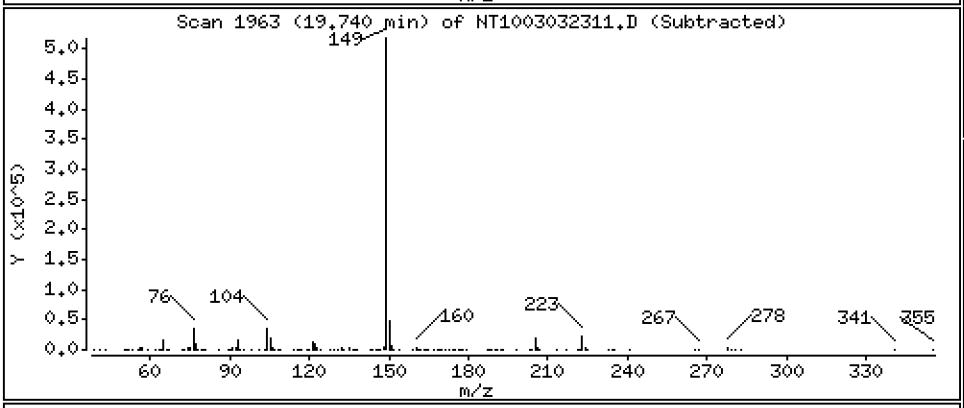
Column diameter: 0.25

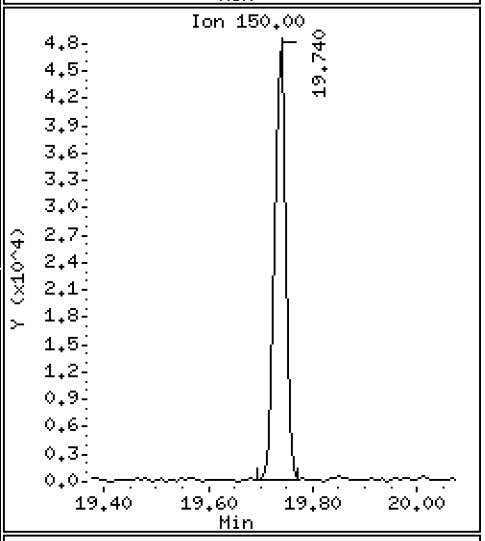
63 Di-n-butylphthalate

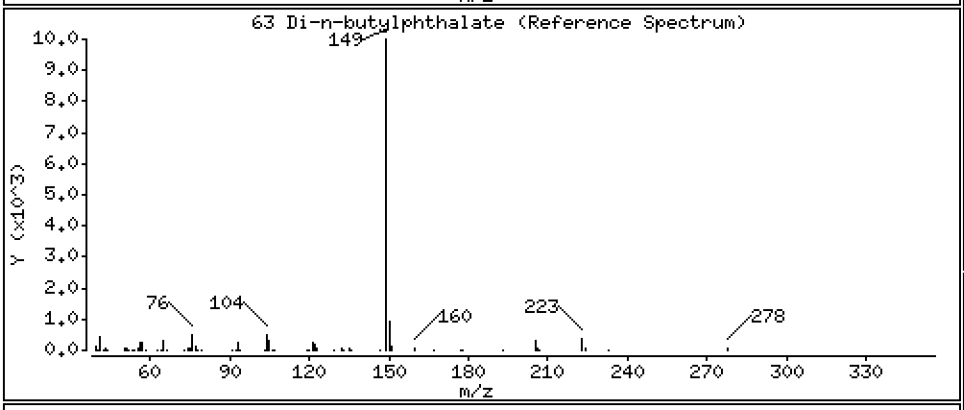
Concentration: 1.674 ug/ml

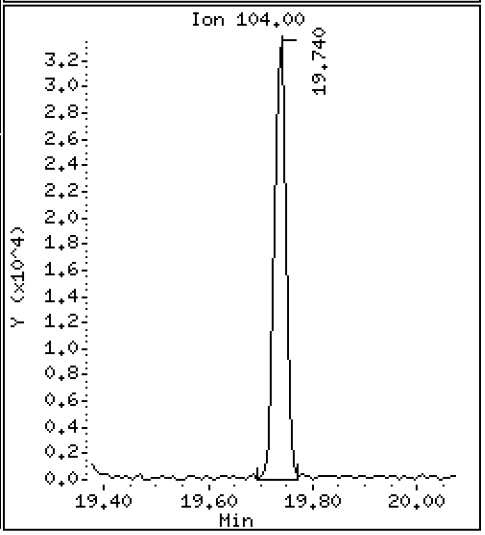


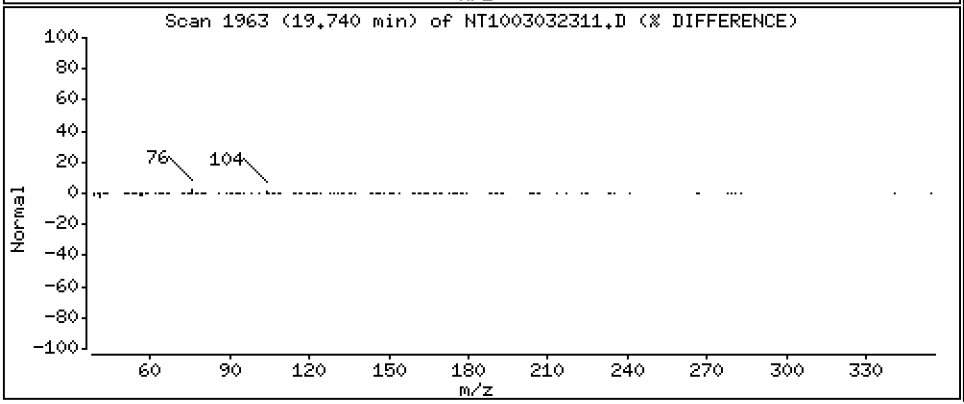












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032311.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

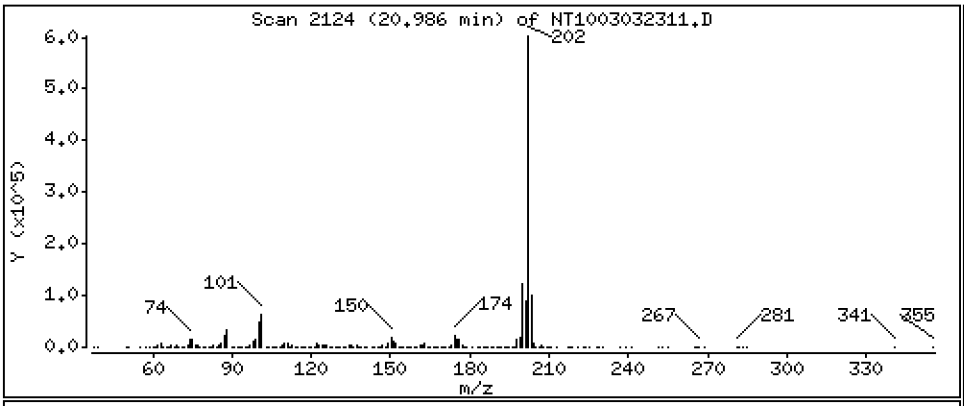
Operator: VTS

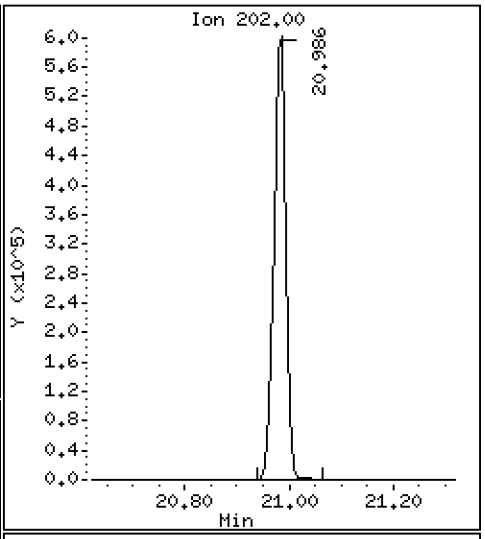
Column phase: ZB-5msi

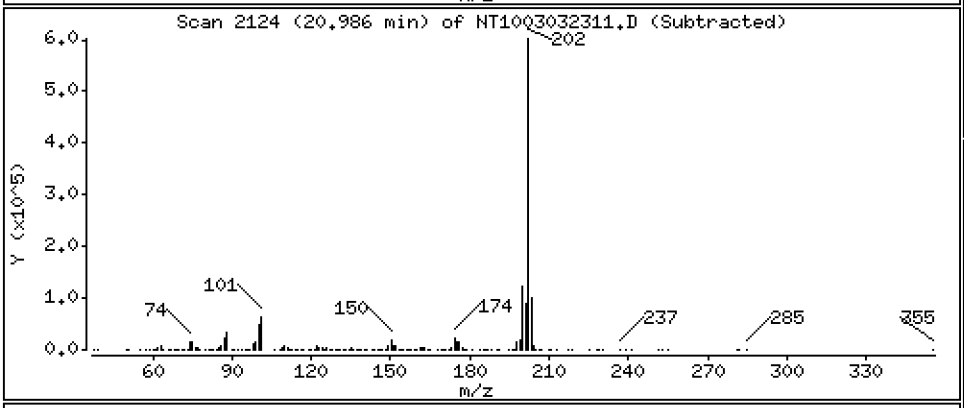
Column diameter: 0.25

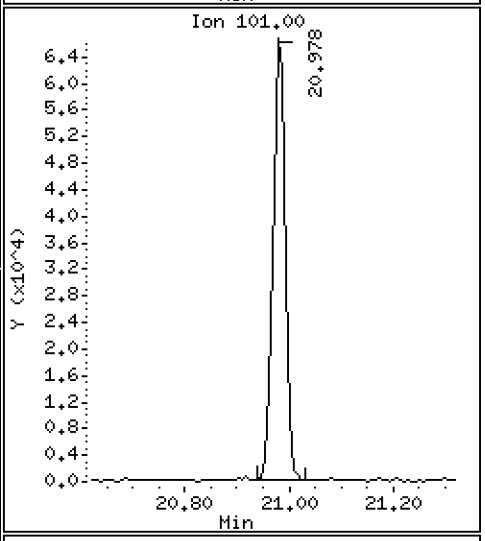
64 Fluoranthene

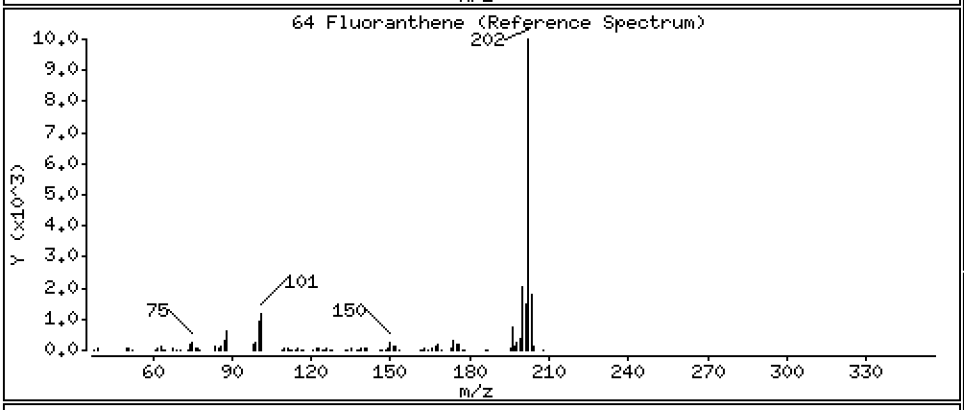
Concentration: 2.379 ug/ml

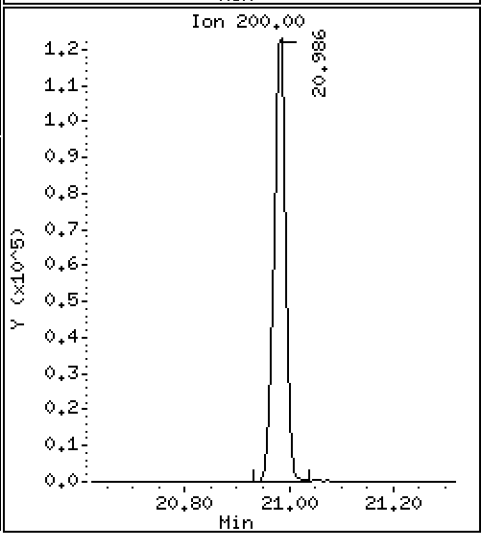


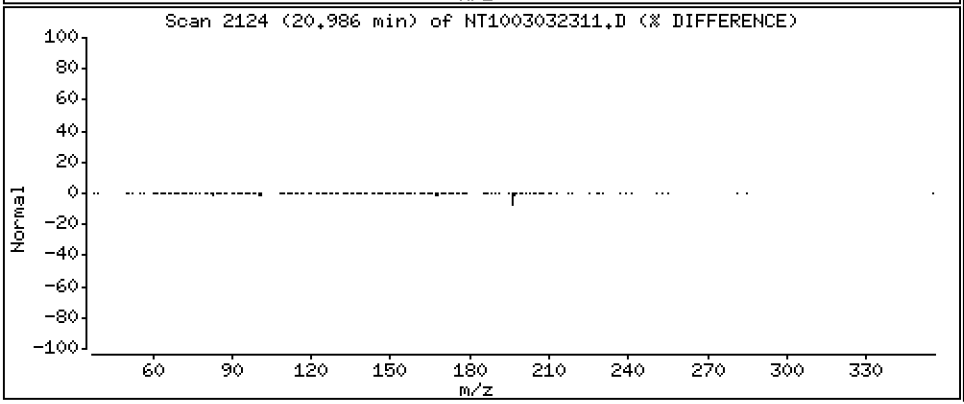












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

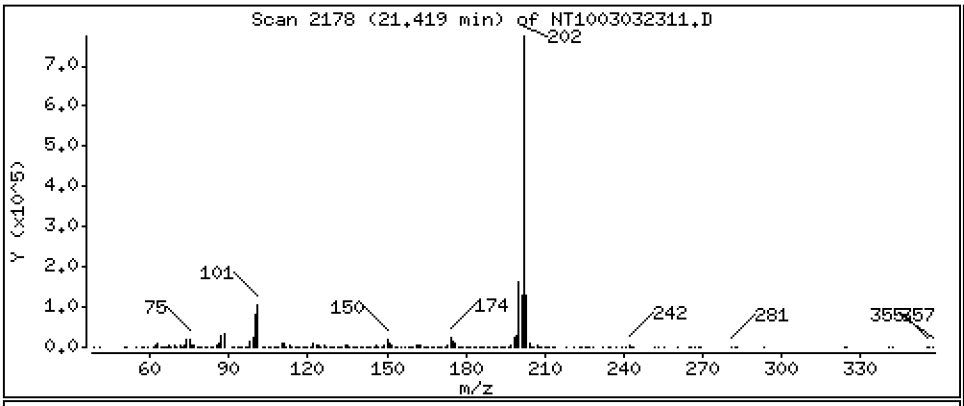
Operator: VTS

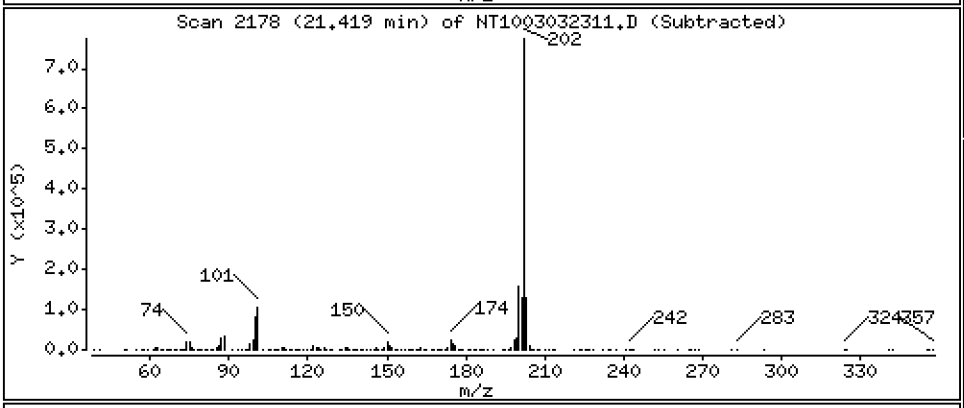
Column phase: ZB-5msi

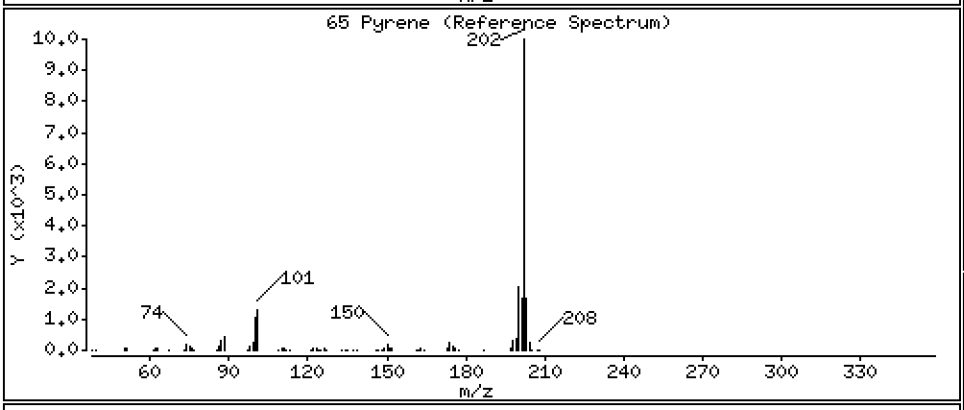
Column diameter: 0.25

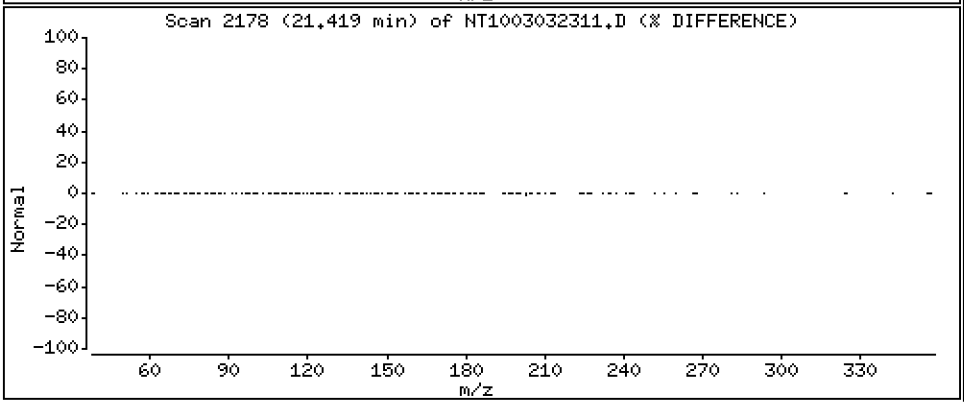
65 Pyrene

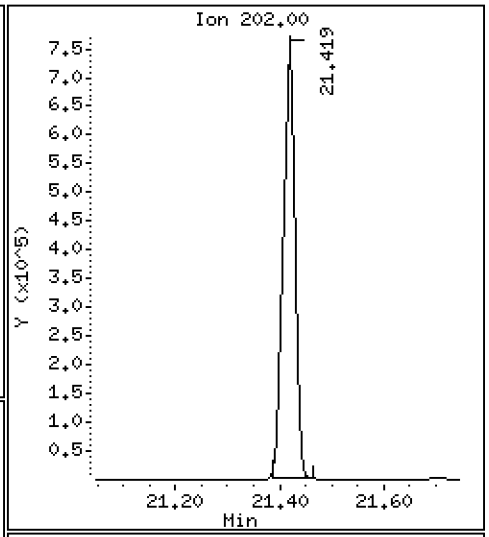
Concentration: 2.359 ug/ml

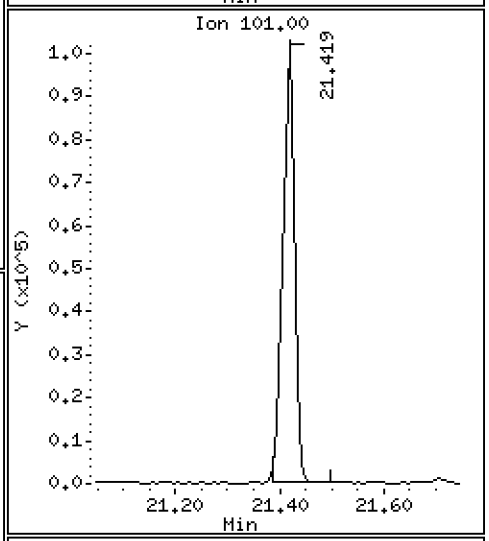


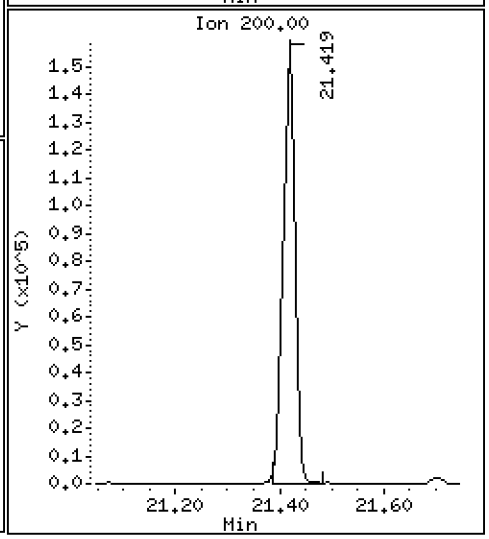












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

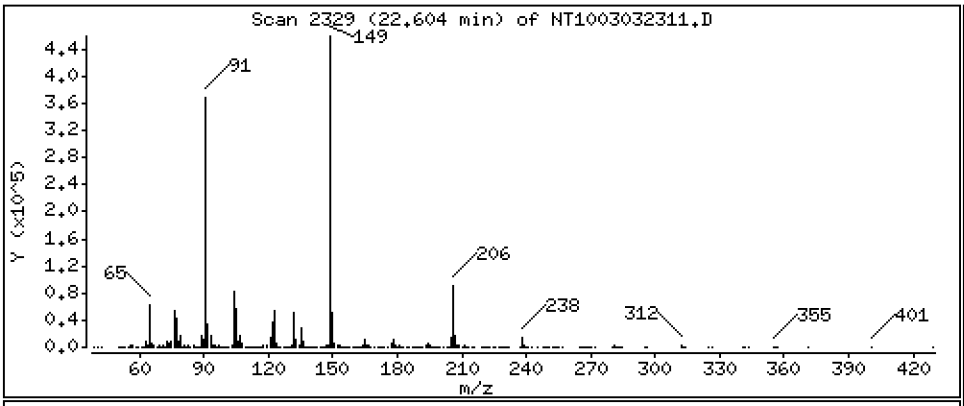
Operator: VTS

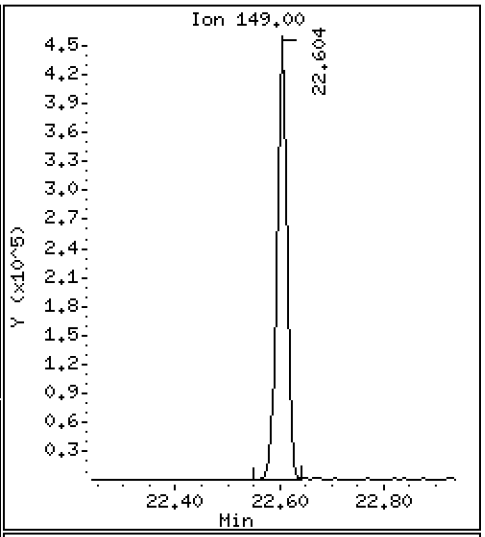
Column phase: ZB-5msi

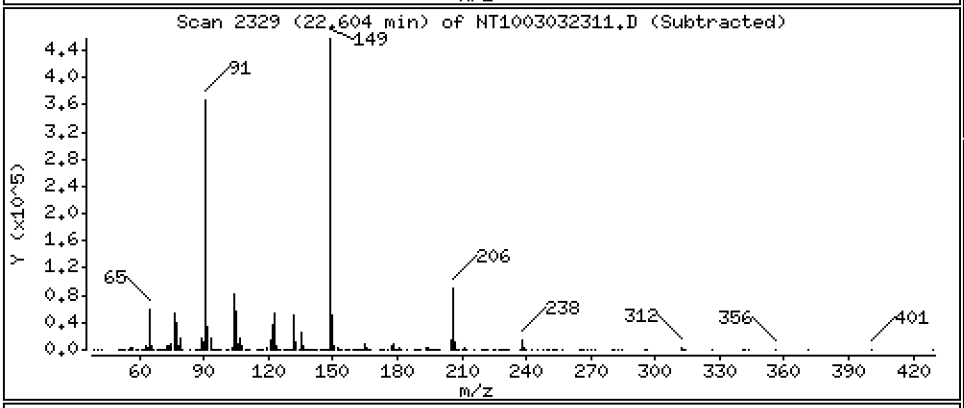
Column diameter: 0.25

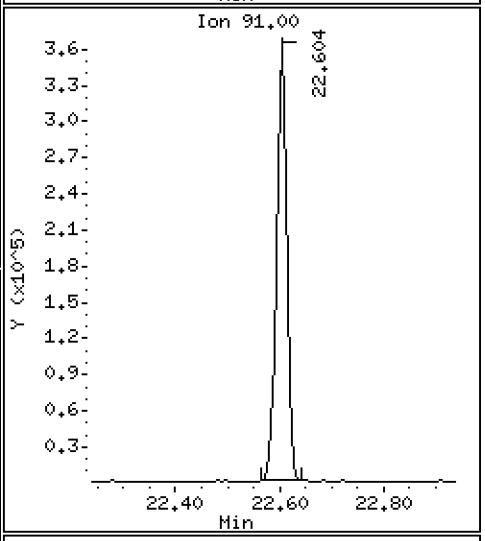
67 Butylbenzylphthalate

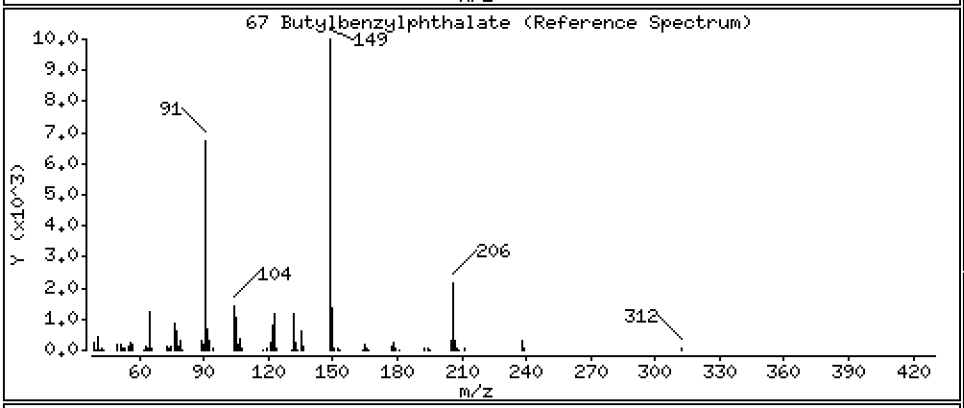
Concentration: 2.884 ug/ml

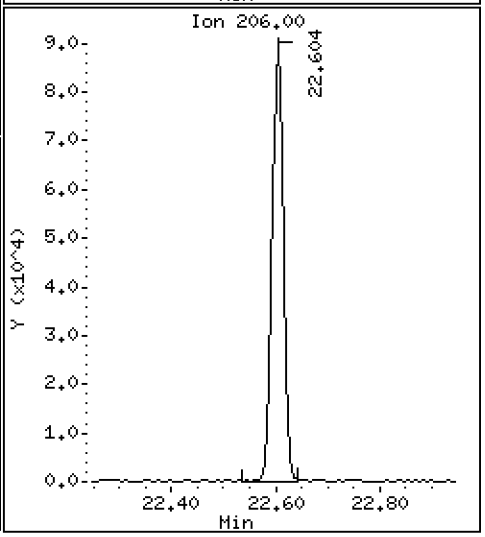


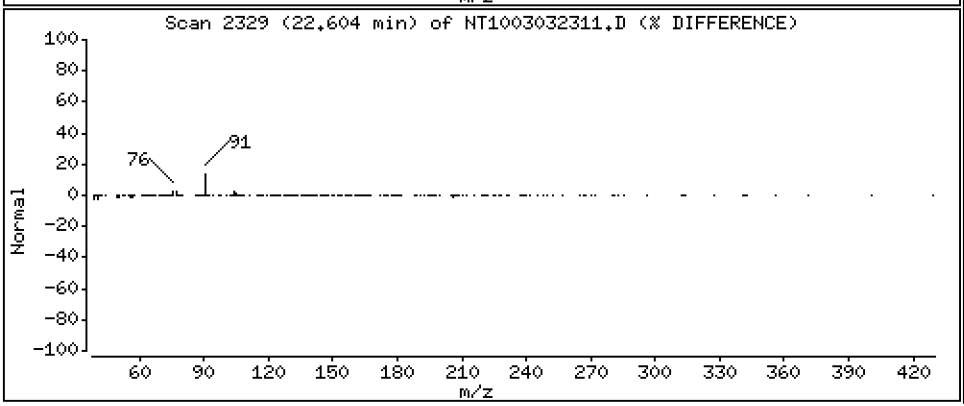












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

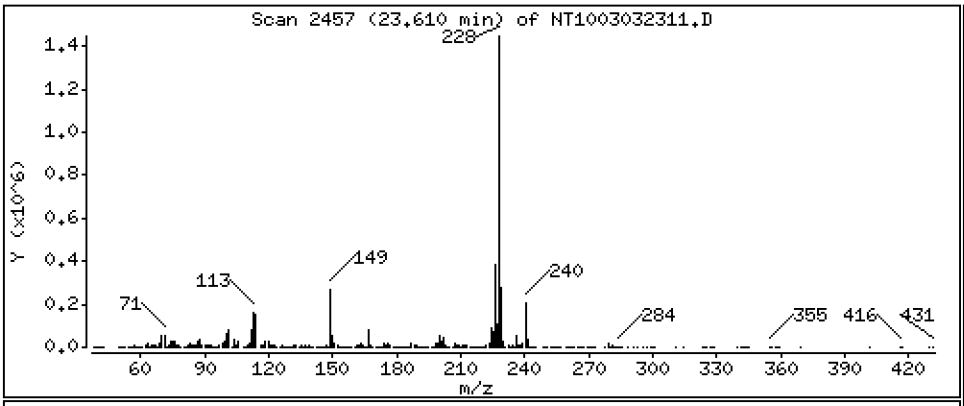
Operator: VTS

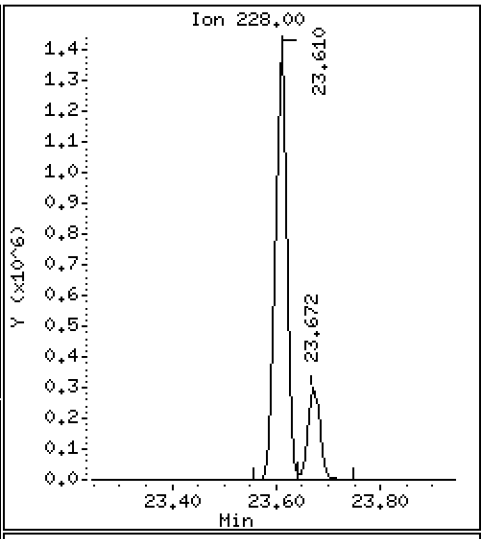
Column phase: ZB-5msi

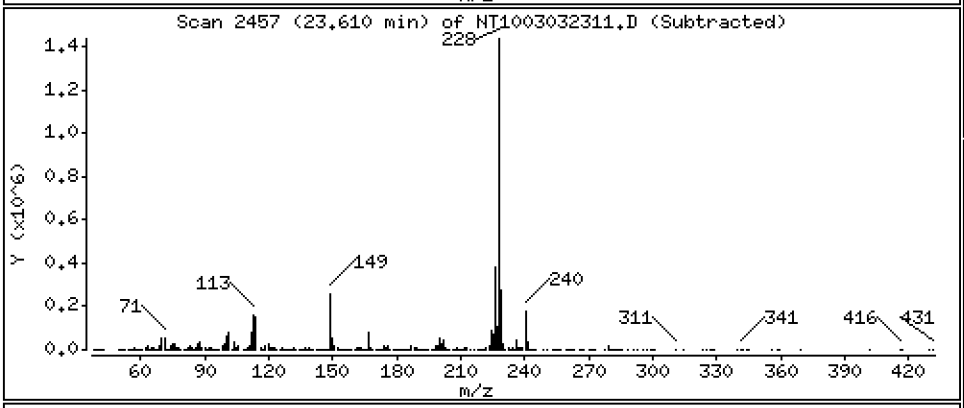
Column diameter: 0.25

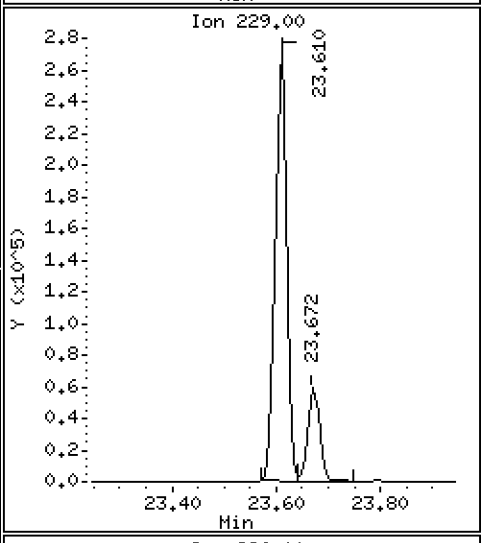
68 Benzo(a)anthracene

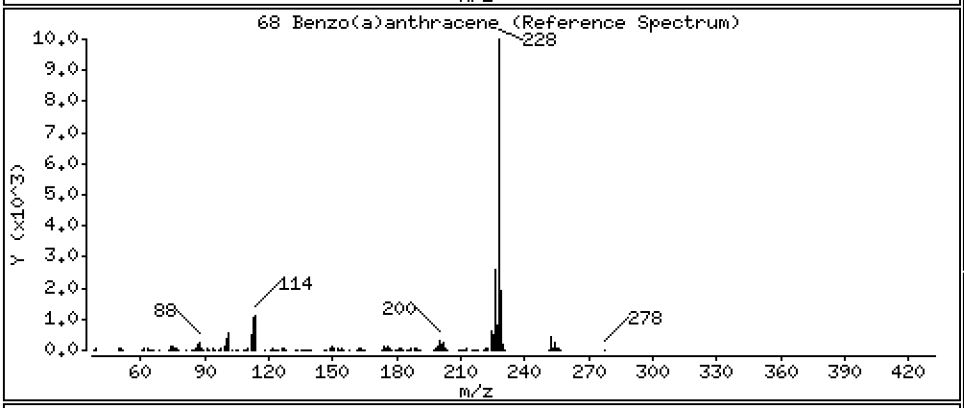
Concentration: 5.146 ug/ml

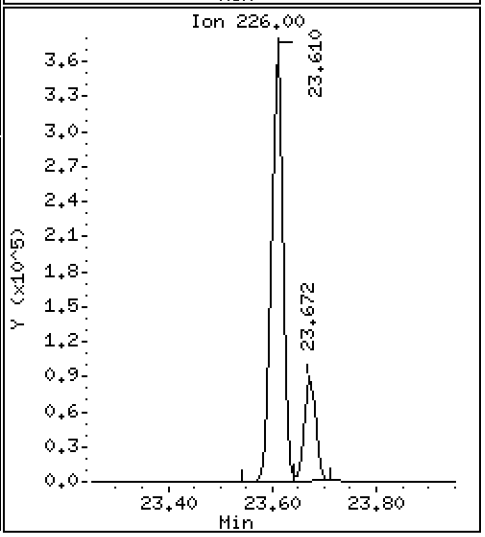


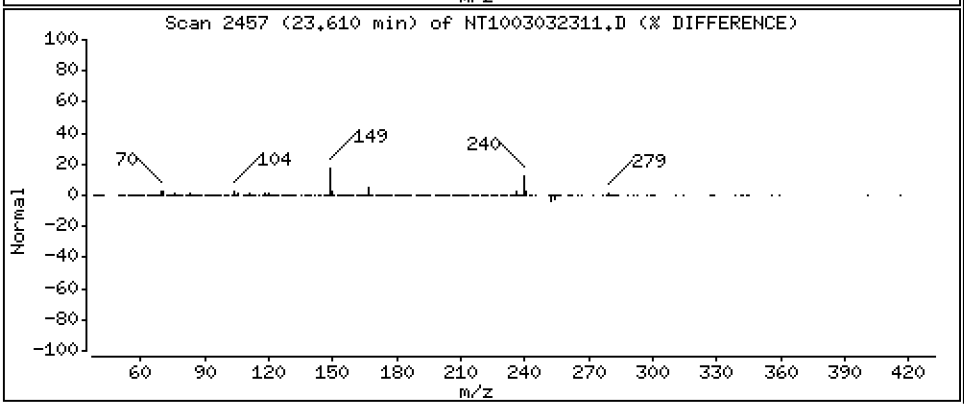












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032311.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

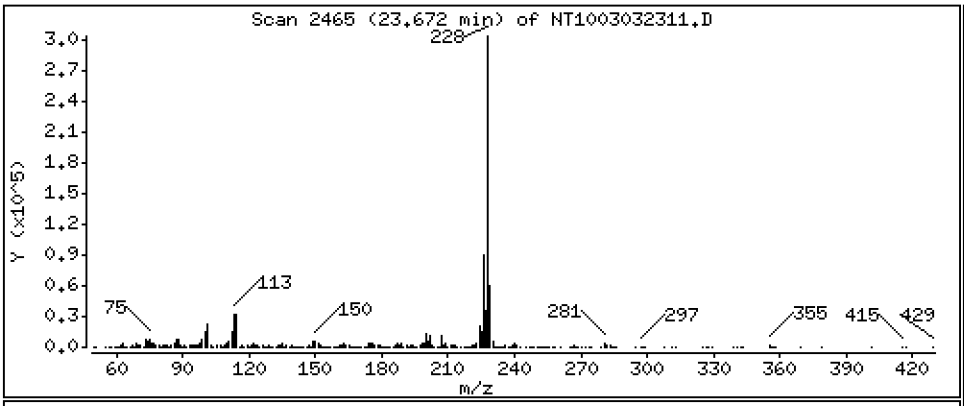
Operator: VTS

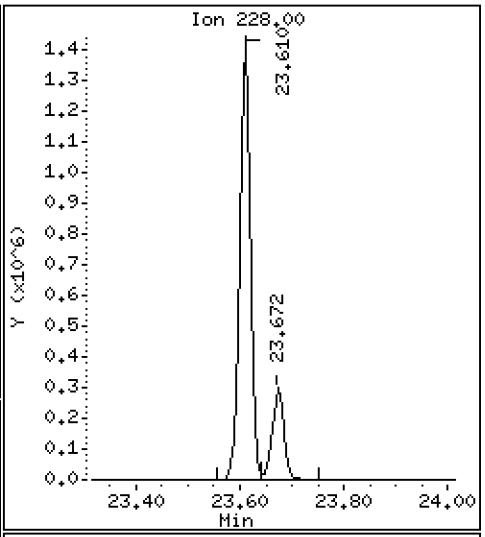
Column phase: ZB-5msi

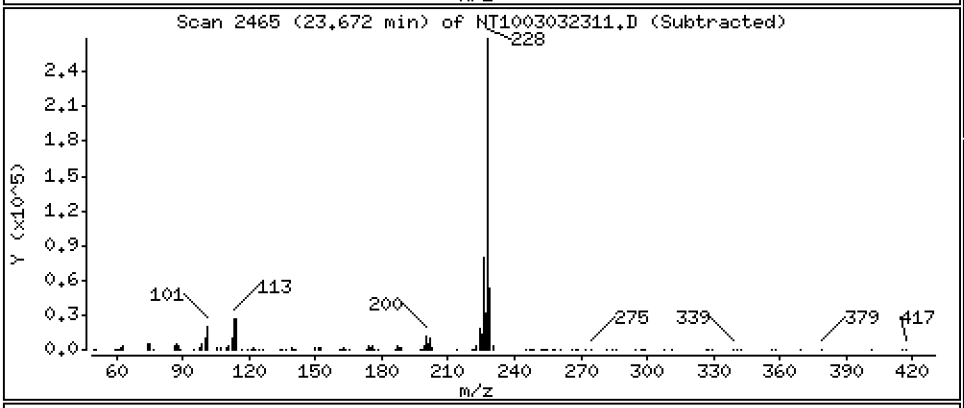
Column diameter: 0.25

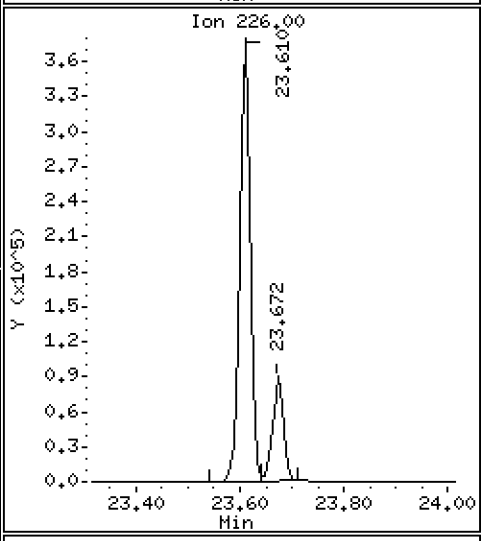
71 Chrysene

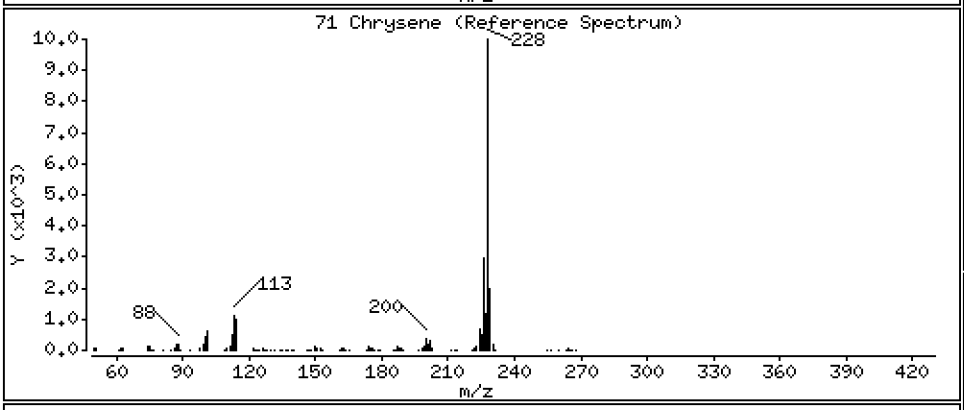
Concentration: 1.381 ug/ml

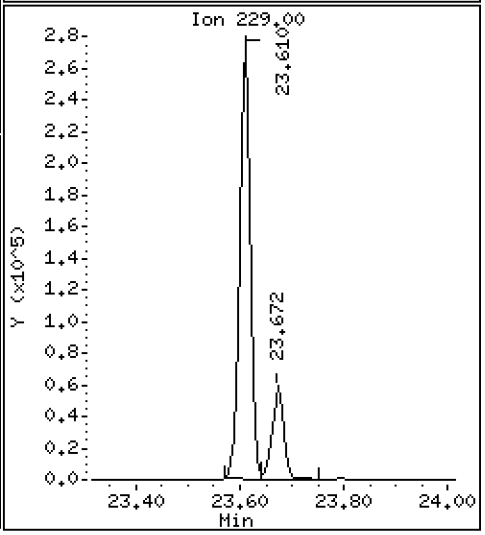


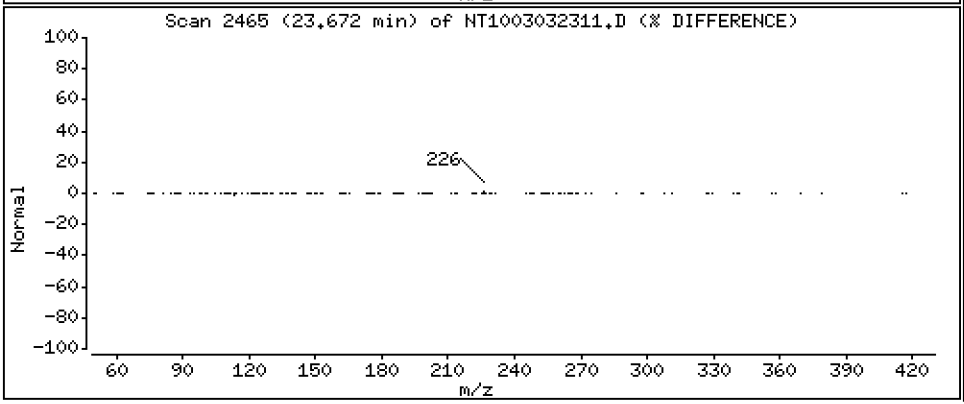












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032311.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

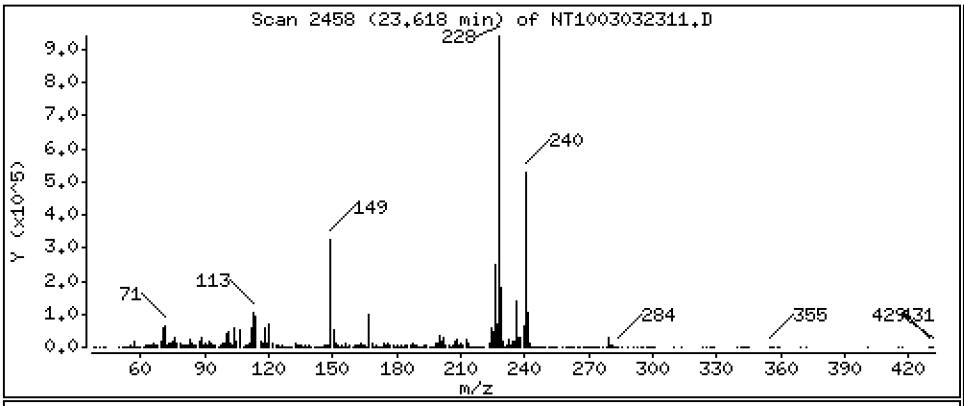
Operator: VTS

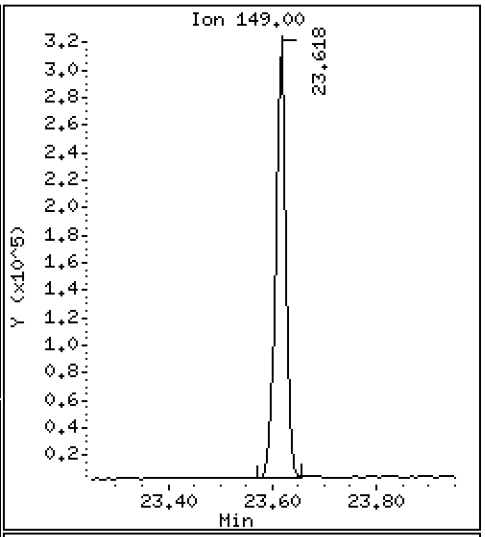
Column phase: ZB-5msi

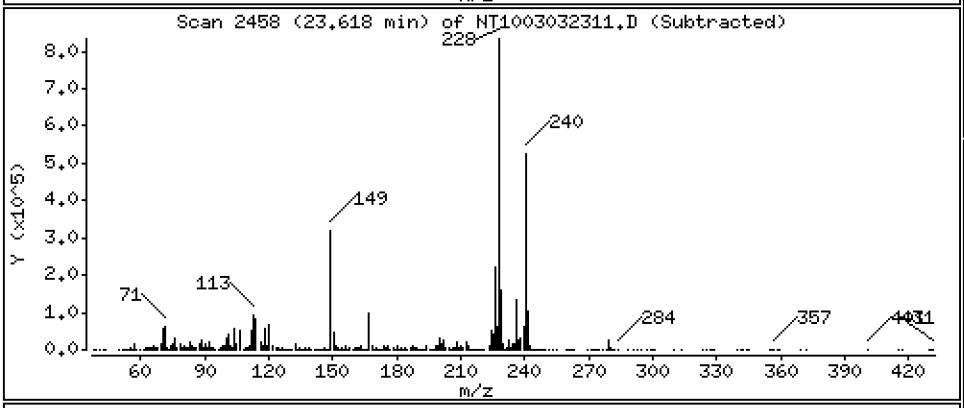
Column diameter: 0.25

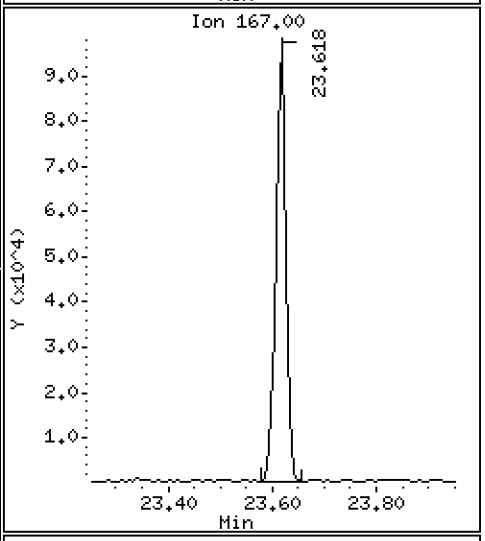
72 bis(2-Ethylhexyl)phthalate

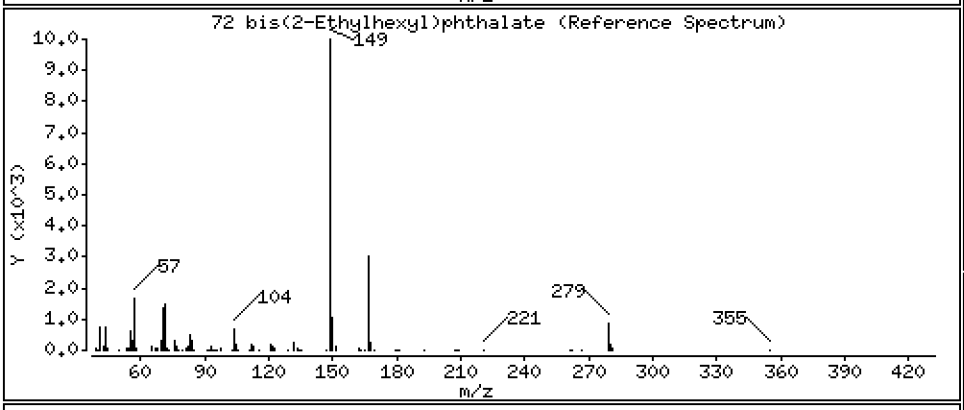
Concentration: 1.485 ug/ml

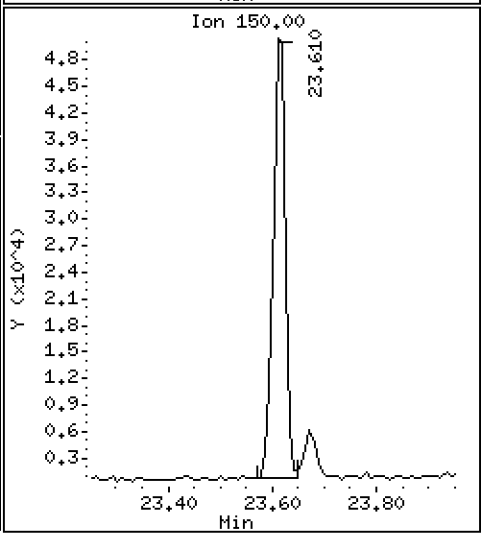


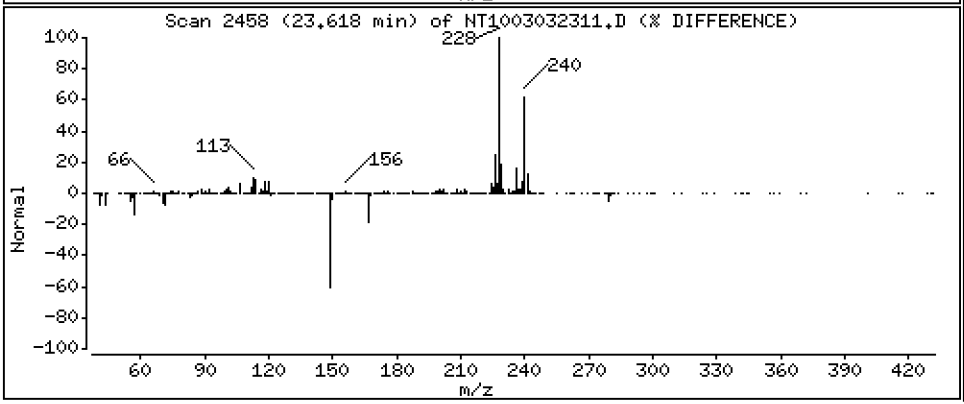












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

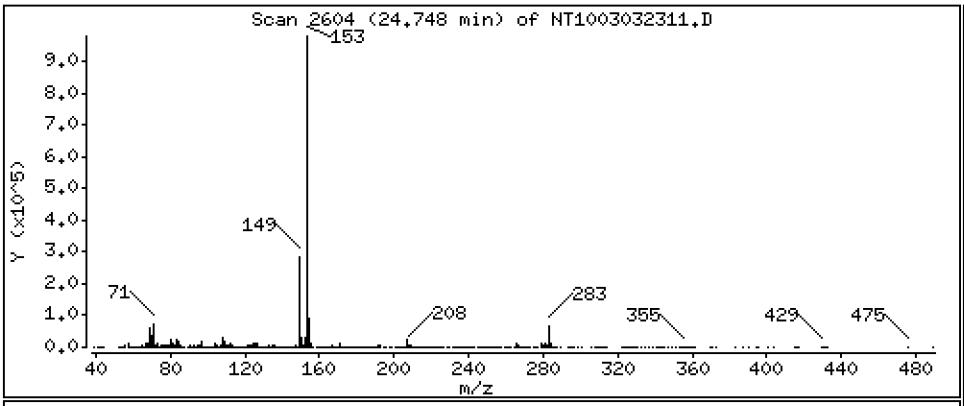
Operator: VTS

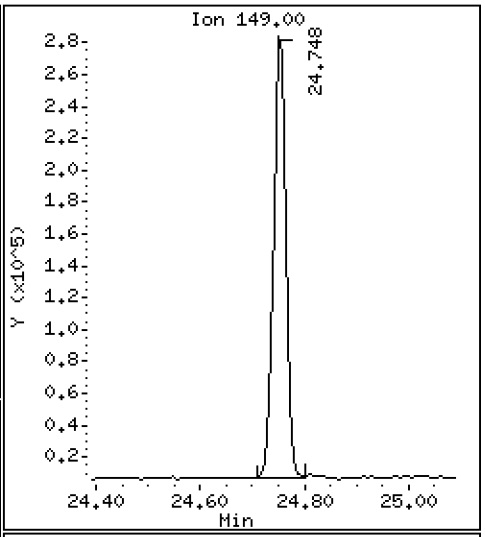
Column phase: ZB-5msi

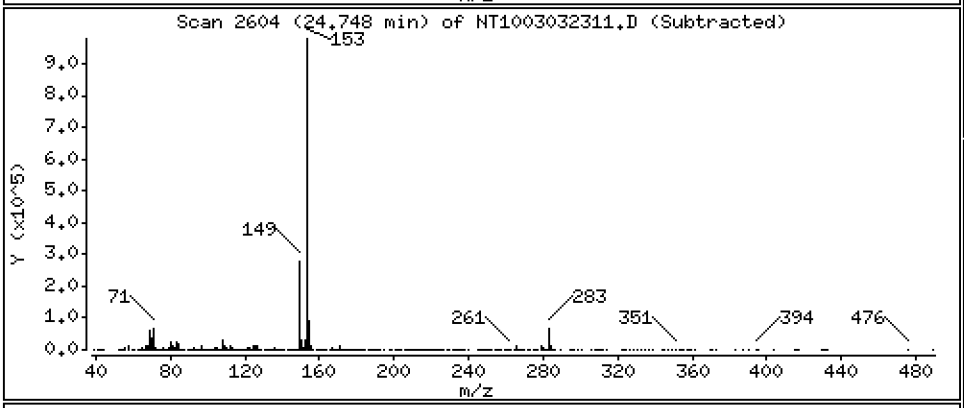
Column diameter: 0.25

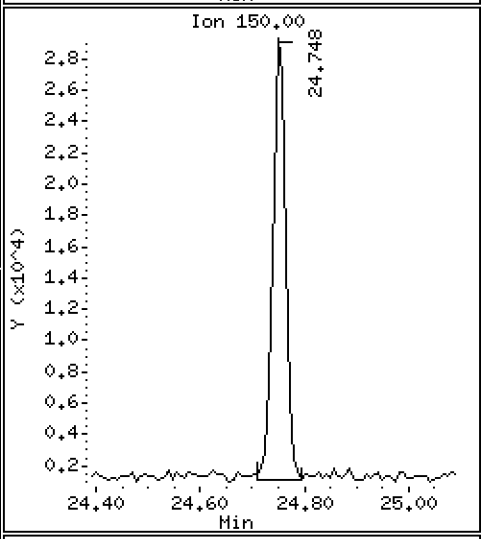
73 Di-n-octylphthalate

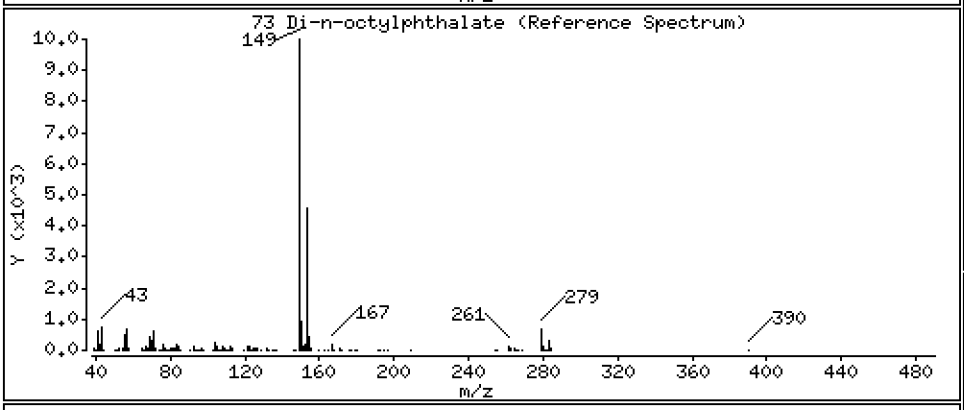
Concentration: 0.9944 ug/ml

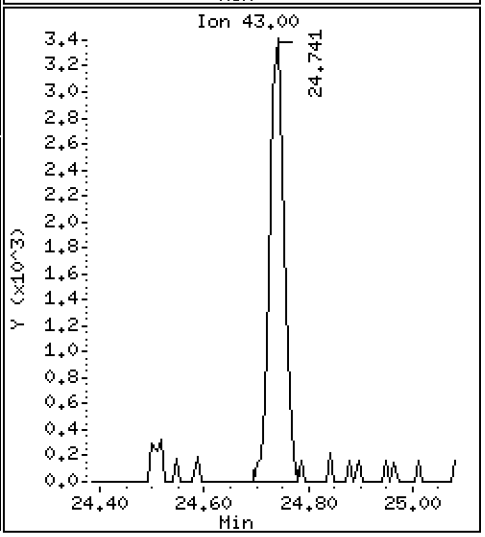


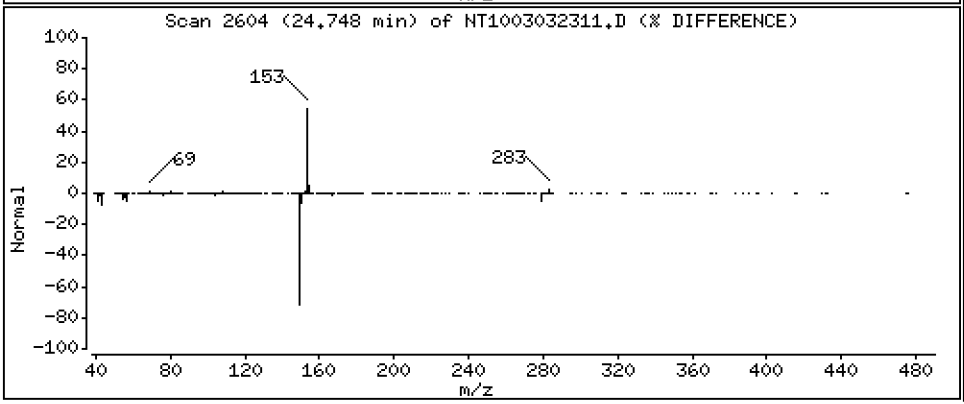












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

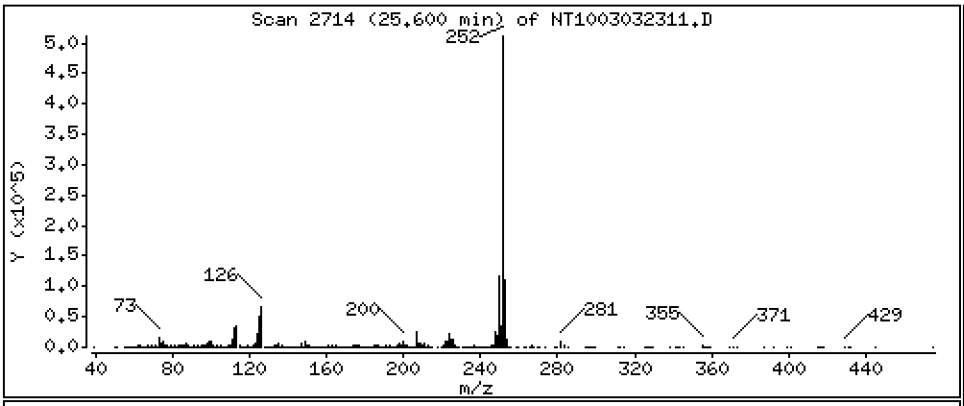
Operator: VTS

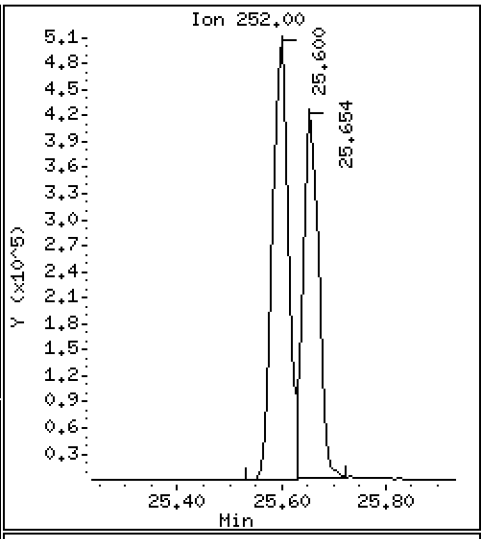
Column phase: ZB-5msi

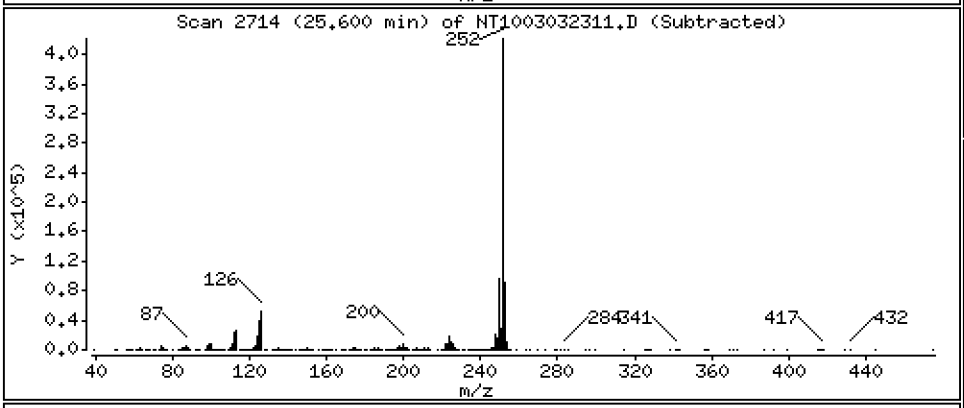
Column diameter: 0.25

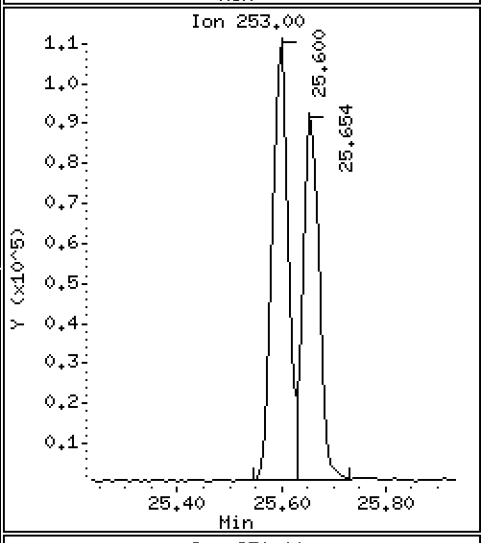
74 Benzo(b)fluoranthene

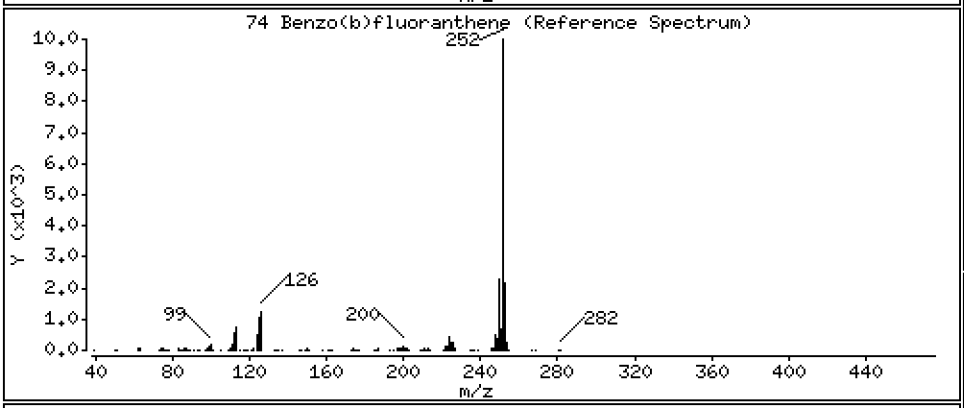
Concentration: 2.581 ug/ml

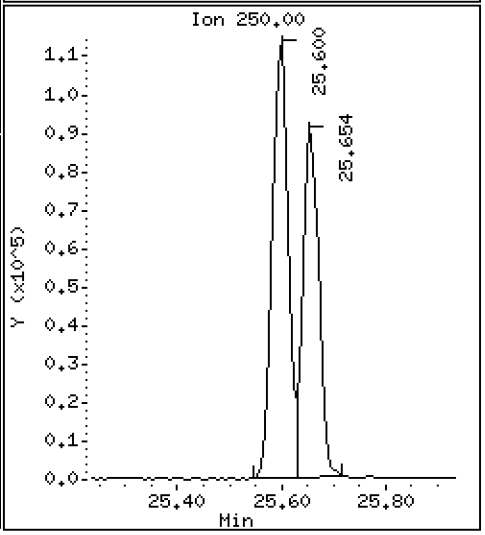


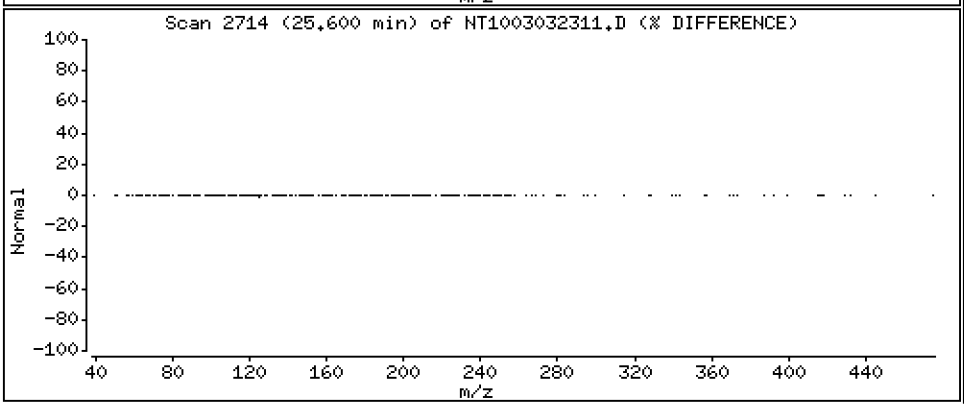












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

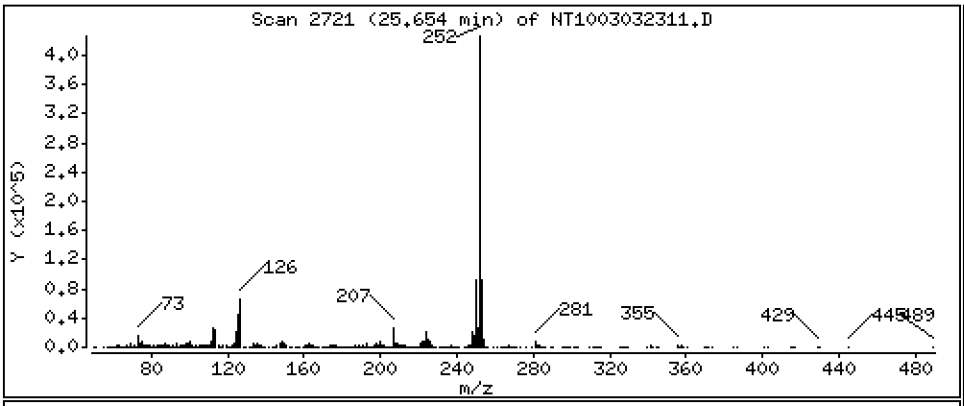
Operator: VTS

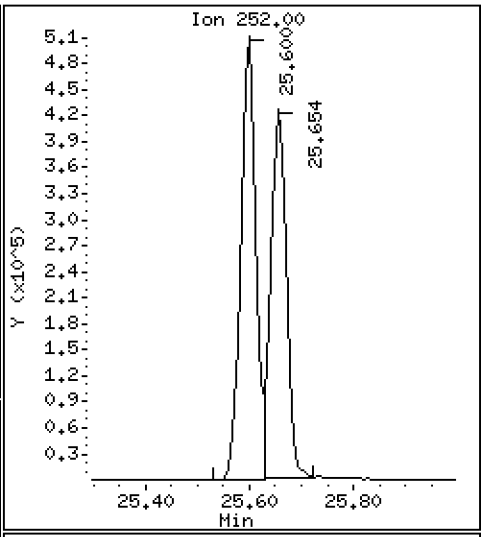
Column phase: ZB-5msi

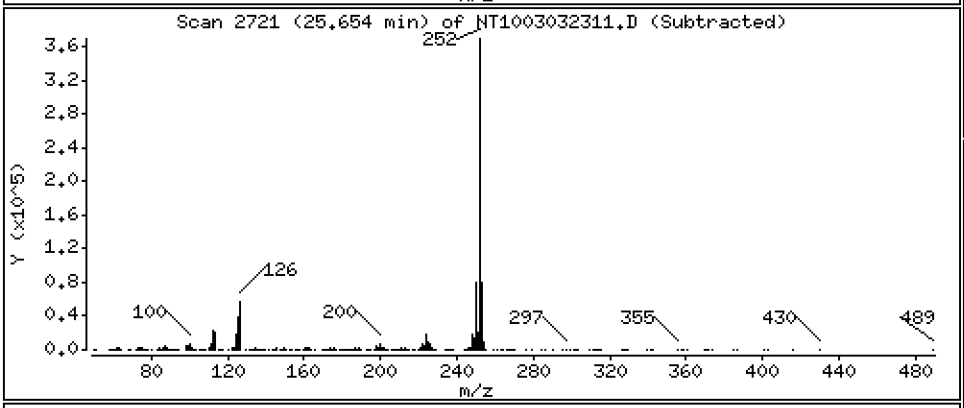
Column diameter: 0.25

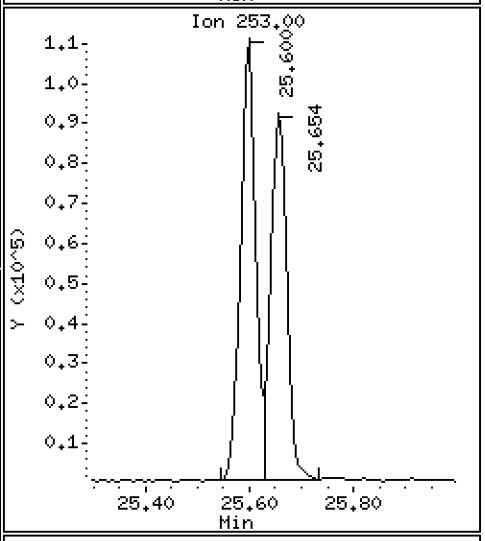
75 Benzo(k)fluoranthene

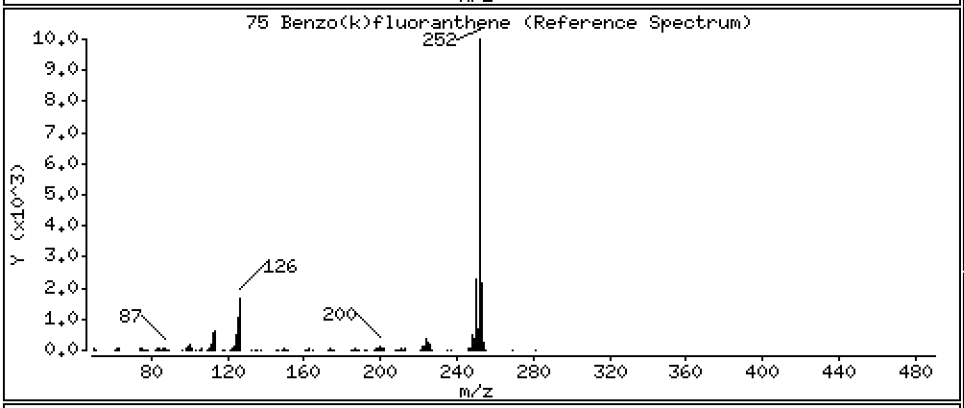
Concentration: 2.552 ug/ml

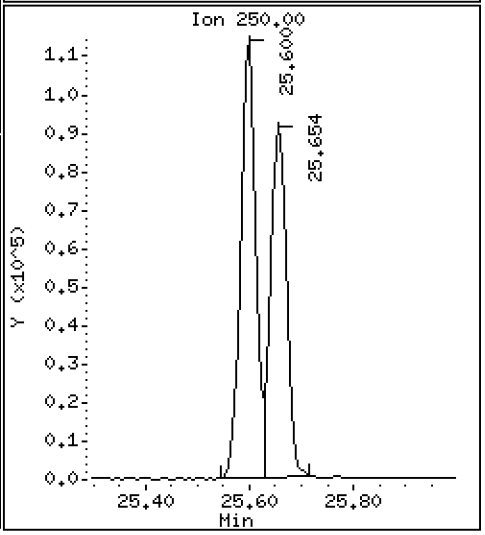


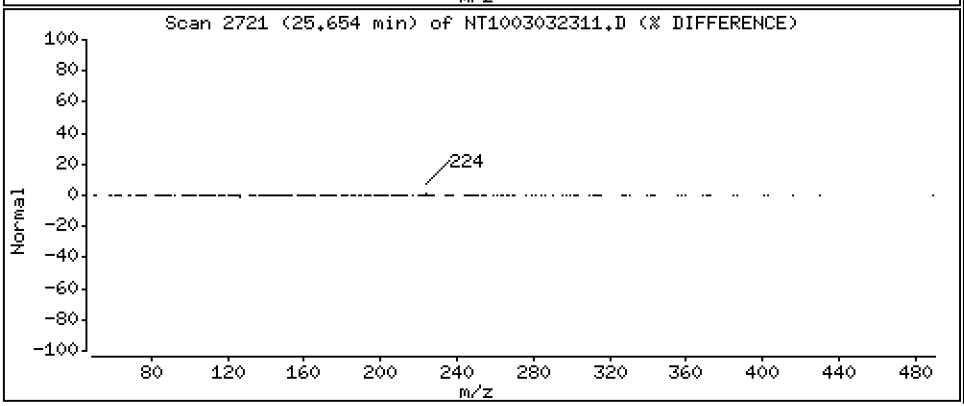












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

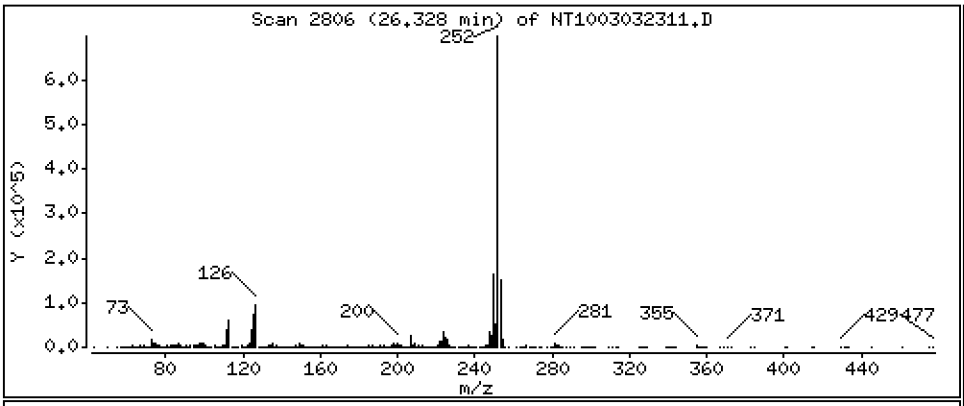
Operator: VTS

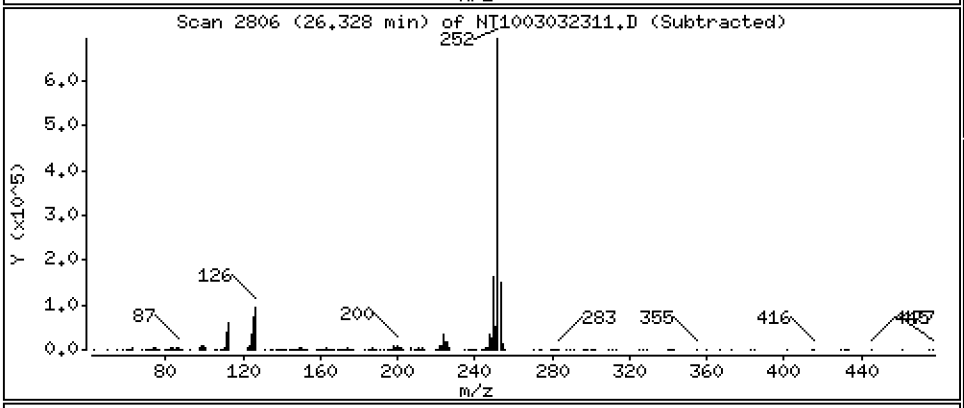
Column phase: ZB-5msi

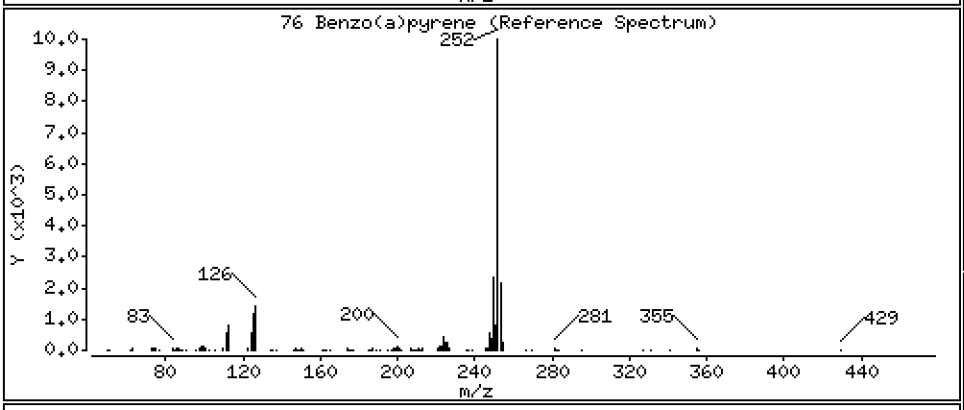
Column diameter: 0.25

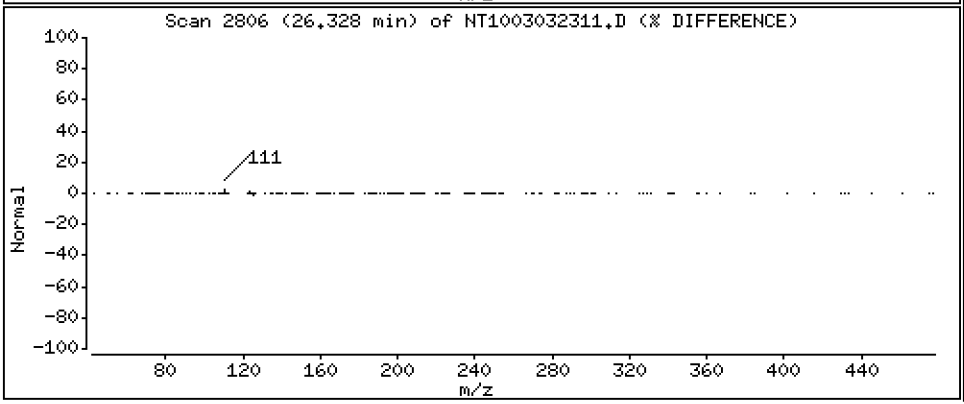
76 Benzo(a)pyrene

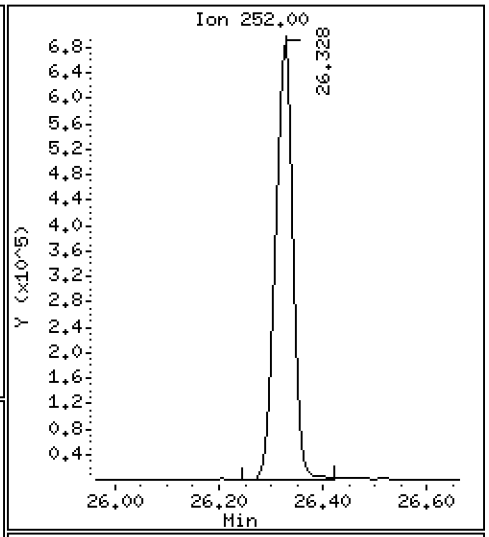
Concentration: 4.235 ug/ml

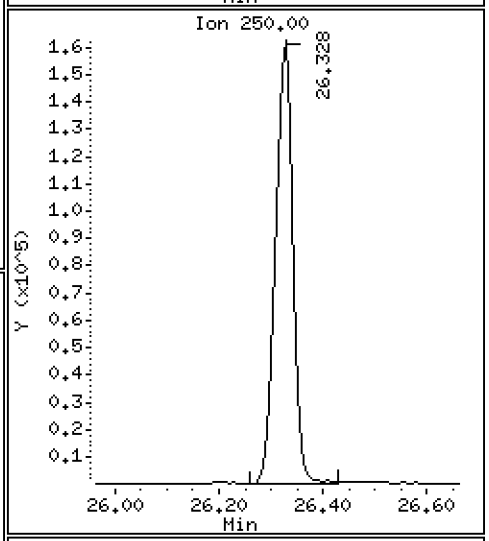


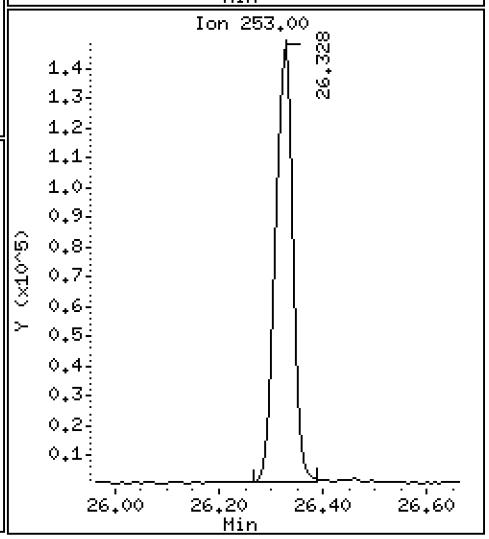












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

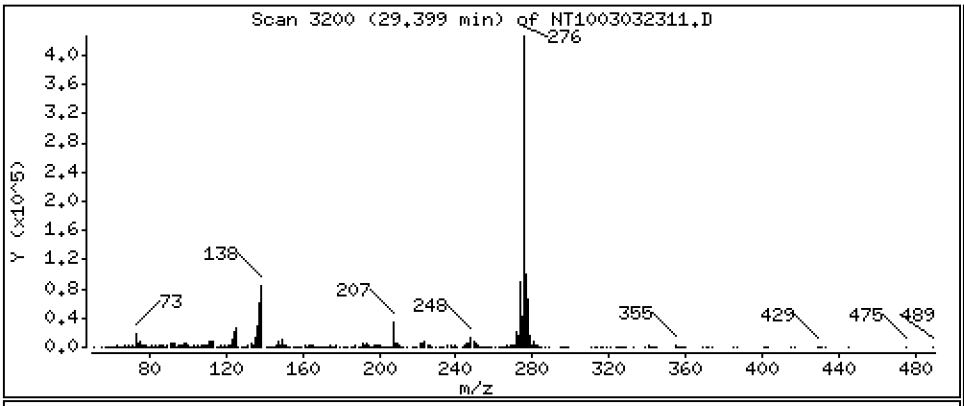
Operator: VTS

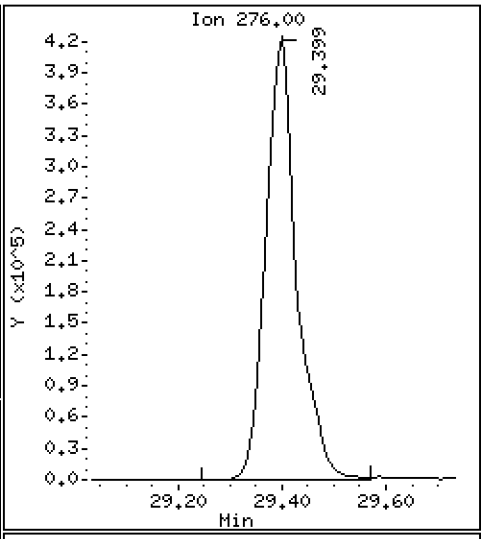
Column phase: ZB-5msi

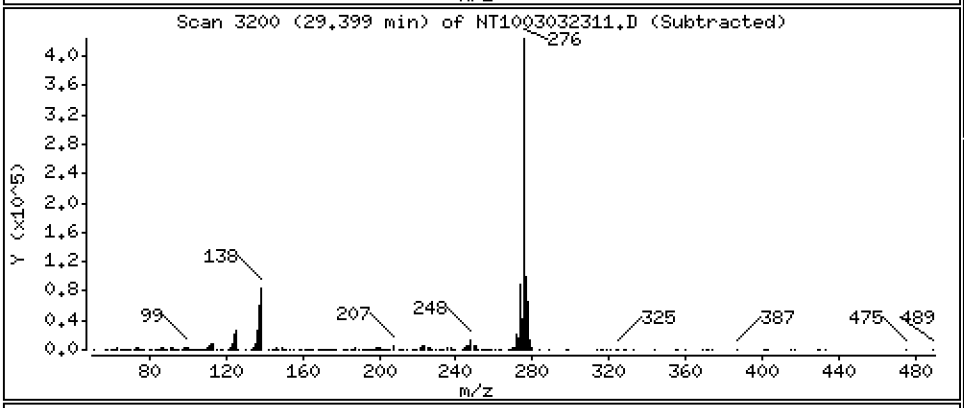
Column diameter: 0.25

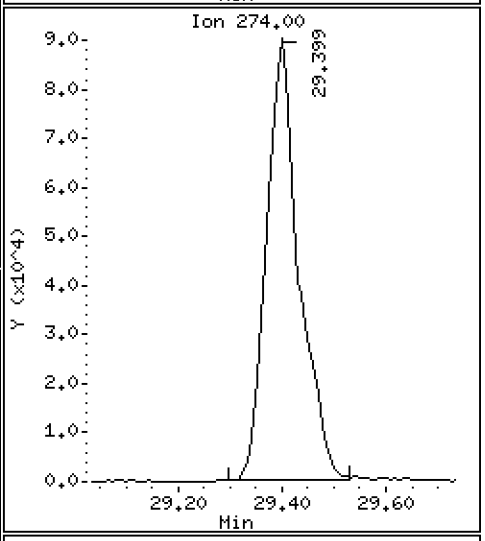
78 Indeno(1,2,3-cd)pyrene

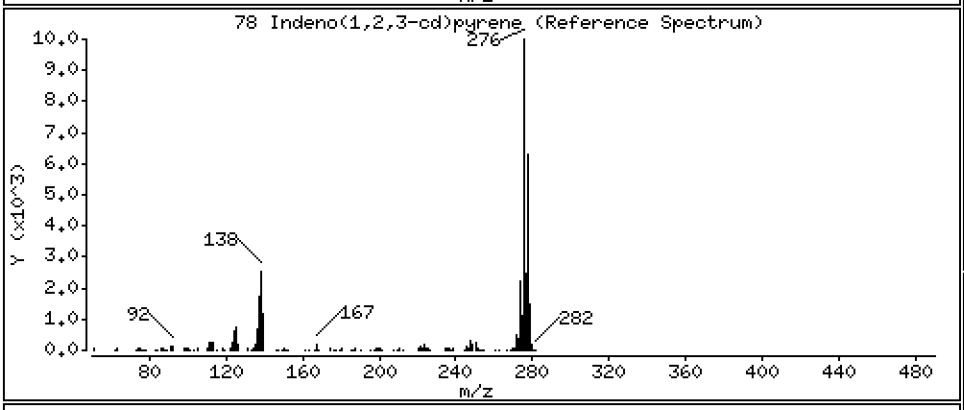
Concentration: 4.003 ug/ml

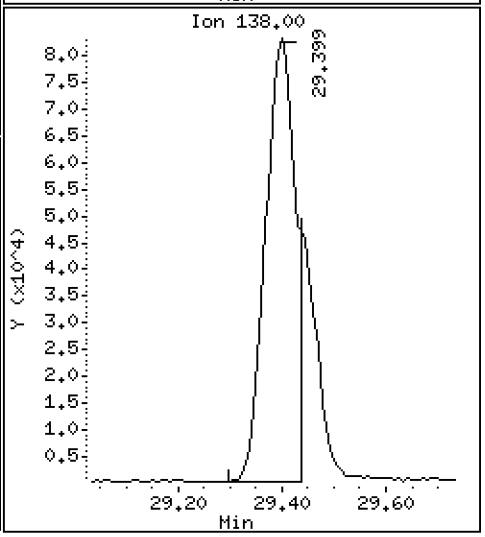


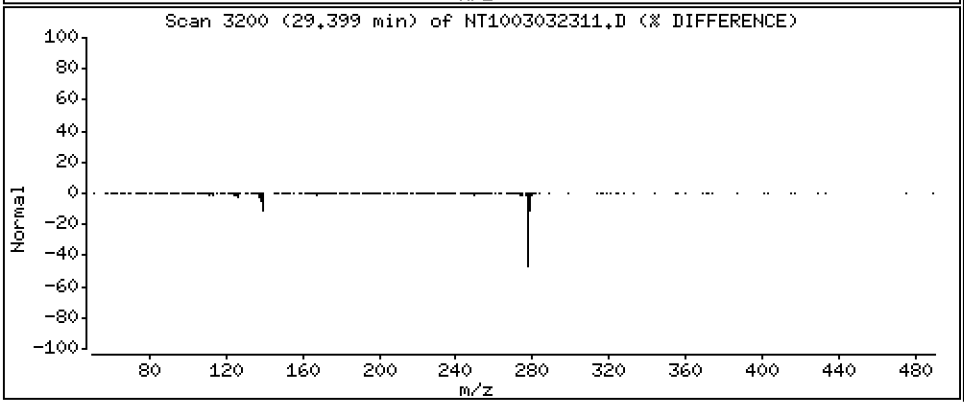












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

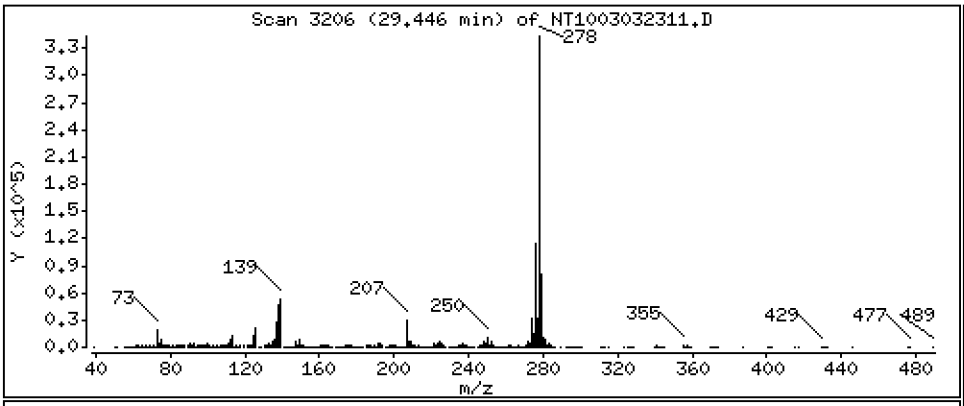
Operator: VTS

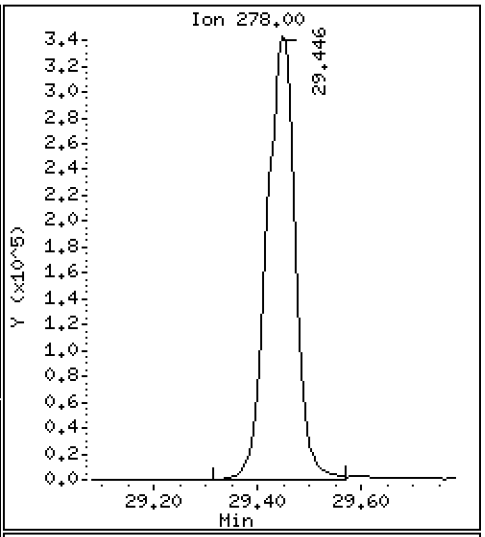
Column phase: ZB-5msi

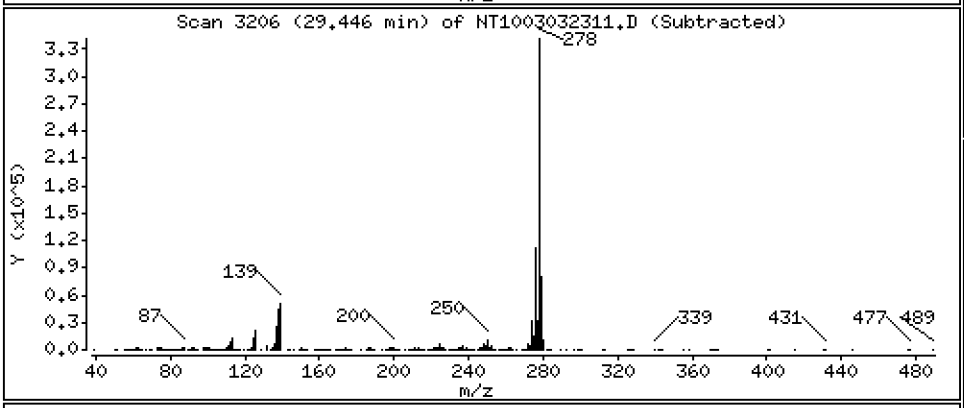
Column diameter: 0.25

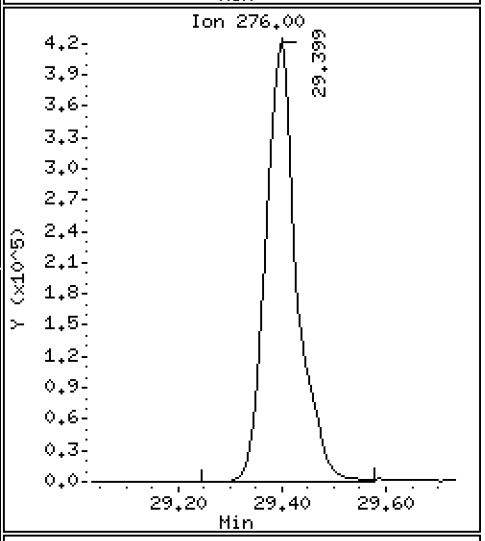
79 Dibenzo(a,h)anthracene

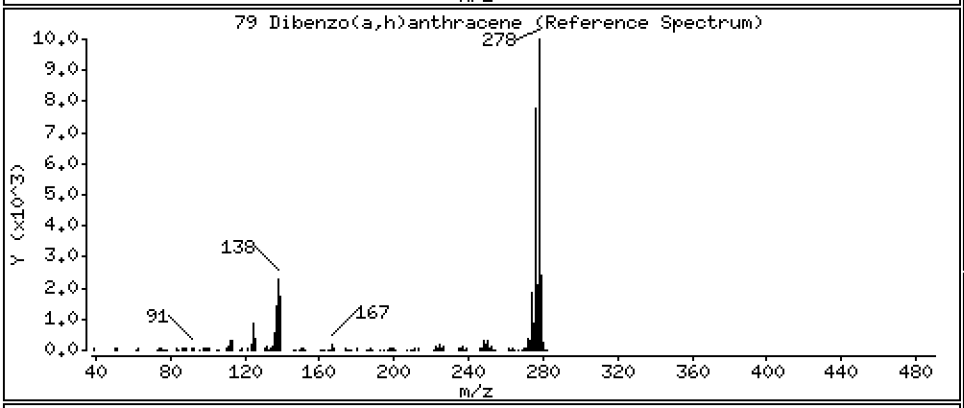
Concentration: 3.934 ug/ml

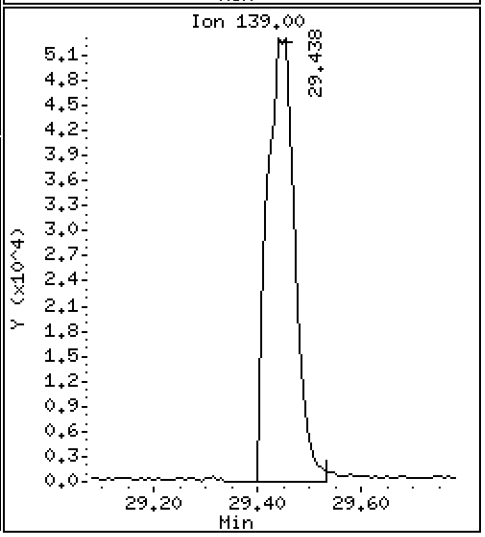


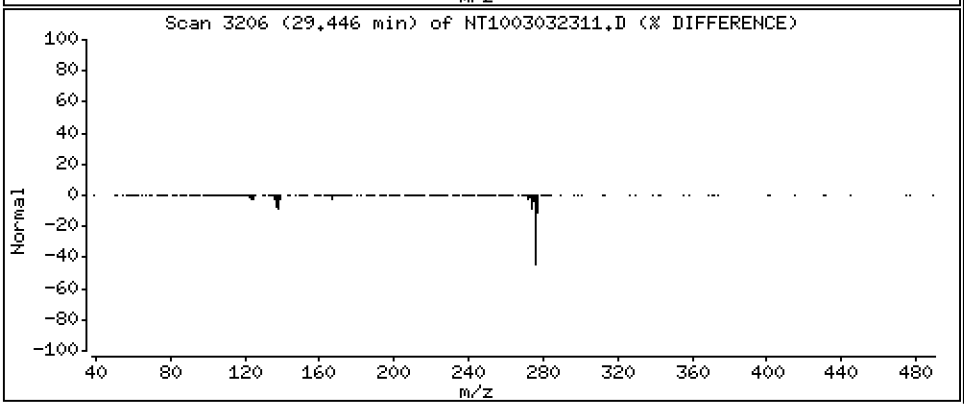












Date : 04-MAR-2023 00:08

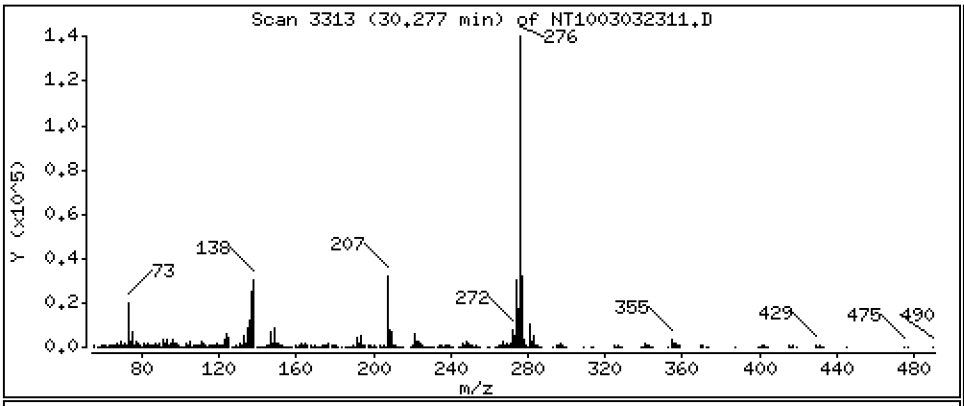
Client ID: Instrument: nt10.i

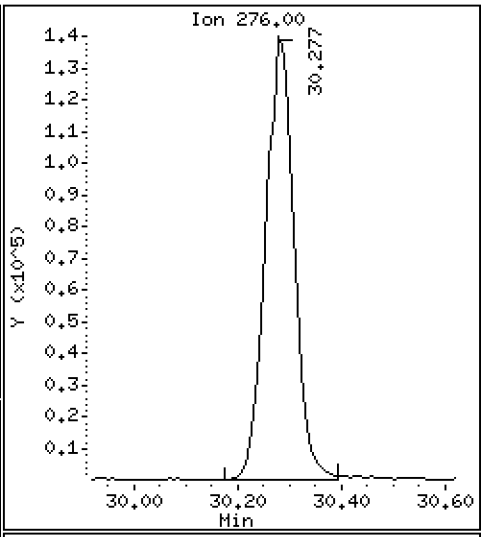
Sample Info: BLA0673-SRM1

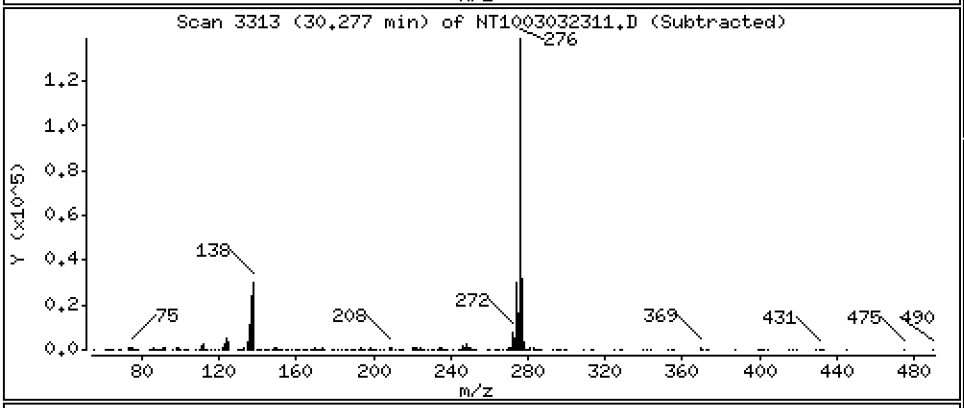
Volume Injected (uL): 1.0 Operator: VTS

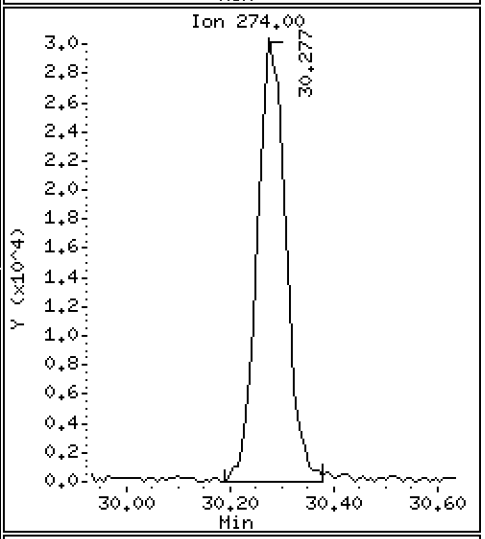
Column phase: ZB-5msi Column diameter: 0.25

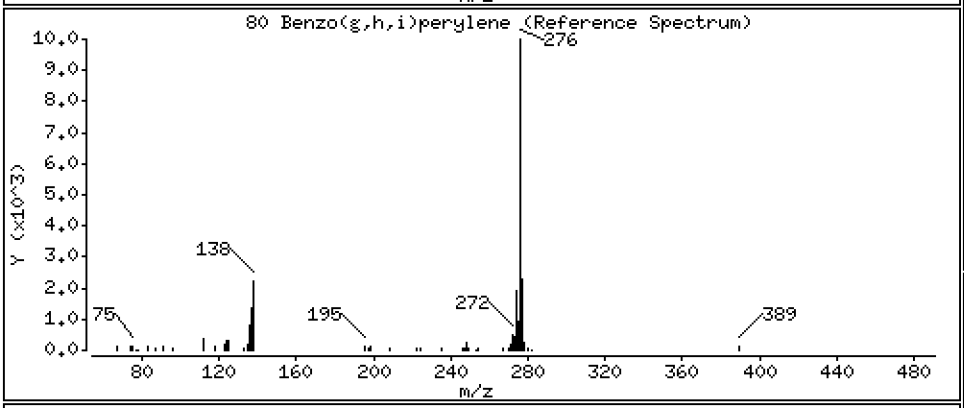
80 Benzo(g,h,i)perylene Concentration: 1.568 ug/ml

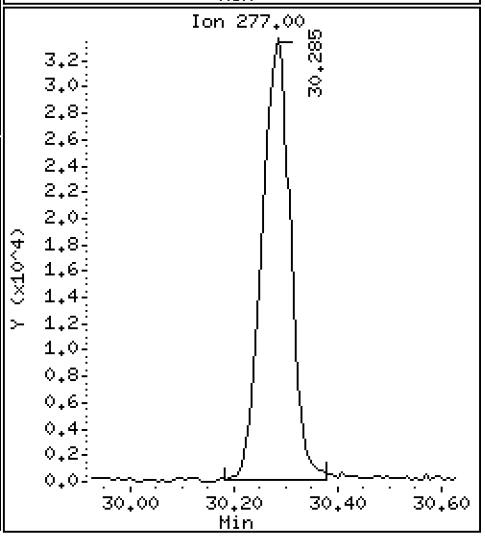


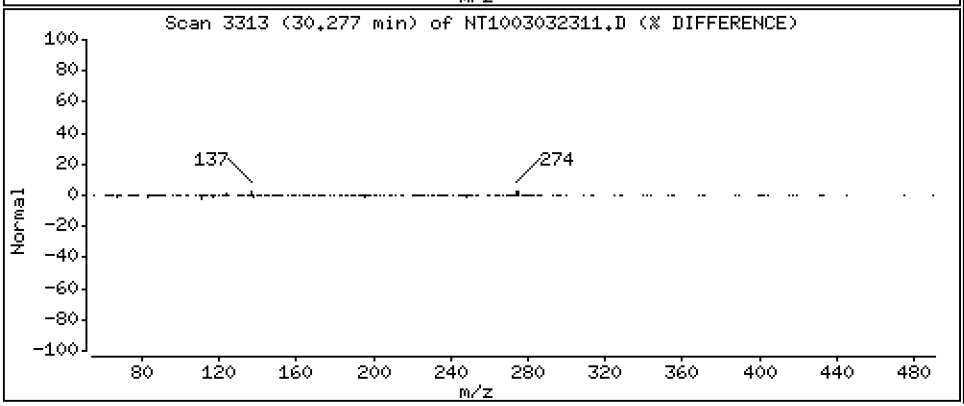












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

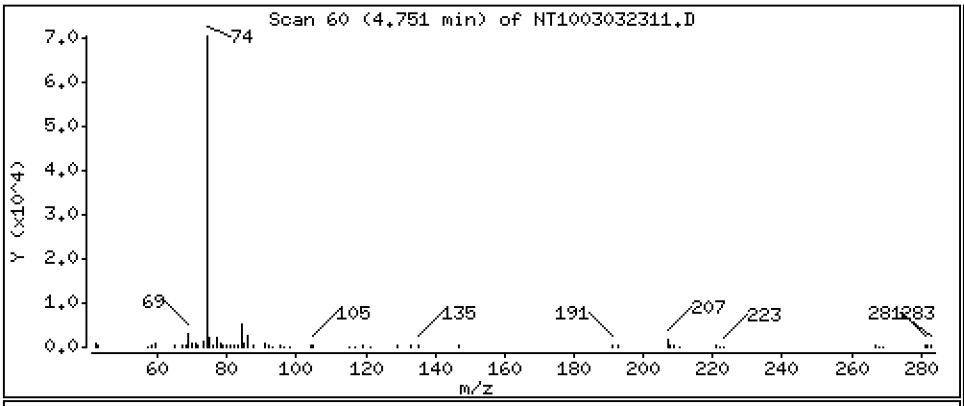
Operator: VTS

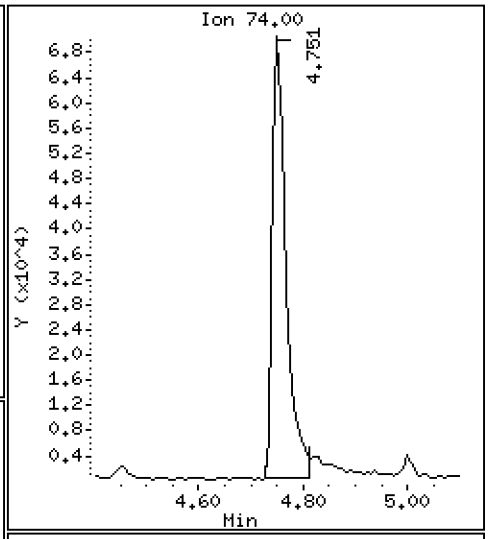
Column phase: ZB-5msi

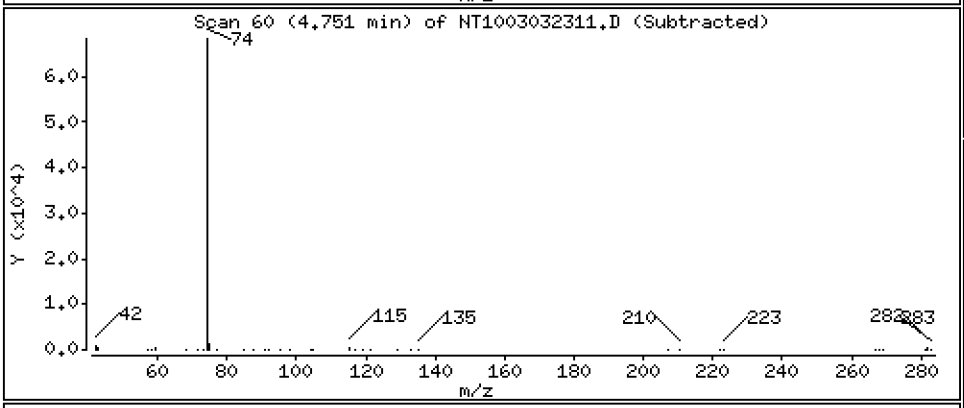
Column diameter: 0.25

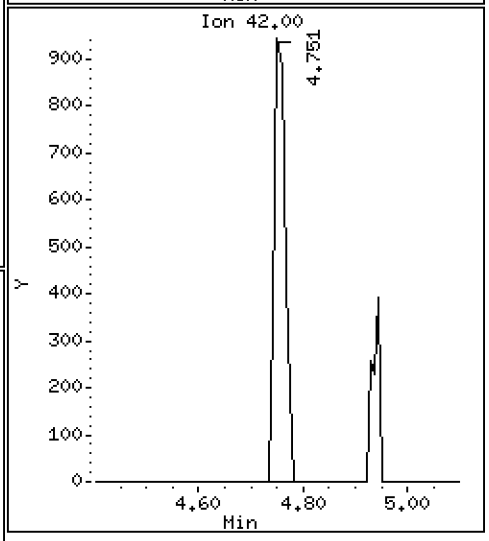
90 N-Nitrosodimethylamine

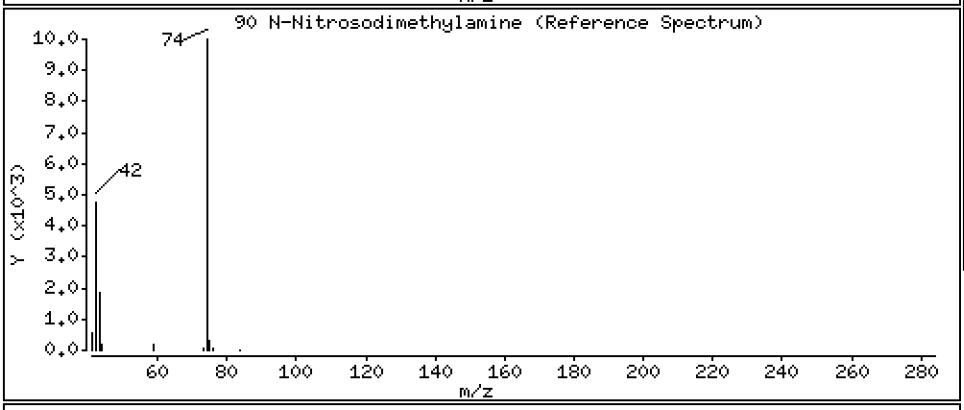
Concentration: 1.288 ug/ml

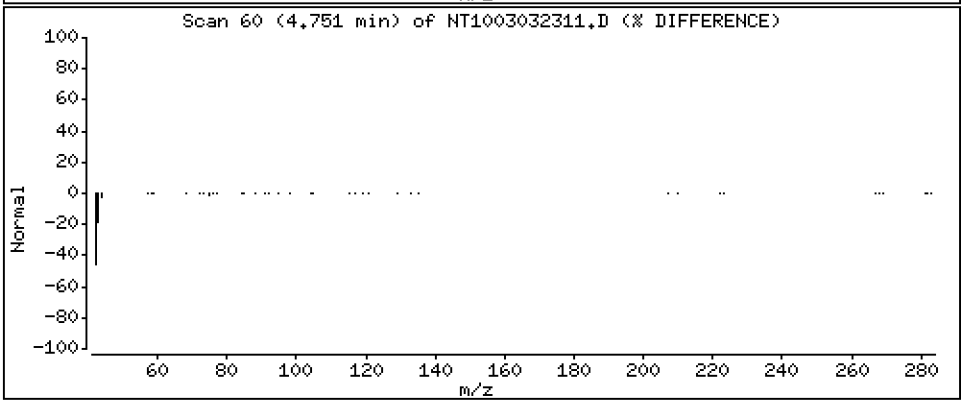












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

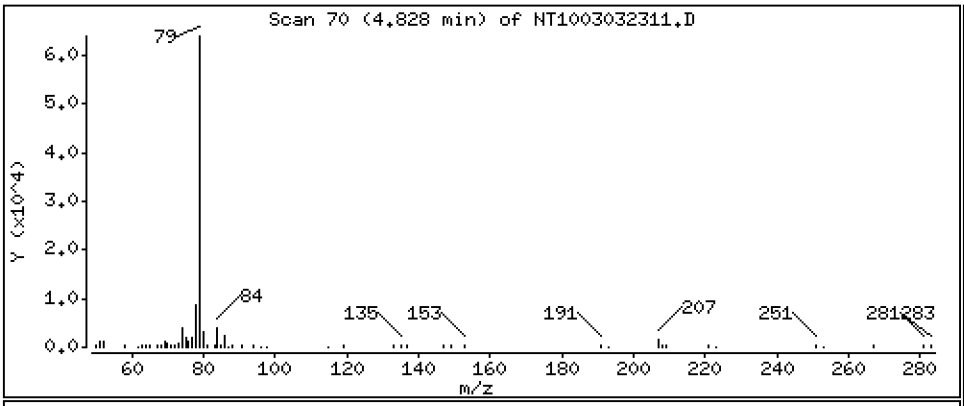
Operator: VTS

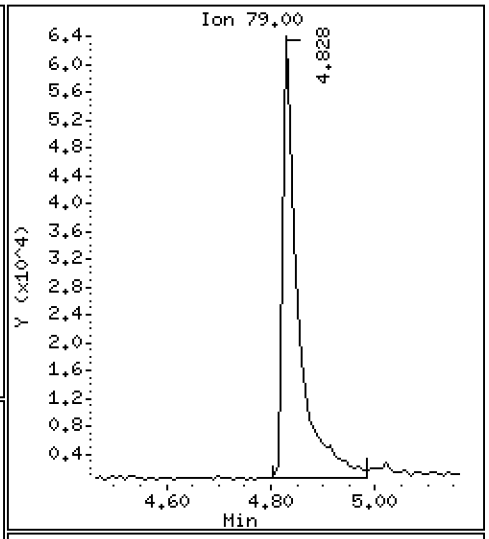
Column phase: ZB-5msi

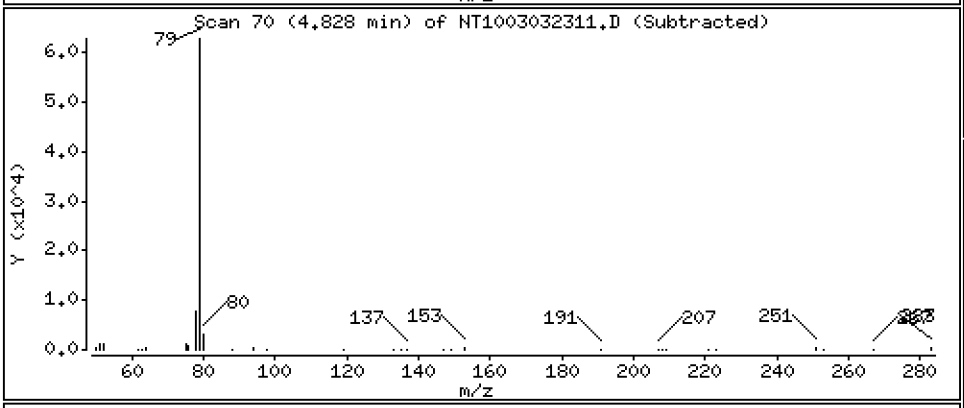
Column diameter: 0.25

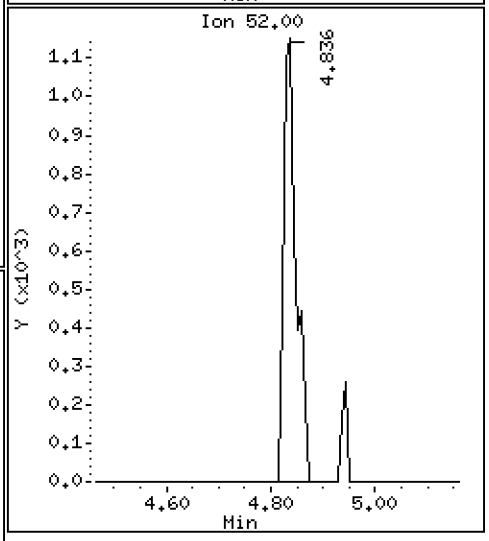
103 Pyridine

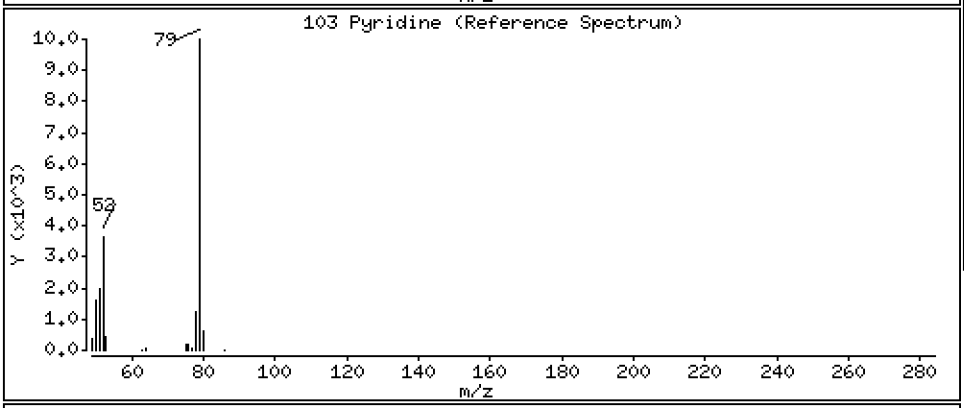
Concentration: 0.8003 ug/ml

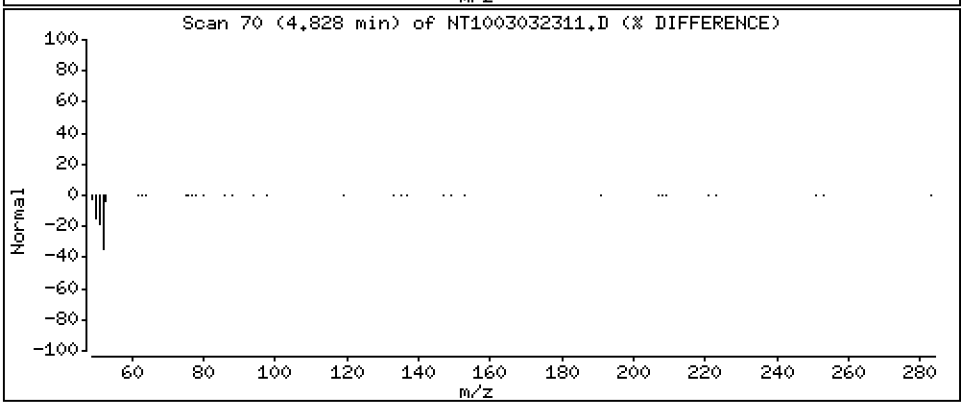












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

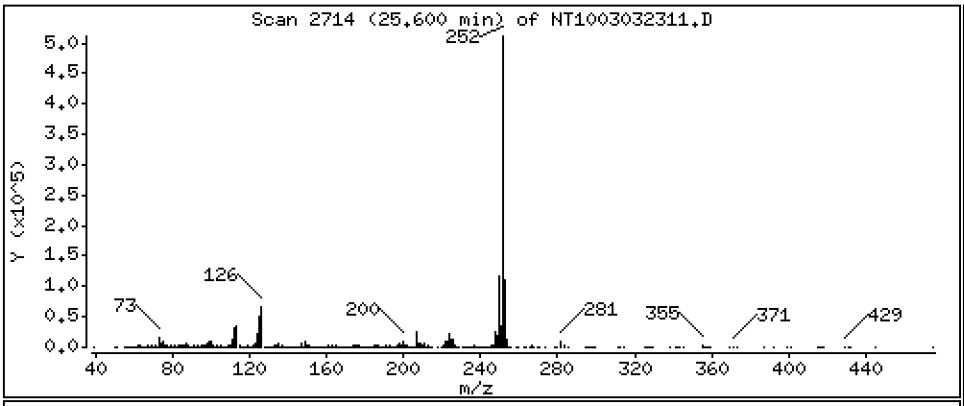
Operator: VTS

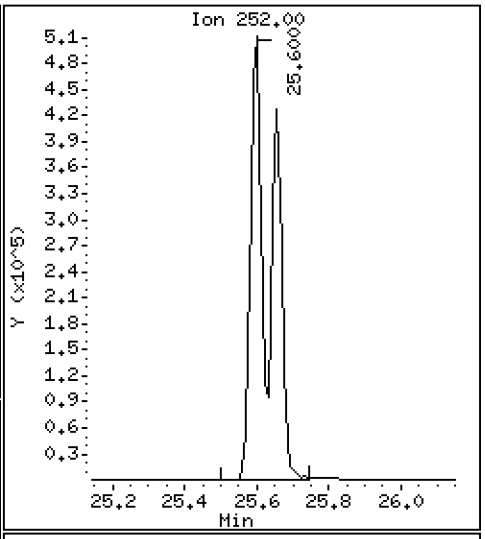
Column phase: ZB-5msi

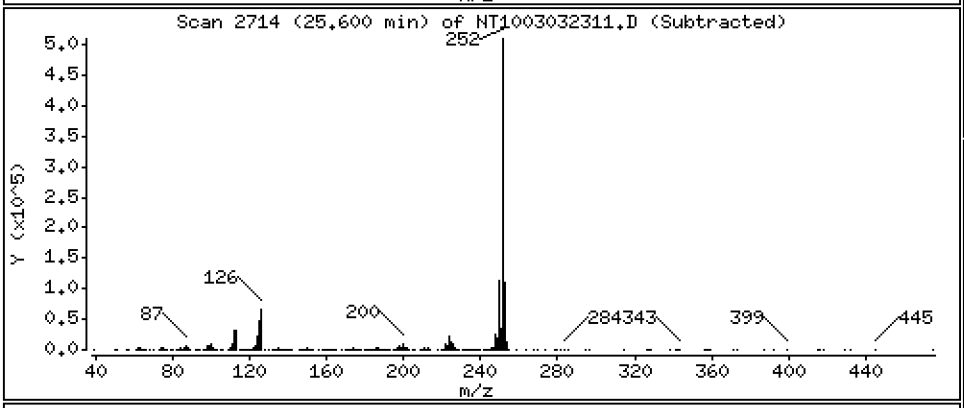
Column diameter: 0.25

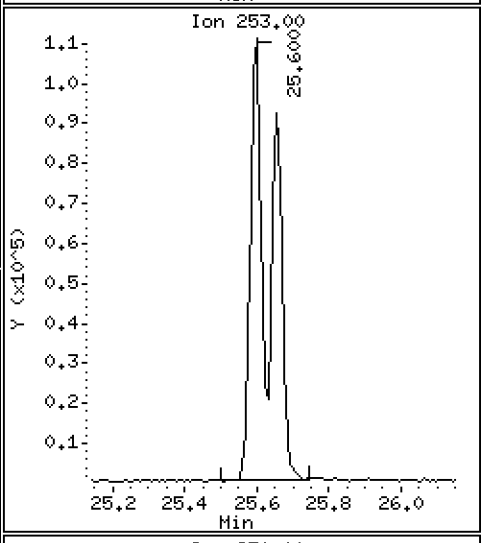
187 Total Benzofluoranthenes

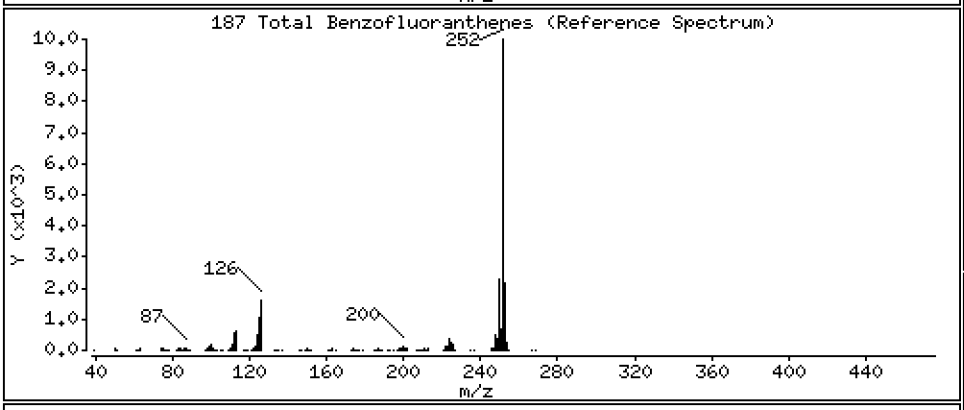
Concentration: 5.066 ug/ml

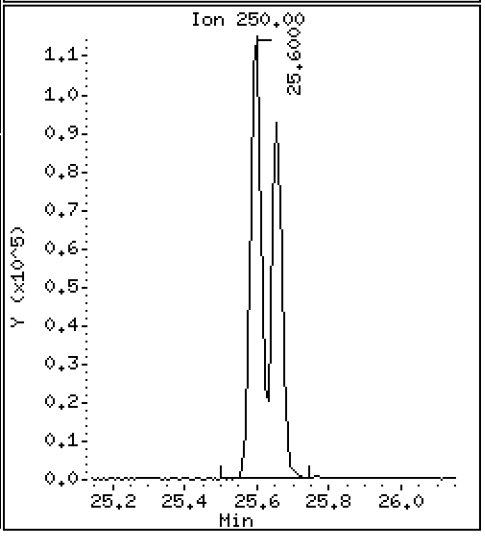


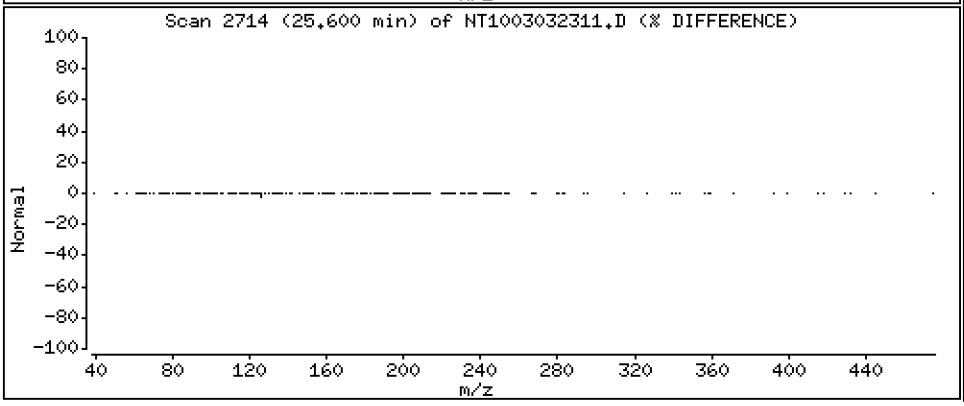












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230303.b\NT1003032311.D
Lab Smp Id: BLA0673-SRM1
Inj Date : 04-MAR-2023 00:08
Operator : VTS Inst ID: nt10.i
Smp Info : BLA0673-SRM1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230303.b\ABN.m
Meth Date : 05-Jul-2023 12:33 van Quant Type: ISTD
Cal Date : 01-MAR-2023 18:37 Cal File: NT1003012306.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/ml)
$ 1	2-Fluorophenol	112	6.920	6.912	(0.745)	868748	5.90813	5.908
$ 2	Phenol-d5	99	8.535	8.527	(0.919)	1192688	6.98641	6.986
3	Phenol	94	8.558	8.550	(0.922)	477738	2.63210	2.632
$ 5	2-Chlorophenol-d4	132	8.852	8.844	(0.953)	1021205	7.01137	7.011
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	8.883	8.875	(0.957)	193820	1.28094	1.281
7	1,3-Dichlorobenzene	146	9.177	9.169	(0.988)	102697	0.61560	0.6156
* 8	1,4-Dichlorobenzene-d4	152	9.286	9.278	(1.000)	467355	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	9.573	9.565	(1.031)	405579	3.72712	3.727
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	9.705	9.510	(1.045)	707205	7.30899	7.309
14	2,2'-oxybis(1-Chloropropane)	121	9.782	9.767	(1.053)	62703	1.35600	1.356
13	2-Methylphenol	108	9.705	9.697	(1.045)	707205	4.91586	4.916
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	10.000	9.984	(1.077)	931100	5.34881	5.349
$ 18	Nitrobenzene-d5	82	10.341	10.333	(0.878)	767564	4.14477	4.145
19	Nitrobenzene	77	10.380	10.372	(0.881)	347955	2.00301	2.003
20	Isophorone	82	10.846	10.838	(0.921)	414324	1.86844	1.868
21	2-Nitrophenol	139	11.010	11.001	(0.935)	364906	3.88523	3.885
22	2,4-Dimethylphenol	107	11.060	11.052	(0.939)	680702	4.05773	4.058
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	11.476	11.468	(0.974)	904598	6.78802	6.788
	26 1,2,4-Trichlorobenzene	180	11.657	11.649	(0.990)	134900	1.07129	1.071
*	27 Naphthalene-d8	136	11.780	11.772	(1.000)	1687034	4.00000	
	28 Naphthalene	128	11.827	11.819	(1.004)	1186435	2.74004	2.740
	29 4-Chloroaniline	127	11.827	11.911	(1.004)	154993	0.81635	0.8163
	30 Hexachlorobutadiene	225	12.051	12.035	(1.023)	125291	1.31983	1.320
	31 4-Chloro-3-methylphenol	107	12.879	12.863	(1.093)	249466	1.79984	1.800
	32 2-Methylnaphthalene	142	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	13.800	13.792	(0.896)	161442	1.97869	1.979
	35 2,4,5-Trichlorophenol	196	13.877	13.861	(0.901)	278193	3.17449	3.174
$	36 2-Fluorobiphenyl	172	13.986	13.978	(0.908)	1356231	4.44166	4.442
	37 2-Chloronaphthalene	162	14.241	14.233	(0.925)	482638	2.01349	2.013
	38 2-Nitroaniline	65	14.287	14.442	(0.928)	43078	0.65635	0.6564
	39 Dimethylphthalate	163	14.829	14.821	(0.963)	1251606	4.52717	4.527
	40 Acenaphthylene	152	15.116	15.092	(0.981)	367604	0.88954	0.8895
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	15.402	15.394	(1.000)	856066	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.471	15.463	(1.005)	1225127	4.91570	4.916
	45 2,4-Dinitrophenol	184	15.533	15.525	(1.009)	86255	5.92931	5.929
	46 Dibenzofuran	168	15.835	15.827	(1.028)	2049723	5.54143	5.541
	47 4-Nitrophenol	109	15.641	15.626	(1.016)	276636	5.58292	5.583
	48 2,4-Dinitrotoluene	165	15.804	15.796	(1.026)	279551	3.14311	3.143
	50 Diethylphthalate	149	16.306	16.298	(1.059)	49817	0.17009	0.1701
	49 Fluorene	166	16.554	16.546	(1.075)	1112142	3.61376	3.614
	51 4-Chlorophenyl-phenylether	204	16.554	16.546	(1.075)	269172	1.97262	1.973
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	16.647	16.646	(0.898)	361550	10.5972	10.60
	54 N-Nitrosodiphenylamine	169	16.801	16.785	(0.907)	826117	3.94043	3.940
$	55 2,4,6-Tribromophenol	330	17.063	17.047	(1.108)	357948	6.50453	6.505
	56 4-Bromophenyl-phenylether	248	17.589	17.573	(0.949)	676096	7.95873	7.959
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	18.115	18.107	(0.977)	76414	1.71867	1.719
*	59 Phenanthrene-d10	188	18.533	18.525	(1.000)	1416982	4.00000	
	60 Phenanthrene	178	18.587	18.571	(1.003)	1751529	4.83005	4.830
	61 Anthracene	178	18.695	18.680	(1.009)	794525	2.25954	2.260
	62 Carbazole	167	19.028	19.020	(1.027)	1851040	5.74614	5.746
	63 Di-n-butylphthalate	149	19.740	19.724	(1.065)	739860	1.67437	1.674
	64 Fluoranthene	202	20.985	20.970	(0.888)	945757	2.37861	2.379
	65 Pyrene	202	21.419	21.395	(0.907)	954996	2.35878	2.359
$	66 Terphenyl-d14	244	21.705	21.689	(0.919)	1533746	4.68182	4.682
	67 Butylbenzylphthalate	149	22.603	22.588	(0.957)	621809	2.88360	2.884
	68 Benzo(a)anthracene	228	23.610	23.594	(0.999)	2097197	5.14596	5.146
*	69 Chrysene-d12	240	23.625	23.617	(1.000)	1155812	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.672	23.664	(1.002)	455651	1.38072	1.381
	72 bis(2-Ethylhexyl)phthalate	149	23.618	23.602	(0.955)	432227	1.48474	1.485
*	134 Di-n-octylphthalate-d4	153	24.740	24.732	(1.000)	2059316	4.00000	
	73 Di-n-octylphthalate	149	24.748	24.740	(1.000)	454117	0.99444	0.9944
	74 Benzo(b)fluoranthene	252	25.600	25.584	(0.968)	1070941	2.58136	2.581(H)
	75 Benzo(k)fluoranthene	252	25.654	25.646	(0.970)	1019525	2.55165	2.552
	76 Benzo(a)pyrene	252	26.328	26.312	(0.995)	1600717	4.23550	4.235

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
* 77 Perylene-d12	264	26.451	26.443	(1.000)	1185167	4.00000	
78 Indeno(1,2,3-cd)pyrene	276	29.399	29.383	(1.111)	1762792	4.00267	4.003
79 Dibenzo(a,h)anthracene	278	29.445	29.429	(1.113)	1319046	3.93372	3.934
80 Benzo(g,h,i)perylene	276	30.276	30.268	(1.145)	534310	1.56820	1.568
90 N-Nitrosodimethylamine	74	4.750	4.750	(0.512)	122254	1.28790	1.288
91 Aniline	93	Compound Not Detected.					
93 Benzidine	184	Compound Not Detected.					
103 Pyridine	79	4.828	4.812	(0.520)	134735	0.80034	0.8003
105 1-methylnaphthalene	142	Compound Not Detected.					
111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
187 Total Benzofluoranthenes	252	25.600	25.646	(0.968)	2018854	5.06619	5.066
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032311.D
Lab Smp Id: BLA0673-SRM1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230303.b\ABN.m
Misc Info:

Calibration Date: 03-MAR-2023
Calibration Time: 18:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	505000	252500	1010000	467355	-7.45
27 Naphthalene-d8	1846542	923271	3693084	1687034	-8.64
42 Acenaphthene-d10	936949	468475	1873898	856066	-8.63
59 Phenanthrene-d10	1548373	774187	3096746	1416982	-8.49
69 Chrysene-d12	1352261	676131	2704522	1155812	-14.53
134 Di-n-octylphthala	2300648	1150324	4601296	2059316	-10.49
77 Perylene-d12	1445020	722510	2890040	1185167	-17.98

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.29	0.09
27 Naphthalene-d8	11.77	11.27	12.27	11.78	0.07
42 Acenaphthene-d10	15.39	14.89	15.89	15.40	0.05
59 Phenanthrene-d10	18.53	18.03	19.03	18.53	0.04
69 Chrysene-d12	23.62	23.12	24.12	23.63	0.03
134 Di-n-octylphthala	24.73	24.23	25.23	24.74	0.03
77 Perylene-d12	26.44	25.94	26.94	26.45	0.03

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

REVIEW SUMMARY FOR FILE - NT1003032311.D

Lab ID: BLA0673-SRM1
nt10.i, 20230303.b\ABN.m,   04-MAR-2023 00:08

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.045	1.025	0.0200	Benzyl alcohol
1.004	1.012	-0.0079	4-Chloroaniline
0.928	0.938	-0.0105	2-Nitroaniline

RRT check based on Ccal File: NT1003032302.D

On Column LOD for nt10.i, 20230303.b\ABN.m, ICAL.sub = 0.0000

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

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E

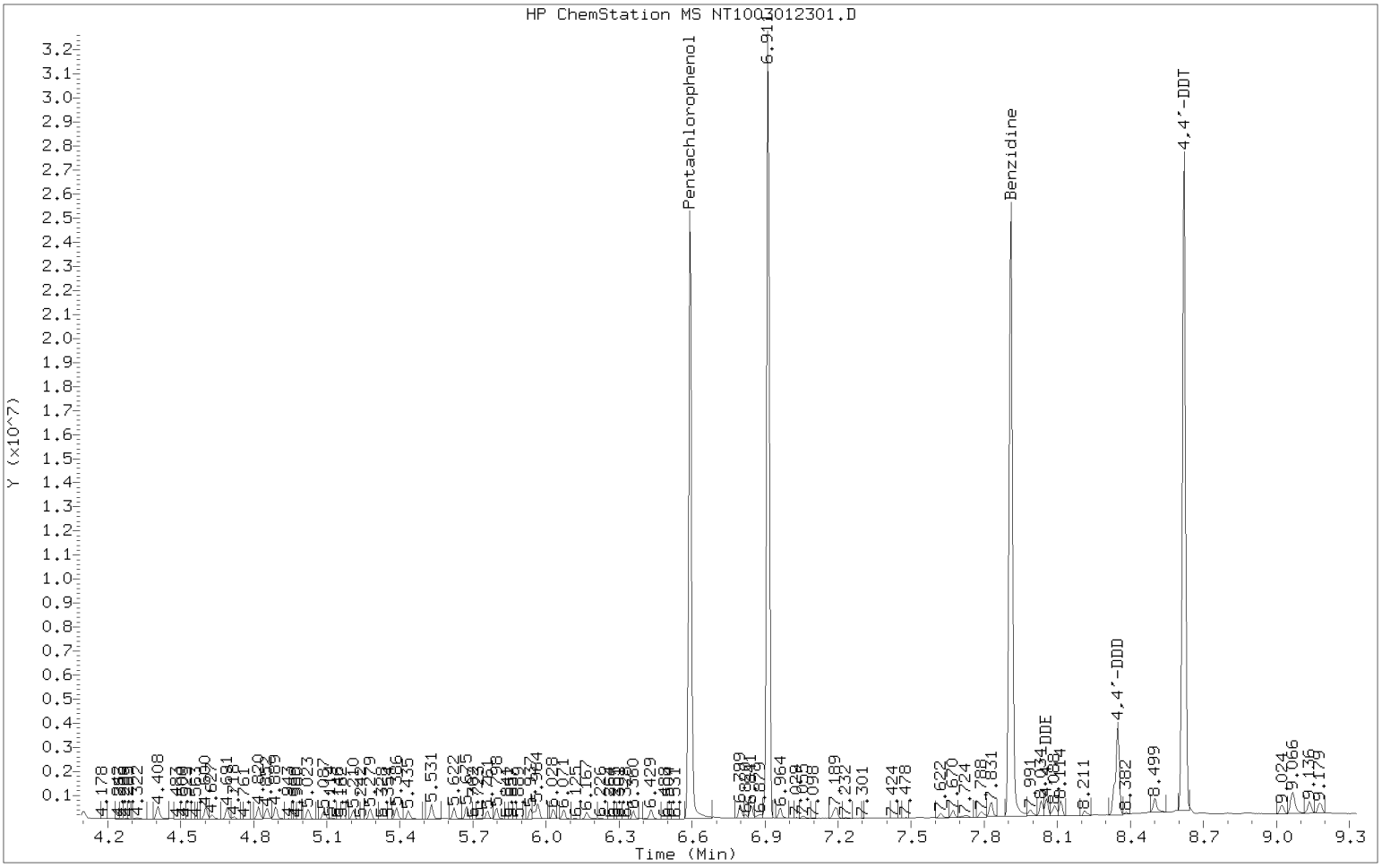
Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Lab File ID:	NT1003012301.D	Injection Date:	03/01/23
Instrument ID:	NT10	Injection Time:	15:49
Sequence:	SLC0084	Lab Sample ID:	SLC0084-TUN1

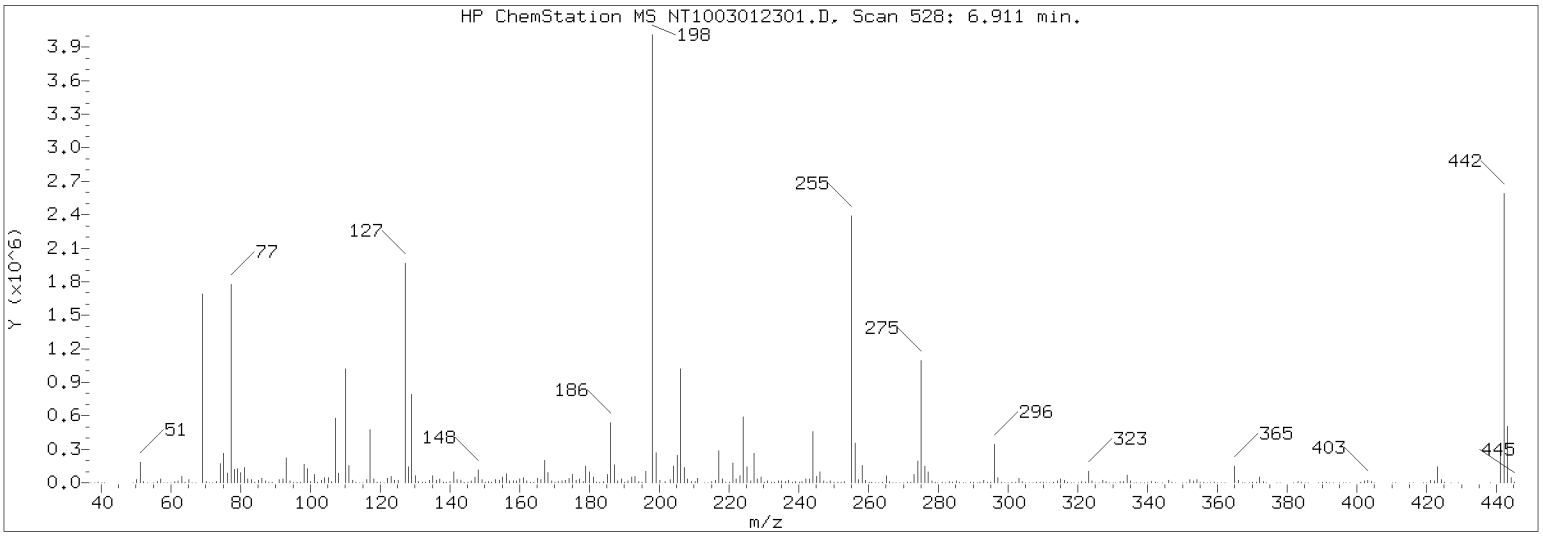
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	0.793	PASS
69	Less than 100% of 198	41.1	PASS
70	Less than 2% of 69	0.366	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.67	PASS
365	1 - 100% of 198	4.33	PASS
441	Less than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

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

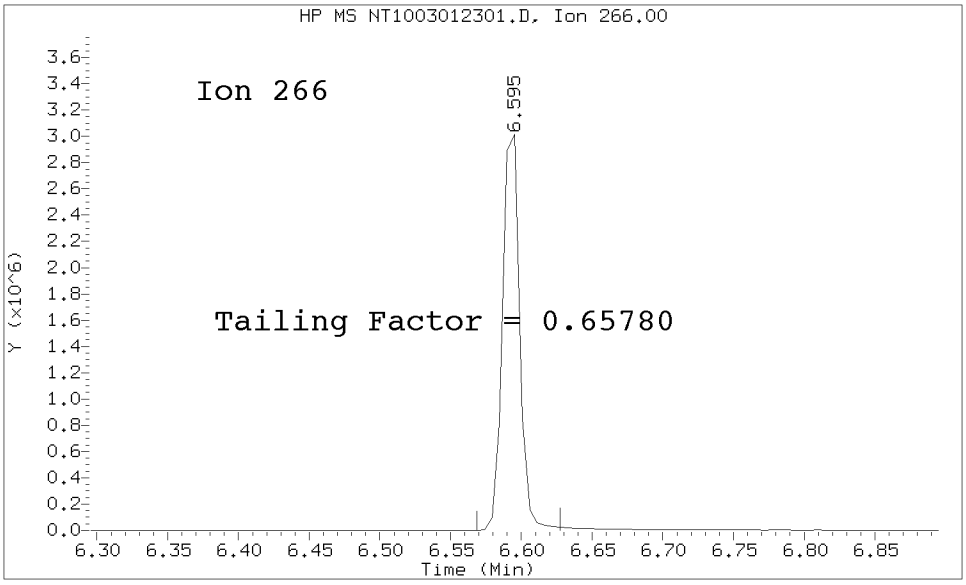
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

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



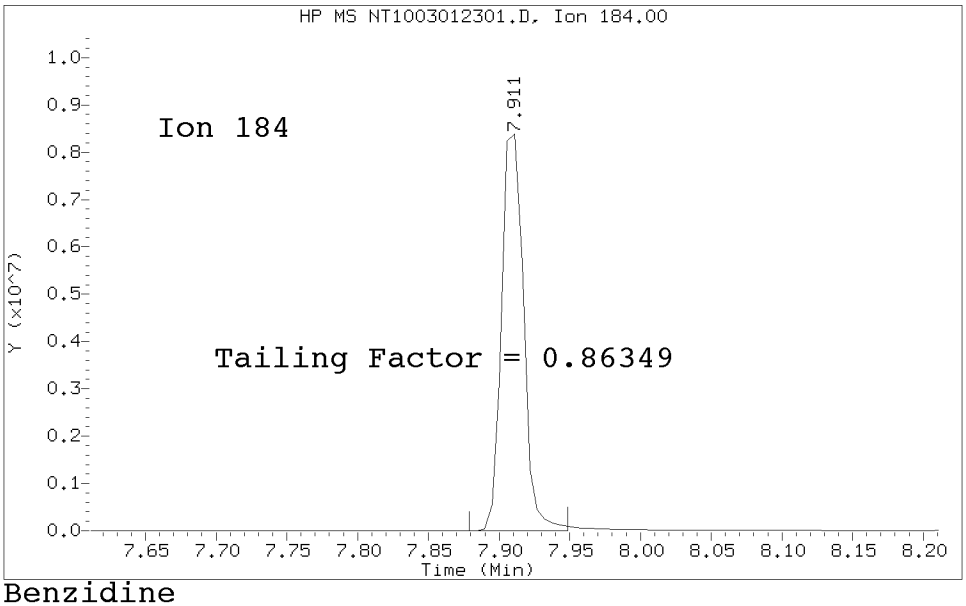


Datafile Analyzed: /20230301.b/NT1003012301.D/NT1003012301.D
Method Used: \20230301.b\DFTPP8270E.m\sw846ddt.m Inst: nt10
Injection Date: 01-MAR-2023 15:49 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 03/07/2023 12:33



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

Tail Factor = 0.658 Maximum Allowed = 2.0



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

Tail Factor = 0.863 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

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

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

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

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

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

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

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

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

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

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

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

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

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

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

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

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

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

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

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

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

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

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

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

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

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

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

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

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

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

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
2-Nitroaniline	0.2857098	24.5		0.9995	QCOD (0.99)	
Acenaphthylene	1.930932	10.3			RSD (15)	
Dimethylphthalate	1.291794	7.1			RSD (15)	
2,6-Dinitrotoluene	0.2723393	17.7		0.9996	QCOD (0.99)	
Acenaphthene	1.164525	7.6			RSD (15)	
3-Nitroaniline	0.325765	11.2			RSD (15)	
2,4-Dinitrophenol	5.587126E-02	114.7		0.9701	QCOD (0.99)	*
Dibenzofuran	1.728326	10.3			RSD (15)	
4-Nitrophenol	0.2049826	36.5		0.9982	QCOD (0.99)	
2,4-Dinitrotoluene	0.3852197	24.5		0.9992	QCOD (0.99)	
Fluorene	1.437984	14.6			RSD (15)	
4-Chlorophenylphenyl ether	0.6424026	17.3		0.9999	QCOD (0.99)	
Diethyl phthalate	1.368486	7.6			RSD (15)	
4-Nitroaniline	0.3501692	14.4			RSD (15)	
4,6-Dinitro-2-methylphenol	7.125058E-02	79.5		0.9864	QCOD (0.99)	*
N-Nitrosodiphenylamine	0.5918253	13.3			RSD (15)	
4-Bromophenyl phenyl ether	0.239806	14.7			RSD (15)	
Hexachlorobenzene	0.270043	6.5			RSD (15)	
Pentachlorophenol	0.114555	46.8		0.9974	QCOD (0.99)	
Phenanthrene	1.023673	9.0			RSD (15)	
Anthracene	0.9926226	13.2			RSD (15)	
Carbazole	0.9093581	10.8			RSD (15)	
Di-n-Butylphthalate	1.181897	17.1		0.9998	QCOD (0.99)	
Fluoranthene	1.376033	12.5			RSD (15)	
Pyrene	1.401156	8.4			RSD (15)	
Butylbenzylphthalate	0.6475451	16.6		0.9998	QCOD (0.99)	
Benzo(a)anthracene	1.41041	13.0			RSD (15)	
3,3'-Dichlorobenzidine	0.5458244	23.5		0.9972	QCOD (0.99)	
Chrysene	1.14625	5.8			RSD (15)	

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00019	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLC0084

Instrument: NT10
Calibration ID: UNASSIGNED

Printed: 3/7/2023 1:01:11PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0084-TUN1	QC		1		K004775			
SLC0084-CAL1	QC		2		K011105	K010831		
SLC0084-CAL2	QC		3		K011106	K010831		
SLC0084-CAL3	QC		4		K011107	K010831		
SLC0084-CAL4	QC		5		K011108	K010831		
SLC0084-CAL5	QC		6		K011109	K010831		
SLC0084-CAL6	QC		7		K011110	K010831		
SLC0084-CAL7	QC		8		K011111	K010831		
SLC0084-SCV1	QC		9		K010066	K010831		
SLC0084-ICB1	QC		10		K005156	K010831		

Samples Loaded By Date

Data Processed By Date

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

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

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

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

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

Security Status Report

Date: 07-Mar-2023 12:54

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

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

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

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	6.905	6.897	6.897	6.897	6.898	6.898	6.897	6.898	3.898-9.898	6.898	0.003
186 Carbaryl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.785	15.785-21.785	+++++	+++++
179 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.645	5.645-11.645	+++++	+++++
180 n-Octadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.455	14.455-20.455	+++++	+++++
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.696	17.696-23.696	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.219	16.219-22.219	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.949	19.949-25.949	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.196	16.196-22.196	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.503	17.503-23.503	+++++	+++++
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.827	4.827-10.827	+++++	+++++
168 Pentachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.842	12.842-18.842	+++++	+++++
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.212	44.212-50.212	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.746	44.746-50.746	+++++	+++++
147 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.216	45.216-51.216	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

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

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

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

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

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

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

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

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

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

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

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

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

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

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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

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

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

ARI Labs, Inc.

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

ARI Labs, Inc.

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

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Last Edit : 07-Mar-2023 12:01 yev

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

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Last Edit : 07-Mar-2023 12:01 yev

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

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INITIAL CALIBRATION DATA

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

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

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

ARI Labs, Inc.

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

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

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

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

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

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

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

ARI Labs, Inc.

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

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

ARI Labs, Inc.

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
39 Dimethylphthalate	1.11316	1.29546	1.25265	1.29991	1.33791	1.33936						
	1.40411						AVRG		1.29179		7.10389	
40 Acenaphthylene	1.85260	1.71889	1.78384	1.83149	1.93340	2.27642						
	2.11989						AVRG		1.93093		10.30781	
41 2,6-Dinitrotoluene	+++++	31365	70653	210738	510956	1069741						
	2401785						QUAD	0.000e+000	3.53000	-0.15836	0.99982	
43 3-Nitroaniline	+++++	0.28399	0.30145	0.30318	0.33064	0.35496						
	0.38037						AVRG		0.32577		11.23975	
44 Acenaphthene	1.08511	1.12430	1.08936	1.11627	1.18374	1.22217						
	1.33072						AVRG		1.16452		7.61746	
45 2,4-Dinitrophenol	+++++	110	2997	32087	171374	663655						
	2386659						QUAD	0.000e+000	13.42637	-2.23607	0.98860	<-
46 Dibenzofuran	1.52937	1.58754	1.60673	1.66349	1.81423	1.88705						
	2.00987						AVRG		1.72833		10.30238	

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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

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

ARI Labs, Inc.

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Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Last Edit : 07-Mar-2023 12:01 yev

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

ARI Labs, Inc.

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Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Last Edit : 07-Mar-2023 12:01 yev

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Last Edit : 07-Mar-2023 12:01 yev

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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

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

ARI Labs, Inc.

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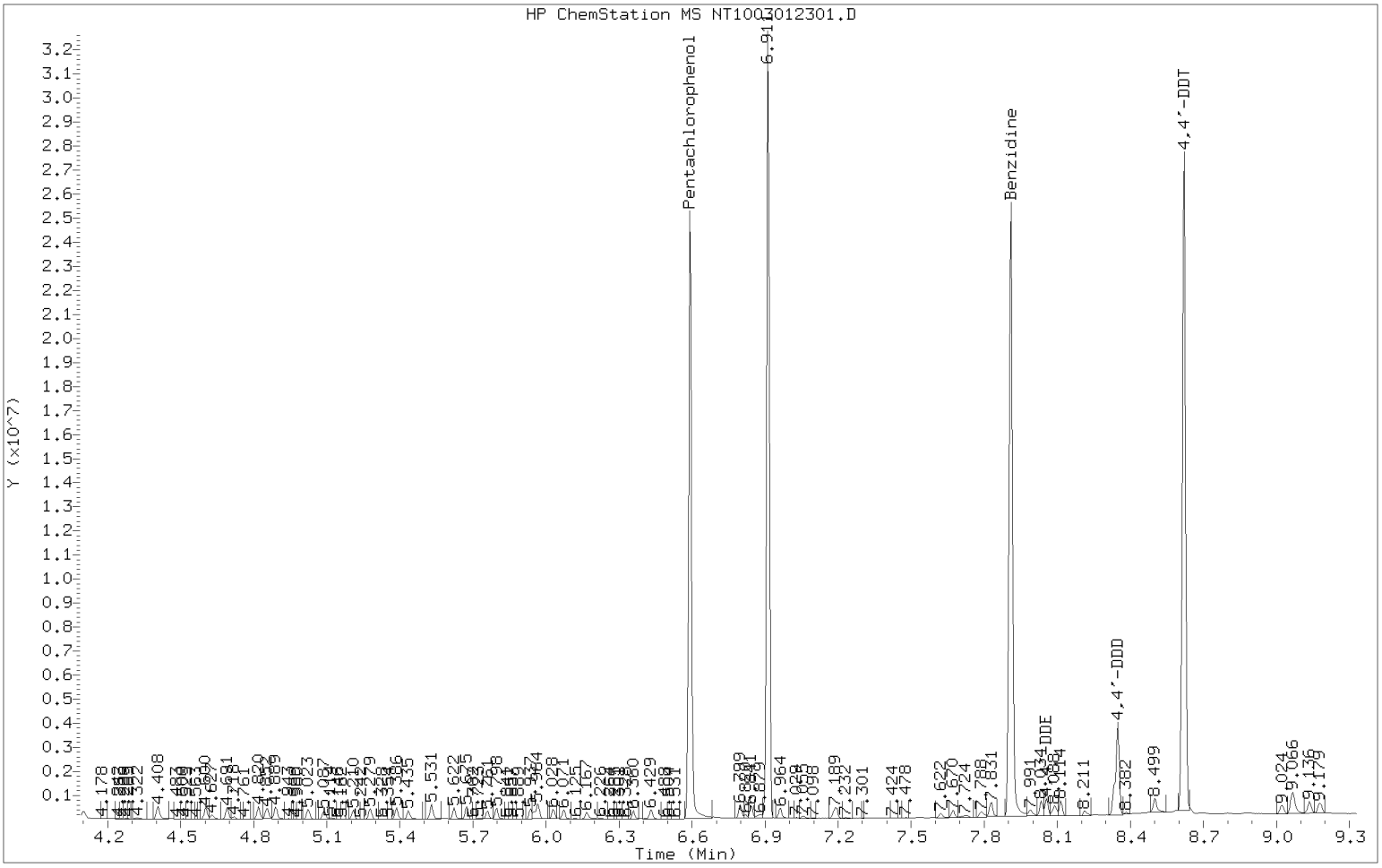
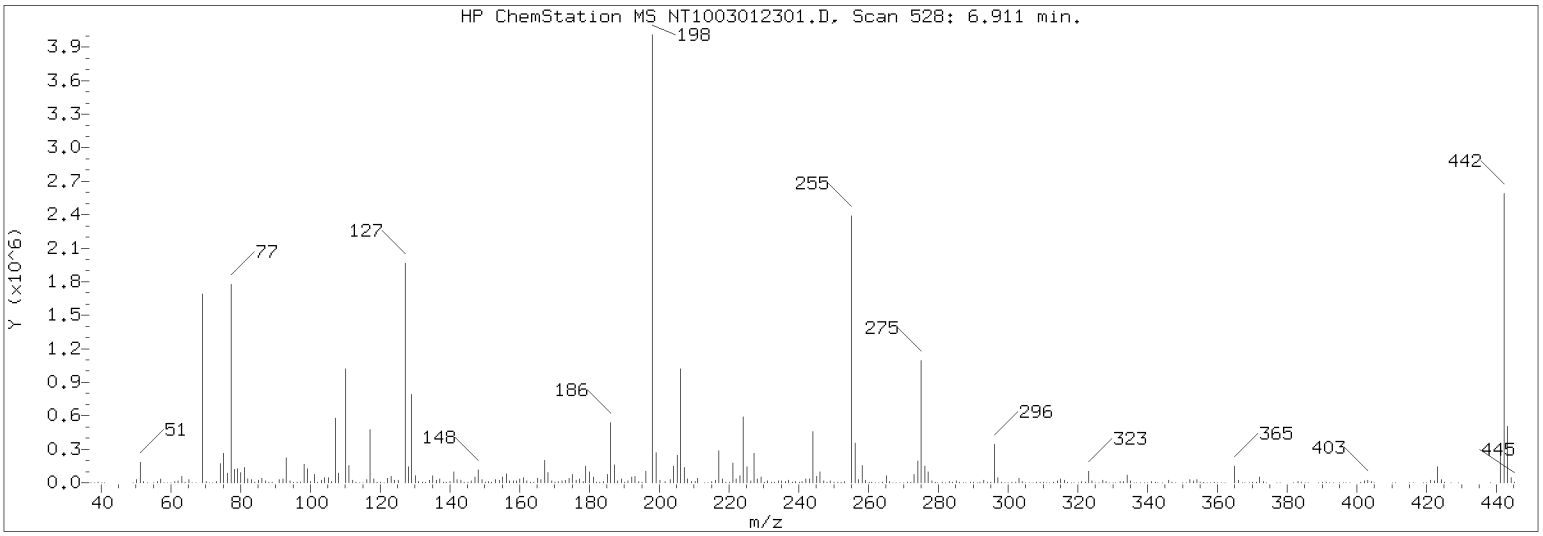
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Last Edit : 07-Mar-2023 12:01 yev

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

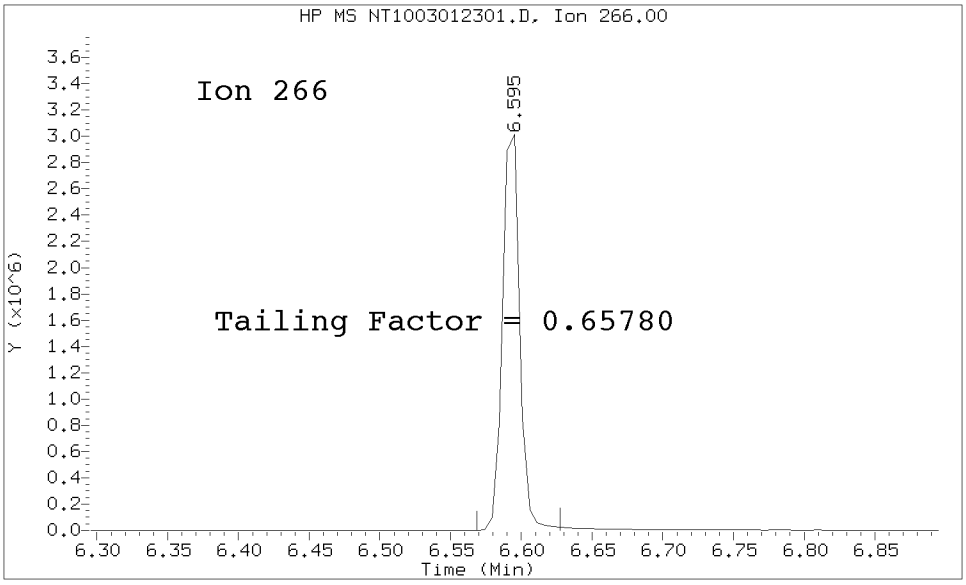
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

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



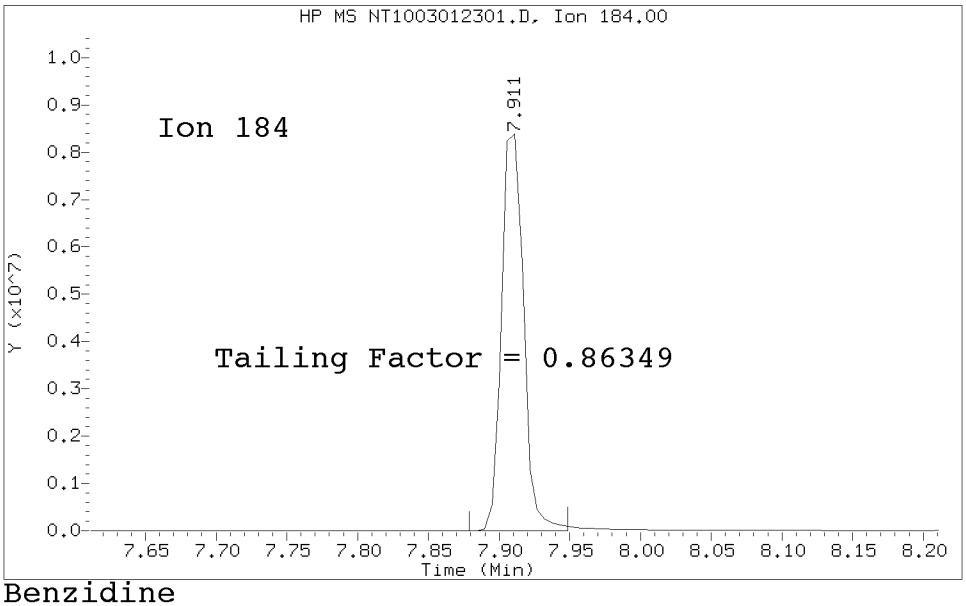


Datafile Analyzed: /20230301.b/NT1003012301.D/NT1003012301.D
Method Used: \20230301.b\DFTPP8270E.m\sw846ddt.m Inst: nt10
Injection Date: 01-MAR-2023 15:49 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 03/07/2023 12:33



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

Tail Factor = 0.658 Maximum Allowed = 2.0



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

Tail Factor = 0.863 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

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

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

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

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

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

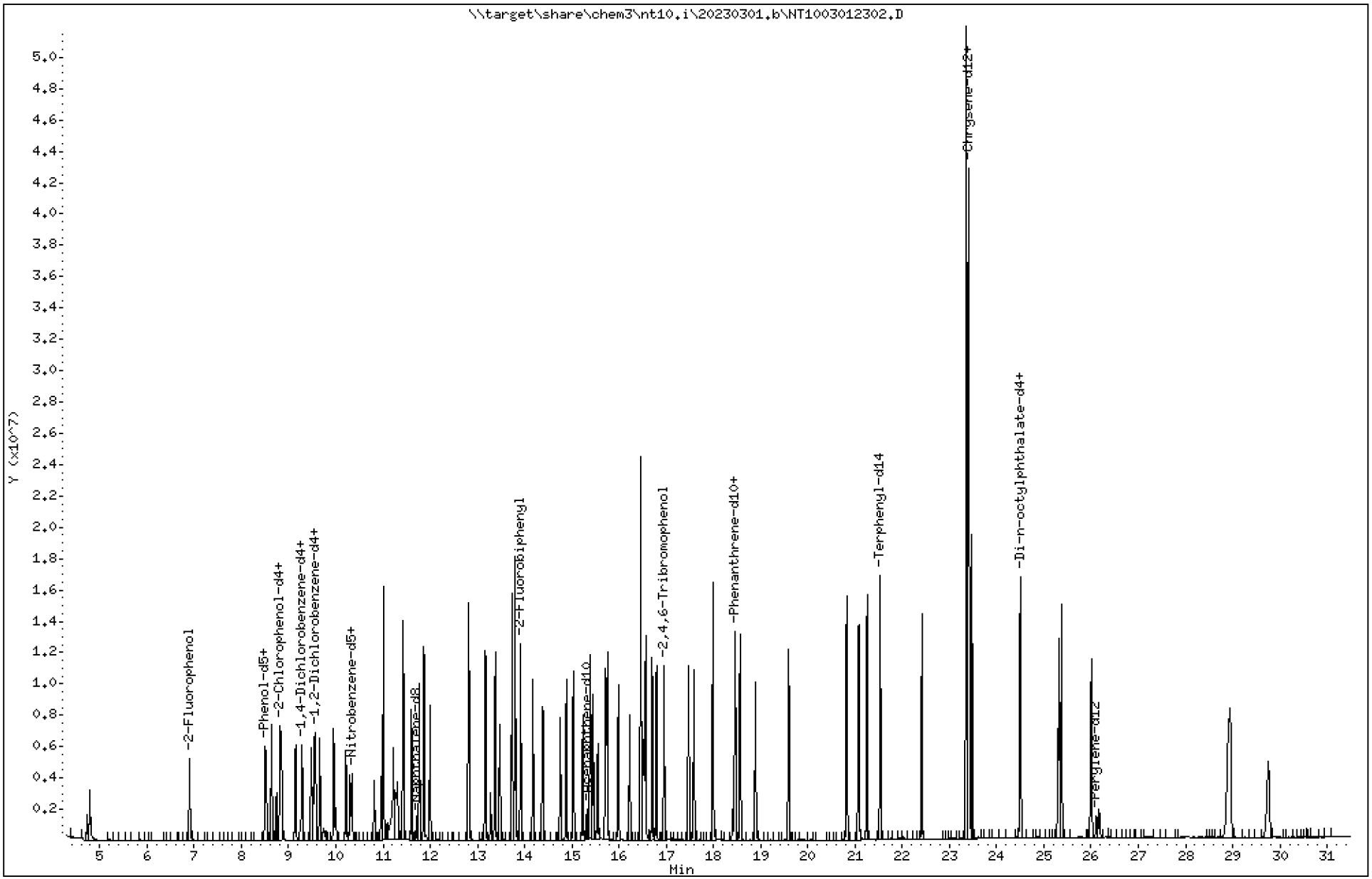
Data File: NT1003012301.D
Spectrum: Avg. Scans 527-529 (6.91), Background Scan 522
Location of Maximum: 198.00
Number of points: 369

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

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

Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012302.D
Date : 01-MAR-2023 16:04
Client ID:
Sample Info: SEQ-CAL7

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



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012302.D
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Inj Date : 01-MAR-2023 16:04
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-CAL7
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Meth Date : 07-Mar-2023 12:44 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
Als bottle: 2 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: ORGDATA102

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

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

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

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012302.D
Lab Smp Id: SLC0084-CAL7
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 17:21
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

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

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

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

REVIEW SUMMARY FOR FILE - NT1003012302.D

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

RT	CO-ELUTION COMPOUNDS
23.409	bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.965	0.943	0.0218	Benzoic acid

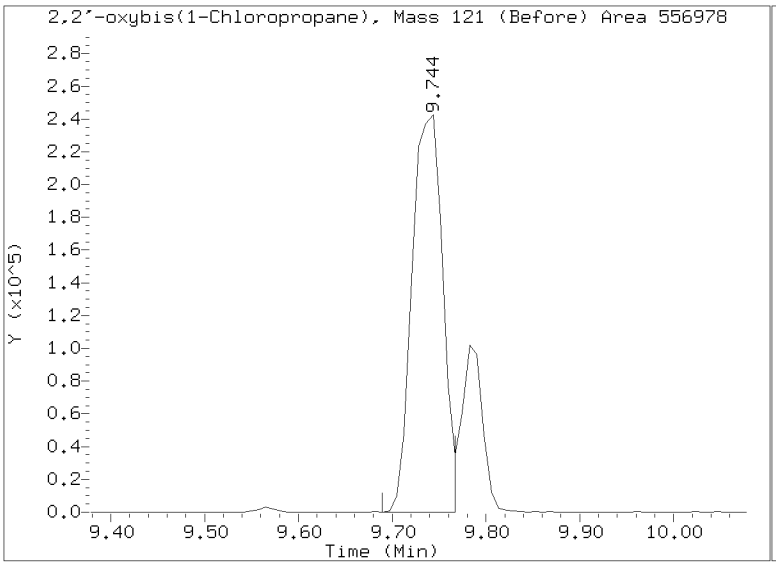
RRT check based on Ccal File: NT1003012307.D

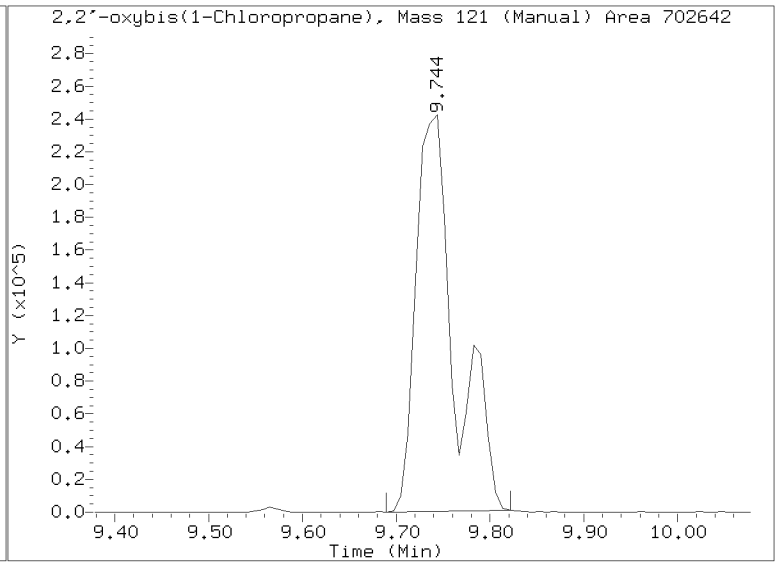
On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

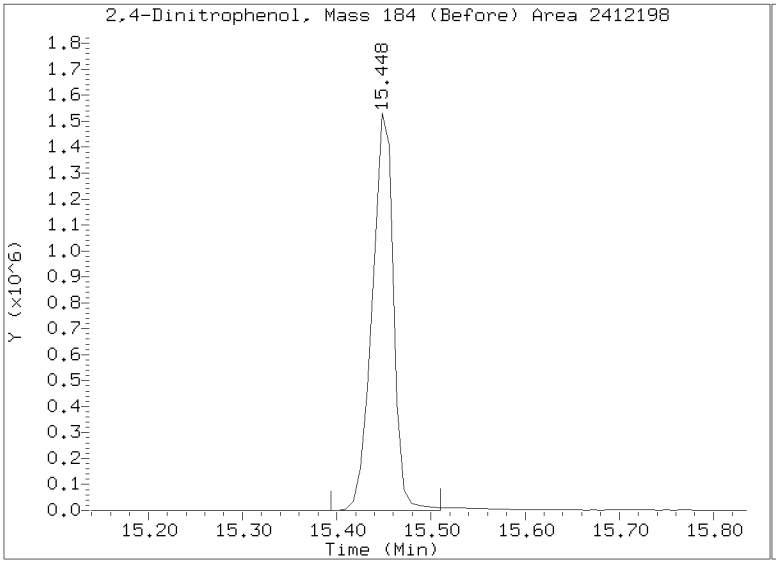
* Only compounds listed in the work order have been verified by the analyst *

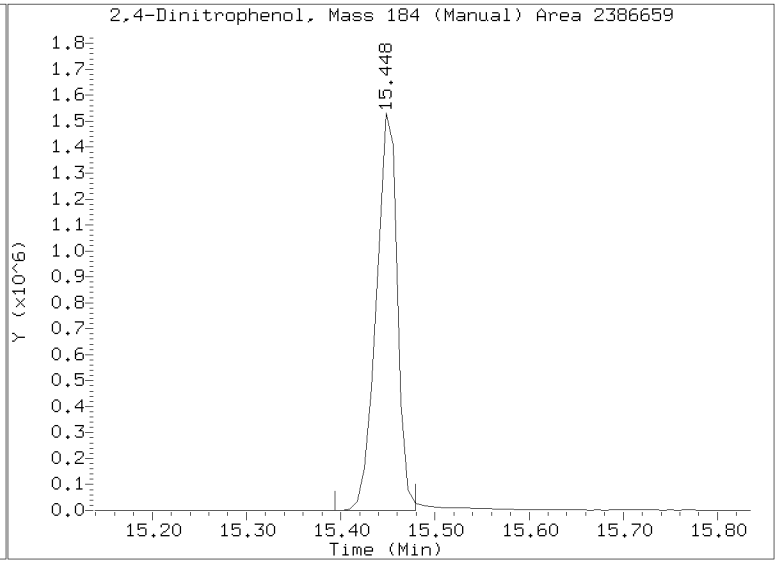
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012302.D
Injection Date: 01-MAR-2023 16:04
Lab ID:SLC0084-CAL7 Client ID:
Report Date: 03/07/2023 12:47



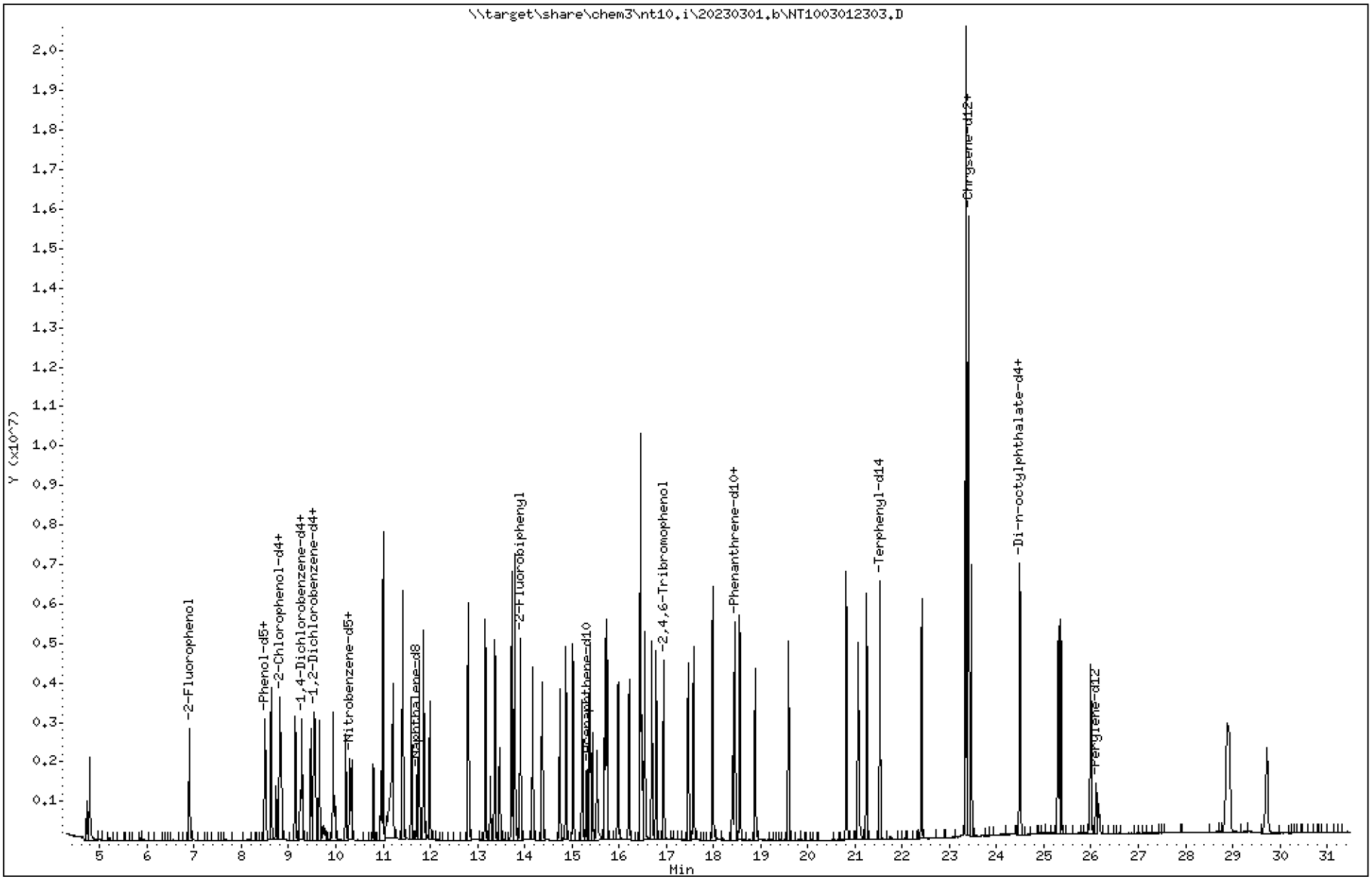






Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012303.D
Date : 01-MAR-2023 16:42
Client ID:
Sample Info: SEQ-CAL6

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



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012303.D
Lab Smp Id: SLC0084-CAL6
Inj Date : 01-MAR-2023 16:42
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-CAL6
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Meth Date : 07-Mar-2023 12:44 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
Als bottle: 3 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: ORGDATA102

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

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

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

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012303.D
Lab Smp Id: SLC0084-CAL6
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 17:21
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

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

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

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

REVIEW SUMMARY FOR FILE - NT1003012303.D

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

RT	CO-ELUTION COMPOUNDS
23.401	bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

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

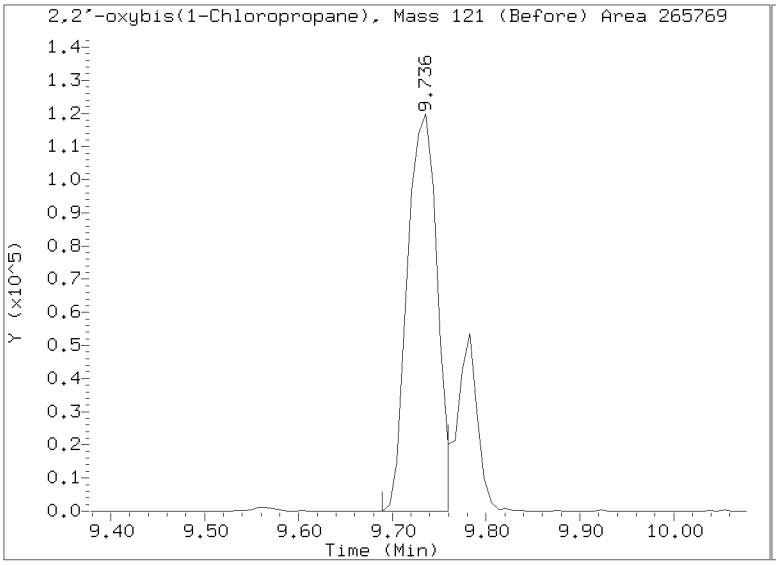
RRT check based on Ccal File: NT1003012307.D

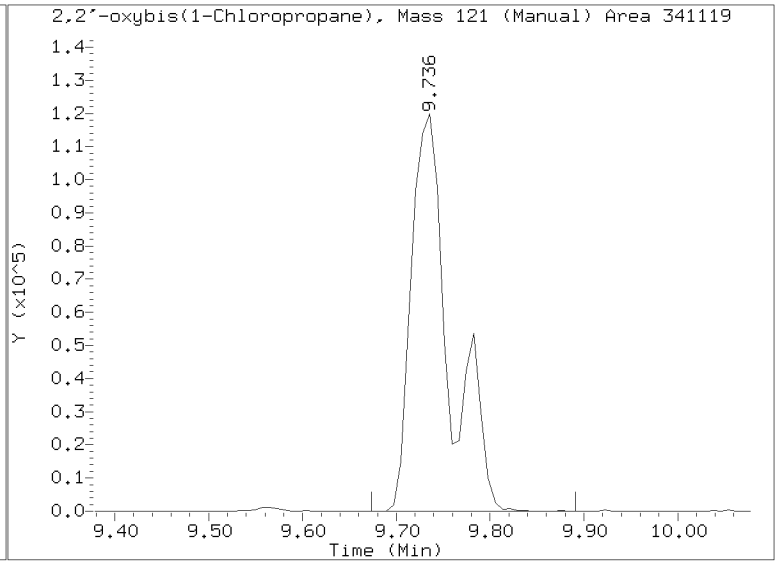
On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

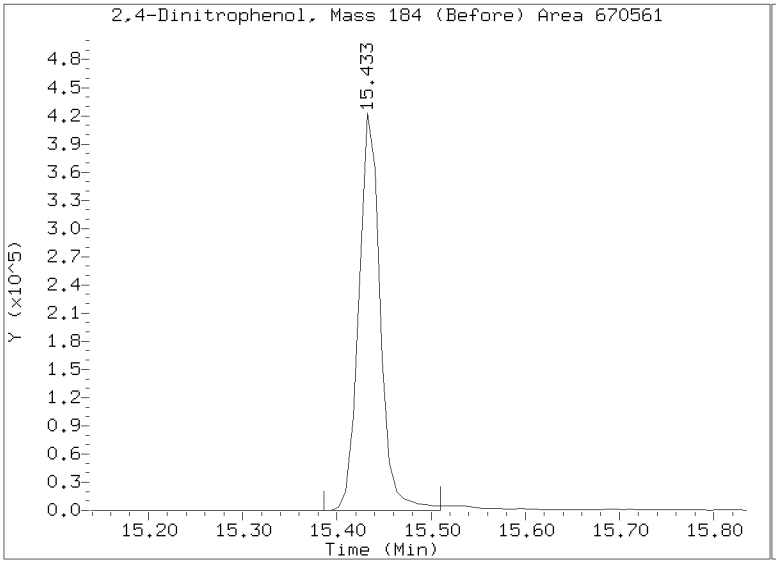
* Only compounds listed in the work order have been verified by the analyst *

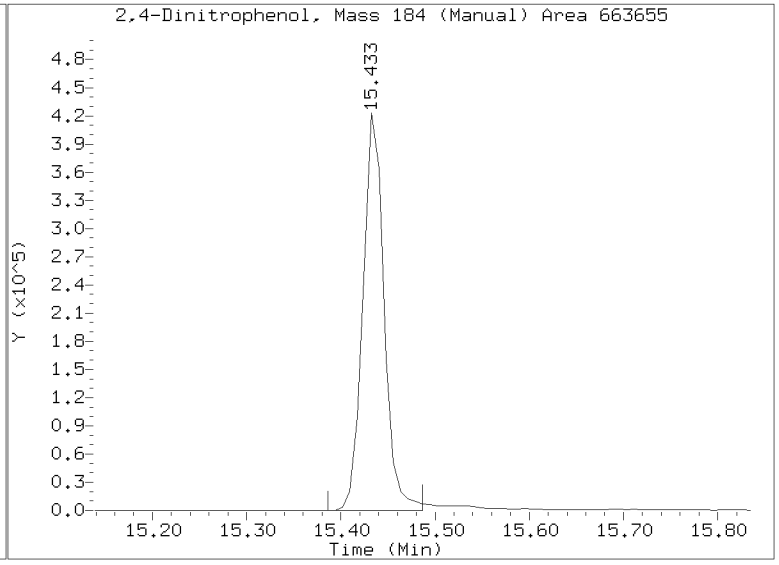
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012303.D
Injection Date: 01-MAR-2023 16:42
Lab ID:SLC0084-CAL6 Client ID:
Report Date: 03/07/2023 12:47



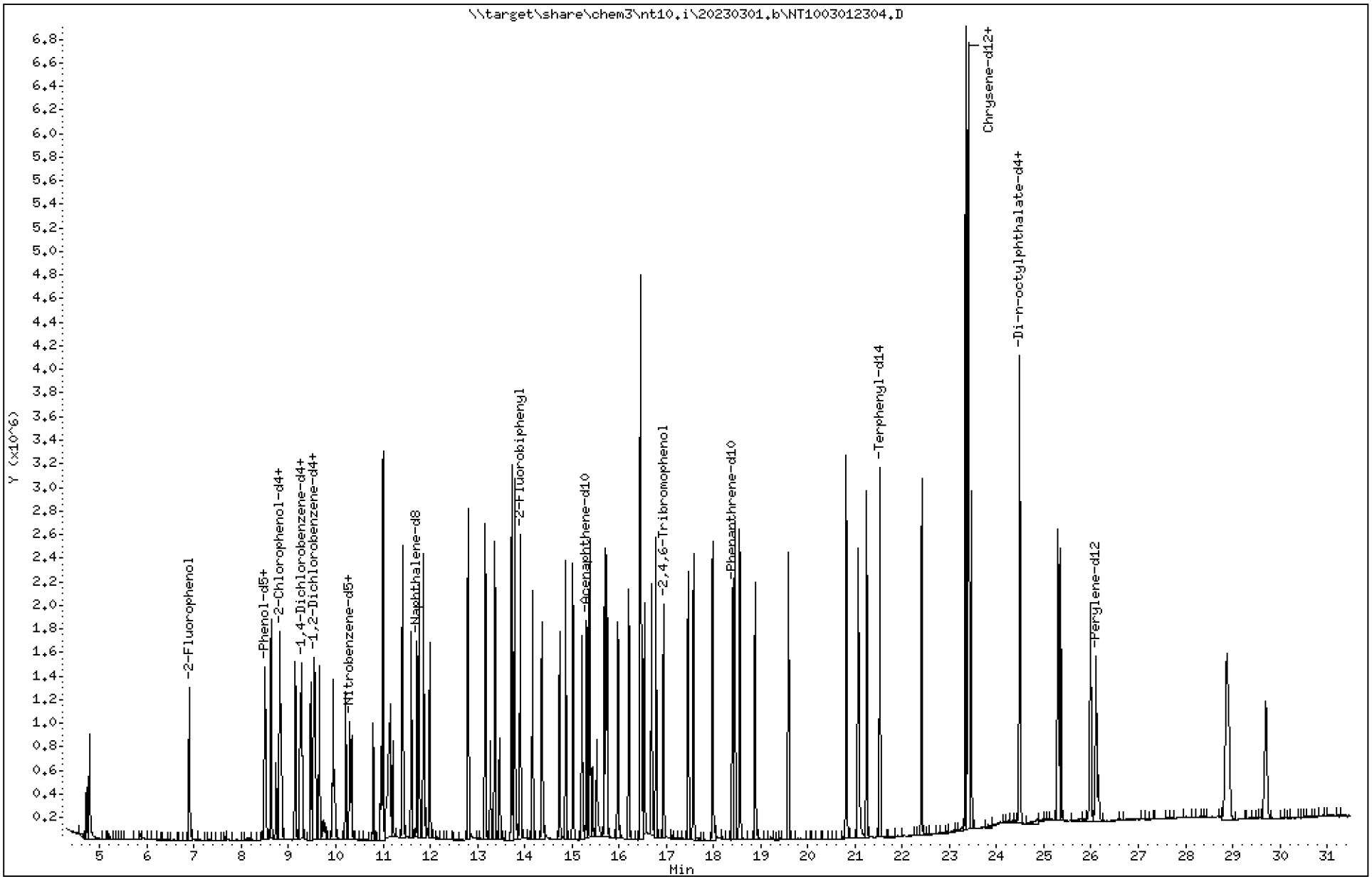






Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012304.D
Date : 01-MAR-2023 17:21
Client ID:
Sample Info: SEQ-CAL5

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



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012304.D
Lab Smp Id: SLC0084-CAL5
Inj Date : 01-MAR-2023 17:21
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-CAL5
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Meth Date : 07-Mar-2023 12:44 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
Als bottle: 4 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: ORGDATA102

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

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

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

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012304.D
Lab Smp Id: SLC0084-CAL5
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 17:21
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

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

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

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

REVIEW SUMMARY FOR FILE - NT1003012304.D

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

RT	CO-ELUTION COMPOUNDS
23.401	bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

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

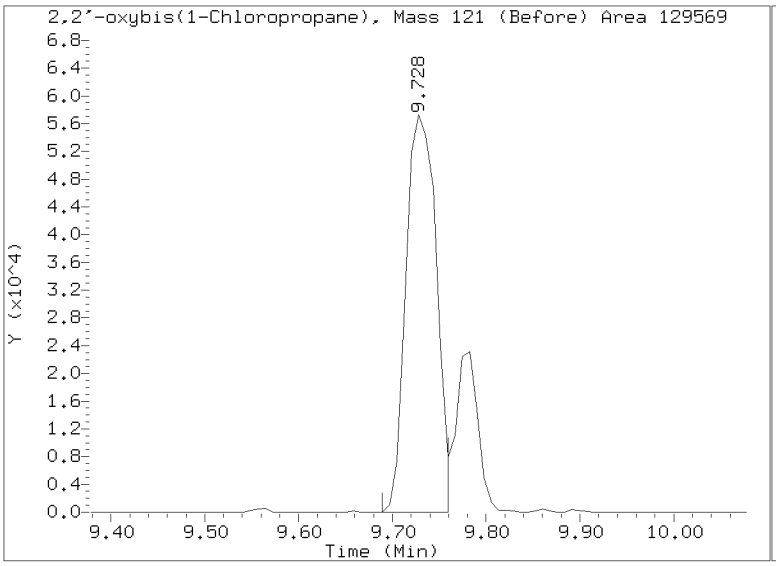
RRT check based on Ccal File: NT1003012307.D

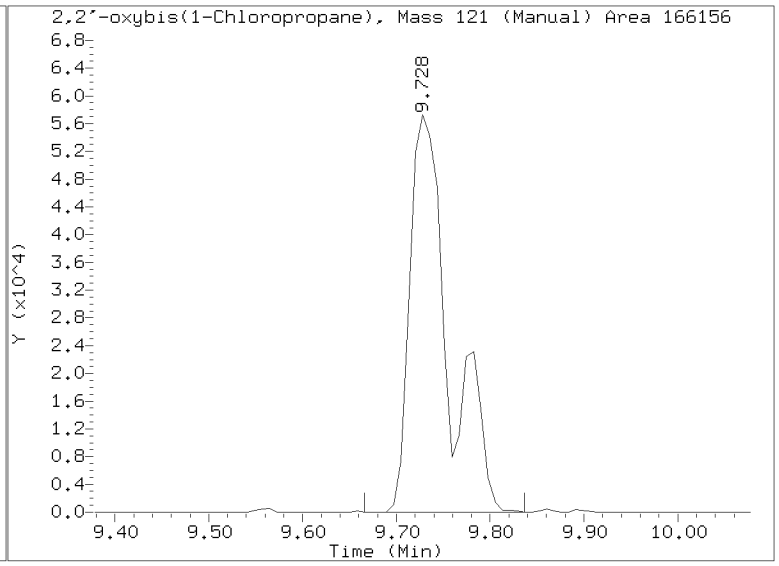
On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

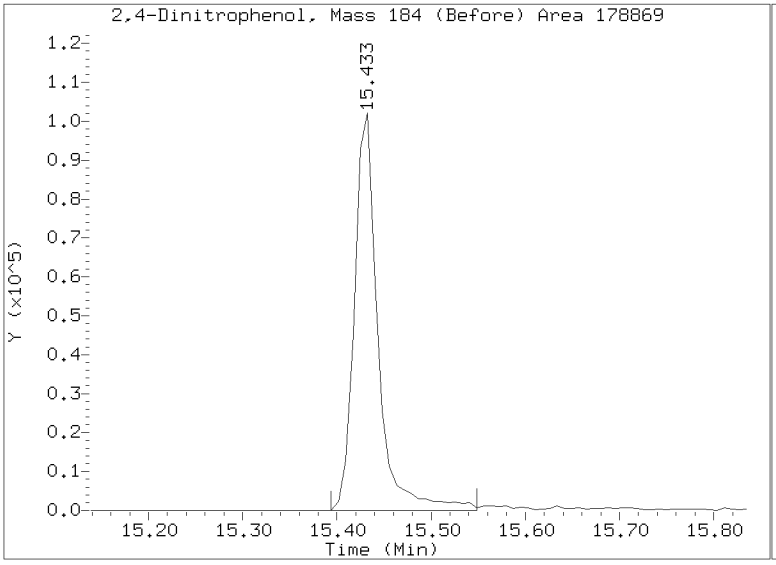
* Only compounds listed in the work order have been verified by the analyst *

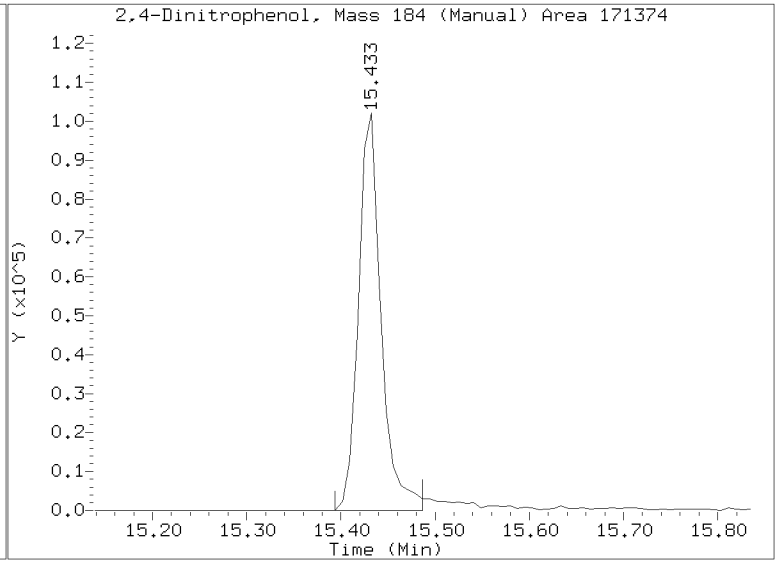
Quant Ion Manual Peak Adjustment Report

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



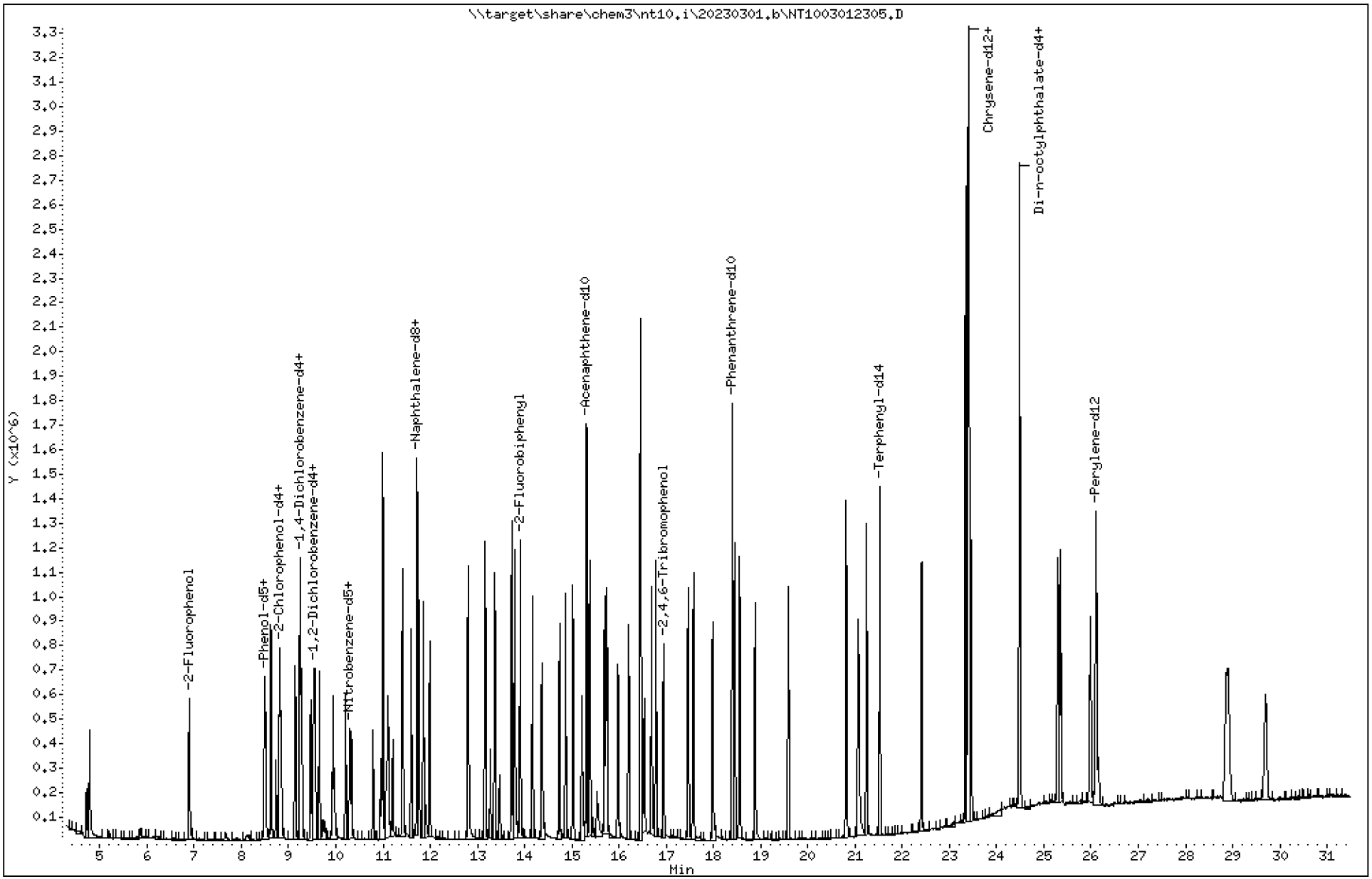






Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012305.D
Date : 01-MAR-2023 17:59
Client ID:
Sample Info: SEQ-CAL4

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



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012305.D
Lab Smp Id: SLC0084-CAL4
Inj Date : 01-MAR-2023 17:59
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-CAL4
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Meth Date : 07-Mar-2023 12:44 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: ORGDATA102

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

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

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

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012305.D
Lab Smp Id: SLC0084-CAL4
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 17:21
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

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

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

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

REVIEW SUMMARY FOR FILE - NT1003012305.D

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

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

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

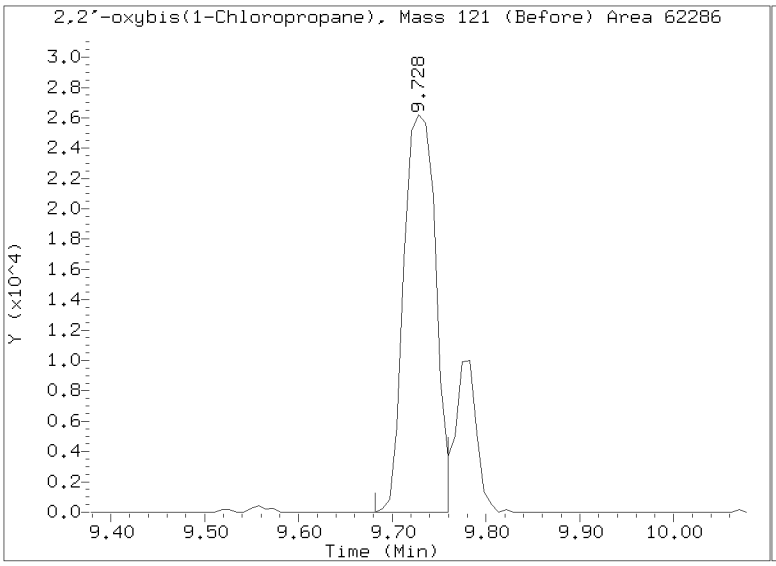
RRT check based on Ccal File: NT1003012307.D

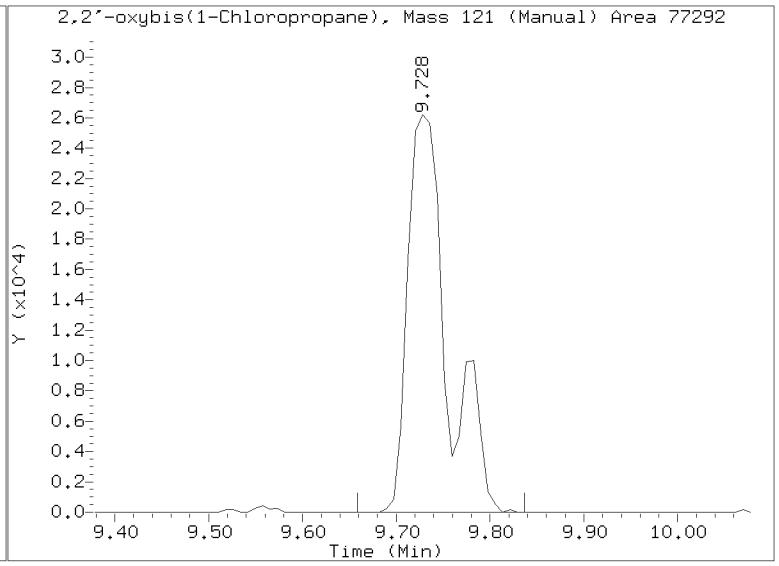
On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

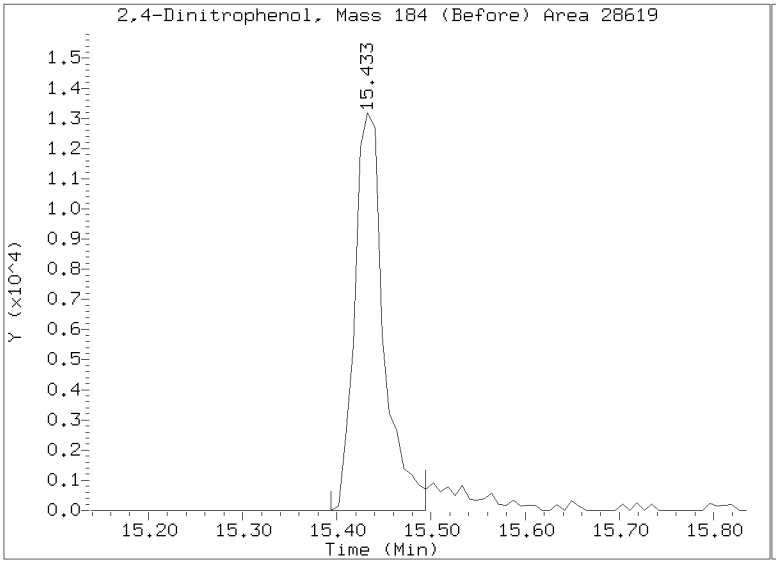
* Only compounds listed in the work order have been verified by the analyst *

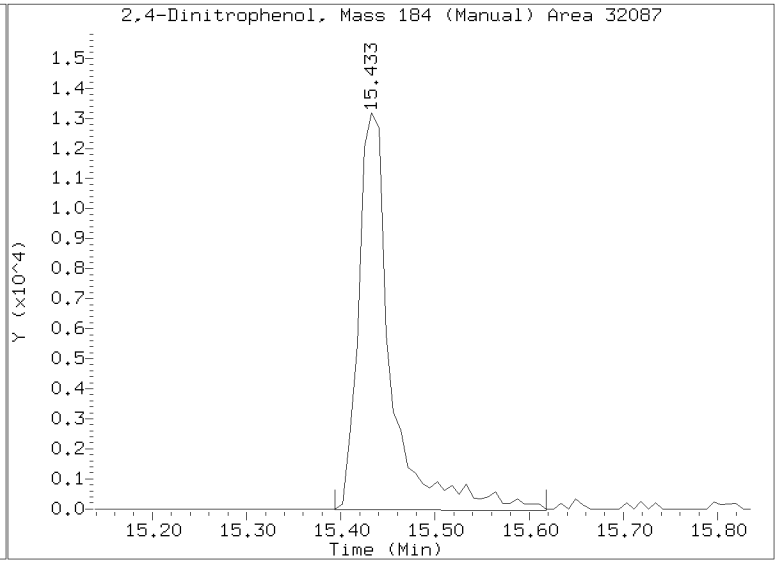
Quant Ion Manual Peak Adjustment Report

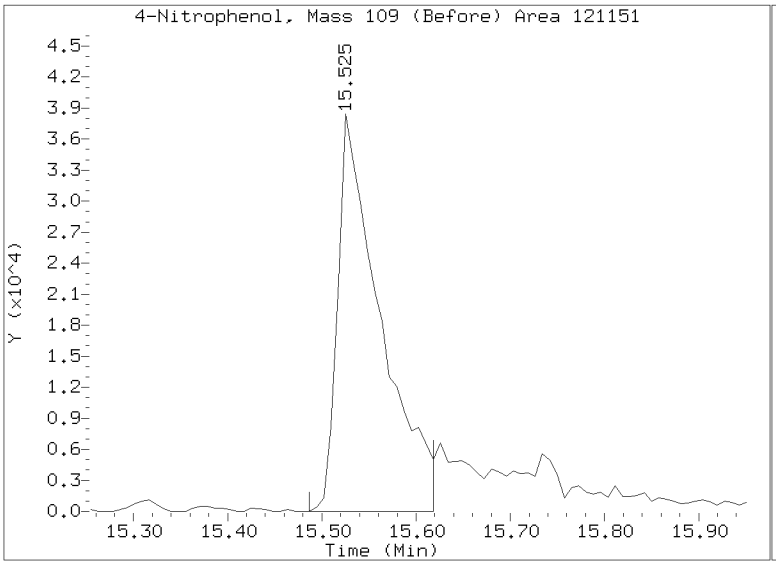
Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012305.D
Injection Date: 01-MAR-2023 17:59
Lab ID:SLC0084-CAL4 Client ID:
Report Date: 03/07/2023 12:47

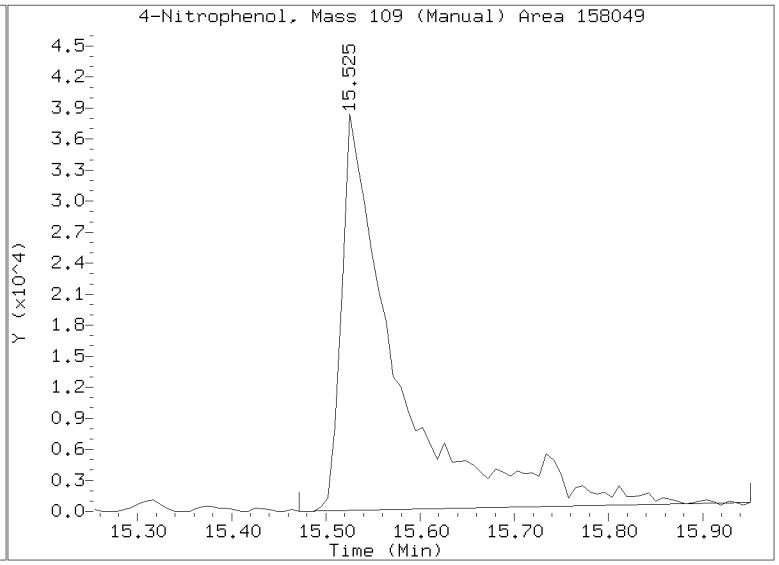












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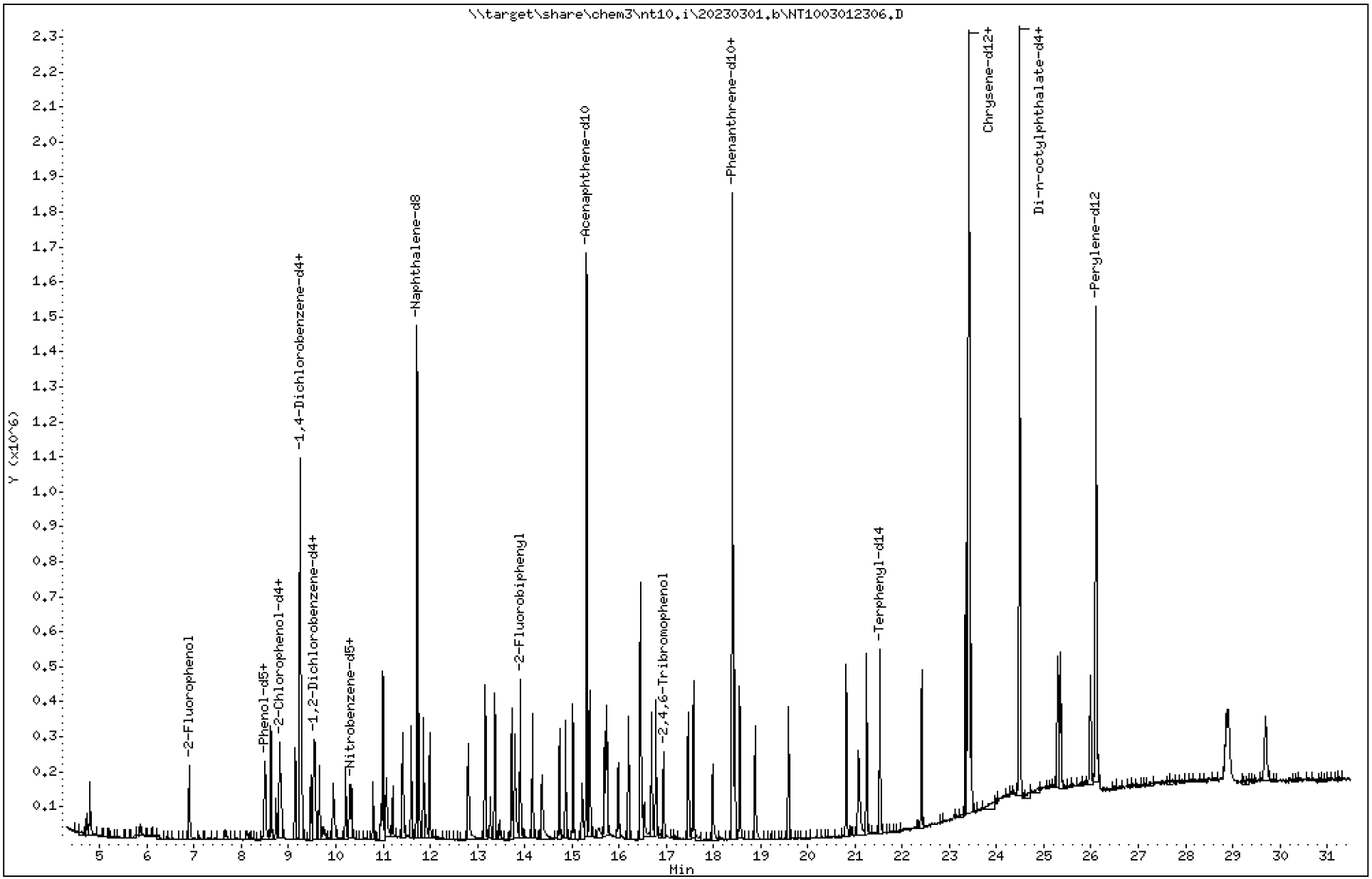
Date : 01-MAR-2023 18:37
Client ID:
Sample Info: SEQ-CAL3

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

Column phase: ZB-5msi



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012306.D
Lab Smp Id: SLC0084-CAL3
Inj Date : 01-MAR-2023 18:37
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-CAL3
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Meth Date : 07-Mar-2023 12:44 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: ORGDATA102

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

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

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

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012306.D
Lab Smp Id: SLC0084-CAL3
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 17:21
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

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

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

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

REVIEW SUMMARY FOR FILE - NT1003012306.D

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

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

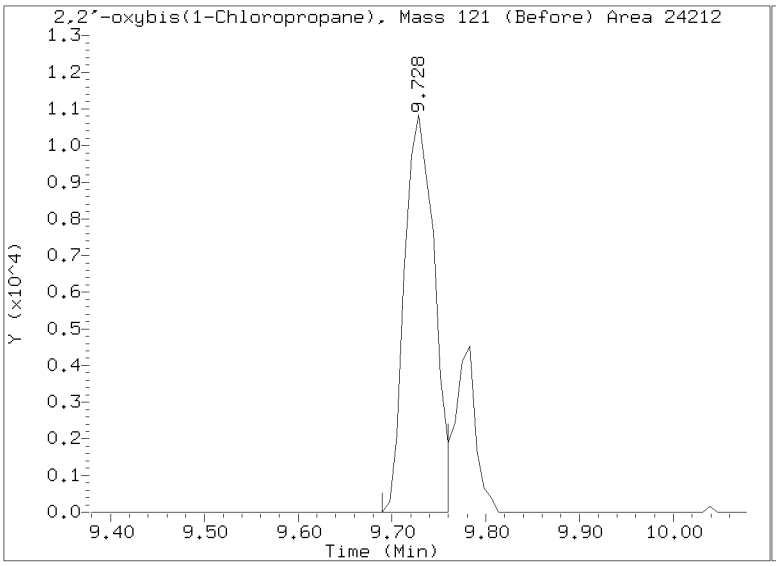
RRT check based on Ccal File: NT1003012307.D

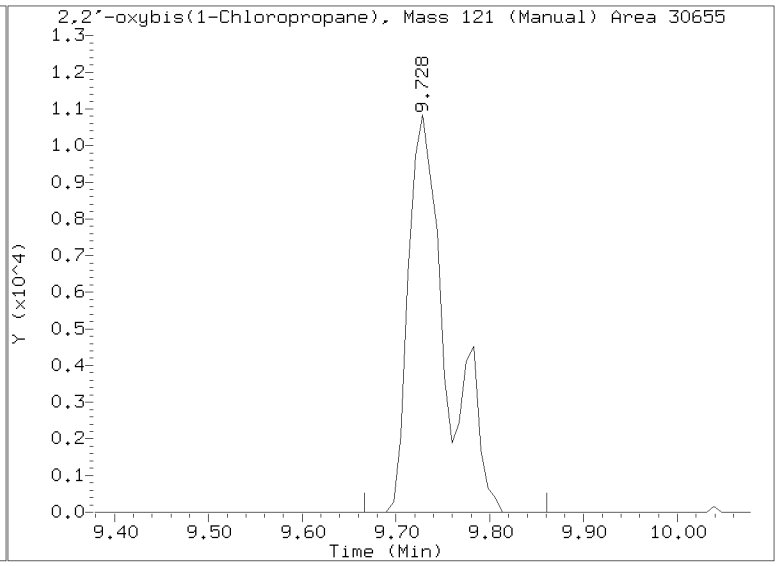
On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

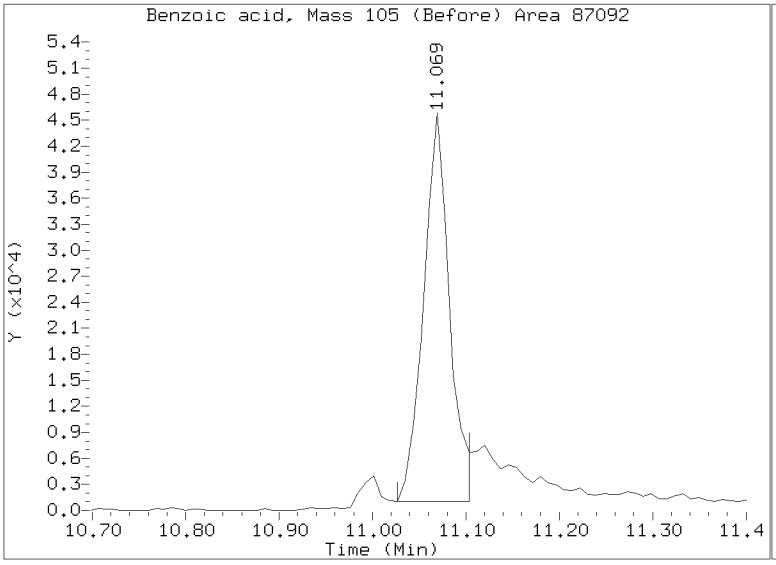
* Only compounds listed in the work order have been verified by the analyst *

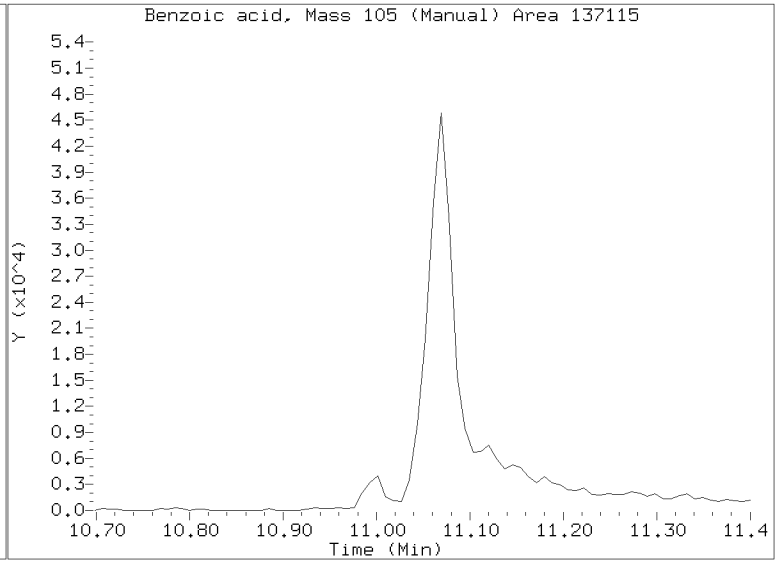
Quant Ion Manual Peak Adjustment Report

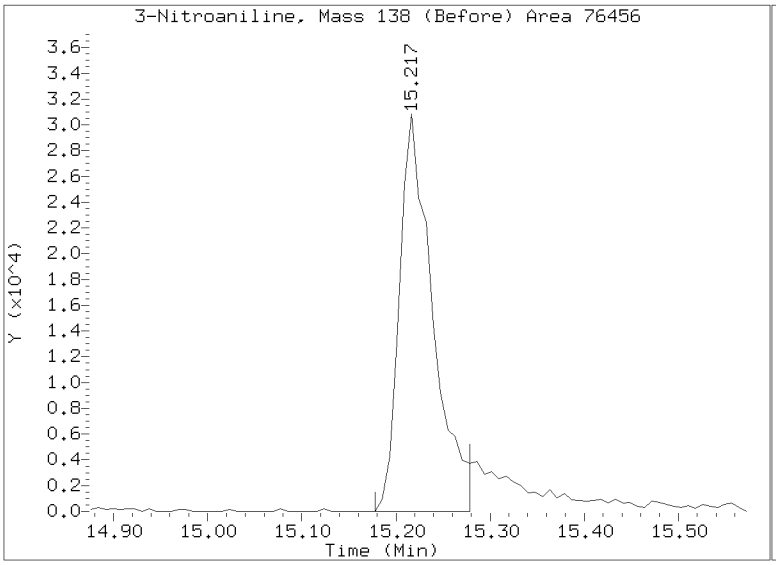
Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012306.D
Injection Date: 01-MAR-2023 18:37
Lab ID:SLC0084-CAL3 Client ID:
Report Date: 03/07/2023 12:47

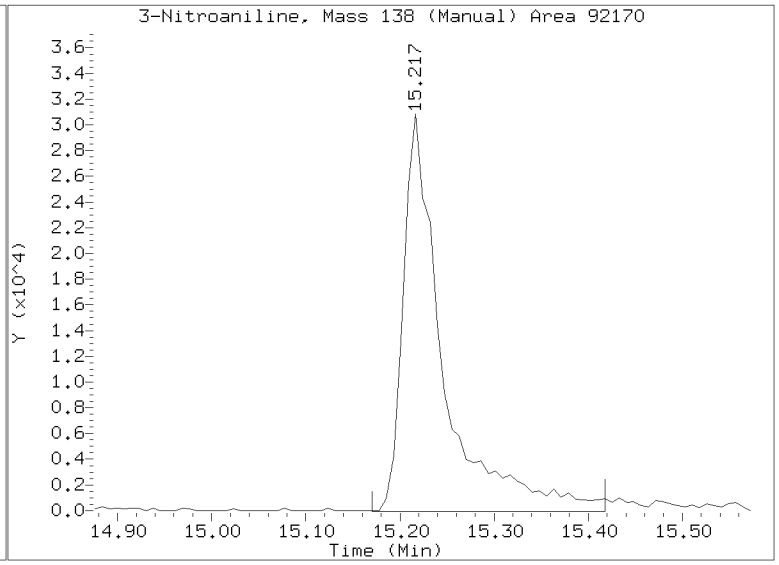












Quant Ion Manual Peak Adjustment Report

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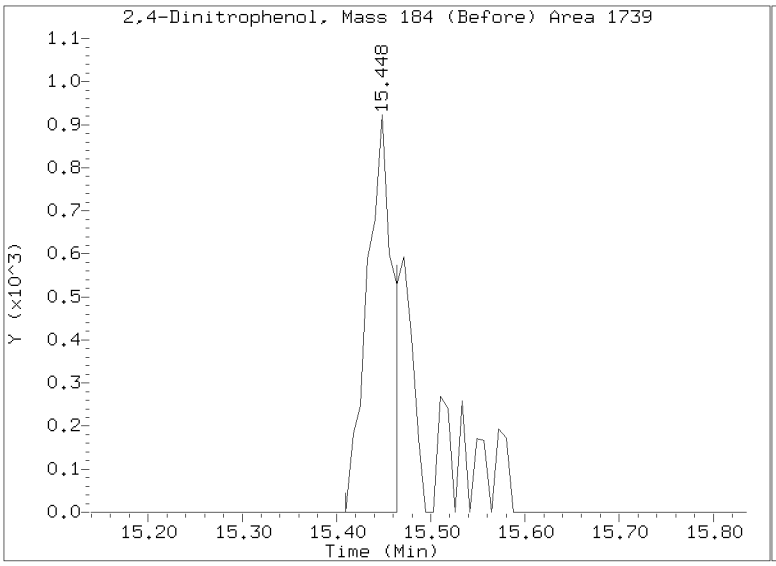
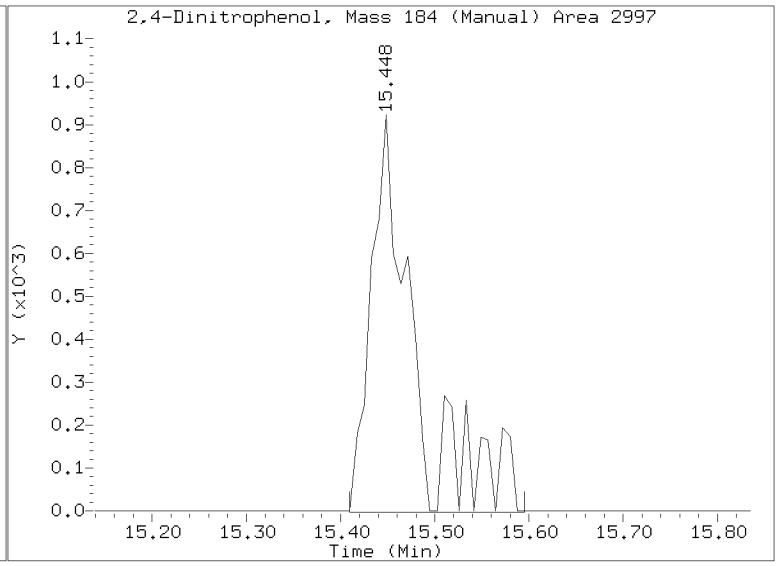
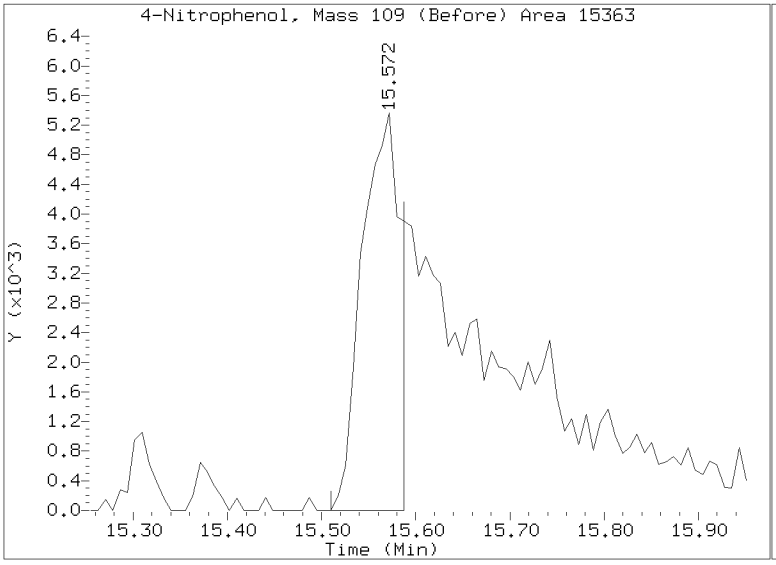
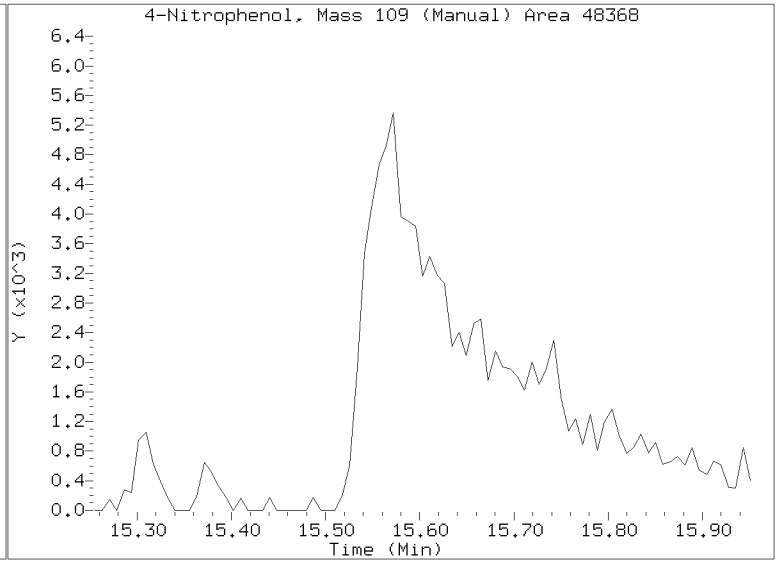
Injection Date: 01-MAR-2023 18:37
Lab ID:SLC0084-CAL3 Client ID:
Report Date: 03/07/2023 12:47





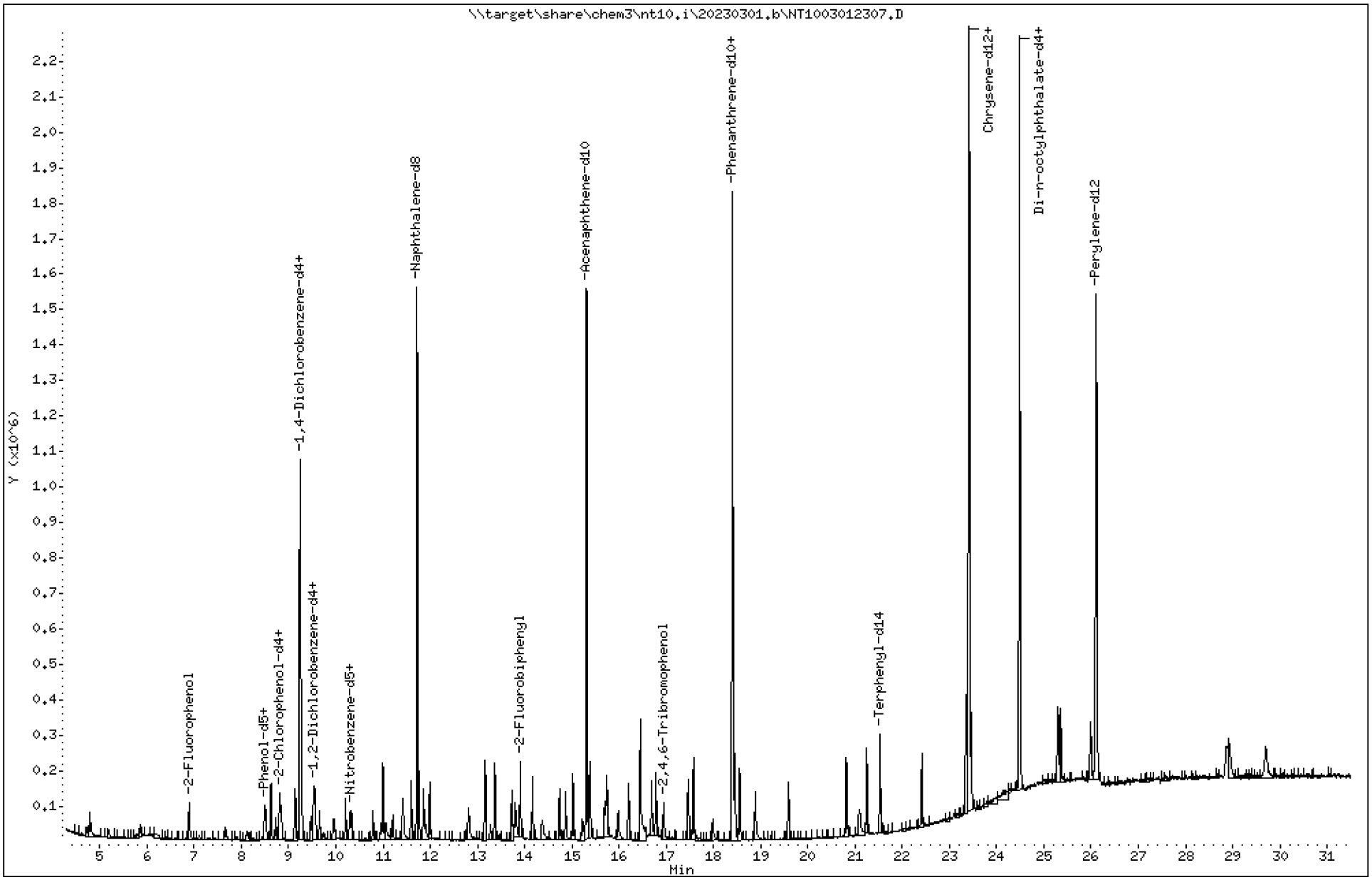




Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012307.D
Date : 01-MAR-2023 19:15
Client ID:
Sample Info: SEQ-CAL2

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

Column phase: ZB-5msi



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012307.D
Lab Smp Id: SLC0084-CAL2
Inj Date : 01-MAR-2023 19:15
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-CAL2
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Meth Date : 07-Mar-2023 12:44 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: ORGDATA102

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

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

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

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012307.D
Lab Smp Id: SLC0084-CAL2
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 17:21
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

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

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

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

REVIEW SUMMARY FOR FILE - NT1003012307.D

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

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

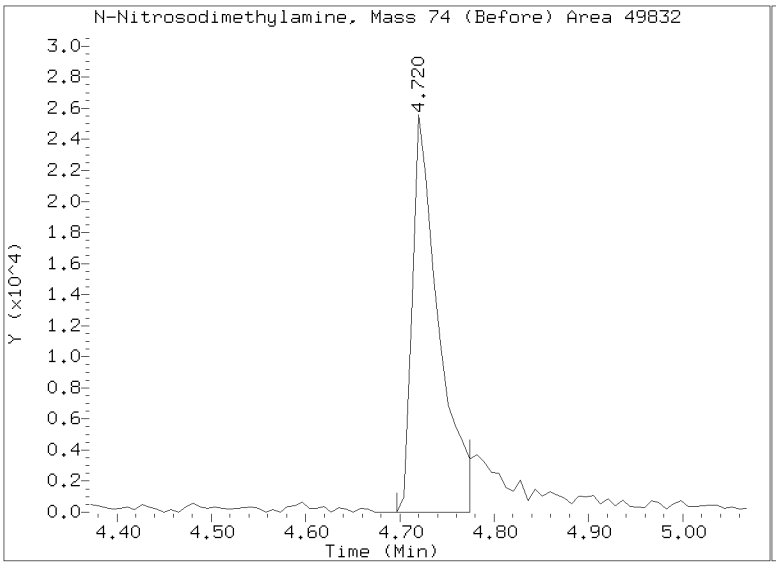
RRT check based on Ccal File: NT1003012307.D

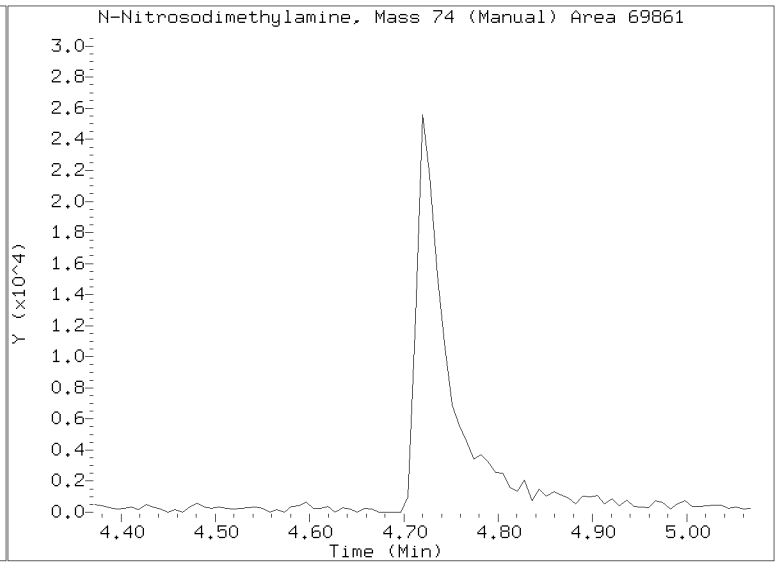
On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

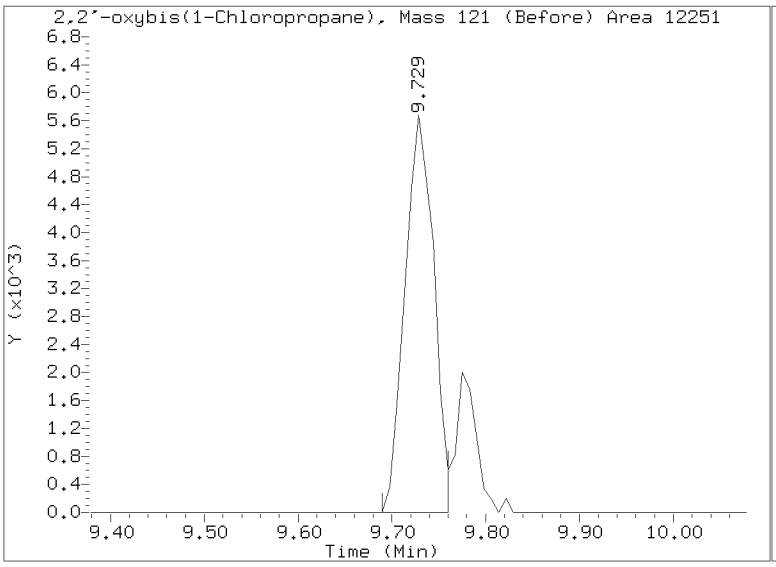
* Only compounds listed in the work order have been verified by the analyst *

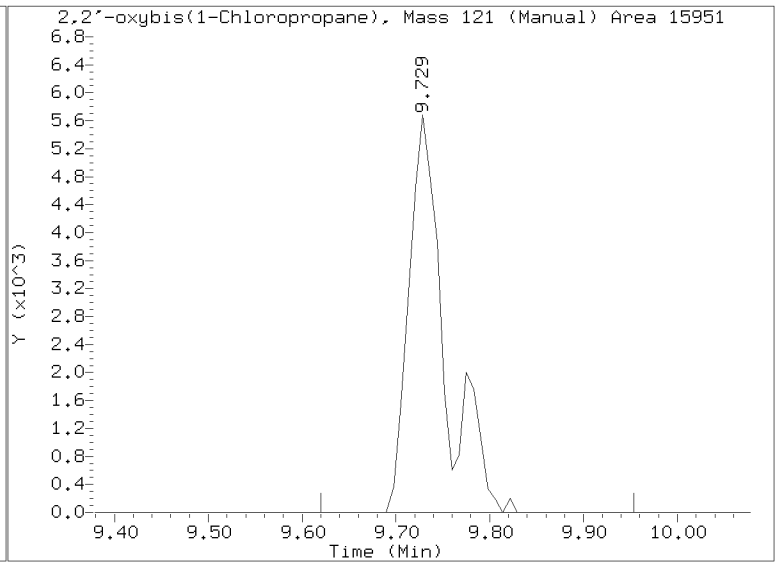
Quant Ion Manual Peak Adjustment Report

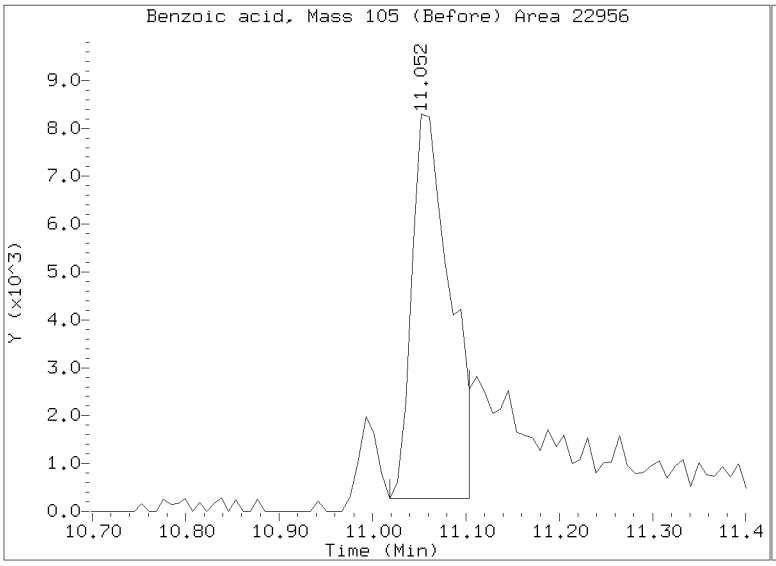
Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012307.D
Injection Date: 01-MAR-2023 19:15
Lab ID:SLC0084-CAL2 Client ID:
Report Date: 03/07/2023 12:48

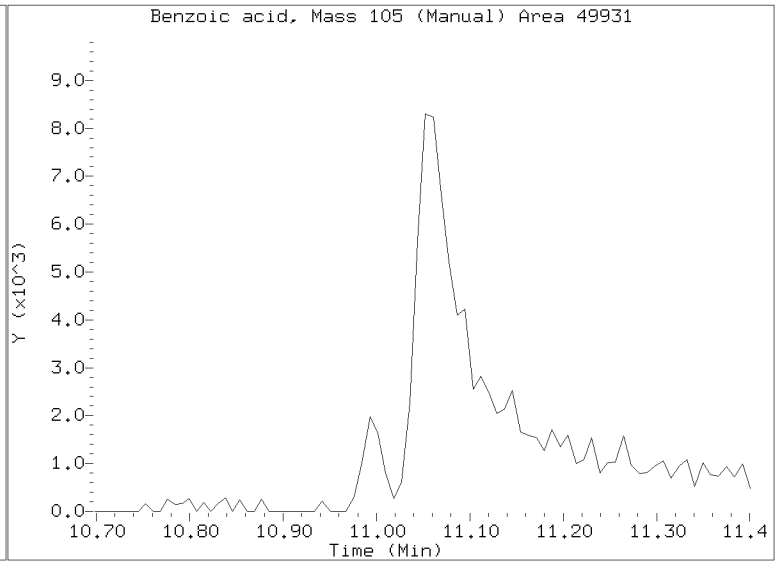












Quant Ion Manual Peak Adjustment Report

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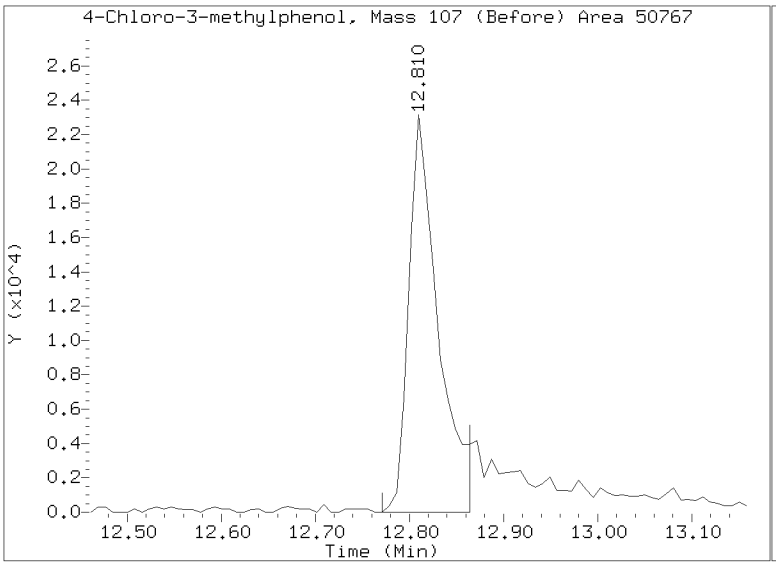
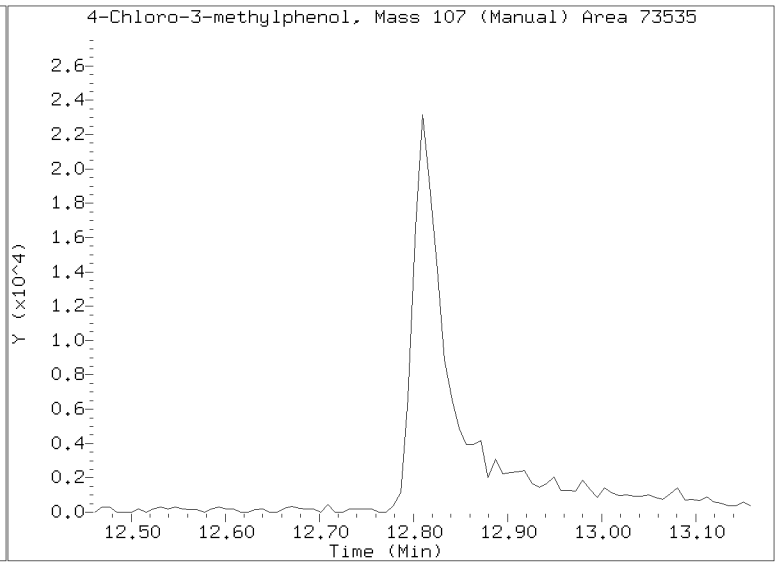
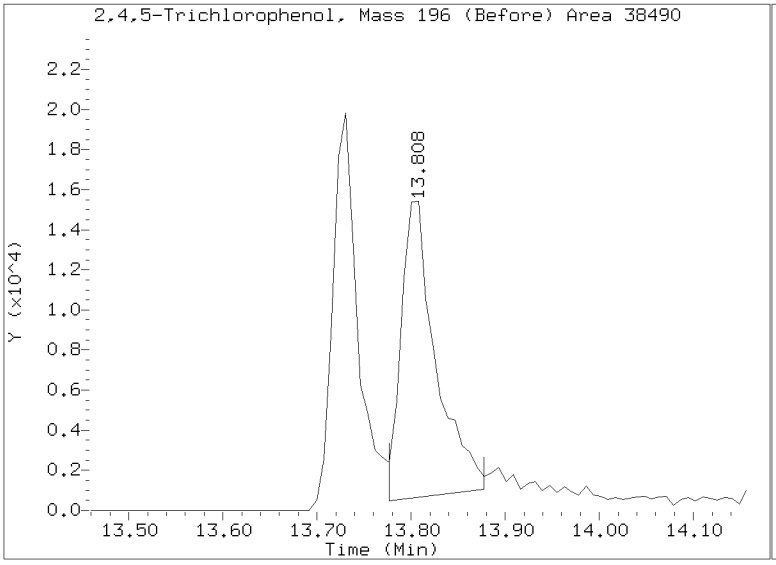
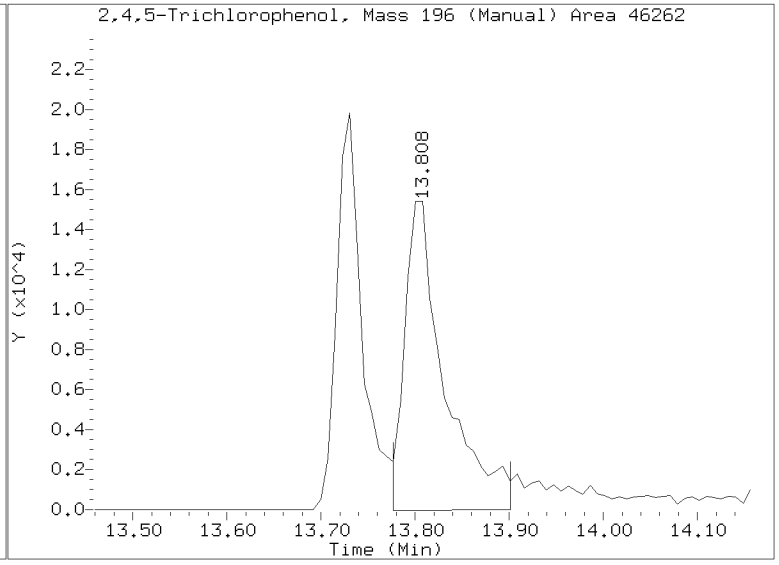
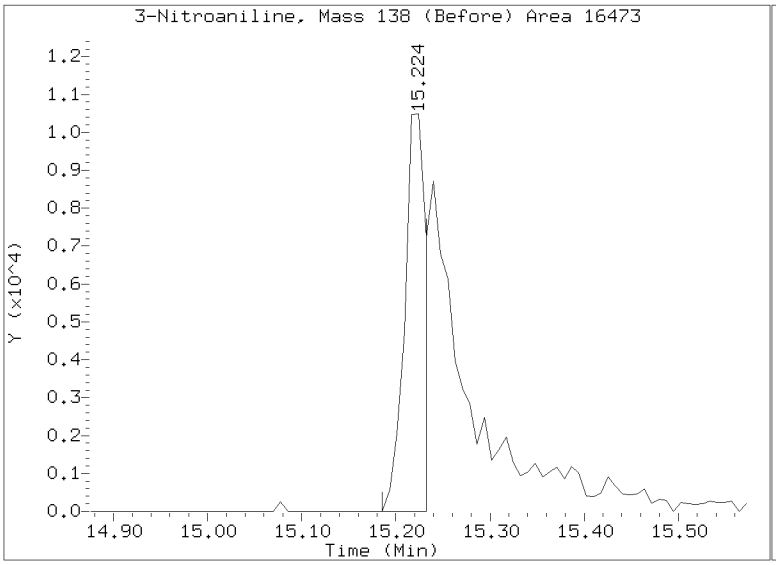
Injection Date: 01-MAR-2023 19:15
Lab ID:SLC0084-CAL2 Client ID:
Report Date: 03/07/2023 12:48

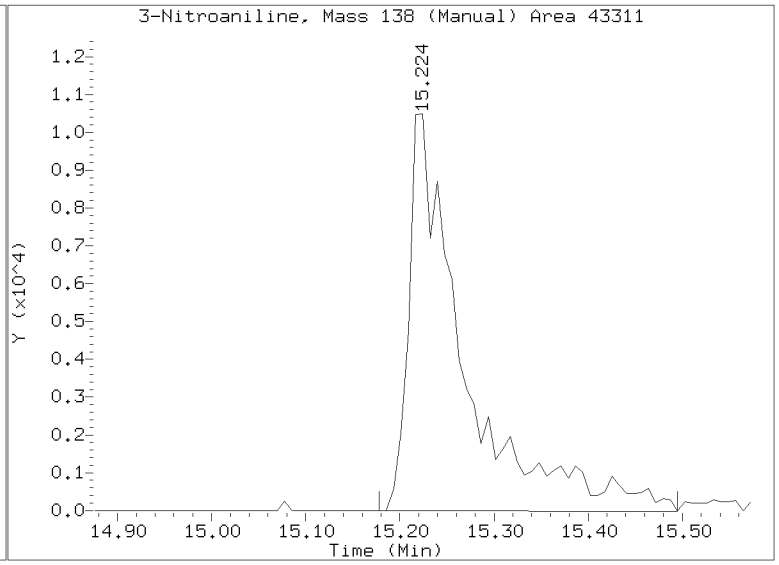












Quant Ion Manual Peak Adjustment Report

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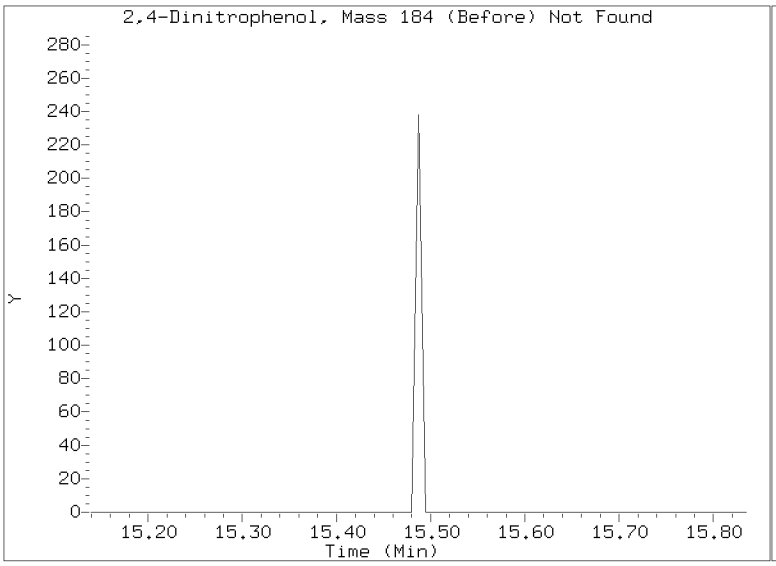
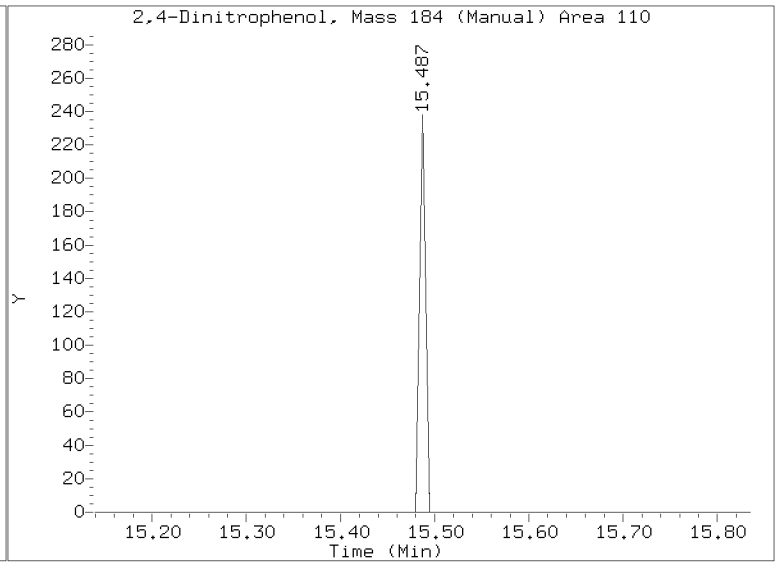
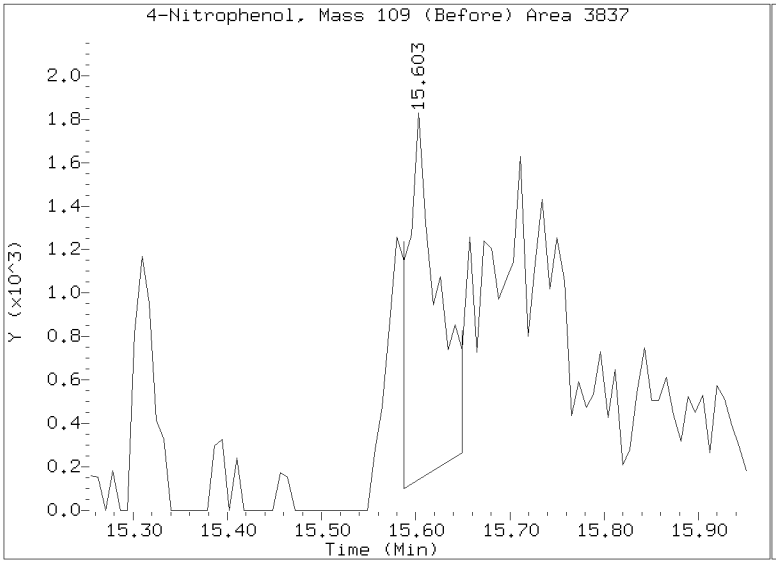
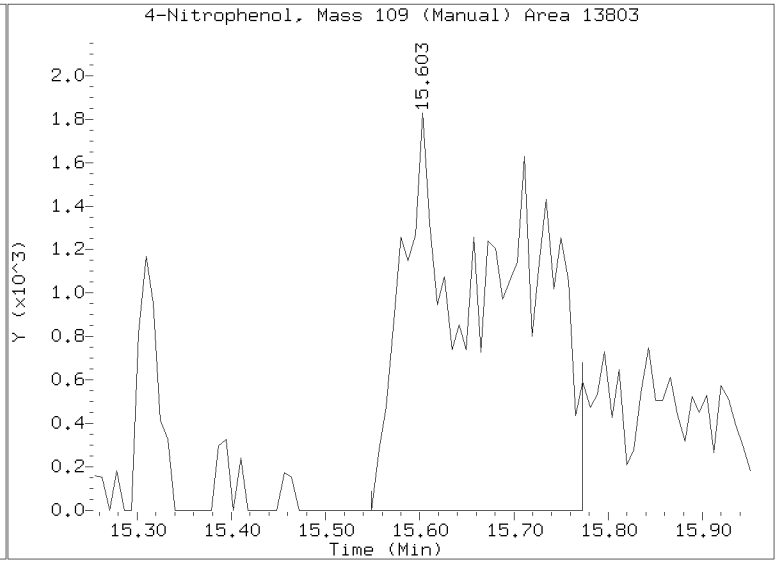
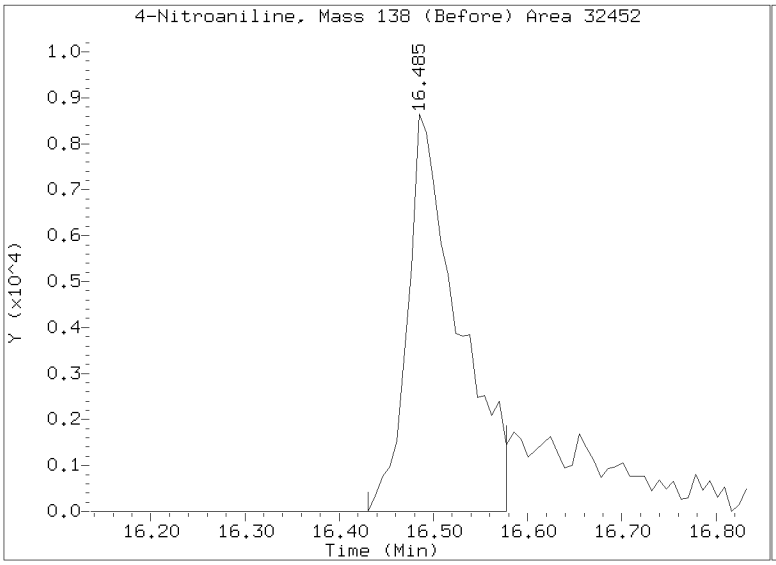
Injection Date: 01-MAR-2023 19:15
Lab ID:SLC0084-CAL2 Client ID:
Report Date: 03/07/2023 12:48

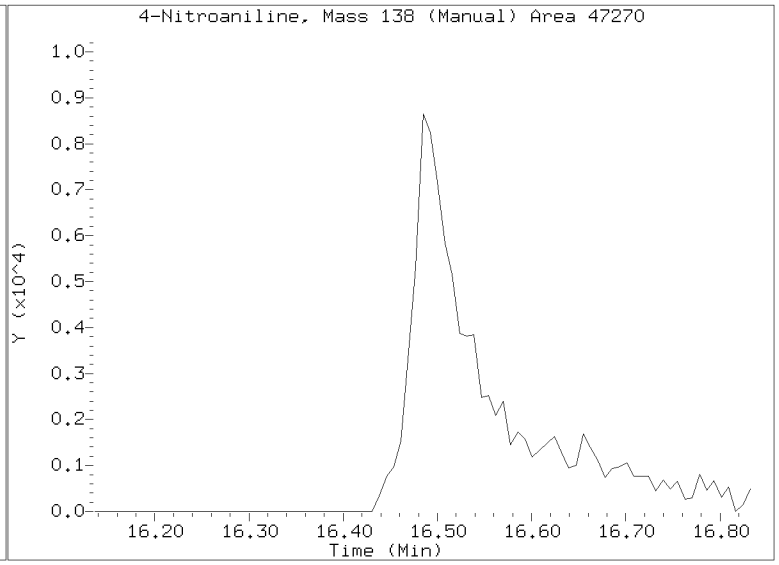






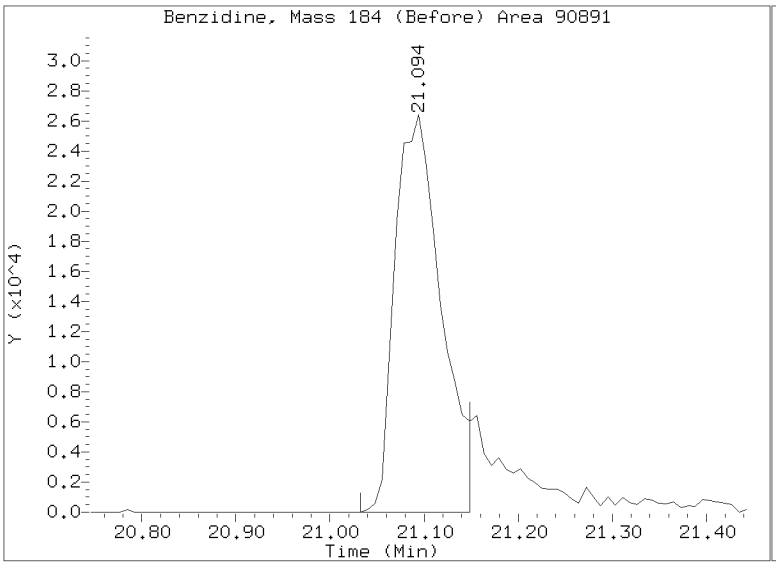


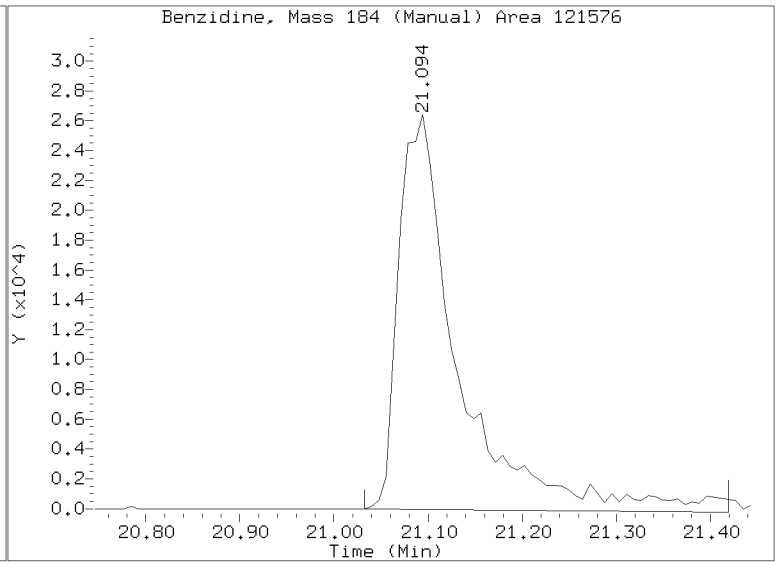




Quant Ion Manual Peak Adjustment Report

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





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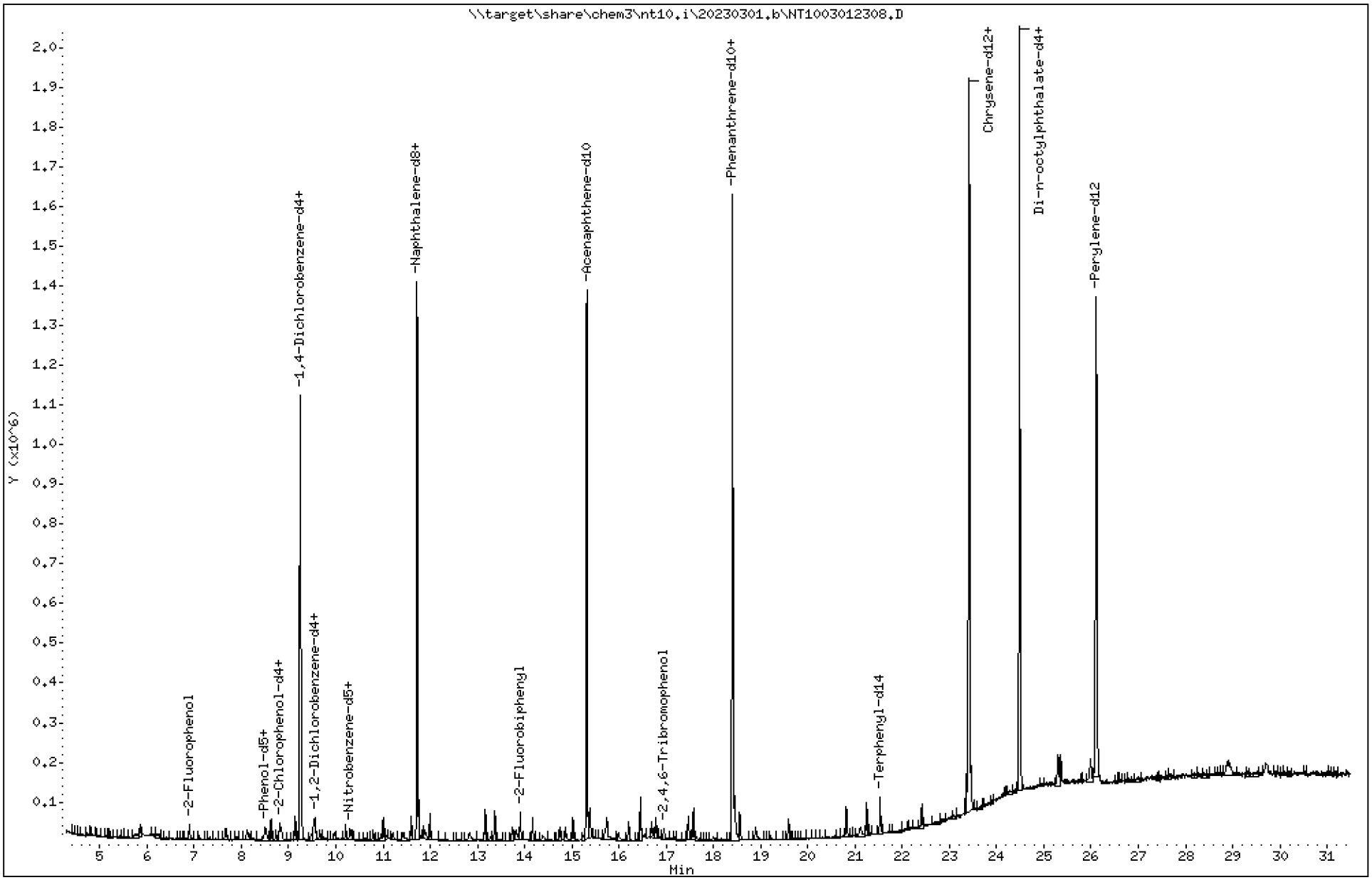
Date : 01-MAR-2023 19:53
Client ID:
Sample Info: SEQ-CAL1

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



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Inj Date : 01-MAR-2023 19:53
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-CAL1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Meth Date : 07-Mar-2023 12:44 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: ORGDATA102

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

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

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

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012308.D
Lab Smp Id: SLC0084-CAL1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 17:21
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

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

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

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

REVIEW SUMMARY FOR FILE - NT1003012308.D

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

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

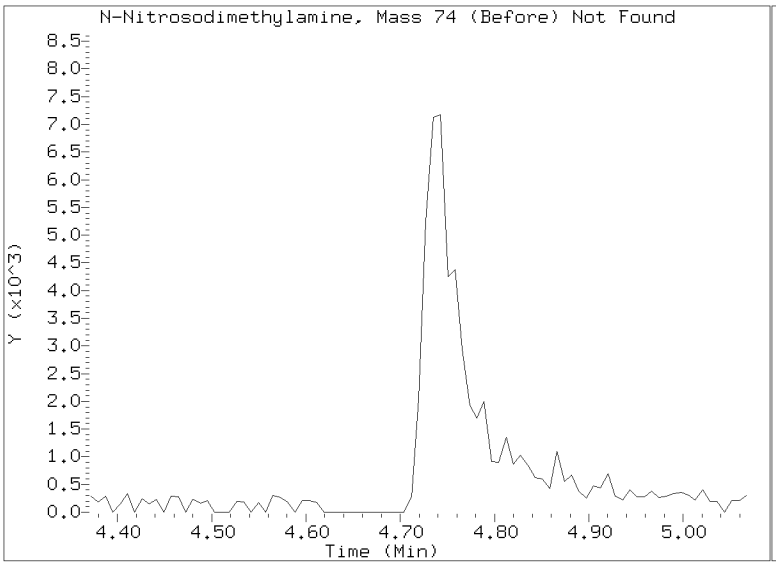
RRT check based on Ccal File: NT1003012307.D

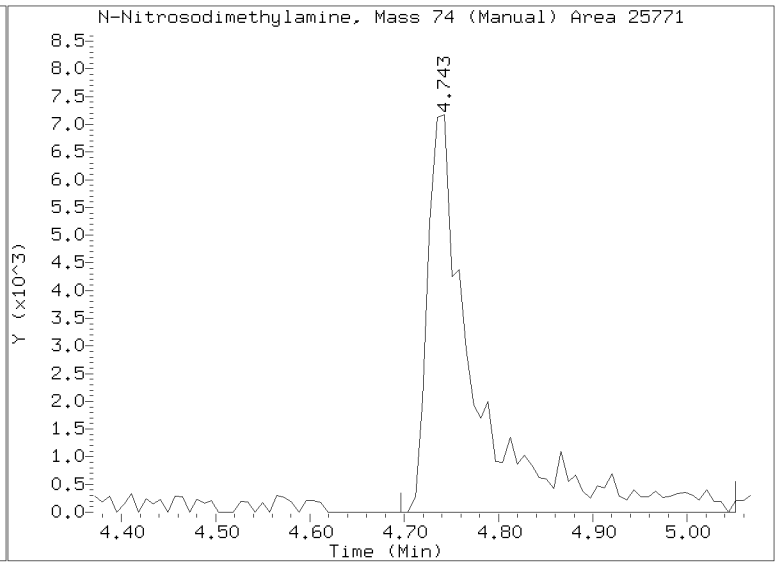
On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

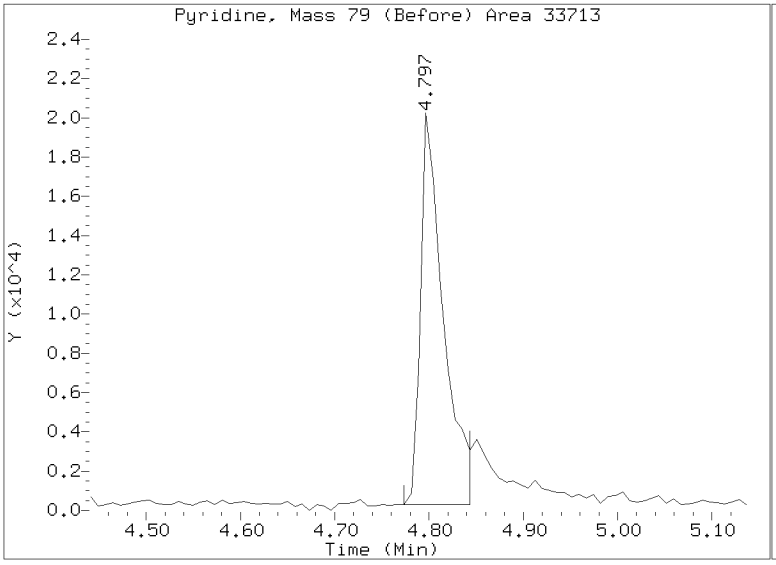
* Only compounds listed in the work order have been verified by the analyst *

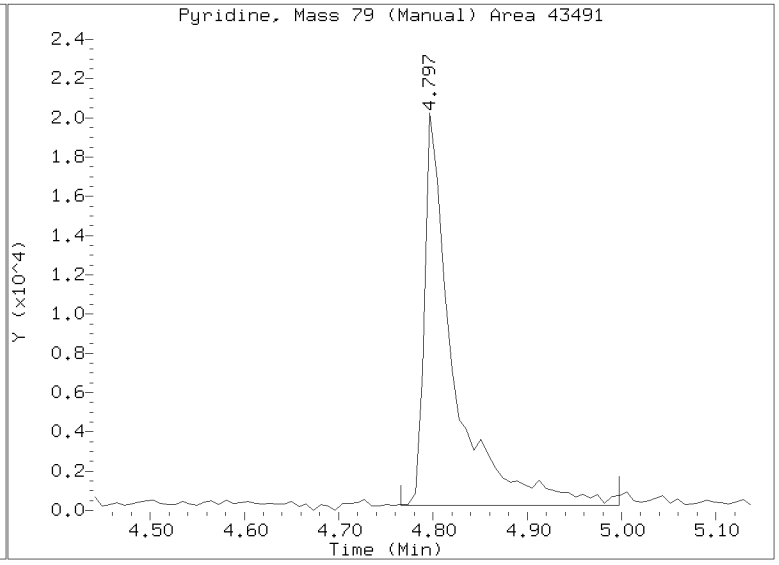
Quant Ion Manual Peak Adjustment Report

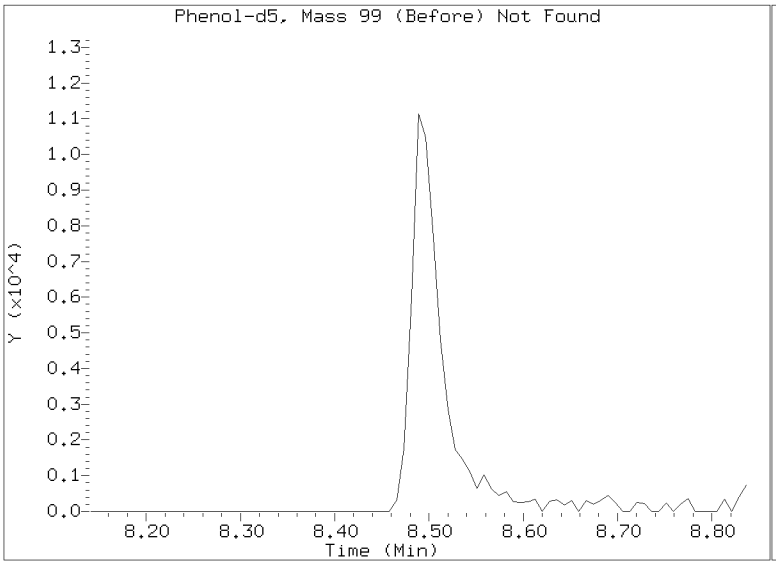
Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012308.D
Injection Date: 01-MAR-2023 19:53
Lab ID:SLC0084-CAL1 Client ID:
Report Date: 03/07/2023 12:48

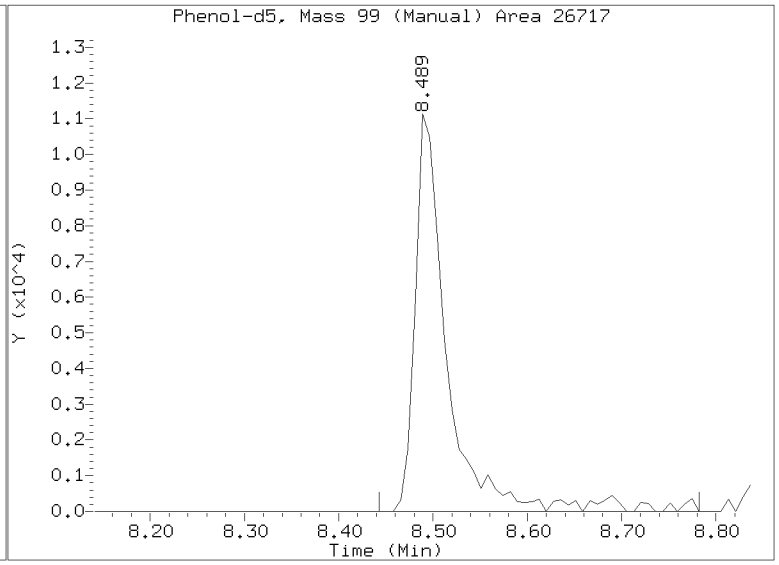






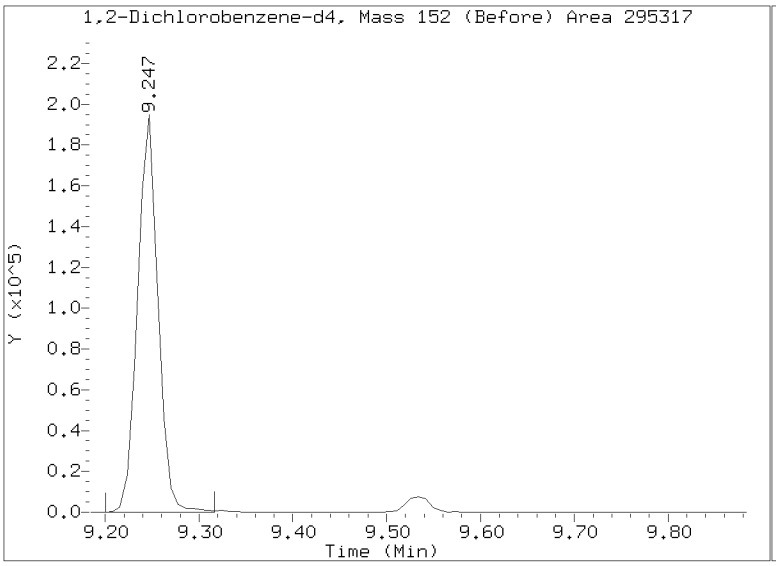


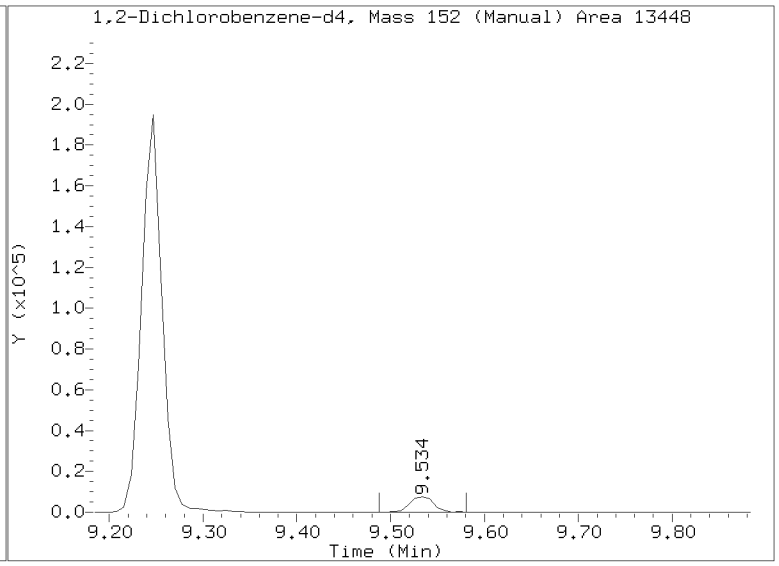


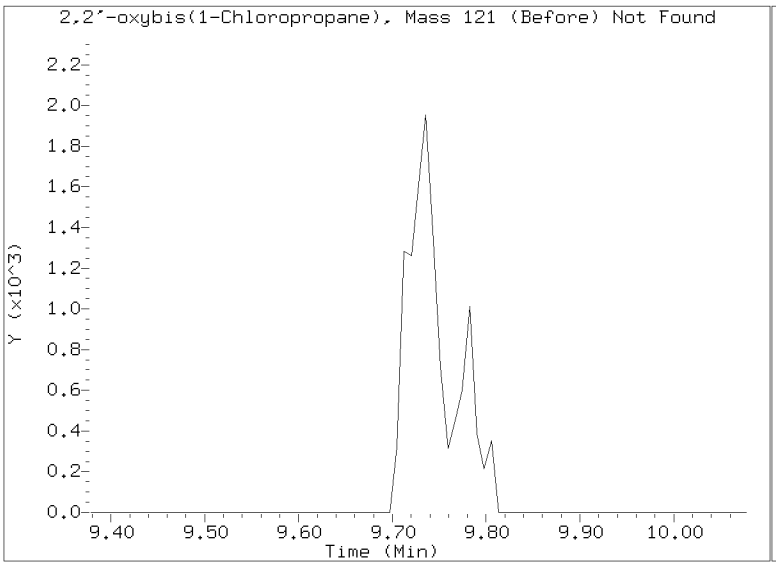


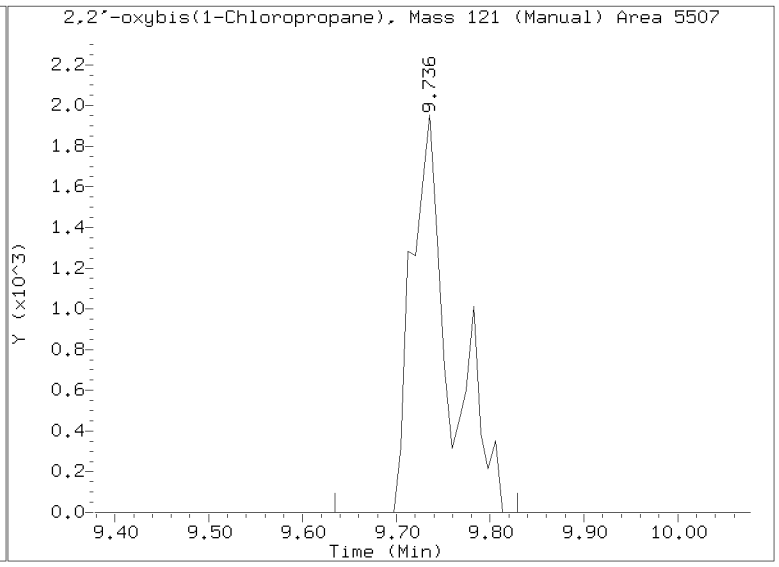
Quant Ion Manual Peak Adjustment Report

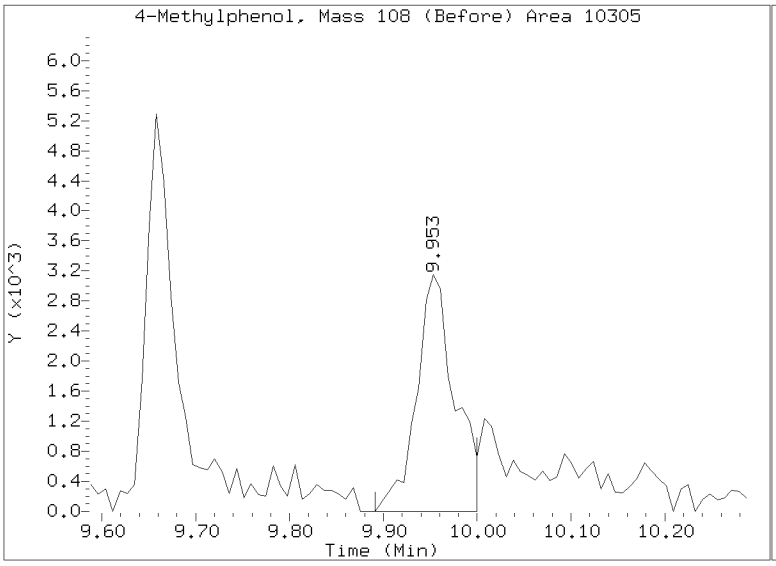
Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012308.D
Injection Date: 01-MAR-2023 19:53
Lab ID:SLC0084-CAL1 Client ID:
Report Date: 03/07/2023 12:48

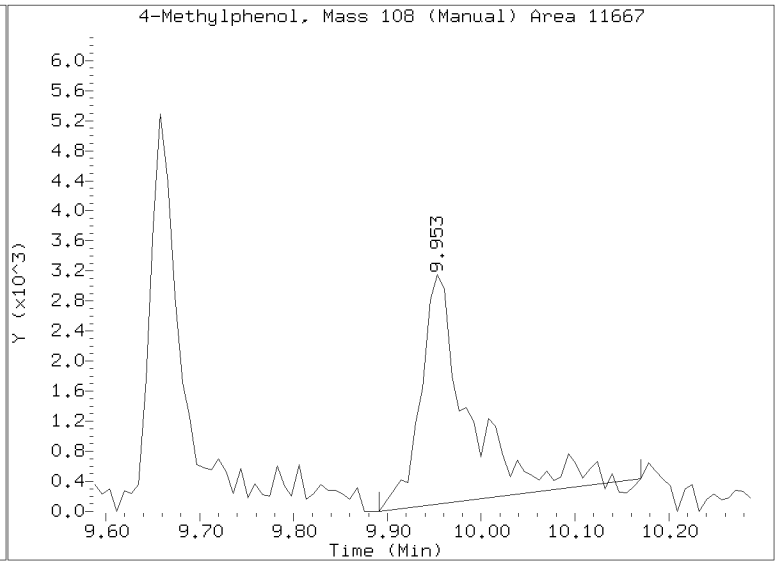












Quant Ion Manual Peak Adjustment Report

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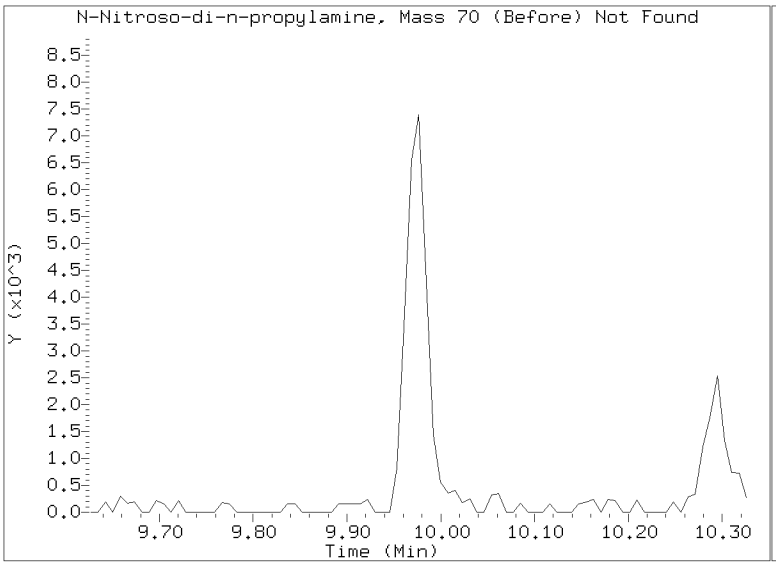
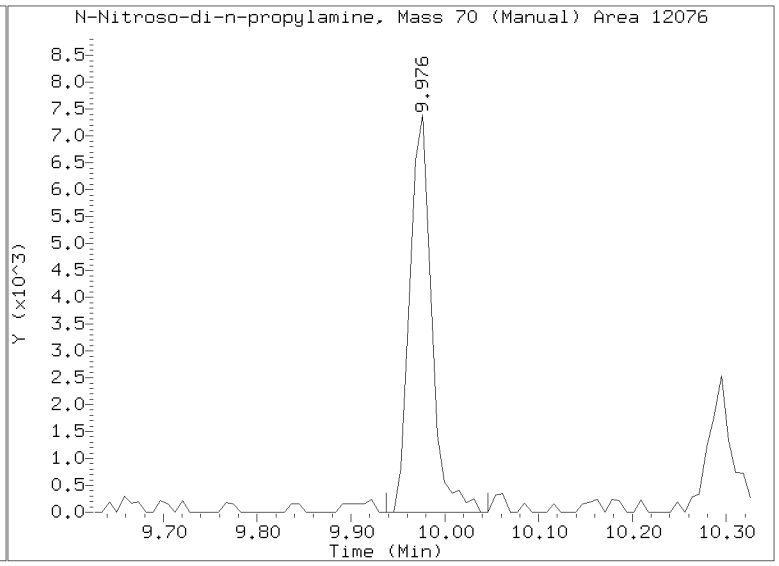
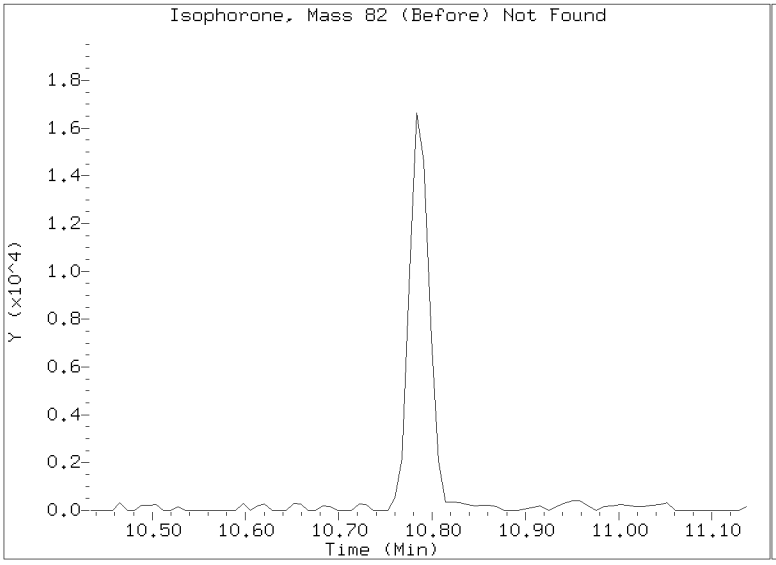
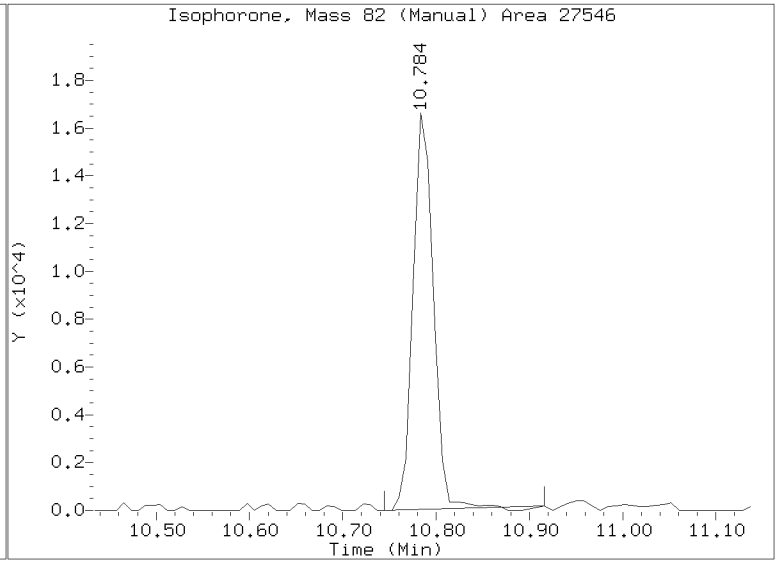
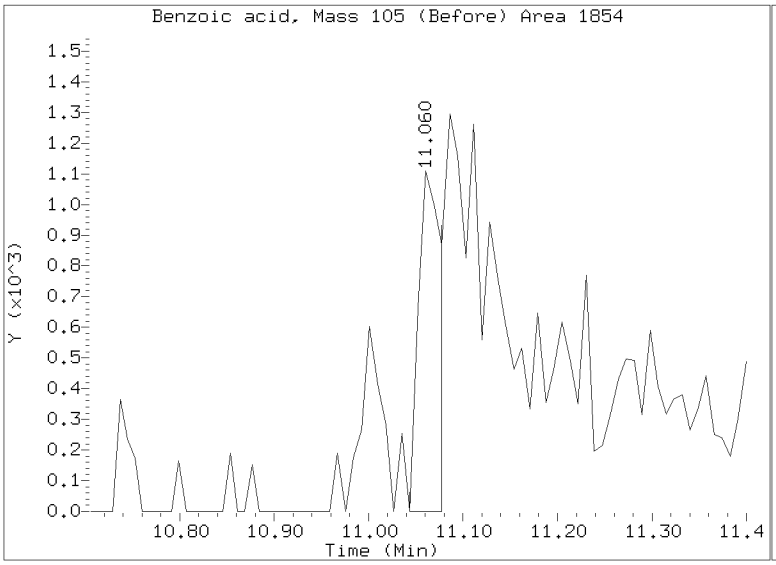
Injection Date: 01-MAR-2023 19:53
Lab ID:SLC0084-CAL1 Client ID:
Report Date: 03/07/2023 12:48

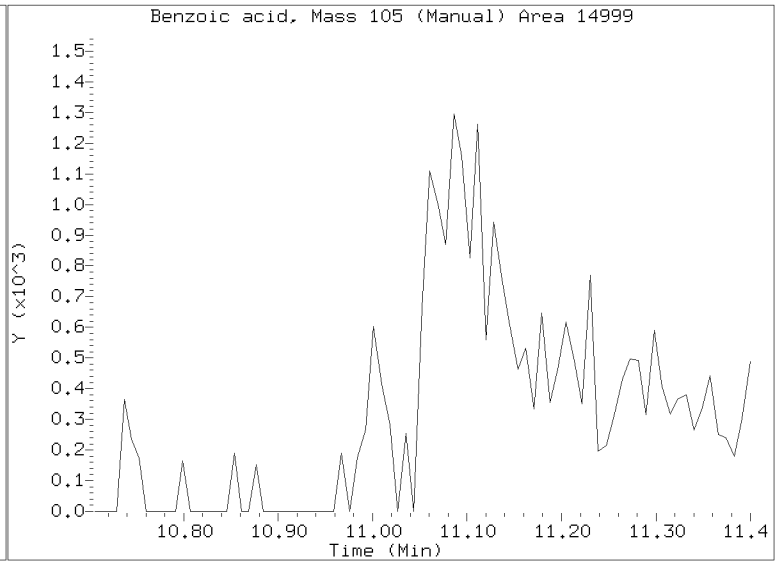






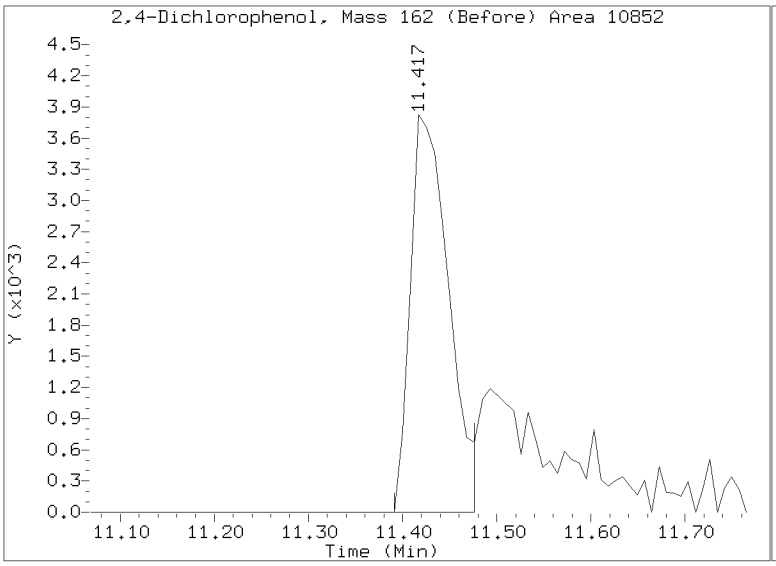


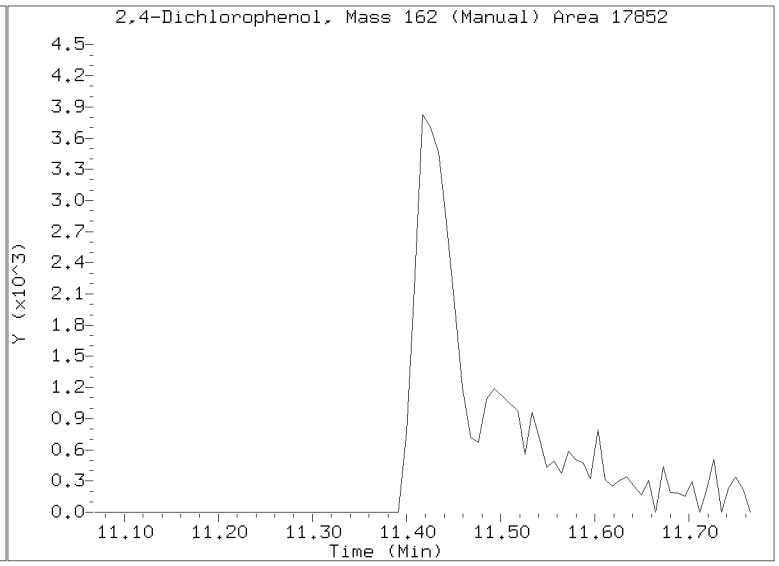


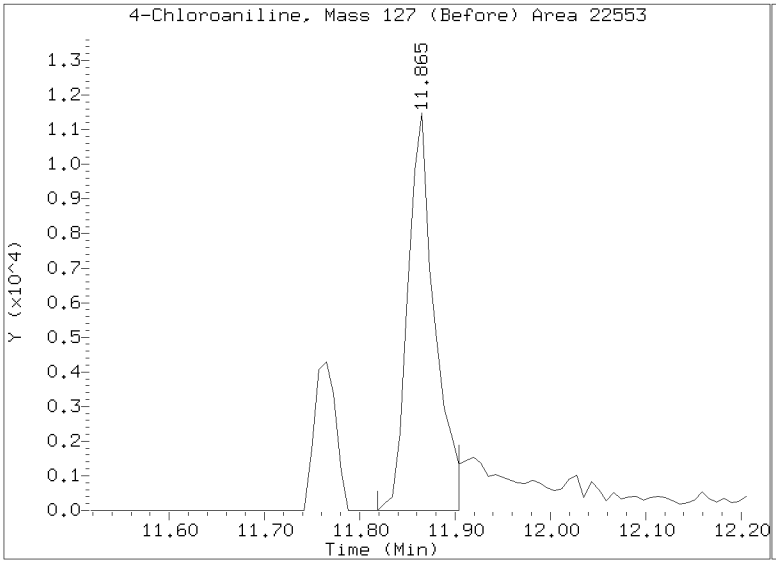


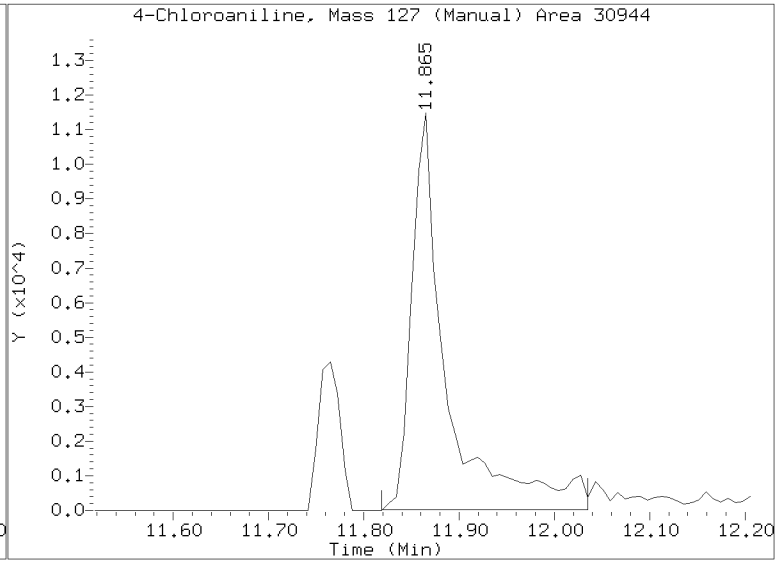
Quant Ion Manual Peak Adjustment Report

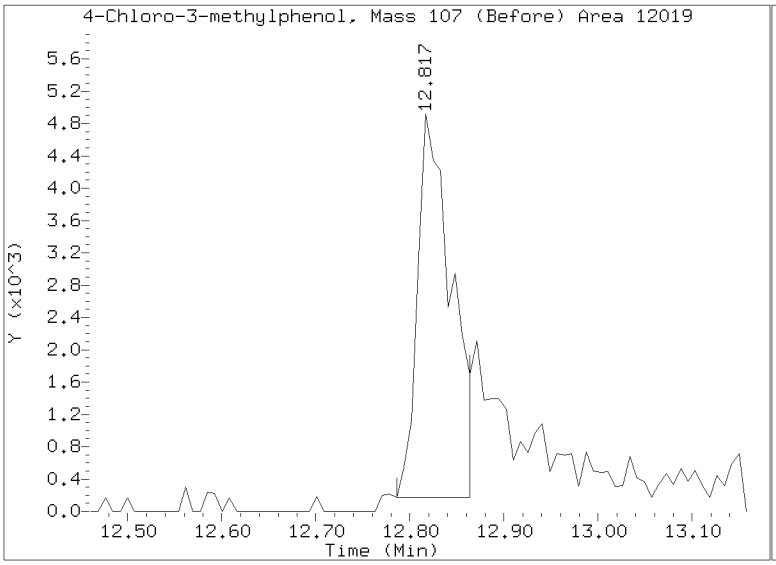
Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012308.D
Injection Date: 01-MAR-2023 19:53
Lab ID:SLC0084-CAL1 Client ID:
Report Date: 03/07/2023 12:48

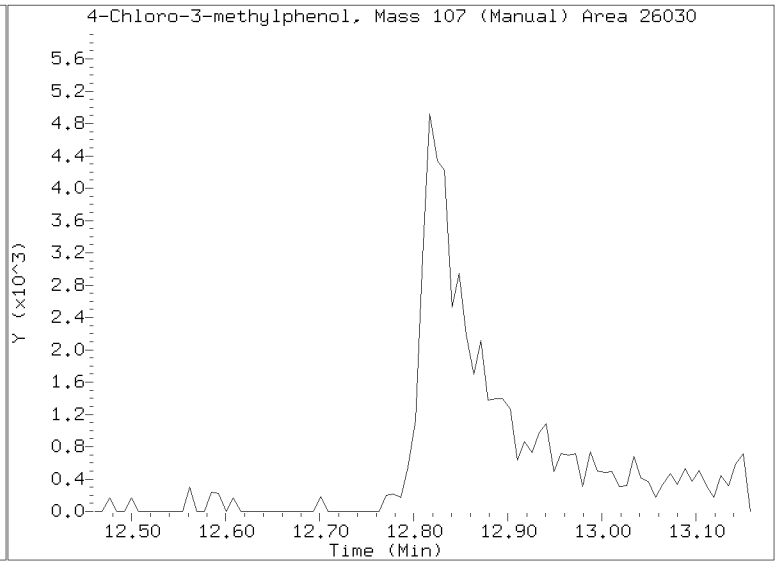












Quant Ion Manual Peak Adjustment Report

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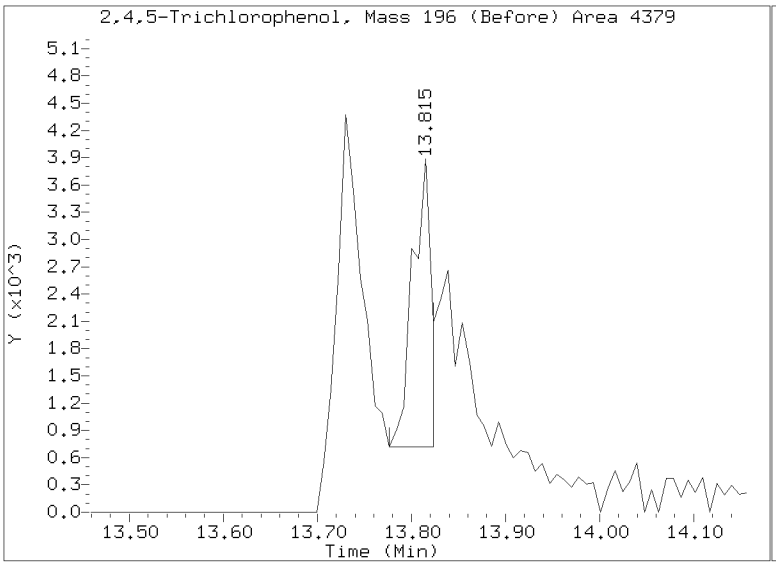
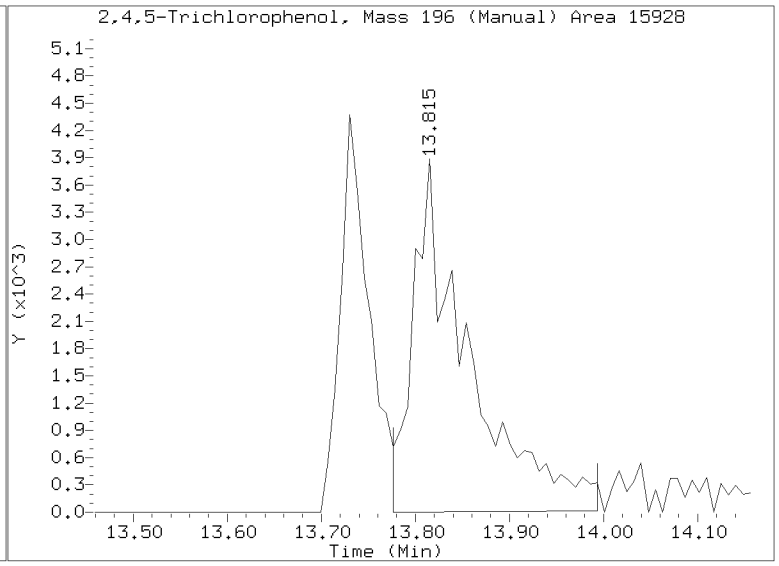
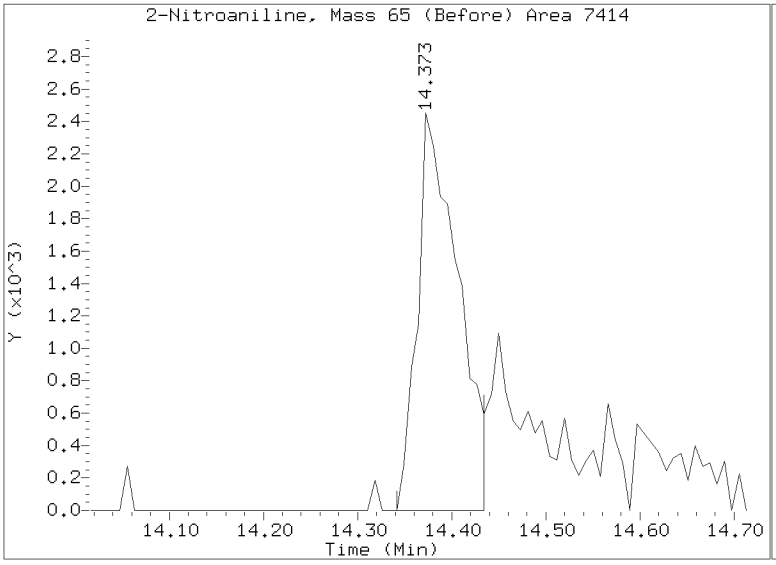
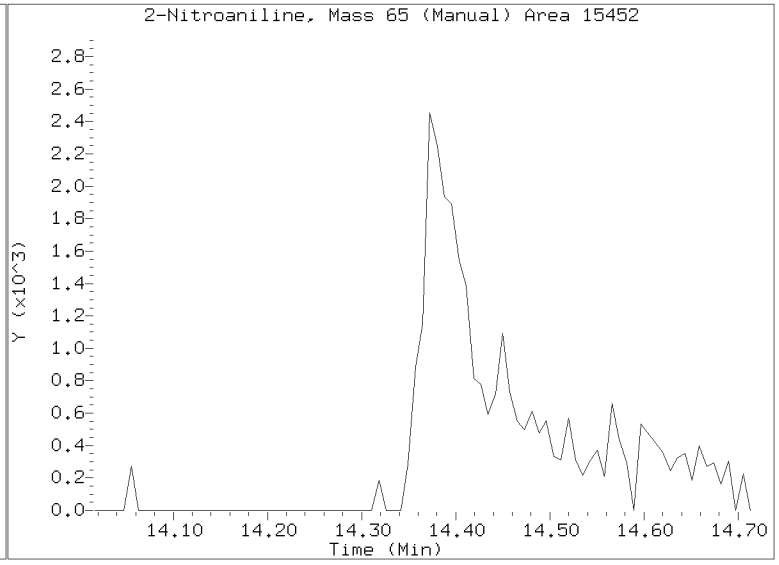
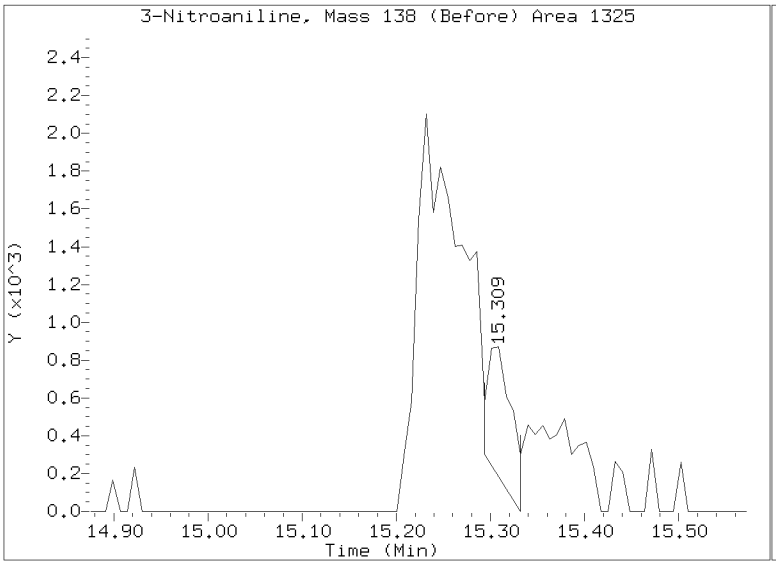
Injection Date: 01-MAR-2023 19:53
Lab ID:SLC0084-CAL1 Client ID:
Report Date: 03/07/2023 12:48

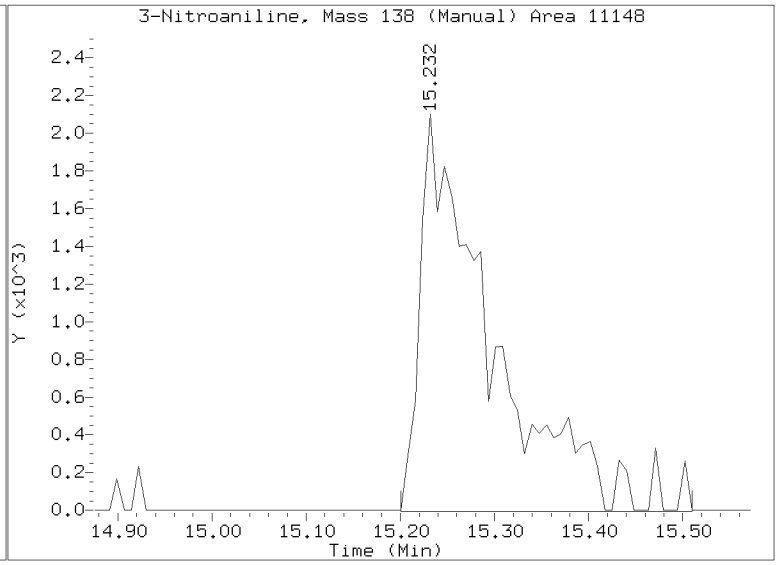












Quant Ion Manual Peak Adjustment Report

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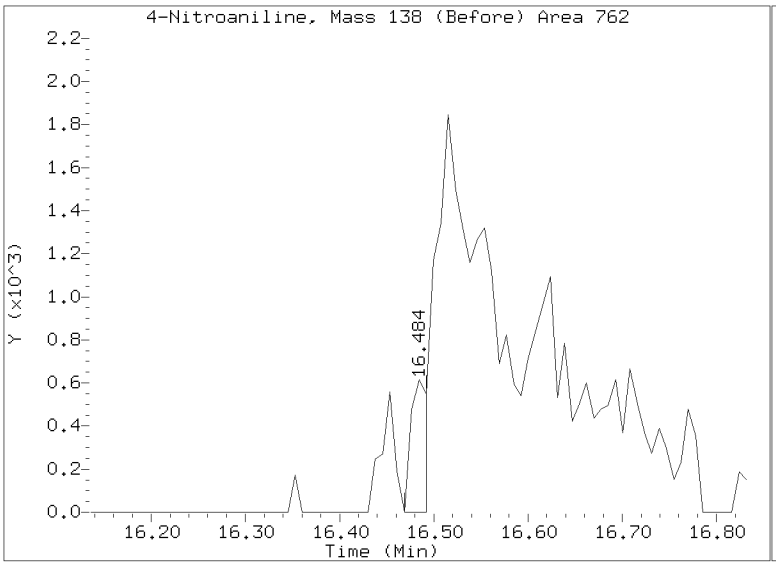
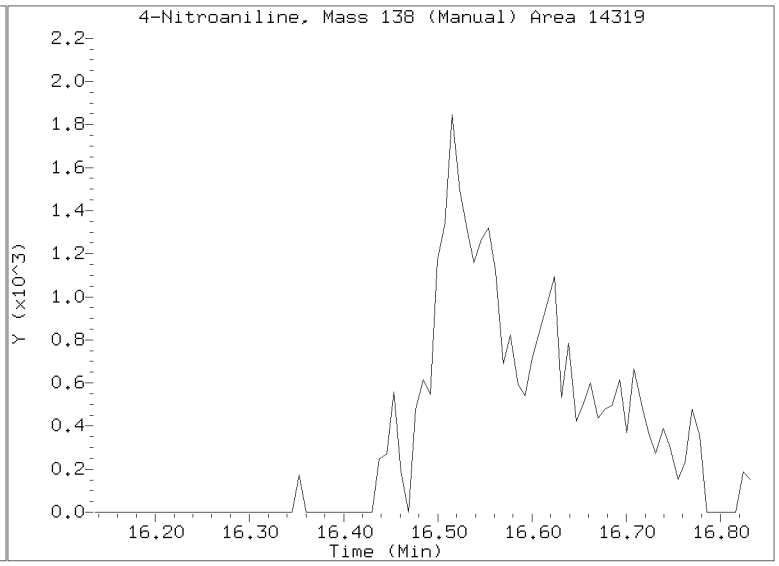
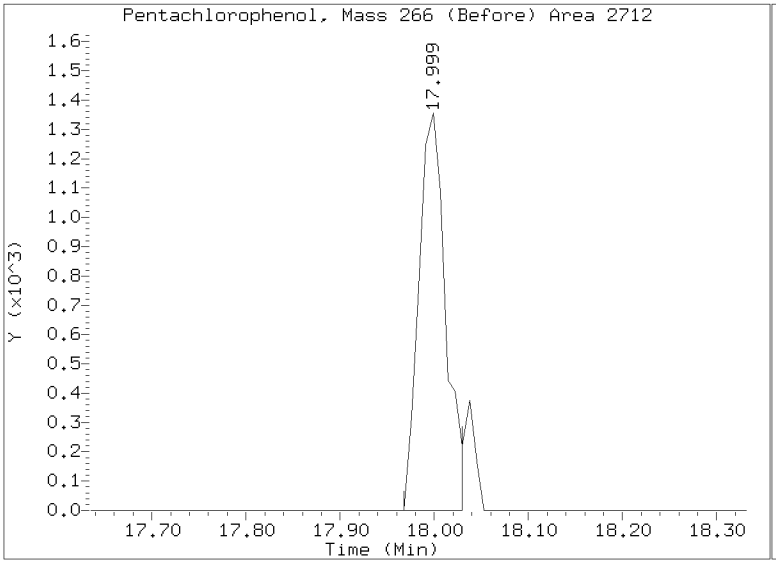
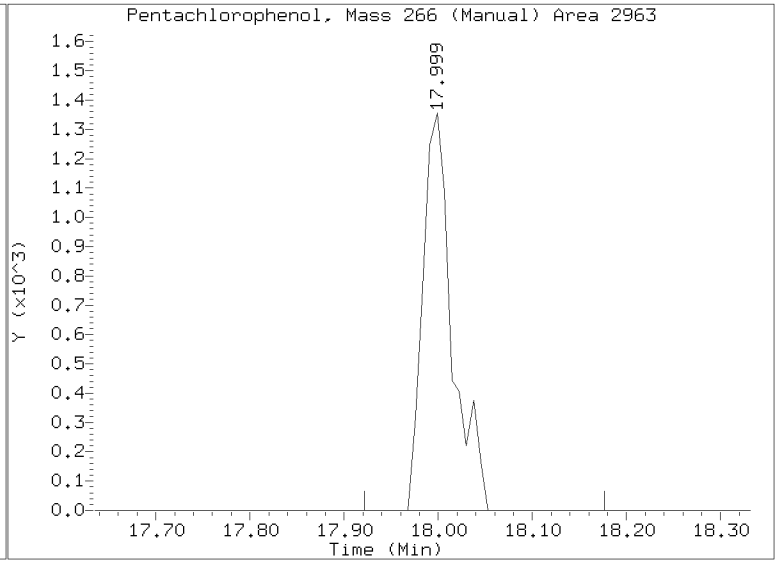
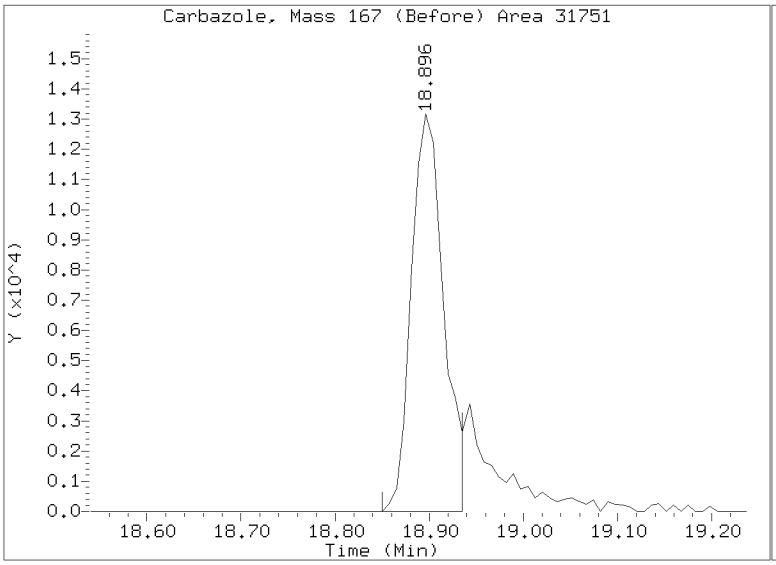
Injection Date: 01-MAR-2023 19:53
Lab ID:SLC0084-CAL1 Client ID:
Report Date: 03/07/2023 12:48

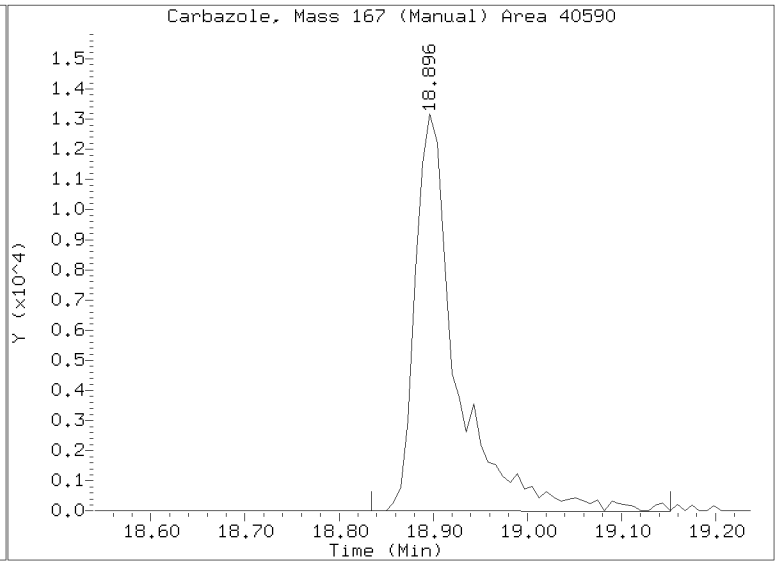












Quant Ion Manual Peak Adjustment Report

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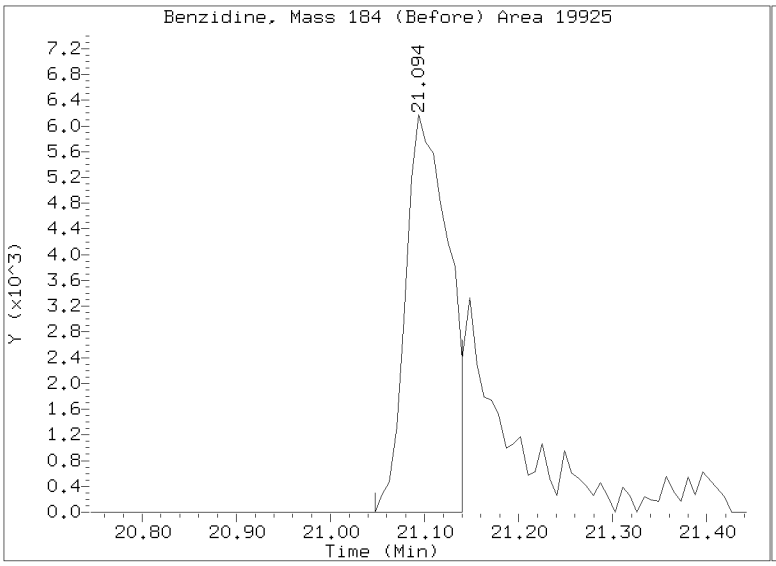
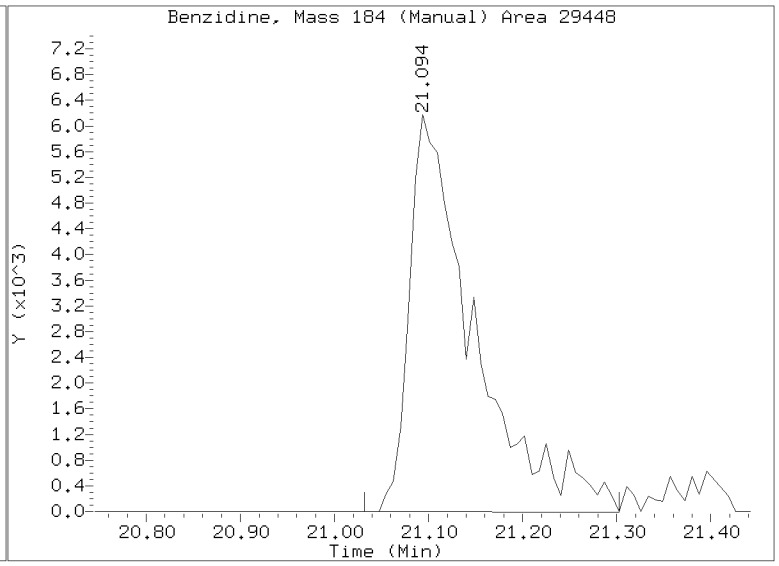
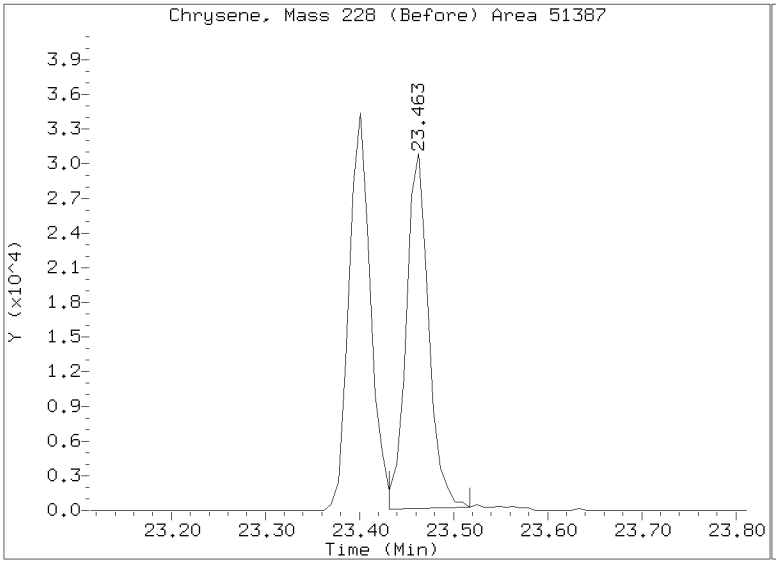
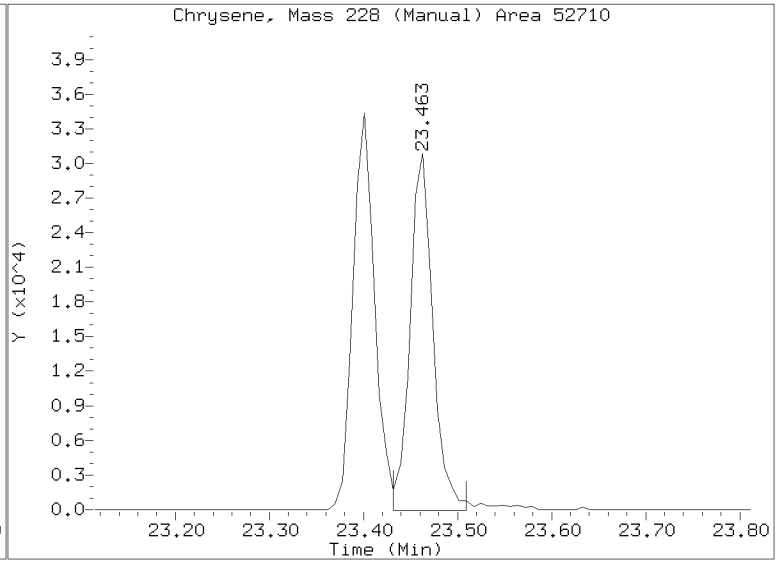
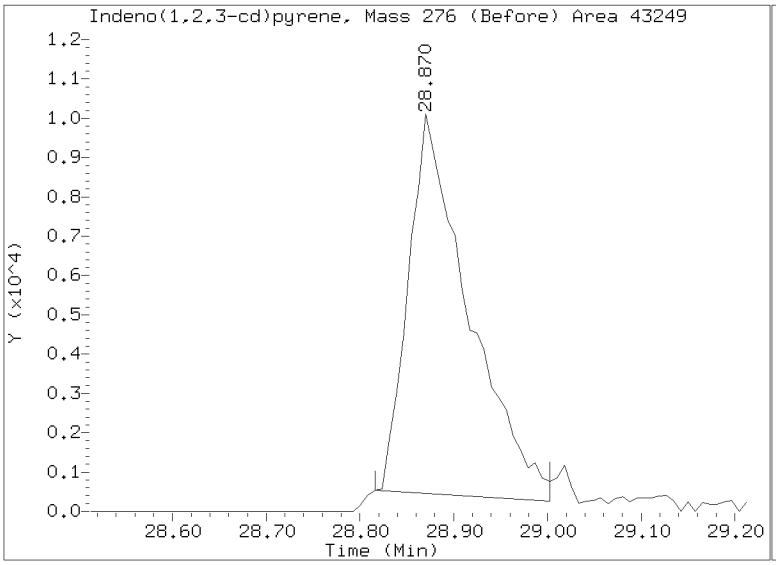
Report Date: 03/07/2023 12:48

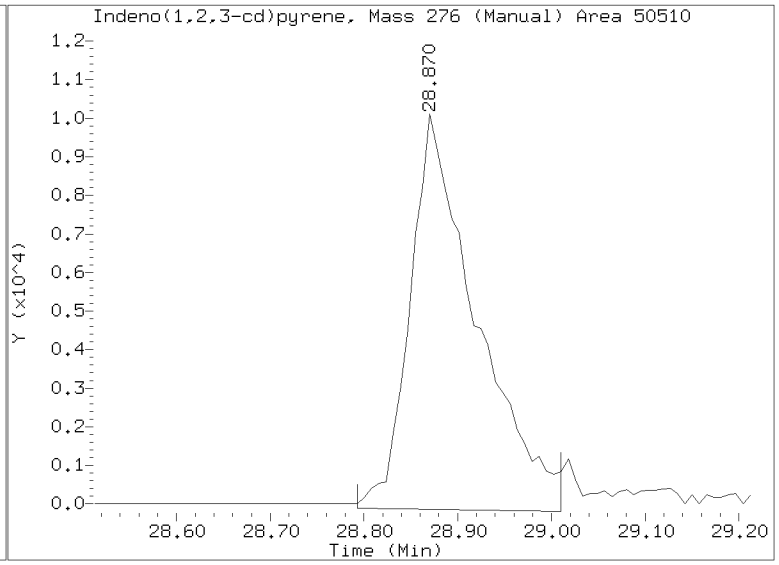












Quant Ion Manual Peak Adjustment Report

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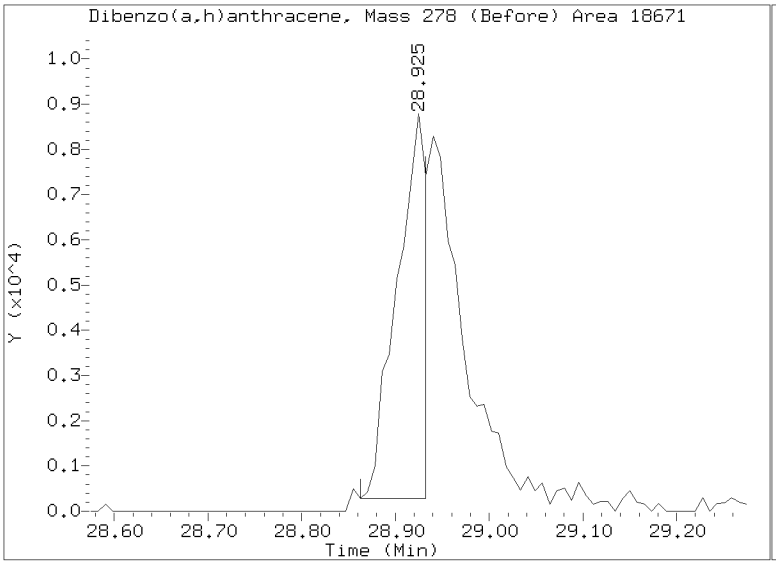
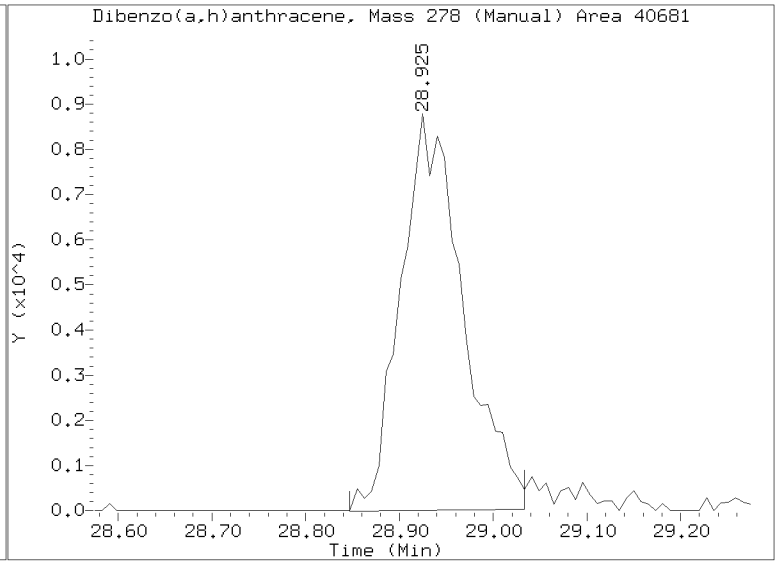
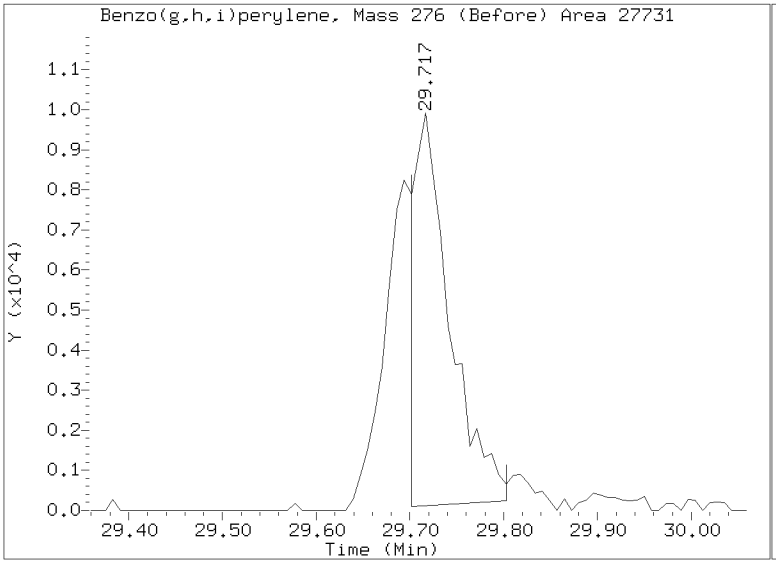
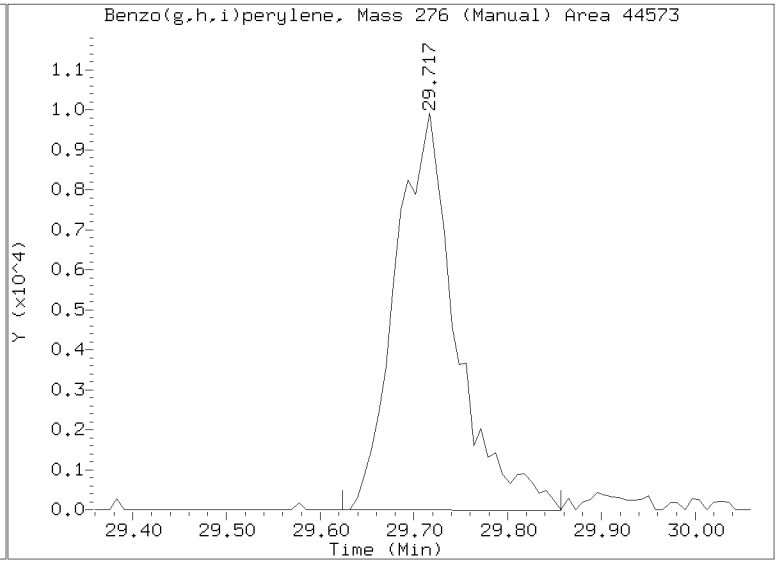
Report Date: 03/07/2023 12:48









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Date : 01-MAR-2023 21:46

Client ID:

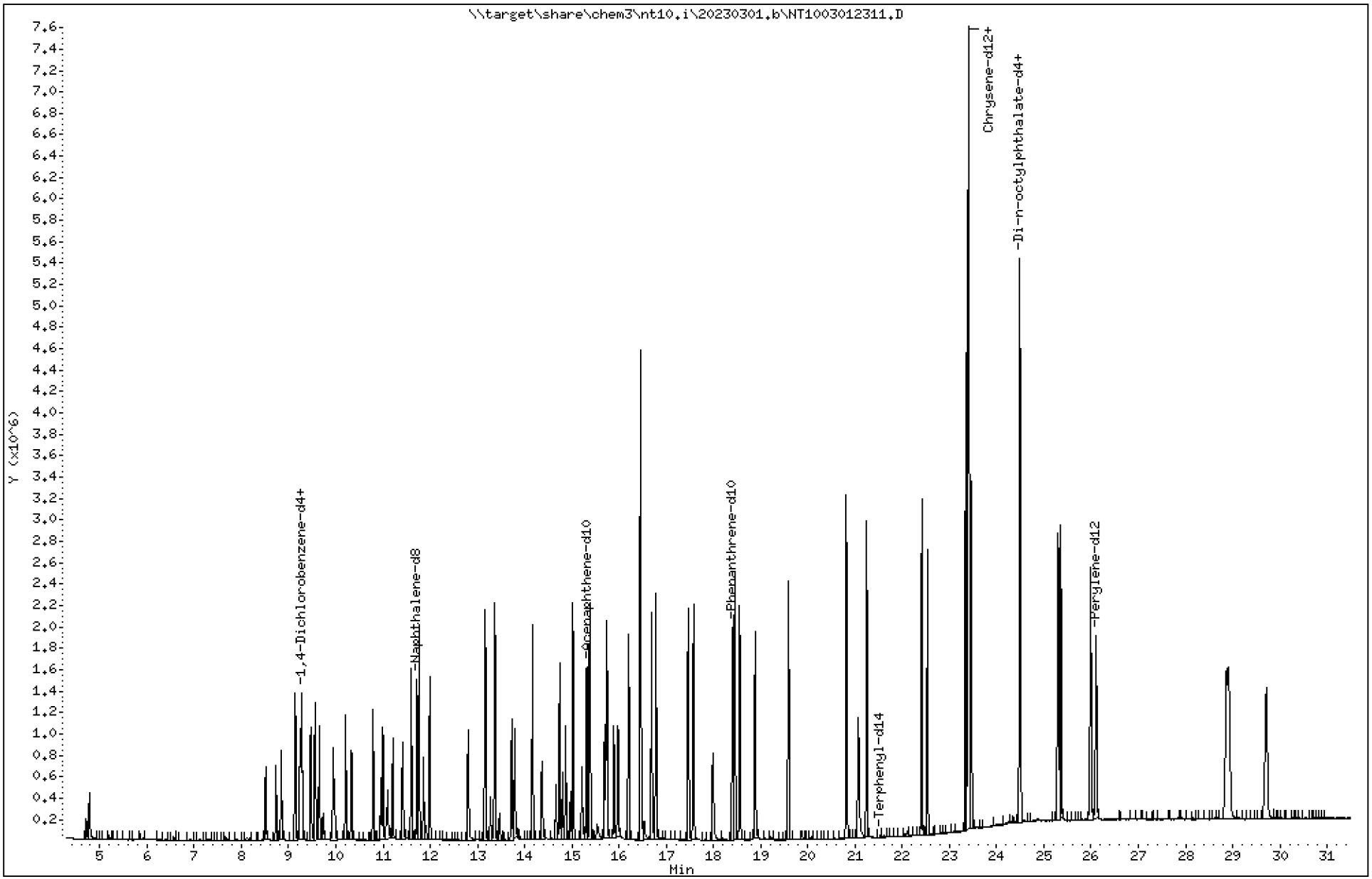
Instrument: nt10.i

Sample Info: SEQ-SCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

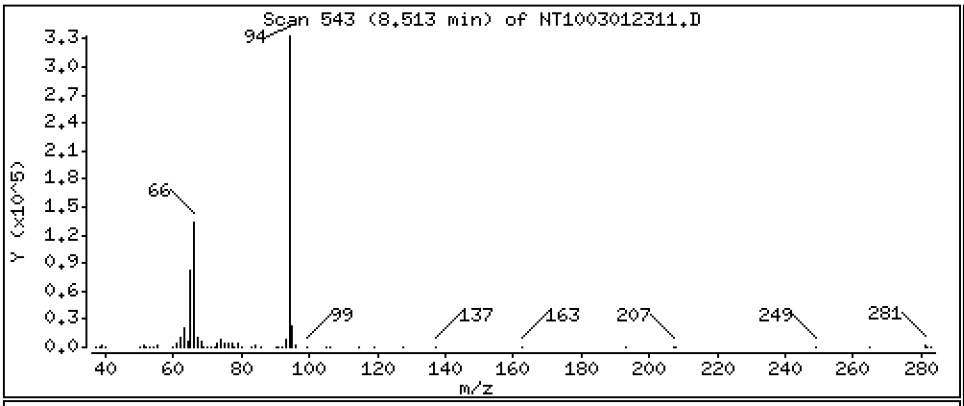
Operator: VTS

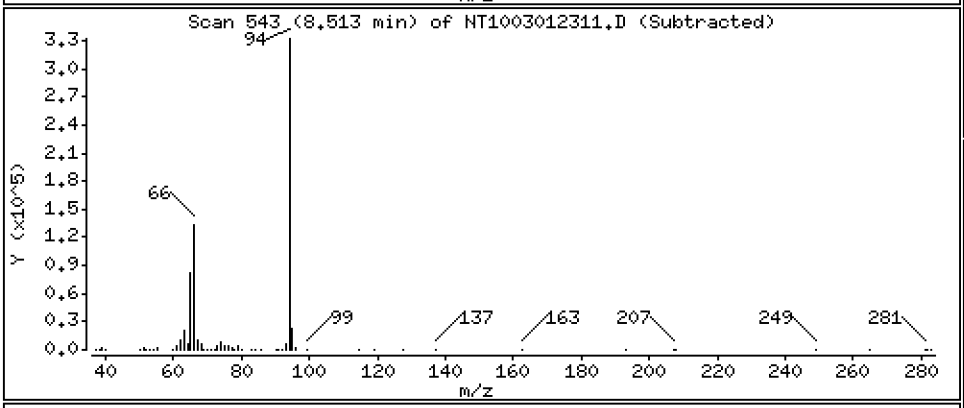
Column phase: ZB-5msi

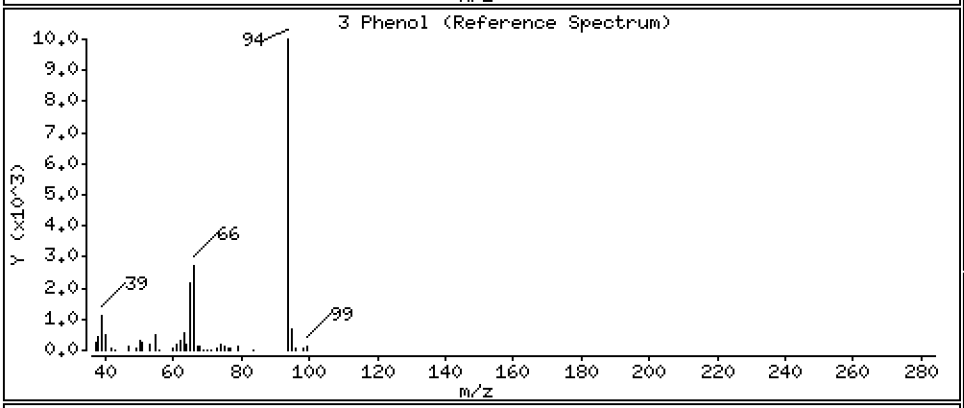
Column diameter: 0.25

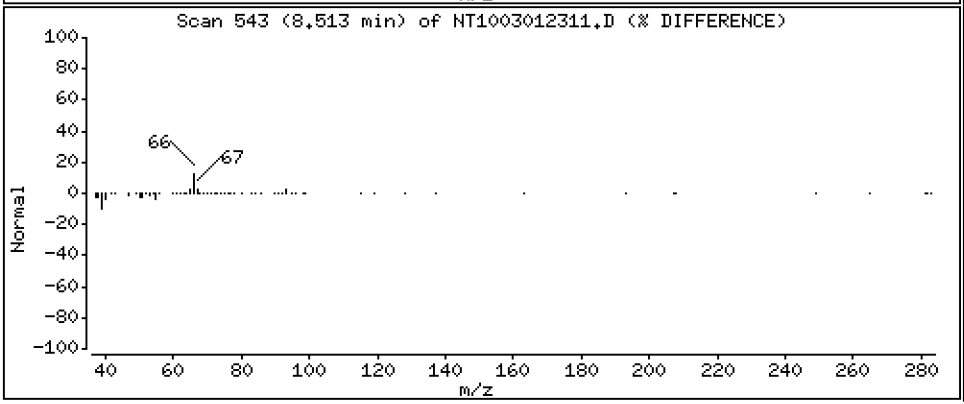
3 Phenol

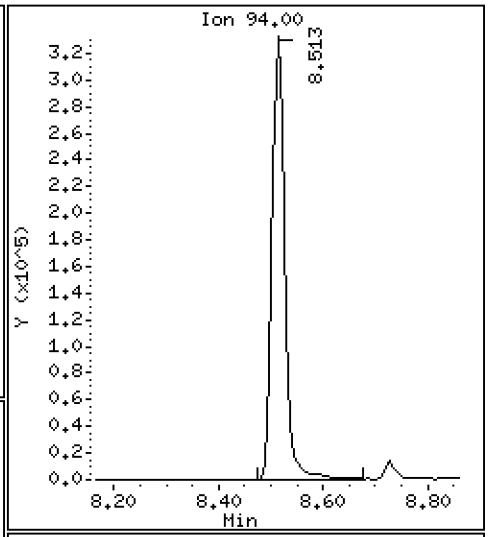
Concentration: 4.852 ug/mL

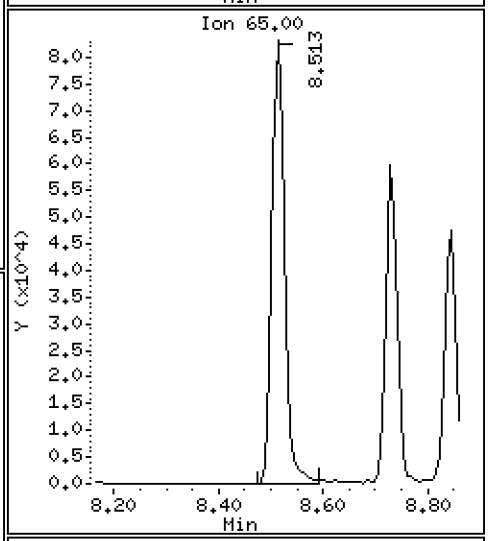


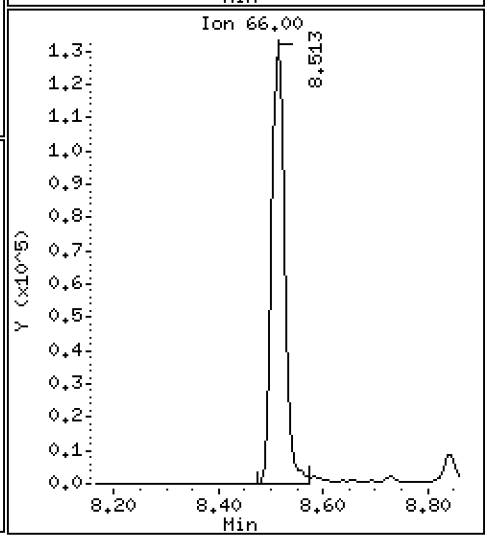












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

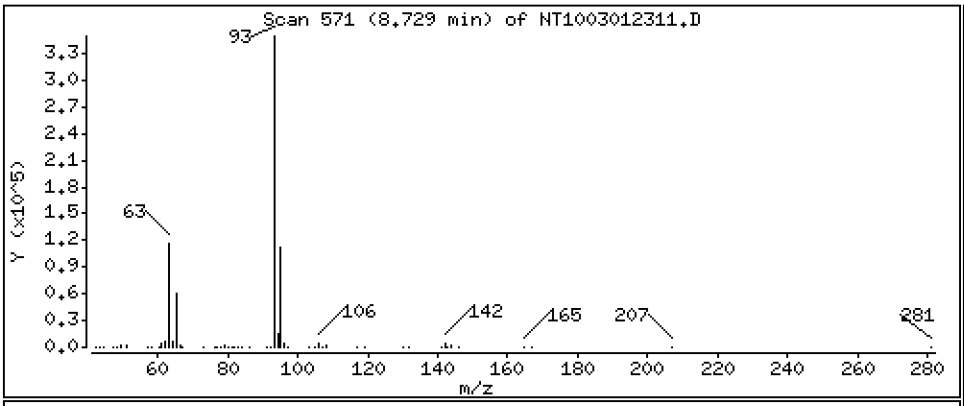
Operator: VTS

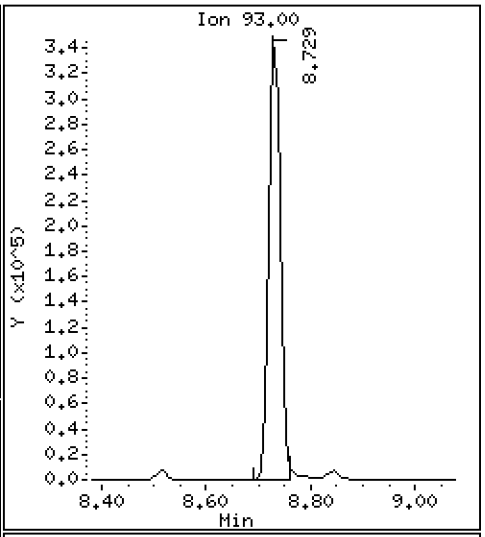
Column phase: ZB-5msi

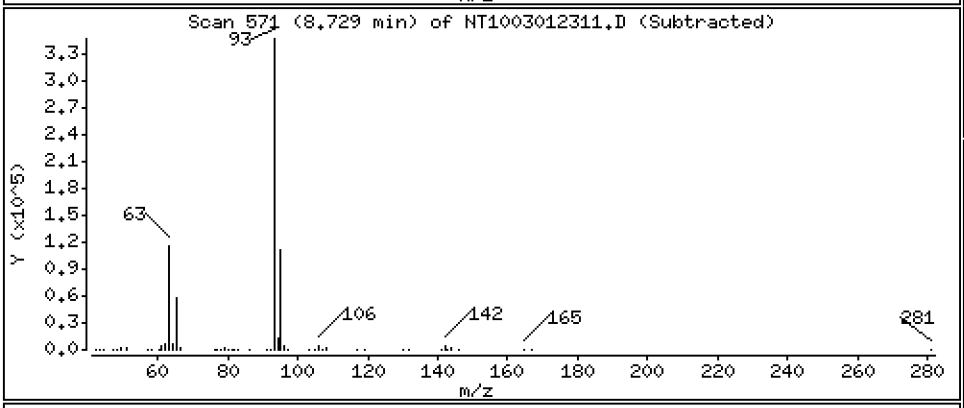
Column diameter: 0.25

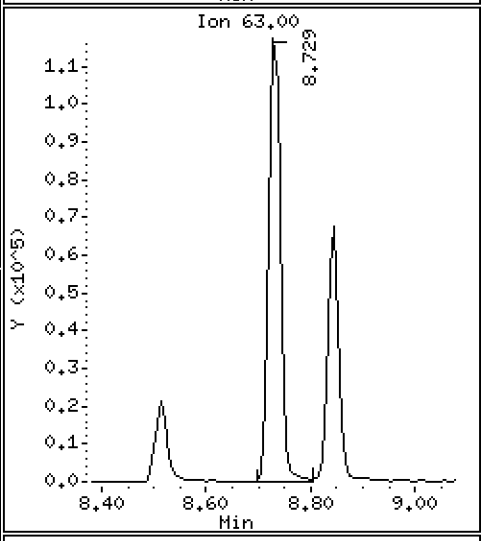
4 Bis(2-Chloroethyl)ether

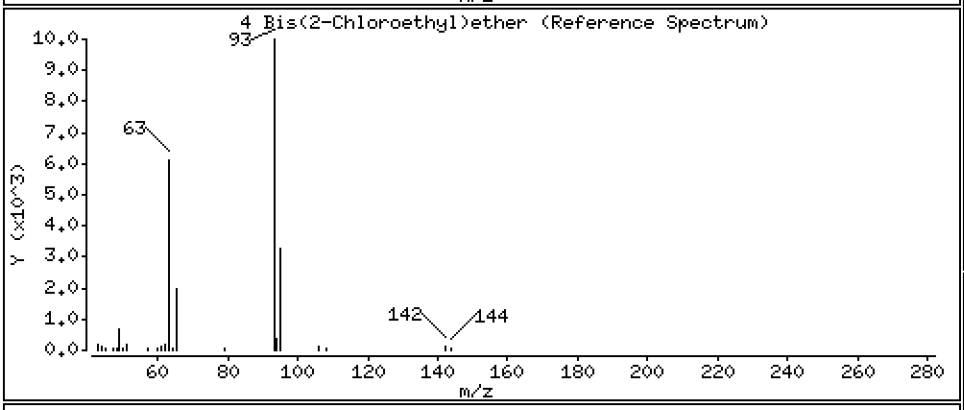
Concentration: 5.928 ug/mL

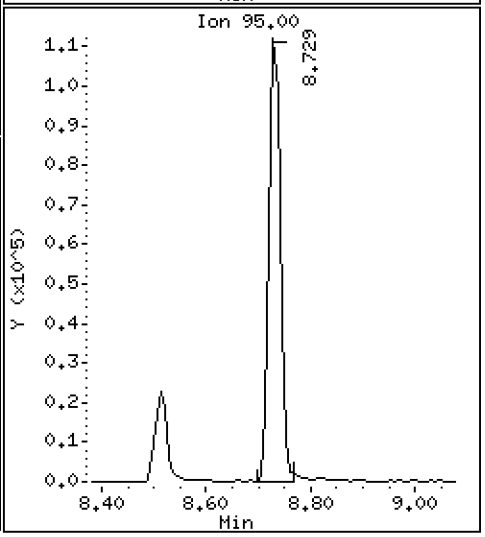


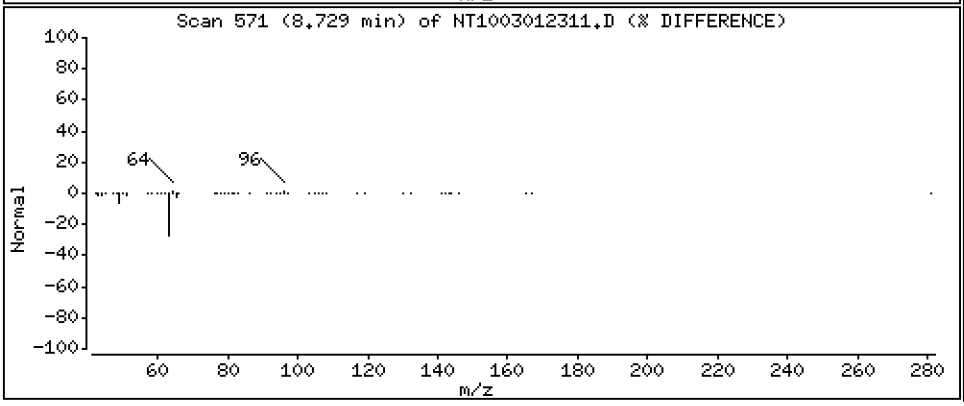












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

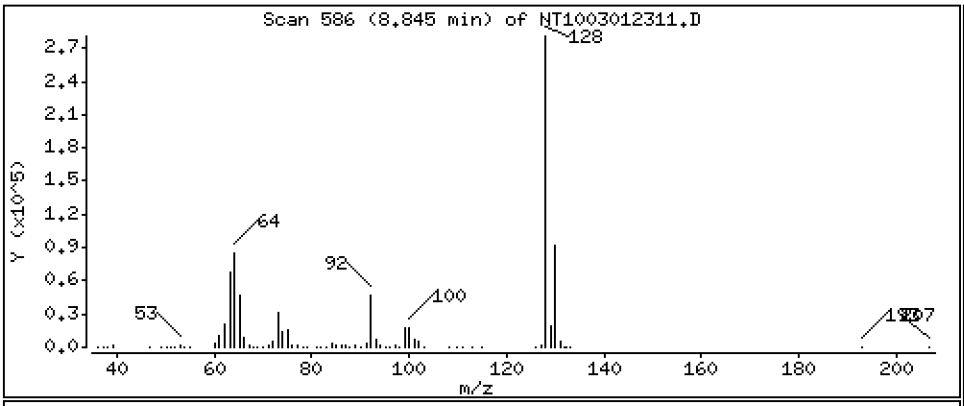
Operator: VTS

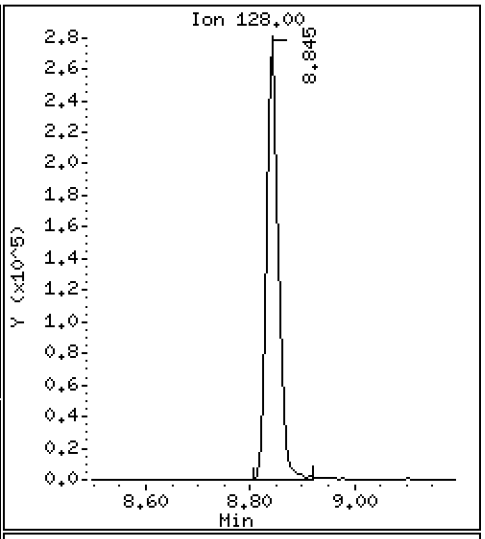
Column phase: ZB-5msi

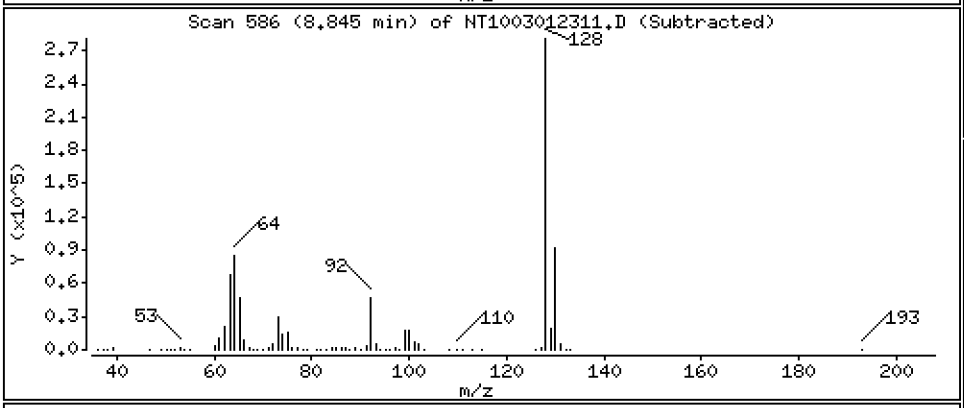
Column diameter: 0.25

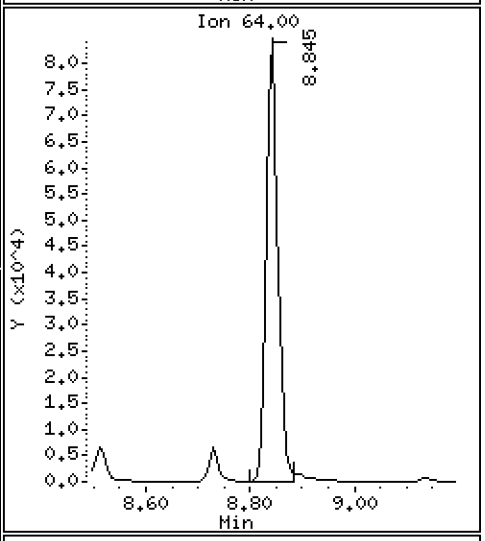
6 2-Chlorophenol

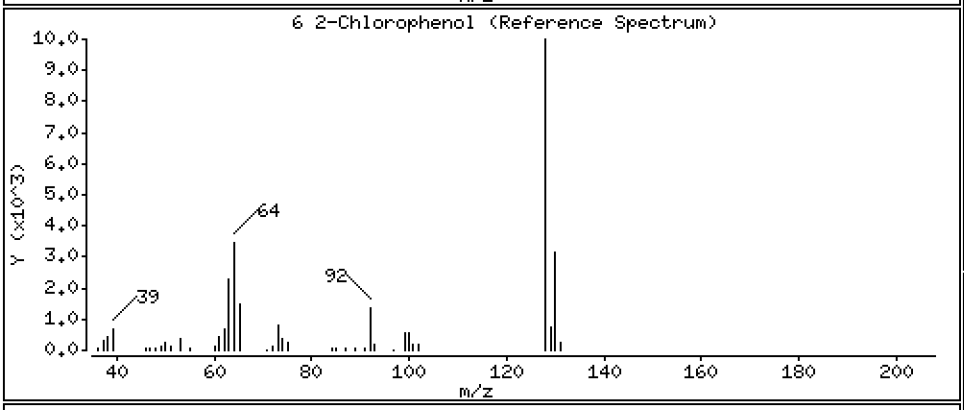
Concentration: 4.692 ug/mL

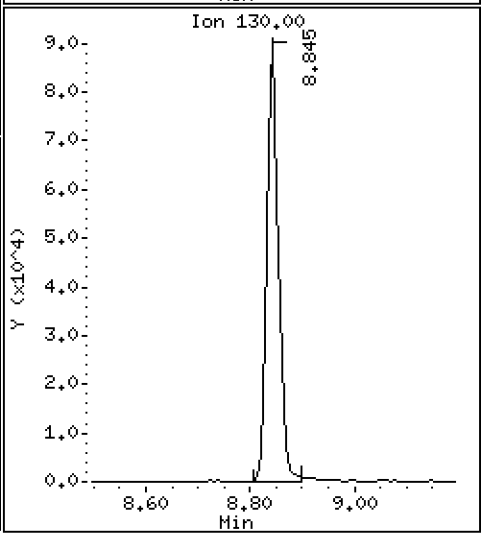


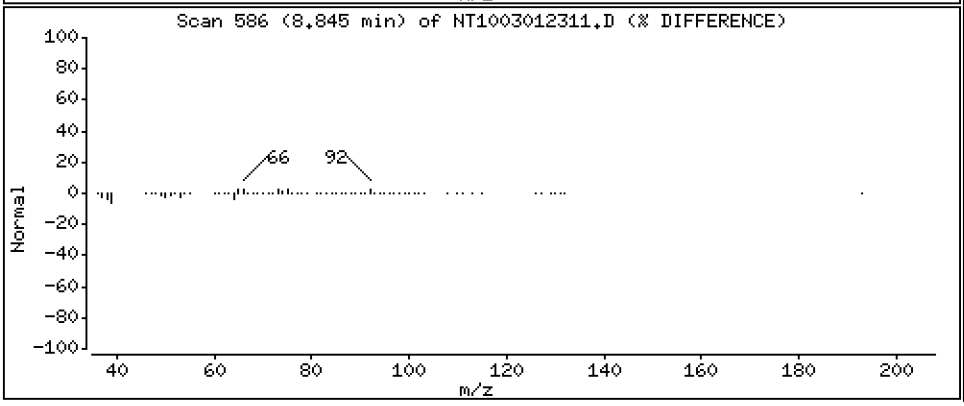












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

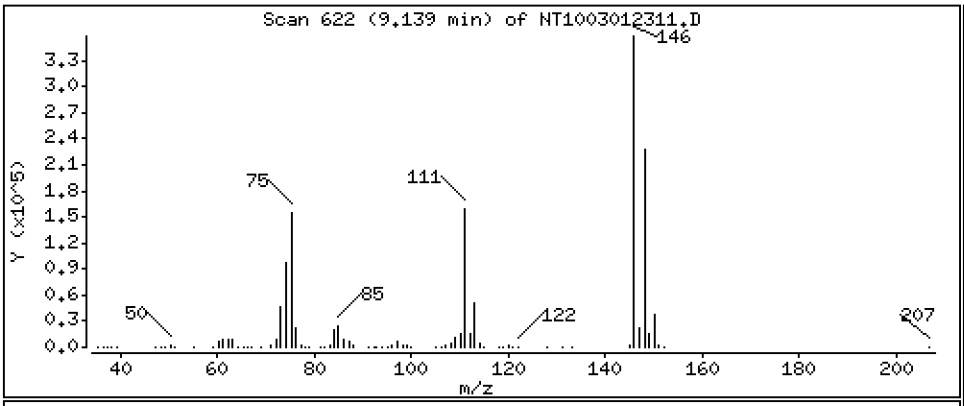
Operator: VTS

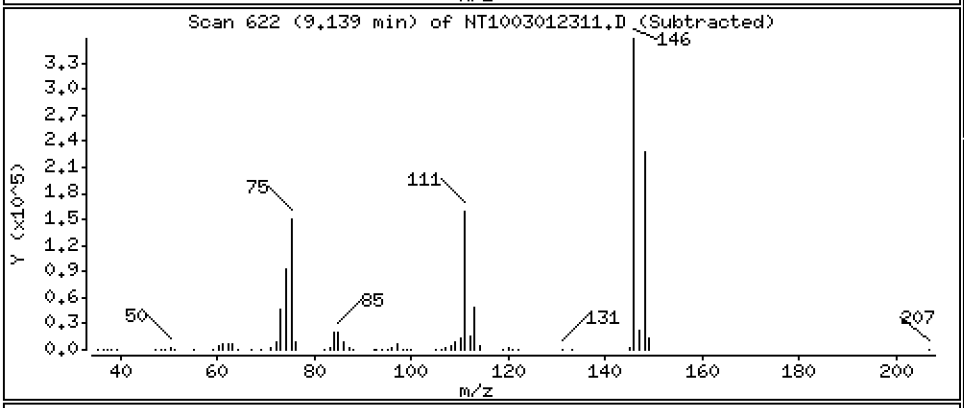
Column phase: ZB-5msi

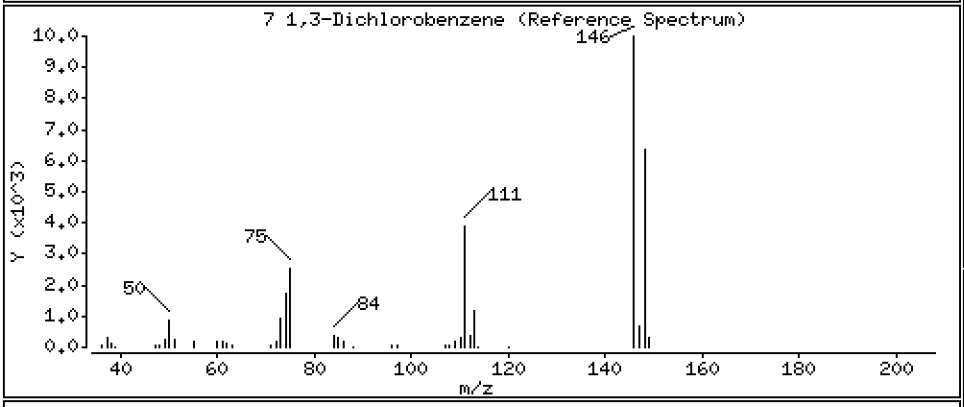
Column diameter: 0.25

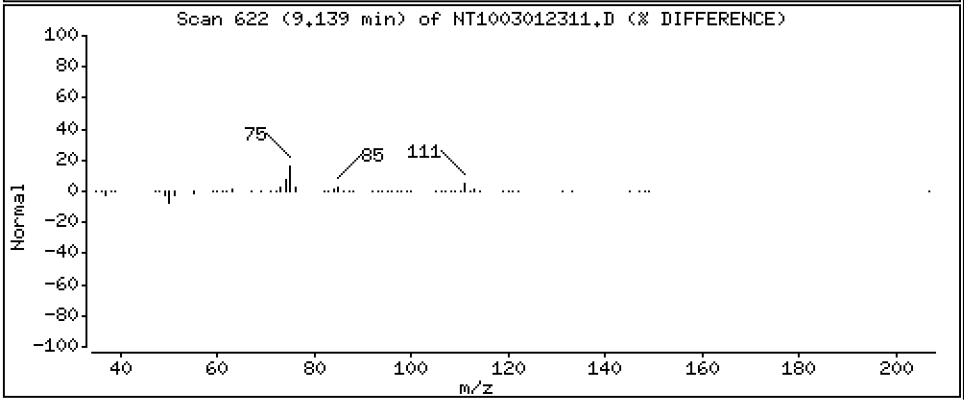
7 1,3-Dichlorobenzene

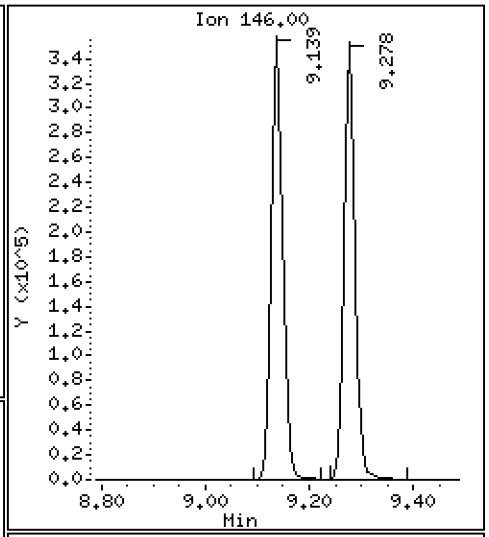
Concentration: 5.266 ug/mL

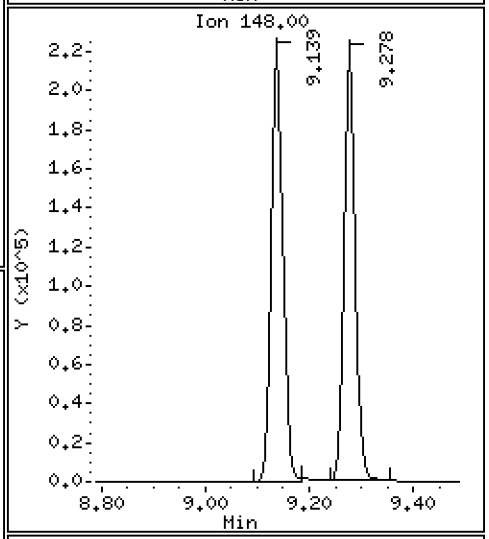


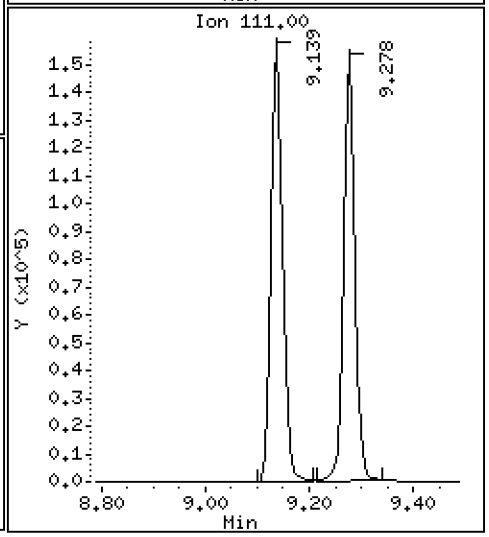












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

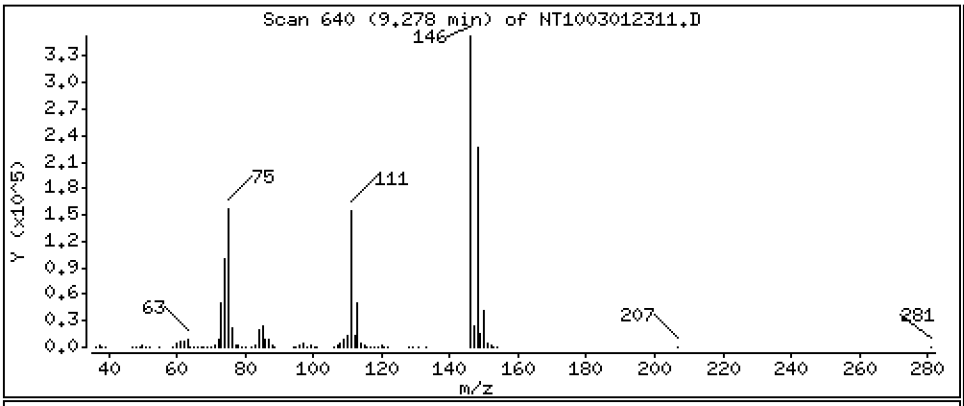
Operator: VTS

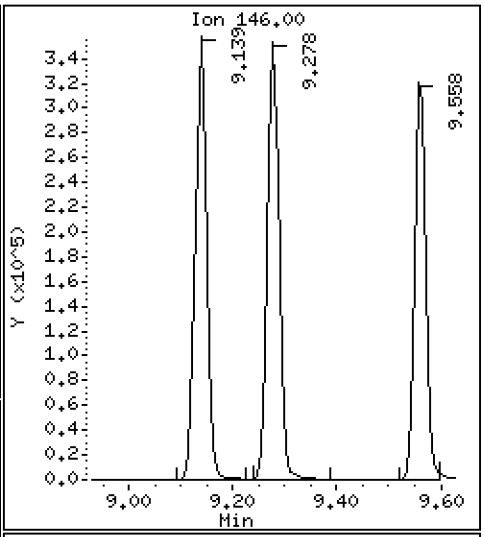
Column phase: ZB-5msi

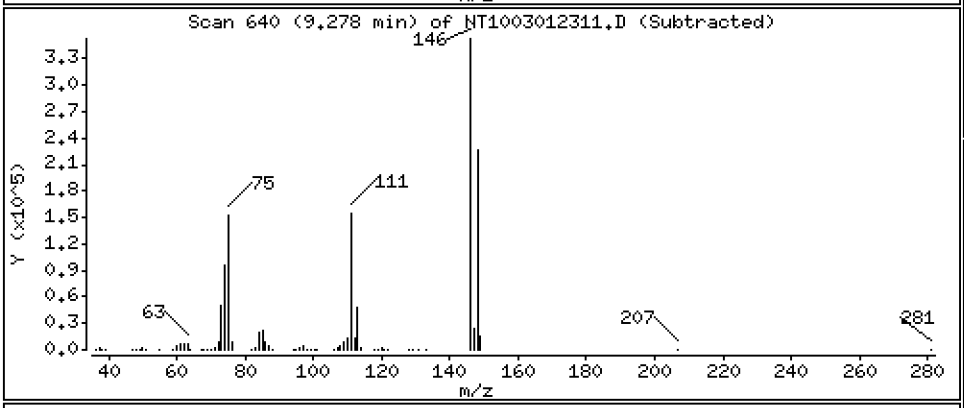
Column diameter: 0.25

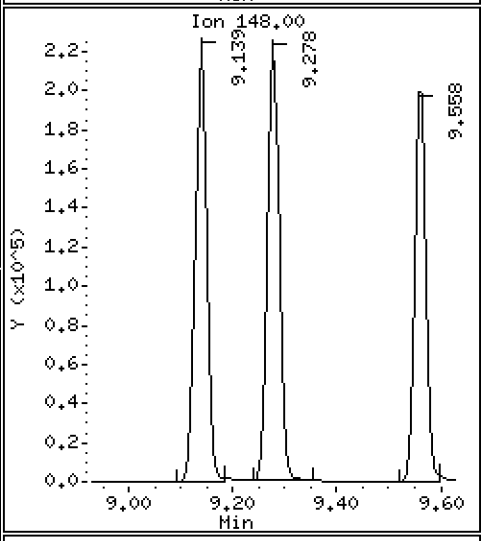
9 1,4-Dichlorobenzene

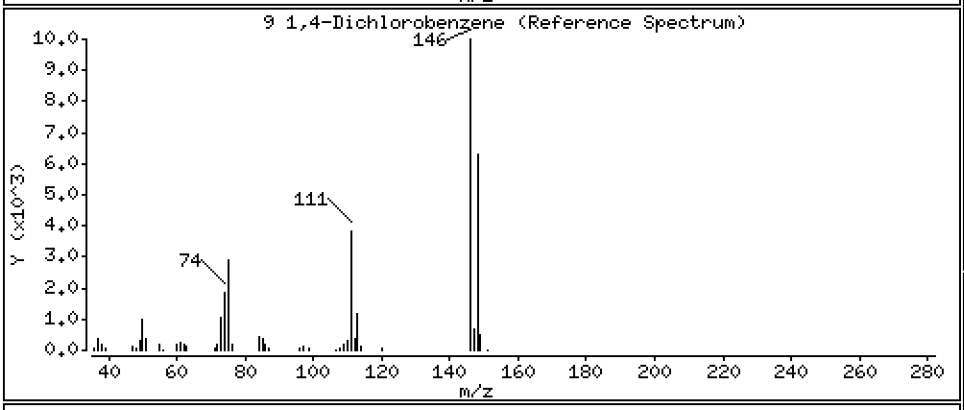
Concentration: 5.216 ug/mL

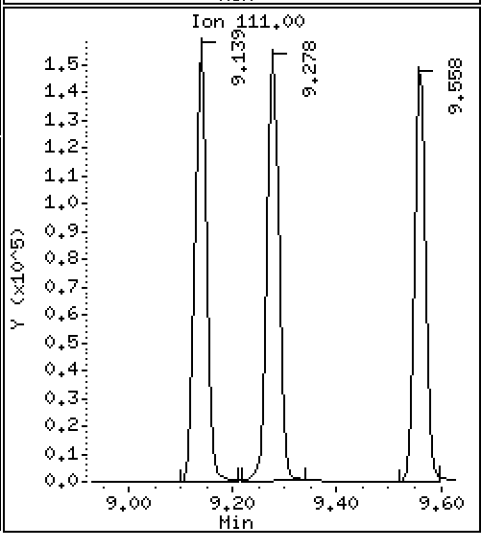


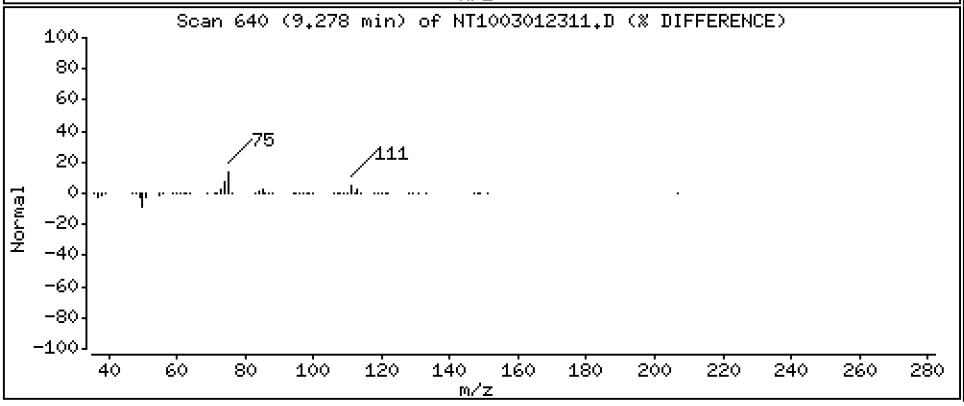












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

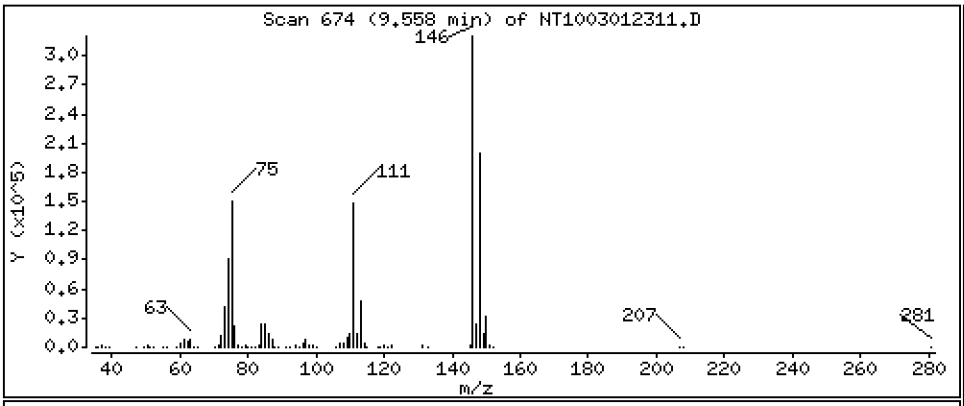
Operator: VTS

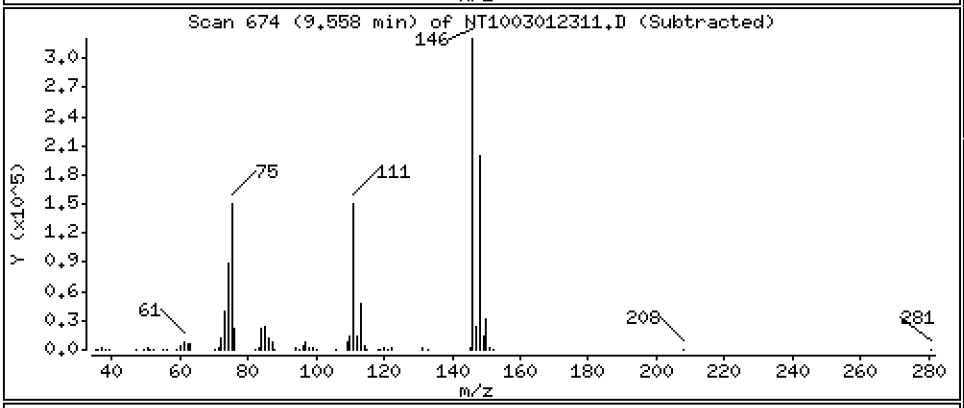
Column phase: ZB-5msi

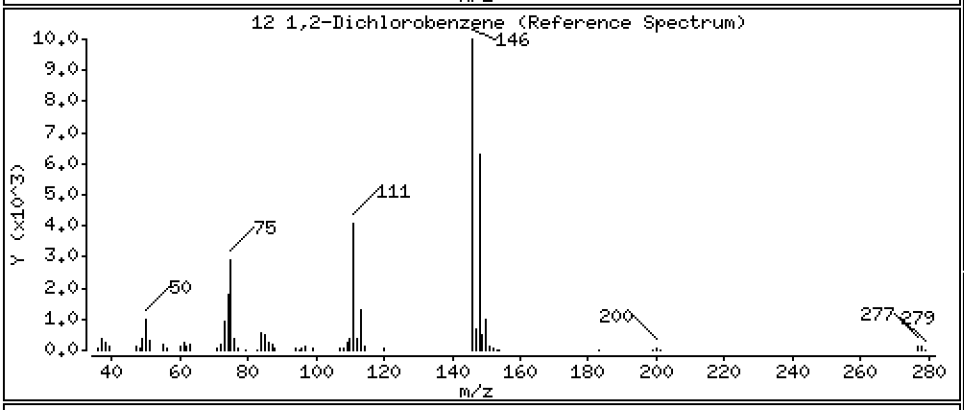
Column diameter: 0.25

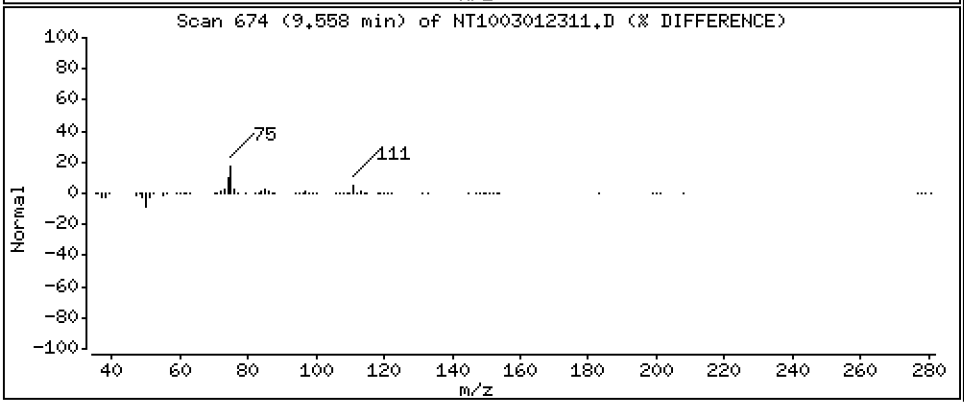
12 1,2-Dichlorobenzene

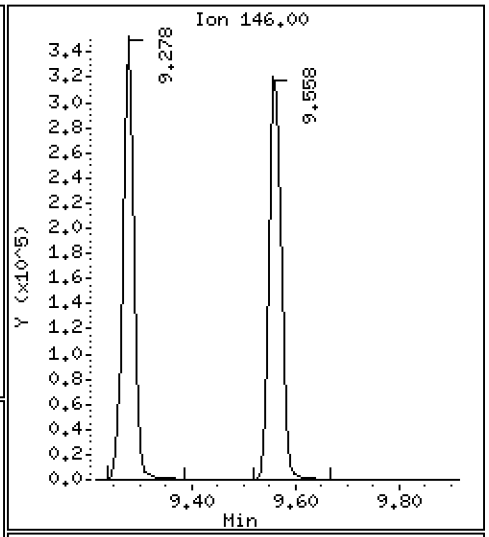
Concentration: 5.194 ug/mL

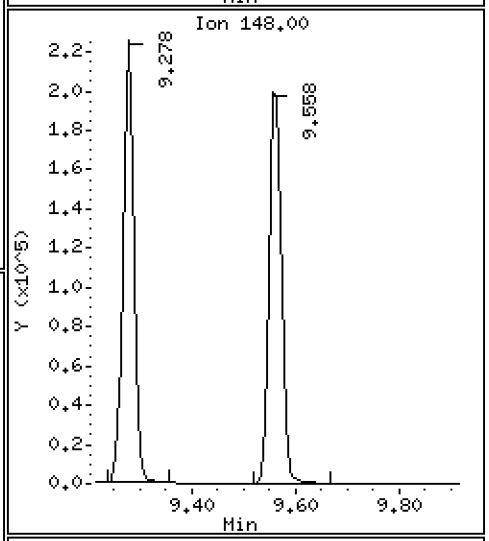


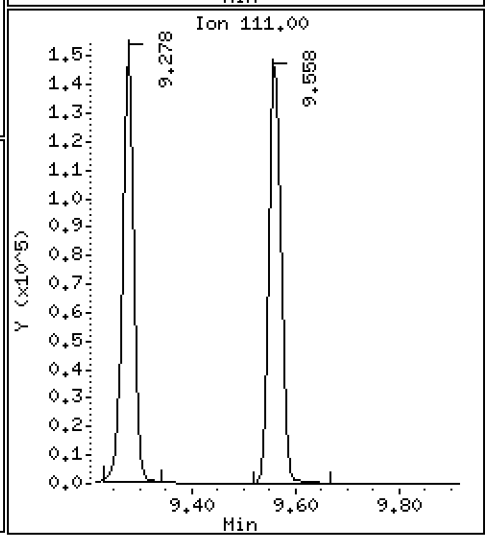












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

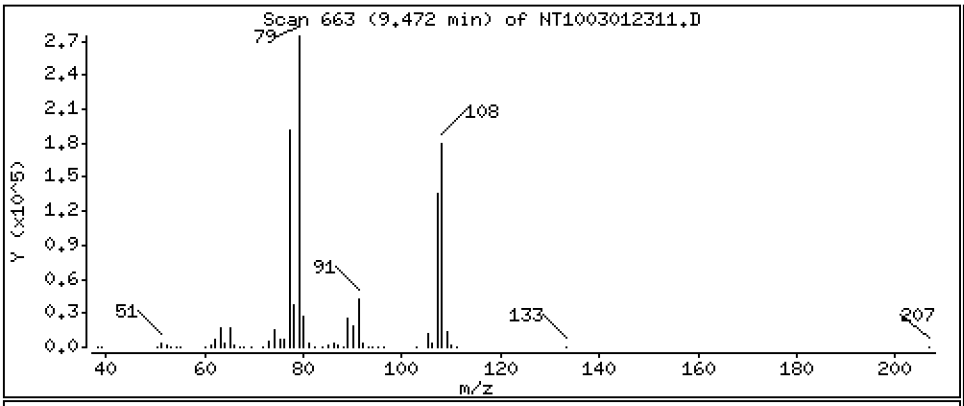
Operator: VTS

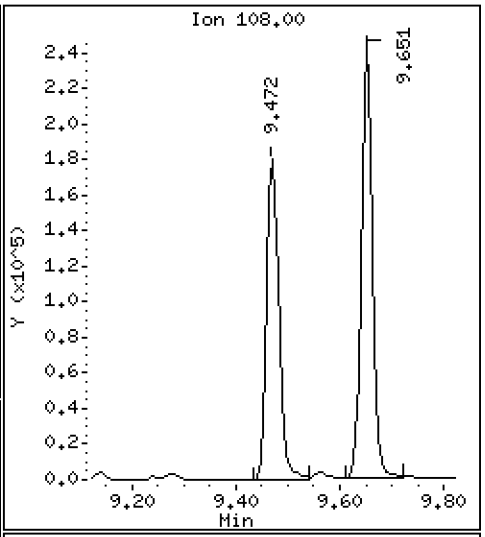
Column phase: ZB-5msi

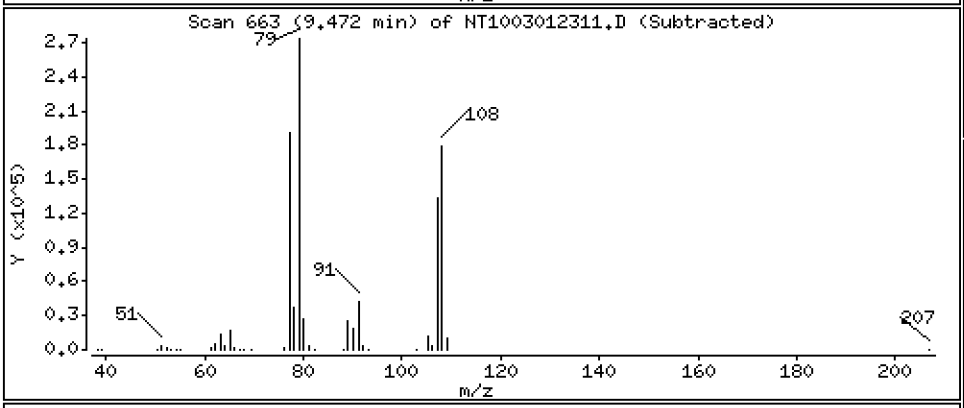
Column diameter: 0.25

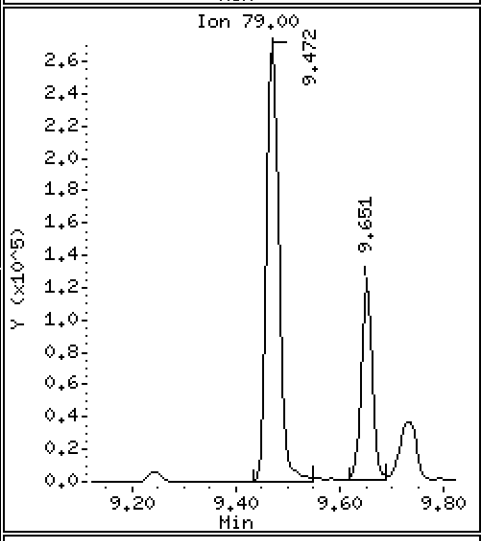
11 Benzyl alcohol

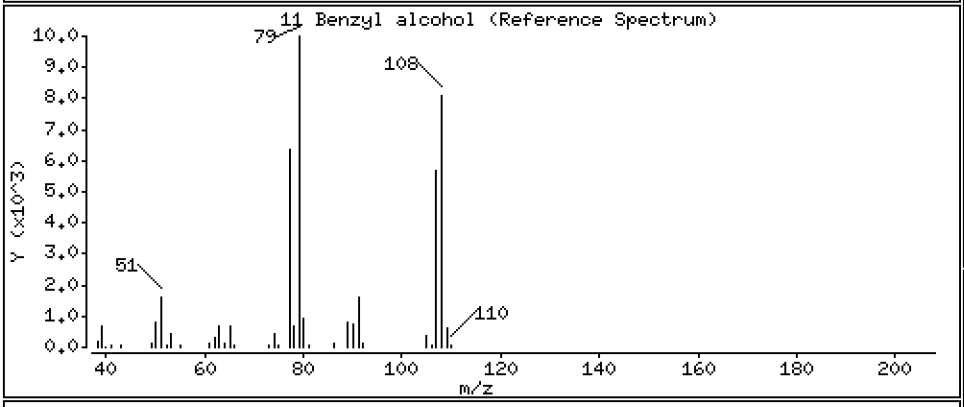
Concentration: 4.898 ug/mL

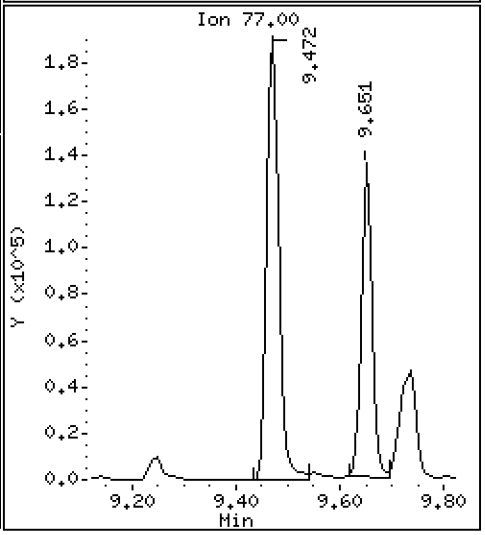


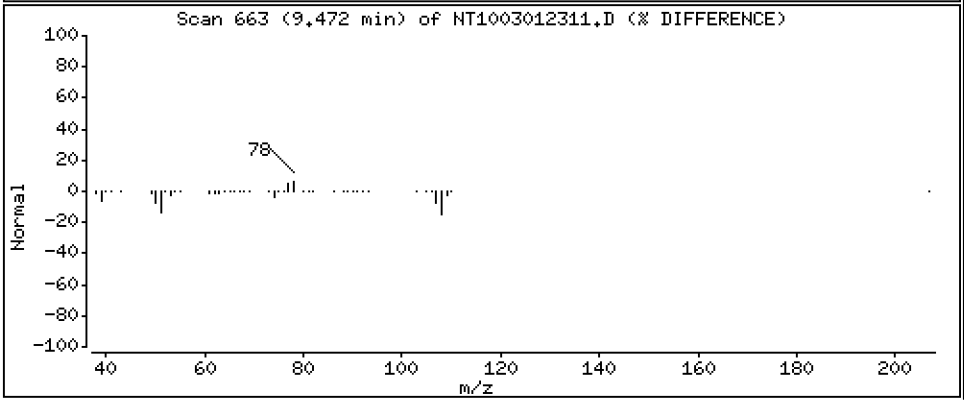












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

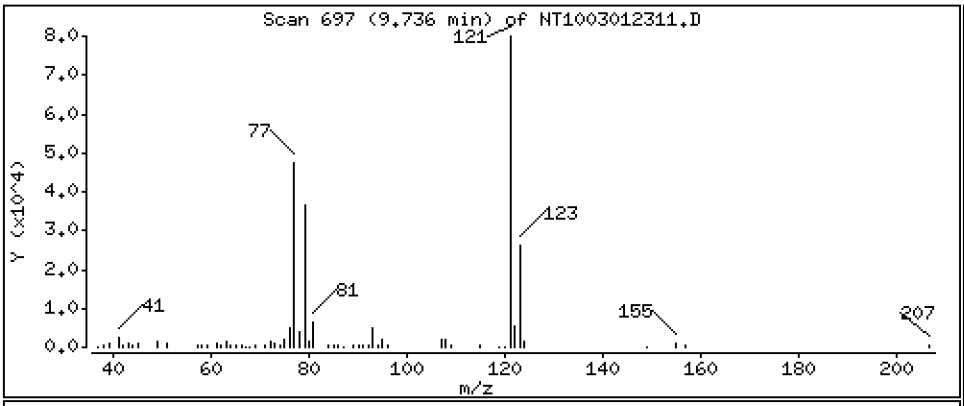
Operator: VTS

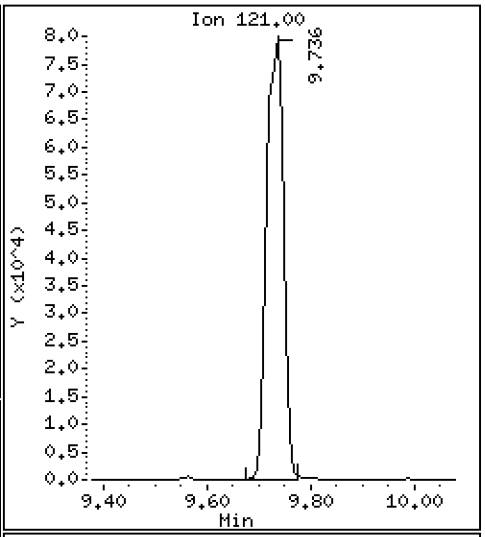
Column phase: ZB-5msi

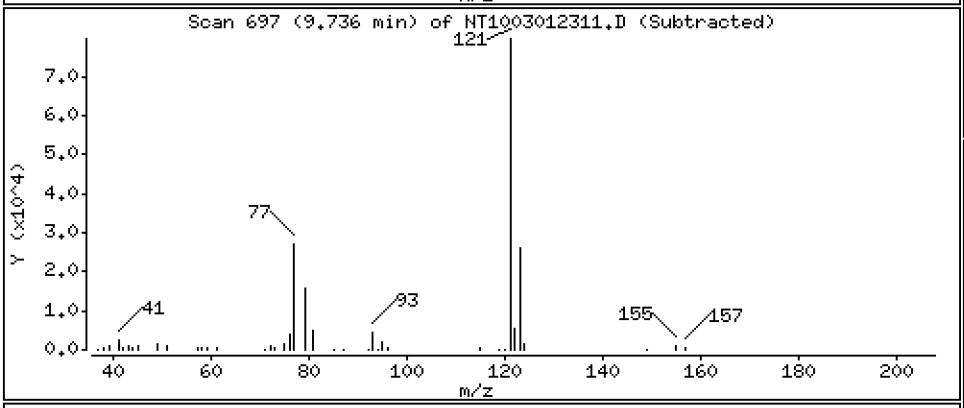
Column diameter: 0.25

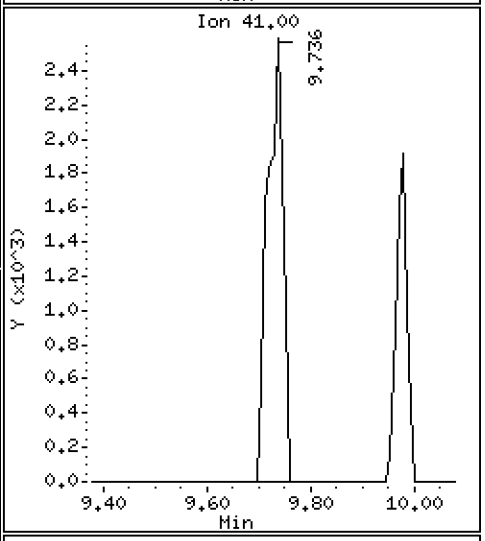
14 2,2'-oxybis(1-Chloropropane)

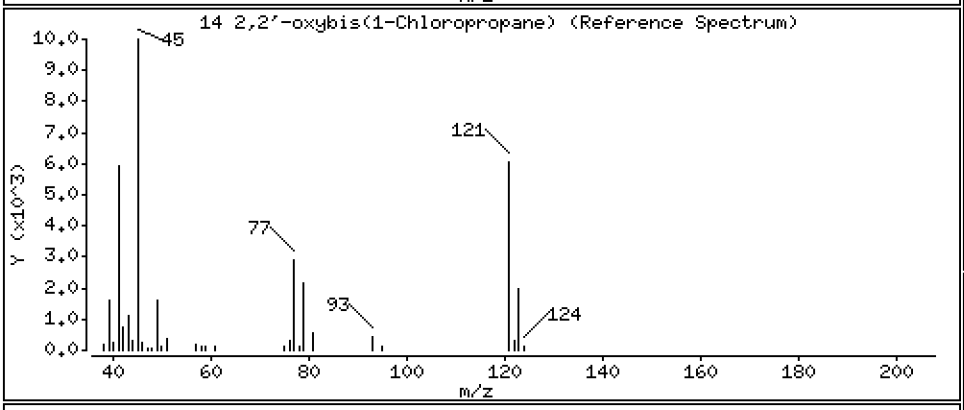
Concentration: 6.232 ug/mL

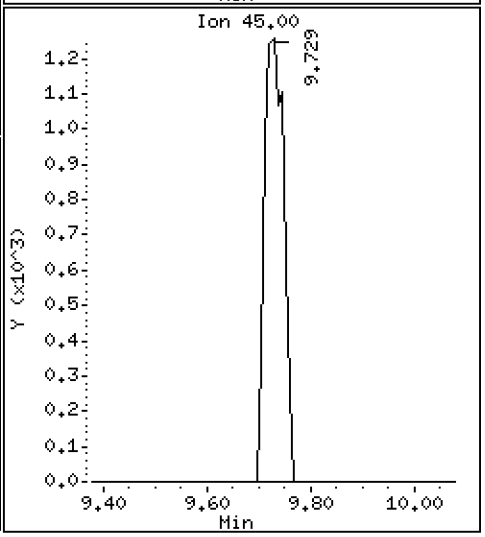


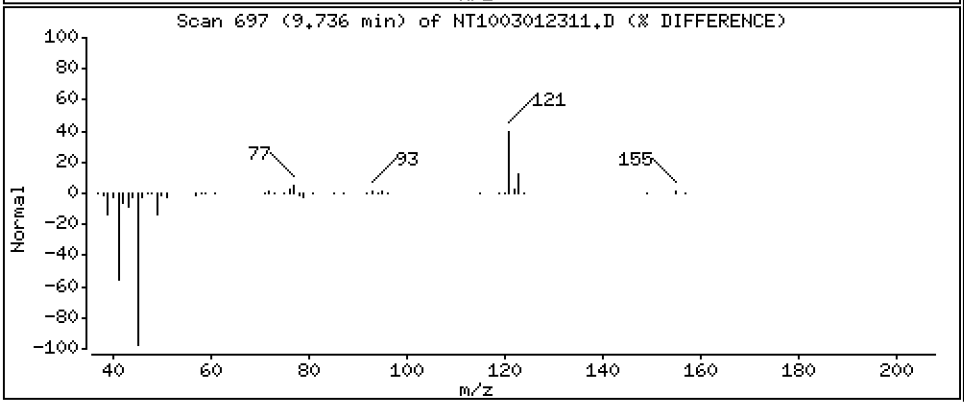












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

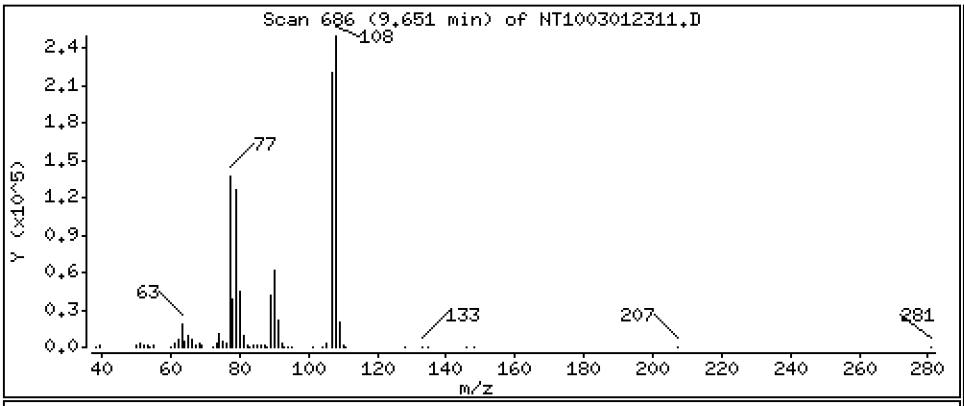
Operator: VTS

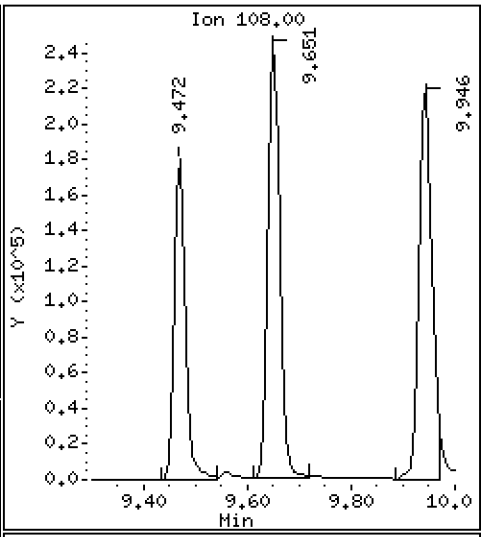
Column phase: ZB-5msi

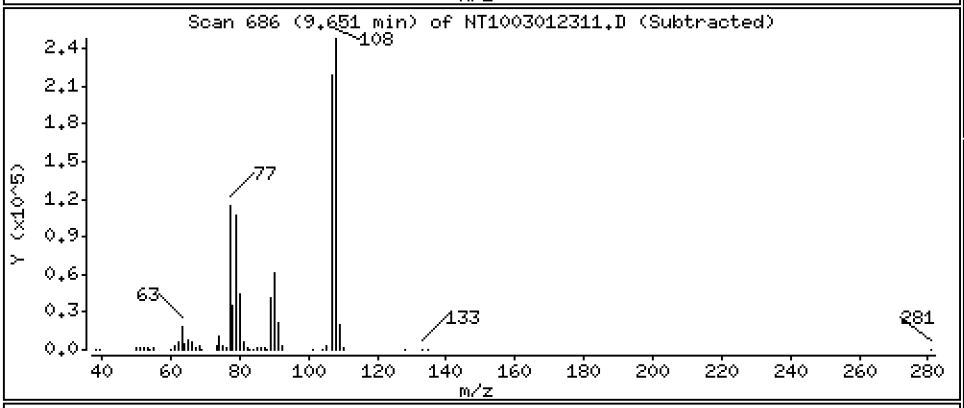
Column diameter: 0.25

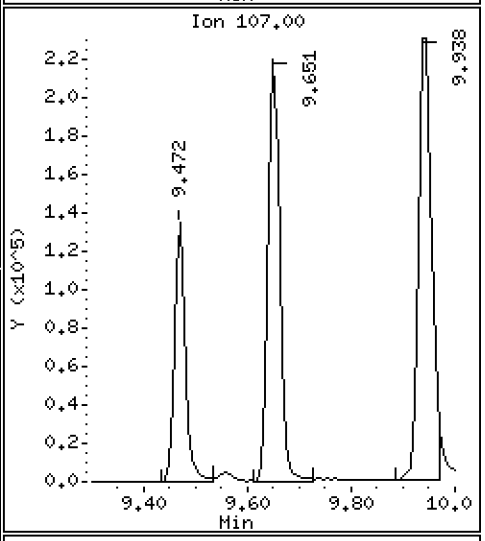
13 2-Methylphenol

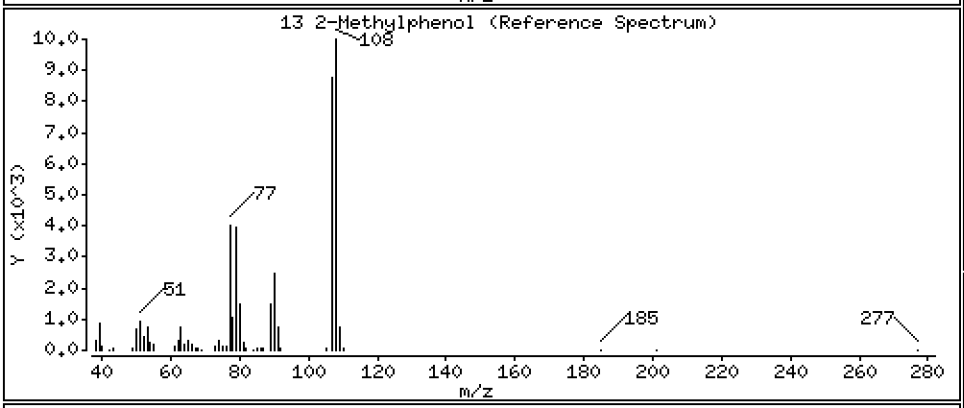
Concentration: 4.192 ug/mL

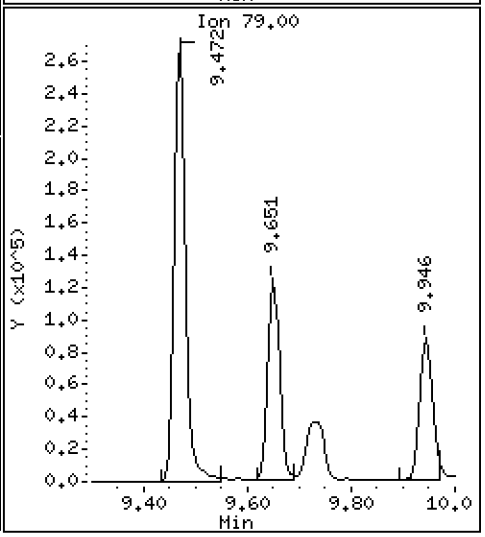


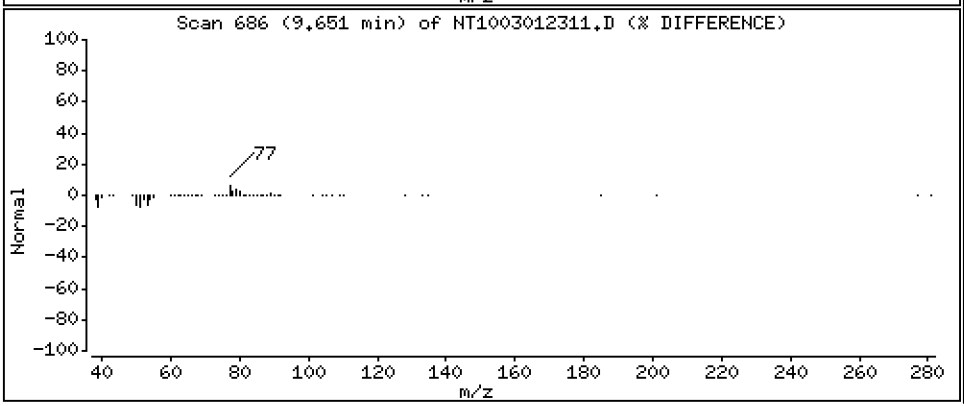












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

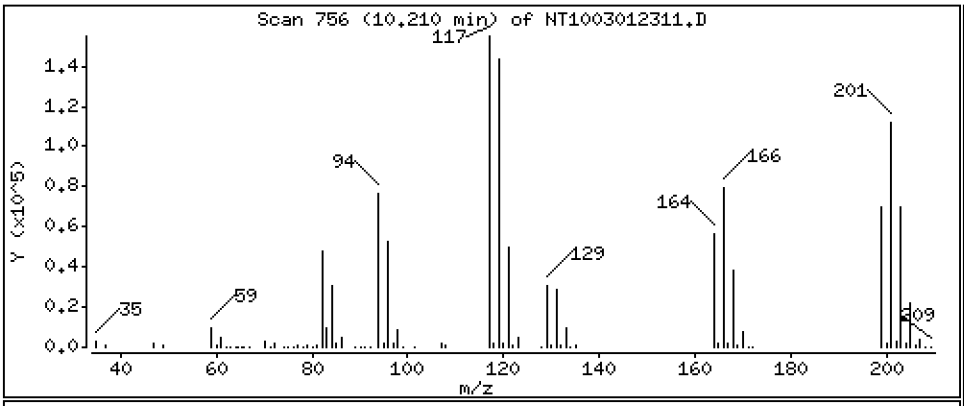
Operator: VTS

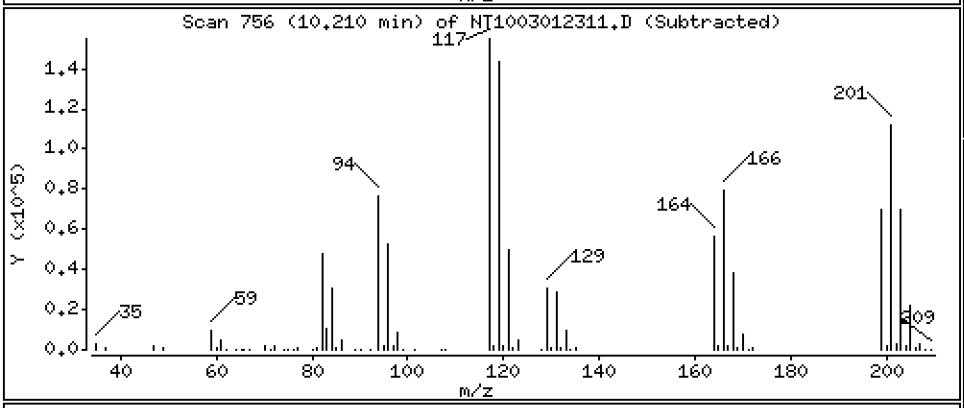
Column phase: ZB-5msi

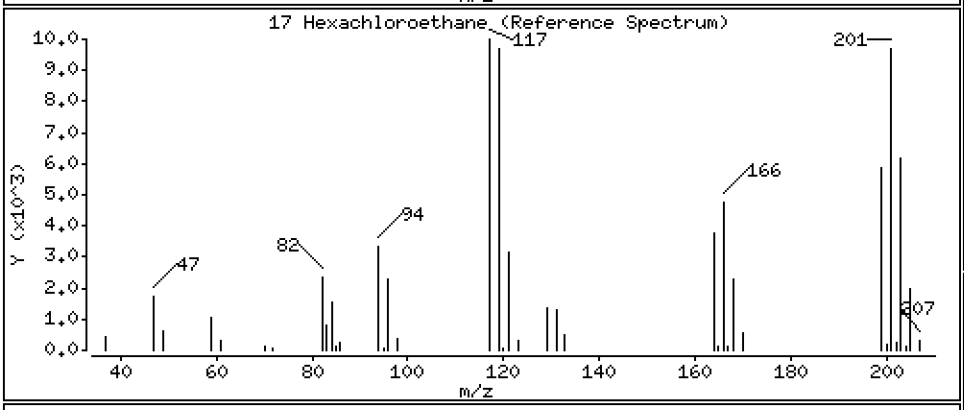
Column diameter: 0.25

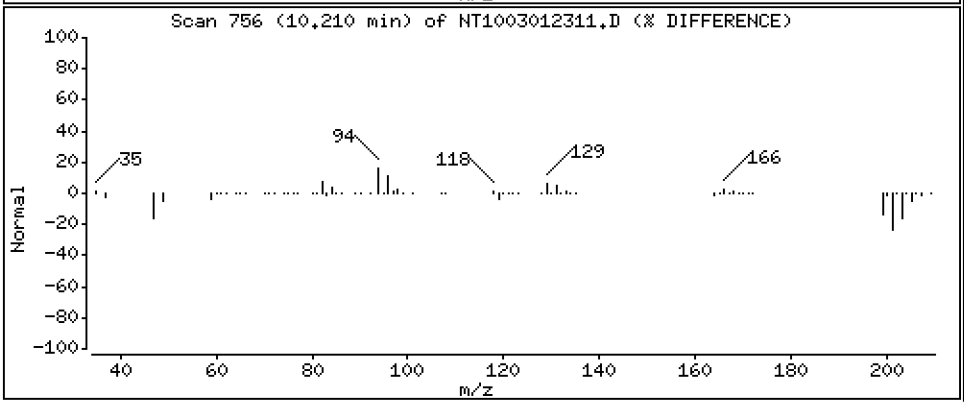
17 Hexachloroethane

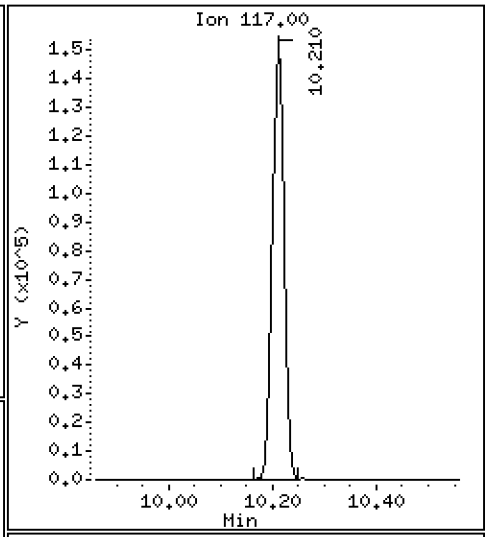
Concentration: 5.443 ug/mL

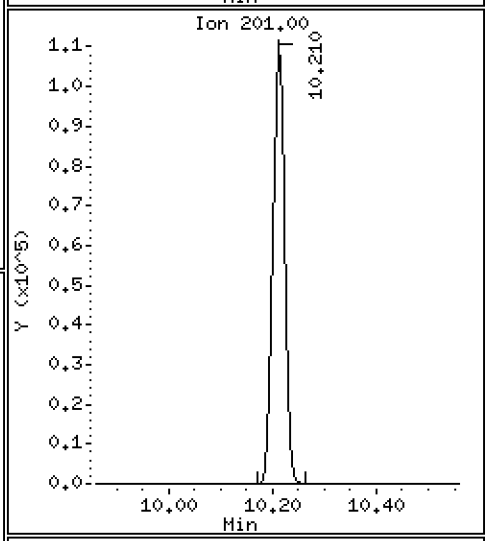


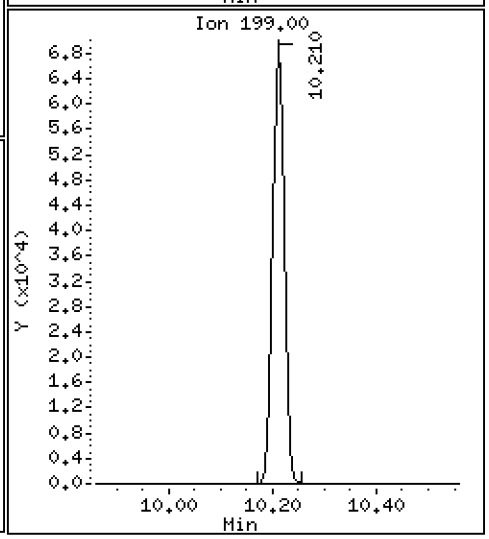












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

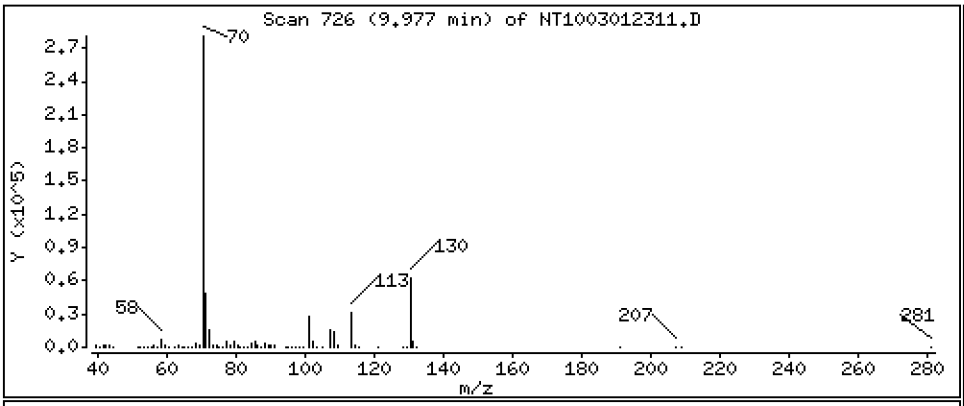
Operator: VTS

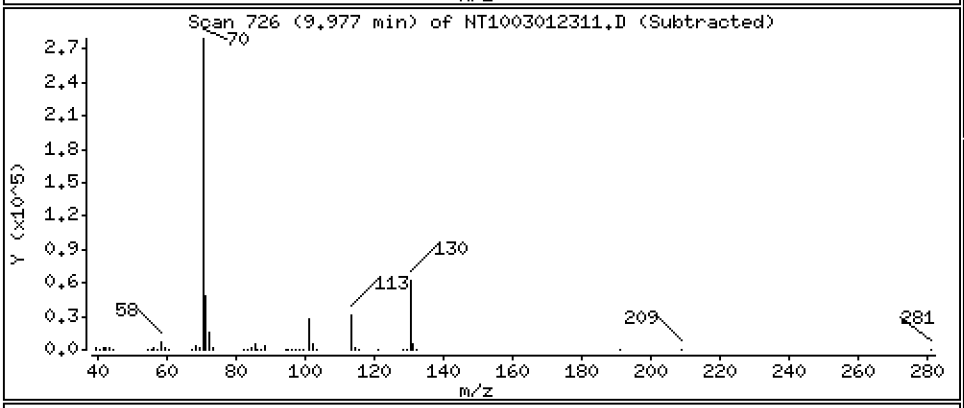
Column phase: ZB-5msi

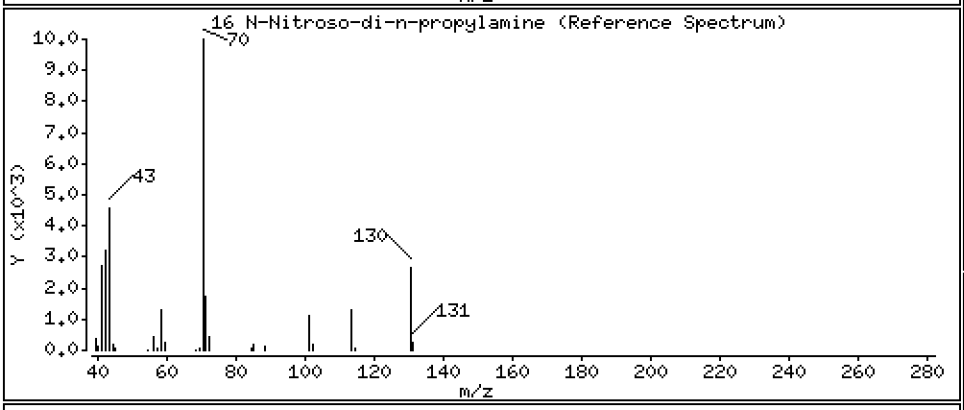
Column diameter: 0.25

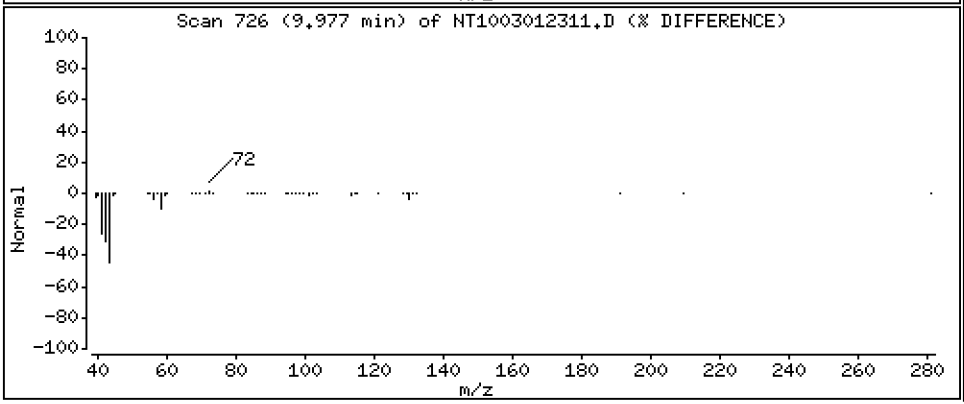
16 N-Nitroso-di-n-propylamine

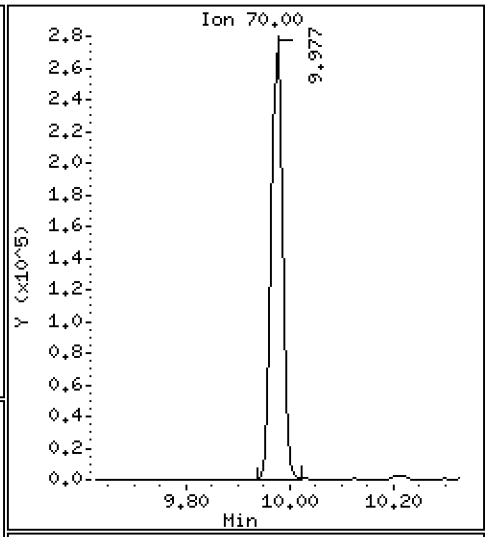
Concentration: 5.905 ug/mL

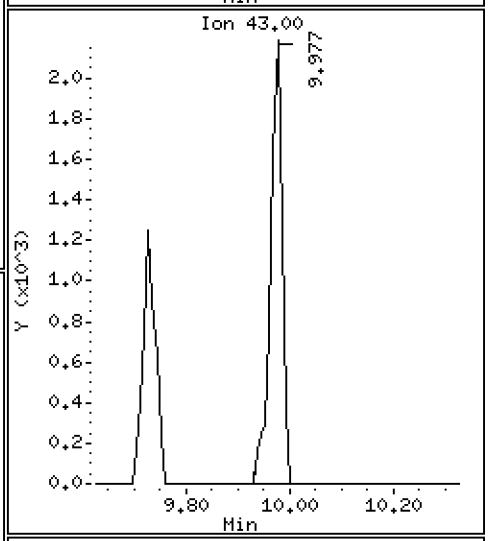


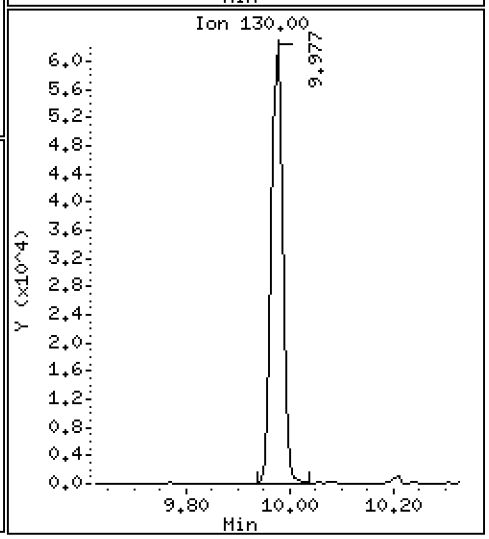












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

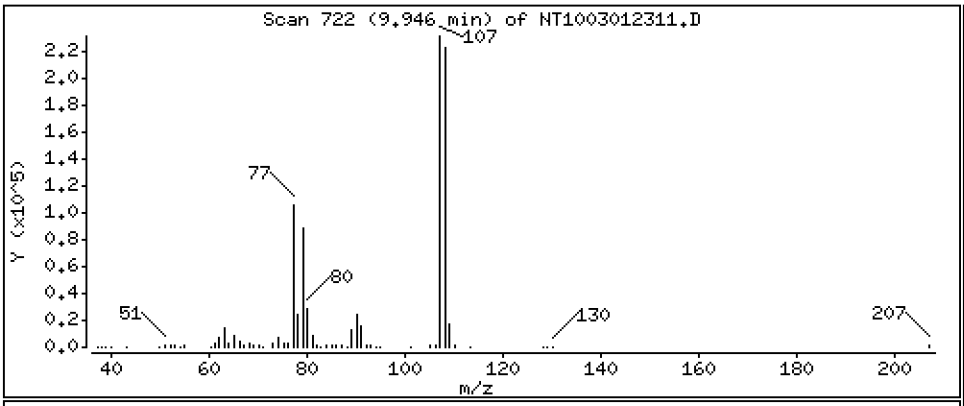
Operator: VTS

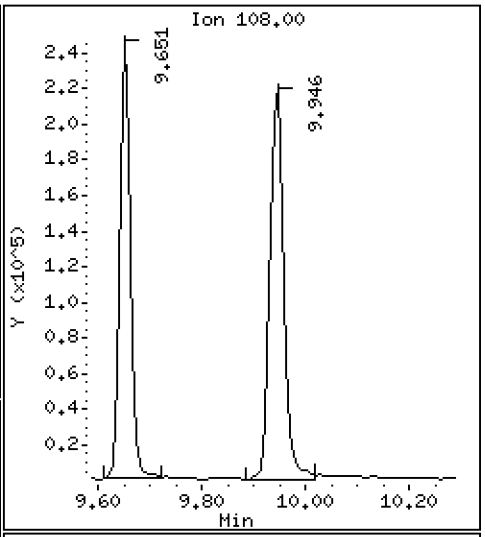
Column phase: ZB-5msi

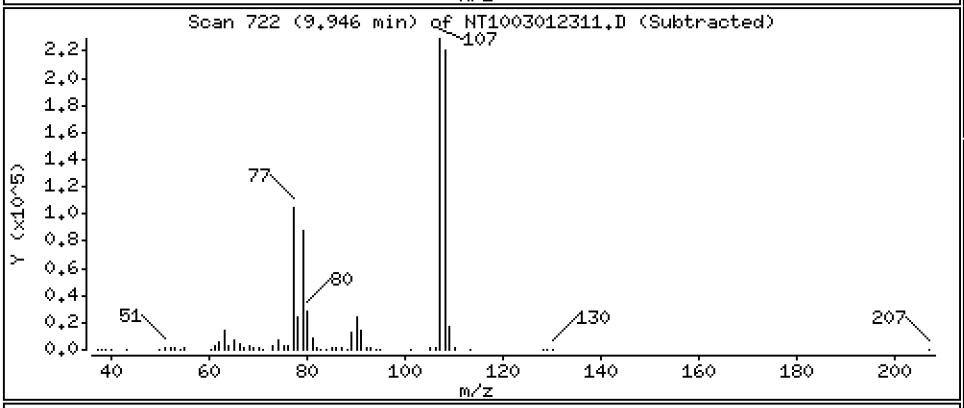
Column diameter: 0.25

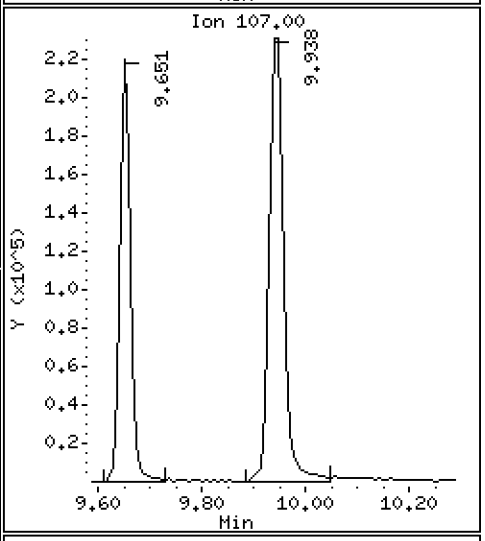
15 4-Methylphenol

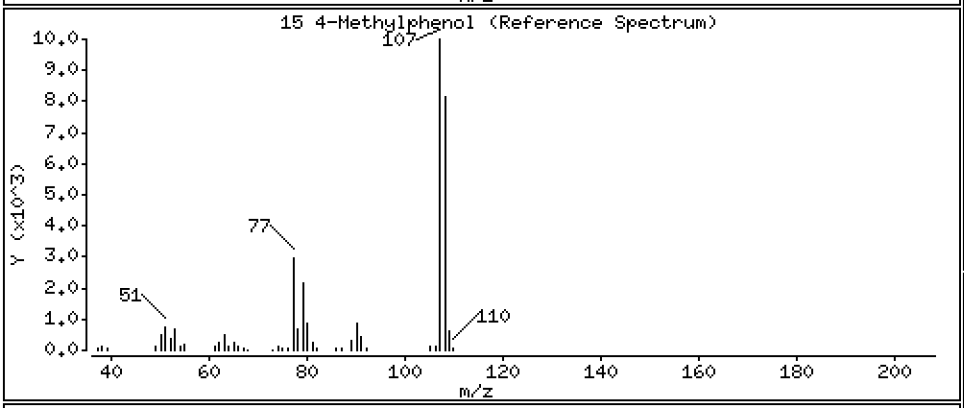
Concentration: 4.239 ug/mL

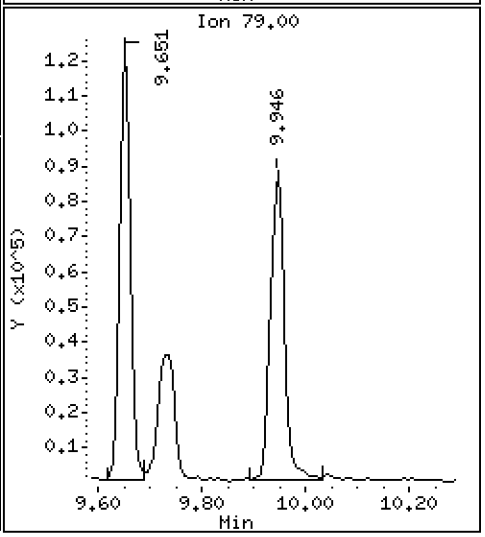


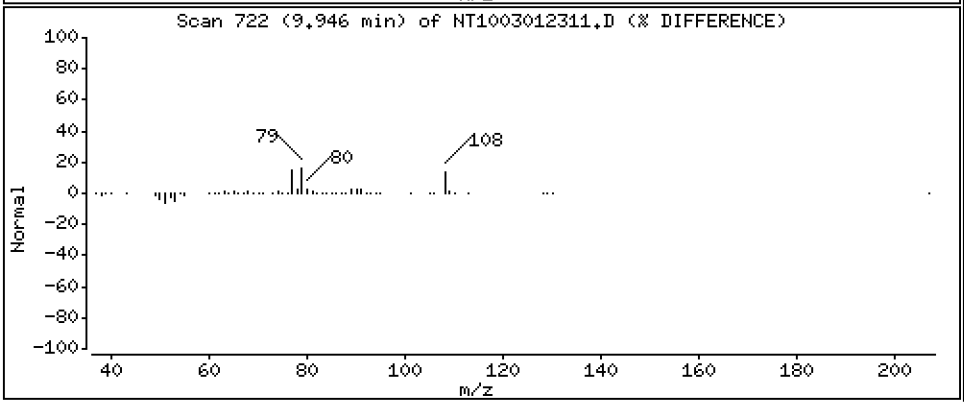












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

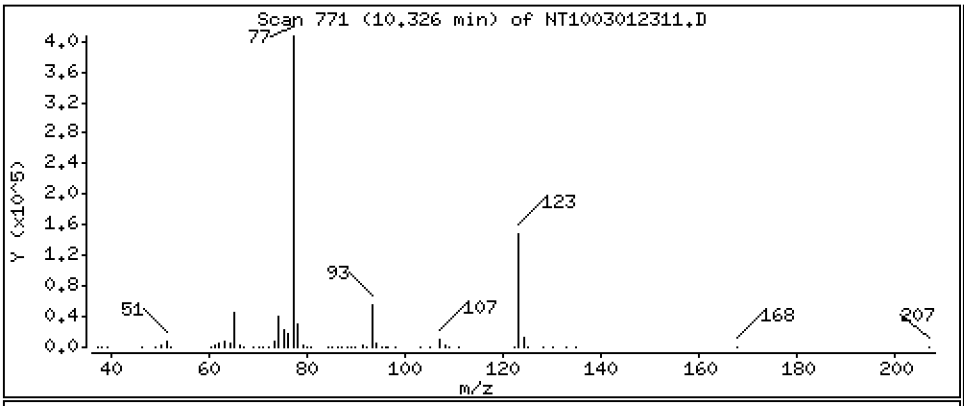
Operator: VTS

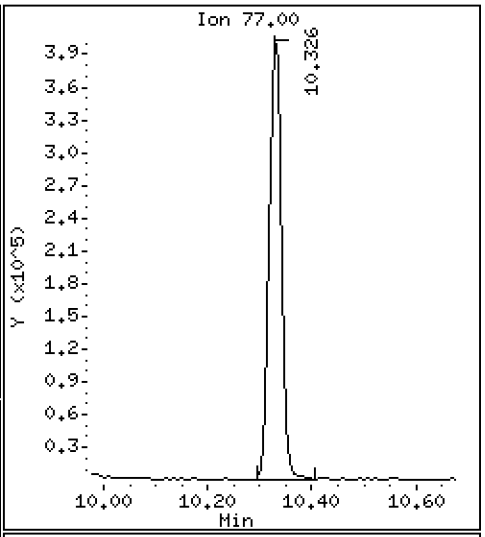
Column phase: ZB-5msi

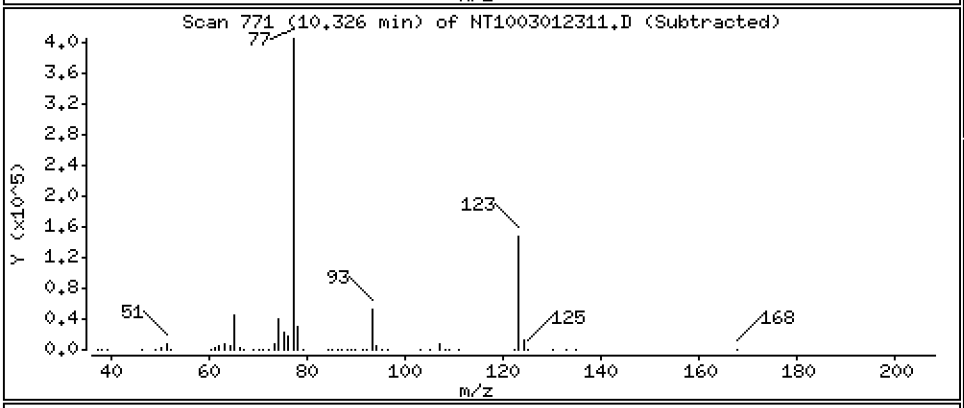
Column diameter: 0.25

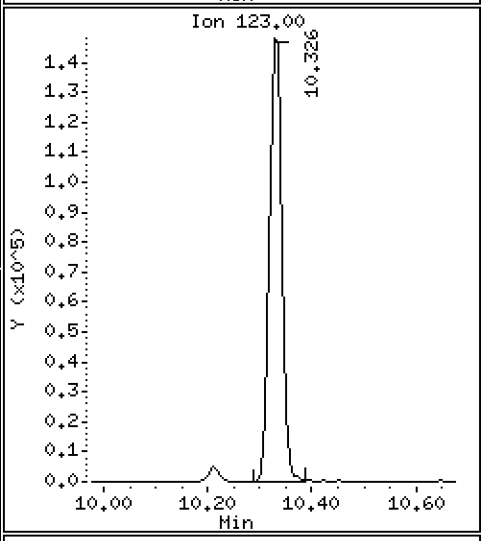
19 Nitrobenzene

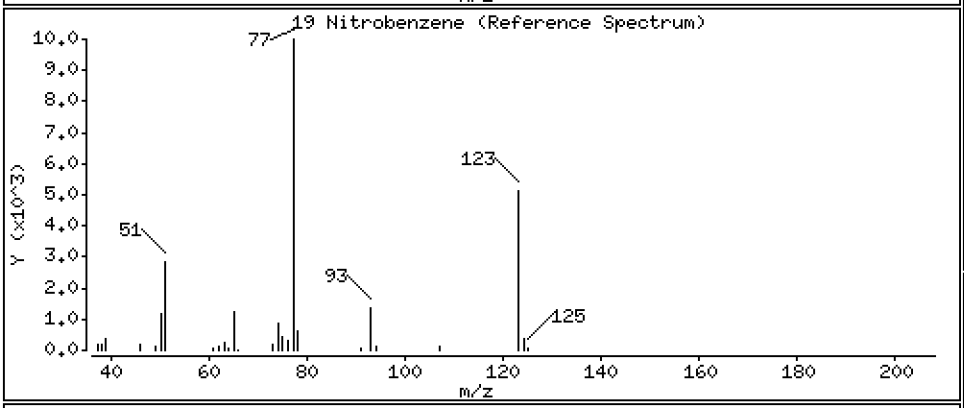
Concentration: 5.569 ug/mL

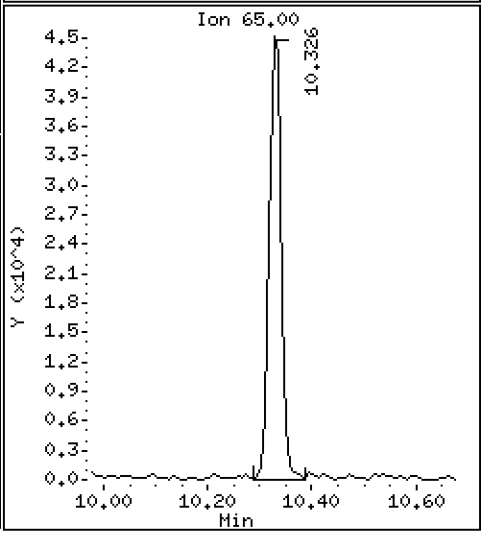


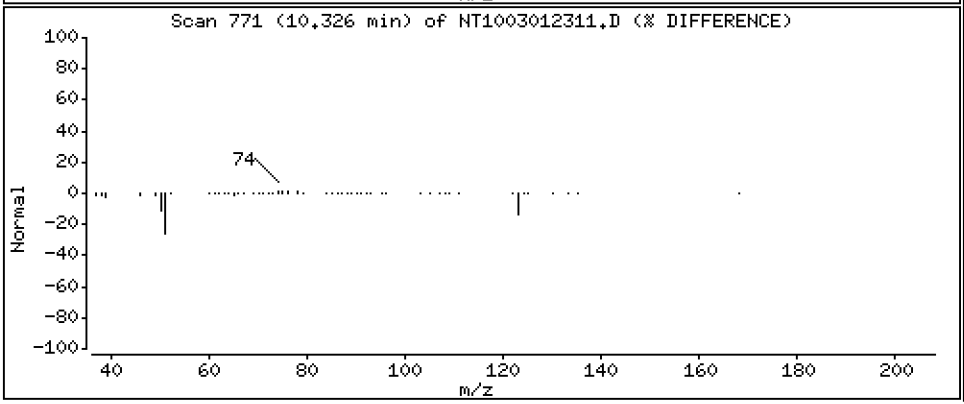












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

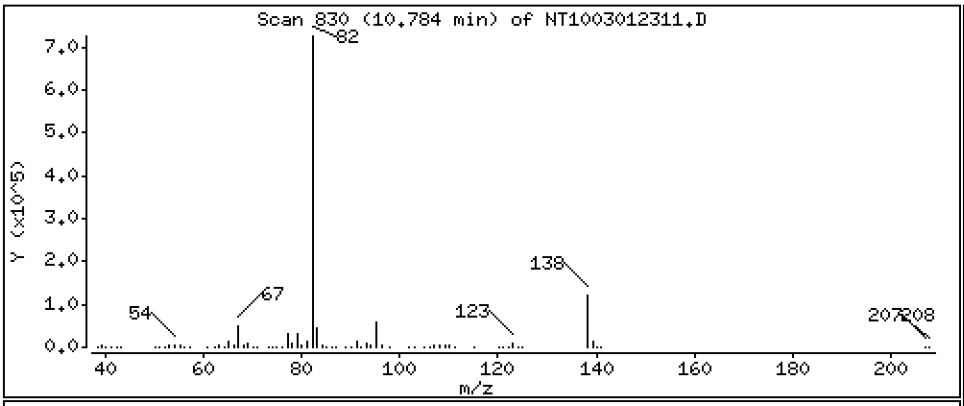
Operator: VTS

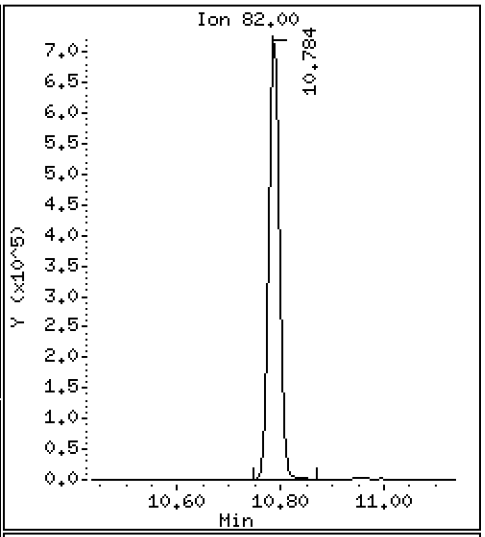
Column phase: ZB-5msi

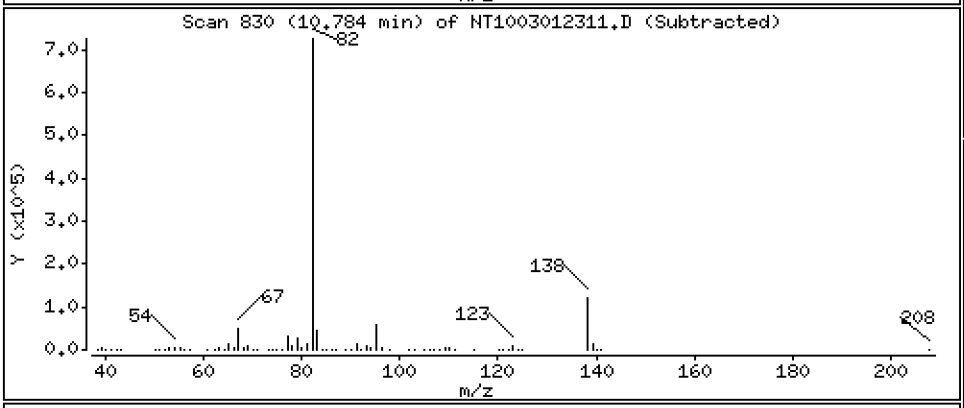
Column diameter: 0.25

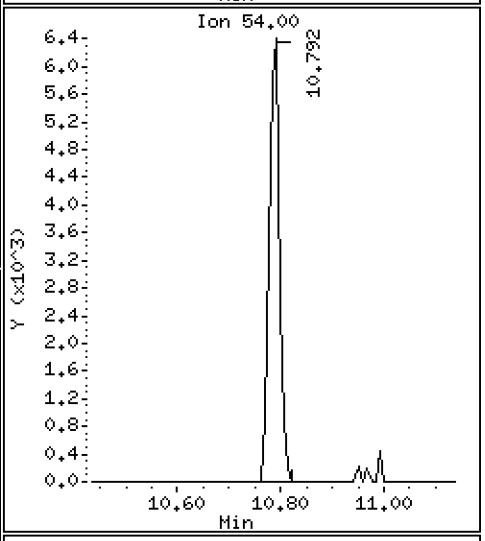
20 Isophorone

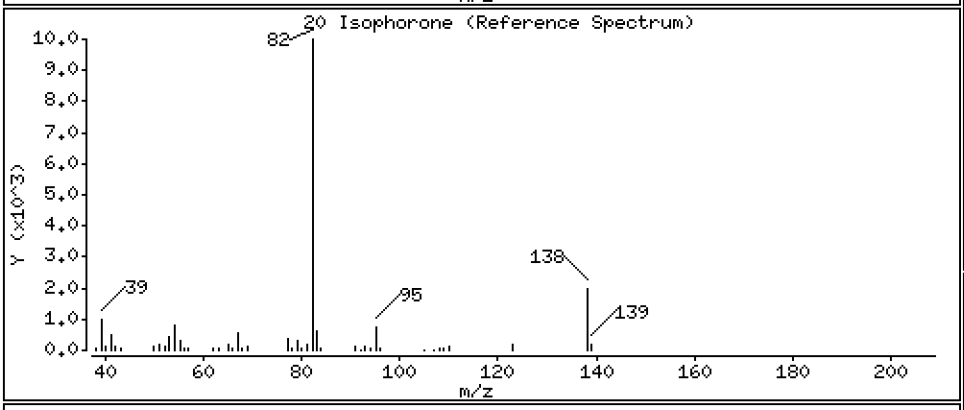
Concentration: 7.672 ug/mL

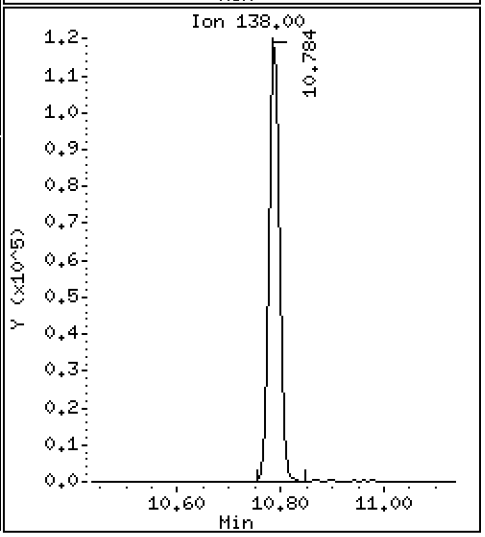


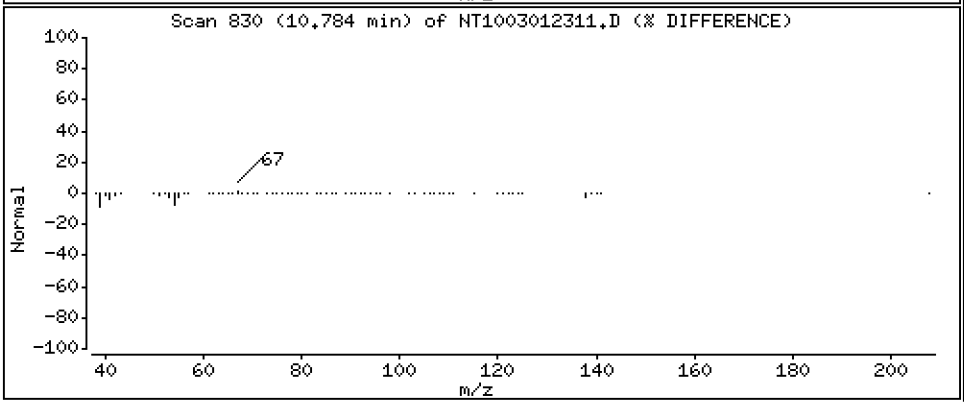












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

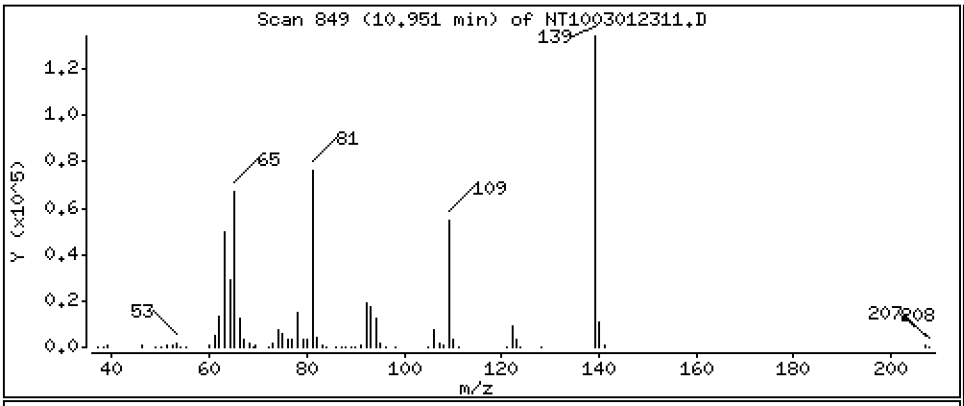
Operator: VTS

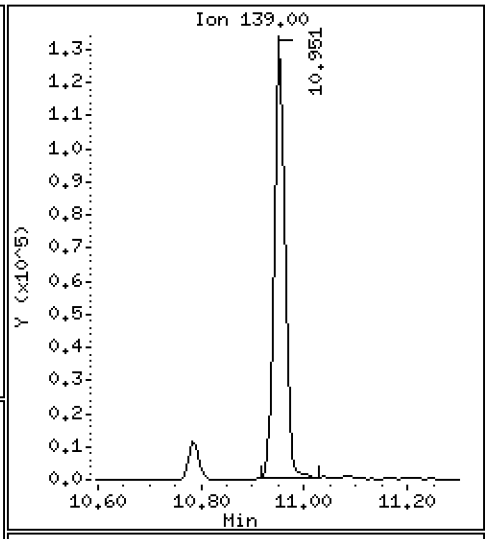
Column phase: ZB-5msi

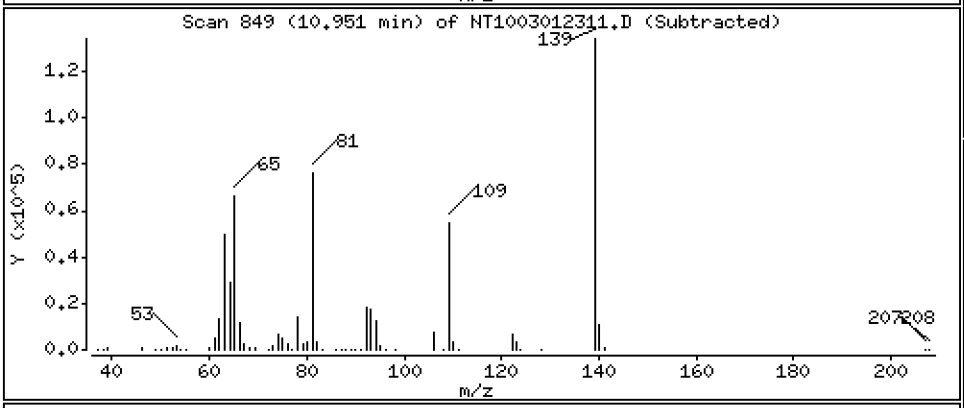
Column diameter: 0.25

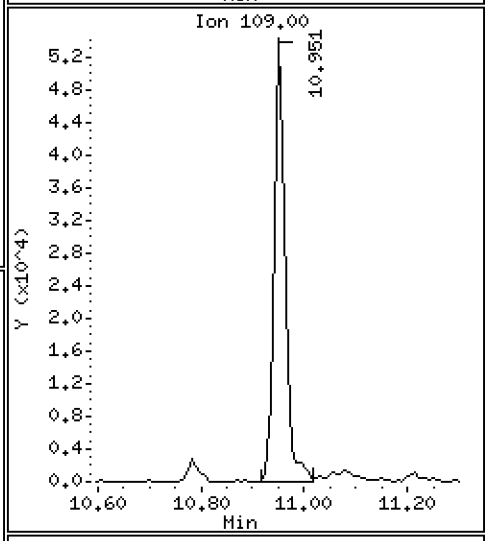
21 2-Nitrophenol

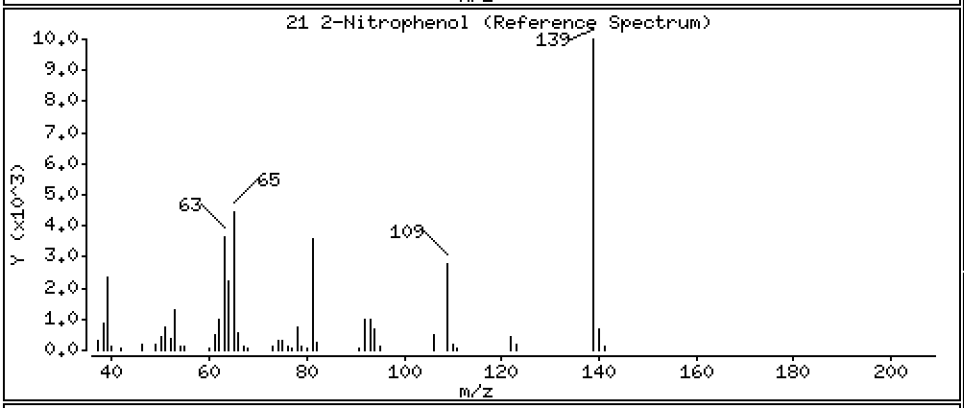
Concentration: 3.244 ug/mL

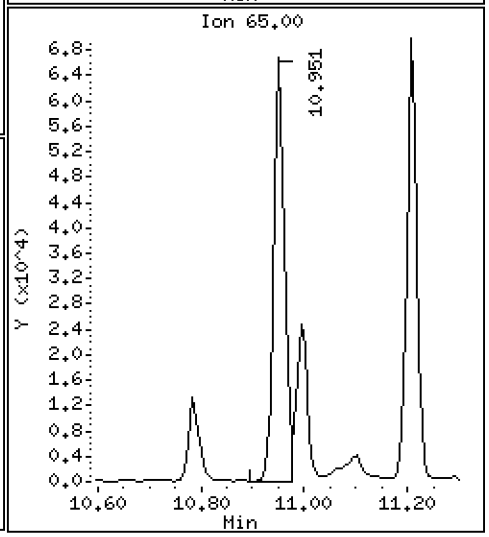


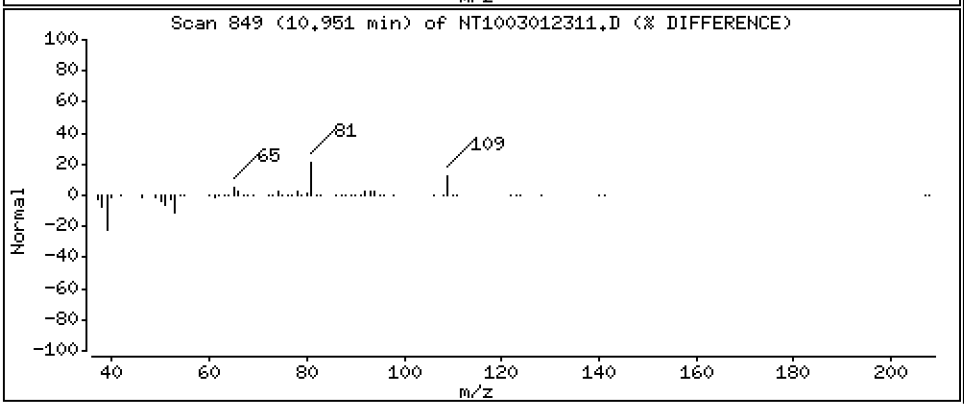












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

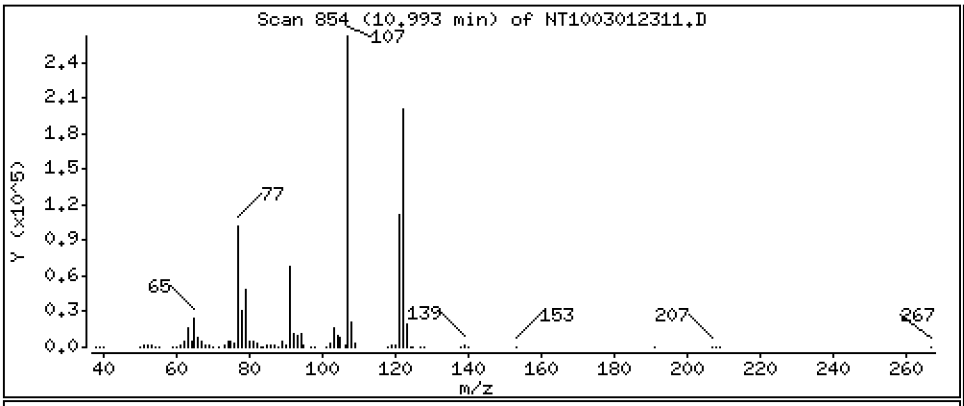
Operator: VTS

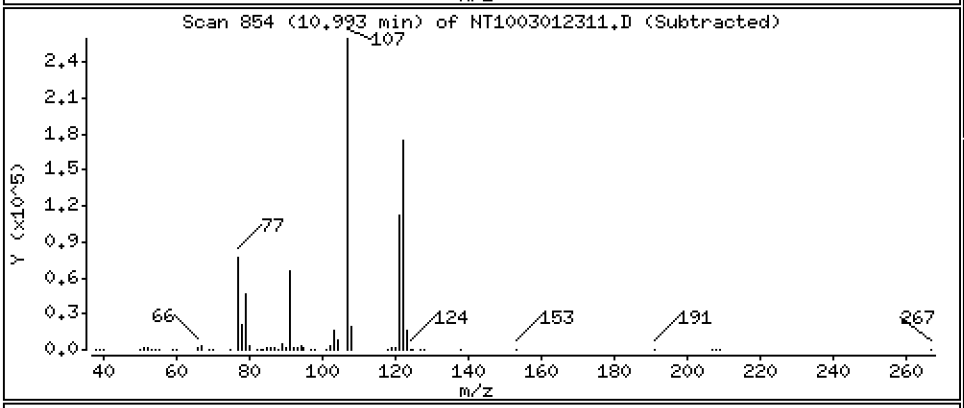
Column phase: ZB-5msi

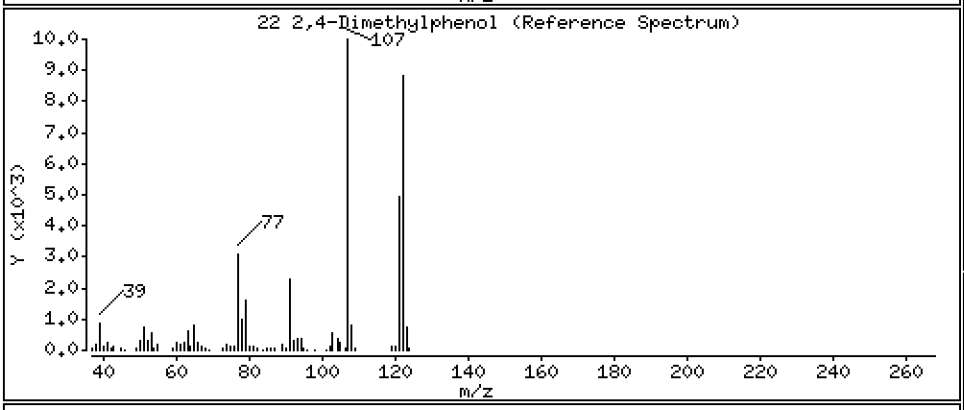
Column diameter: 0.25

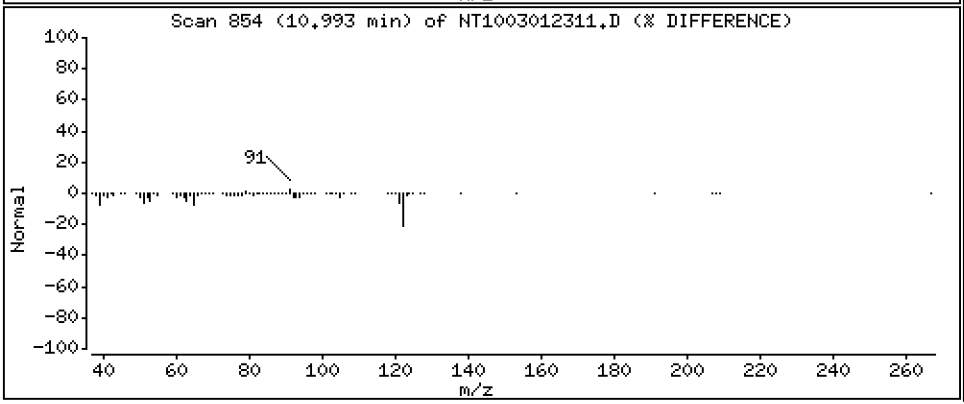
22 2,4-Dimethylphenol

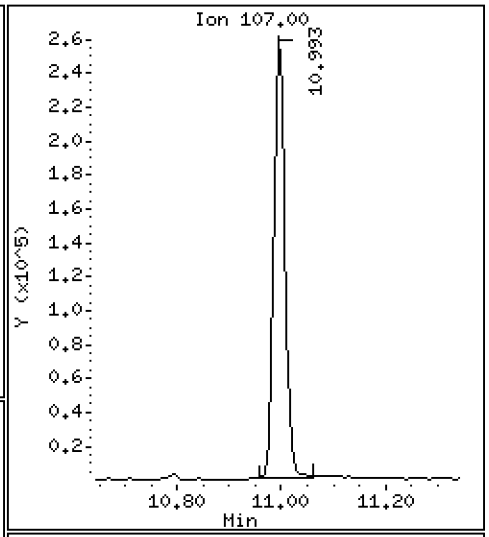
Concentration: 3.507 ug/mL

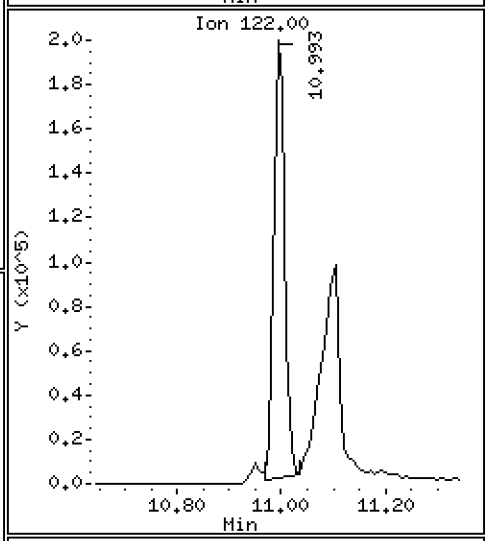


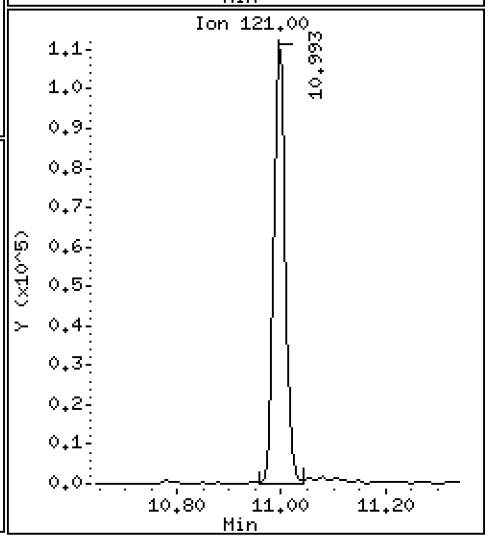












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

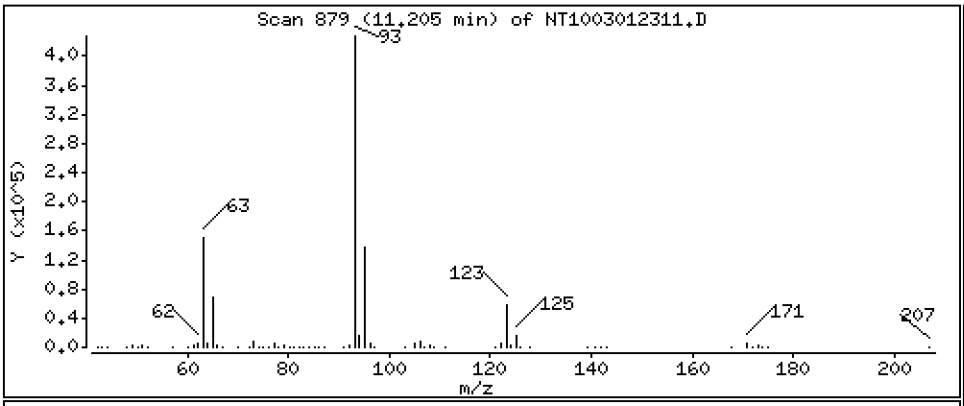
Operator: VTS

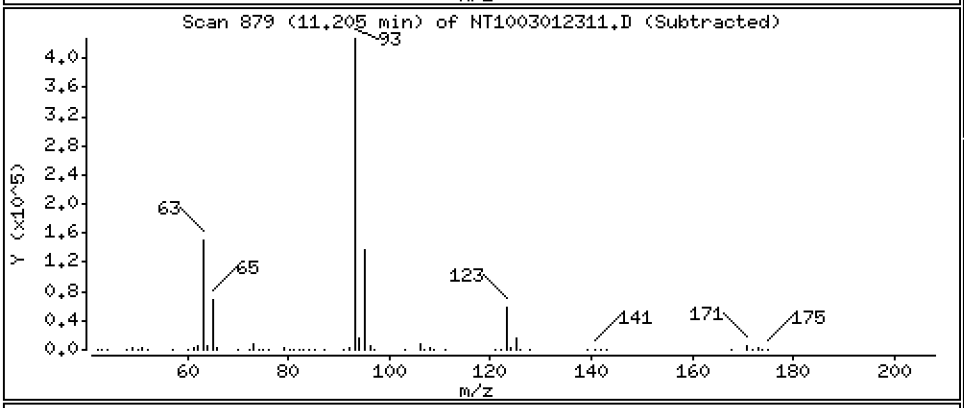
Column phase: ZB-5msi

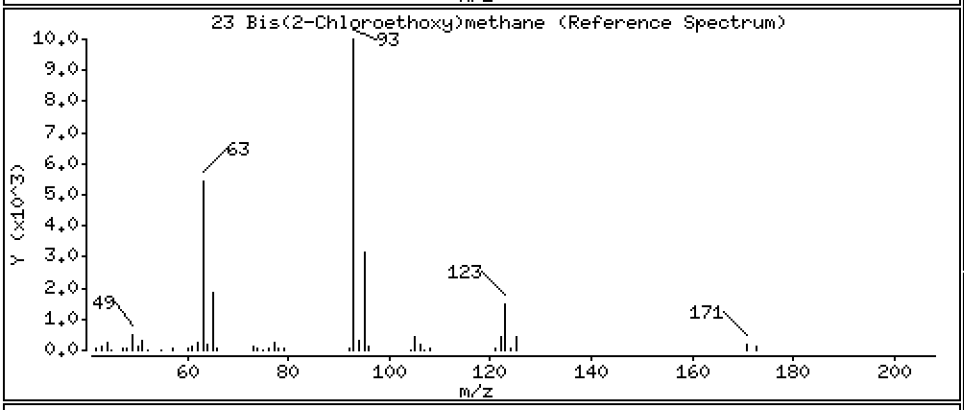
Column diameter: 0.25

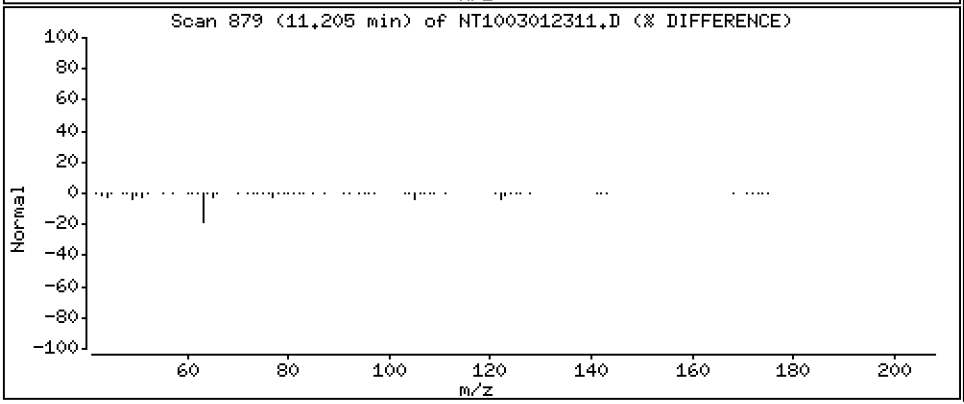
23 Bis(2-Chloroethoxy)methane

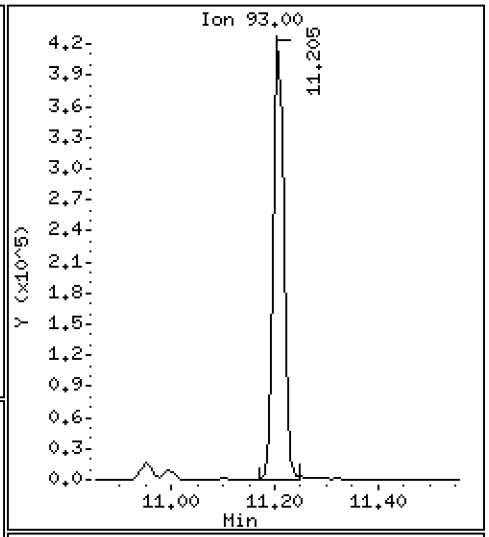
Concentration: 6.727 ug/mL

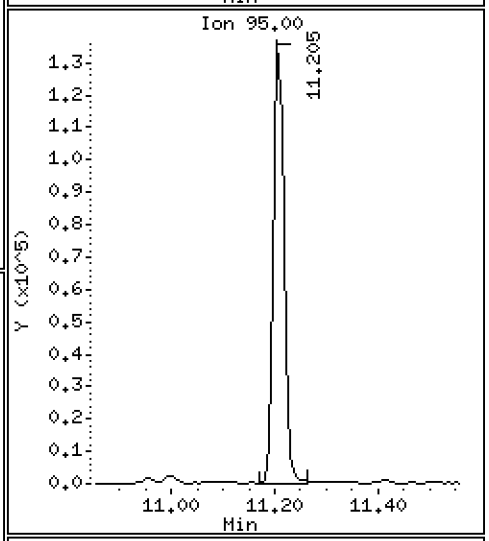


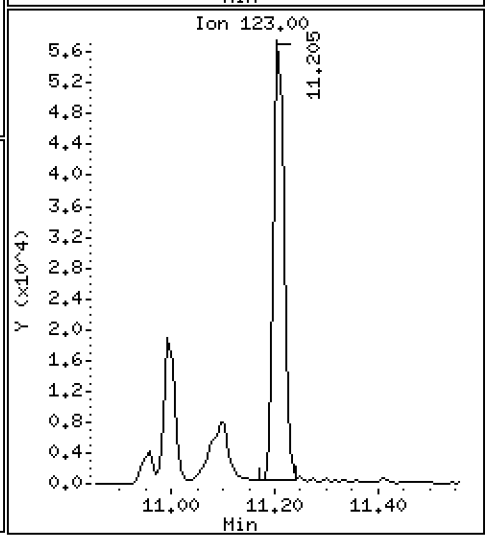












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

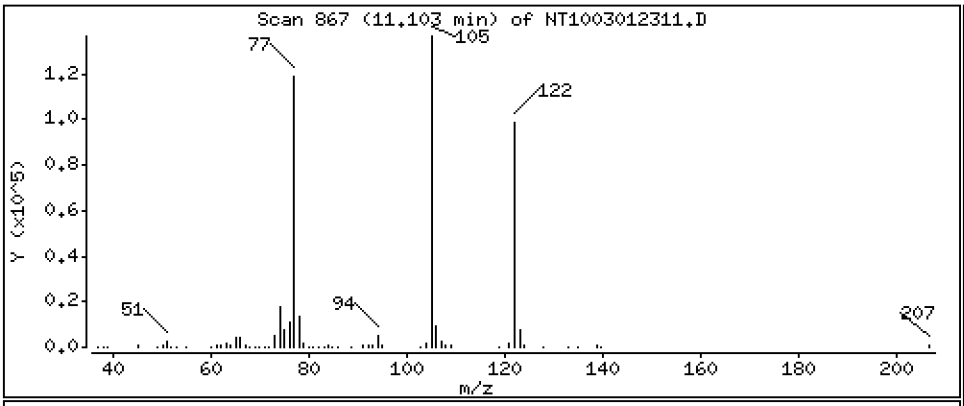
Operator: VTS

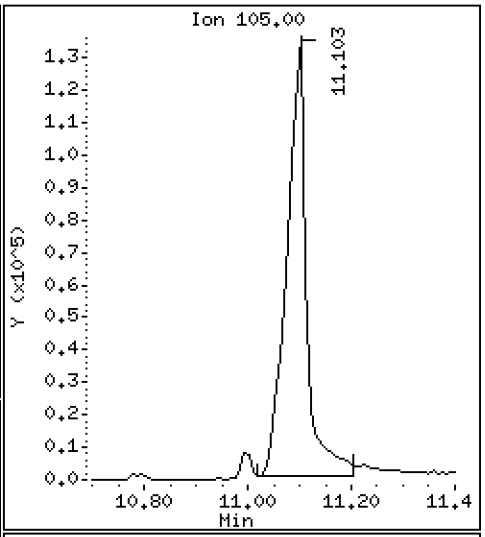
Column phase: ZB-5msi

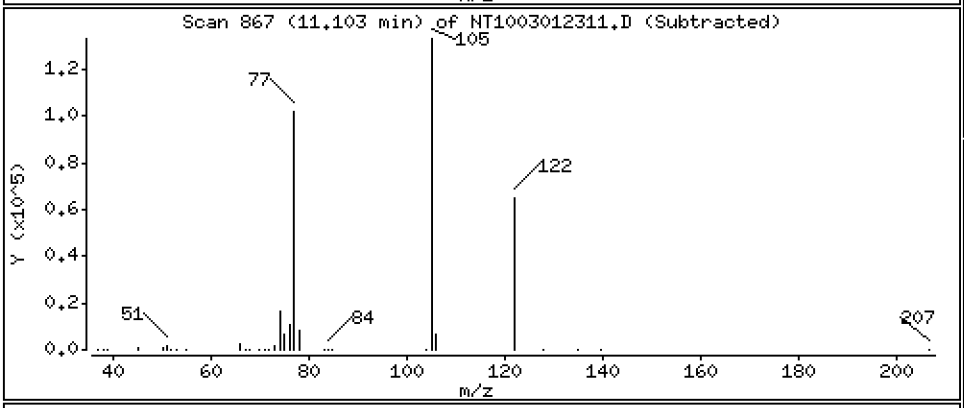
Column diameter: 0.25

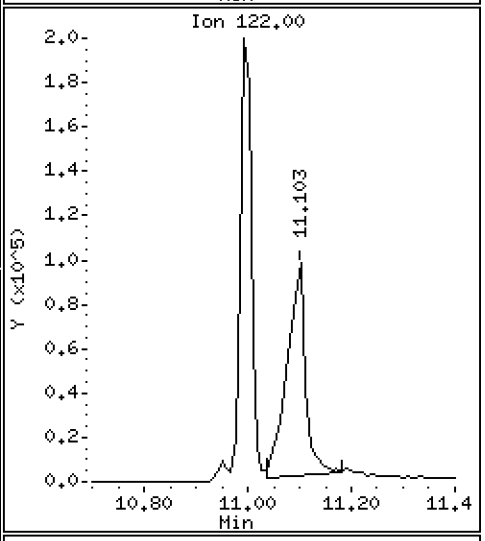
24 Benzoic acid

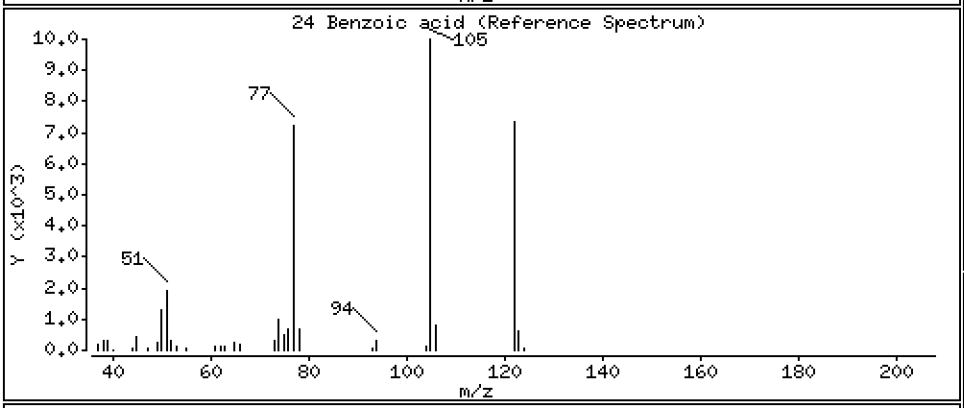
Concentration: 5.635 ug/mL

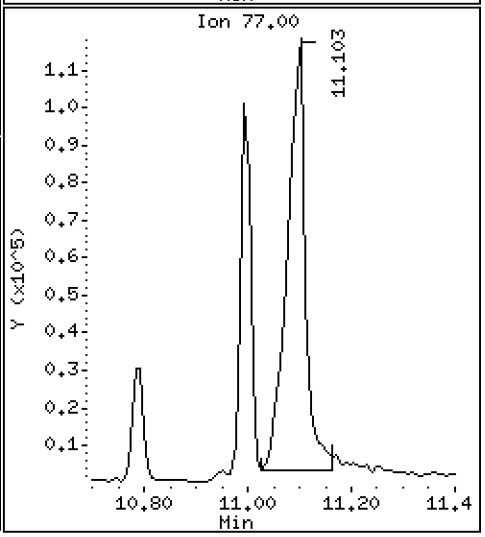


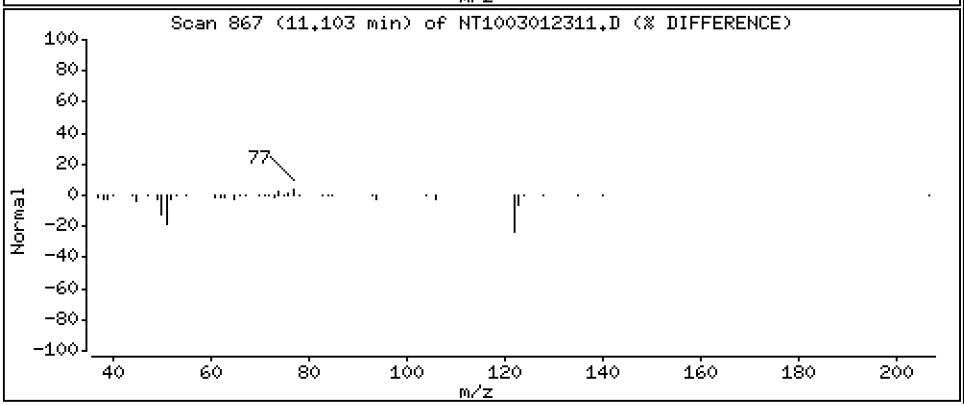












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

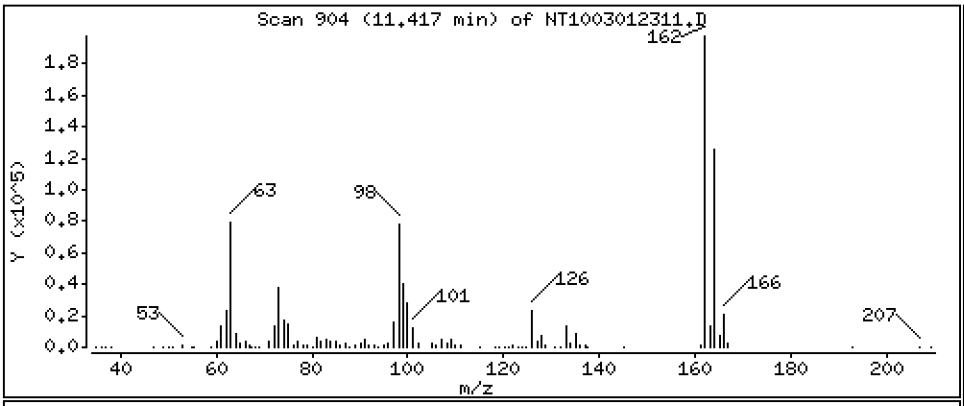
Operator: VTS

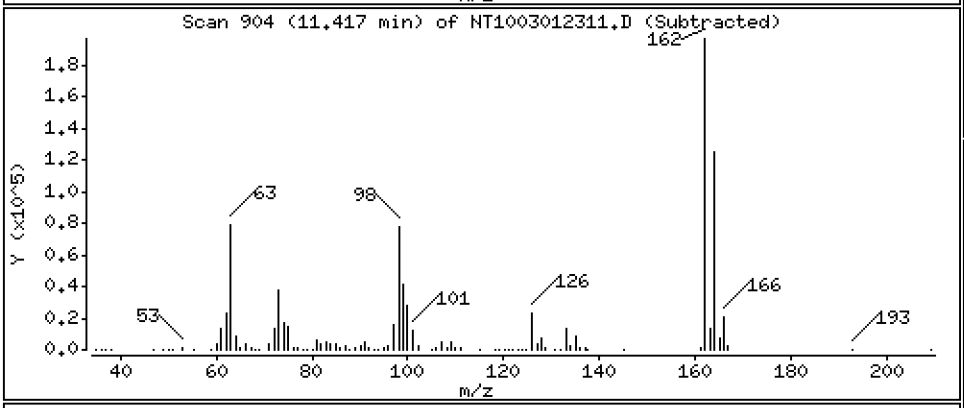
Column phase: ZB-5msi

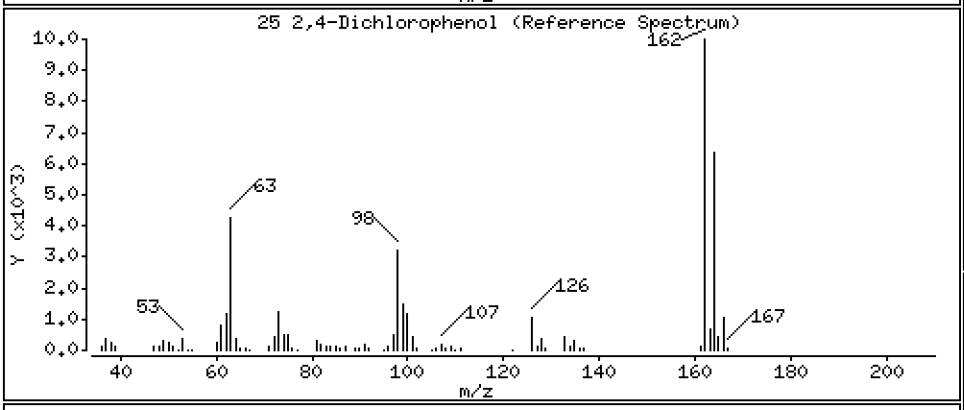
Column diameter: 0.25

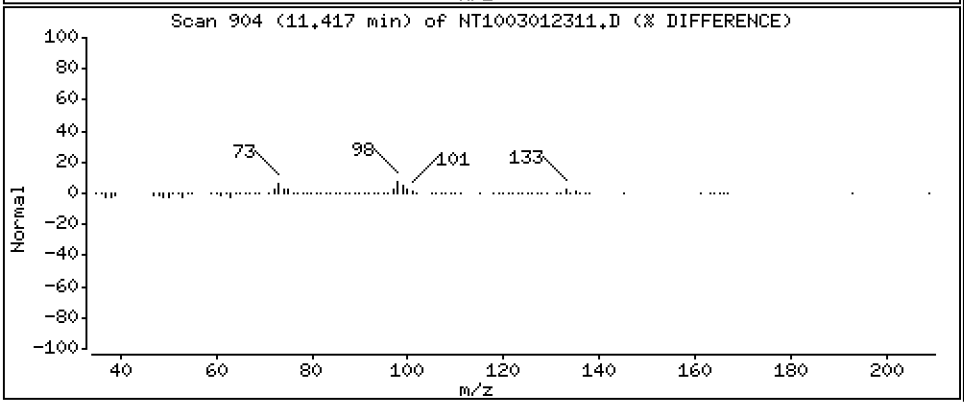
25 2,4-Dichlorophenol

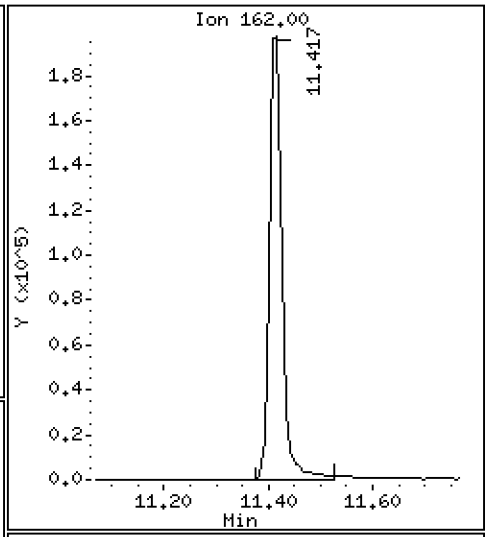
Concentration: 4.437 ug/mL

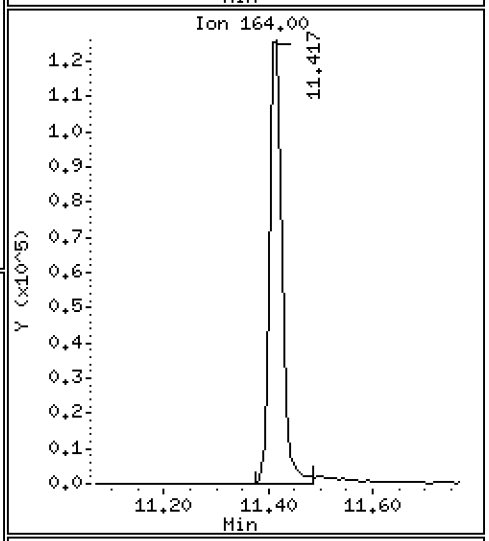


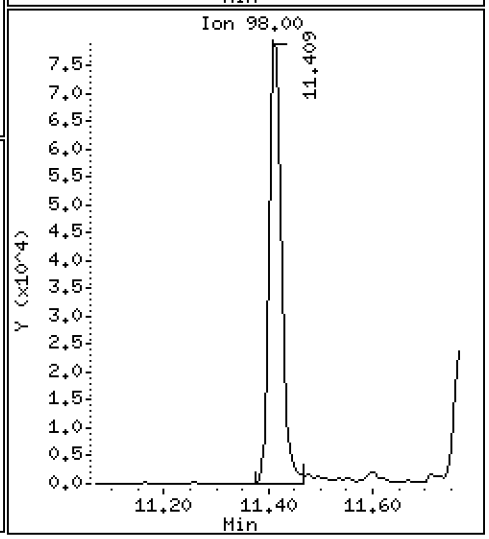












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

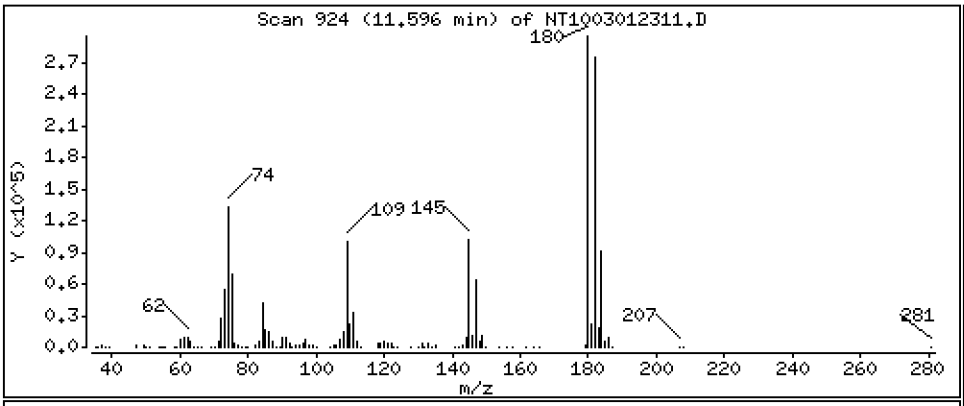
Operator: VTS

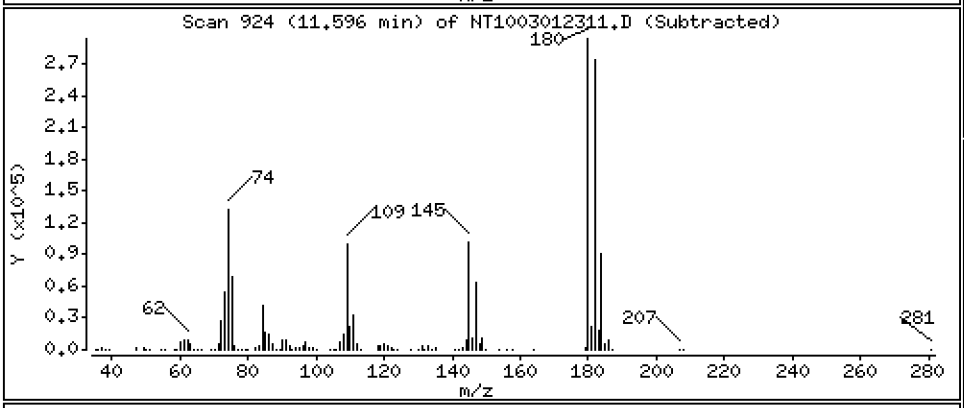
Column phase: ZB-5msi

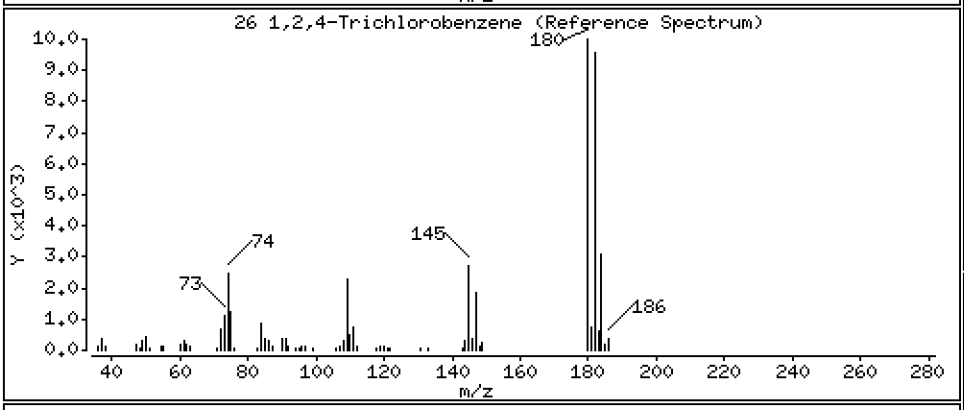
Column diameter: 0.25

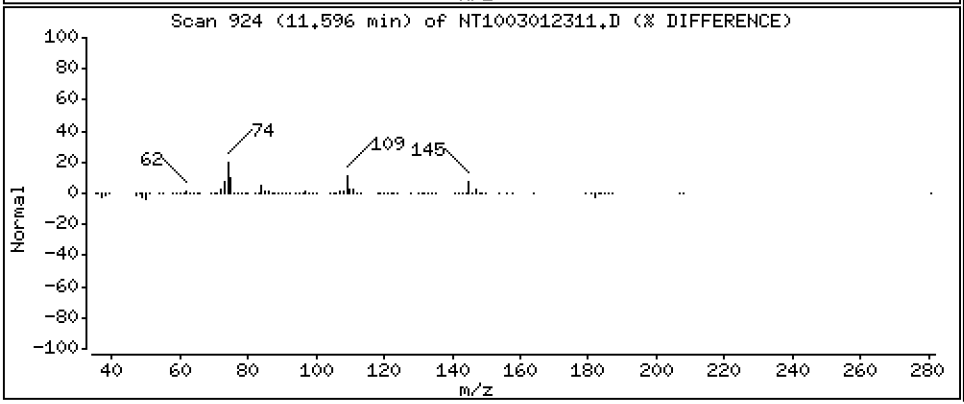
26 1,2,4-Trichlorobenzene

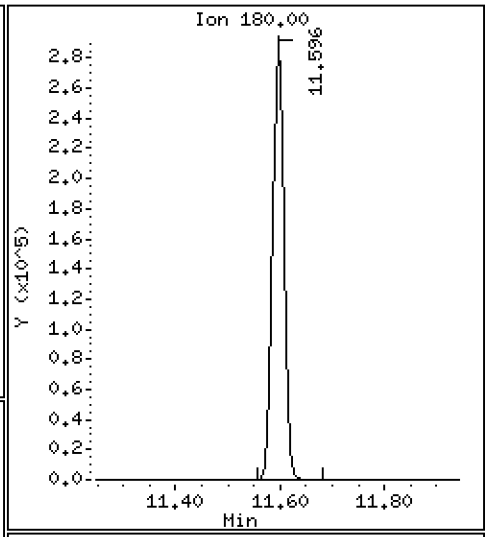
Concentration: 4.908 ug/mL

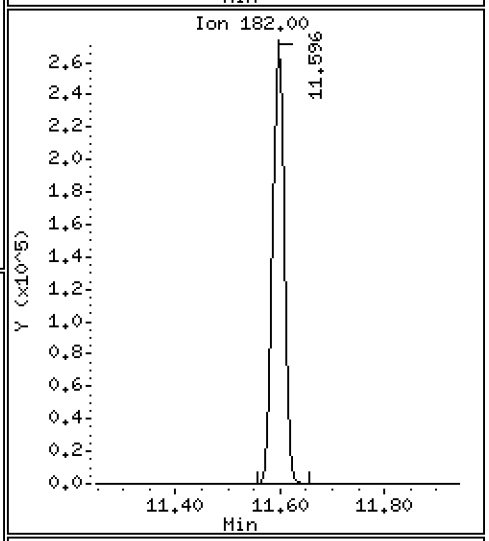


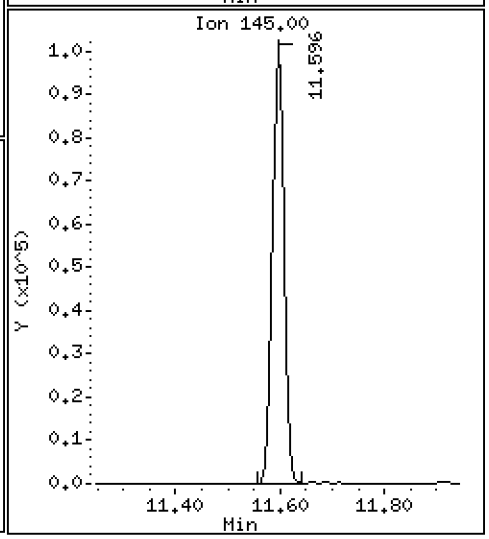












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

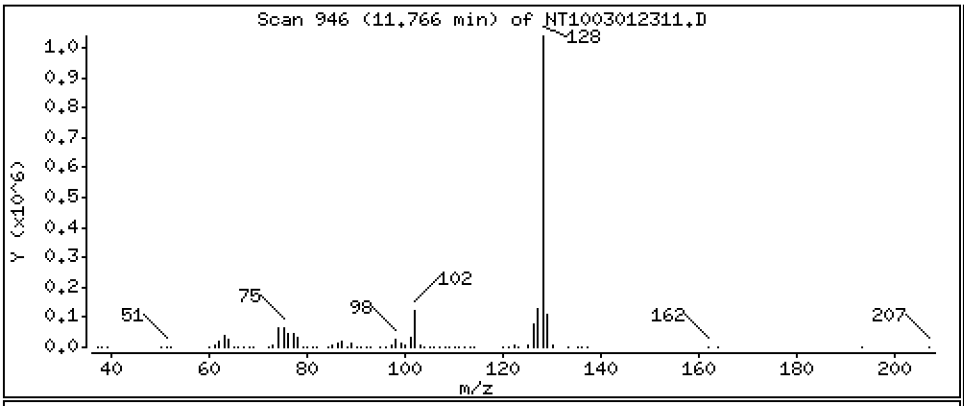
Operator: VTS

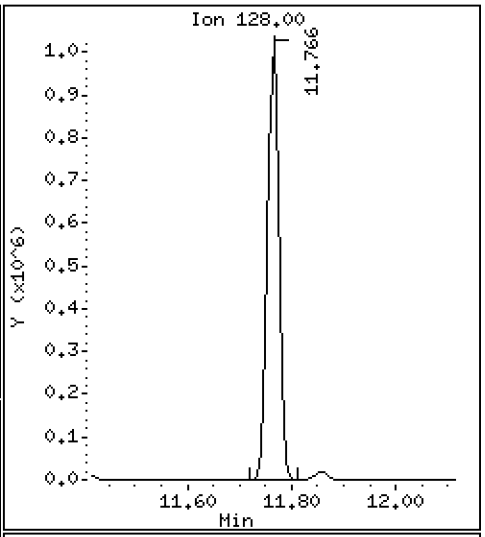
Column phase: ZB-5msi

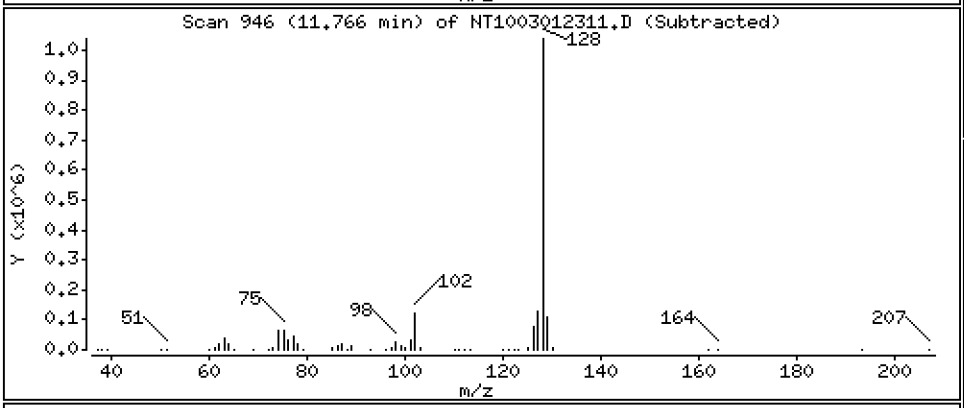
Column diameter: 0.25

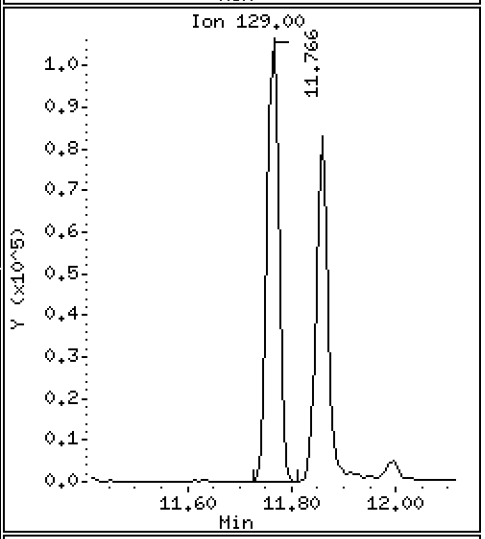
28 Naphthalene

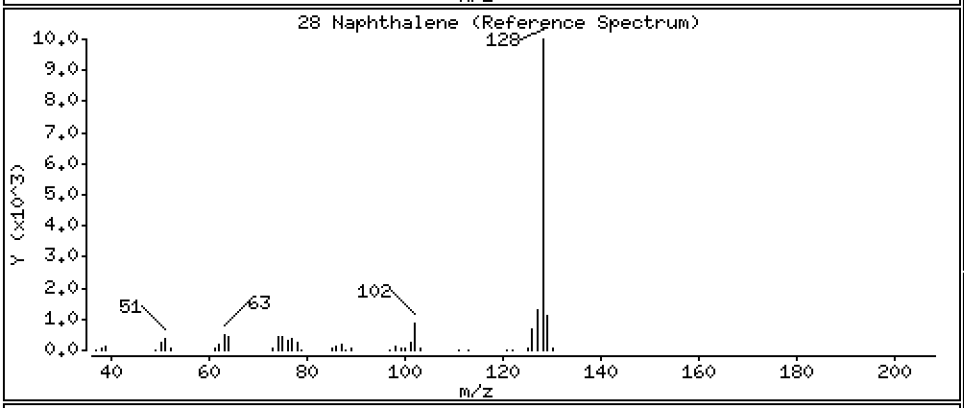
Concentration: 5.255 ug/mL

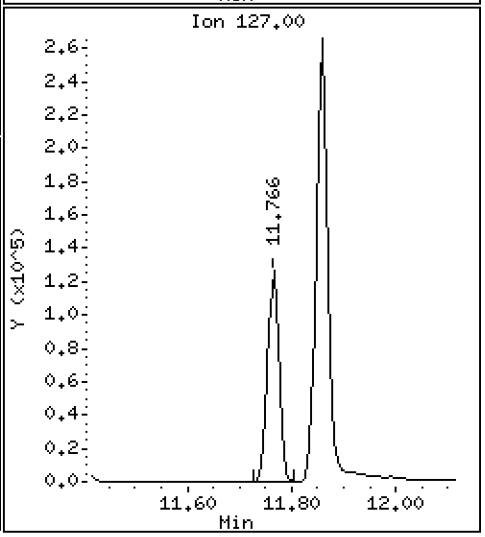


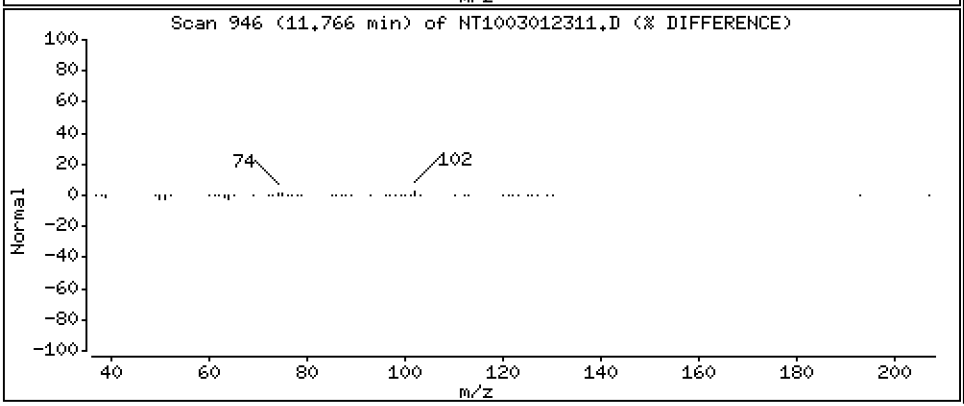












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

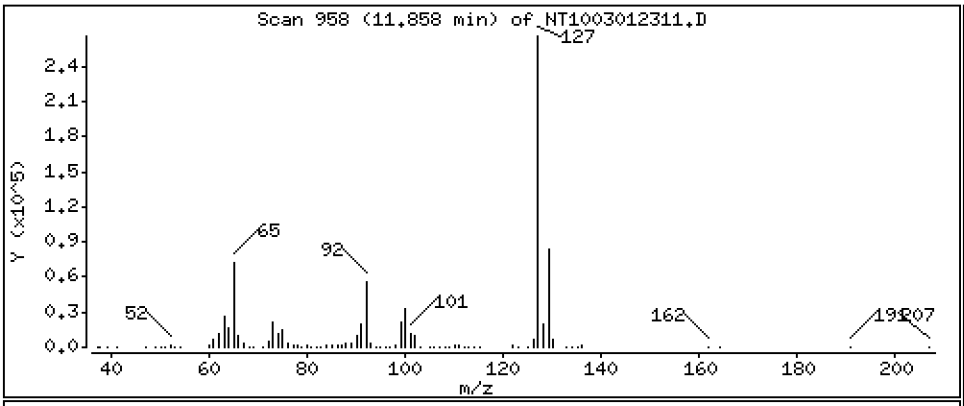
Operator: VTS

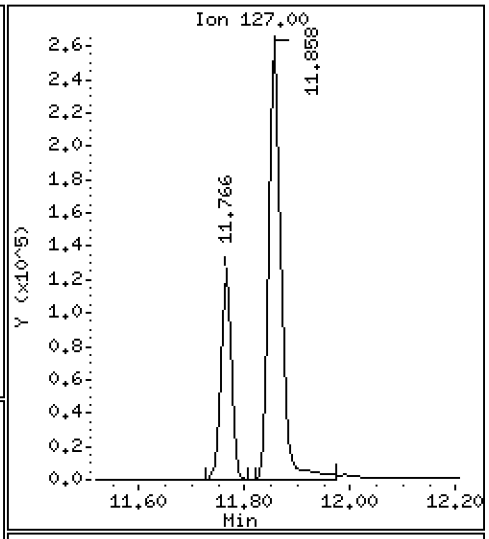
Column phase: ZB-5msi

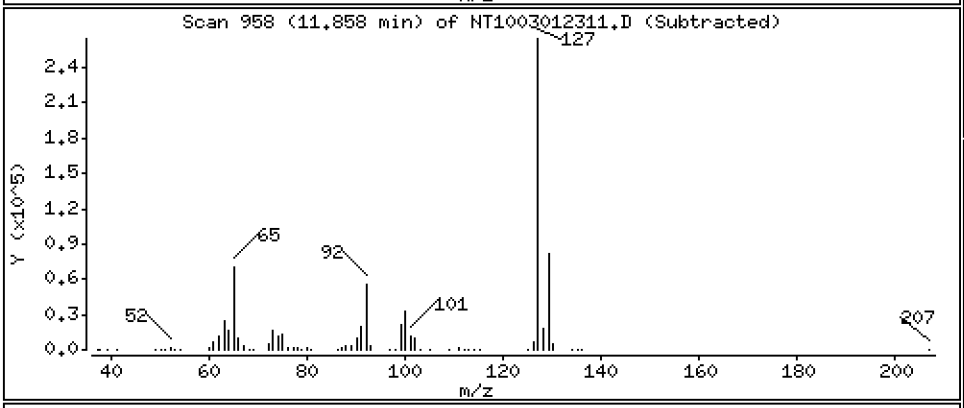
Column diameter: 0.25

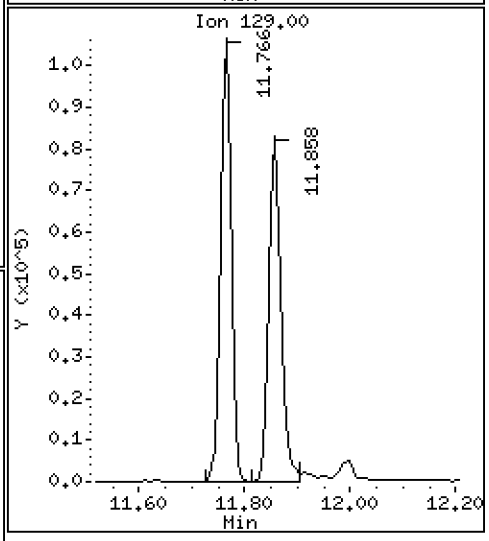
29 4-Chloroaniline

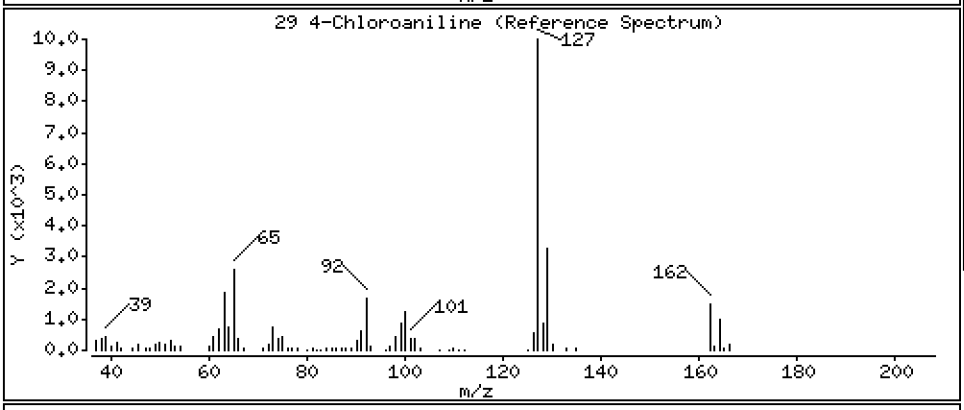
Concentration: 3.791 ug/mL

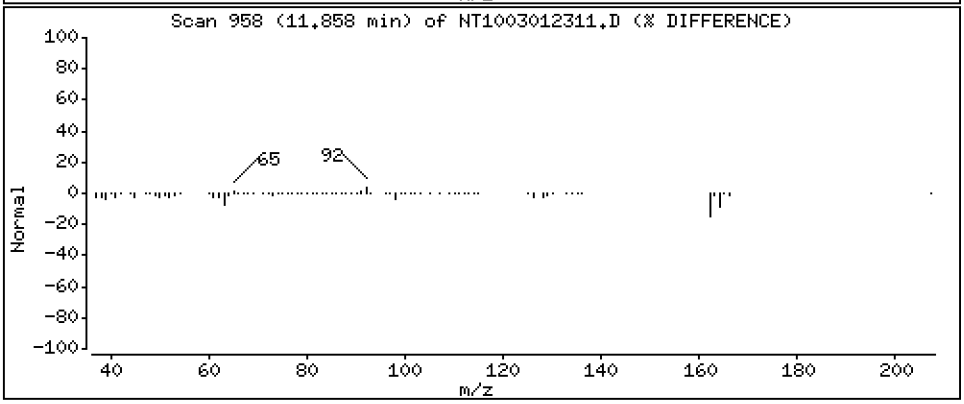












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

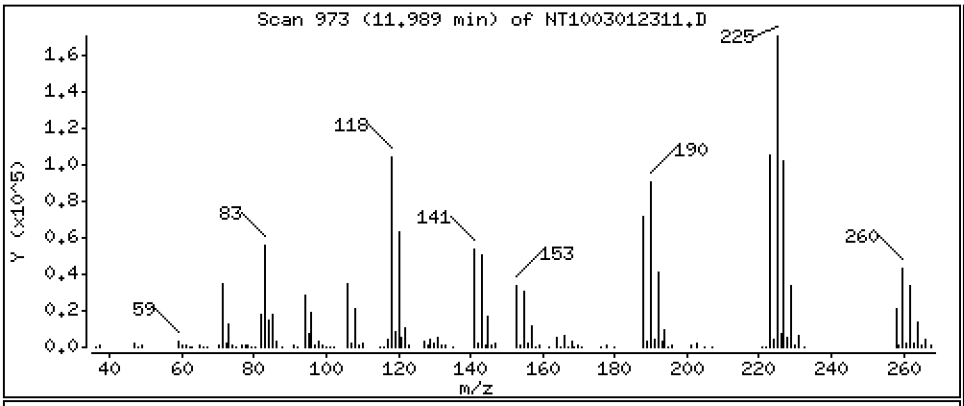
Operator: VTS

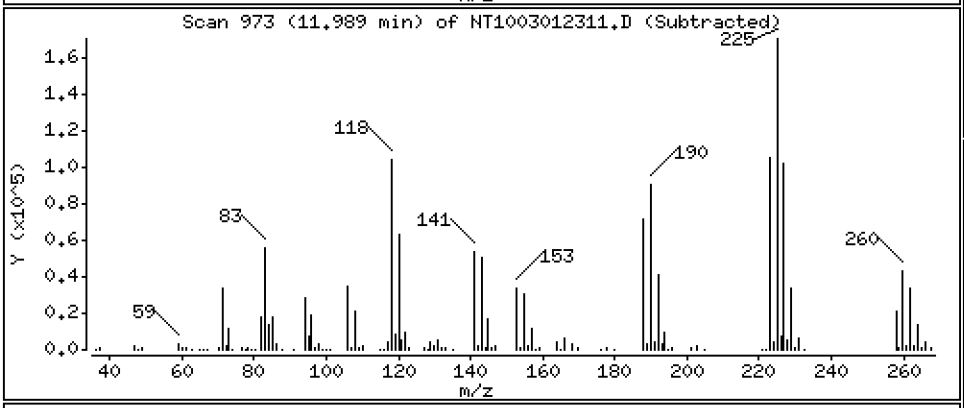
Column phase: ZB-5msi

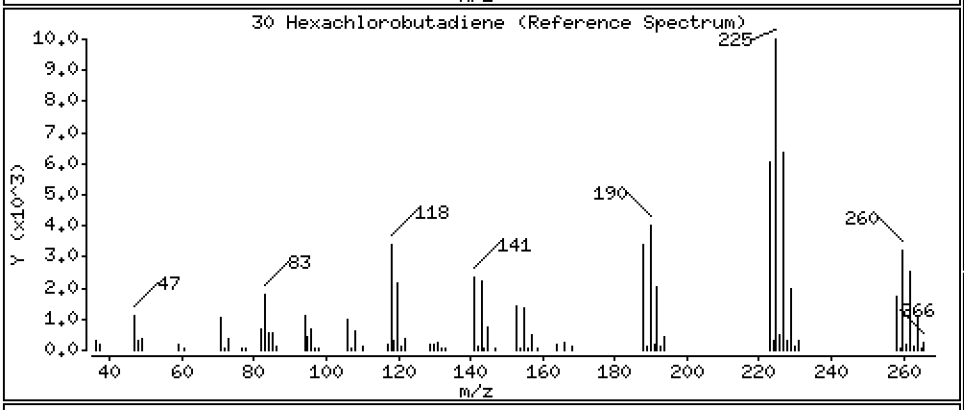
Column diameter: 0.25

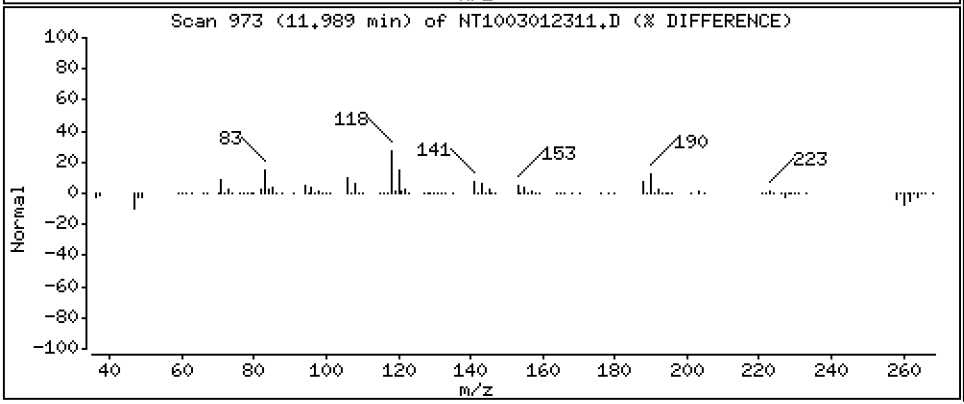
30 Hexachlorobutadiene

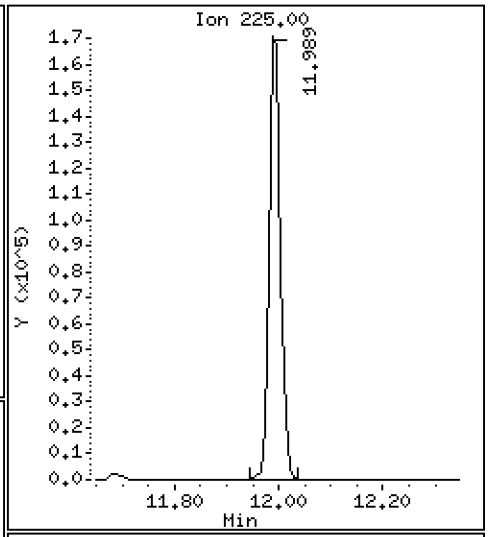
Concentration: 5.014 ug/mL

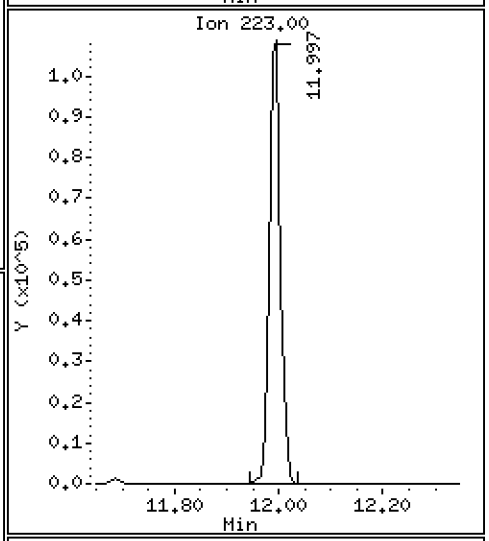


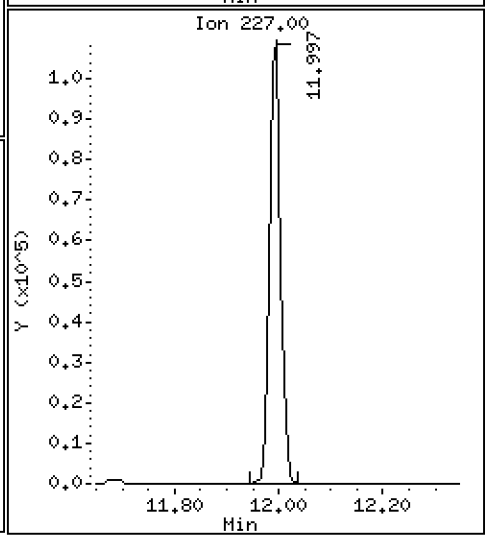












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

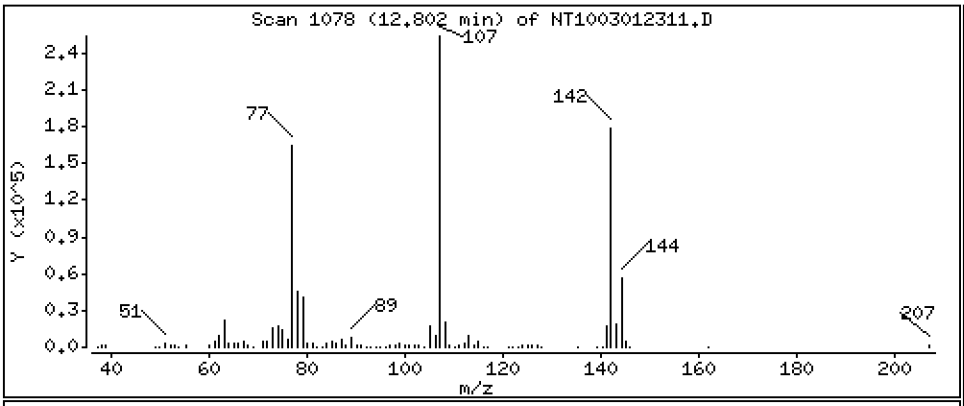
Operator: VTS

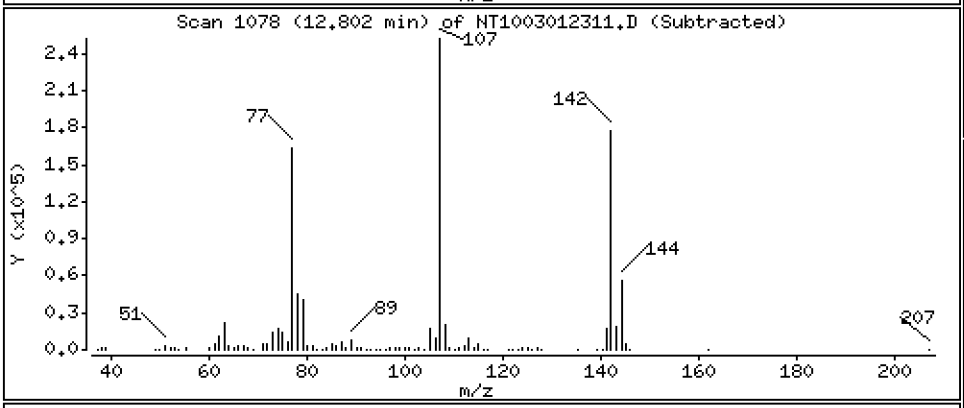
Column phase: ZB-5msi

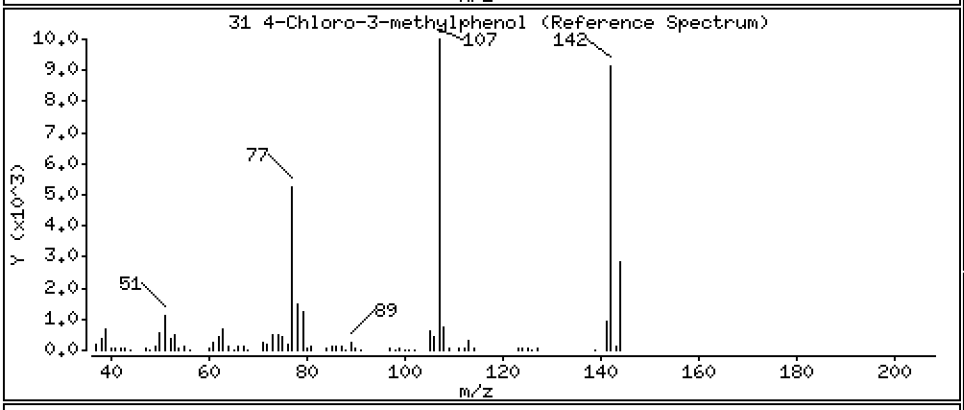
Column diameter: 0.25

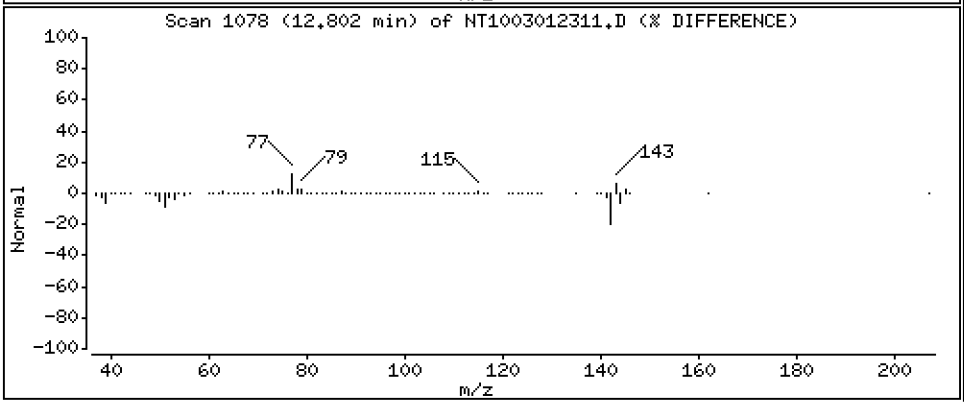
31 4-Chloro-3-methylphenol

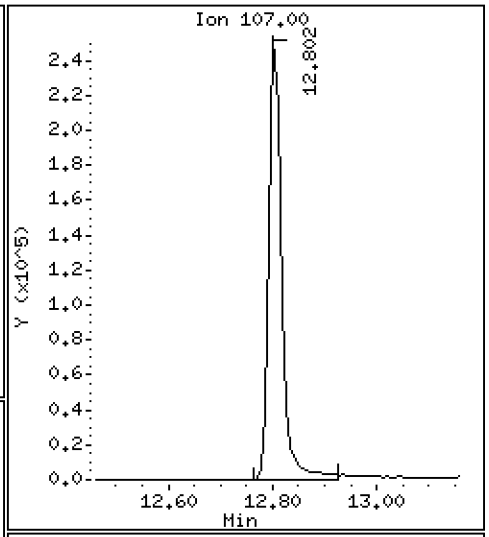
Concentration: 4.452 ug/mL

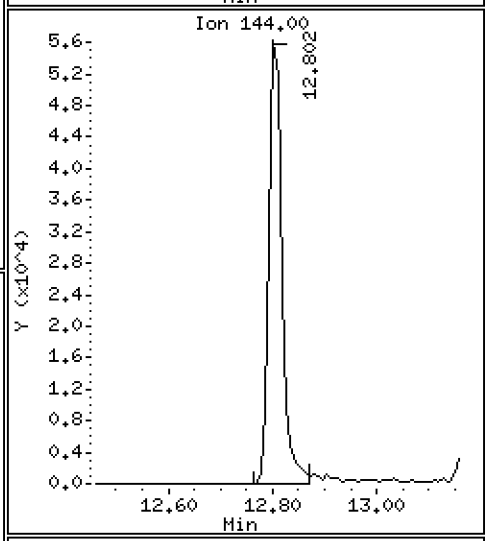


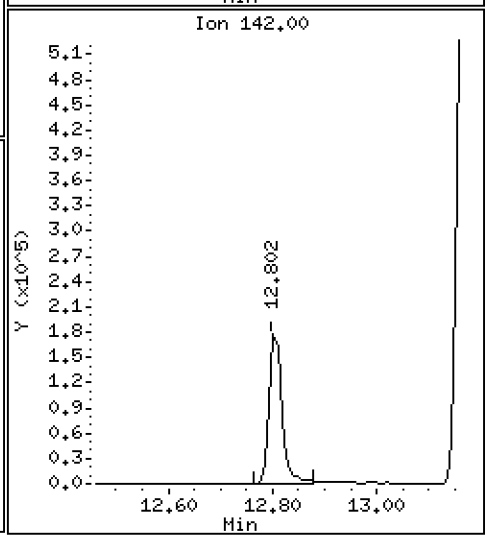












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

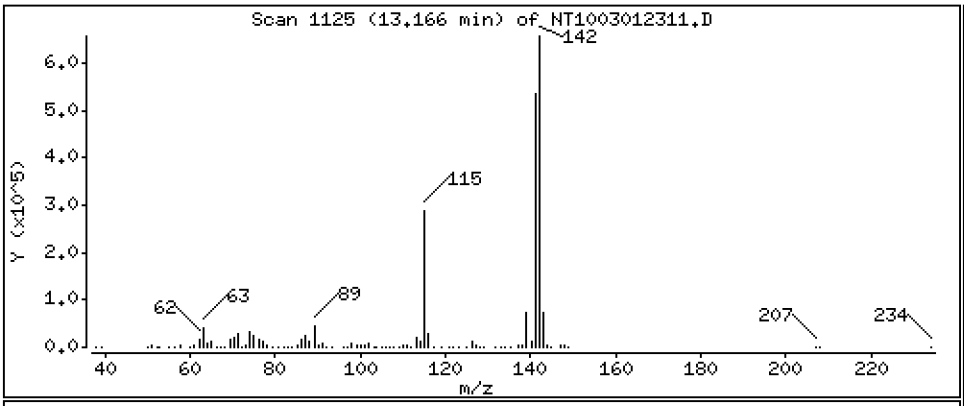
Operator: VTS

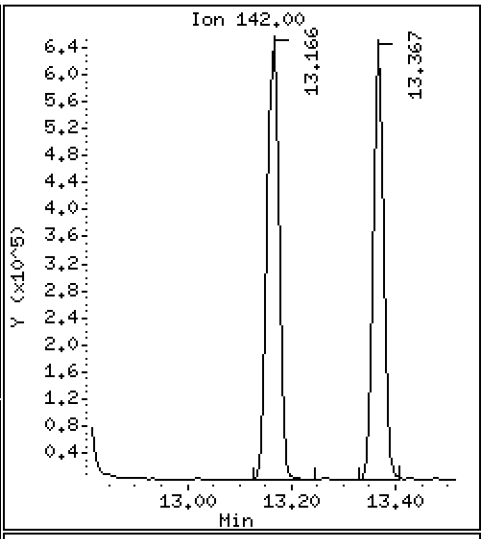
Column phase: ZB-5msi

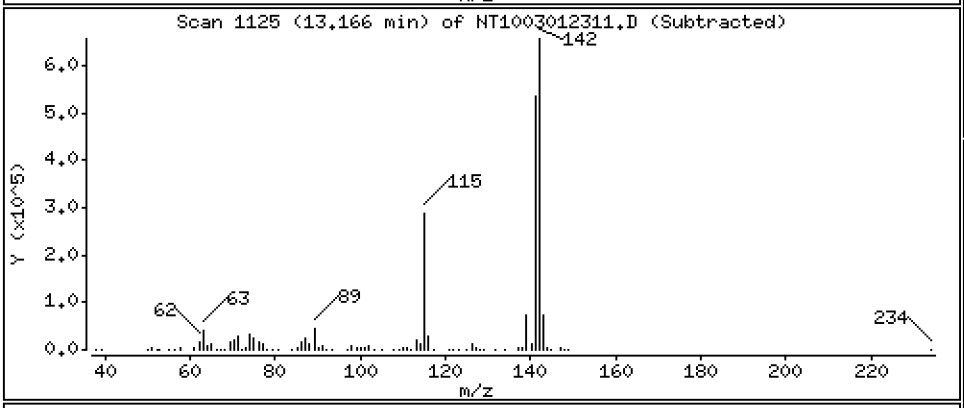
Column diameter: 0.25

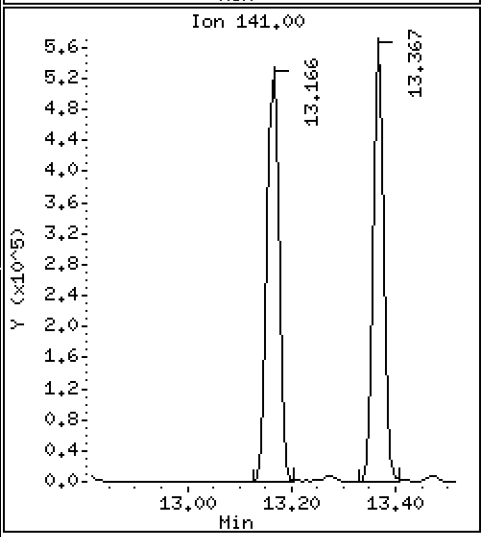
32 2-Methylnaphthalene

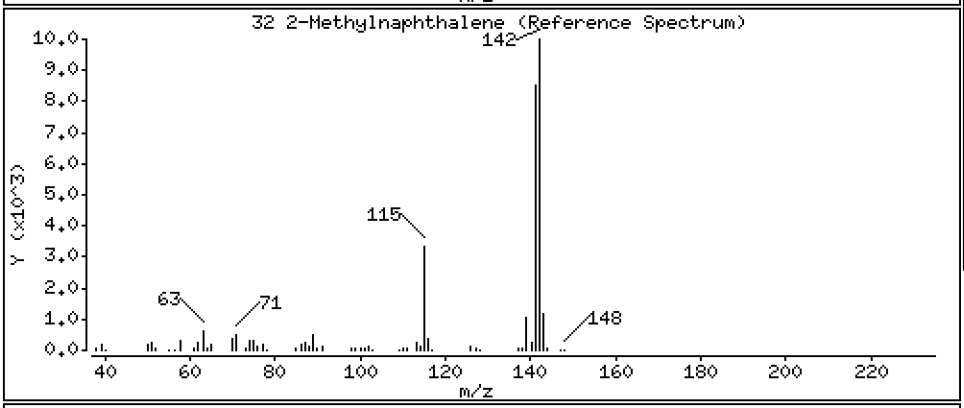
Concentration: 4.951 ug/mL

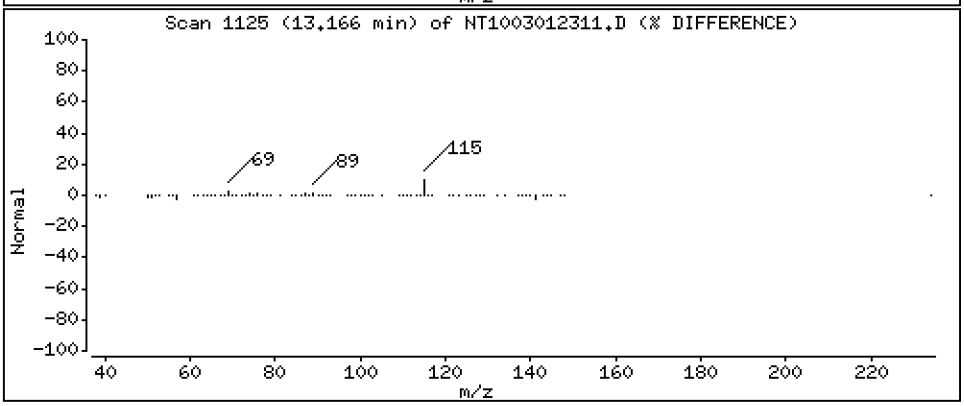












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

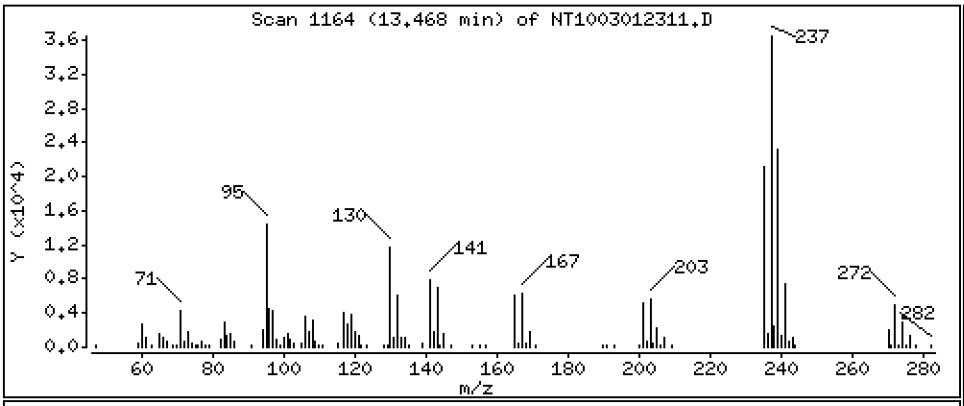
Operator: VTS

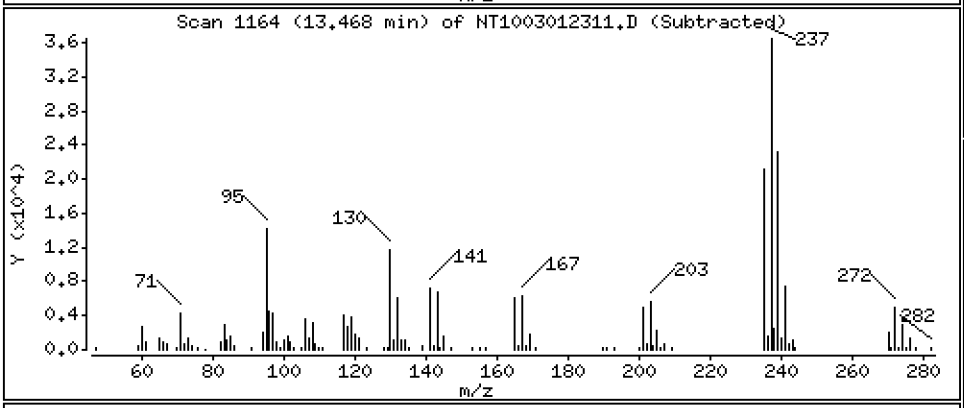
Column phase: ZB-5msi

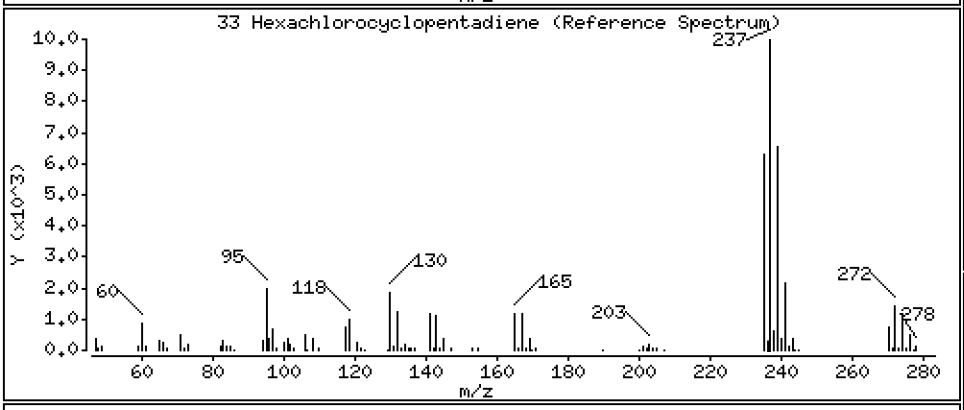
Column diameter: 0.25

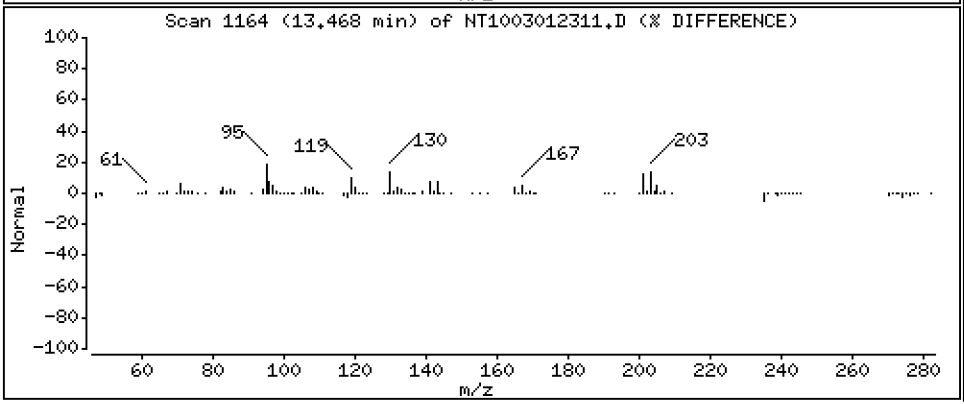
33 Hexachlorocyclopentadiene

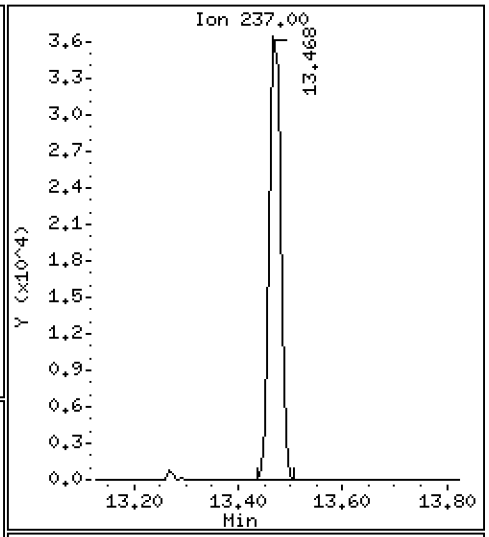
Concentration: 2.562 ug/mL

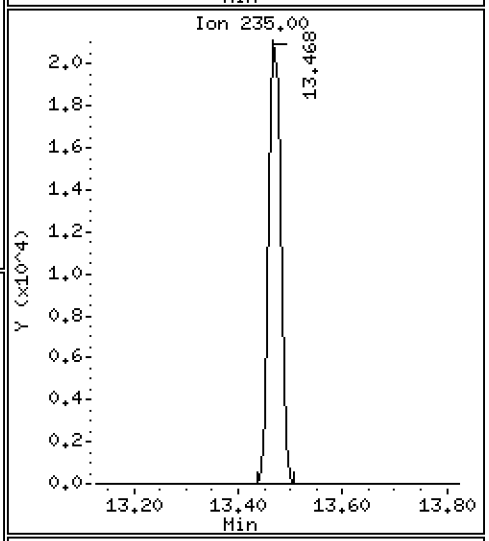


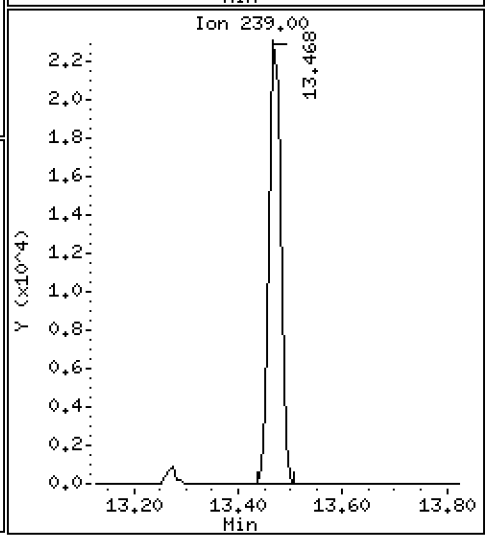












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

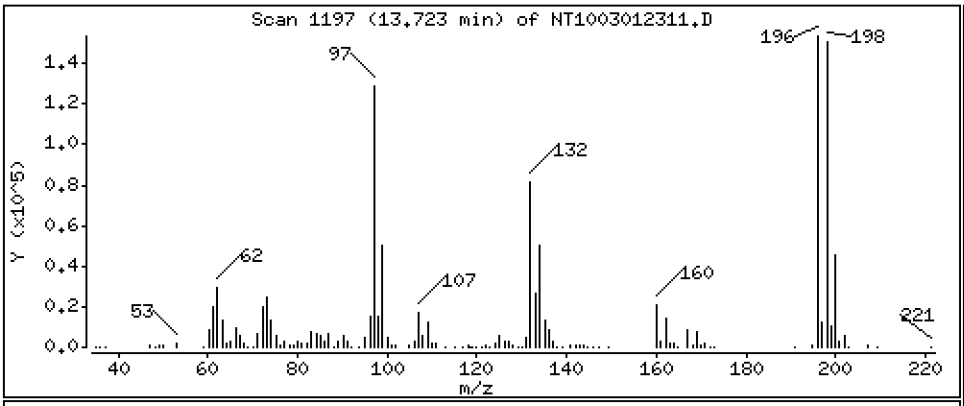
Operator: VTS

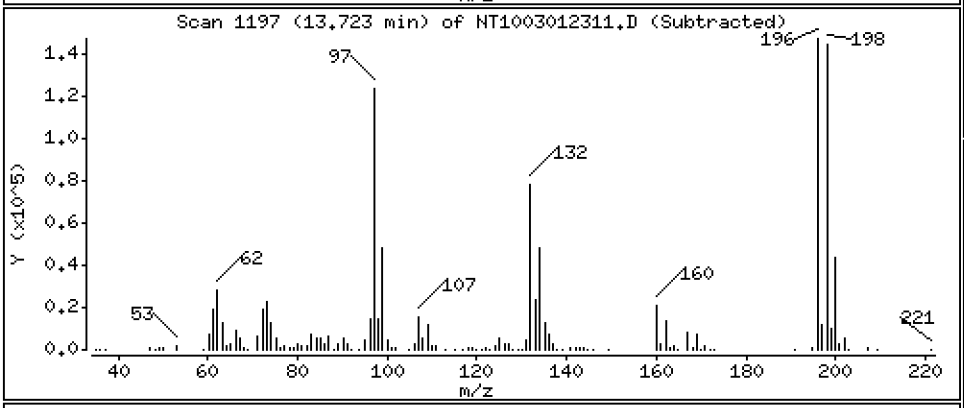
Column phase: ZB-5msi

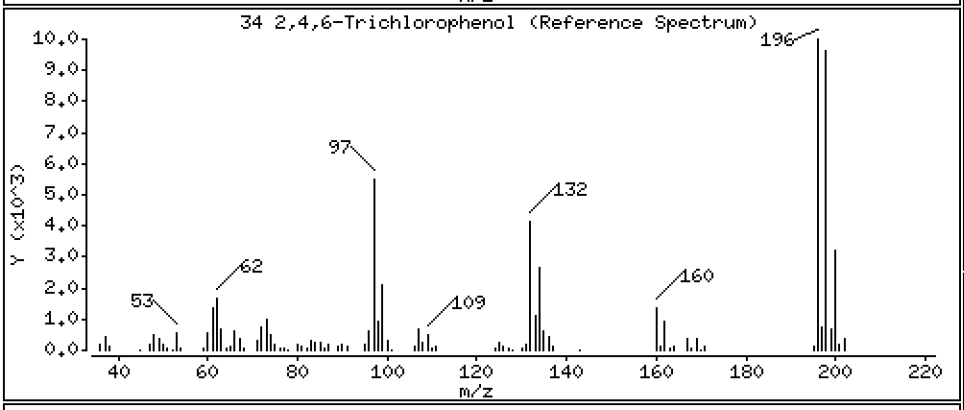
Column diameter: 0.25

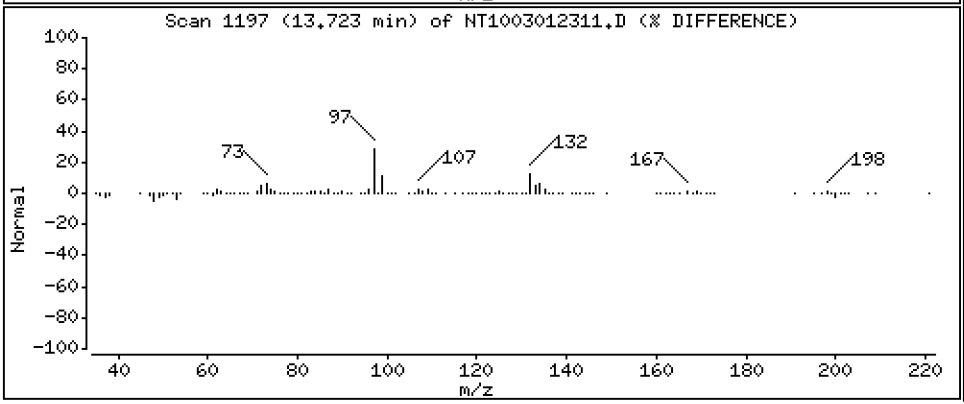
34 2,4,6-Trichlorophenol

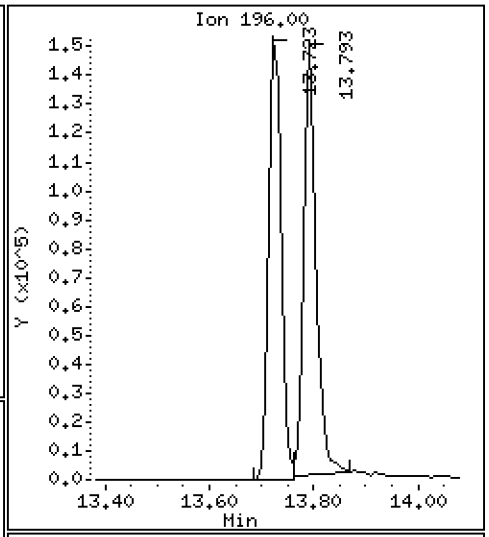
Concentration: 4.120 ug/mL

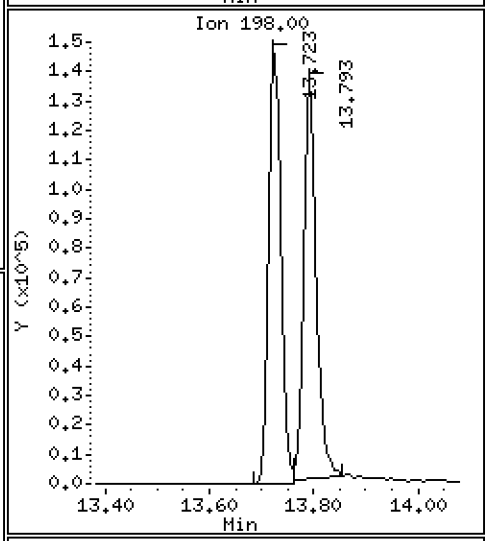


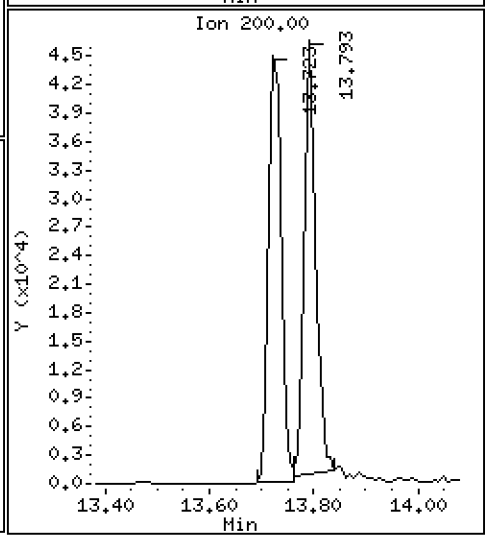












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

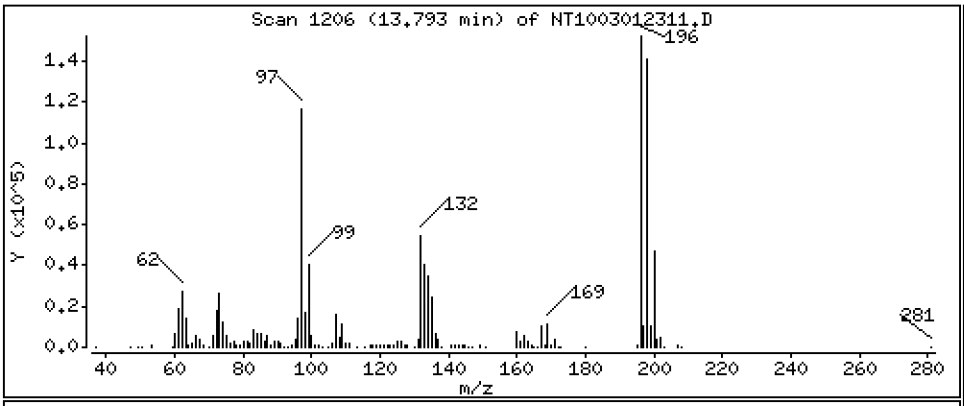
Operator: VTS

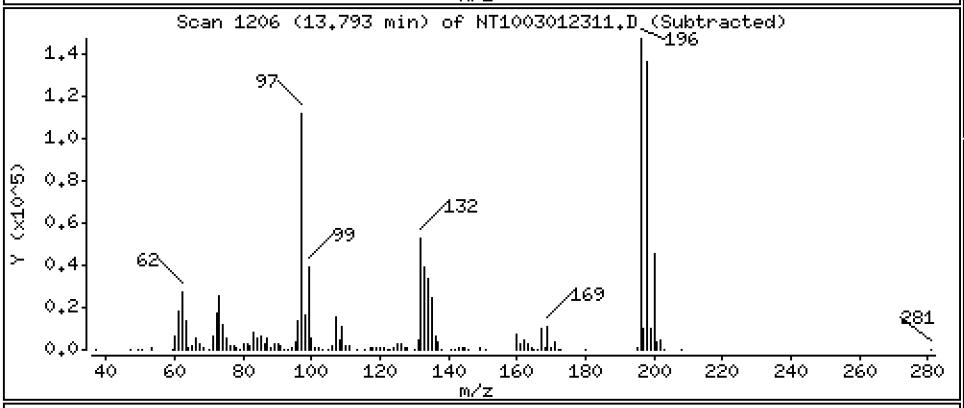
Column phase: ZB-5msi

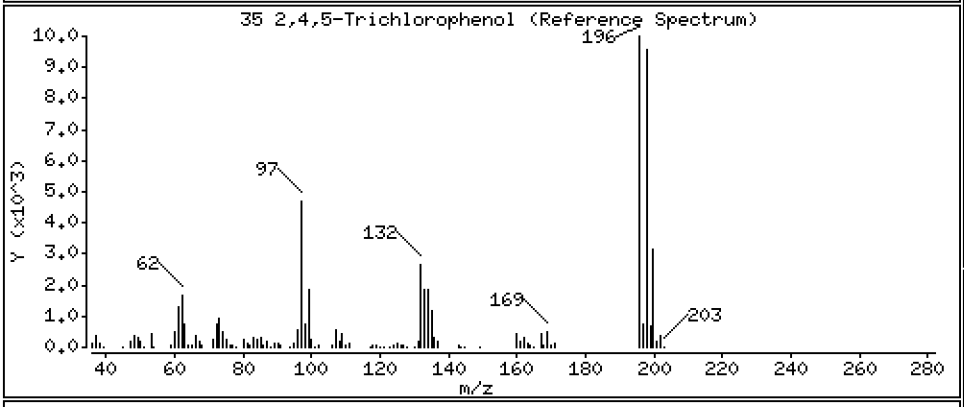
Column diameter: 0.25

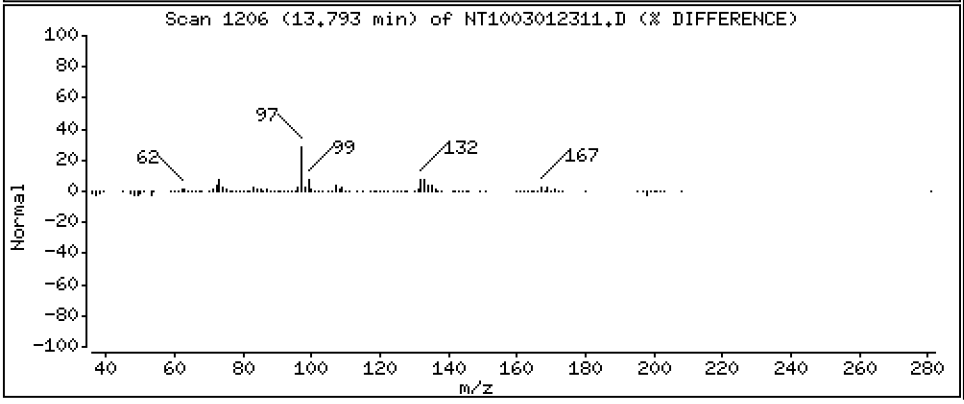
35 2,4,5-Trichlorophenol

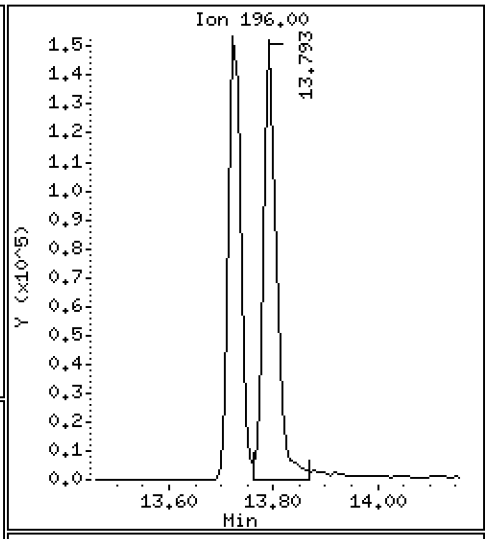
Concentration: 4.149 ug/mL

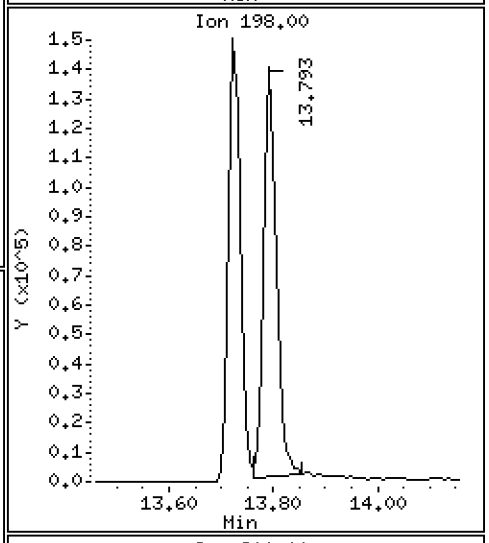


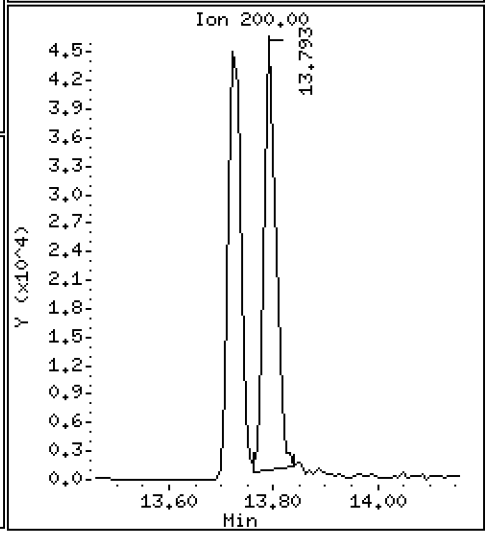












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

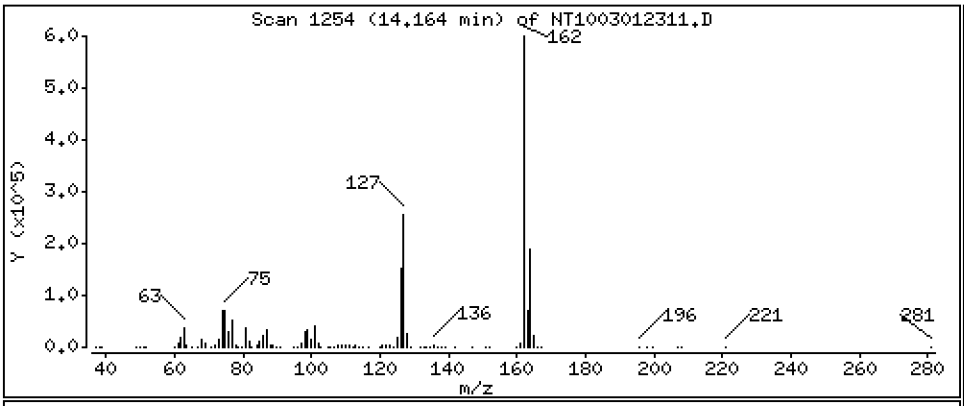
Operator: VTS

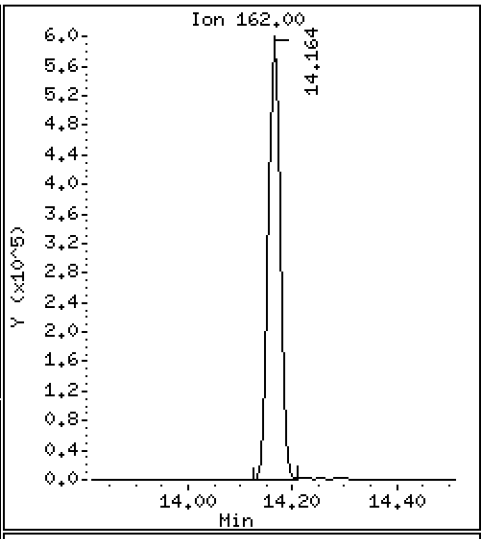
Column phase: ZB-5msi

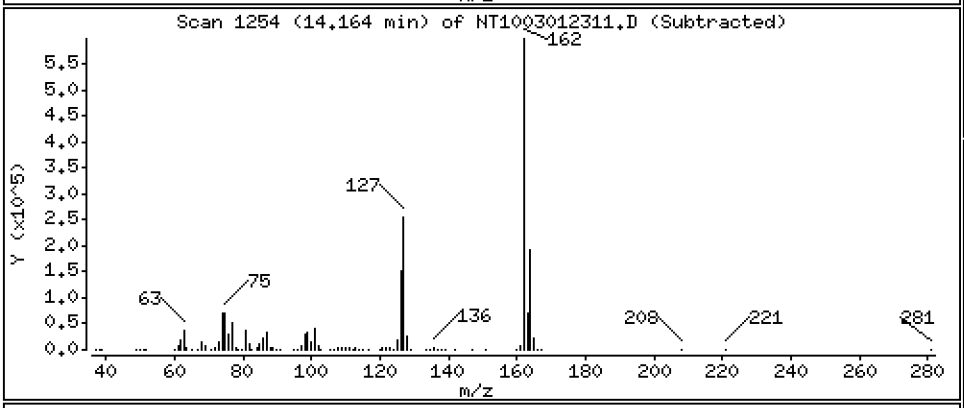
Column diameter: 0.25

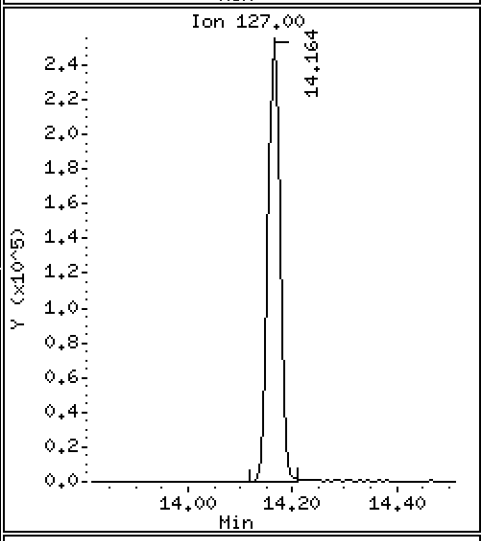
37 2-Chloronaphthalene

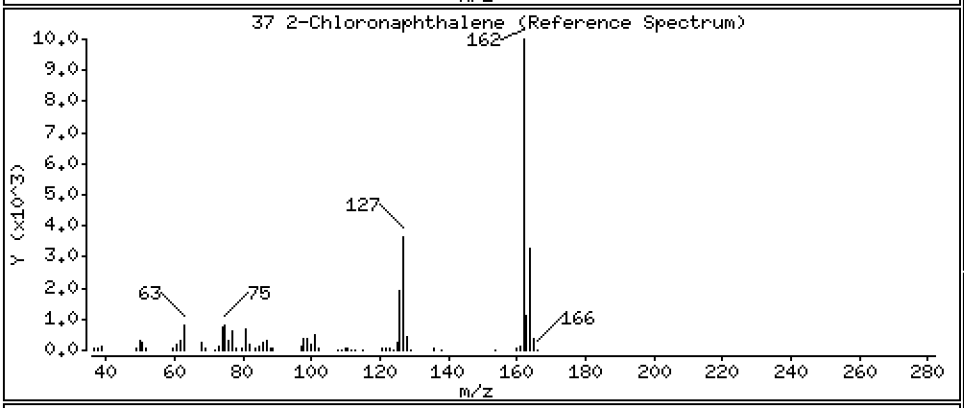
Concentration: 5.264 ug/mL

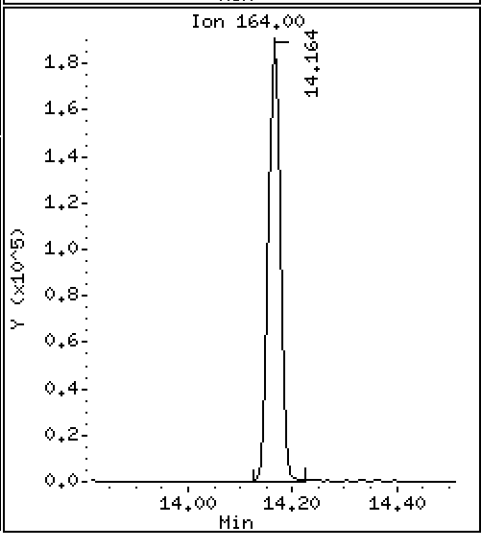


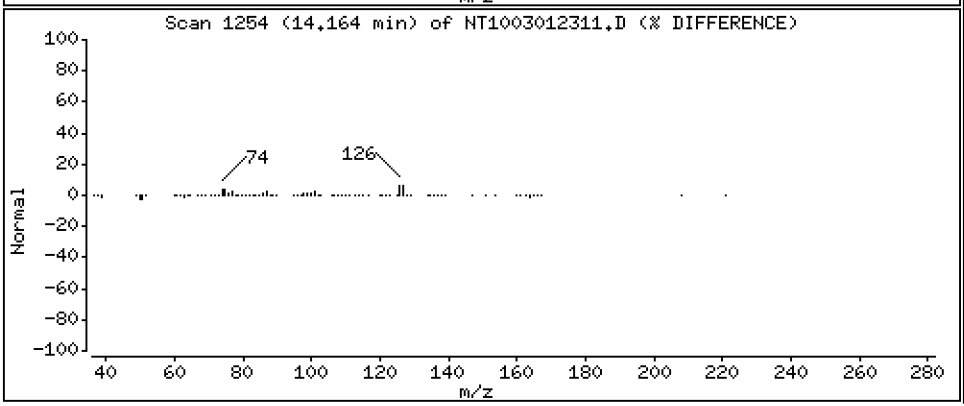












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

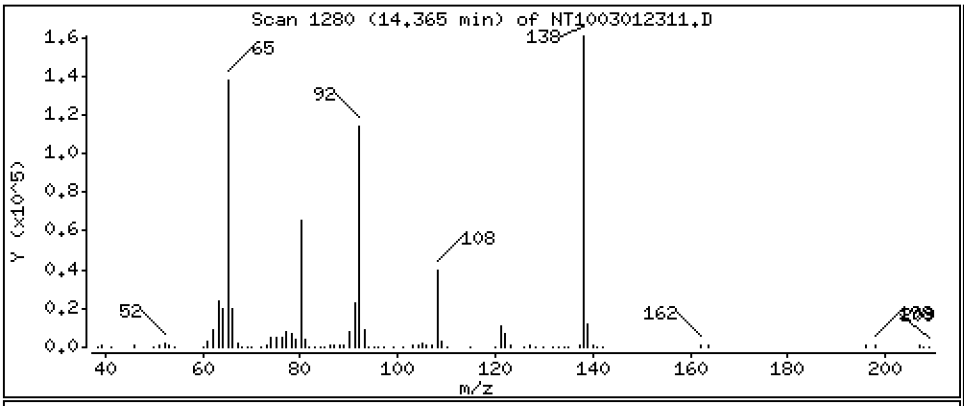
Operator: VTS

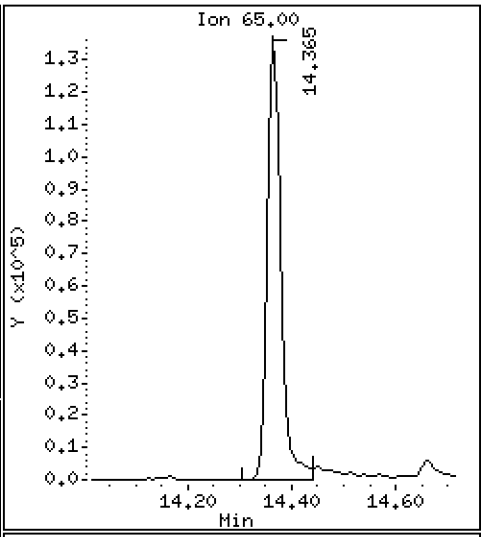
Column phase: ZB-5msi

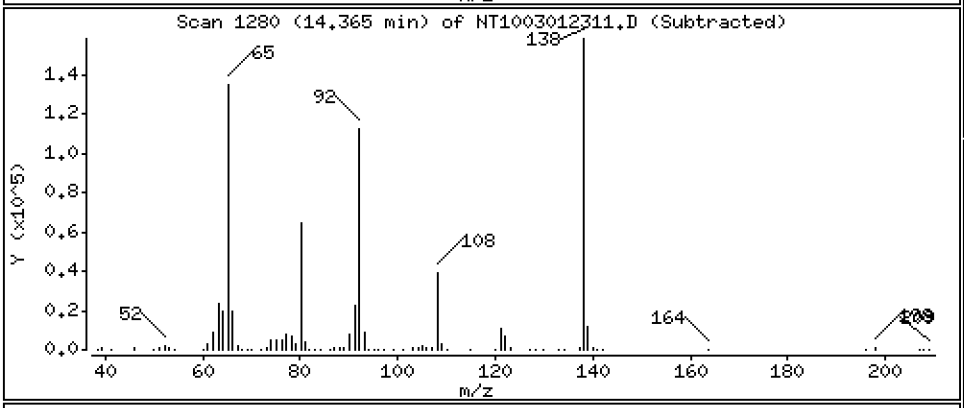
Column diameter: 0.25

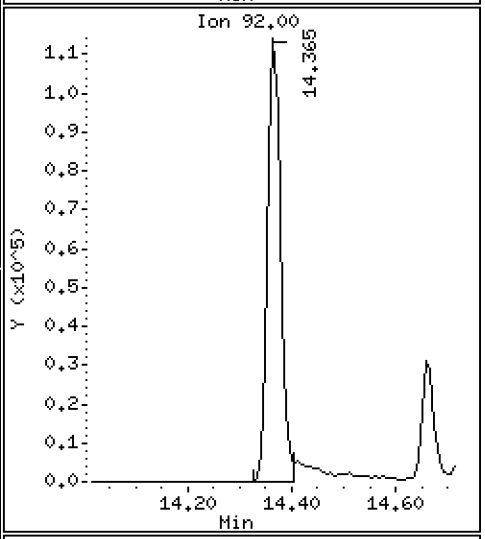
38 2-Nitroaniline

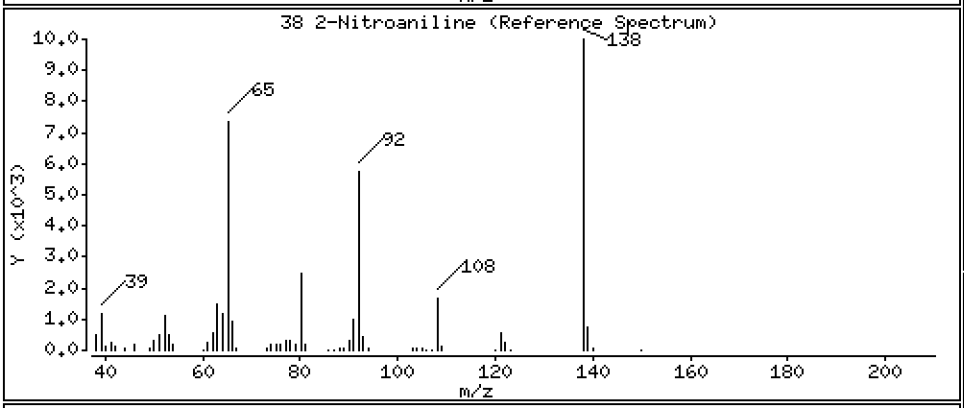
Concentration: 5.027 ug/mL

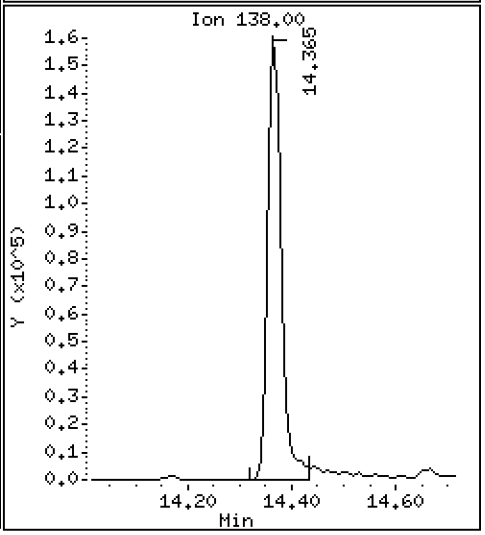


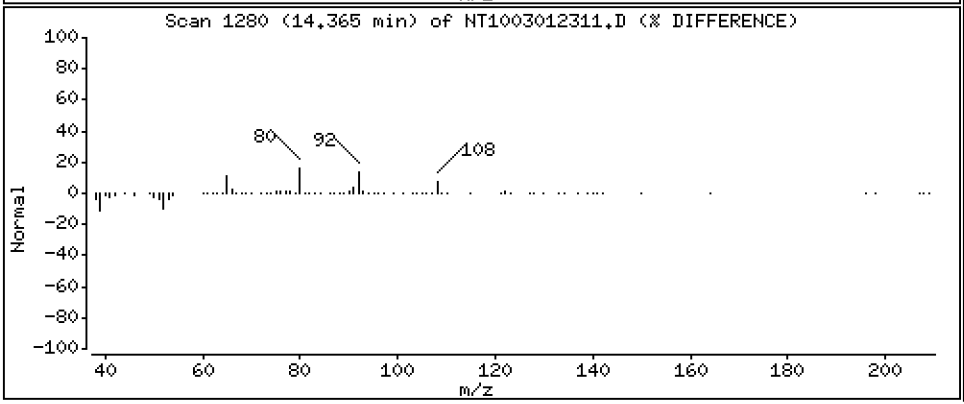












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

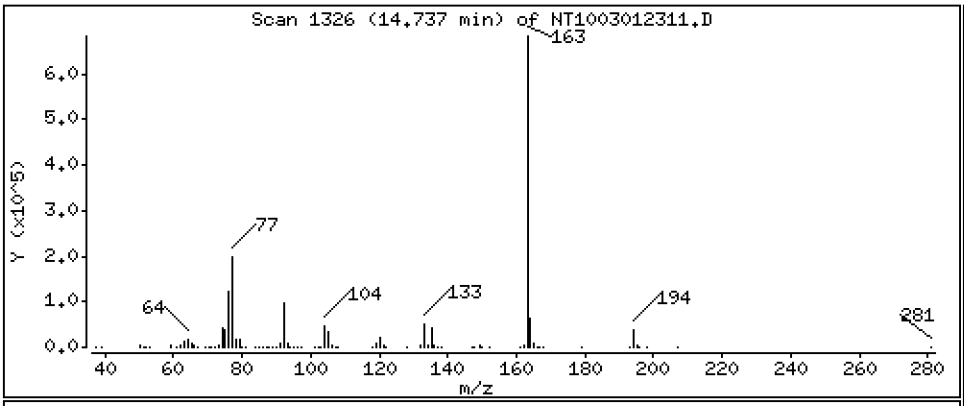
Operator: VTS

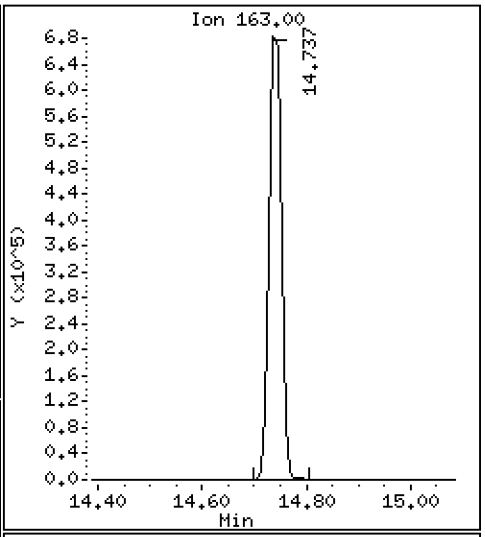
Column phase: ZB-5msi

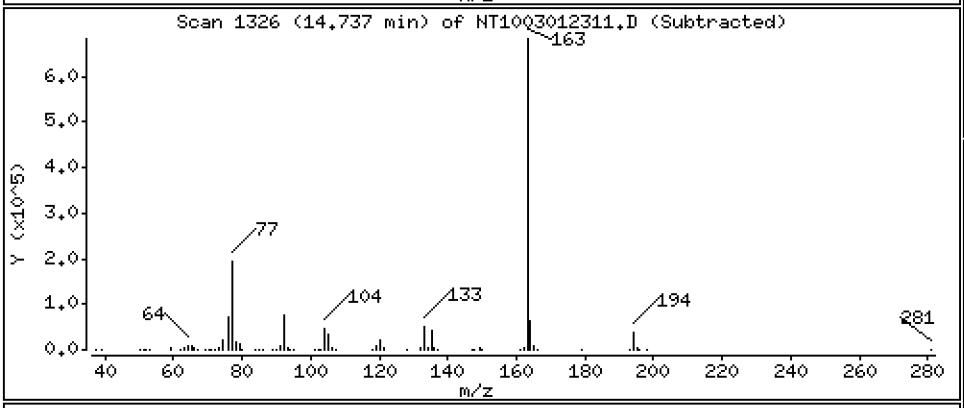
Column diameter: 0.25

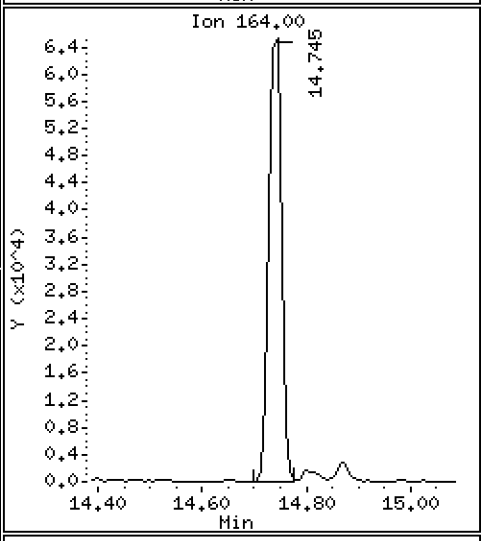
39 Dimethylphthalate

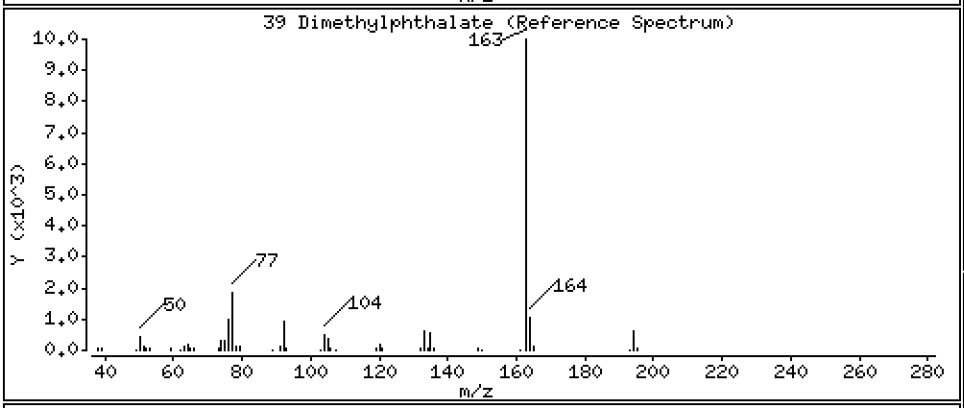
Concentration: 5.384 ug/mL

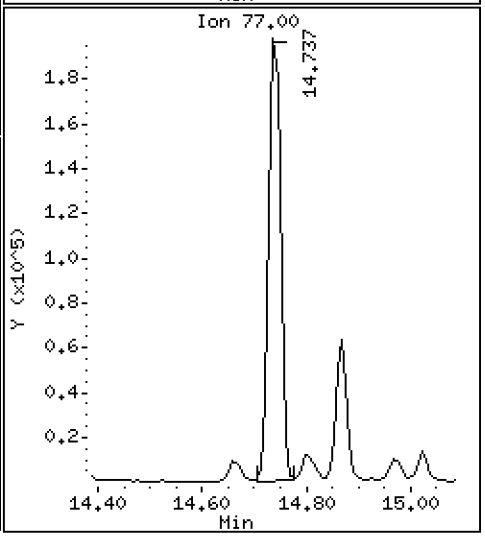


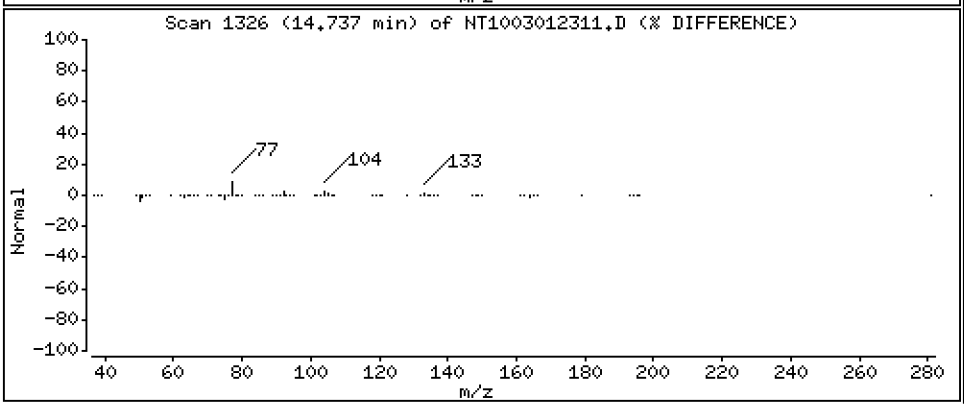












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

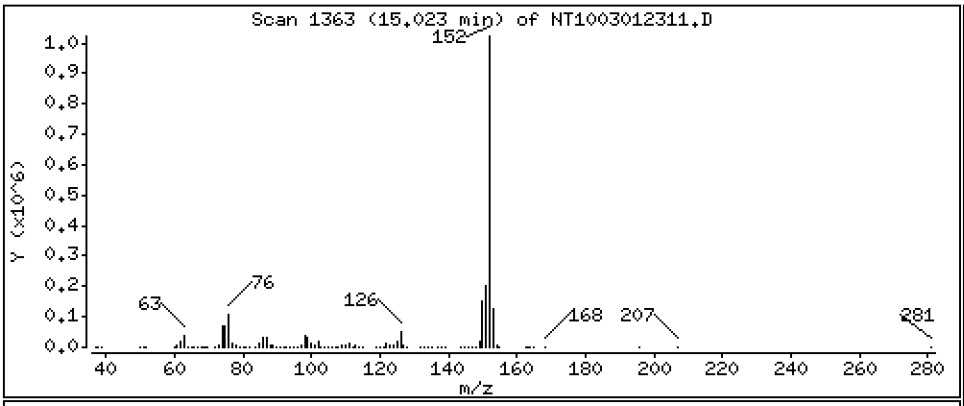
Operator: VTS

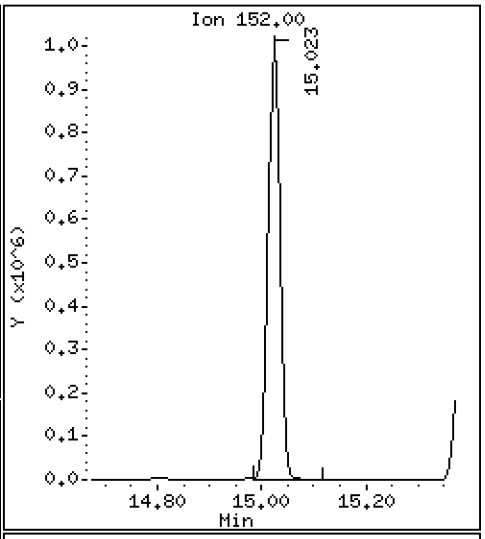
Column phase: ZB-5msi

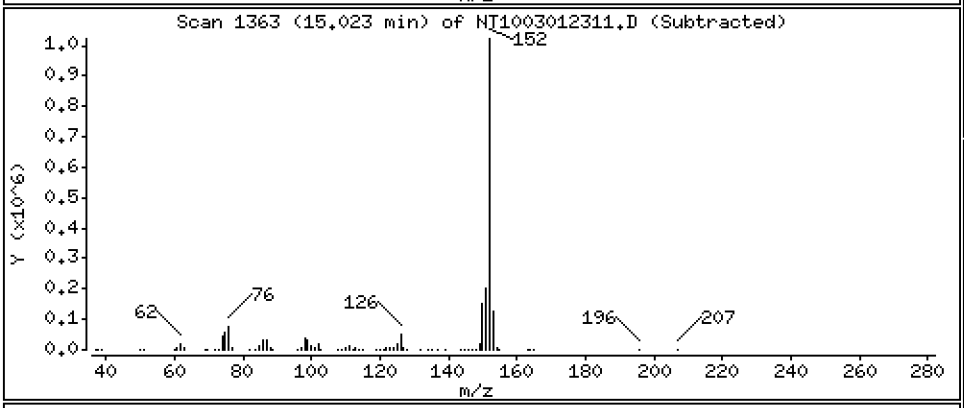
Column diameter: 0.25

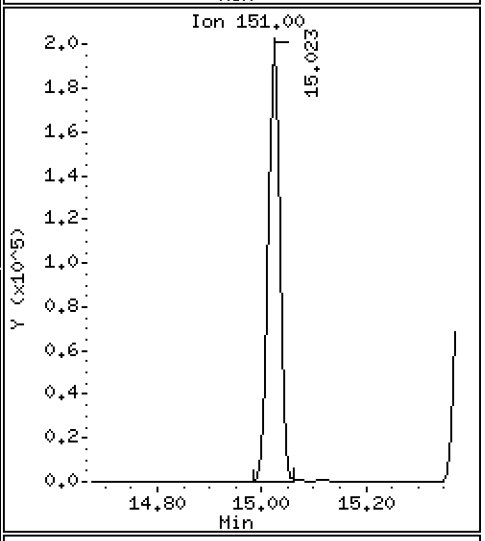
40 Acenaphthylene

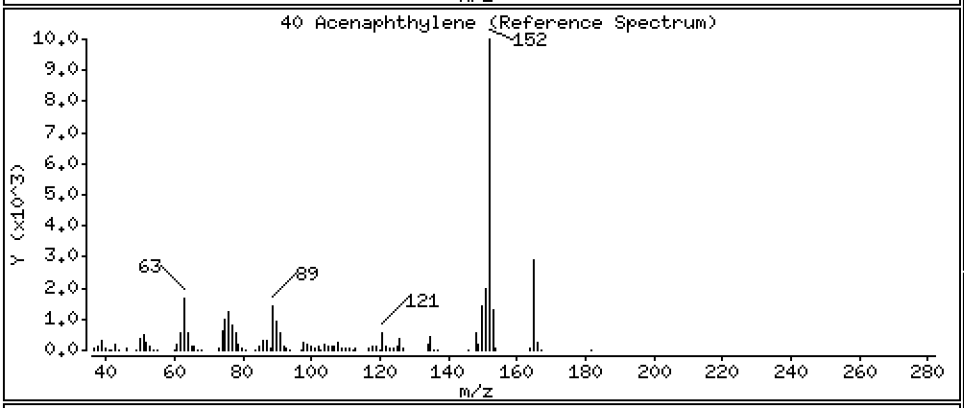
Concentration: 5.806 ug/mL

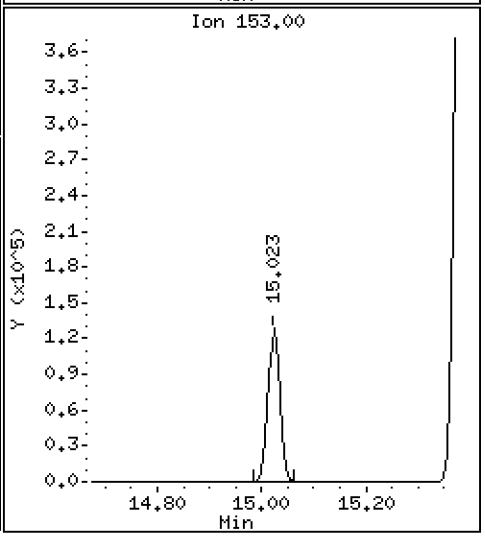


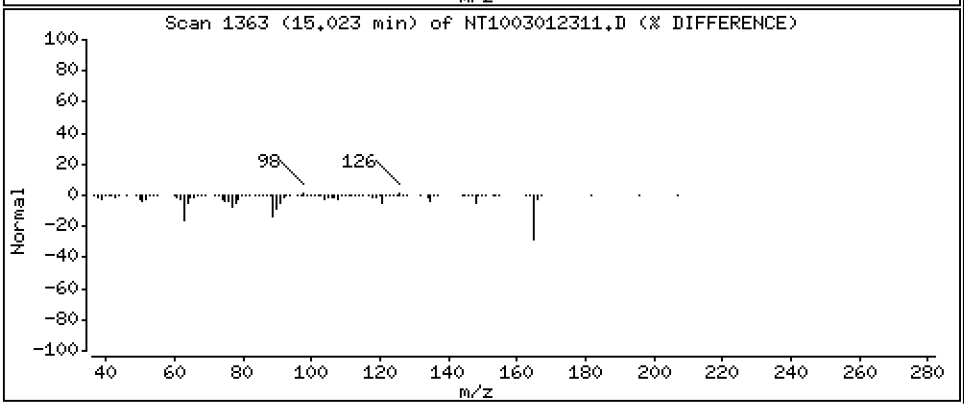












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

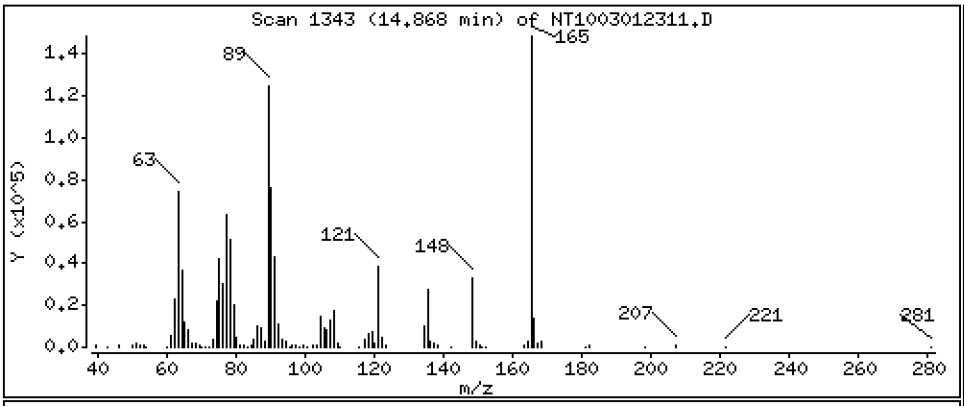
Operator: VTS

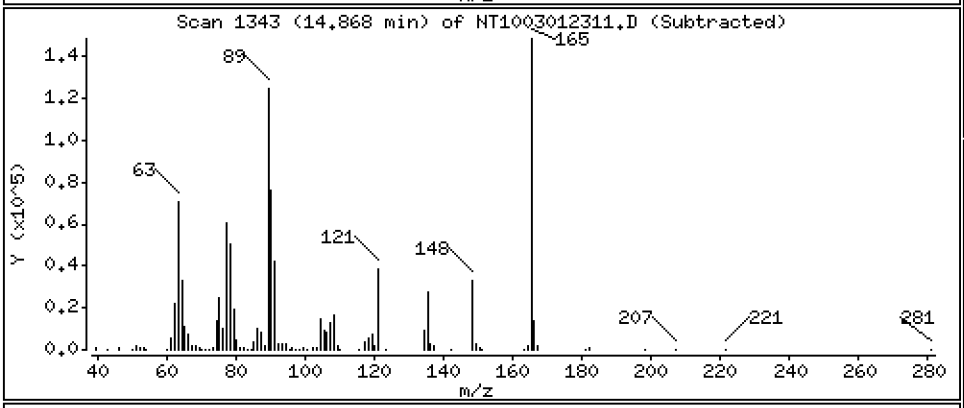
Column phase: ZB-5msi

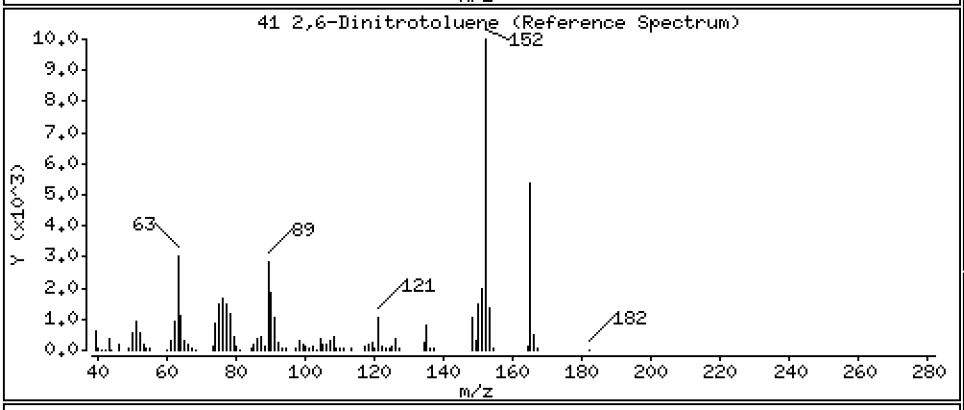
Column diameter: 0.25

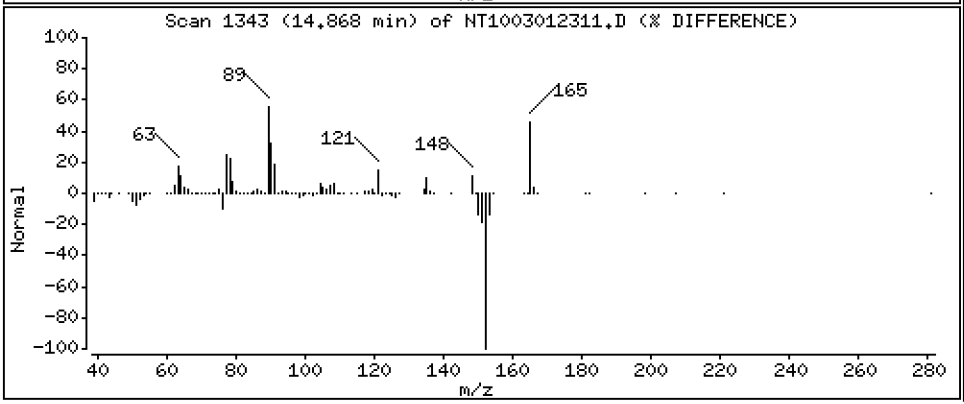
41 2,6-Dinitrotoluene

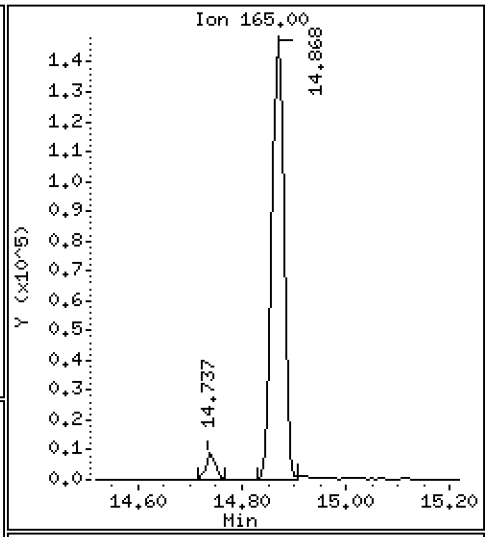
Concentration: 5.187 ug/mL

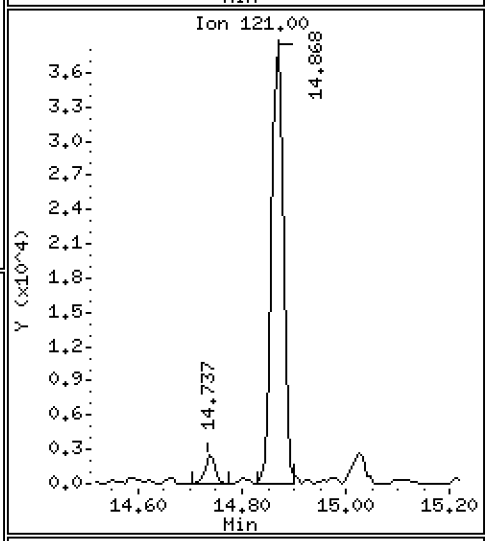


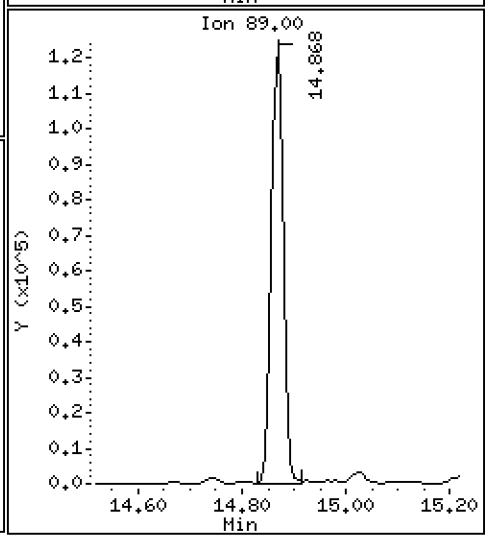












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

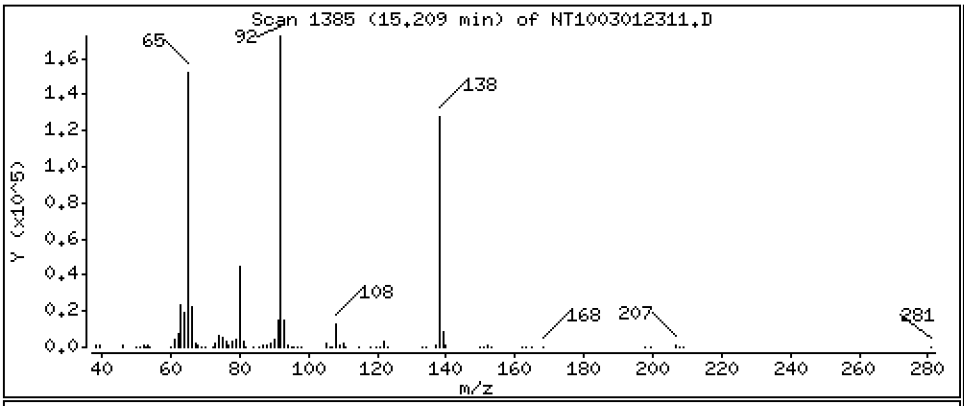
Operator: VTS

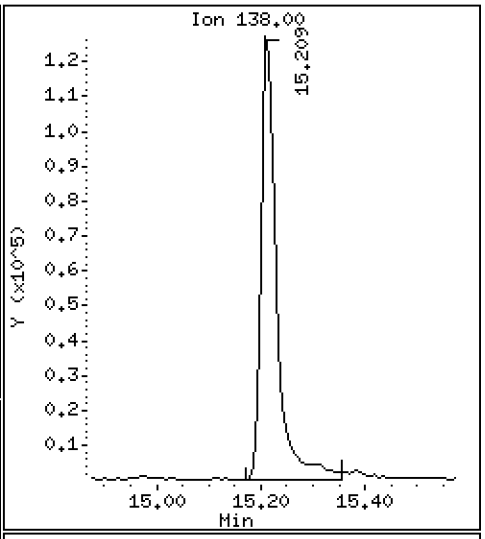
Column phase: ZB-5msi

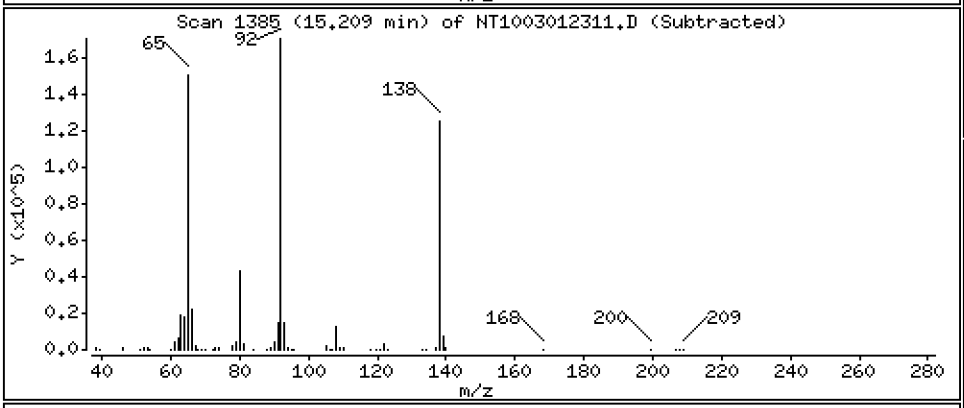
Column diameter: 0.25

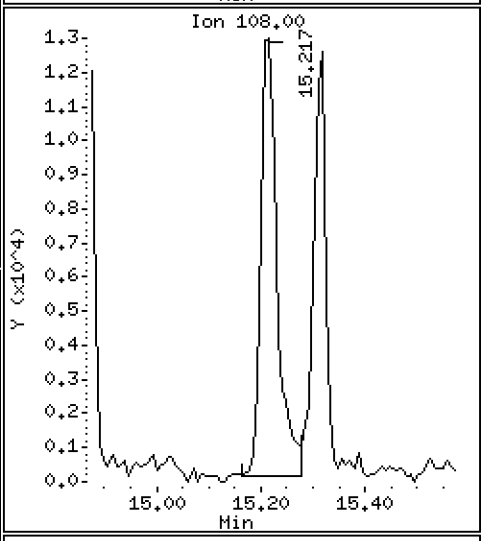
43 3-Nitroaniline

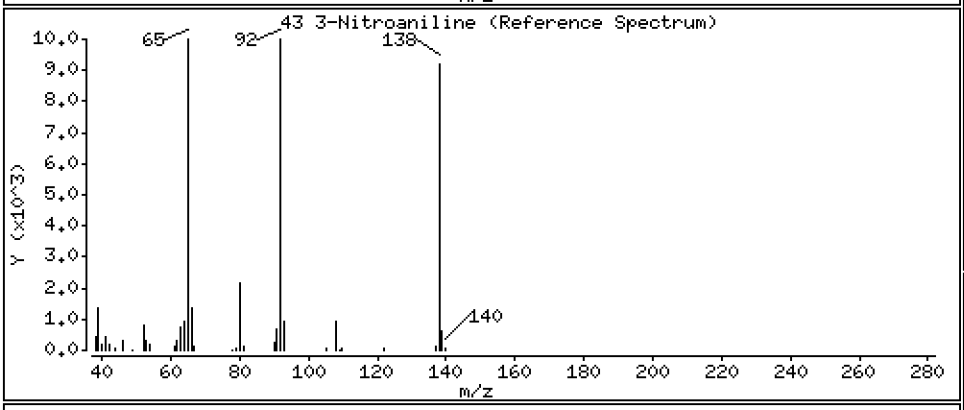
Concentration: 5.172 ug/mL

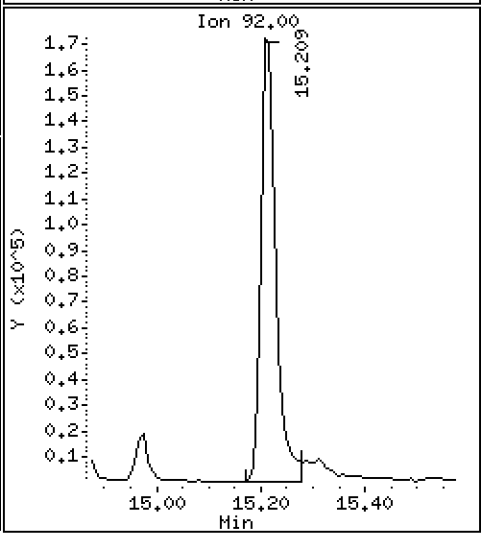


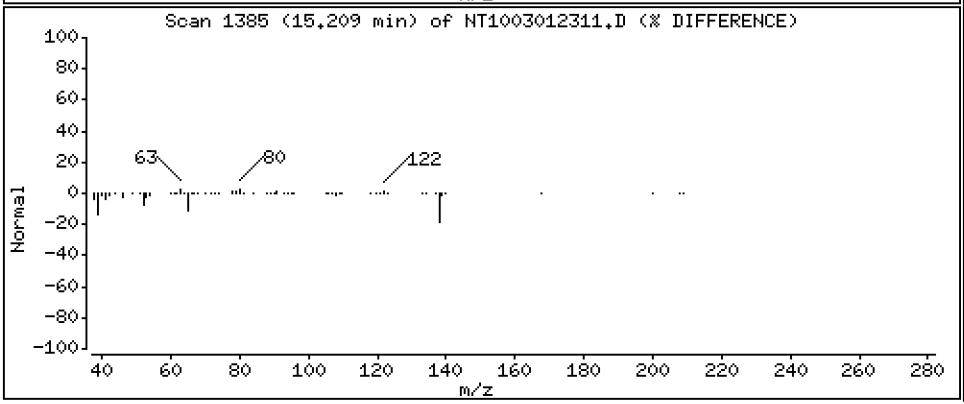












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

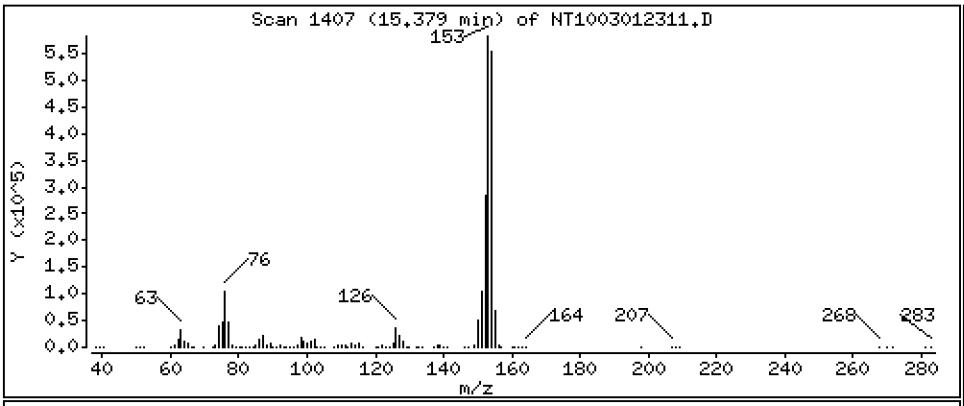
Operator: VTS

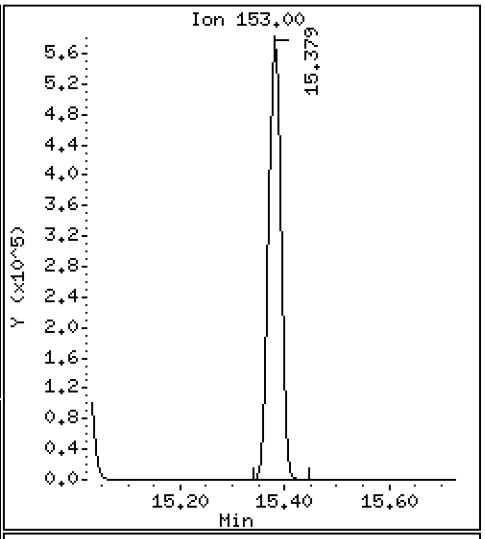
Column phase: ZB-5msi

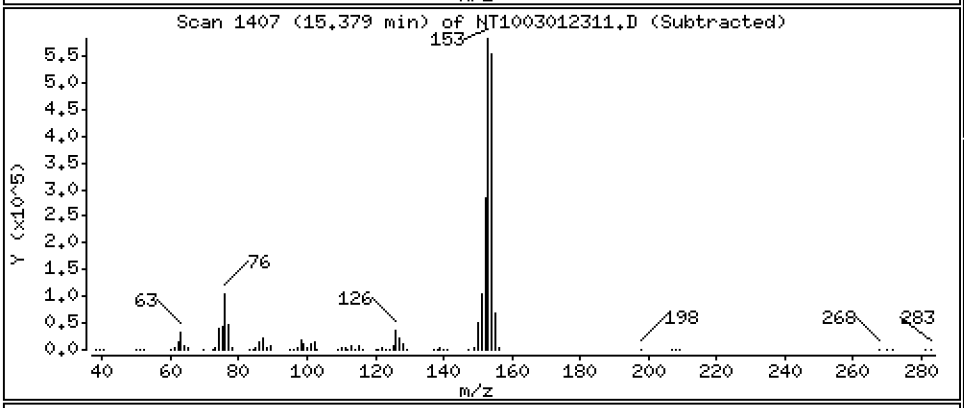
Column diameter: 0.25

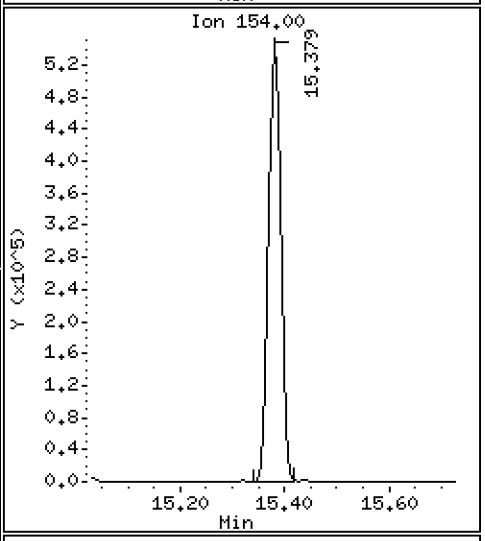
44 Acenaphthene

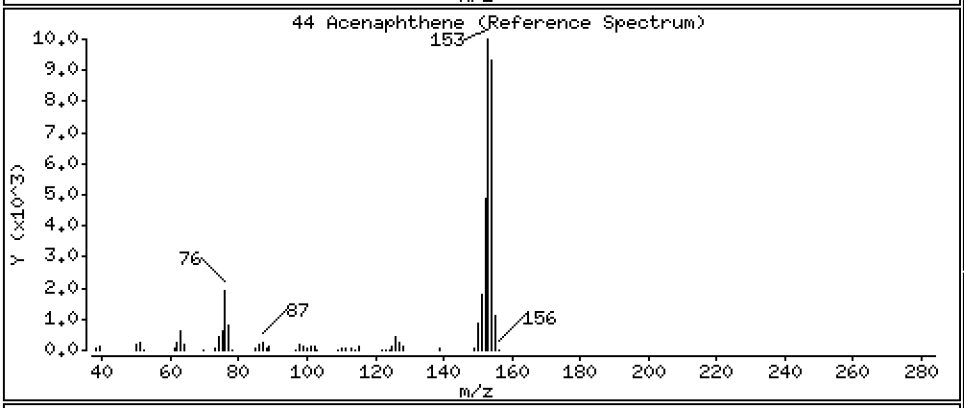
Concentration: 5.154 ug/mL

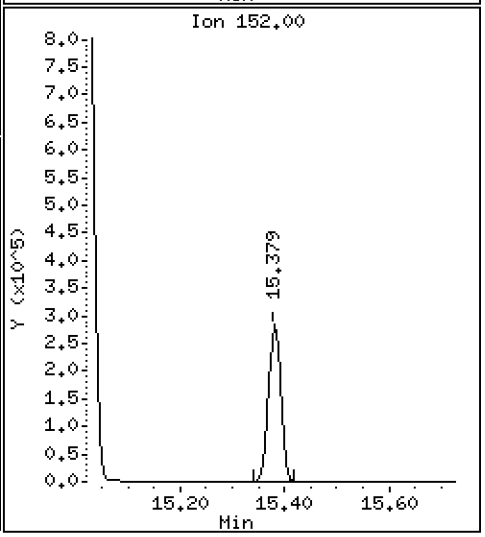


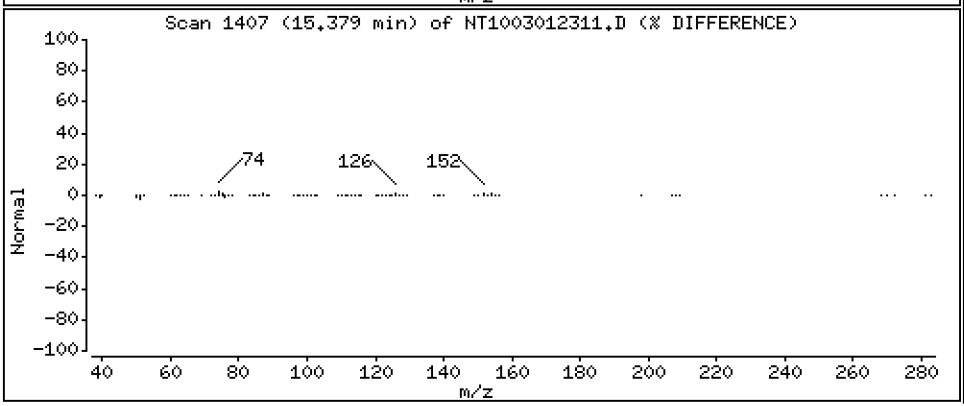












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

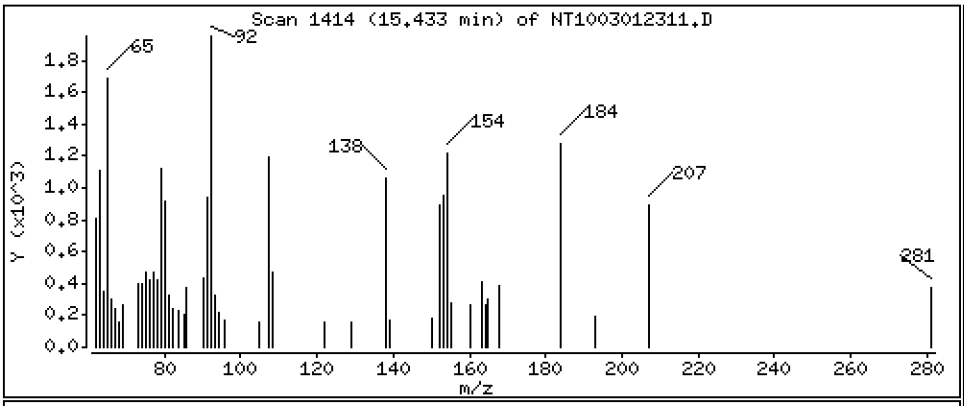
Operator: VTS

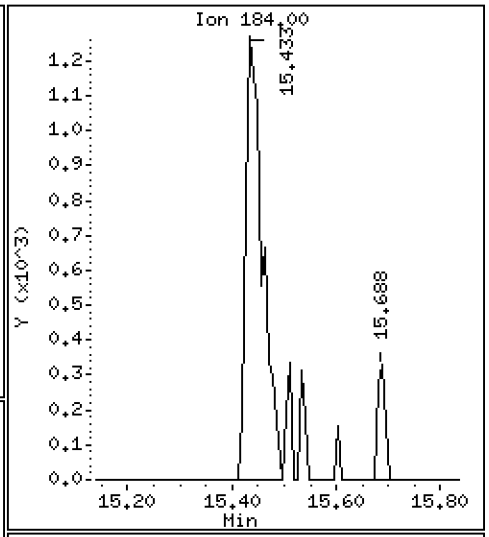
Column phase: ZB-5msi

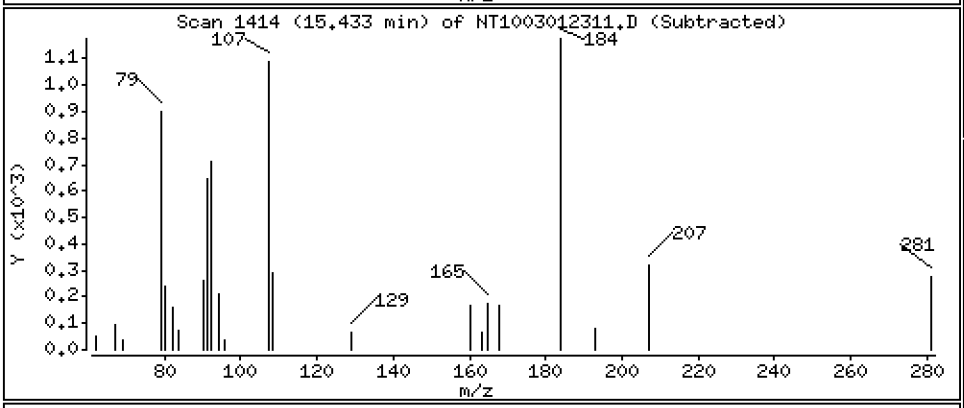
Column diameter: 0.25

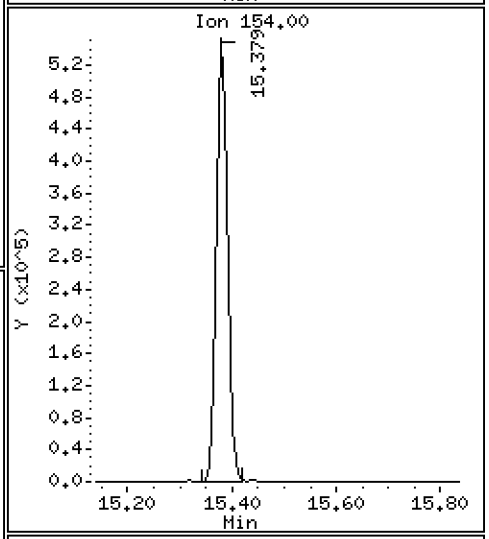
45 2,4-Dinitrophenol

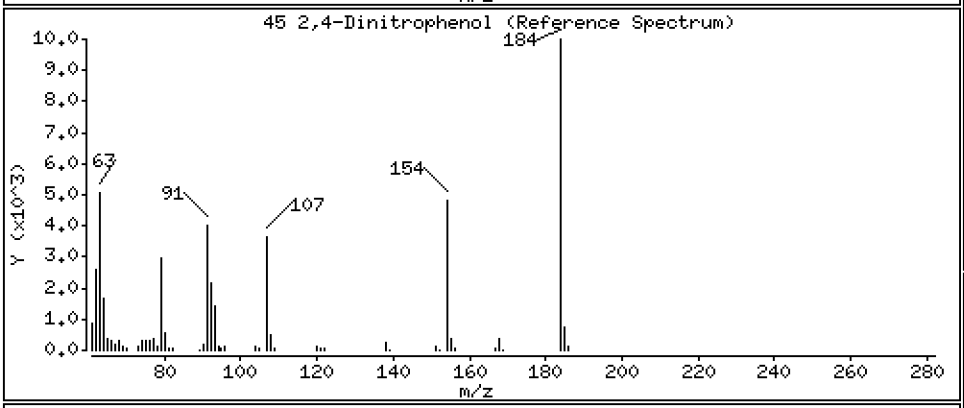
Concentration: 0.2667 ug/mL

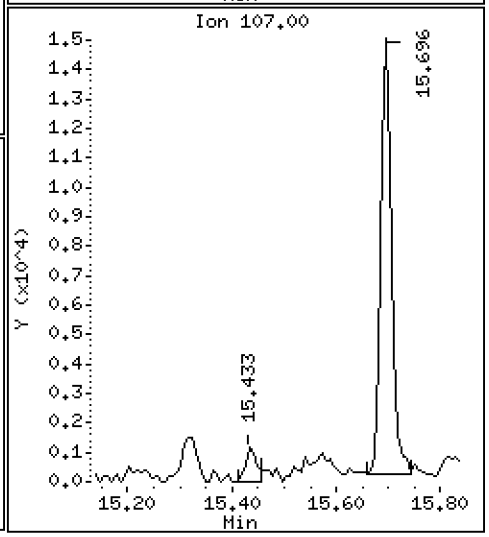


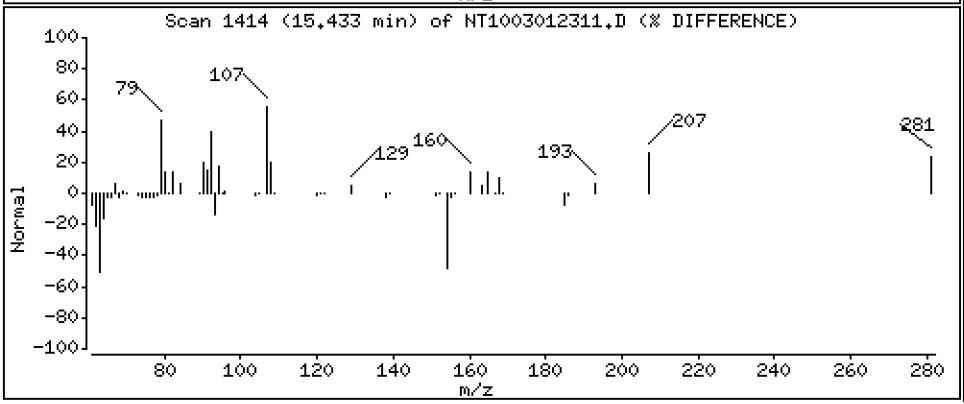












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

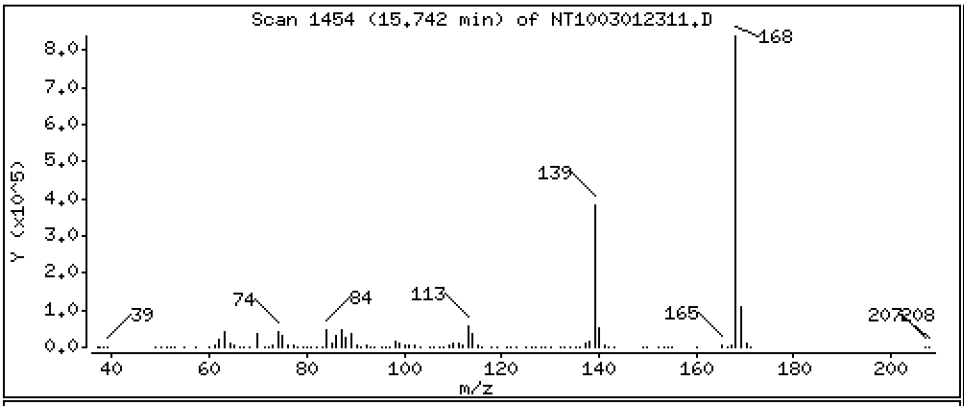
Operator: VTS

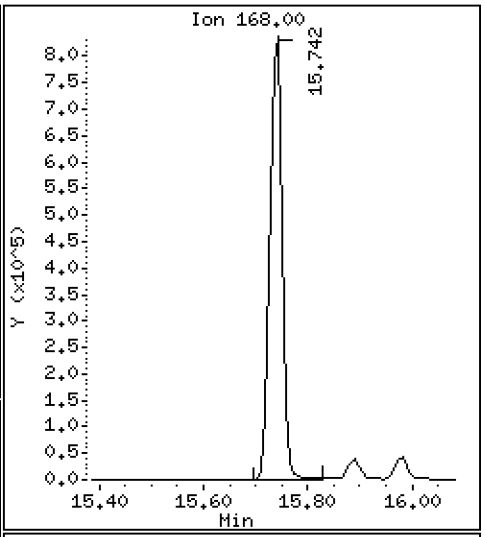
Column phase: ZB-5msi

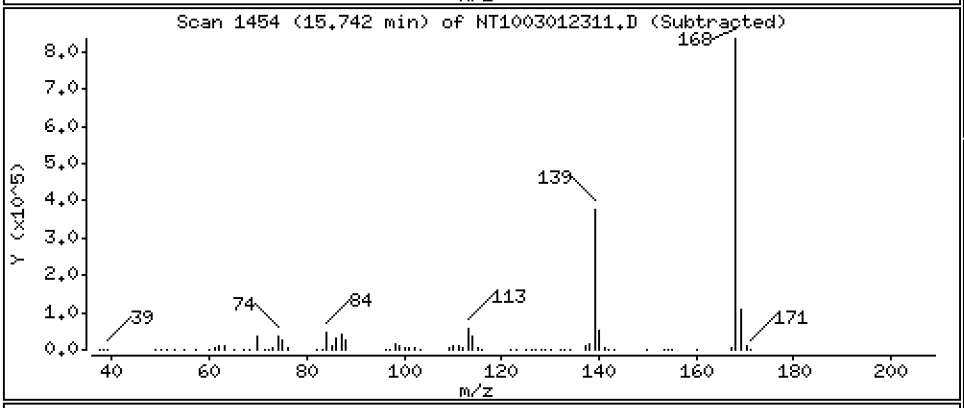
Column diameter: 0.25

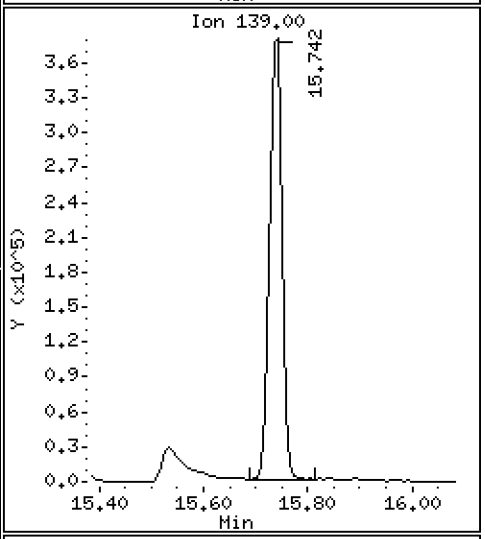
46 Dibenzofuran

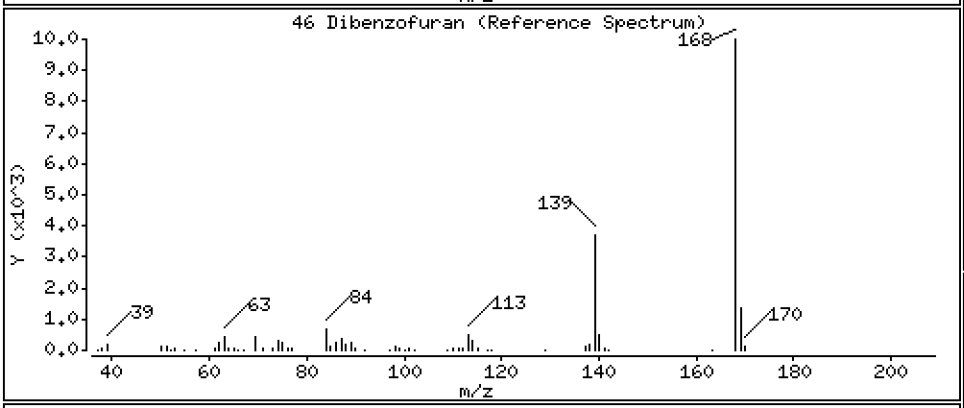
Concentration: 4.994 ug/mL

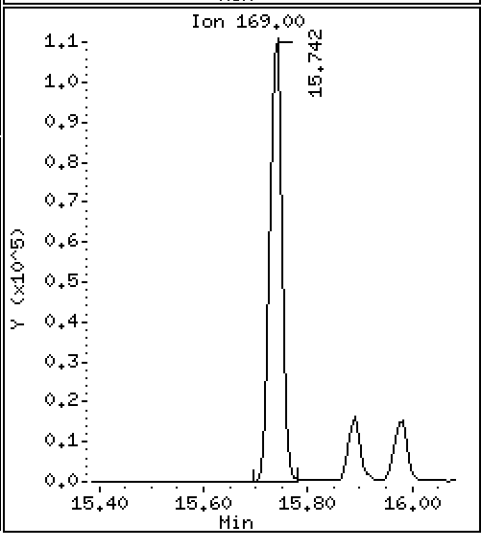


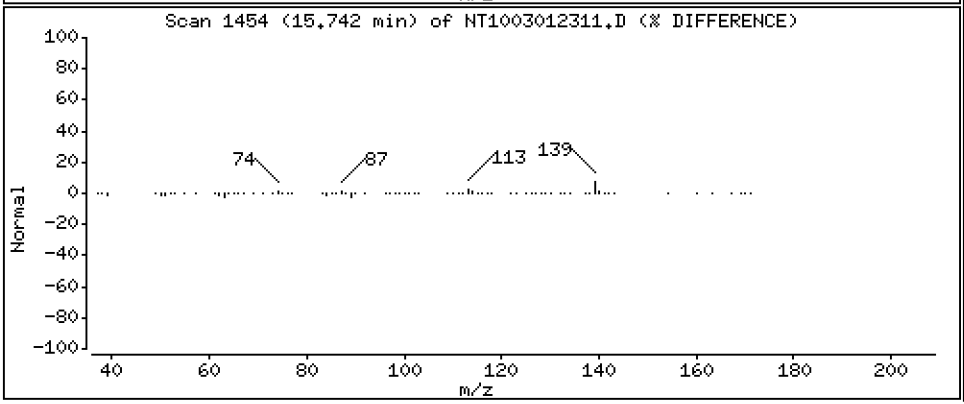












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

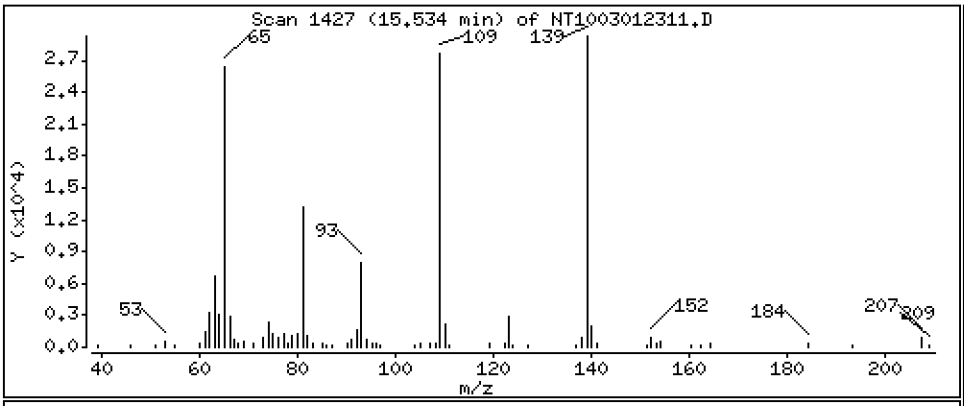
Operator: VTS

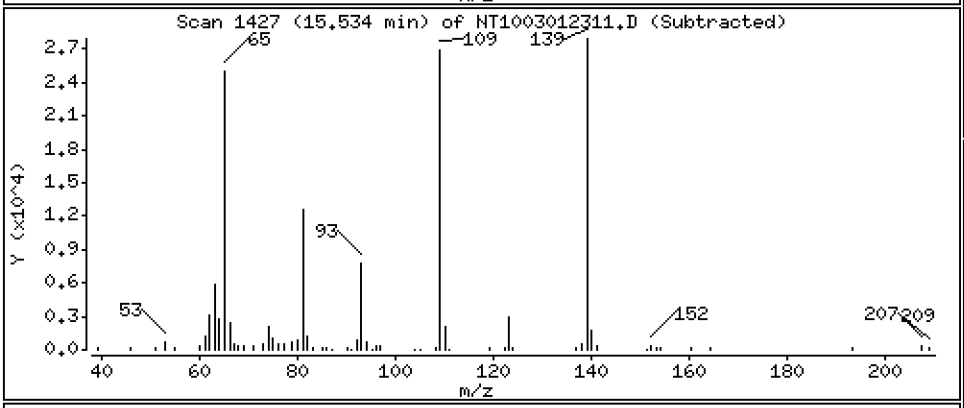
Column phase: ZB-5msi

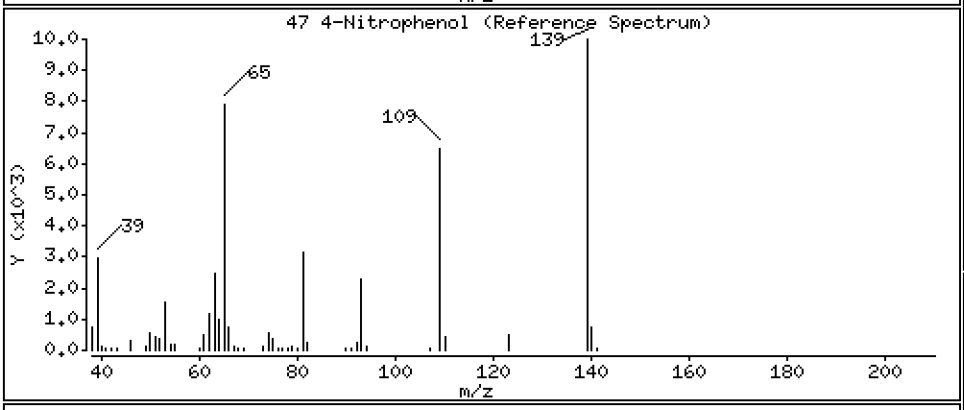
Column diameter: 0.25

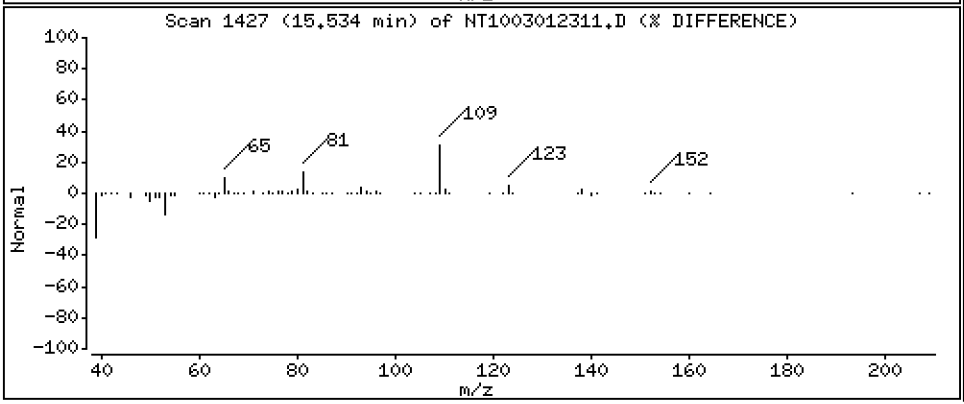
47 4-Nitrophenol

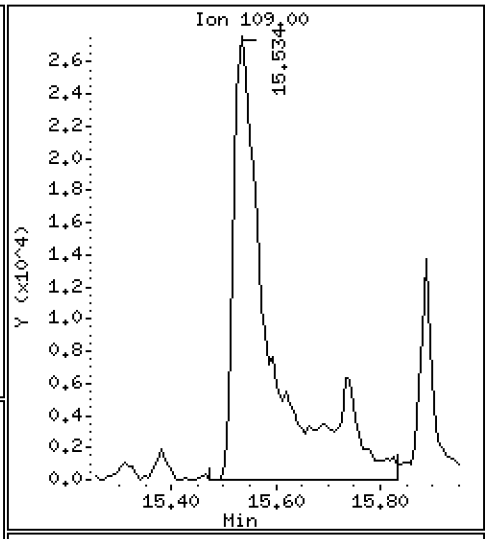
Concentration: 3.822 ug/mL

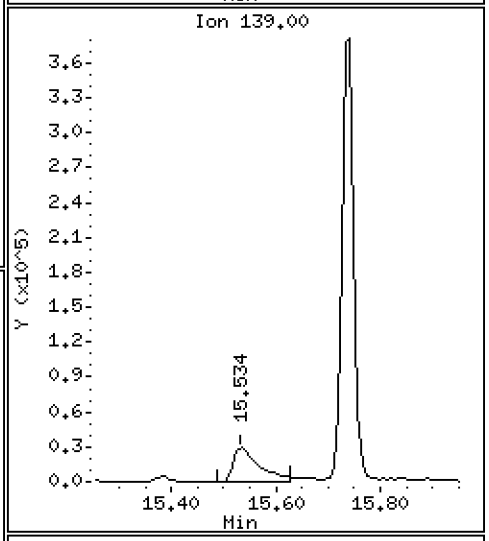


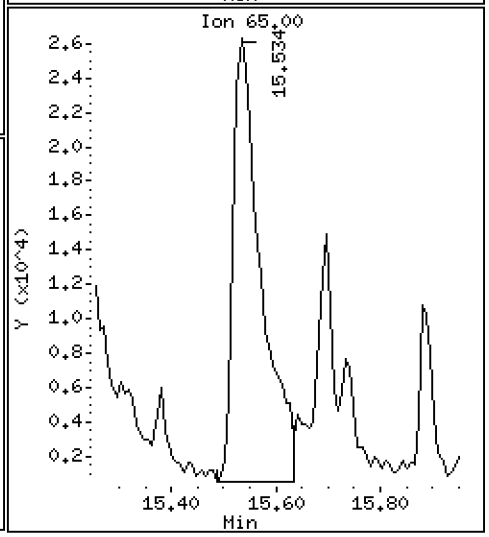












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

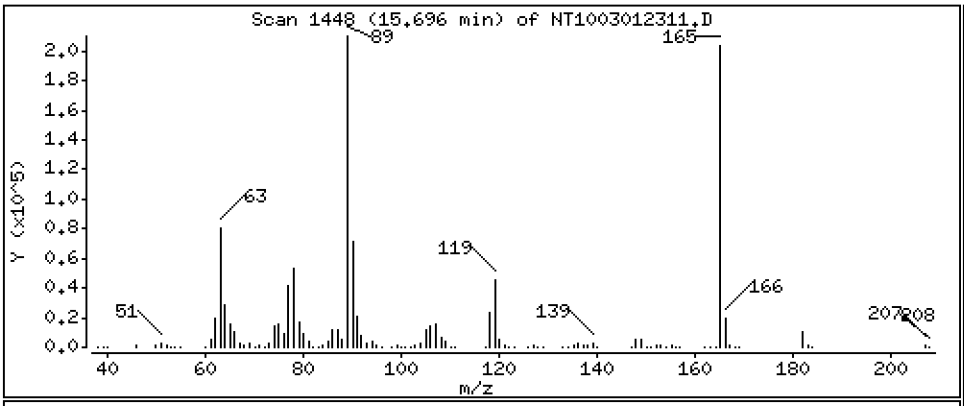
Operator: VTS

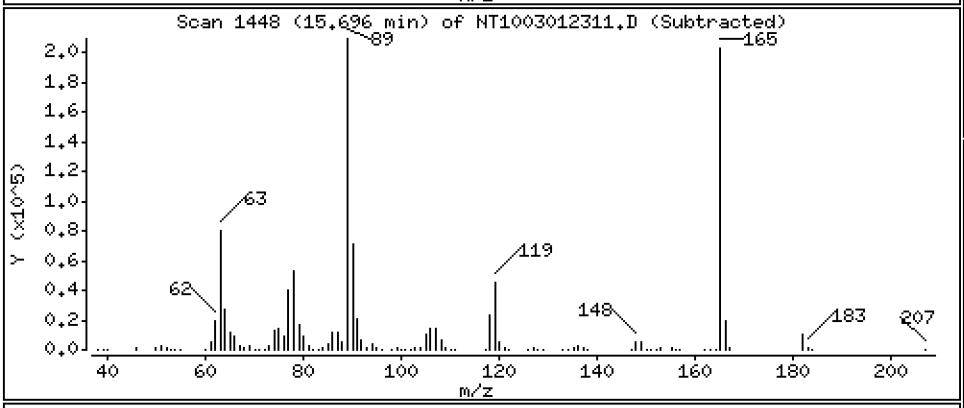
Column phase: ZB-5msi

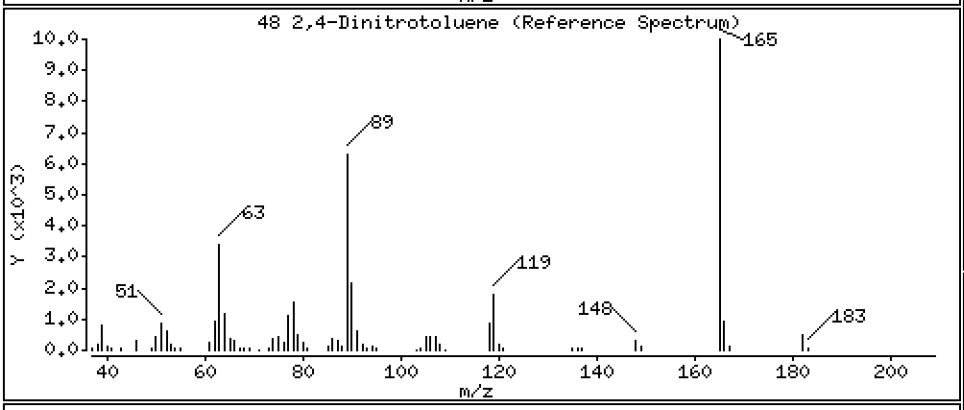
Column diameter: 0.25

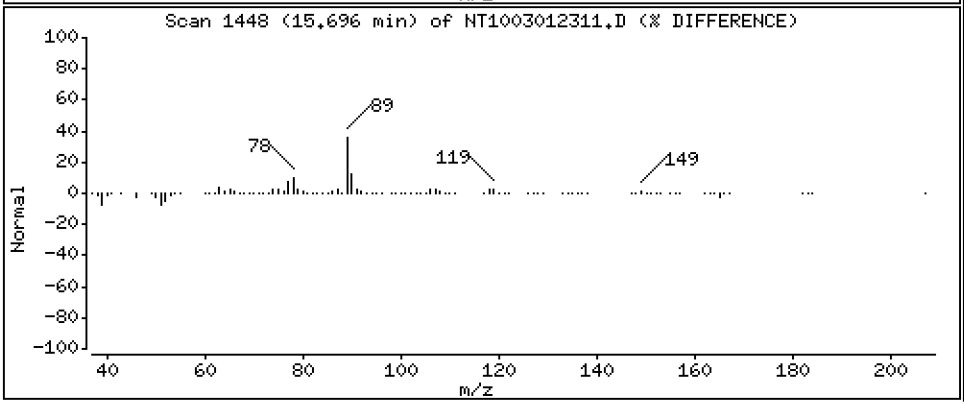
48 2,4-Dinitrotoluene

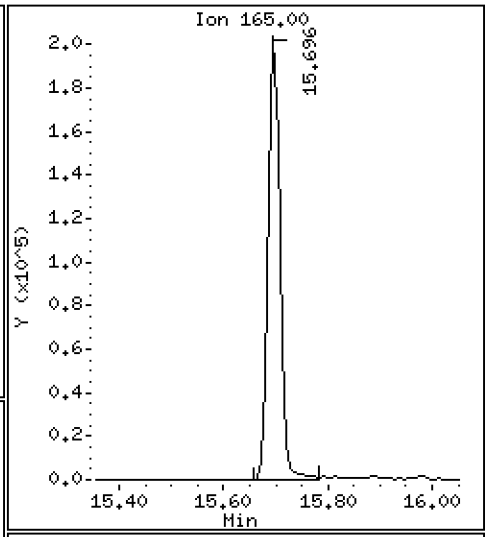
Concentration: 4.729 ug/mL

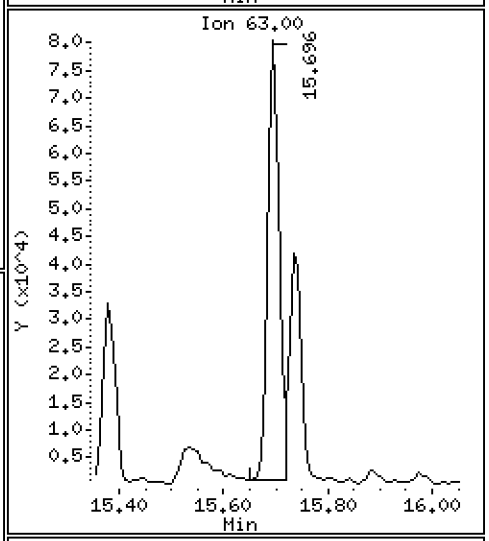


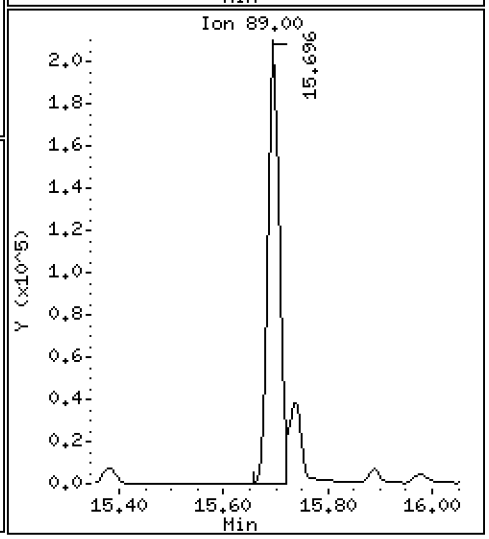












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

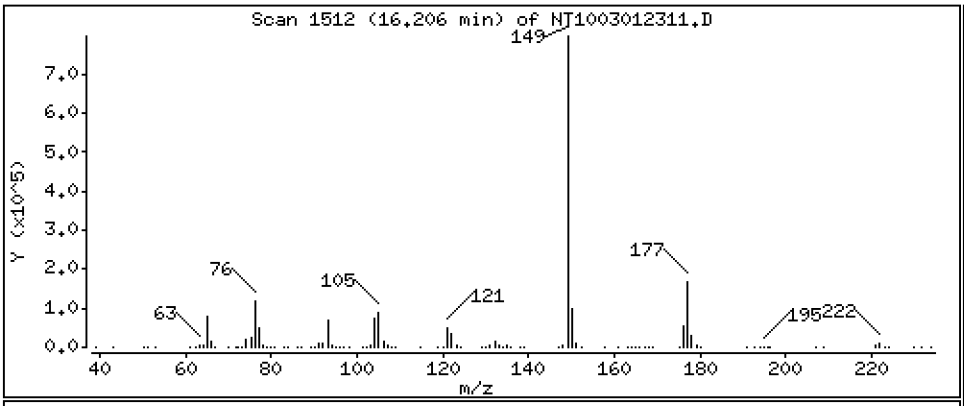
Operator: VTS

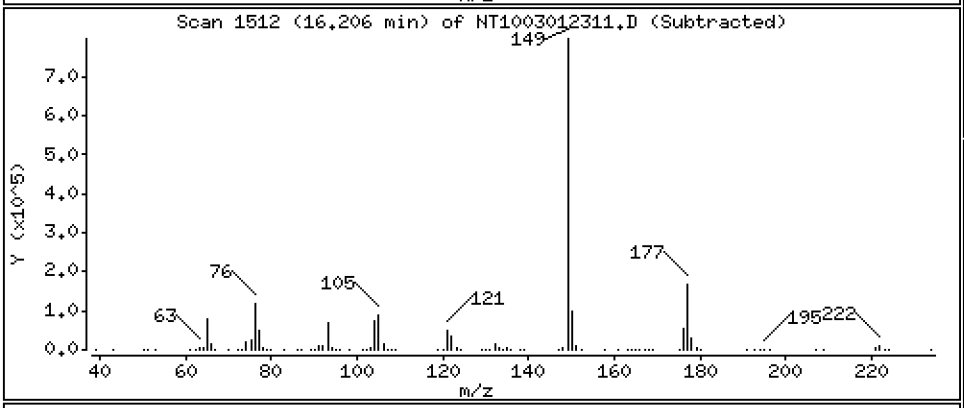
Column phase: ZB-5msi

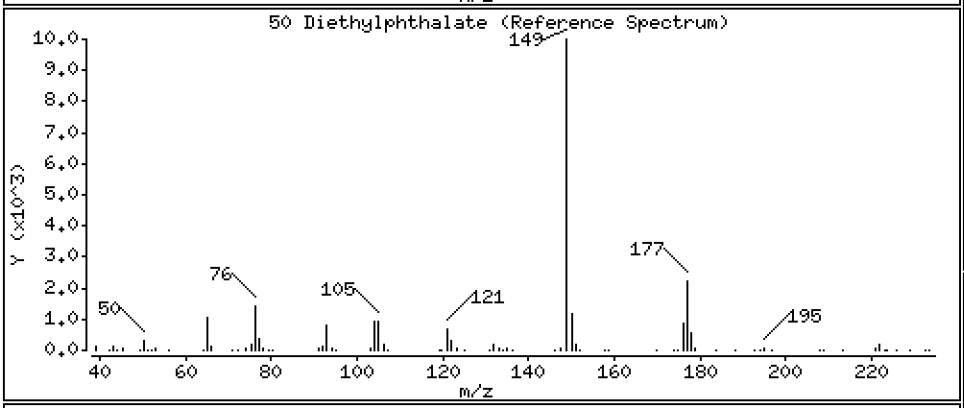
Column diameter: 0.25

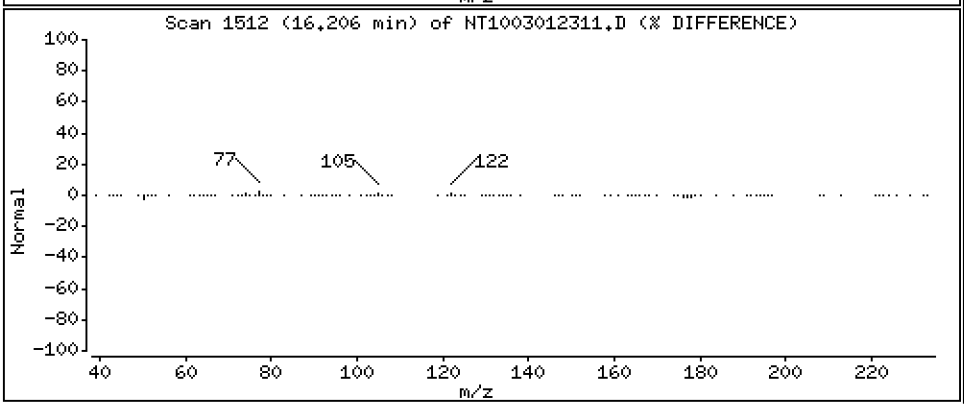
50 Diethylphthalate

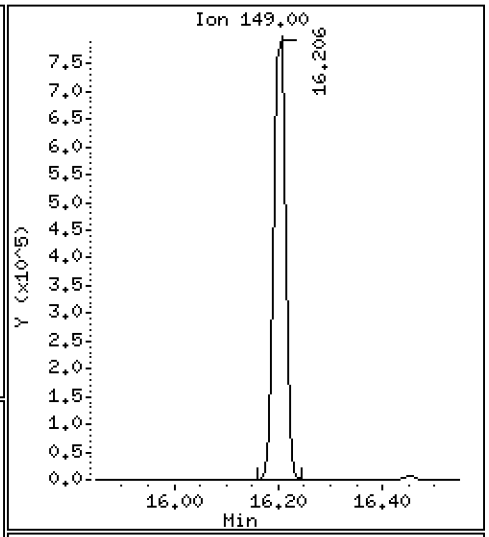
Concentration: 5.639 ug/mL

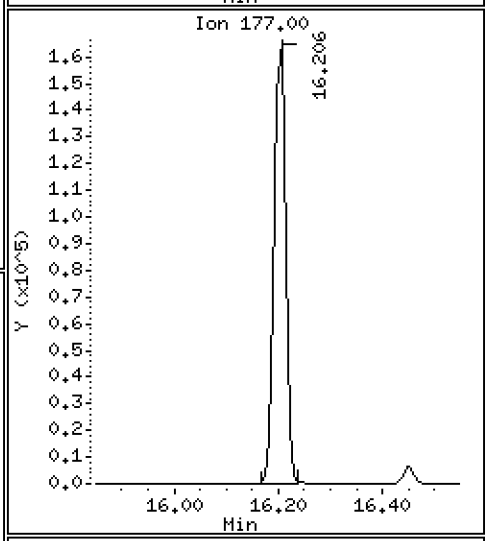


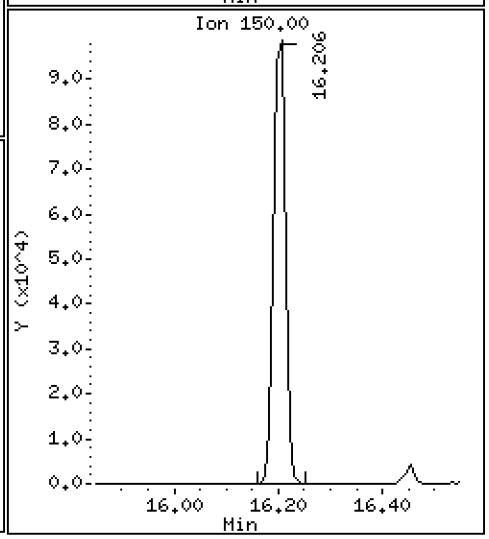












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

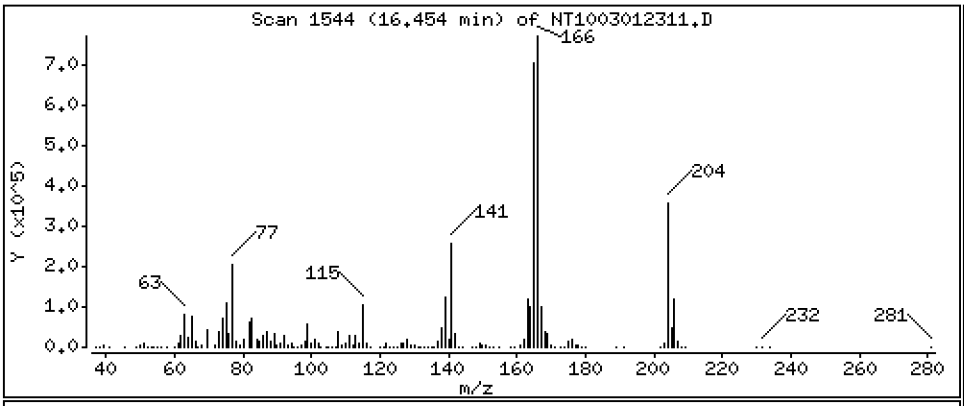
Operator: VTS

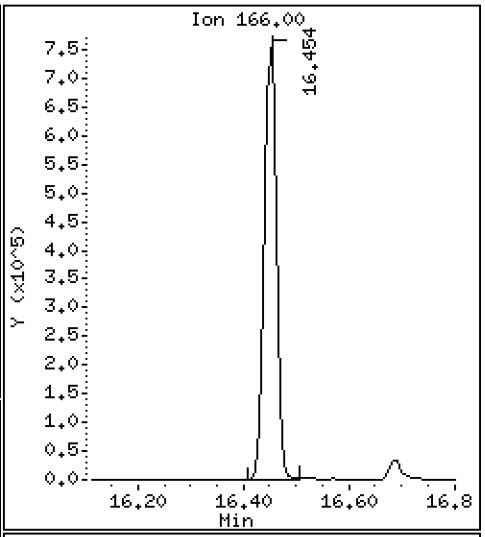
Column phase: ZB-5msi

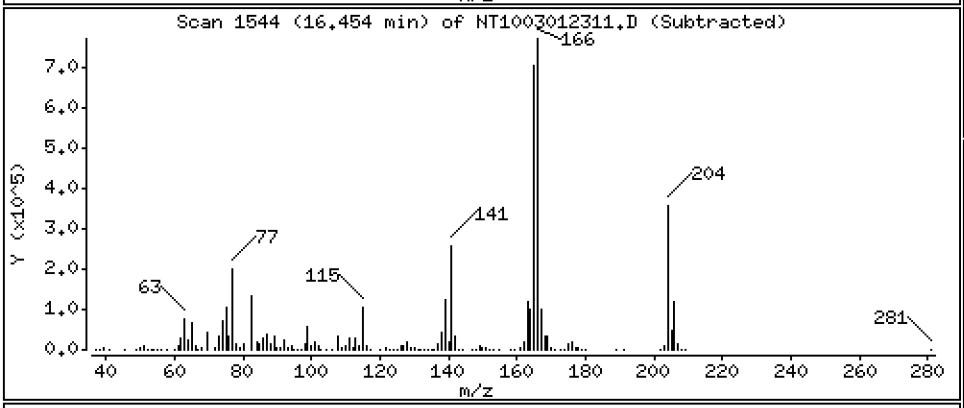
Column diameter: 0.25

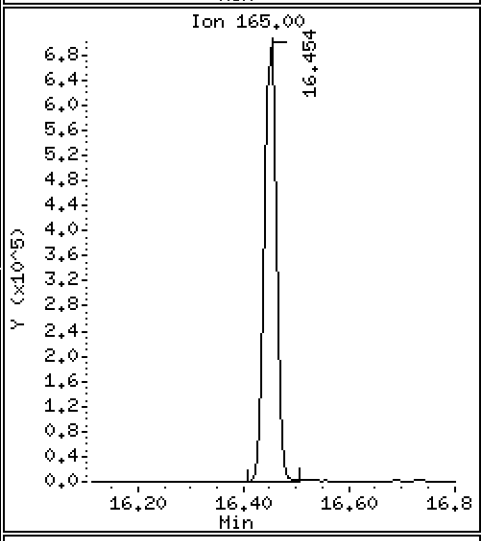
49 Fluorene

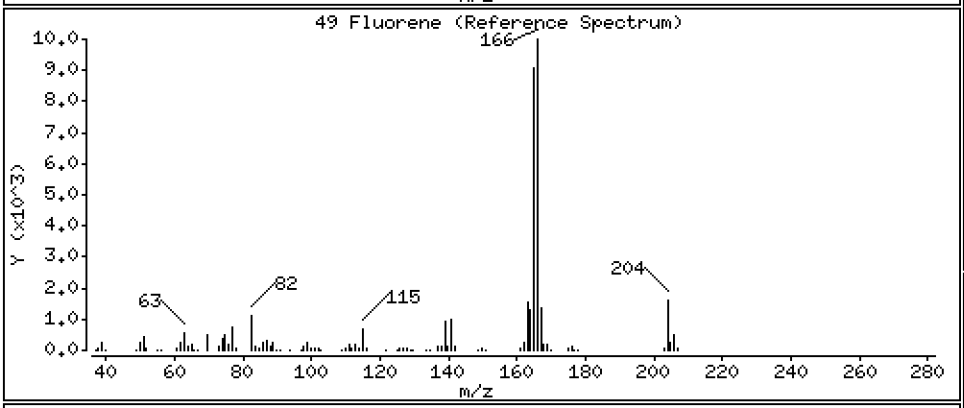
Concentration: 5.305 ug/mL

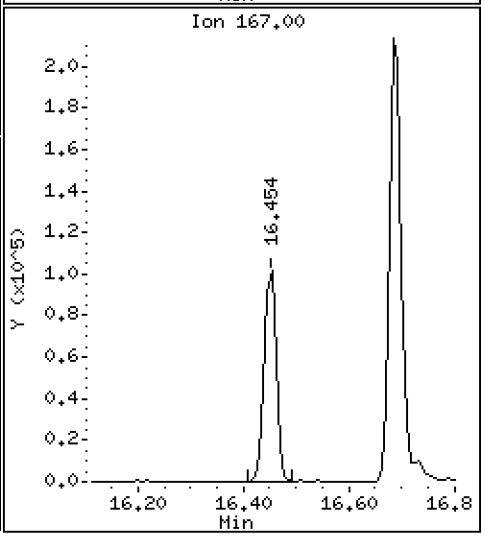


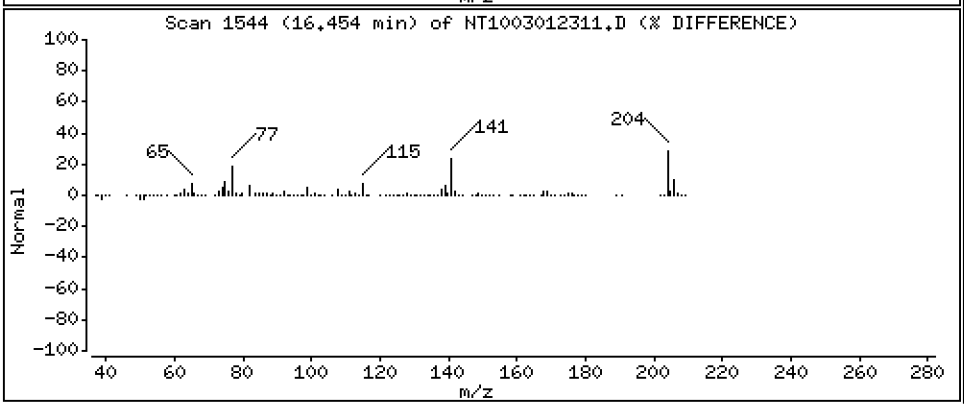












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

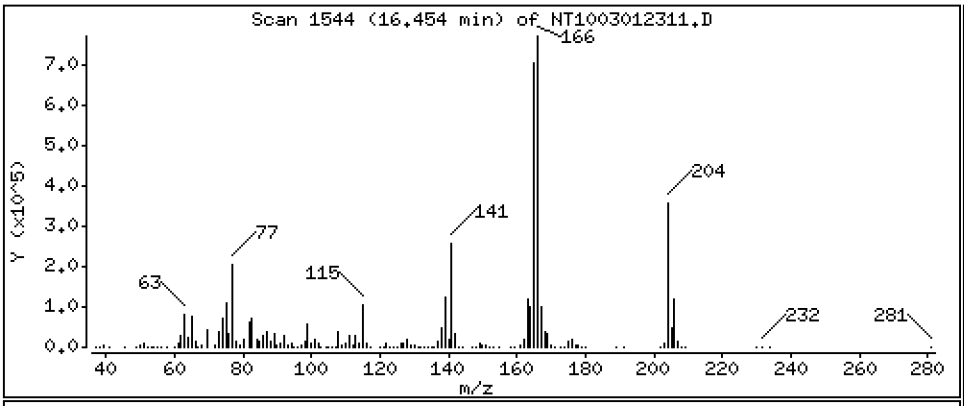
Operator: VTS

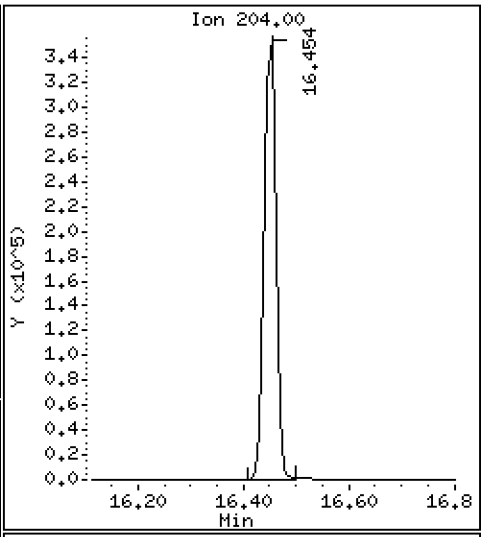
Column phase: ZB-5msi

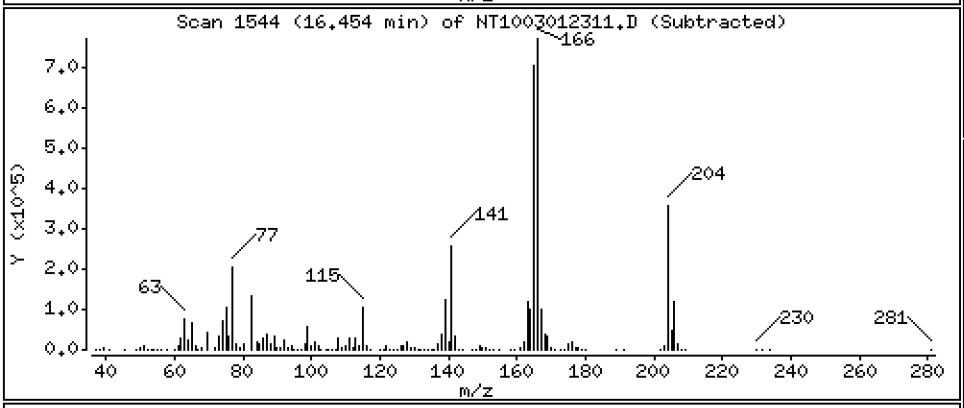
Column diameter: 0.25

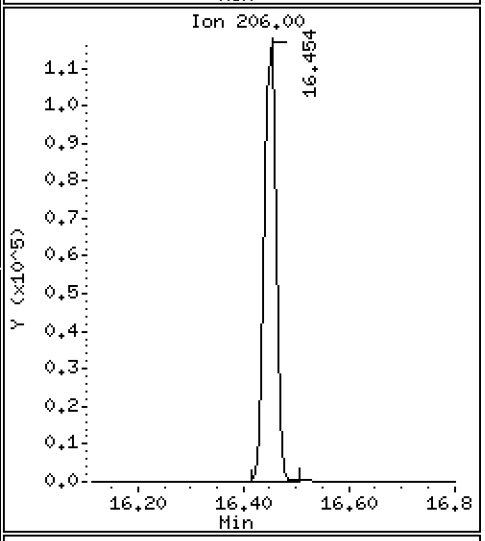
51 4-Chlorophenyl-phenylether

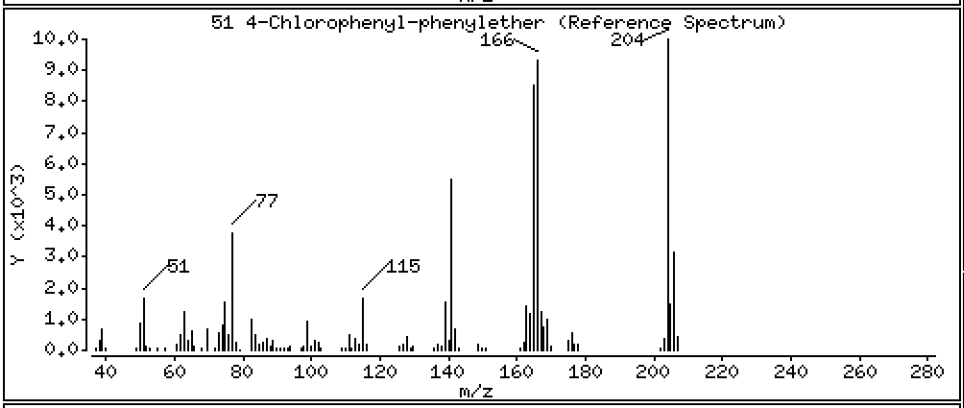
Concentration: 5.253 ug/mL

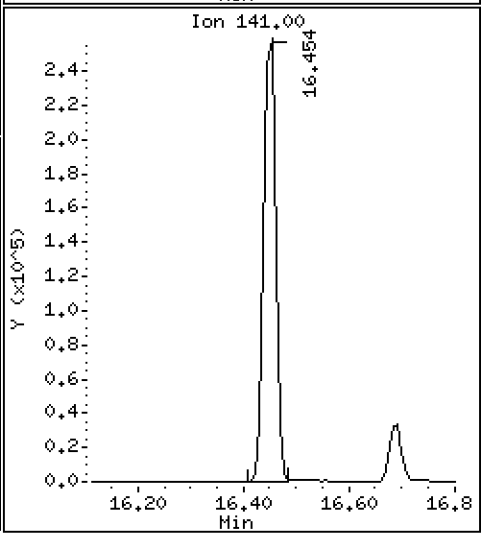


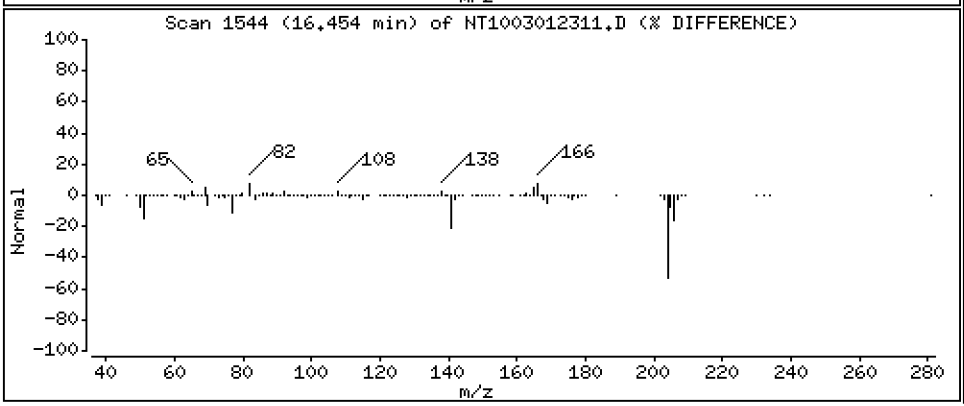












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

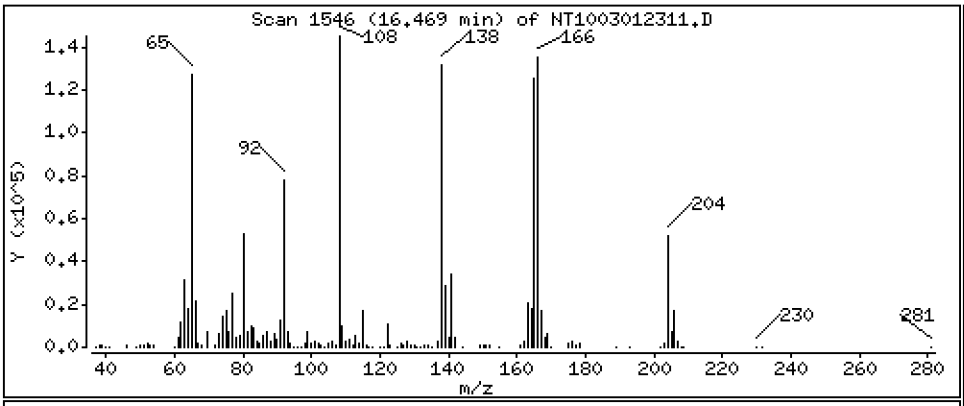
Operator: VTS

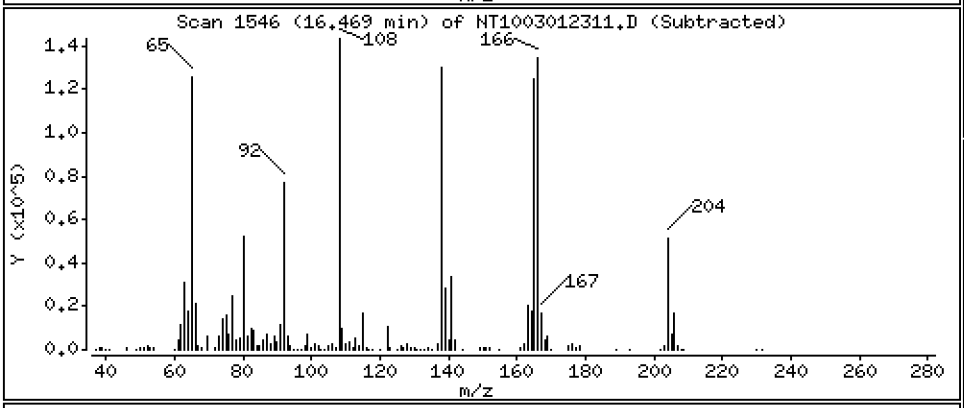
Column phase: ZB-5msi

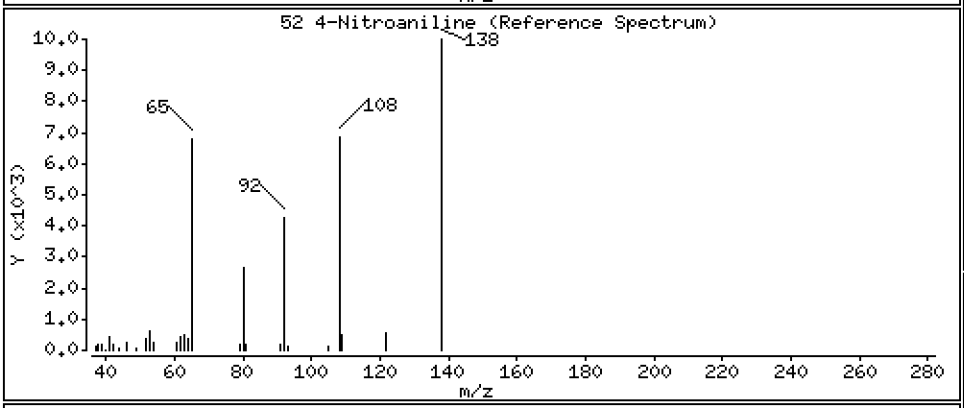
Column diameter: 0.25

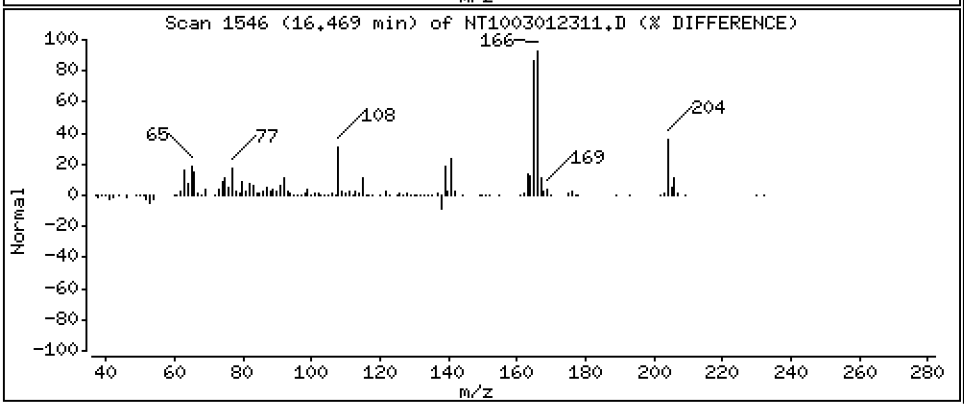
52 4-Nitroaniline

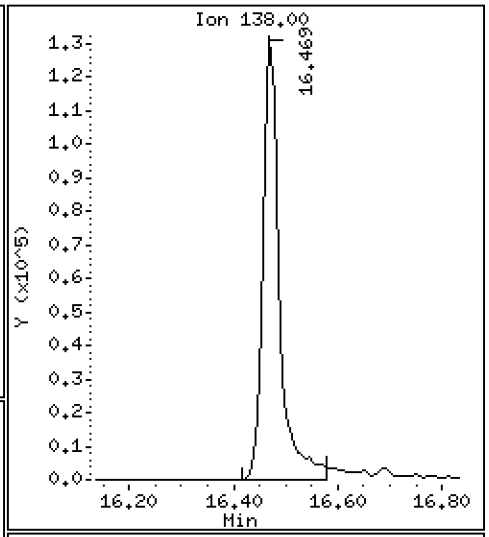
Concentration: 5.232 ug/mL

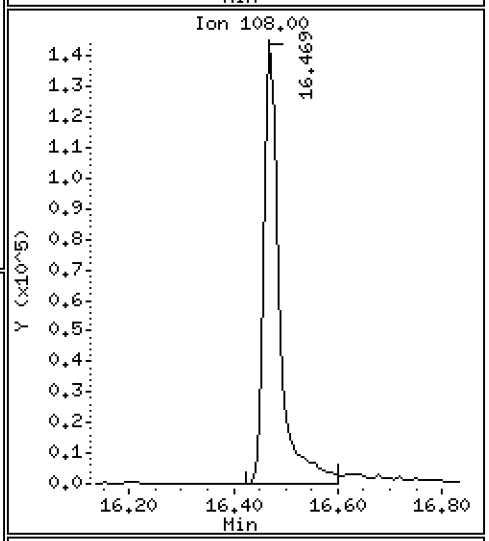


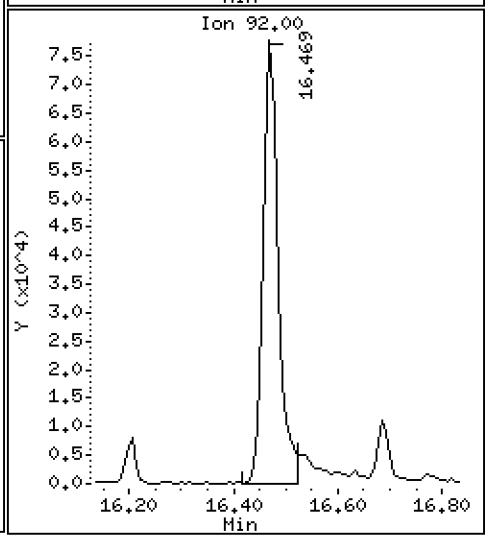












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

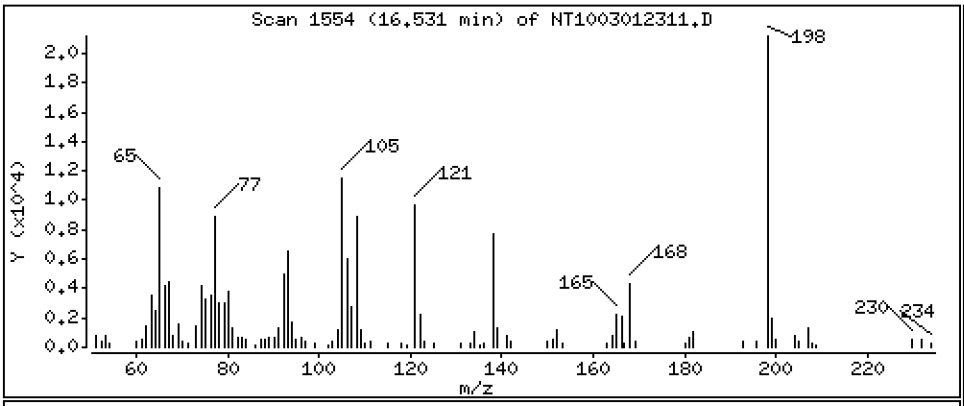
Operator: VTS

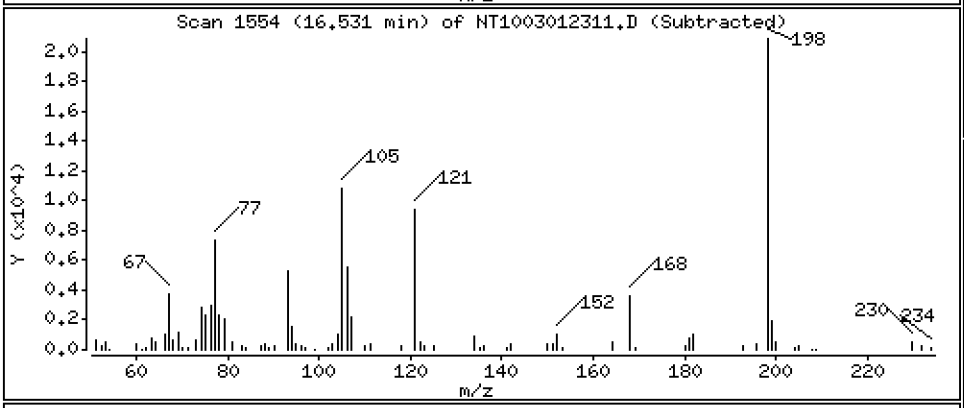
Column phase: ZB-5msi

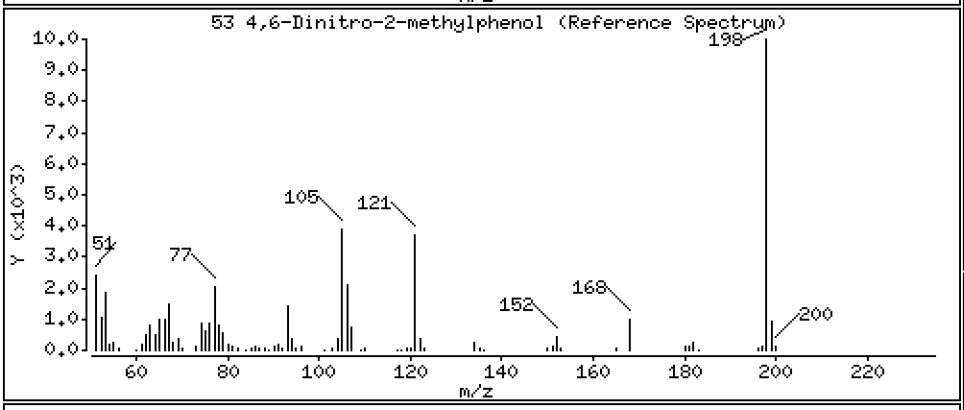
Column diameter: 0.25

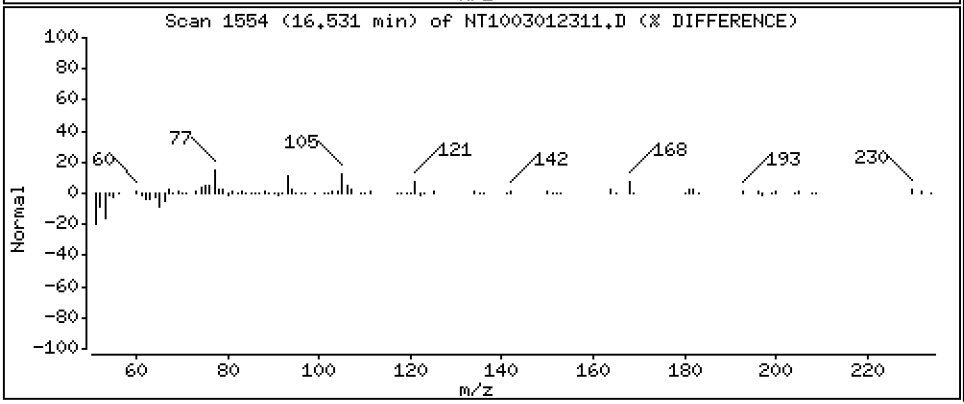
53 4,6-Dinitro-2-methylphenol

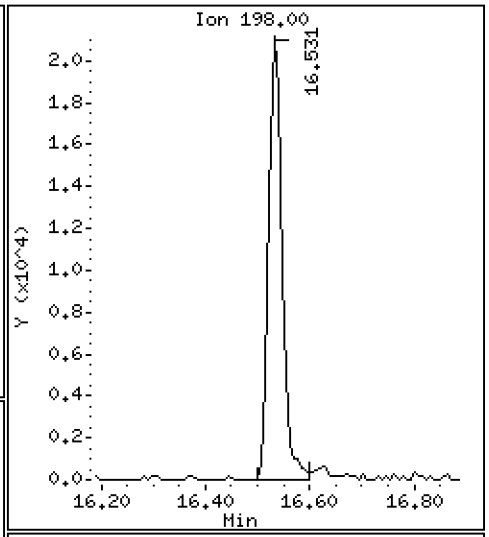
Concentration: 1.292 ug/mL

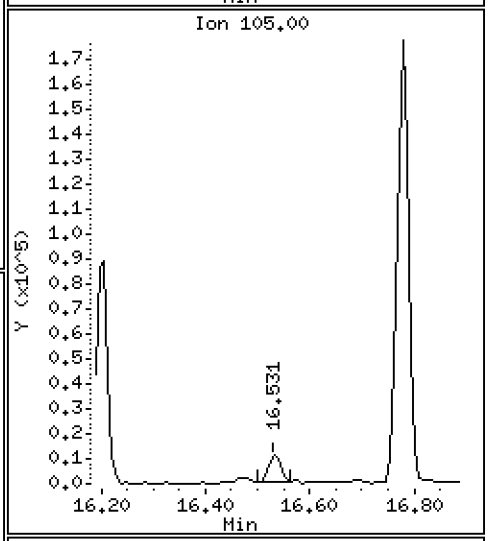


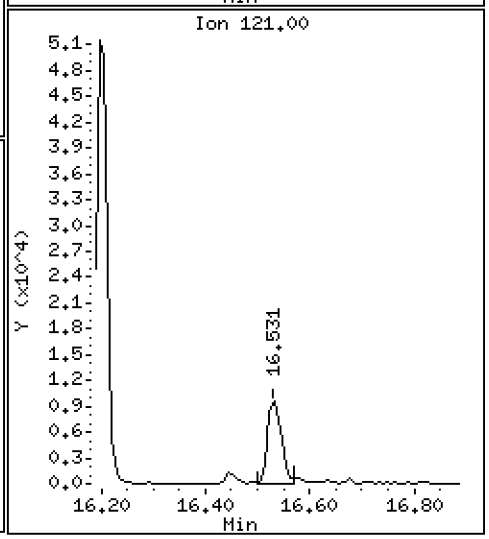












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

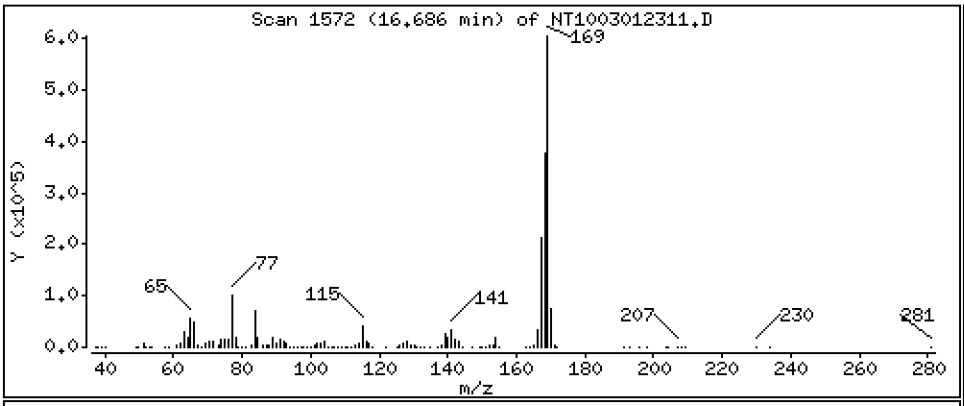
Operator: VTS

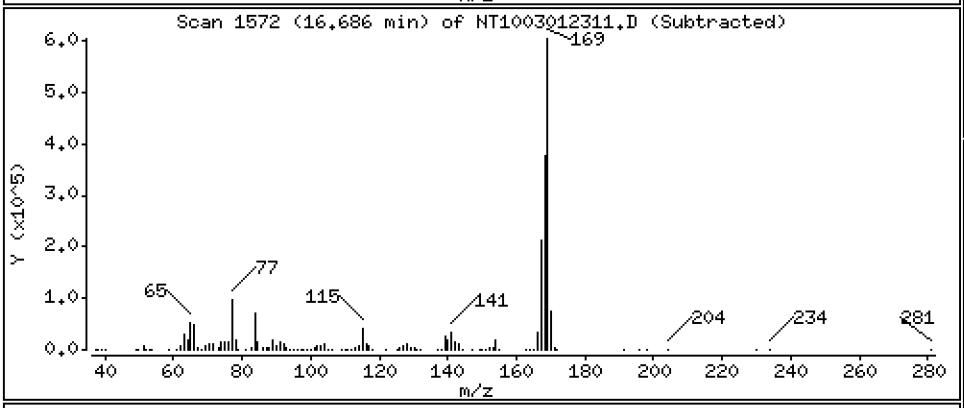
Column phase: ZB-5msi

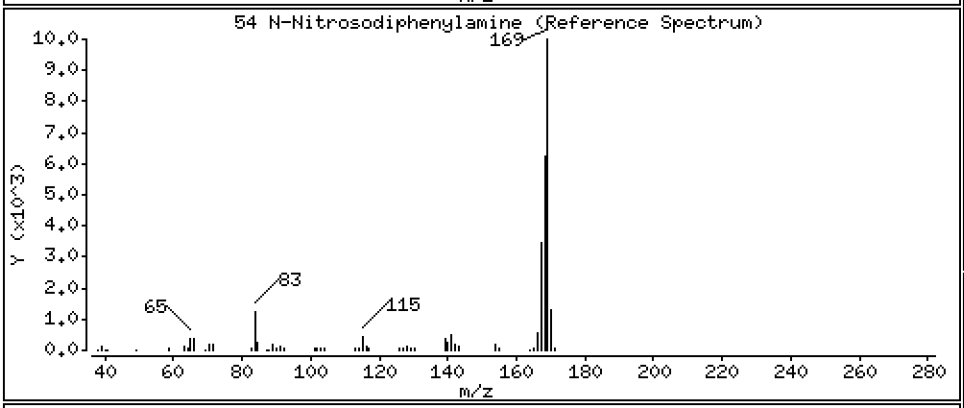
Column diameter: 0.25

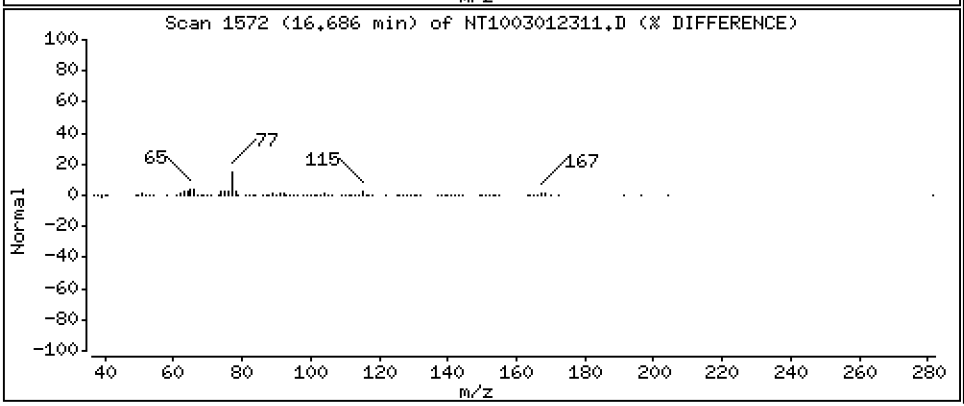
54 N-Nitrosodiphenylamine

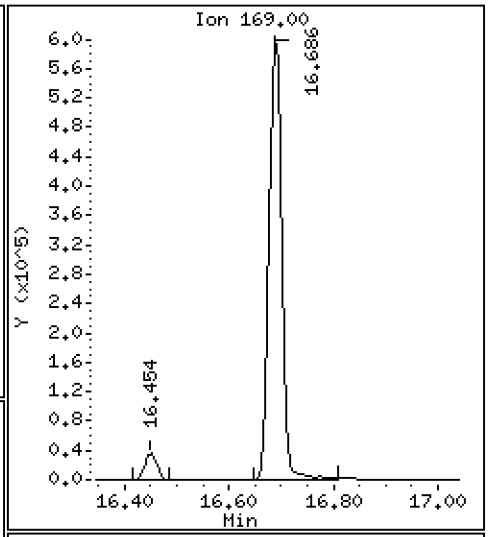
Concentration: 5.416 ug/mL

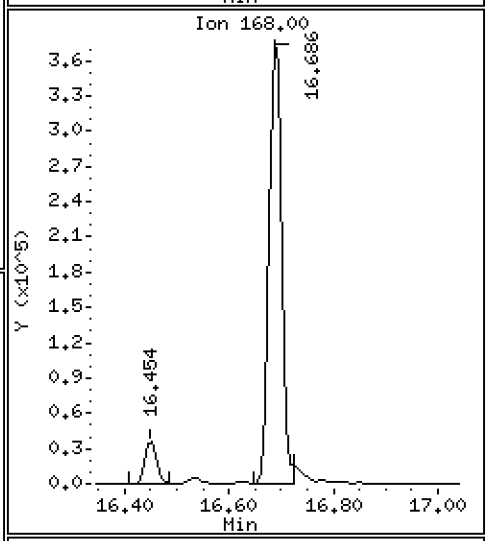


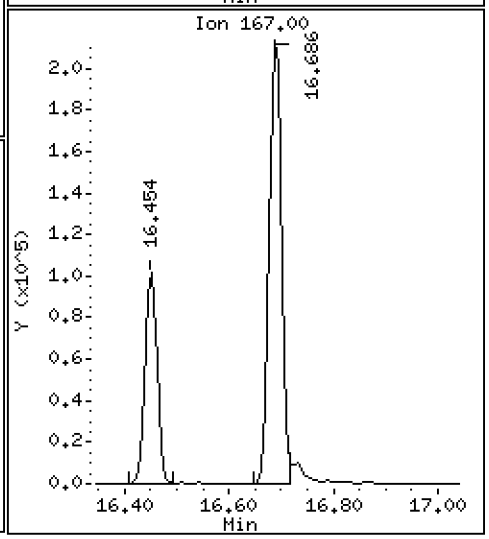












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

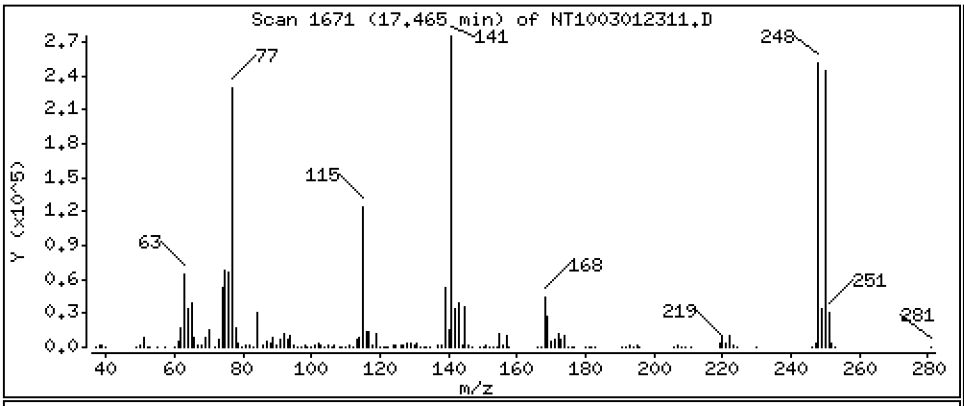
Operator: VTS

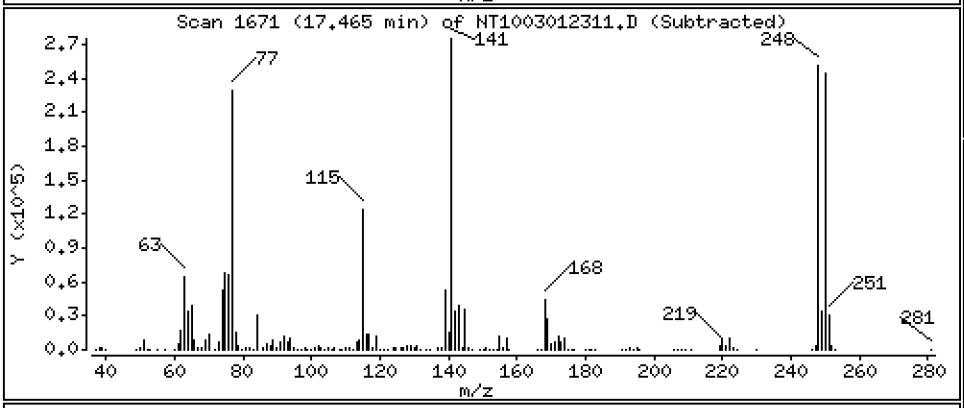
Column phase: ZB-5msi

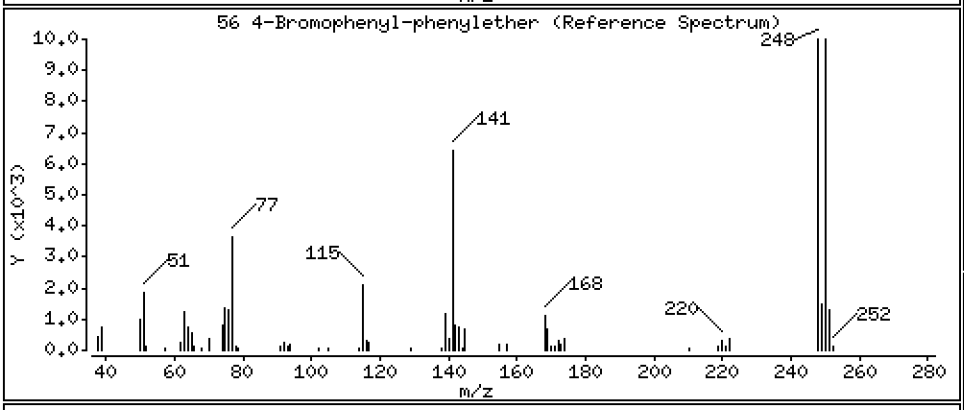
Column diameter: 0.25

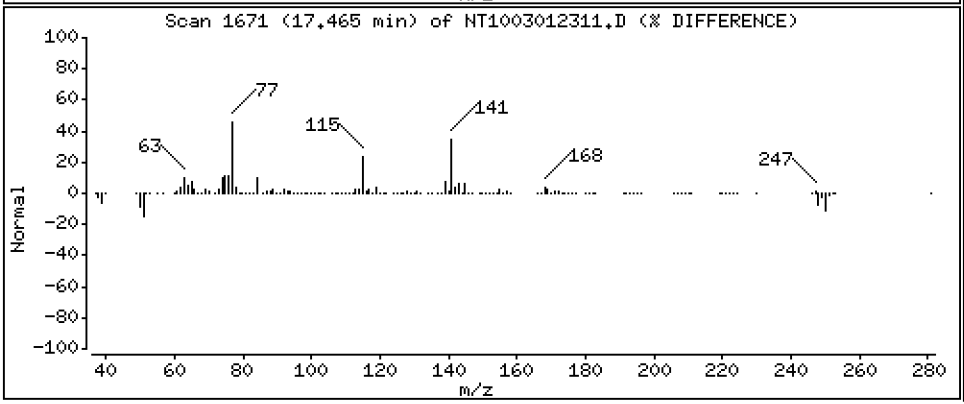
56 4-Bromophenyl-phenylether

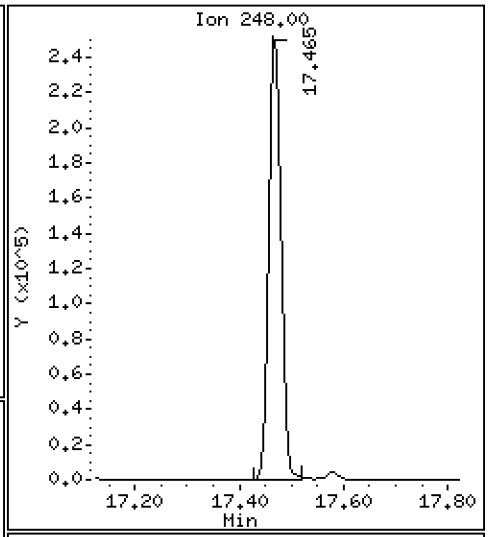
Concentration: 5.460 ug/mL

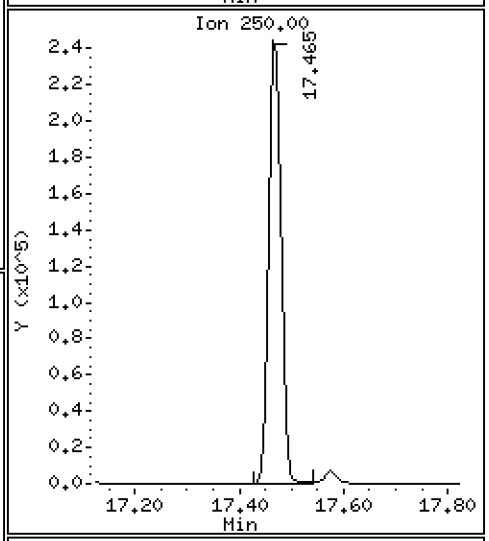


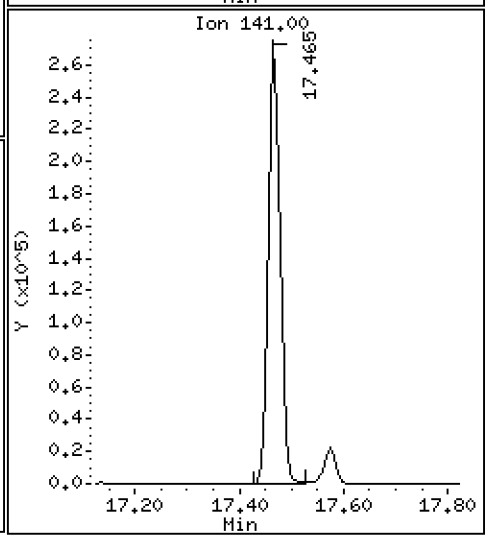












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

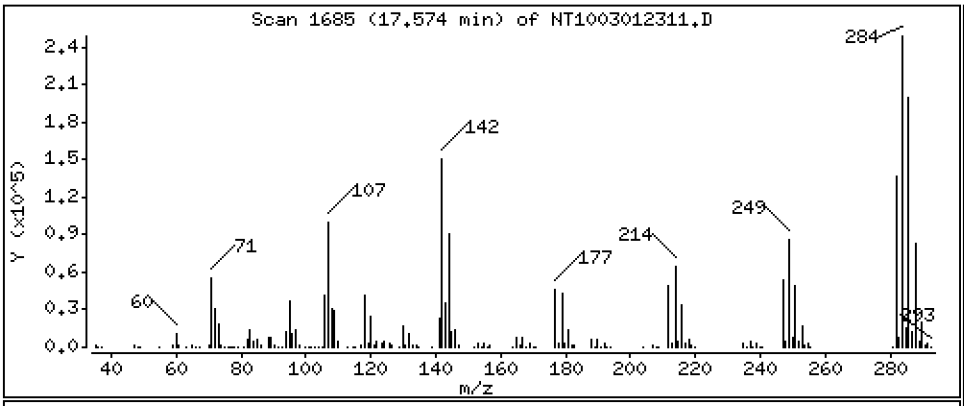
Operator: VTS

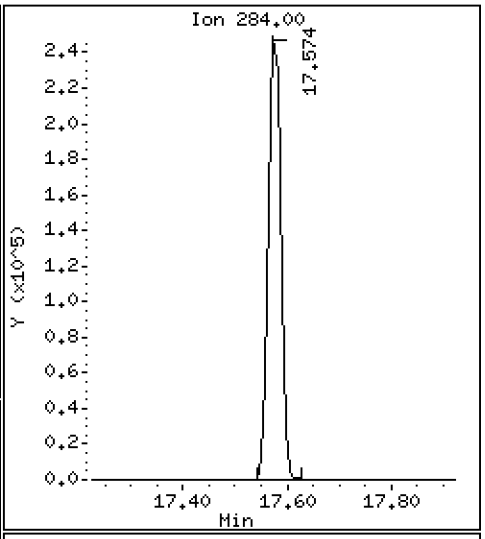
Column phase: ZB-5msi

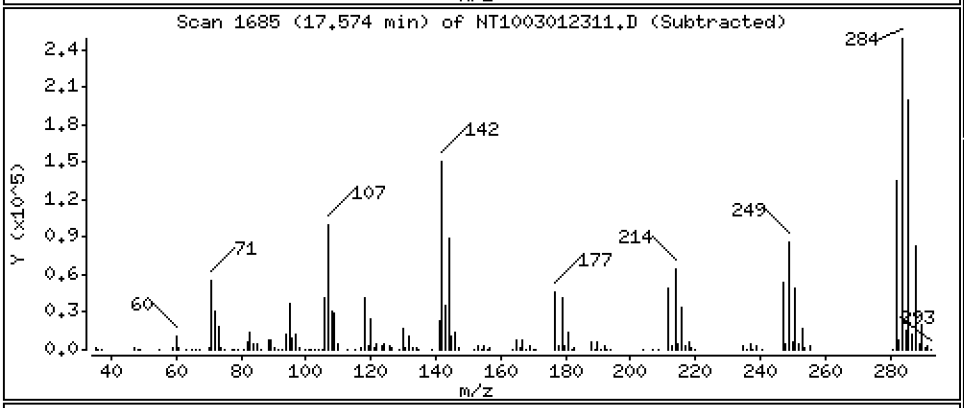
Column diameter: 0.25

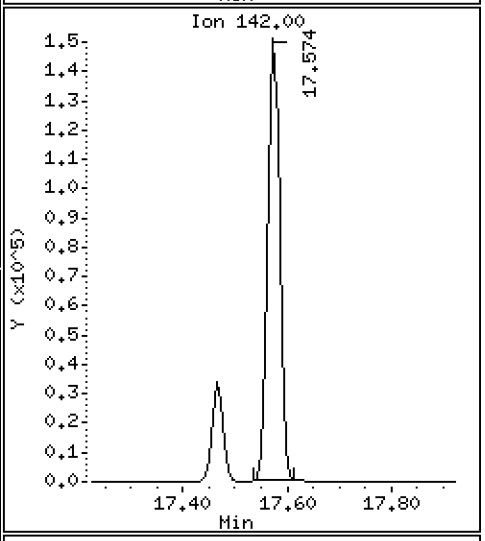
57 Hexachlorobenzene

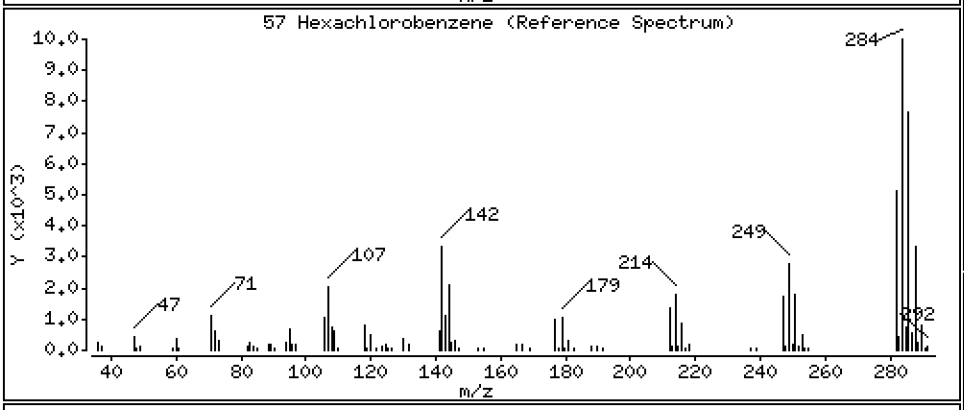
Concentration: 4.805 ug/mL

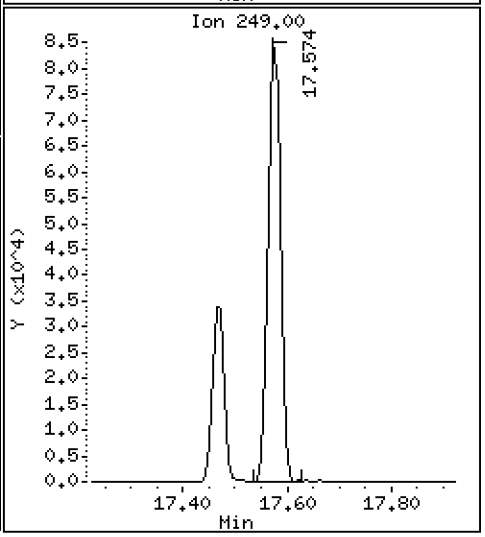


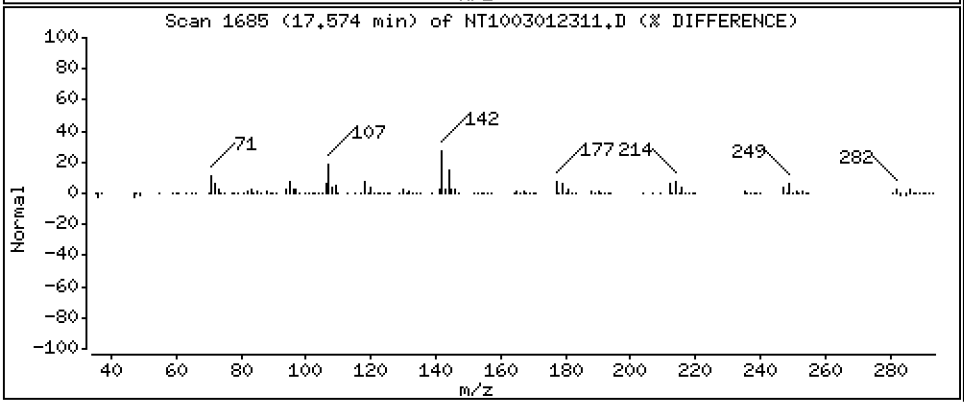












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

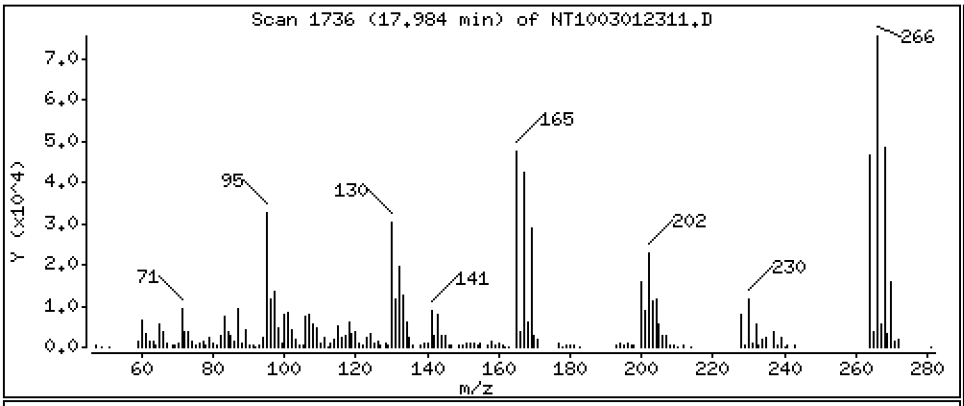
Operator: VTS

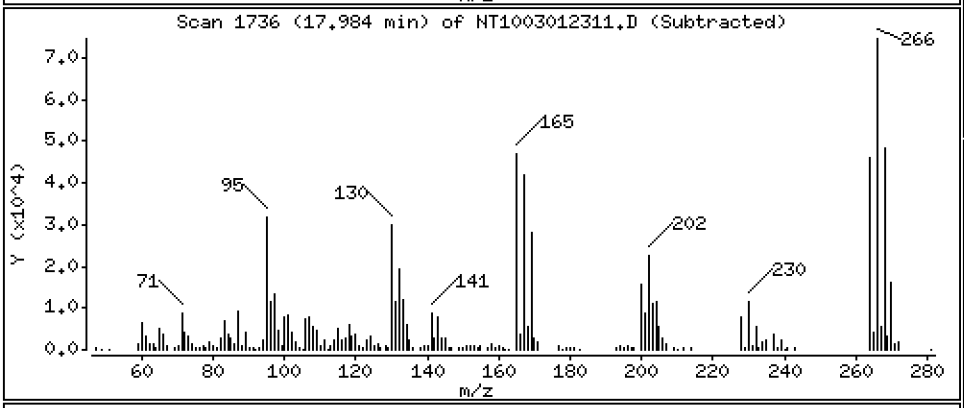
Column phase: ZB-5msi

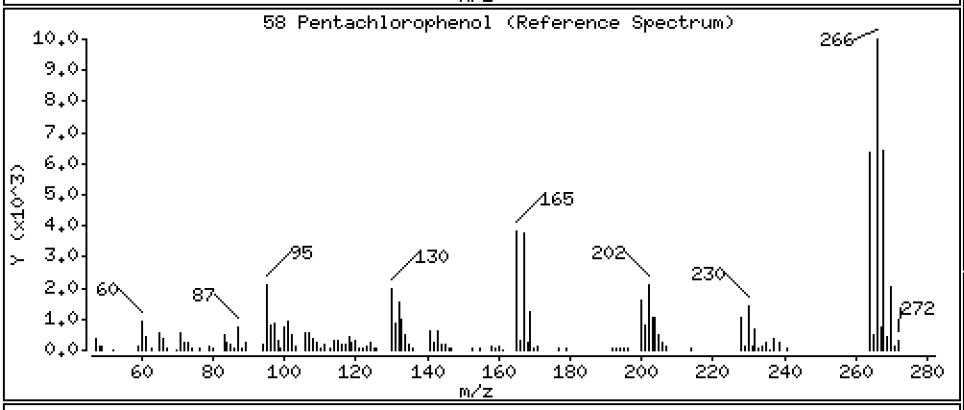
Column diameter: 0.25

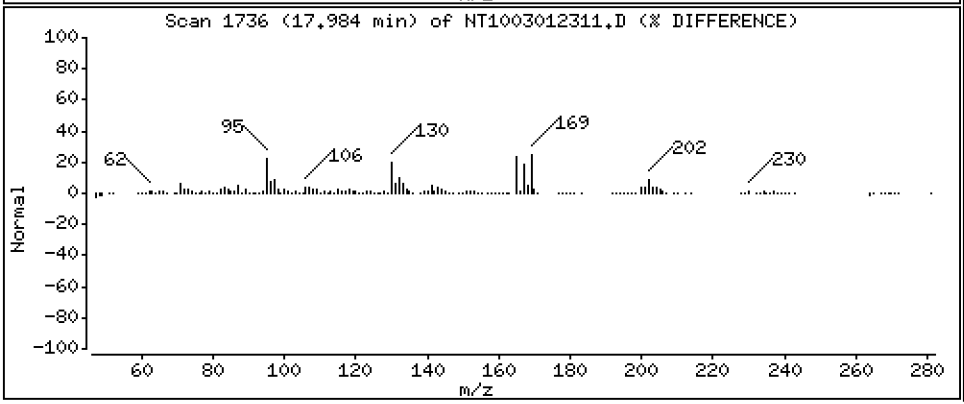
58 Pentachlorophenol

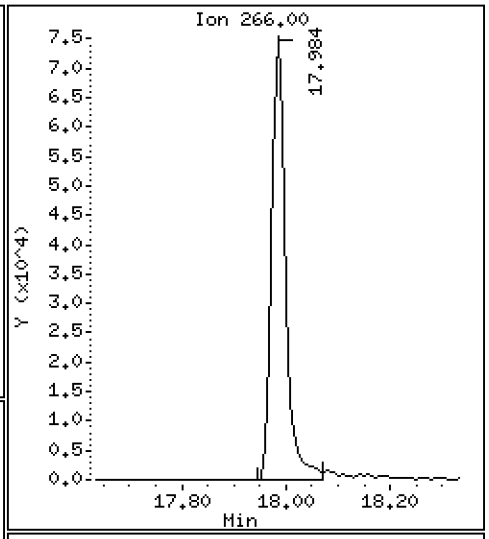
Concentration: 3.492 ug/mL

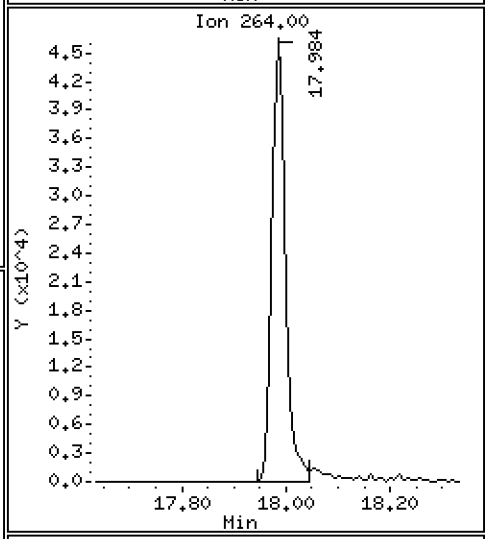


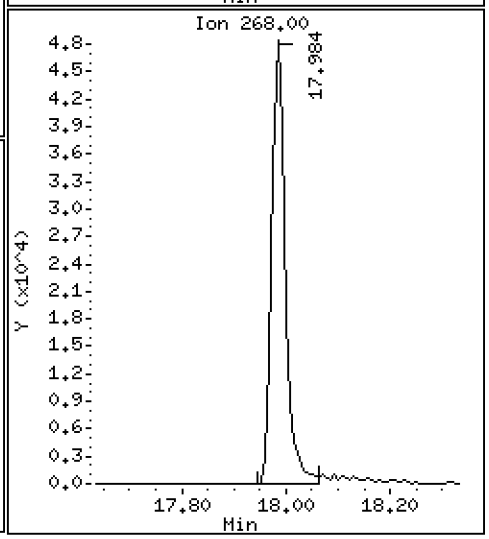












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

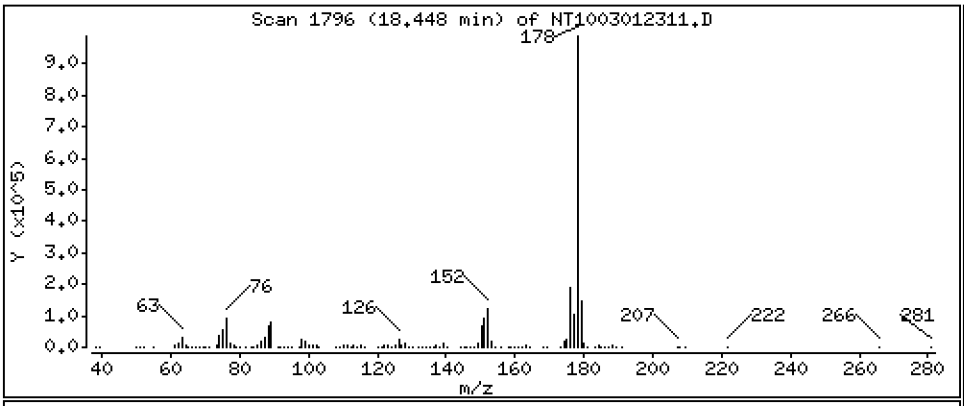
Operator: VTS

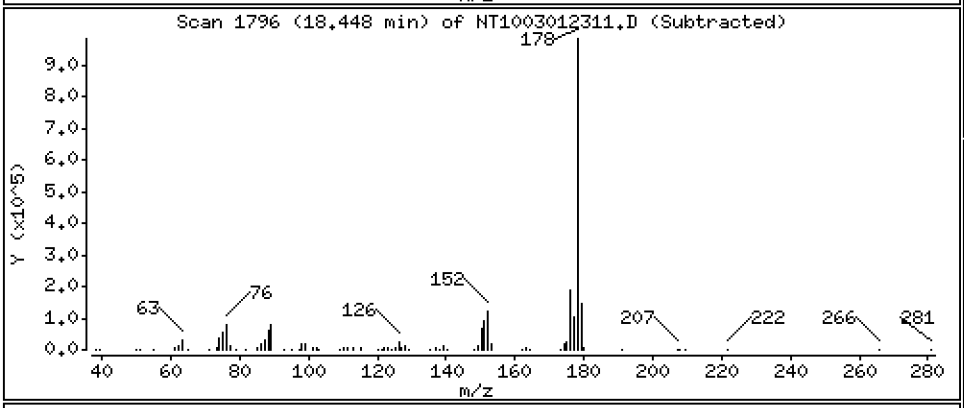
Column phase: ZB-5msi

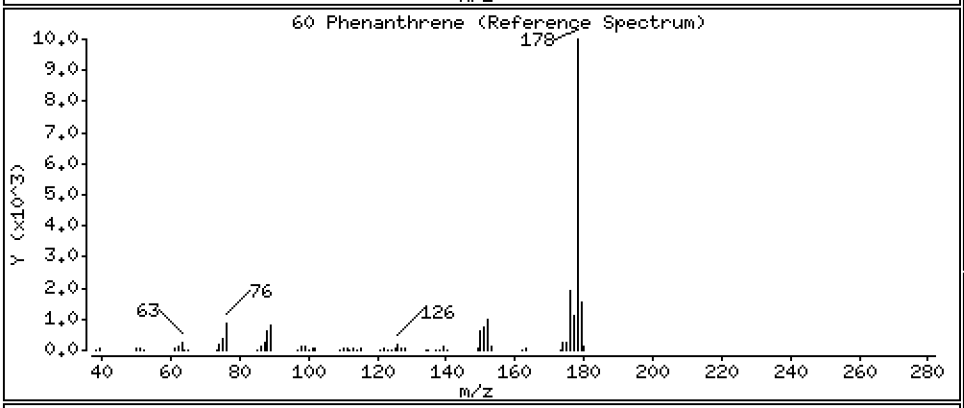
Column diameter: 0.25

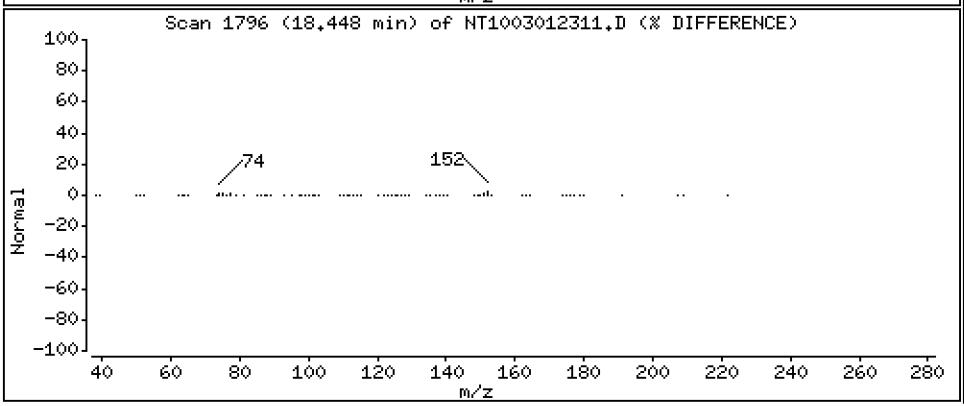
60 Phenanthrene

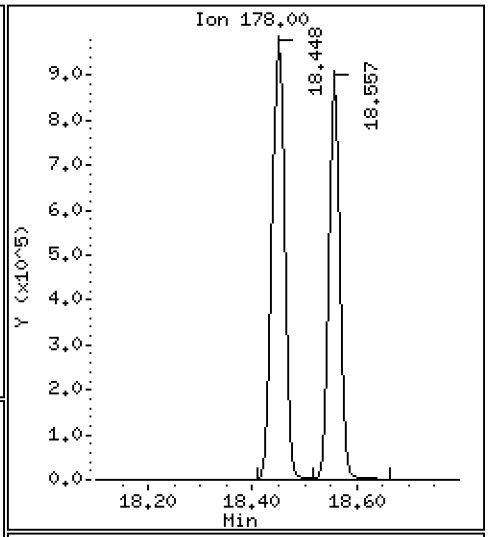
Concentration: 5.085 ug/mL

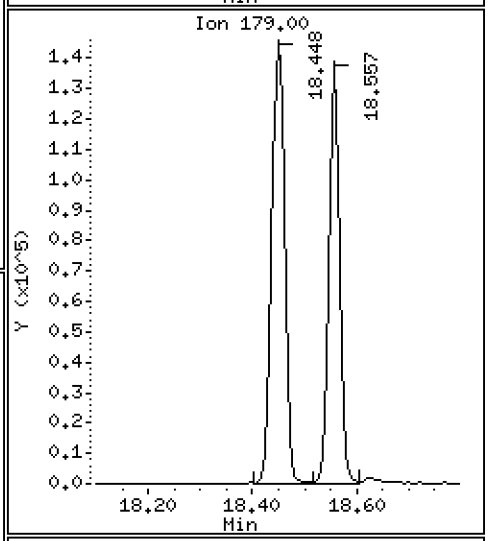


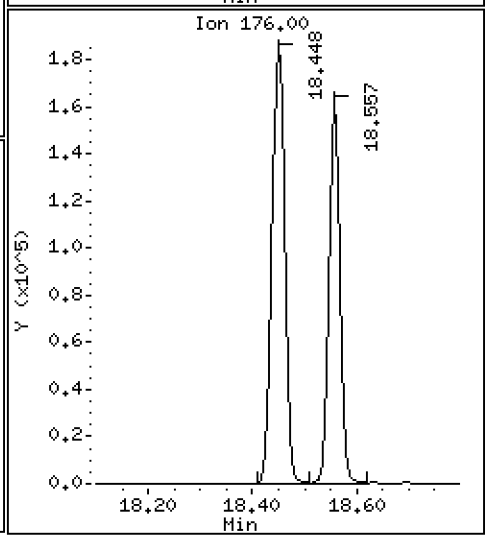












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

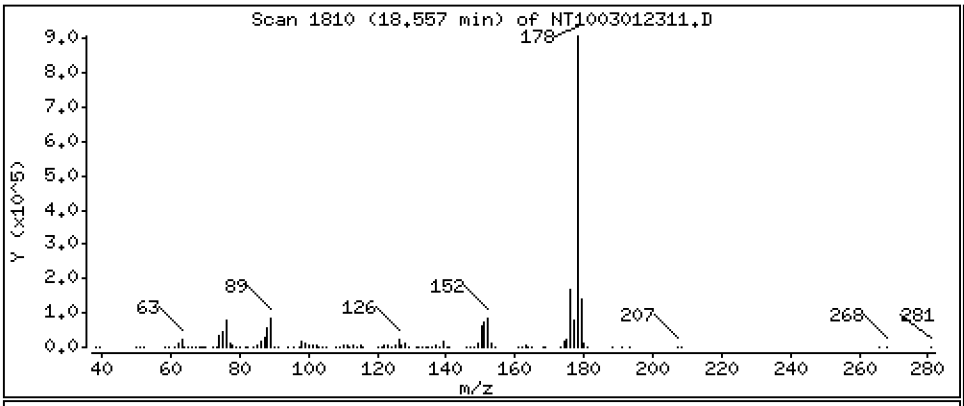
Operator: VTS

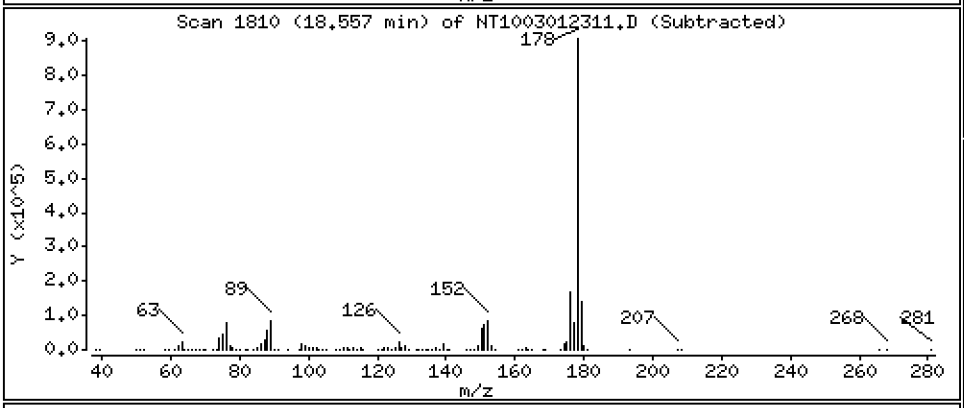
Column phase: ZB-5msi

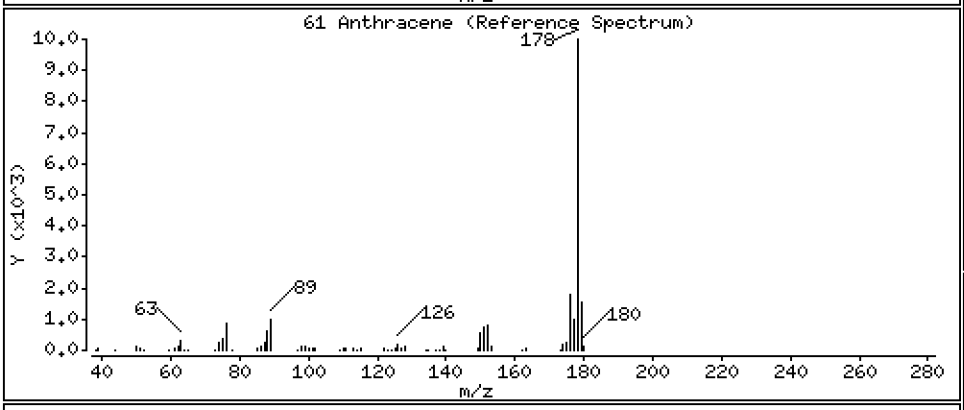
Column diameter: 0.25

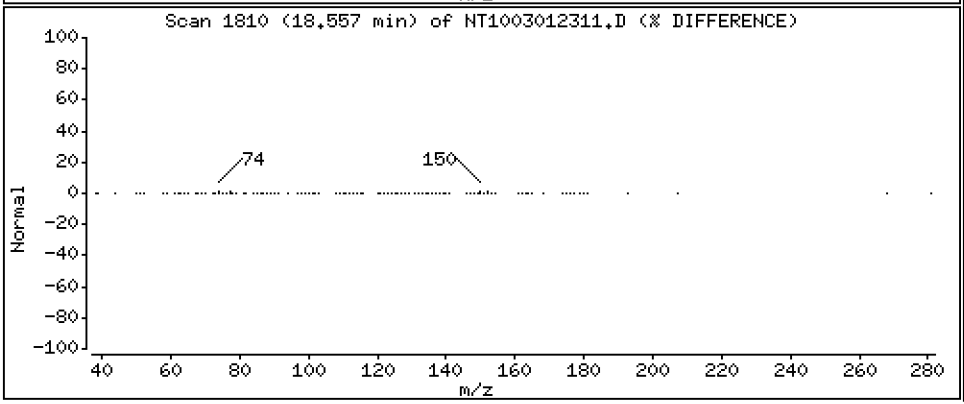
61 Anthracene

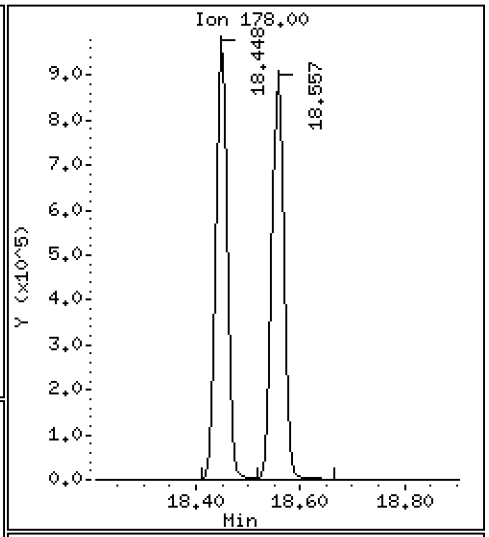
Concentration: 4.585 ug/mL

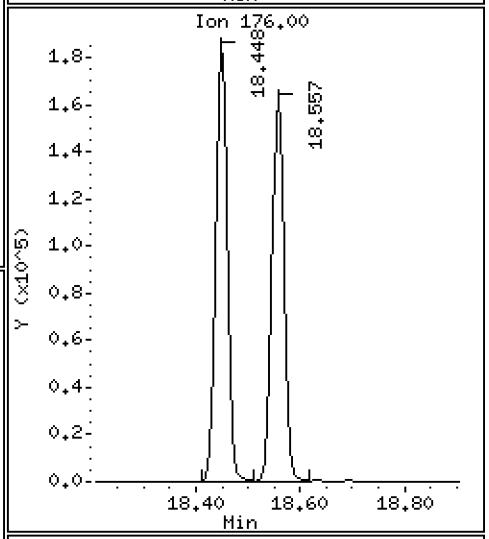


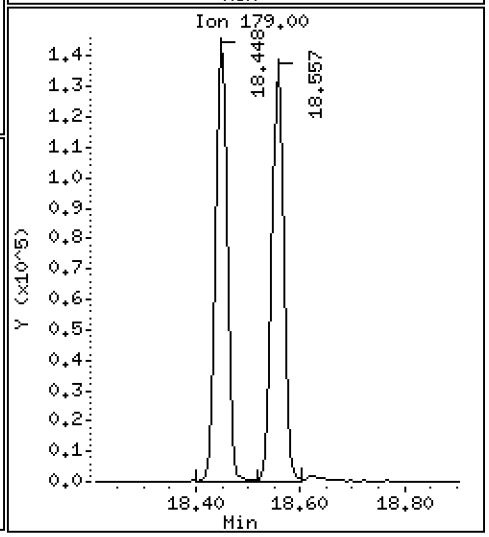












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

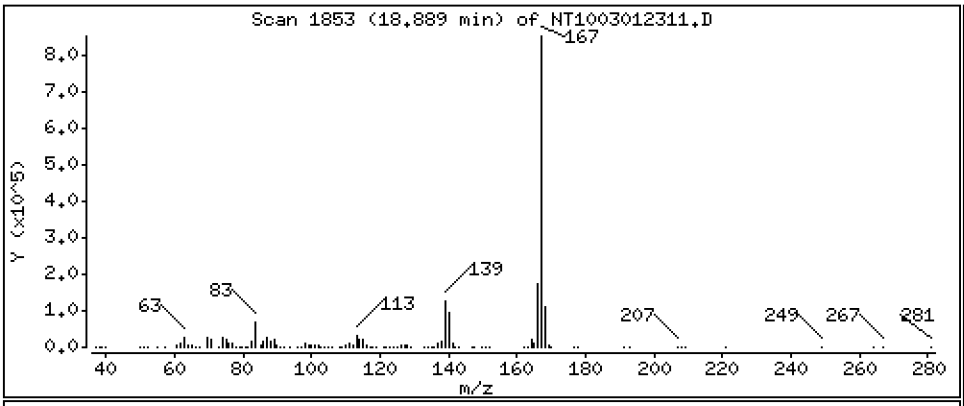
Operator: VTS

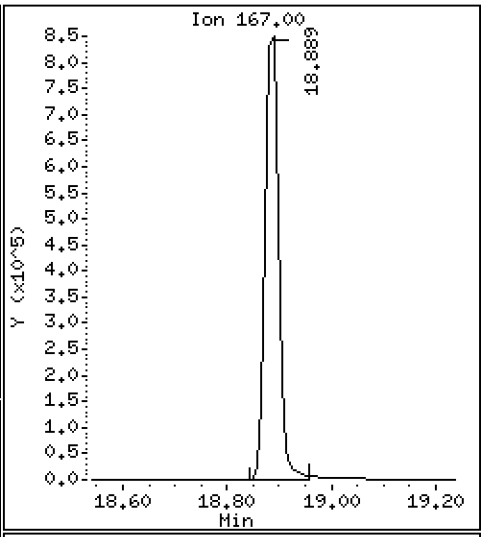
Column phase: ZB-5msi

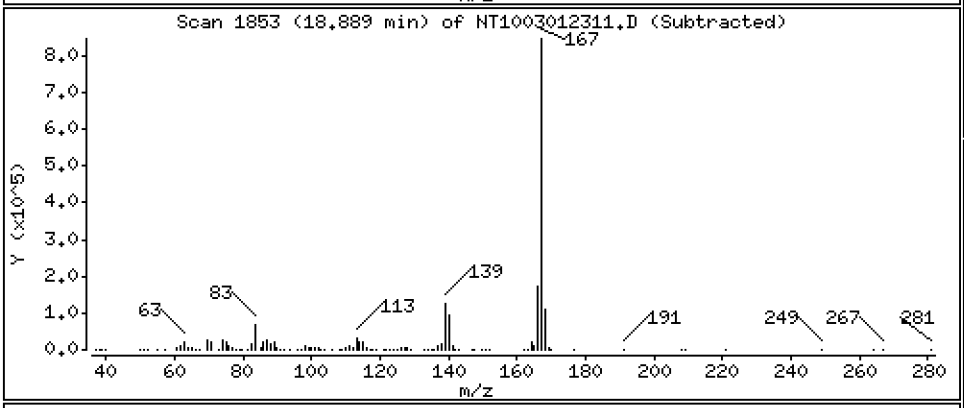
Column diameter: 0.25

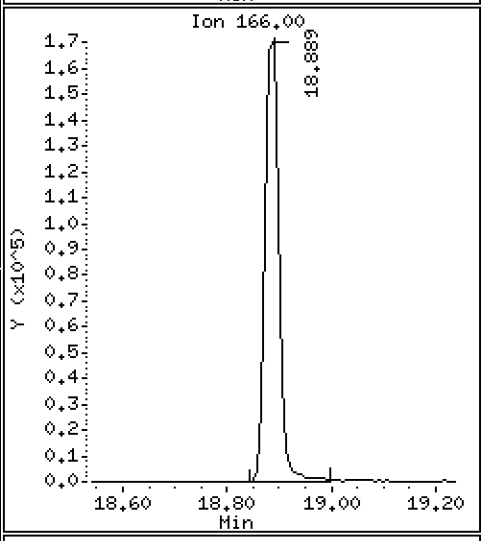
62 Carbazole

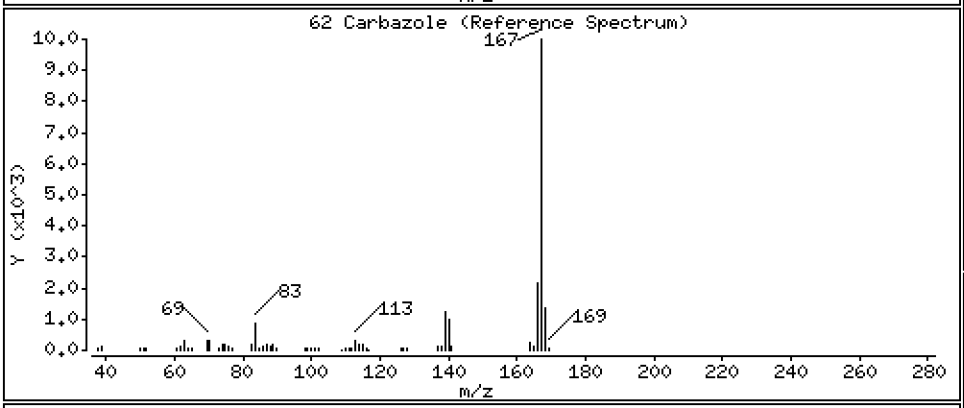
Concentration: 5.335 ug/mL

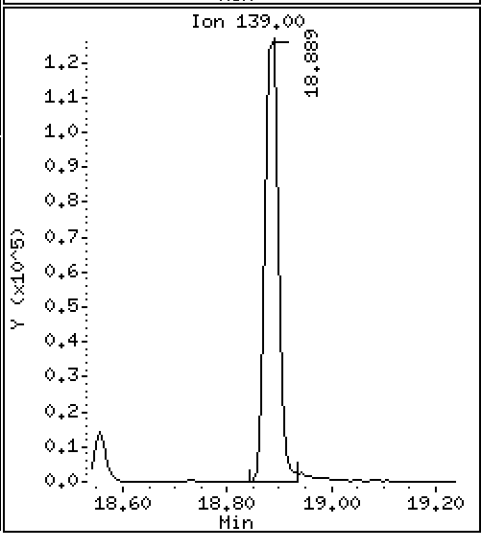


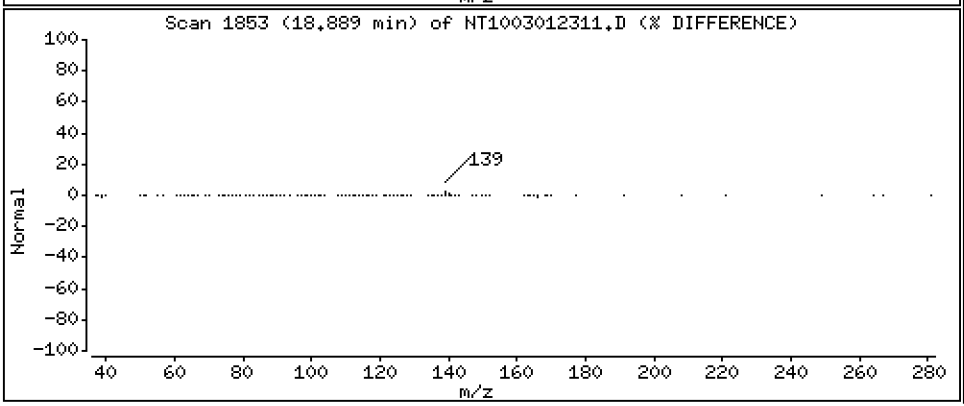












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

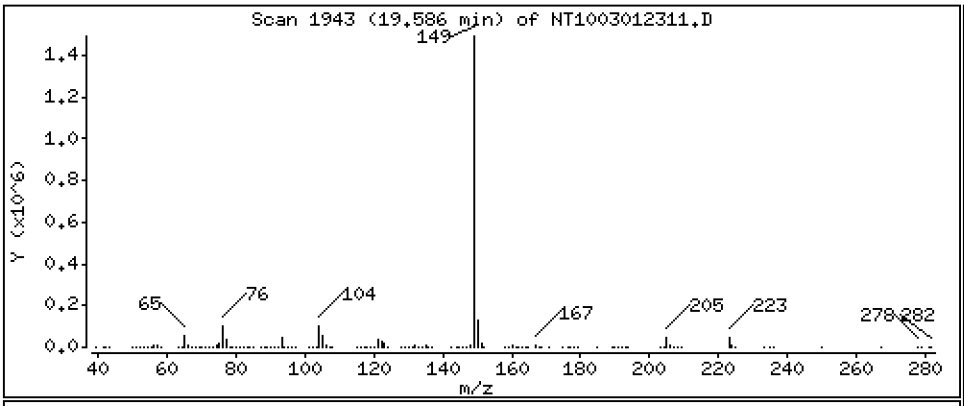
Operator: VTS

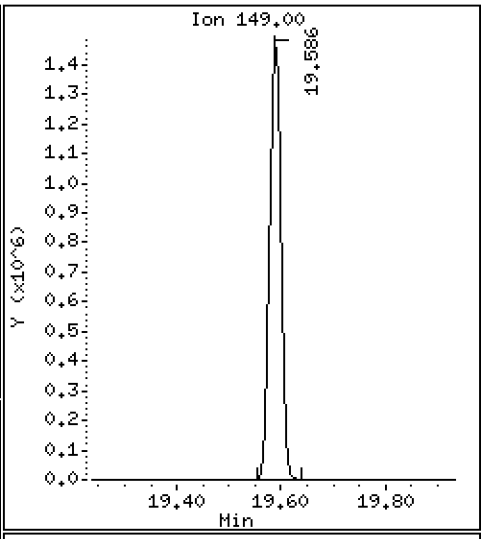
Column phase: ZB-5msi

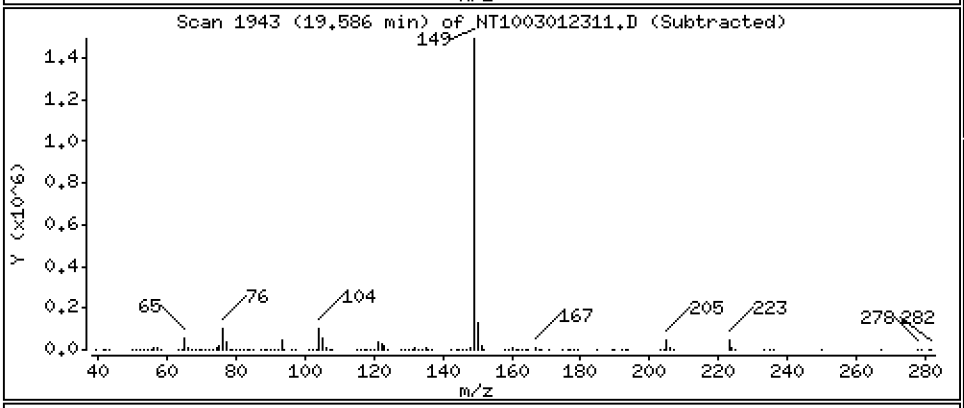
Column diameter: 0.25

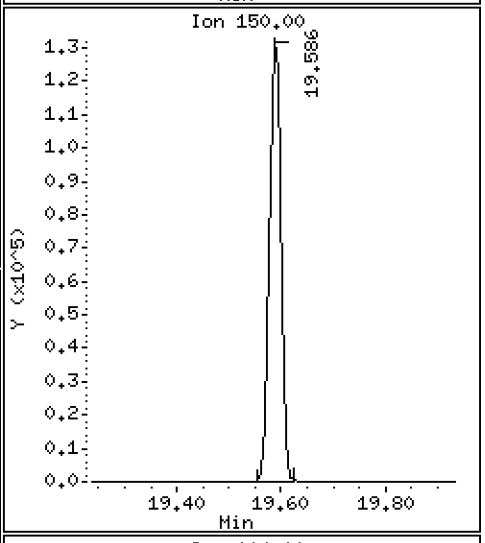
63 Di-n-butylphthalate

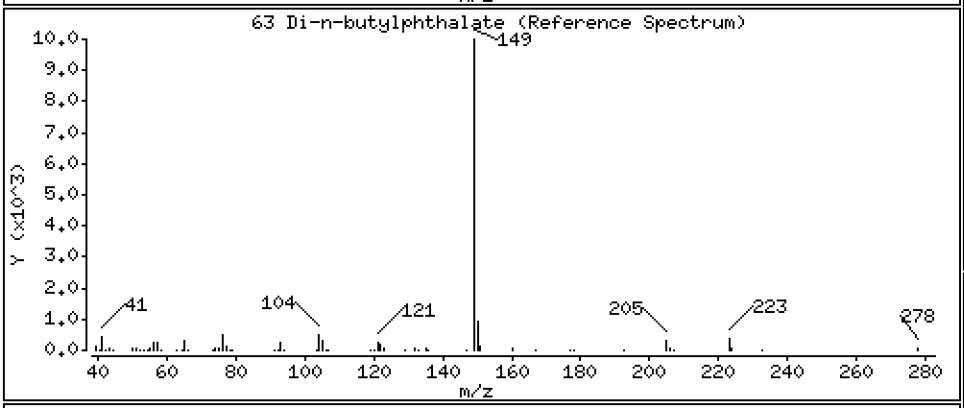
Concentration: 5.463 ug/mL

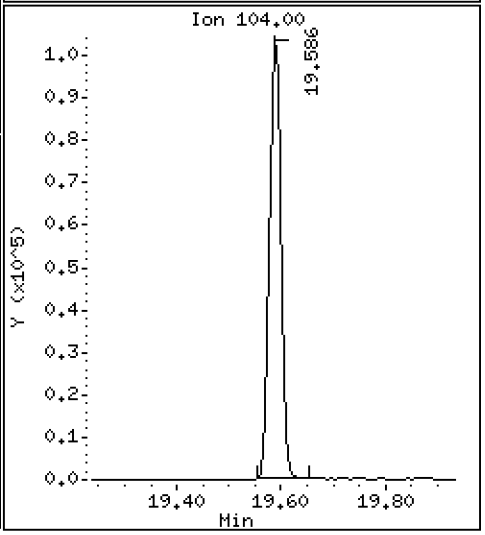


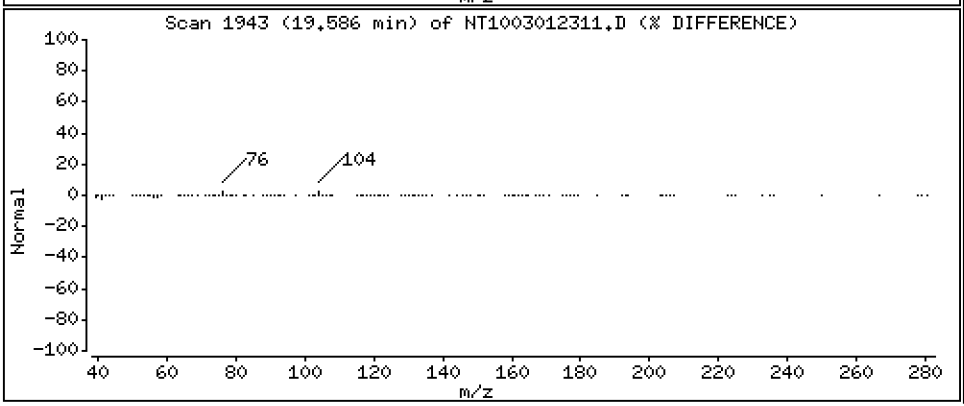












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

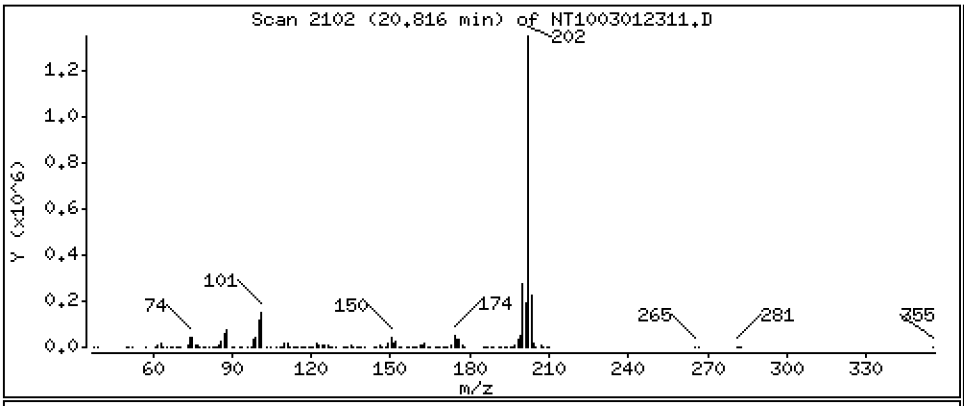
Operator: VTS

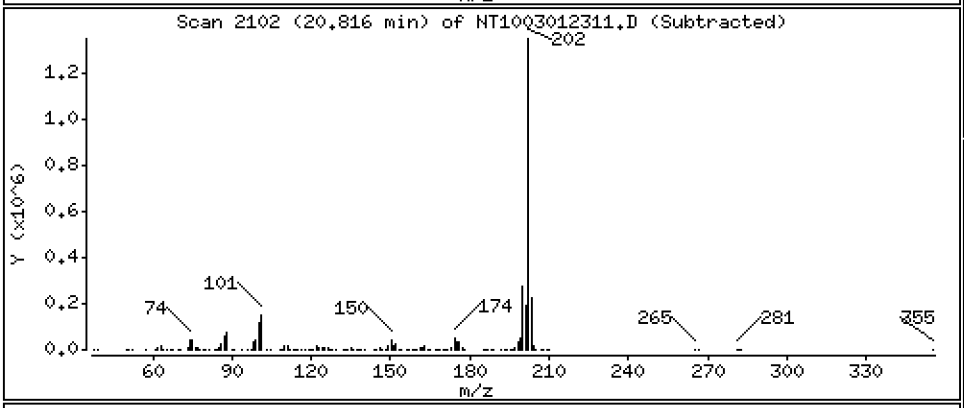
Column phase: ZB-5msi

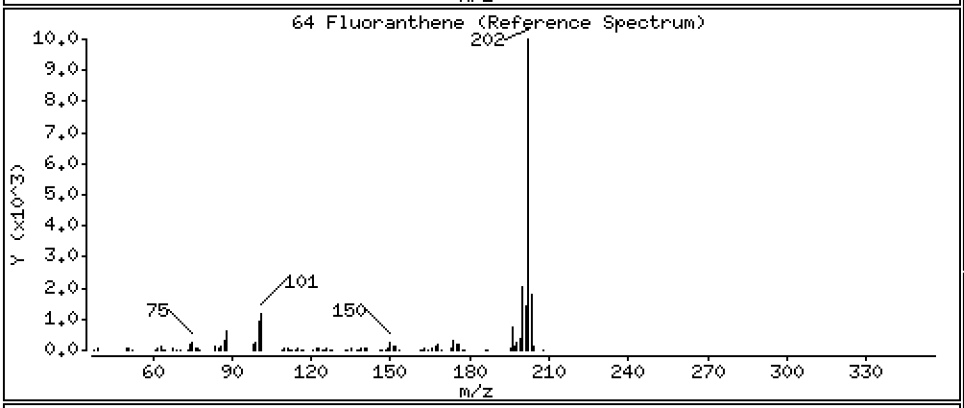
Column diameter: 0.25

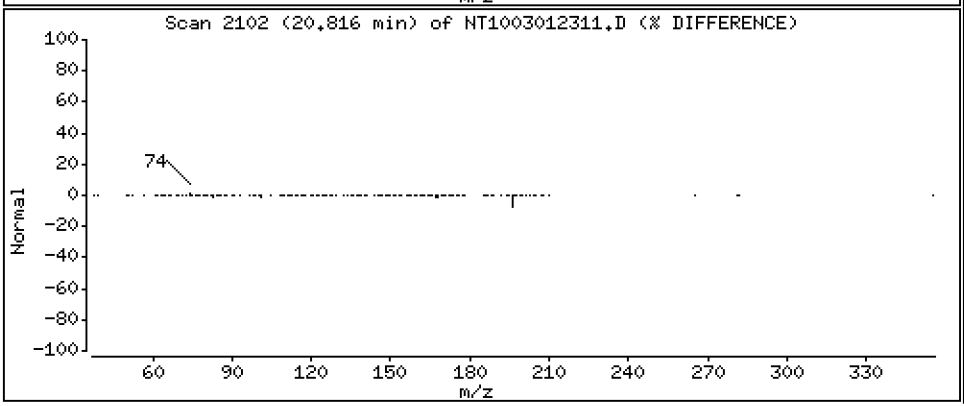
64 Fluoranthene

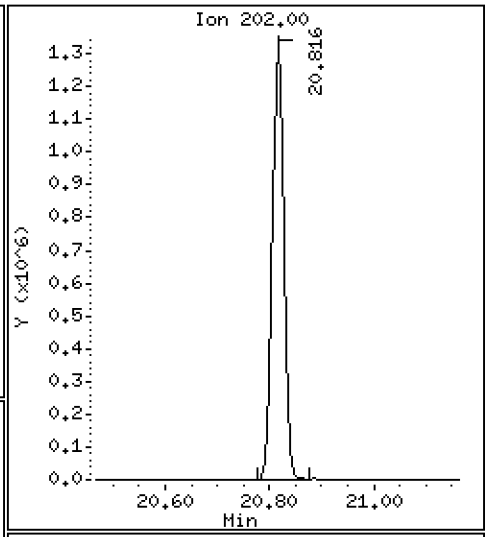
Concentration: 4.542 ug/mL

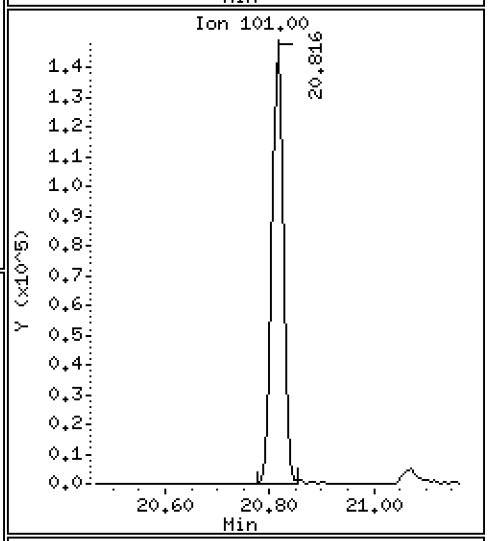


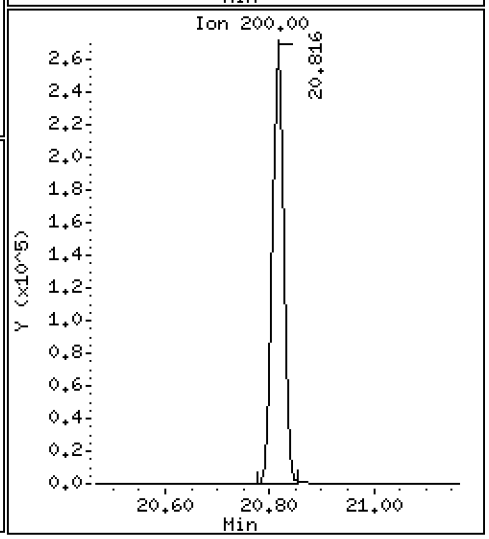












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

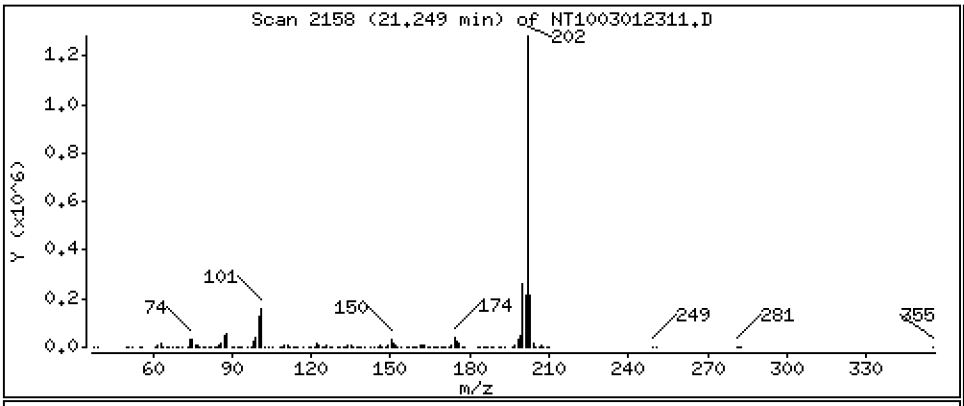
Operator: VTS

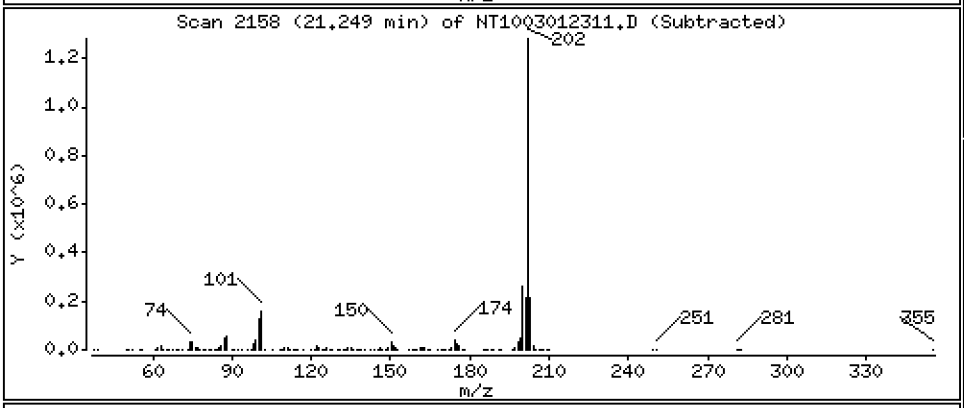
Column phase: ZB-5msi

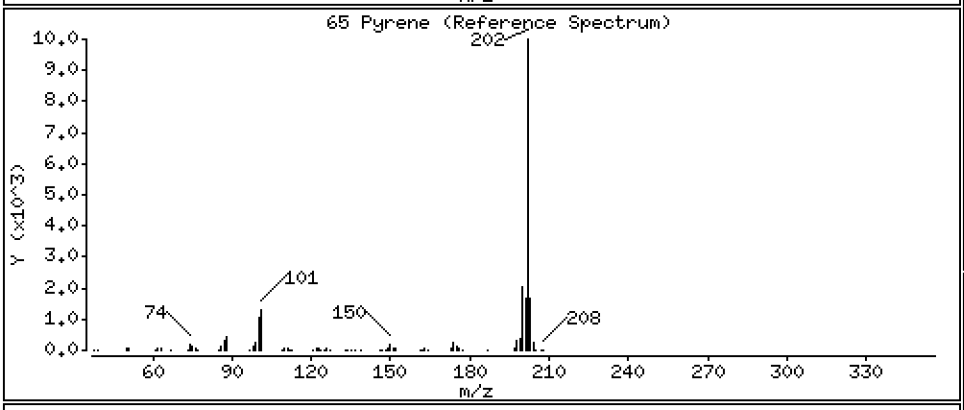
Column diameter: 0.25

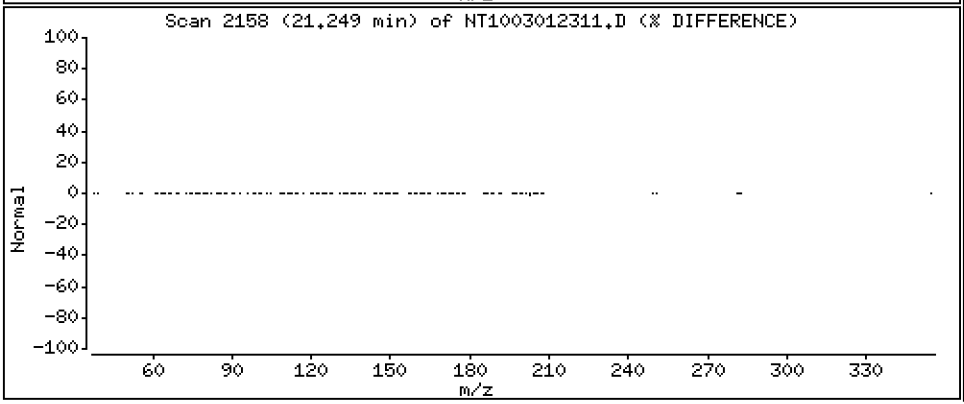
65 Pyrene

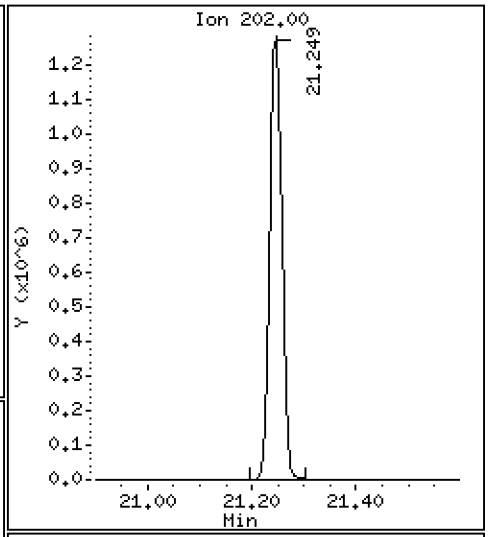
Concentration: 4.626 ug/mL

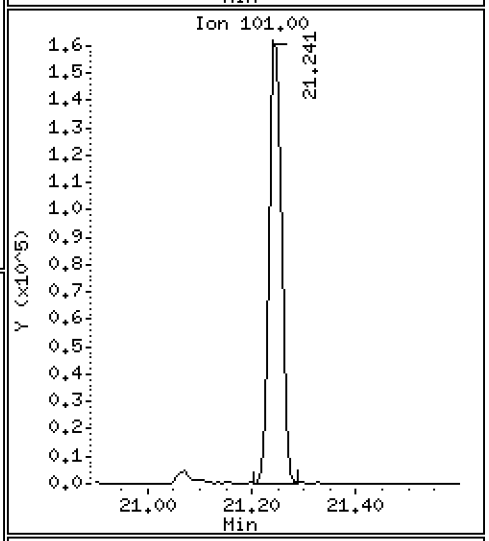


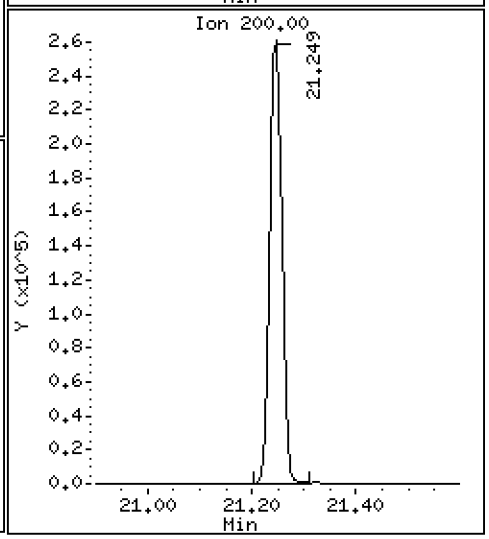












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

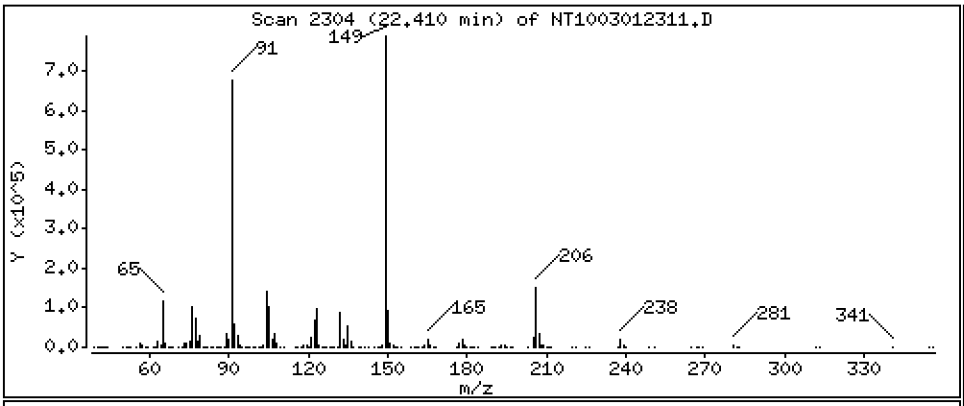
Operator: VTS

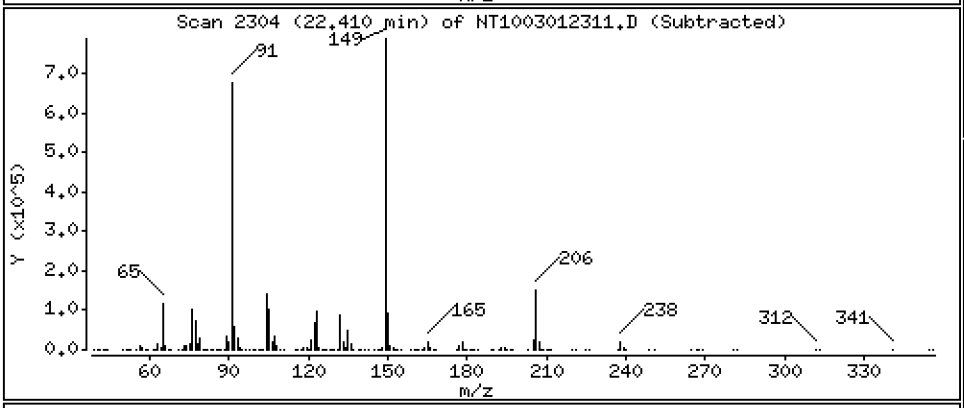
Column phase: ZB-5msi

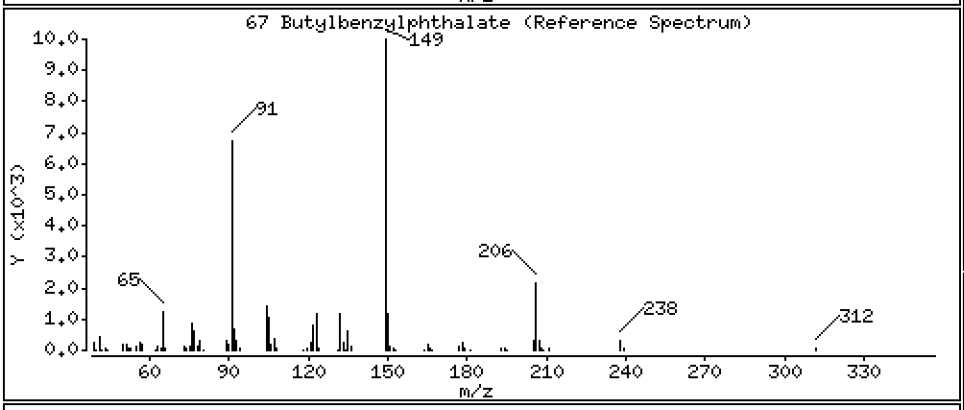
Column diameter: 0.25

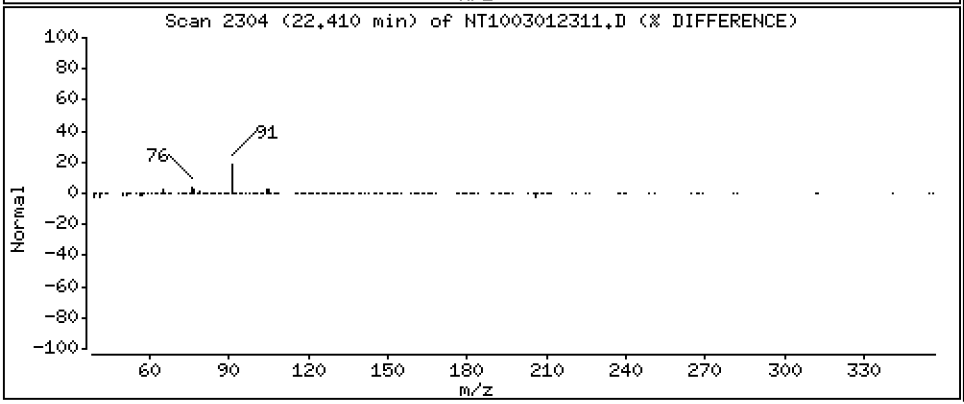
67 Butylbenzylphthalate

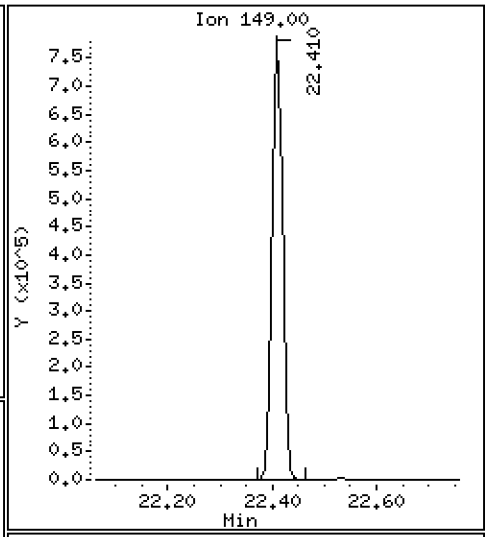
Concentration: 4.525 ug/mL

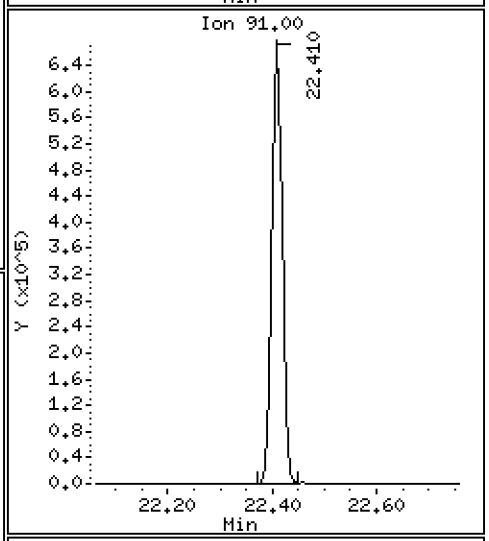


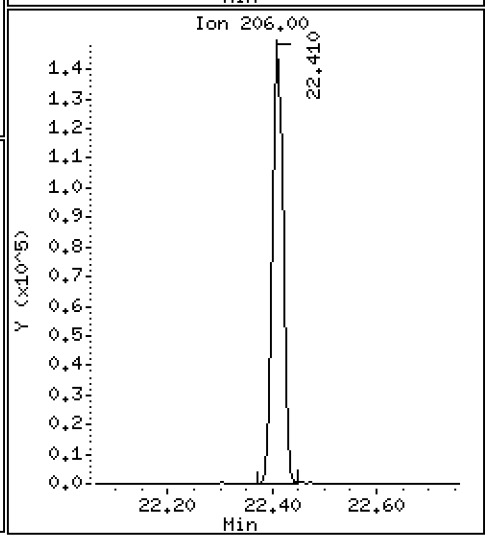












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

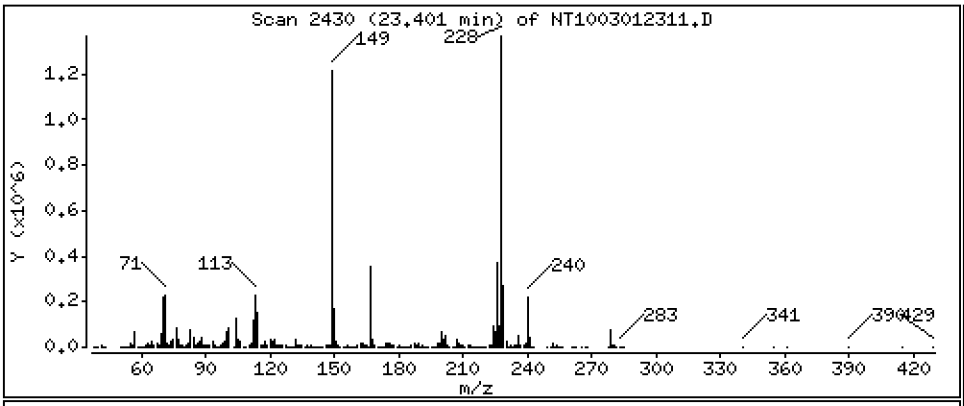
Operator: VTS

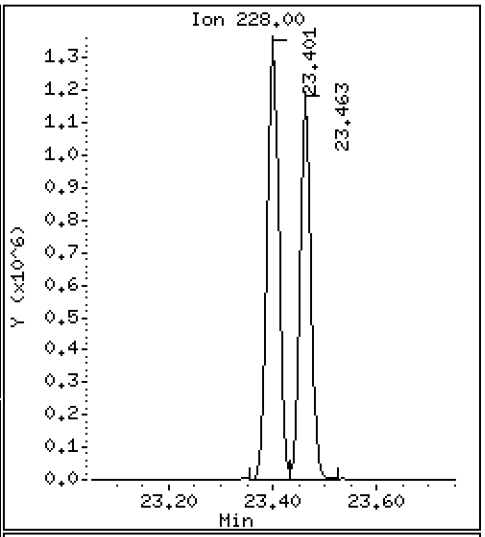
Column phase: ZB-5msi

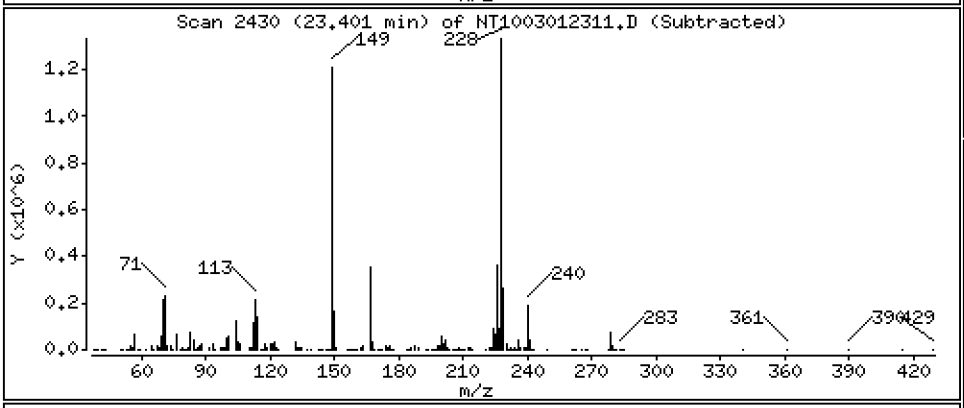
Column diameter: 0.25

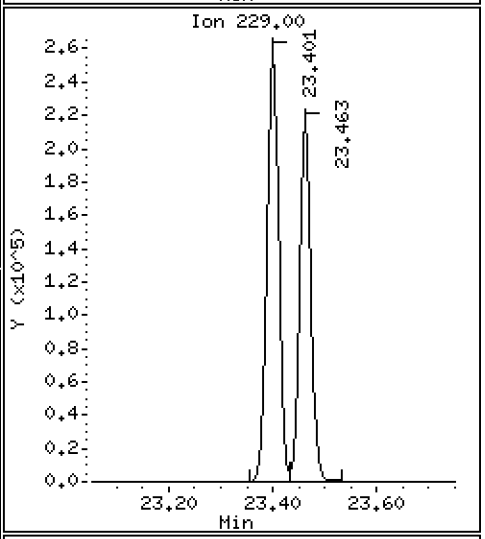
68 Benzo(a)anthracene

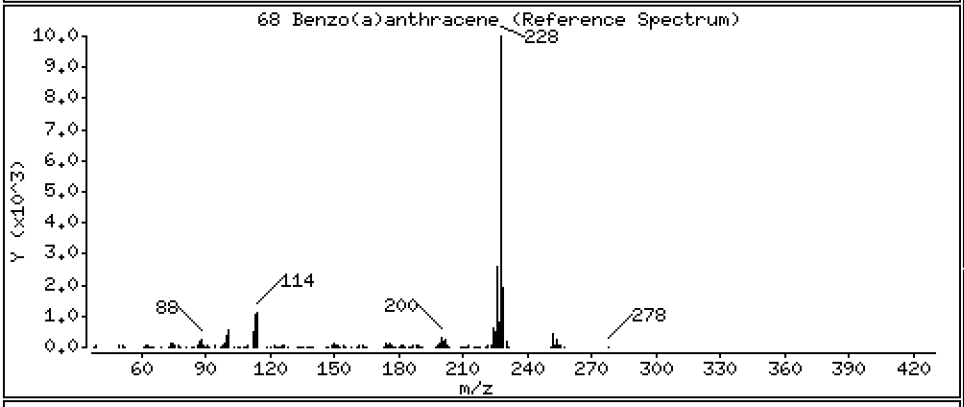
Concentration: 4.578 ug/mL

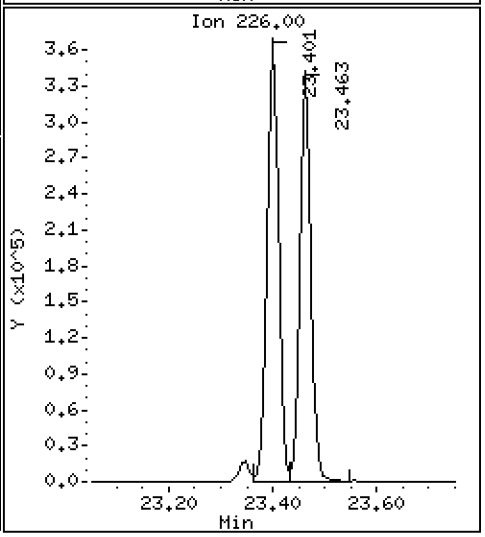


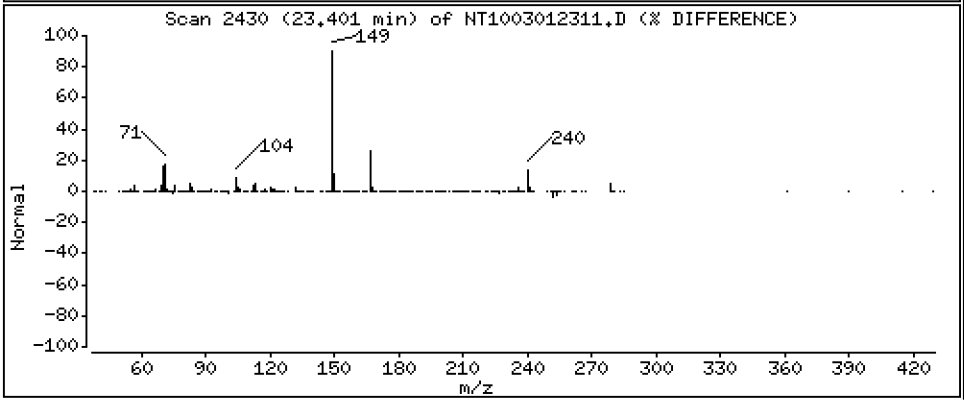












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

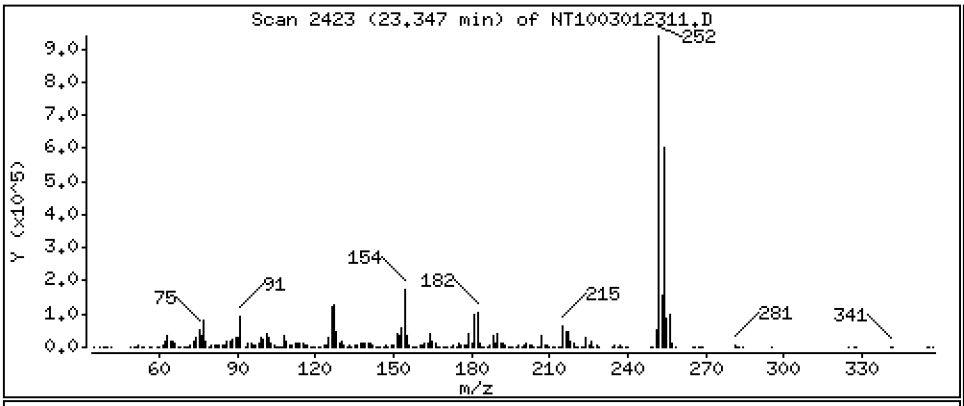
Operator: VTS

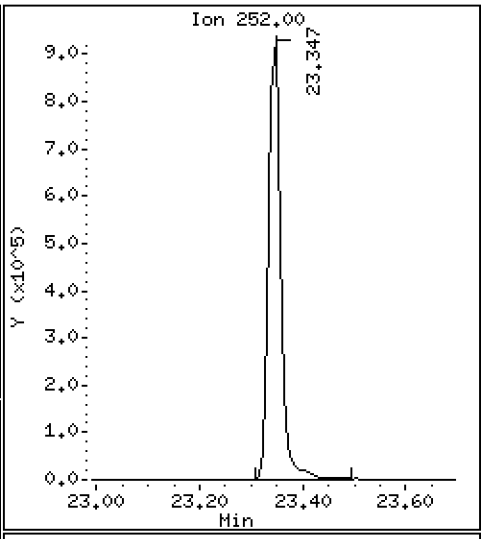
Column phase: ZB-5msi

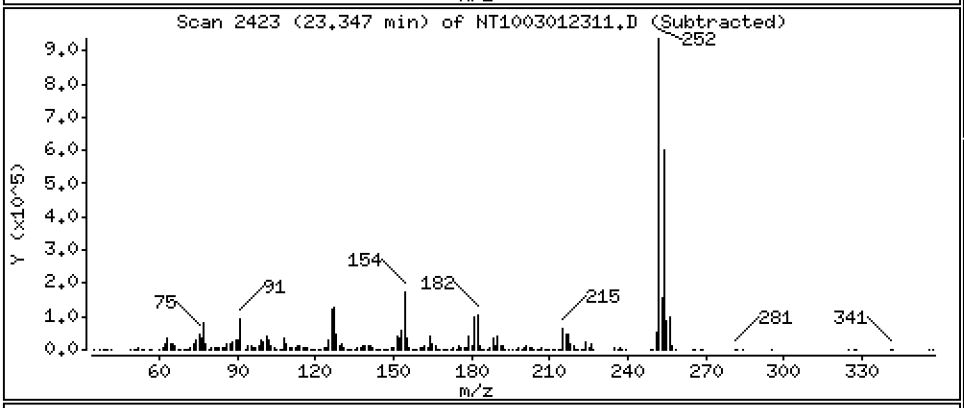
Column diameter: 0.25

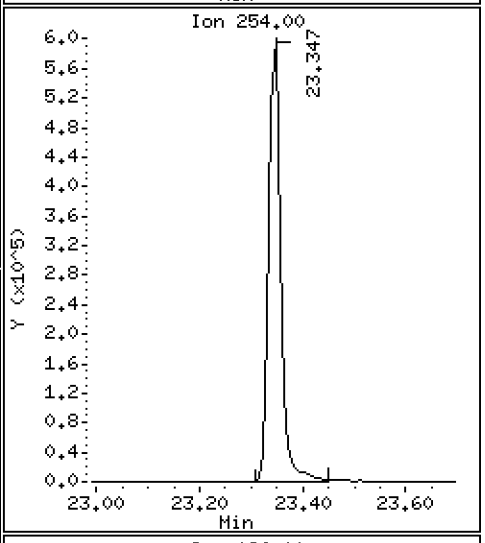
70 3,3'-Dichlorobenzidine

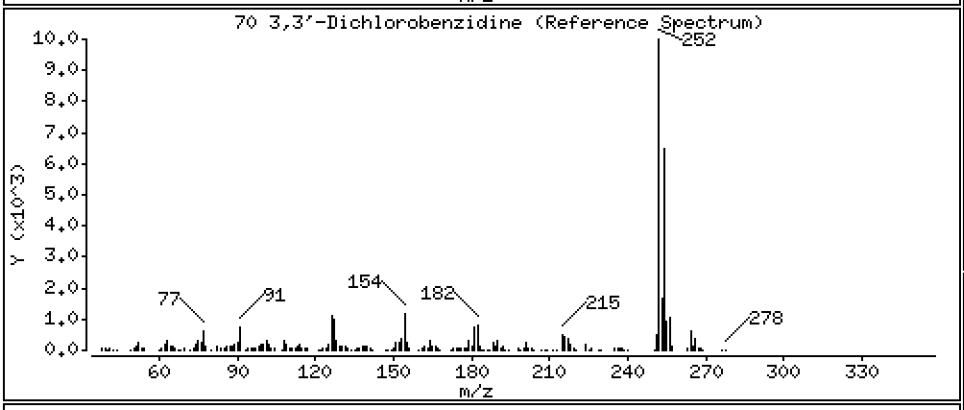
Concentration: 7.383 ug/mL

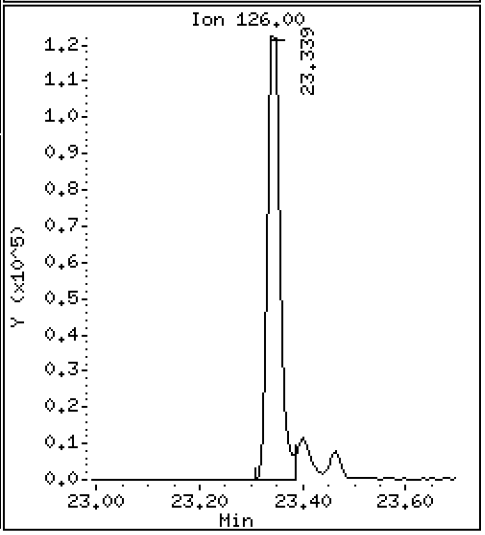


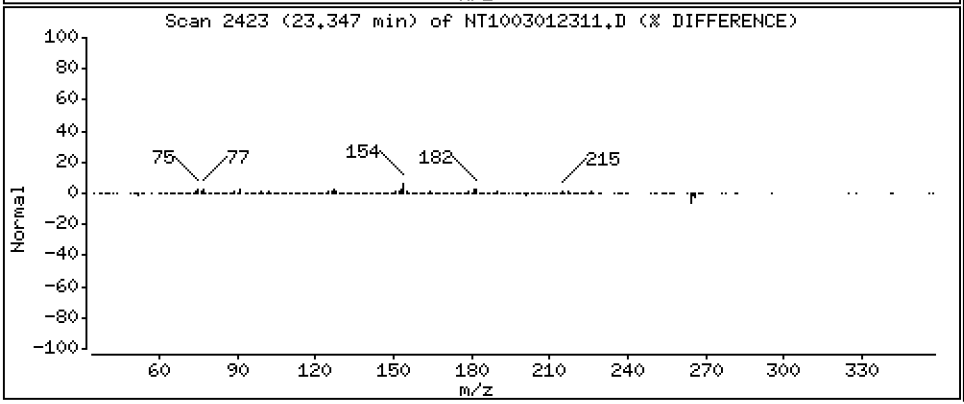












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

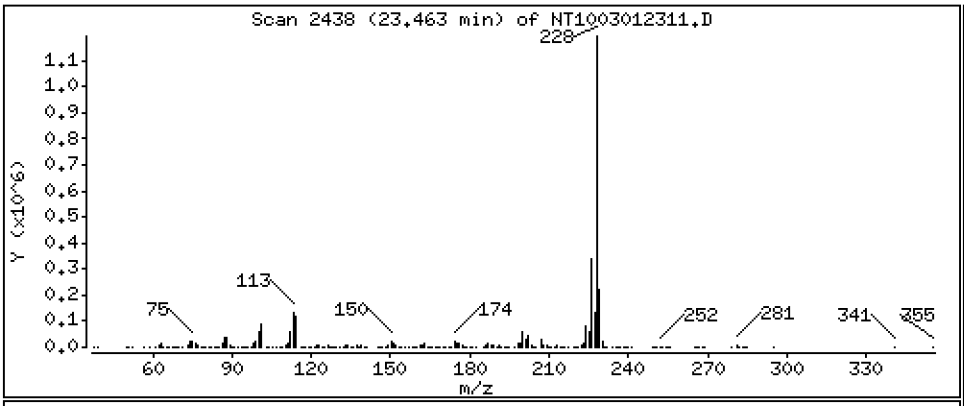
Operator: VTS

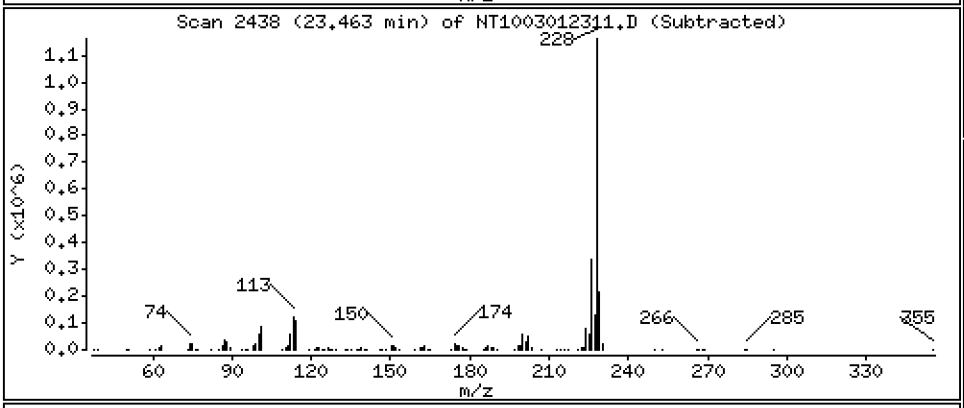
Column phase: ZB-5msi

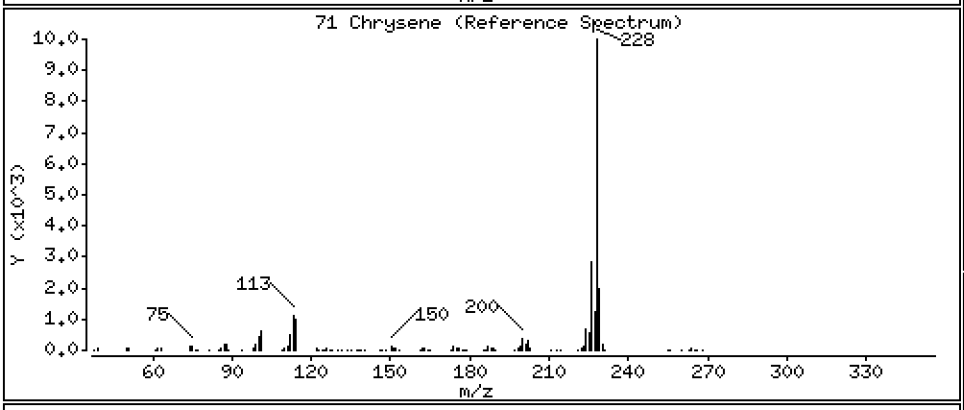
Column diameter: 0.25

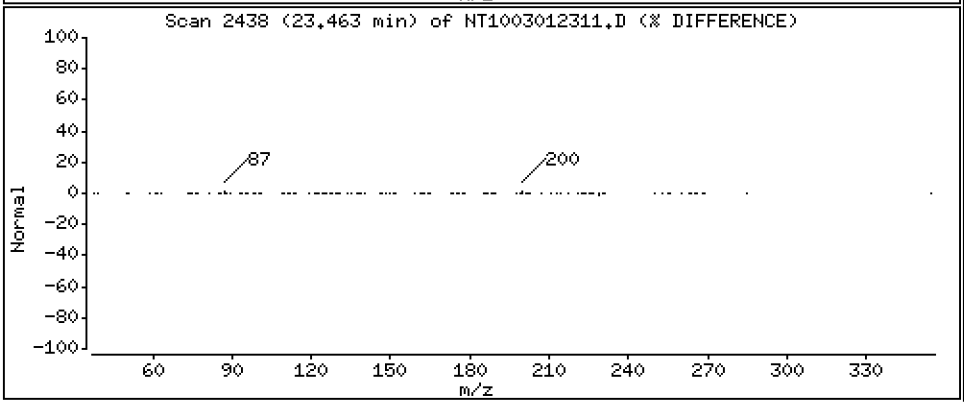
71 Chrysene

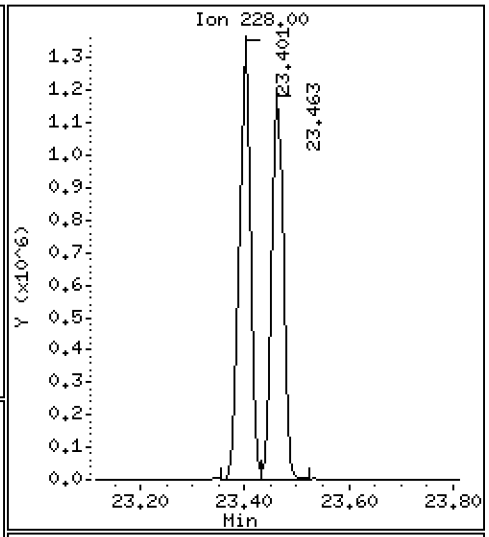
Concentration: 4.967 ug/mL

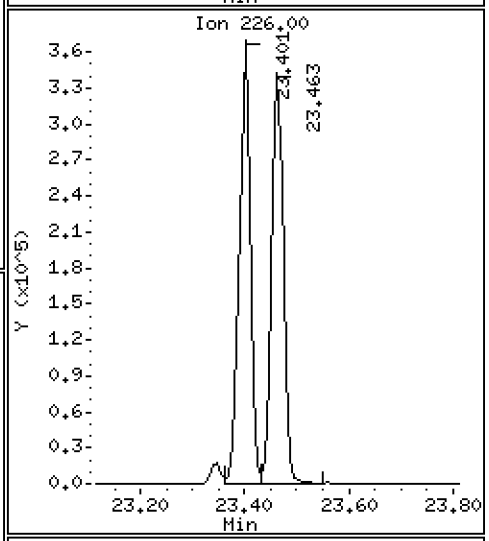


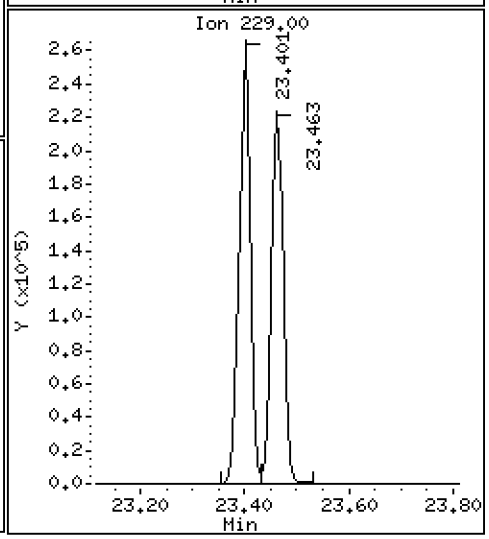












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

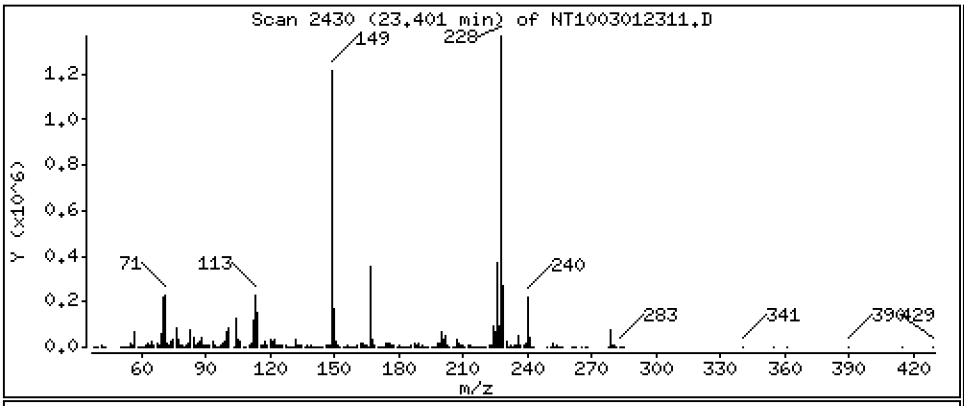
Operator: VTS

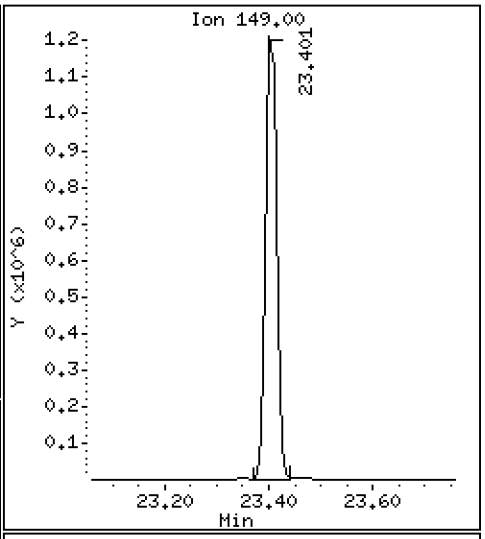
Column phase: ZB-5msi

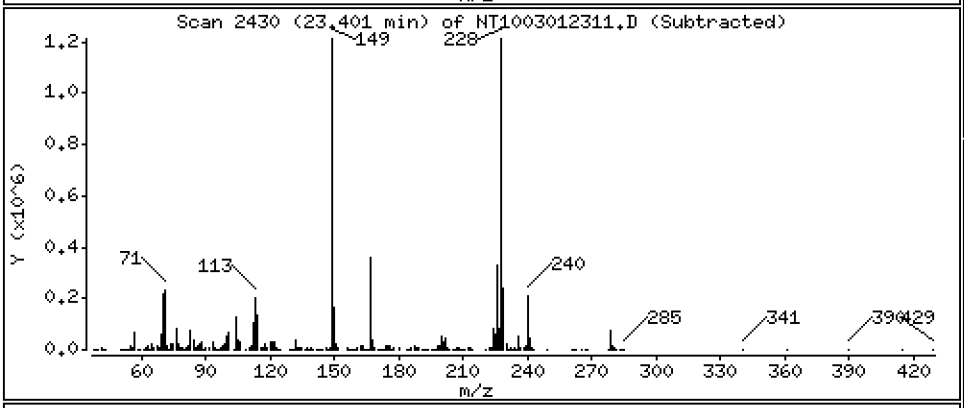
Column diameter: 0.25

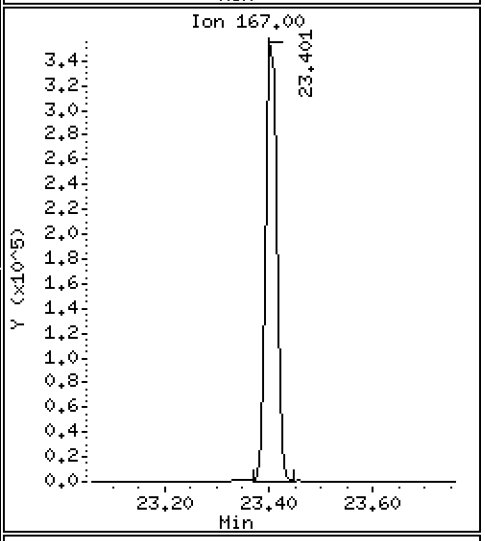
72 bis(2-Ethylhexyl)phthalate

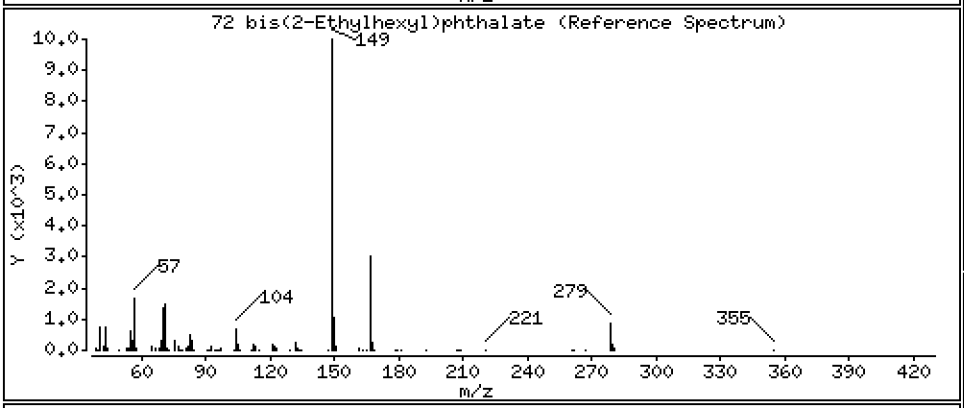
Concentration: 4.956 ug/mL

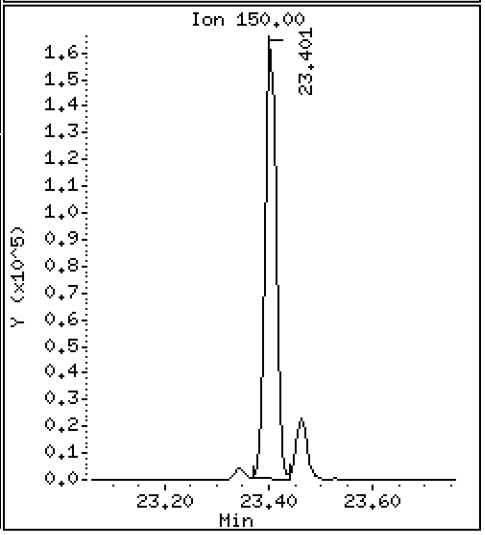


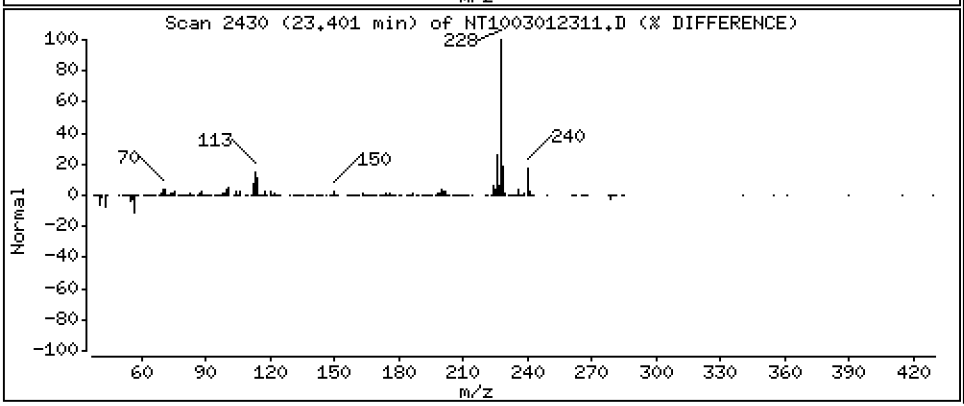












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

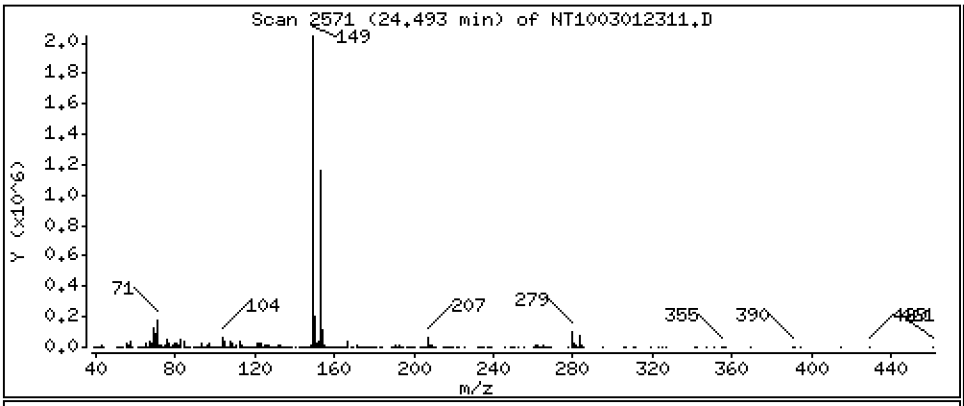
Operator: VTS

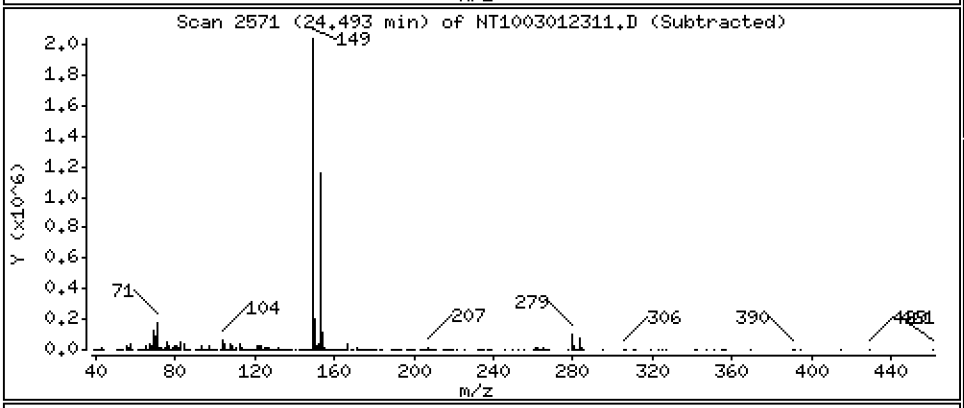
Column phase: ZB-5msi

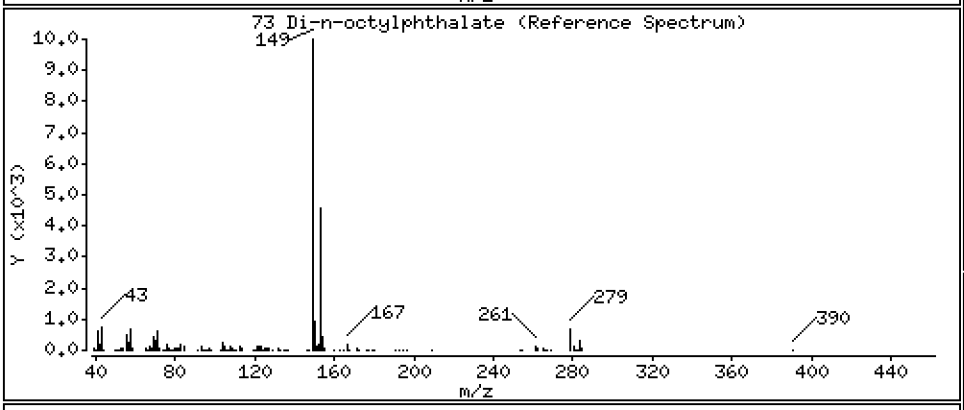
Column diameter: 0.25

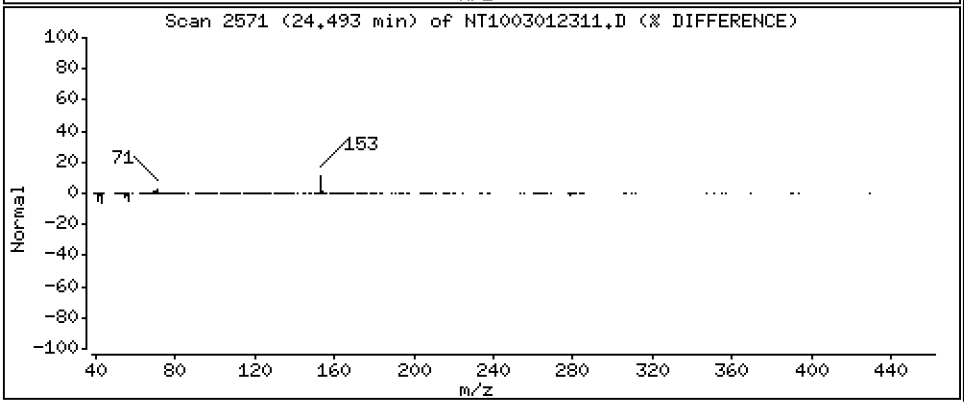
73 Di-n-octylphthalate

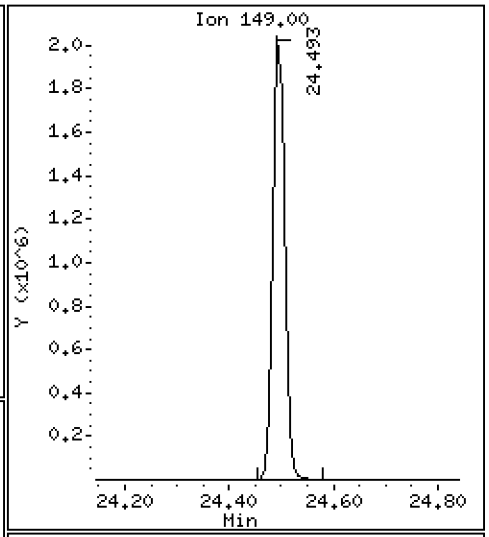
Concentration: 5.844 ug/mL

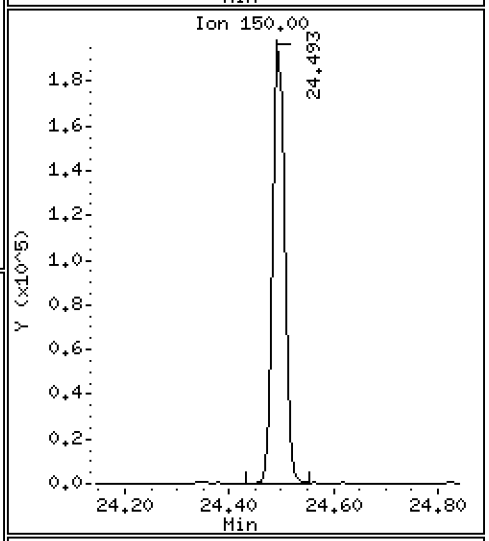


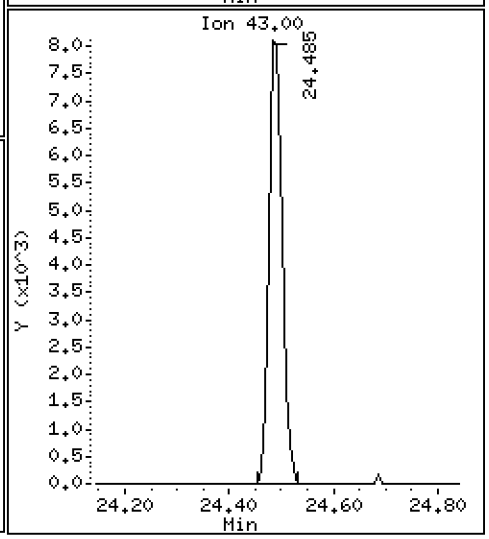












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

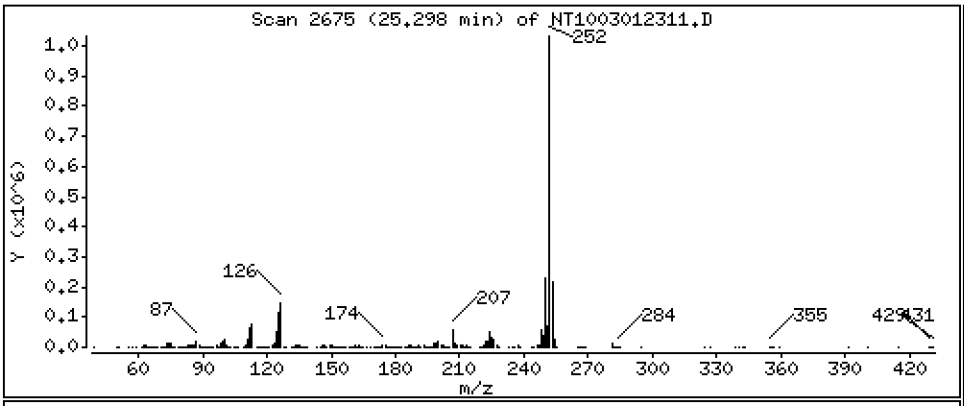
Operator: VTS

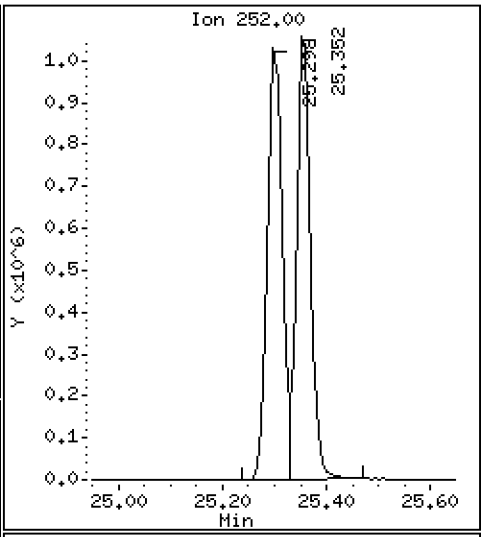
Column phase: ZB-5msi

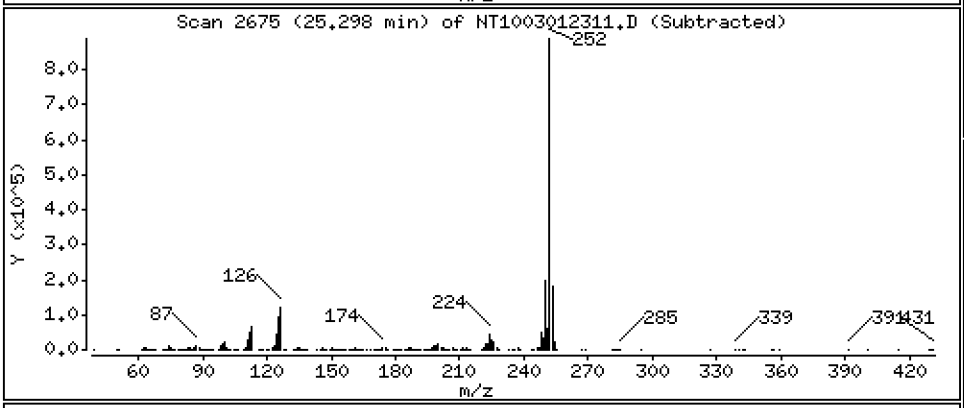
Column diameter: 0.25

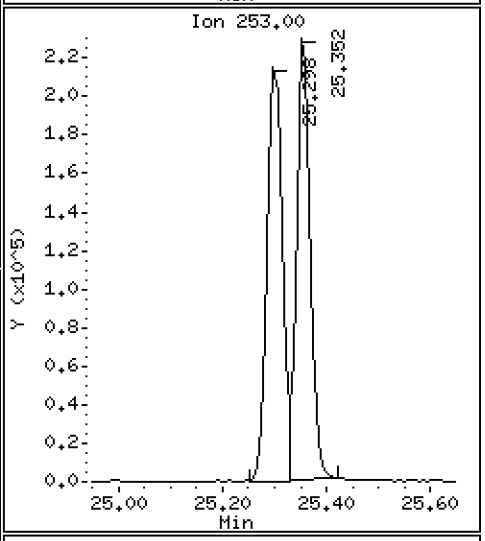
74 Benzo(b)fluoranthene

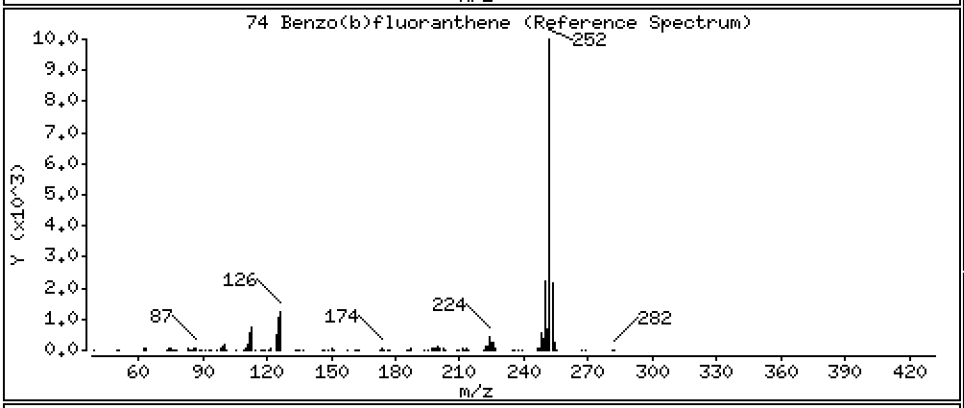
Concentration: 4.319 ug/mL

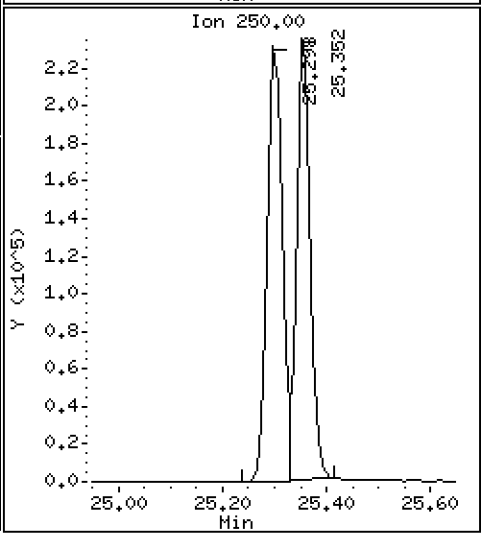


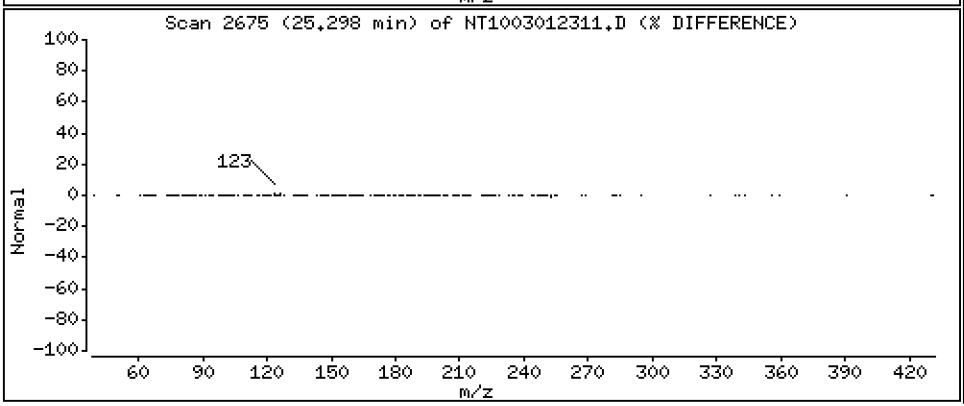












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

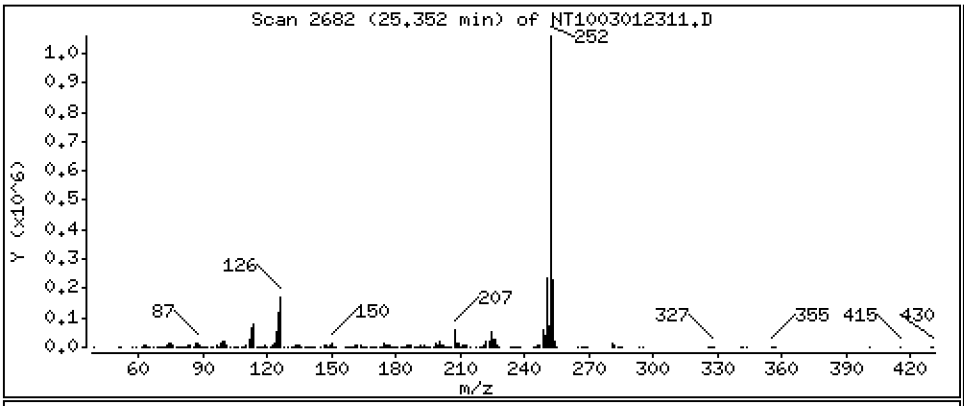
Operator: VTS

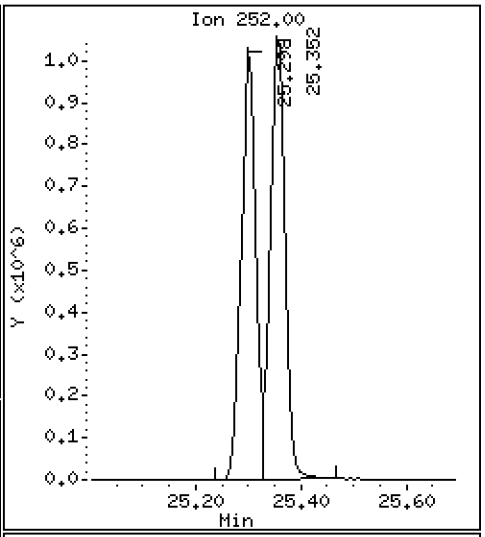
Column phase: ZB-5msi

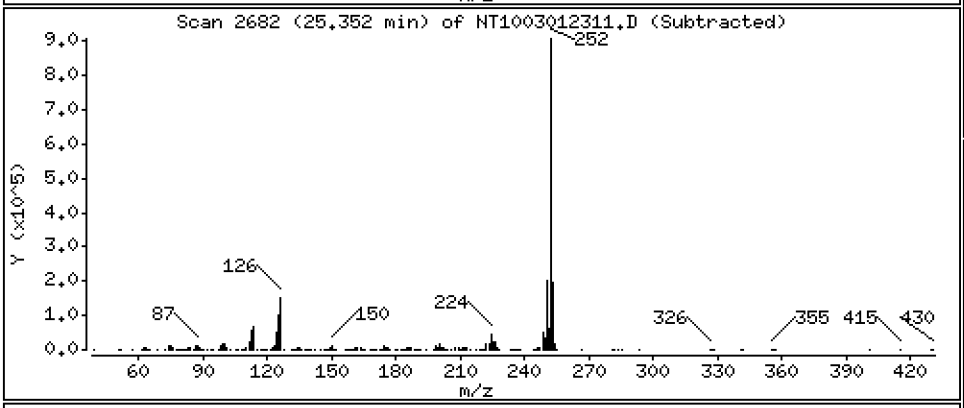
Column diameter: 0.25

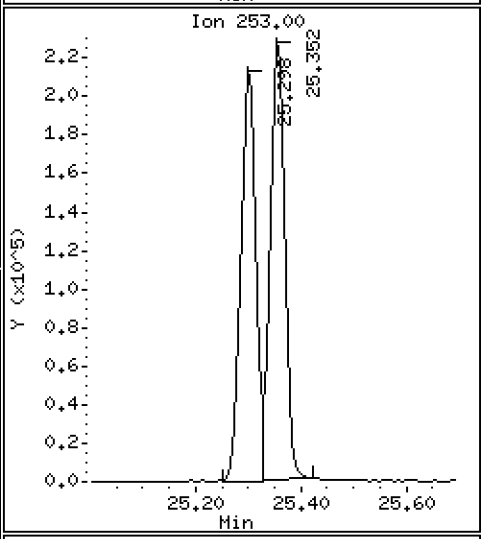
75 Benzo(k)fluoranthene

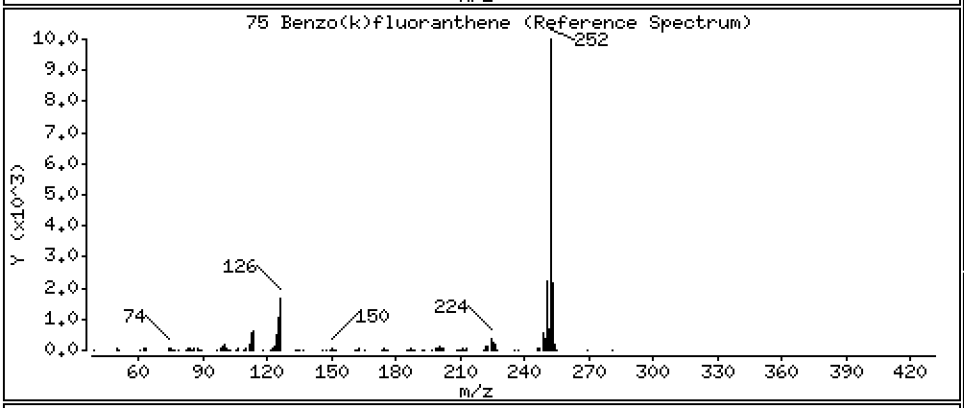
Concentration: 4.563 ug/mL

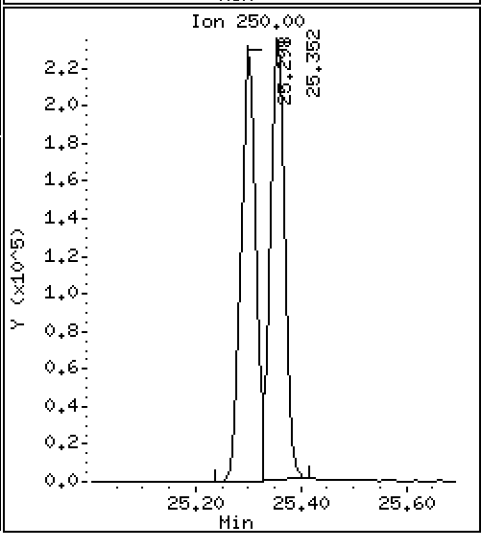


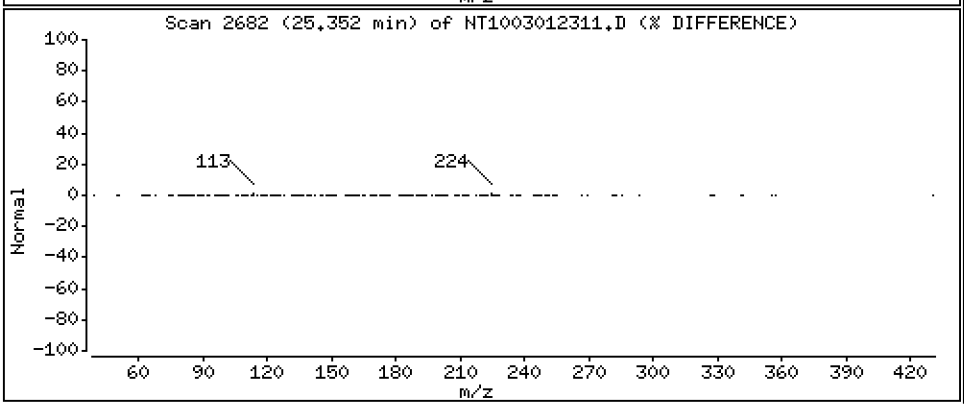












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

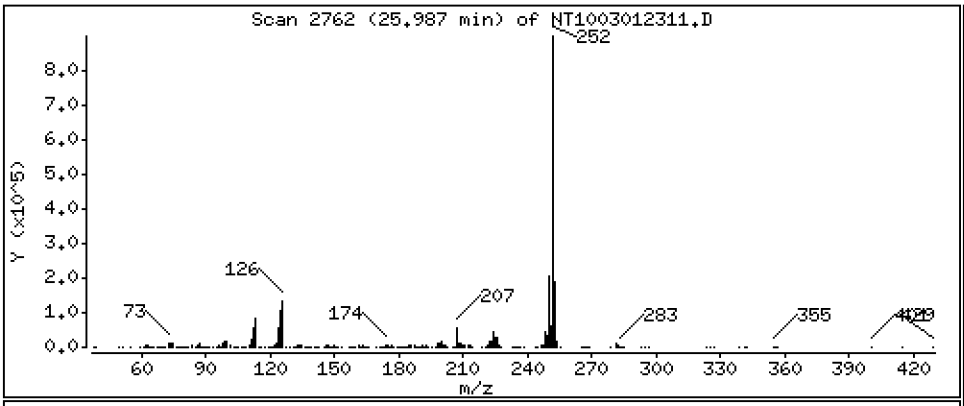
Operator: VTS

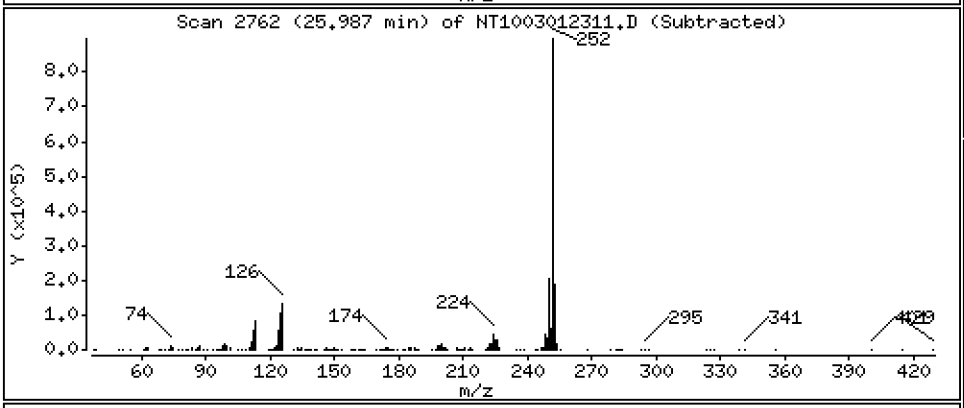
Column phase: ZB-5msi

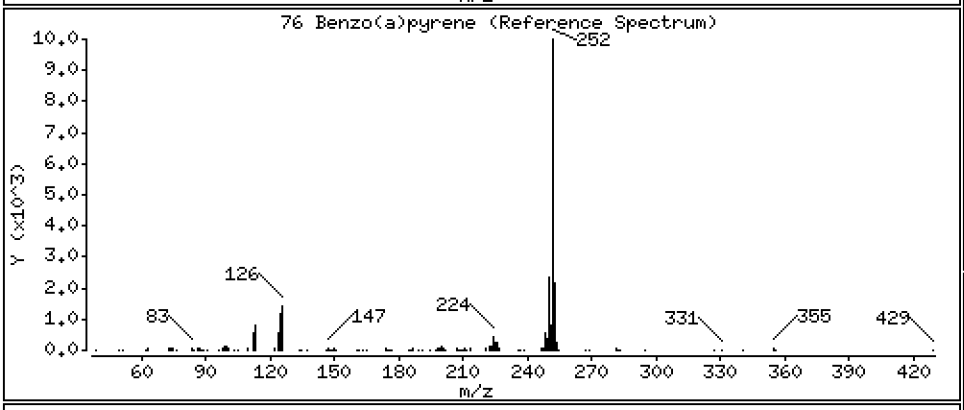
Column diameter: 0.25

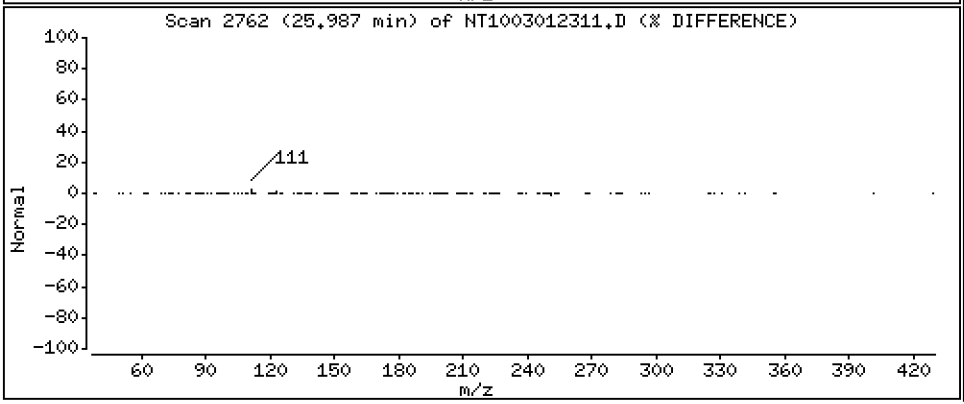
76 Benzo(a)pyrene

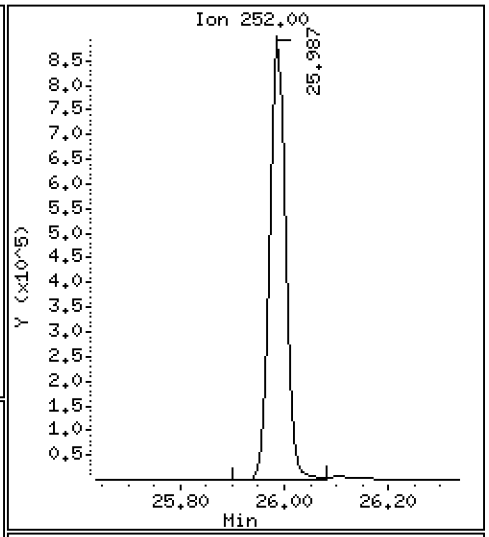
Concentration: 4.445 ug/mL

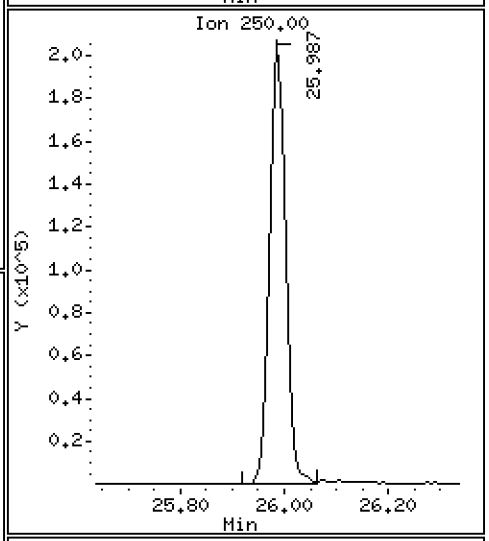


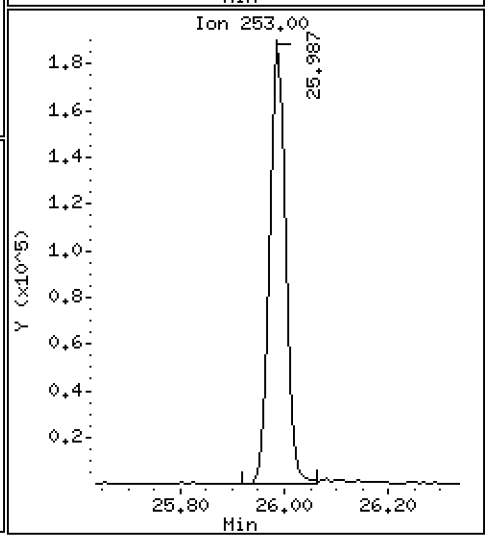












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

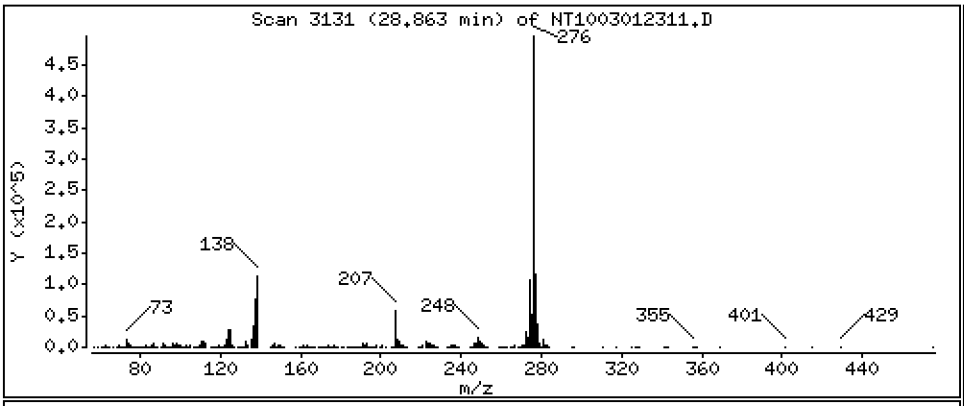
Operator: VTS

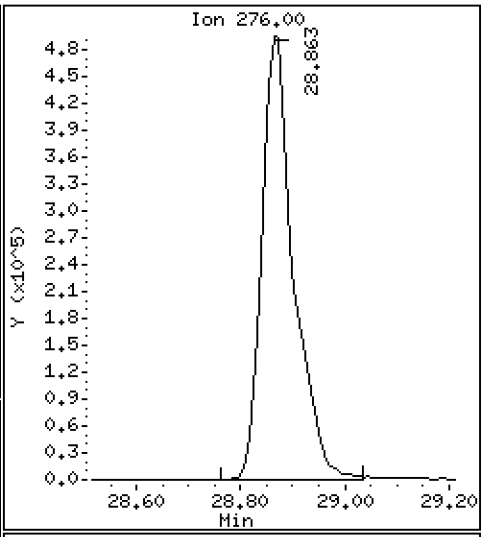
Column phase: ZB-5msi

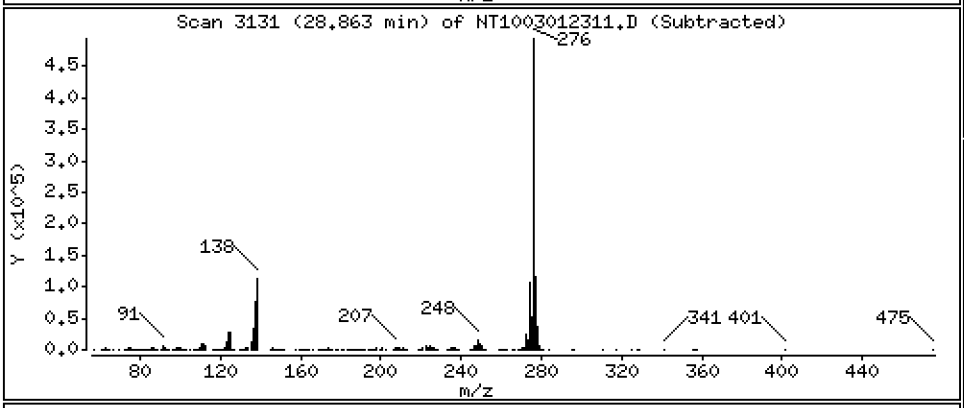
Column diameter: 0.25

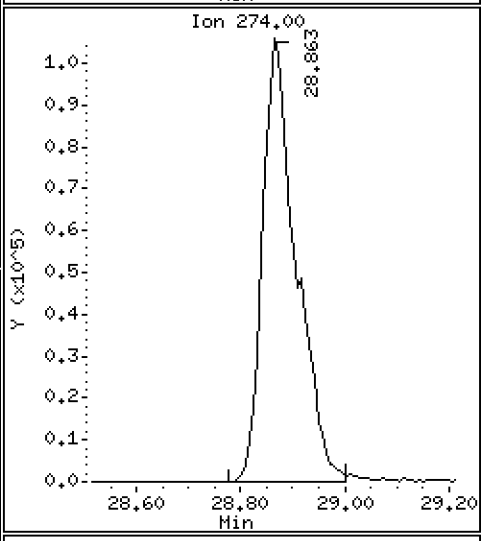
78 Indeno(1,2,3-cd)pyrene

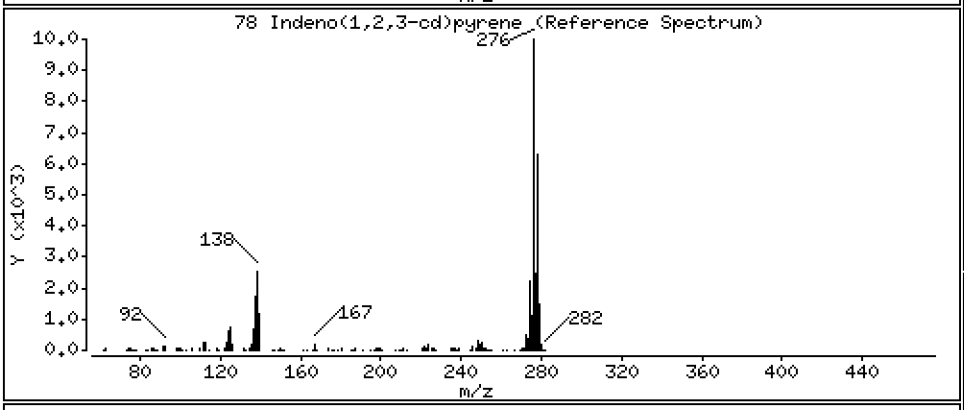
Concentration: 4.345 ug/mL

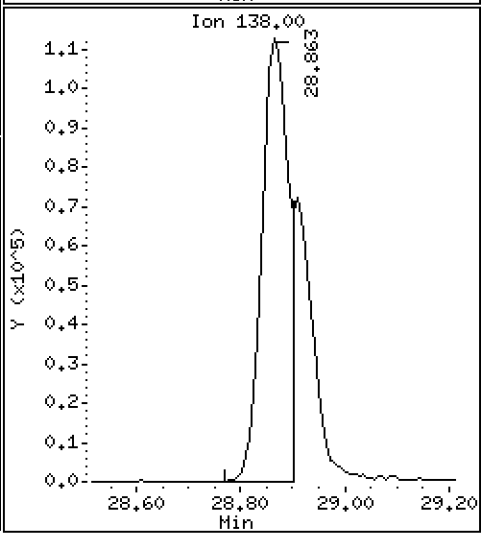


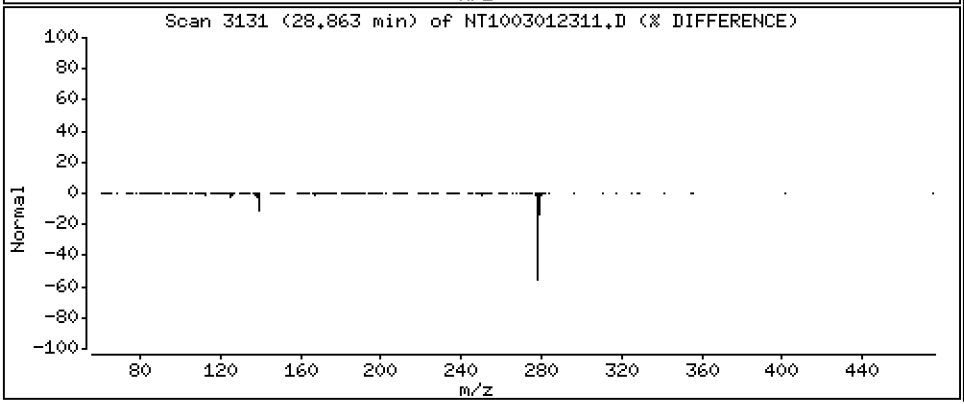












Date : 01-MAR-2023 21:46

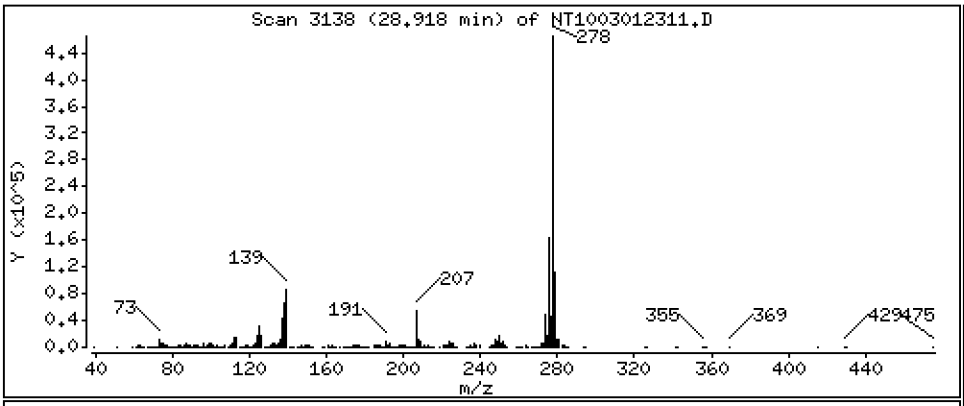
Client ID: Instrument: nt10.i

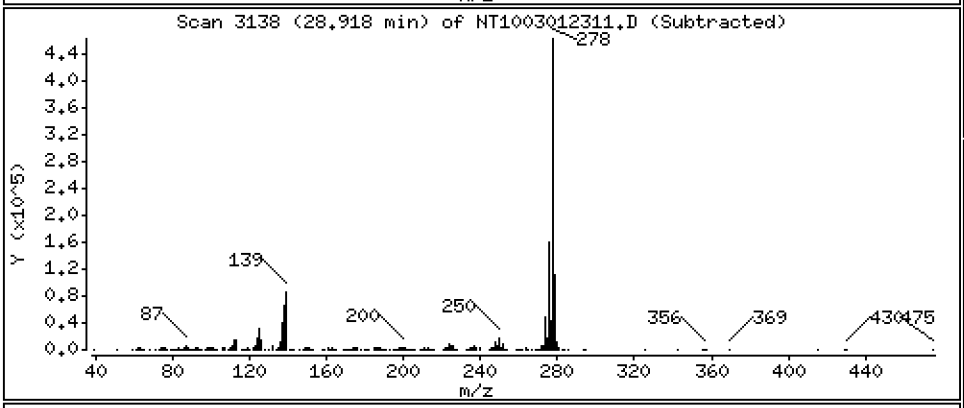
Sample Info: SEQ-SCV1

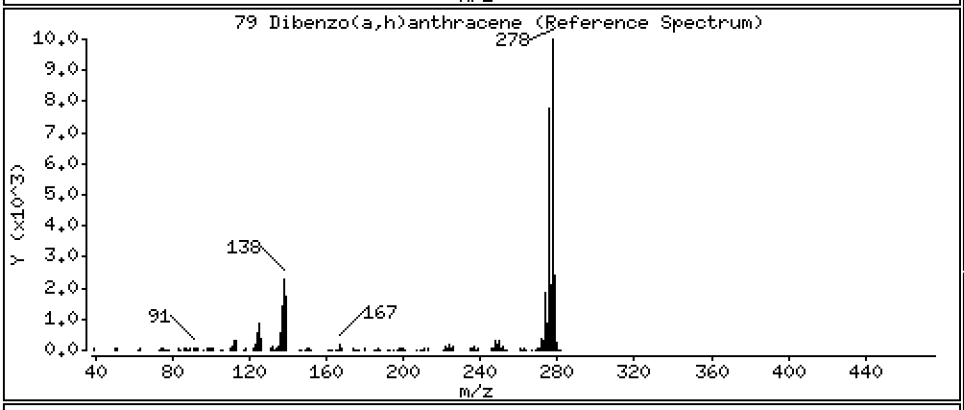
Operator: VTS

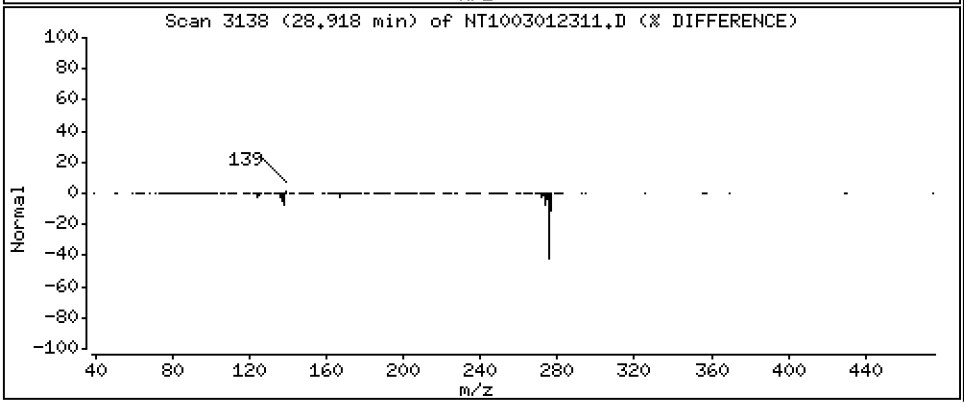
Column phase: ZB-5msi Column diameter: 0.25

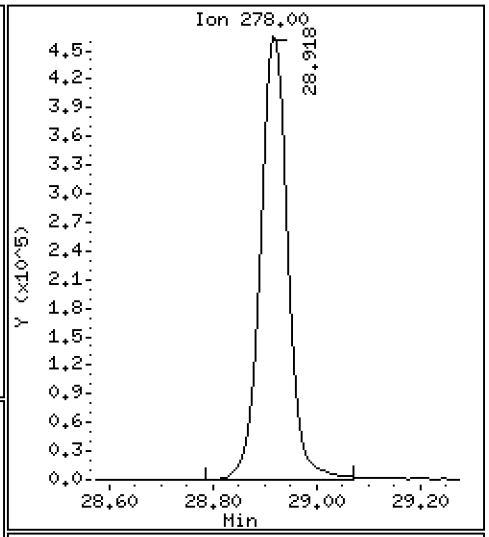
79 Dibenzo(a,h)anthracene Concentration: 4.608 ug/mL

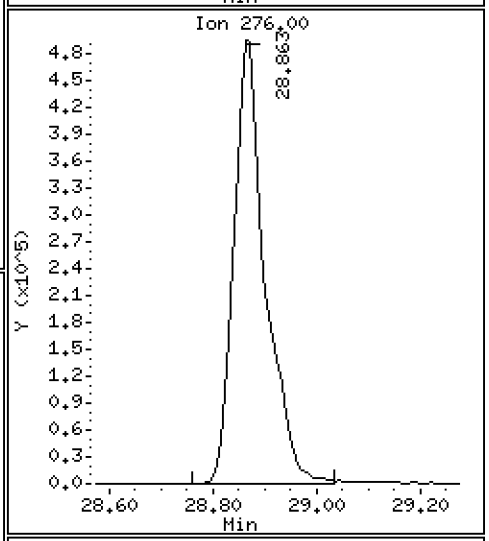


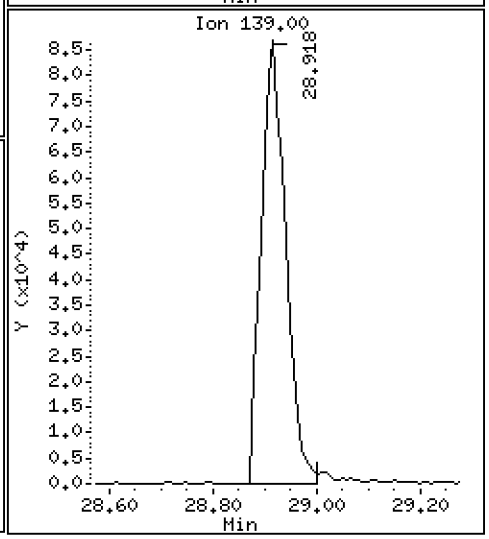












Date : 01-MAR-2023 21:46

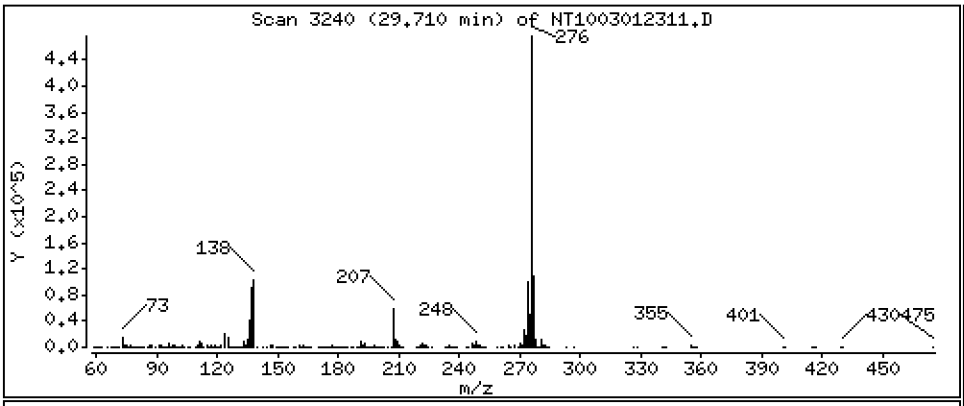
Client ID: Instrument: nt10.i

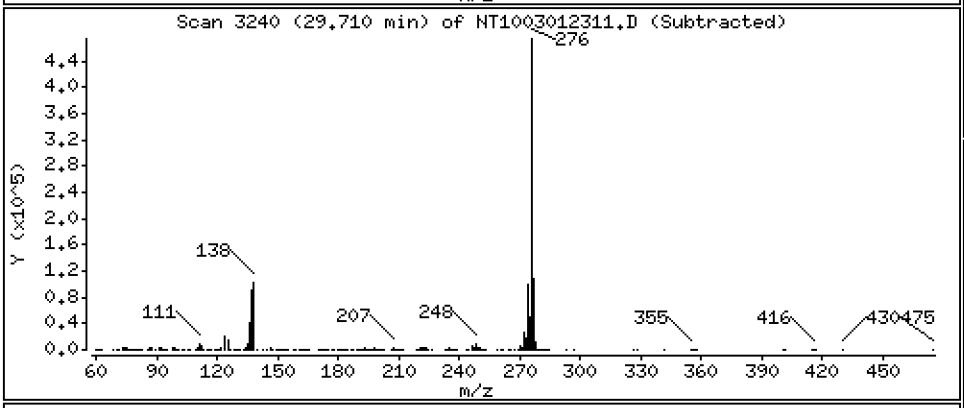
Sample Info: SEQ-SCV1

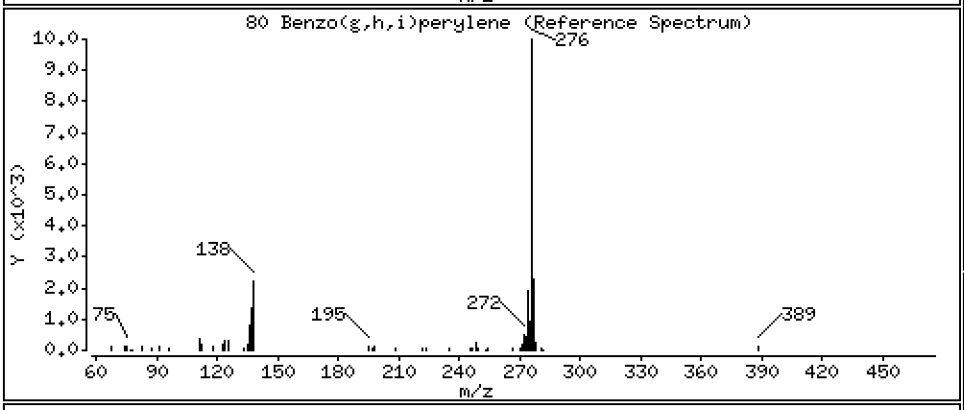
Operator: VTS

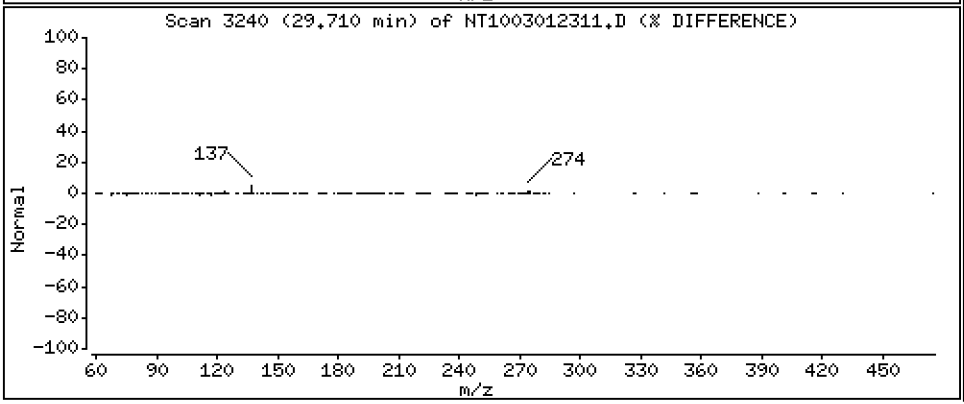
Column phase: ZB-5msi Column diameter: 0.25

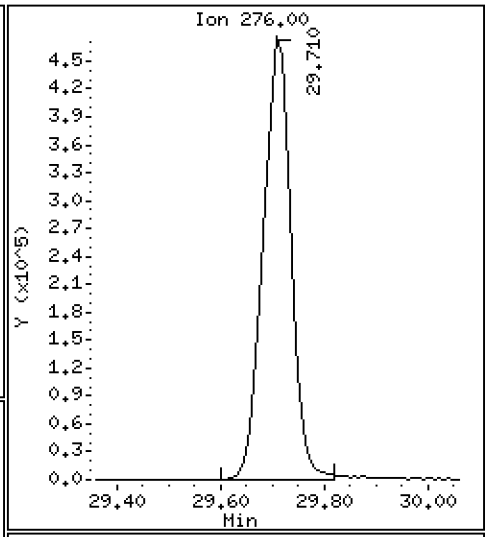
80 Benzo(g,h,i)perylene Concentration: 4.602 ug/mL

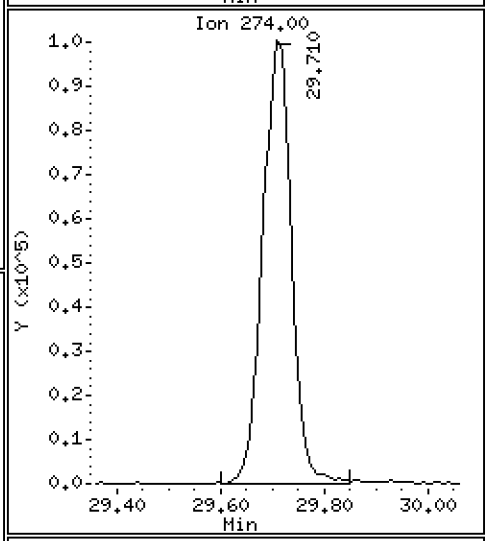


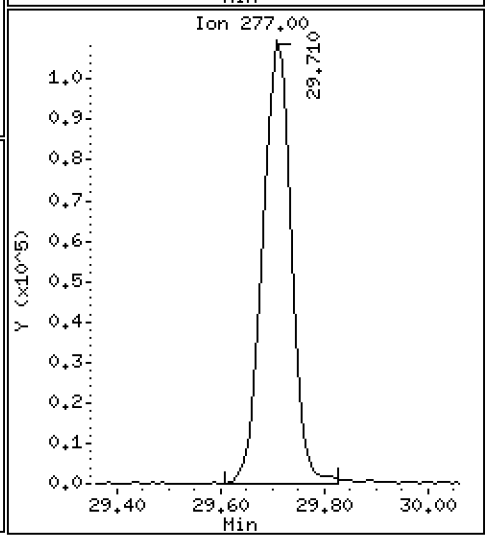












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

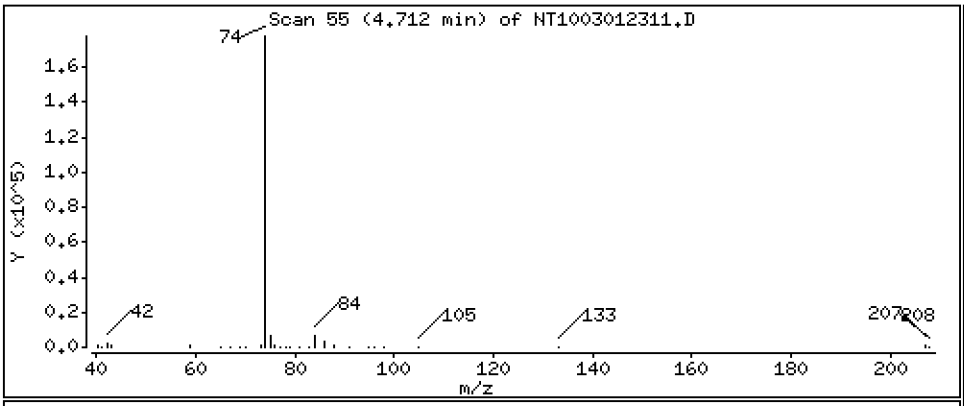
Operator: VTS

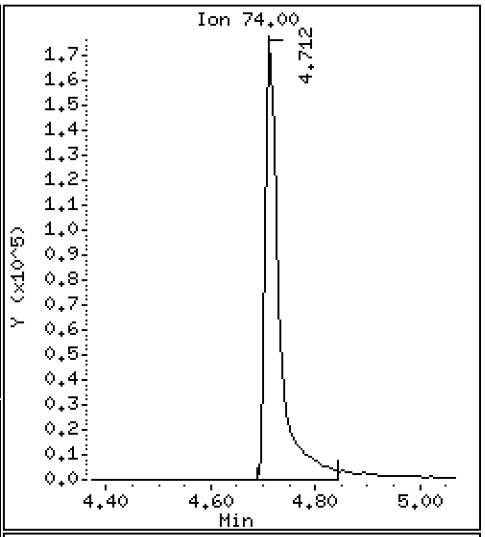
Column phase: ZB-5msi

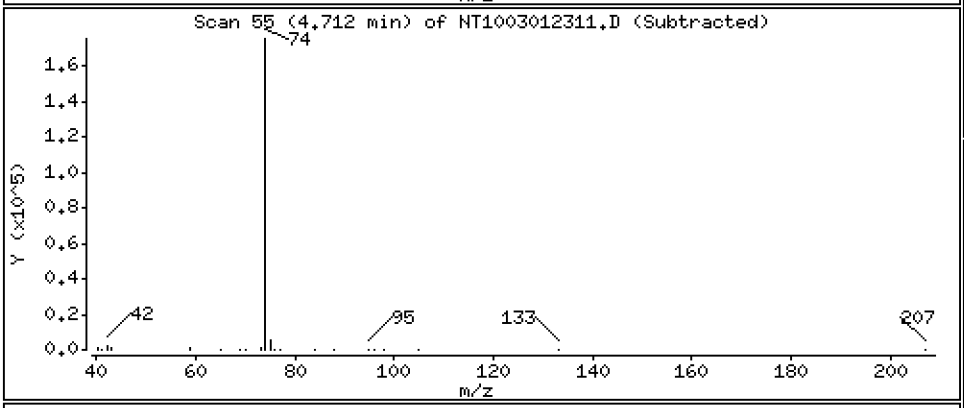
Column diameter: 0.25

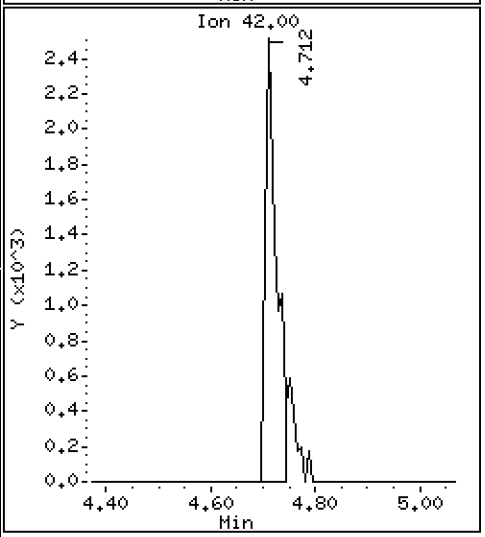
90 N-Nitrosodimethylamine

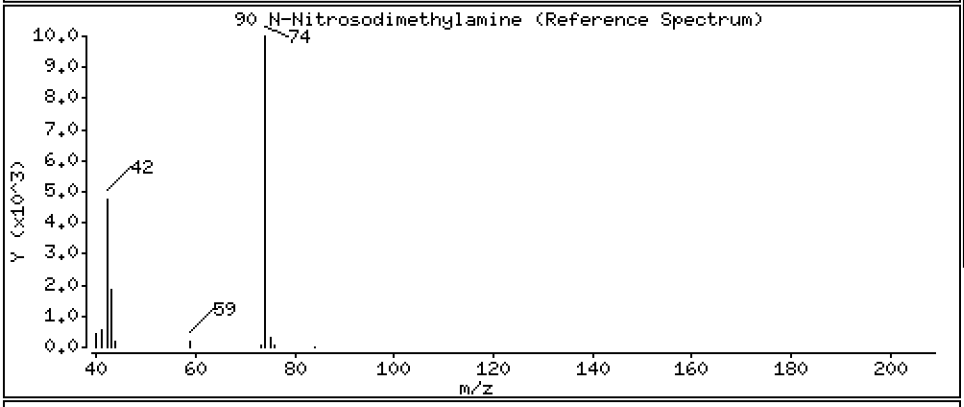
Concentration: 5.491 ug/mL

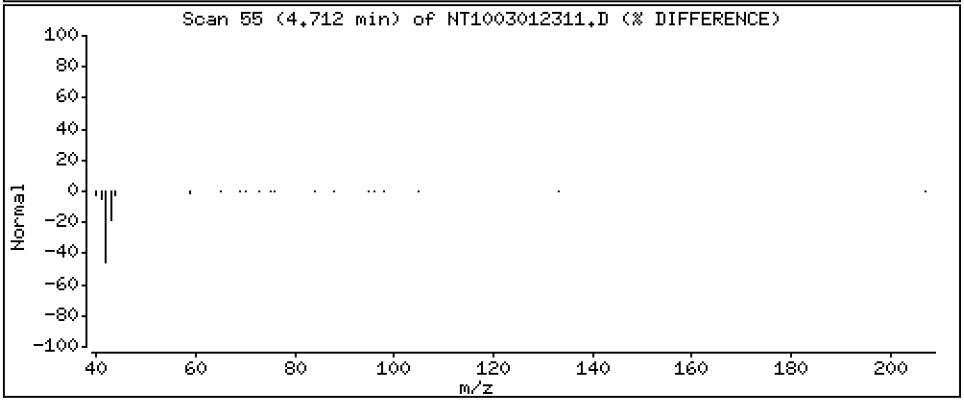












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

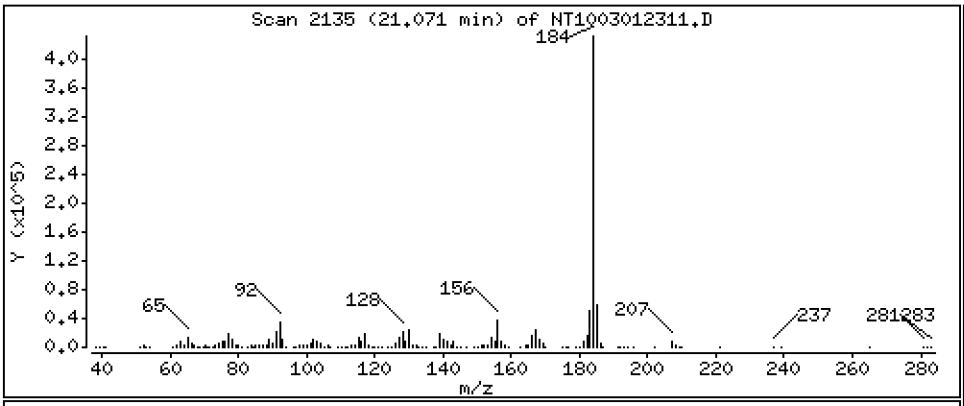
Operator: VTS

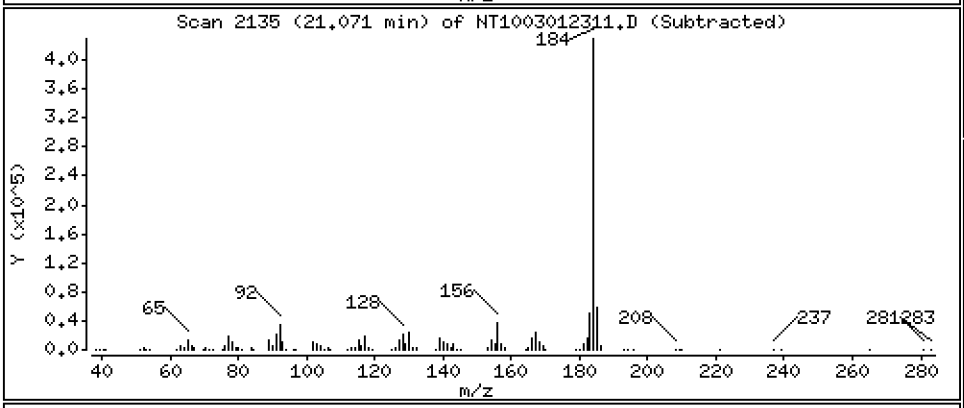
Column phase: ZB-5msi

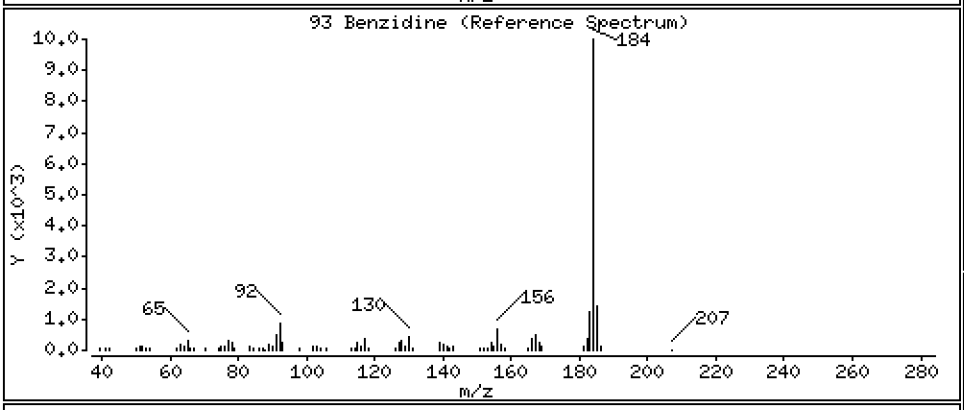
Column diameter: 0.25

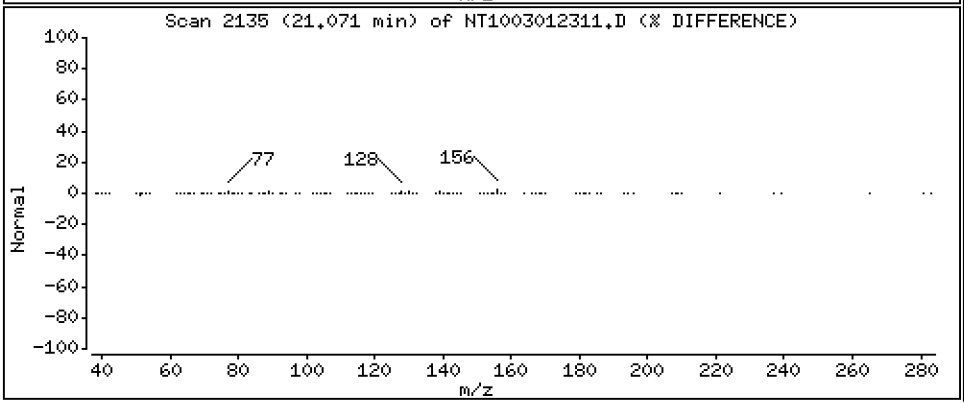
93 Benzidine

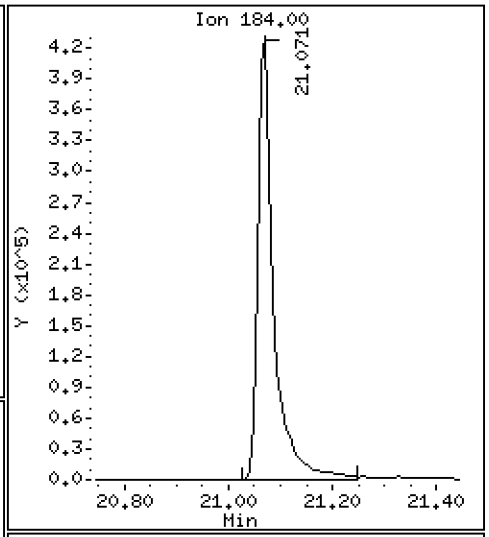
Concentration: 5.007 ug/mL

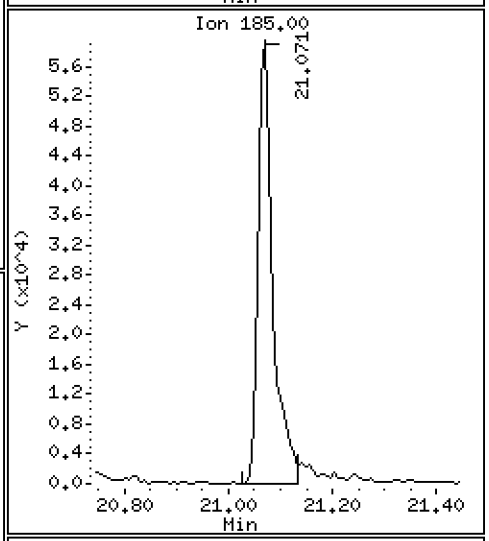


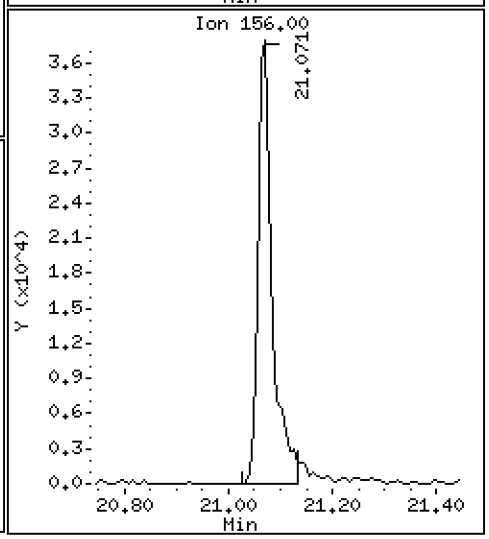












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

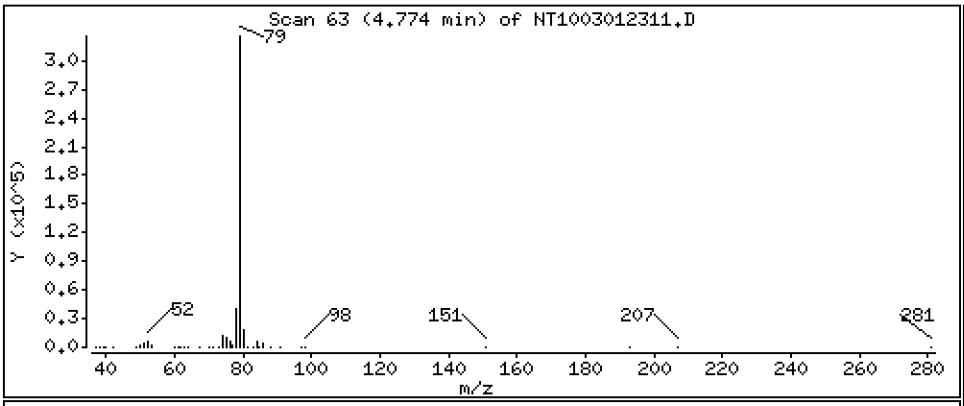
Operator: VTS

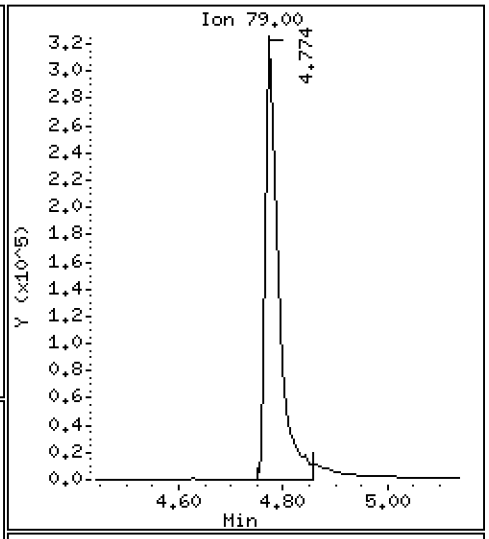
Column phase: ZB-5msi

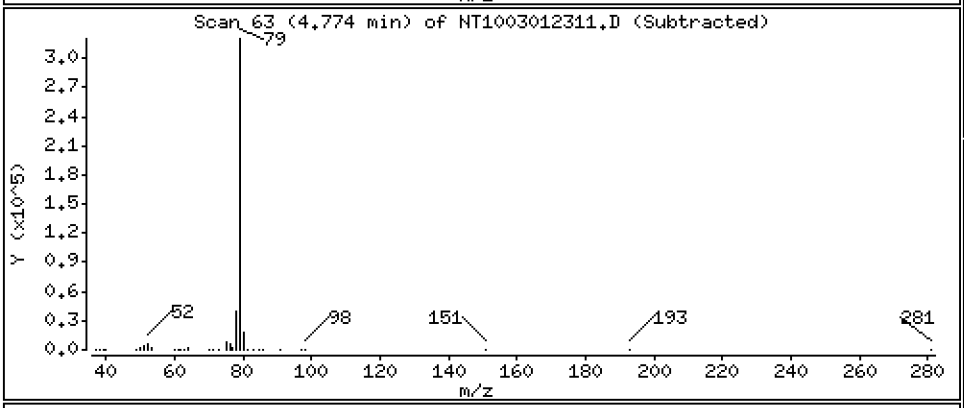
Column diameter: 0.25

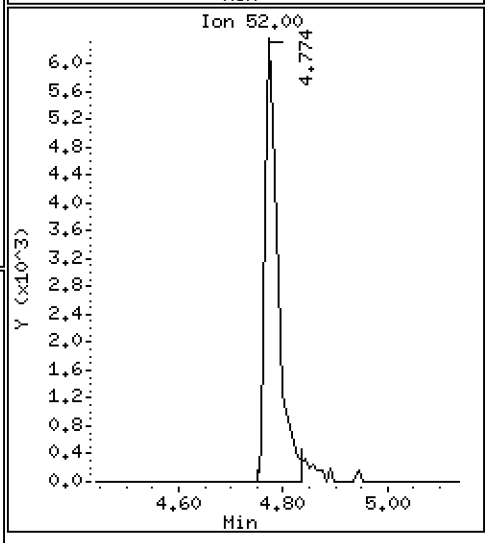
103 Pyridine

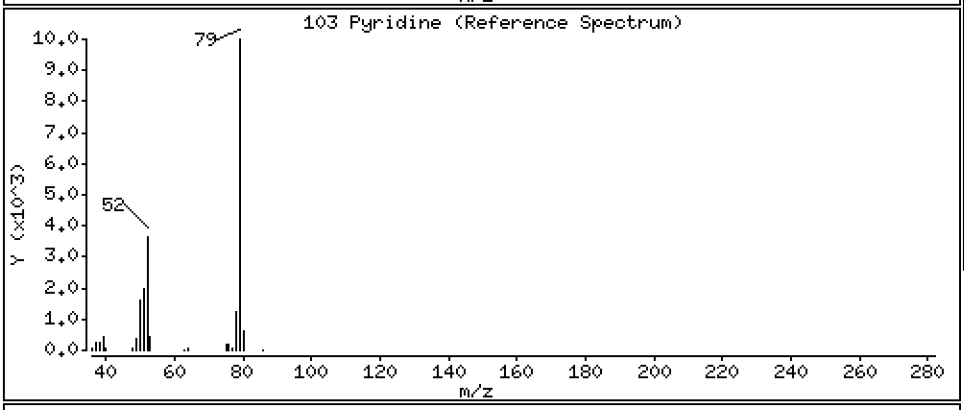
Concentration: 5.430 ug/mL

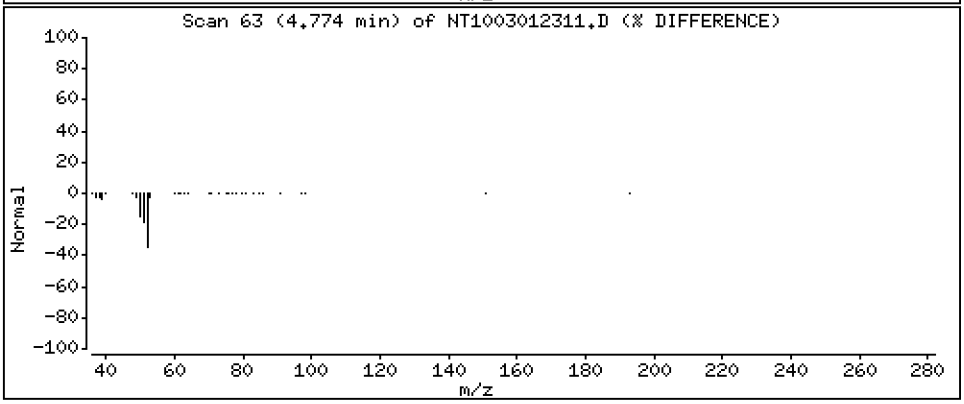












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

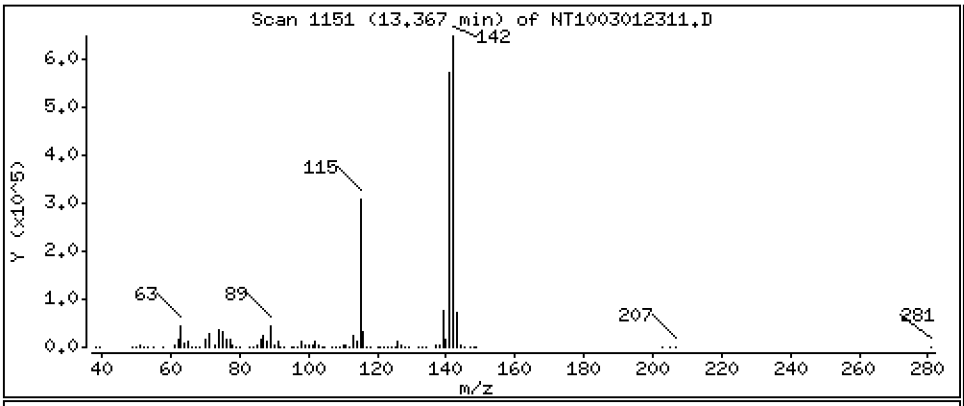
Operator: VTS

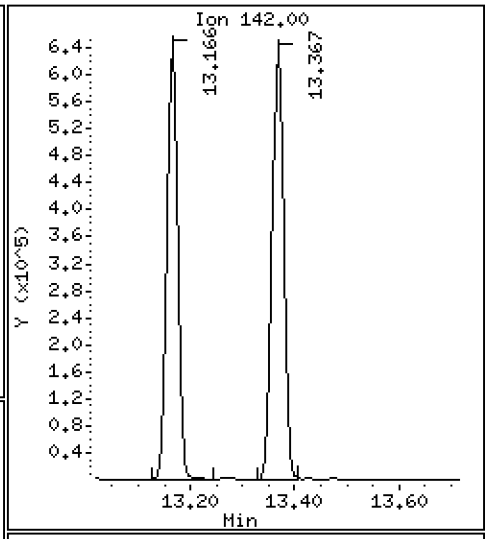
Column phase: ZB-5msi

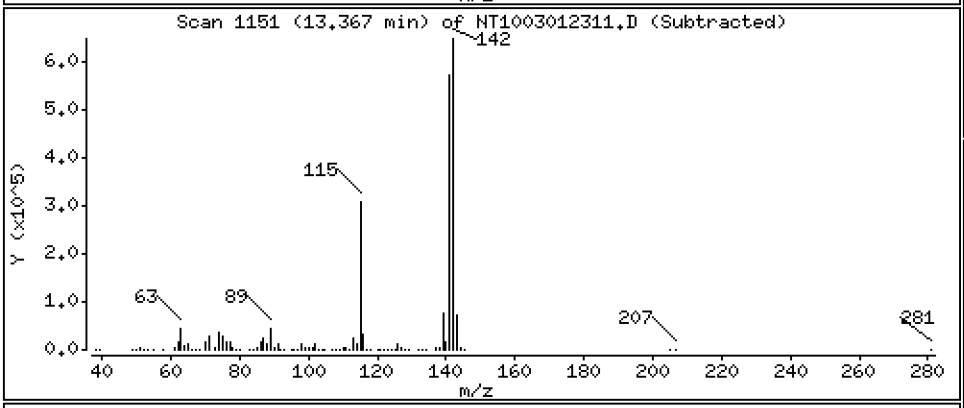
Column diameter: 0.25

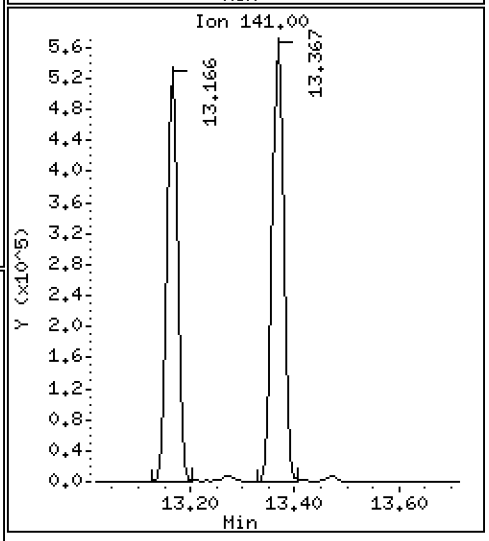
105 1-methylnaphthalene

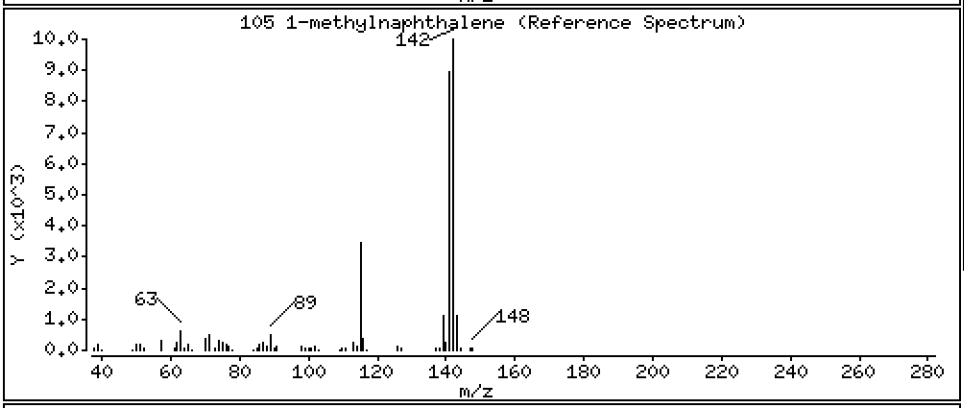
Concentration: 5.219 ug/mL

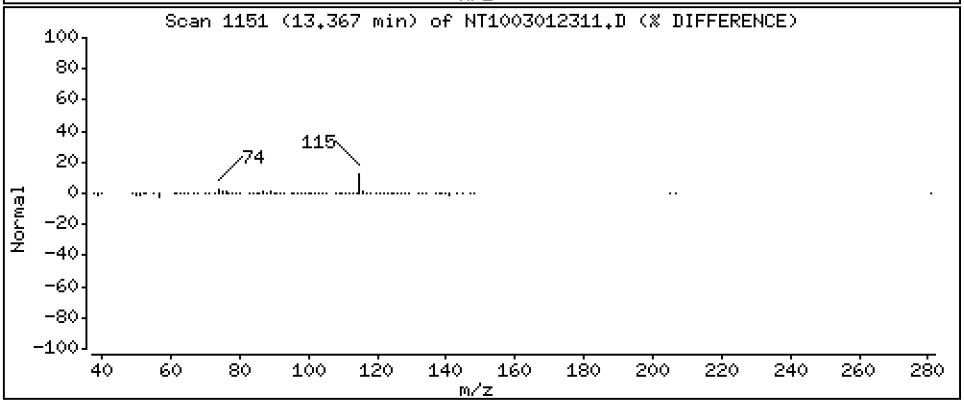












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

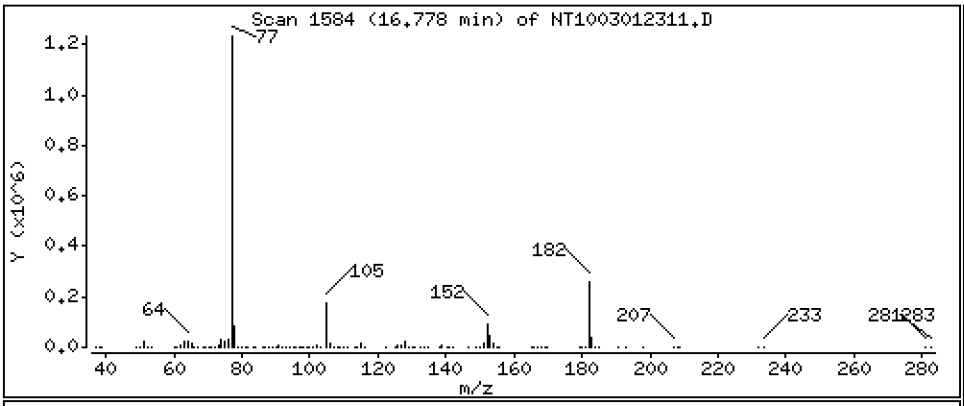
Operator: VTS

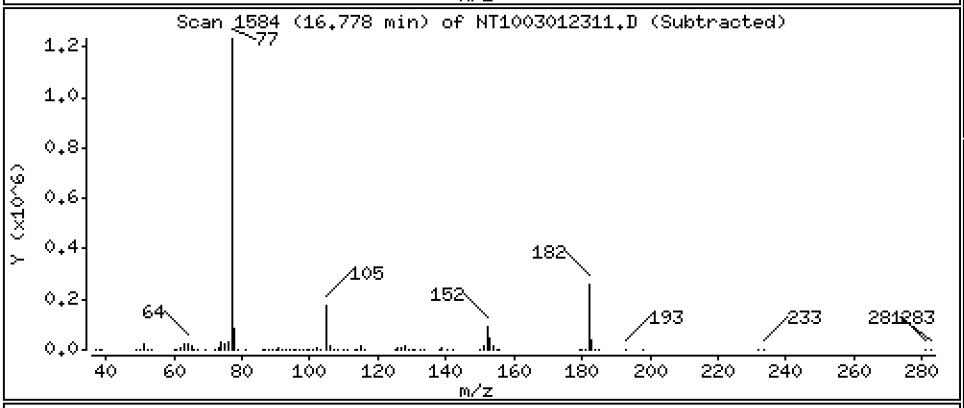
Column phase: ZB-5msi

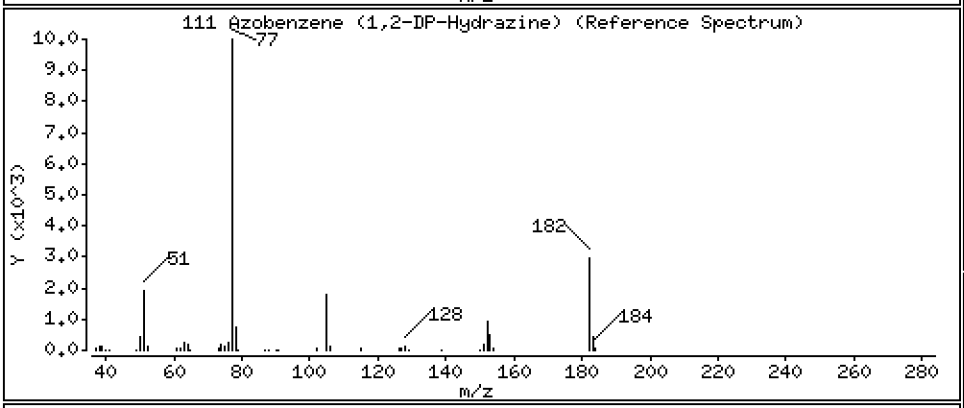
Column diameter: 0.25

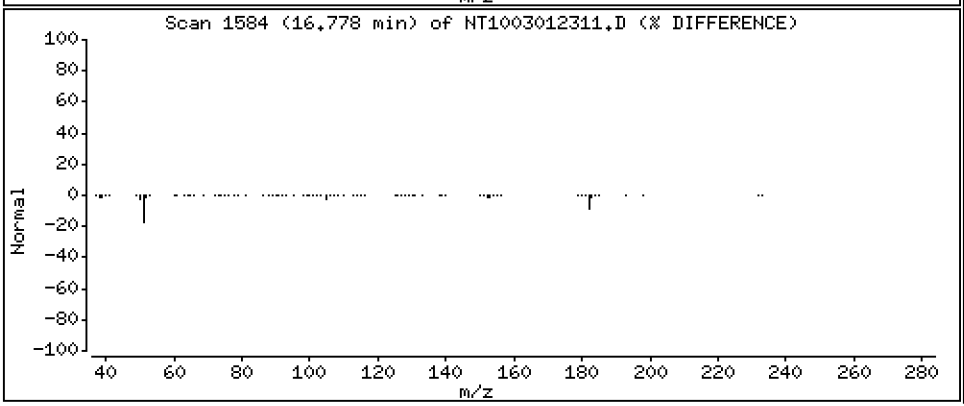
111 Azobenzene (1,2-DP-Hydrazine)

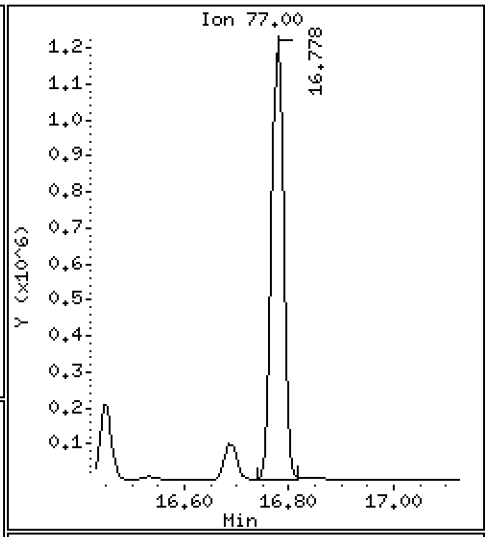
Concentration: 5.953 ug/mL

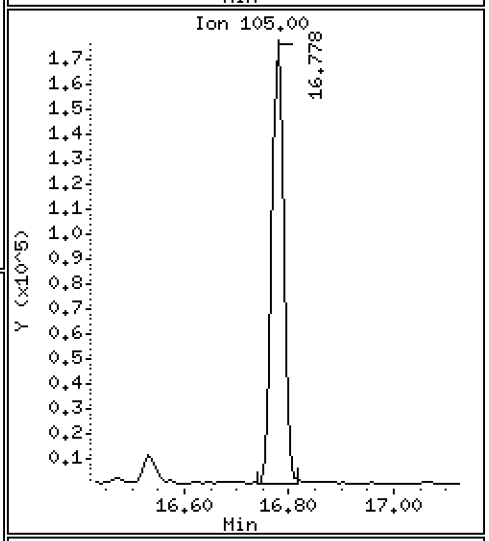


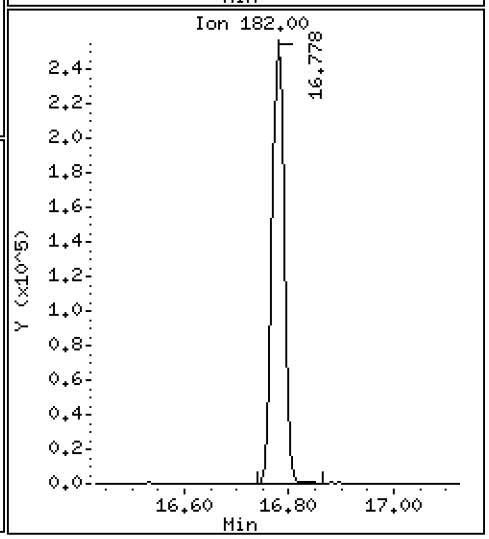












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

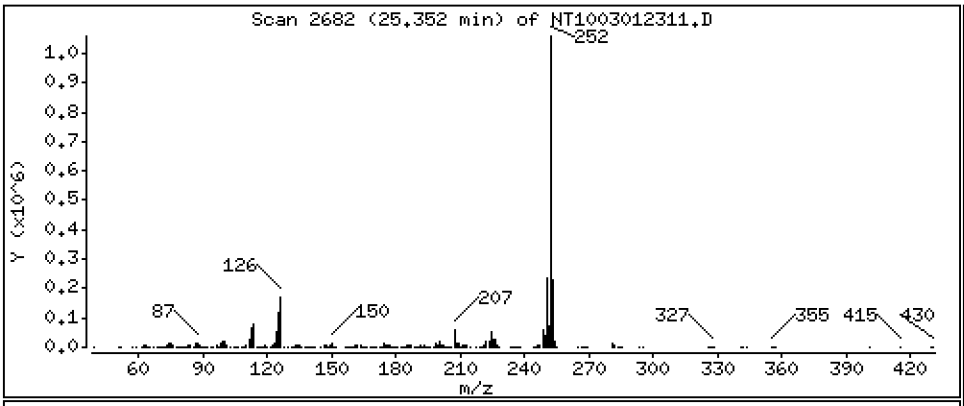
Operator: VTS

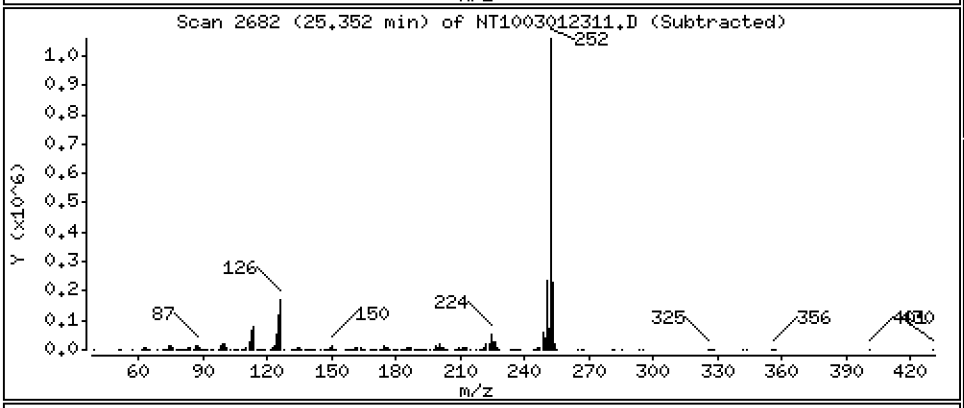
Column phase: ZB-5msi

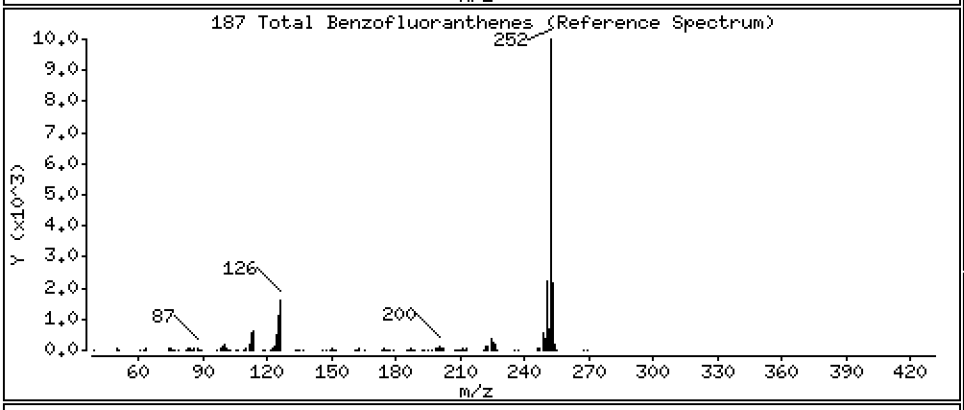
Column diameter: 0.25

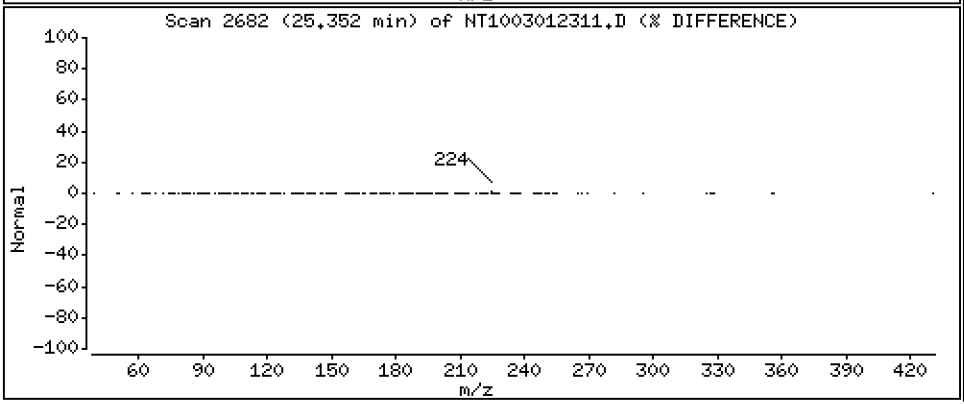
187 Total Benzofluoranthenes

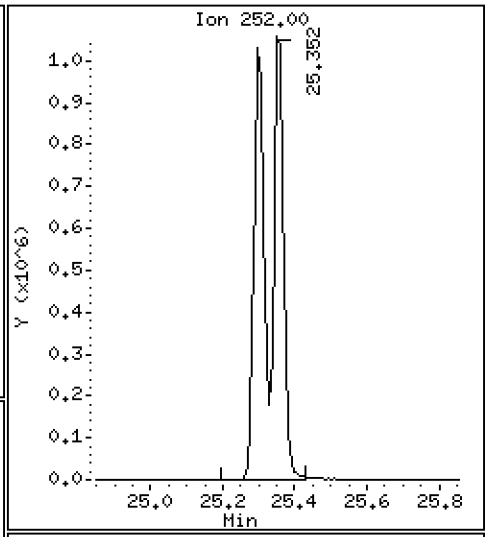
Concentration: 8.905 ug/mL

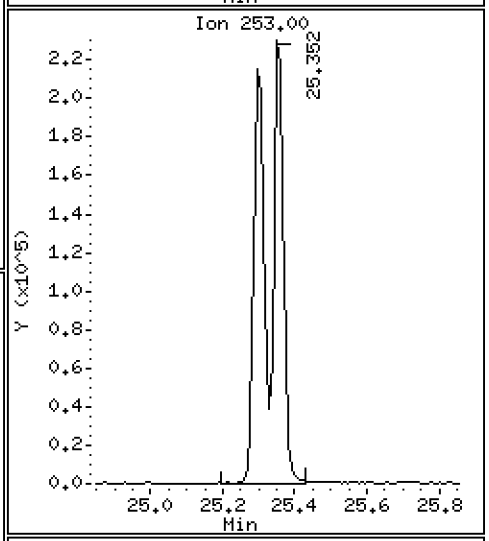


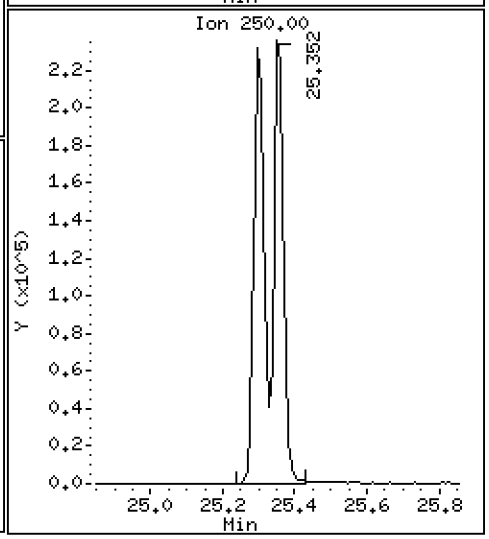












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

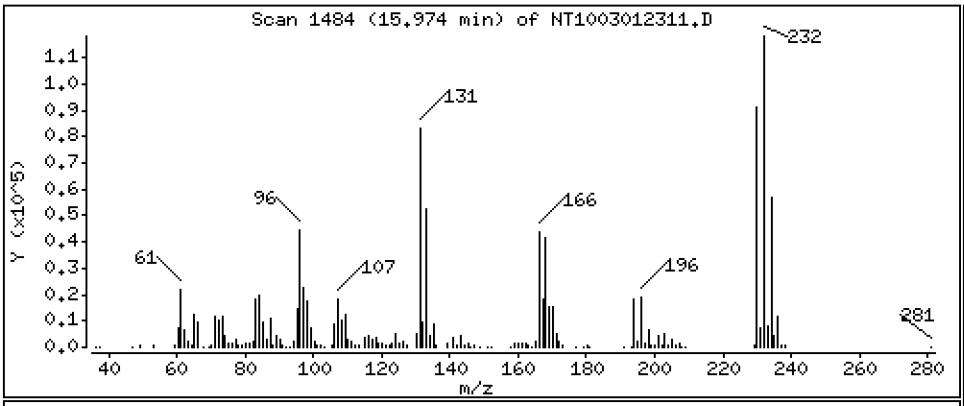
Operator: VTS

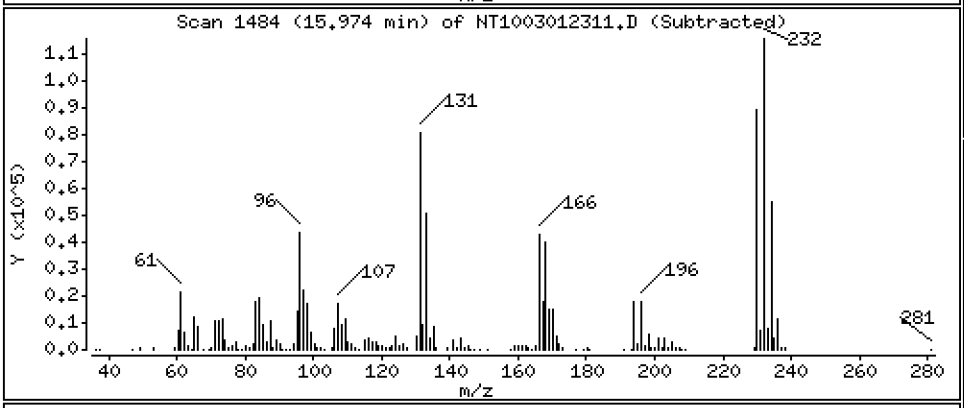
Column phase: ZB-5msi

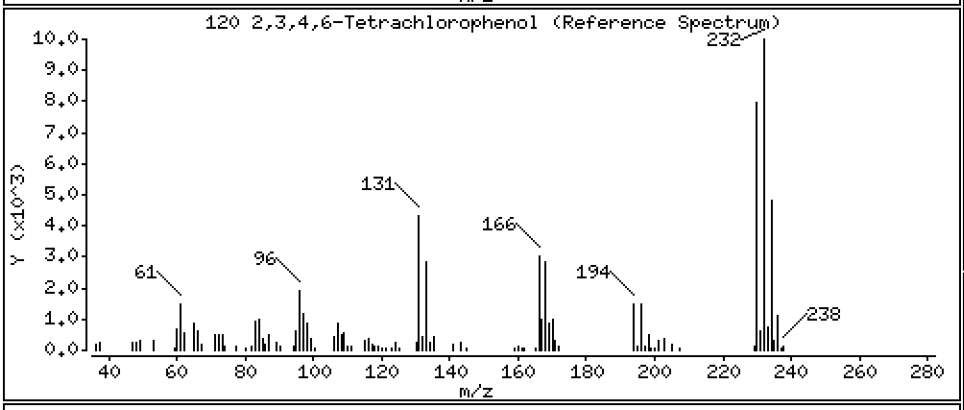
Column diameter: 0.25

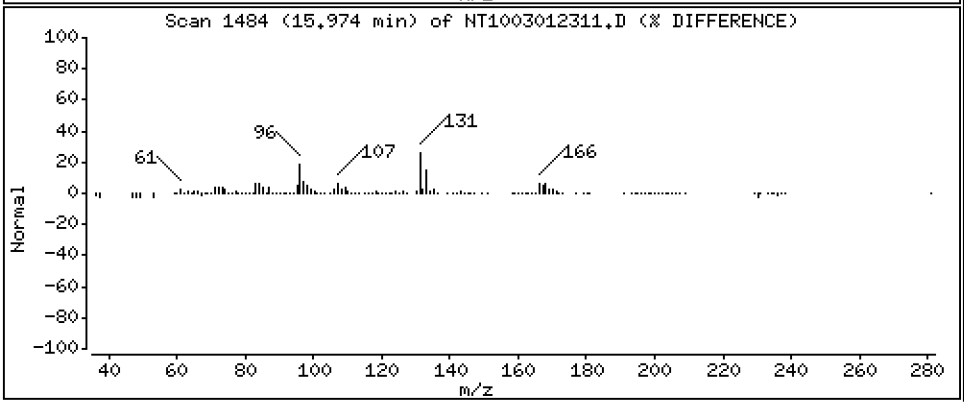
120 2,3,4,6-Tetrachlorophenol

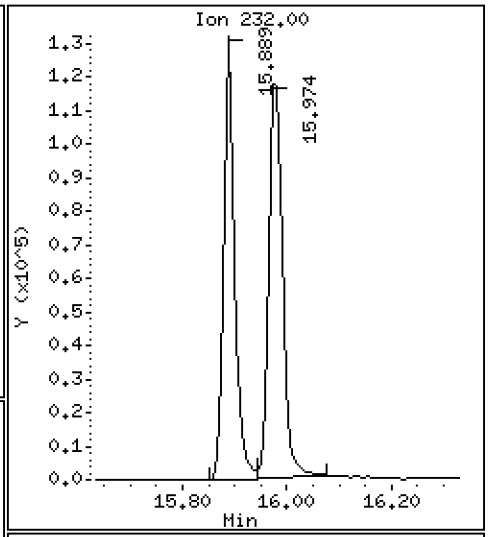
Concentration: 3.534 ug/mL

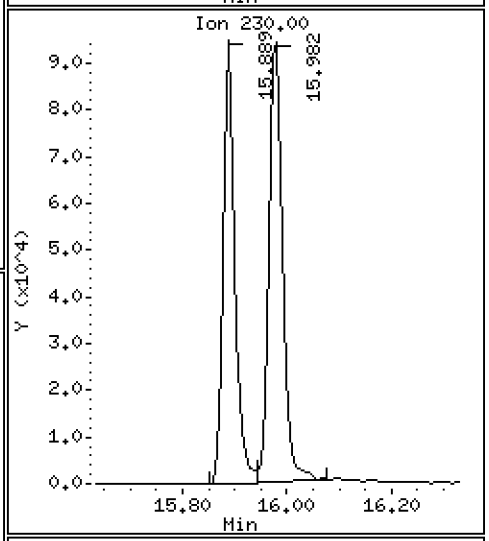


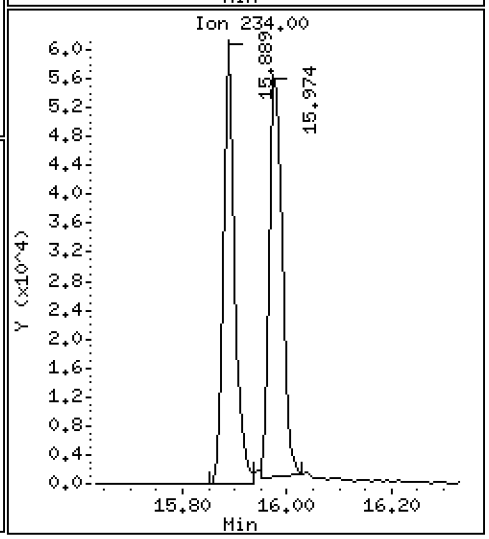












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D
Lab Smp Id: SLC0084-SCV1
Inj Date : 01-MAR-2023 21:46
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Meth Date : 07-Mar-2023 12:44 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: ORGDATA102

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

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

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

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012311.D
Lab Smp Id: SLC0084-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 17:21
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

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

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

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

REVIEW SUMMARY FOR FILE - NT1003012311.D

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

RT	CO-ELUTION COMPOUNDS
23.401	bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

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

RRT CHECK

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

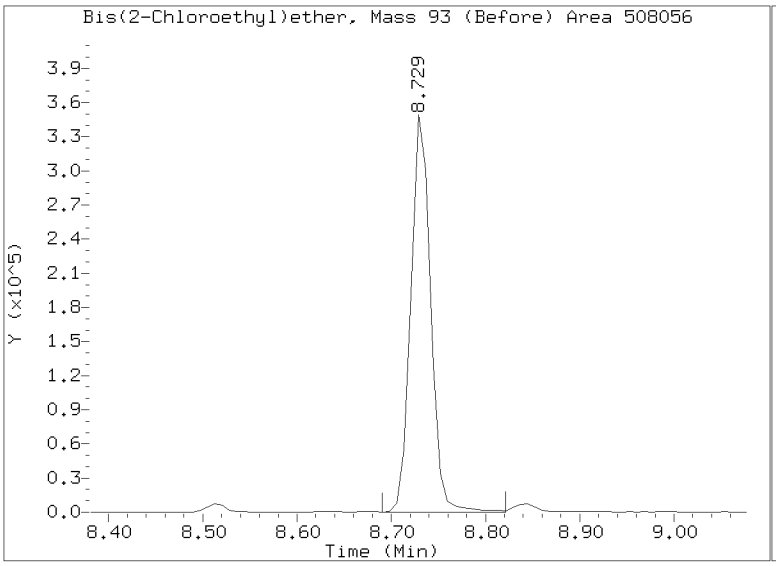
RRT check based on Ccal File: NT1003012307.D

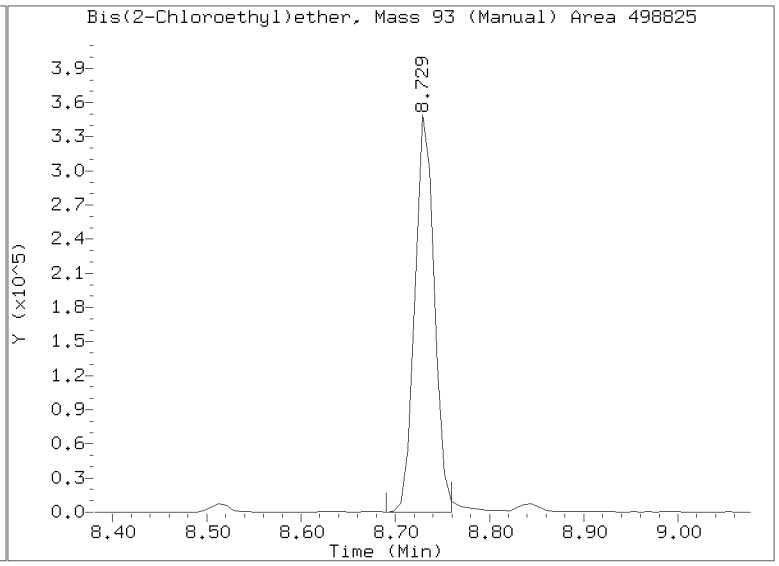
On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

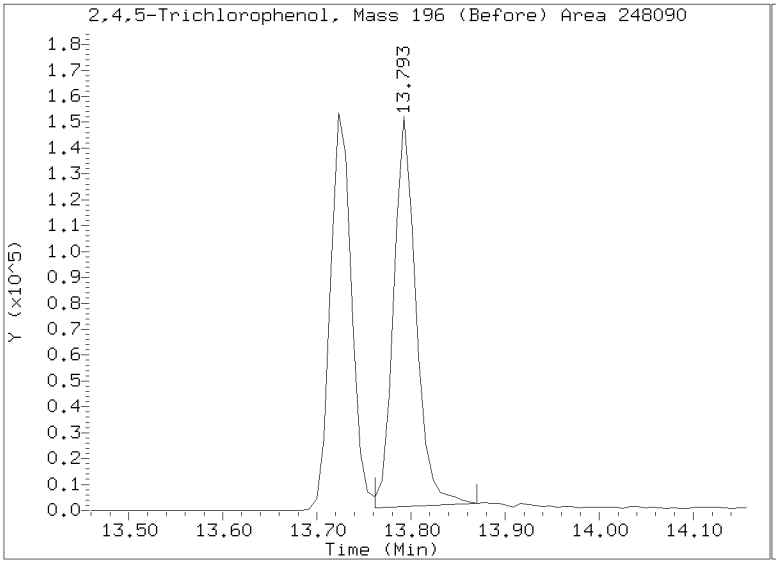
* Only compounds listed in the work order have been verified by the analyst *

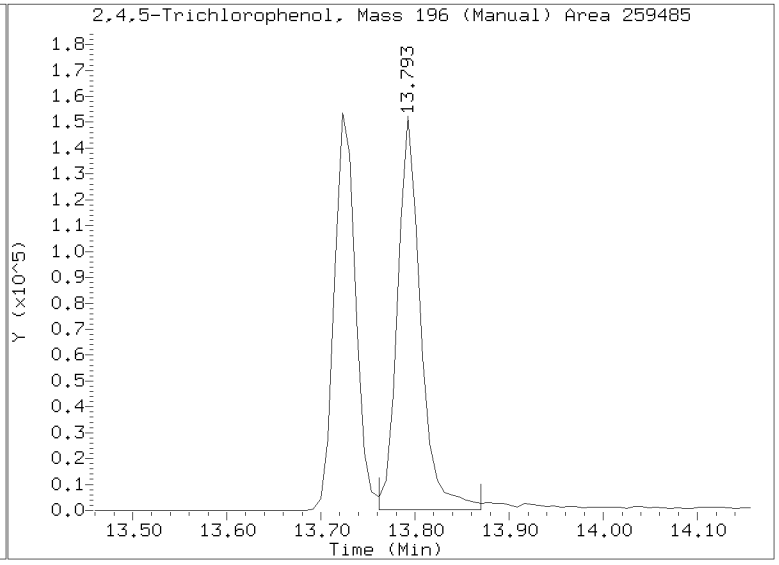
Quant Ion Manual Peak Adjustment Report

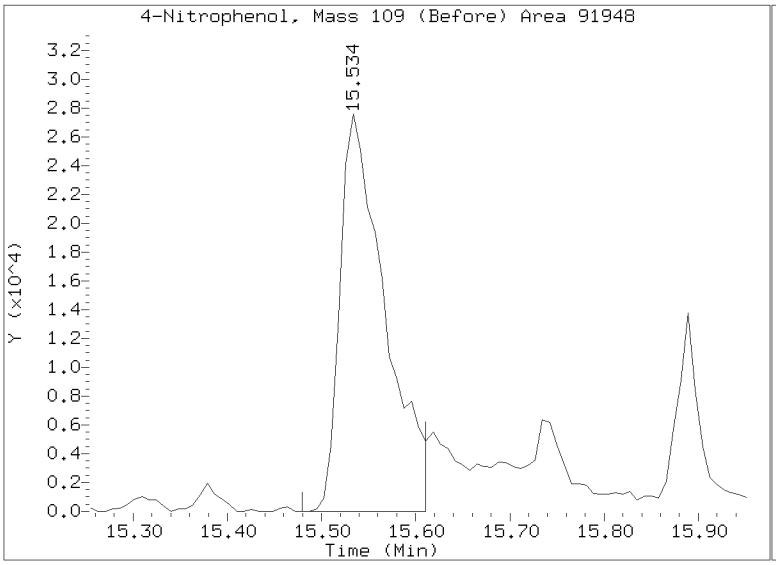
Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012311.D
Injection Date: 01-MAR-2023 21:46
Lab ID:SLC0084-SCV1 Client ID:
Report Date: 03/07/2023 12:48

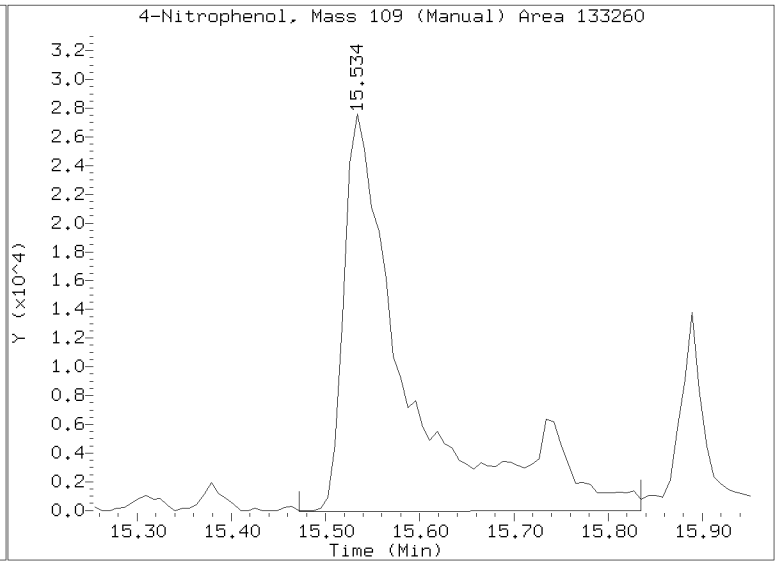












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012312.D

Date : 01-MAR-2023 22:24

Client ID:

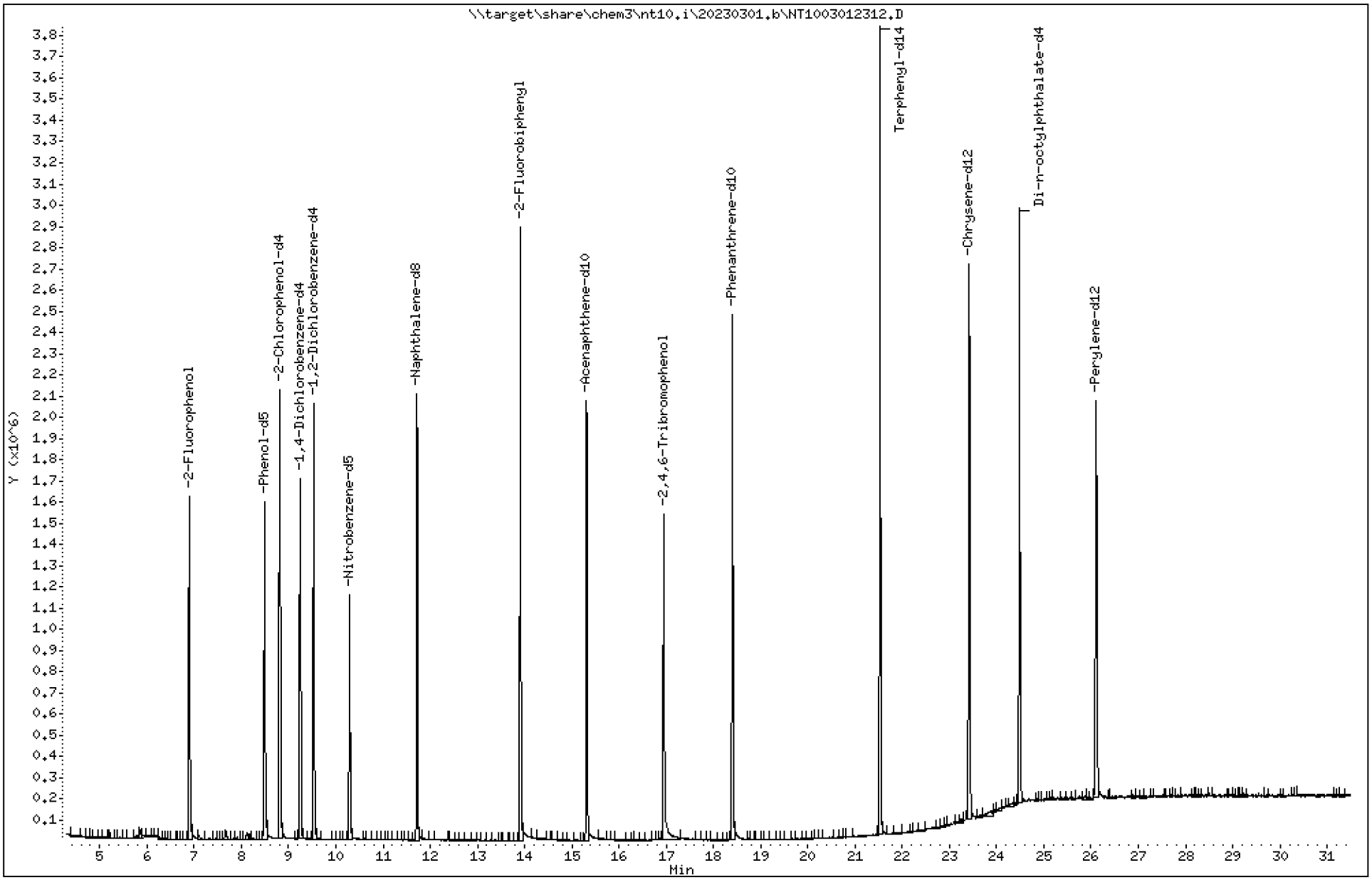
Sample Info: SEQ-IBL1

Column phase: ZB-5msi

Instrument: nt10.i

Operator: VTS

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012312.D
Lab Smp Id: SLC0084-ICB1
Inj Date : 01-MAR-2023 22:24
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-IBL1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Meth Date : 07-Mar-2023 12:44 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: ORGDATA102

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

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.908	13.908	(0.909)	1465702	4.91041	4.910
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
	40	Acenaphthylene	152	Compound Not Detected.					
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	15.308	15.309	(1.000)	836849	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	Compound Not Detected.					
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	Compound Not Detected.					
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	Compound Not Detected.					
	49	Fluorene	166	Compound Not Detected.					
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.947	16.947	(1.107)	300263	5.61962	5.620
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.401	18.401	(1.000)	1648281	4.00000	
	60	Phenanthrene	178	Compound Not Detected.					
	61	Anthracene	178	Compound Not Detected.					
	62	Carbazole	167	Compound Not Detected.					
	63	Di-n-butylphthalate	149	Compound Not Detected.					
	64	Fluoranthene	202	Compound Not Detected.					
	65	Pyrene	202	Compound Not Detected.					
$	66	Terphenyl-d14	244	21.527	21.527	(0.919)	1900377	4.81850	4.819
	67	Butylbenzylphthalate	149	Compound Not Detected.					
	68	Benzo(a)anthracene	228	Compound Not Detected.					
*	69	Chrysene-d12	240	23.416	23.416	(1.000)	1391477	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	Compound Not Detected.					
	72	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
*	134	Di-n-octylphthalate-d4	153	24.484	24.485	(1.000)	2481481	4.00000	
	73	Di-n-octylphthalate	149	Compound Not Detected.					
	74	Benzo(b)fluoranthene	252	Compound Not Detected.					
	75	Benzo(k)fluoranthene	252	Compound Not Detected.					
	76	Benzo(a)pyrene	252	Compound Not Detected.					
*	77	Perylene-d12	264	26.102	26.103	(1.000)	1542419	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	Compound Not Detected.					
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012312.D
Lab Smp Id: SLC0084-ICB1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 17:21
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

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

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

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

REVIEW SUMMARY FOR FILE - NT1003012312.D

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

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1003012307.D

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00019
Laboratory ID: SLC0084-SCV1
Sequence: SLC0084
Sequence Name: SCV 5.0
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.9	-3.0	20.00
bis(2-chloroethyl) ether	5.0000	5.9	18.6	20.00
2-Chlorophenol	5.0000	4.7	-6.2	20.00
1,3-Dichlorobenzene	5.0000	5.3	5.3	20.00
1,4-Dichlorobenzene	5.0000	5.2	4.3	20.00
1,2-Dichlorobenzene	5.0000	5.2	3.9	20.00
Benzyl Alcohol	5.0000	4.9	-2.0	20.00
2,2'-Oxybis(1-chloropropane)	5.0000	6.2	24.6 *	20.00
2-Methylphenol	5.0000	4.2	-16.2	20.00
Hexachloroethane	5.0000	5.4	8.9	20.00
N-Nitroso-di-n-Propylamine	5.0000	5.9	18.1	20.00
4-Methylphenol	5.0000	4.2	-15.2	20.00
Nitrobenzene	5.0000	5.6	11.4	20.00
Isophorone	5.0000	7.7	53.4 *	20.00
2-Nitrophenol	5.0000	3.2	-35.1 *	20.00
2,4-Dimethylphenol	5.0000	3.5	-29.9 *	20.00
Bis(2-Chloroethoxy)methane	5.0000	6.7	34.5 *	20.00
2,4-Dichlorophenol	5.0000	4.4	-11.3	20.00
1,2,4-Trichlorobenzene	5.0000	4.9	-1.8	20.00
Naphthalene	5.0000	5.3	5.1	20.00
Benzoic acid	10.000	5.6	-43.6 *	20.00
4-Chloroaniline	5.0000	3.8	-24.2 *	20.00
Hexachlorobutadiene	5.0000	5.0	0.3	20.00
4-Chloro-3-Methylphenol	5.0000	4.5	-11.0	20.00
2-Methylnaphthalene	5.0000	5.0	-1.0	20.00
Hexachlorocyclopentadiene	5.0000	2.6	-48.8 *	20.00
2,4,6-Trichlorophenol	5.0000	4.1	-17.6	20.00
2,4,5-Trichlorophenol	5.0000	4.1	-17.0	20.00
2-Chloronaphthalene	5.0000	5.3	5.3	20.00
2-Nitroaniline	5.0000	5.0	0.5	20.00
Acenaphthylene	5.0000	5.8	16.1	20.00
Dimethylphthalate	5.0000	5.4	7.7	20.00
2,6-Dinitrotoluene	5.0000	5.2	3.7	20.00
Acenaphthene	5.0000	5.2	3.1	20.00

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00019
Laboratory ID: SLC0084-SCV1
Sequence: SLC0084
Sequence Name: SCV 5.0
Standard ID: K010066

3-Nitroaniline	5.0000	5.2	3.4	20.00
2,4-Dinitrophenol	5.0000	0.3	-94.7 *	20.00
Dibenzofuran	5.0000	5.0	-0.1	20.00
4-Nitrophenol	5.0000	3.8	-23.6 *	20.00
2,4-Dinitrotoluene	5.0000	4.7	-5.4	20.00
Fluorene	5.0000	5.3	6.1	20.00
4-Chlorophenylphenyl ether	5.0000	5.3	5.1	20.00
Diethyl phthalate	5.0000	5.6	12.8	20.00
4-Nitroaniline	5.0000	5.2	4.6	20.00
4,6-Dinitro-2-methylphenol	5.0000	1.3	-74.2 *	20.00
N-Nitrosodiphenylamine	5.0000	5.4	8.3	20.00
4-Bromophenyl phenyl ether	5.0000	5.5	9.2	20.00
Hexachlorobenzene	5.0000	4.8	-3.9	20.00
Pentachlorophenol	5.0000	3.5	-30.2 *	20.00
Phenanthrene	5.0000	5.1	1.7	20.00
Anthracene	5.0000	4.6	-8.3	20.00
Carbazole	5.0000	5.3	6.7	20.00
Di-n-Butylphthalate	5.0000	5.5	9.3	20.00
Fluoranthene	5.0000	4.5	-9.2	20.00
Pyrene	5.0000	4.6	-7.5	20.00
Butylbenzylphthalate	5.0000	4.5	-9.5	20.00
Benzo(a)anthracene	5.0000	4.6	-8.4	20.00
3,3'-Dichlorobenzidine	10.000	7.4	-26.2 *	20.00
Chrysene	5.0000	5.0	-0.7	20.00
bis(2-Ethylhexyl)phthalate	5.0000	5.0	-0.9	20.00
Di-n-Octylphthalate	5.0000	5.8	16.9	20.00
Benzofluoranthenes, Total	10.000	8.9	-11.0	20.00
Benzo(a)pyrene	5.0000	4.4	-11.1	20.00
Indeno(1,2,3-cd)pyrene	5.0000	4.3	-13.1	20.00
Dibenzo(a,h)anthracene	5.0000	4.6	-7.8	20.00
Benzo(g,h,i)perylene	5.0000	4.6	-8.0	20.00
1-Methylnaphthalene	5.0000	5.2	4.4	20.00
2-Fluorophenol	7.5000	0.00	*	20.00
Phenol-d5	7.5000	0.00	*	20.00
2-Chlorophenol-d4	7.5000	0.00	*	20.00
1,2-Dichlorobenzene-d4	5.0000	4.29	-14.1	20.00
Nitrobenzene-d5	5.0000	0.00	*	20.00

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00019
Laboratory ID: SLC0084-SCV1
Sequence: SLC0084
Sequence Name: SCV 5.0
Standard ID: K010066

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

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

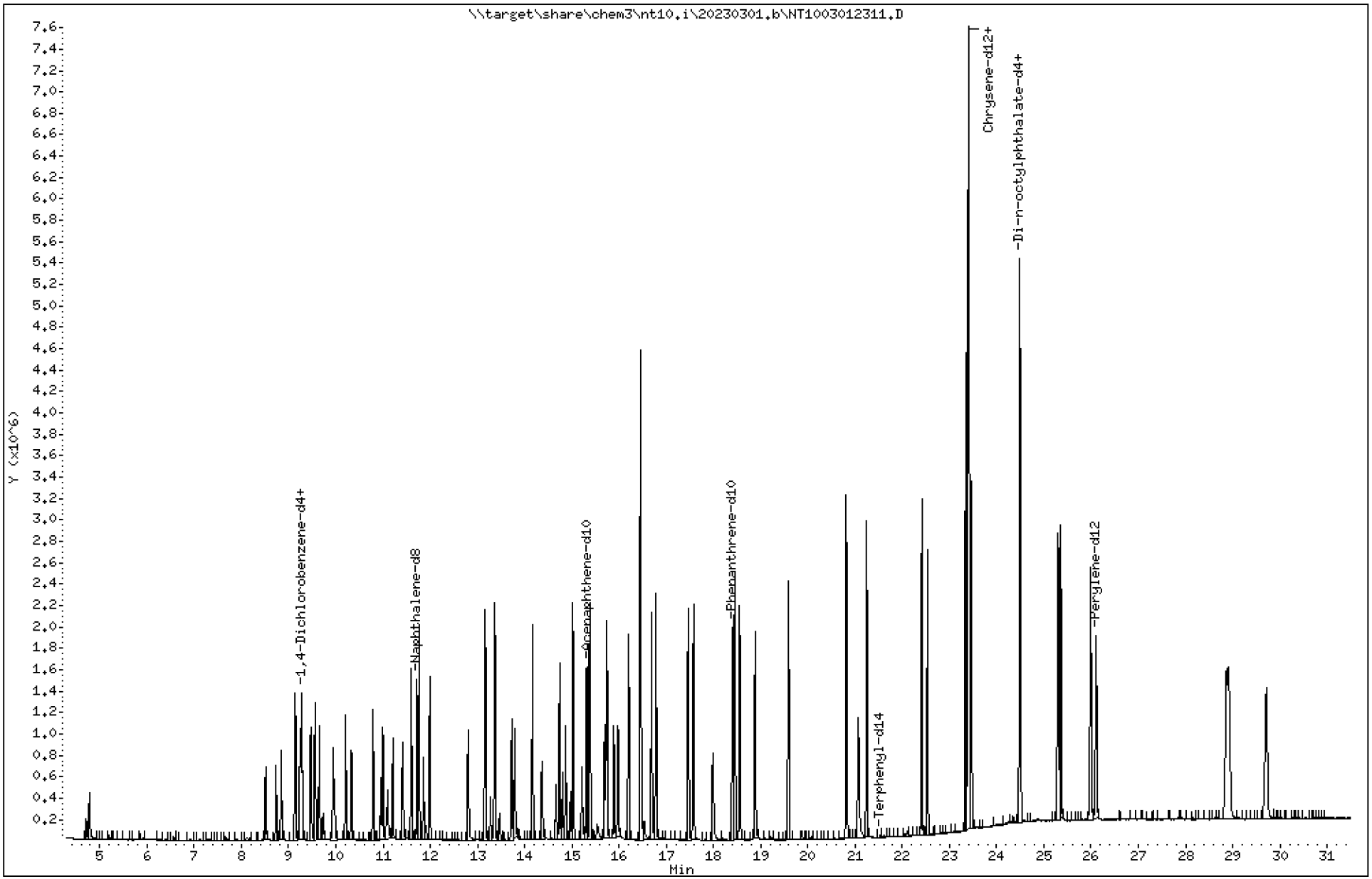
Instrument: nt10.i

Sample Info: SEQ-SCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

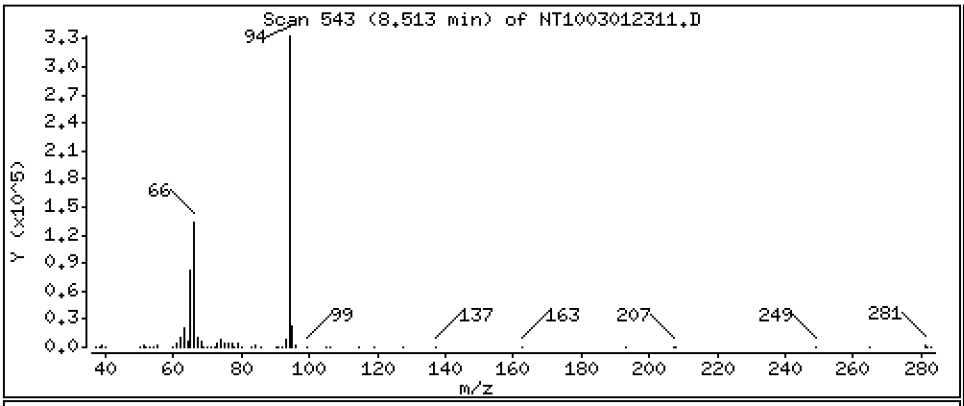
Operator: VTS

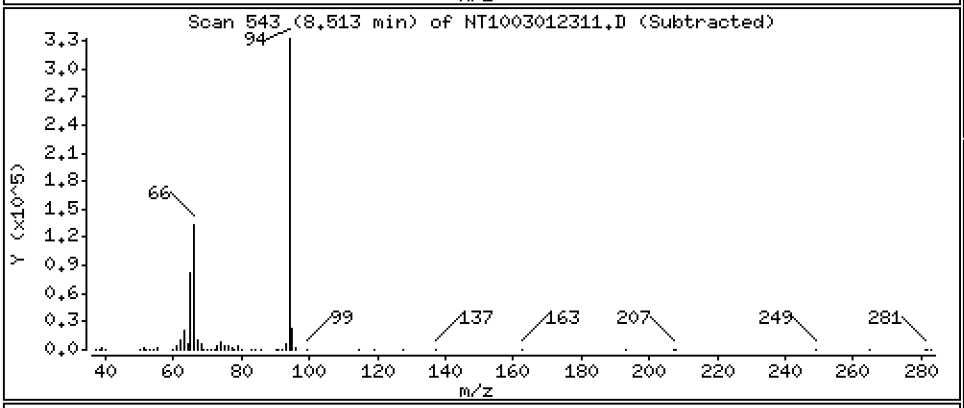
Column phase: ZB-5msi

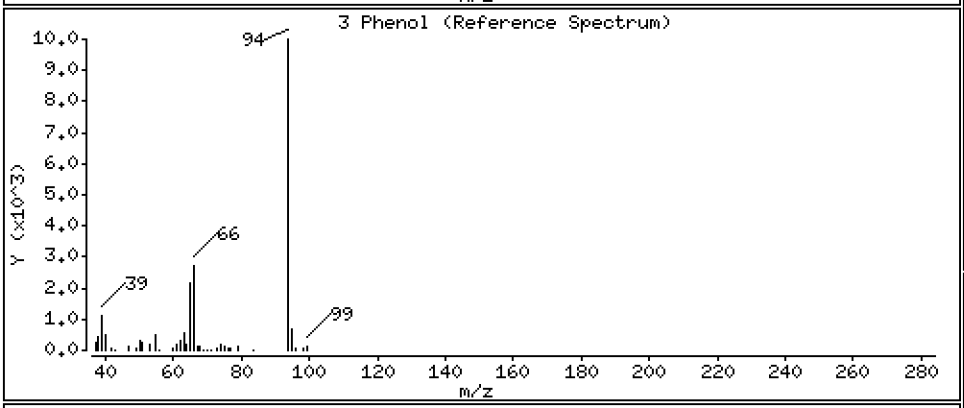
Column diameter: 0.25

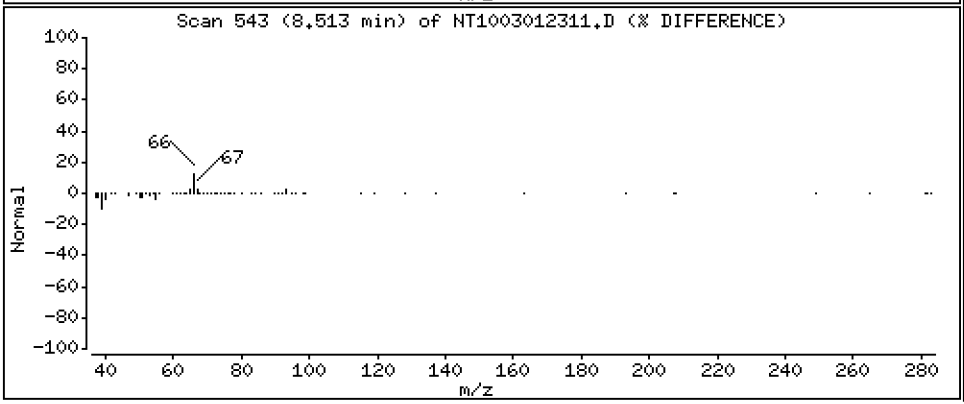
3 Phenol

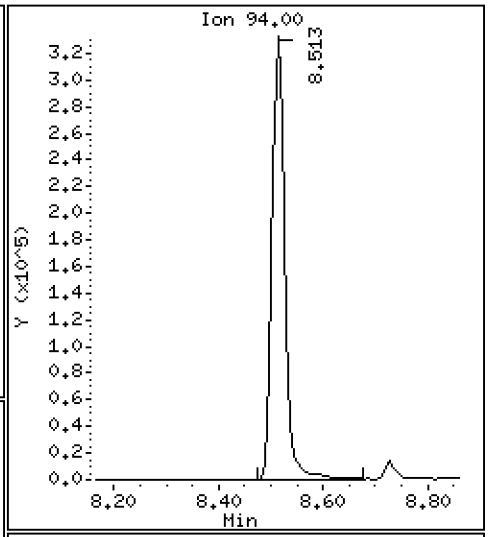
Concentration: 4.852 ug/mL

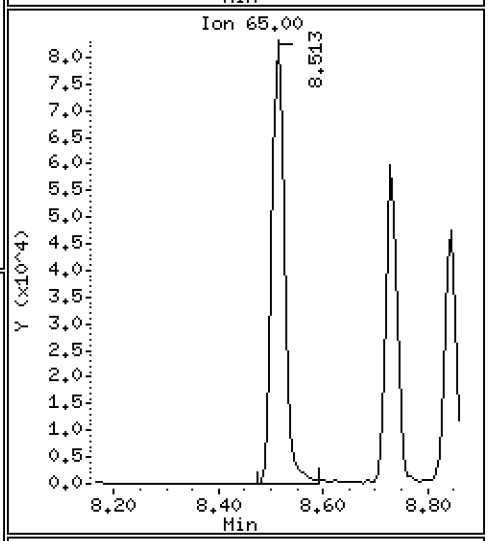


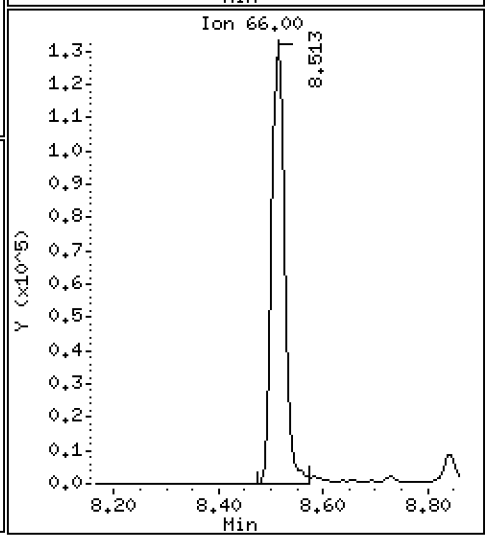












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

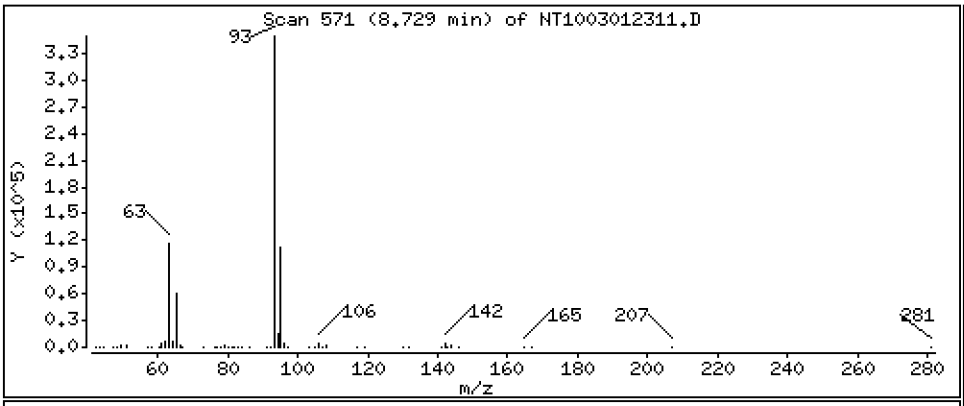
Operator: VTS

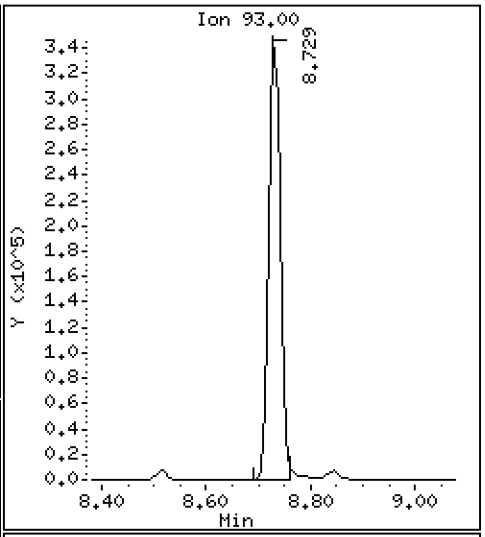
Column phase: ZB-5msi

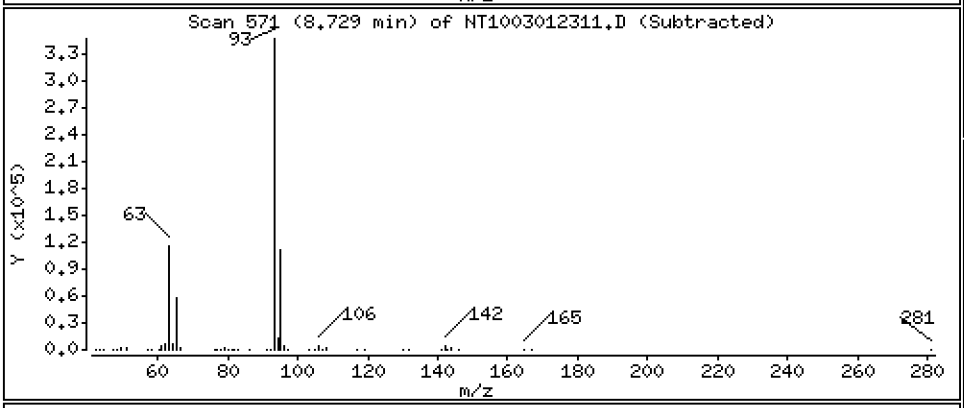
Column diameter: 0.25

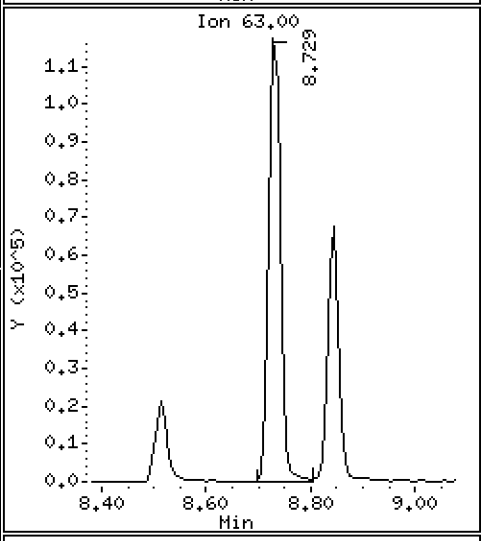
4 Bis(2-Chloroethyl)ether

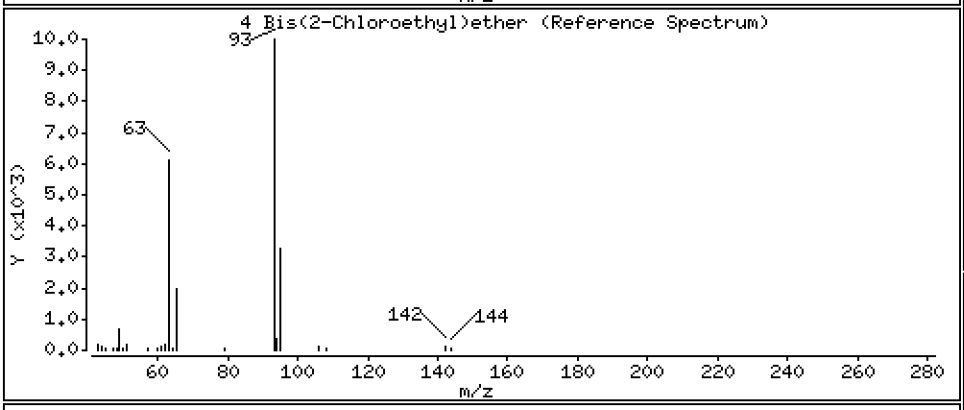
Concentration: 5.928 ug/mL

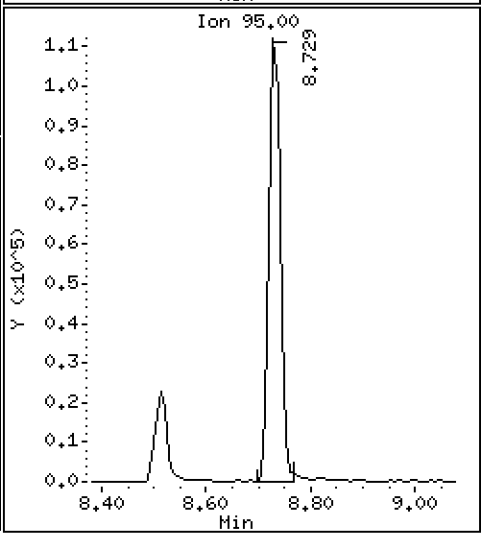


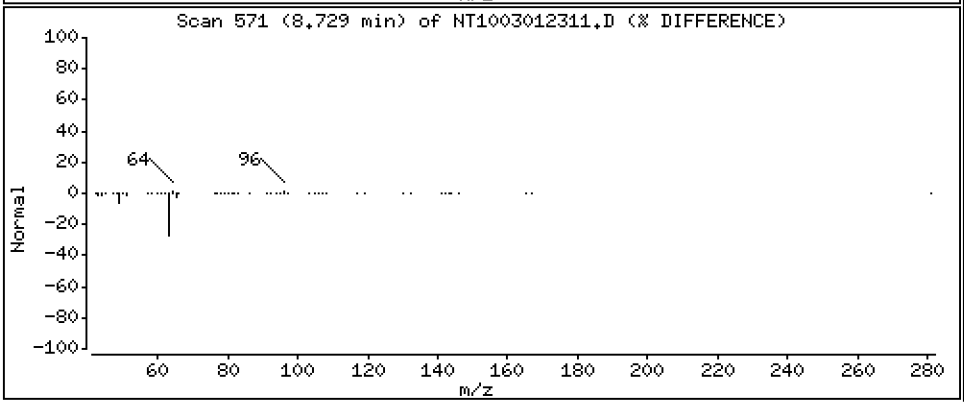












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

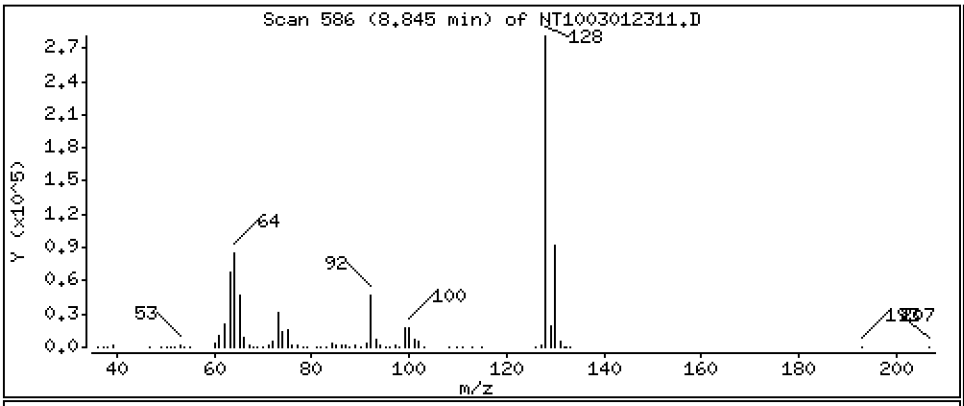
Operator: VTS

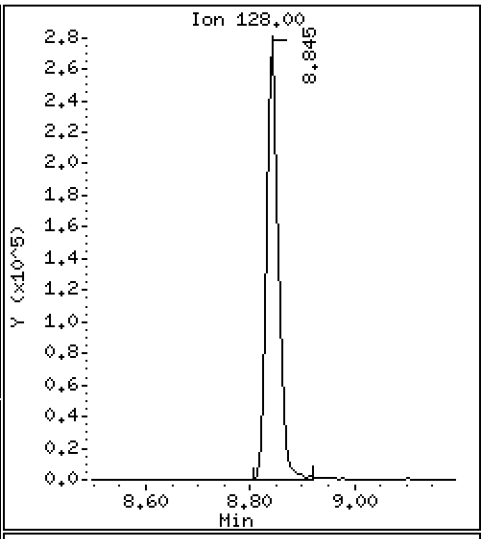
Column phase: ZB-5msi

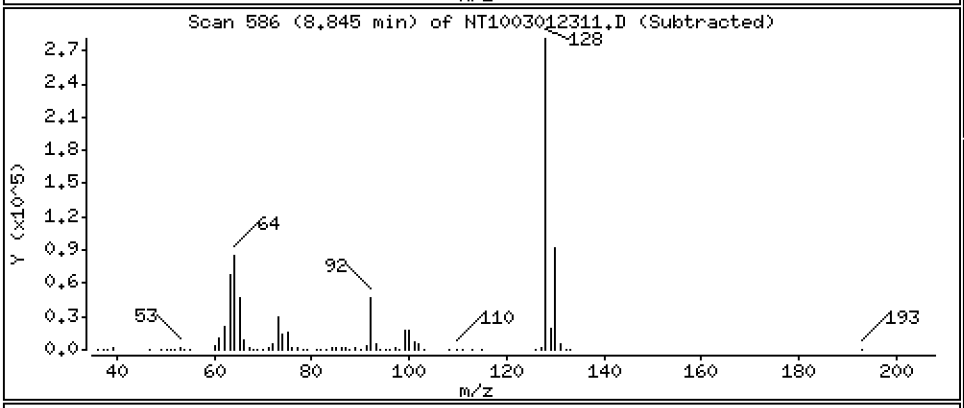
Column diameter: 0.25

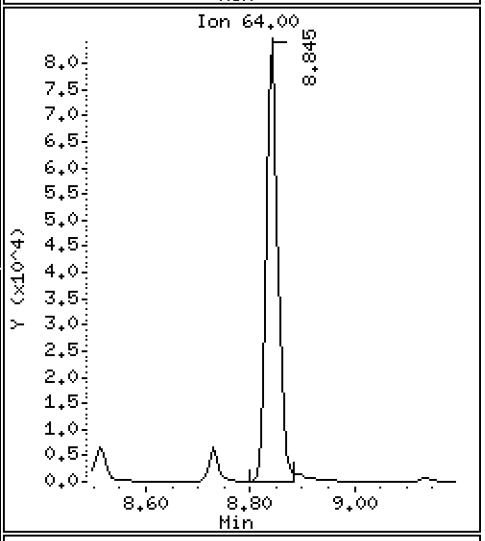
6 2-Chlorophenol

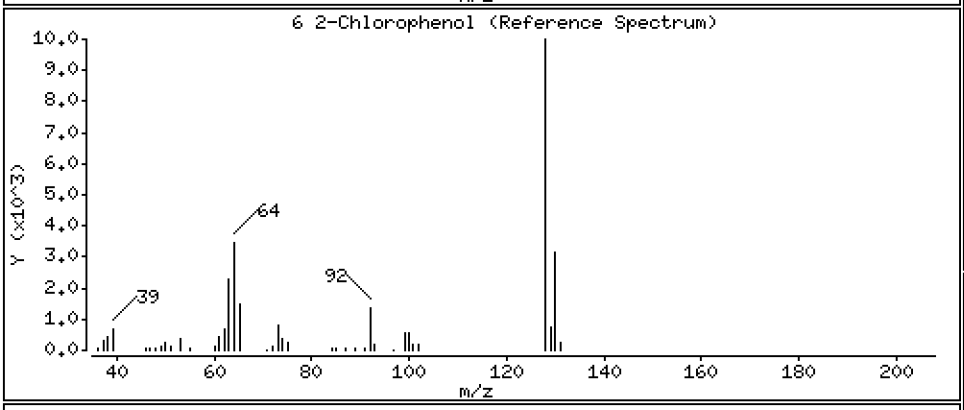
Concentration: 4.692 ug/mL

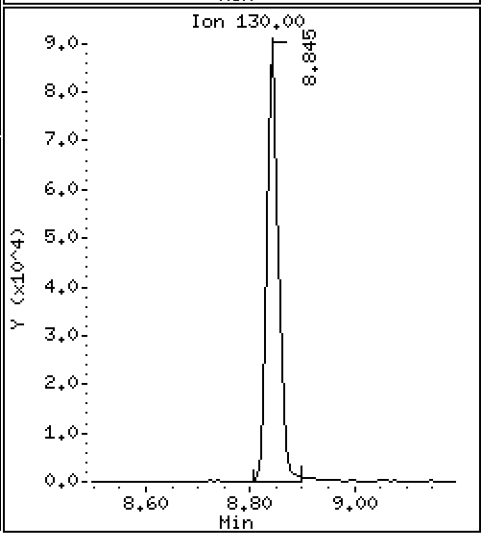


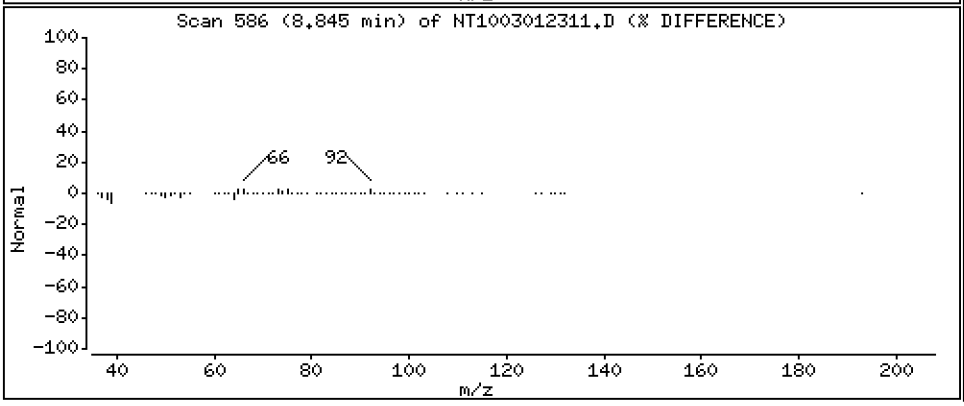












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

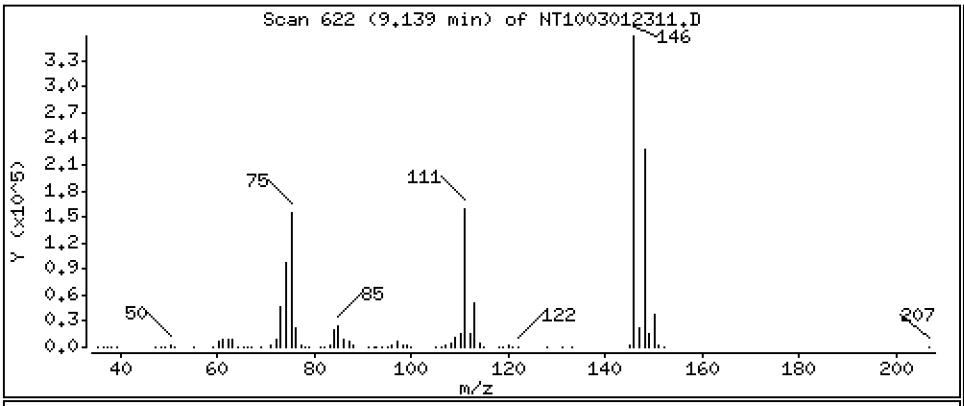
Operator: VTS

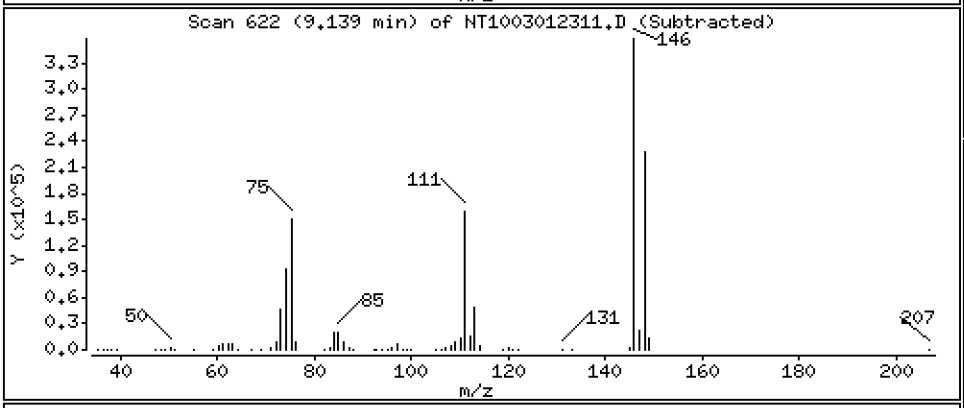
Column phase: ZB-5msi

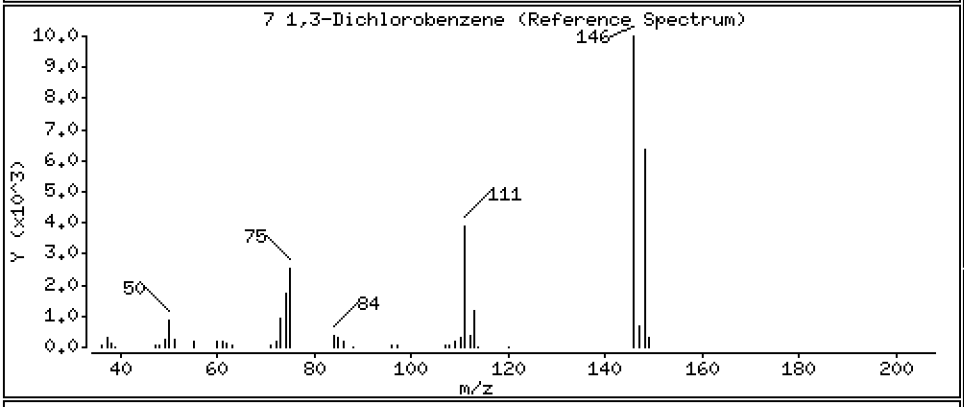
Column diameter: 0.25

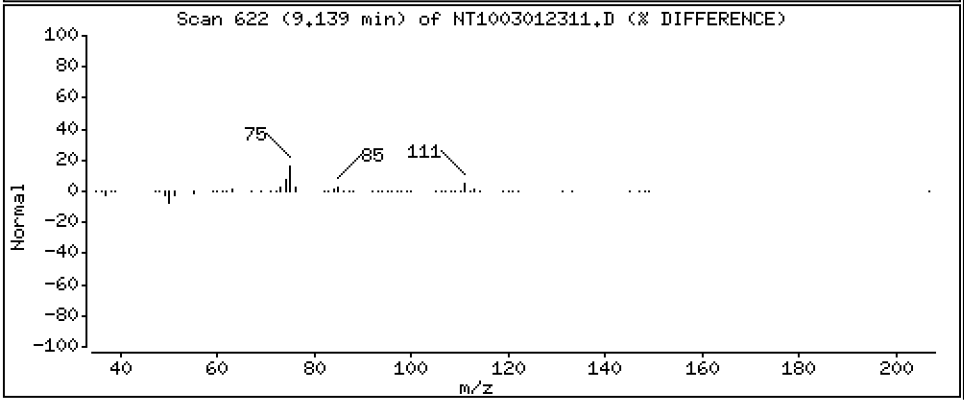
7 1,3-Dichlorobenzene

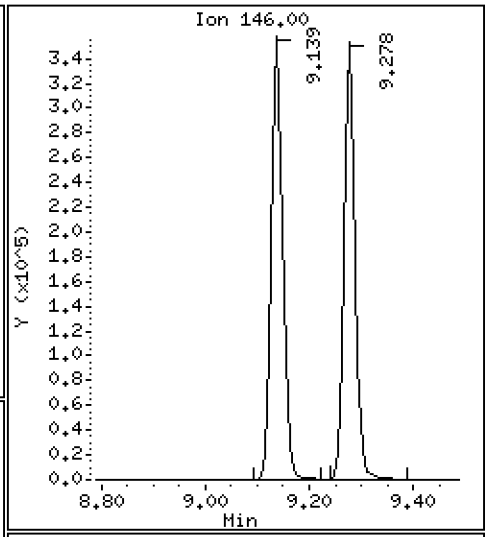
Concentration: 5.266 ug/mL

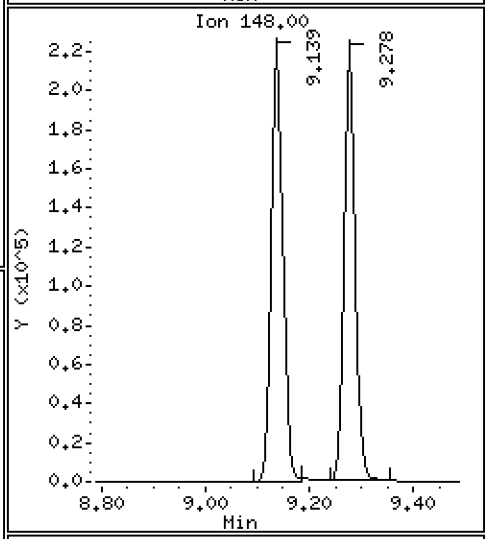


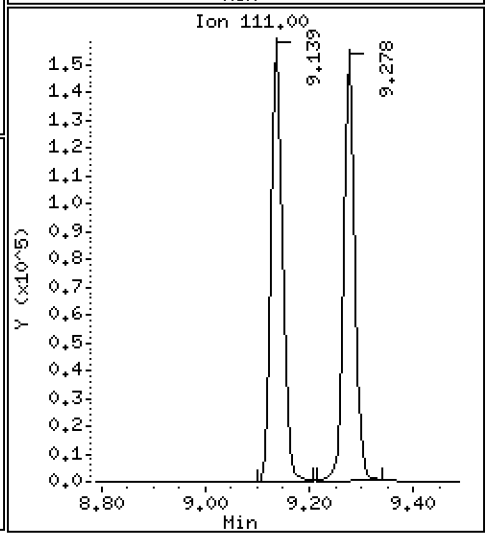












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

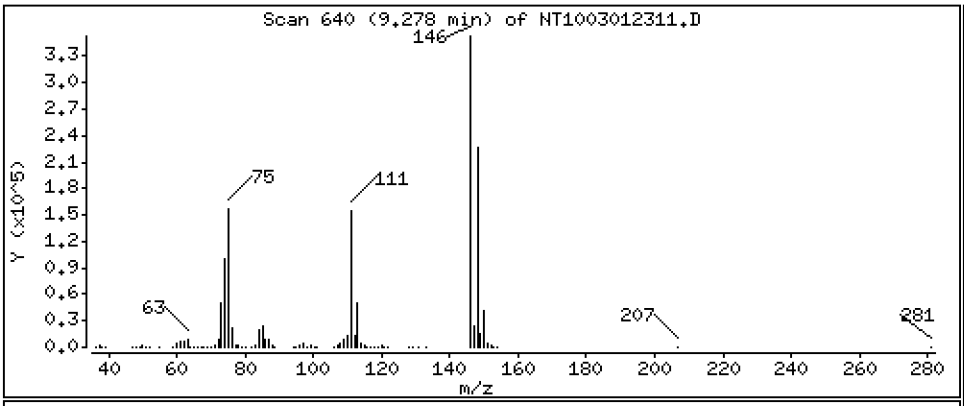
Operator: VTS

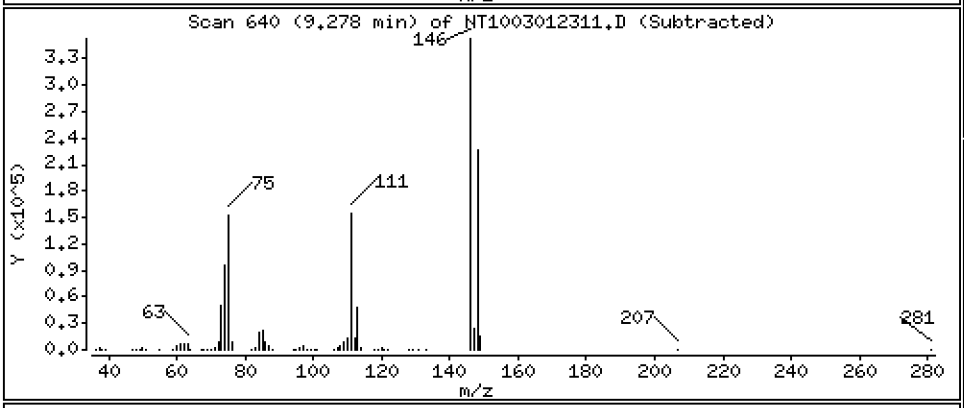
Column phase: ZB-5msi

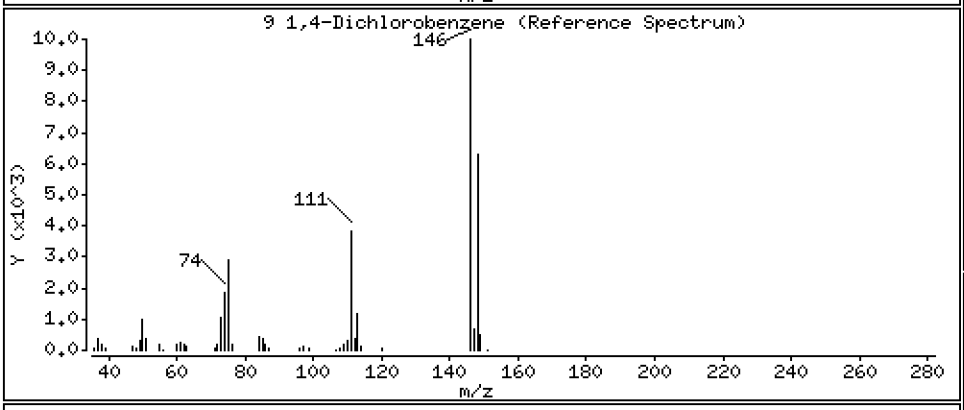
Column diameter: 0.25

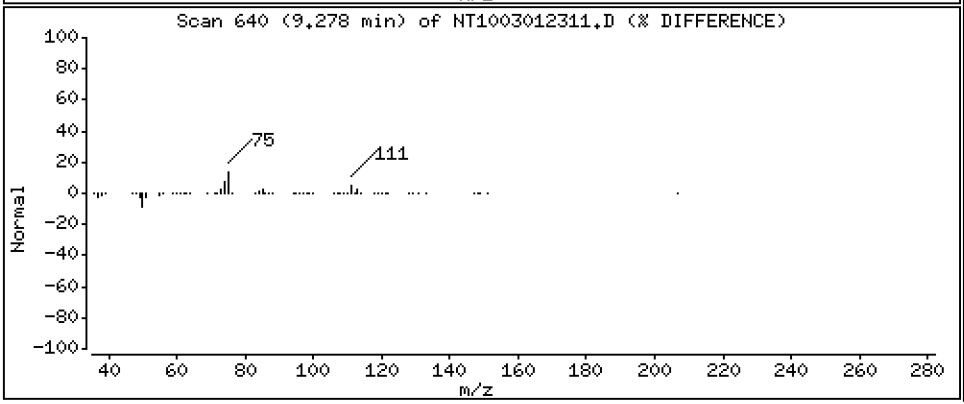
9 1,4-Dichlorobenzene

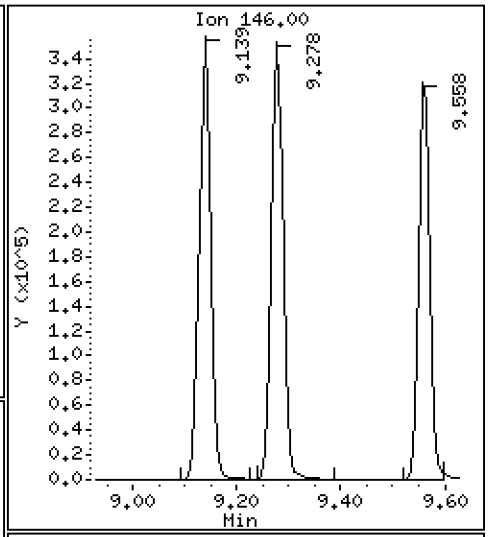
Concentration: 5.216 ug/mL

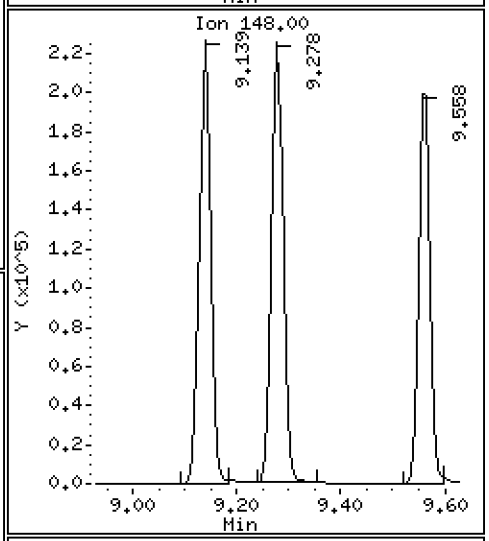


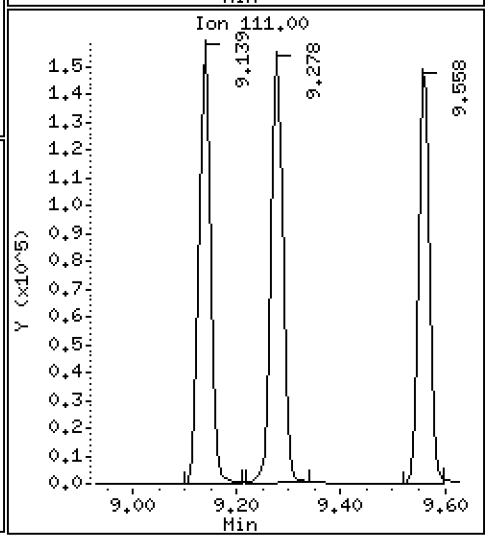












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

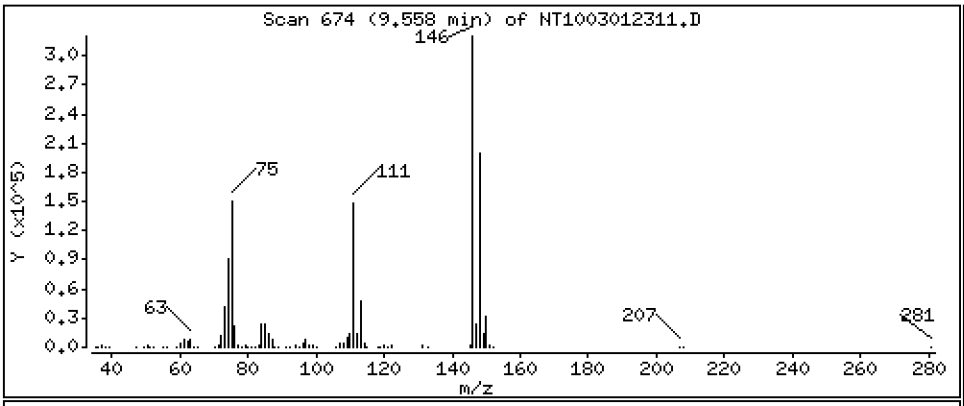
Operator: VTS

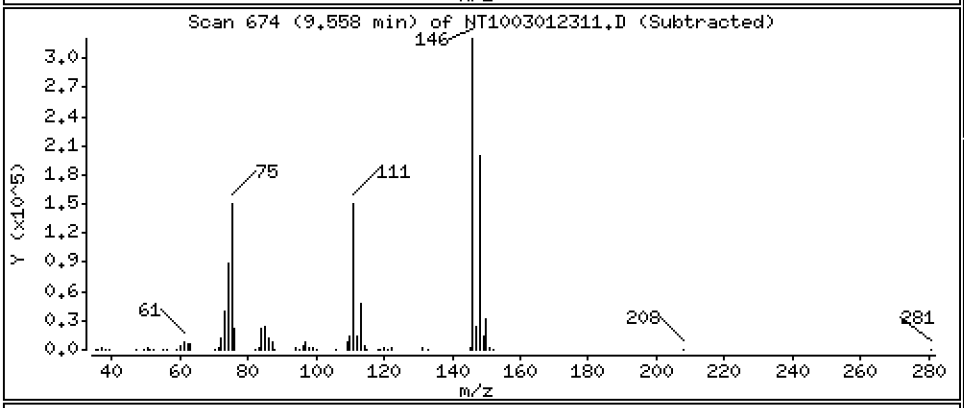
Column phase: ZB-5msi

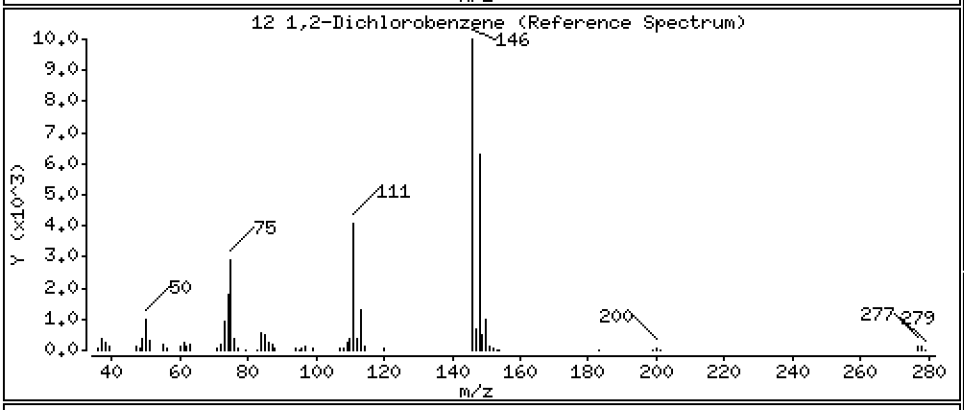
Column diameter: 0.25

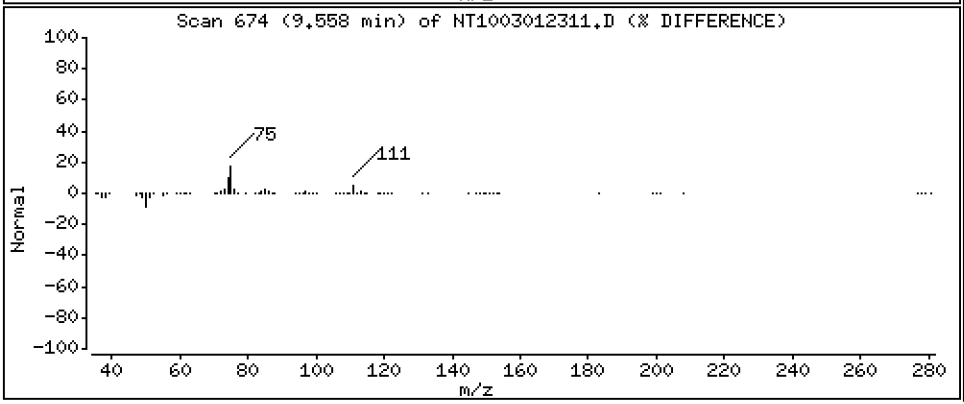
12 1,2-Dichlorobenzene

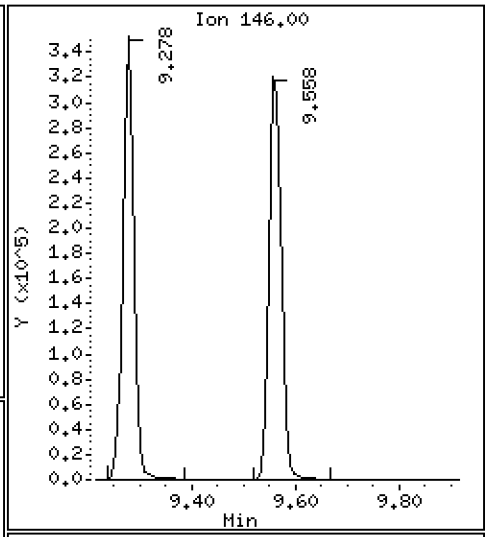
Concentration: 5.194 ug/mL

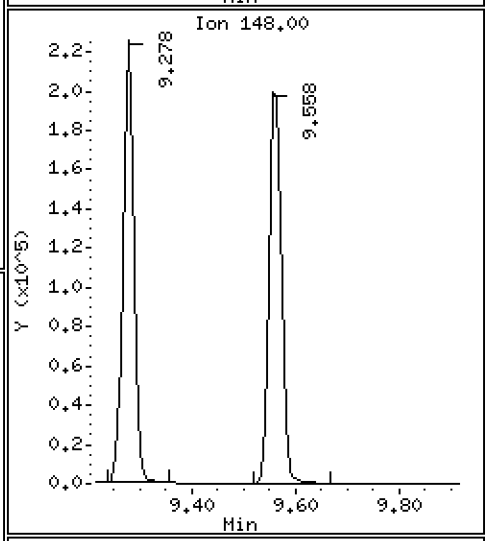


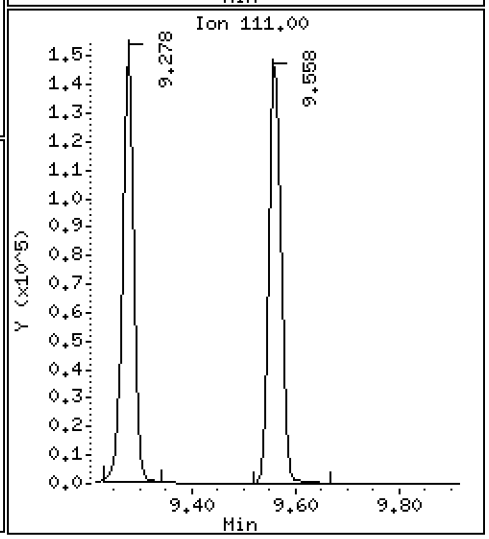












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

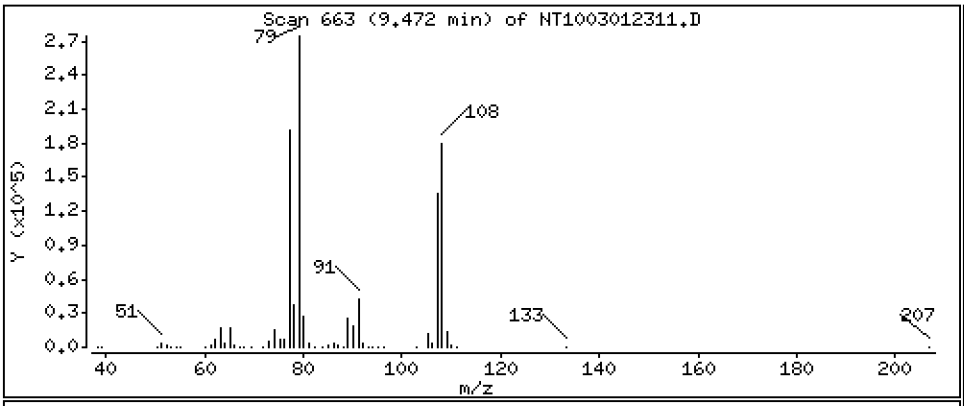
Operator: VTS

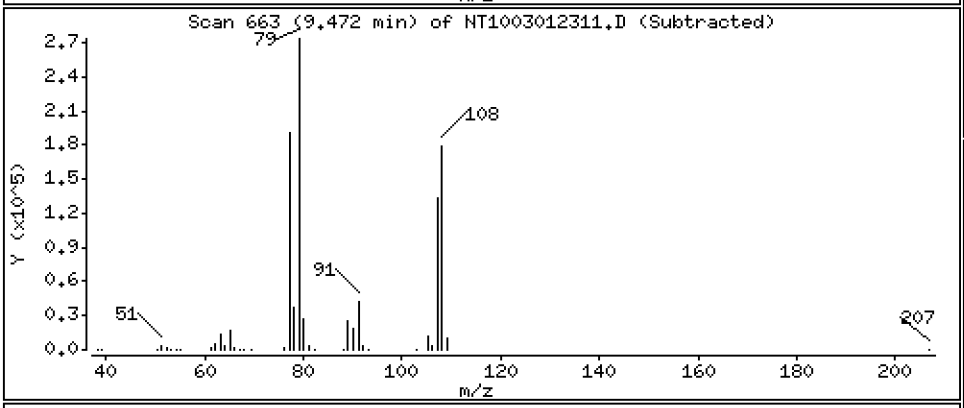
Column phase: ZB-5msi

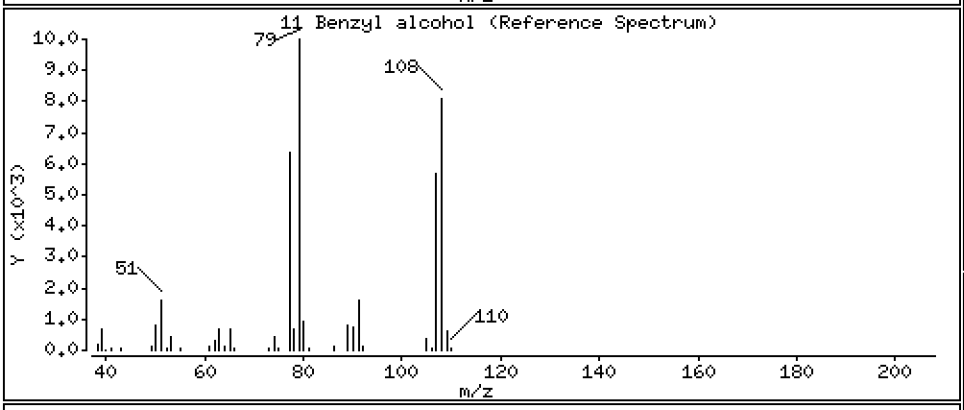
Column diameter: 0.25

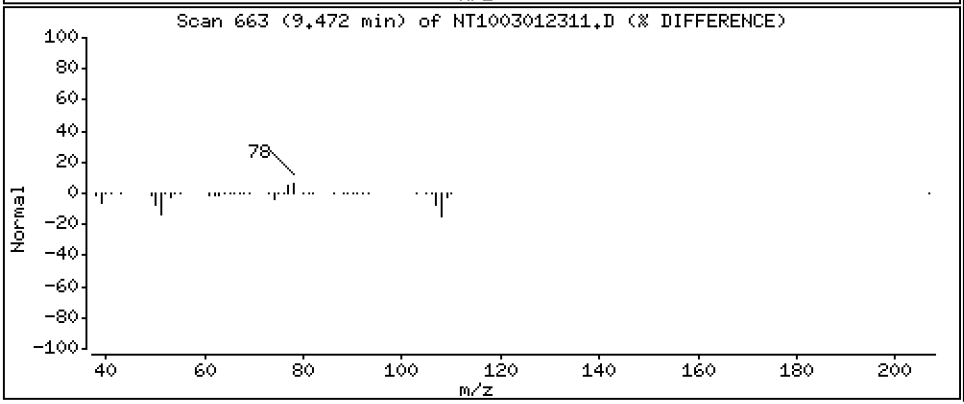
11 Benzyl alcohol

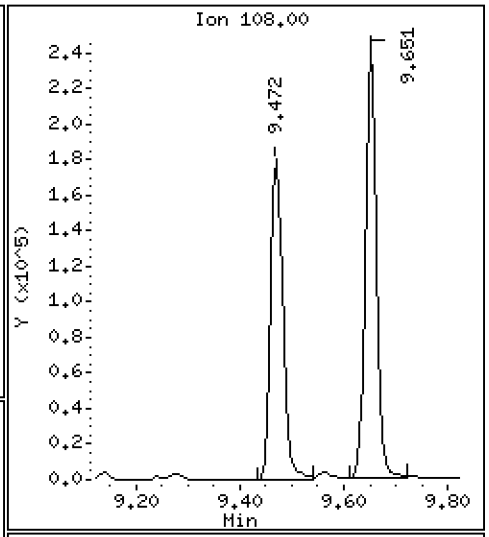
Concentration: 4.898 ug/mL

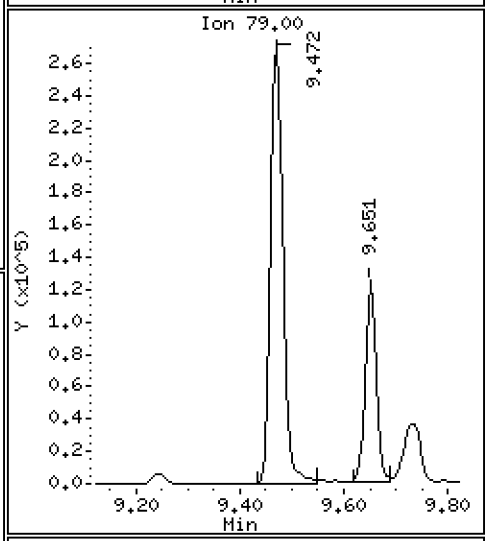


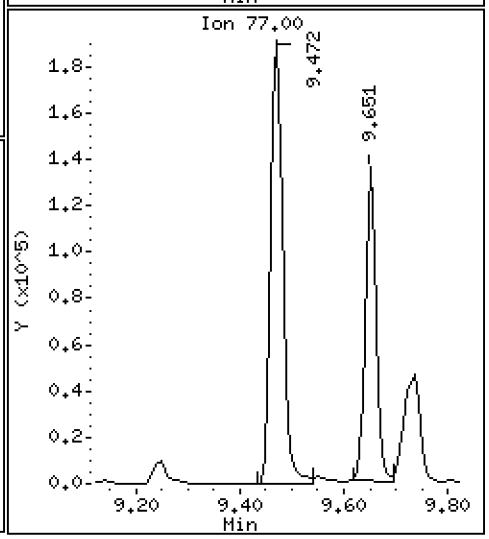












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

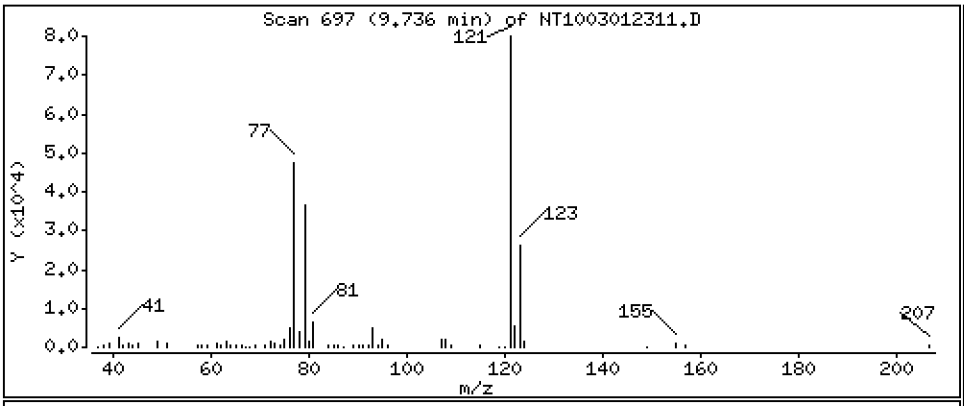
Operator: VTS

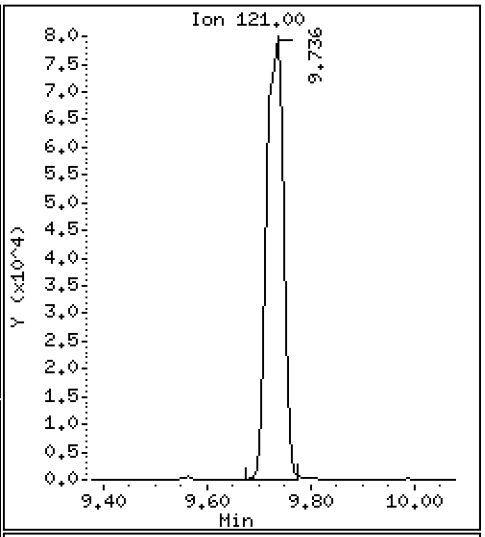
Column phase: ZB-5msi

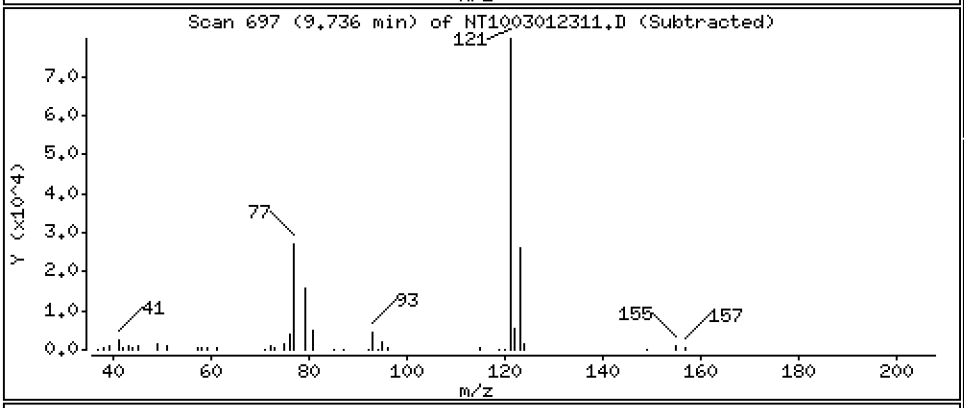
Column diameter: 0.25

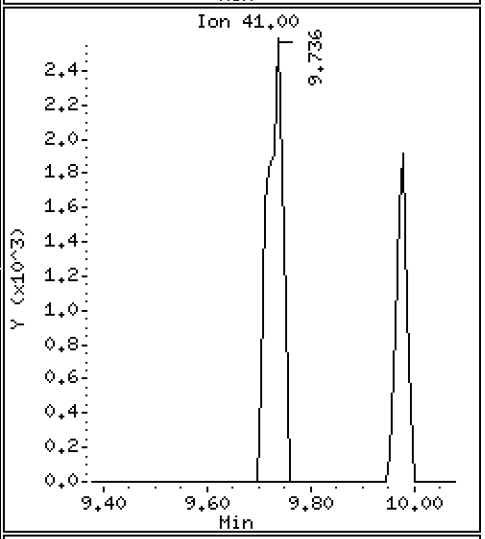
14 2,2'-oxybis(1-Chloropropane)

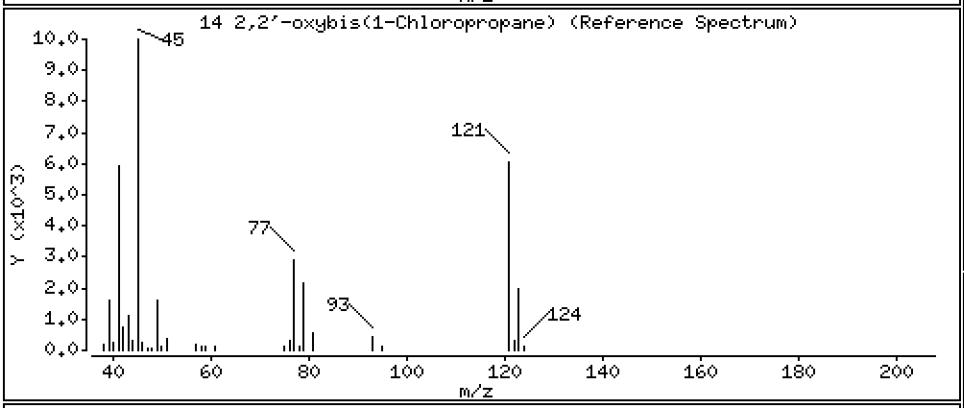
Concentration: 6.232 ug/mL

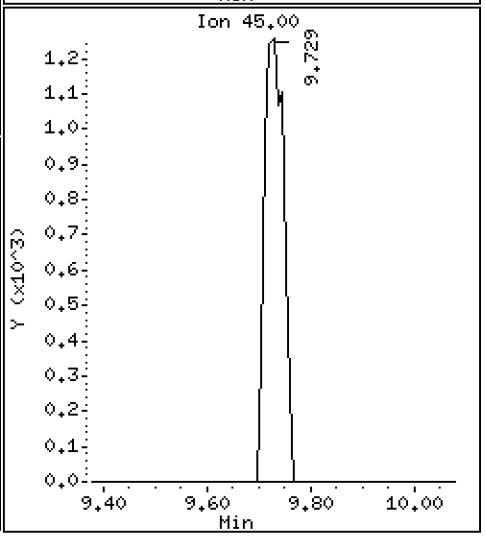


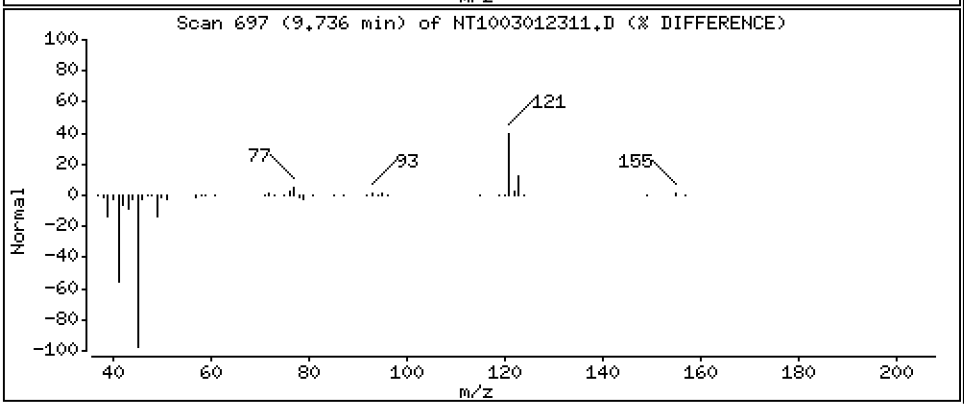












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

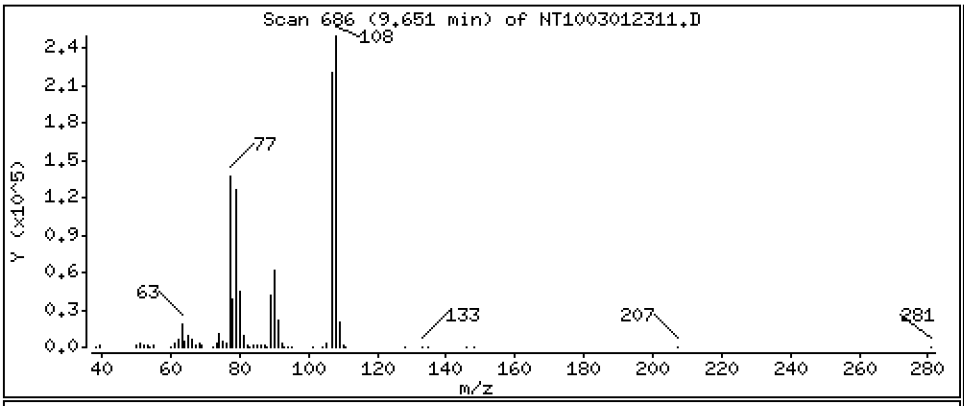
Operator: VTS

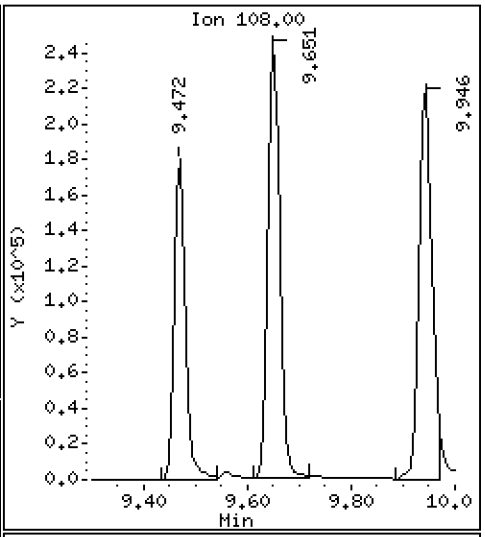
Column phase: ZB-5msi

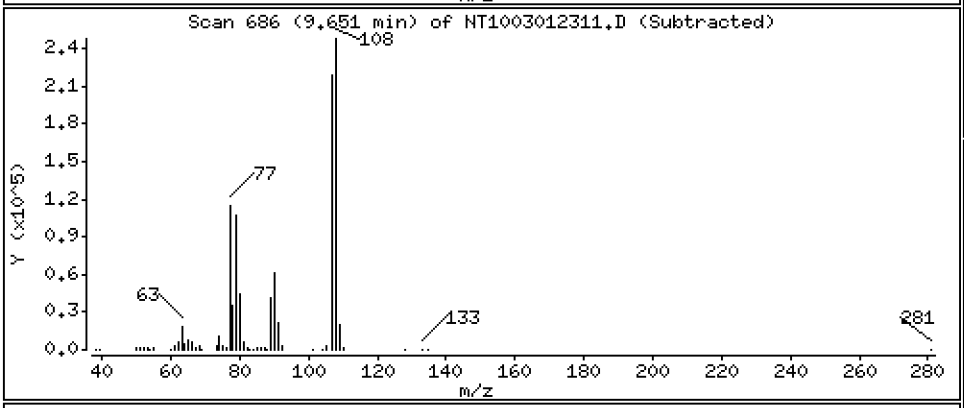
Column diameter: 0.25

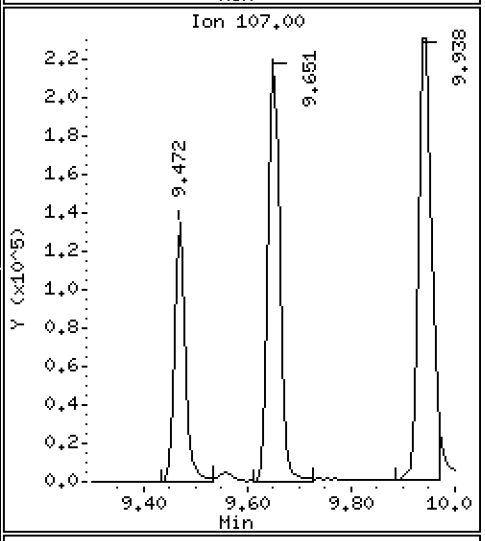
13 2-Methylphenol

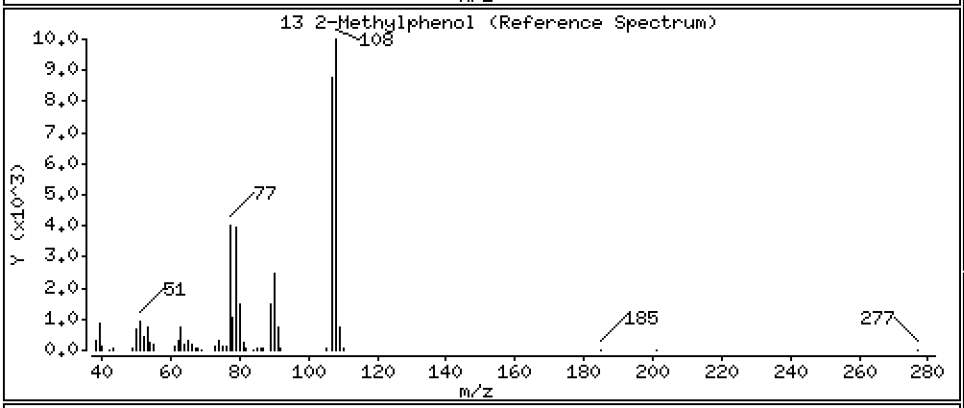
Concentration: 4.192 ug/mL

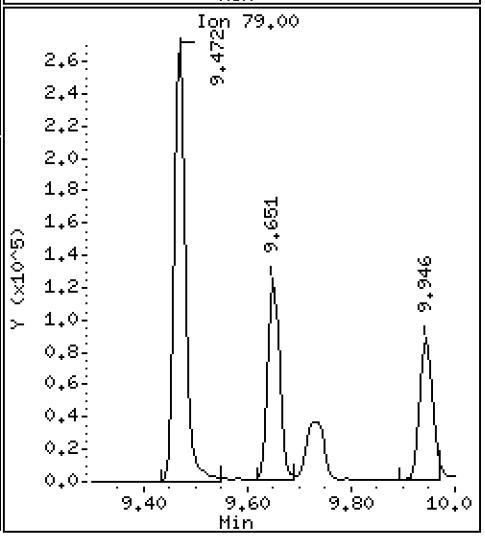


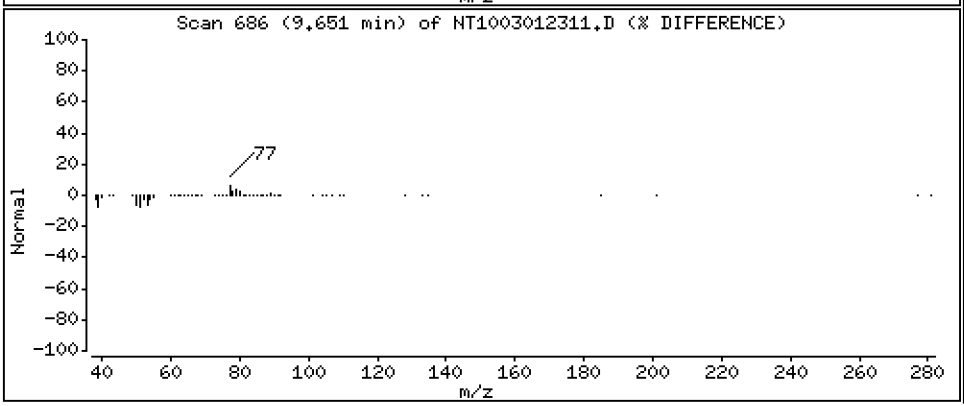












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

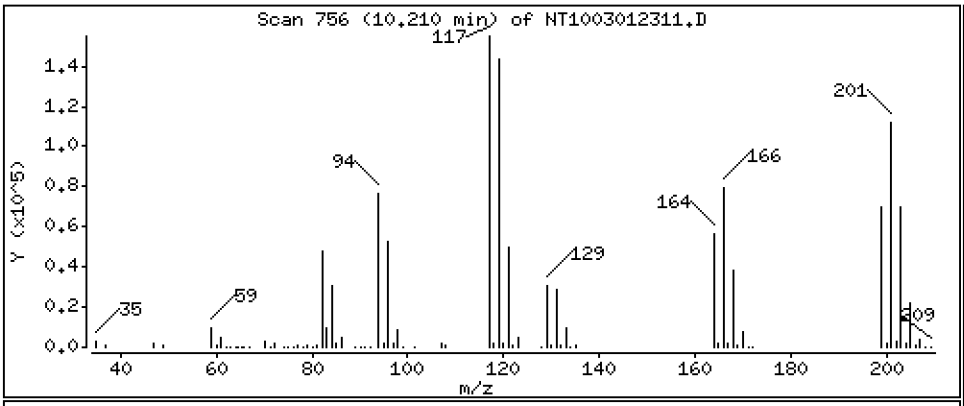
Operator: VTS

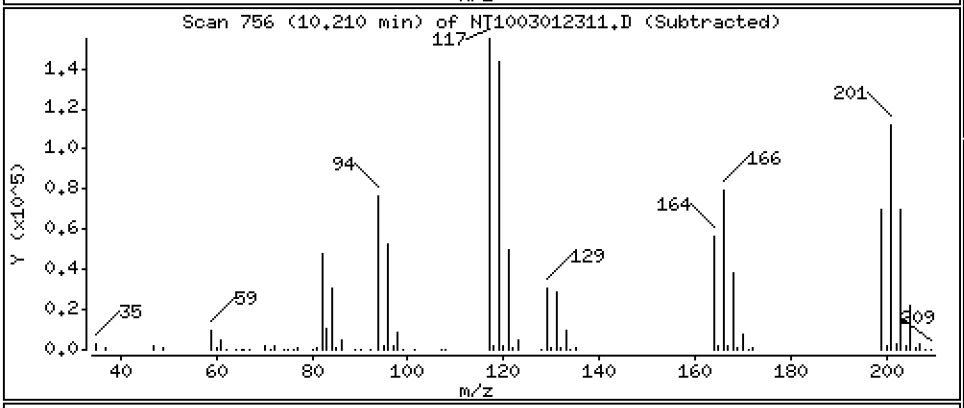
Column phase: ZB-5msi

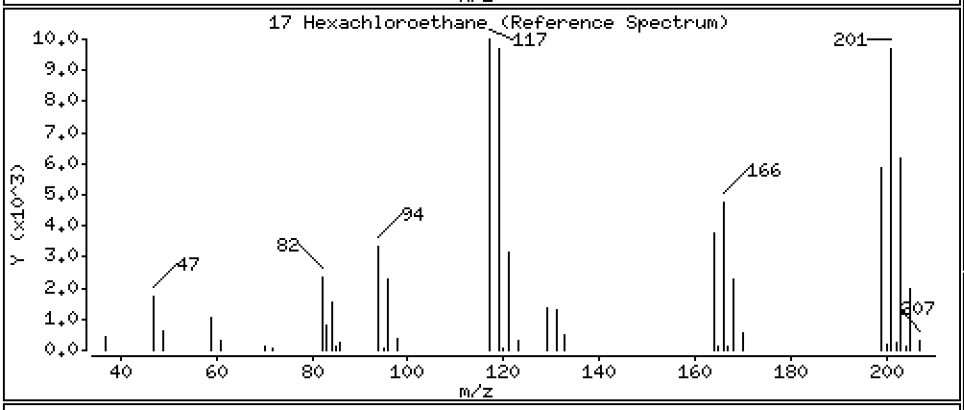
Column diameter: 0.25

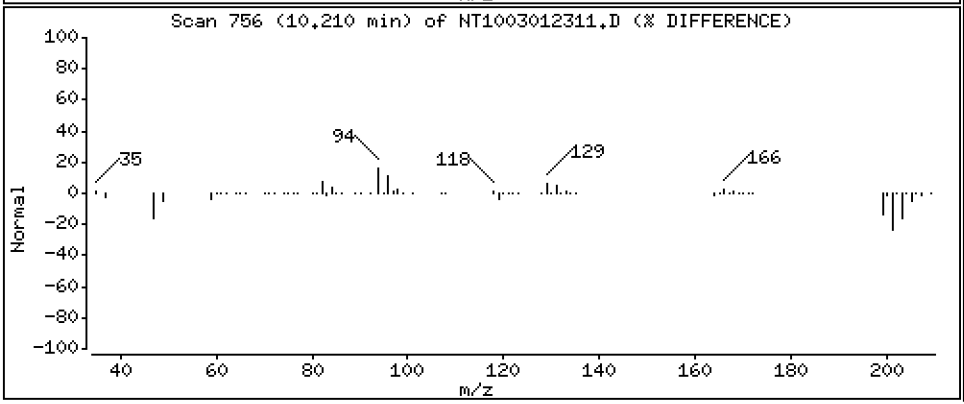
17 Hexachloroethane

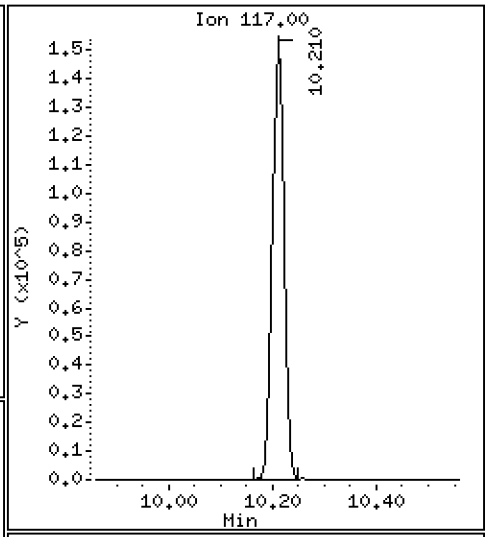
Concentration: 5.443 ug/mL

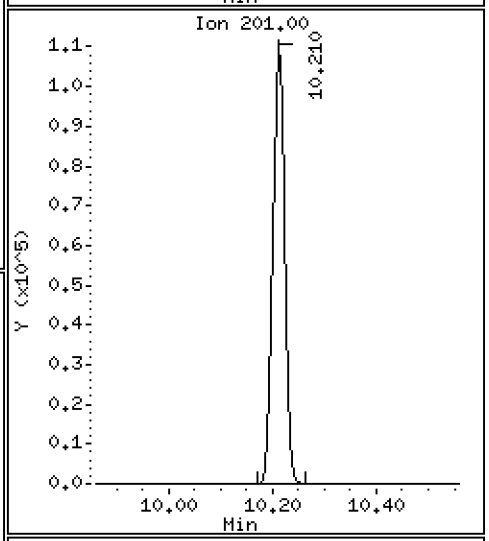


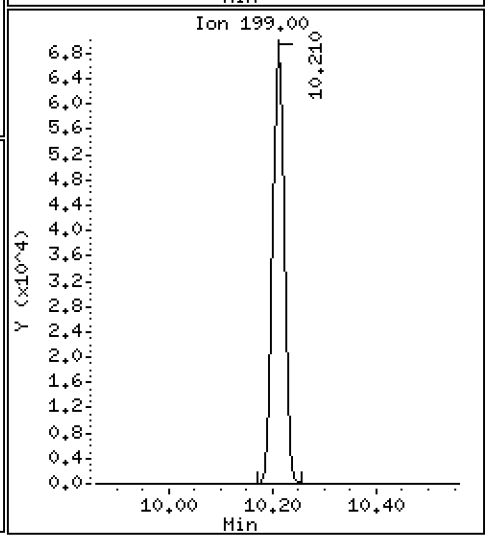












Date : 01-MAR-2023 21:46

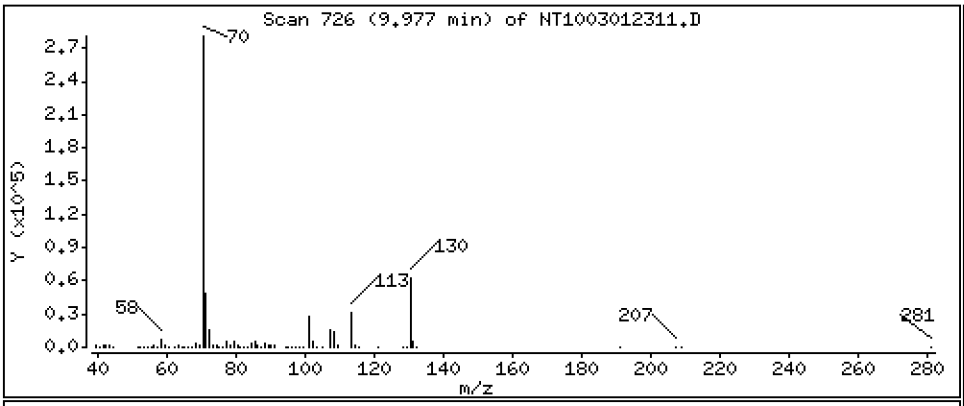
Client ID: Instrument: nt10.i

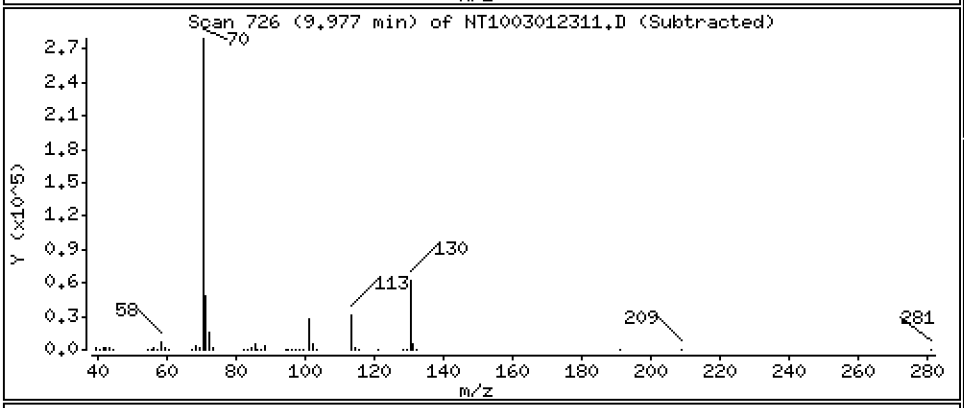
Sample Info: SEQ-SCV1

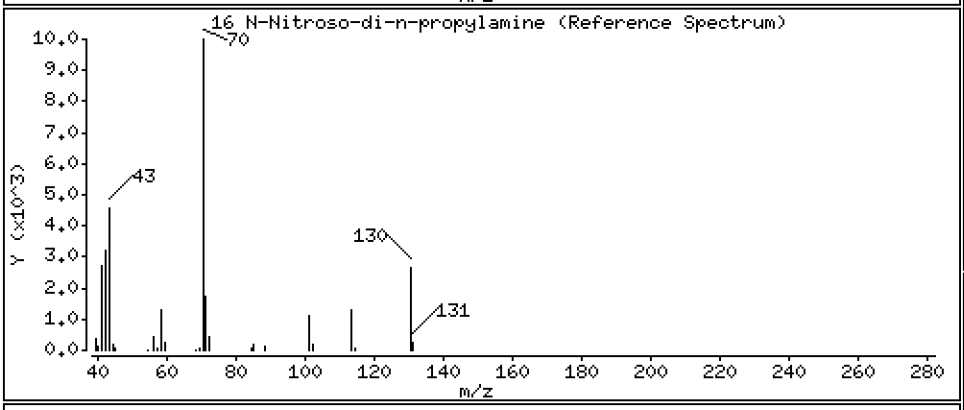
Operator: VTS

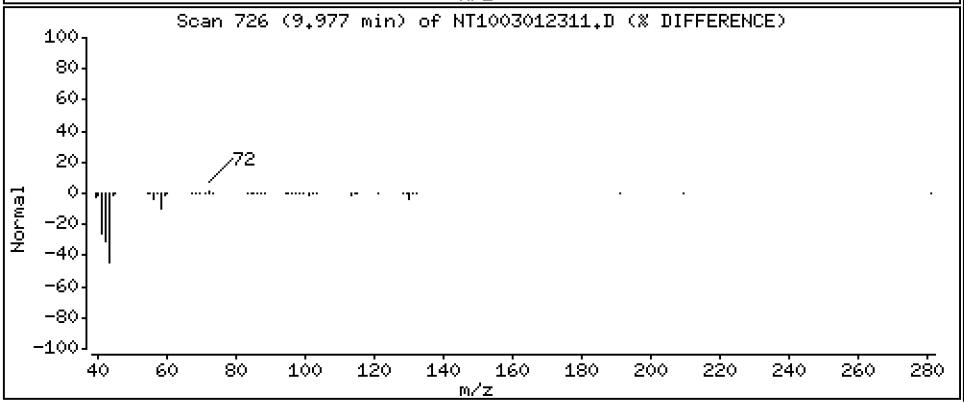
Column phase: ZB-5msi Column diameter: 0.25

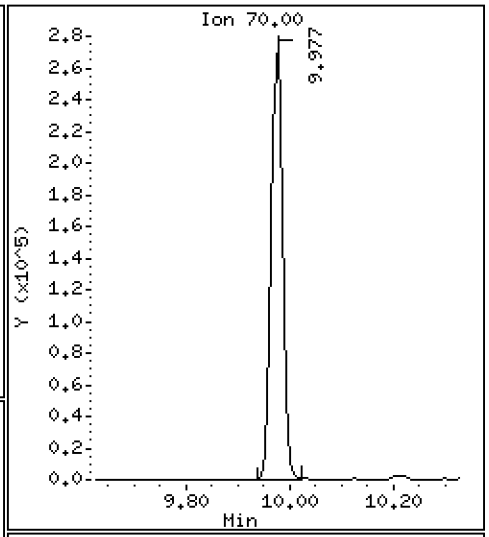
16 N-Nitroso-di-n-propylamine Concentration: 5.905 ug/mL

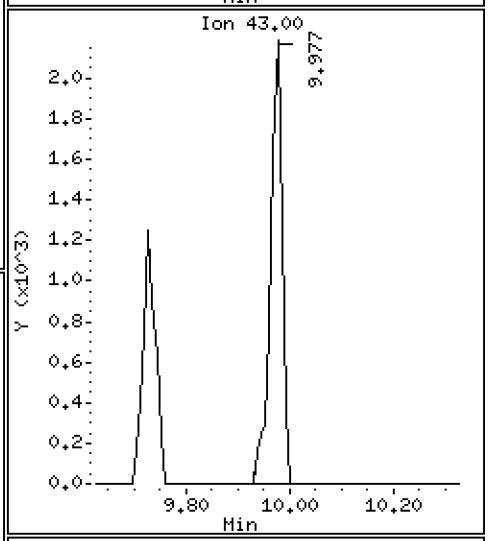


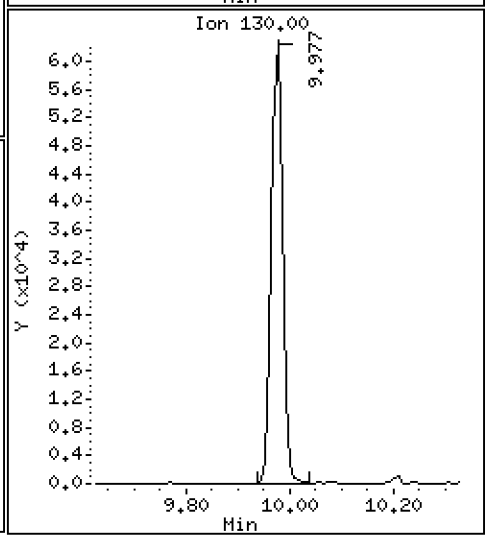












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

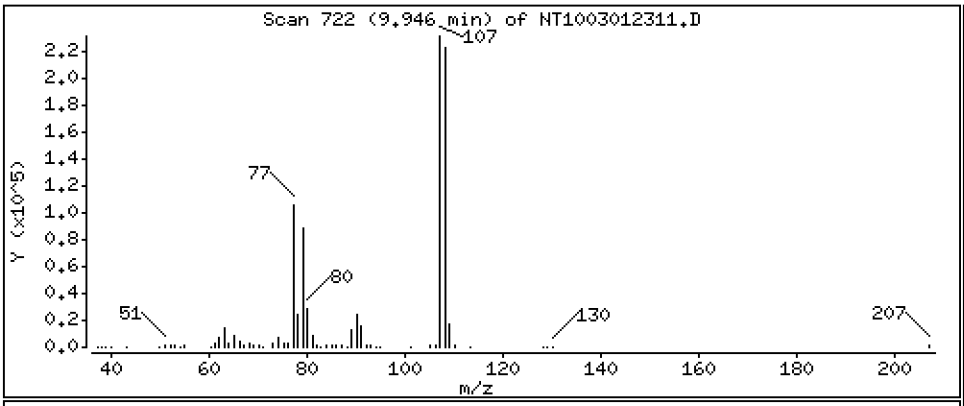
Operator: VTS

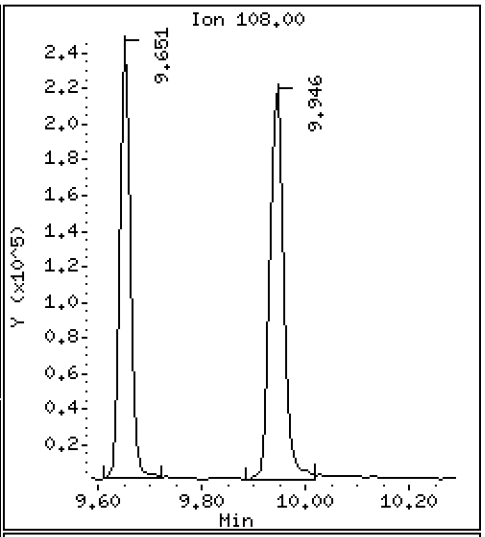
Column phase: ZB-5msi

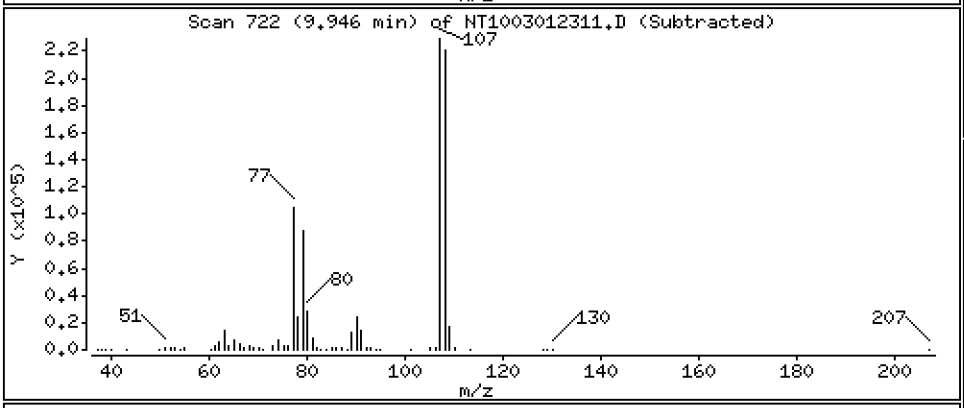
Column diameter: 0.25

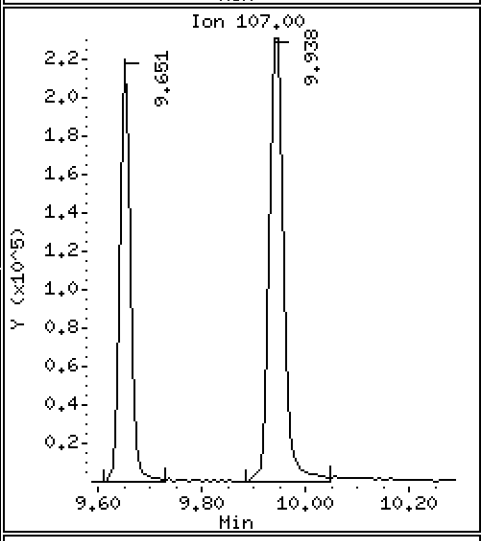
15 4-Methylphenol

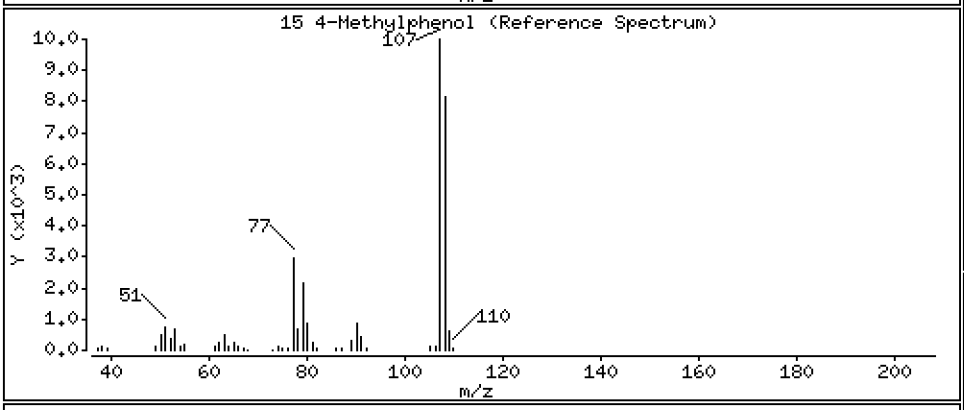
Concentration: 4.239 ug/mL

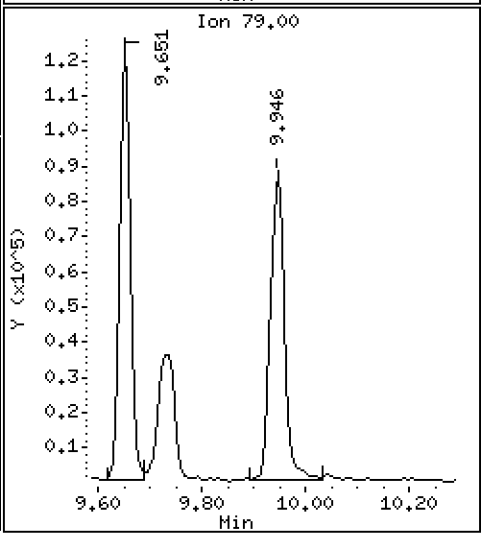


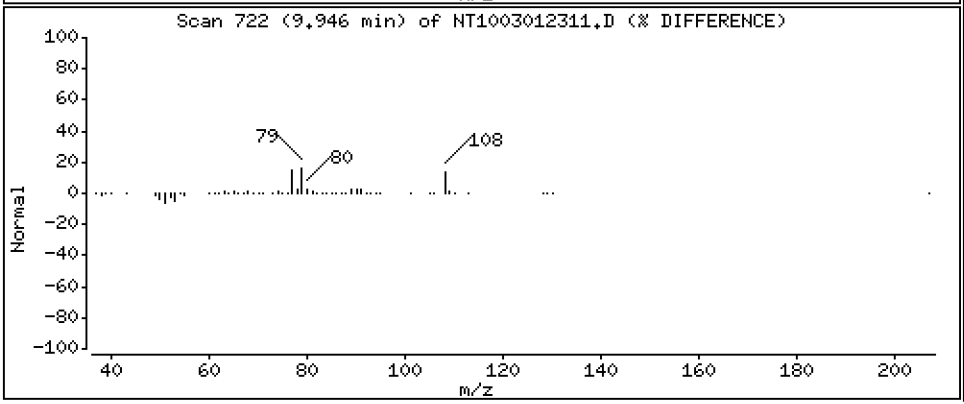












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

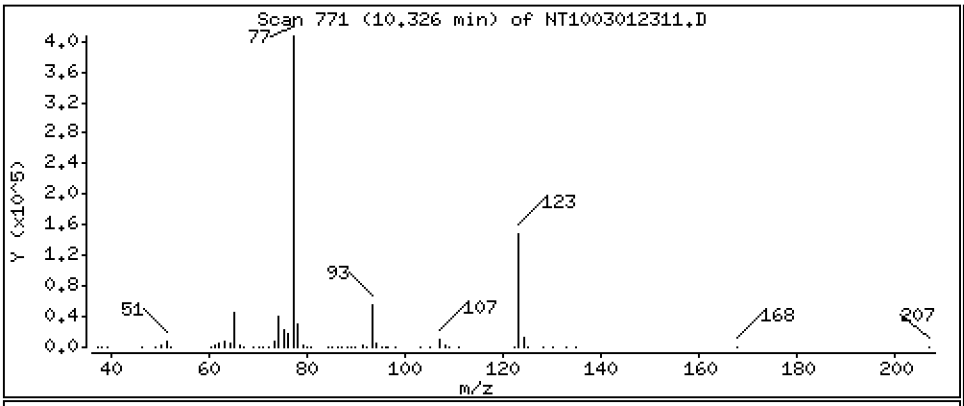
Operator: VTS

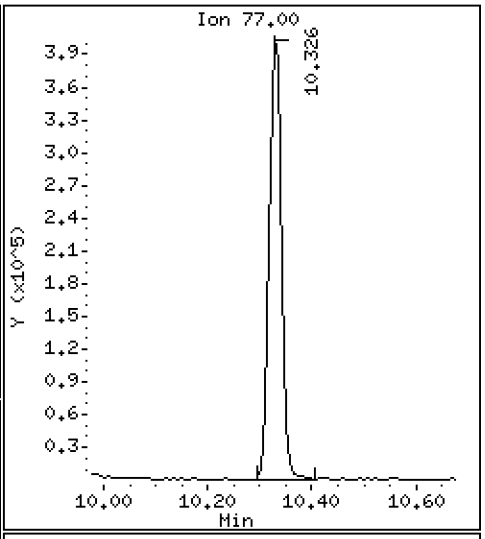
Column phase: ZB-5msi

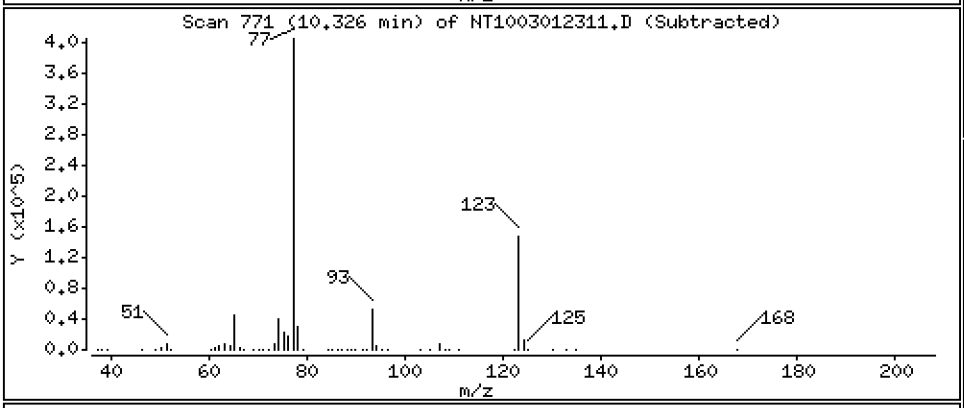
Column diameter: 0.25

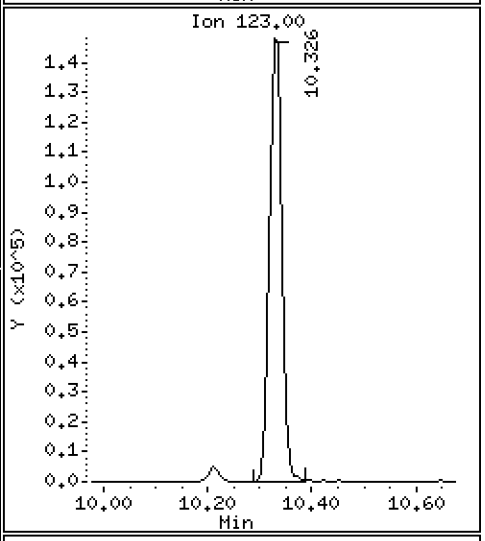
19 Nitrobenzene

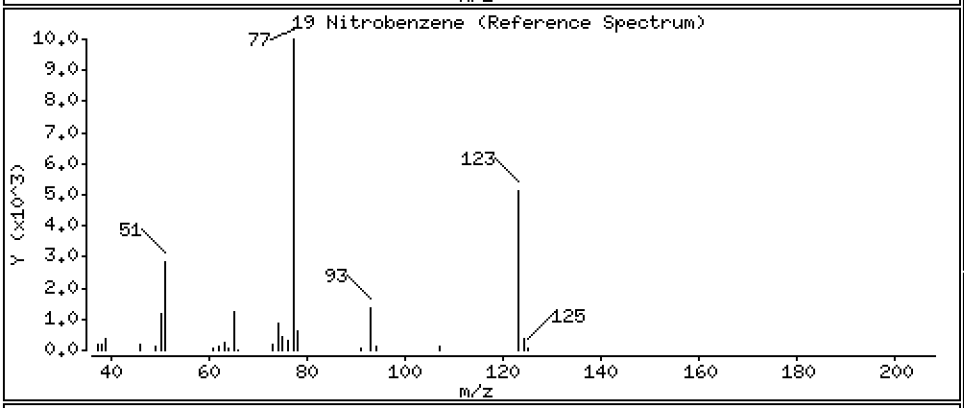
Concentration: 5.569 ug/mL

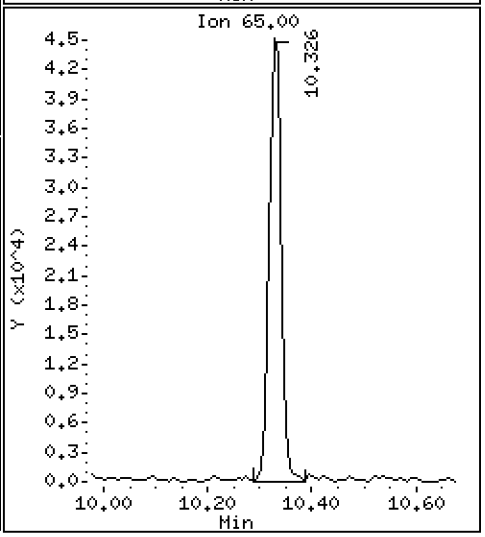


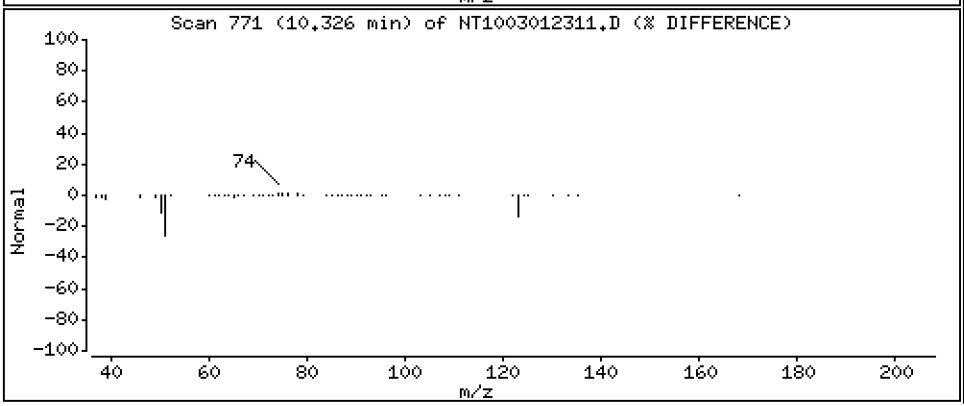












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

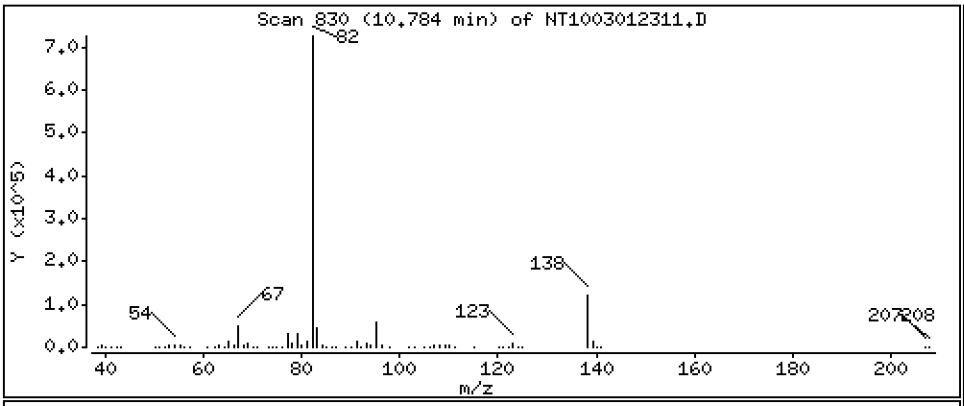
Operator: VTS

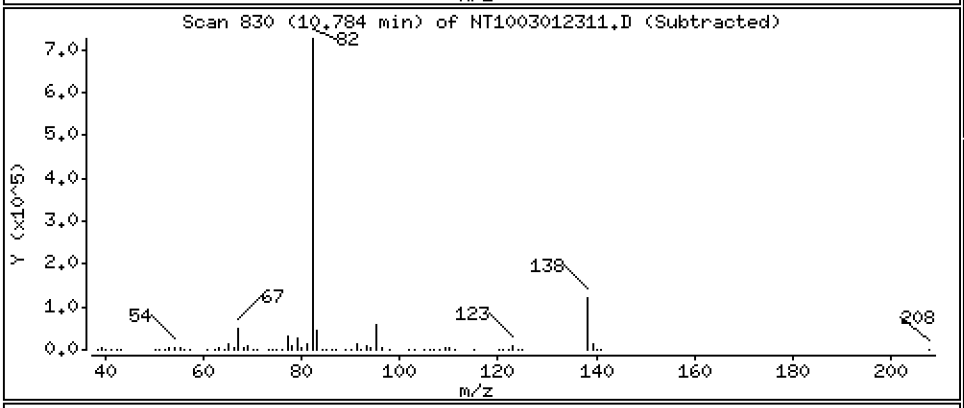
Column phase: ZB-5msi

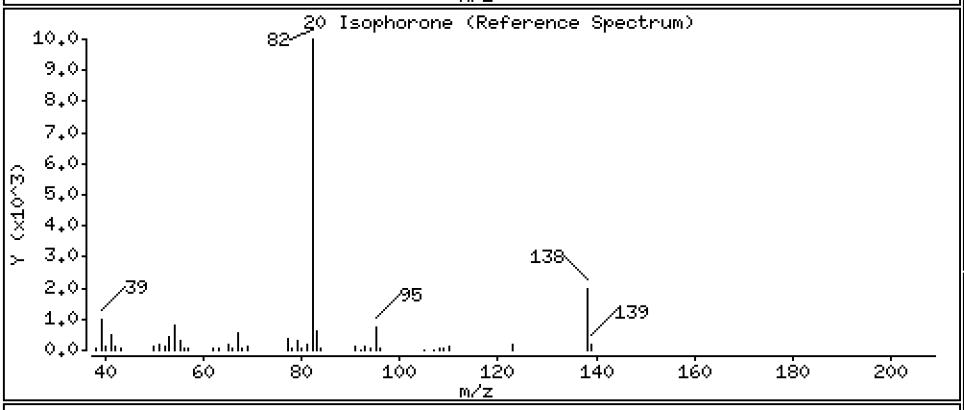
Column diameter: 0.25

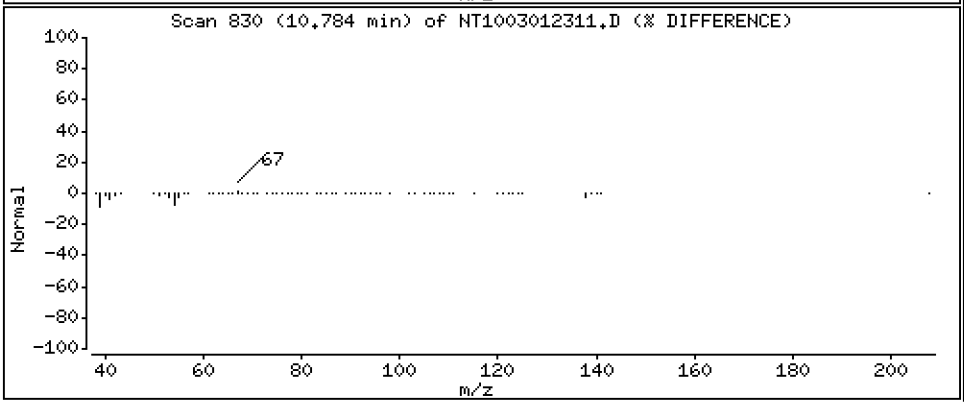
20 Isophorone

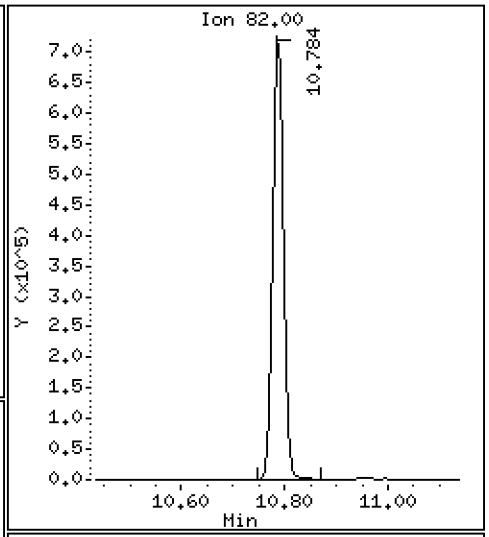
Concentration: 7.672 ug/mL

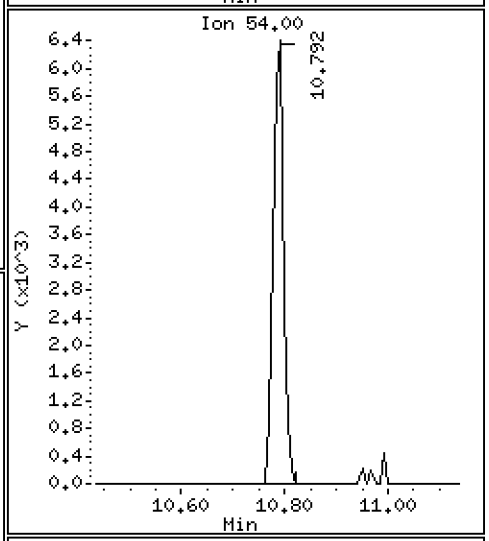


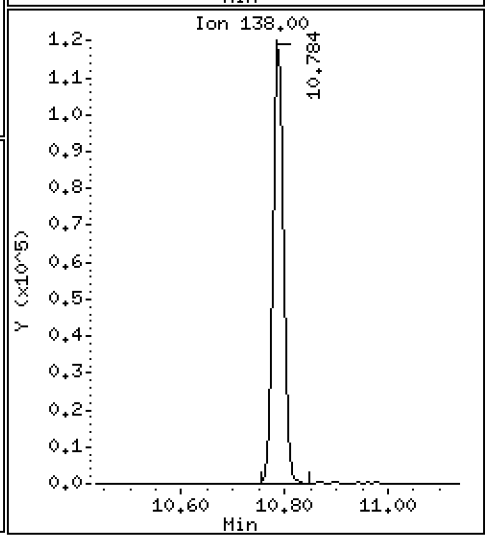












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

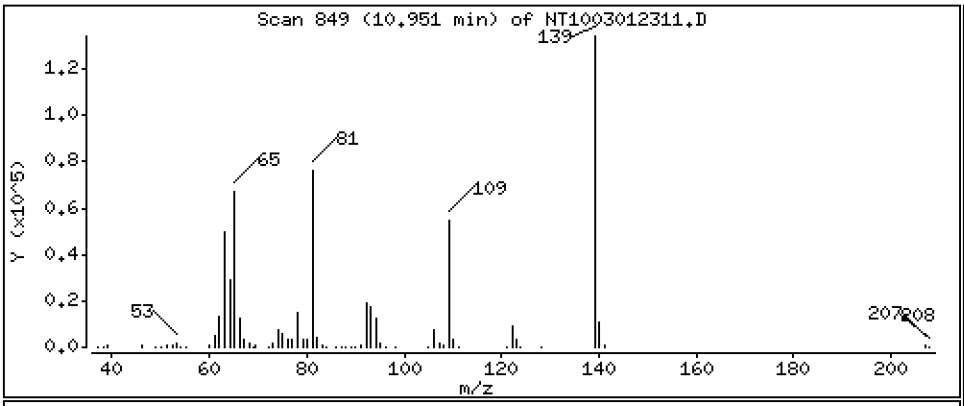
Operator: VTS

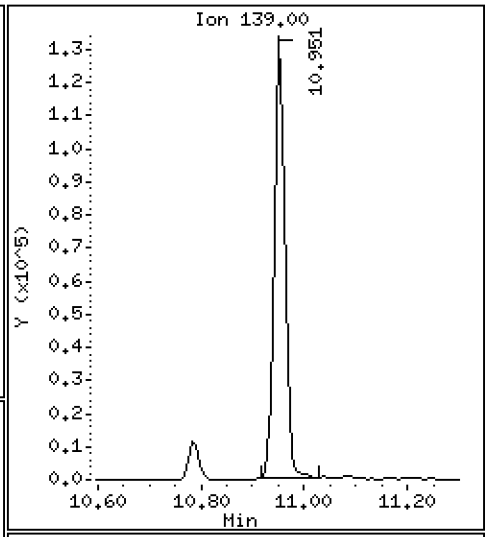
Column phase: ZB-5msi

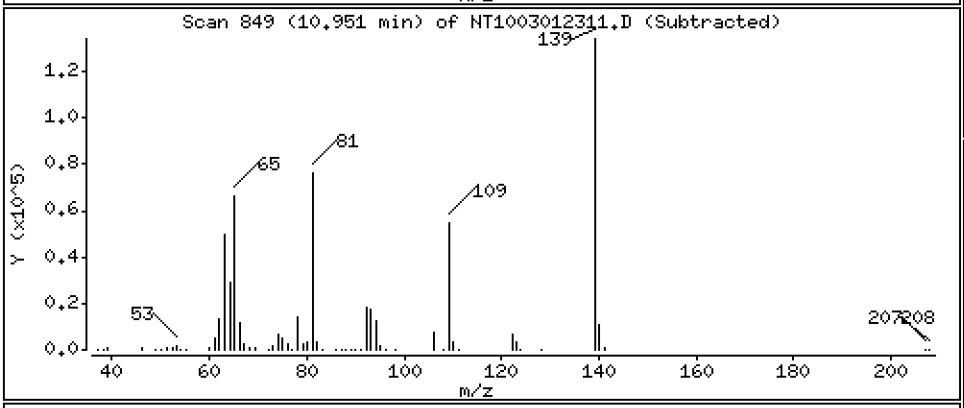
Column diameter: 0.25

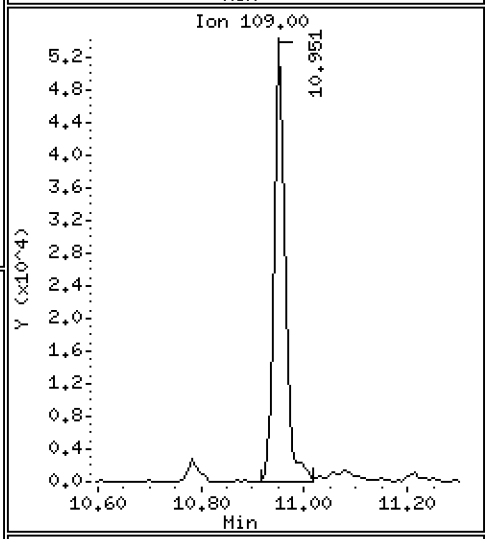
21 2-Nitrophenol

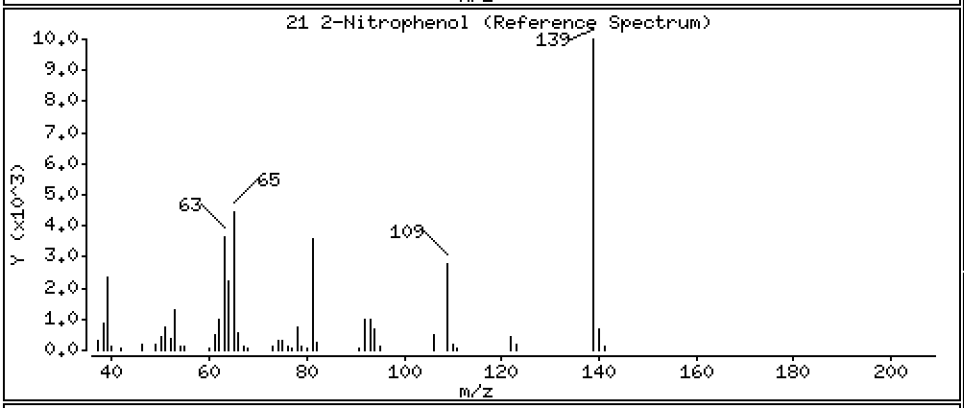
Concentration: 3.244 ug/mL

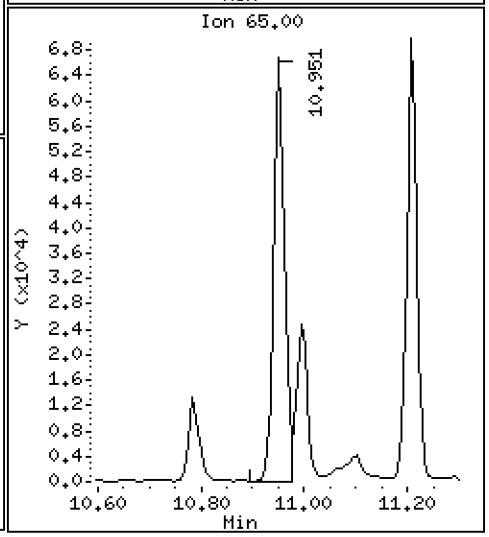


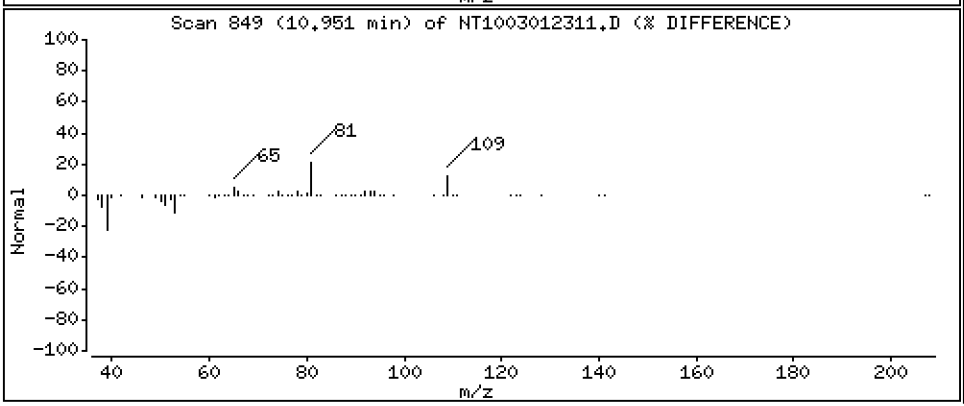












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

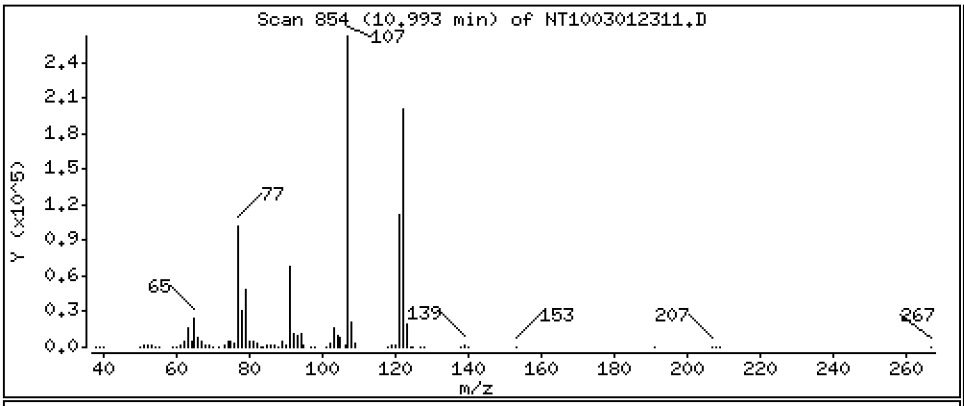
Operator: VTS

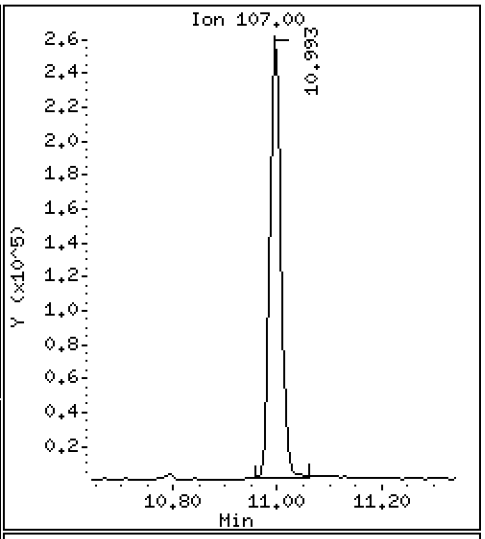
Column phase: ZB-5msi

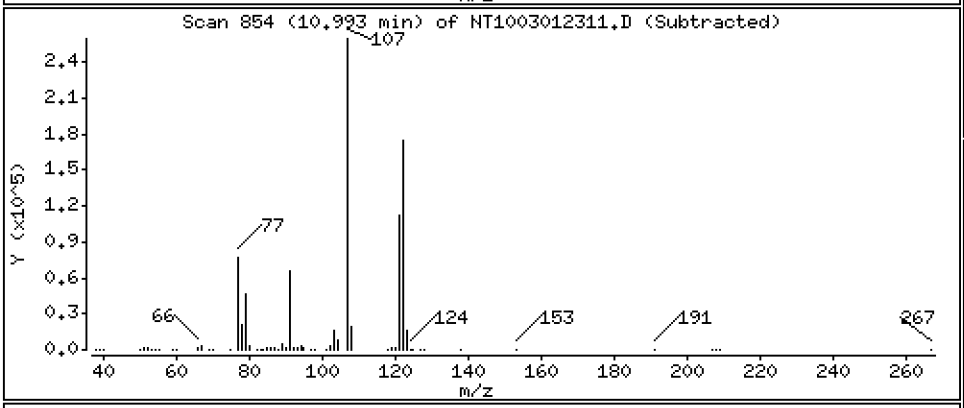
Column diameter: 0.25

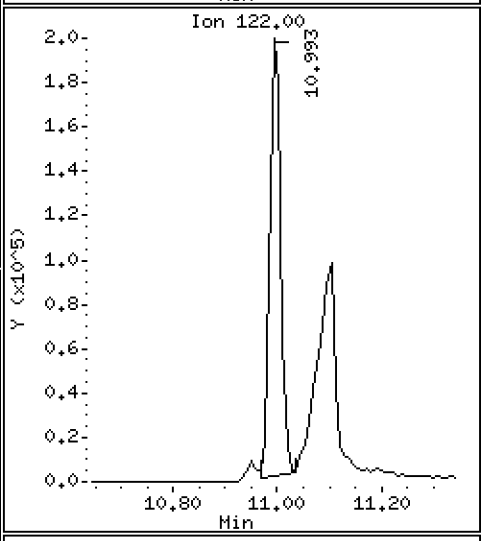
22 2,4-Dimethylphenol

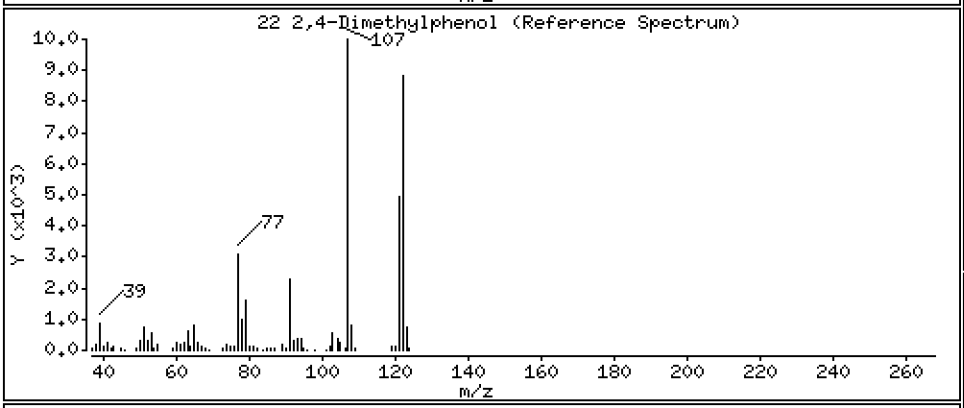
Concentration: 3.507 ug/mL

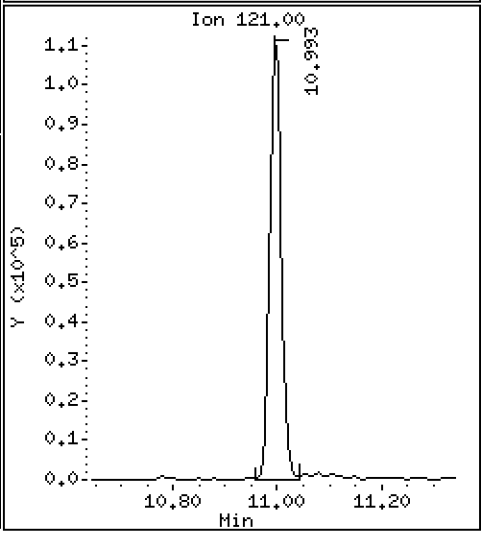


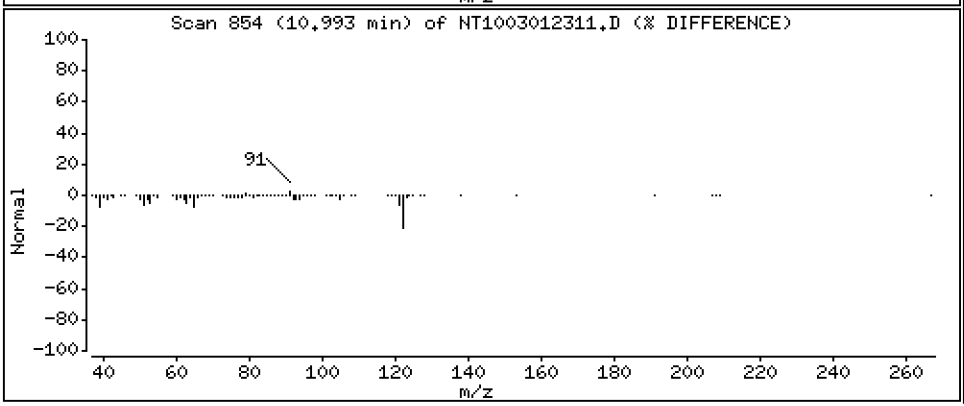












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

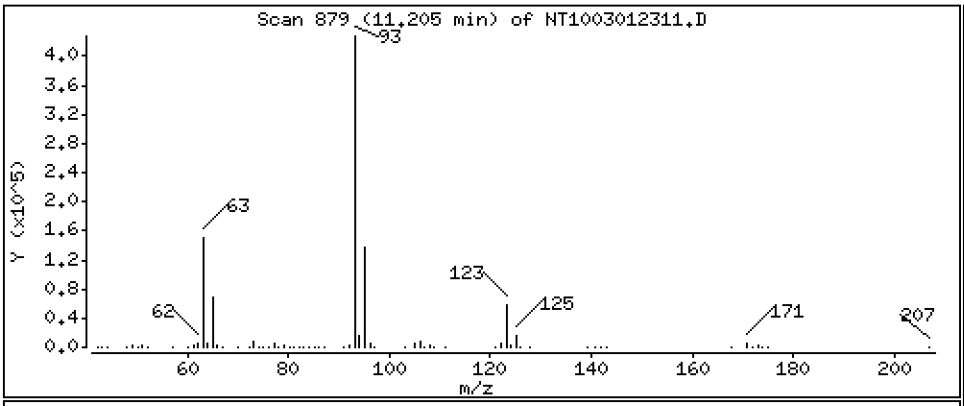
Operator: VTS

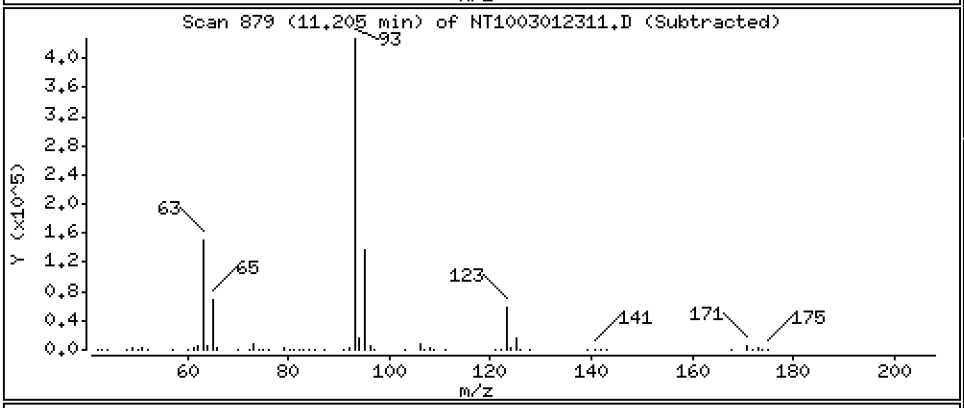
Column phase: ZB-5msi

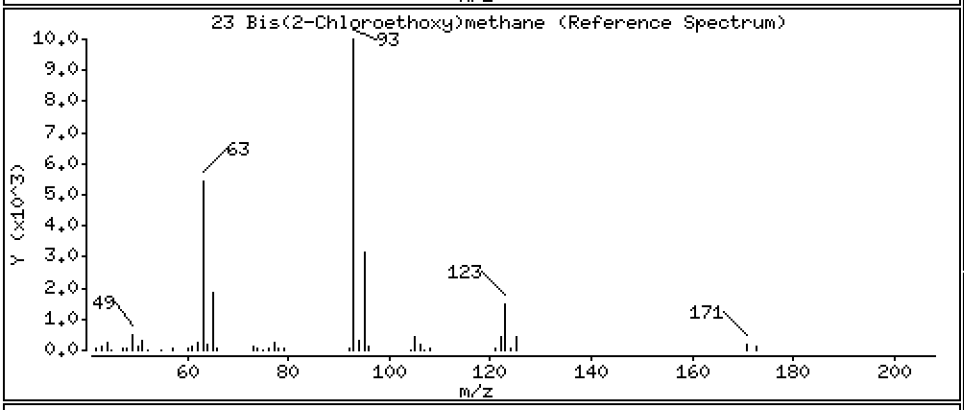
Column diameter: 0.25

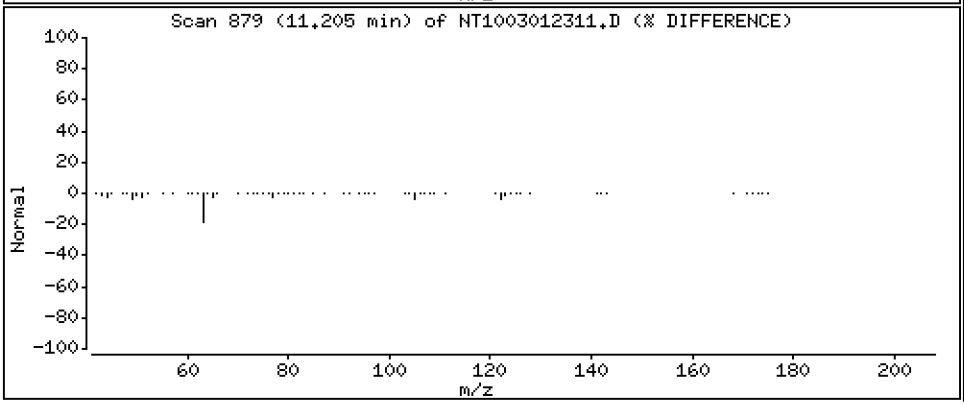
23 Bis(2-Chloroethoxy)methane

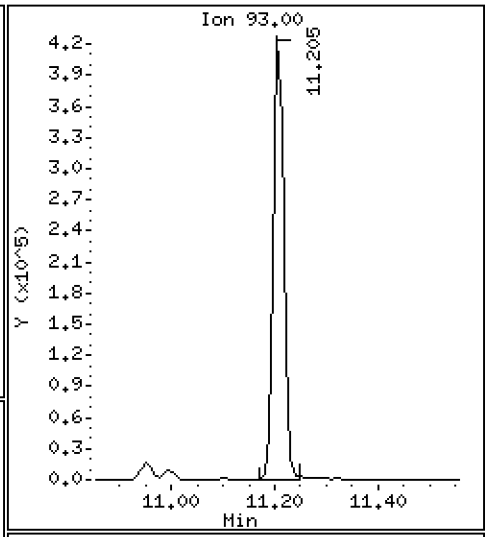
Concentration: 6.727 ug/mL

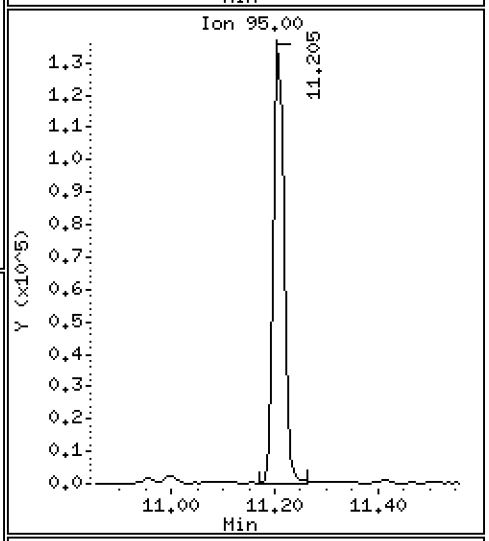


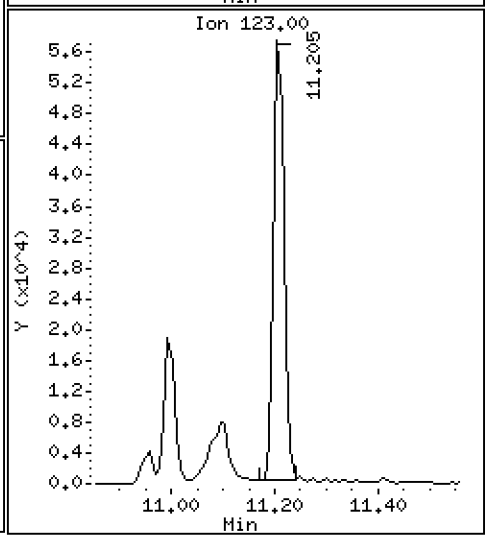












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

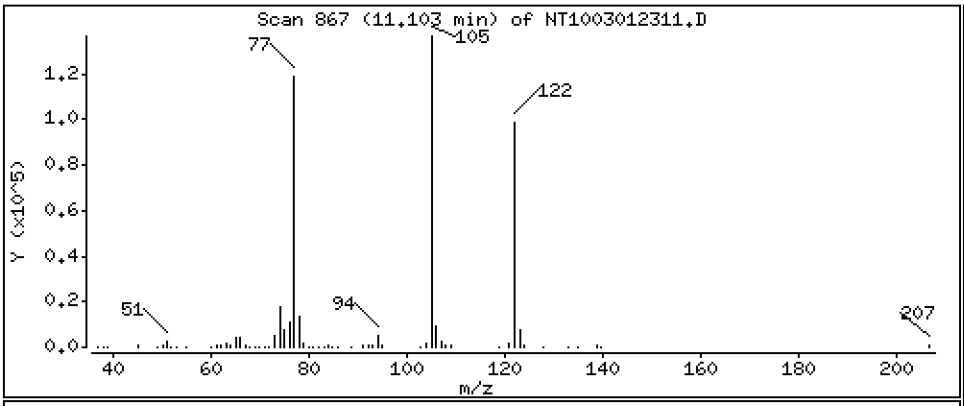
Operator: VTS

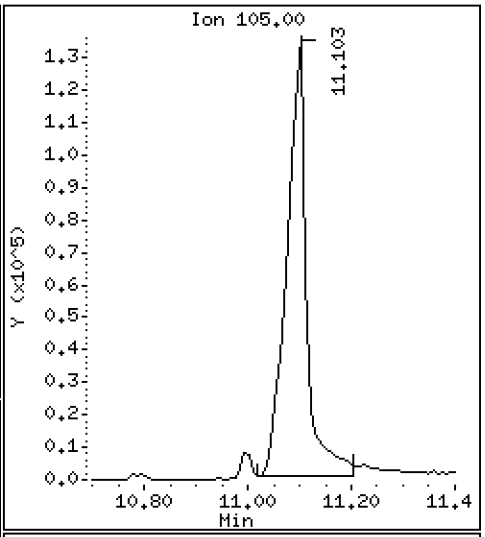
Column phase: ZB-5msi

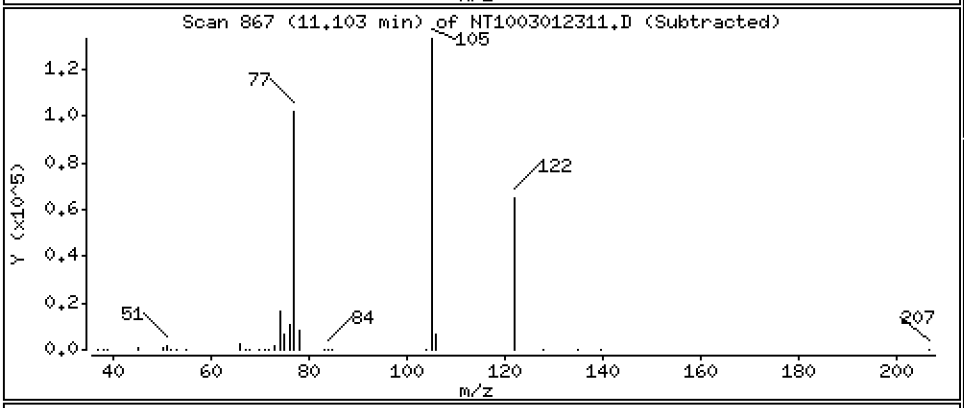
Column diameter: 0.25

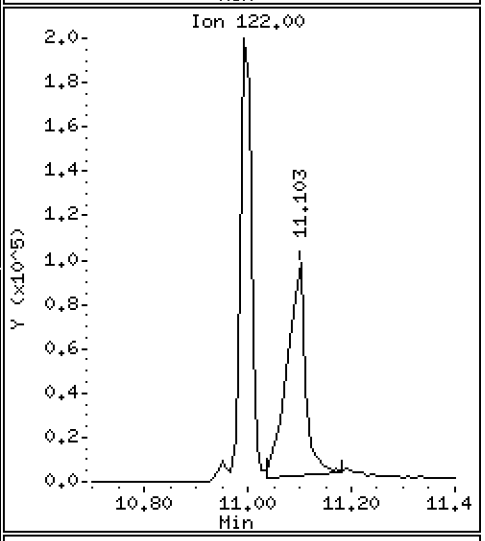
24 Benzoic acid

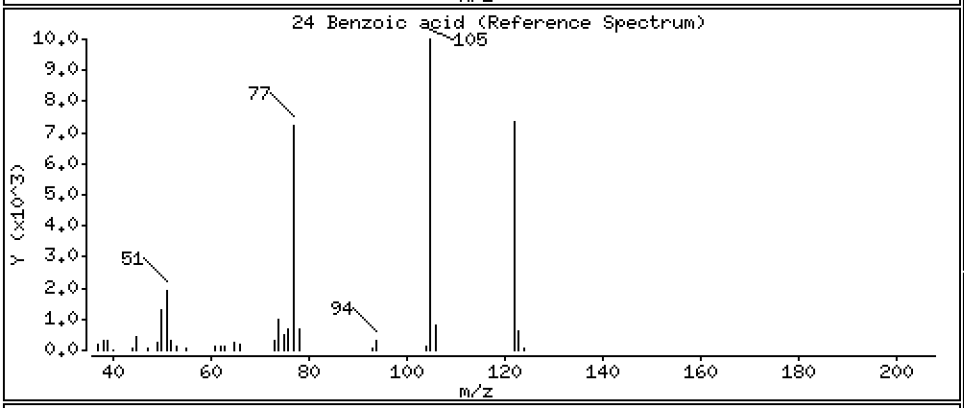
Concentration: 5.635 ug/mL

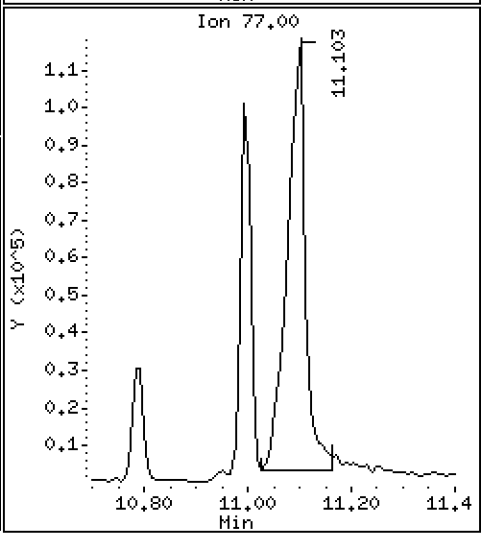


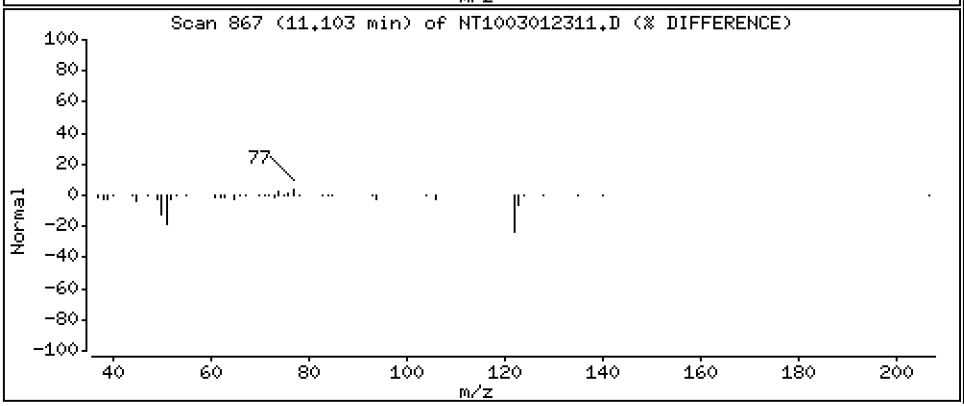












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

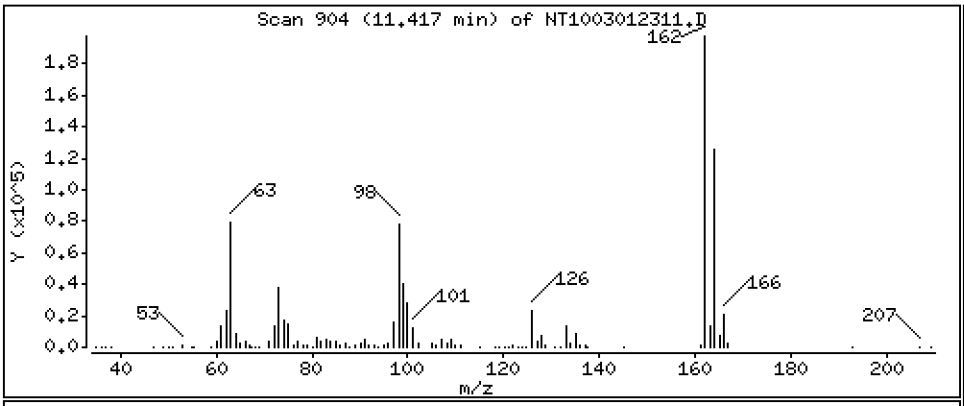
Operator: VTS

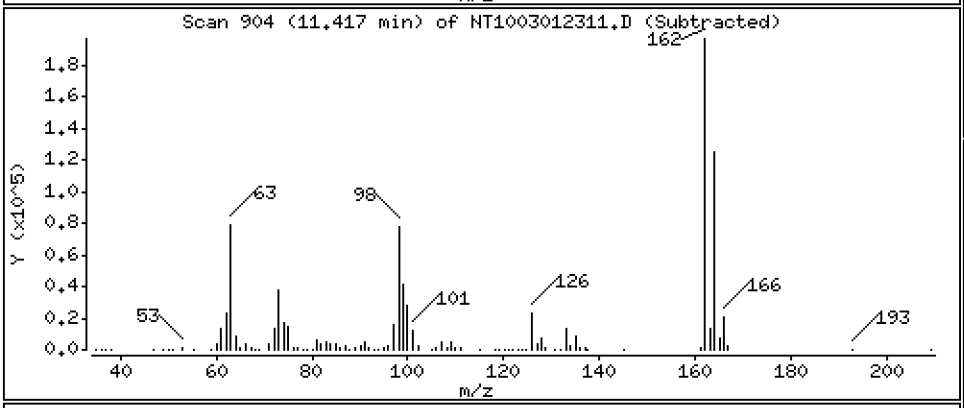
Column phase: ZB-5msi

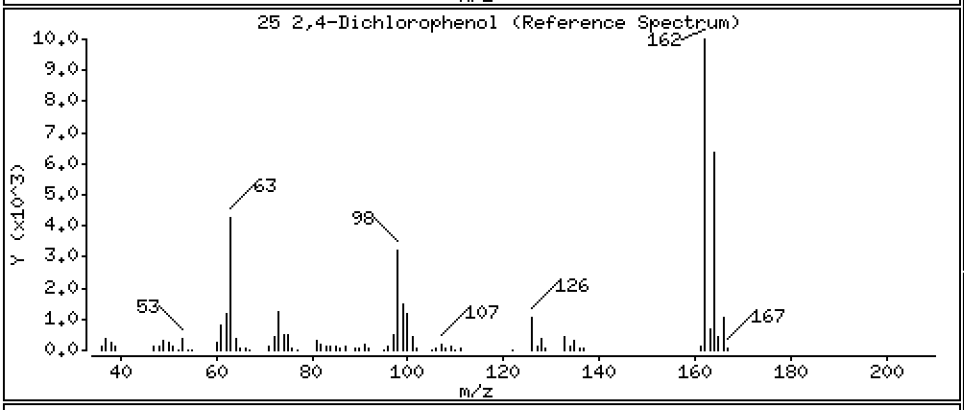
Column diameter: 0.25

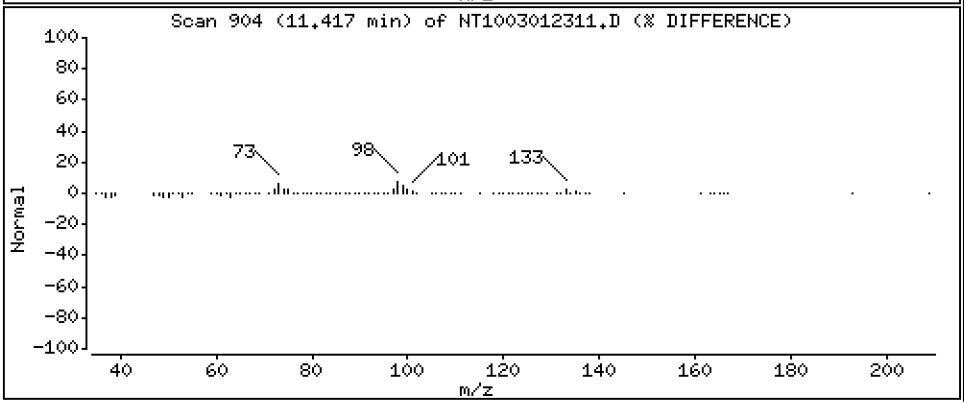
25 2,4-Dichlorophenol

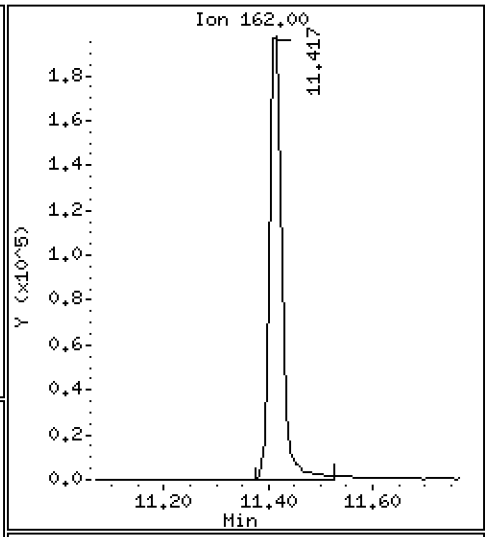
Concentration: 4.437 ug/mL

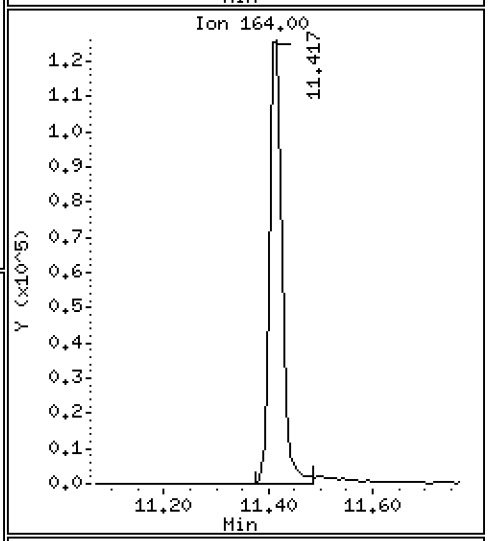


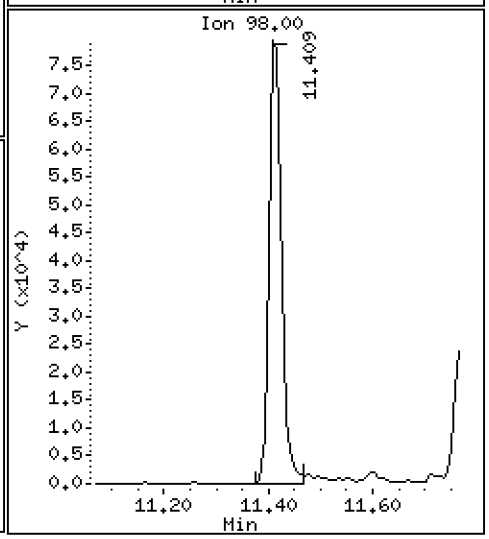












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

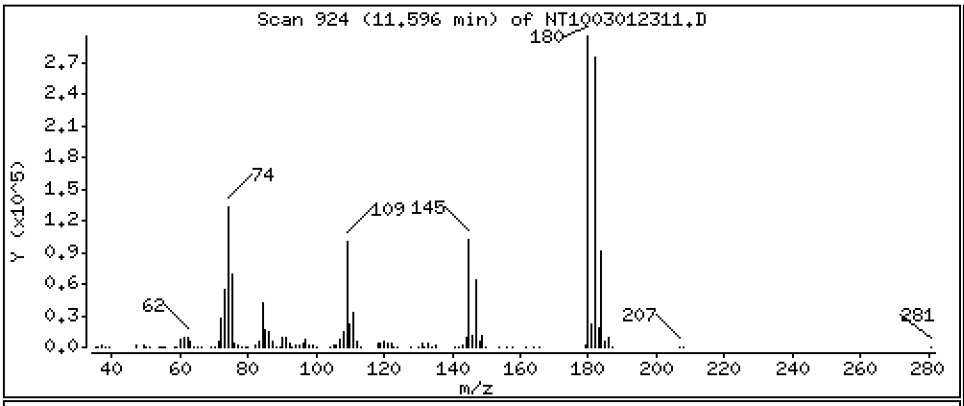
Operator: VTS

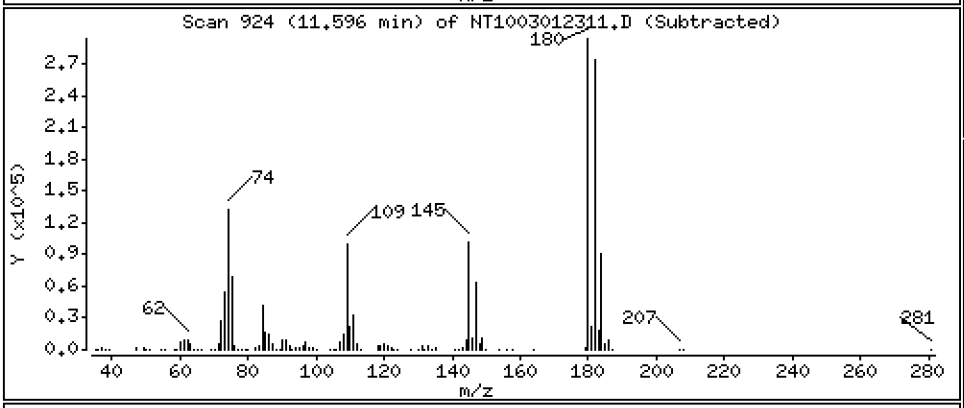
Column phase: ZB-5msi

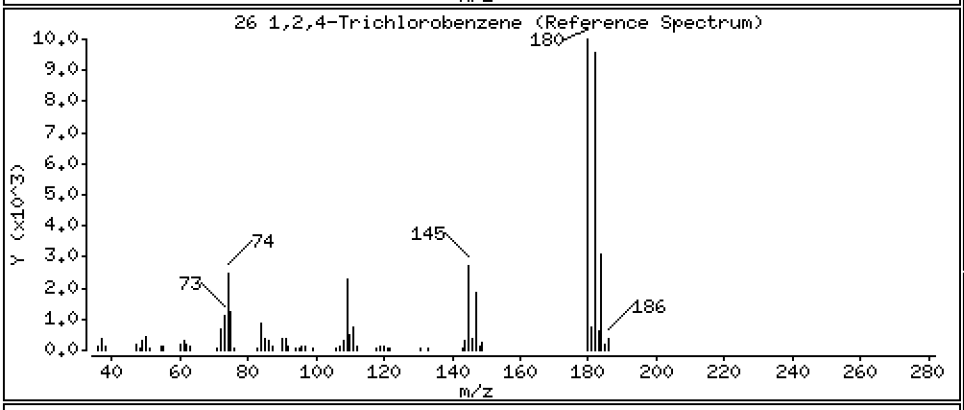
Column diameter: 0.25

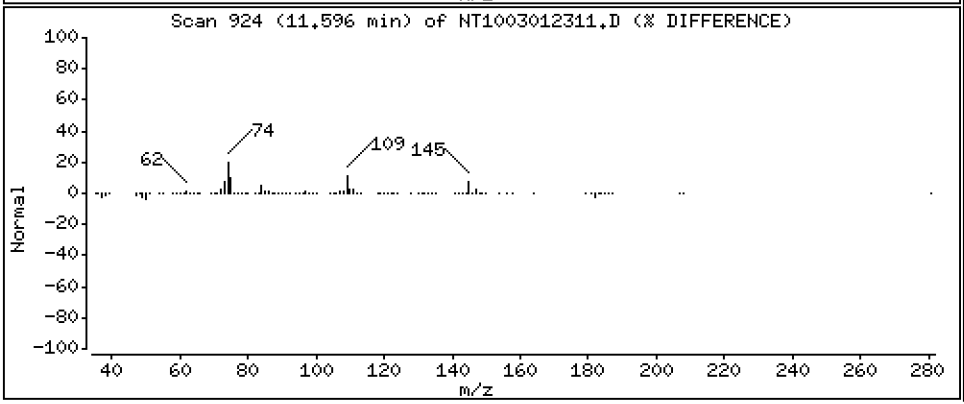
26 1,2,4-Trichlorobenzene

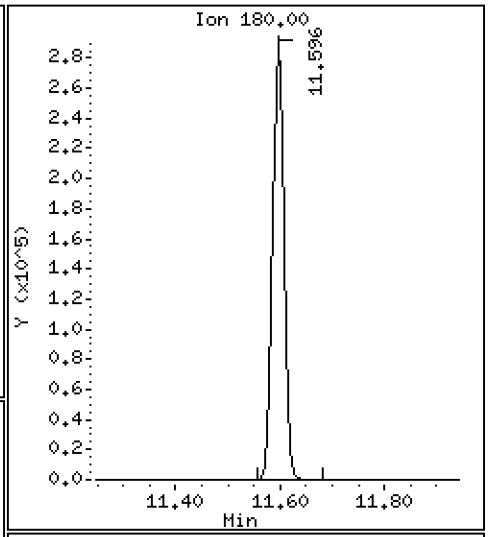
Concentration: 4.908 ug/mL

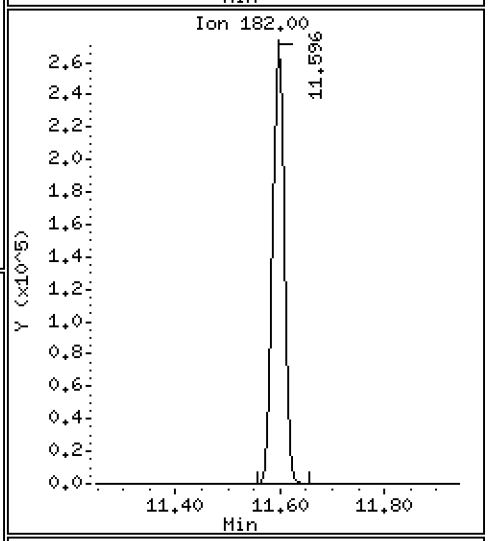


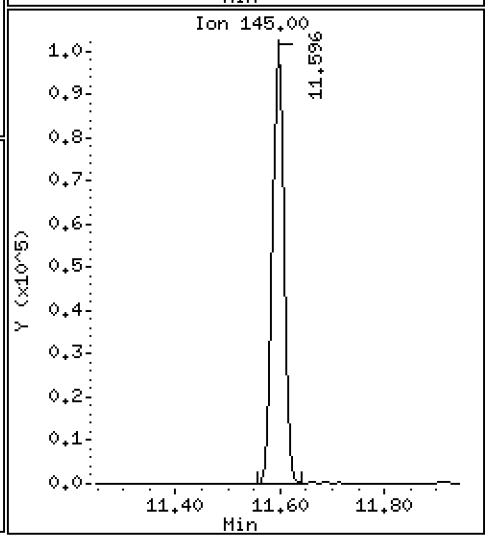












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

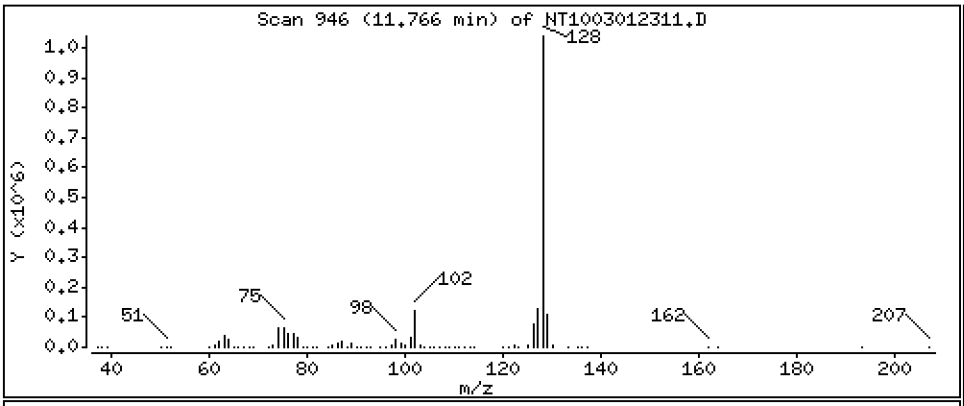
Operator: VTS

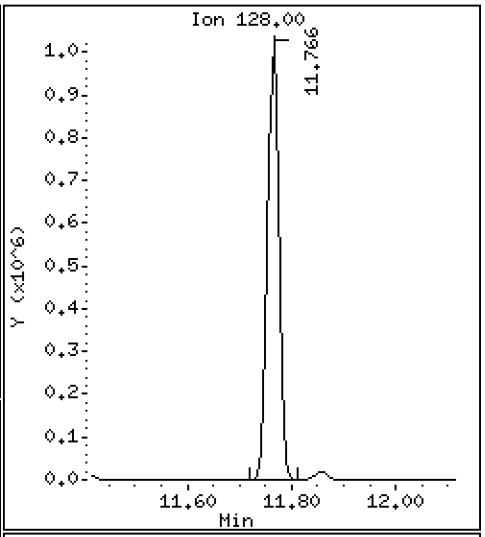
Column phase: ZB-5msi

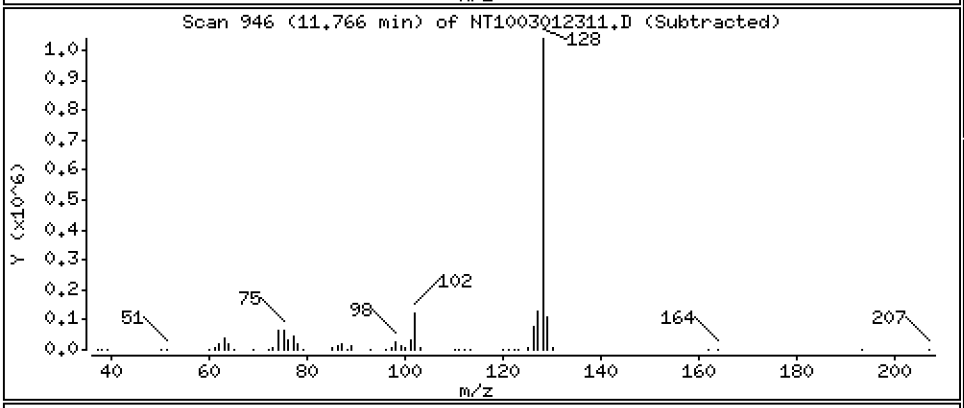
Column diameter: 0.25

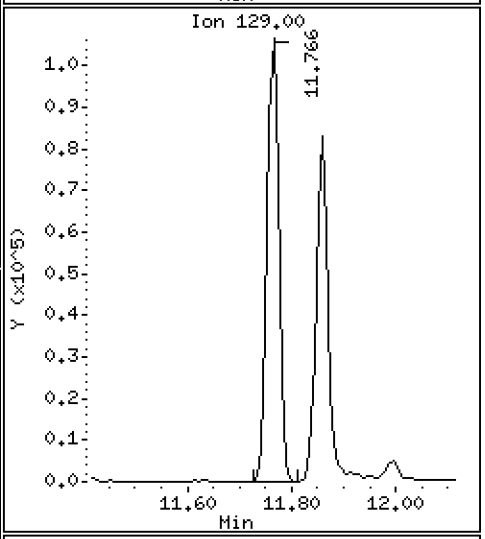
28 Naphthalene

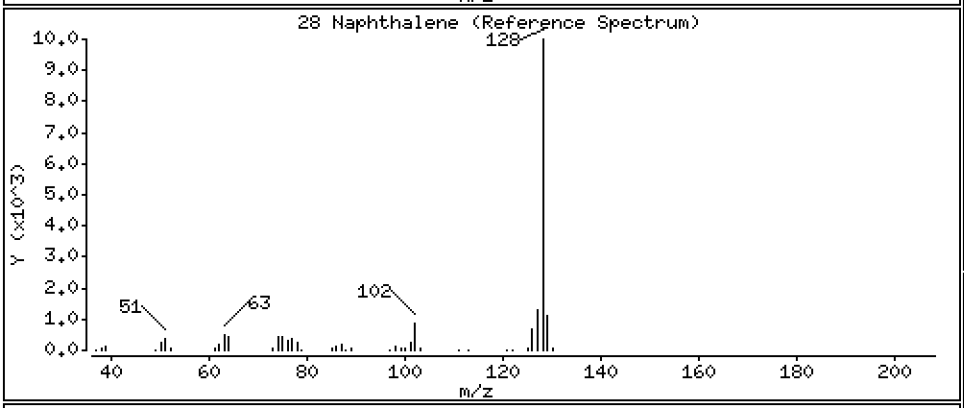
Concentration: 5.255 ug/mL

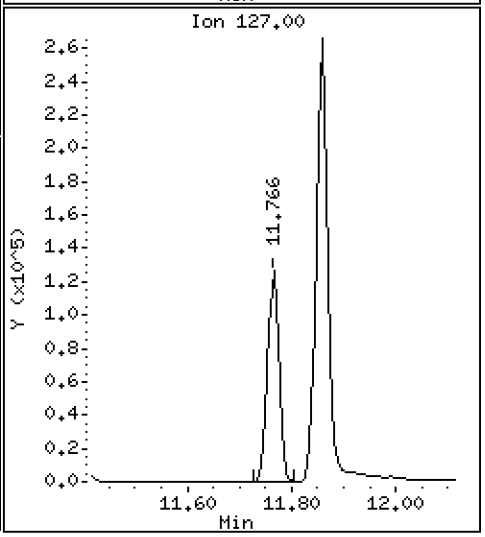


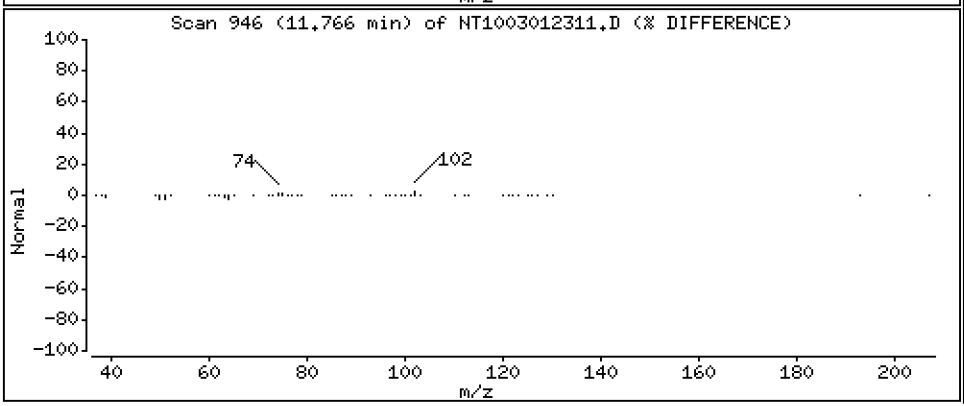












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

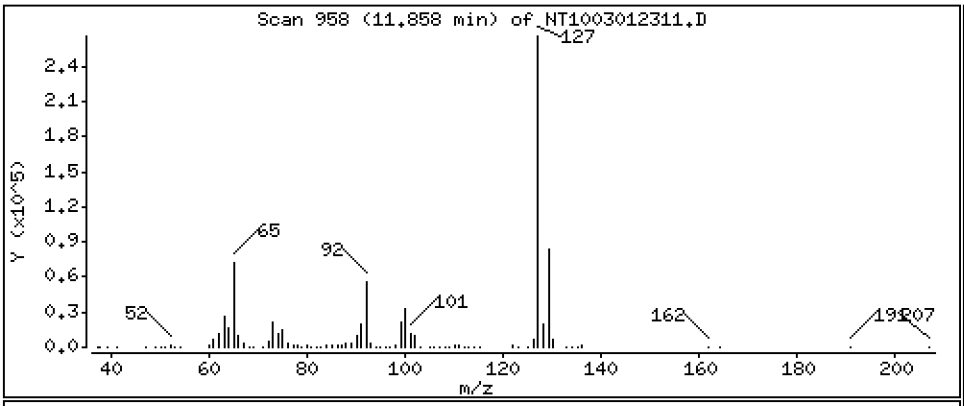
Operator: VTS

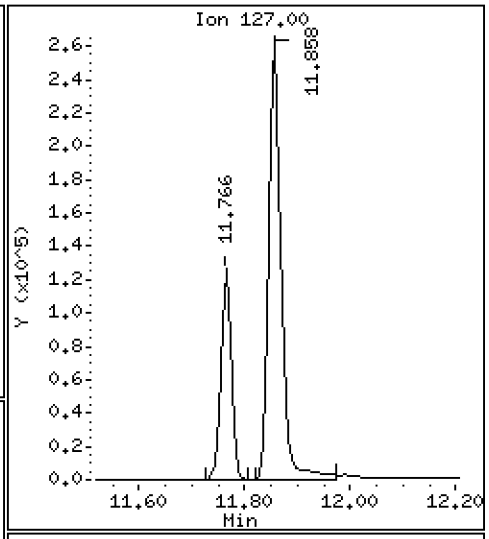
Column phase: ZB-5msi

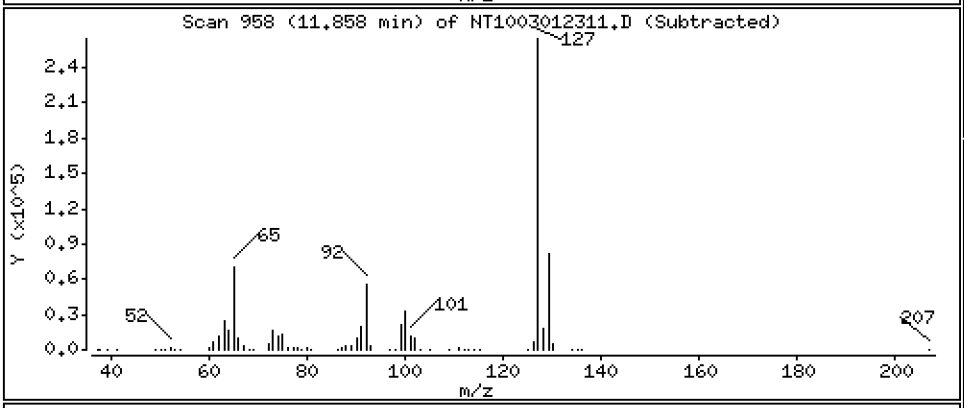
Column diameter: 0.25

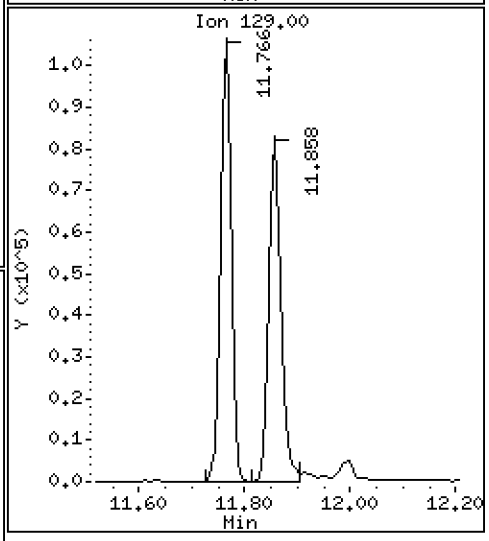
29 4-Chloroaniline

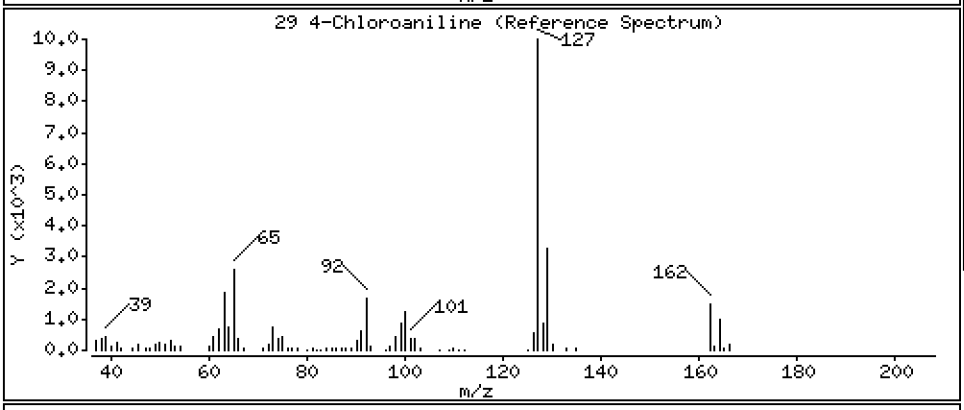
Concentration: 3.791 ug/mL

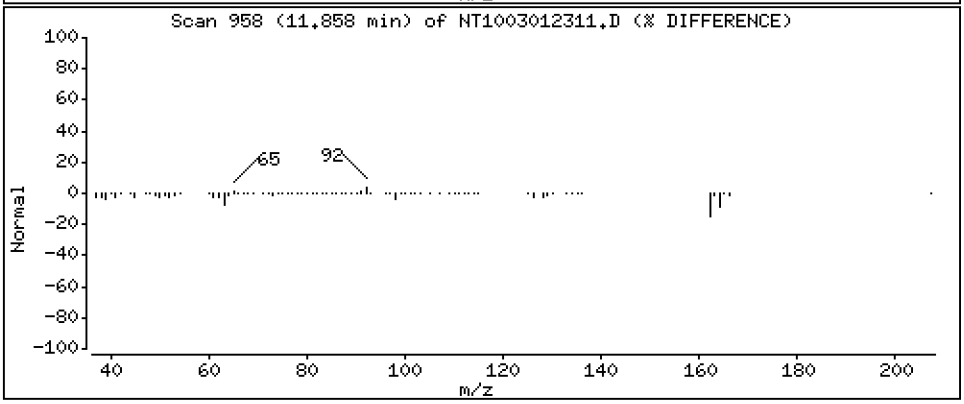












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

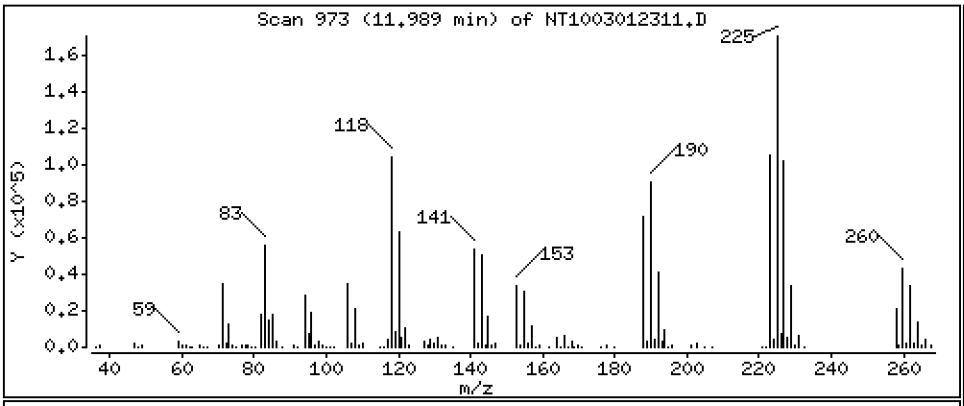
Operator: VTS

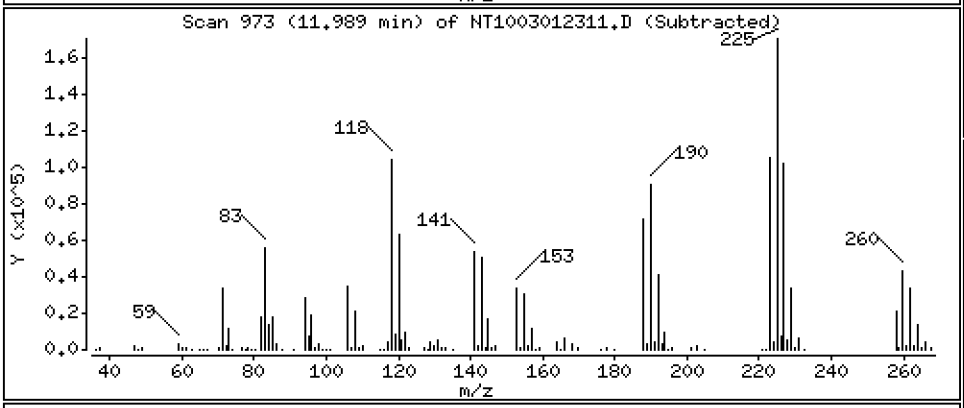
Column phase: ZB-5msi

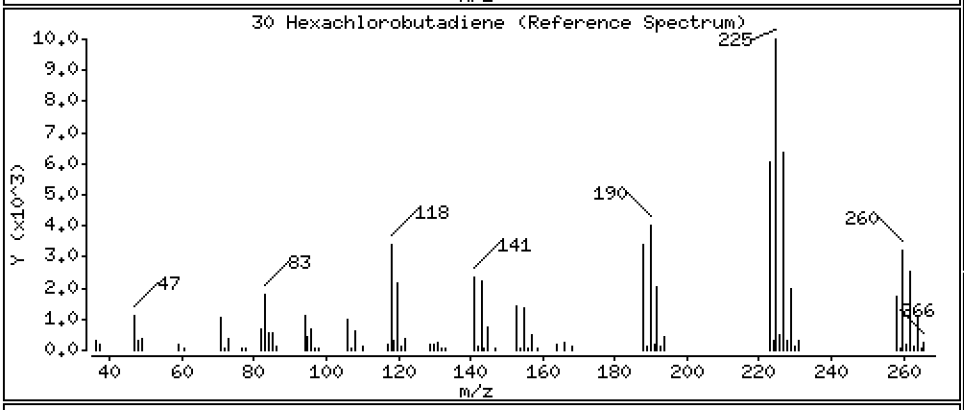
Column diameter: 0.25

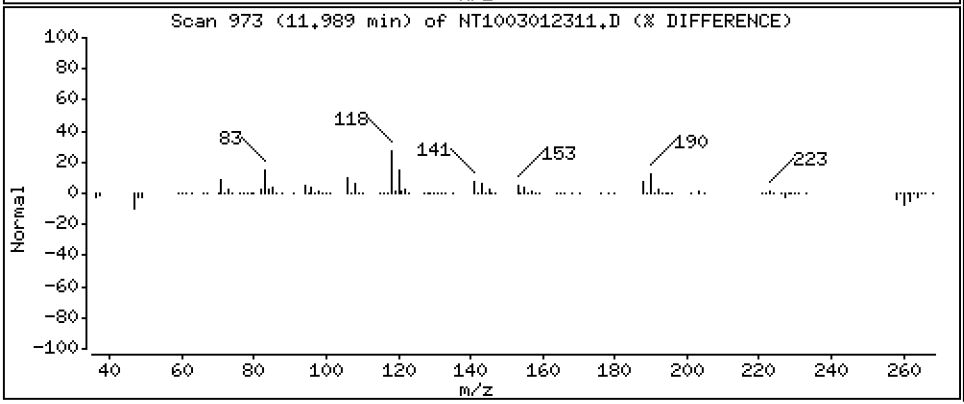
30 Hexachlorobutadiene

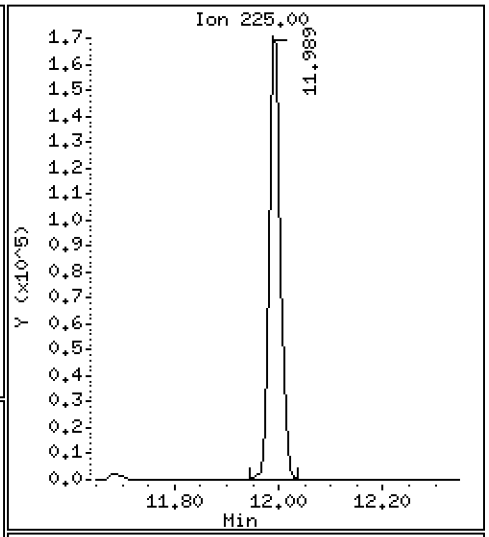
Concentration: 5.014 ug/mL

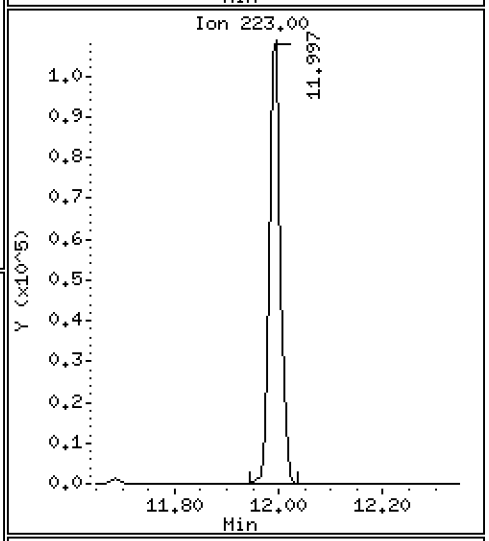


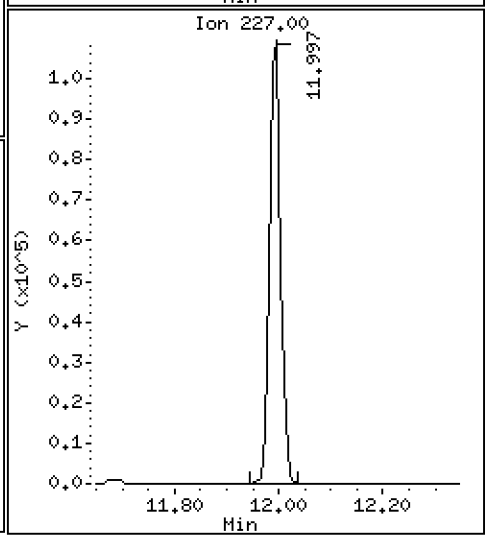












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

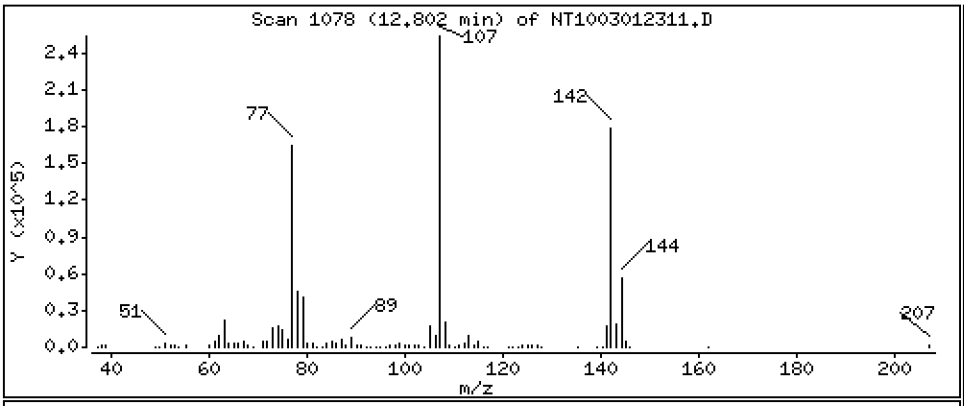
Operator: VTS

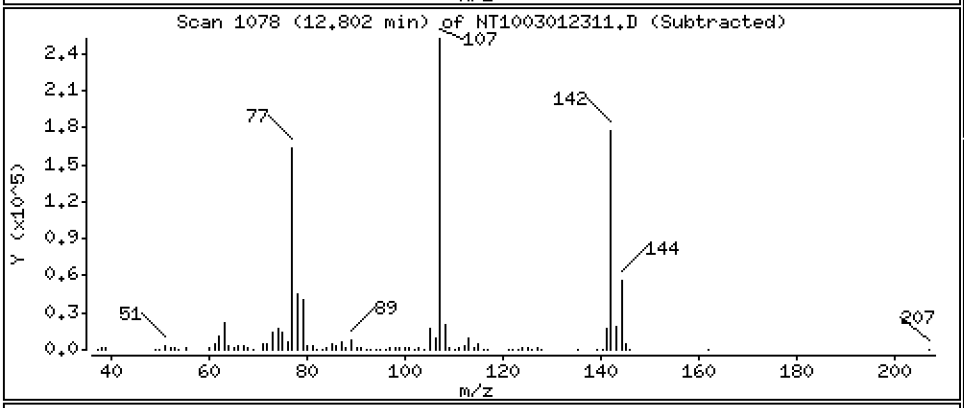
Column phase: ZB-5msi

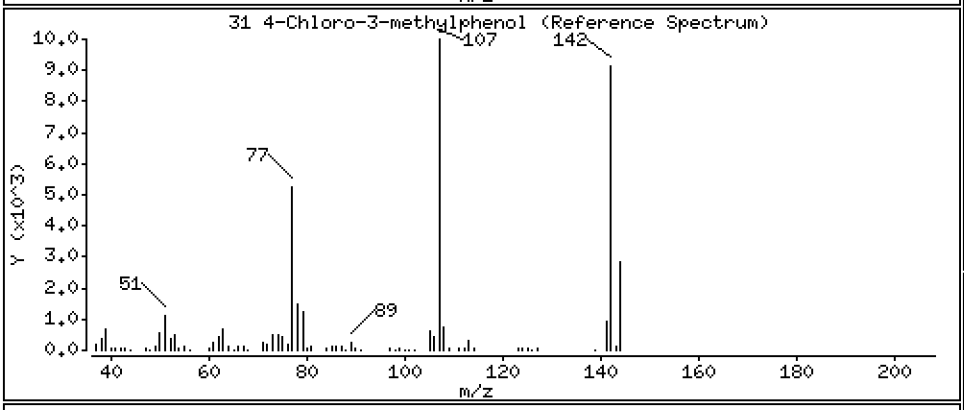
Column diameter: 0.25

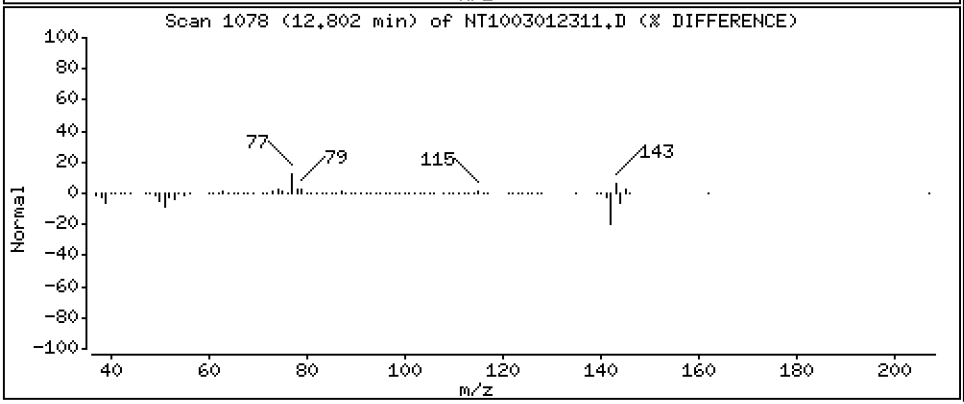
31 4-Chloro-3-methylphenol

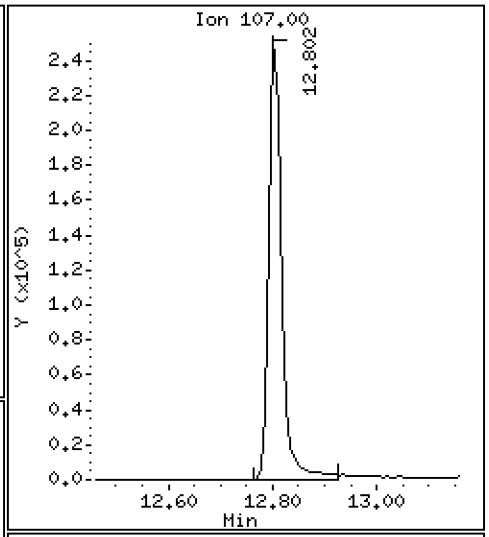
Concentration: 4.452 ug/mL

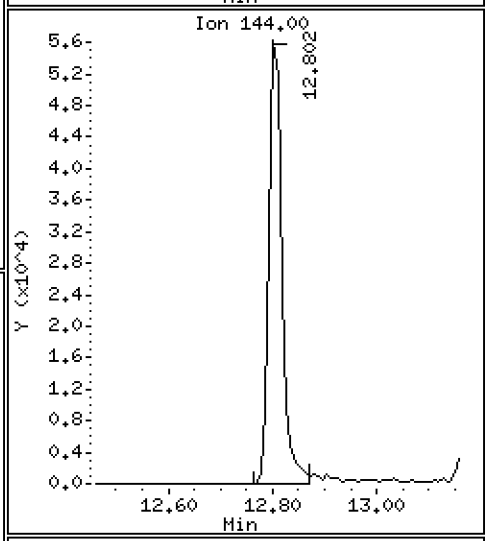


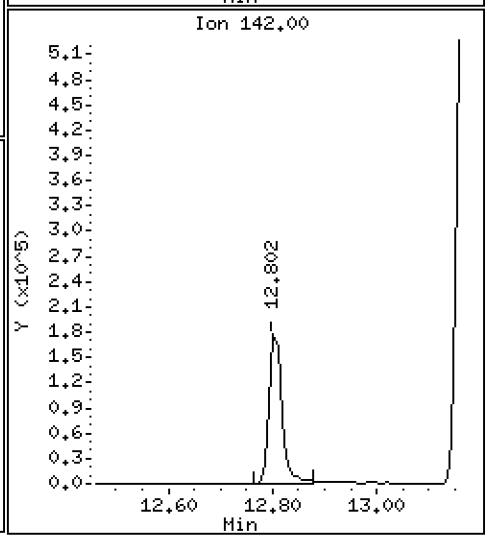












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

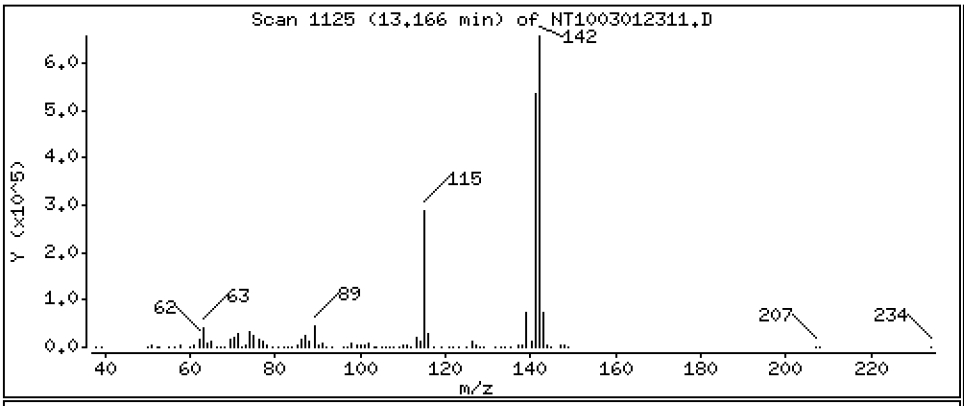
Operator: VTS

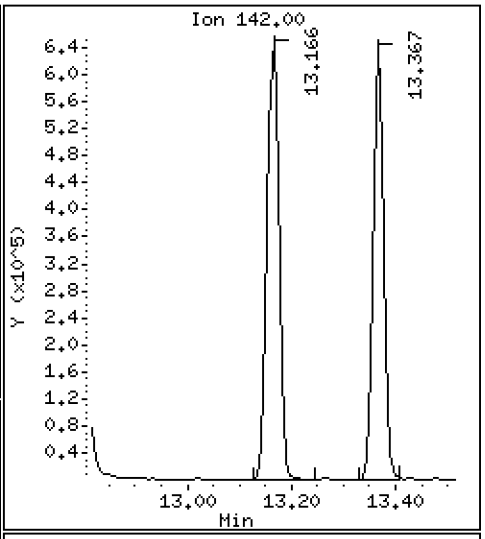
Column phase: ZB-5msi

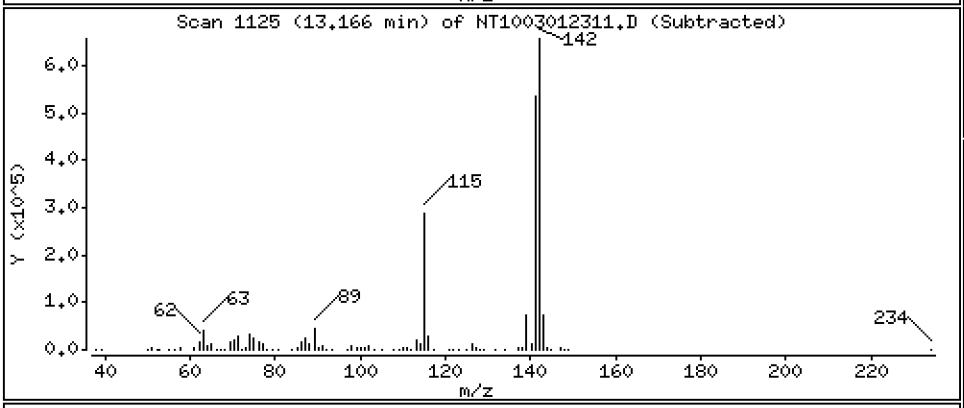
Column diameter: 0.25

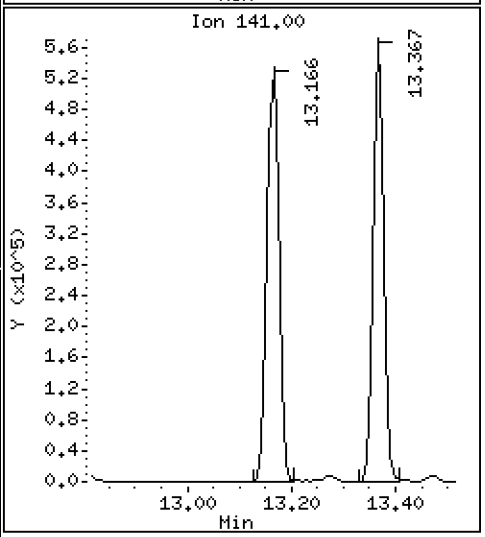
32 2-Methylnaphthalene

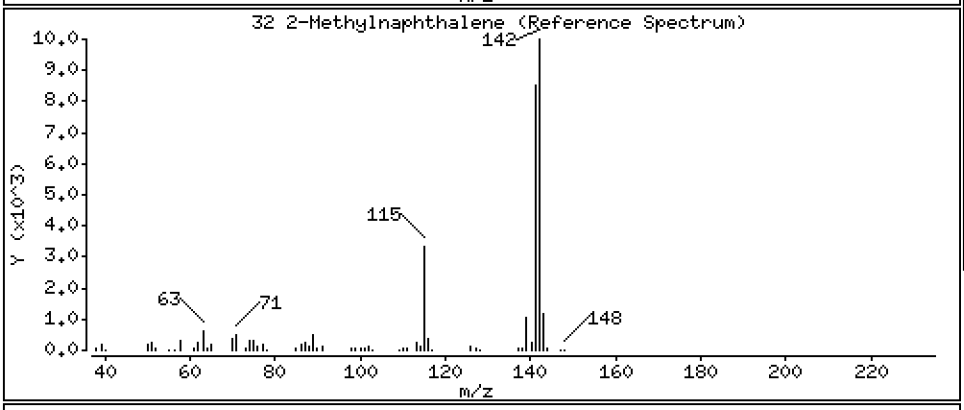
Concentration: 4.951 ug/mL

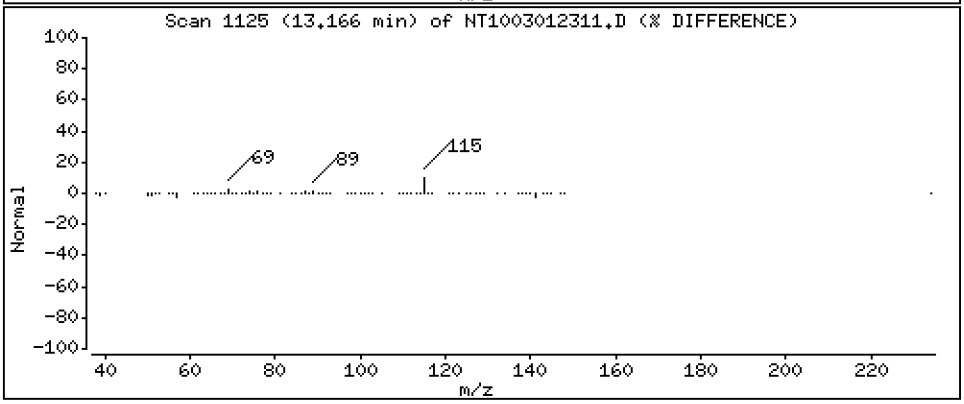












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

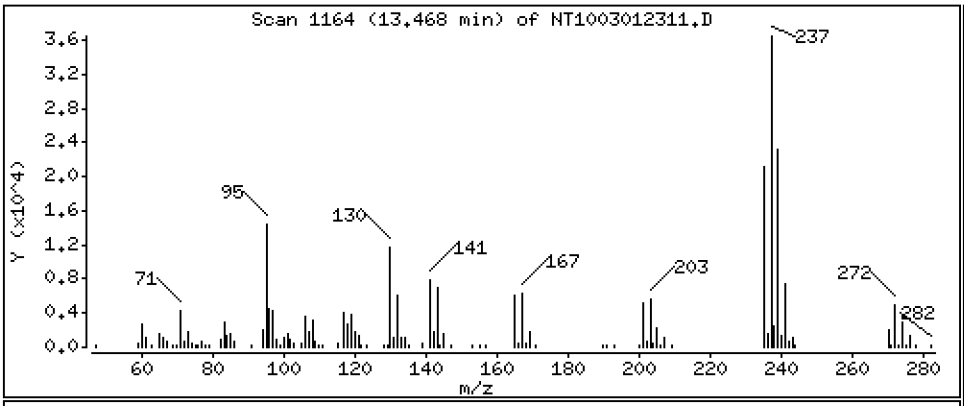
Operator: VTS

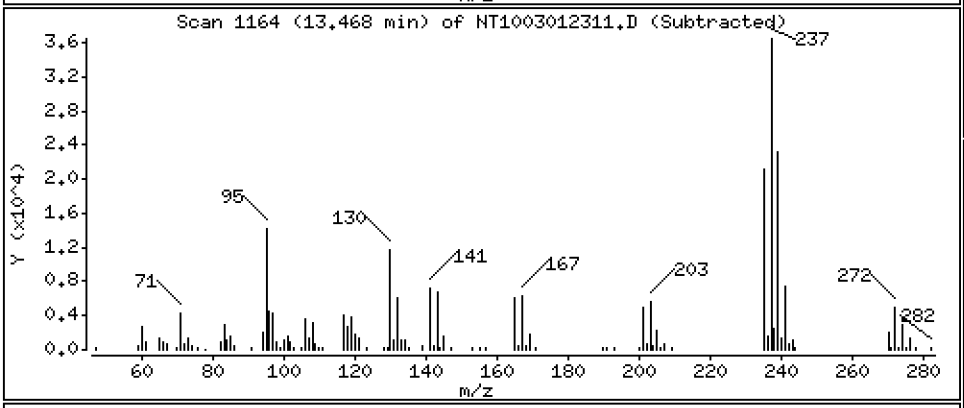
Column phase: ZB-5msi

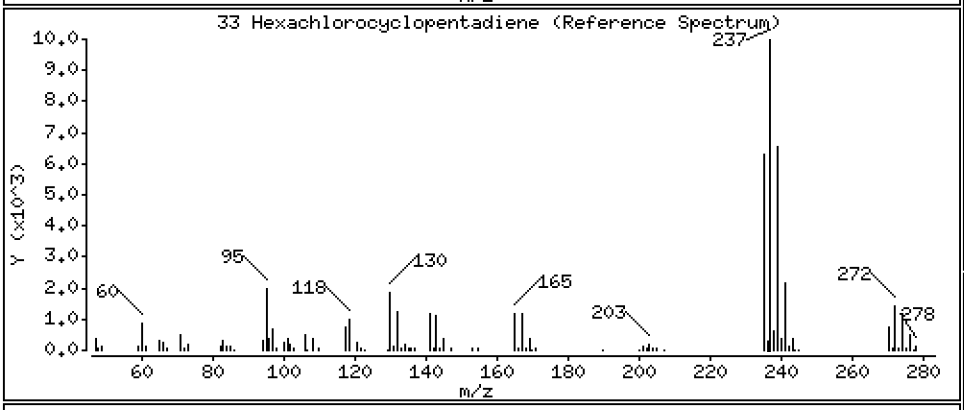
Column diameter: 0.25

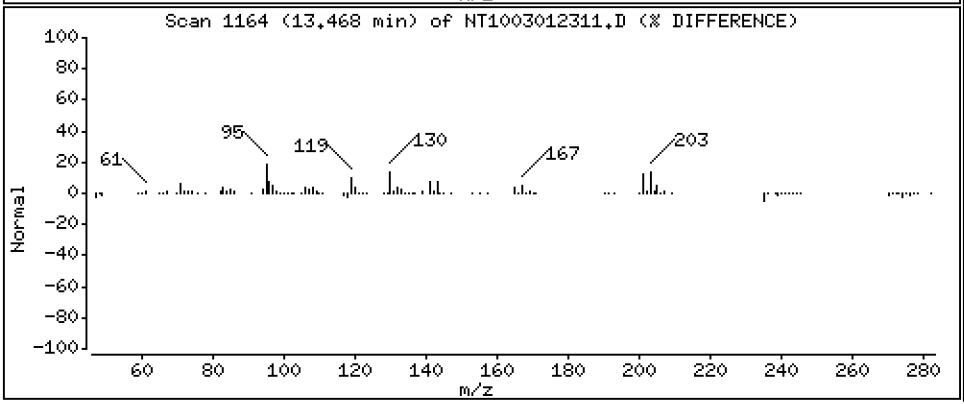
33 Hexachlorocyclopentadiene

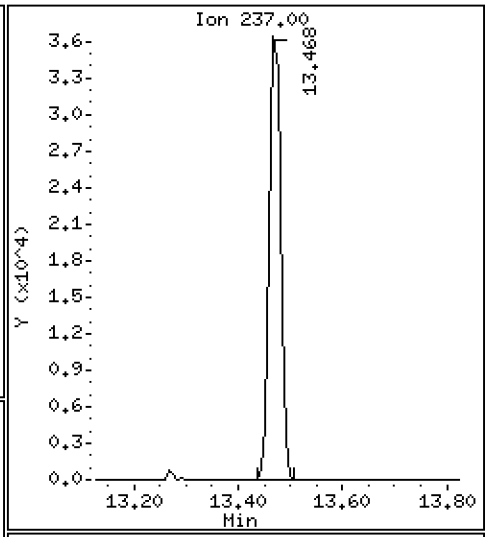
Concentration: 2.562 ug/mL

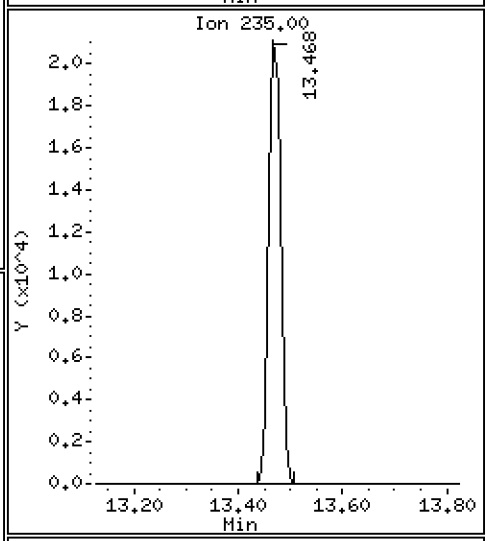


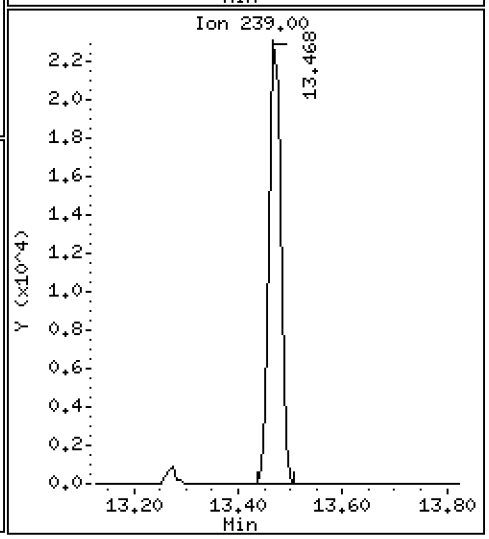












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

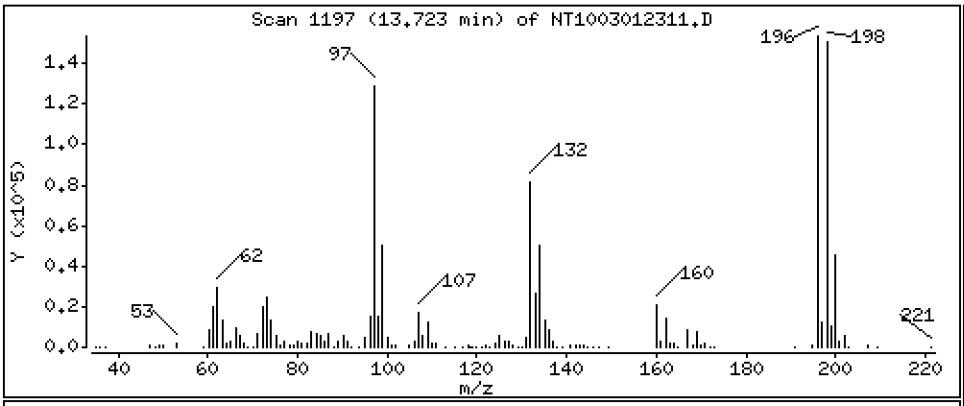
Operator: VTS

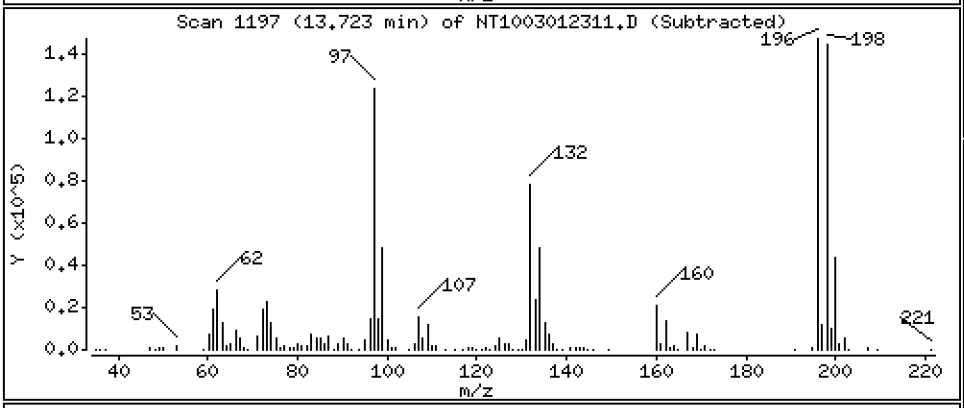
Column phase: ZB-5msi

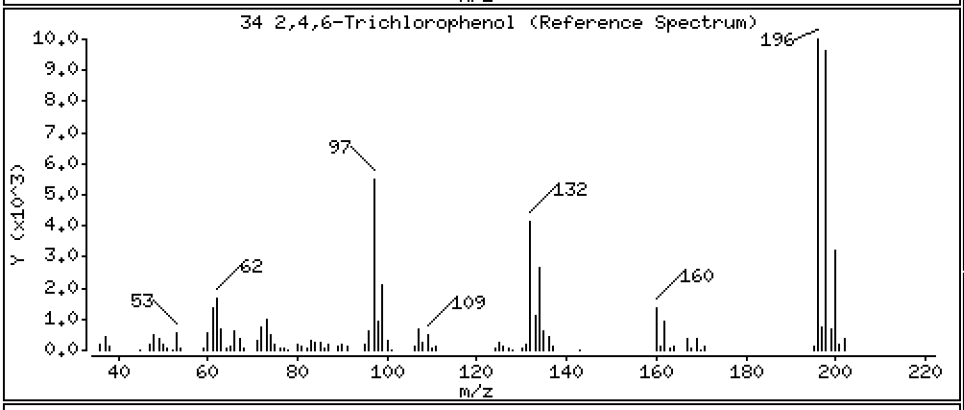
Column diameter: 0.25

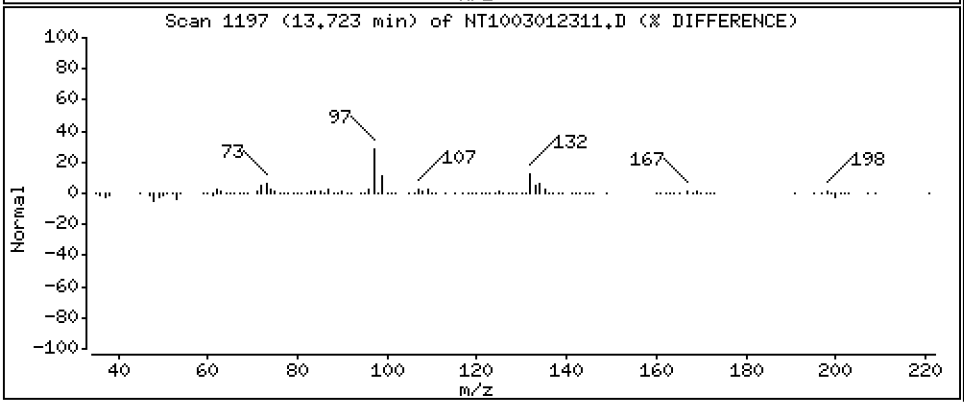
34 2,4,6-Trichlorophenol

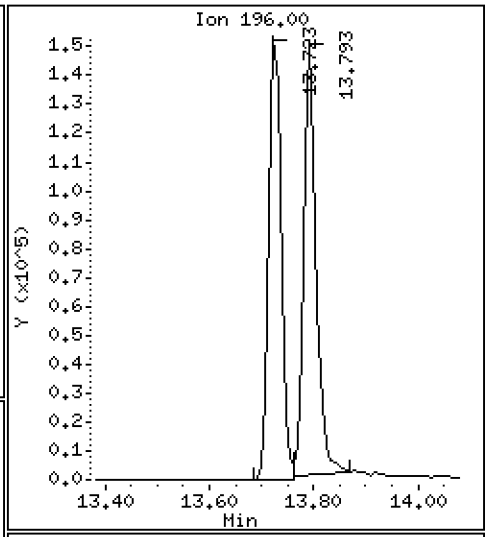
Concentration: 4.120 ug/mL

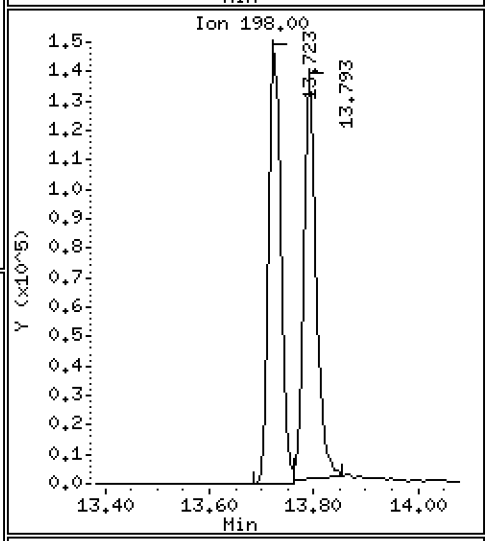


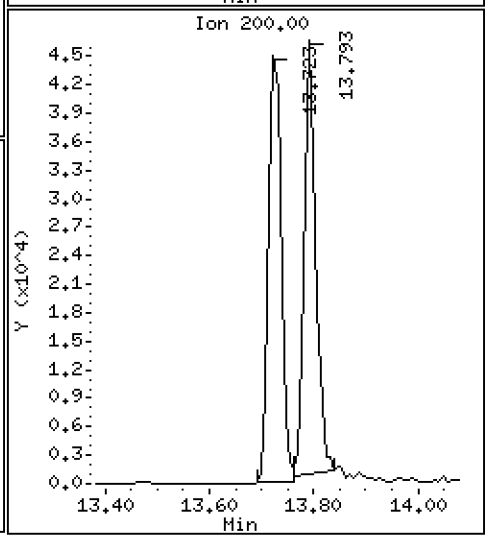












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

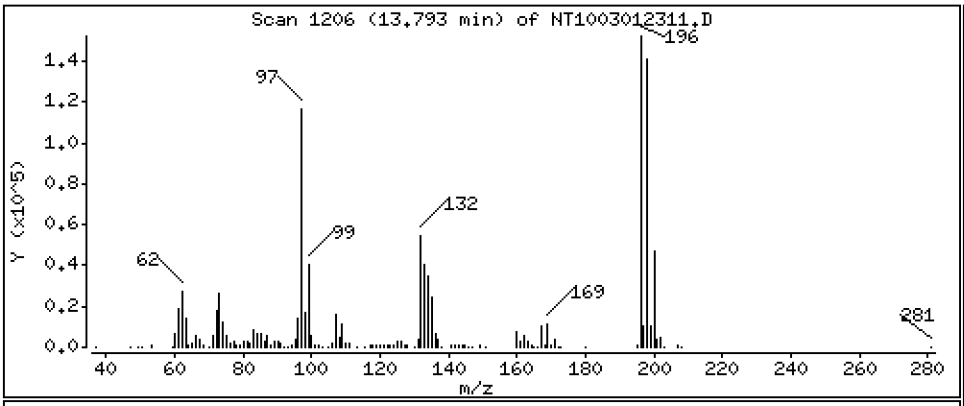
Operator: VTS

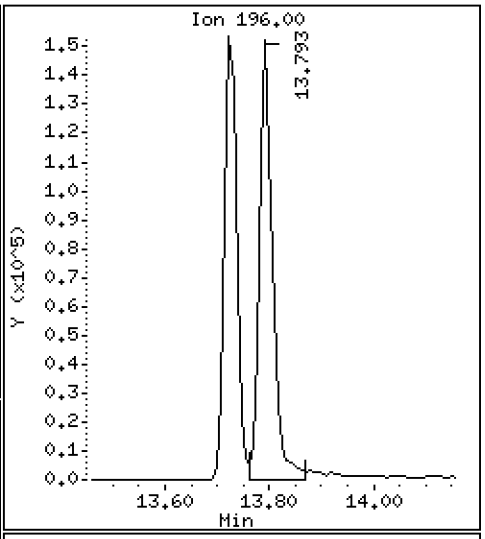
Column phase: ZB-5msi

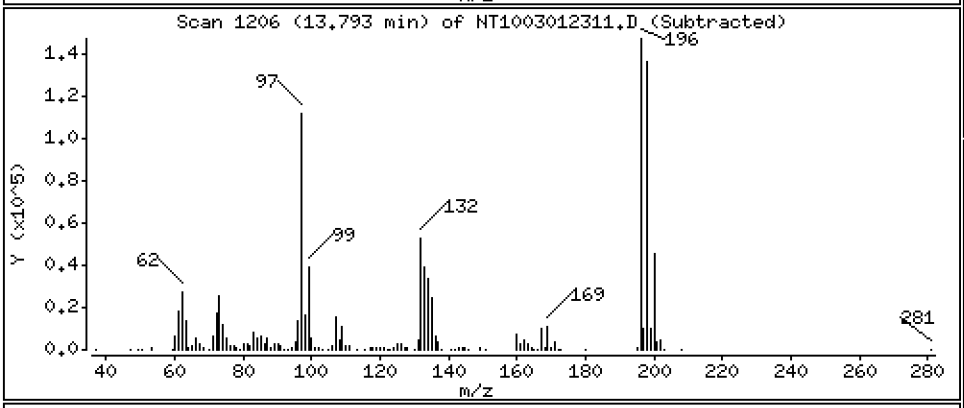
Column diameter: 0.25

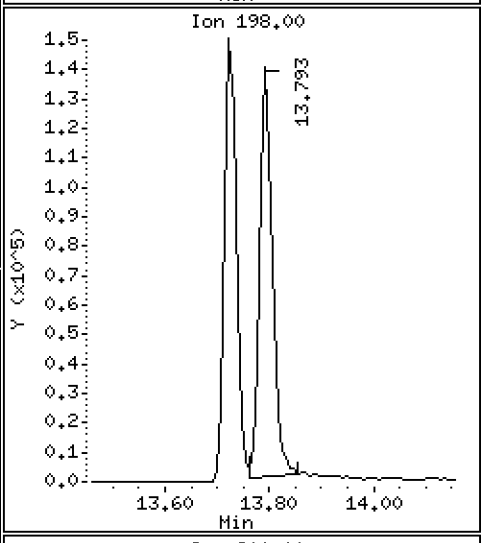
35 2,4,5-Trichlorophenol

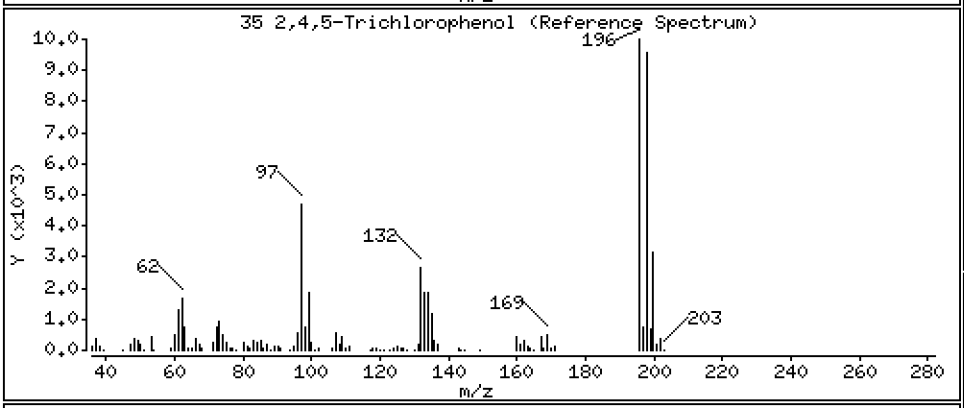
Concentration: 4.149 ug/mL

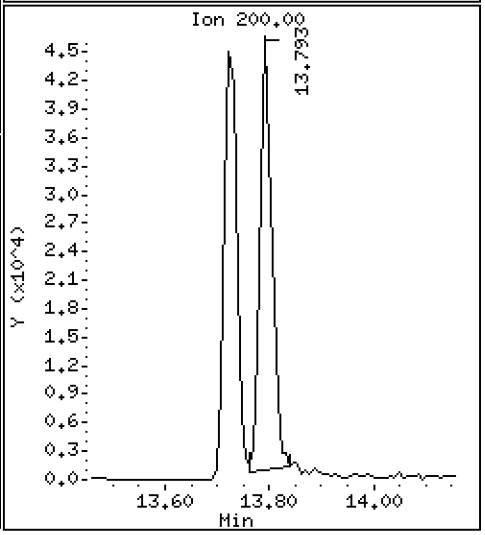


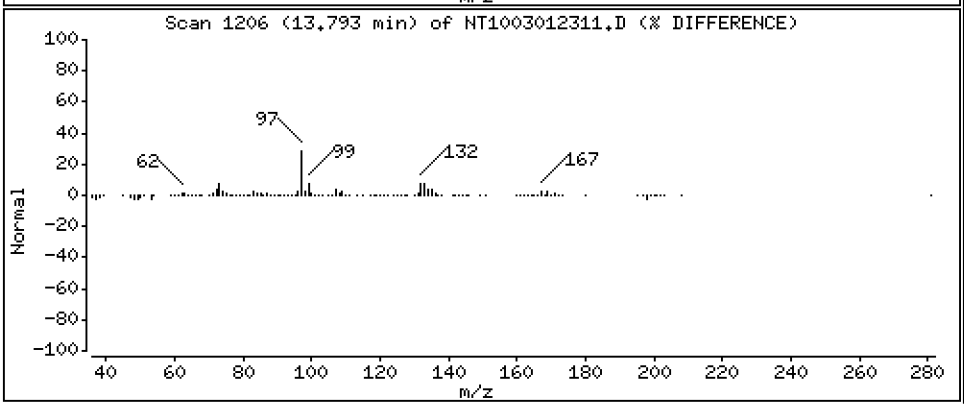












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

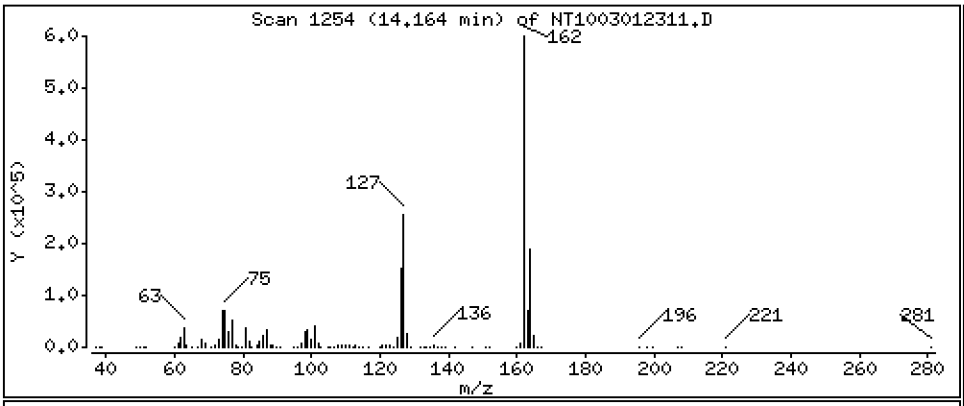
Operator: VTS

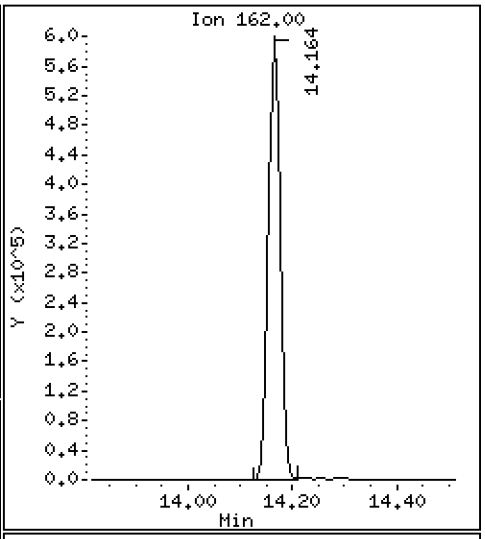
Column phase: ZB-5msi

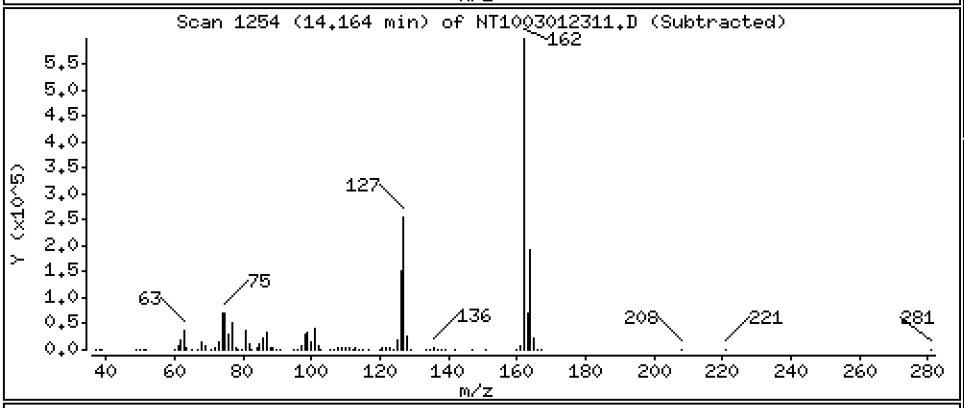
Column diameter: 0.25

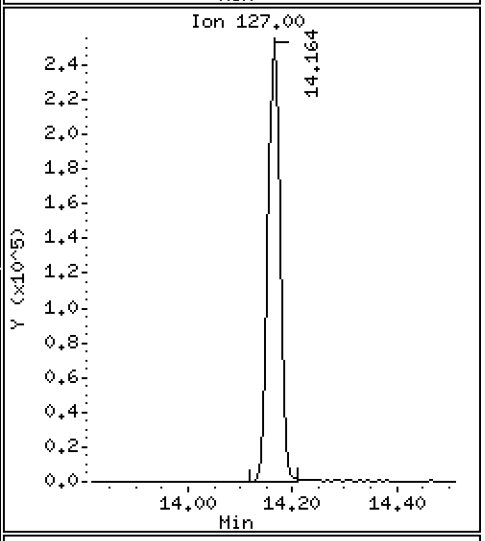
37 2-Chloronaphthalene

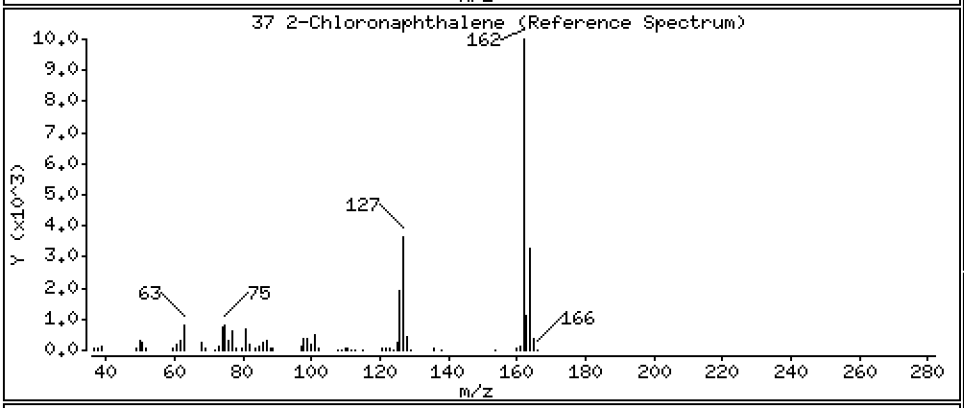
Concentration: 5.264 ug/mL

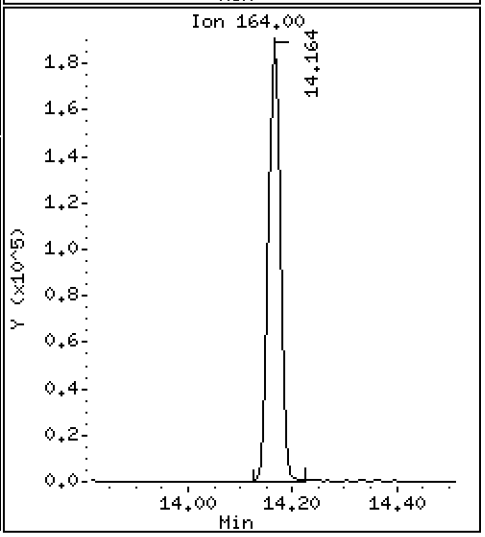


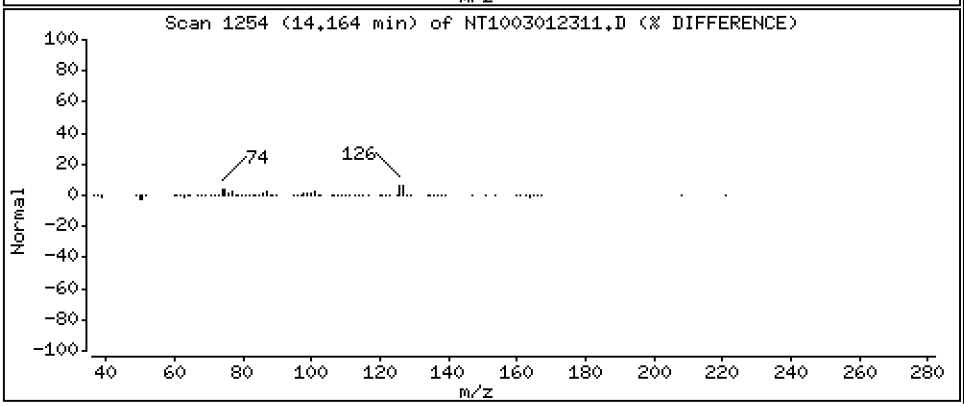












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

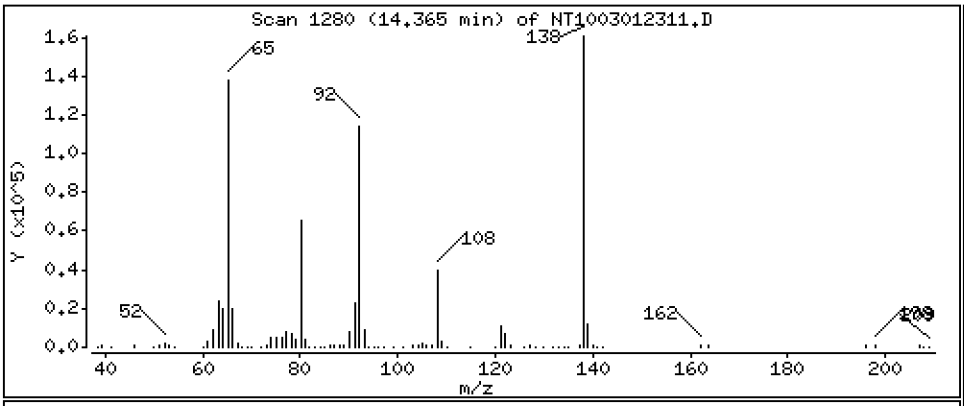
Operator: VTS

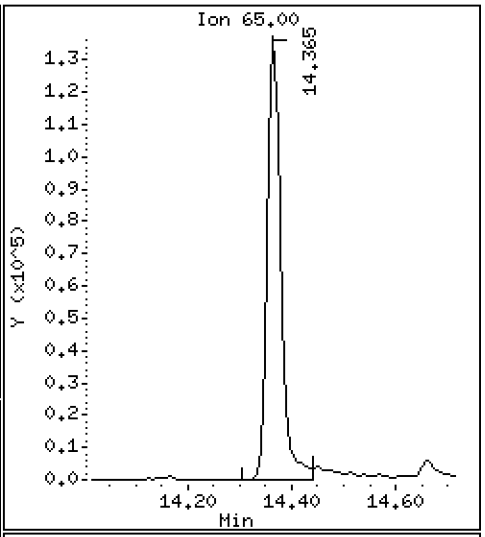
Column phase: ZB-5msi

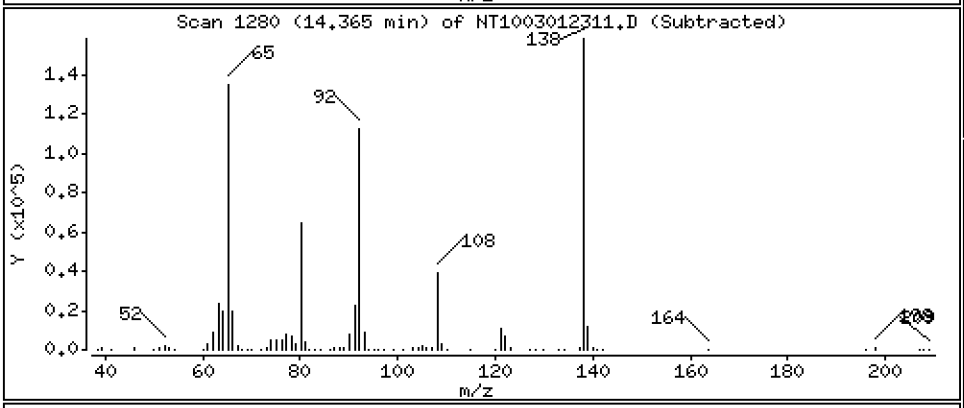
Column diameter: 0.25

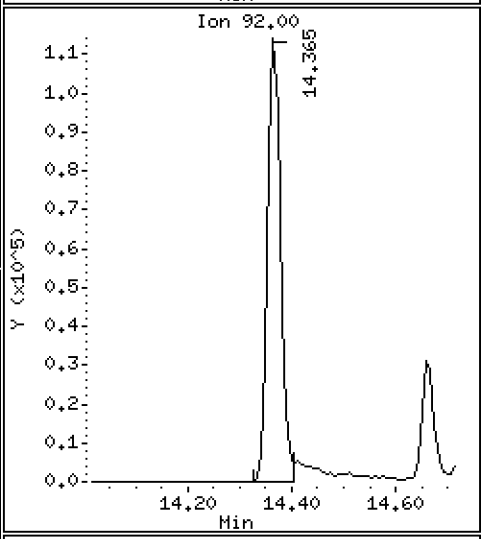
38 2-Nitroaniline

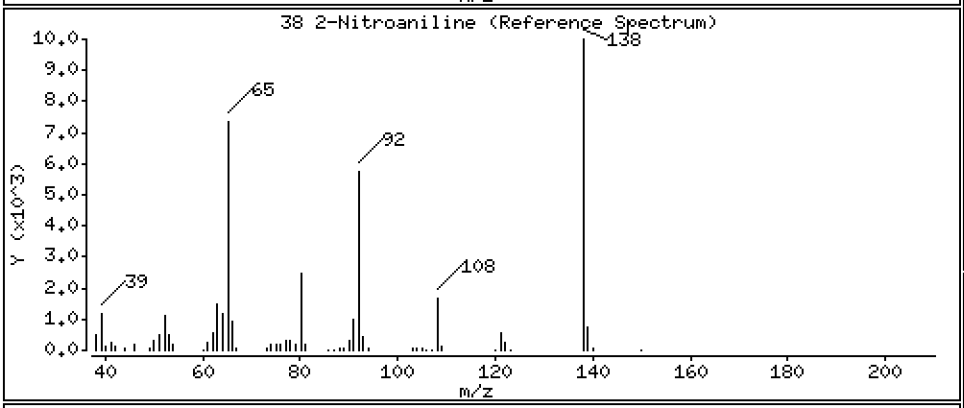
Concentration: 5.027 ug/mL

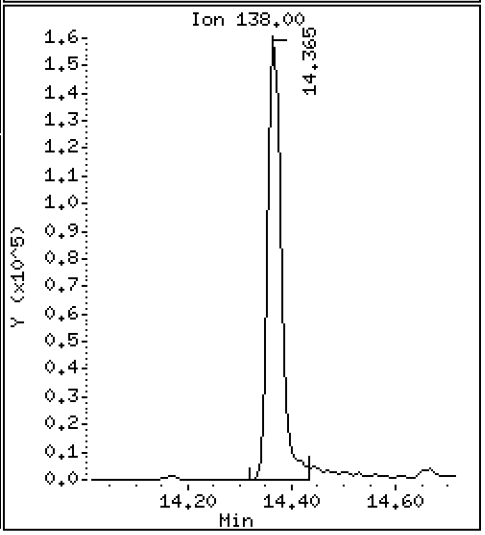


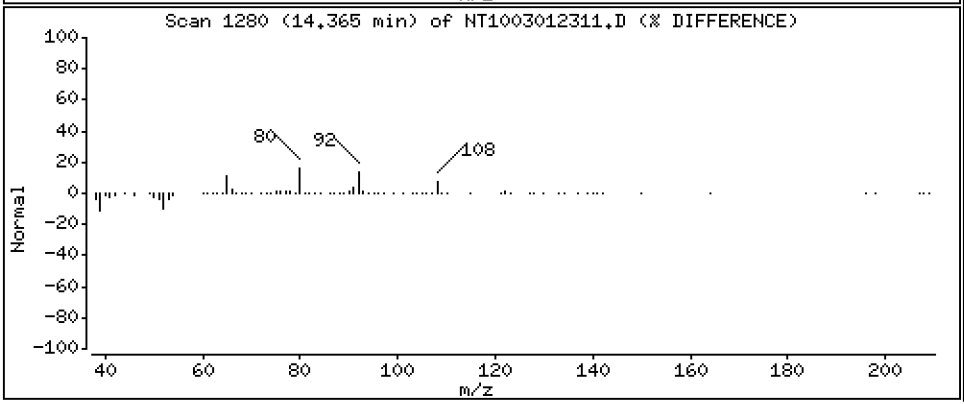












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

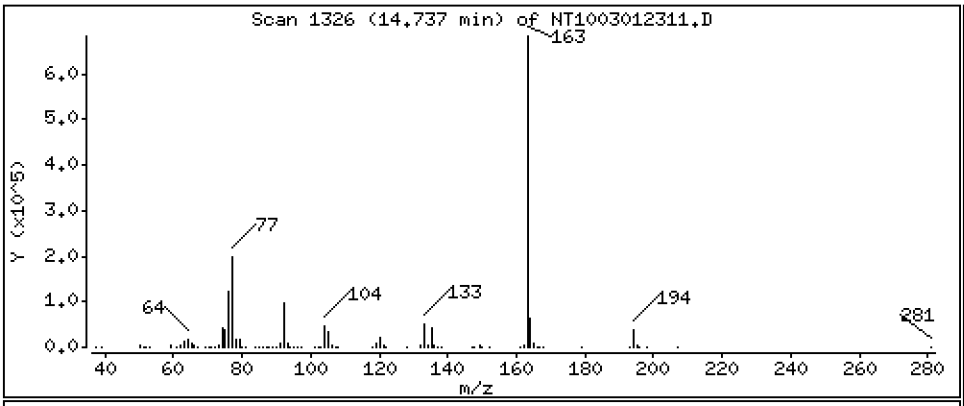
Operator: VTS

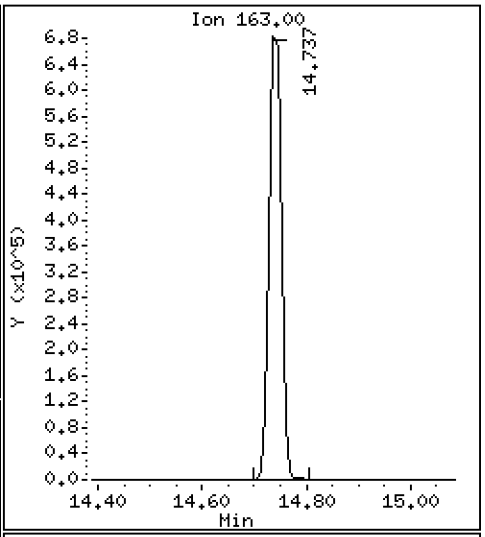
Column phase: ZB-5msi

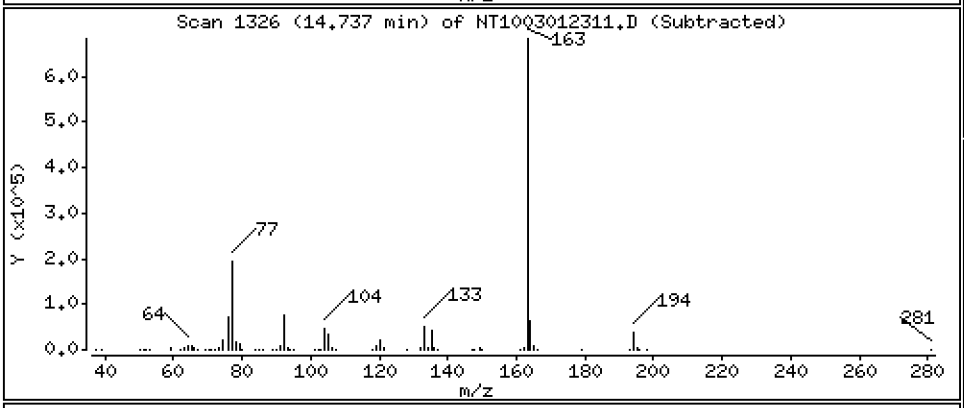
Column diameter: 0.25

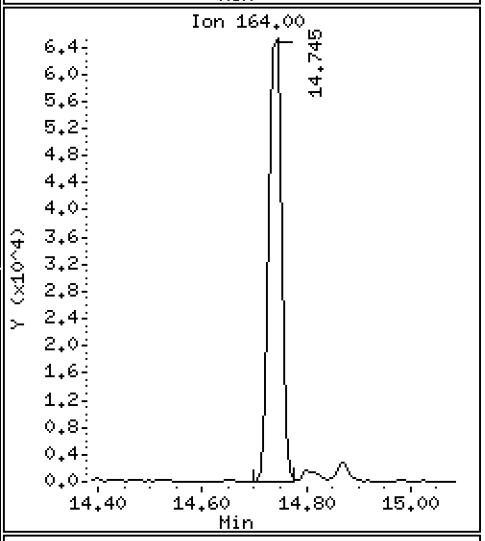
39 Dimethylphthalate

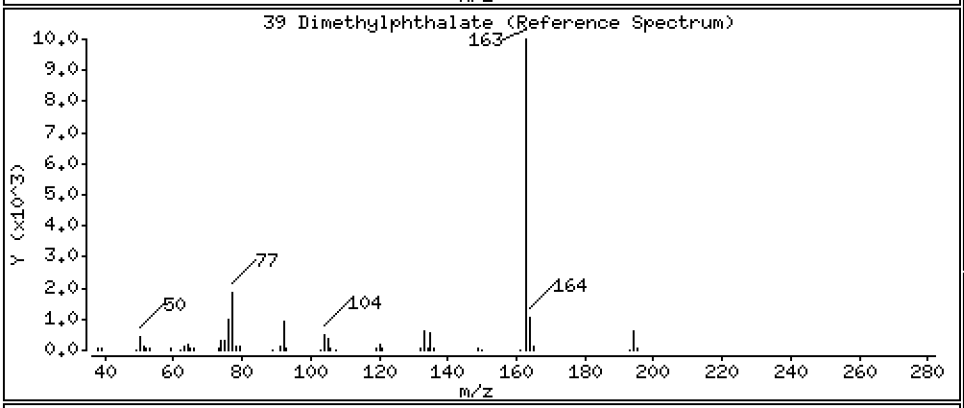
Concentration: 5.384 ug/mL

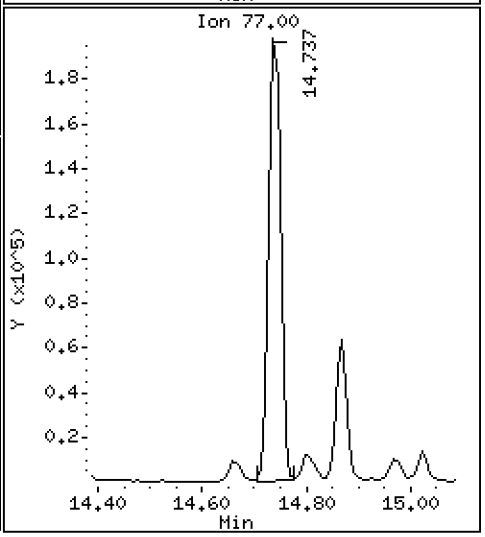


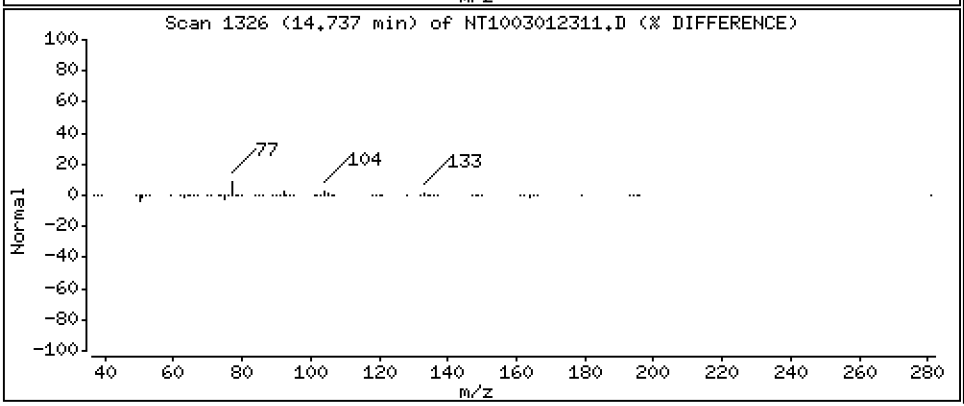












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

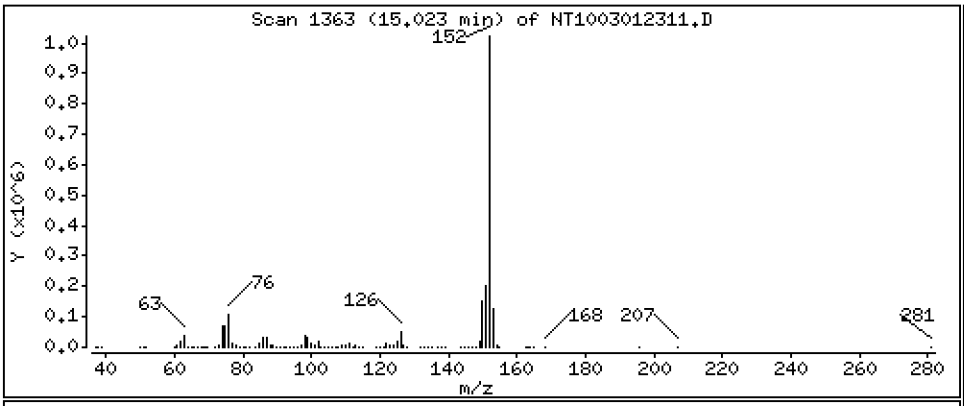
Operator: VTS

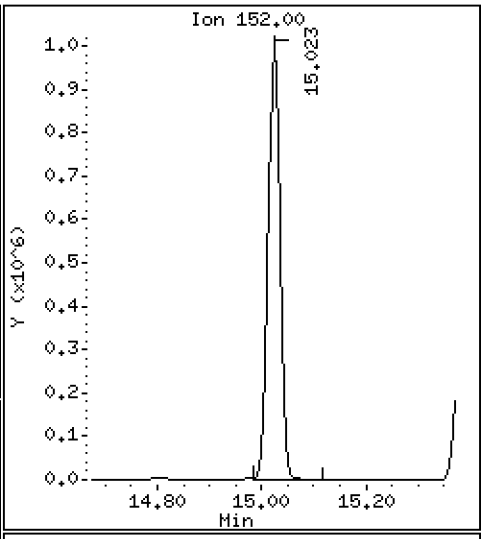
Column phase: ZB-5msi

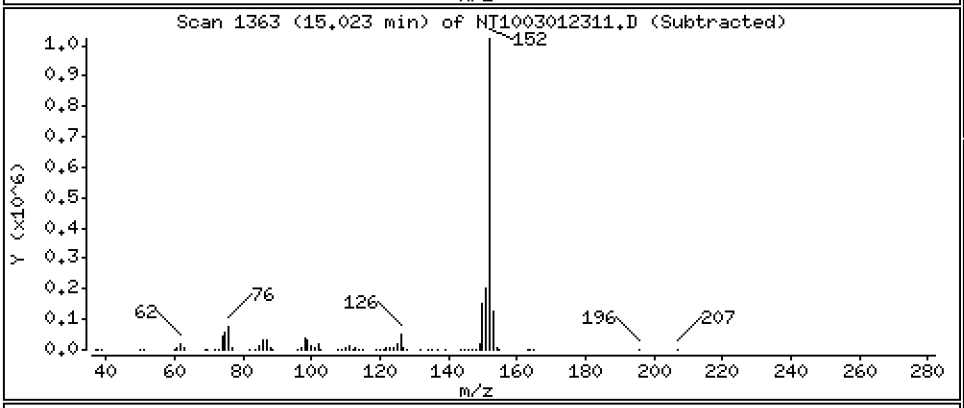
Column diameter: 0.25

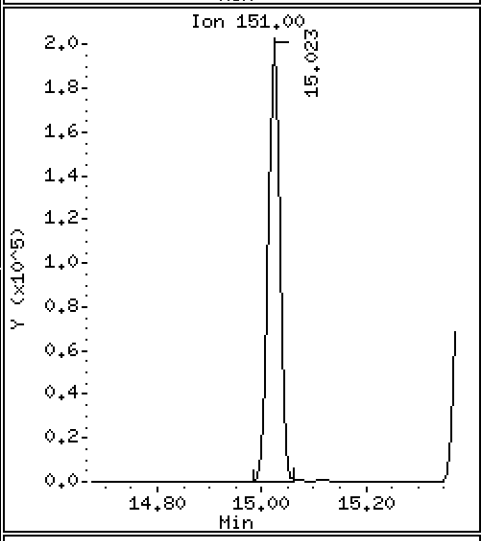
40 Acenaphthylene

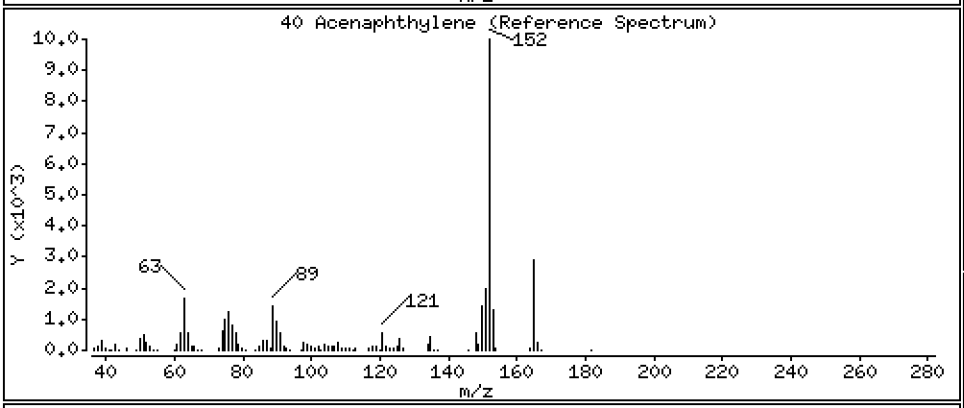
Concentration: 5.806 ug/mL

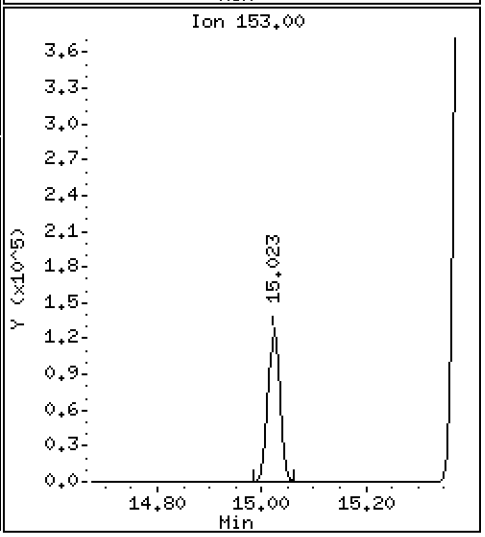


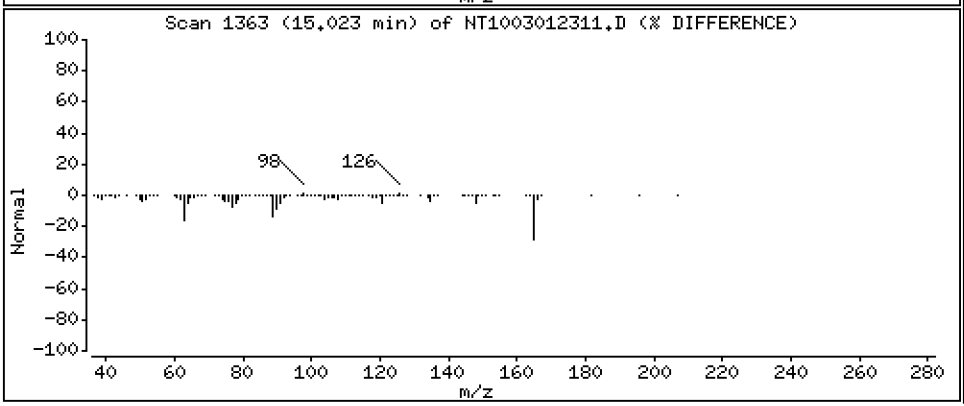












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

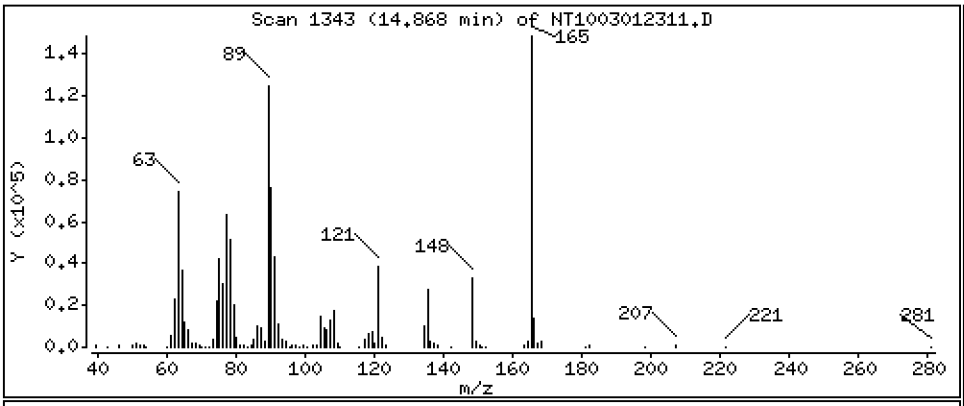
Operator: VTS

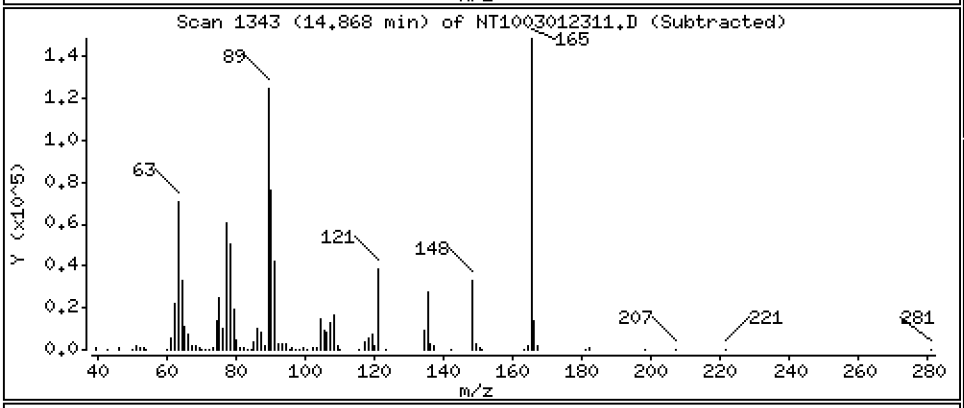
Column phase: ZB-5msi

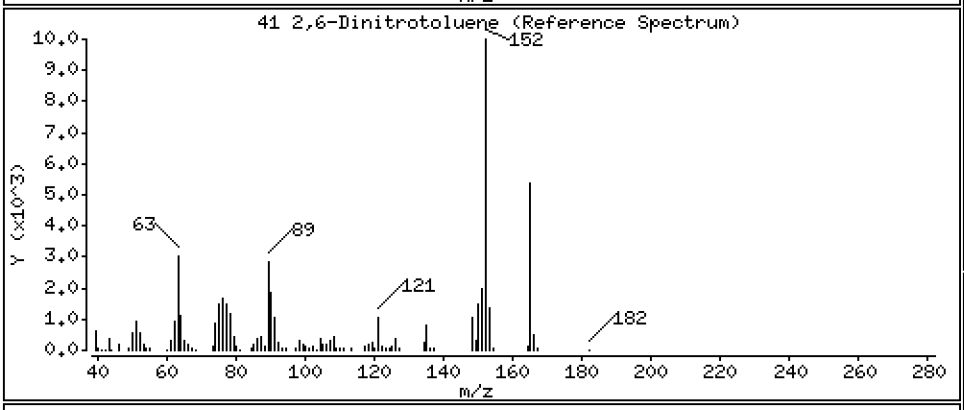
Column diameter: 0.25

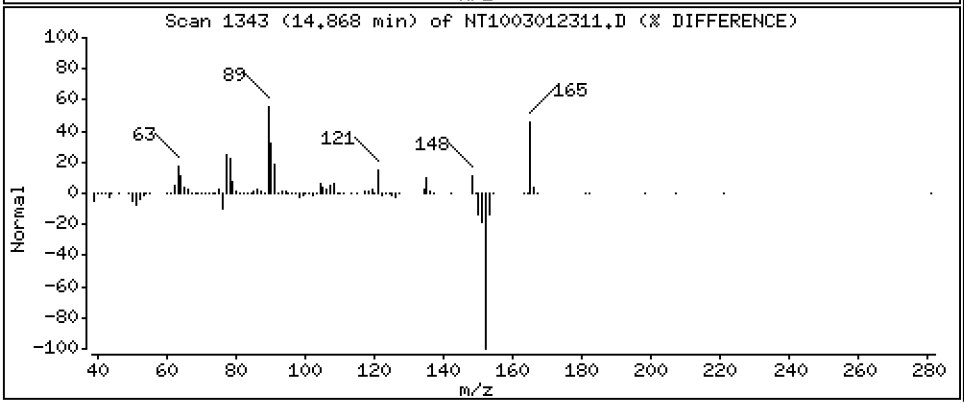
41 2,6-Dinitrotoluene

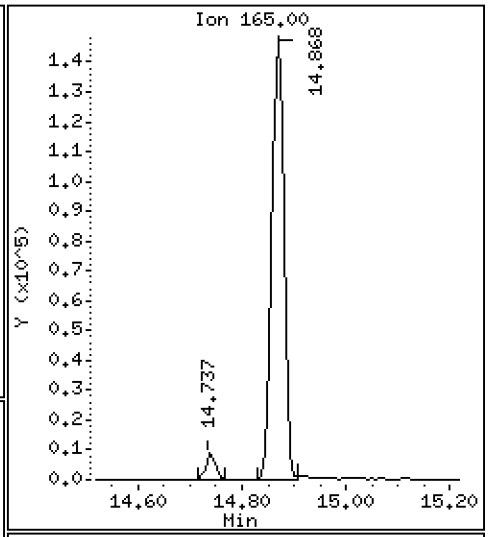
Concentration: 5.187 ug/mL

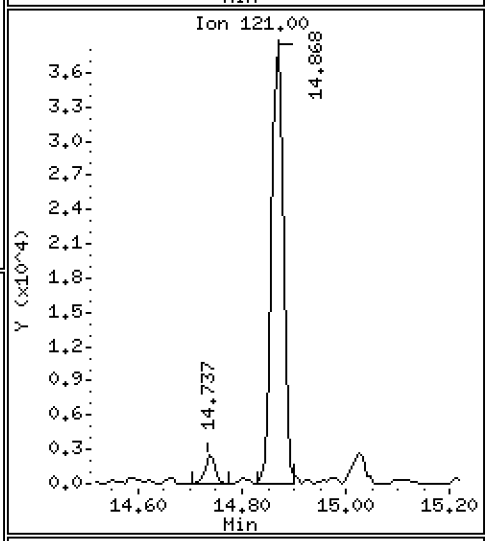


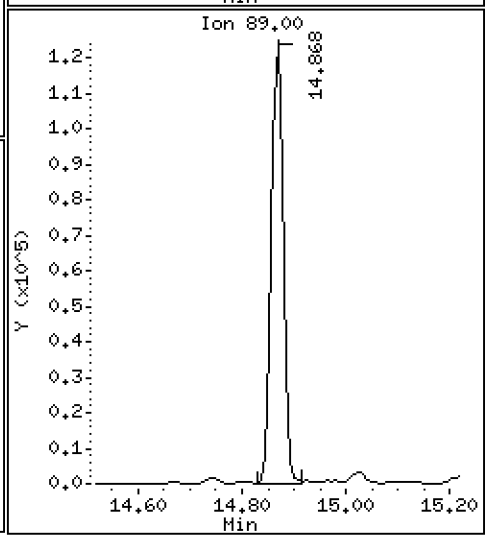












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

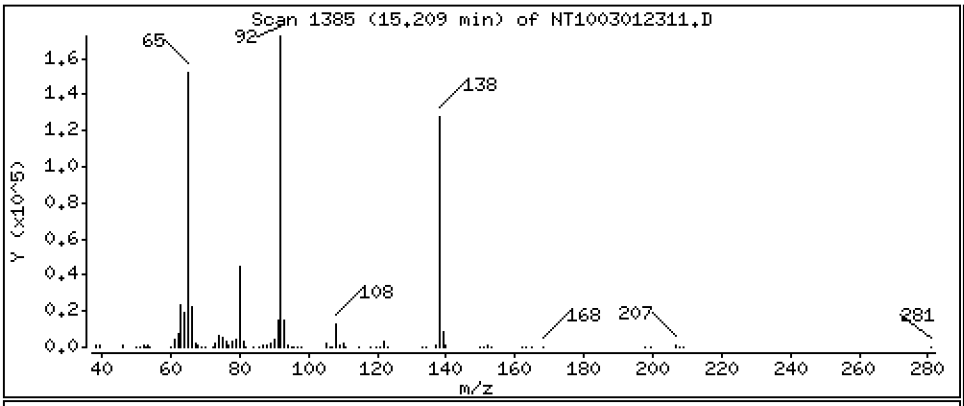
Operator: VTS

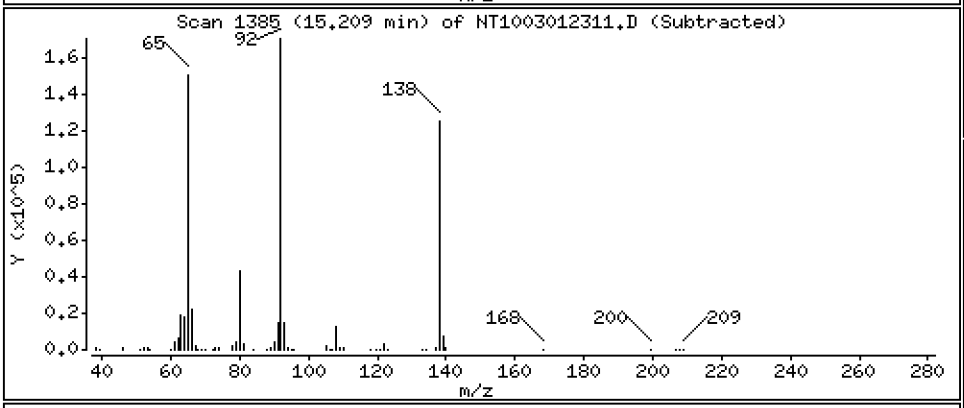
Column phase: ZB-5msi

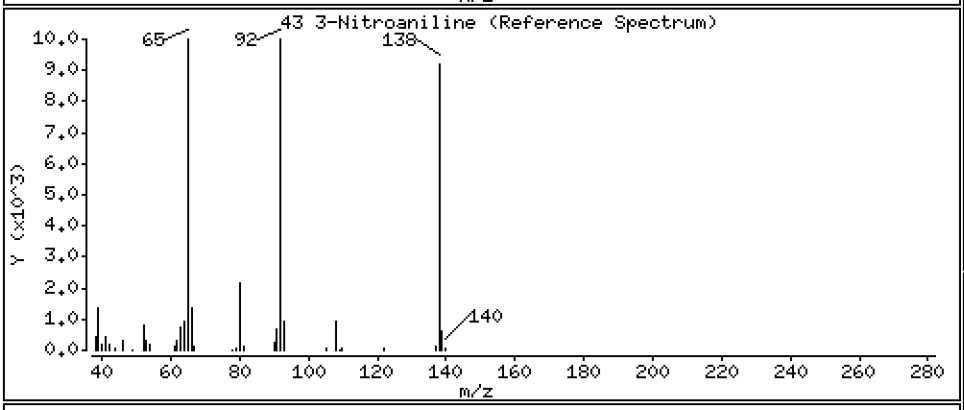
Column diameter: 0.25

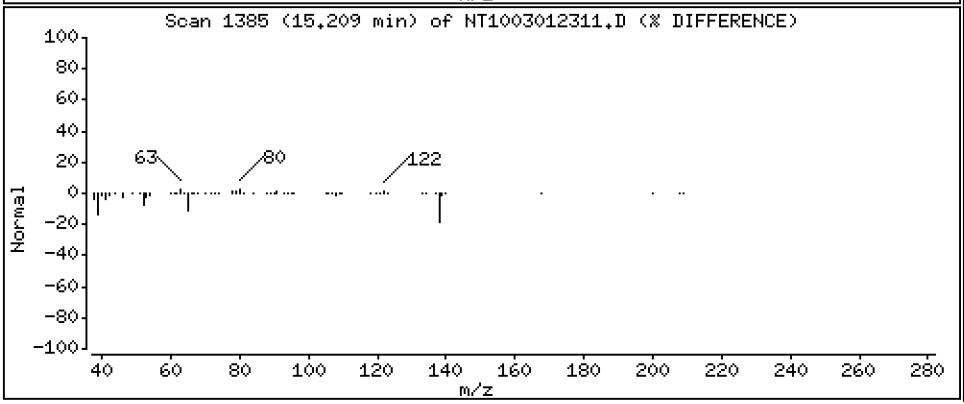
43 3-Nitroaniline

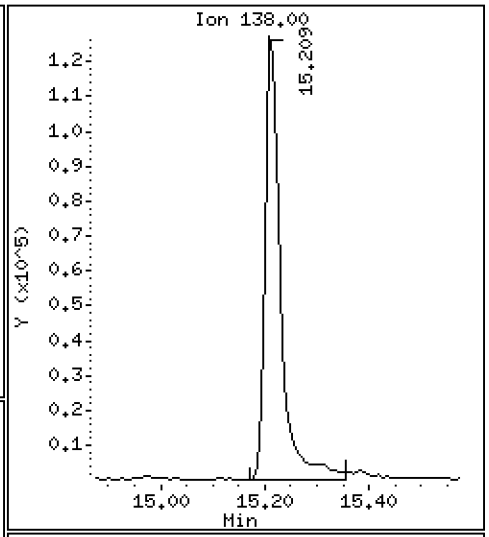
Concentration: 5.172 ug/mL

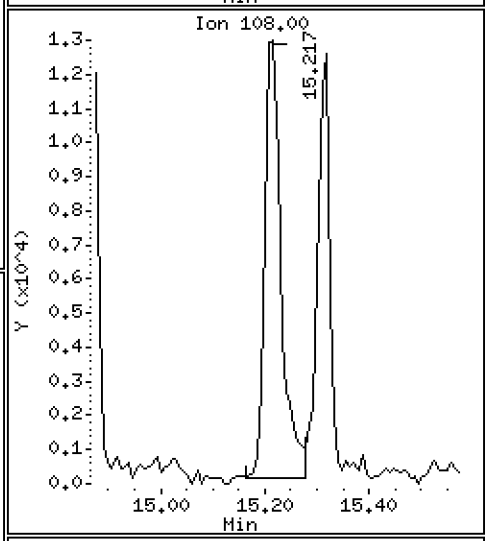


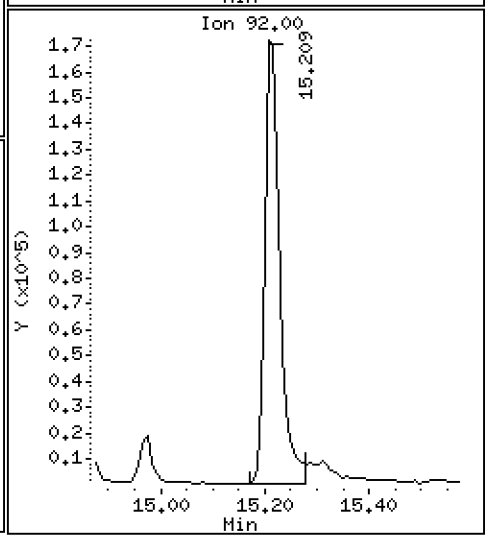












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

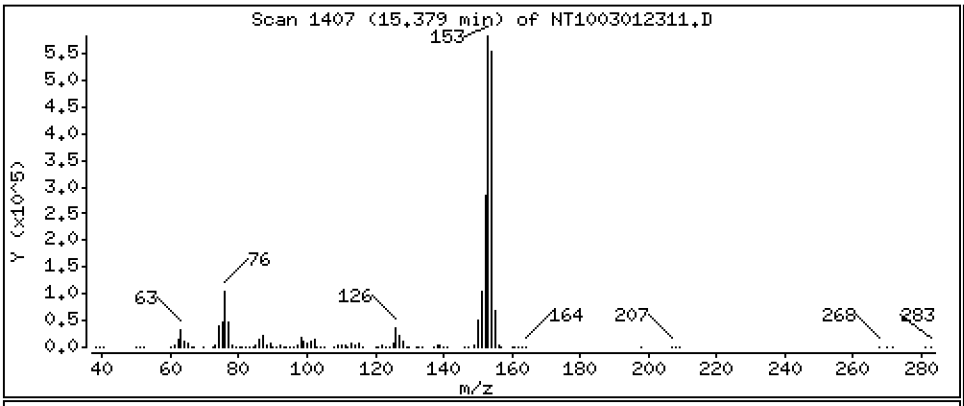
Operator: VTS

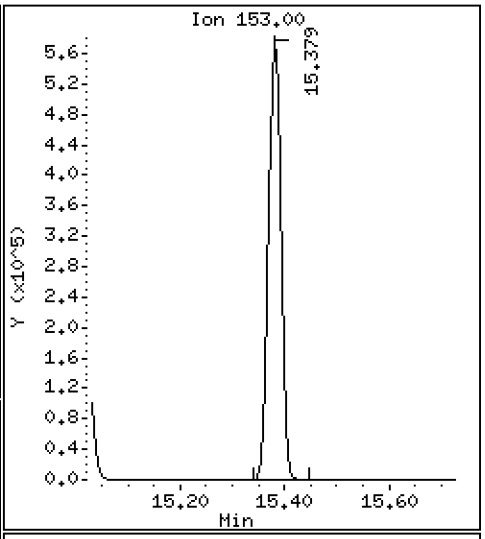
Column phase: ZB-5msi

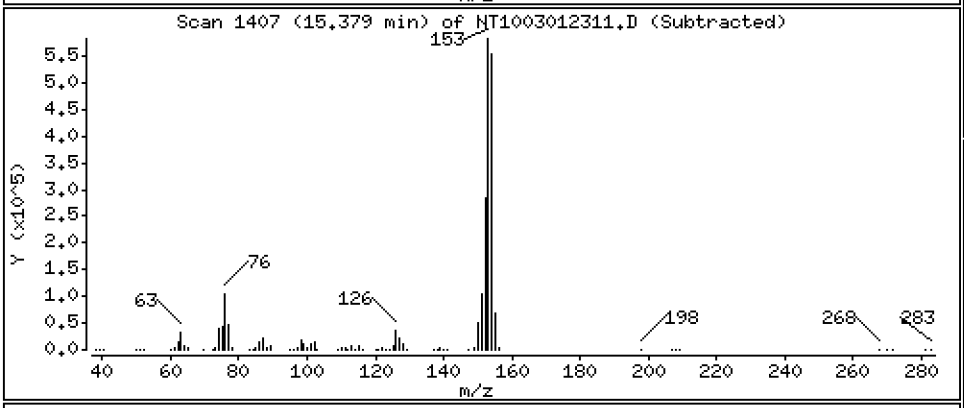
Column diameter: 0.25

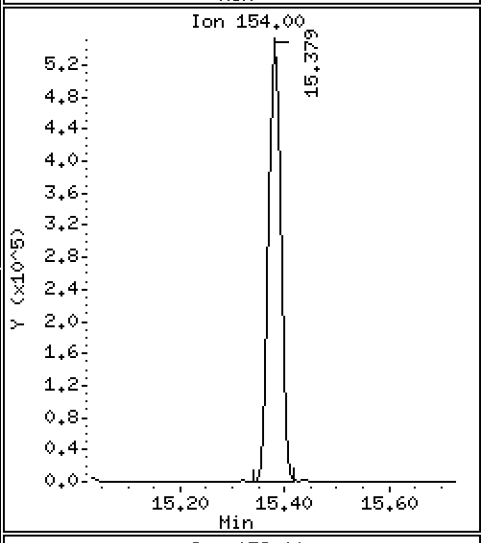
44 Acenaphthene

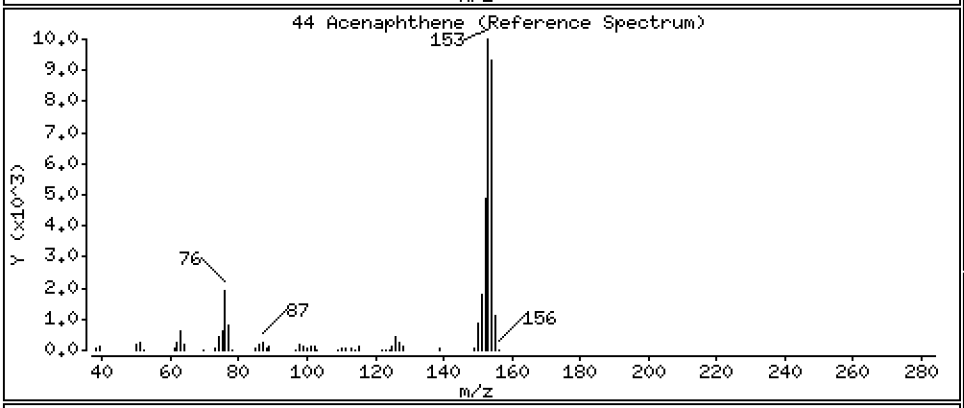
Concentration: 5.154 ug/mL

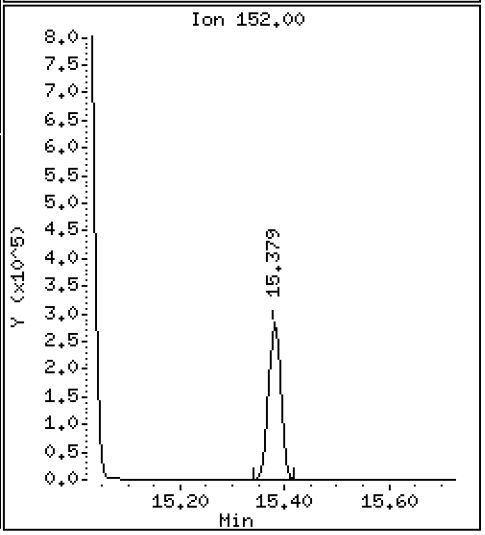


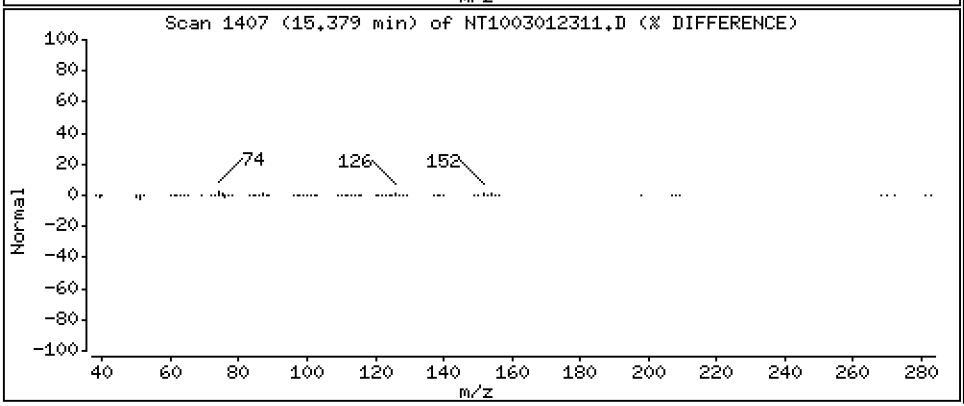












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

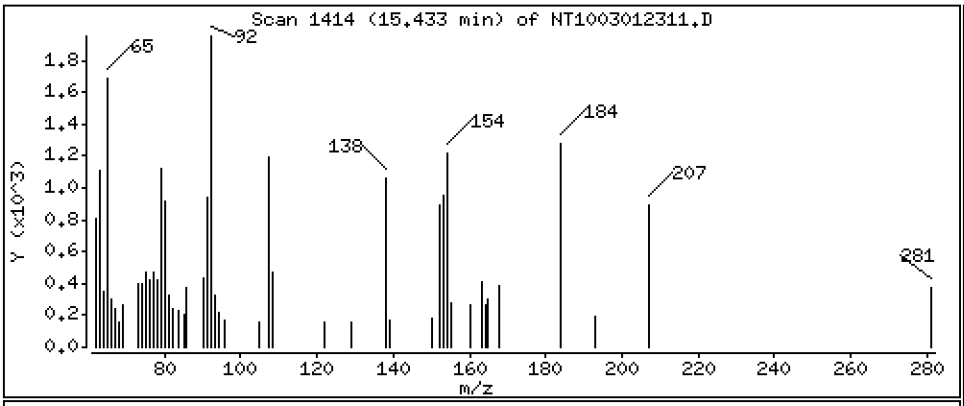
Operator: VTS

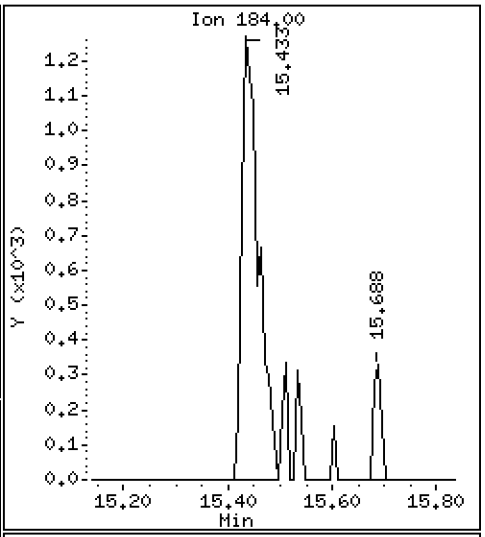
Column phase: ZB-5msi

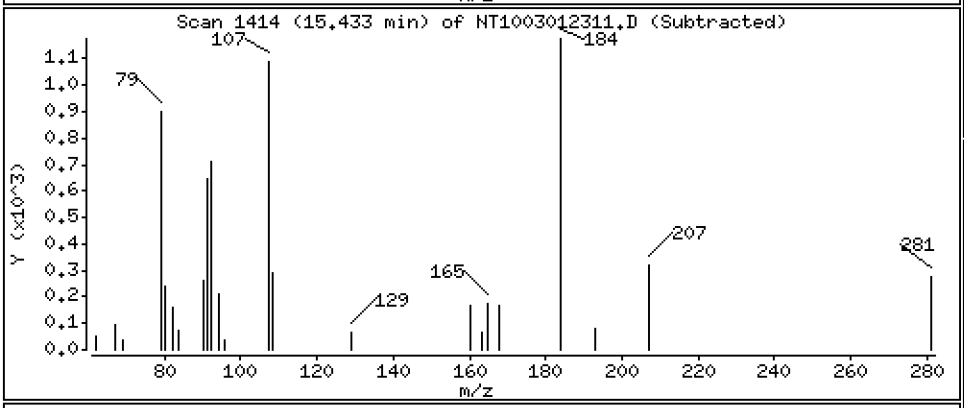
Column diameter: 0.25

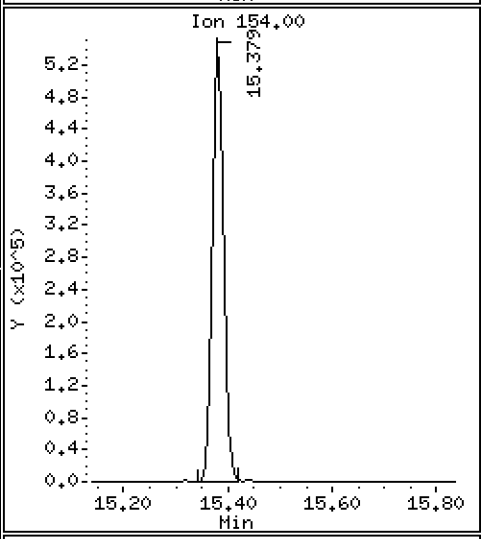
45 2,4-Dinitrophenol

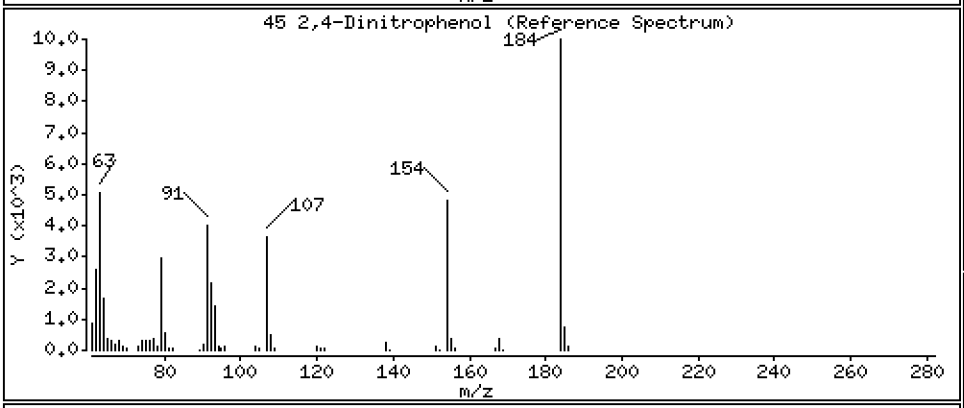
Concentration: 0.2667 ug/mL

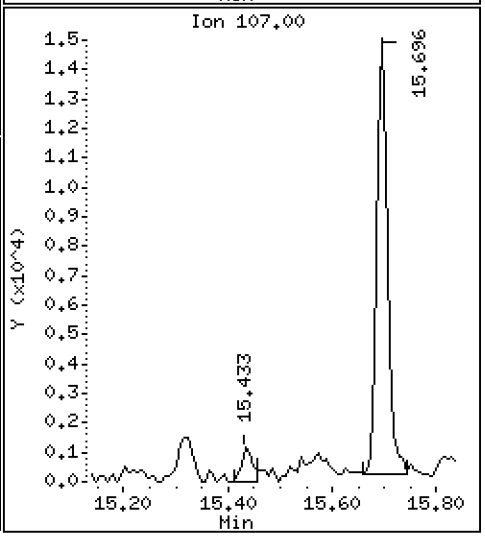


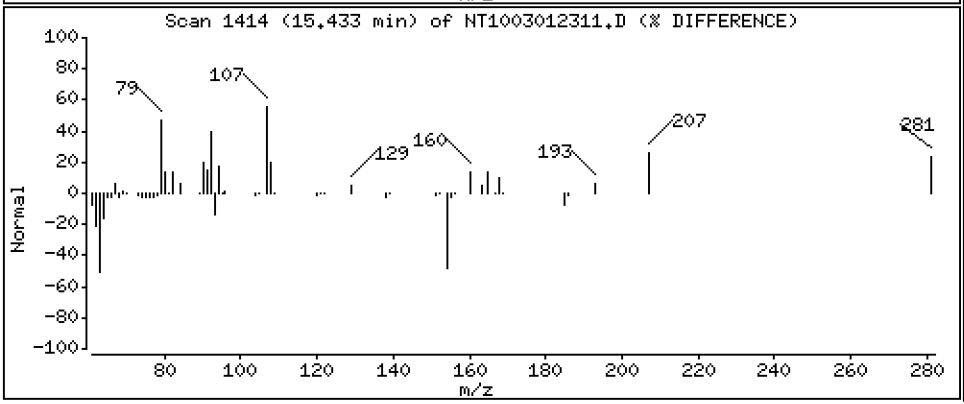












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

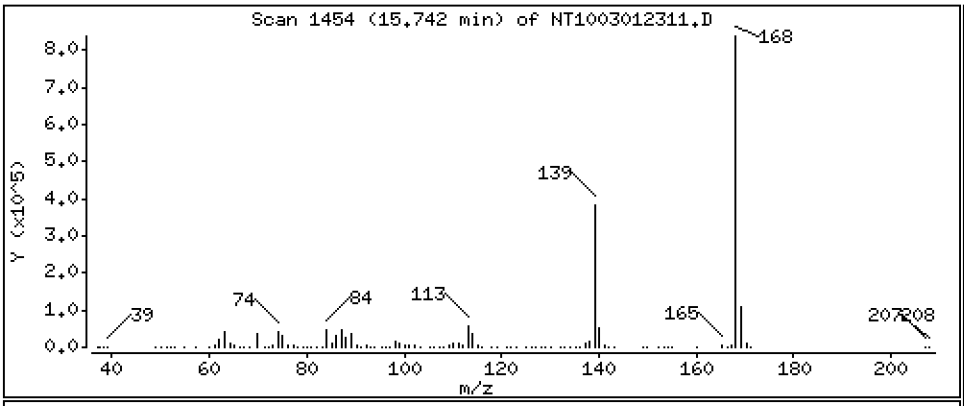
Operator: VTS

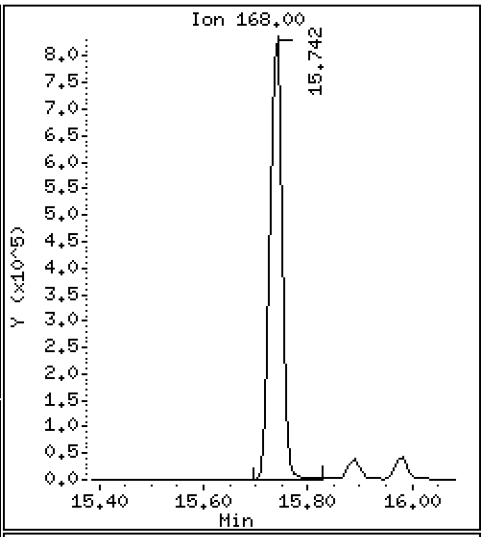
Column phase: ZB-5msi

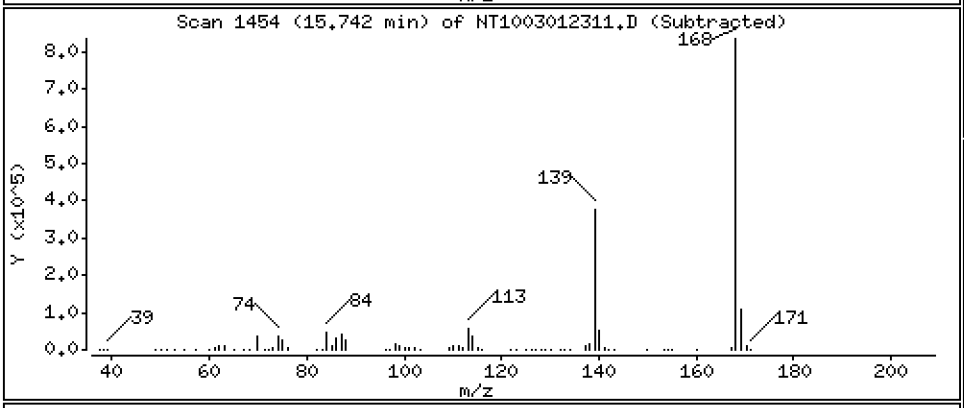
Column diameter: 0.25

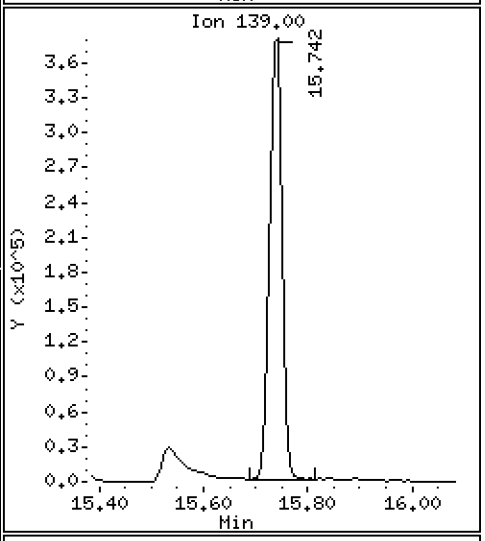
46 Dibenzofuran

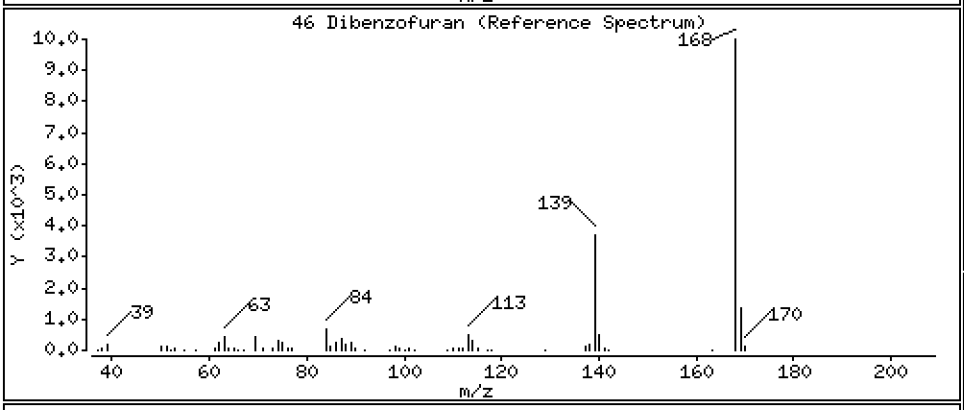
Concentration: 4.994 ug/mL

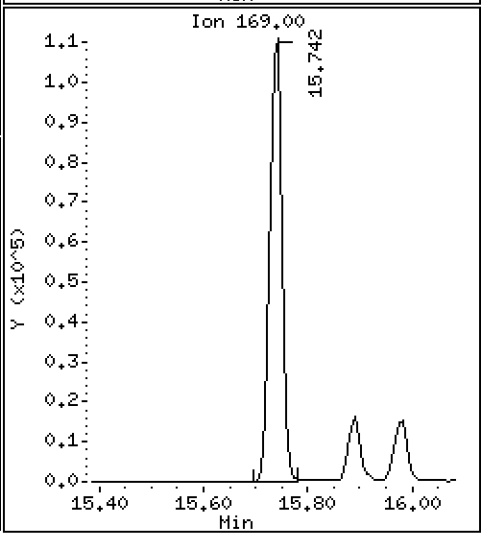


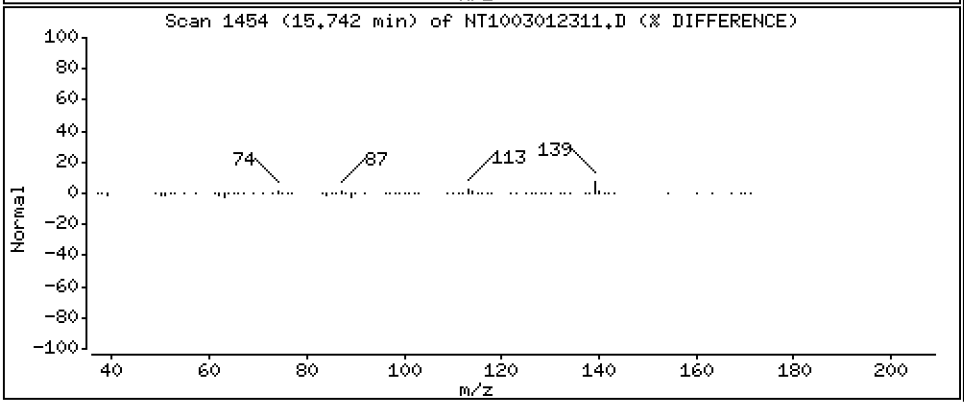












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

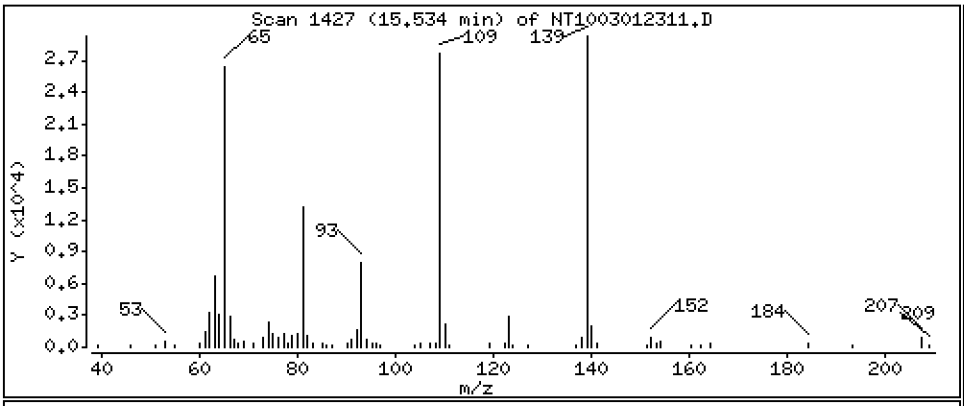
Operator: VTS

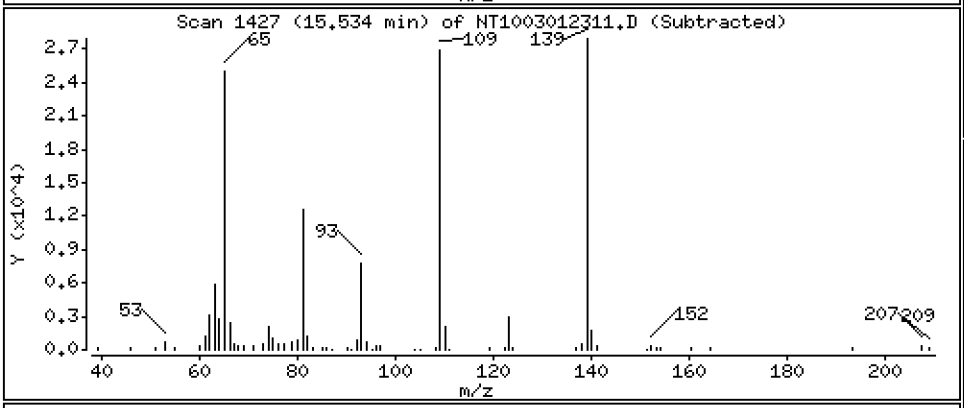
Column phase: ZB-5msi

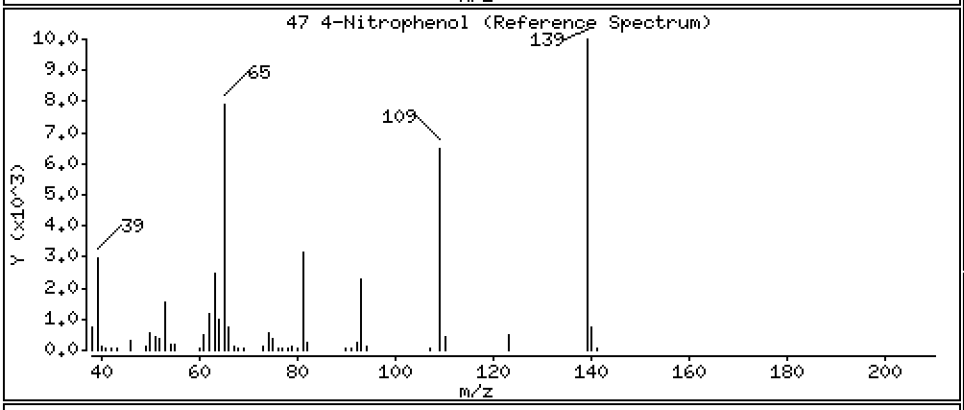
Column diameter: 0.25

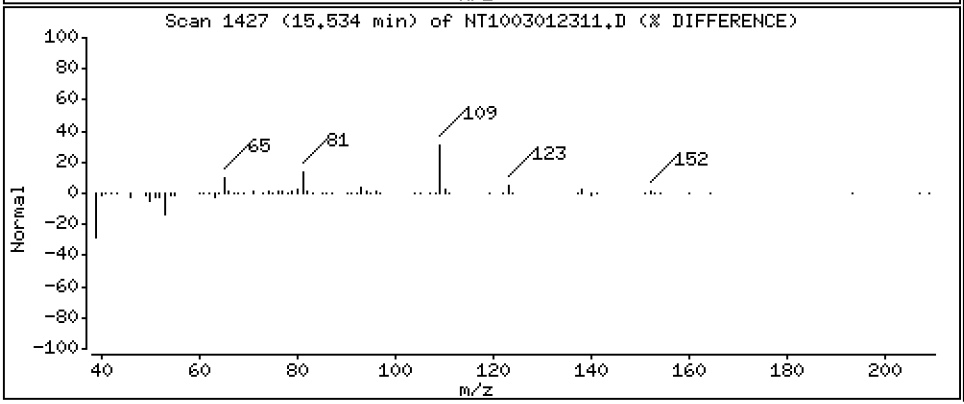
47 4-Nitrophenol

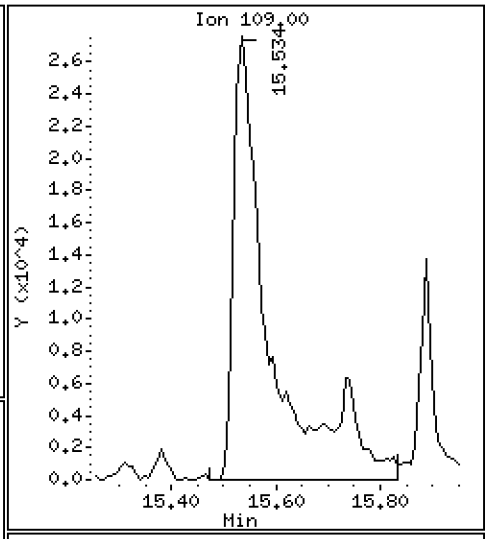
Concentration: 3.822 ug/mL

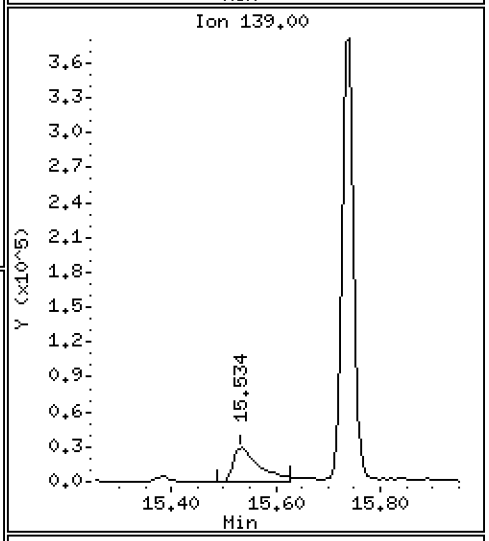


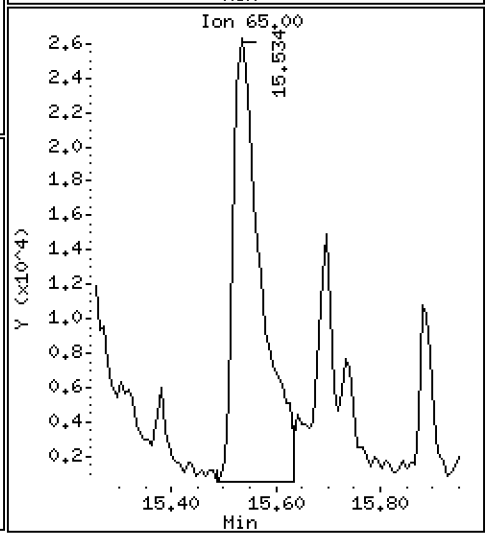












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

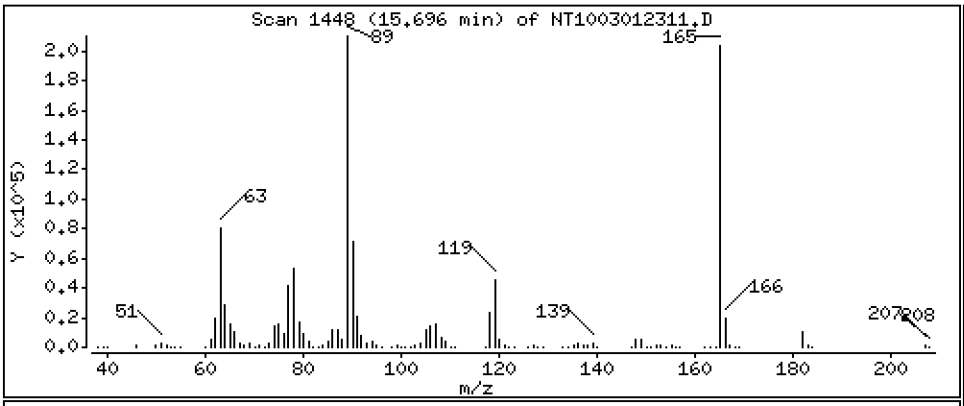
Operator: VTS

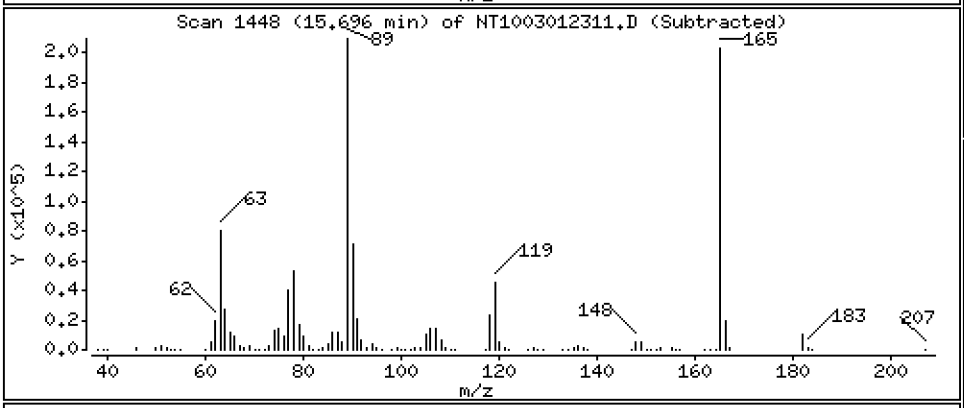
Column phase: ZB-5msi

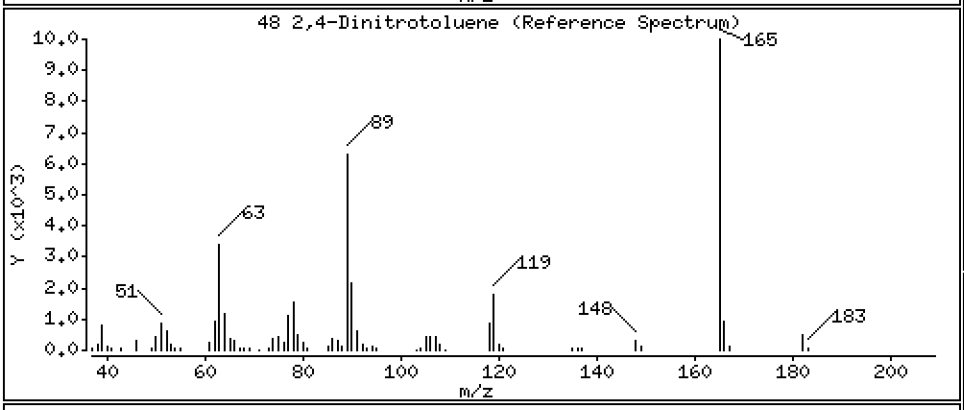
Column diameter: 0.25

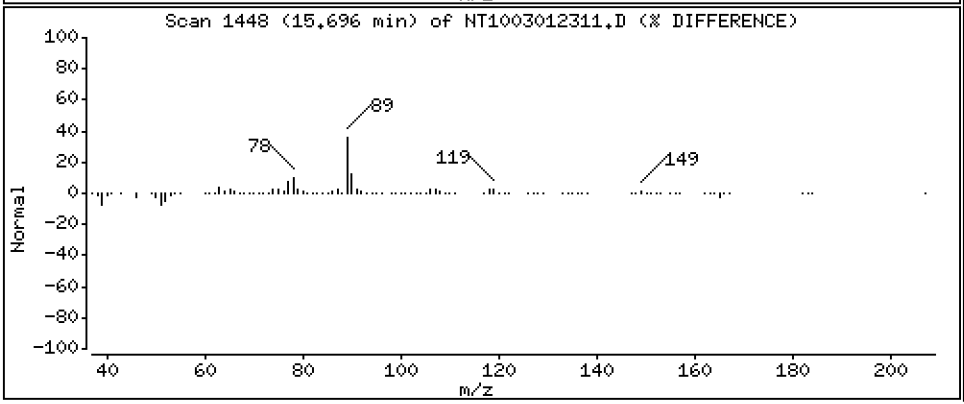
48 2,4-Dinitrotoluene

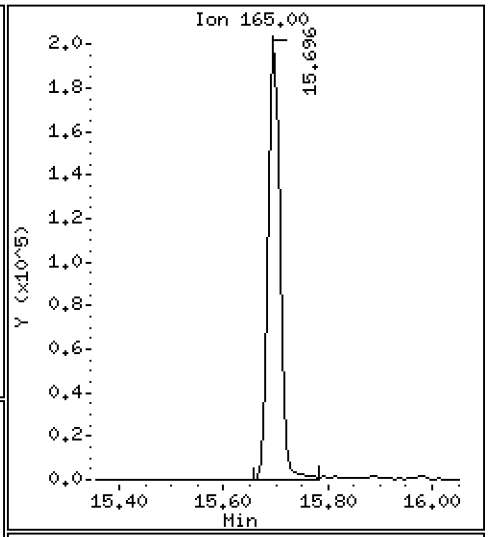
Concentration: 4.729 ug/mL

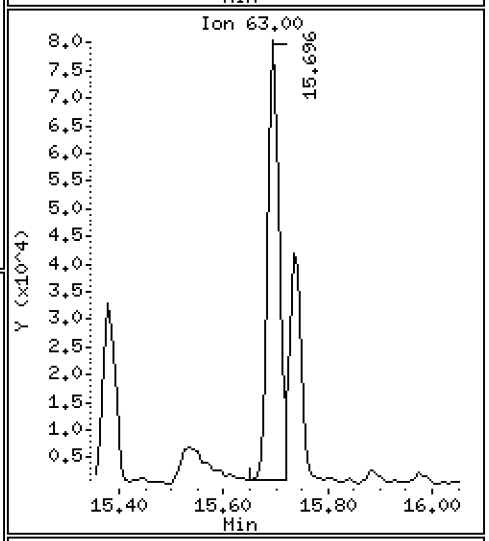


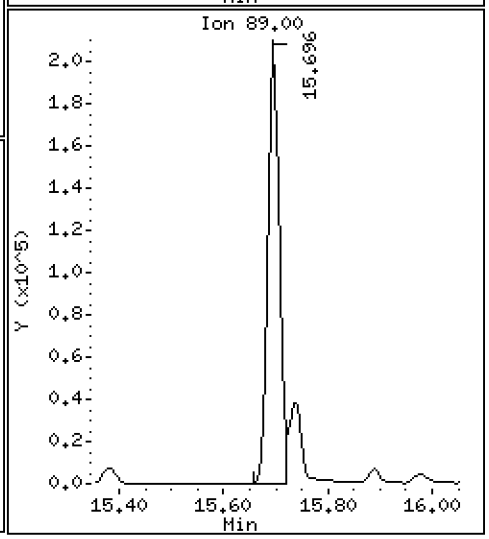












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

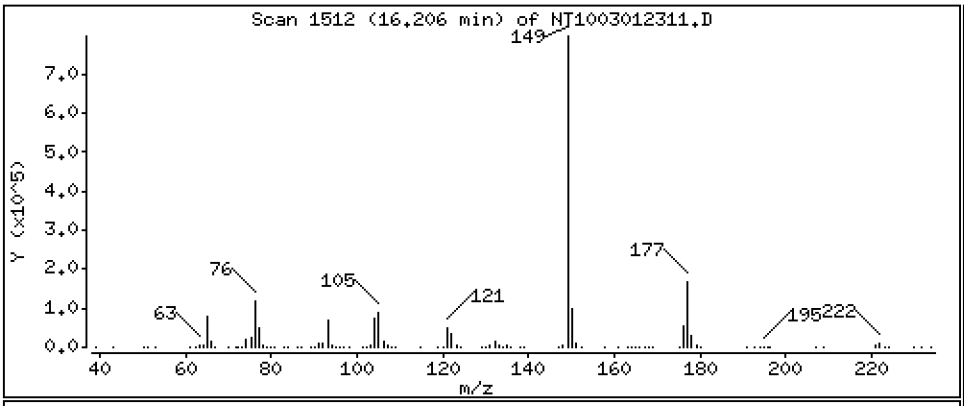
Operator: VTS

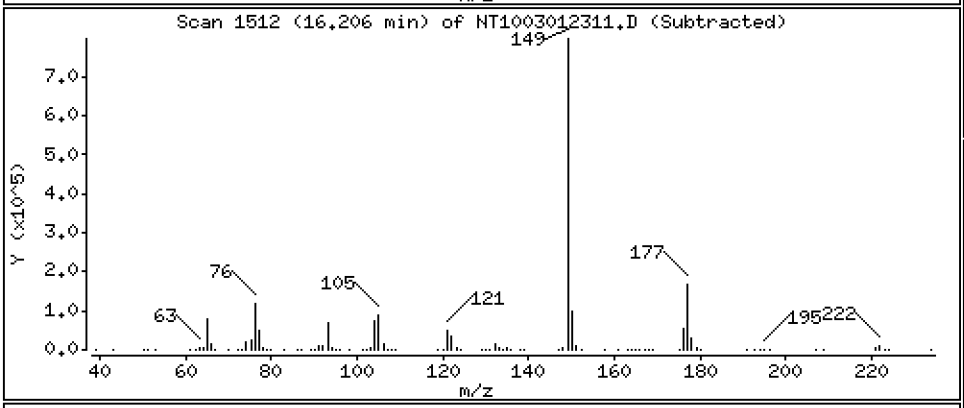
Column phase: ZB-5msi

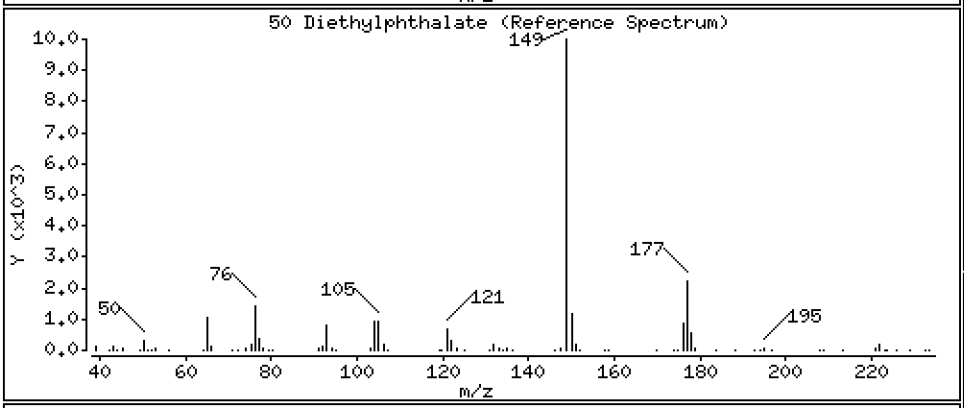
Column diameter: 0.25

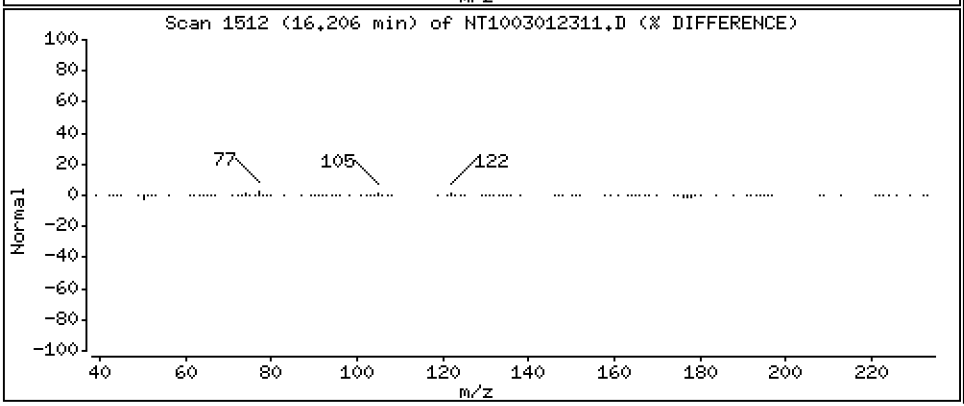
50 Diethylphthalate

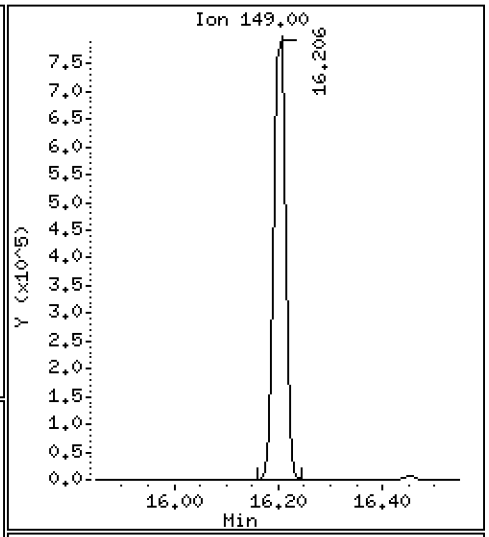
Concentration: 5.639 ug/mL

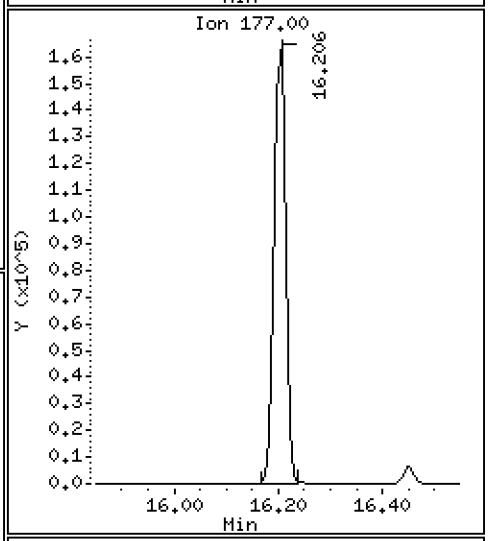


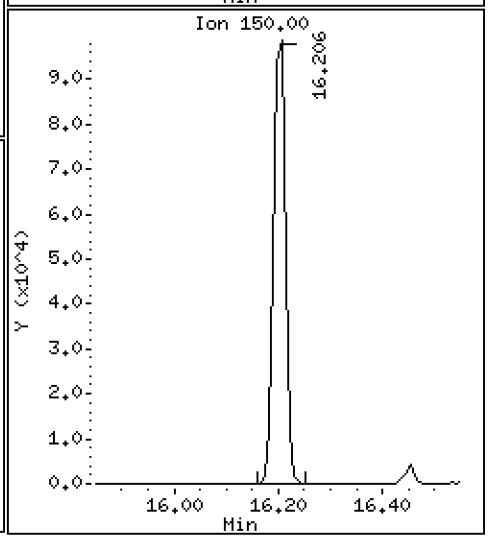












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

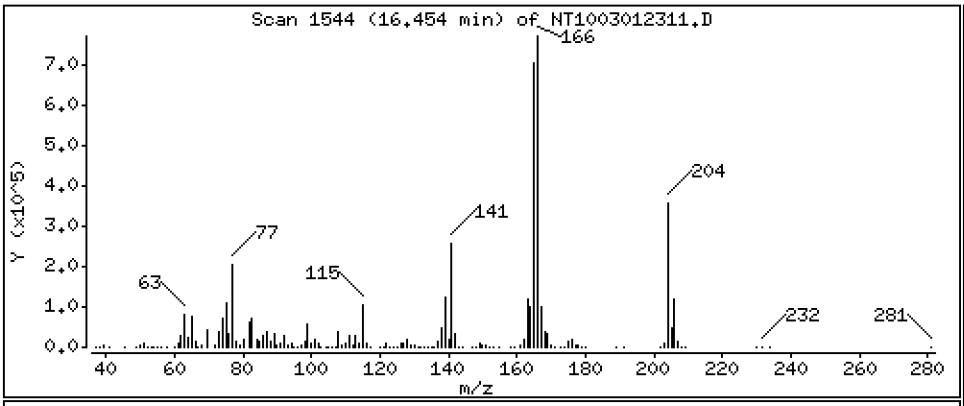
Operator: VTS

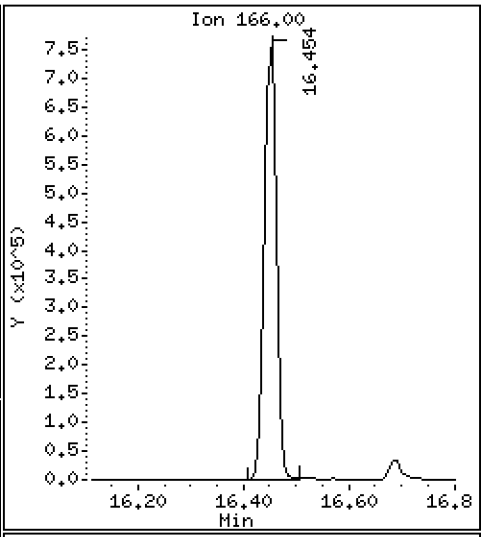
Column phase: ZB-5msi

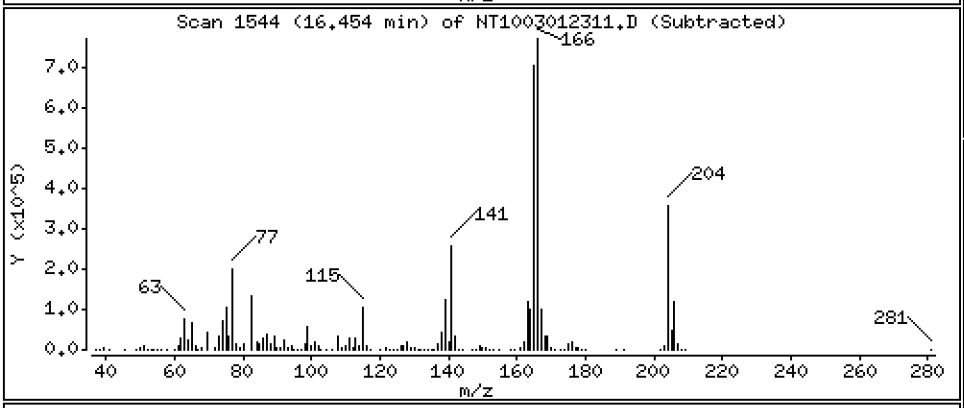
Column diameter: 0.25

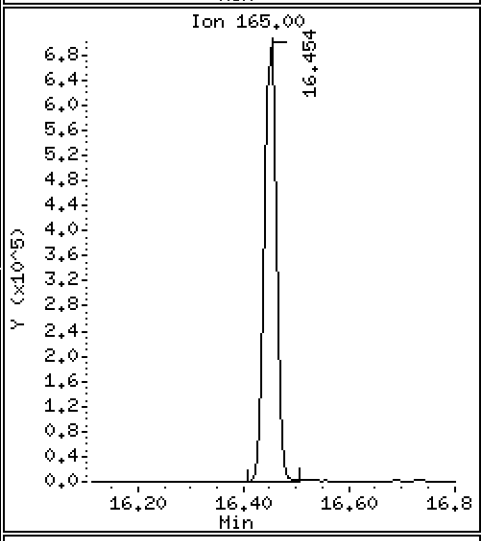
49 Fluorene

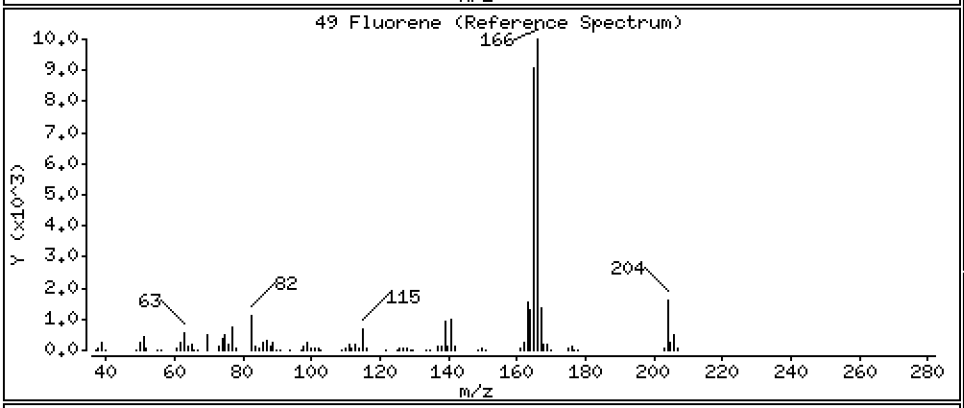
Concentration: 5.305 ug/mL

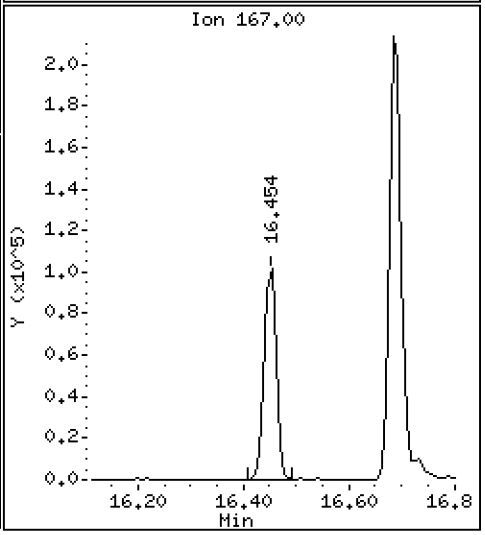


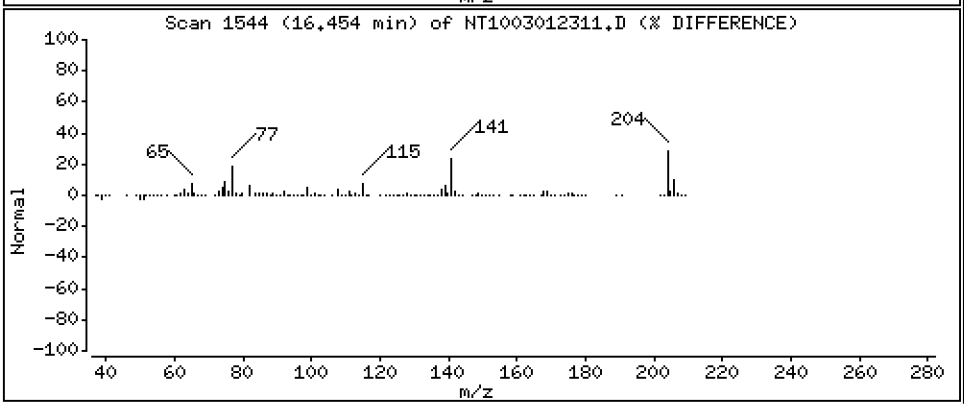












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

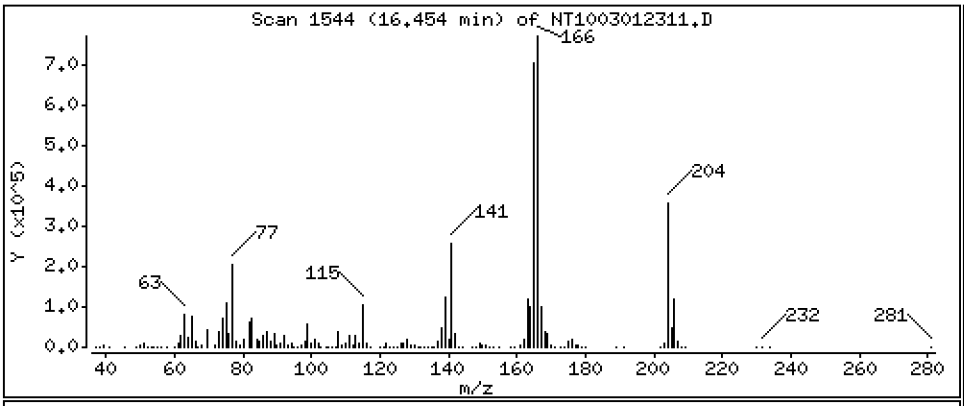
Operator: VTS

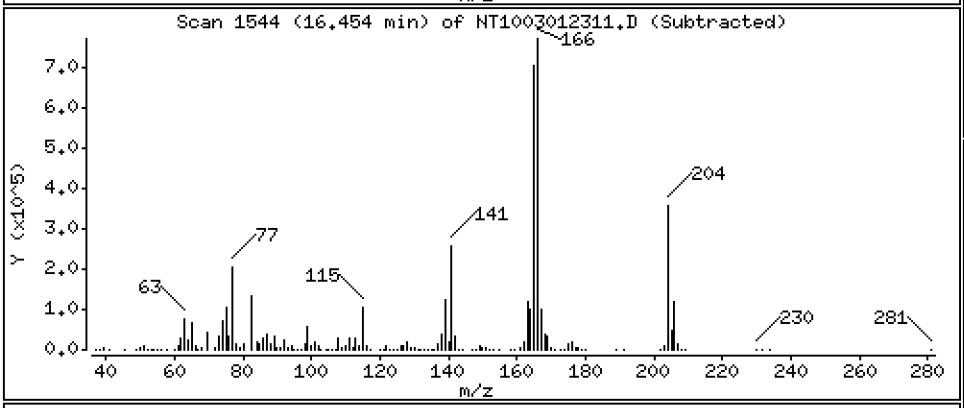
Column phase: ZB-5msi

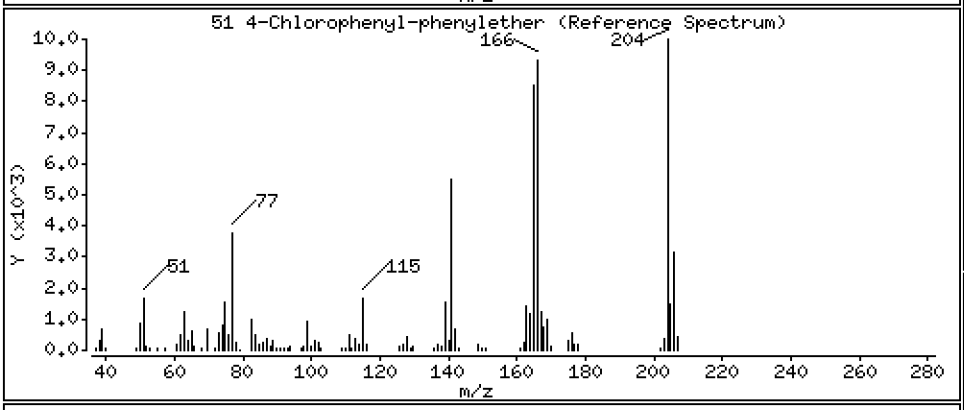
Column diameter: 0.25

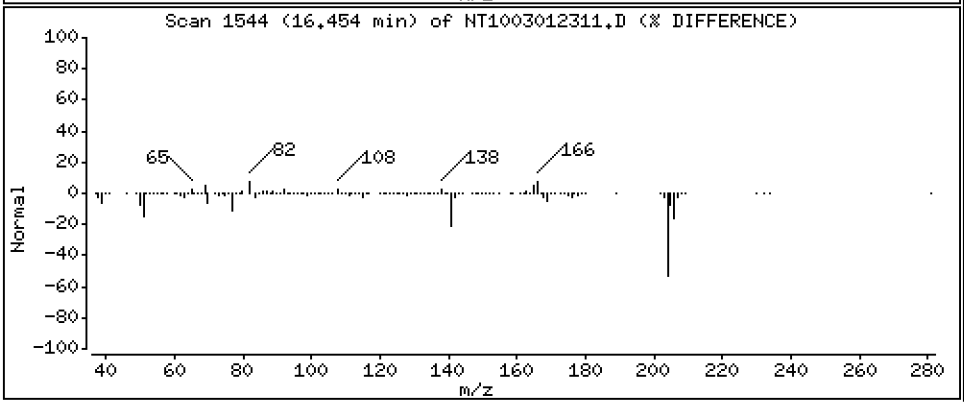
51 4-Chlorophenyl-phenylether

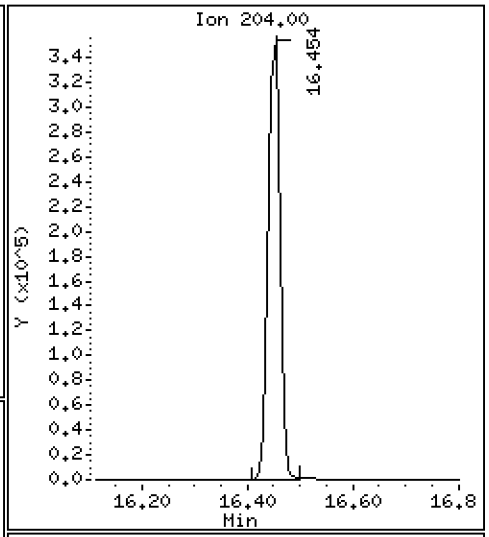
Concentration: 5.253 ug/mL

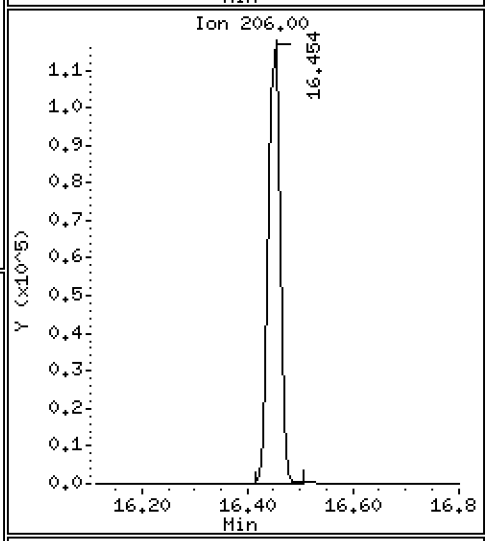


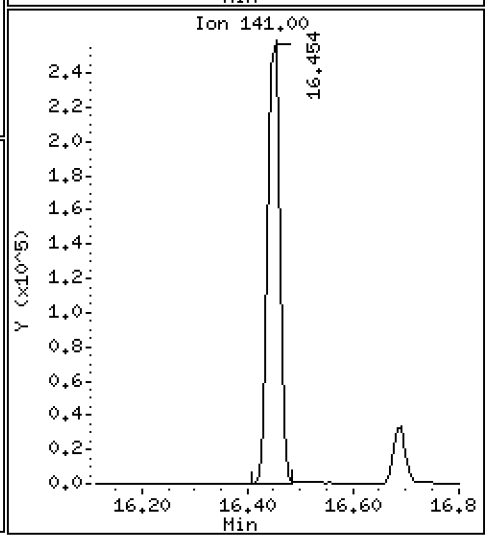












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

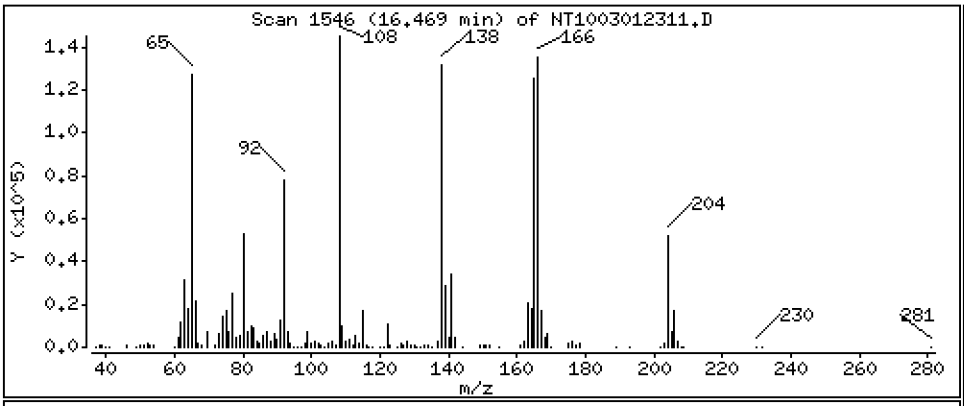
Operator: VTS

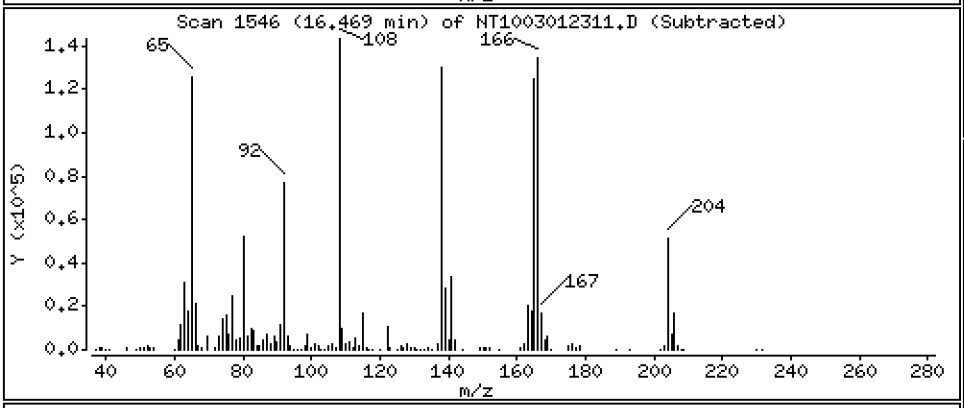
Column phase: ZB-5msi

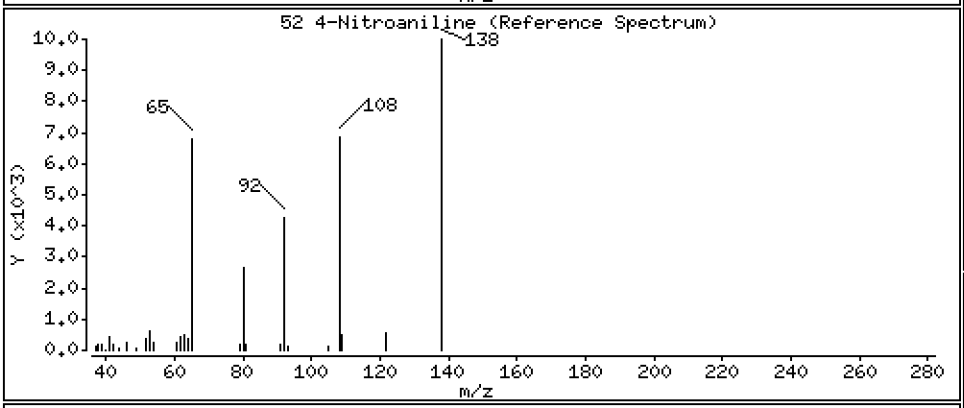
Column diameter: 0.25

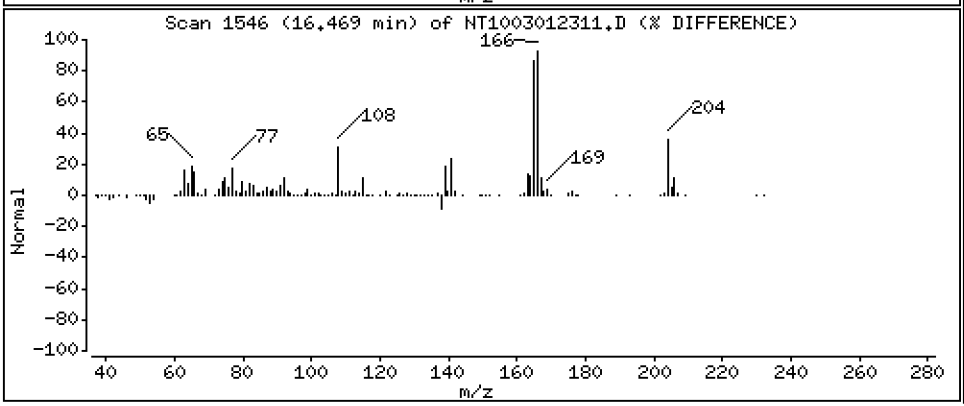
52 4-Nitroaniline

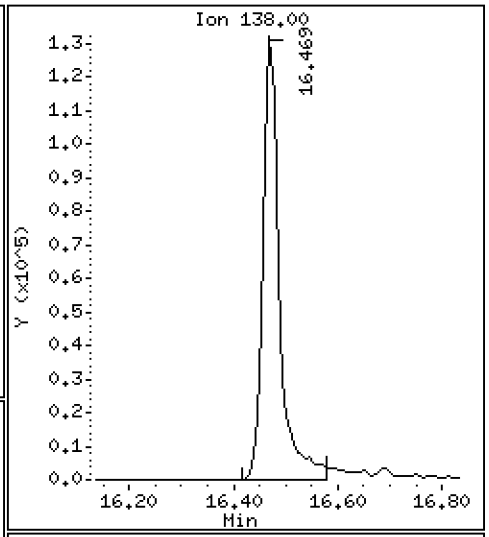
Concentration: 5.232 ug/mL

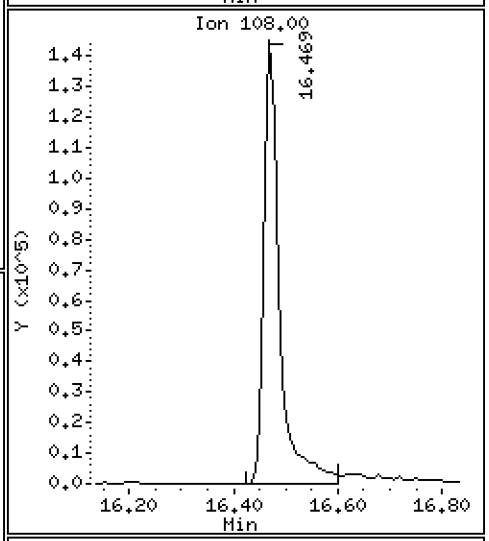


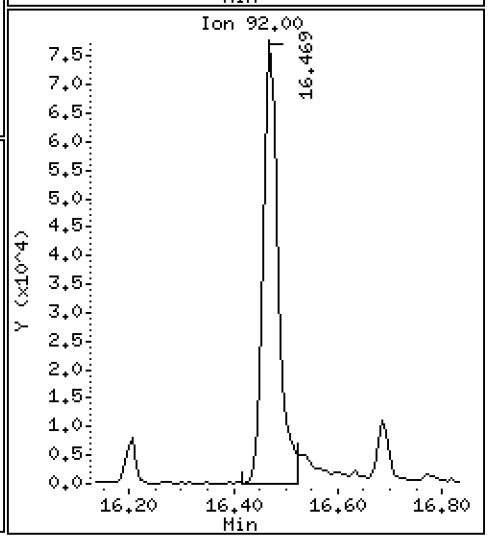












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

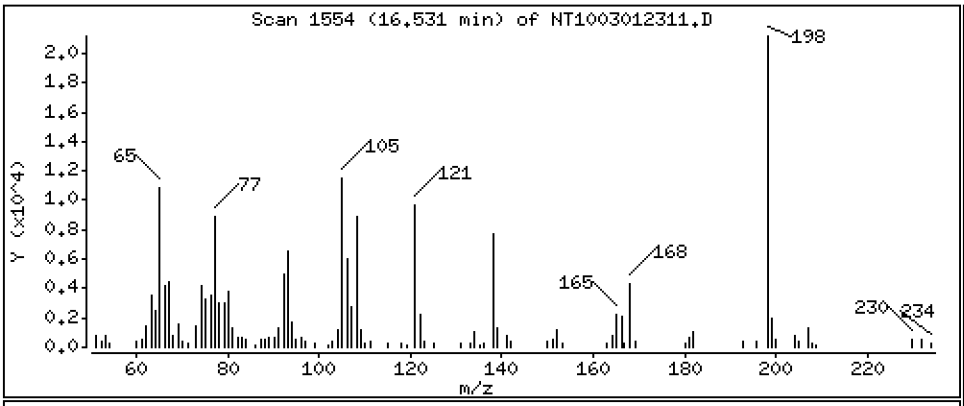
Operator: VTS

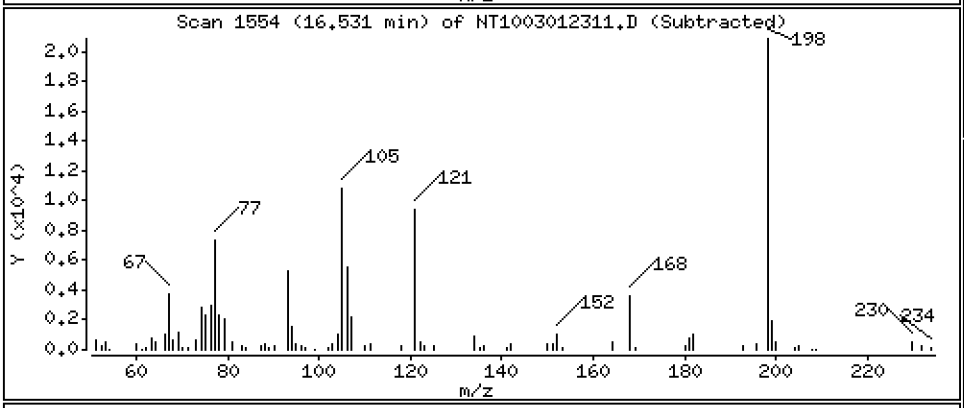
Column phase: ZB-5msi

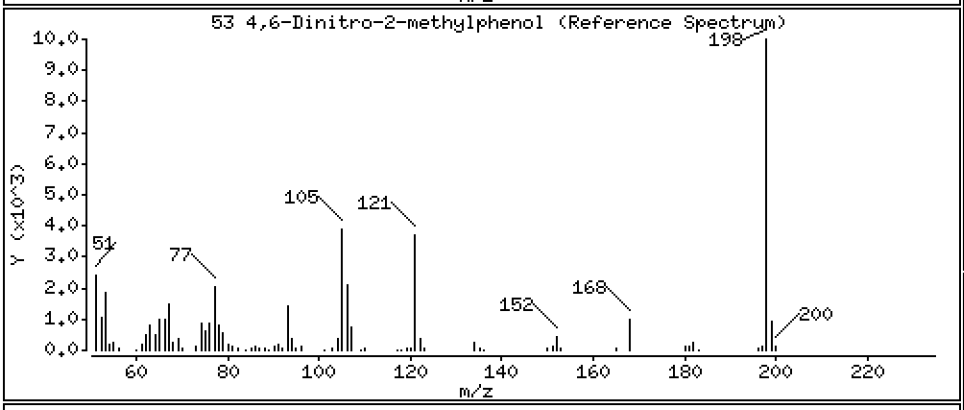
Column diameter: 0.25

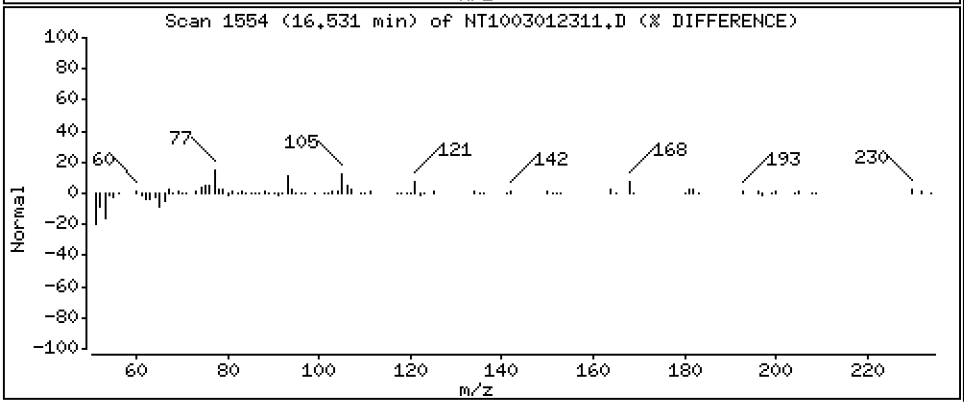
53 4,6-Dinitro-2-methylphenol

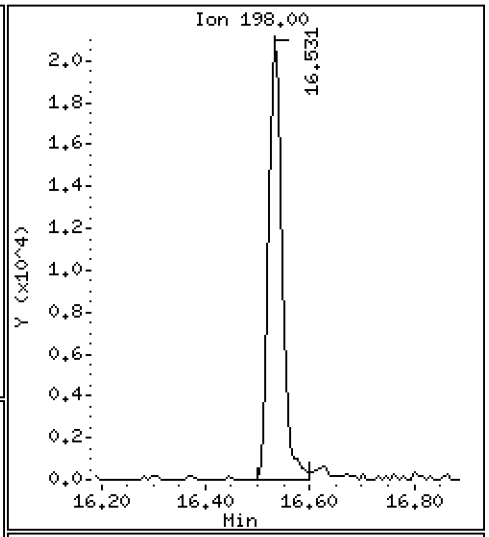
Concentration: 1.292 ug/mL

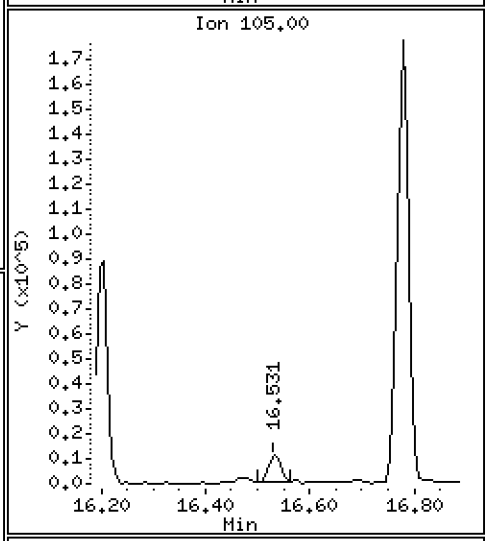


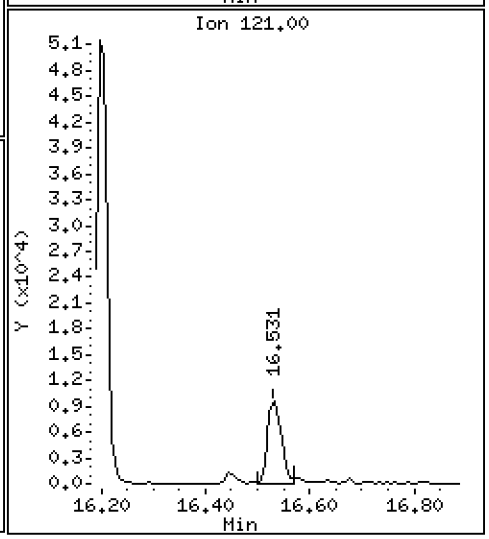












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

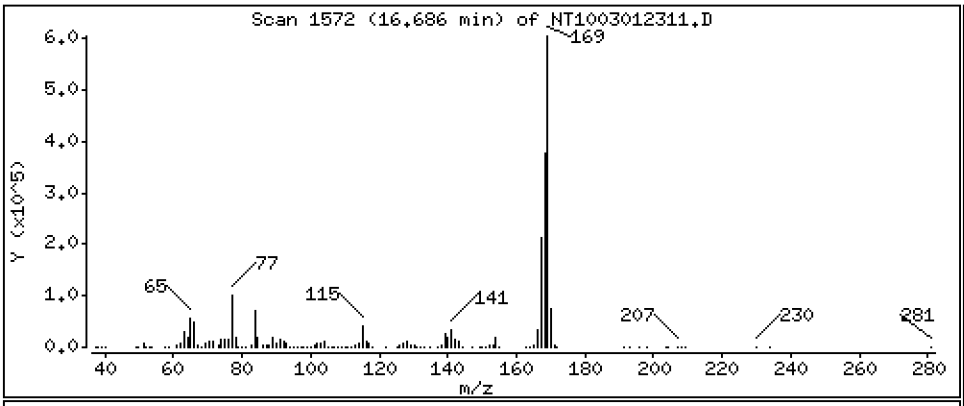
Operator: VTS

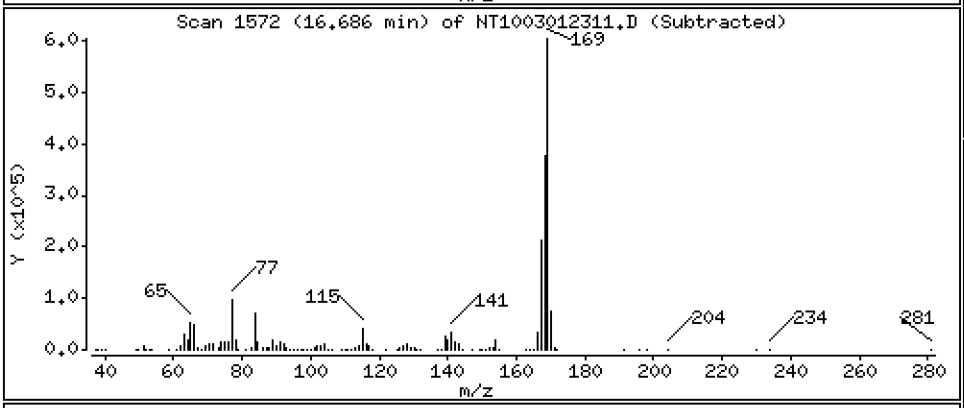
Column phase: ZB-5msi

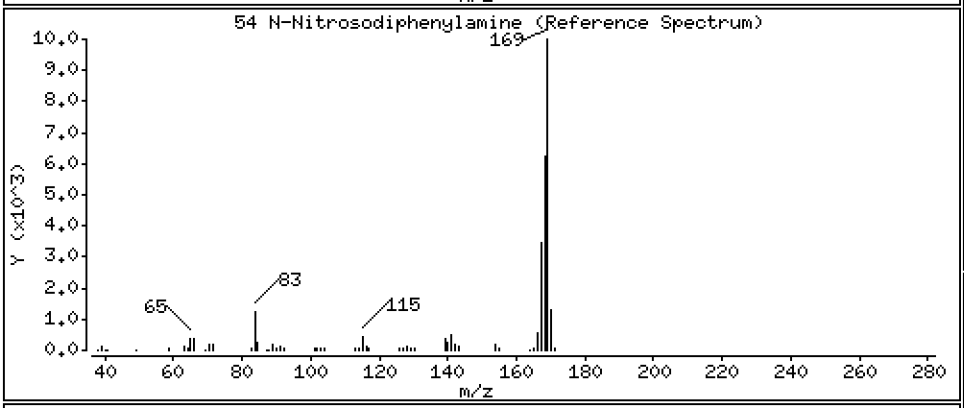
Column diameter: 0.25

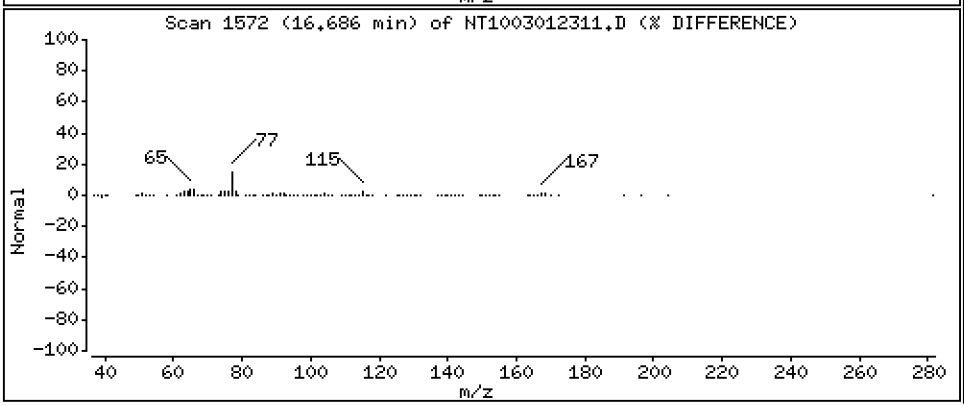
54 N-Nitrosodiphenylamine

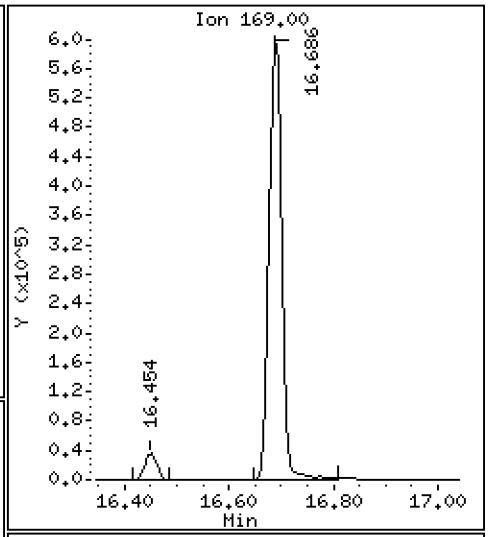
Concentration: 5.416 ug/mL

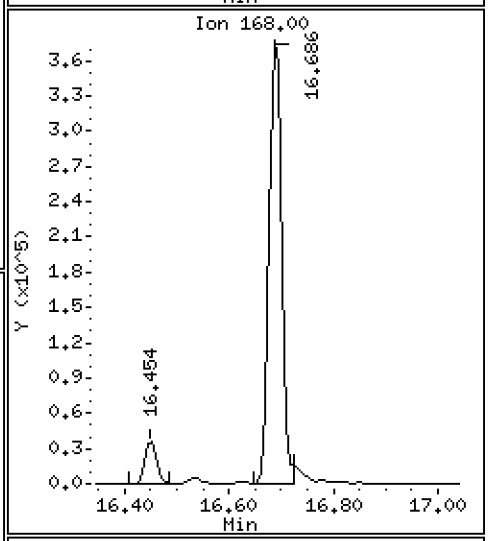


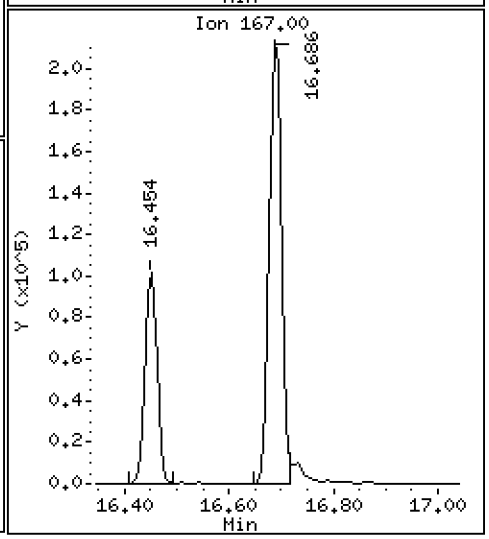












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

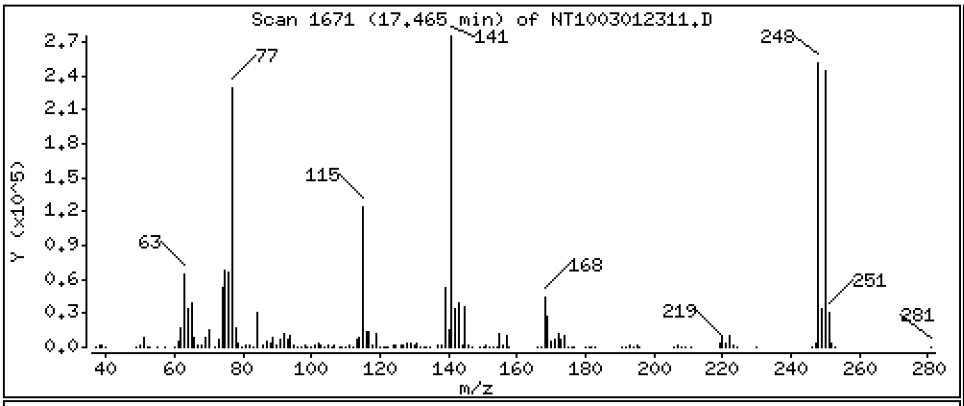
Operator: VTS

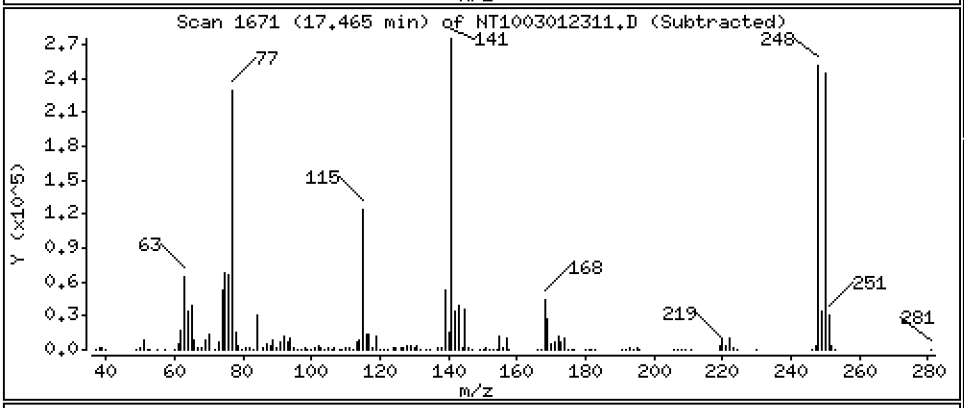
Column phase: ZB-5msi

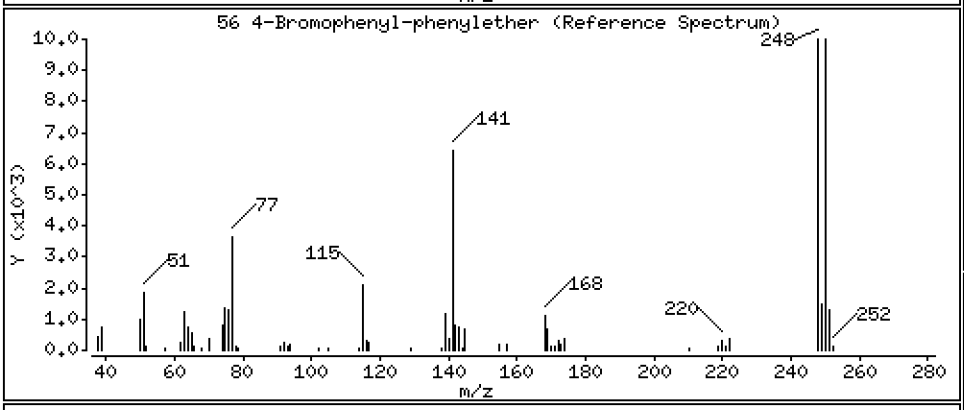
Column diameter: 0.25

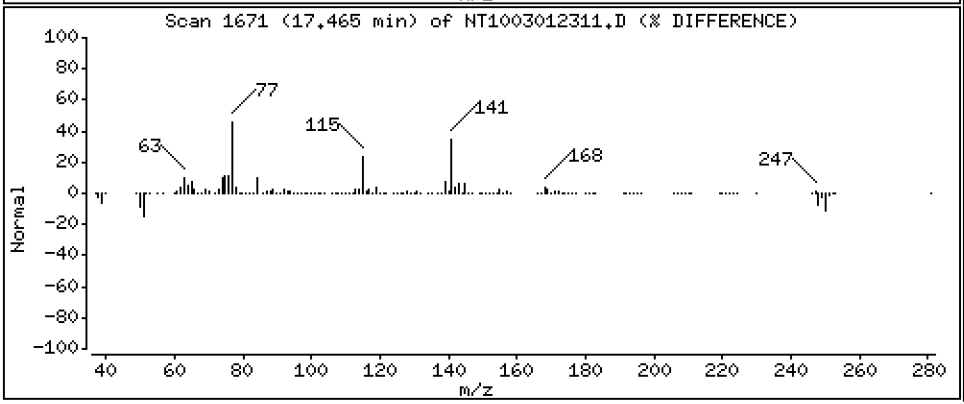
56 4-Bromophenyl-phenylether

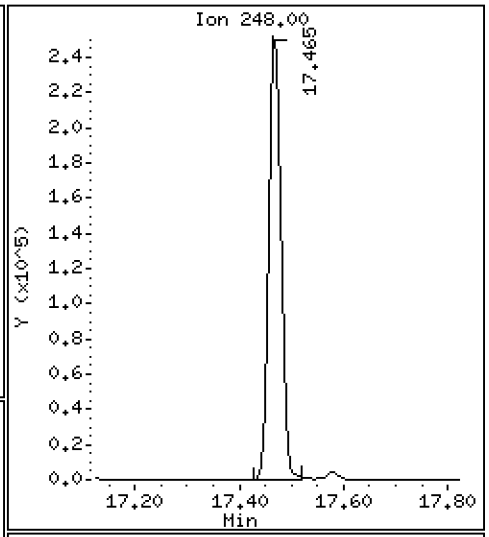
Concentration: 5.460 ug/mL

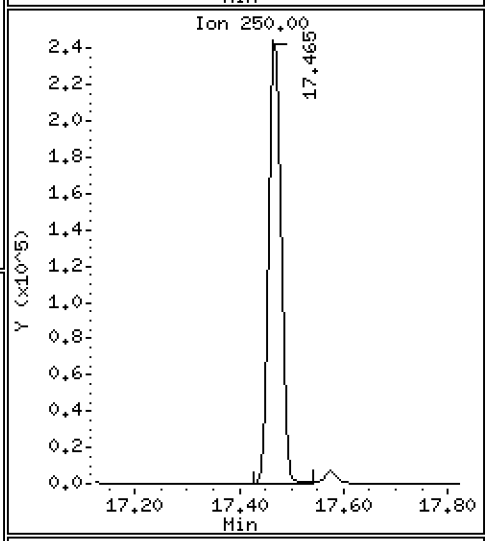


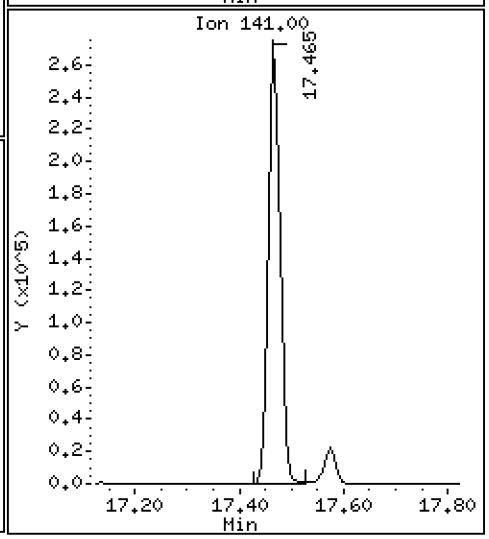












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

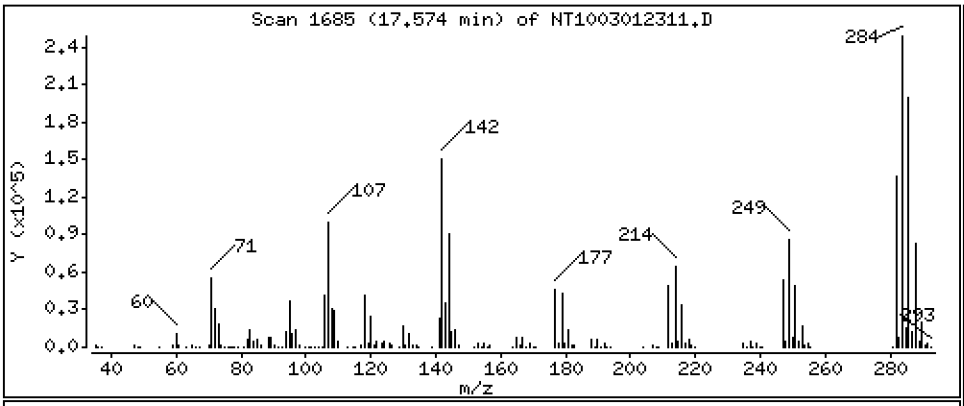
Operator: VTS

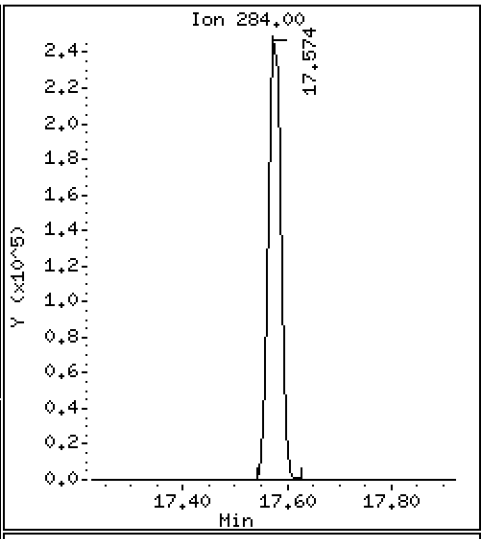
Column phase: ZB-5msi

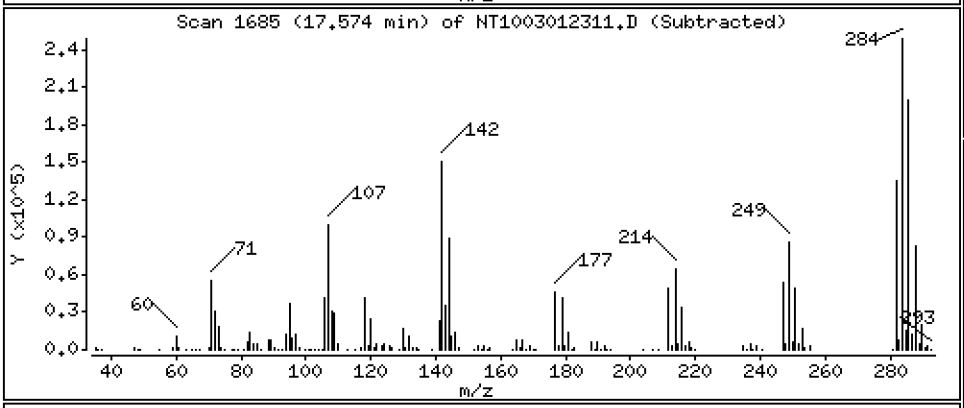
Column diameter: 0.25

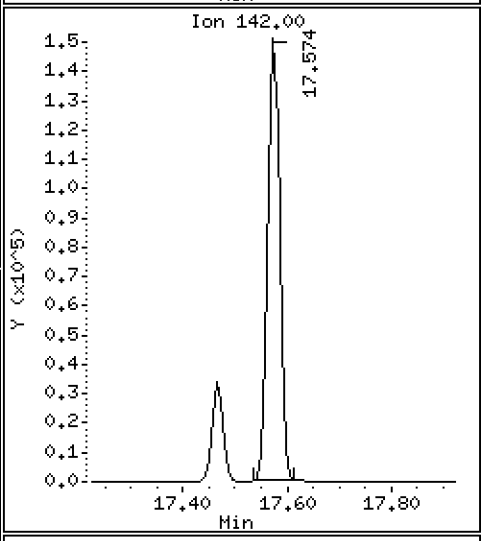
57 Hexachlorobenzene

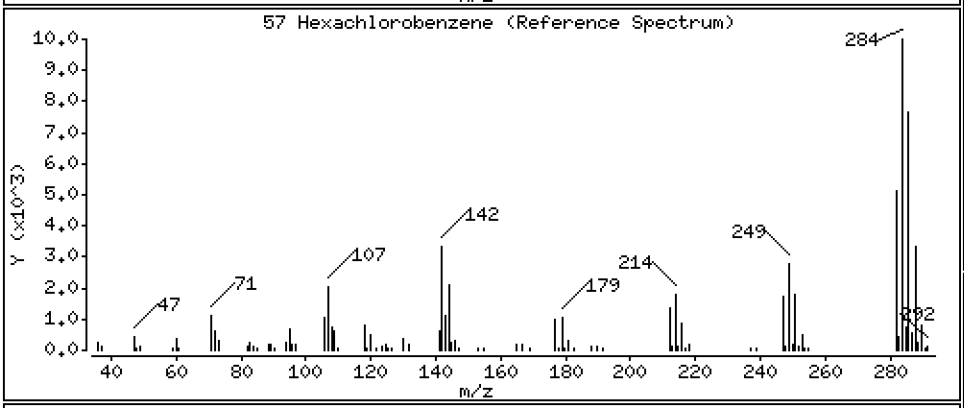
Concentration: 4.805 ug/mL

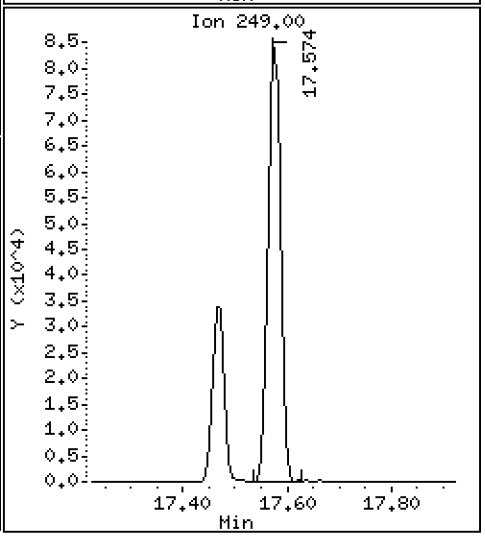


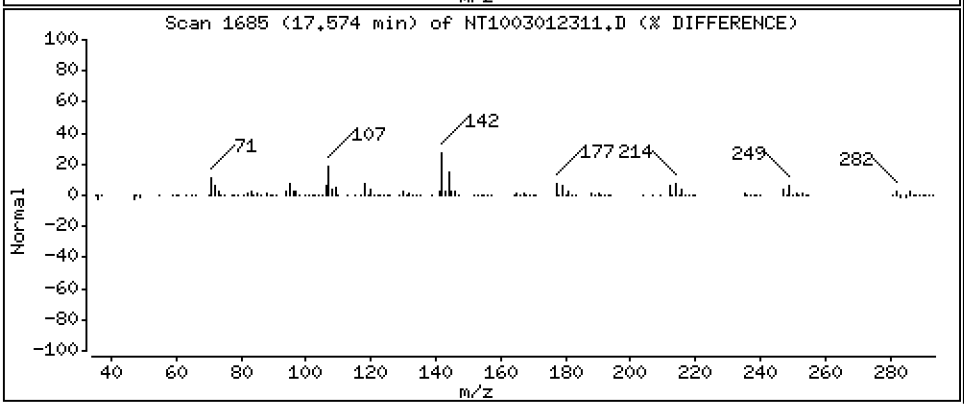












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

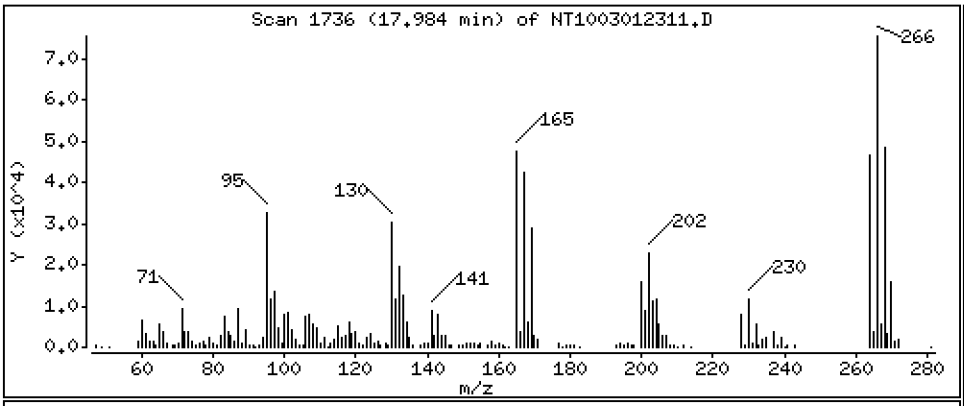
Operator: VTS

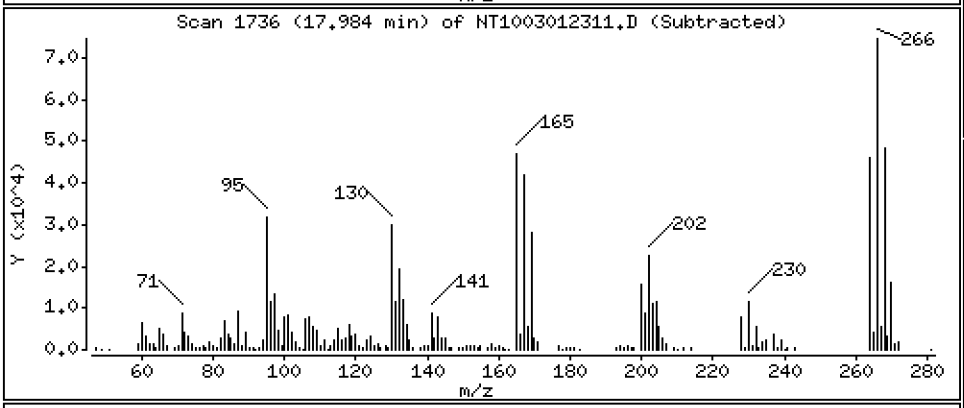
Column phase: ZB-5msi

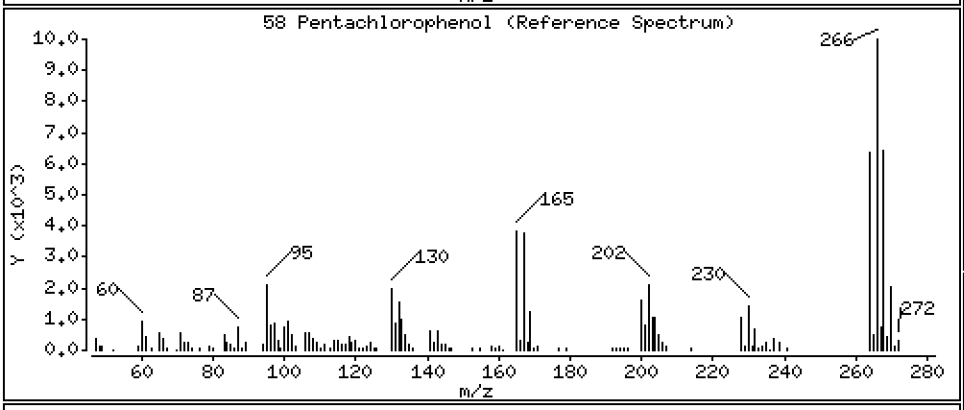
Column diameter: 0.25

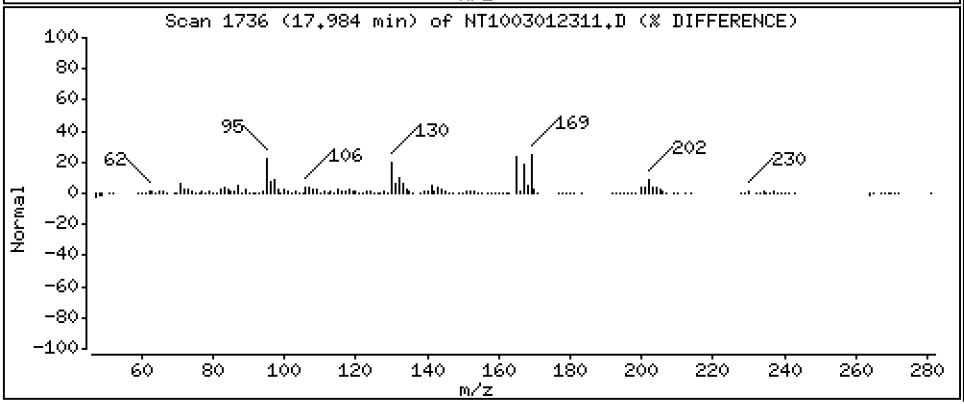
58 Pentachlorophenol

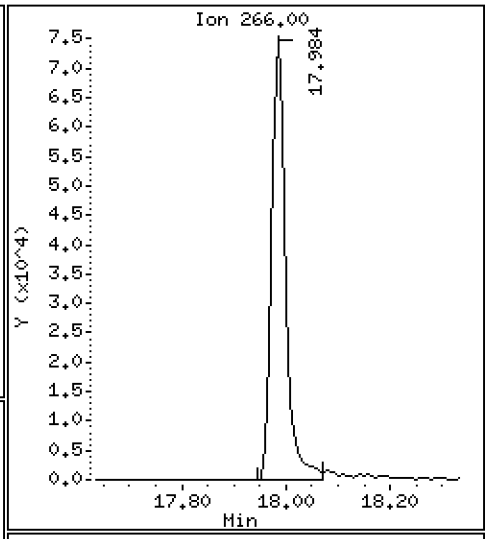
Concentration: 3.492 ug/mL

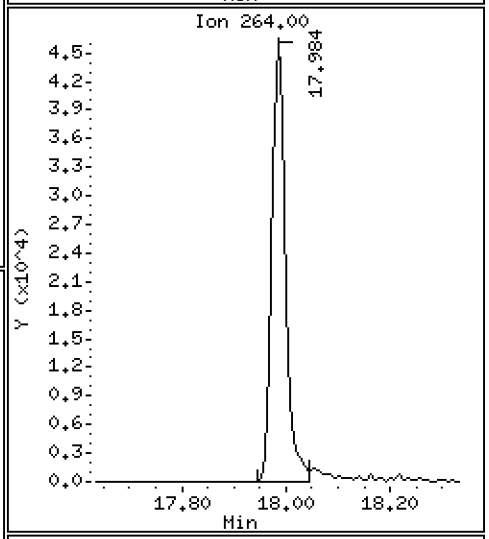


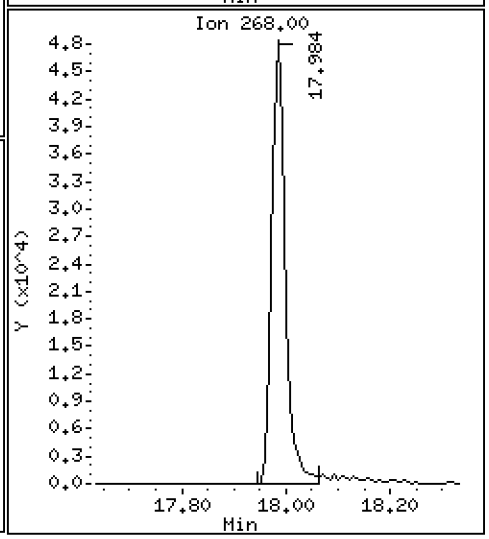












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

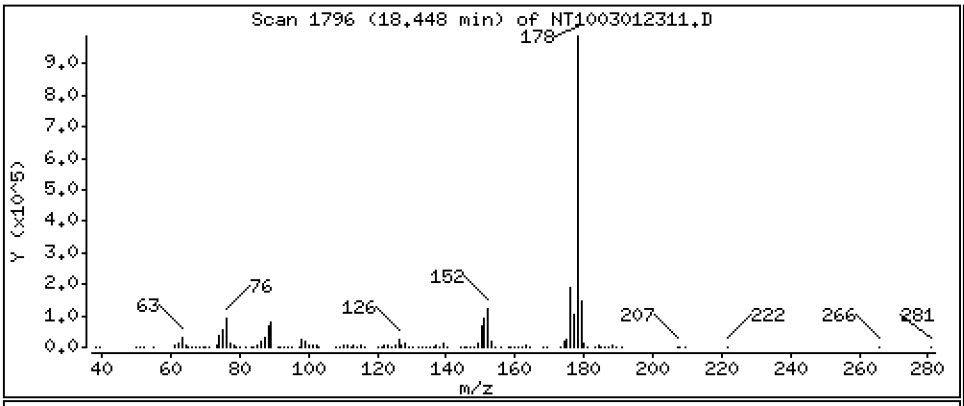
Operator: VTS

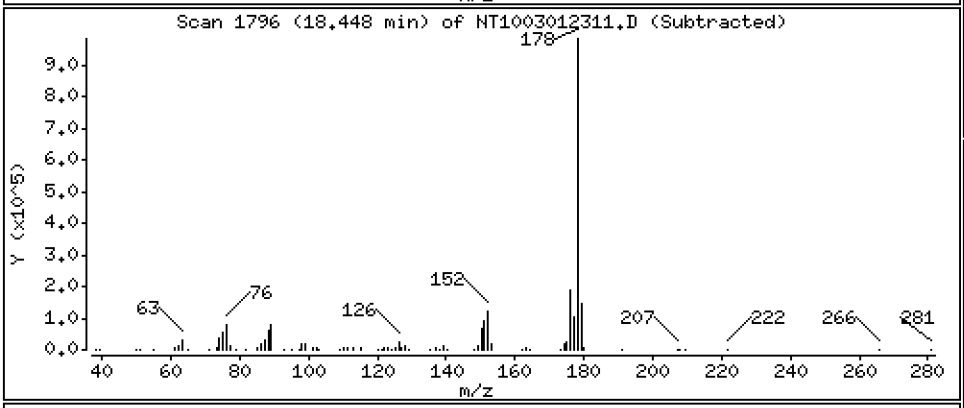
Column phase: ZB-5msi

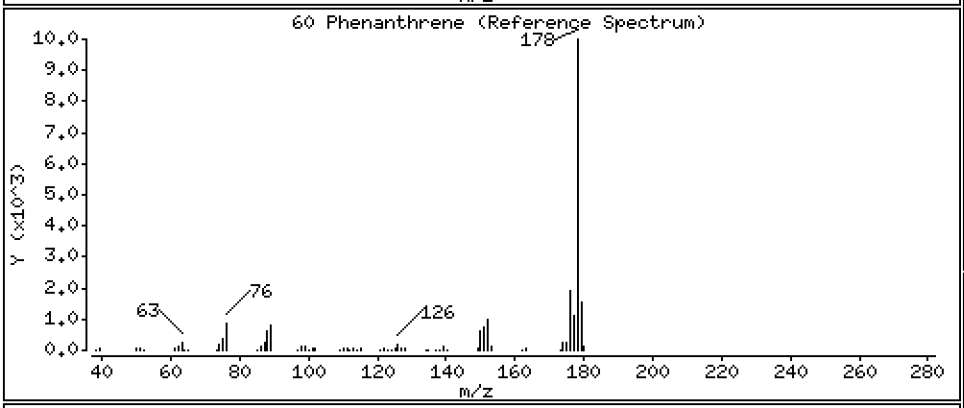
Column diameter: 0.25

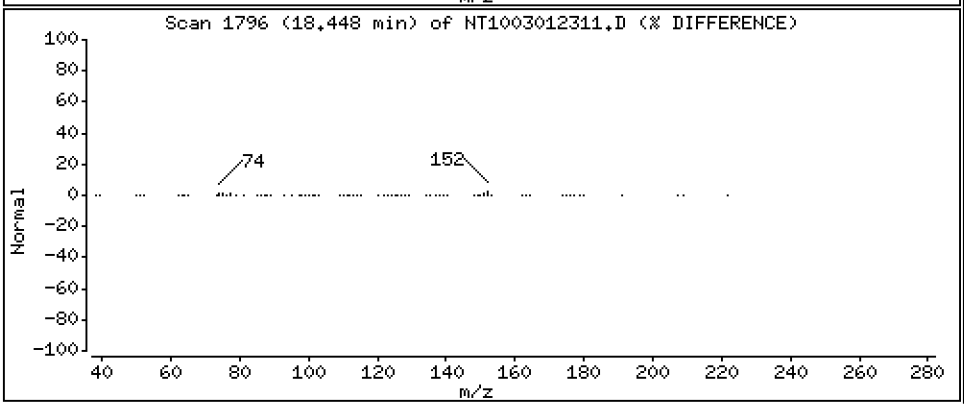
60 Phenanthrene

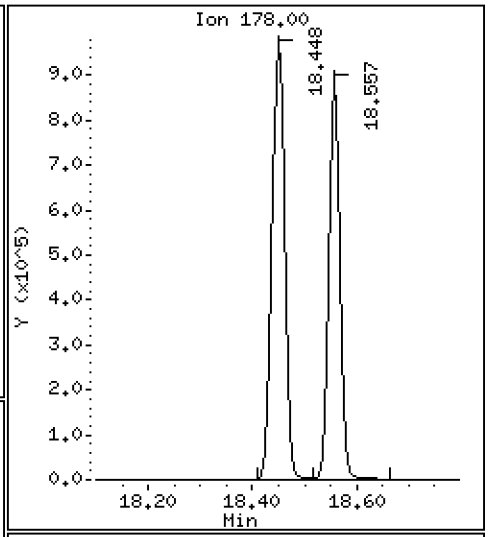
Concentration: 5.085 ug/mL

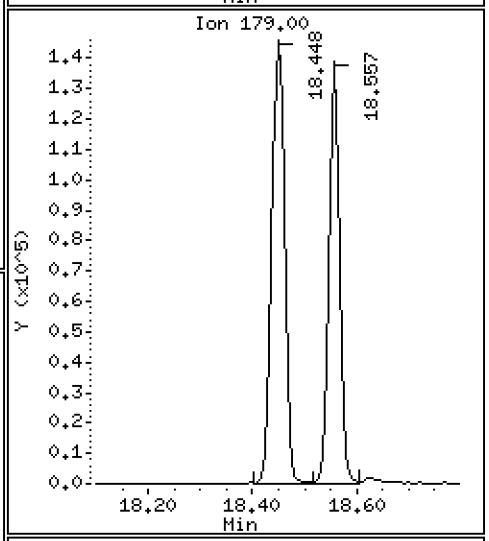


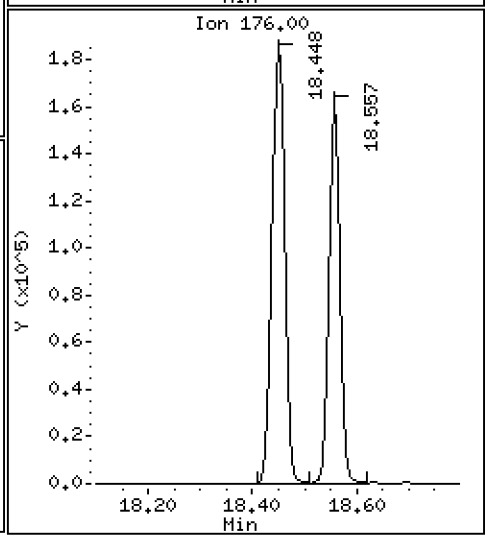












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

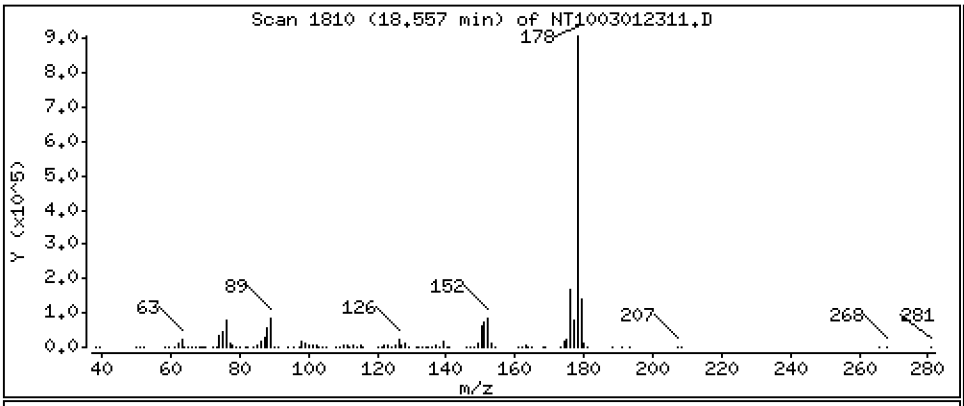
Operator: VTS

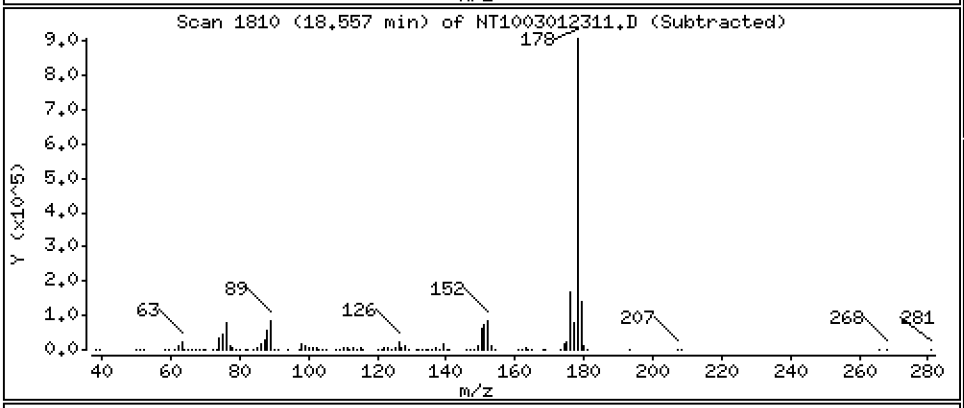
Column phase: ZB-5msi

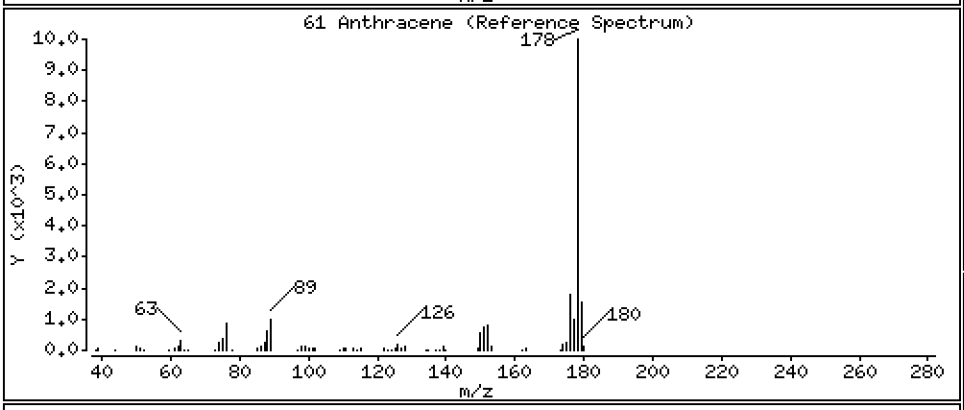
Column diameter: 0.25

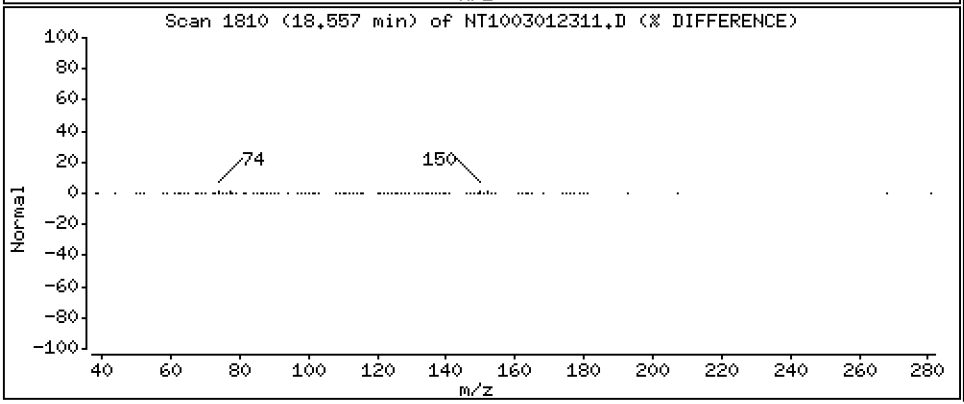
61 Anthracene

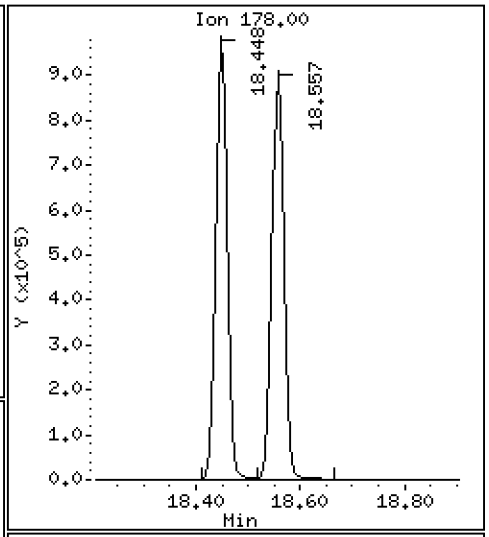
Concentration: 4.585 ug/mL

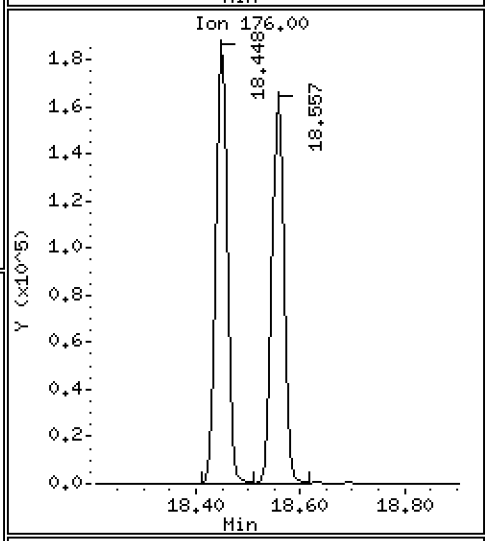


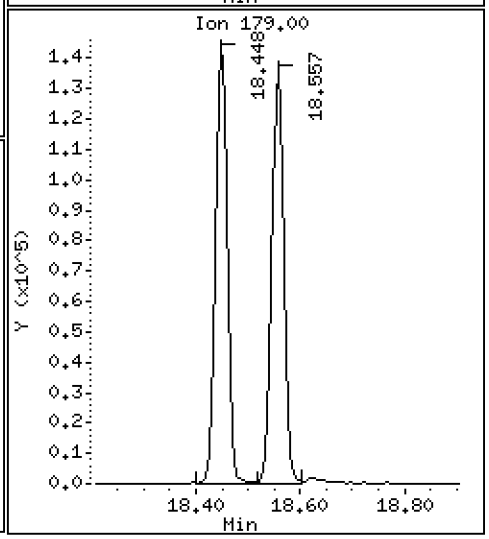












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

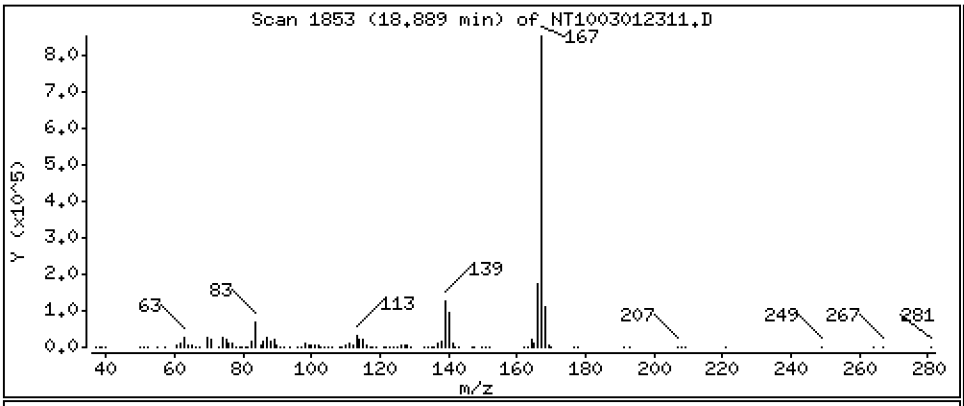
Operator: VTS

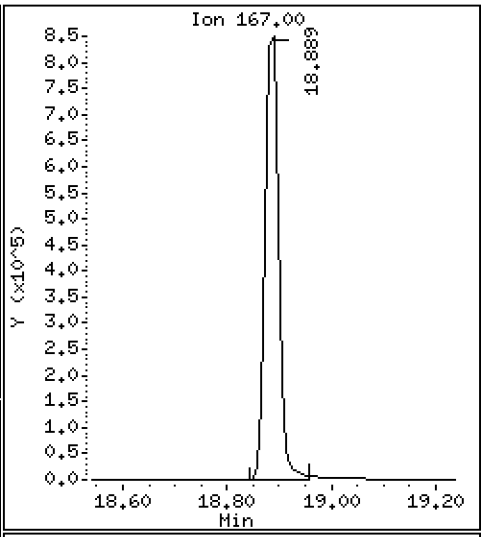
Column phase: ZB-5msi

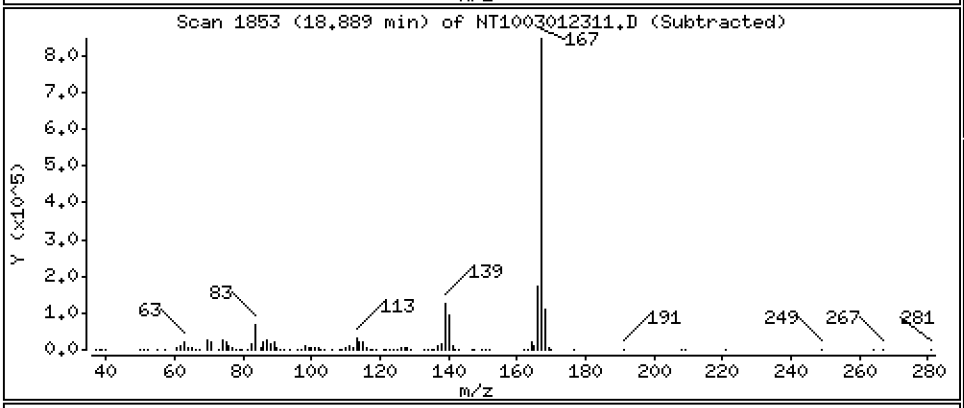
Column diameter: 0.25

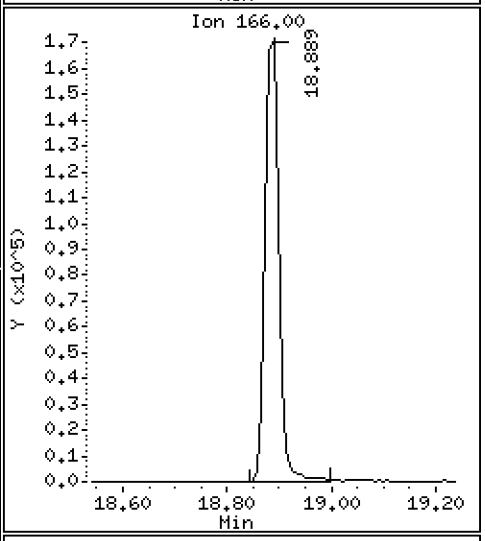
62 Carbazole

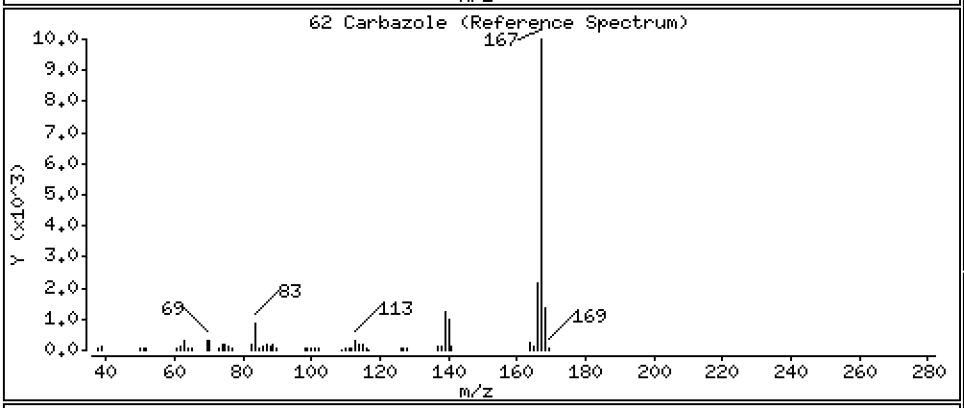
Concentration: 5.335 ug/mL

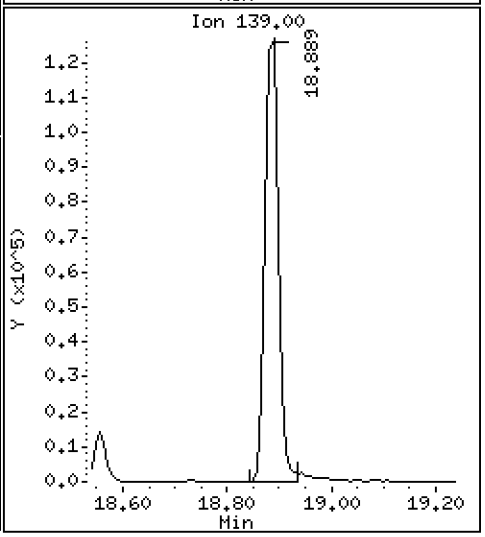


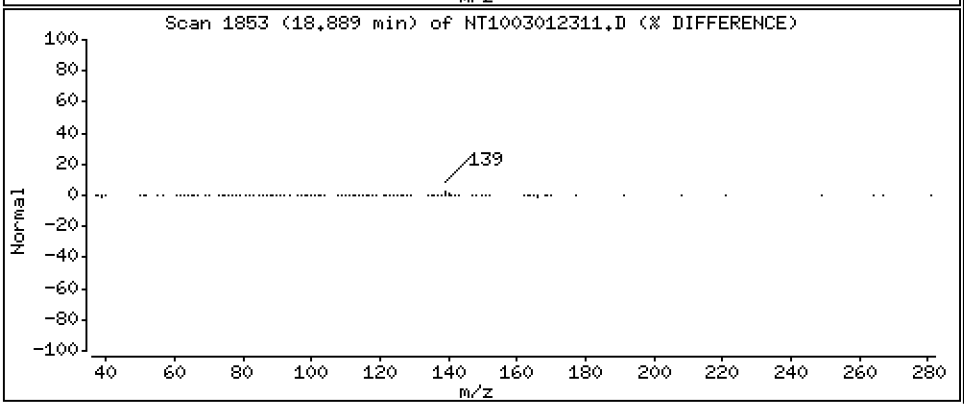












Date : 01-MAR-2023 21:46

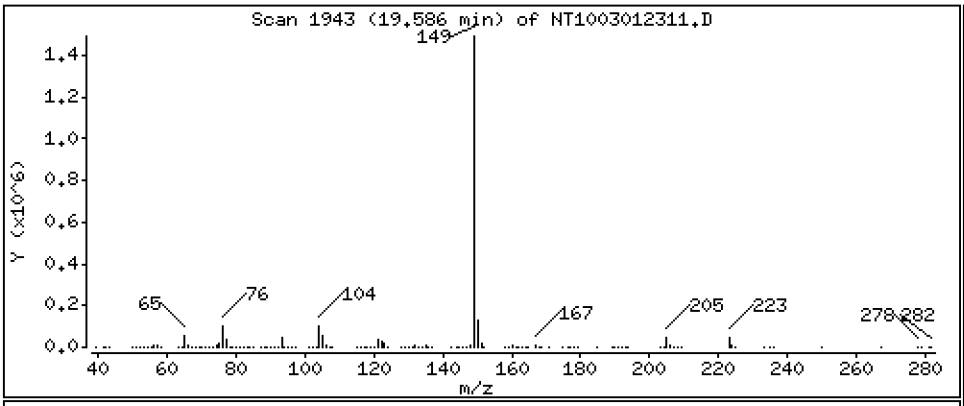
Client ID: Instrument: nt10.i

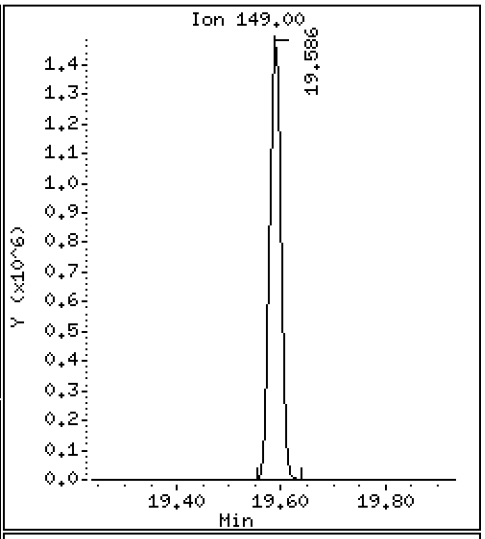
Sample Info: SEQ-SCV1

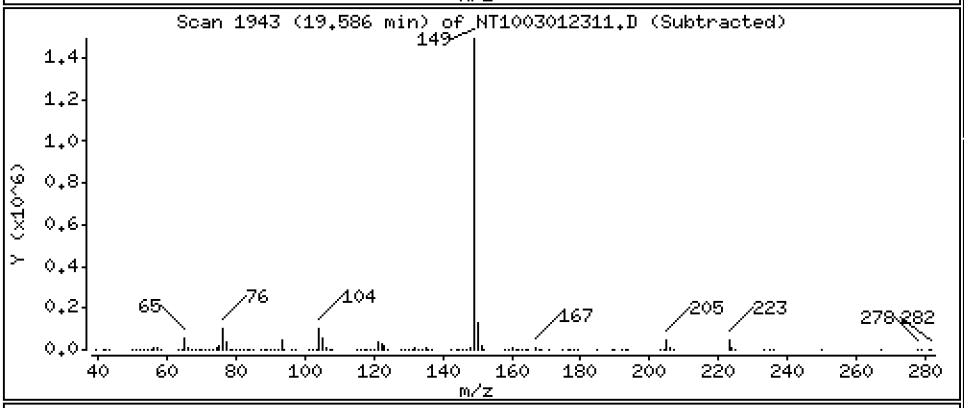
Operator: VTS

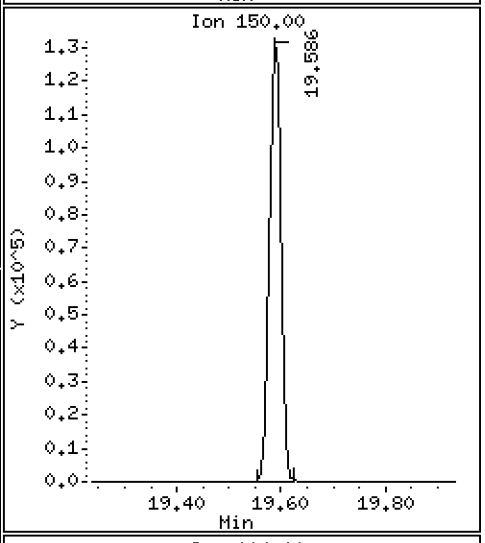
Column phase: ZB-5msi Column diameter: 0.25

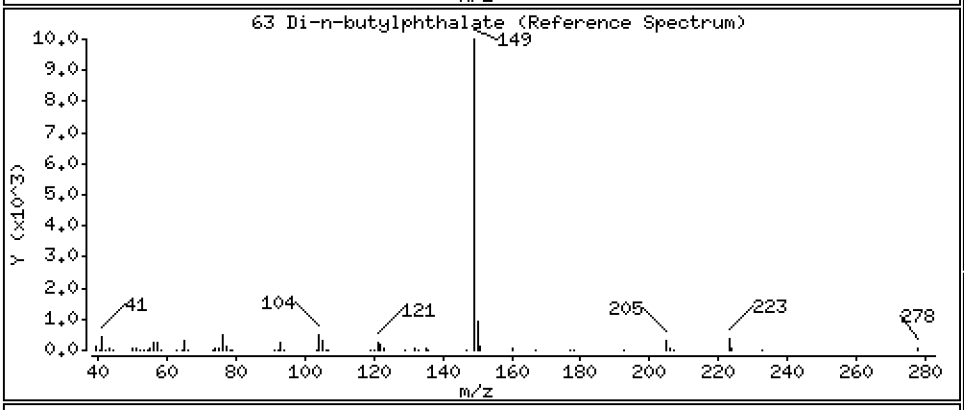
63 Di-n-butylphthalate Concentration: 5.463 ug/mL

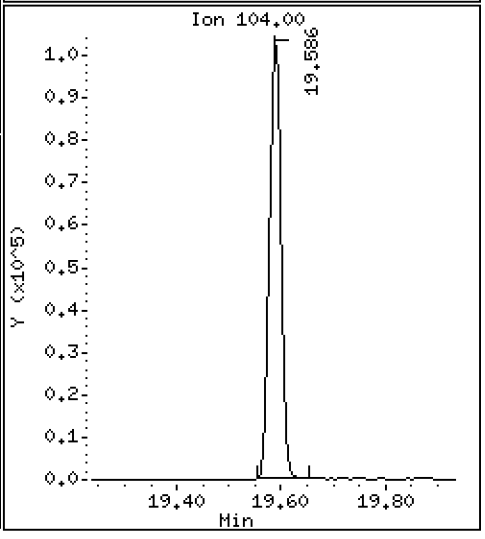


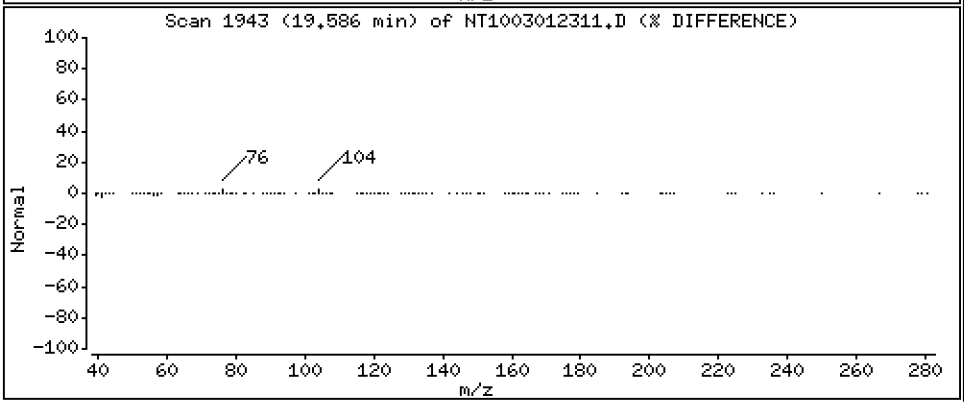












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

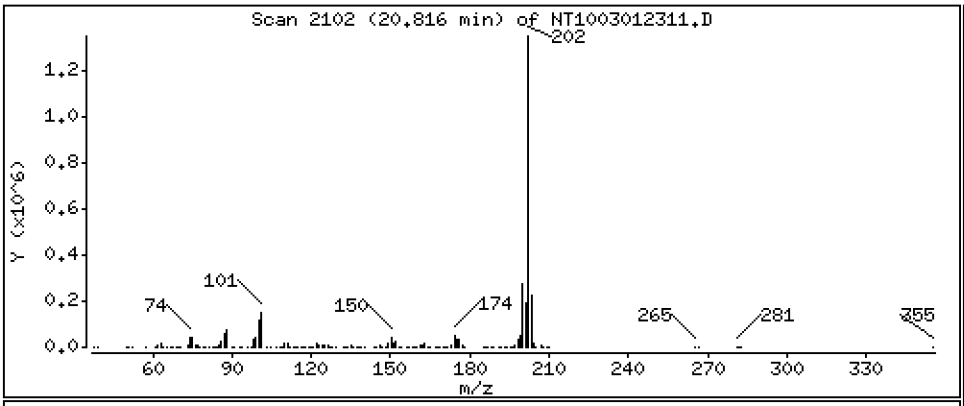
Operator: VTS

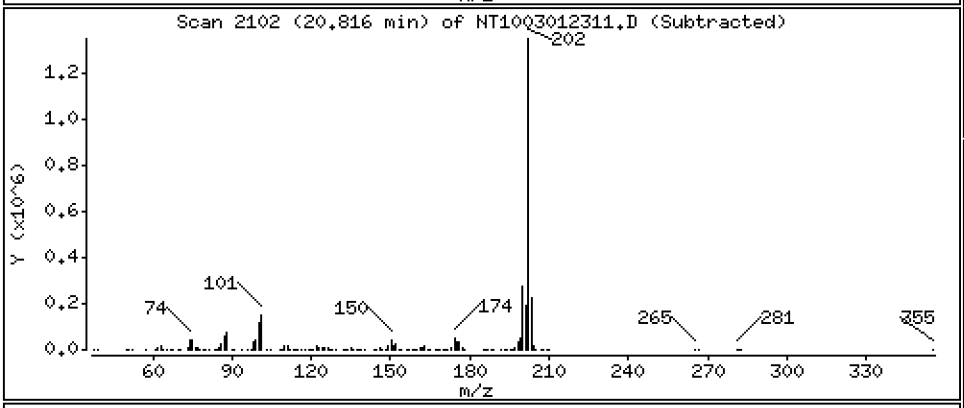
Column phase: ZB-5msi

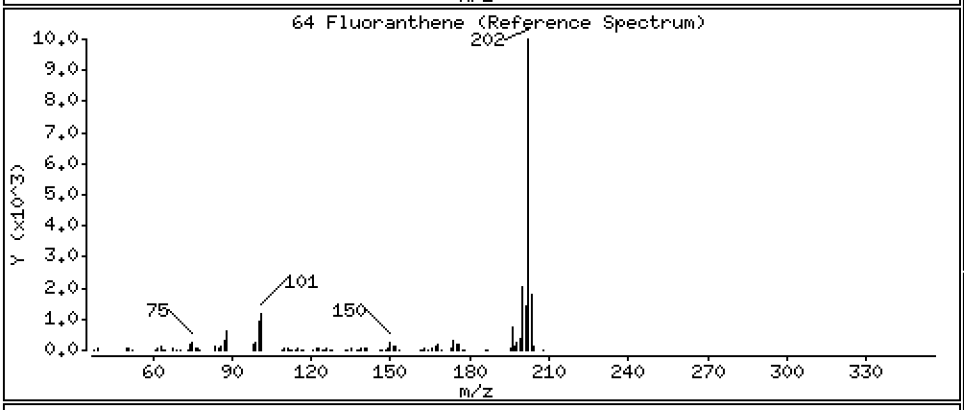
Column diameter: 0.25

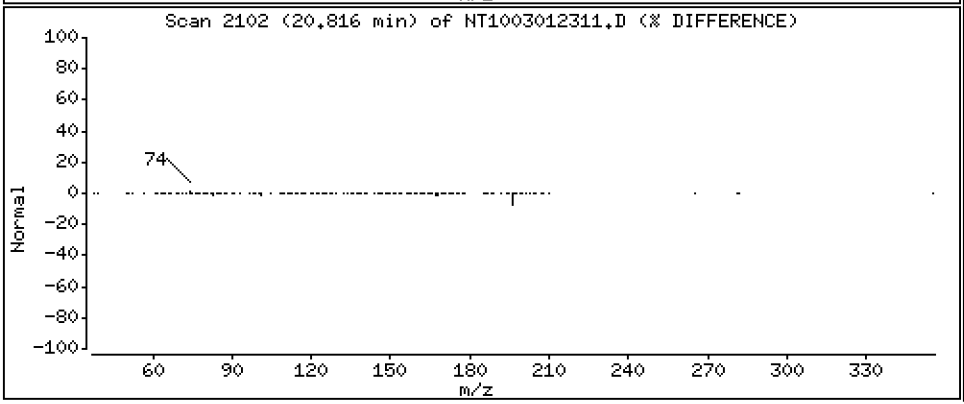
64 Fluoranthene

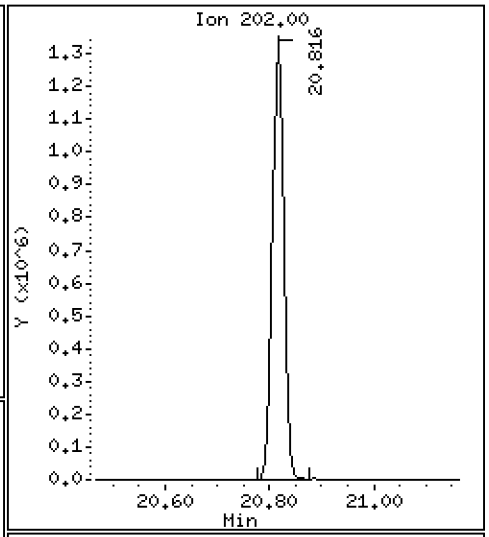
Concentration: 4.542 ug/mL

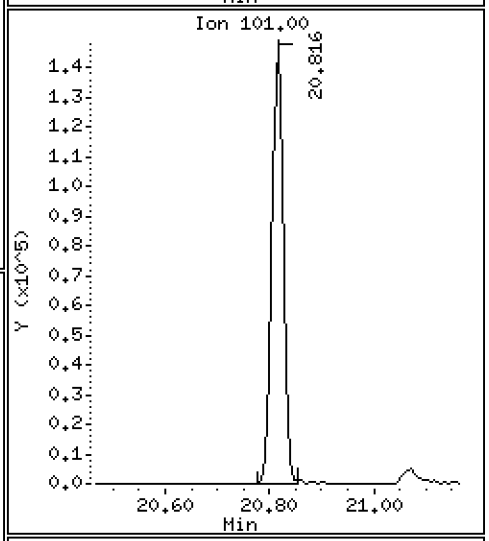


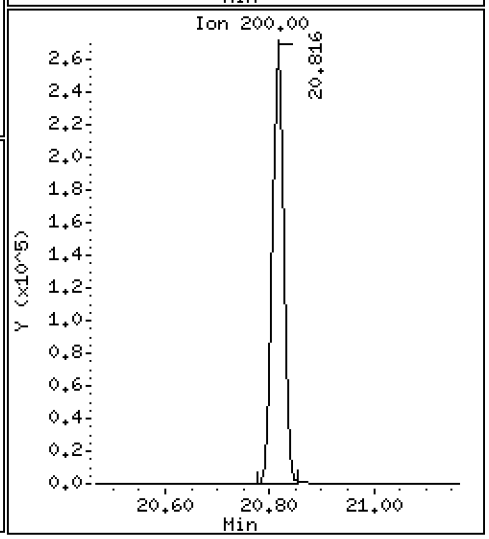












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

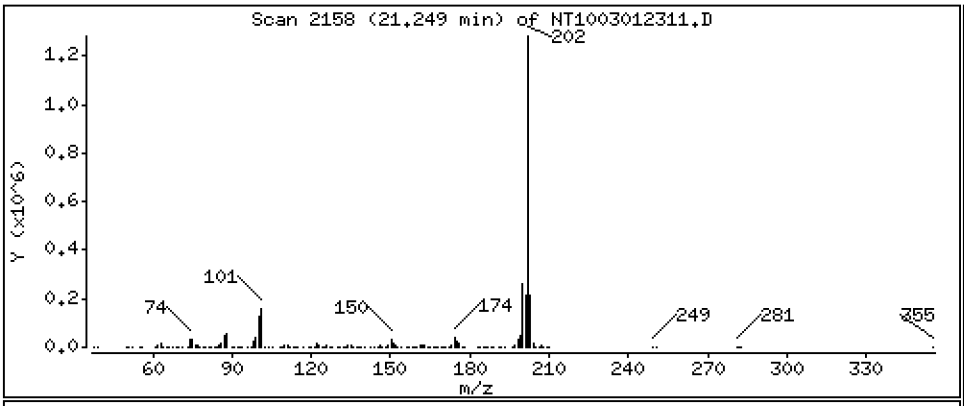
Operator: VTS

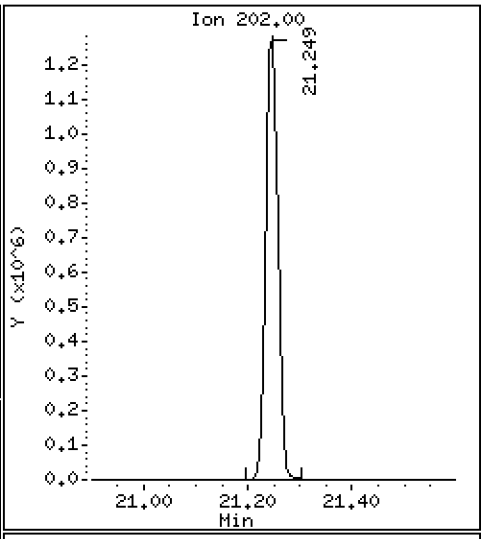
Column phase: ZB-5msi

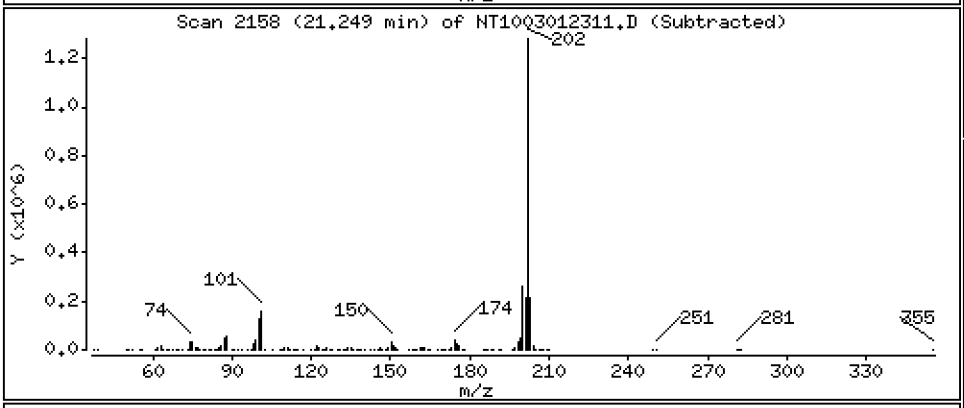
Column diameter: 0.25

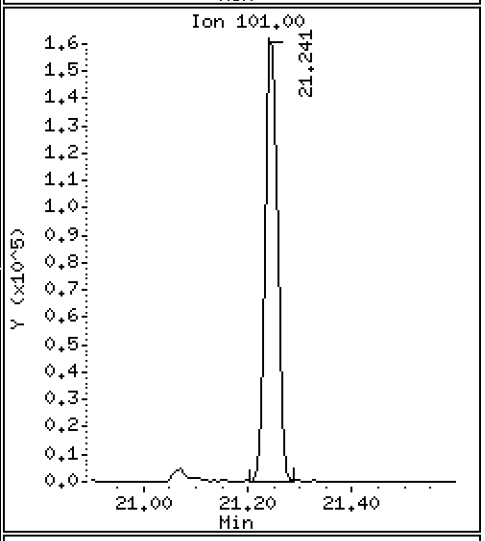
65 Pyrene

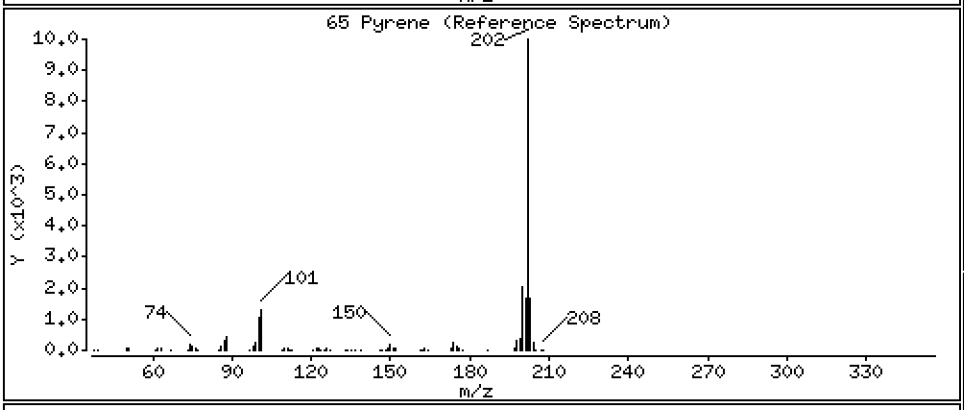
Concentration: 4.626 ug/mL

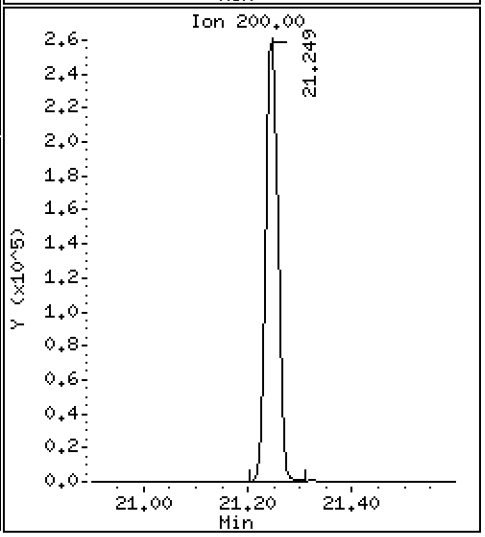


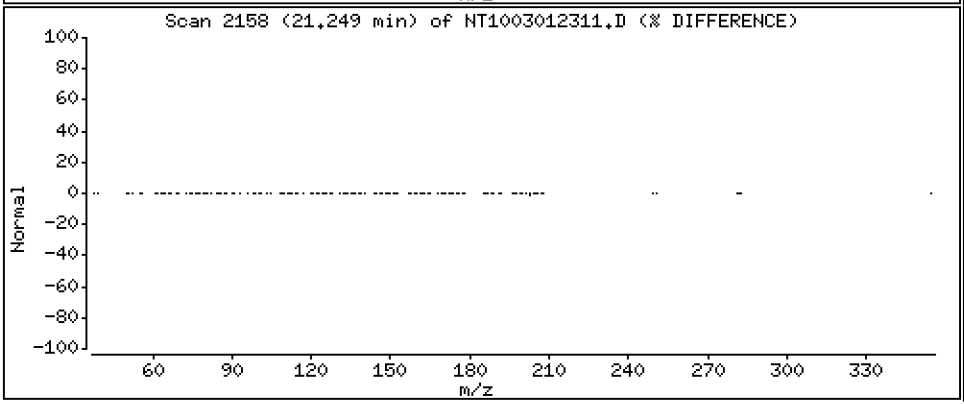












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

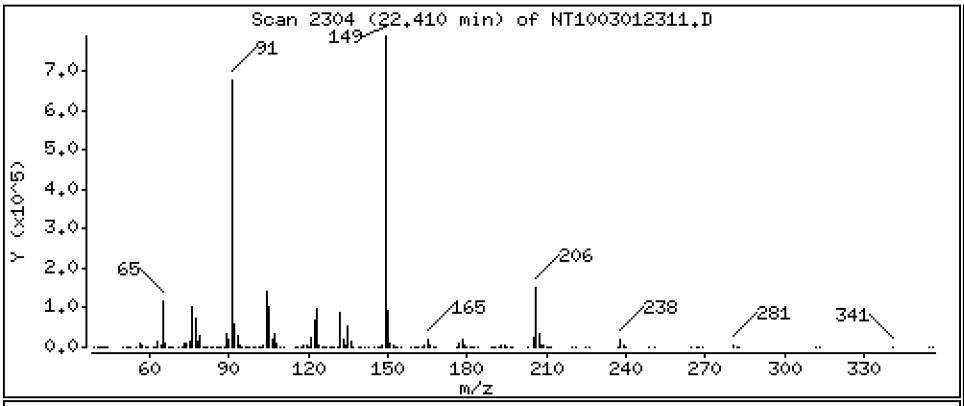
Operator: VTS

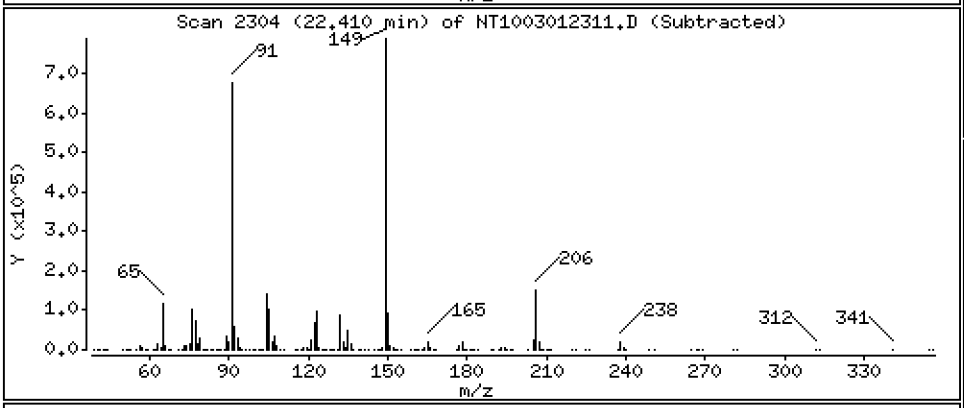
Column phase: ZB-5msi

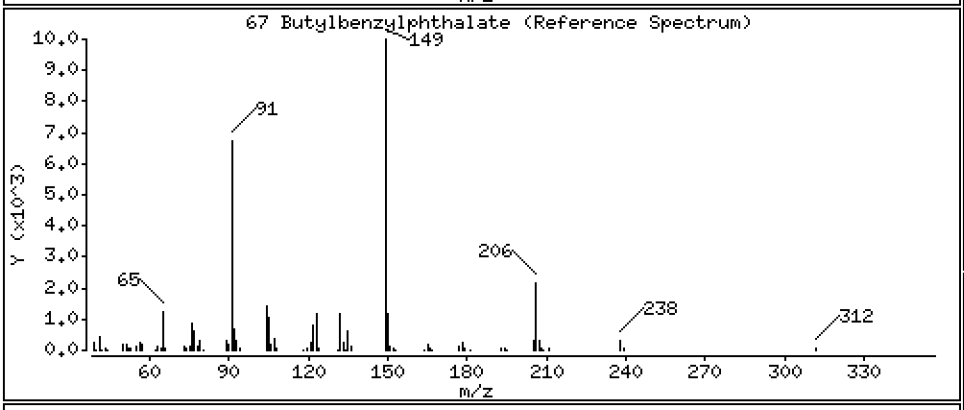
Column diameter: 0.25

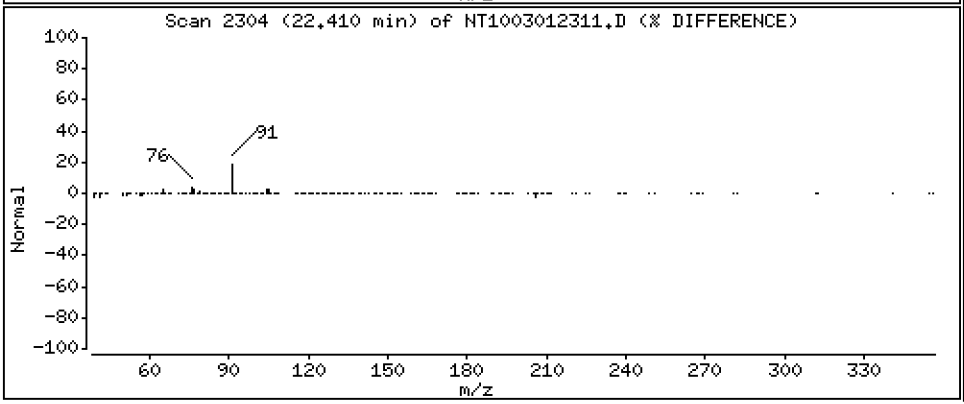
67 Butylbenzylphthalate

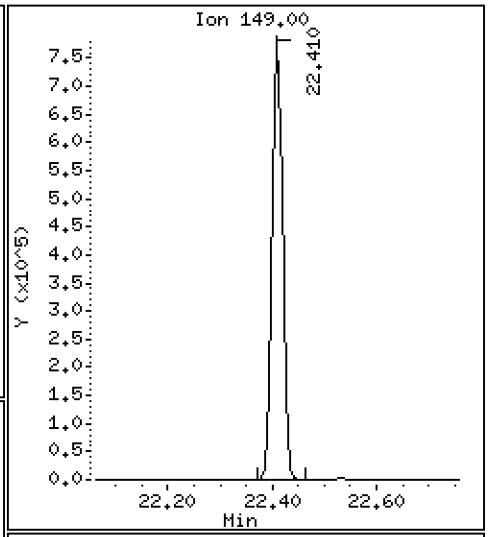
Concentration: 4.525 ug/mL

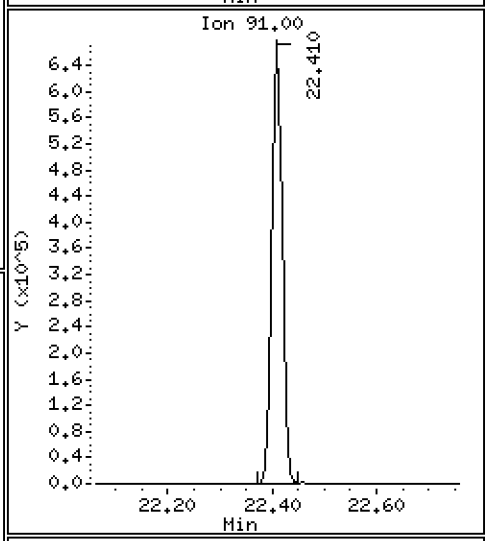


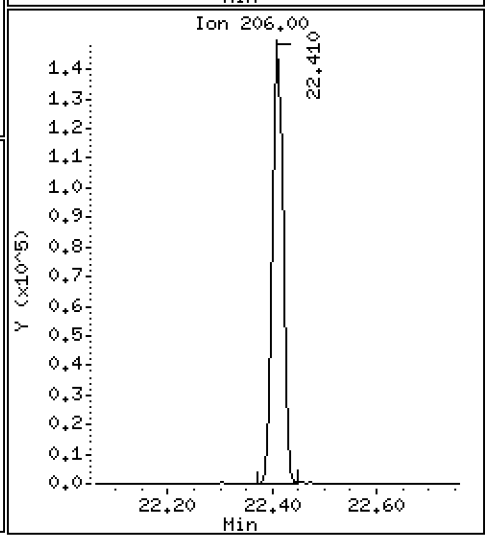












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

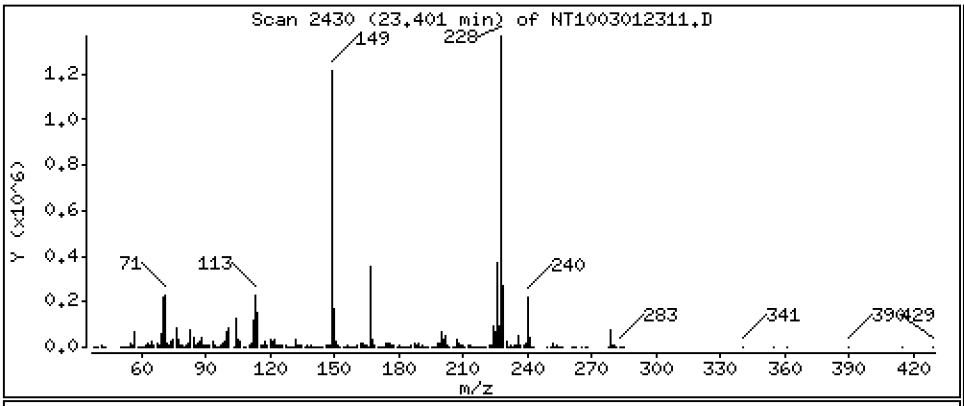
Operator: VTS

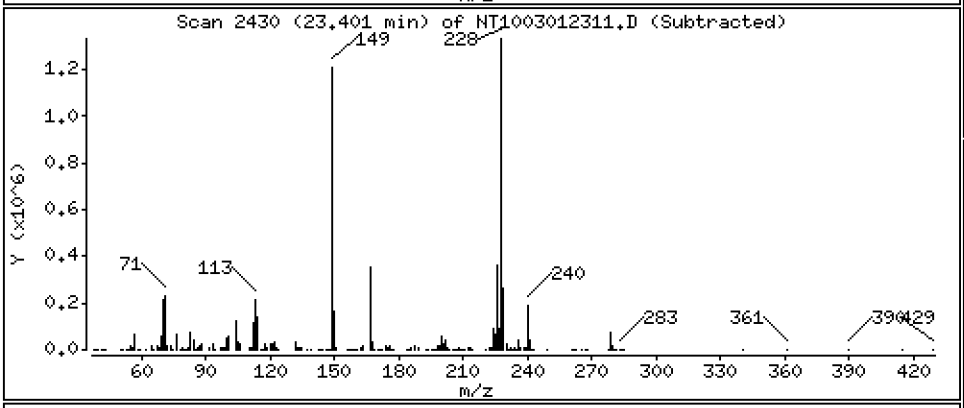
Column phase: ZB-5msi

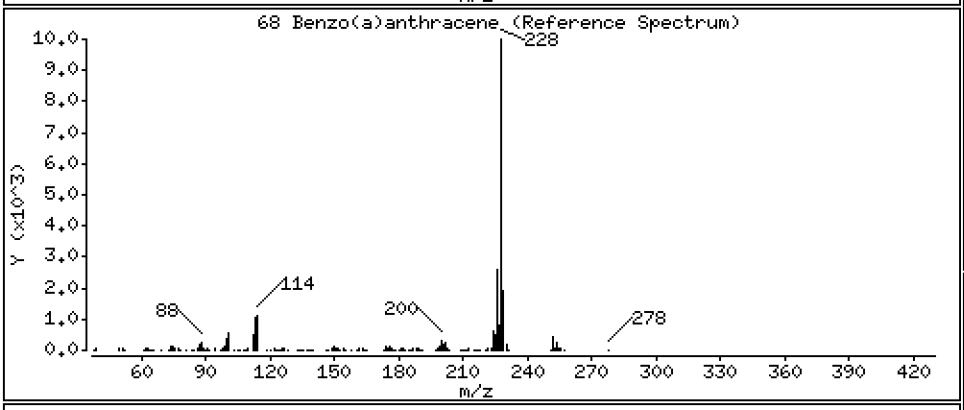
Column diameter: 0.25

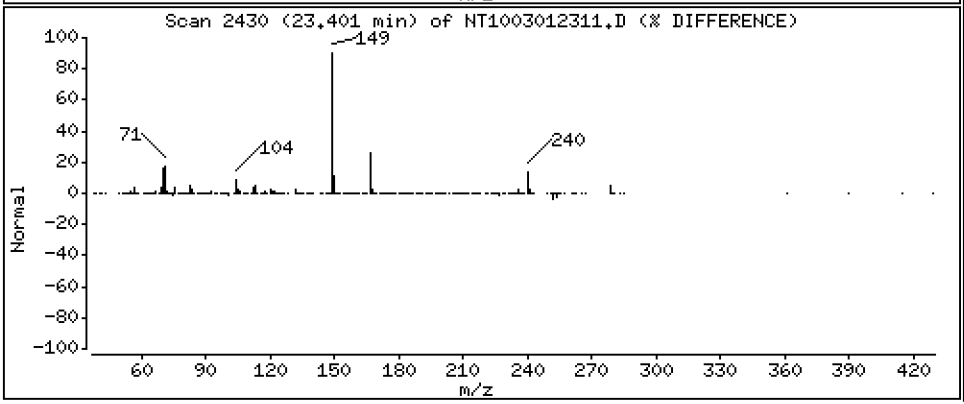
68 Benzo(a)anthracene

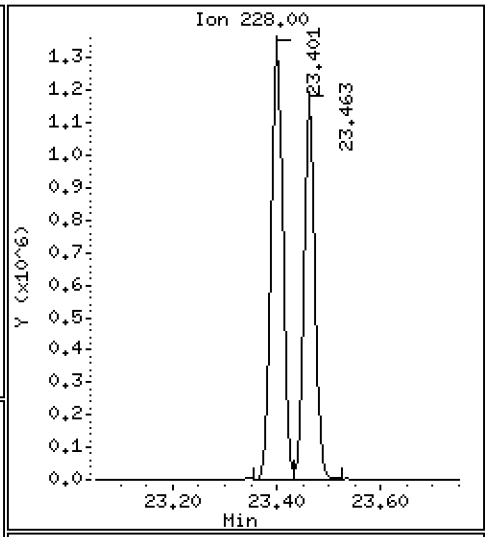
Concentration: 4.578 ug/mL

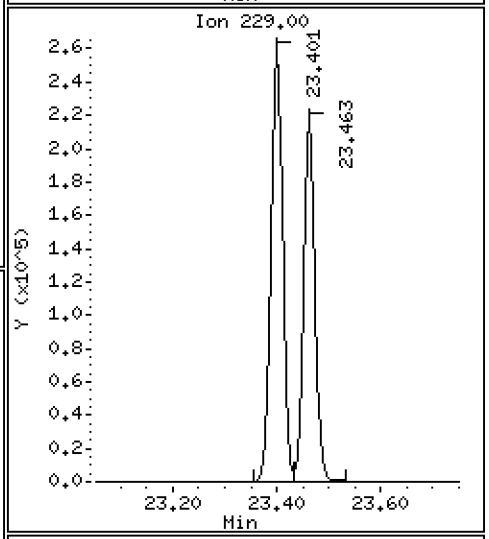


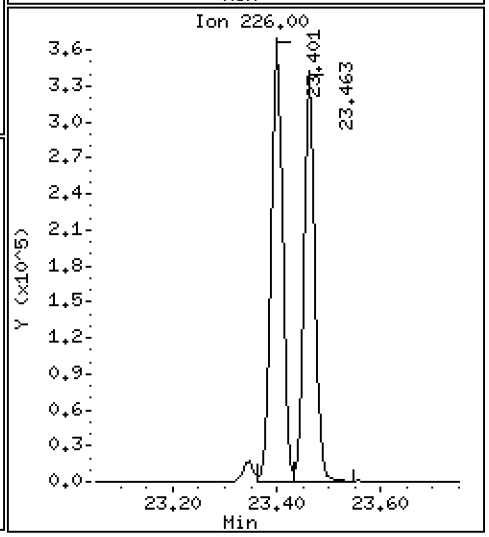












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

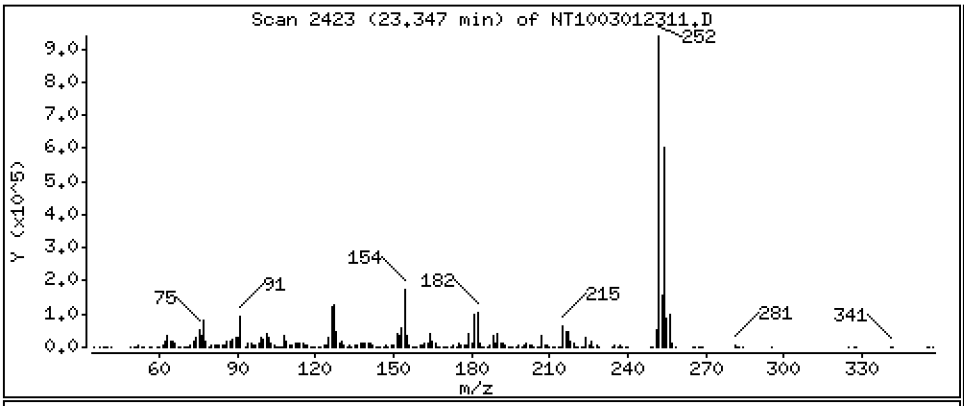
Operator: VTS

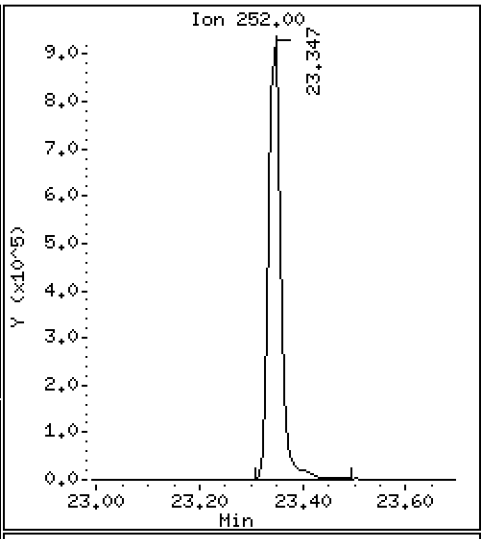
Column phase: ZB-5msi

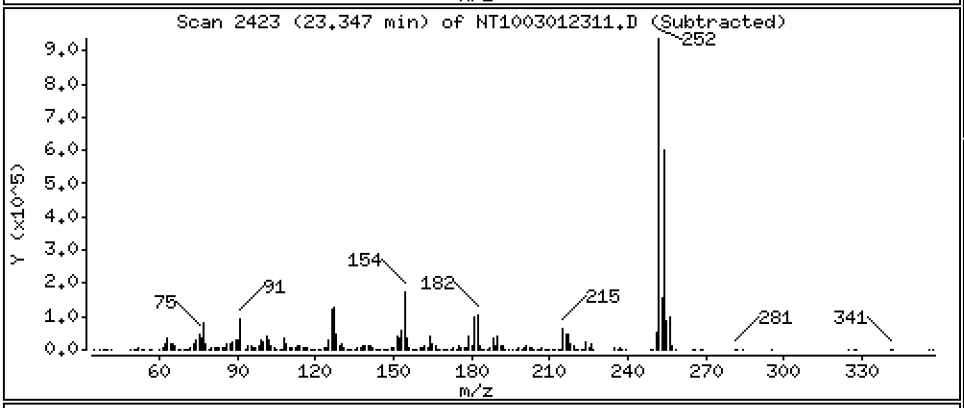
Column diameter: 0.25

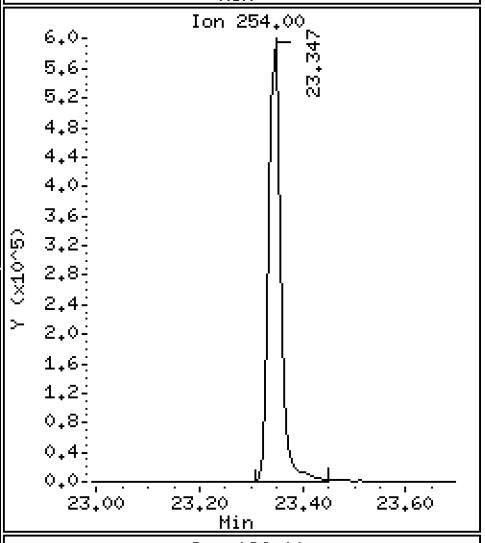
70 3,3'-Dichlorobenzidine

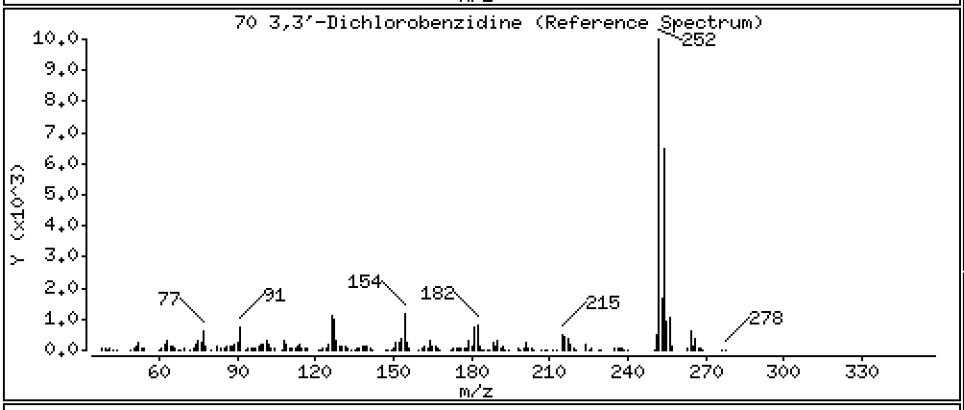
Concentration: 7.383 ug/mL

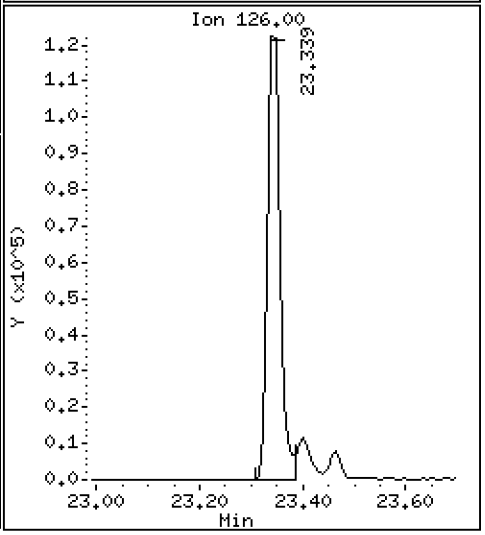


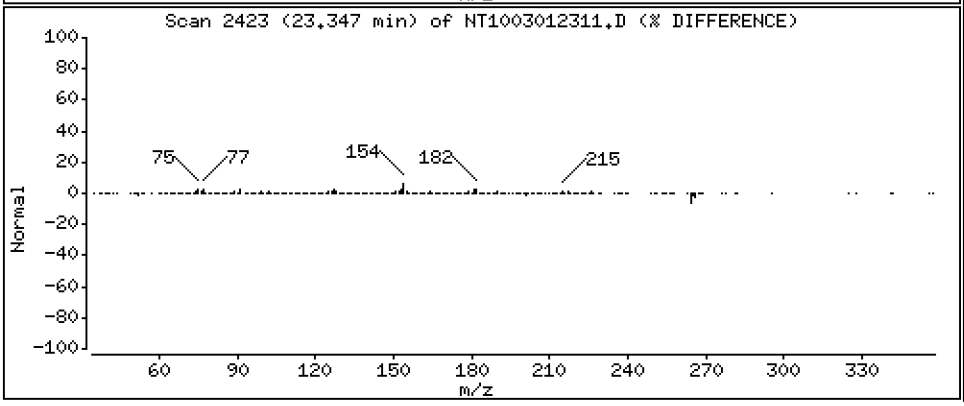












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

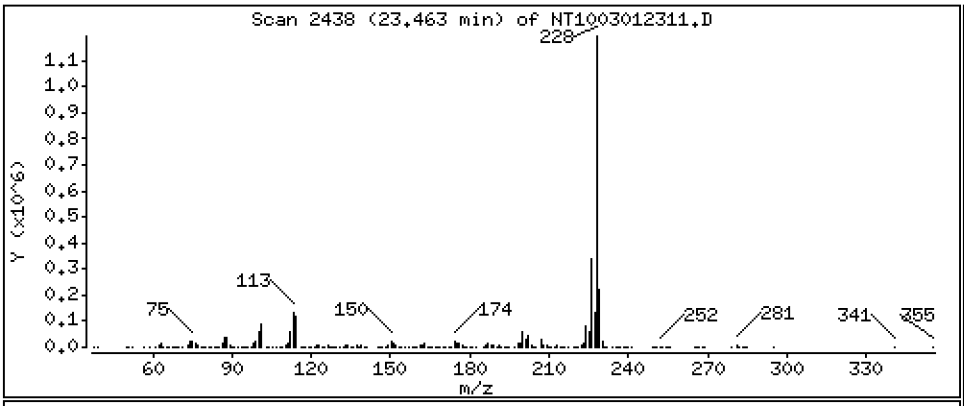
Operator: VTS

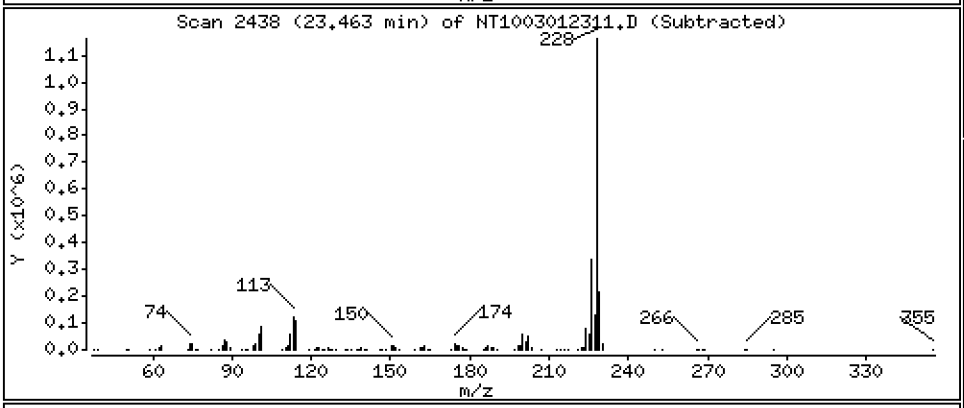
Column phase: ZB-5msi

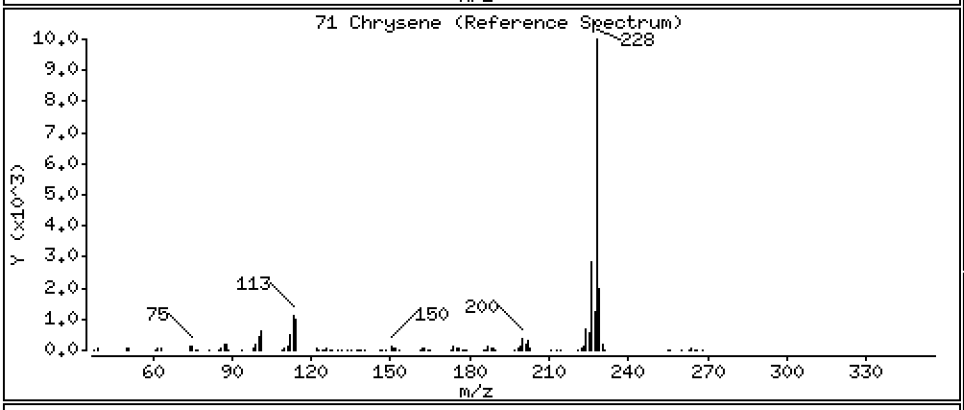
Column diameter: 0.25

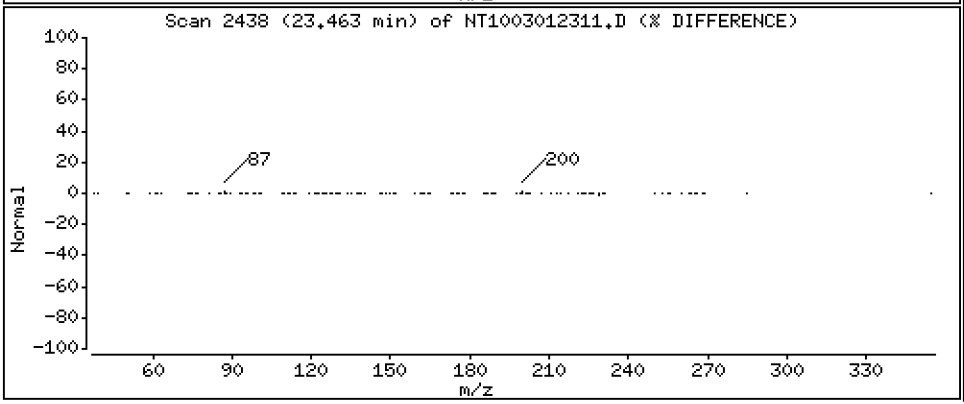
71 Chrysene

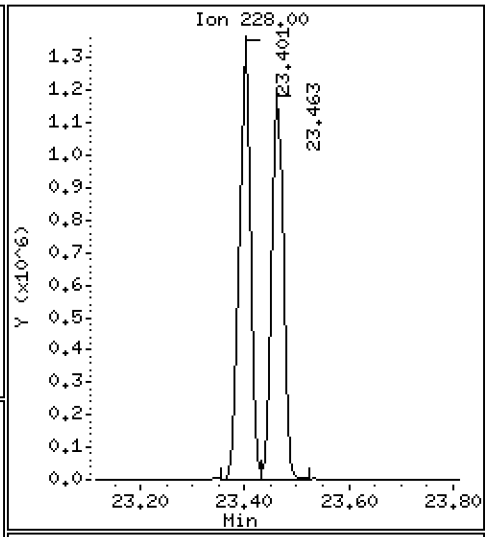
Concentration: 4.967 ug/mL

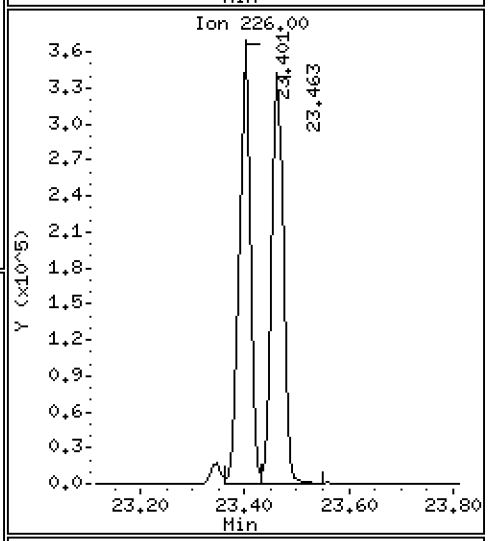


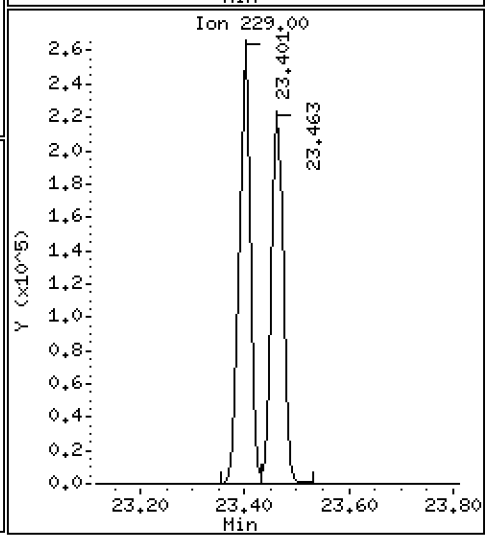












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

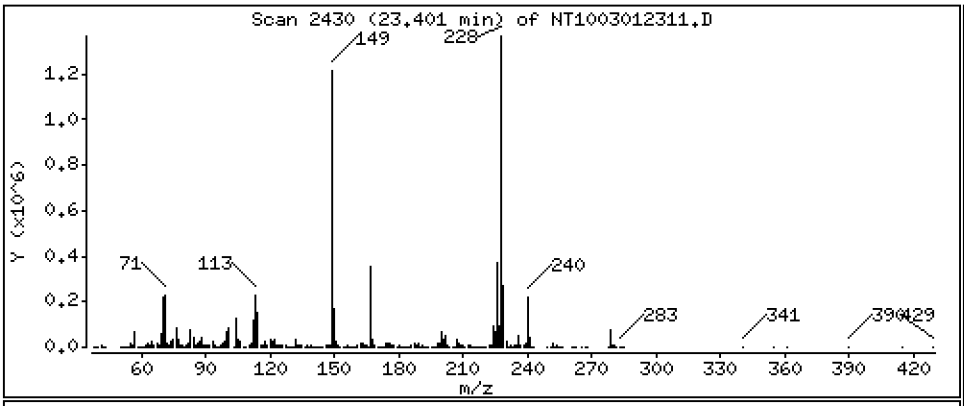
Operator: VTS

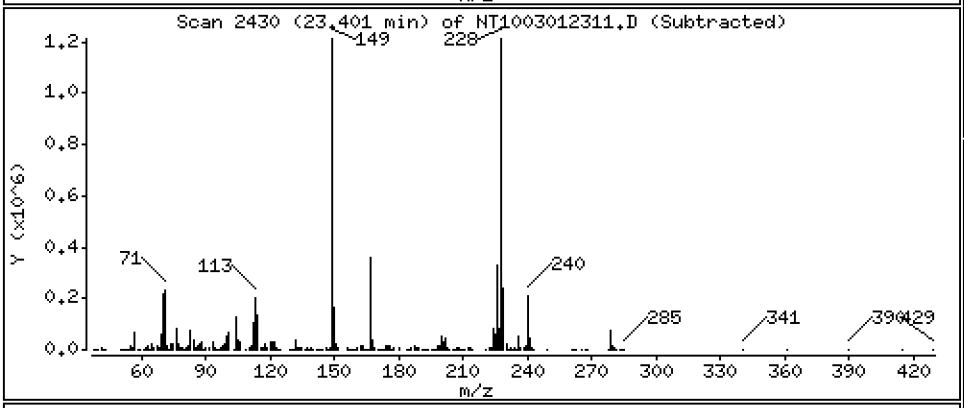
Column phase: ZB-5msi

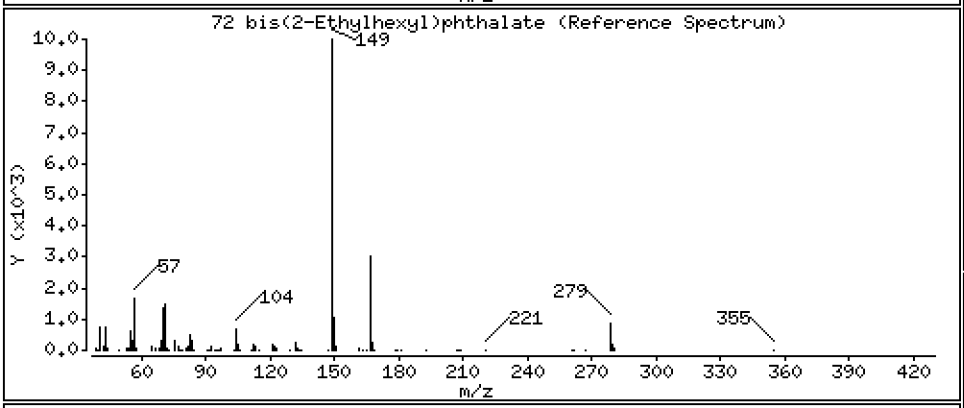
Column diameter: 0.25

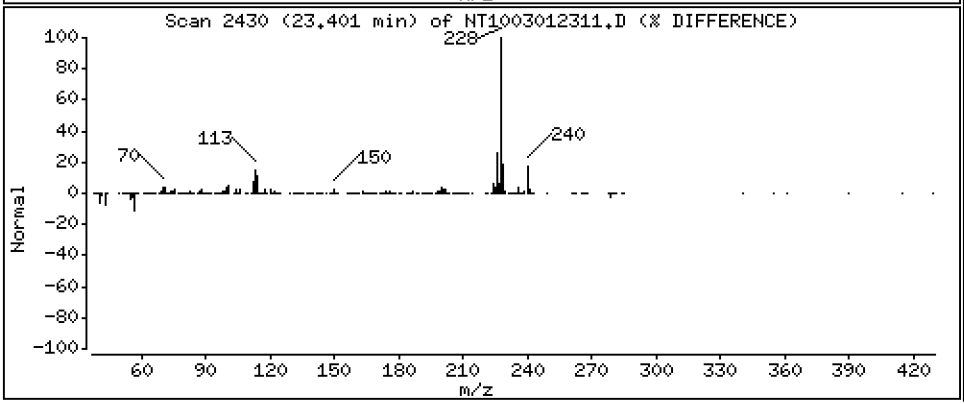
72 bis(2-Ethylhexyl)phthalate

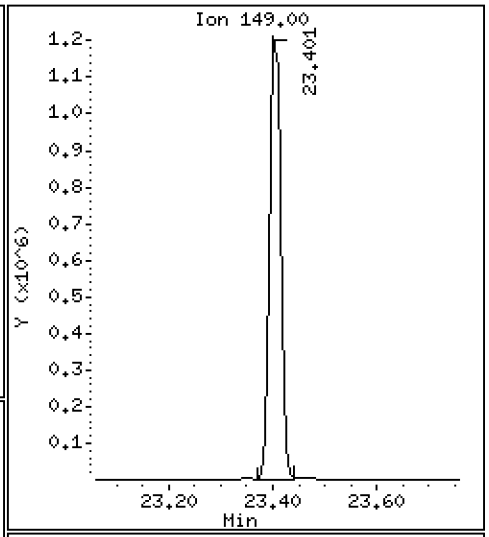
Concentration: 4.956 ug/mL

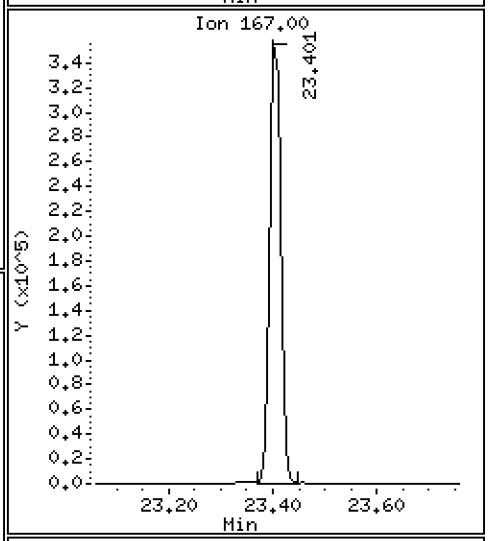


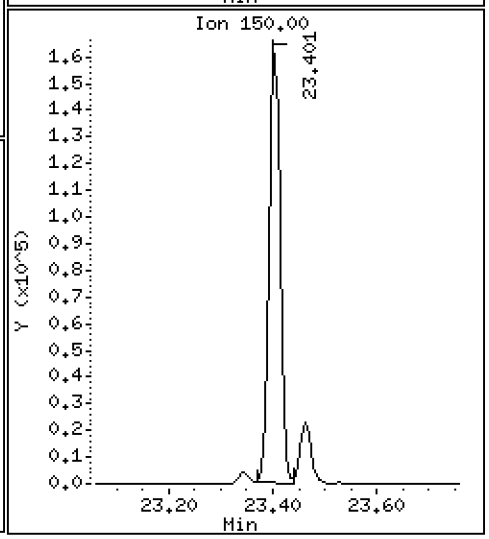












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

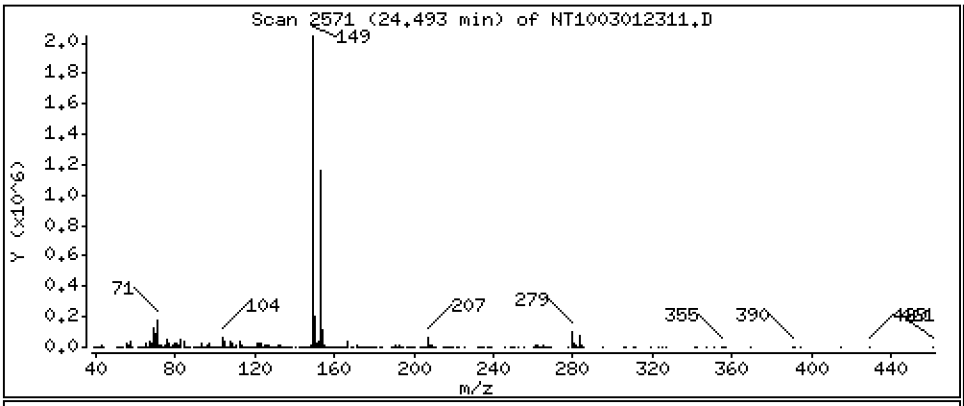
Operator: VTS

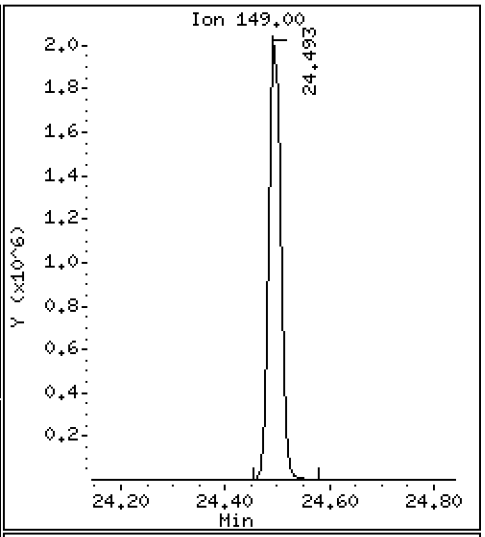
Column phase: ZB-5msi

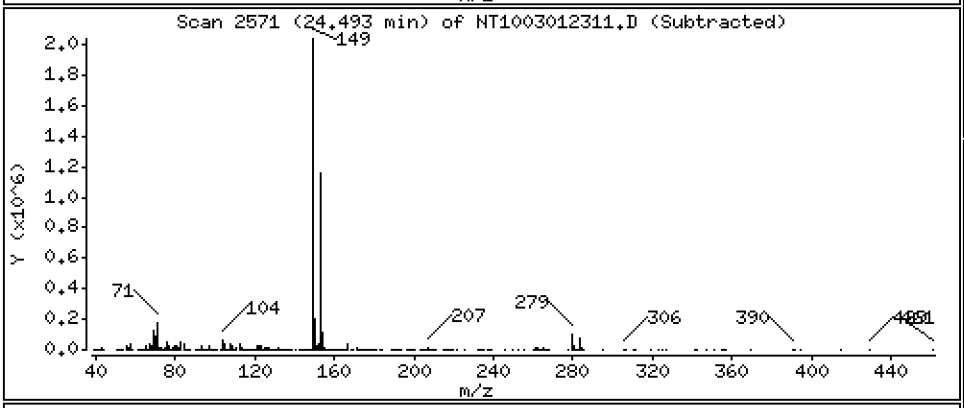
Column diameter: 0.25

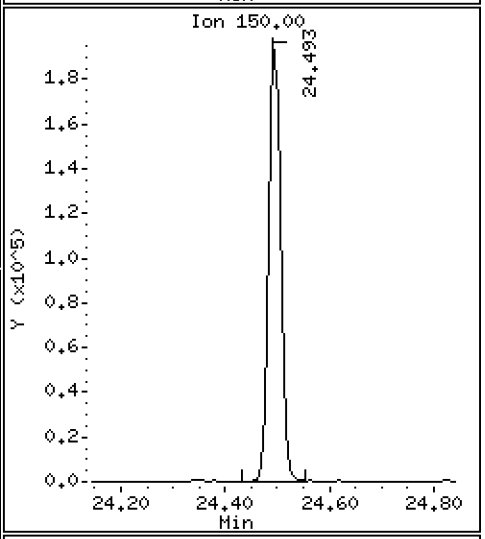
73 Di-n-octylphthalate

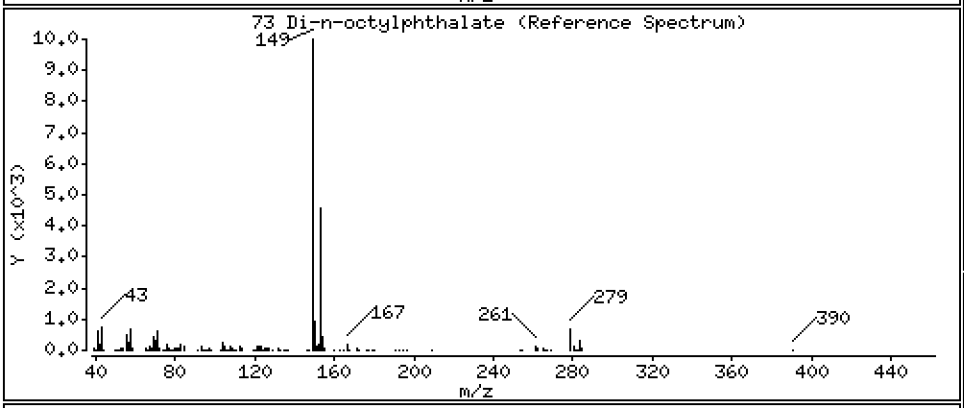
Concentration: 5.844 ug/mL

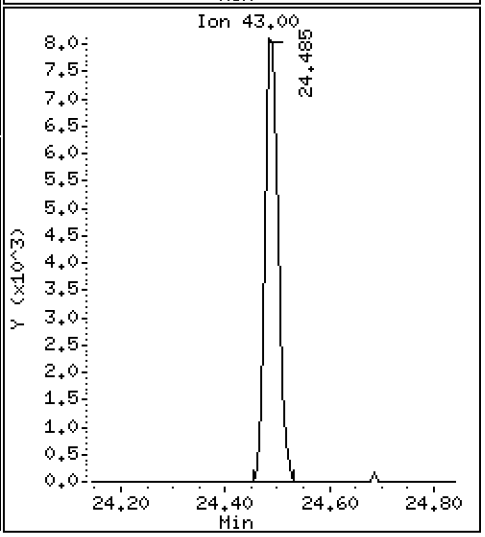


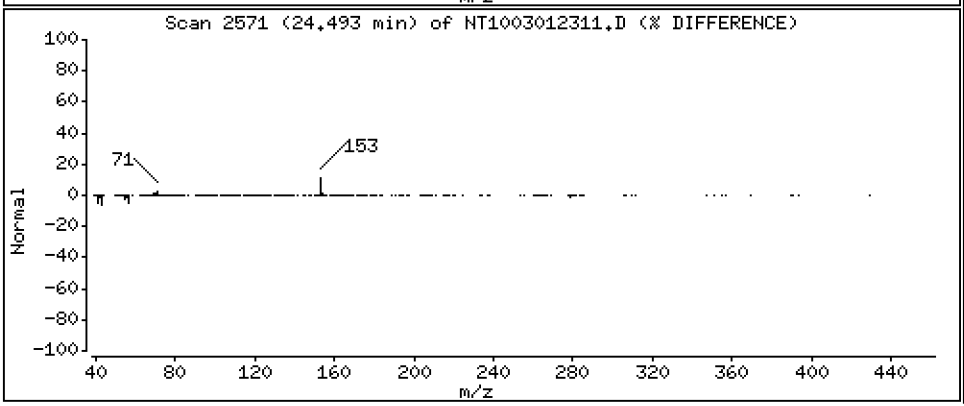












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

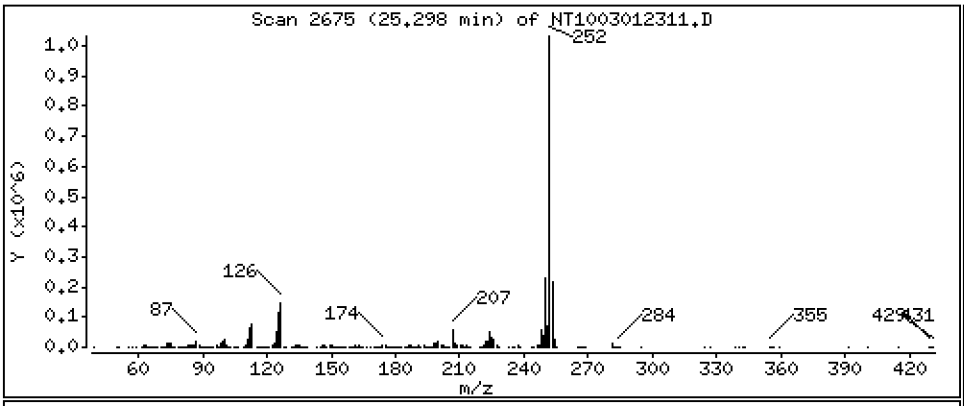
Operator: VTS

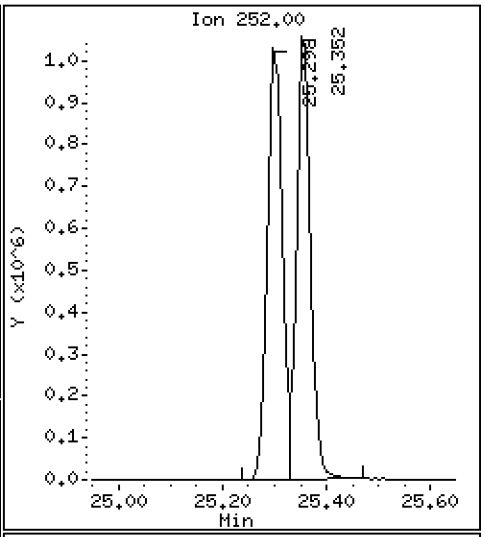
Column phase: ZB-5msi

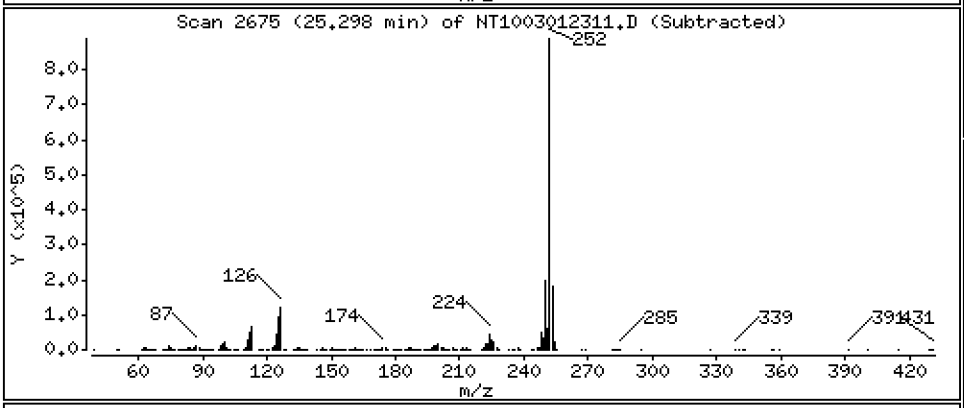
Column diameter: 0.25

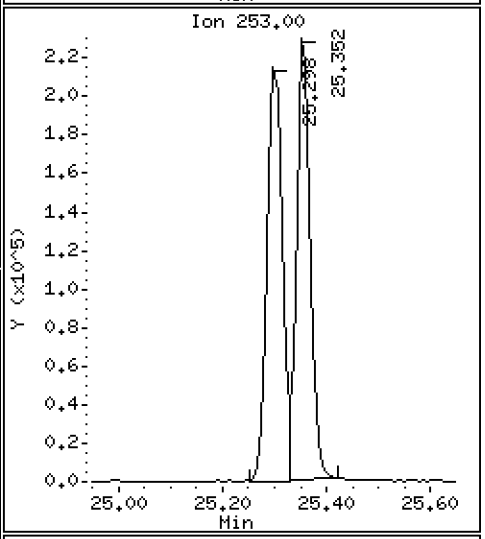
74 Benzo(b)fluoranthene

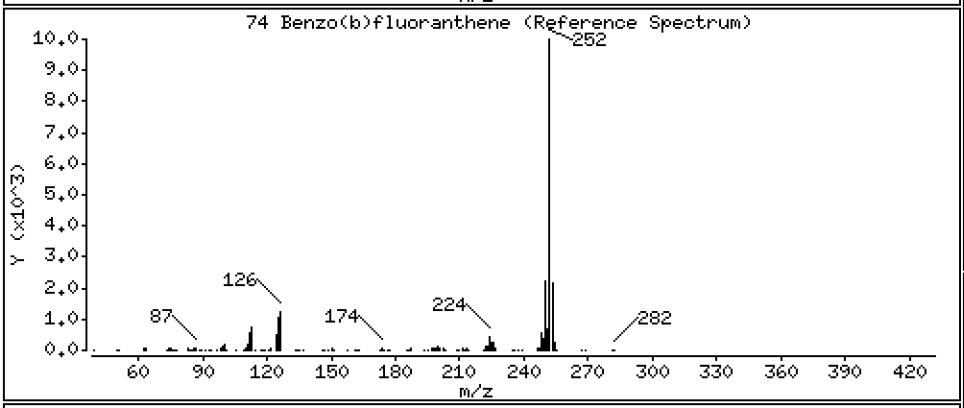
Concentration: 4.319 ug/mL

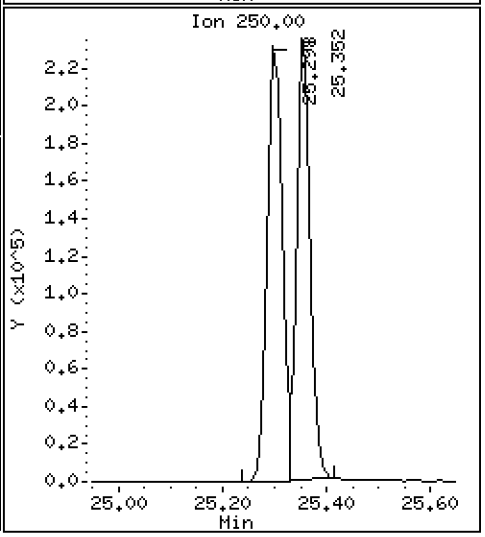


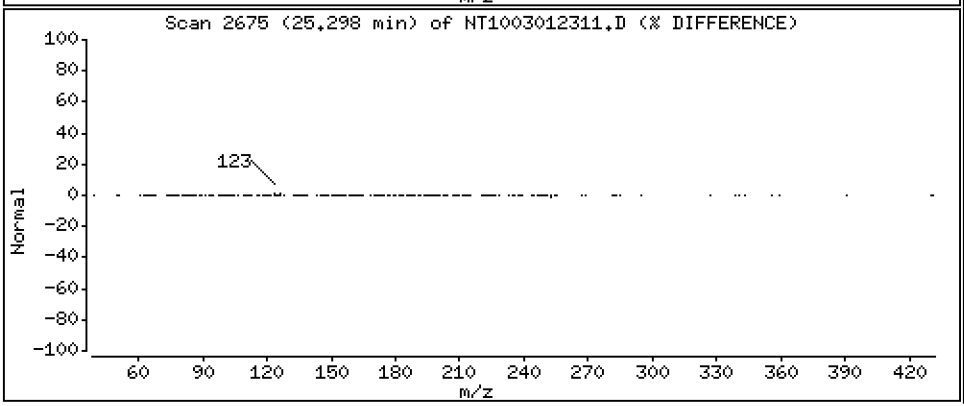












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

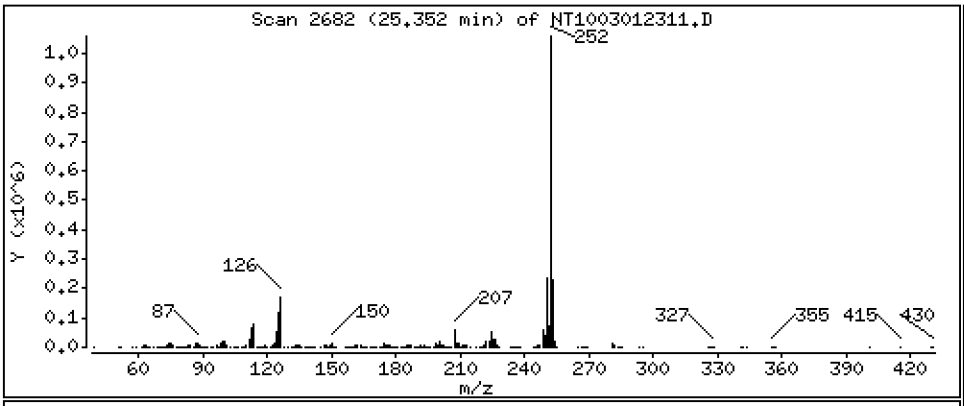
Operator: VTS

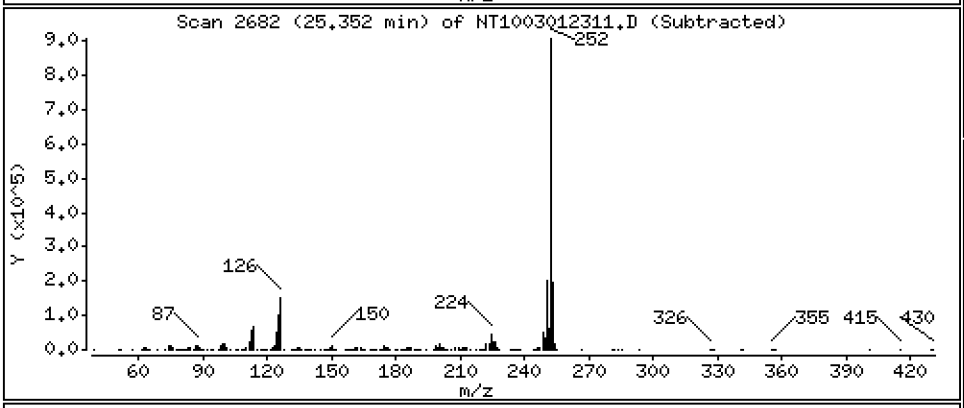
Column phase: ZB-5msi

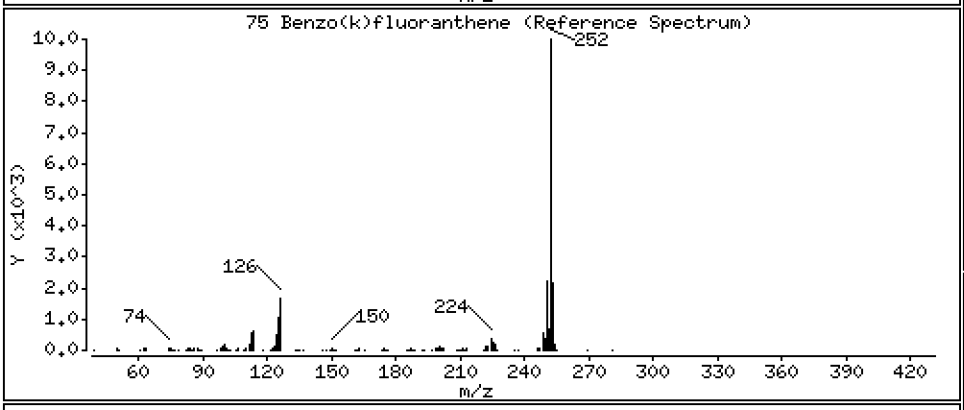
Column diameter: 0.25

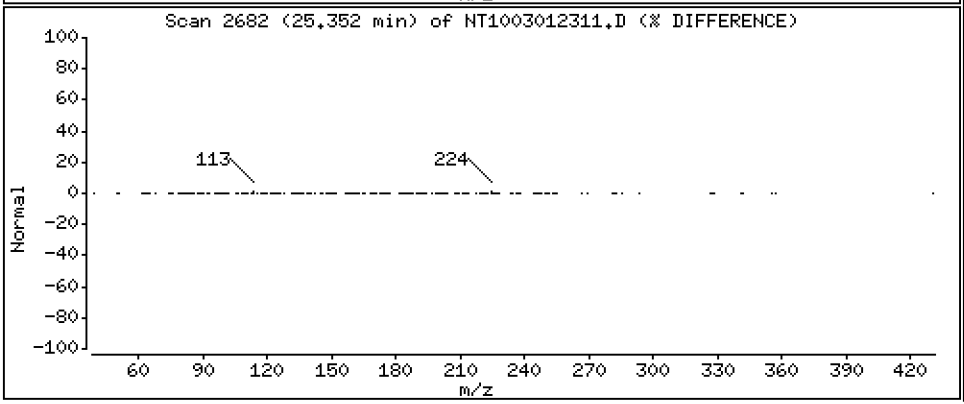
75 Benzo(k)fluoranthene

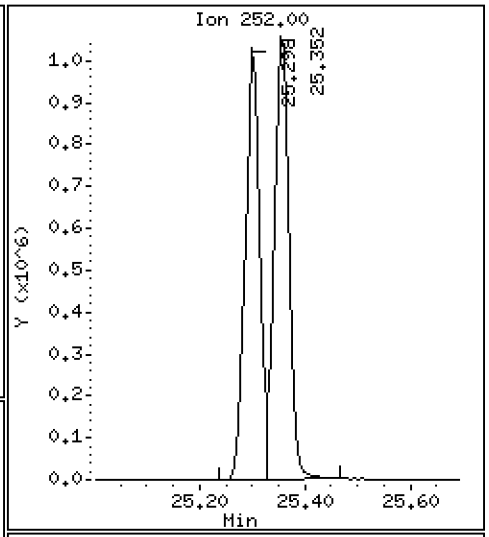
Concentration: 4.563 ug/mL

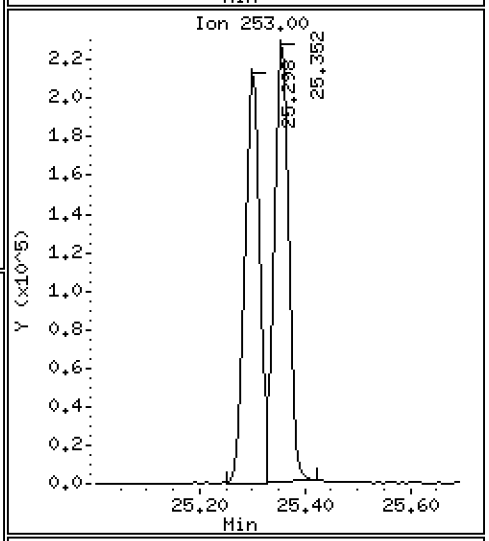


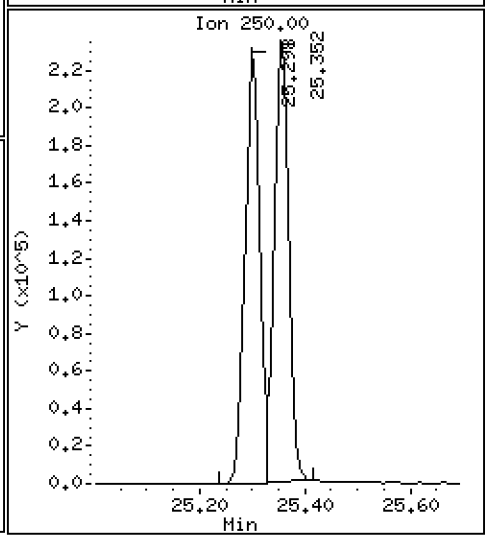












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

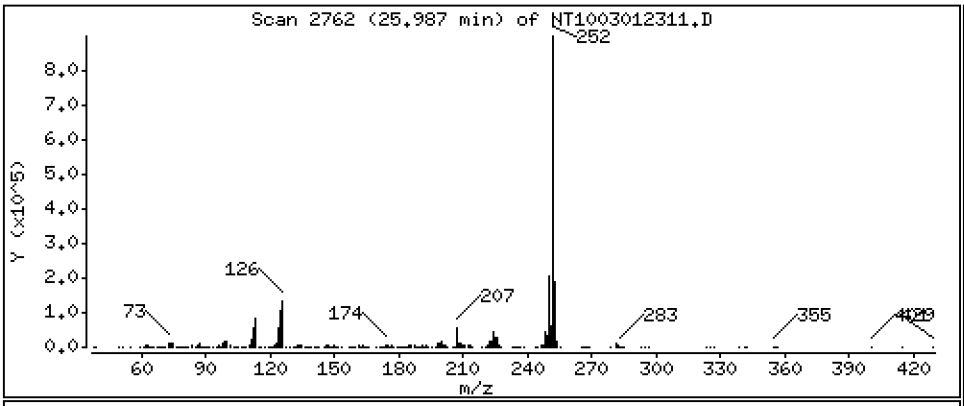
Operator: VTS

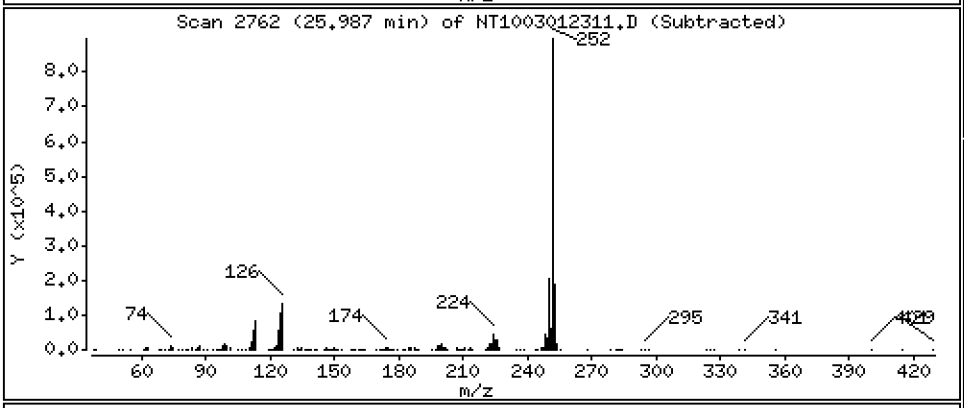
Column phase: ZB-5msi

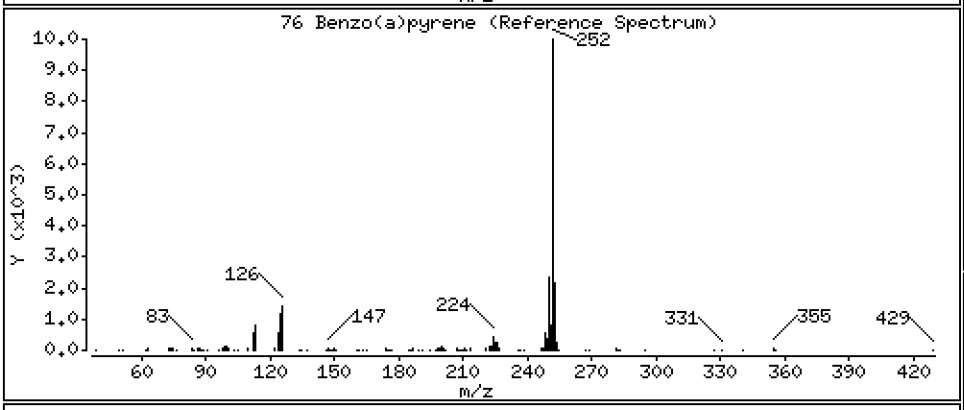
Column diameter: 0.25

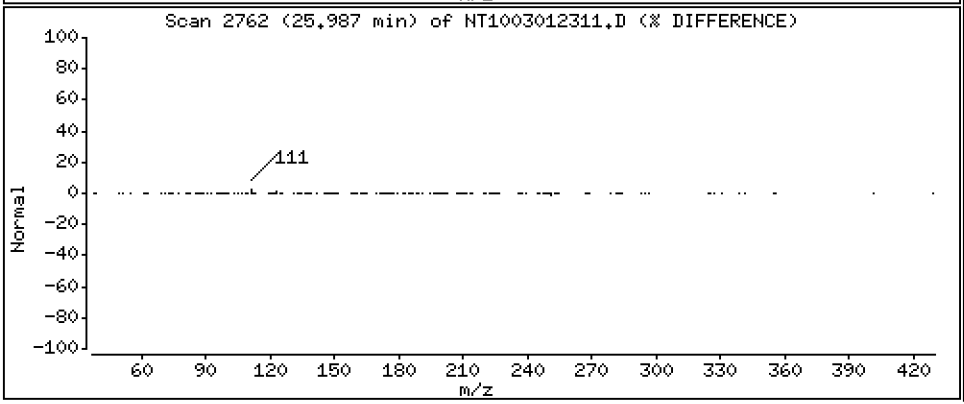
76 Benzo(a)pyrene

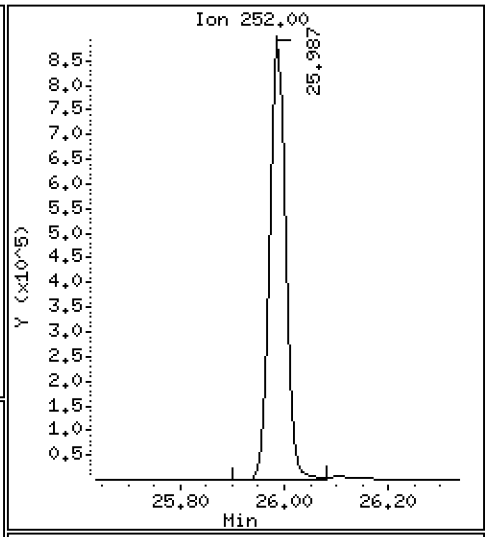
Concentration: 4.445 ug/mL

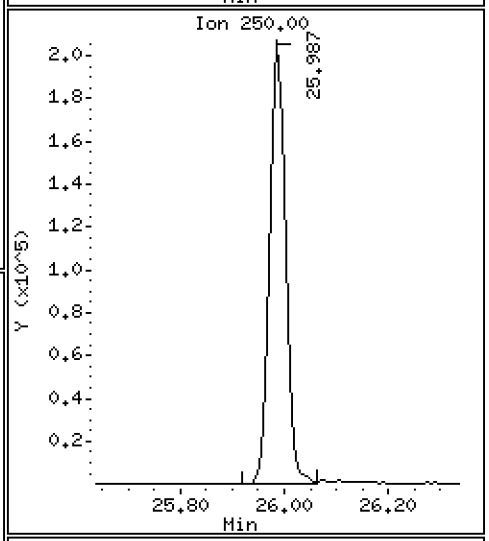


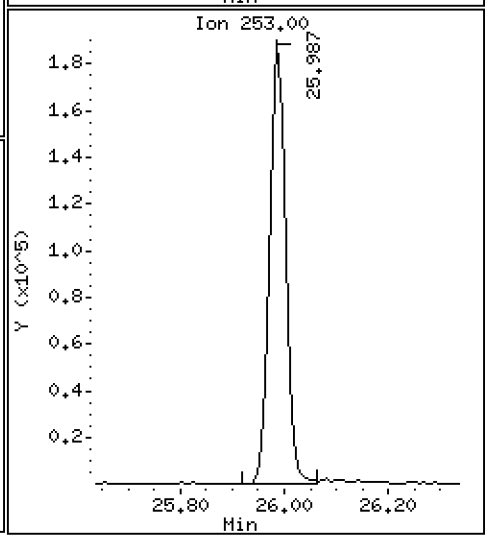












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

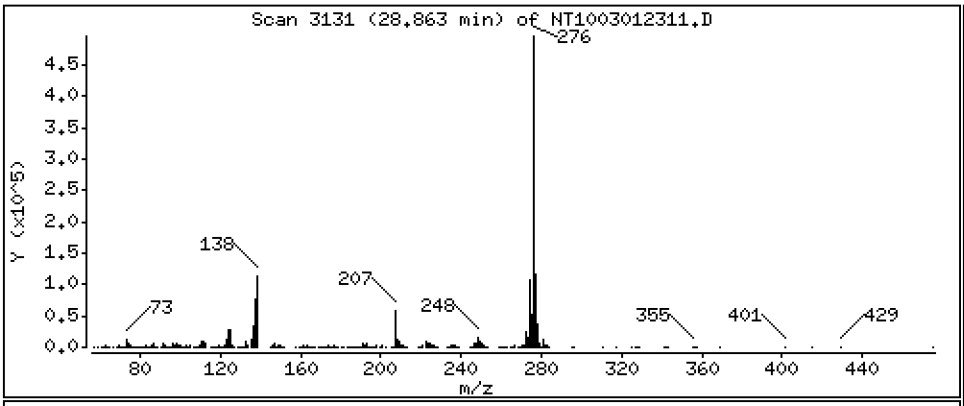
Operator: VTS

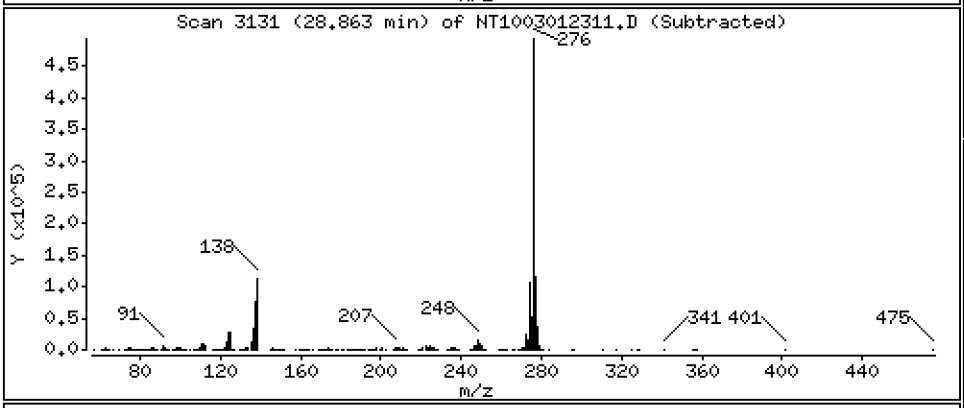
Column phase: ZB-5msi

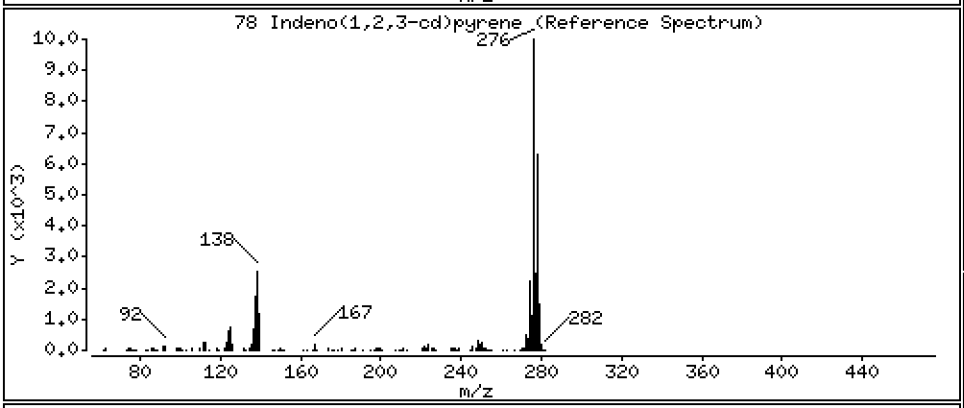
Column diameter: 0.25

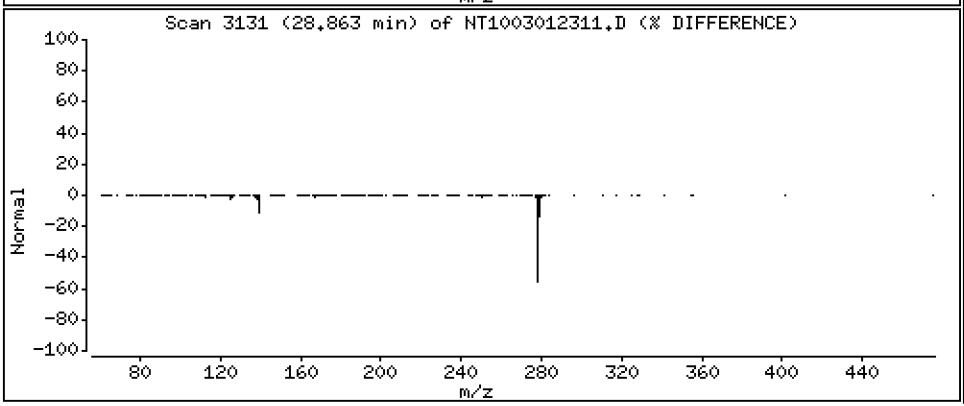
78 Indeno(1,2,3-cd)pyrene

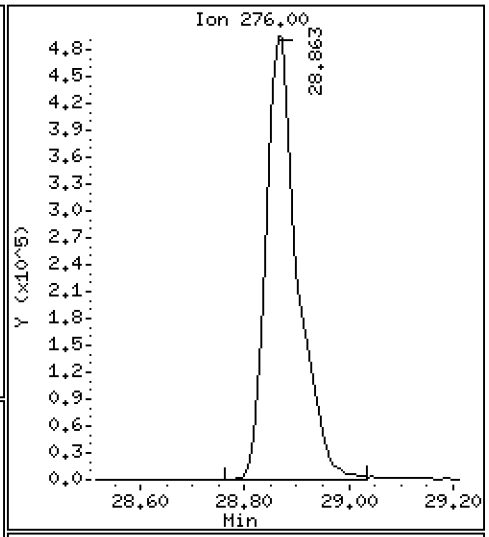
Concentration: 4.345 ug/mL

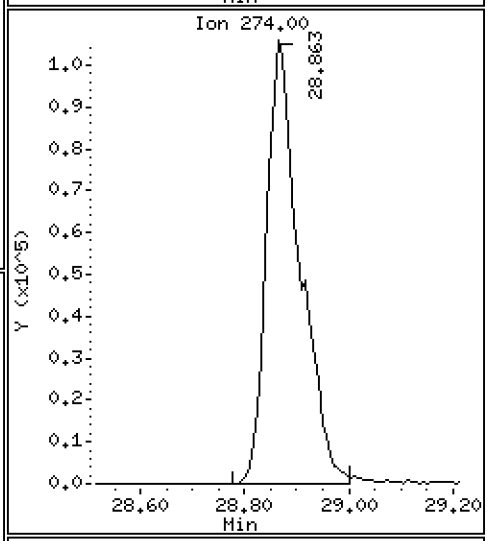


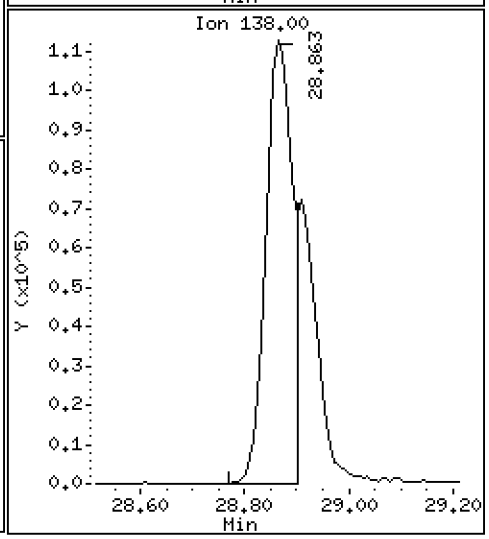












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

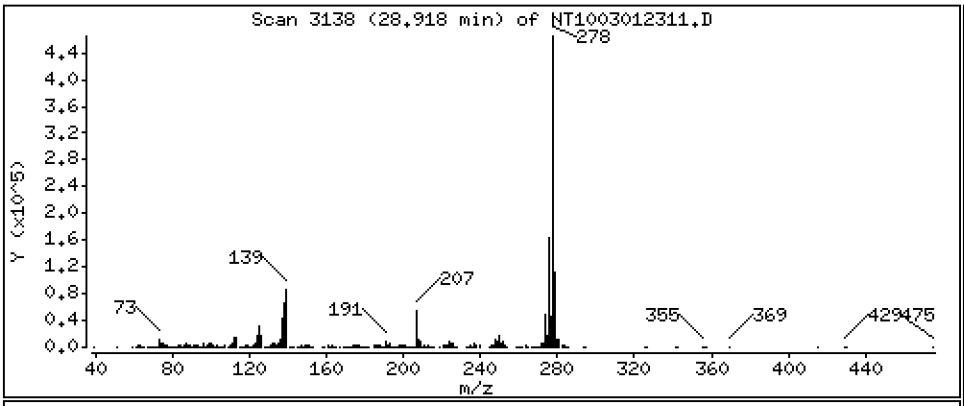
Operator: VTS

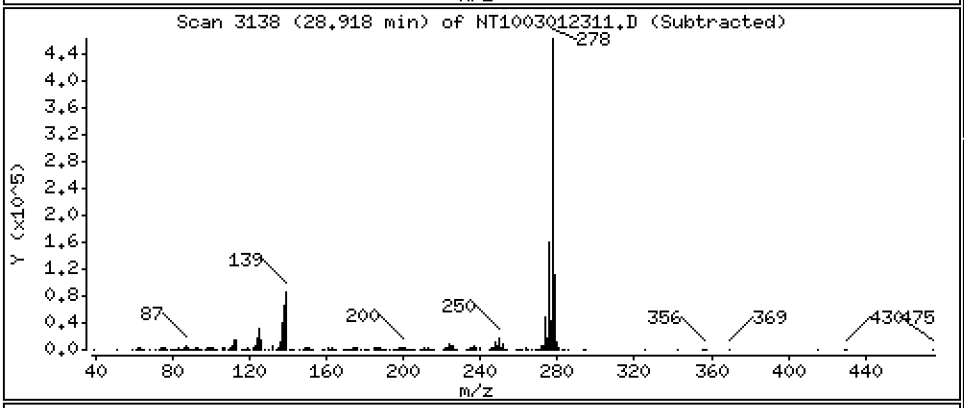
Column phase: ZB-5msi

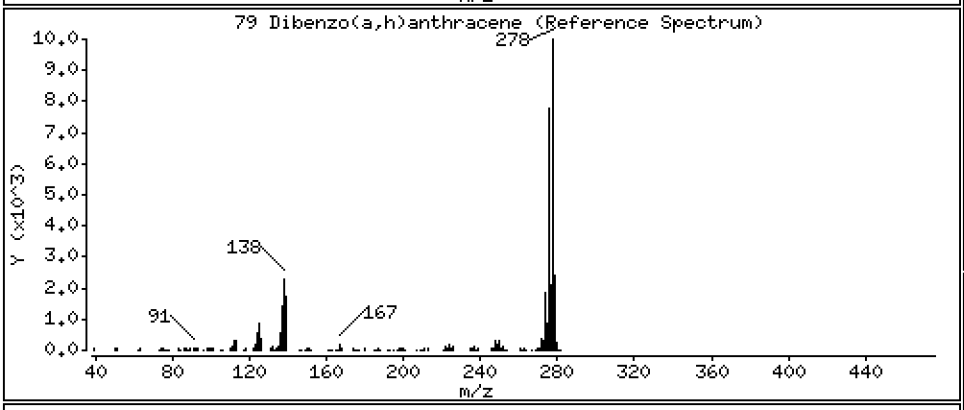
Column diameter: 0.25

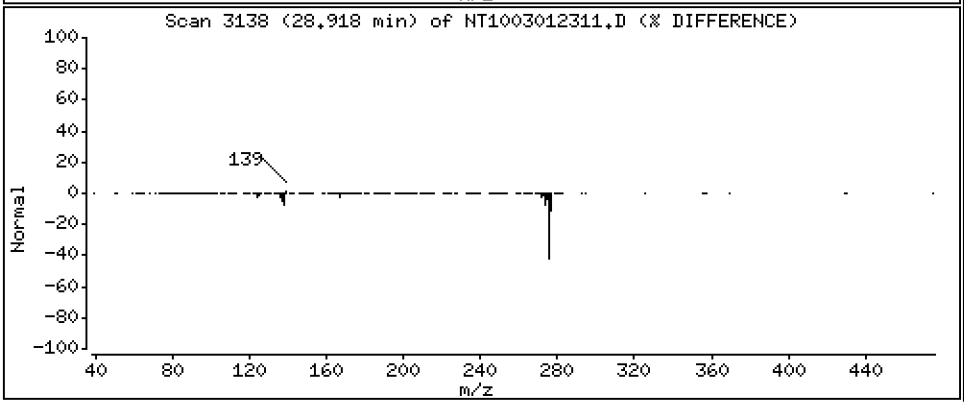
79 Dibenzo(a,h)anthracene

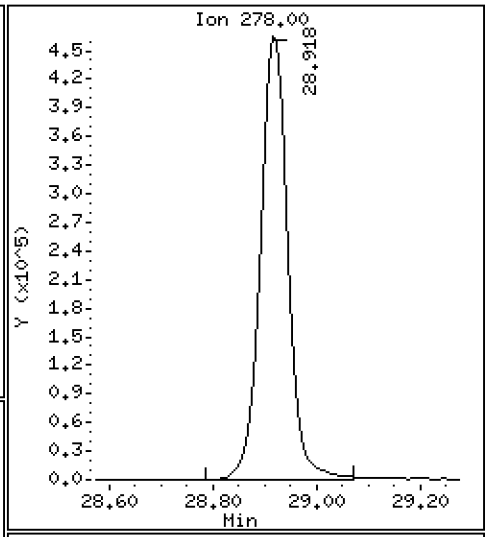
Concentration: 4.608 ug/mL

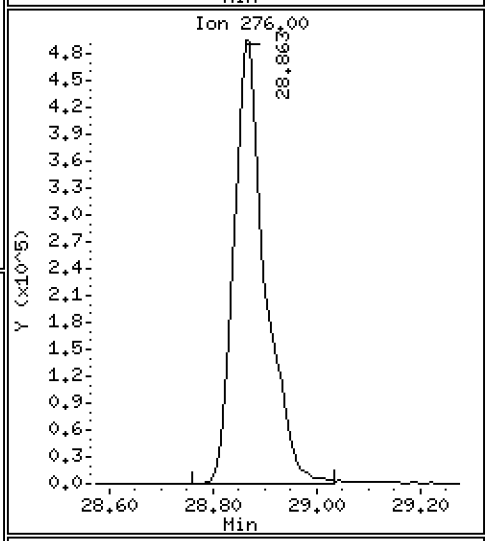


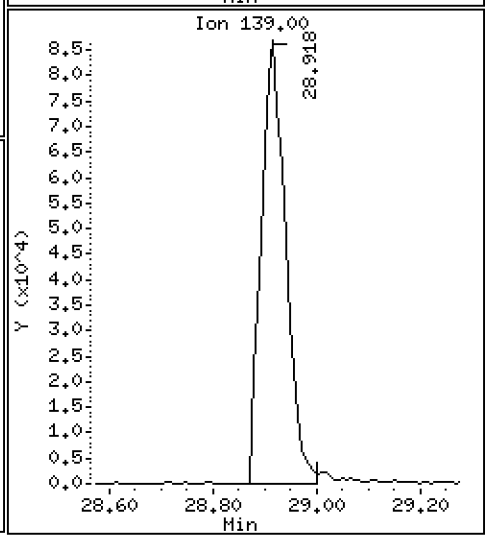












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

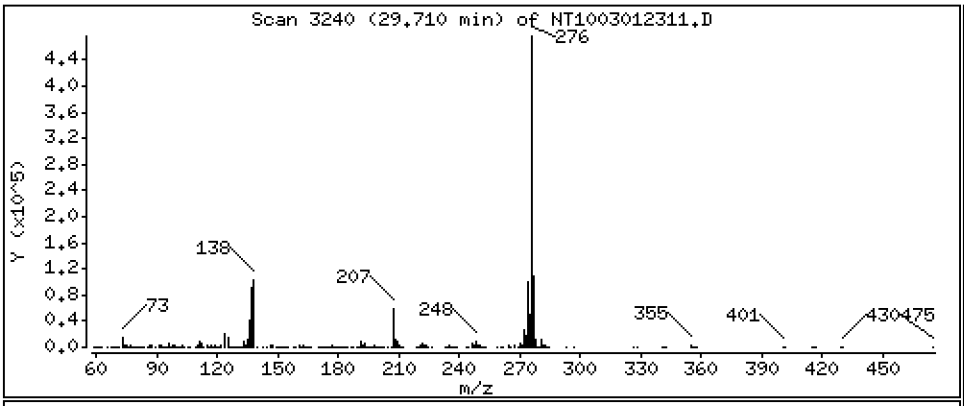
Operator: VTS

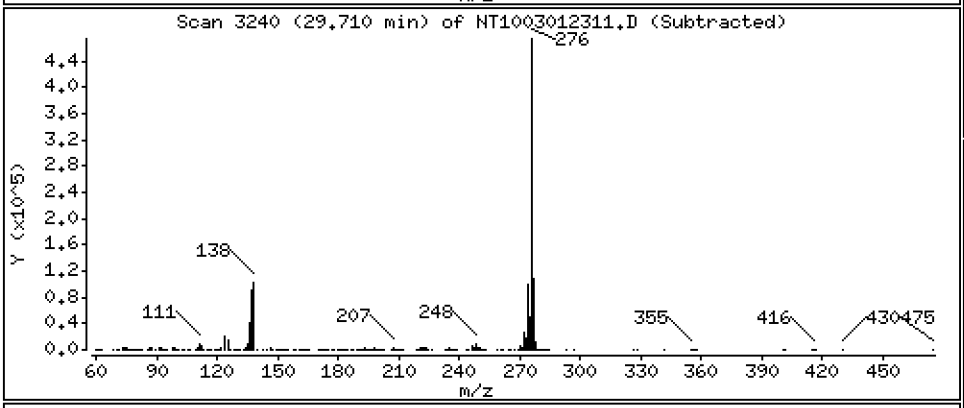
Column phase: ZB-5msi

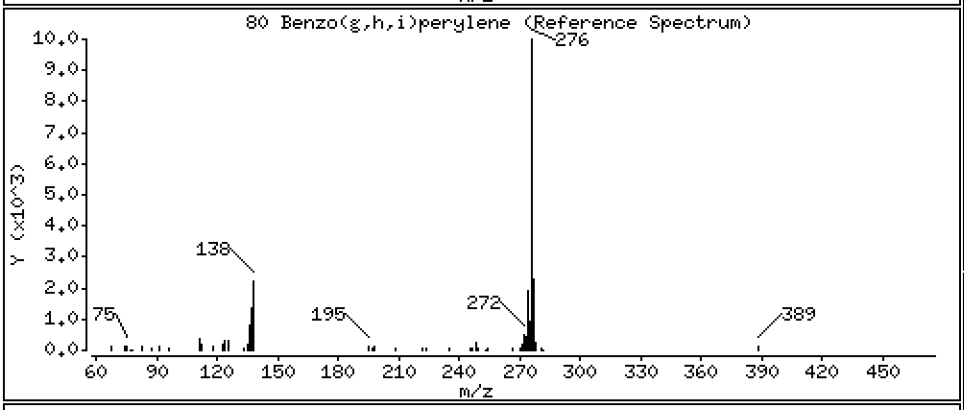
Column diameter: 0.25

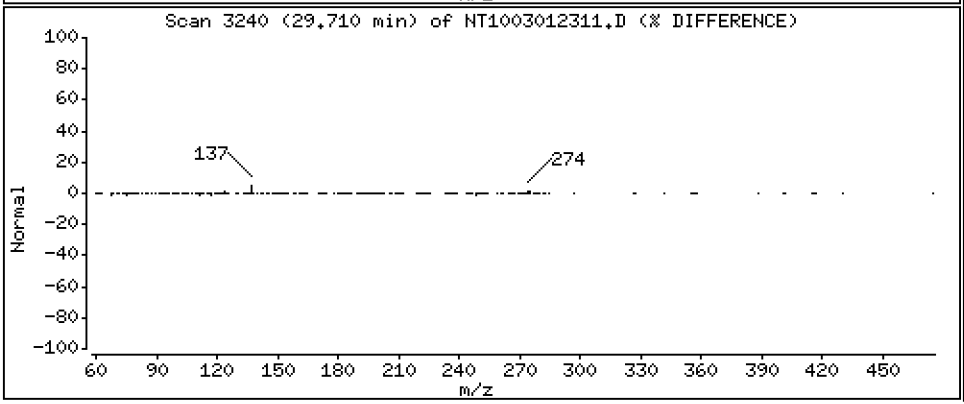
80 Benzo(g,h,i)perylene

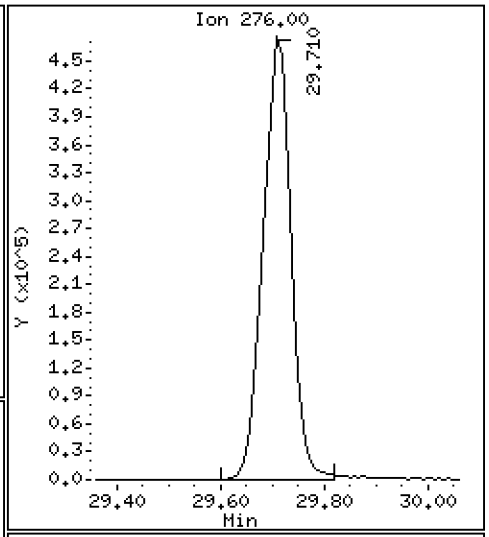
Concentration: 4.602 ug/mL

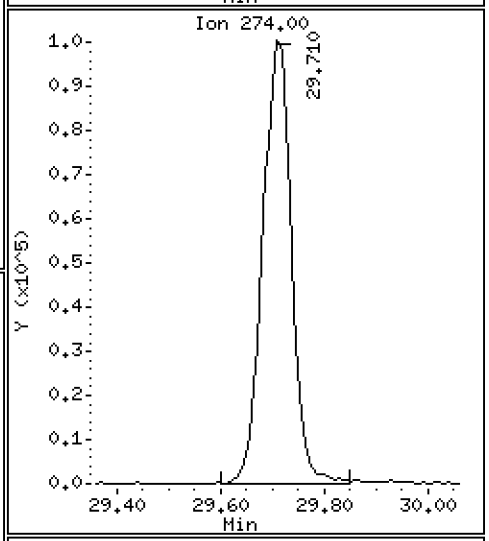


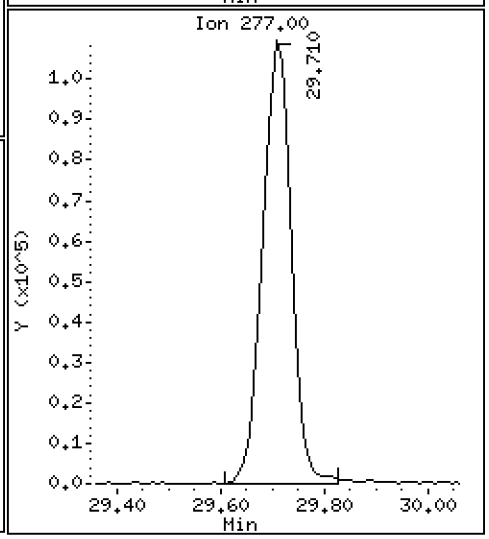












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

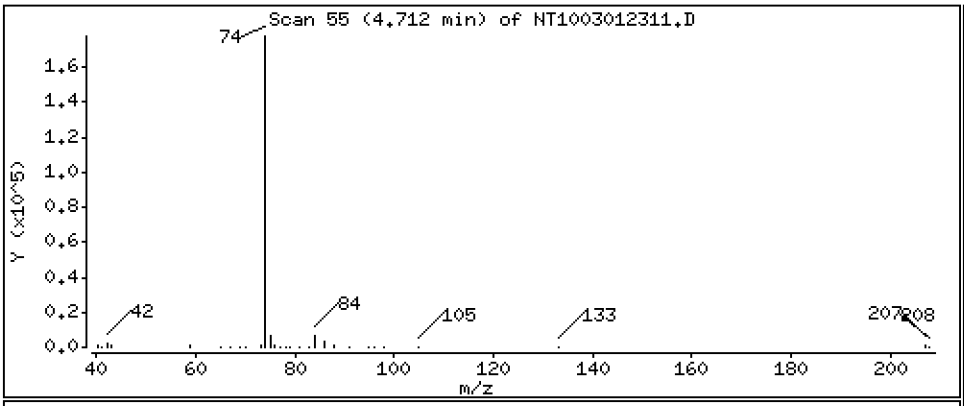
Operator: VTS

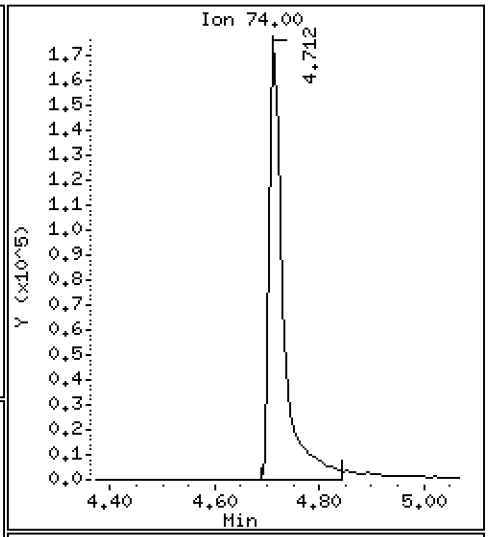
Column phase: ZB-5msi

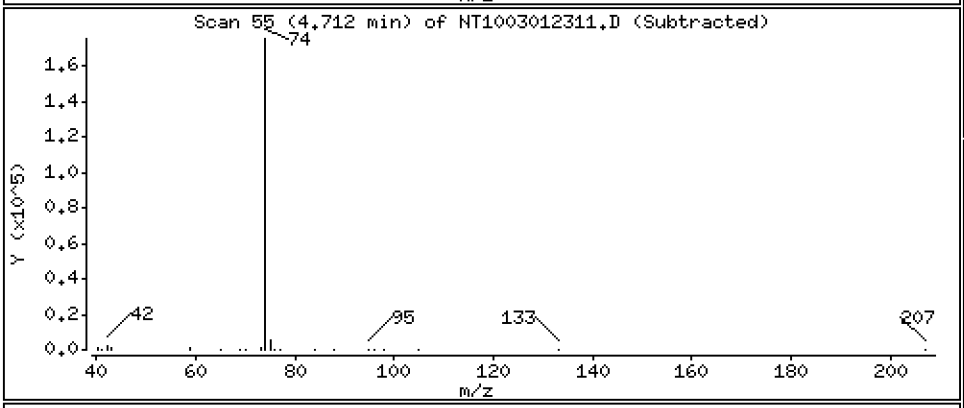
Column diameter: 0.25

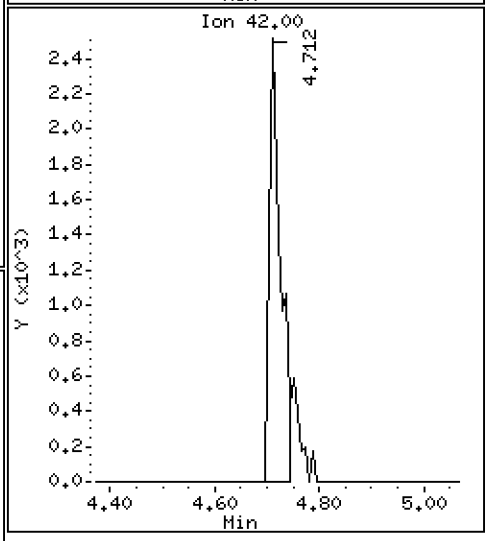
90 N-Nitrosodimethylamine

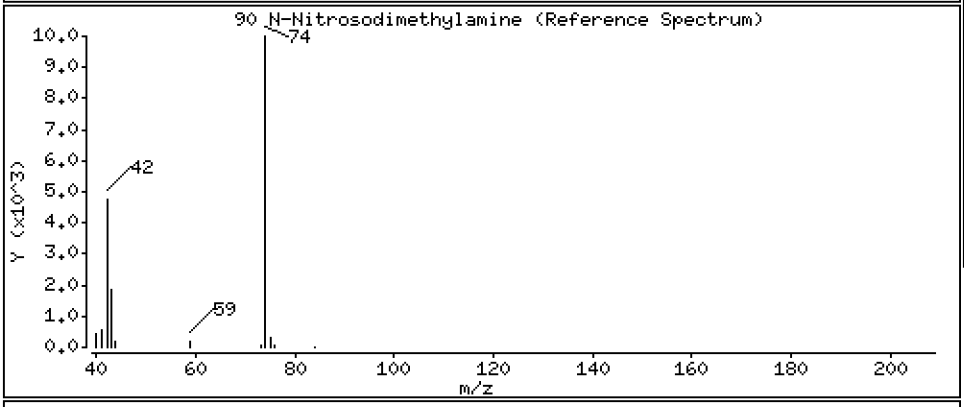
Concentration: 5.491 ug/mL

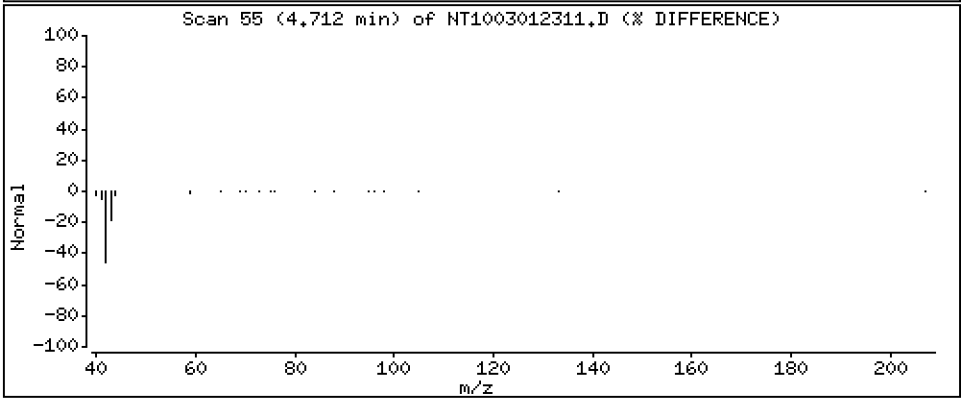












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

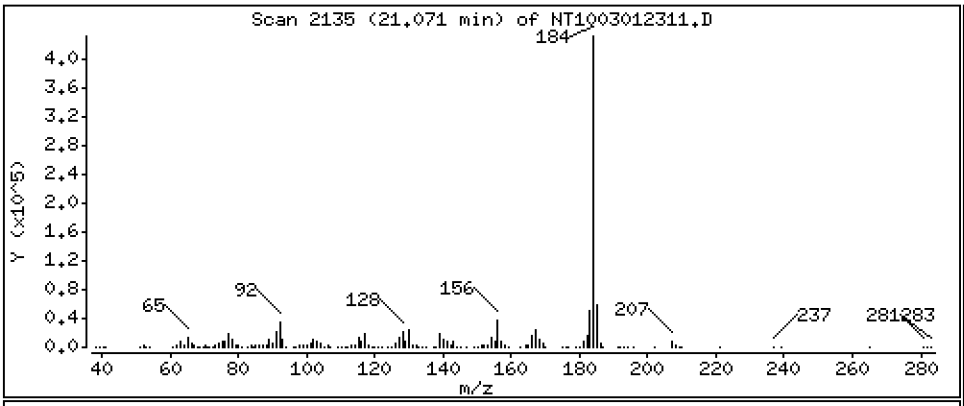
Operator: VTS

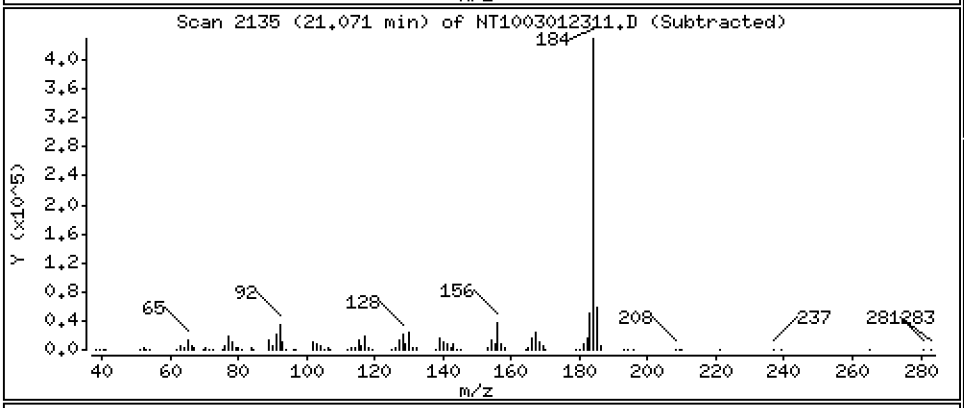
Column phase: ZB-5msi

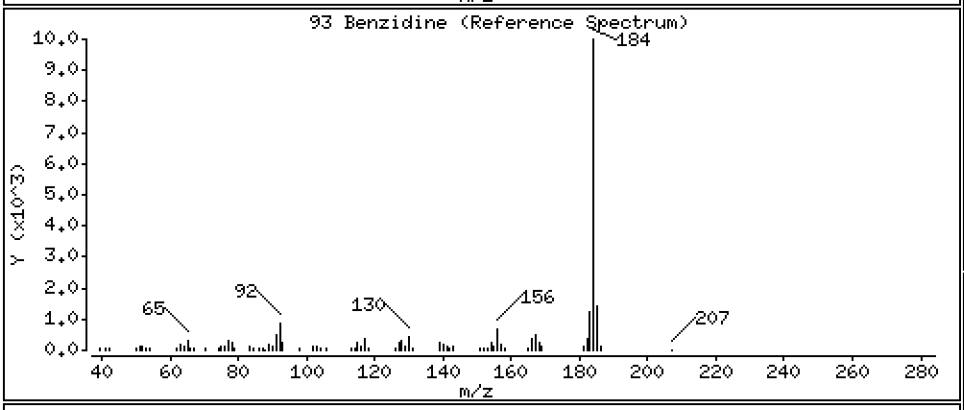
Column diameter: 0.25

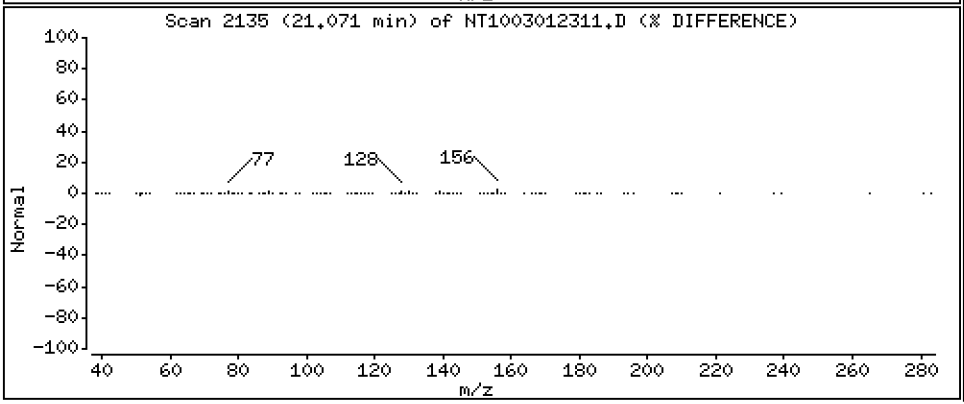
93 Benzidine

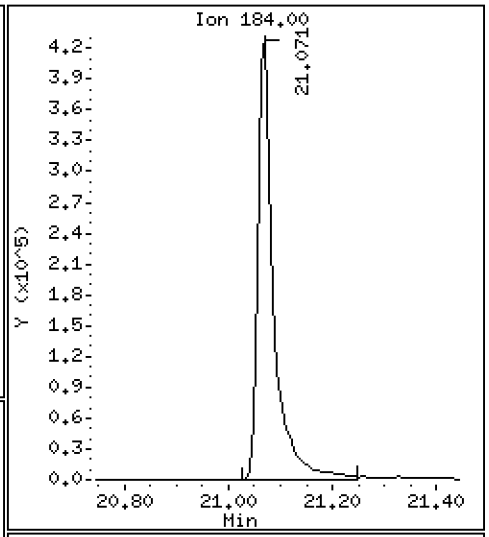
Concentration: 5.007 ug/mL

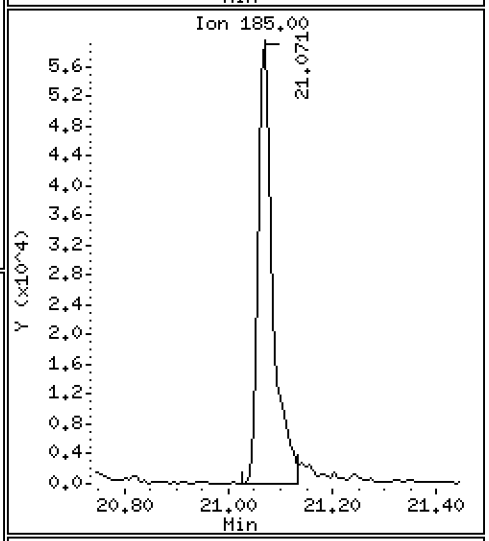


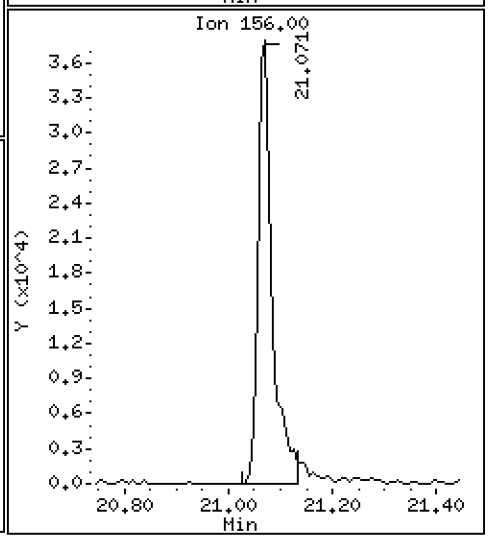












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

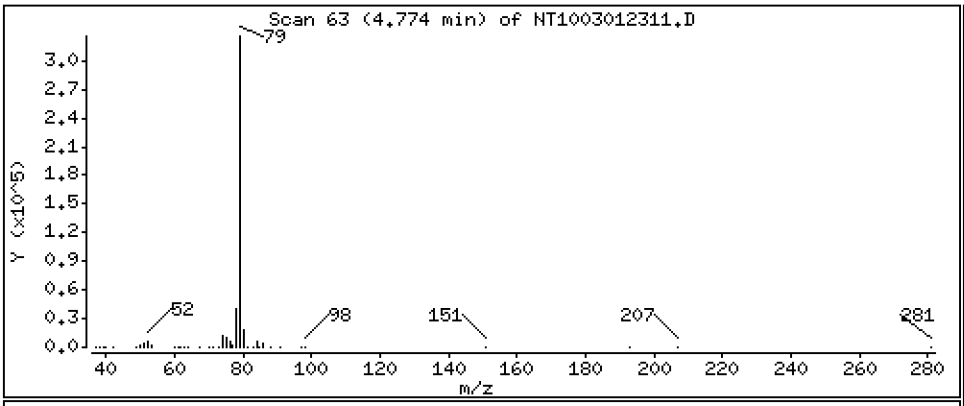
Operator: VTS

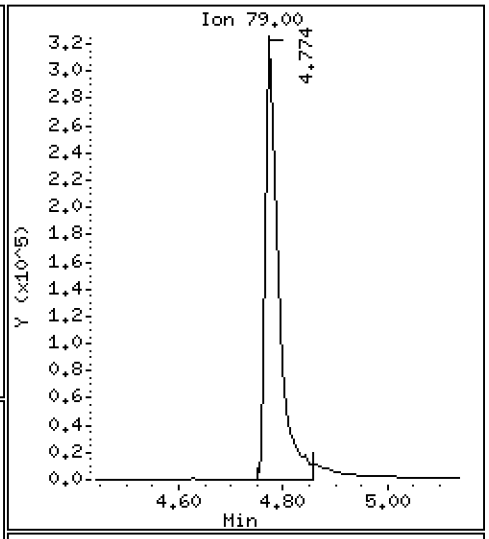
Column phase: ZB-5msi

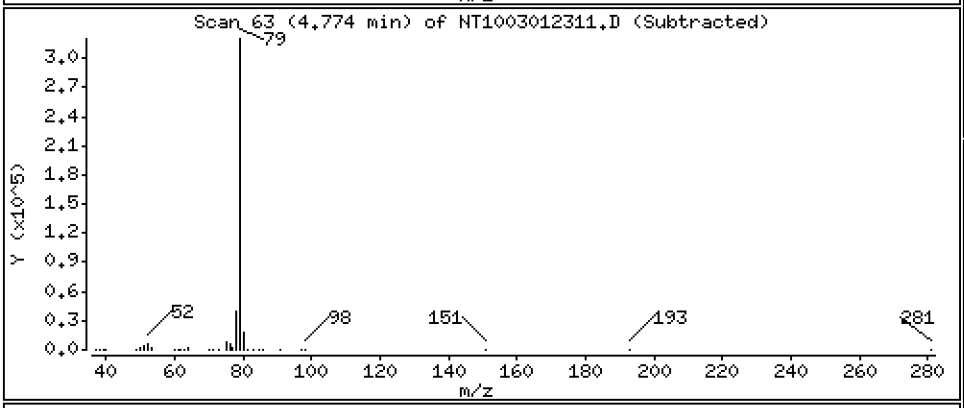
Column diameter: 0.25

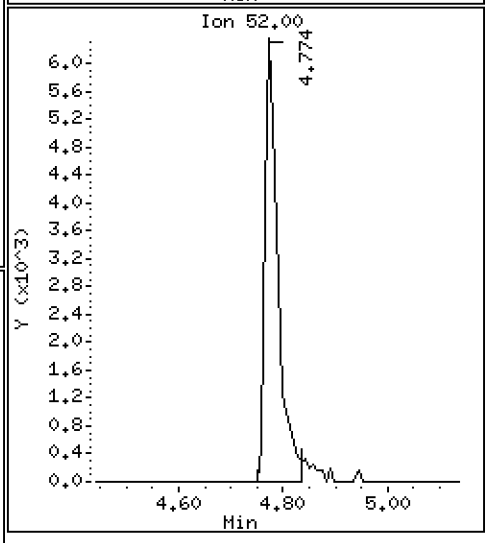
103 Pyridine

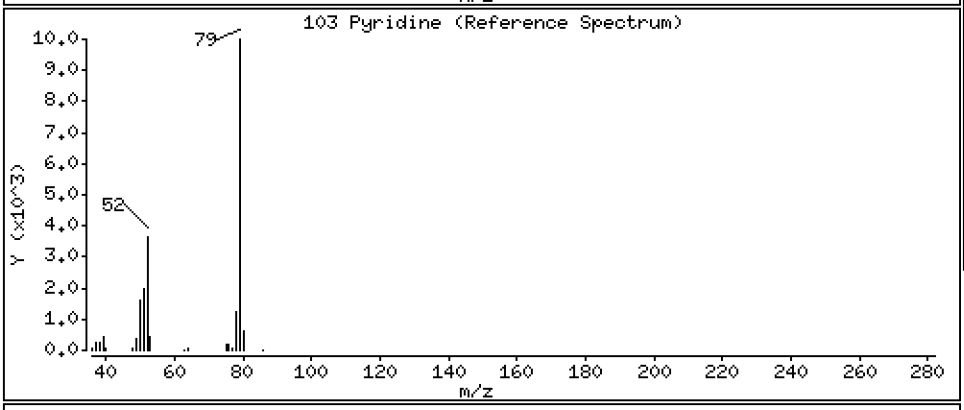
Concentration: 5.430 ug/mL

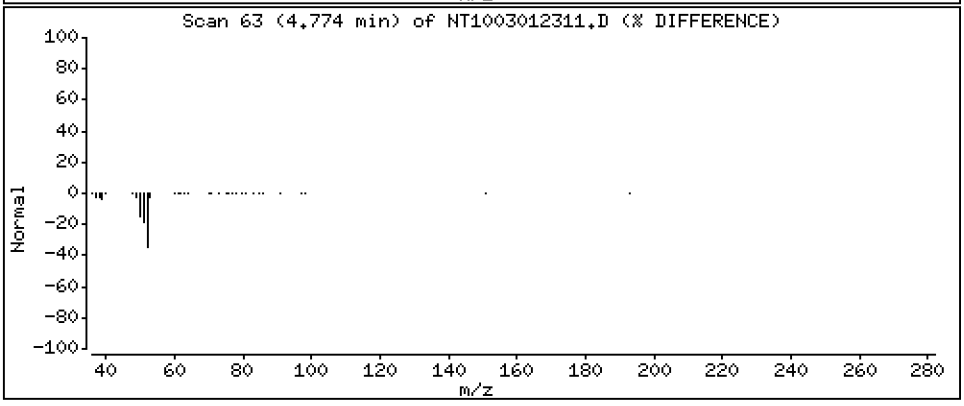












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

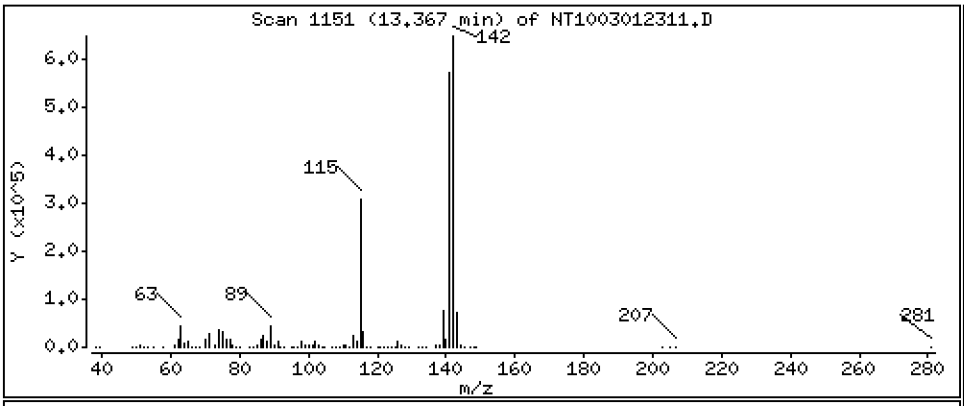
Operator: VTS

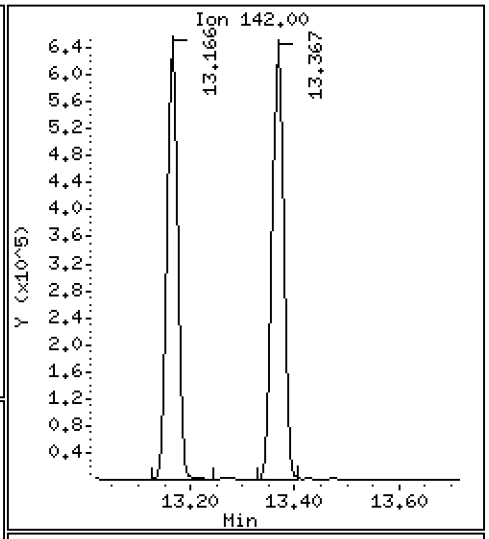
Column phase: ZB-5msi

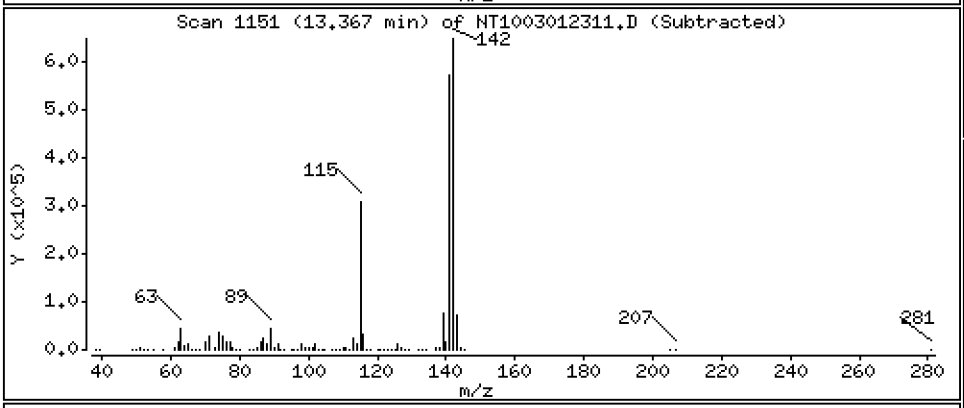
Column diameter: 0.25

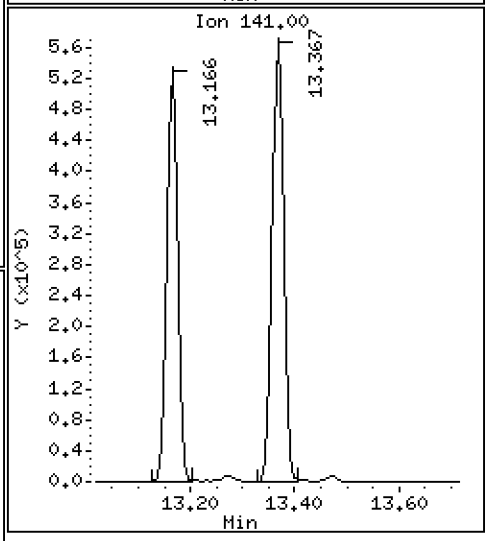
105 1-methylnaphthalene

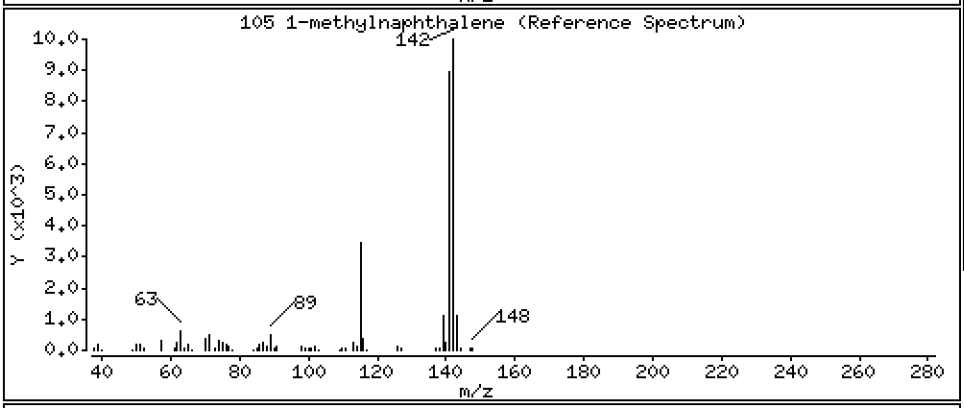
Concentration: 5.219 ug/mL

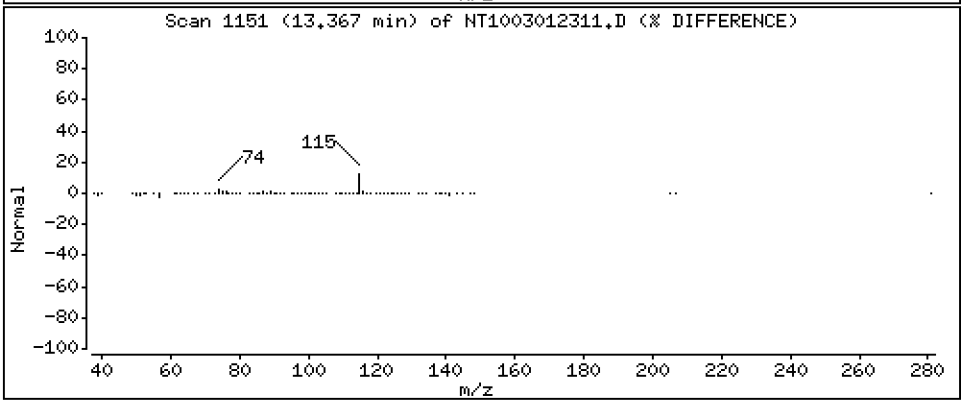












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

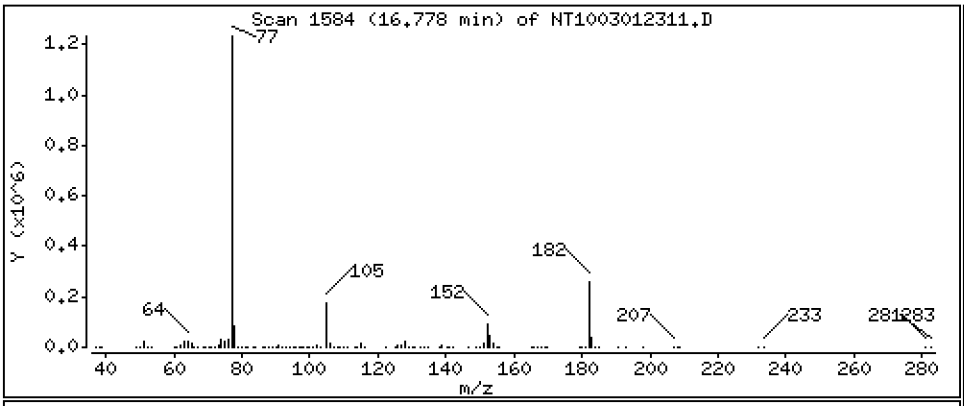
Operator: VTS

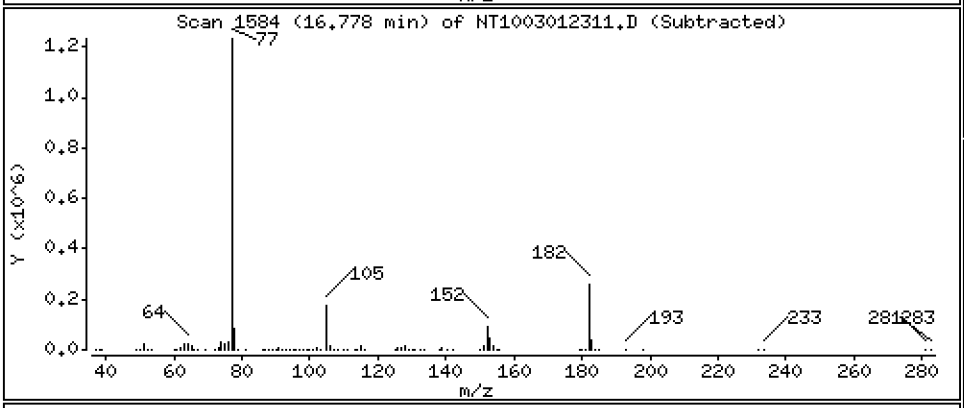
Column phase: ZB-5msi

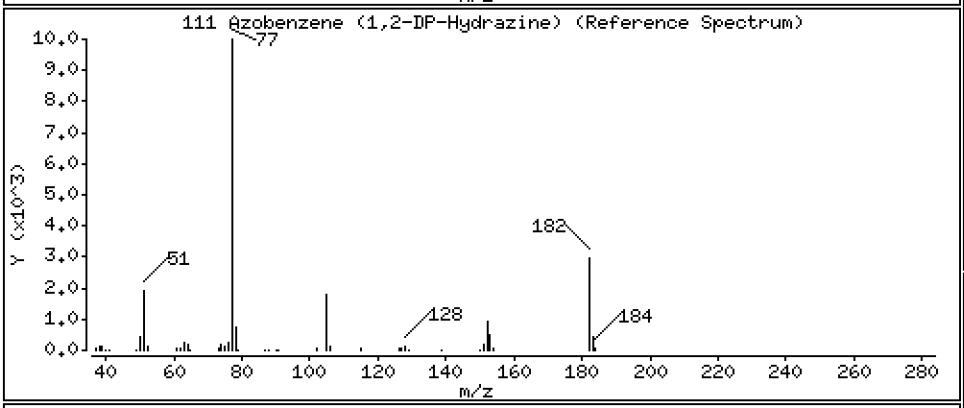
Column diameter: 0.25

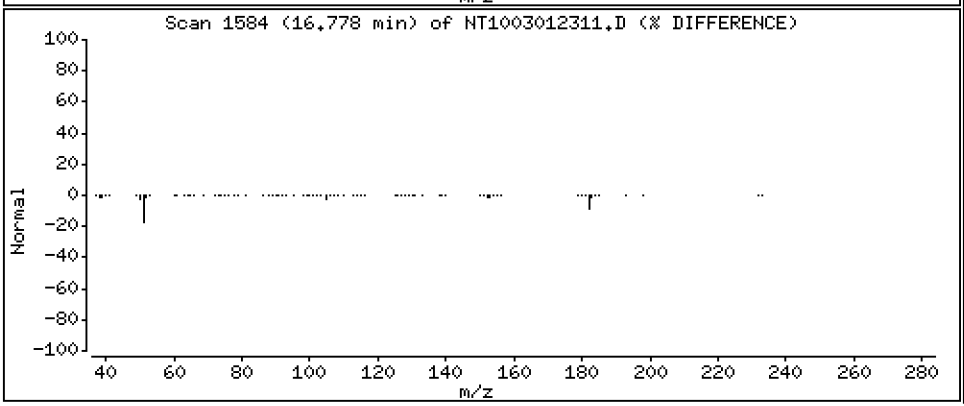
111 Azobenzene (1,2-DP-Hydrazine)

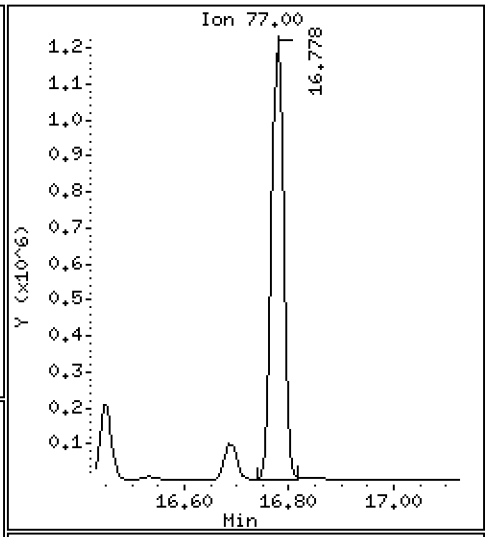
Concentration: 5.953 ug/mL

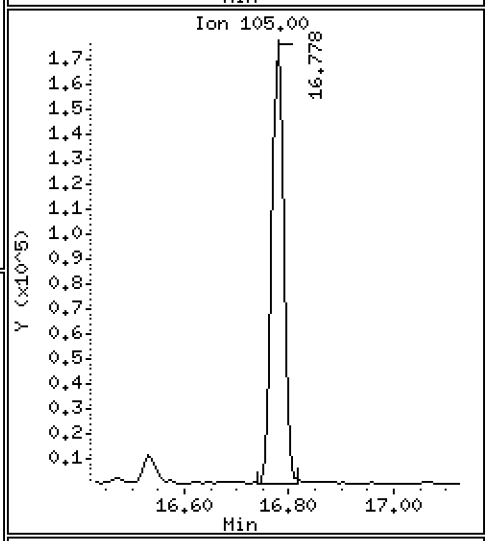


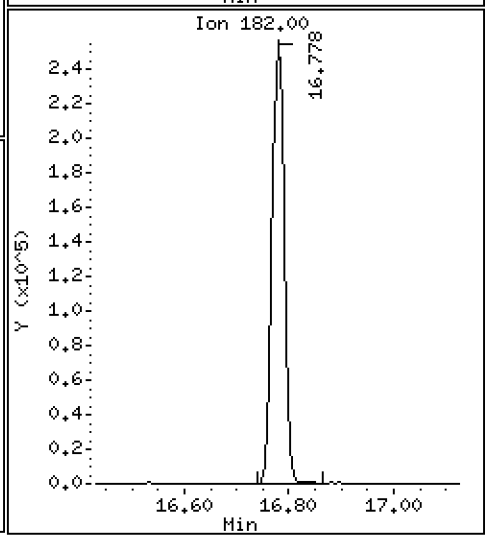












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

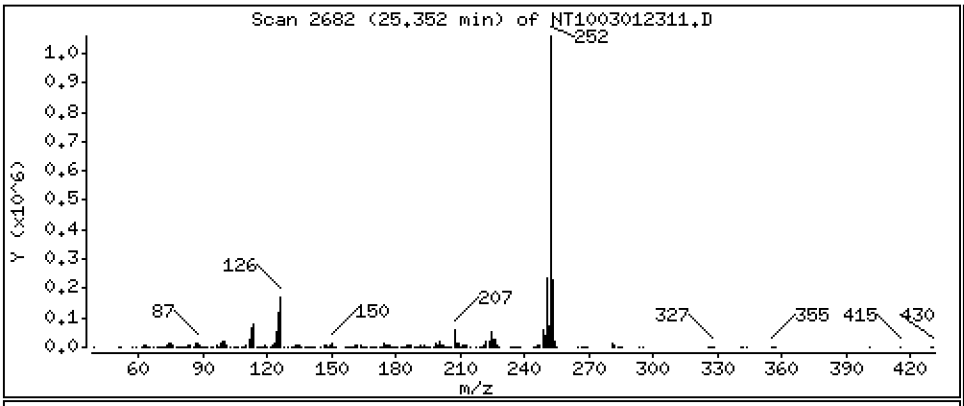
Operator: VTS

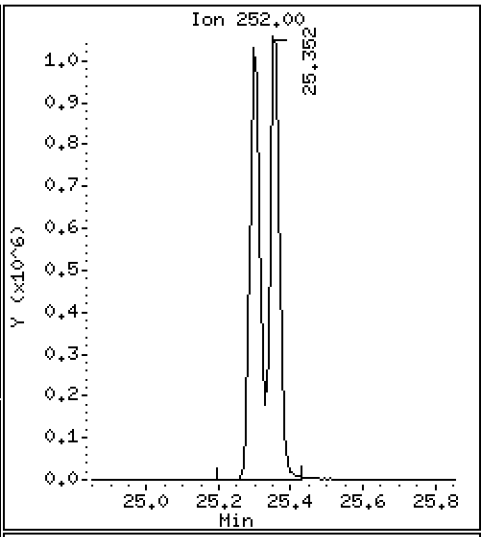
Column phase: ZB-5msi

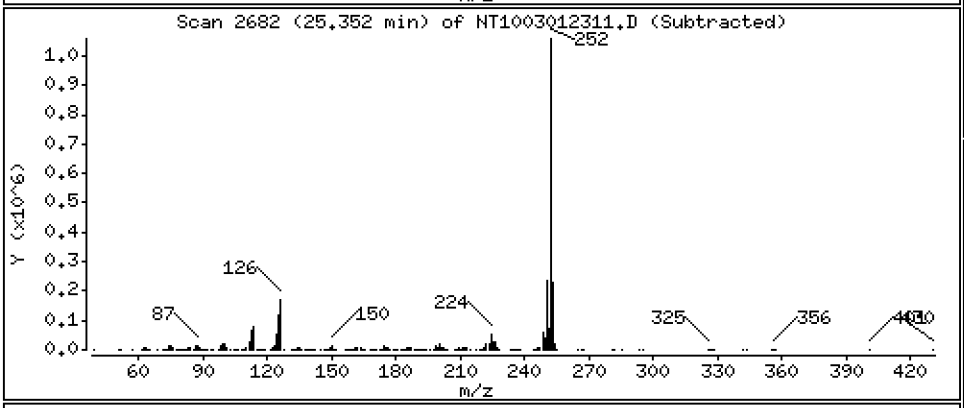
Column diameter: 0.25

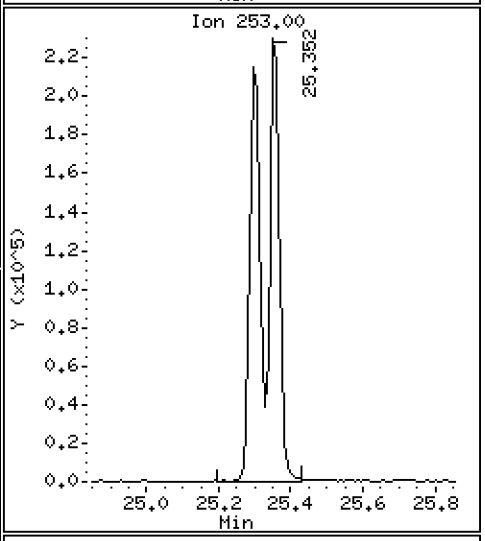
187 Total Benzofluoranthenes

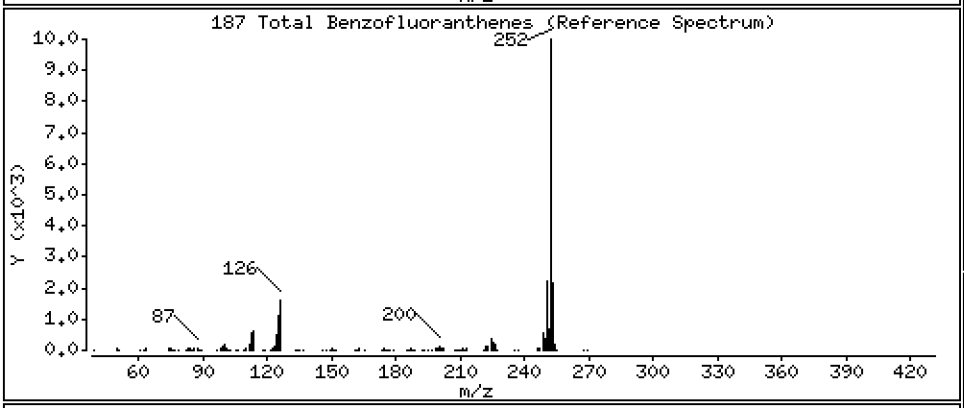
Concentration: 8.905 ug/mL

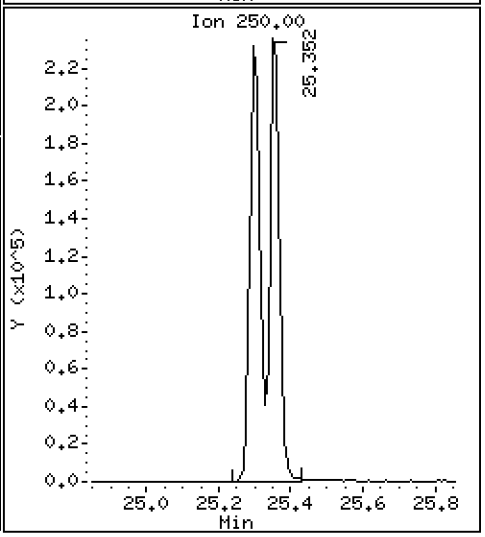


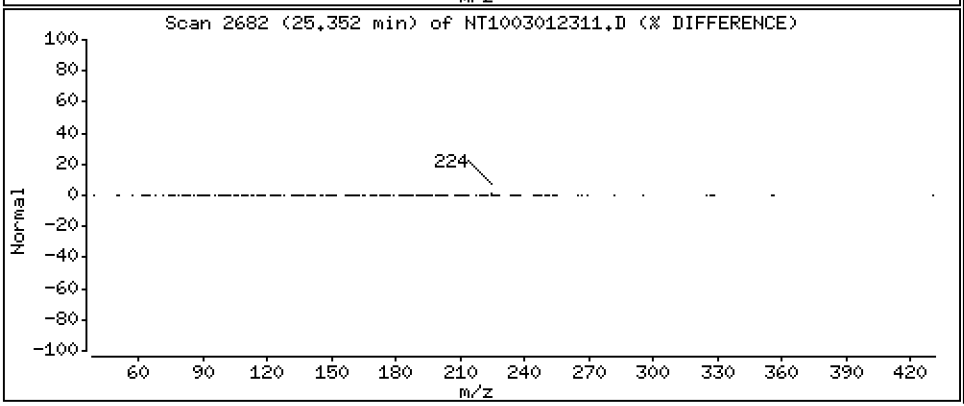












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

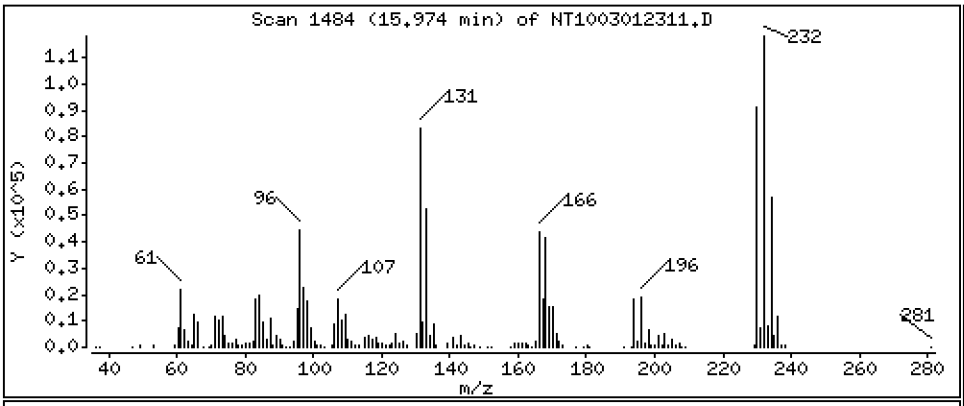
Operator: VTS

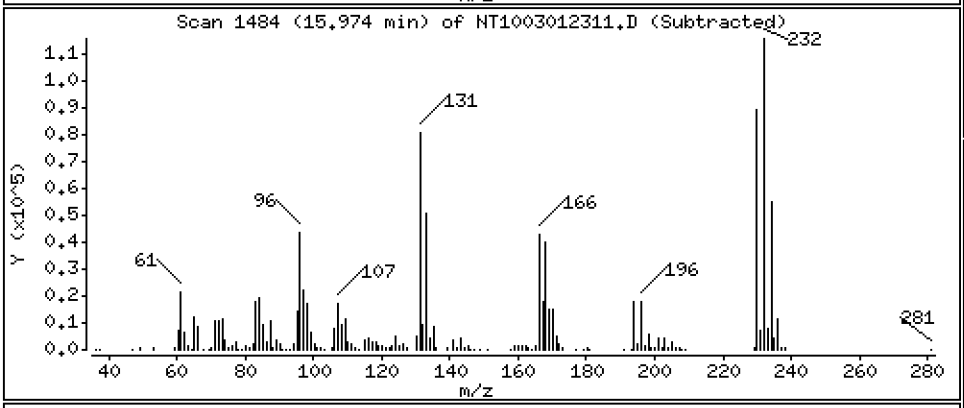
Column phase: ZB-5msi

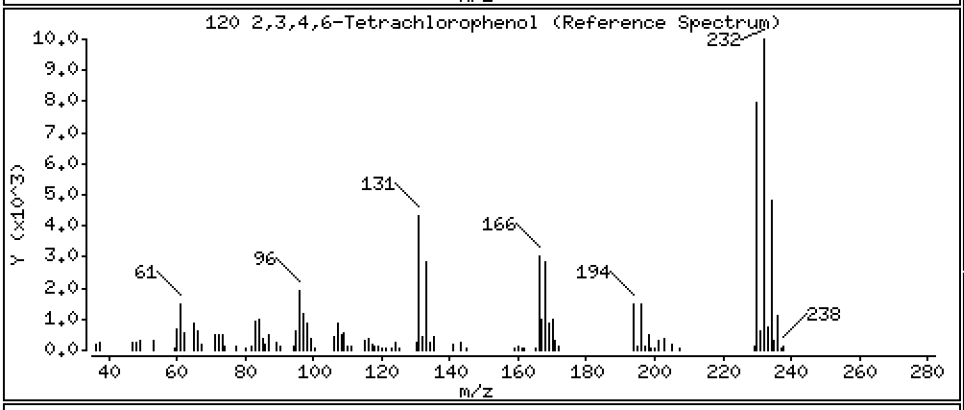
Column diameter: 0.25

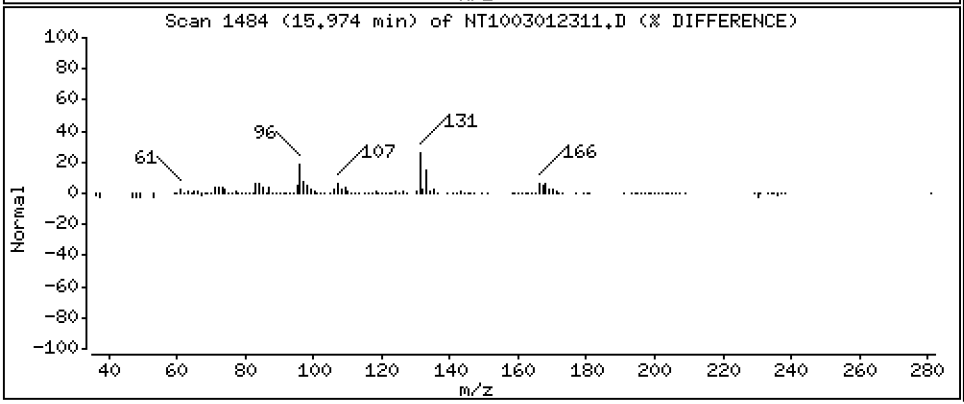
120 2,3,4,6-Tetrachlorophenol

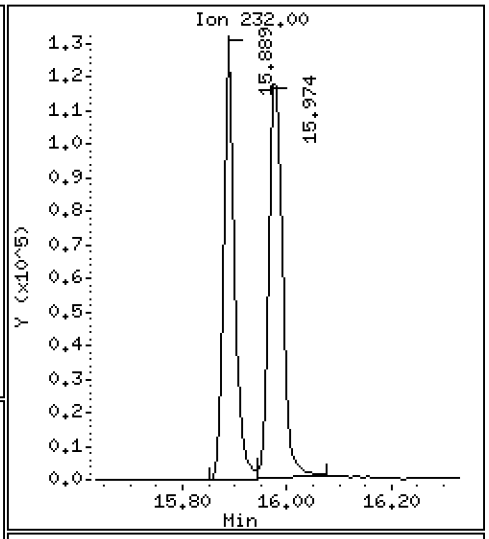
Concentration: 3.534 ug/mL

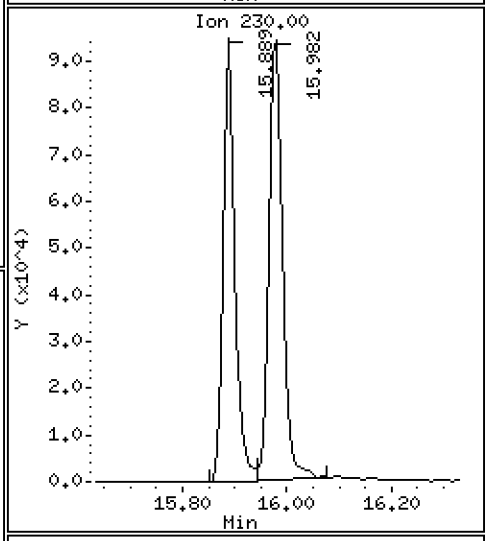


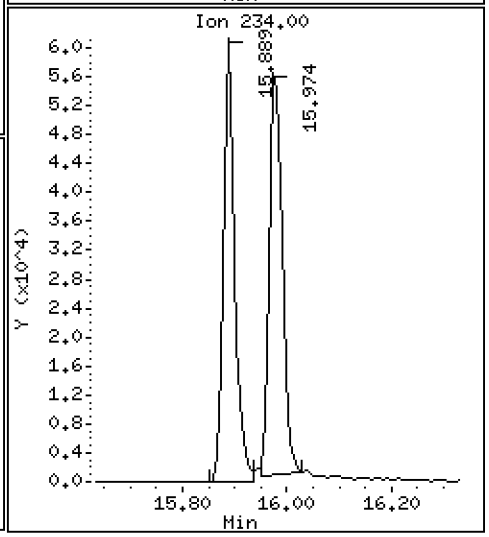












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D
Lab Smp Id: SLC0084-SCV1
Inj Date : 01-MAR-2023 21:46
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Meth Date : 07-Mar-2023 12:44 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: ORGDATA102

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

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

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

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012311.D
Lab Smp Id: SLC0084-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 17:21
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

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

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

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

REVIEW SUMMARY FOR FILE - NT1003012311.D

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

RT	CO-ELUTION COMPOUNDS
23.401	bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

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

RRT CHECK

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

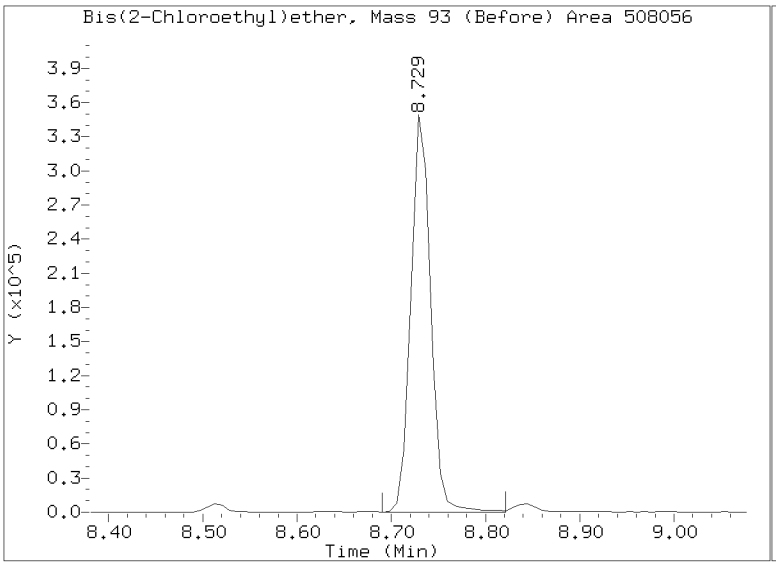
RRT check based on Ccal File: NT1003012307.D

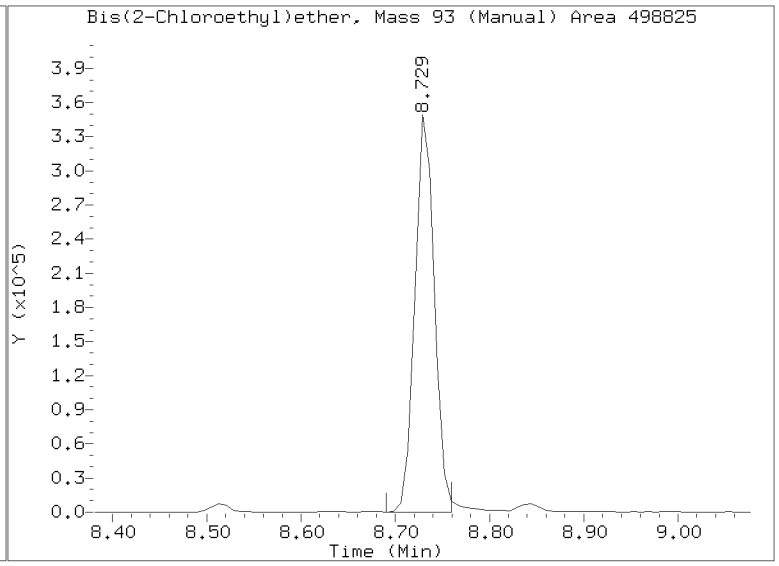
On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

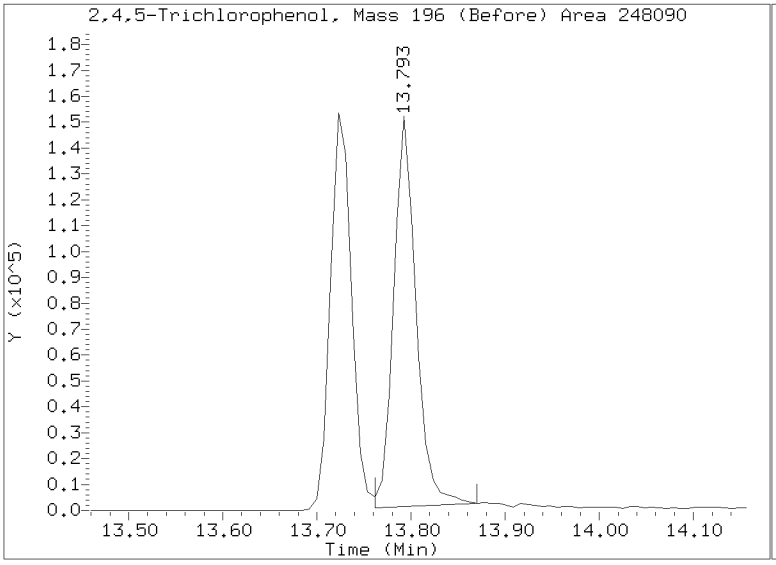
* Only compounds listed in the work order have been verified by the analyst *

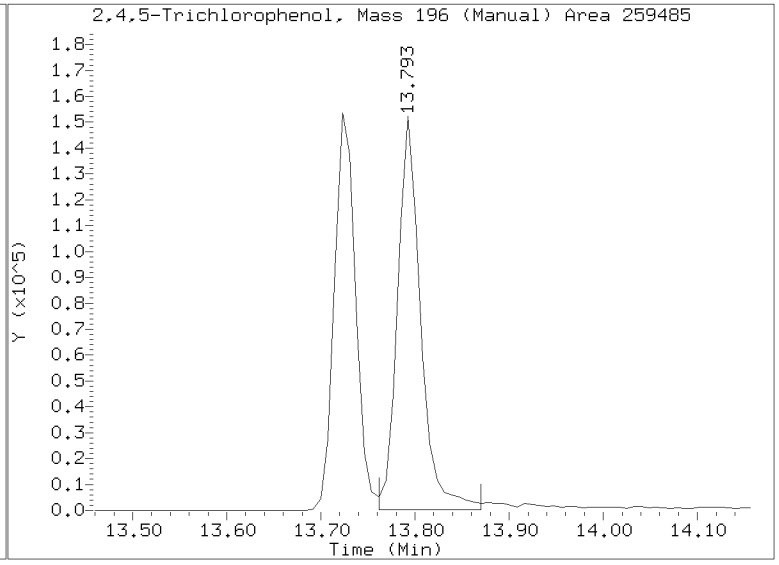
Quant Ion Manual Peak Adjustment Report

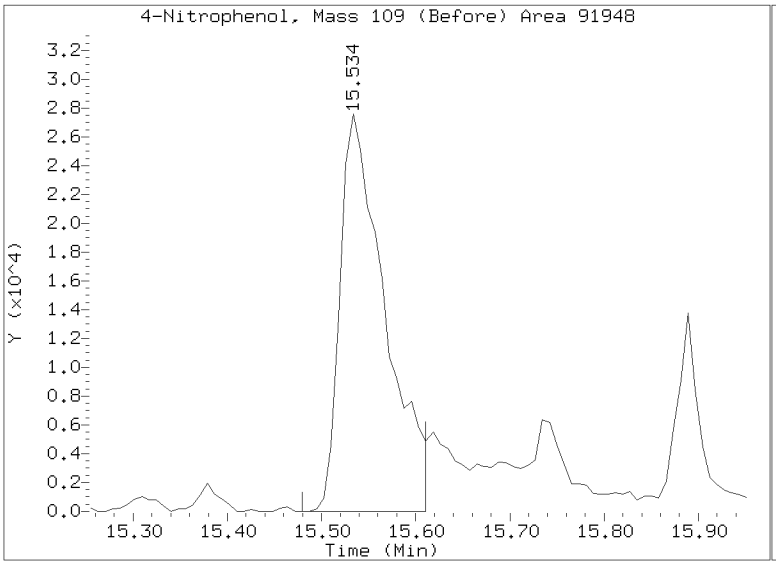
Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012311.D
Injection Date: 01-MAR-2023 21:46
Lab ID:SLC0084-SCV1 Client ID:
Report Date: 03/07/2023 12:48

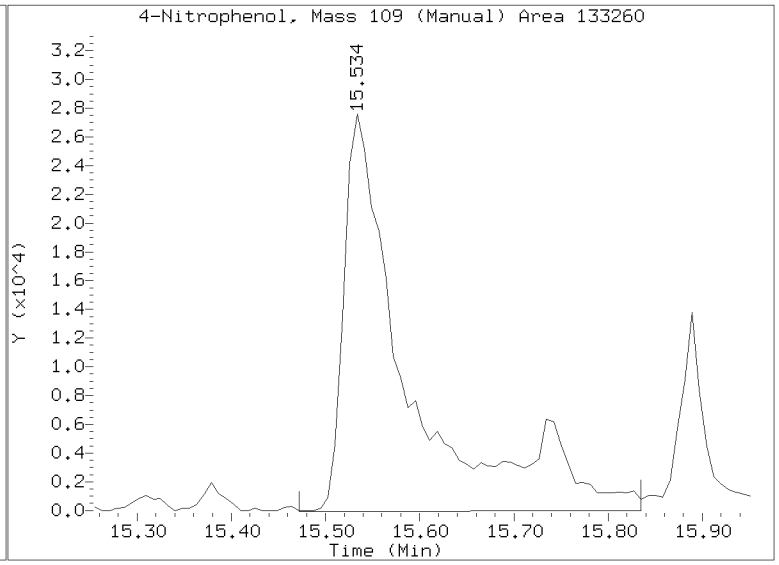












SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00019
Laboratory ID: SLC0084-SCV1
Sequence: SLC0084
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.9	-3.0	20.00
bis(2-chloroethyl) ether	5.0000	5.9	18.6	20.00
2-Chlorophenol	5.0000	4.7	-6.2	20.00
1,3-Dichlorobenzene	5.0000	5.3	5.3	20.00
1,4-Dichlorobenzene	5.0000	5.2	4.3	20.00
1,2-Dichlorobenzene	5.0000	5.2	3.9	20.00
Benzyl Alcohol	5.0000	4.9	-2.0	20.00
2,2'-Oxybis(1-chloropropane)	5.0000	6.2	24.6 *	20.00
2-Methylphenol	5.0000	4.2	-16.2	20.00
Hexachloroethane	5.0000	5.4	8.9	20.00
N-Nitroso-di-n-Propylamine	5.0000	5.9	18.1	20.00
4-Methylphenol	5.0000	4.2	-15.2	20.00
Nitrobenzene	5.0000	5.6	11.4	20.00
Isophorone	5.0000	7.7	53.4 *	20.00
2-Nitrophenol	5.0000	3.2	-35.1 *	20.00
2,4-Dimethylphenol	5.0000	3.5	-29.9 *	20.00
Bis(2-Chloroethoxy)methane	5.0000	6.7	34.5 *	20.00
2,4-Dichlorophenol	5.0000	4.4	-11.3	20.00
1,2,4-Trichlorobenzene	5.0000	4.9	-1.8	20.00
Naphthalene	5.0000	5.3	5.1	20.00
Benzoic acid	10.000	5.6	-43.6 *	20.00
4-Chloroaniline	5.0000	3.8	-24.2 *	20.00
Hexachlorobutadiene	5.0000	5.0	0.3	20.00
4-Chloro-3-Methylphenol	5.0000	4.5	-11.0	20.00
2-Methylnaphthalene	5.0000	5.0	-1.0	20.00
Hexachlorocyclopentadiene	5.0000	2.6	-48.8 *	20.00
2,4,6-Trichlorophenol	5.0000	4.1	-17.6	20.00
2,4,5-Trichlorophenol	5.0000	4.1	-17.0	20.00
2-Chloronaphthalene	5.0000	5.3	5.3	20.00
2-Nitroaniline	5.0000	5.0	0.5	20.00
Acenaphthylene	5.0000	5.8	16.1	20.00
Dimethylphthalate	5.0000	5.4	7.7	20.00

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00019
Laboratory ID: SLC0084-SCV1
Sequence: SLC0084
Standard ID: K010066

2,6-Dinitrotoluene	5.0000	5.2	3.7	20.00
Acenaphthene	5.0000	5.2	3.1	20.00
3-Nitroaniline	5.0000	5.2	3.4	20.00
2,4-Dinitrophenol	5.0000	0.3	-94.7 *	20.00
Dibenzofuran	5.0000	5.0	-0.1	20.00
4-Nitrophenol	5.0000	3.8	-23.6 *	20.00
2,4-Dinitrotoluene	5.0000	4.7	-5.4	20.00
Fluorene	5.0000	5.3	6.1	20.00
4-Chlorophenylphenyl ether	5.0000	5.3	5.1	20.00
Diethyl phthalate	5.0000	5.6	12.8	20.00
4-Nitroaniline	5.0000	5.2	4.6	20.00
4,6-Dinitro-2-methylphenol	5.0000	1.3	-74.2 *	20.00
N-Nitrosodiphenylamine	5.0000	5.4	8.3	20.00
4-Bromophenyl phenyl ether	5.0000	5.5	9.2	20.00
Hexachlorobenzene	5.0000	4.8	-3.9	20.00
Pentachlorophenol	5.0000	3.5	-30.2 *	20.00
Phenanthrene	5.0000	5.1	1.7	20.00
Anthracene	5.0000	4.6	-8.3	20.00
Carbazole	5.0000	5.3	6.7	20.00
Di-n-Butylphthalate	5.0000	5.5	9.3	20.00
Fluoranthene	5.0000	4.5	-9.2	20.00
Pyrene	5.0000	4.6	-7.5	20.00
Butylbenzylphthalate	5.0000	4.5	-9.5	20.00
Benzo(a)anthracene	5.0000	4.6	-8.4	20.00
3,3'-Dichlorobenzidine	10.000	7.4	-26.2 *	20.00
Chrysene	5.0000	5.0	-0.7	20.00
bis(2-Ethylhexyl)phthalate	5.0000	5.0	-0.9	20.00
Di-n-Octylphthalate	5.0000	5.8	16.9	20.00
Benzofluoranthenes, Total	10.000	8.9	-11.0	20.00
Benzo(a)pyrene	5.0000	4.4	-11.1	20.00
Indeno(1,2,3-cd)pyrene	5.0000	4.3	-13.1	20.00
Dibenzo(a,h)anthracene	5.0000	4.6	-7.8	20.00
Benzo(g,h,i)perylene	5.0000	4.6	-8.0	20.00
1-Methylnaphthalene	5.0000	5.2	4.4	20.00
2-Fluorophenol	7.5000	0.00	*	20.00

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

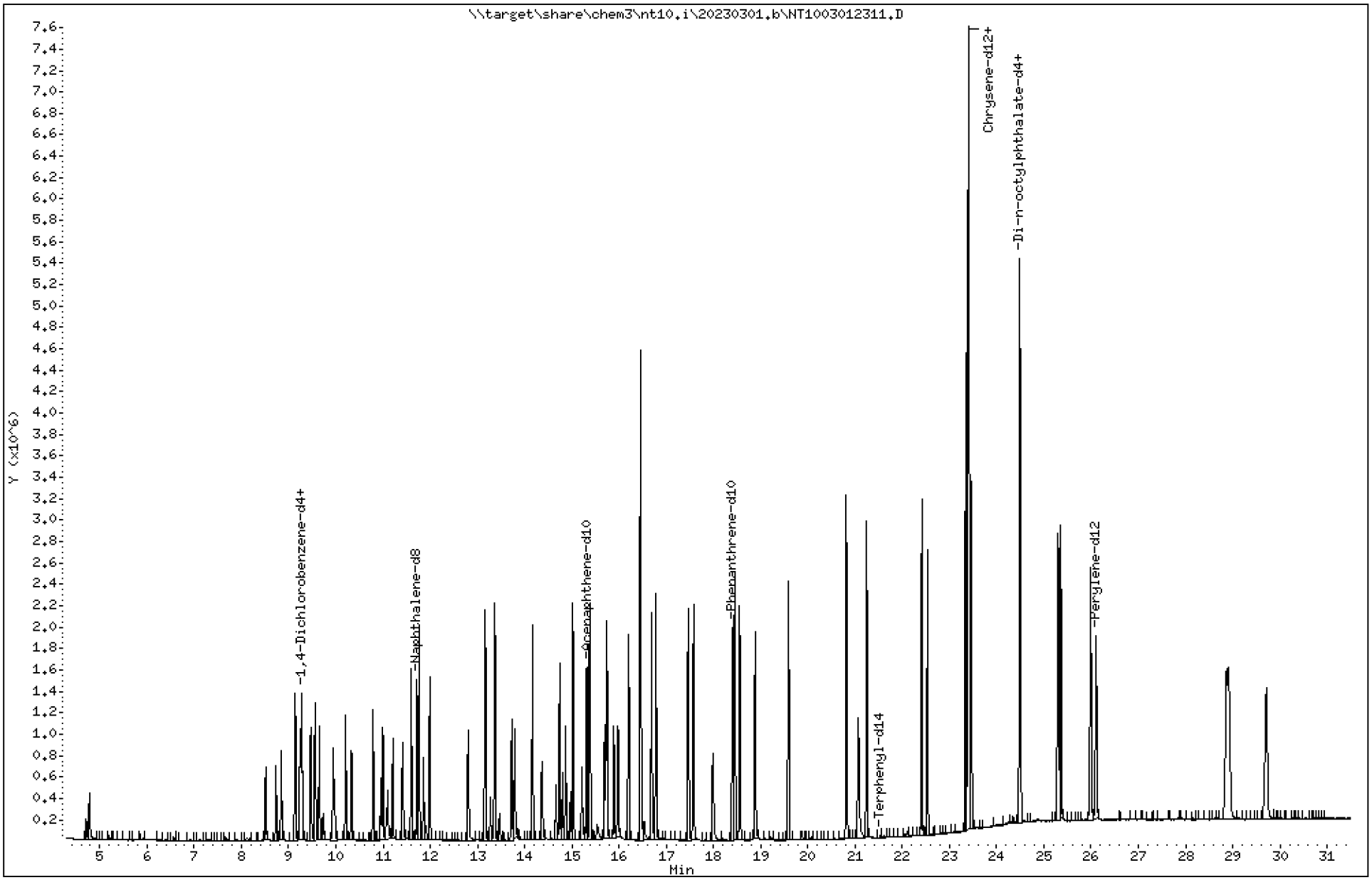
Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00019
Laboratory ID: SLC0084-SCV1
Sequence: SLC0084
Standard ID: K010066

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

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D
Date : 01-MAR-2023 21:46
Client ID:
Sample Info: SEQ-SCV1

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



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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

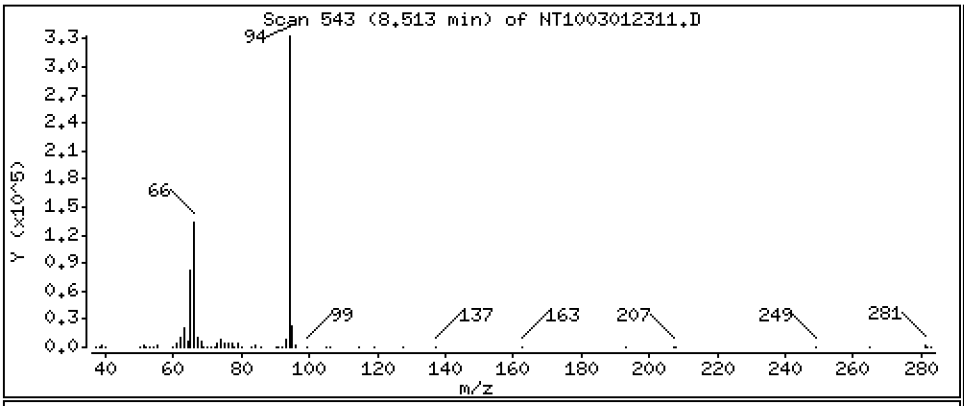
Operator: VTS

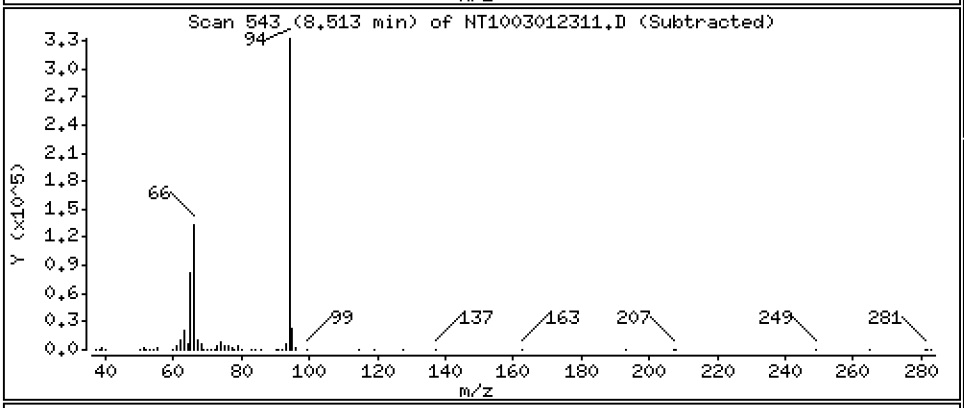
Column phase: ZB-5msi

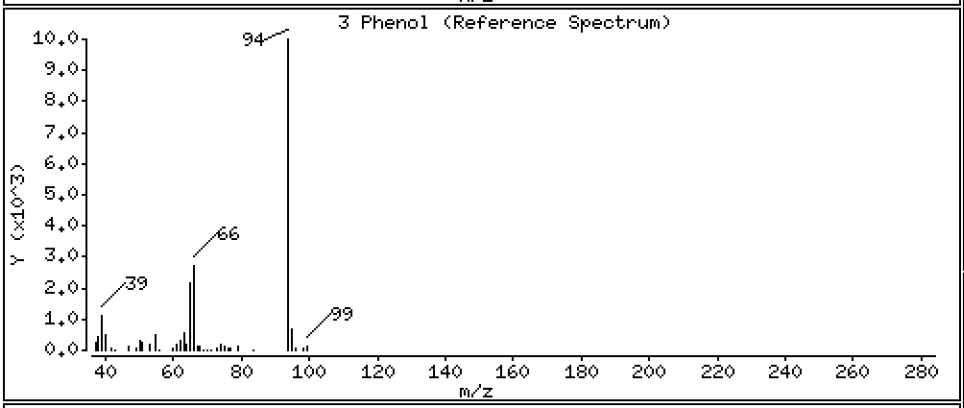
Column diameter: 0.25

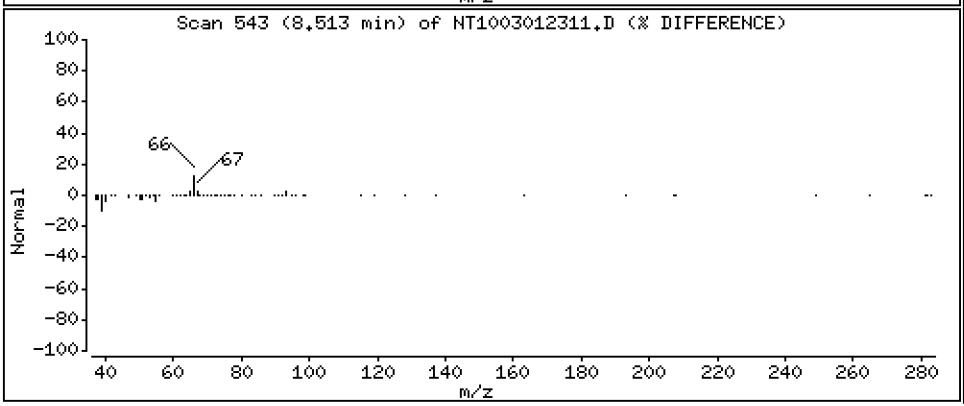
3 Phenol

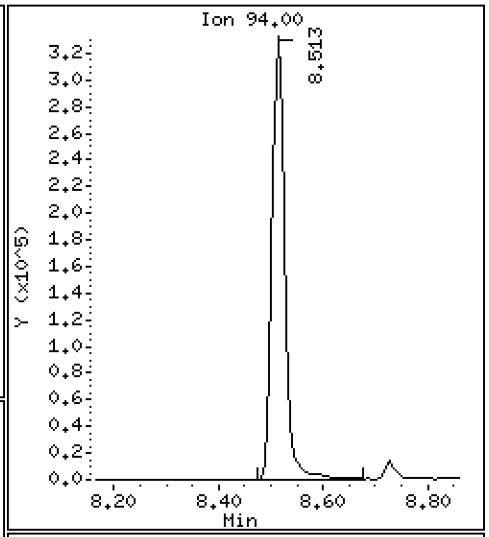
Concentration: 4.852 ug/mL

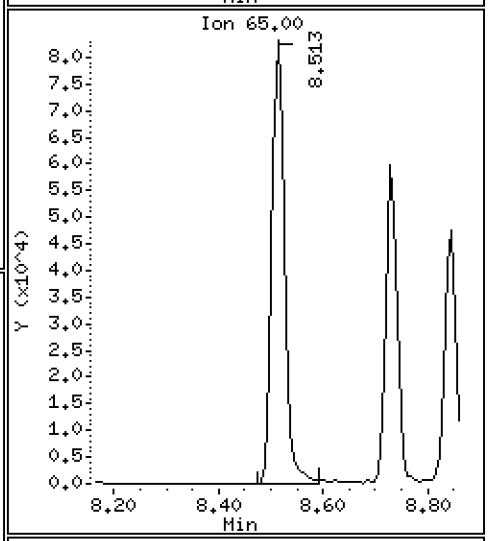


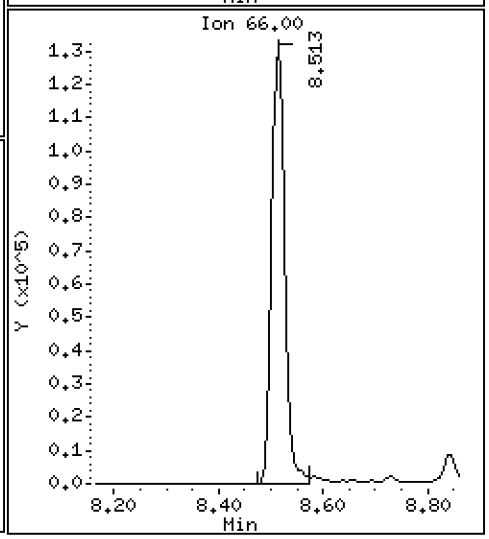












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

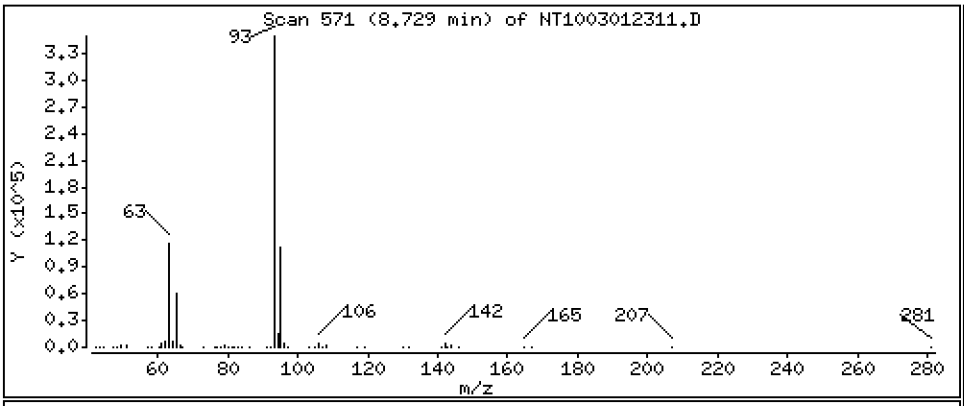
Operator: VTS

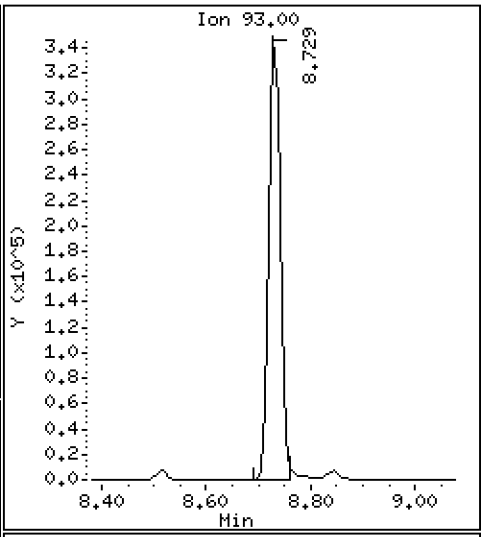
Column phase: ZB-5msi

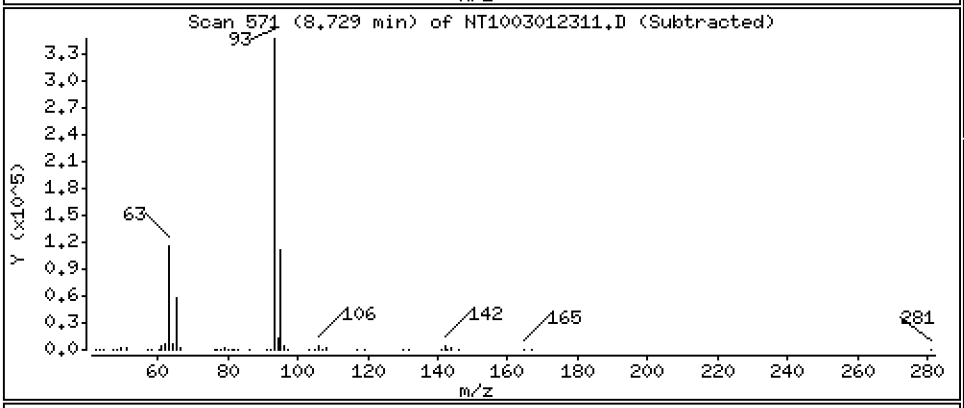
Column diameter: 0.25

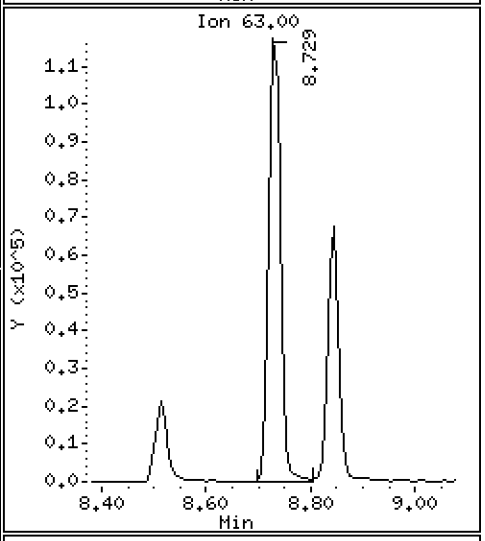
4 Bis(2-Chloroethyl)ether

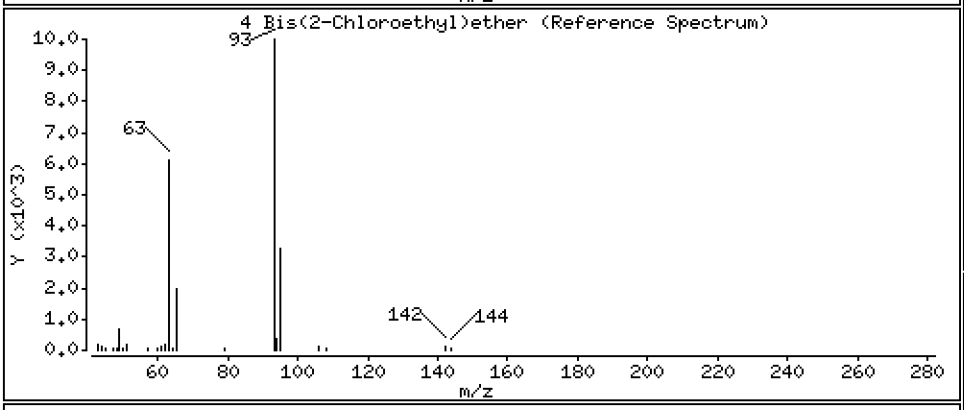
Concentration: 5.928 ug/mL

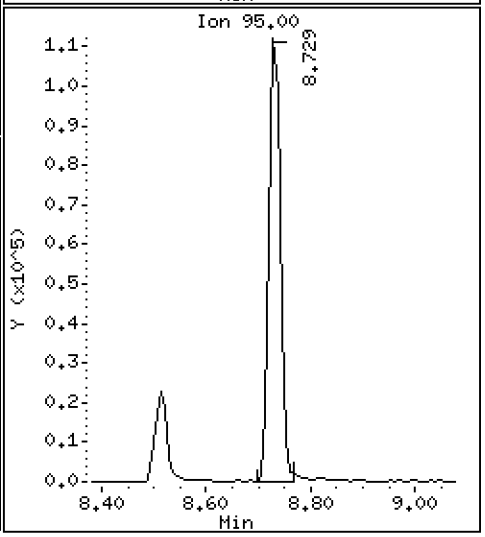


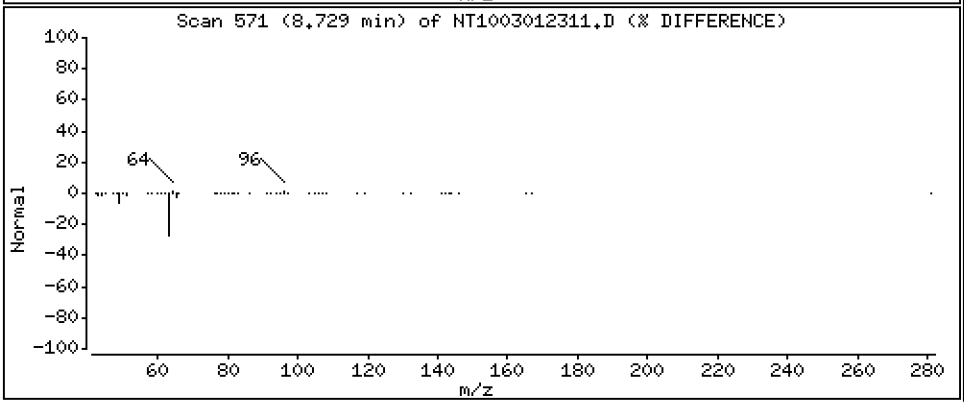












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

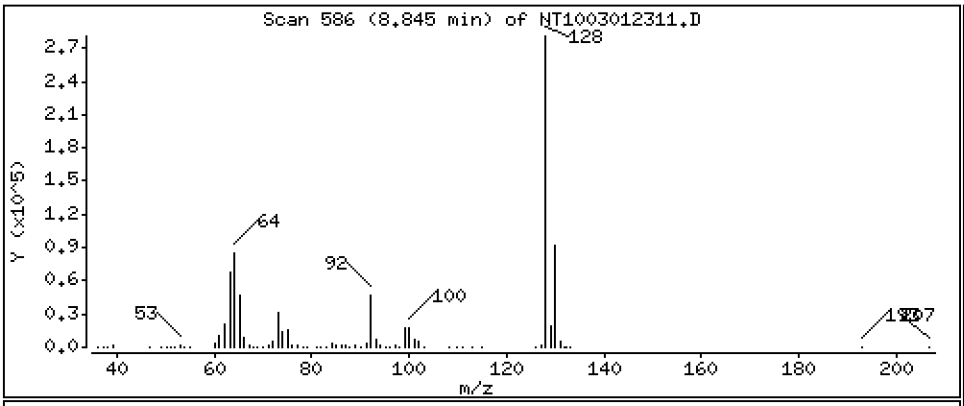
Operator: VTS

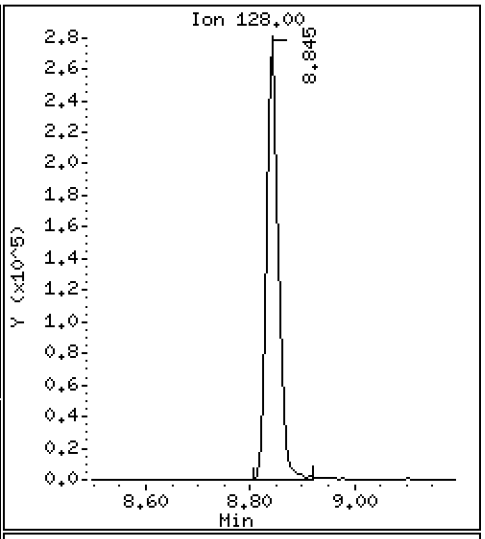
Column phase: ZB-5msi

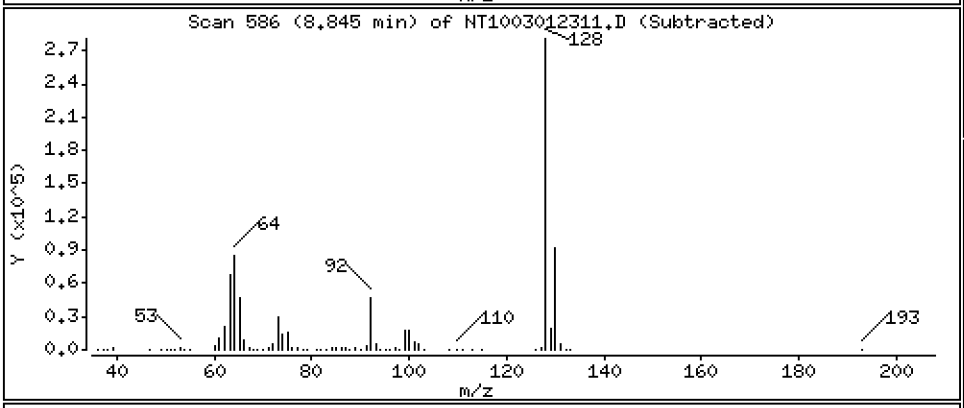
Column diameter: 0.25

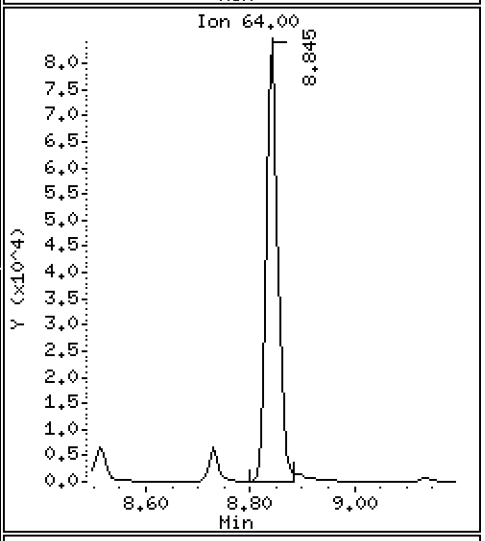
6 2-Chlorophenol

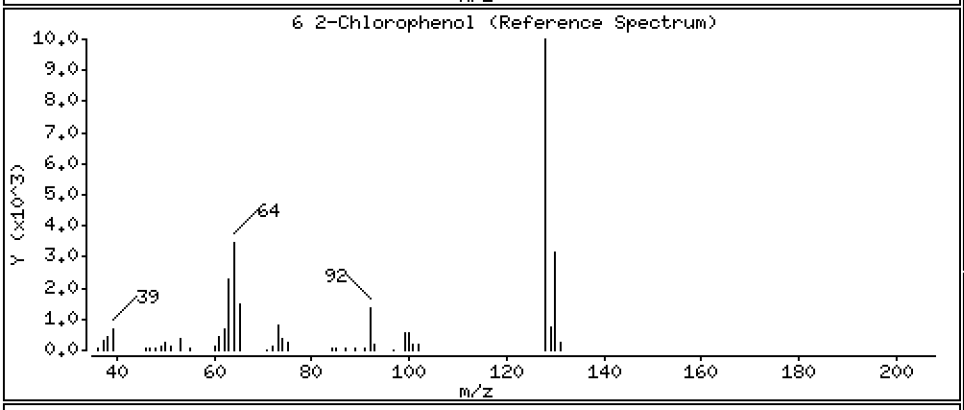
Concentration: 4.692 ug/mL

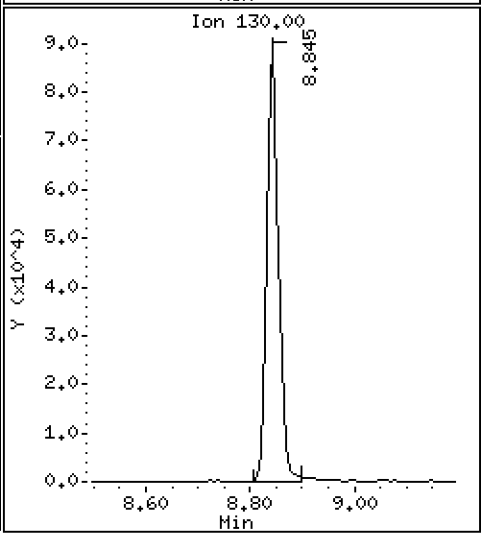


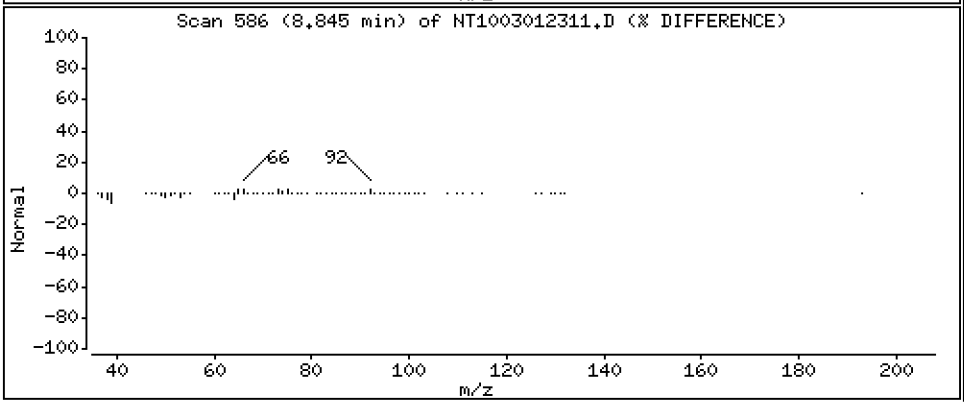












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

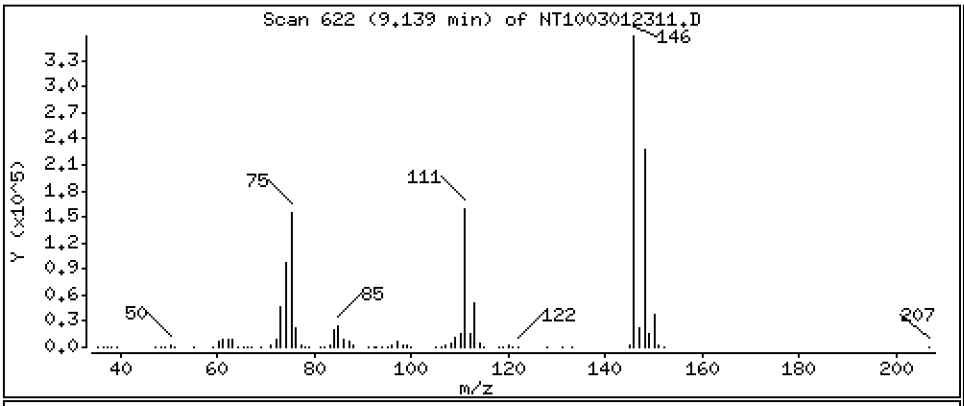
Operator: VTS

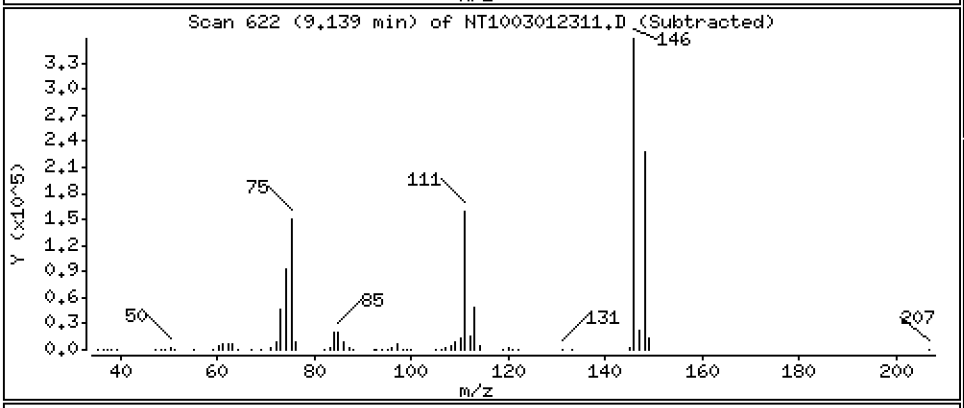
Column phase: ZB-5msi

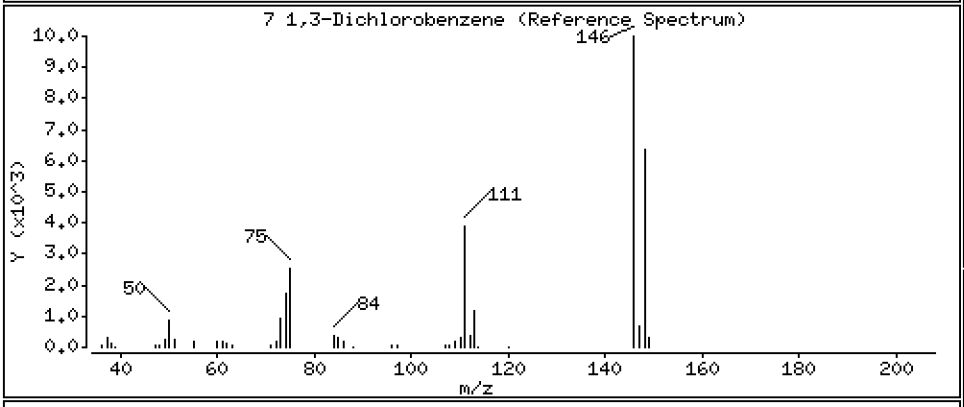
Column diameter: 0.25

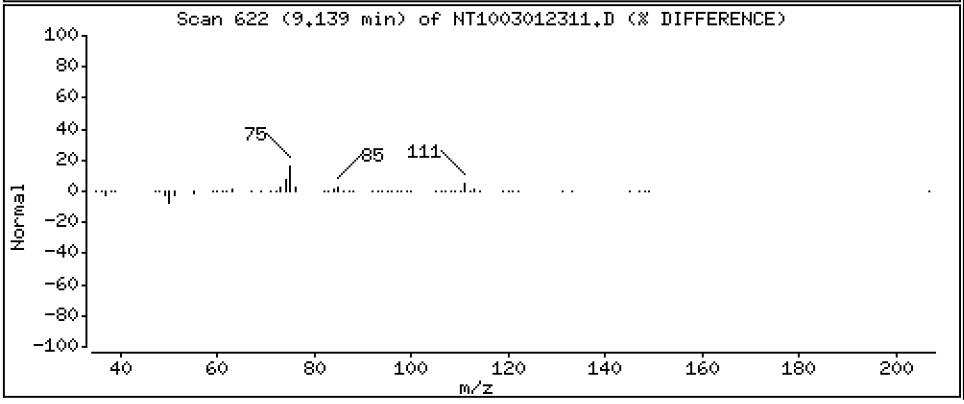
7 1,3-Dichlorobenzene

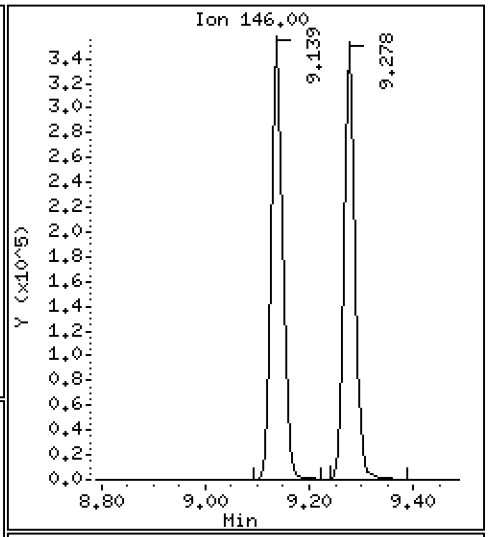
Concentration: 5.266 ug/mL

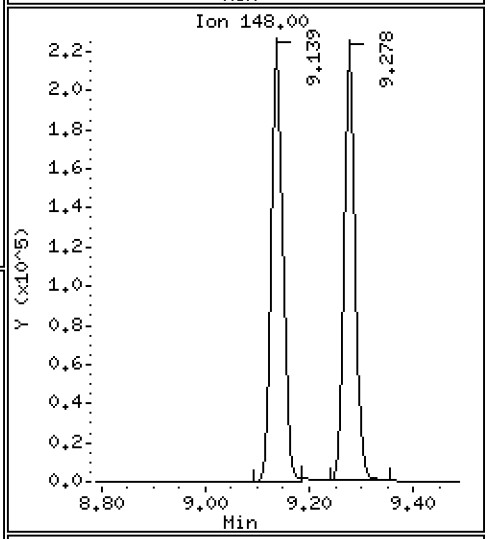


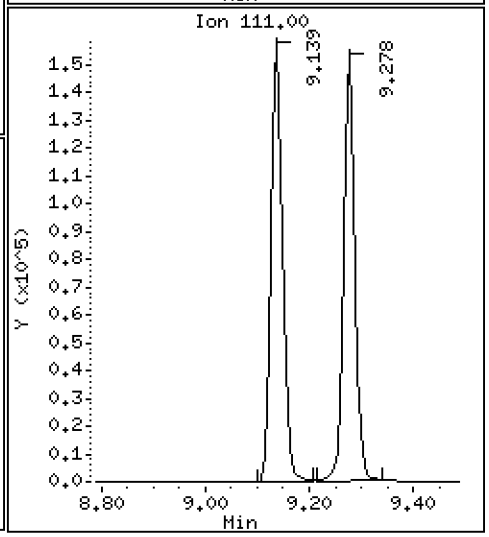












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

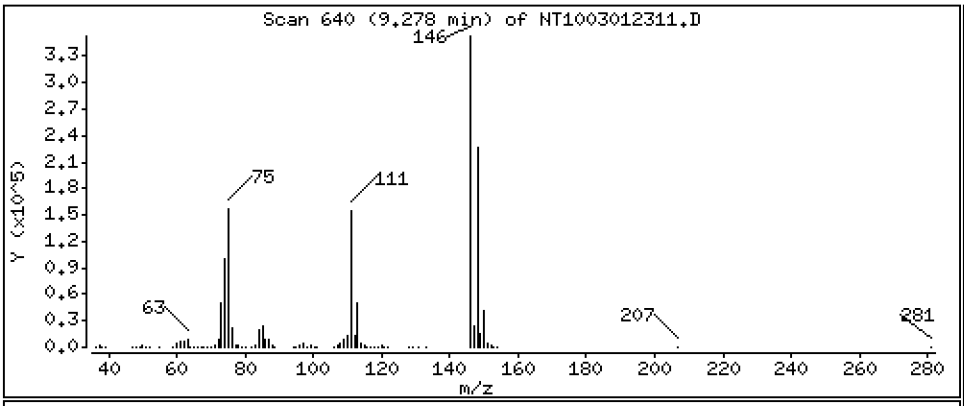
Operator: VTS

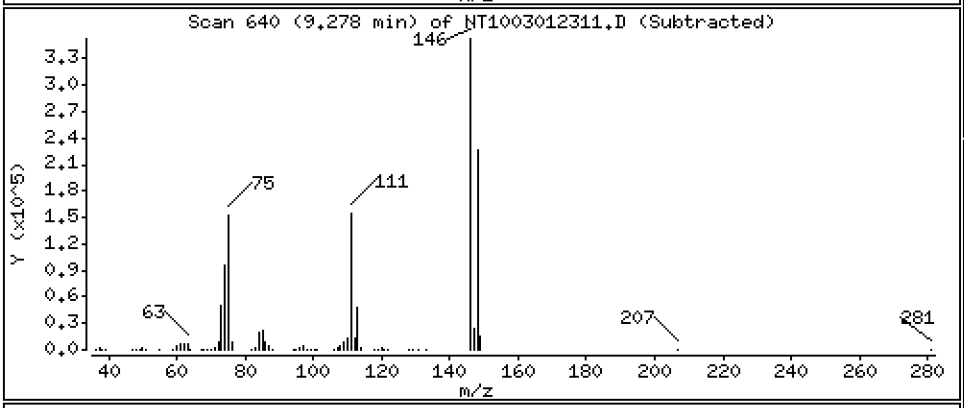
Column phase: ZB-5msi

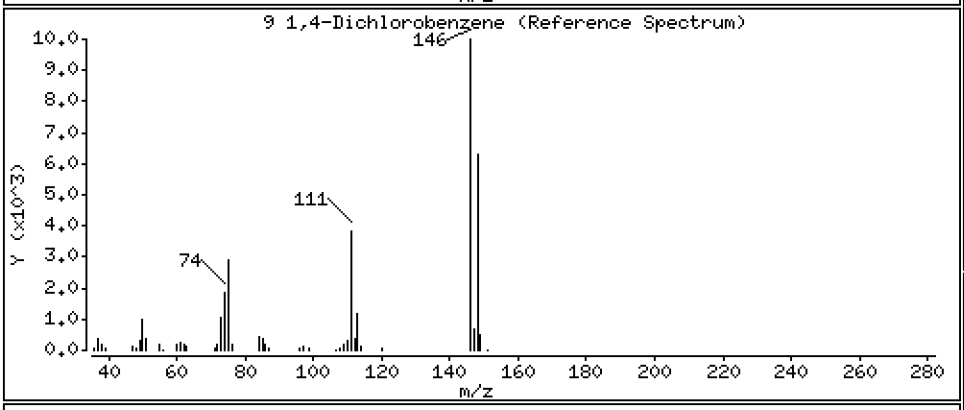
Column diameter: 0.25

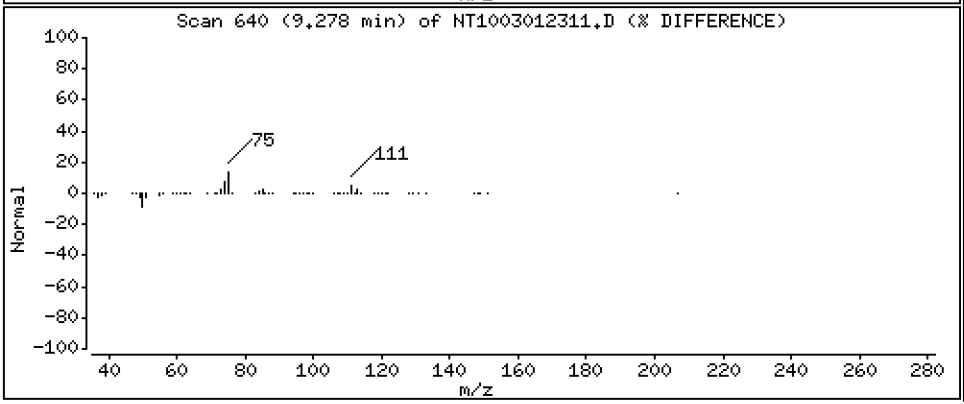
9 1,4-Dichlorobenzene

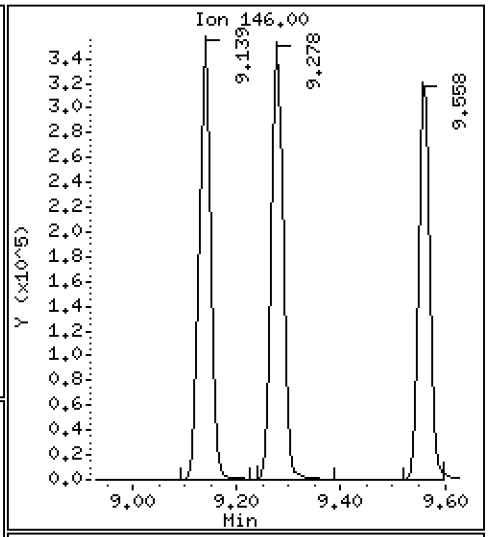
Concentration: 5.216 ug/mL

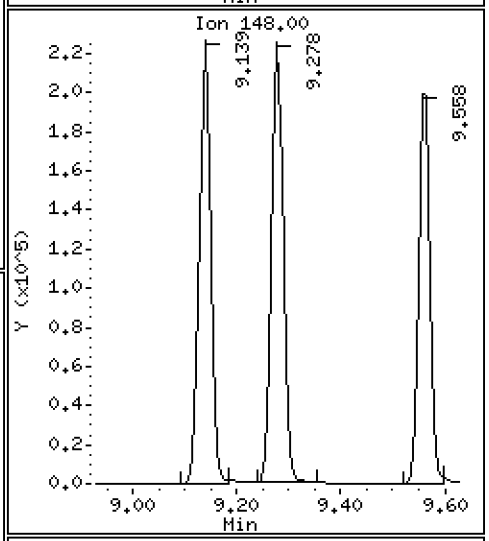


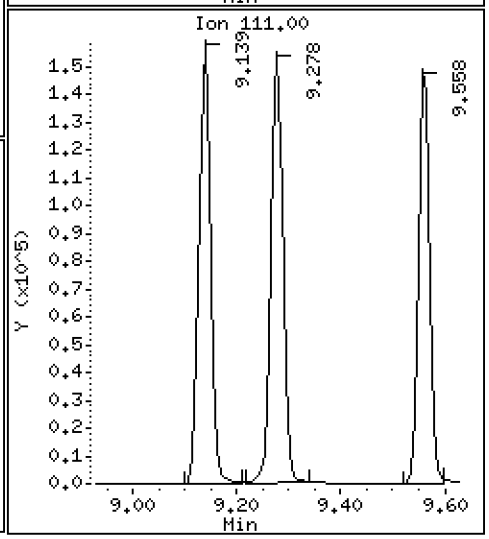












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

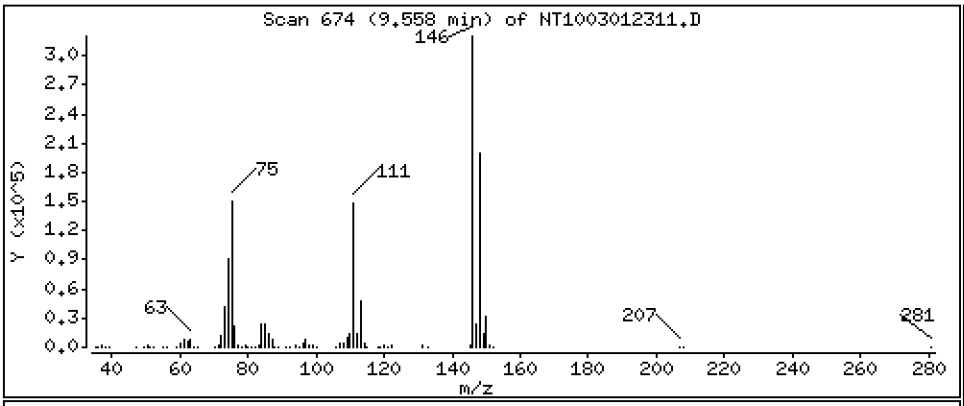
Operator: VTS

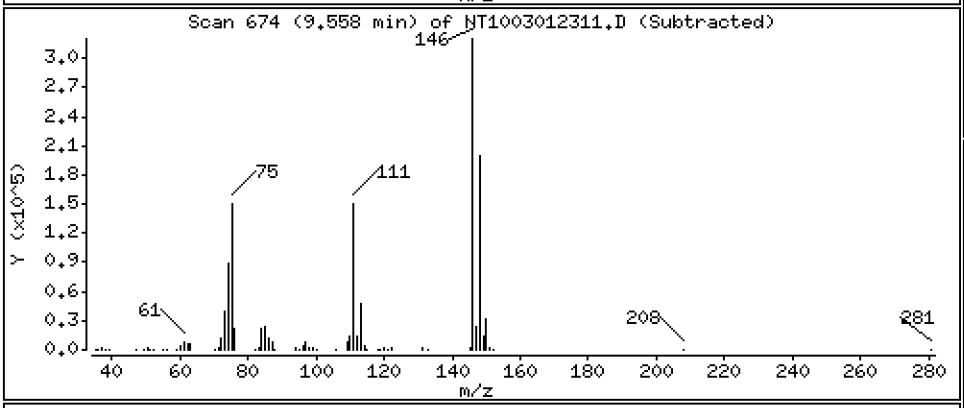
Column phase: ZB-5msi

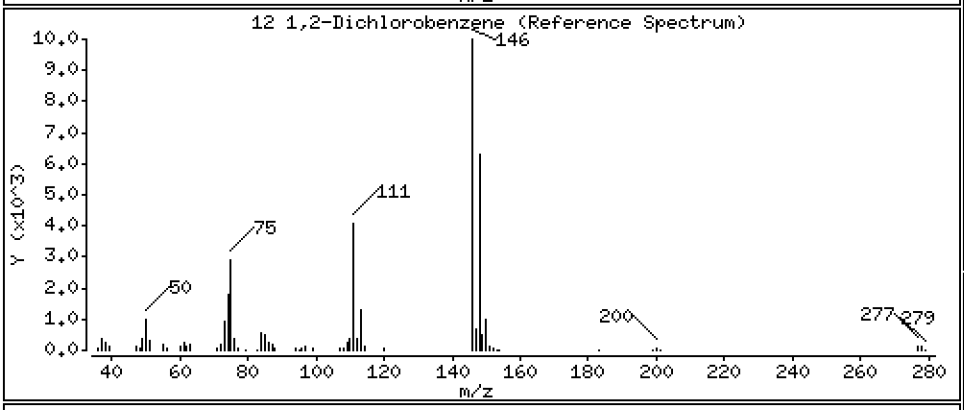
Column diameter: 0.25

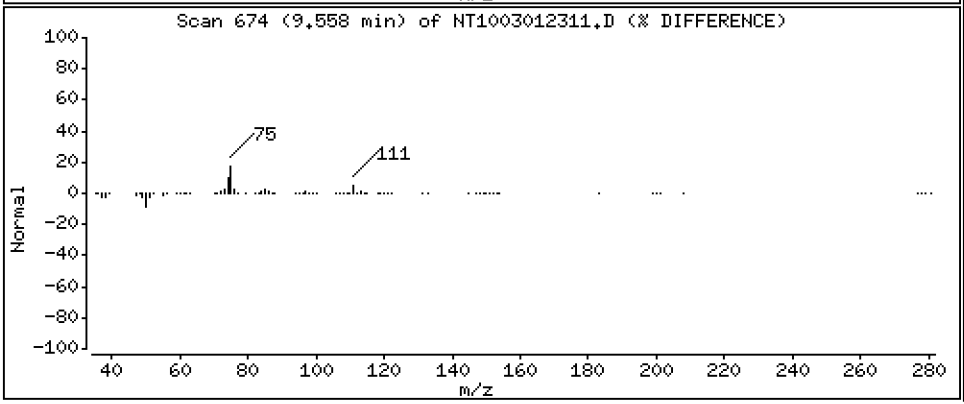
12 1,2-Dichlorobenzene

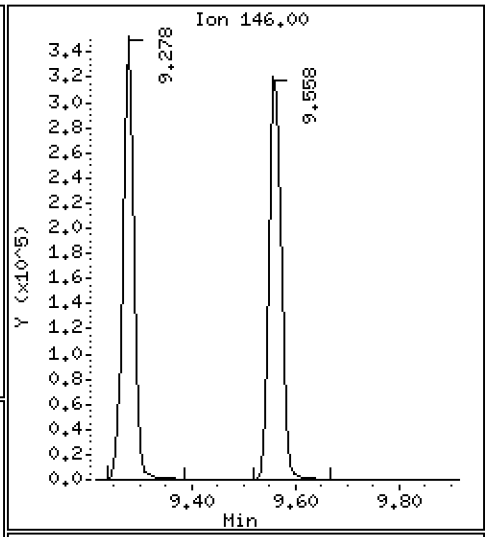
Concentration: 5.194 ug/mL

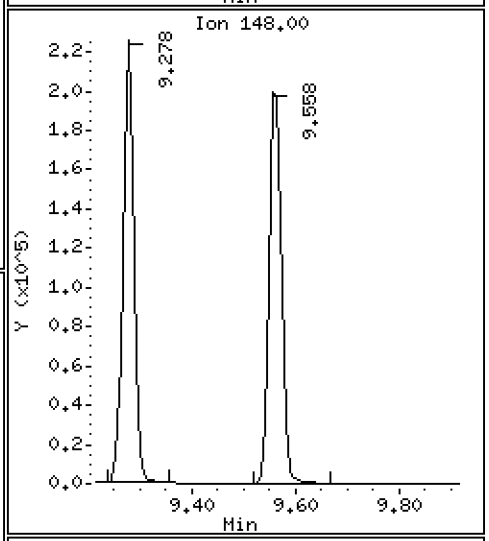


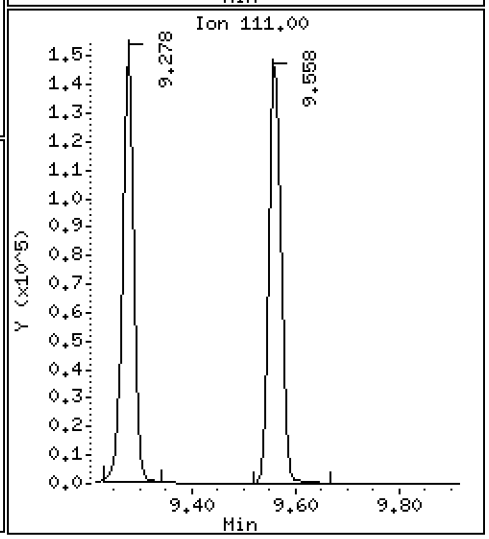












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

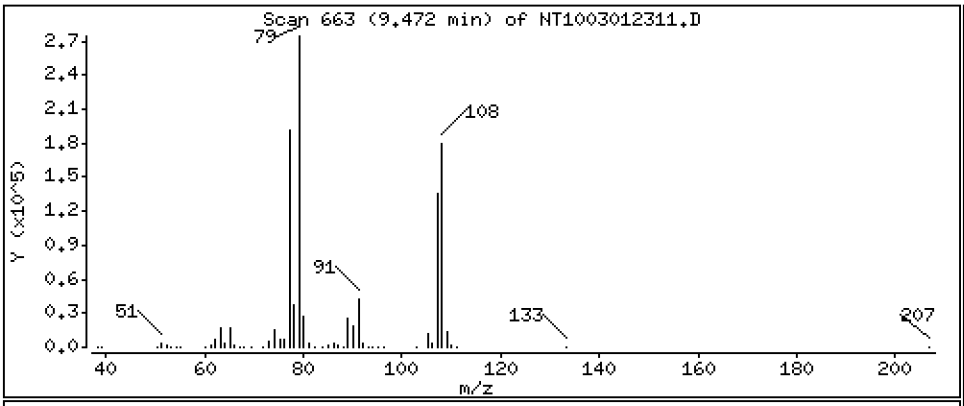
Operator: VTS

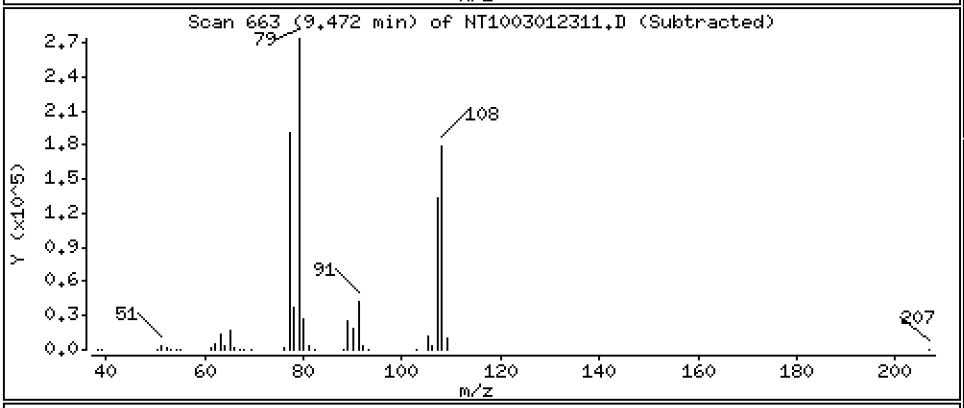
Column phase: ZB-5msi

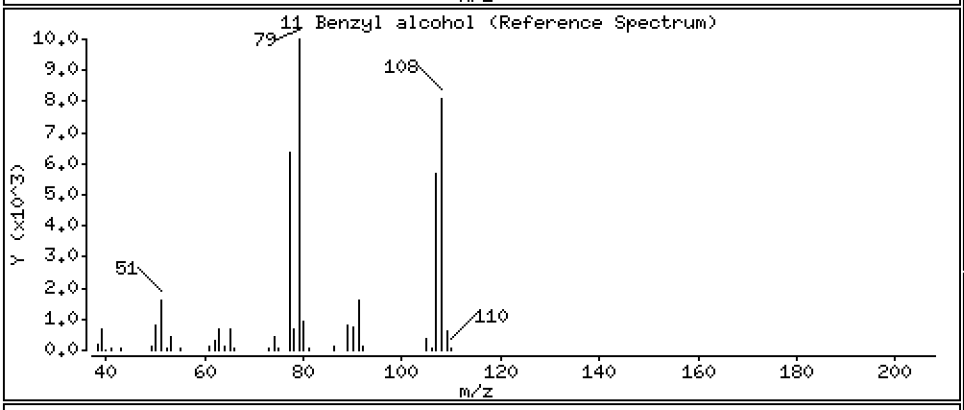
Column diameter: 0.25

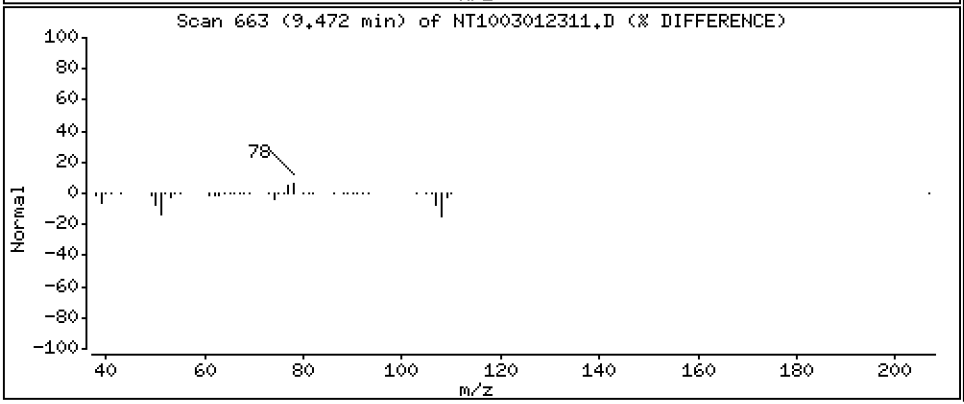
11 Benzyl alcohol

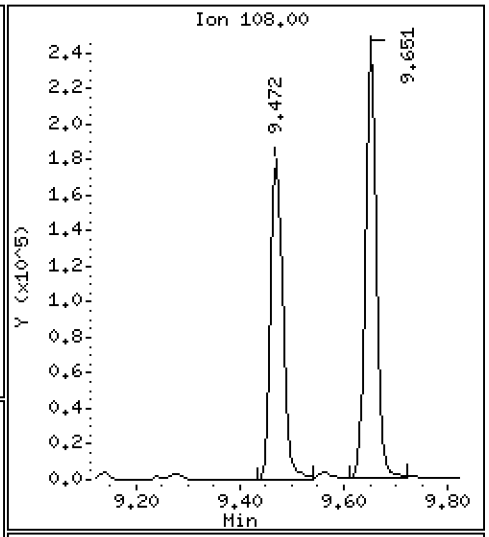
Concentration: 4.898 ug/mL

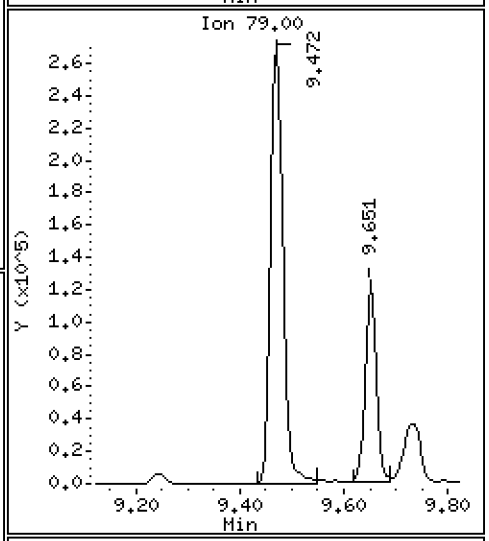


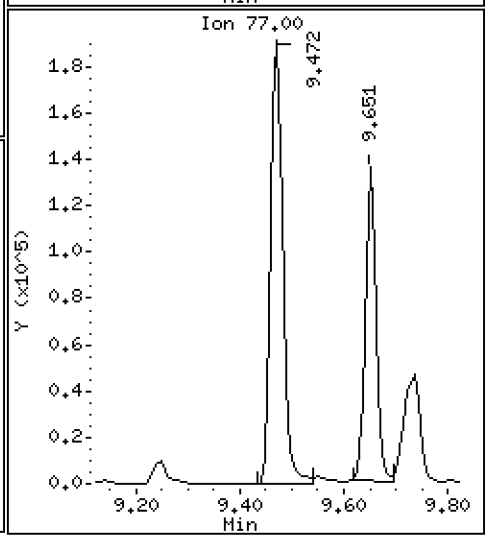












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

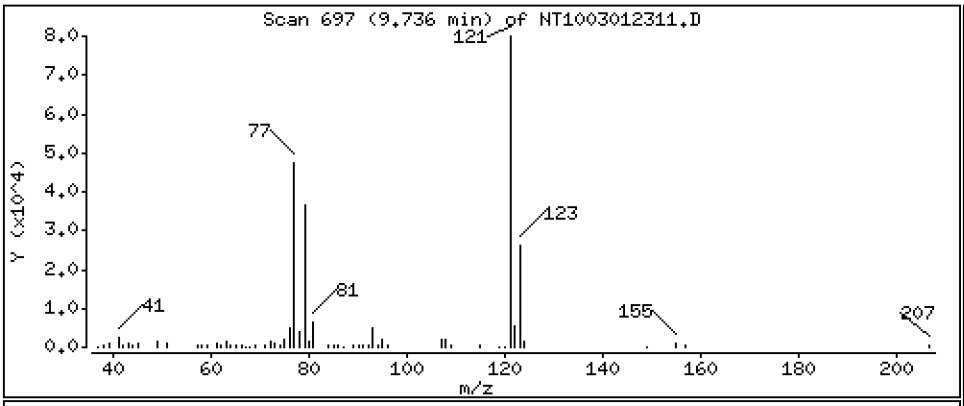
Operator: VTS

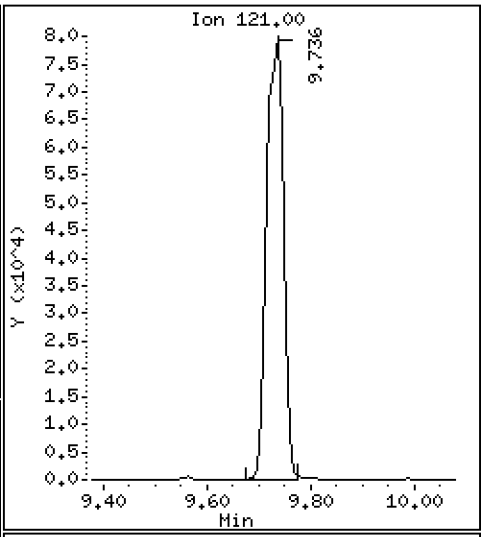
Column phase: ZB-5msi

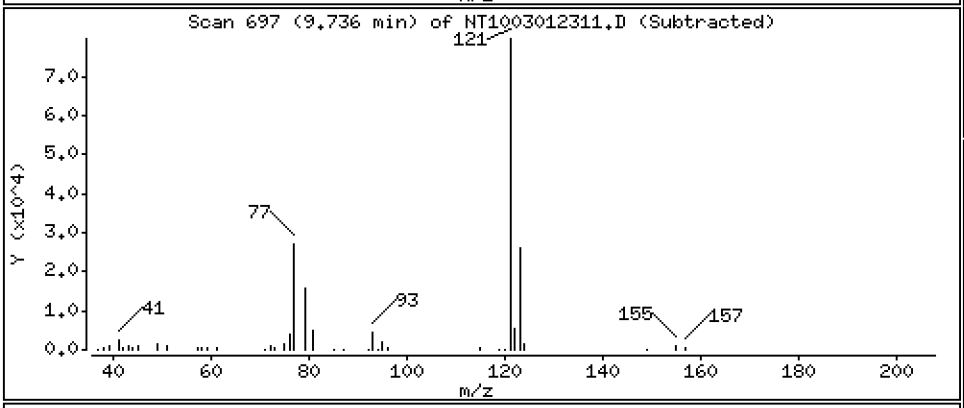
Column diameter: 0.25

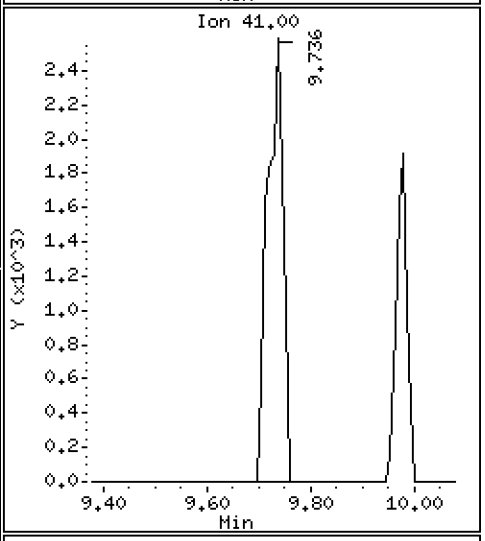
14 2,2'-oxybis(1-Chloropropane)

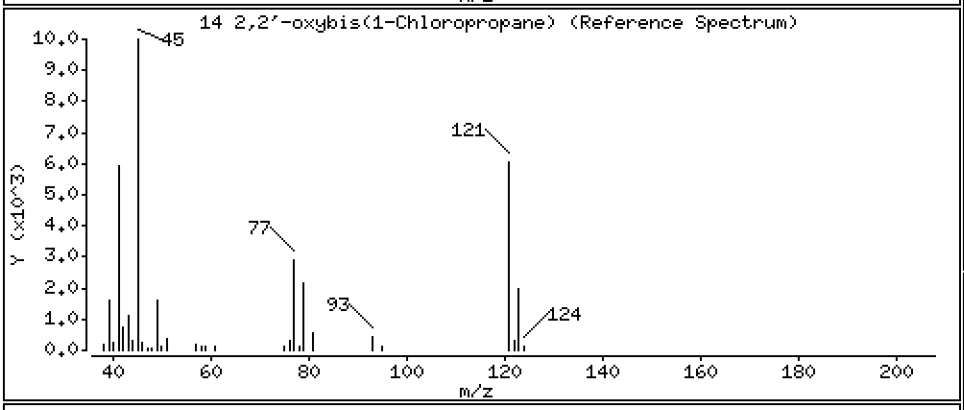
Concentration: 6.232 ug/mL

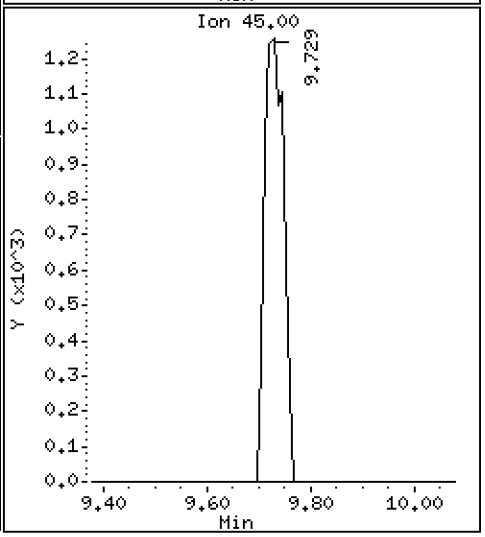


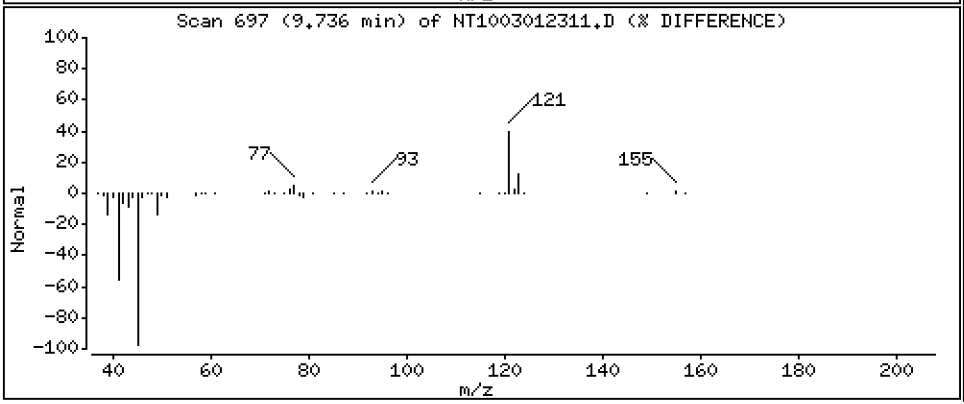












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

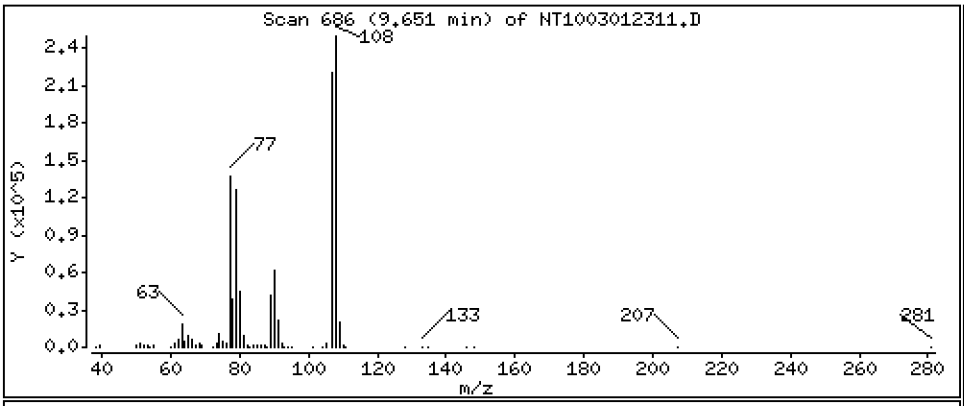
Operator: VTS

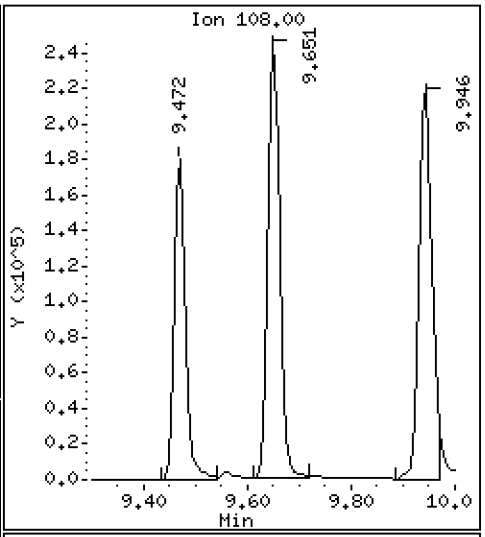
Column phase: ZB-5msi

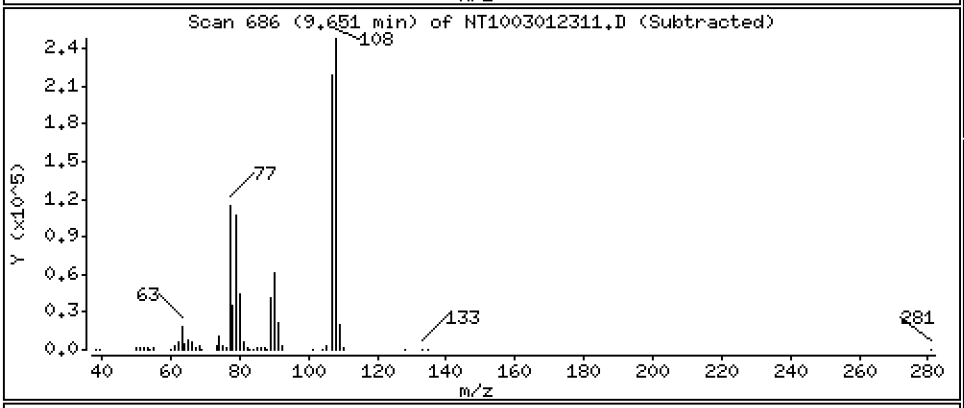
Column diameter: 0.25

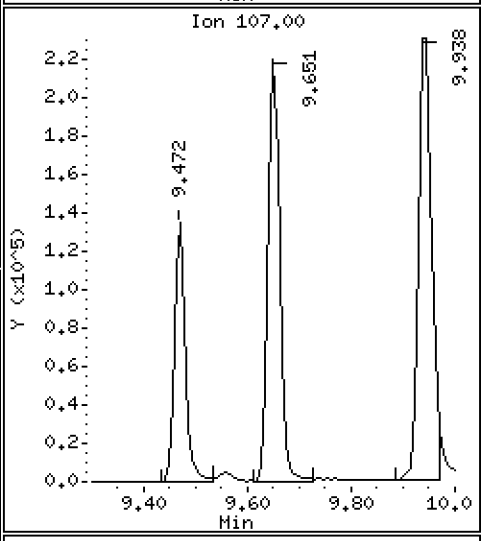
13 2-Methylphenol

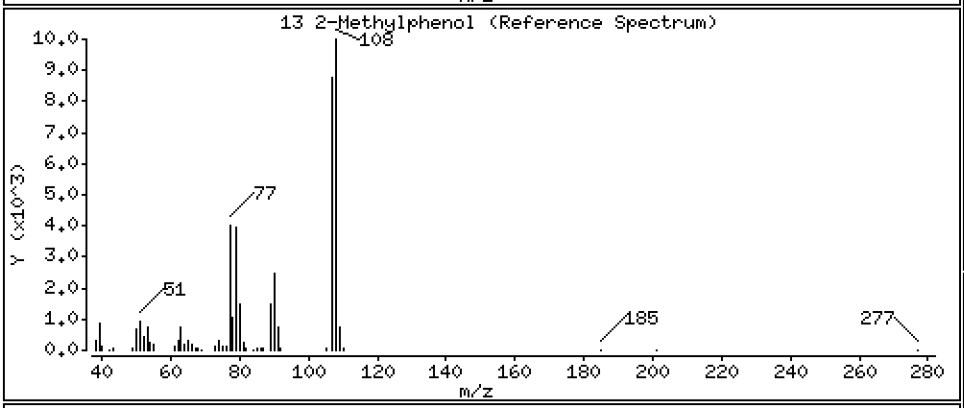
Concentration: 4.192 ug/mL

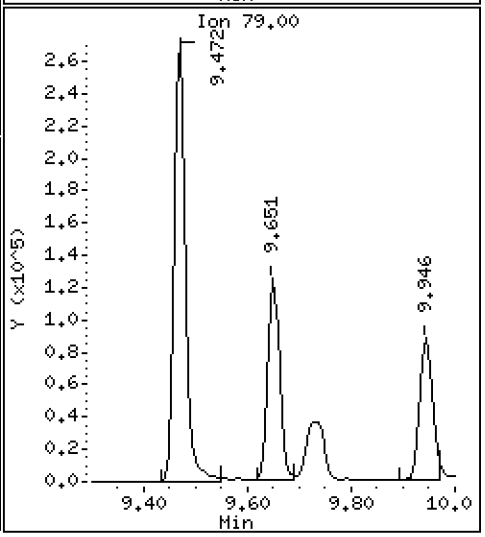


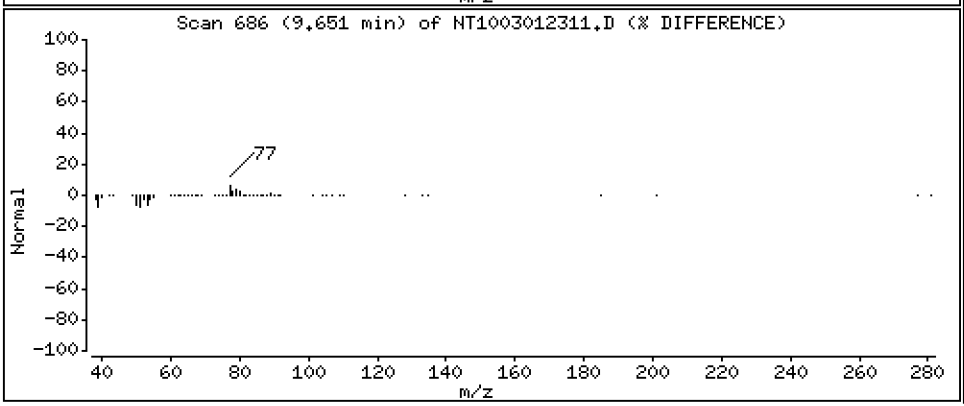












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

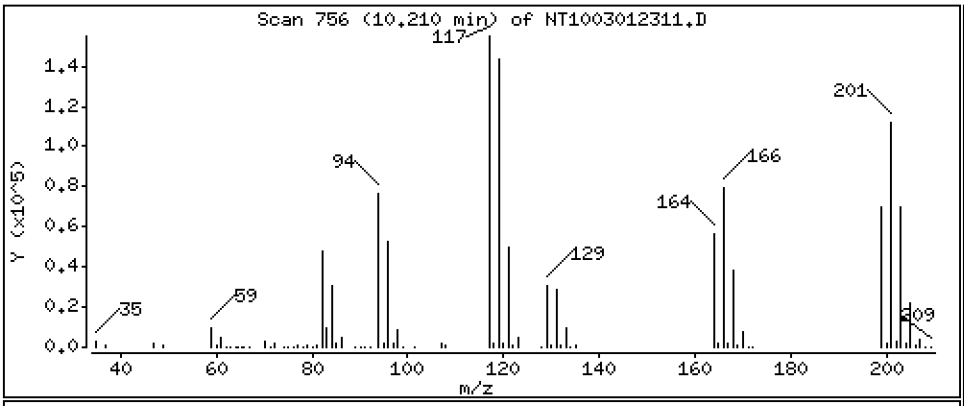
Operator: VTS

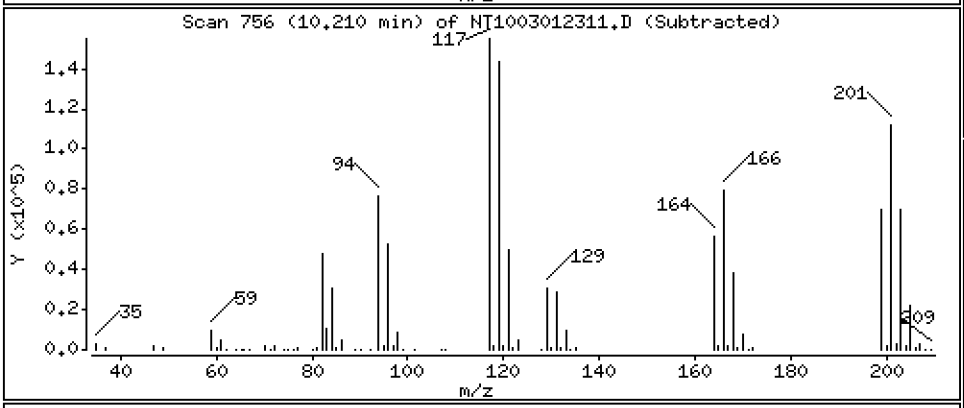
Column phase: ZB-5msi

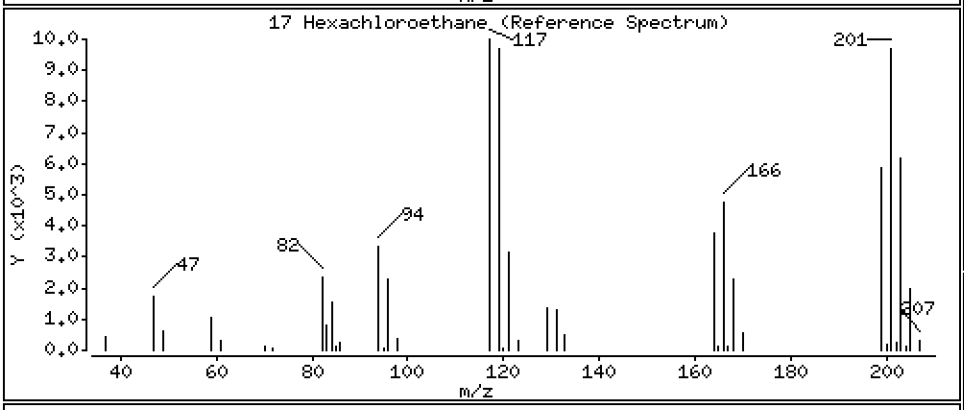
Column diameter: 0.25

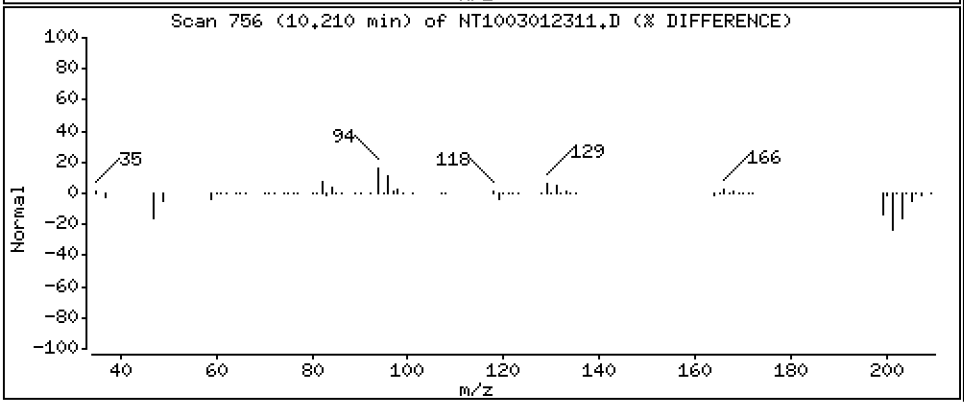
17 Hexachloroethane

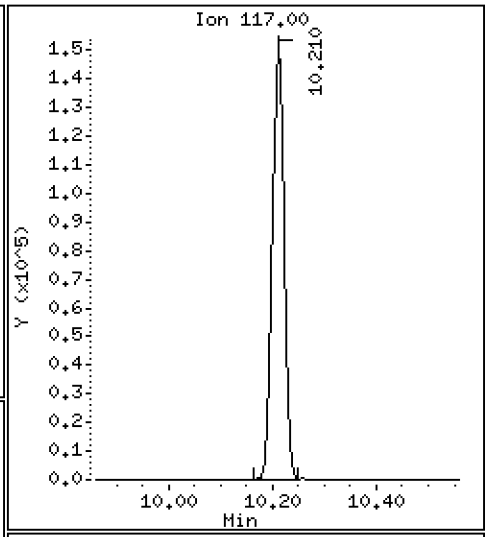
Concentration: 5.443 ug/mL

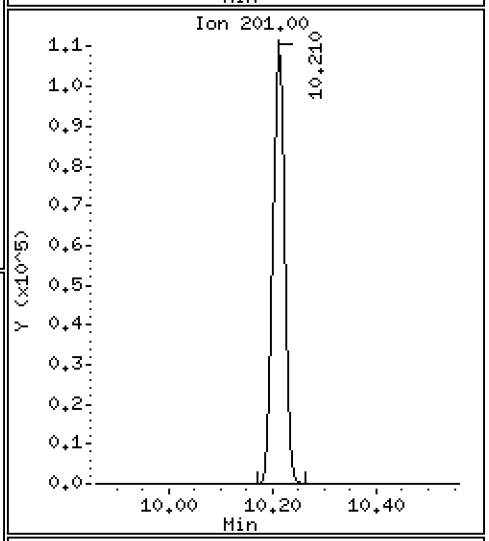


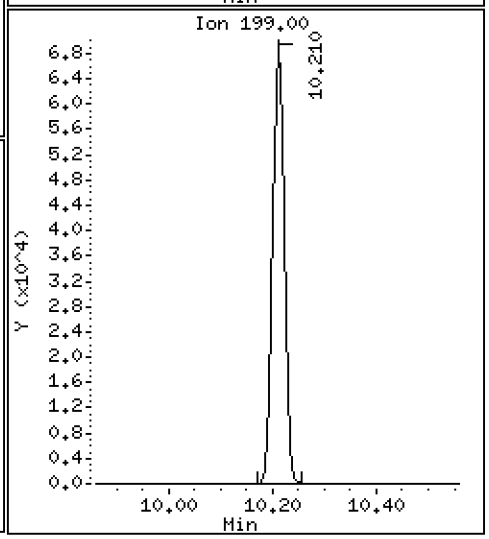












Date : 01-MAR-2023 21:46

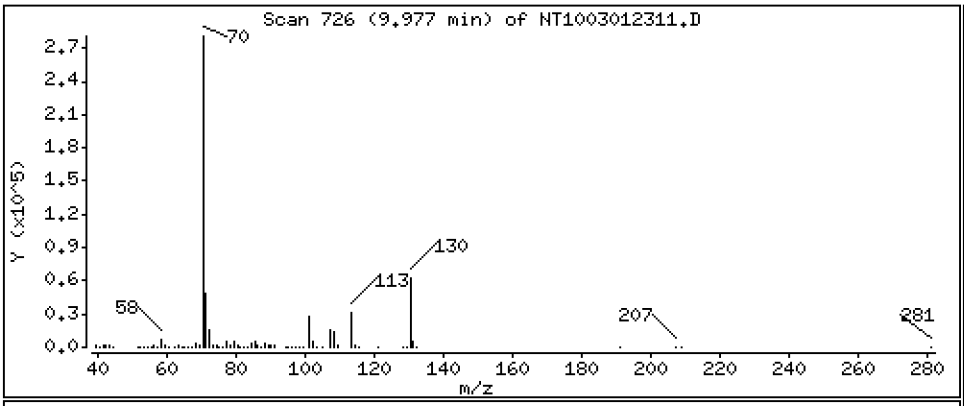
Client ID: Instrument: nt10.i

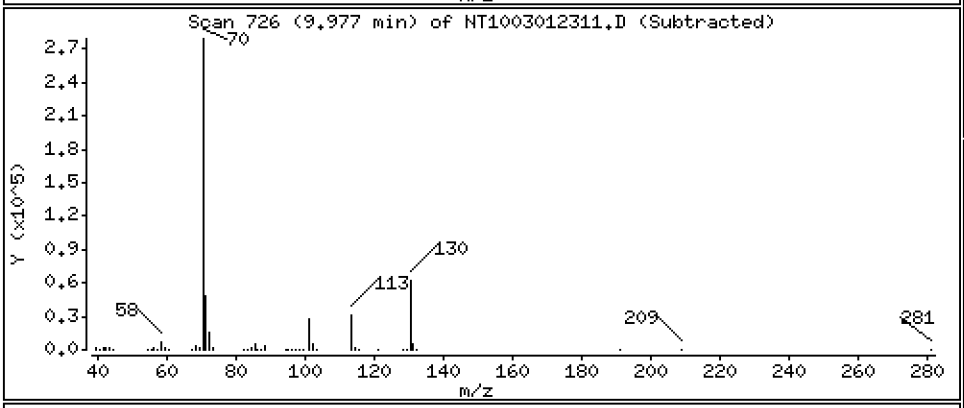
Sample Info: SEQ-SCV1

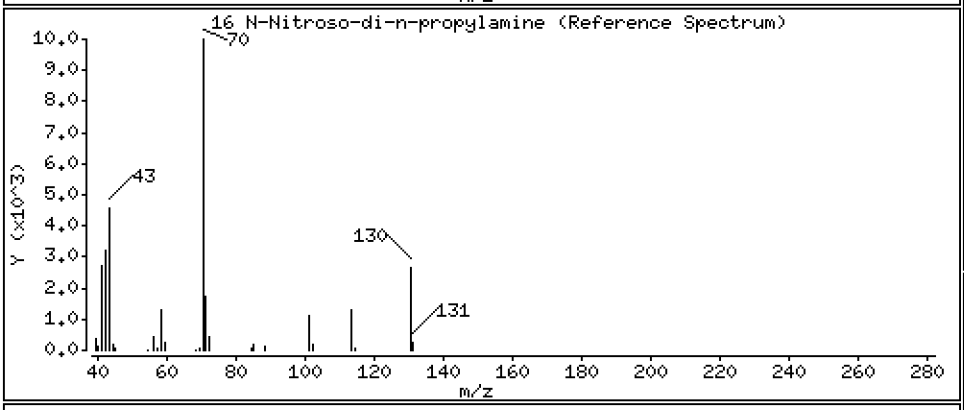
Operator: VTS

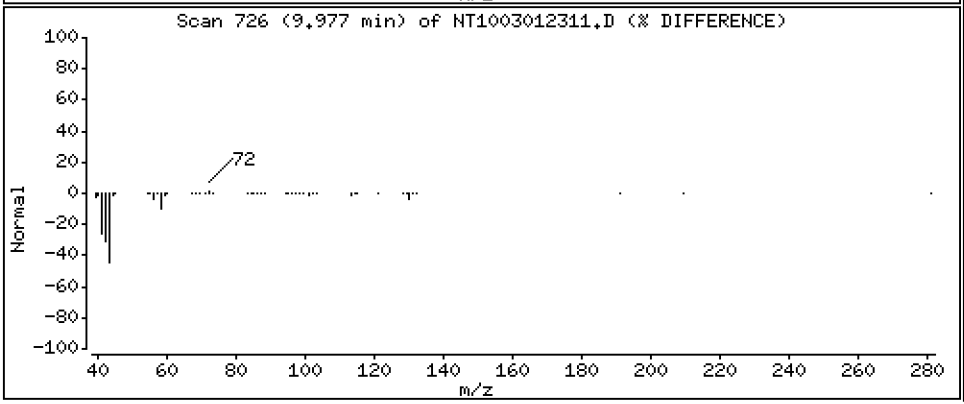
Column phase: ZB-5msi Column diameter: 0.25

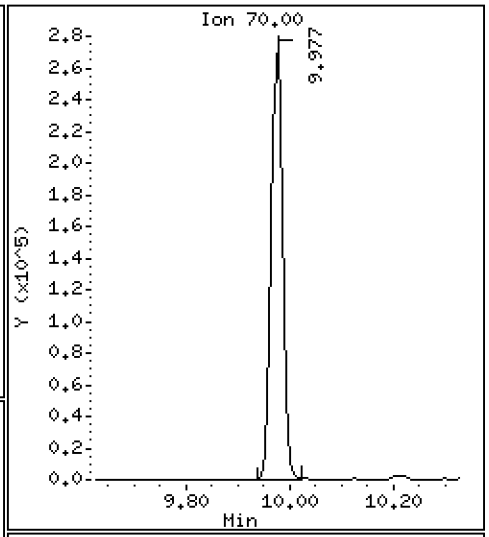
16 N-Nitroso-di-n-propylamine Concentration: 5.905 ug/mL

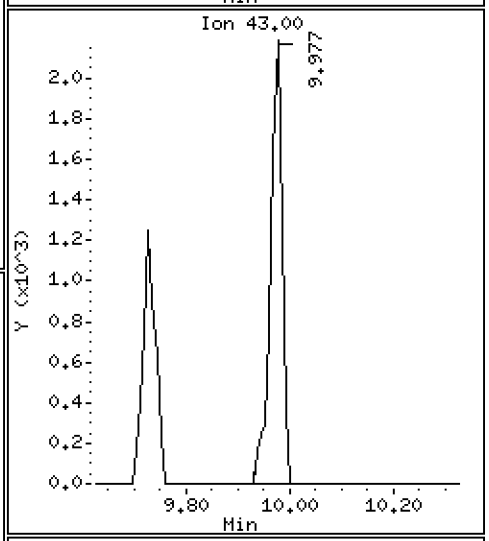


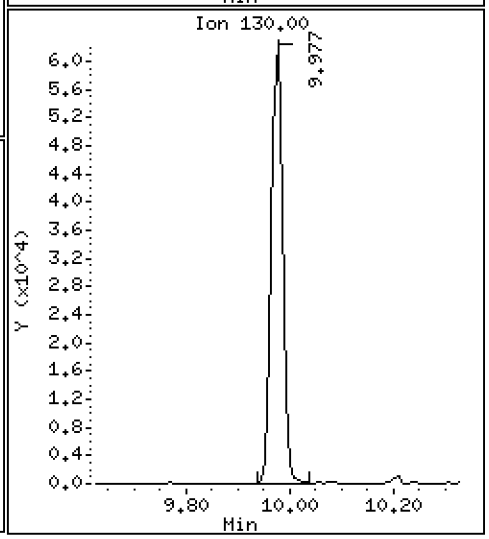












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

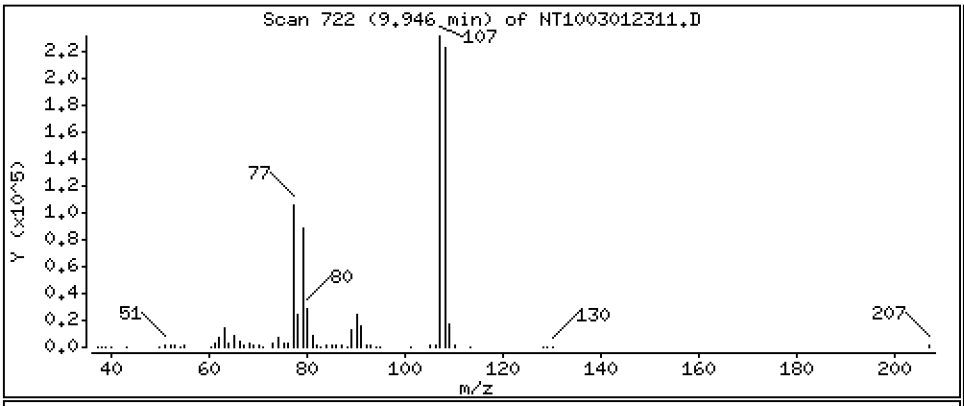
Operator: VTS

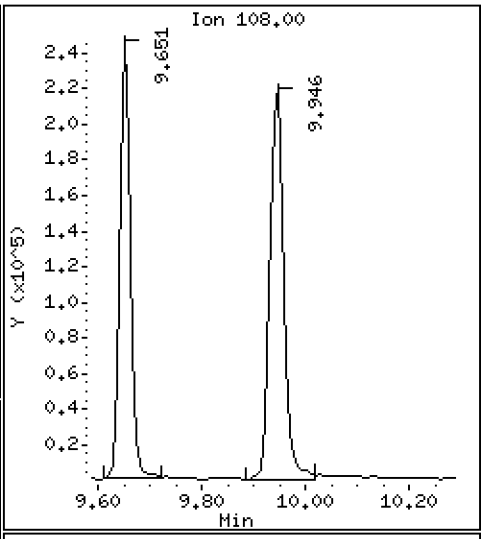
Column phase: ZB-5msi

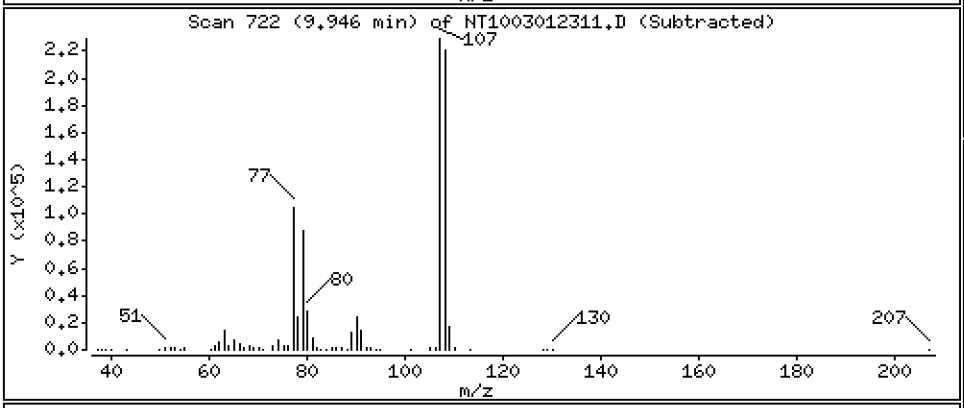
Column diameter: 0.25

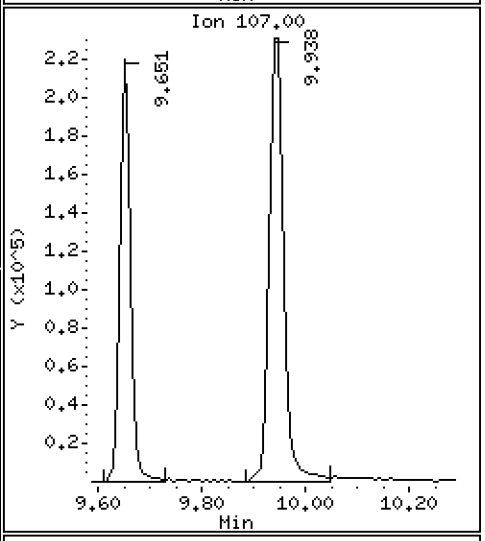
15 4-Methylphenol

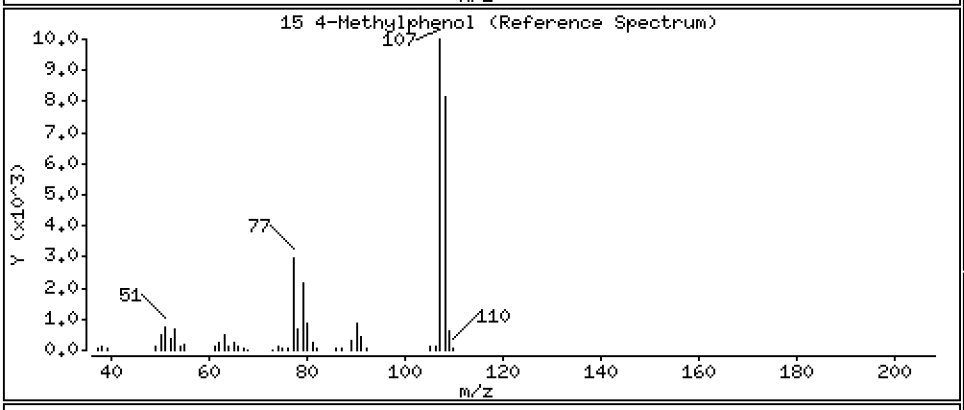
Concentration: 4.239 ug/mL

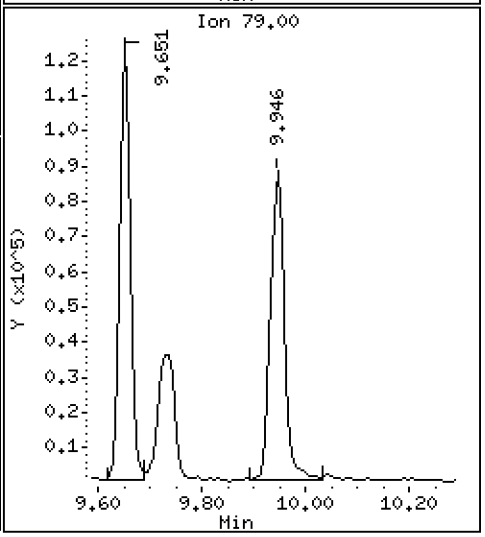


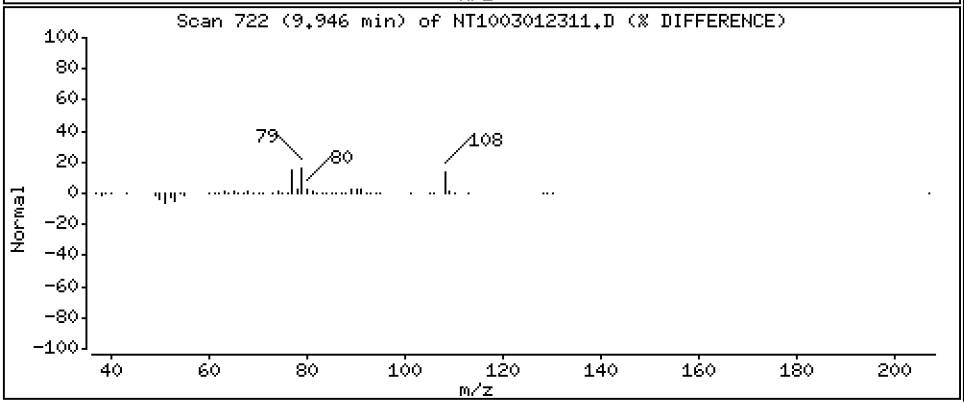












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

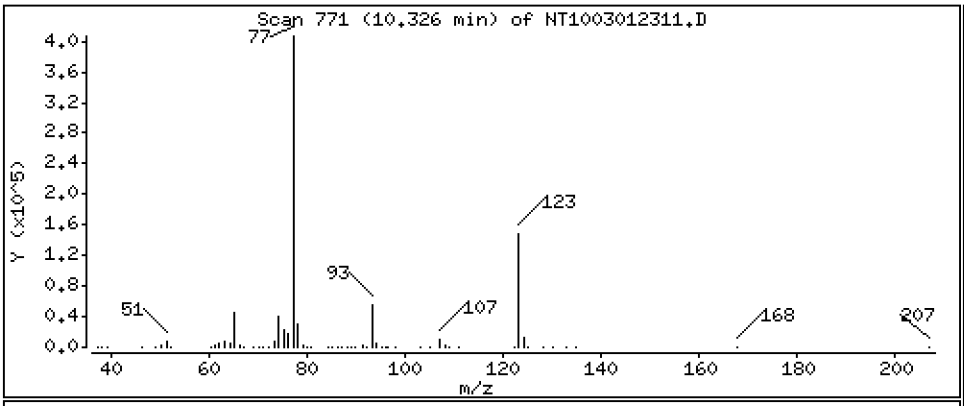
Operator: VTS

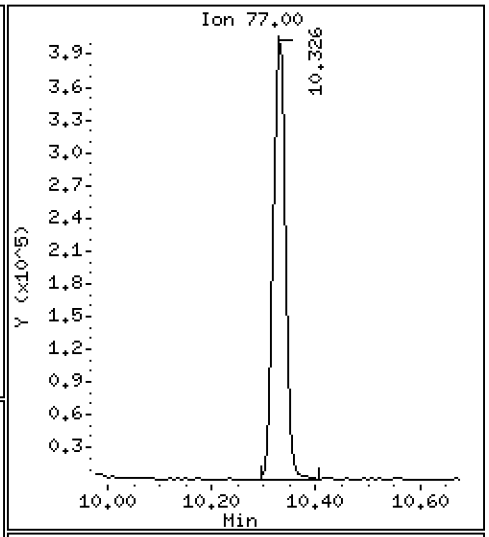
Column phase: ZB-5msi

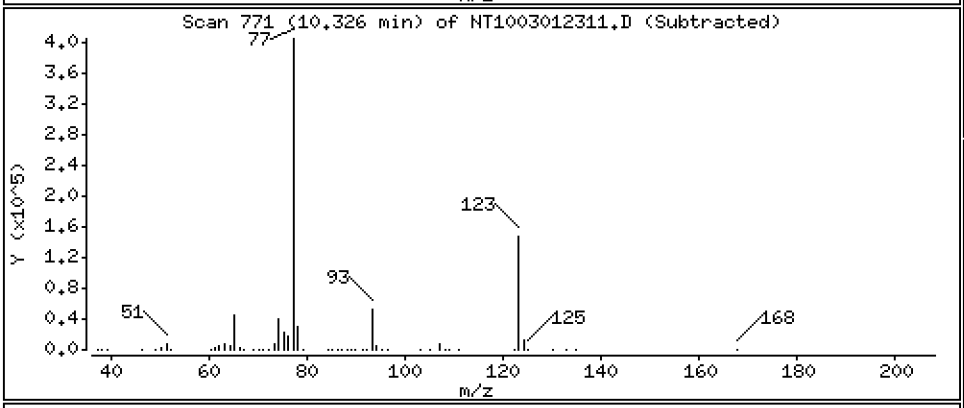
Column diameter: 0.25

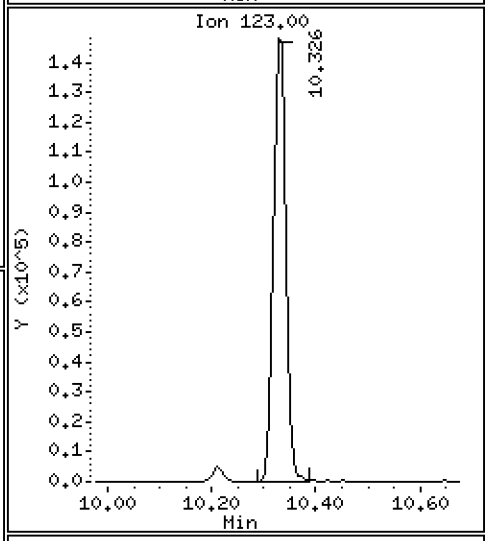
19 Nitrobenzene

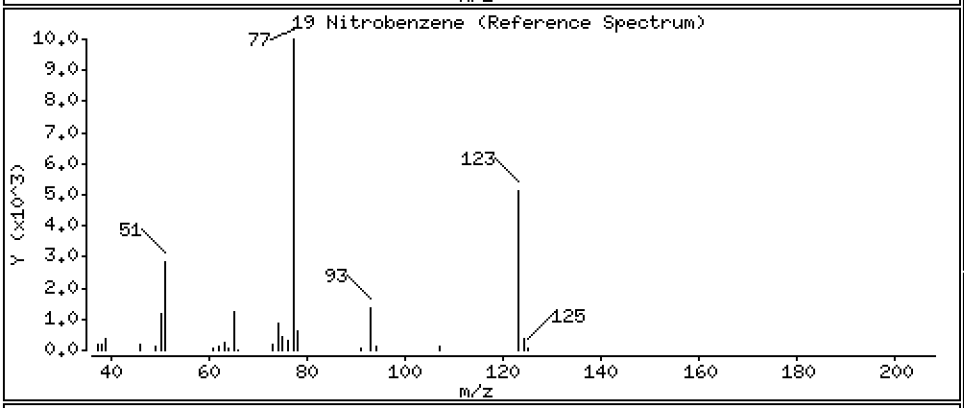
Concentration: 5.569 ug/mL

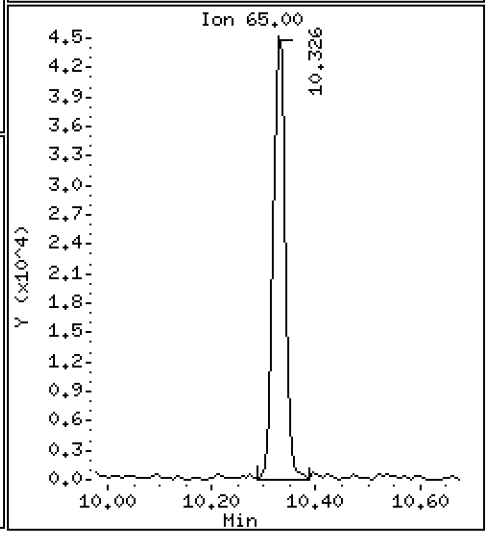


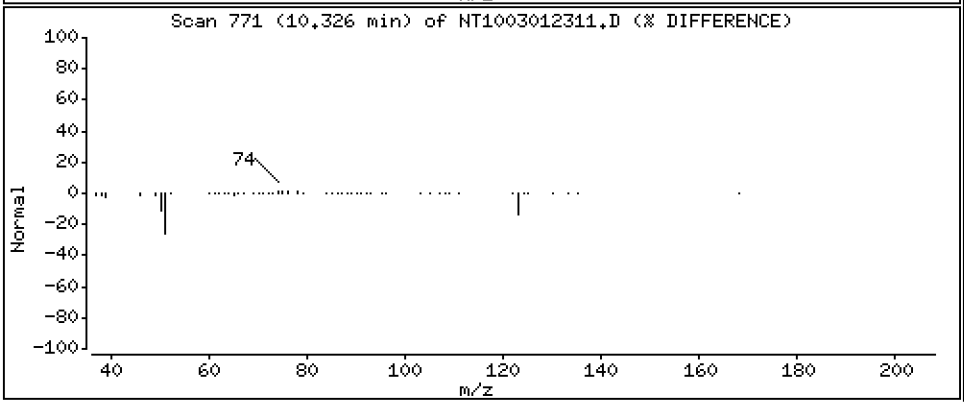












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

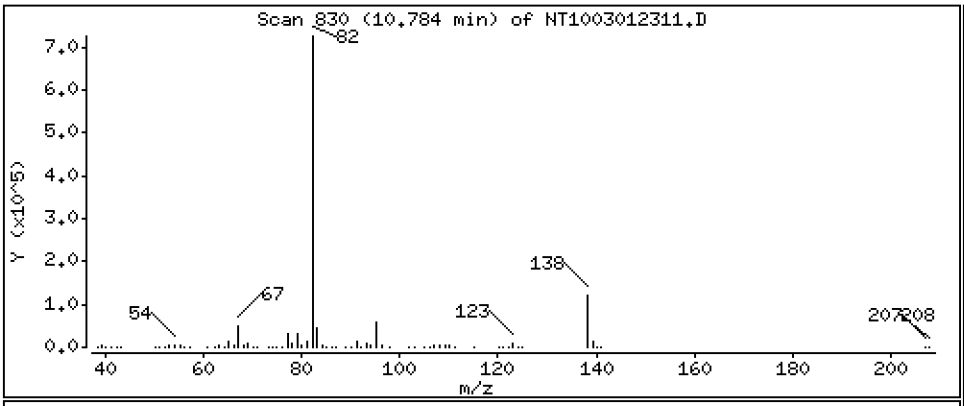
Operator: VTS

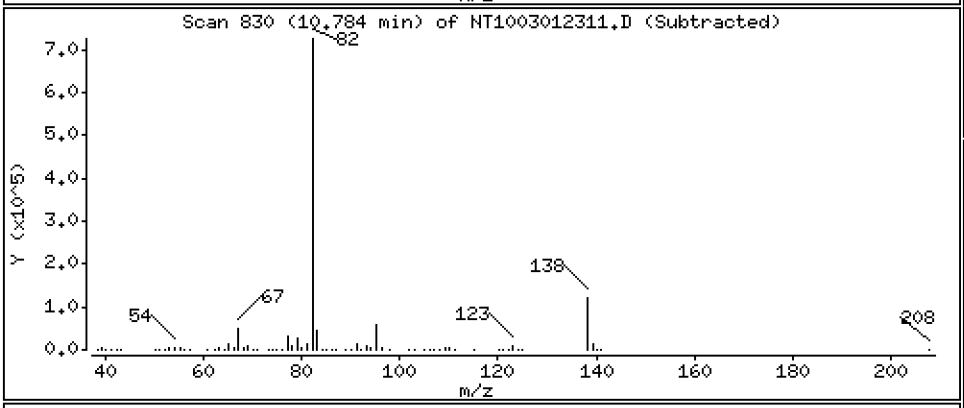
Column phase: ZB-5msi

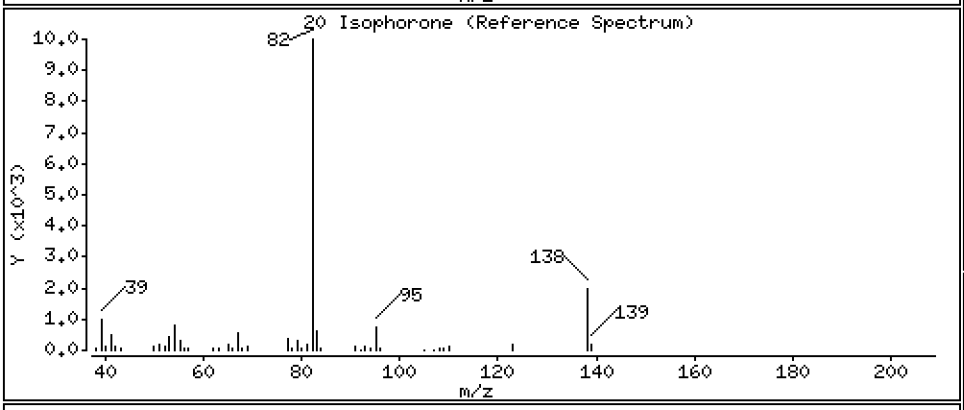
Column diameter: 0.25

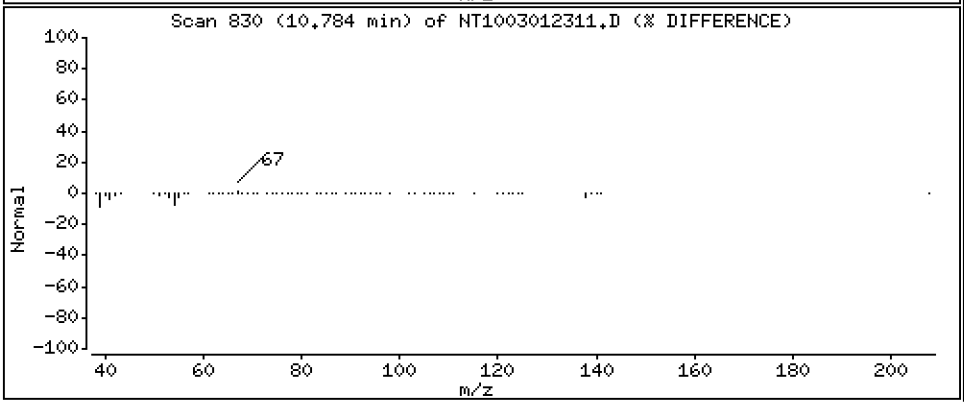
20 Isophorone

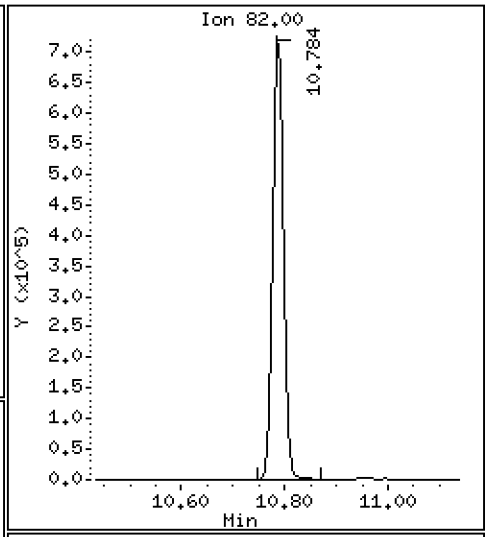
Concentration: 7.672 ug/mL

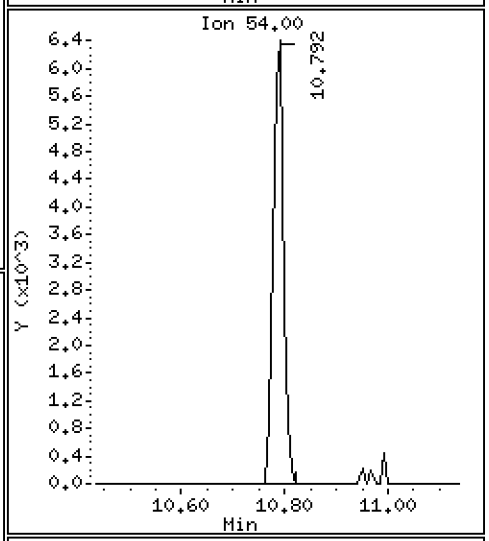


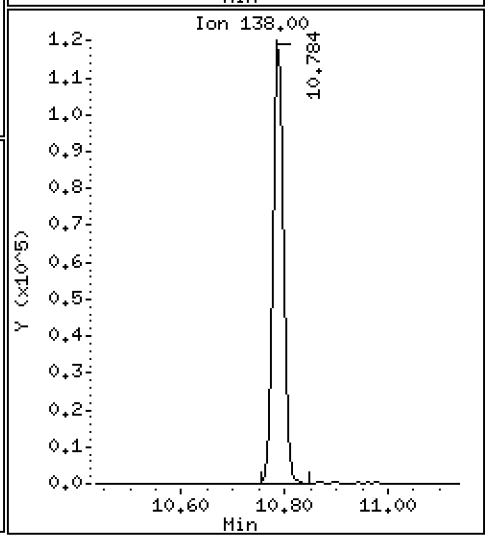












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

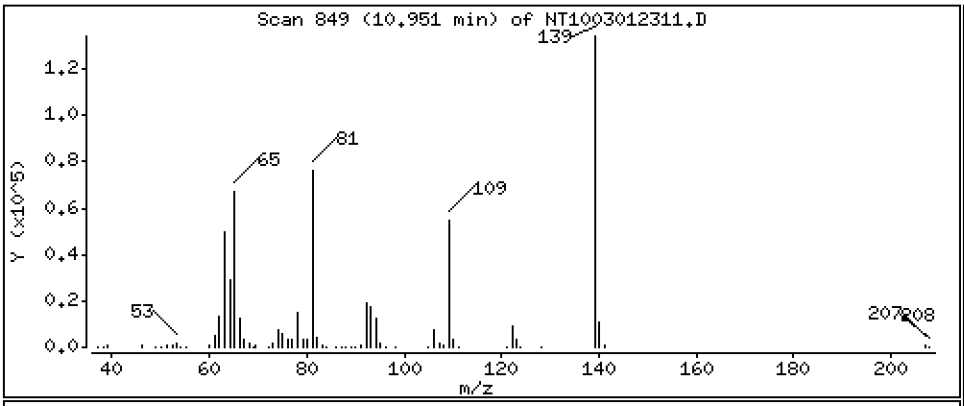
Operator: VTS

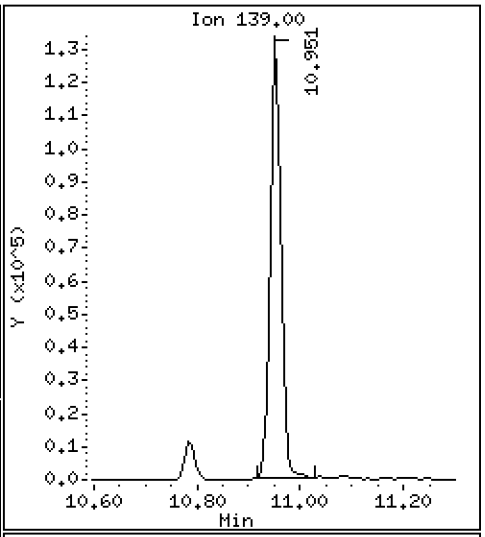
Column phase: ZB-5msi

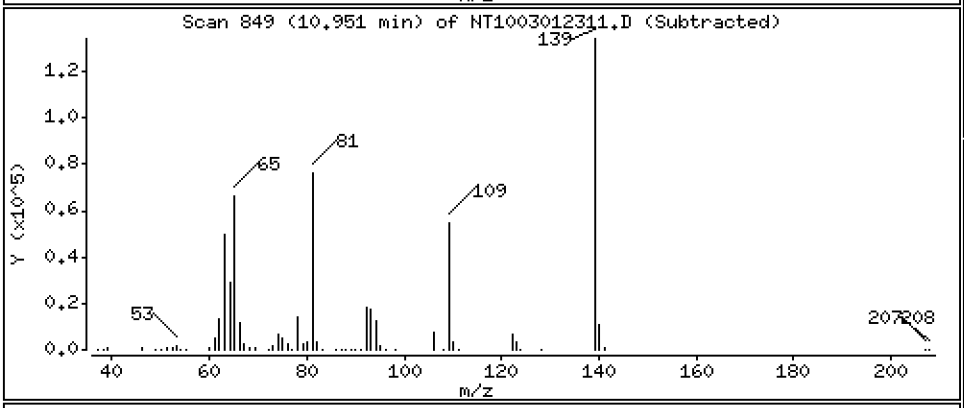
Column diameter: 0.25

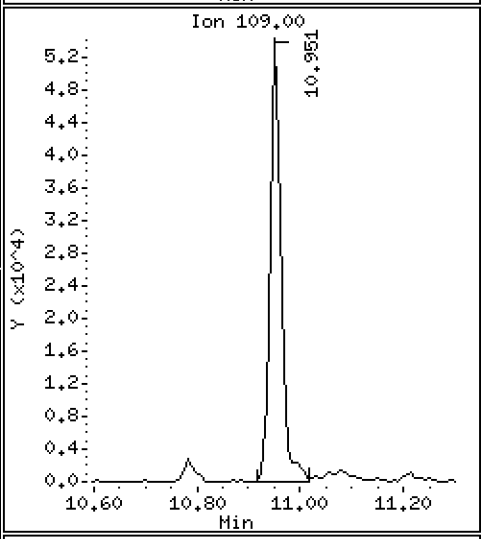
21 2-Nitrophenol

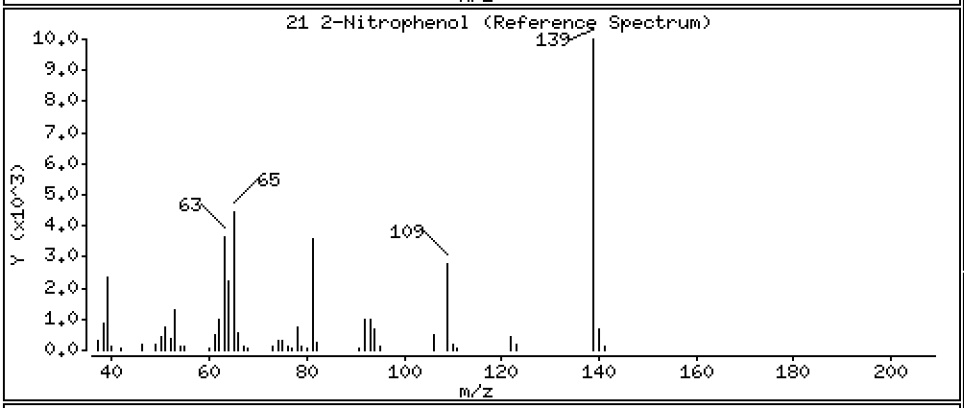
Concentration: 3.244 ug/mL

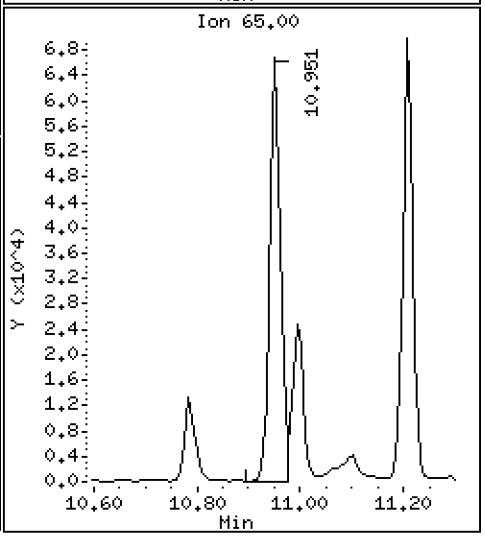


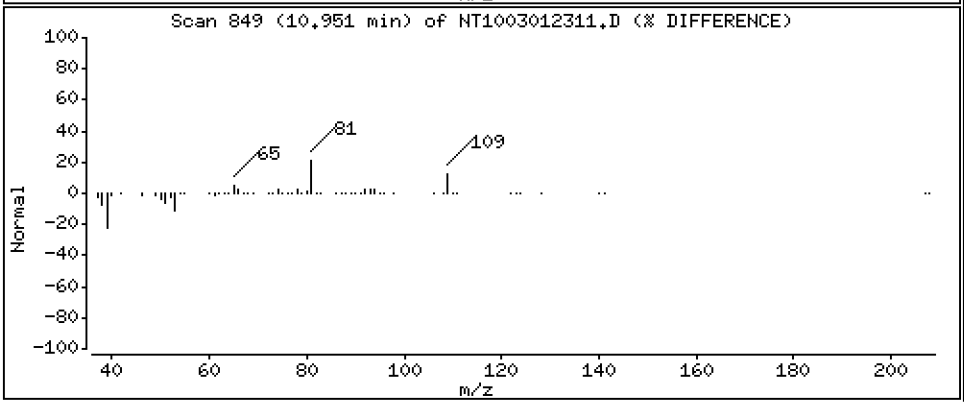












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

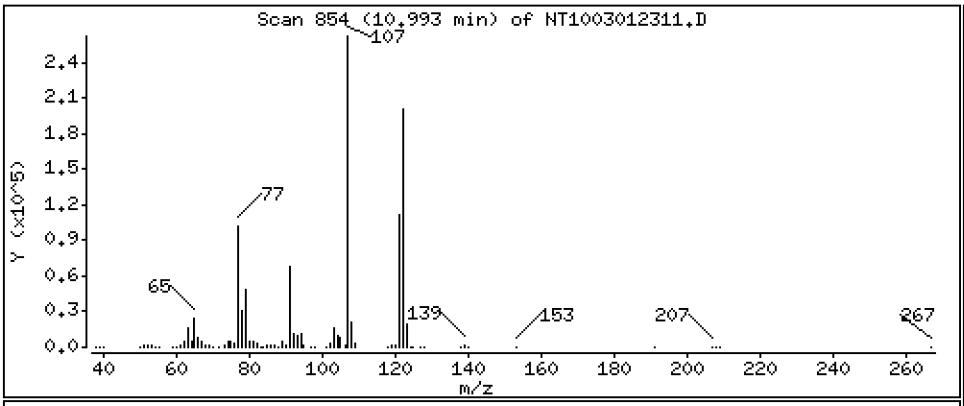
Operator: VTS

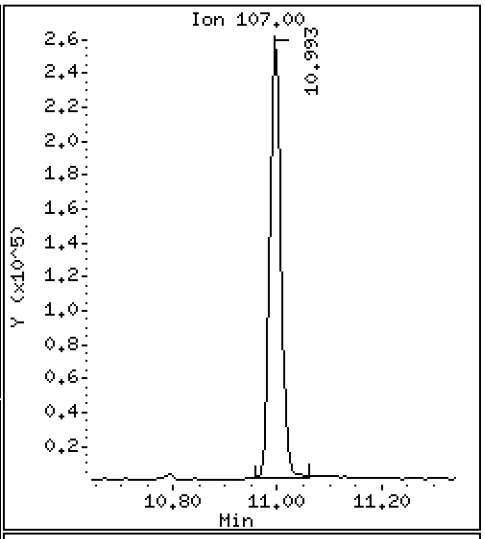
Column phase: ZB-5msi

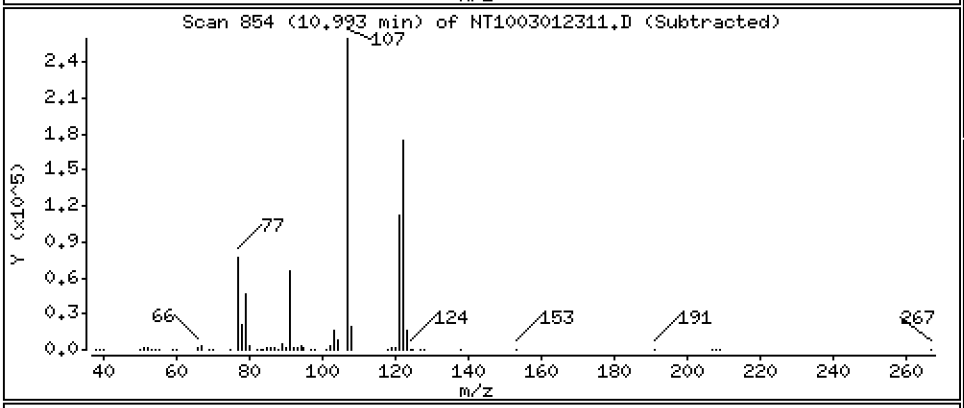
Column diameter: 0.25

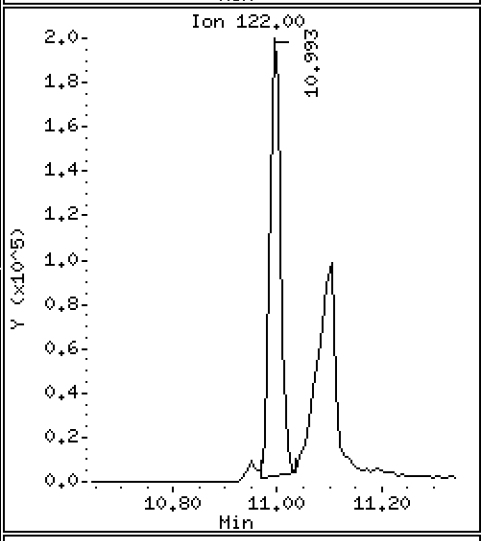
22 2,4-Dimethylphenol

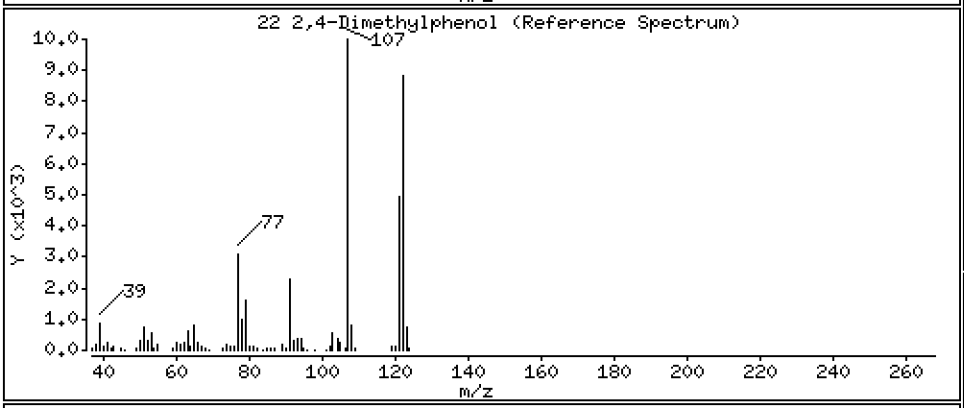
Concentration: 3.507 ug/mL

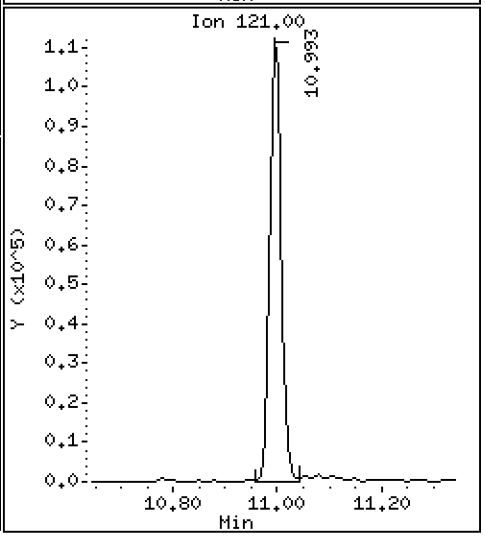


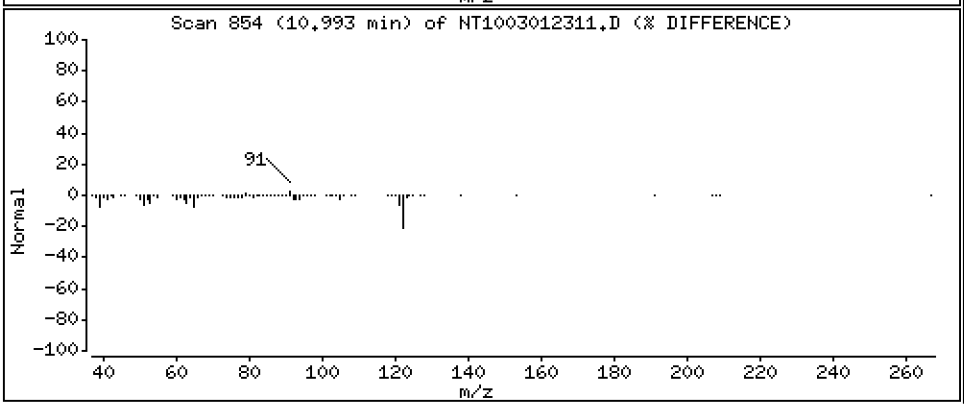












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

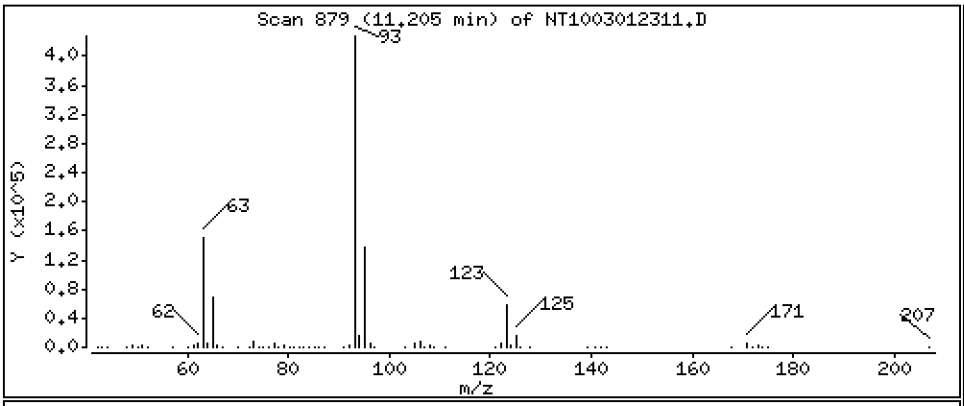
Operator: VTS

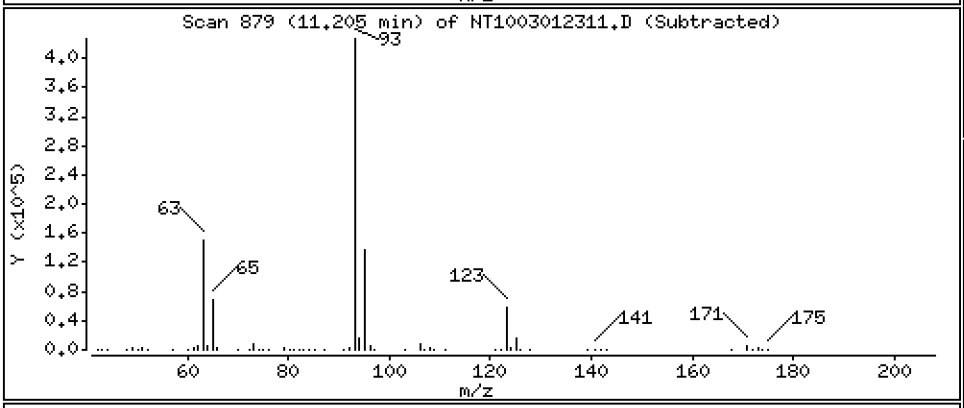
Column phase: ZB-5msi

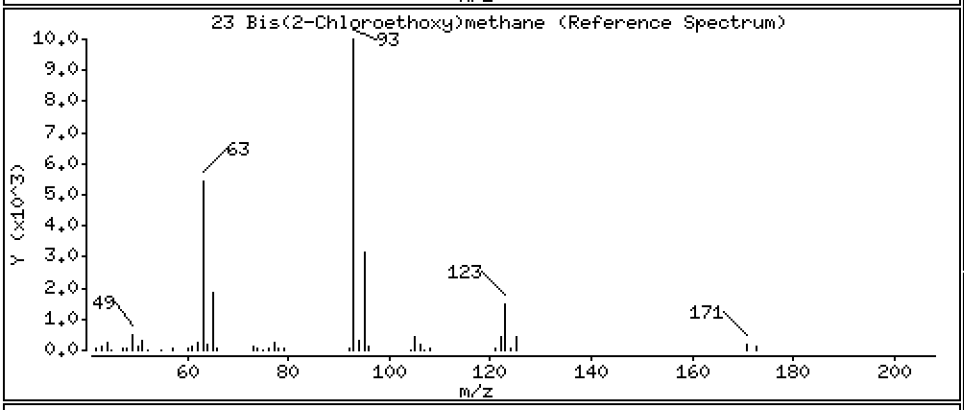
Column diameter: 0.25

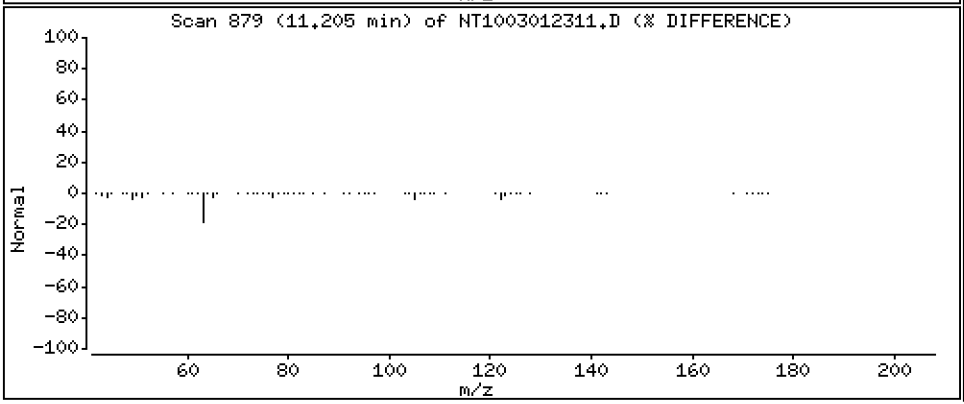
23 Bis(2-Chloroethoxy)methane

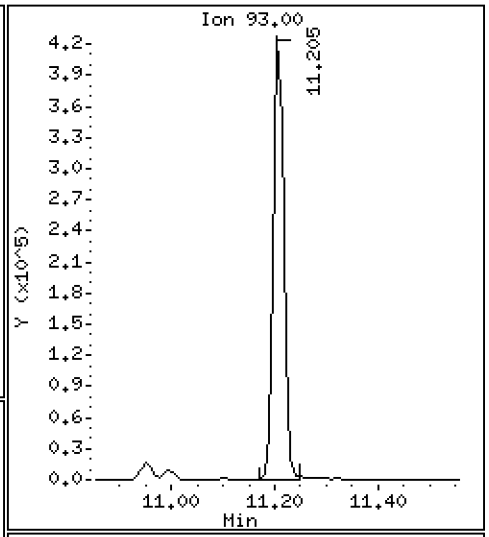
Concentration: 6.727 ug/mL

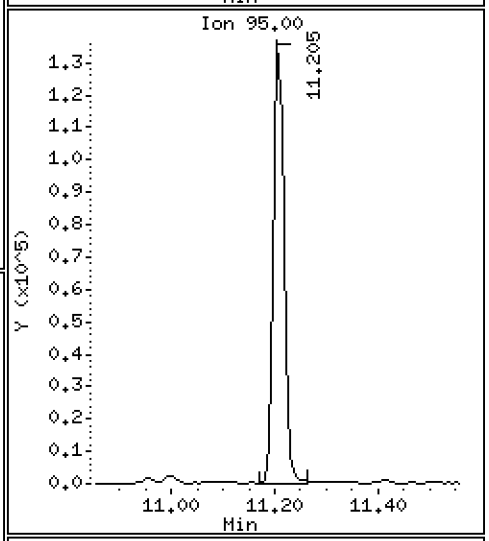


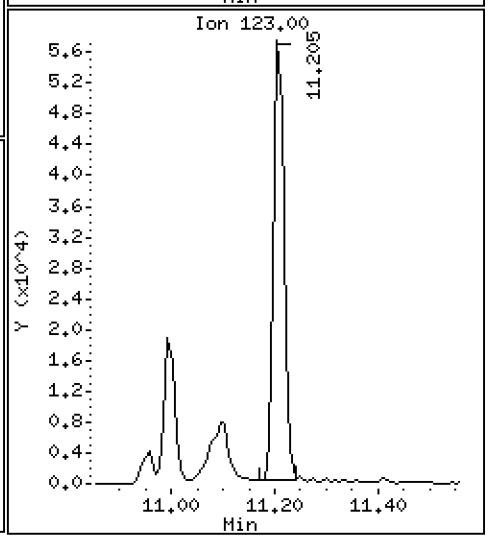












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

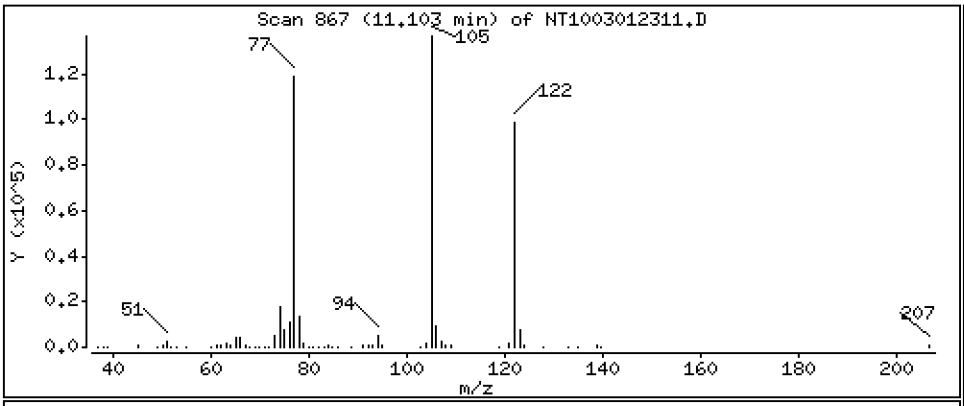
Operator: VTS

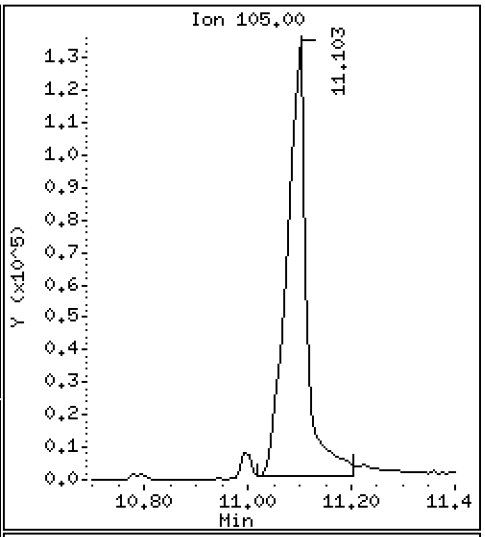
Column phase: ZB-5msi

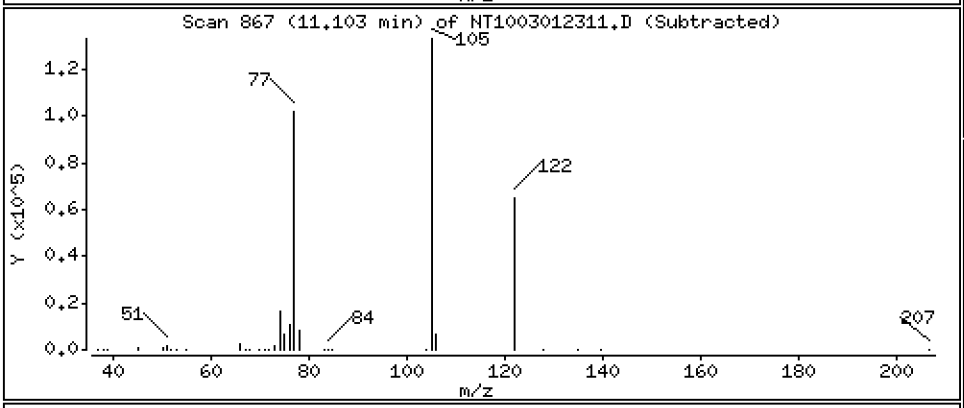
Column diameter: 0.25

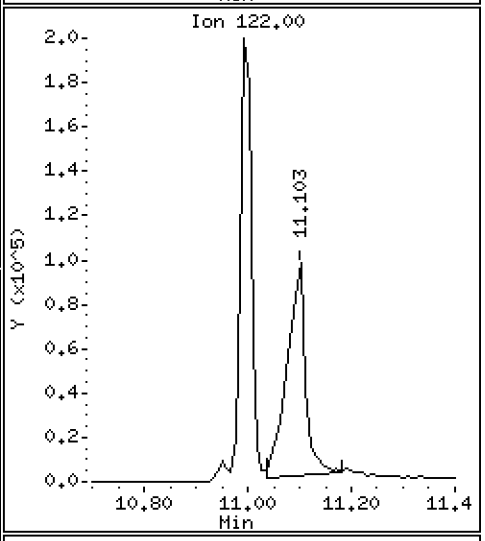
24 Benzoic acid

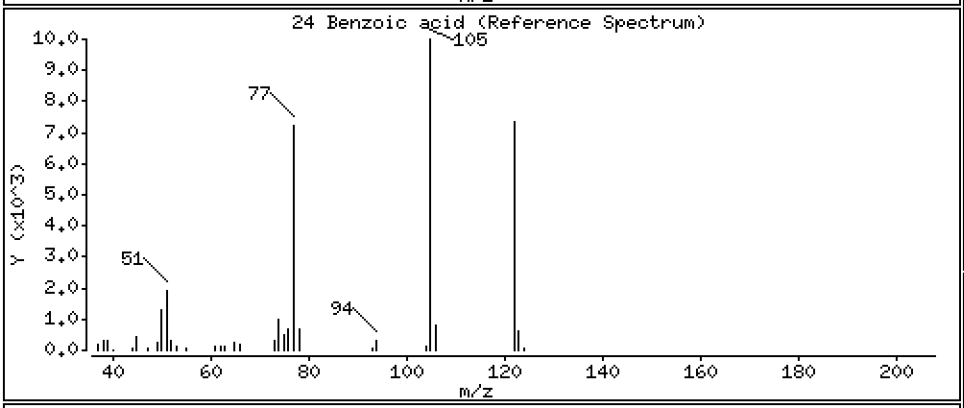
Concentration: 5.635 ug/mL

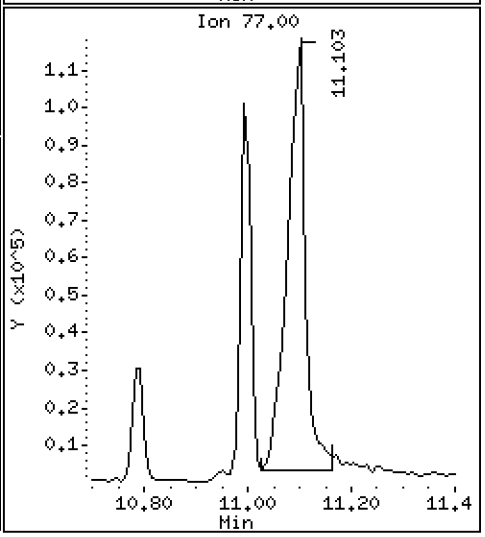


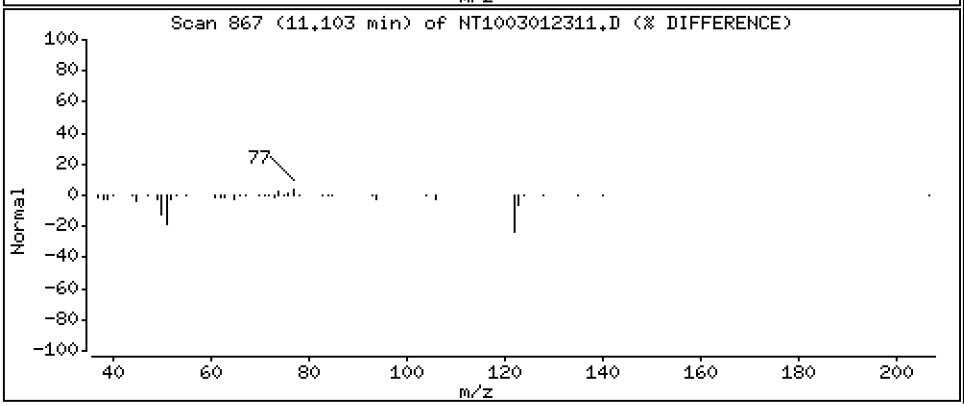












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

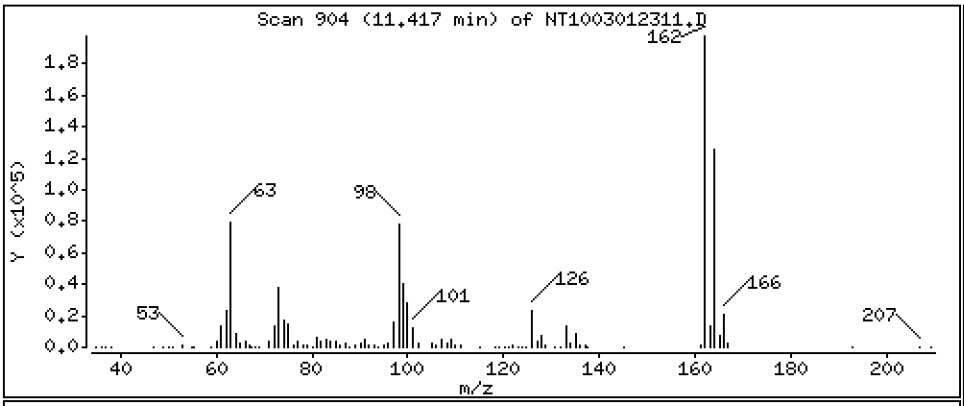
Operator: VTS

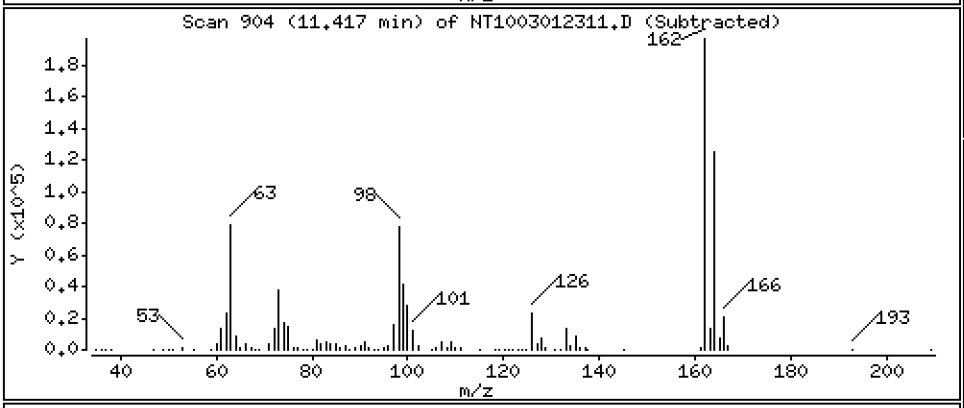
Column phase: ZB-5msi

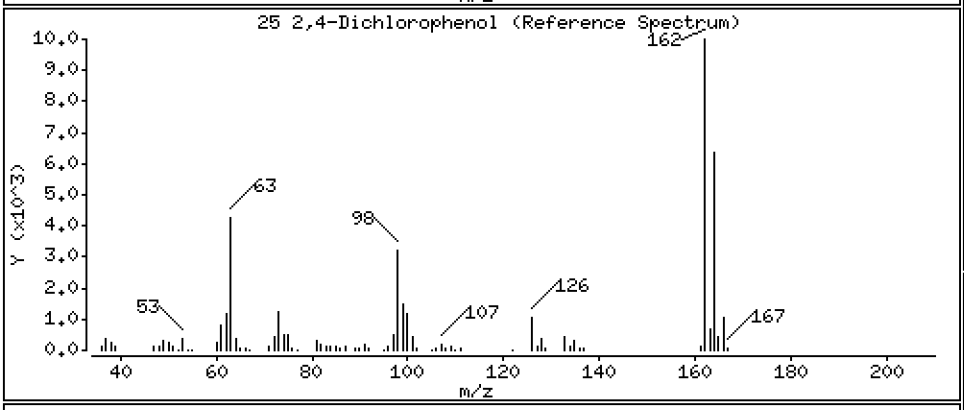
Column diameter: 0.25

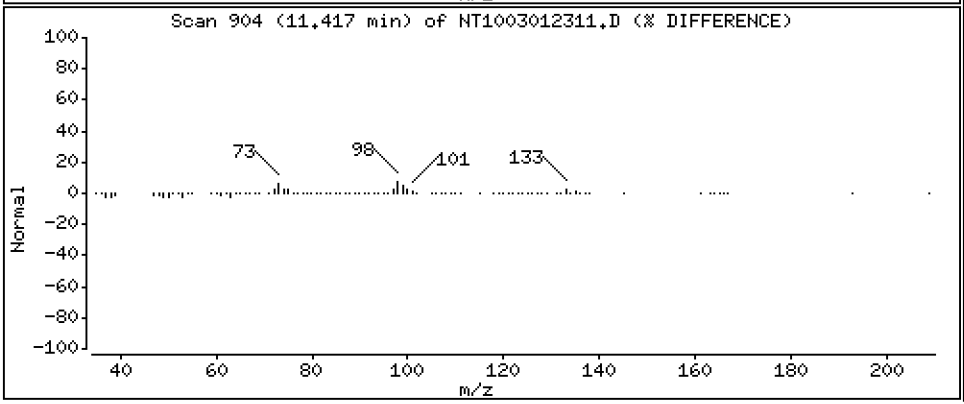
25 2,4-Dichlorophenol

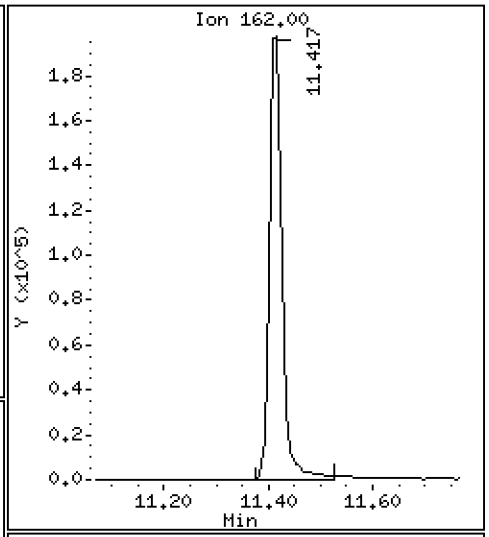
Concentration: 4.437 ug/mL

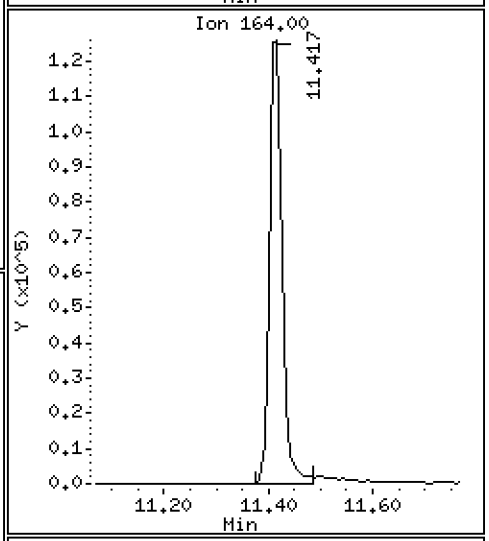


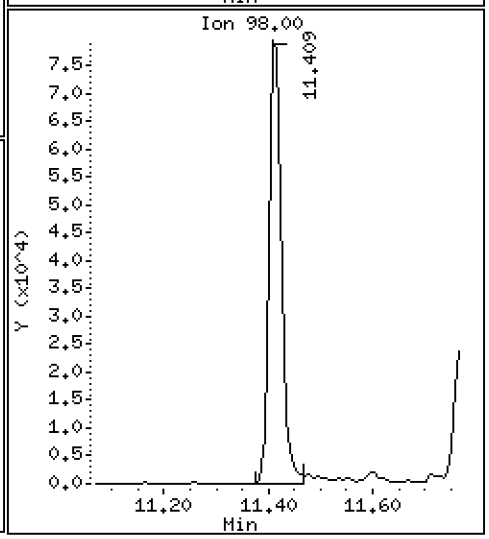












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

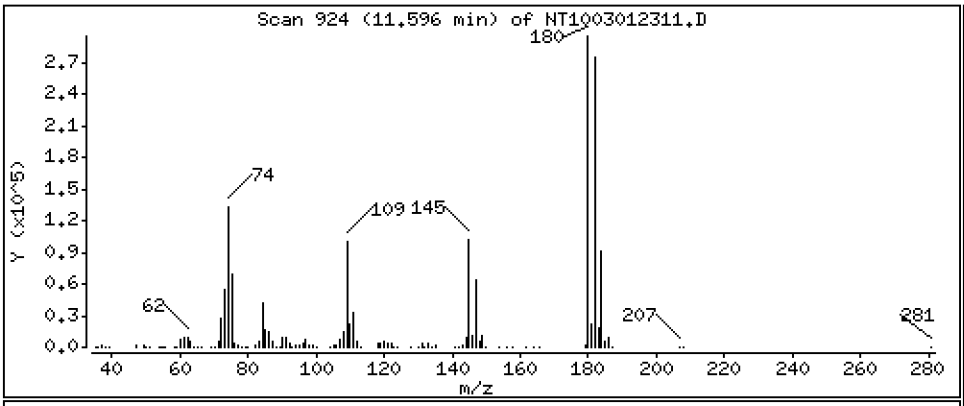
Operator: VTS

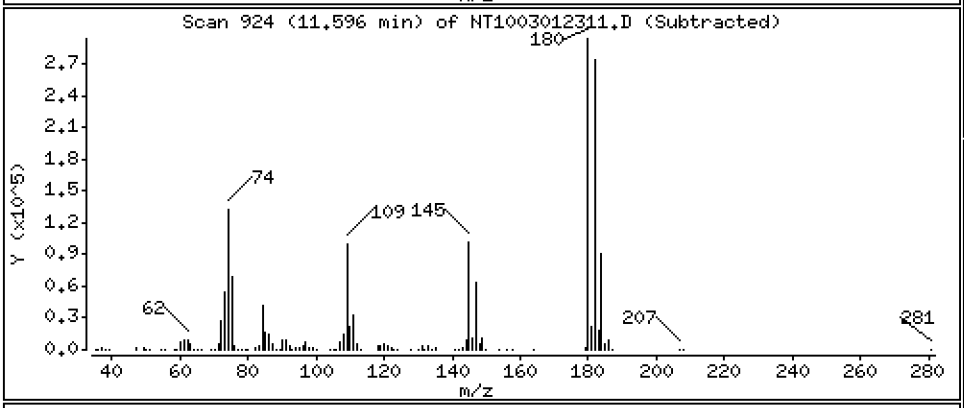
Column phase: ZB-5msi

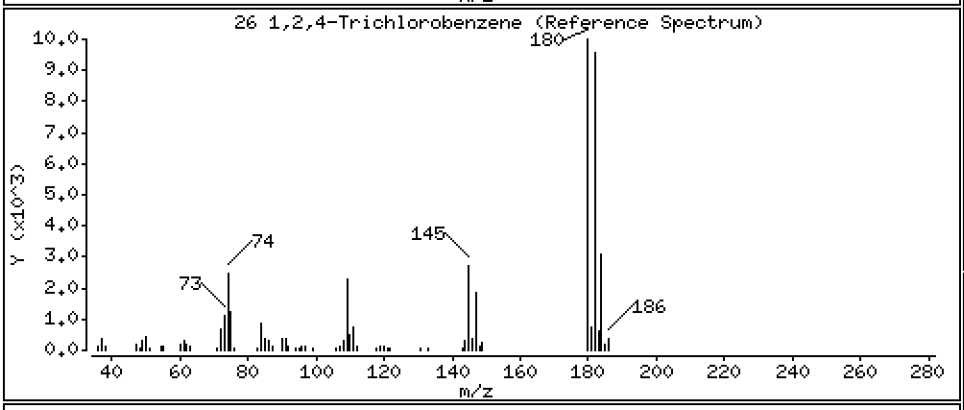
Column diameter: 0.25

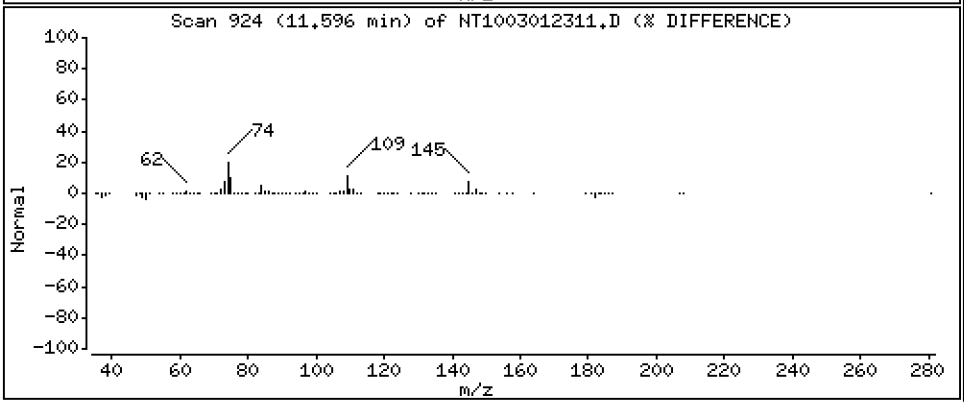
26 1,2,4-Trichlorobenzene

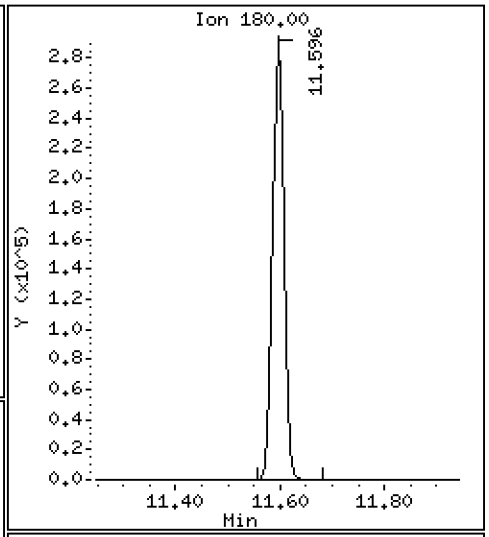
Concentration: 4.908 ug/mL

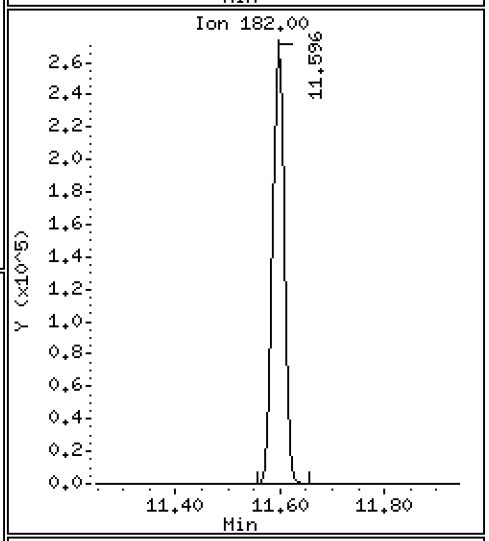


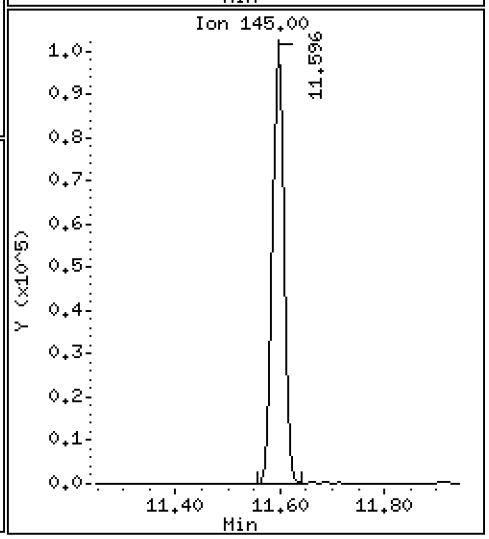












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

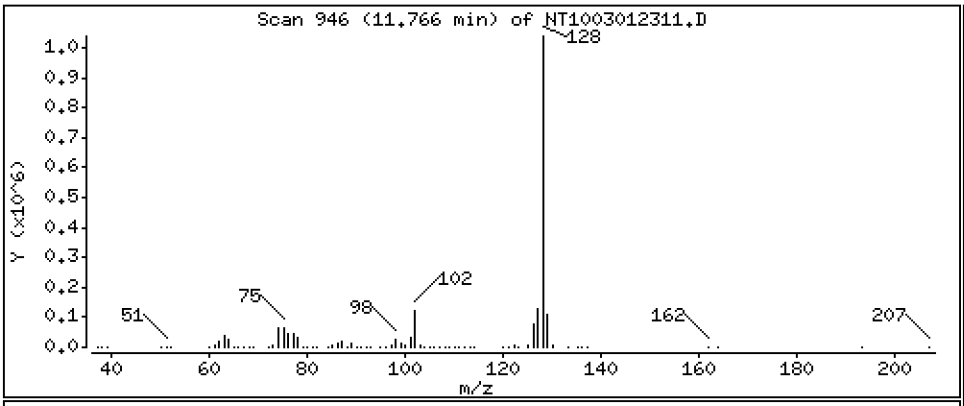
Operator: VTS

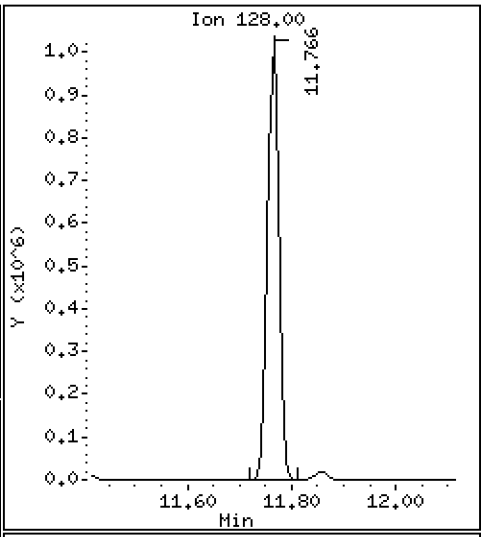
Column phase: ZB-5msi

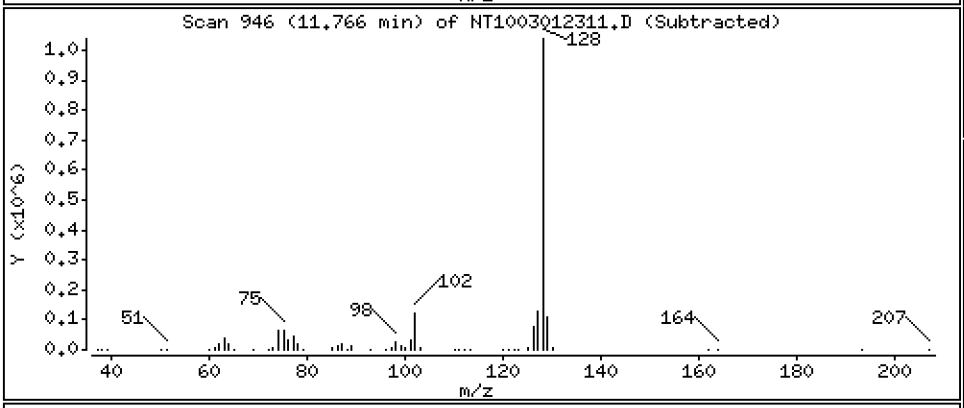
Column diameter: 0.25

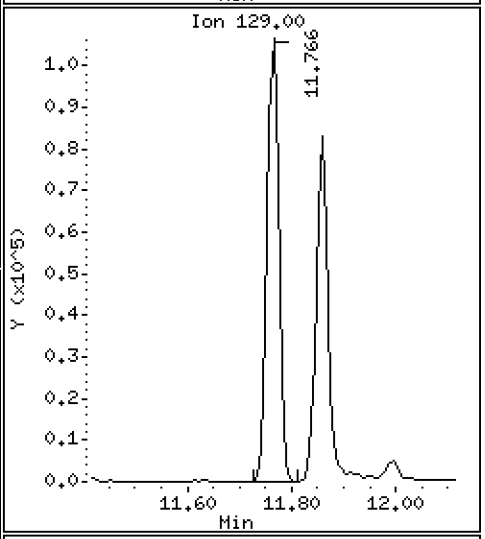
28 Naphthalene

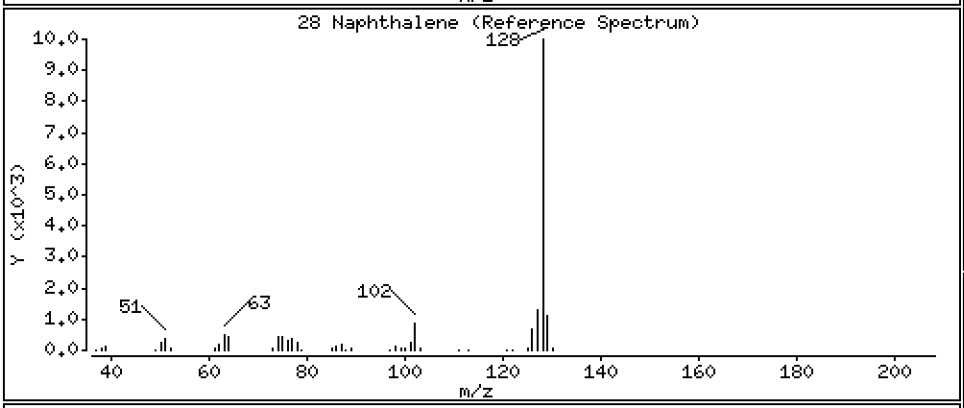
Concentration: 5.255 ug/mL

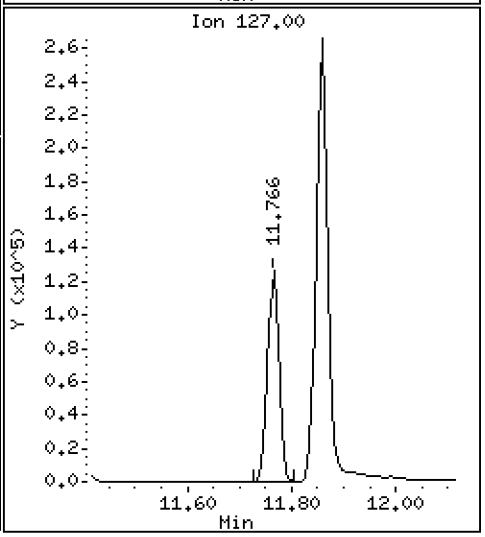


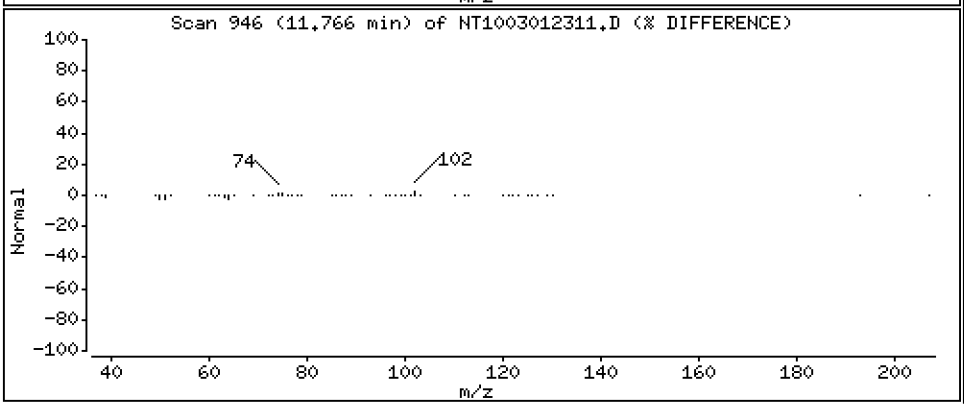












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

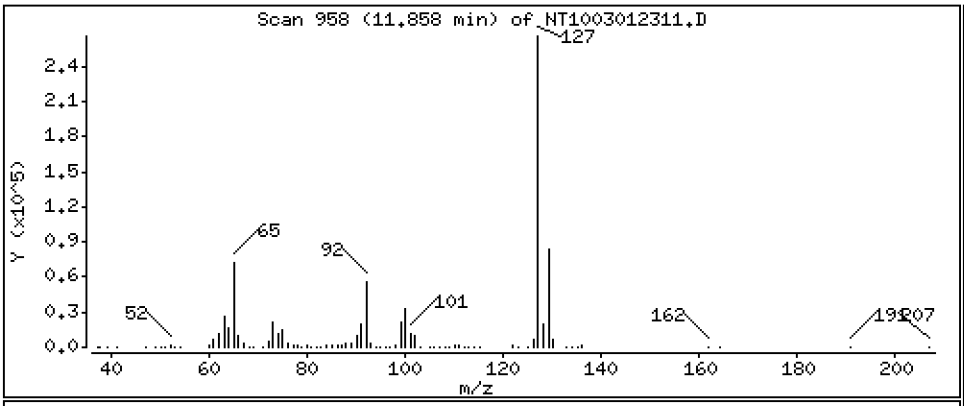
Operator: VTS

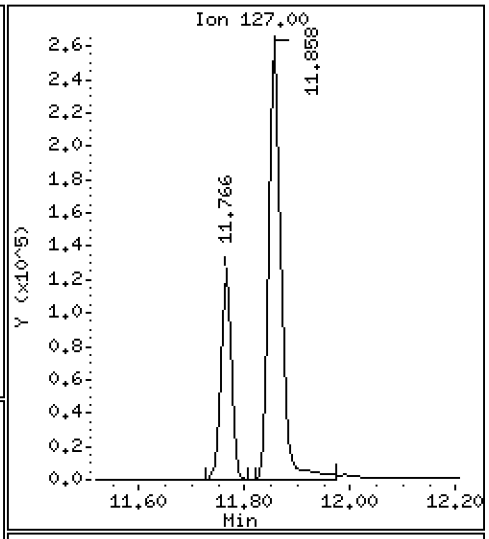
Column phase: ZB-5msi

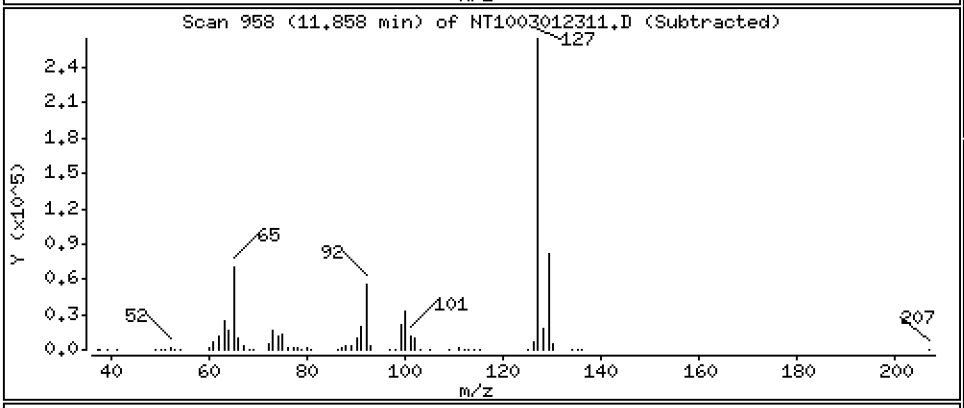
Column diameter: 0.25

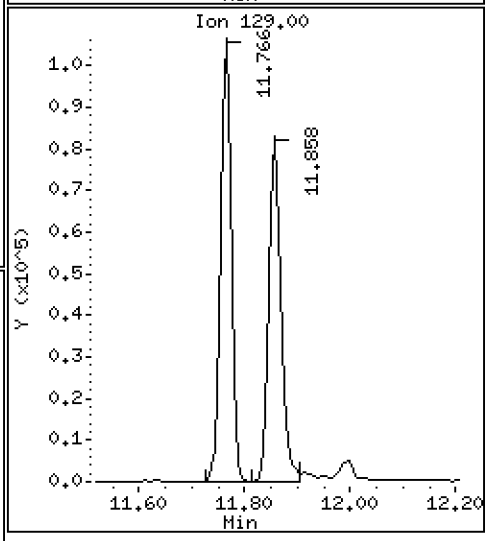
29 4-Chloroaniline

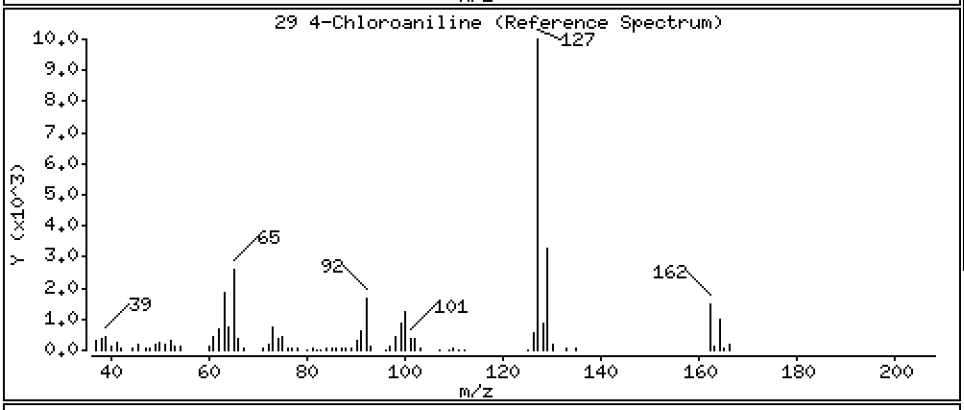
Concentration: 3.791 ug/mL

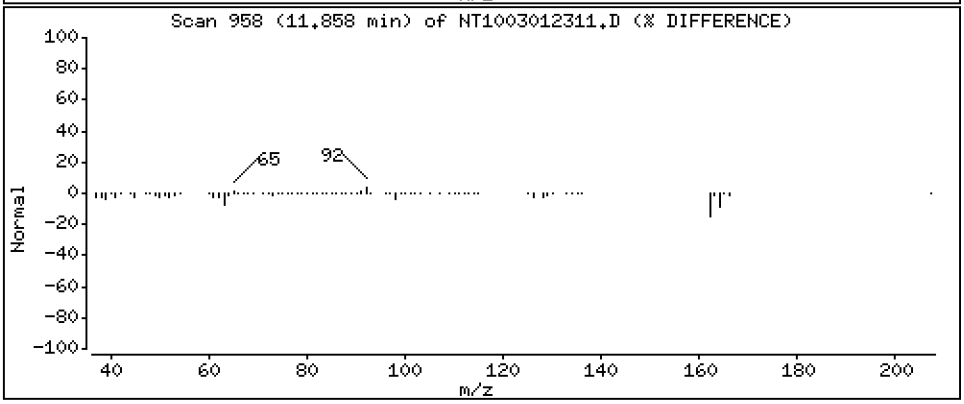












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

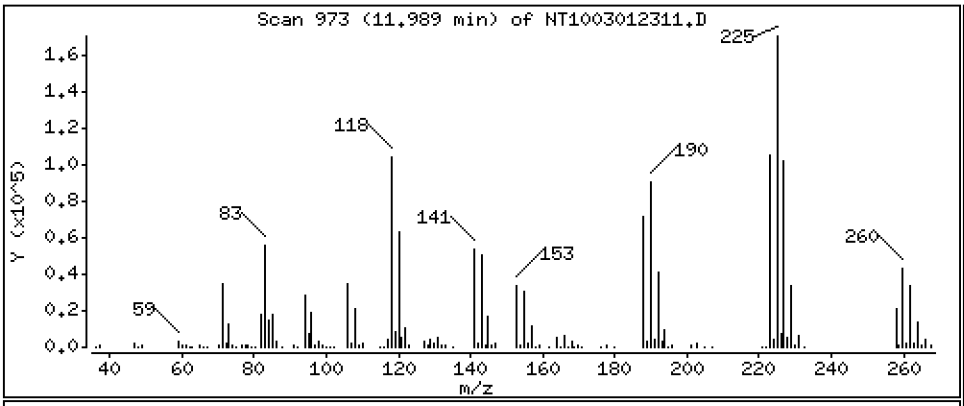
Operator: VTS

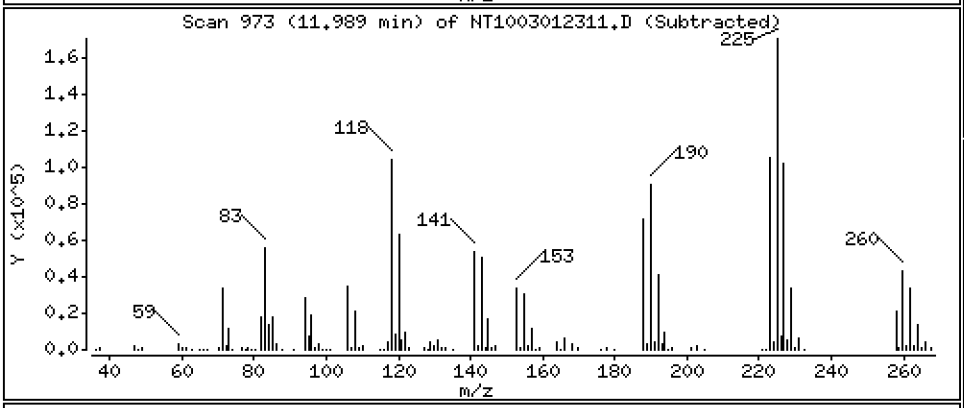
Column phase: ZB-5msi

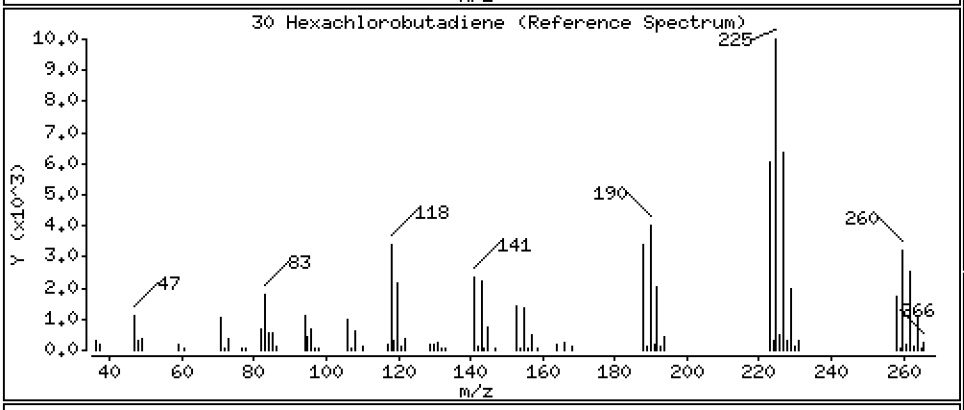
Column diameter: 0.25

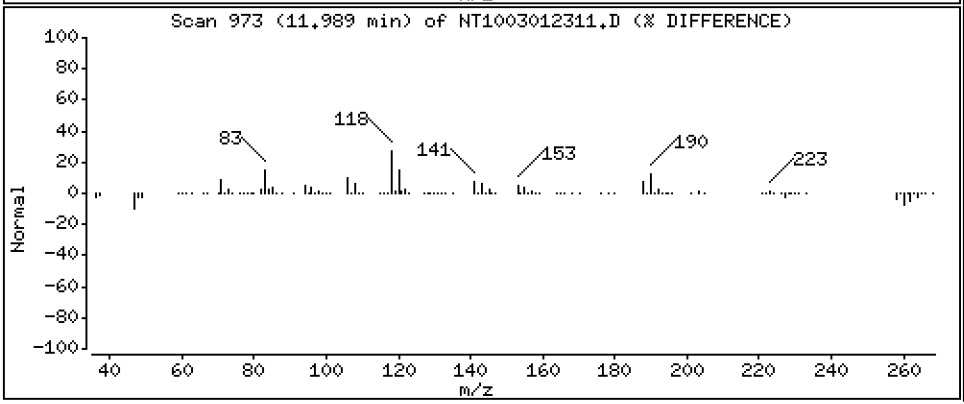
30 Hexachlorobutadiene

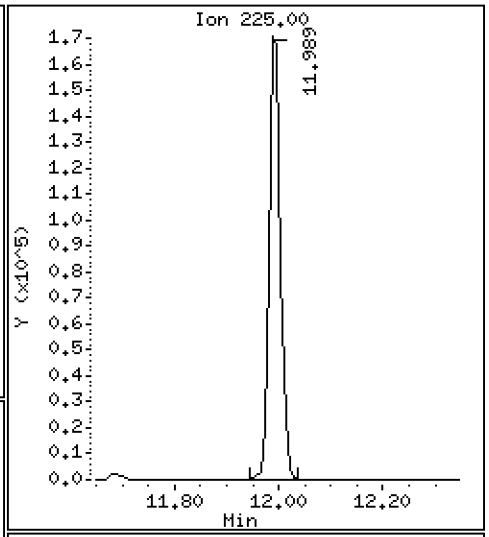
Concentration: 5.014 ug/mL

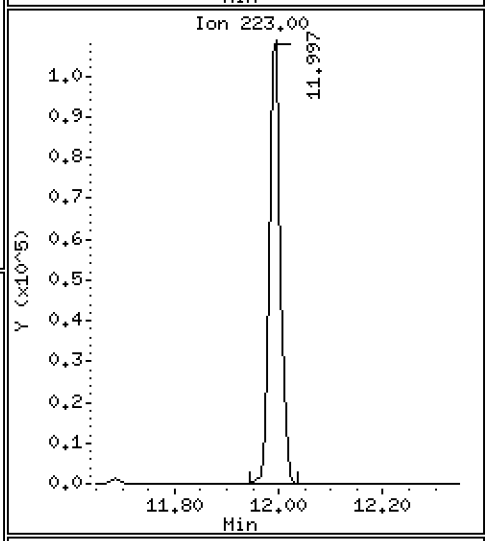


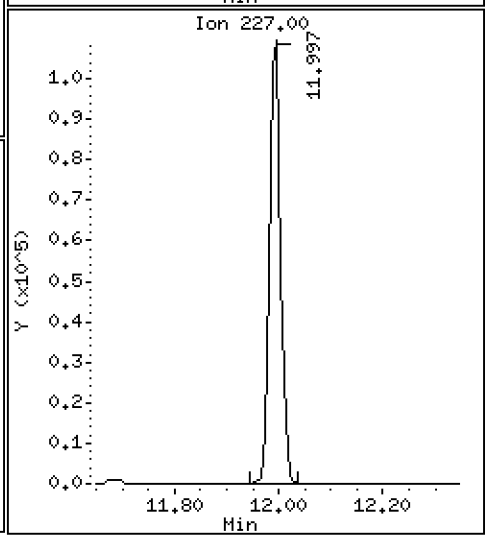












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

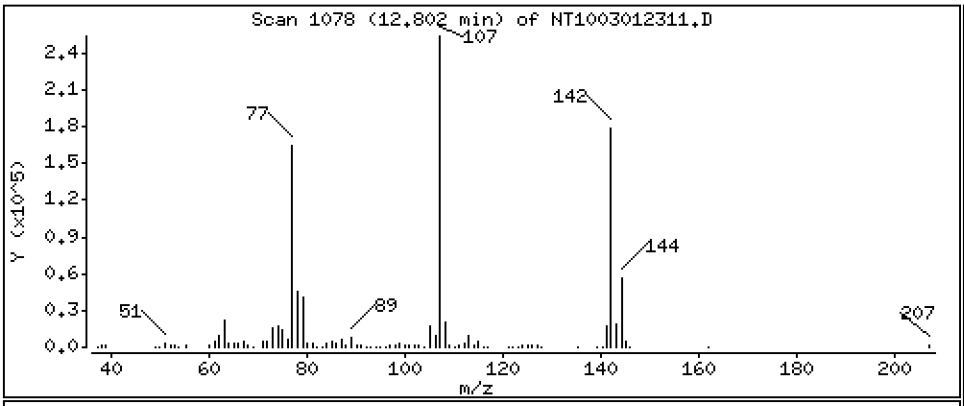
Operator: VTS

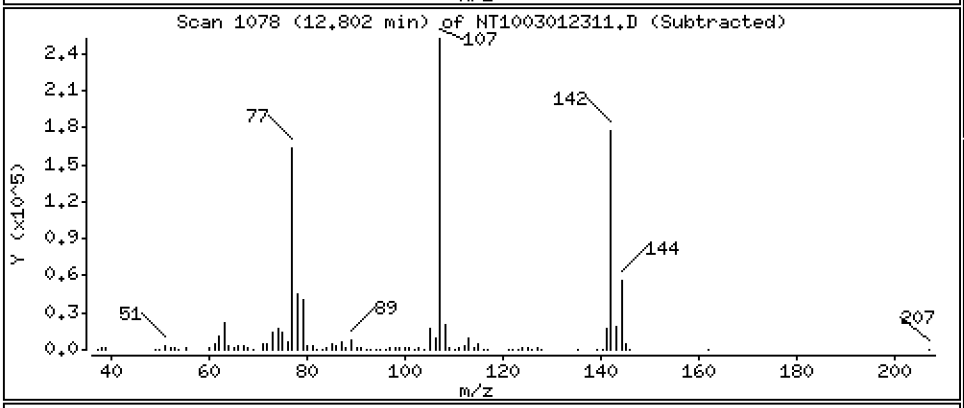
Column phase: ZB-5msi

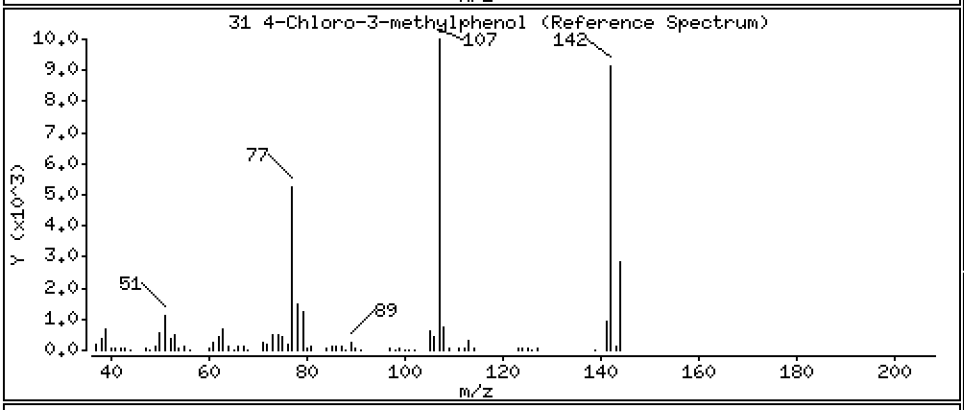
Column diameter: 0.25

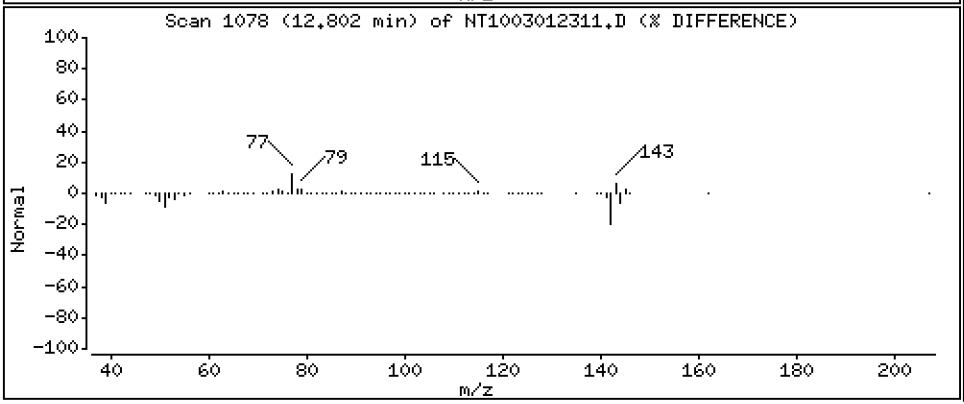
31 4-Chloro-3-methylphenol

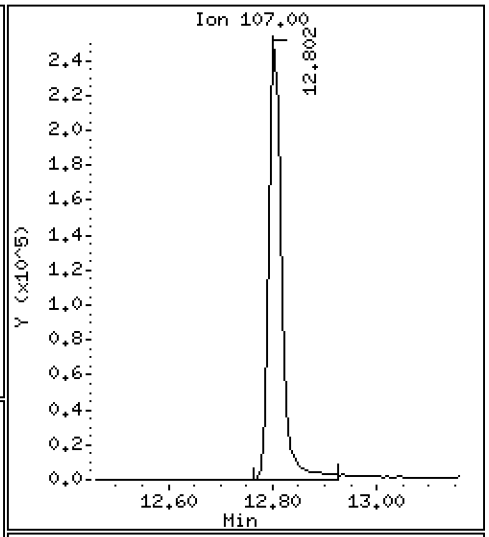
Concentration: 4.452 ug/mL

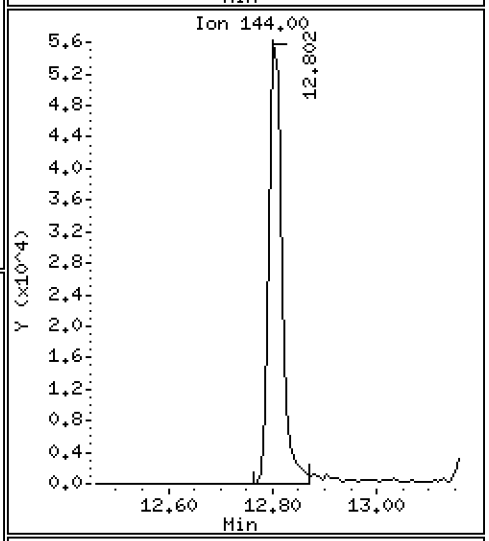


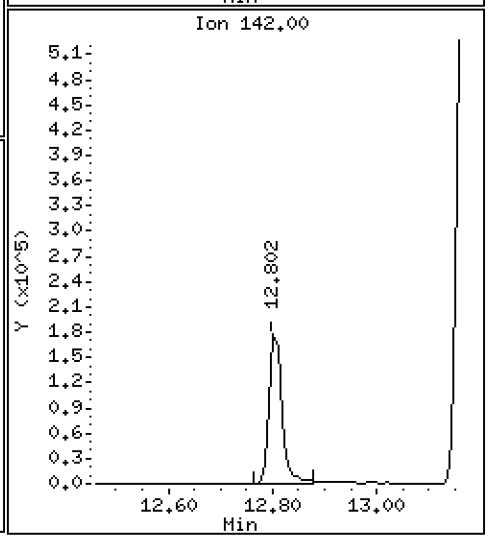












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

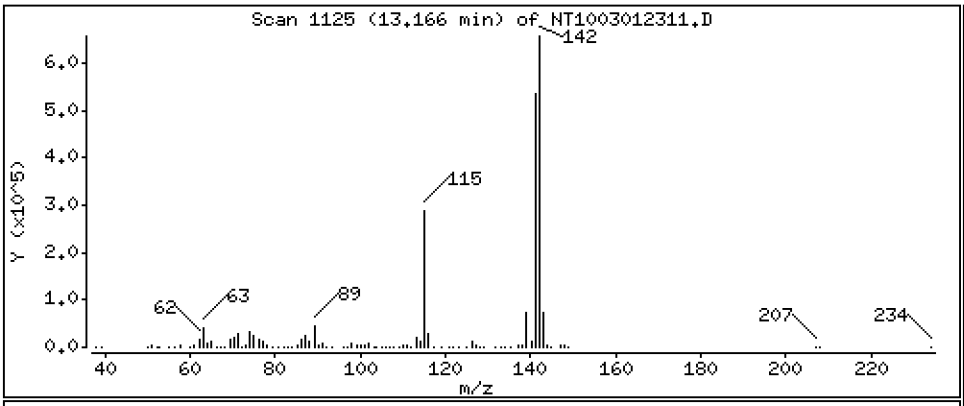
Operator: VTS

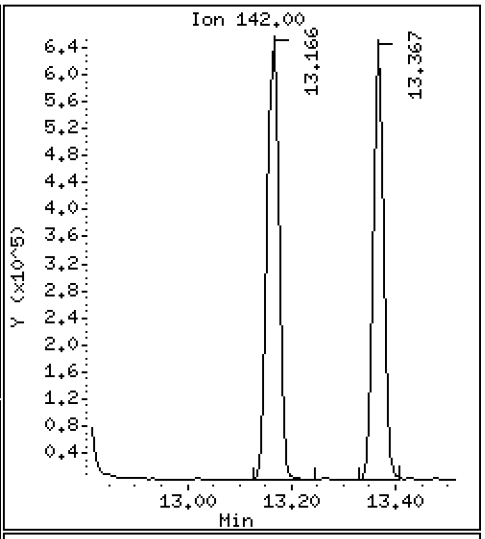
Column phase: ZB-5msi

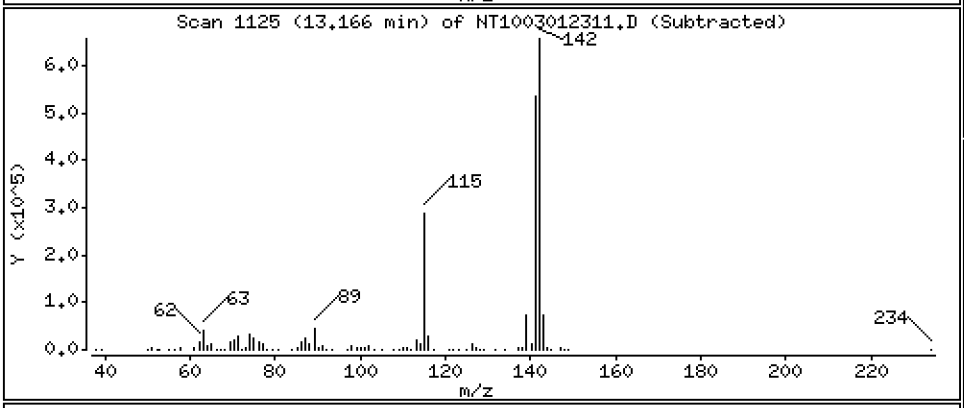
Column diameter: 0.25

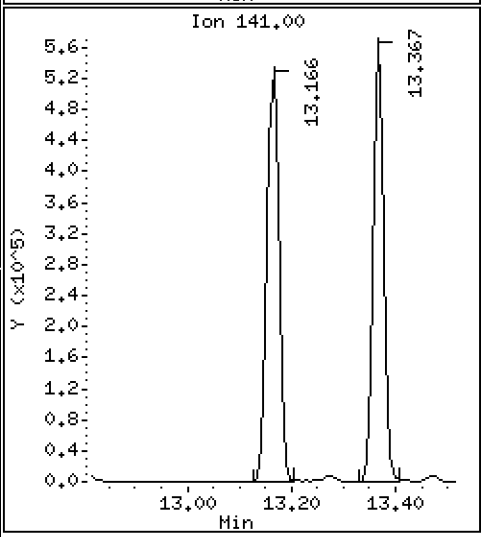
32 2-Methylnaphthalene

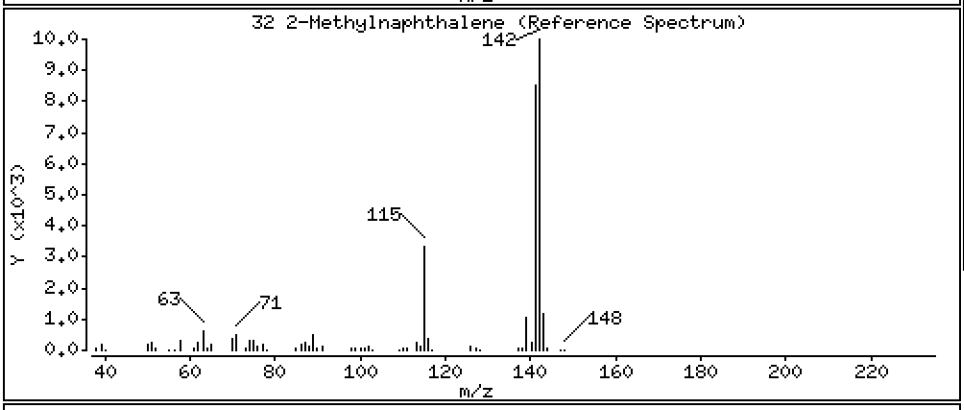
Concentration: 4.951 ug/mL

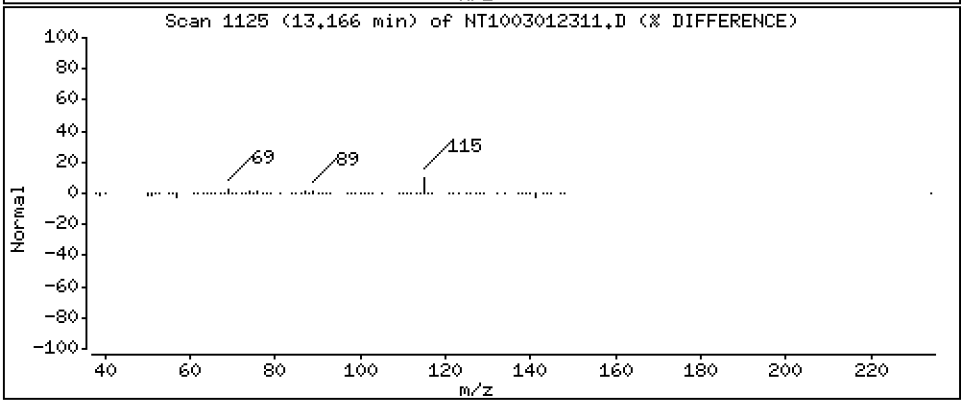












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

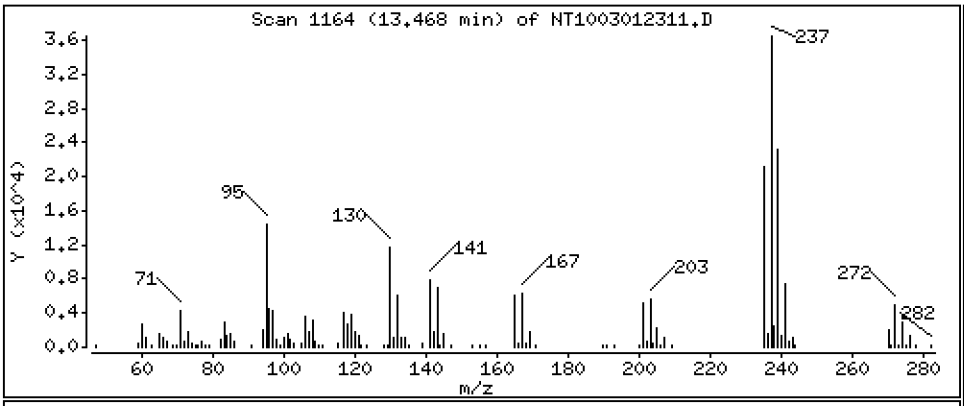
Operator: VTS

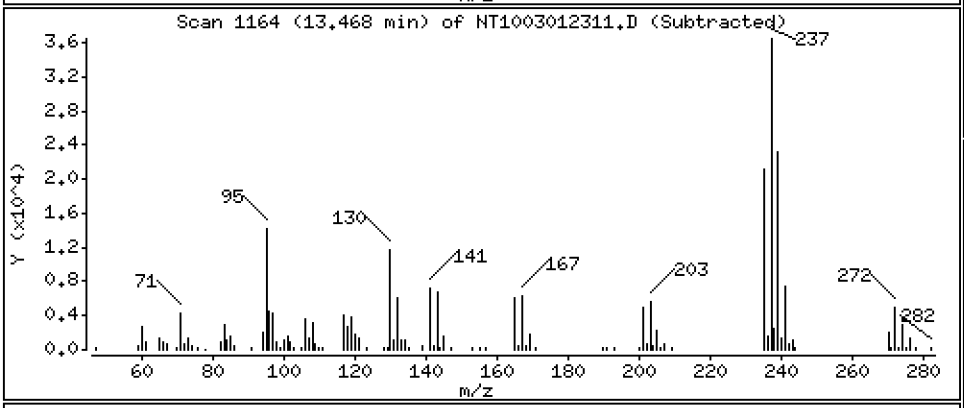
Column phase: ZB-5msi

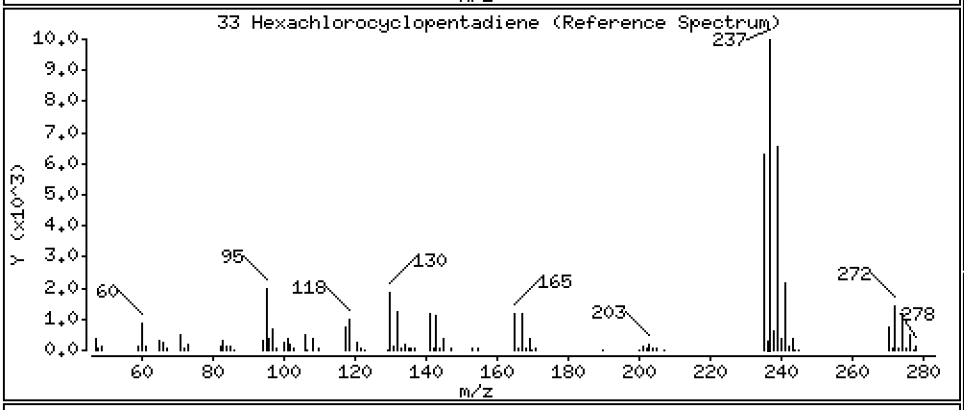
Column diameter: 0.25

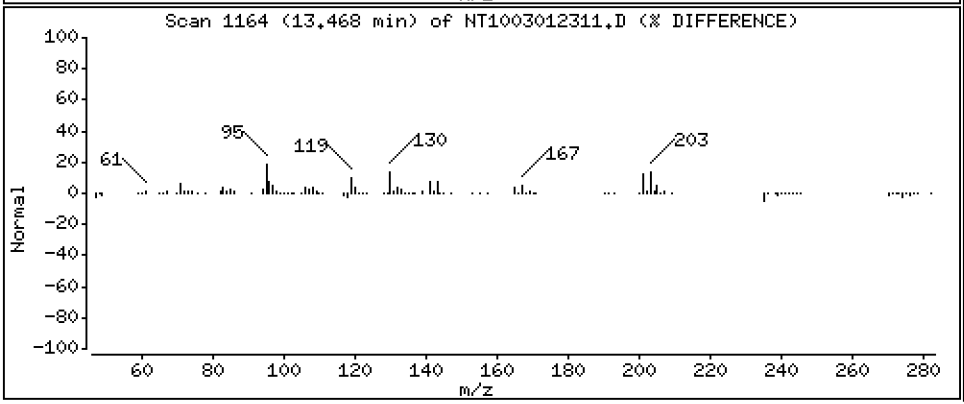
33 Hexachlorocyclopentadiene

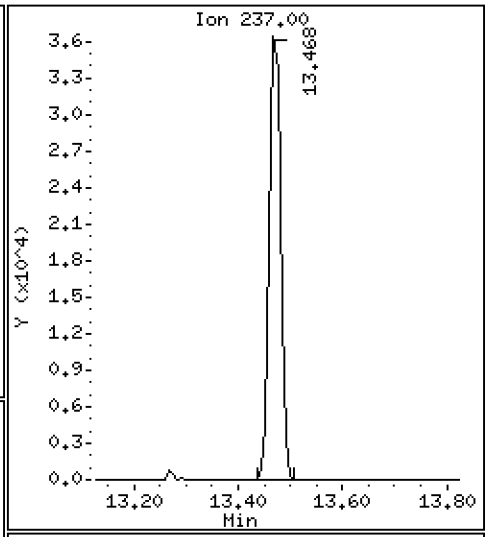
Concentration: 2.562 ug/mL

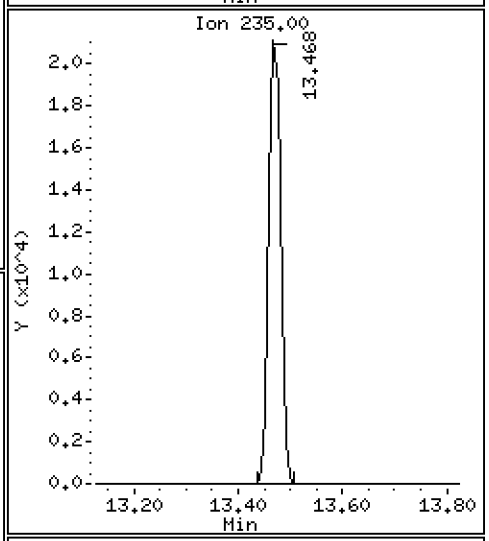


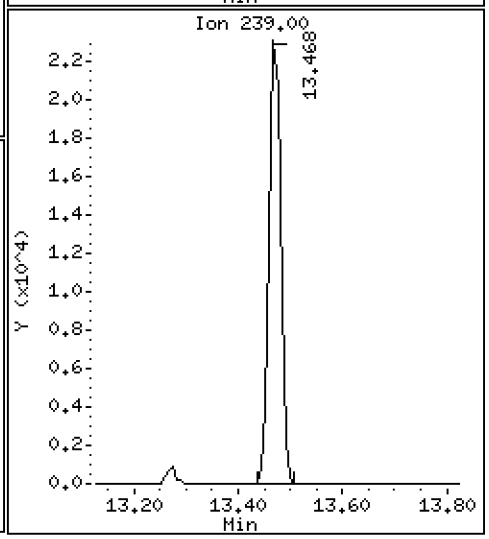












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

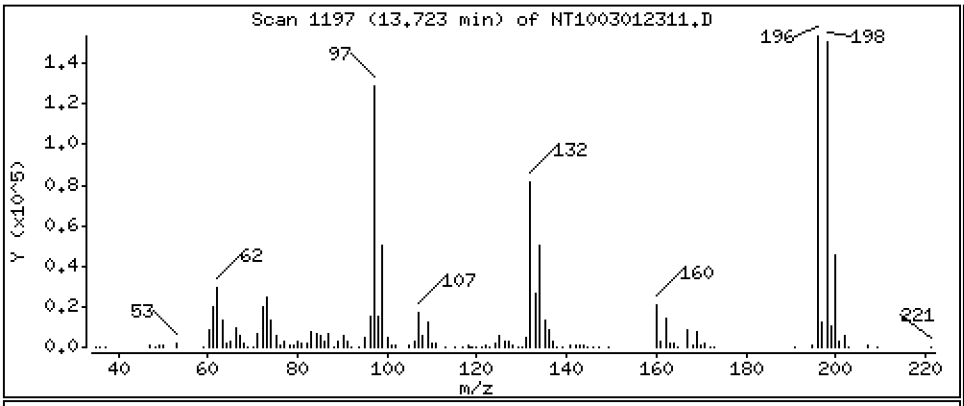
Operator: VTS

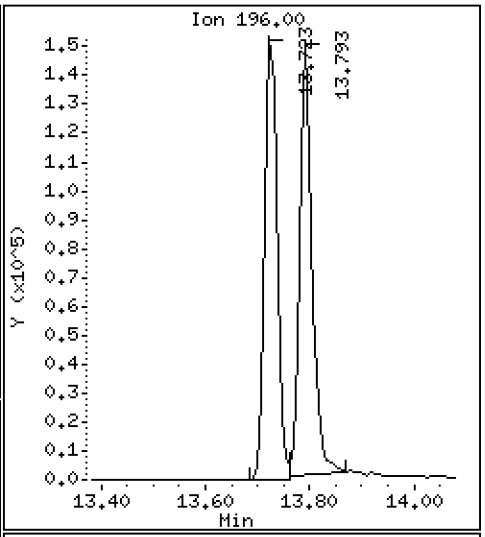
Column phase: ZB-5msi

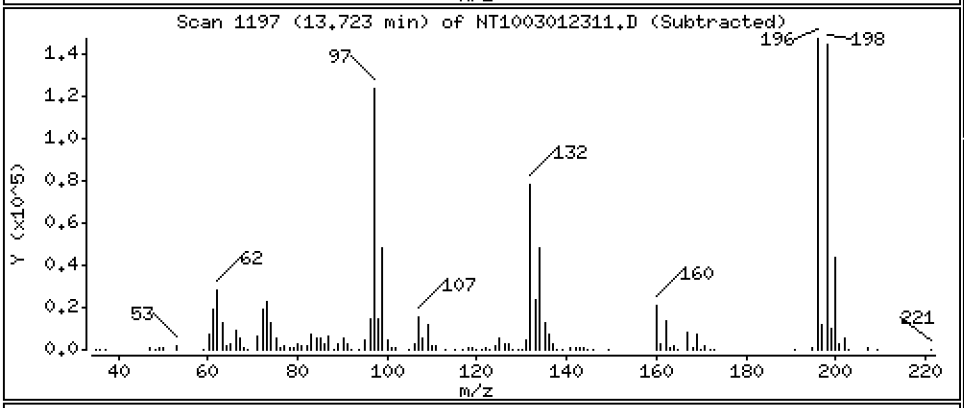
Column diameter: 0.25

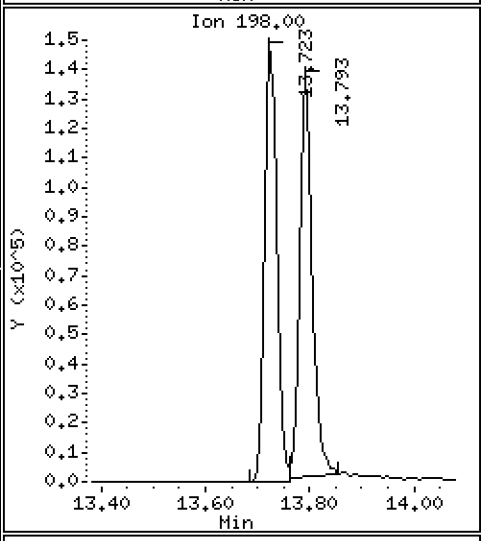
34 2,4,6-Trichlorophenol

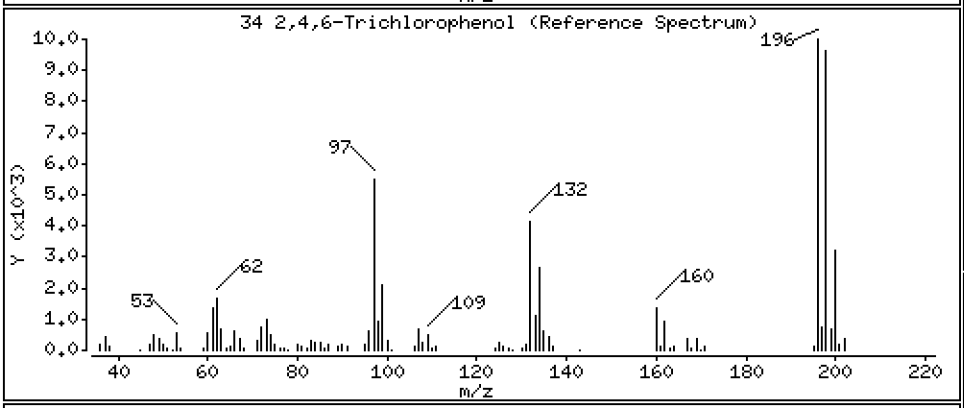
Concentration: 4.120 ug/mL

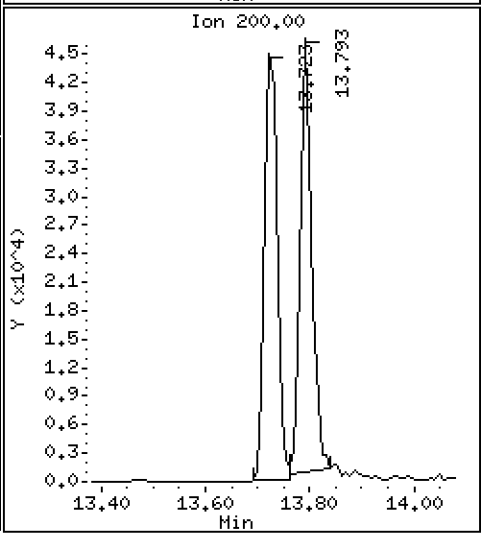


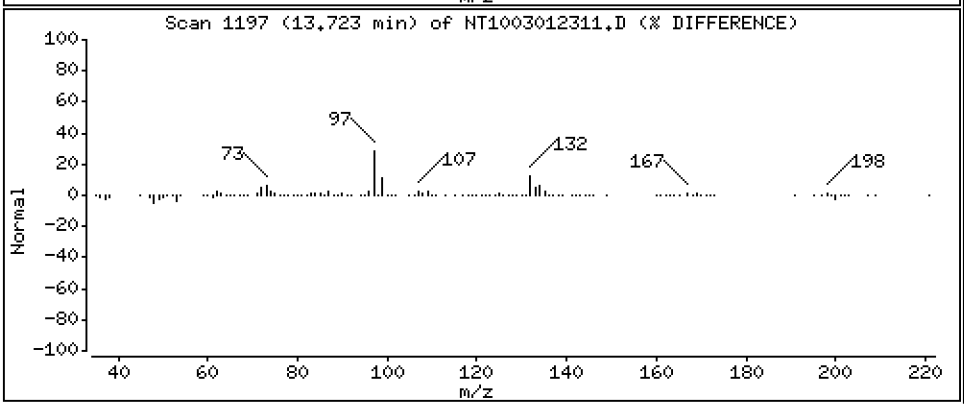












Date : 01-MAR-2023 21:46

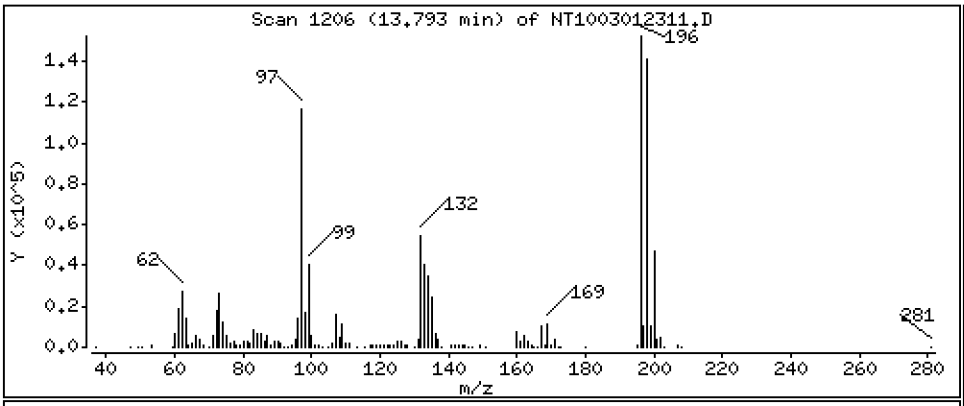
Client ID: Instrument: nt10.i

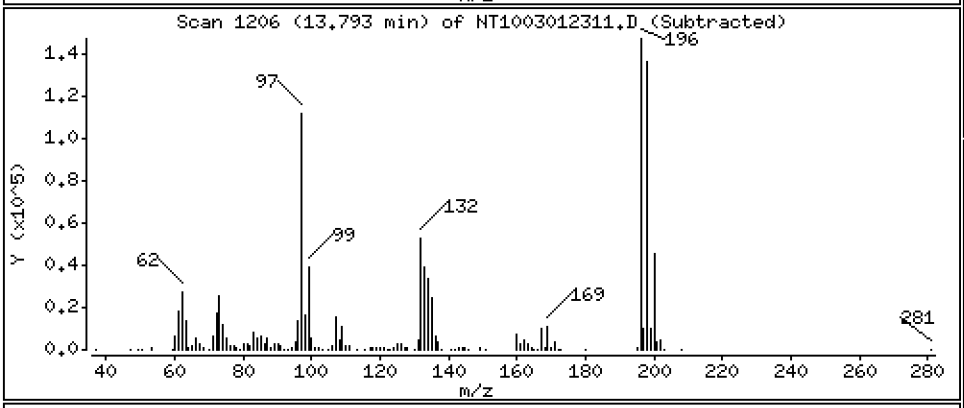
Sample Info: SEQ-SCV1

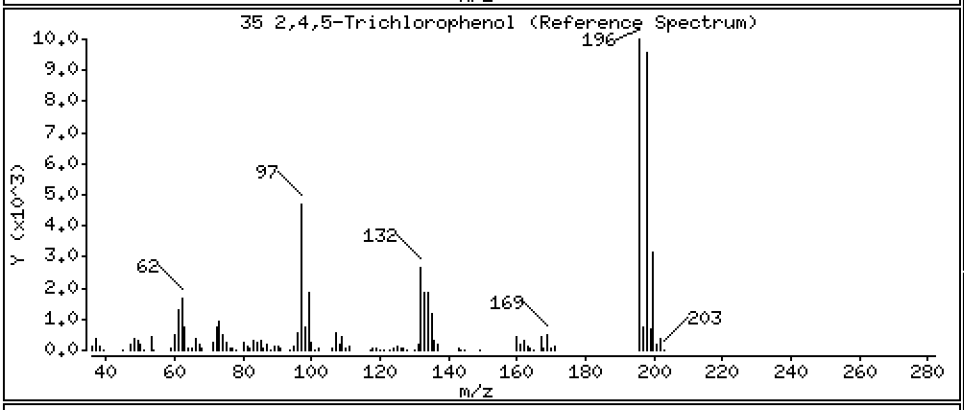
Operator: VTS

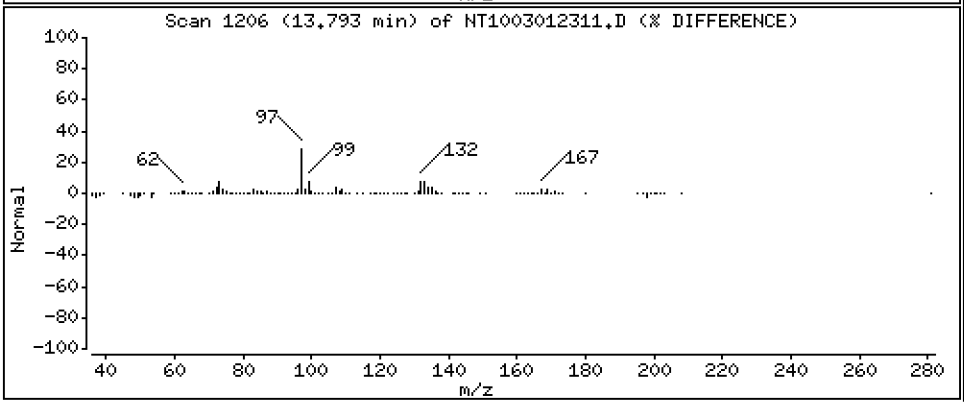
Column phase: ZB-5msi Column diameter: 0.25

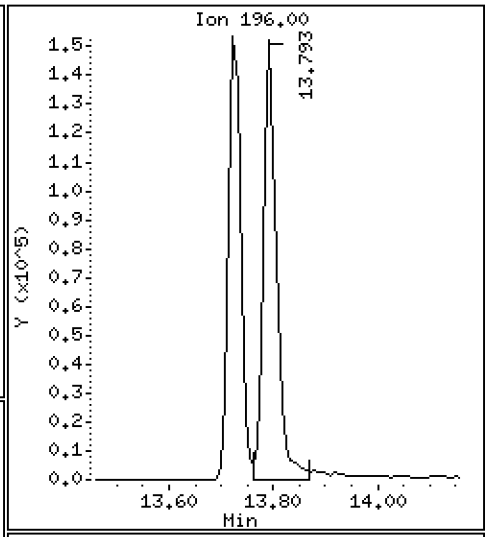
35 2,4,5-Trichlorophenol Concentration: 4.149 ug/mL

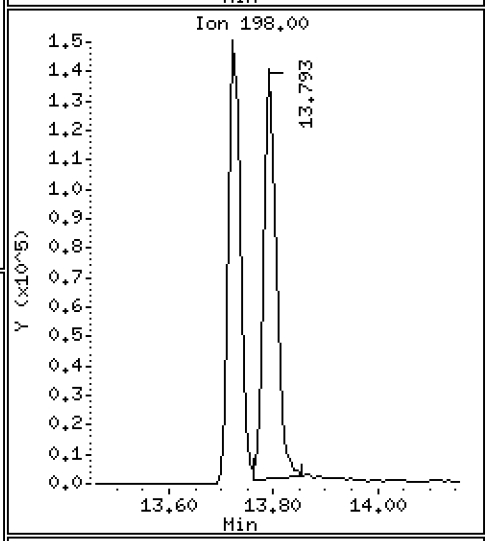


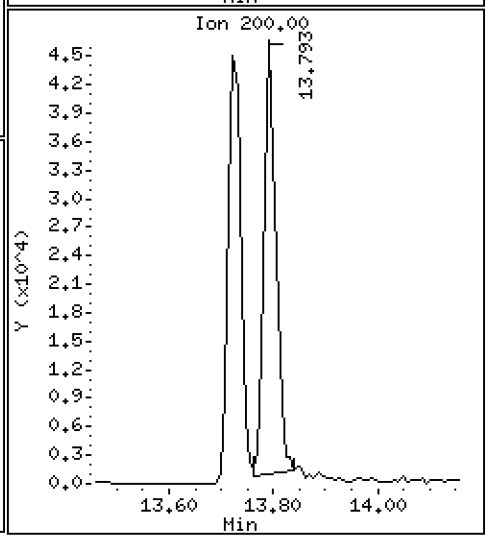












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

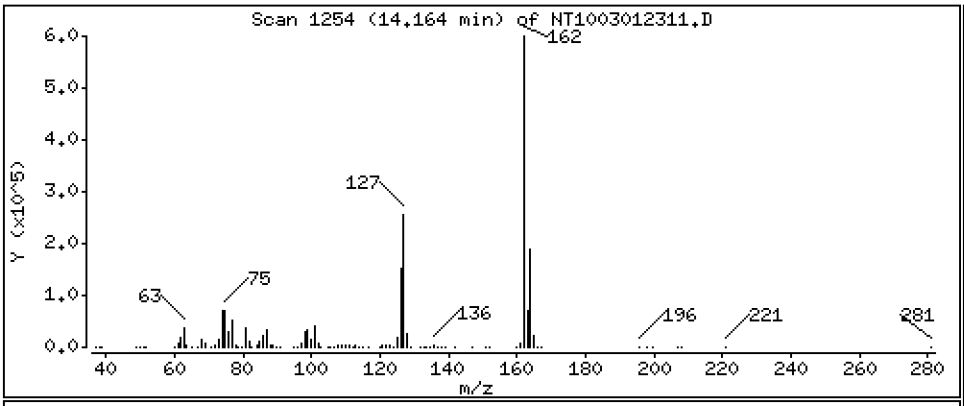
Operator: VTS

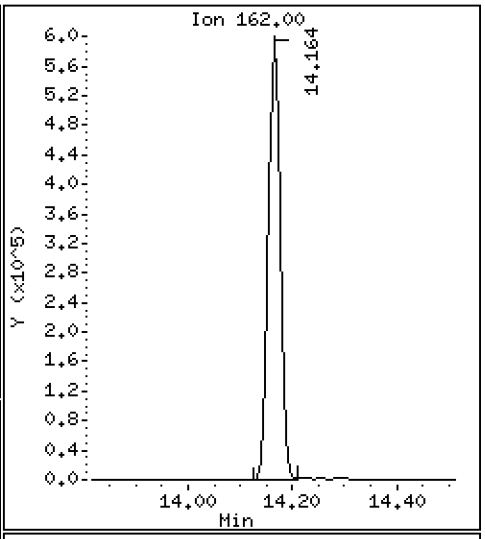
Column phase: ZB-5msi

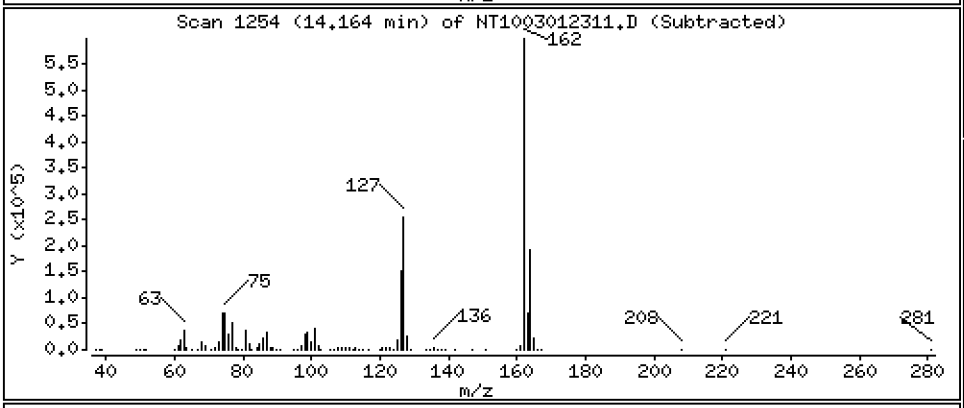
Column diameter: 0.25

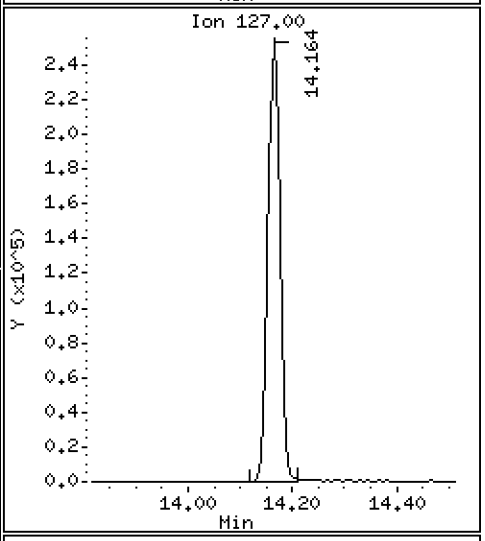
37 2-Chloronaphthalene

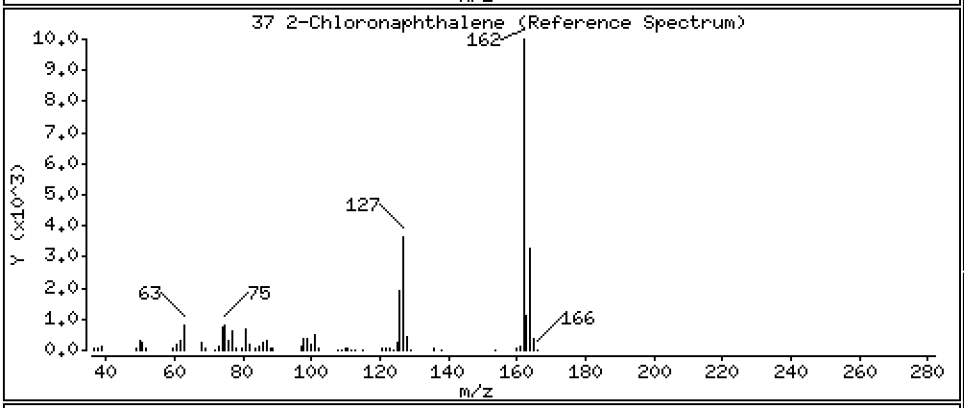
Concentration: 5.264 ug/mL

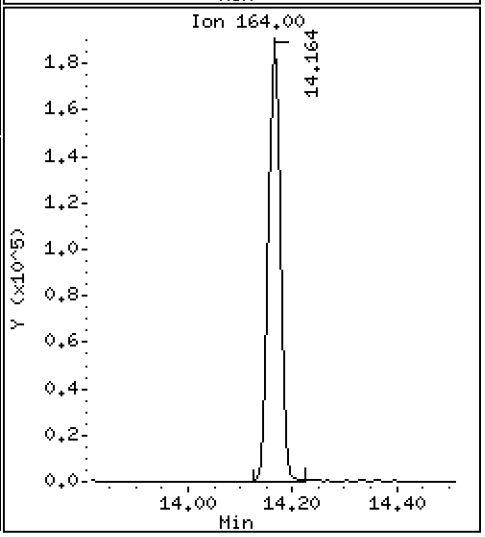


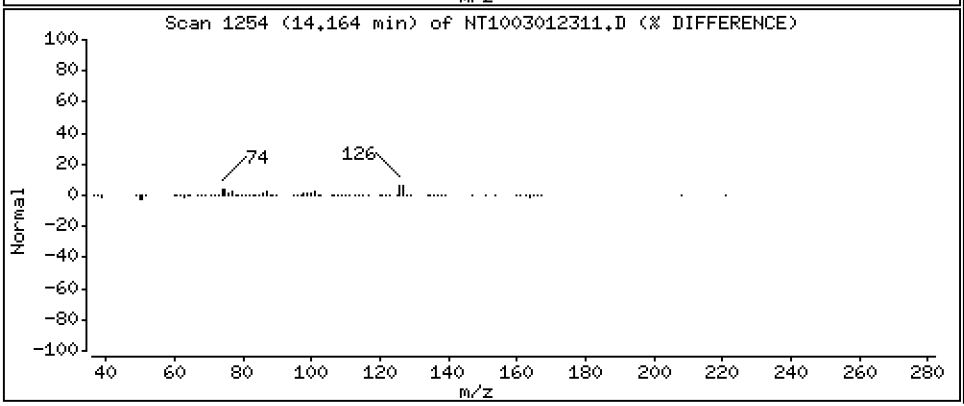












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

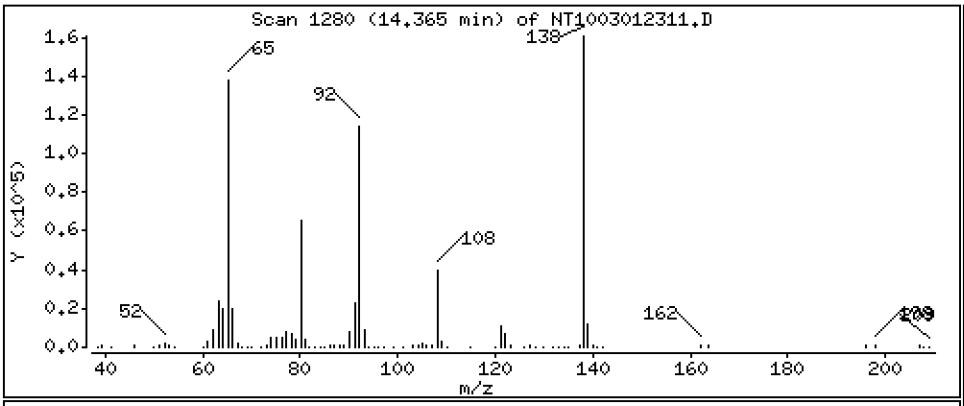
Operator: VTS

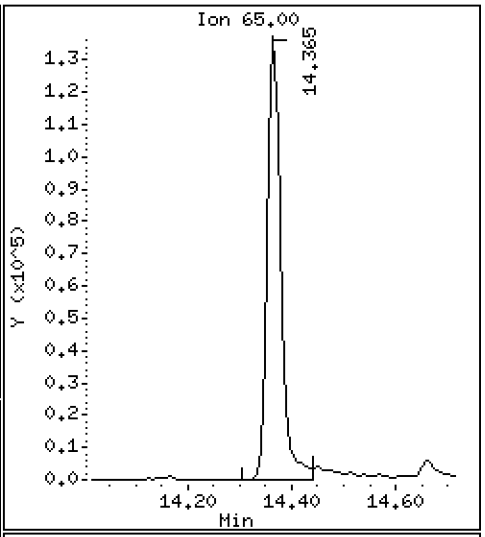
Column phase: ZB-5msi

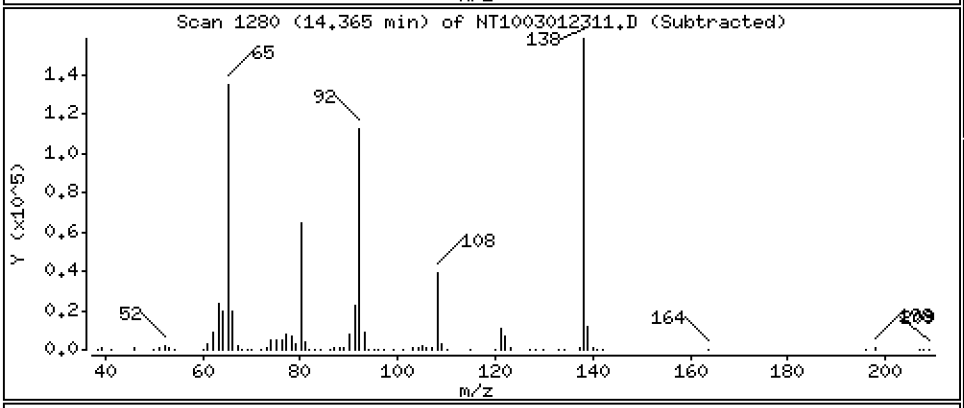
Column diameter: 0.25

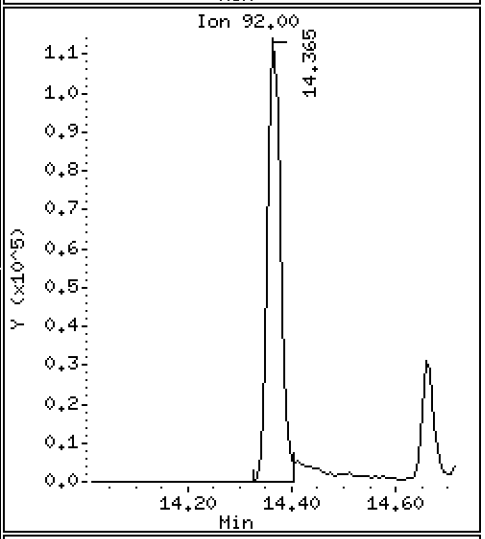
38 2-Nitroaniline

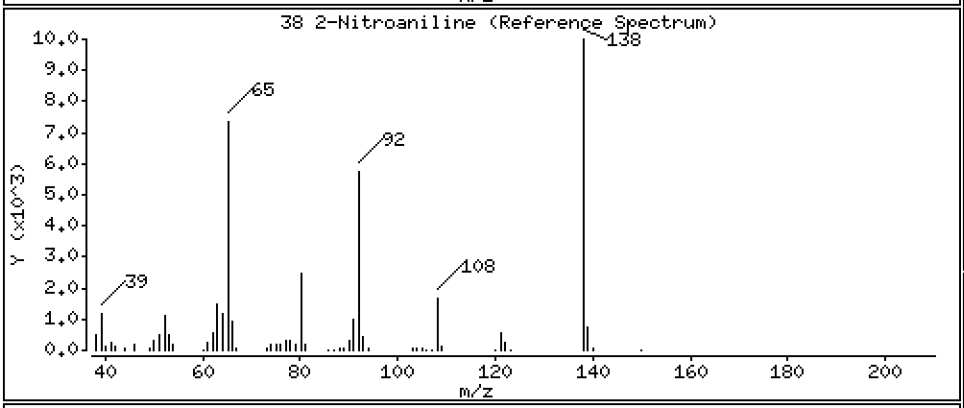
Concentration: 5.027 ug/mL

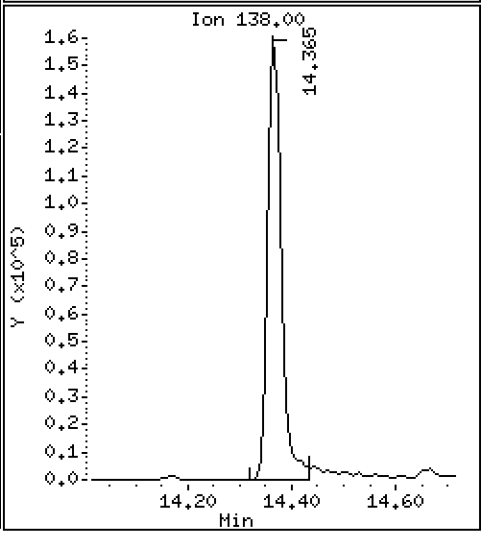


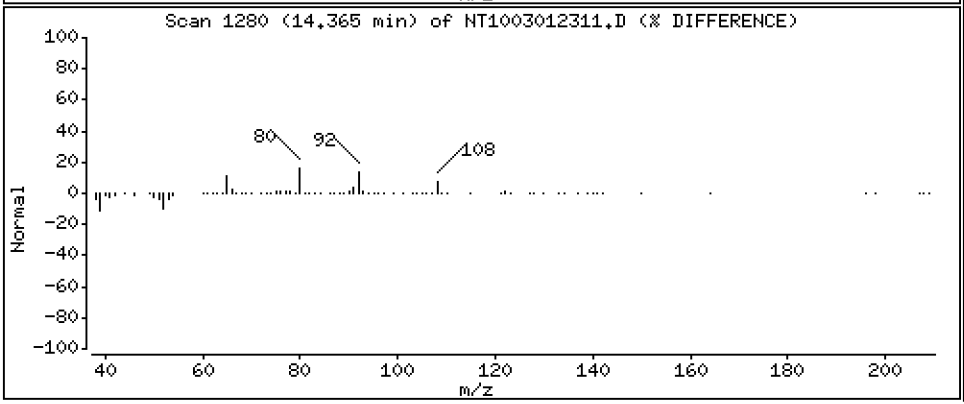












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

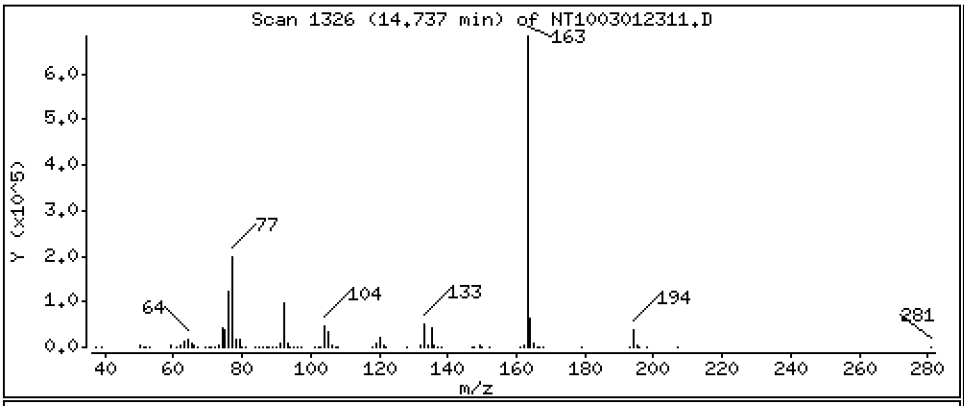
Operator: VTS

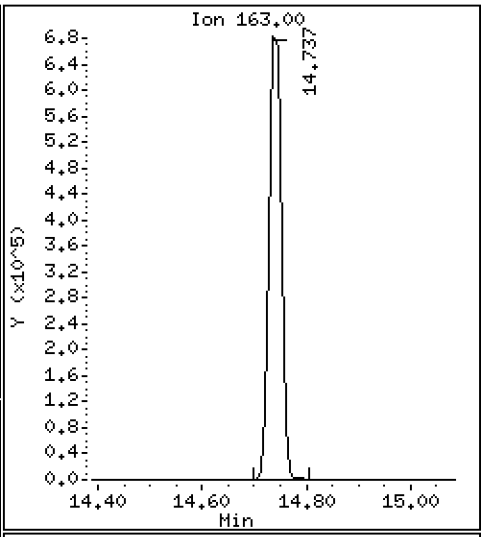
Column phase: ZB-5msi

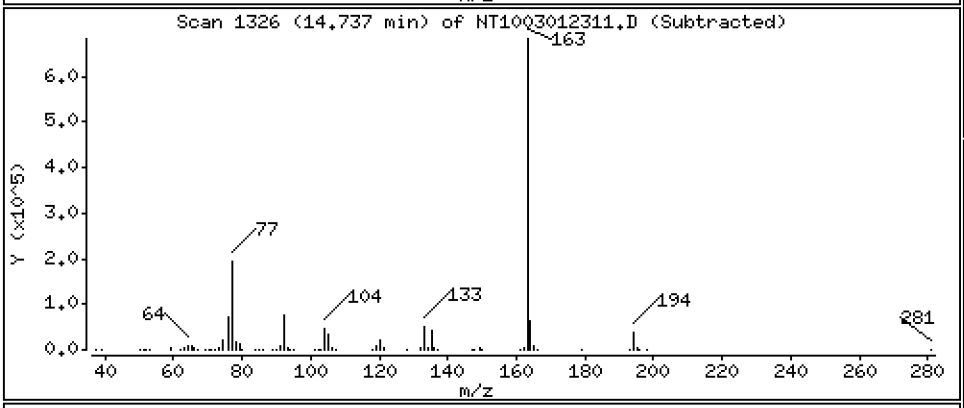
Column diameter: 0.25

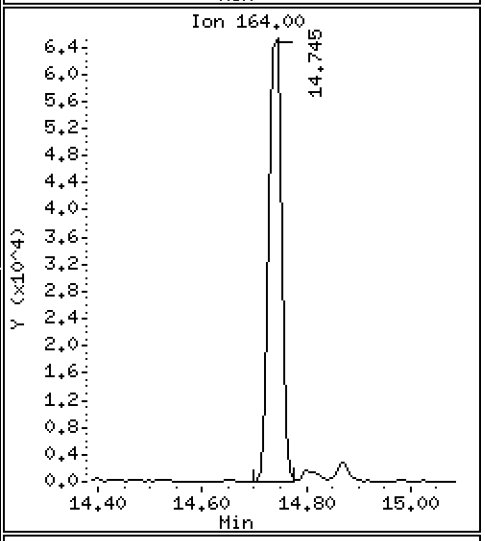
39 Dimethylphthalate

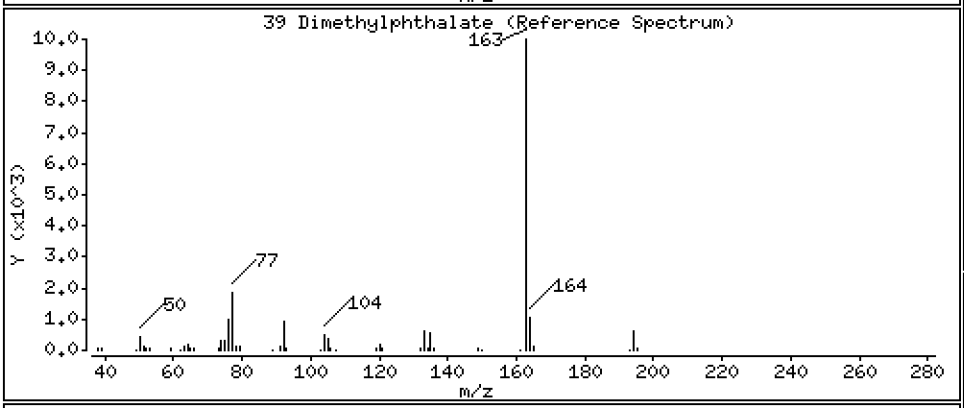
Concentration: 5.384 ug/mL

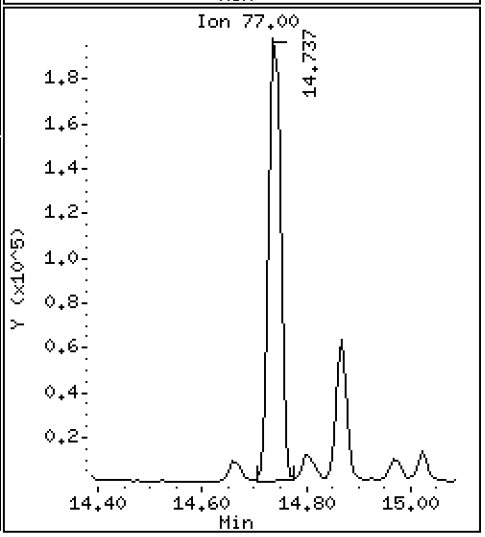


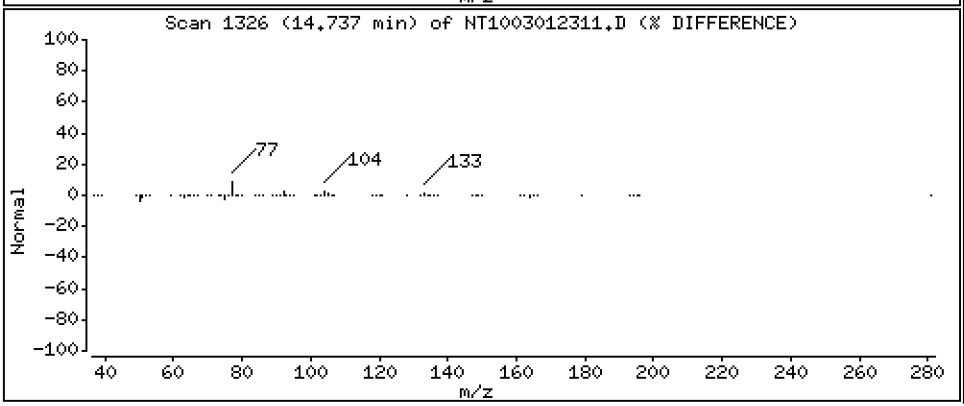












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

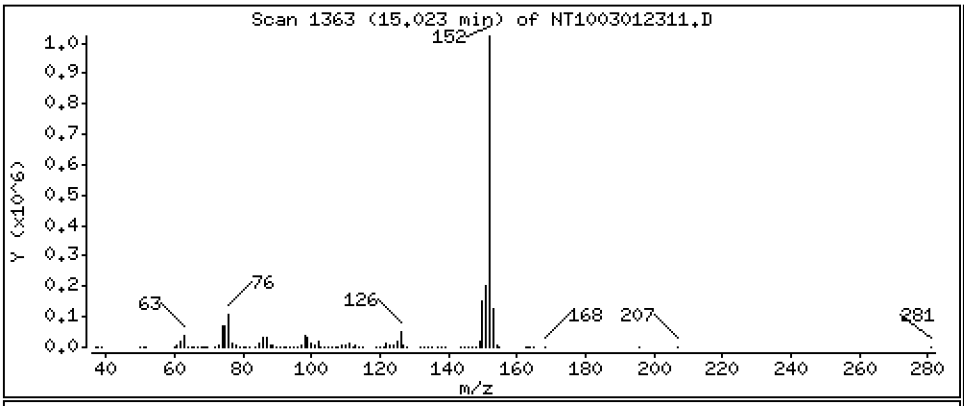
Operator: VTS

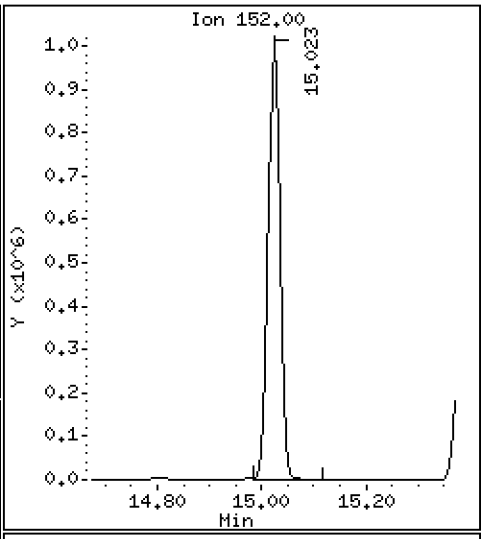
Column phase: ZB-5msi

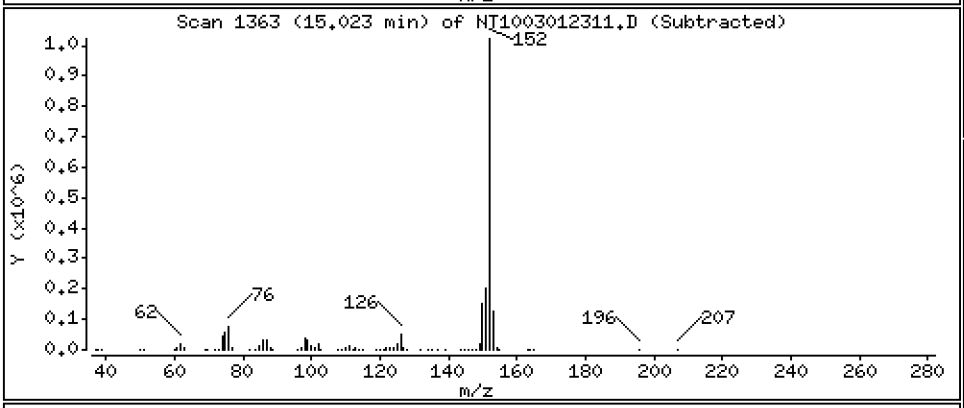
Column diameter: 0.25

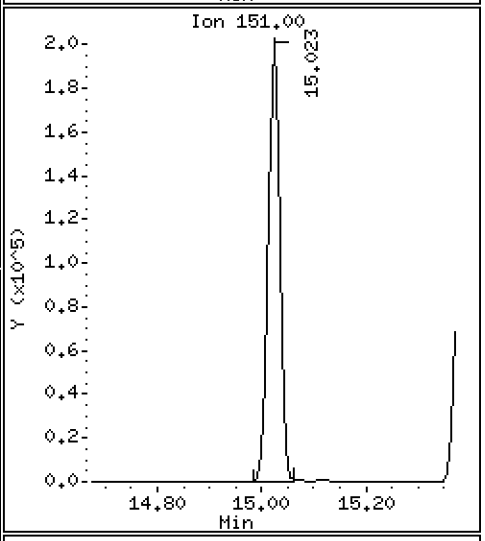
40 Acenaphthylene

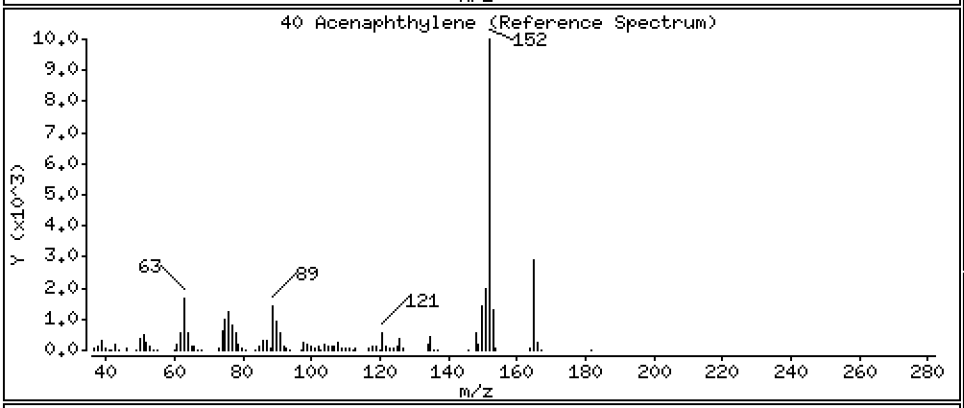
Concentration: 5.806 ug/mL

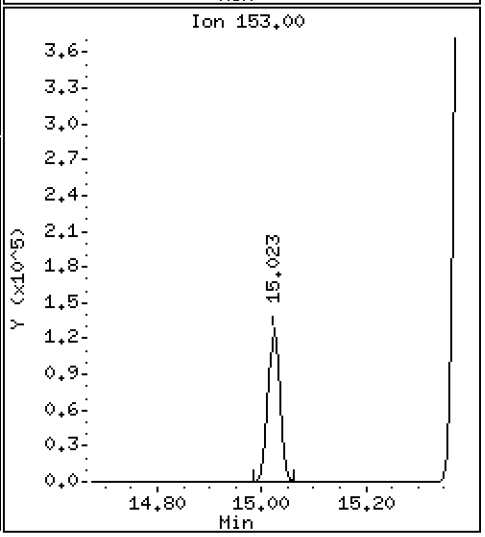


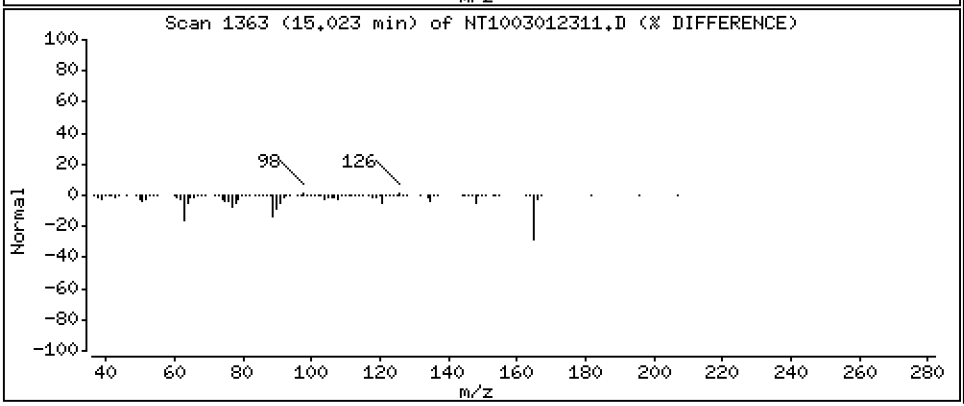












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

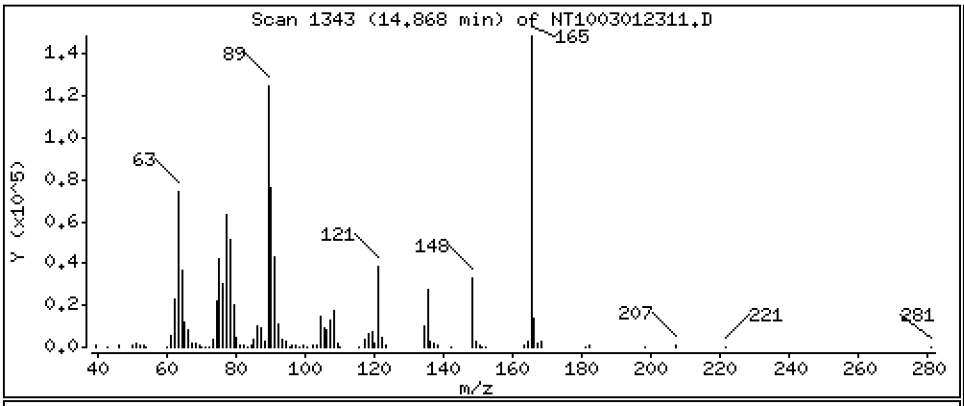
Operator: VTS

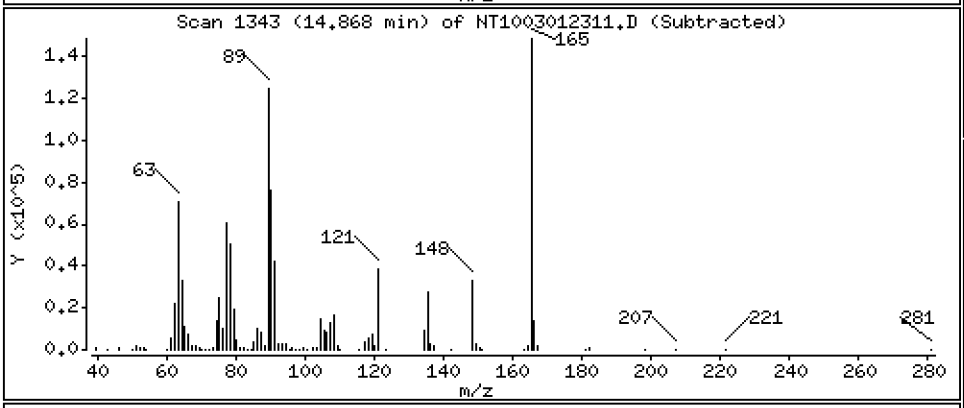
Column phase: ZB-5msi

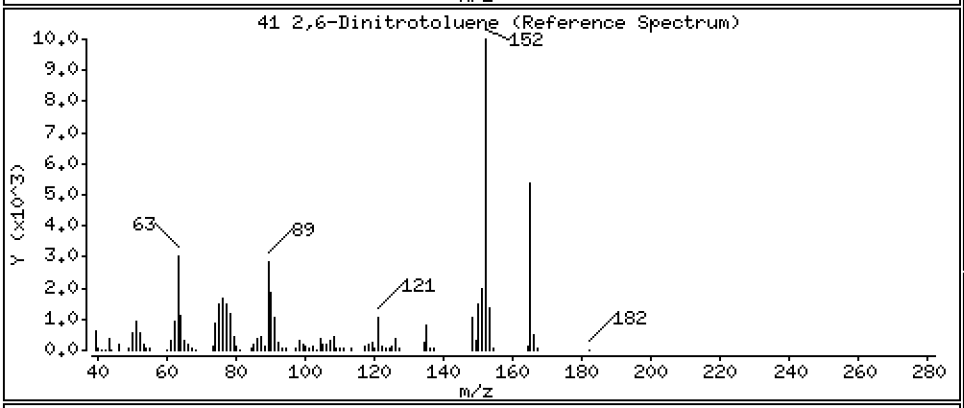
Column diameter: 0.25

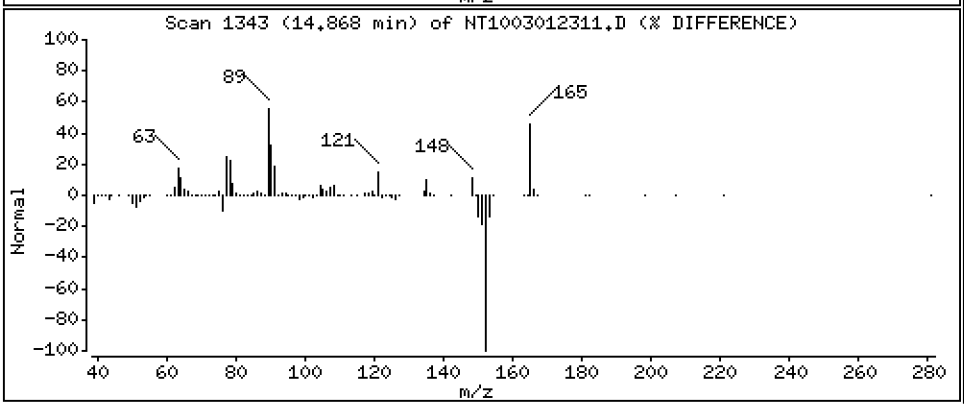
41 2,6-Dinitrotoluene

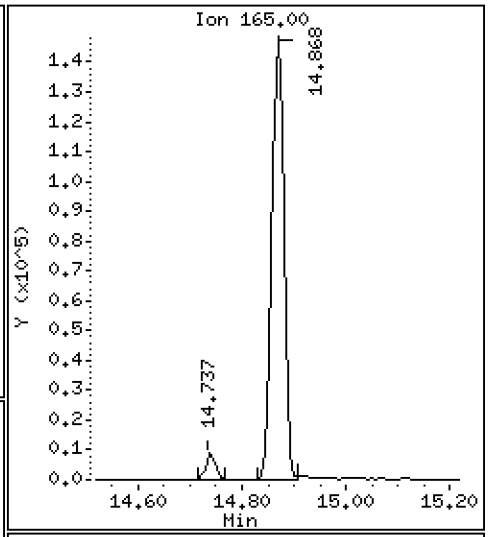
Concentration: 5.187 ug/mL

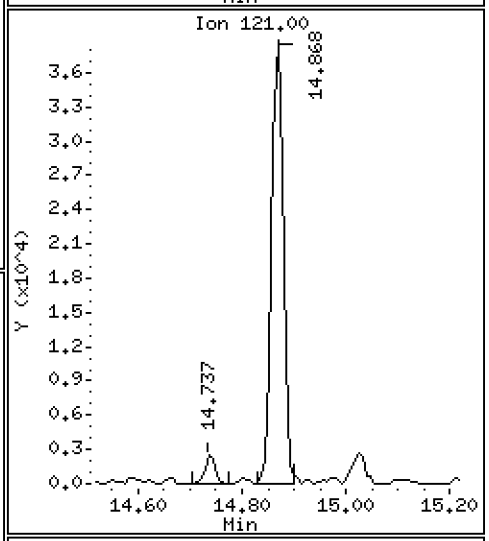


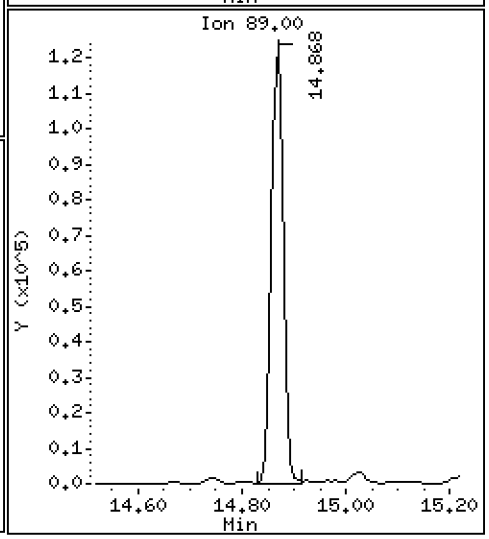












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

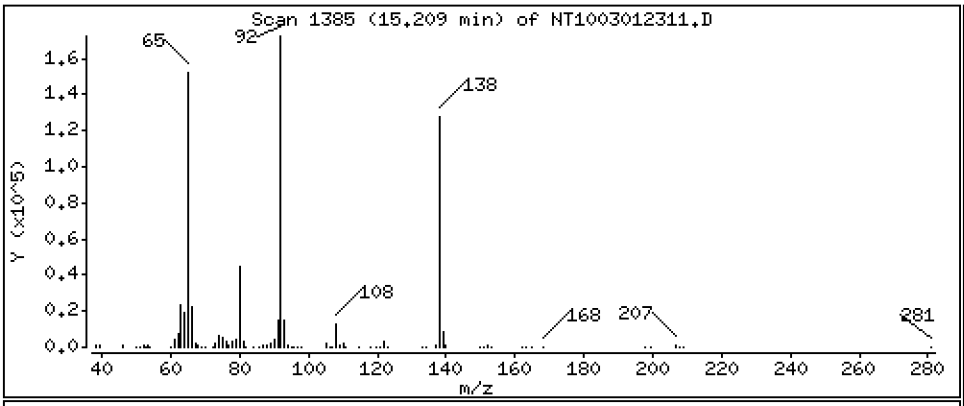
Operator: VTS

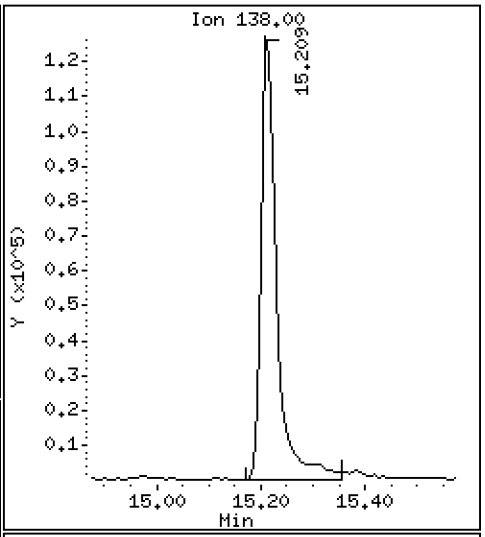
Column phase: ZB-5msi

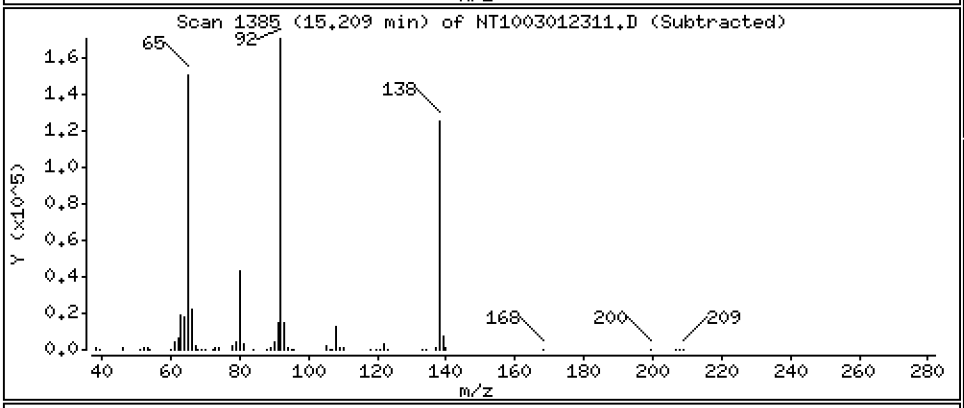
Column diameter: 0.25

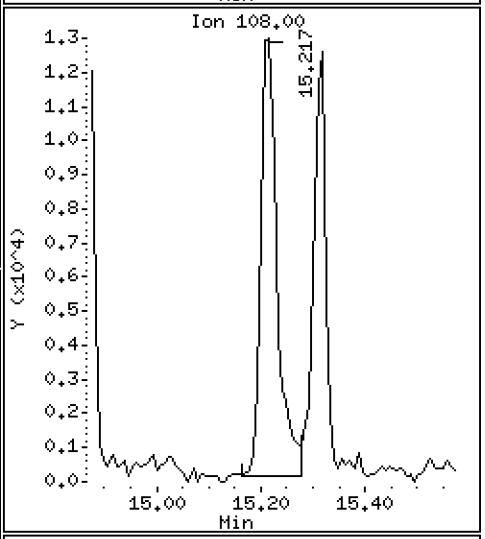
43 3-Nitroaniline

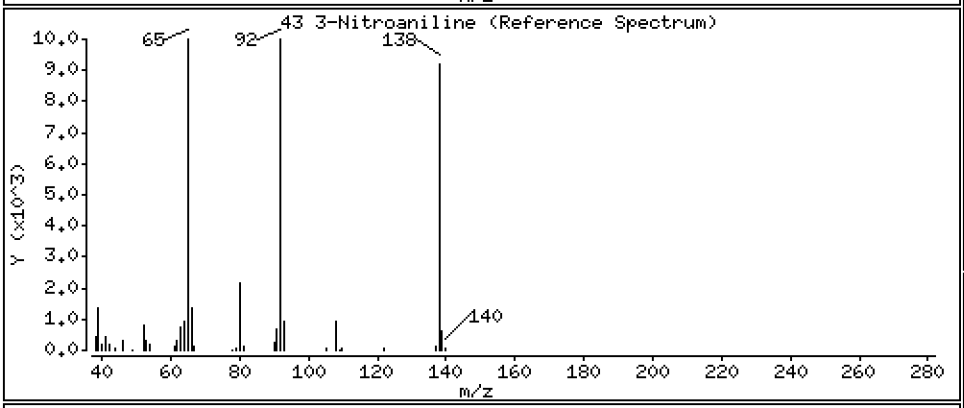
Concentration: 5.172 ug/mL

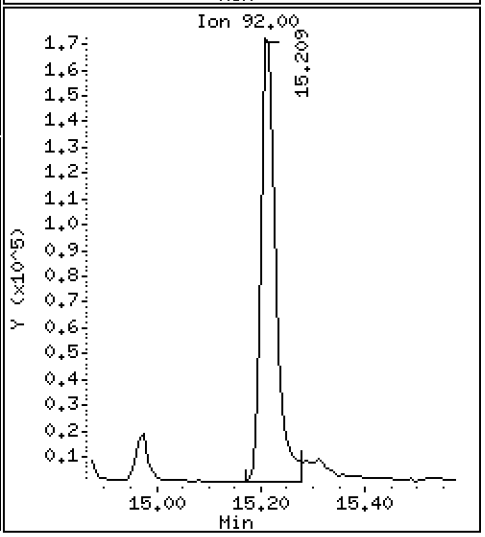


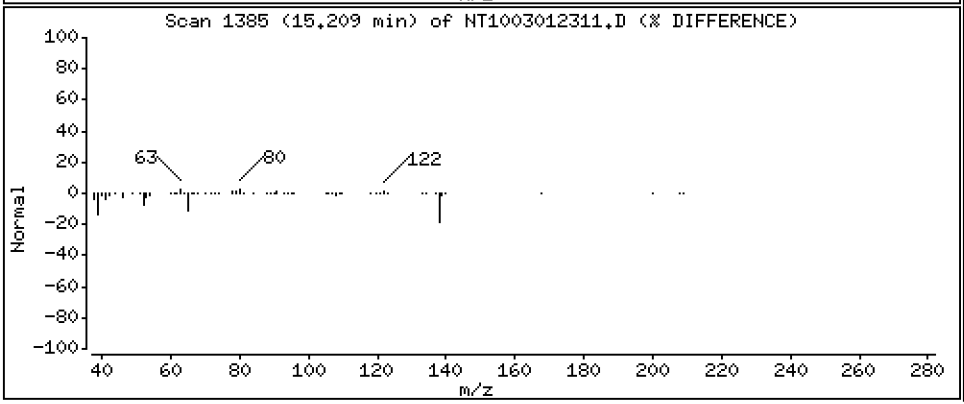












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

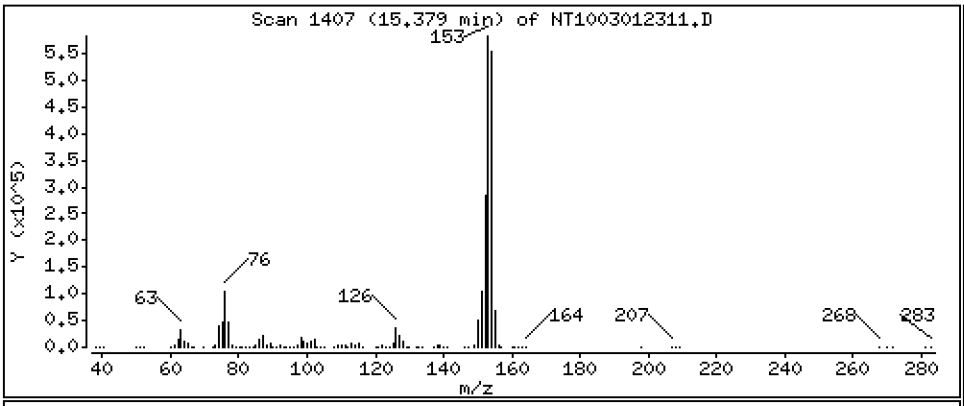
Operator: VTS

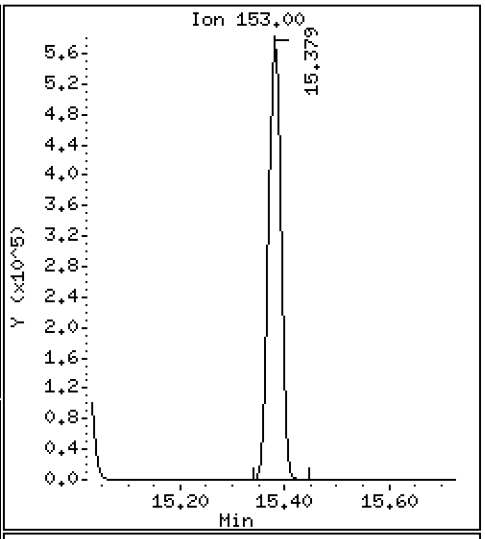
Column phase: ZB-5msi

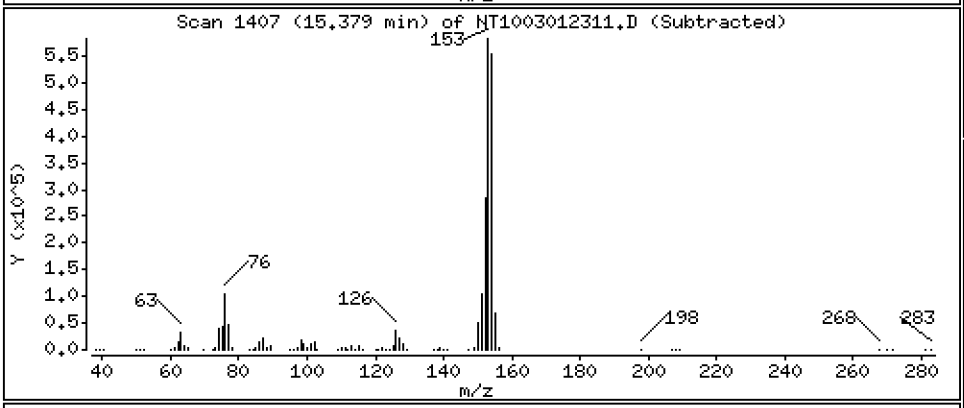
Column diameter: 0.25

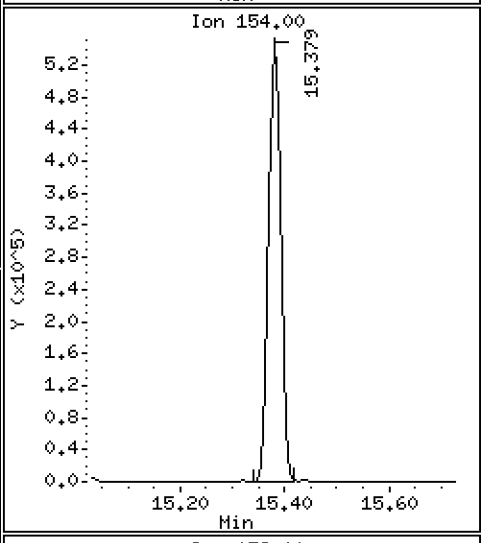
44 Acenaphthene

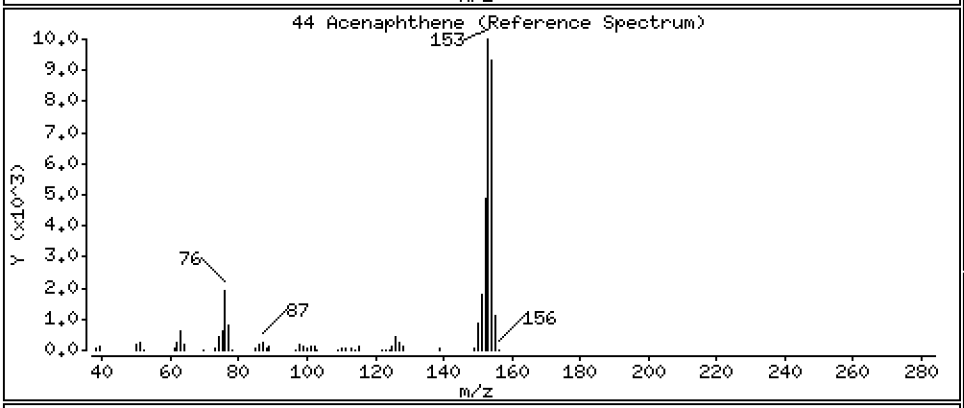
Concentration: 5.154 ug/mL

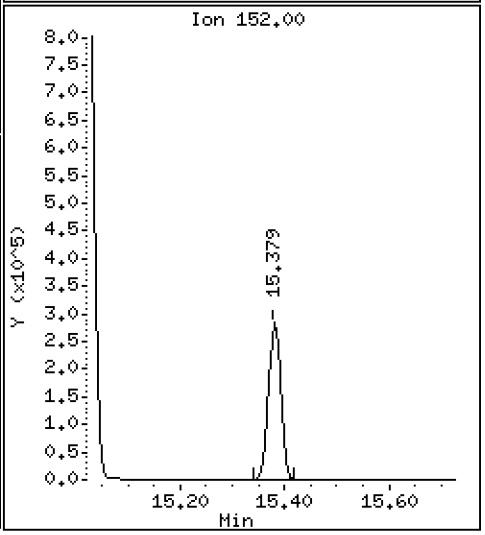


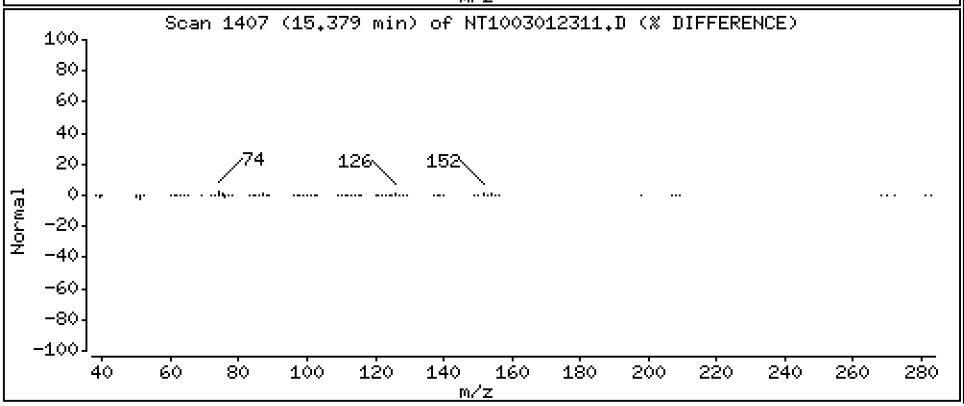












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

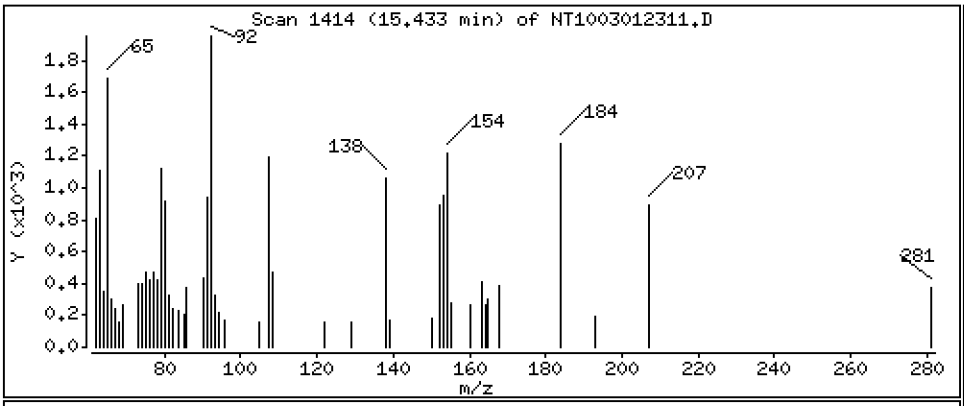
Operator: VTS

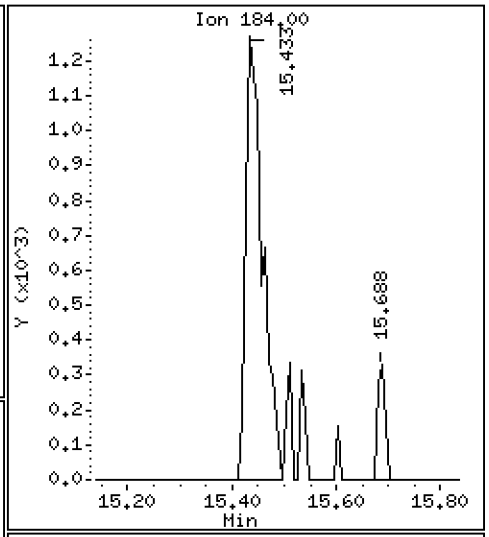
Column phase: ZB-5msi

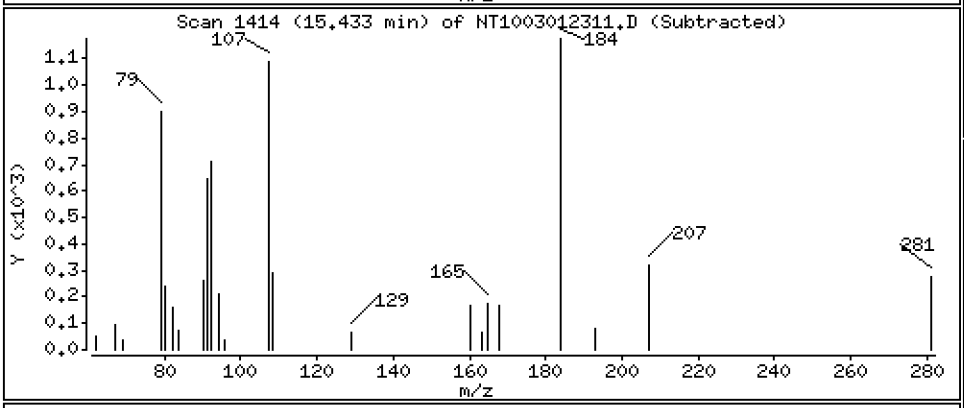
Column diameter: 0.25

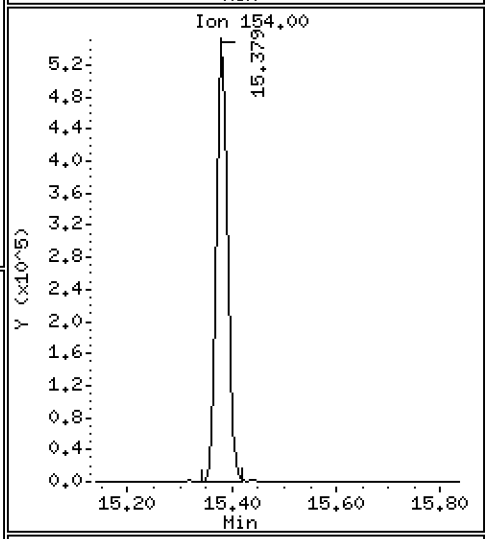
45 2,4-Dinitrophenol

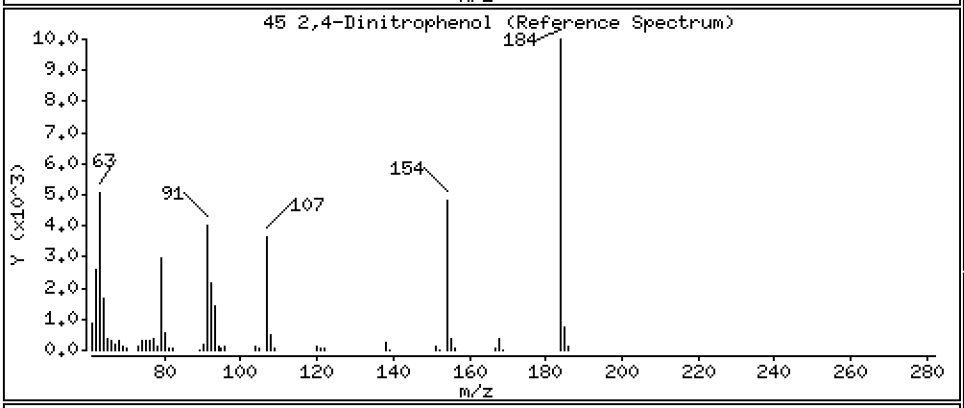
Concentration: 0.2667 ug/mL

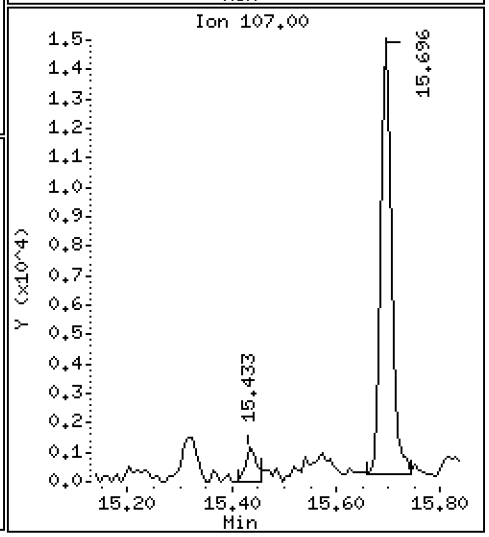


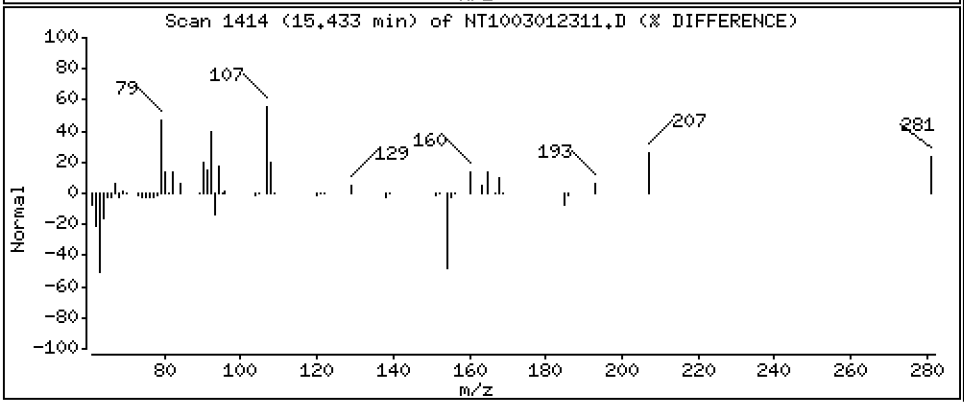












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

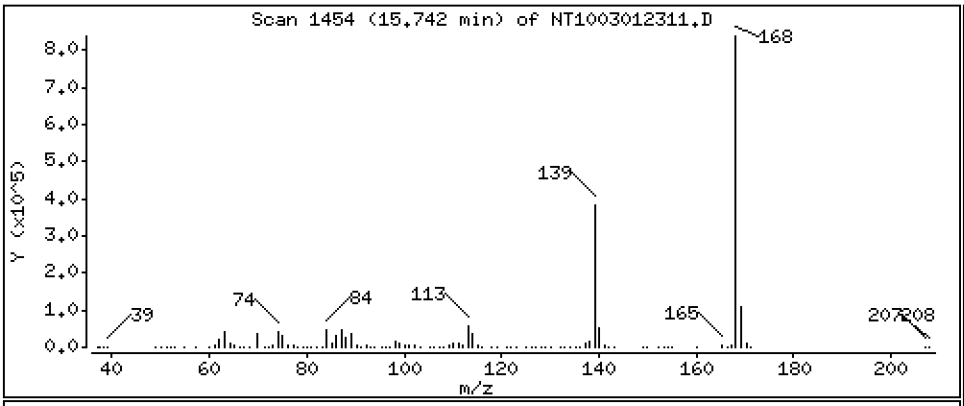
Operator: VTS

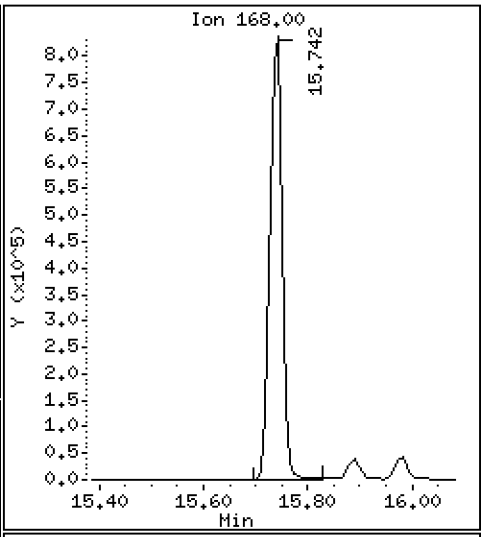
Column phase: ZB-5msi

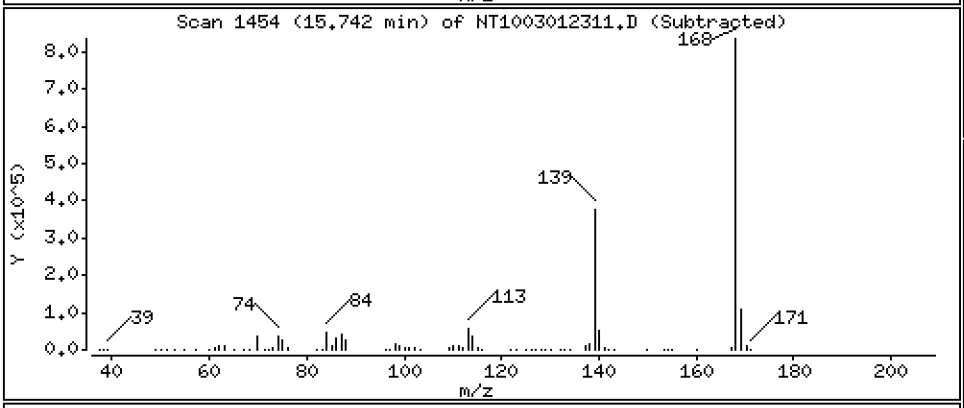
Column diameter: 0.25

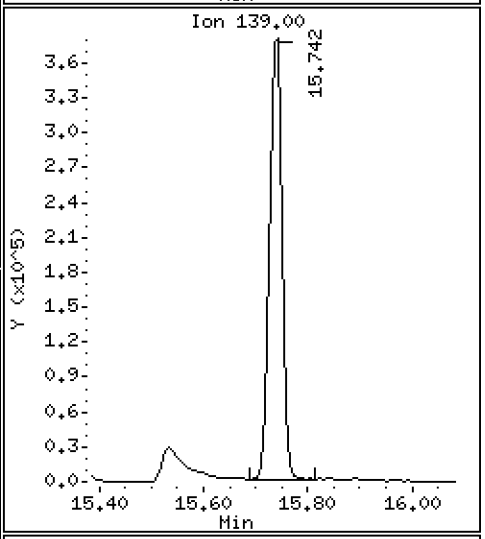
46 Dibenzofuran

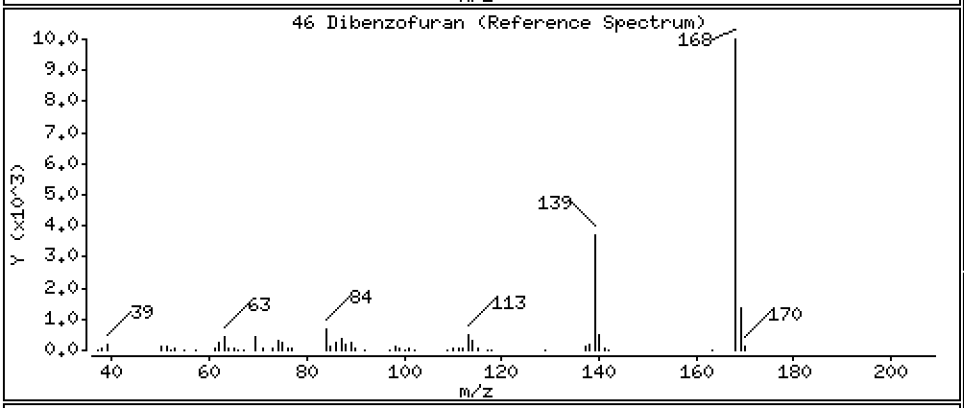
Concentration: 4.994 ug/mL

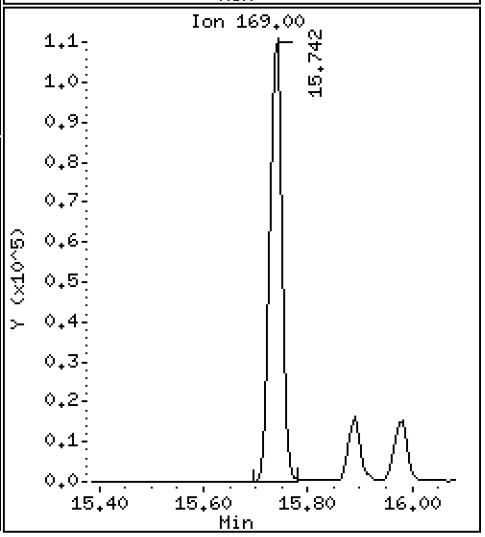


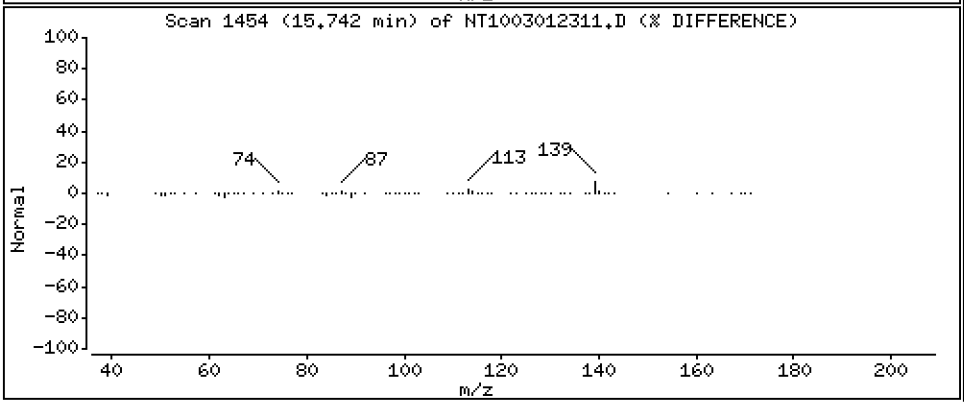












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

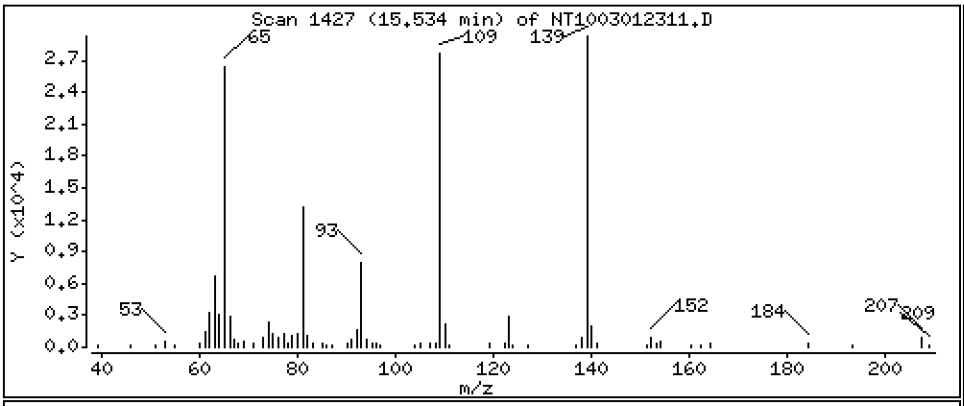
Operator: VTS

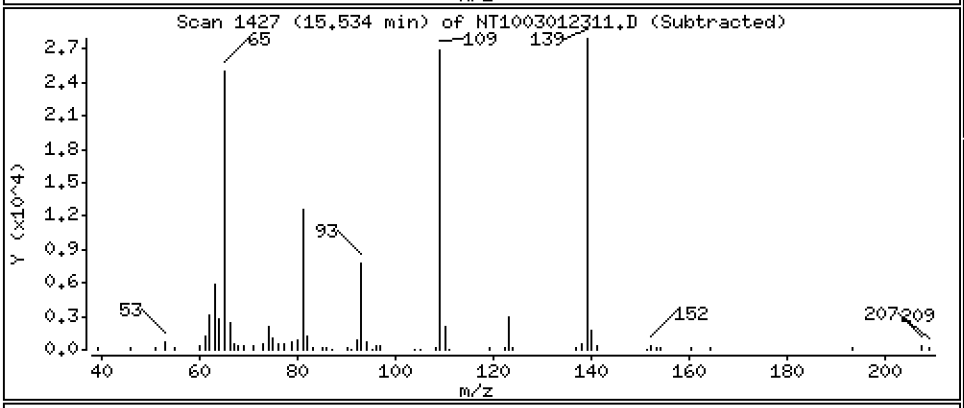
Column phase: ZB-5msi

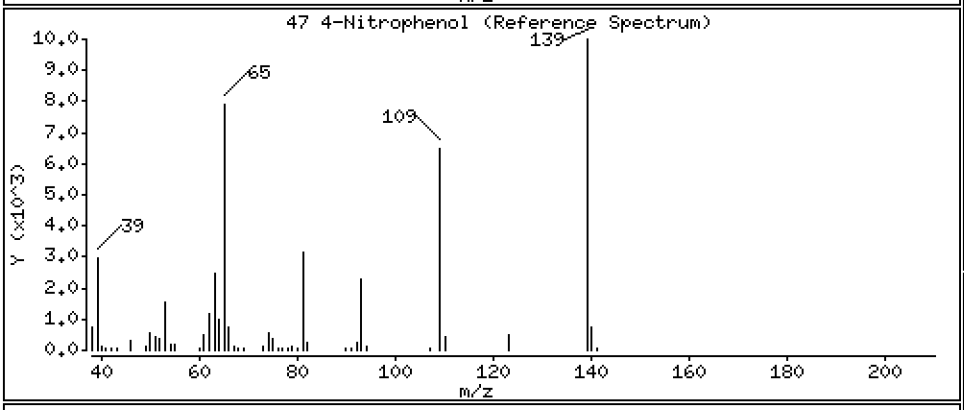
Column diameter: 0.25

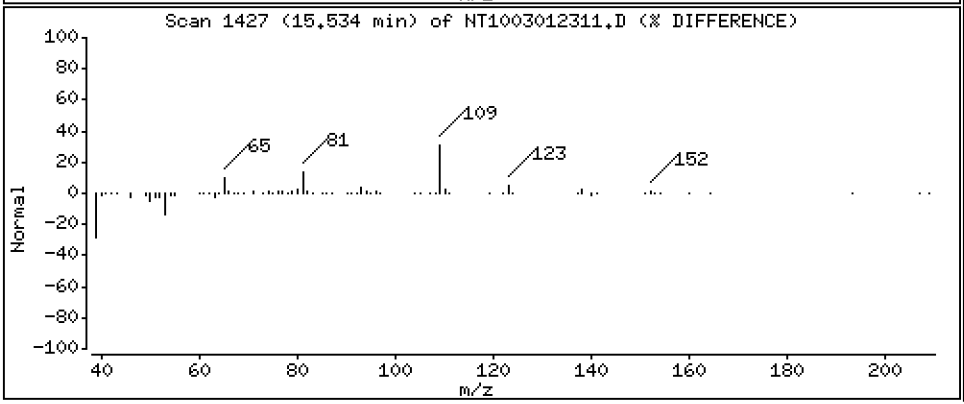
47 4-Nitrophenol

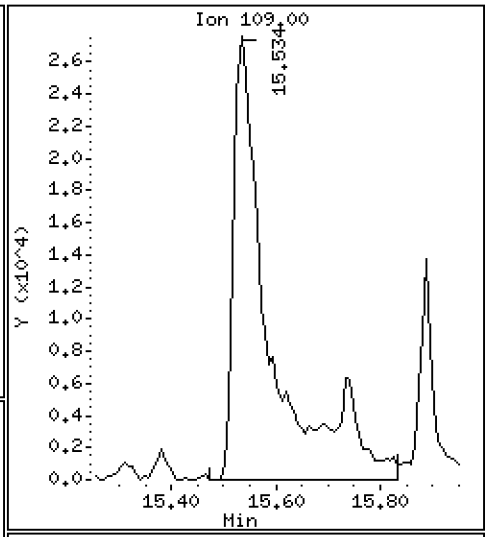
Concentration: 3.822 ug/mL

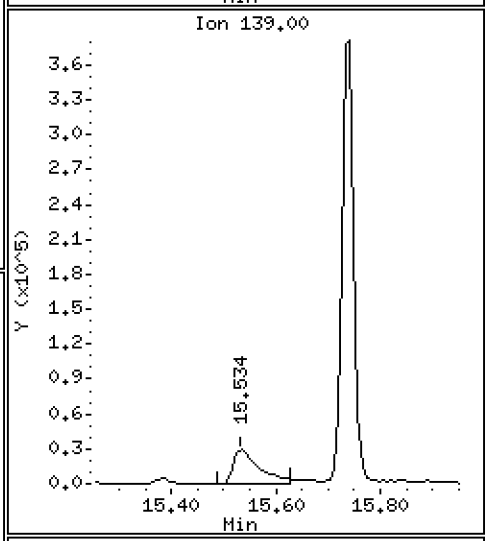


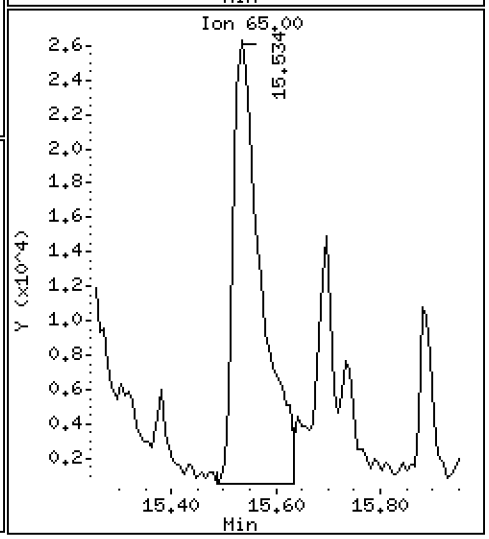












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

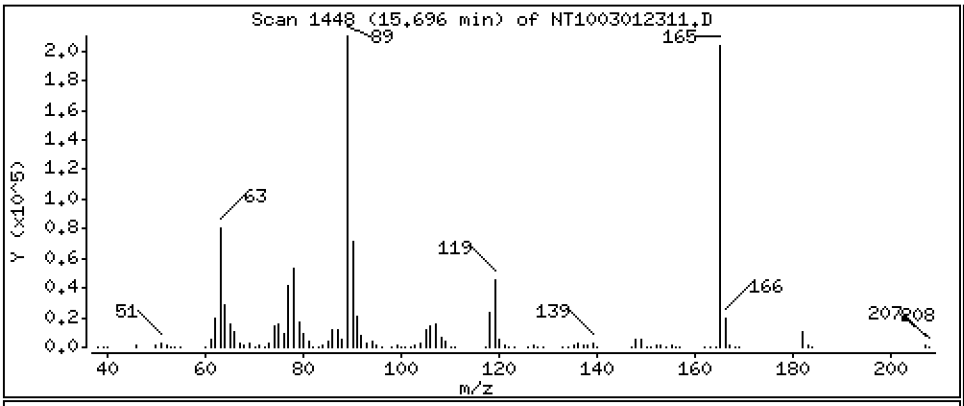
Operator: VTS

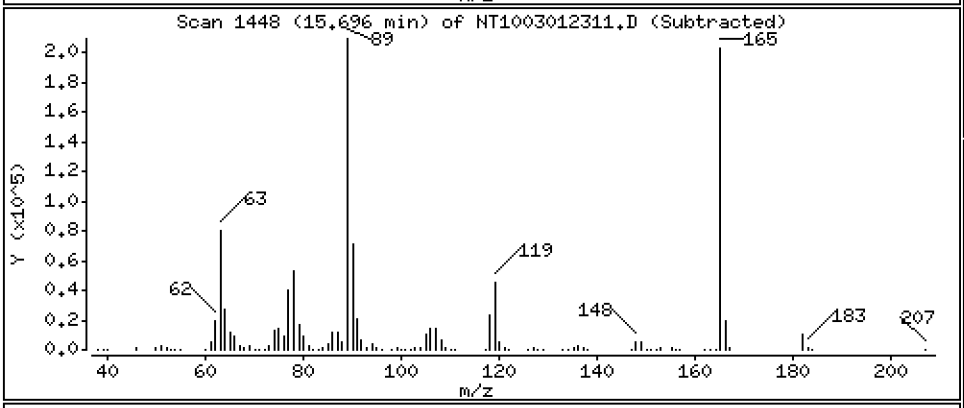
Column phase: ZB-5msi

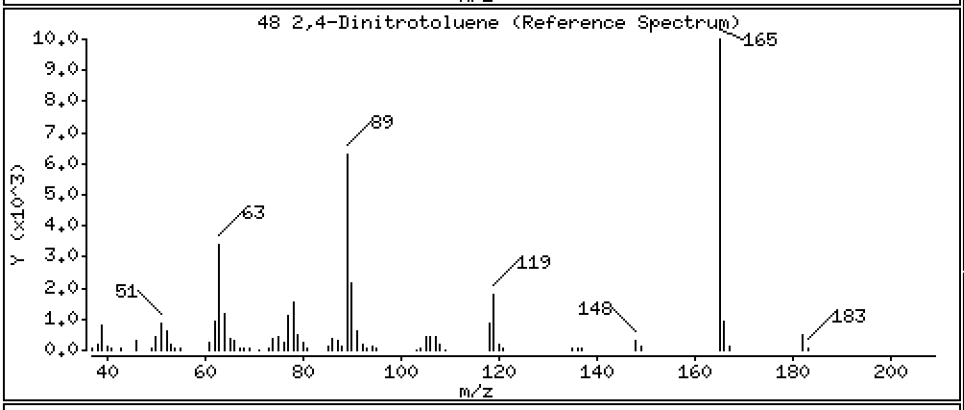
Column diameter: 0.25

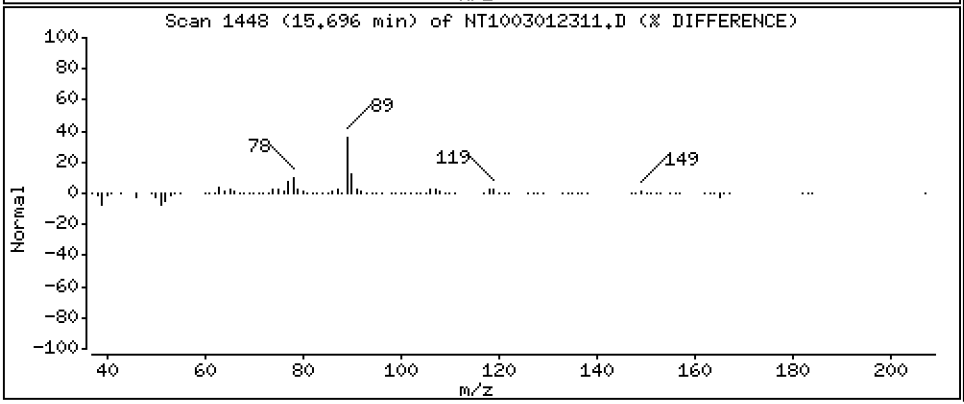
48 2,4-Dinitrotoluene

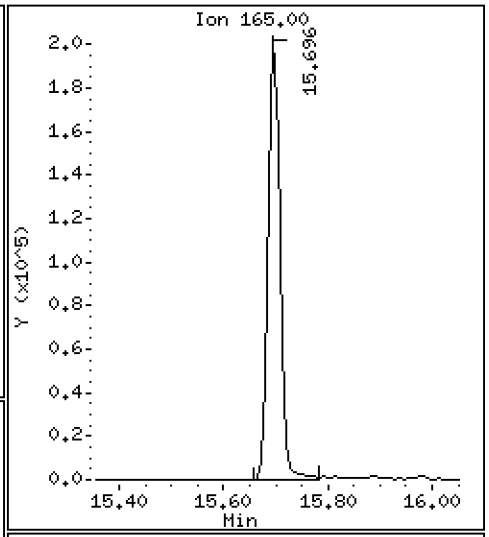
Concentration: 4.729 ug/mL

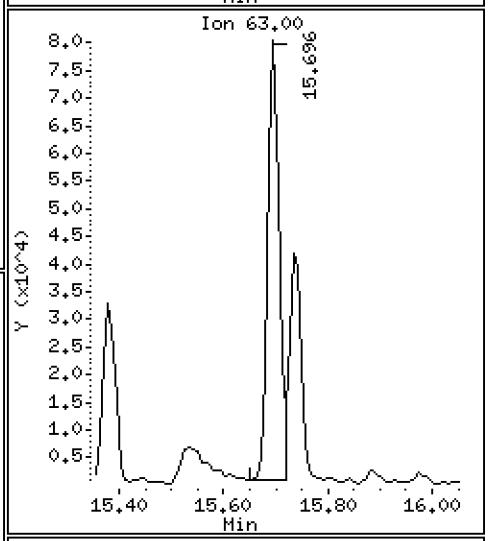


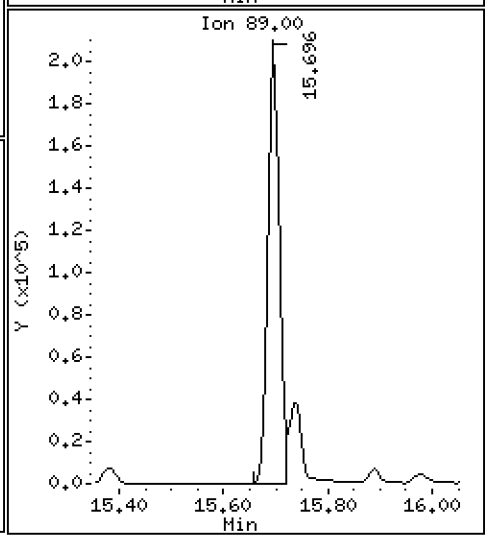












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

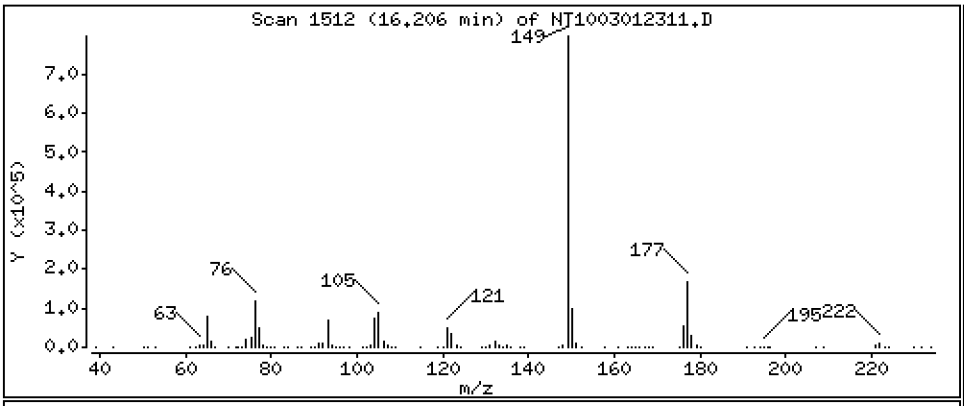
Operator: VTS

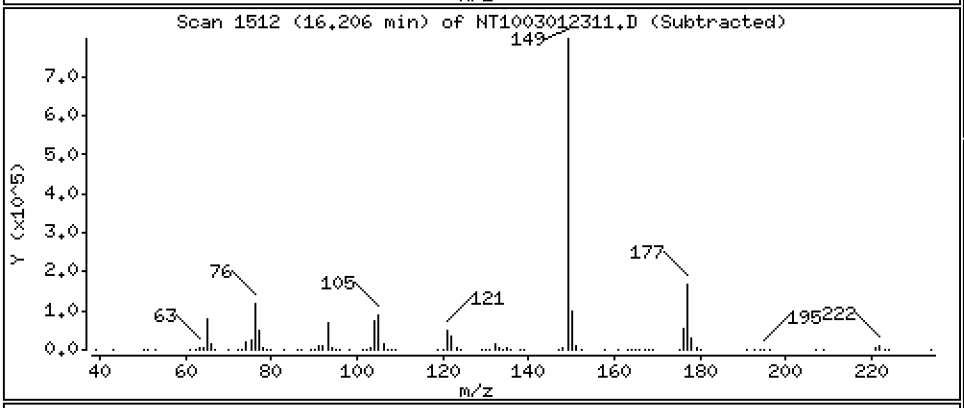
Column phase: ZB-5msi

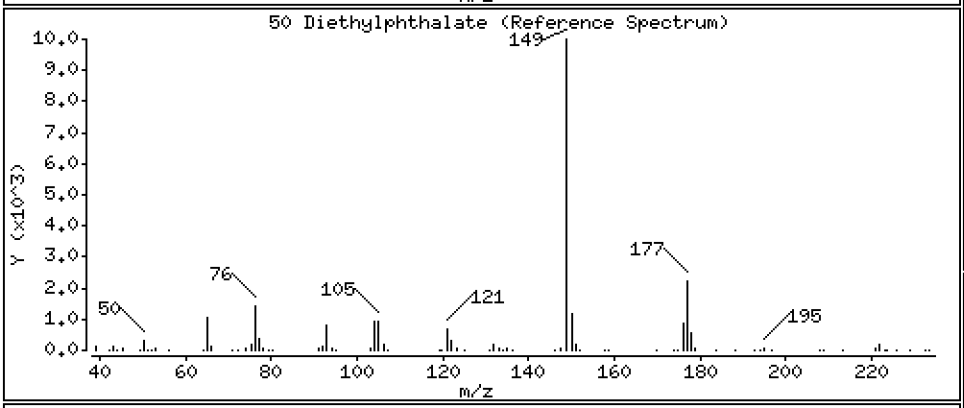
Column diameter: 0.25

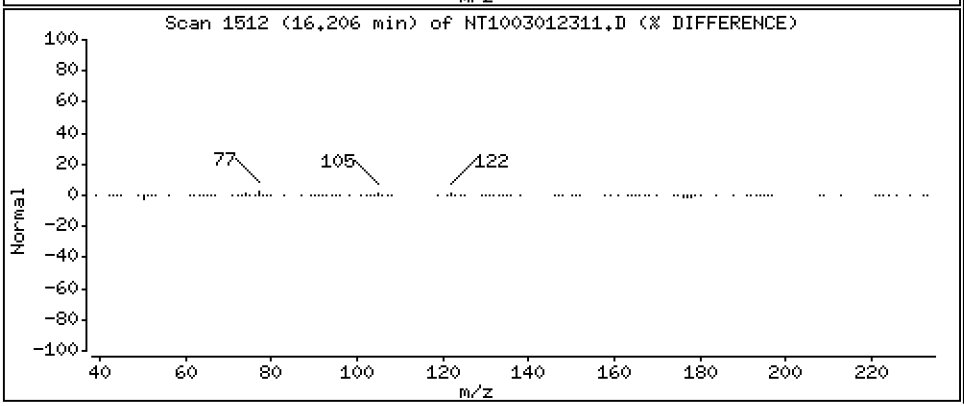
50 Diethylphthalate

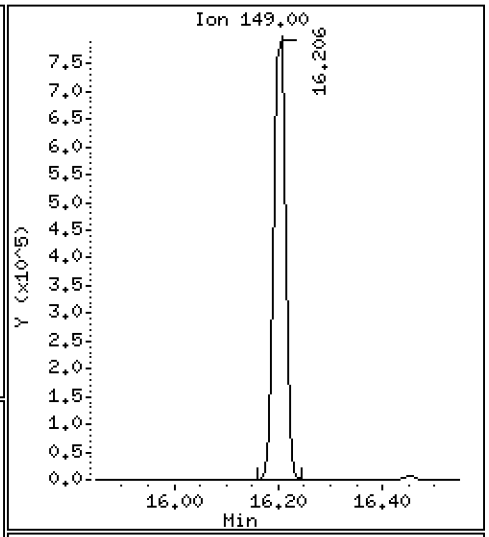
Concentration: 5.639 ug/mL

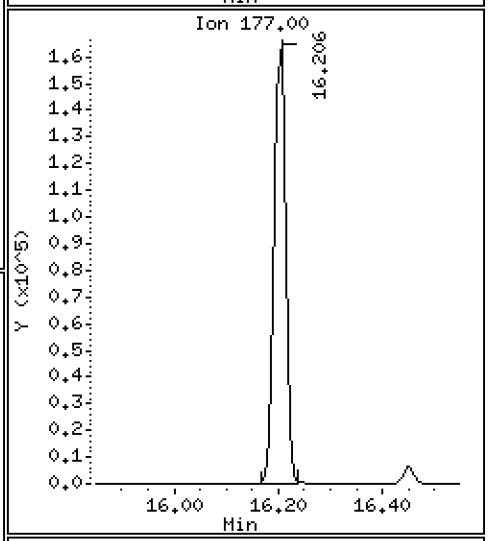


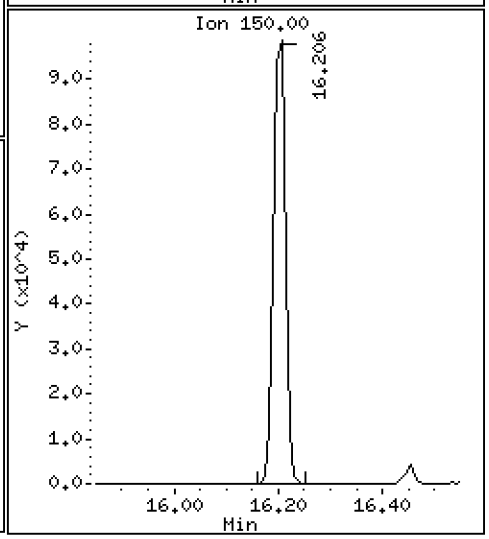












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

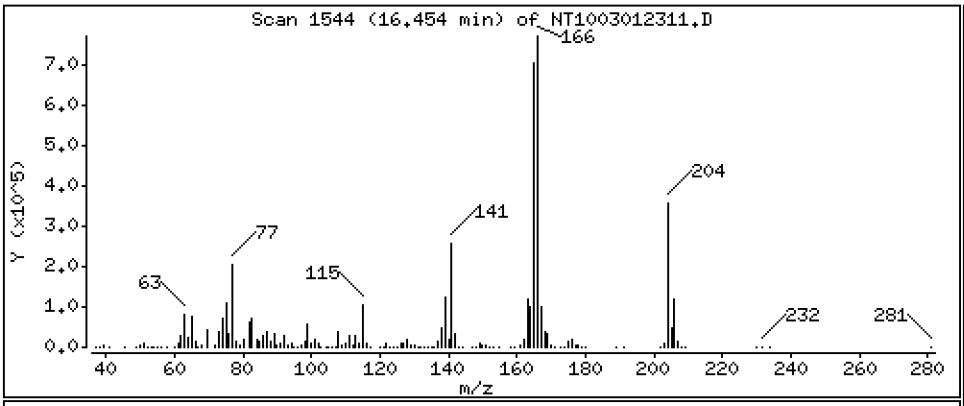
Operator: VTS

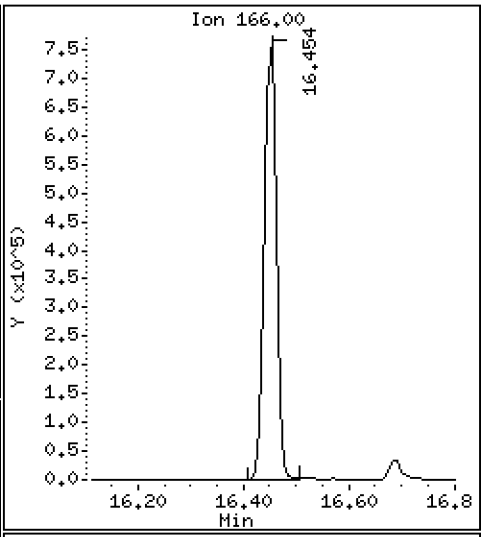
Column phase: ZB-5msi

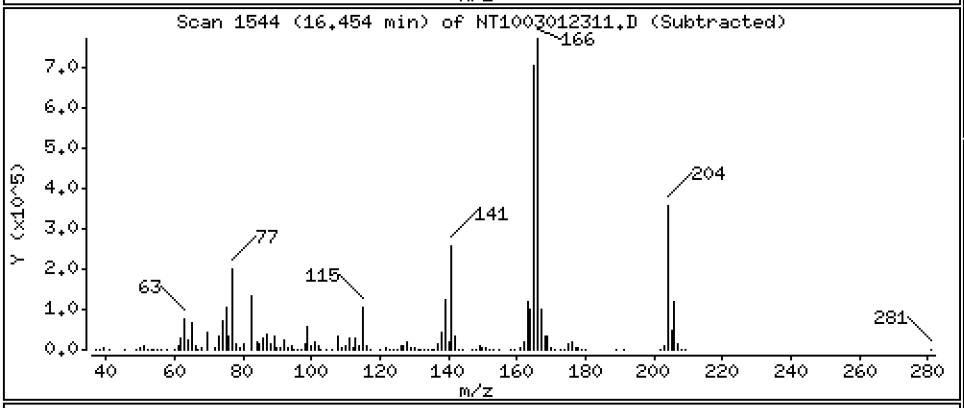
Column diameter: 0.25

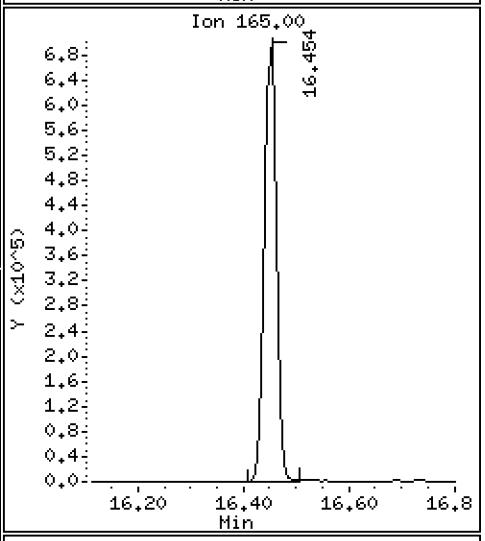
49 Fluorene

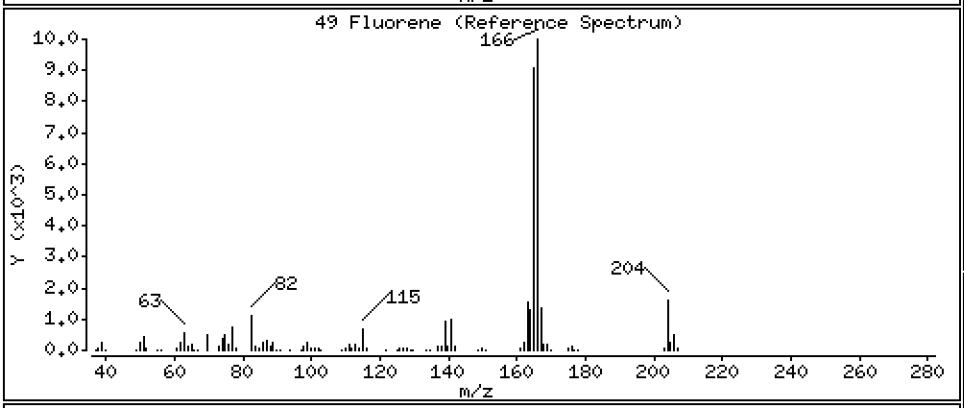
Concentration: 5.305 ug/mL

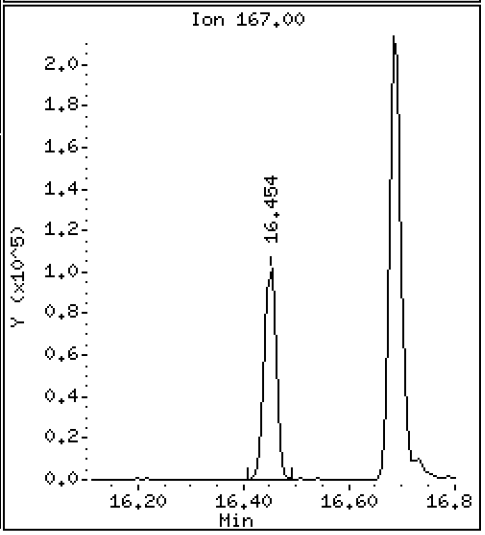


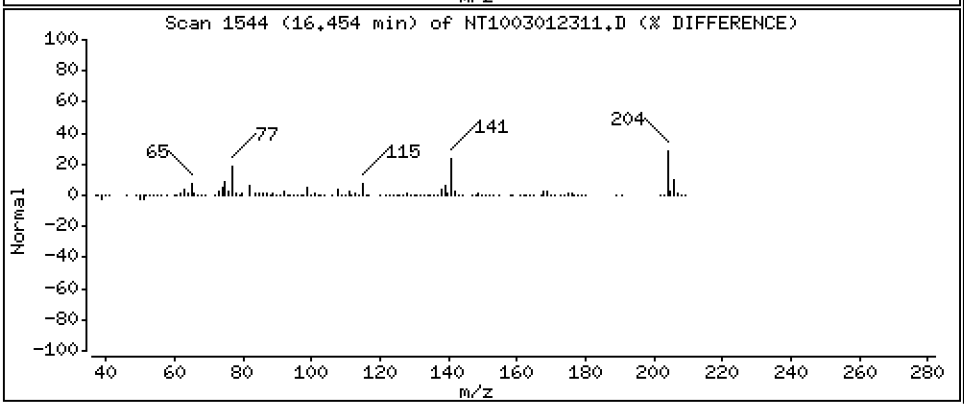












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

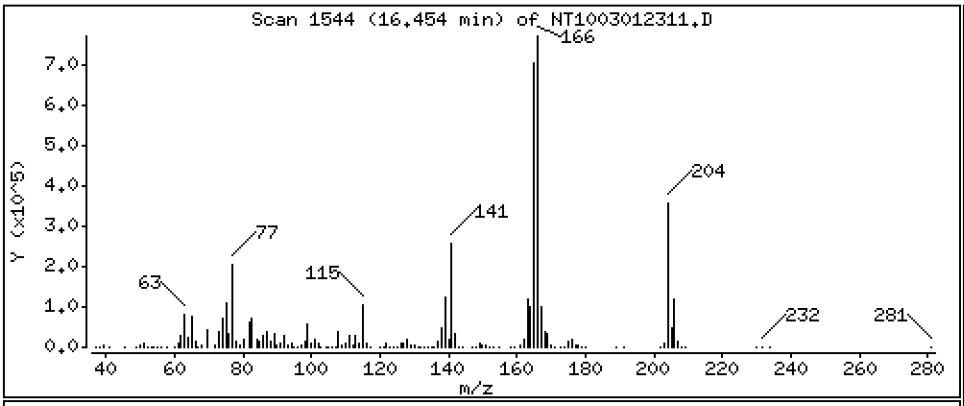
Operator: VTS

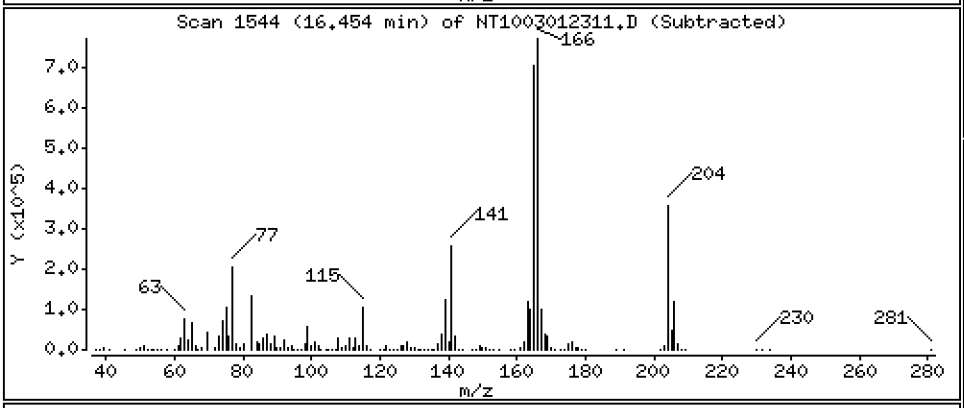
Column phase: ZB-5msi

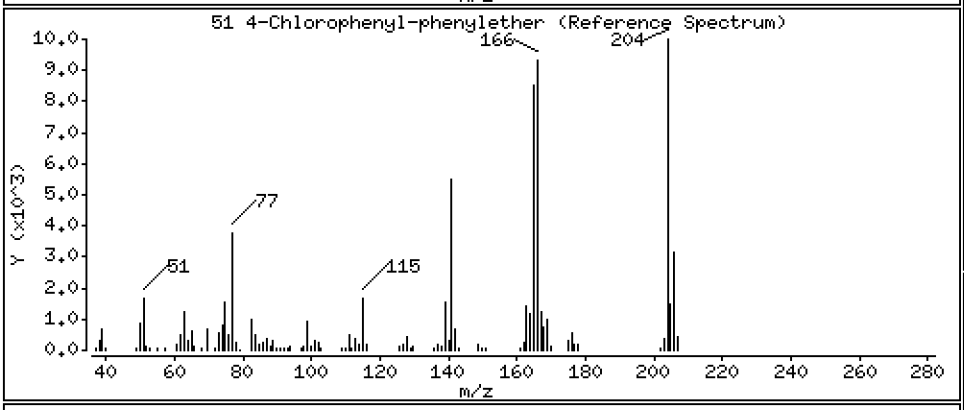
Column diameter: 0.25

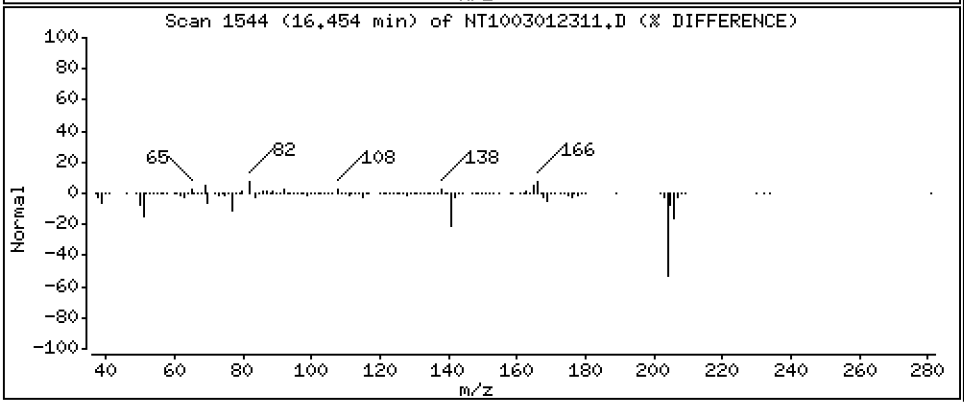
51 4-Chlorophenyl-phenylether

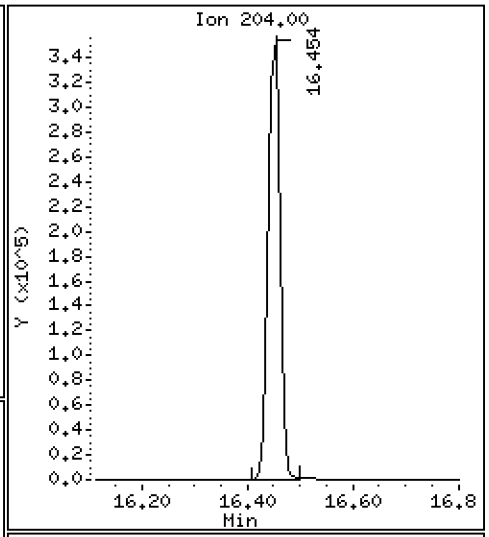
Concentration: 5.253 ug/mL

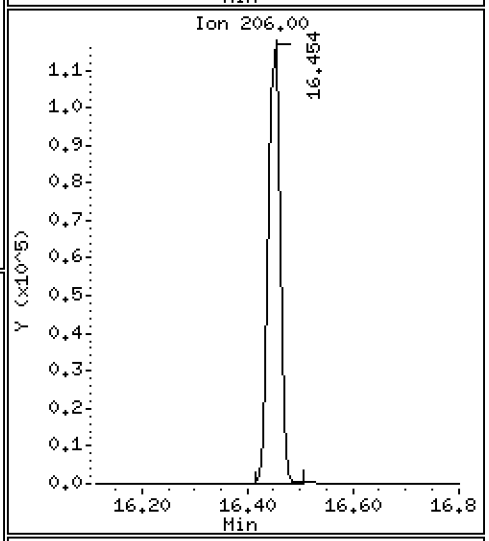


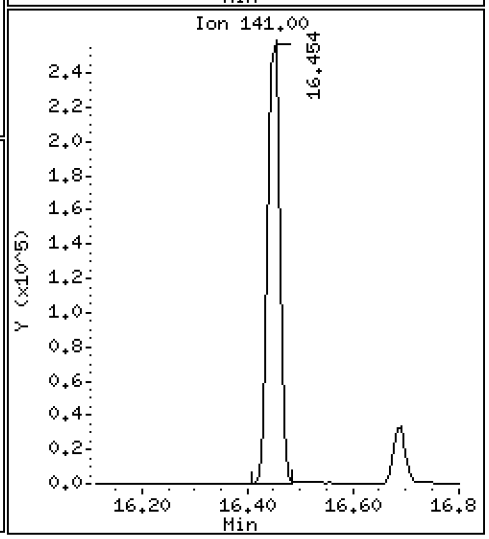












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

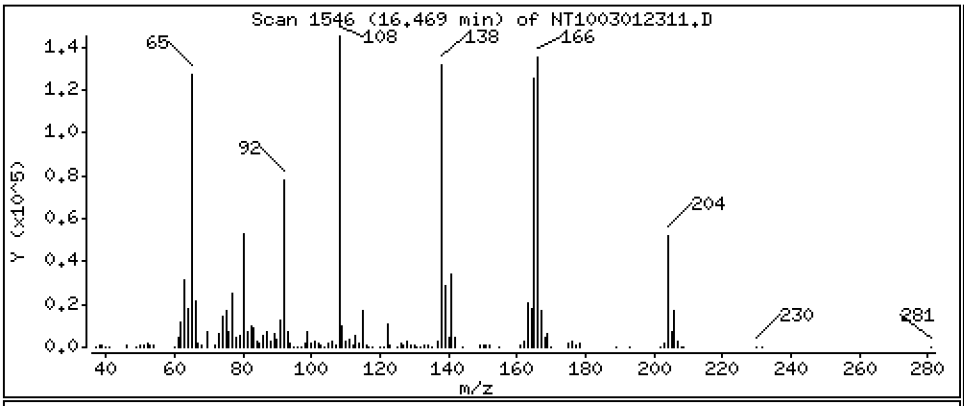
Operator: VTS

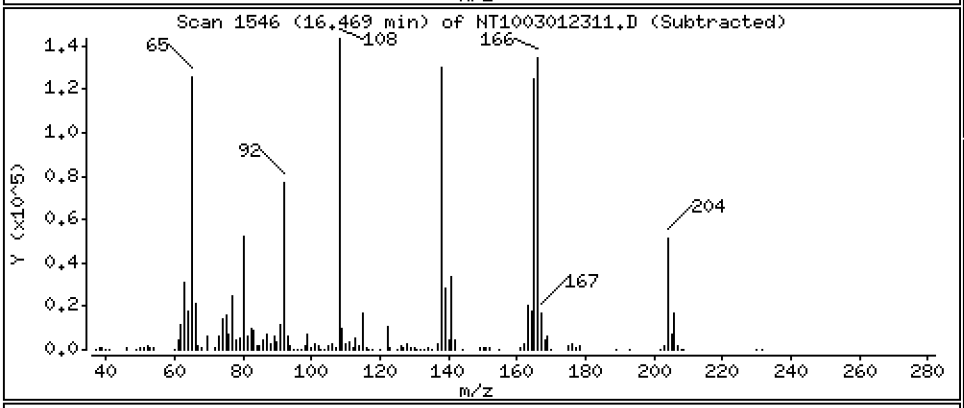
Column phase: ZB-5msi

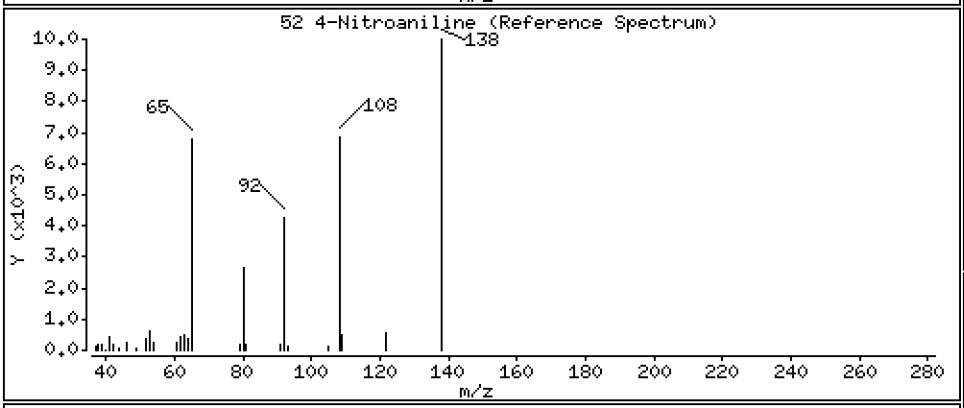
Column diameter: 0.25

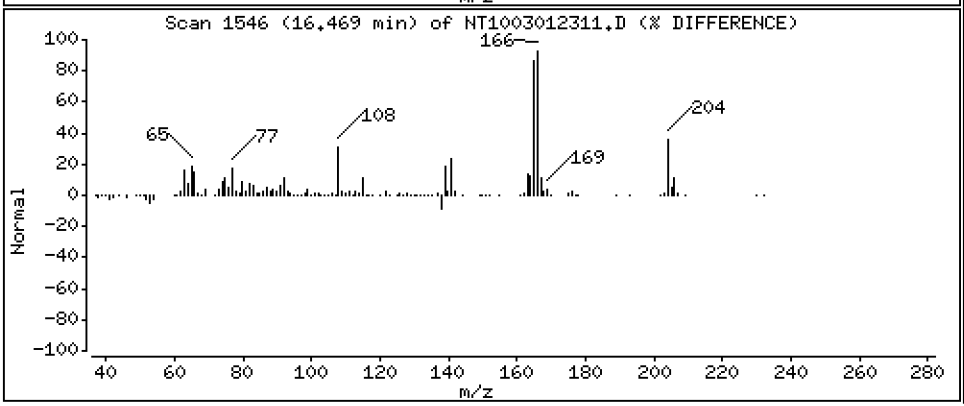
52 4-Nitroaniline

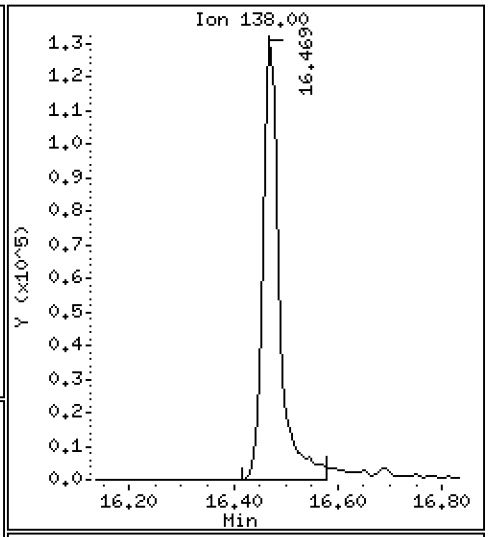
Concentration: 5.232 ug/mL

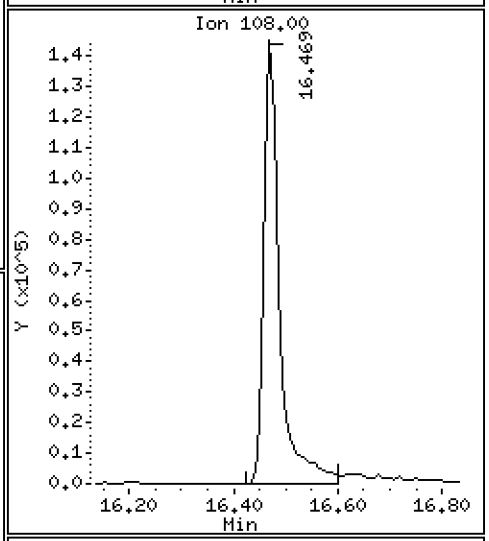


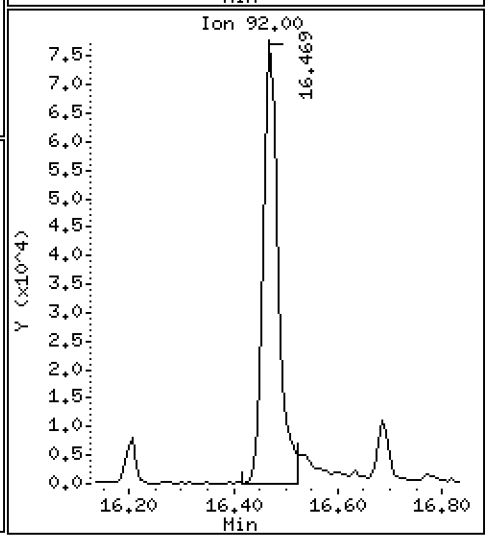












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

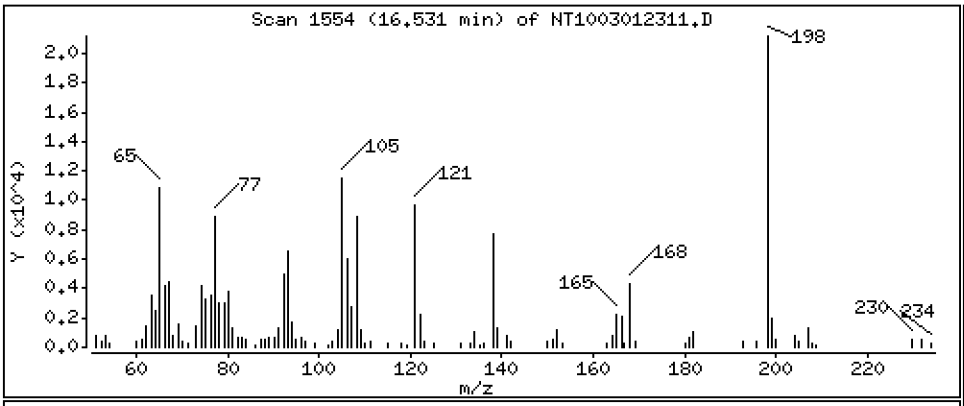
Operator: VTS

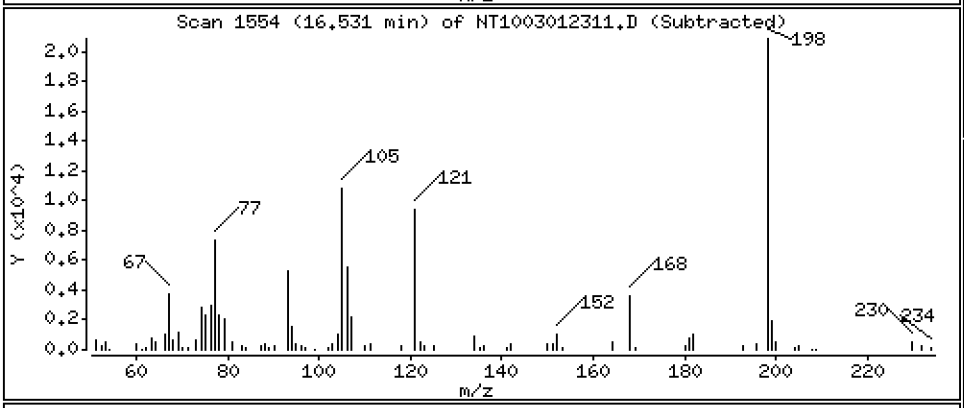
Column phase: ZB-5msi

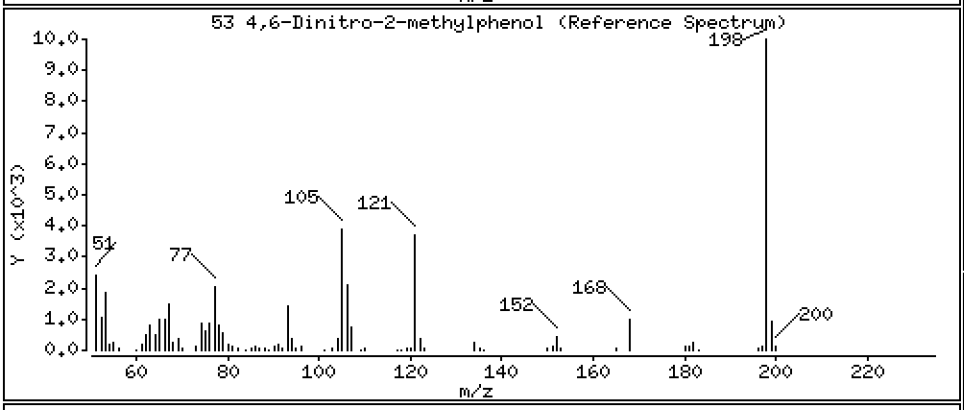
Column diameter: 0.25

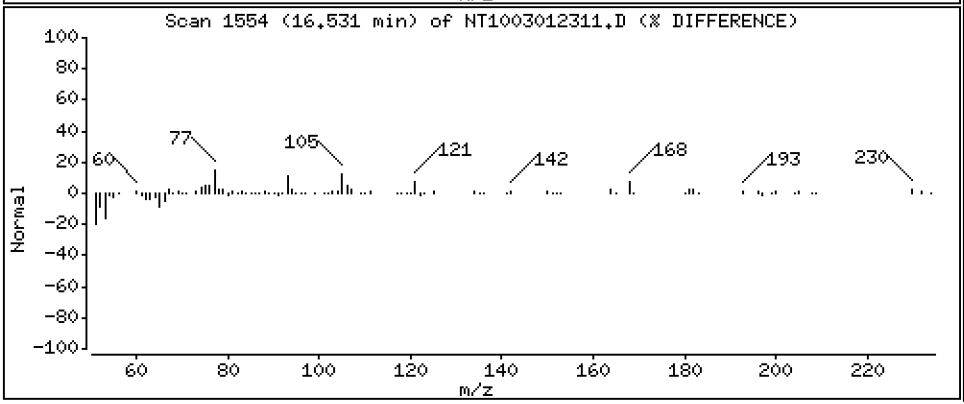
53 4,6-Dinitro-2-methylphenol

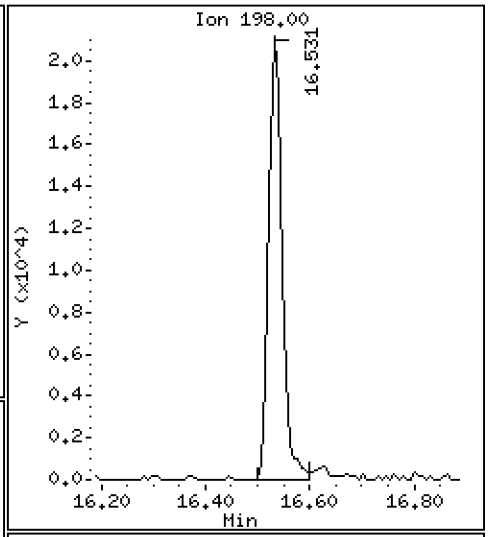
Concentration: 1.292 ug/mL

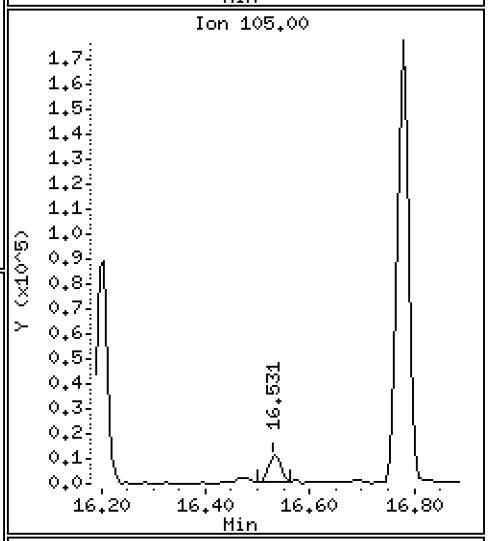


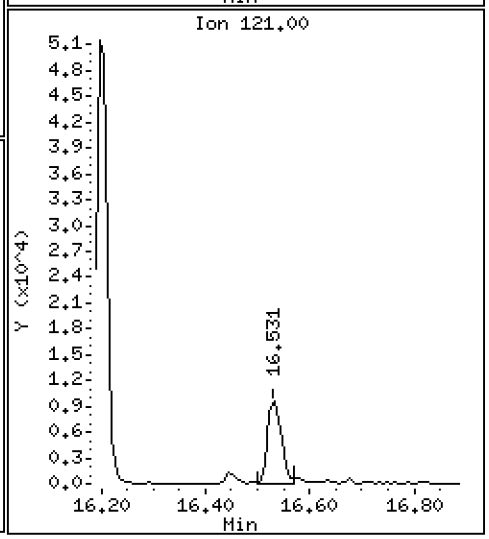












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

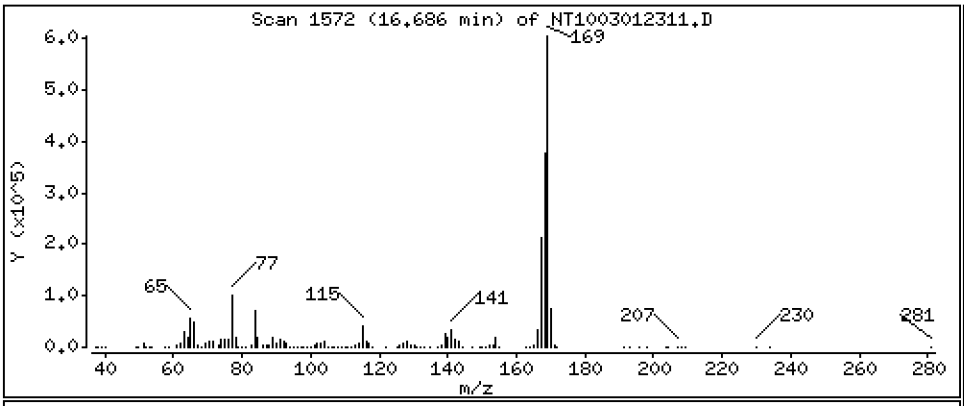
Operator: VTS

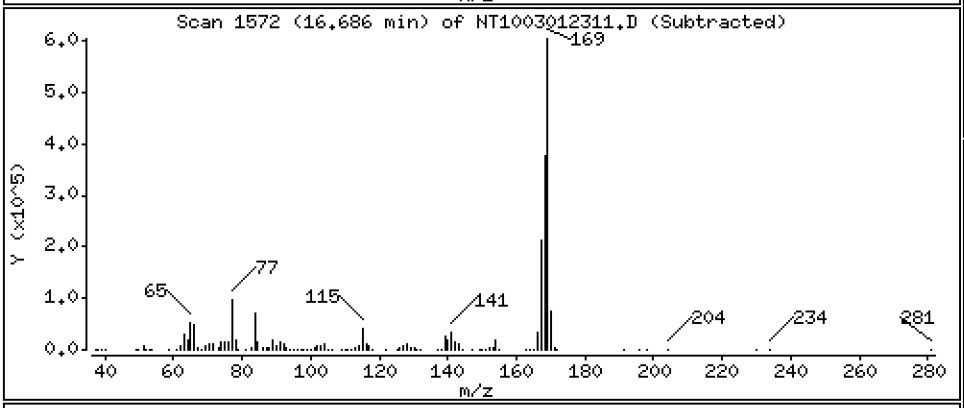
Column phase: ZB-5msi

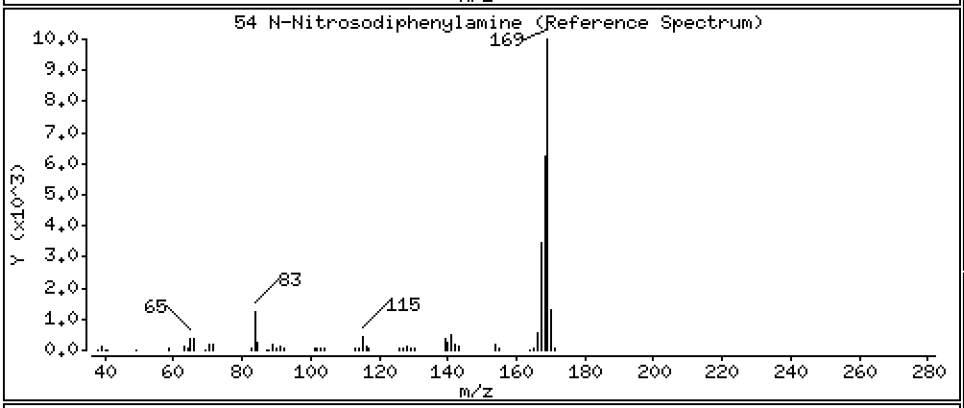
Column diameter: 0.25

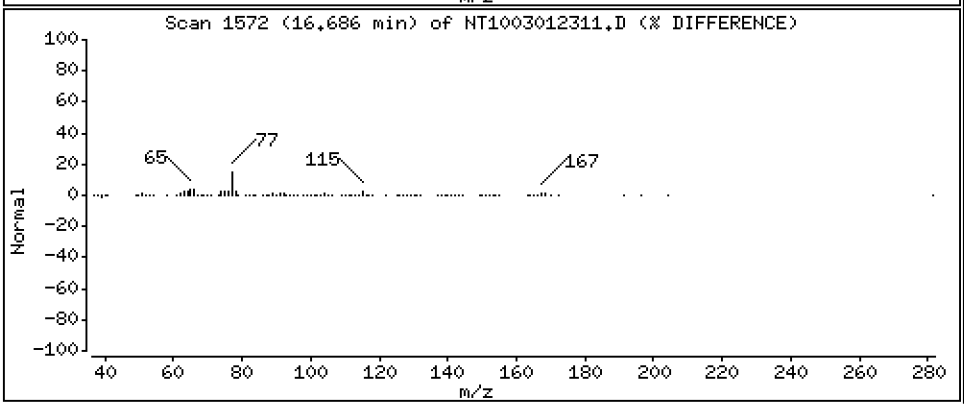
54 N-Nitrosodiphenylamine

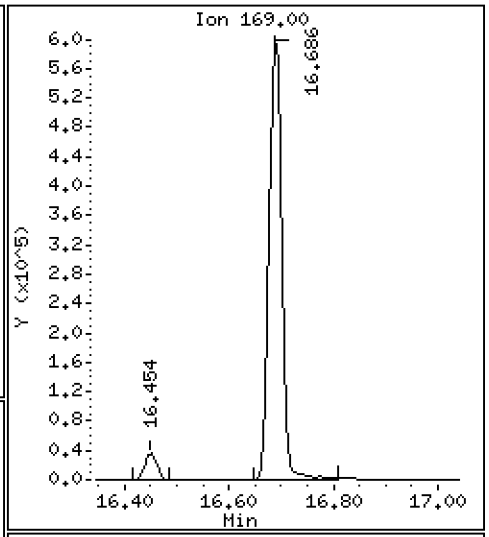
Concentration: 5.416 ug/mL

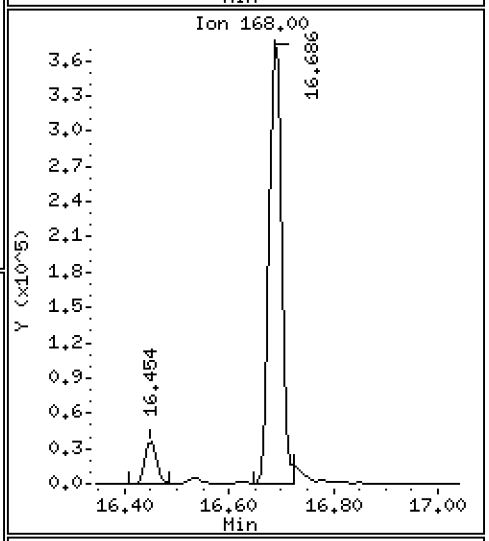


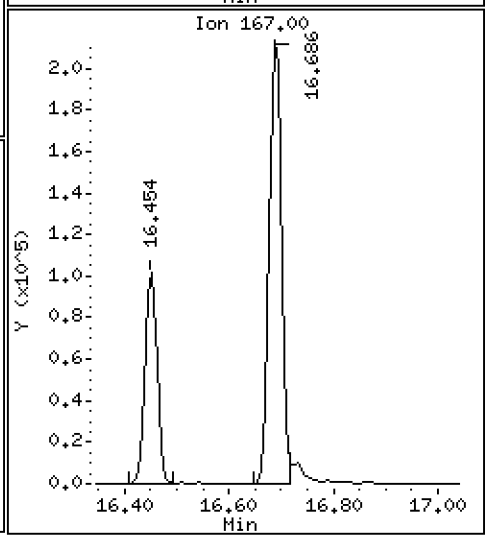












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

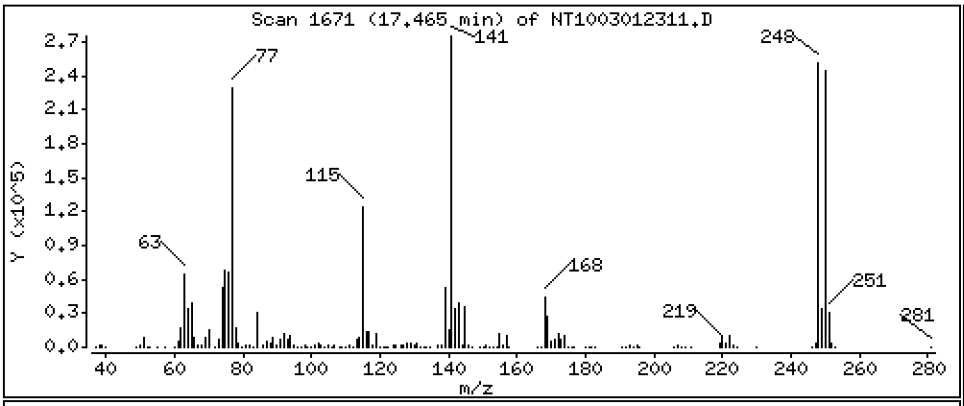
Operator: VTS

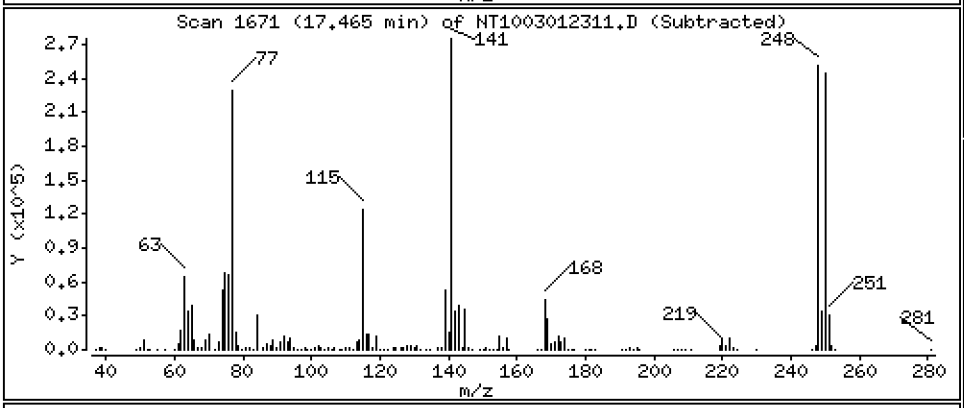
Column phase: ZB-5msi

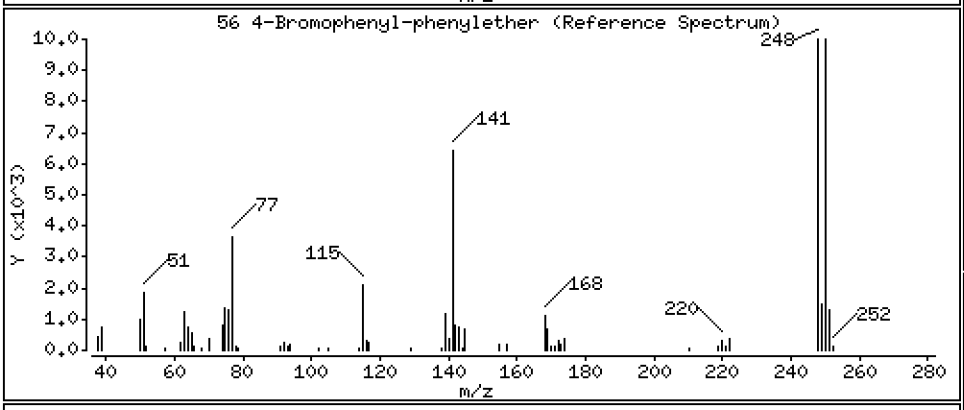
Column diameter: 0.25

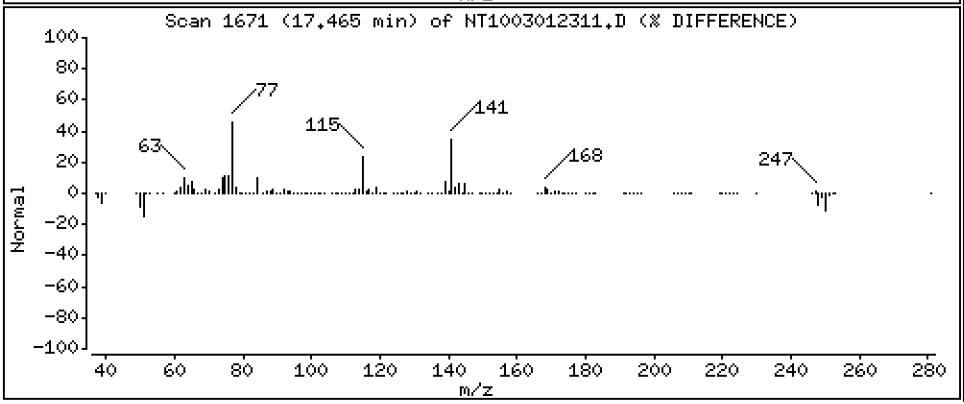
56 4-Bromophenyl-phenylether

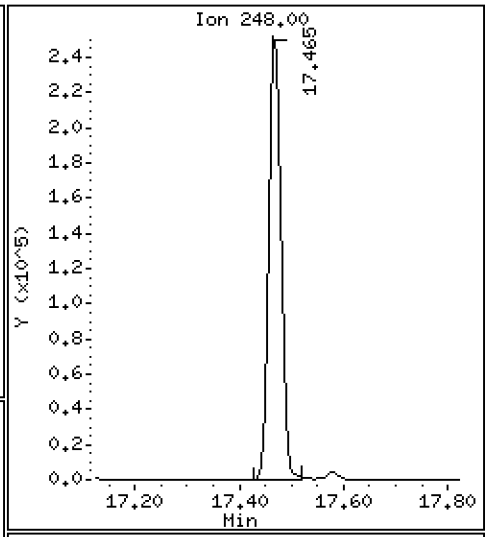
Concentration: 5.460 ug/mL

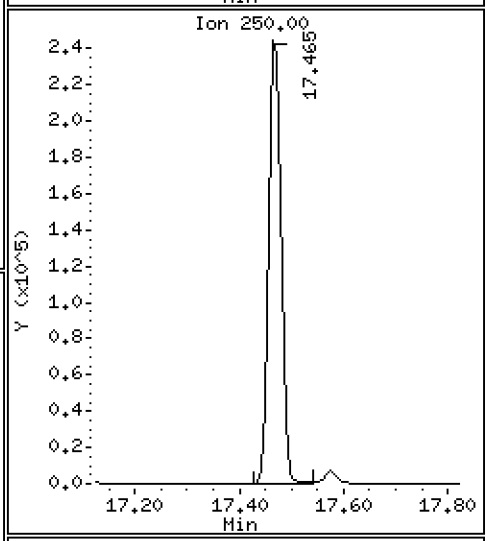


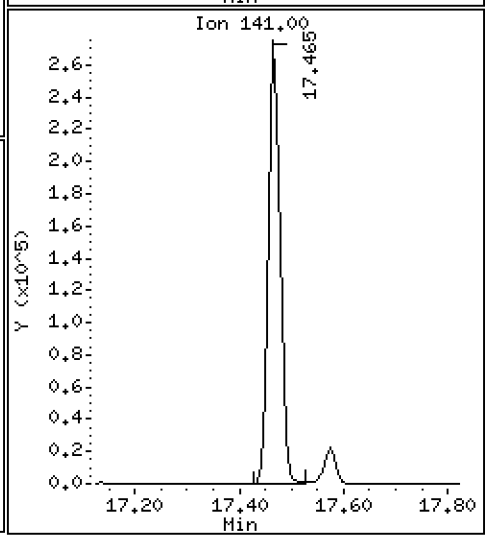












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

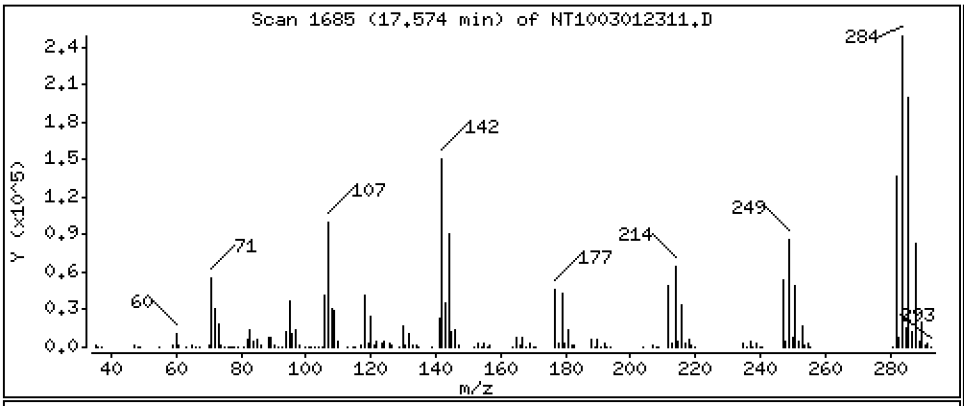
Operator: VTS

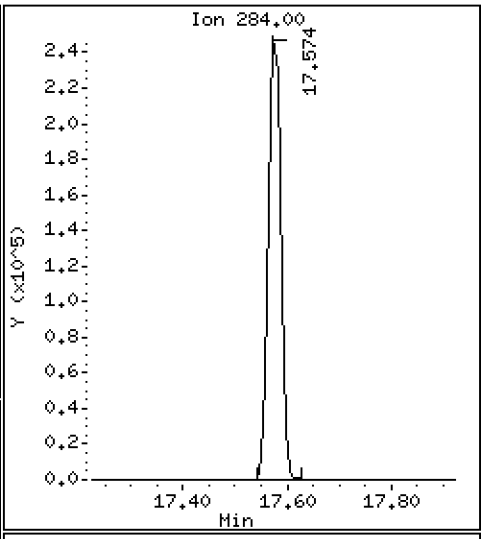
Column phase: ZB-5msi

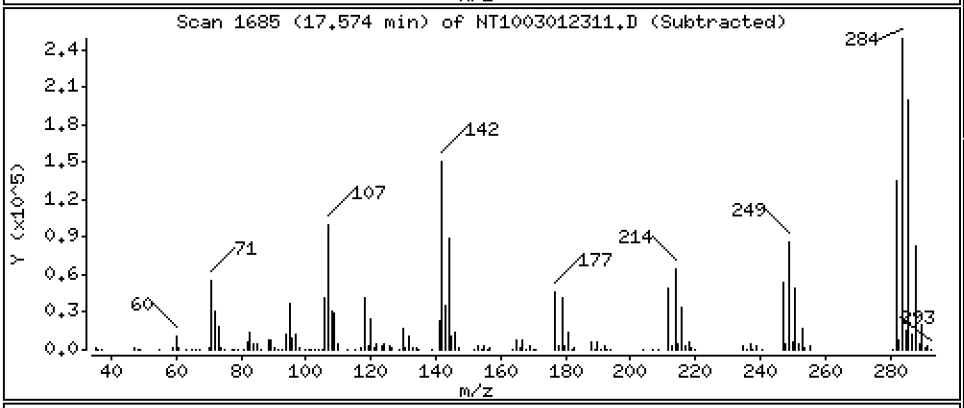
Column diameter: 0.25

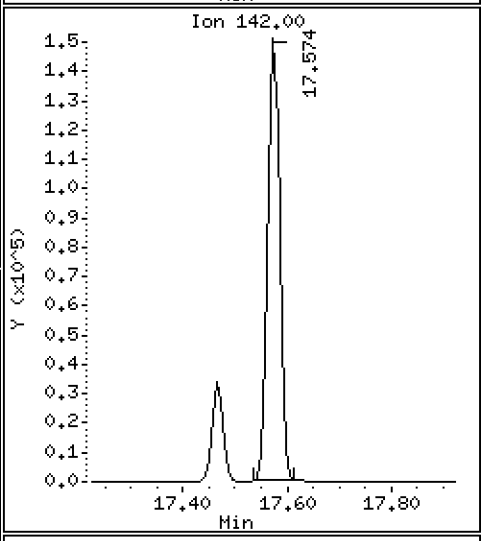
57 Hexachlorobenzene

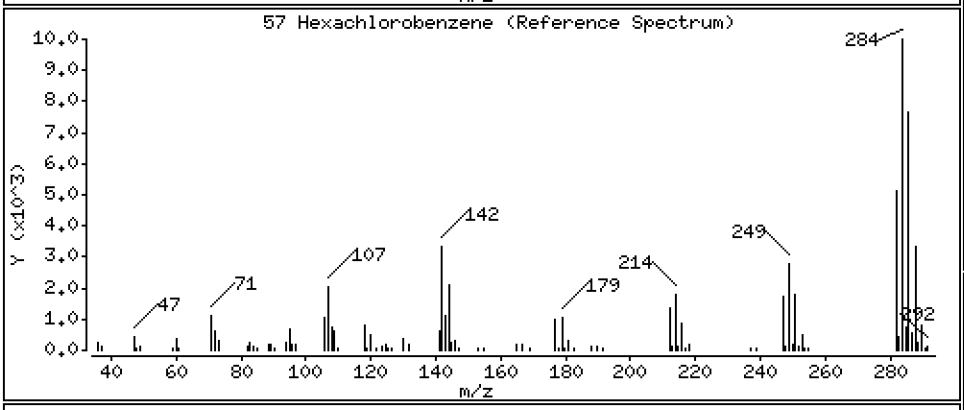
Concentration: 4.805 ug/mL

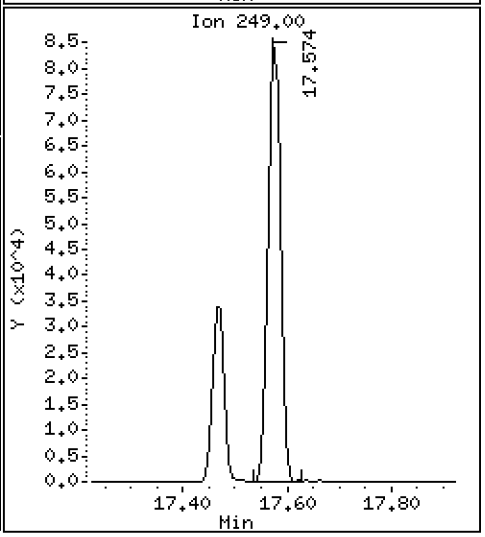


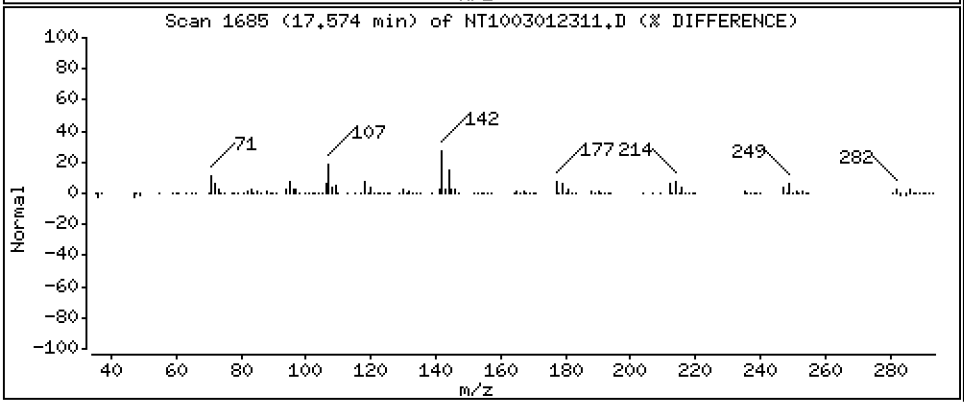












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

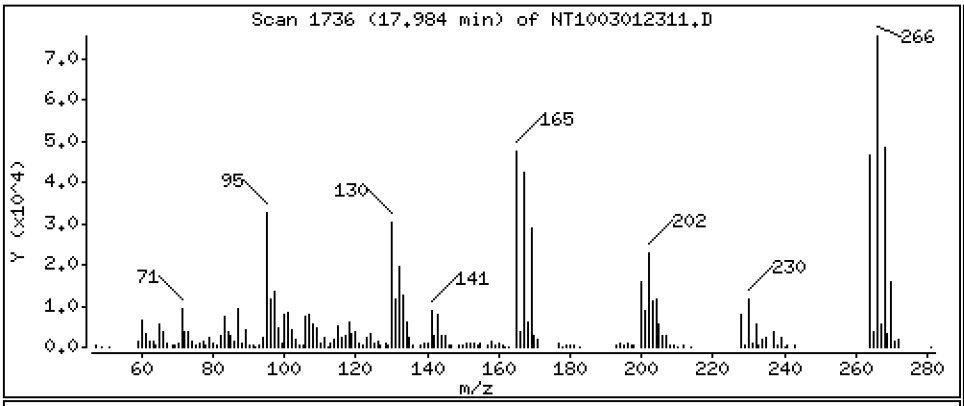
Operator: VTS

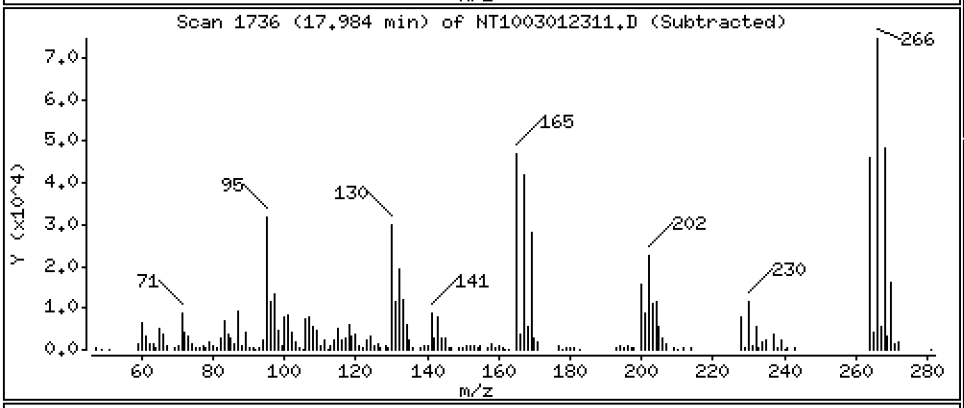
Column phase: ZB-5msi

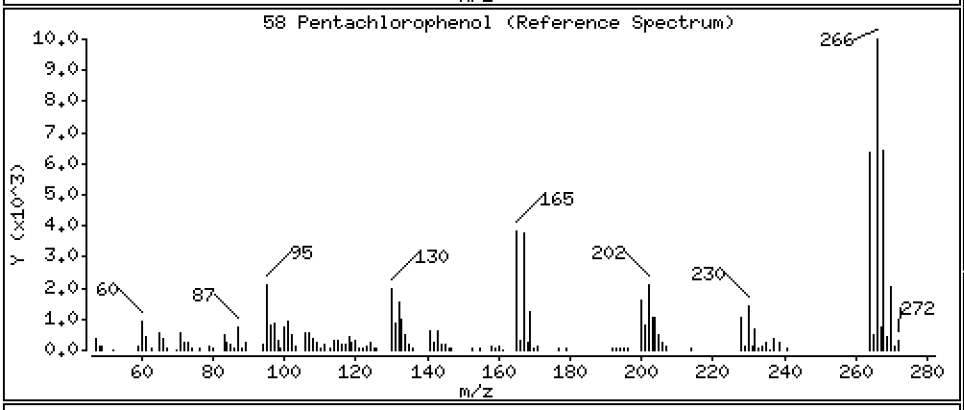
Column diameter: 0.25

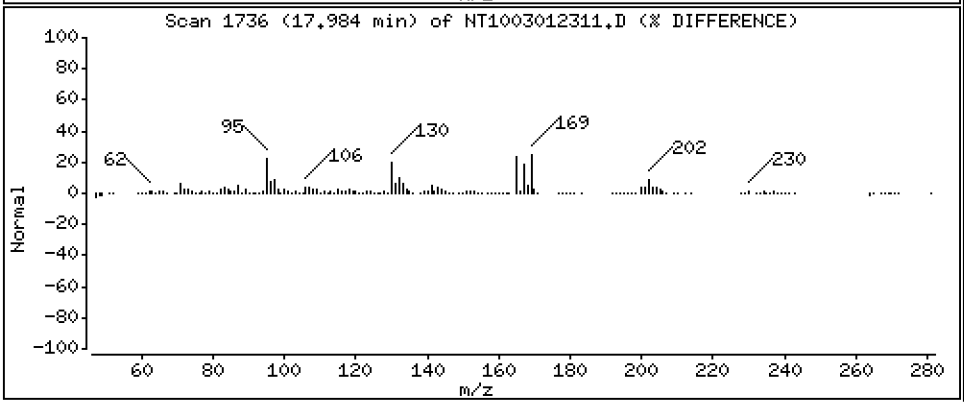
58 Pentachlorophenol

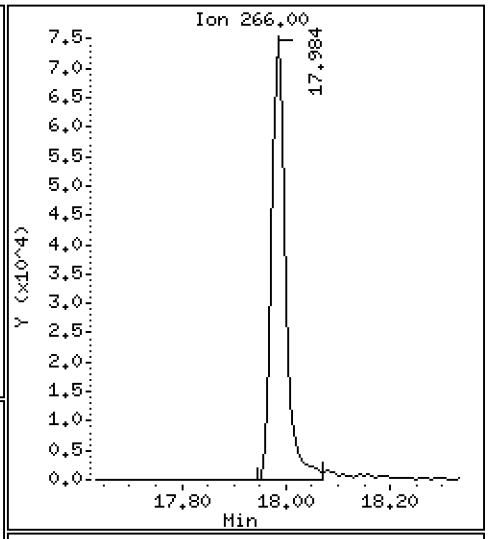
Concentration: 3.492 ug/mL

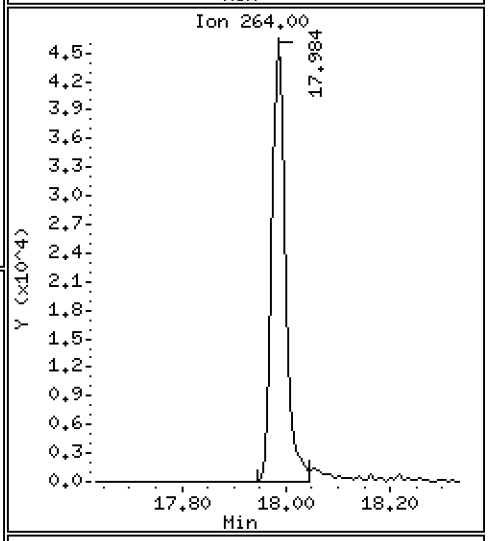


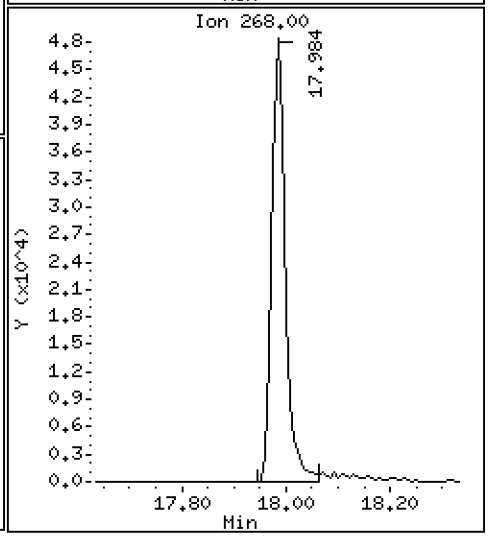












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

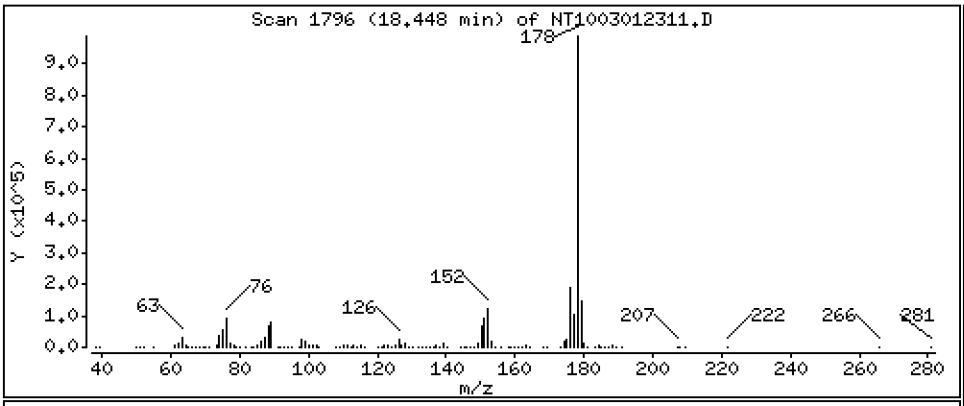
Operator: VTS

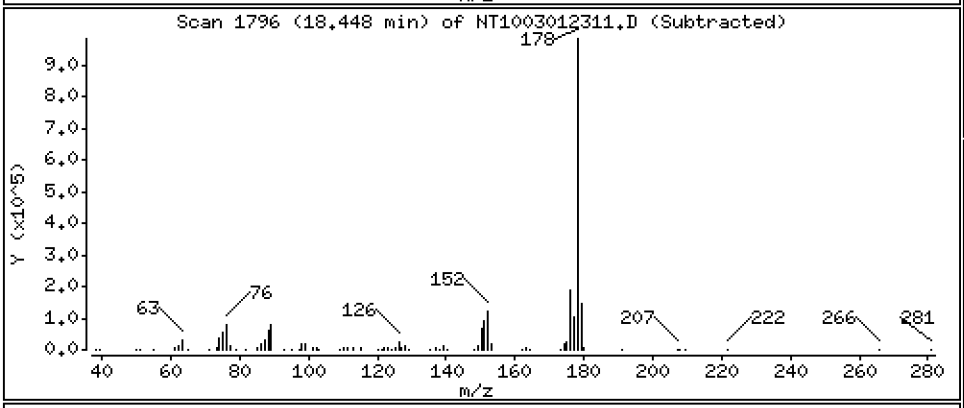
Column phase: ZB-5msi

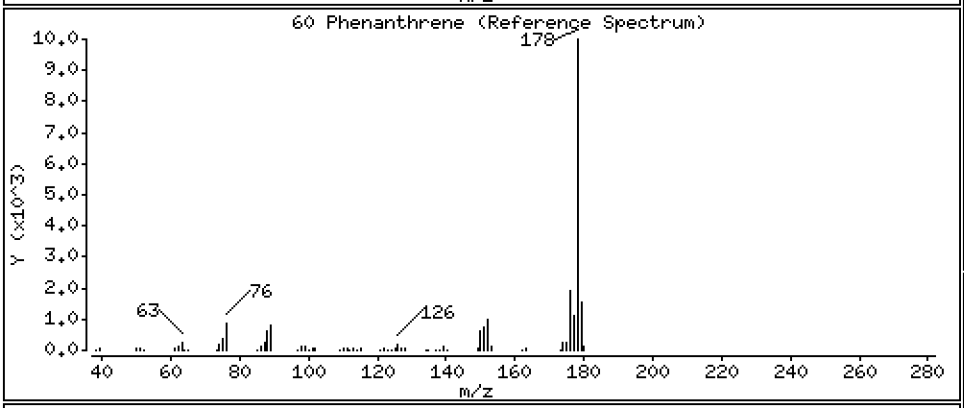
Column diameter: 0.25

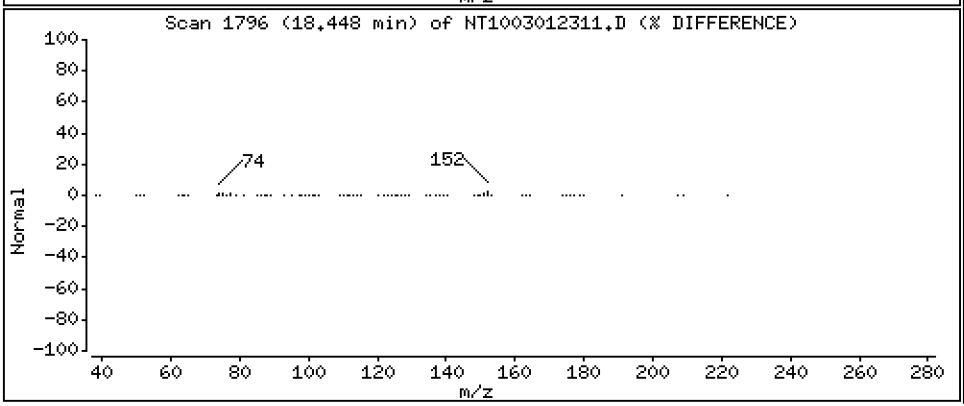
60 Phenanthrene

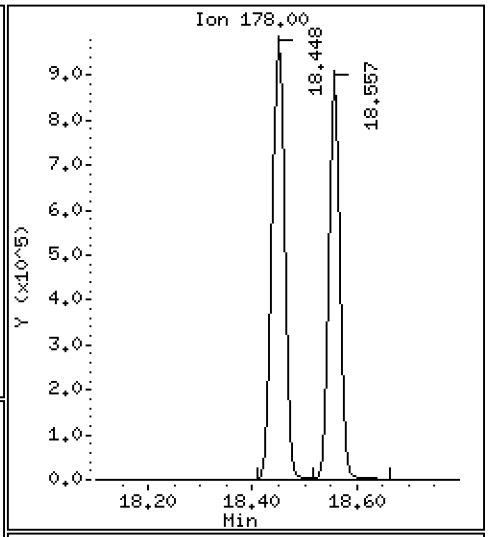
Concentration: 5.085 ug/mL

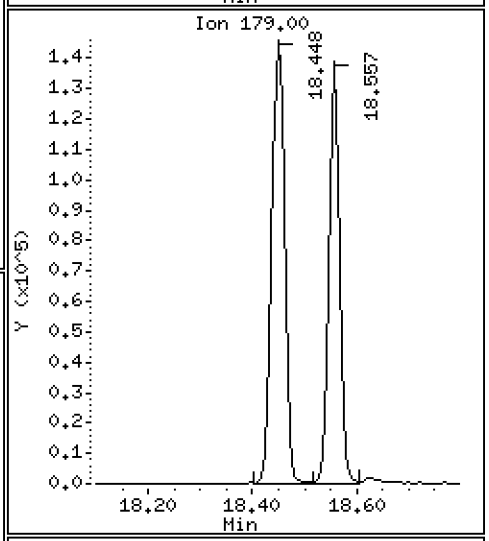


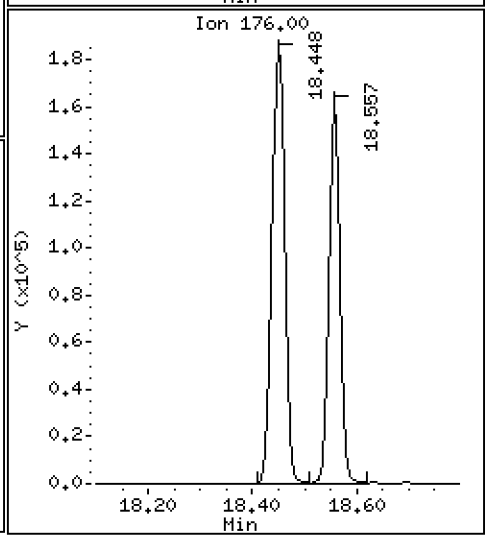












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

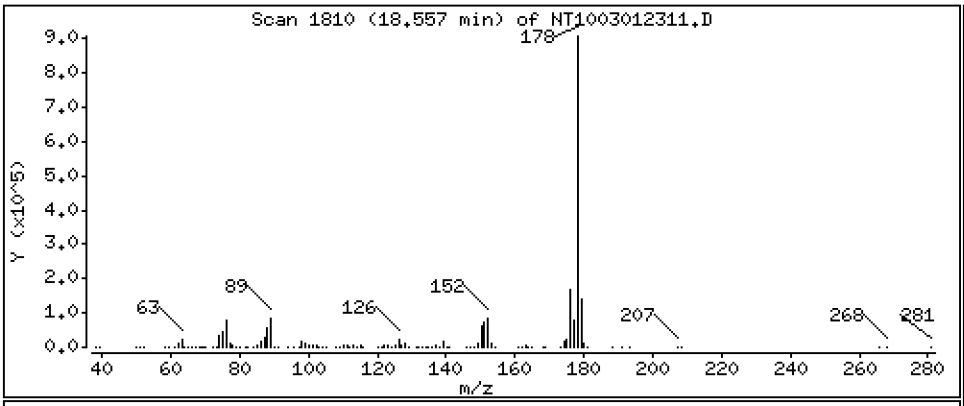
Operator: VTS

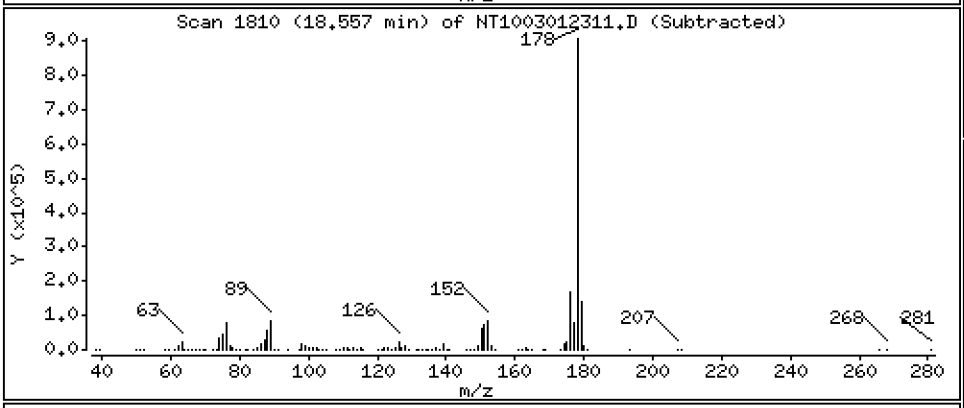
Column phase: ZB-5msi

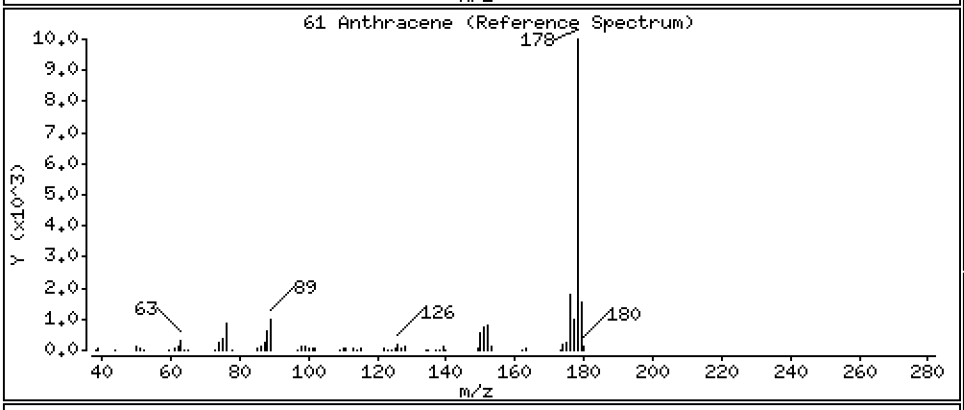
Column diameter: 0.25

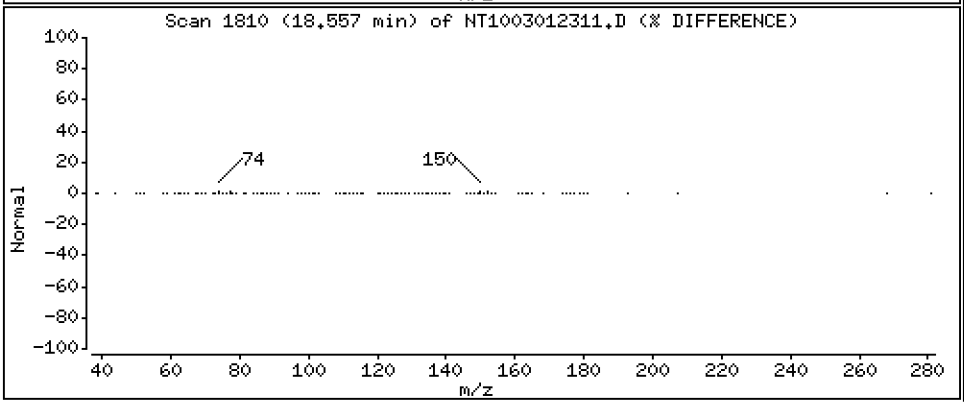
61 Anthracene

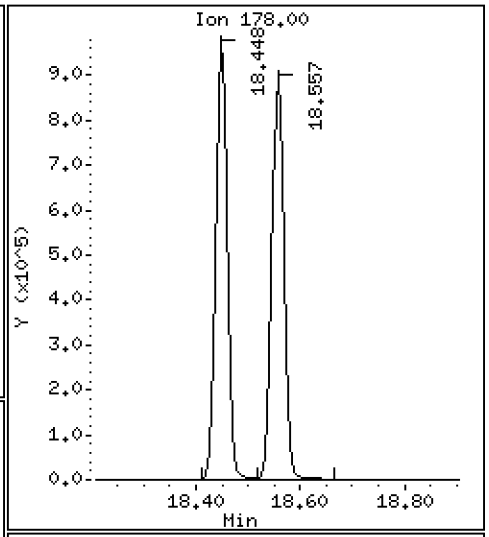
Concentration: 4.585 ug/mL

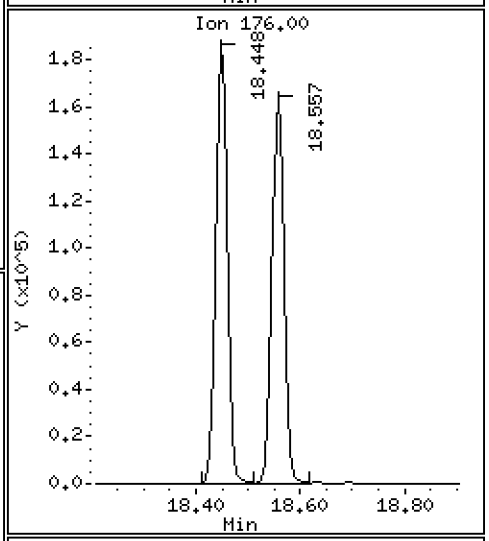


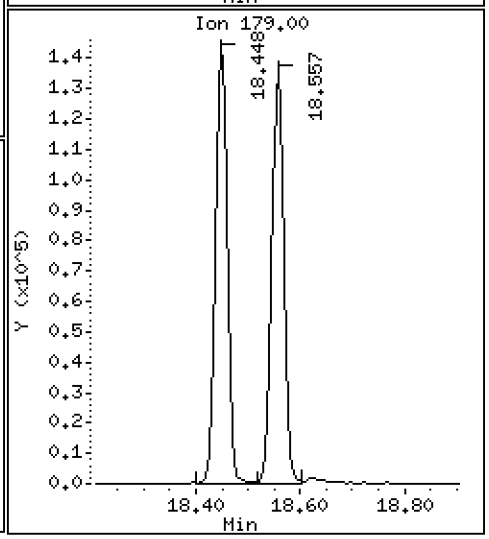












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

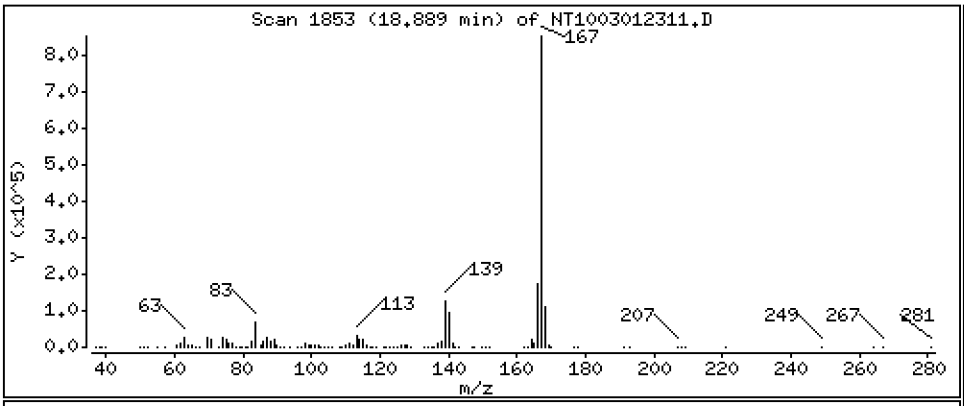
Operator: VTS

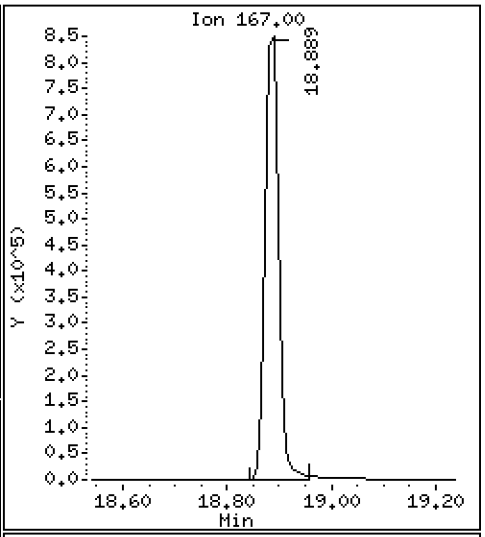
Column phase: ZB-5msi

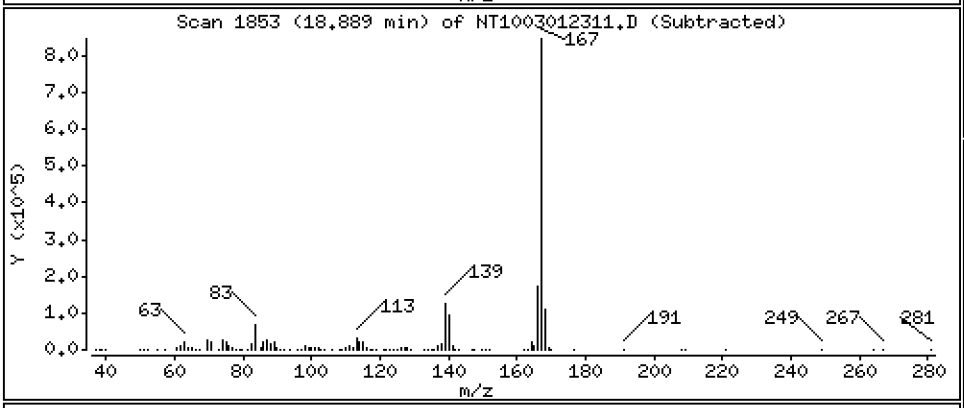
Column diameter: 0.25

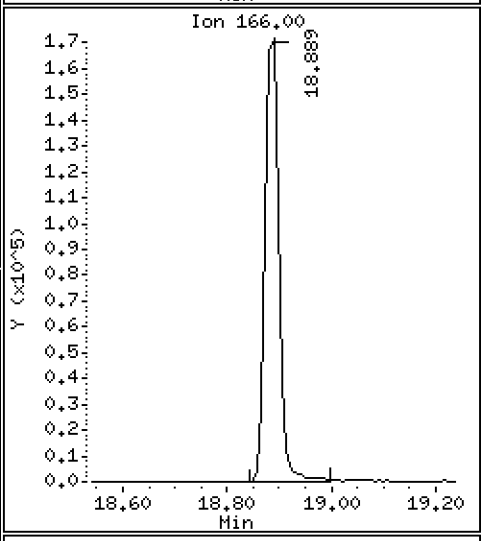
62 Carbazole

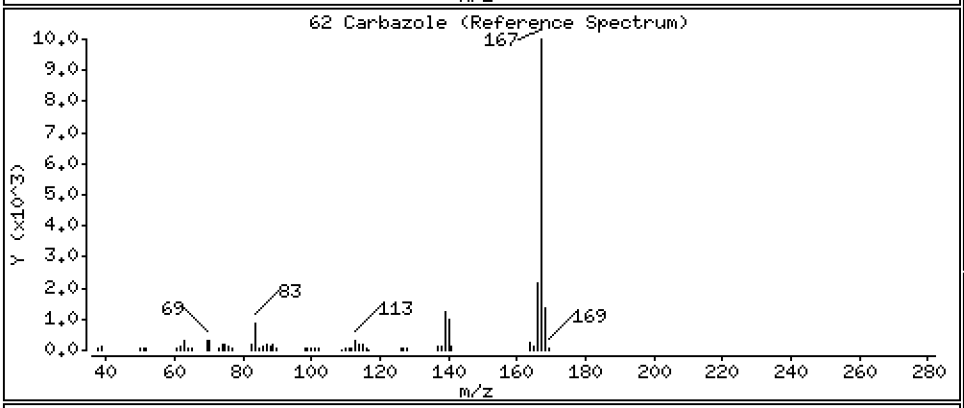
Concentration: 5.335 ug/mL

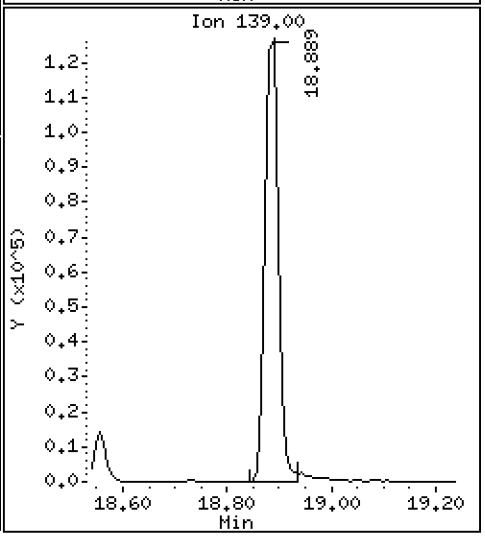


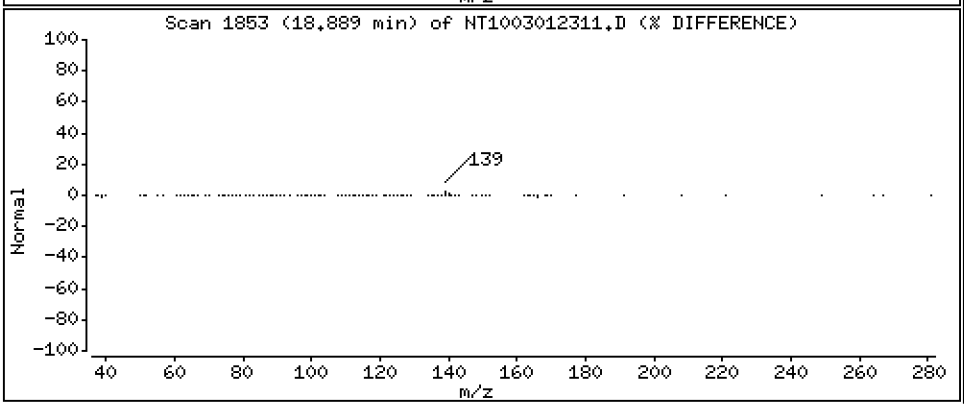












Date : 01-MAR-2023 21:46

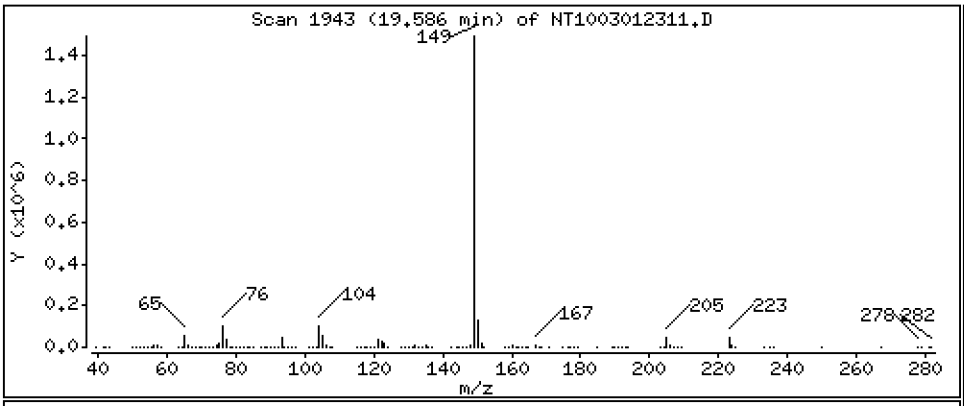
Client ID: Instrument: nt10.i

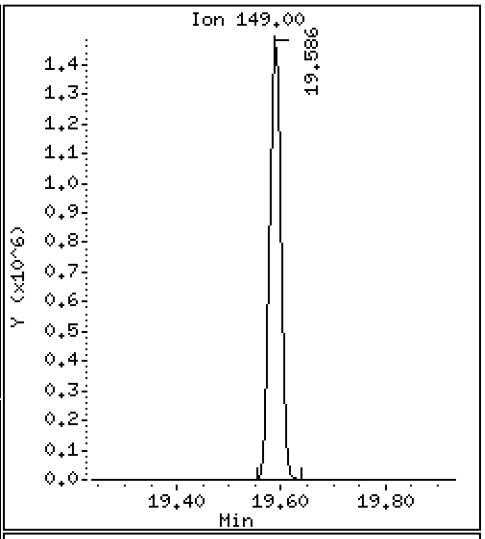
Sample Info: SEQ-SCV1

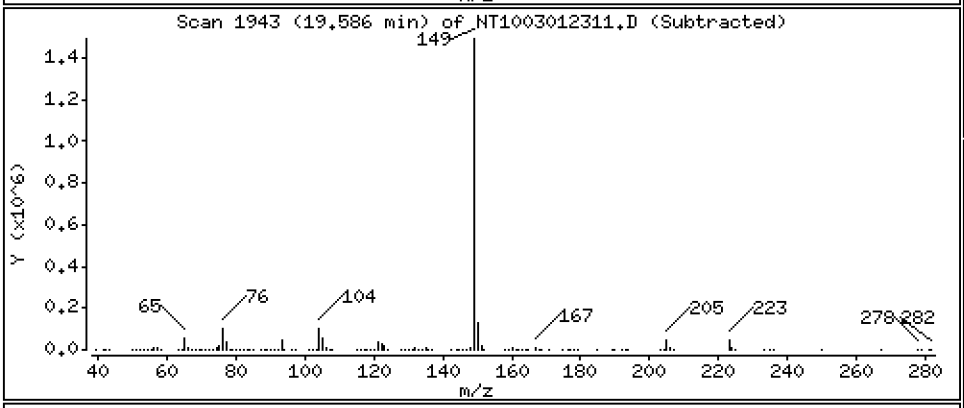
Operator: VTS

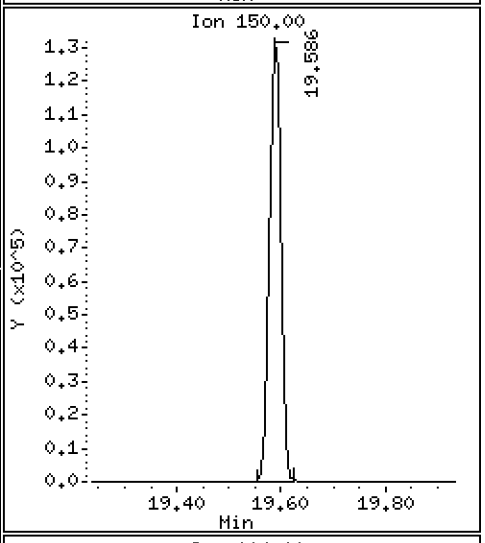
Column phase: ZB-5msi Column diameter: 0.25

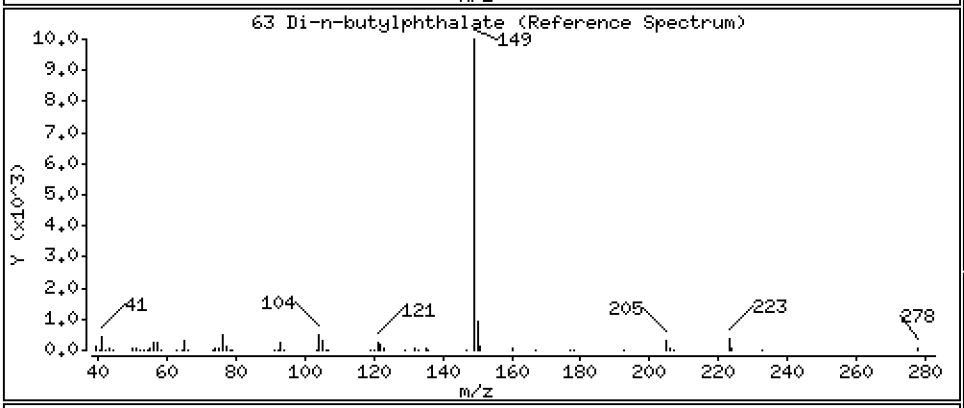
63 Di-n-butylphthalate Concentration: 5.463 ug/mL

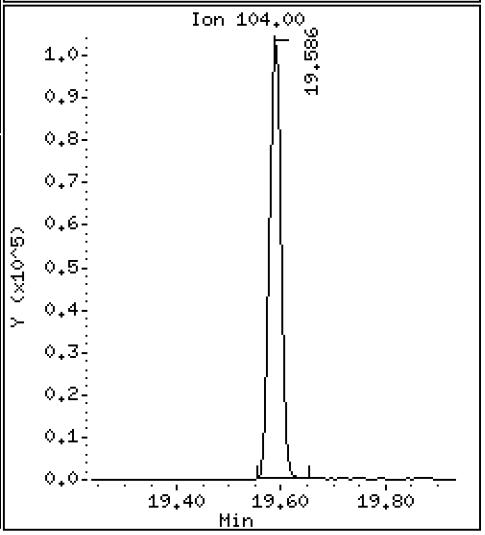


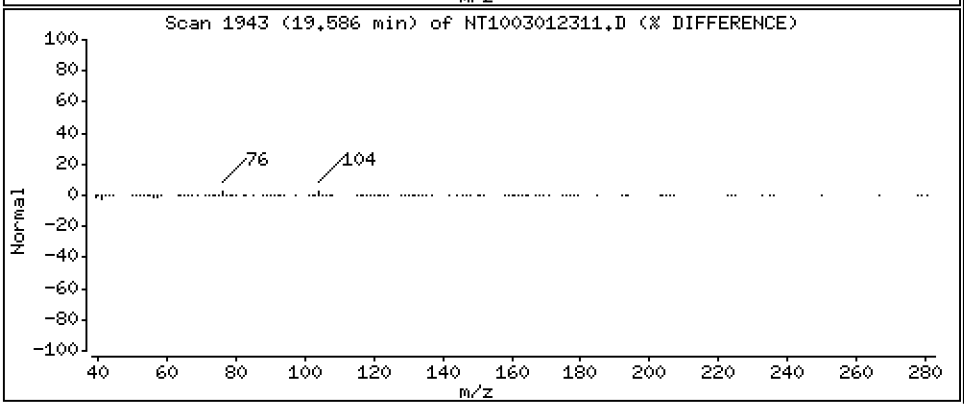












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

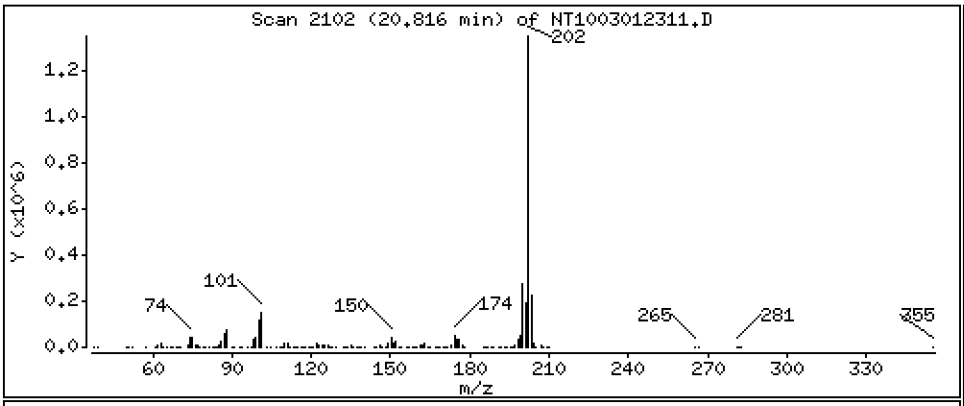
Operator: VTS

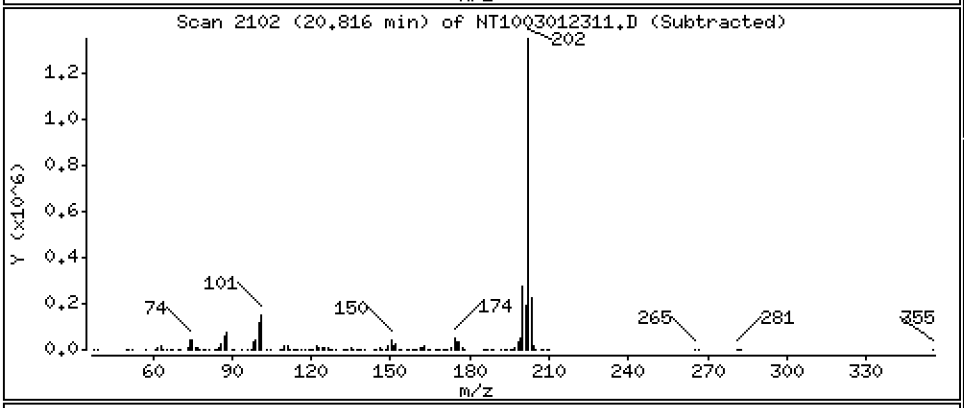
Column phase: ZB-5msi

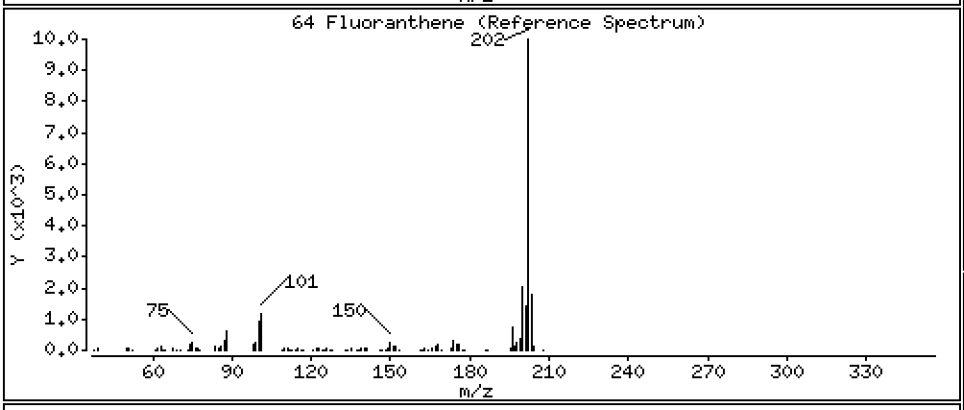
Column diameter: 0.25

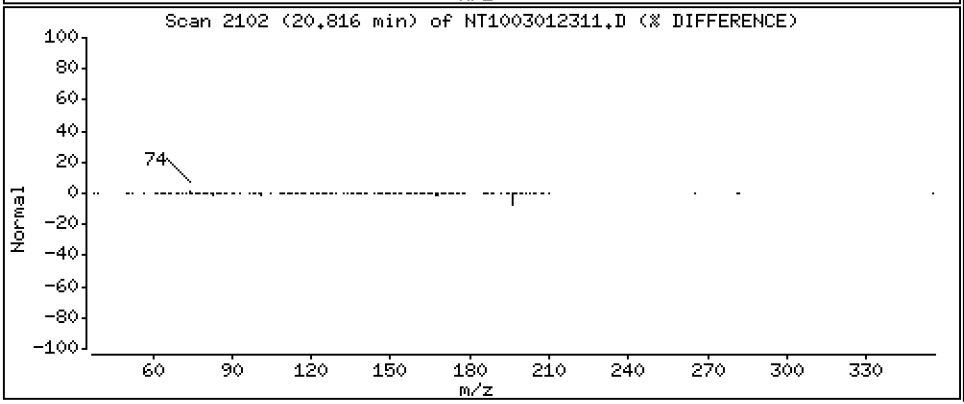
64 Fluoranthene

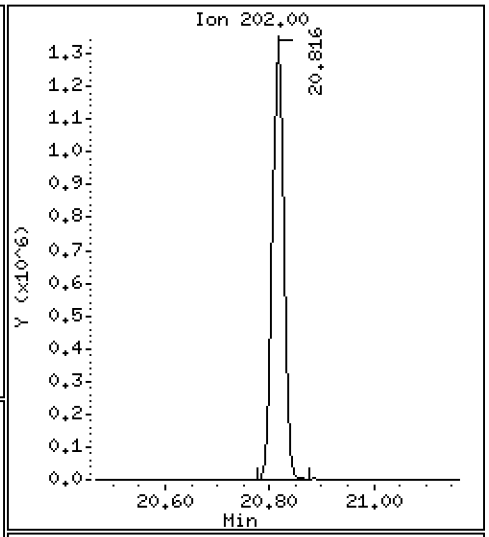
Concentration: 4.542 ug/mL

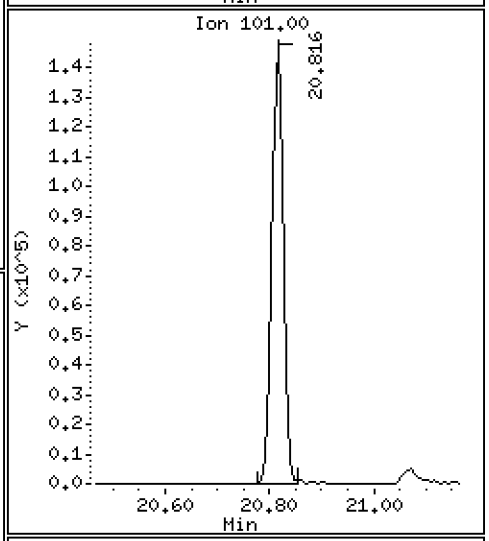


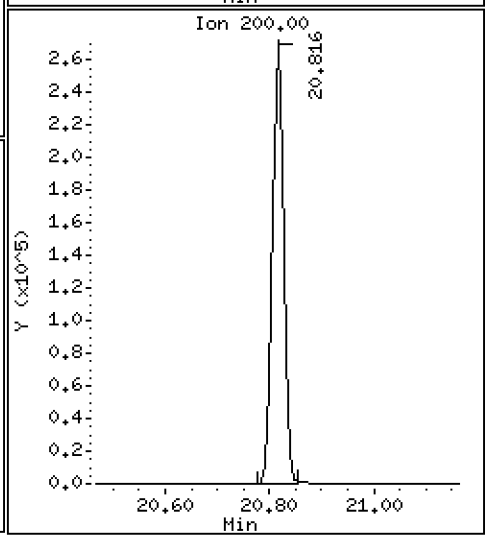












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

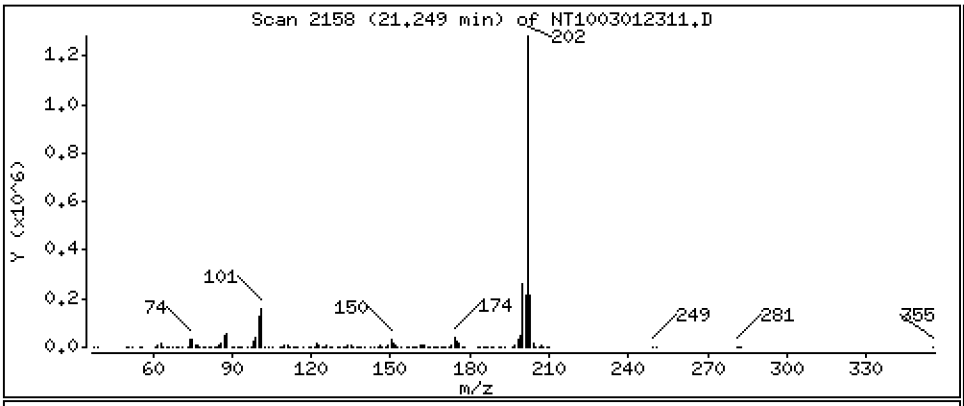
Operator: VTS

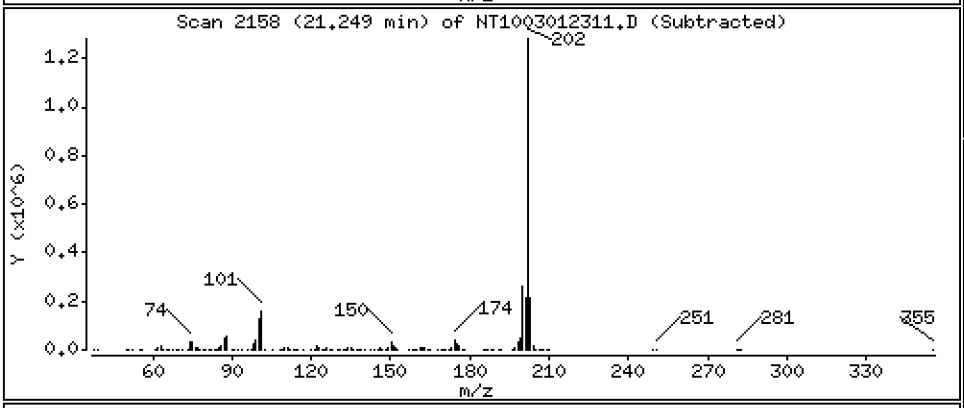
Column phase: ZB-5msi

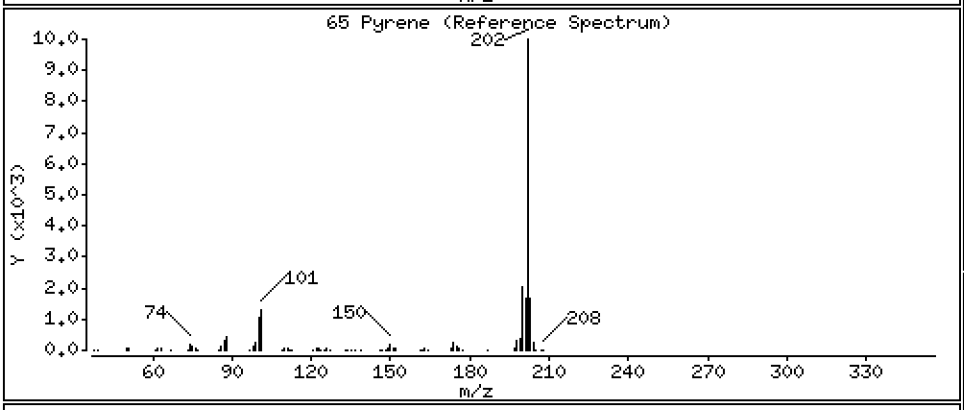
Column diameter: 0.25

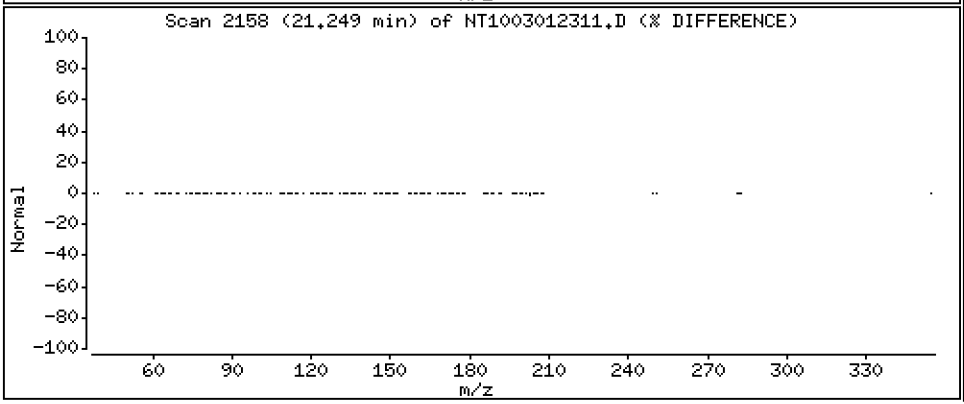
65 Pyrene

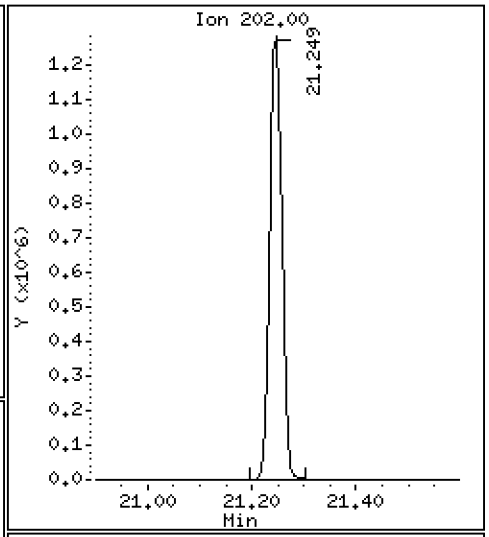
Concentration: 4.626 ug/mL

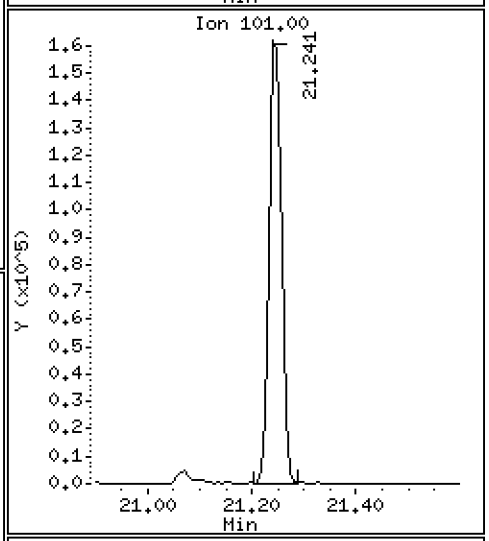


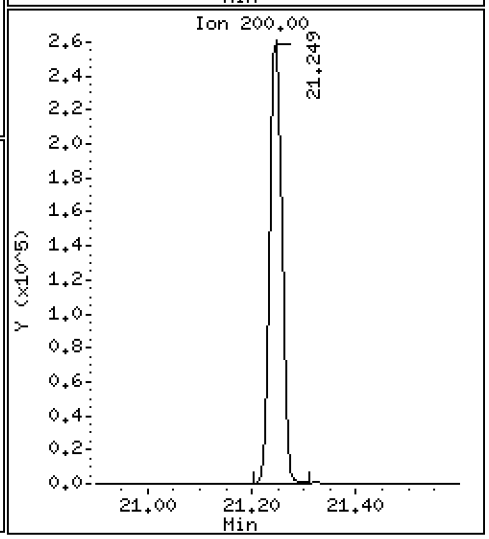












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

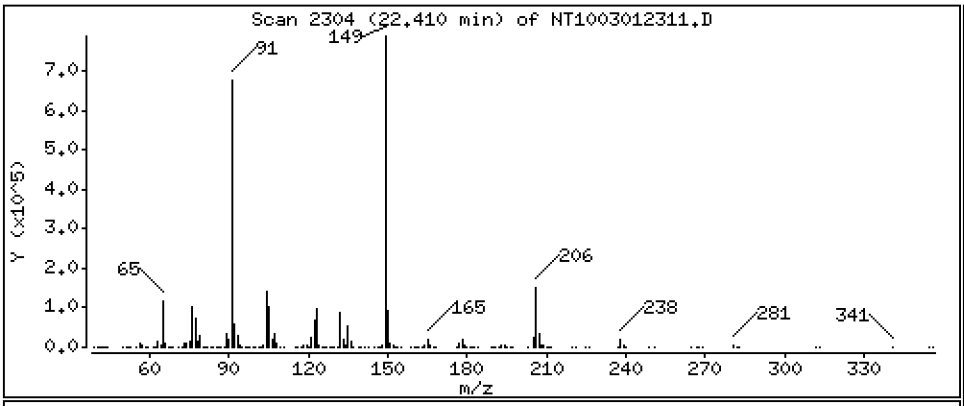
Operator: VTS

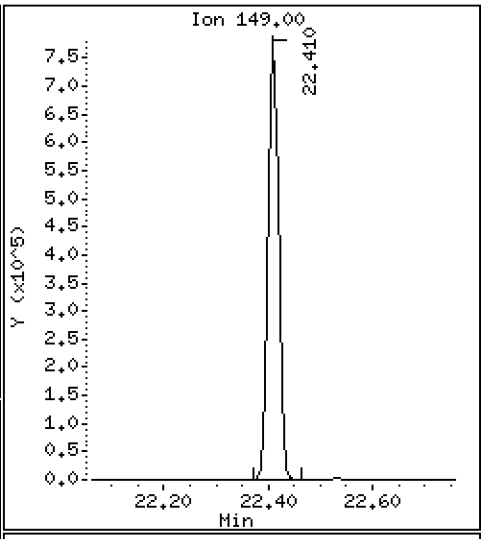
Column phase: ZB-5msi

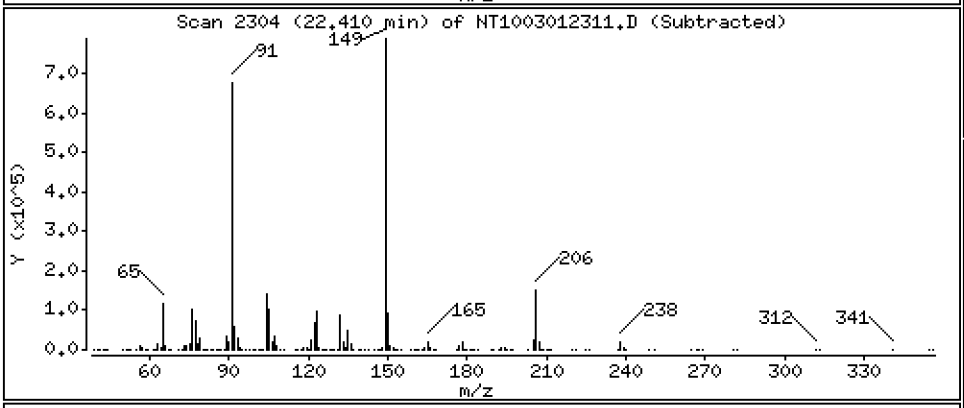
Column diameter: 0.25

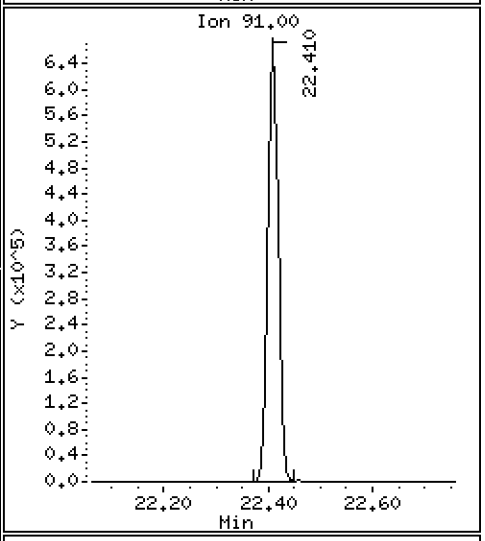
67 Butylbenzylphthalate

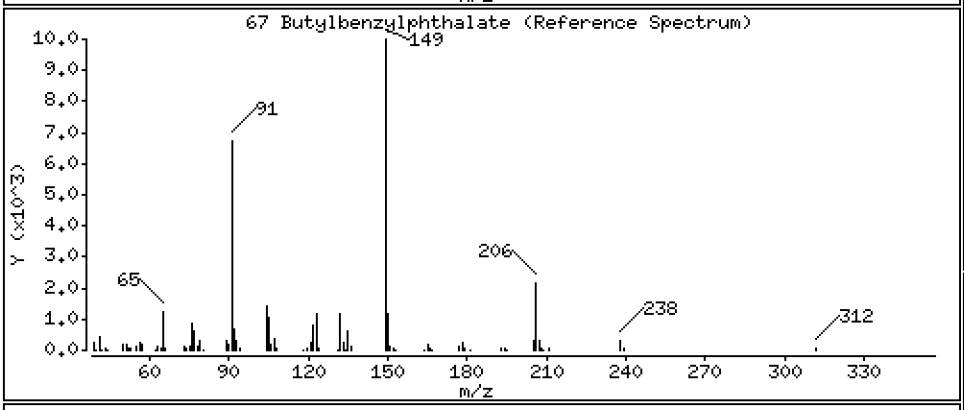
Concentration: 4.525 ug/mL

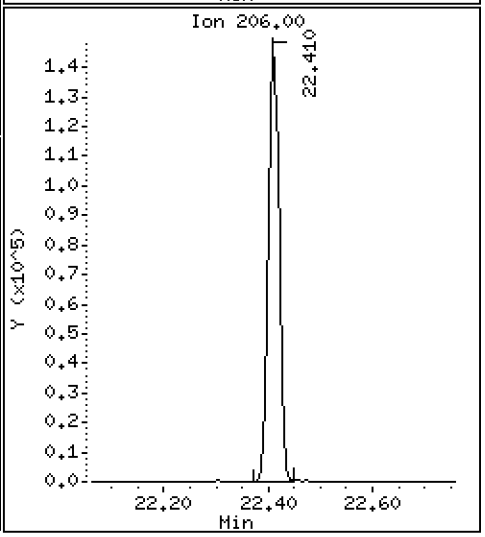


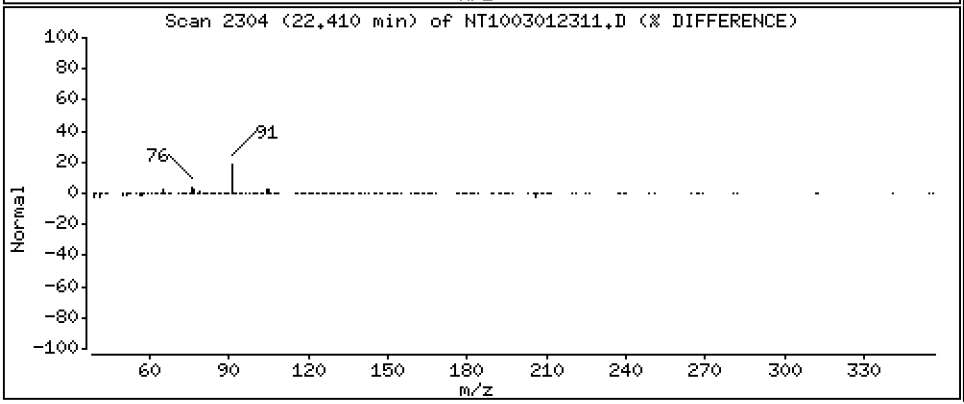












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

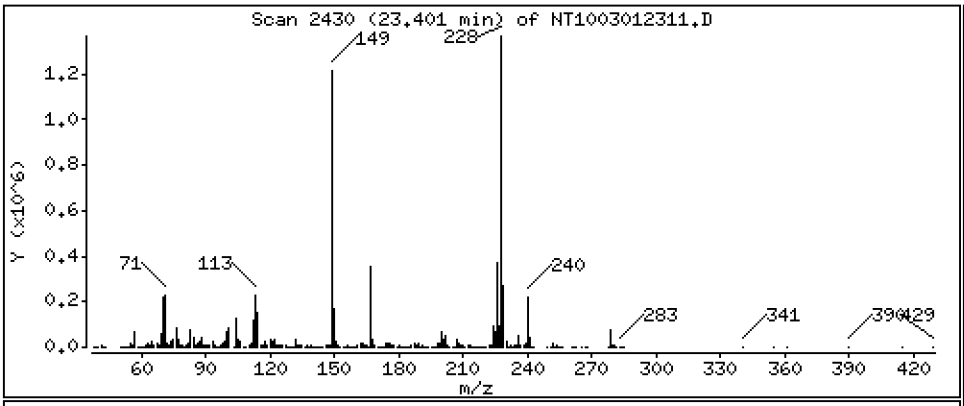
Operator: VTS

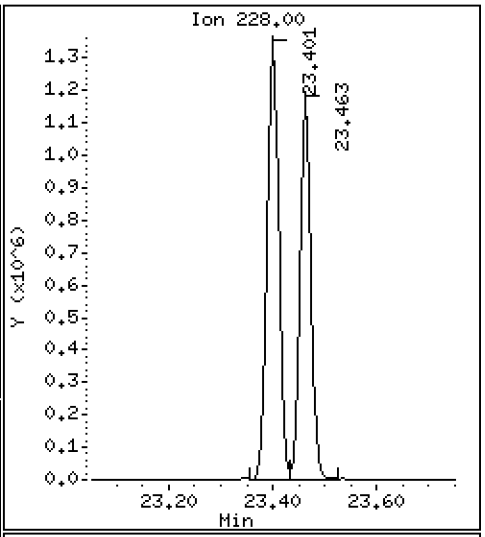
Column phase: ZB-5msi

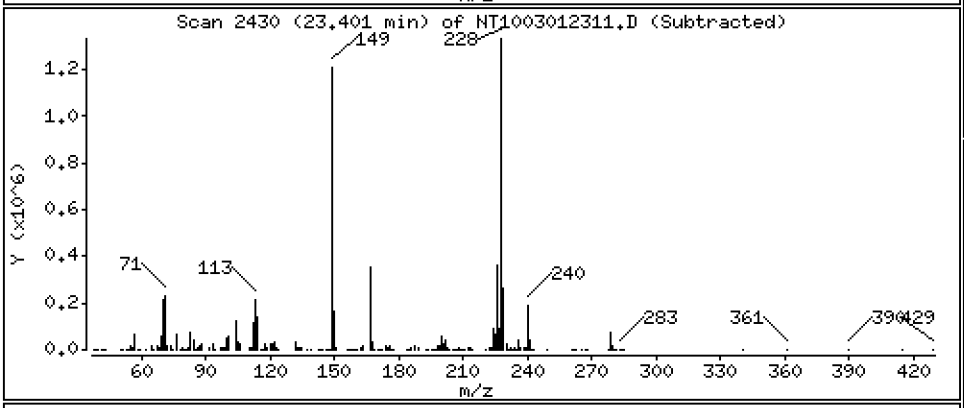
Column diameter: 0.25

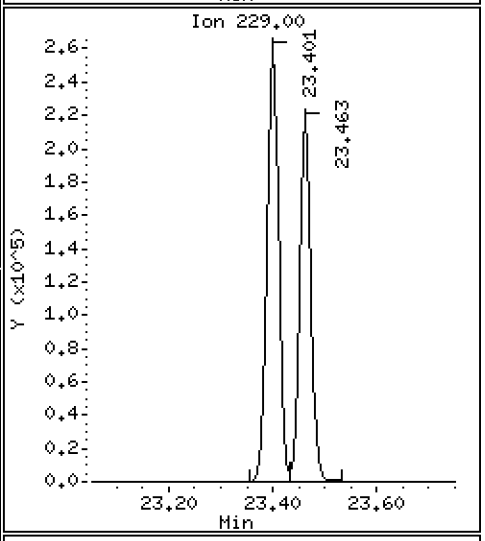
68 Benzo(a)anthracene

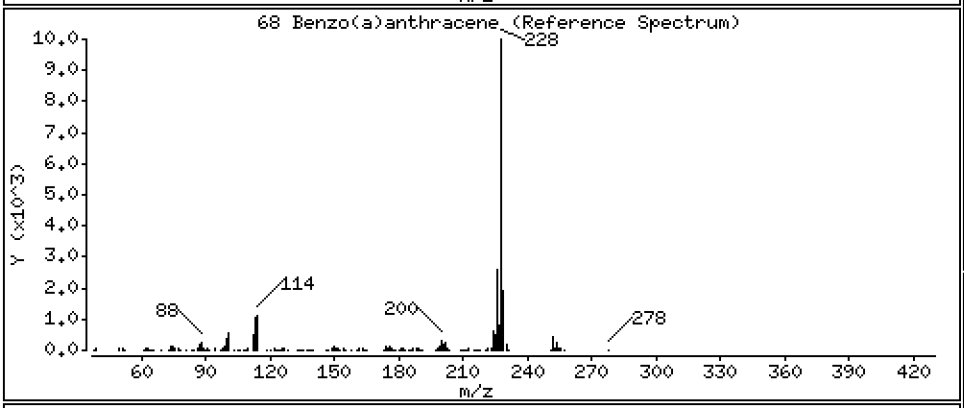
Concentration: 4.578 ug/mL

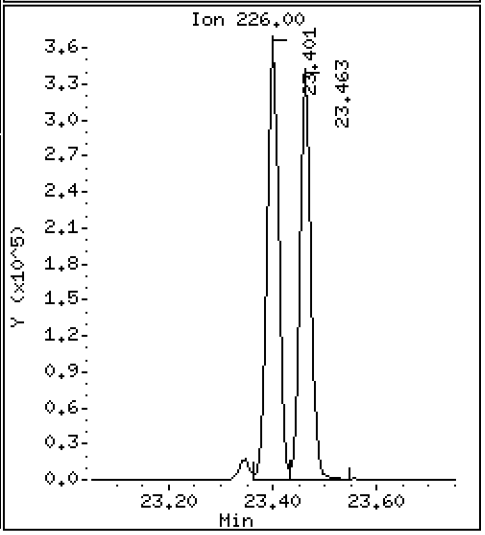


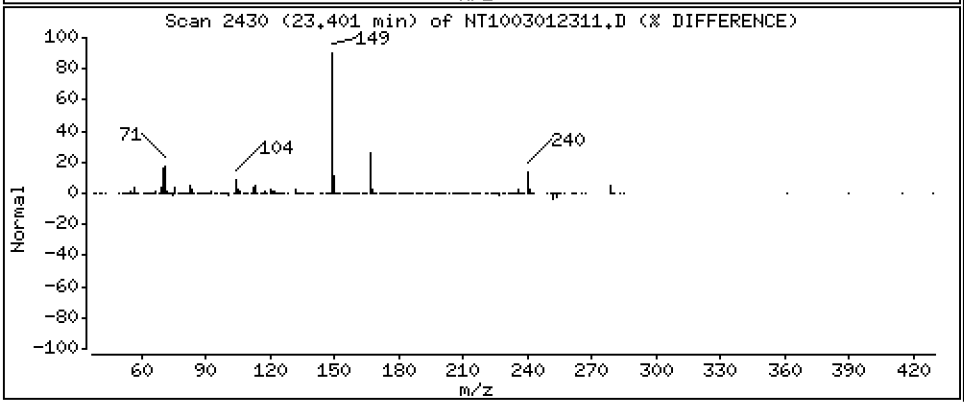












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

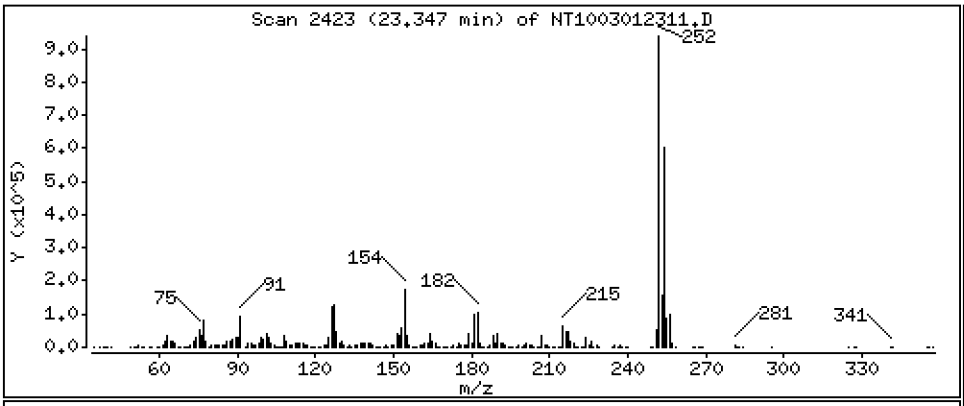
Operator: VTS

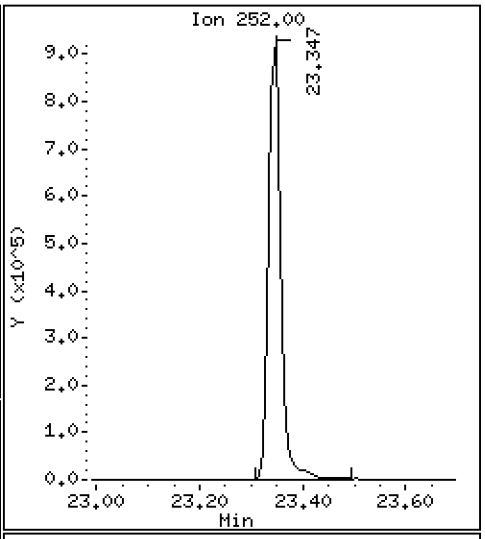
Column phase: ZB-5msi

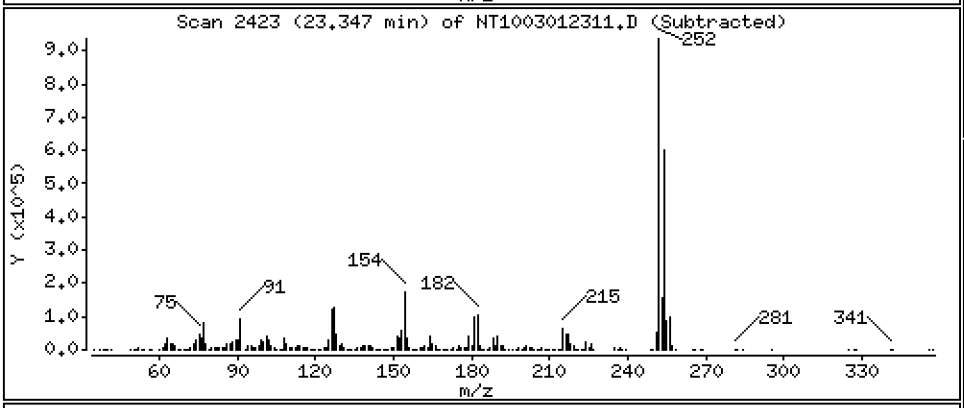
Column diameter: 0.25

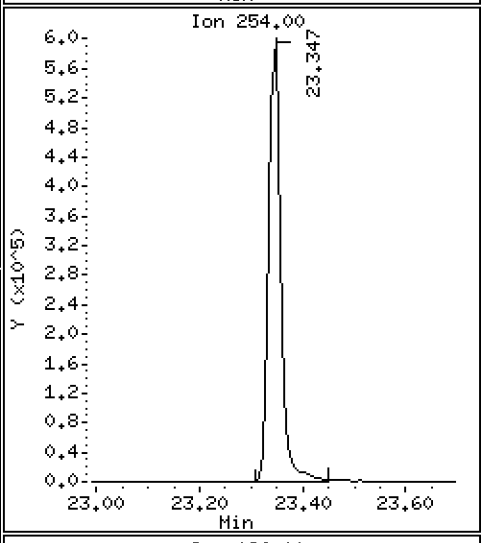
70 3,3'-Dichlorobenzidine

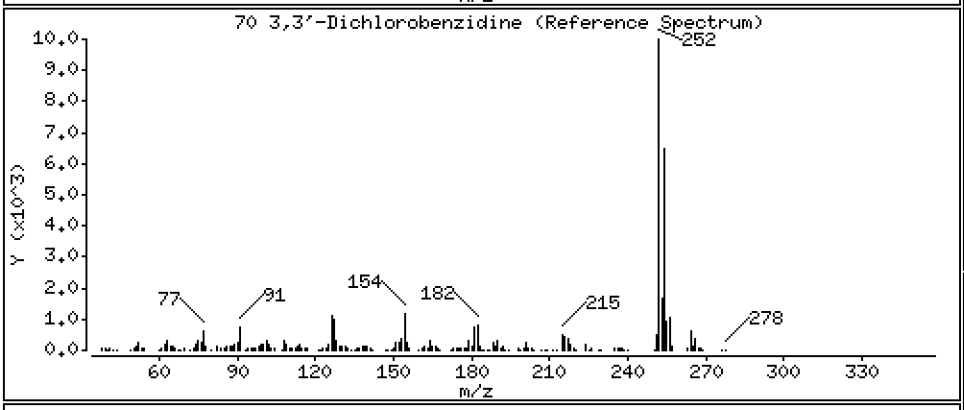
Concentration: 7.383 ug/mL

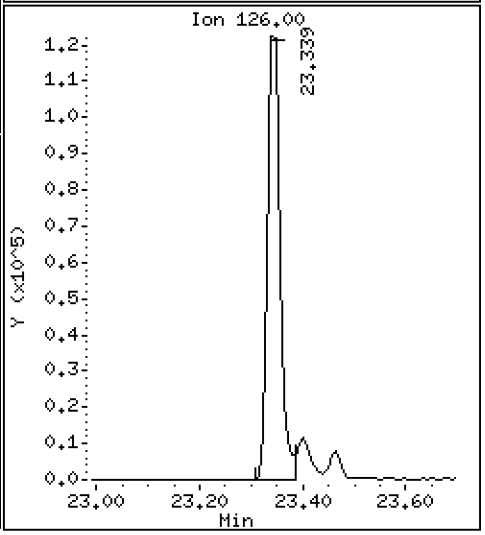


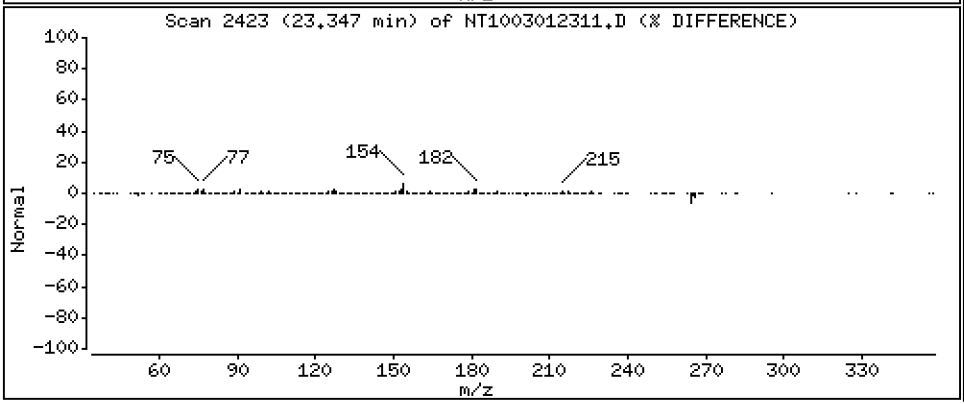












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

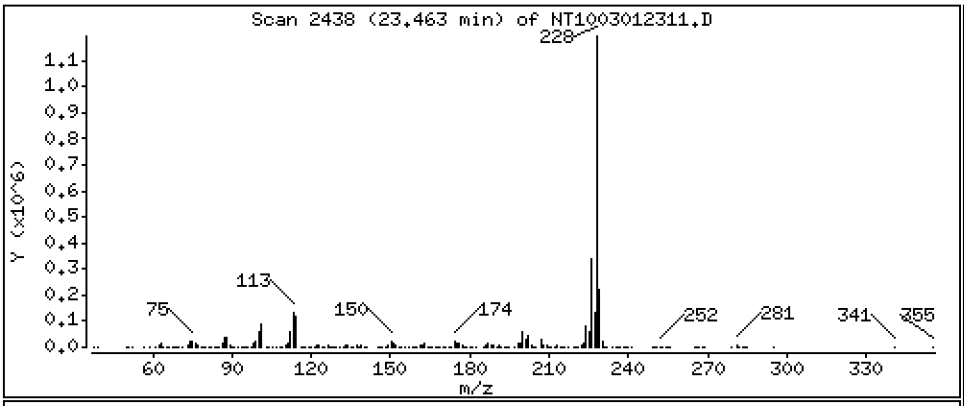
Operator: VTS

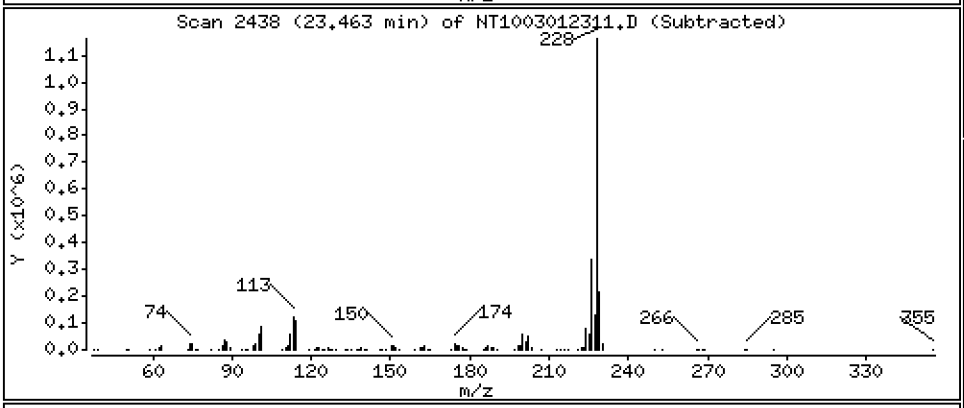
Column phase: ZB-5msi

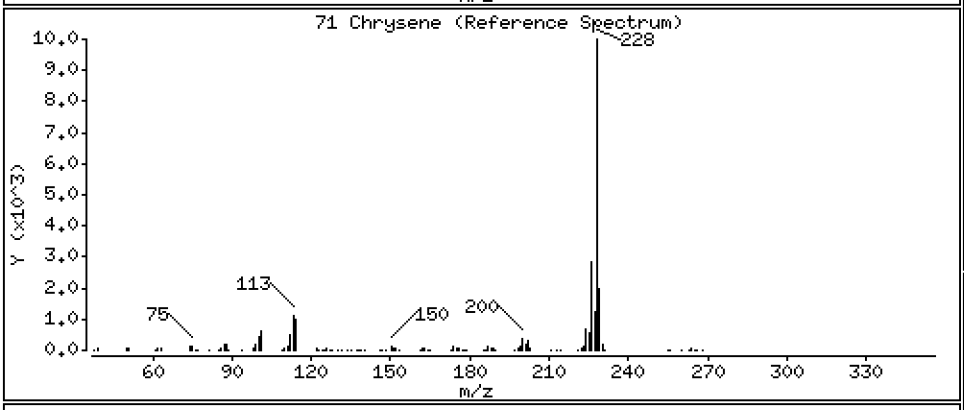
Column diameter: 0.25

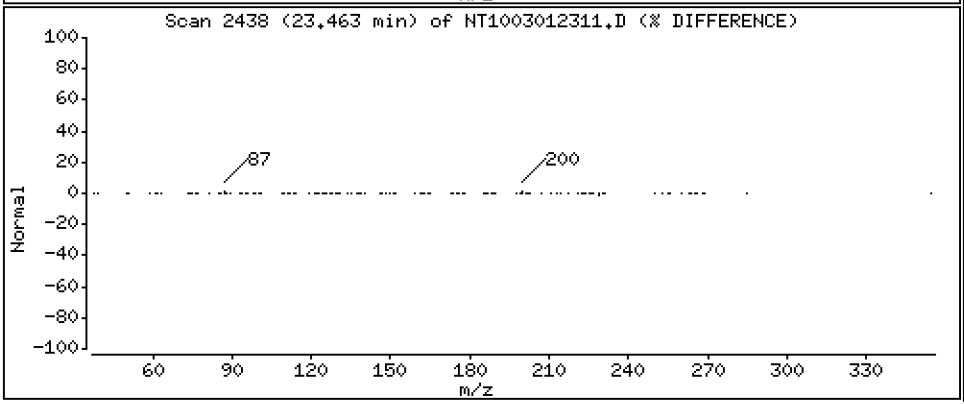
71 Chrysene

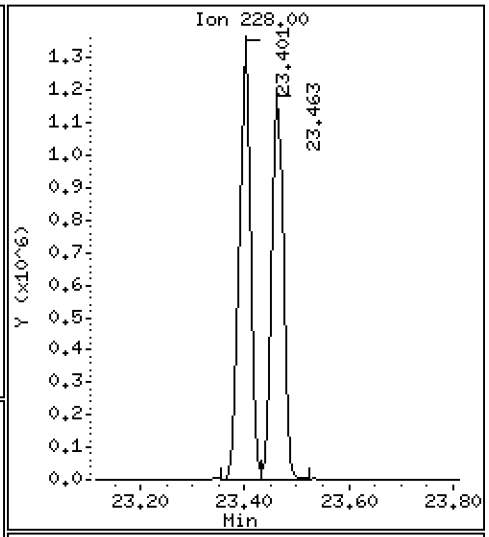
Concentration: 4.967 ug/mL

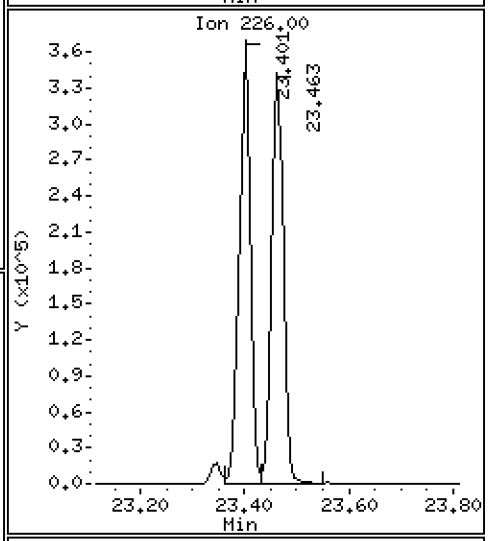


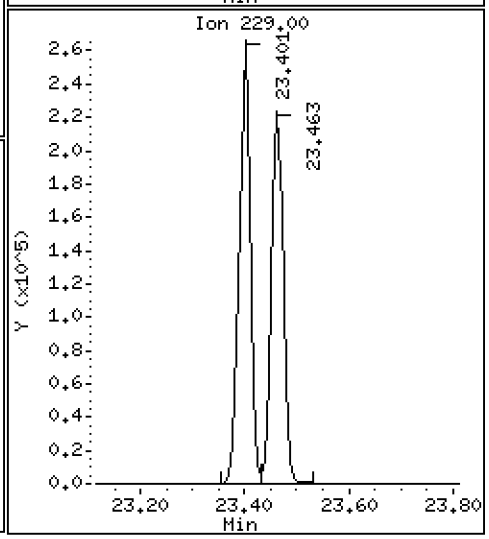












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

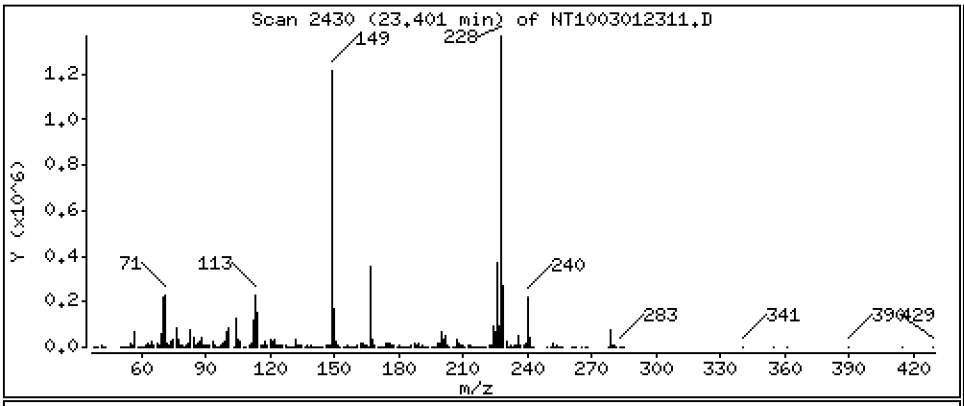
Operator: VTS

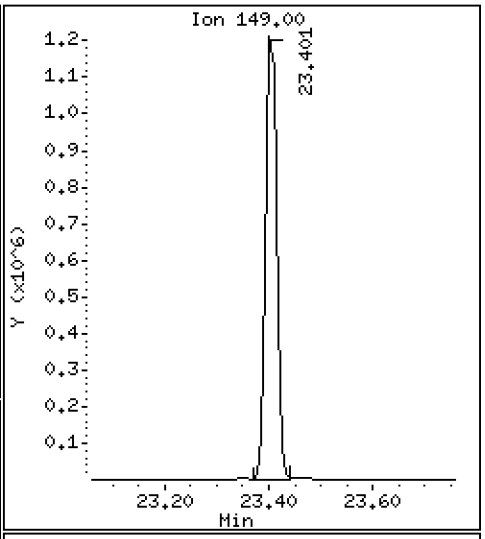
Column phase: ZB-5msi

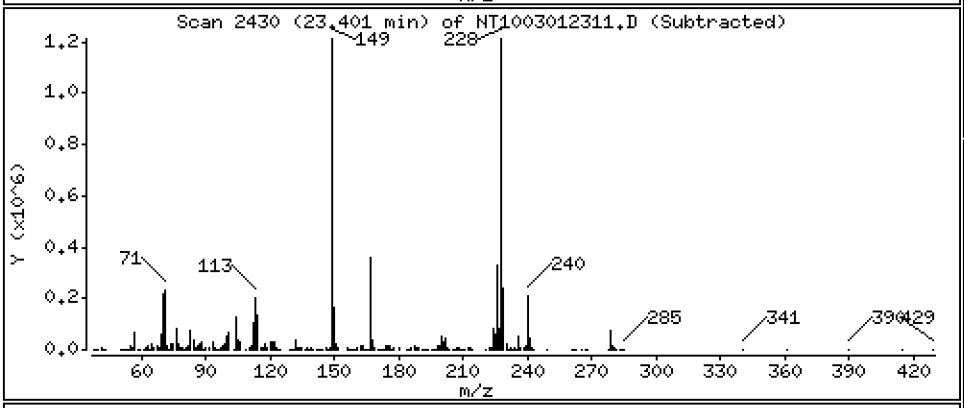
Column diameter: 0.25

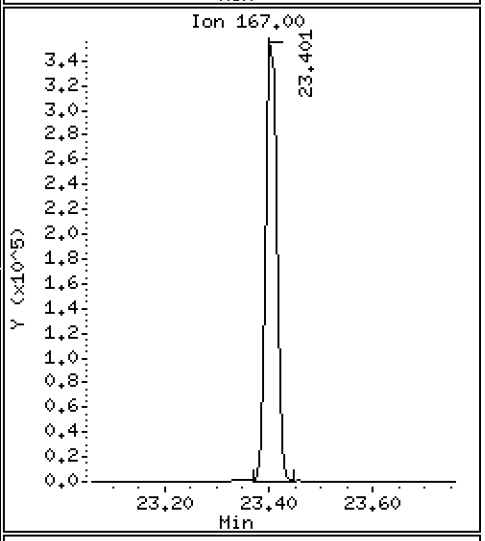
72 bis(2-Ethylhexyl)phthalate

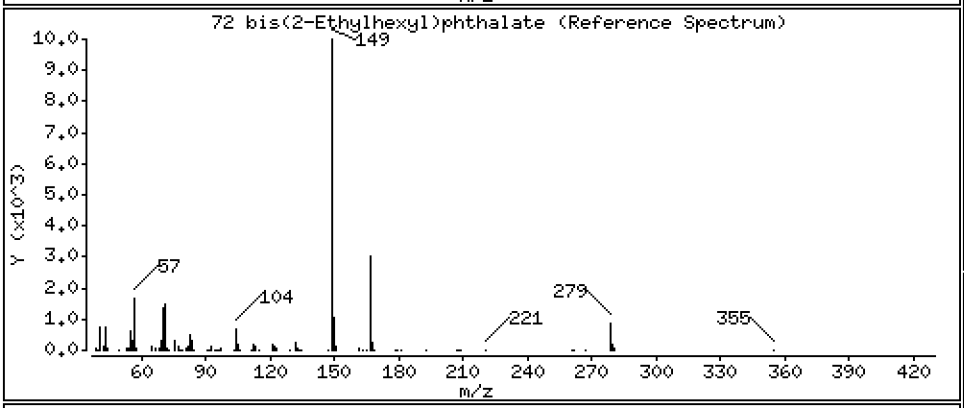
Concentration: 4.956 ug/mL

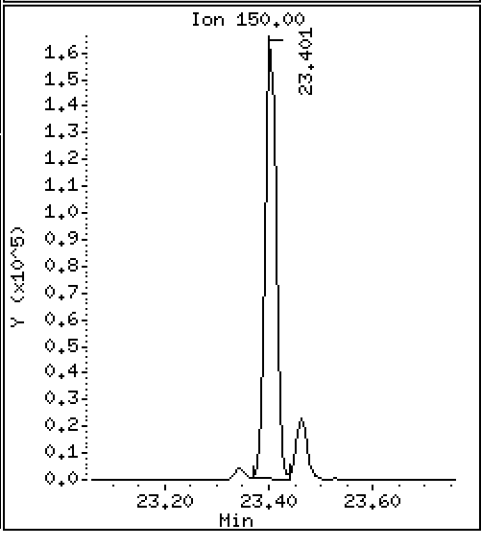


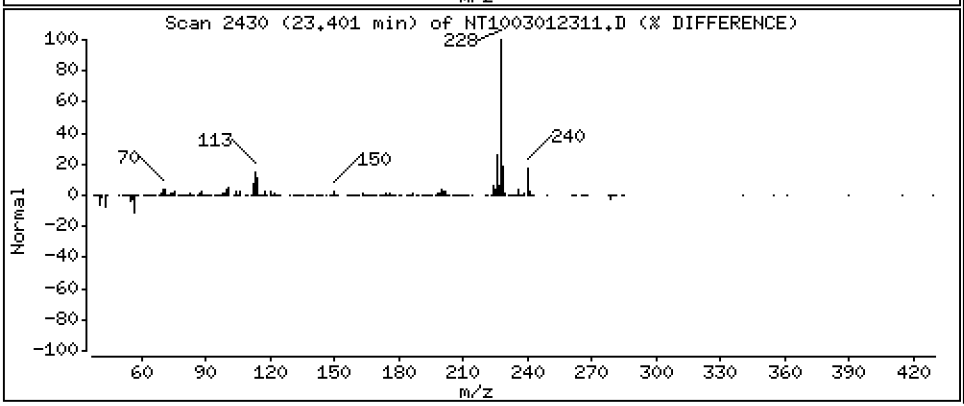












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

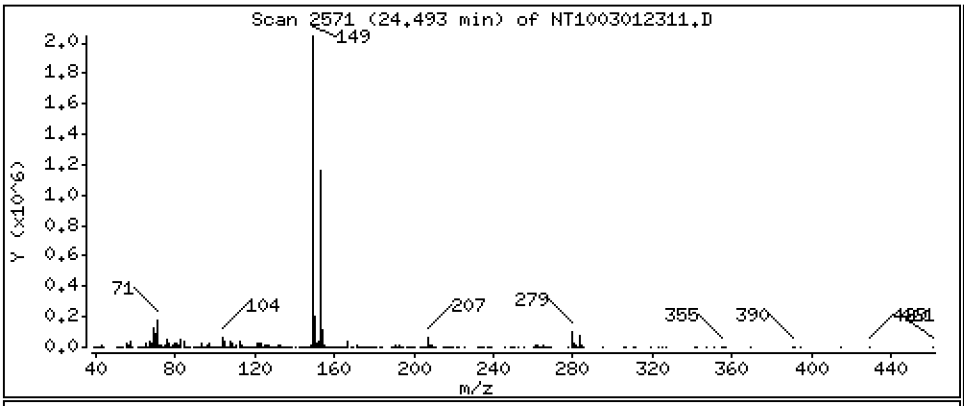
Operator: VTS

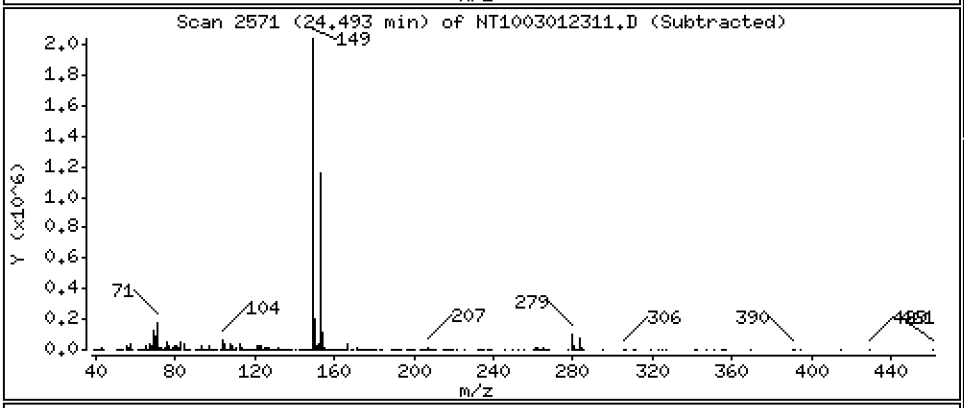
Column phase: ZB-5msi

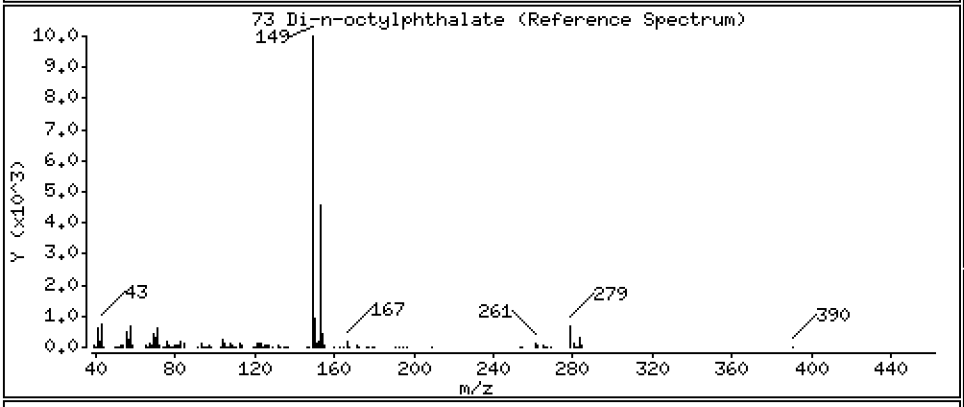
Column diameter: 0.25

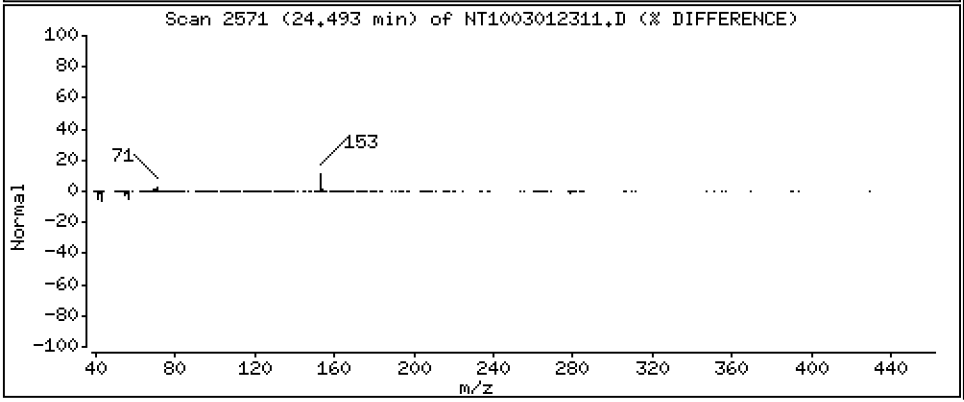
73 Di-n-octylphthalate

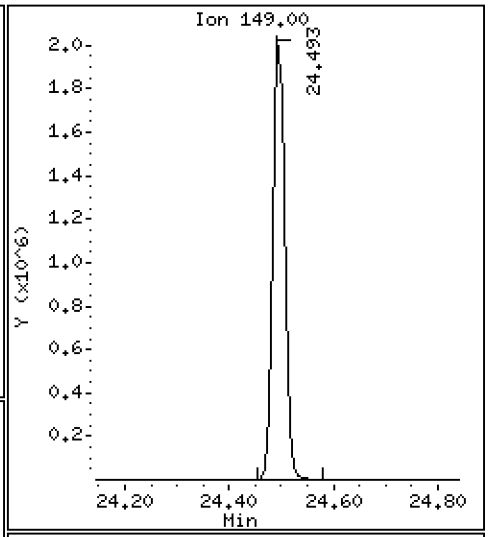
Concentration: 5.844 ug/mL

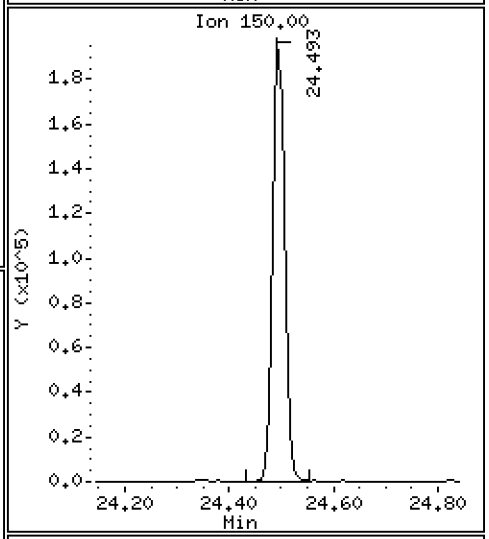


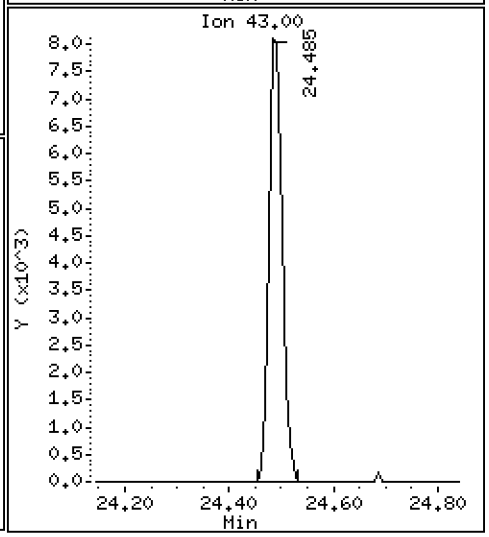












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

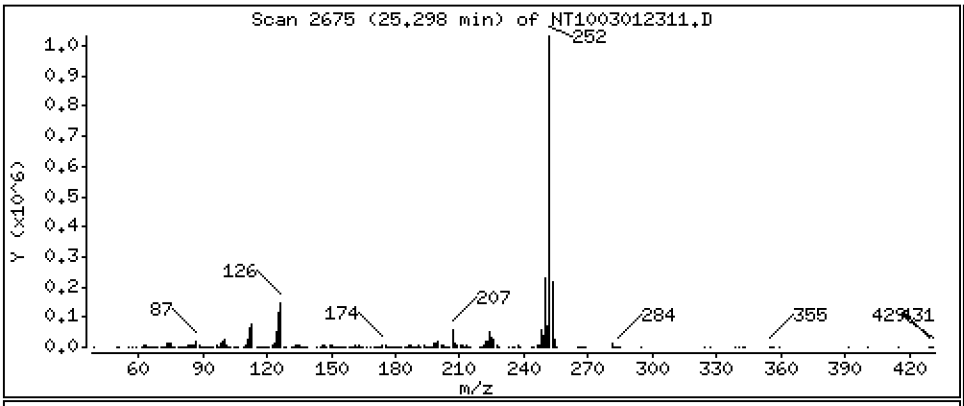
Operator: VTS

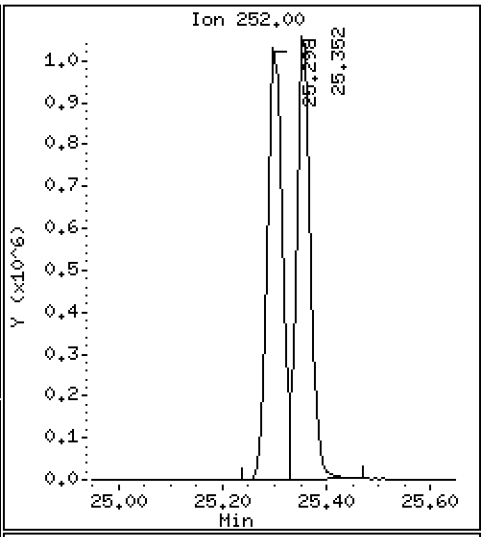
Column phase: ZB-5msi

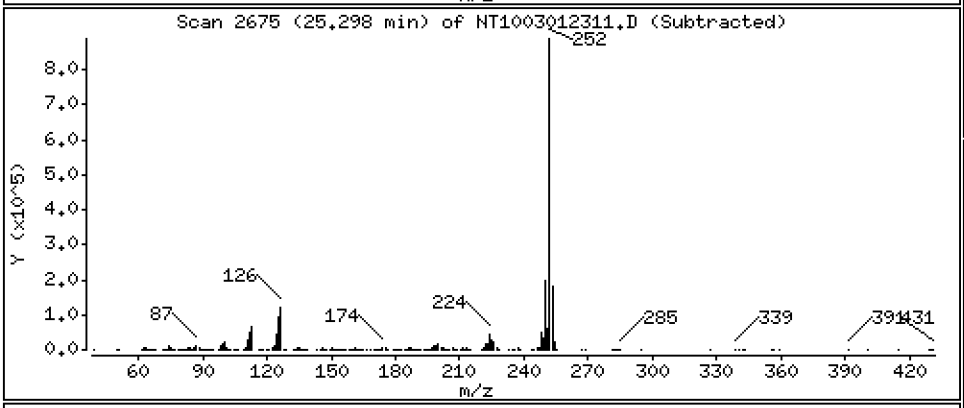
Column diameter: 0.25

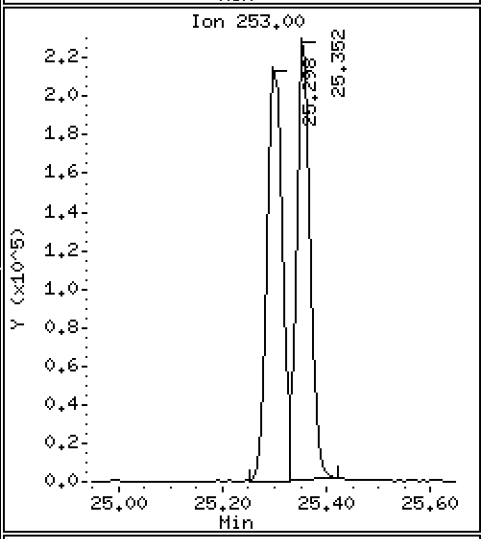
74 Benzo(b)fluoranthene

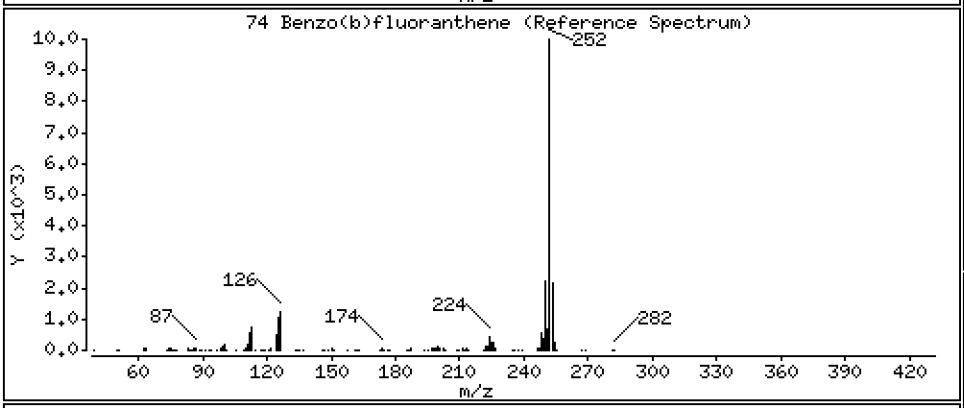
Concentration: 4.319 ug/mL

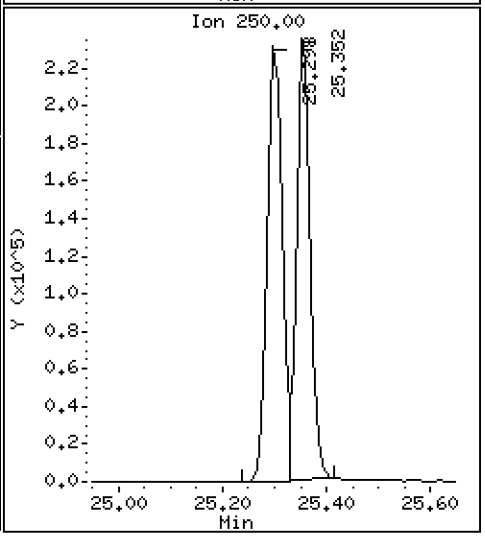


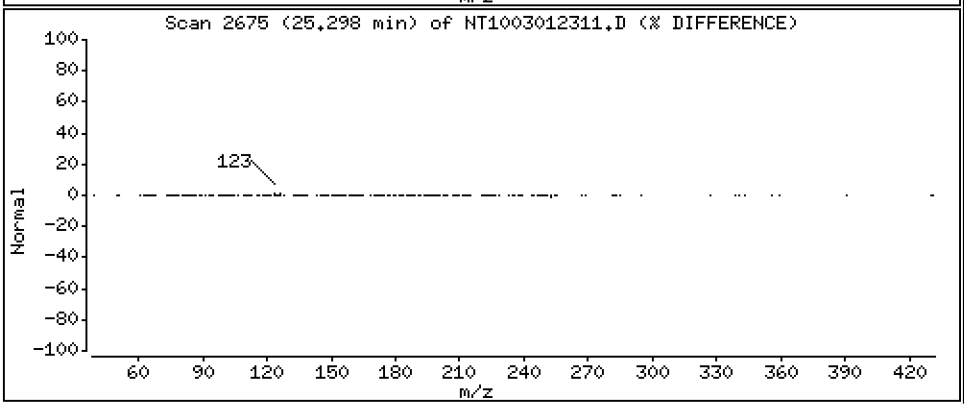












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

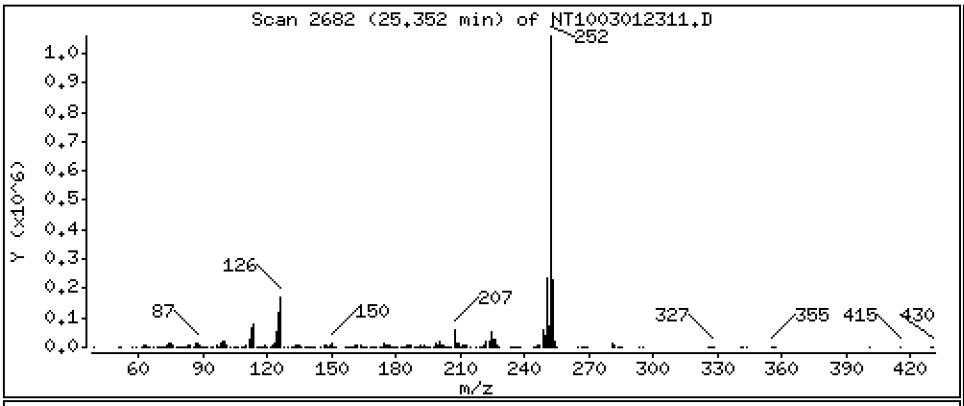
Operator: VTS

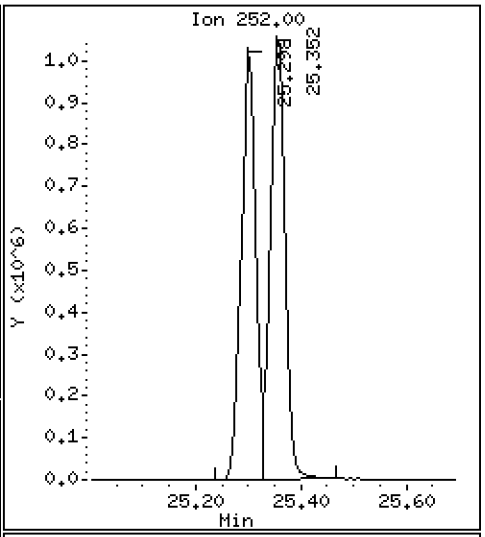
Column phase: ZB-5msi

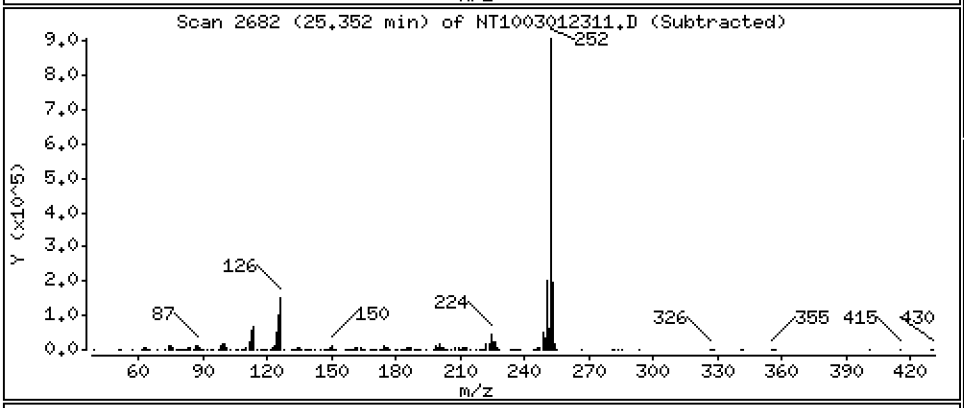
Column diameter: 0.25

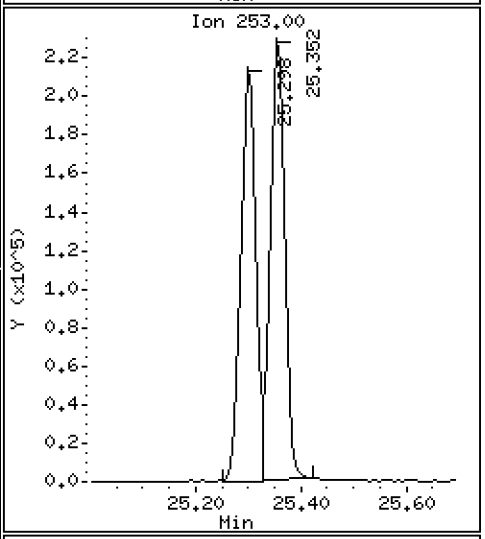
75 Benzo(k)fluoranthene

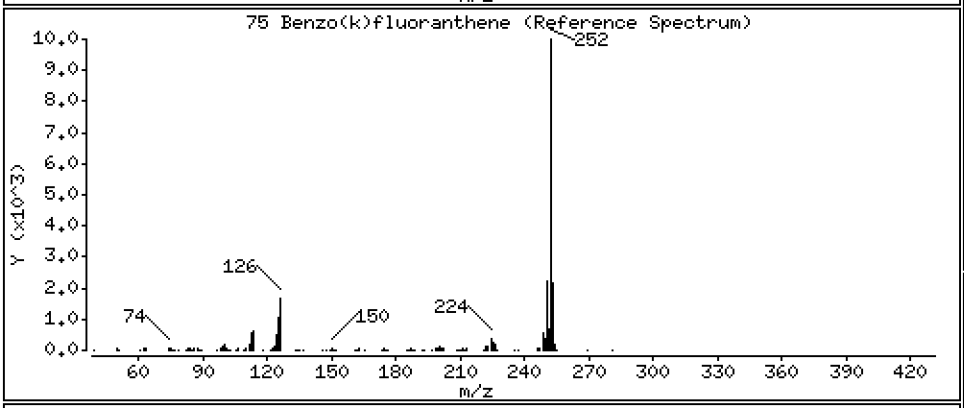
Concentration: 4.563 ug/mL

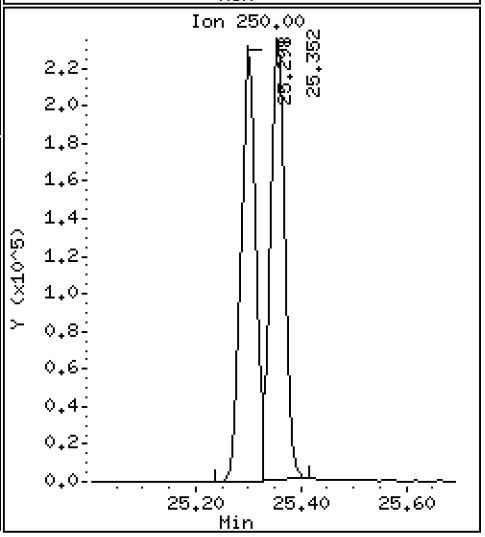


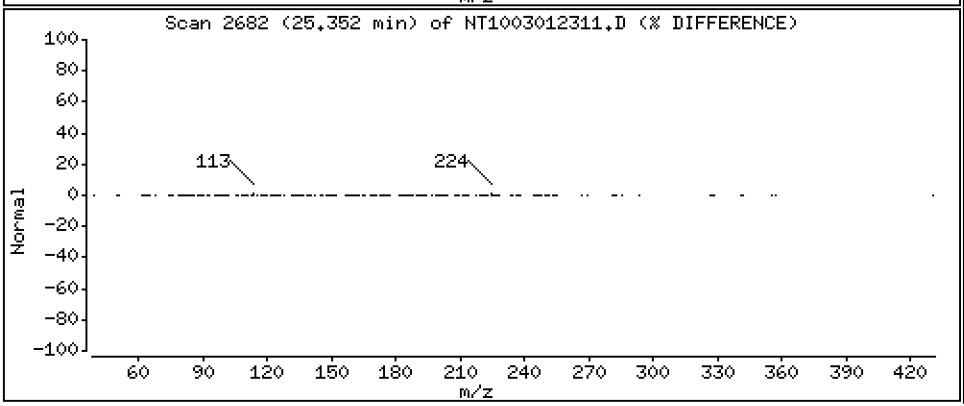












Date : 01-MAR-2023 21:46

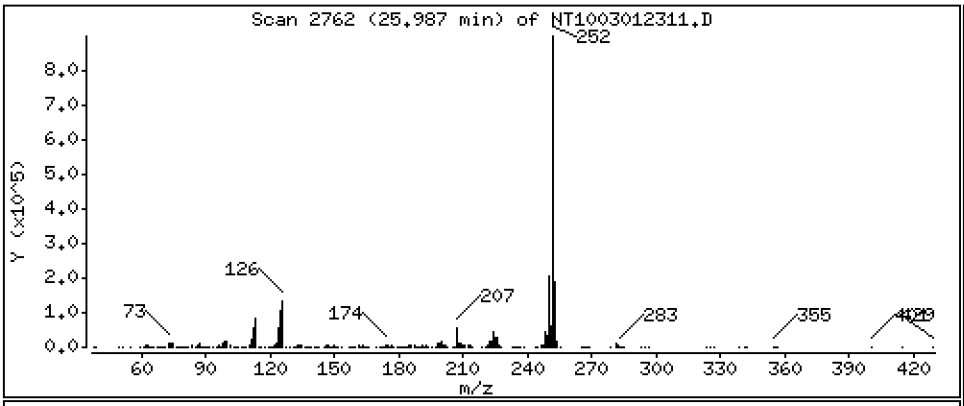
Client ID: Instrument: nt10.i

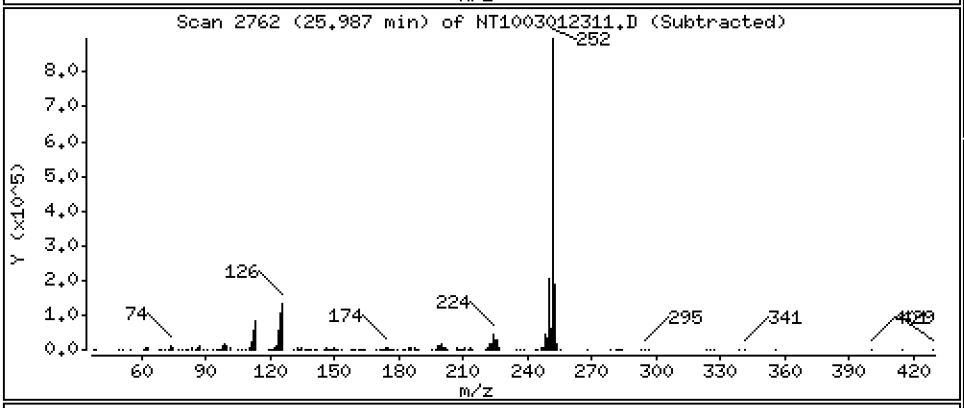
Sample Info: SEQ-SCV1

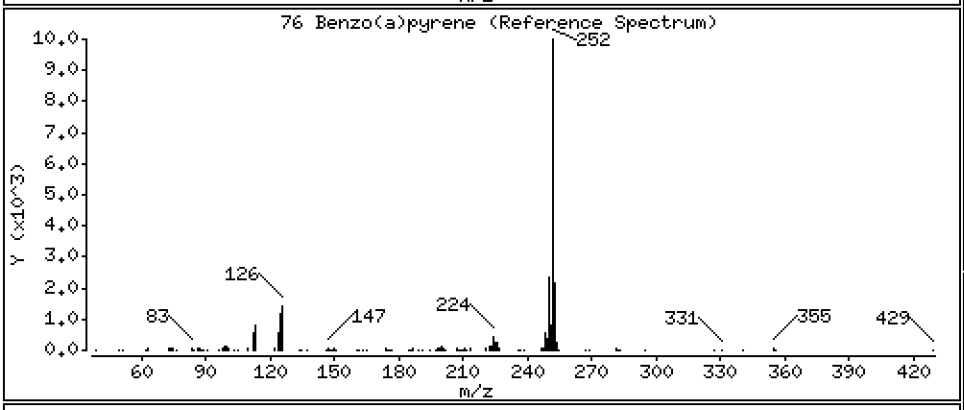
Operator: VTS

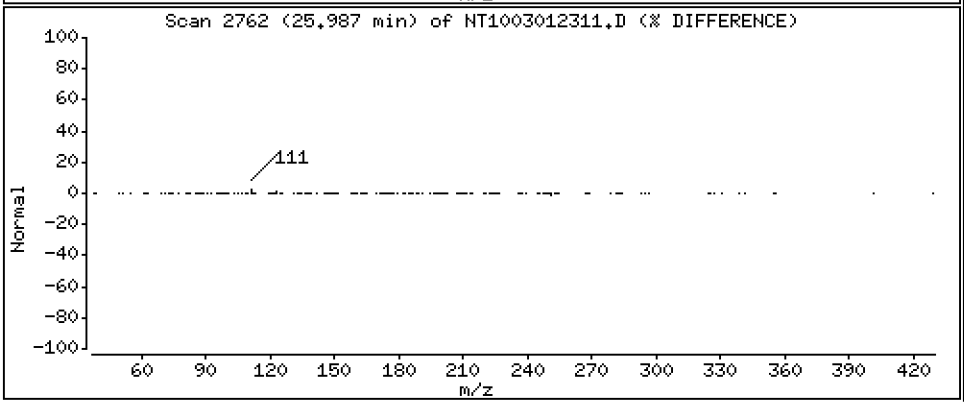
Column phase: ZB-5msi Column diameter: 0.25

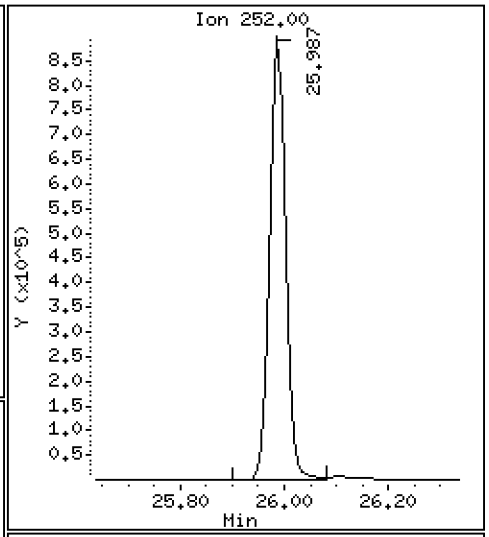
76 Benzo(a)pyrene Concentration: 4.445 ug/mL

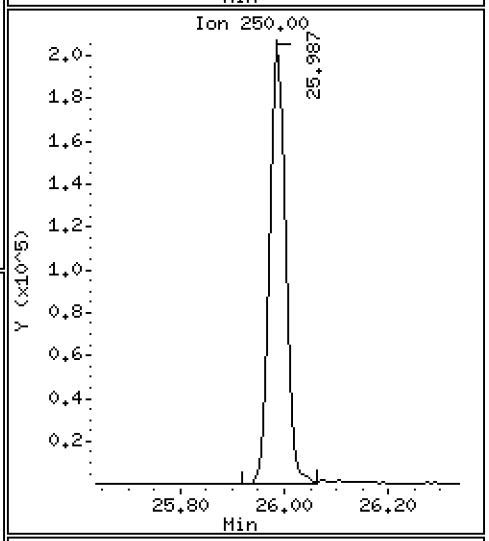


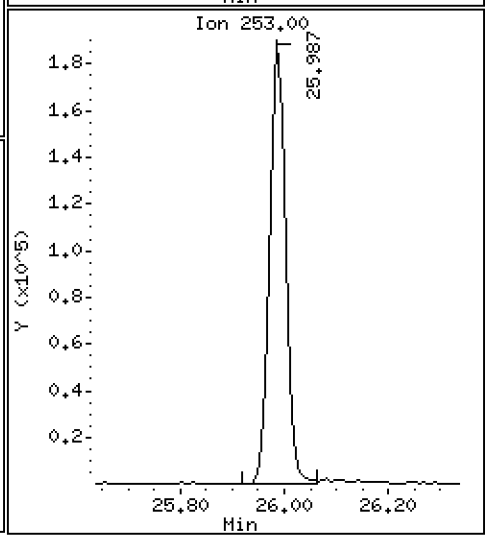












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

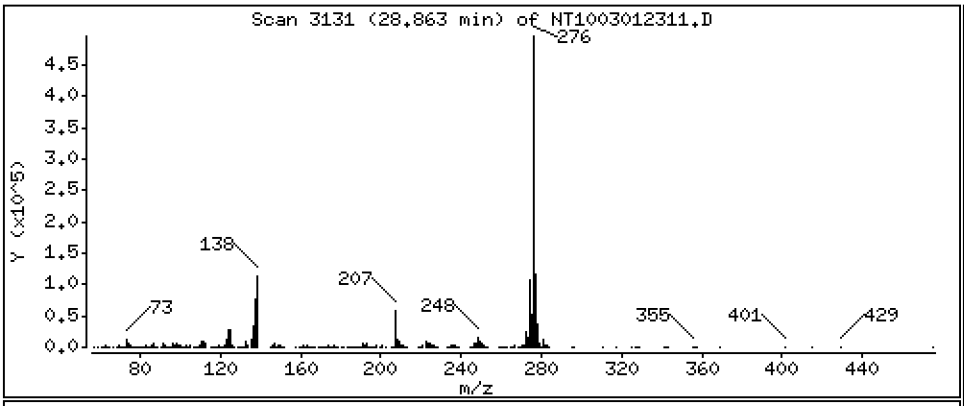
Operator: VTS

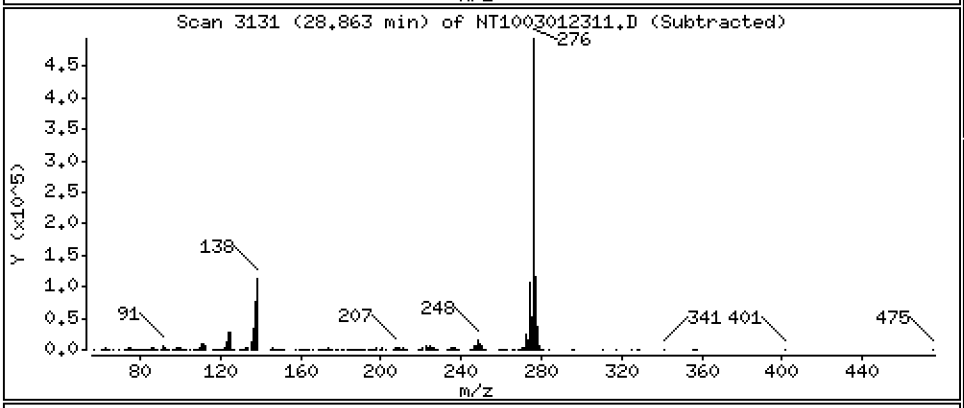
Column phase: ZB-5msi

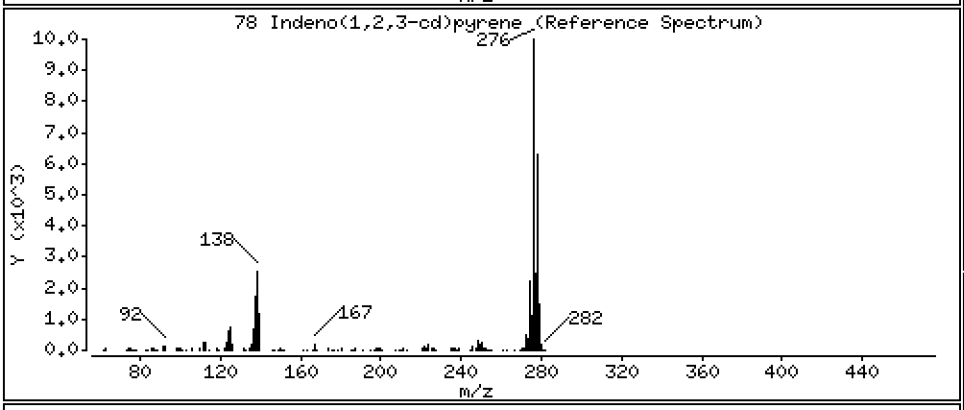
Column diameter: 0.25

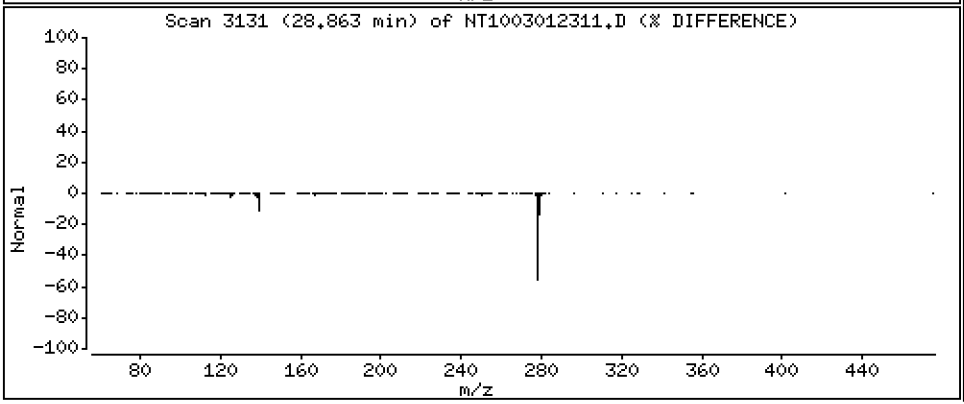
78 Indeno(1,2,3-cd)pyrene

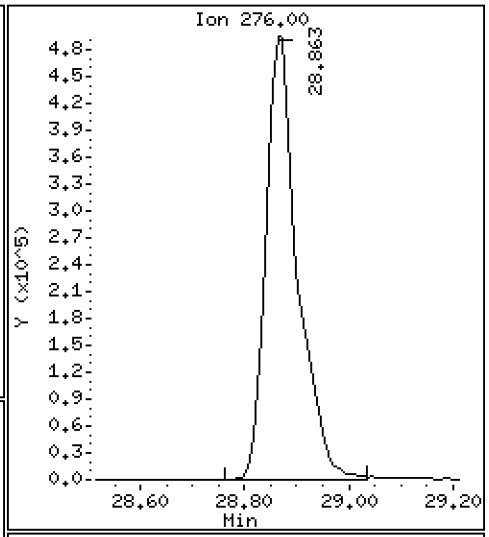
Concentration: 4.345 ug/mL

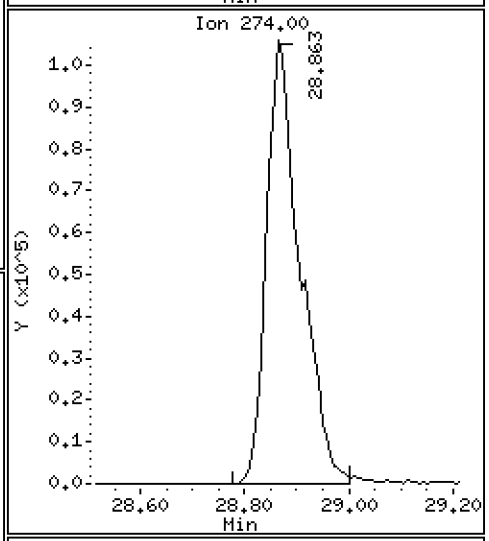


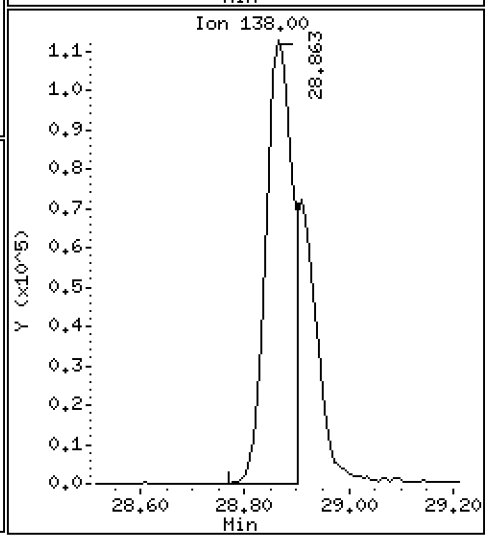












Date : 01-MAR-2023 21:46

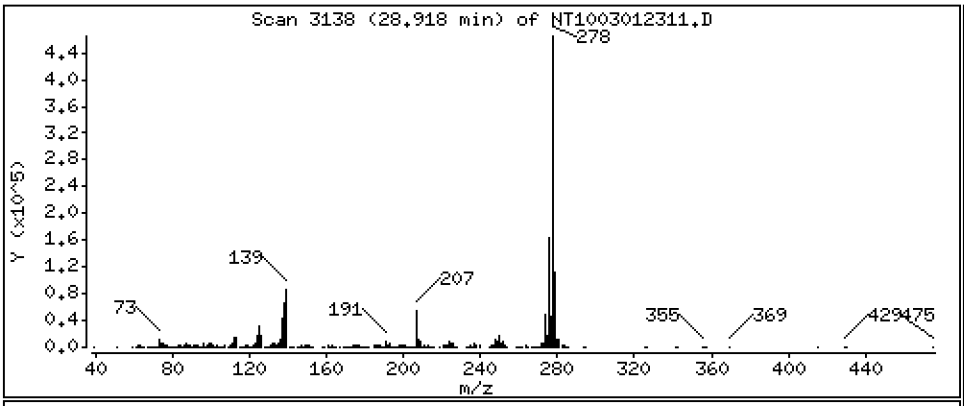
Client ID: Instrument: nt10.i

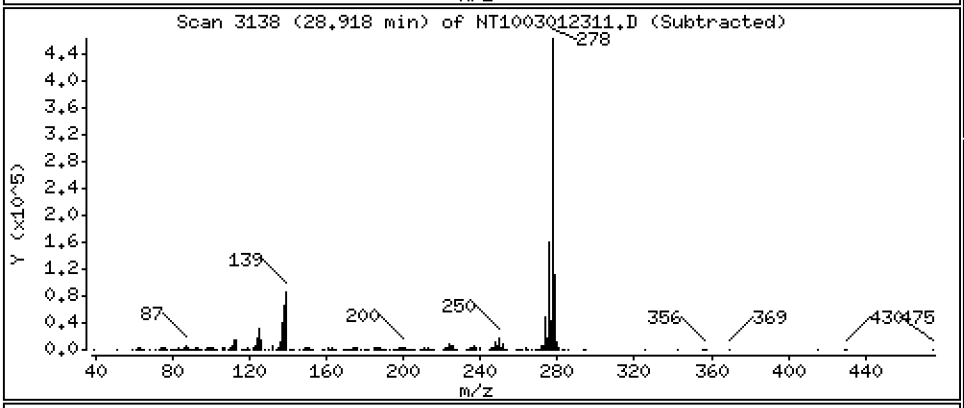
Sample Info: SEQ-SCV1

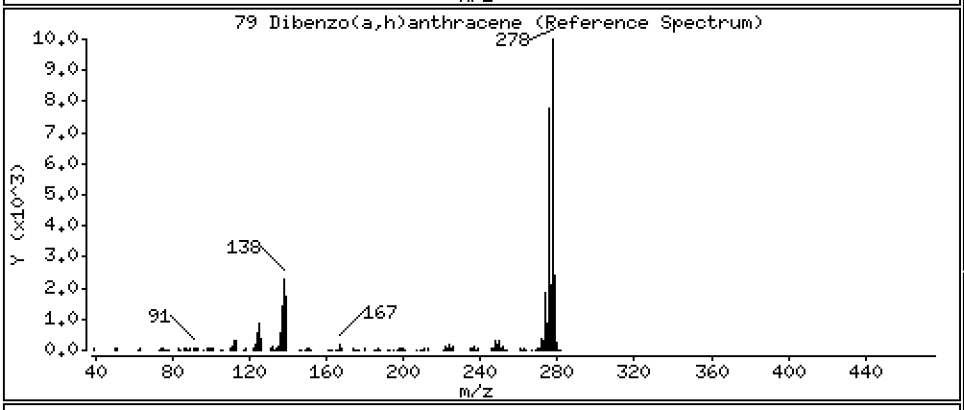
Operator: VTS

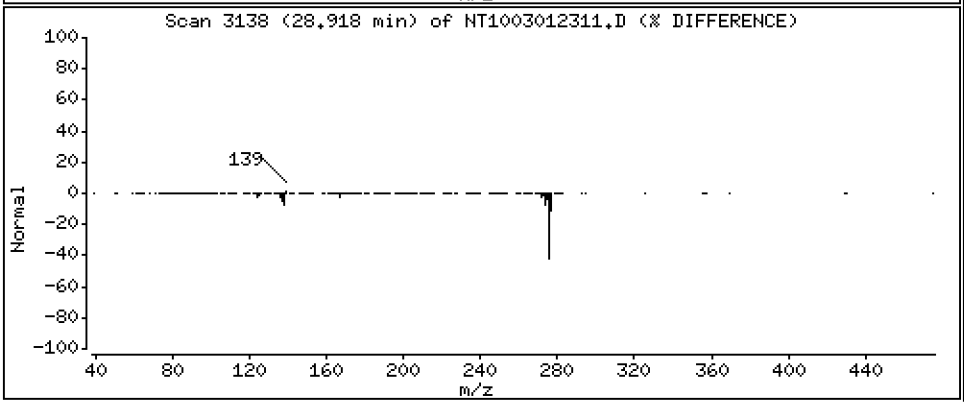
Column phase: ZB-5msi Column diameter: 0.25

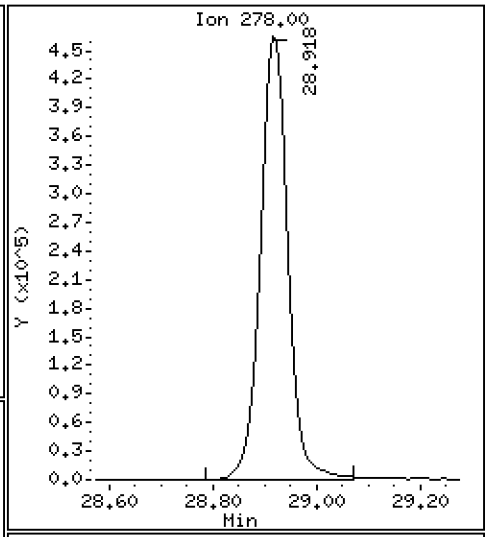
79 Dibenzo(a,h)anthracene Concentration: 4.608 ug/mL

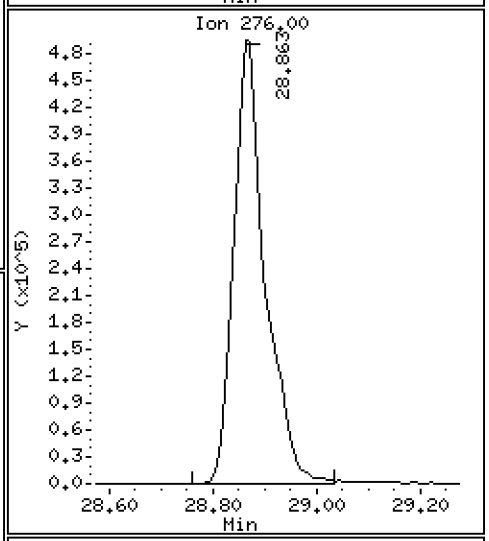


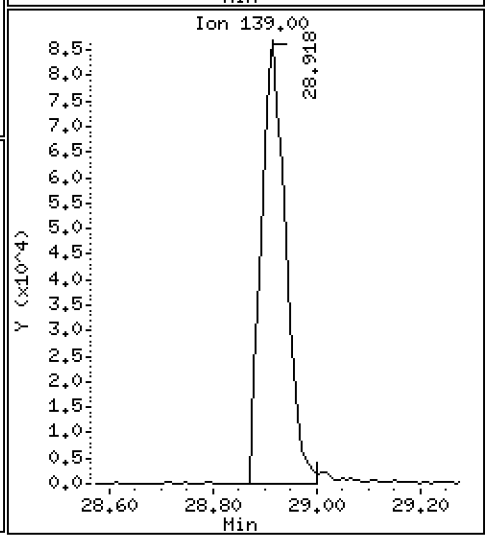












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

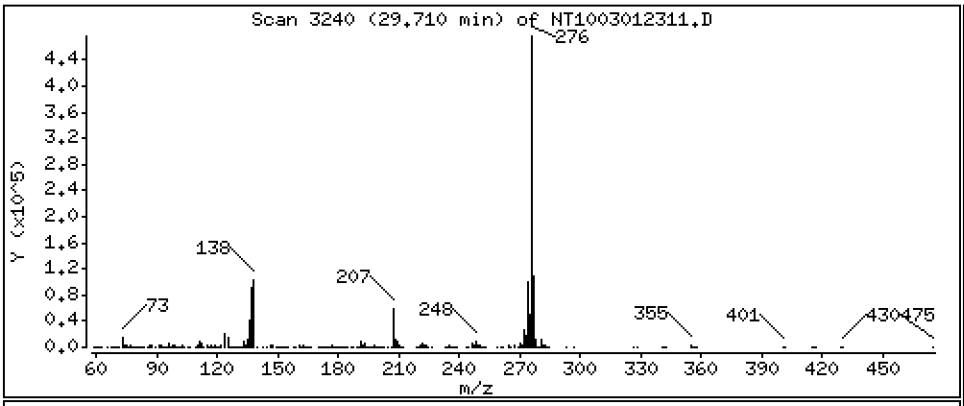
Operator: VTS

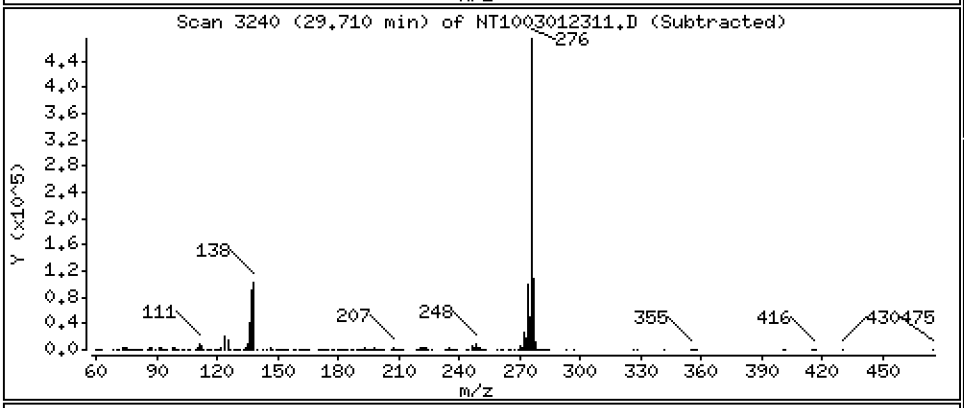
Column phase: ZB-5msi

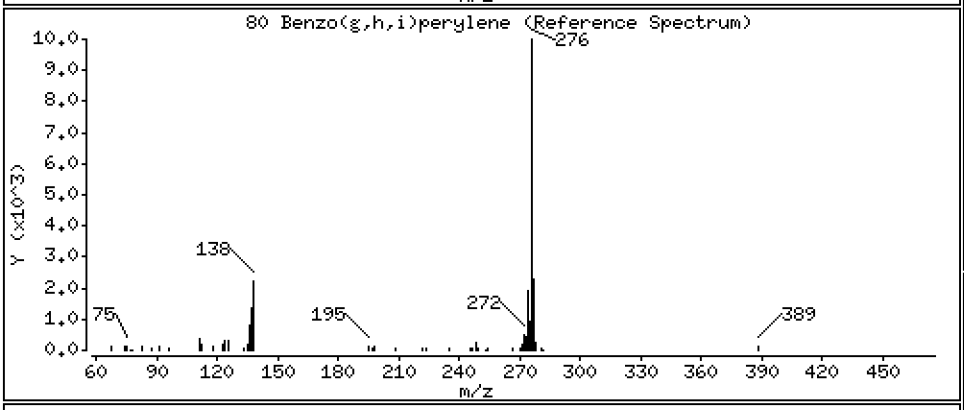
Column diameter: 0.25

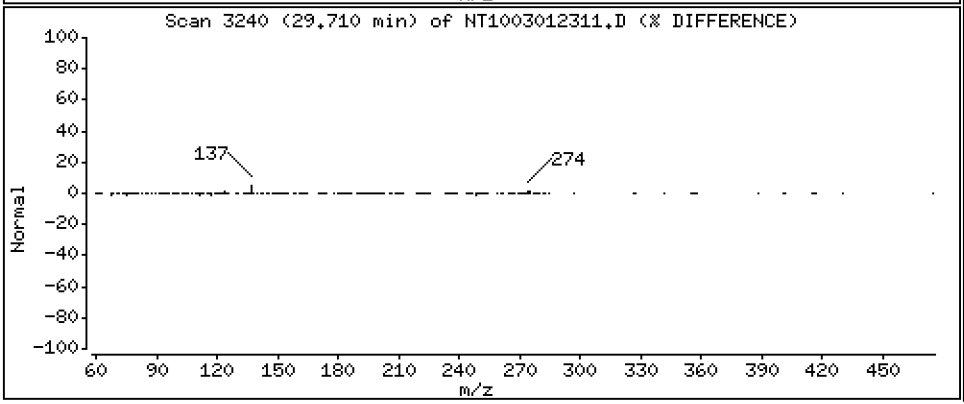
80 Benzo(g,h,i)perylene

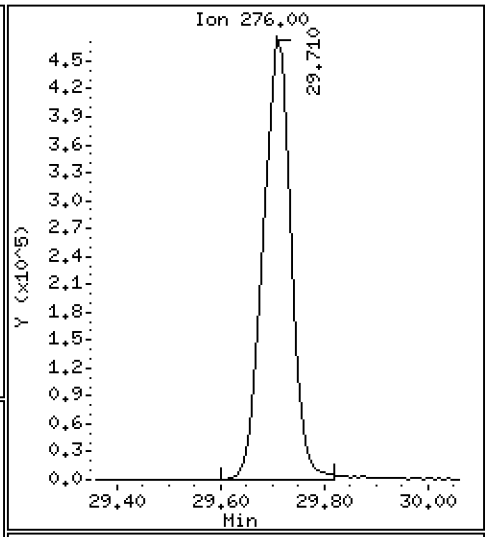
Concentration: 4.602 ug/mL

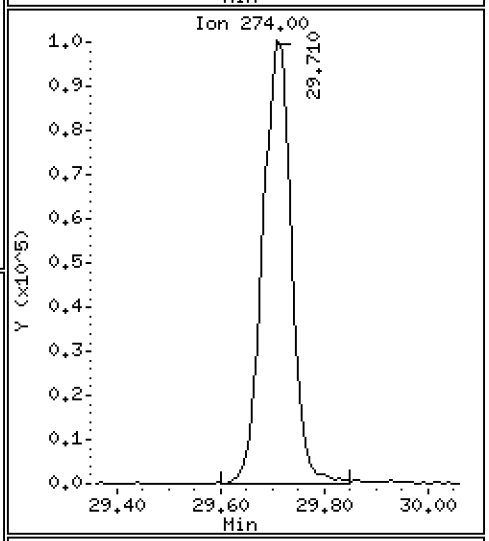


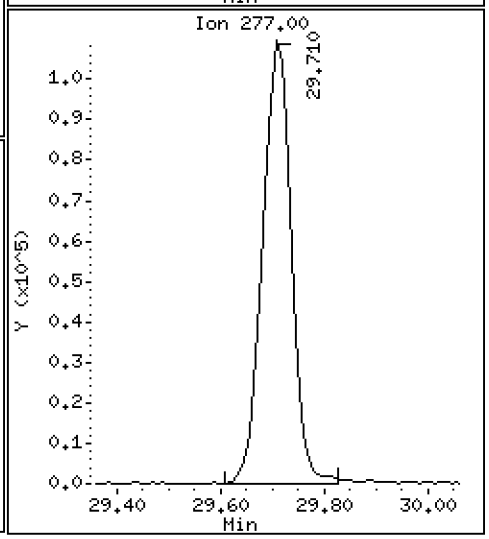












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

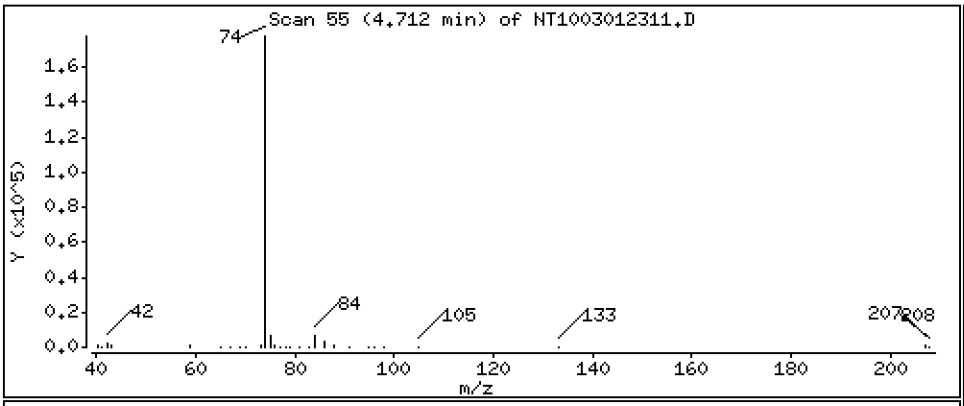
Operator: VTS

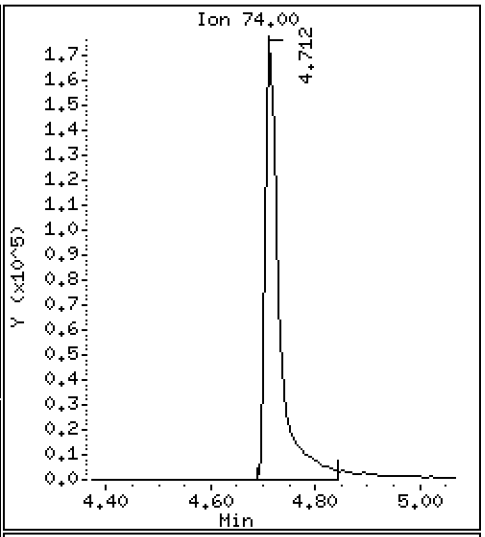
Column phase: ZB-5msi

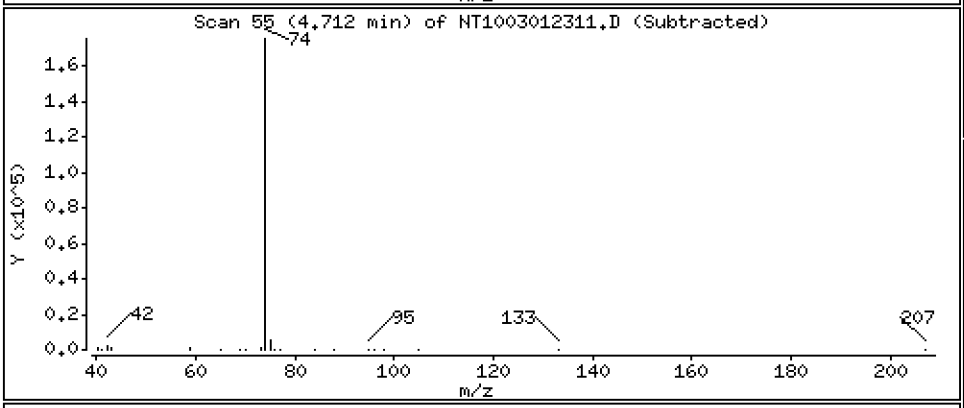
Column diameter: 0.25

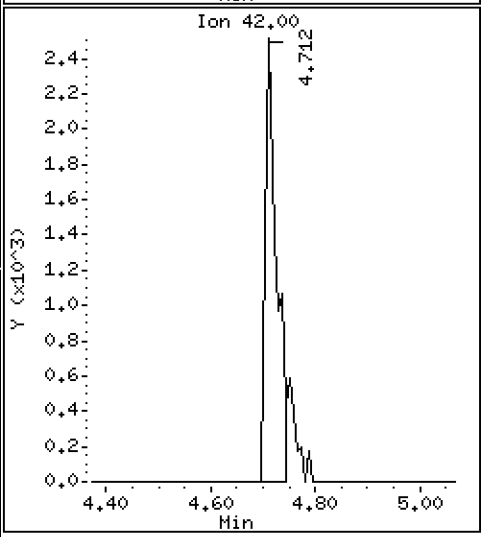
90 N-Nitrosodimethylamine

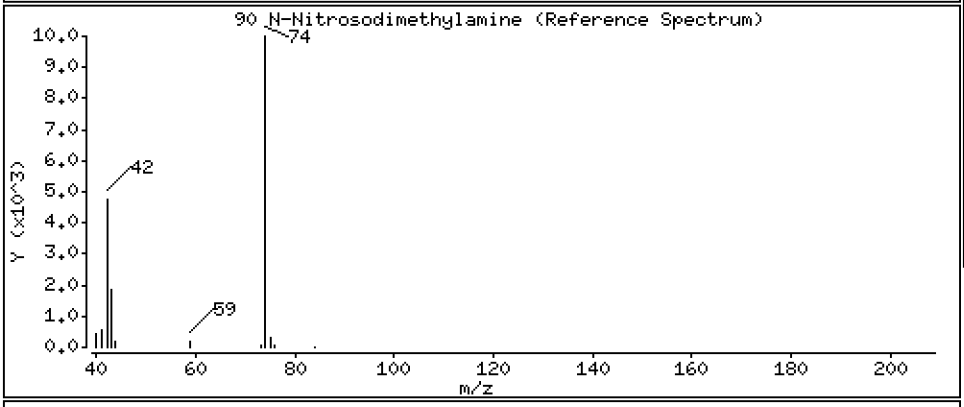
Concentration: 5.491 ug/mL

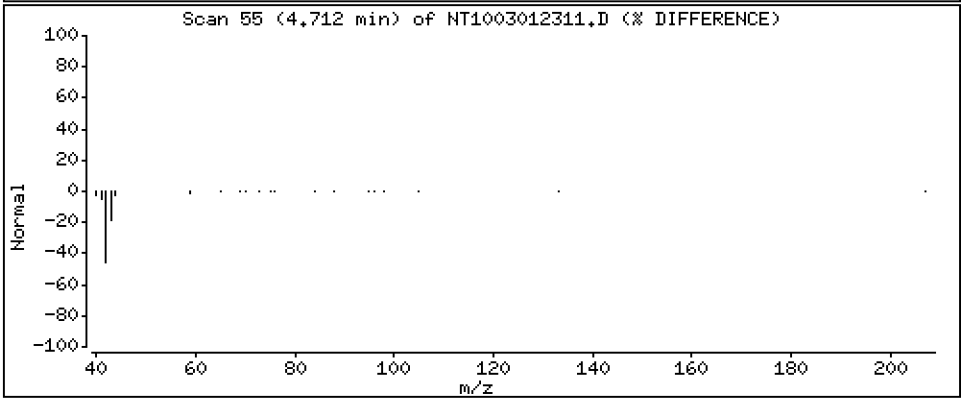












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

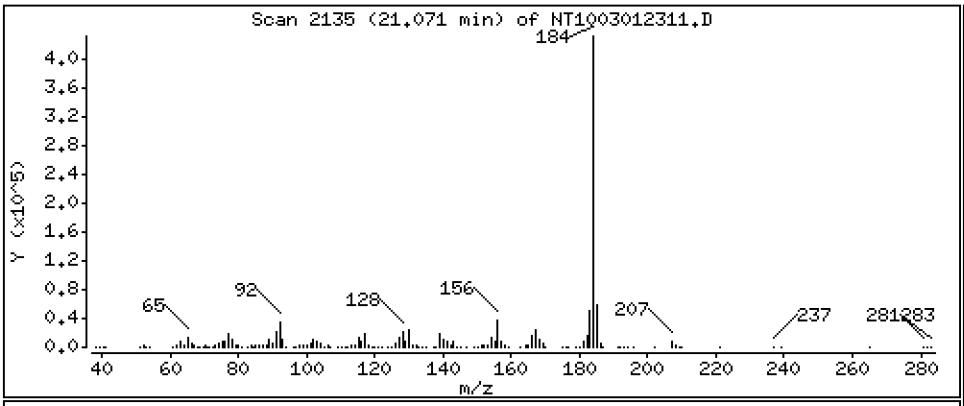
Operator: VTS

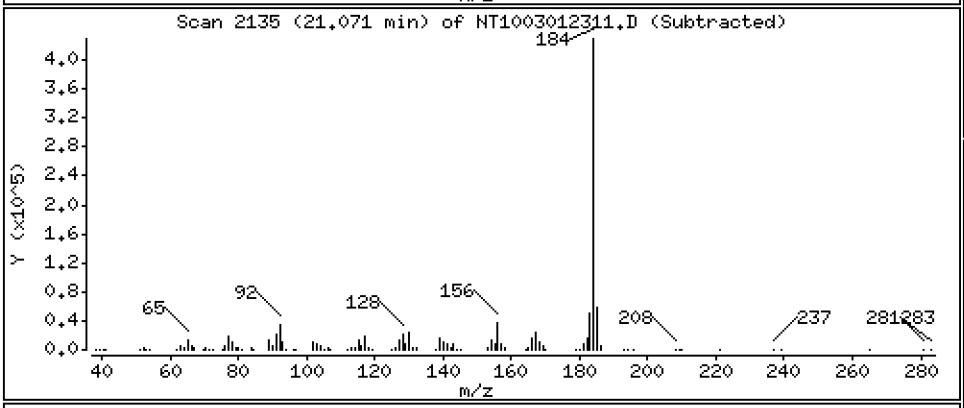
Column phase: ZB-5msi

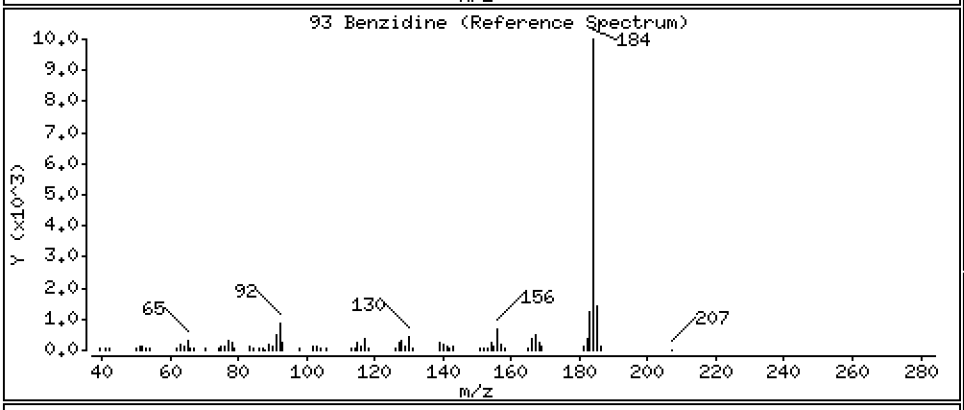
Column diameter: 0.25

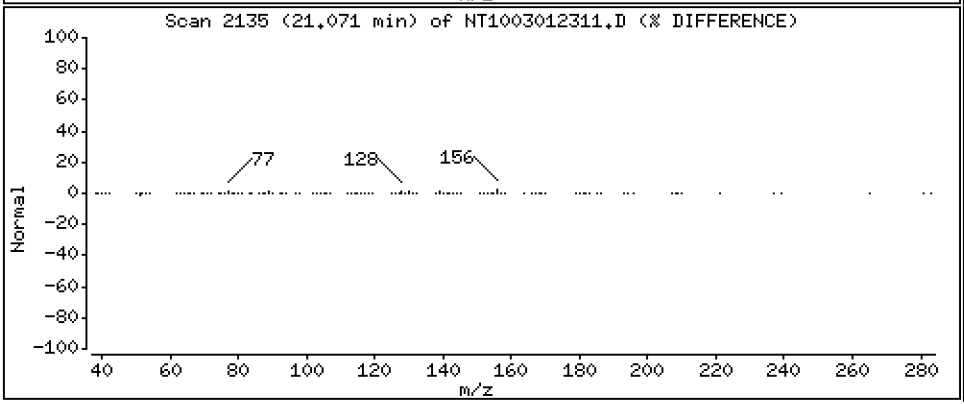
93 Benzidine

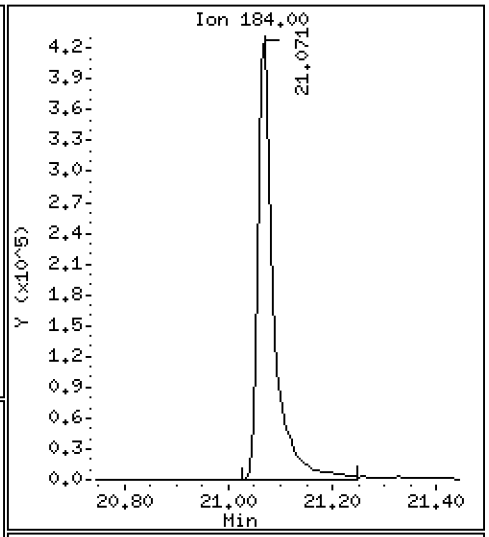
Concentration: 5.007 ug/mL

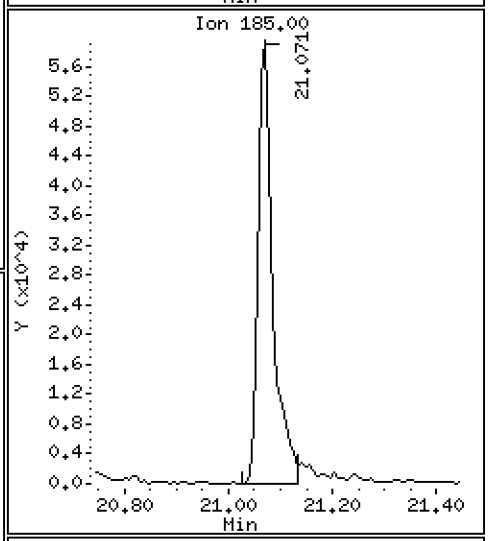


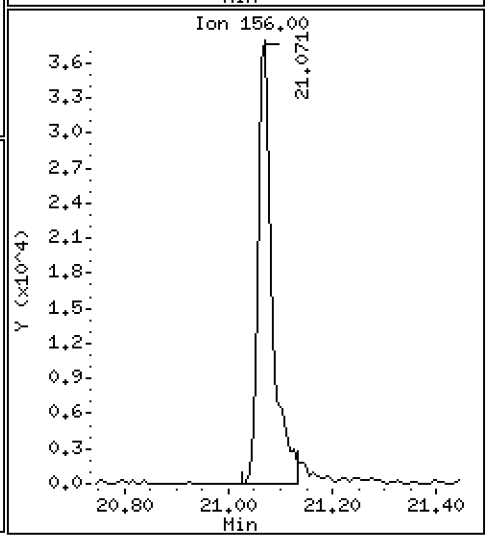












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

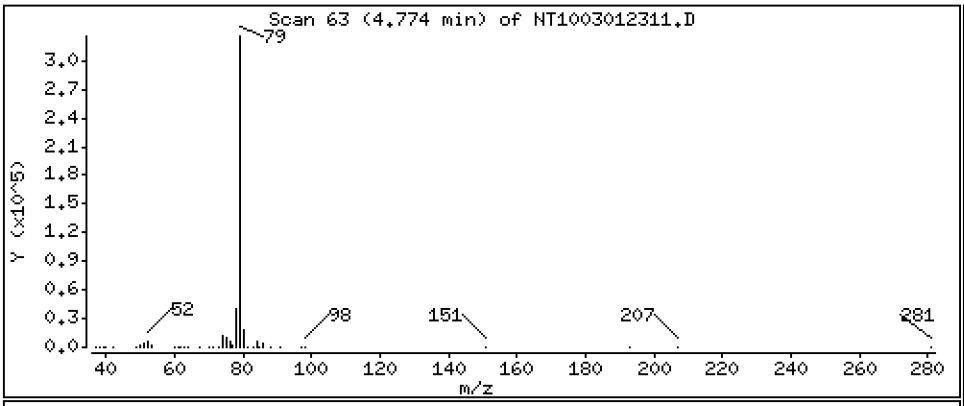
Operator: VTS

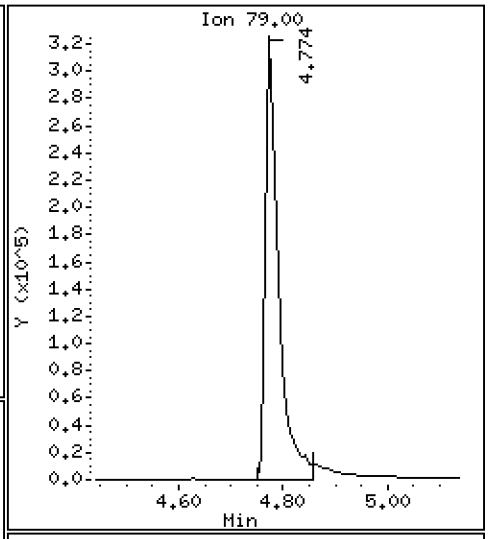
Column phase: ZB-5msi

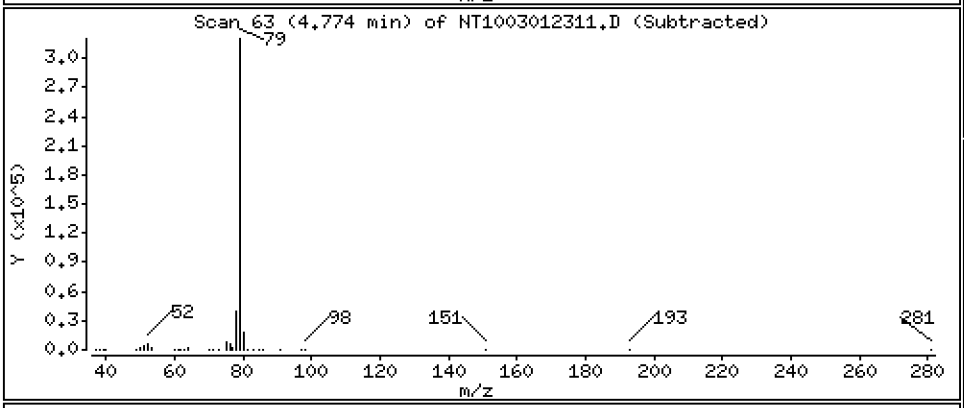
Column diameter: 0.25

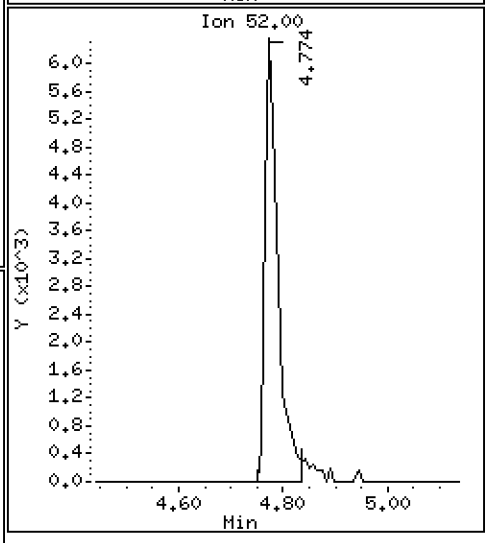
103 Pyridine

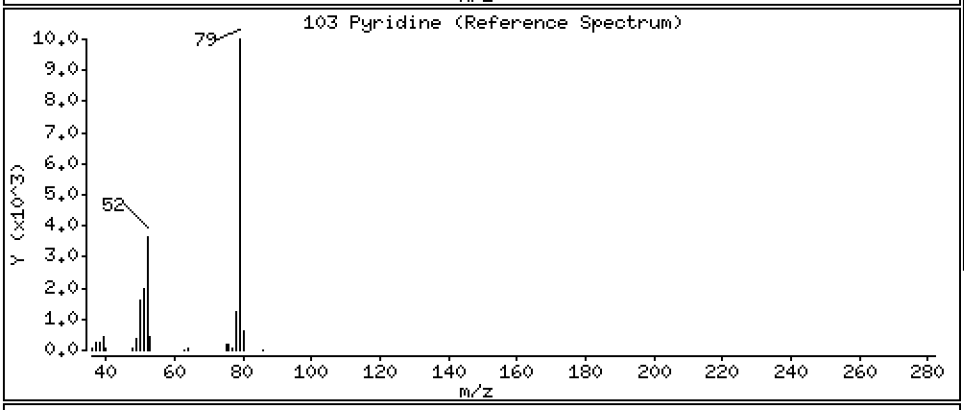
Concentration: 5.430 ug/mL

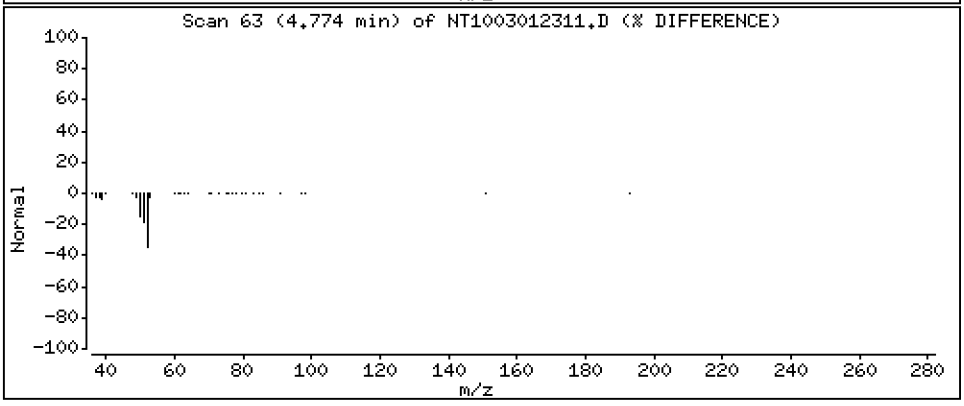












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

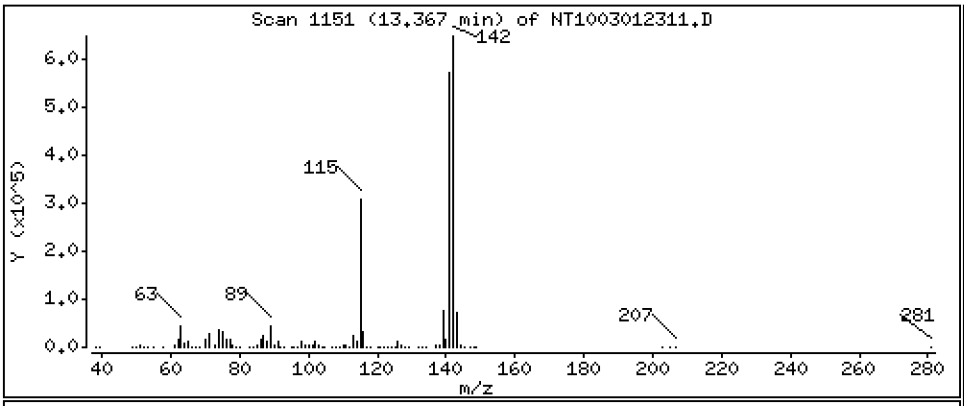
Operator: VTS

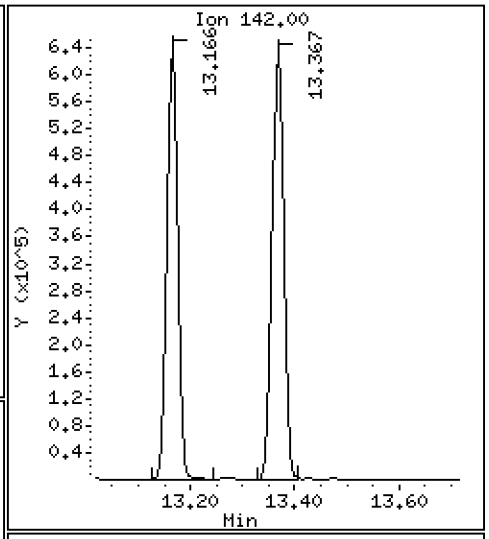
Column phase: ZB-5msi

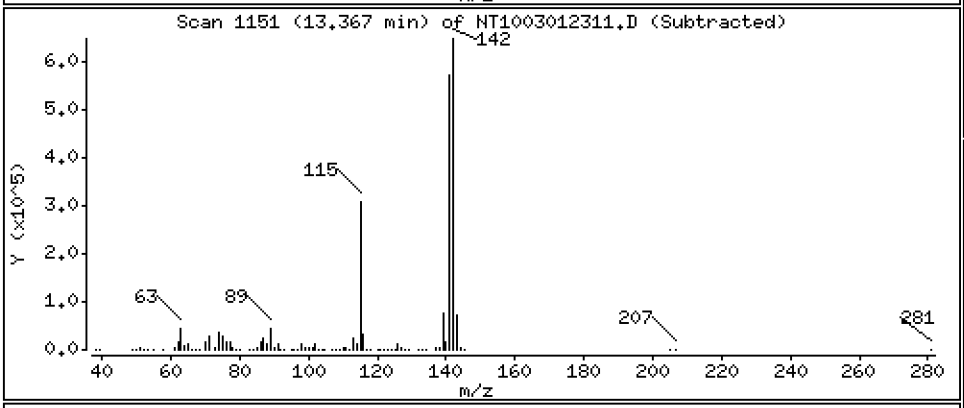
Column diameter: 0.25

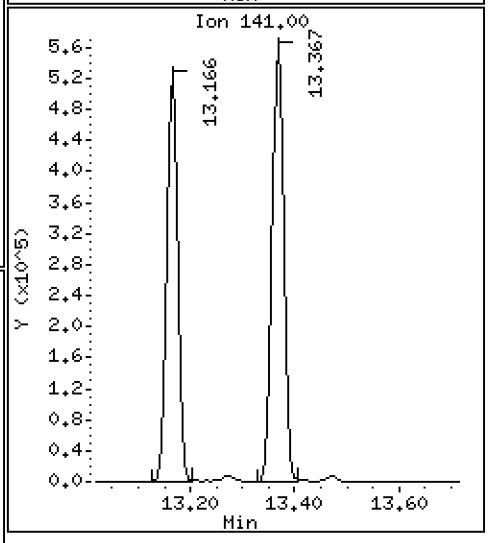
105 1-methylnaphthalene

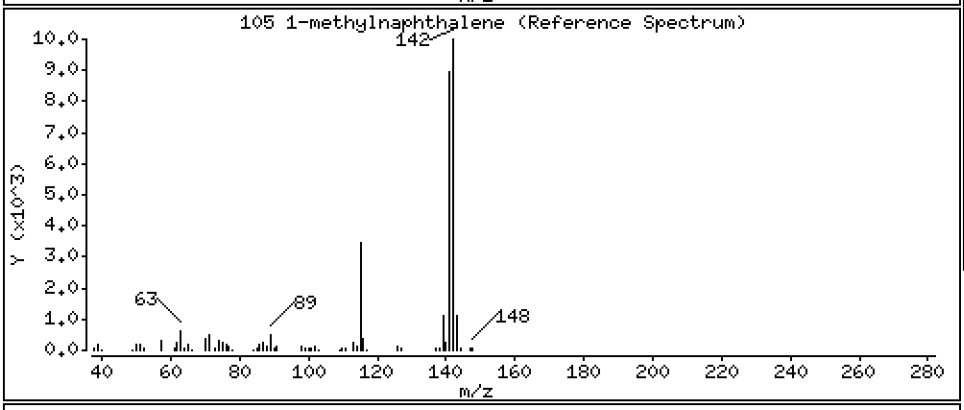
Concentration: 5.219 ug/mL

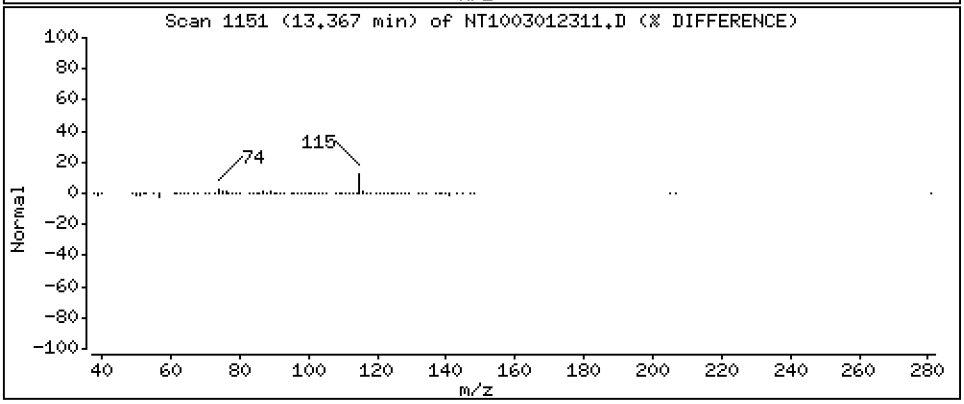












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

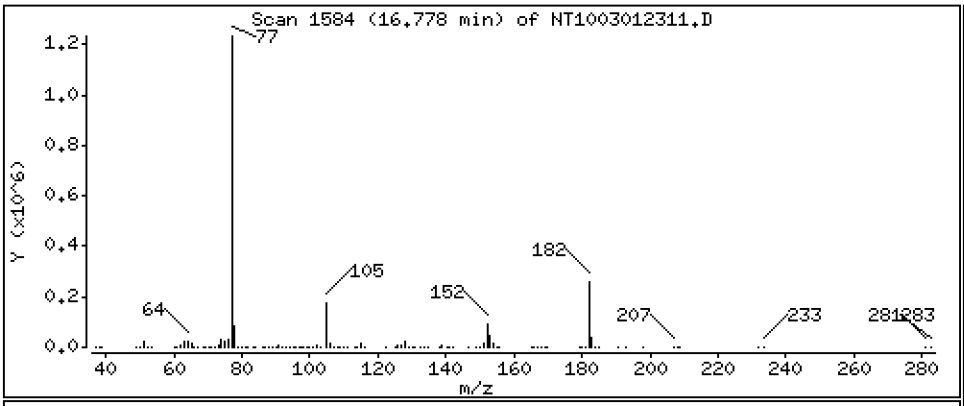
Operator: VTS

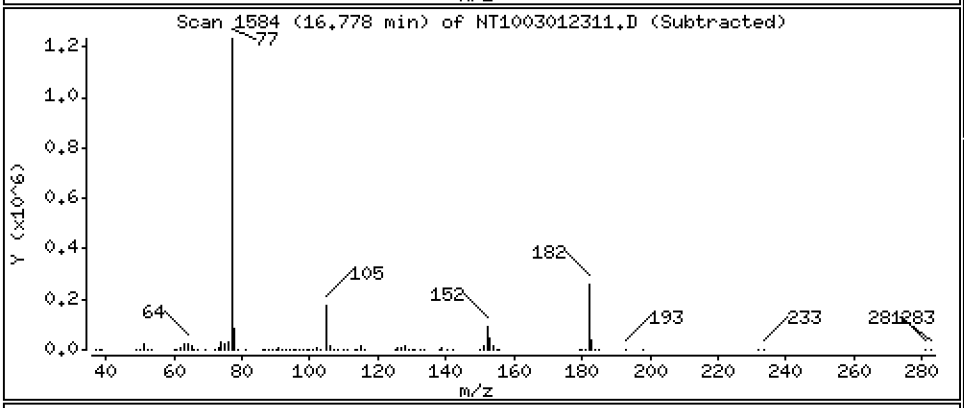
Column phase: ZB-5msi

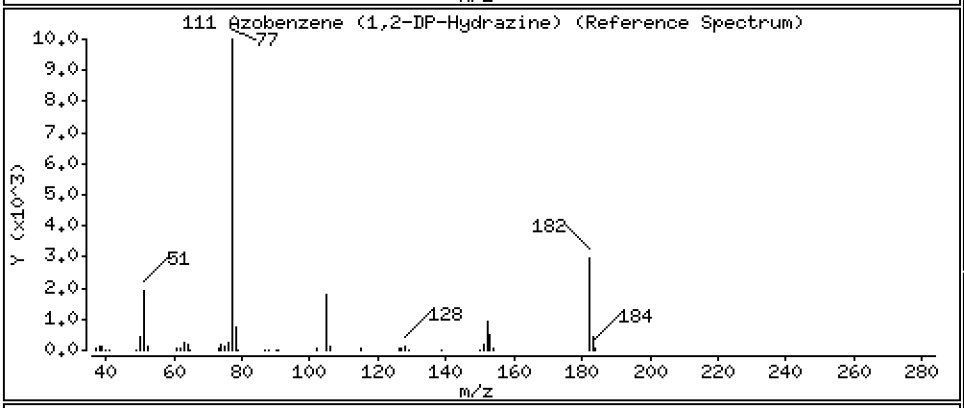
Column diameter: 0.25

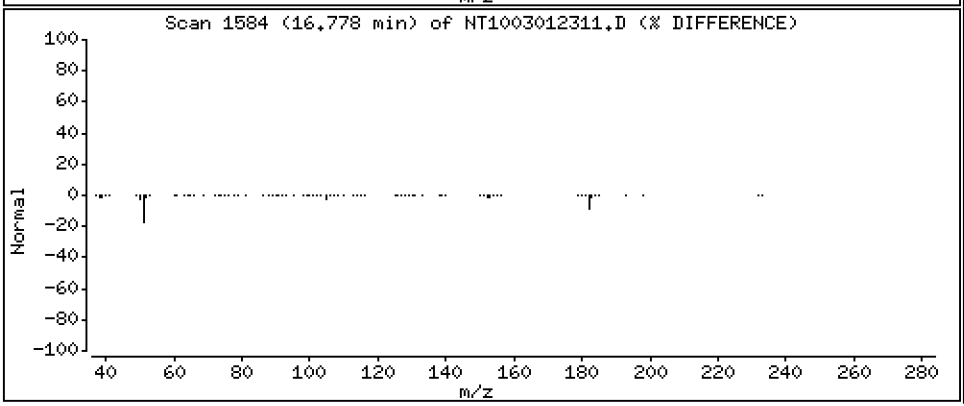
111 Azobenzene (1,2-DP-Hydrazine)

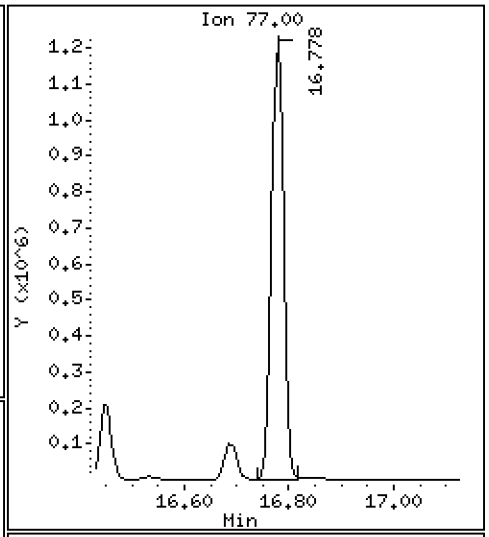
Concentration: 5.953 ug/mL

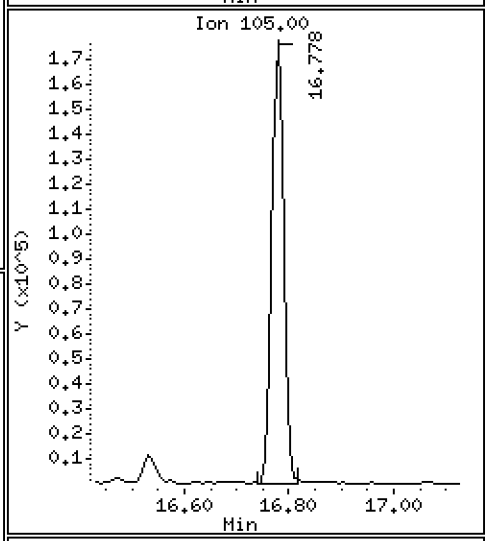


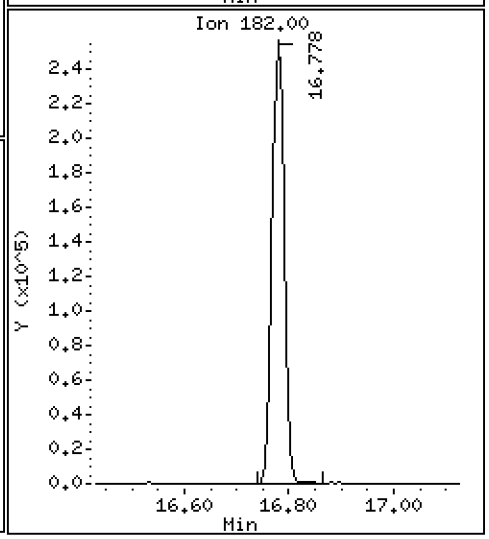












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

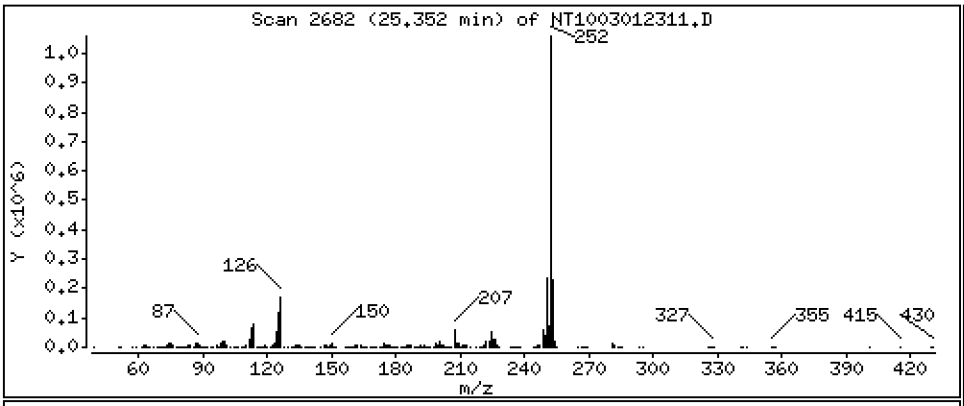
Operator: VTS

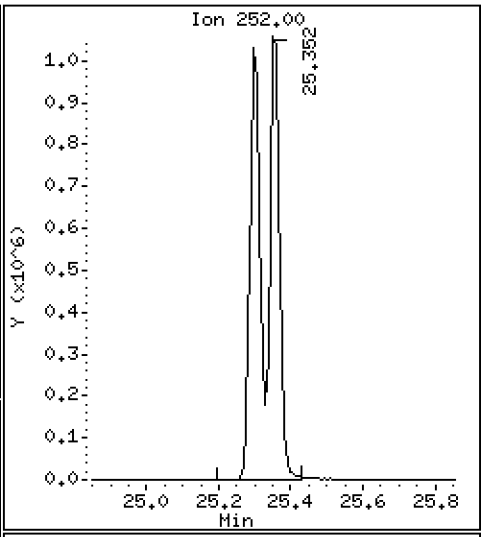
Column phase: ZB-5msi

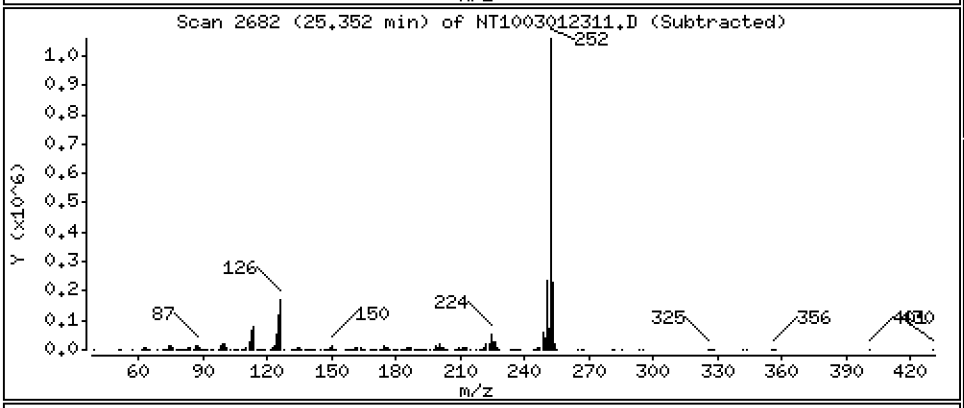
Column diameter: 0.25

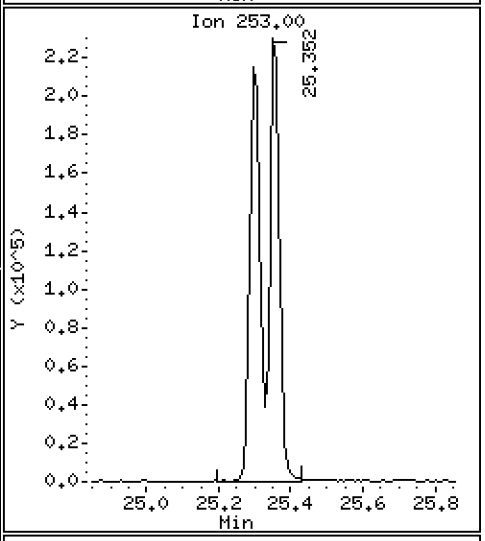
187 Total Benzofluoranthenes

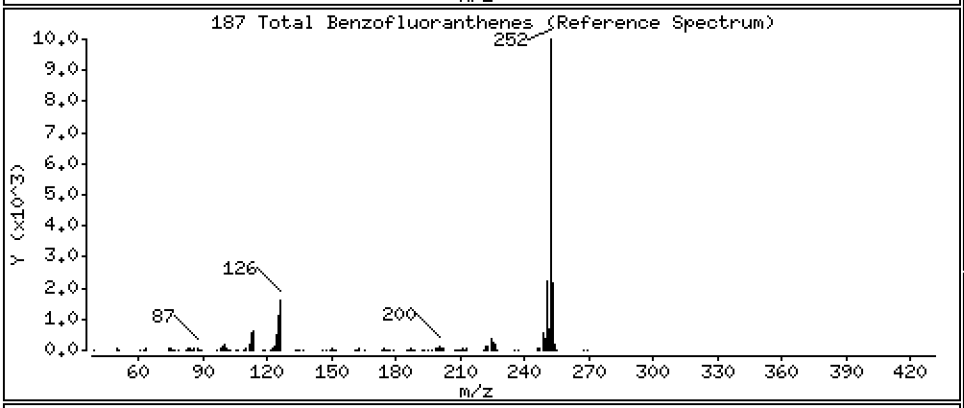
Concentration: 8.905 ug/mL

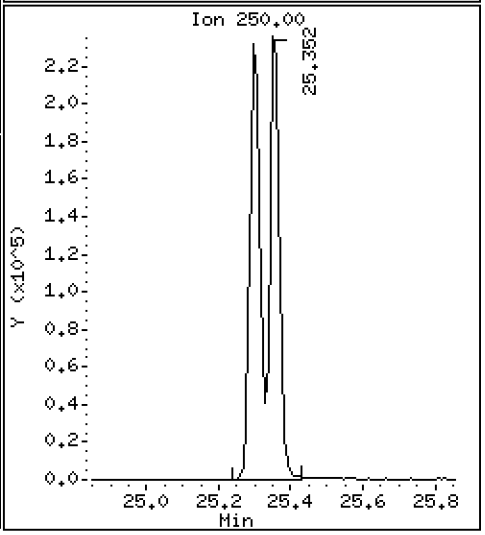


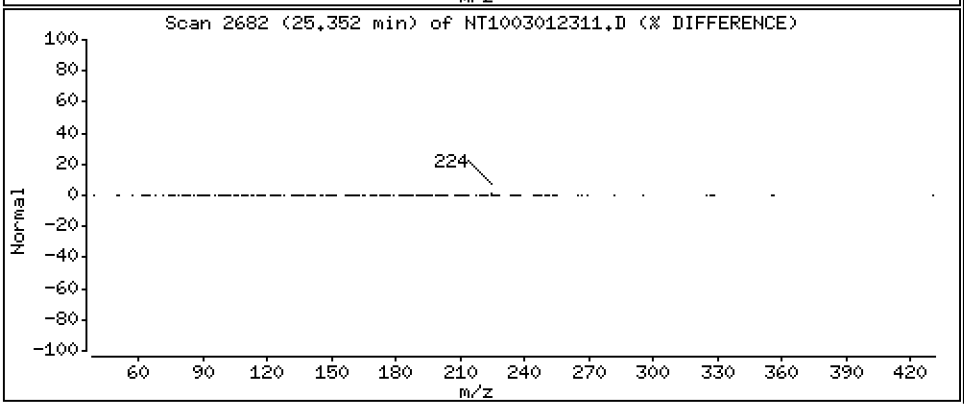












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

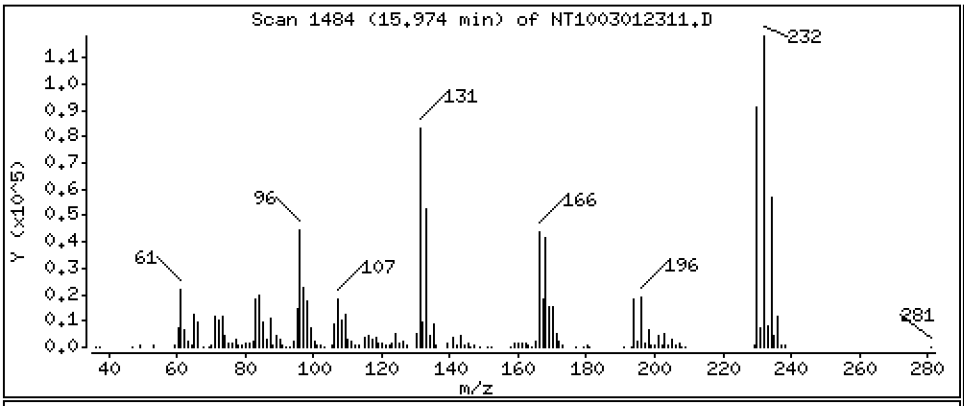
Operator: VTS

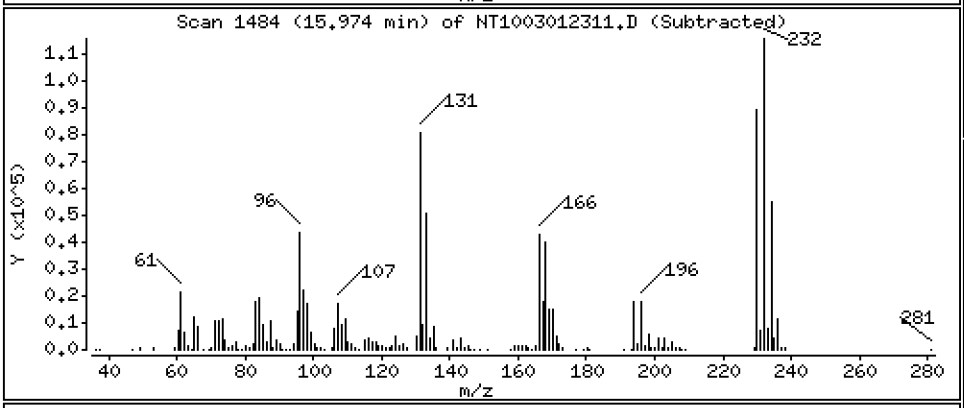
Column phase: ZB-5msi

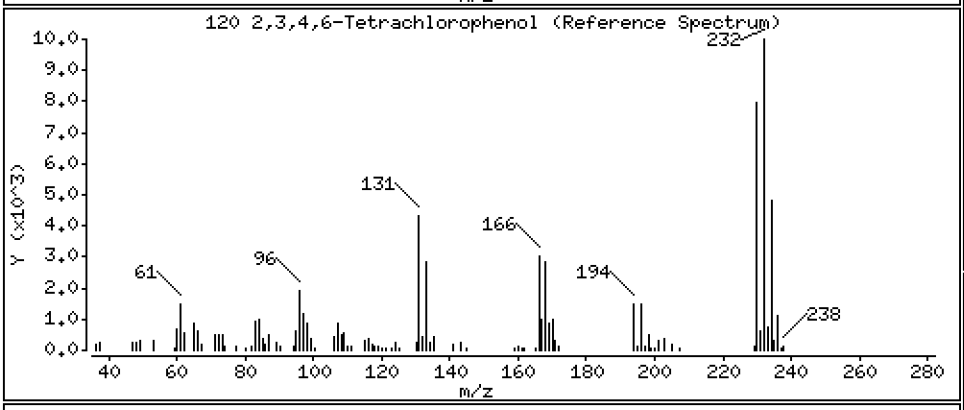
Column diameter: 0.25

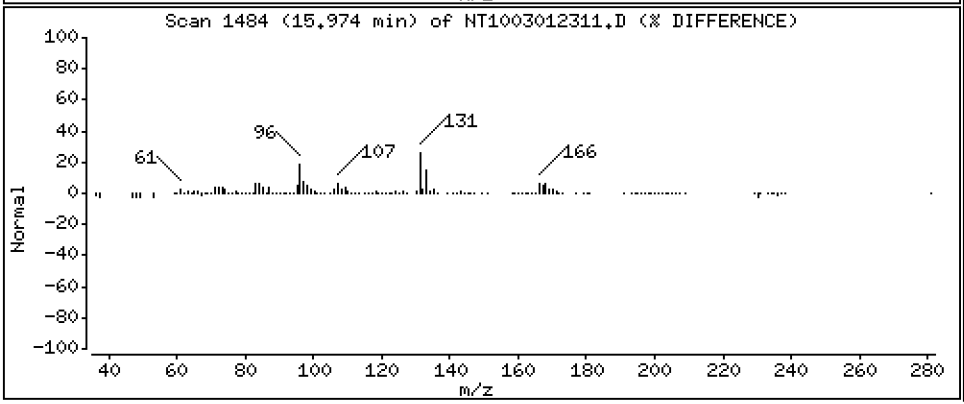
120 2,3,4,6-Tetrachlorophenol

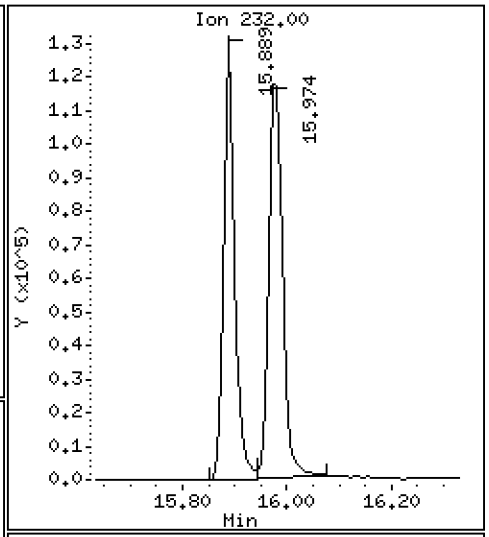
Concentration: 3.534 ug/mL

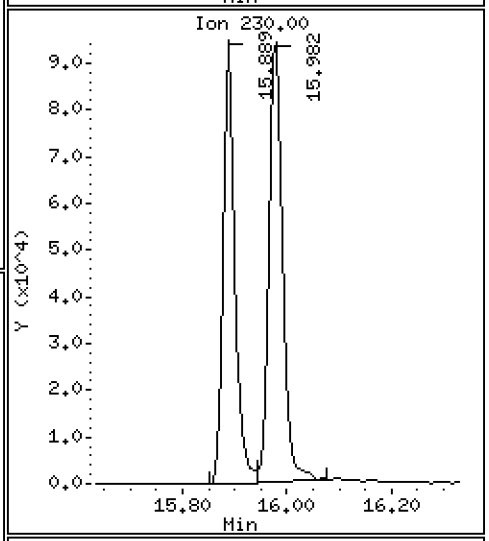


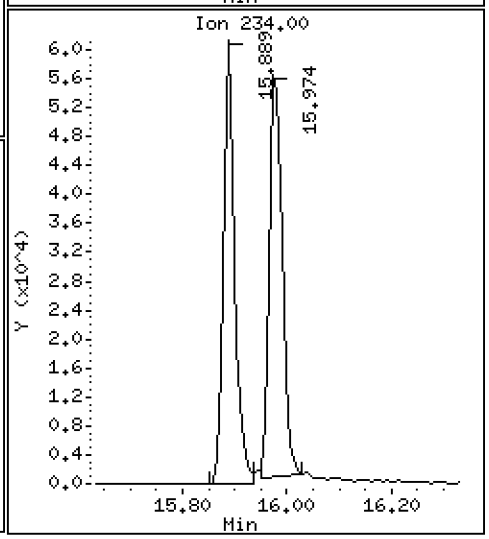












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D
Lab Smp Id: SLC0084-SCV1
Inj Date : 01-MAR-2023 21:46
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Meth Date : 07-Mar-2023 12:44 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: ORGDATA102

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

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

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

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012311.D
Lab Smp Id: SLC0084-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 17:21
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

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

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

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

REVIEW SUMMARY FOR FILE - NT1003012311.D

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

RT	CO-ELUTION COMPOUNDS
23.401	bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

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

RRT CHECK

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

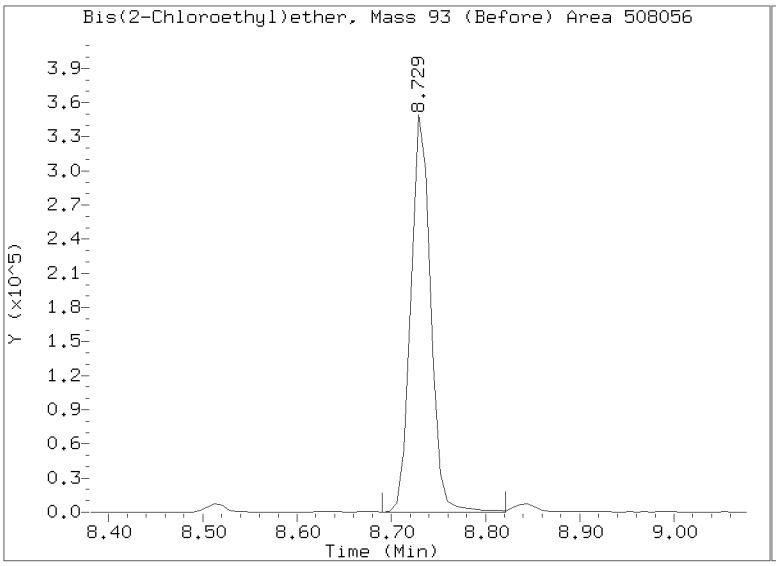
RRT check based on Ccal File: NT1003012307.D

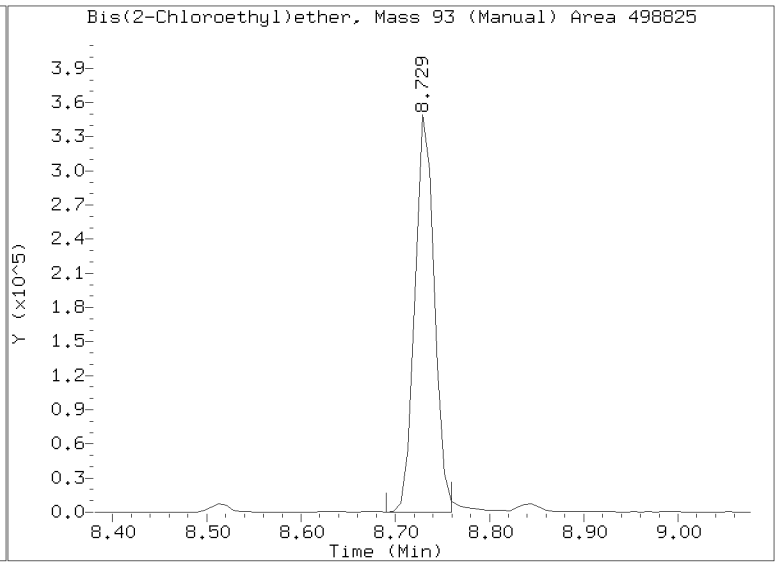
On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

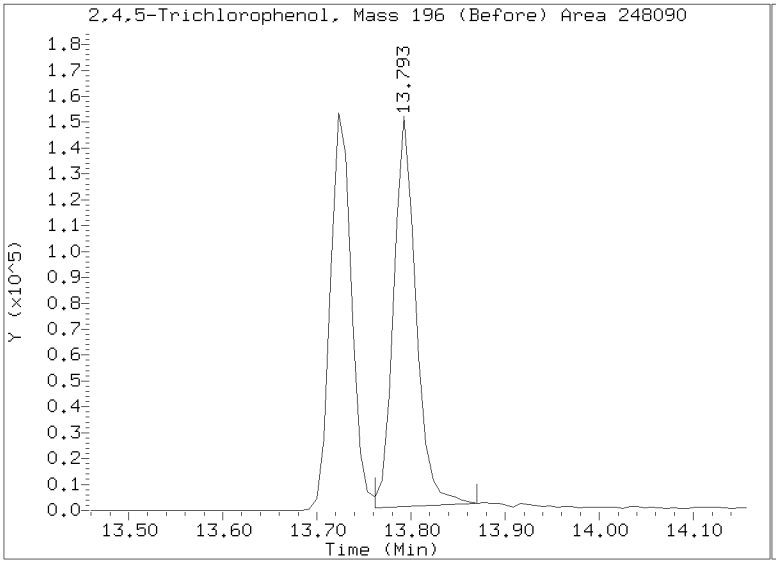
* Only compounds listed in the work order have been verified by the analyst *

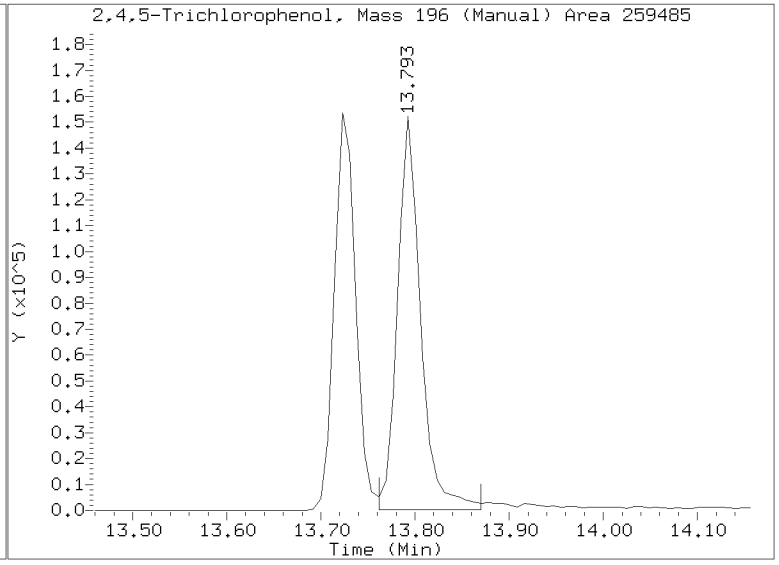
Quant Ion Manual Peak Adjustment Report

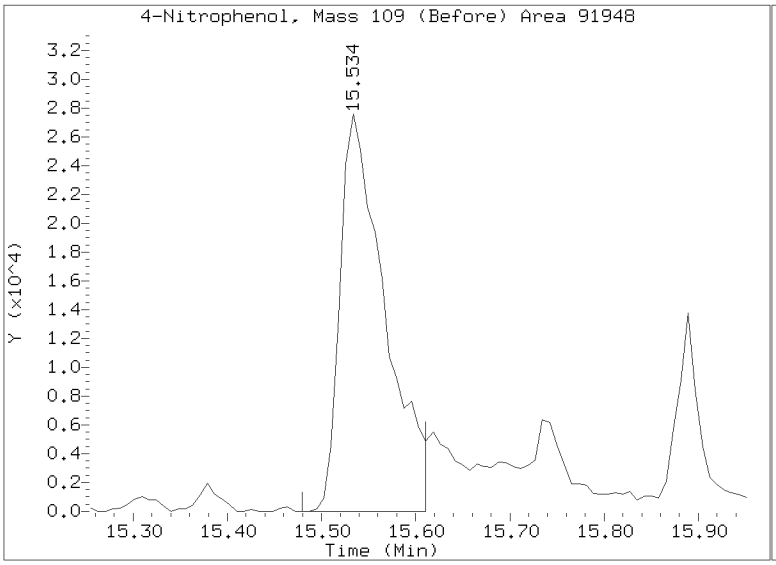
Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012311.D
Injection Date: 01-MAR-2023 21:46
Lab ID:SLC0084-SCV1 Client ID:
Report Date: 03/07/2023 12:48

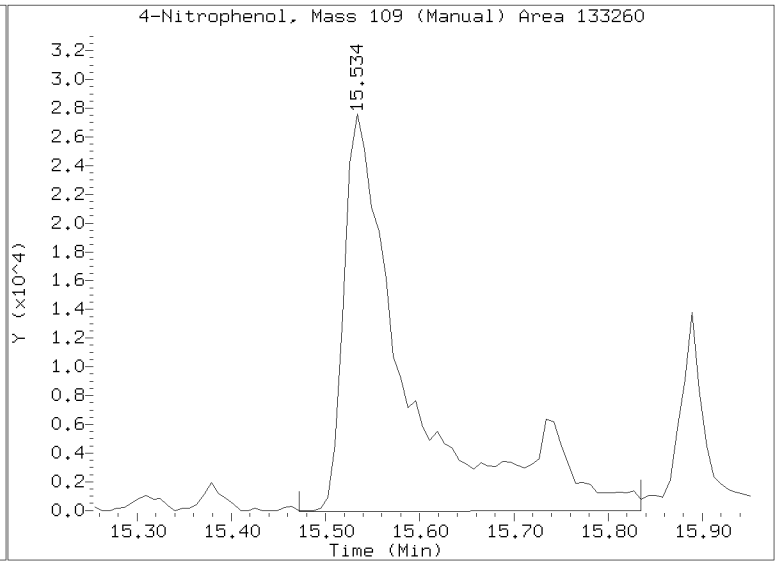












Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00019
Lab File ID:	NT1003032302.D	Calibration Date:	03/01/2023
Sequence:	SLC0161	Injection Date:	03/03/23
Lab Sample ID:	SLC0161-ICV1	Injection Time:	18:27
Sequence Name:	SICV1		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
Phenol	A	5.0000	5.5	1.5534590	1.7003260		9.5	+/-20	
4-Methylphenol	A	5.0000	4.3	1.2087680	1.2898680		-13.6	+/-20	
Naphthalene	A	5.0000	4.9	1.0266520	1.0087980		-1.7	+/-20	
2-Methylnaphthalene	A	5.0000	5.1	0.7252818	0.7338309		1.2	+/-20	
Acenaphthylene	A	5.0000	2.5	1.9309320	0.9725729		-49.6	+/-20	*
Dimethylphthalate	A	5.0000	4.7	1.2917940	1.2080880		-6.5	+/-20	
Acenaphthene	A	5.0000	5.0	1.1645250	1.1572540		-0.6	+/-20	
Dibenzofuran	A	5.0000	4.9	1.7283260	1.7035510		-1.4	+/-20	
Fluorene	A	5.0000	5.4	1.4379840	1.5460680		7.5	+/-20	
Phenanthrene	A	5.0000	5.1	1.0236730	1.0359580		1.2	+/-20	
Anthracene	A	5.0000	5.2	0.9926226	1.0330660		4.1	+/-20	
Fluoranthene	A	5.0000	4.6	1.3760330	1.2636420		-8.2	+/-20	
Pyrene	A	5.0000	2.1	1.4011560	0.6010349		-57.1	+/-20	*
Butylbenzylphthalate	A	5.0000	3.7	0.6475451	0.5542025		-25.5	+/-20	*
Benzo(a)anthracene	A	5.0000	4.6	1.4104100	1.2842530		-8.9	+/-20	
Chrysene	A	5.0000	5.0	1.1462500	1.1441570		0.2	+/-20	
bis(2-Ethylhexyl)phthalate	A	5.0000	4.8	0.5331838	0.5569780		-3.6	+/-20	
Benzofluoranthenes, Total	A	10.000	9.2	1.3383070	1.2739520		-7.6	+/-20	
Benzo(a)pyrene	A	5.0000	4.6	1.2312020	1.1697870		-8.7	+/-20	
Indeno(1,2,3-cd)pyrene	A	5.0000	4.9	1.4033590	1.4730320		-1.9	+/-20	
Dibenzo(a,h)anthracene	A	5.0000	5.3	1.1150690	1.2116550		5.2	+/-20	
Benzo(g,h,i)perylene	A	5.0000	5.3	1.1245240	1.2594480		5.8	+/-20	
2-Fluorophenol	A	7.5000	7.95	1.2585100	1.3342100		6.0	+/-20	
Phenol-d5	A	7.5000	8.65	1.4611190	1.6848600		15.3	+/-20	
2-Chlorophenol-d4	A	7.5000	8.10	1.2465880	1.3466480		8.0	+/-20	
1,2-Dichlorobenzene-d4	A	5.0000	4.85	0.9313544	0.9031350		-3.0	+/-20	
Nitrobenzene-d5	A	5.0000	5.16	0.4390871	0.4528582		3.1	+/-20	
2-Fluorobiphenyl	A	5.0000	5.30	1.4267270	1.5108650		5.9	+/-20	
2,4,6-Tribromophenol	A	7.5000	6.61	0.2287830	0.2267314		-11.9	+/-20	
p-Terphenyl-d14	A	5.0000	4.49	1.1337350	1.0185090		-10.2	+/-20	

* Values outside of QC limits

INITIAL CALIBRATION CHECK
EPA 8270E

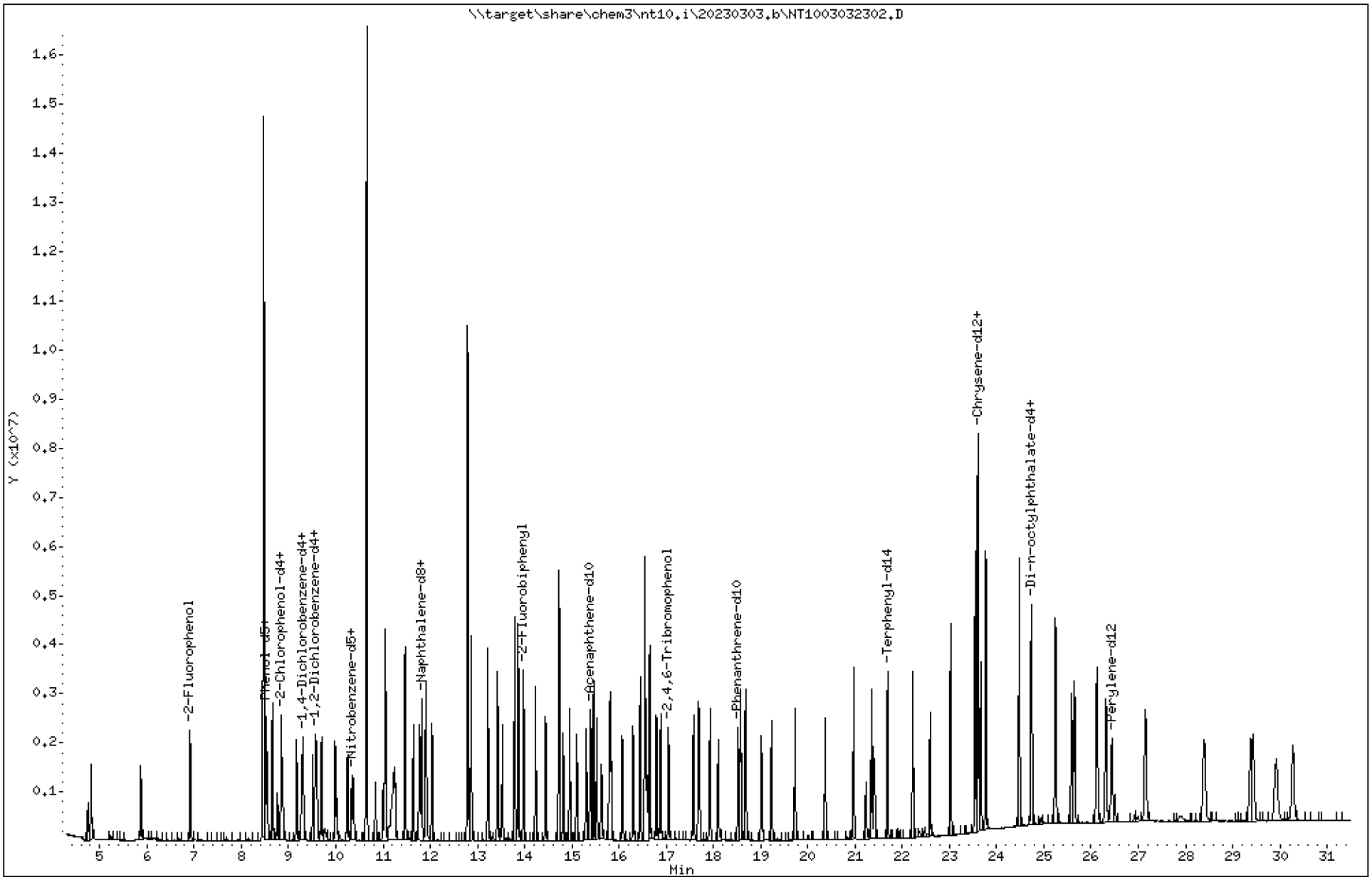
Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00019
Lab File ID:	NT1003032302.D	Calibration Date:	03/01/2023
Sequence:	SLC0161	Injection Date:	03/03/23
Lab Sample ID:	SLC0161-ICV1	Injection Time:	18:27
Sequence Name:	SICV1		

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

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032302.D
Date : 03-MAR-2023 18:27
Client ID:
Sample Info: SLC0161-ICV1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230303.b\NT1003032302.D
Lab Smp Id: SLC0161-ICV1
Inj Date : 03-MAR-2023 18:27
Operator : VTS Inst ID: nt10.i
Smp Info : SLC0161-ICV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230303.b\ABN.m
Meth Date : 05-Jul-2023 12:33 van Quant Type: ISTD
Cal Date : 01-MAR-2023 18:37 Cal File: NT1003012306.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	6.912	6.912	(0.745)	1263330	7.50000	7.951
$ 2	Phenol-d5	99	8.527	8.527	(0.919)	1595352	7.50000	8.648
3	Phenol	94	8.550	8.550	(0.922)	1073331	5.00000	5.473
$ 5	2-Chlorophenol-d4	132	8.844	8.844	(0.953)	1275107	7.50000	8.102
4	Bis(2-Chloroethyl)ether	93	8.767	8.767	(0.945)	760316	5.00000	5.073
6	2-Chlorophenol	128	8.875	8.875	(0.957)	874736	5.00000	5.350
7	1,3-Dichlorobenzene	146	9.169	9.169	(0.988)	872852	5.00000	4.842
* 8	1,4-Dichlorobenzene-d4	152	9.278	9.278	(1.000)	505000	4.00000	
9	1,4-Dichlorobenzene	146	9.309	9.309	(1.003)	946460	5.00000	5.286
$ 10	1,2-Dichlorobenzene-d4	152	9.565	9.565	(1.031)	570104	5.00000	4.849
12	1,2-Dichlorobenzene	146	9.596	9.596	(1.034)	831877	5.00000	4.800
11	Benzyl alcohol	108	9.510	9.510	(1.025)	501130	5.00000	4.860
14	2,2'-oxybis(1-Chloropropane)	121	9.767	9.767	(1.053)	186398	5.00000	3.731
13	2-Methylphenol	108	9.697	9.697	(1.045)	778127	5.00000	5.003
17	Hexachloroethane	117	10.248	10.248	(1.105)	378329	5.00000	5.148
16	N-Nitroso-di-n-propylamine	70	10.023	10.023	(1.080)	613313	5.00000	5.182
15	4-Methylphenol	108	9.984	9.984	(1.076)	814229	5.00000	4.318
$ 18	Nitrobenzene-d5	82	10.333	10.333	(0.878)	1045277	5.00000	5.157
19	Nitrobenzene	77	10.372	10.372	(0.881)	952150	5.00000	5.008
20	Isophorone	82	10.838	10.838	(0.921)	1365469	5.00000	5.626
21	2-Nitrophenol	139	11.001	11.001	(0.934)	428220	5.00000	4.173
22	2,4-Dimethylphenol	107	11.052	11.052	(0.939)	1683401	10.0000	9.048

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
23	Bis(2-Chloroethoxy)methane	93	11.255	11.255	(0.956)	794198	5.00000	5.295
24	Benzoic acid	105	11.238	11.238	(0.955)	1774978	20.0000	15.89
25	2,4-Dichlorophenol	162	11.468	11.468	(0.974)	1606935	10.0000	10.89
26	1,2,4-Trichlorobenzene	180	11.649	11.649	(0.990)	699708	5.00000	4.973
* 27	Naphthalene-d8	136	11.772	11.772	(1.000)	1846542	4.00000	
28	Naphthalene	128	11.819	11.819	(1.004)	2328485	5.00000	4.913
29	4-Chloroaniline	127	11.911	11.911	(1.012)	2124597	10.0000	9.906
30	Hexachlorobutadiene	225	12.035	12.035	(1.022)	421445	5.00000	4.056
31	4-Chloro-3-methylphenol	107	12.863	12.863	(1.093)	1500607	10.0000	9.573
32	2-Methylnaphthalene	142	13.219	13.219	(1.123)	1693812	5.00000	5.059
33	Hexachlorocyclopentadiene	237	13.529	13.529	(0.879)	508613	10.0000	14.79
34	2,4,6-Trichlorophenol	196	13.792	13.792	(0.896)	988512	10.0000	10.60
35	2,4,5-Trichlorophenol	196	13.861	13.861	(0.900)	1059871	10.0000	10.62
$ 36	2-Fluorobiphenyl	172	13.978	13.978	(0.908)	1769504	5.00000	5.295
37	2-Chloronaphthalene	162	14.233	14.233	(0.925)	1408139	5.00000	5.367
38	2-Nitroaniline	65	14.442	14.442	(0.938)	712892	10.0000	9.618
39	Dimethylphthalate	163	14.821	14.821	(0.963)	1414896	5.00000	4.676
40	Acenaphthylene	152	15.092	15.092	(0.980)	1139064	5.00000	2.518
41	2,6-Dinitrotoluene	165	14.953	14.953	(0.971)	655630	10.0000	9.572
* 42	Acenaphthene-d10	164	15.394	15.394	(1.000)	936949	4.00000	
43	3-Nitroaniline	138	15.301	15.301	(0.994)	736872	10.0000	9.375
44	Acenaphthene	153	15.463	15.463	(1.005)	1355360	5.00000	4.969
45	2,4-Dinitrophenol	184	15.525	15.525	(1.009)	649821	20.0000	40.81
46	Dibenzofuran	168	15.827	15.827	(1.028)	1995176	5.00000	4.928
47	4-Nitrophenol	109	15.626	15.626	(1.015)	470471	10.0000	8.541
48	2,4-Dinitrotoluene	165	15.796	15.796	(1.026)	913140	10.0000	9.158
50	Diethylphthalate	149	16.298	16.298	(1.059)	1436147	5.00000	4.480
49	Fluorene	166	16.546	16.546	(1.075)	1810733	5.00000	5.376
51	4-Chlorophenyl-phenylether	204	16.546	16.546	(1.075)	736820	5.00000	4.785
52	4-Nitroaniline	138	16.585	16.585	(1.077)	687090	10.0000	8.377
53	4,6-Dinitro-2-methylphenol	198	16.646	16.646	(0.899)	1278405	20.0000	31.68
54	N-Nitrosodiphenylamine	169	16.785	16.785	(0.906)	1182033	5.00000	5.160
$ 55	2,4,6-Tribromophenol	330	17.047	17.047	(1.107)	398317	7.50000	6.608
56	4-Bromophenyl-phenylether	248	17.573	17.573	(0.949)	530323	5.00000	5.713
57	Hexachlorobenzene	284	17.681	17.681	(0.954)	663149	5.00000	6.344
58	Pentachlorophenol	266	18.107	18.107	(0.977)	366998	10.0000	7.294
* 59	Phenanthrene-d10	188	18.525	18.525	(1.000)	1548373	4.00000	
60	Phenanthrene	178	18.571	18.571	(1.002)	2005061	5.00000	5.060
61	Anthracene	178	18.680	18.680	(1.008)	1999465	5.00000	5.204
62	Carbazole	167	19.020	19.020	(1.027)	1708392	5.00000	4.853
63	Di-n-butylphthalate	149	19.724	19.724	(1.065)	2416991	5.00000	4.886
64	Fluoranthene	202	20.970	20.970	(0.888)	2135968	5.00000	4.592
65	Pyrene	202	21.395	21.395	(0.906)	1015945	5.00000	2.145
$ 66	Terphenyl-d14	244	21.689	21.689	(0.918)	1721613	5.00000	4.492
67	Butylbenzylphthalate	149	22.588	22.588	(0.956)	936783	5.00000	3.725
68	Benzo(a)anthracene	228	23.594	23.594	(0.999)	2170807	5.00000	4.553
* 69	Chrysene-d12	240	23.617	23.617	(1.000)	1352261	4.00000	
70	3,3'-Dichlorobenzidine	252	23.540	23.540	(0.997)	1938094	15.0000	9.026
71	Chrysene	228	23.664	23.664	(1.002)	1933998	5.00000	5.009
72	bis(2-Ethylhexyl)phthalate	149	23.602	23.602	(0.954)	1601763	5.00000	4.820
* 134	Di-n-octylphthalate-d4	153	24.732	24.732	(1.000)	2300648	4.00000	
73	Di-n-octylphthalate	149	24.740	24.740	(1.000)	2667990	5.00000	5.230
74	Benzo(b)fluoranthene	252	25.584	25.584	(0.967)	2168798	5.00000	4.207(H)
75	Benzo(k)fluoranthene	252	25.646	25.646	(0.970)	2552019	5.00000	5.080

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
76	Benzo(a)pyrene	252	26.312	26.312	(0.995)	2112957	5.00000	4.567
* 77	Perylene-d12	264	26.443	26.443	(1.000)	1445020	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.383	29.383	(1.111)	2660701	5.00000	4.903
79	Dibenzo(a,h)anthracene	278	29.429	29.429	(1.113)	2188582	5.00000	5.259
80	Benzo(g,h,i)perylene	276	30.268	30.268	(1.145)	2274909	5.00000	5.292
90	N-Nitrosodimethylamine	74	4.750	4.750	(0.512)	1009078	10.0000	9.838
91	Aniline	93	8.659	8.659	(0.933)	2336427	10.0000	10.27
93	Benzidine	184	21.225	21.225	(0.899)	809720	10.0000	3.921
103	Pyridine	79	4.812	4.812	(0.519)	1803381	10.0000	9.914
105	1-methylnaphthalene	142	13.428	13.428	(1.141)	1522065	5.00000	5.023
111	Azobenzene (1,2-DP-Hydrazine)	77	16.878	16.878	(1.096)	2130502	5.00000	4.451
187	Total Benzofluoranthenes	252	25.646	25.646	(0.970)	4602216	10.0000	9.240
120	2,3,4,6-Tetrachlorophenol	232	16.066	16.066	(1.044)	497910	5.00000	6.038

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032302.D
Lab Smp Id: SLC0161-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230303.b\ABN.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 17:21

Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	505000	252500	1010000	505000	0.00
27 Naphthalene-d8	1846542	923271	3693084	1846542	0.00
42 Acenaphthene-d10	936949	468475	1873898	936949	0.00
59 Phenanthrene-d10	1548373	774187	3096746	1548373	0.00
69 Chrysene-d12	1352261	676131	2704522	1352261	0.00
134 Di-n-octylphthala	2300648	1150324	4601296	2300648	0.00
77 Perylene-d12	1445020	722510	2890040	1445020	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	0.00
27 Naphthalene-d8	11.77	11.27	12.27	11.77	0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	0.00
59 Phenanthrene-d10	18.53	18.03	19.03	18.53	0.00
69 Chrysene-d12	23.62	23.12	24.12	23.62	0.00
134 Di-n-octylphthala	24.73	24.23	25.23	24.73	0.00
77 Perylene-d12	26.44	25.94	26.94	26.44	0.00

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

REVIEW SUMMARY FOR FILE - NT1003032302.D

Lab ID: SLC0161-ICV1
nt10.i, 20230303.b\ABN.m,   03-MAR-2023 18:27

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

No RRT check. Ccal file.

On Column LOD for nt10.i, 20230303.b\ABN.m, ICAL.sub = 0.0000

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230303.b

Instrument: nt10.i Date: 03-MAR-2023 Method: 20230303.b\ABN.m

INITIAL CAL: 30-DEC-2022

Compound	%RSD or R^2
2,4-Dinitrophenol	96.4
2,3,4,6-Tetrachlorophenol	32.6

ICV CAL: NT1003032302.D 03-MAR-2023 18:27

Compound	%D
2,2'-oxybis(1-Chloropropane)	-25.4
Benzoic acid	-20.5
Hexachlorocyclopentadiene	47.9
Acenaphthylene	-49.6
2,4-Dinitrophenol	104.1
4,6-Dinitro-2-methylphenol	58.4
Hexachlorobenzene	26.9
Pentachlorophenol	-27.1
Pyrene	-57.1
Butylbenzylphthalate	-25.5
3,3'-Dichlorobenzidine	-39.8
Benzidine	-60.8
2,3,4,6-Tetrachlorophenol	20.8

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00019
Lab File ID:	NT1003032314ICV.D	Calibration Date:	03/01/2023
Sequence:	SLC0162	Injection Date:	03/04/23
Lab Sample ID:	SLC0162-ICV1	Injection Time:	02:02
Sequence Name:	ABN 5		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
Phenol	A	5.0000	5.3	1.5534590	1.6602960		6.9	+/-20	
4-Methylphenol	A	5.0000	4.3	1.2087680	1.2819730		-14.2	+/-20	
Naphthalene	A	5.0000	4.9	1.0266520	0.9967383		-2.9	+/-20	
2-Methylnaphthalene	A	5.0000	5.0	0.7252818	0.7318050		0.9	+/-20	
Acenaphthylene	A	5.0000	2.8	1.9309320	1.0965990		-43.2	+/-20	*
Dimethylphthalate	A	5.0000	4.7	1.2917940	1.2240910		-5.2	+/-20	
Acenaphthene	A	5.0000	4.9	1.1645250	1.1482420		-1.4	+/-20	
Dibenzofuran	A	5.0000	5.0	1.7283260	1.7249870		-0.2	+/-20	
Fluorene	A	5.0000	5.4	1.4379840	1.5509940		7.9	+/-20	
Phenanthrene	A	5.0000	5.0	1.0236730	1.0257400		0.2	+/-20	
Anthracene	A	5.0000	5.3	0.9926226	1.0541720		6.2	+/-20	
Fluoranthene	A	5.0000	4.4	1.3760330	1.2154940		-11.7	+/-20	
Pyrene	A	5.0000	4.1	1.4011560	1.1429540		-18.4	+/-20	
Butylbenzylphthalate	A	5.0000	4.1	0.6475451	0.6128258		-17.5	+/-20	
Benzo(a)anthracene	A	5.0000	4.7	1.4104100	1.3333340		-5.5	+/-20	
Chrysene	A	5.0000	5.1	1.1462500	1.1734070		2.7	+/-20	
bis(2-Ethylhexyl)phthalate	A	5.0000	4.9	0.5331838	0.5720508		-1.1	+/-20	
Benzofluoranthenes, Total	A	10.000	9.0	1.3383070	1.2372050		-10.1	+/-20	
Benzo(a)pyrene	A	5.0000	4.4	1.2312020	1.1125420		-12.9	+/-20	
Indeno(1,2,3-cd)pyrene	A	5.0000	4.8	1.4033590	1.4378990		-4.2	+/-20	
Dibenzo(a,h)anthracene	A	5.0000	5.1	1.1150690	1.1728430		2.0	+/-20	
Benzo(g,h,i)perylene	A	5.0000	4.9	1.1245240	1.1520030		-2.8	+/-20	
2-Fluorophenol	A	7.5000	7.89	1.2585100	1.3244470		5.2	+/-20	
Phenol-d5	A	7.5000	8.61	1.4611190	1.6764920		14.7	+/-20	
2-Chlorophenol-d4	A	7.5000	8.83	1.2465880	1.4677750		17.7	+/-20	
1,2-Dichlorobenzene-d4	A	5.0000	4.89	0.9313544	0.9109051		-2.2	+/-20	
Nitrobenzene-d5	A	5.0000	5.15	0.4390871	0.4523605		3.0	+/-20	
2-Fluorobiphenyl	A	5.0000	5.37	1.4267270	1.5331790		7.5	+/-20	
2,4,6-Tribromophenol	A	7.5000	6.82	0.2287830	0.2344494		-9.1	+/-20	
p-Terphenyl-d14	A	5.0000	4.44	1.1337350	1.0072420		-11.2	+/-20	

* Values outside of QC limits

INITIAL CALIBRATION CHECK
EPA 8270E

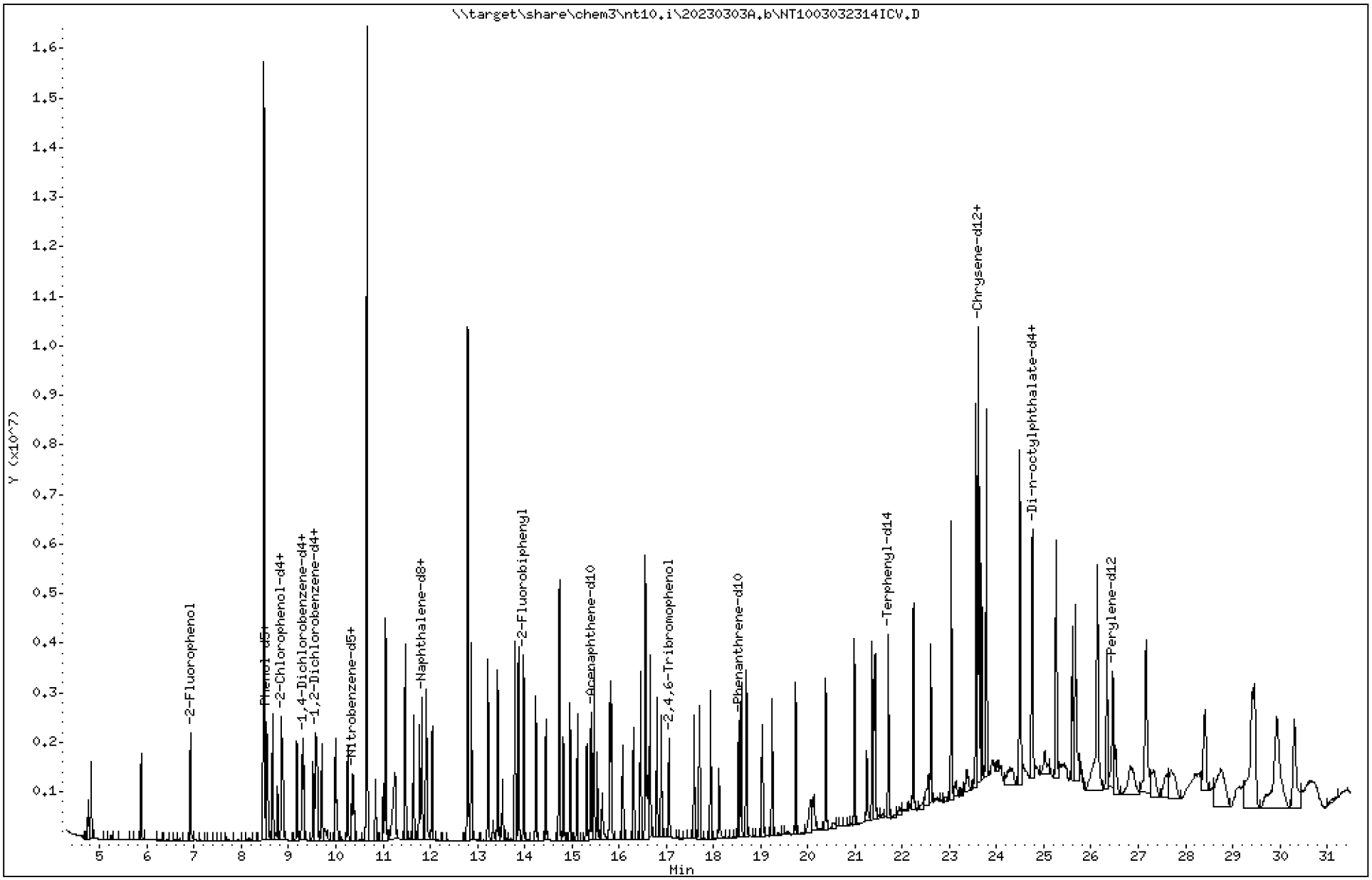
Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00019
Lab File ID:	NT1003032314ICV.D	Calibration Date:	03/01/2023
Sequence:	SLC0162	Injection Date:	03/04/23
Lab Sample ID:	SLC0162-ICV1	Injection Time:	02:02
Sequence Name:	ABN 5		

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

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032314ICV.D
Date : 04-MAR-2023 02:02
Client ID:
Sample Info: SEQ-CCVFULL
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230303A.b\NT1003032314ICV.D
Lab Smp Id: SLC0162-ICV1
Inj Date : 04-MAR-2023 02:02
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-CCVFULL
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Meth Date : 26-Apr-2023 10:41 van Quant Type: ISTD
Cal Date : 01-MAR-2023 18:37 Cal File: NT1003012306.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	6.920	6.920	(0.746)	1276659	7.50000	7.893
$ 2	Phenol-d5	99	8.535	8.535	(0.920)	1616002	7.50000	8.606
3	Phenol	94	8.558	8.558	(0.922)	1066927	5.00000	5.344
$ 5	2-Chlorophenol-d4	132	8.852	8.852	(0.954)	1414816	7.50000	8.831
4	Bis(2-Chloroethyl)ether	93	8.767	8.767	(0.945)	791473	5.00000	5.188
6	2-Chlorophenol	128	8.883	8.883	(0.957)	972496	5.00000	5.843
7	1,3-Dichlorobenzene	146	9.169	9.169	(0.988)	899485	5.00000	4.902
* 8	1,4-Dichlorobenzene-d4	152	9.278	9.278	(1.000)	514090	4.00000	
9	1,4-Dichlorobenzene	146	9.316	9.316	(1.004)	971928	5.00000	5.332
$ 10	1,2-Dichlorobenzene-d4	152	9.572	9.572	(1.032)	585359	5.00000	4.890
12	1,2-Dichlorobenzene	146	9.604	9.604	(1.035)	844629	5.00000	4.787
11	Benzyl alcohol	108	9.518	9.518	(1.026)	516754	5.00000	4.921
14	2,2'-oxybis(1-Chloropropane)	121	9.767	9.767	(1.053)	190748	5.00000	3.750
13	2-Methylphenol	108	9.704	9.704	(1.046)	788644	5.00000	4.982
17	Hexachloroethane	117	10.248	10.248	(1.105)	373617	5.00000	4.994
16	N-Nitroso-di-n-propylamine	70	10.023	10.023	(1.080)	614898	5.00000	5.104
15	4-Methylphenol	108	9.992	9.992	(1.077)	823812	5.00000	4.291
$ 18	Nitrobenzene-d5	82	10.341	10.341	(0.878)	1036950	5.00000	5.151
19	Nitrobenzene	77	10.380	10.380	(0.882)	936900	5.00000	4.962
20	Isophorone	82	10.845	10.845	(0.921)	1371417	5.00000	5.689
21	2-Nitrophenol	139	11.001	11.001	(0.934)	445610	5.00000	4.379
22	2,4-Dimethylphenol	107	11.052	11.052	(0.939)	1634533	10.0000	8.851

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	23 Bis(2-Chloroethoxy)methane	93	11.264	11.264	(0.957)	757880	5.00000	5.088
	24 Benzoic acid	105	11.238	11.238	(0.955)	1325226	20.0000	12.06
	25 2,4-Dichlorophenol	162	11.467	11.467	(0.974)	1650481	10.0000	11.25
	26 1,2,4-Trichlorobenzene	180	11.649	11.649	(0.990)	705127	5.00000	5.044
*	27 Naphthalene-d8	136	11.772	11.772	(1.000)	1833847	4.00000	
	28 Naphthalene	128	11.819	11.819	(1.004)	2284832	5.00000	4.854
	29 4-Chloroaniline	127	11.911	11.911	(1.012)	2014667	10.0000	9.473
	30 Hexachlorobutadiene	225	12.043	12.043	(1.023)	433818	5.00000	4.204
	31 4-Chloro-3-methylphenol	107	12.871	12.871	(1.093)	1442510	10.0000	9.278
	32 2-Methylnaphthalene	142	13.227	13.227	(1.124)	1677523	5.00000	5.045
	33 Hexachlorocyclopentadiene	237	13.529	13.529	(0.878)	311984	10.0000	9.491
	34 2,4,6-Trichlorophenol	196	13.800	13.800	(0.896)	980526	10.0000	10.53
	35 2,4,5-Trichlorophenol	196	13.869	13.869	(0.901)	1041470	10.0000	10.46
$	36 2-Fluorobiphenyl	172	13.978	13.978	(0.908)	1792443	5.00000	5.373
	37 2-Chloronaphthalene	162	14.241	14.241	(0.925)	1404946	5.00000	5.365
	38 2-Nitroaniline	65	14.450	14.450	(0.938)	681518	10.0000	9.224
	39 Dimethylphthalate	163	14.821	14.821	(0.962)	1431088	5.00000	4.738
	40 Acenaphthylene	152	15.115	15.115	(0.981)	1282037	5.00000	2.840
	41 2,6-Dinitrotoluene	165	14.961	14.961	(0.971)	676170	10.0000	9.879
*	42 Acenaphthene-d10	164	15.401	15.401	(1.000)	935282	4.00000	
	43 3-Nitroaniline	138	15.316	15.316	(0.994)	686755	10.0000	8.771
	44 Acenaphthene	153	15.471	15.471	(1.005)	1342413	5.00000	4.930
	45 2,4-Dinitrophenol	184	15.533	15.533	(1.009)	482152	20.0000	30.34
	46 Dibenzofuran	168	15.834	15.834	(1.028)	2016687	5.00000	4.990
	47 4-Nitrophenol	109	15.641	15.641	(1.016)	400162	10.0000	7.325
	48 2,4-Dinitrotoluene	165	15.803	15.803	(1.026)	933072	10.0000	9.367
	50 Diethylphthalate	149	16.306	16.306	(1.059)	1453540	5.00000	4.543
	49 Fluorene	166	16.554	16.554	(1.075)	1813271	5.00000	5.393
	51 4-Chlorophenyl-phenylether	204	16.554	16.554	(1.075)	862786	5.00000	5.562
	52 4-Nitroaniline	138	16.600	16.600	(1.078)	606080	10.0000	7.402
	53 4,6-Dinitro-2-methylphenol	198	16.654	16.654	(0.899)	1135714	20.0000	27.73
	54 N-Nitrosodiphenylamine	169	16.801	16.801	(0.907)	1204945	5.00000	5.097
$	55 2,4,6-Tribromophenol	330	17.063	17.063	(1.108)	411143	7.50000	6.821
	56 4-Bromophenyl-phenylether	248	17.588	17.588	(0.949)	548209	5.00000	5.723
	57 Hexachlorobenzene	284	17.697	17.697	(0.955)	476408	5.00000	4.416
	58 Pentachlorophenol	266	18.122	18.122	(0.978)	284332	10.0000	5.539
*	59 Phenanthrene-d10	188	18.533	18.533	(1.000)	1597882	4.00000	
	60 Phenanthrene	178	18.587	18.587	(1.003)	2048765	5.00000	5.010
	61 Anthracene	178	18.695	18.695	(1.009)	2105553	5.00000	5.310
	62 Carbazole	167	19.035	19.035	(1.027)	1813564	5.00000	4.992
	63 Di-n-butylphthalate	149	19.739	19.739	(1.065)	2715365	5.00000	5.302
	64 Fluoranthene	202	20.985	20.985	(0.888)	2354592	5.00000	4.417
	65 Pyrene	202	21.426	21.426	(0.907)	2214071	5.00000	4.079
$	66 Terphenyl-d14	244	21.705	21.705	(0.918)	1951177	5.00000	4.442
	67 Butylbenzylphthalate	149	22.611	22.611	(0.957)	1187134	5.00000	4.126
	68 Benzo(a)anthracene	228	23.617	23.617	(0.999)	2582864	5.00000	4.727
*	69 Chrysene-d12	240	23.633	23.633	(1.000)	1549718	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.563	23.563	(0.997)	2805799	15.0000	11.37
	71 Chrysene	228	23.679	23.679	(1.002)	2273063	5.00000	5.137
	72 bis(2-Ethylhexyl)phthalate	149	23.617	23.617	(0.954)	1953299	5.00000	4.946
*	134 Di-n-octylphthalate-d4	153	24.748	24.748	(1.000)	2731644	4.00000	
	73 Di-n-octylphthalate	149	24.755	24.755	(1.000)	3149877	5.00000	5.200
	74 Benzo(b)fluoranthene	252	25.607	25.607	(0.968)	2535849	5.00000	4.119(H)
	75 Benzo(k)fluoranthene	252	25.669	25.669	(0.970)	3092215	5.00000	5.144

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
76	Benzo(a)pyrene	252	26.335	26.335	(0.995)	2402677	5.00000	4.355
* 77	Perylene-d12	264	26.459	26.459	(1.000)	1727703	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.406	29.406	(1.111)	3105328	5.00000	4.792
79	Dibenzo(a,h)anthracene	278	29.460	29.460	(1.113)	2532905	5.00000	5.102
80	Benzo(g,h,i)perylene	276	30.307	30.307	(1.145)	2487899	5.00000	4.860
90	N-Nitrosodimethylamine	74	4.758	4.758	(0.513)	1024083	10.0000	9.808
91	Aniline	93	8.666	8.666	(0.934)	2287896	10.0000	9.883
93	Benzidine	184	21.248	21.248	(0.899)	1040602	10.0000	4.397
103	Pyridine	79	4.812	4.812	(0.519)	1790290	10.0000	9.668
105	1-methylnaphthalene	142	13.428	13.428	(1.141)	1513643	5.00000	5.029
111	Azobenzene (1,2-DP-Hydrazine)	77	16.893	16.893	(1.097)	2072145	5.00000	4.337
187	Total Benzofluoranthenes	252	25.669	25.669	(0.970)	5343809	10.0000	8.987
120	2,3,4,6-Tetrachlorophenol	232	16.082	16.082	(1.044)	435359	5.00000	5.289

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032314ICV.D
Lab Smp Id: SLC0162-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Misc Info:

Calibration Date: 03-MAR-2023
Calibration Time: 18:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	514090	257045	1028180	514090	0.00
27 Naphthalene-d8	1833847	916924	3667694	1833847	0.00
42 Acenaphthene-d10	935282	467641	1870564	935282	0.00
59 Phenanthrene-d10	1597882	798941	3195764	1597882	0.00
69 Chrysene-d12	1549718	774859	3099436	1549718	0.00
134 Di-n-octylphthala	2731644	1365822	5463288	2731644	0.00
77 Perylene-d12	1727703	863852	3455406	1727703	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	0.00
27 Naphthalene-d8	11.77	11.27	12.27	11.77	0.00
42 Acenaphthene-d10	15.40	14.90	15.90	15.40	0.00
59 Phenanthrene-d10	18.53	18.03	19.03	18.53	0.00
69 Chrysene-d12	23.63	23.13	24.13	23.63	0.00
134 Di-n-octylphthala	24.75	24.25	25.25	24.75	0.00
77 Perylene-d12	26.46	25.96	26.96	26.46	0.00

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

REVIEW SUMMARY FOR FILE - NT1003032314ICV.D

Lab ID: SLC0162-ICV1
nt10.i, 20230303A.b\ABN.m,   04-MAR-2023 02:02

RT	CO-ELUTION COMPOUNDS
23.618	bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

No RRT check. Ccal file.

On Column LOD for nt10.i, 20230303A.b\ABN.m, ICAL.sub = 0.0000

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230303A.b

Instrument: nt10.i Date: 04-MAR-2023 Method: 20230303A.b\ABN.m

INITIAL CAL: 30-DEC-2022

Compound	%RSD or R^2
2,4-Dinitrophenol	96.4
2,3,4,6-Tetrachlorophenol	32.6

ICV CAL: NT1003032314ICV.D 04-MAR-2023 02:02

Compound	%D
2,2′-oxybis(1-Chloropropane)	-25.0
Benzoic acid	-39.7
Acenaphthylene	-43.2
2,4-Dinitrophenol	51.7
4-Nitrophenol	-26.7
4-Nitroaniline	-26.0
4,6-Dinitro-2-methylphenol	38.6
Pentachlorophenol	-44.6
3,3′-Dichlorobenzidine	-24.2
Benzidine	-56.0

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00019
Lab File ID:	NT1003012311.D	Calibration Date:	03/01/2023
Sequence:	SLC0084	Injection Date:	03/01/23
Lab Sample ID:	SLC0084-SCV1	Injection Time:	21:46
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Phenol	A	5.0000	4.9	1.5534590	1.5075140		-3.0	+/-20	
bis(2-chloroethyl) ether	A	5.0000	5.9	1.1870870	1.4074350		18.6	+/-20	
2-Chlorophenol	A	5.0000	4.7	1.2950380	1.2153530		-6.2	+/-20	
1,3-Dichlorobenzene	A	5.0000	5.3	1.4278260	1.5038770		5.3	+/-20	
1,4-Dichlorobenzene	A	5.0000	5.2	1.4182650	1.4795020		4.3	+/-20	
1,2-Dichlorobenzene	A	5.0000	5.2	1.3727590	1.4260290		3.9	+/-20	
Benzyl Alcohol	A	5.0000	4.9	0.7104711	0.8002285		-2.0	+/-20	
2,2'-Oxybis(1-chloropropane)	A	5.0000	6.2	0.3957681	0.4932577		24.6	+/-20	*
2-Methylphenol	A	5.0000	4.2	1.0954470	1.0287080		-16.2	+/-20	
Hexachloroethane	A	5.0000	5.4	0.5821386	0.6336697		8.9	+/-20	
N-Nitroso-di-n-Propylamine	A	5.0000	5.9	0.9374094	1.1070890		18.1	+/-20	
4-Methylphenol	A	5.0000	4.2	1.2087680	1.2666790		-15.2	+/-20	
Nitrobenzene	A	5.0000	5.6	0.4118860	0.4587792		11.4	+/-20	
Isophorone	A	5.0000	7.7	0.5257709	0.8066960		53.4	+/-20	*
2-Nitrophenol	A	5.0000	3.2	0.1627036	0.1451285		-35.1	+/-20	*
2,4-Dimethylphenol	A	5.0000	3.5	0.3830403	0.2785662		-29.9	+/-20	*
Bis(2-Chloroethoxy)methane	A	5.0000	6.7	0.3249172	0.4371566		34.5	+/-20	*
2,4-Dichlorophenol	A	5.0000	4.4	0.2612827	0.2786176		-11.3	+/-20	
1,2,4-Trichlorobenzene	A	5.0000	4.9	0.3091179	0.3034222		-1.8	+/-20	
Naphthalene	A	5.0000	5.3	1.0266520	1.0790290		5.1	+/-20	
Benzoic acid	A	10.000	5.6	0.1970511	0.1331005		-43.6	+/-20	*
4-Chloroaniline	A	5.0000	3.8	0.4009859	0.3447752		-24.2	+/-20	*
Hexachlorobutadiene	A	5.0000	5.0	0.2250808	0.2257331		0.3	+/-20	
4-Chloro-3-Methylphenol	A	5.0000	4.5	0.3168628	0.2958278		-11.0	+/-20	
2-Methylnaphthalene	A	5.0000	5.0	0.7252818	0.7181482		-1.0	+/-20	
Hexachlorocyclopentadiene	A	5.0000	2.6	0.1096304	0.0686178		-48.8	+/-20	*
2,4,6-Trichlorophenol	A	5.0000	4.1	0.3635155	0.3174533		-17.6	+/-20	
2,4,5-Trichlorophenol	A	5.0000	4.1	0.3974340	0.3415557		-17.0	+/-20	
2-Chloronaphthalene	A	5.0000	5.3	1.1200160	1.1792440		5.3	+/-20	
2-Nitroaniline	A	5.0000	5.0	0.2857098	0.3129766		0.5	+/-20	
Acenaphthylene	A	5.0000	5.8	1.9309320	2.2420970		16.1	+/-20	
Dimethylphthalate	A	5.0000	5.4	1.2917940	1.3911230		7.7	+/-20	
2,6-Dinitrotoluene	A	5.0000	5.2	0.2723393	0.2988779		3.7	+/-20	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00019
Lab File ID:	NT1003012311.D	Calibration Date:	03/01/2023
Sequence:	SLC0084	Injection Date:	03/01/23
Lab Sample ID:	SLC0084-SCV1	Injection Time:	21:46
Sequence Name:	SCV 5.0		

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
		STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Acenaphthene	A	5.0000	5.2	1.1645250	1.2003320		3.1	+/-20
3-Nitroaniline	A	5.0000	5.2	0.3257650	0.3369711		3.4	+/-20
2,4-Dinitrophenol	A	5.0000	0.3	0.0558713	0.0039765		-94.7	+/-20 *
Dibenzofuran	A	5.0000	5.0	1.7283260	1.7261300		-0.1	+/-20
4-Nitrophenol	A	5.0000	3.8	0.2049826	0.1754079		-23.6	+/-20 *
2,4-Dinitrotoluene	A	5.0000	4.7	0.3852197	0.3955023		-5.4	+/-20
Fluorene	A	5.0000	5.3	1.4379840	1.5256380		6.1	+/-20
4-Chlorophenylphenyl ether	A	5.0000	5.3	0.6424026	0.6943814		5.1	+/-20
Diethyl phthalate	A	5.0000	5.6	1.3684860	1.5432660		12.8	+/-20
4-Nitroaniline	A	5.0000	5.2	0.3501692	0.3664427		4.6	+/-20
4,6-Dinitro-2-methylphenol	A	5.0000	1.3	0.0712506	0.0241548		-74.2	+/-20 *
N-Nitrosodiphenylamine	A	5.0000	5.4	0.5918253	0.6410493		8.3	+/-20
4-Bromophenyl phenyl ether	A	5.0000	5.5	0.2398060	0.2618590		9.2	+/-20
Hexachlorobenzene	A	5.0000	4.8	0.2700430	0.2595304		-3.9	+/-20
Pentachlorophenol	A	5.0000	3.5	0.1145550	0.0886055		-30.2	+/-20 *
Phenanthrene	A	5.0000	5.1	1.0236730	1.0409810		1.7	+/-20
Anthracene	A	5.0000	4.6	0.9926226	0.9101788		-8.3	+/-20
Carbazole	A	5.0000	5.3	0.9093581	0.9702244		6.7	+/-20
Di-n-Butylphthalate	A	5.0000	5.5	1.1818970	1.4025400		9.3	+/-20
Fluoranthene	A	5.0000	4.5	1.3760330	1.2499020		-9.2	+/-20
Pyrene	A	5.0000	4.6	1.4011560	1.2963060		-7.5	+/-20
Butylbenzylphthalate	A	5.0000	4.5	0.6475451	0.6710971		-9.5	+/-20
Benzo(a)anthracene	A	5.0000	4.6	1.4104100	1.2914460		-8.4	+/-20
3,3'-Dichlorobenzidine	A	10.000	7.4	0.5458244	0.4679806		-26.2	+/-20 *
Chrysene	A	5.0000	5.0	1.1462500	1.1386240		-0.7	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	5.0	0.5331838	0.5732313		-0.9	+/-20
Di-n-Octylphthalate	A	5.0000	5.8	0.8870063	1.0367270		16.9	+/-20
Benzofluoranthenes, Total	A	10.000	8.9	1.3383070	1.2252050		-11.0	+/-20
Benzo(a)pyrene	A	5.0000	4.4	1.2312020	1.1368210		-11.1	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	4.3	1.4033590	1.2968100		-13.1	+/-20
Dibenzo(a,h)anthracene	A	5.0000	4.6	1.1150690	1.0521910		-7.8	+/-20
Benzo(g,h,i)perylene	A	5.0000	4.6	1.1245240	1.0882170		-8.0	+/-20
1-Methylnaphthalene	A	5.0000	5.2	0.6564478	0.6851418		4.4	+/-20
2-Fluorophenol	A	7.5000	0.00	1.2585100				+/-20 *

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00019
Lab File ID:	NT1003012311.D	Calibration Date:	03/01/2023
Sequence:	SLC0084	Injection Date:	03/01/23
Lab Sample ID:	SLC0084-SCV1	Injection Time:	21:46
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol-d5	A	7.5000	0.00	1.4611190				+/-20 *
2-Chlorophenol-d4	A	7.5000	0.00	1.2465880				+/-20 *
1,2-Dichlorobenzene-d4	A	5.0000	4.29	0.9313544	0.8000000		-14.1	+/-20
Nitrobenzene-d5	A	5.0000	0.00	0.4390871				+/-20 *
2-Fluorobiphenyl	A	5.0000	0.00	1.4267270				+/-20 *
2,4,6-Tribromophenol	A	7.5000	0.00	0.2287830				+/-20 *
p-Terphenyl-d14	A	5.0000	0.0196	1.1337350	0.0044473		-99.6	+/-20 *

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

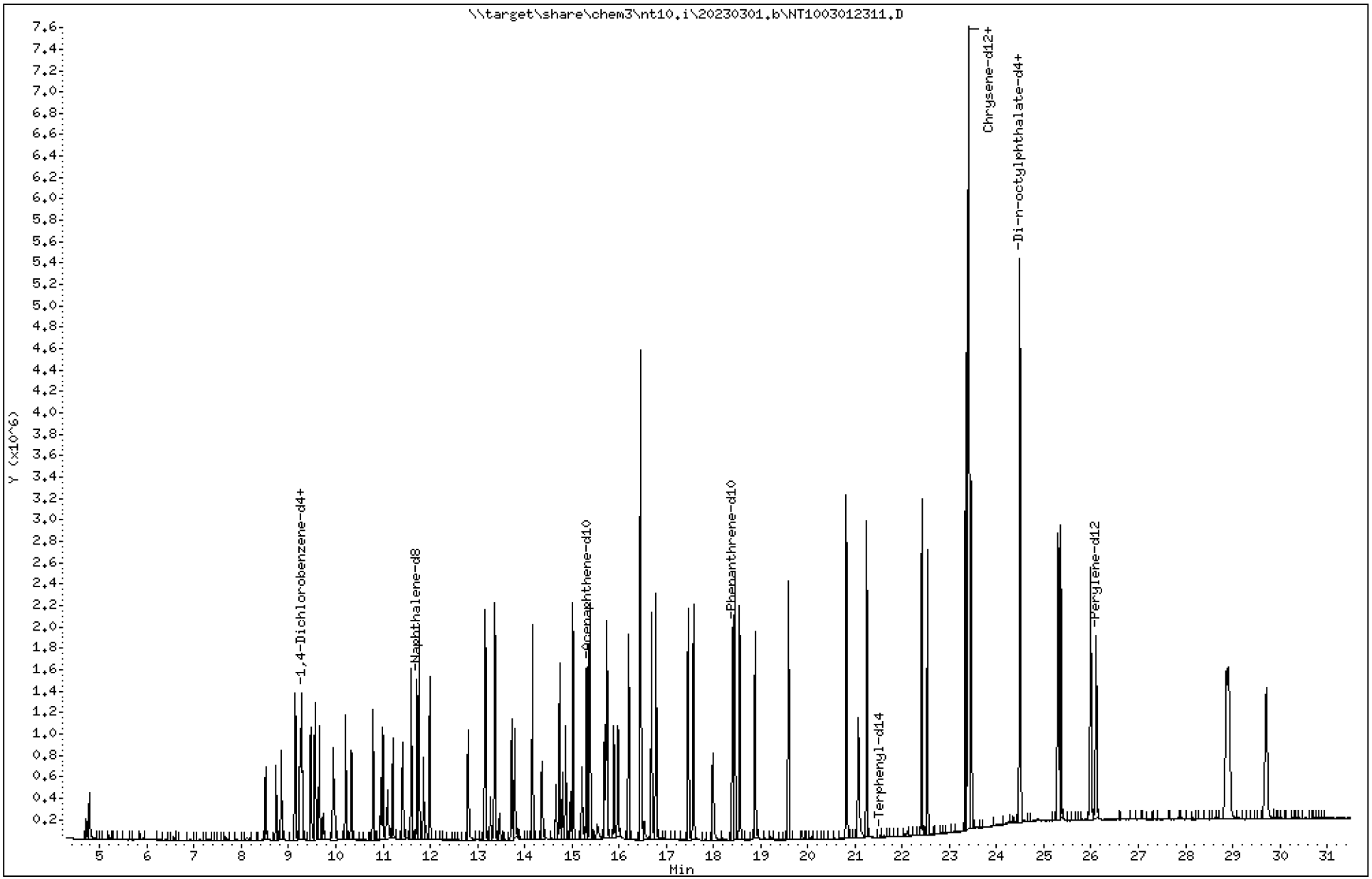
Instrument: nt10.i

Sample Info: SEQ-SCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

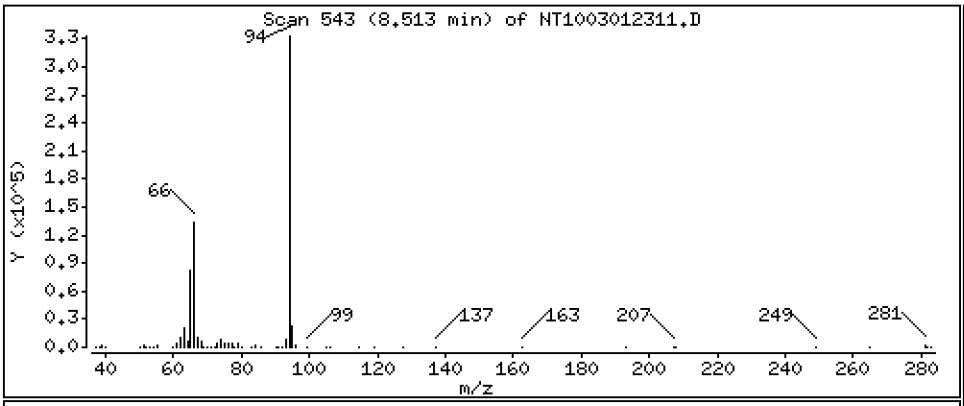
Operator: VTS

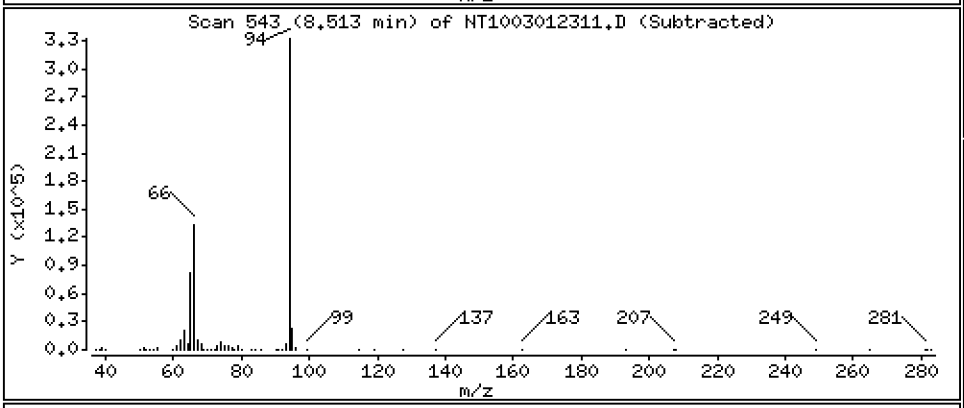
Column phase: ZB-5msi

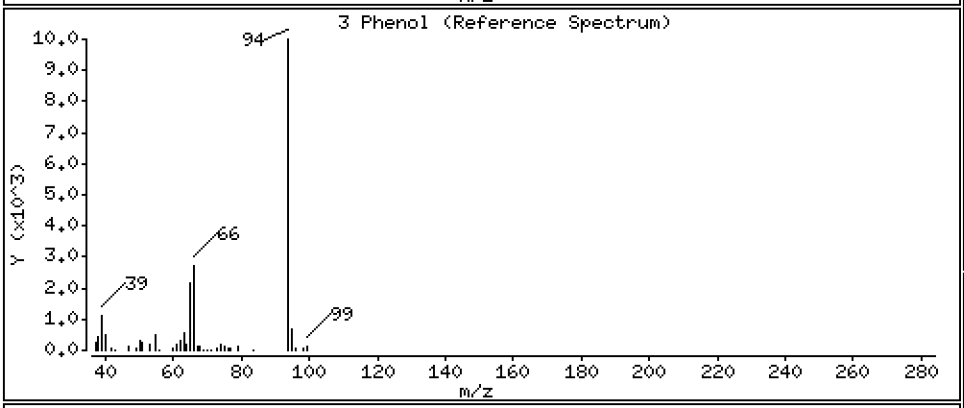
Column diameter: 0.25

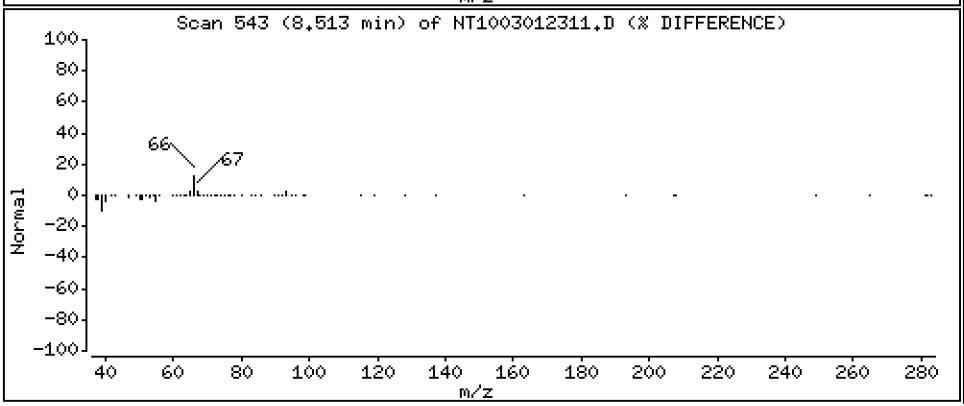
3 Phenol

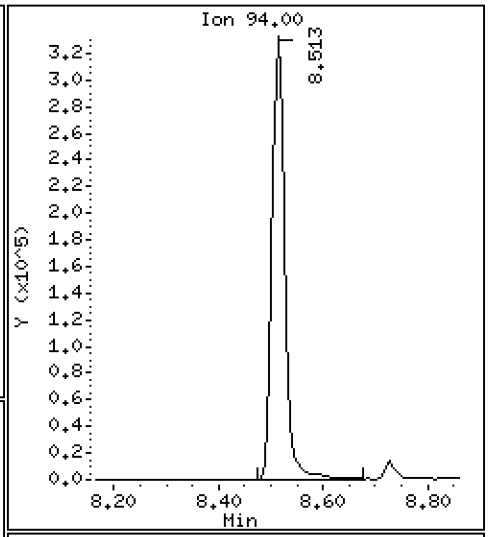
Concentration: 4.852 ug/mL

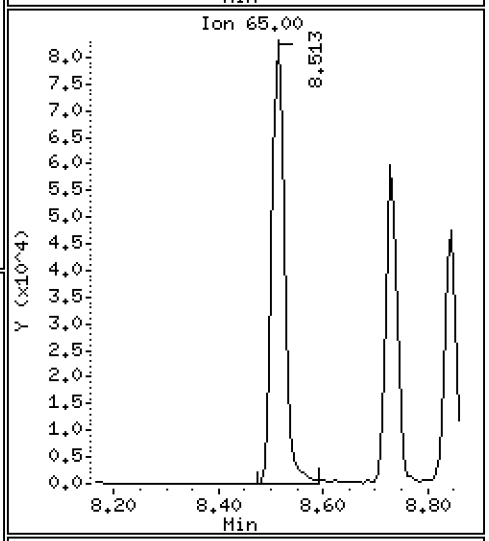


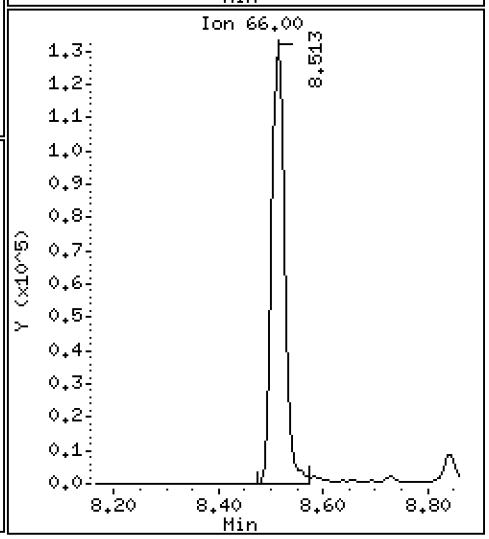












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

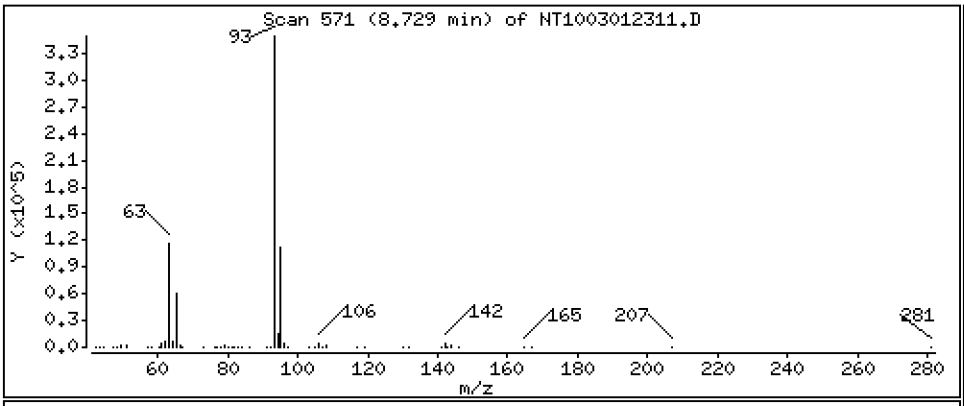
Operator: VTS

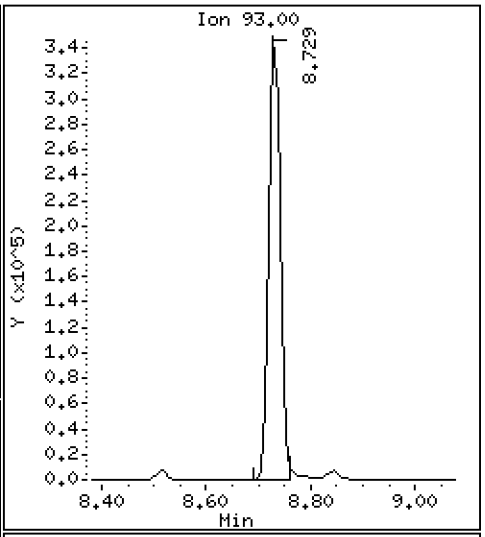
Column phase: ZB-5msi

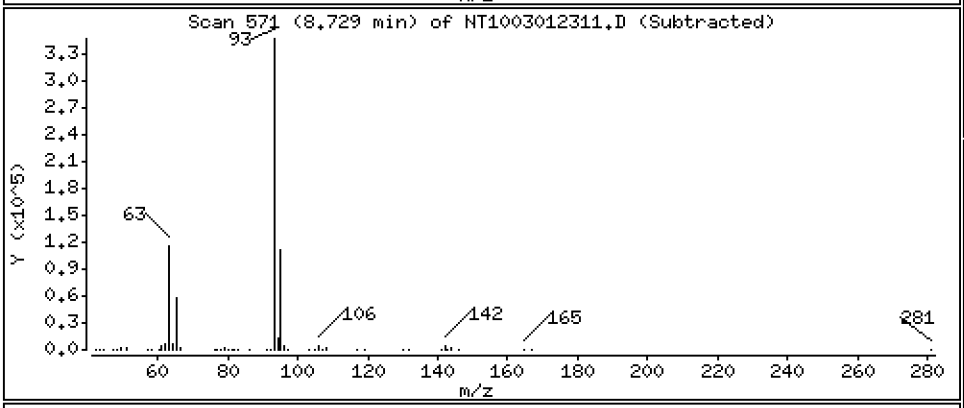
Column diameter: 0.25

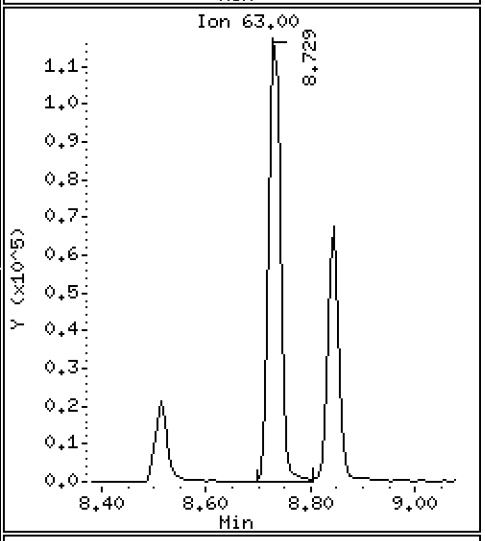
4 Bis(2-Chloroethyl)ether

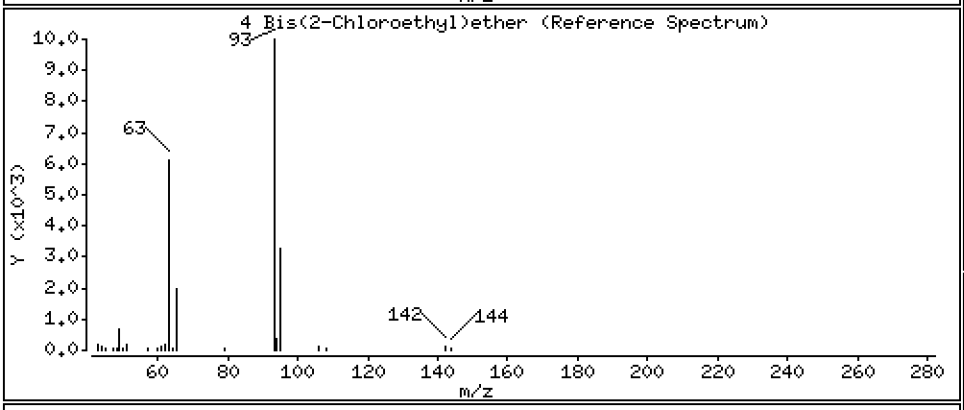
Concentration: 5.928 ug/mL

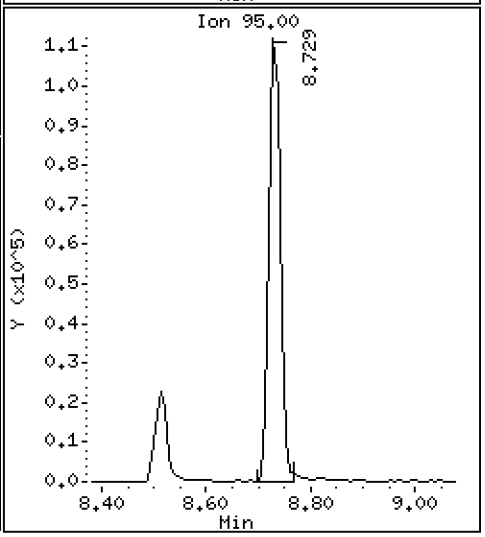


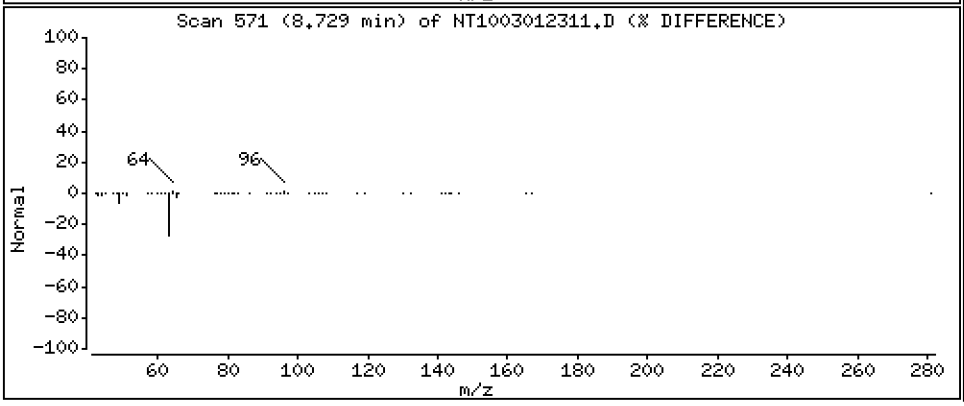












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

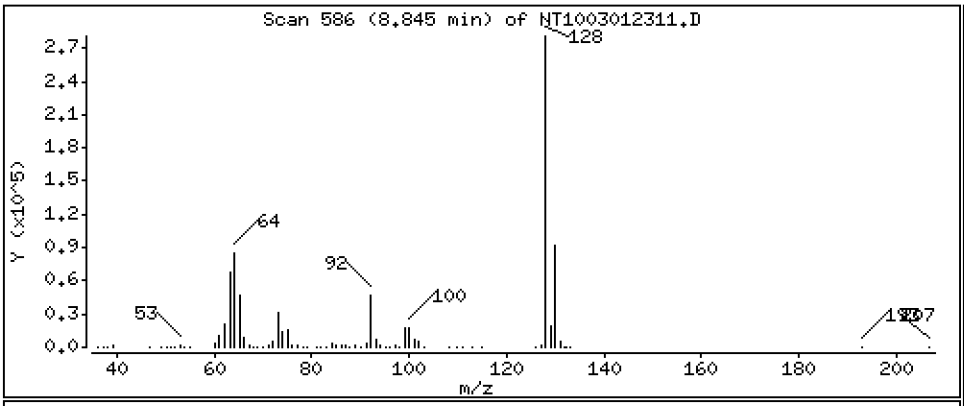
Operator: VTS

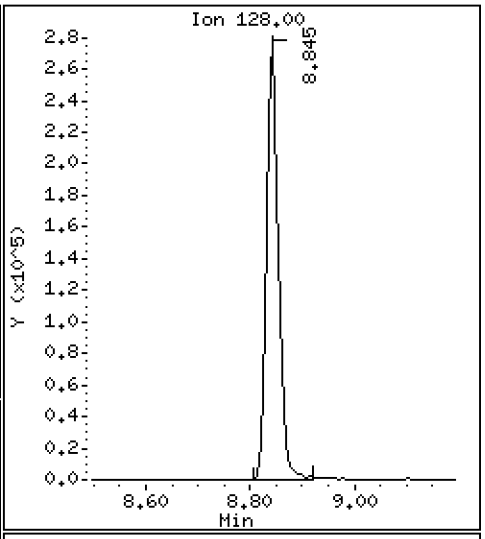
Column phase: ZB-5msi

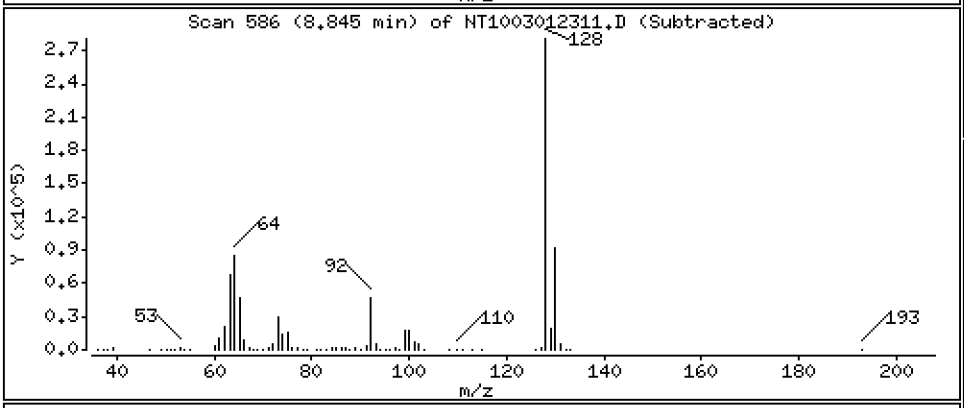
Column diameter: 0.25

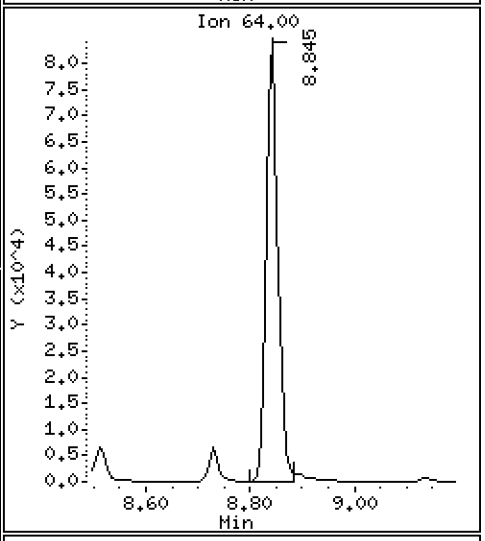
6 2-Chlorophenol

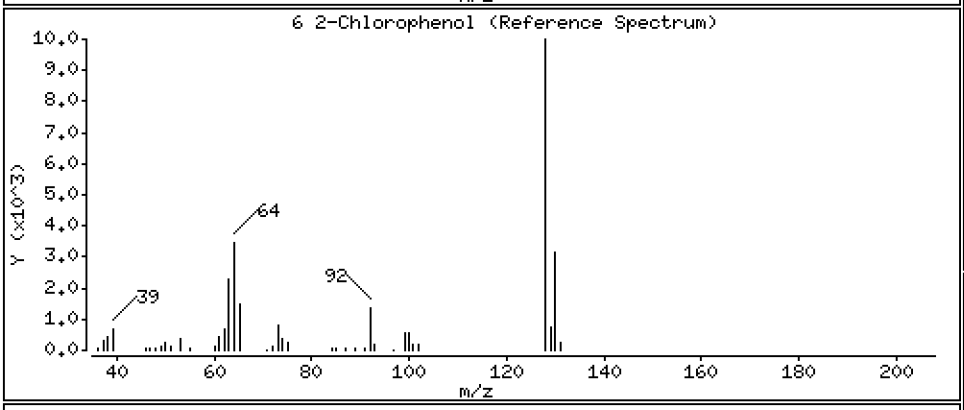
Concentration: 4.692 ug/mL

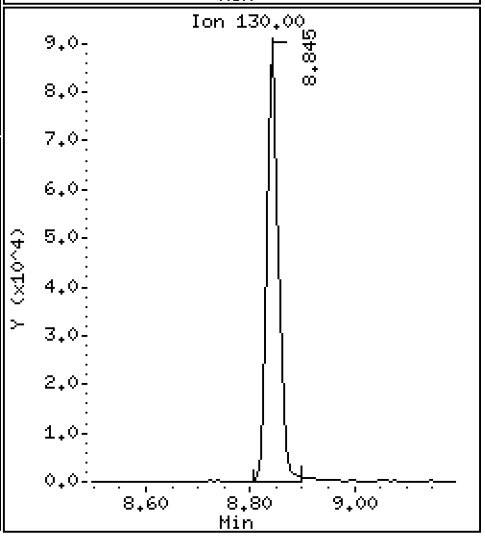


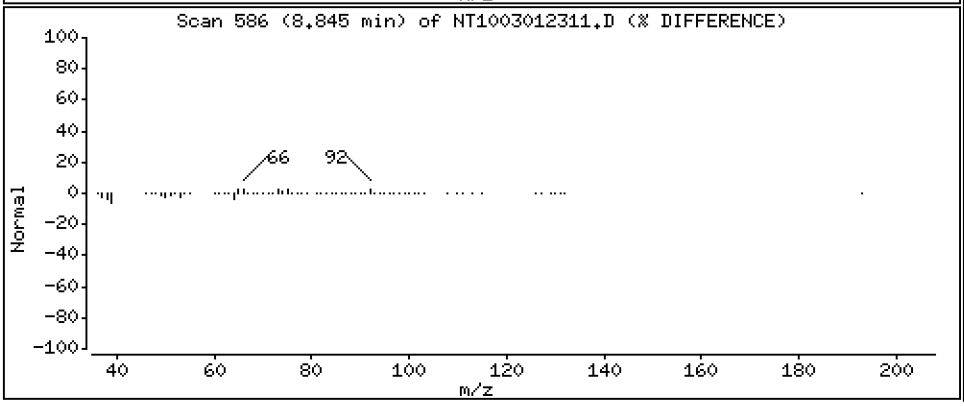












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

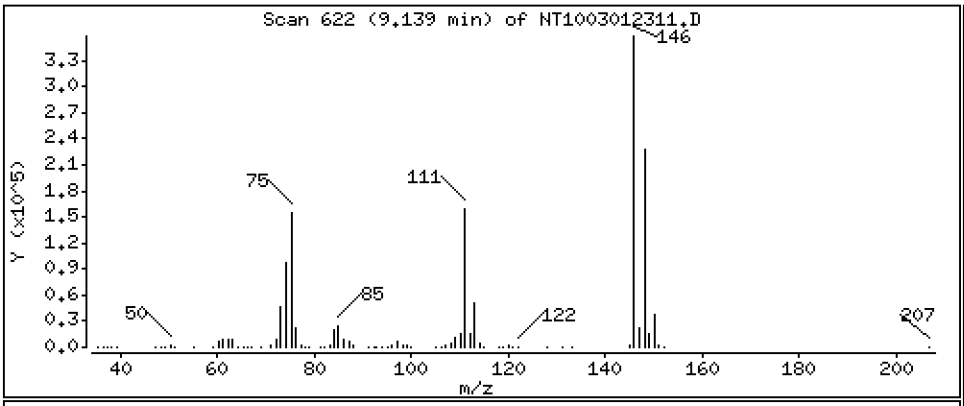
Operator: VTS

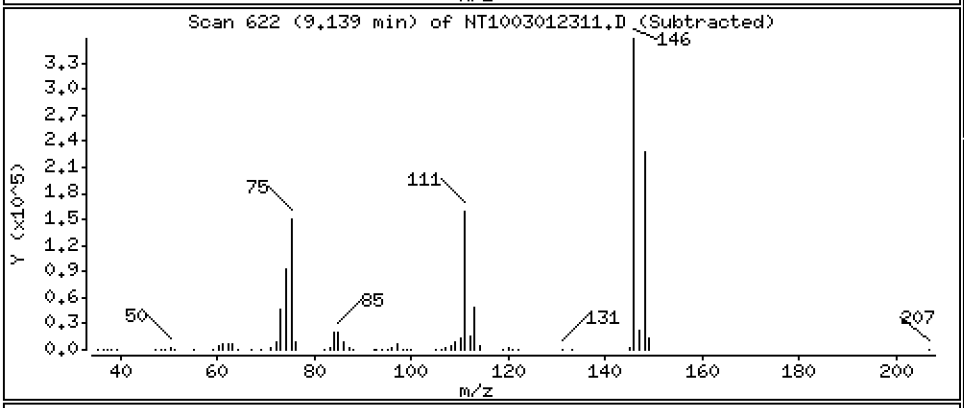
Column phase: ZB-5msi

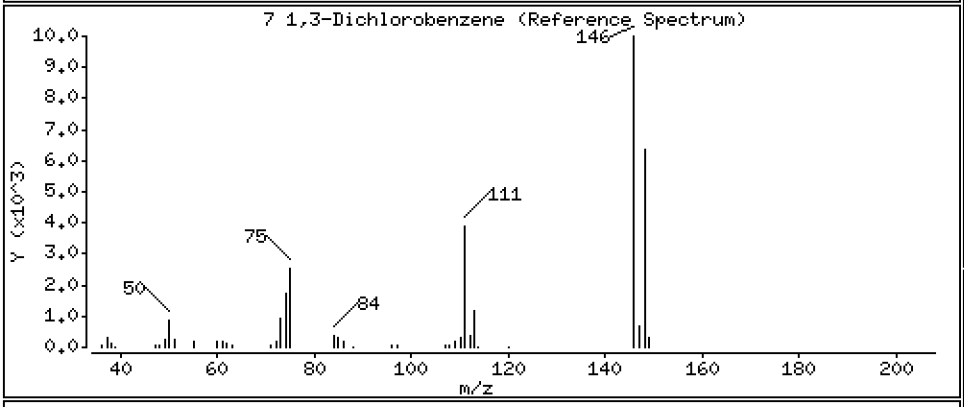
Column diameter: 0.25

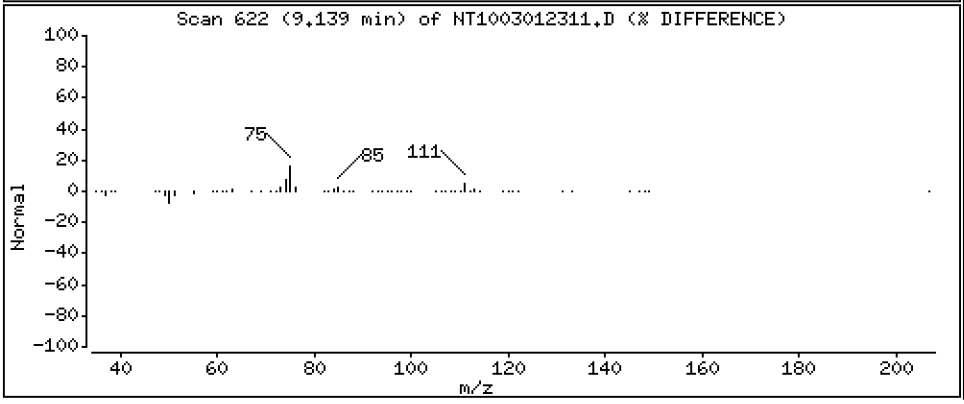
7 1,3-Dichlorobenzene

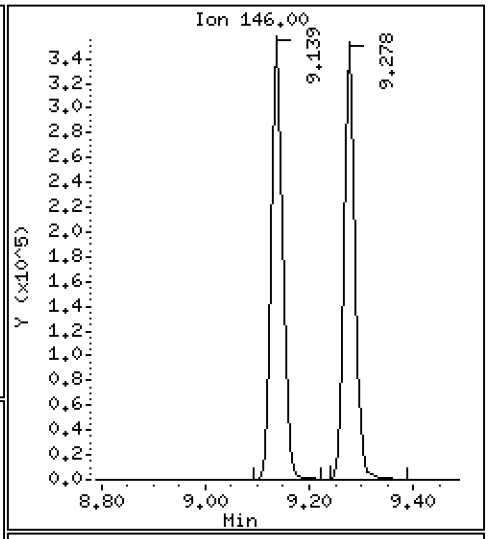
Concentration: 5.266 ug/mL

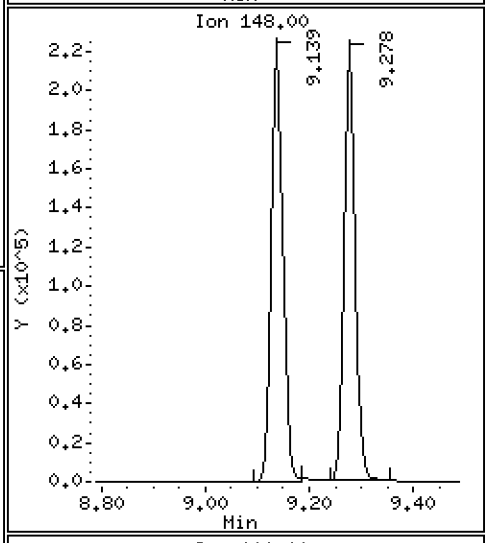


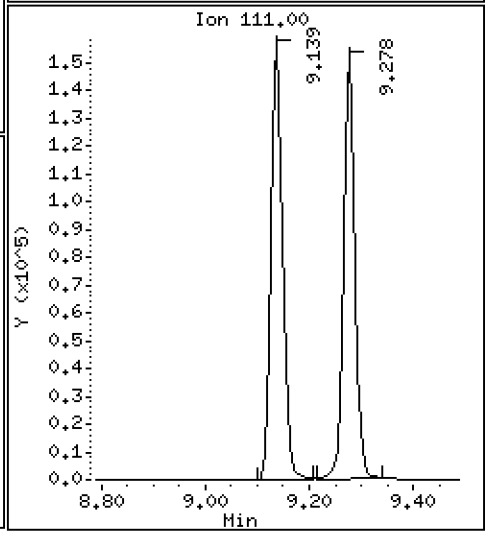












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

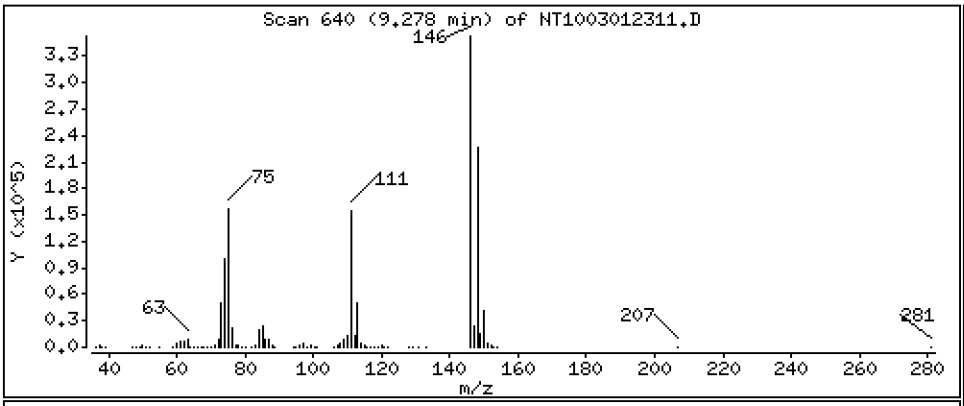
Operator: VTS

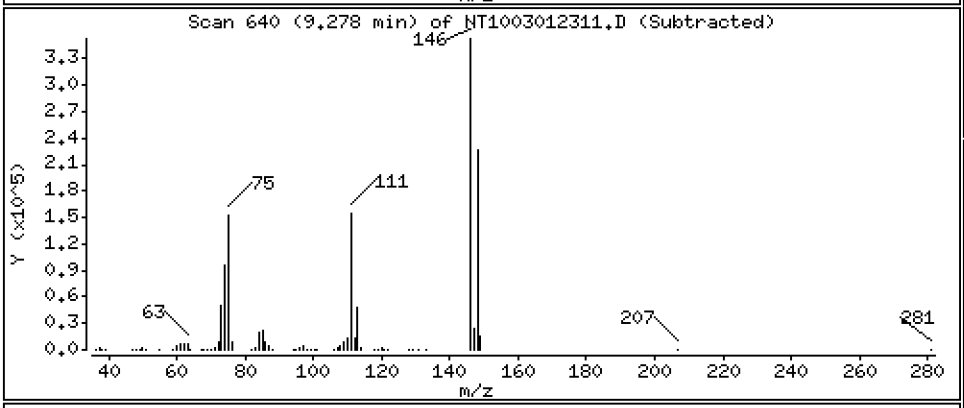
Column phase: ZB-5msi

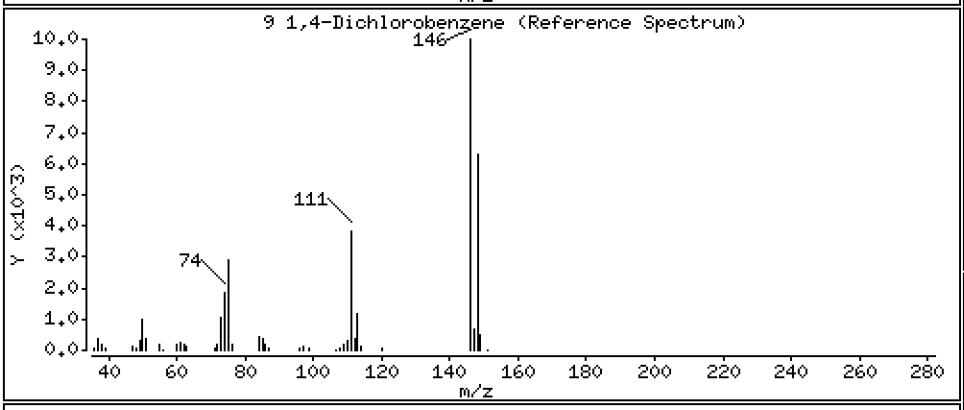
Column diameter: 0.25

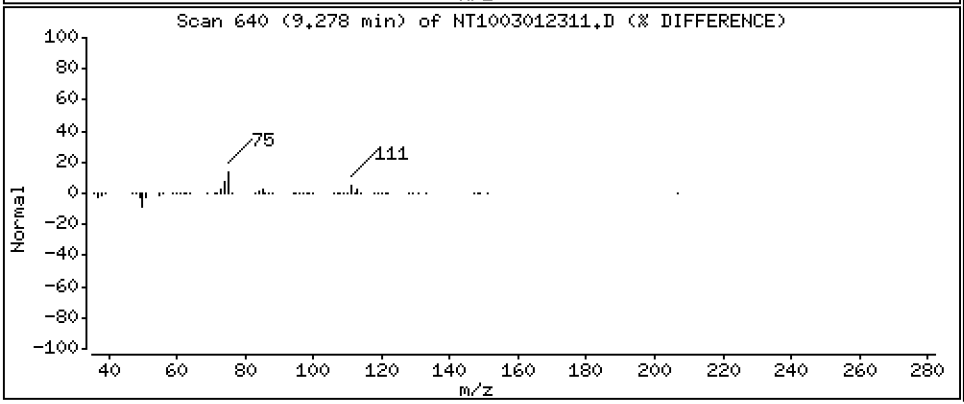
9 1,4-Dichlorobenzene

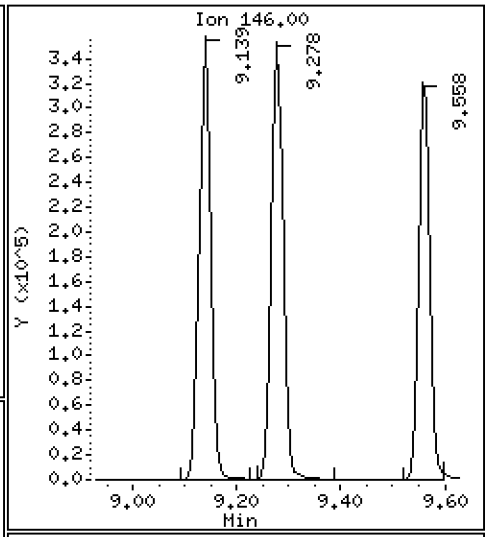
Concentration: 5.216 ug/mL

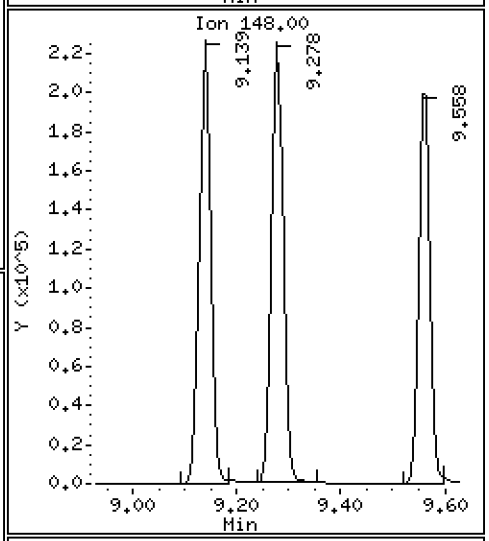


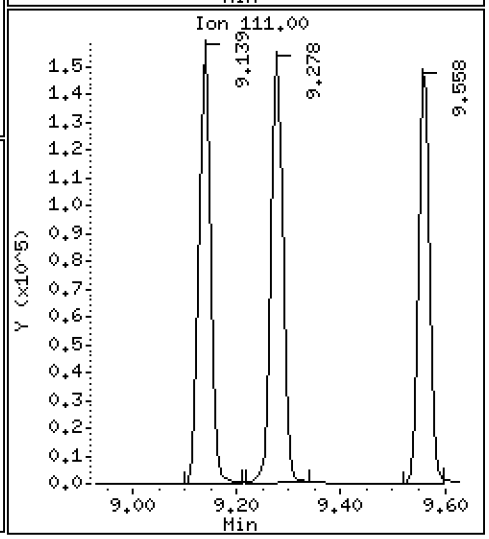












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

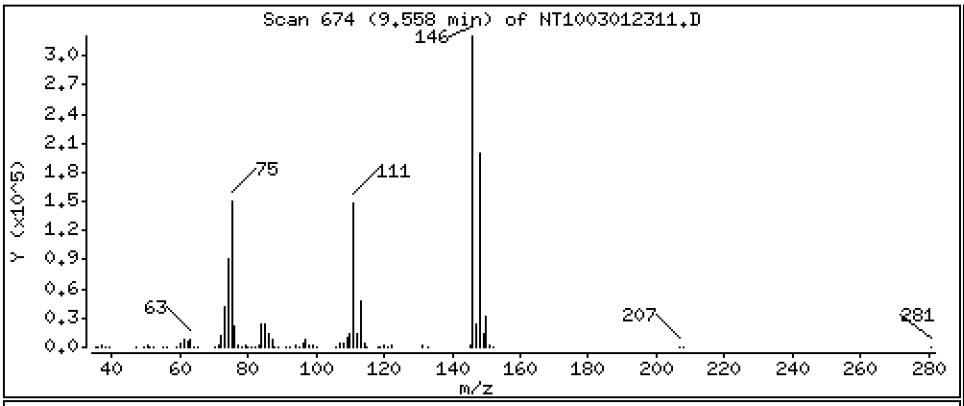
Operator: VTS

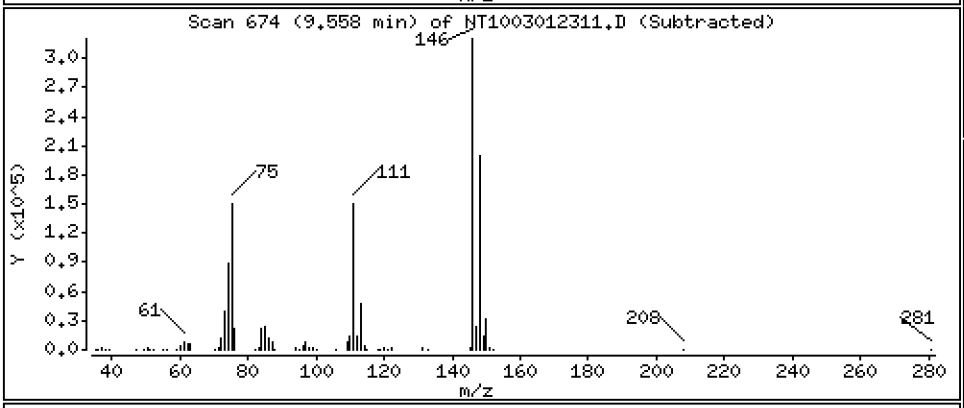
Column phase: ZB-5msi

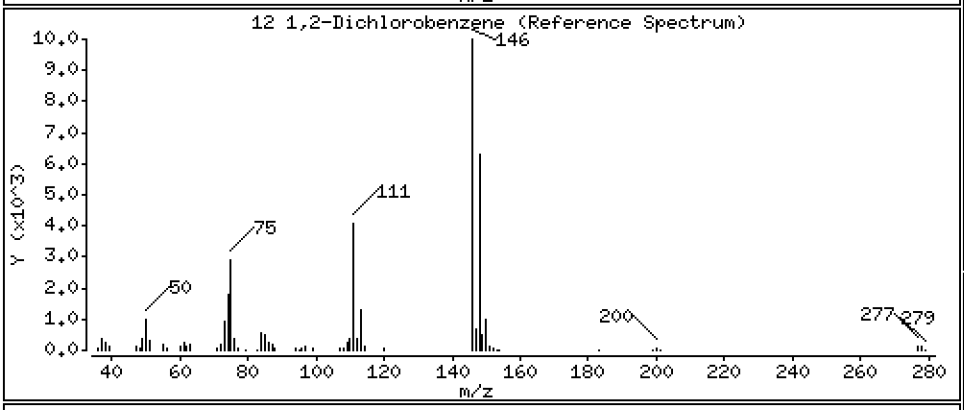
Column diameter: 0.25

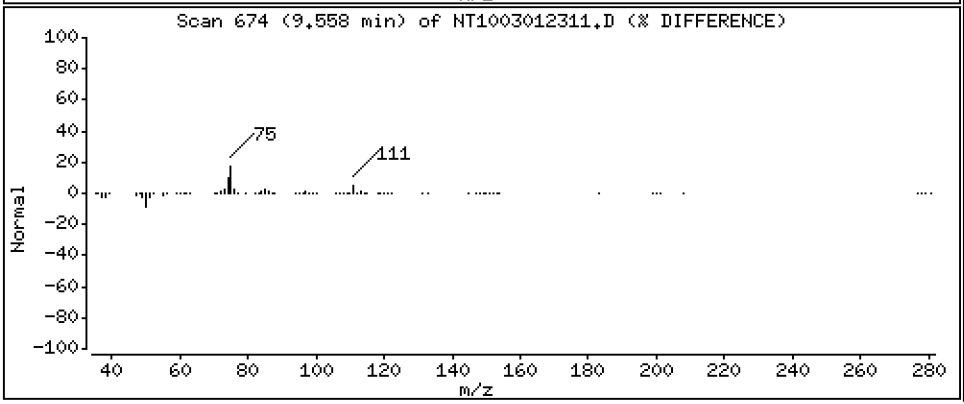
12 1,2-Dichlorobenzene

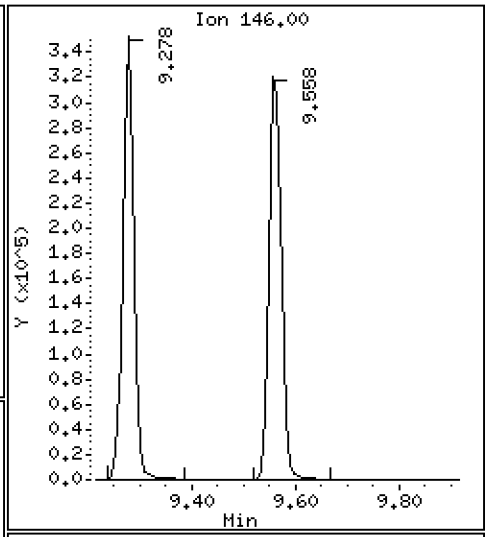
Concentration: 5.194 ug/mL

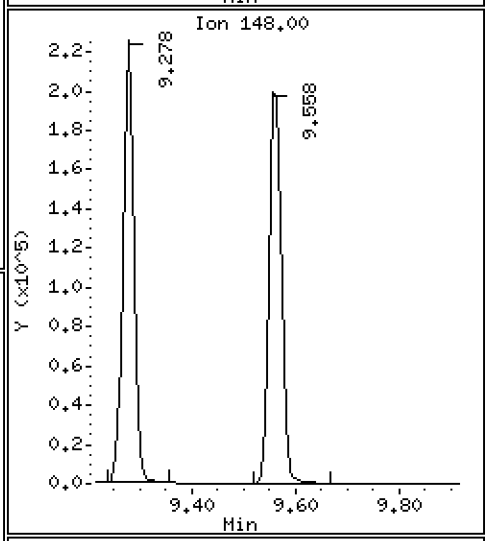


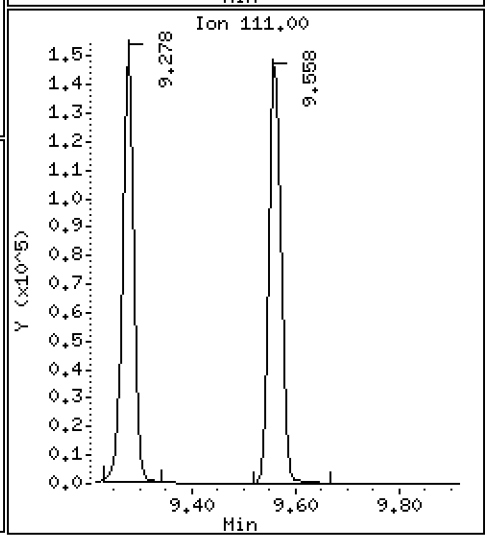












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

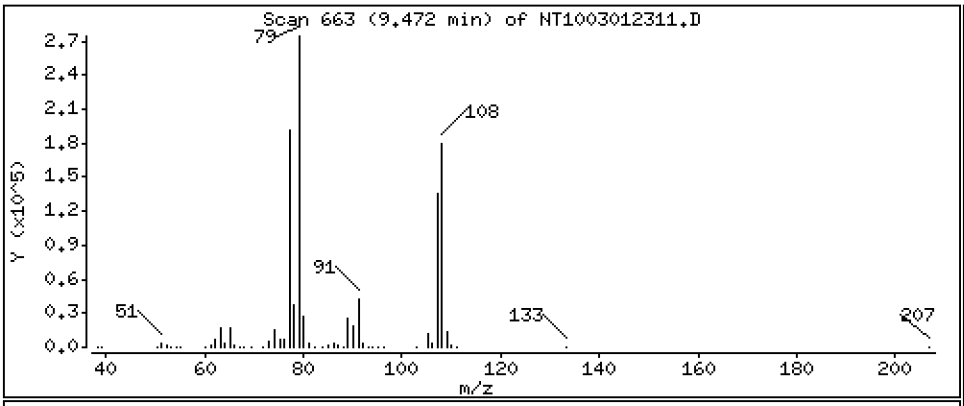
Operator: VTS

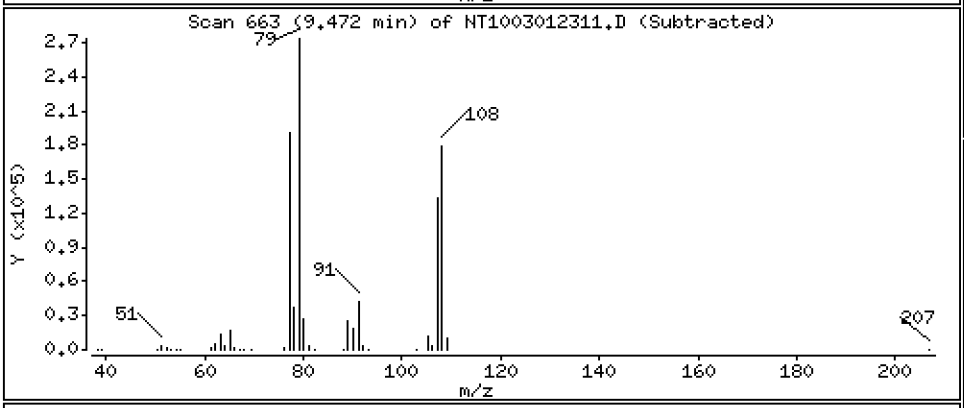
Column phase: ZB-5msi

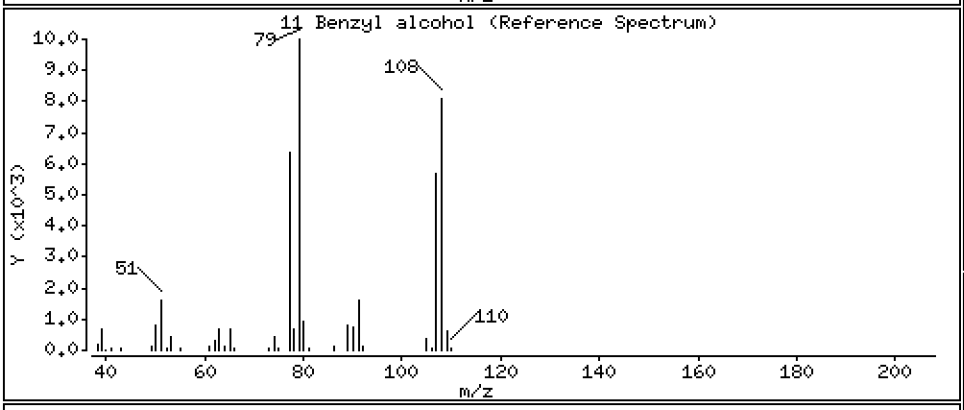
Column diameter: 0.25

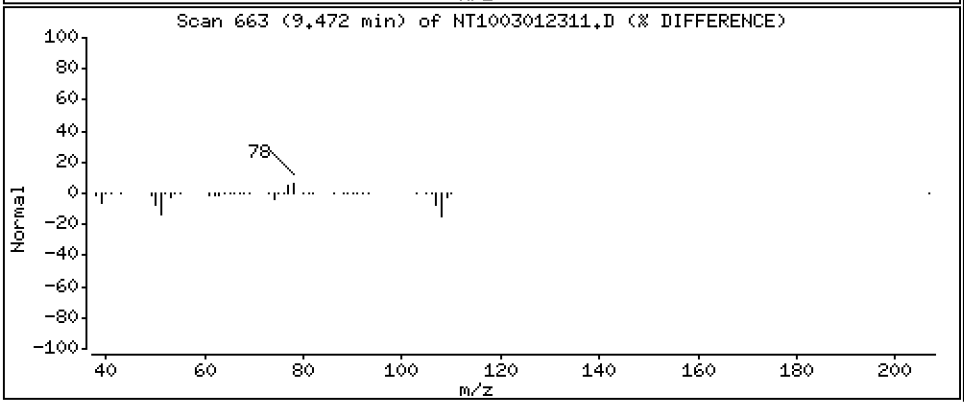
11 Benzyl alcohol

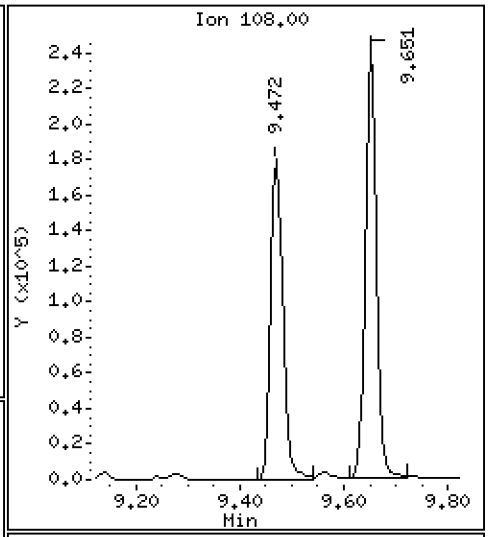
Concentration: 4.898 ug/mL

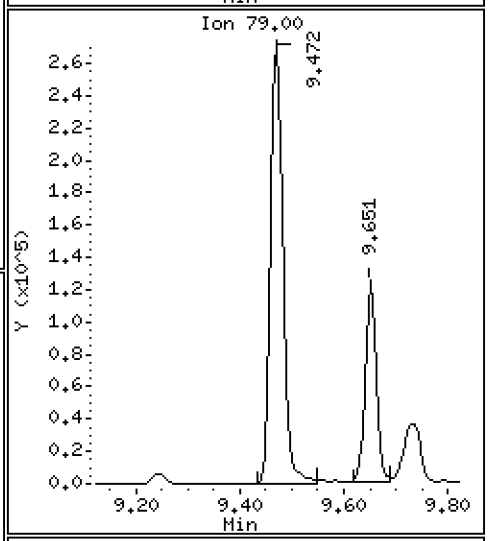


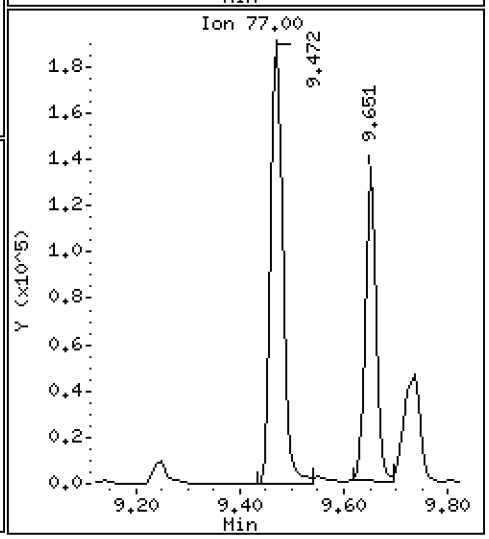












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

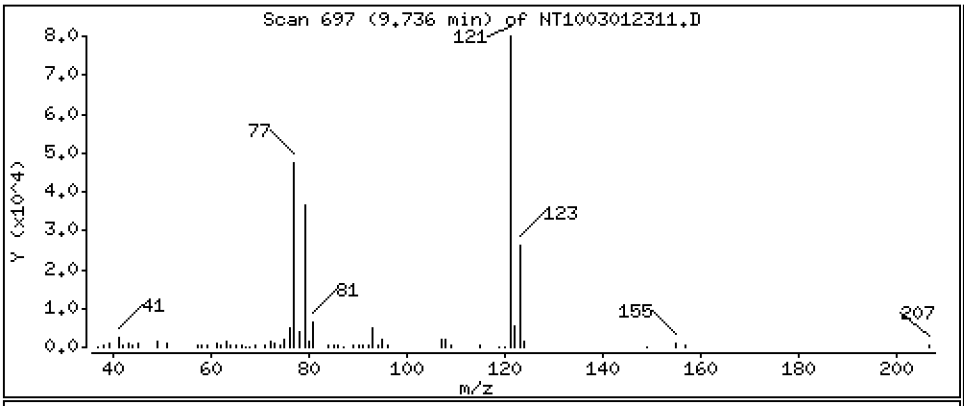
Operator: VTS

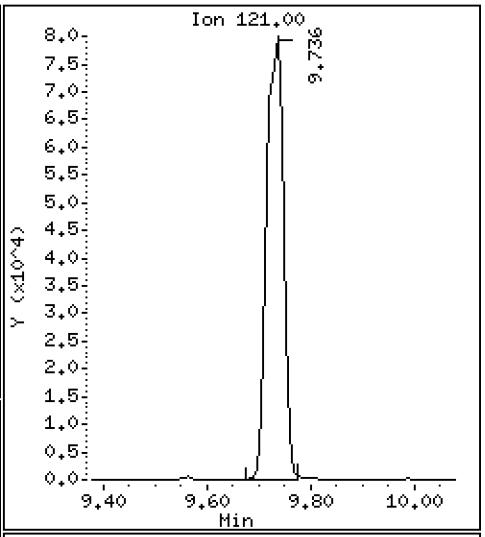
Column phase: ZB-5msi

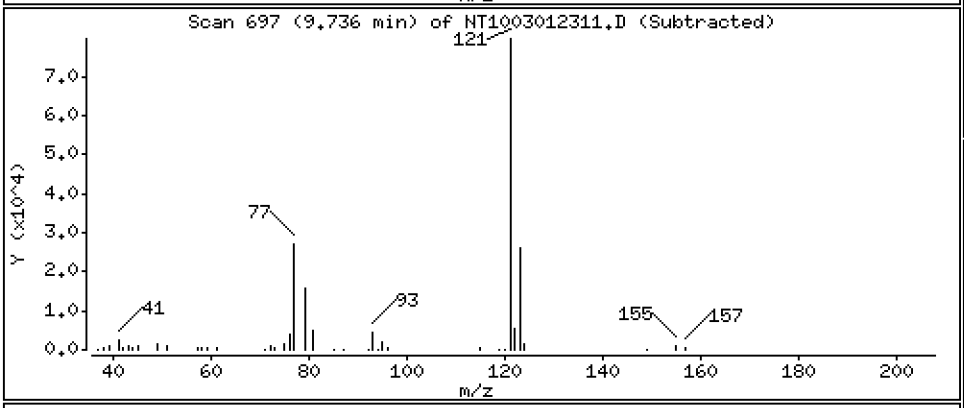
Column diameter: 0.25

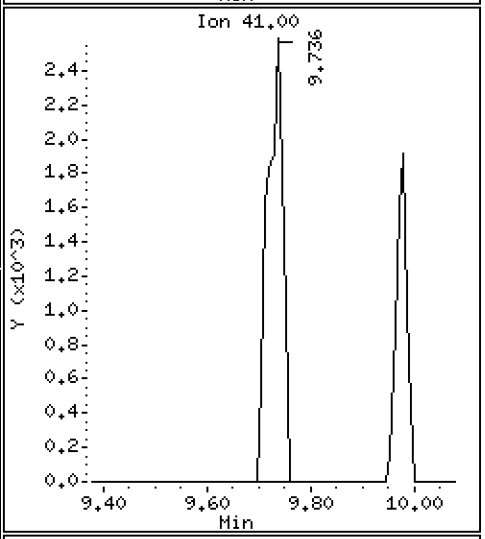
14 2,2'-oxybis(1-Chloropropane)

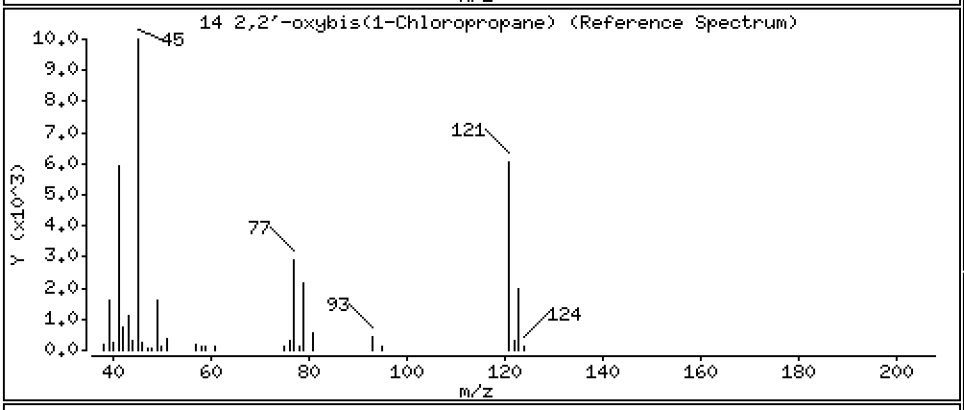
Concentration: 6.232 ug/mL

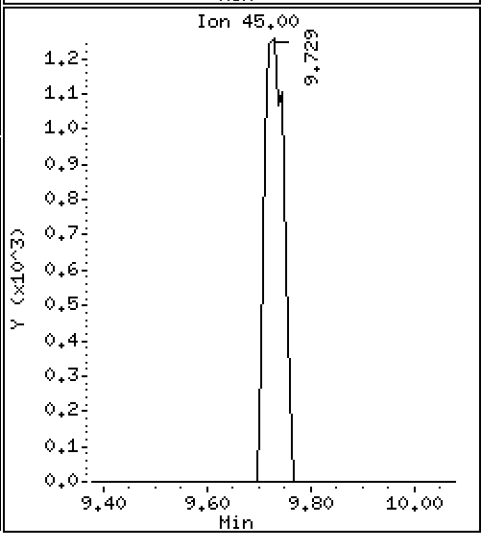


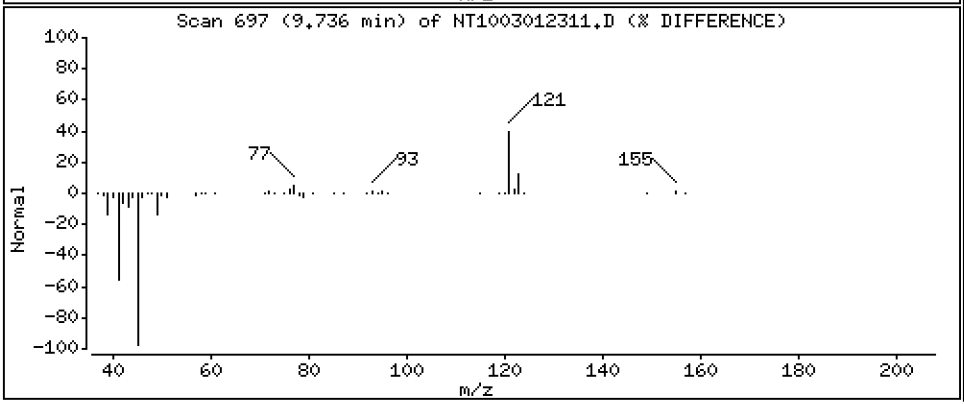












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

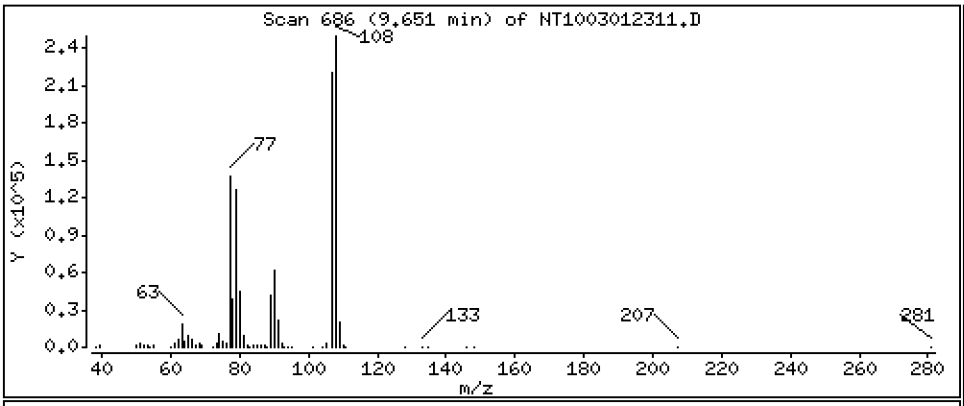
Operator: VTS

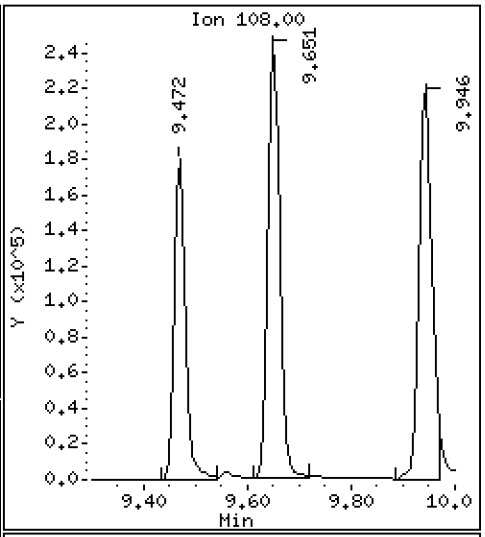
Column phase: ZB-5msi

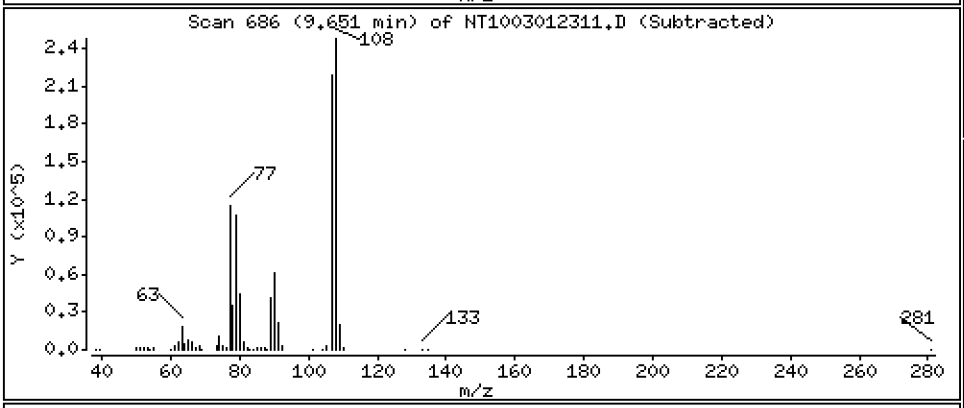
Column diameter: 0.25

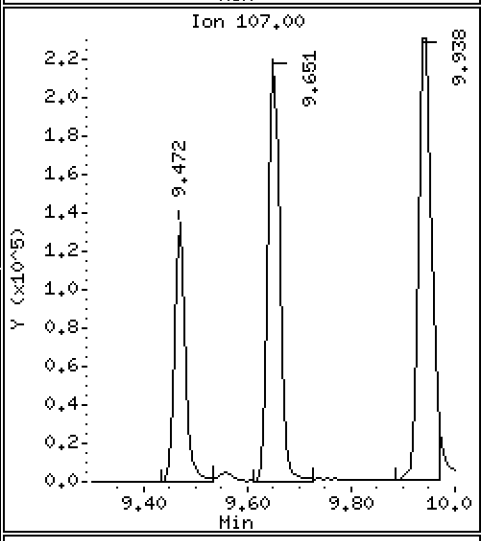
13 2-Methylphenol

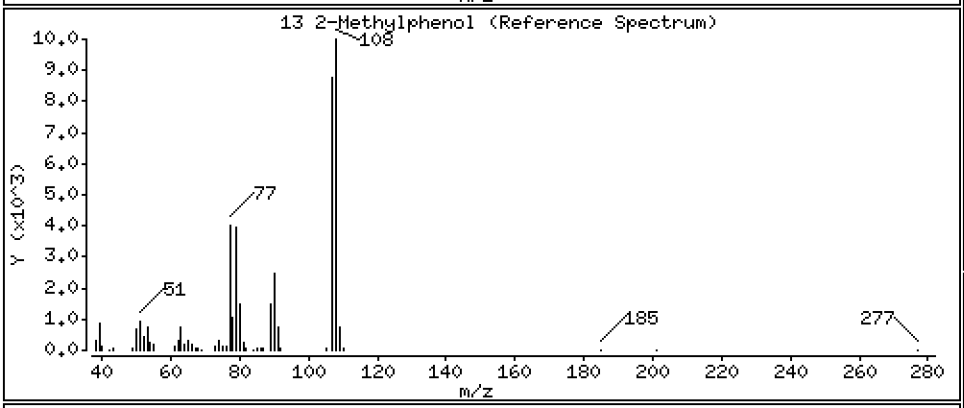
Concentration: 4.192 ug/mL

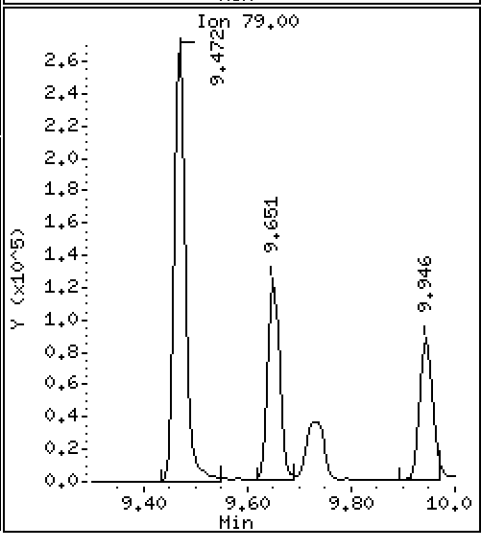


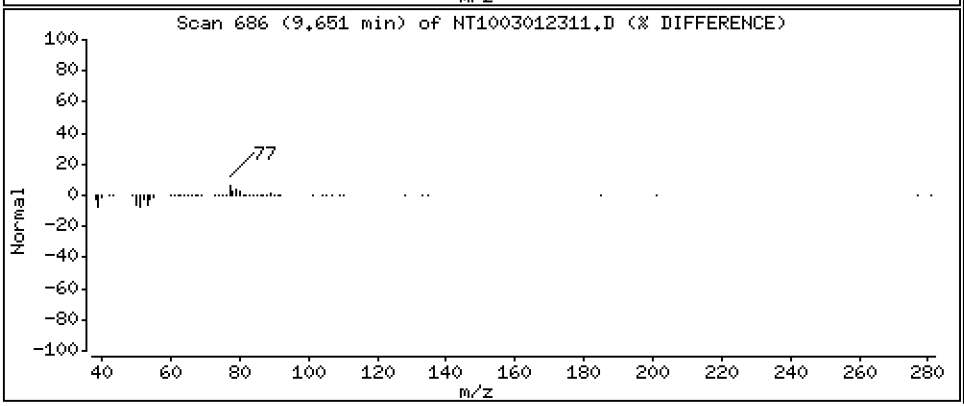












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

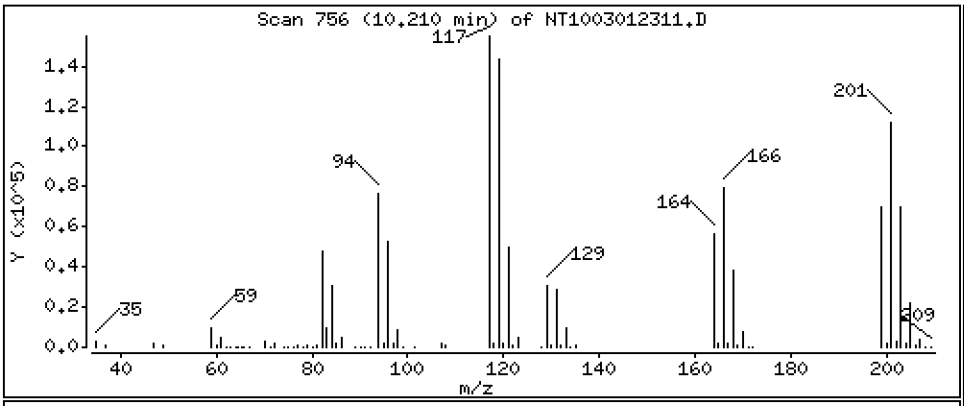
Operator: VTS

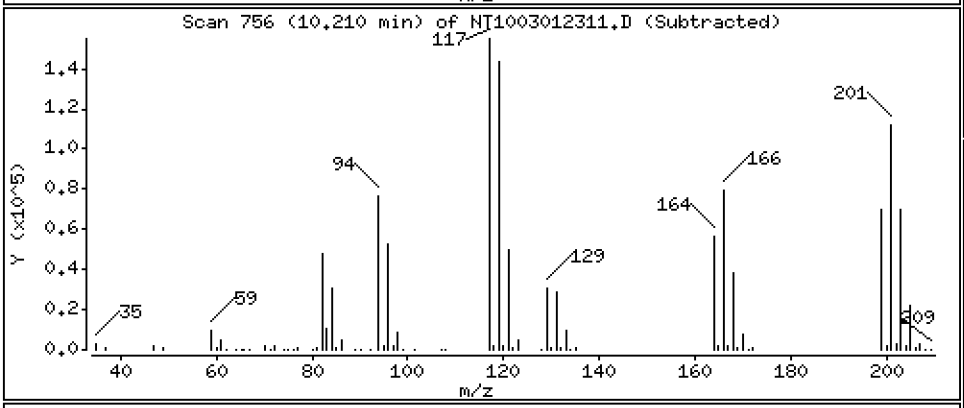
Column phase: ZB-5msi

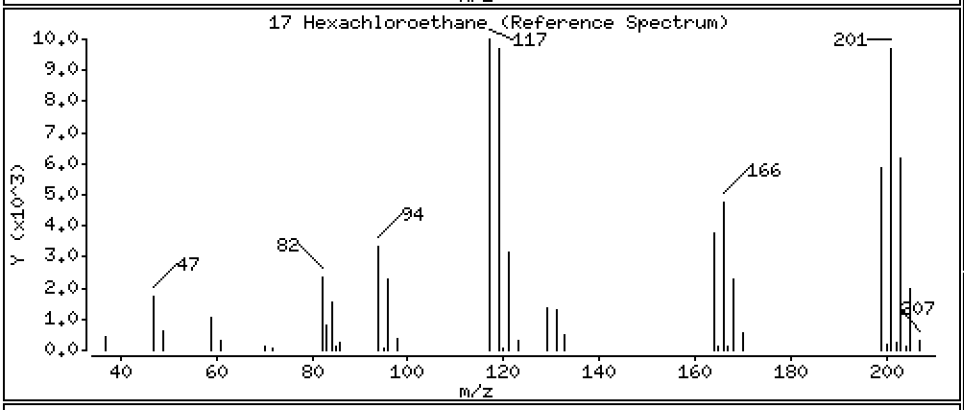
Column diameter: 0.25

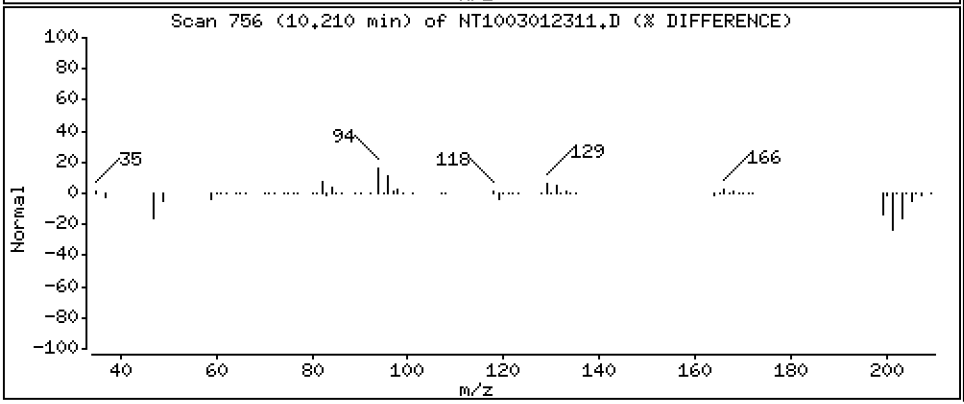
17 Hexachloroethane

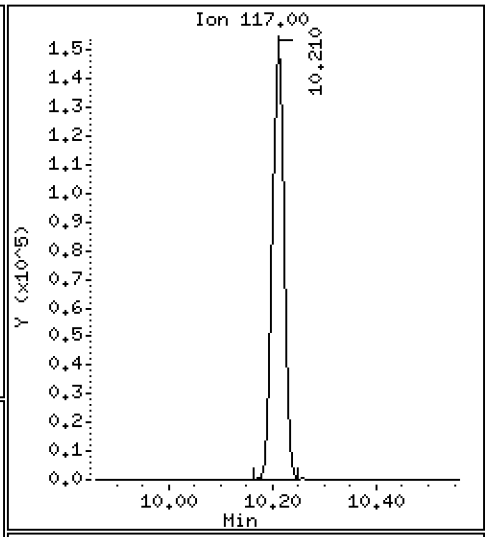
Concentration: 5.443 ug/mL

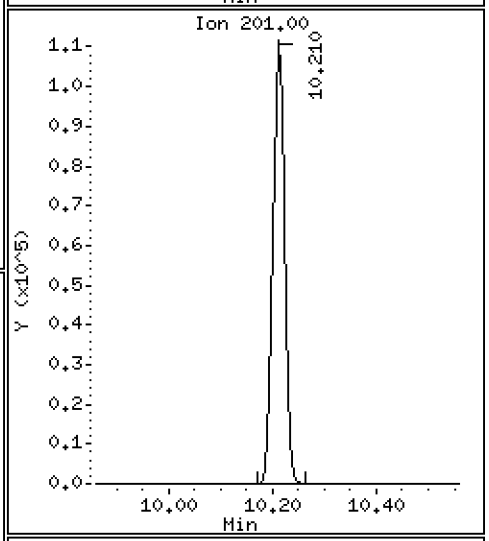


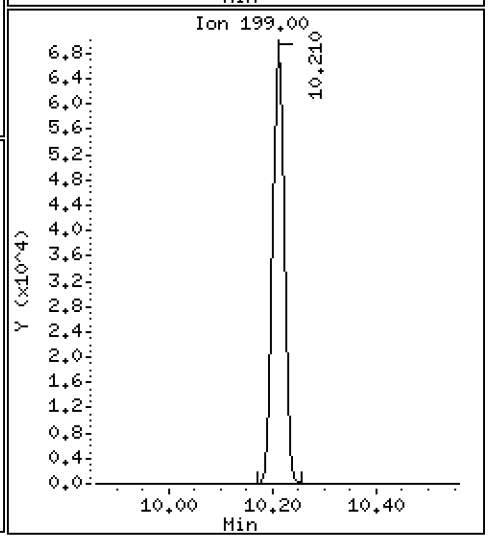












Date : 01-MAR-2023 21:46

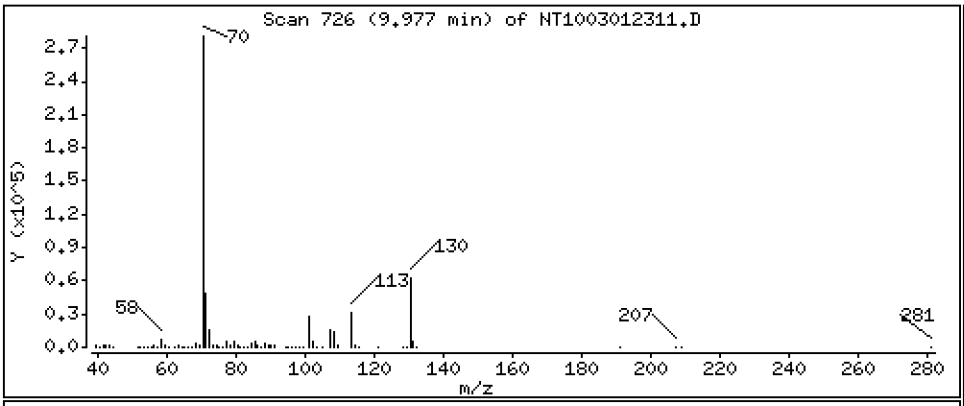
Client ID: Instrument: nt10.i

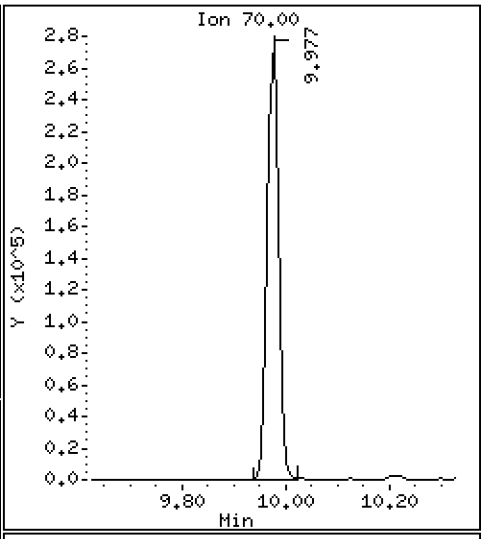
Sample Info: SEQ-SCV1

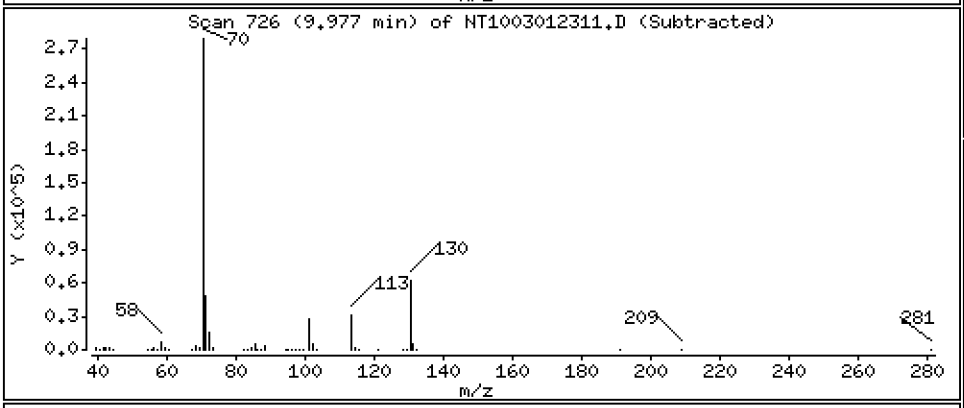
Operator: VTS

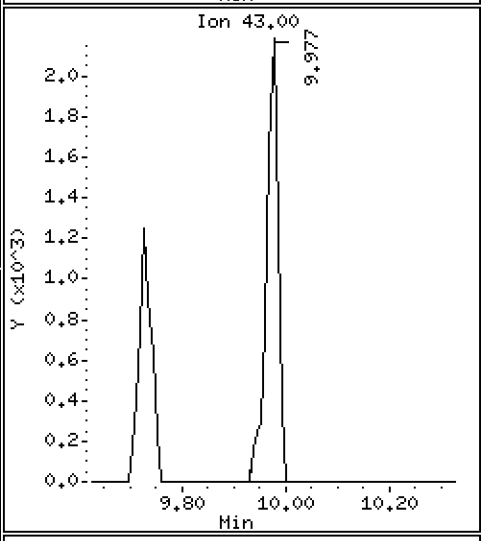
Column phase: ZB-5msi Column diameter: 0.25

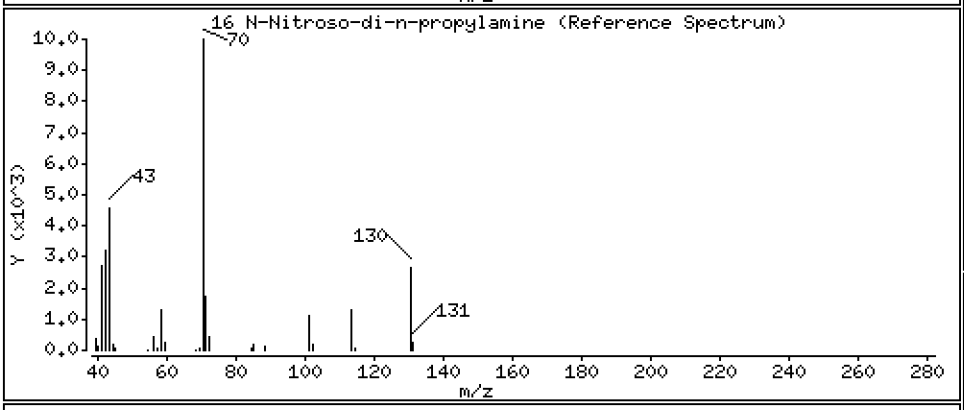
16 N-Nitroso-di-n-propylamine Concentration: 5.905 ug/mL

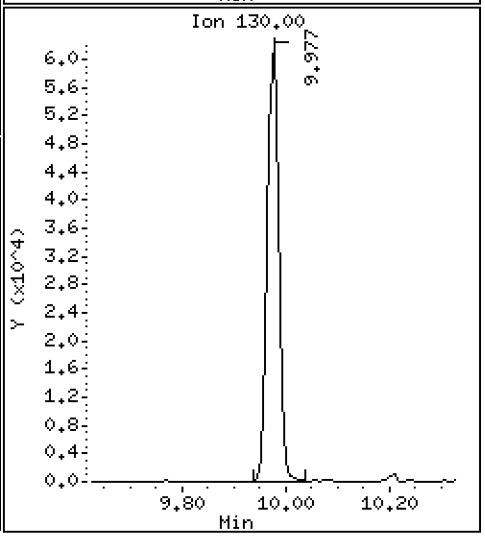


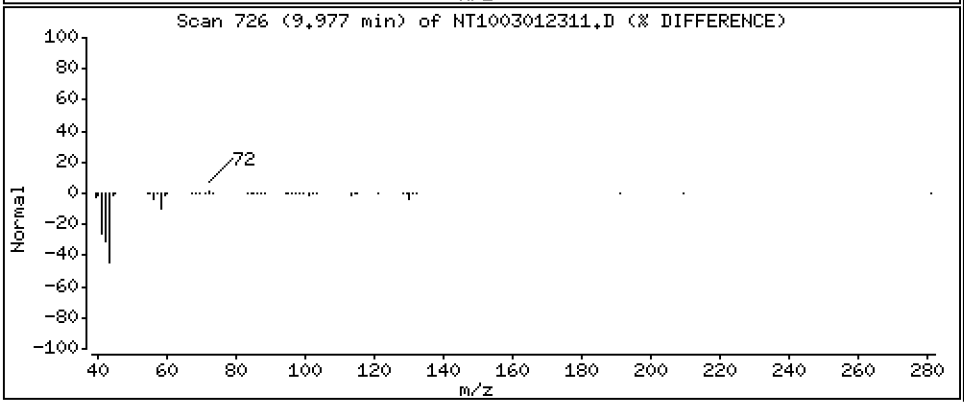












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

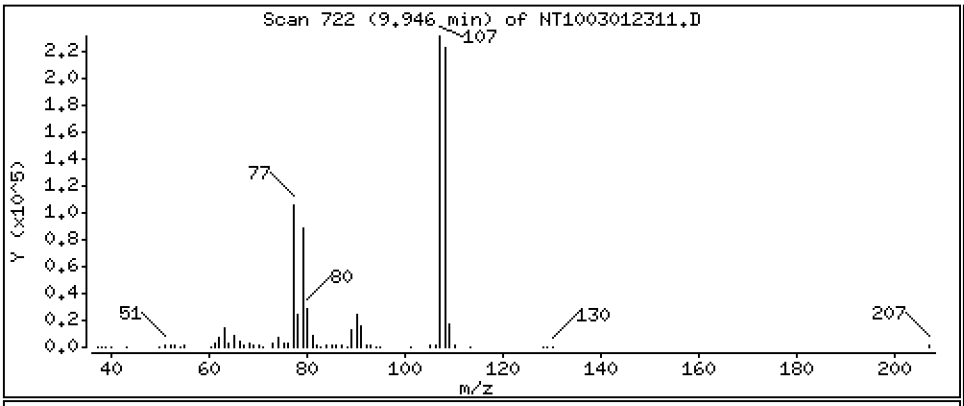
Operator: VTS

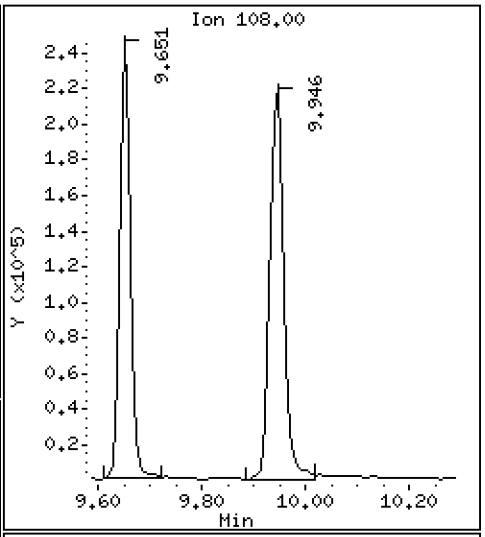
Column phase: ZB-5msi

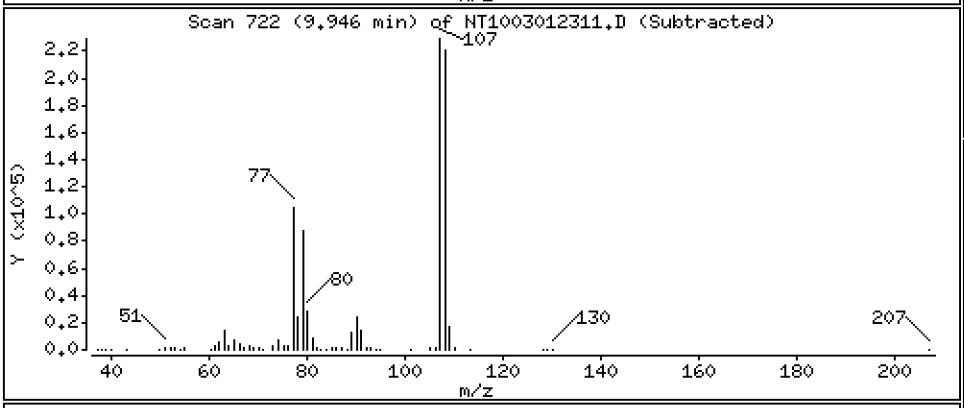
Column diameter: 0.25

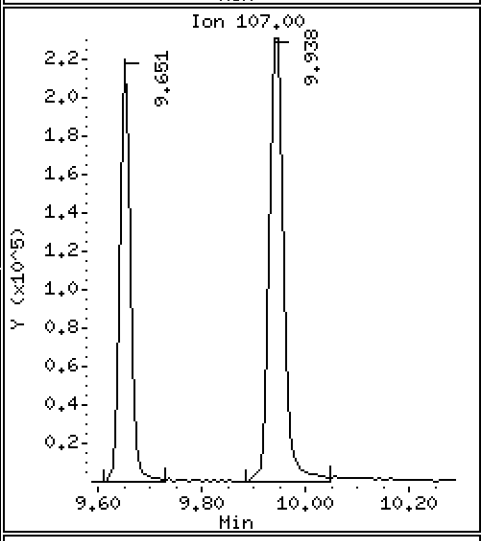
15 4-Methylphenol

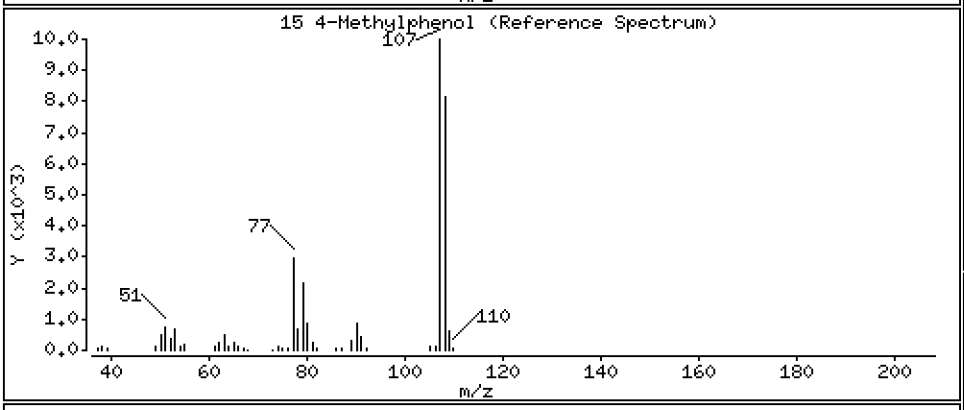
Concentration: 4.239 ug/mL

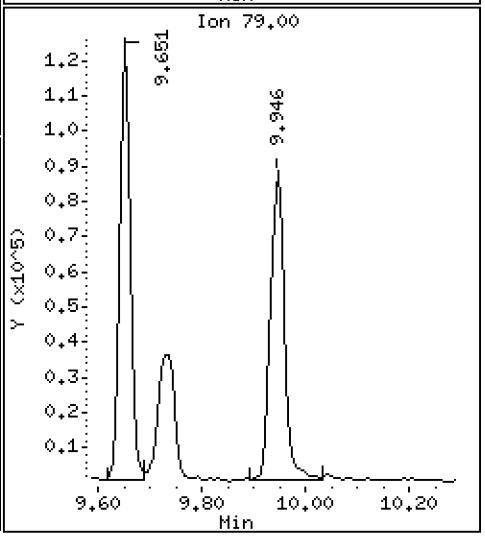


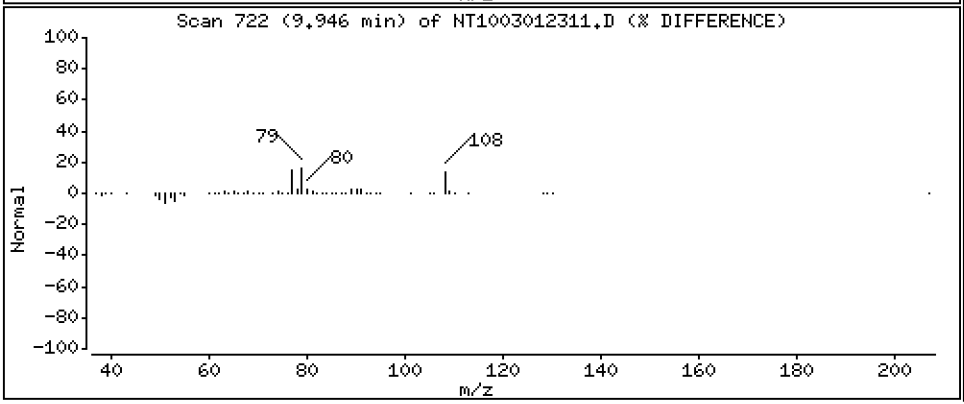












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

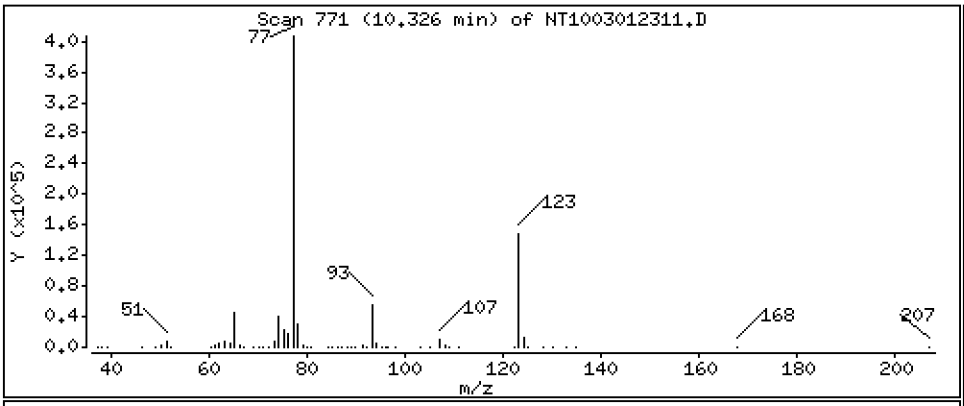
Operator: VTS

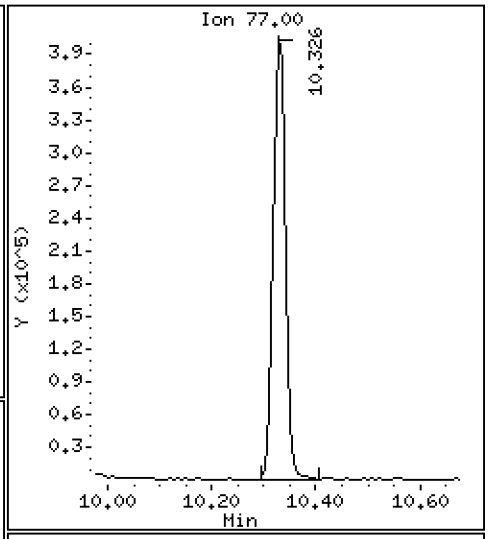
Column phase: ZB-5msi

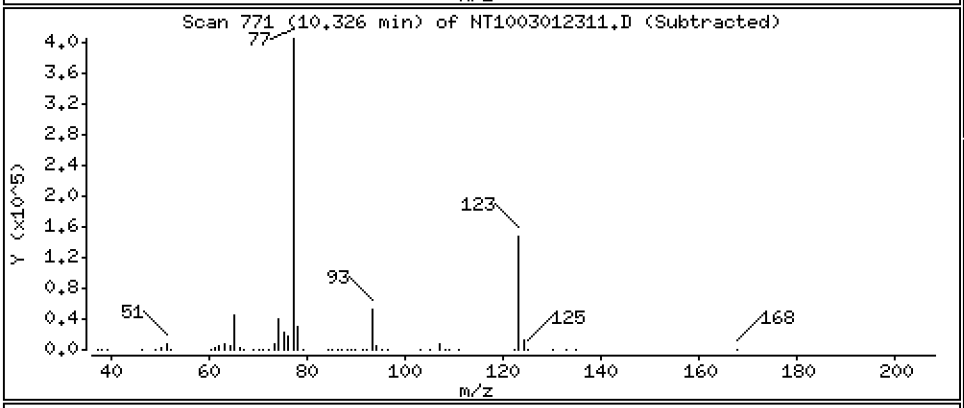
Column diameter: 0.25

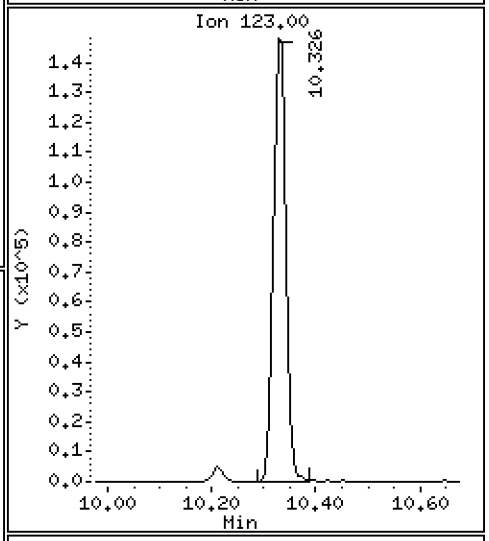
19 Nitrobenzene

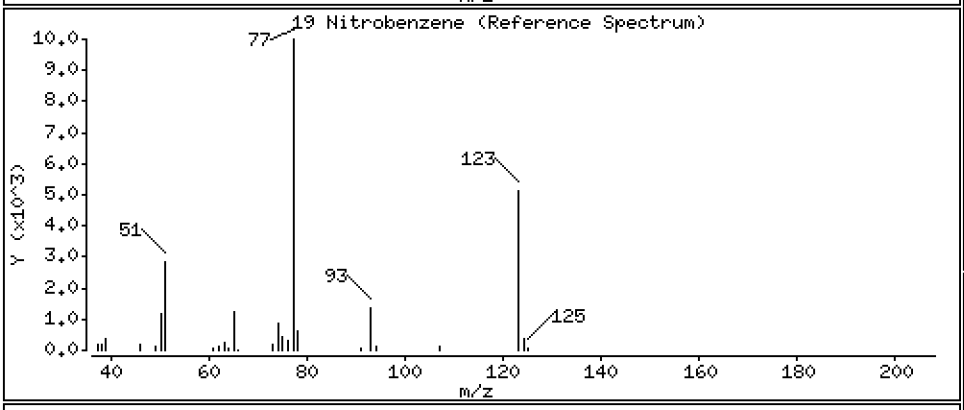
Concentration: 5.569 ug/mL

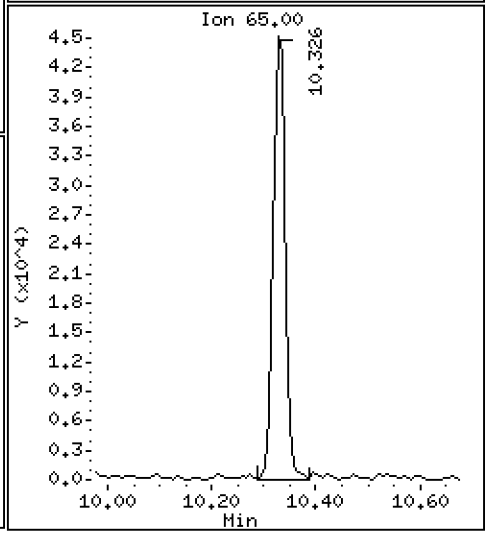


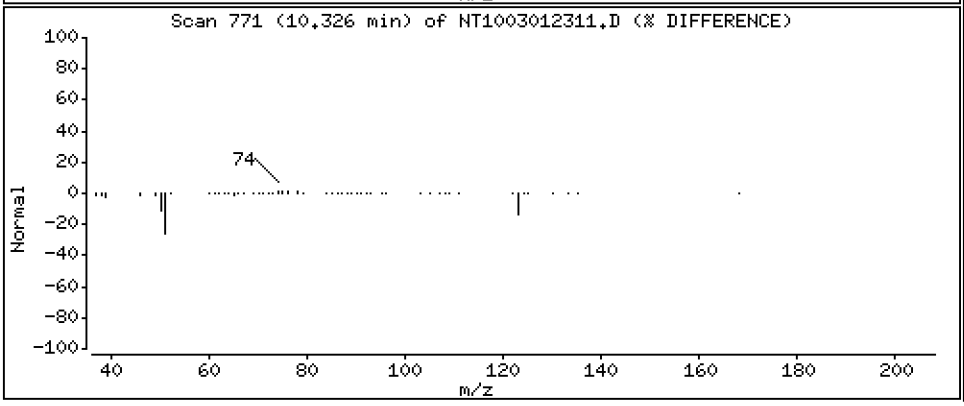












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

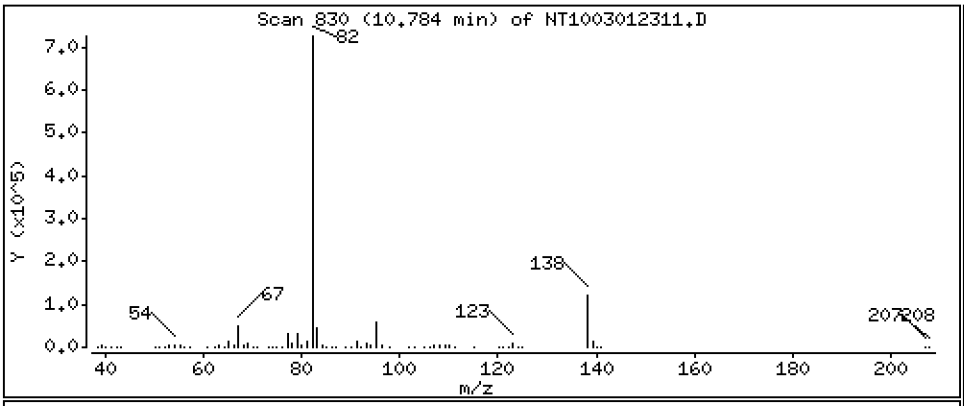
Operator: VTS

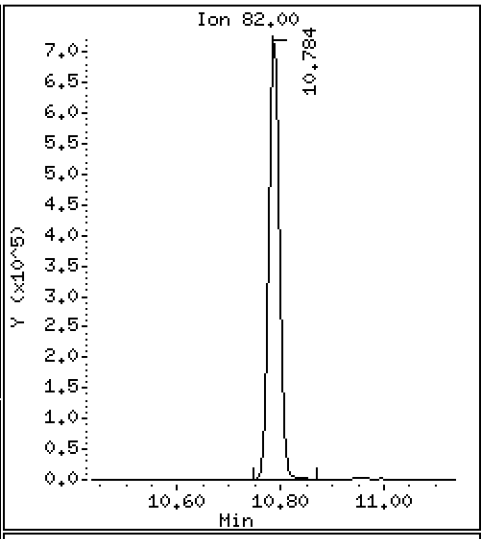
Column phase: ZB-5msi

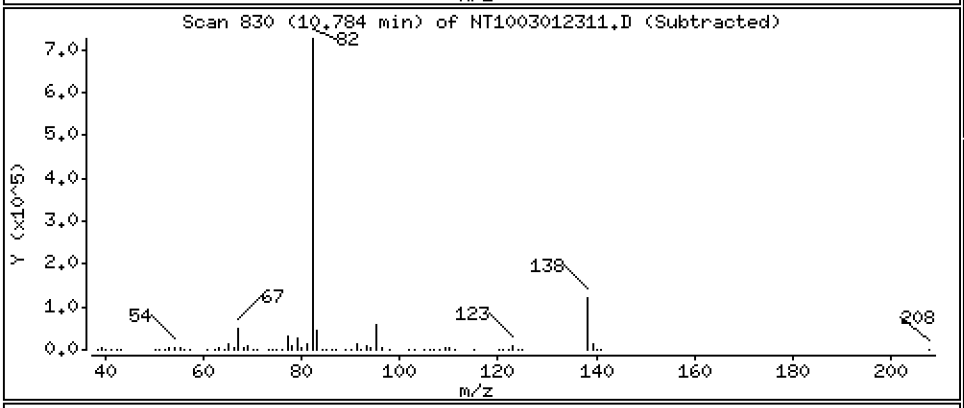
Column diameter: 0.25

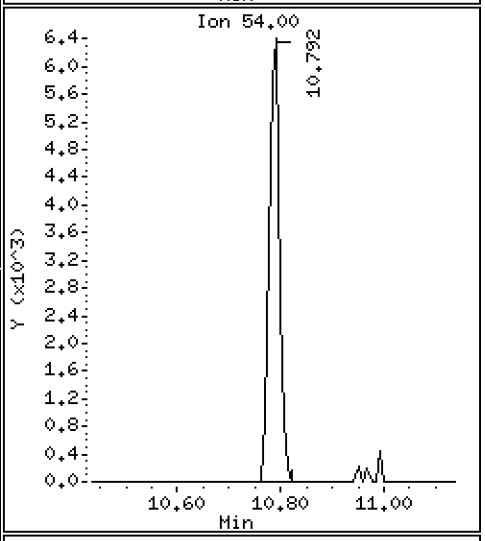
20 Isophorone

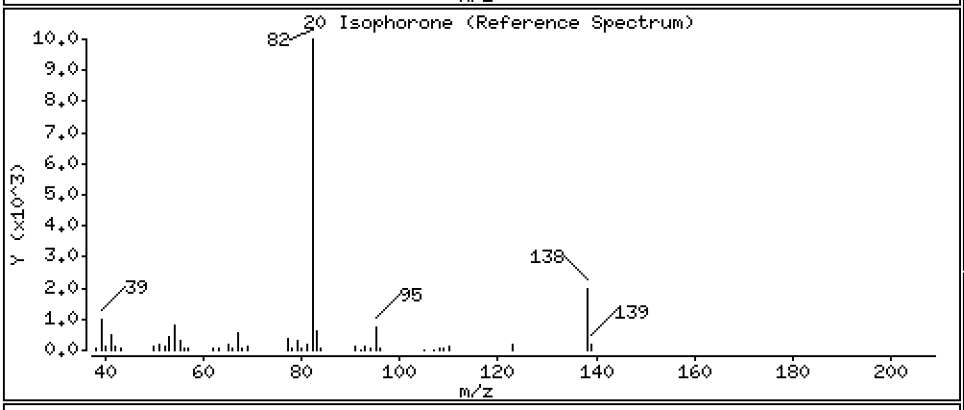
Concentration: 7.672 ug/mL

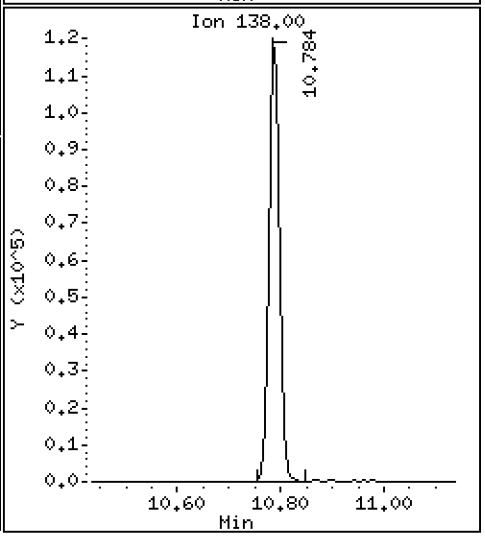


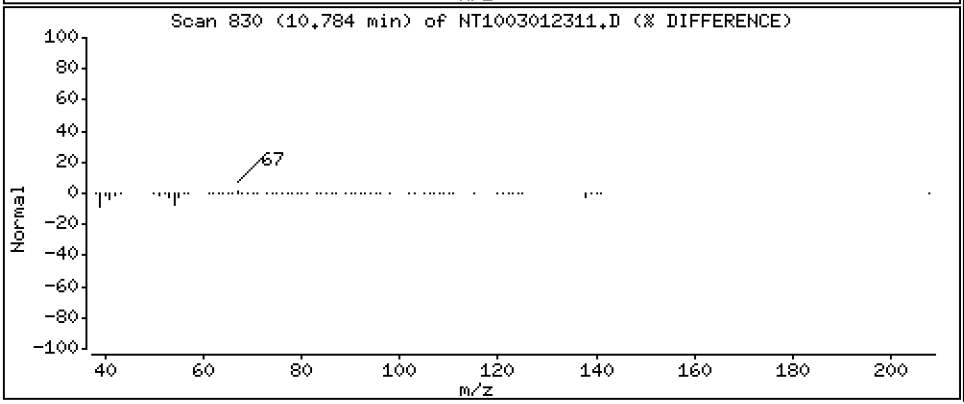












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

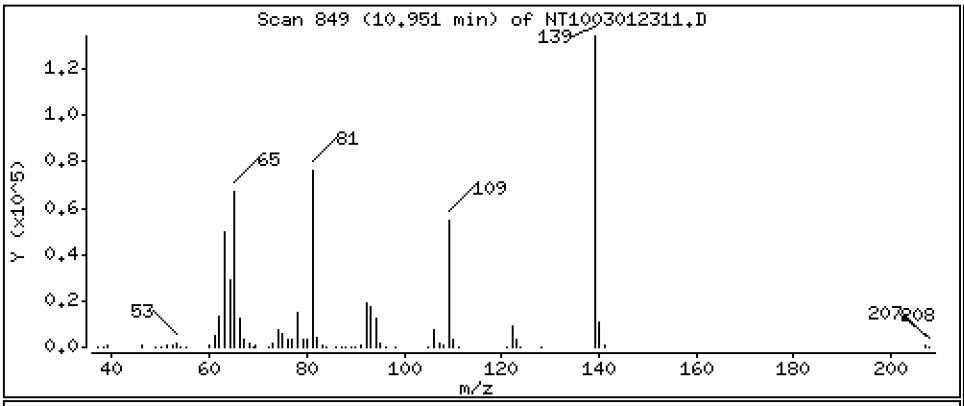
Operator: VTS

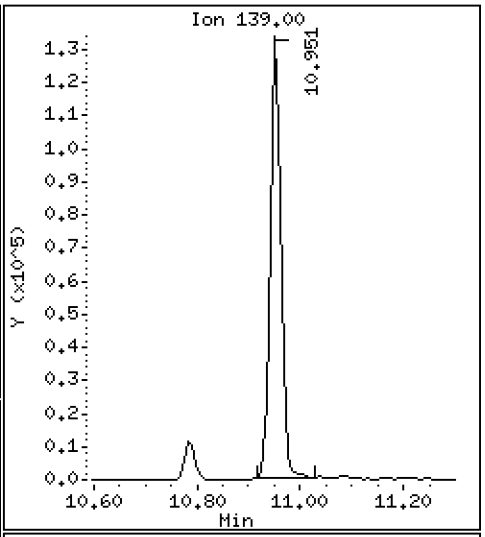
Column phase: ZB-5msi

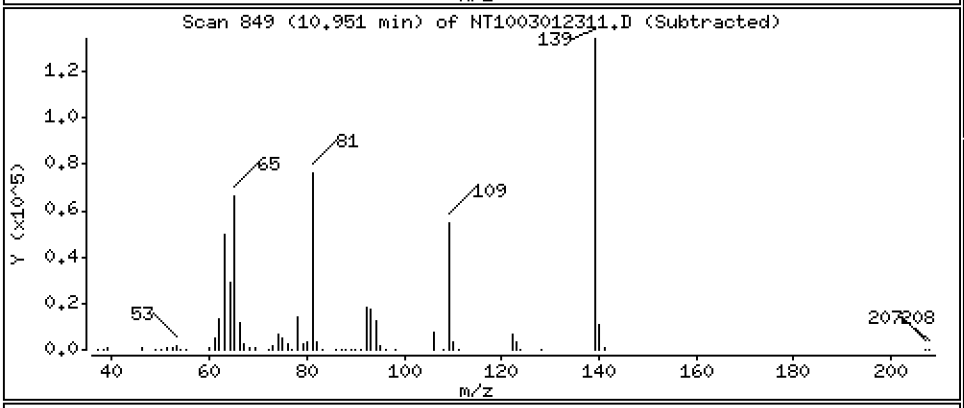
Column diameter: 0.25

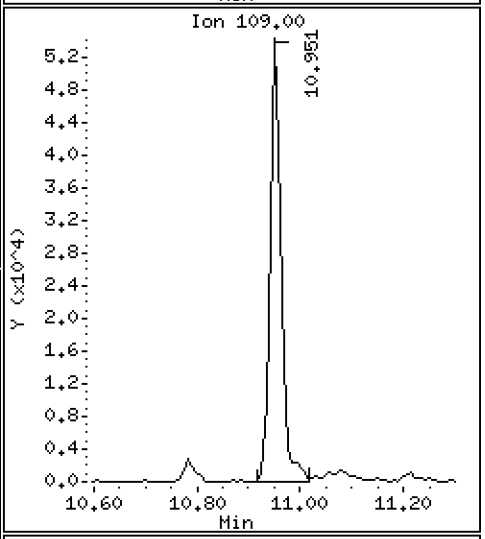
21 2-Nitrophenol

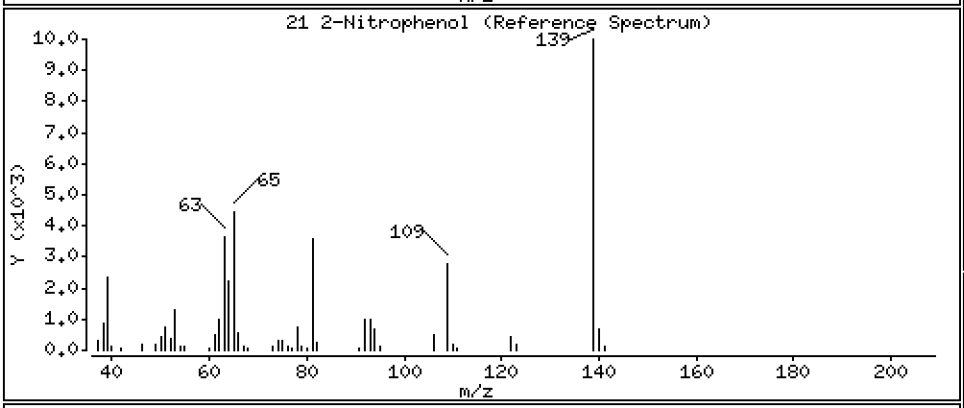
Concentration: 3.244 ug/mL

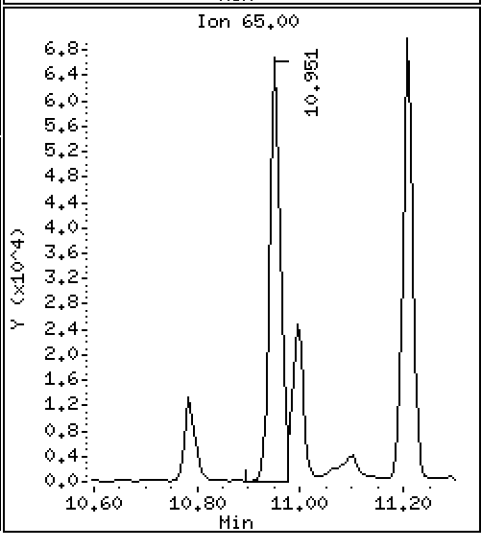


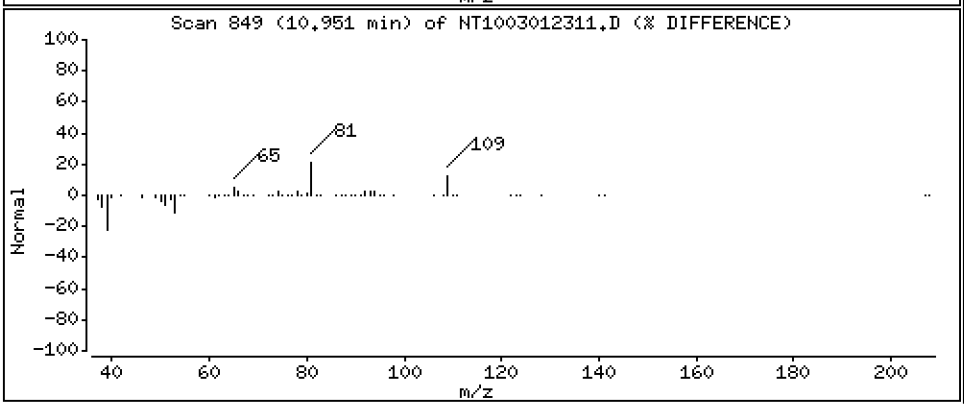












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

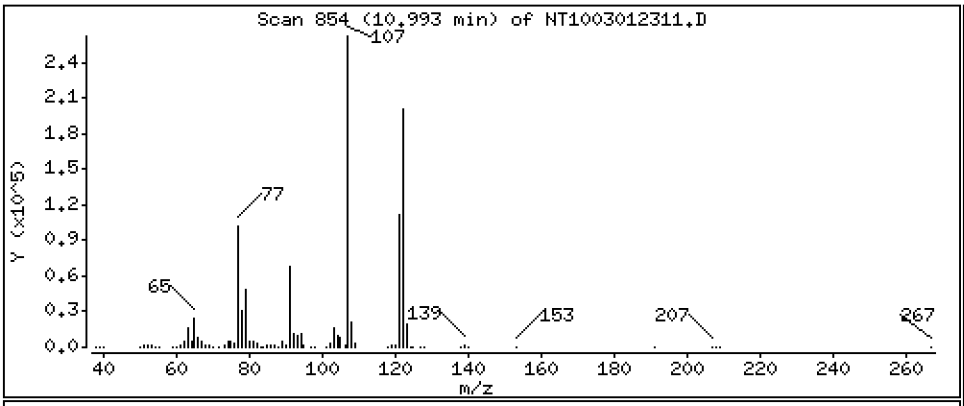
Operator: VTS

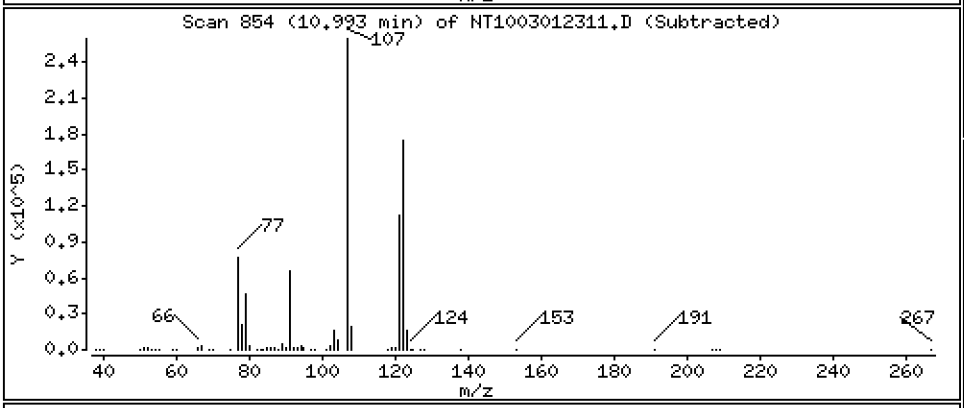
Column phase: ZB-5msi

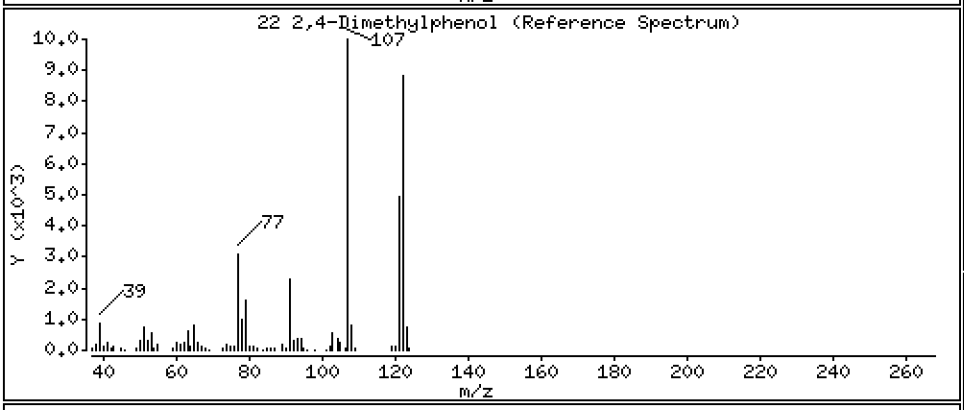
Column diameter: 0.25

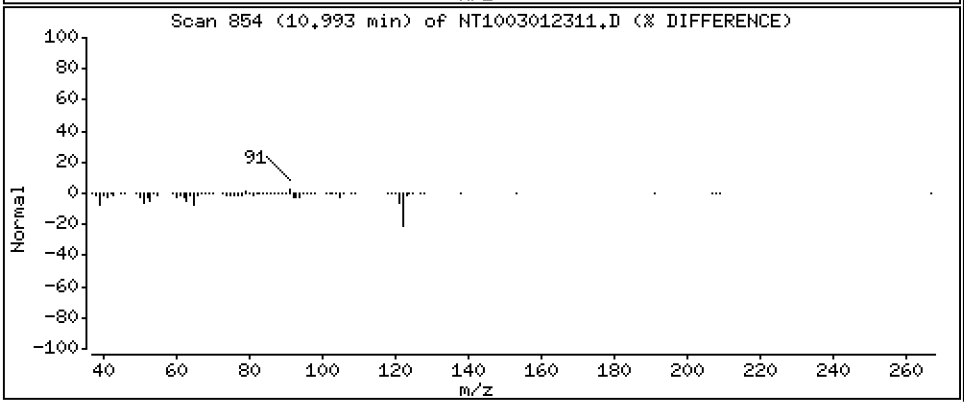
22 2,4-Dimethylphenol

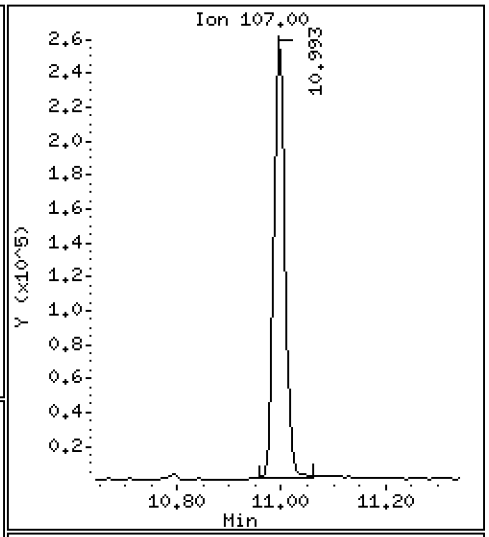
Concentration: 3.507 ug/mL

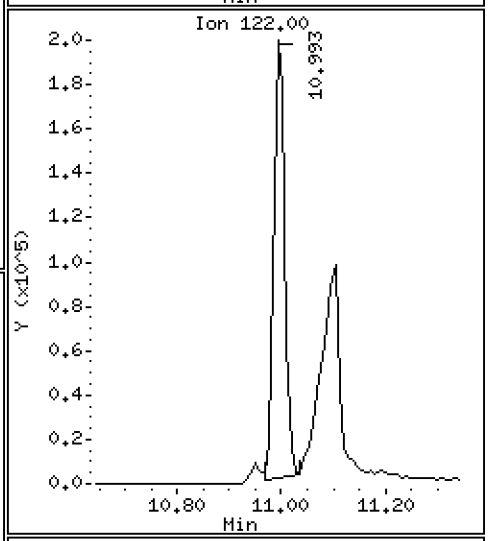


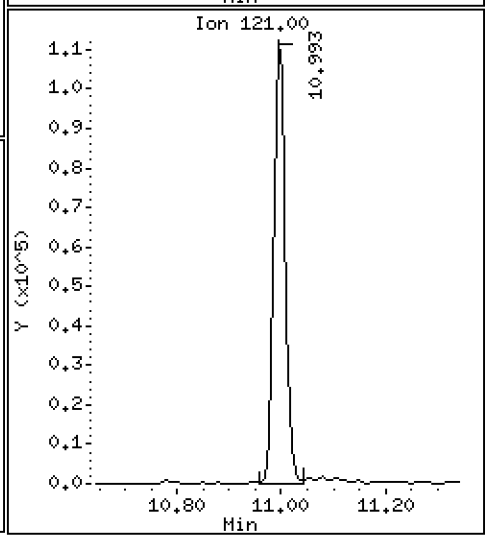












Date : 01-MAR-2023 21:46

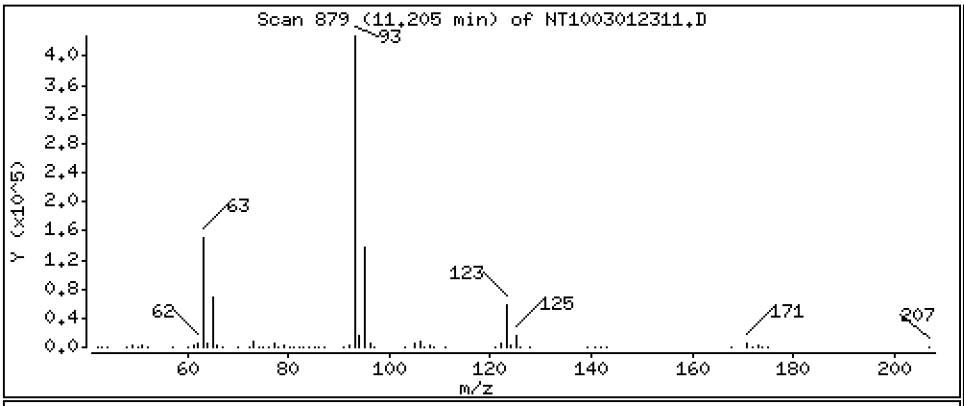
Client ID: Instrument: nt10.i

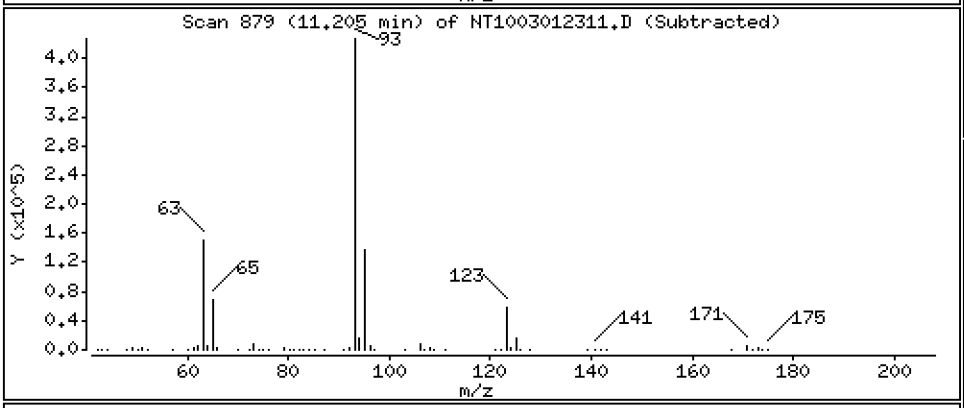
Sample Info: SEQ-SCV1

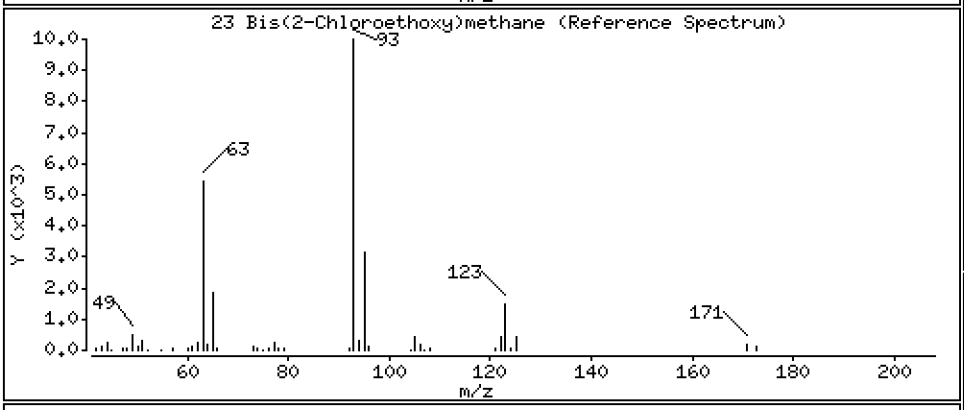
Operator: VTS

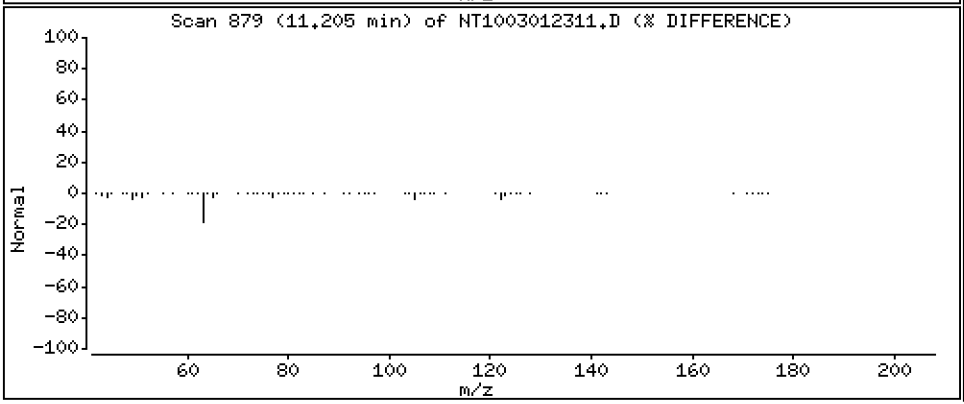
Column phase: ZB-5msi Column diameter: 0.25

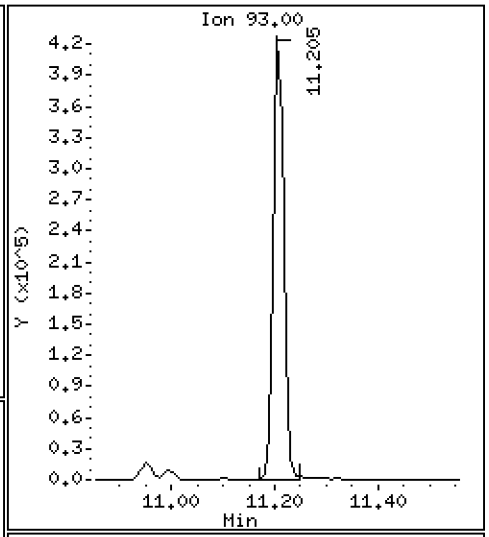
23 Bis(2-Chloroethoxy)methane Concentration: 6.727 ug/mL

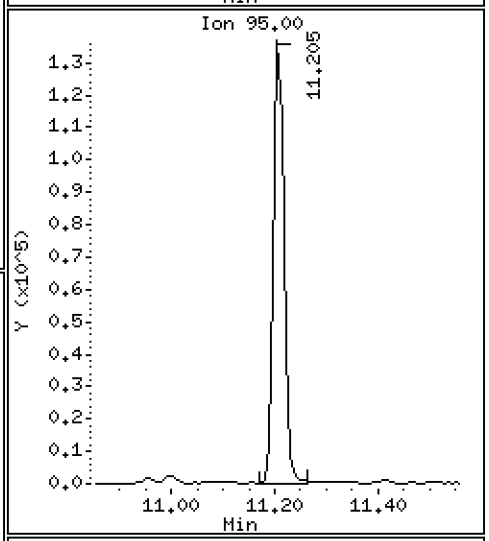


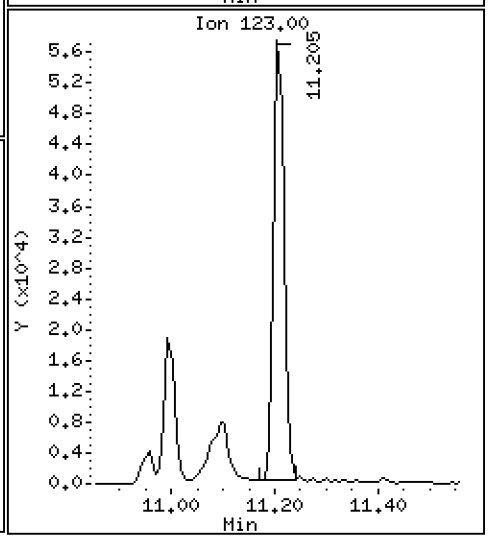












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

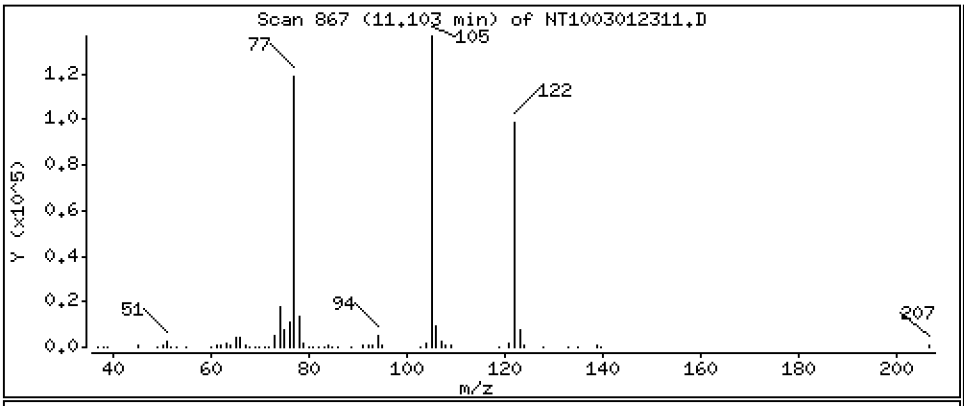
Operator: VTS

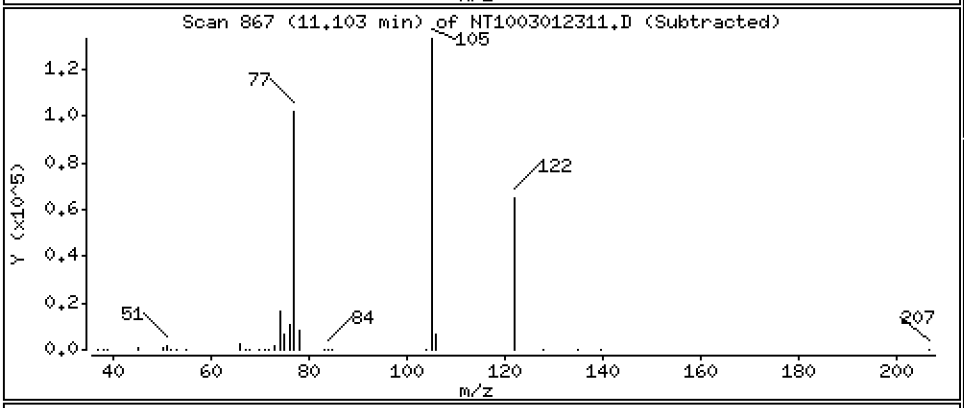
Column phase: ZB-5msi

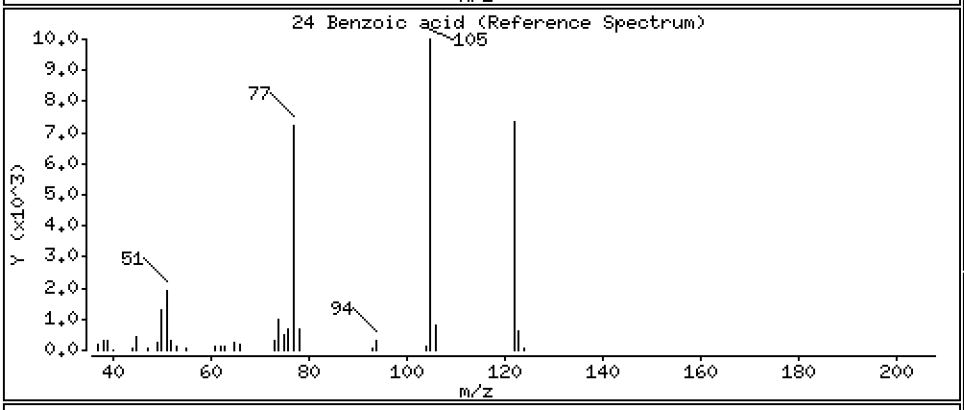
Column diameter: 0.25

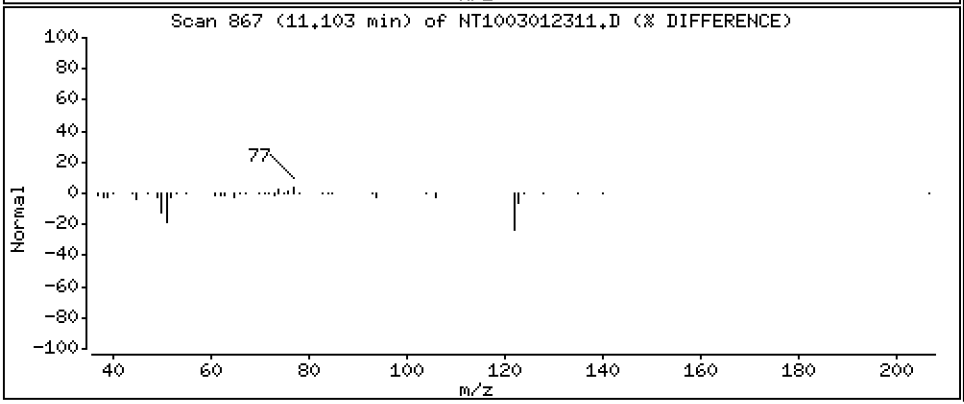
24 Benzoic acid

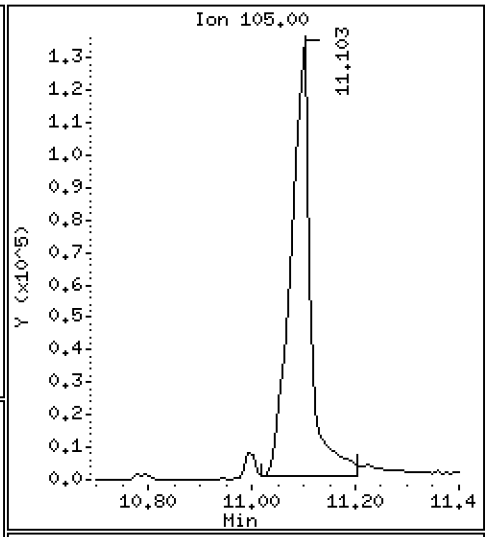
Concentration: 5.635 ug/mL

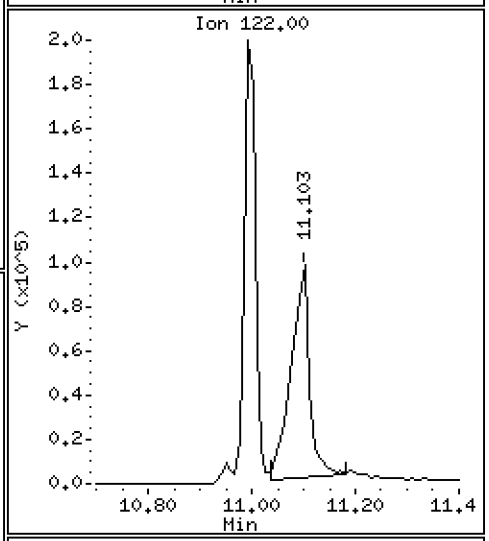


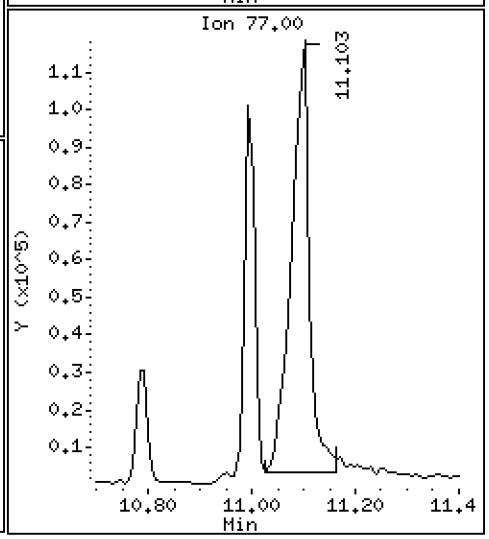












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

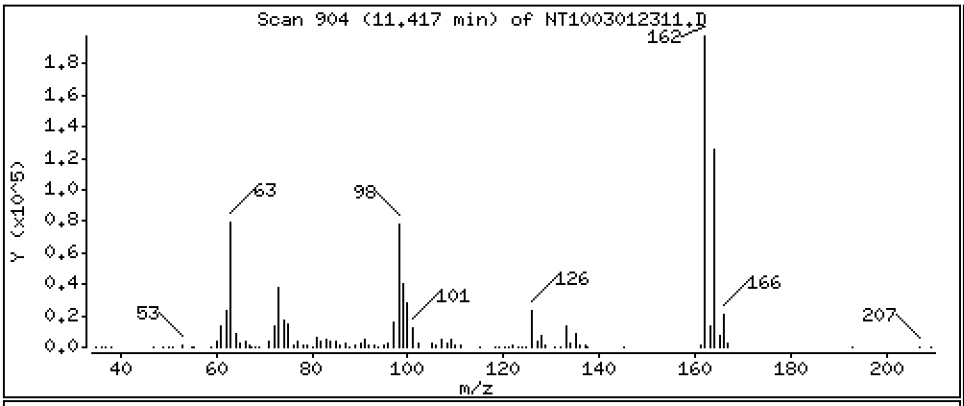
Operator: VTS

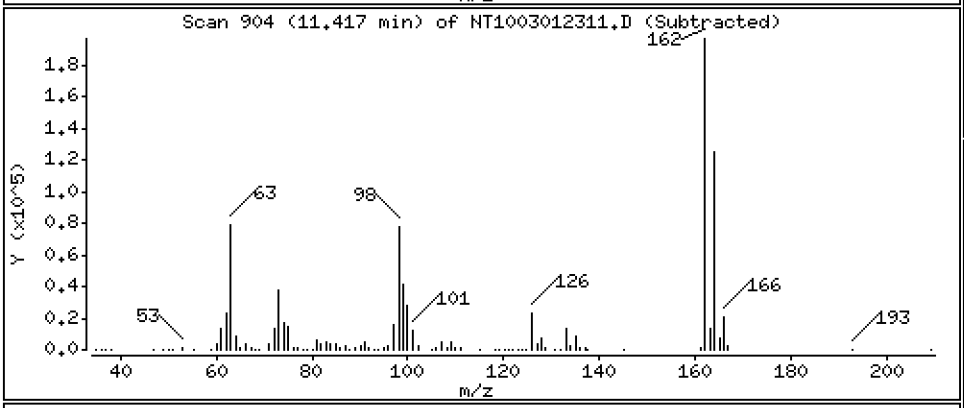
Column phase: ZB-5msi

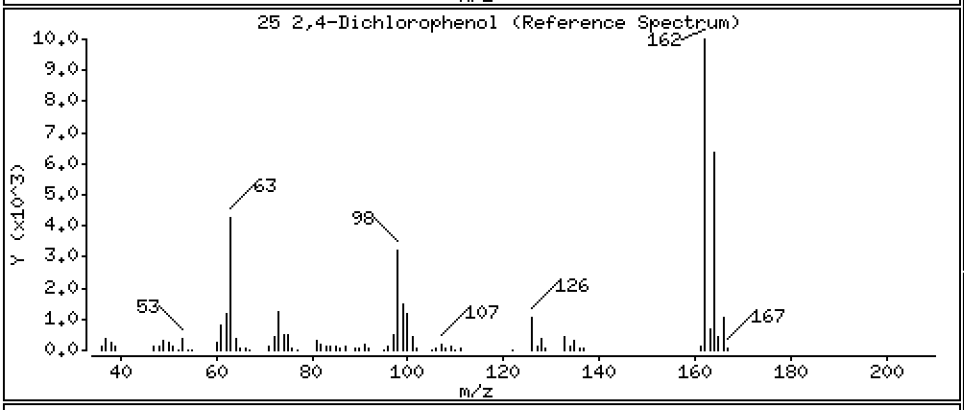
Column diameter: 0.25

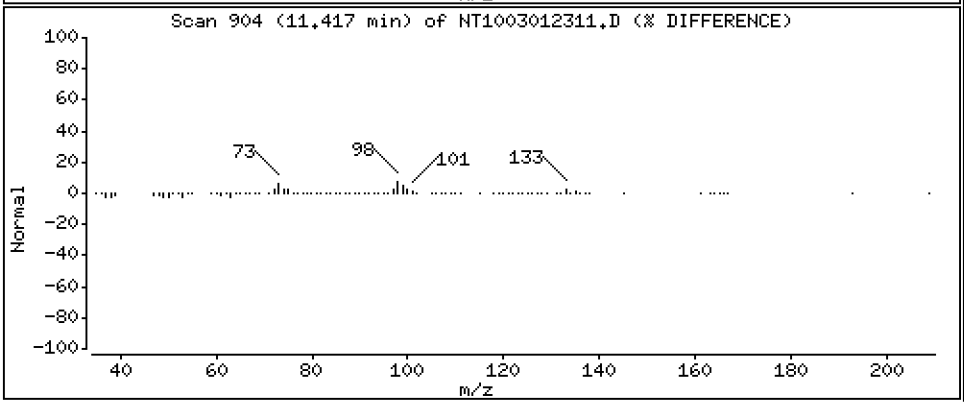
25 2,4-Dichlorophenol

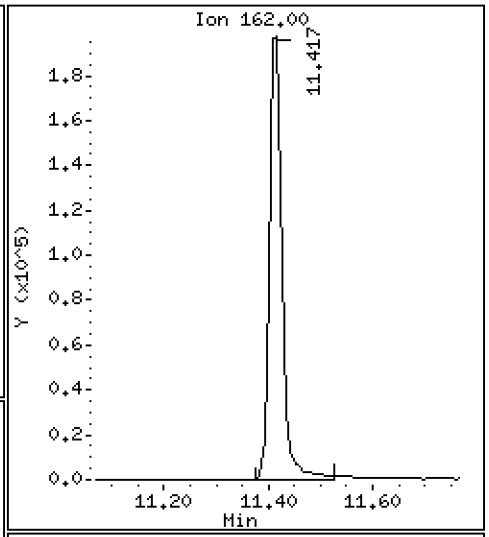
Concentration: 4.437 ug/mL

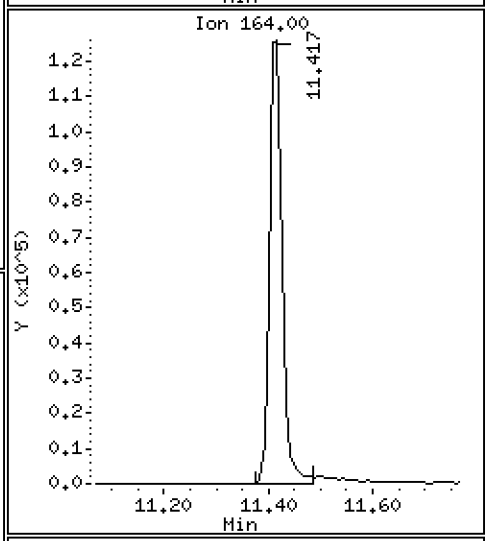


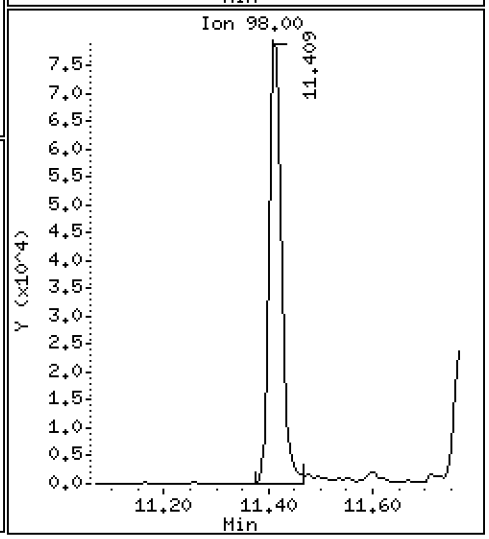












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

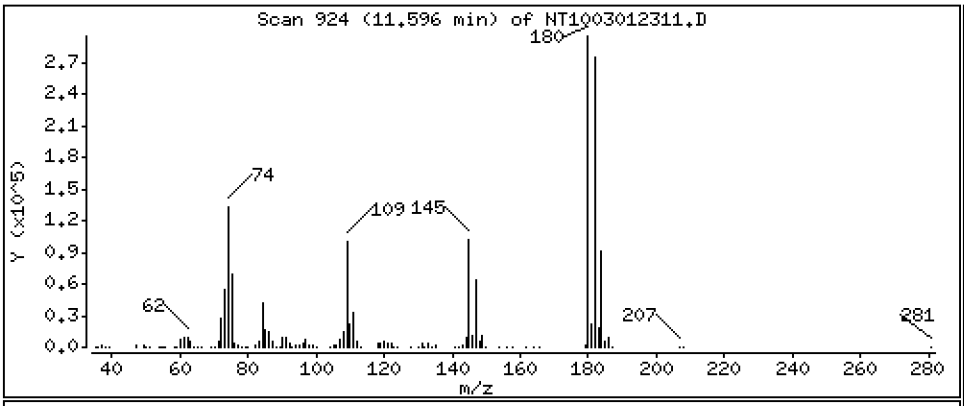
Operator: VTS

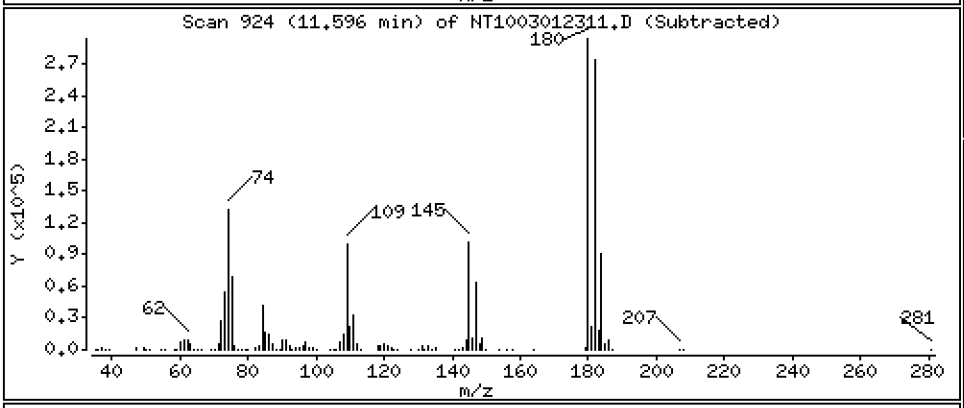
Column phase: ZB-5msi

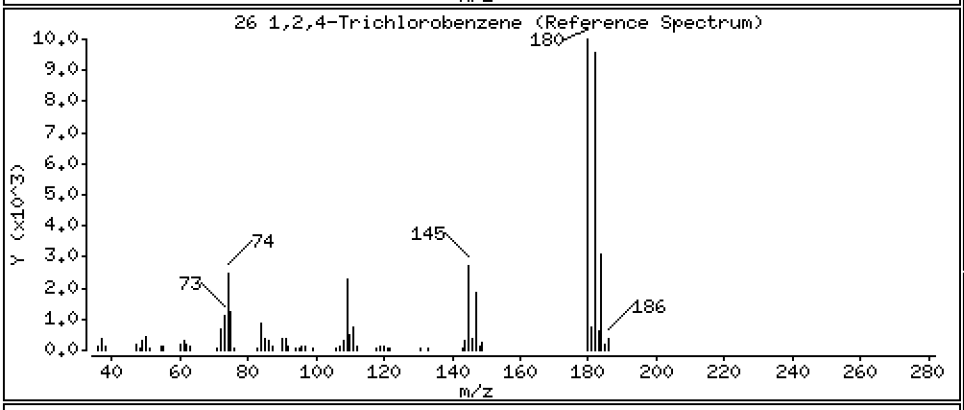
Column diameter: 0.25

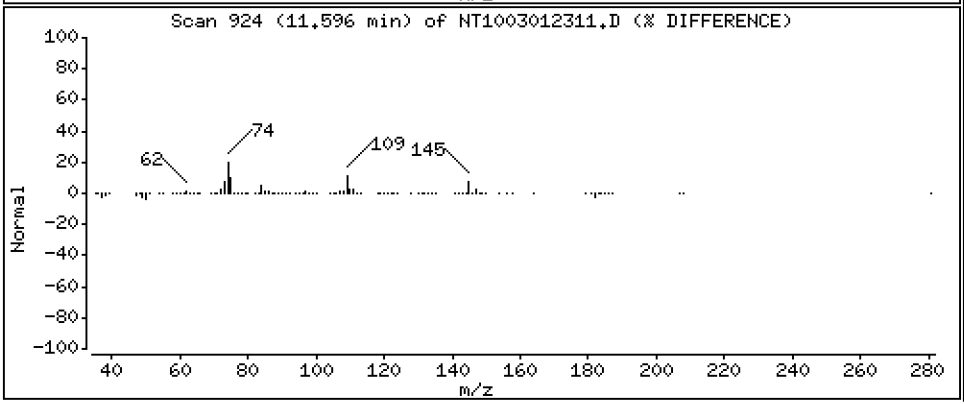
26 1,2,4-Trichlorobenzene

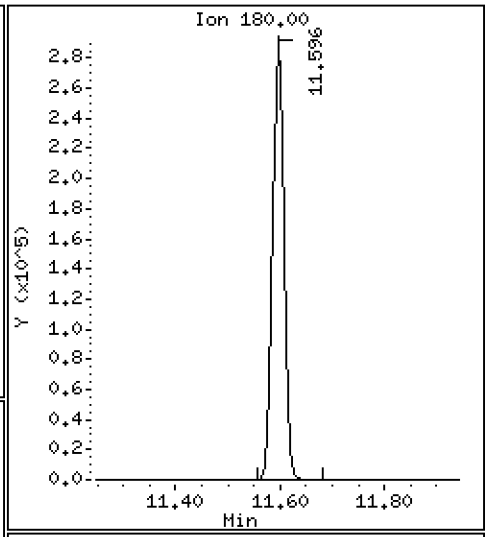
Concentration: 4.908 ug/mL

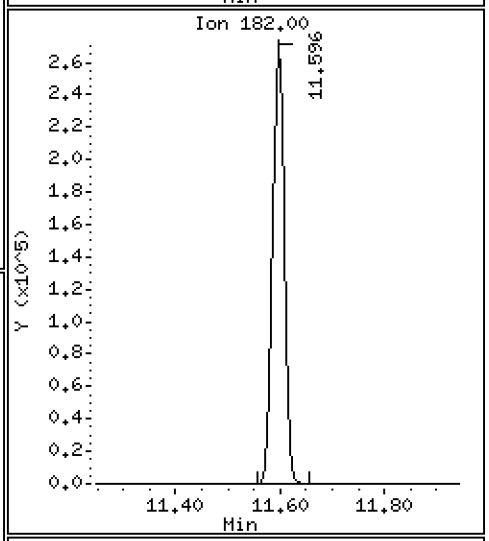


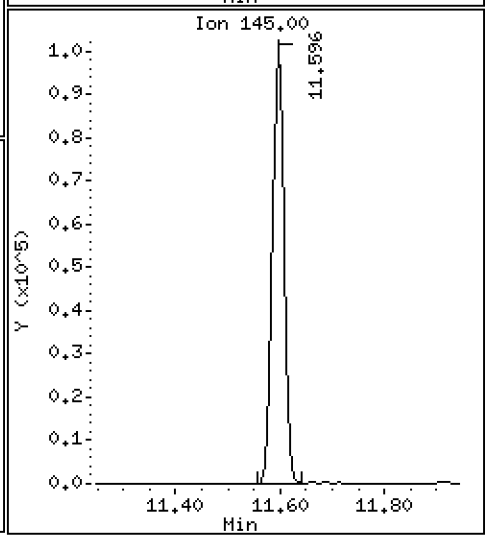












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

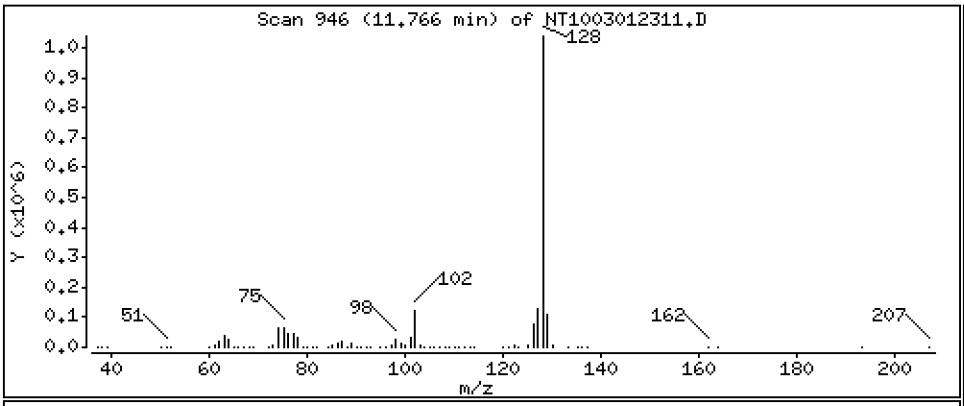
Operator: VTS

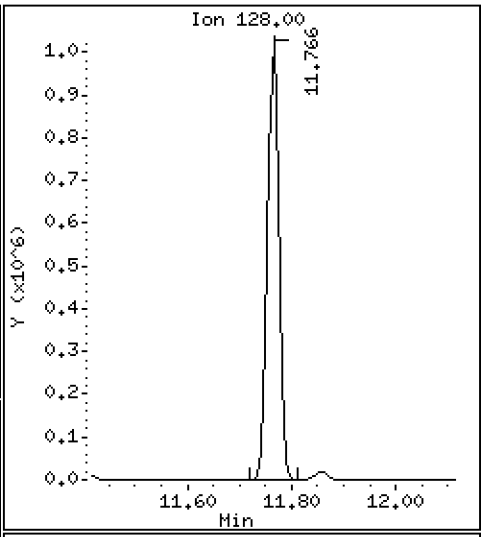
Column phase: ZB-5msi

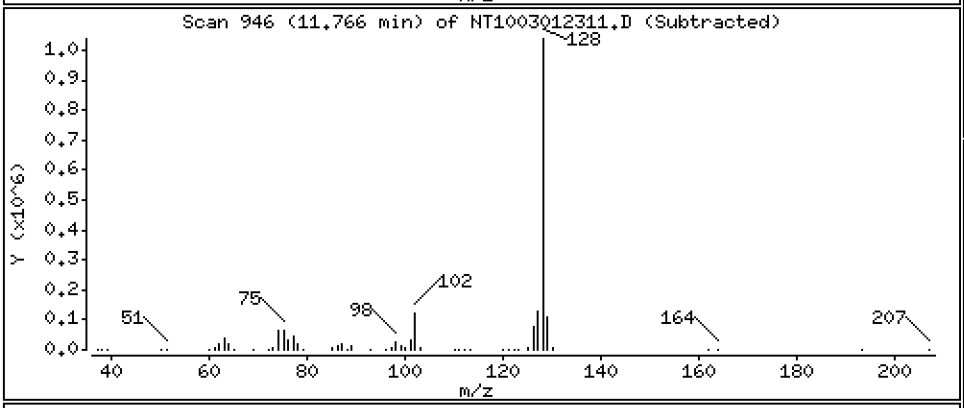
Column diameter: 0.25

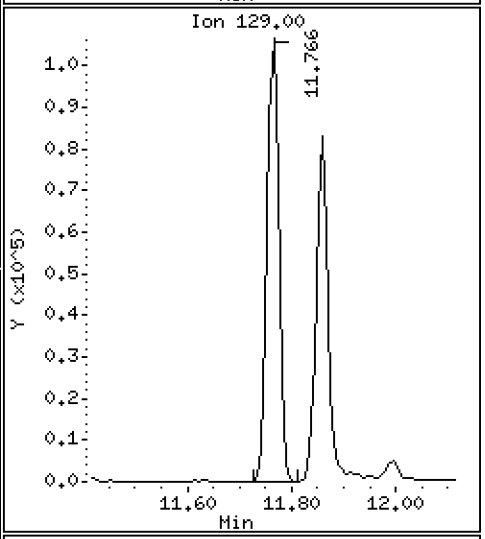
28 Naphthalene

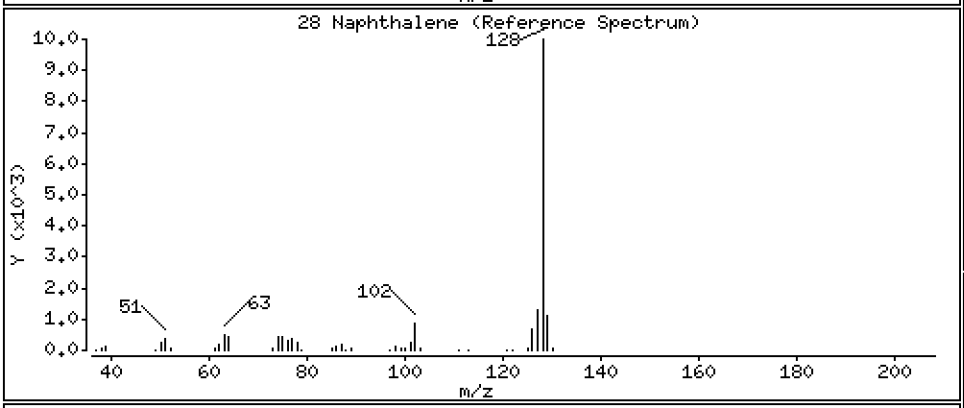
Concentration: 5.255 ug/mL

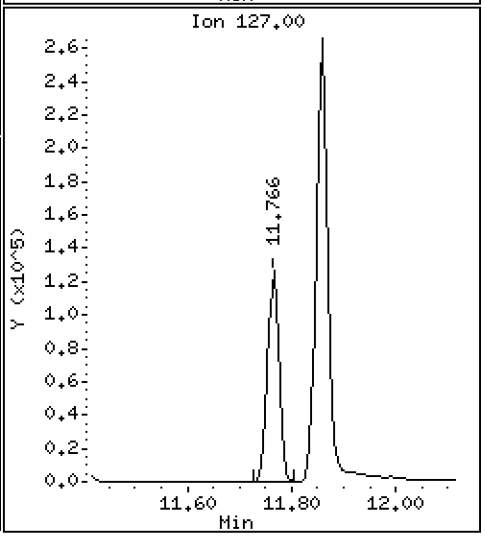


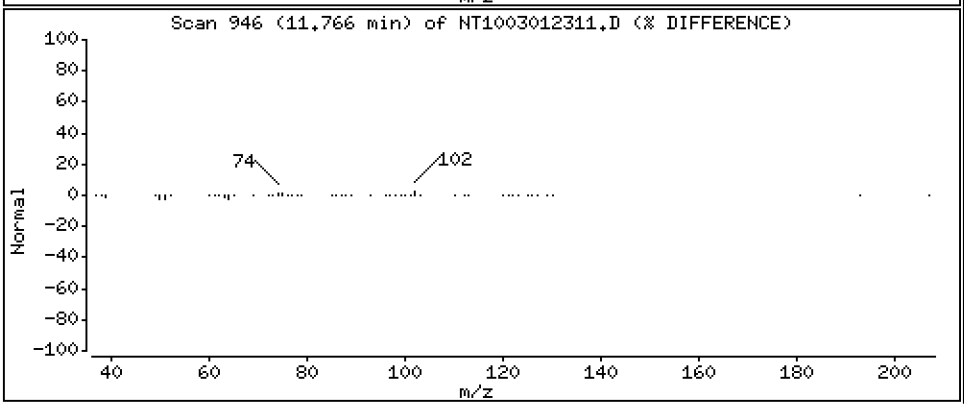












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

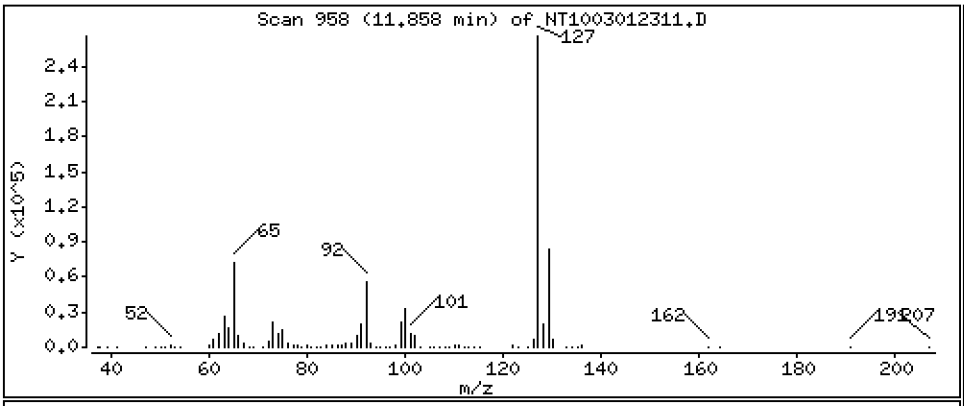
Operator: VTS

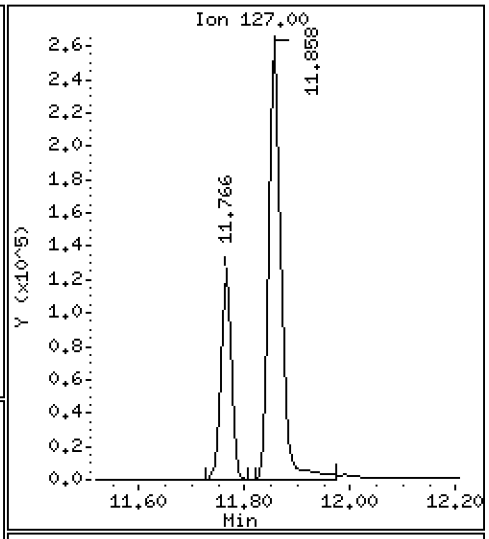
Column phase: ZB-5msi

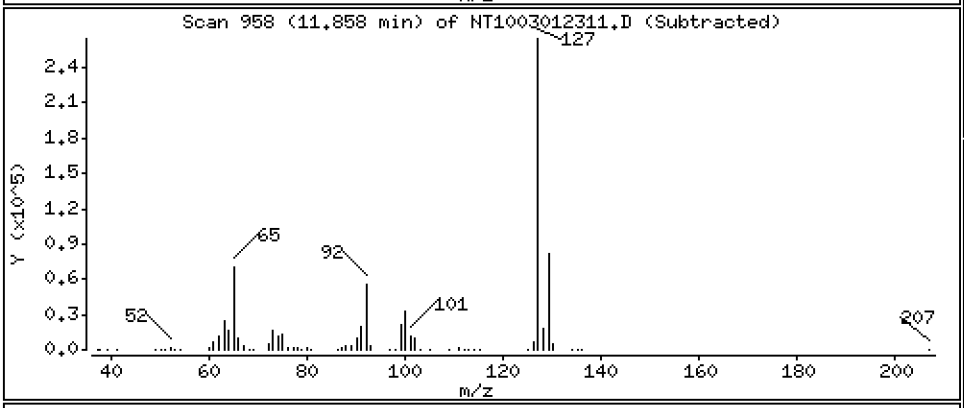
Column diameter: 0.25

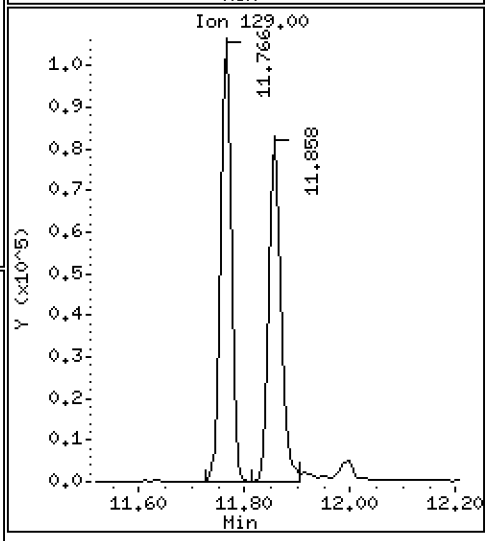
29 4-Chloroaniline

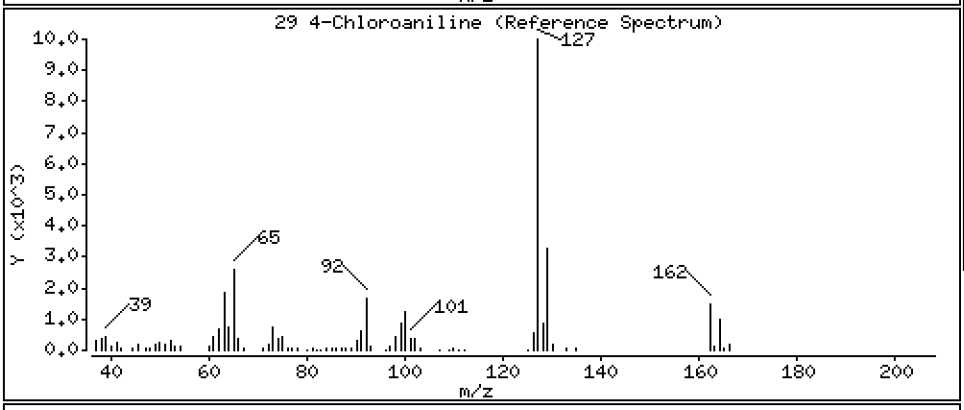
Concentration: 3.791 ug/mL

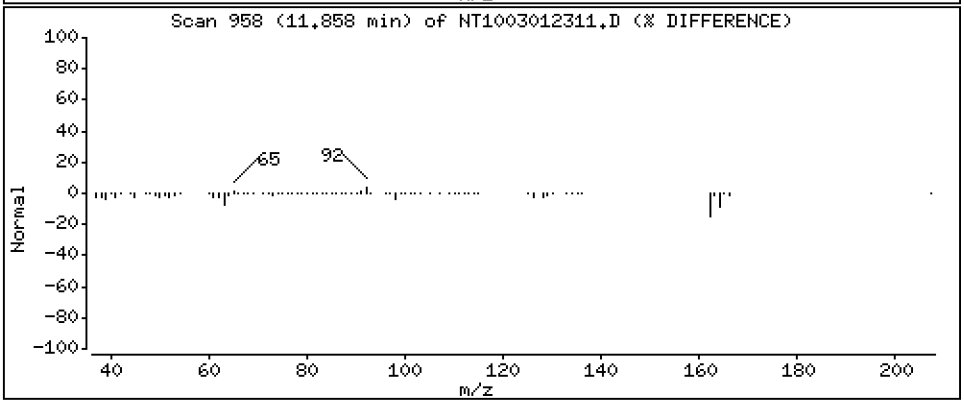












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

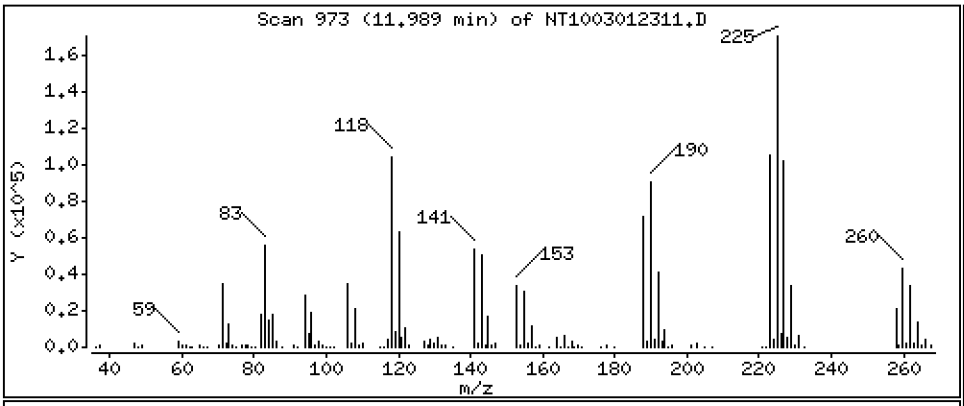
Operator: VTS

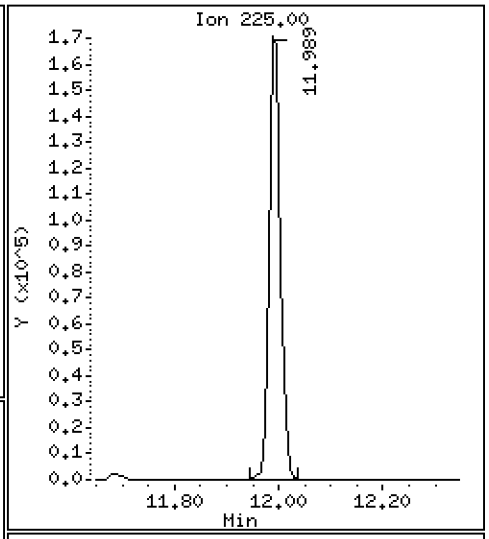
Column phase: ZB-5msi

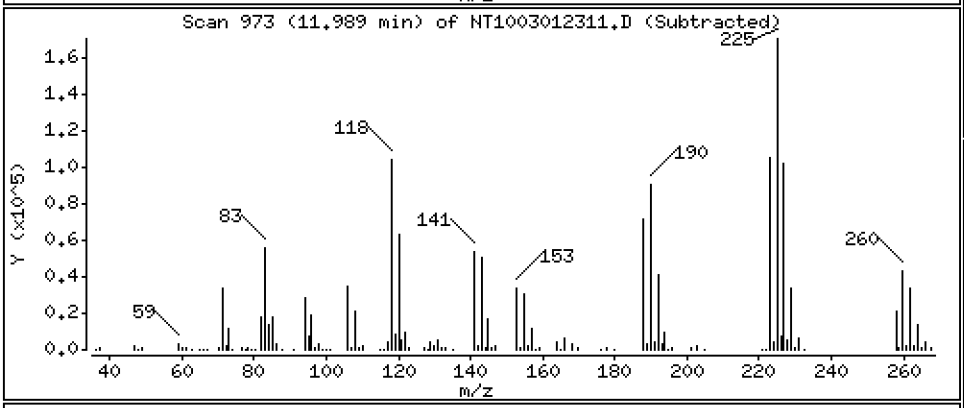
Column diameter: 0.25

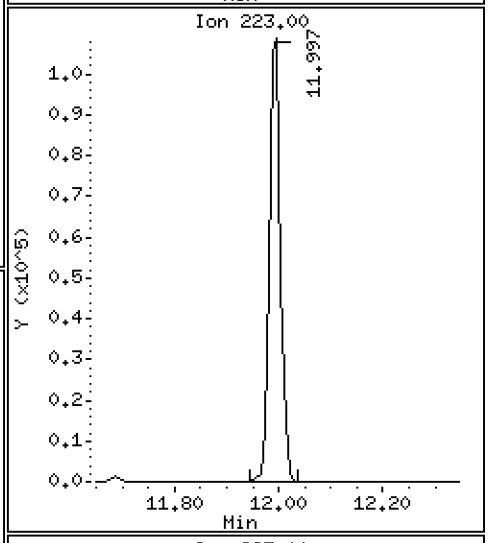
30 Hexachlorobutadiene

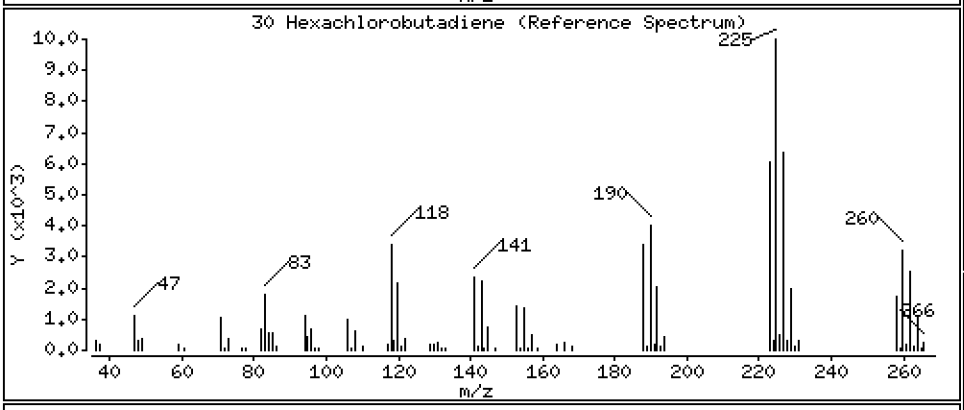
Concentration: 5.014 ug/mL

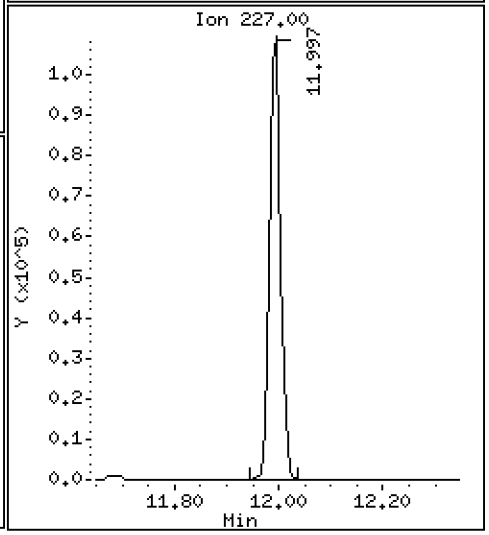


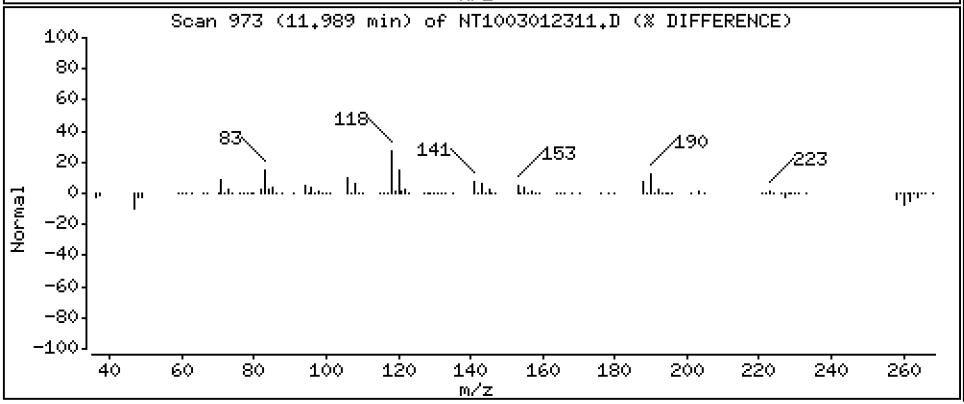












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

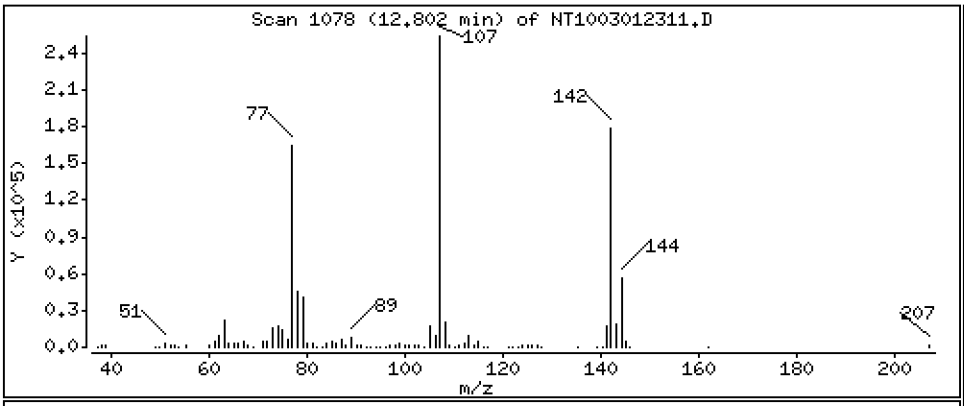
Operator: VTS

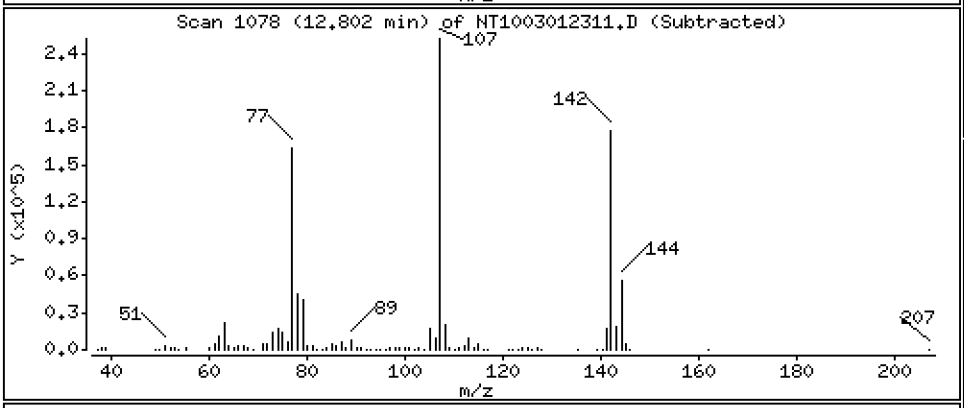
Column phase: ZB-5msi

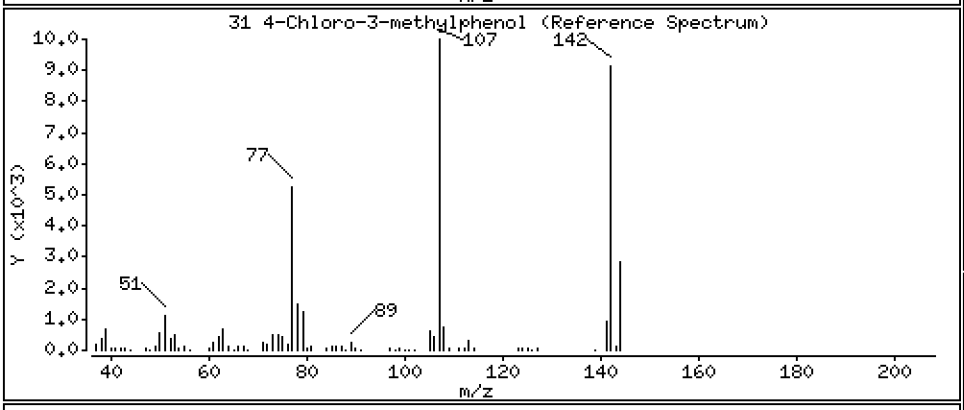
Column diameter: 0.25

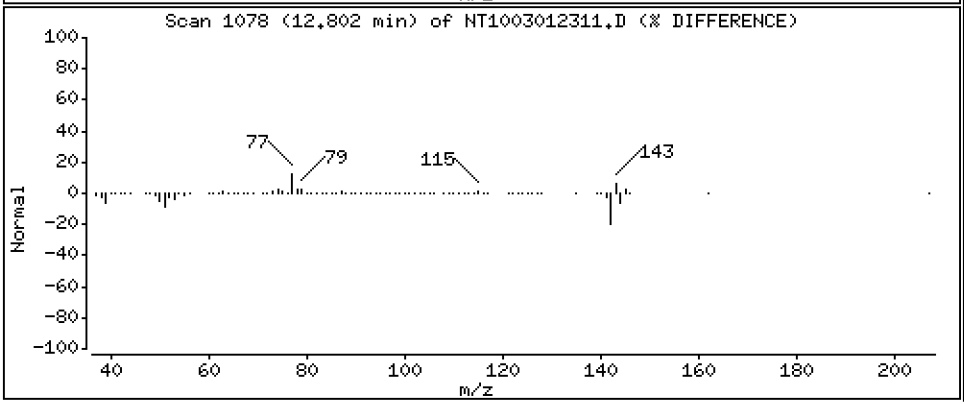
31 4-Chloro-3-methylphenol

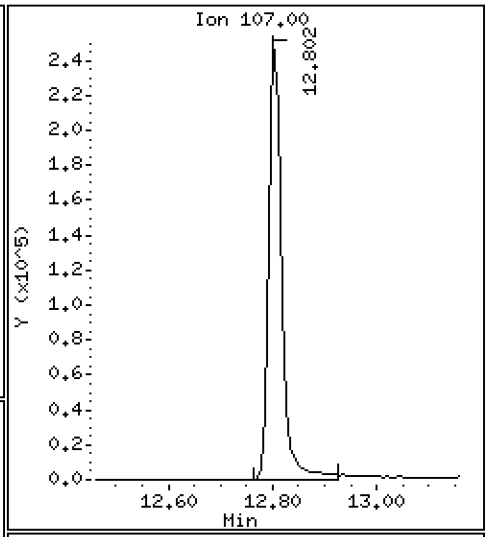
Concentration: 4.452 ug/mL

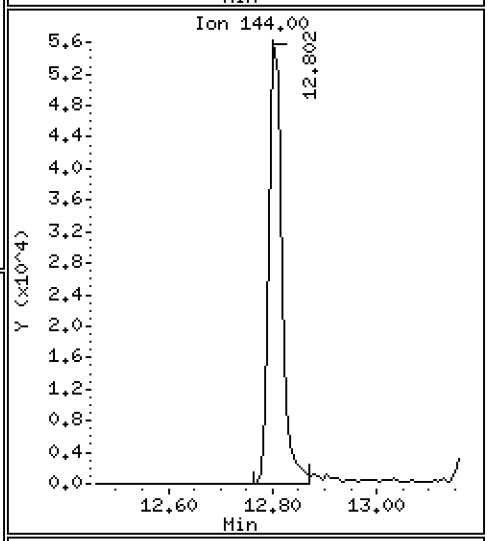


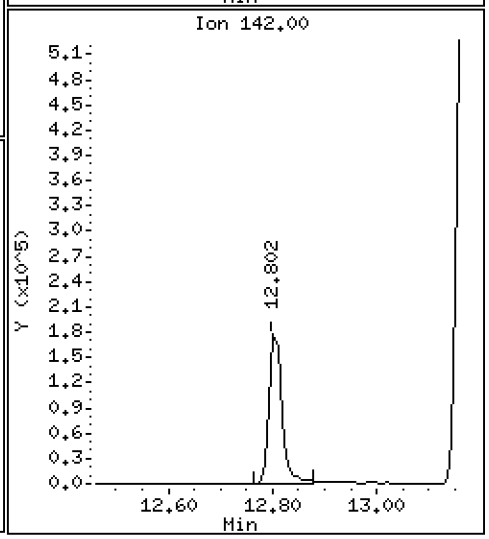












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

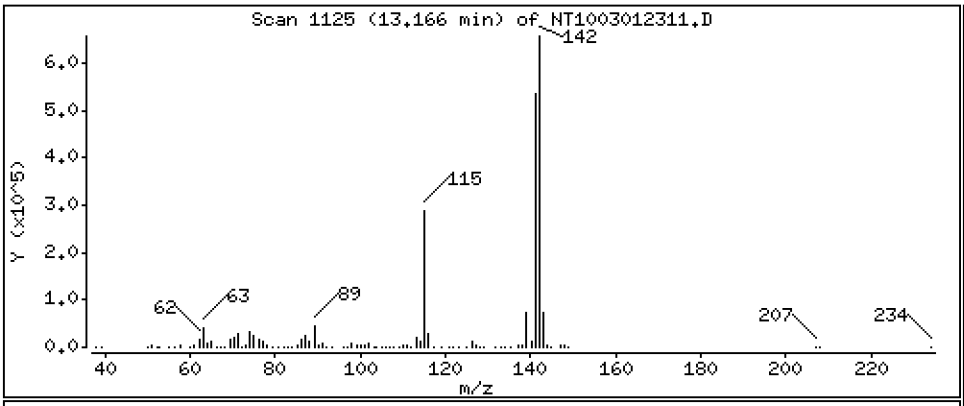
Operator: VTS

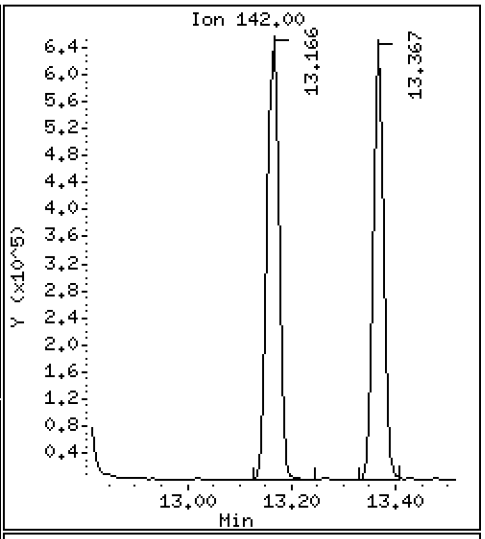
Column phase: ZB-5msi

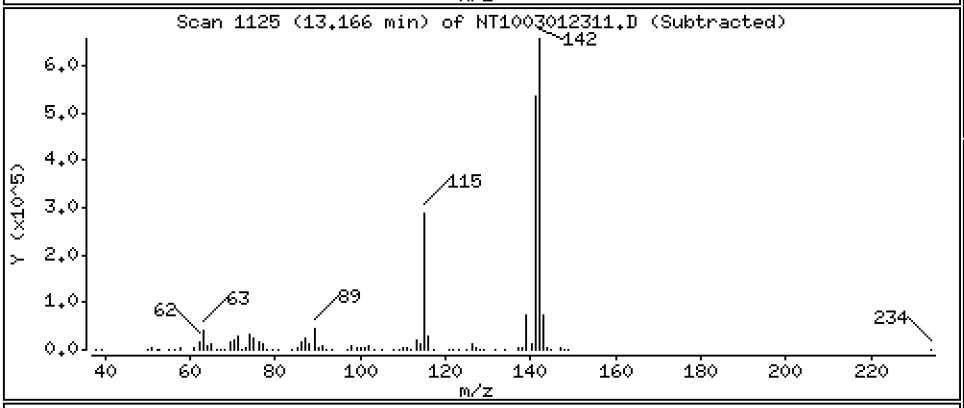
Column diameter: 0.25

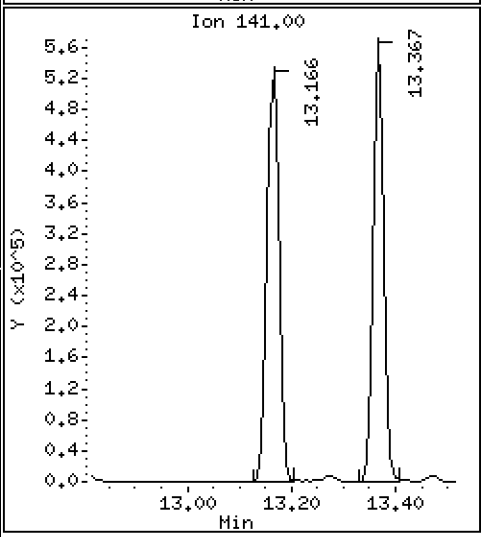
32 2-Methylnaphthalene

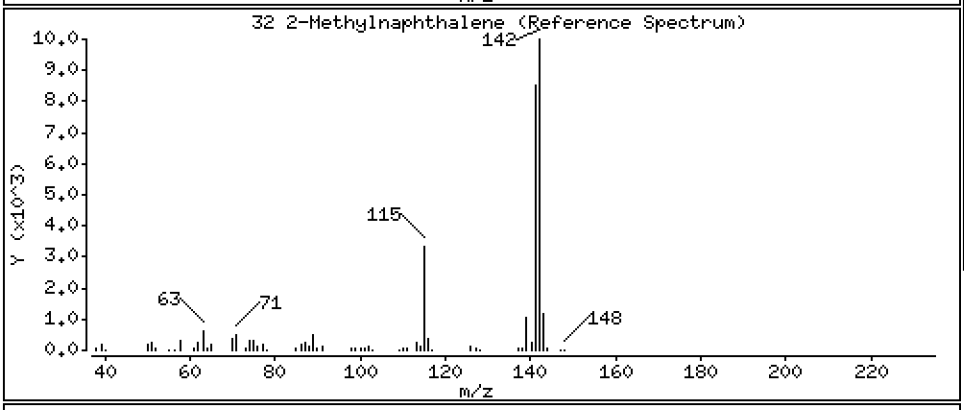
Concentration: 4.951 ug/mL

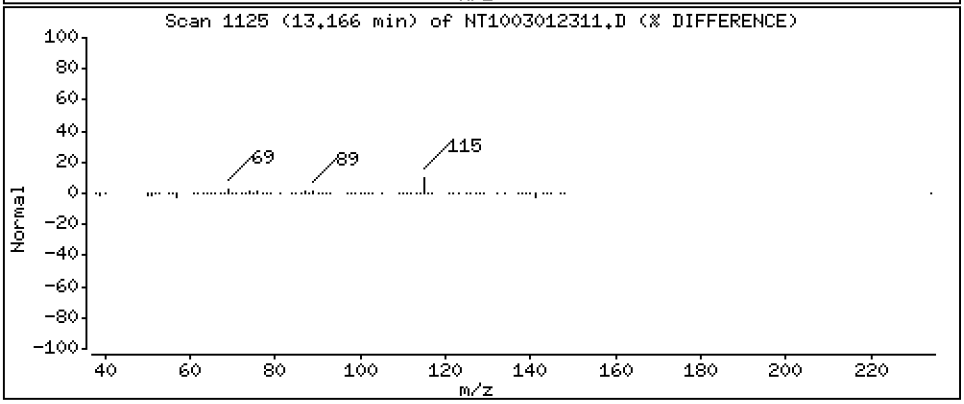












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

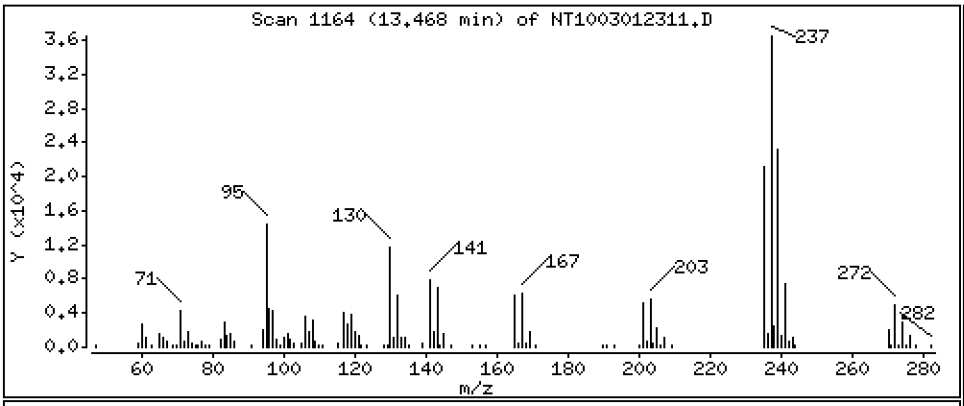
Operator: VTS

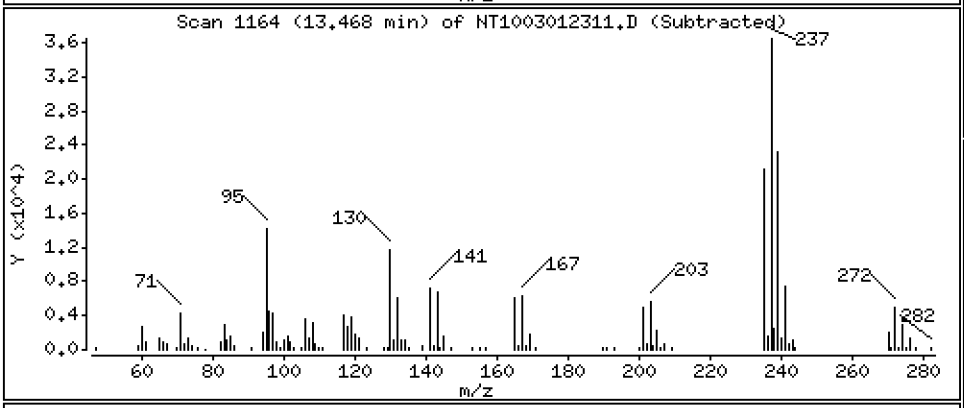
Column phase: ZB-5msi

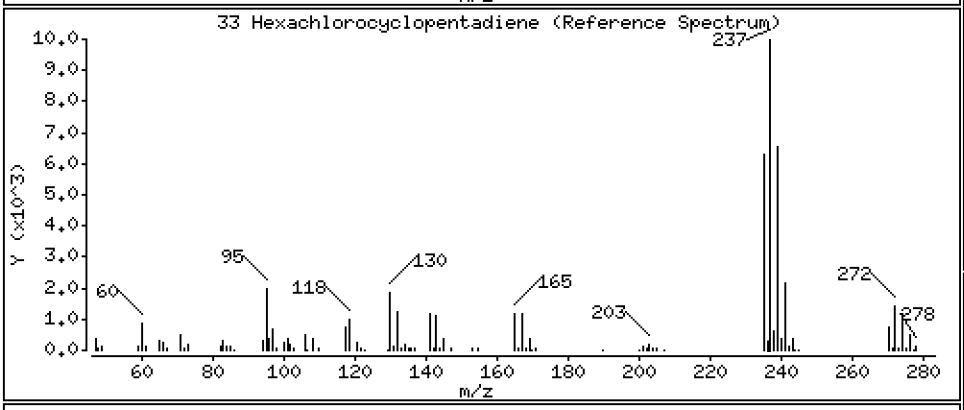
Column diameter: 0.25

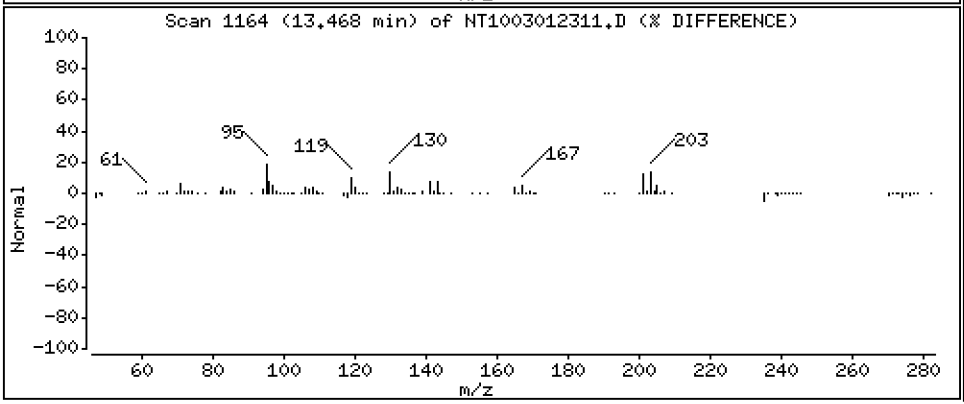
33 Hexachlorocyclopentadiene

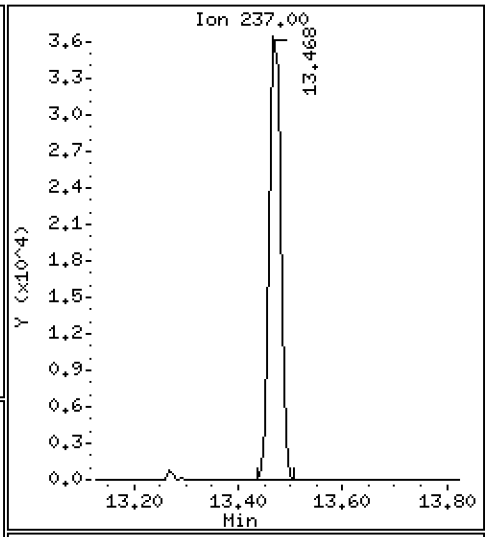
Concentration: 2.562 ug/mL

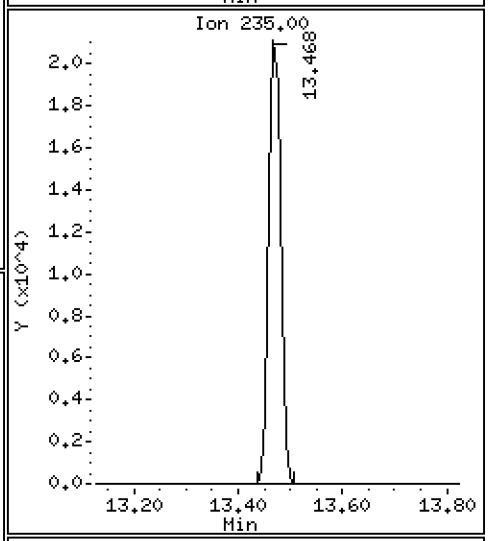


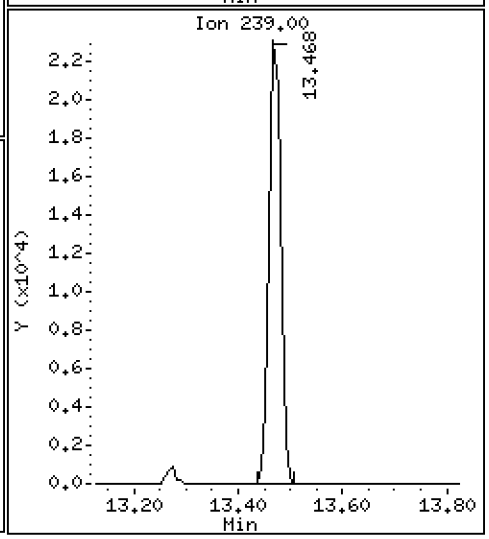












Date : 01-MAR-2023 21:46

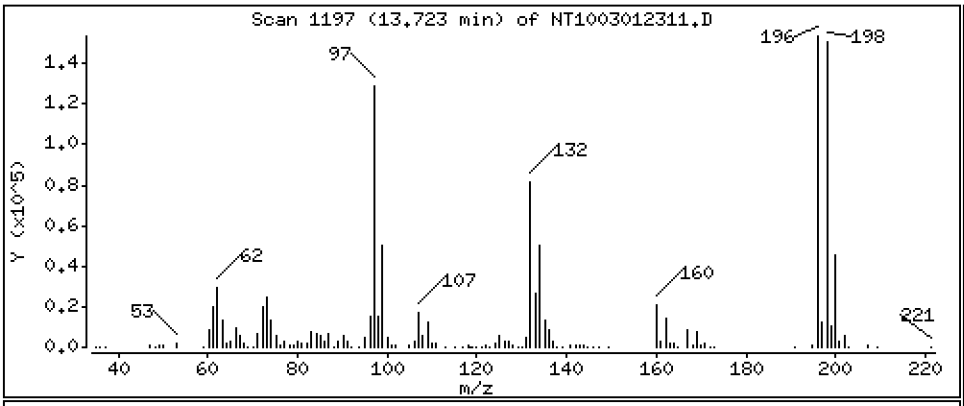
Client ID: Instrument: nt10.i

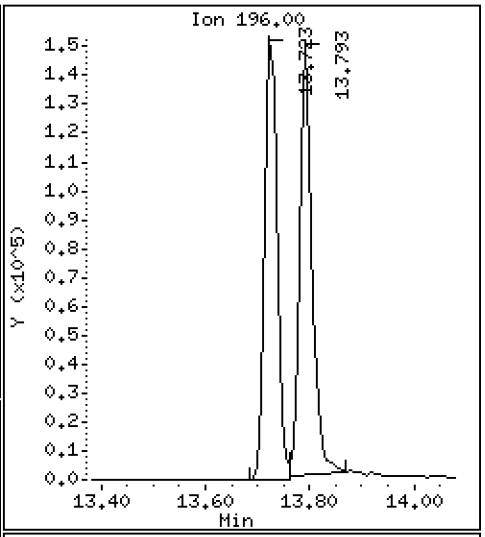
Sample Info: SEQ-SCV1

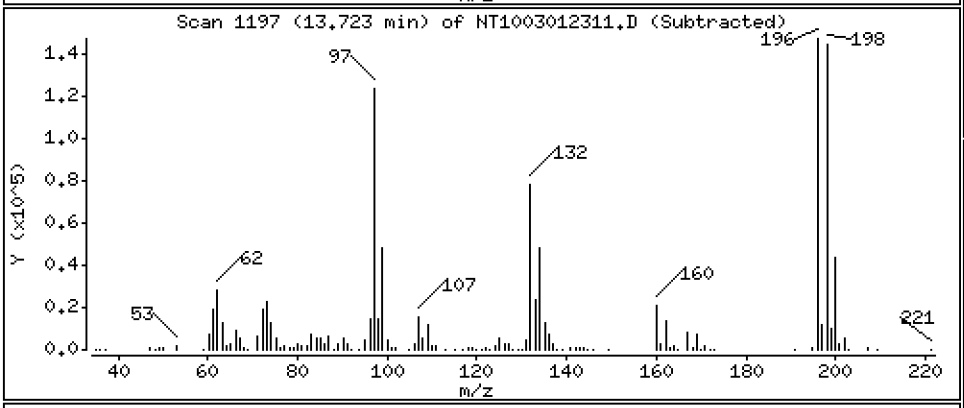
Operator: VTS

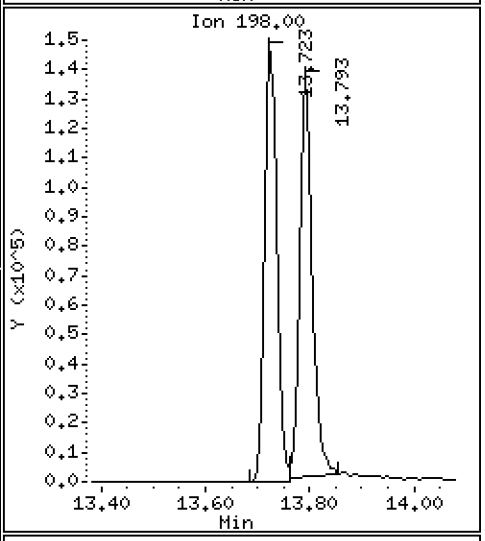
Column phase: ZB-5msi Column diameter: 0.25

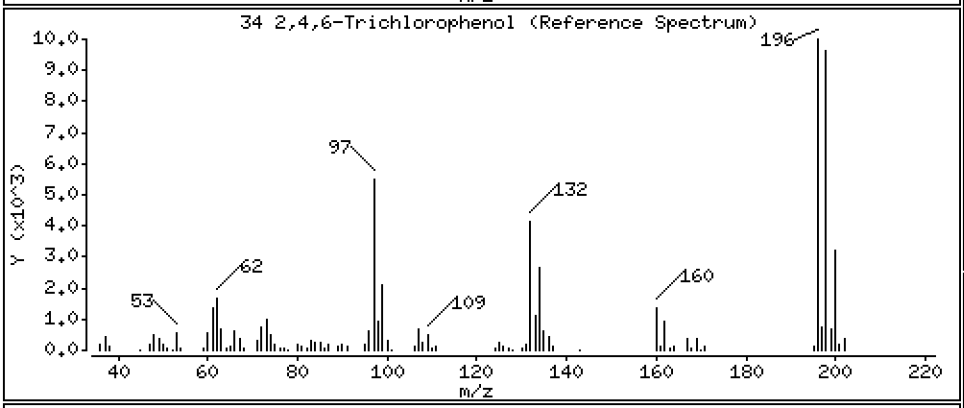
34 2,4,6-Trichlorophenol Concentration: 4.120 ug/mL

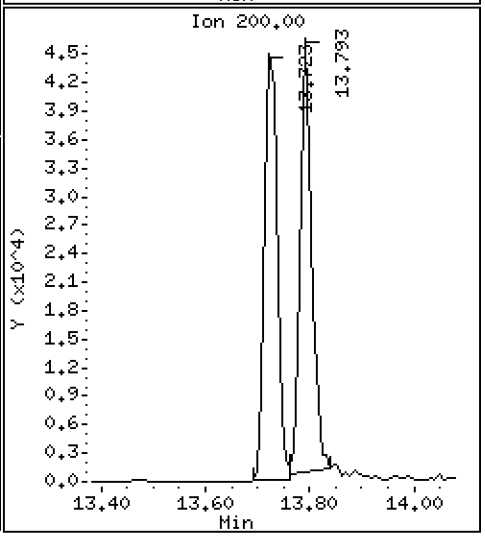


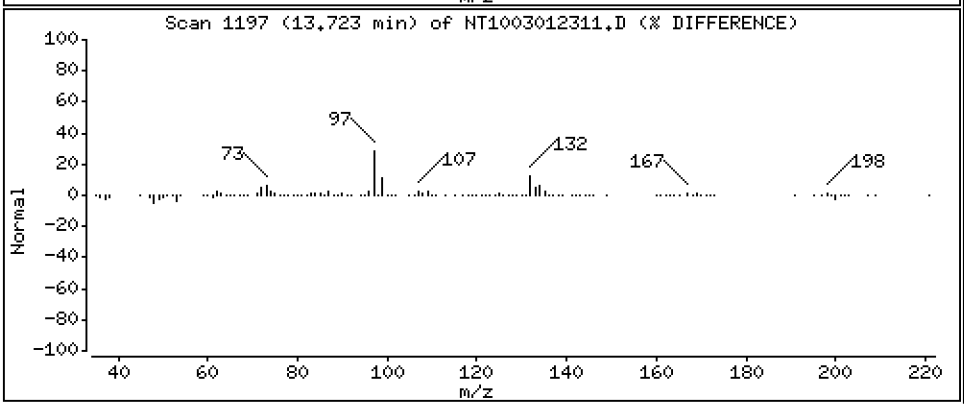












Date : 01-MAR-2023 21:46

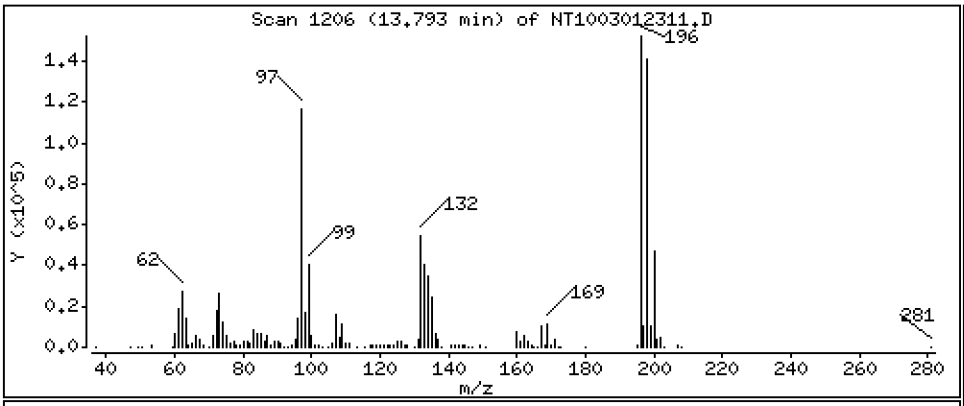
Client ID: Instrument: nt10.i

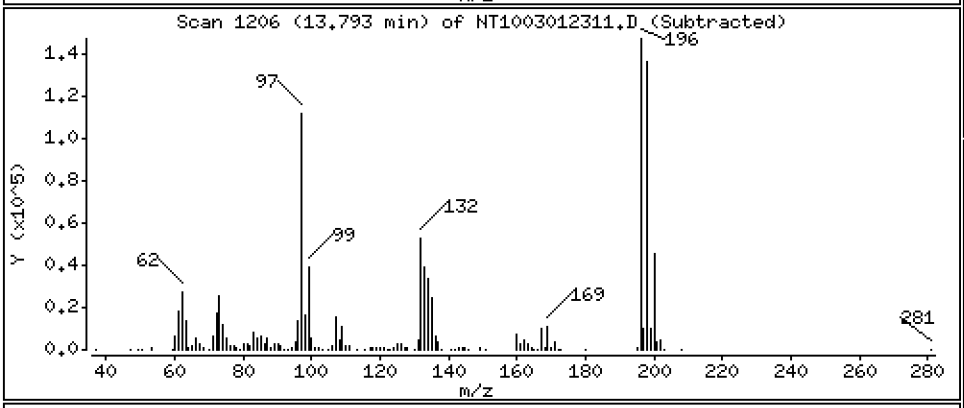
Sample Info: SEQ-SCV1

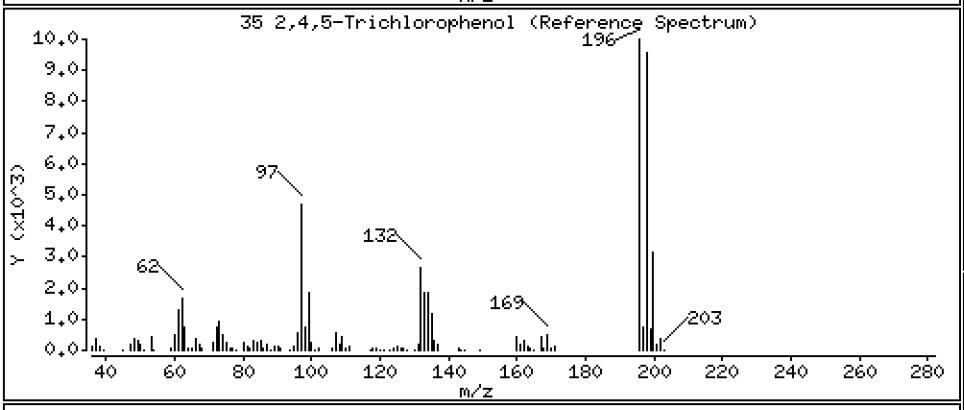
Operator: VTS

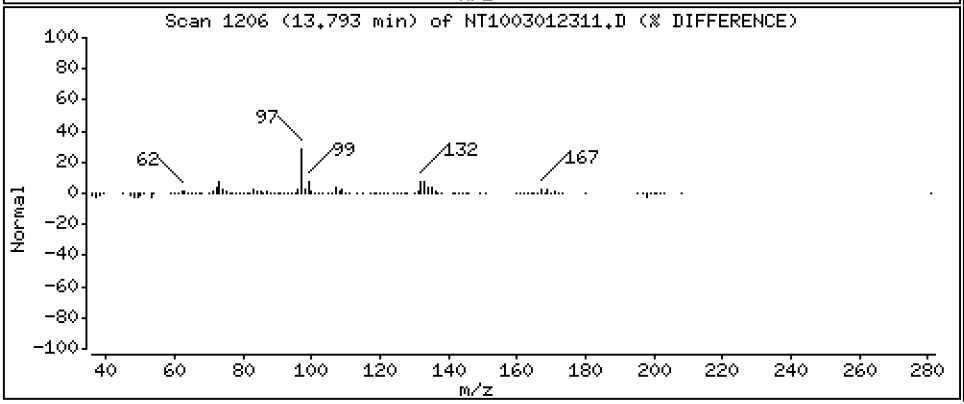
Column phase: ZB-5msi Column diameter: 0.25

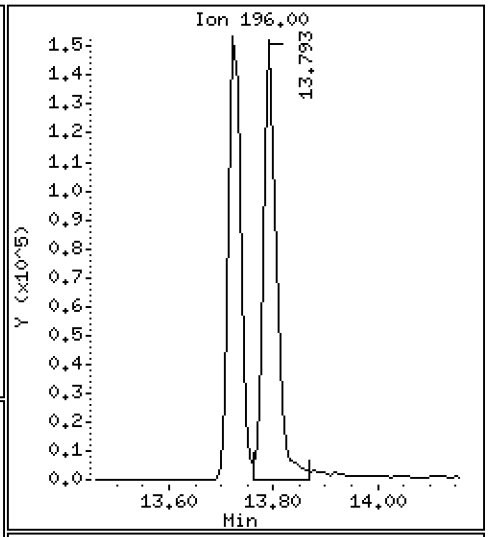
35 2,4,5-Trichlorophenol Concentration: 4.149 ug/mL

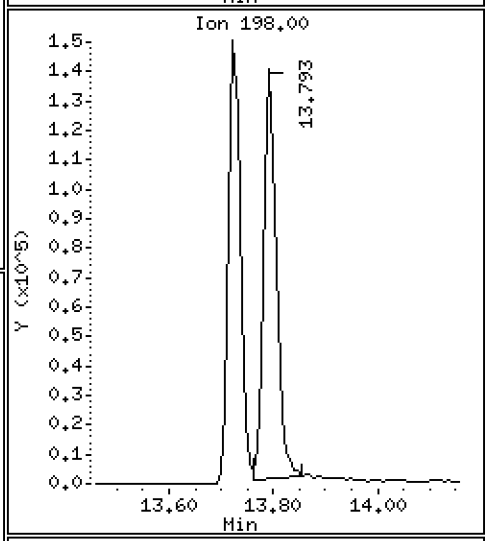


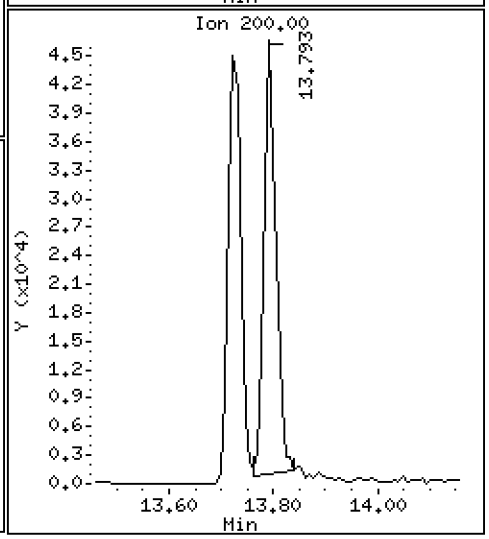












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

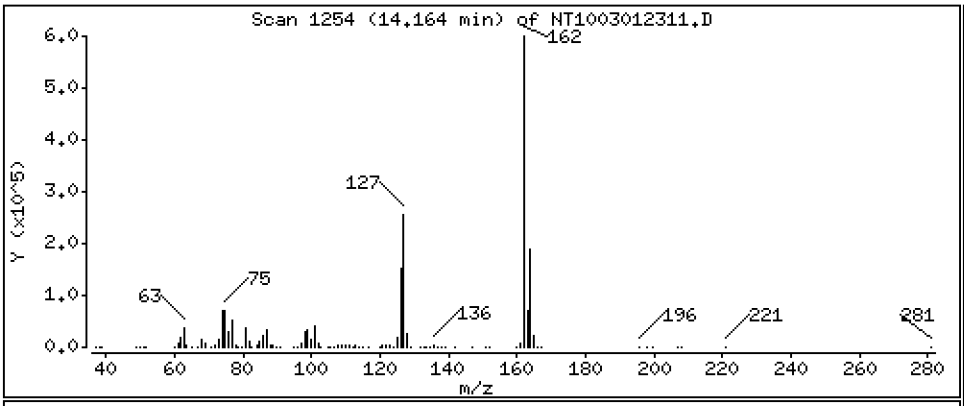
Operator: VTS

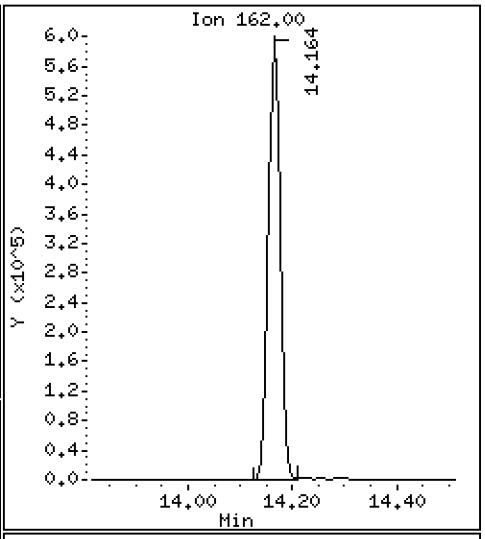
Column phase: ZB-5msi

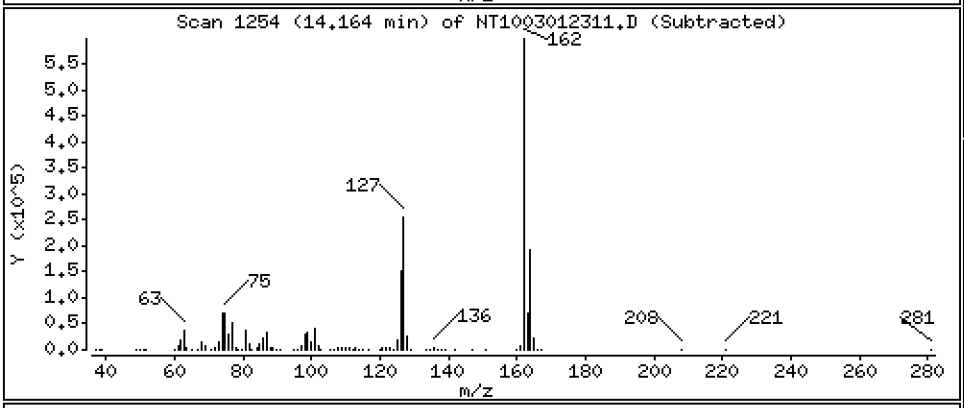
Column diameter: 0.25

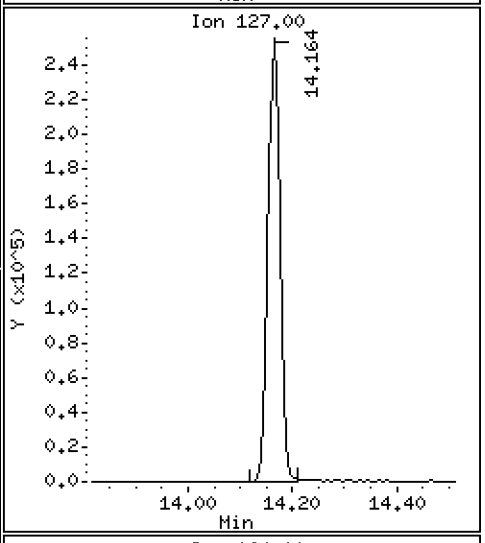
37 2-Chloronaphthalene

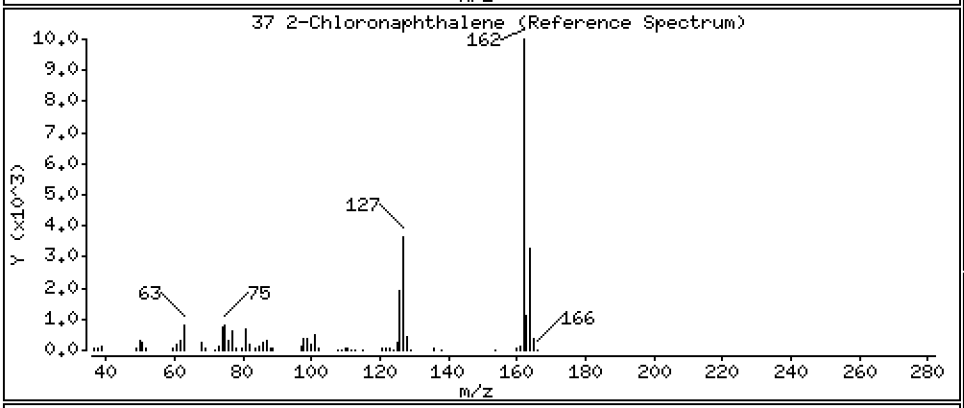
Concentration: 5.264 ug/mL

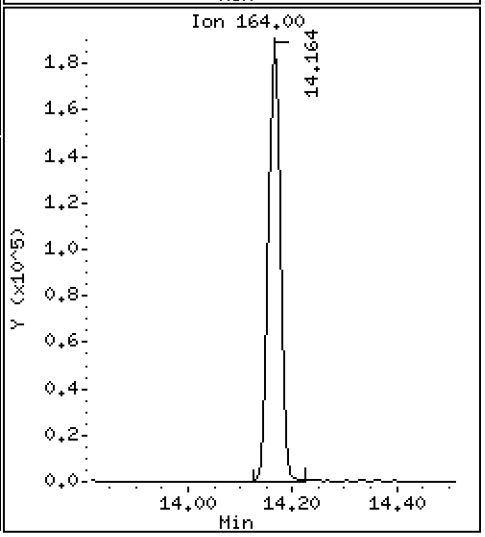


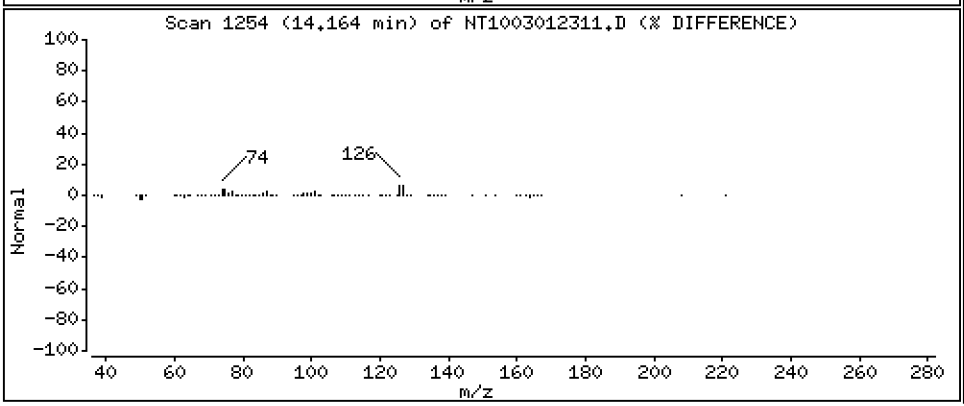












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

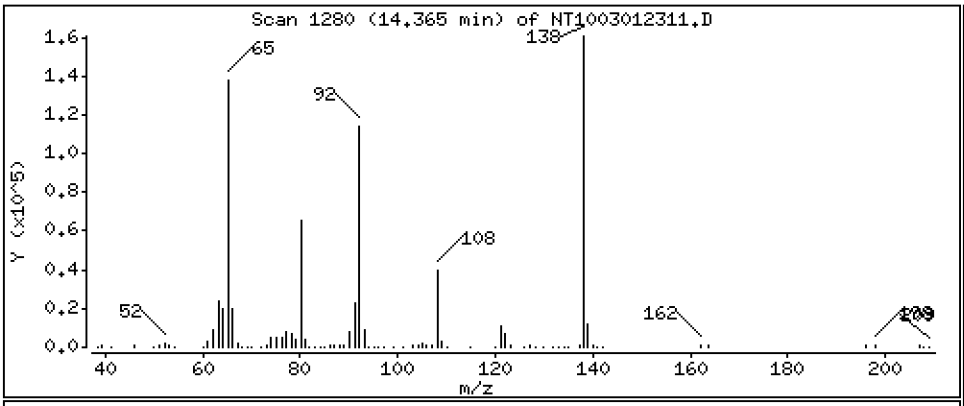
Operator: VTS

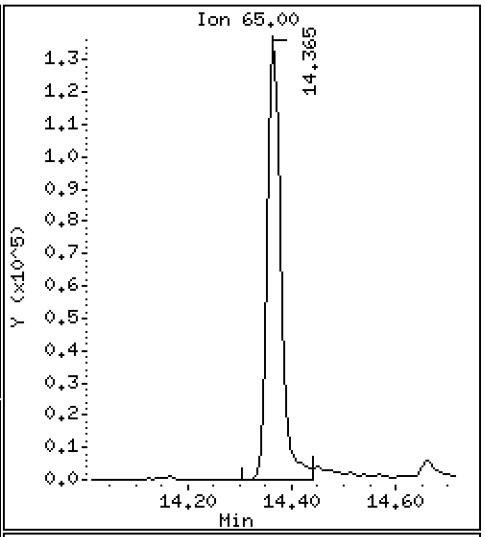
Column phase: ZB-5msi

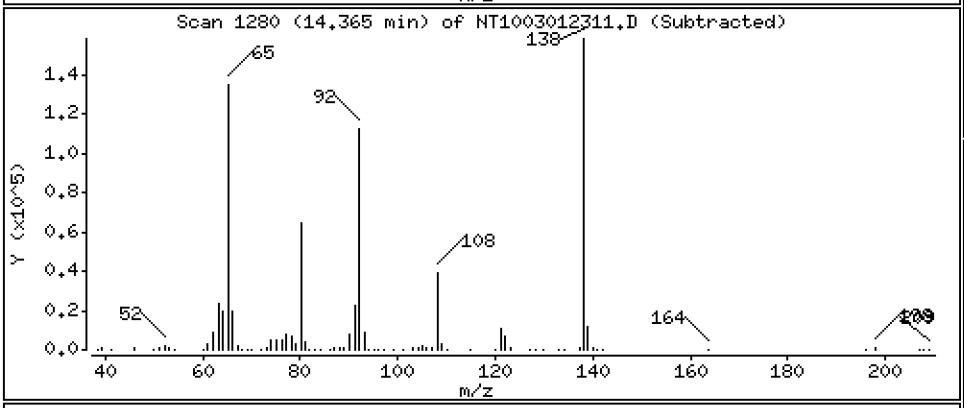
Column diameter: 0.25

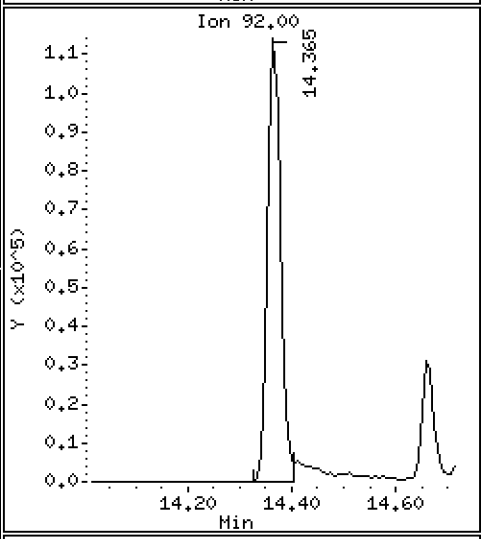
38 2-Nitroaniline

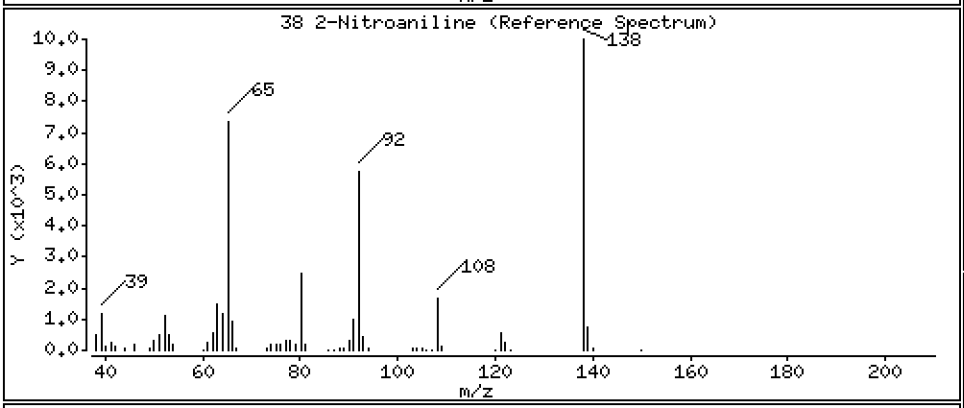
Concentration: 5.027 ug/mL

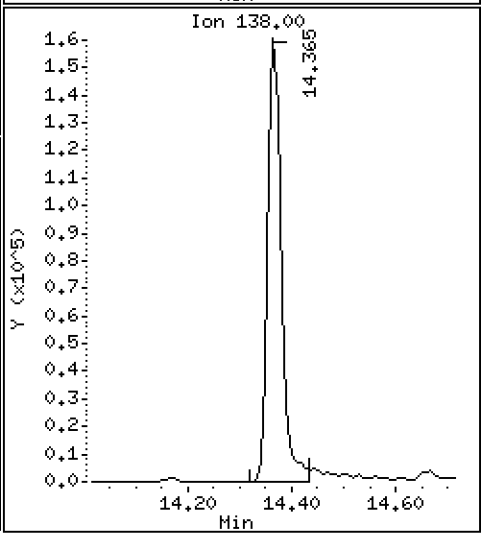


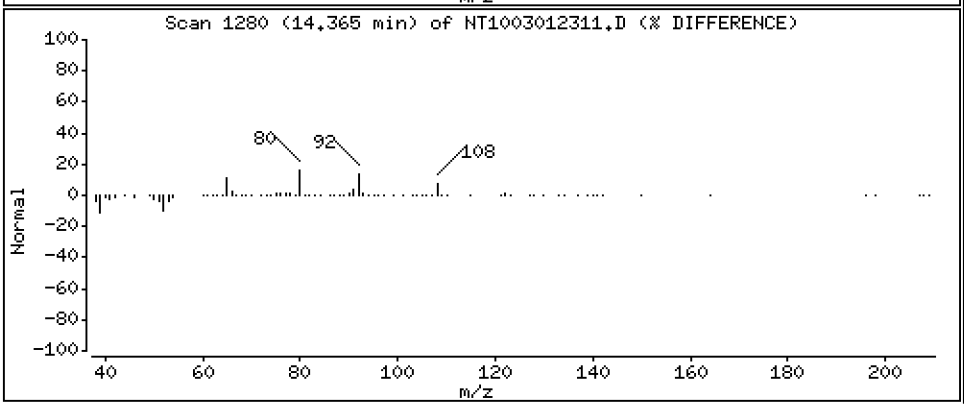












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

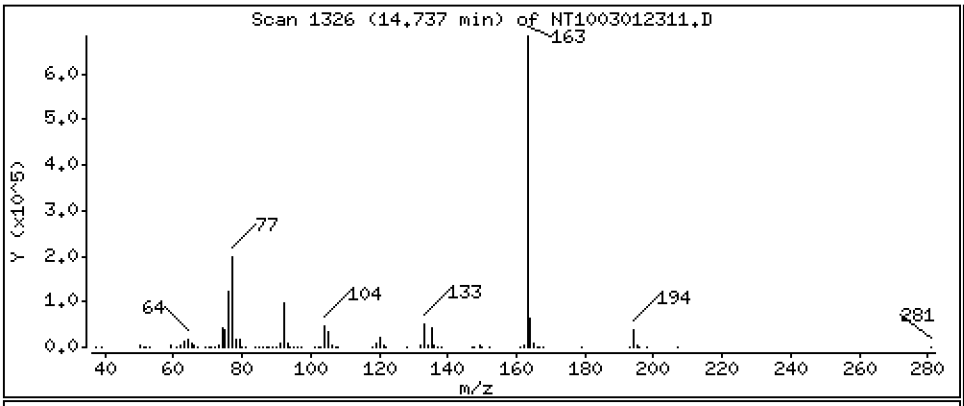
Operator: VTS

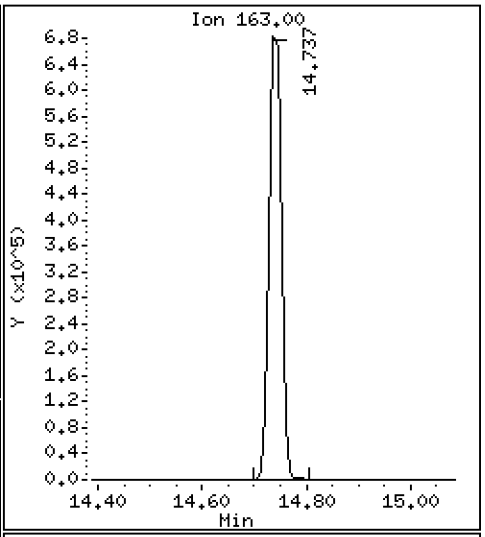
Column phase: ZB-5msi

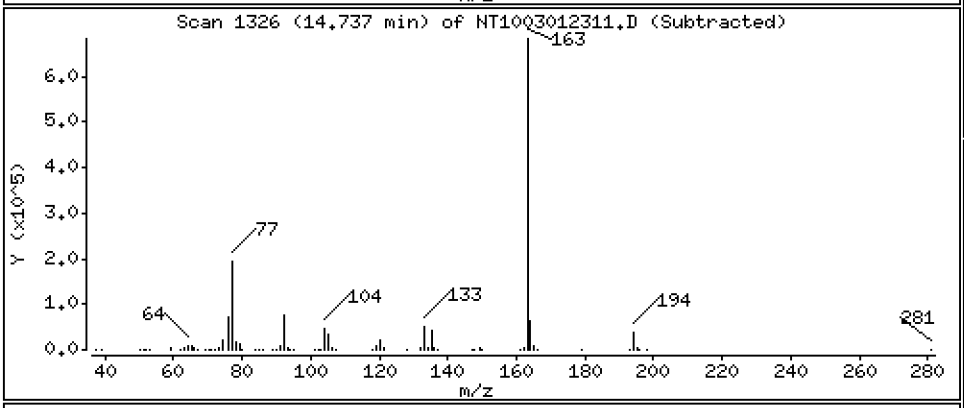
Column diameter: 0.25

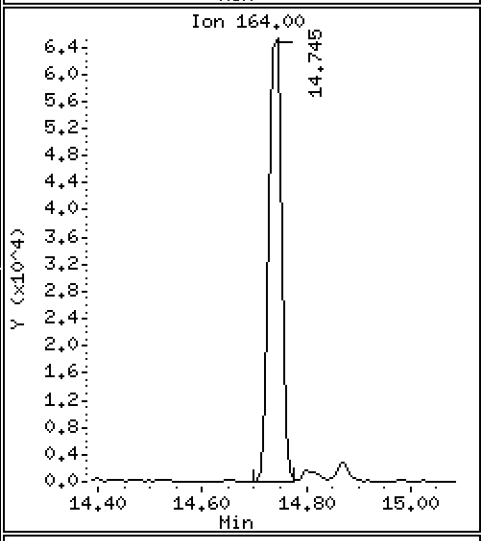
39 Dimethylphthalate

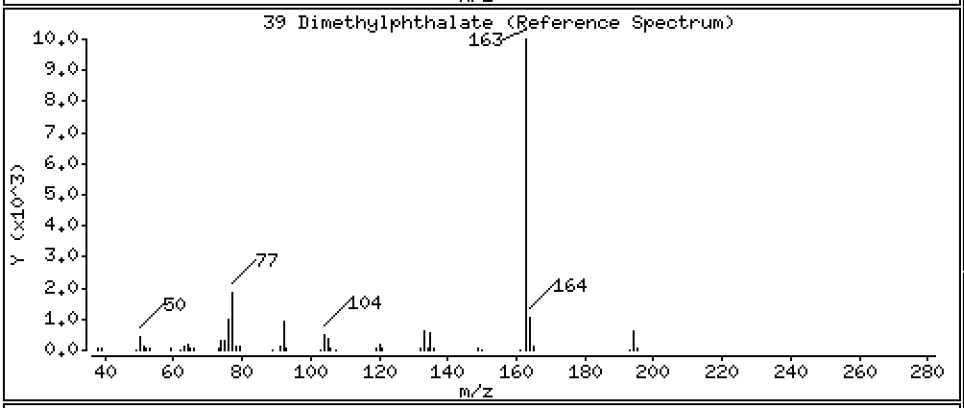
Concentration: 5.384 ug/mL

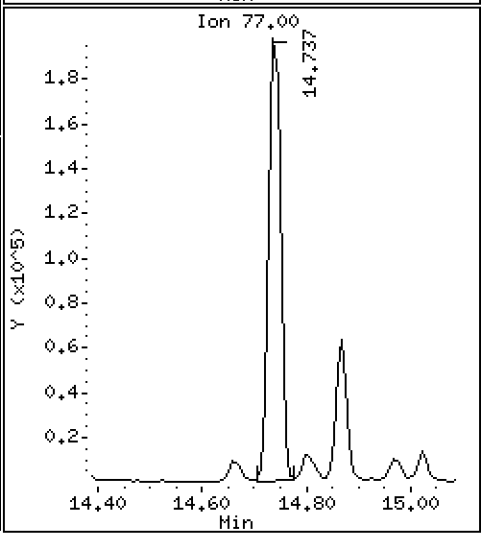


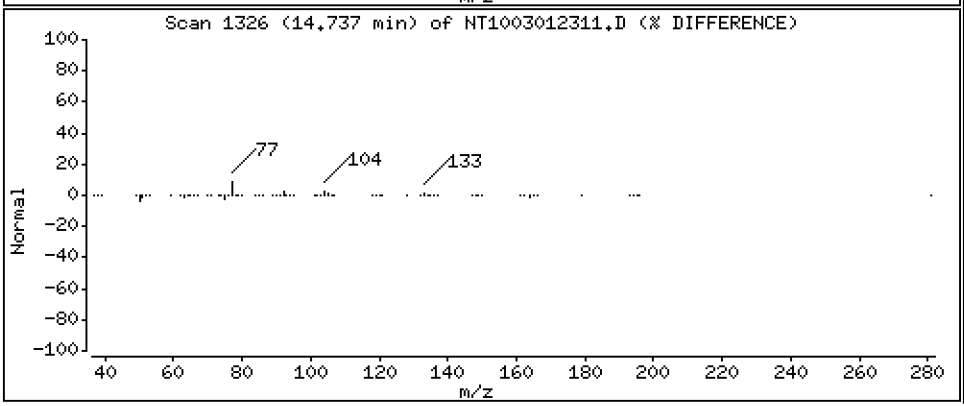












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

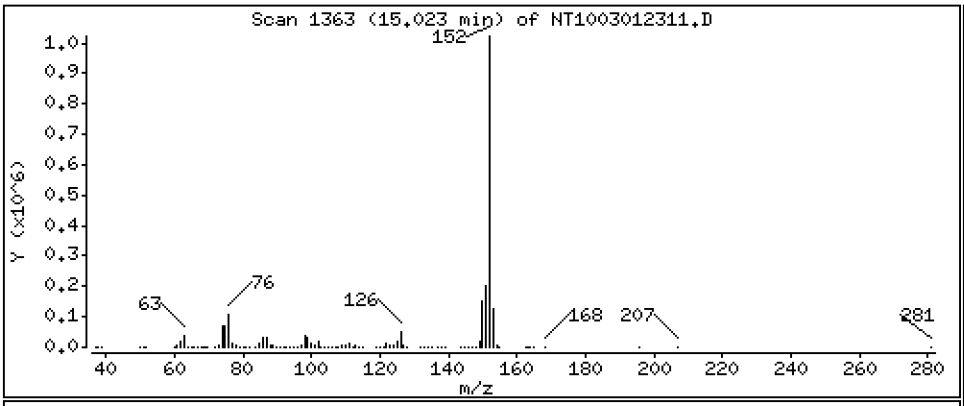
Operator: VTS

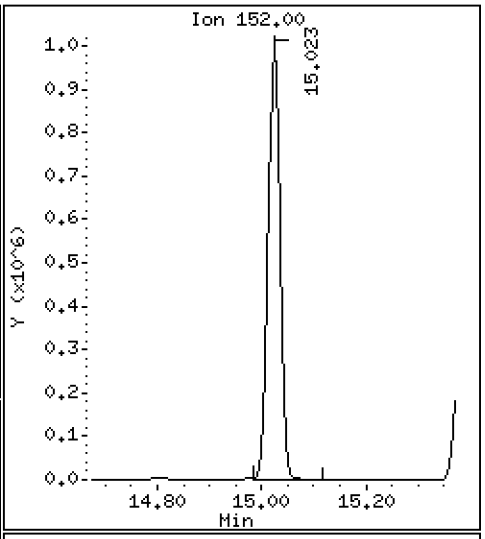
Column phase: ZB-5msi

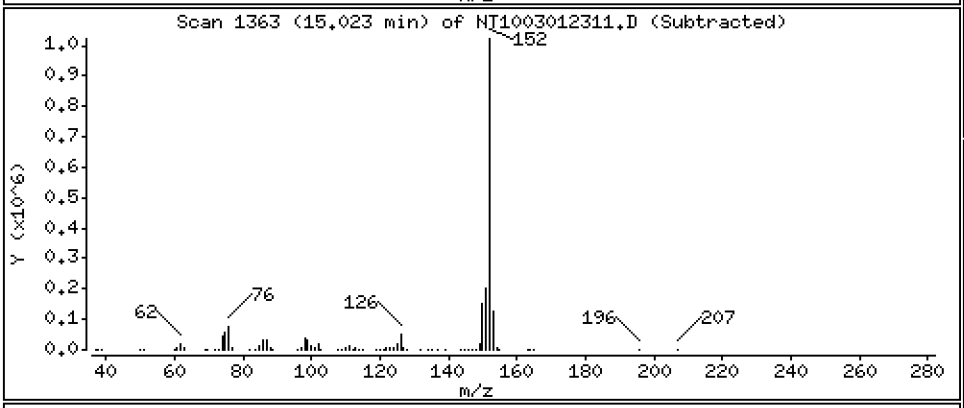
Column diameter: 0.25

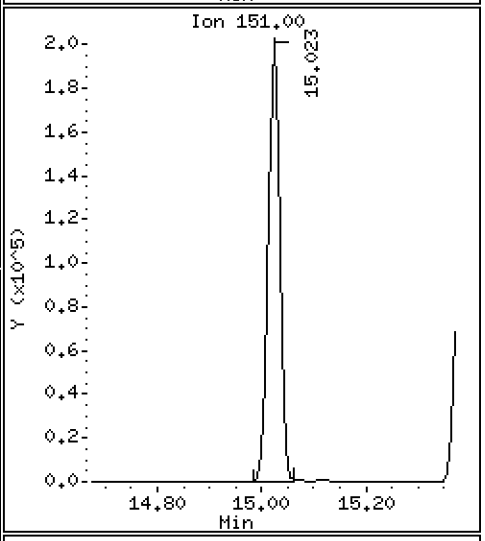
40 Acenaphthylene

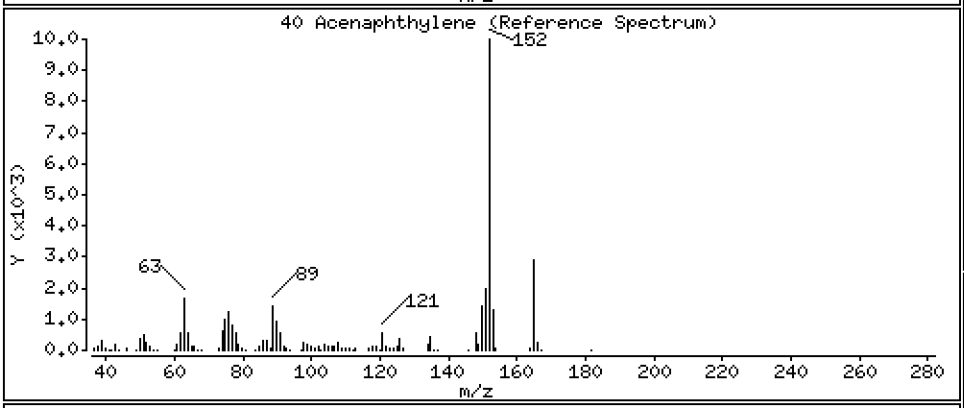
Concentration: 5.806 ug/mL

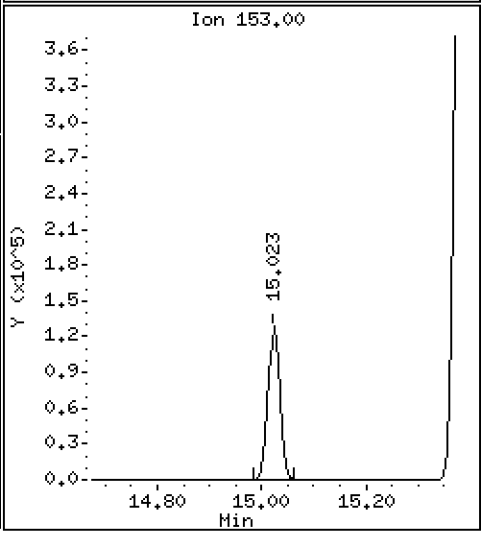


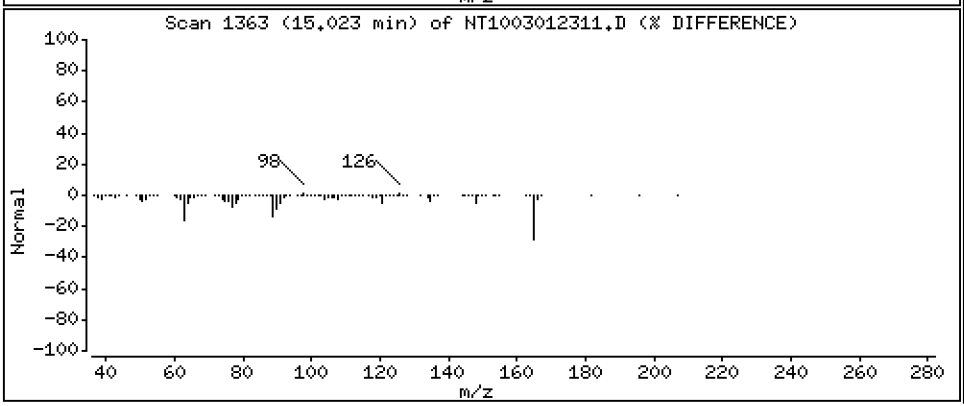












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

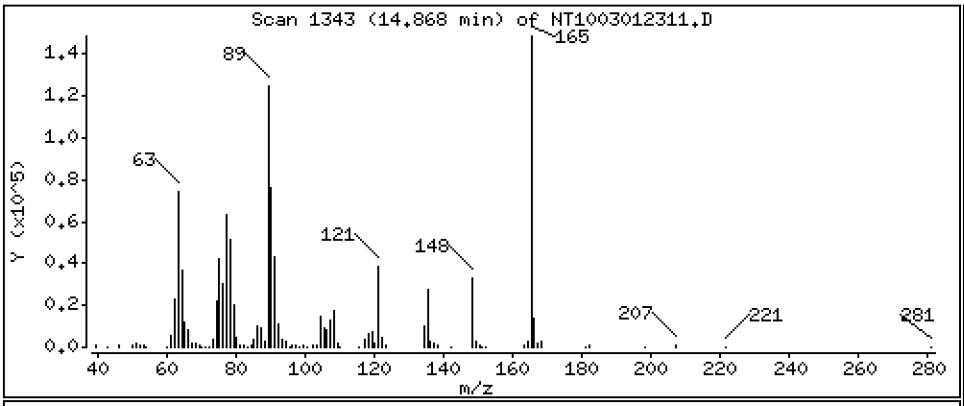
Operator: VTS

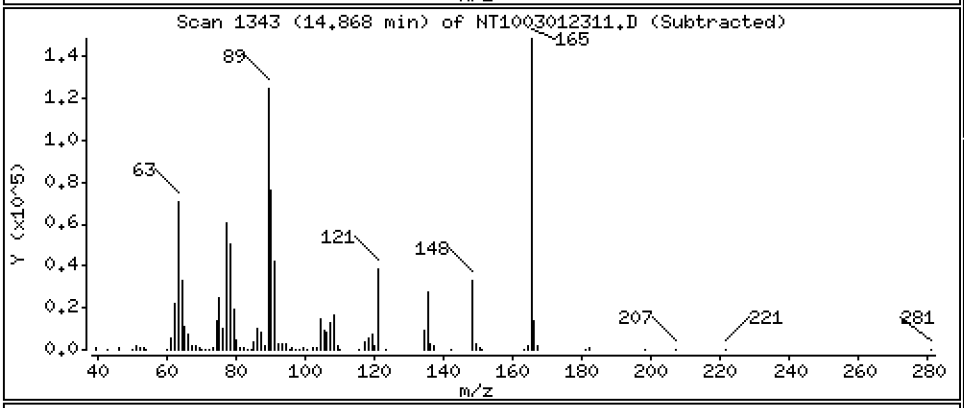
Column phase: ZB-5msi

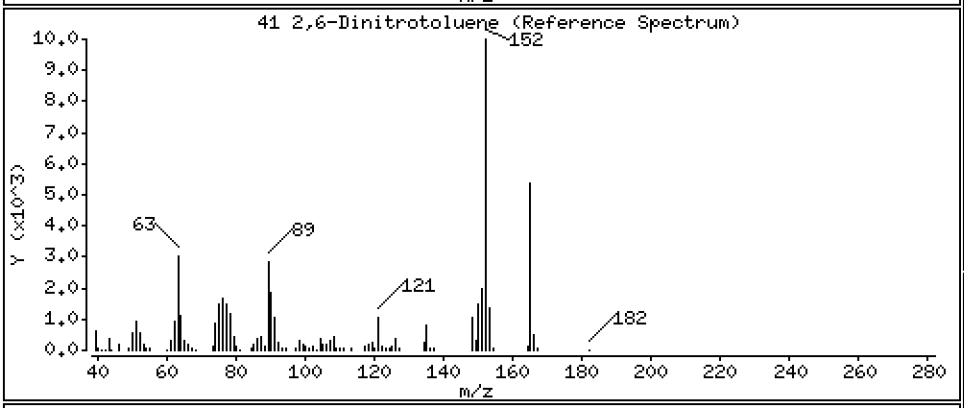
Column diameter: 0.25

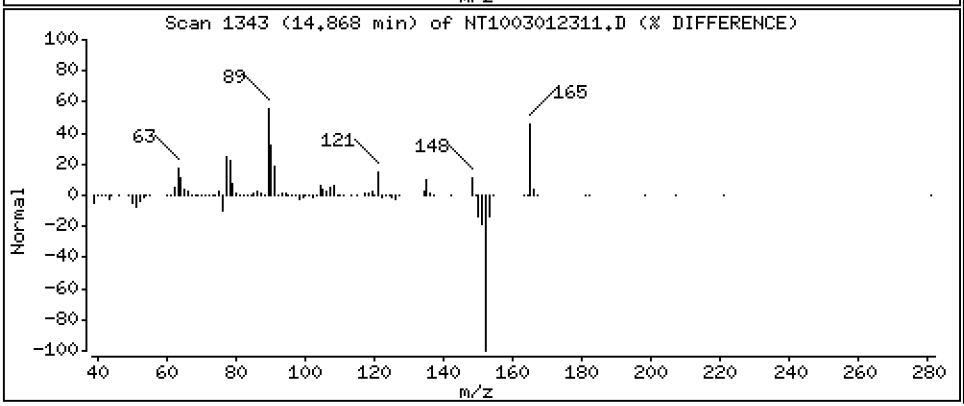
41 2,6-Dinitrotoluene

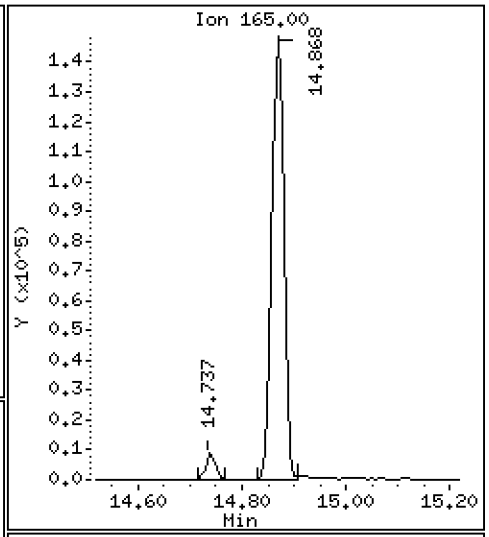
Concentration: 5.187 ug/mL

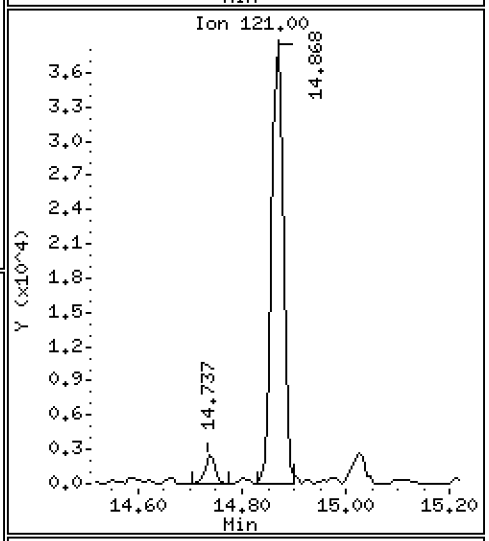


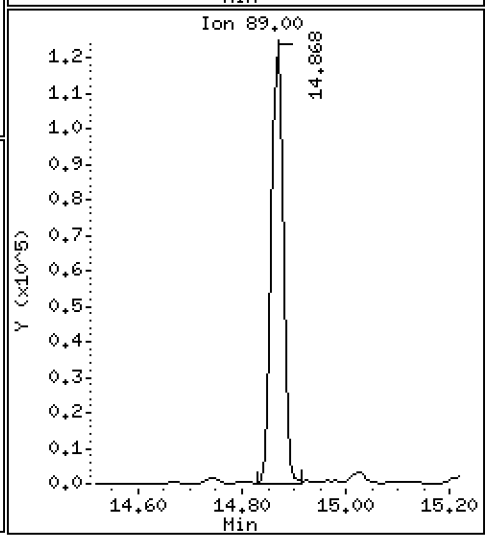












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

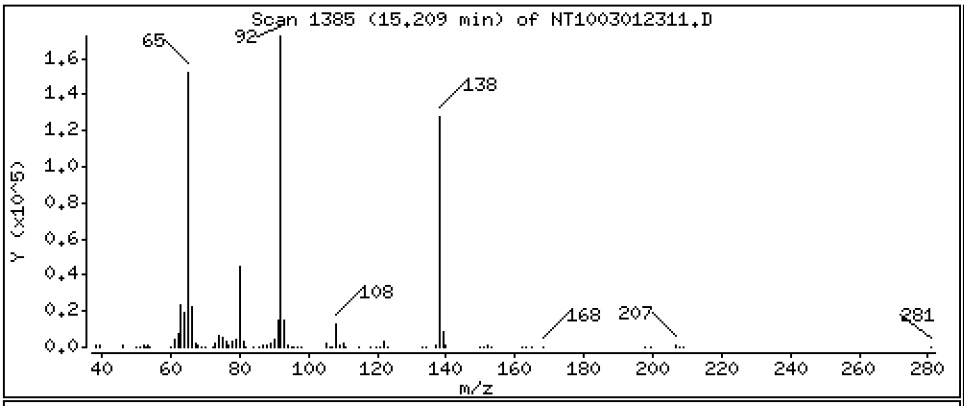
Operator: VTS

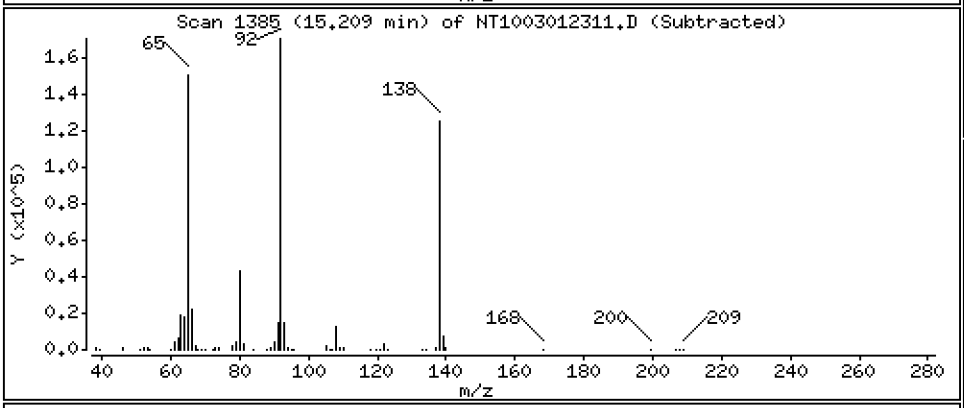
Column phase: ZB-5msi

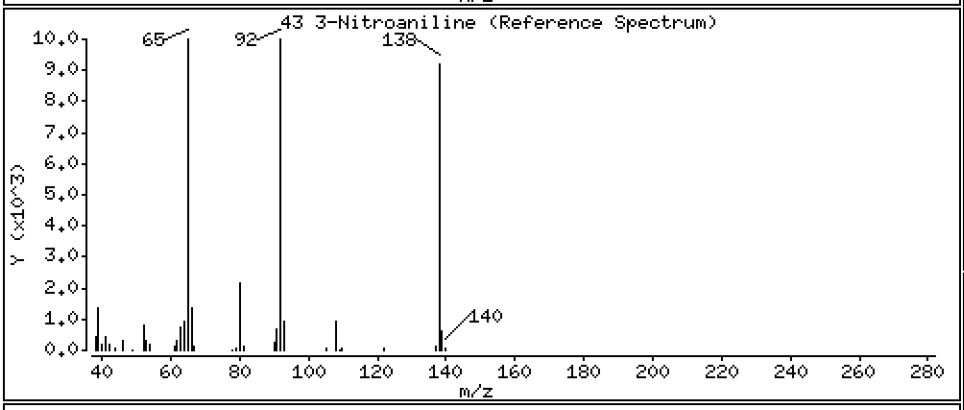
Column diameter: 0.25

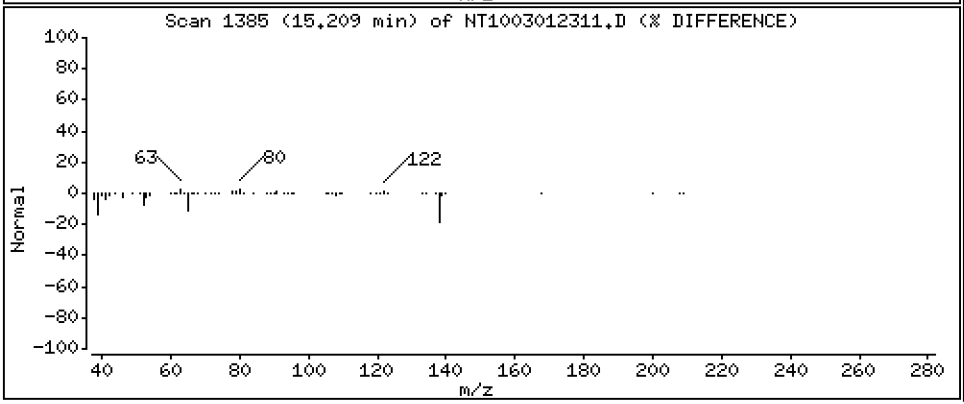
43 3-Nitroaniline

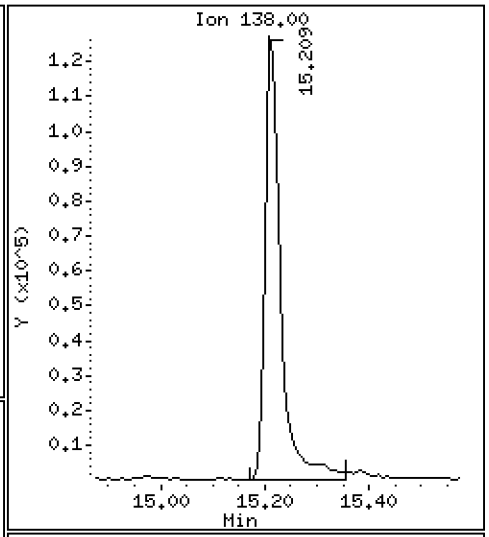
Concentration: 5.172 ug/mL

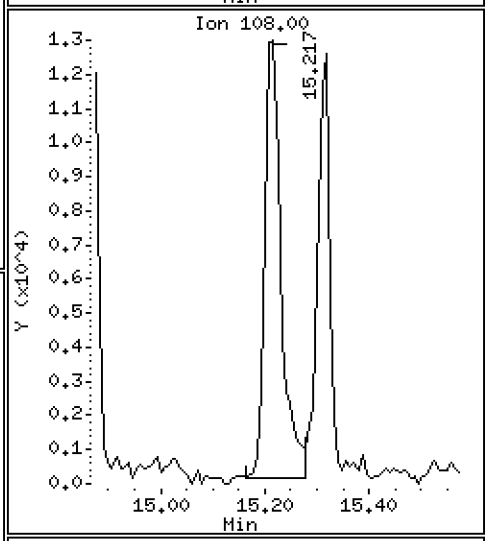


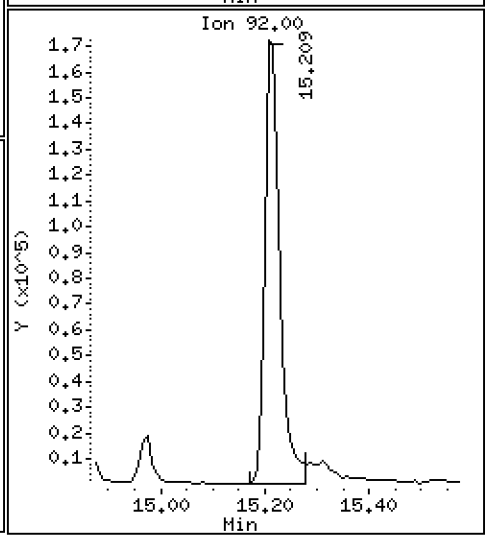












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

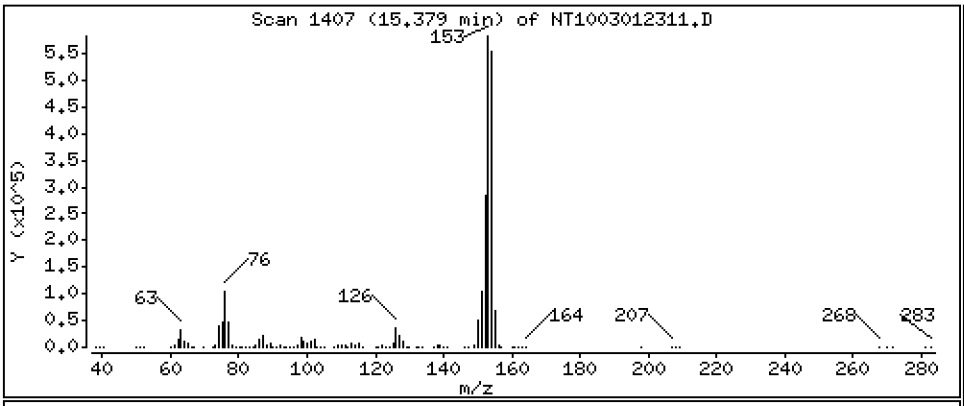
Operator: VTS

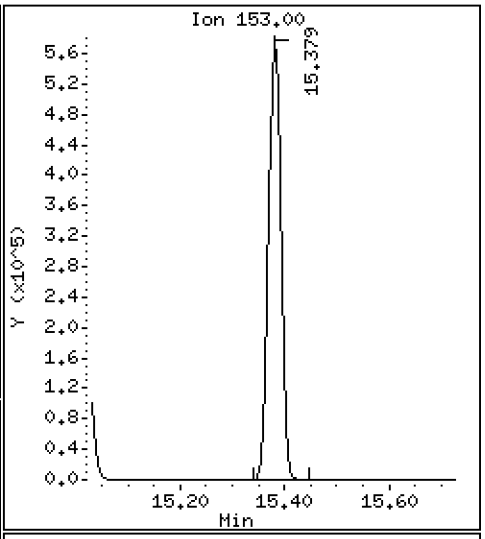
Column phase: ZB-5msi

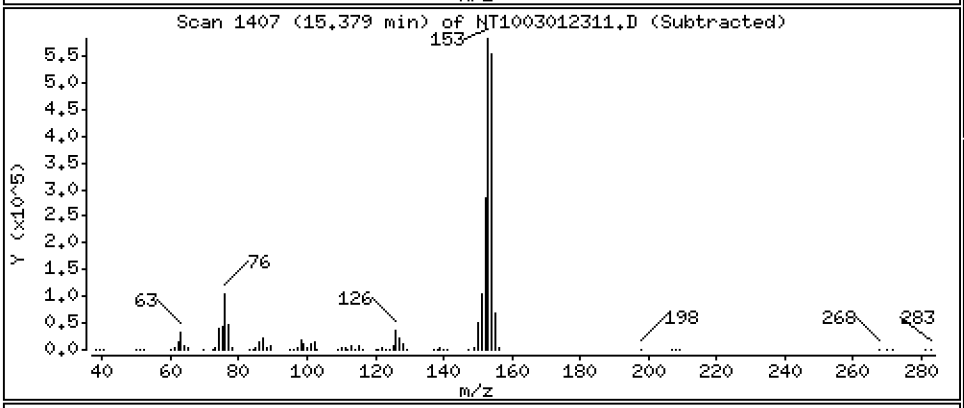
Column diameter: 0.25

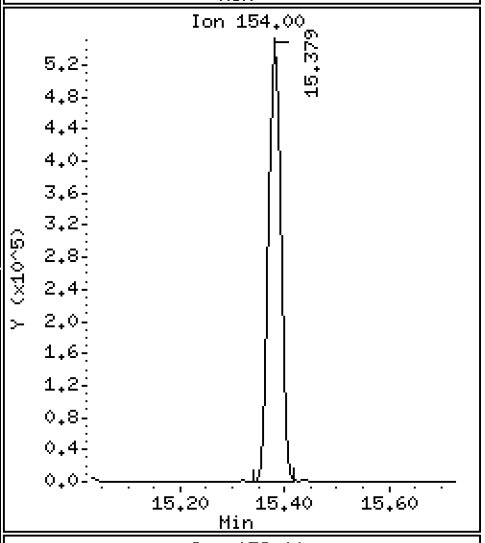
44 Acenaphthene

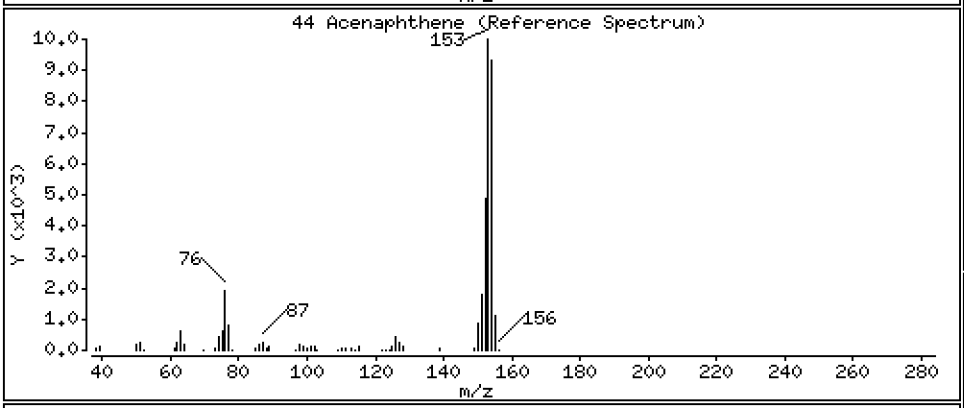
Concentration: 5.154 ug/mL

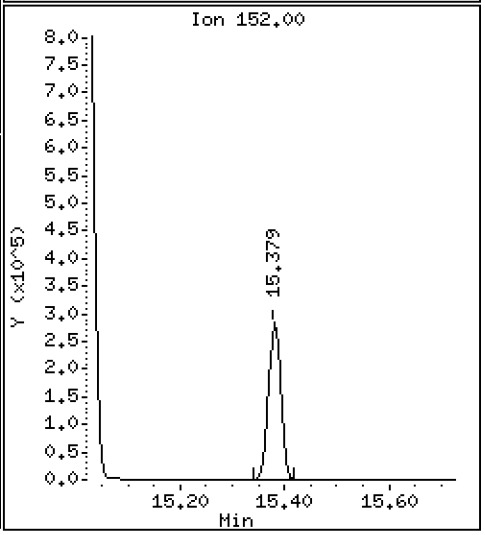


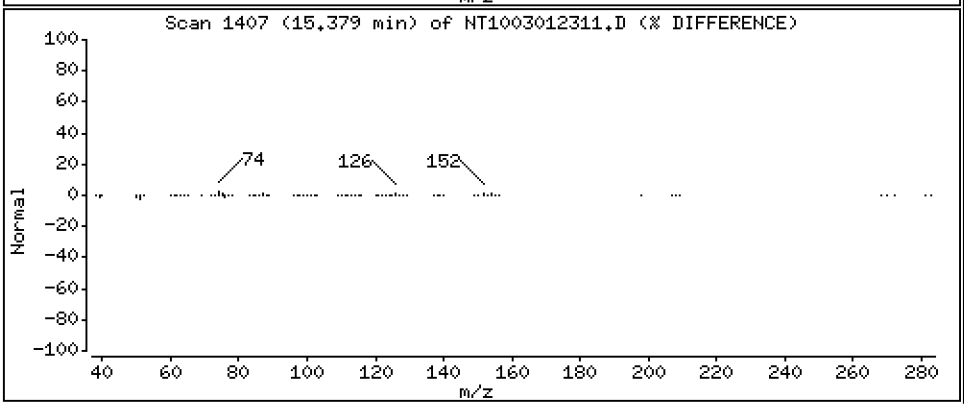












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

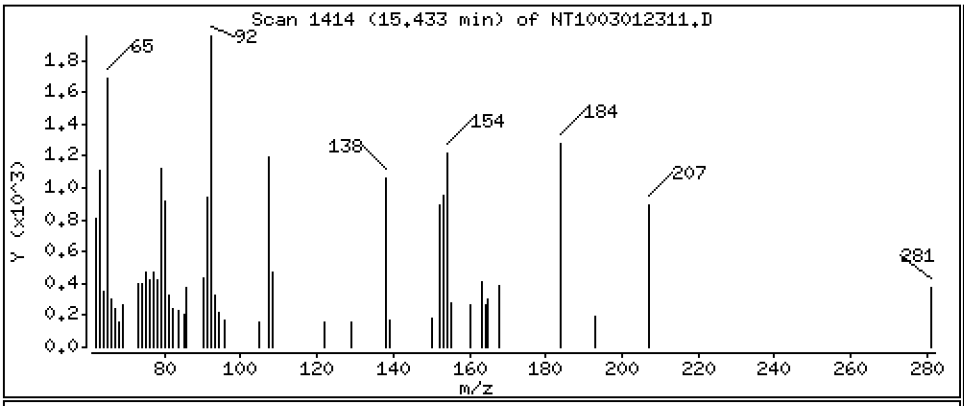
Operator: VTS

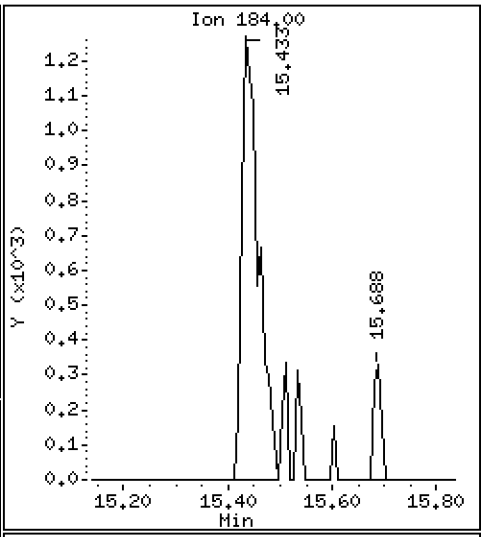
Column phase: ZB-5msi

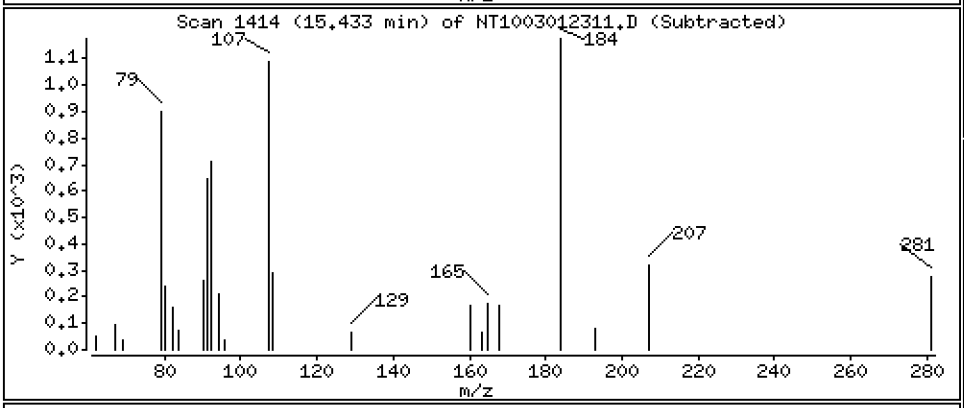
Column diameter: 0.25

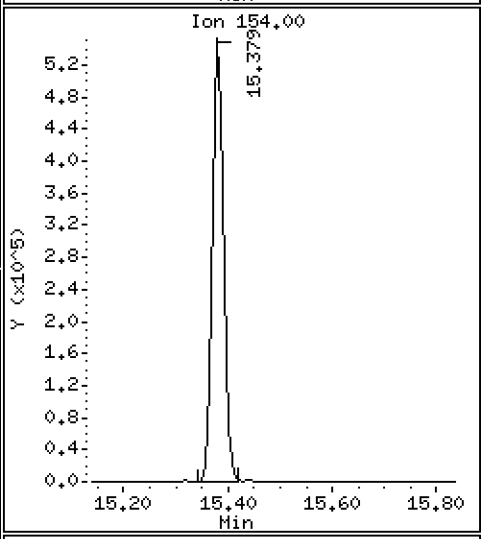
45 2,4-Dinitrophenol

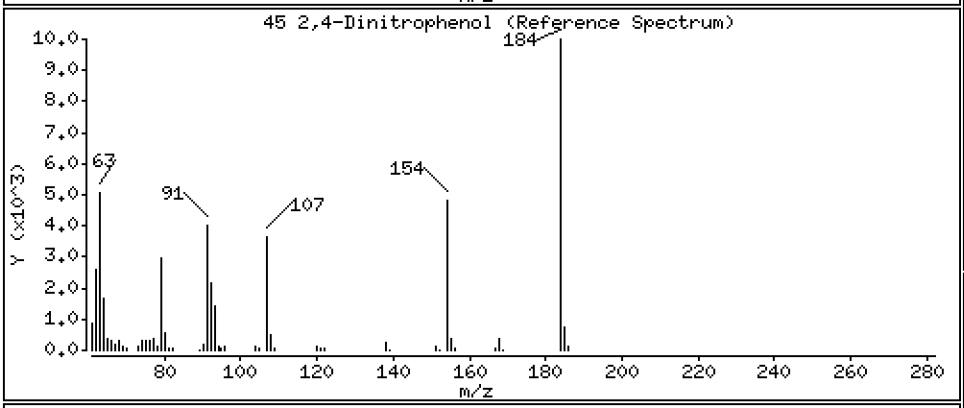
Concentration: 0.2667 ug/mL

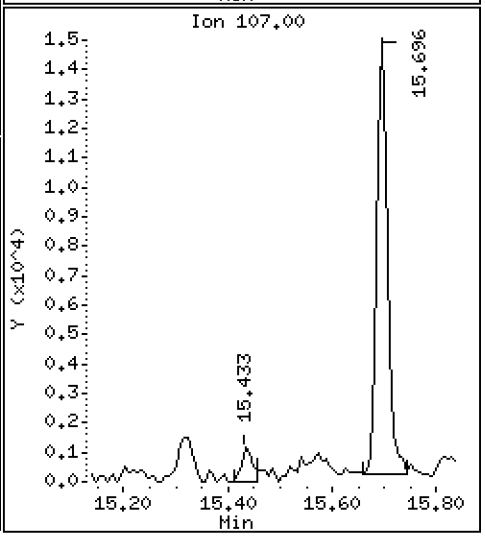


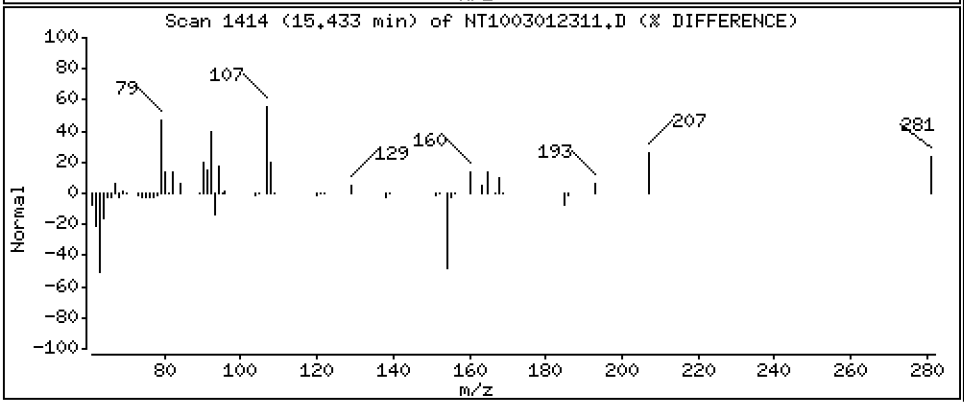












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

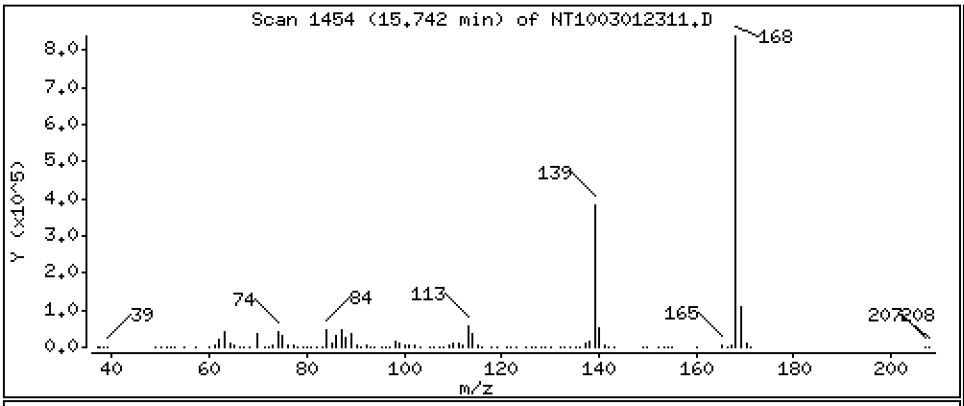
Operator: VTS

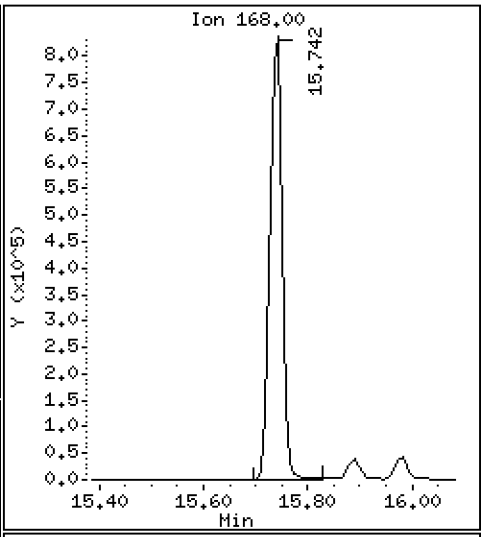
Column phase: ZB-5msi

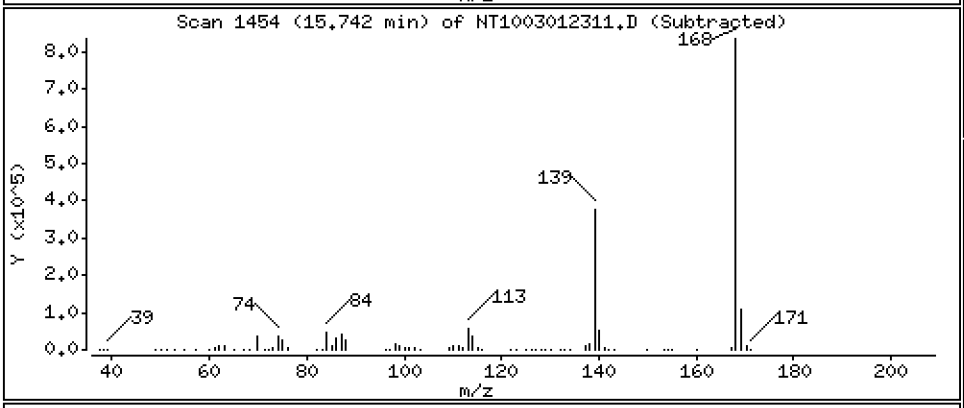
Column diameter: 0.25

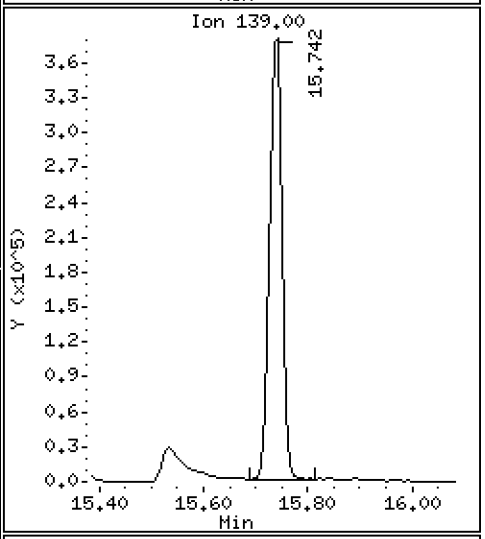
46 Dibenzofuran

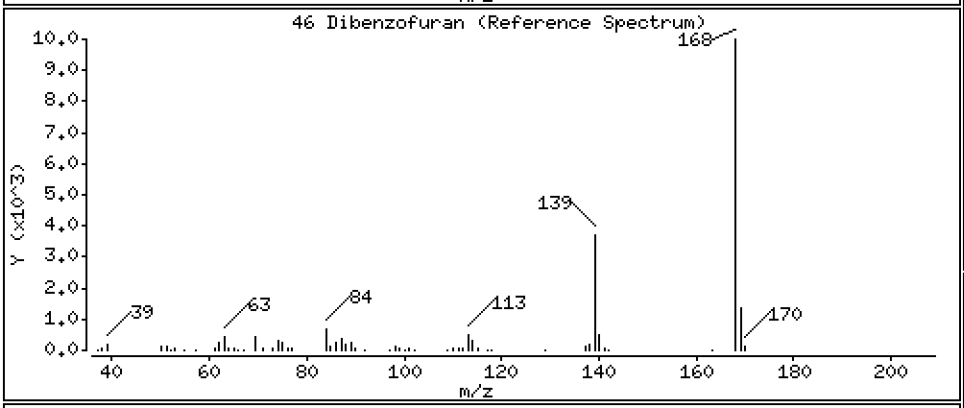
Concentration: 4.994 ug/mL

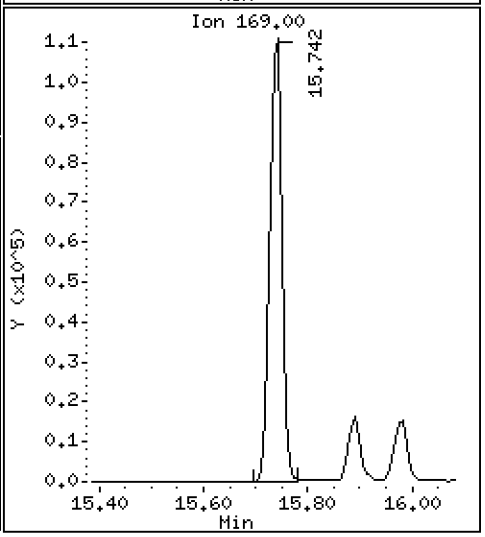


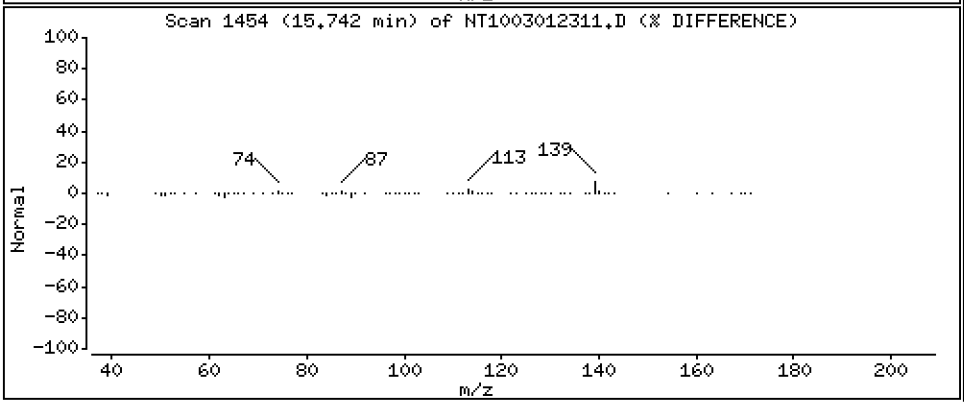












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

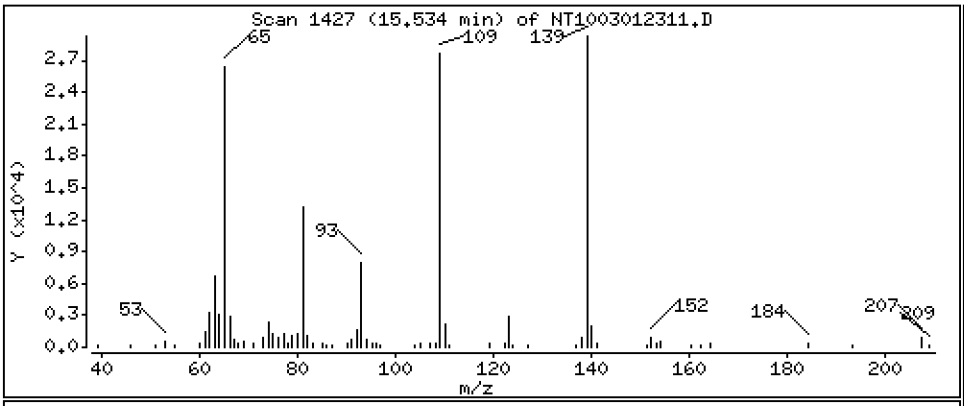
Operator: VTS

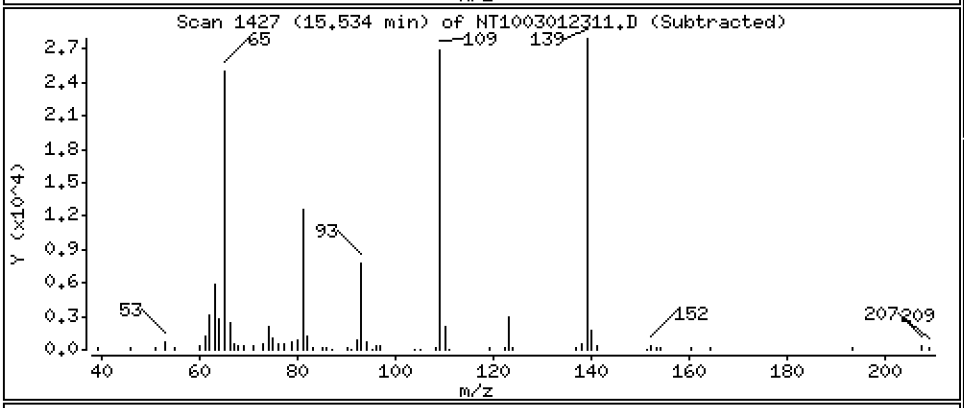
Column phase: ZB-5msi

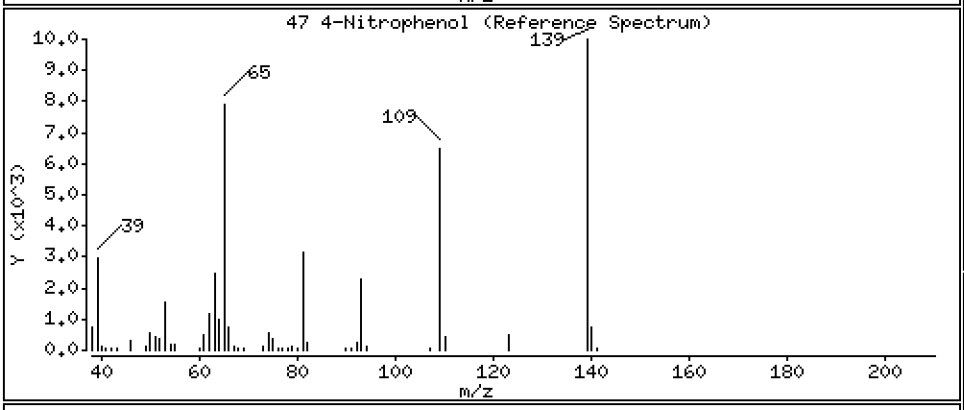
Column diameter: 0.25

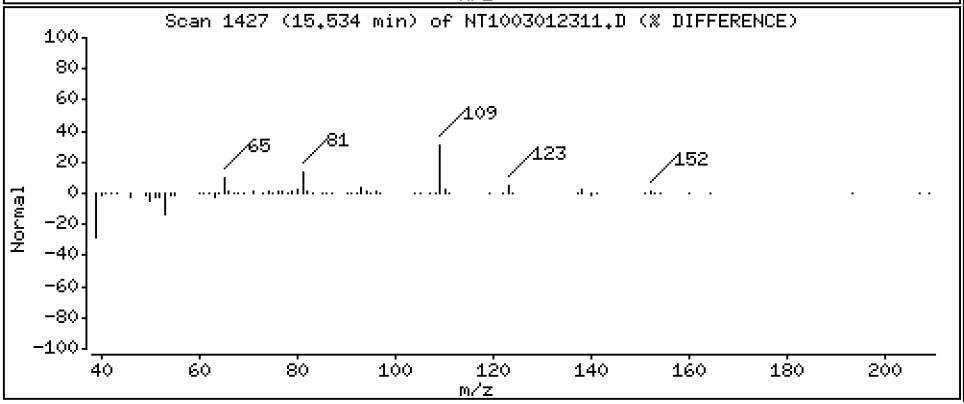
47 4-Nitrophenol

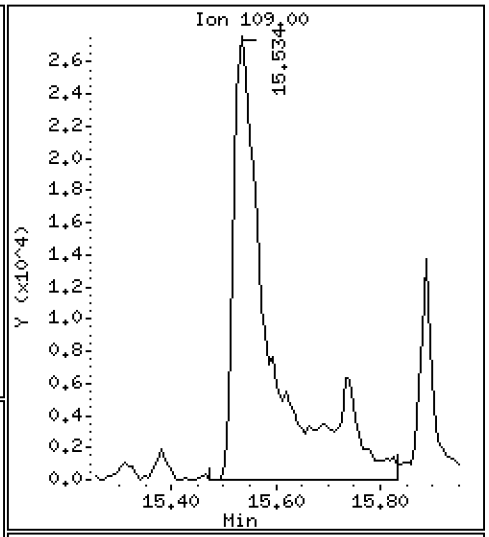
Concentration: 3.822 ug/mL

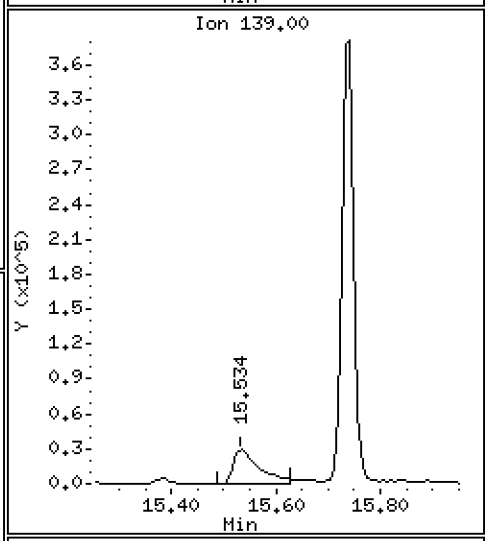


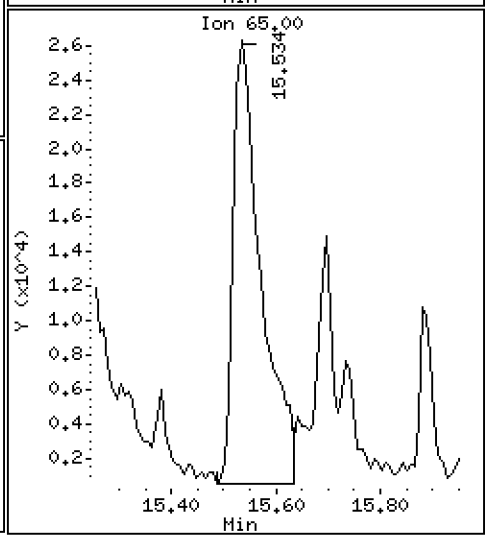












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

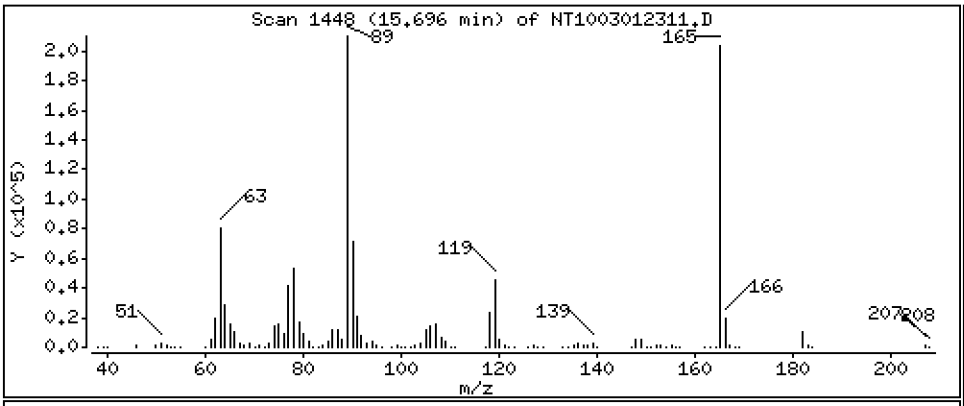
Operator: VTS

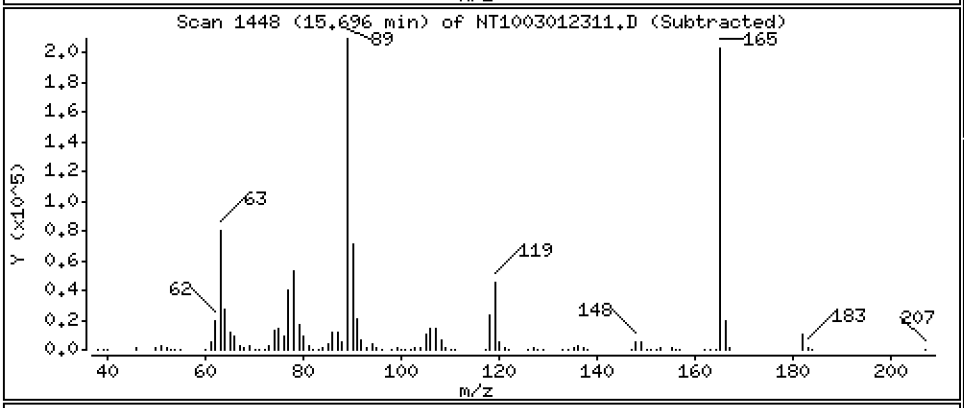
Column phase: ZB-5msi

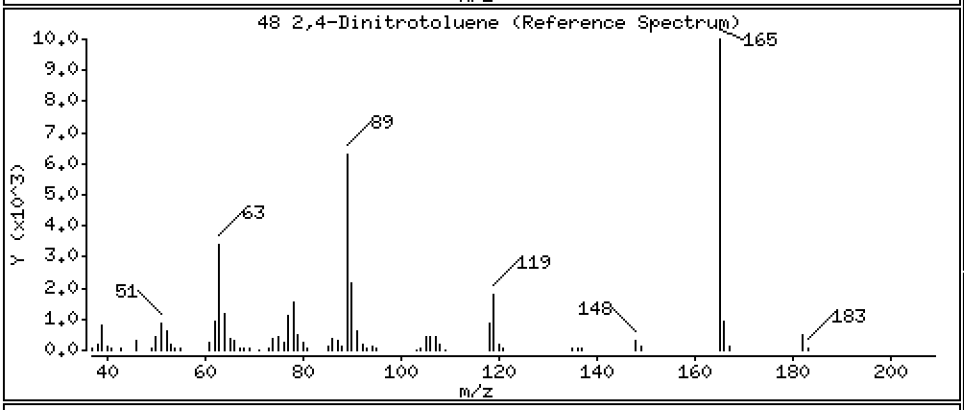
Column diameter: 0.25

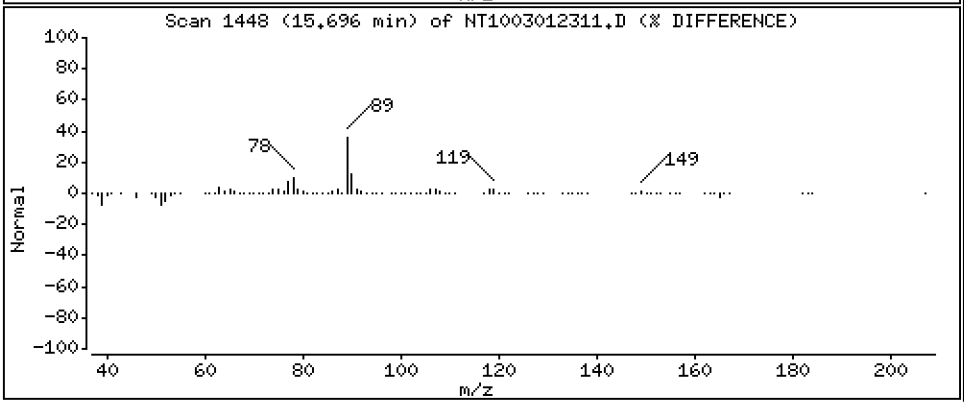
48 2,4-Dinitrotoluene

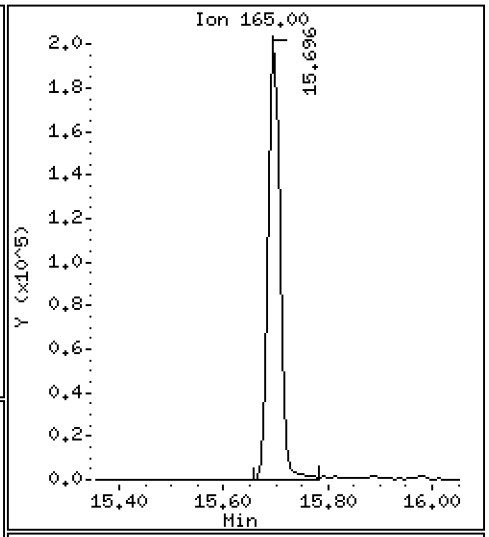
Concentration: 4.729 ug/mL

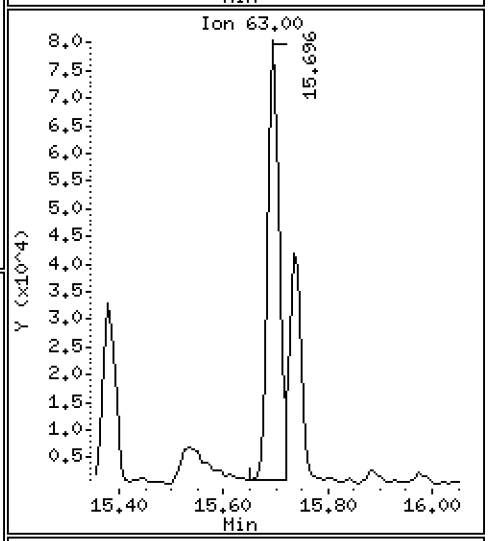


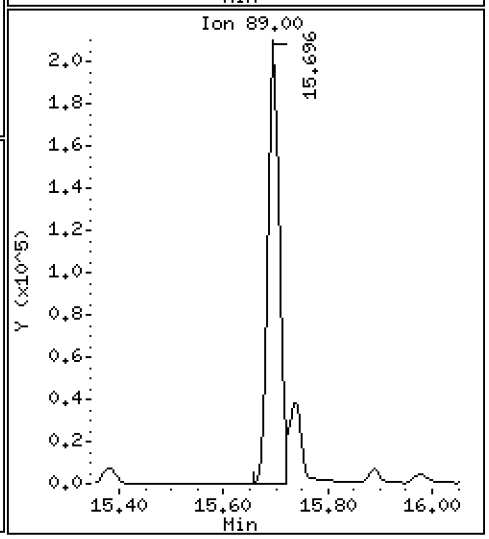












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

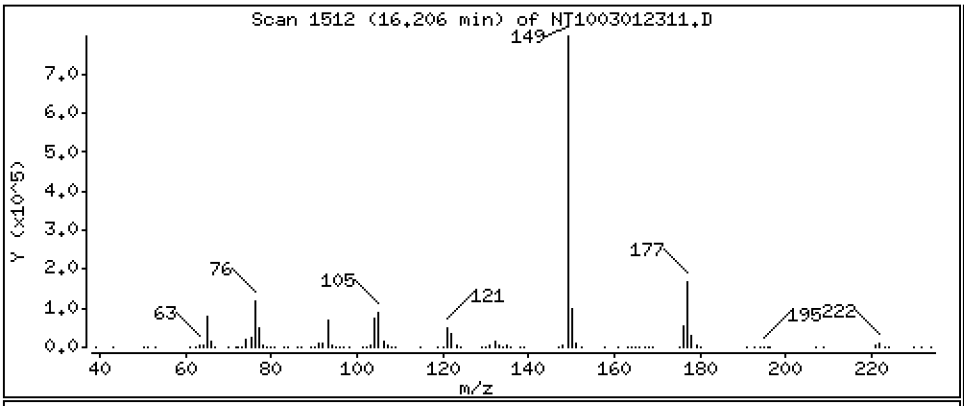
Operator: VTS

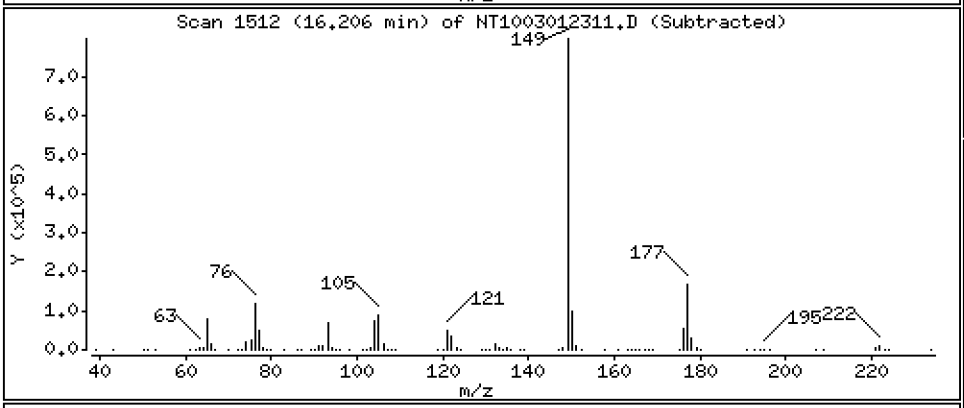
Column phase: ZB-5msi

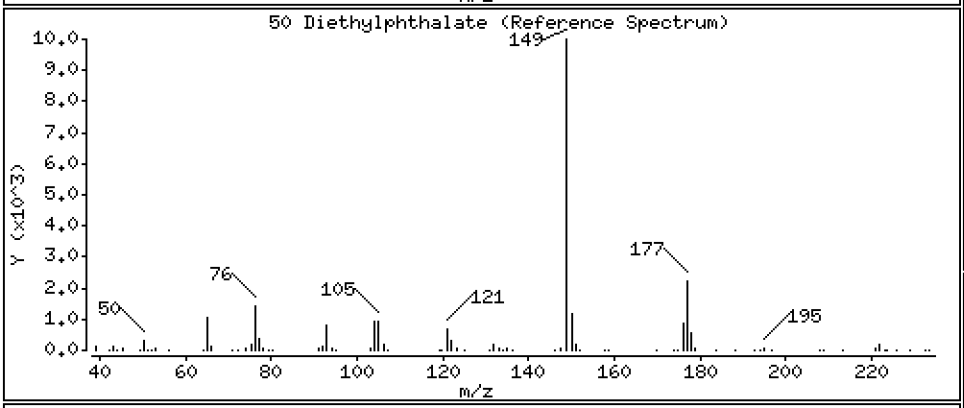
Column diameter: 0.25

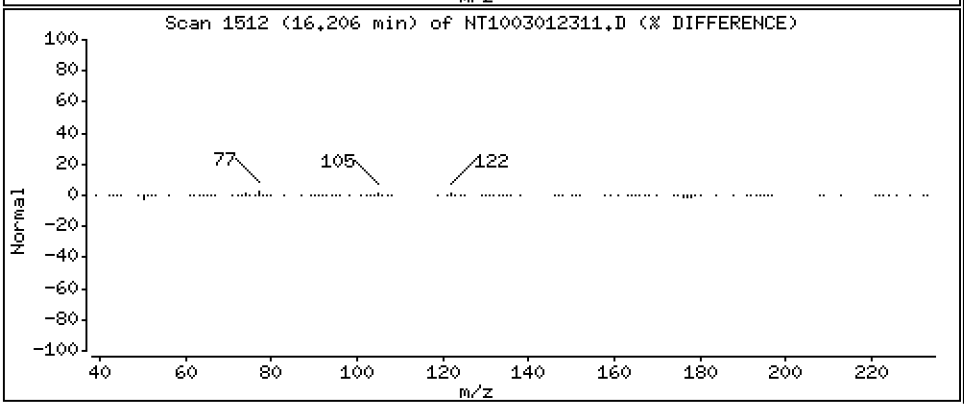
50 Diethylphthalate

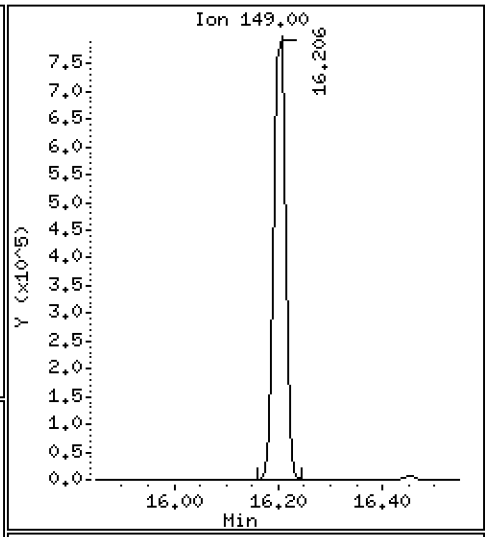
Concentration: 5.639 ug/mL

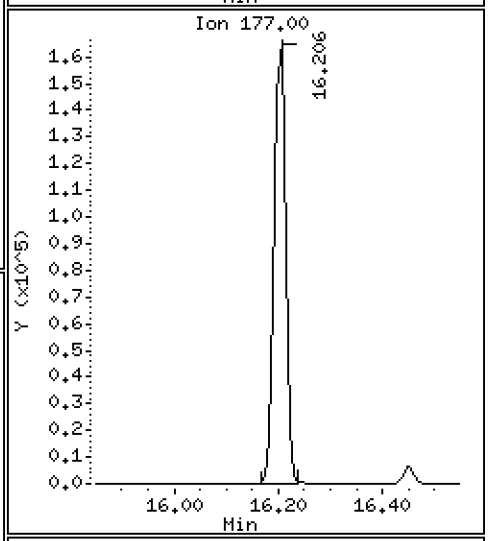


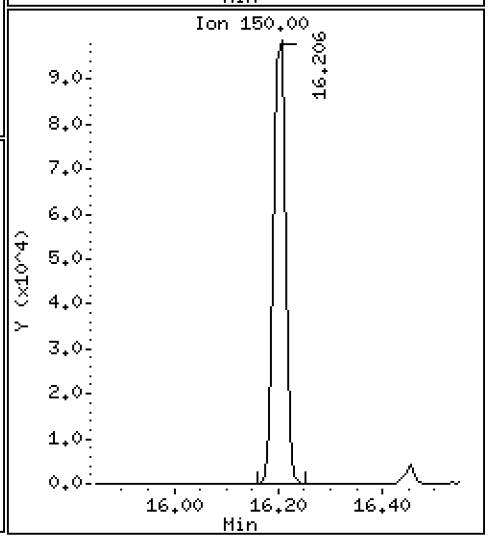












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

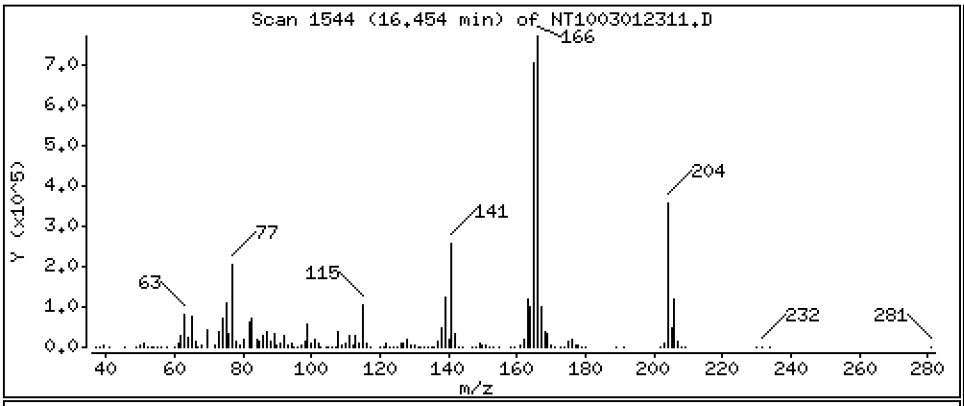
Operator: VTS

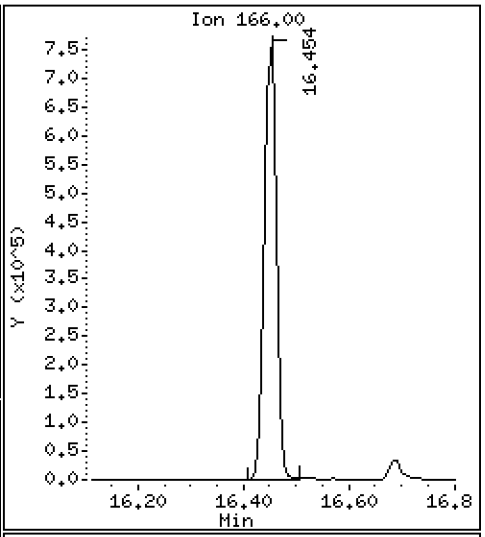
Column phase: ZB-5msi

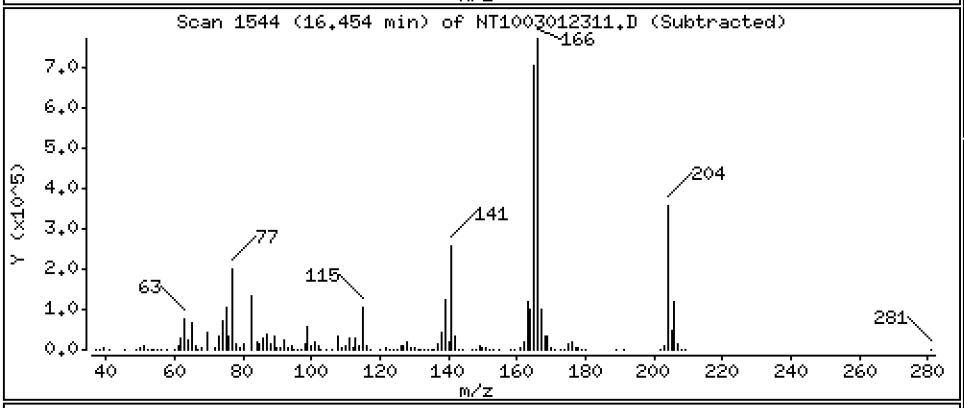
Column diameter: 0.25

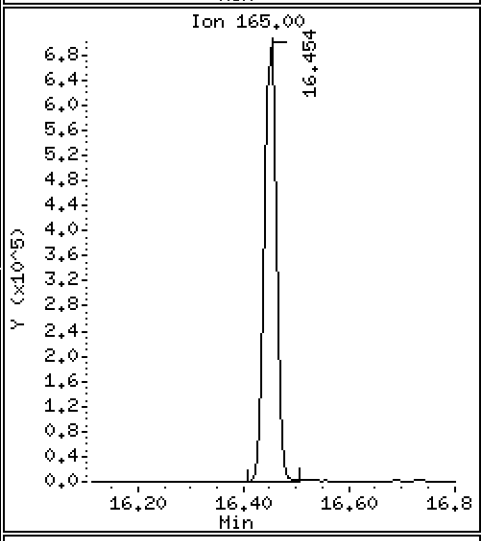
49 Fluorene

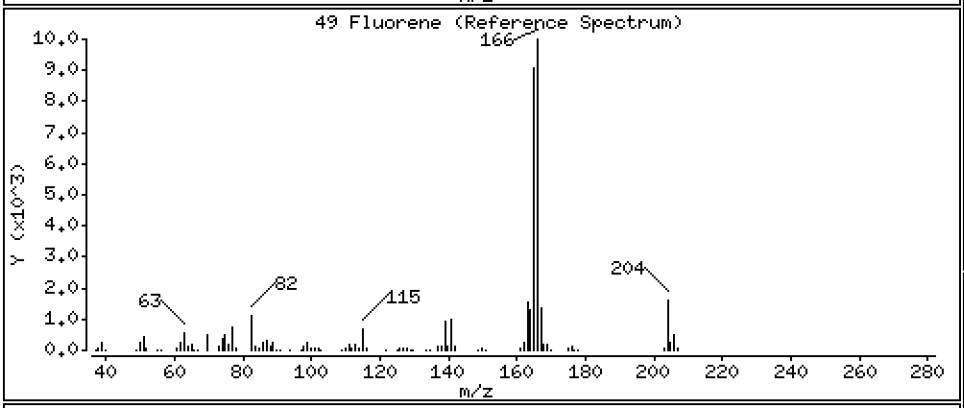
Concentration: 5.305 ug/mL

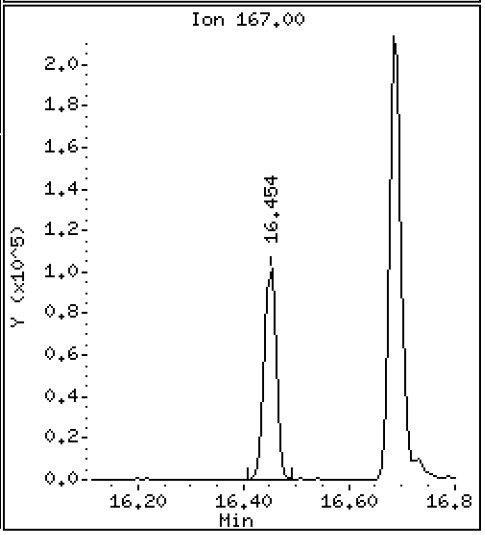


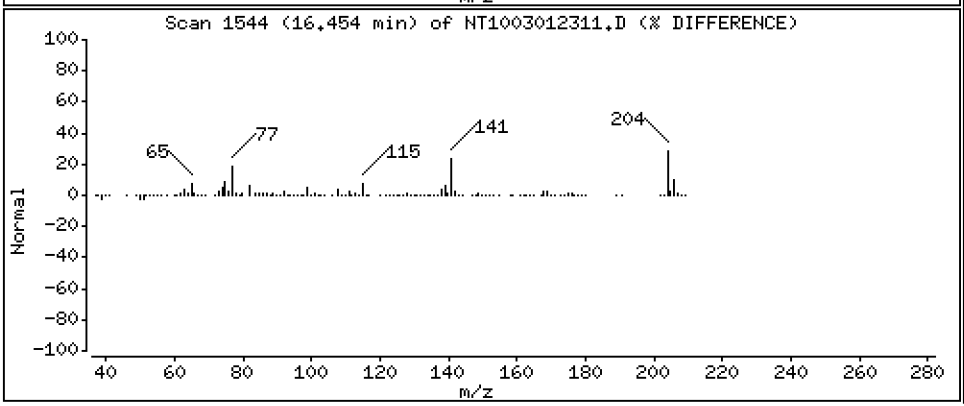












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

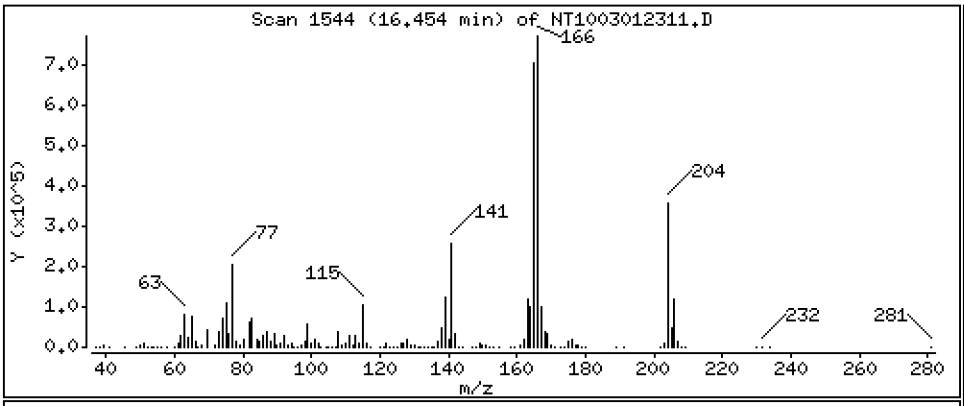
Operator: VTS

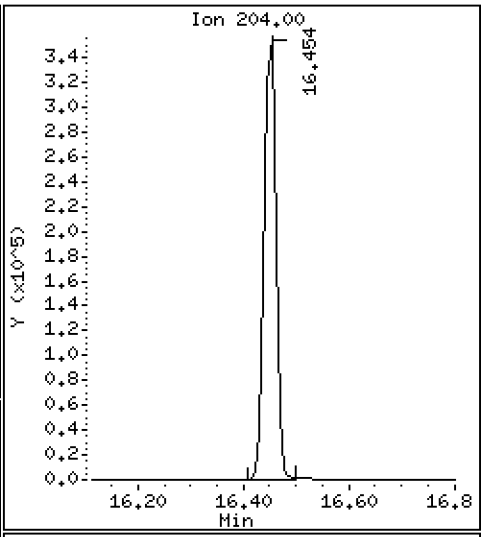
Column phase: ZB-5msi

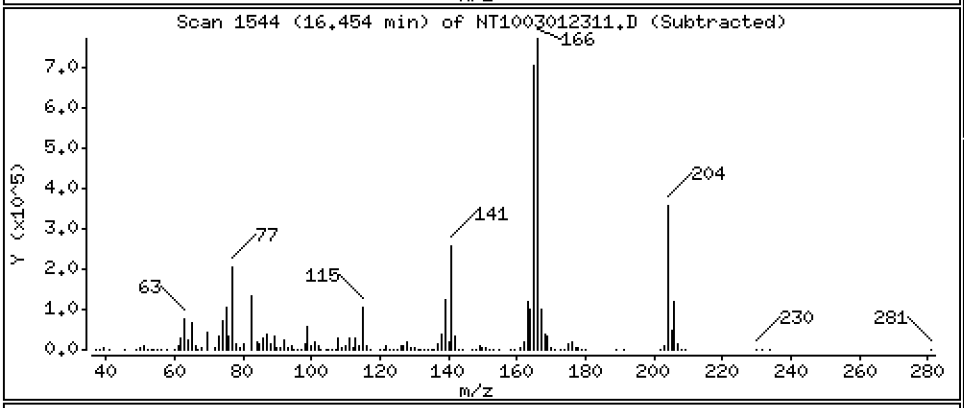
Column diameter: 0.25

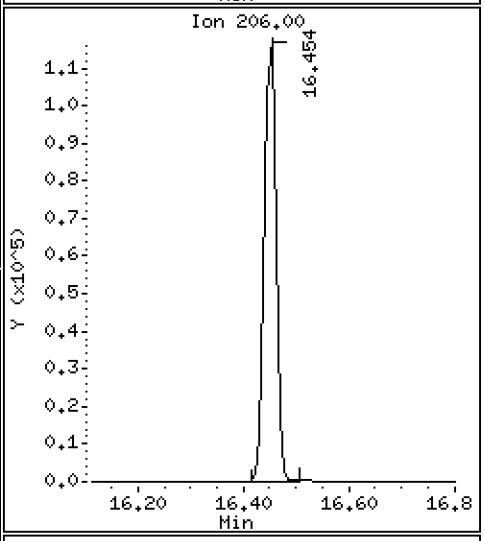
51 4-Chlorophenyl-phenylether

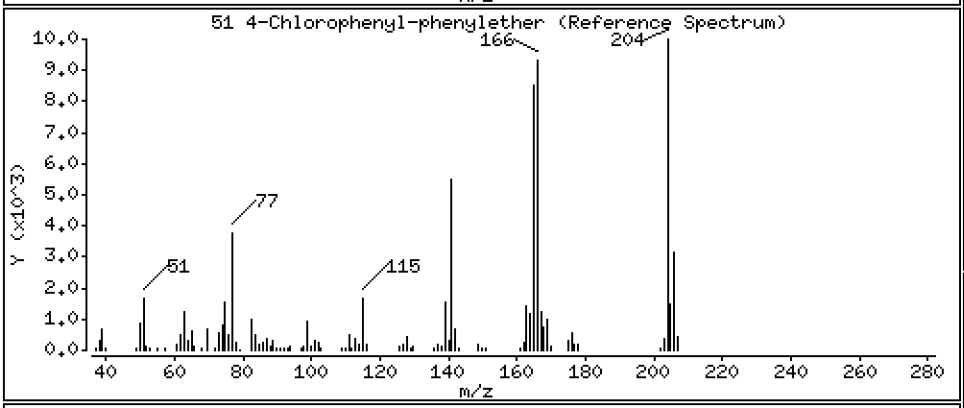
Concentration: 5.253 ug/mL

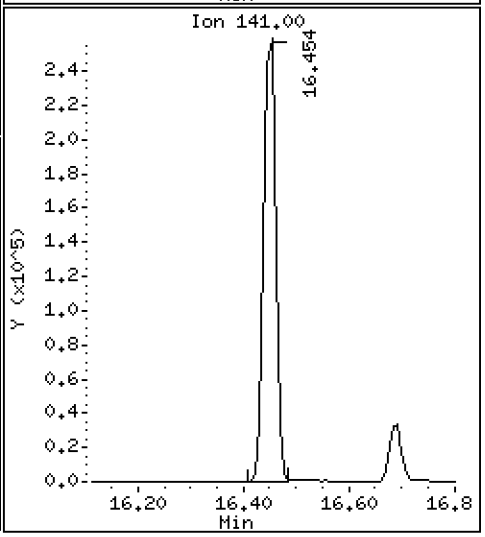


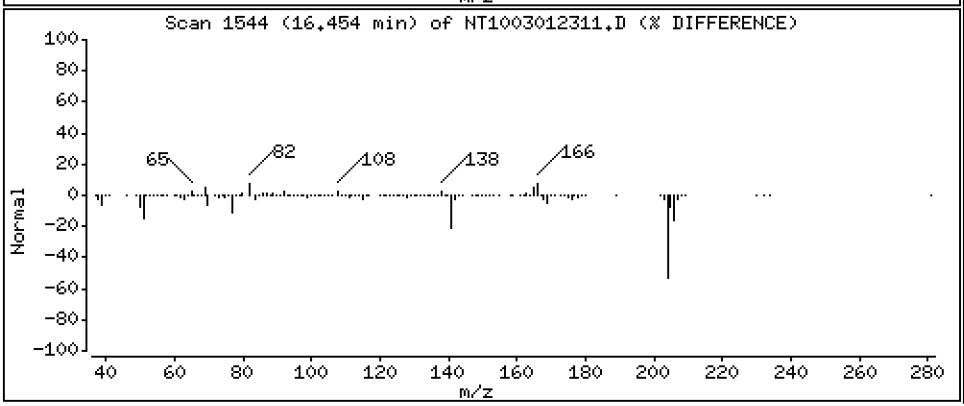












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

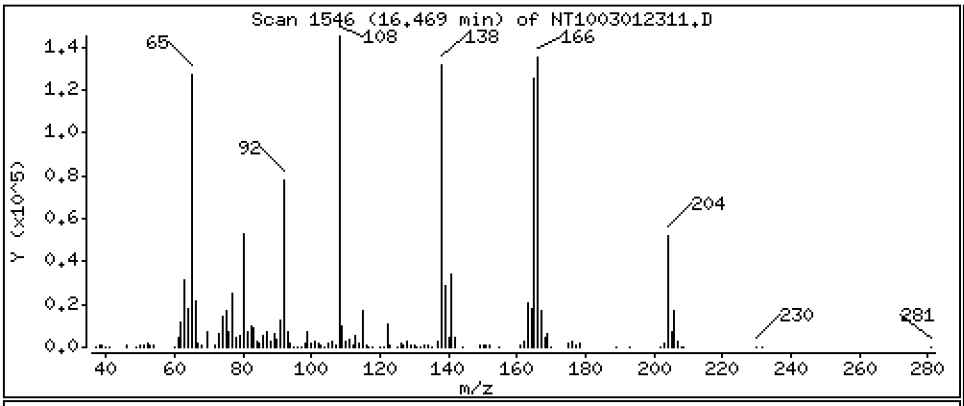
Operator: VTS

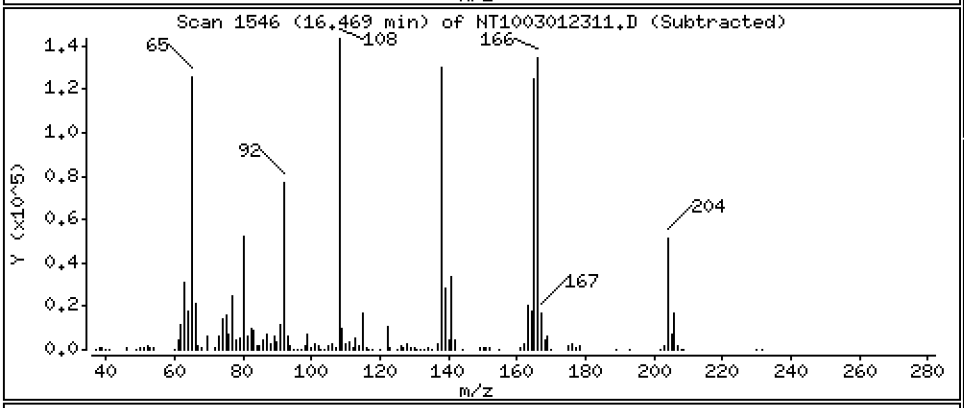
Column phase: ZB-5msi

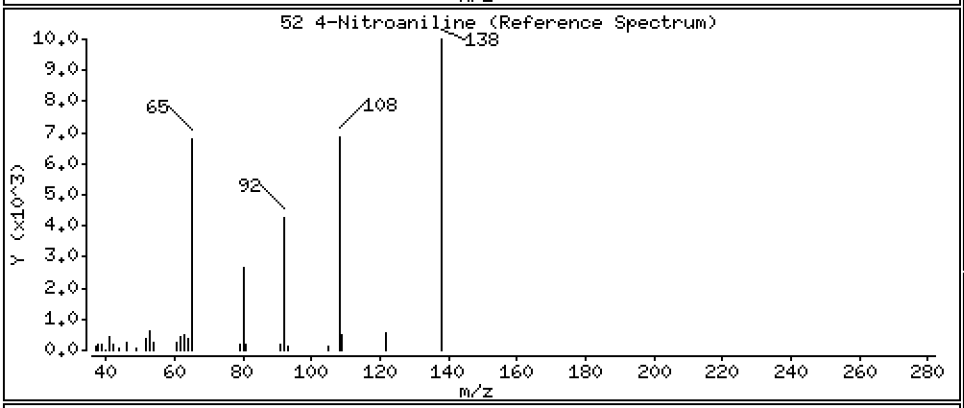
Column diameter: 0.25

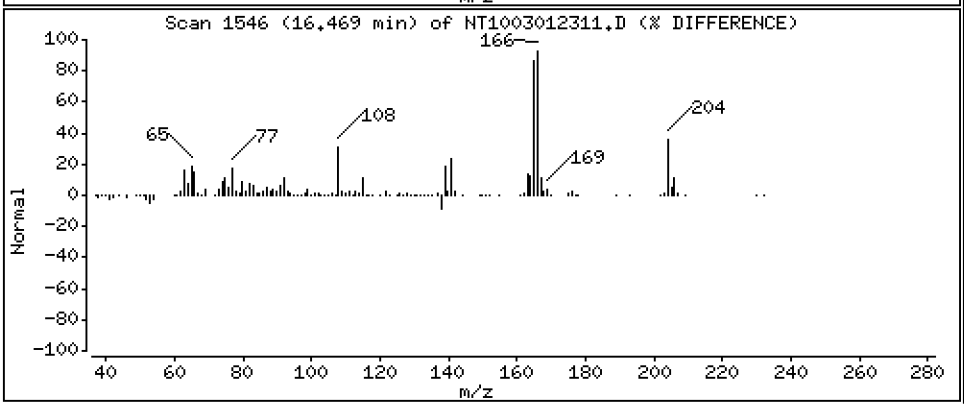
52 4-Nitroaniline

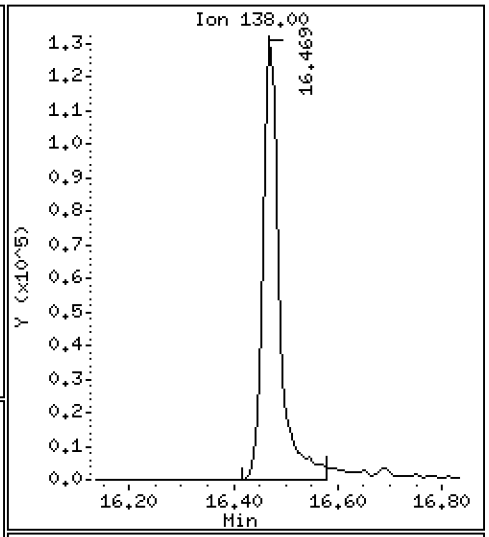
Concentration: 5.232 ug/mL

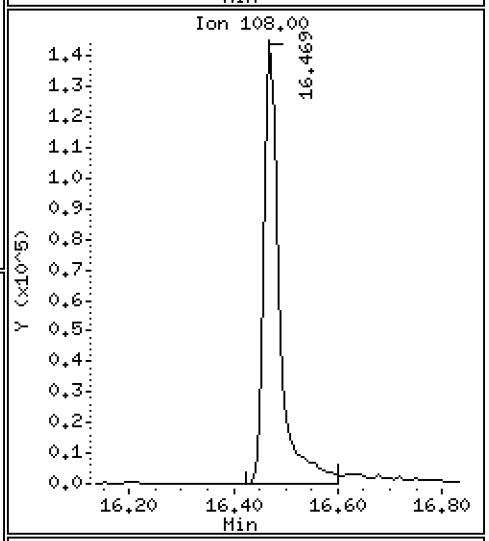


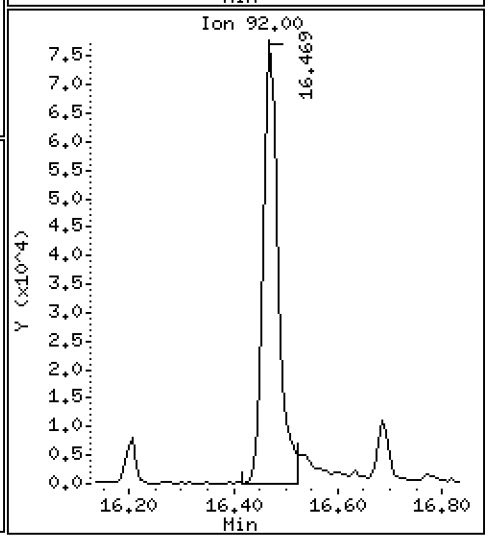












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

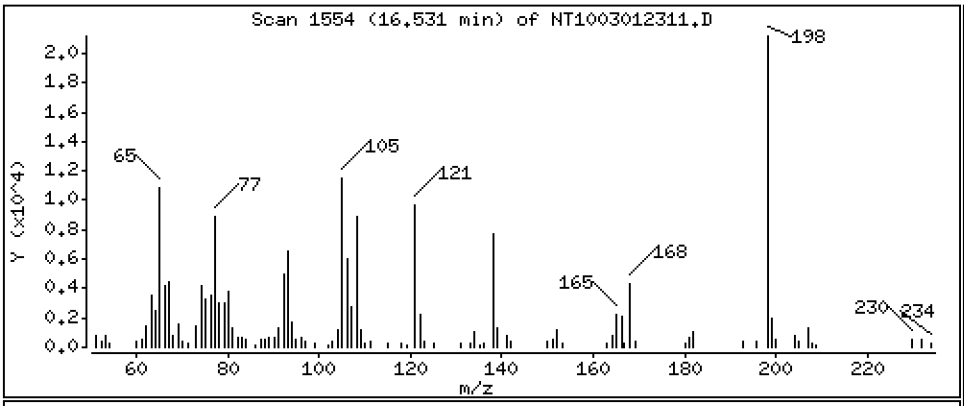
Operator: VTS

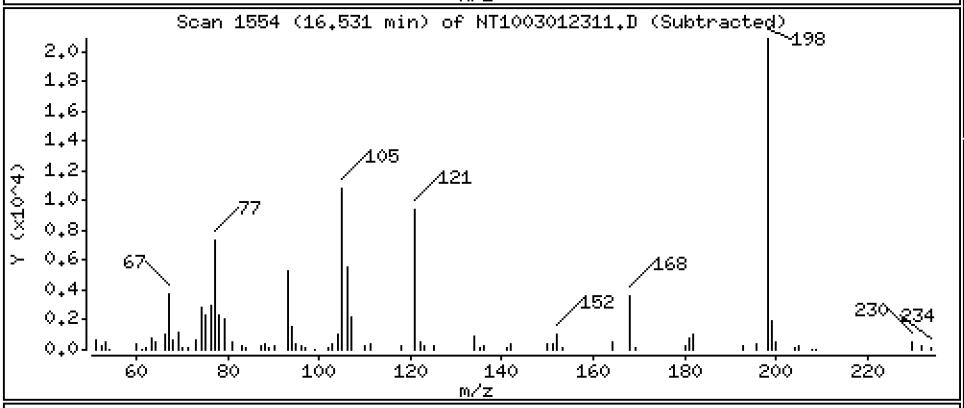
Column phase: ZB-5msi

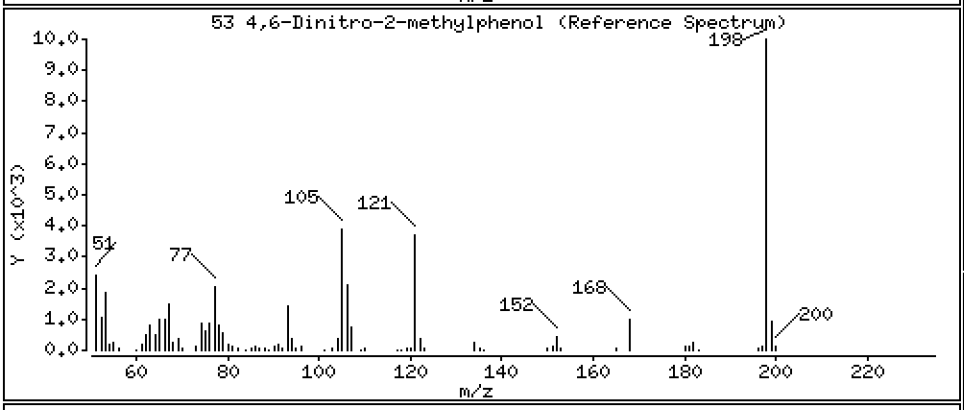
Column diameter: 0.25

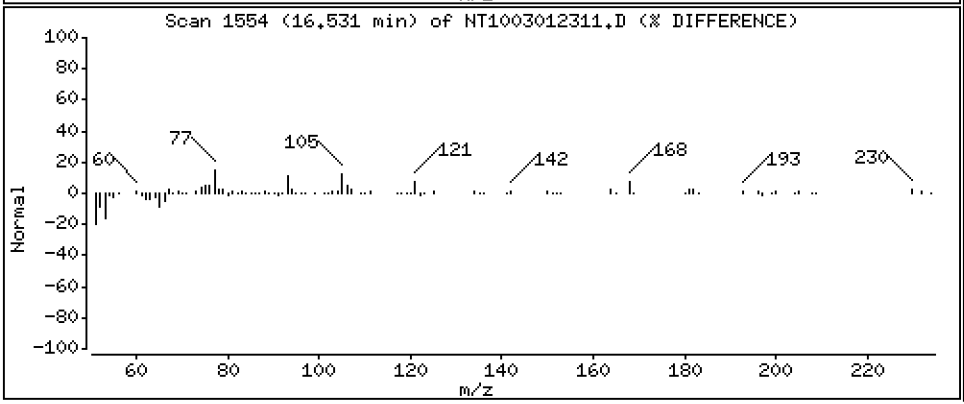
53 4,6-Dinitro-2-methylphenol

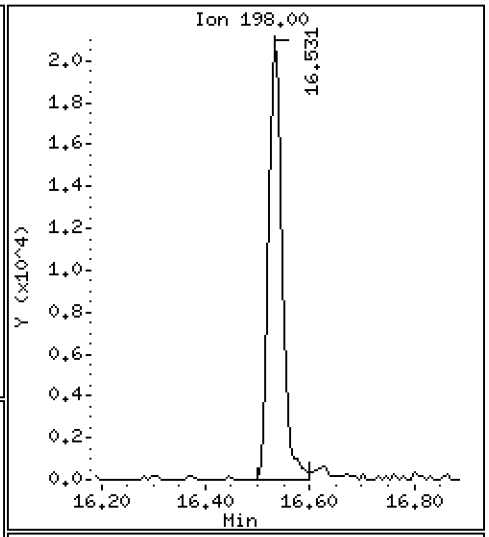
Concentration: 1.292 ug/mL

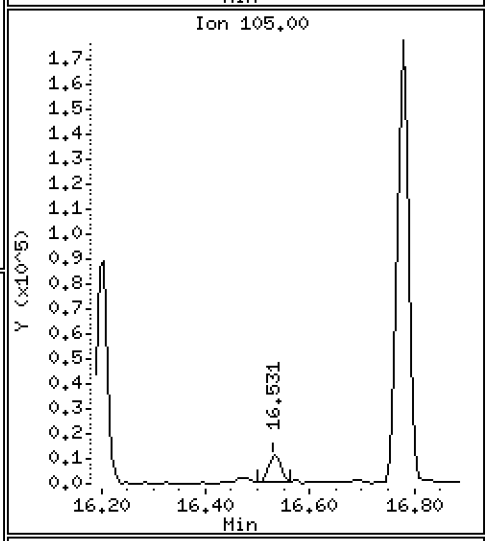


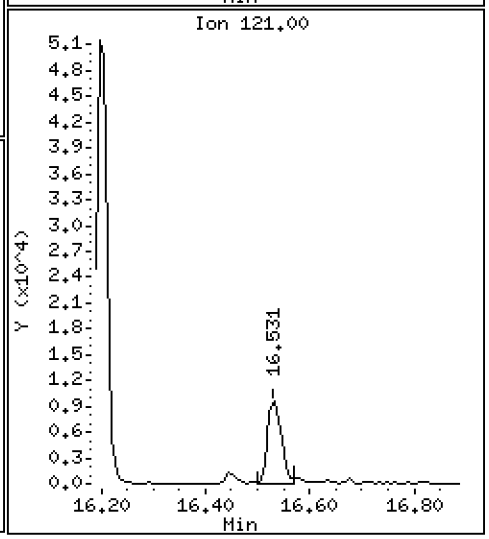












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

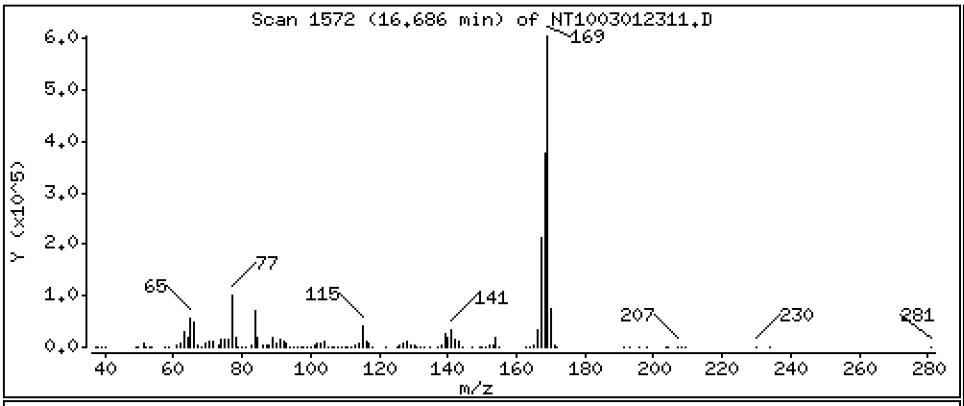
Operator: VTS

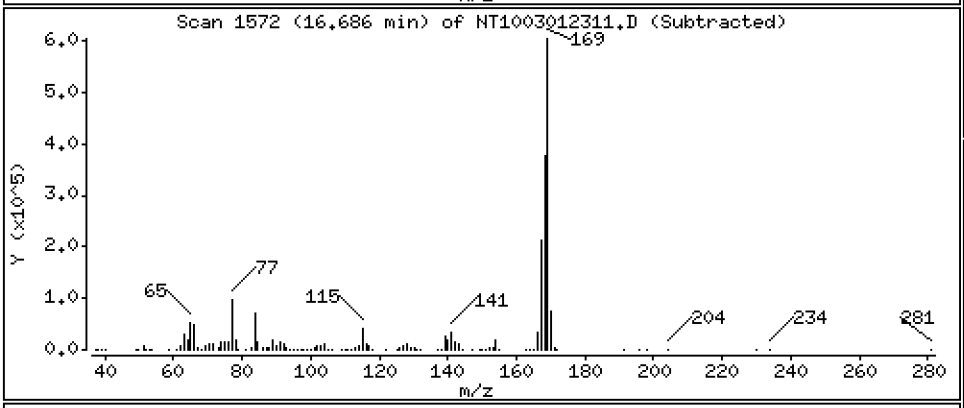
Column phase: ZB-5msi

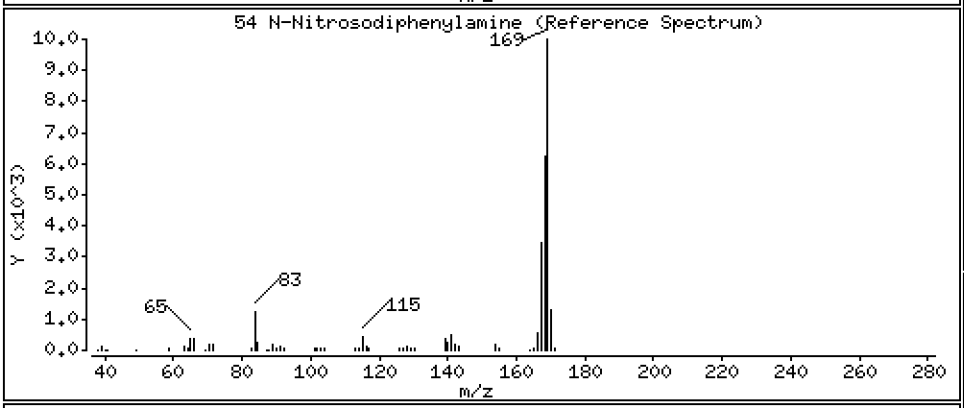
Column diameter: 0.25

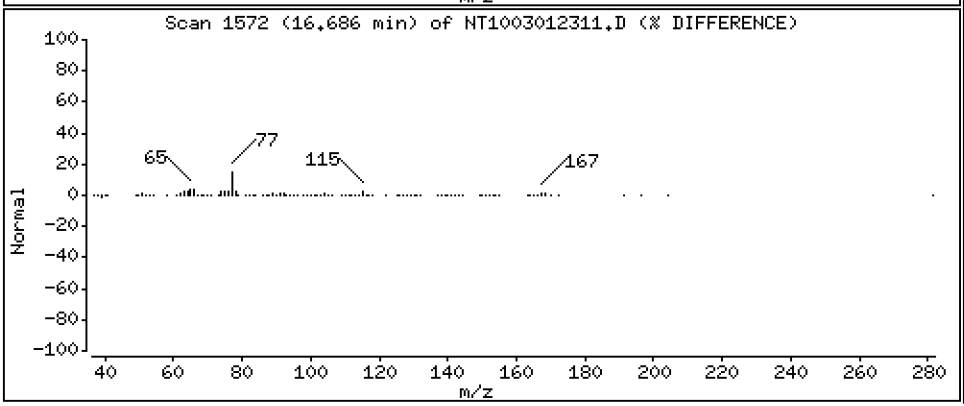
54 N-Nitrosodiphenylamine

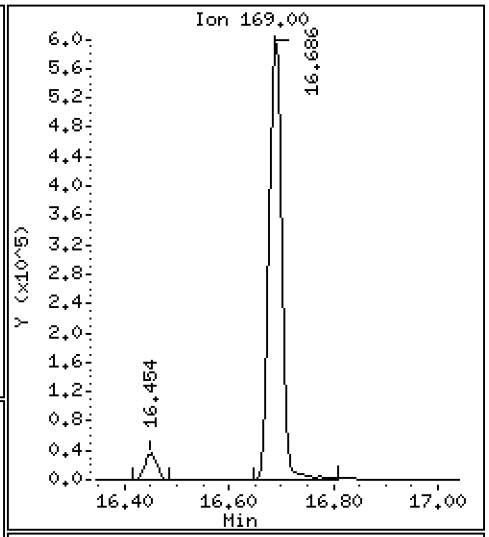
Concentration: 5.416 ug/mL

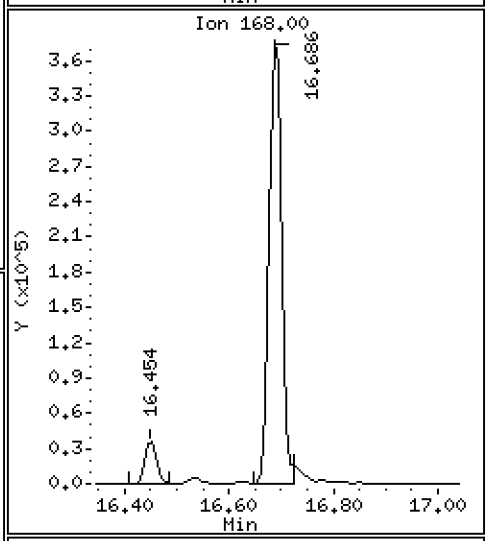


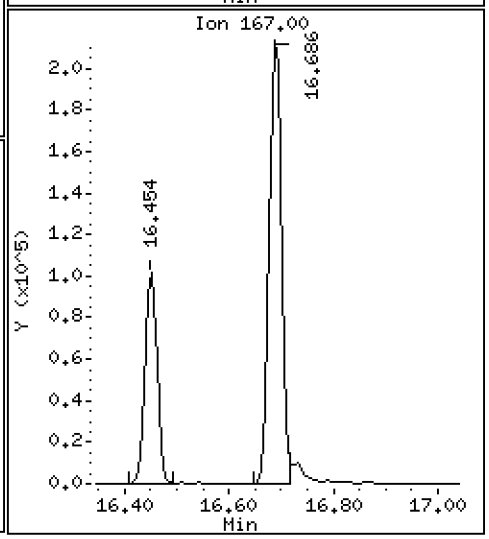












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

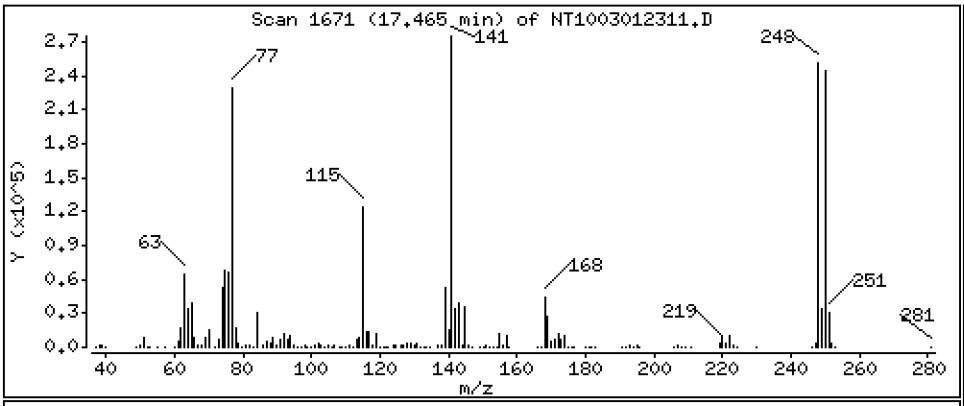
Operator: VTS

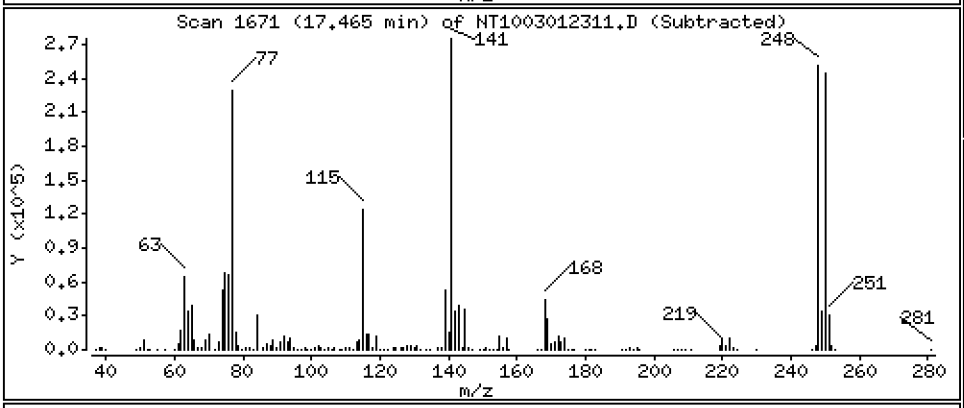
Column phase: ZB-5msi

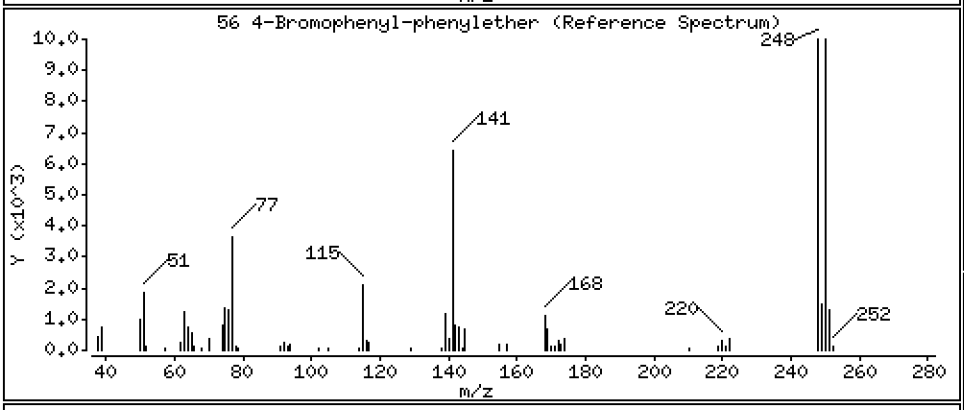
Column diameter: 0.25

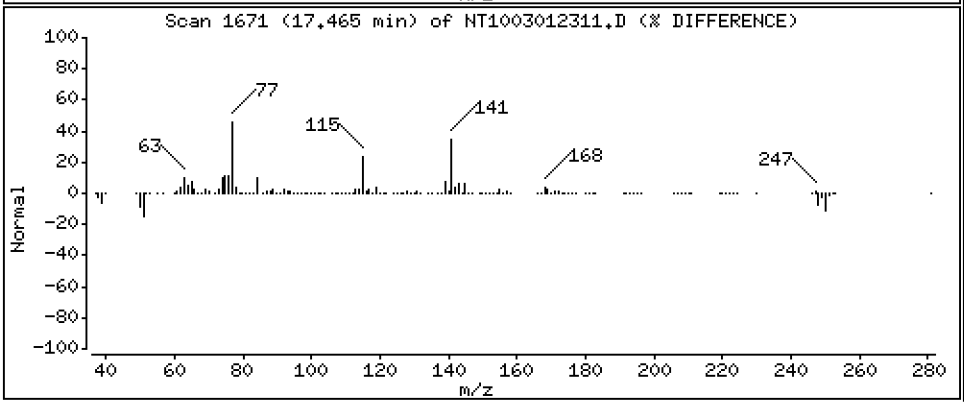
56 4-Bromophenyl-phenylether

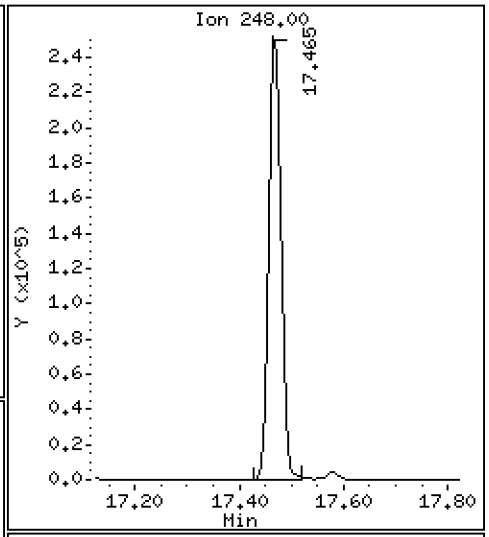
Concentration: 5.460 ug/mL

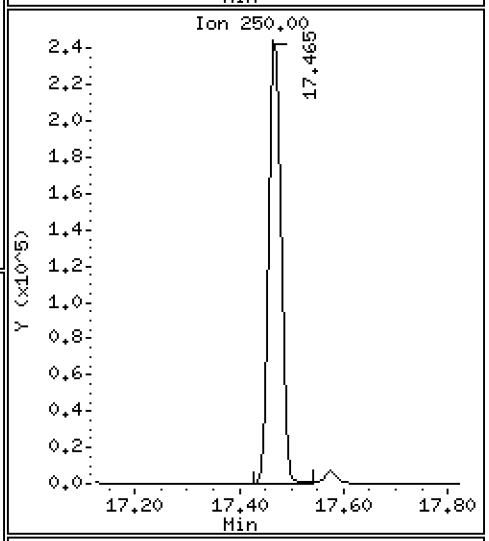


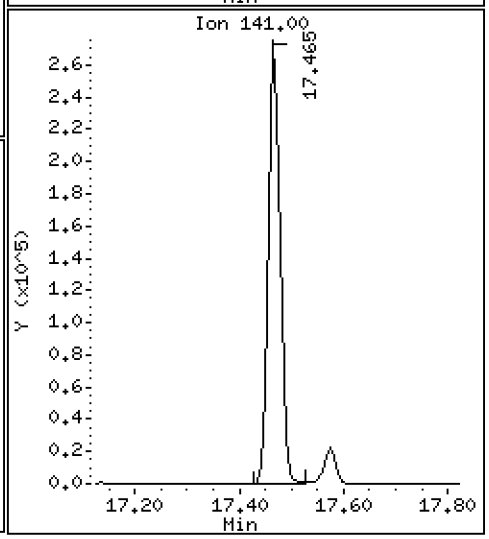












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

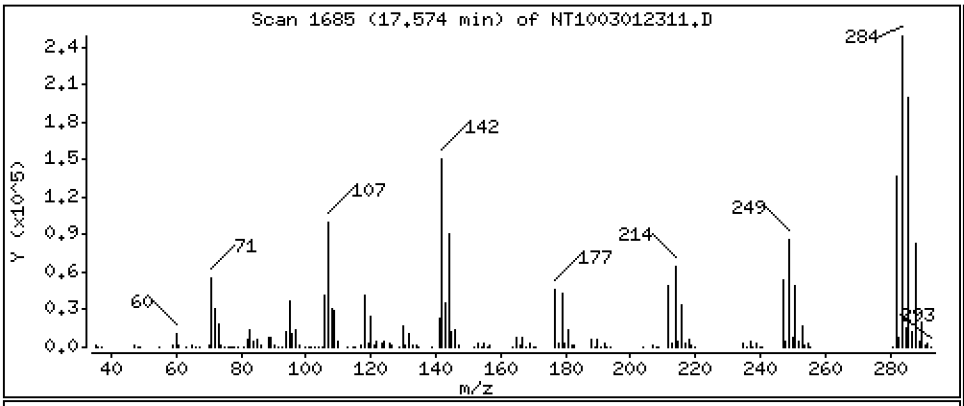
Operator: VTS

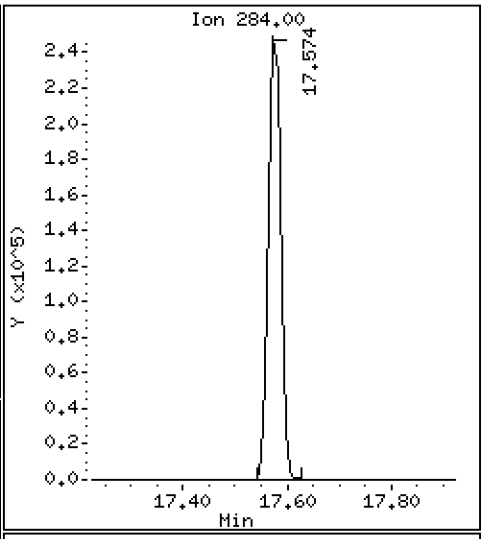
Column phase: ZB-5msi

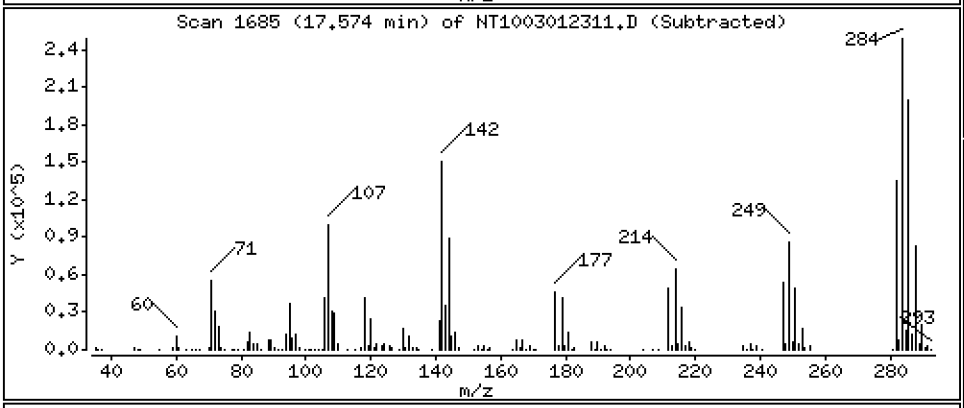
Column diameter: 0.25

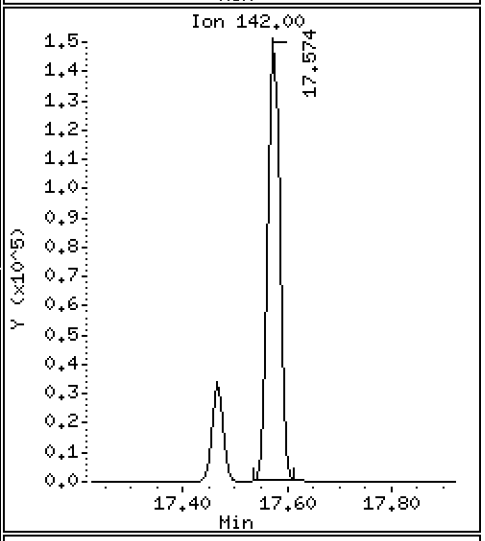
57 Hexachlorobenzene

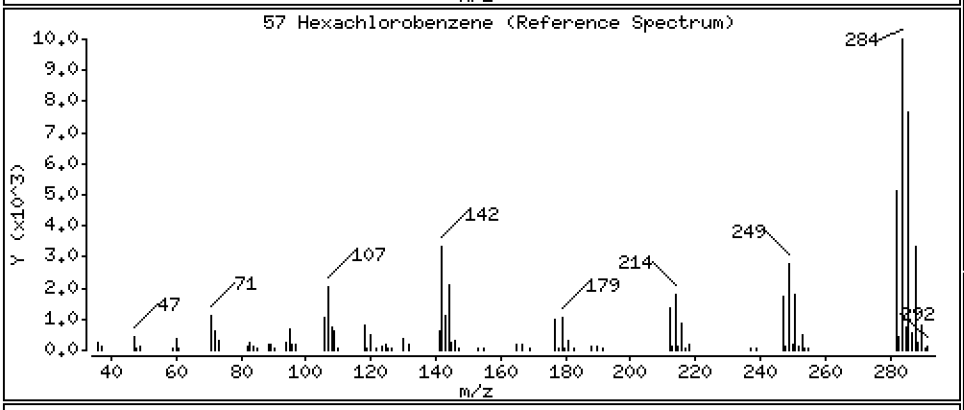
Concentration: 4.805 ug/mL

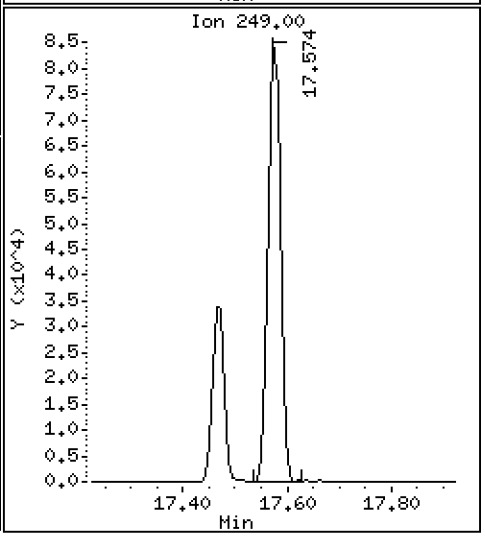


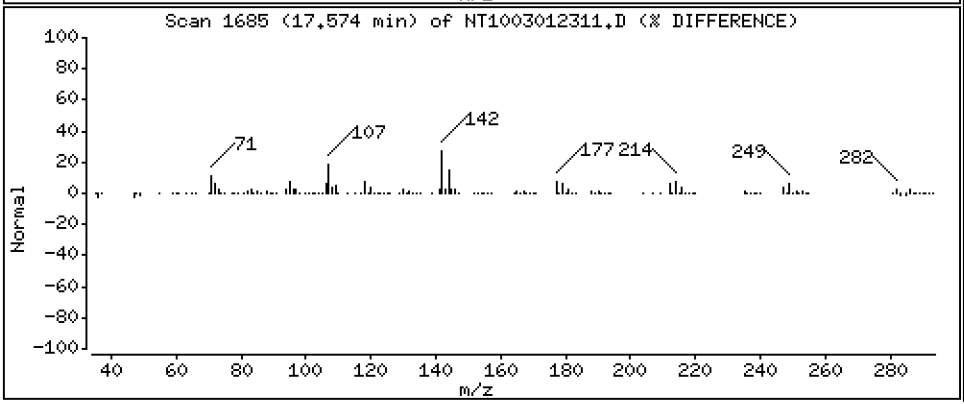












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

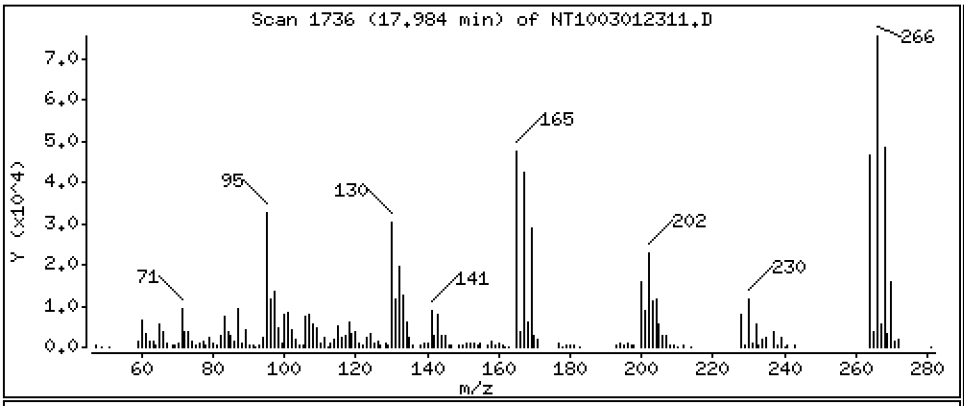
Operator: VTS

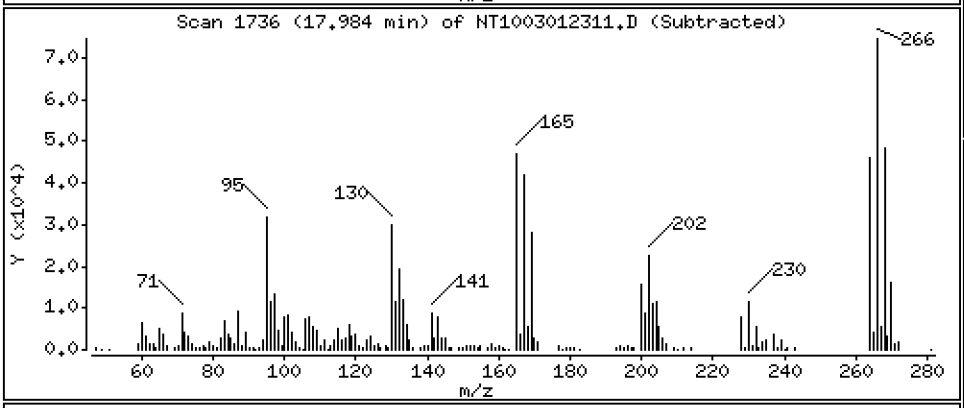
Column phase: ZB-5msi

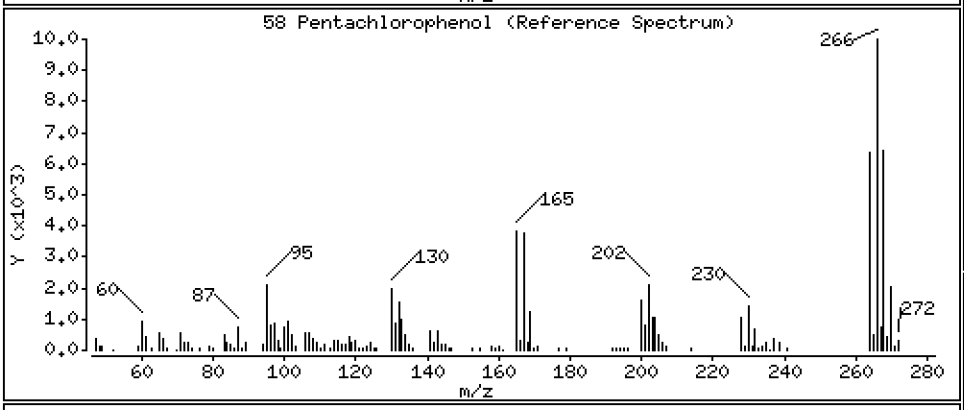
Column diameter: 0.25

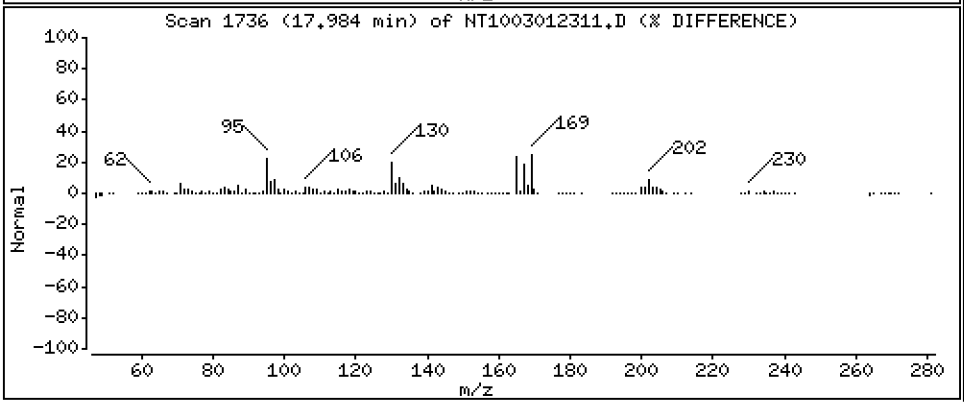
58 Pentachlorophenol

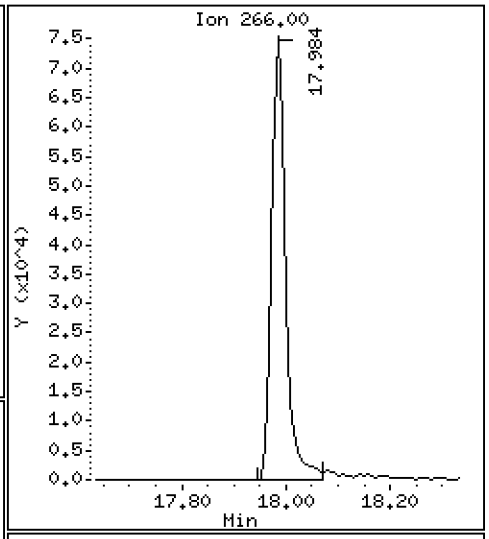
Concentration: 3.492 ug/mL

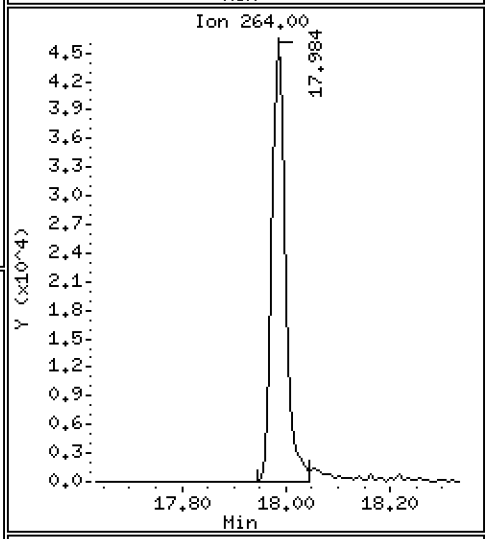


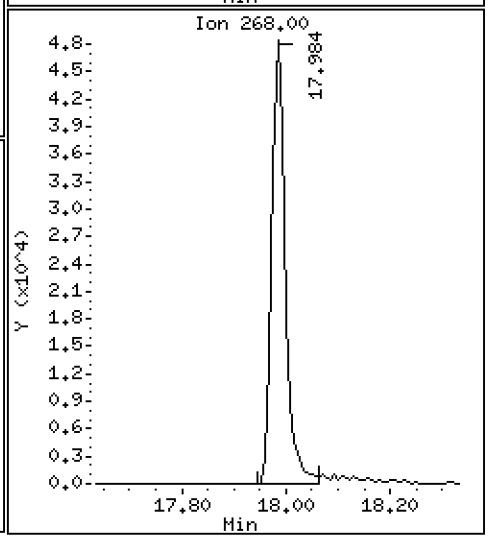












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

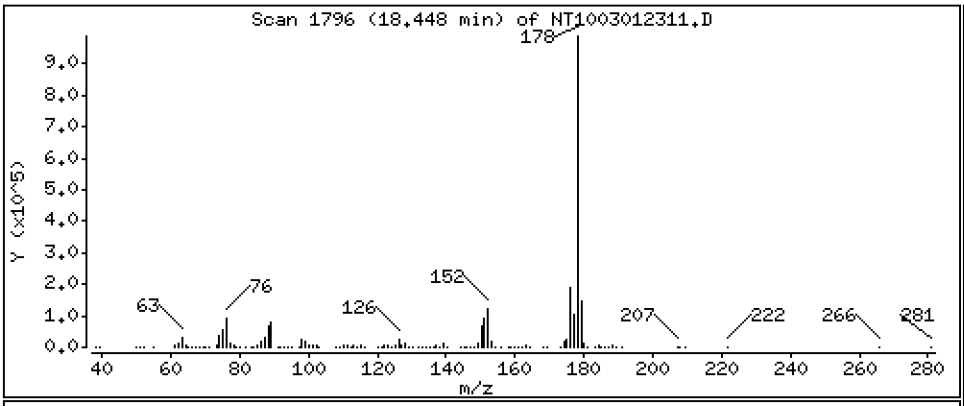
Operator: VTS

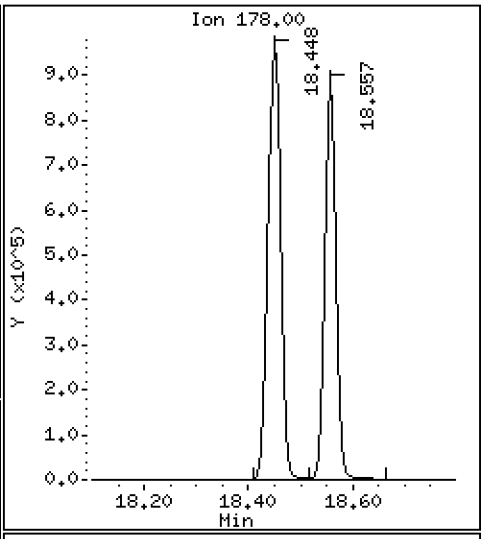
Column phase: ZB-5msi

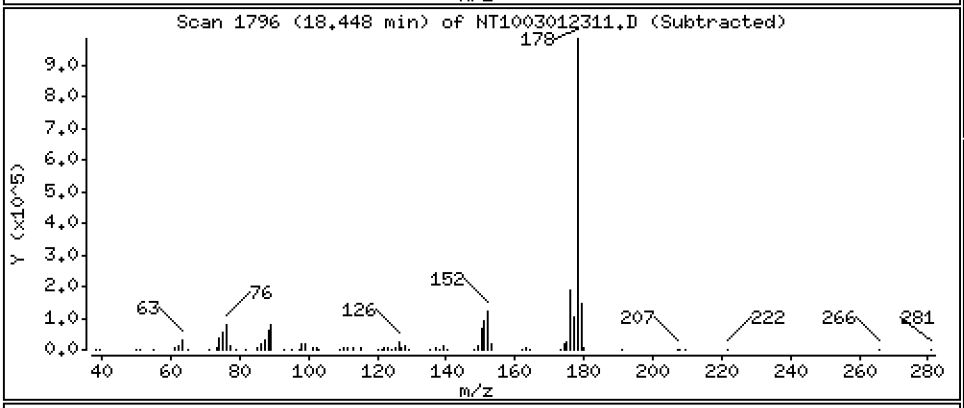
Column diameter: 0.25

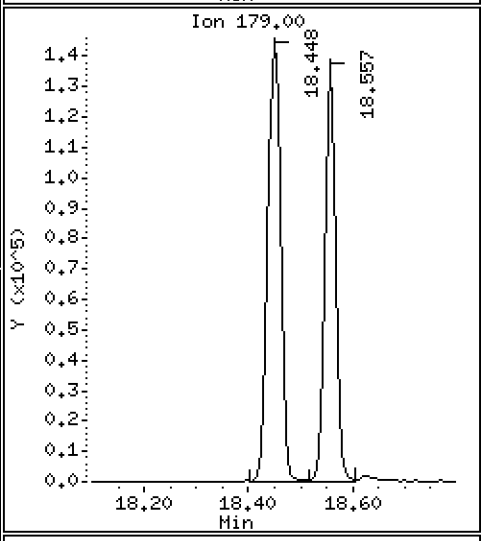
60 Phenanthrene

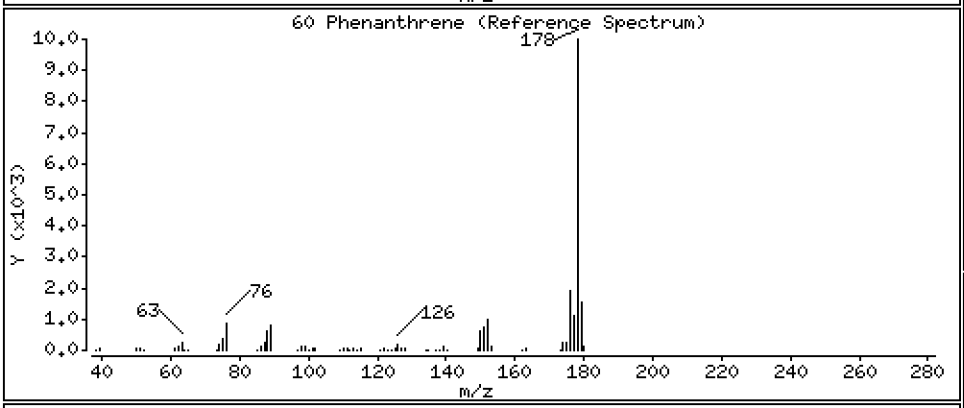
Concentration: 5.085 ug/mL

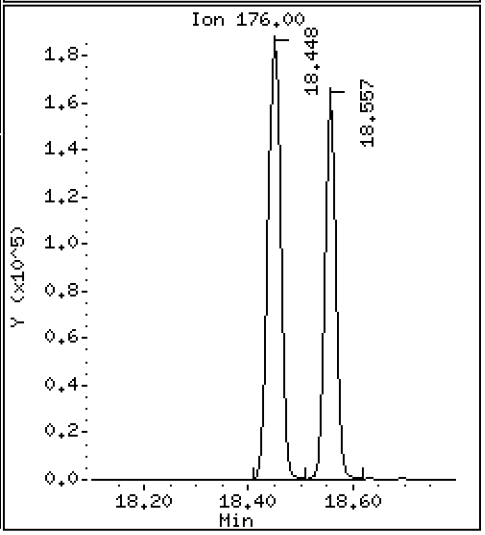


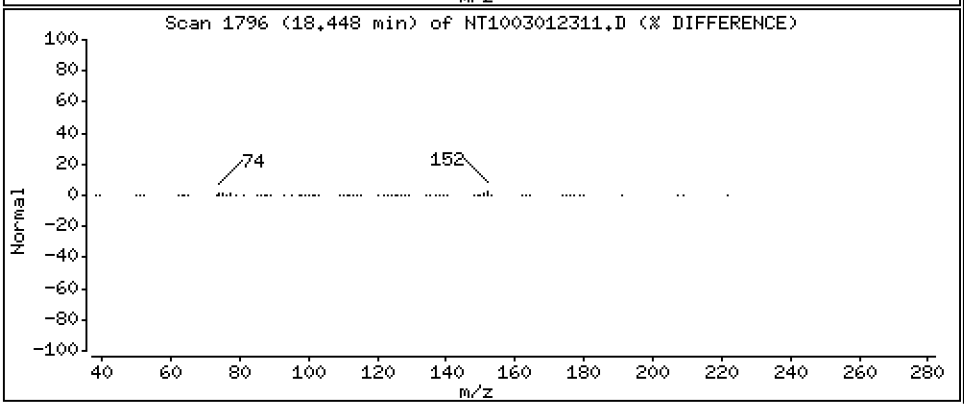












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

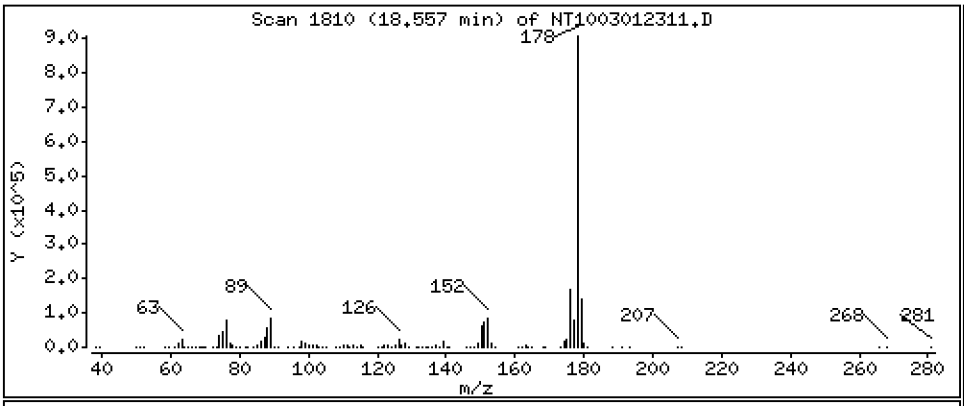
Operator: VTS

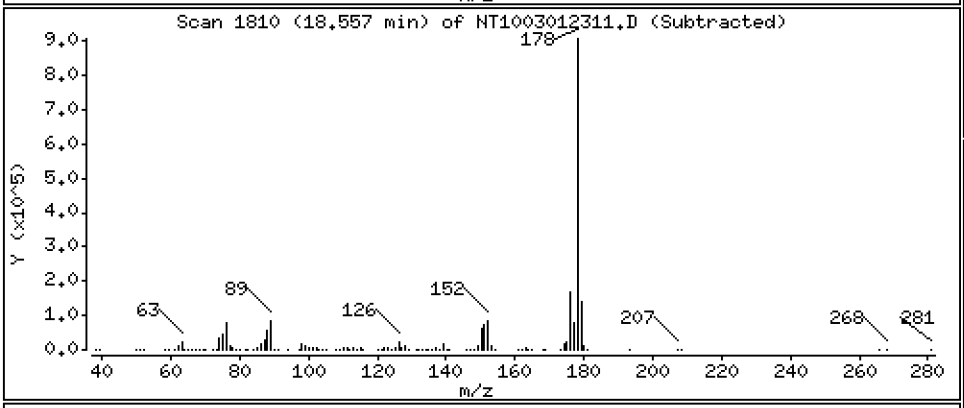
Column phase: ZB-5msi

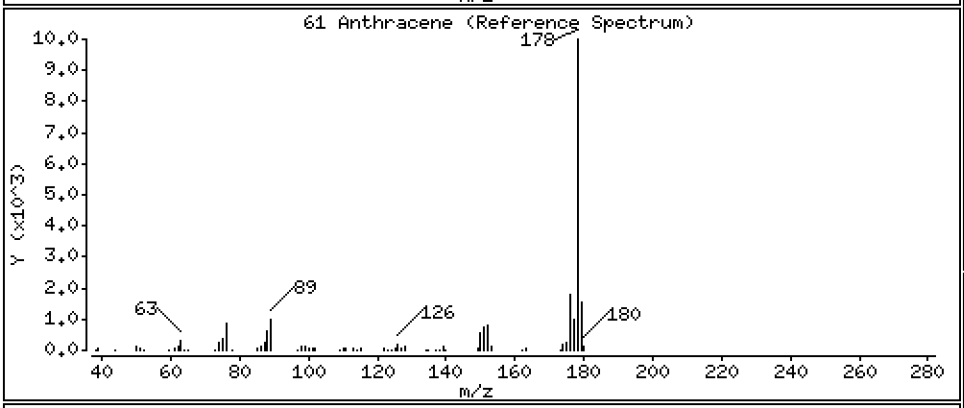
Column diameter: 0.25

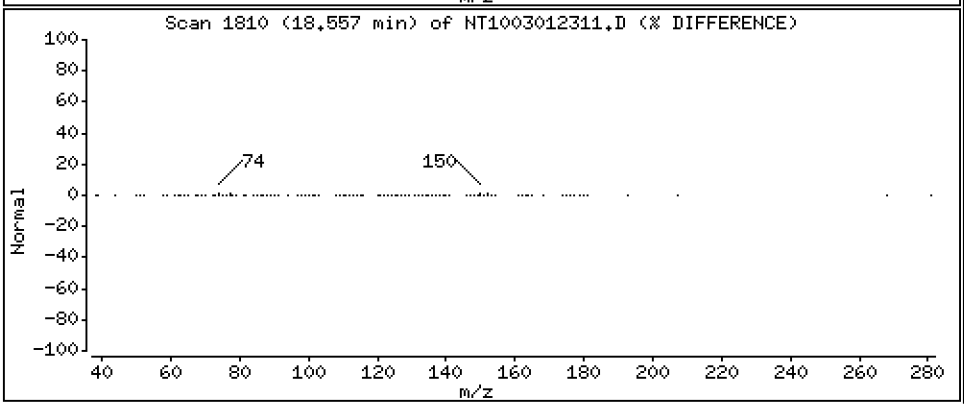
61 Anthracene

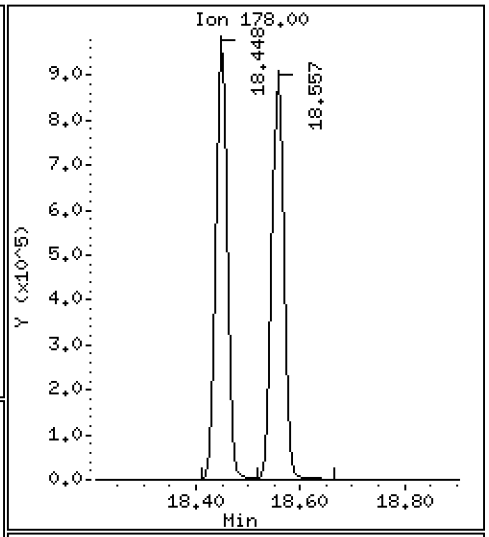
Concentration: 4.585 ug/mL

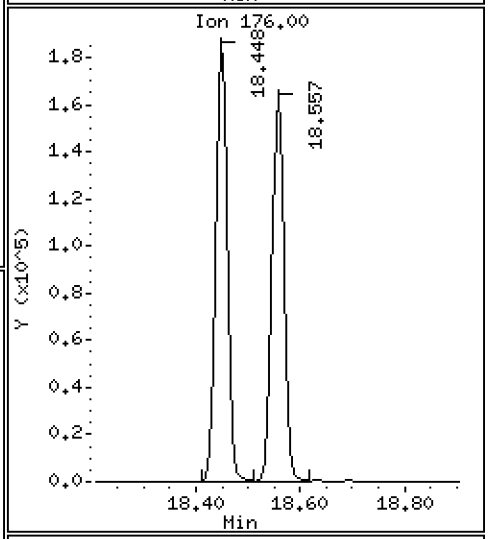


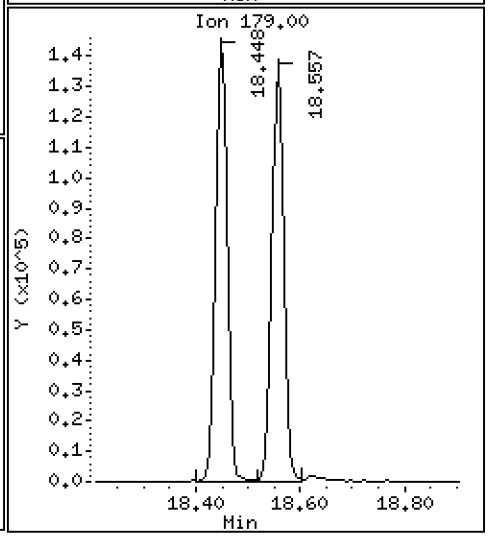












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

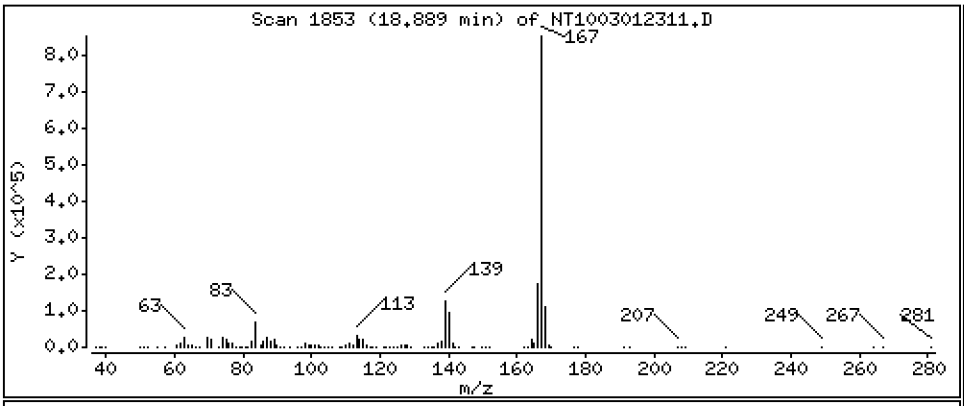
Operator: VTS

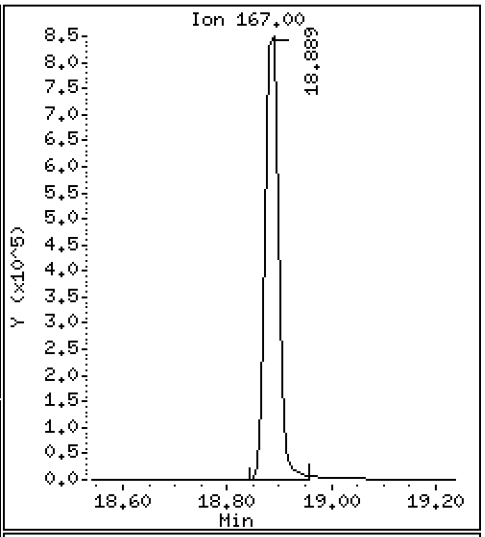
Column phase: ZB-5msi

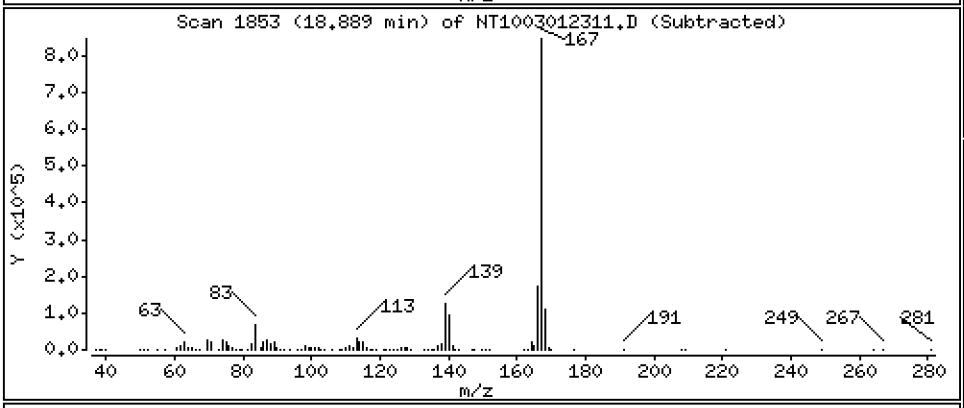
Column diameter: 0.25

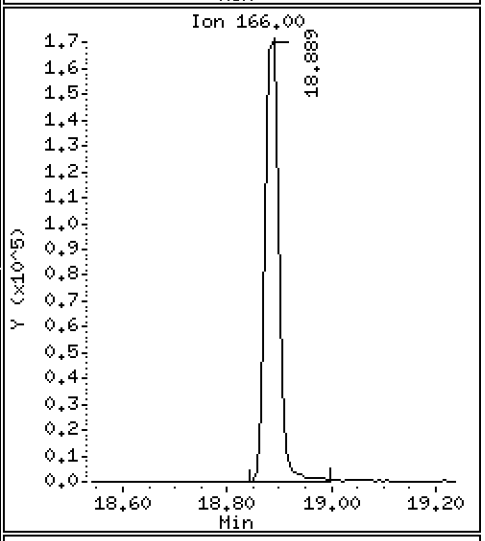
62 Carbazole

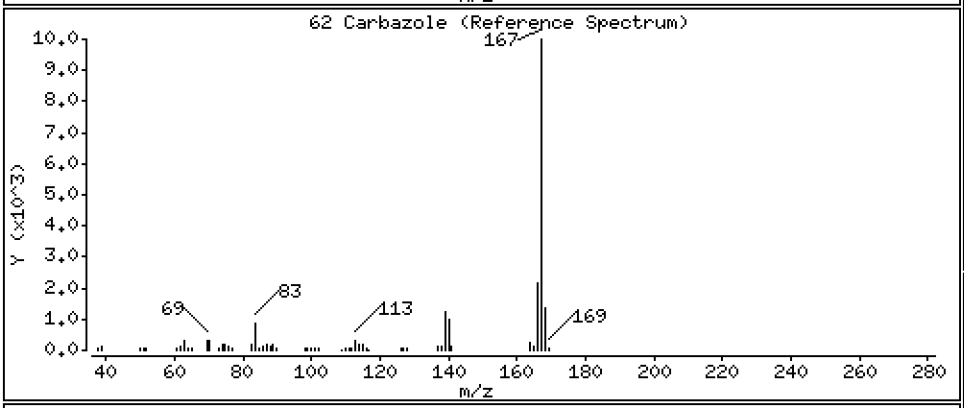
Concentration: 5.335 ug/mL

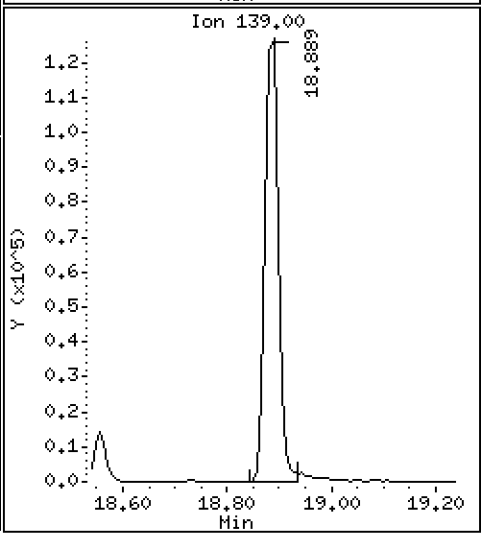


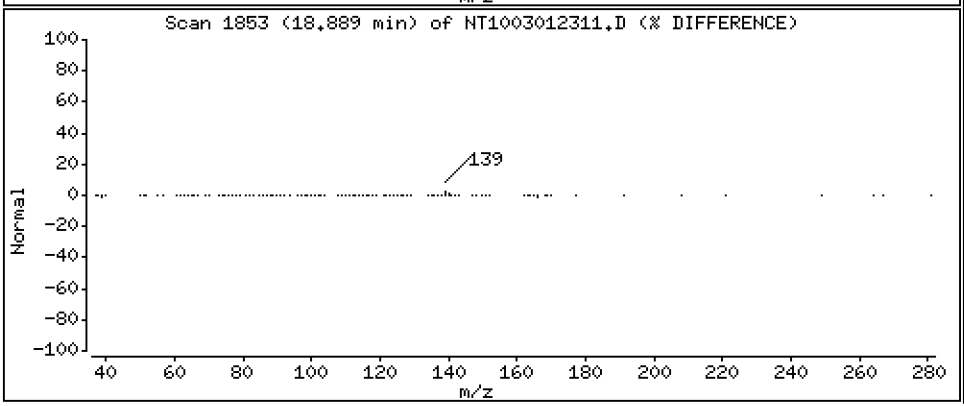












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

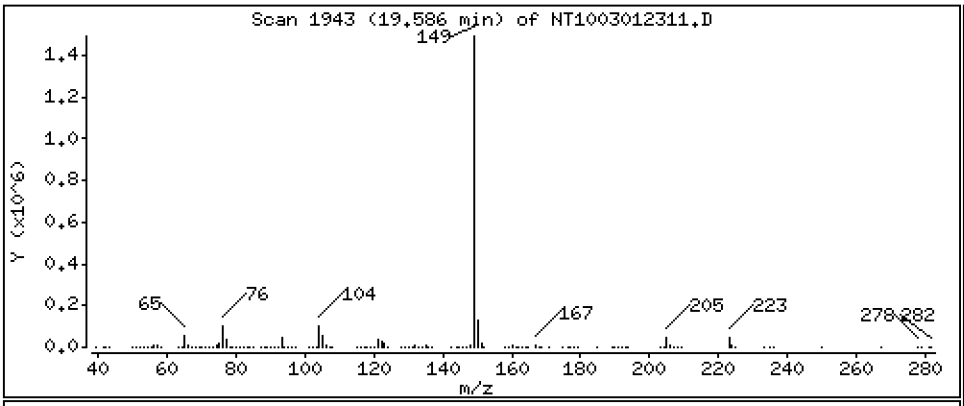
Operator: VTS

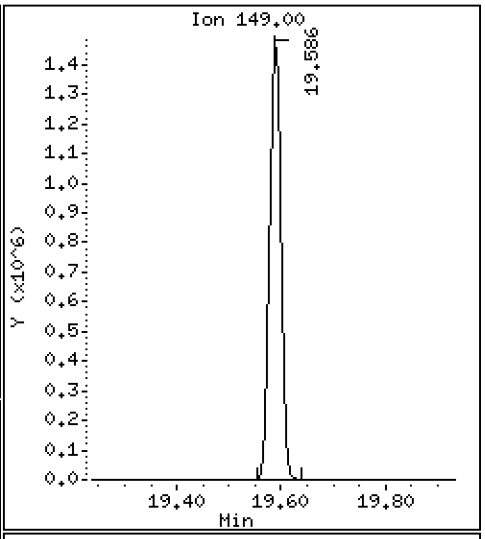
Column phase: ZB-5msi

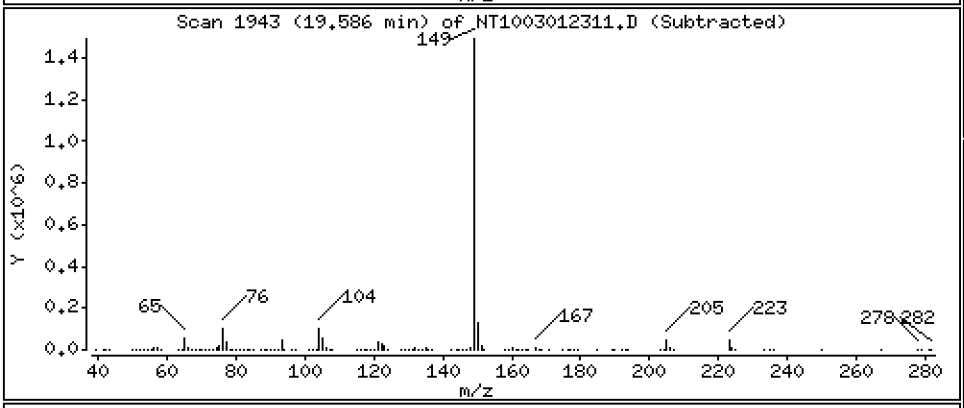
Column diameter: 0.25

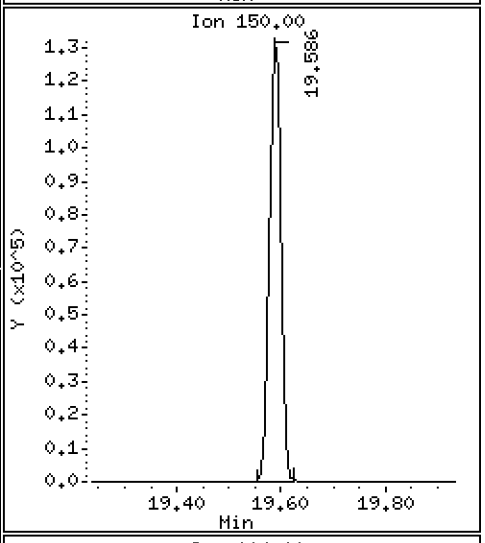
63 Di-n-butylphthalate

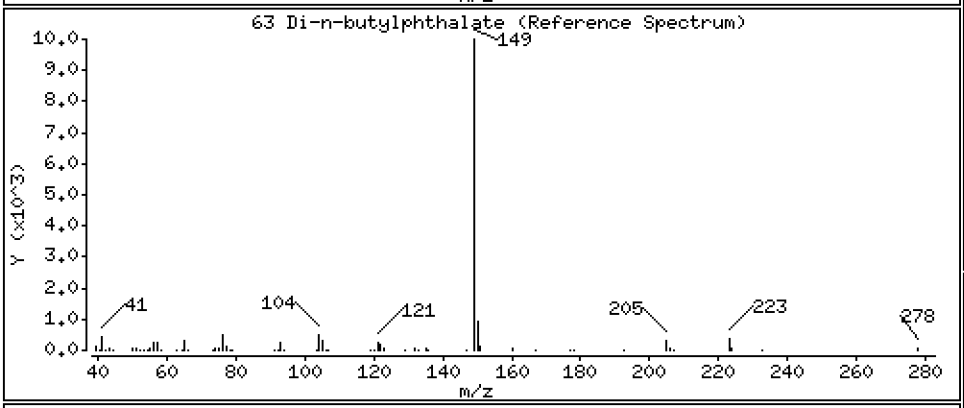
Concentration: 5.463 ug/mL

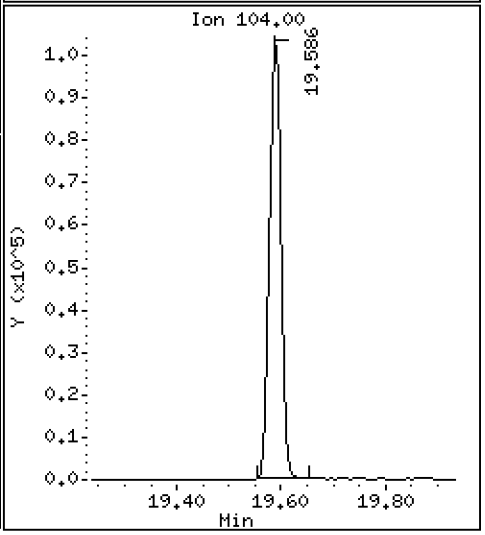


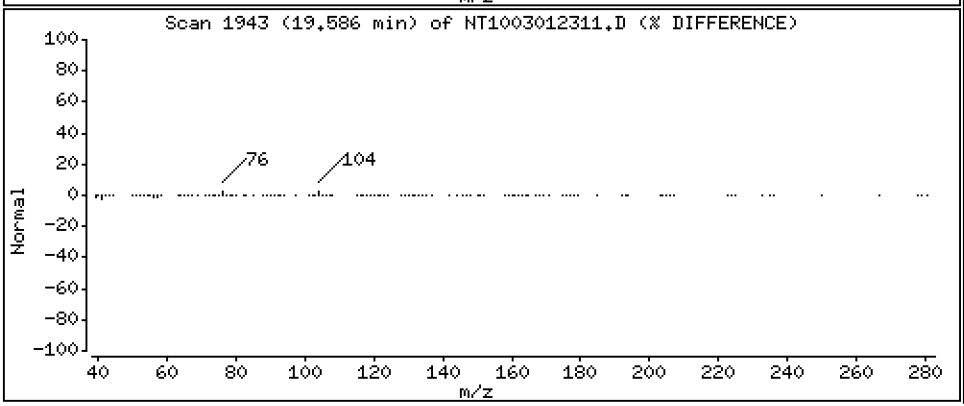












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

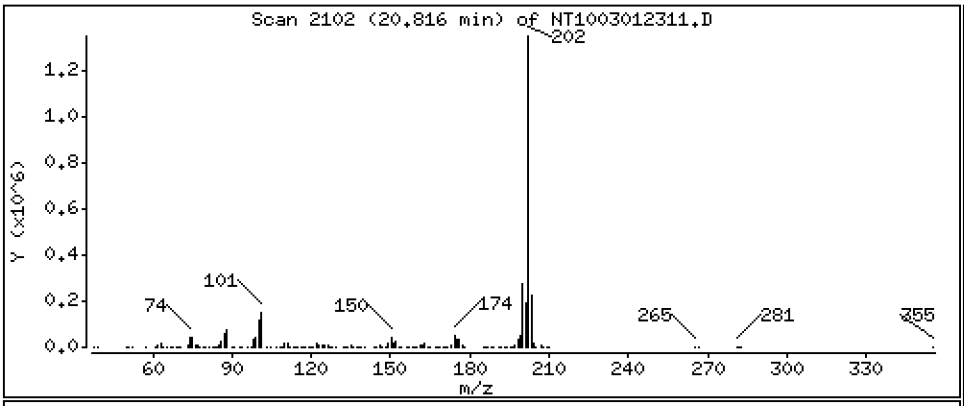
Operator: VTS

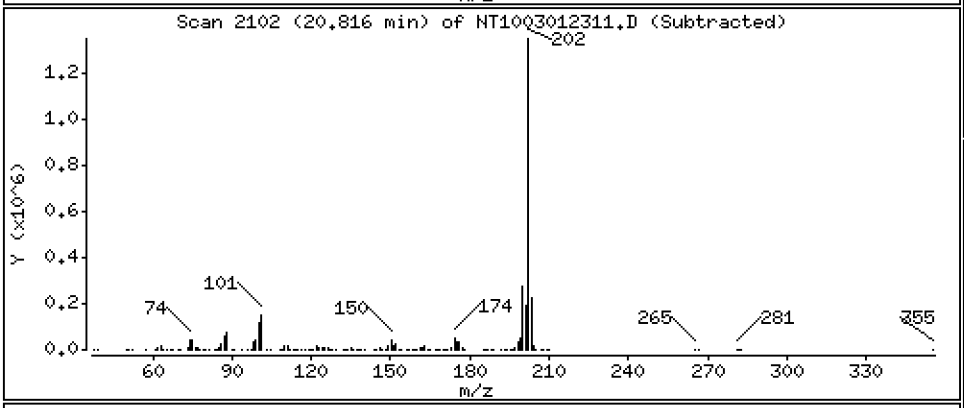
Column phase: ZB-5msi

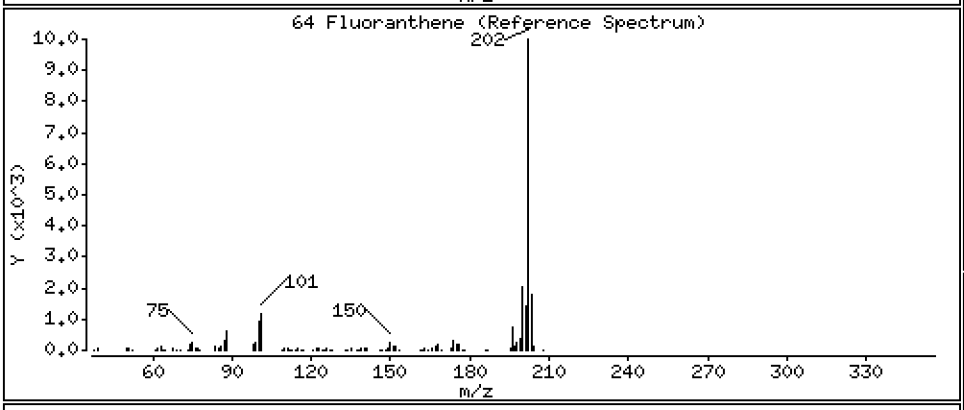
Column diameter: 0.25

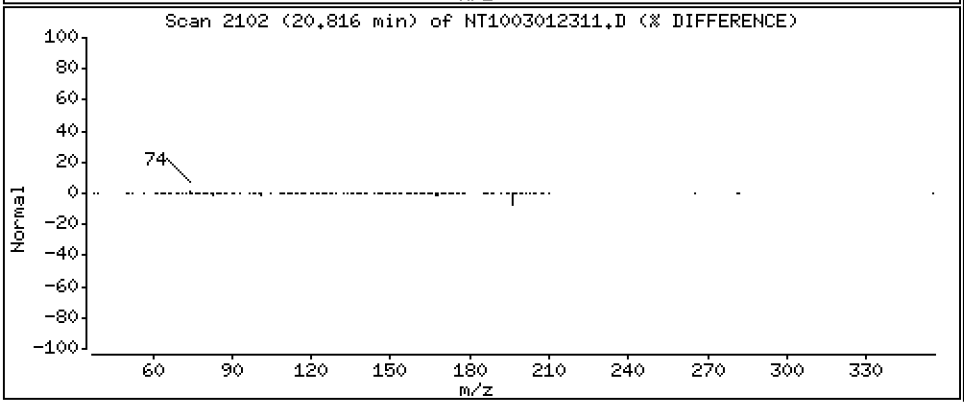
64 Fluoranthene

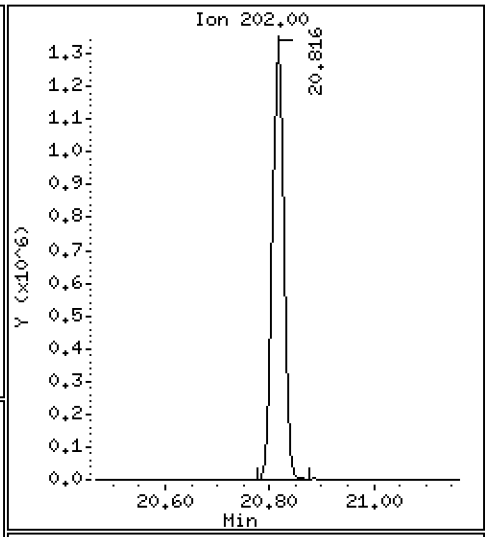
Concentration: 4.542 ug/mL

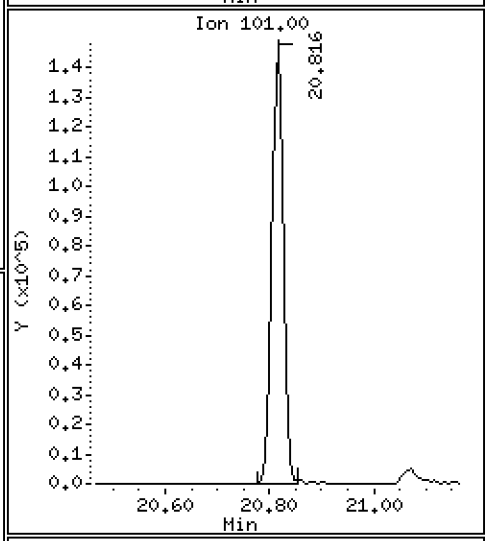


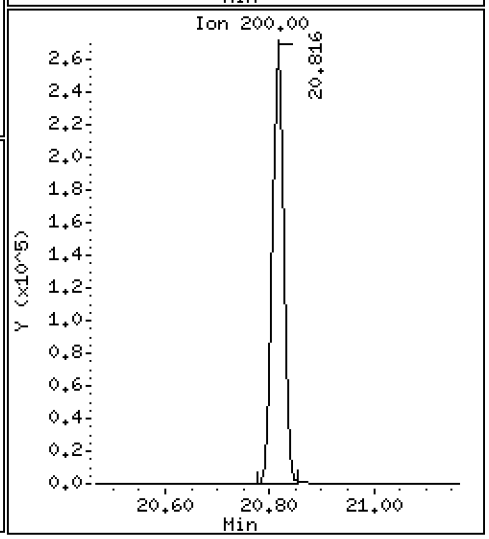












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

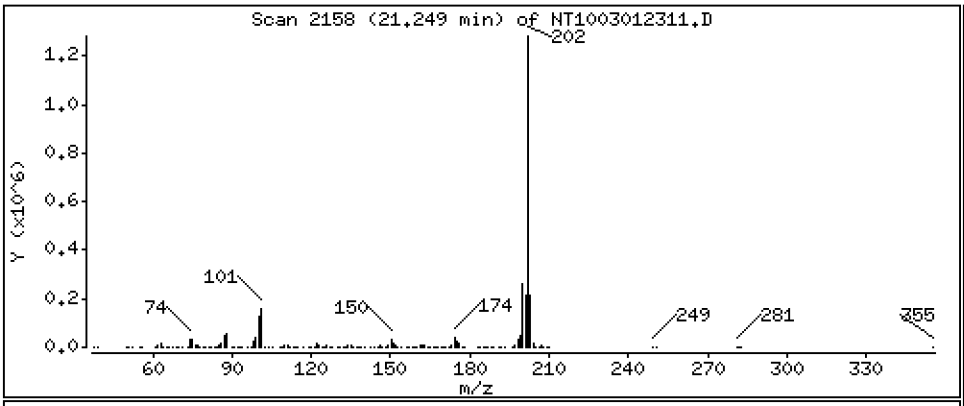
Operator: VTS

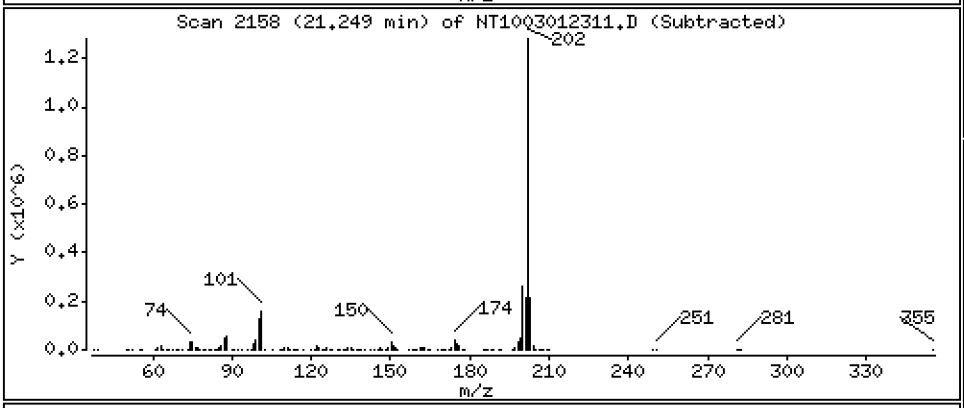
Column phase: ZB-5msi

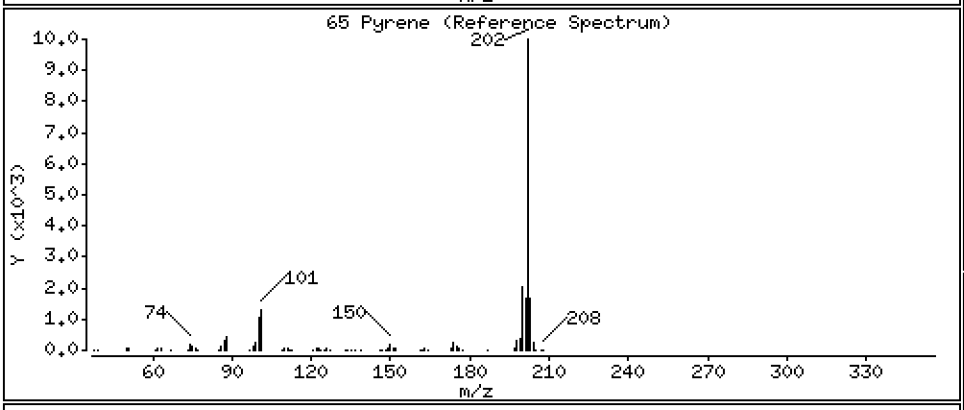
Column diameter: 0.25

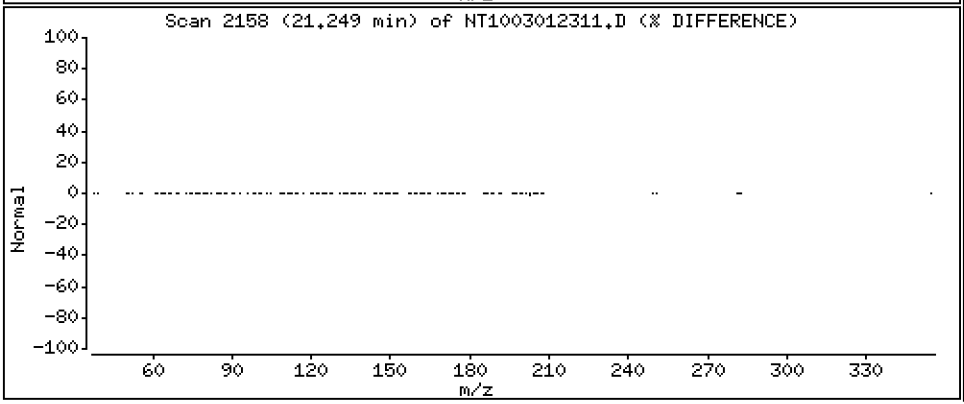
65 Pyrene

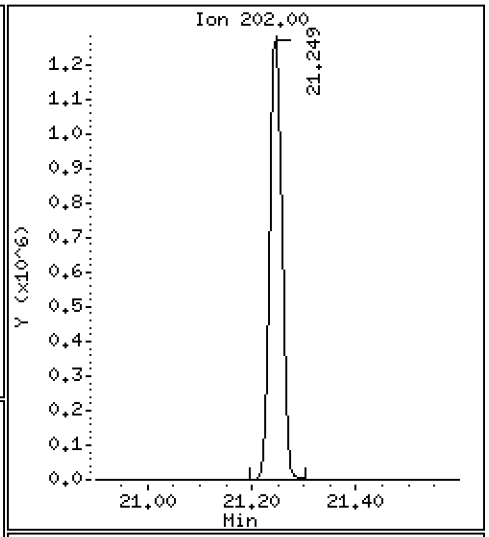
Concentration: 4.626 ug/mL

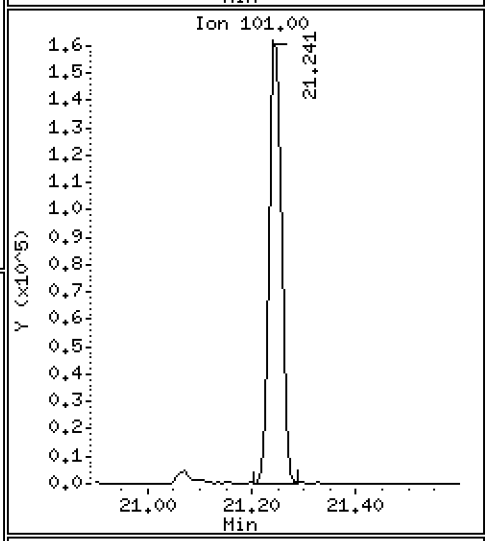


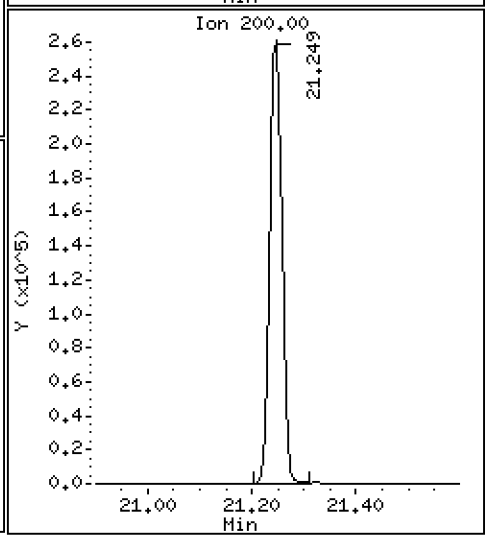












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

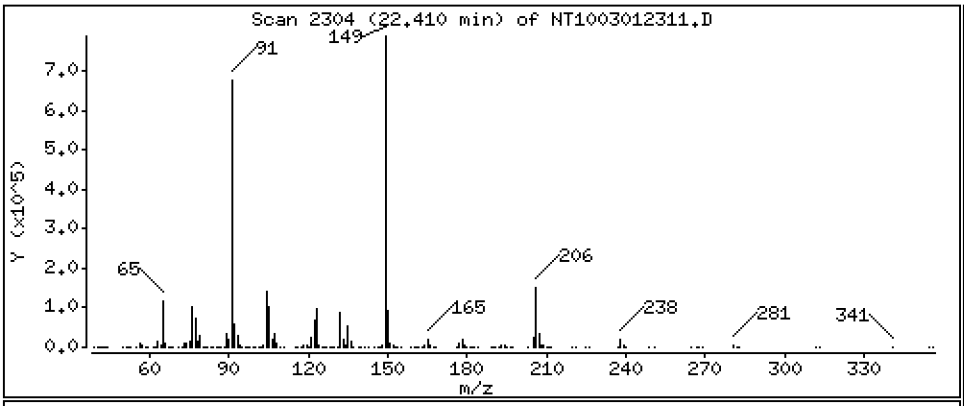
Operator: VTS

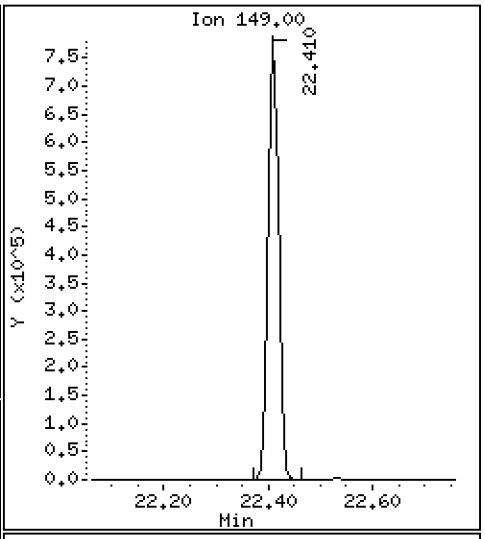
Column phase: ZB-5msi

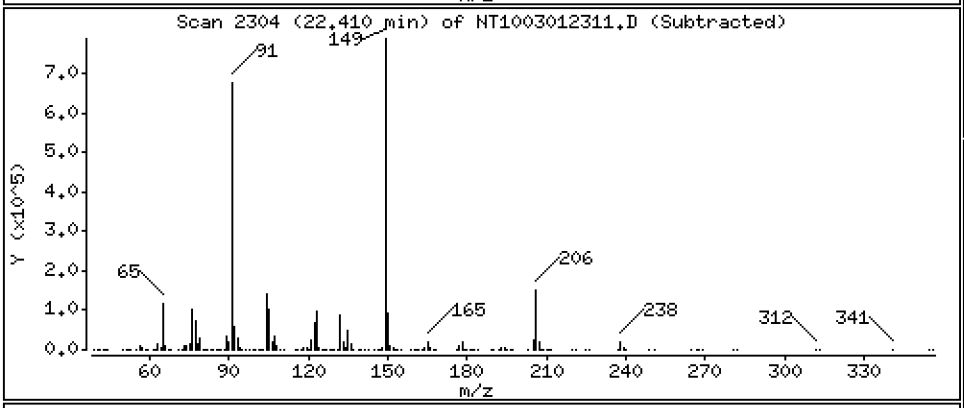
Column diameter: 0.25

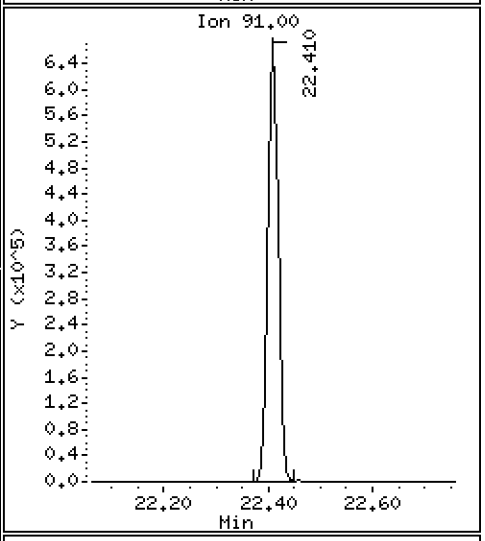
67 Butylbenzylphthalate

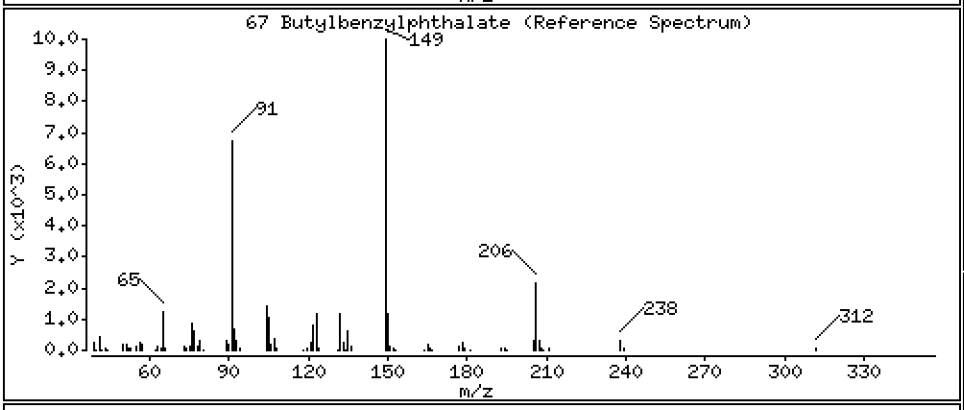
Concentration: 4.525 ug/mL

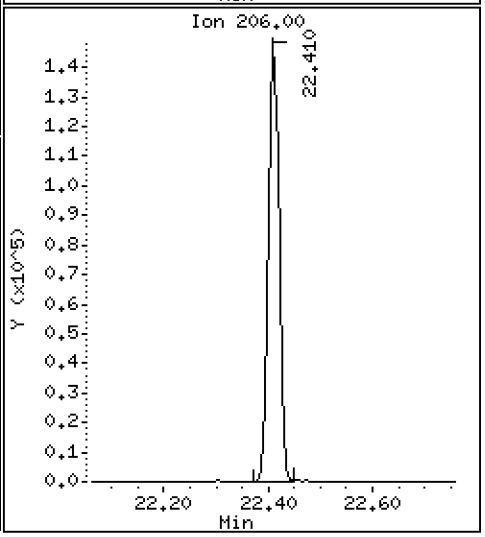


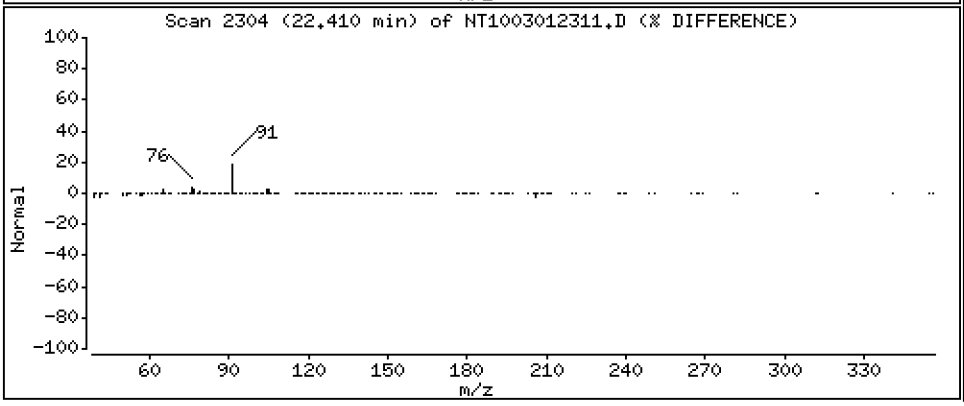












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

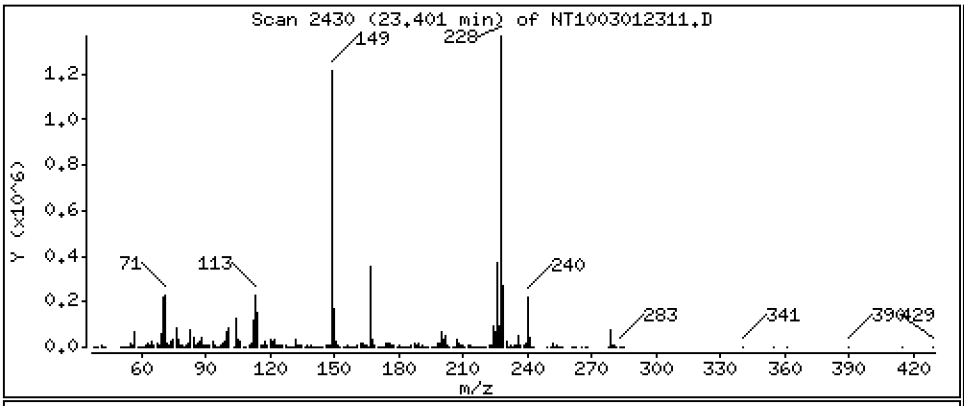
Operator: VTS

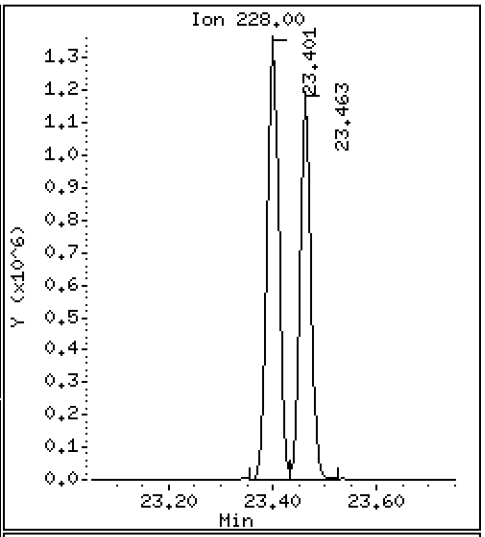
Column phase: ZB-5msi

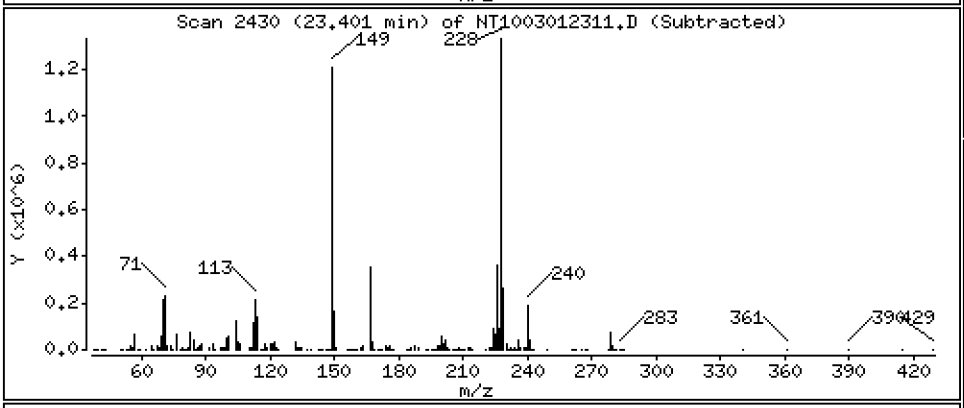
Column diameter: 0.25

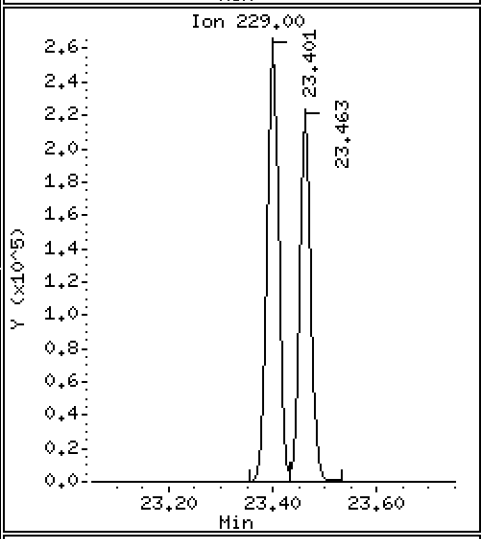
68 Benzo(a)anthracene

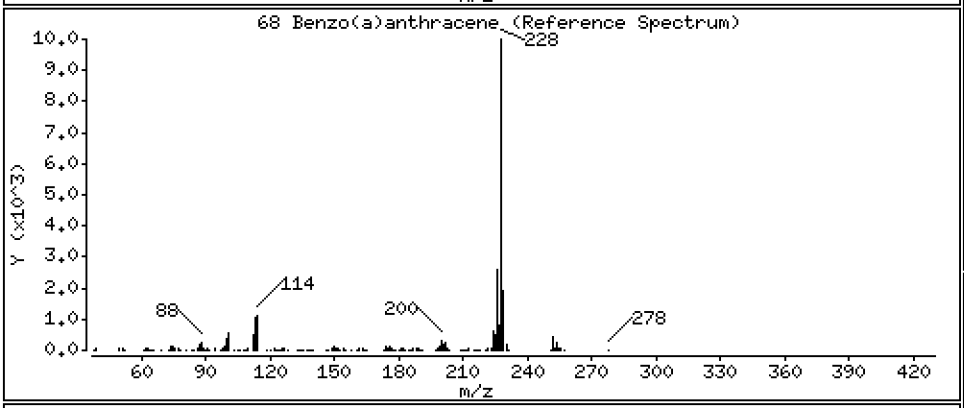
Concentration: 4.578 ug/mL

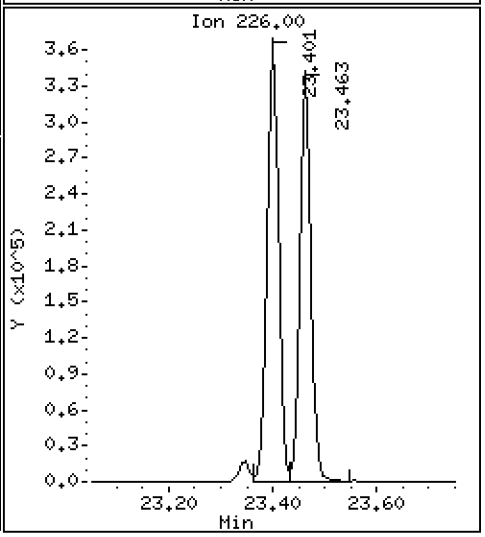


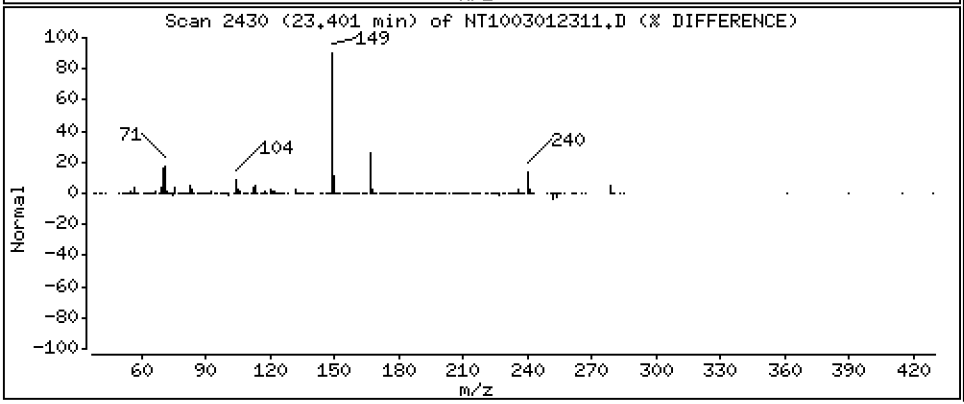












Date : 01-MAR-2023 21:46

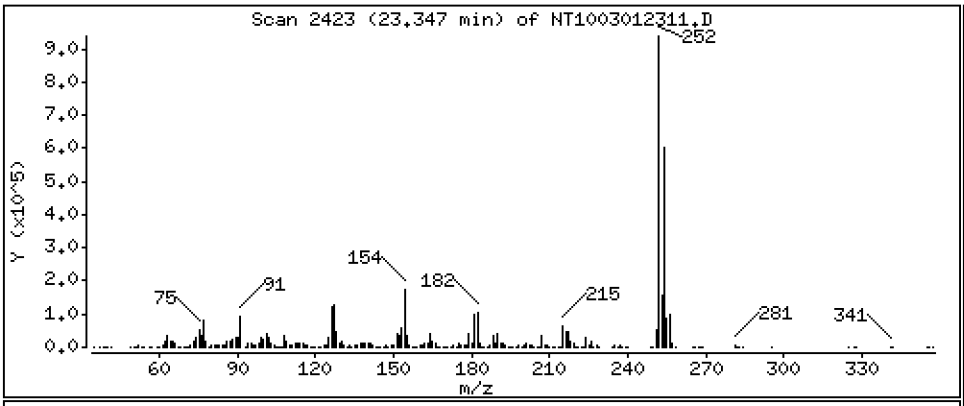
Client ID: Instrument: nt10.i

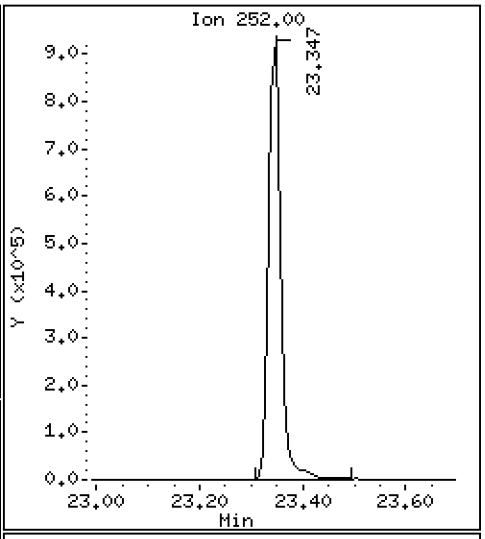
Sample Info: SEQ-SCV1

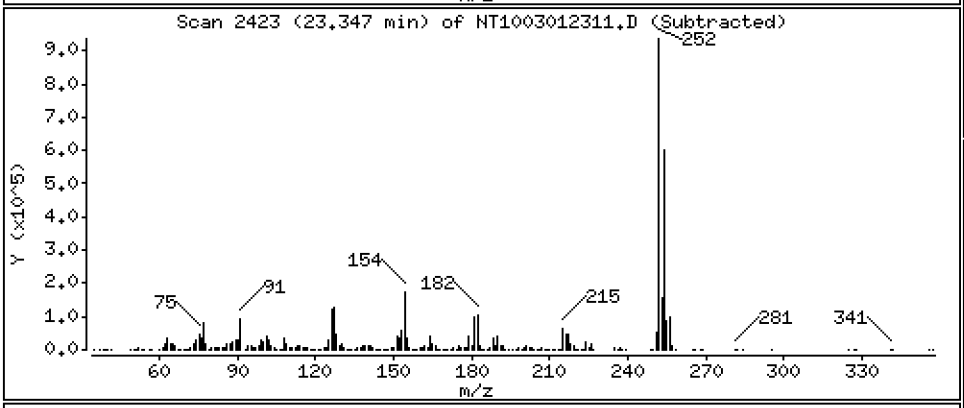
Operator: VTS

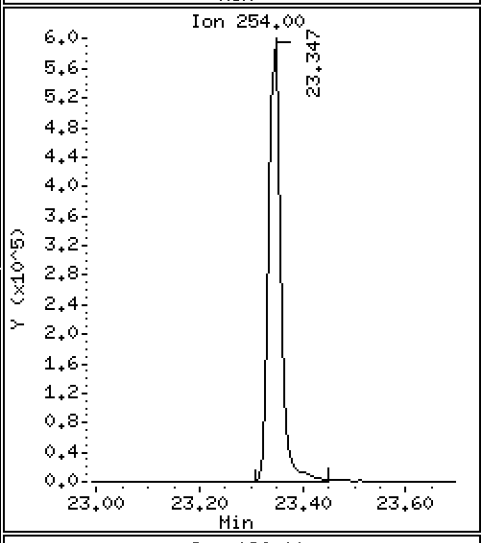
Column phase: ZB-5msi Column diameter: 0.25

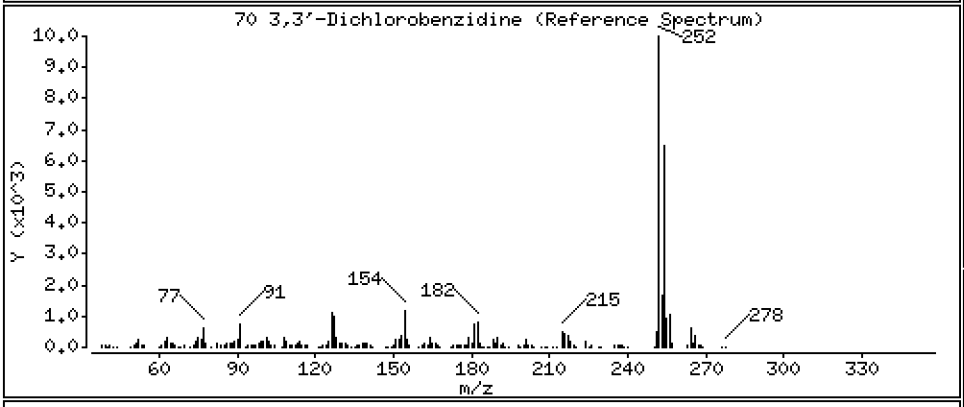
70 3,3'-Dichlorobenzidine Concentration: 7.383 ug/mL

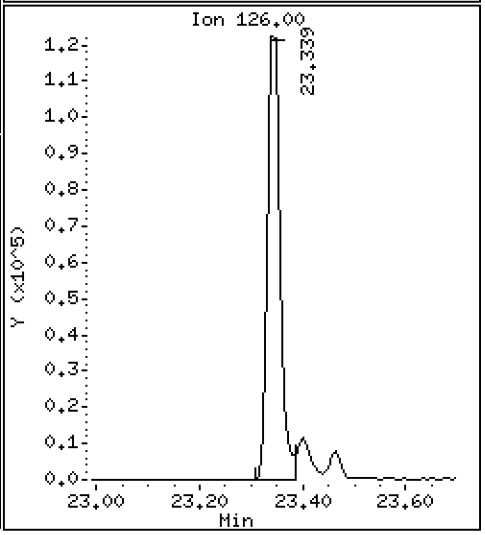


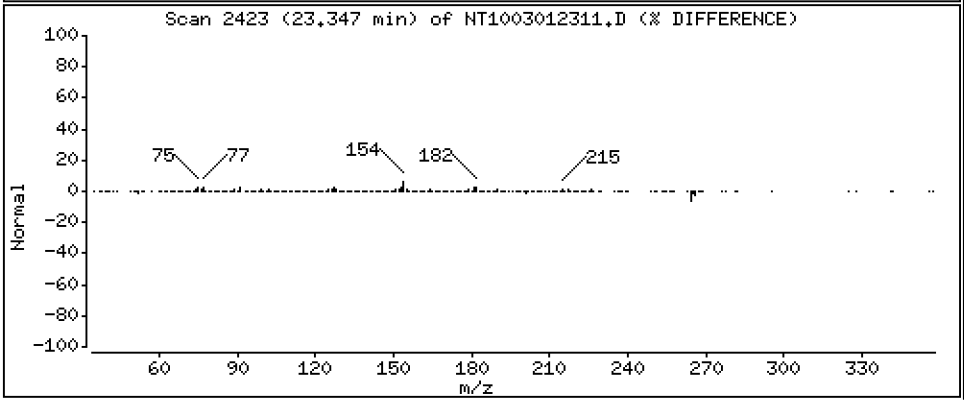












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

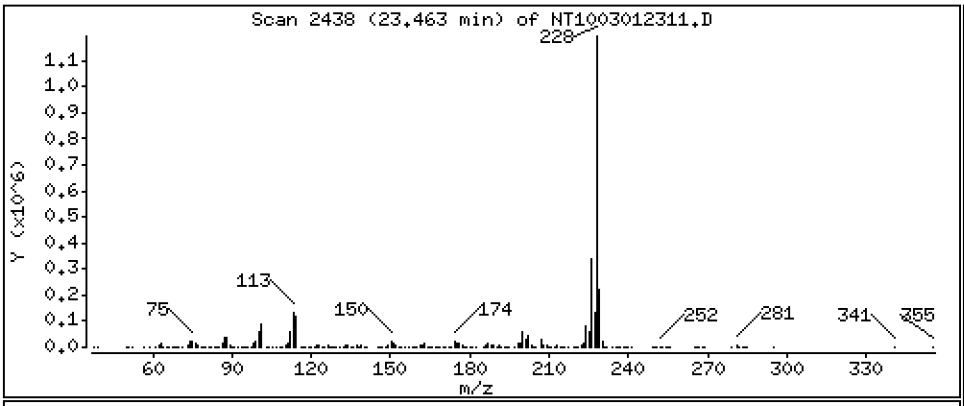
Operator: VTS

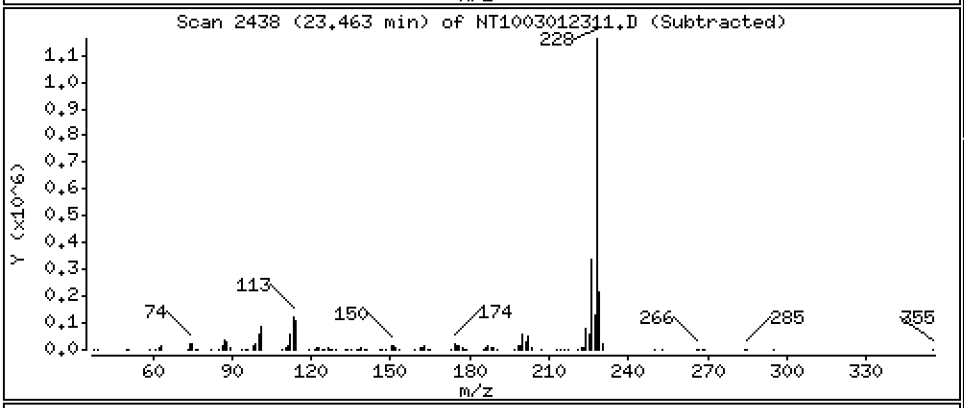
Column phase: ZB-5msi

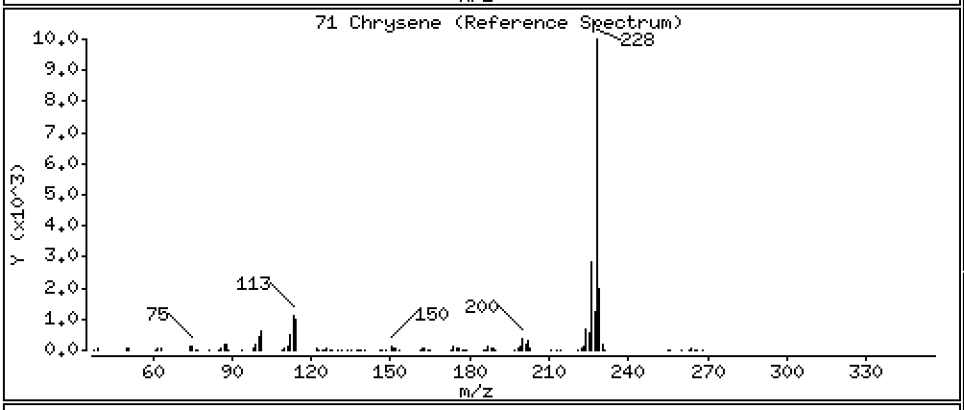
Column diameter: 0.25

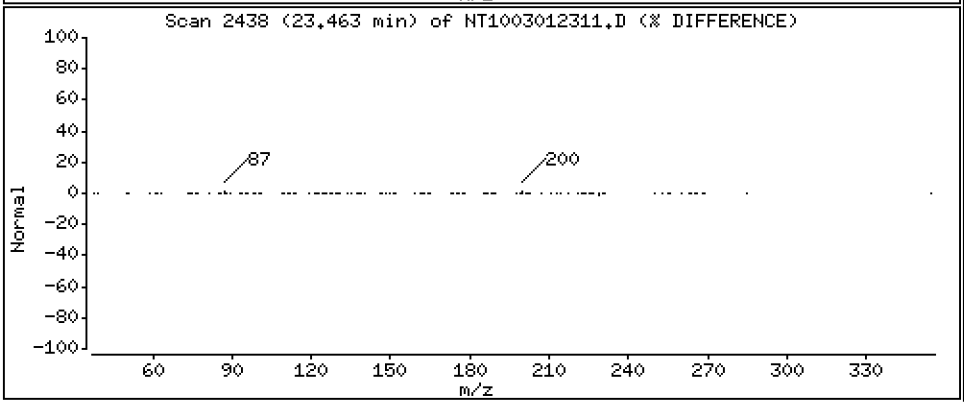
71 Chrysene

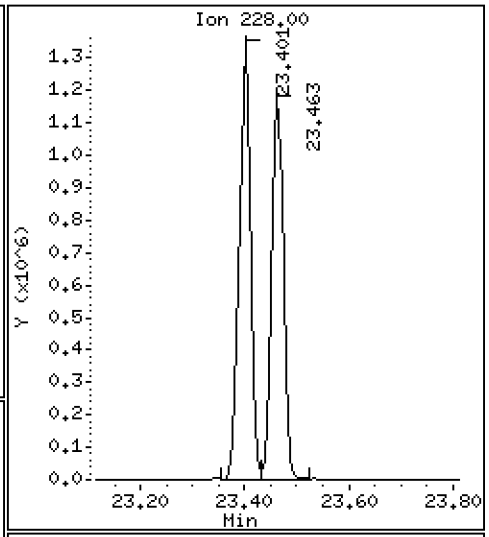
Concentration: 4.967 ug/mL

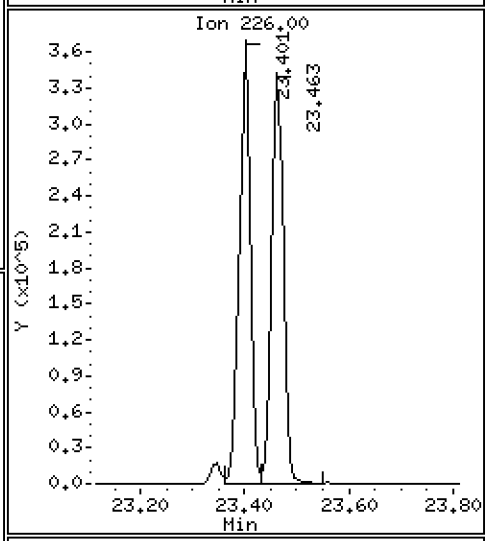


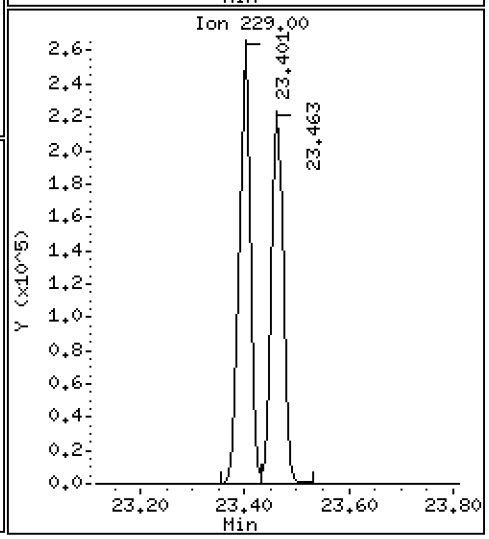












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

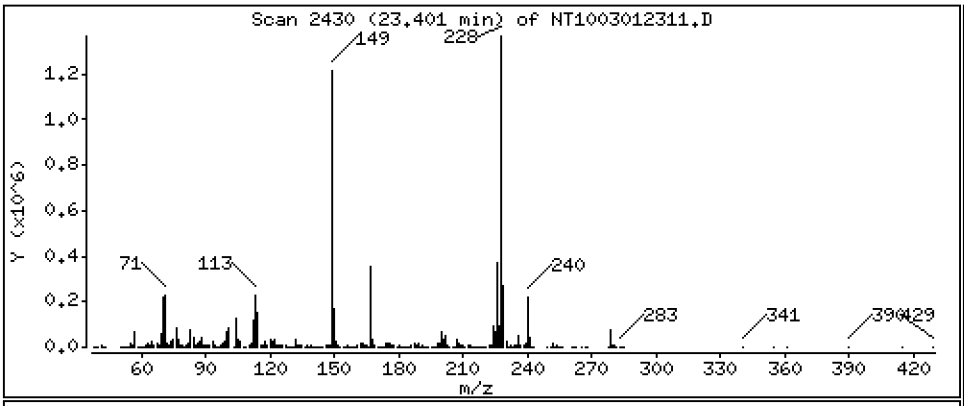
Operator: VTS

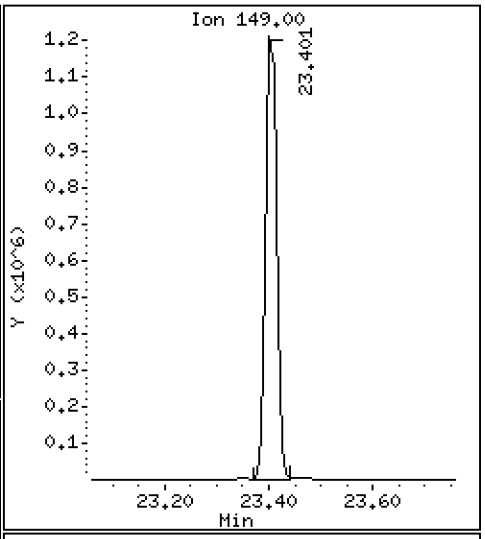
Column phase: ZB-5msi

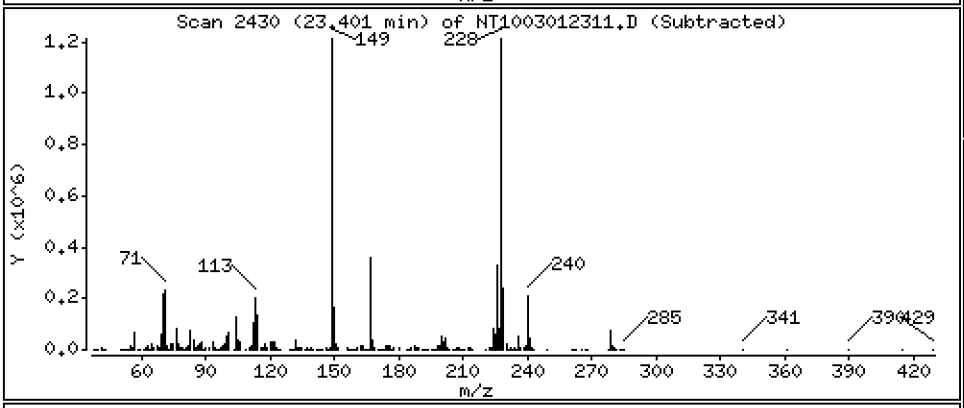
Column diameter: 0.25

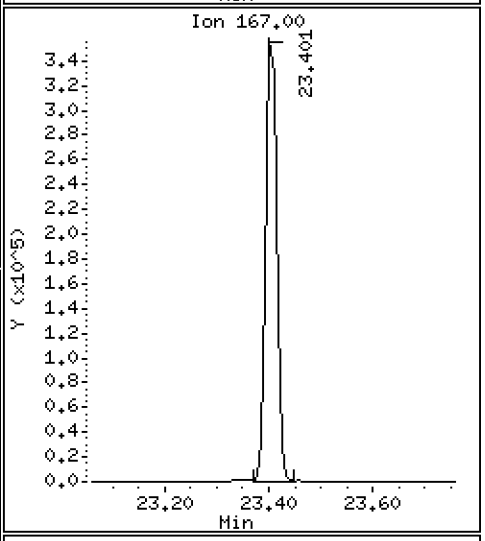
72 bis(2-Ethylhexyl)phthalate

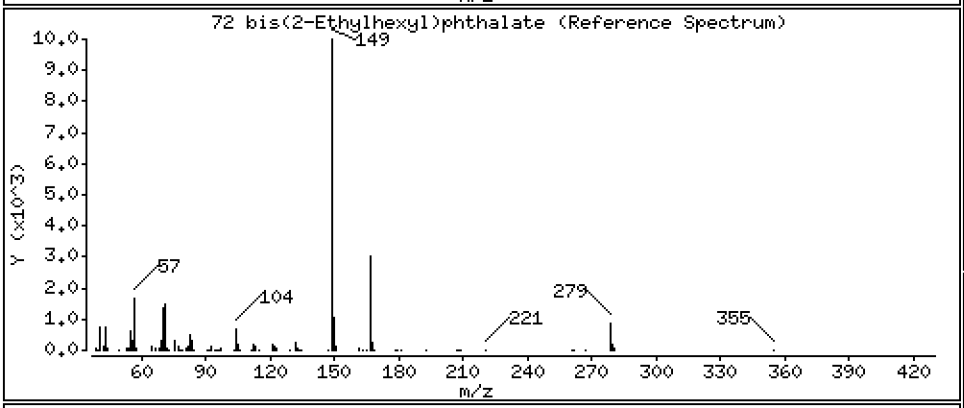
Concentration: 4.956 ug/mL

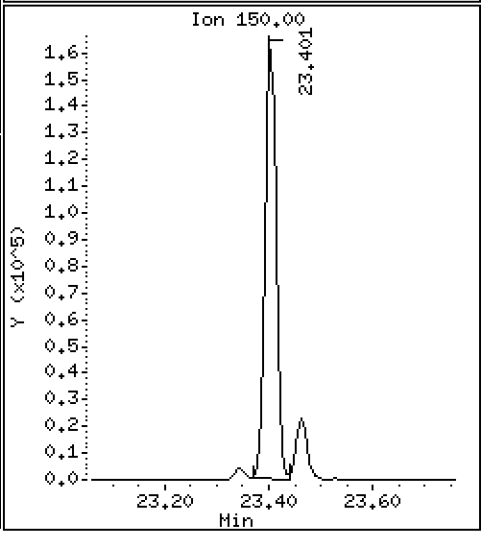


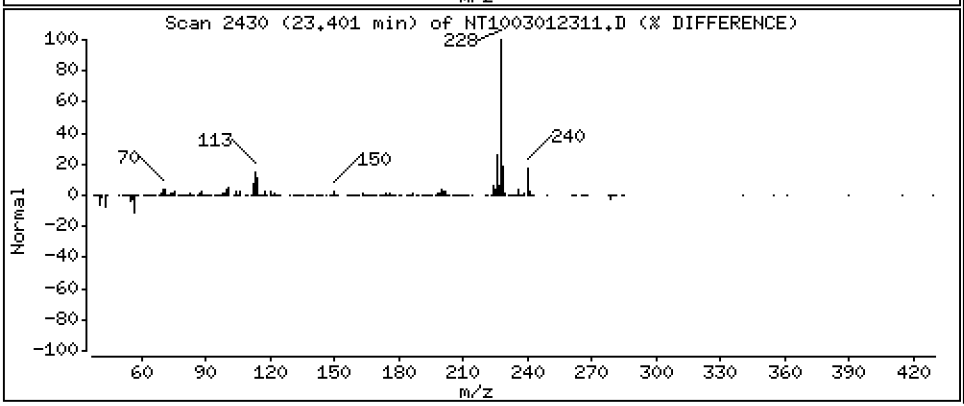












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

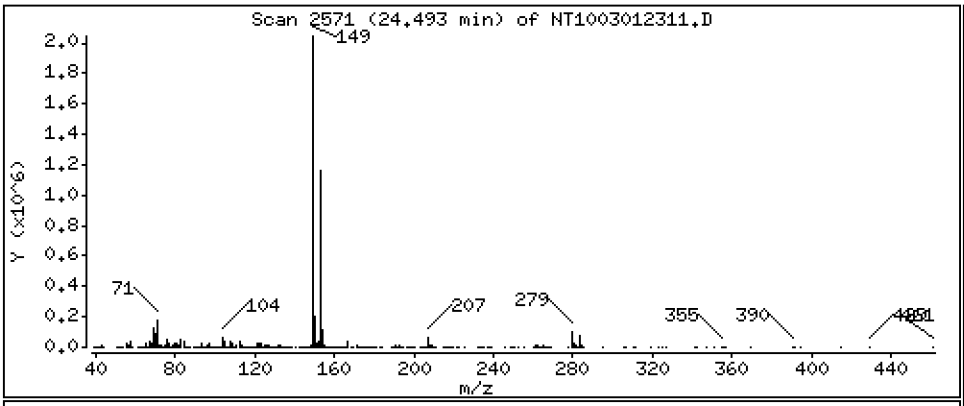
Operator: VTS

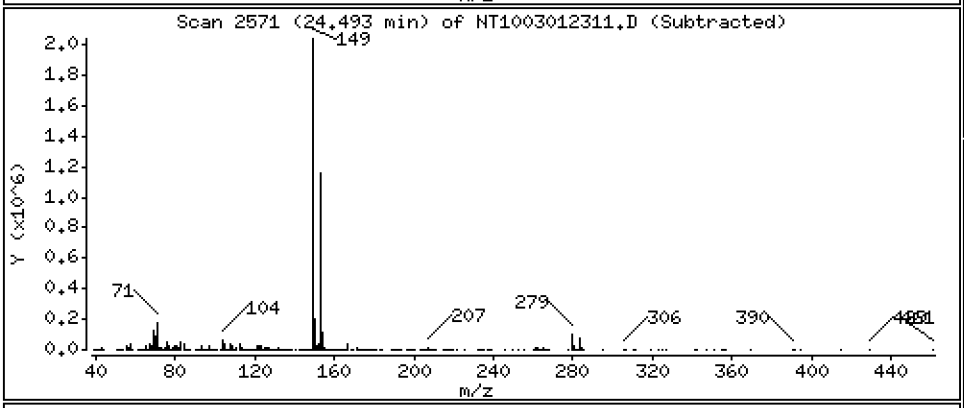
Column phase: ZB-5msi

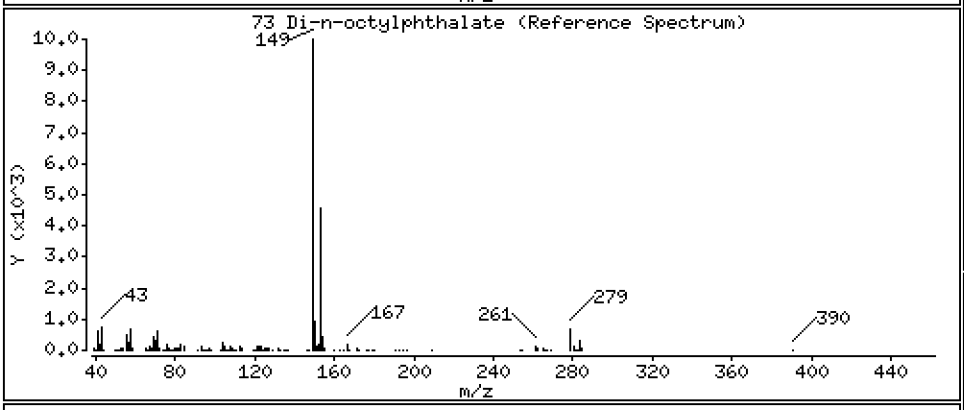
Column diameter: 0.25

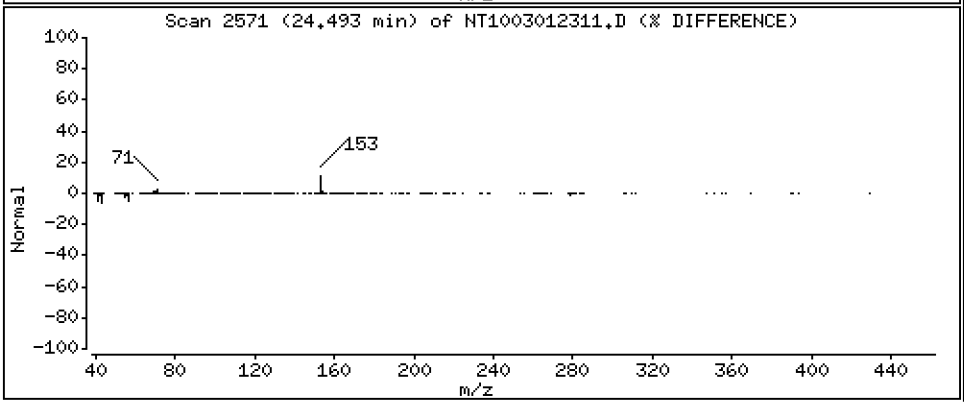
73 Di-n-octylphthalate

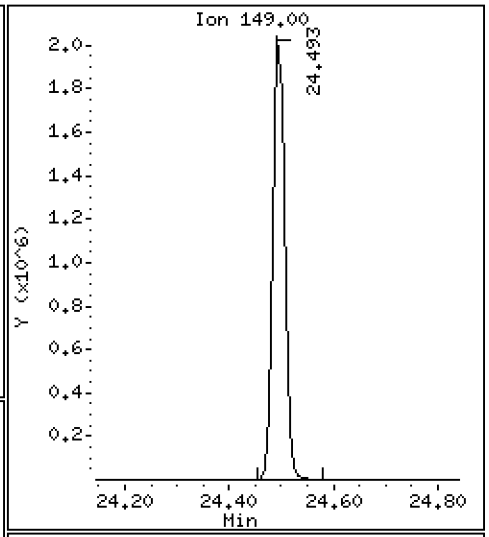
Concentration: 5.844 ug/mL

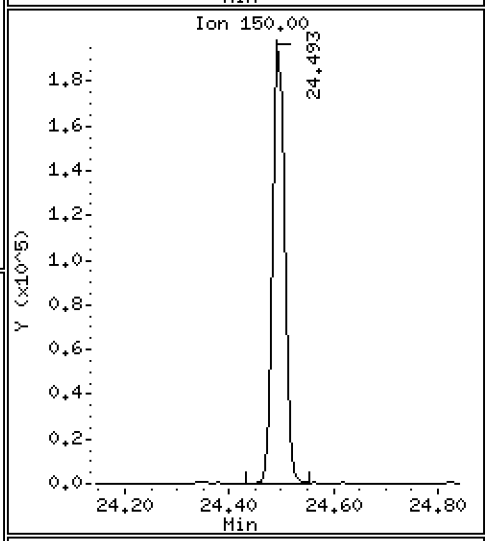


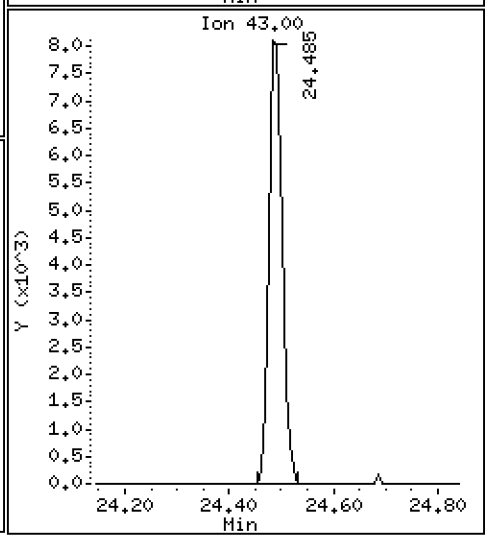












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

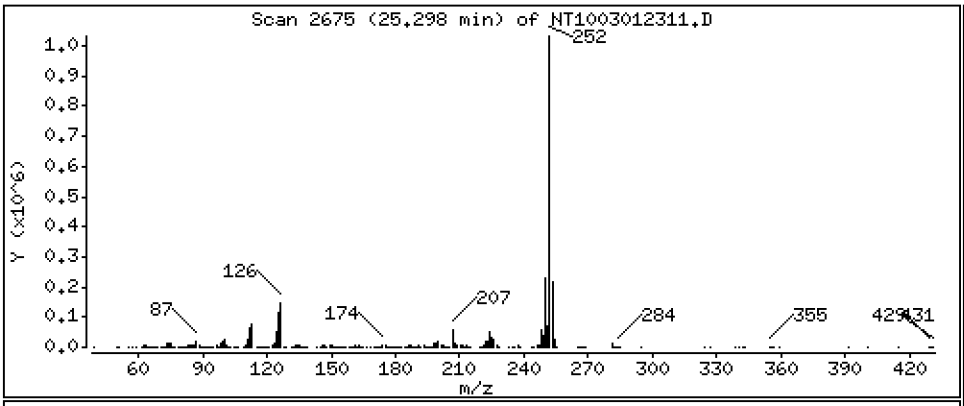
Operator: VTS

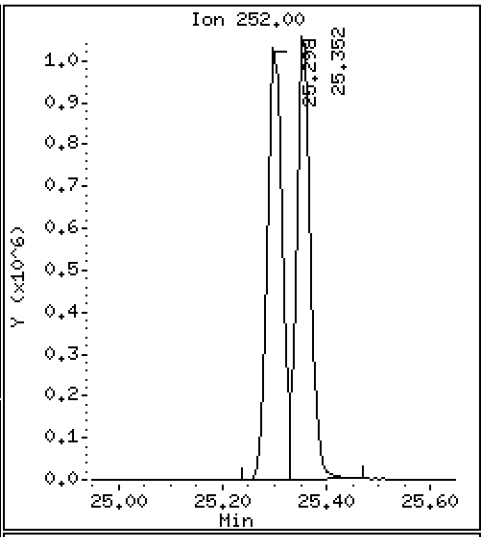
Column phase: ZB-5msi

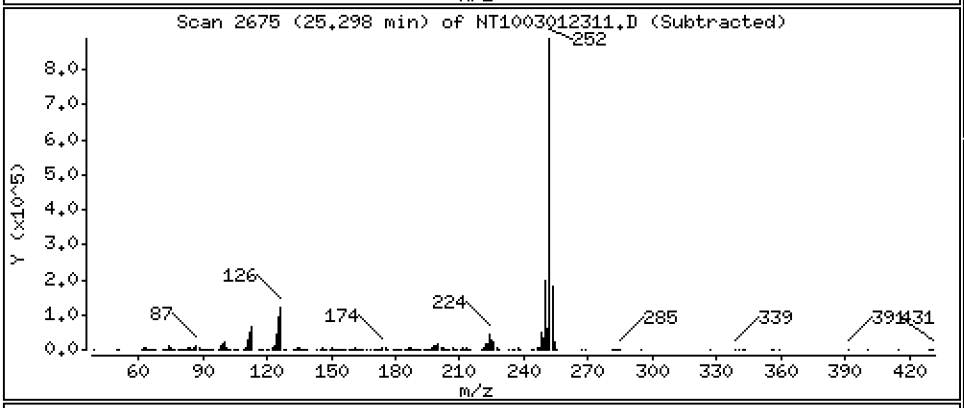
Column diameter: 0.25

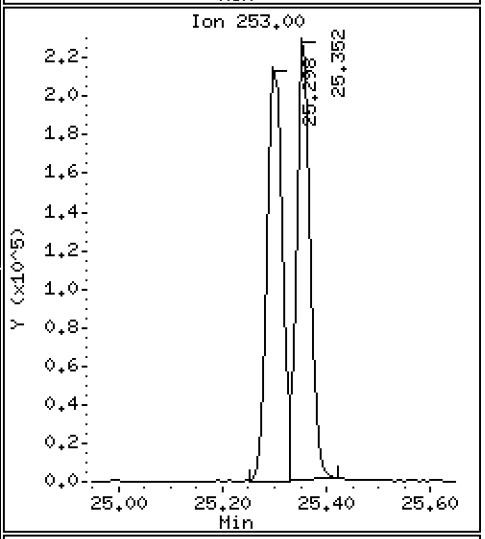
74 Benzo(b)fluoranthene

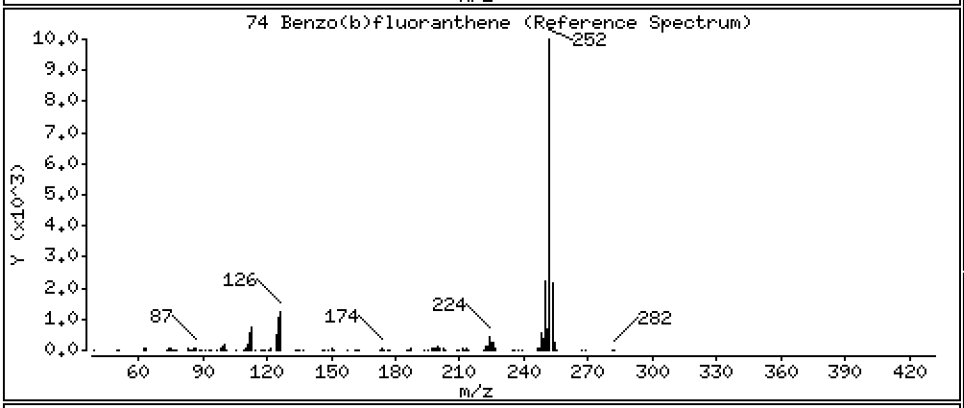
Concentration: 4.319 ug/mL

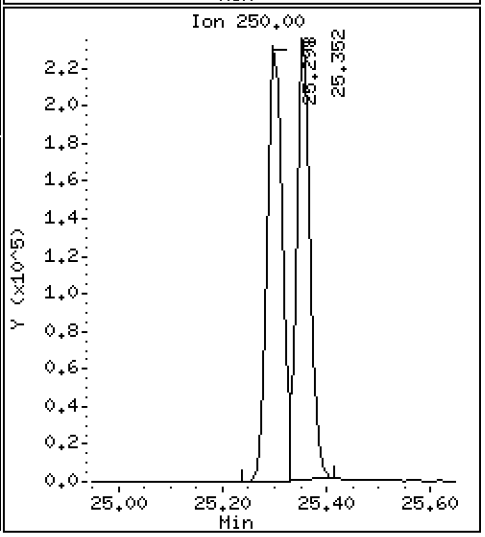


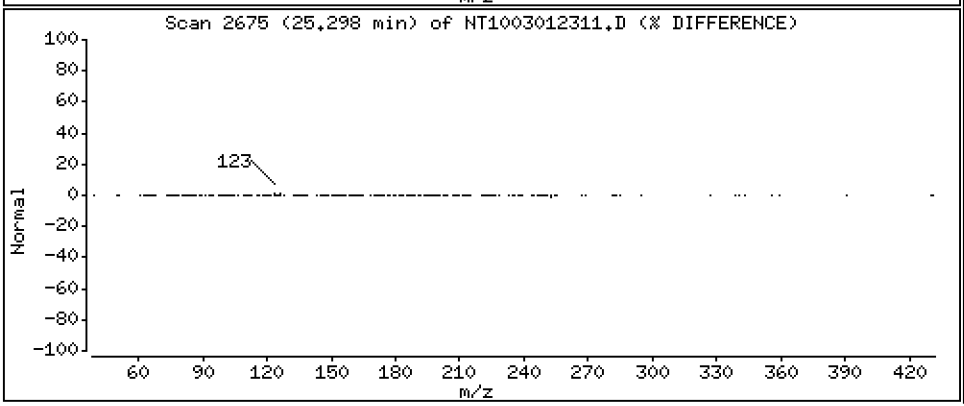












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

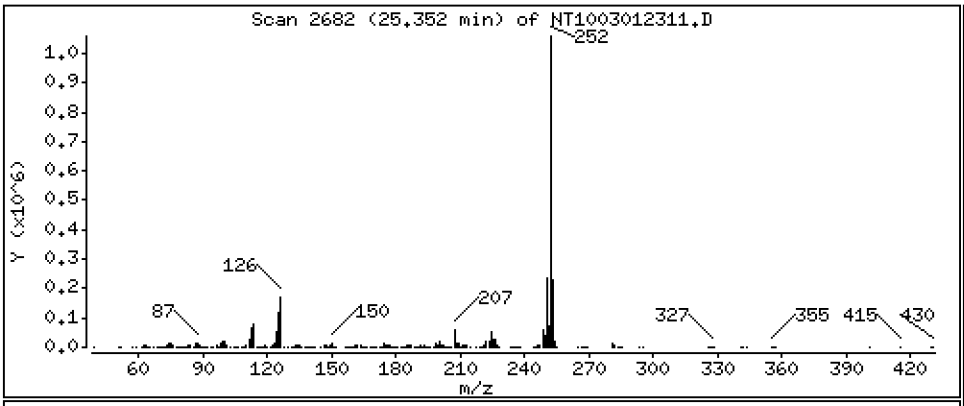
Operator: VTS

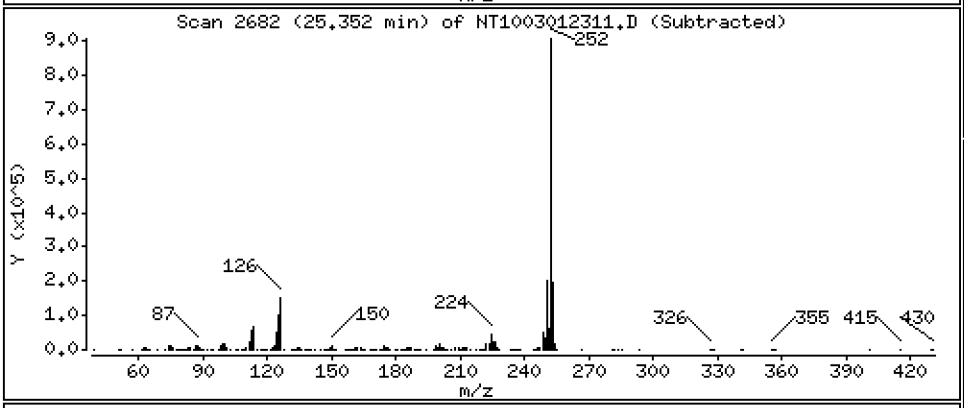
Column phase: ZB-5msi

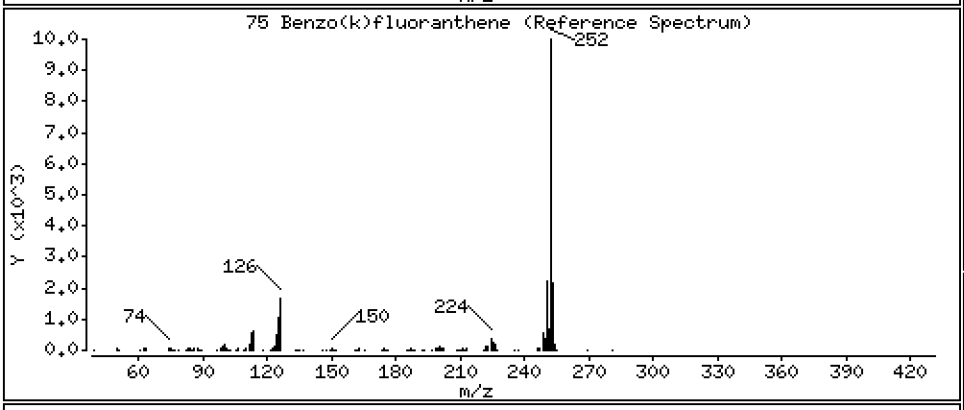
Column diameter: 0.25

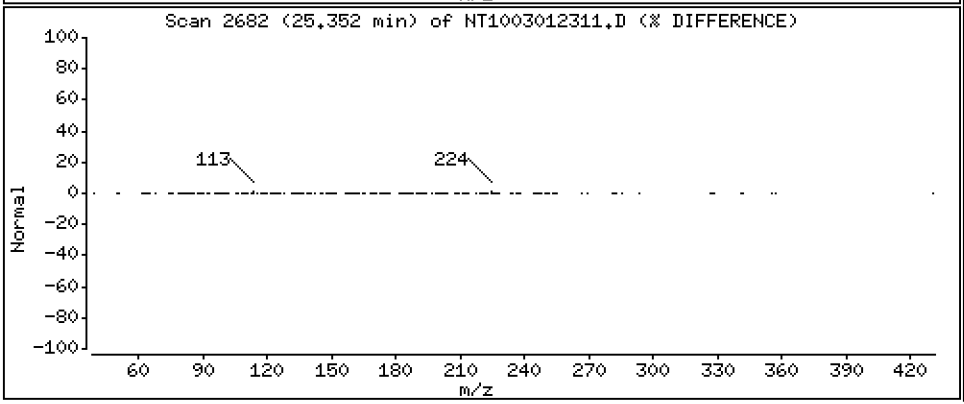
75 Benzo(k)fluoranthene

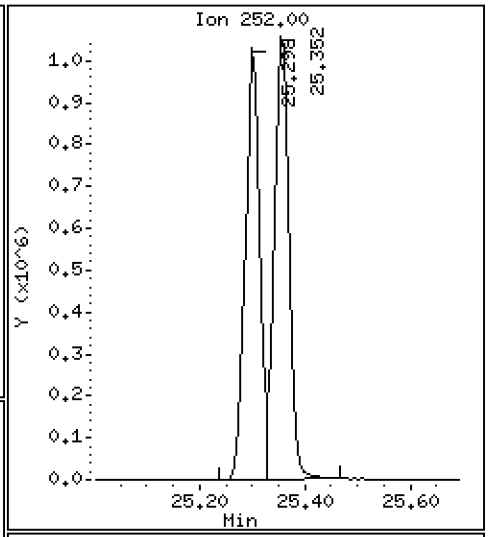
Concentration: 4.563 ug/mL

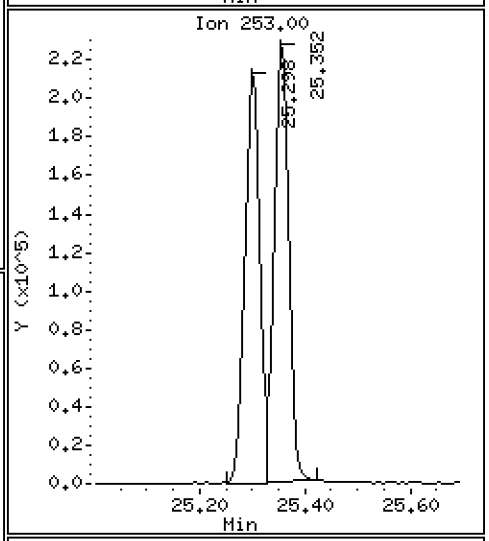


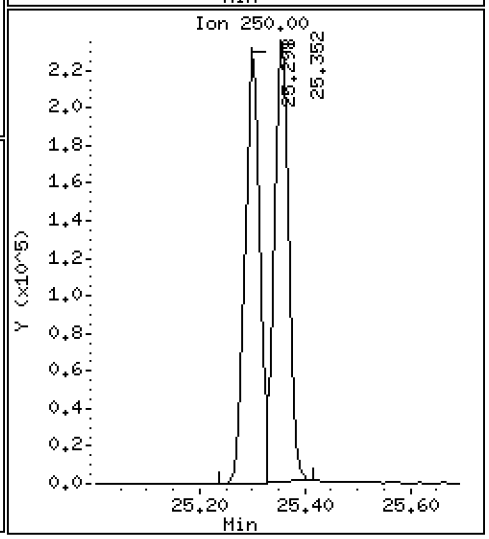












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

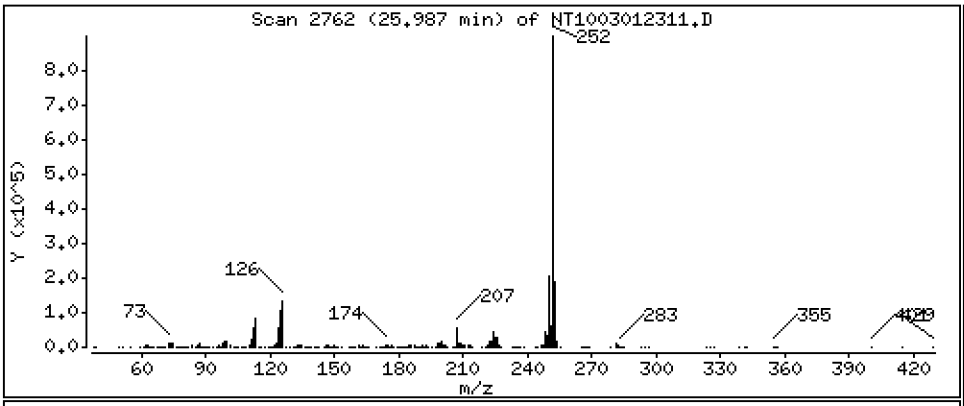
Operator: VTS

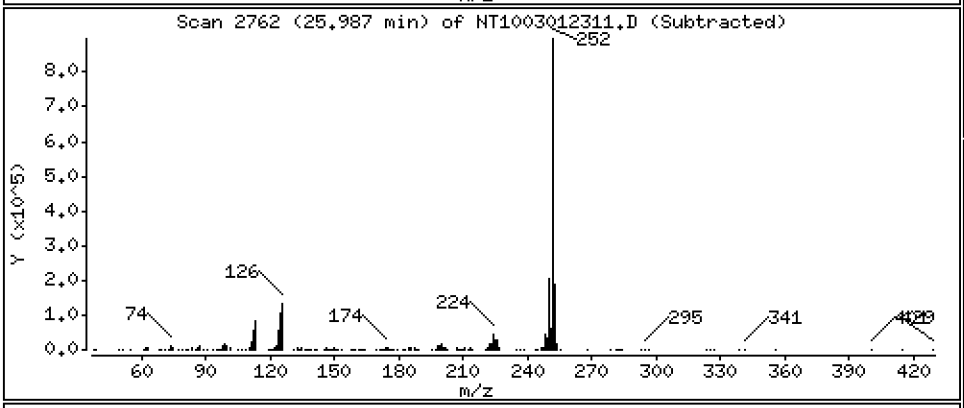
Column phase: ZB-5msi

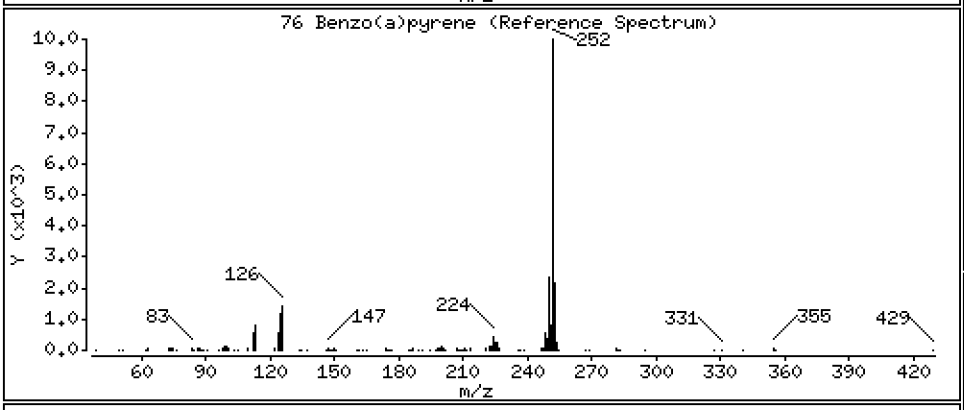
Column diameter: 0.25

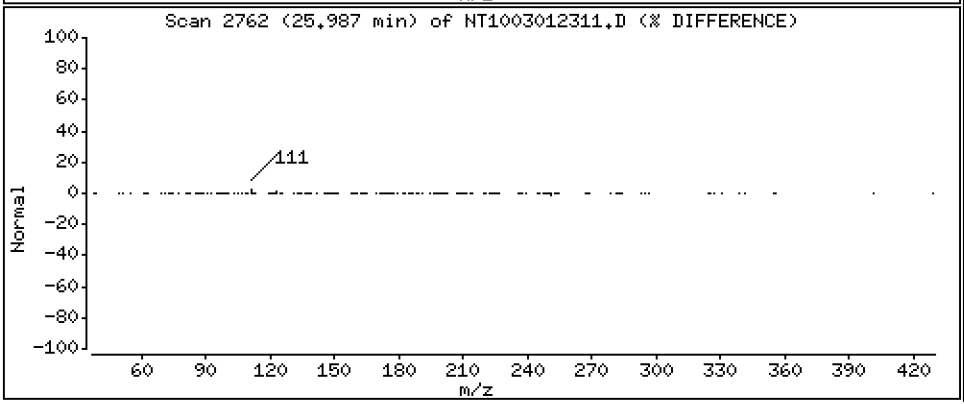
76 Benzo(a)pyrene

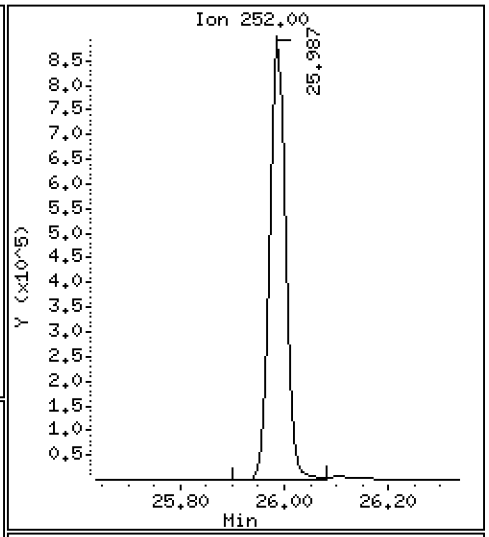
Concentration: 4.445 ug/mL

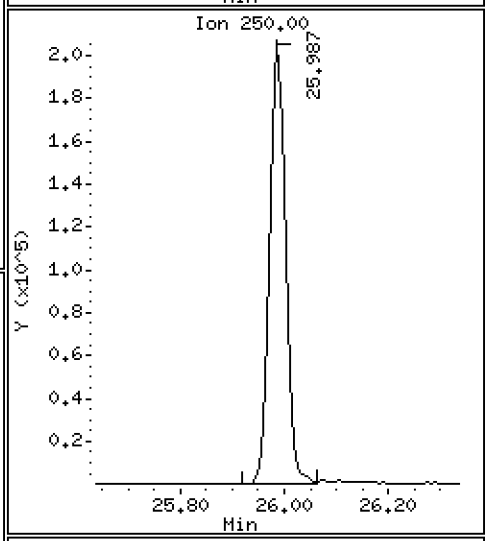


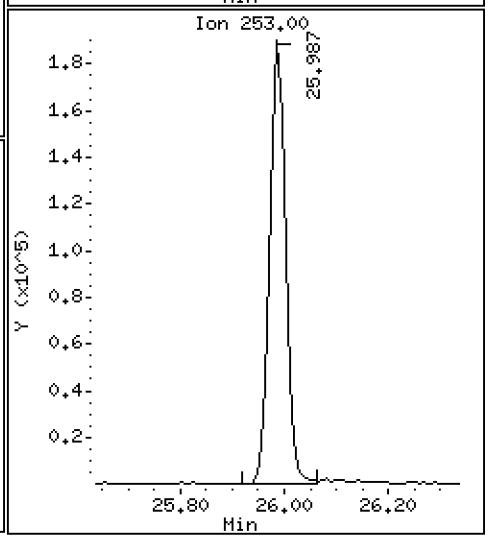












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

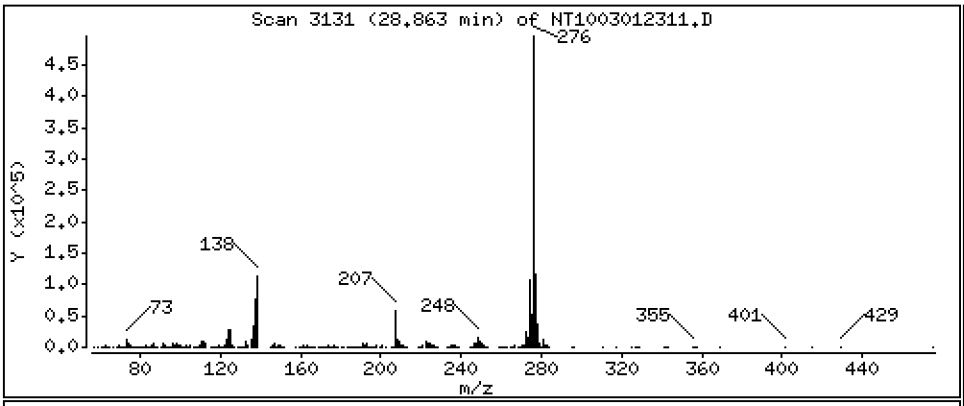
Operator: VTS

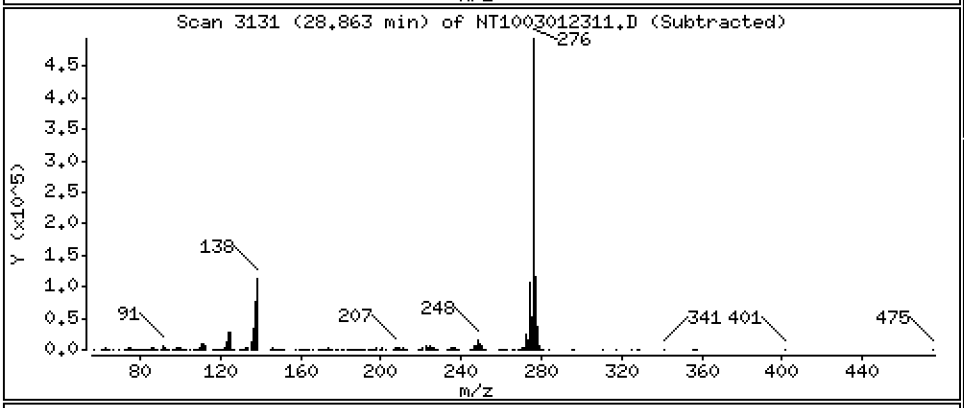
Column phase: ZB-5msi

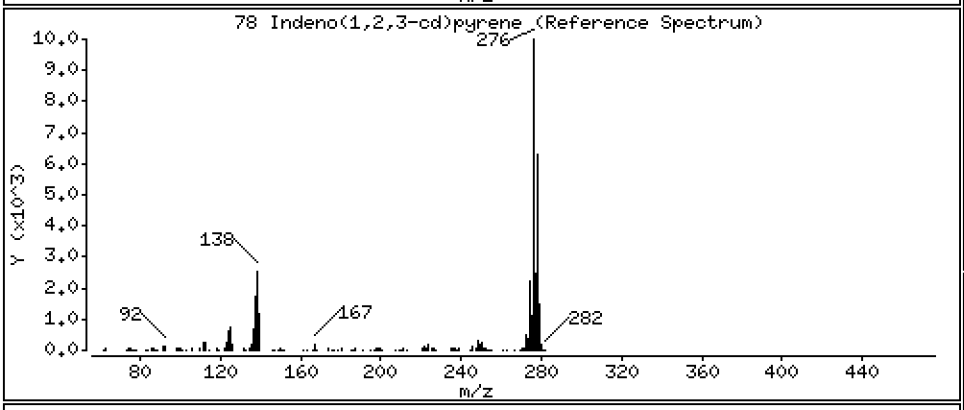
Column diameter: 0.25

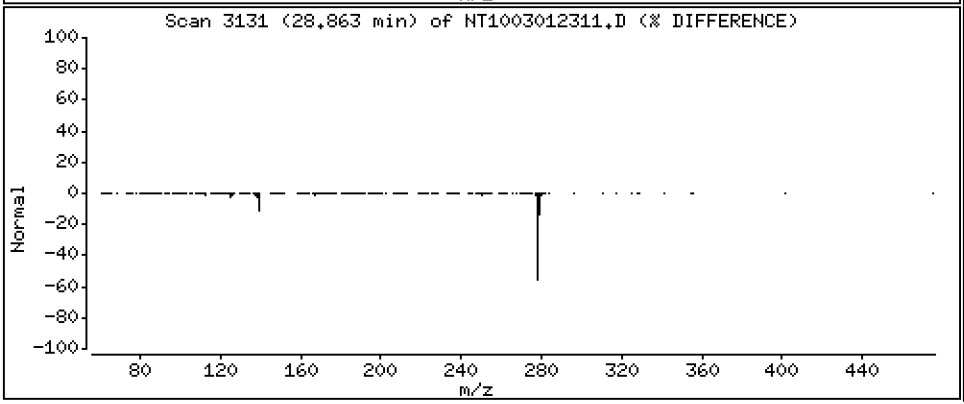
78 Indeno(1,2,3-cd)pyrene

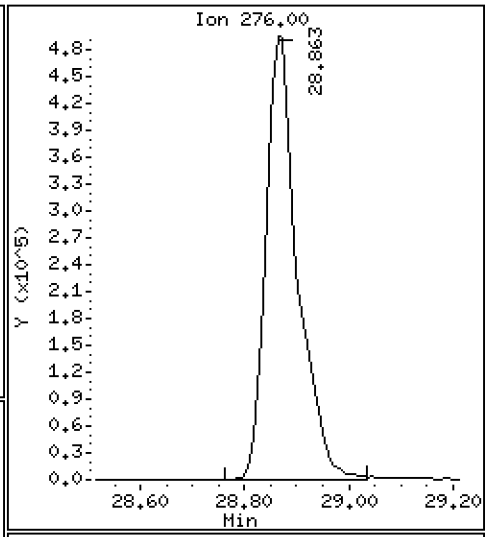
Concentration: 4.345 ug/mL

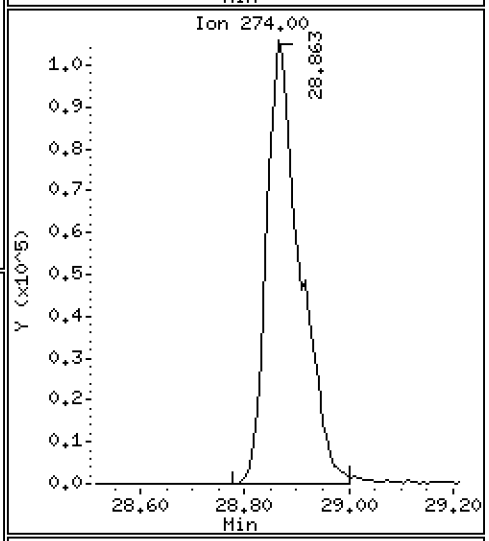


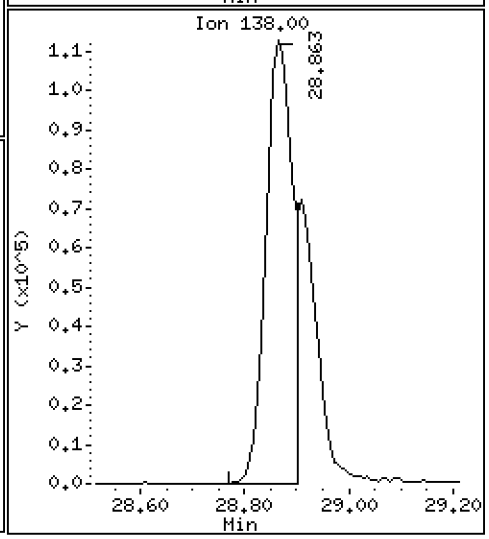












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

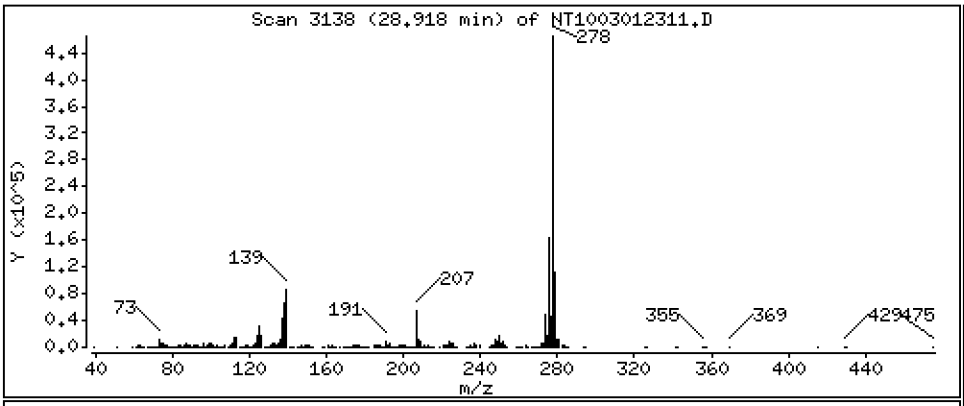
Operator: VTS

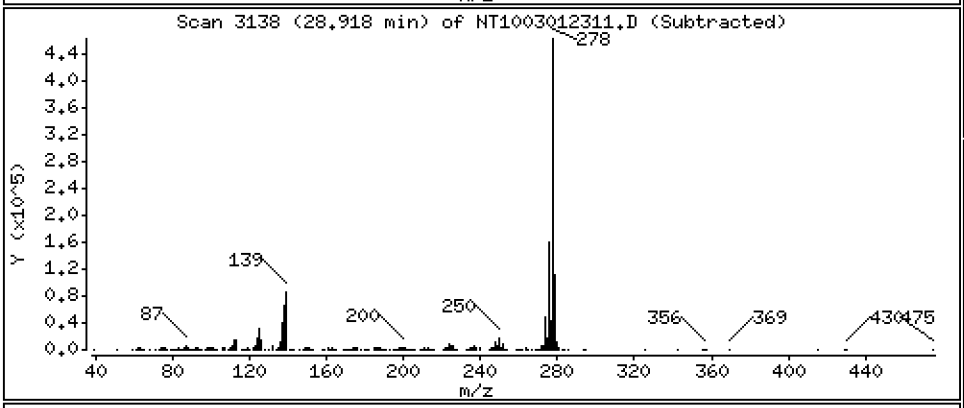
Column phase: ZB-5msi

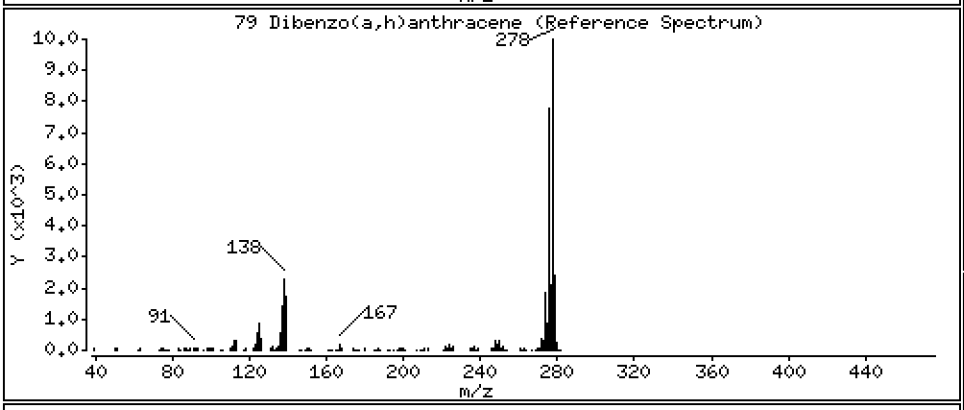
Column diameter: 0.25

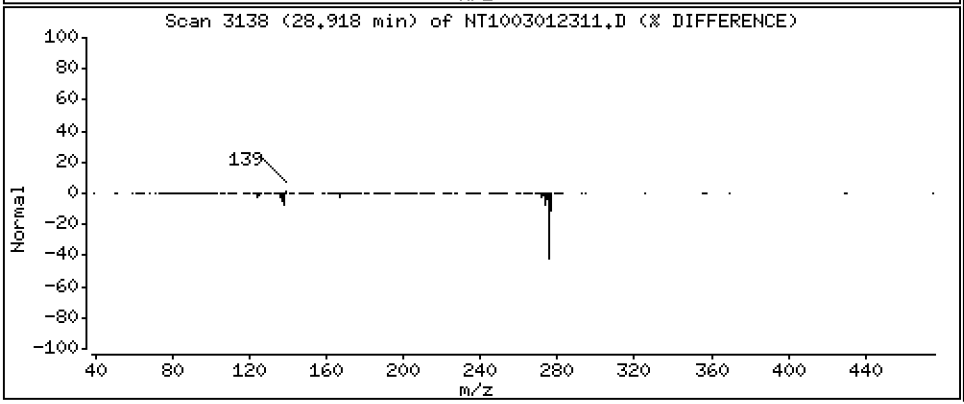
79 Dibenzo(a,h)anthracene

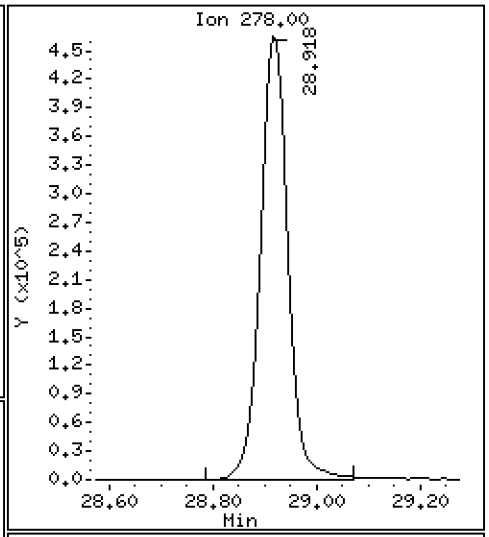
Concentration: 4.608 ug/mL

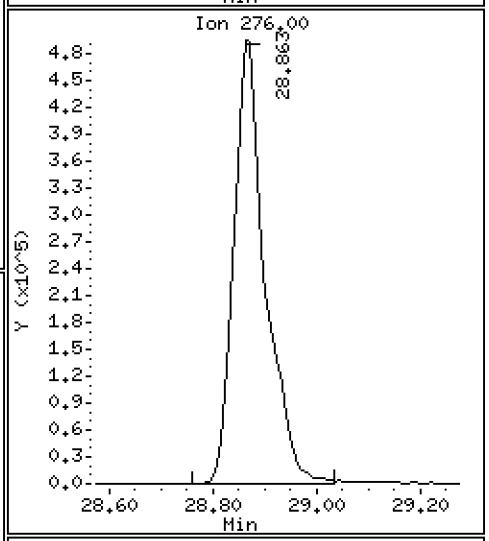


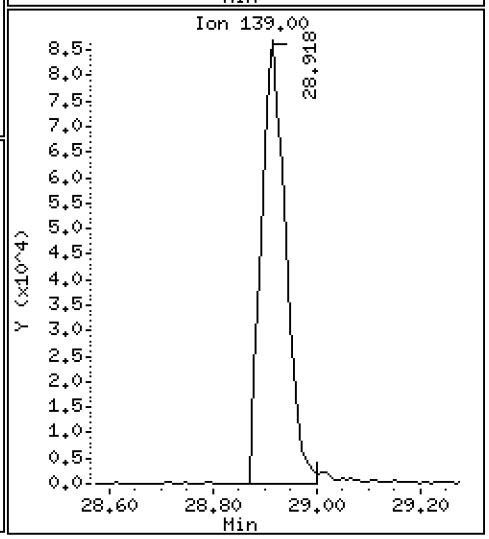












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

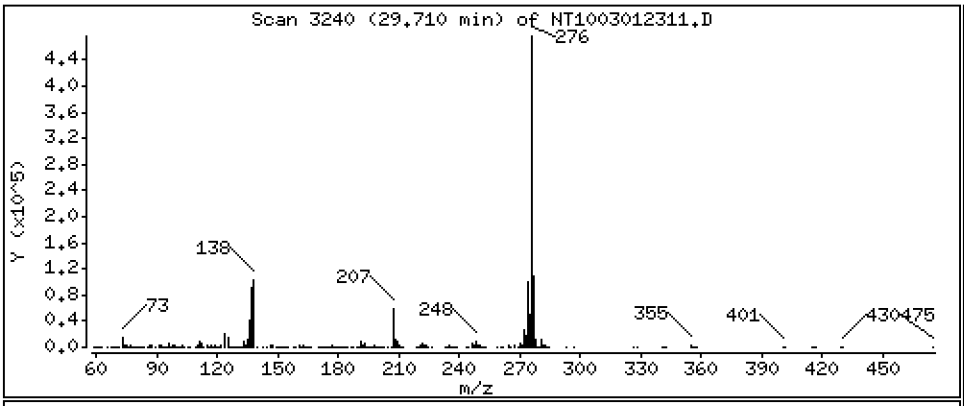
Operator: VTS

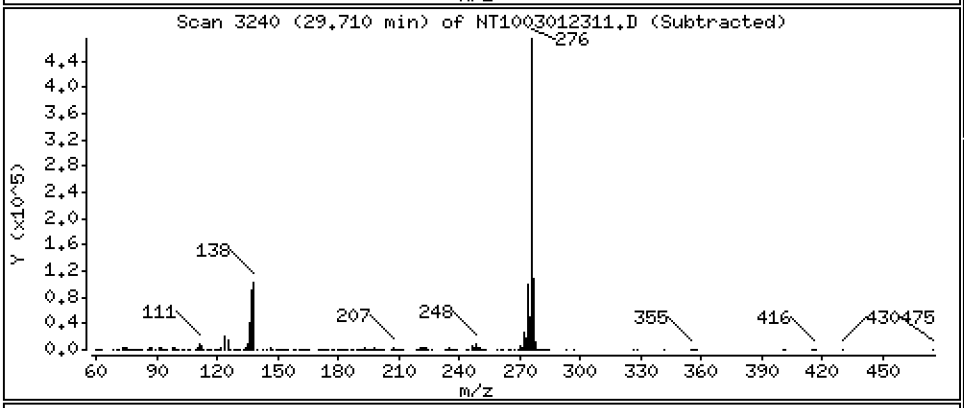
Column phase: ZB-5msi

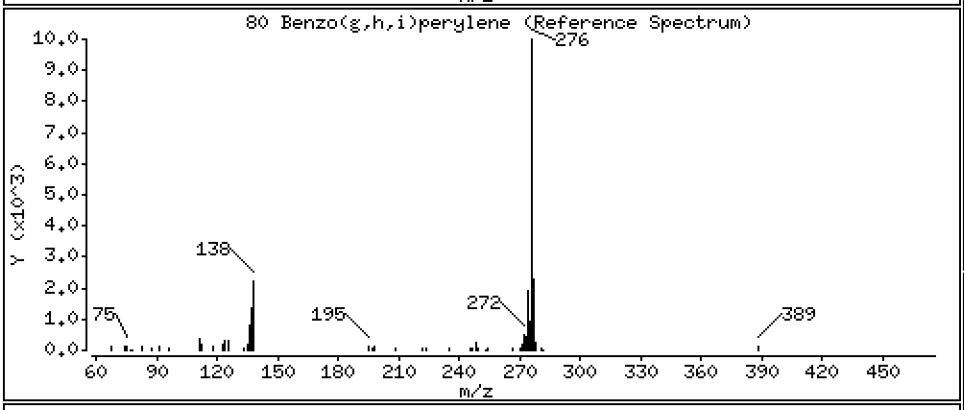
Column diameter: 0.25

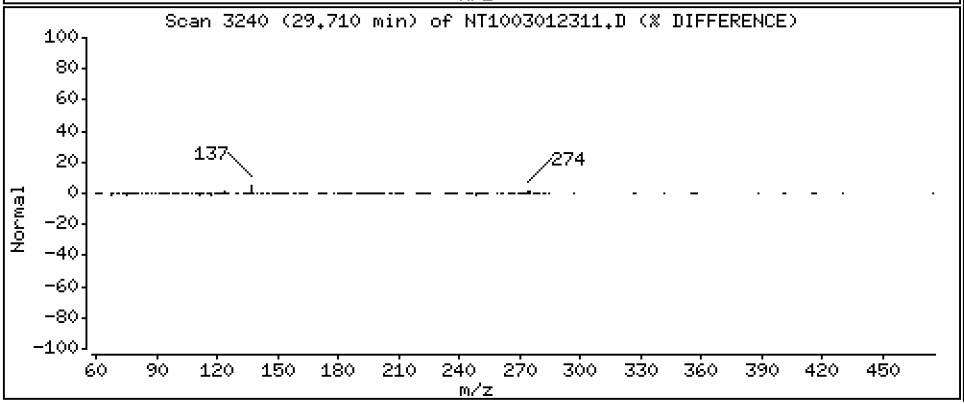
80 Benzo(g,h,i)perylene

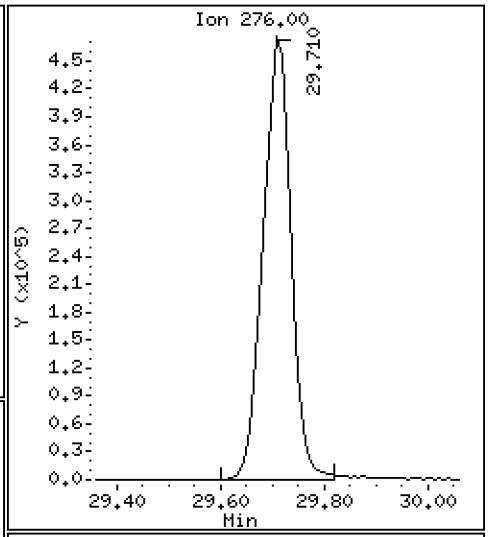
Concentration: 4.602 ug/mL

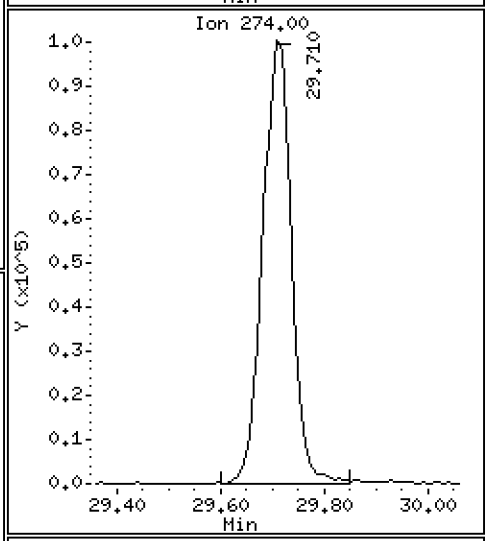


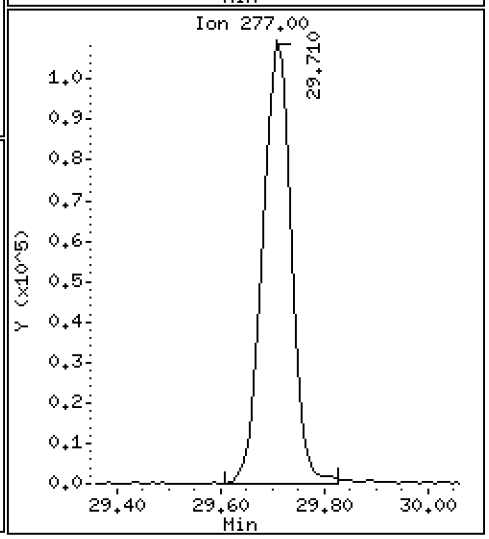












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

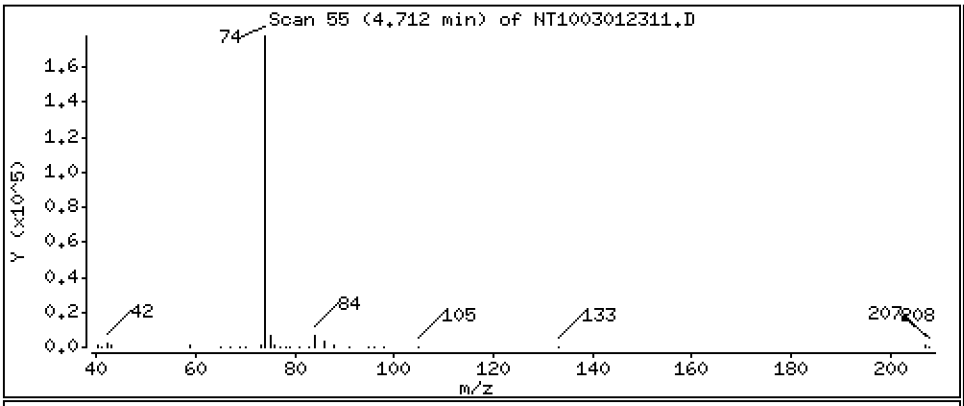
Operator: VTS

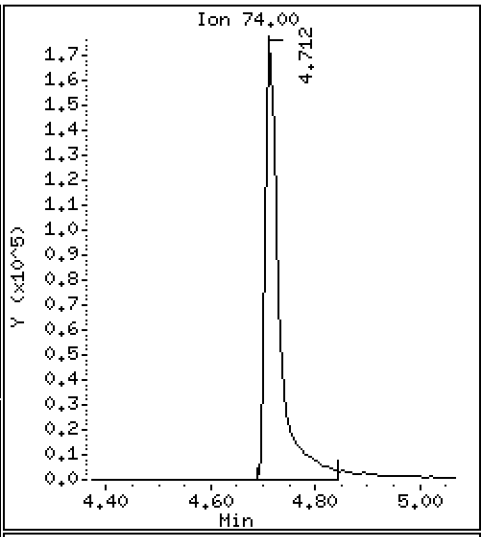
Column phase: ZB-5msi

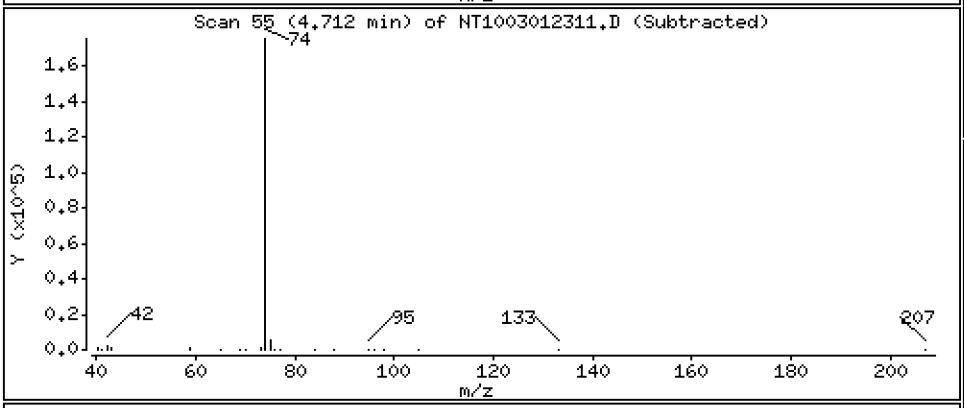
Column diameter: 0.25

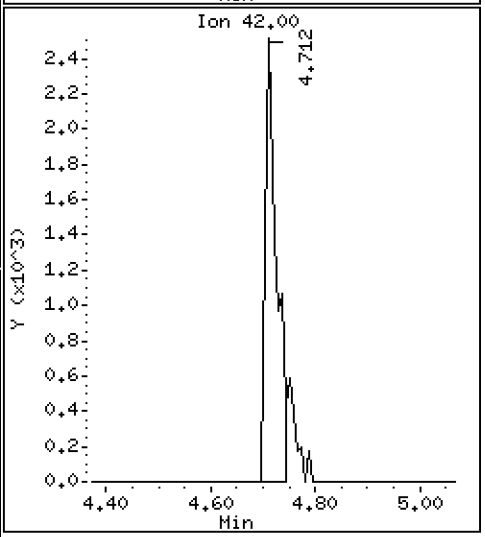
90 N-Nitrosodimethylamine

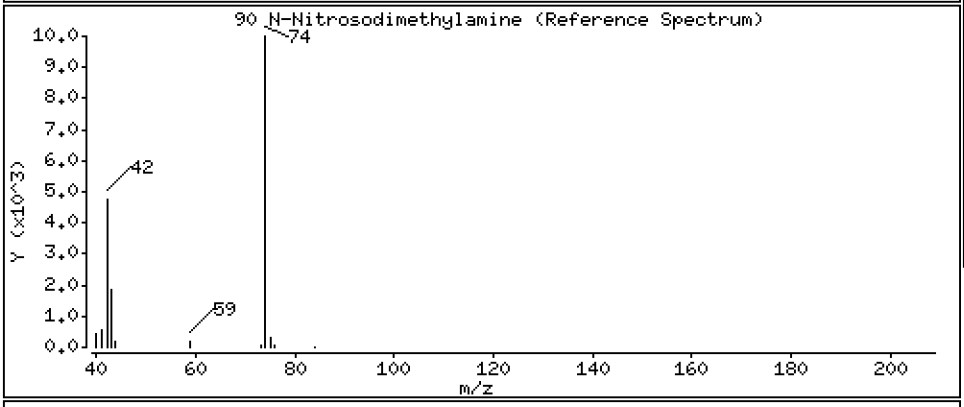
Concentration: 5.491 ug/mL

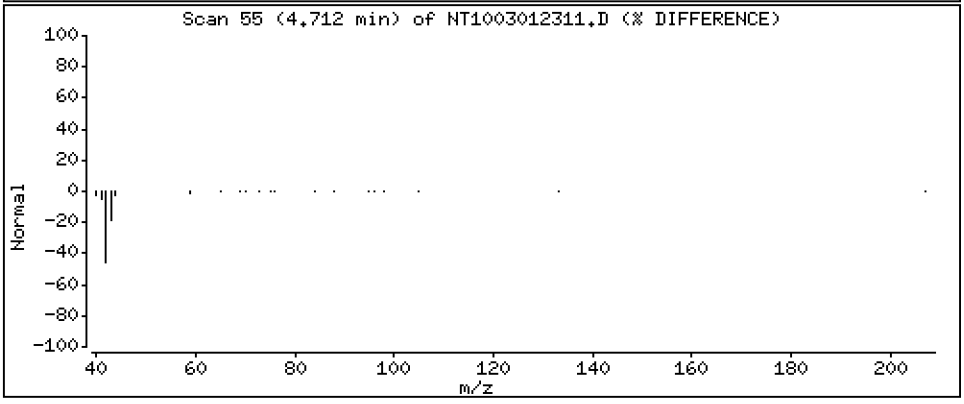












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

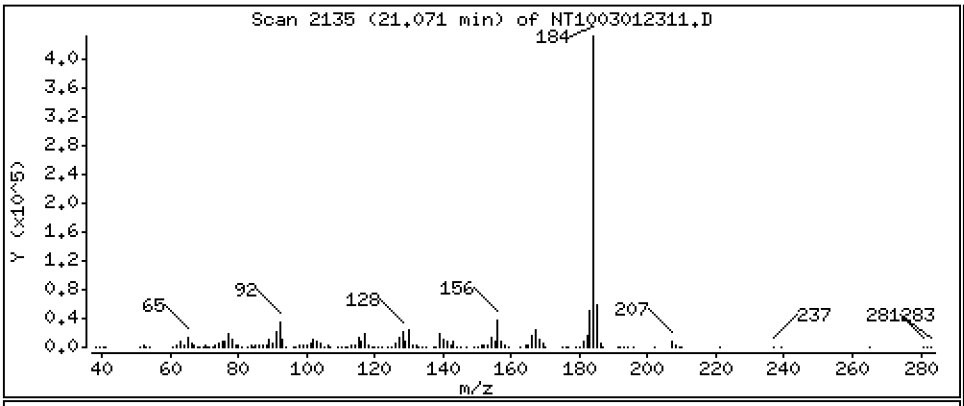
Operator: VTS

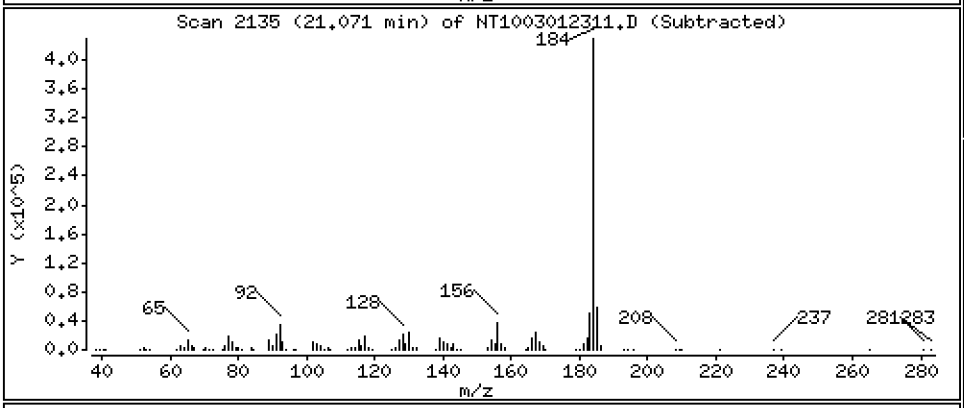
Column phase: ZB-5msi

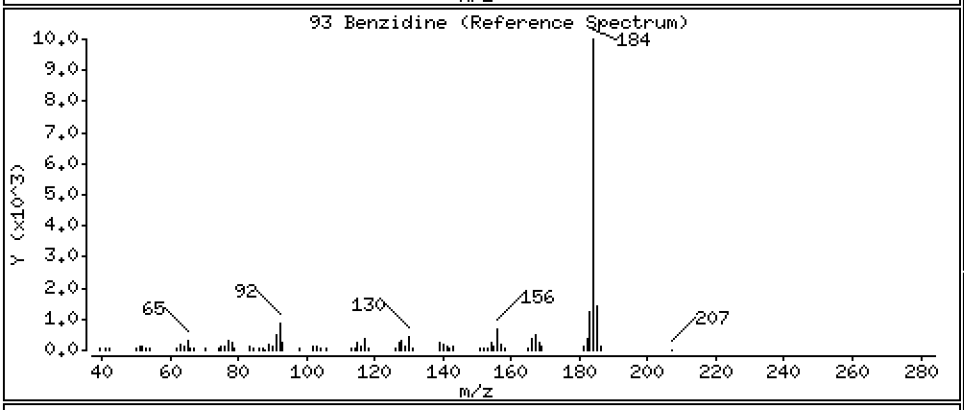
Column diameter: 0.25

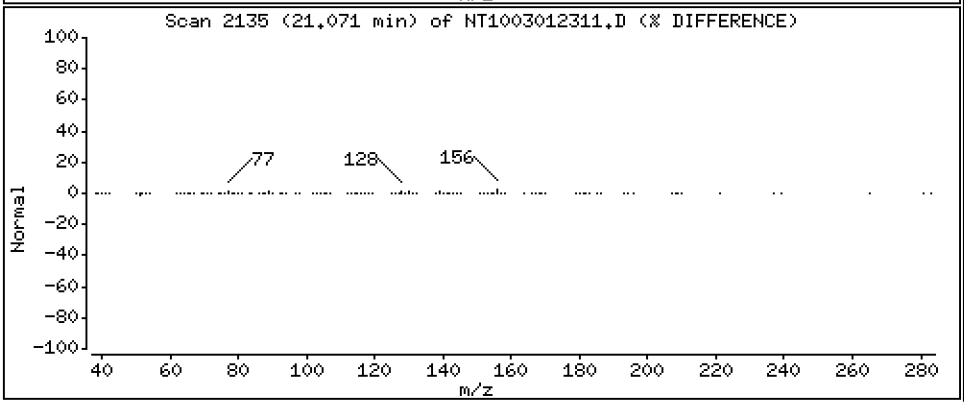
93 Benzidine

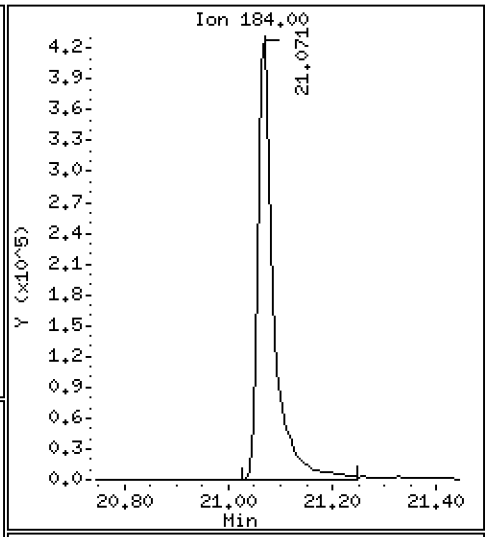
Concentration: 5.007 ug/mL

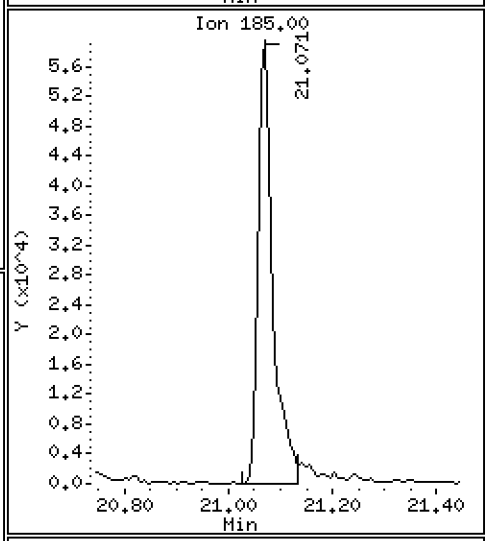


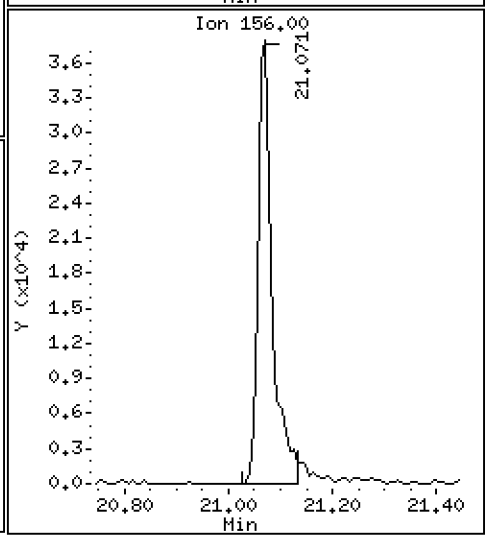












Data File: \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

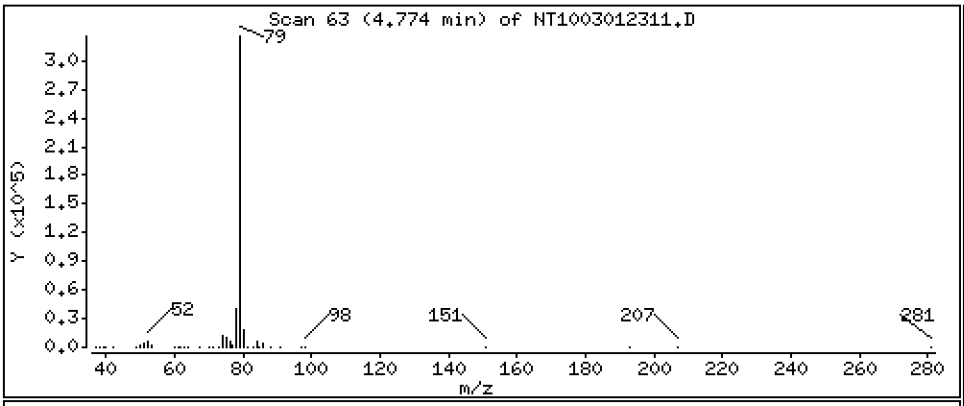
Operator: VTS

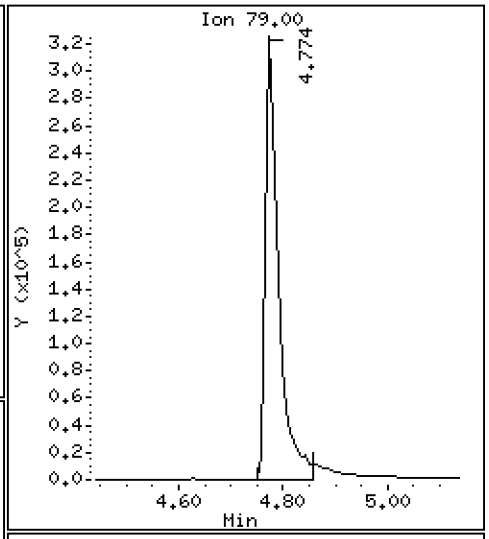
Column phase: ZB-5msi

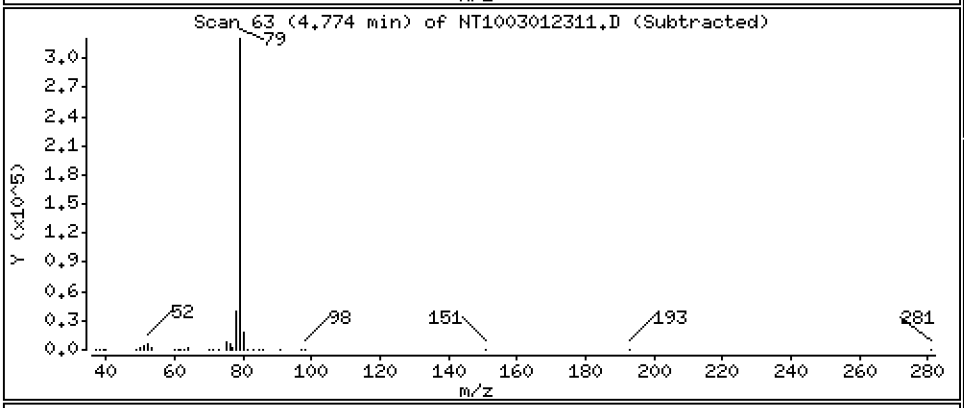
Column diameter: 0.25

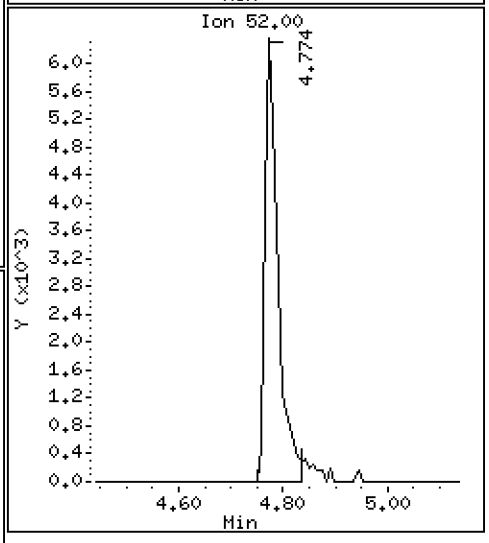
103 Pyridine

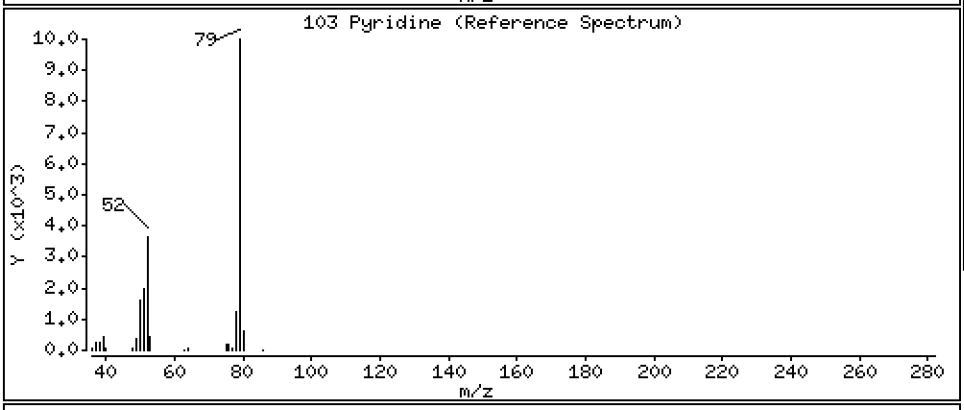
Concentration: 5.430 ug/mL

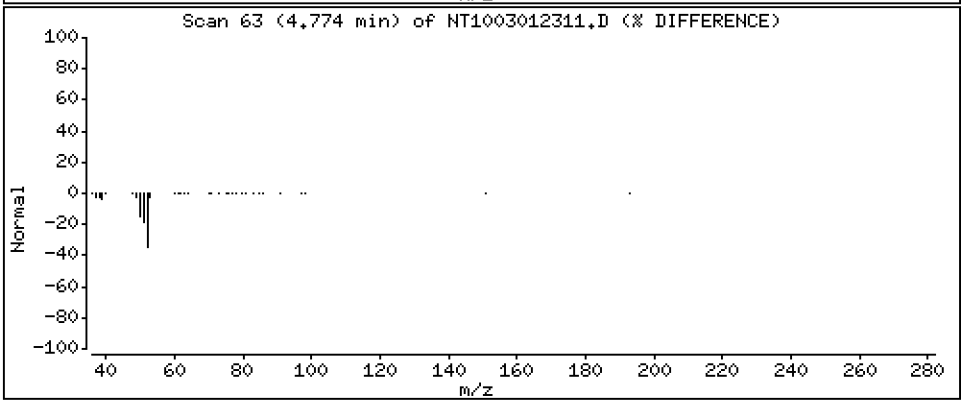












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

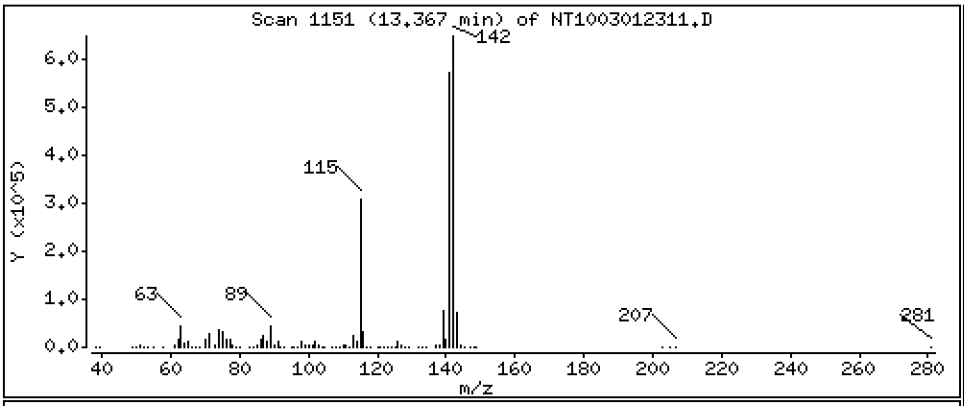
Operator: VTS

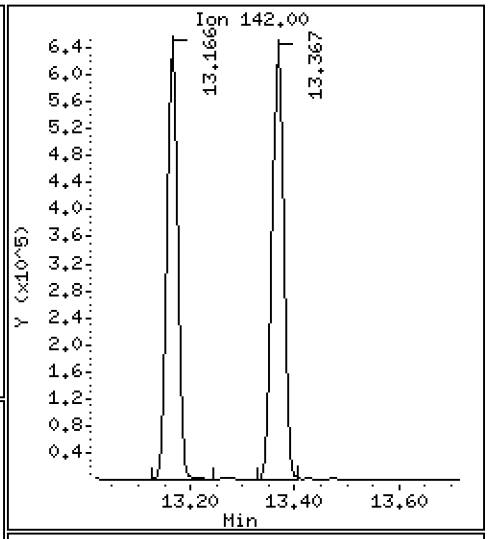
Column phase: ZB-5msi

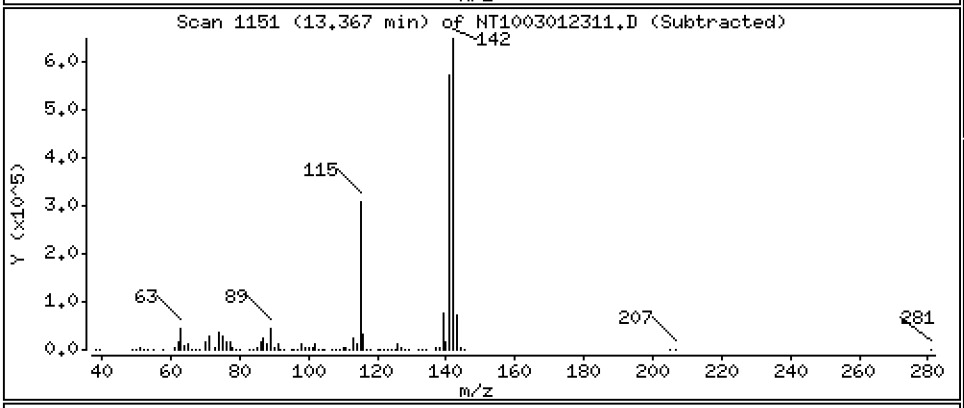
Column diameter: 0.25

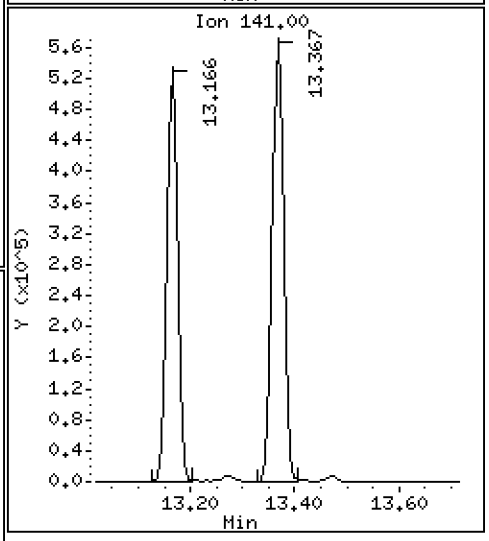
105 1-methylnaphthalene

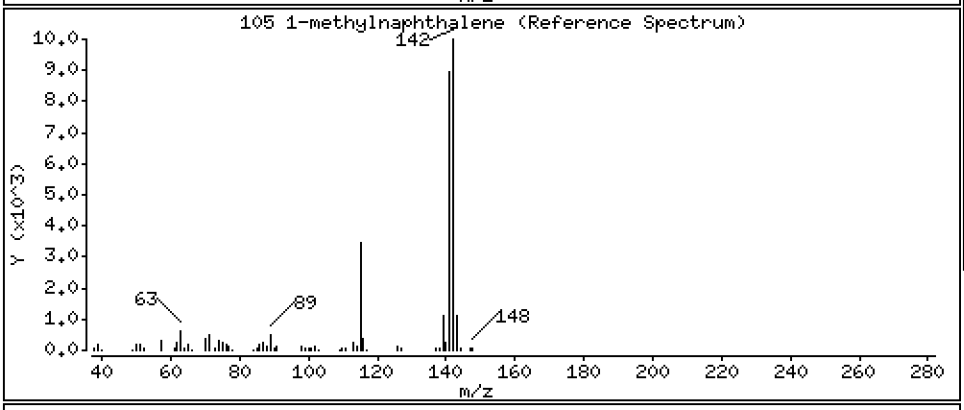
Concentration: 5.219 ug/mL

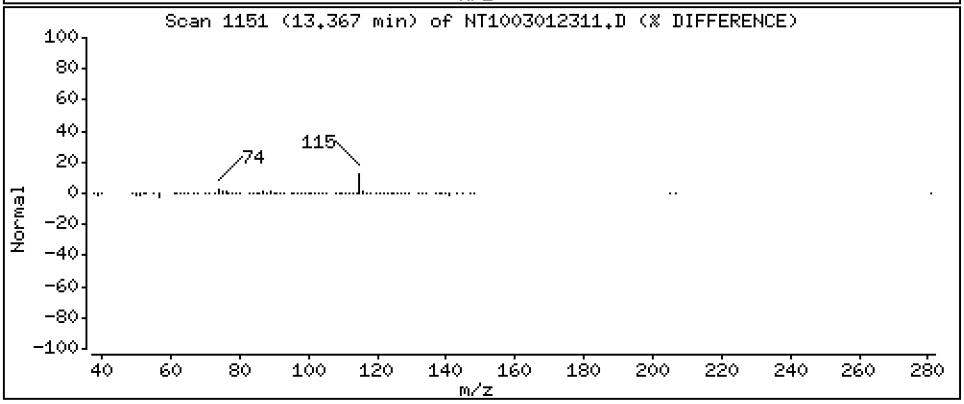












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

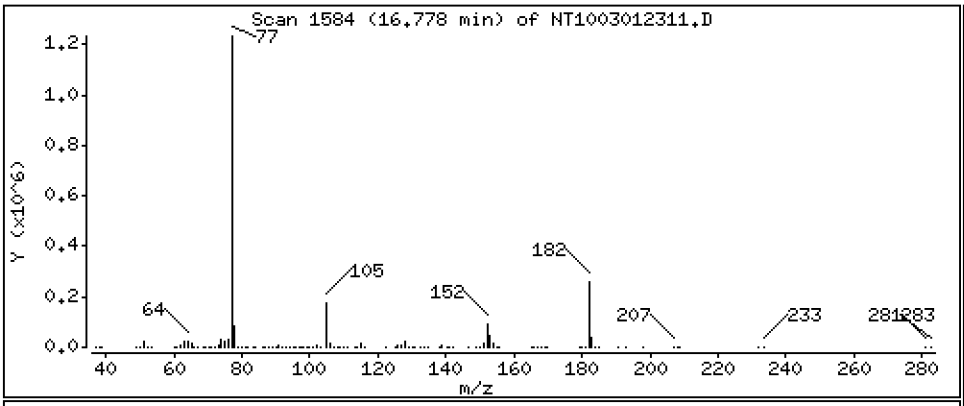
Operator: VTS

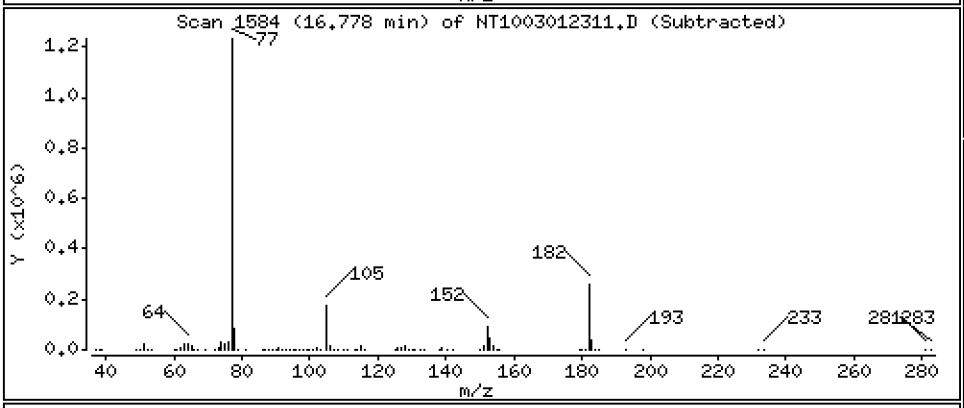
Column phase: ZB-5msi

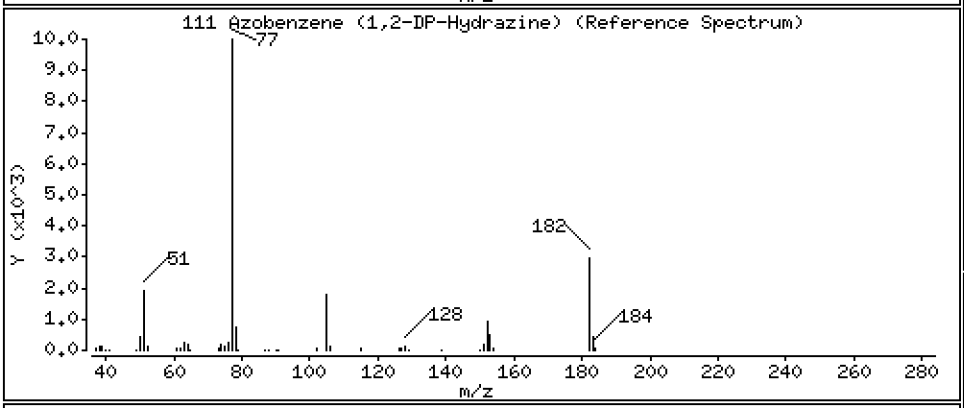
Column diameter: 0.25

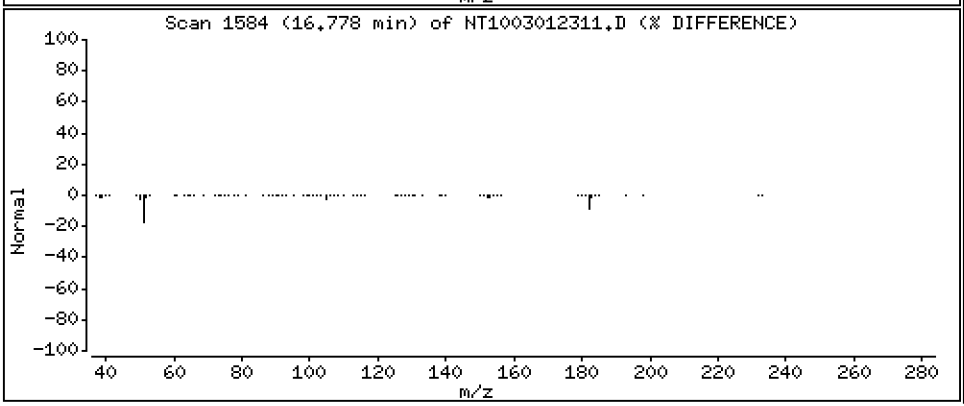
111 Azobenzene (1,2-DP-Hydrazine)

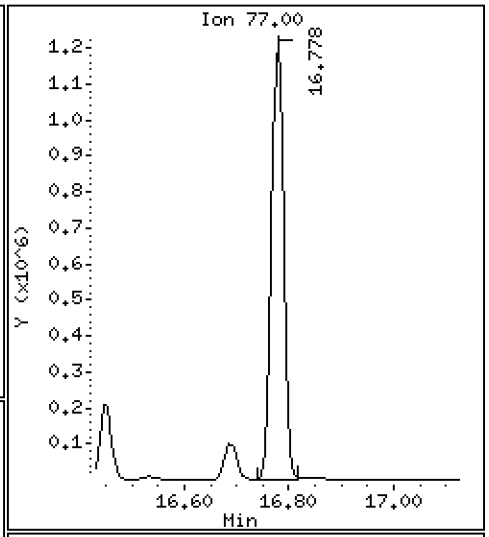
Concentration: 5.953 ug/mL

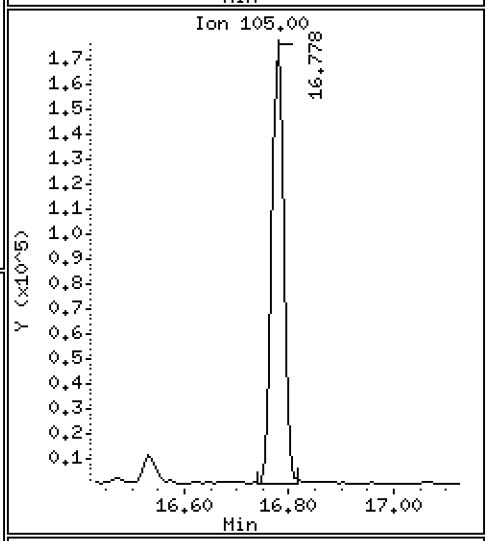


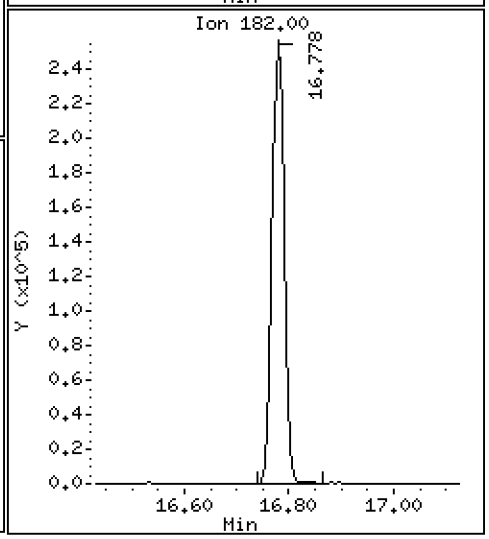












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

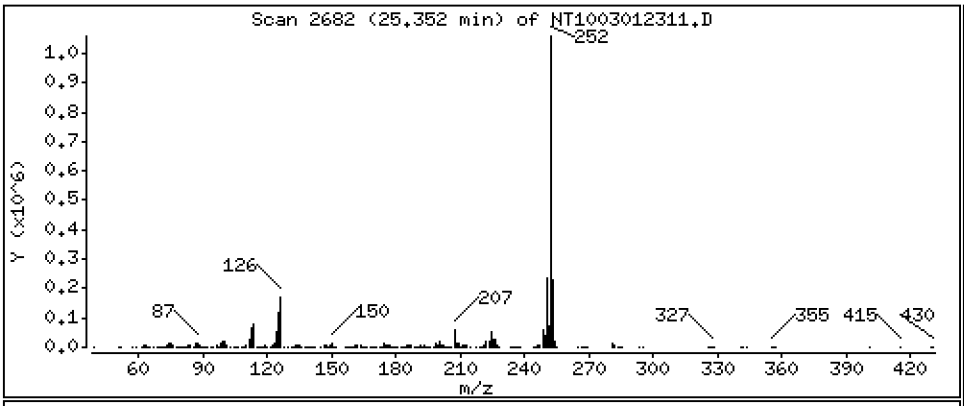
Operator: VTS

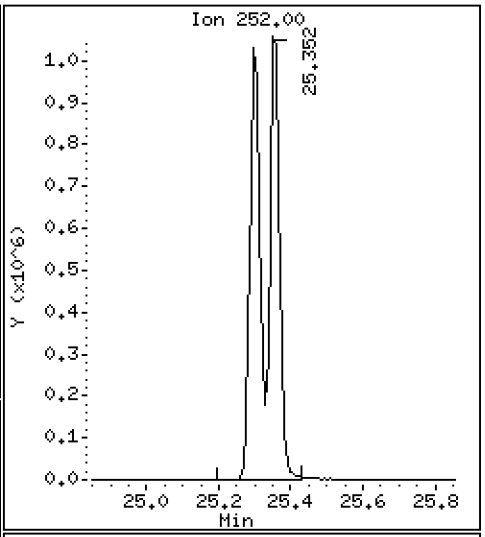
Column phase: ZB-5msi

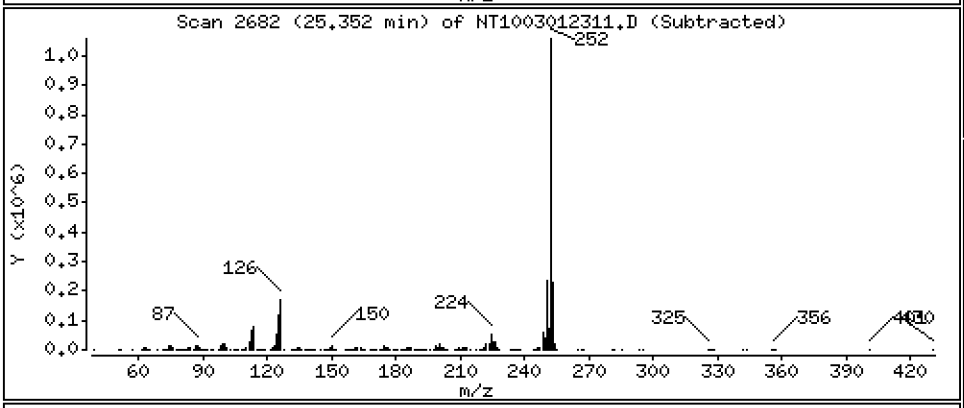
Column diameter: 0.25

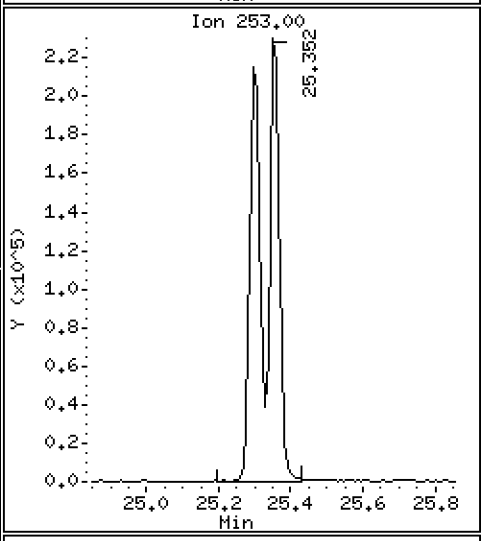
187 Total Benzofluoranthenes

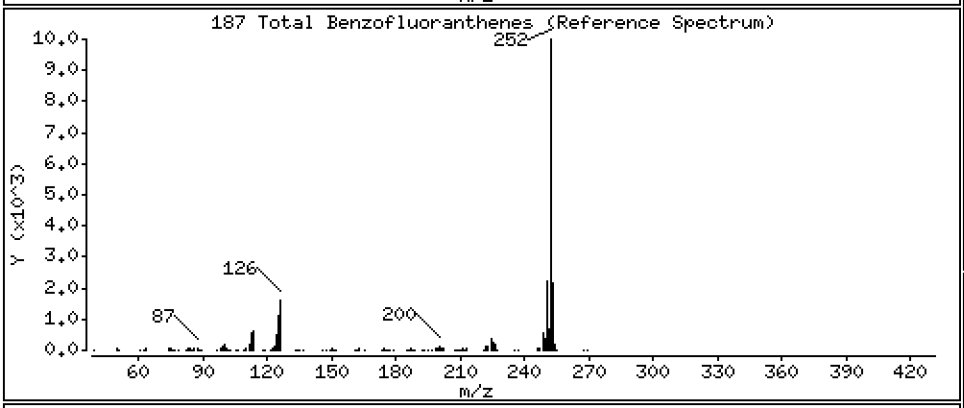
Concentration: 8.905 ug/mL

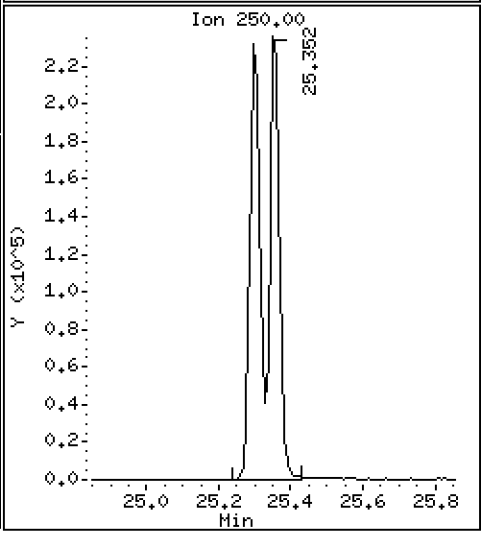


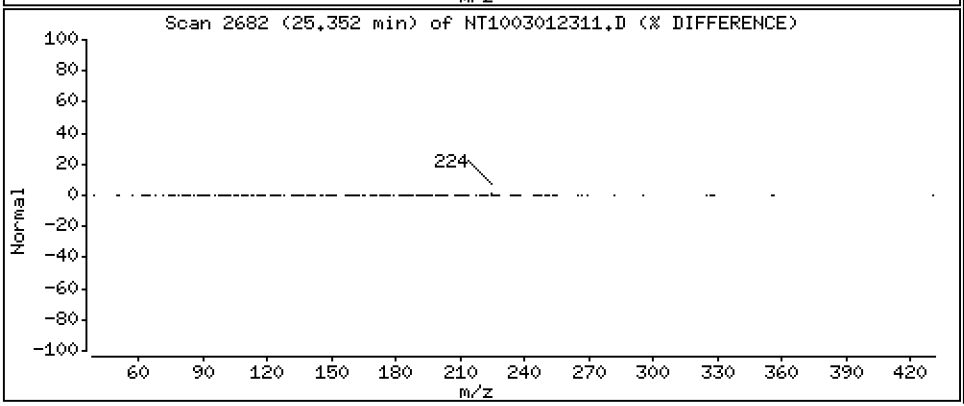












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

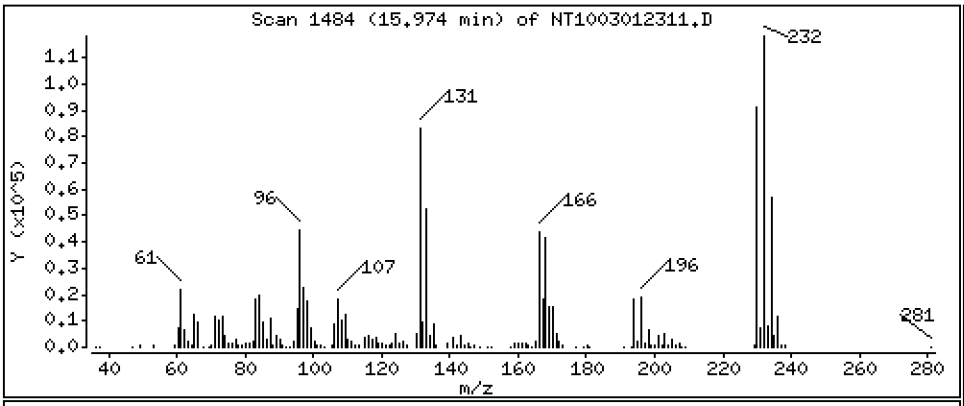
Operator: VTS

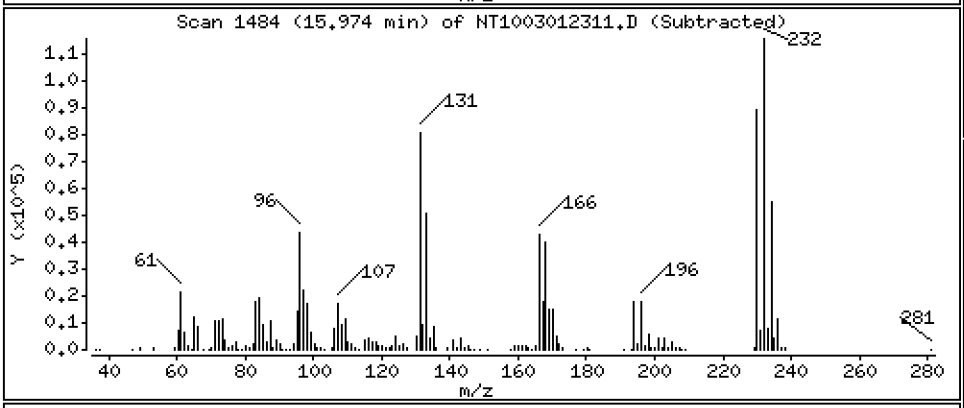
Column phase: ZB-5msi

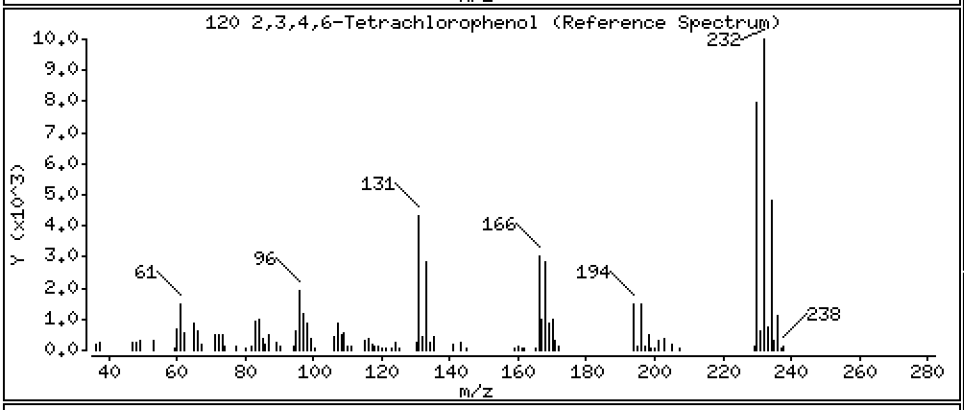
Column diameter: 0.25

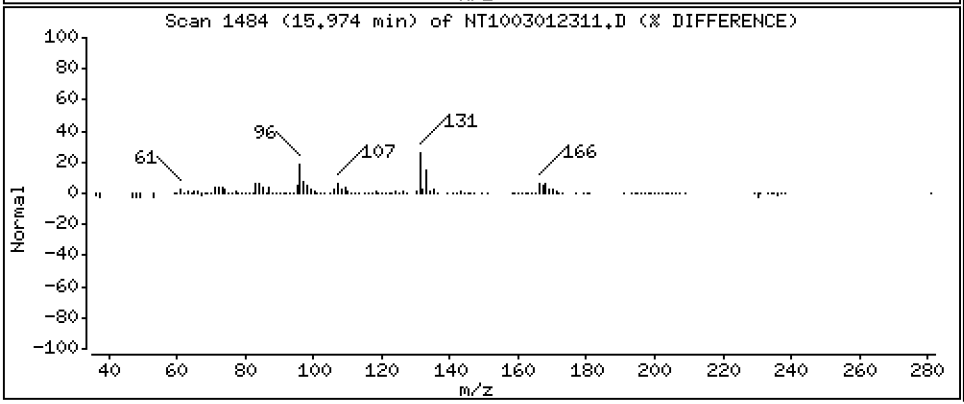
120 2,3,4,6-Tetrachlorophenol

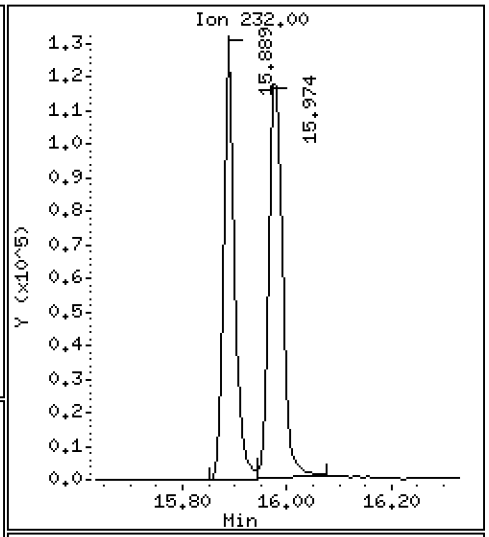
Concentration: 3.534 ug/mL

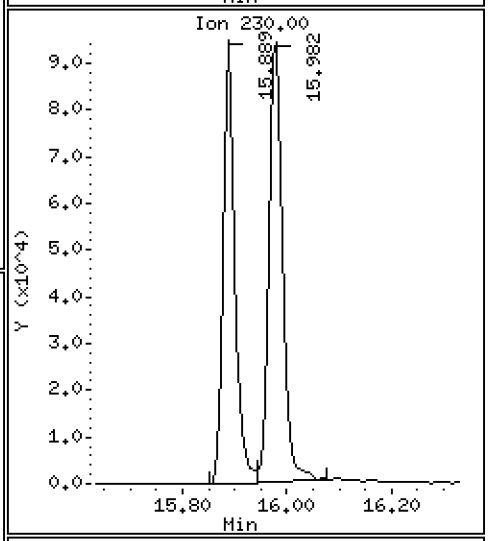


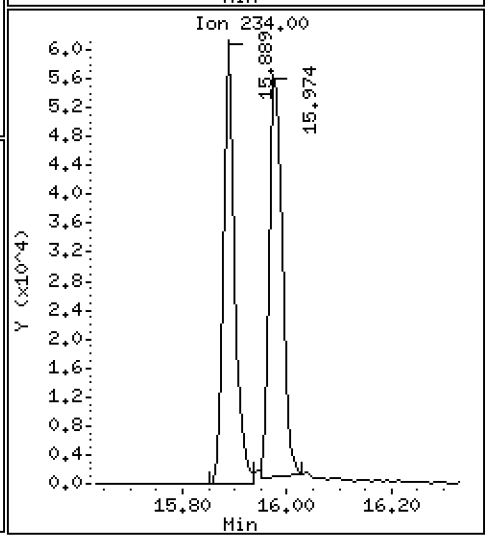












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230301.b\NT1003012311.D
Lab Smp Id: SLC0084-SCV1
Inj Date : 01-MAR-2023 21:46
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230301.b\ABN.m
Meth Date : 07-Mar-2023 12:44 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 19:15 Cal File: NT1003012307.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: ORGDATA102

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

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

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

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012311.D
Lab Smp Id: SLC0084-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230301.b\ABN.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 17:21
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

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

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

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

REVIEW SUMMARY FOR FILE - NT1003012311.D

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

RT	CO-ELUTION COMPOUNDS
23.401	bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

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

RRT CHECK

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

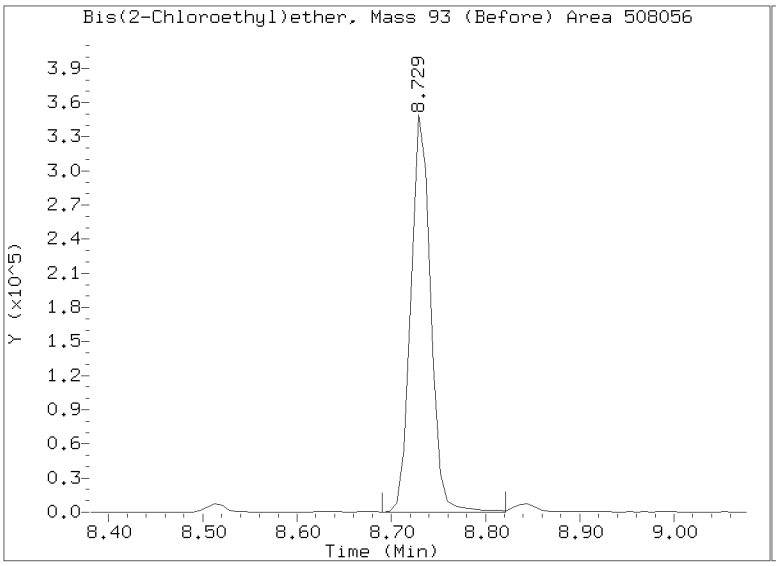
RRT check based on Ccal File: NT1003012307.D

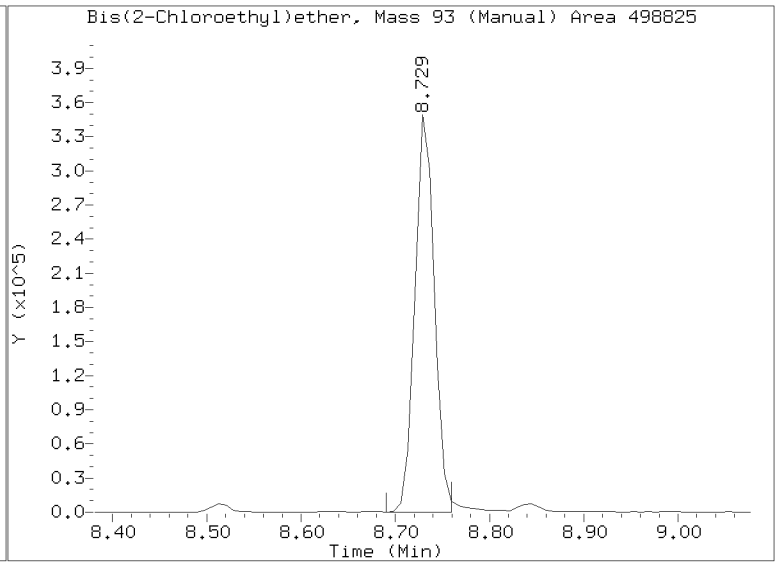
On Column LOD for nt10.i, 20230301.b\ABN.m, ICAL.sub = 0.0000

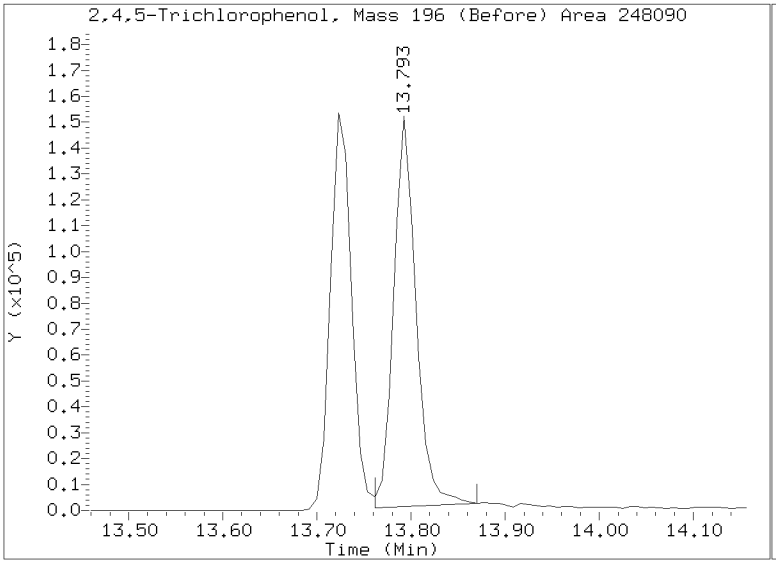
* Only compounds listed in the work order have been verified by the analyst *

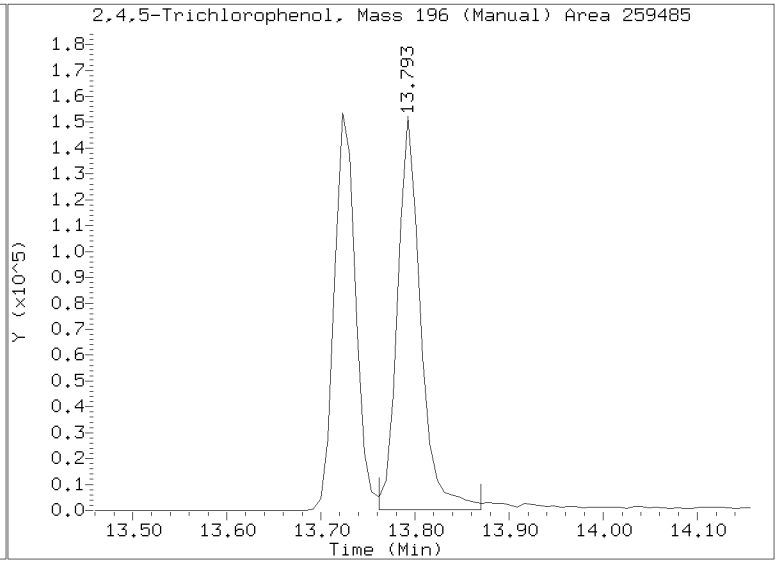
Quant Ion Manual Peak Adjustment Report

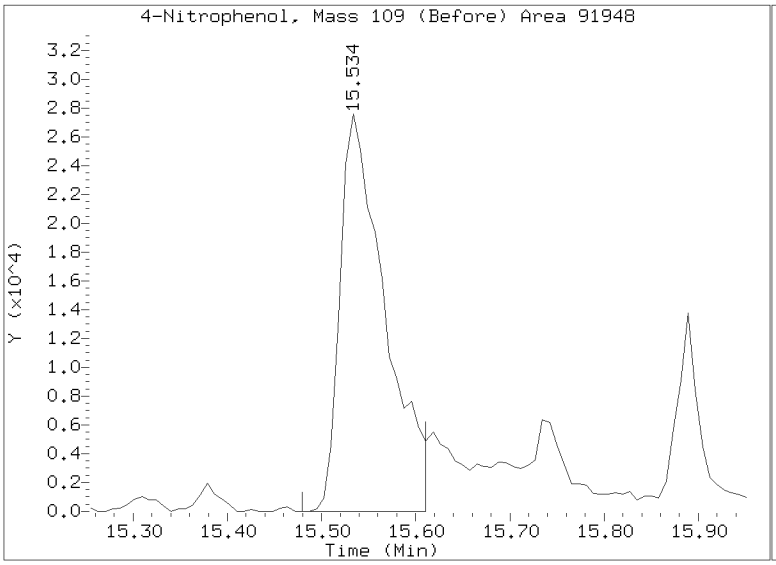
Datafile: //target/share/chem3/nt10.i/20230301.b/NT1003012311.D
Injection Date: 01-MAR-2023 21:46
Lab ID:SLC0084-SCV1 Client ID:
Report Date: 03/07/2023 12:48

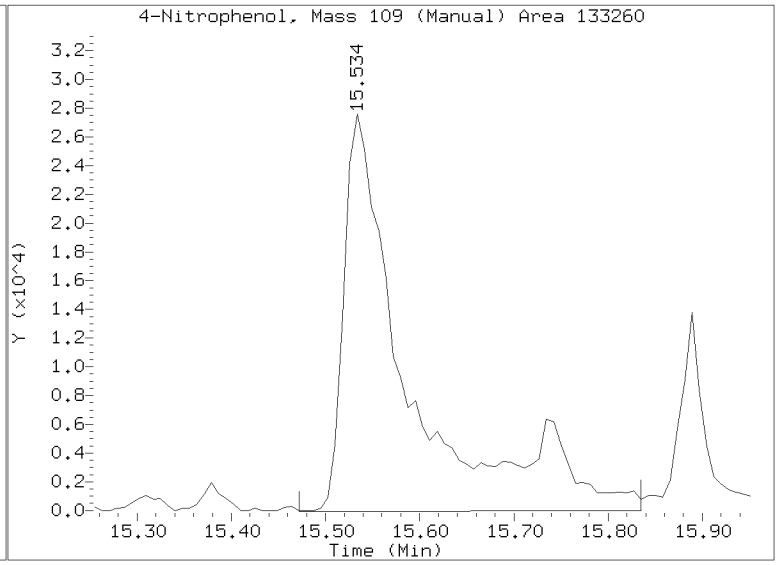












Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E

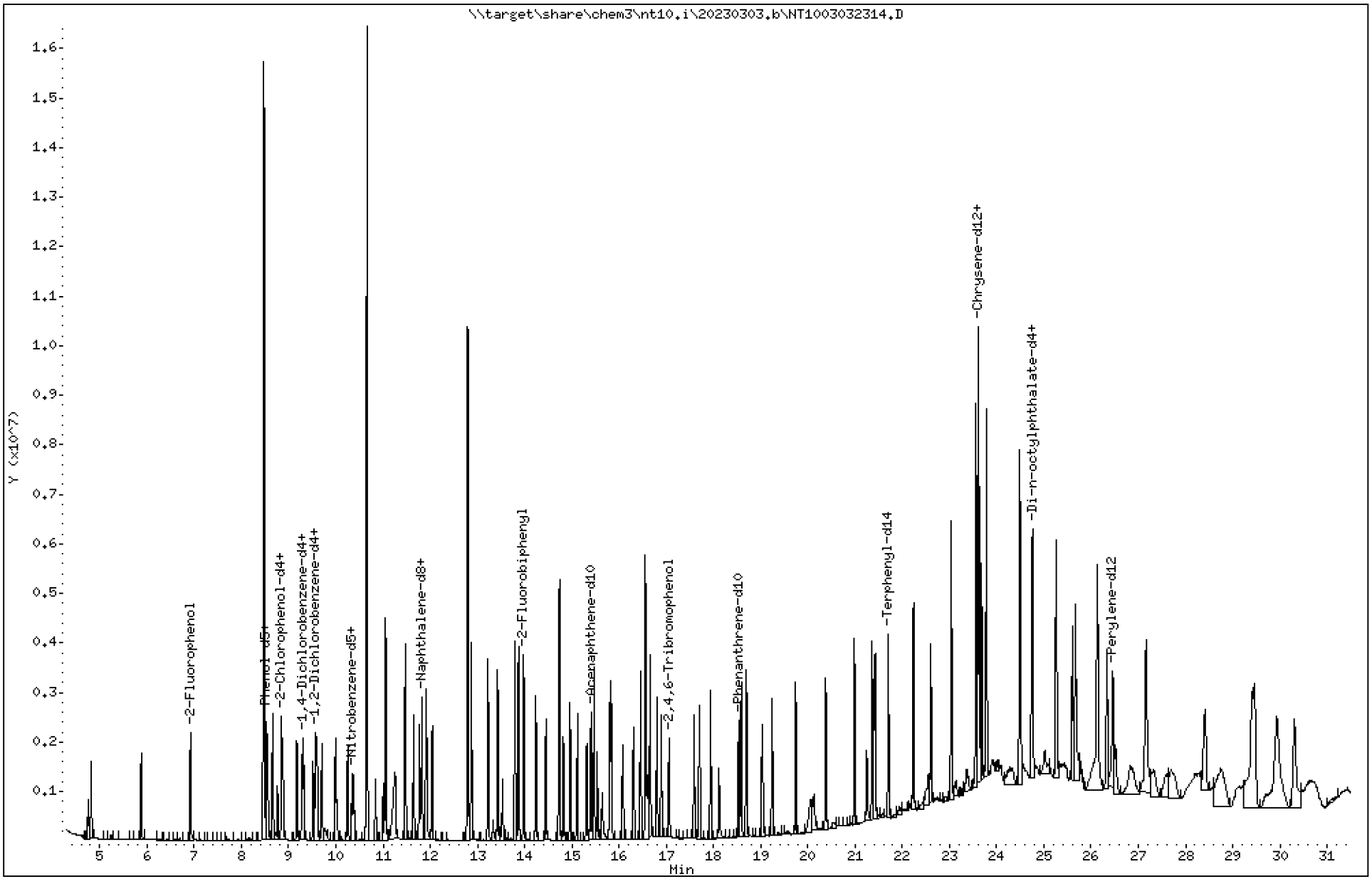
Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00019
Lab File ID:	NT1003032314.D	Calibration Date:	03/01/2023
Sequence:	SLC0161	Injection Date:	03/04/23
Lab Sample ID:	SLC0161-CCV1	Injection Time:	02:02
Sequence Name:	ABN 5		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	5.0000	5.3	1.5534590	1.6602960		6.9	+/-50
4-Methylphenol	A	5.0000	4.3	1.2087680	1.2819730		-14.2	+/-50
Naphthalene	A	5.0000	4.9	1.0266520	0.9967383		-2.9	+/-50
2-Methylnaphthalene	A	5.0000	5.0	0.7252818	0.7318050		0.9	+/-50
Acenaphthylene	A	5.0000	2.8	1.9309320	1.0965990		-43.2	+/-50
Dimethylphthalate	A	5.0000	4.7	1.2917940	1.2240910		-5.2	+/-50
Acenaphthene	A	5.0000	4.9	1.1645250	1.1482420		-1.4	+/-50
Dibenzofuran	A	5.0000	5.0	1.7283260	1.7249870		-0.2	+/-50
Fluorene	A	5.0000	5.4	1.4379840	1.5509940		7.9	+/-50
Phenanthrene	A	5.0000	5.0	1.0236730	1.0257400		0.2	+/-50
Anthracene	A	5.0000	5.3	0.9926226	1.0541720		6.2	+/-50
Fluoranthene	A	5.0000	4.4	1.3760330	1.2154940		-11.7	+/-50
Pyrene	A	5.0000	4.1	1.4011560	1.1429540		-18.4	+/-50
Butylbenzylphthalate	A	5.0000	4.1	0.6475451	0.6128258		-17.5	+/-50
Benzo(a)anthracene	A	5.0000	4.7	1.4104100	1.3333340		-5.5	+/-50
Chrysene	A	5.0000	5.1	1.1462500	1.1734070		2.7	+/-50
bis(2-Ethylhexyl)phthalate	A	5.0000	4.9	0.5331838	0.5720508		-1.1	+/-50
Benzofluoranthenes, Total	A	10.000	9.0	1.3383070	1.2372050		-10.1	+/-50
Benzo(a)pyrene	A	5.0000	4.4	1.2312020	1.1125420		-12.9	+/-50
Indeno(1,2,3-cd)pyrene	A	5.0000	4.8	1.4033590	1.4378990		-4.2	+/-50
Dibenzo(a,h)anthracene	A	5.0000	5.1	1.1150690	1.1728430		2.0	+/-50
Benzo(g,h,i)perylene	A	5.0000	4.9	1.1245240	1.1520030		-2.8	+/-50
2-Fluorophenol	A	7.5000	7.89	1.2585100	1.3244470		5.2	+/-50
Phenol-d5	A	7.5000	8.61	1.4611190	1.6764920		14.7	+/-50
2-Chlorophenol-d4	A	7.5000	8.83	1.2465880	1.4677750		17.7	+/-50
1,2-Dichlorobenzene-d4	A	5.0000	4.89	0.9313544	0.9109051		-2.2	+/-50
Nitrobenzene-d5	A	5.0000	5.15	0.4390871	0.4523605		3.0	+/-50
2-Fluorobiphenyl	A	5.0000	5.37	1.4267270	1.5331790		7.5	+/-50
2,4,6-Tribromophenol	A	7.5000	6.82	0.2287830	0.2344494		-9.0	+/-50
p-Terphenyl-d14	A	5.0000	4.44	1.1337350	1.0072420		-11.2	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D
Date : 04-MAR-2023 02:02
Client ID:
Sample Info: SEQ-CCVFULL
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

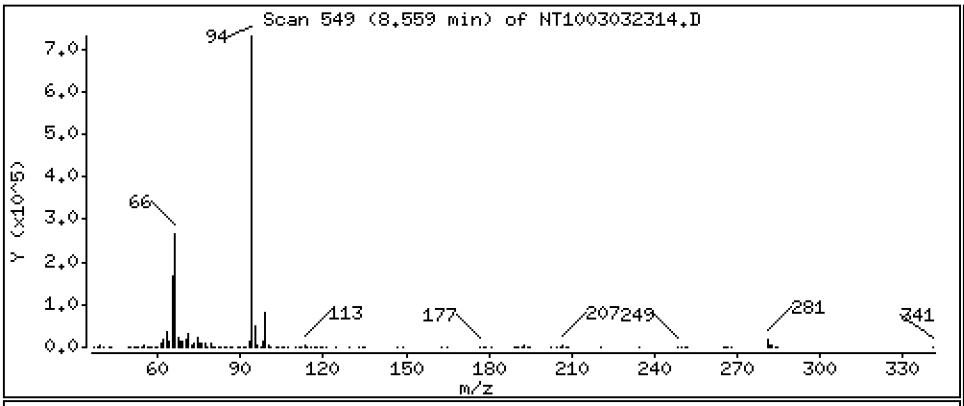
Operator: VTS

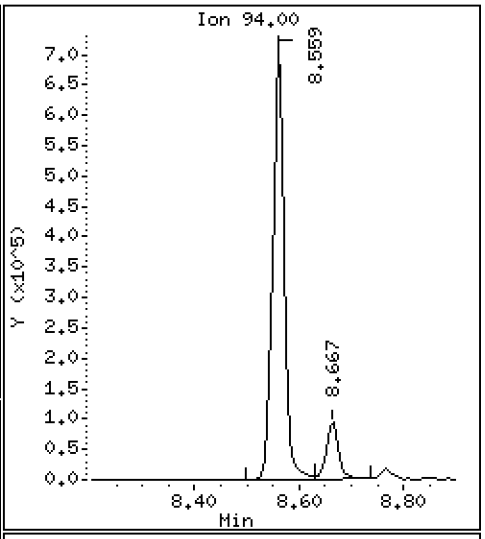
Column phase: ZB-5msi

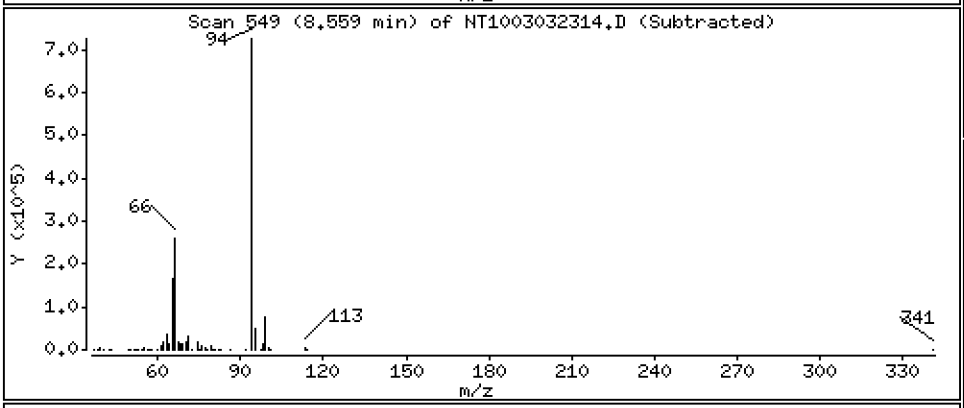
Column diameter: 0.25

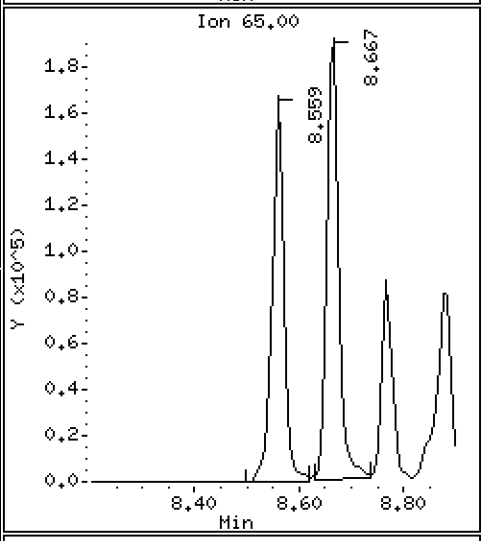
3 Phenol

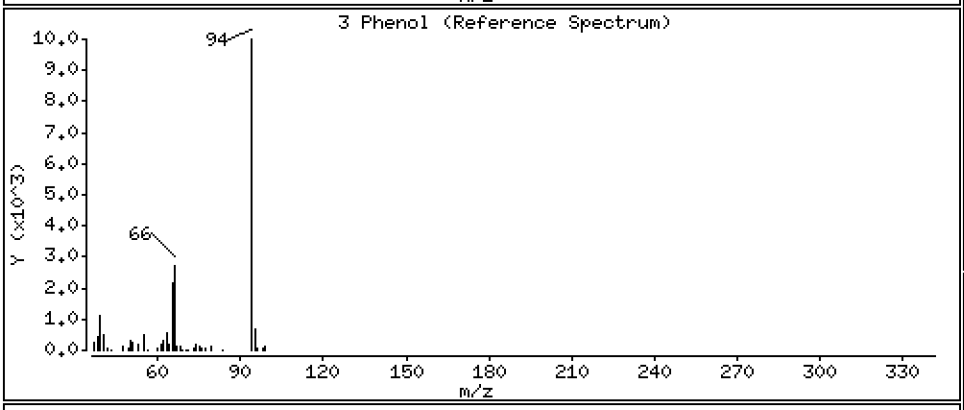
Concentration: 5.344 ug/ml

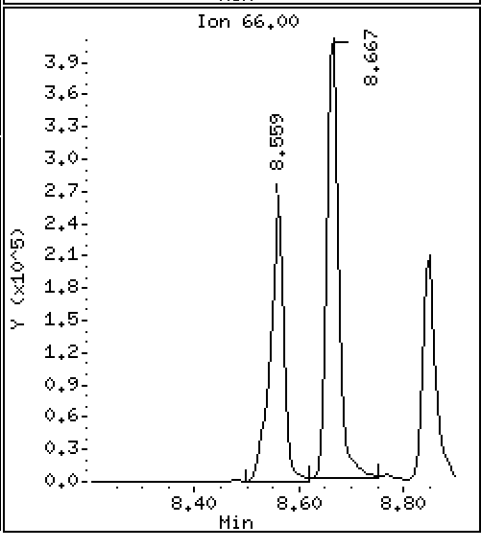


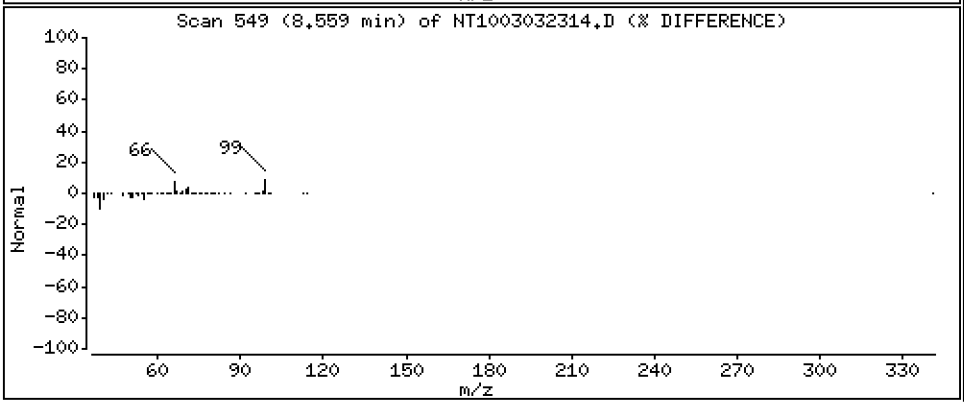












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

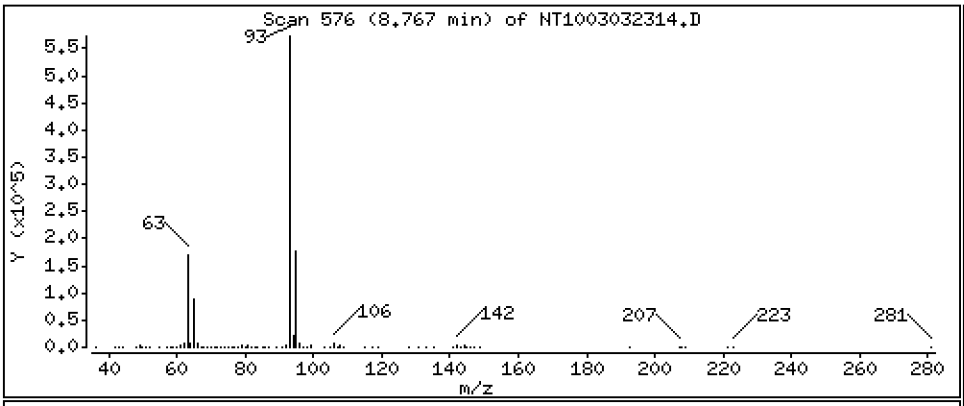
Operator: VTS

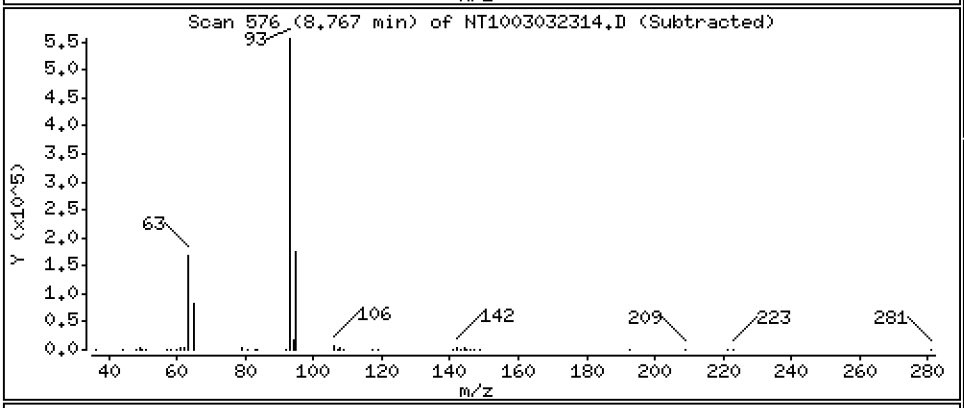
Column phase: ZB-5msi

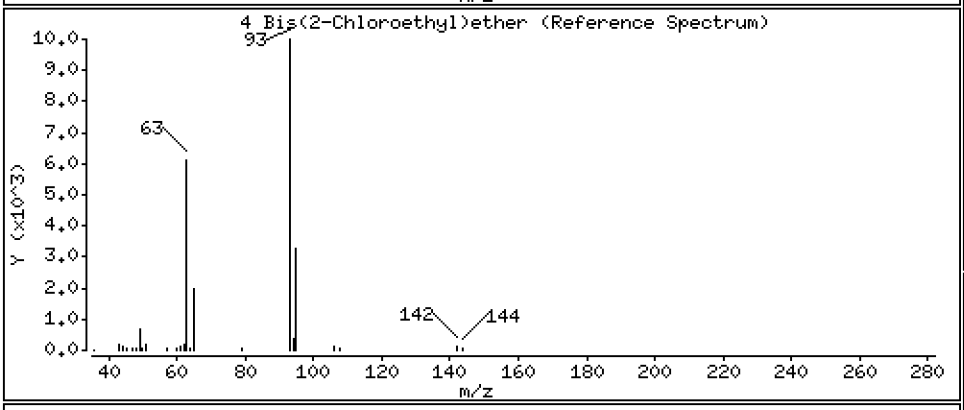
Column diameter: 0.25

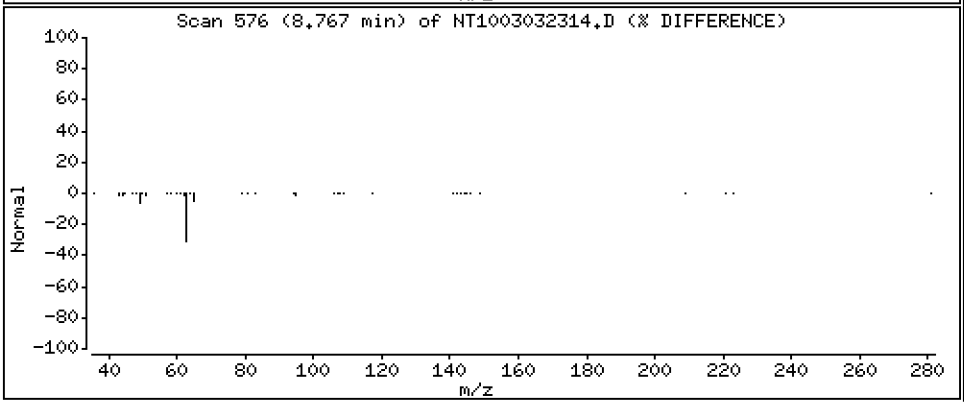
4 Bis(2-Chloroethyl)ether

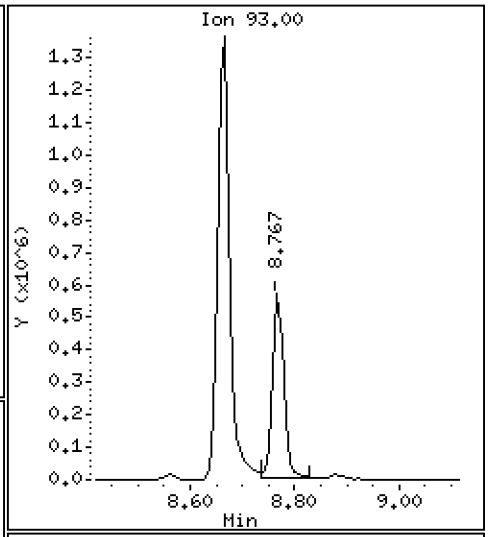
Concentration: 5.188 ug/ml

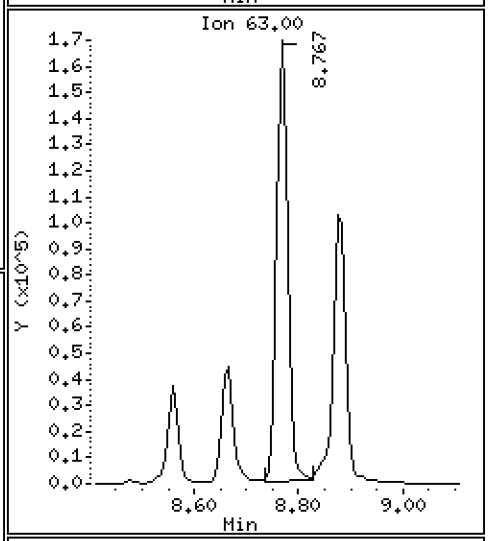


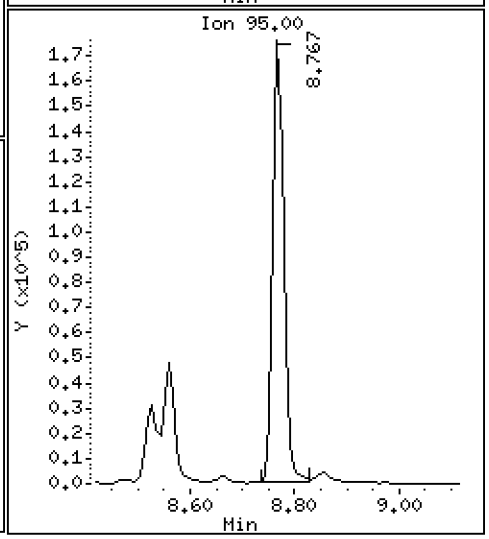












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

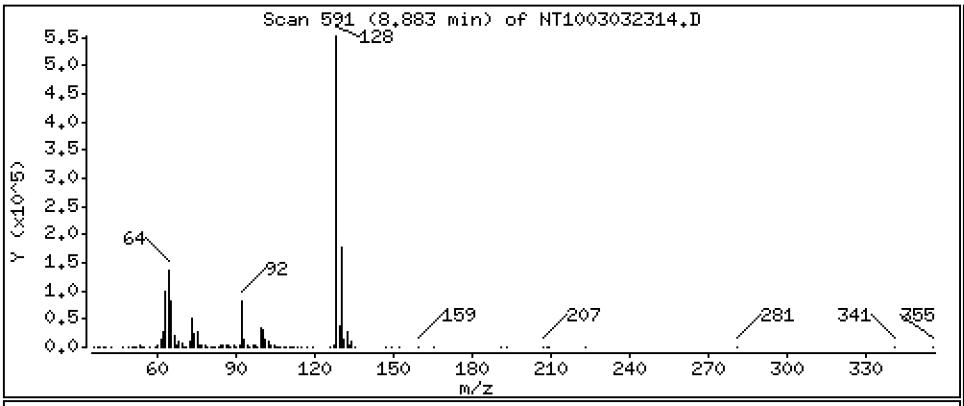
Operator: VTS

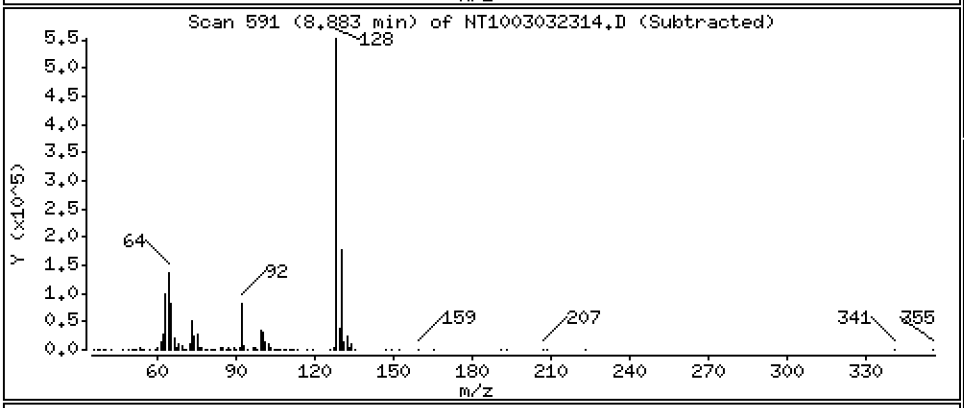
Column phase: ZB-5msi

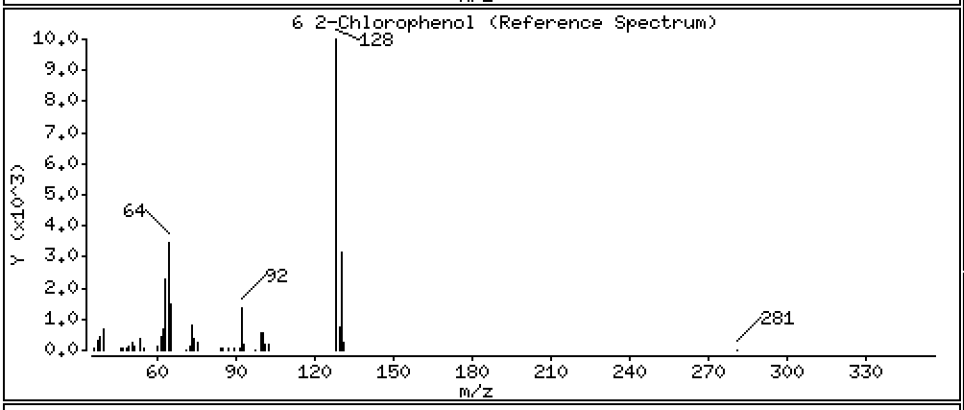
Column diameter: 0.25

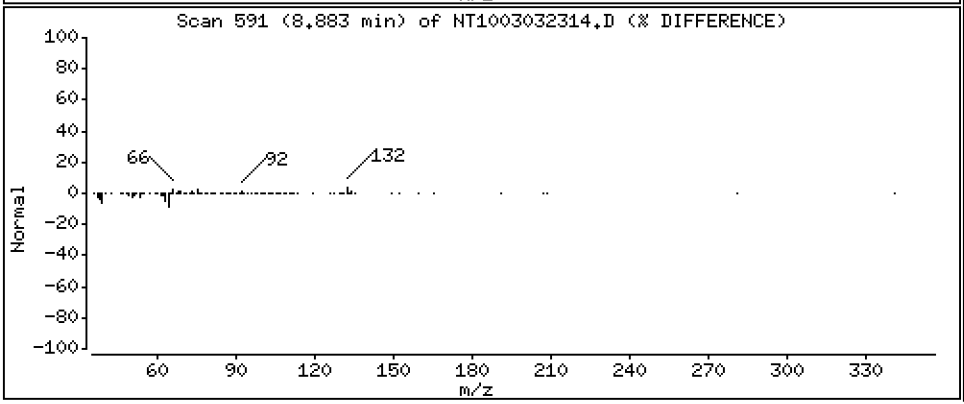
6 2-Chlorophenol

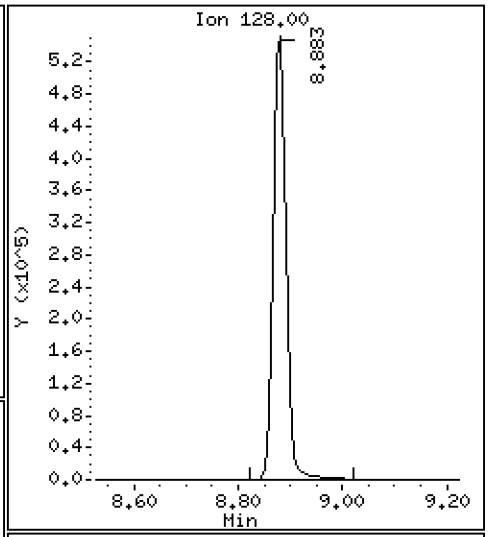
Concentration: 5.843 ug/ml

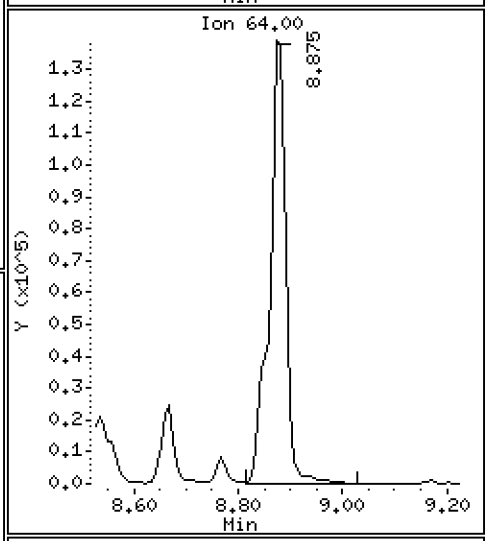


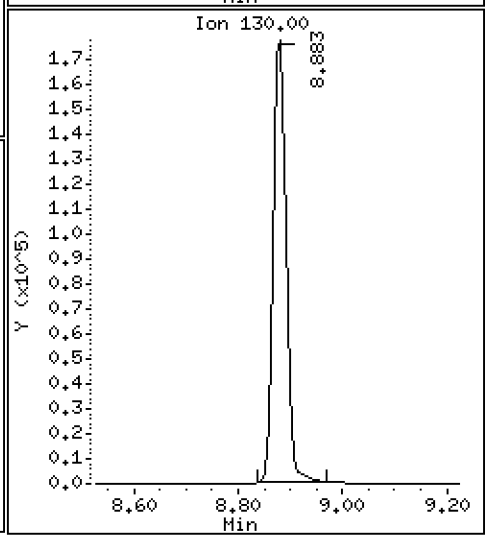












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

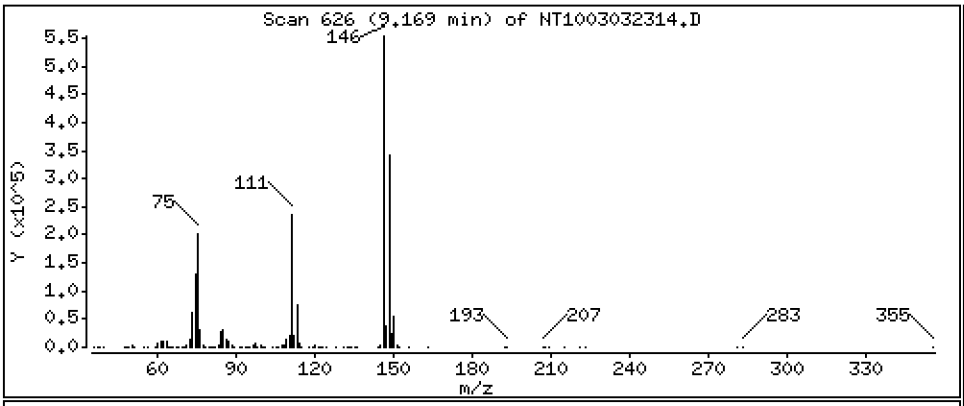
Operator: VTS

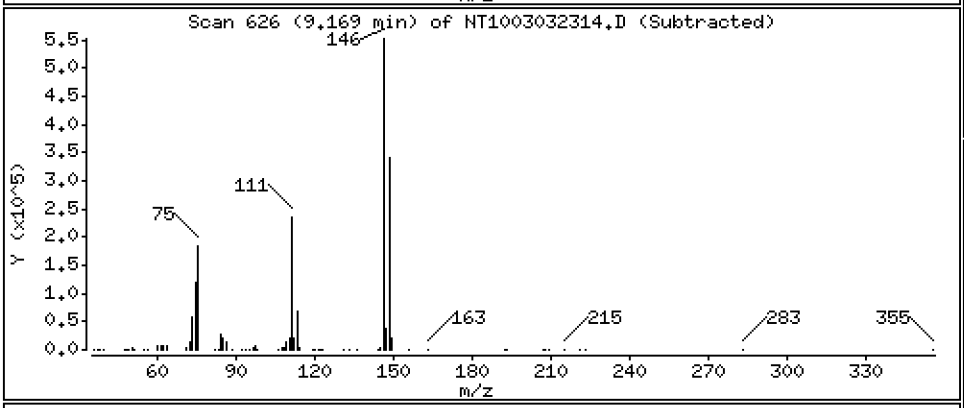
Column phase: ZB-5msi

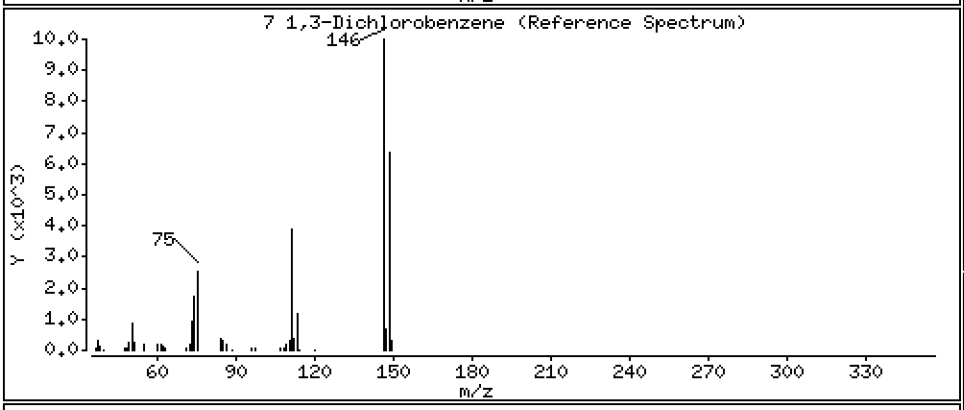
Column diameter: 0.25

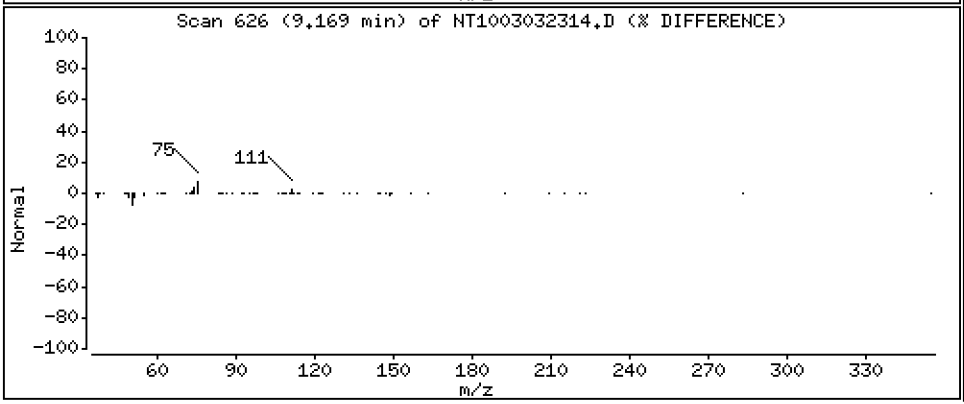
7 1,3-Dichlorobenzene

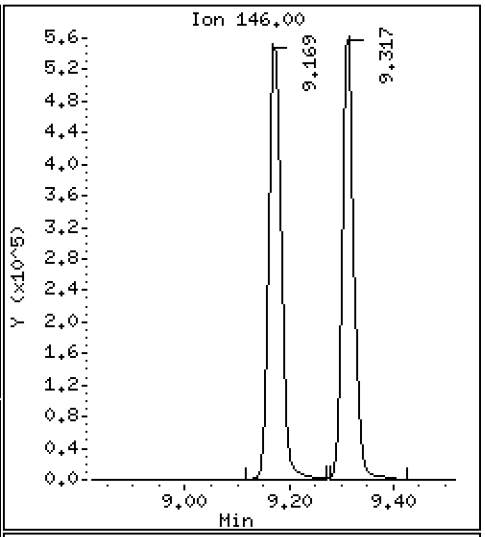
Concentration: 4.902 ug/ml

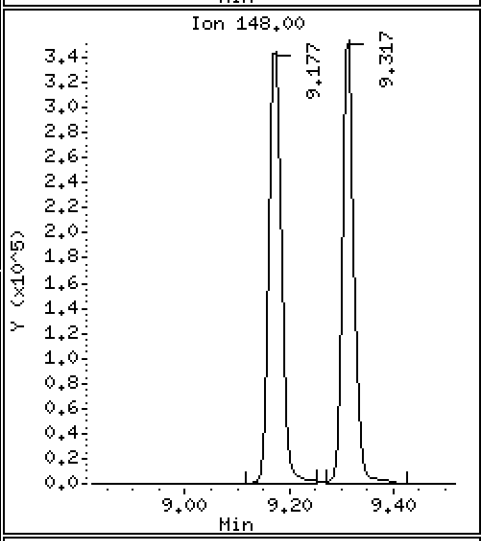


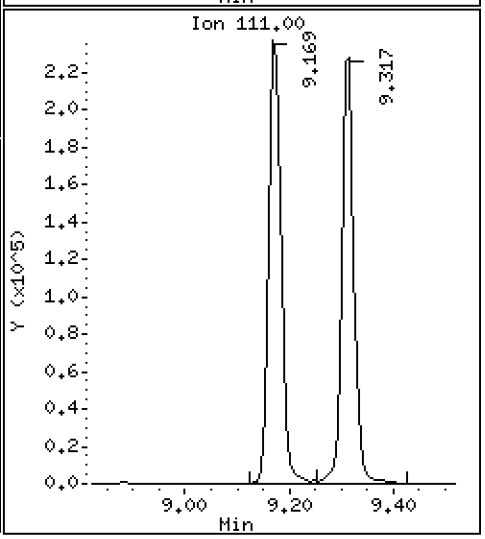












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

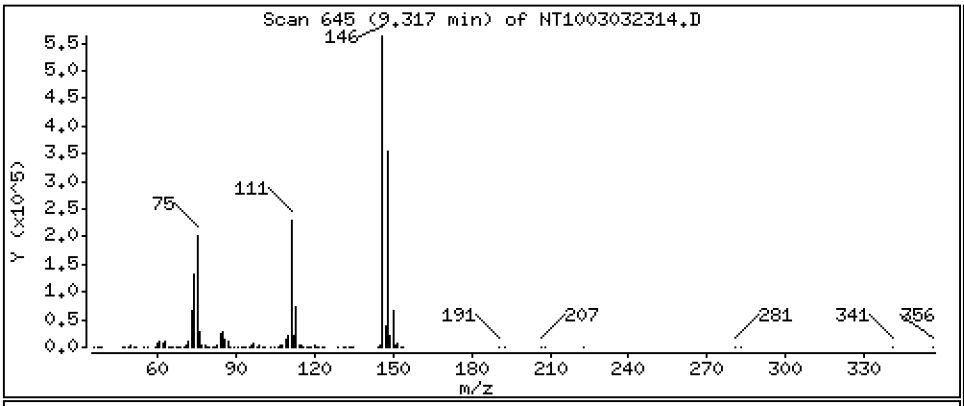
Operator: VTS

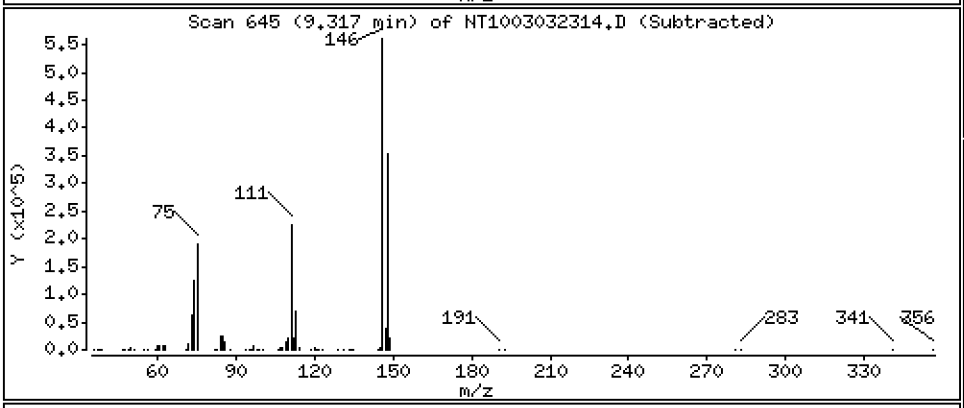
Column phase: ZB-5msi

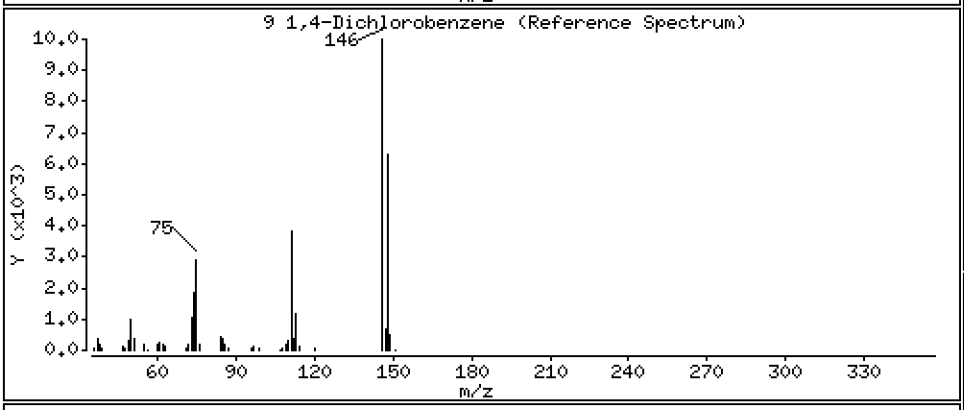
Column diameter: 0.25

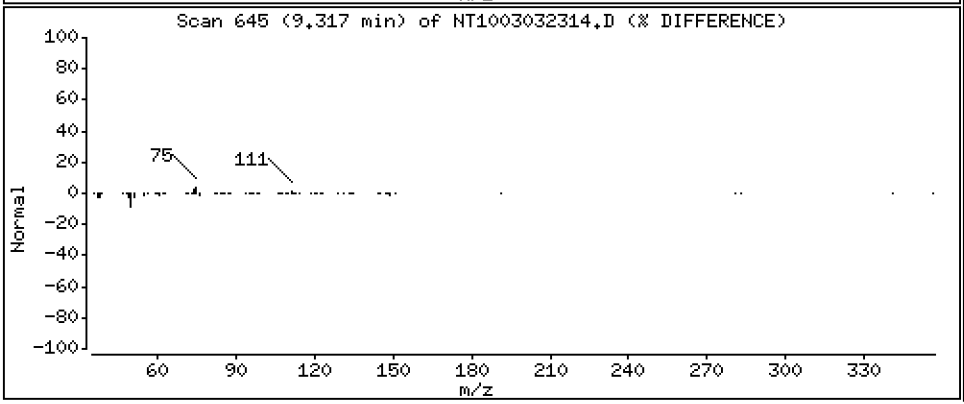
9 1,4-Dichlorobenzene

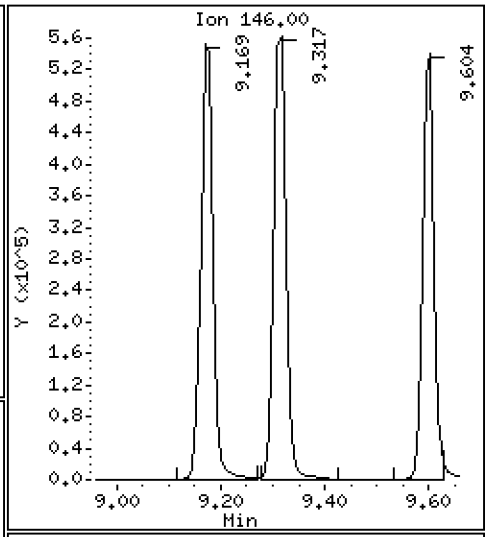
Concentration: 5.332 ug/ml

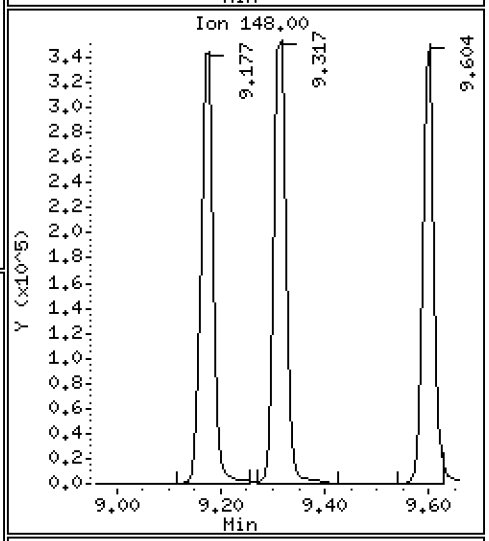


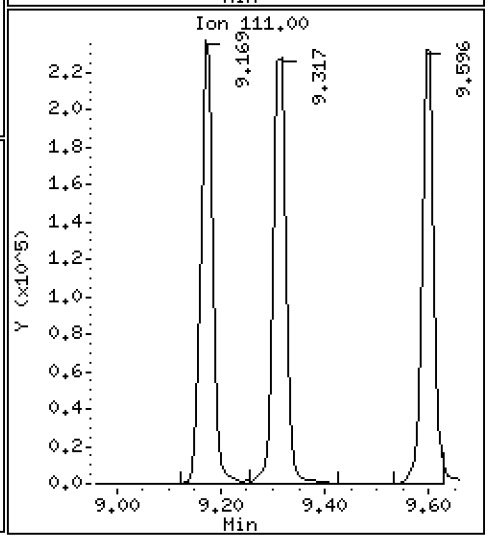












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

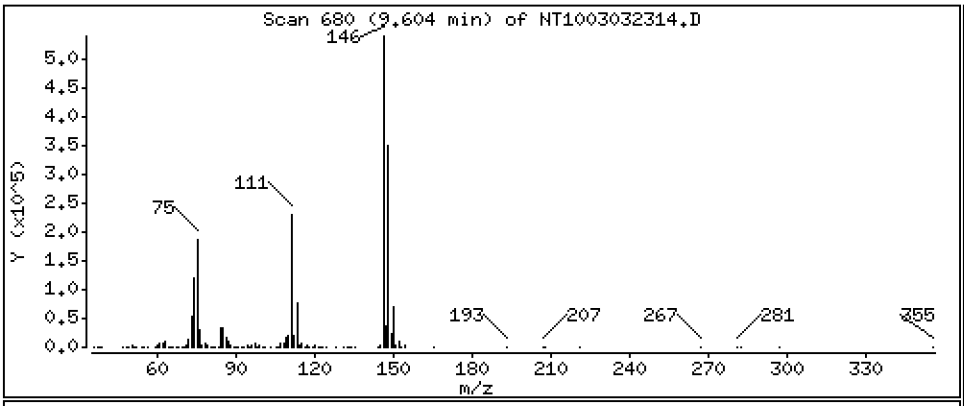
Operator: VTS

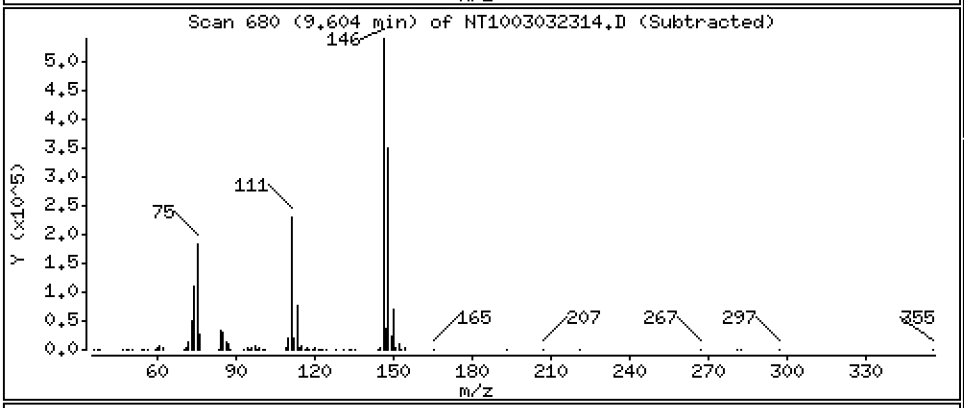
Column phase: ZB-5msi

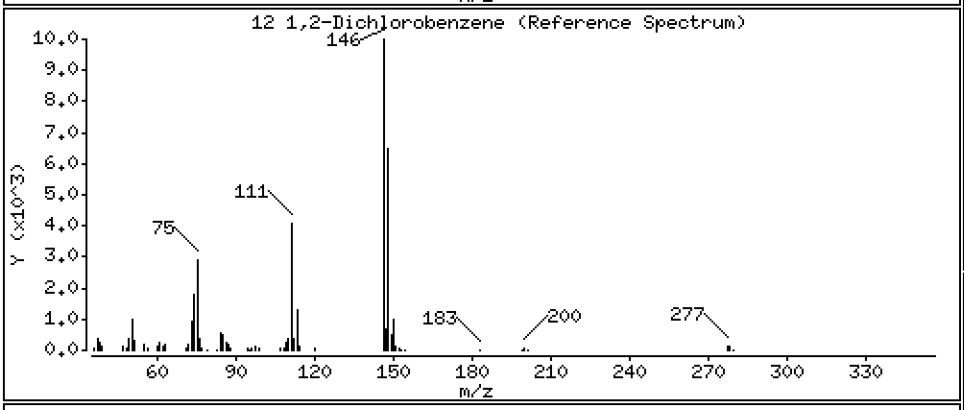
Column diameter: 0.25

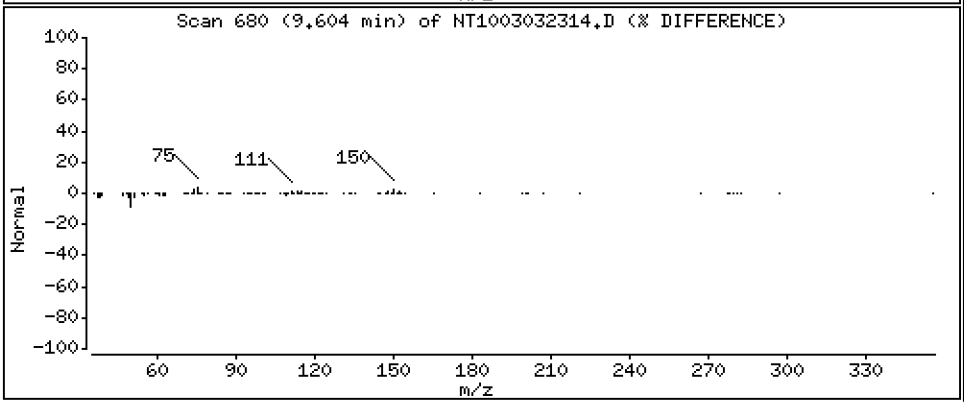
12 1,2-Dichlorobenzene

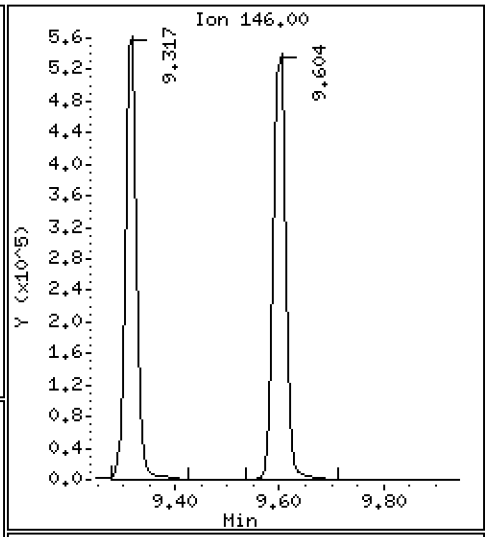
Concentration: 4.787 ug/ml

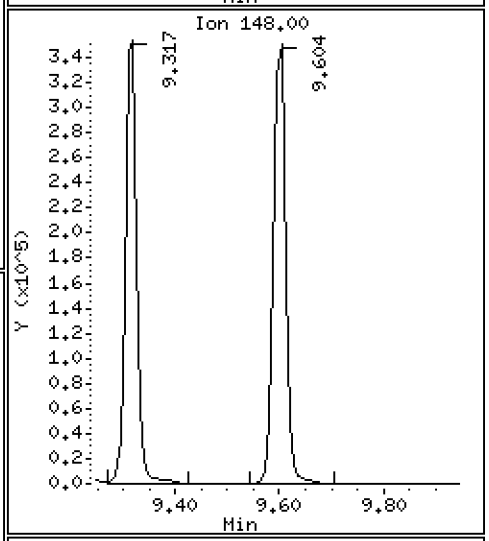


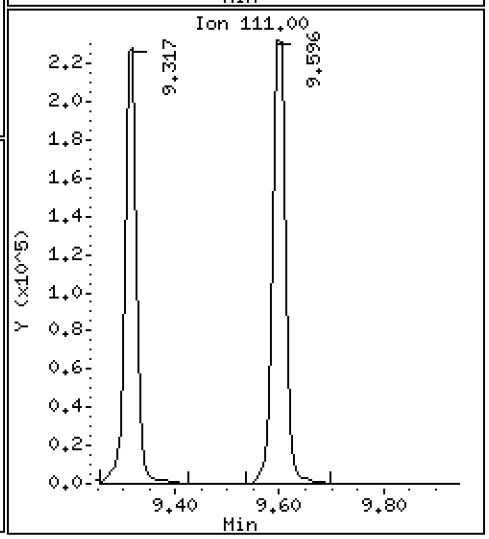












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

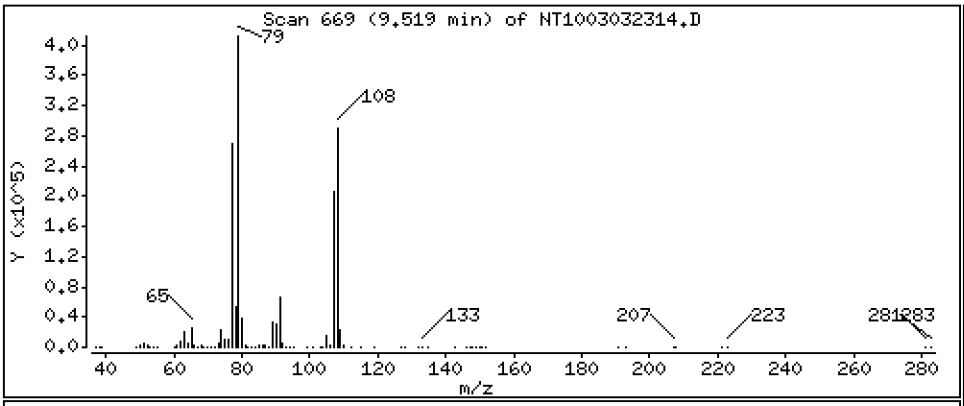
Operator: VTS

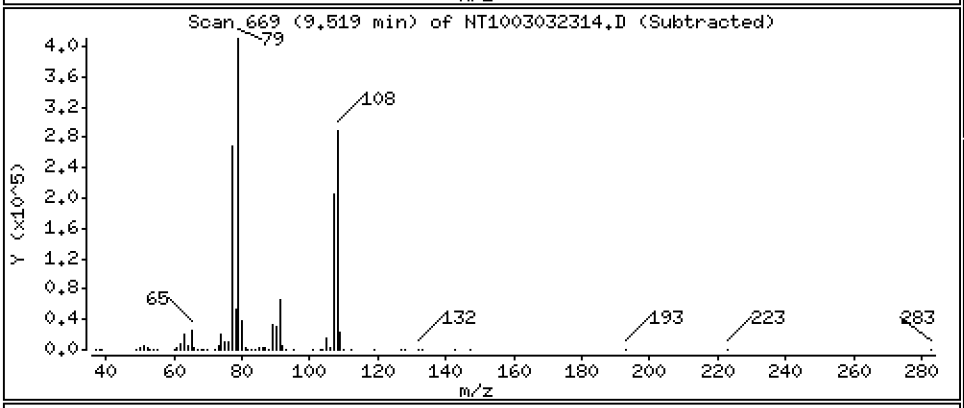
Column phase: ZB-5msi

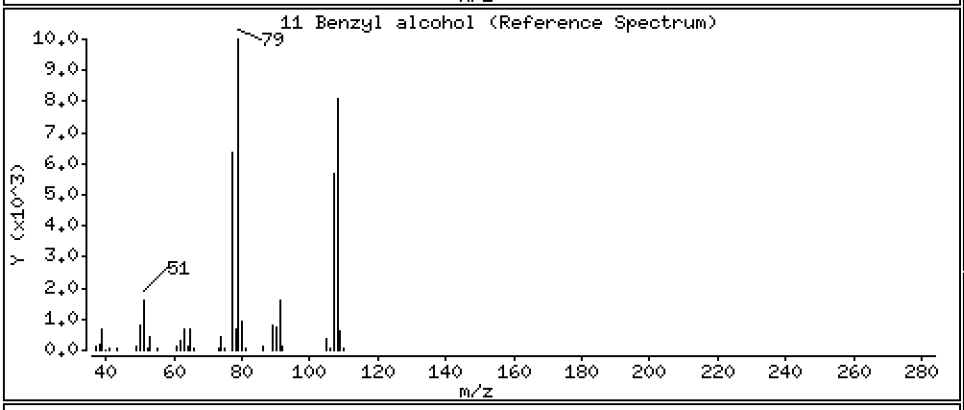
Column diameter: 0.25

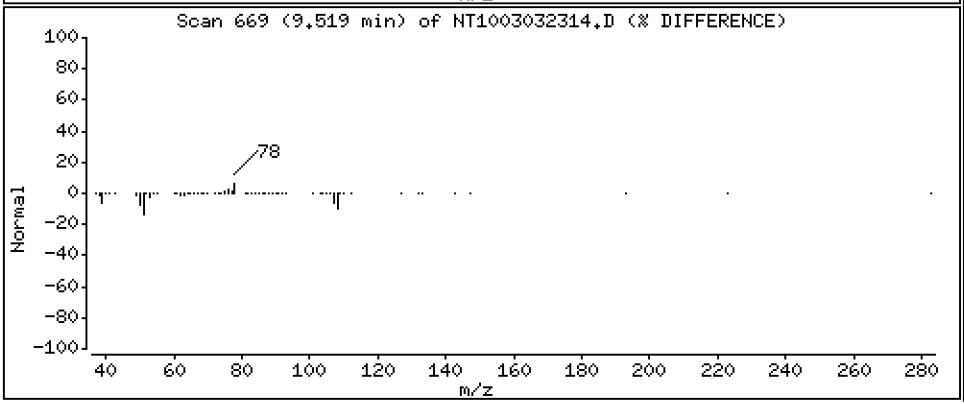
11 Benzyl alcohol

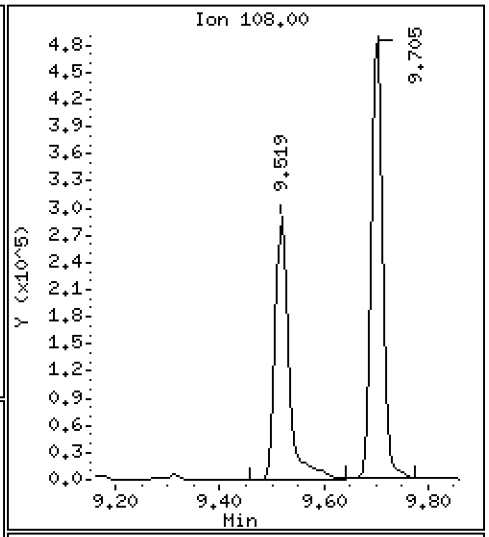
Concentration: 4.921 ug/ml

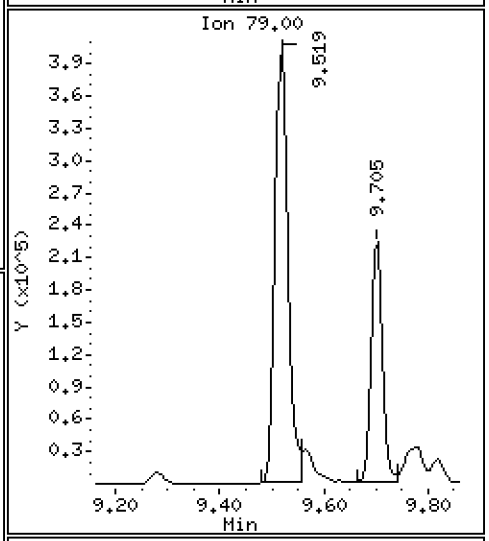


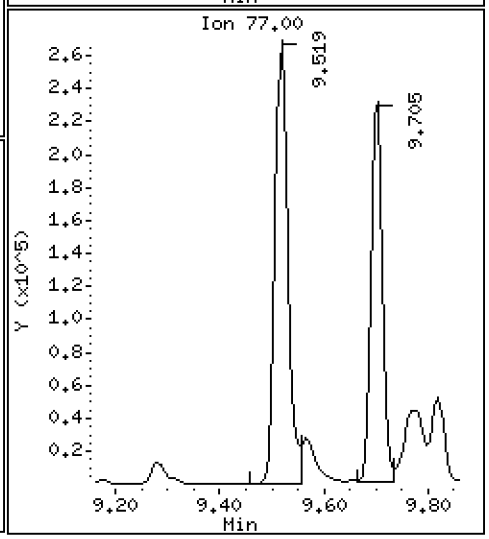












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

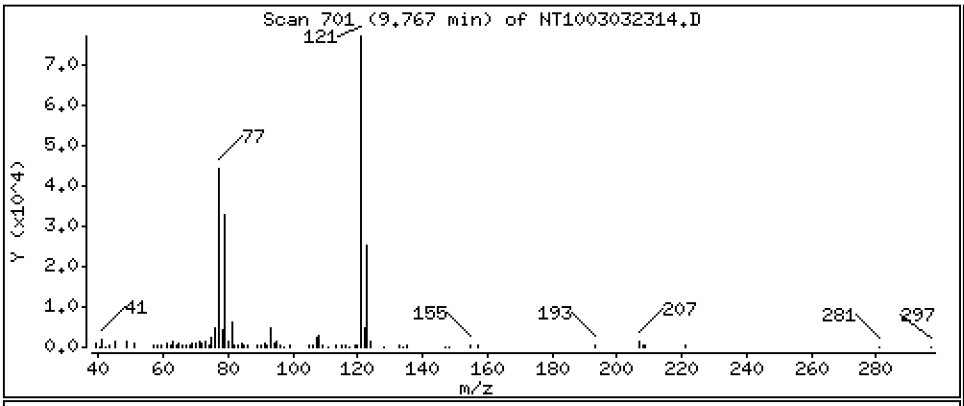
Operator: VTS

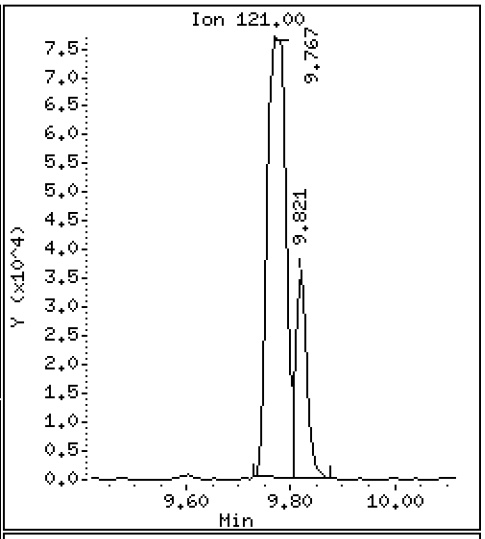
Column phase: ZB-5msi

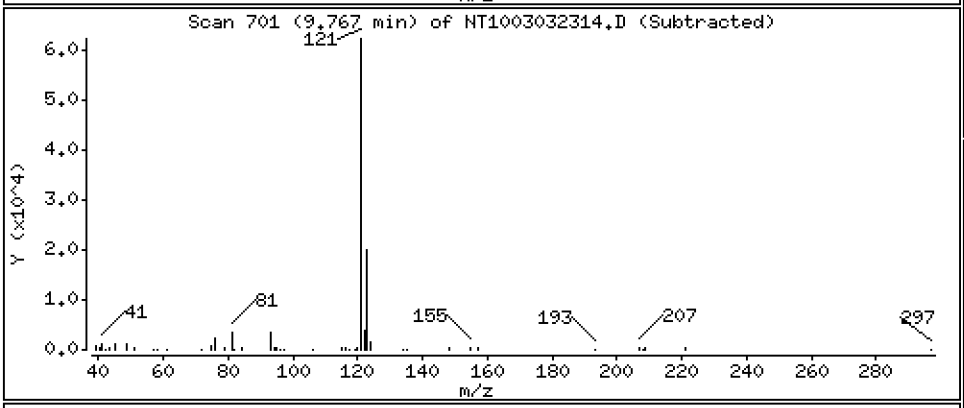
Column diameter: 0.25

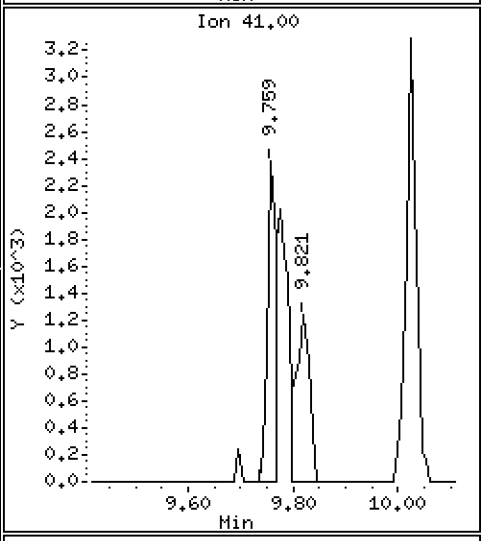
14 2,2'-oxybis(1-Chloropropane)

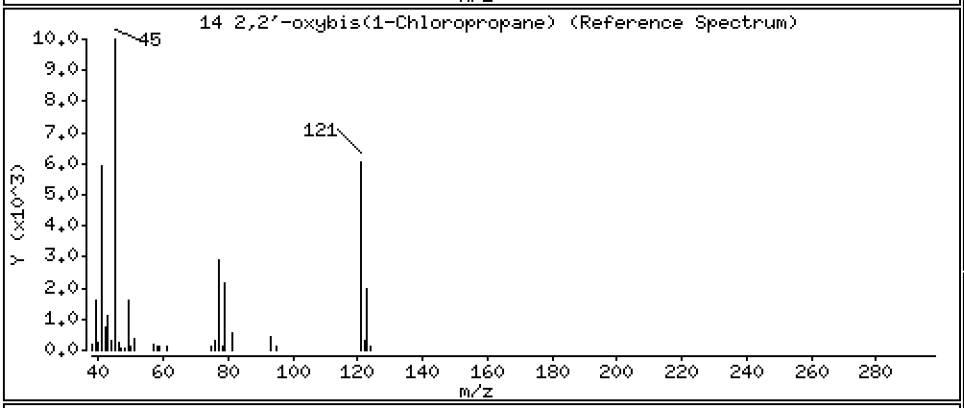
Concentration: 3.750 ug/ml

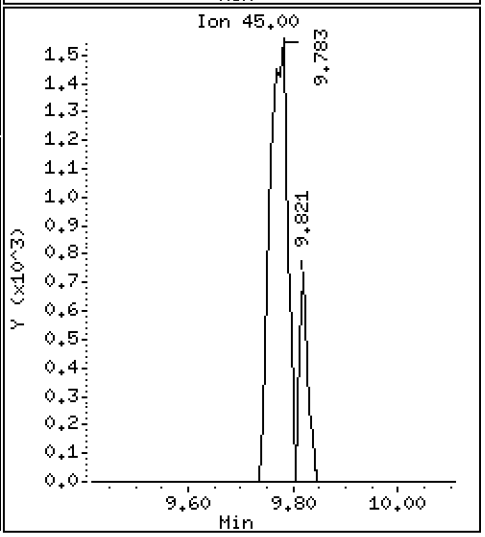


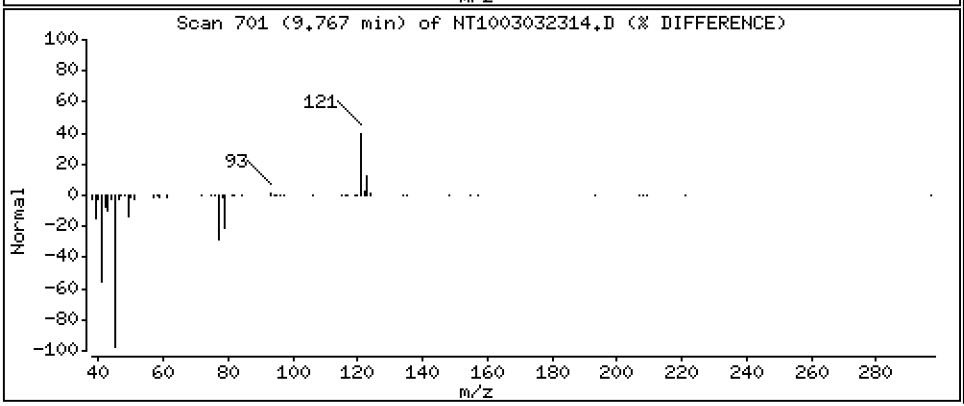












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

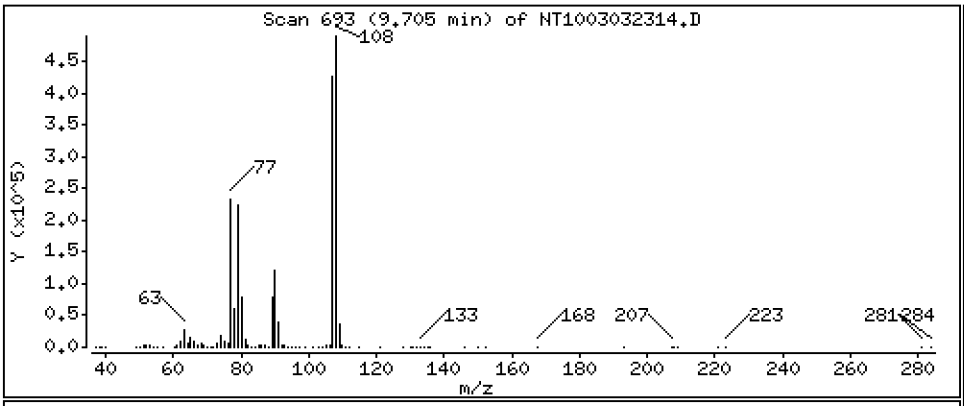
Operator: VTS

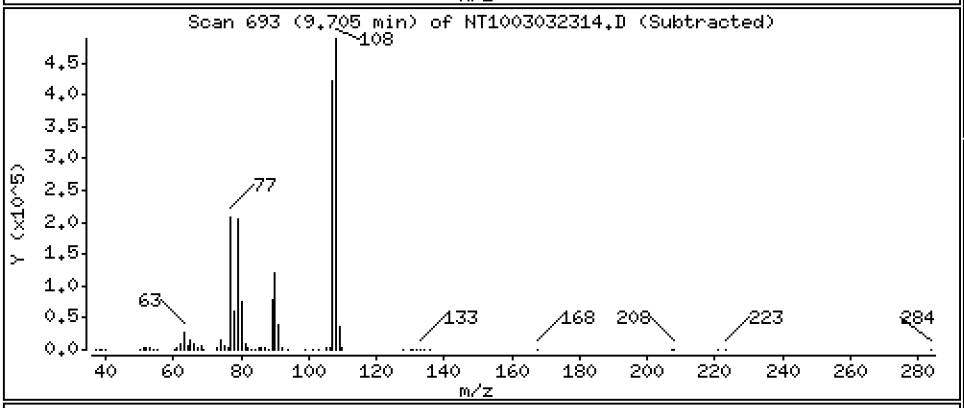
Column phase: ZB-5msi

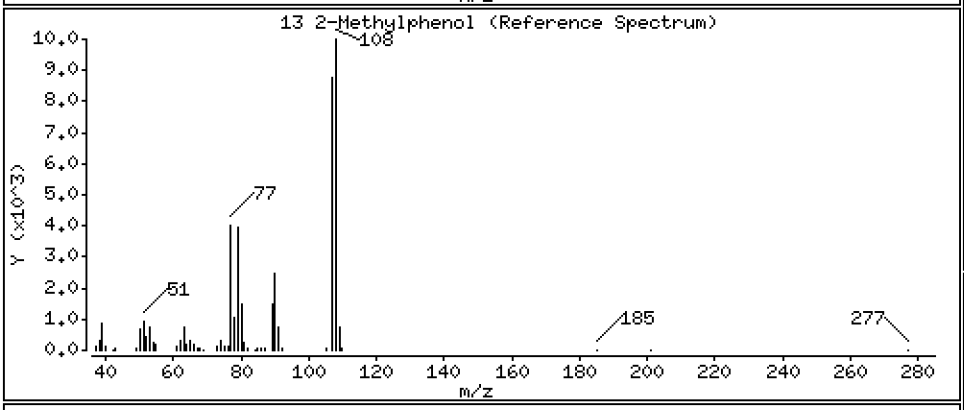
Column diameter: 0.25

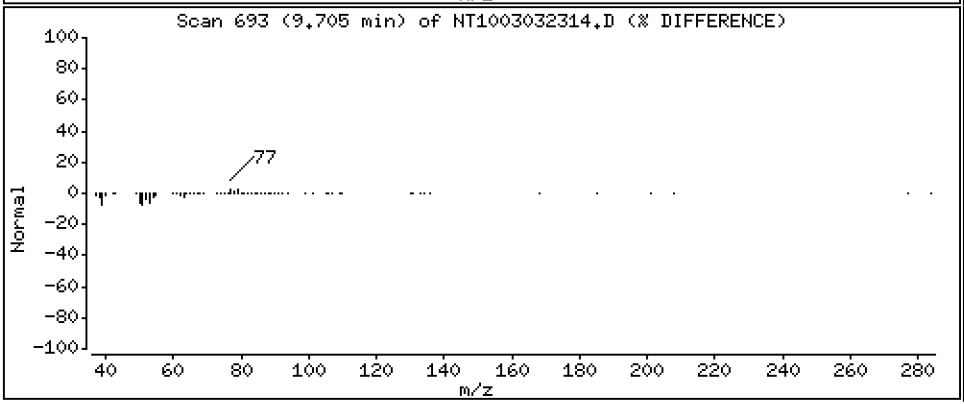
13 2-Methylphenol

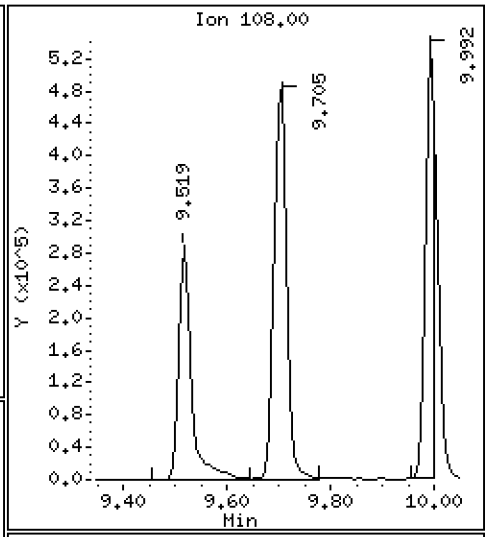
Concentration: 4.982 ug/ml

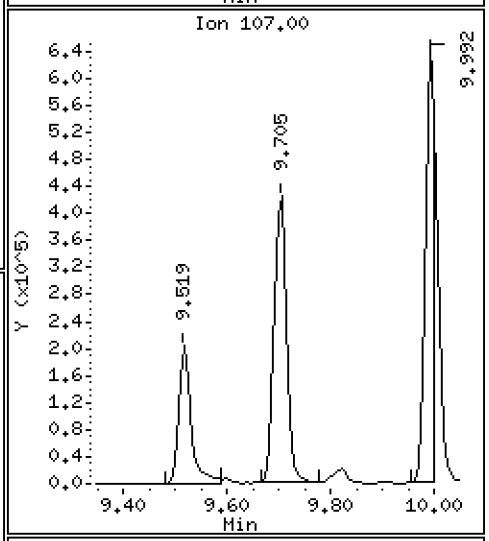


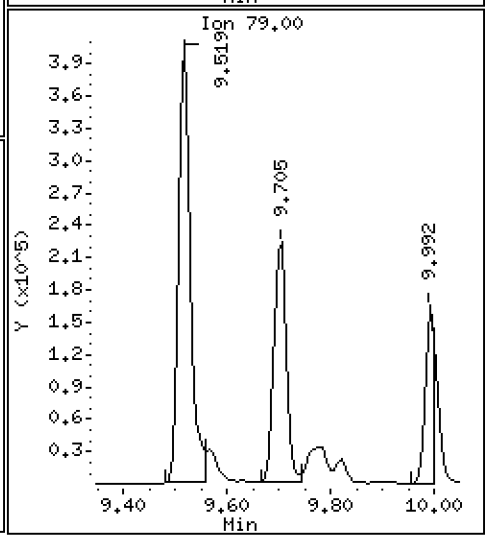












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

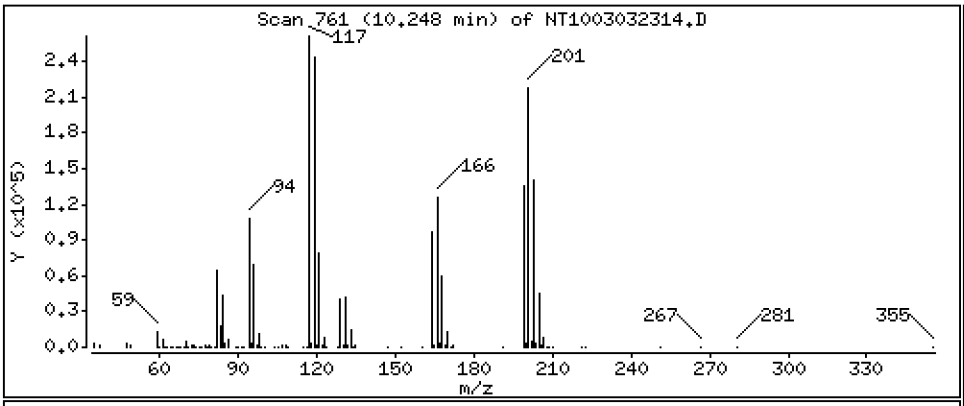
Operator: VTS

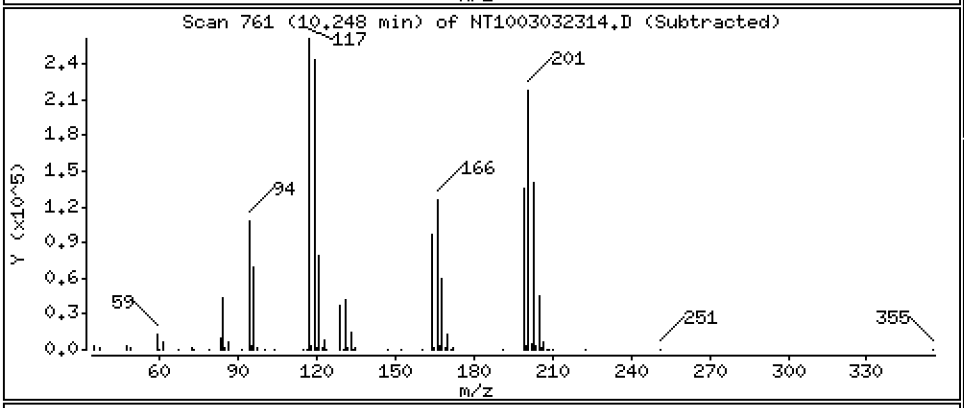
Column phase: ZB-5msi

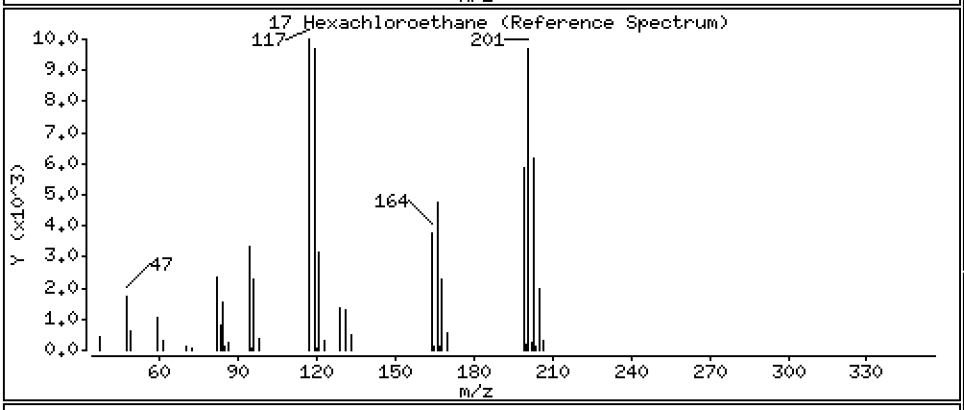
Column diameter: 0.25

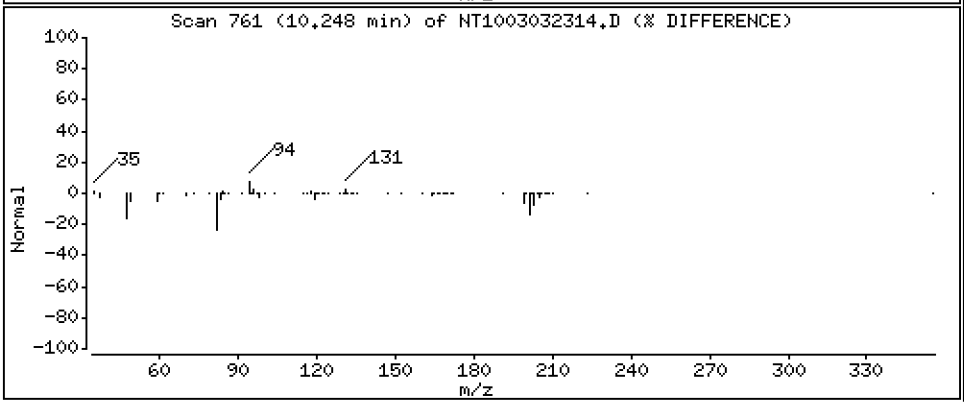
17 Hexachloroethane

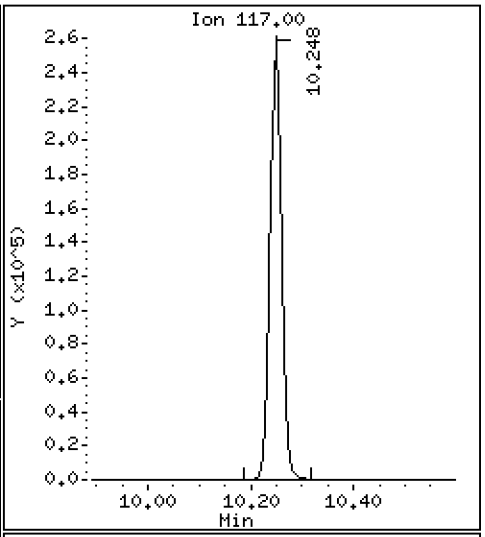
Concentration: 4.994 ug/ml

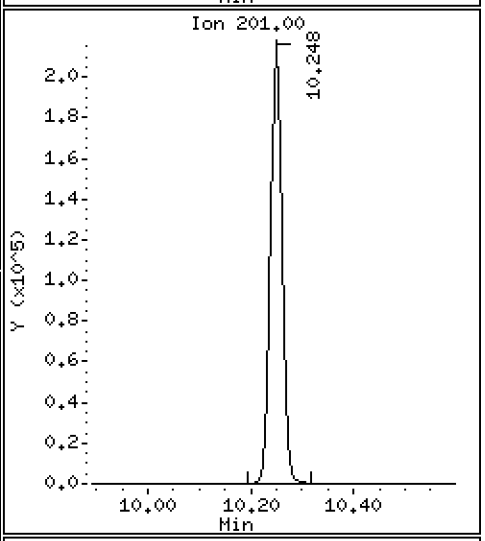


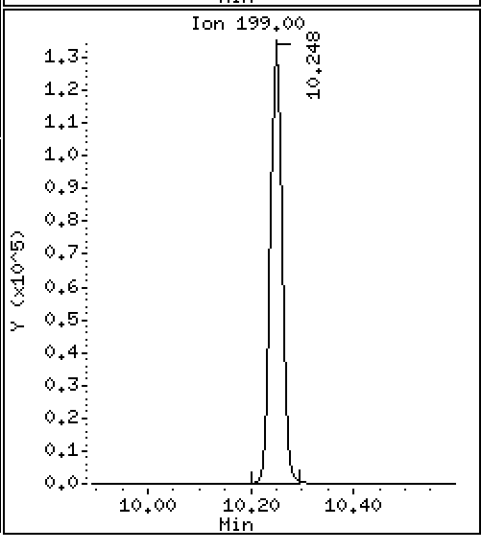












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

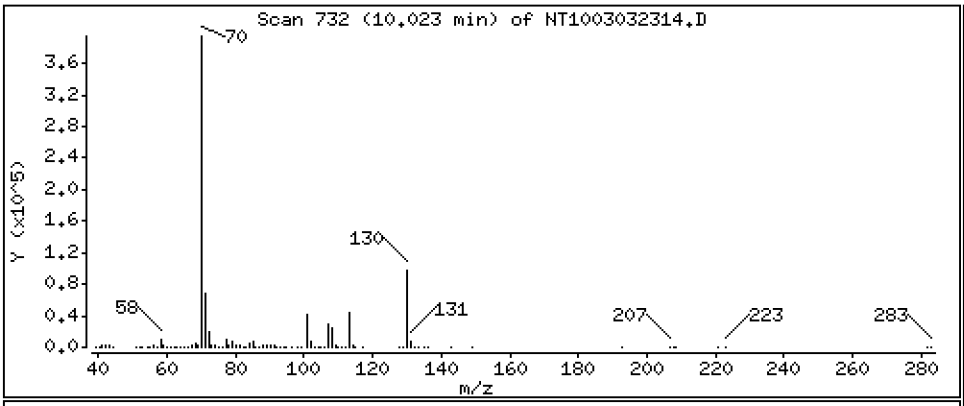
Operator: VTS

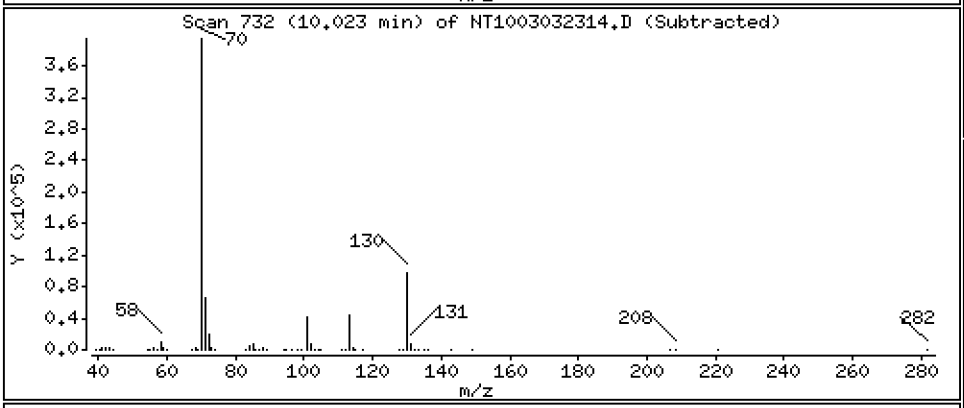
Column phase: ZB-5msi

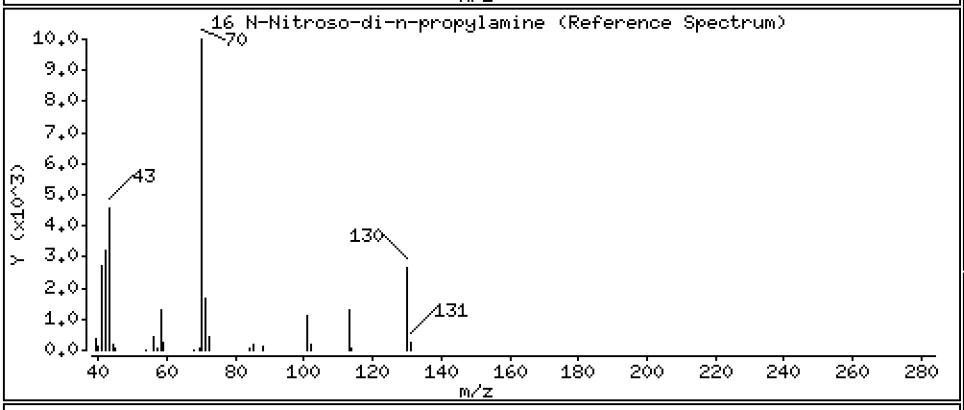
Column diameter: 0.25

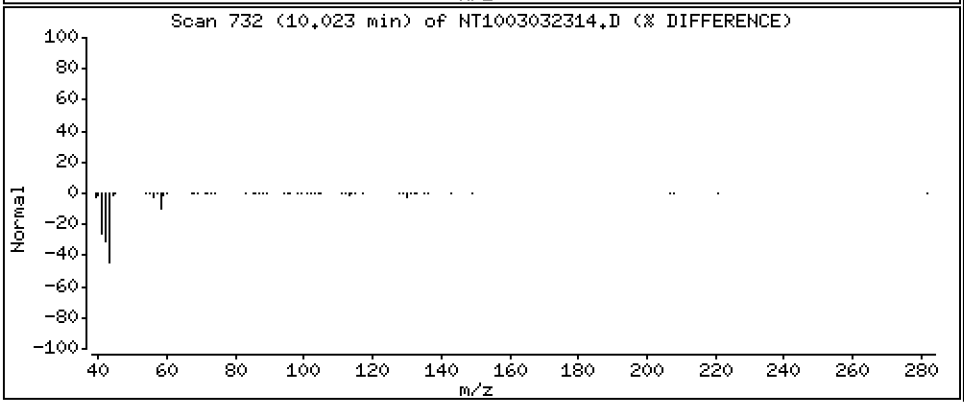
16 N-Nitroso-di-n-propylamine

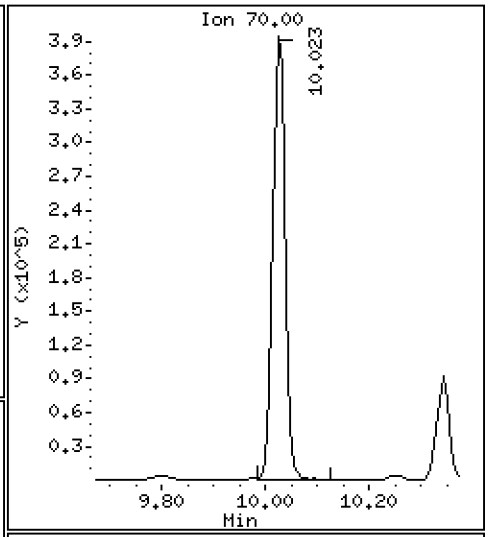
Concentration: 5.104 ug/ml

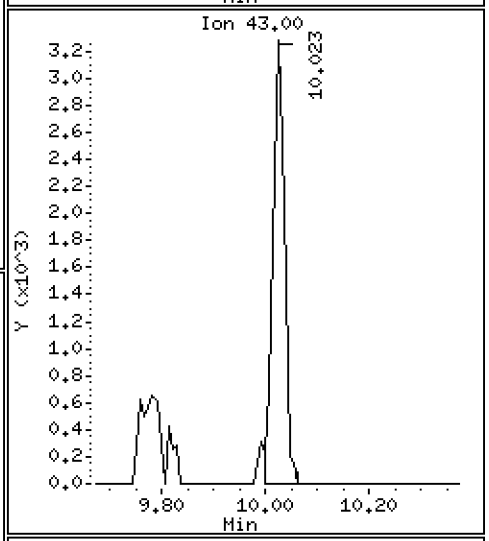


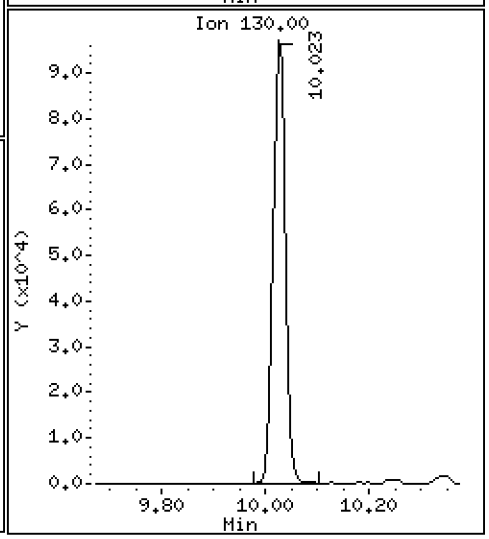












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

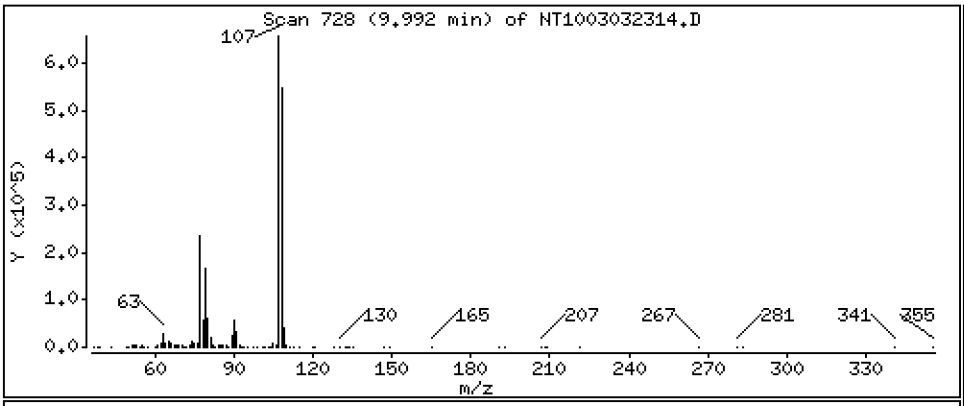
Operator: VTS

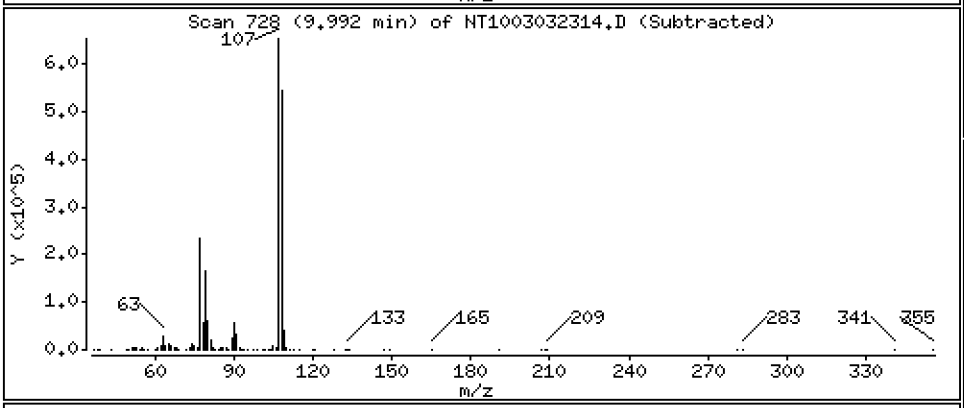
Column phase: ZB-5msi

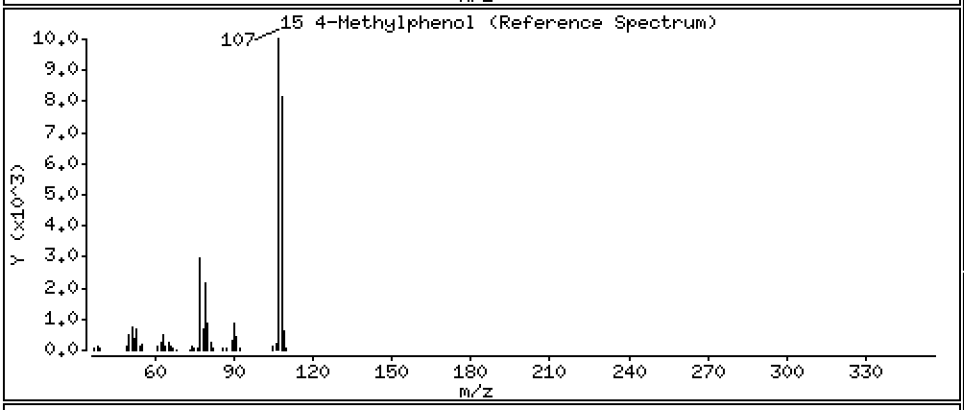
Column diameter: 0.25

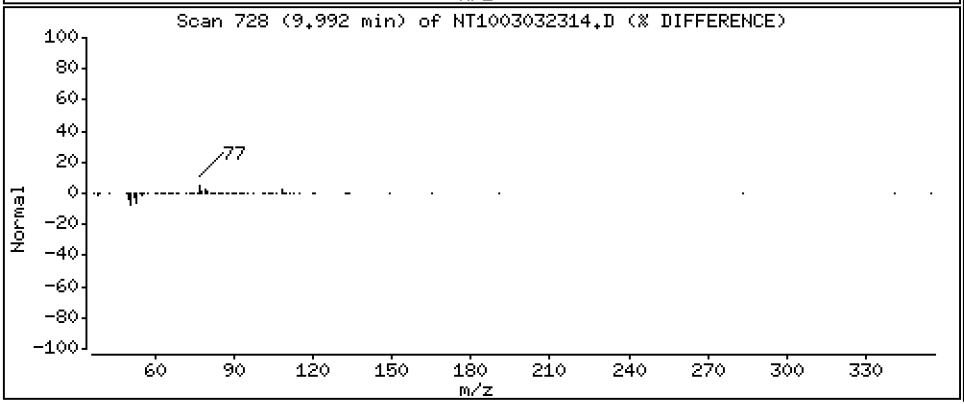
15 4-Methylphenol

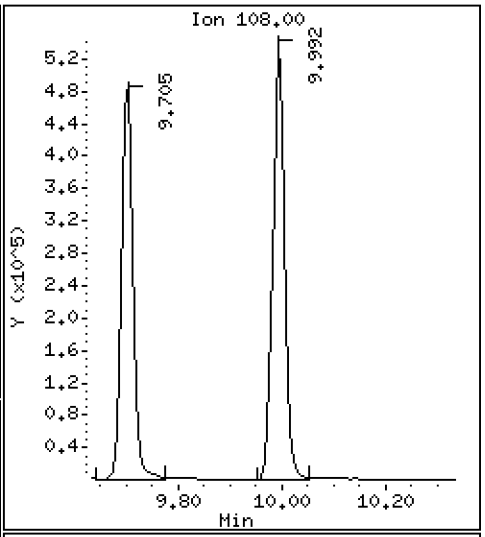
Concentration: 4.291 ug/ml

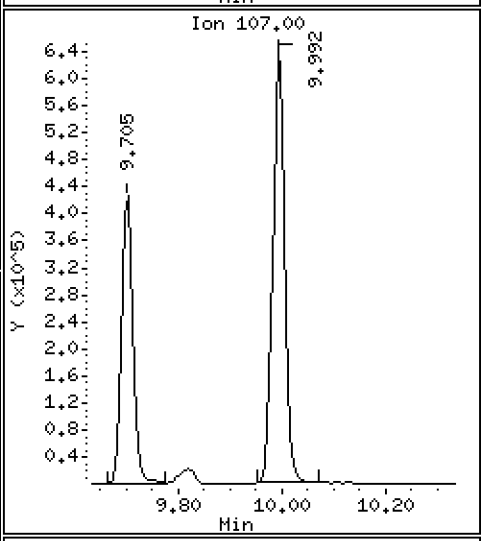


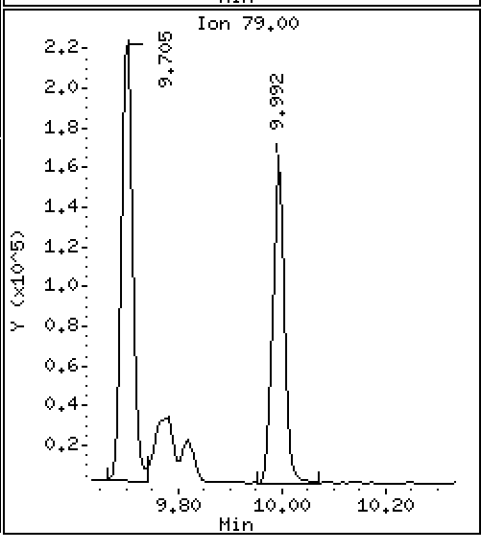












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

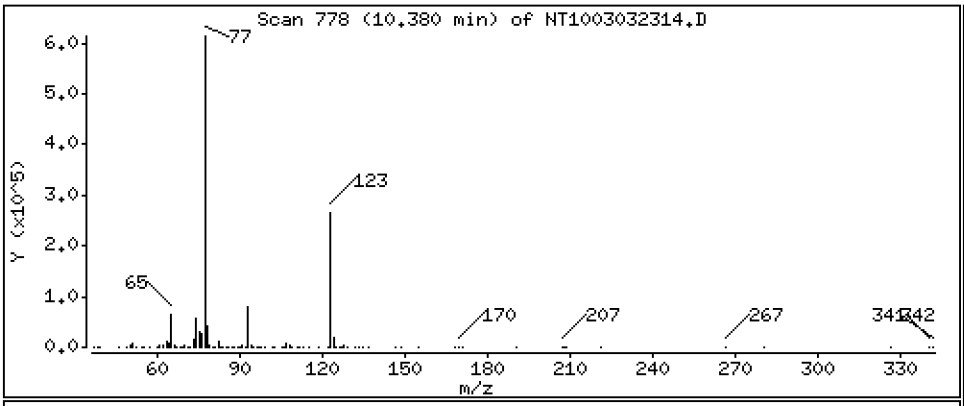
Operator: VTS

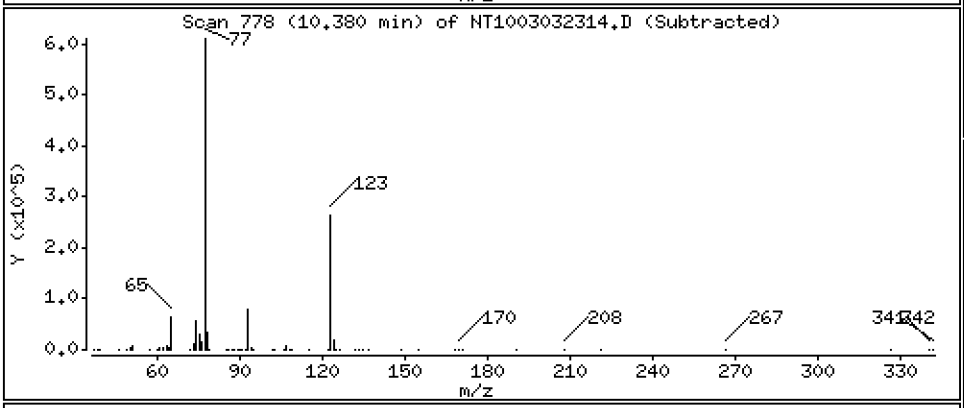
Column phase: ZB-5msi

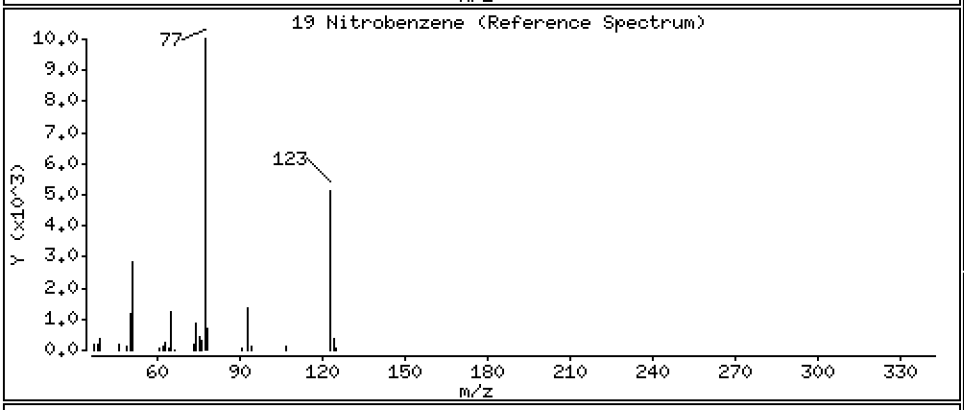
Column diameter: 0.25

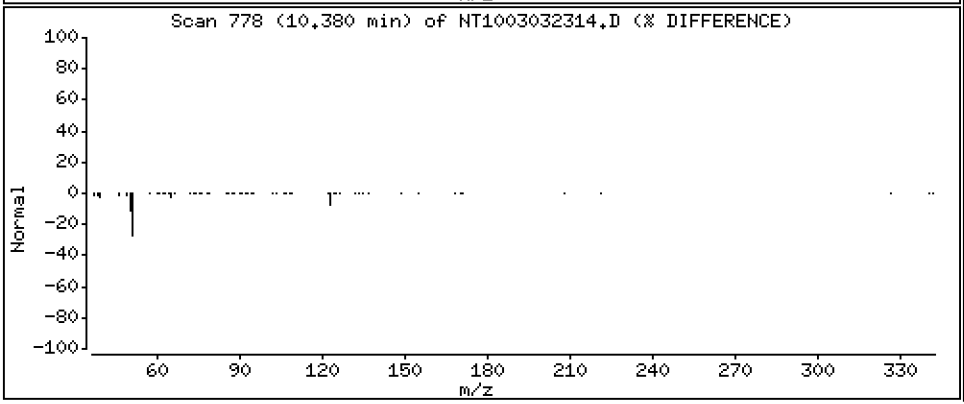
19 Nitrobenzene

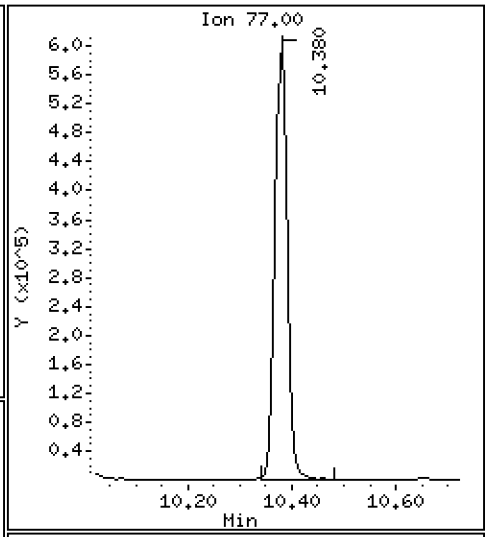
Concentration: 4.962 ug/ml

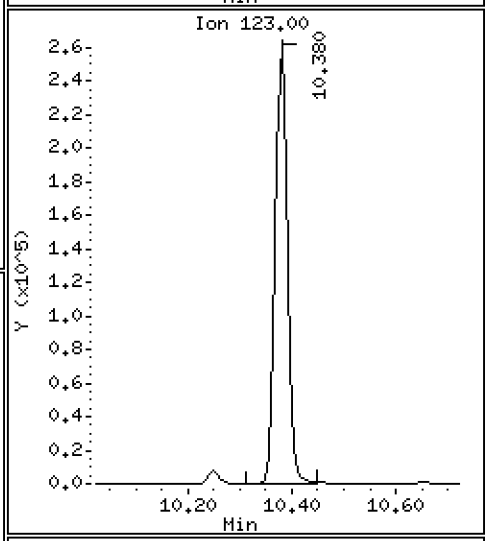


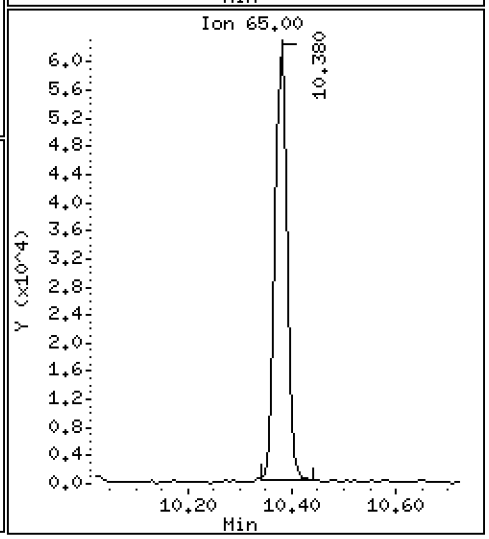












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

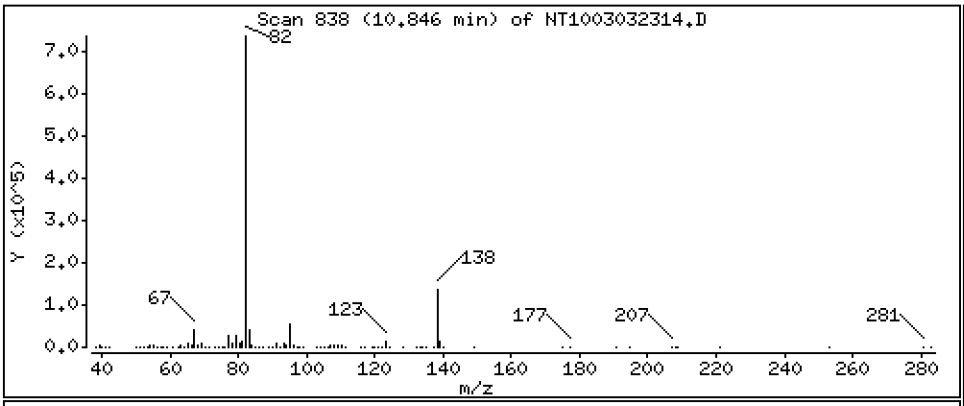
Operator: VTS

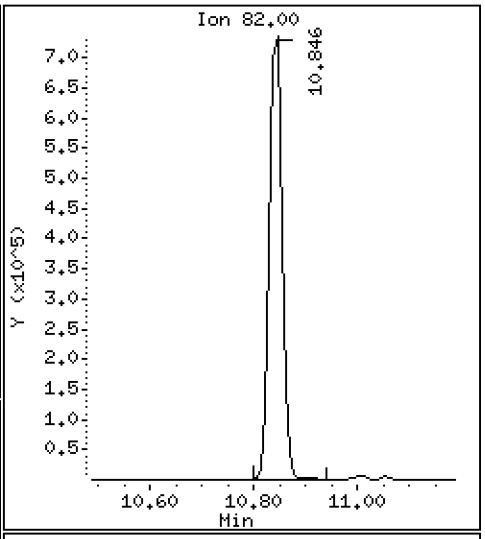
Column phase: ZB-5msi

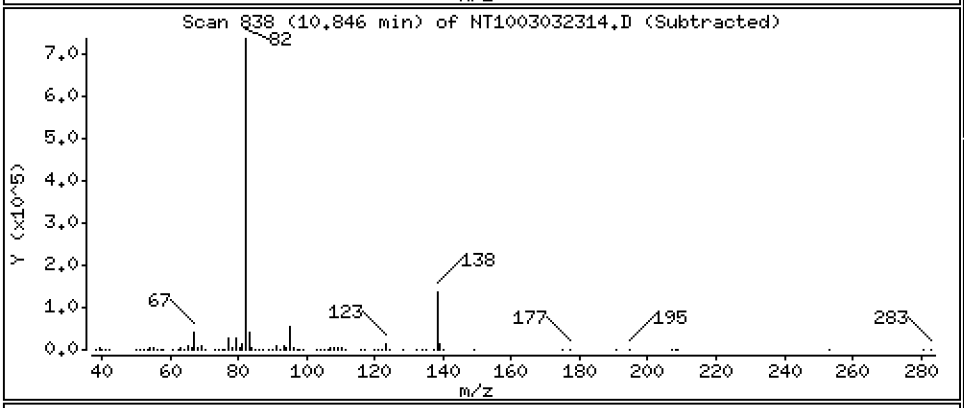
Column diameter: 0.25

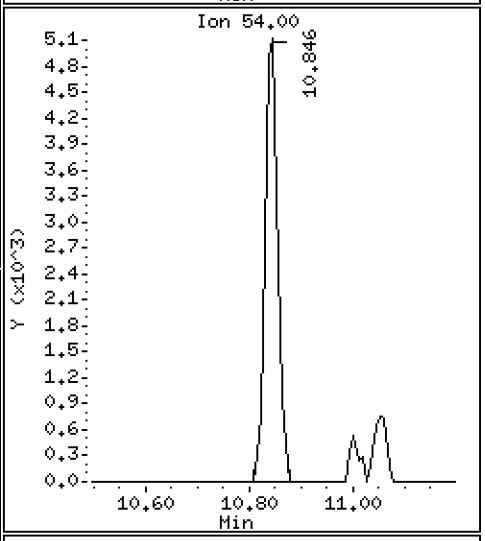
20 Isophorone

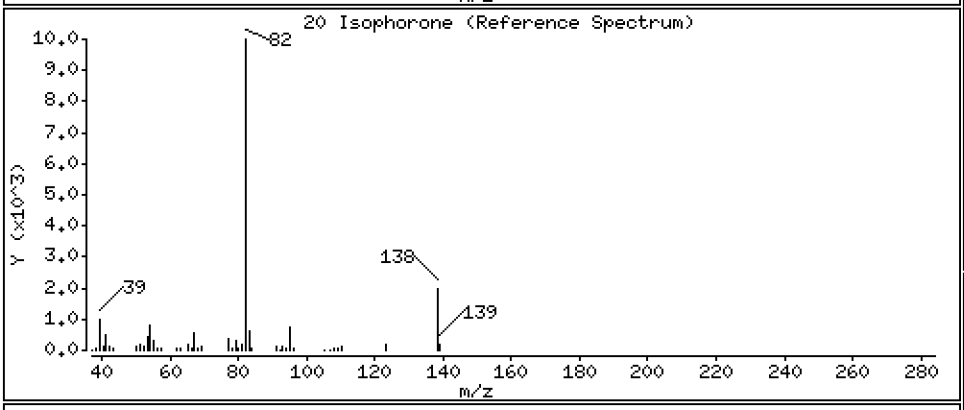
Concentration: 5.689 ug/ml

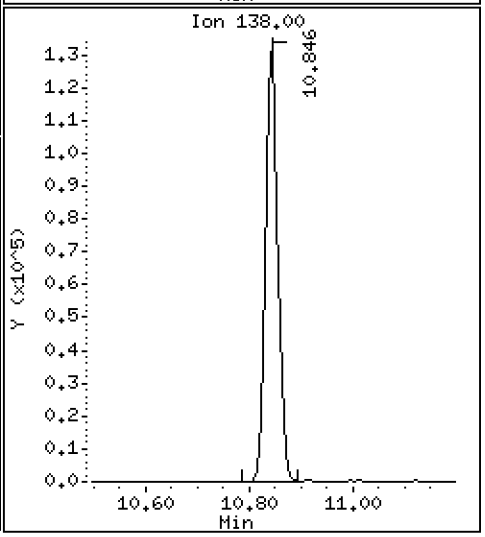


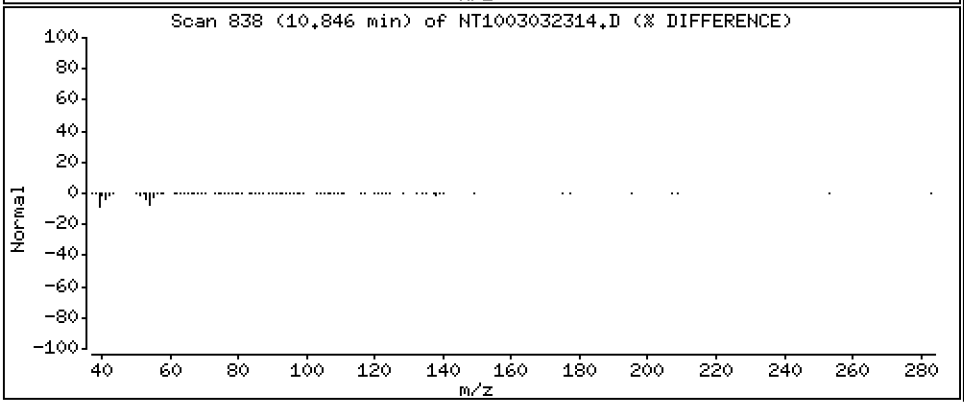












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

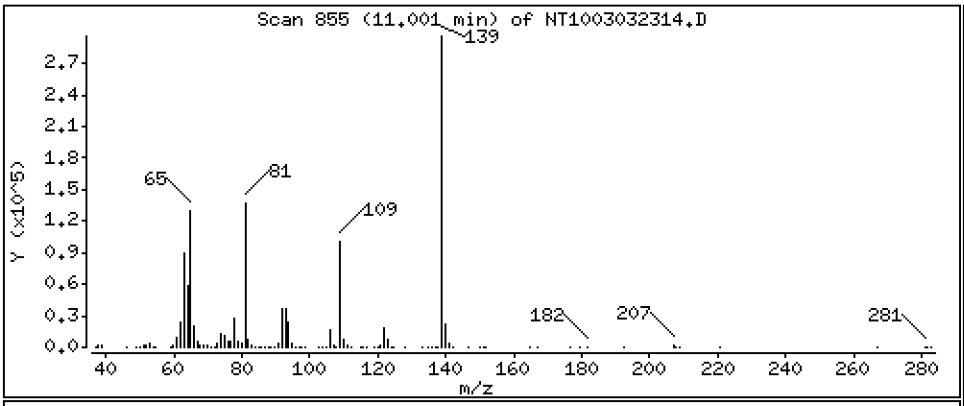
Operator: VTS

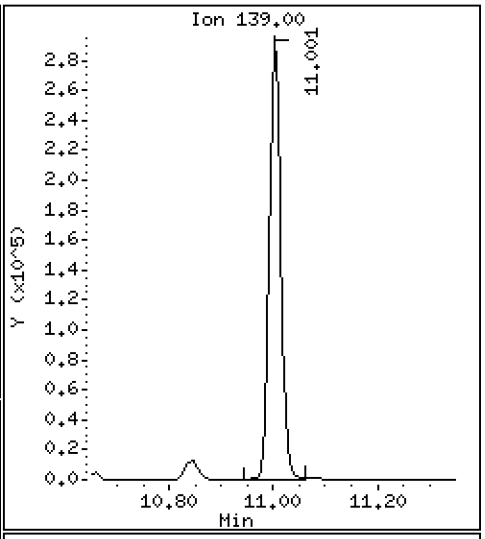
Column phase: ZB-5msi

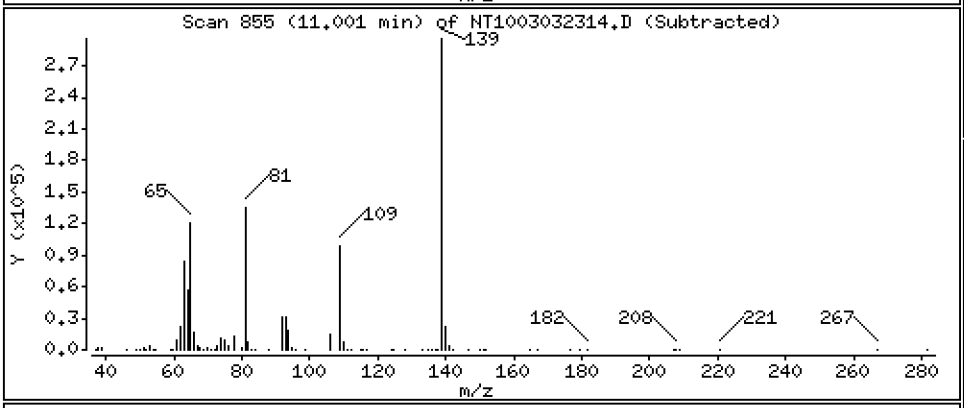
Column diameter: 0.25

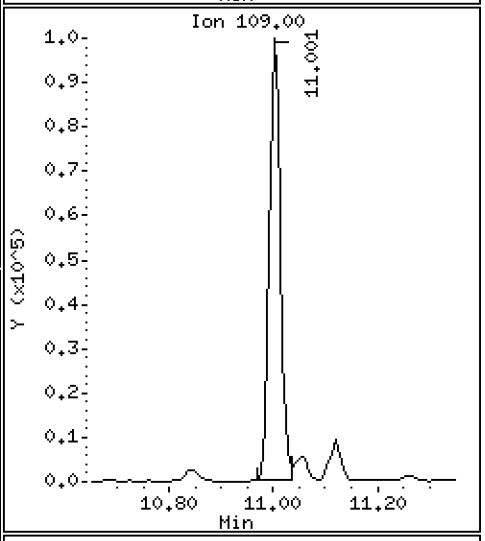
21 2-Nitrophenol

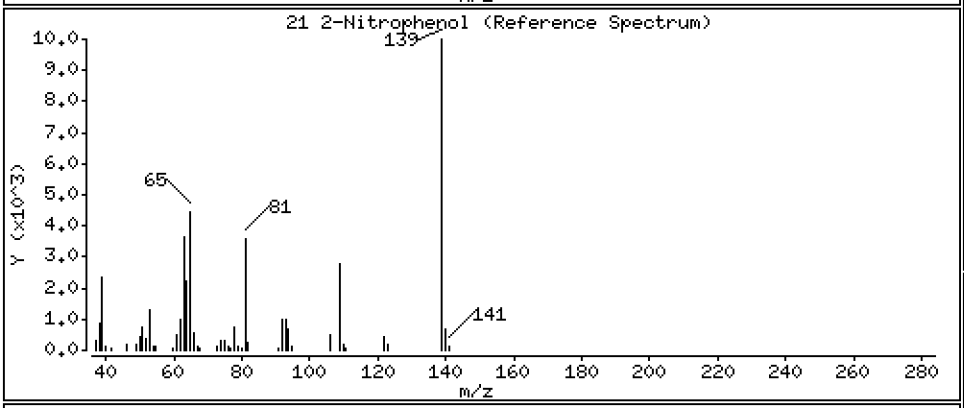
Concentration: 4.379 ug/ml

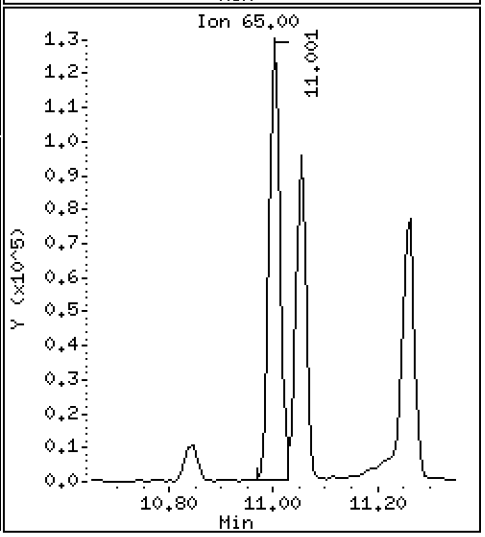


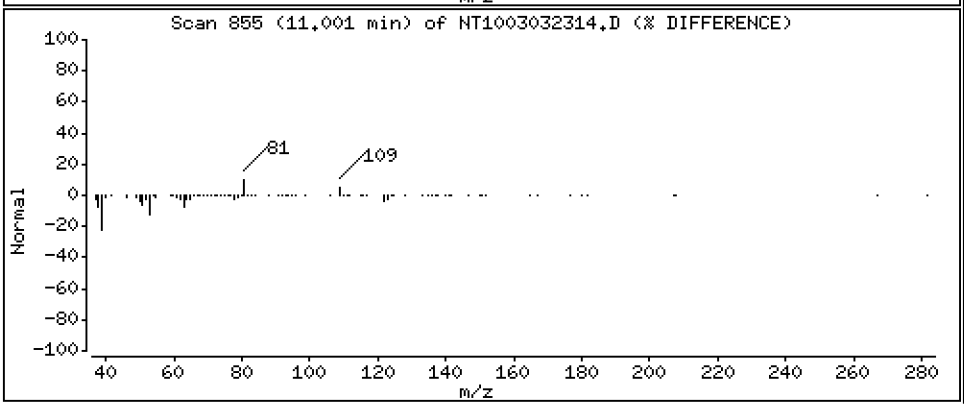












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

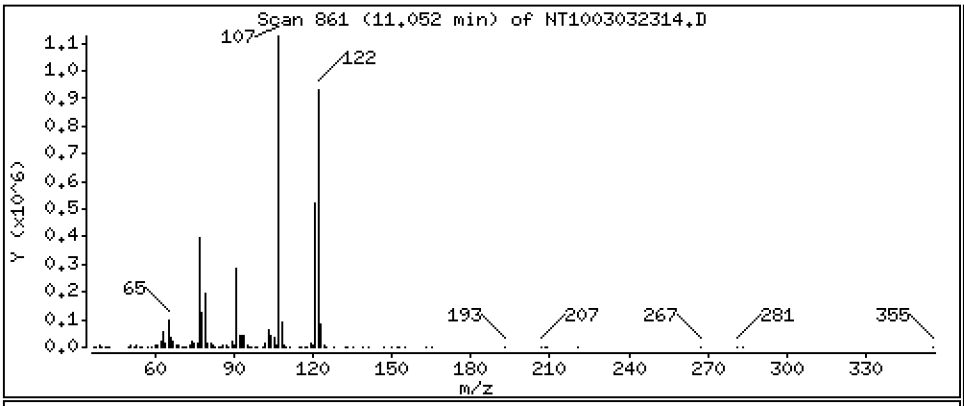
Operator: VTS

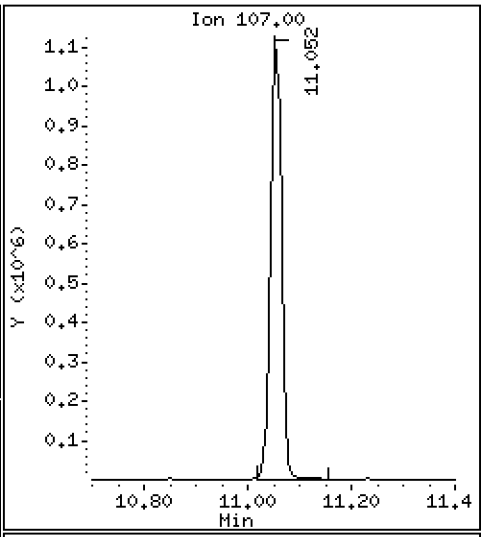
Column phase: ZB-5msi

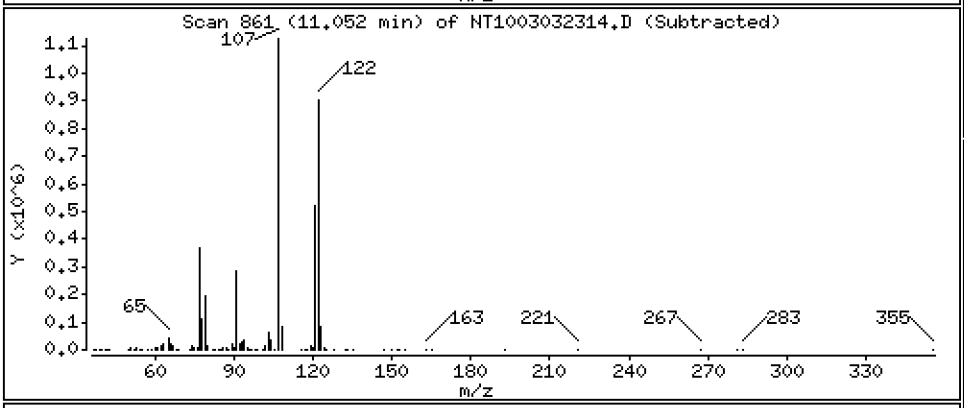
Column diameter: 0.25

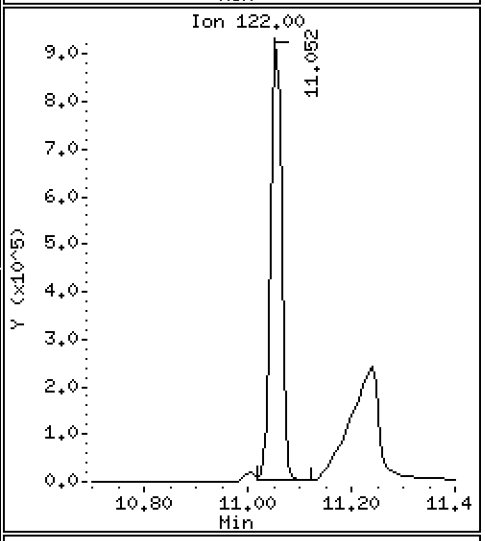
22 2,4-Dimethylphenol

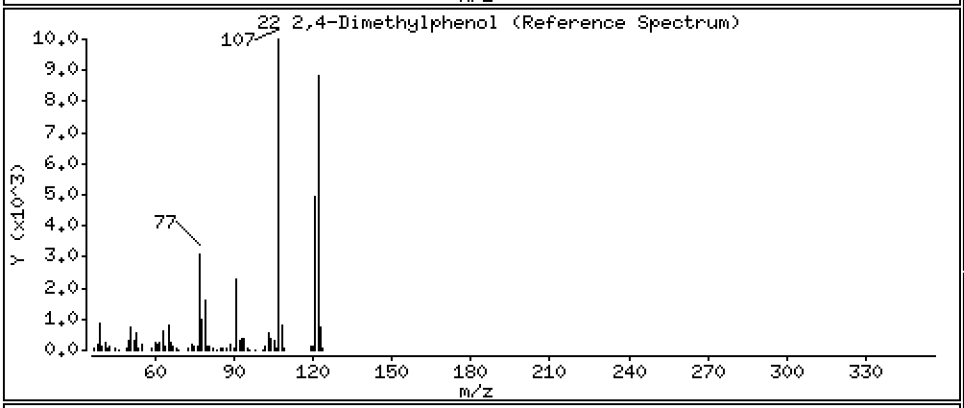
Concentration: 8.851 ug/ml

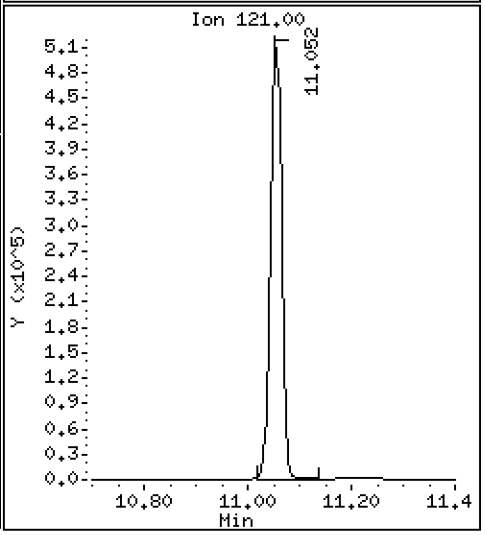


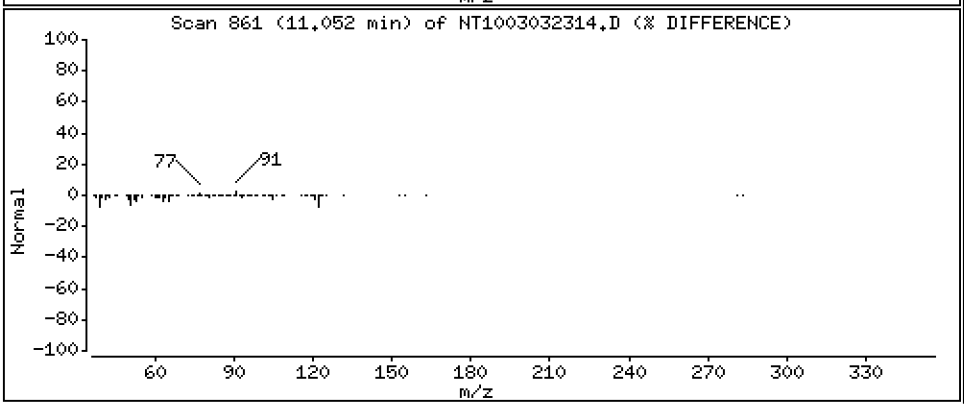












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

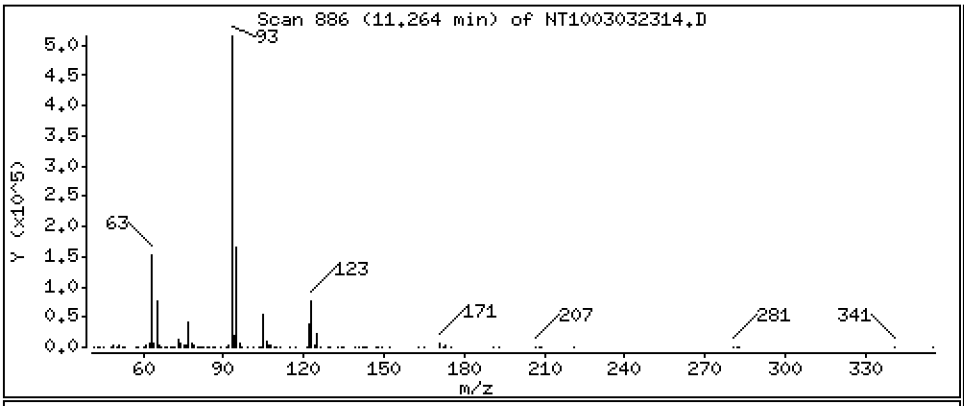
Operator: VTS

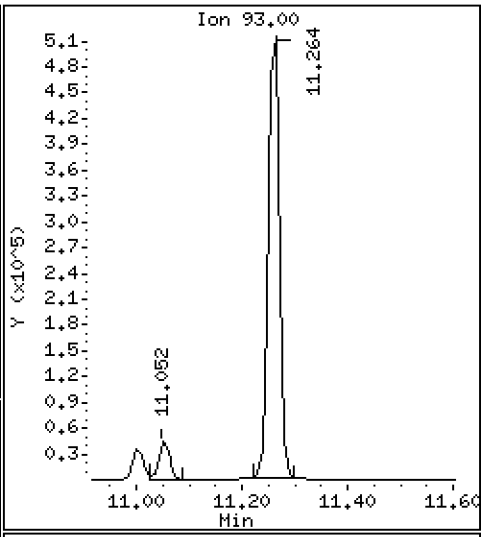
Column phase: ZB-5msi

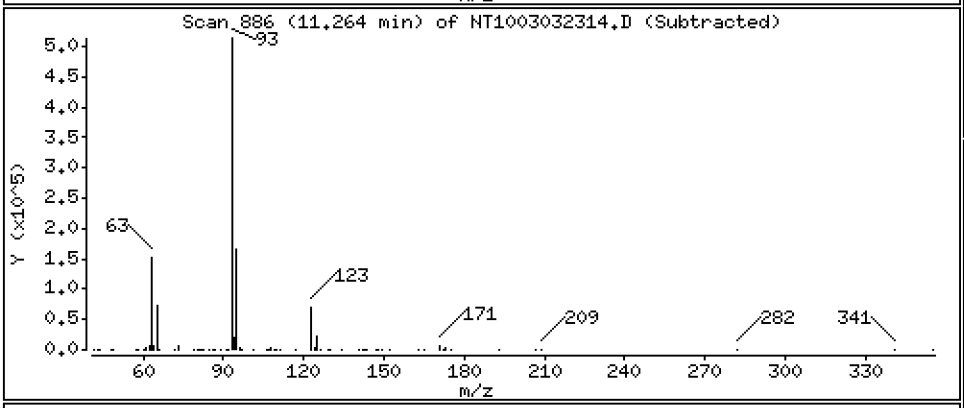
Column diameter: 0.25

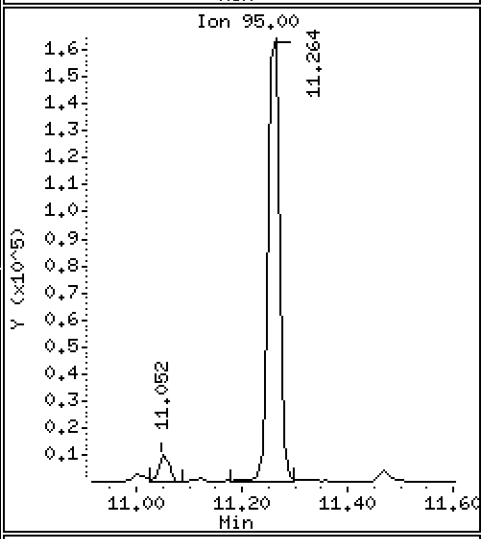
23 Bis(2-Chloroethoxy)methane

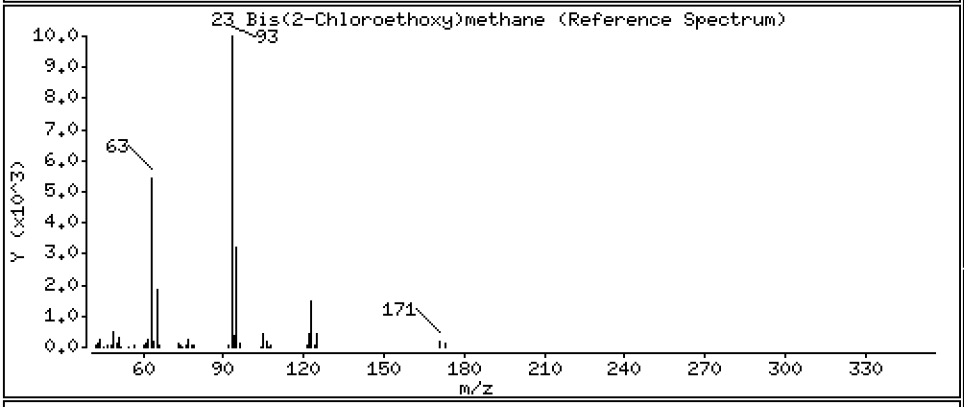
Concentration: 5.088 ug/ml

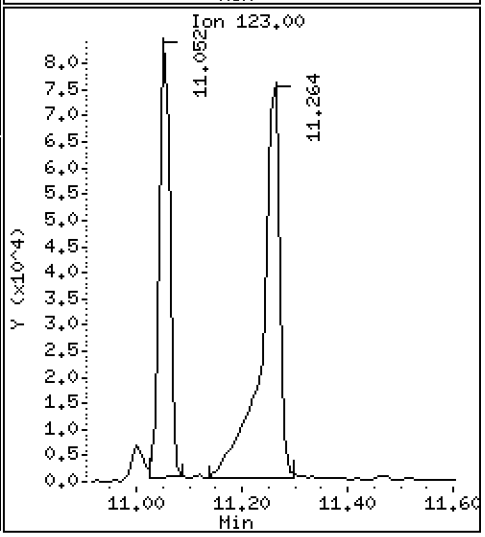


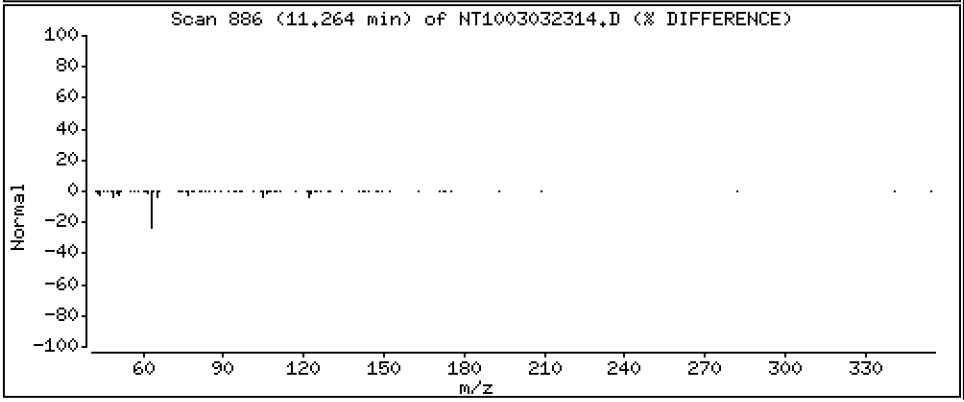












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

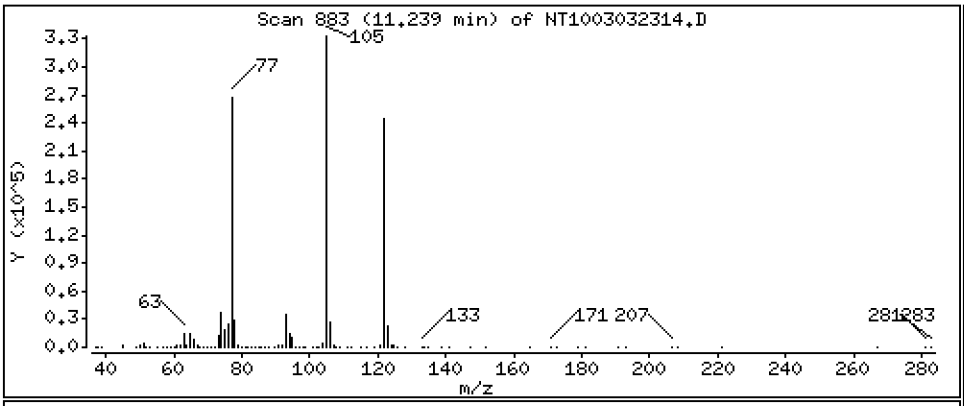
Operator: VTS

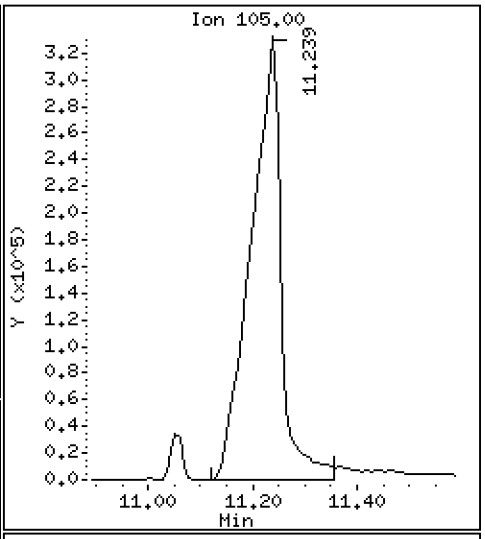
Column phase: ZB-5msi

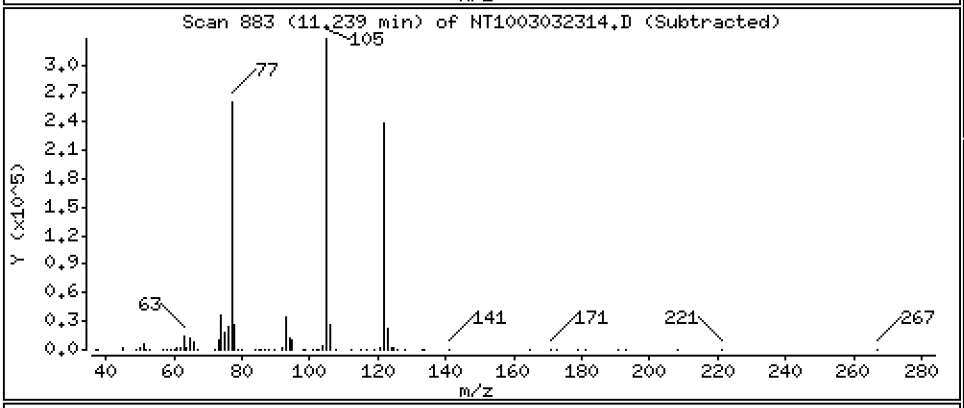
Column diameter: 0.25

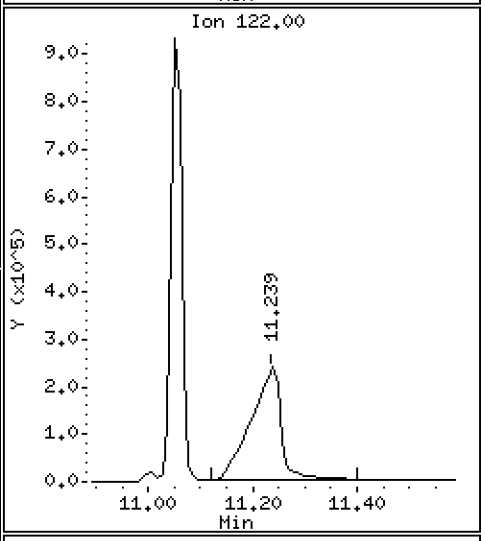
24 Benzoic acid

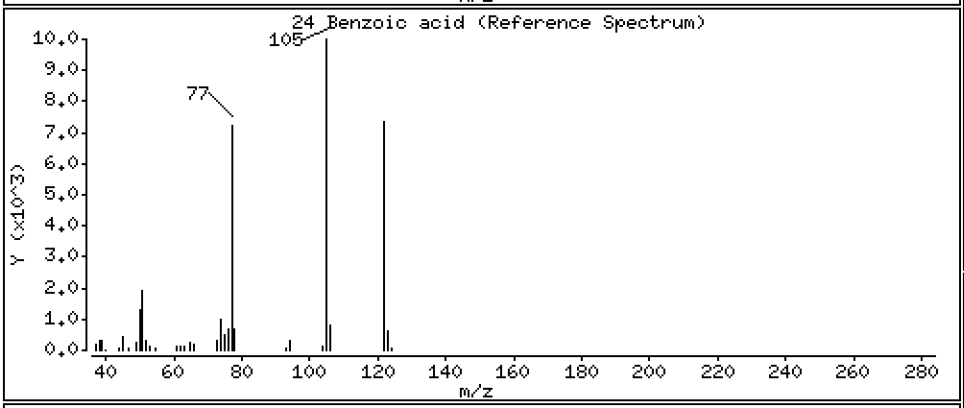
Concentration: 12.06 ug/ml

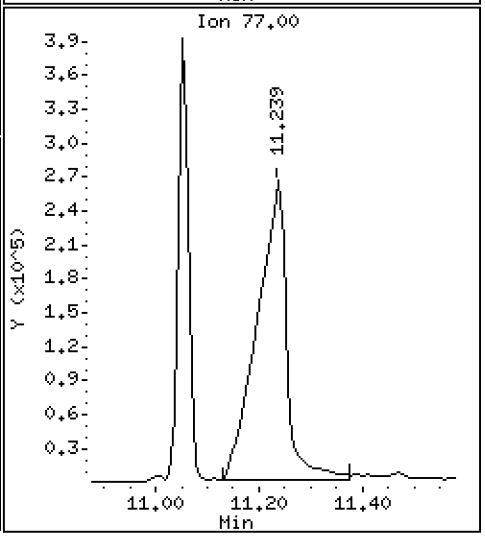


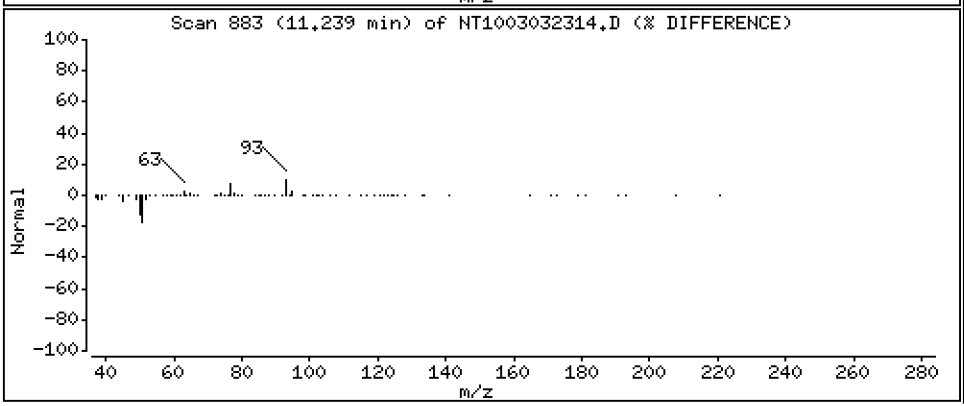












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

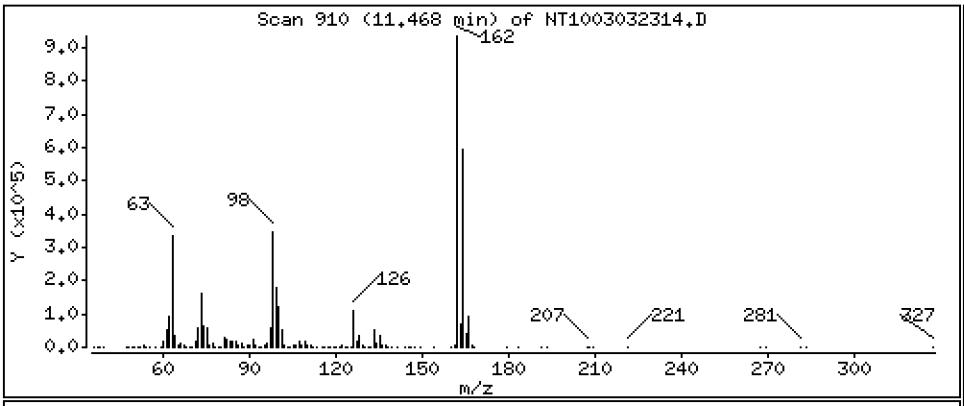
Operator: VTS

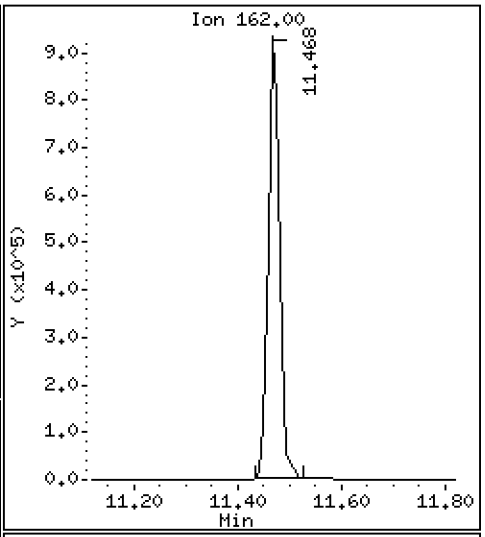
Column phase: ZB-5msi

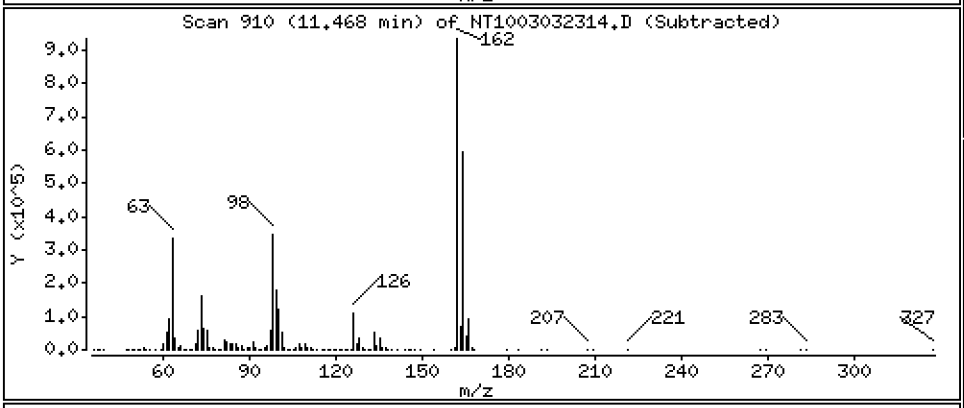
Column diameter: 0.25

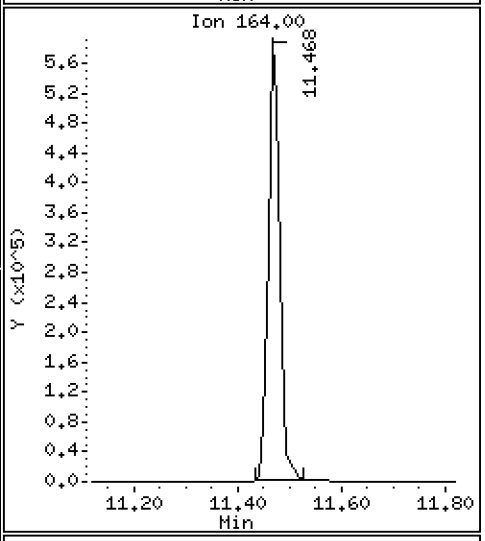
25 2,4-Dichlorophenol

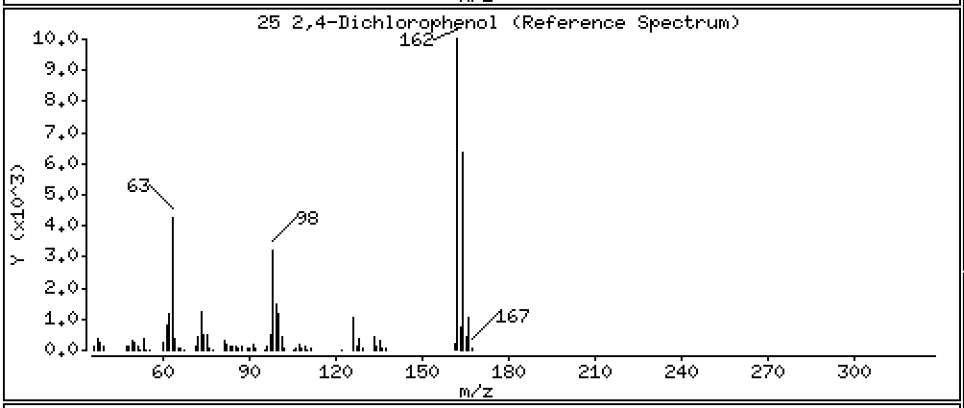
Concentration: 11.25 ug/ml

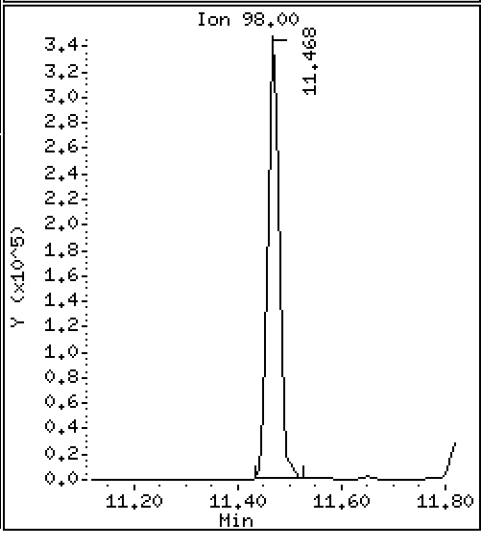


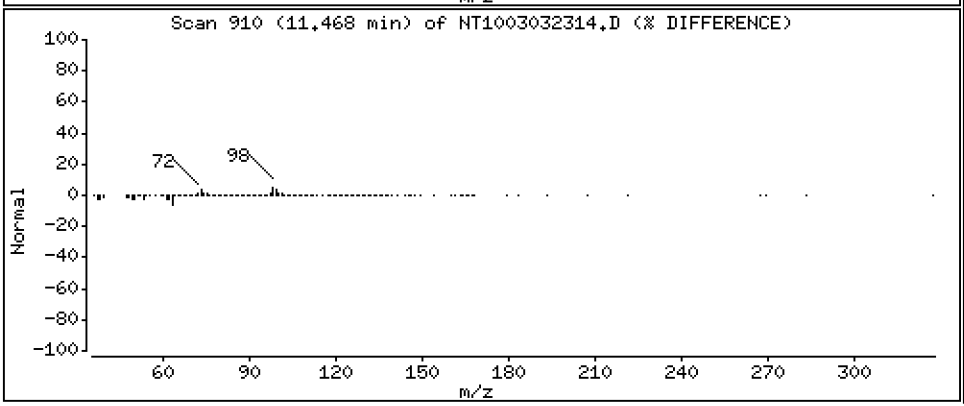












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

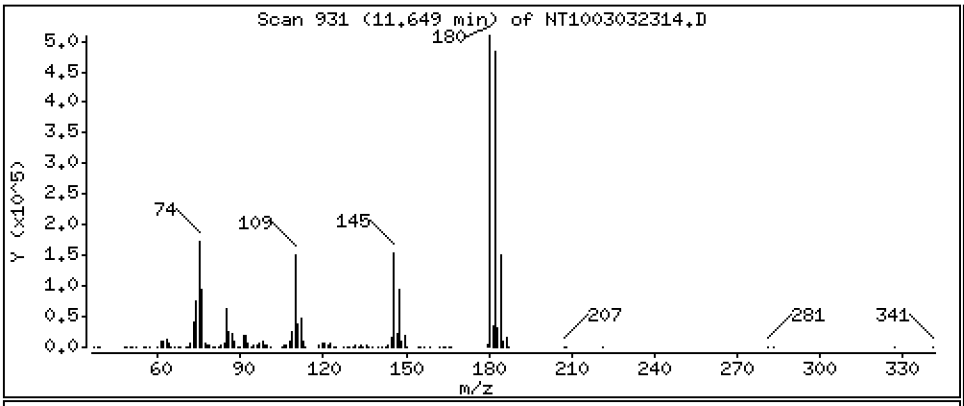
Operator: VTS

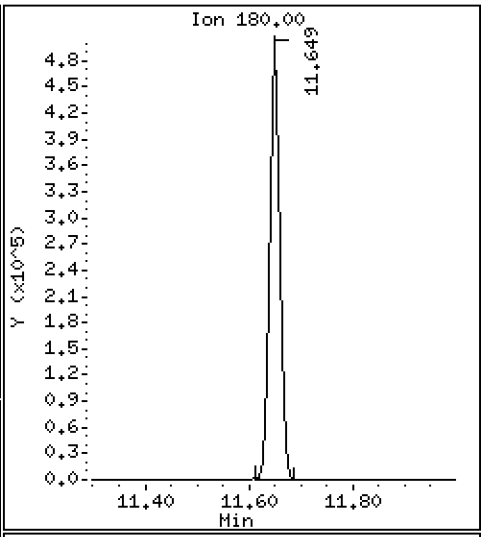
Column phase: ZB-5msi

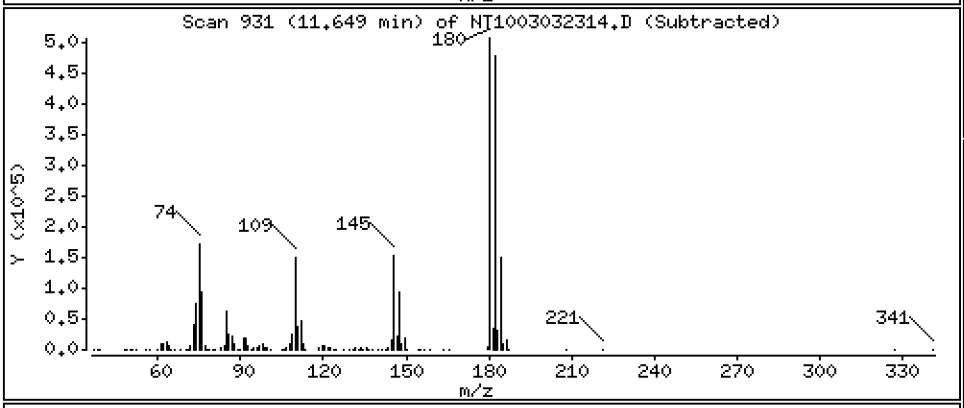
Column diameter: 0.25

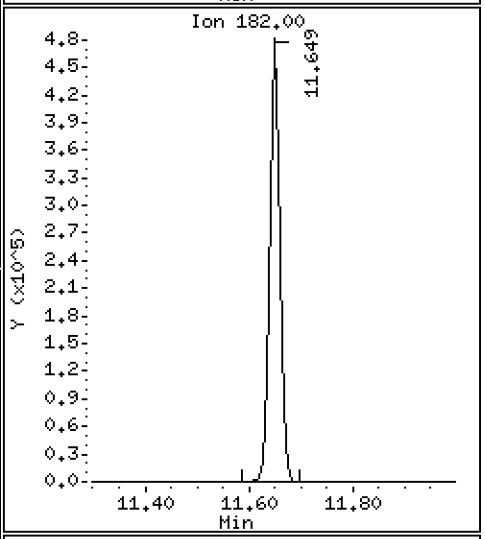
26 1,2,4-Trichlorobenzene

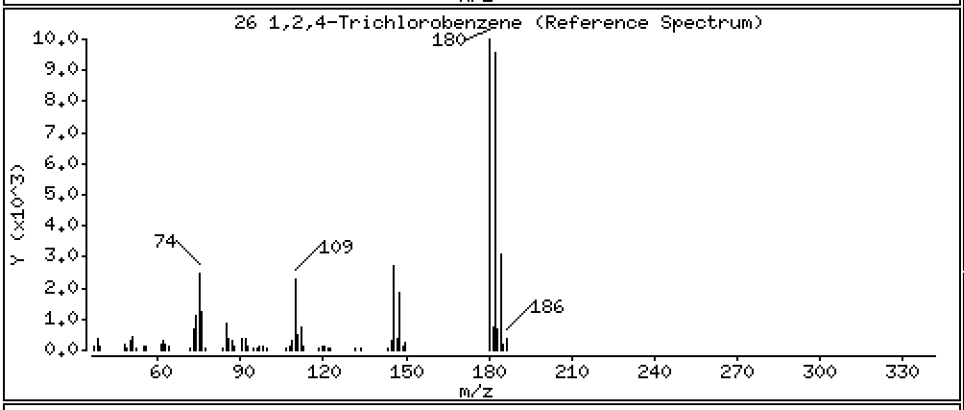
Concentration: 5.044 ug/ml

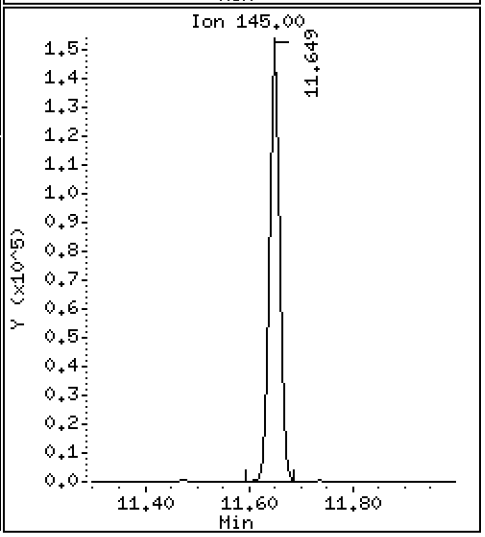


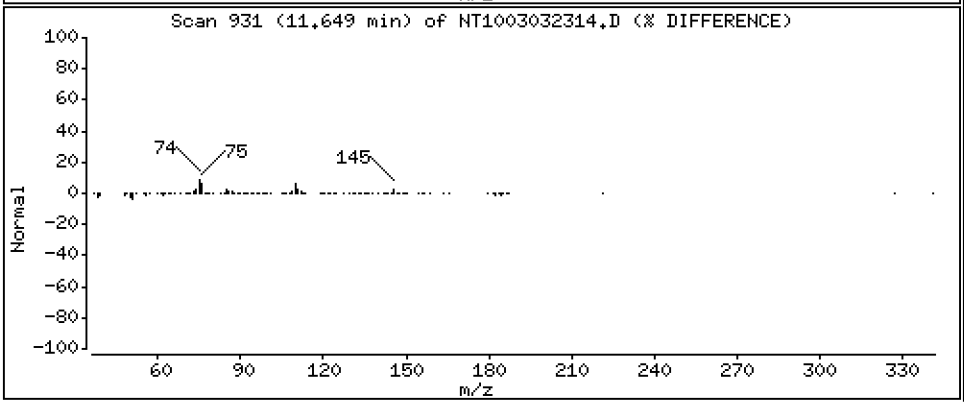












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

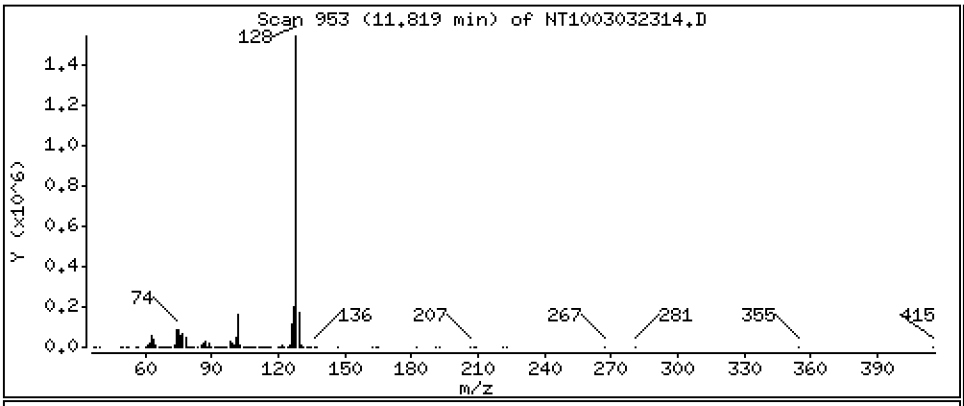
Operator: VTS

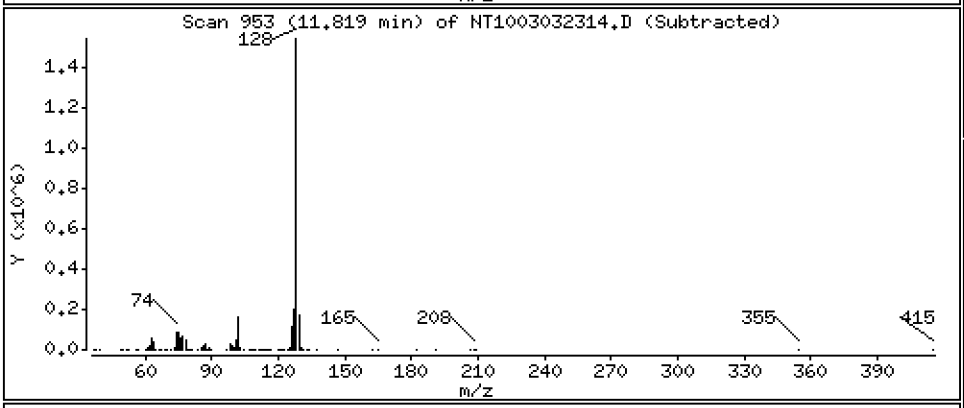
Column phase: ZB-5msi

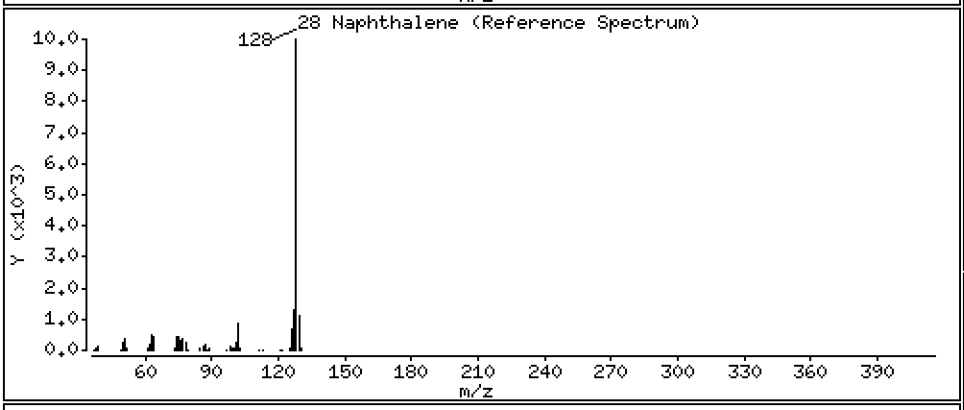
Column diameter: 0.25

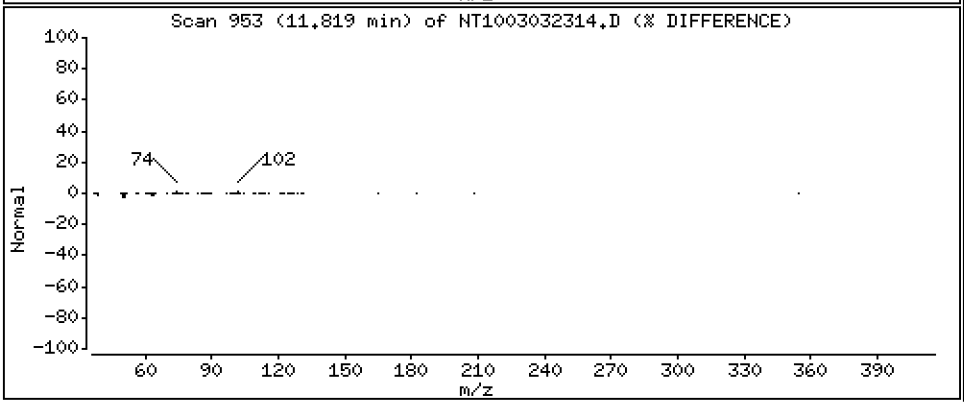
28 Naphthalene

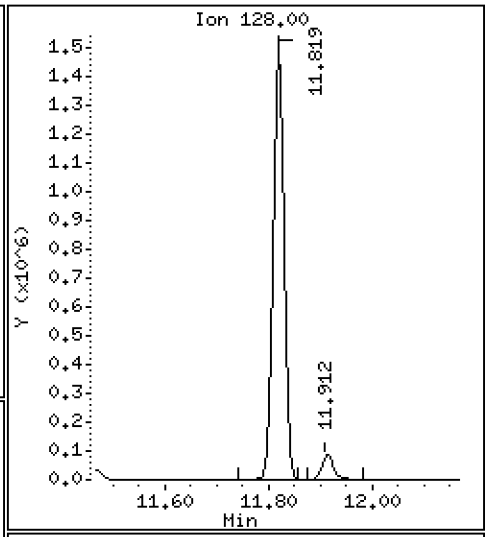
Concentration: 4.854 ug/ml

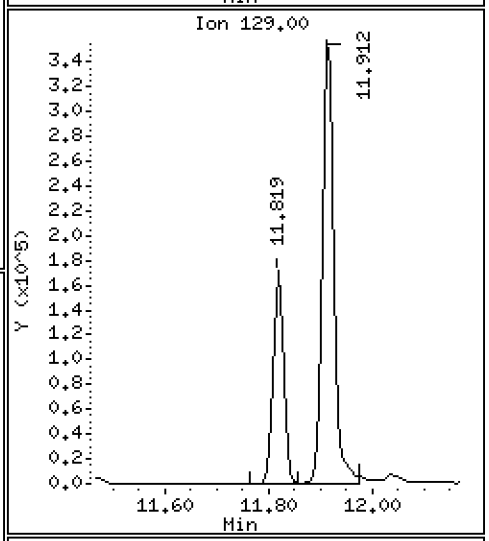


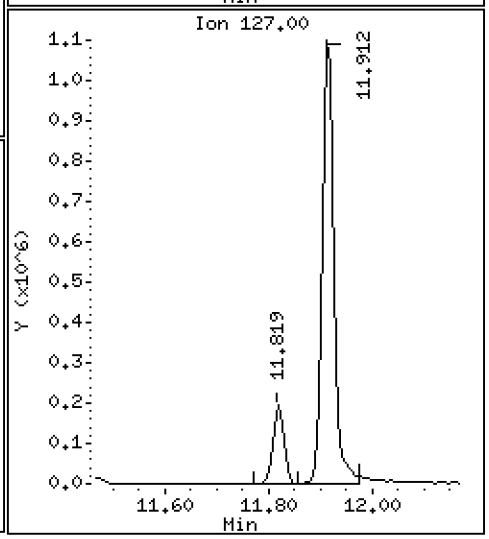












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

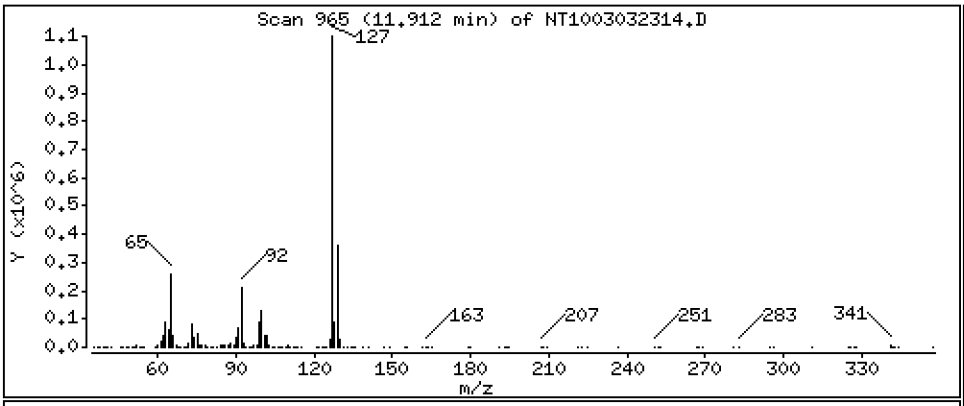
Operator: VTS

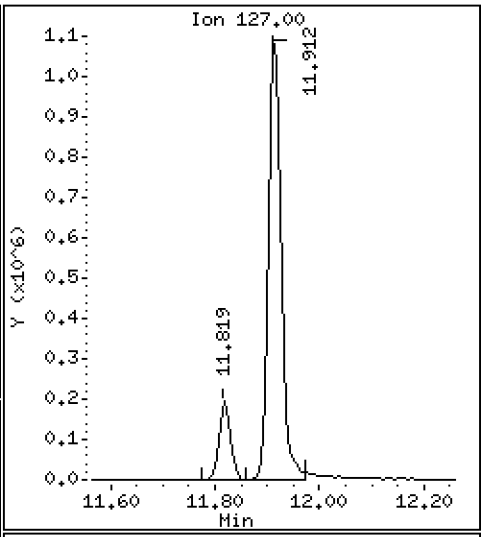
Column phase: ZB-5msi

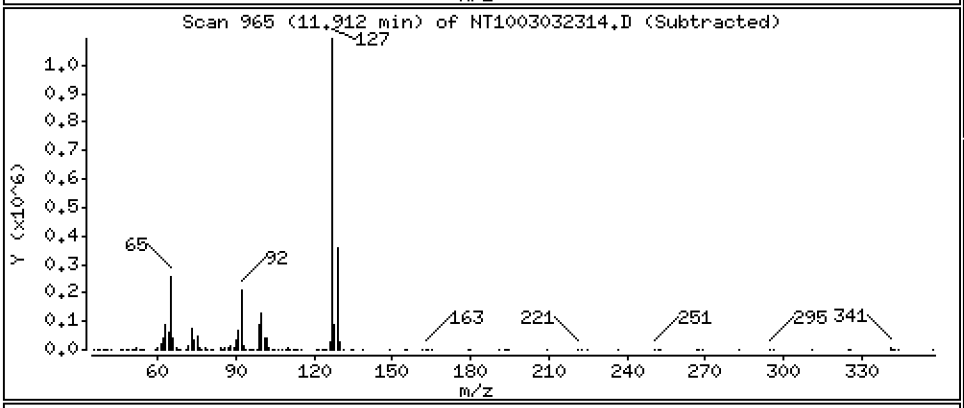
Column diameter: 0.25

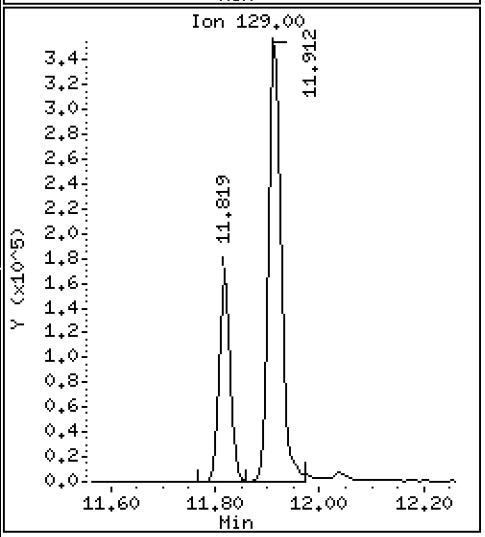
29 4-Chloroaniline

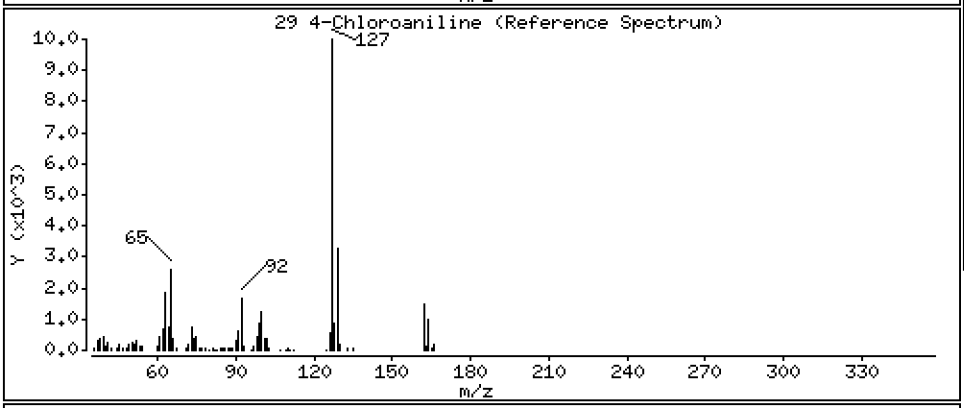
Concentration: 9.473 ug/ml

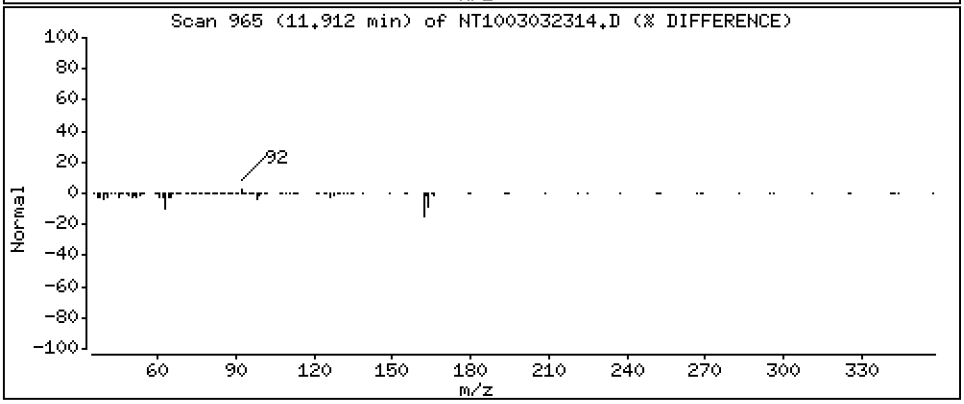












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

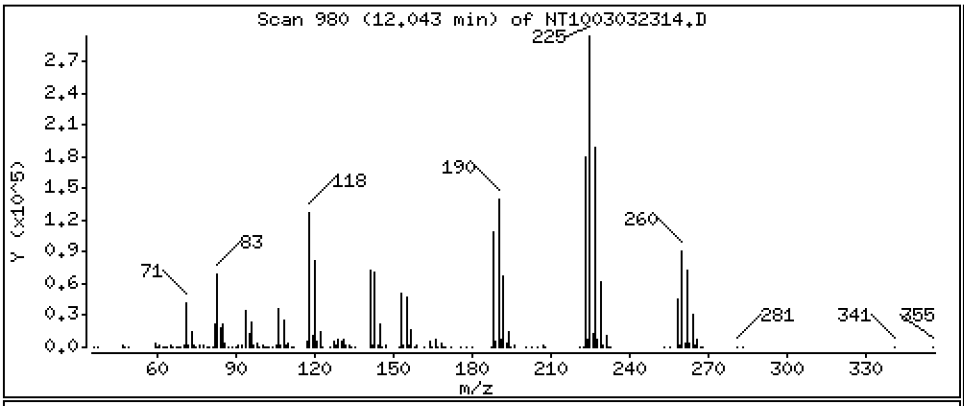
Operator: VTS

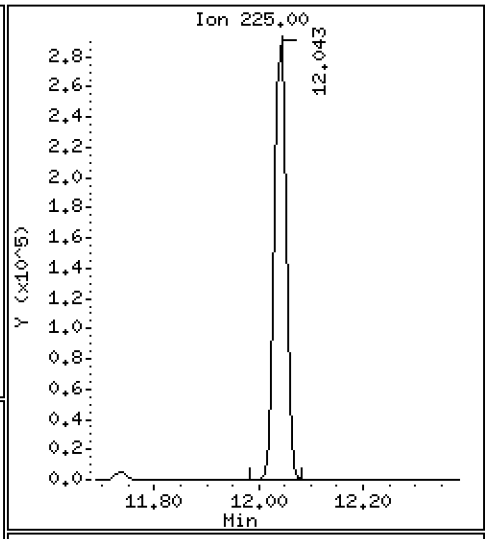
Column phase: ZB-5msi

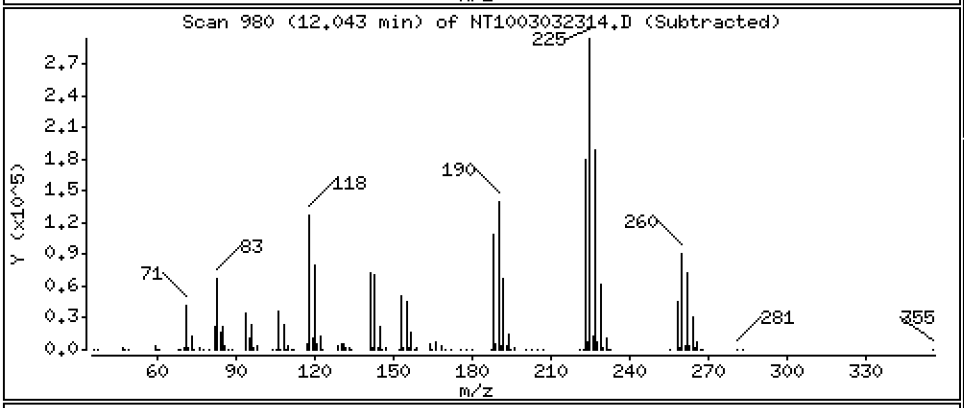
Column diameter: 0.25

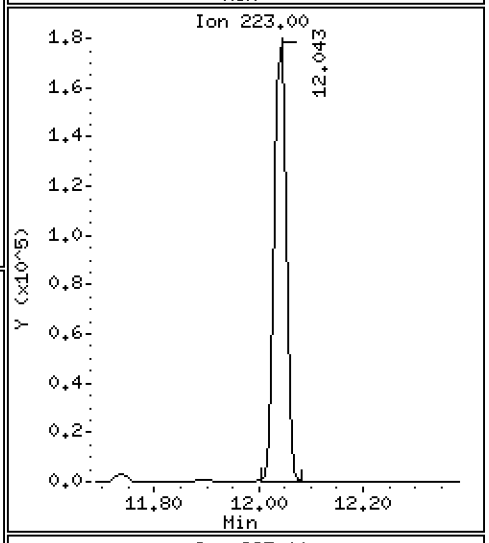
30 Hexachlorobutadiene

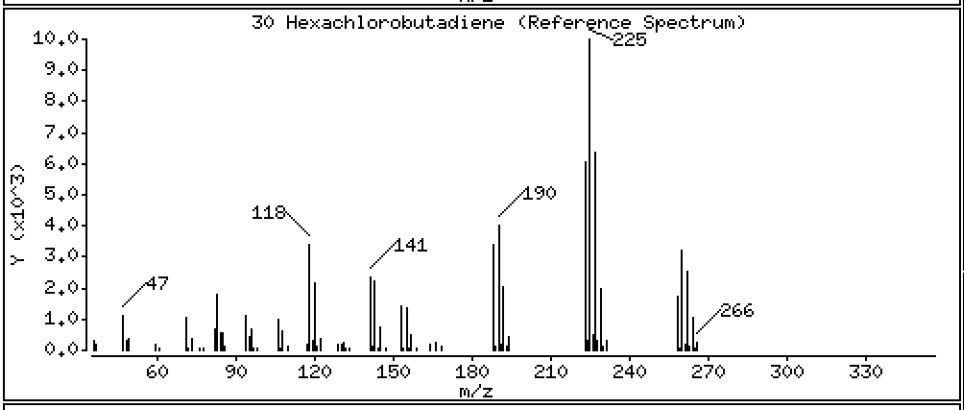
Concentration: 4.204 ug/ml

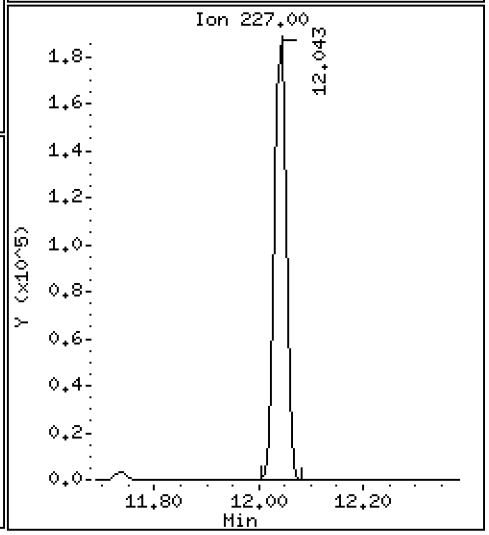


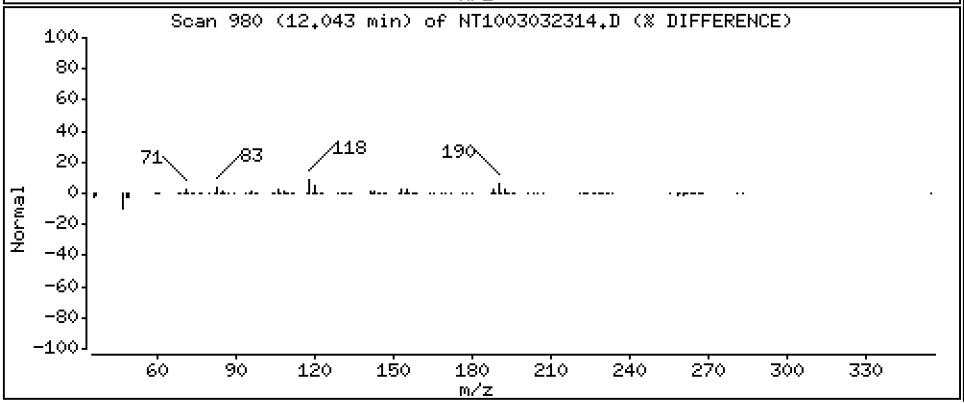












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

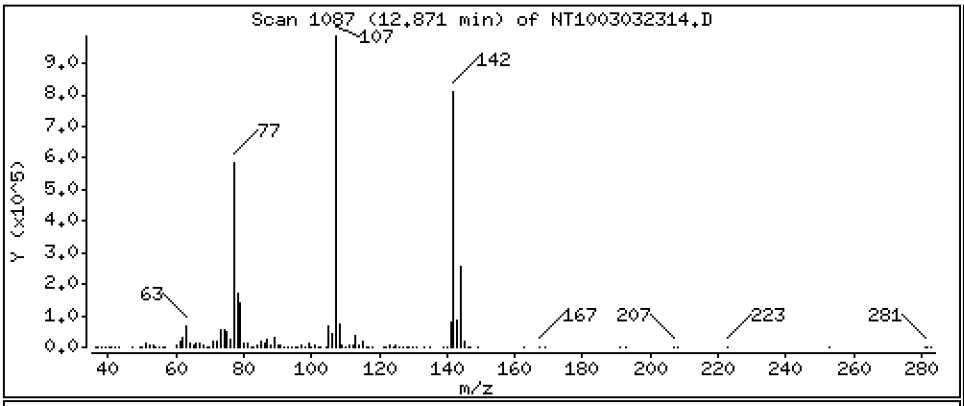
Operator: VTS

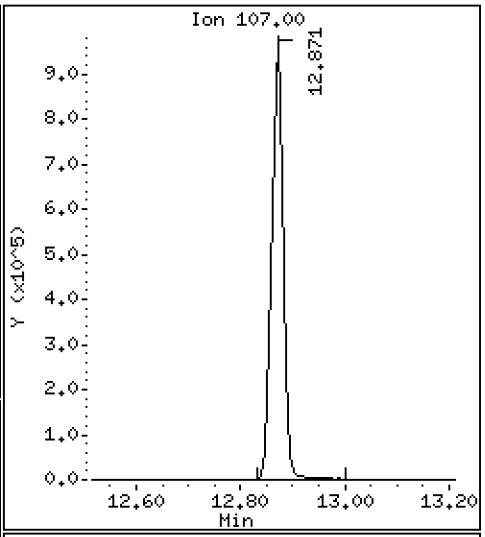
Column phase: ZB-5msi

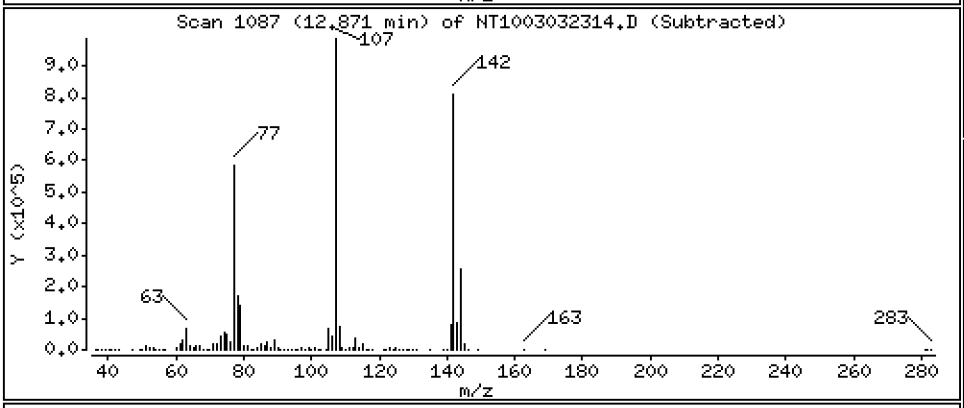
Column diameter: 0.25

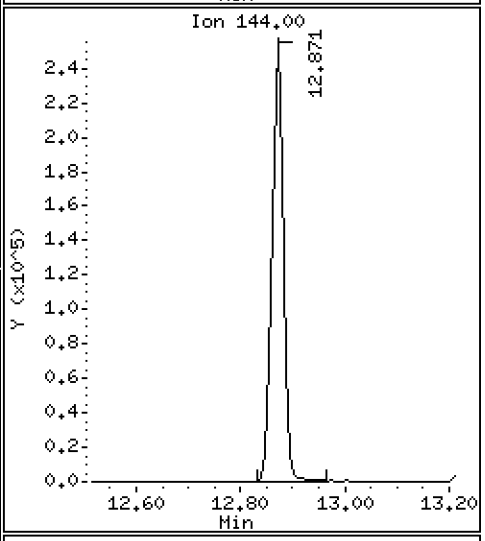
31 4-Chloro-3-methylphenol

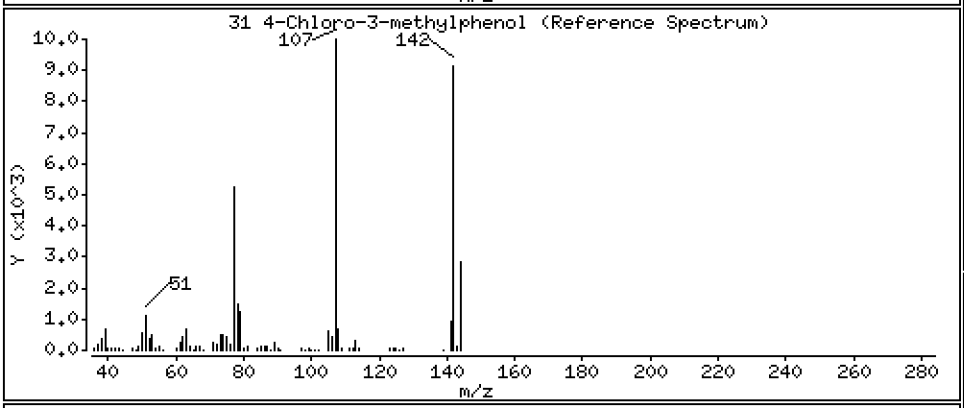
Concentration: 9.278 ug/ml

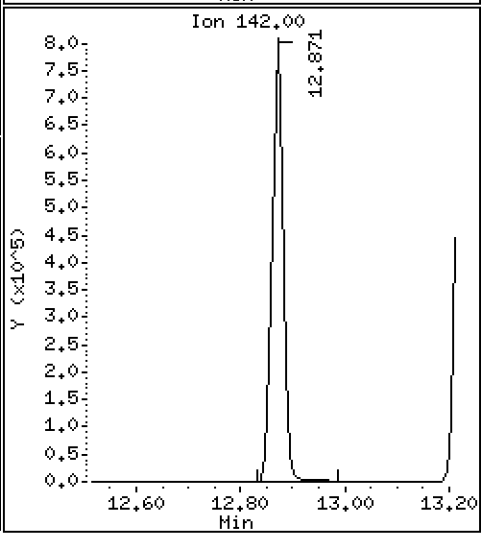


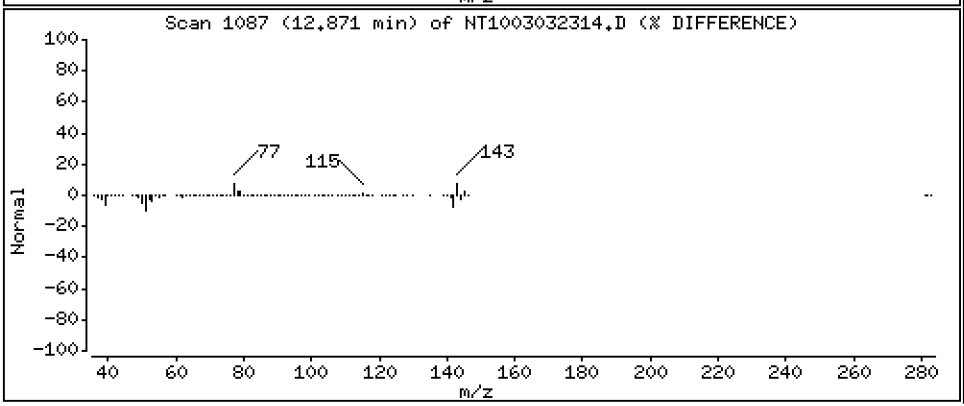












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

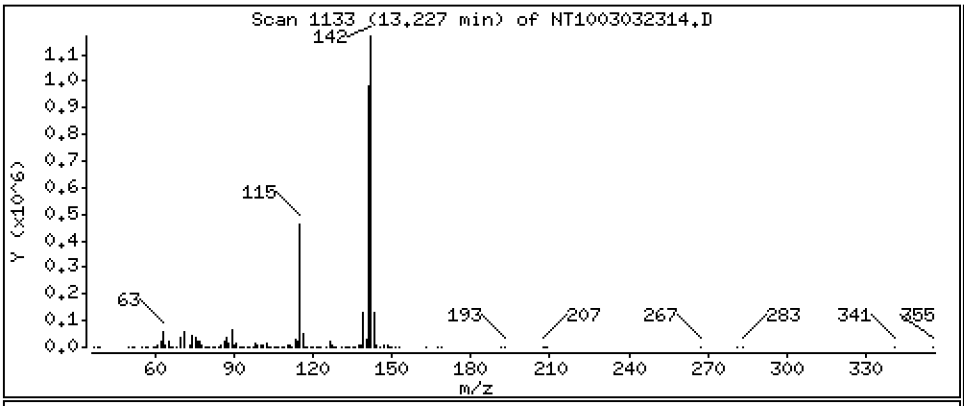
Operator: VTS

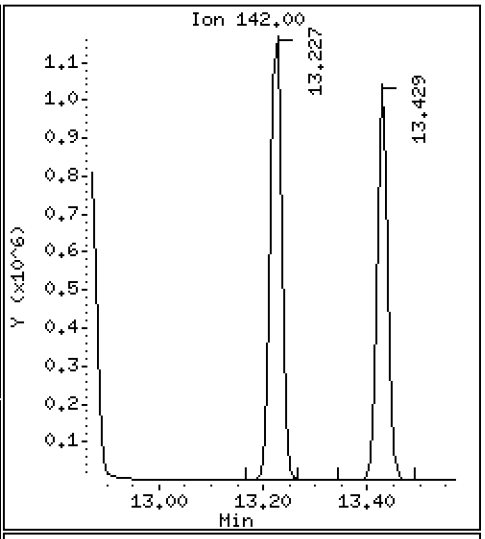
Column phase: ZB-5msi

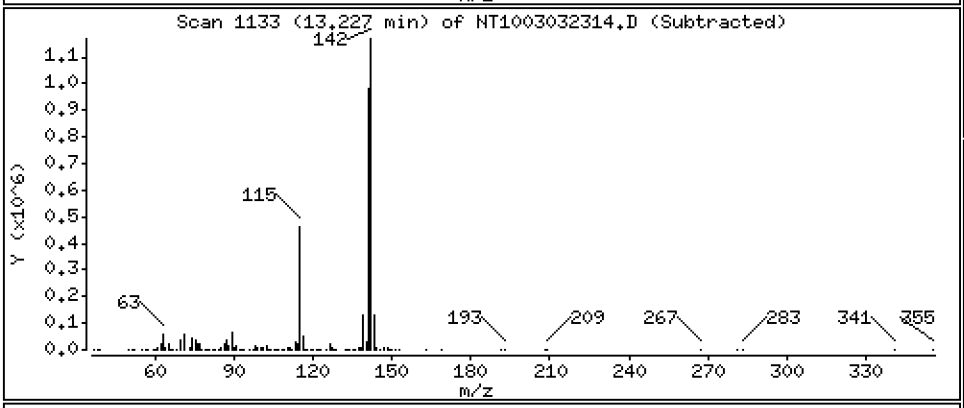
Column diameter: 0.25

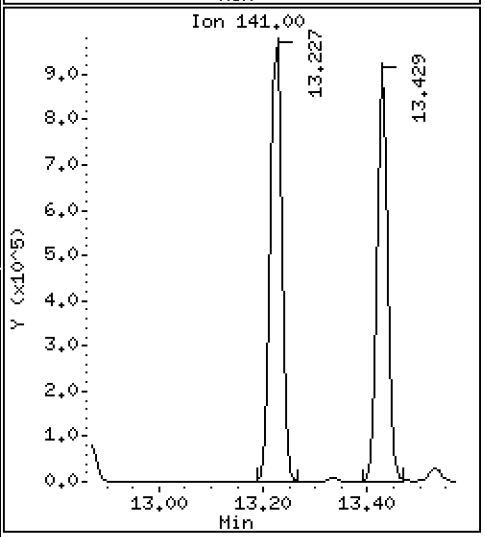
32 2-Methylnaphthalene

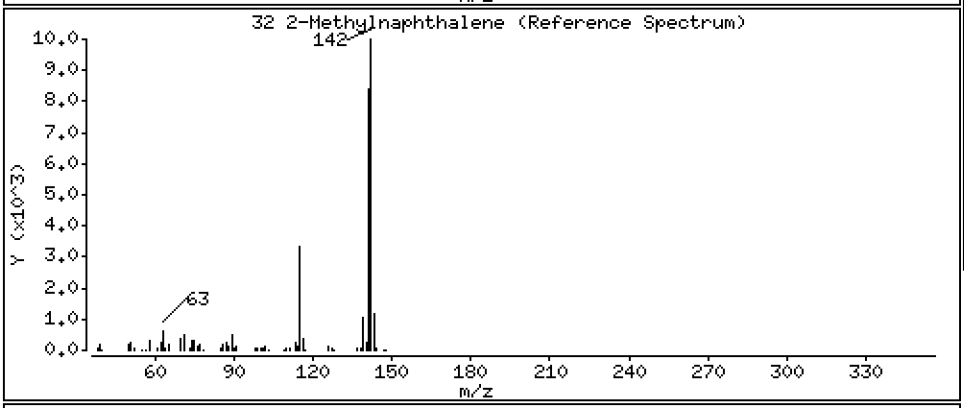
Concentration: 5.045 ug/ml

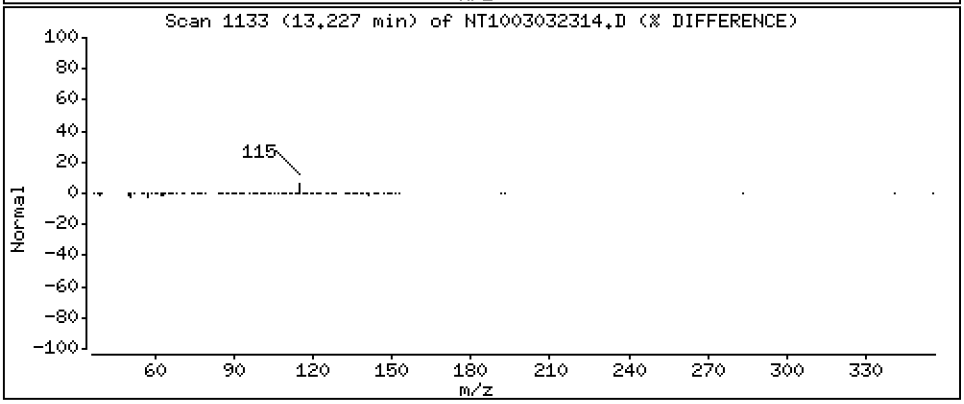












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

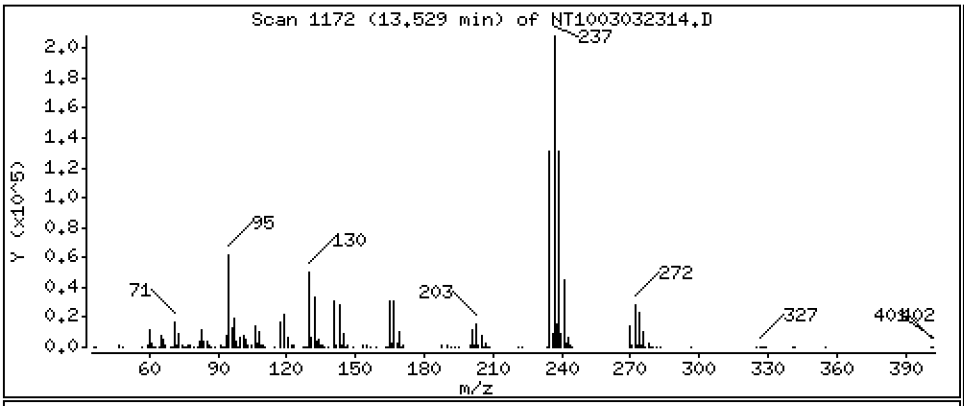
Operator: VTS

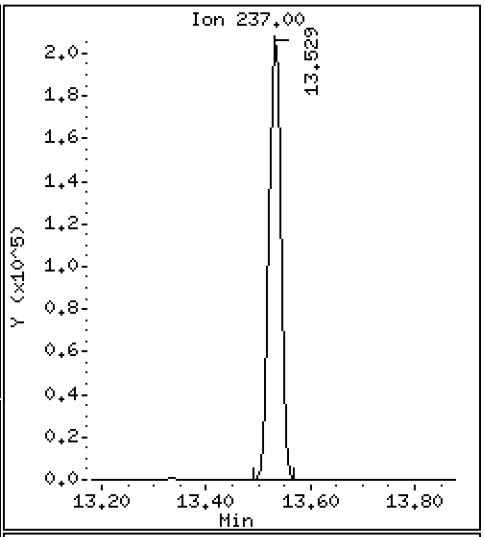
Column phase: ZB-5msi

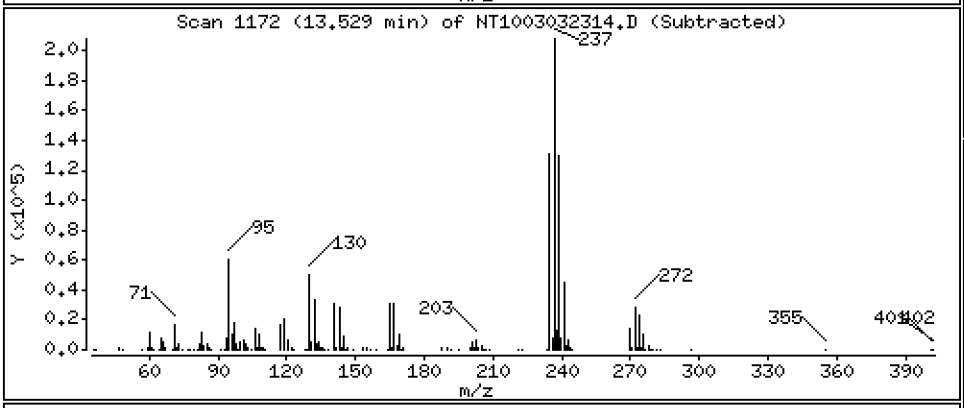
Column diameter: 0.25

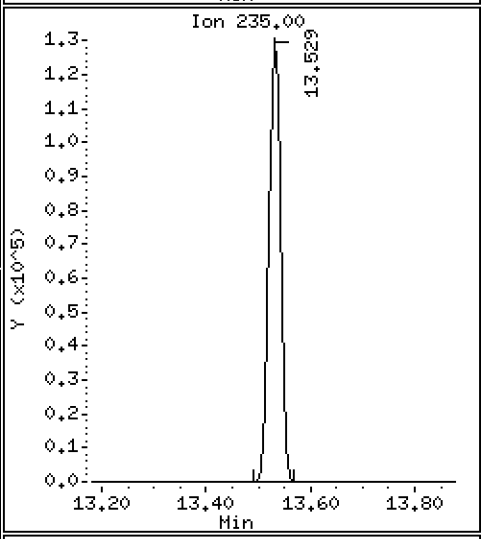
33 Hexachlorocyclopentadiene

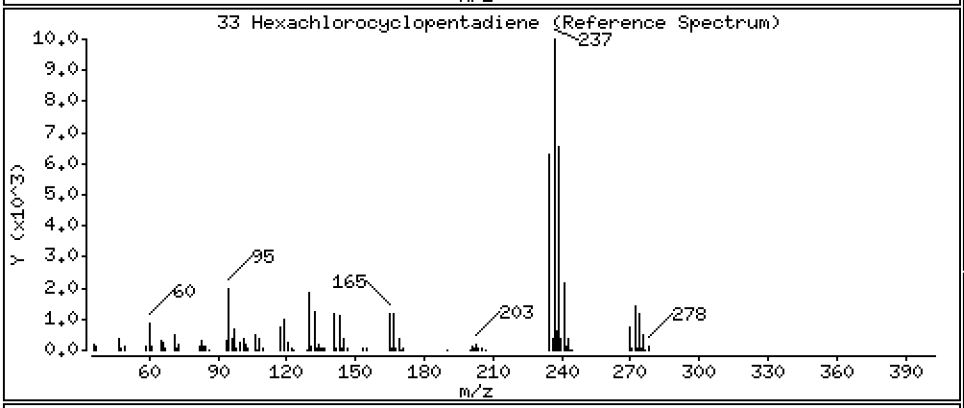
Concentration: 9.491 ug/ml

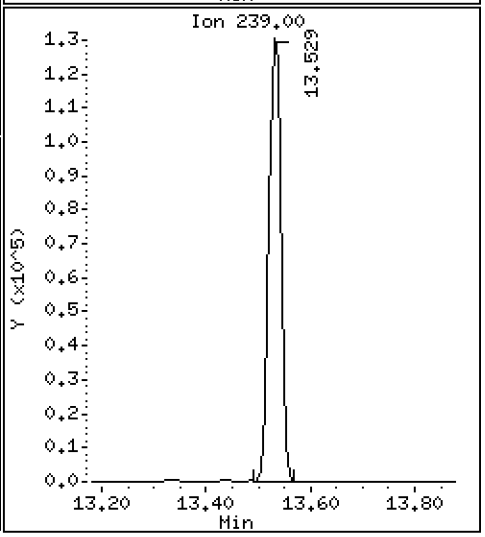


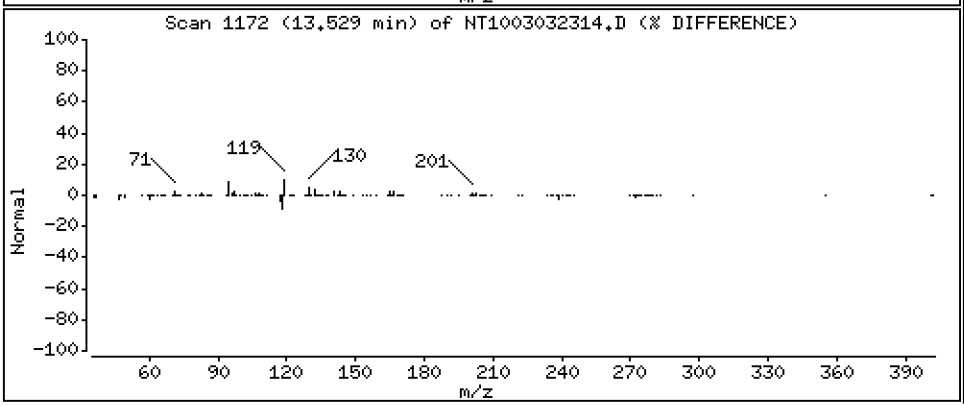












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

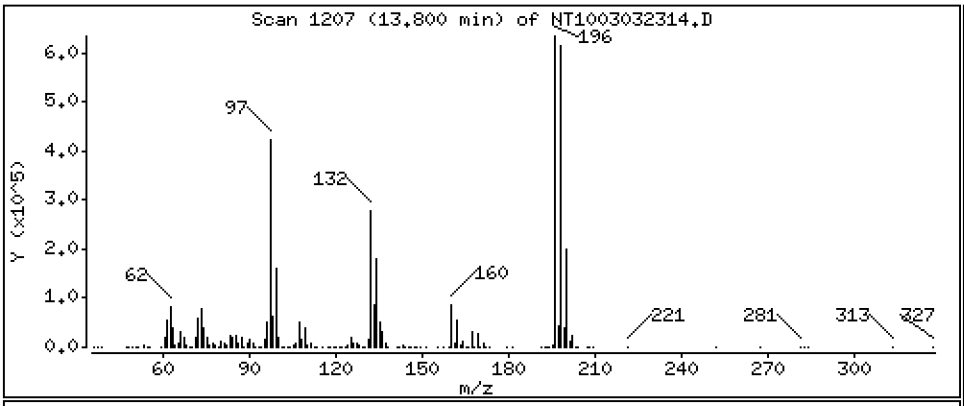
Operator: VTS

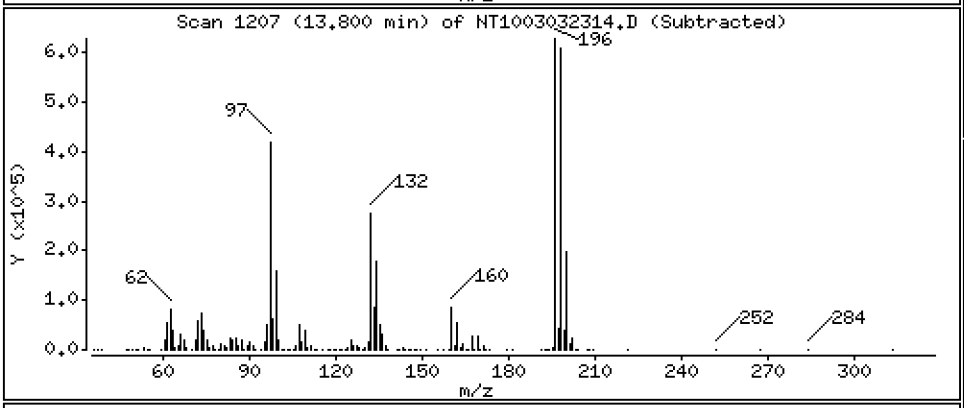
Column phase: ZB-5msi

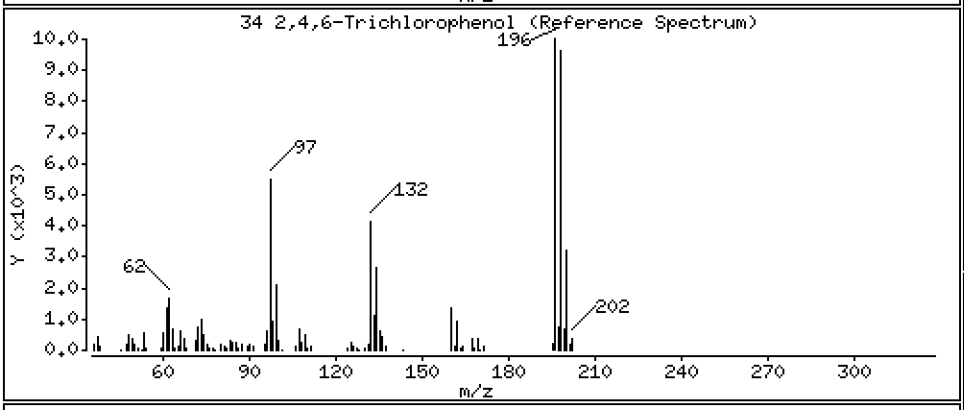
Column diameter: 0.25

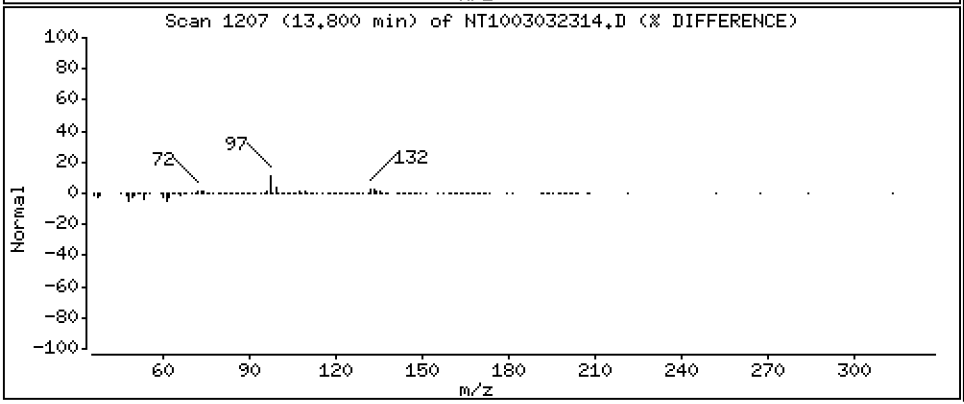
34 2,4,6-Trichlorophenol

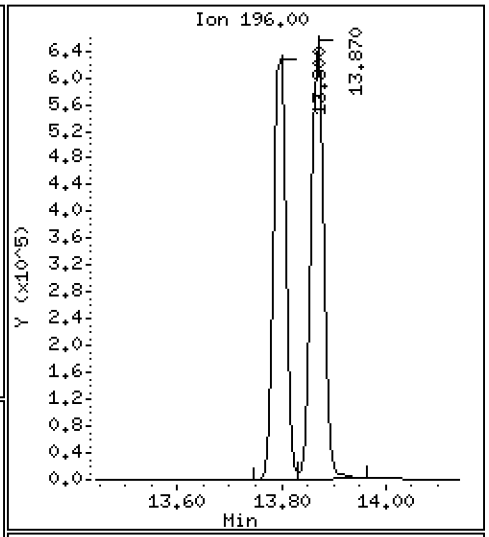
Concentration: 10.53 ug/ml

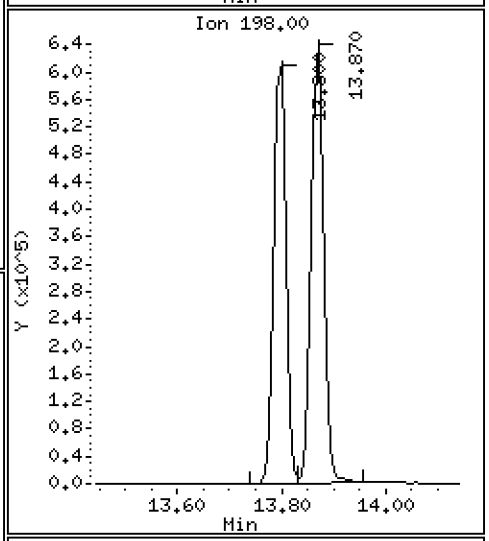


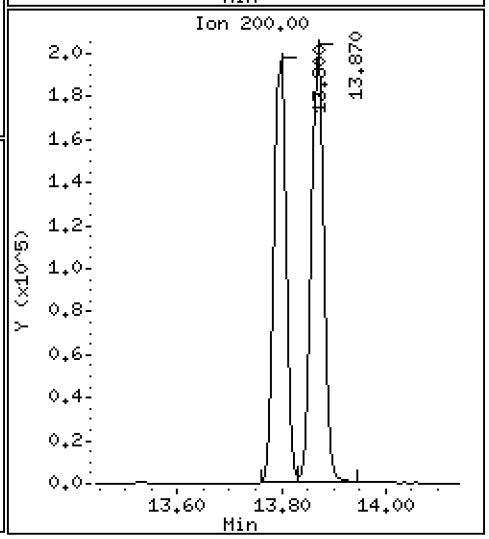












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

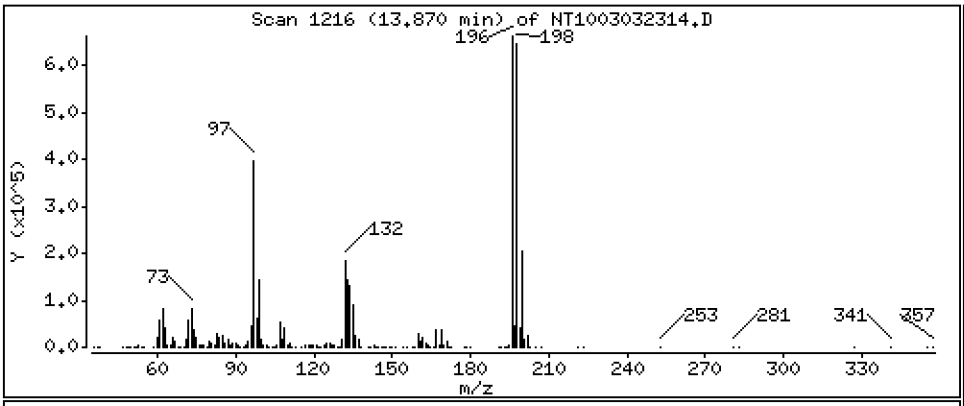
Operator: VTS

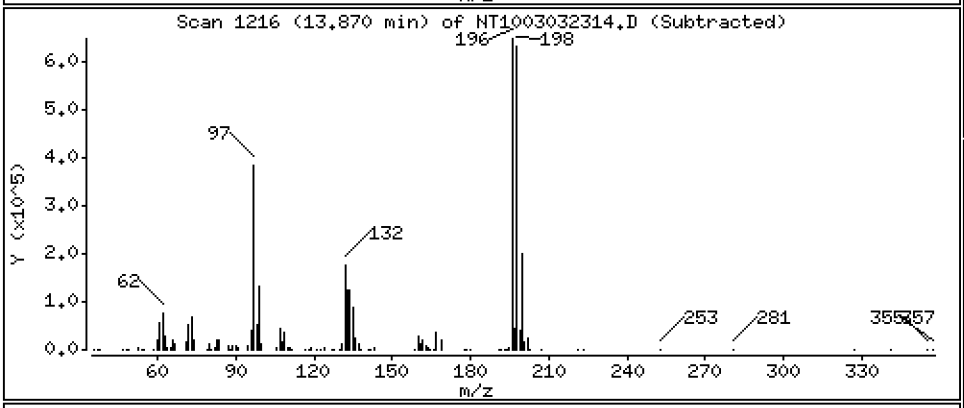
Column phase: ZB-5msi

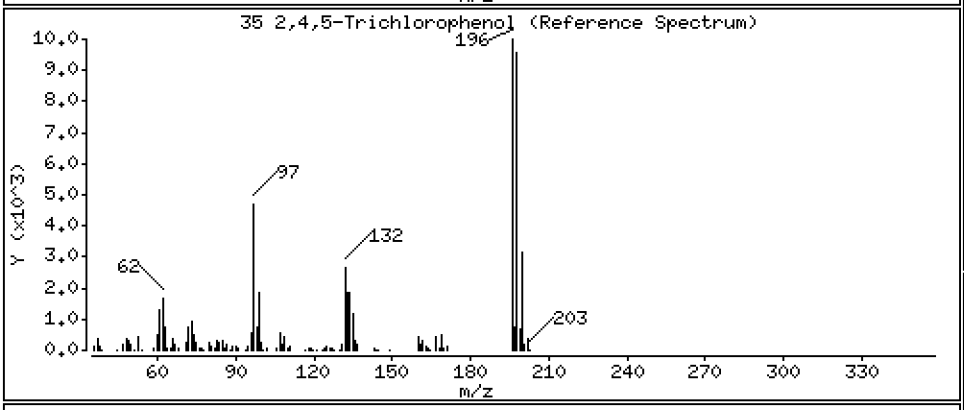
Column diameter: 0.25

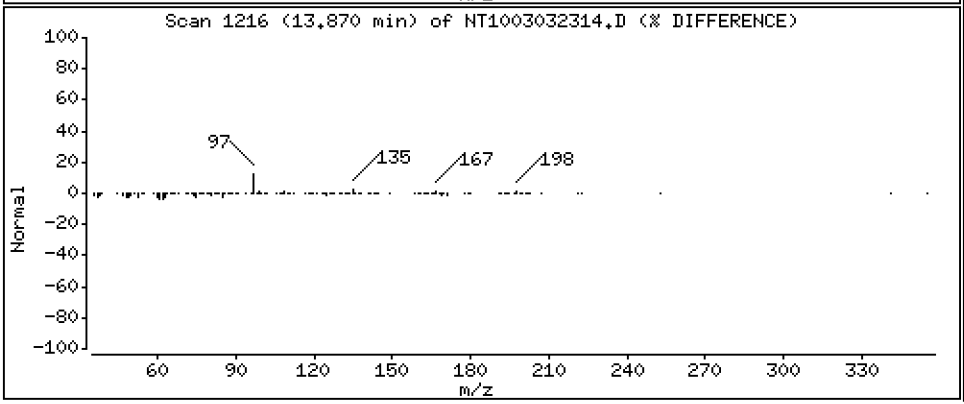
35 2,4,5-Trichlorophenol

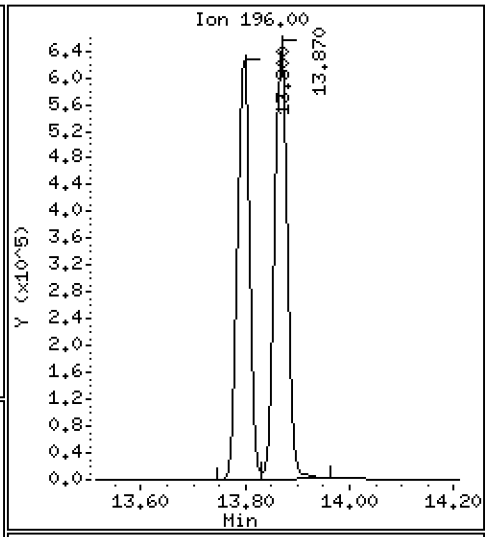
Concentration: 10.46 ug/ml

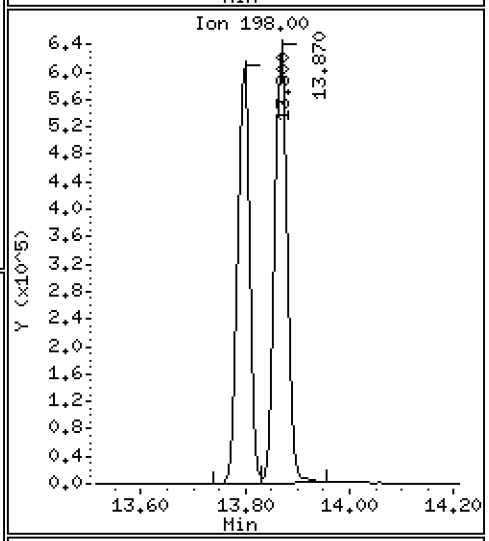


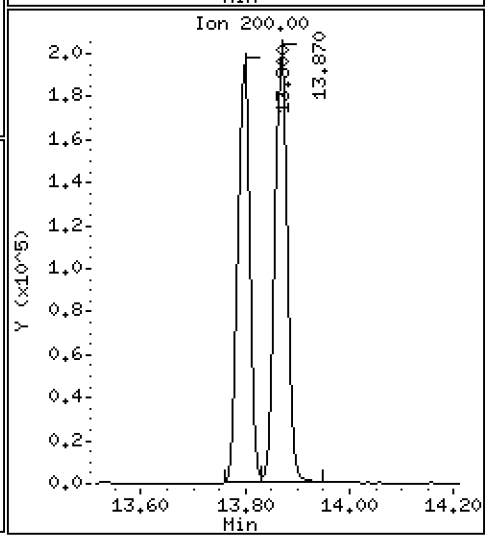












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

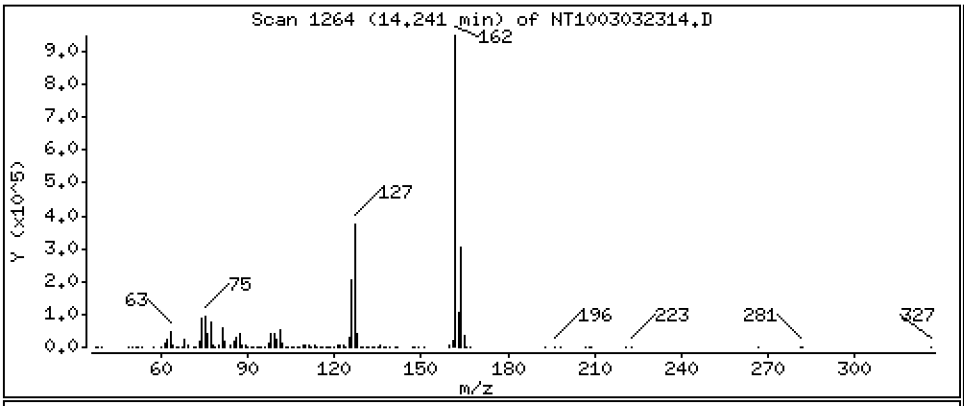
Operator: VTS

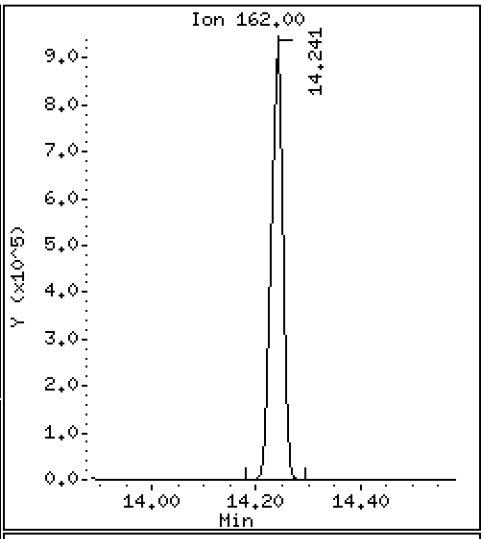
Column phase: ZB-5msi

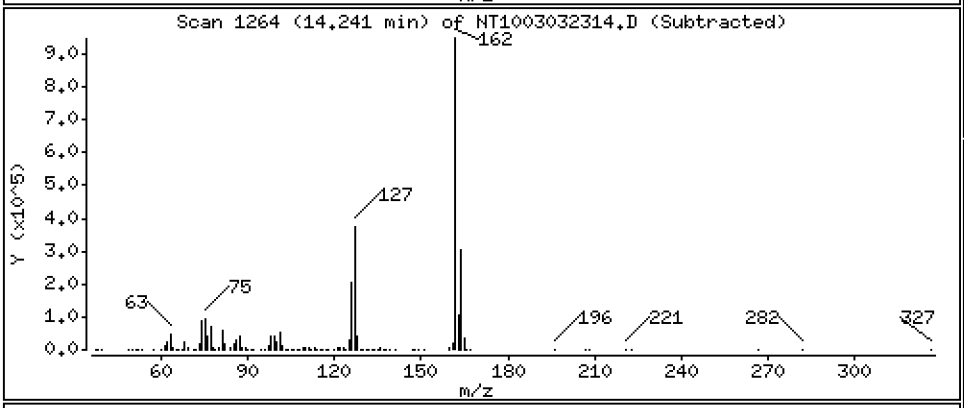
Column diameter: 0.25

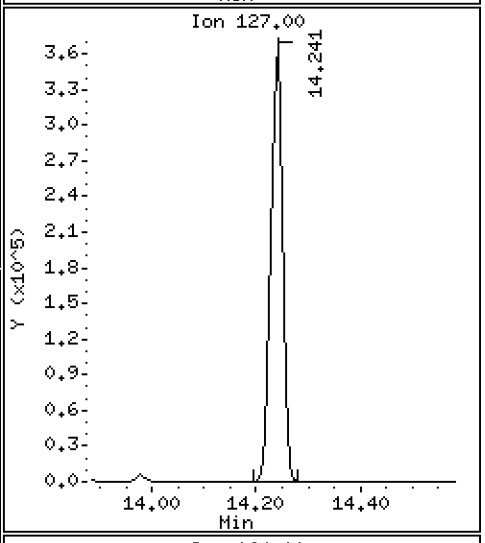
37 2-Chloronaphthalene

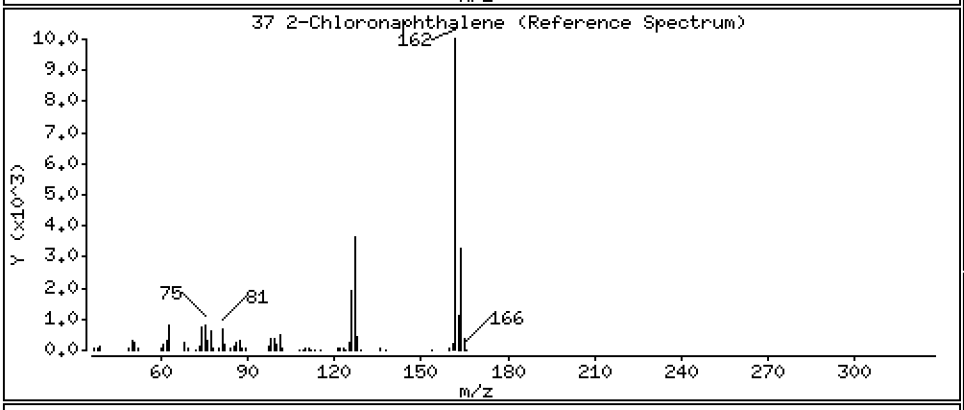
Concentration: 5.365 ug/ml

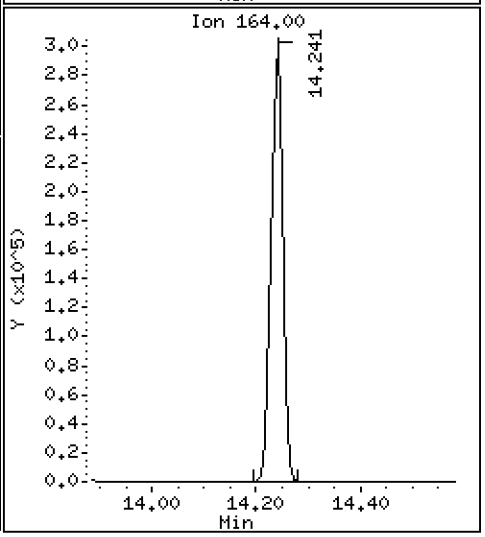


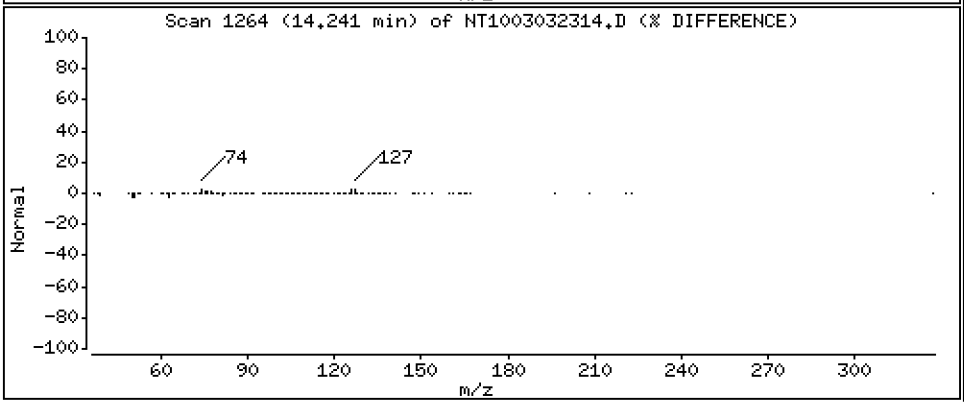












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

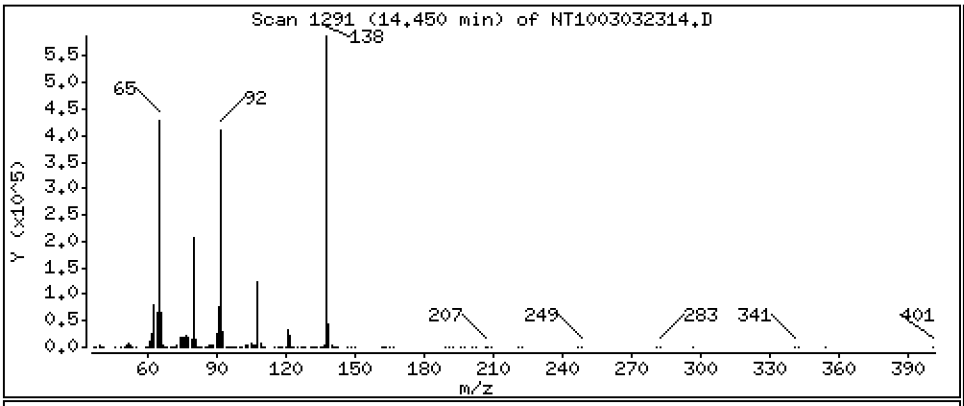
Operator: VTS

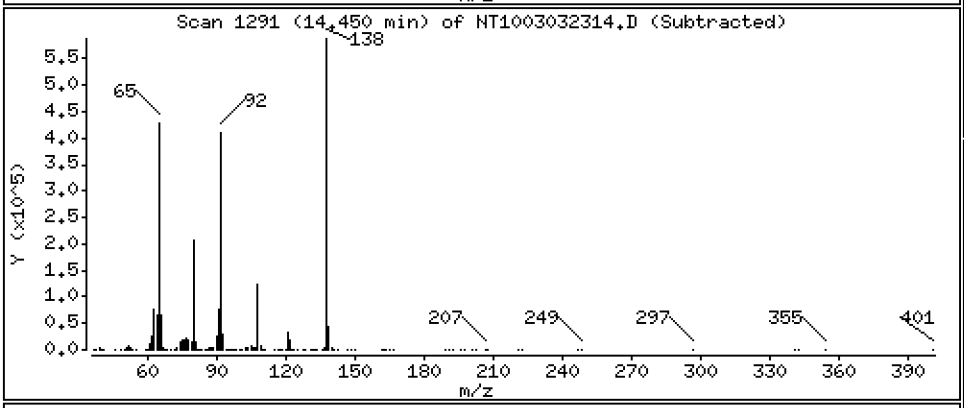
Column phase: ZB-5msi

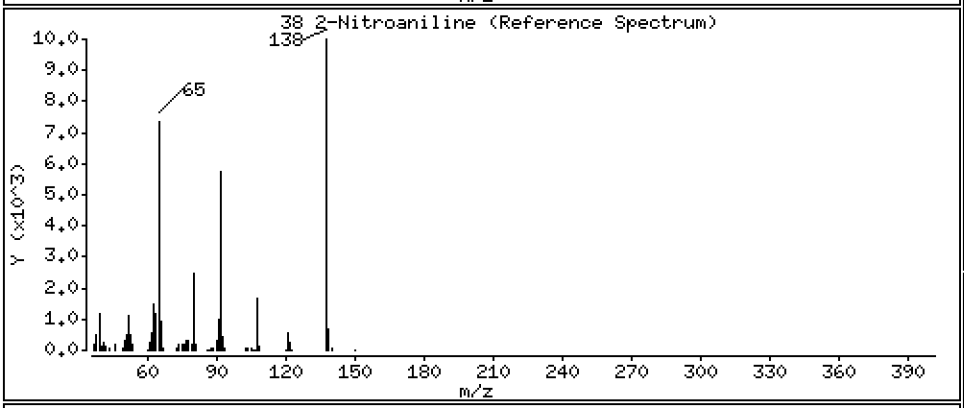
Column diameter: 0.25

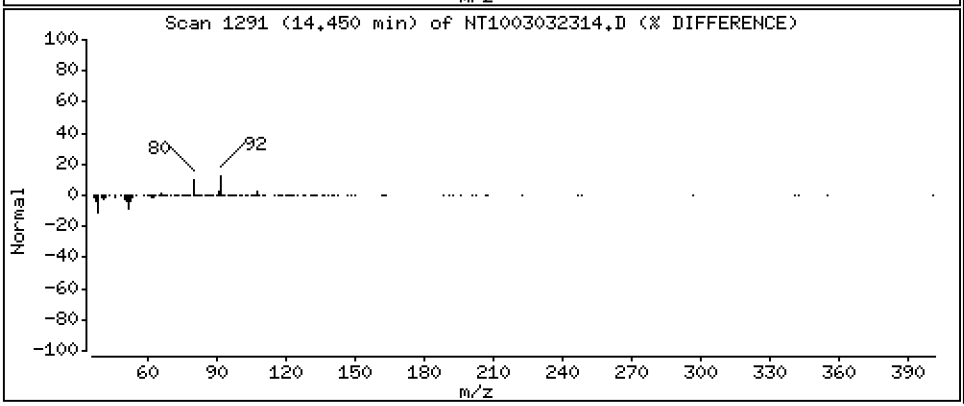
38 2-Nitroaniline

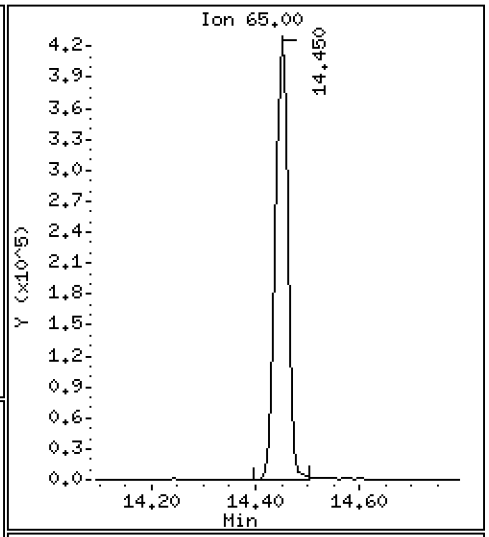
Concentration: 9.224 ug/ml

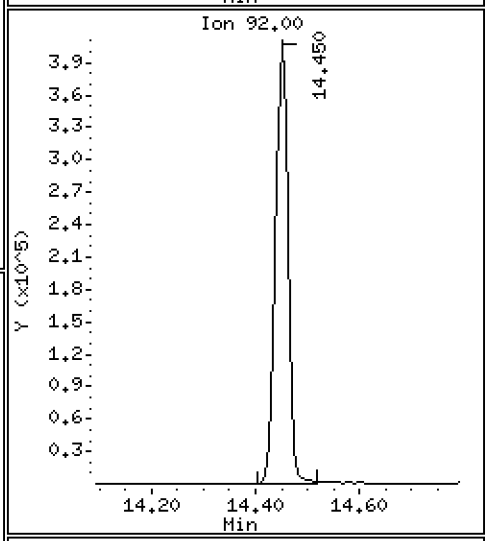


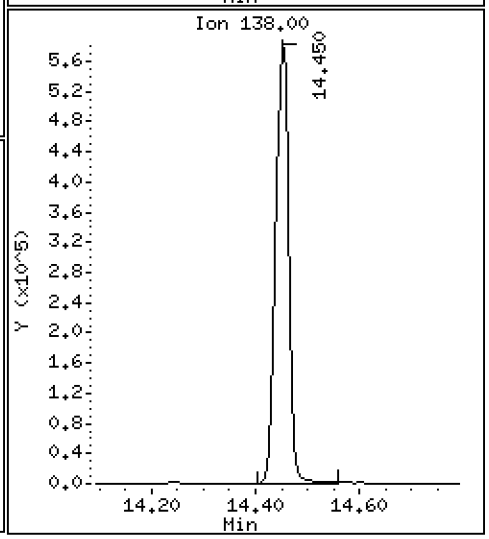












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

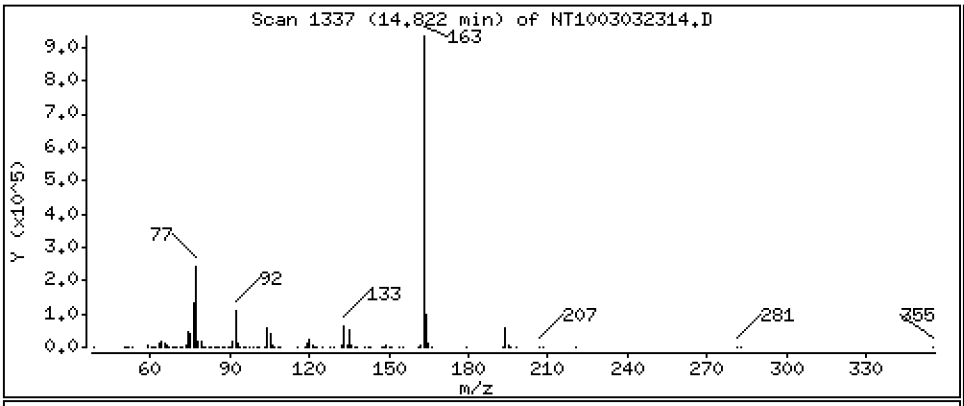
Operator: VTS

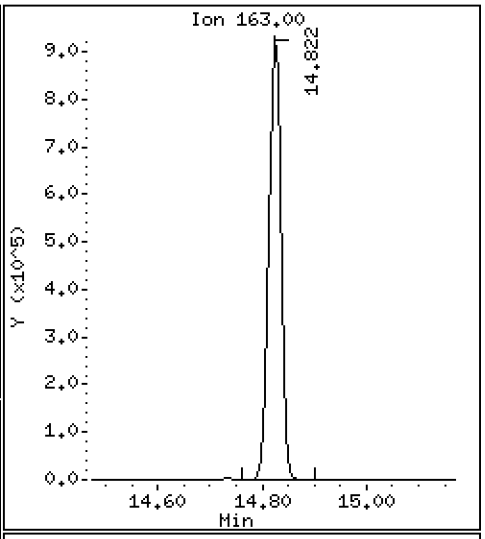
Column phase: ZB-5msi

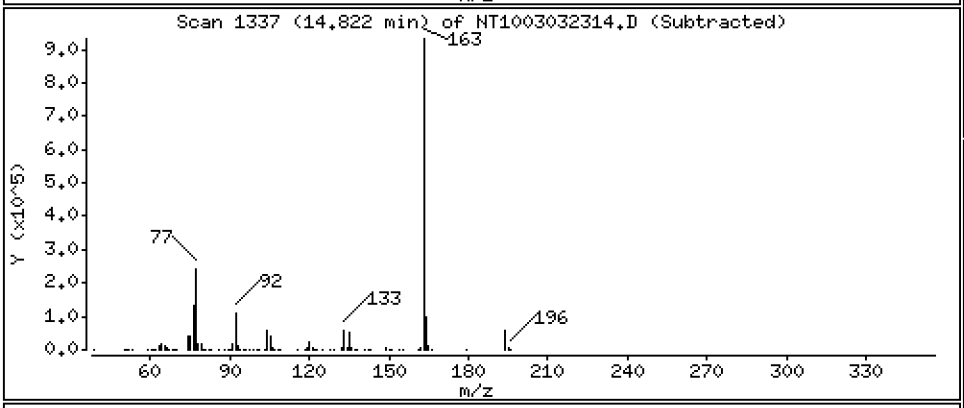
Column diameter: 0.25

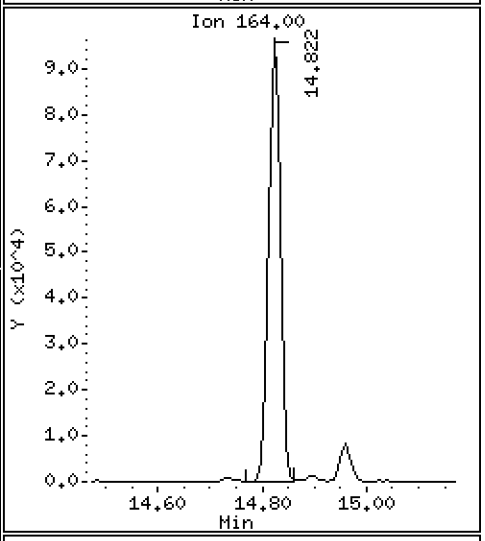
39 Dimethylphthalate

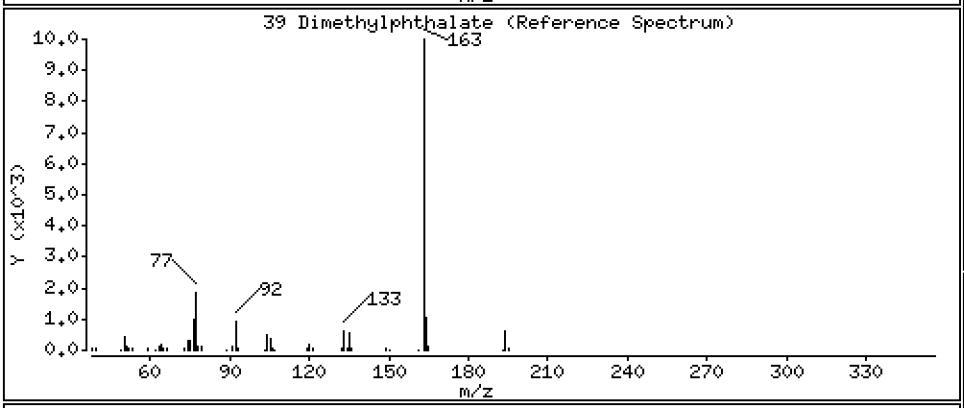
Concentration: 4.738 ug/ml

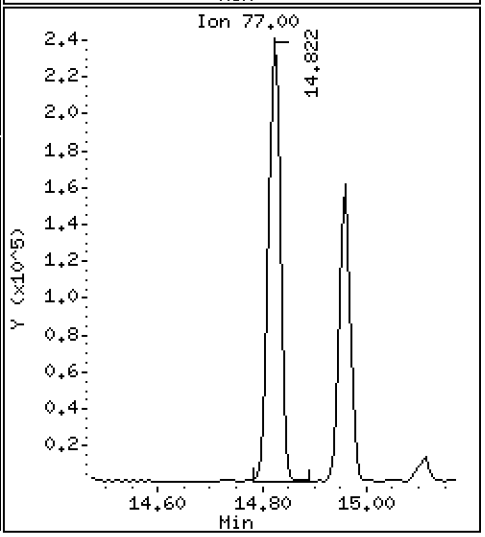


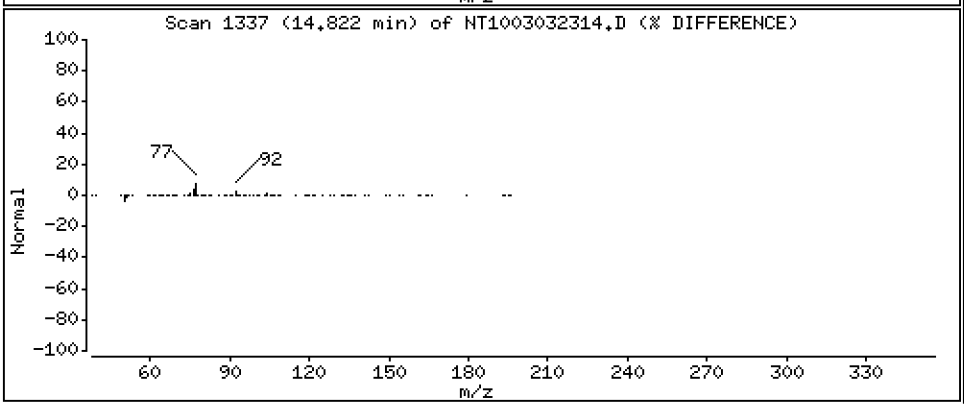












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

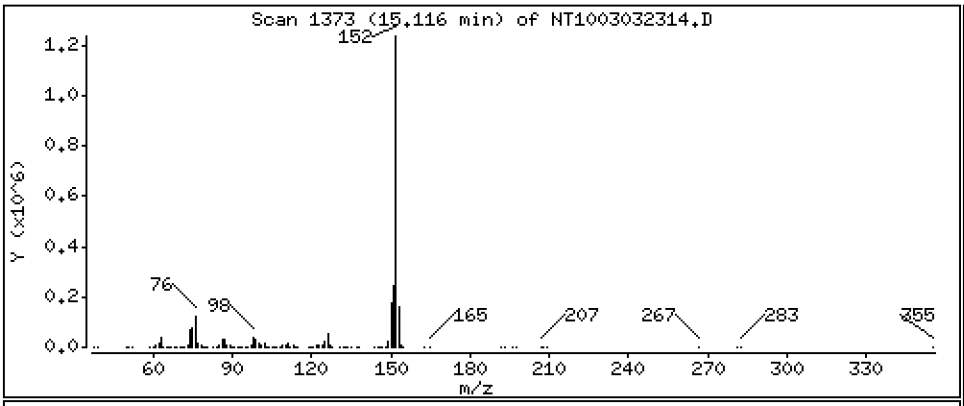
Operator: VTS

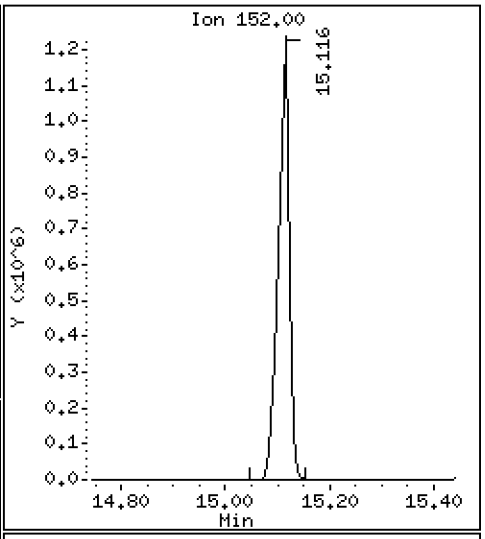
Column phase: ZB-5msi

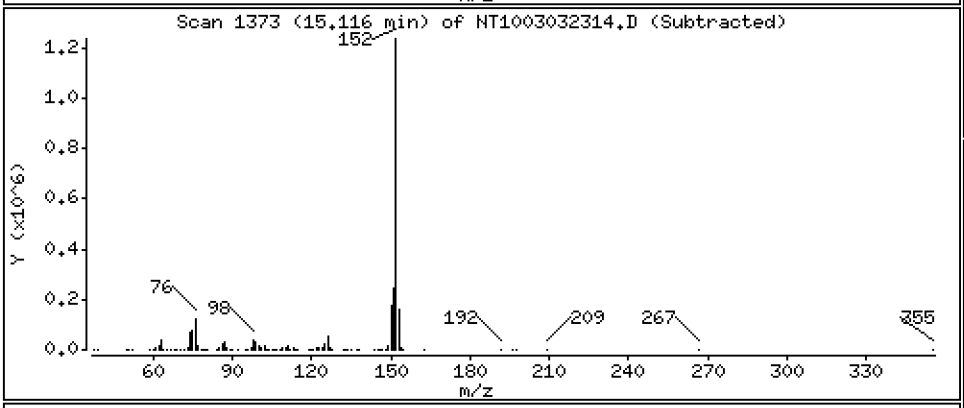
Column diameter: 0.25

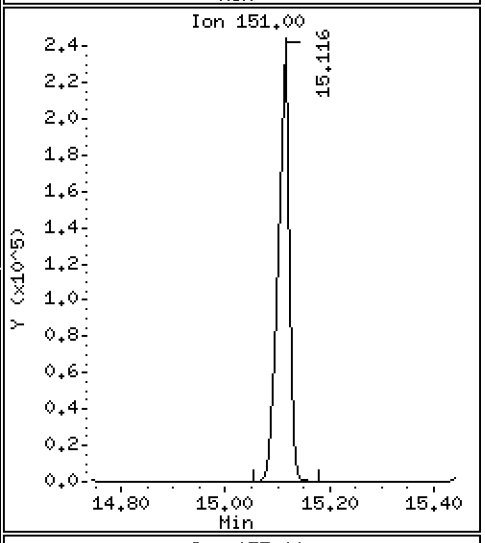
40 Acenaphthylene

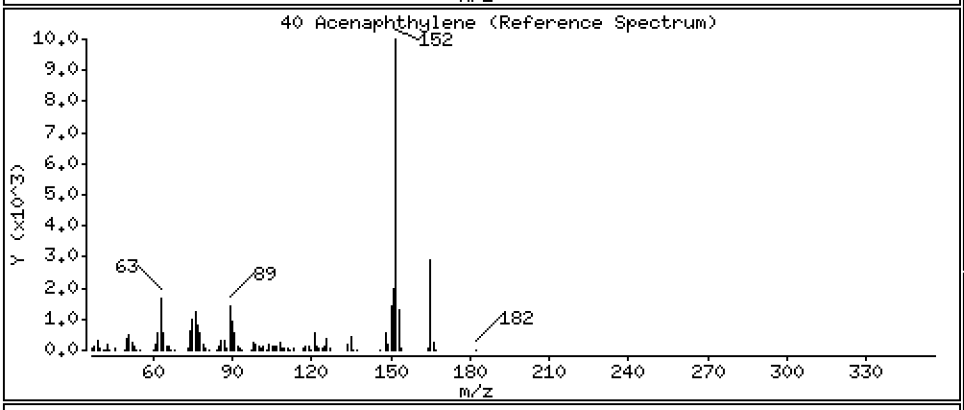
Concentration: 2.840 ug/ml

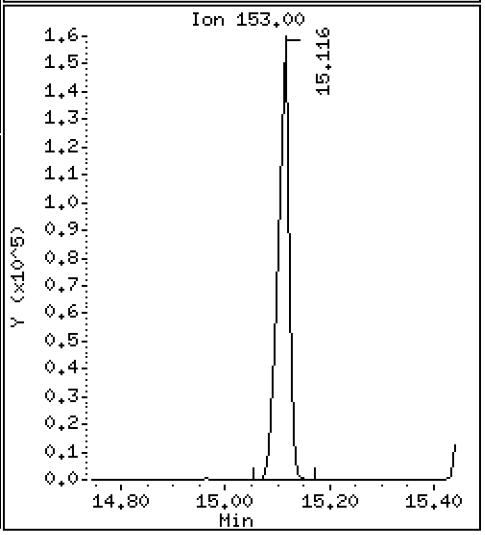


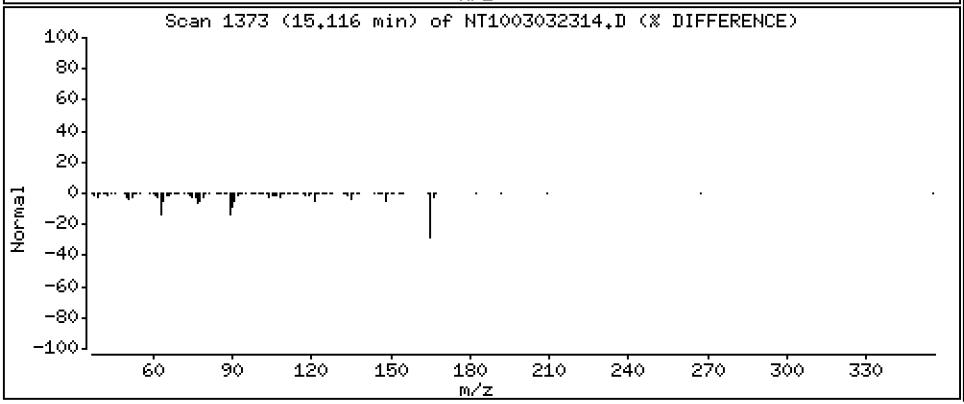












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

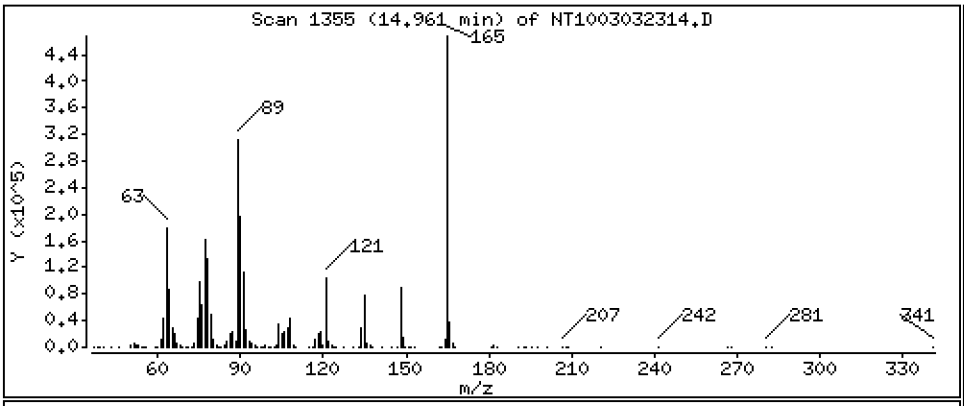
Operator: VTS

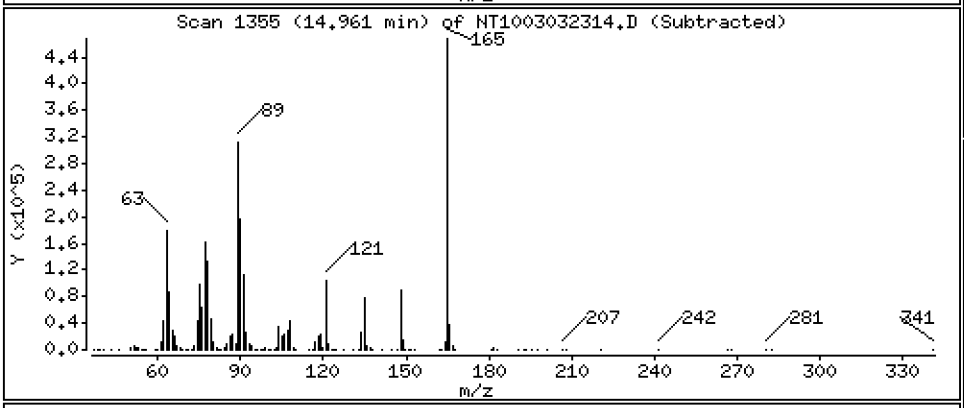
Column phase: ZB-5msi

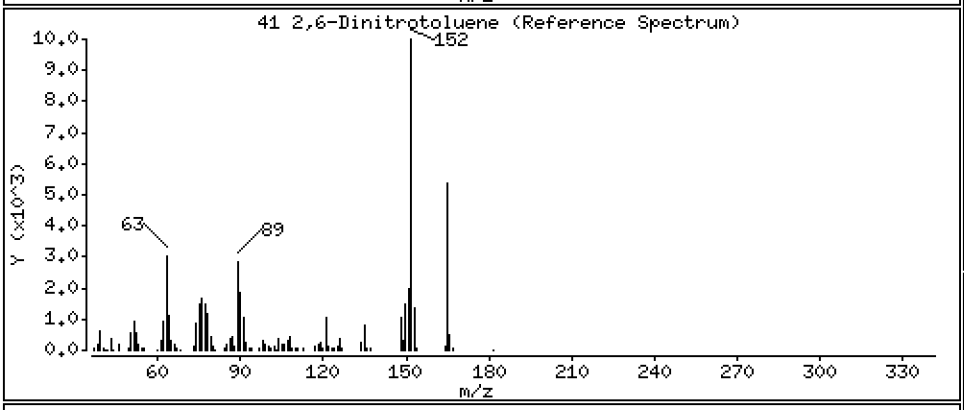
Column diameter: 0.25

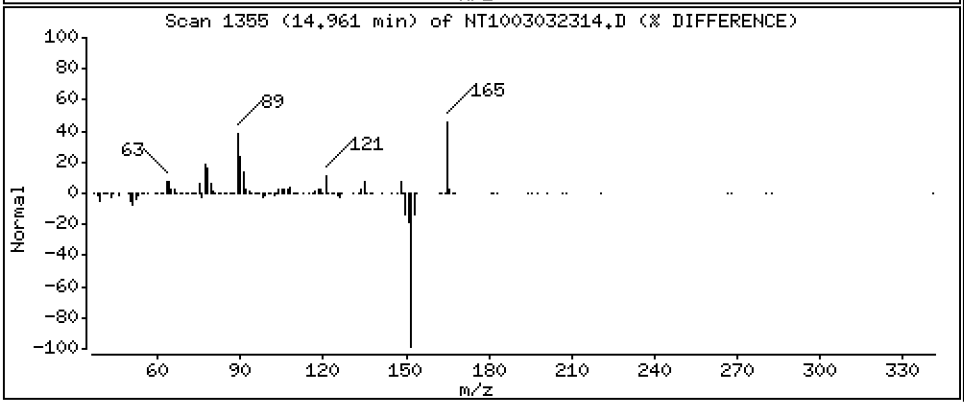
41 2,6-Dinitrotoluene

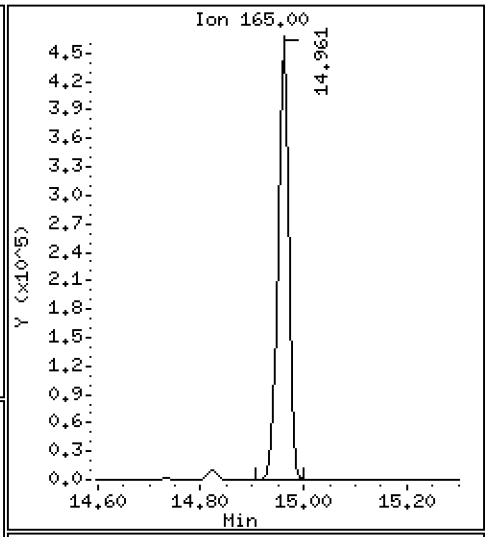
Concentration: 9.879 ug/ml

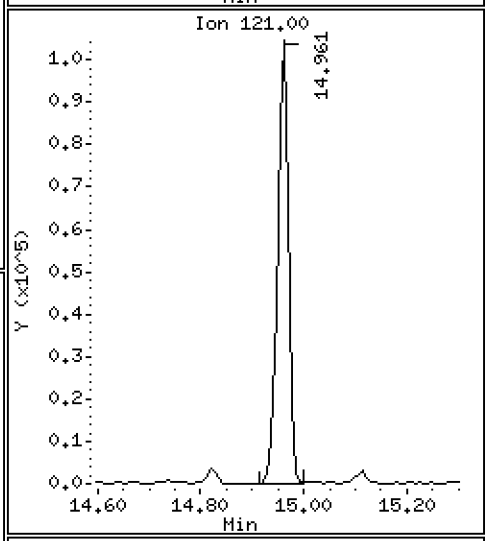


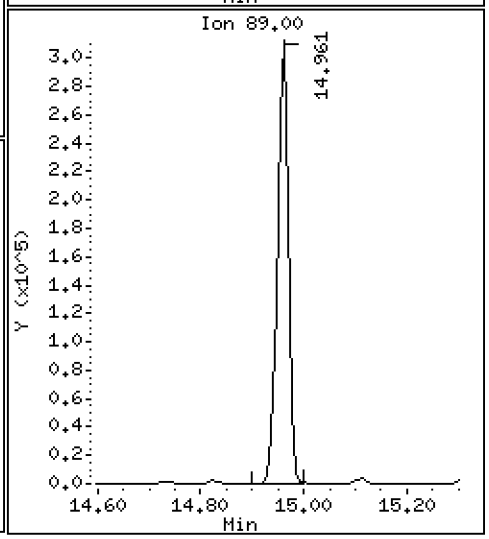












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

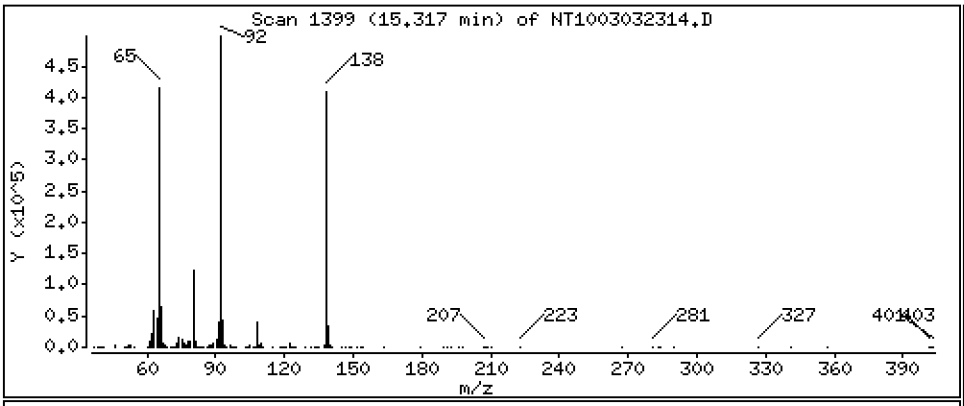
Operator: VTS

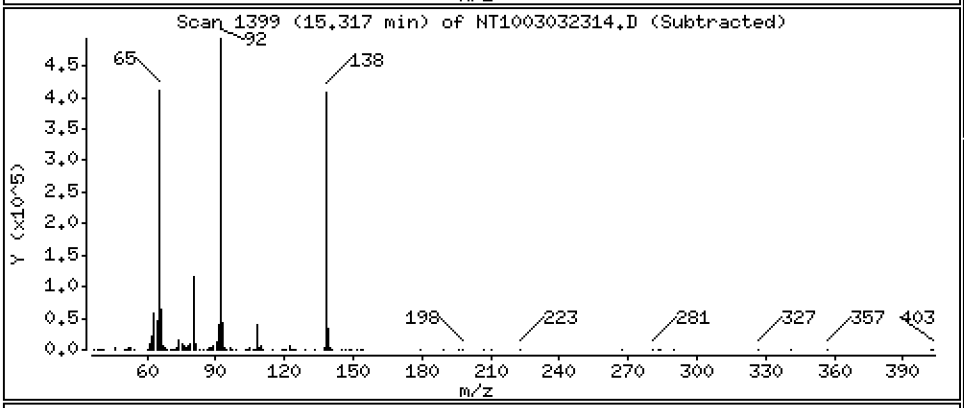
Column phase: ZB-5msi

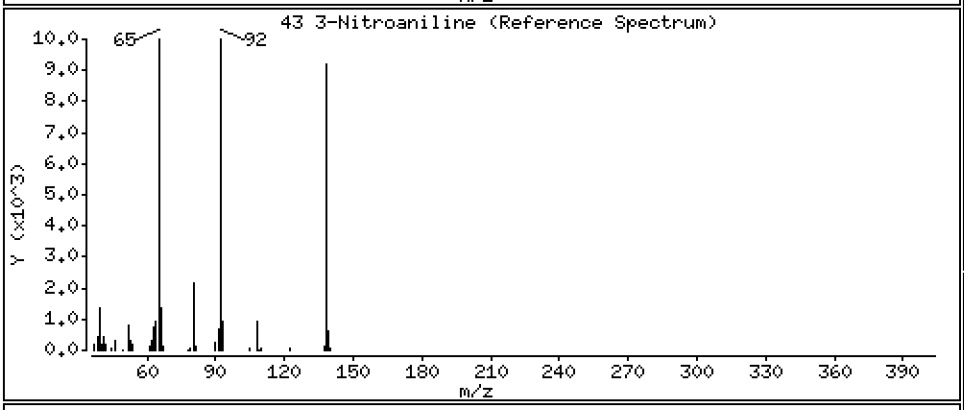
Column diameter: 0.25

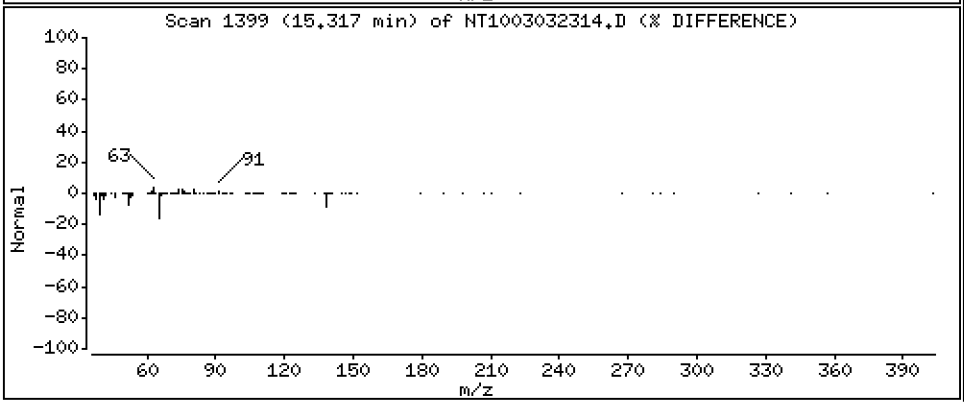
43 3-Nitroaniline

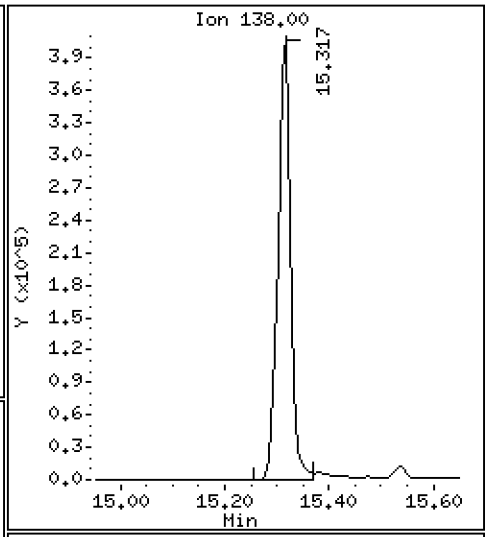
Concentration: 8.771 ug/ml

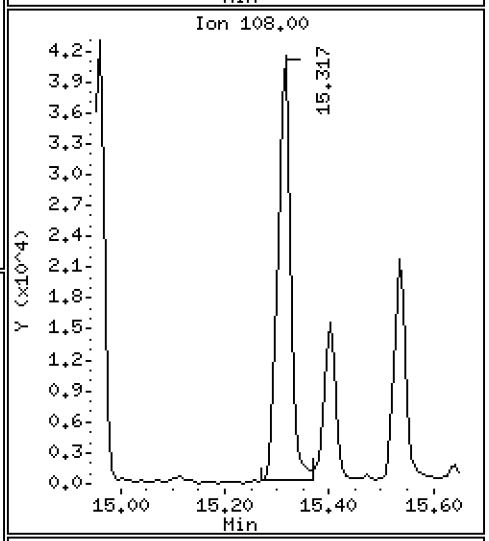


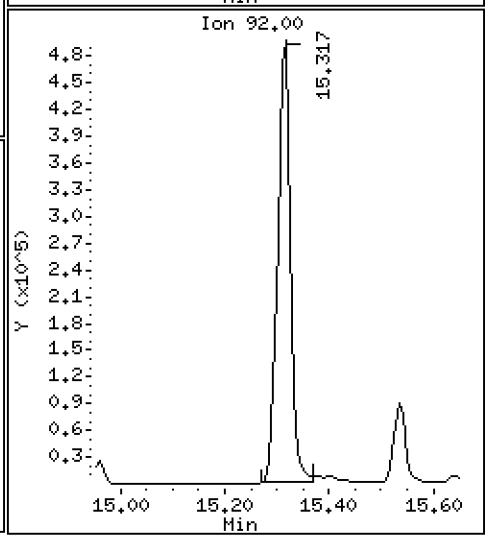












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

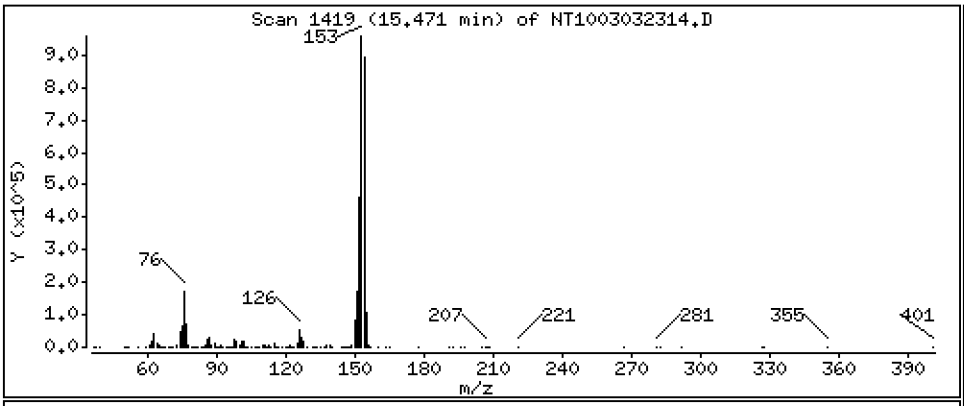
Operator: VTS

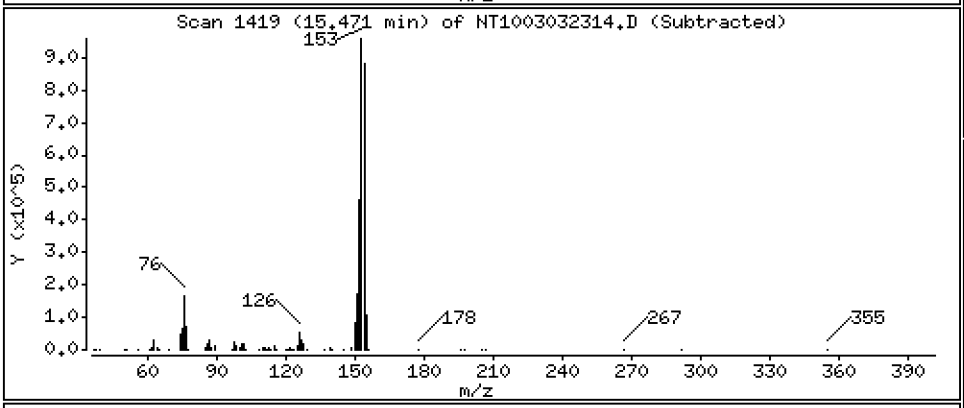
Column phase: ZB-5msi

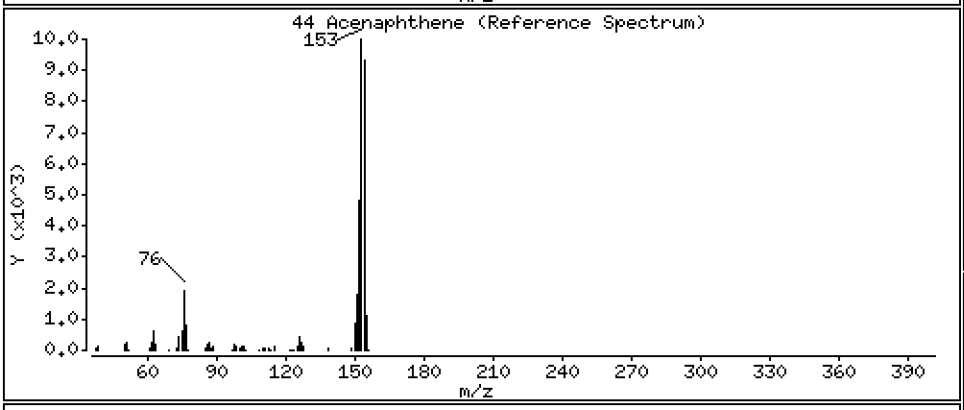
Column diameter: 0.25

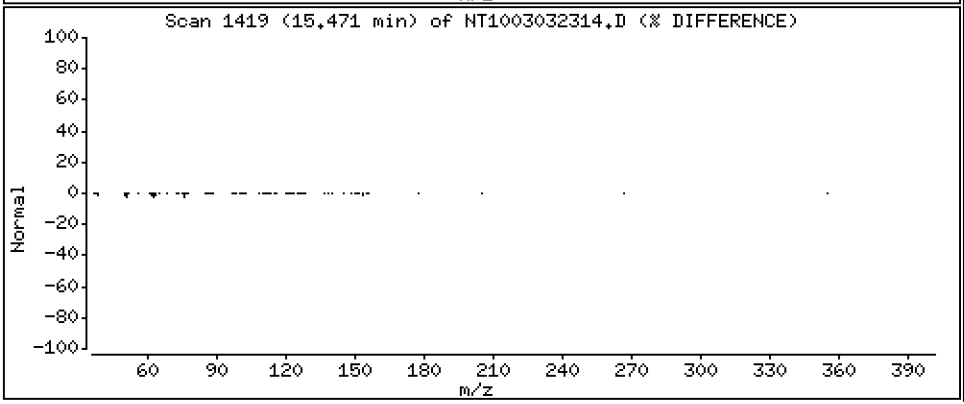
44 Acenaphthene

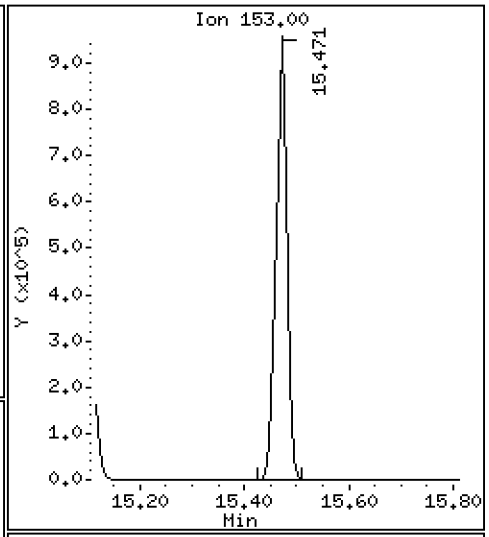
Concentration: 4.930 ug/ml

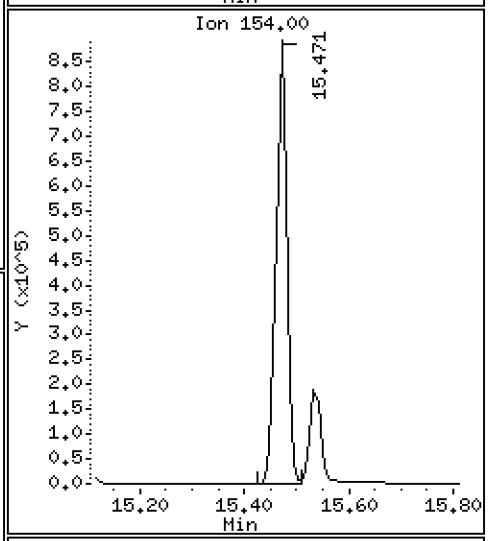


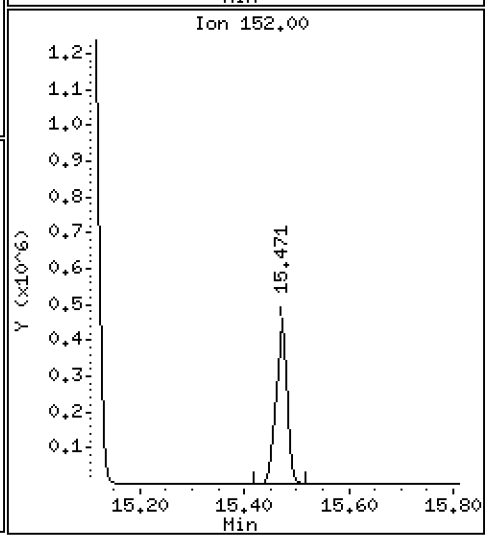












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

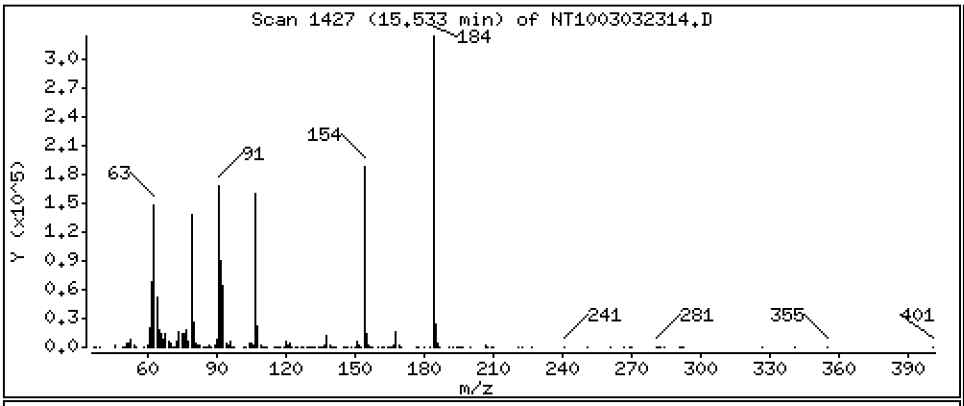
Operator: VTS

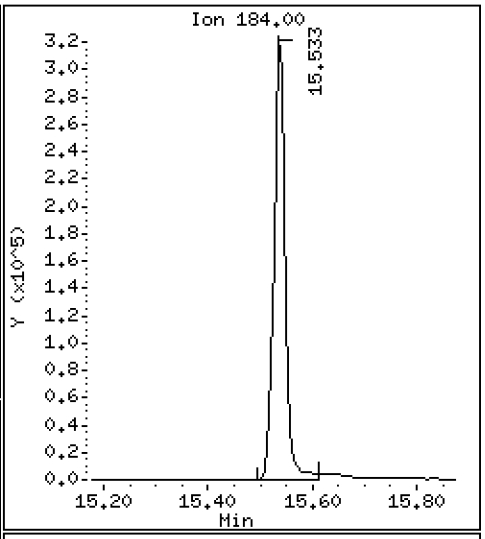
Column phase: ZB-5msi

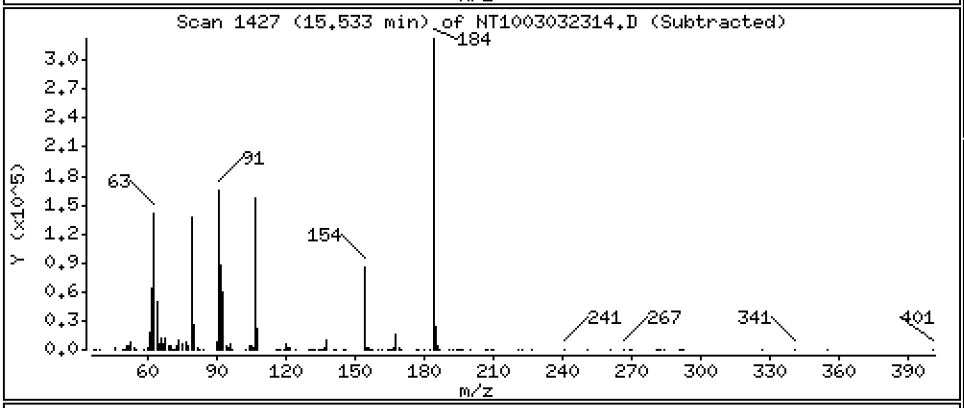
Column diameter: 0.25

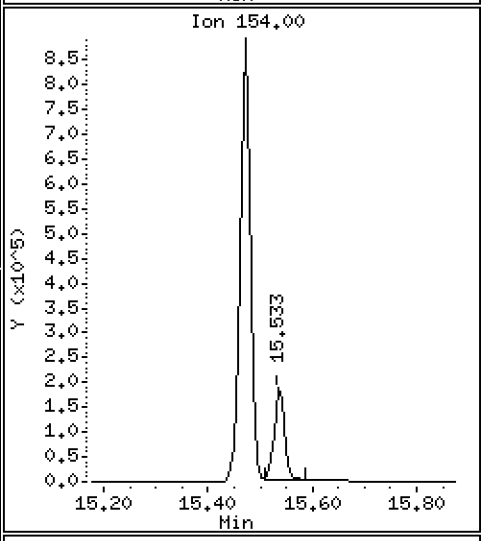
45 2,4-Dinitrophenol

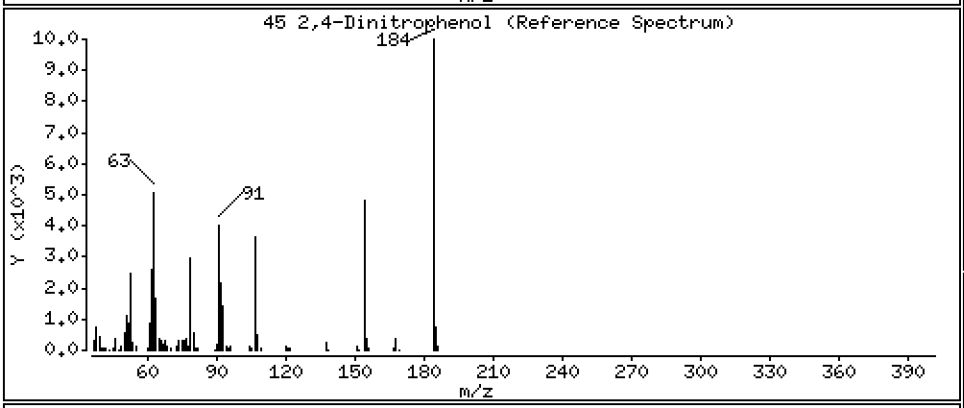
Concentration: 30.34 ug/ml

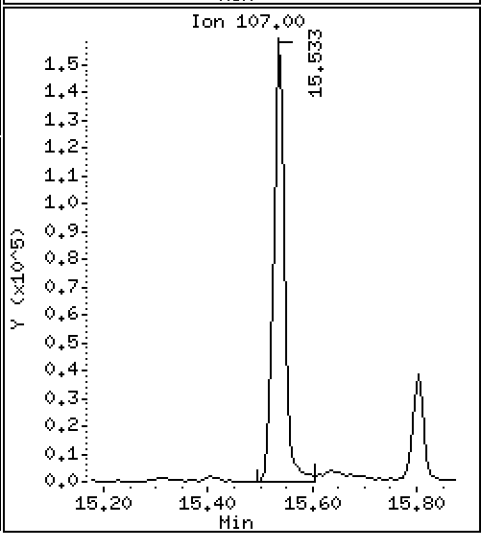


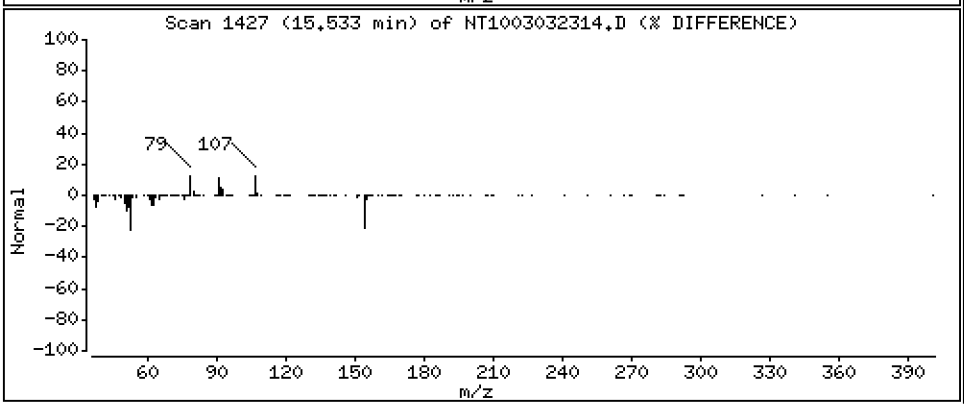












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

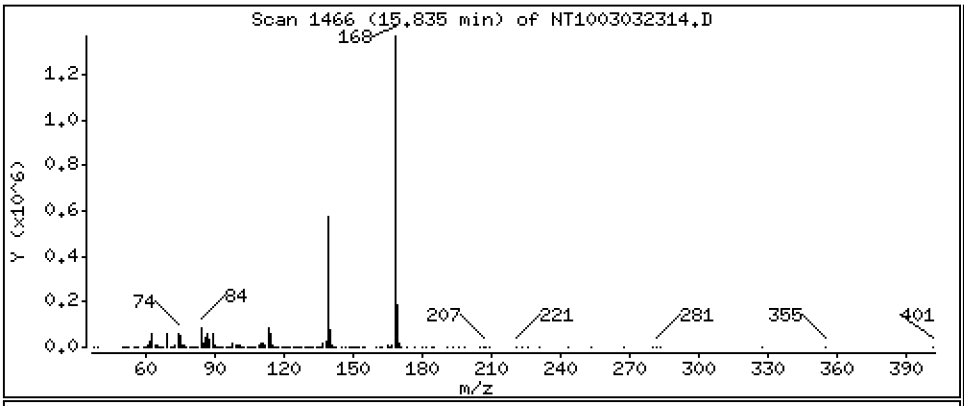
Operator: VTS

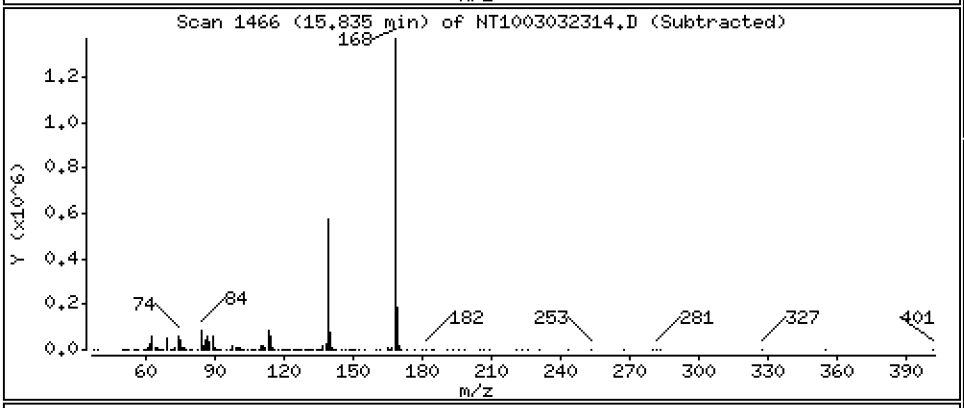
Column phase: ZB-5msi

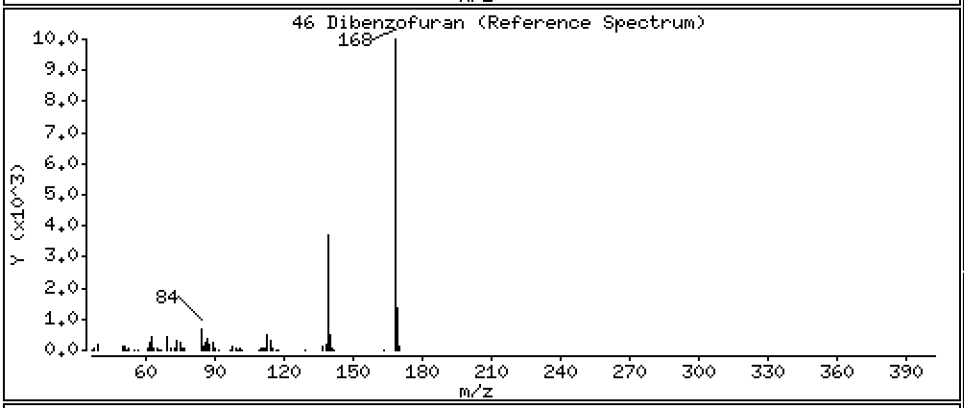
Column diameter: 0.25

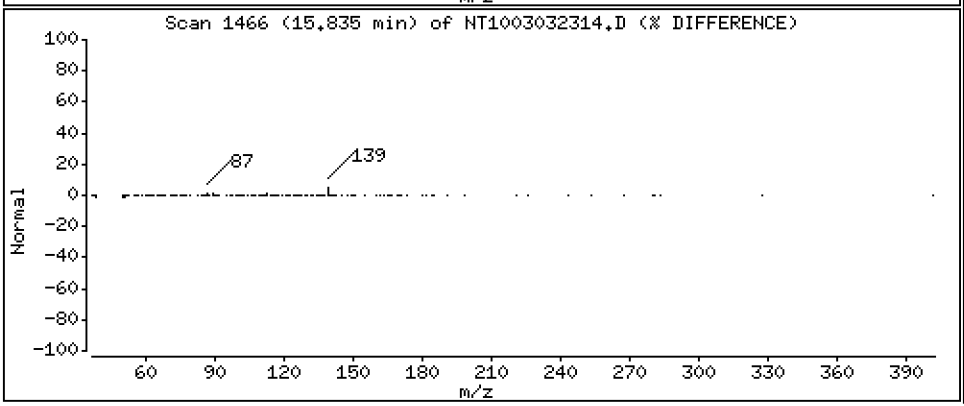
46 Dibenzofuran

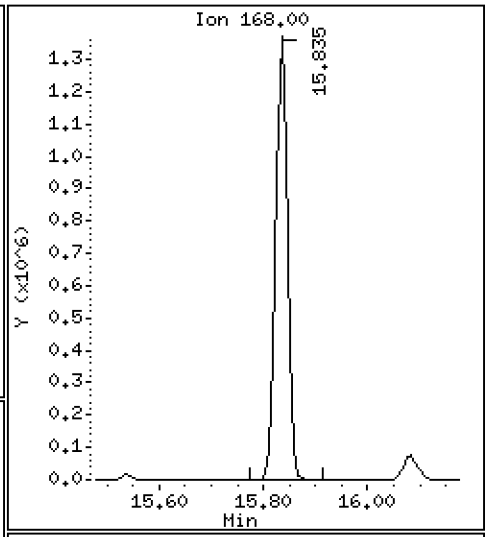
Concentration: 4.990 ug/ml

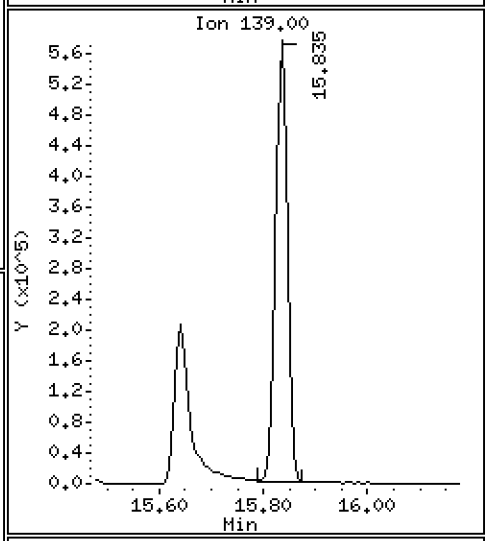


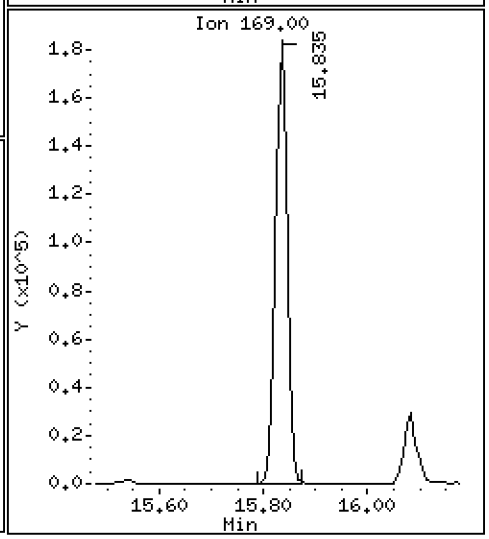












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

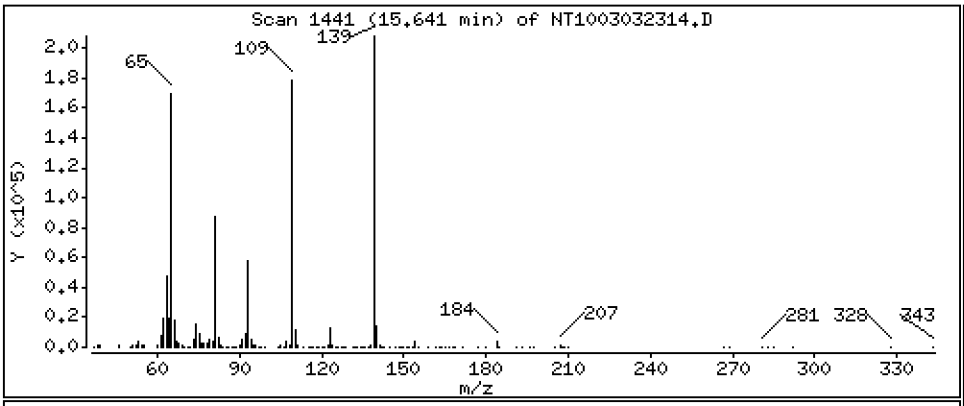
Operator: VTS

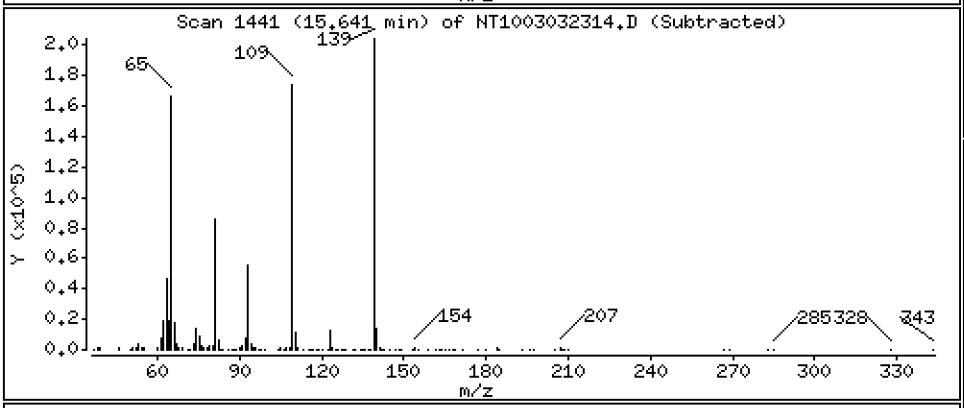
Column phase: ZB-5msi

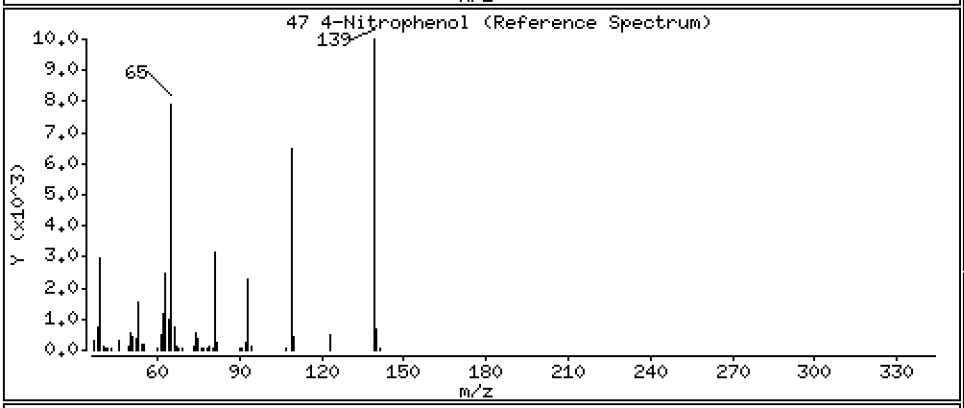
Column diameter: 0.25

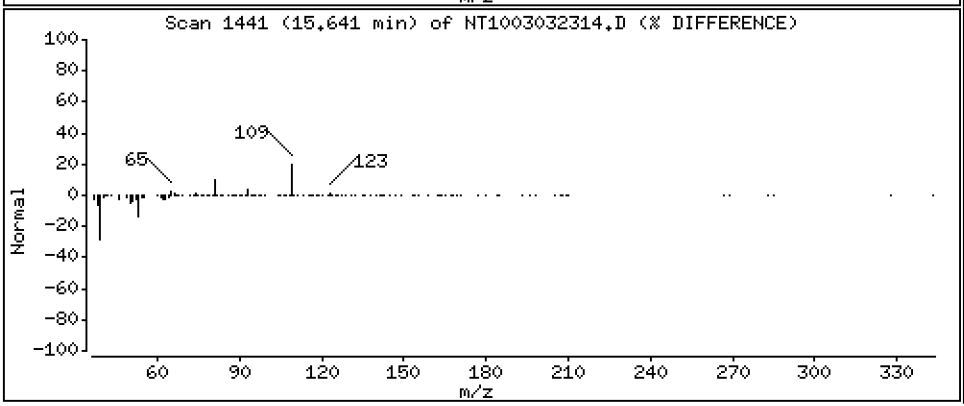
47 4-Nitrophenol

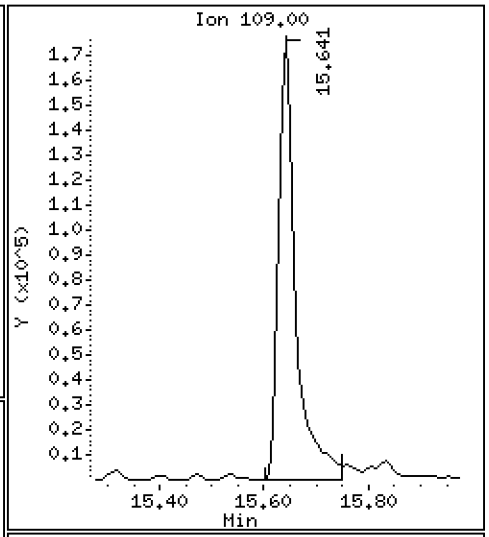
Concentration: 7.325 ug/ml

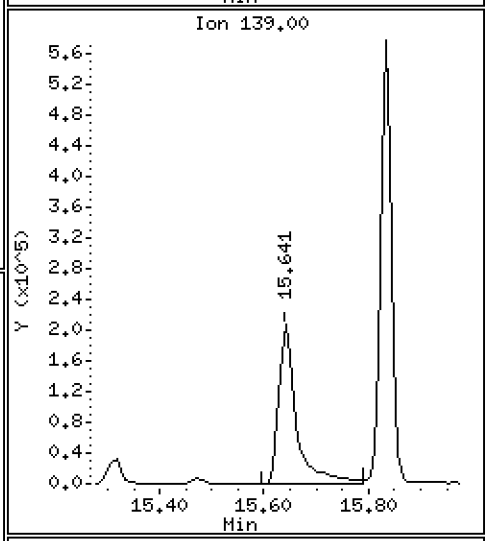


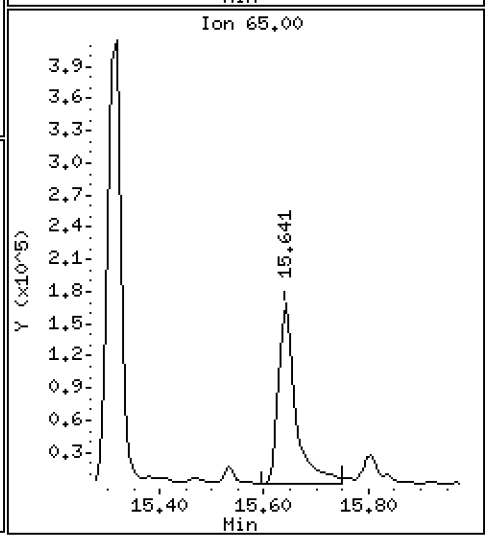












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

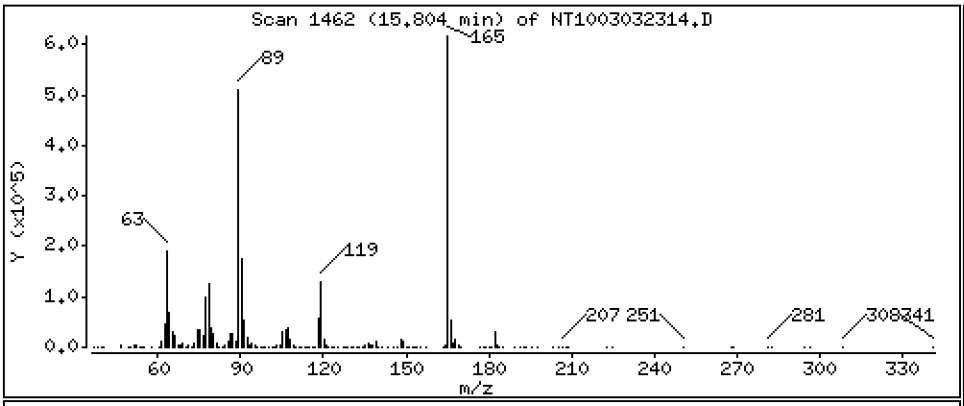
Operator: VTS

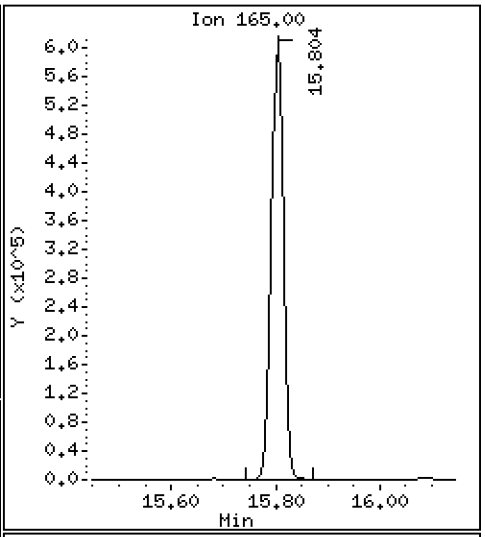
Column phase: ZB-5msi

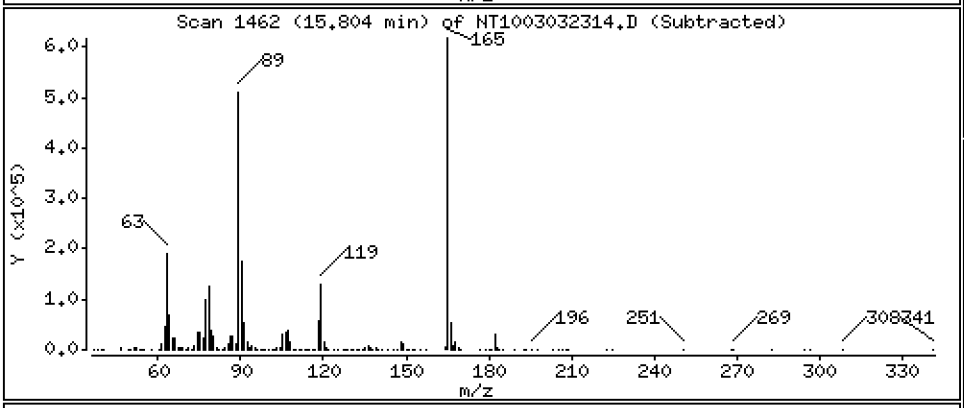
Column diameter: 0.25

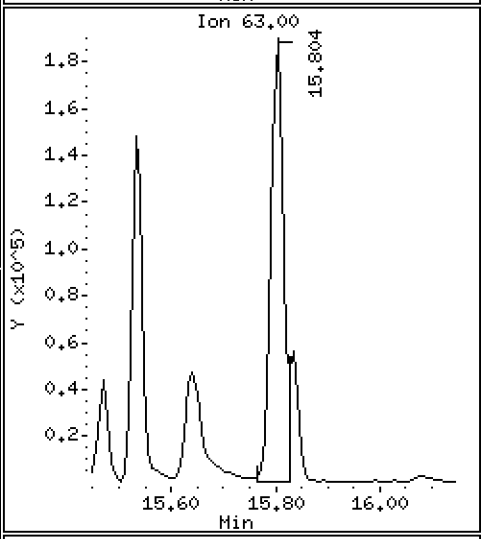
48 2,4-Dinitrotoluene

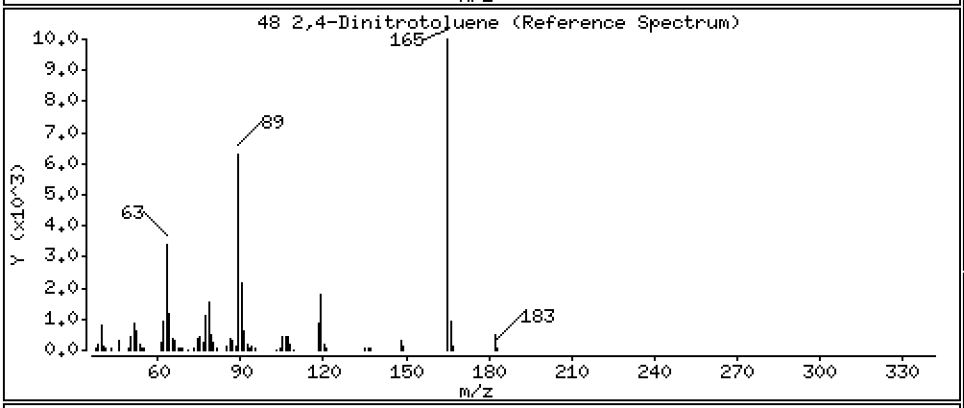
Concentration: 9.367 ug/ml

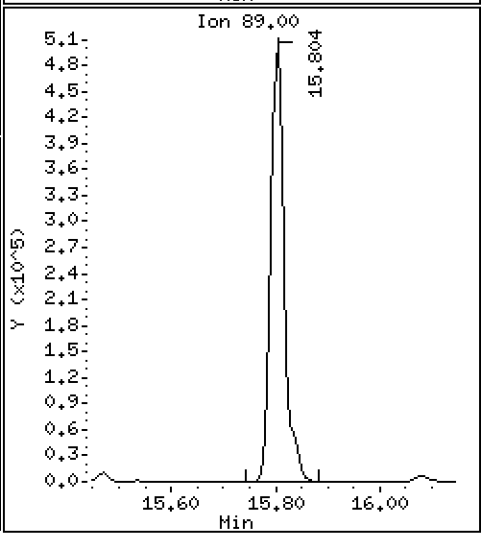


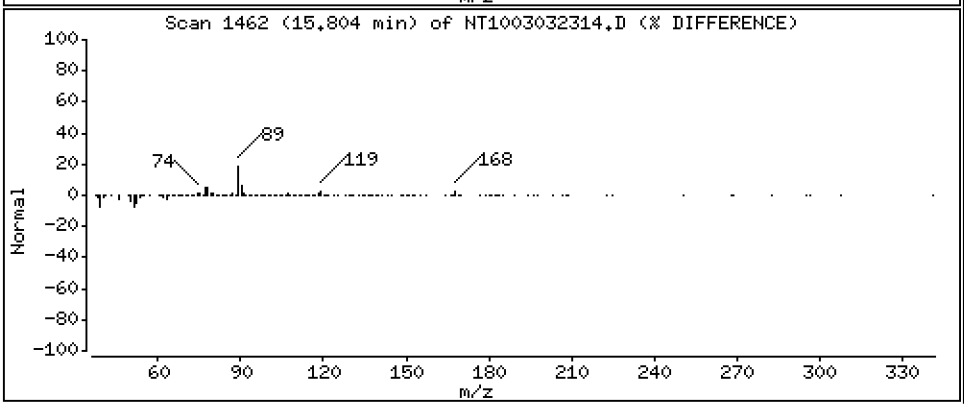












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

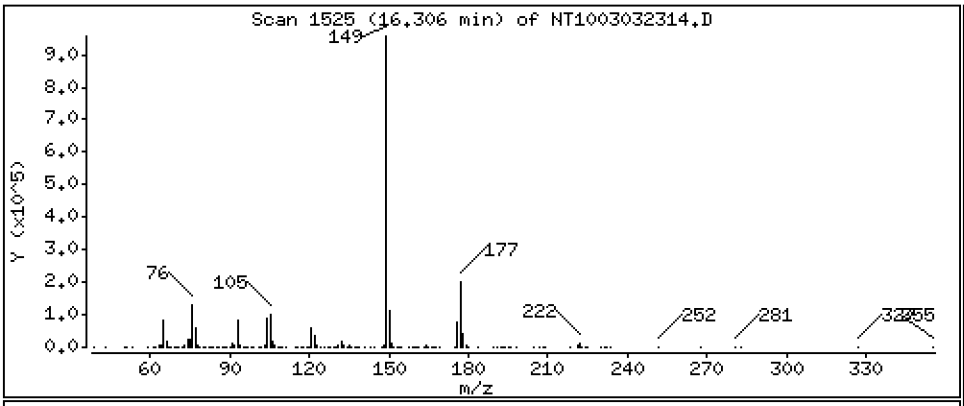
Operator: VTS

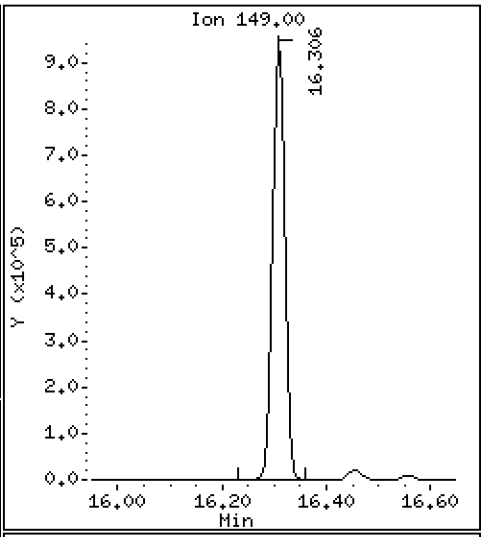
Column phase: ZB-5msi

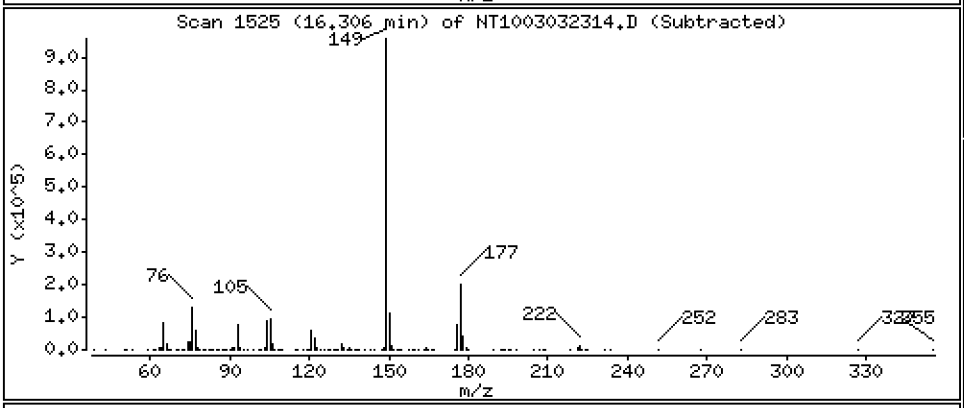
Column diameter: 0.25

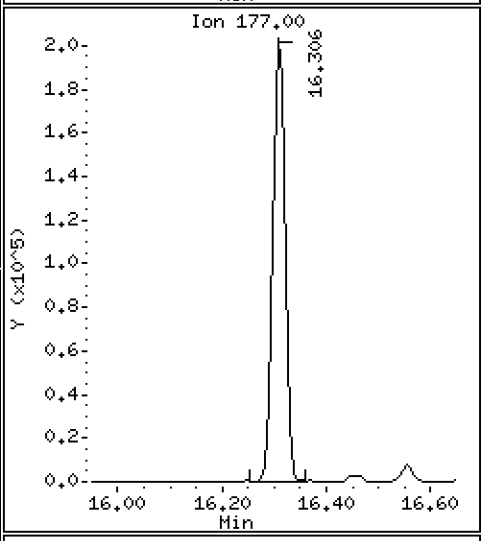
50 Diethylphthalate

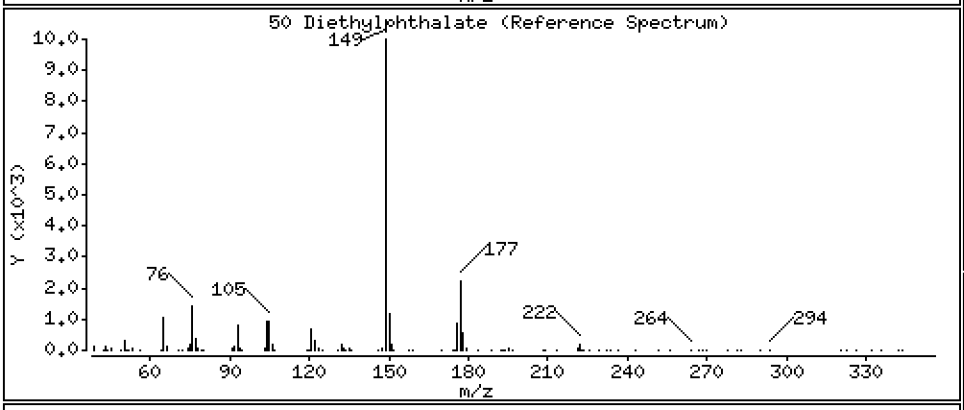
Concentration: 4.543 ug/ml

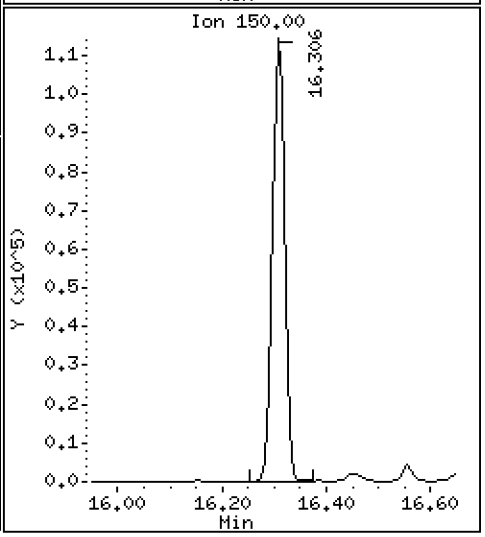


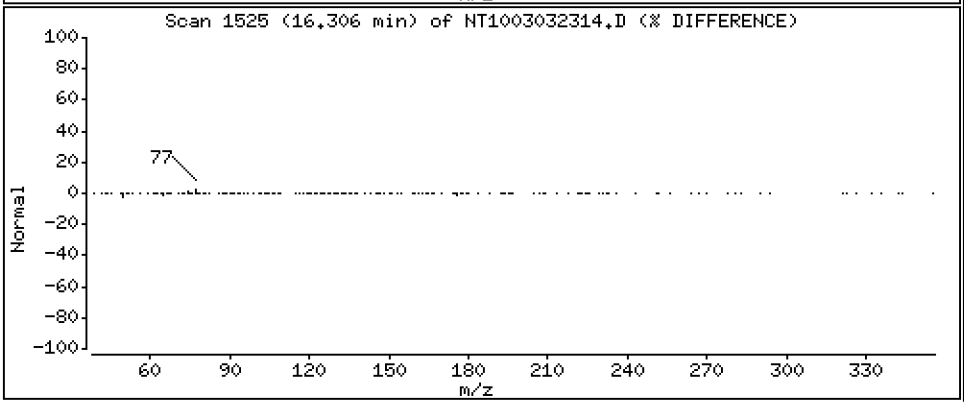












Date : 04-MAR-2023 02:02

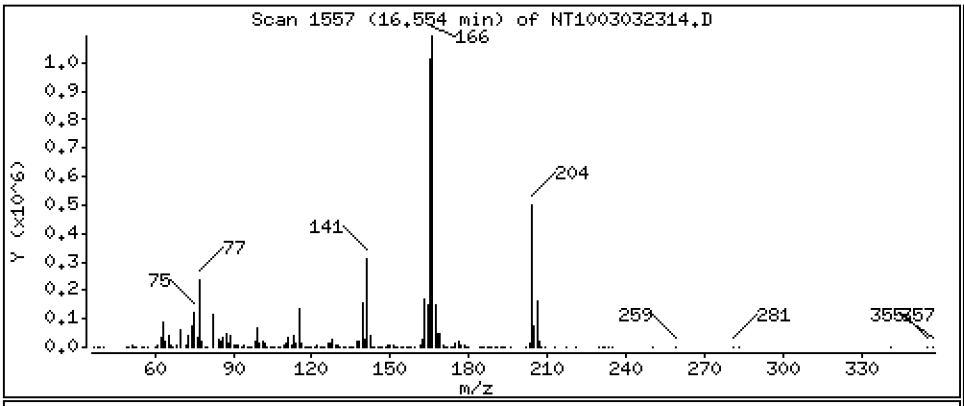
Client ID: Instrument: nt10.i

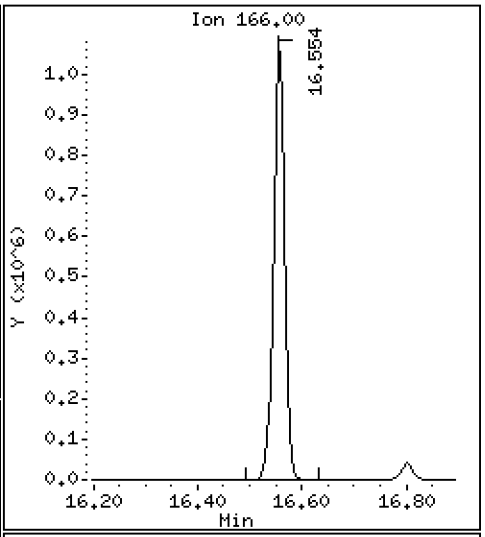
Sample Info: SEQ-CCVFULL

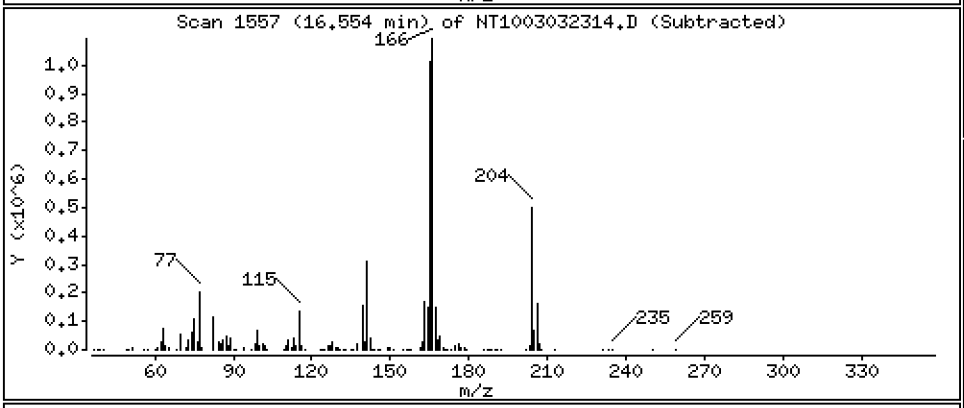
Volume Injected (uL): 1.0 Operator: VTS

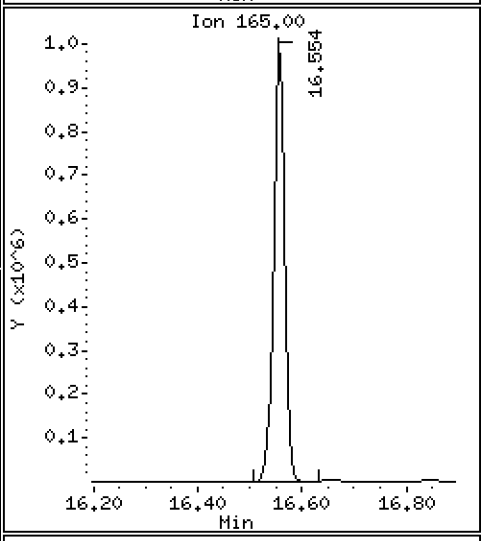
Column phase: ZB-5msi Column diameter: 0.25

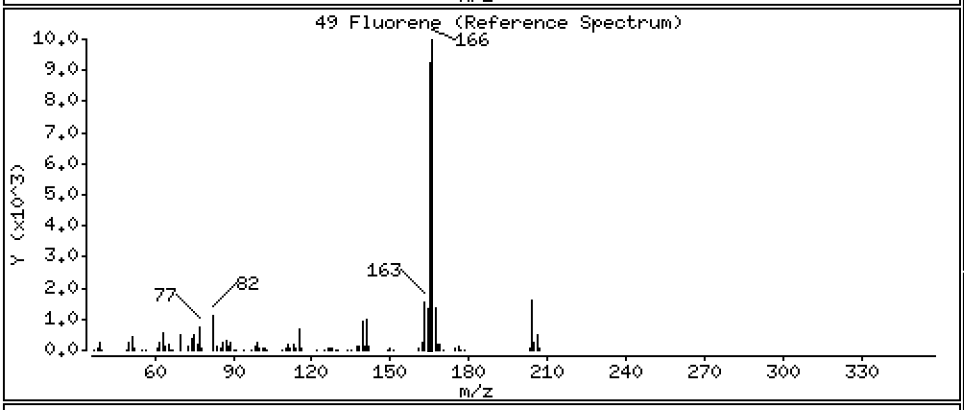
49 Fluorene Concentration: 5.393 ug/ml

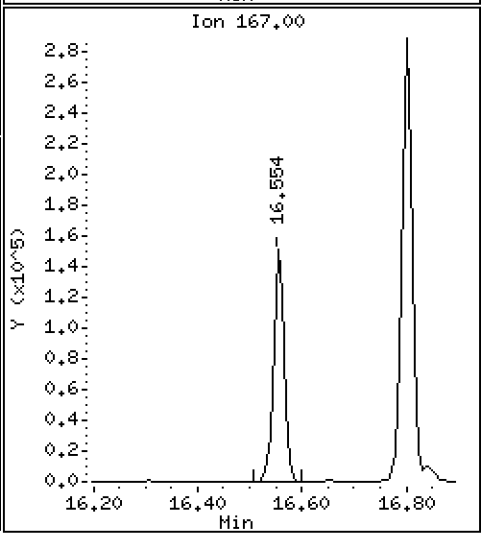


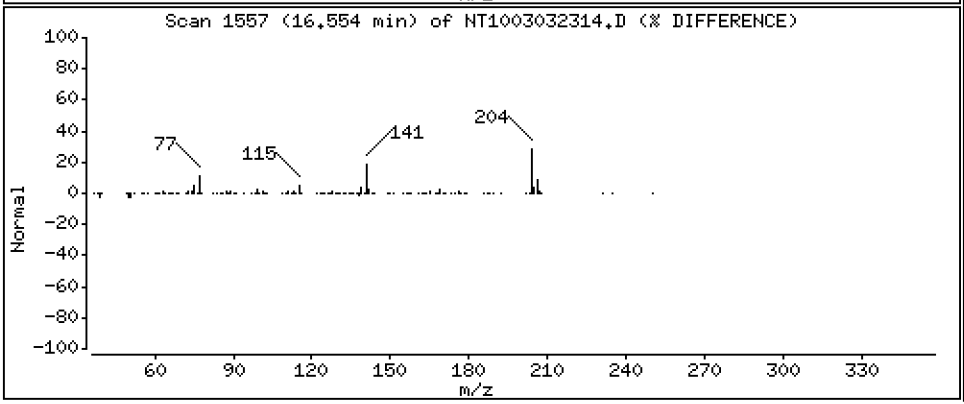












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

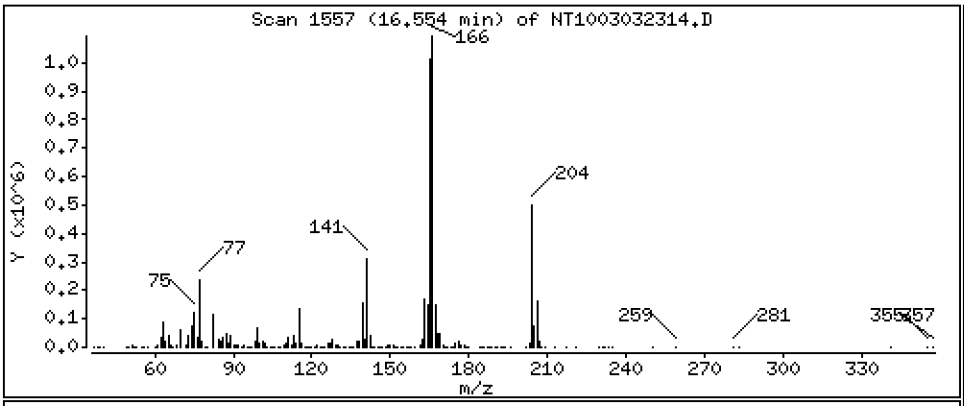
Operator: VTS

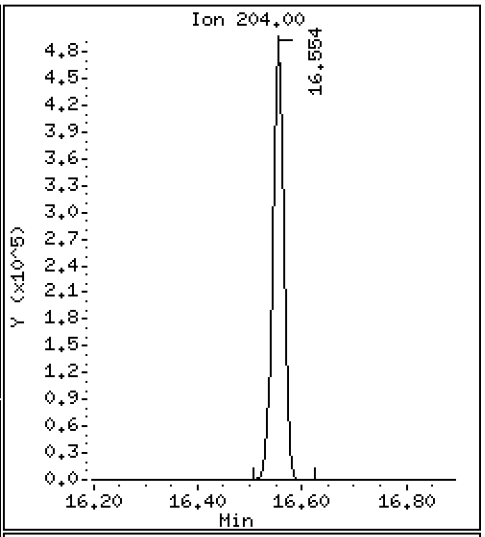
Column phase: ZB-5msi

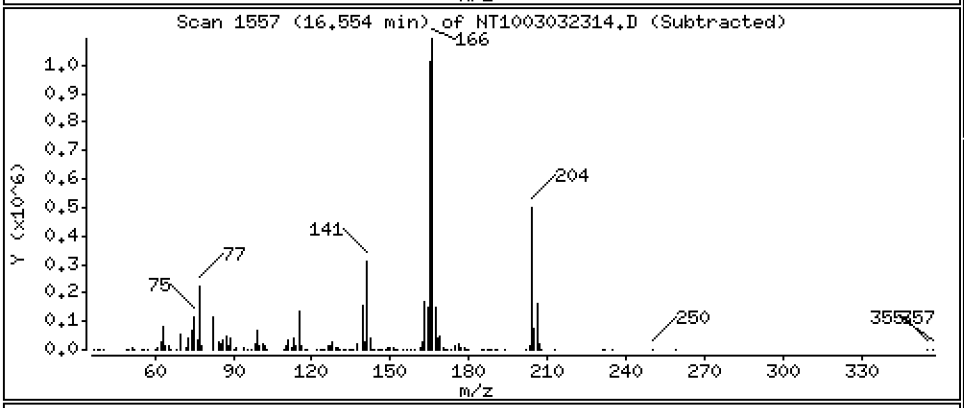
Column diameter: 0.25

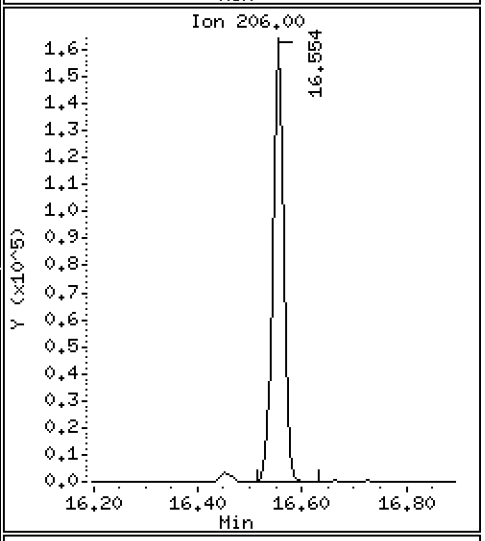
51 4-Chlorophenyl-phenylether

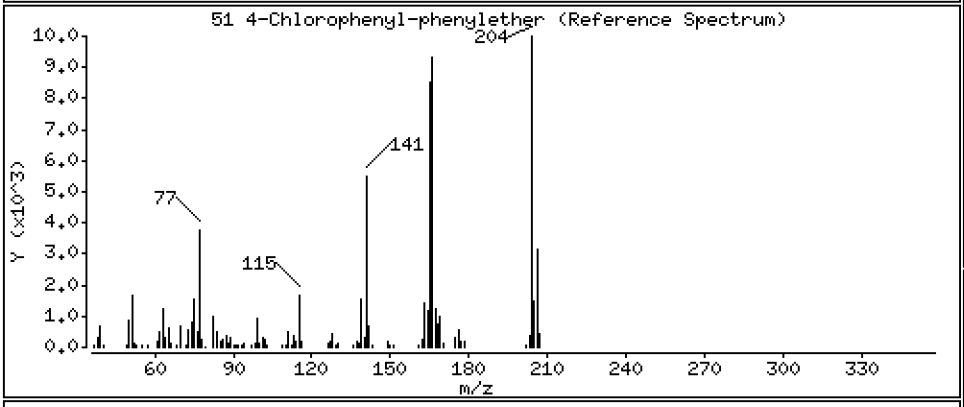
Concentration: 5.562 ug/ml

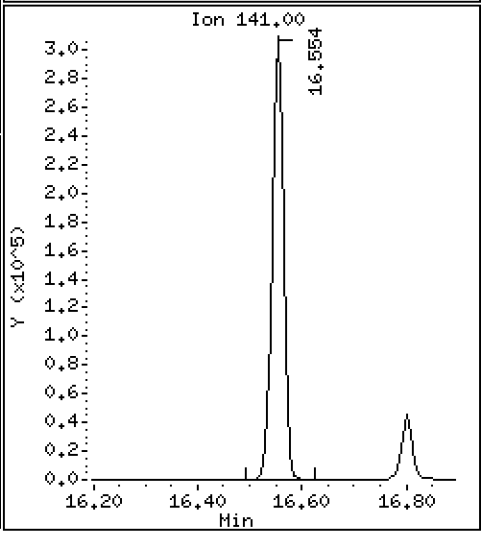


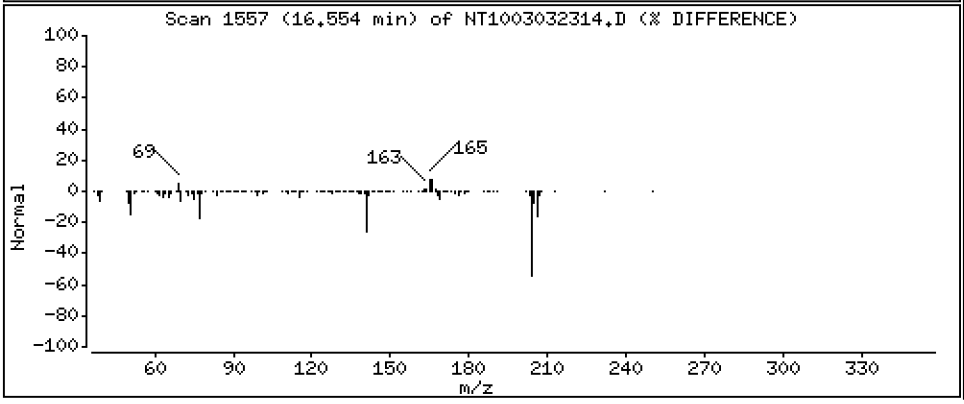












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

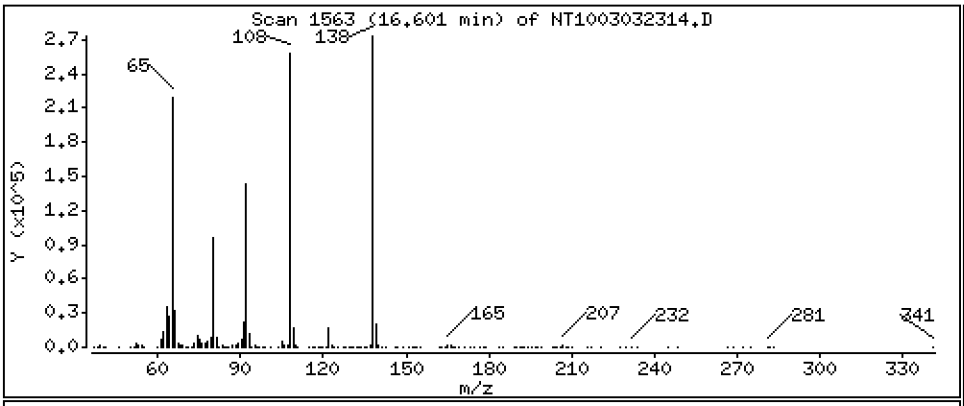
Operator: VTS

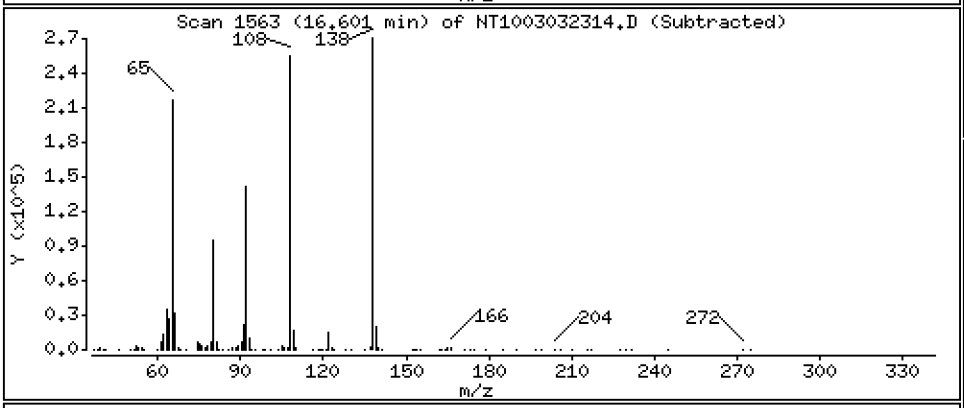
Column phase: ZB-5msi

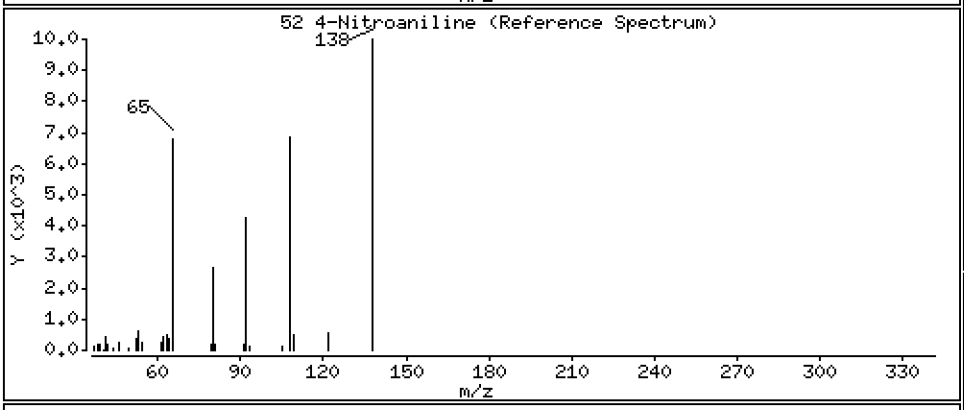
Column diameter: 0.25

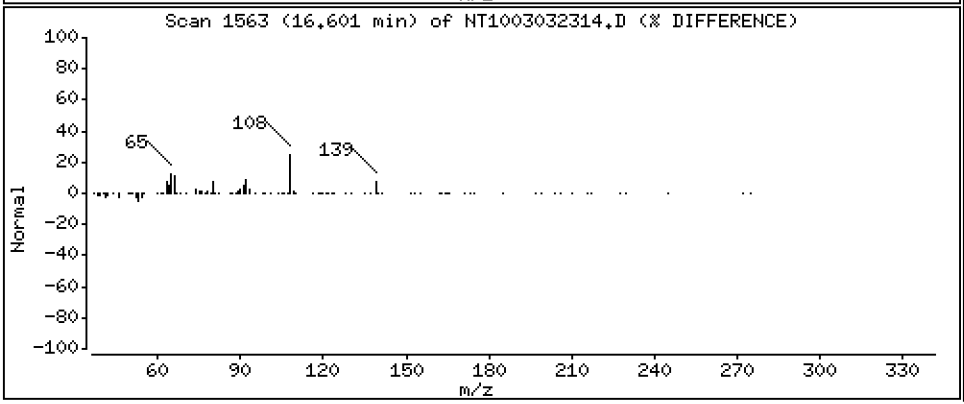
52 4-Nitroaniline

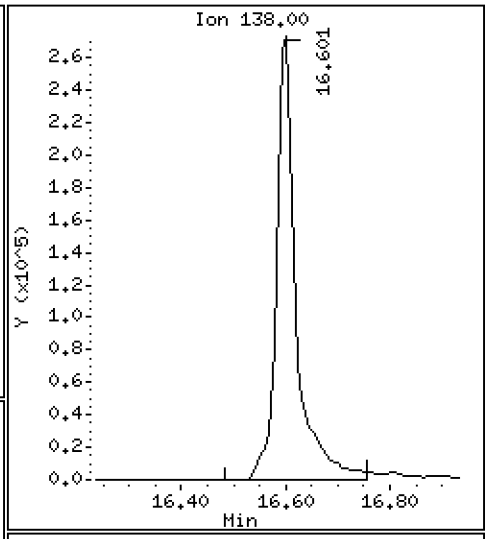
Concentration: 7.402 ug/ml

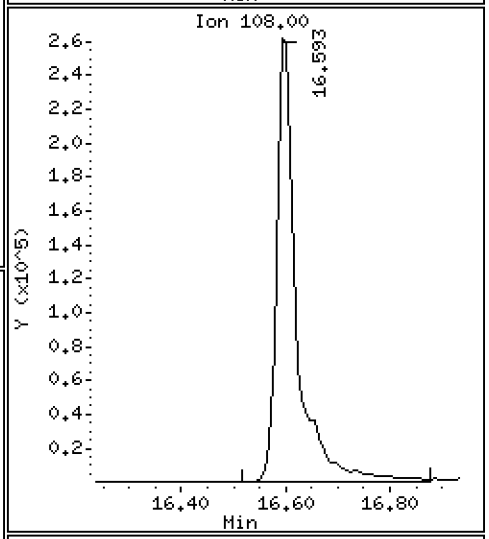


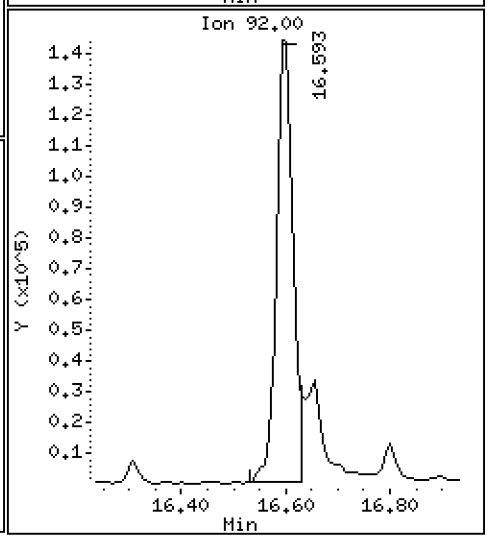












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

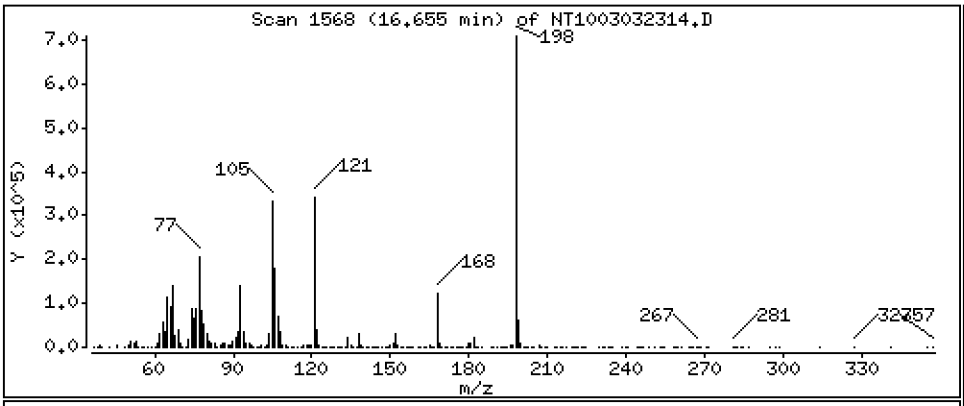
Operator: VTS

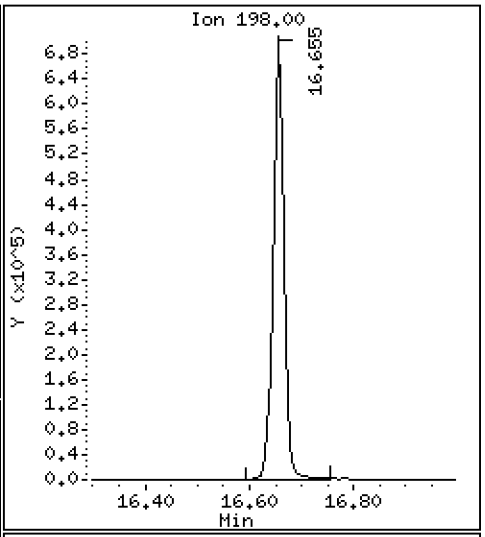
Column phase: ZB-5msi

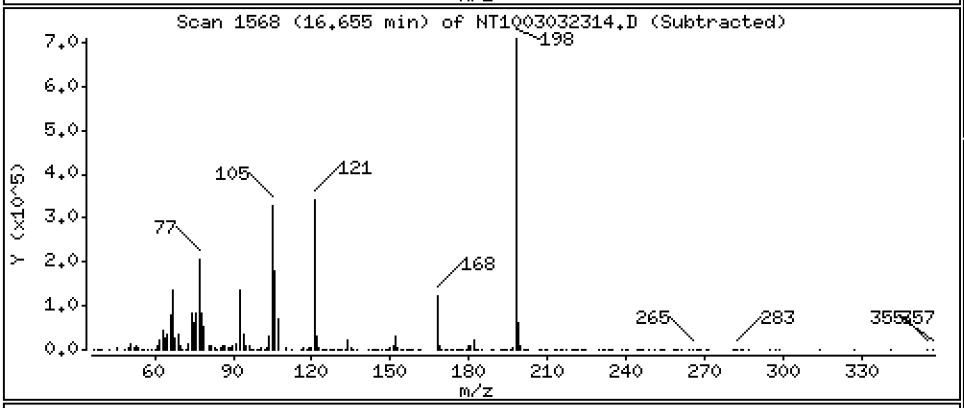
Column diameter: 0.25

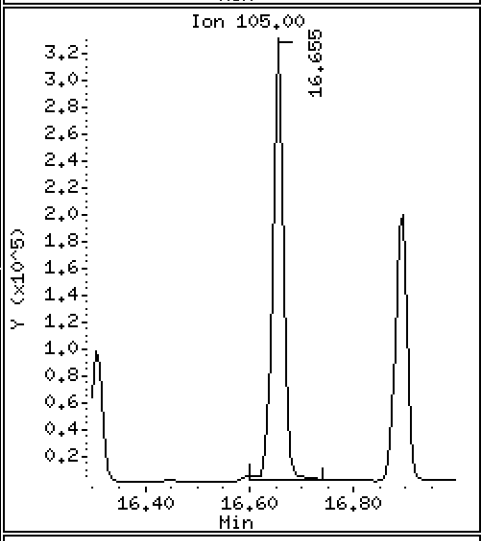
53 4,6-Dinitro-2-methylphenol

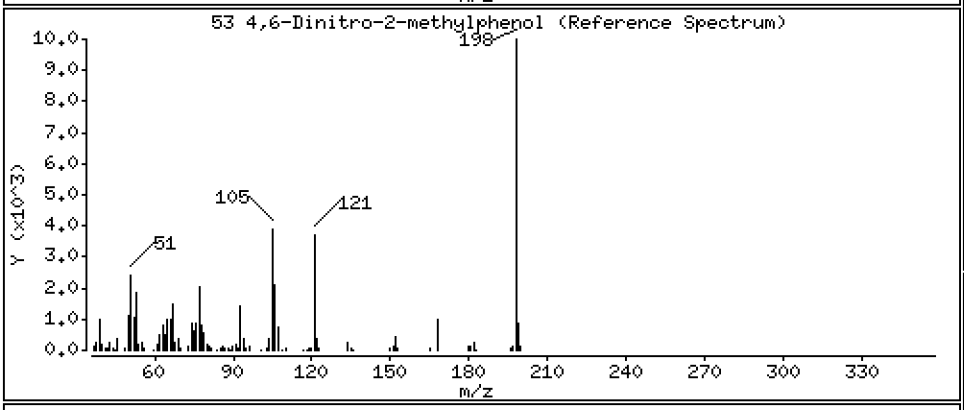
Concentration: 27.73 ug/ml

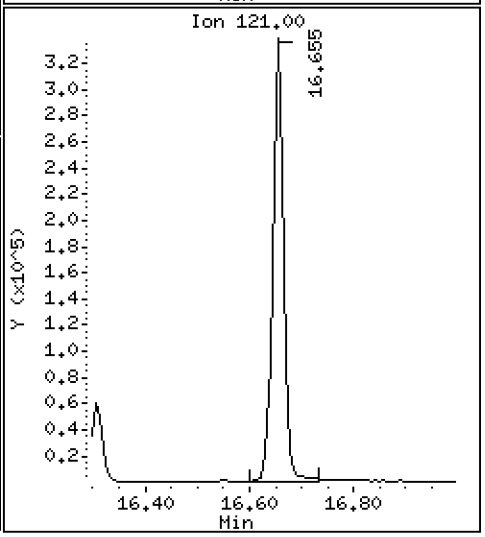


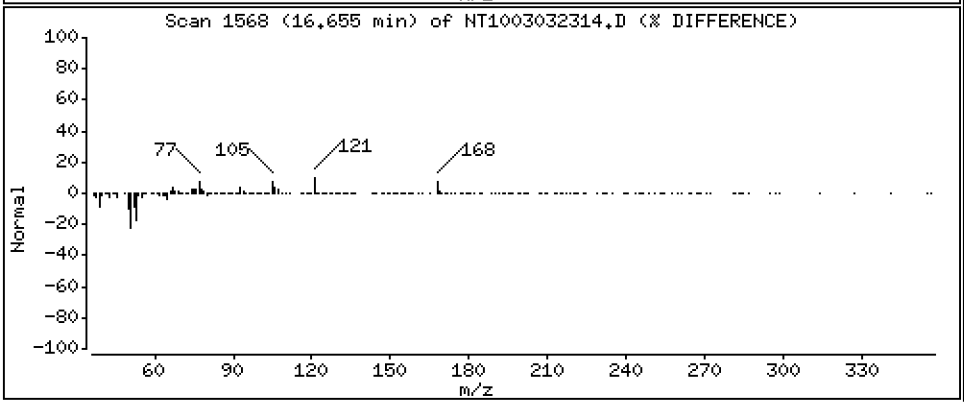












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

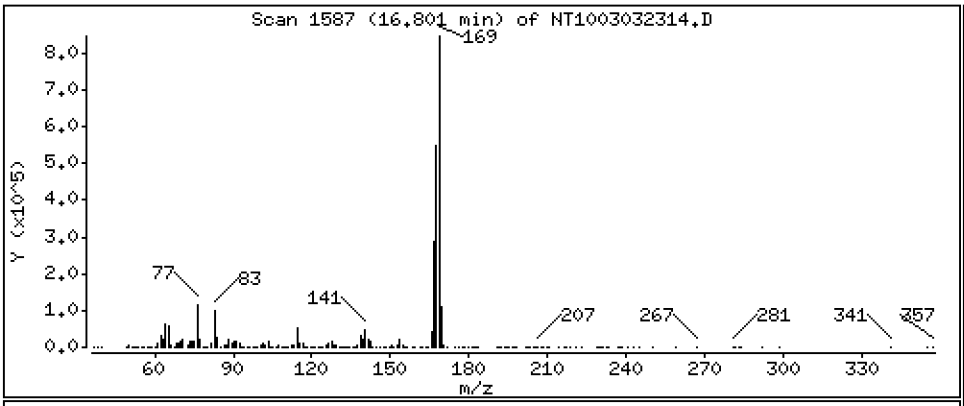
Operator: VTS

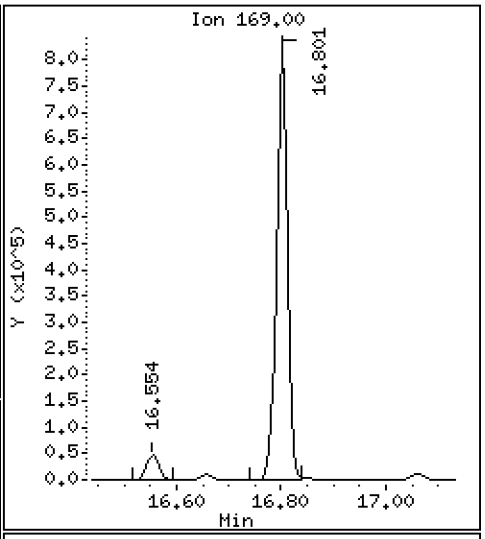
Column phase: ZB-5msi

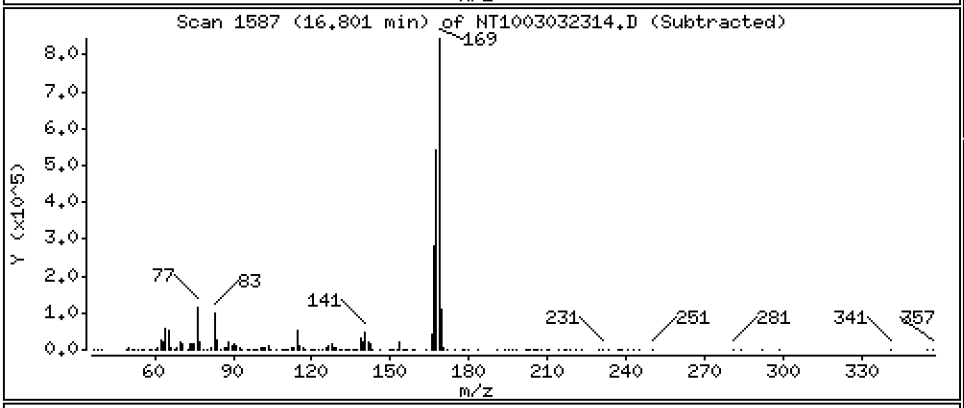
Column diameter: 0.25

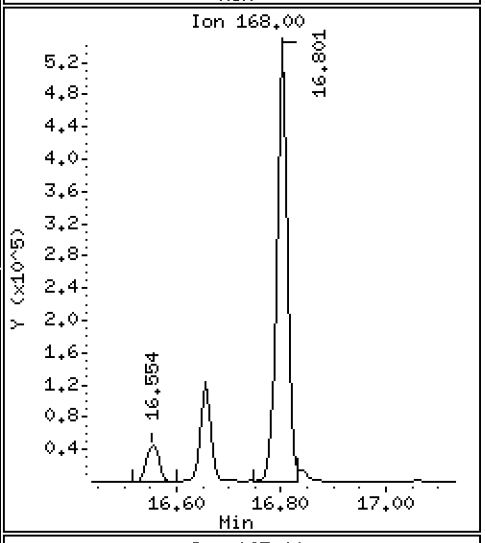
54 N-Nitrosodiphenylamine

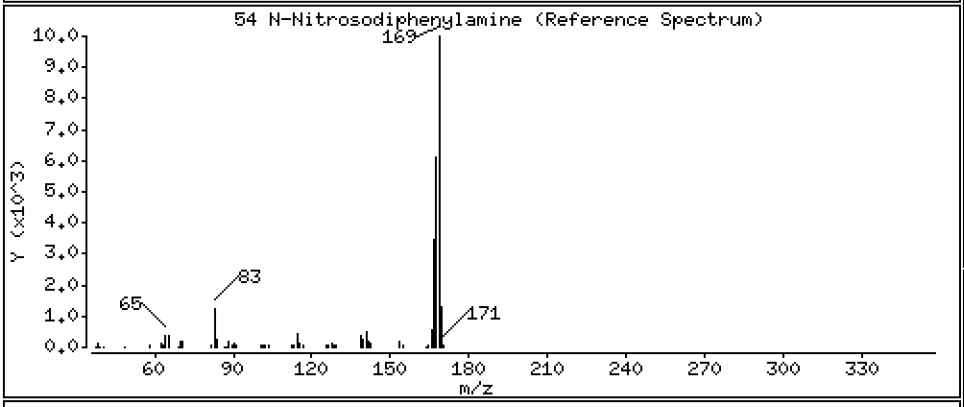
Concentration: 5.097 ug/ml

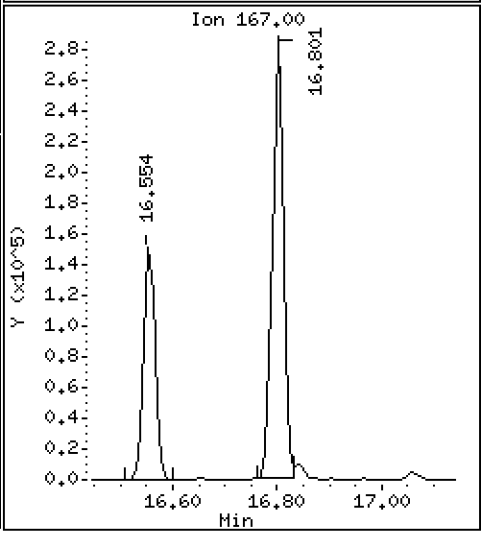


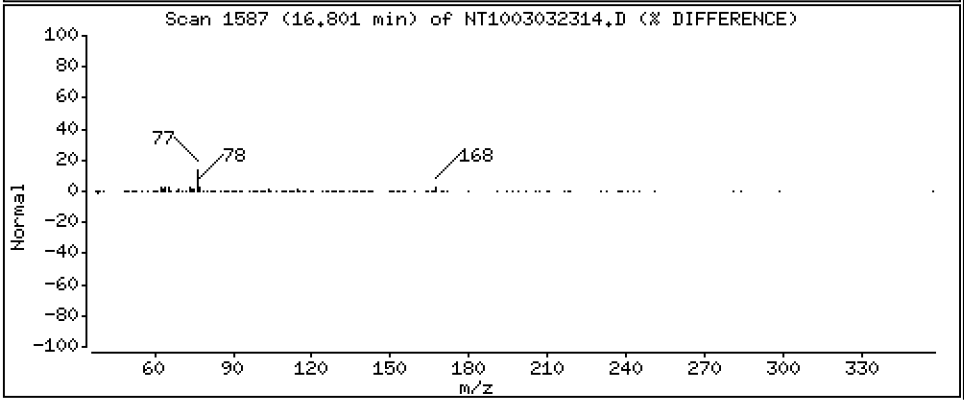












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

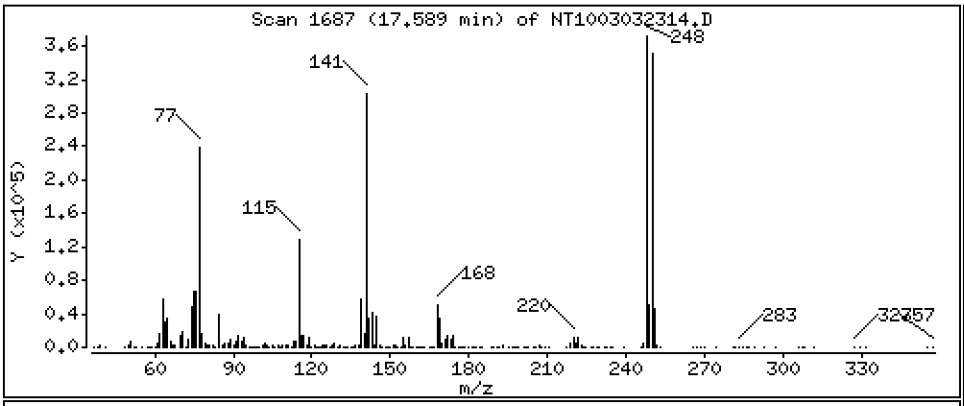
Operator: VTS

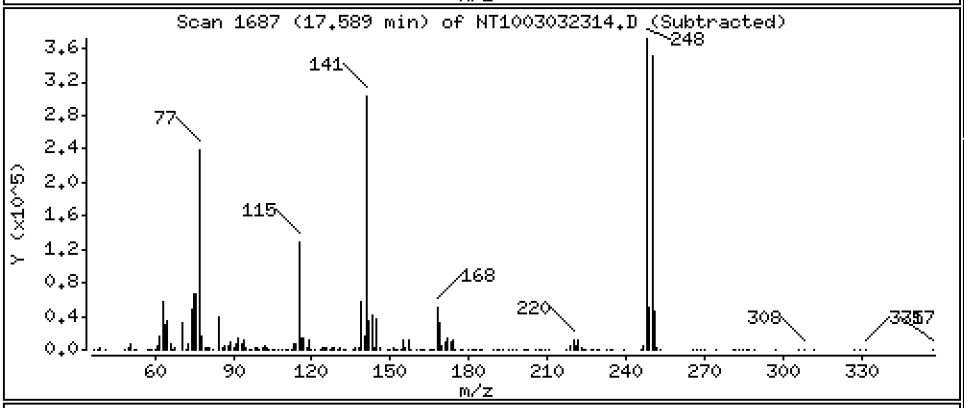
Column phase: ZB-5msi

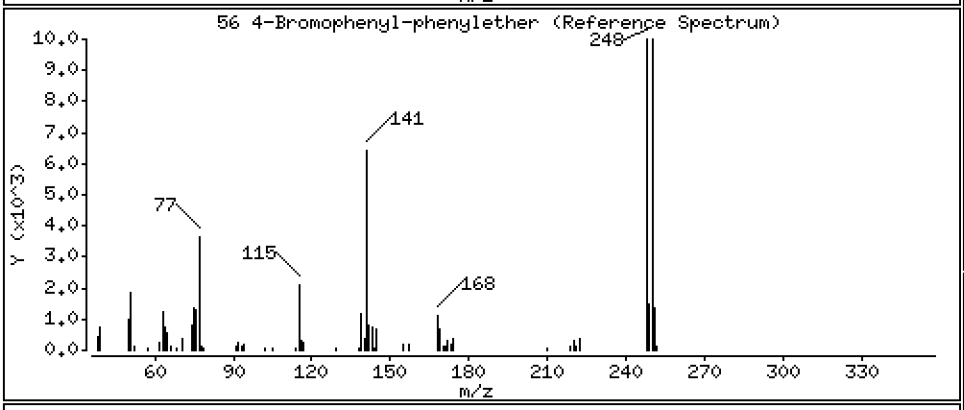
Column diameter: 0.25

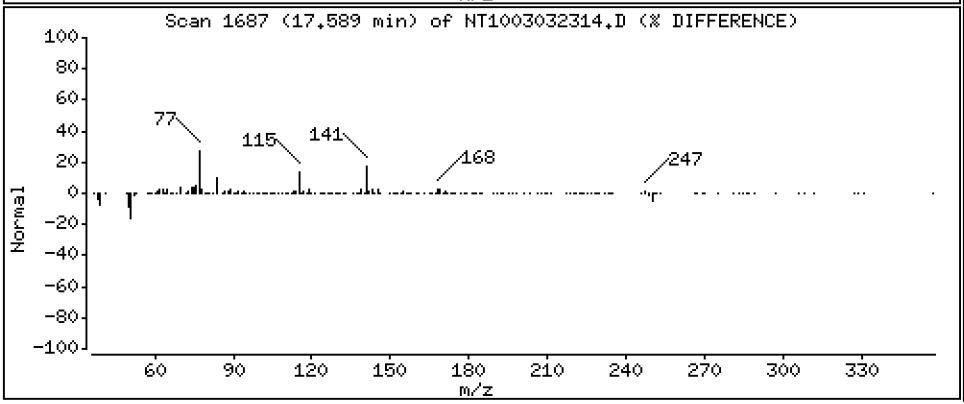
56 4-Bromophenyl-phenylether

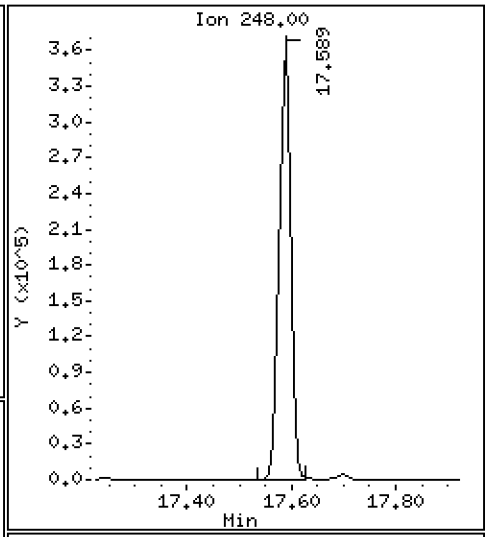
Concentration: 5.723 ug/ml

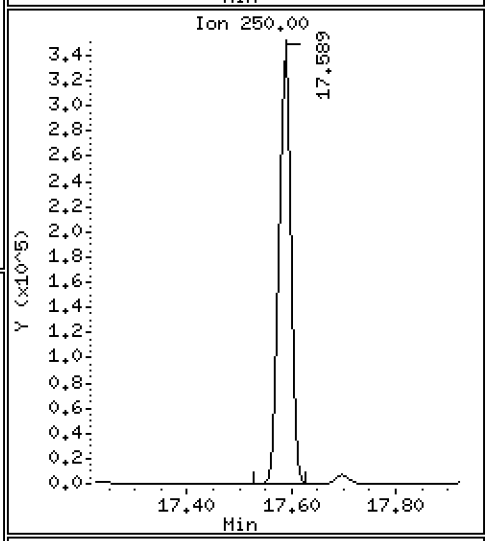


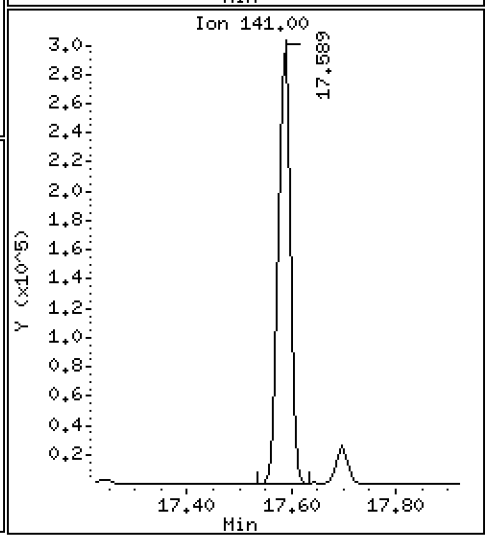












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

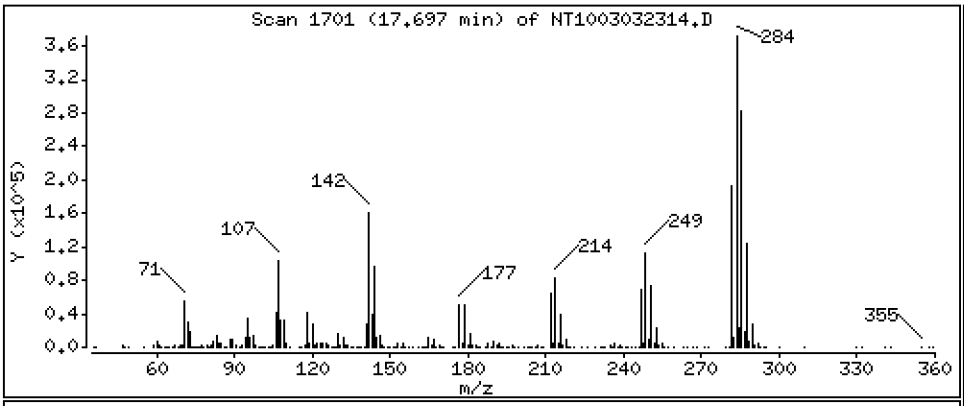
Operator: VTS

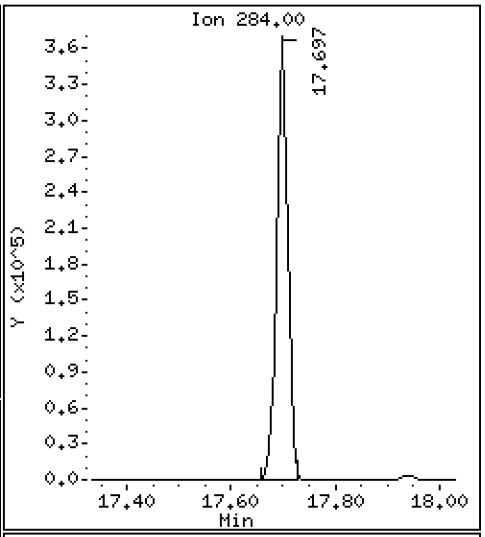
Column phase: ZB-5msi

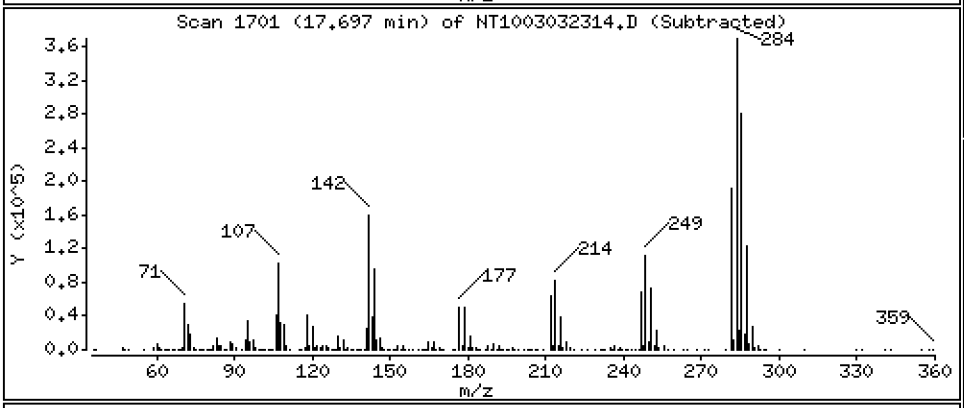
Column diameter: 0.25

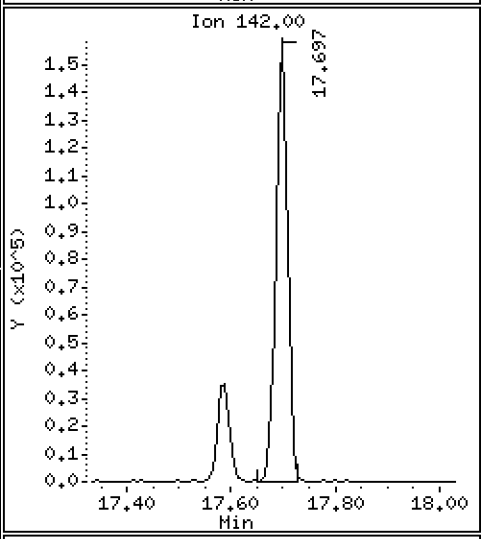
57 Hexachlorobenzene

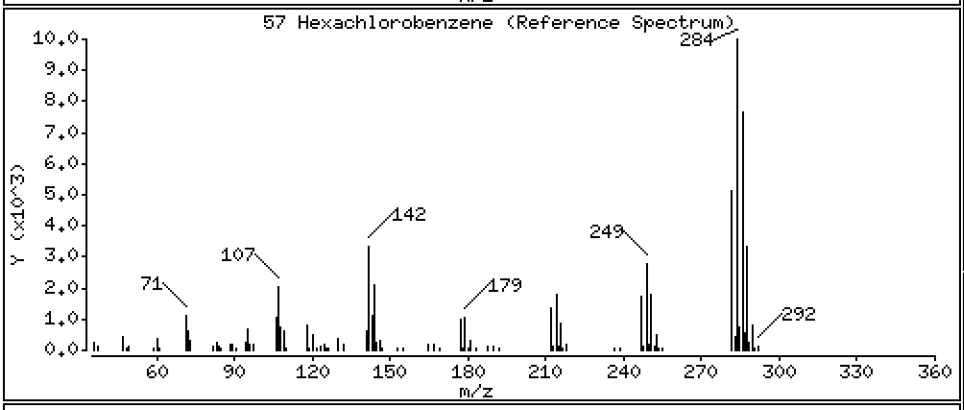
Concentration: 4.416 ug/ml

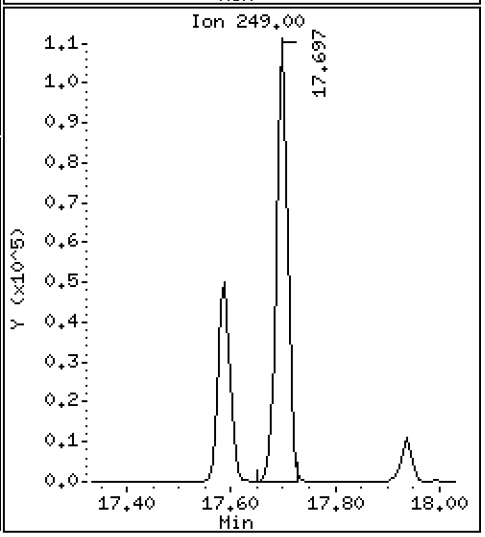


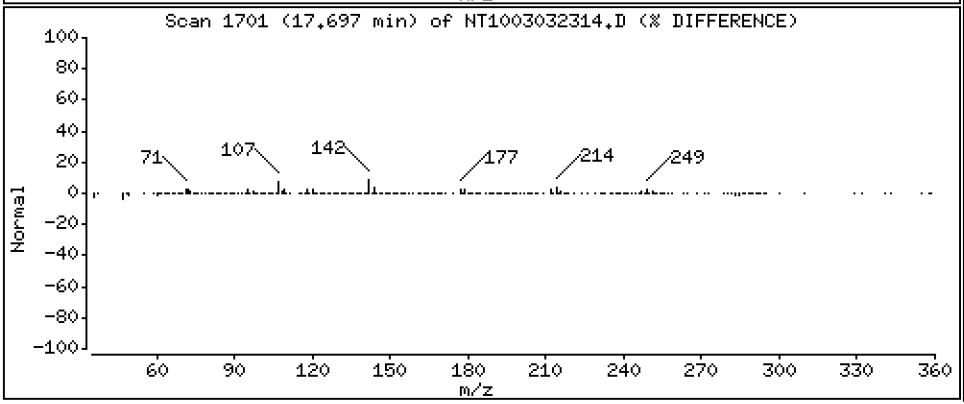












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

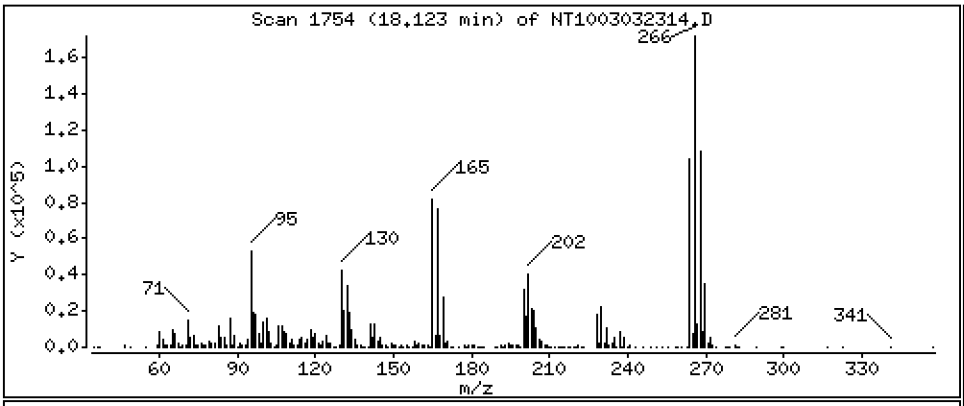
Operator: VTS

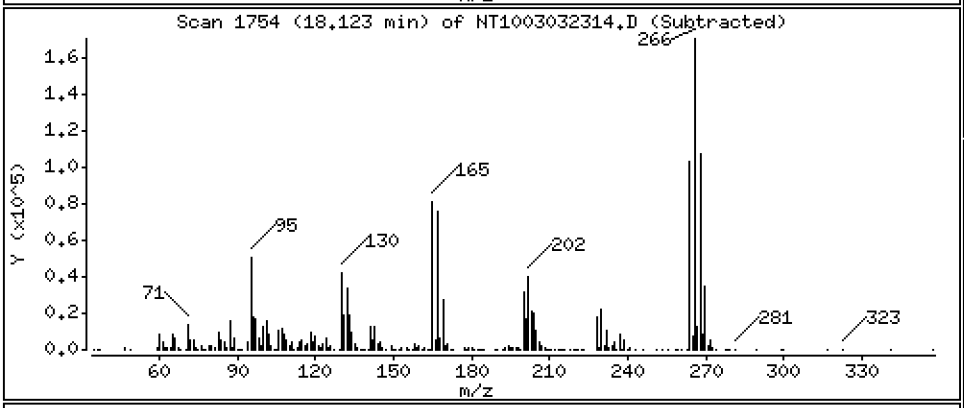
Column phase: ZB-5msi

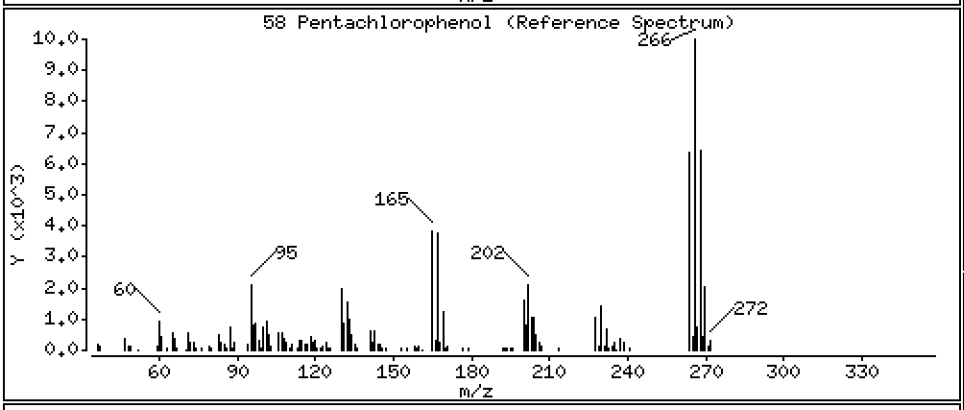
Column diameter: 0.25

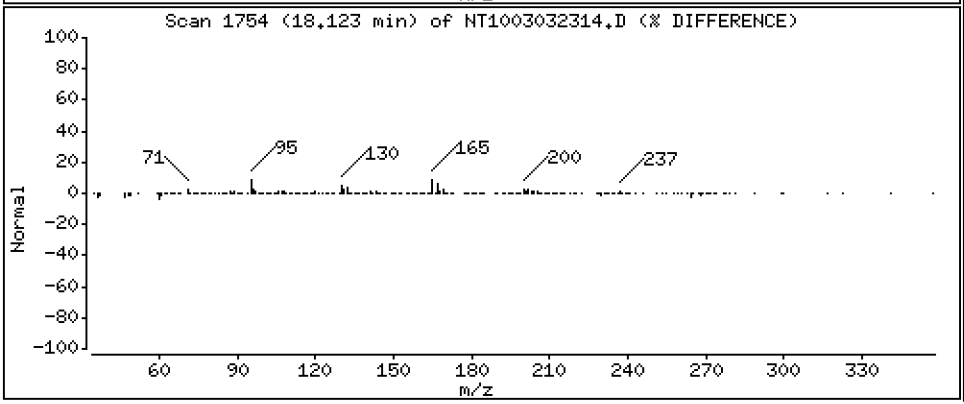
58 Pentachlorophenol

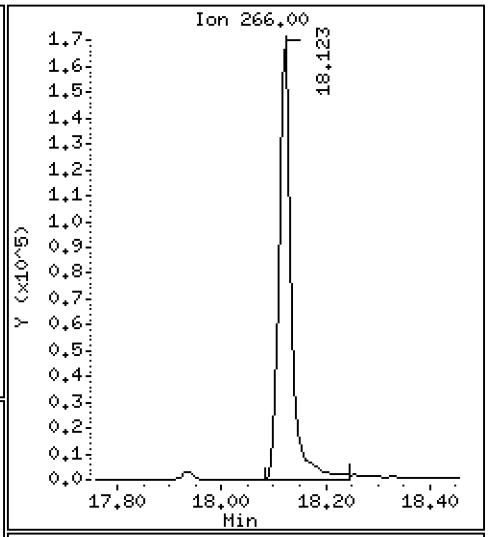
Concentration: 5.539 ug/ml

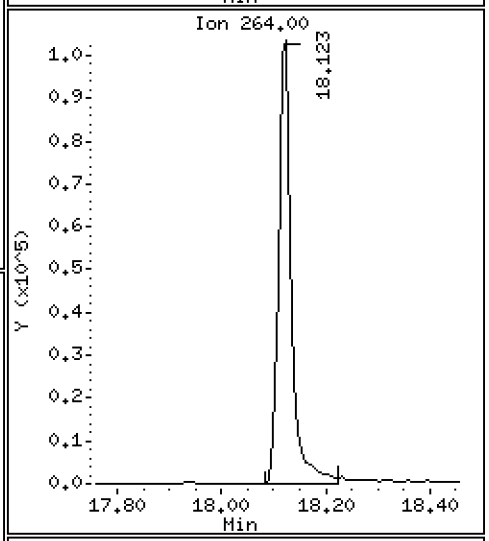


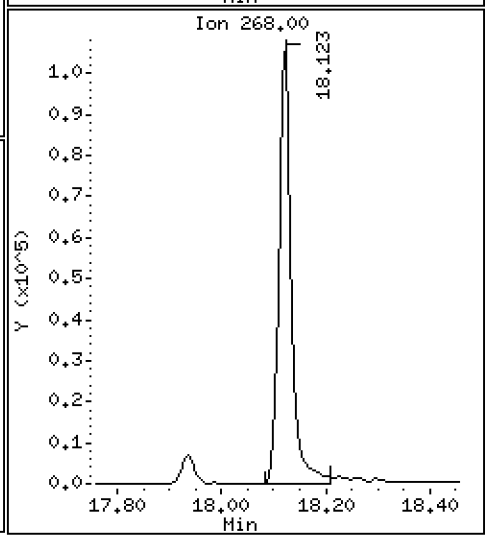












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

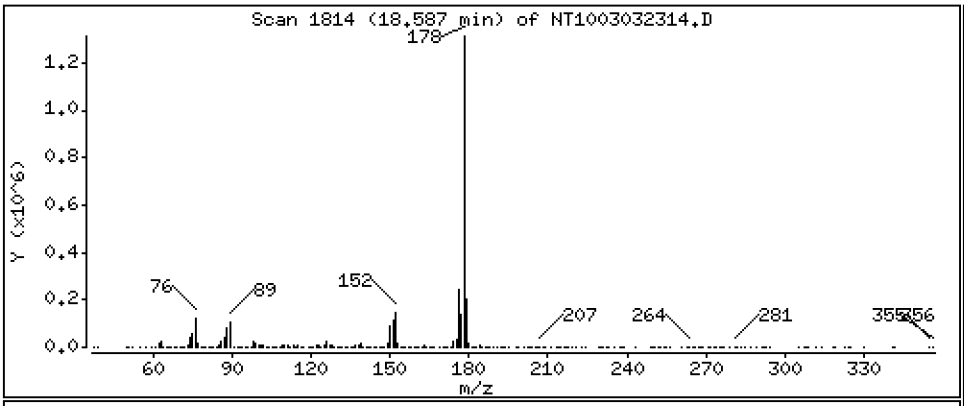
Operator: VTS

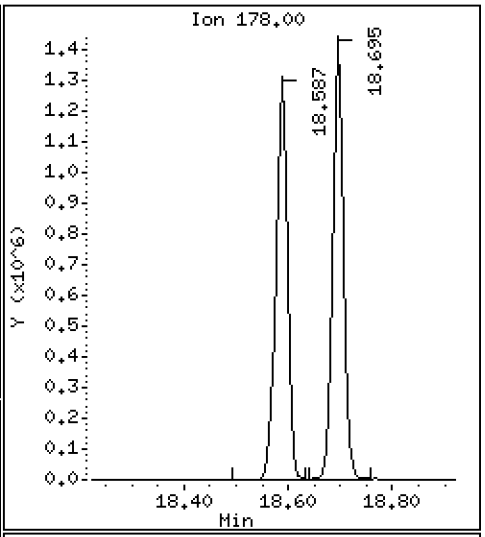
Column phase: ZB-5msi

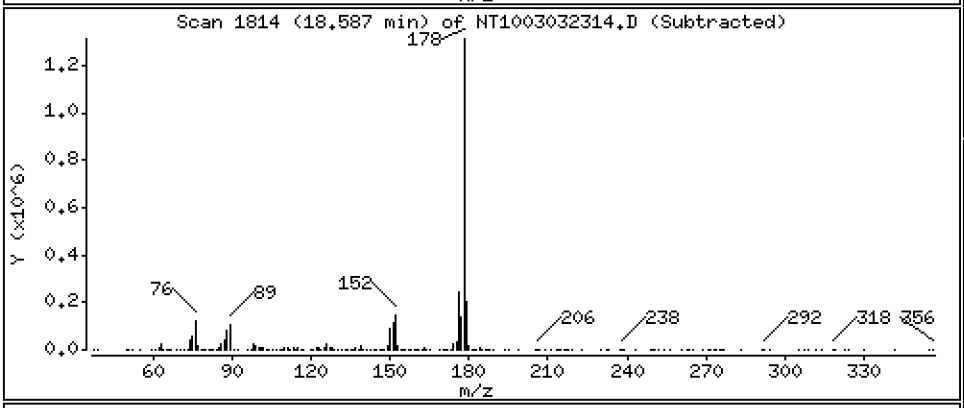
Column diameter: 0.25

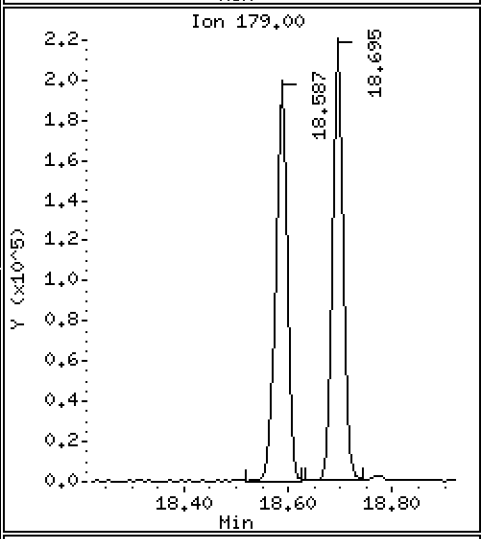
60 Phenanthrene

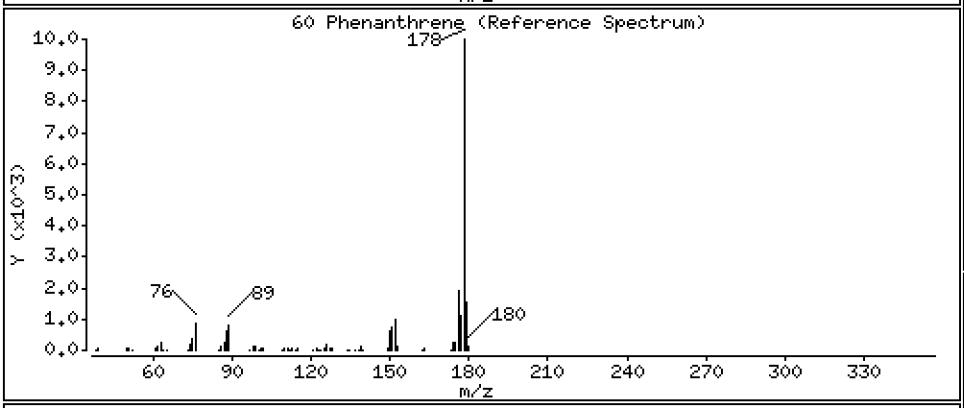
Concentration: 5.010 ug/ml

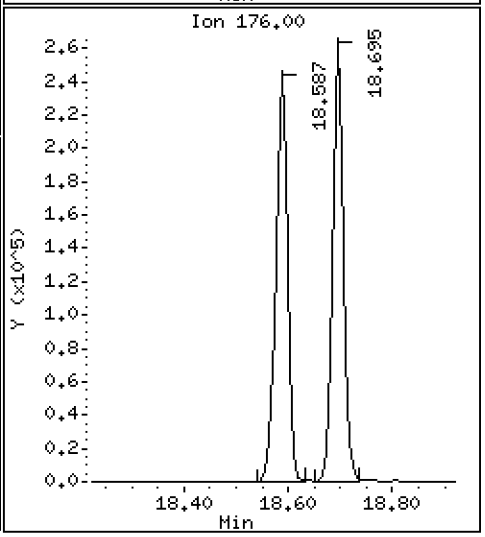


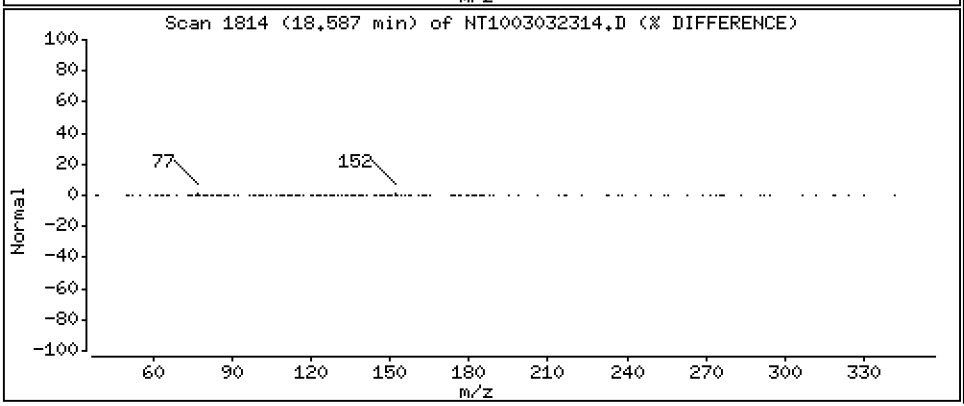












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

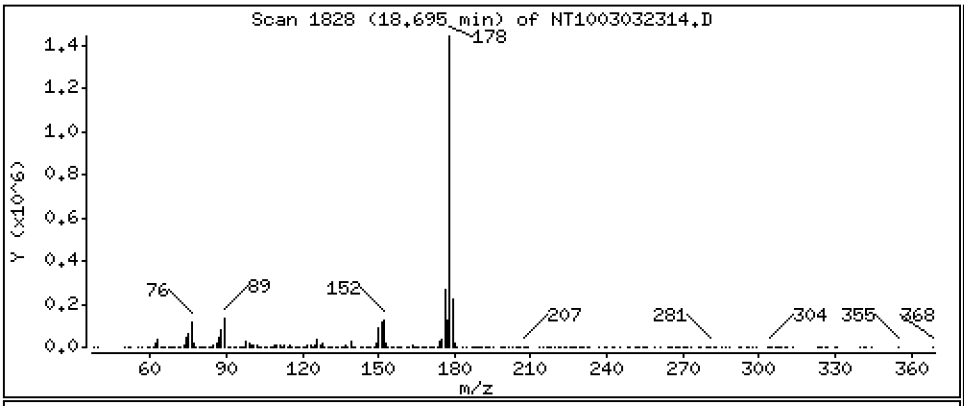
Operator: VTS

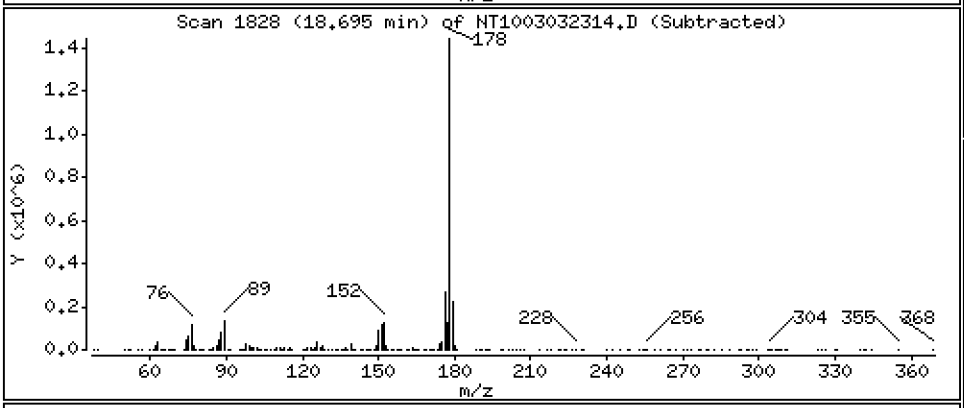
Column phase: ZB-5msi

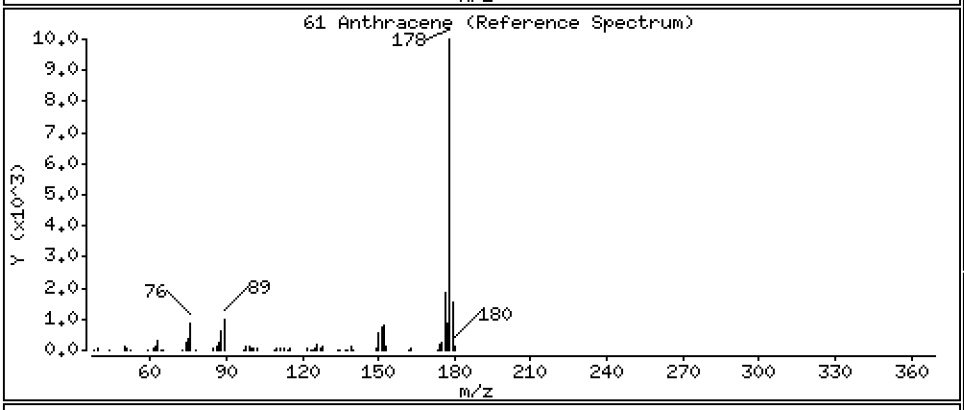
Column diameter: 0.25

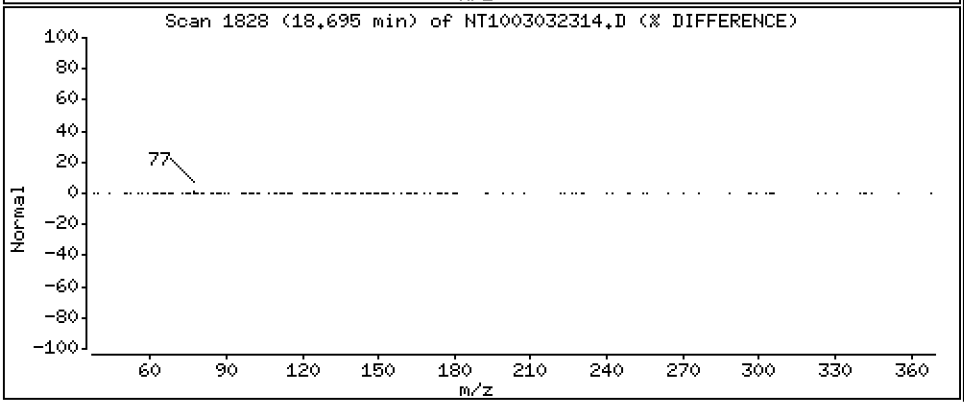
61 Anthracene

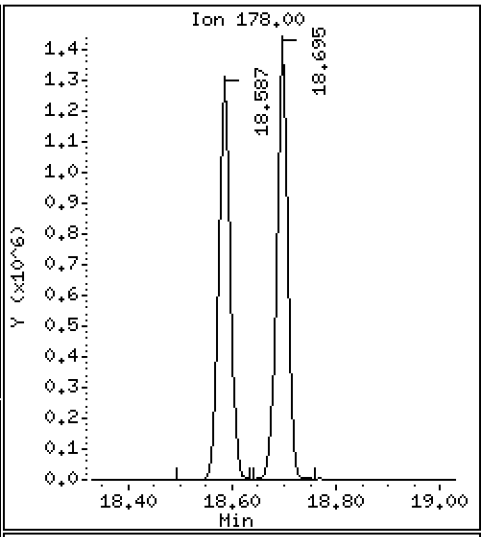
Concentration: 5.310 ug/ml

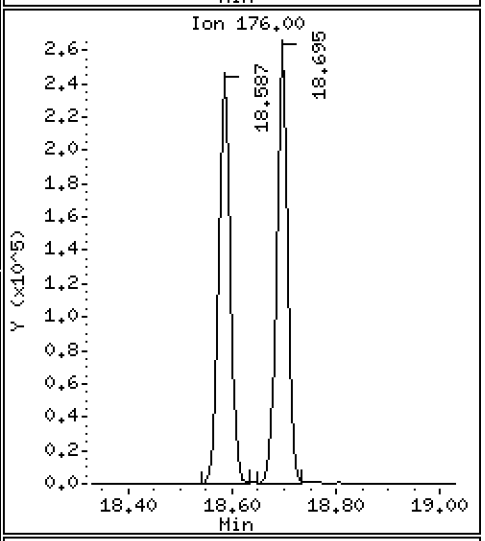


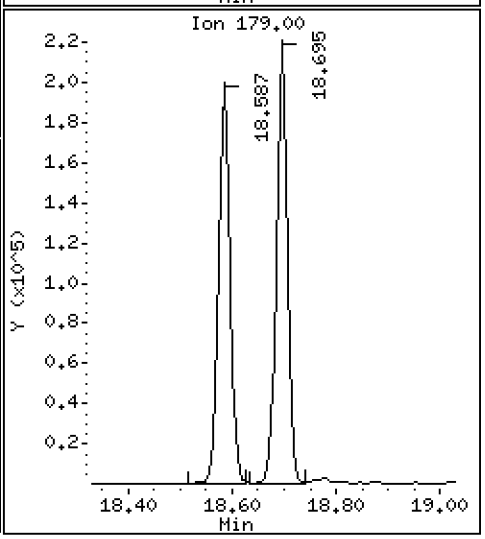












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

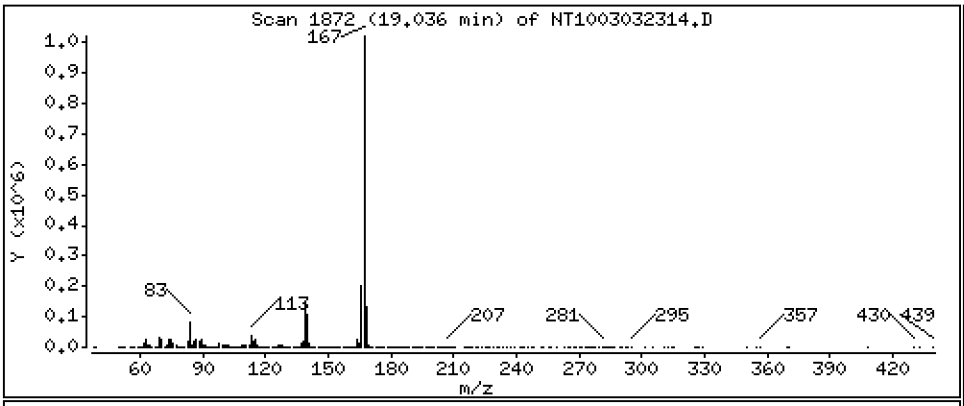
Operator: VTS

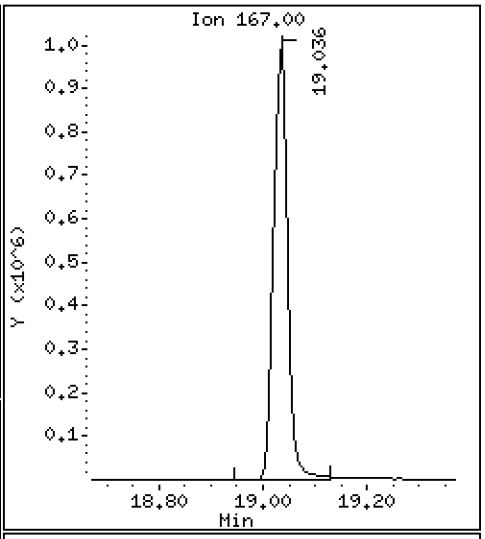
Column phase: ZB-5msi

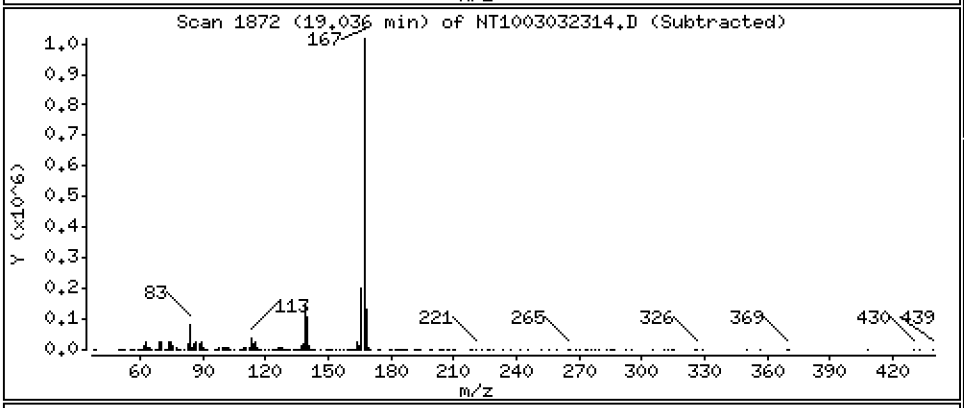
Column diameter: 0.25

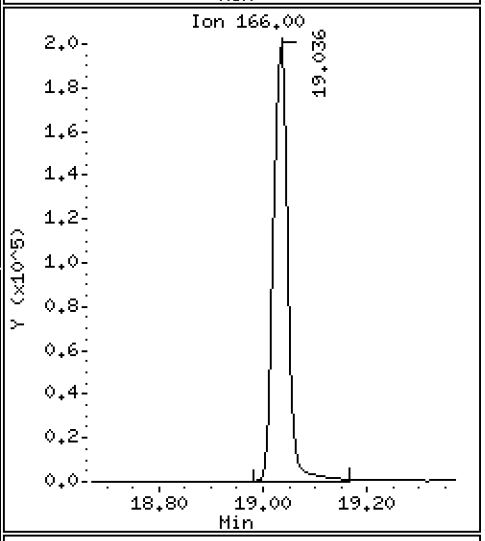
62 Carbazole

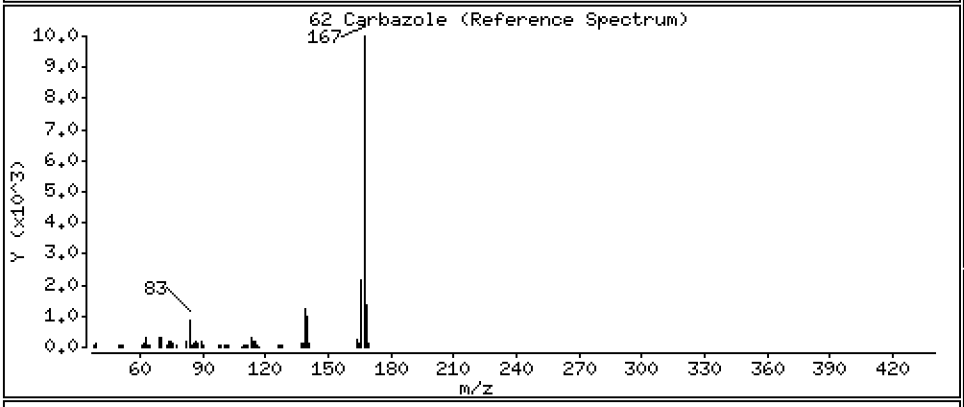
Concentration: 4.992 ug/ml

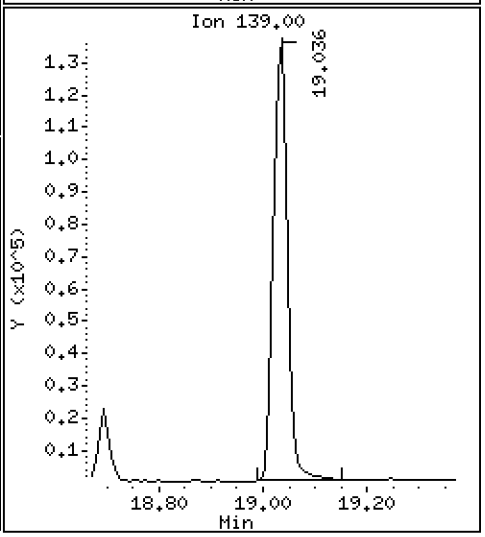


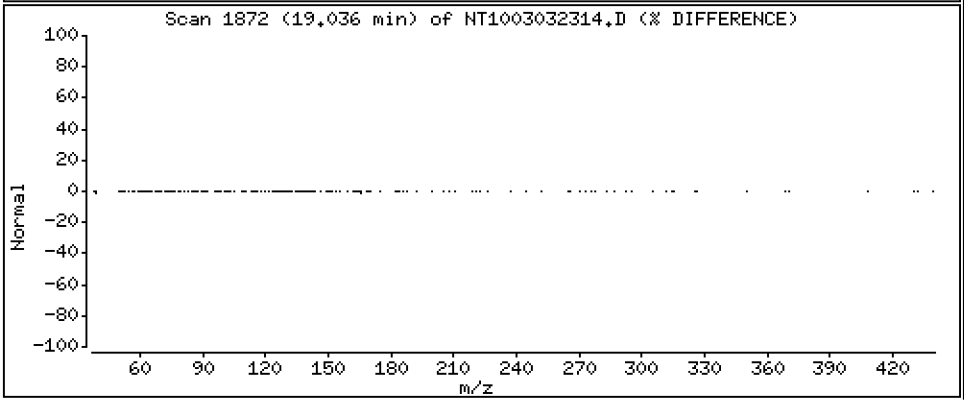












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

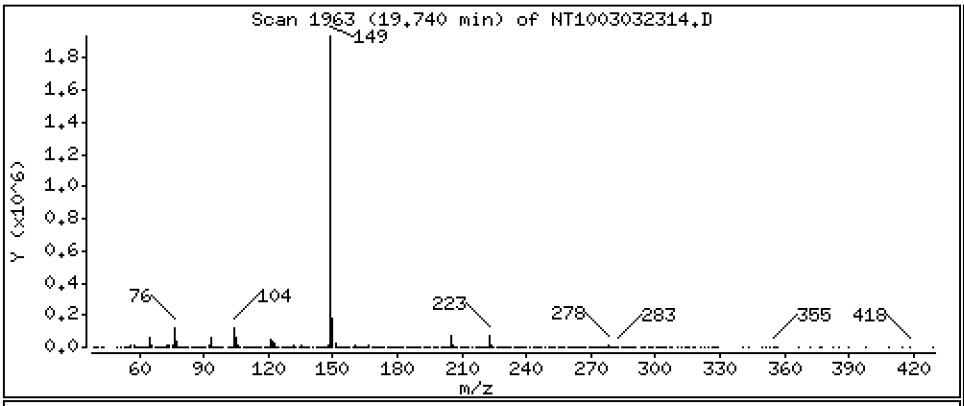
Operator: VTS

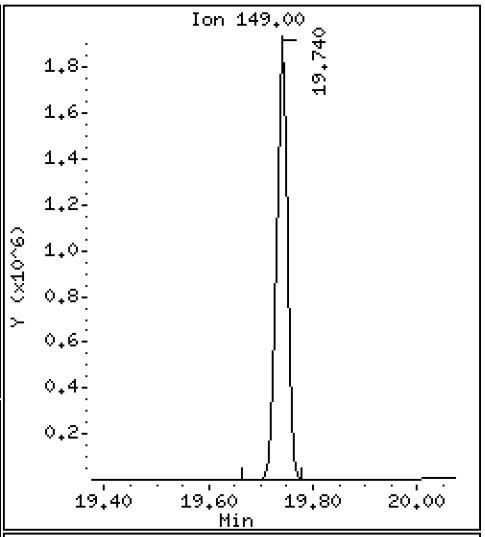
Column phase: ZB-5msi

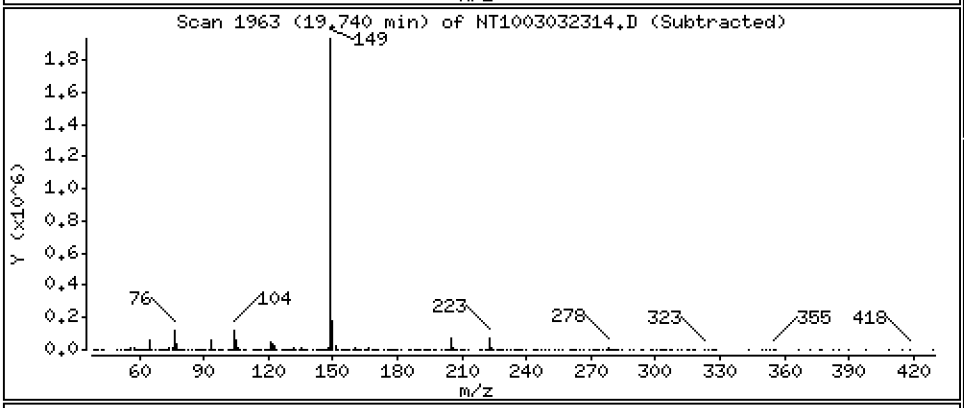
Column diameter: 0.25

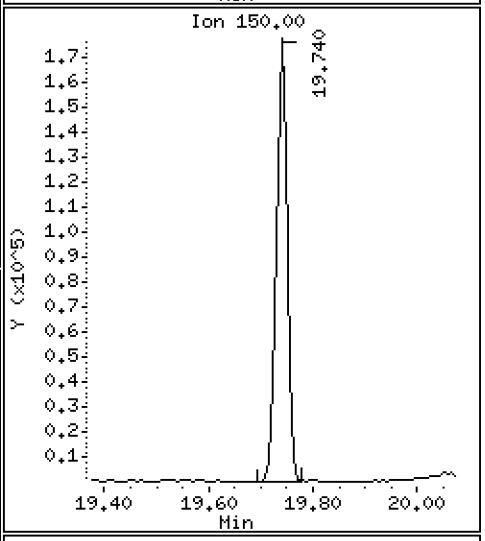
63 Di-n-butylphthalate

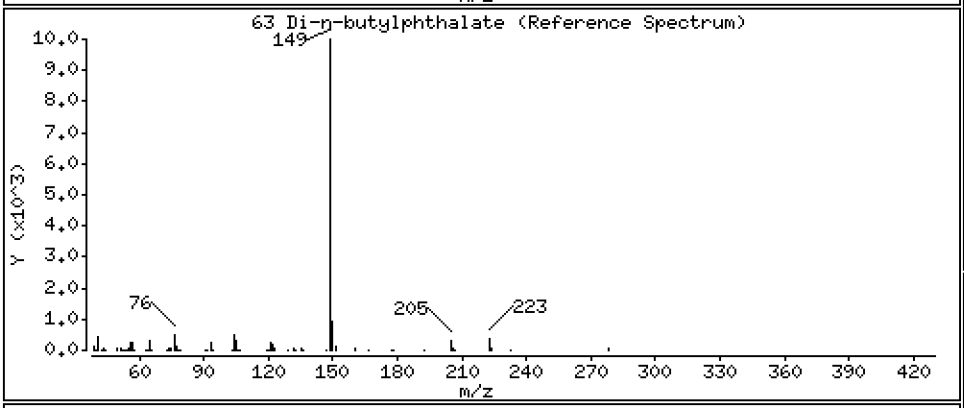
Concentration: 5.302 ug/ml

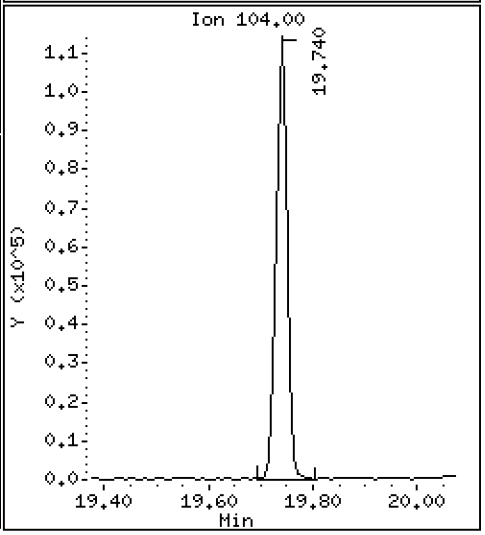


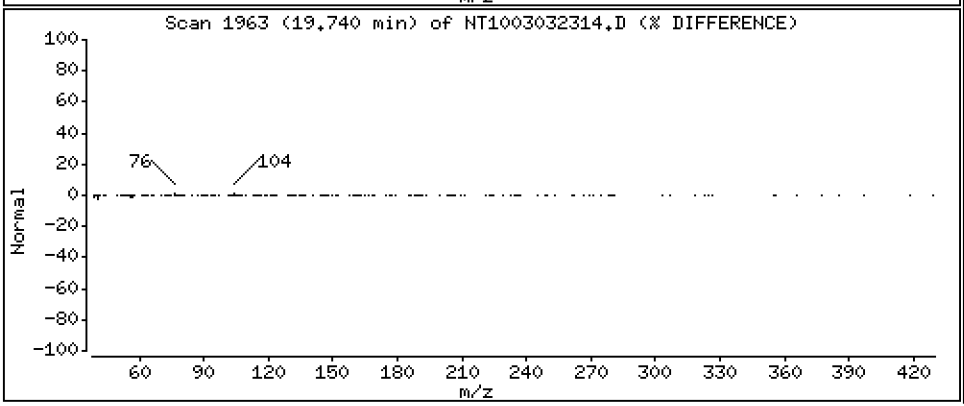












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

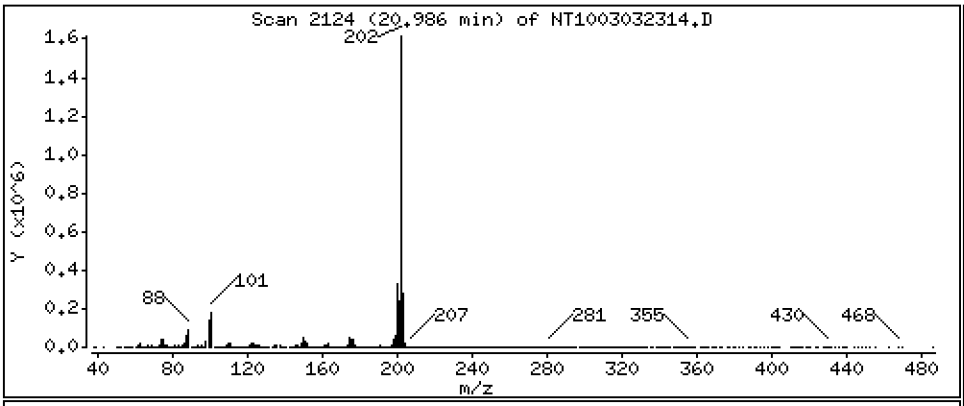
Operator: VTS

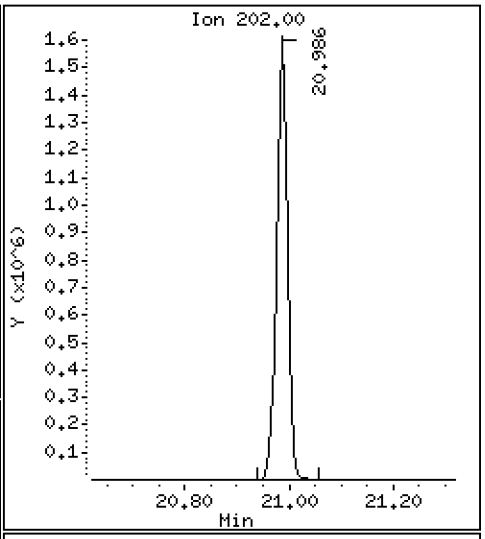
Column phase: ZB-5msi

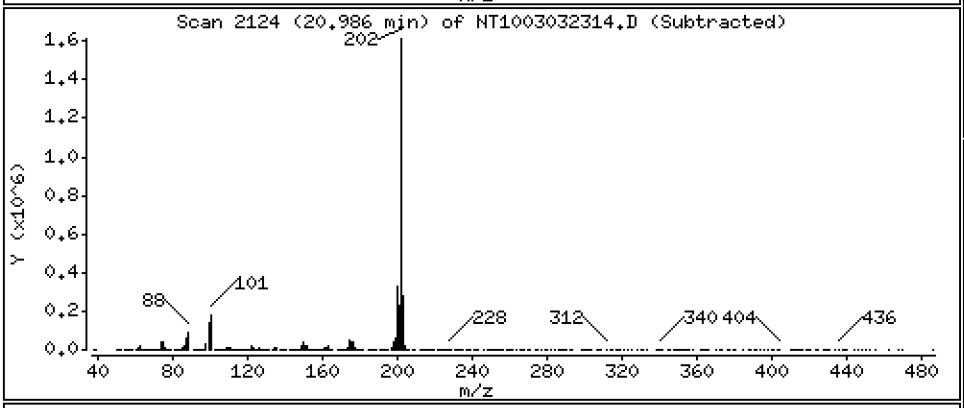
Column diameter: 0.25

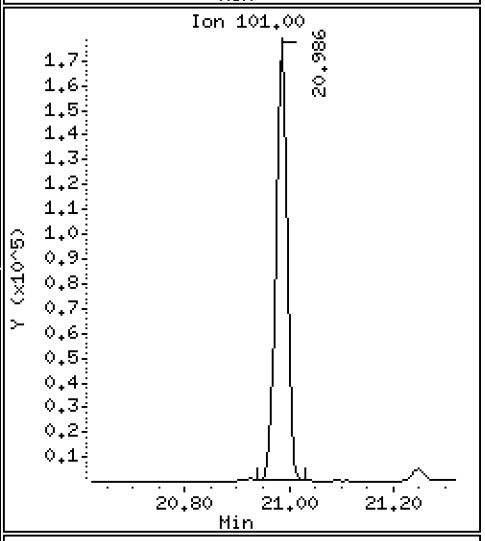
64 Fluoranthene

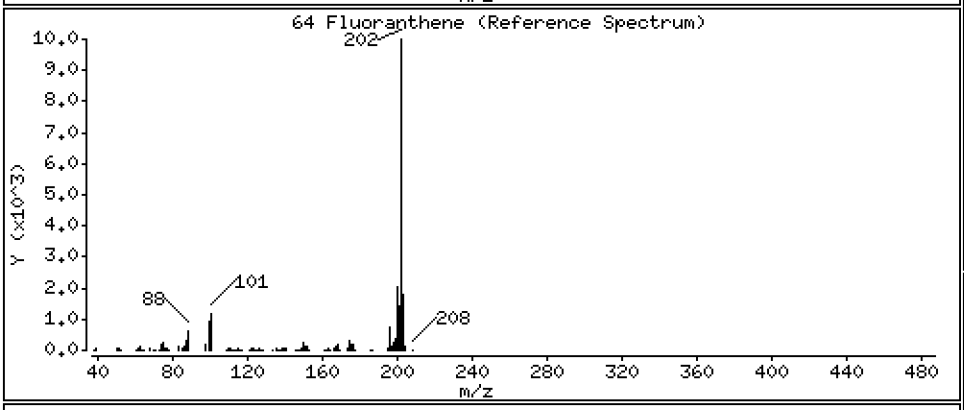
Concentration: 4.417 ug/ml

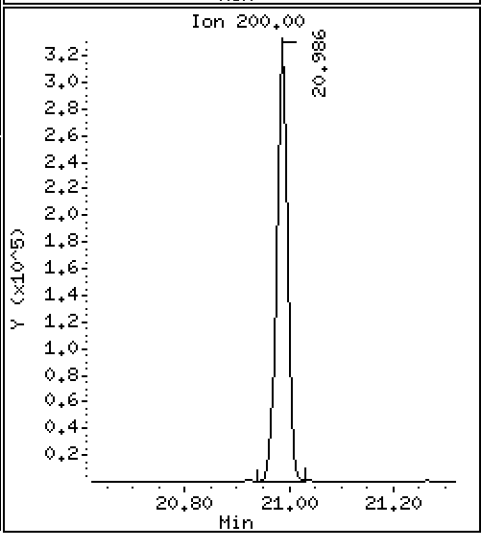


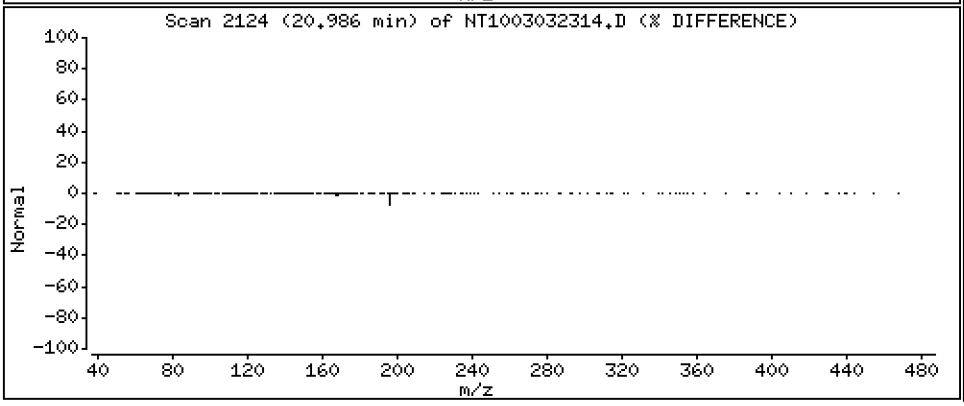












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

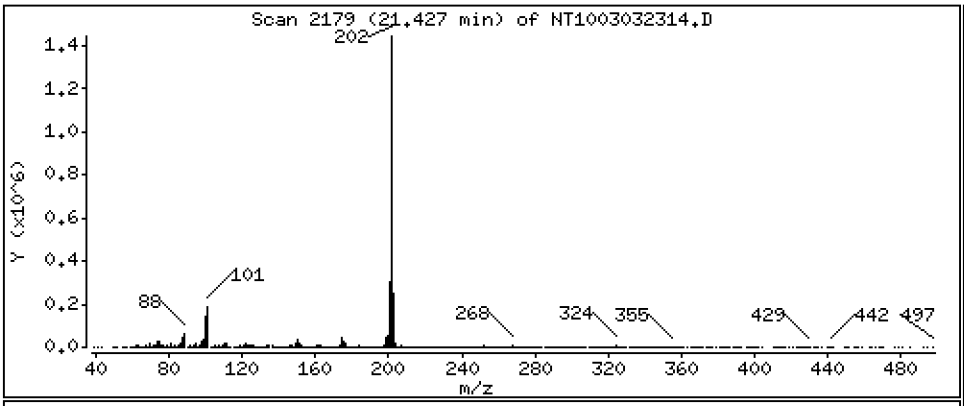
Operator: VTS

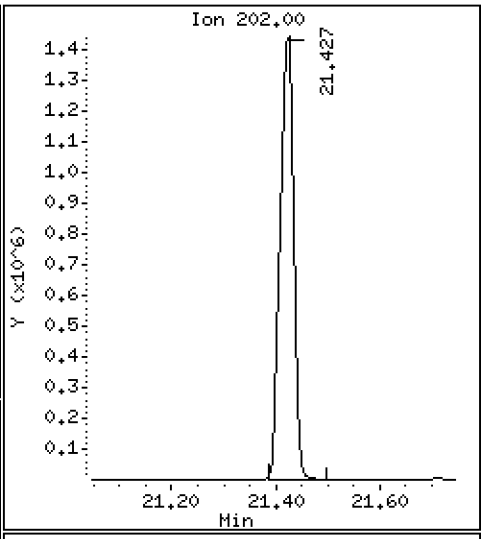
Column phase: ZB-5msi

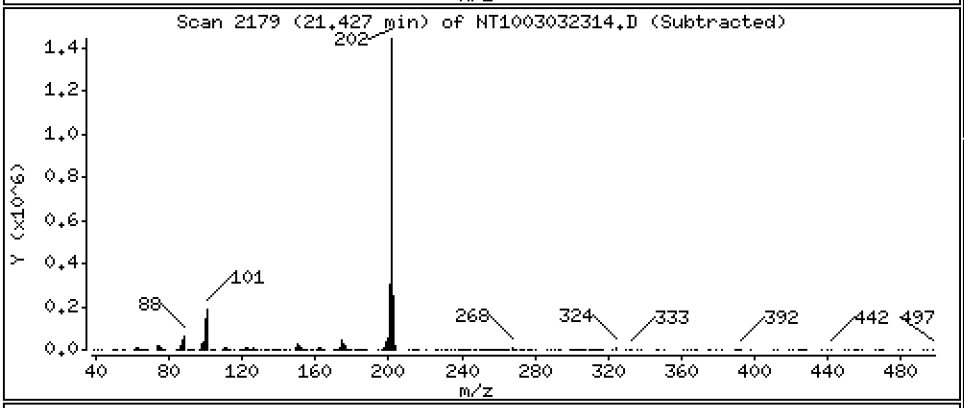
Column diameter: 0.25

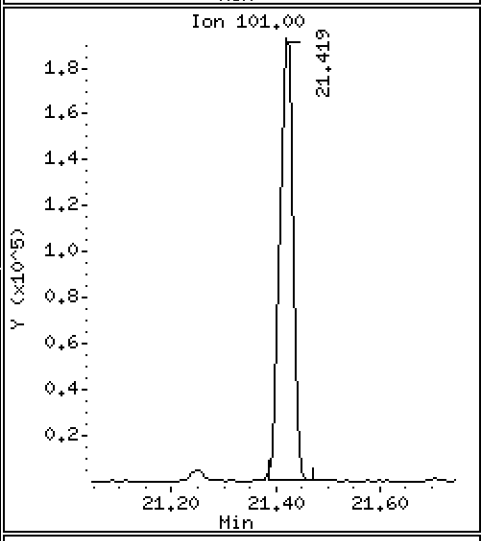
65 Pyrene

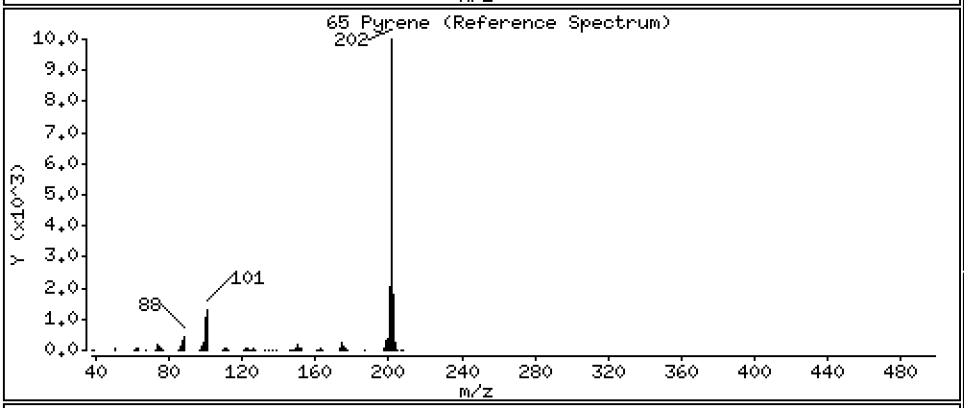
Concentration: 4.079 ug/ml

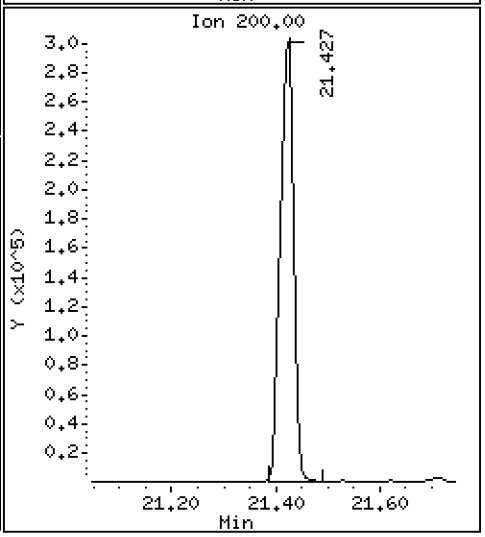


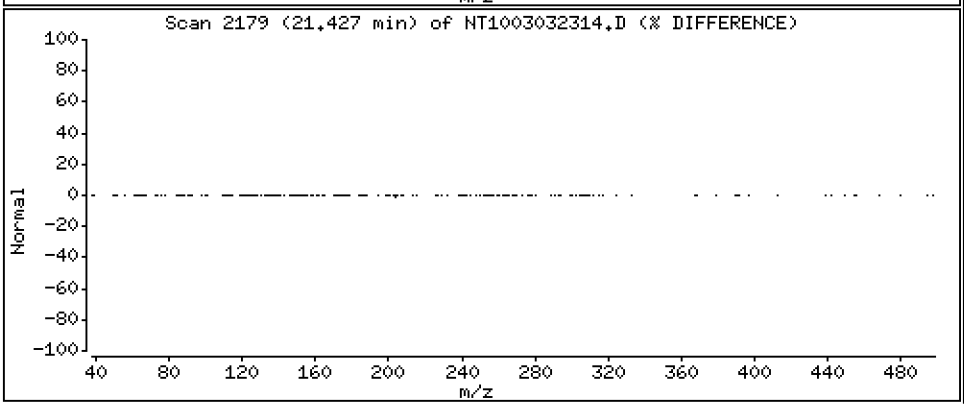












Date : 04-MAR-2023 02:02

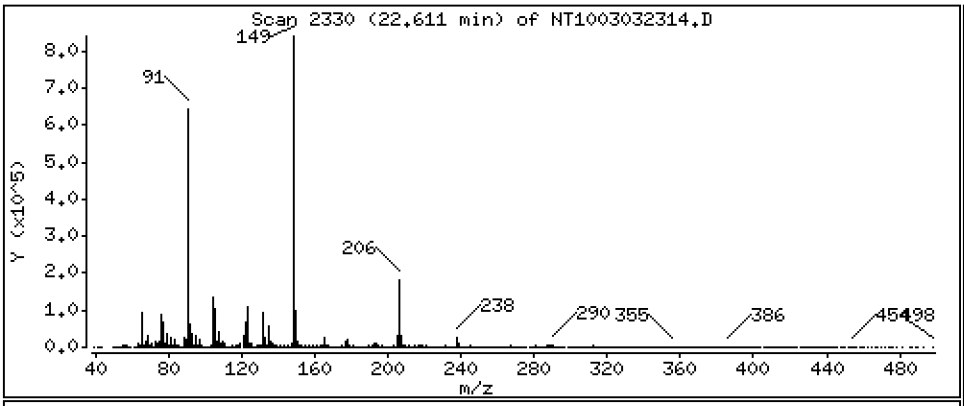
Client ID: Instrument: nt10.i

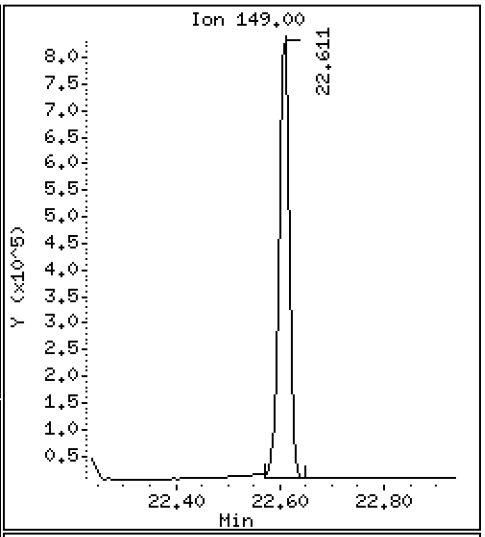
Sample Info: SEQ-CCVFULL

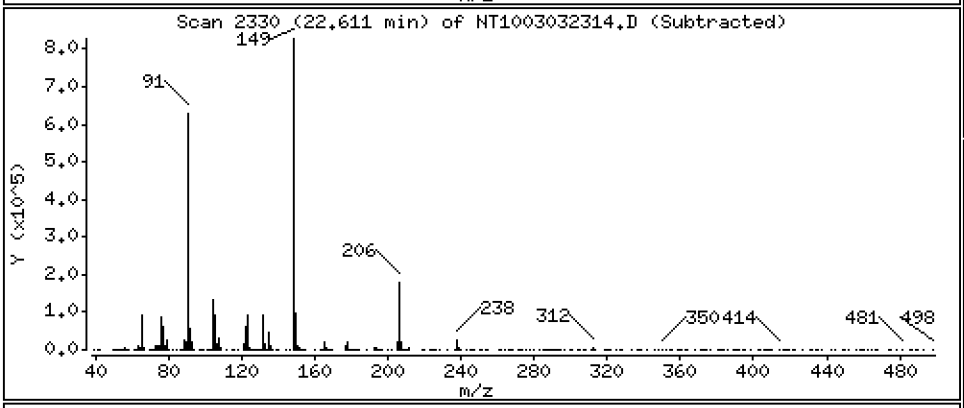
Volume Injected (uL): 1.0 Operator: VTS

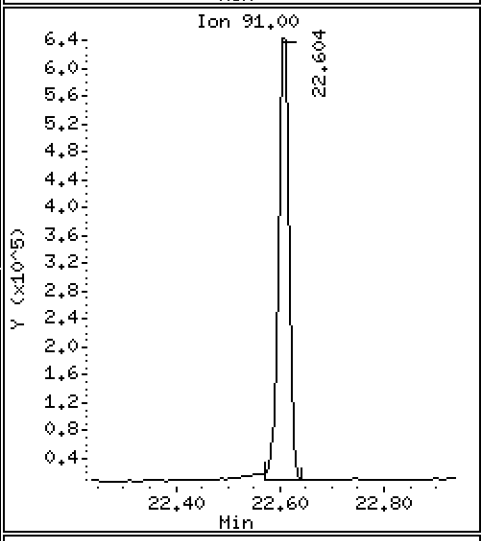
Column phase: ZB-5msi Column diameter: 0.25

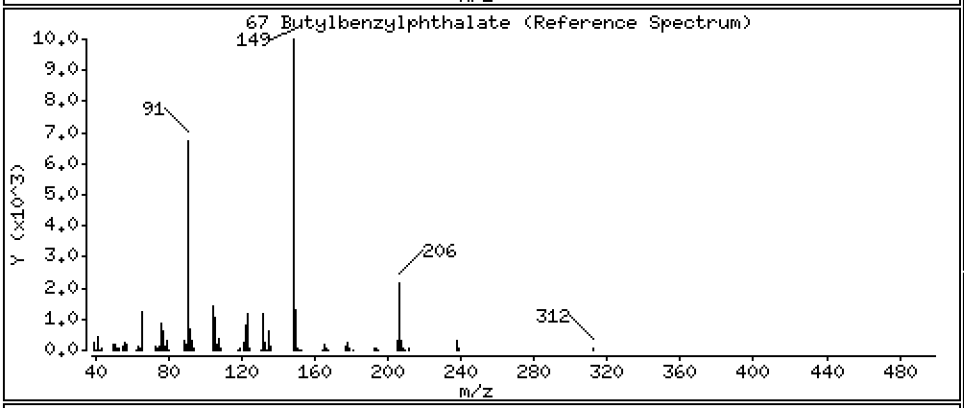
67 Butylbenzylphthalate Concentration: 4.126 ug/ml

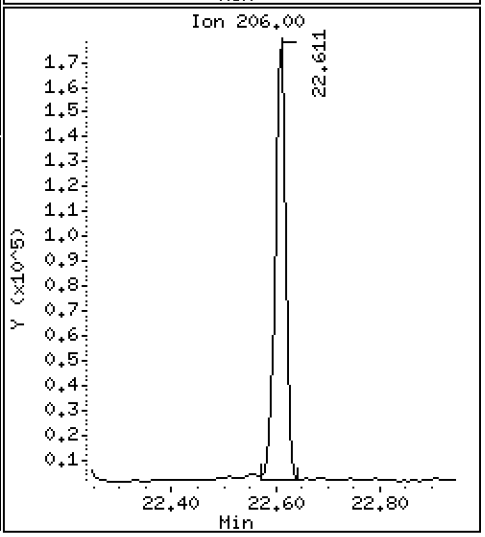


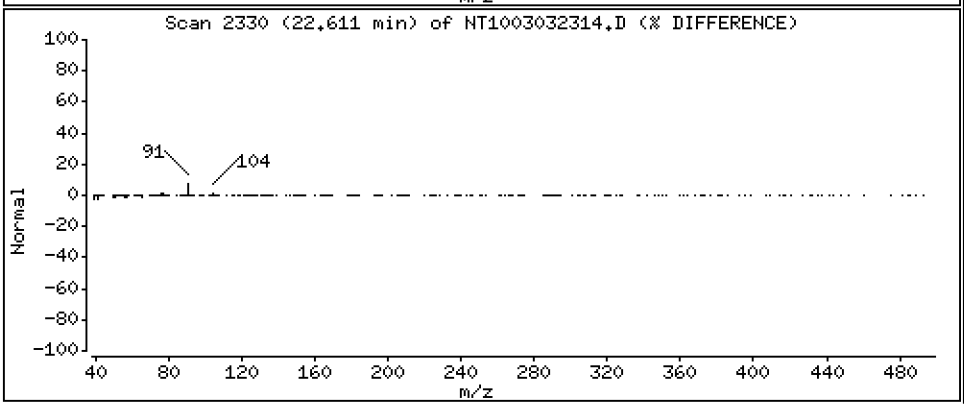












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

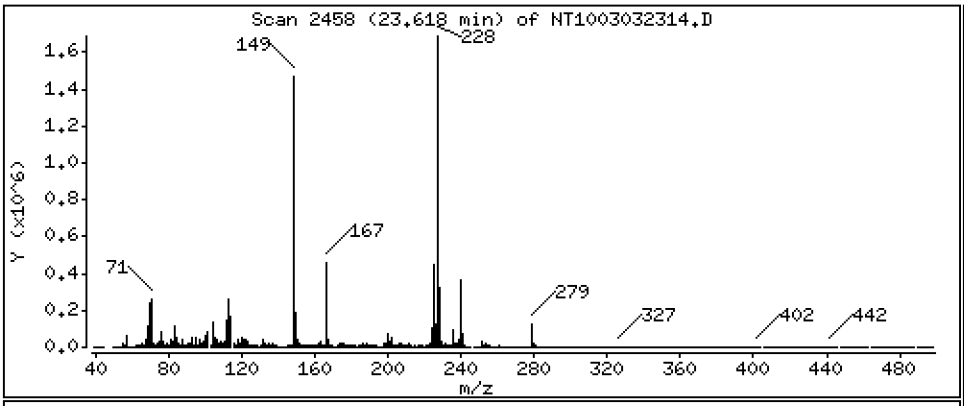
Operator: VTS

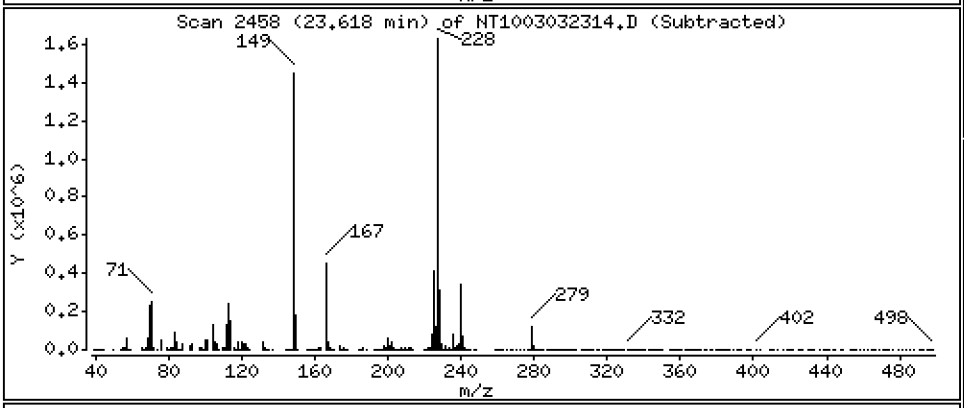
Column phase: ZB-5msi

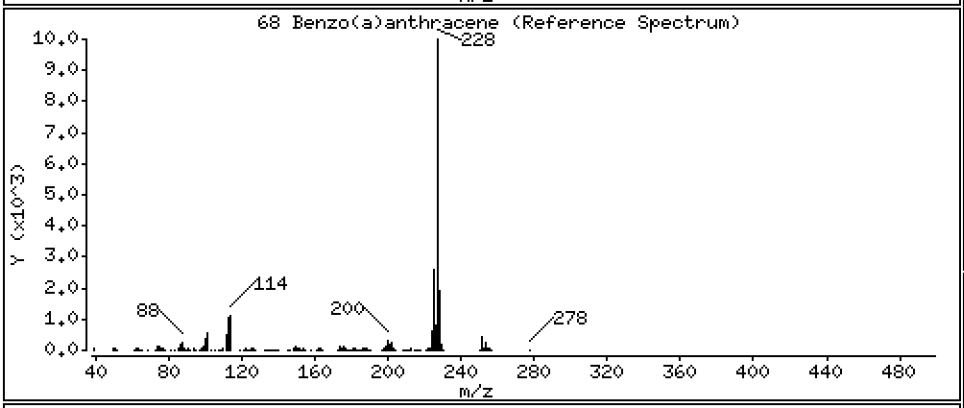
Column diameter: 0.25

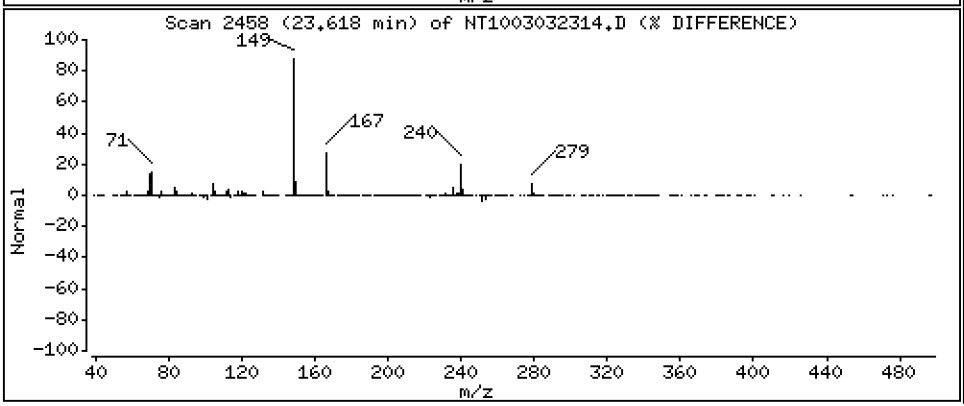
68 Benzo(a)anthracene

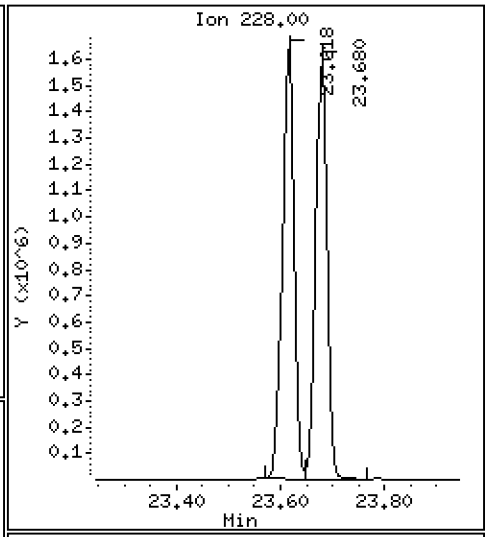
Concentration: 4.727 ug/ml

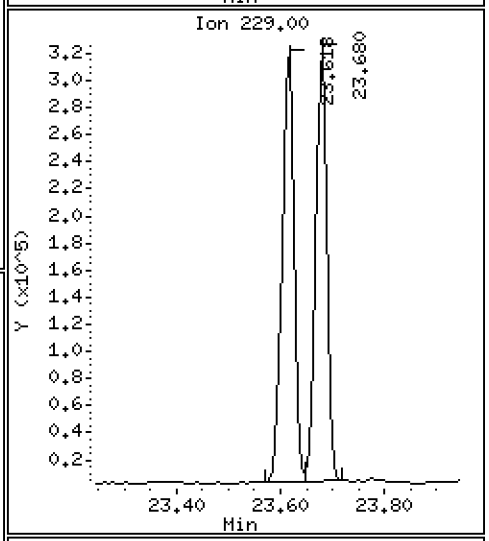


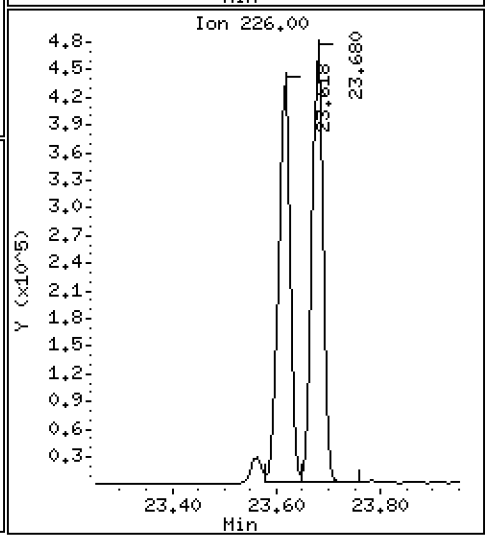












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

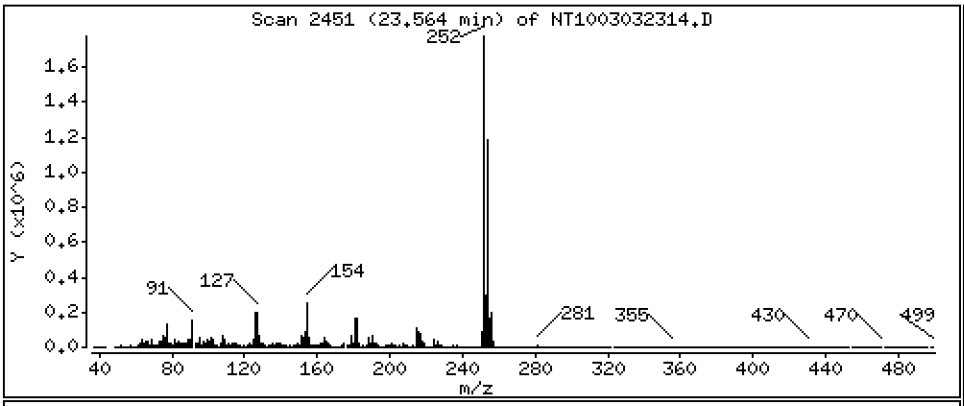
Operator: VTS

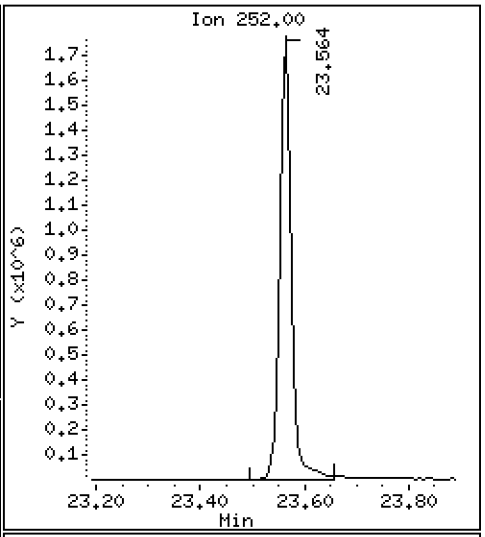
Column phase: ZB-5msi

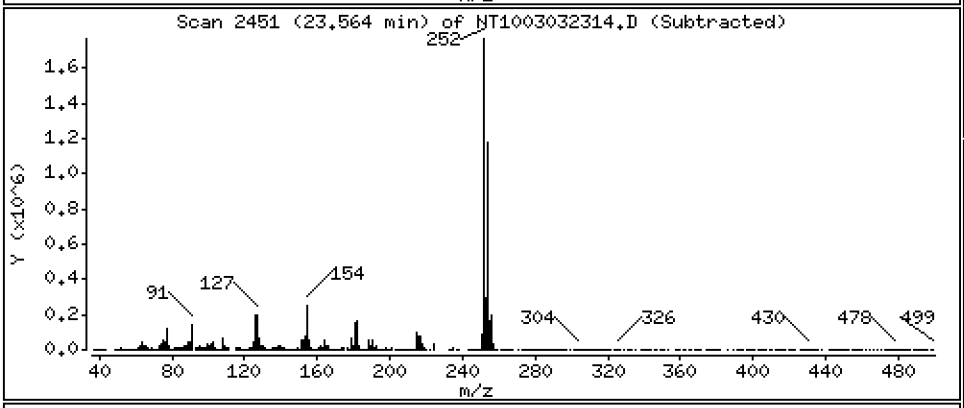
Column diameter: 0.25

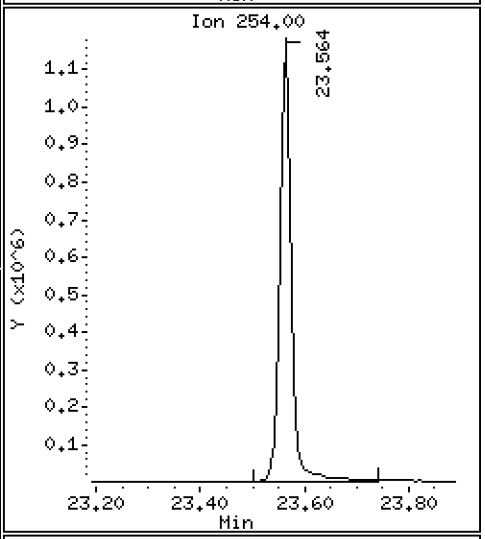
70 3,3'-Dichlorobenzidine

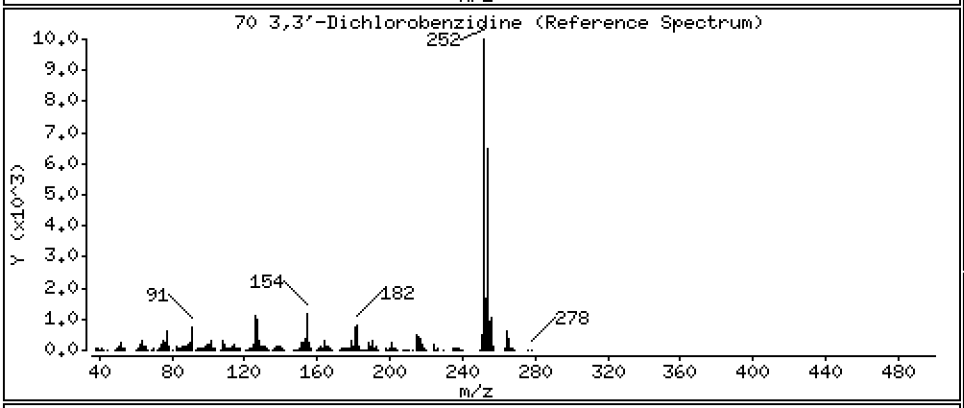
Concentration: 11.37 ug/ml

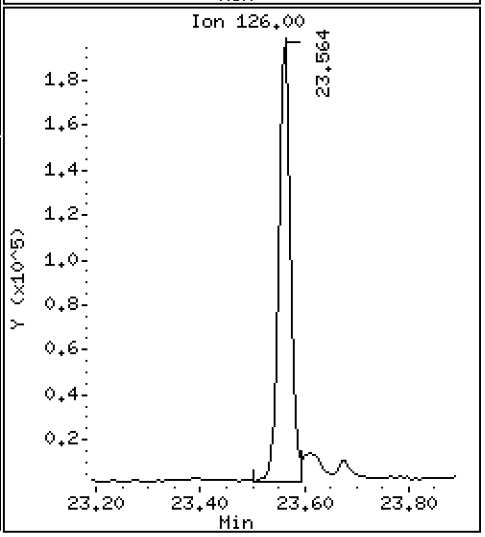


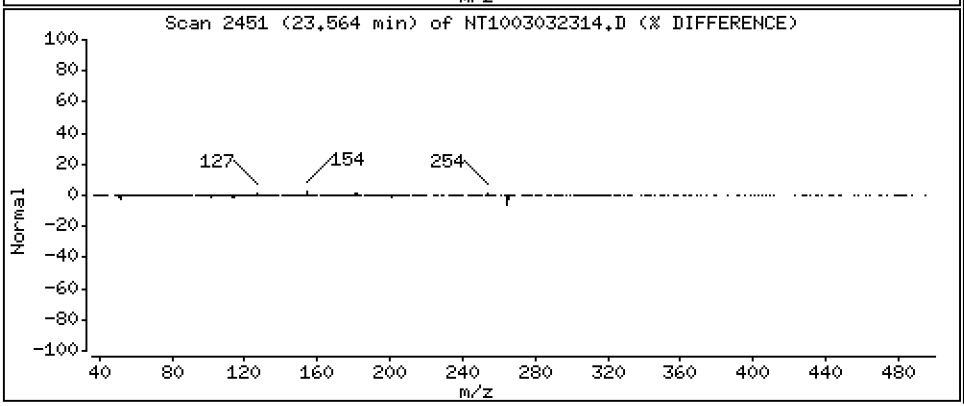












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

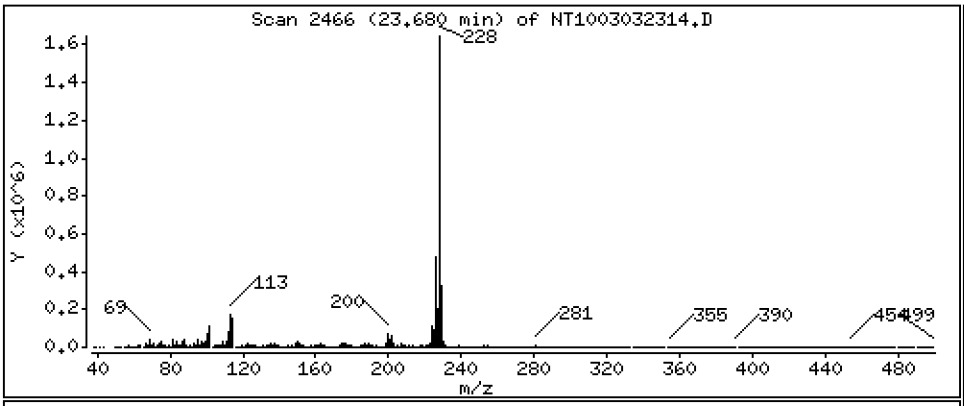
Operator: VTS

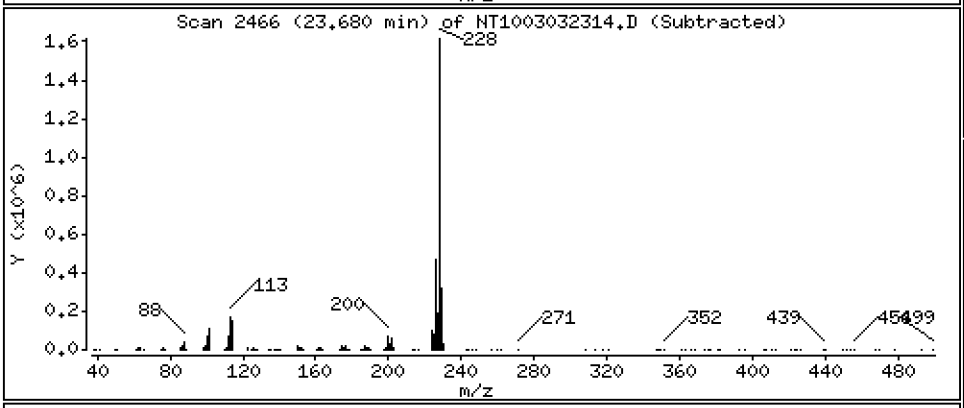
Column phase: ZB-5msi

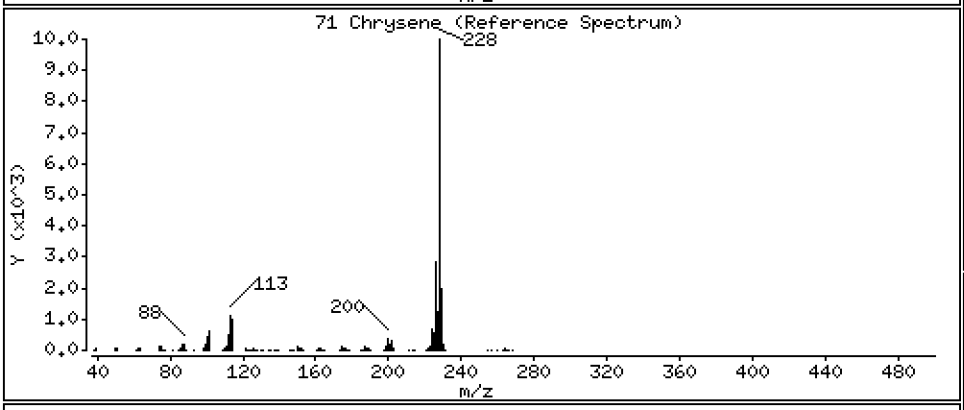
Column diameter: 0.25

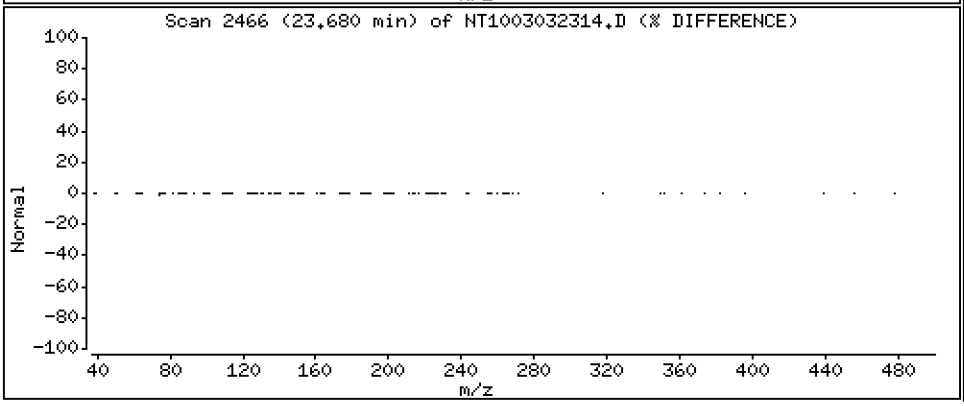
71 Chrysene

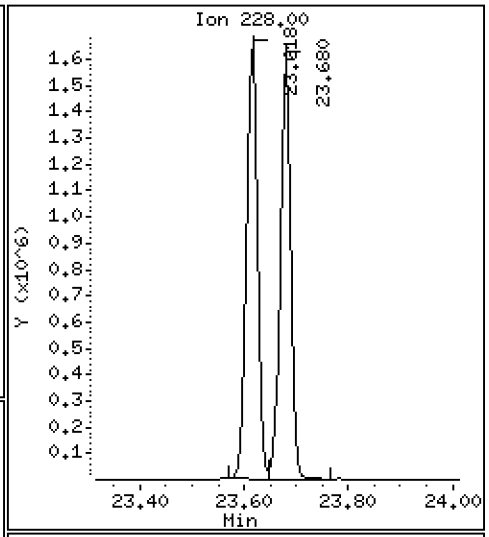
Concentration: 5.137 ug/ml

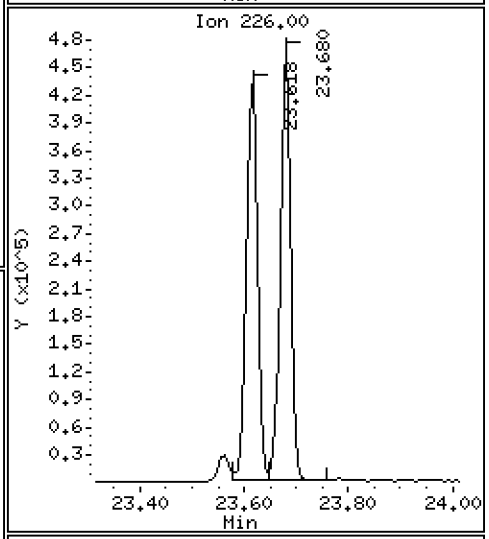


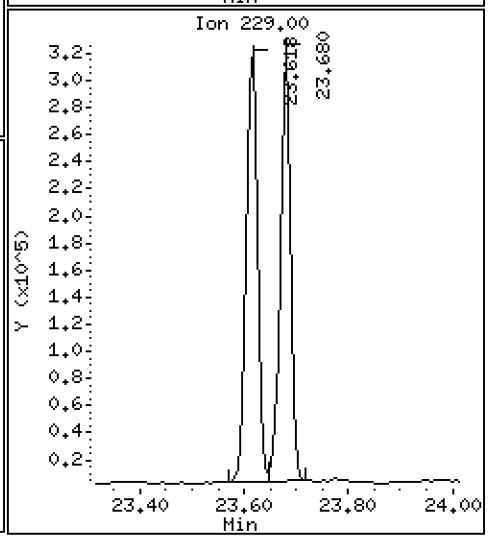












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

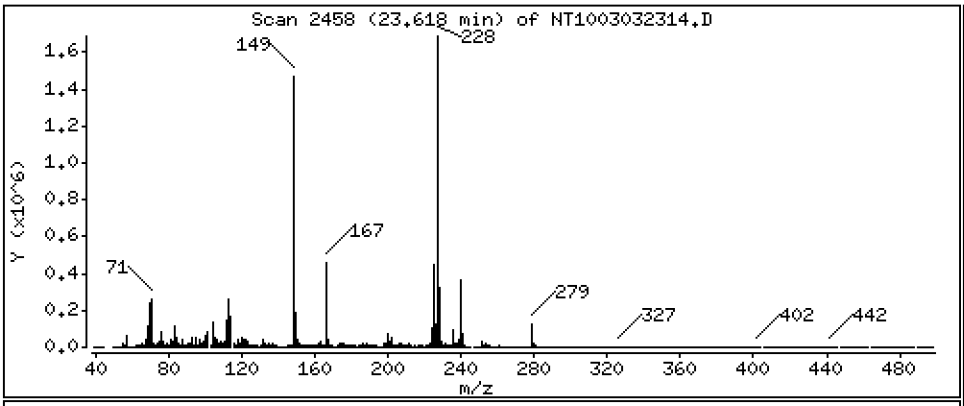
Operator: VTS

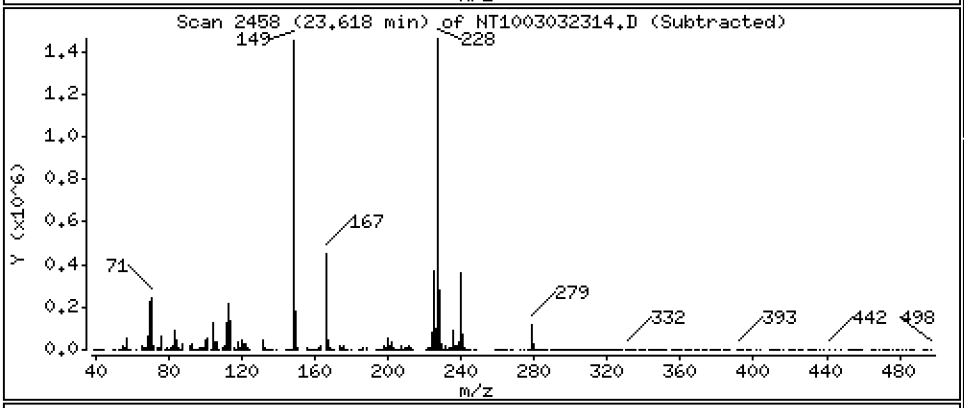
Column phase: ZB-5msi

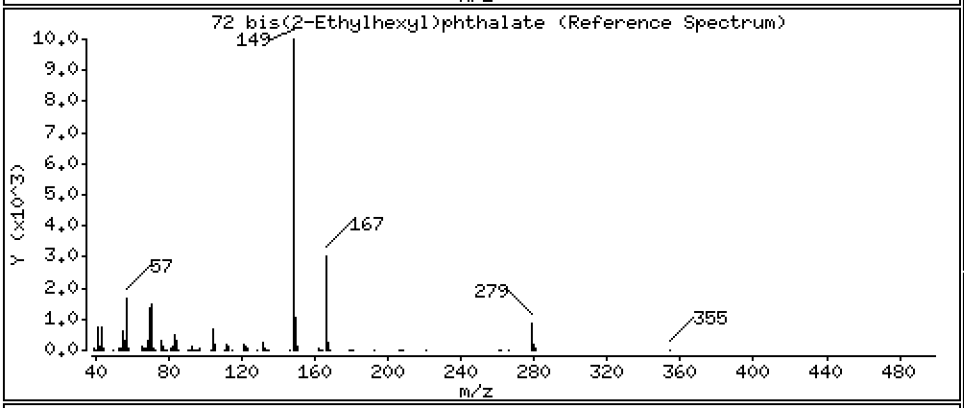
Column diameter: 0.25

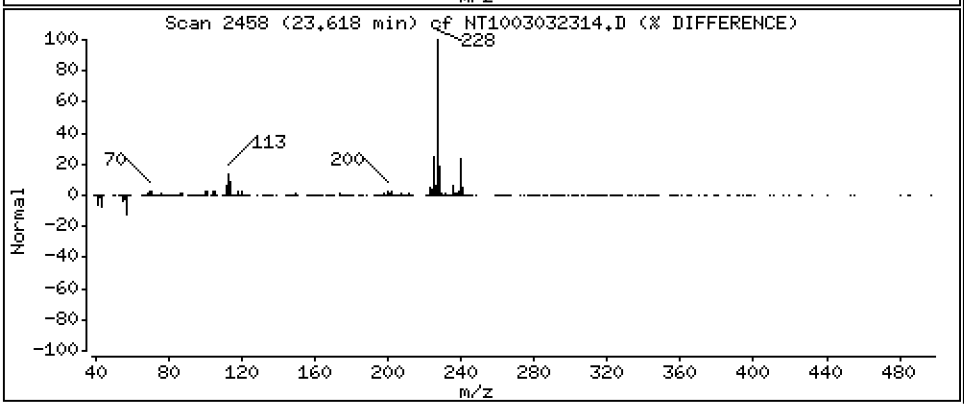
72 bis(2-Ethylhexyl)phthalate

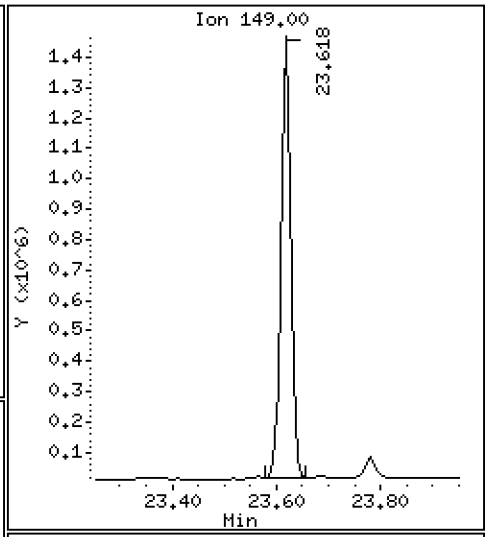
Concentration: 4.946 ug/ml

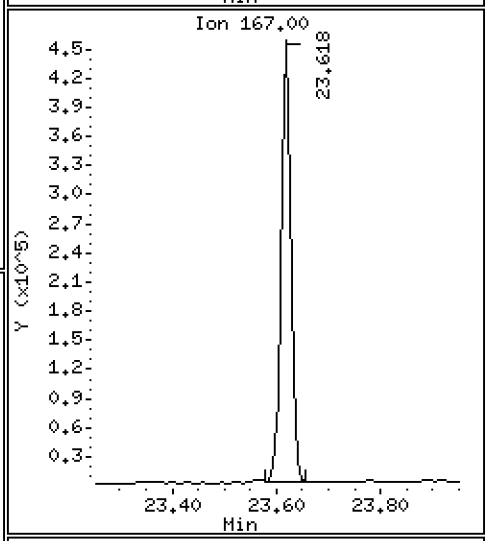


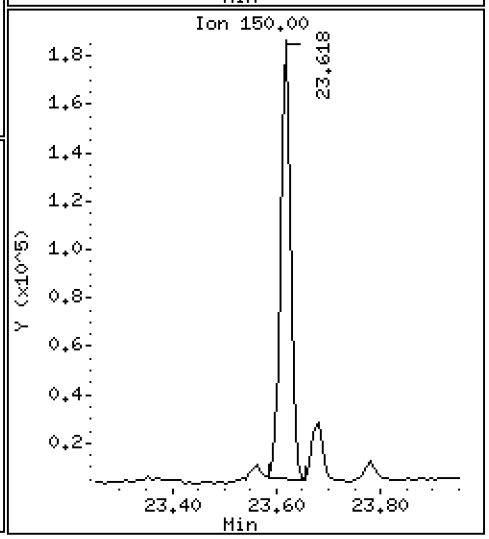












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

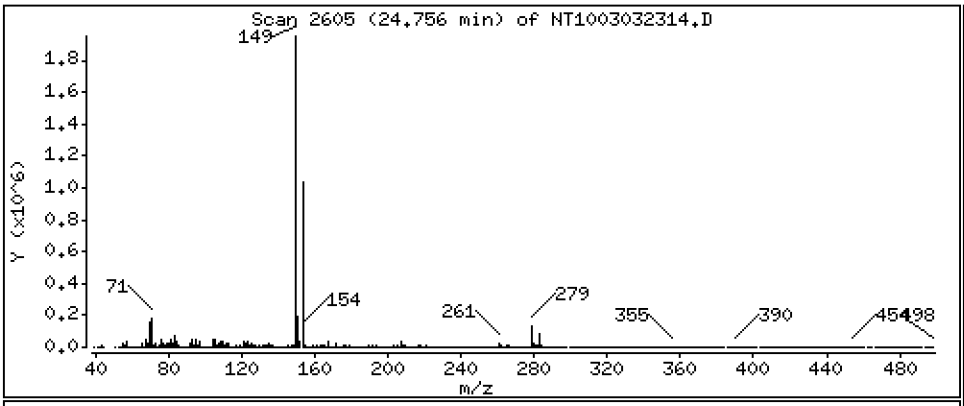
Operator: VTS

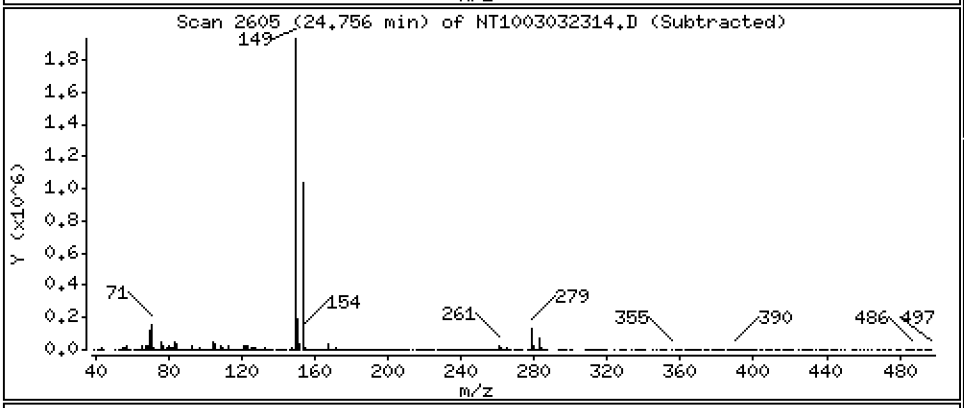
Column phase: ZB-5msi

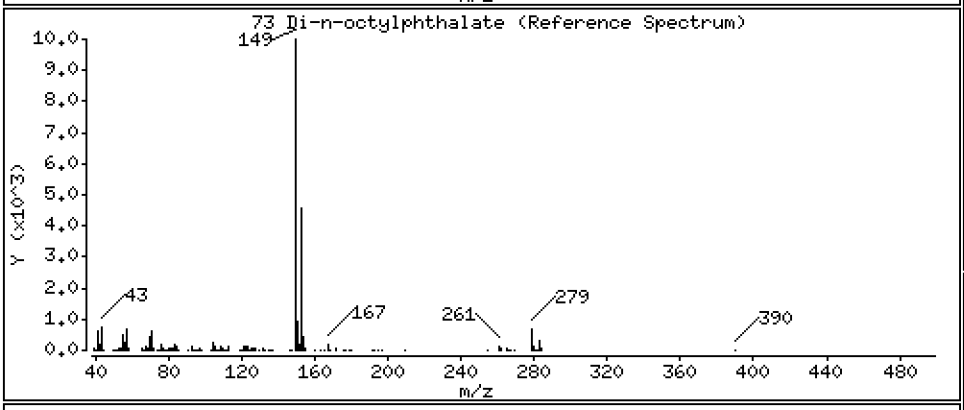
Column diameter: 0.25

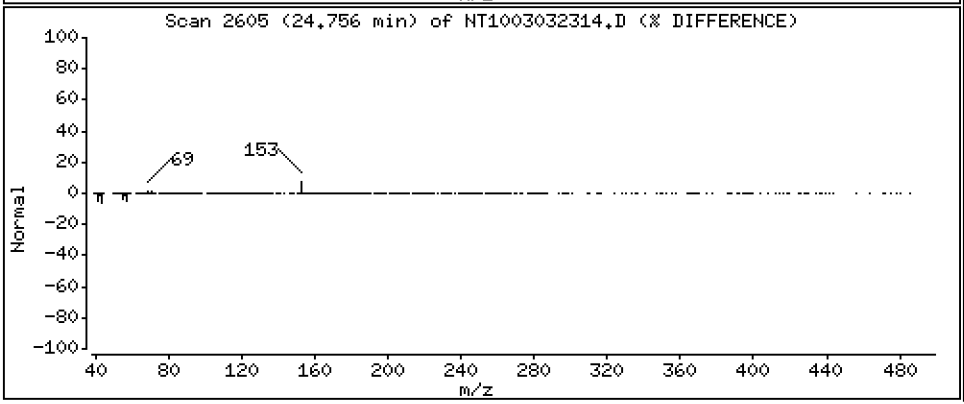
73 Di-n-octylphthalate

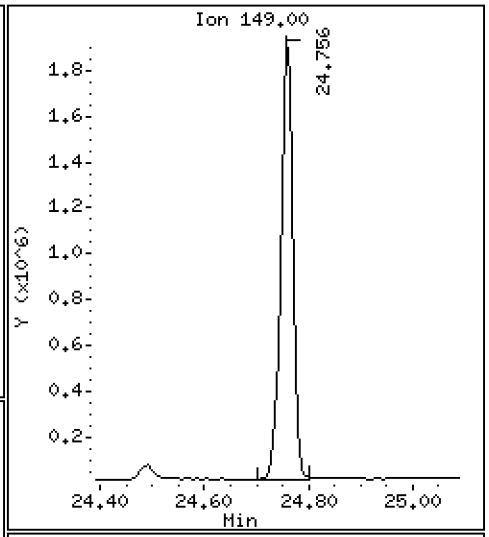
Concentration: 5.200 ug/ml

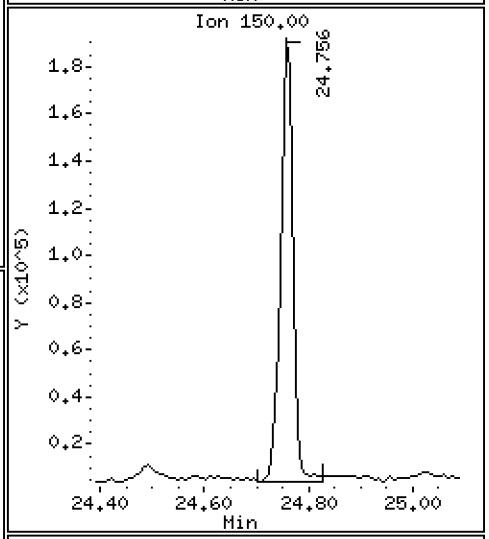


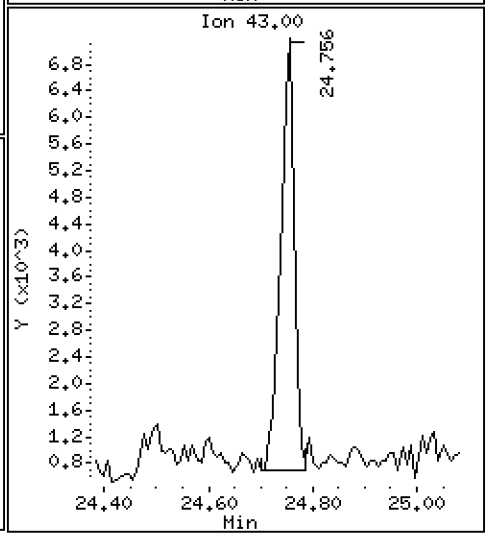












Date : 04-MAR-2023 02:02

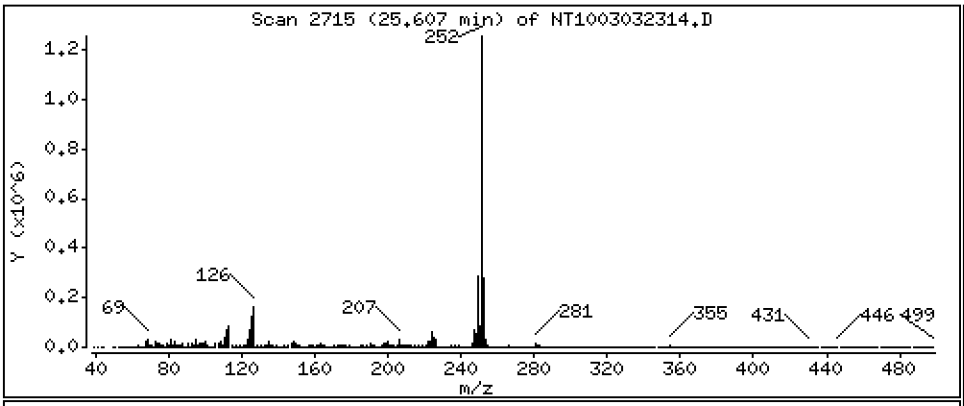
Client ID: Instrument: nt10.i

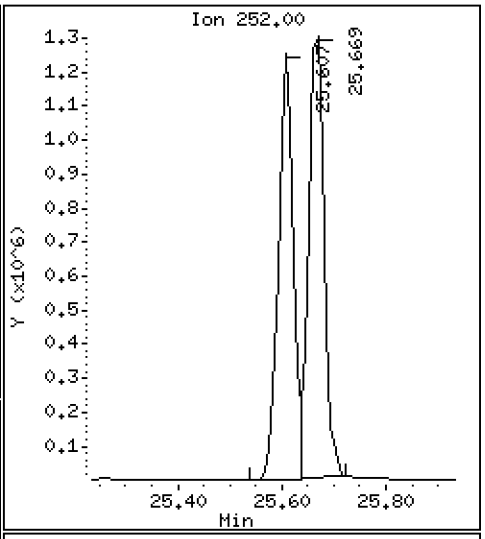
Sample Info: SEQ-CCVFULL

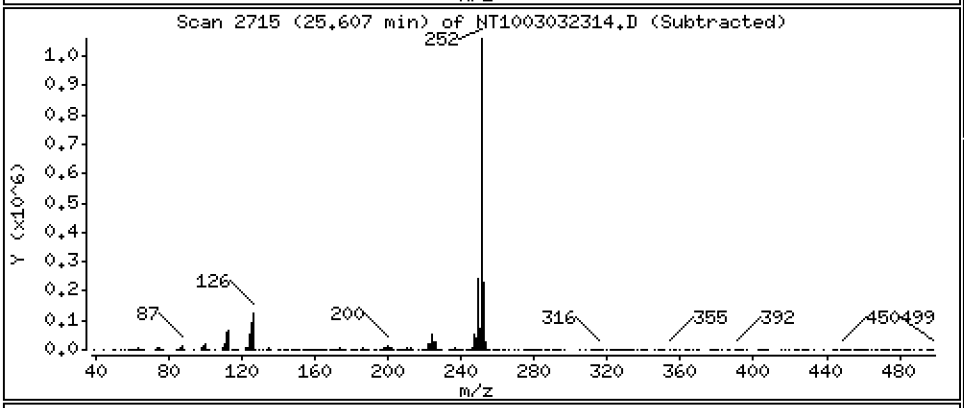
Volume Injected (uL): 1.0 Operator: VTS

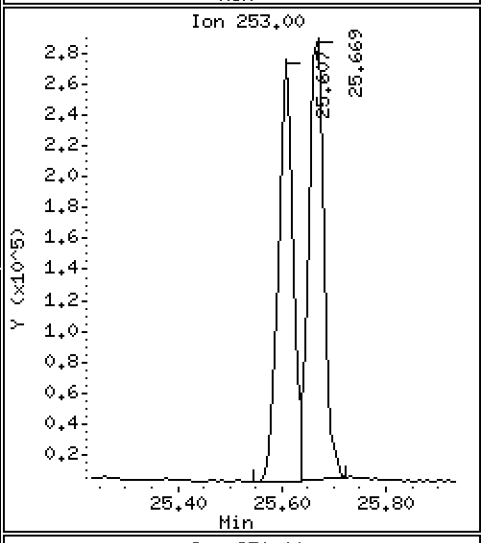
Column phase: ZB-5msi Column diameter: 0.25

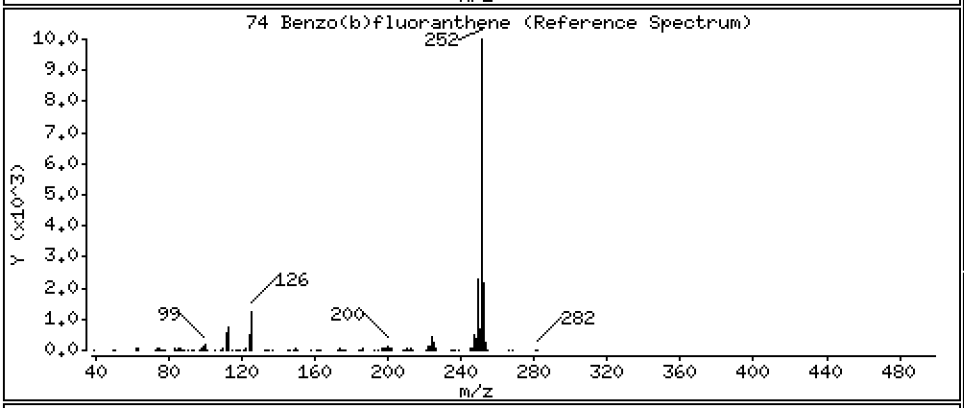
74 Benzo(b)fluoranthene Concentration: 4.119 ug/ml

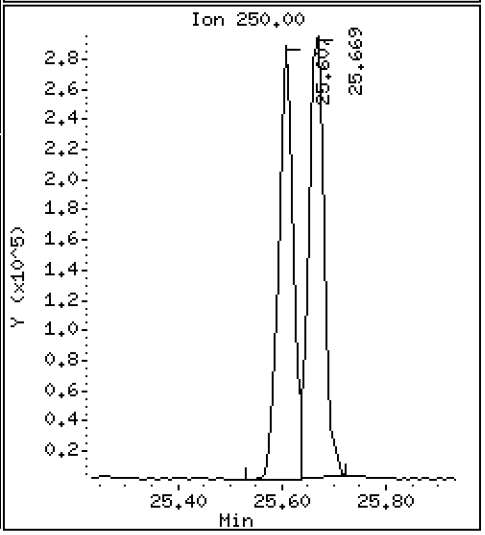


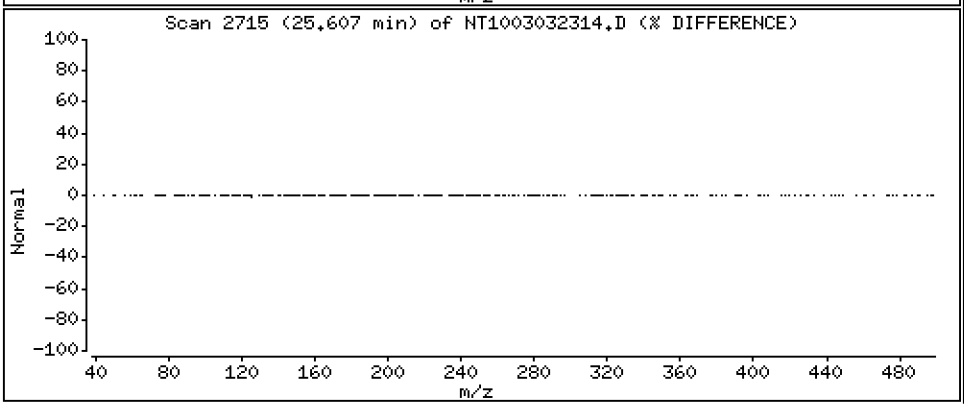












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

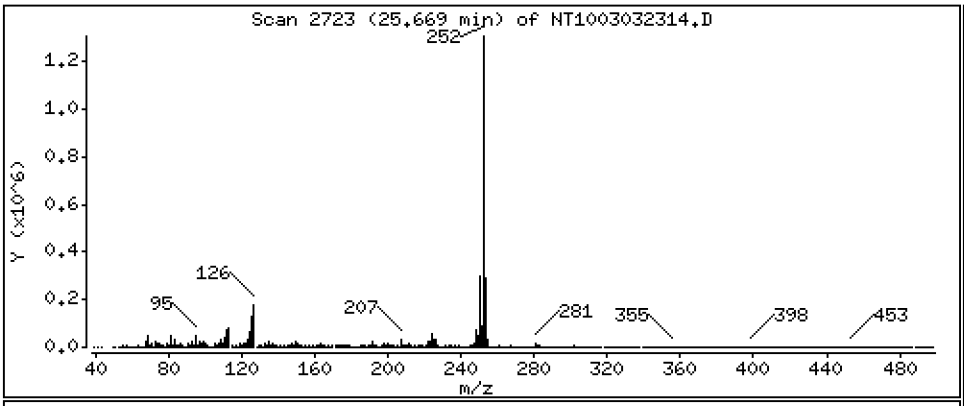
Operator: VTS

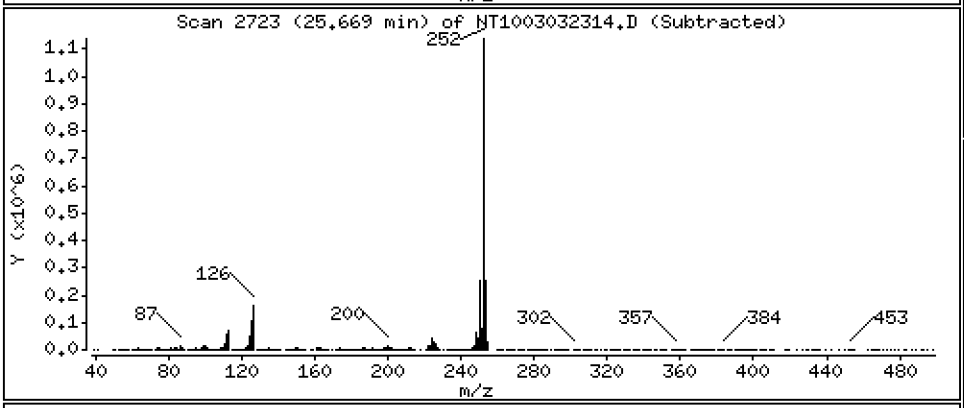
Column phase: ZB-5msi

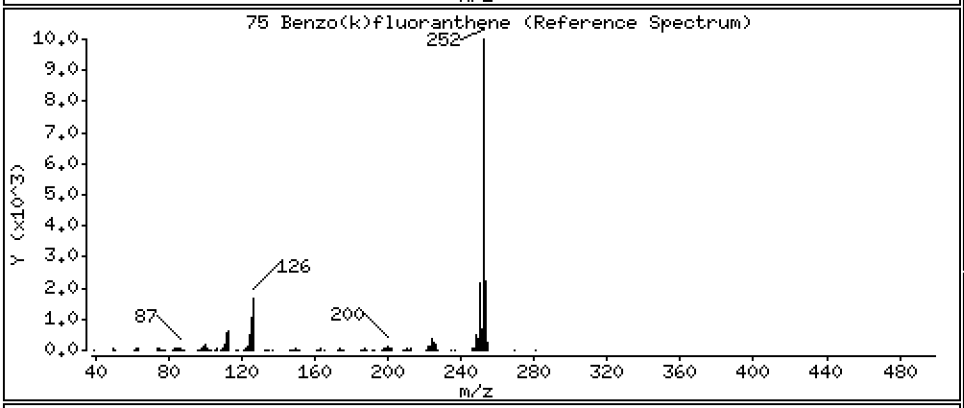
Column diameter: 0.25

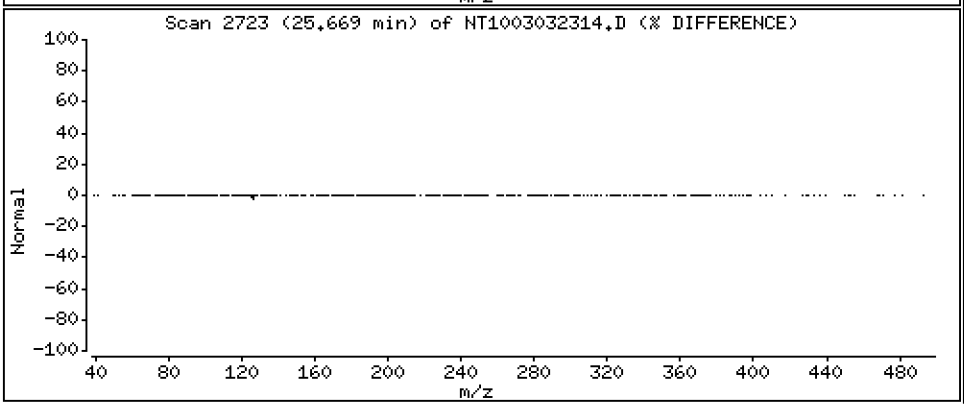
75 Benzo(k)fluoranthene

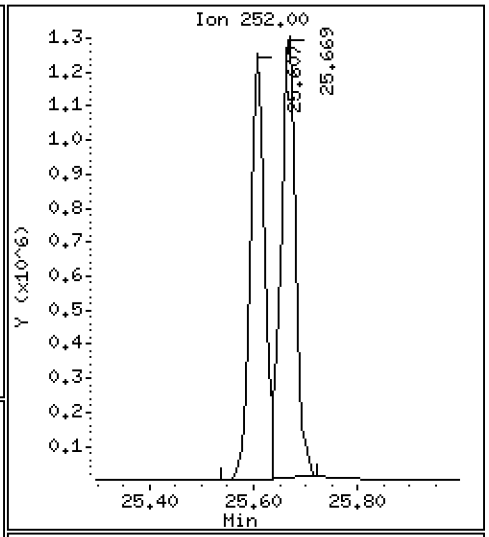
Concentration: 5.144 ug/ml

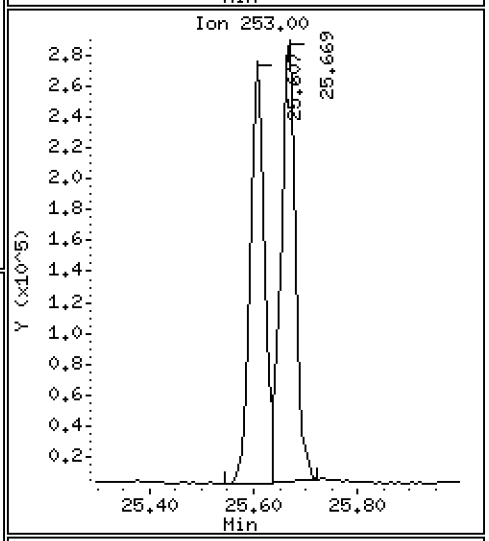


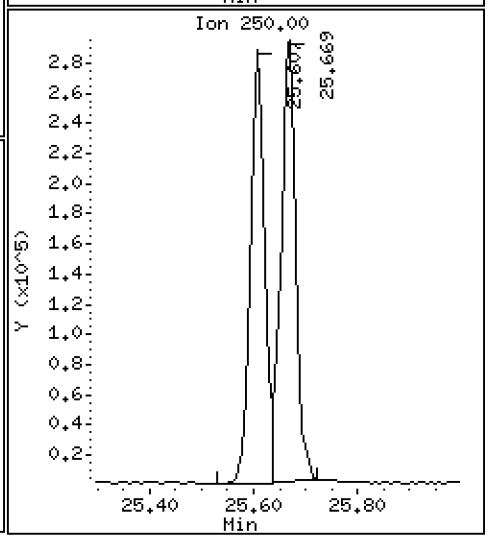












Date : 04-MAR-2023 02:02

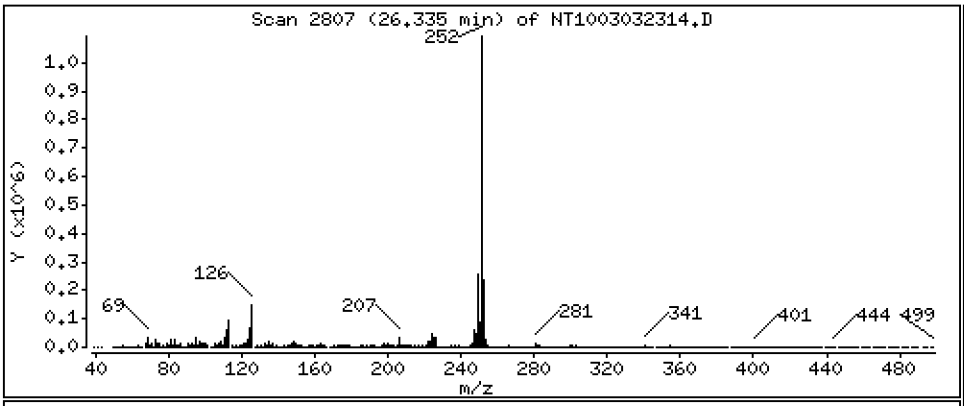
Client ID: Instrument: nt10.i

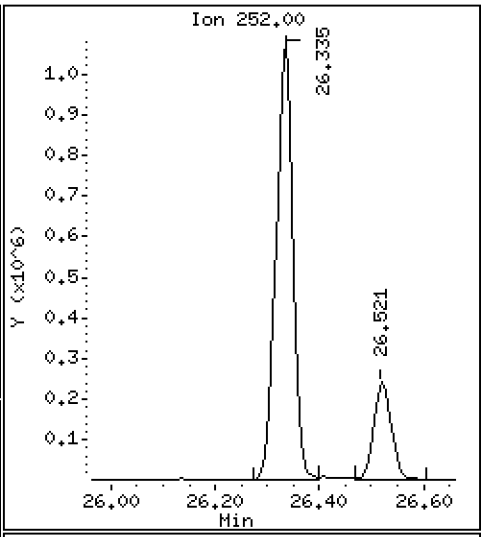
Sample Info: SEQ-CCVFULL

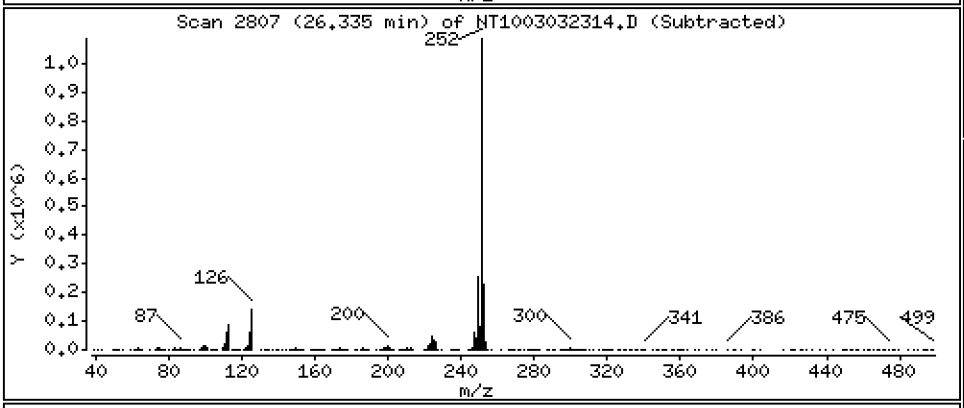
Volume Injected (uL): 1.0 Operator: VTS

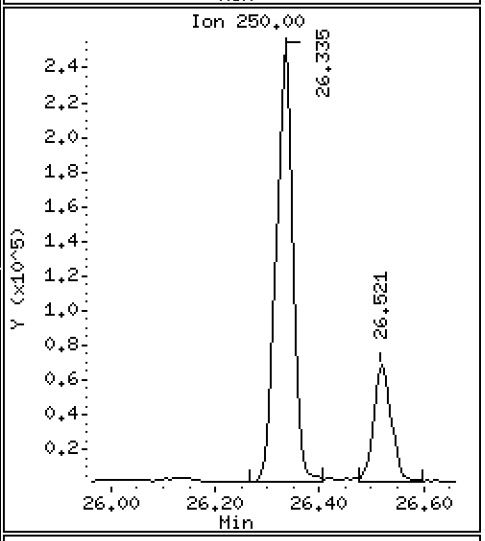
Column phase: ZB-5msi Column diameter: 0.25

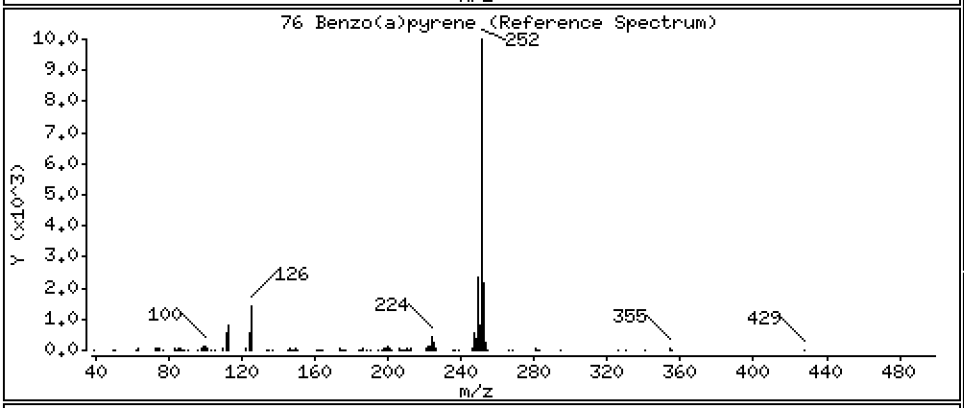
76 Benzo(a)pyrene Concentration: 4.355 ug/ml

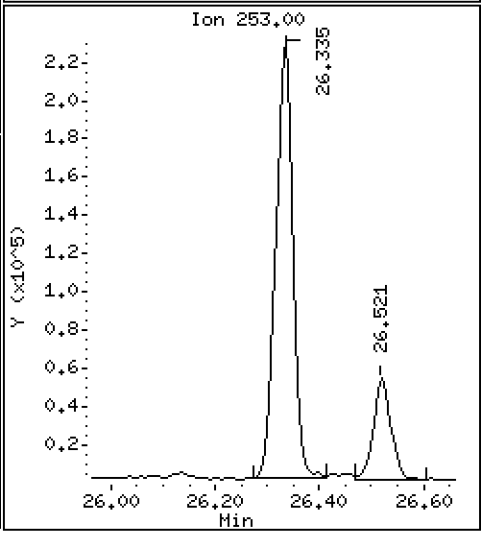


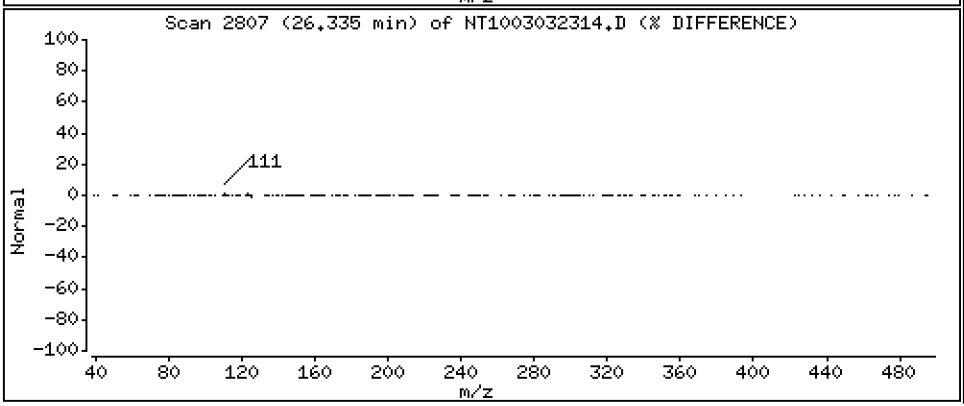












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

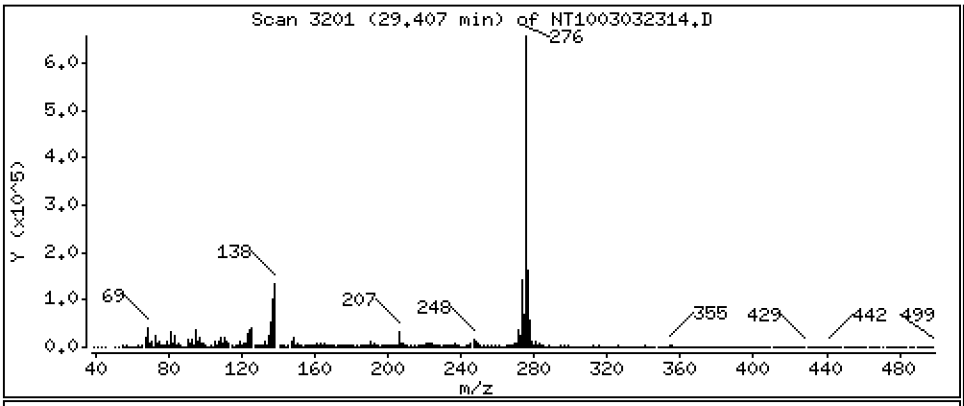
Operator: VTS

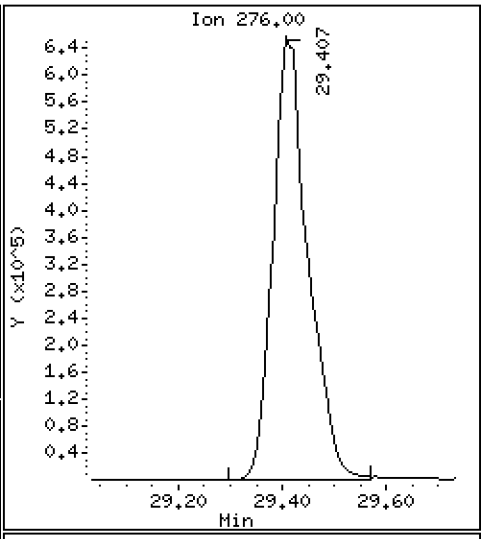
Column phase: ZB-5msi

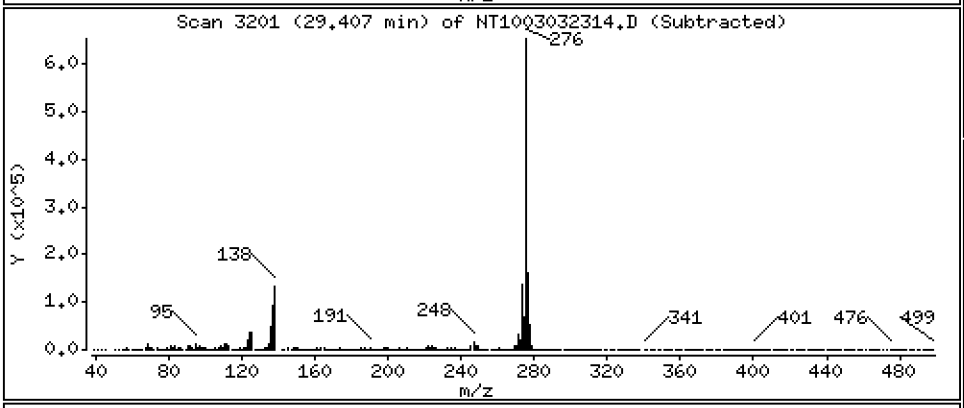
Column diameter: 0.25

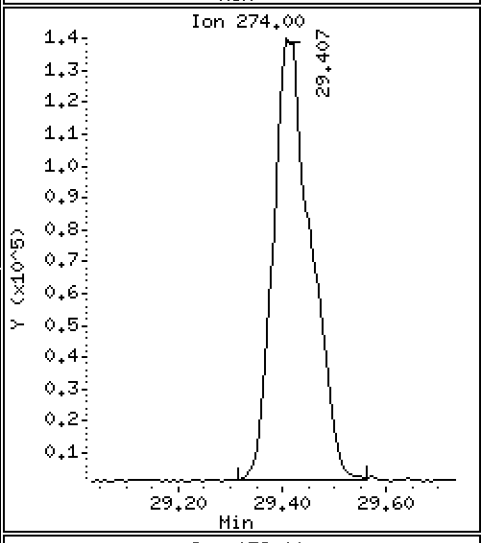
78 Indeno(1,2,3-cd)pyrene

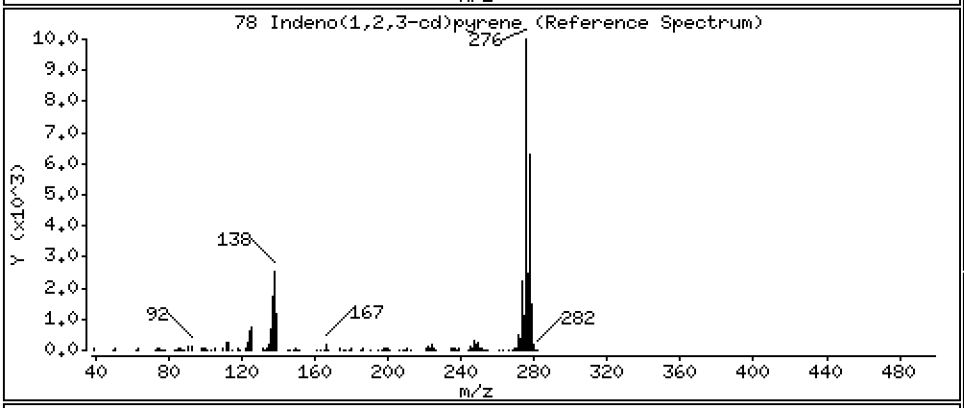
Concentration: 4.792 ug/ml

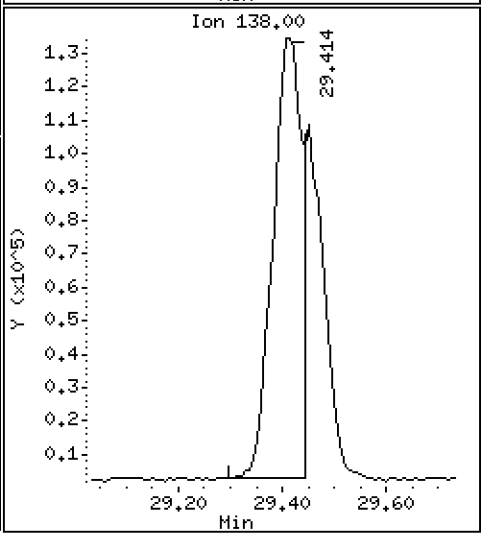


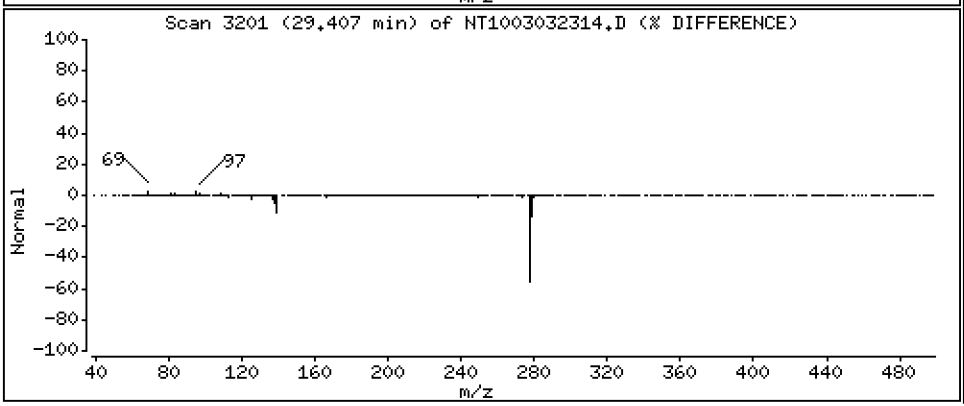












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

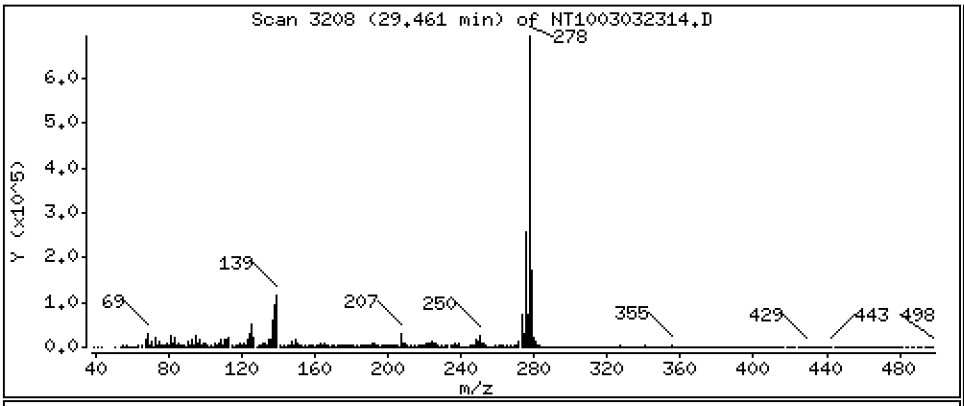
Operator: VTS

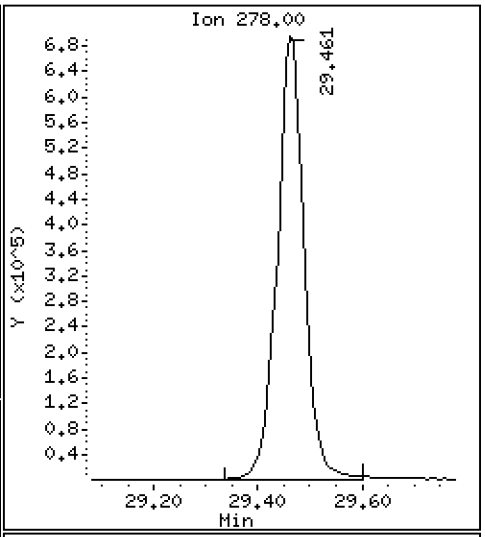
Column phase: ZB-5msi

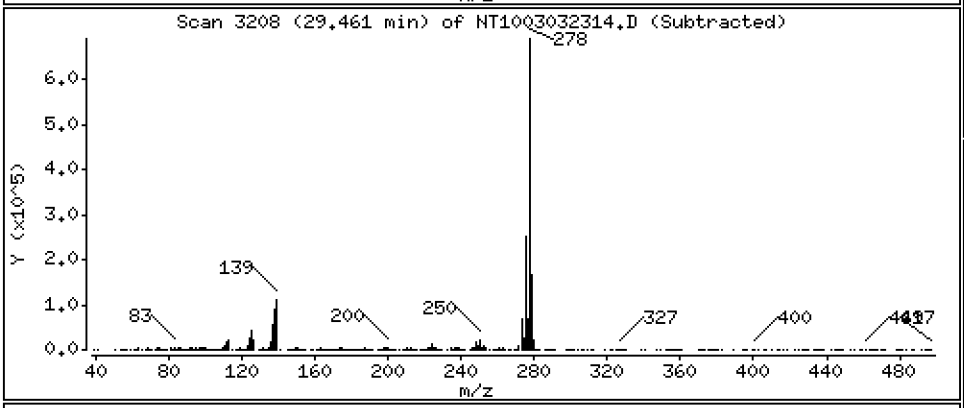
Column diameter: 0.25

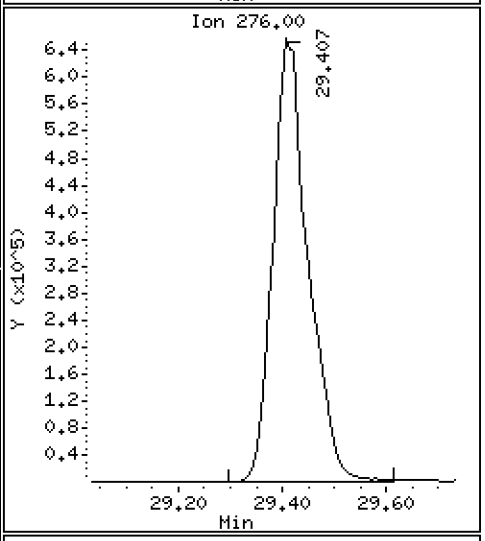
79 Dibenzo(a,h)anthracene

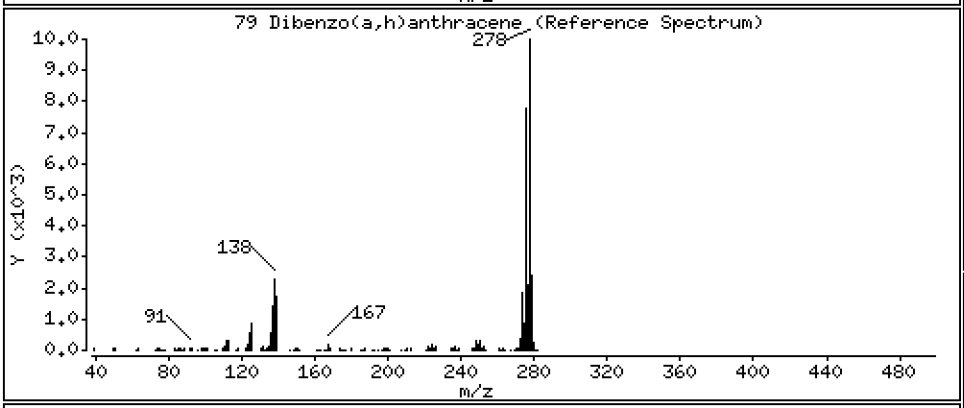
Concentration: 5.102 ug/ml

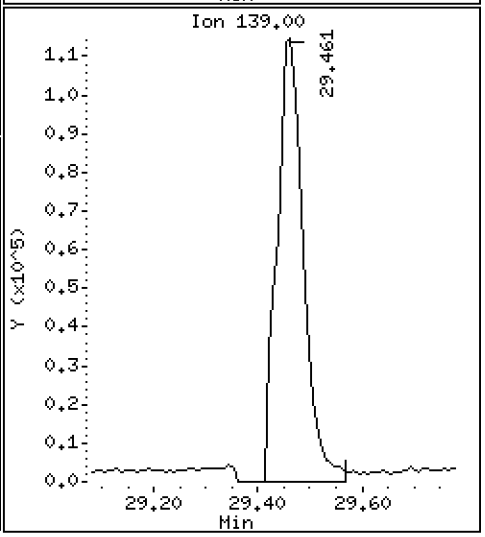


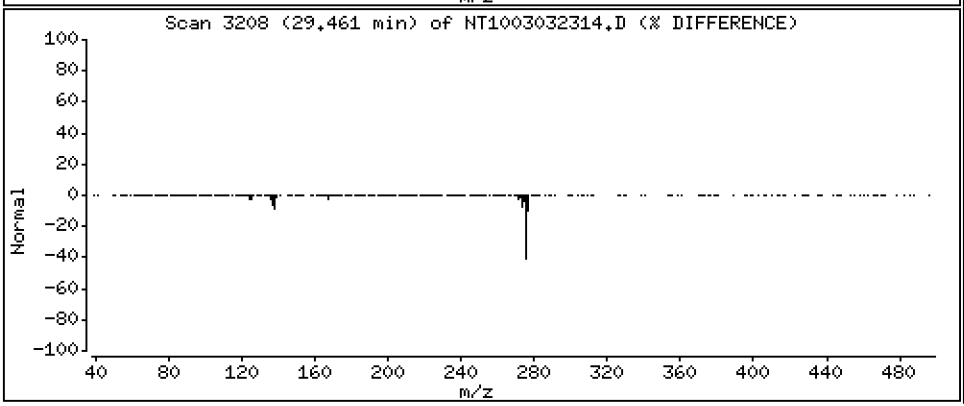












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

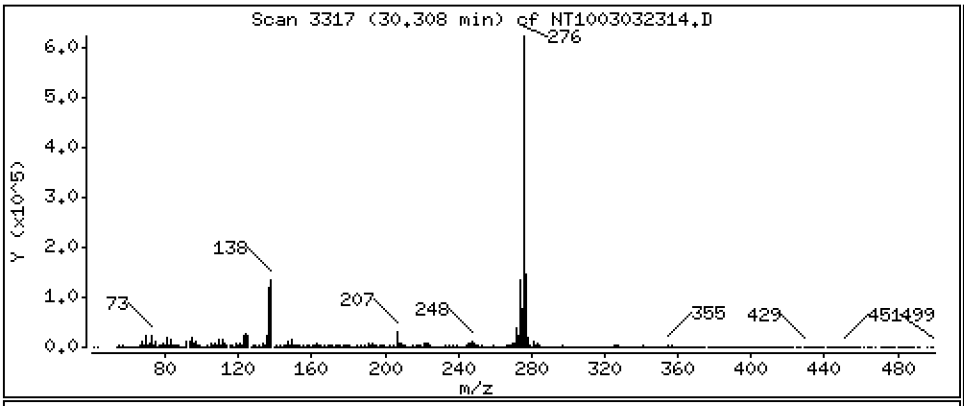
Operator: VTS

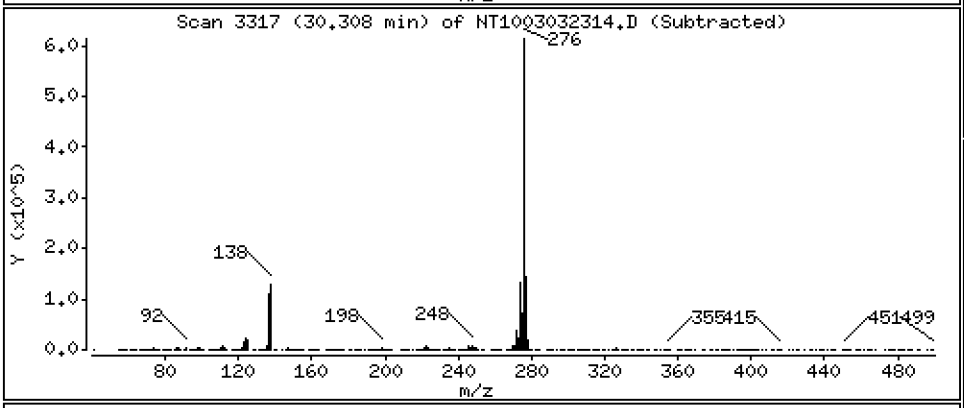
Column phase: ZB-5msi

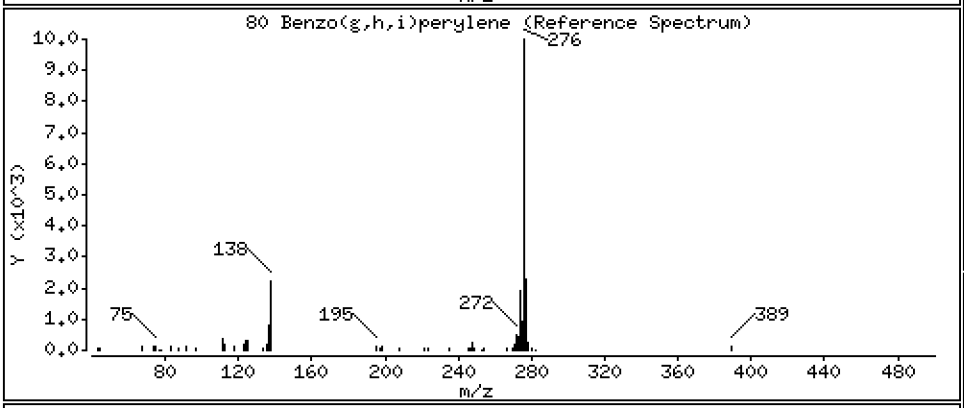
Column diameter: 0.25

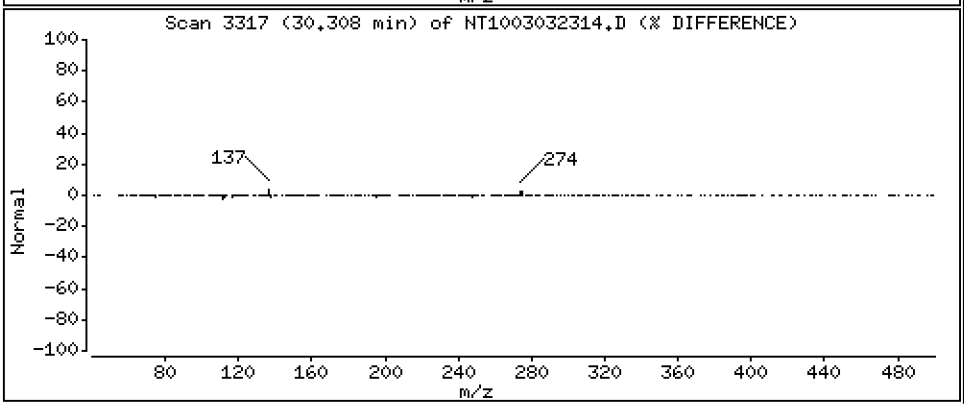
80 Benzo(g,h,i)perylene

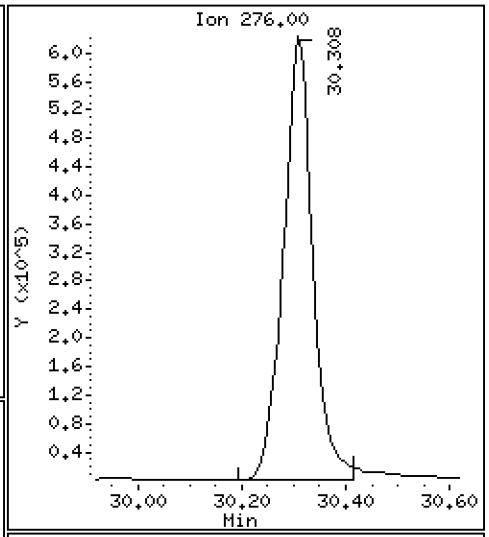
Concentration: 4.860 ug/ml

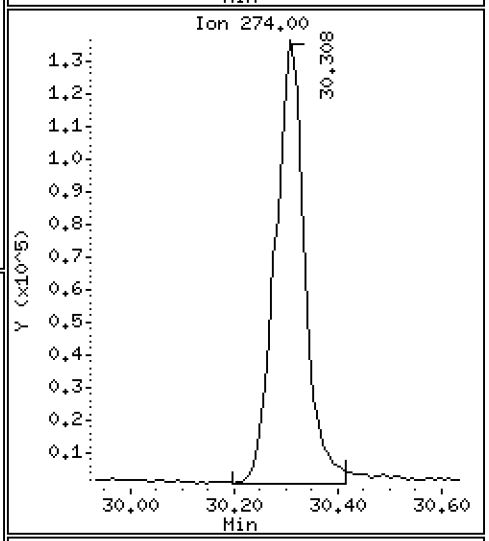


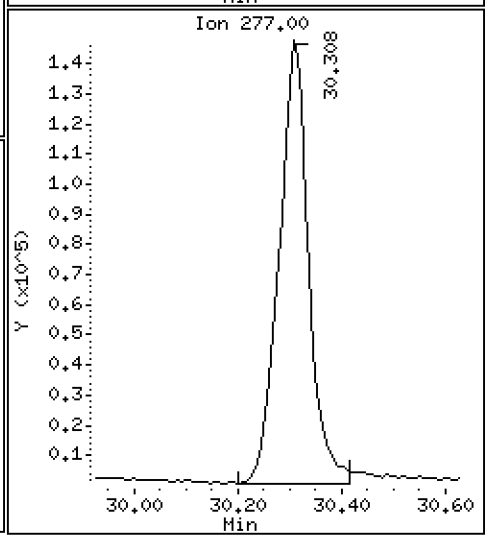












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Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

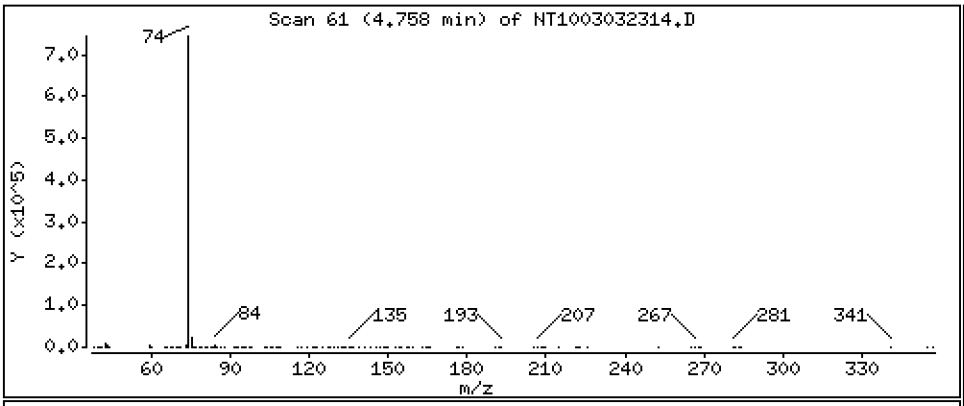
Operator: VTS

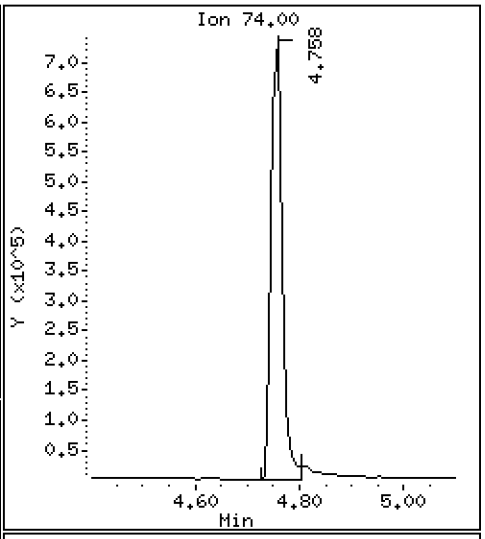
Column phase: ZB-5msi

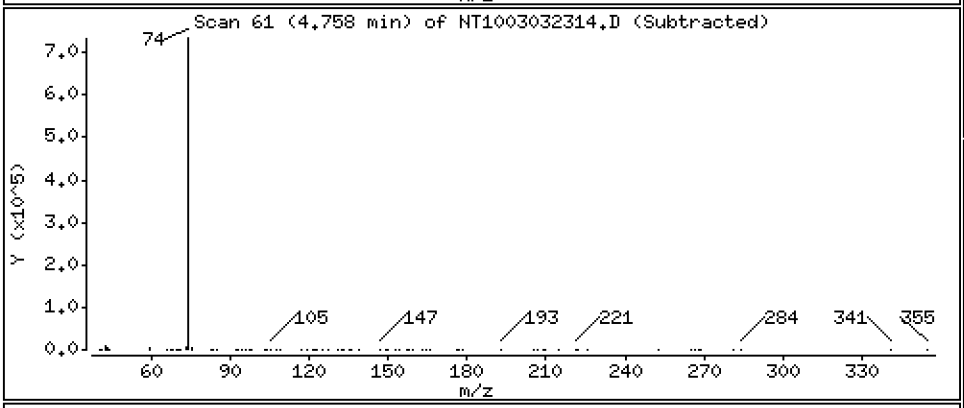
Column diameter: 0.25

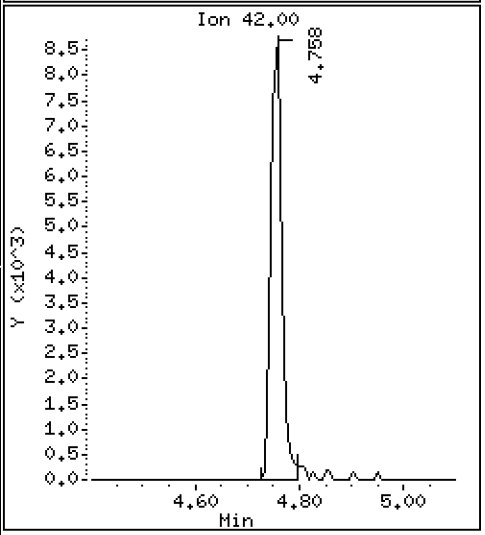
90 N-Nitrosodimethylamine

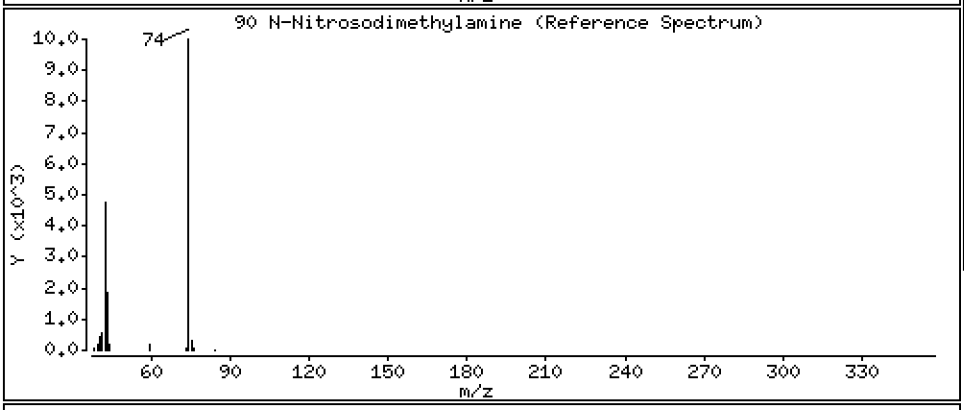
Concentration: 9.808 ug/ml

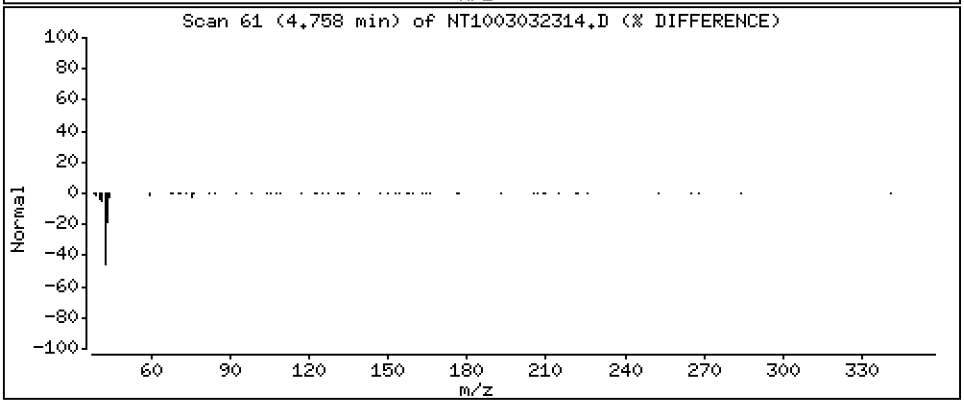












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

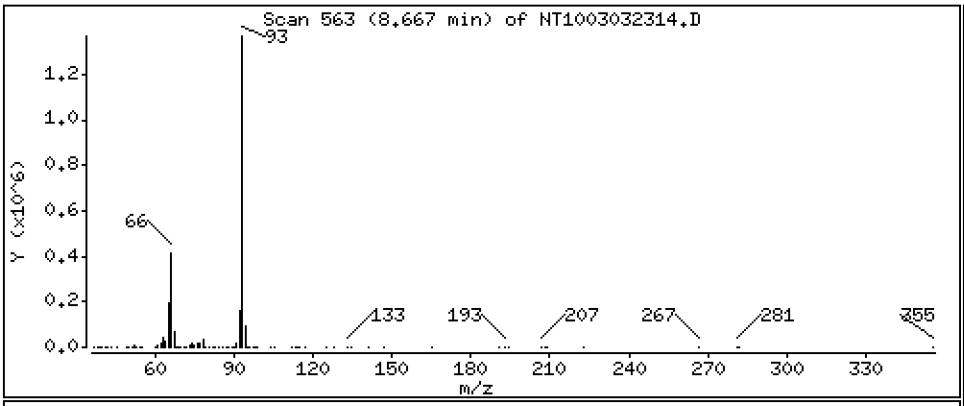
Operator: VTS

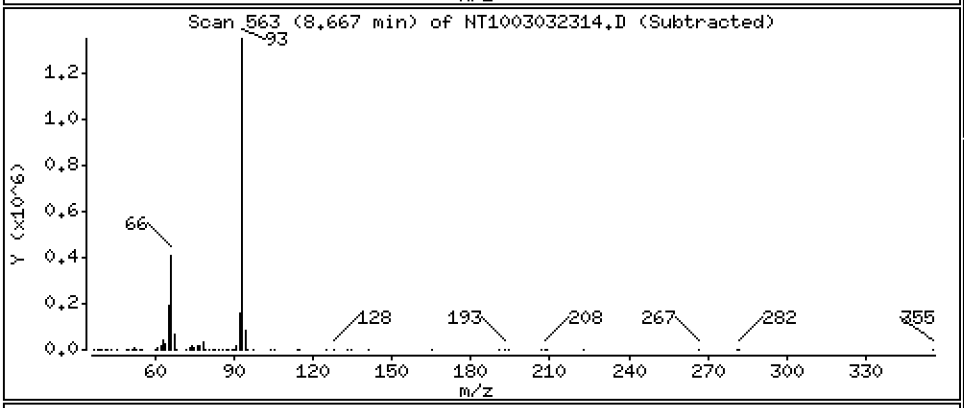
Column phase: ZB-5msi

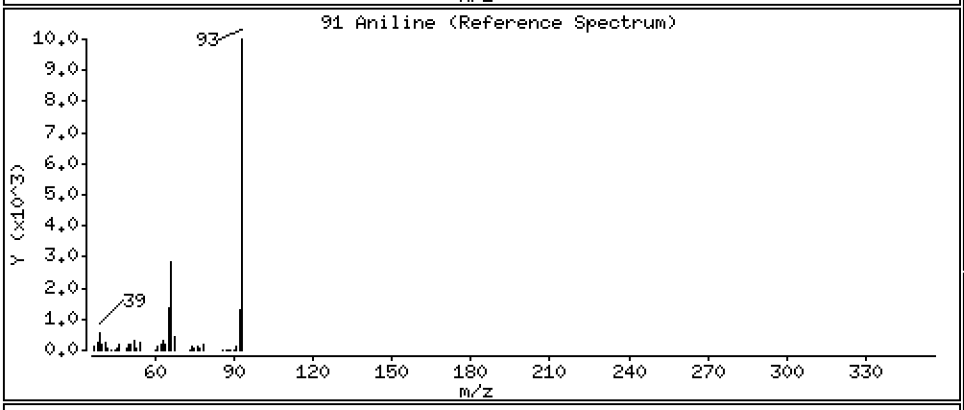
Column diameter: 0.25

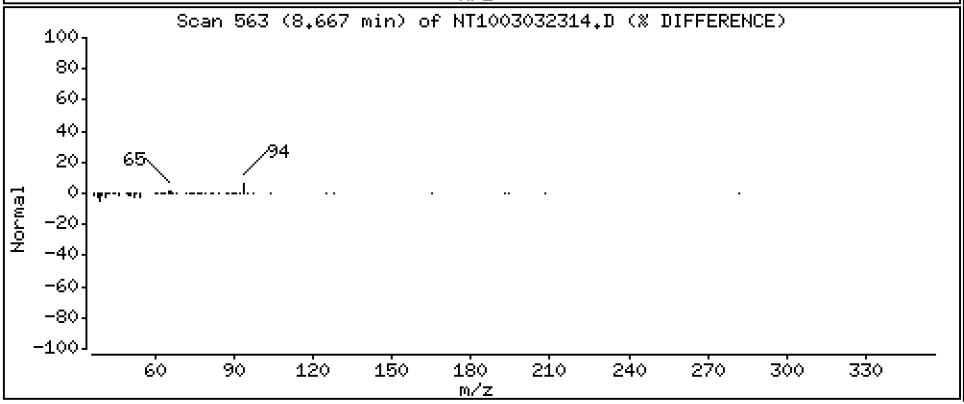
91 Aniline

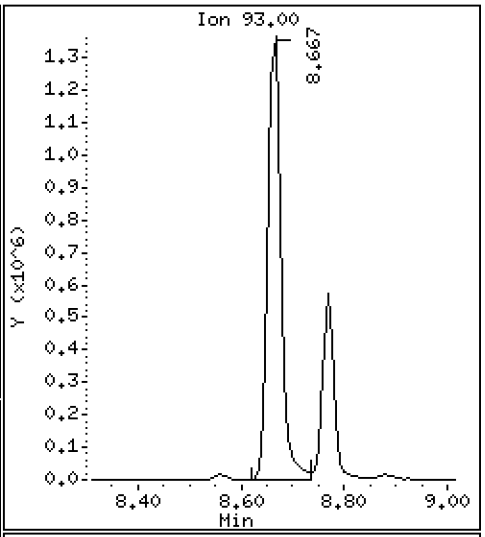
Concentration: 9.883 ug/ml

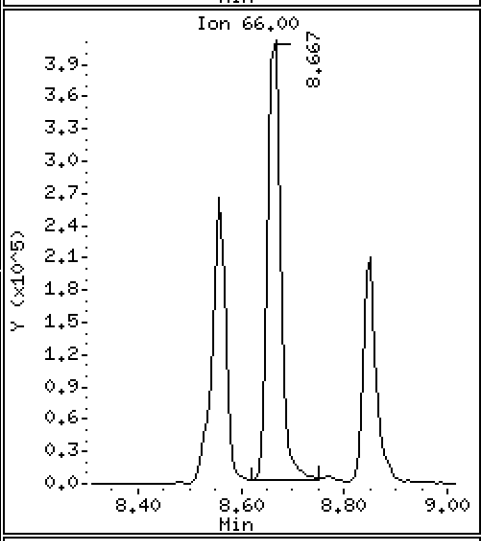


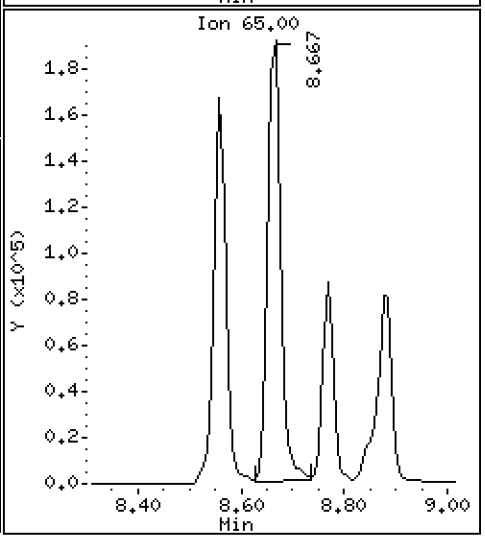












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

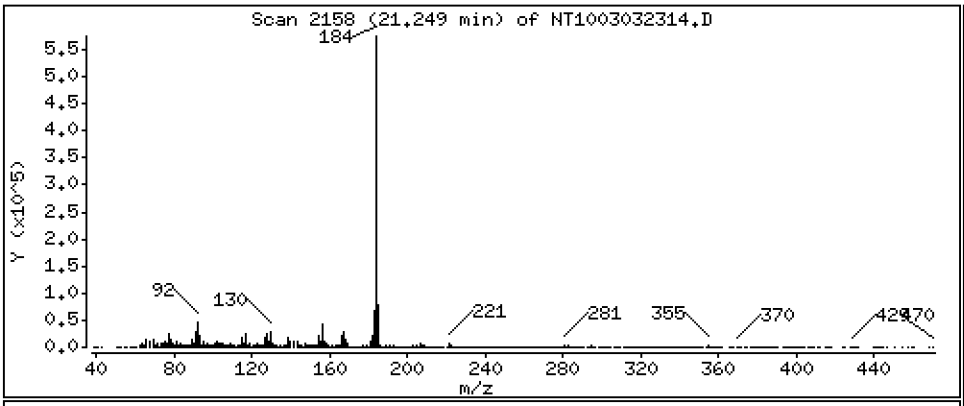
Operator: VTS

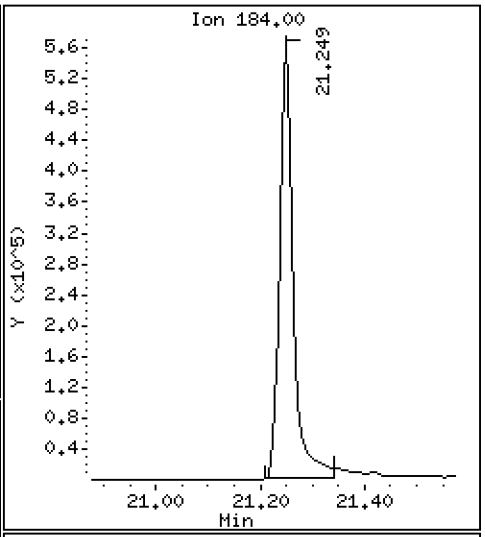
Column phase: ZB-5msi

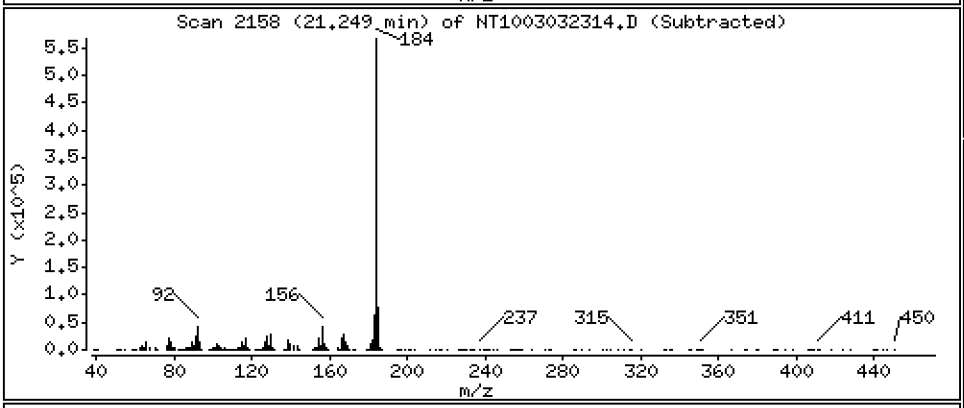
Column diameter: 0.25

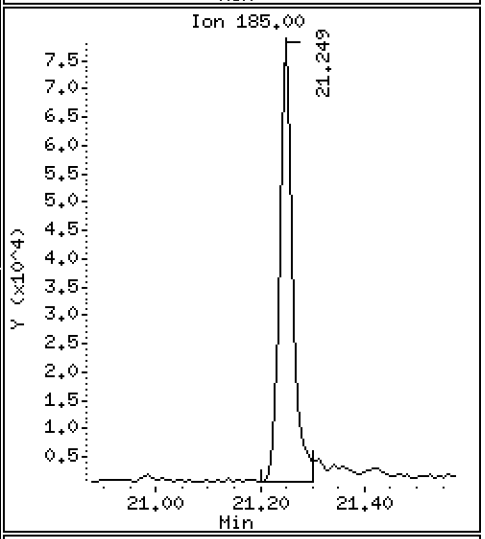
93 Benzidine

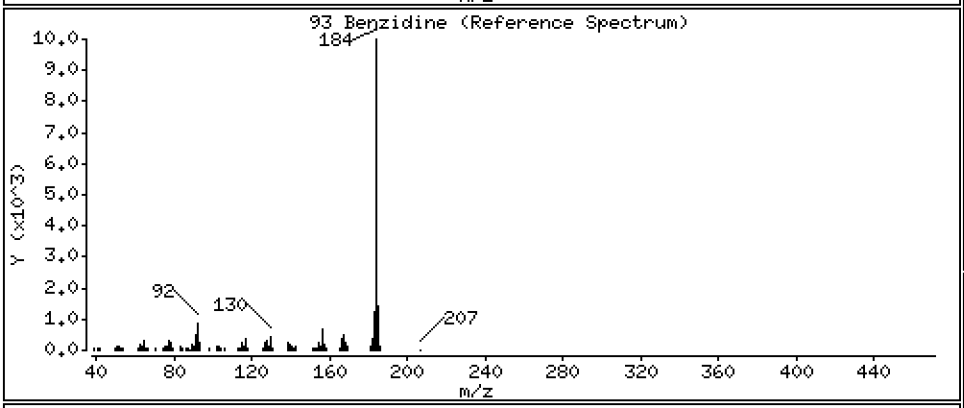
Concentration: 4.397 ug/ml

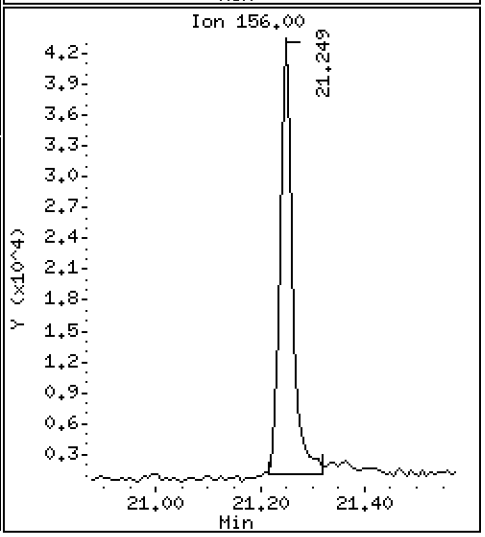


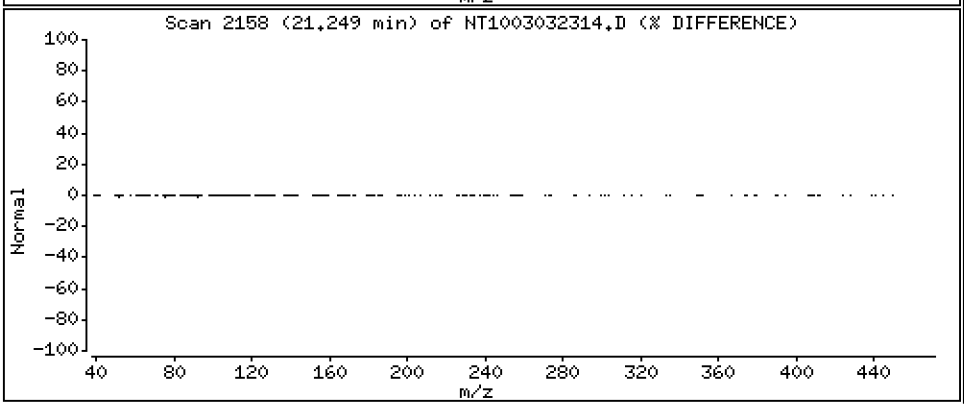












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

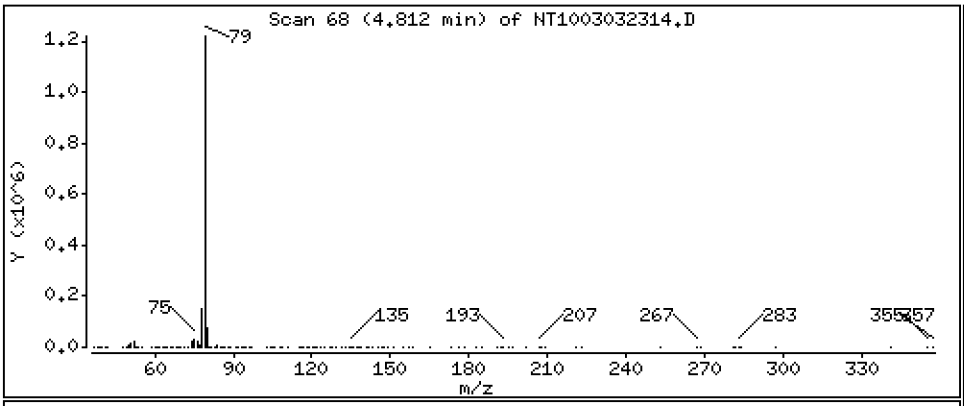
Operator: VTS

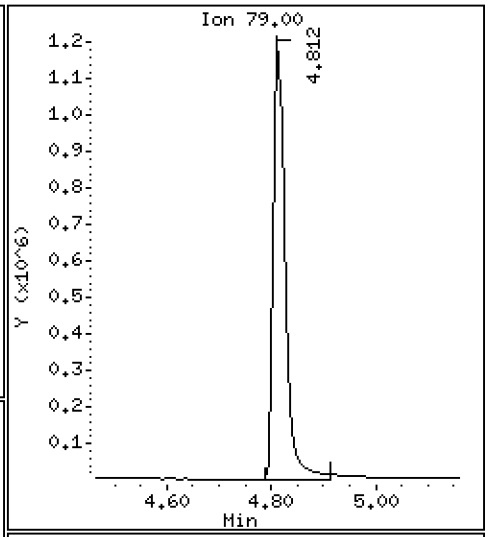
Column phase: ZB-5msi

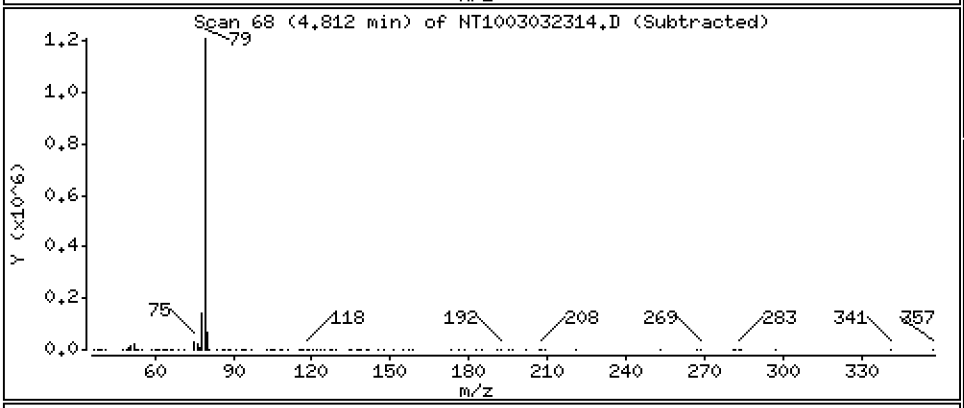
Column diameter: 0.25

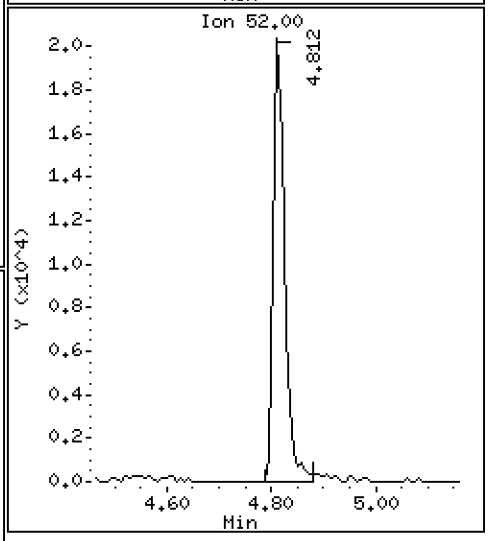
103 Pyridine

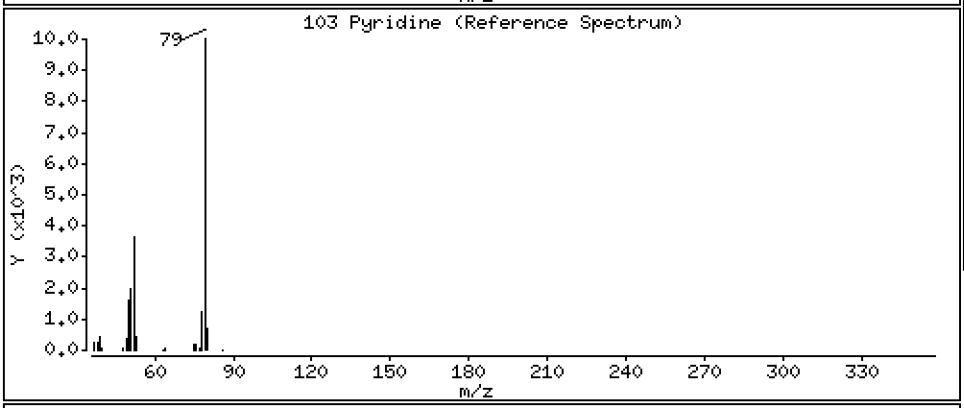
Concentration: 9.668 ug/ml

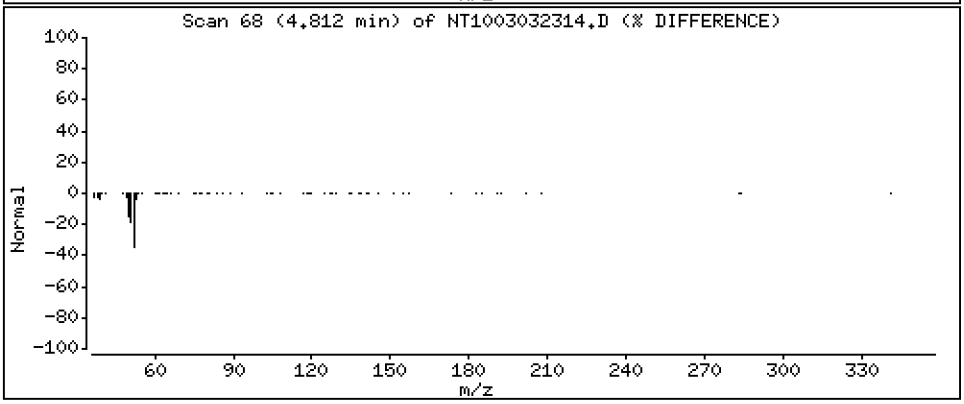












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

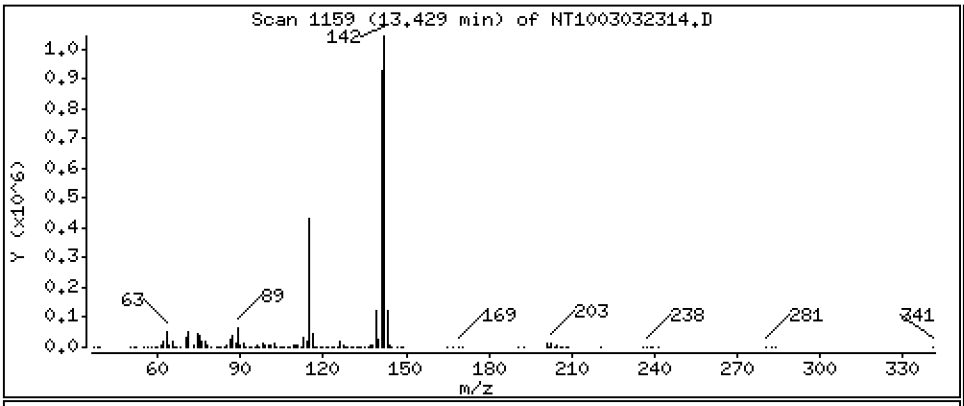
Operator: VTS

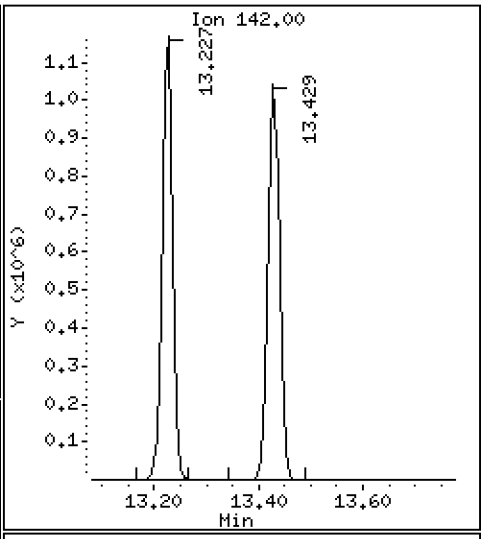
Column phase: ZB-5msi

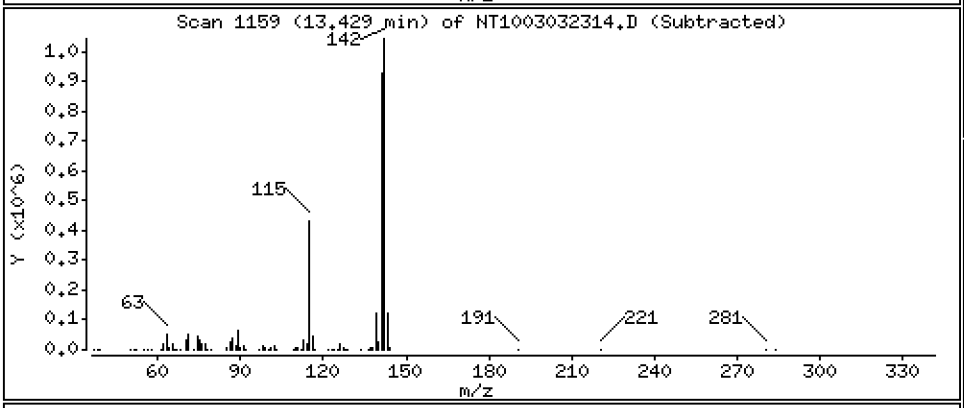
Column diameter: 0.25

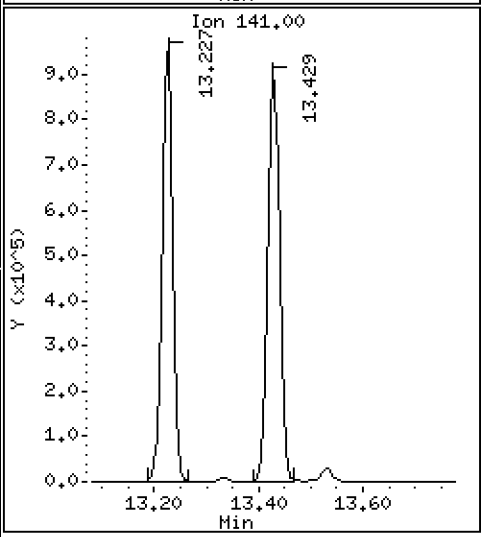
105 1-methylnaphthalene

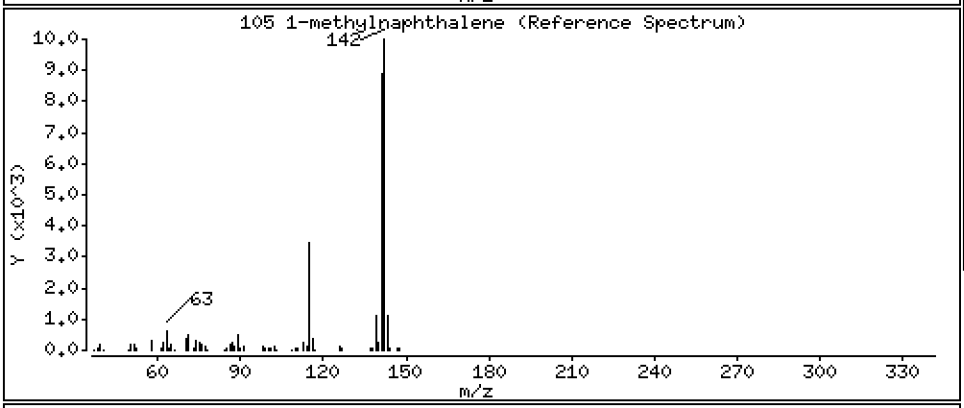
Concentration: 5.029 ug/ml

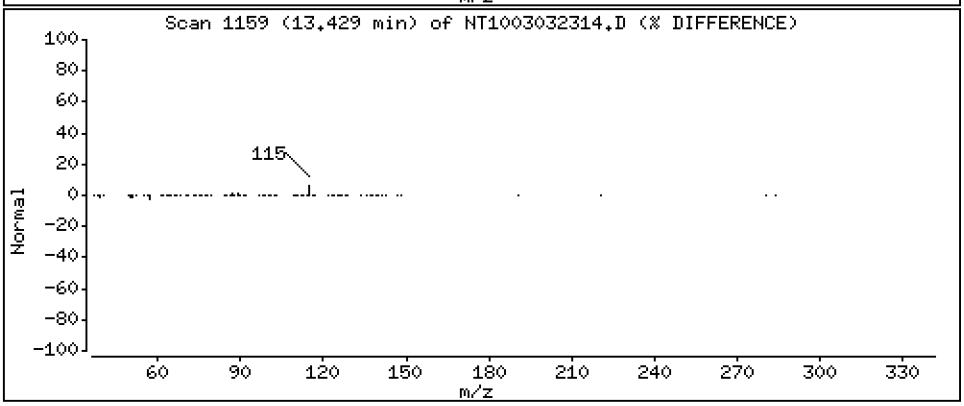












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

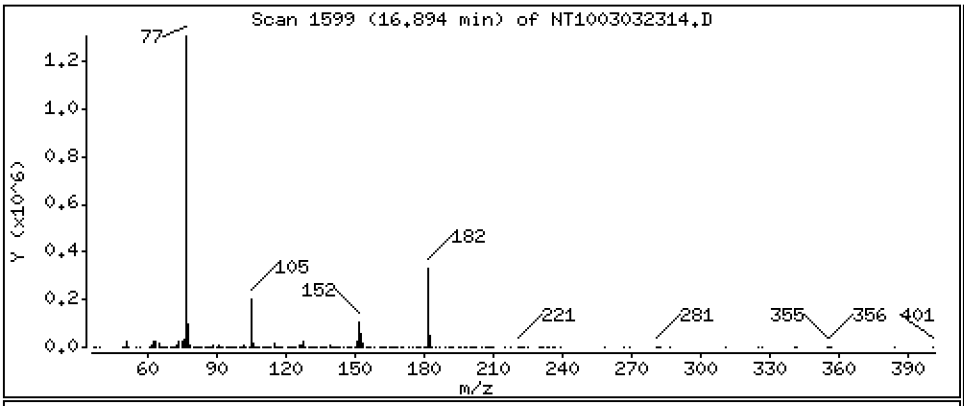
Operator: VTS

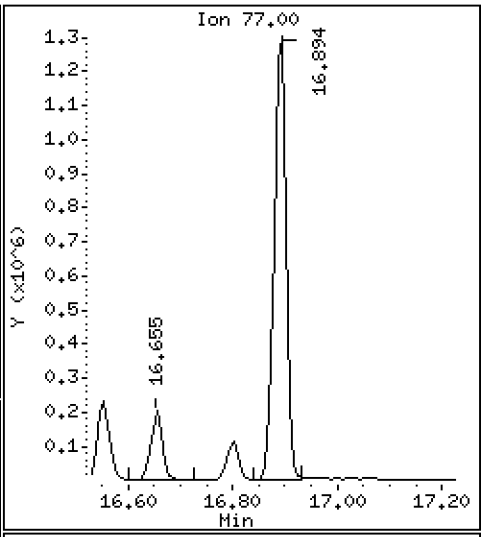
Column phase: ZB-5msi

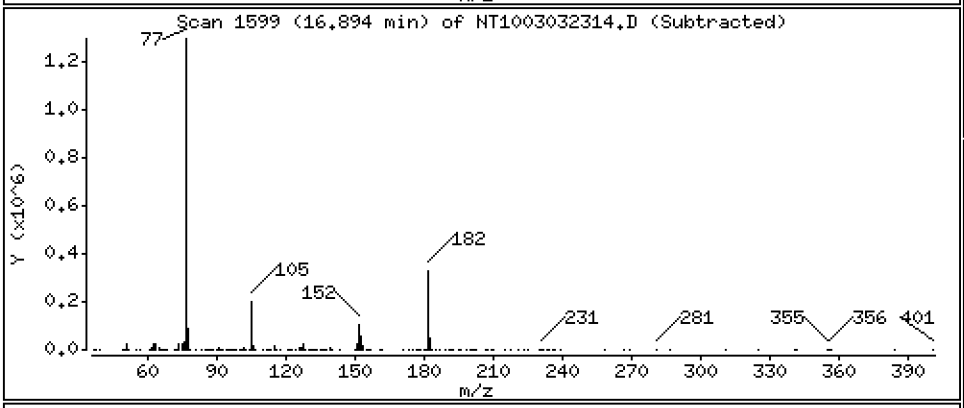
Column diameter: 0.25

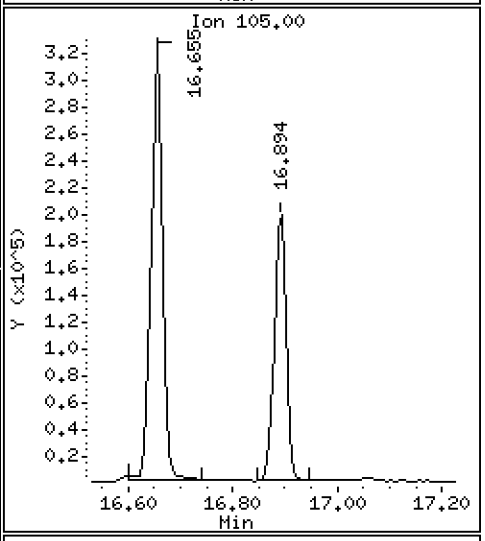
111 Azobenzene (1,2-DP-Hydrazine)

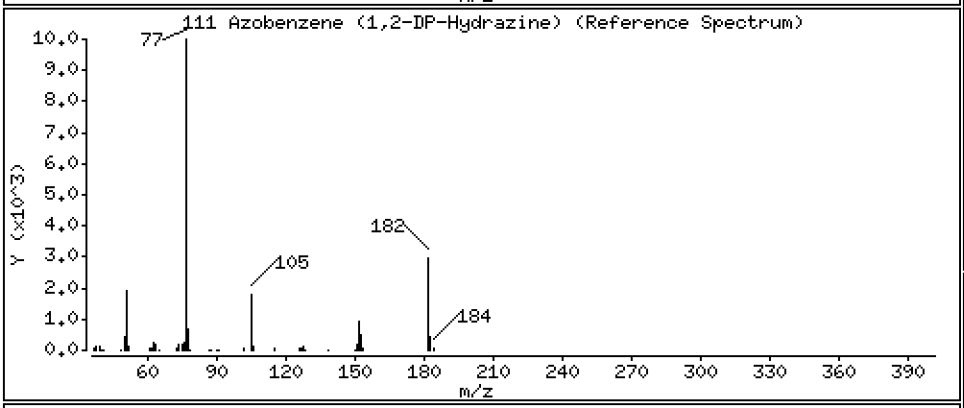
Concentration: 4.337 ug/ml

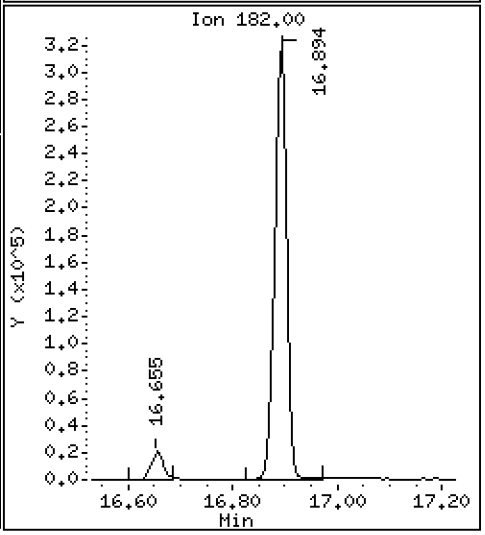


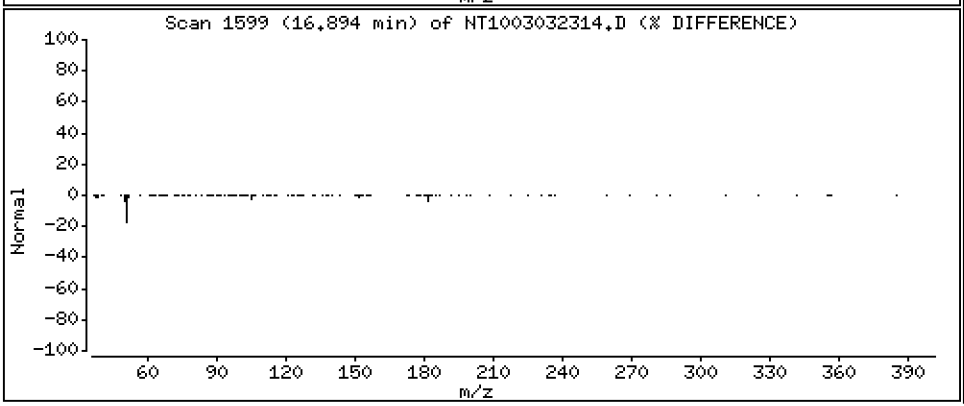












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

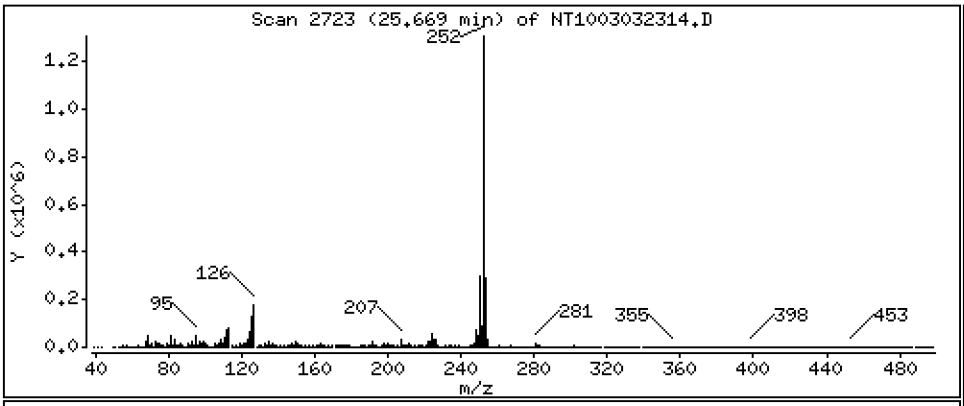
Operator: VTS

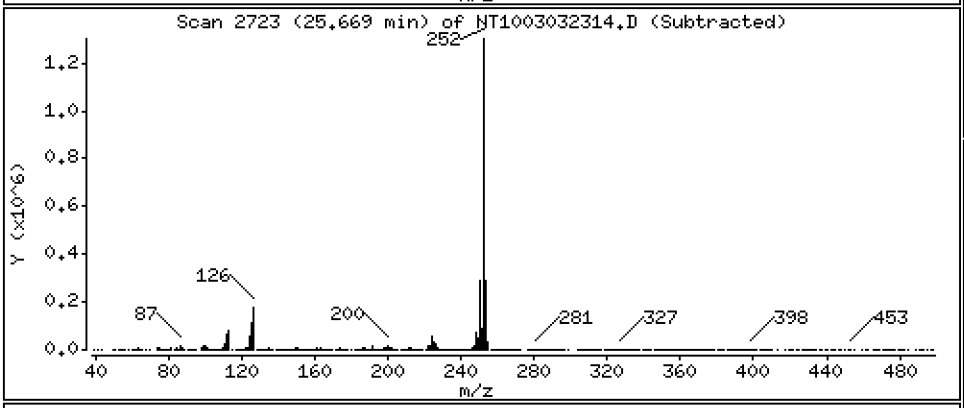
Column phase: ZB-5msi

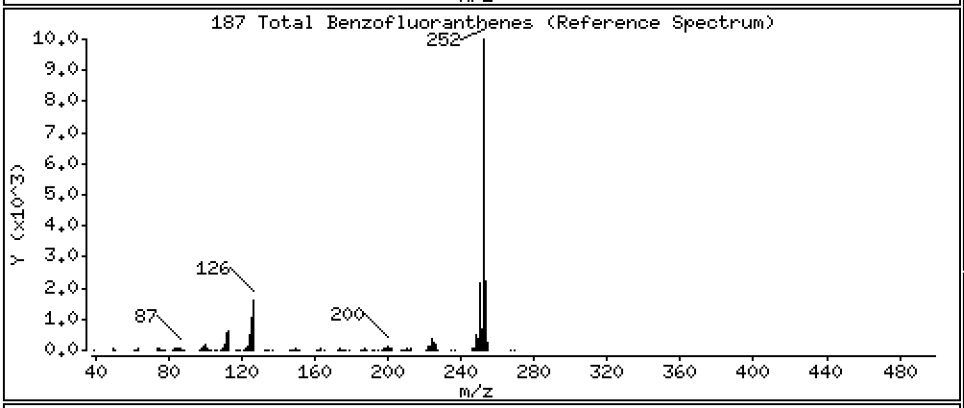
Column diameter: 0.25

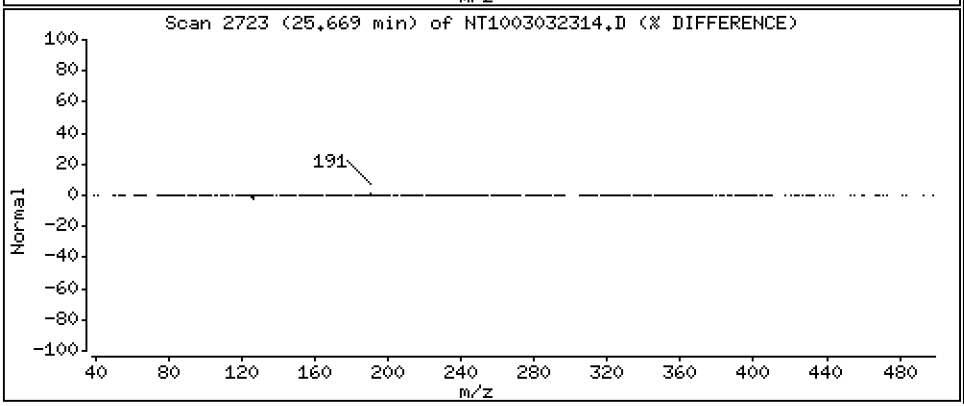
187 Total Benzofluoranthenes

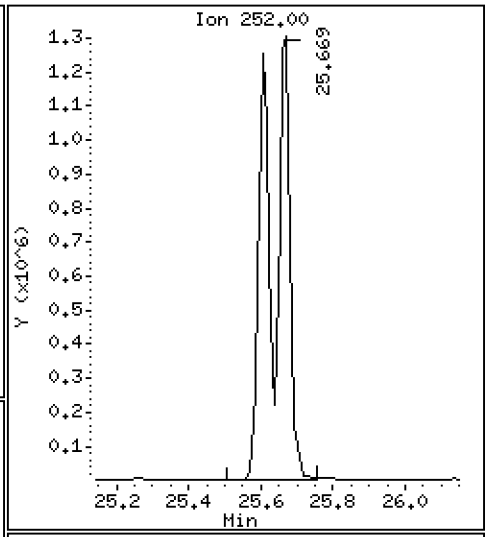
Concentration: 8.987 ug/ml

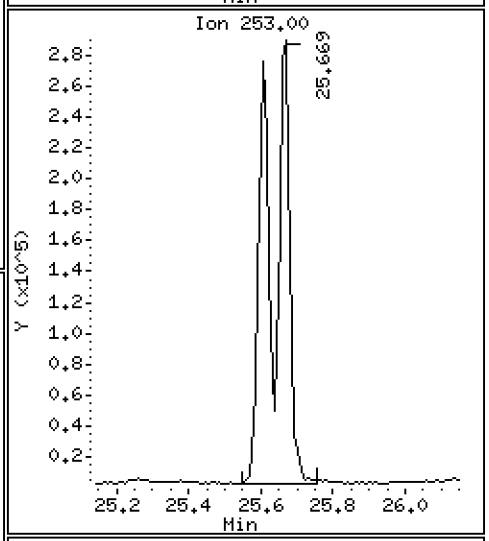


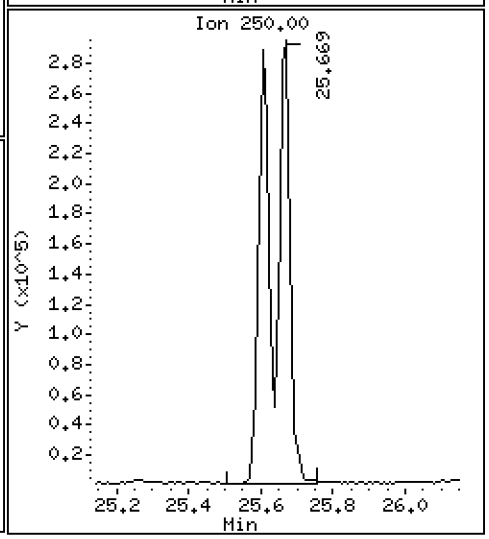












Data File: \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D

Date : 04-MAR-2023 02:02

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

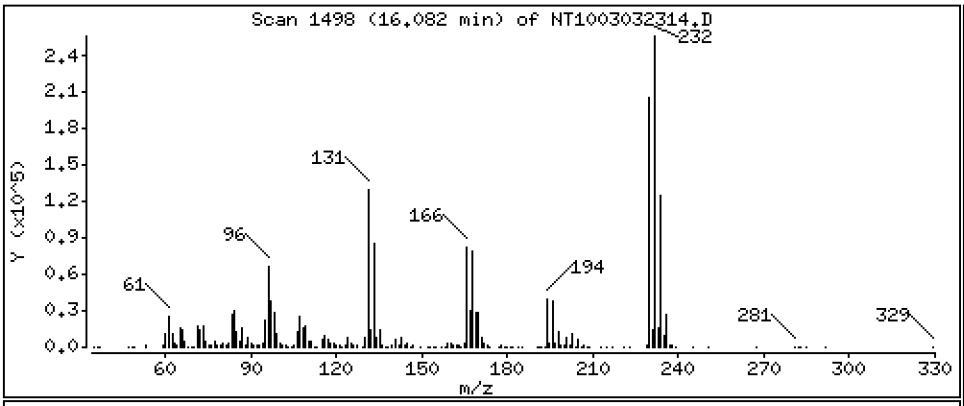
Operator: VTS

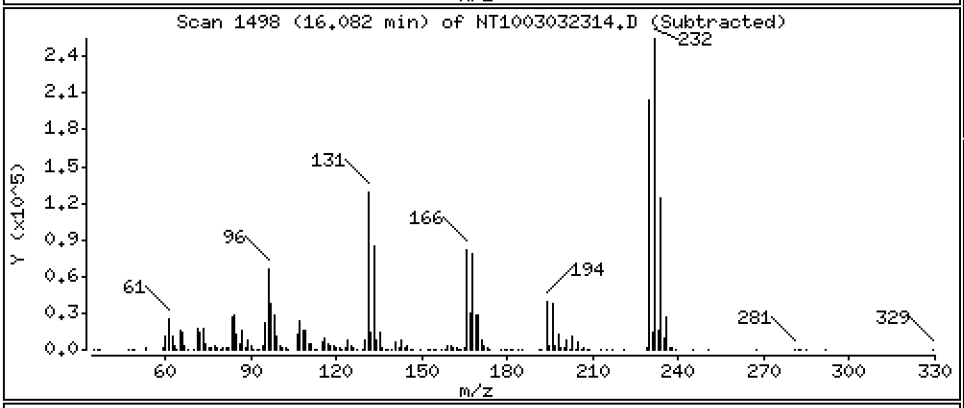
Column phase: ZB-5msi

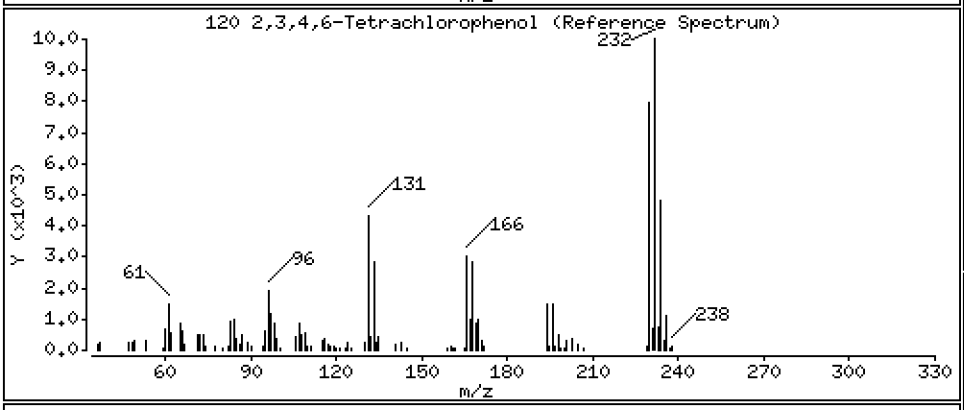
Column diameter: 0.25

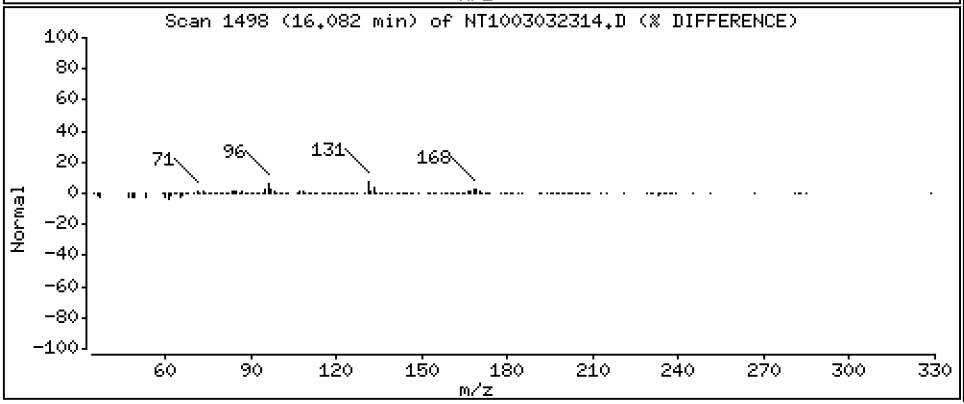
120 2,3,4,6-Tetrachlorophenol

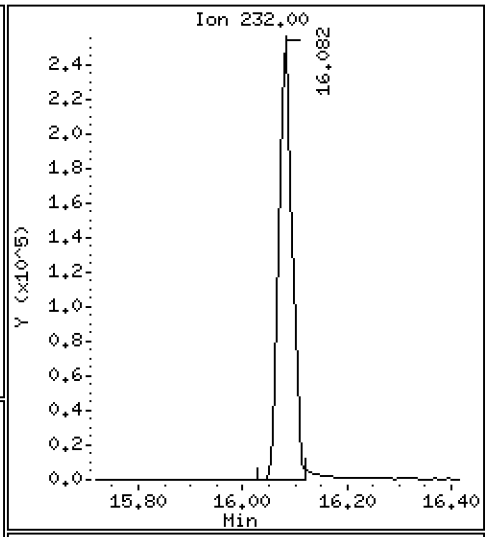
Concentration: 5.289 ug/ml

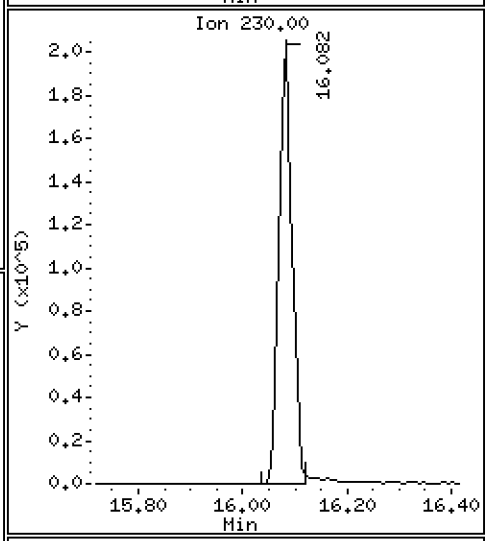


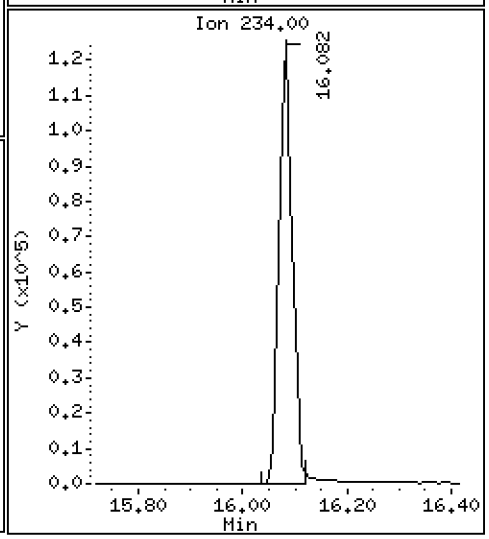












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230303.b\NT1003032314.D
Lab Smp Id: SLC0161-CCV1
Inj Date : 04-MAR-2023 02:02
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-CCVFULL
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230303.b\ABN.m
Meth Date : 05-Jul-2023 12:33 van Quant Type: ISTD
Cal Date : 01-MAR-2023 18:37 Cal File: NT1003012306.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/ml)
$ 1	2-Fluorophenol	112	6.920	6.912	(0.746)	1276659	7.89294	7.893
$ 2	Phenol-d5	99	8.535	8.527	(0.920)	1616002	8.60552	8.606
3	Phenol	94	8.558	8.550	(0.922)	1066927	5.34387	5.344
$ 5	2-Chlorophenol-d4	132	8.852	8.844	(0.954)	1414816	8.83075	8.831
4	Bis(2-Chloroethyl)ether	93	8.767	8.767	(0.945)	791473	5.18770	5.188
6	2-Chlorophenol	128	8.883	8.875	(0.957)	972496	5.84287	5.843
7	1,3-Dichlorobenzene	146	9.169	9.169	(0.988)	899485	4.90162	4.902
* 8	1,4-Dichlorobenzene-d4	152	9.278	9.278	(1.000)	514090	4.00000	
9	1,4-Dichlorobenzene	146	9.316	9.309	(1.004)	971928	5.33209	5.332
$ 10	1,2-Dichlorobenzene-d4	152	9.572	9.565	(1.032)	585359	4.89022	4.890
12	1,2-Dichlorobenzene	146	9.604	9.596	(1.035)	844629	4.78732	4.787
11	Benzyl alcohol	108	9.518	9.510	(1.026)	516754	4.92113	4.921
14	2,2'-oxybis(1-Chloropropane)	121	9.767	9.767	(1.053)	190748	3.75008	3.750
13	2-Methylphenol	108	9.704	9.697	(1.046)	788644	4.98196	4.982
17	Hexachloroethane	117	10.248	10.248	(1.105)	373617	4.99368	4.994
16	N-Nitroso-di-n-propylamine	70	10.023	10.023	(1.080)	614898	5.10381	5.104
15	4-Methylphenol	108	9.992	9.984	(1.077)	823812	4.29112	4.291
$ 18	Nitrobenzene-d5	82	10.341	10.333	(0.878)	1036950	5.15115	5.151
19	Nitrobenzene	77	10.380	10.372	(0.882)	936900	4.96150	4.962
20	Isophorone	82	10.845	10.838	(0.921)	1371417	5.68944	5.689
21	2-Nitrophenol	139	11.001	11.001	(0.934)	445610	4.37867	4.379
22	2,4-Dimethylphenol	107	11.052	11.052	(0.939)	1634533	8.85122	8.851

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
	23 Bis(2-Chloroethoxy)methane	93	11.264	11.255	(0.957)	757880	5.08774	5.088
	24 Benzoic acid	105	11.238	11.238	(0.955)	1325226	12.0573	12.06
	25 2,4-Dichlorophenol	162	11.467	11.468	(0.974)	1650481	11.2508	11.25
	26 1,2,4-Trichlorobenzene	180	11.649	11.649	(0.990)	705127	5.04394	5.044
*	27 Naphthalene-d8	136	11.772	11.772	(1.000)	1833847	4.00000	
	28 Naphthalene	128	11.819	11.819	(1.004)	2284832	4.85431	4.854
	29 4-Chloroaniline	127	11.911	11.911	(1.012)	2014667	9.47343	9.473
	30 Hexachlorobutadiene	225	12.043	12.035	(1.023)	433818	4.20403	4.204
	31 4-Chloro-3-methylphenol	107	12.871	12.863	(1.093)	1442510	9.27786	9.278
	32 2-Methylnaphthalene	142	13.227	13.219	(1.124)	1677523	5.04497	5.045
	33 Hexachlorocyclopentadiene	237	13.529	13.529	(0.878)	311984	9.49099	9.491
	34 2,4,6-Trichlorophenol	196	13.800	13.792	(0.896)	980526	10.5350	10.53
	35 2,4,5-Trichlorophenol	196	13.869	13.861	(0.901)	1041470	10.4626	10.46
$	36 2-Fluorobiphenyl	172	13.978	13.978	(0.908)	1792443	5.37306	5.373
	37 2-Chloronaphthalene	162	14.241	14.233	(0.925)	1404946	5.36479	5.365
	38 2-Nitroaniline	65	14.450	14.442	(0.938)	681518	9.22432	9.224
	39 Dimethylphthalate	163	14.821	14.821	(0.962)	1431088	4.73795	4.738
	40 Acenaphthylene	152	15.115	15.092	(0.981)	1282037	2.83956	2.840
	41 2,6-Dinitrotoluene	165	14.961	14.953	(0.971)	676170	9.87856	9.879
*	42 Acenaphthene-d10	164	15.401	15.394	(1.000)	935282	4.00000	
	43 3-Nitroaniline	138	15.316	15.301	(0.994)	686755	8.77127	8.771
	44 Acenaphthene	153	15.471	15.463	(1.005)	1342413	4.93009	4.930
	45 2,4-Dinitrophenol	184	15.533	15.525	(1.009)	482152	30.3367	30.34
	46 Dibenzofuran	168	15.834	15.827	(1.028)	2016687	4.99034	4.990
	47 4-Nitrophenol	109	15.641	15.626	(1.016)	400162	7.32507	7.325
	48 2,4-Dinitrotoluene	165	15.803	15.796	(1.026)	933072	9.36664	9.367
	50 Diethylphthalate	149	16.306	16.298	(1.059)	1453540	4.54260	4.543
	49 Fluorene	166	16.554	16.546	(1.075)	1813271	5.39295	5.393
	51 4-Chlorophenyl-phenylether	204	16.554	16.546	(1.075)	862786	5.56232	5.562
	52 4-Nitroaniline	138	16.600	16.585	(1.078)	606080	7.40235	7.402
	53 4,6-Dinitro-2-methylphenol	198	16.654	16.646	(0.899)	1135714	27.7271	27.73
	54 N-Nitrosodiphenylamine	169	16.801	16.785	(0.907)	1204945	5.09670	5.097
$	55 2,4,6-Tribromophenol	330	17.063	17.047	(1.108)	411143	6.82152	6.822
	56 4-Bromophenyl-phenylether	248	17.588	17.573	(0.949)	548209	5.72271	5.723
	57 Hexachlorobenzene	284	17.697	17.681	(0.955)	476408	4.41633	4.416
	58 Pentachlorophenol	266	18.122	18.107	(0.978)	284332	5.53871	5.539
*	59 Phenanthrene-d10	188	18.533	18.525	(1.000)	1597882	4.00000	
	60 Phenanthrene	178	18.587	18.571	(1.003)	2048765	5.01010	5.010
	61 Anthracene	178	18.695	18.680	(1.009)	2105553	5.31003	5.310
	62 Carbazole	167	19.035	19.020	(1.027)	1813564	4.99244	4.992
	63 Di-n-butylphthalate	149	19.739	19.724	(1.065)	2715365	5.30207	5.302
	64 Fluoranthene	202	20.985	20.970	(0.888)	2354592	4.41666	4.417
	65 Pyrene	202	21.426	21.395	(0.907)	2214071	4.07861	4.079
$	66 Terphenyl-d14	244	21.705	21.689	(0.918)	1951177	4.44214	4.442
	67 Butylbenzylphthalate	149	22.611	22.588	(0.957)	1187134	4.12590	4.126
	68 Benzo(a)anthracene	228	23.617	23.594	(0.999)	2582864	4.72676	4.727
*	69 Chrysene-d12	240	23.633	23.617	(1.000)	1549718	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.563	23.540	(0.997)	2805799	11.3674	11.37
	71 Chrysene	228	23.679	23.664	(1.002)	2273063	5.13711	5.137
	72 bis(2-Ethylhexyl)phthalate	149	23.617	23.602	(0.954)	1953299	4.94580	4.946
*	134 Di-n-octylphthalate-d4	153	24.748	24.732	(1.000)	2731644	4.00000	
	73 Di-n-octylphthalate	149	24.755	24.740	(1.000)	3149877	5.19999	5.200
	74 Benzo(b)fluoranthene	252	25.607	25.584	(0.968)	2535849	4.11896	4.119(H)
	75 Benzo(k)fluoranthene	252	25.669	25.646	(0.970)	3092215	5.14429	5.144

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
76	Benzo(a)pyrene	252	26.335	26.312	(0.995)	2402677	4.35490	4.355
* 77	Perylene-d12	264	26.459	26.443	(1.000)	1727703	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.406	29.383	(1.111)	3105328	4.79234	4.792
79	Dibenzo(a,h)anthracene	278	29.460	29.429	(1.113)	2532905	5.10174	5.102
80	Benzo(g,h,i)perylene	276	30.307	30.268	(1.145)	2487899	4.86033	4.860
90	N-Nitrosodimethylamine	74	4.758	4.750	(0.513)	1024083	9.80760	9.808
91	Aniline	93	8.666	8.659	(0.934)	2287896	9.88312	9.883
93	Benzidine	184	21.248	21.225	(0.899)	1040602	4.39696	4.397
103	Pyridine	79	4.812	4.812	(0.519)	1790290	9.66777	9.668
105	1-methylnaphthalene	142	13.428	13.428	(1.141)	1513643	5.02945	5.029
111	Azobenzene (1,2-DP-Hydrazine)	77	16.893	16.878	(1.097)	2072145	4.33660	4.337
187	Total Benzofluoranthenes	252	25.669	25.646	(0.970)	5343809	8.98717	8.987
120	2,3,4,6-Tetrachlorophenol	232	16.082	16.066	(1.044)	435359	5.28916	5.289

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032314.D
Lab Smp Id: SLC0161-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230303.b\ABN.m
Misc Info:

Calibration Date: 03-MAR-2023
Calibration Time: 18:27
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	505000	252500	1010000	514090	1.80
27 Naphthalene-d8	1846542	923271	3693084	1833847	-0.69
42 Acenaphthene-d10	936949	468475	1873898	935282	-0.18
59 Phenanthrene-d10	1548373	774187	3096746	1597882	3.20
69 Chrysene-d12	1352261	676131	2704522	1549718	14.60
134 Di-n-octylphthala	2300648	1150324	4601296	2731644	18.73
77 Perylene-d12	1445020	722510	2890040	1727703	19.56

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	-0.00
27 Naphthalene-d8	11.77	11.27	12.27	11.77	-0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.40	0.05
59 Phenanthrene-d10	18.53	18.03	19.03	18.53	0.04
69 Chrysene-d12	23.62	23.12	24.12	23.63	0.07
134 Di-n-octylphthala	24.73	24.23	25.23	24.75	0.06
77 Perylene-d12	26.44	25.94	26.94	26.46	0.06

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

REVIEW SUMMARY FOR FILE - NT1003032314.D

Lab ID: SLC0161-CCV1
nt10.i, 20230303.b\ABN.m,   04-MAR-2023 02:02

RT	CO-ELUTION COMPOUNDS
23.618	bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: NT1003032302.D

On Column LOD for nt10.i, 20230303.b\ABN.m, ICAL.sub = 0.0000

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

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E

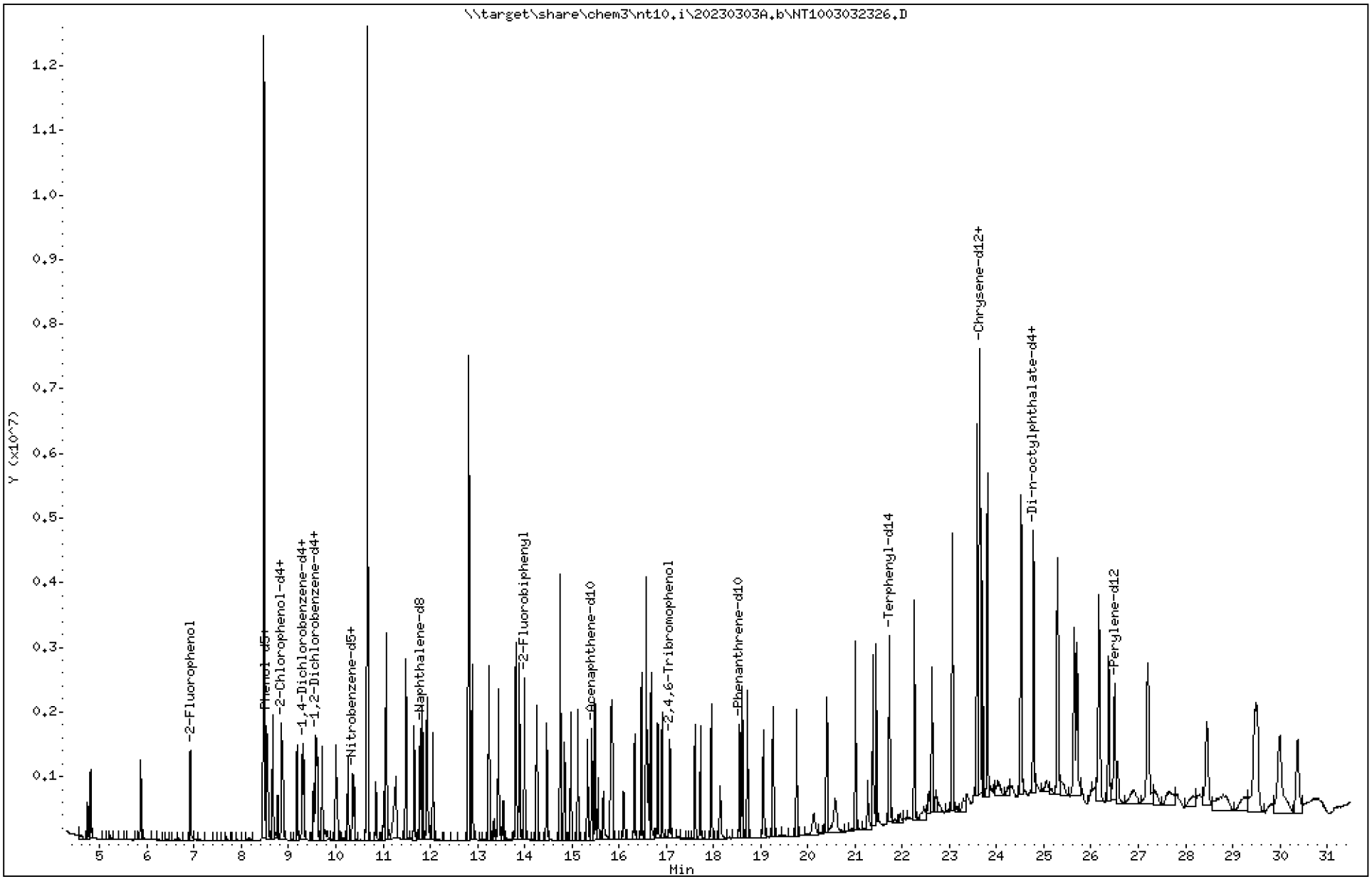
Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00019
Lab File ID:	NT1003032326.D	Calibration Date:	03/01/2023
Sequence:	SLC0162	Injection Date:	03/04/23
Lab Sample ID:	SLC0162-CCV1	Injection Time:	09:39
Sequence Name:	ABN 5		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	5.0000	5.4	1.5534590	1.6633340		7.1	+/-50
4-Methylphenol	A	5.0000	4.3	1.2087680	1.2851670		-14.0	+/-50
Naphthalene	A	5.0000	4.8	1.0266520	0.9792816		-4.6	+/-50
2-Methylnaphthalene	A	5.0000	5.0	0.7252818	0.7216729		-0.5	+/-50
Acenaphthylene	A	5.0000	5.1	1.9309320	1.9571530		1.4	+/-50
Dimethylphthalate	A	5.0000	4.8	1.2917940	1.2340910		-4.5	+/-50
Acenaphthene	A	5.0000	4.9	1.1645250	1.1302490		-2.9	+/-50
Dibenzofuran	A	5.0000	5.0	1.7283260	1.7286540		0.02	+/-50
Fluorene	A	5.0000	5.4	1.4379840	1.5622730		8.6	+/-50
Phenanthrene	A	5.0000	4.9	1.0236730	1.0038820		-1.9	+/-50
Anthracene	A	5.0000	5.2	0.9926226	1.0269310		3.5	+/-50
Fluoranthene	A	5.0000	4.3	1.3760330	1.1747800		-14.6	+/-50
Pyrene	A	5.0000	5.0	1.4011560	1.3935340		-0.5	+/-50
Butylbenzylphthalate	A	5.0000	3.8	0.6475451	0.5618506		-24.4	+/-50
Benzo(a)anthracene	A	5.0000	4.7	1.4104100	1.3181630		-6.5	+/-50
Chrysene	A	5.0000	5.1	1.1462500	1.1679950		2.3	+/-50
bis(2-Ethylhexyl)phthalate	A	5.0000	4.8	0.5331838	0.5522646		-4.4	+/-50
Benzofluoranthenes, Total	A	10.000	7.2	1.3383070	0.9820639		-27.9	+/-50
Benzo(a)pyrene	A	5.0000	4.4	1.2312020	1.1367090		-11.1	+/-50
Indeno(1,2,3-cd)pyrene	A	5.0000	4.6	1.4033590	1.3660100		-8.7	+/-50
Dibenzo(a,h)anthracene	A	5.0000	4.9	1.1150690	1.1315720		-1.3	+/-50
Benzo(g,h,i)perylene	A	5.0000	4.5	1.1245240	1.0571110		-10.5	+/-50
2-Fluorophenol	A	7.5000	7.76	1.2585100	1.3027220		3.5	+/-50
Phenol-d5	A	7.5000	8.46	1.4611190	1.6476290		12.8	+/-50
2-Chlorophenol-d4	A	7.5000	8.09	1.2465880	1.3439060		7.8	+/-50
1,2-Dichlorobenzene-d4	A	5.0000	4.79	0.9313544	0.8917236		-4.3	+/-50
Nitrobenzene-d5	A	5.0000	5.29	0.4390871	0.4642156		5.7	+/-50
2-Fluorobiphenyl	A	5.0000	5.32	1.4267270	1.5180190		6.4	+/-50
2,4,6-Tribromophenol	A	7.5000	6.52	0.2287830	0.2237189		-13.0	+/-50
p-Terphenyl-d14	A	5.0000	4.51	1.1337350	1.0220870		-9.8	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D
Date : 04-MAR-2023 09:39
Client ID:
Sample Info: SEQ-CCVFULL
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

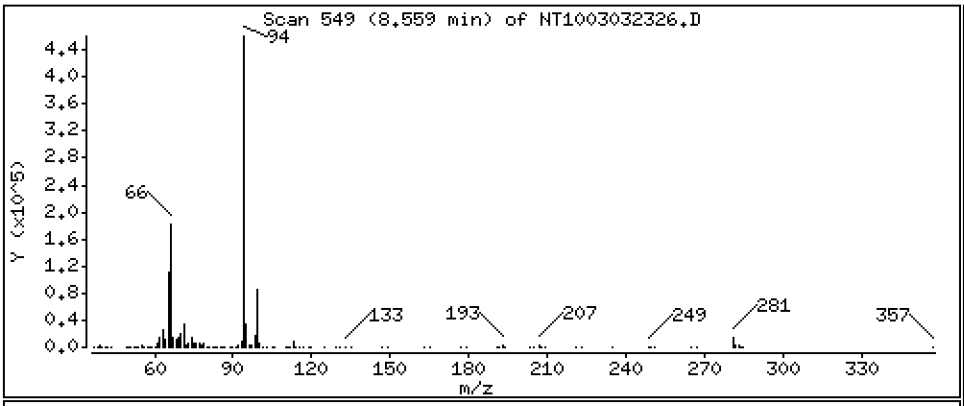
Operator: VTS

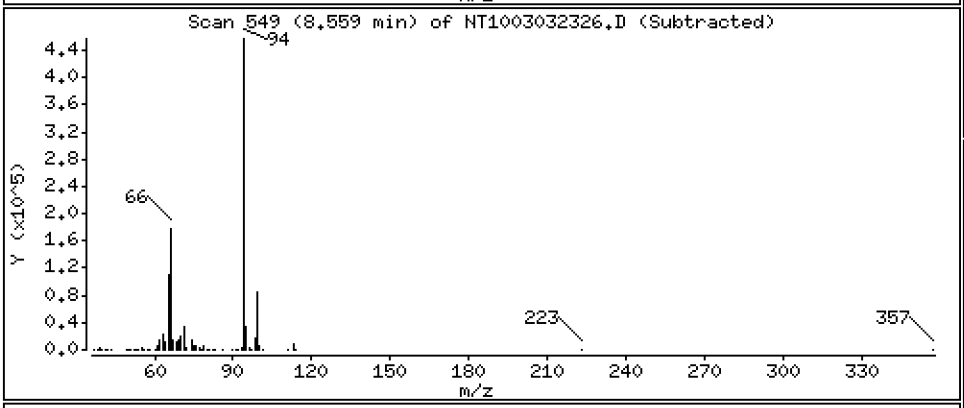
Column phase: ZB-5msi

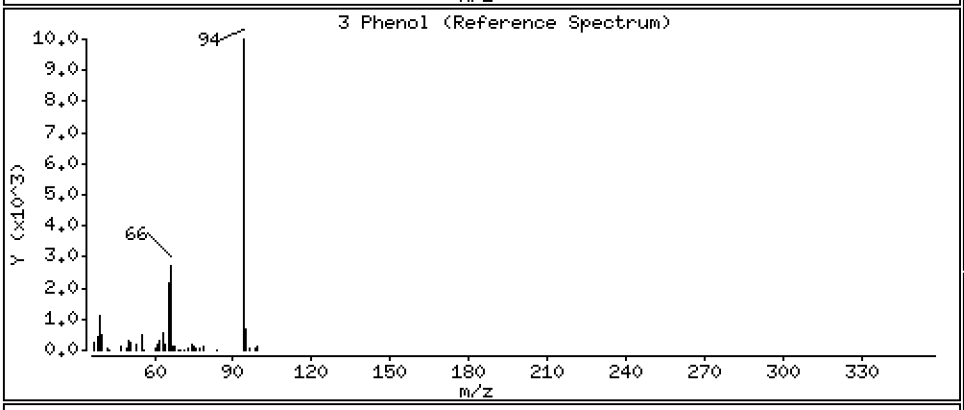
Column diameter: 0.25

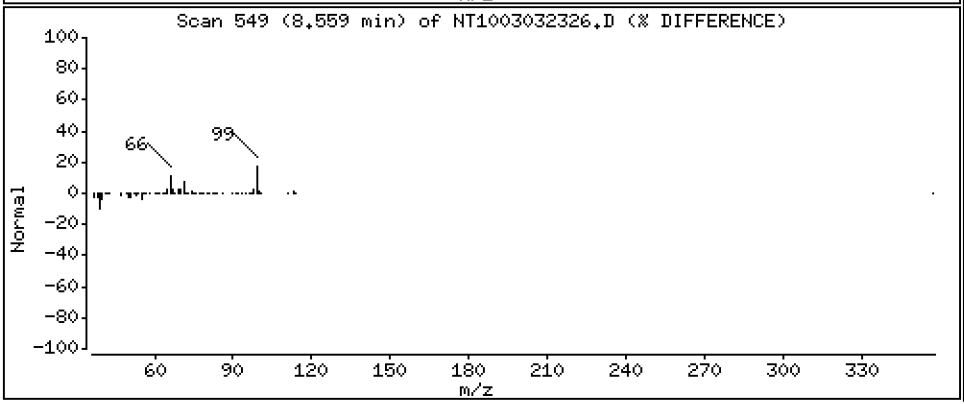
3 Phenol

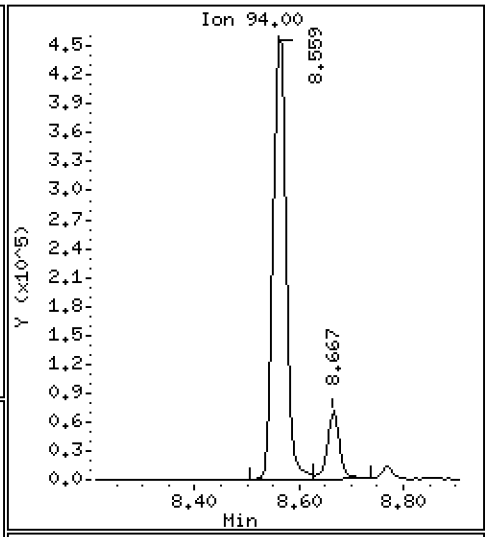
Concentration: 5.354 ug/ml

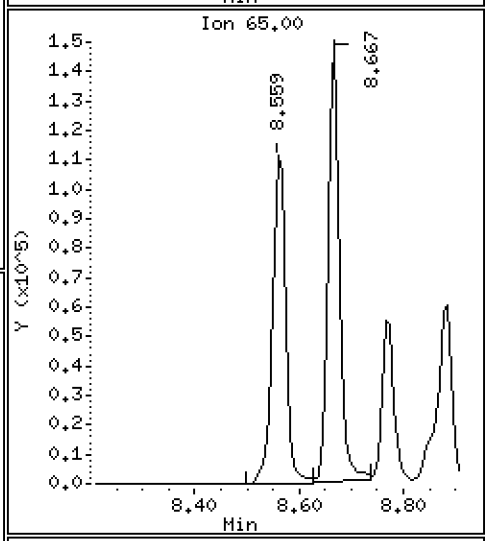


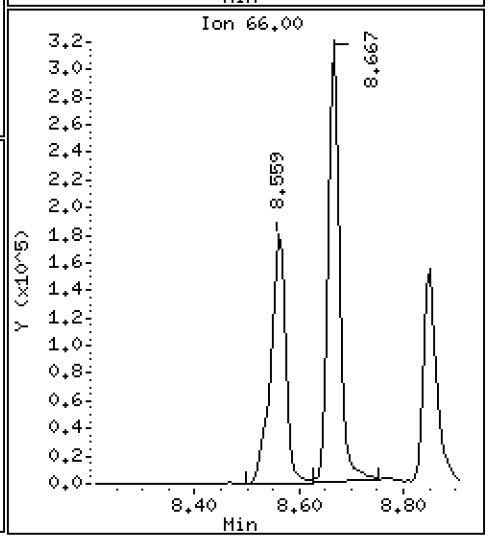












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

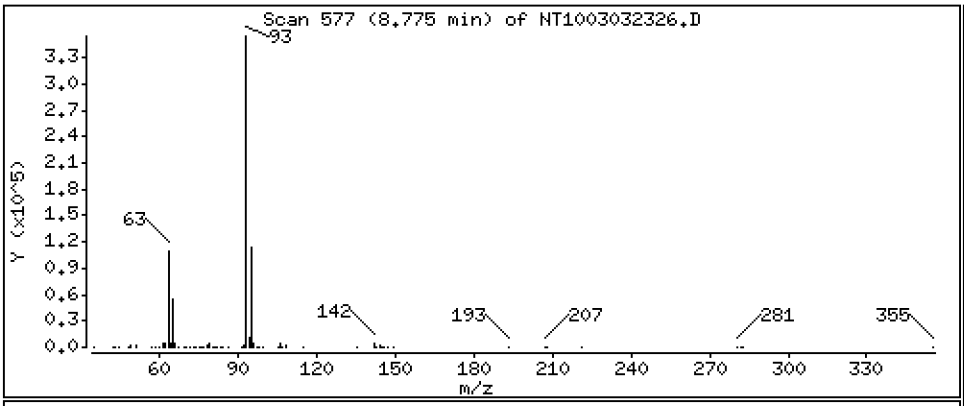
Operator: VTS

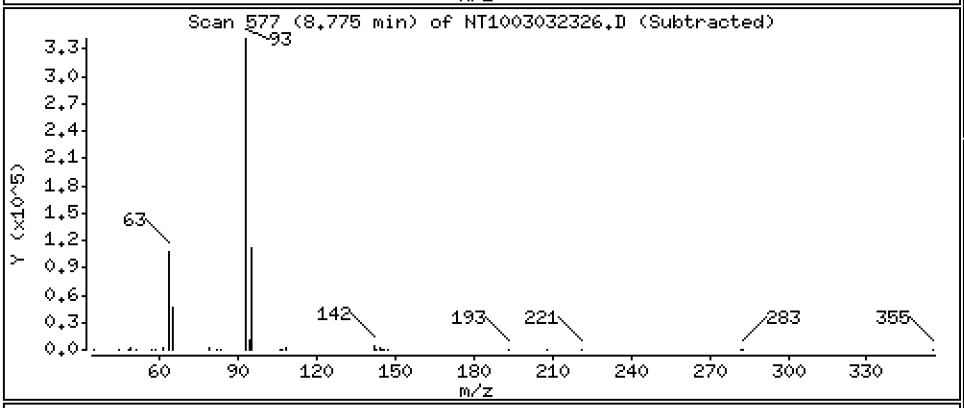
Column phase: ZB-5msi

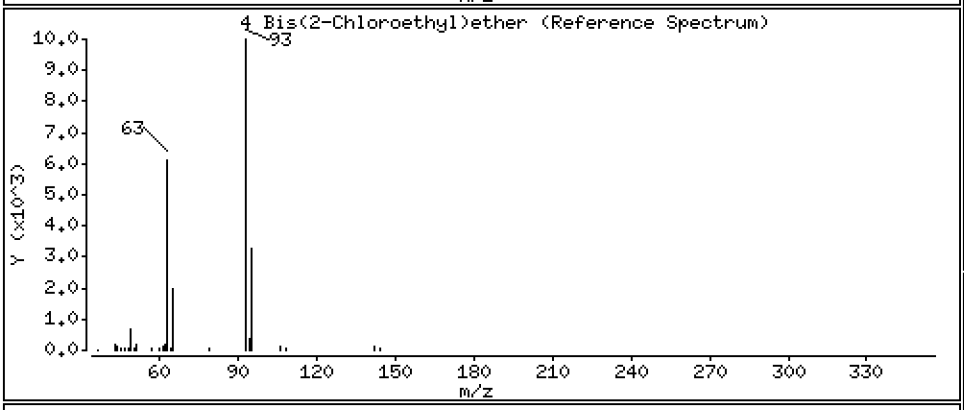
Column diameter: 0.25

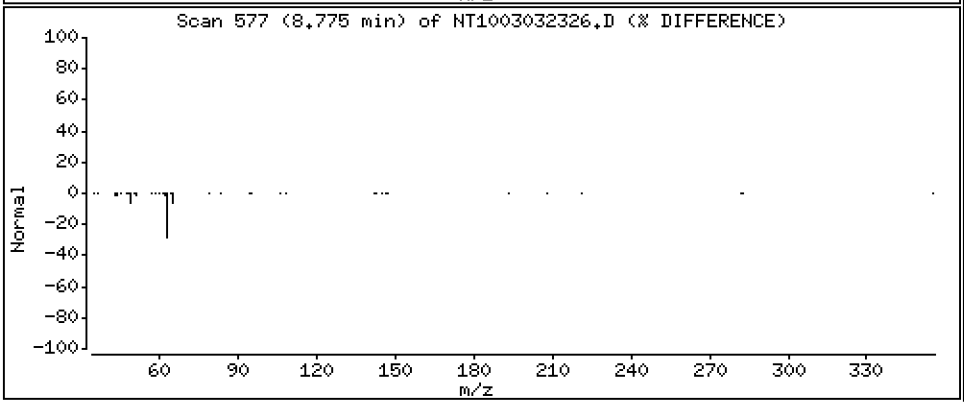
4 Bis(2-Chloroethyl)ether

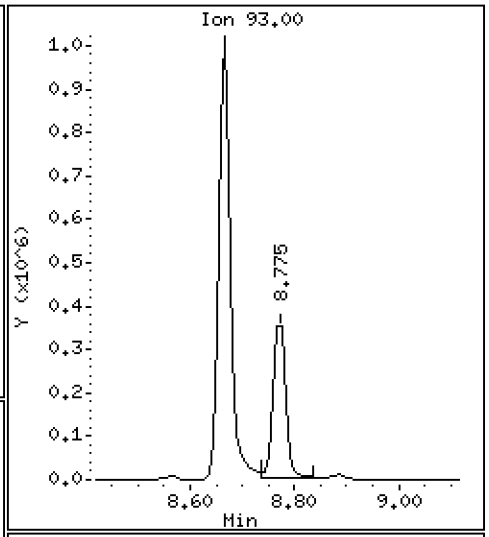
Concentration: 5.135 ug/ml

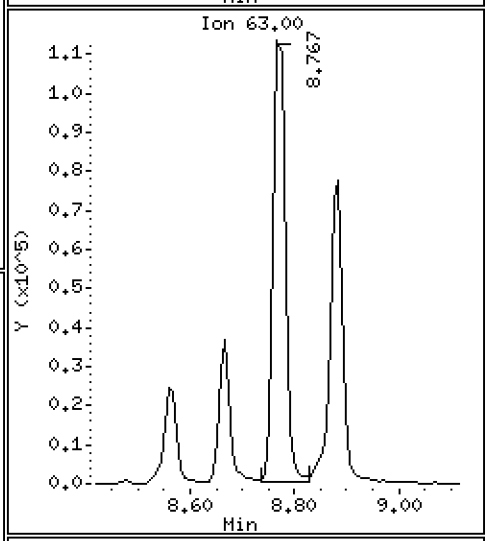


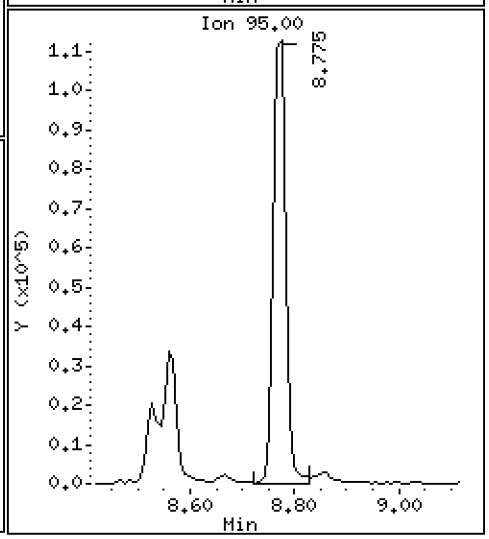












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

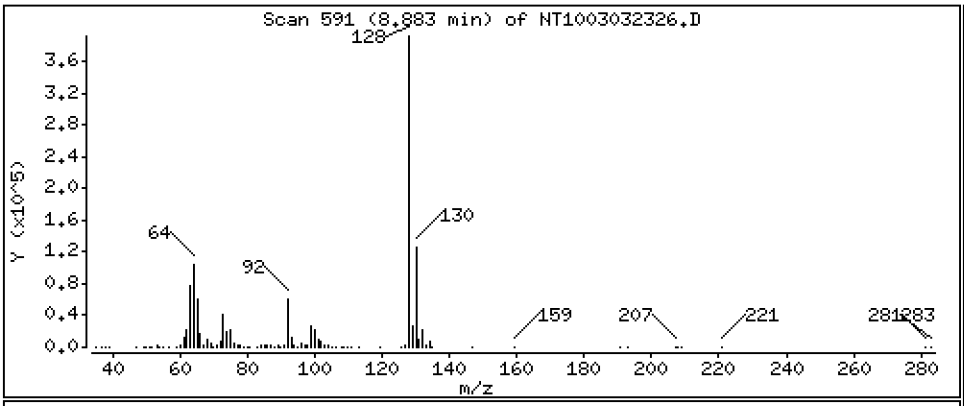
Operator: VTS

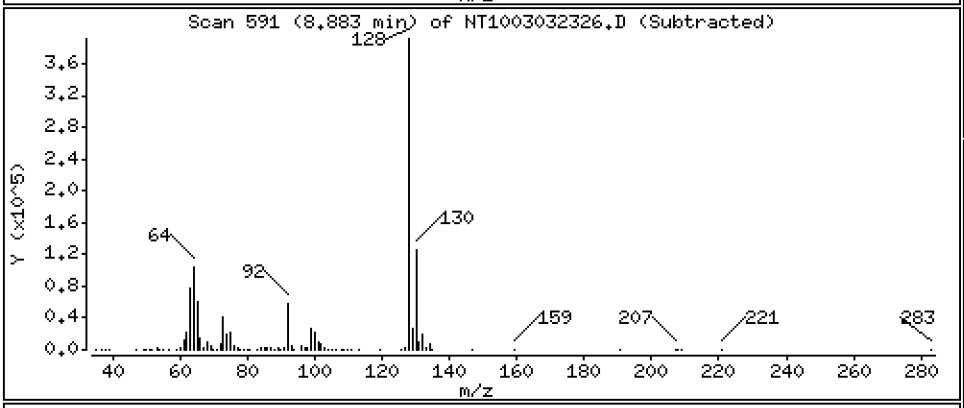
Column phase: ZB-5msi

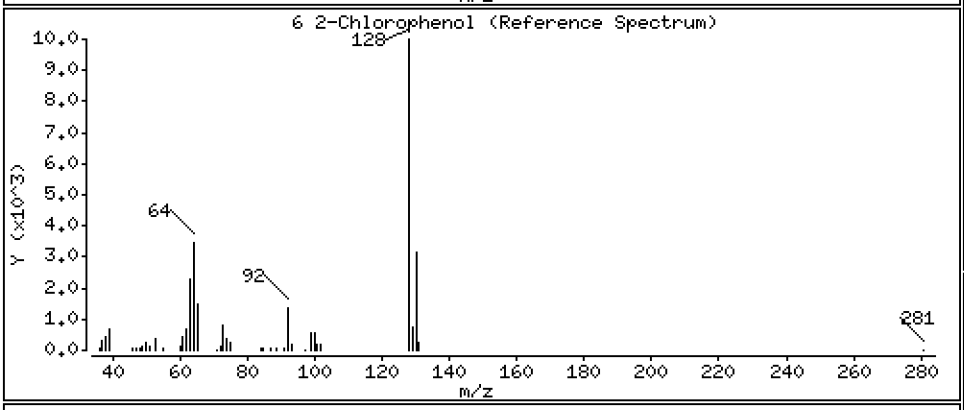
Column diameter: 0.25

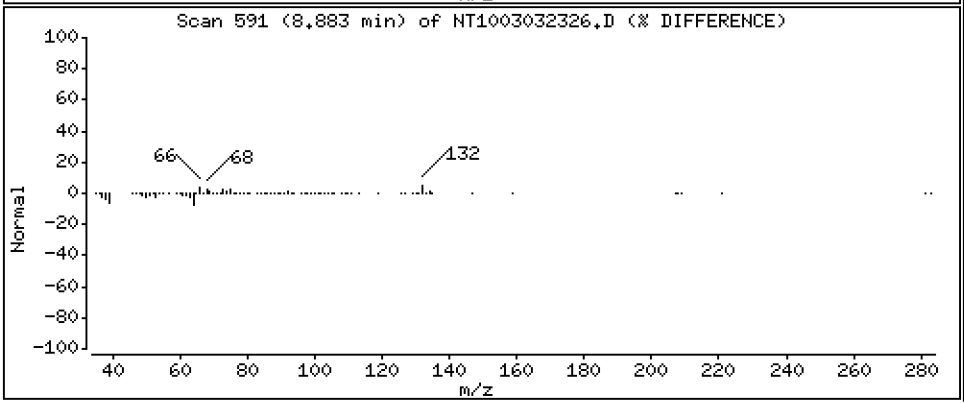
6 2-Chlorophenol

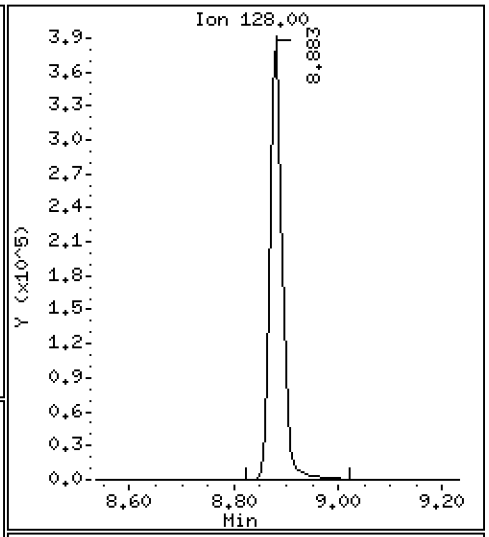
Concentration: 5.714 ug/ml

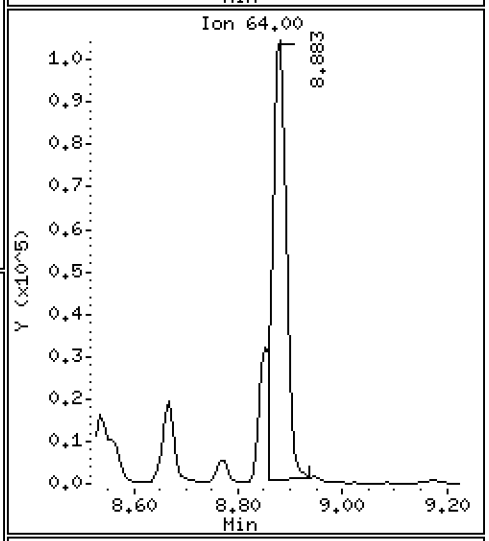


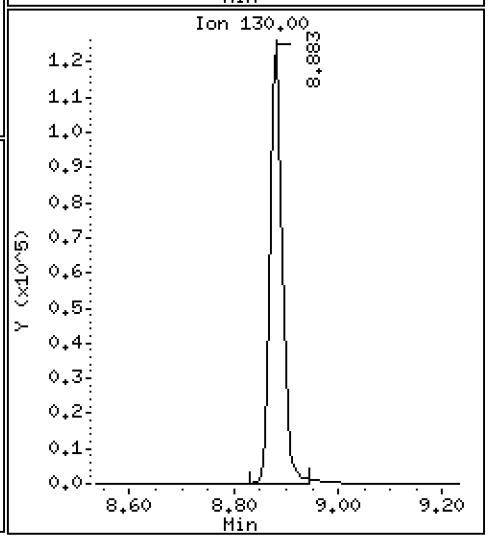












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

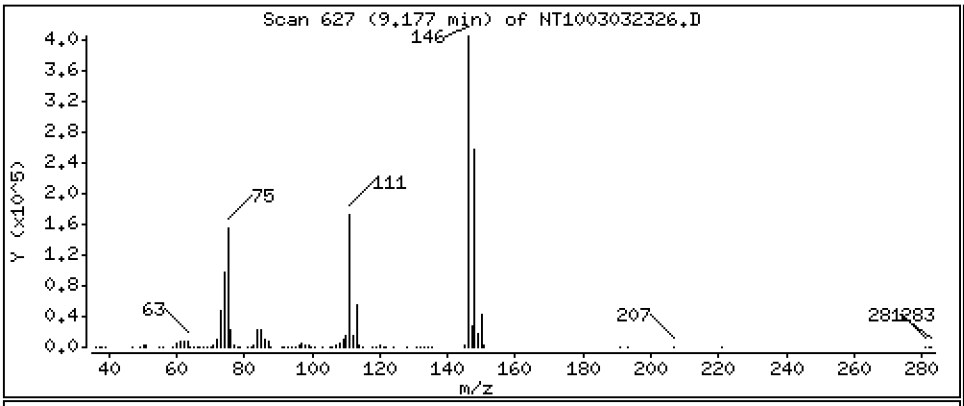
Operator: VTS

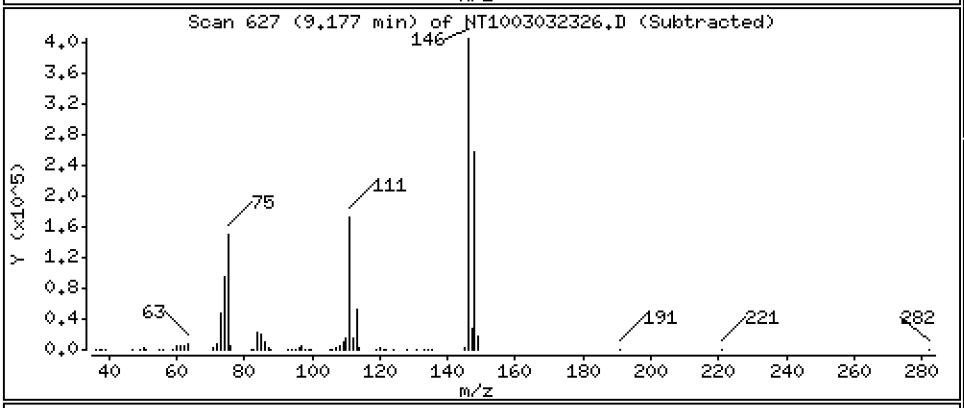
Column phase: ZB-5msi

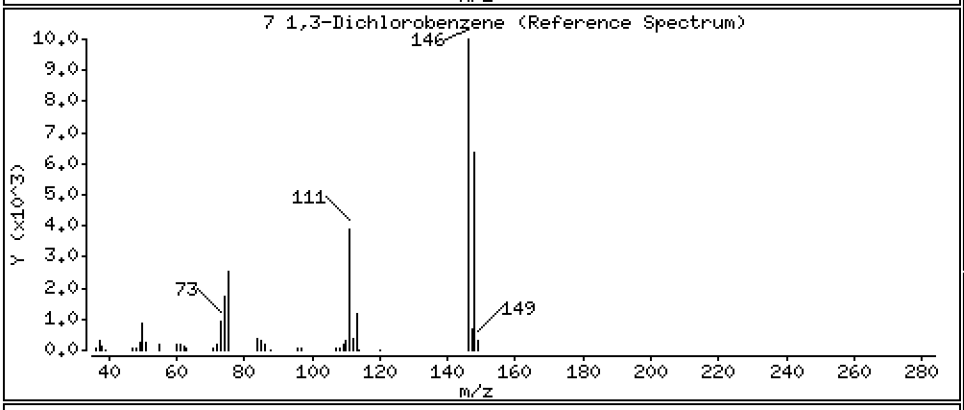
Column diameter: 0.25

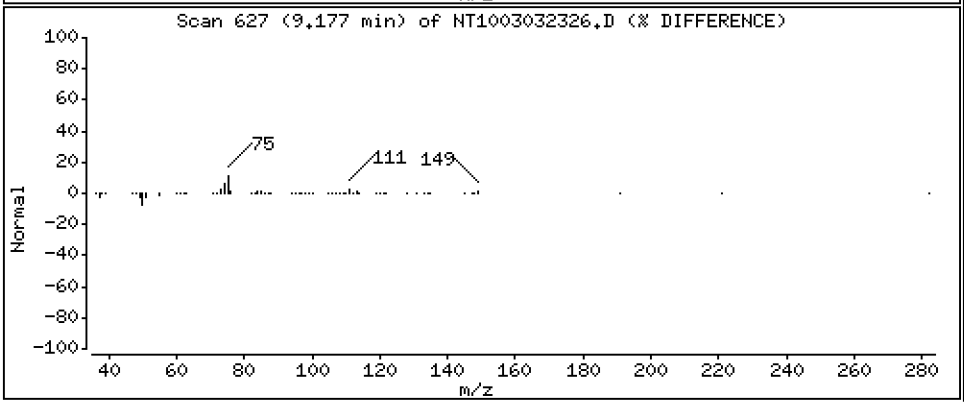
7 1,3-Dichlorobenzene

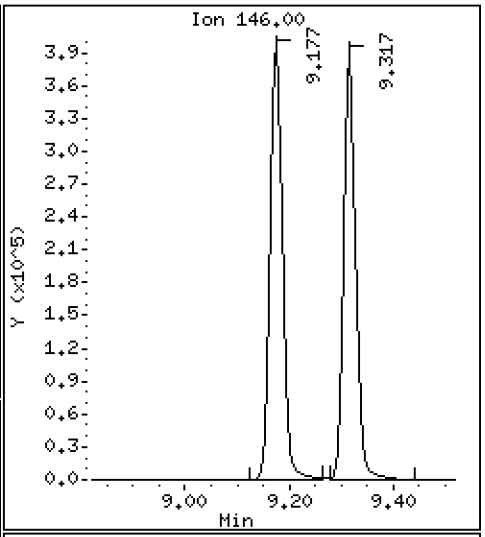
Concentration: 4.784 ug/ml

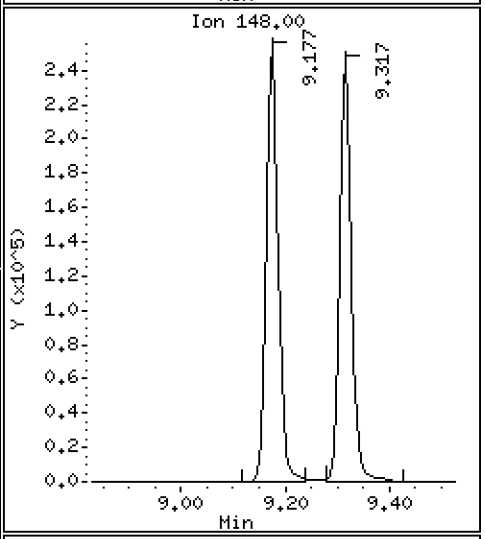


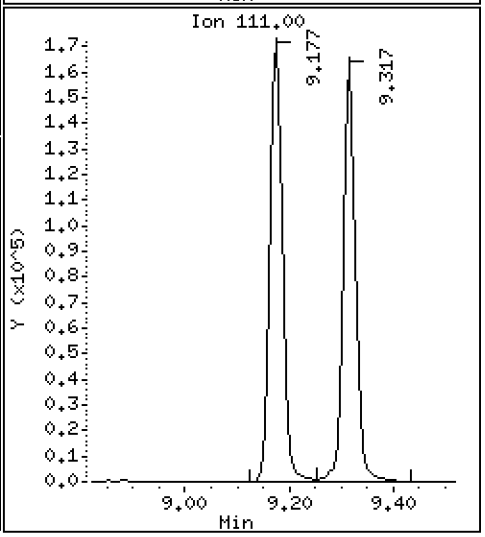












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

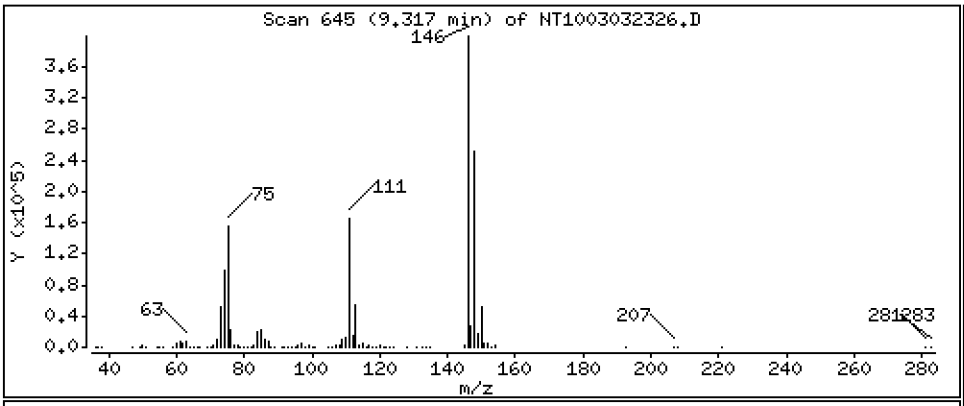
Operator: VTS

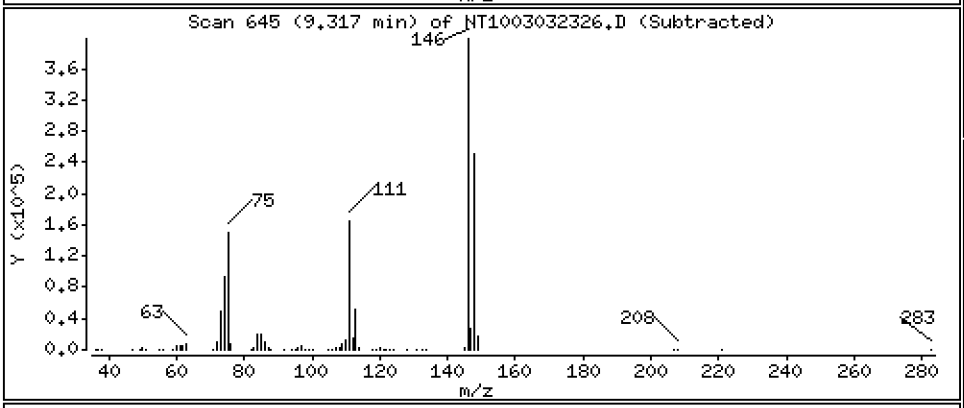
Column phase: ZB-5msi

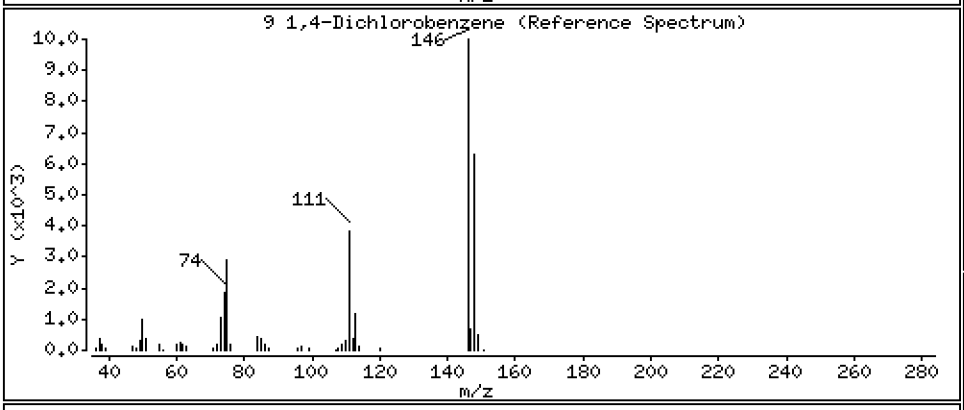
Column diameter: 0.25

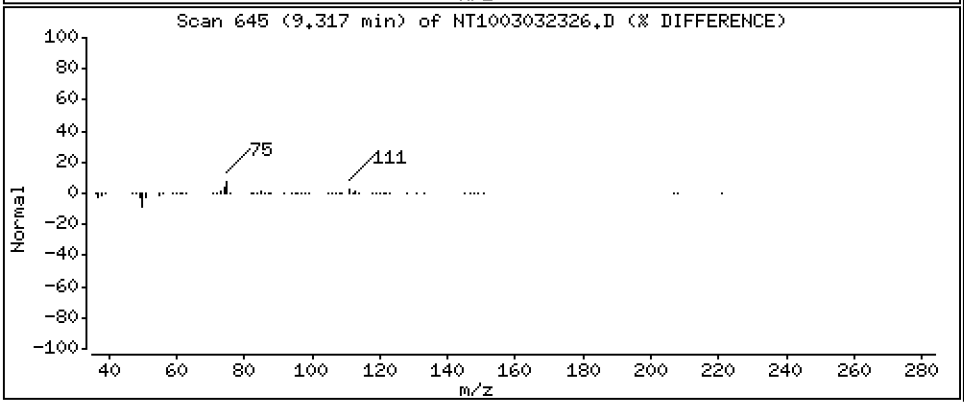
9 1,4-Dichlorobenzene

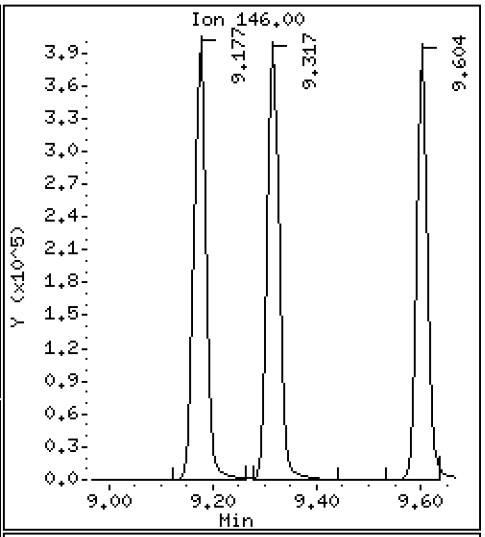
Concentration: 5.168 ug/ml

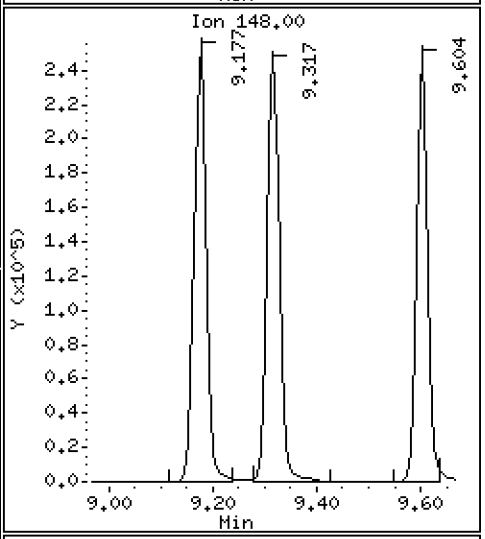


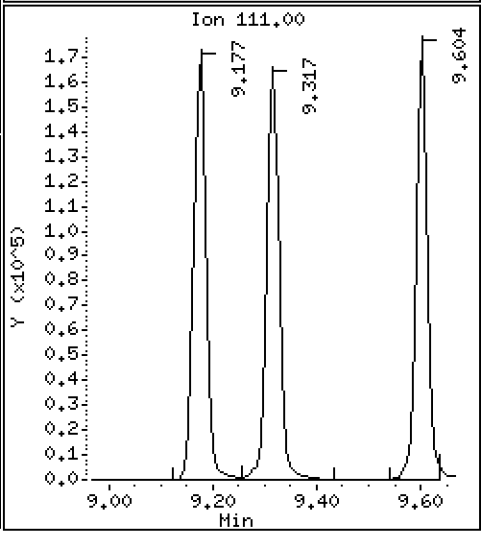












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

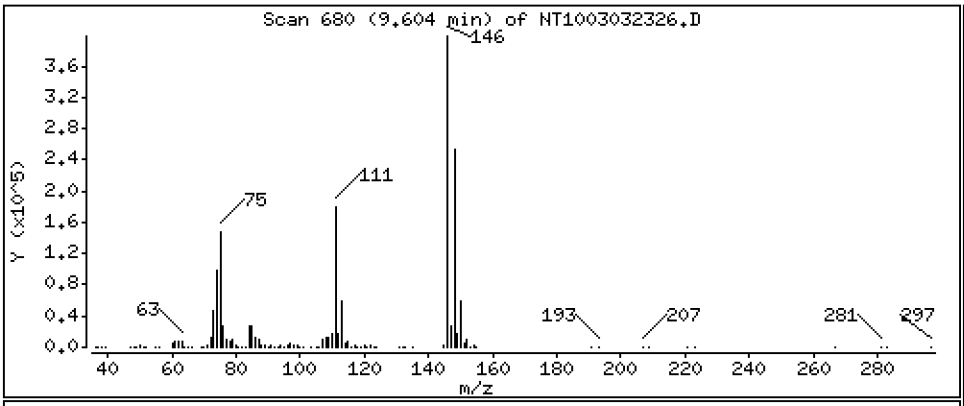
Operator: VTS

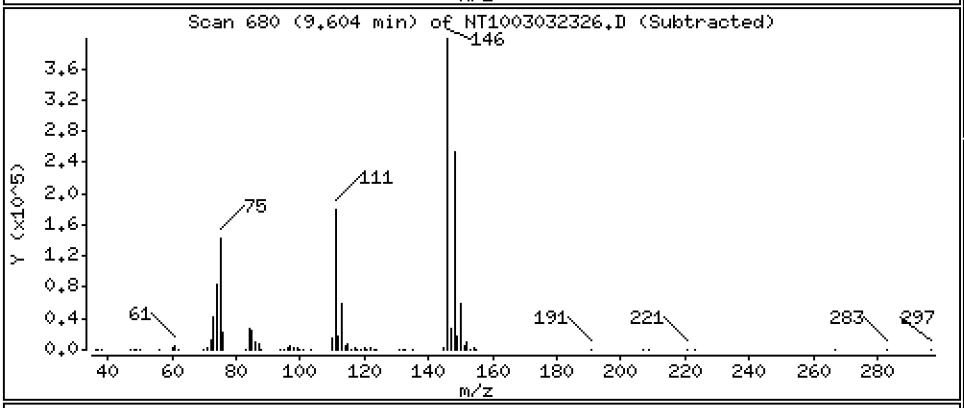
Column phase: ZB-5msi

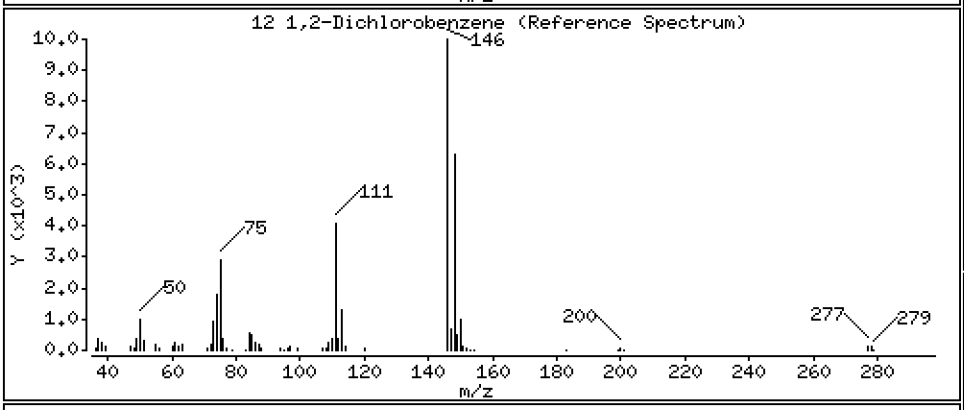
Column diameter: 0.25

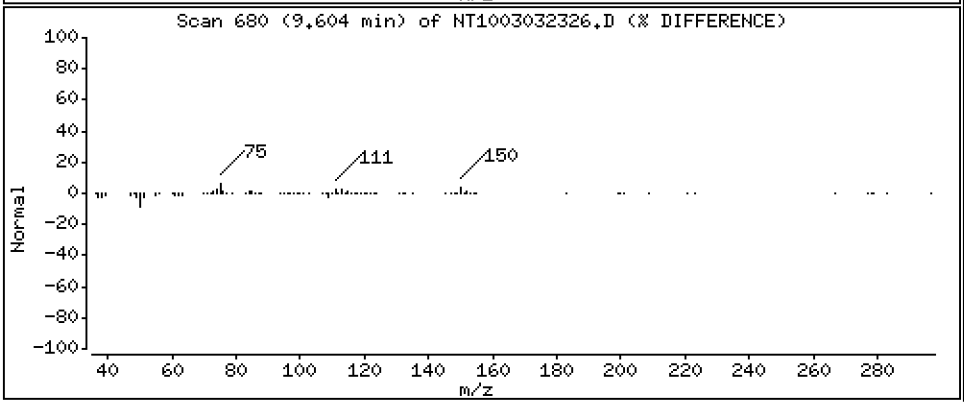
12 1,2-Dichlorobenzene

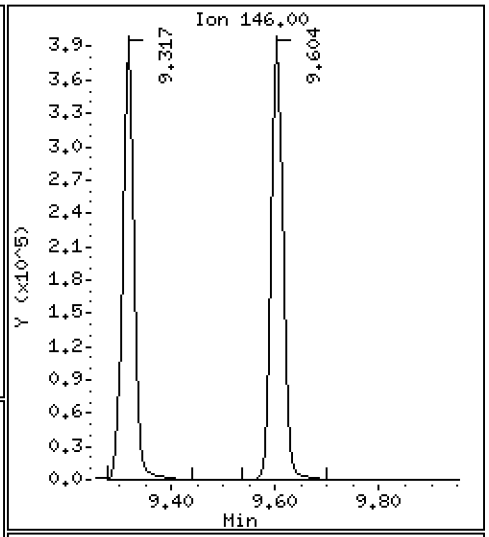
Concentration: 4.694 ug/ml

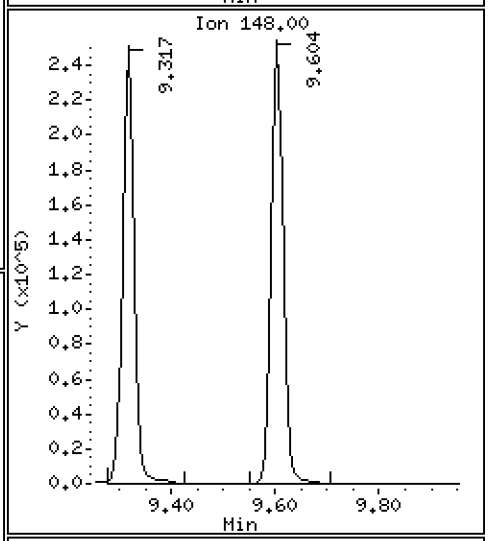


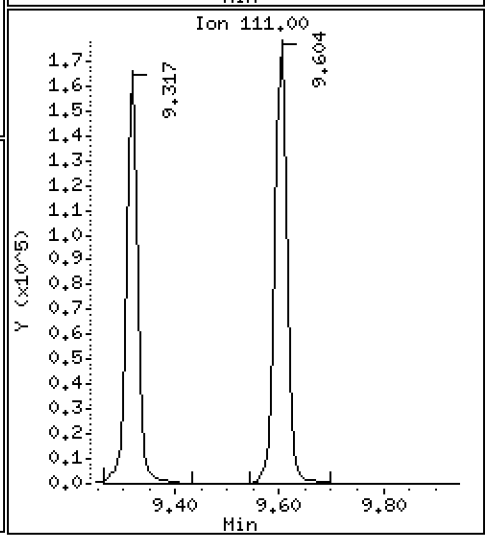












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

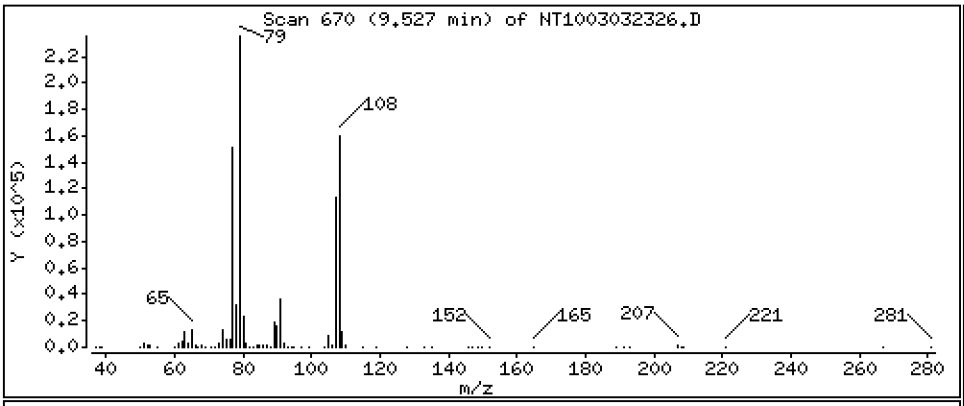
Operator: VTS

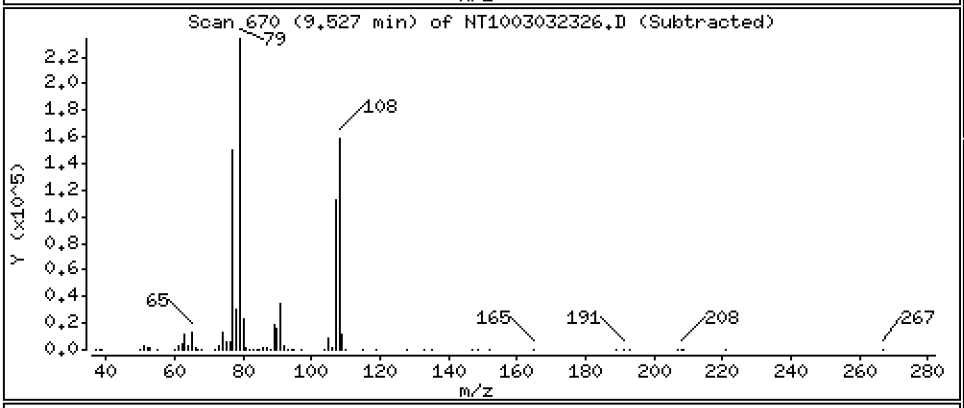
Column phase: ZB-5msi

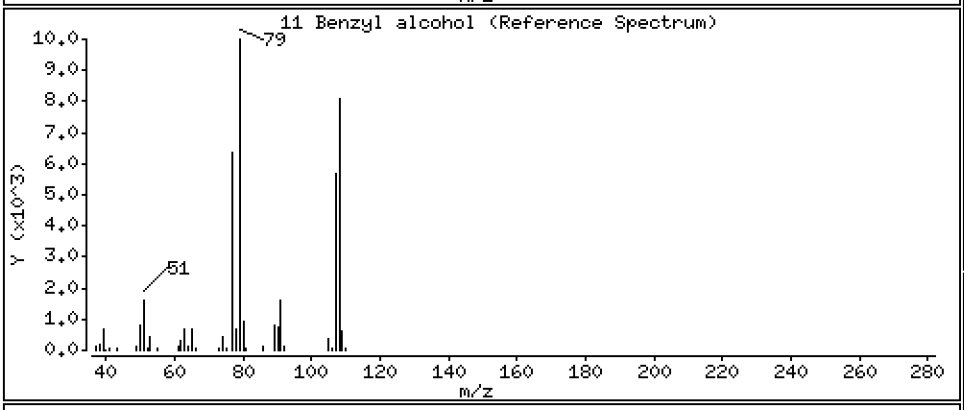
Column diameter: 0.25

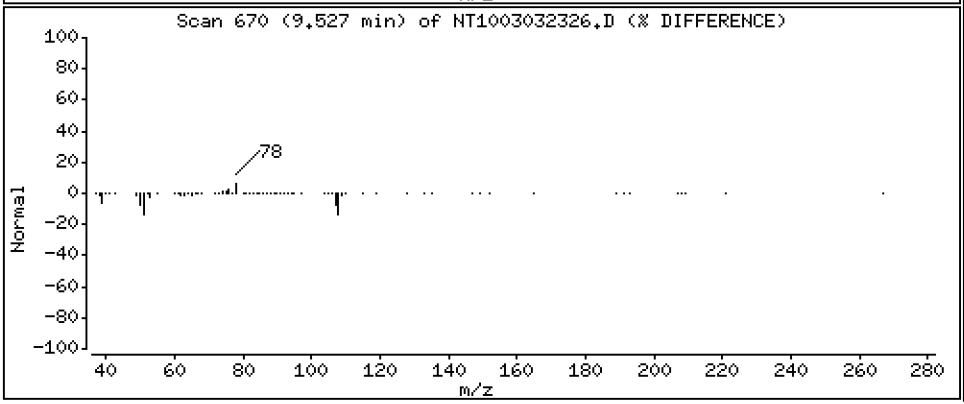
11 Benzyl alcohol

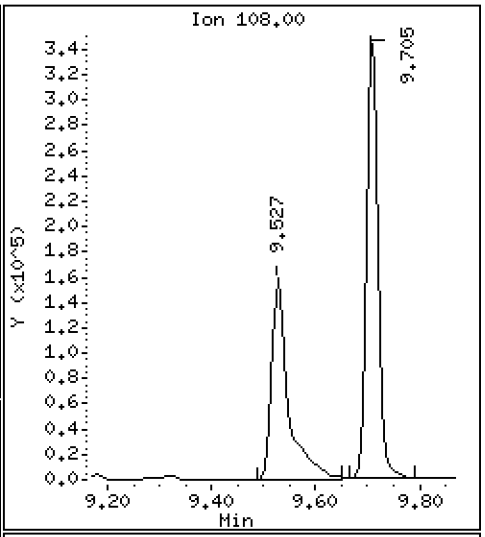
Concentration: 4.529 ug/ml

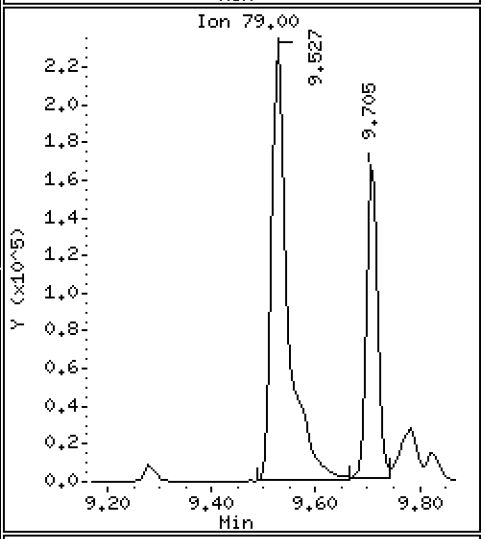


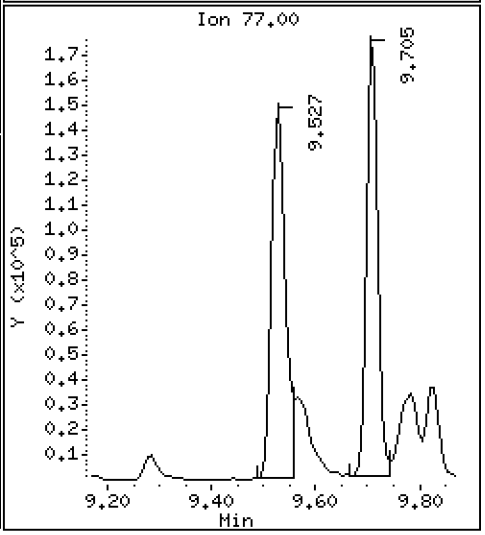












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

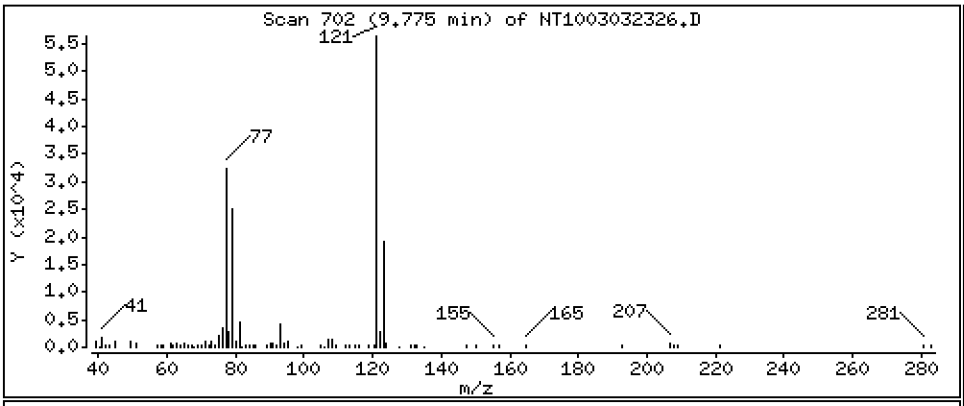
Operator: VTS

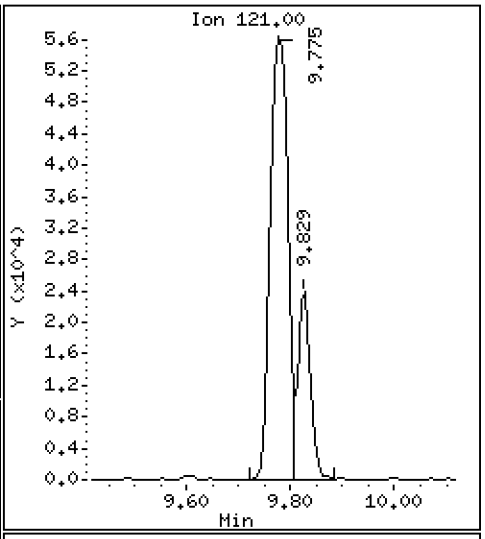
Column phase: ZB-5msi

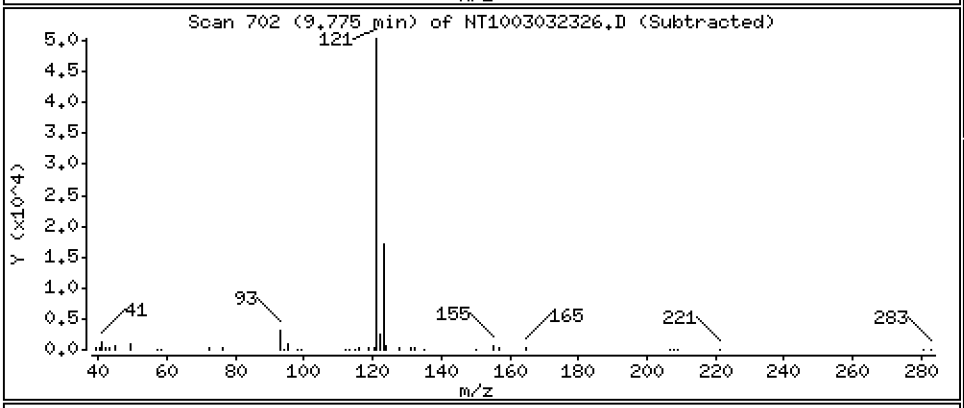
Column diameter: 0.25

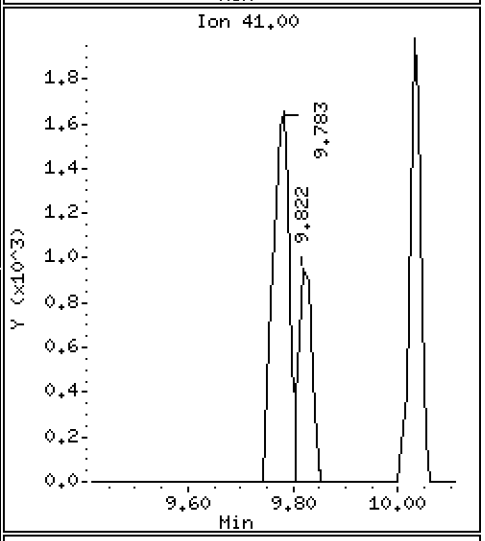
14 2,2'-oxybis(1-Chloropropane)

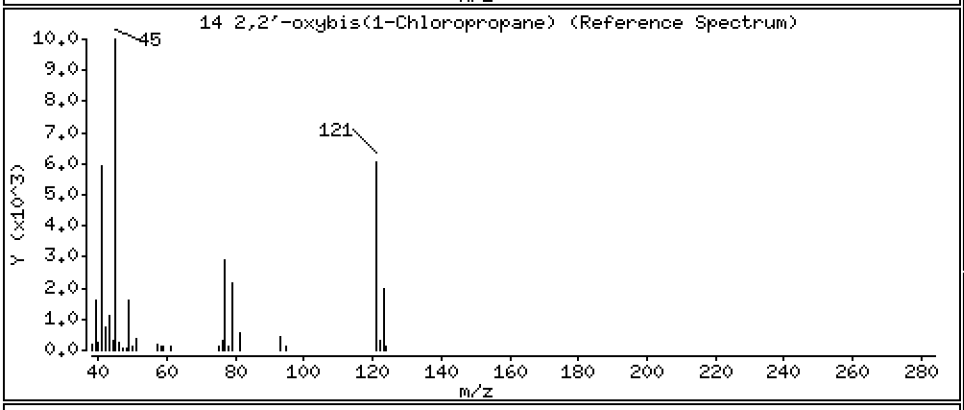
Concentration: 3.620 ug/ml

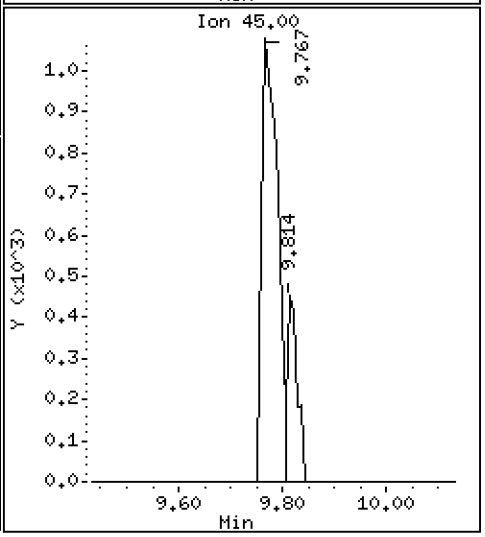


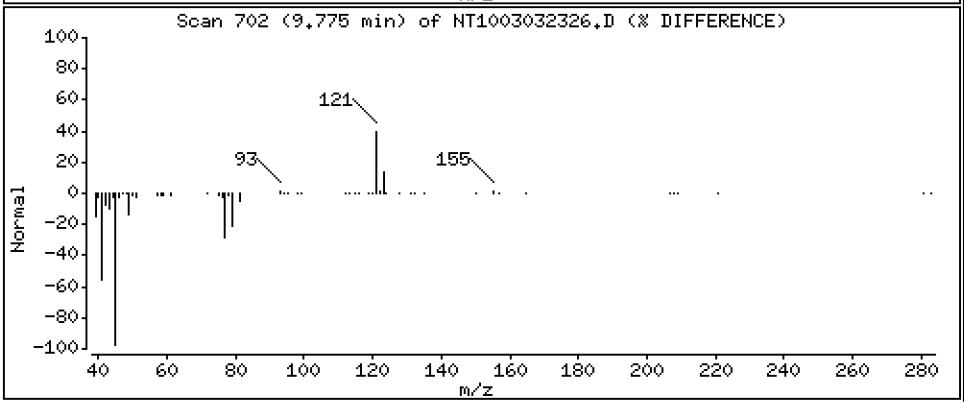












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

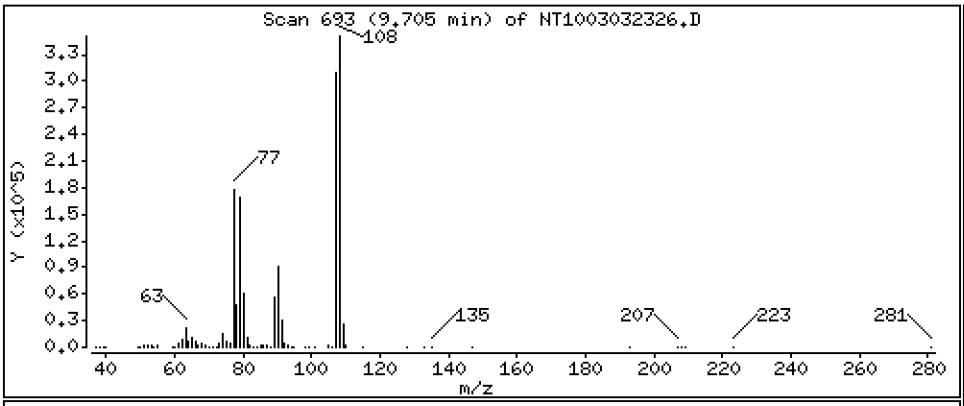
Operator: VTS

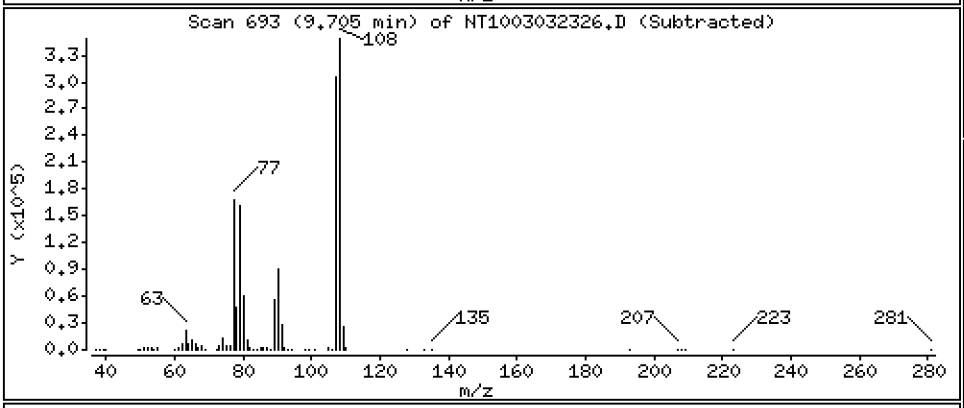
Column phase: ZB-5msi

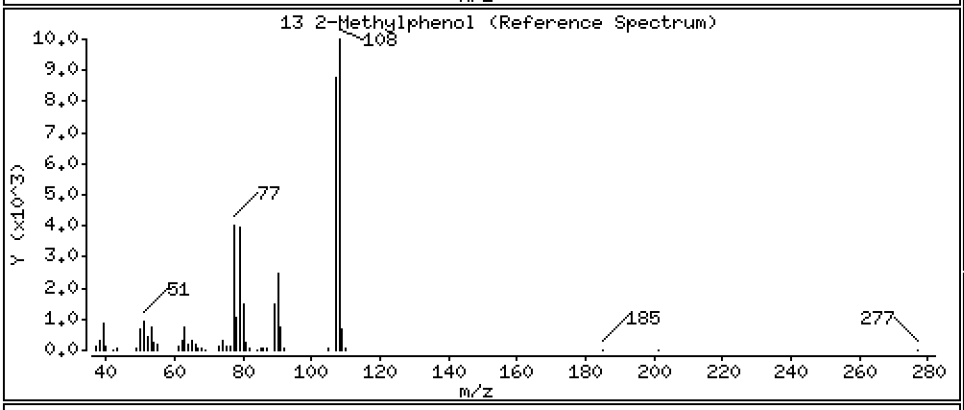
Column diameter: 0.25

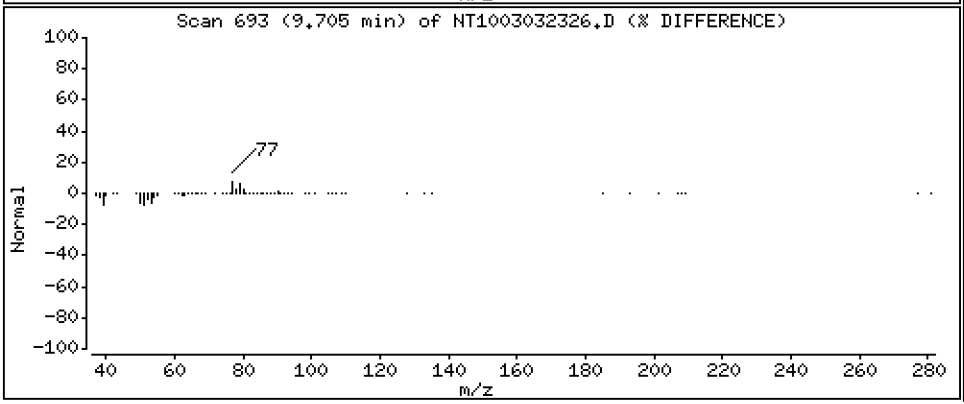
13 2-Methylphenol

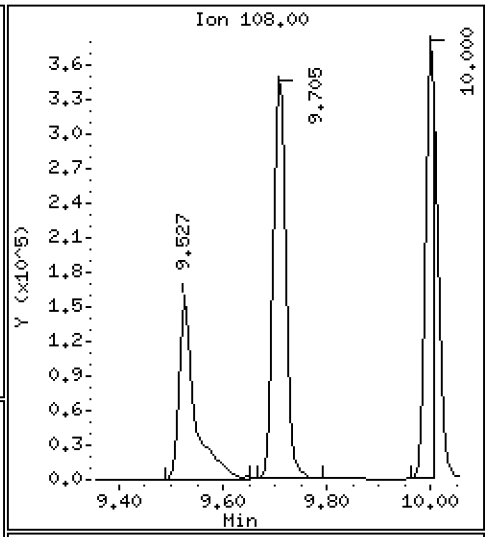
Concentration: 4.935 ug/ml

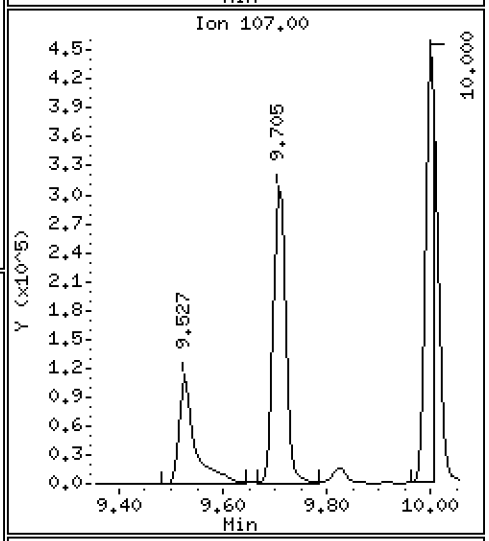


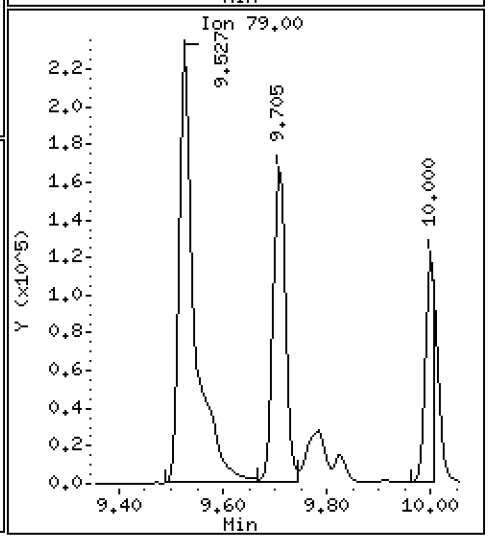












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

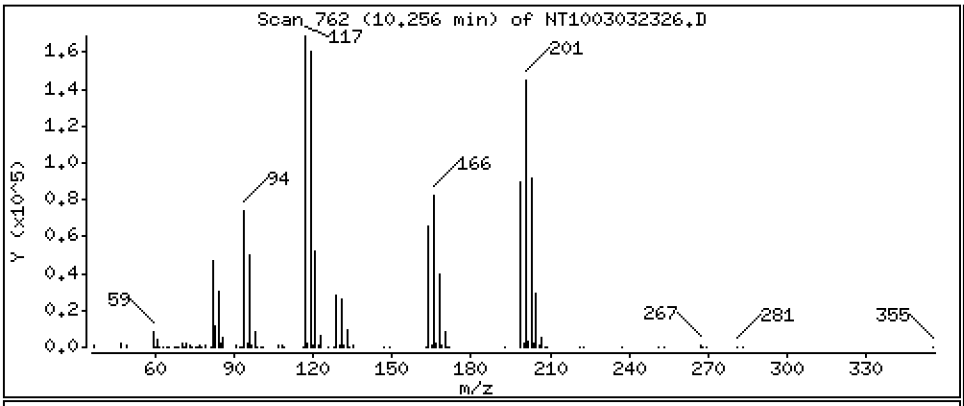
Operator: VTS

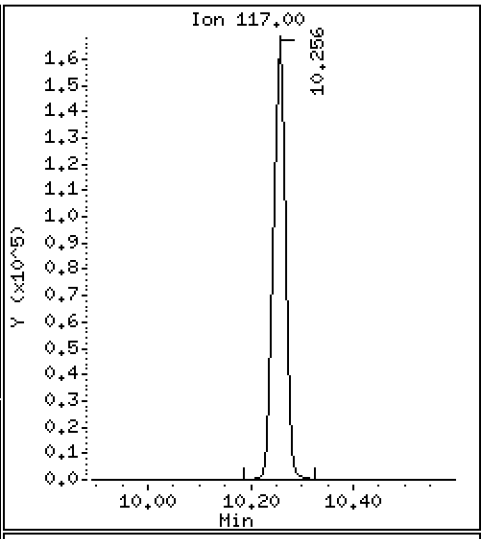
Column phase: ZB-5msi

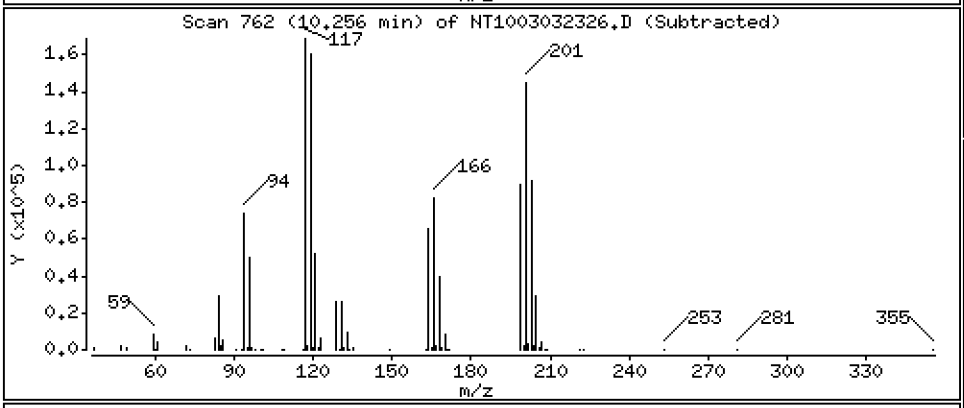
Column diameter: 0.25

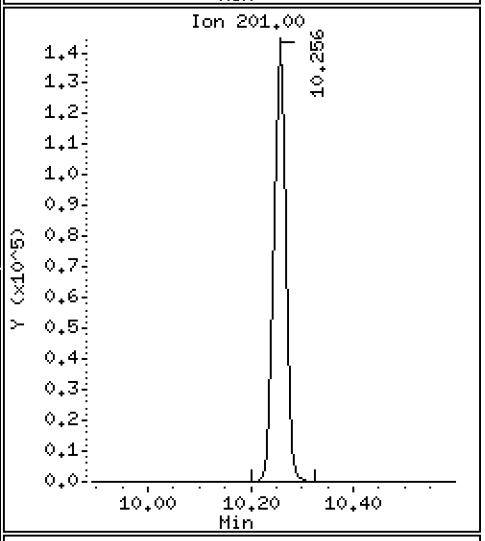
17 Hexachloroethane

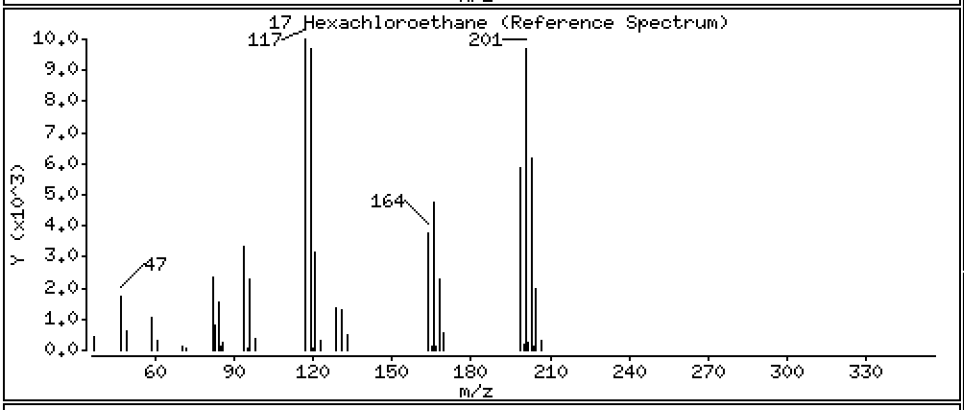
Concentration: 4.940 ug/ml

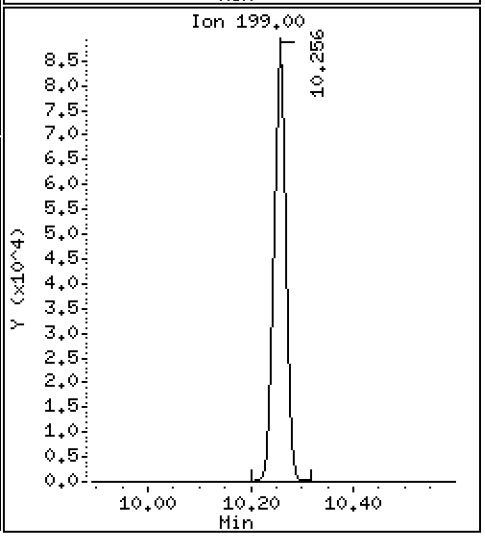


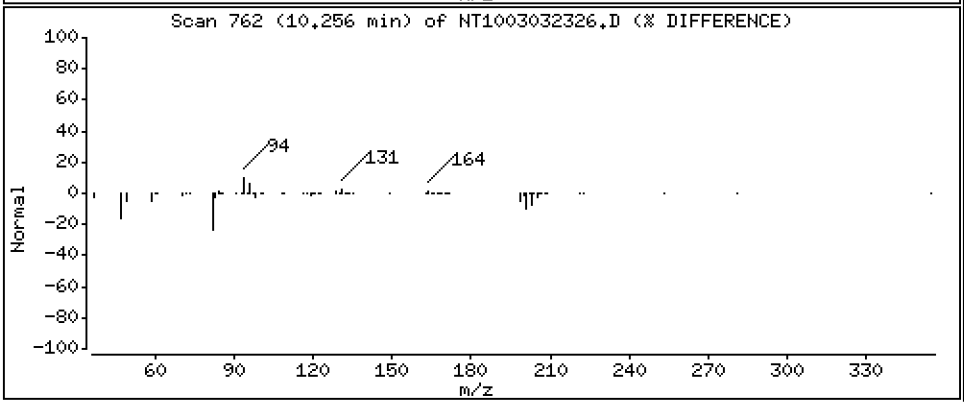












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

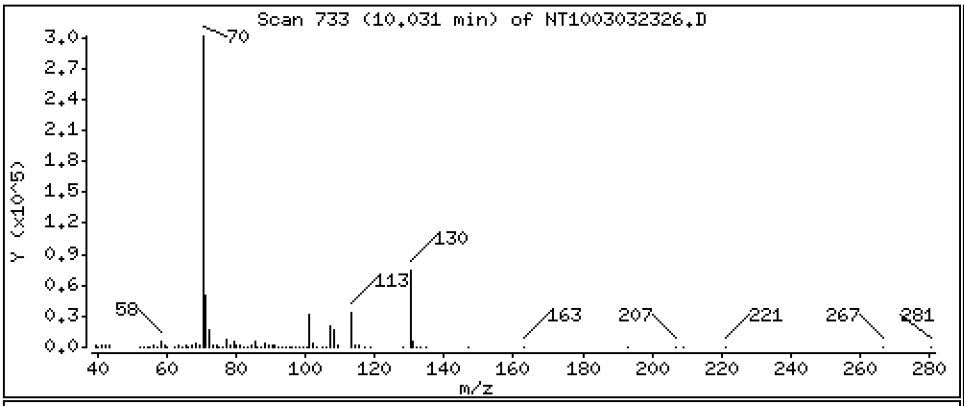
Operator: VTS

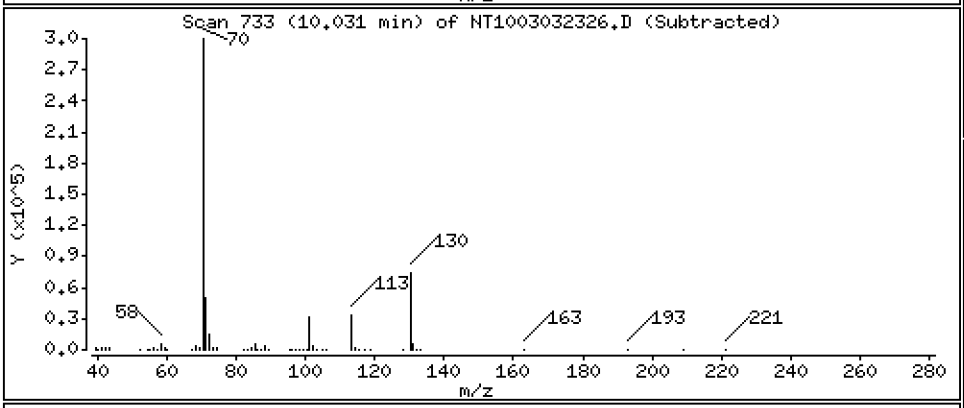
Column phase: ZB-5msi

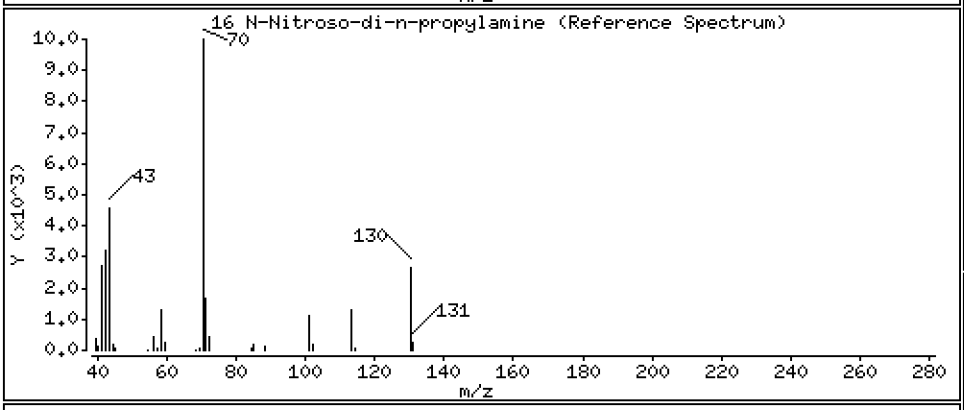
Column diameter: 0.25

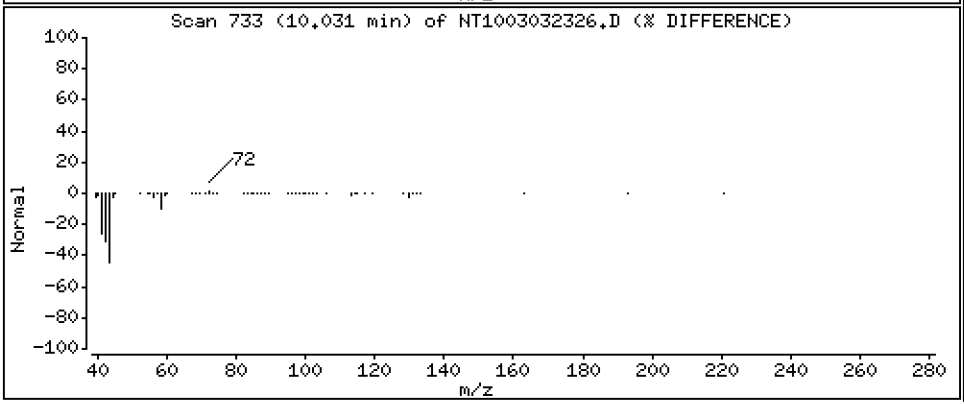
16 N-Nitroso-di-n-propylamine

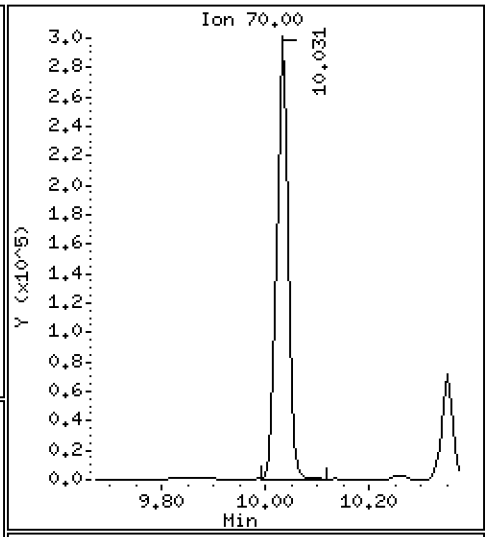
Concentration: 5.188 ug/ml

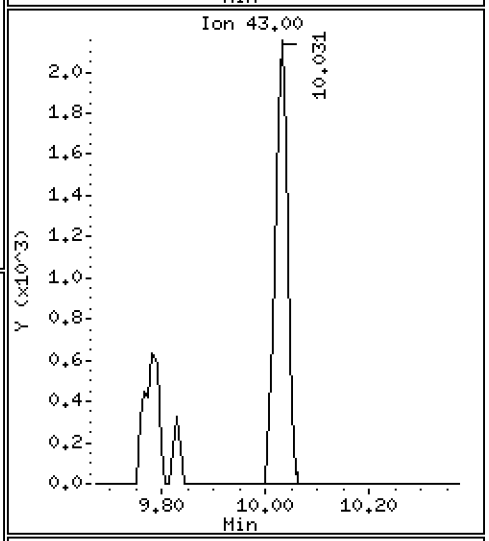


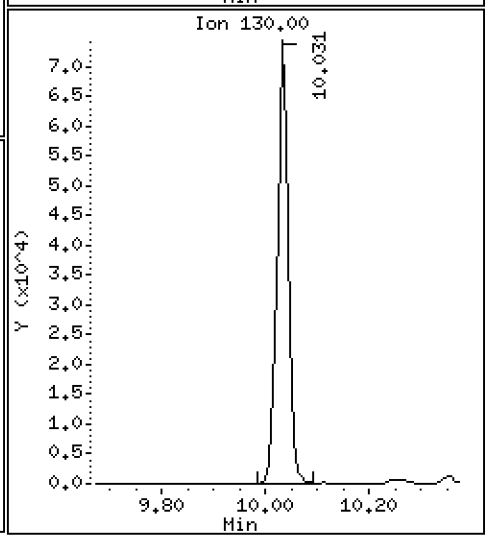












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

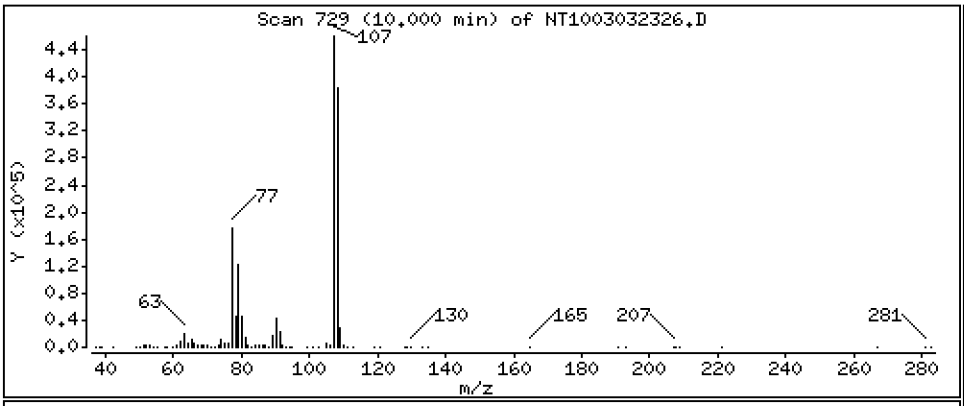
Operator: VTS

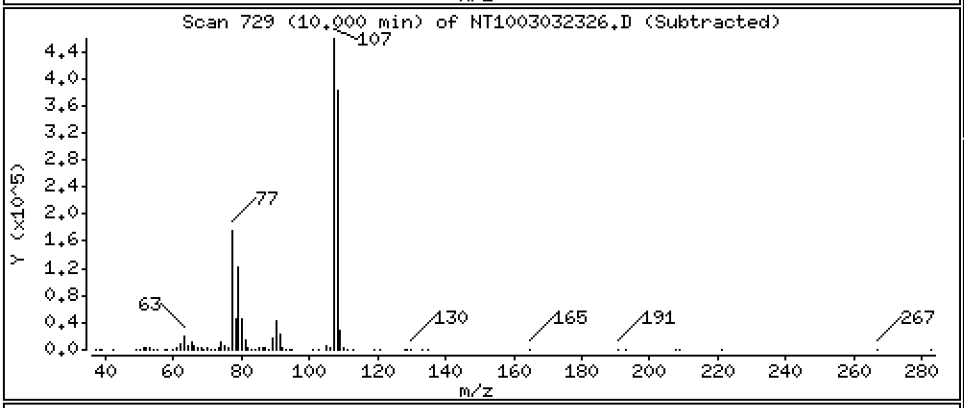
Column phase: ZB-5msi

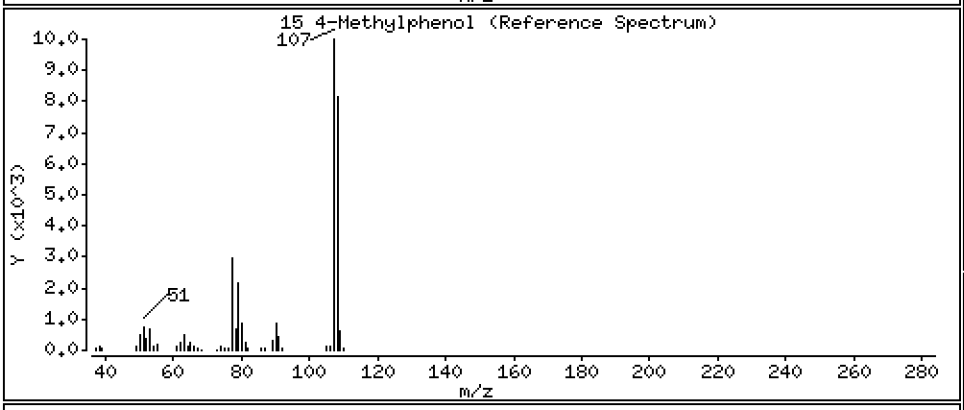
Column diameter: 0.25

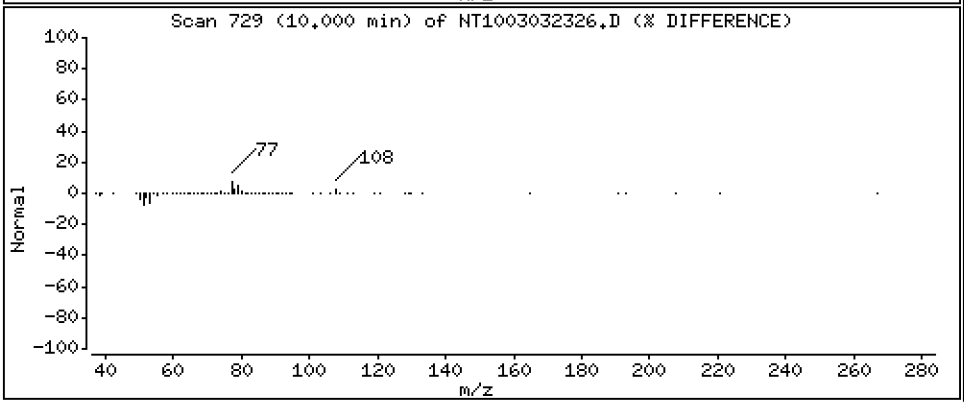
15 4-Methylphenol

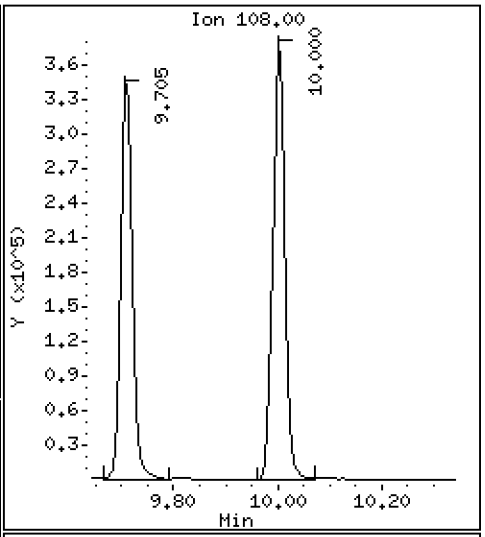
Concentration: 4.302 ug/ml

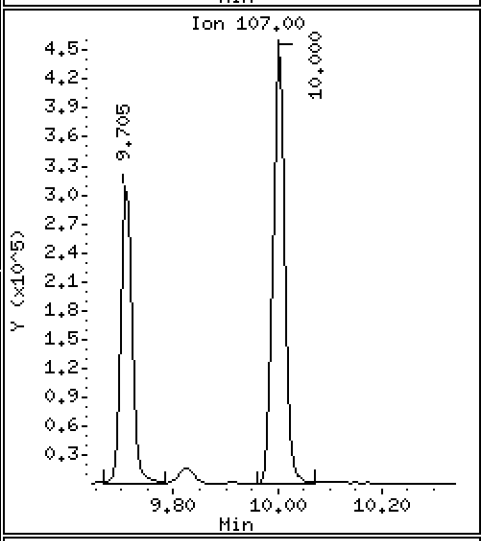


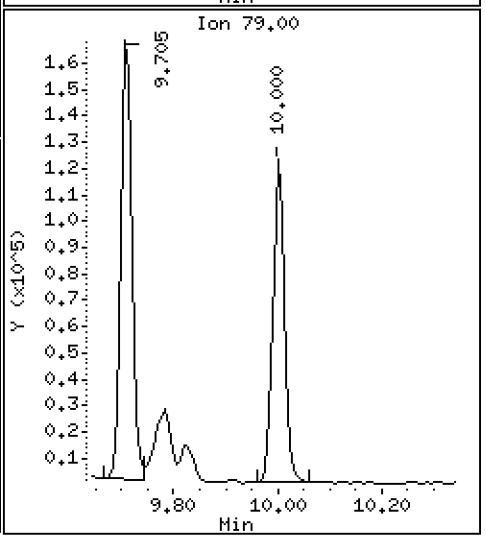












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

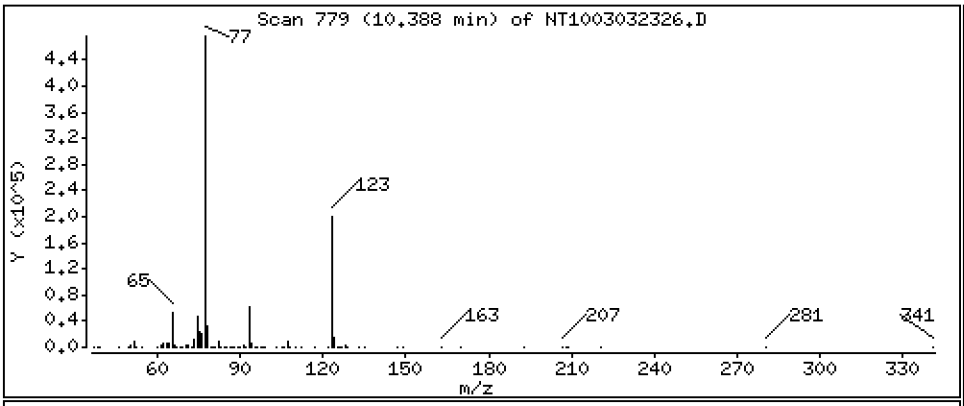
Operator: VTS

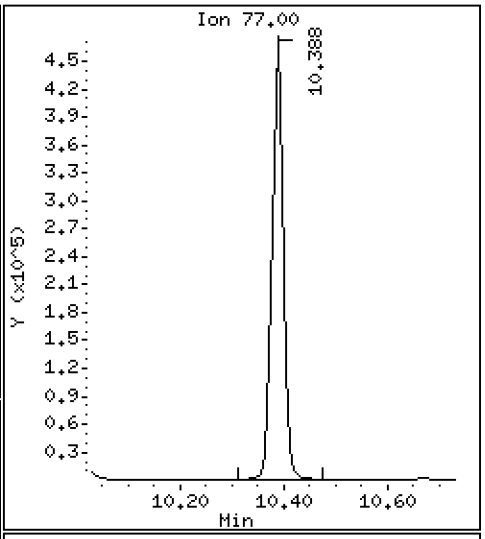
Column phase: ZB-5msi

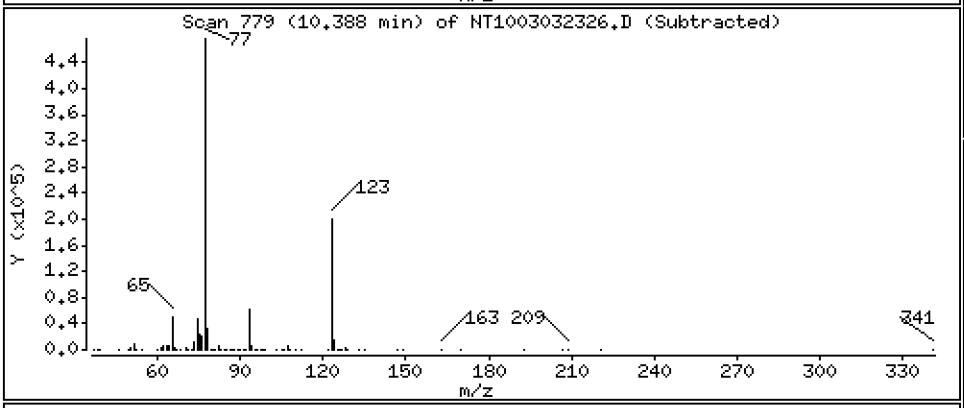
Column diameter: 0.25

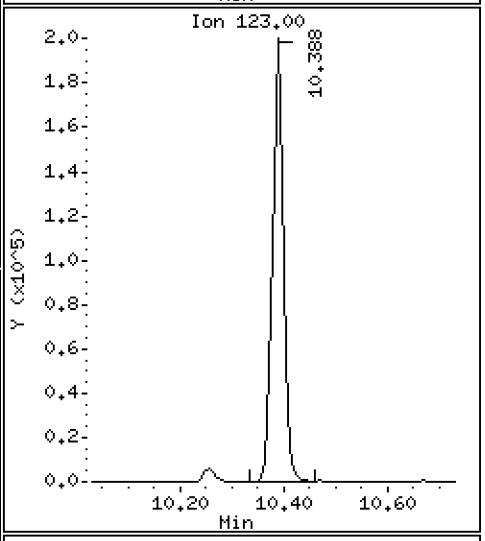
19 Nitrobenzene

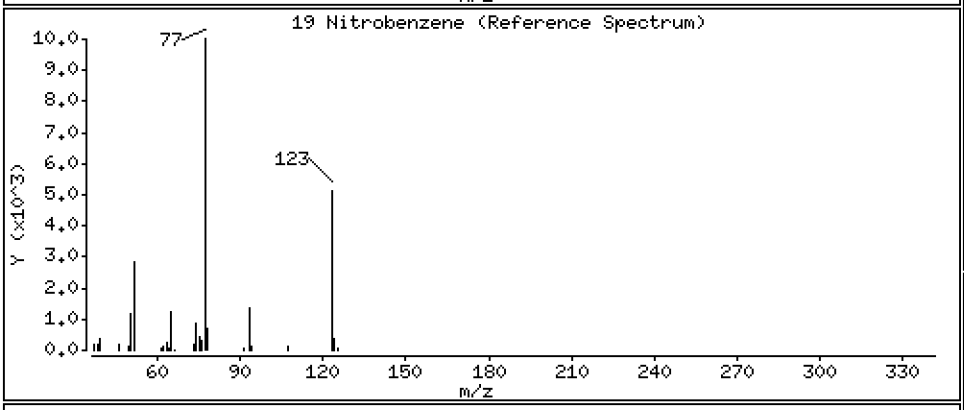
Concentration: 5.148 ug/ml

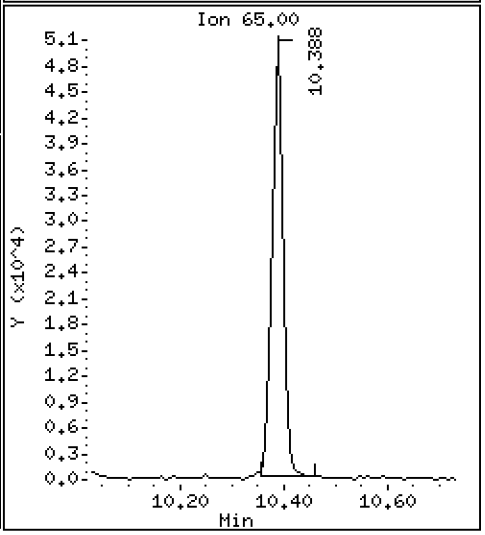


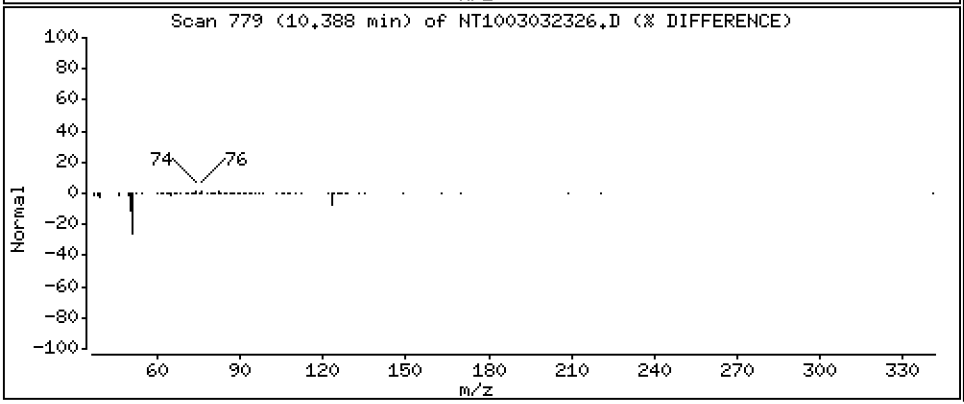












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

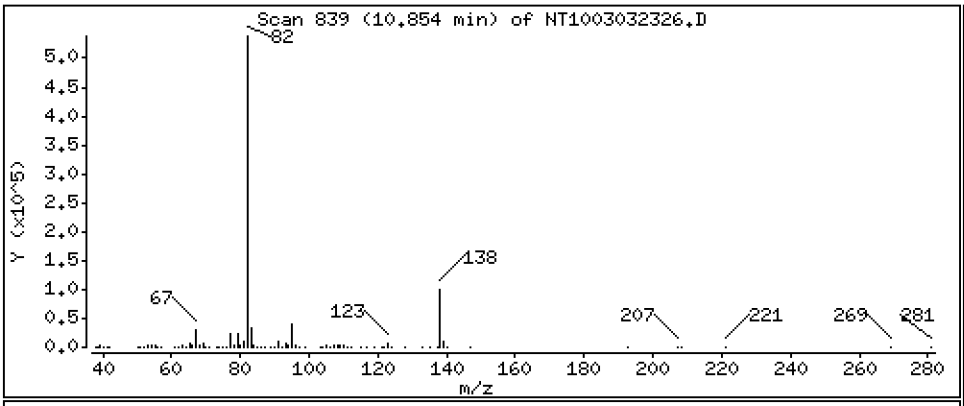
Operator: VTS

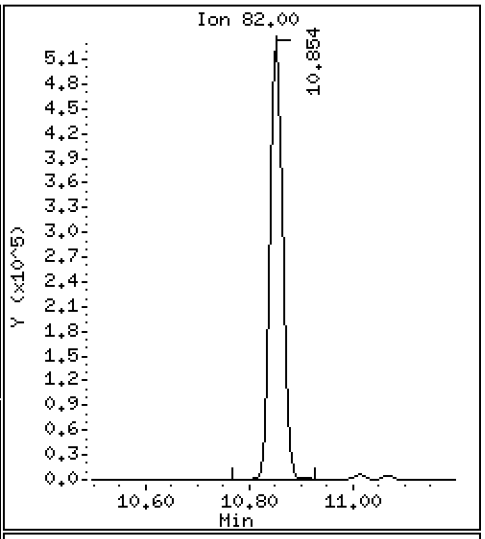
Column phase: ZB-5msi

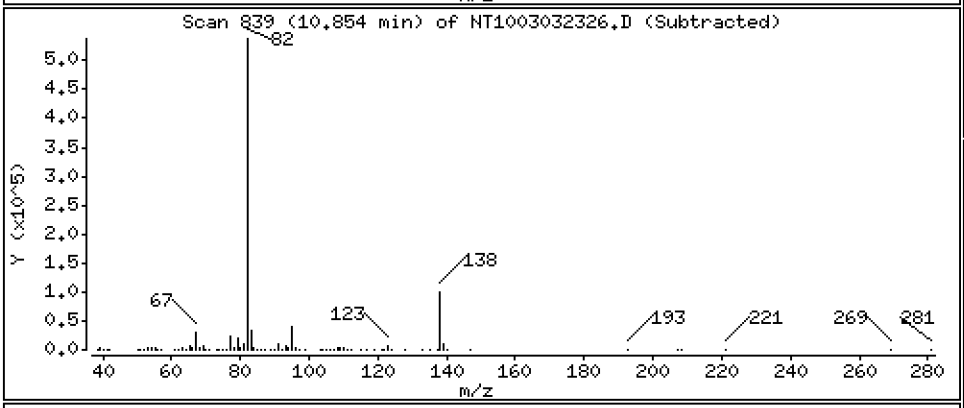
Column diameter: 0.25

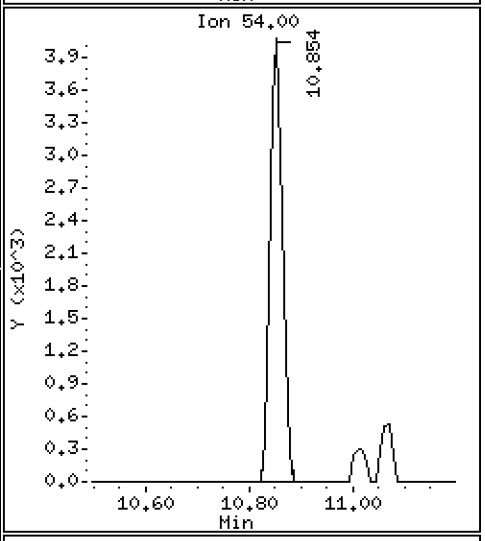
20 Isophorone

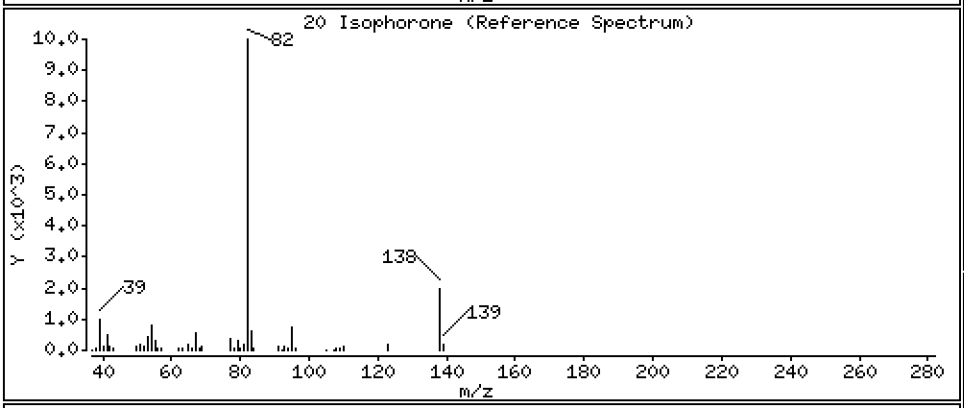
Concentration: 5.583 ug/ml

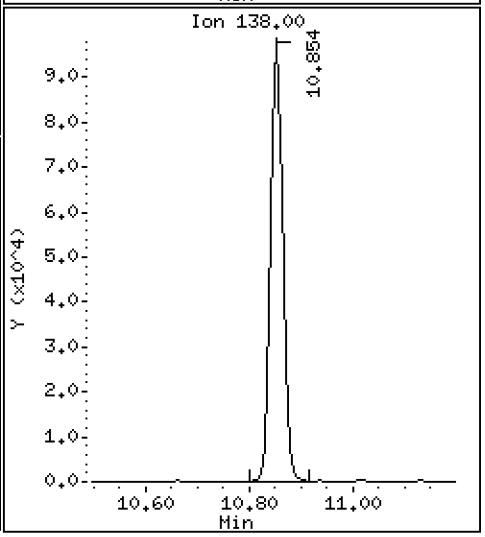


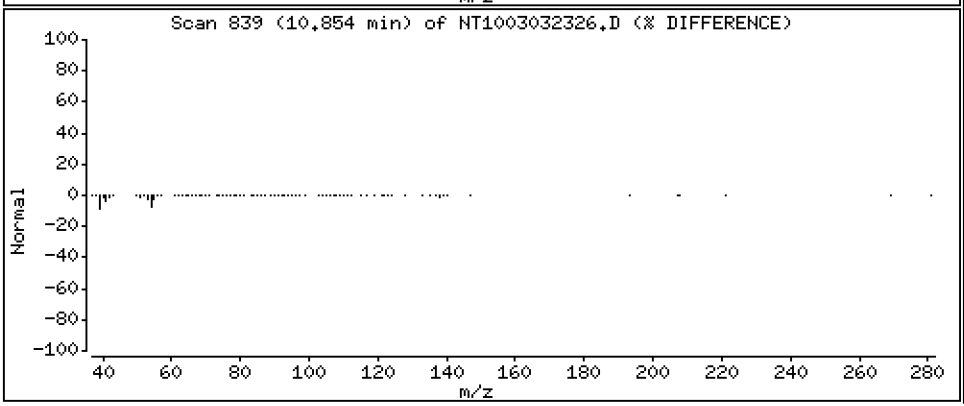












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

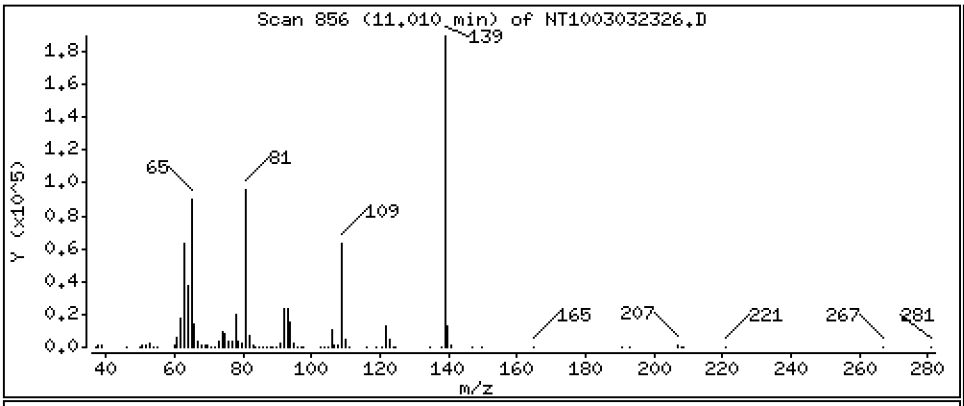
Operator: VTS

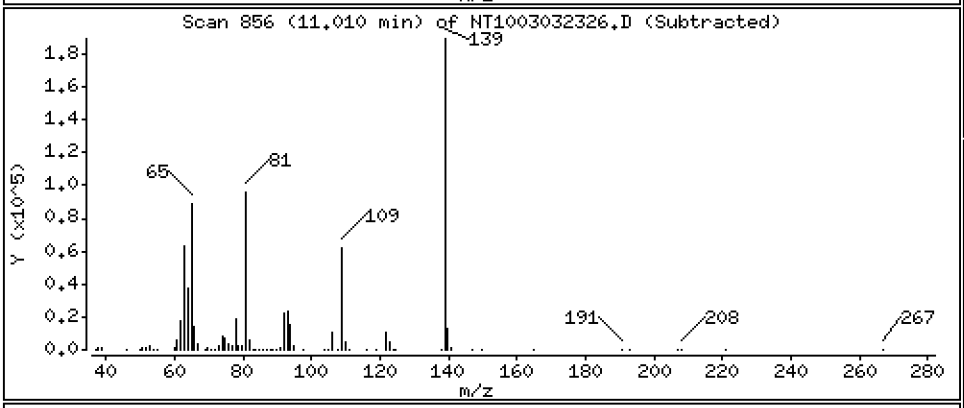
Column phase: ZB-5msi

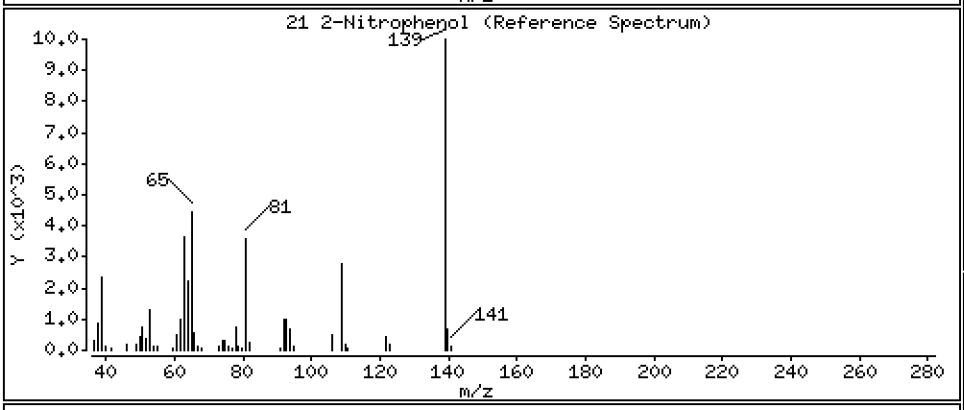
Column diameter: 0.25

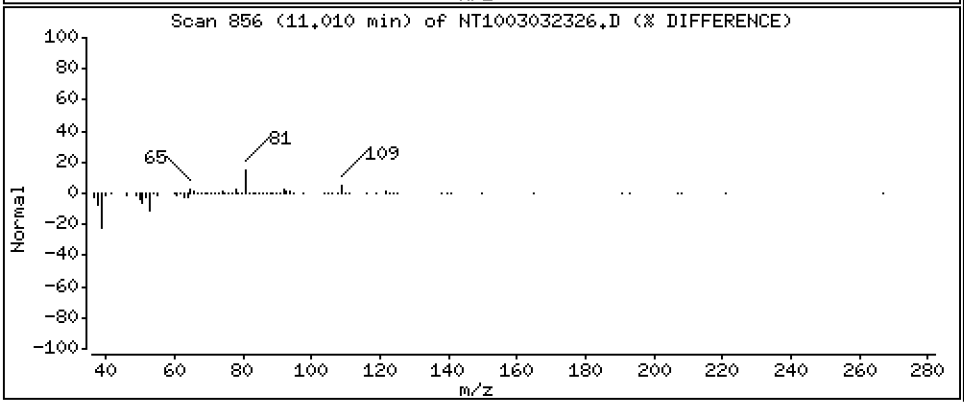
21 2-Nitrophenol

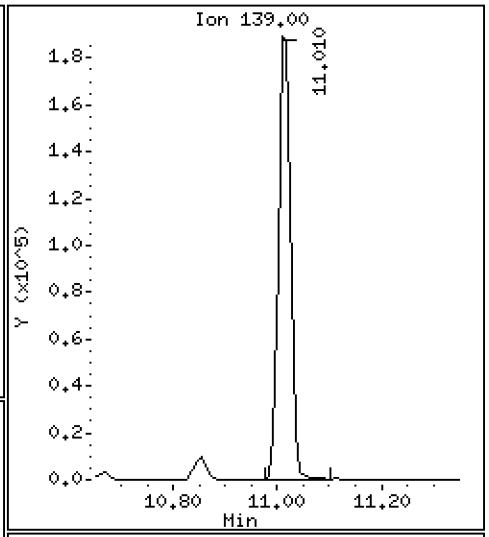
Concentration: 4.177 ug/ml

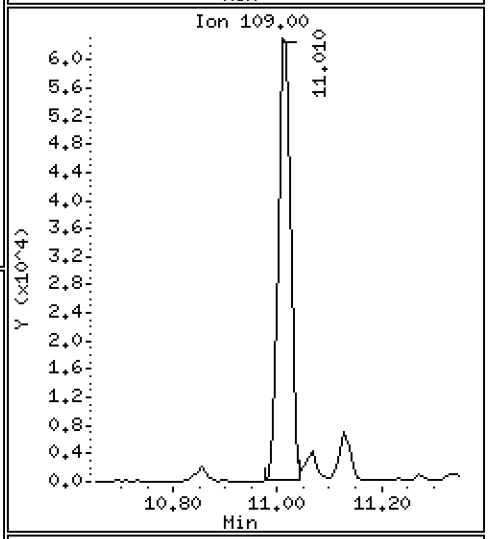


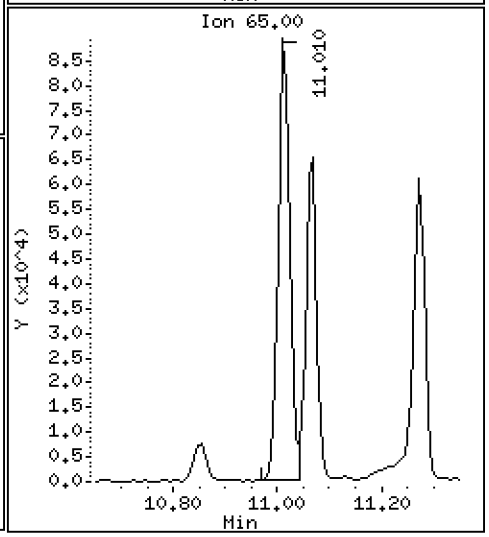












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

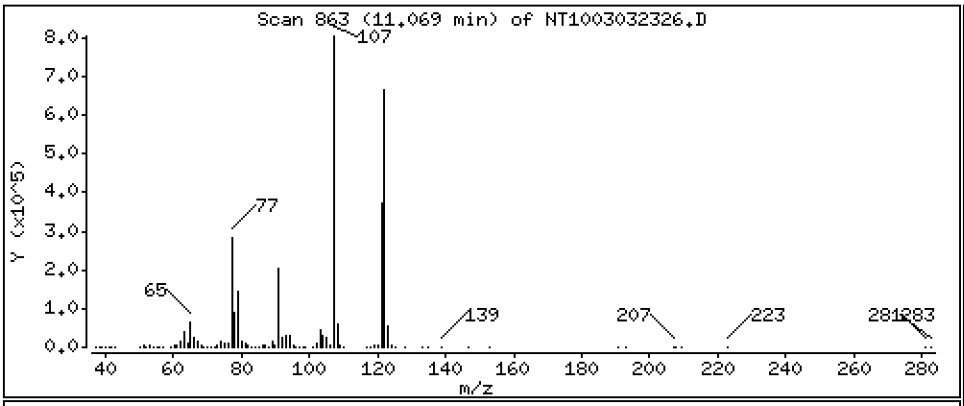
Operator: VTS

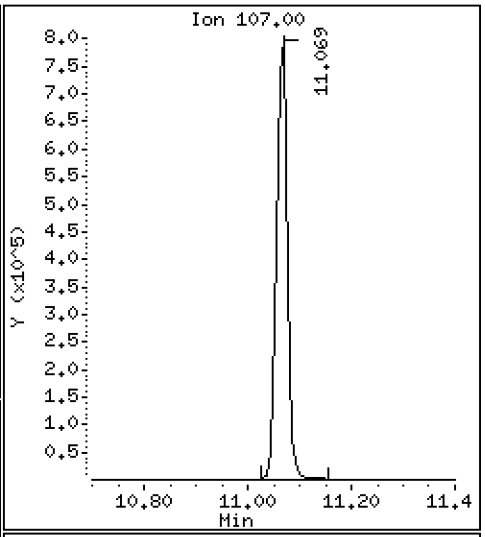
Column phase: ZB-5msi

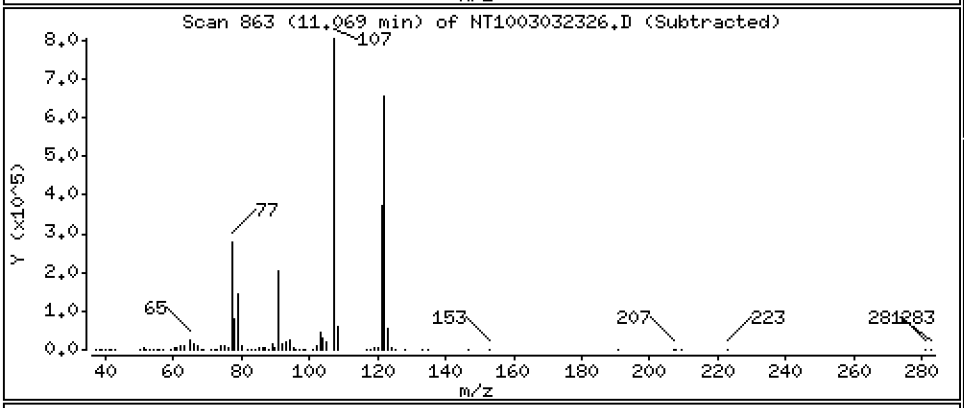
Column diameter: 0.25

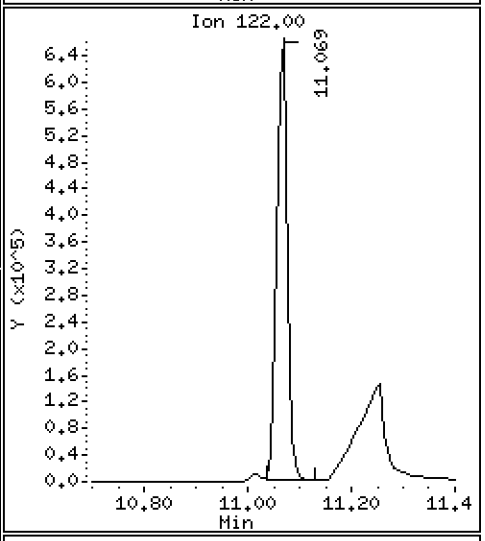
22 2,4-Dimethylphenol

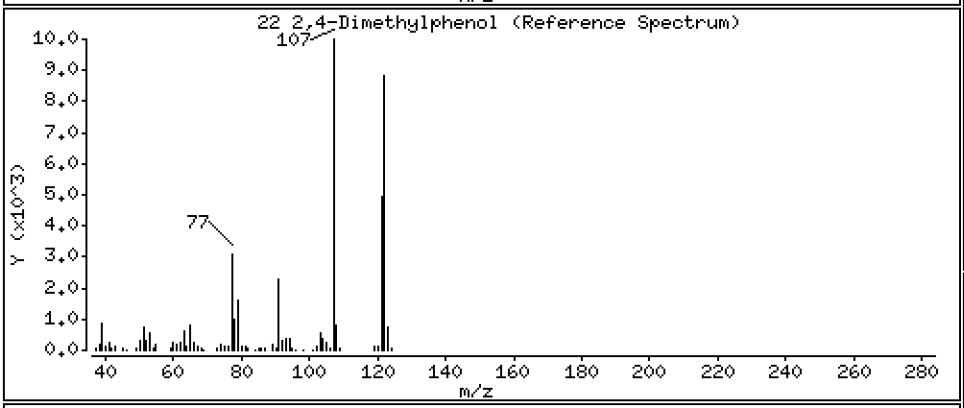
Concentration: 8.975 ug/ml

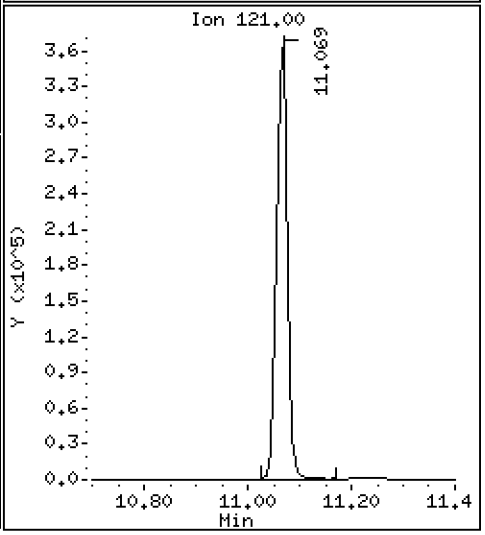


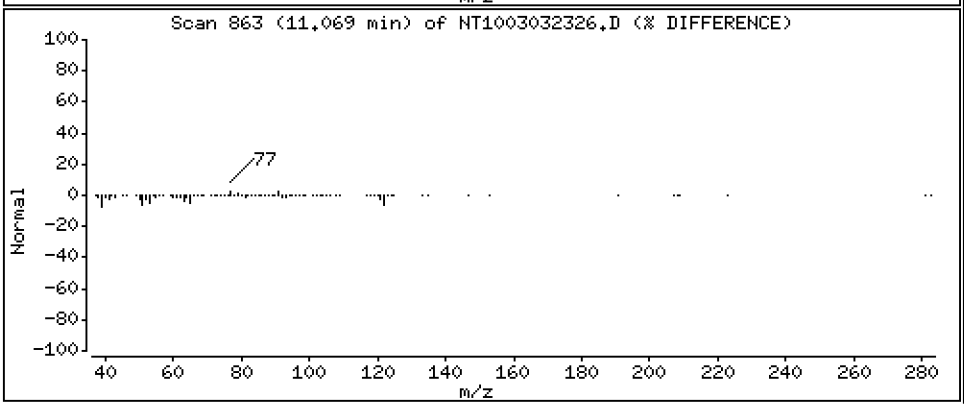












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

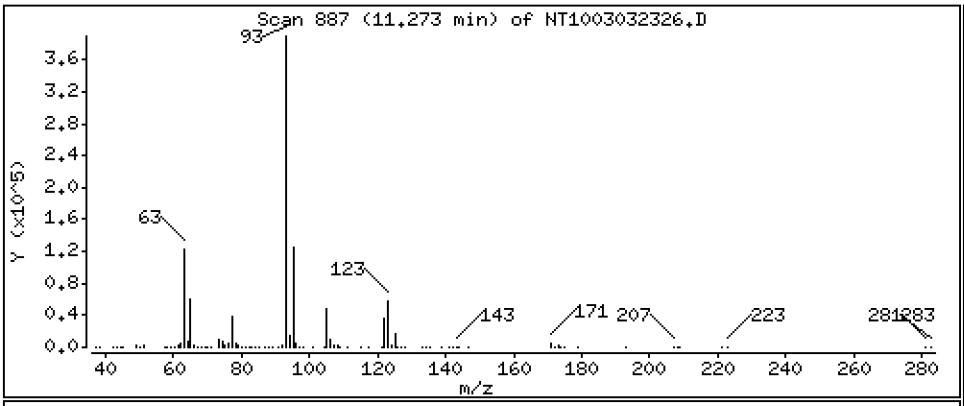
Operator: VTS

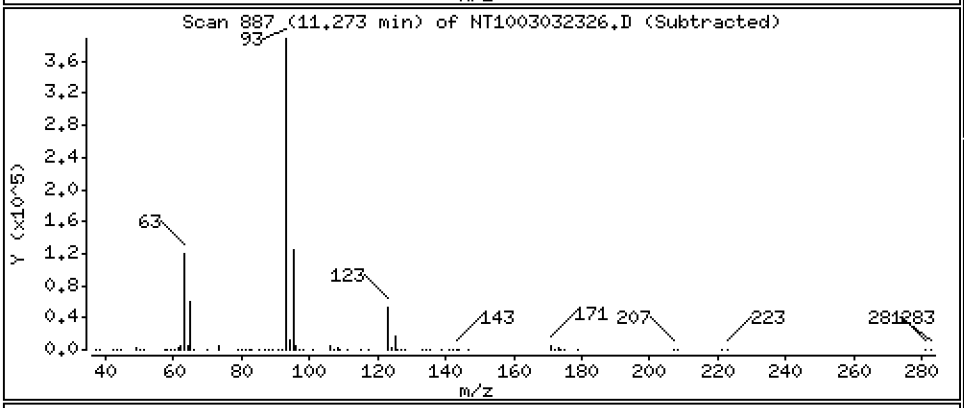
Column phase: ZB-5msi

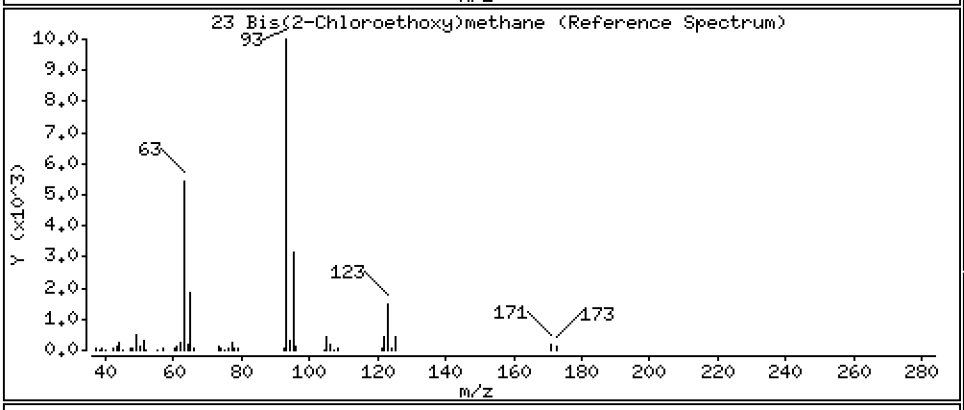
Column diameter: 0.25

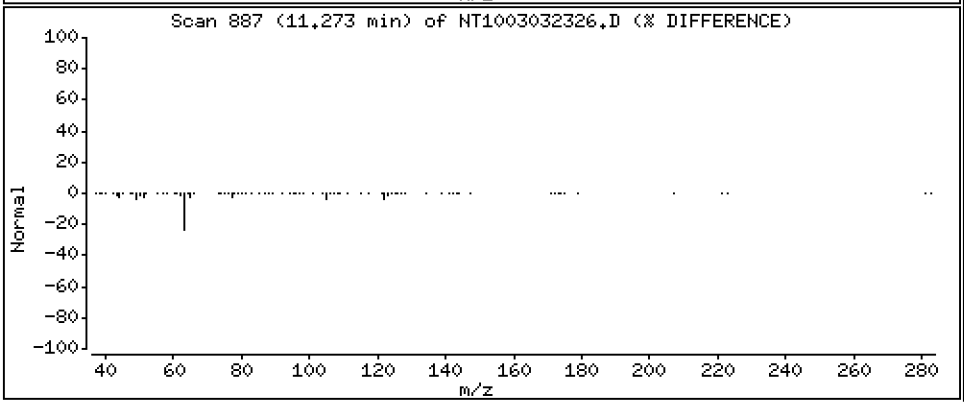
23 Bis(2-Chloroethoxy)methane

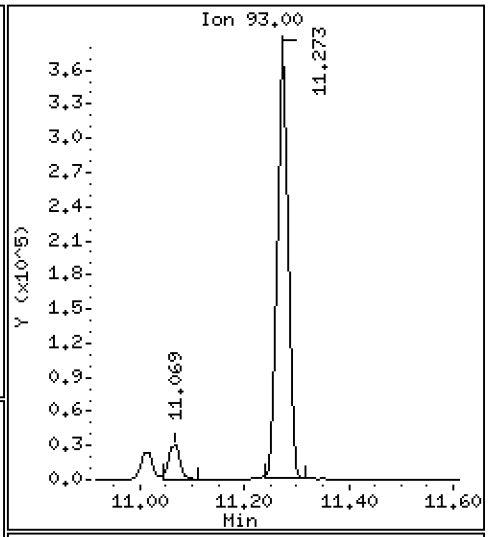
Concentration: 5.126 ug/ml

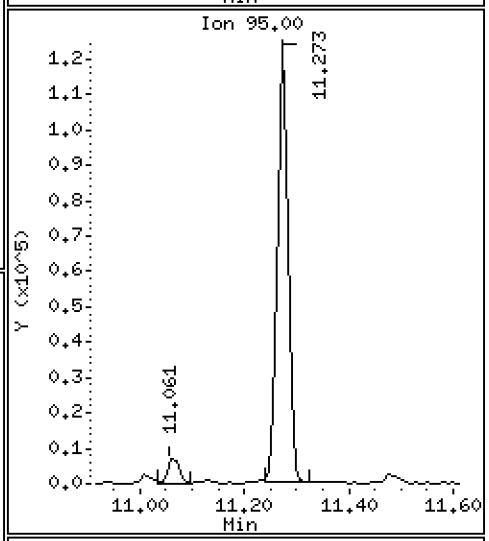


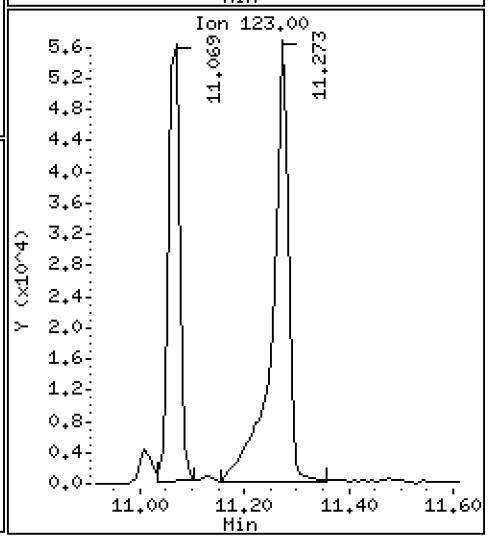












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

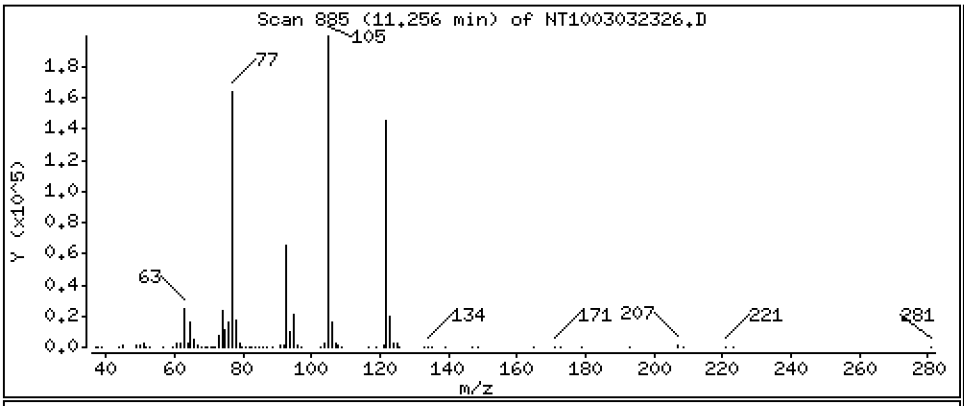
Operator: VTS

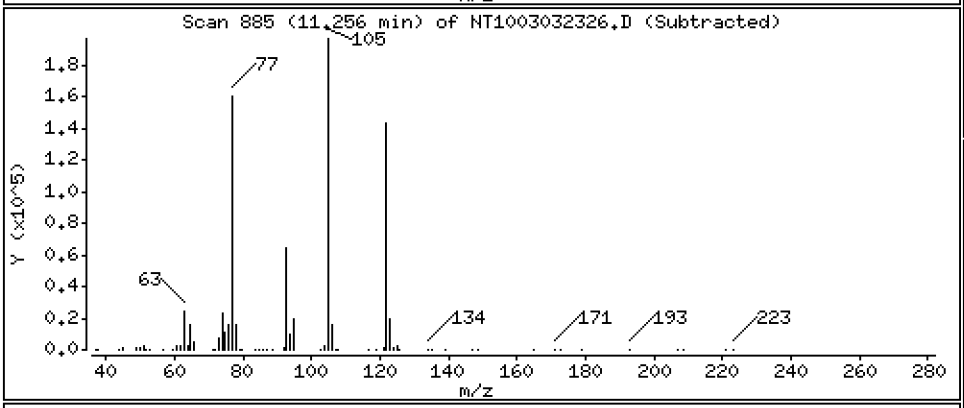
Column phase: ZB-5msi

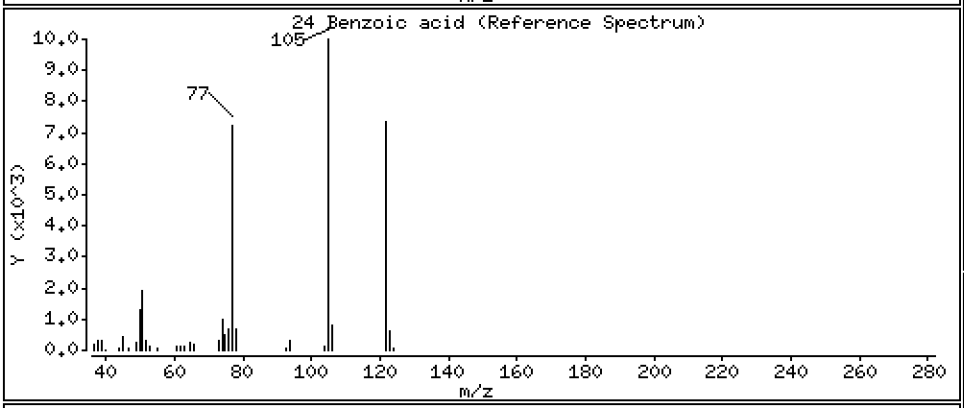
Column diameter: 0.25

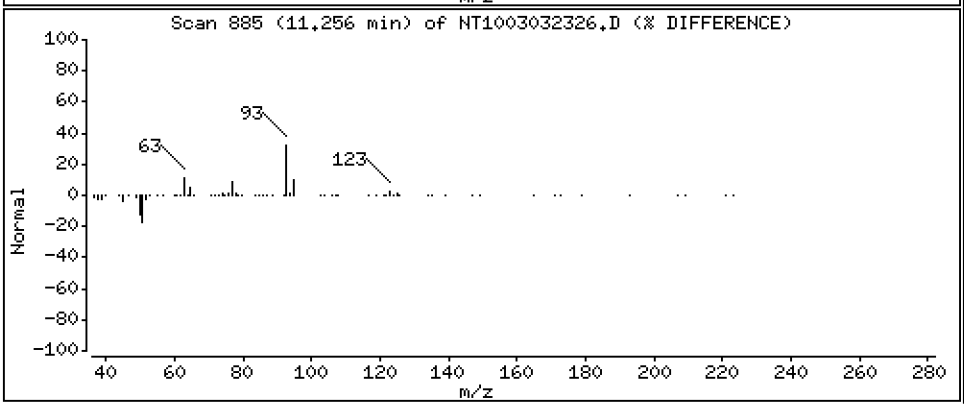
24 Benzoic acid

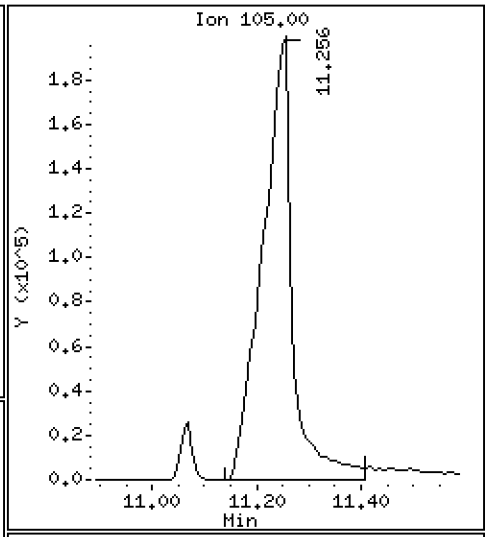
Concentration: 10.26 ug/ml

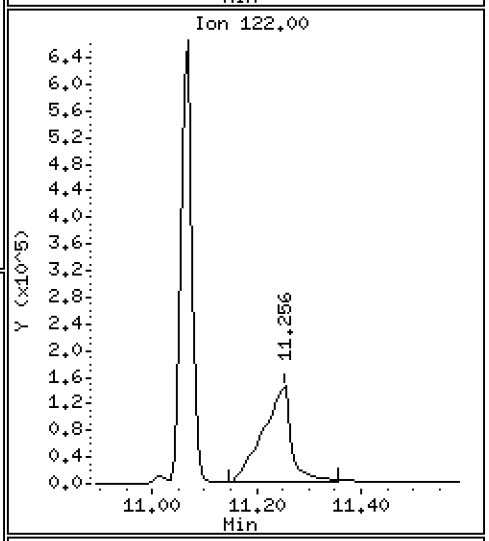


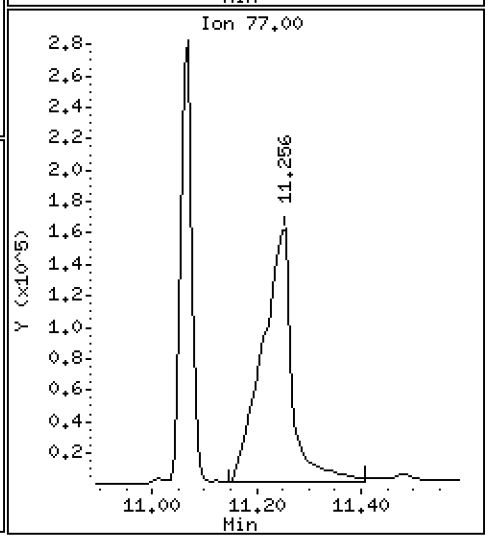












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

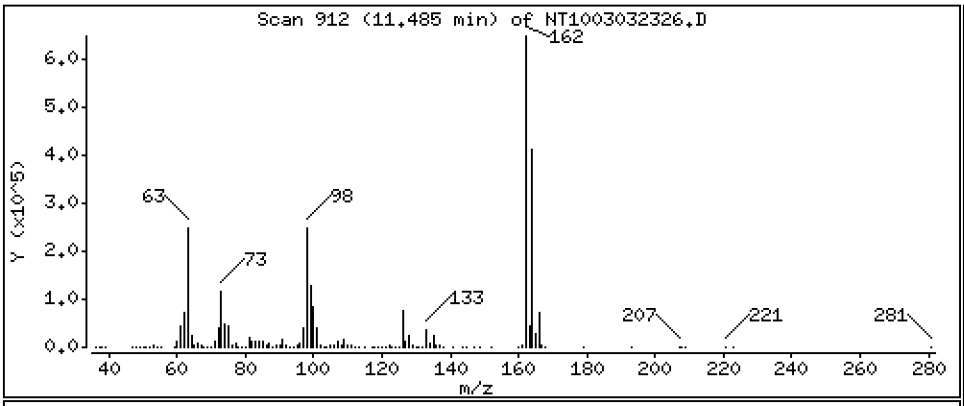
Operator: VTS

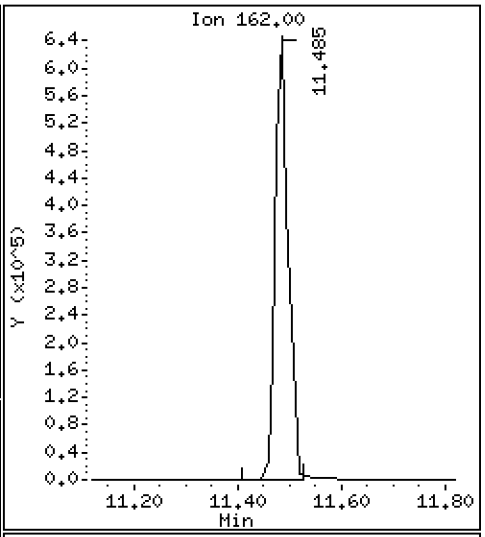
Column phase: ZB-5msi

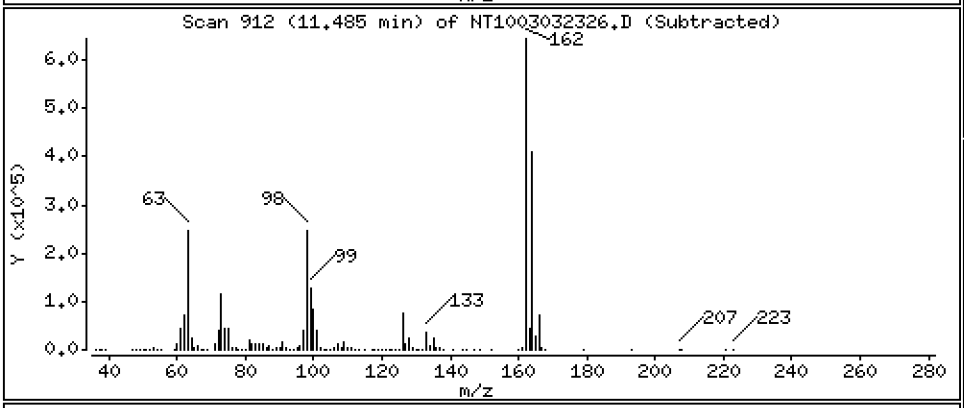
Column diameter: 0.25

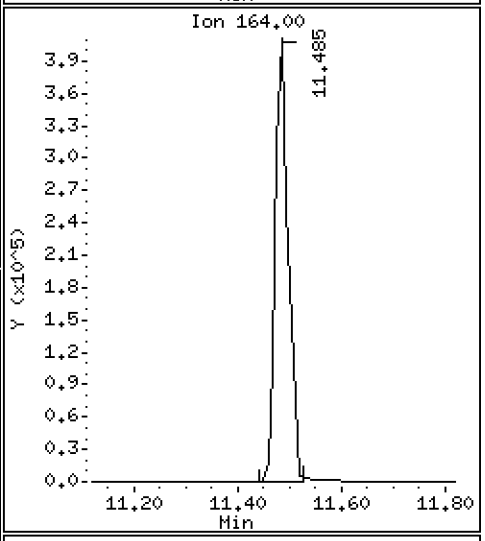
25 2,4-Dichlorophenol

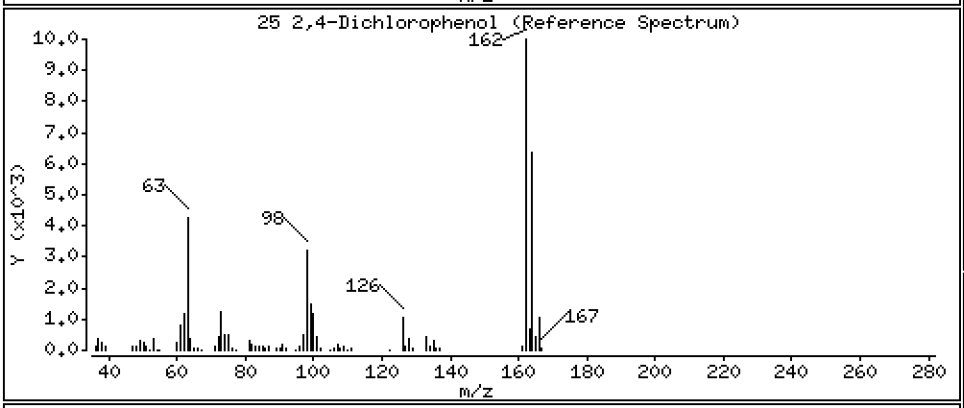
Concentration: 9.844 ug/ml

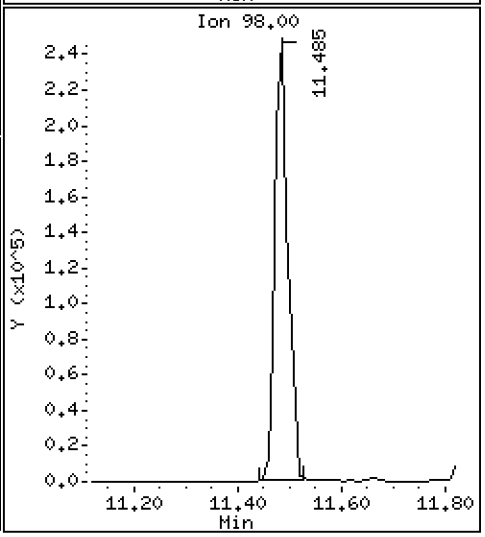


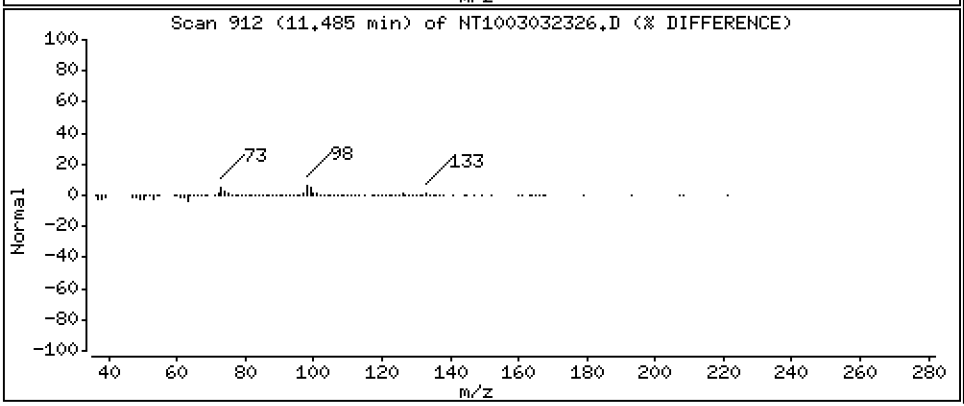












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

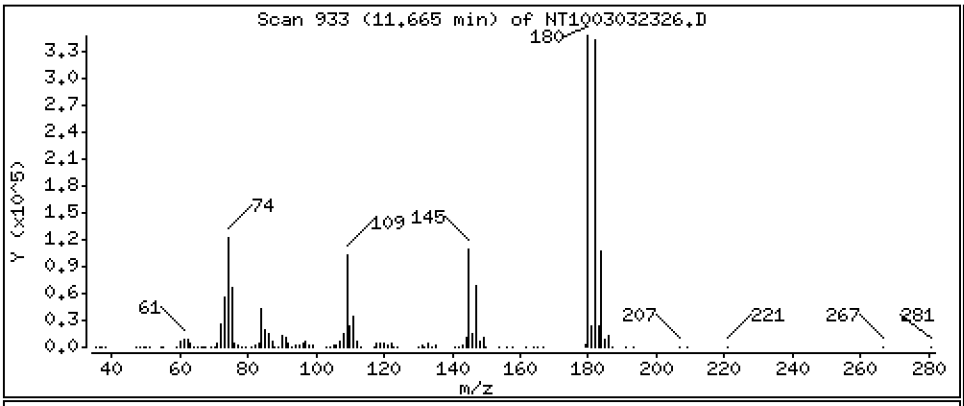
Operator: VTS

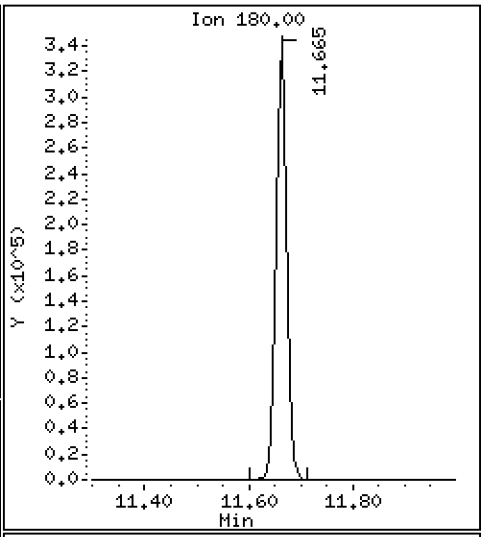
Column phase: ZB-5msi

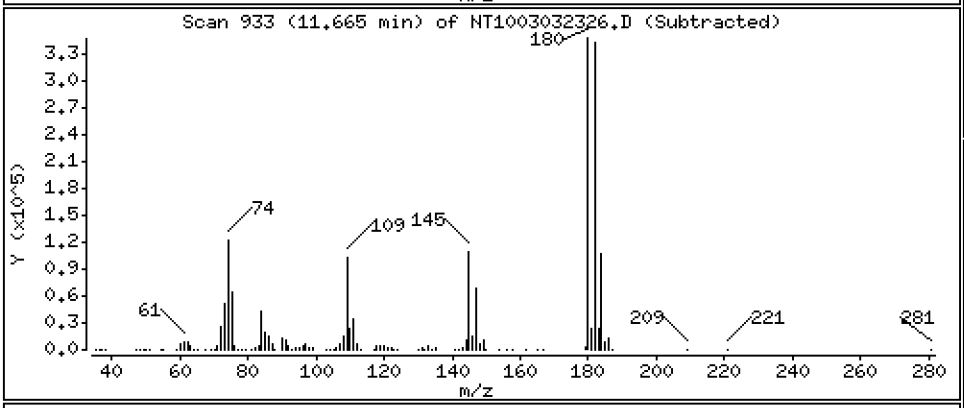
Column diameter: 0.25

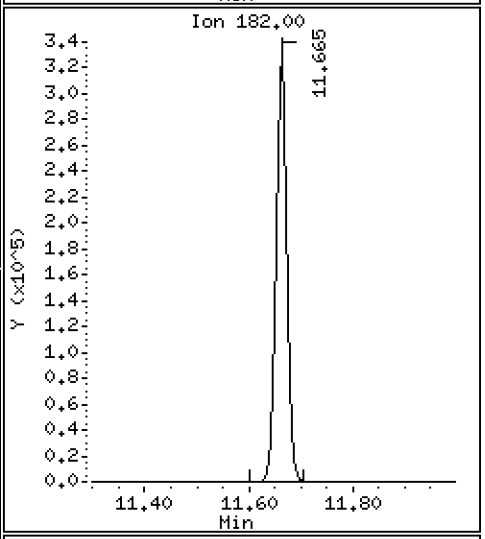
26 1,2,4-Trichlorobenzene

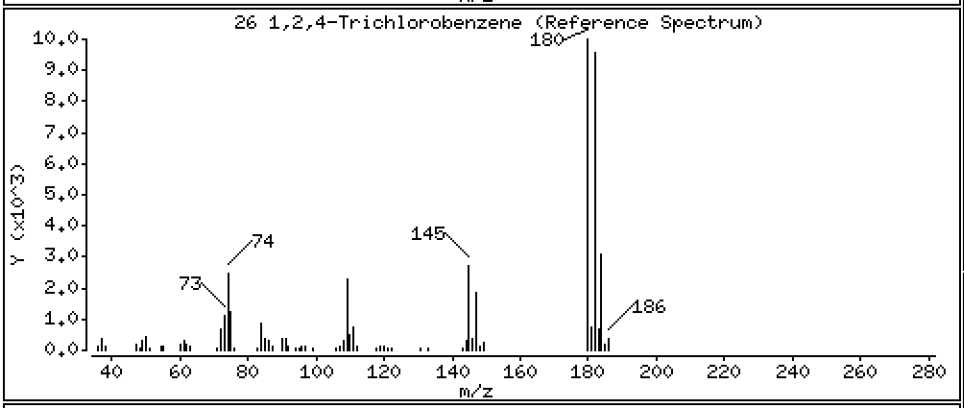
Concentration: 5.097 ug/ml

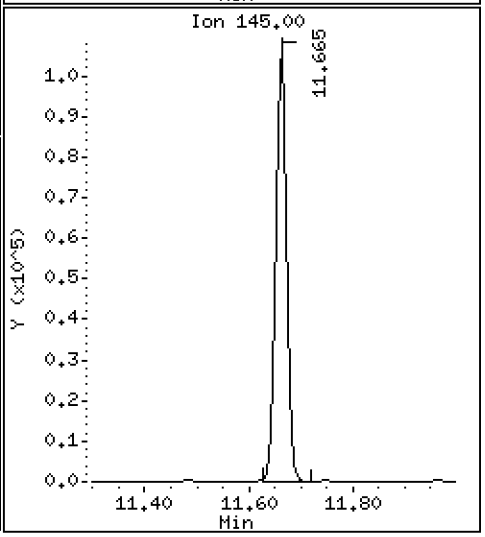


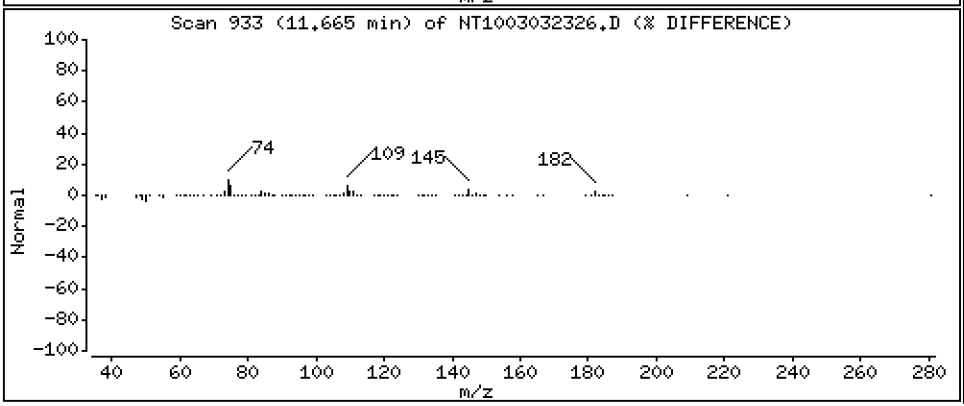












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

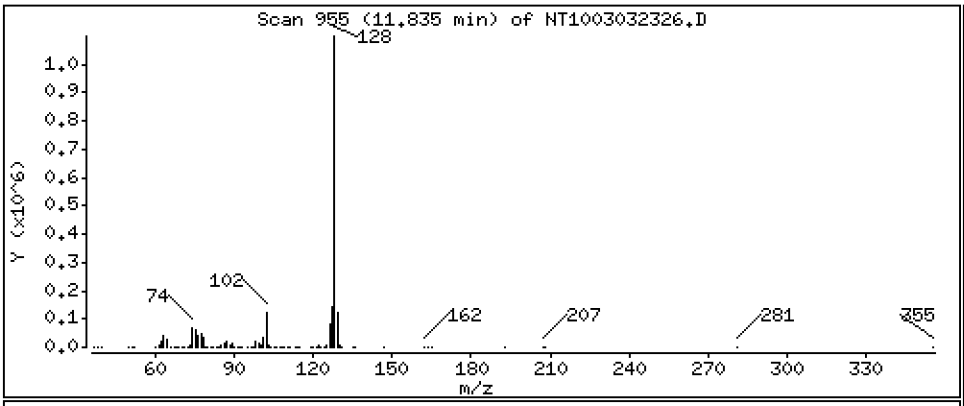
Operator: VTS

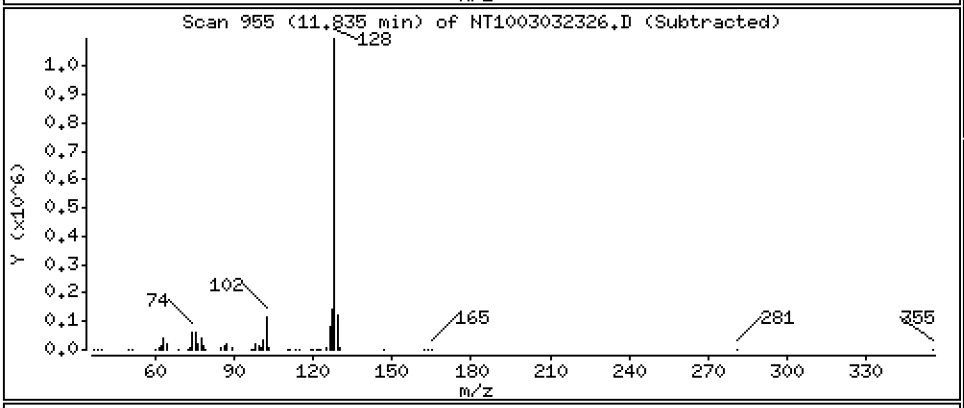
Column phase: ZB-5msi

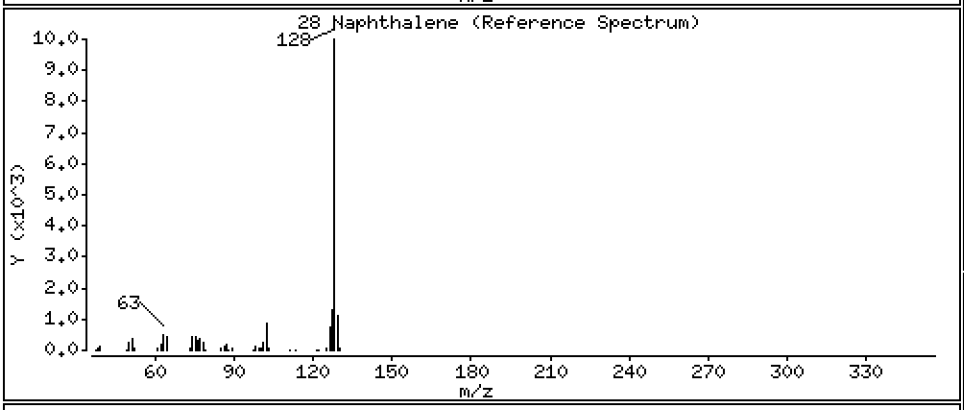
Column diameter: 0.25

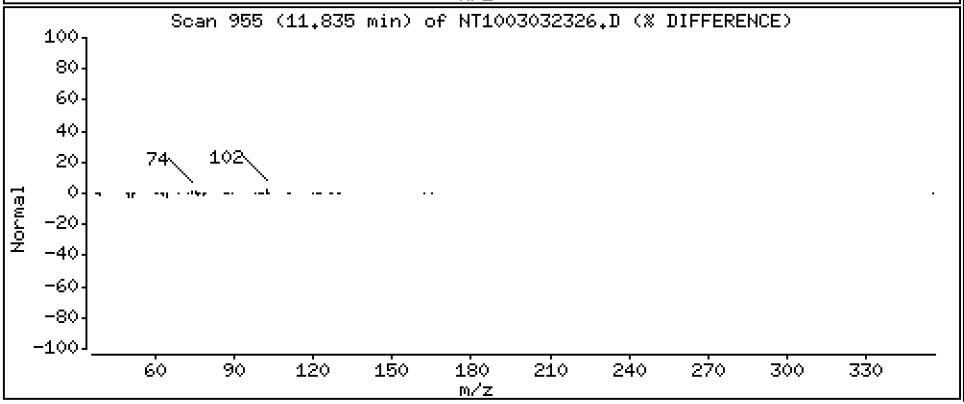
28 Naphthalene

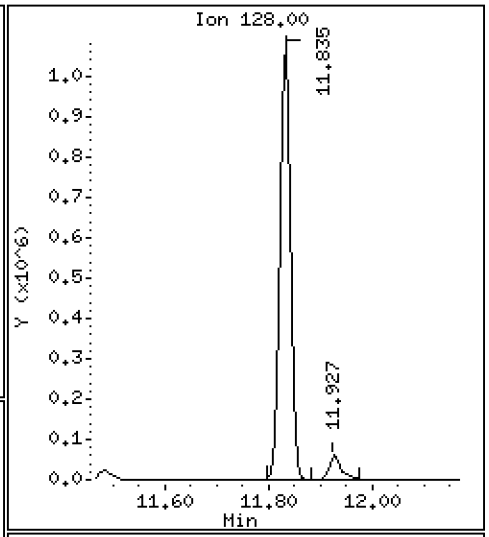
Concentration: 4.769 ug/ml

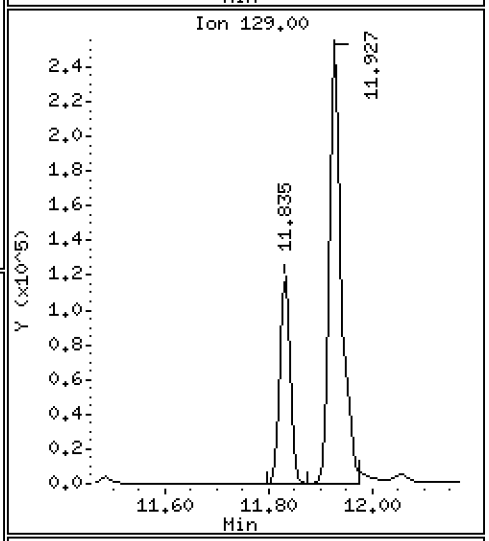


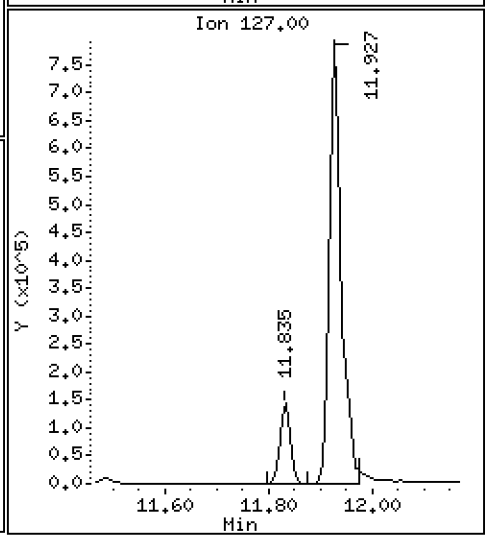












Date : 04-MAR-2023 09:39

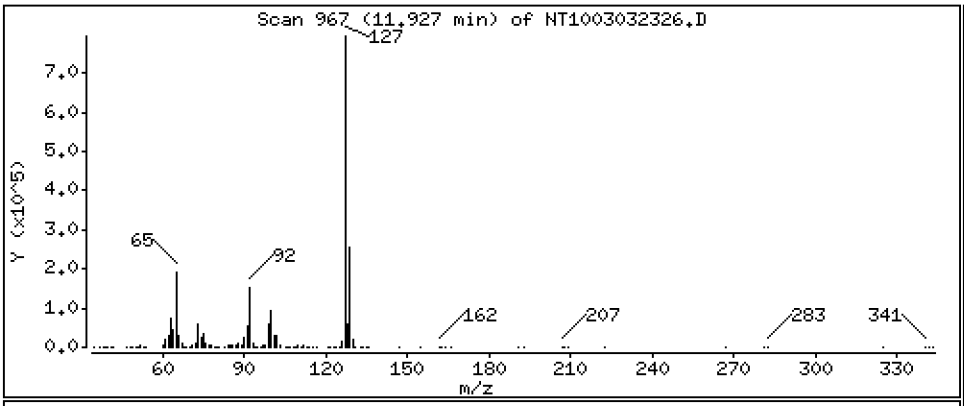
Client ID: Instrument: nt10.i

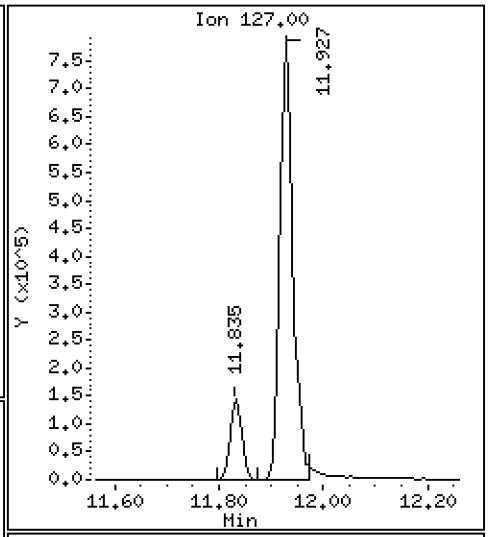
Sample Info: SEQ-CCVFULL

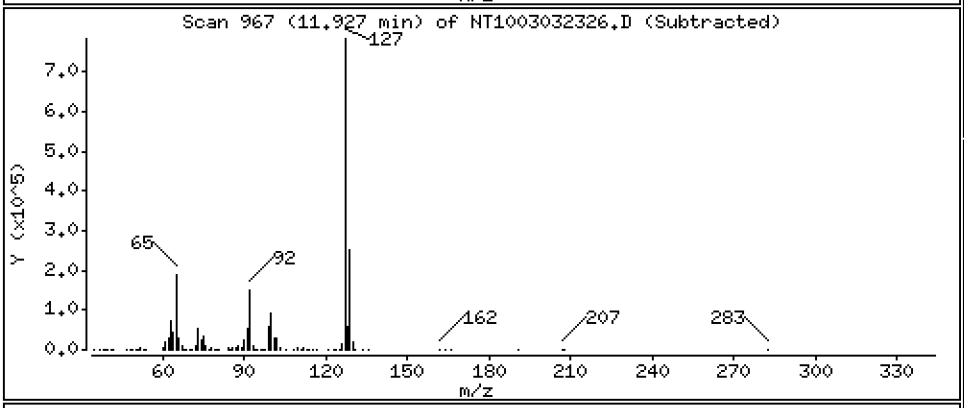
Volume Injected (uL): 1.0 Operator: VTS

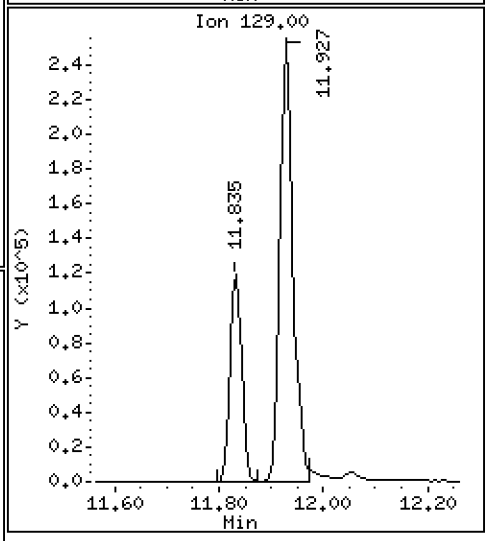
Column phase: ZB-5msi Column diameter: 0.25

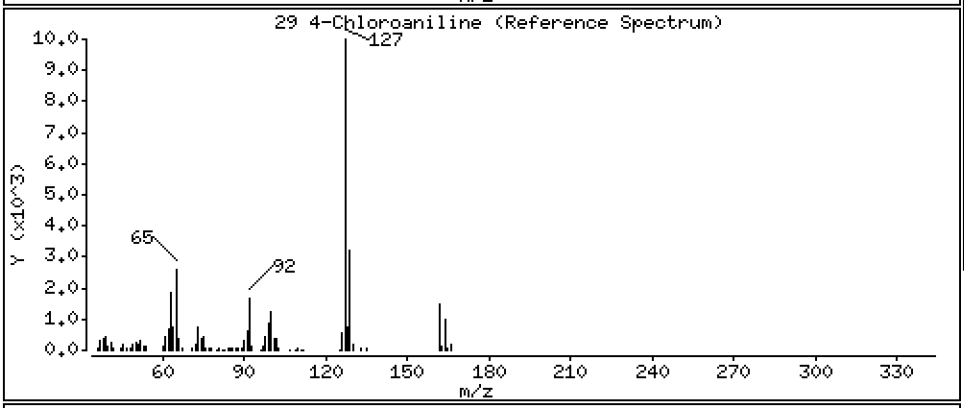
29 4-Chloroaniline Concentration: 8.986 ug/ml

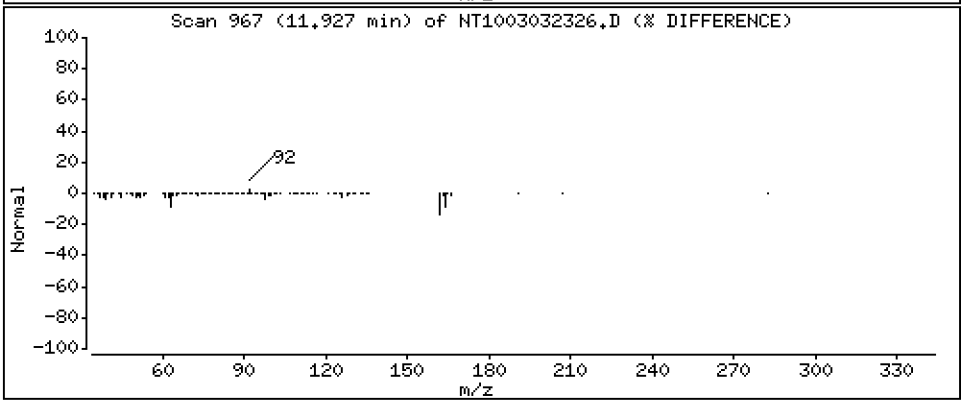












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

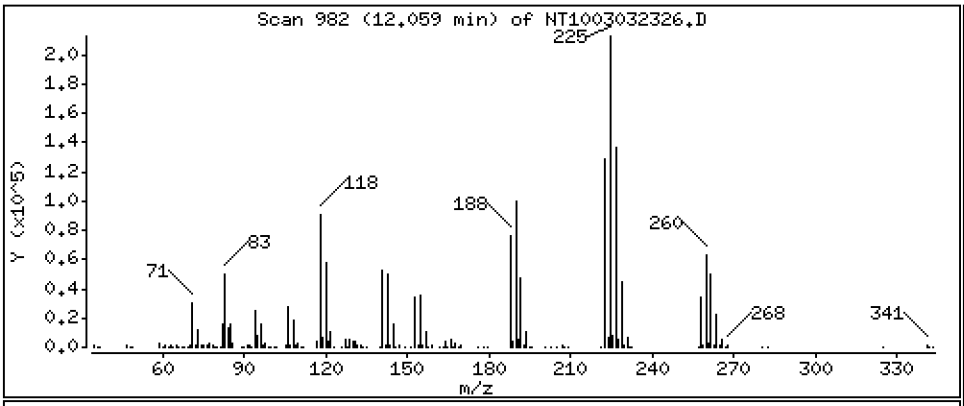
Operator: VTS

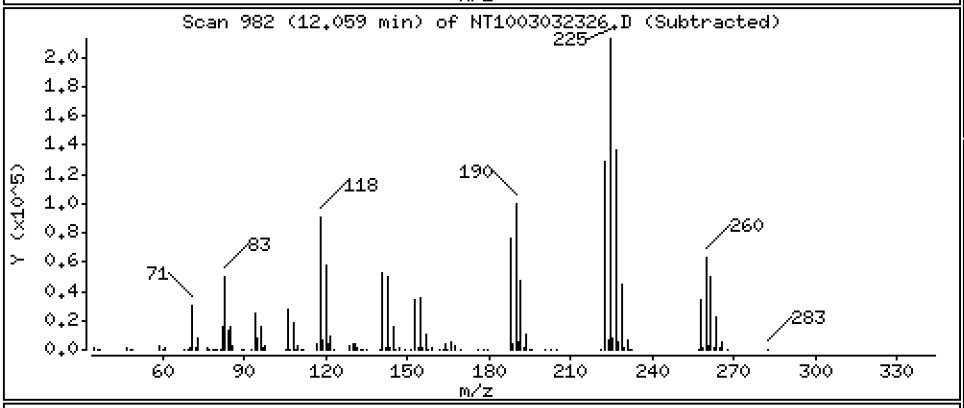
Column phase: ZB-5msi

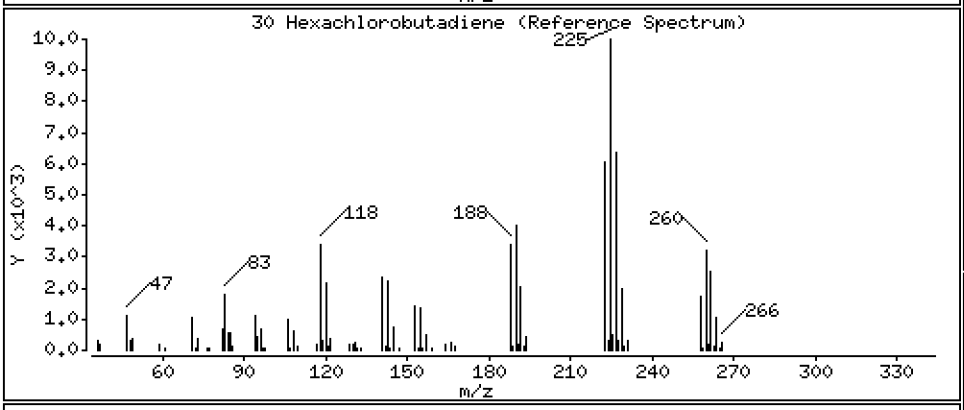
Column diameter: 0.25

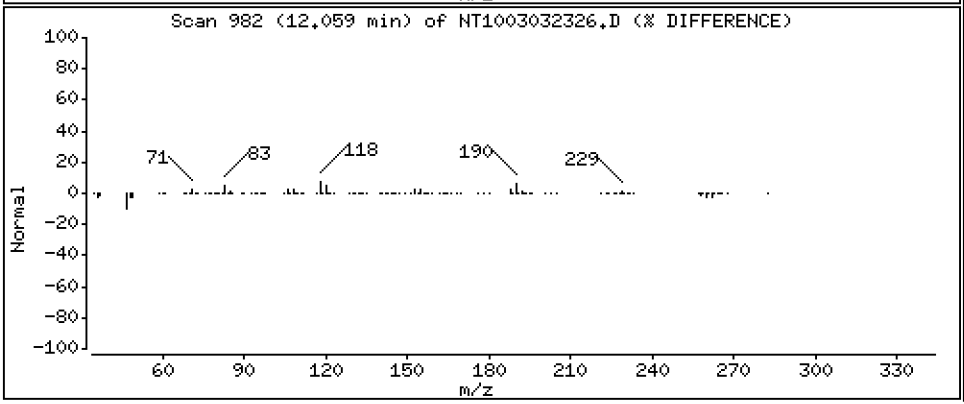
30 Hexachlorobutadiene

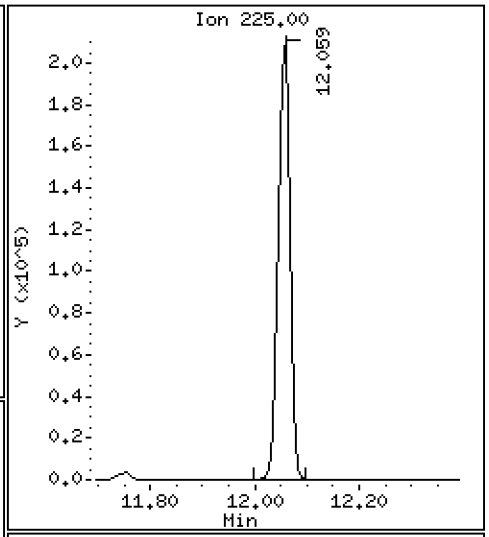
Concentration: 4.321 ug/ml

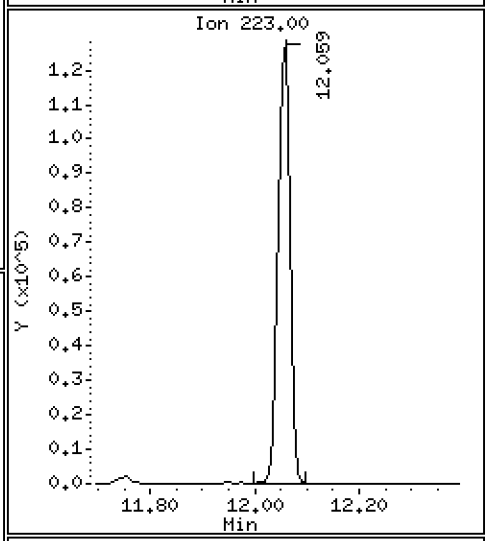


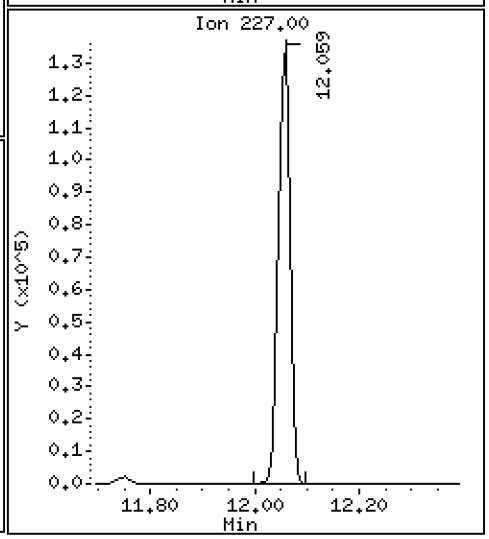












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

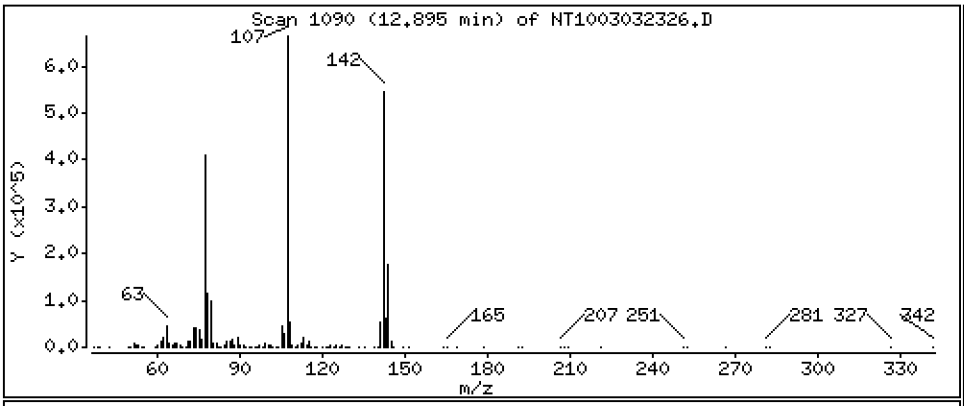
Operator: VTS

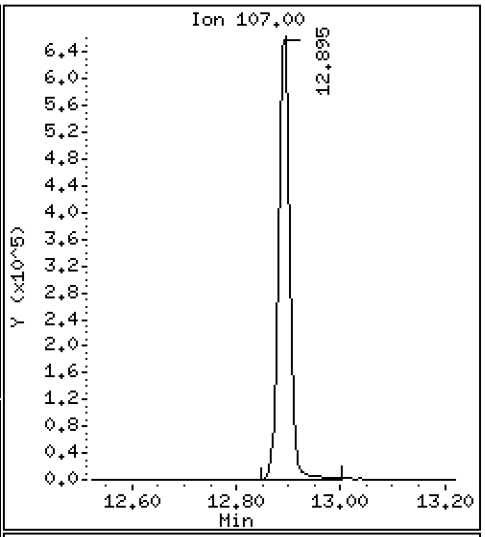
Column phase: ZB-5msi

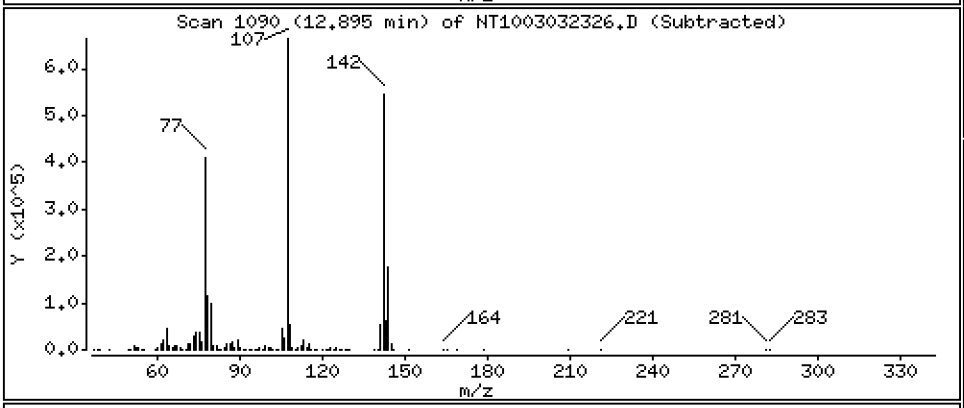
Column diameter: 0.25

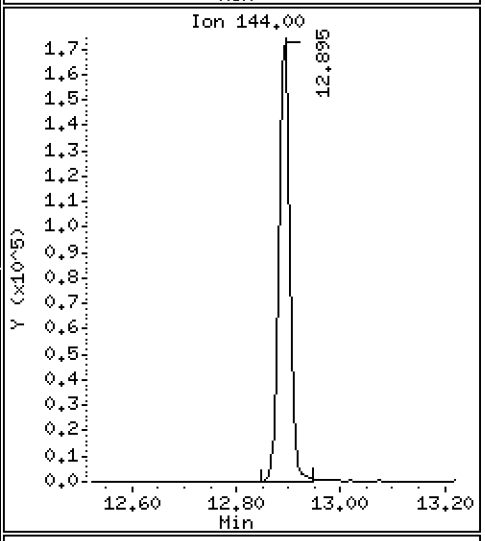
31 4-Chloro-3-methylphenol

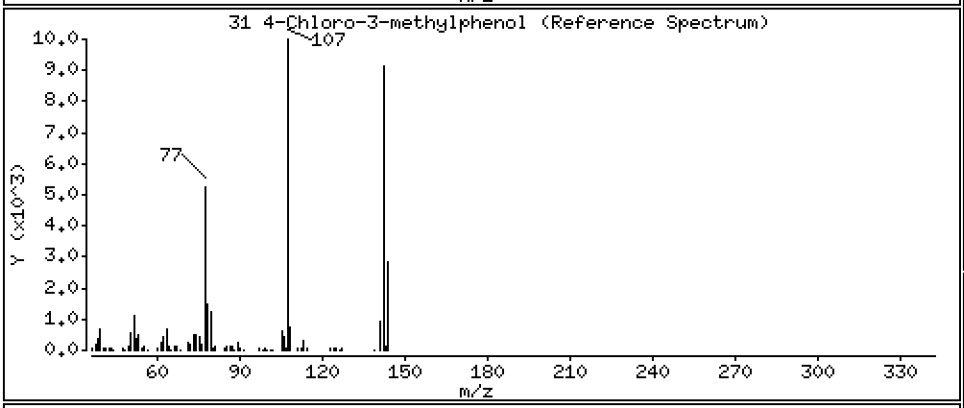
Concentration: 9.308 ug/ml

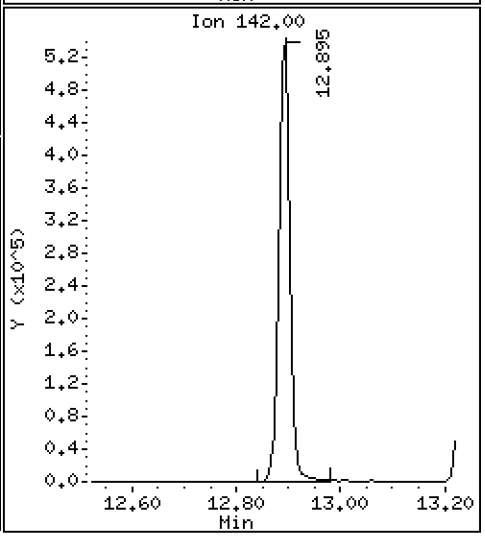


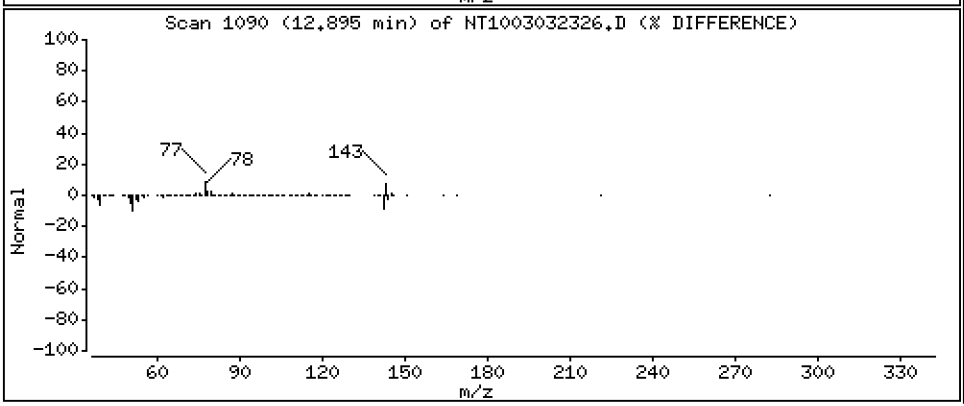












Date : 04-MAR-2023 09:39

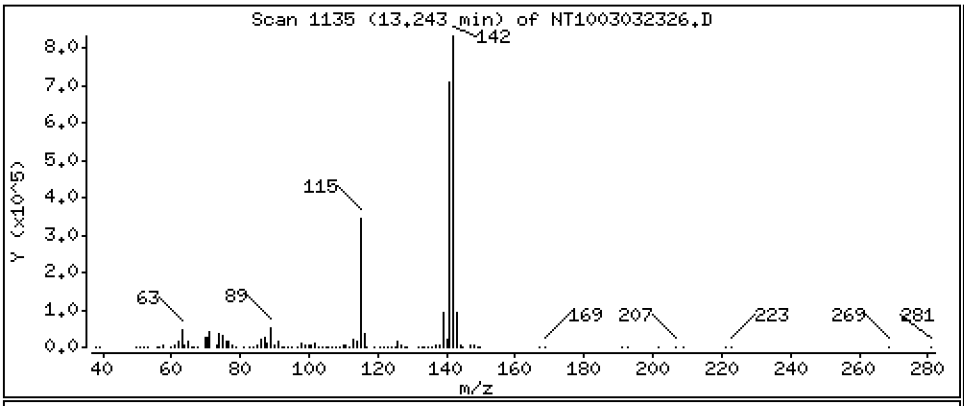
Client ID: Instrument: nt10.i

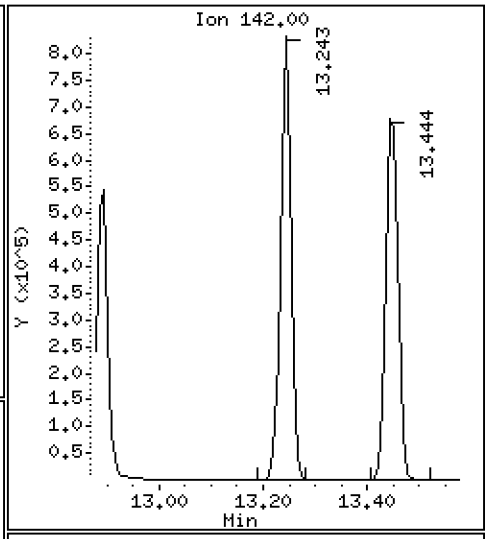
Sample Info: SEQ-CCVFULL

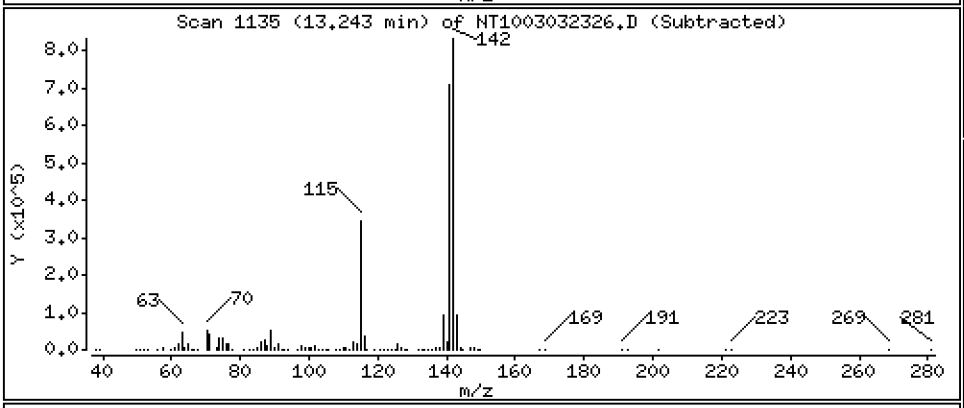
Volume Injected (uL): 1.0 Operator: VTS

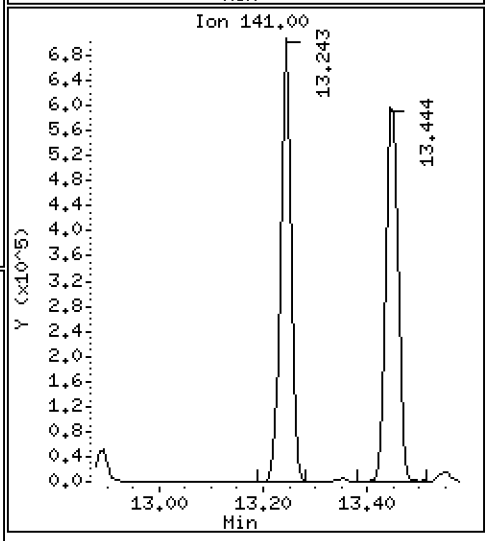
Column phase: ZB-5msi Column diameter: 0.25

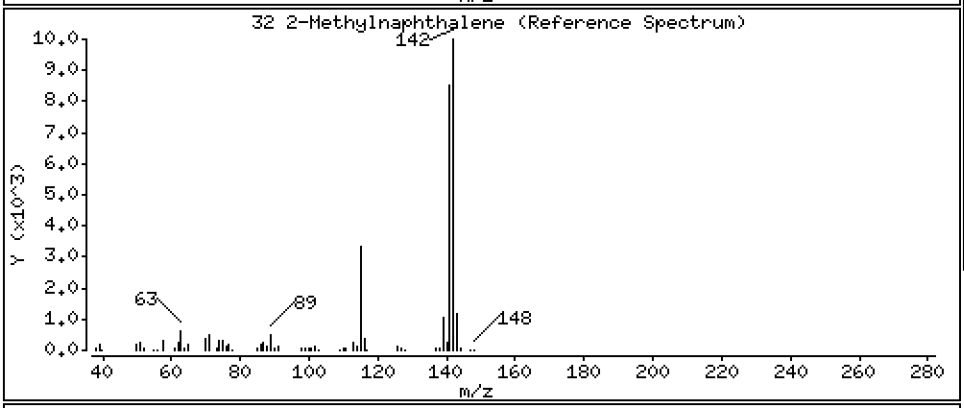
32 2-Methylnaphthalene Concentration: 4.975 ug/ml

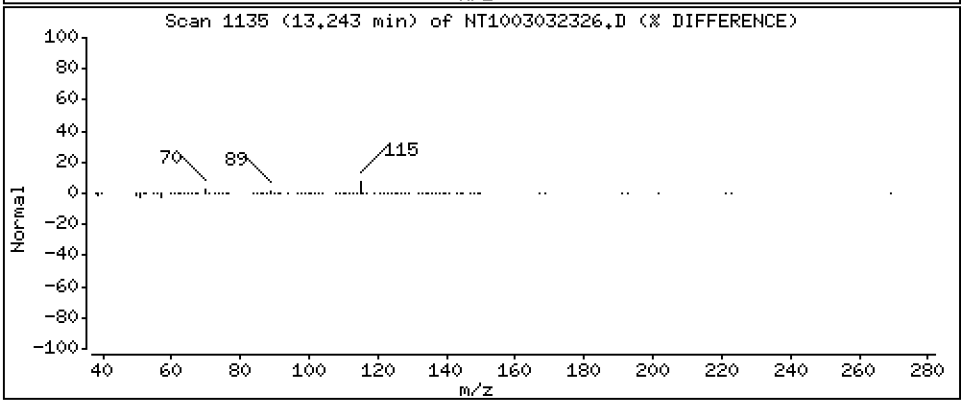












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

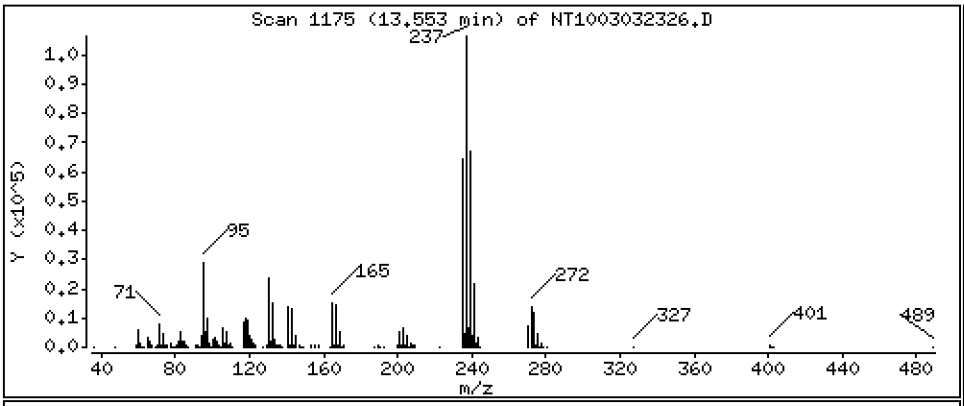
Operator: VTS

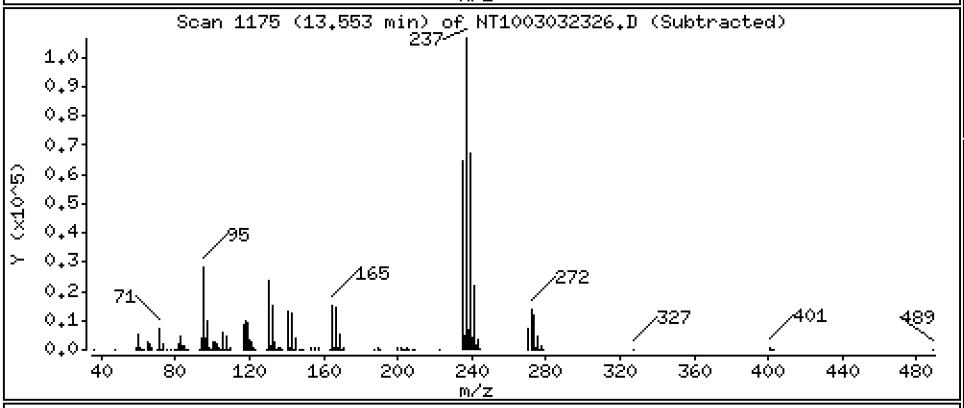
Column phase: ZB-5msi

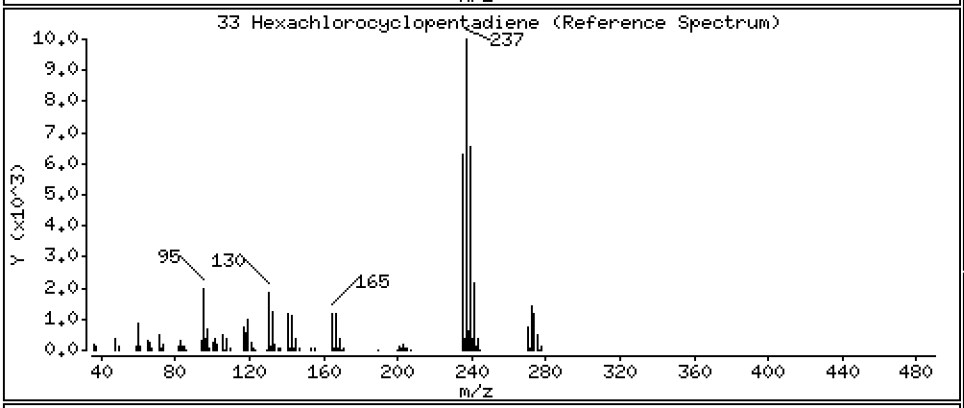
Column diameter: 0.25

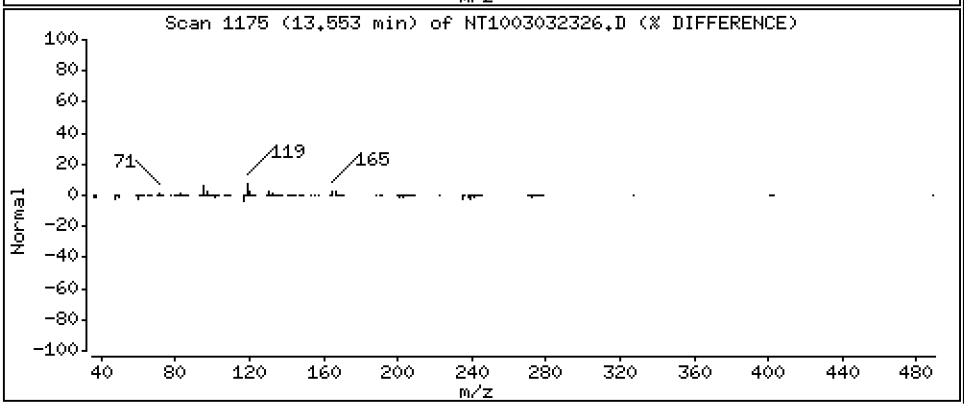
33 Hexachlorocyclopentadiene

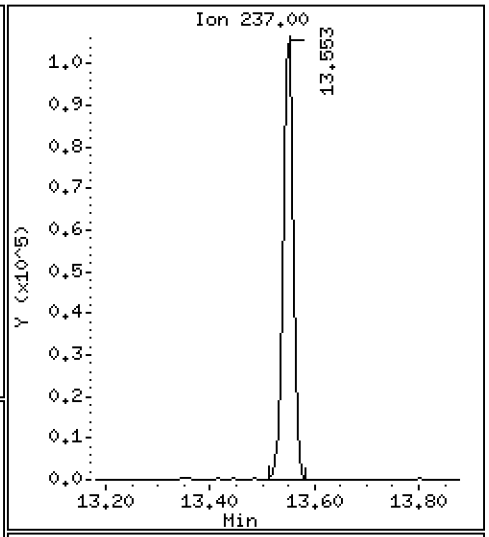
Concentration: 6.442 ug/ml

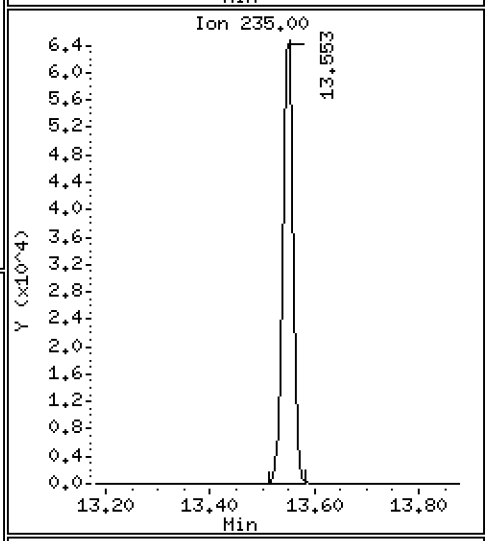


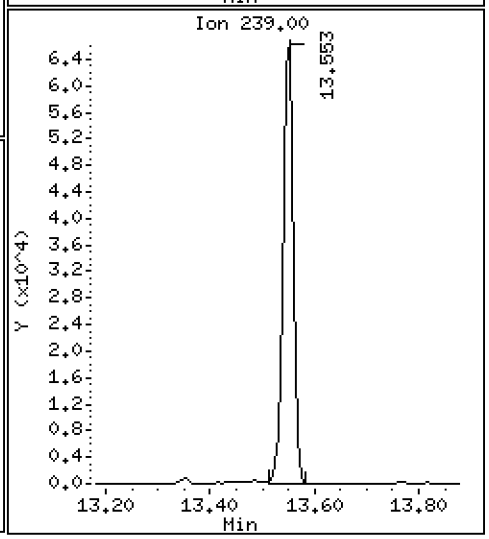












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

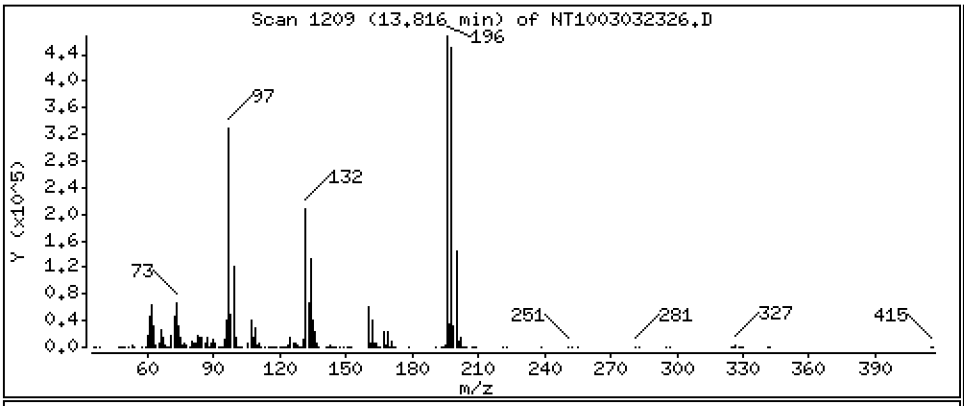
Operator: VTS

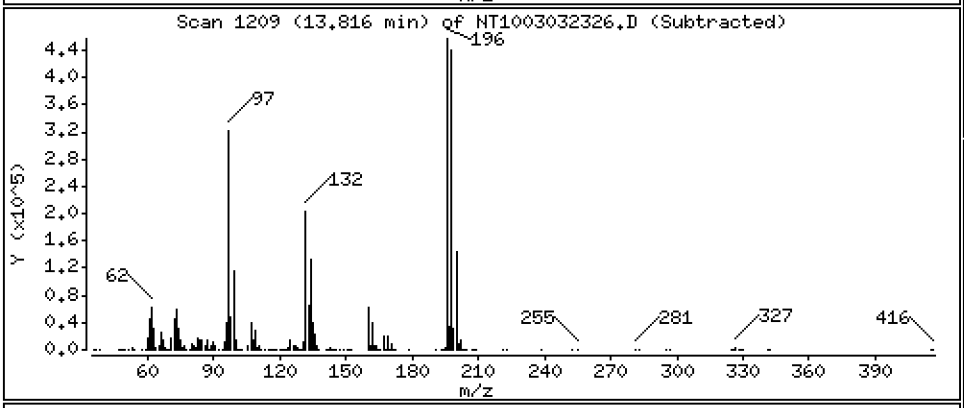
Column phase: ZB-5msi

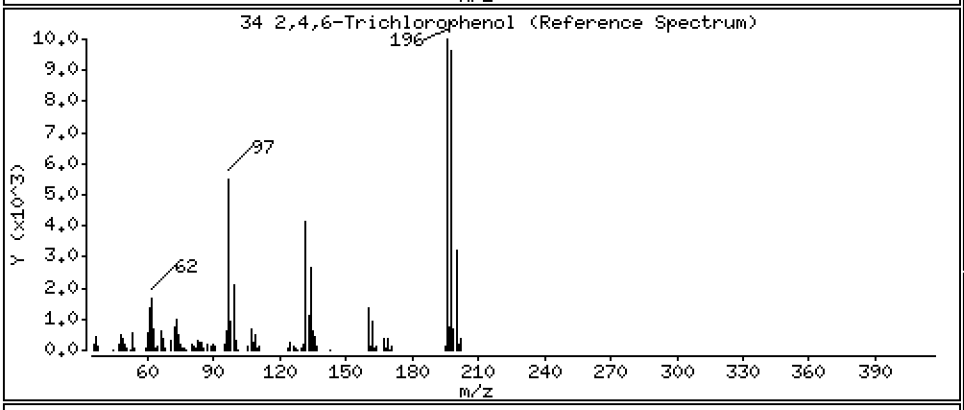
Column diameter: 0.25

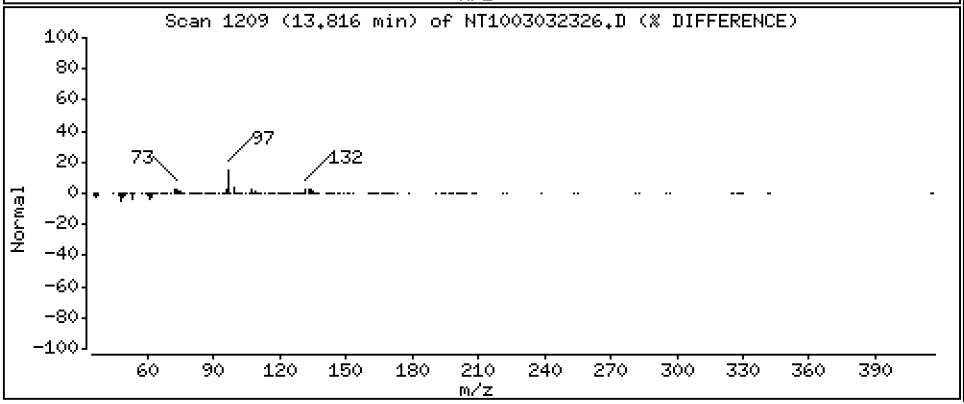
34 2,4,6-Trichlorophenol

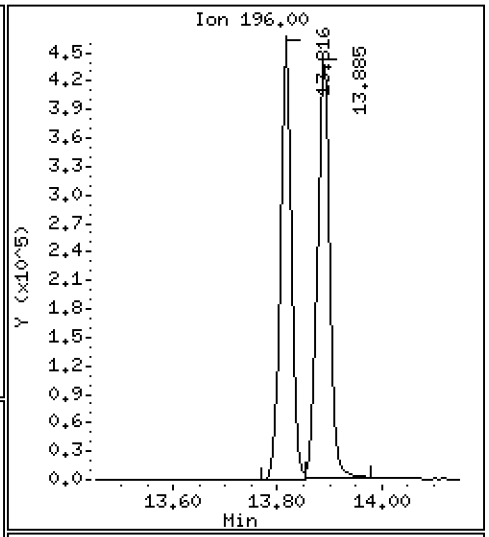
Concentration: 10.37 ug/ml

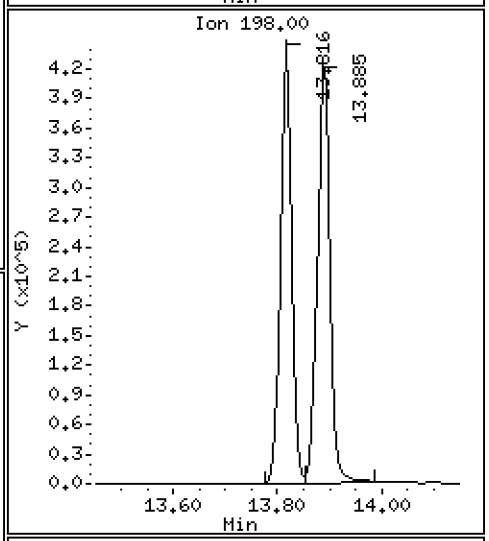


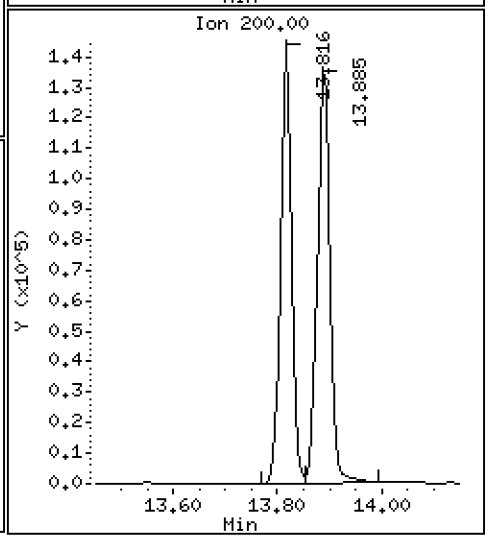












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

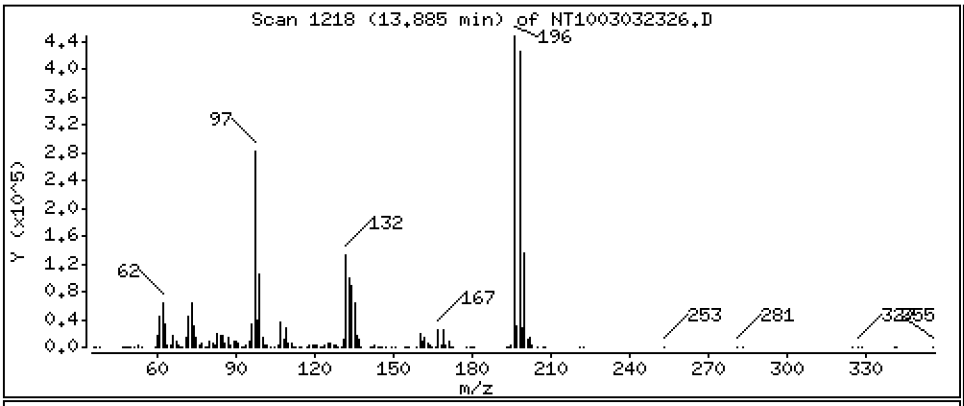
Operator: VTS

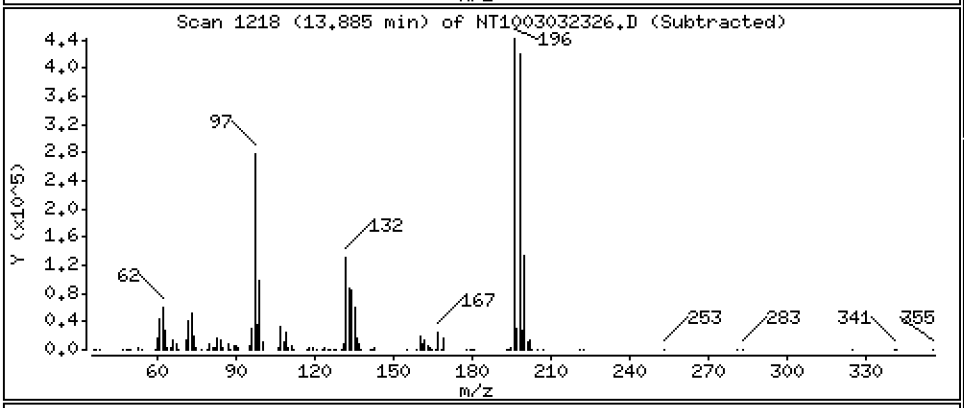
Column phase: ZB-5msi

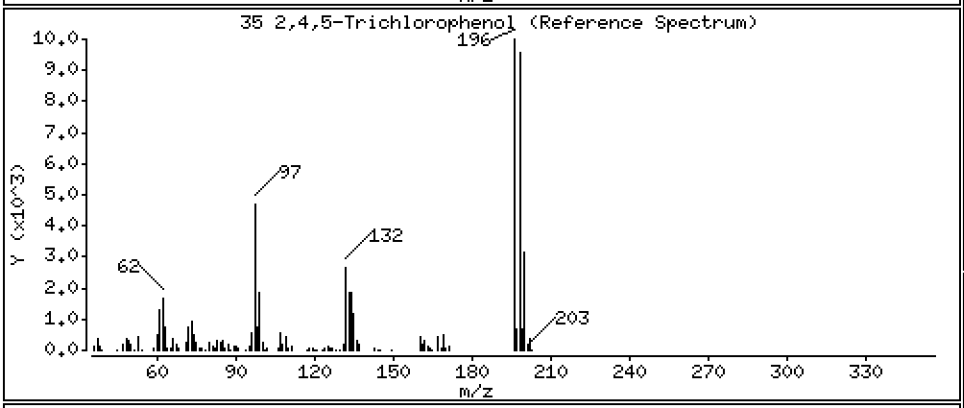
Column diameter: 0.25

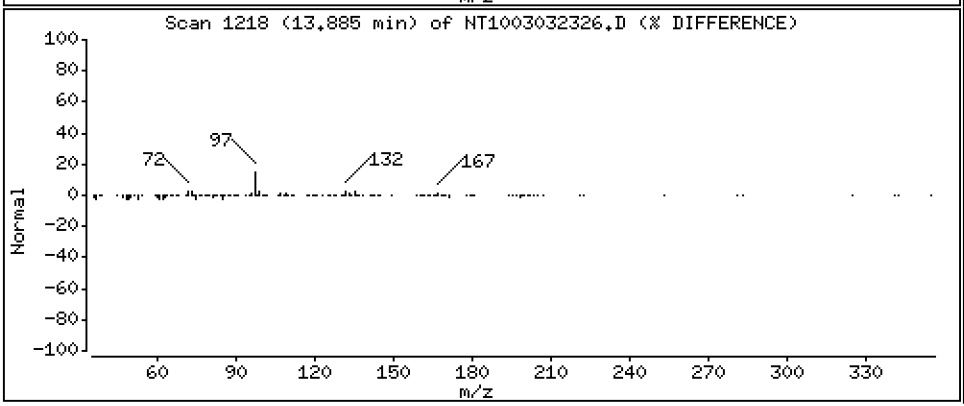
35 2,4,5-Trichlorophenol

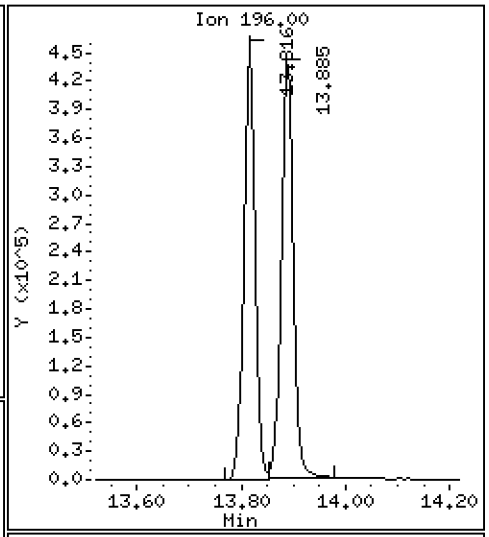
Concentration: 10.16 ug/ml

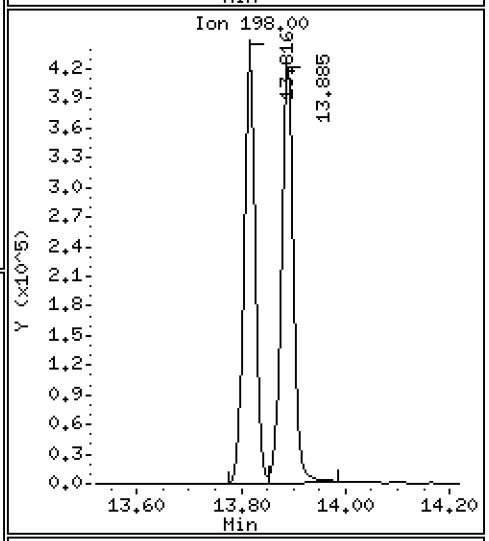


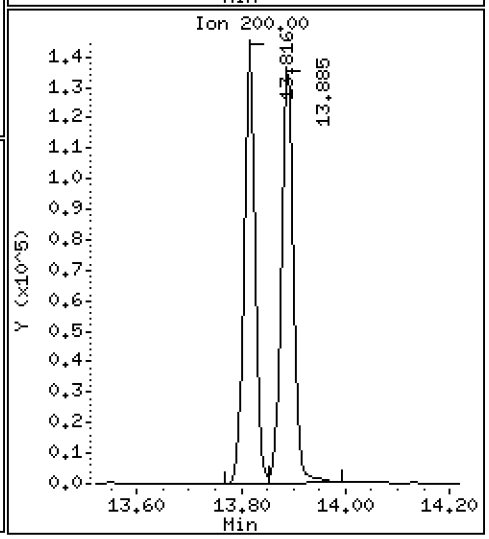












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

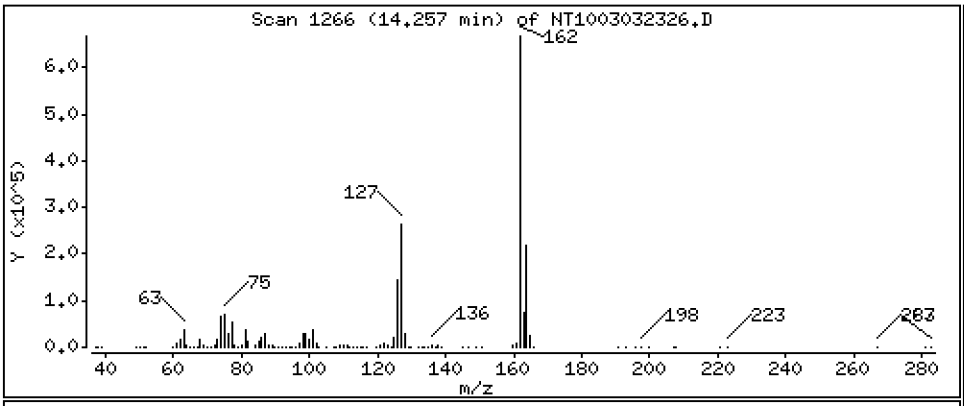
Operator: VTS

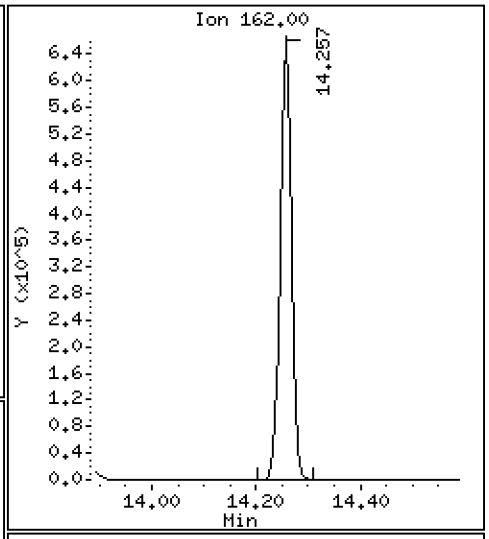
Column phase: ZB-5msi

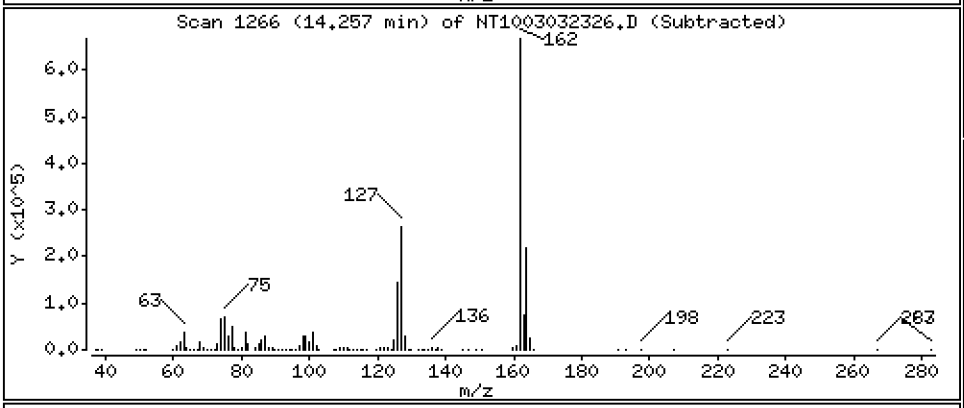
Column diameter: 0.25

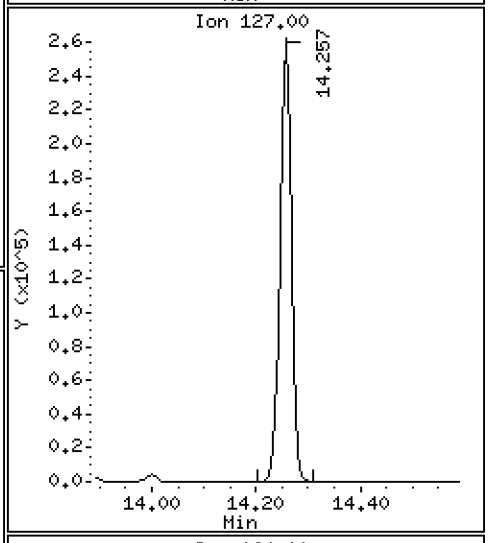
37 2-Chloronaphthalene

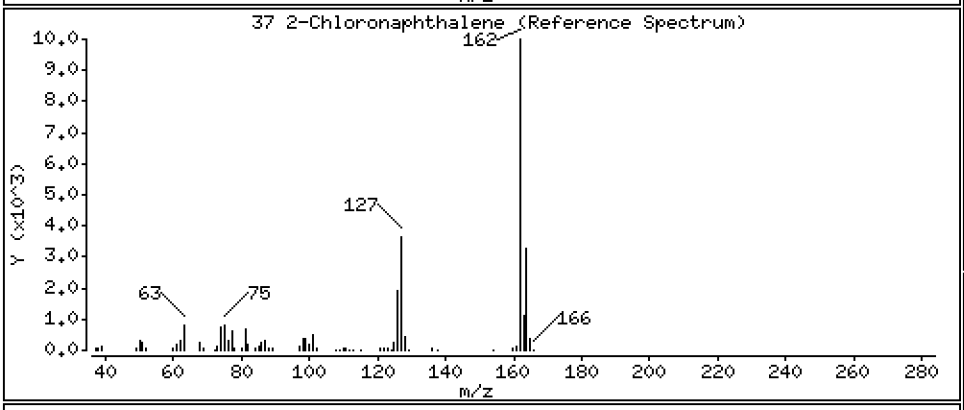
Concentration: 5.376 ug/ml

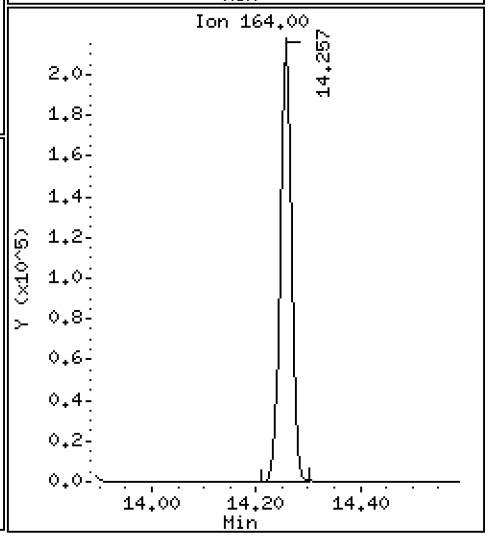


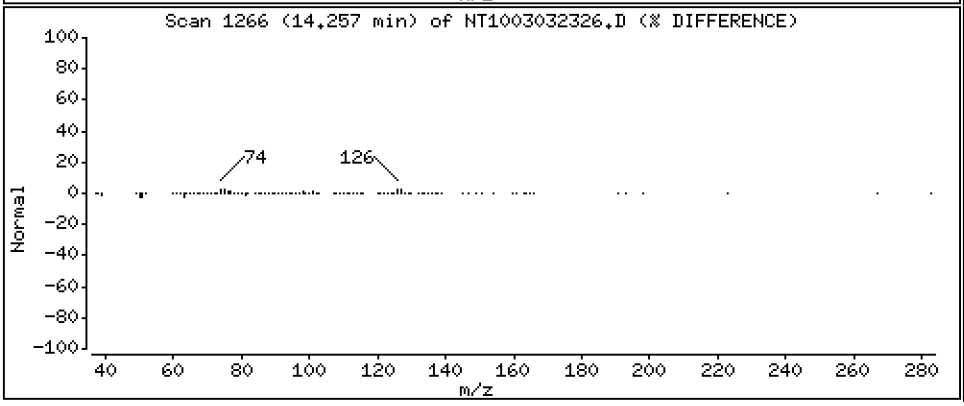












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

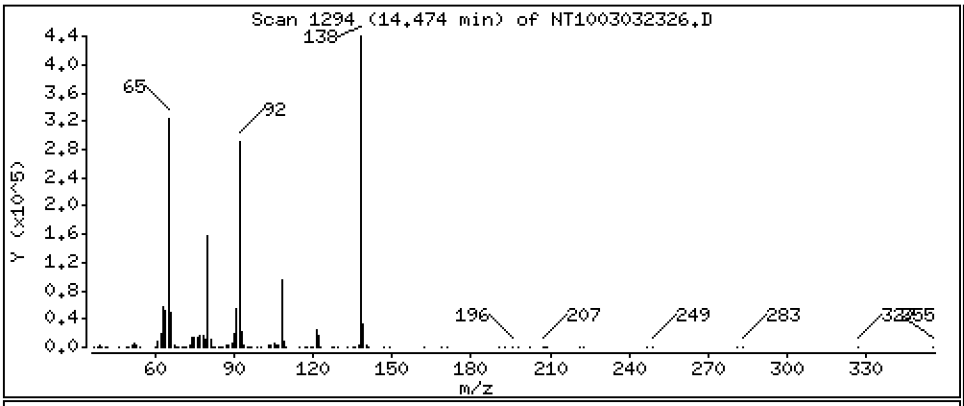
Operator: VTS

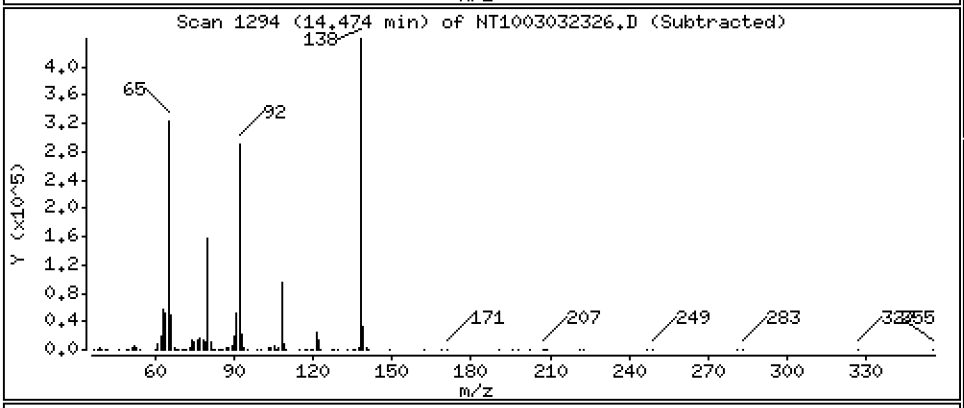
Column phase: ZB-5msi

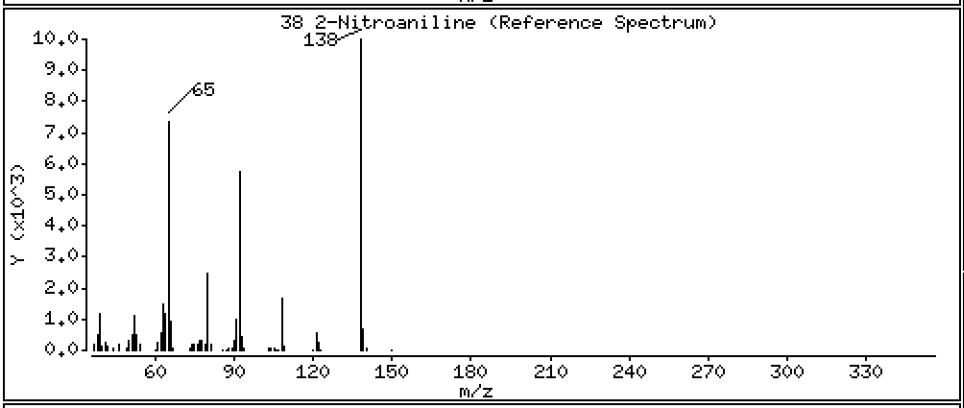
Column diameter: 0.25

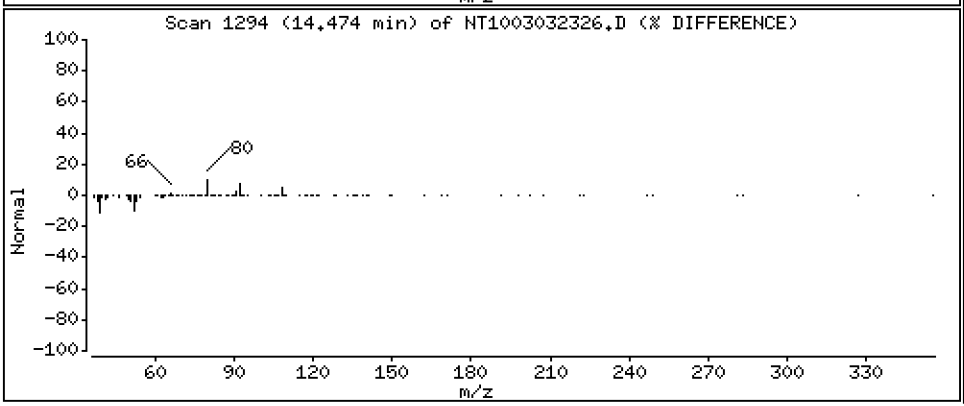
38 2-Nitroaniline

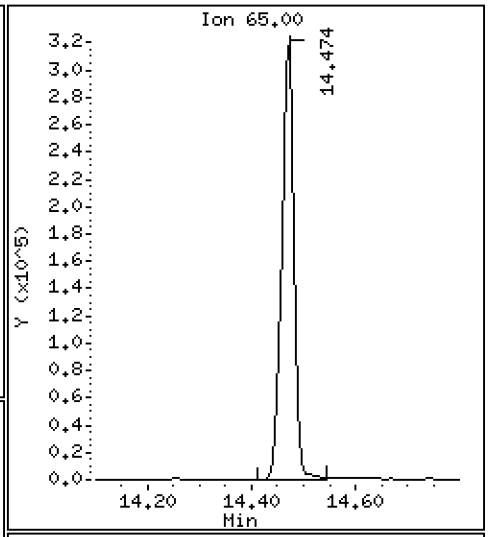
Concentration: 9.812 ug/ml

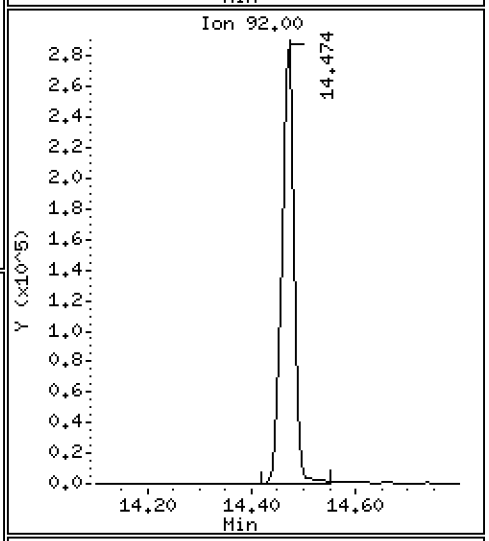


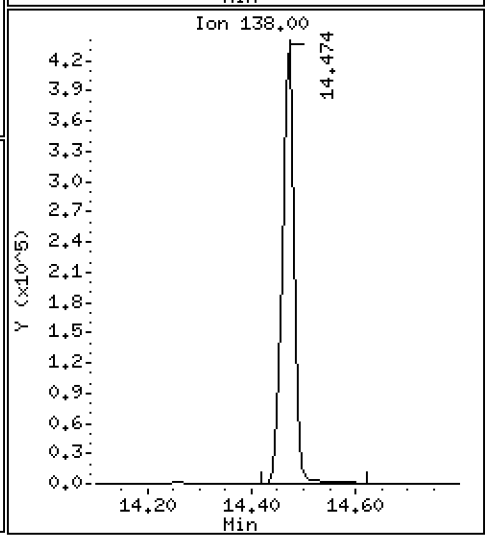












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

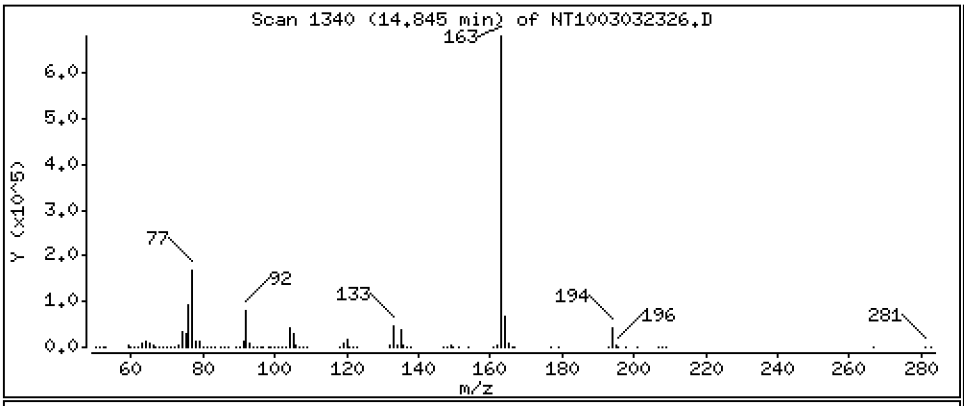
Operator: VTS

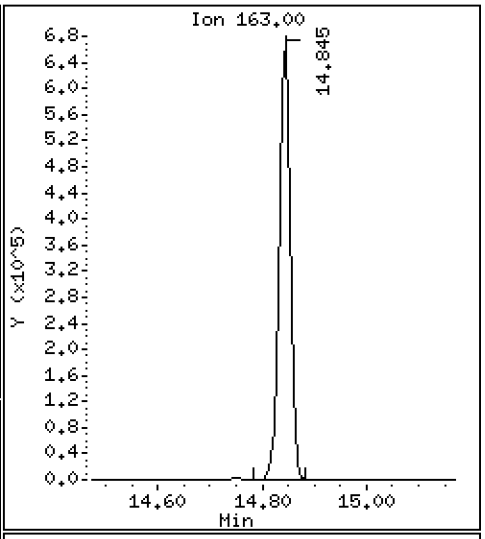
Column phase: ZB-5msi

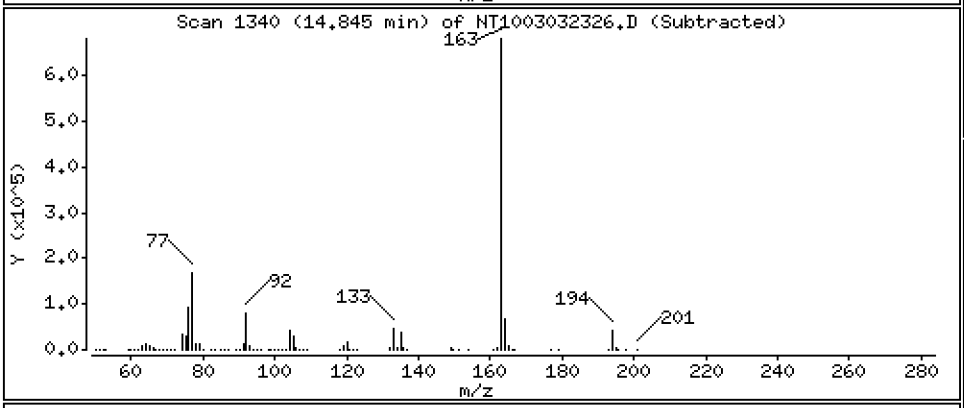
Column diameter: 0.25

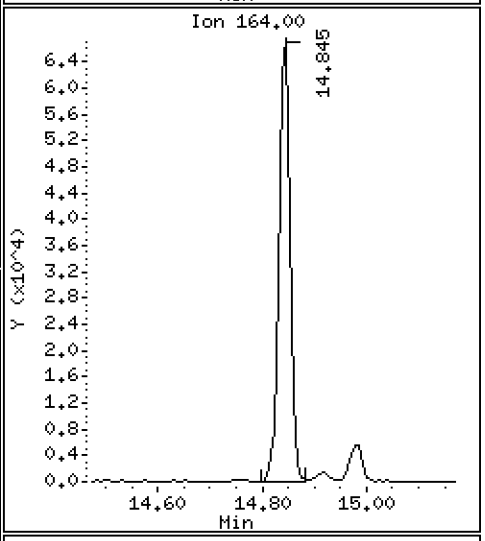
39 Dimethylphthalate

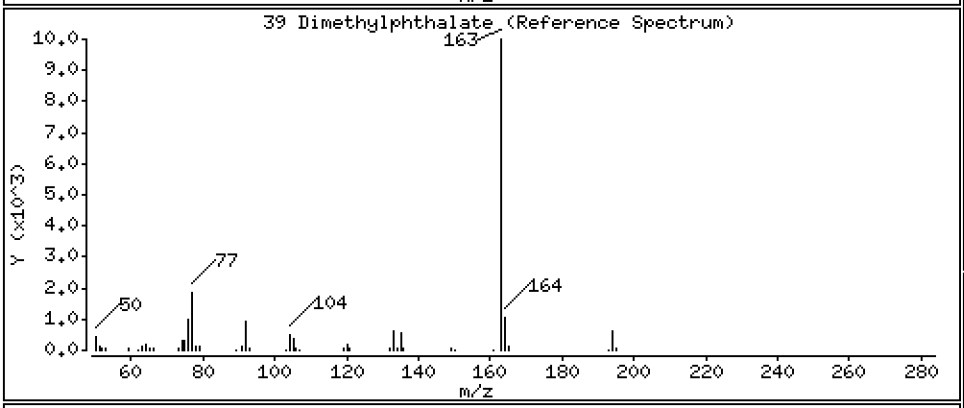
Concentration: 4.777 ug/ml

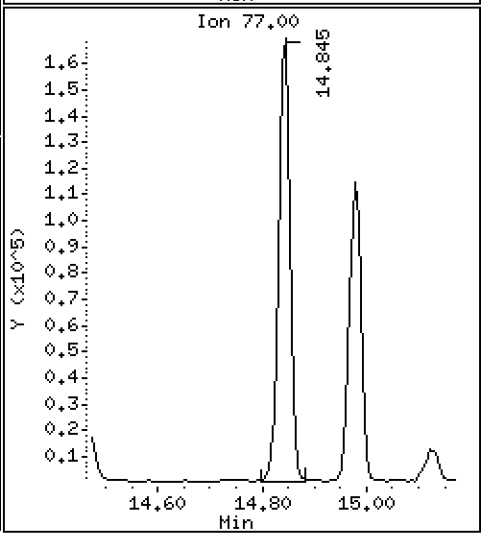


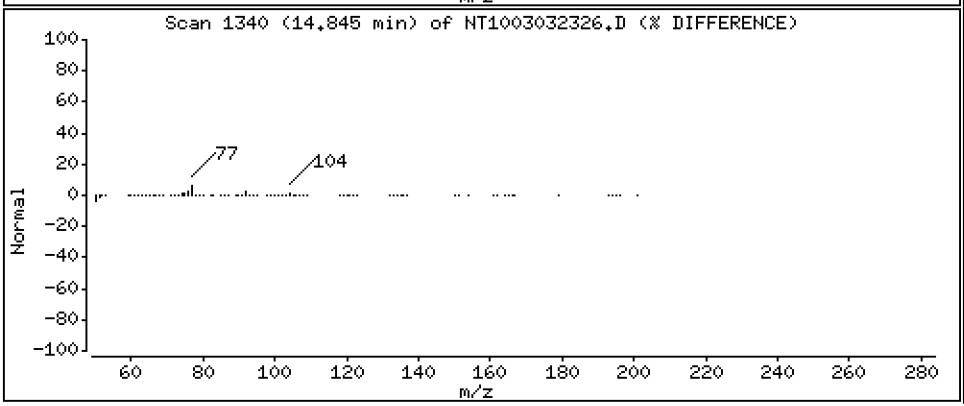












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

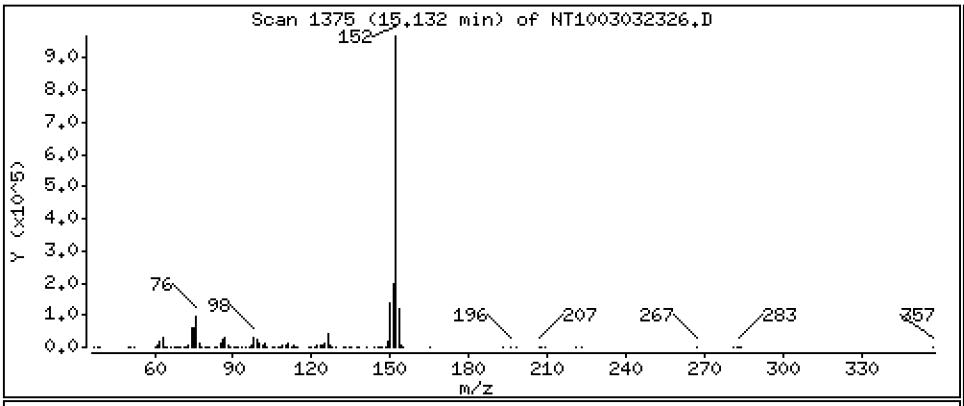
Operator: VTS

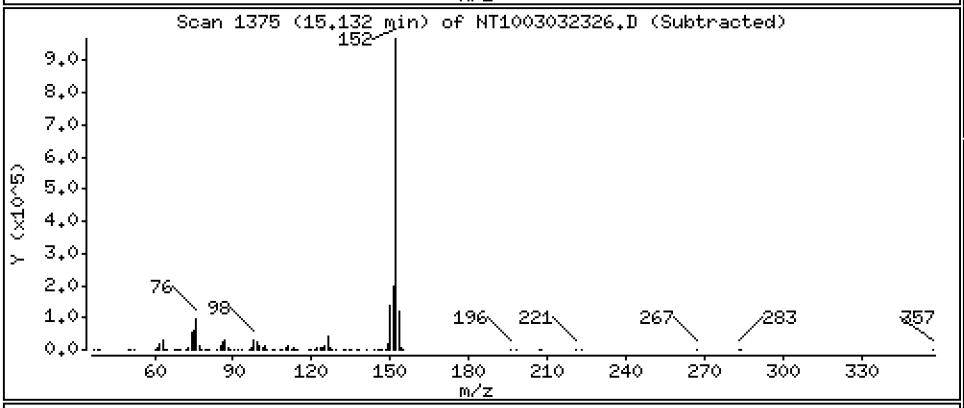
Column phase: ZB-5msi

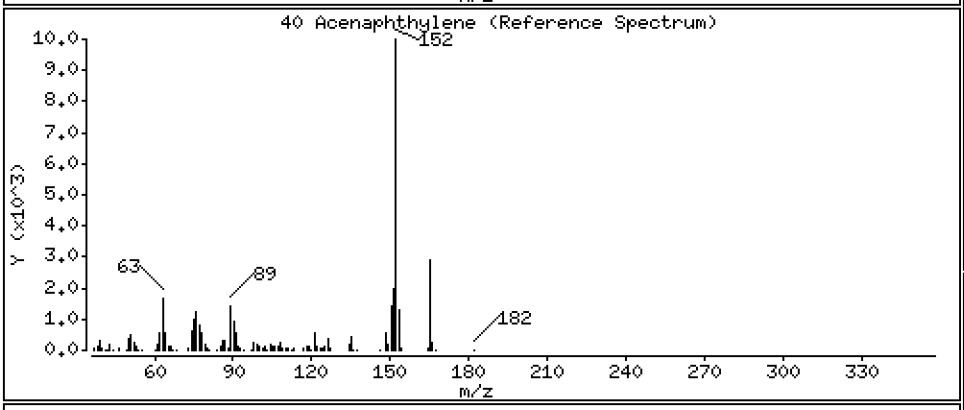
Column diameter: 0.25

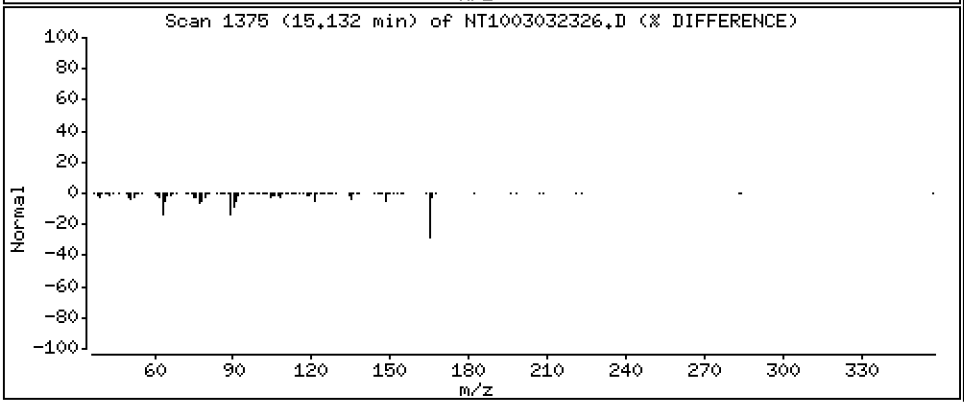
40 Acenaphthylene

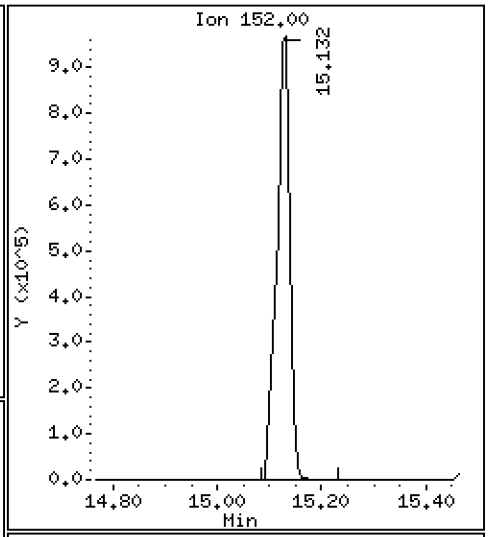
Concentration: 5.068 ug/ml

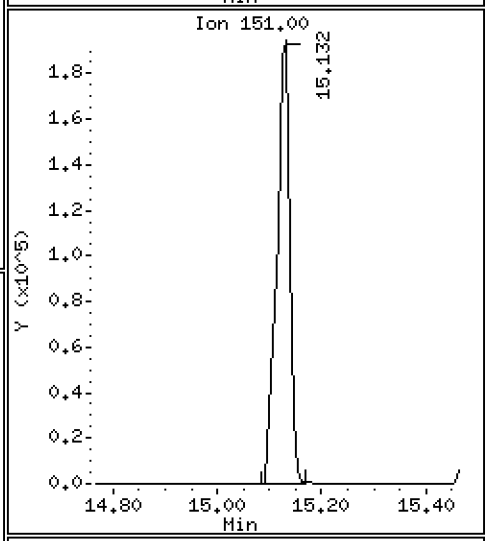


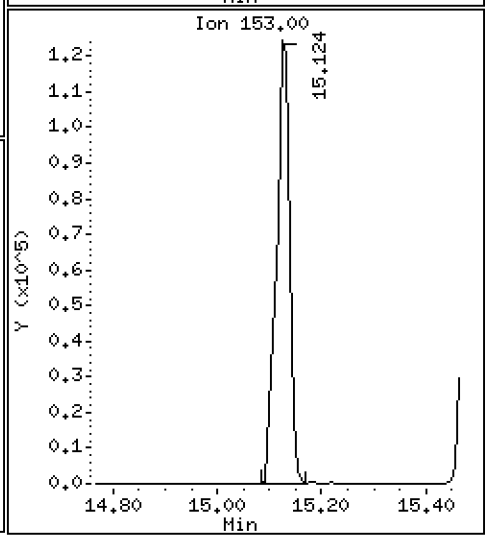












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

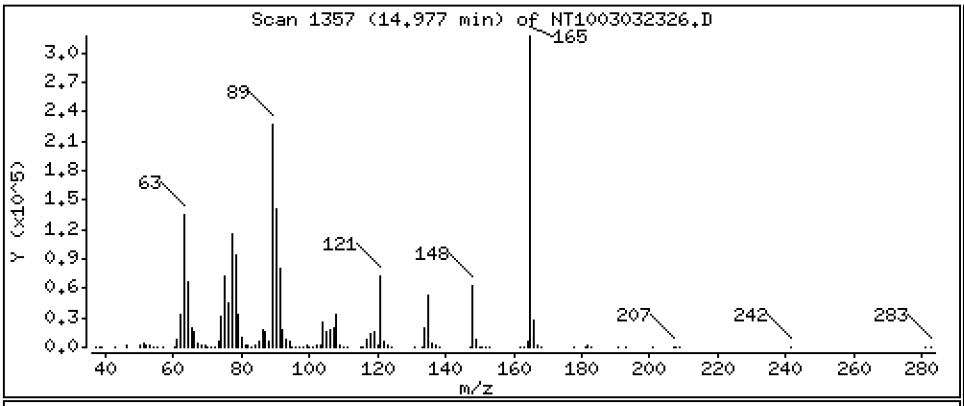
Operator: VTS

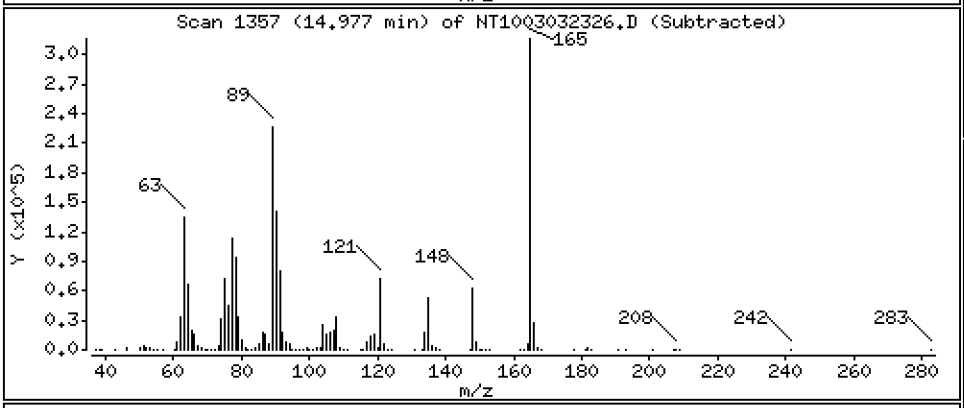
Column phase: ZB-5msi

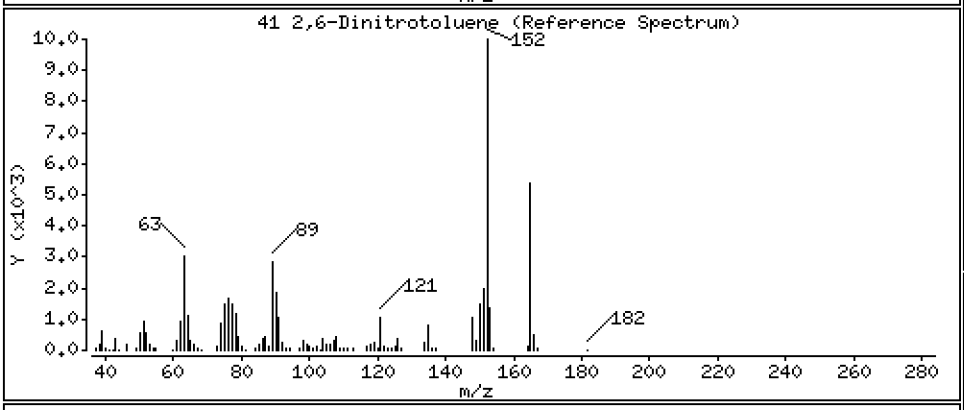
Column diameter: 0.25

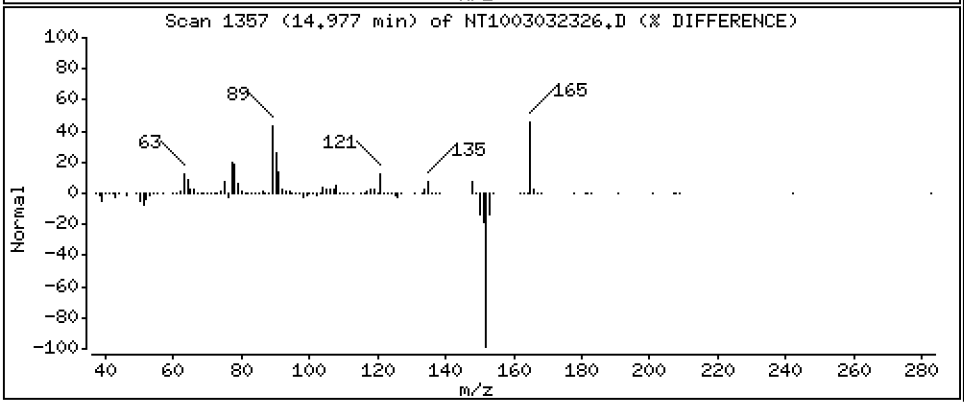
41 2,6-Dinitrotoluene

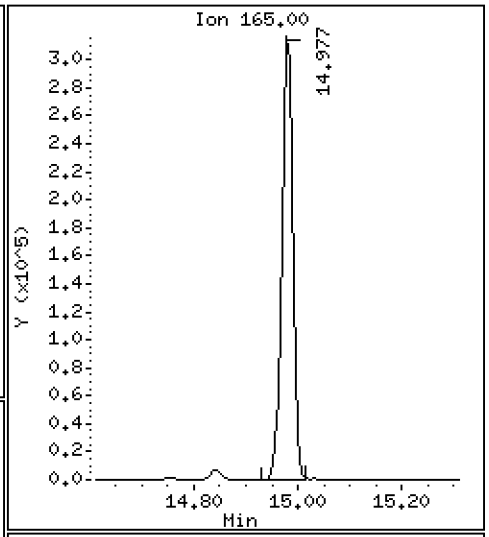
Concentration: 9.696 ug/ml

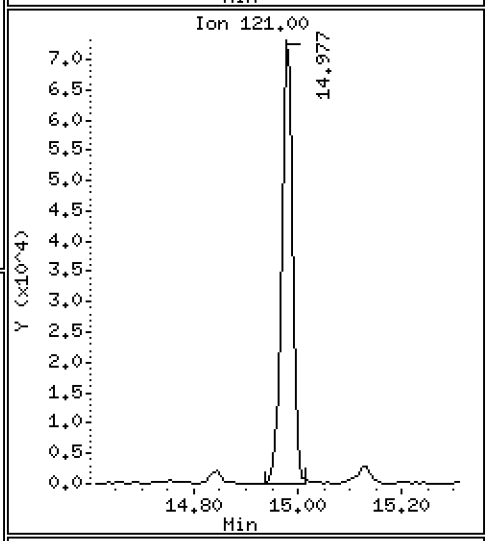


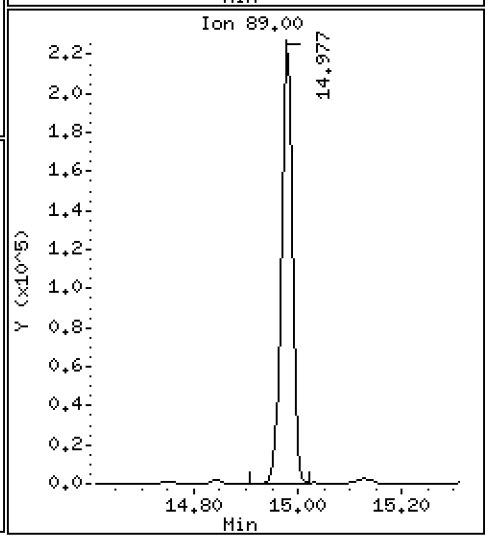












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

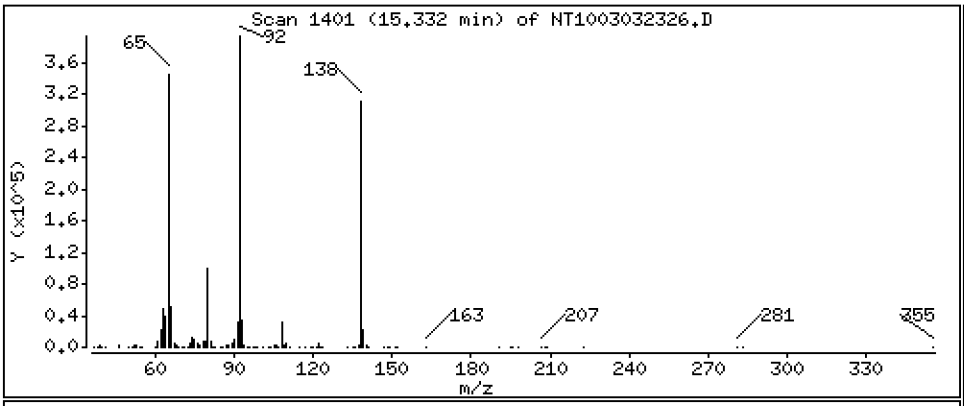
Operator: VTS

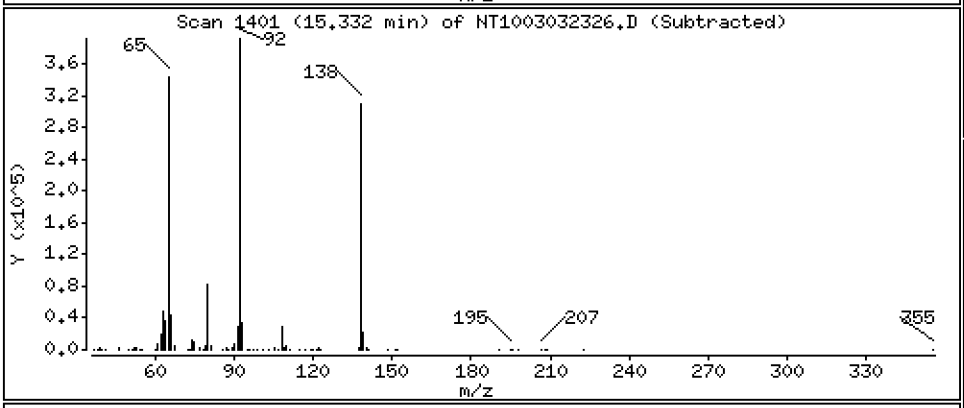
Column phase: ZB-5msi

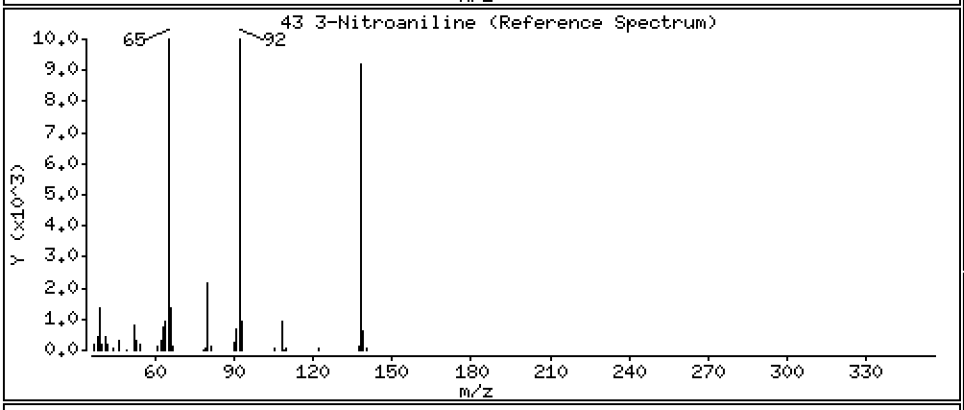
Column diameter: 0.25

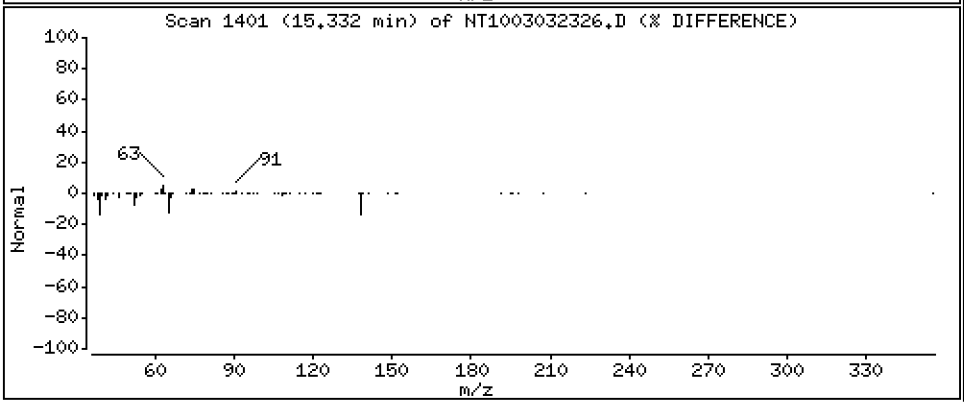
43 3-Nitroaniline

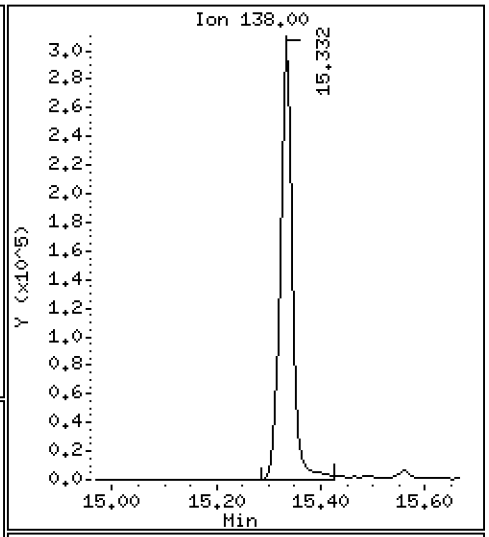
Concentration: 8.855 ug/ml

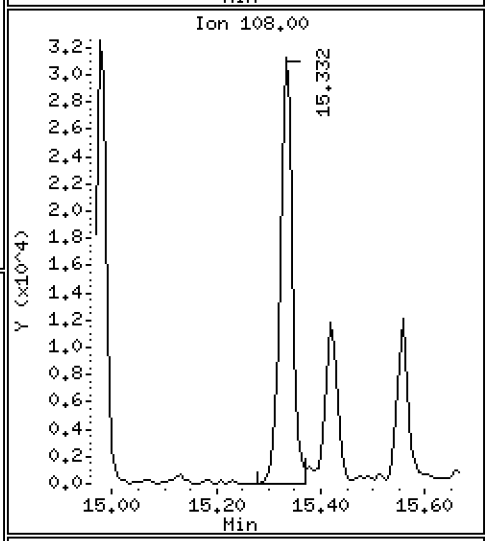


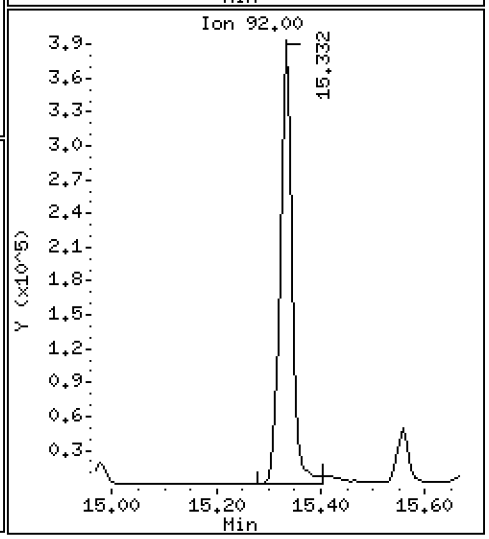












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

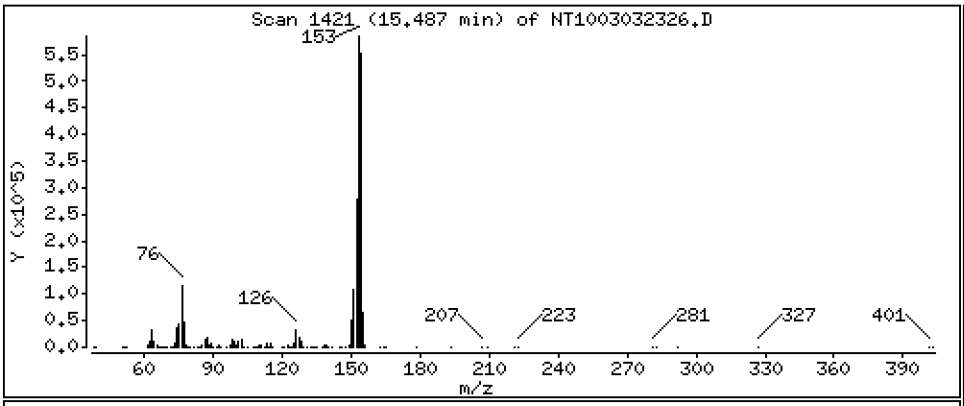
Operator: VTS

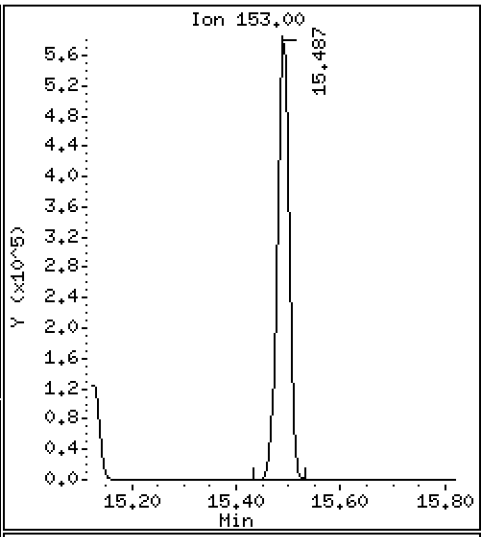
Column phase: ZB-5msi

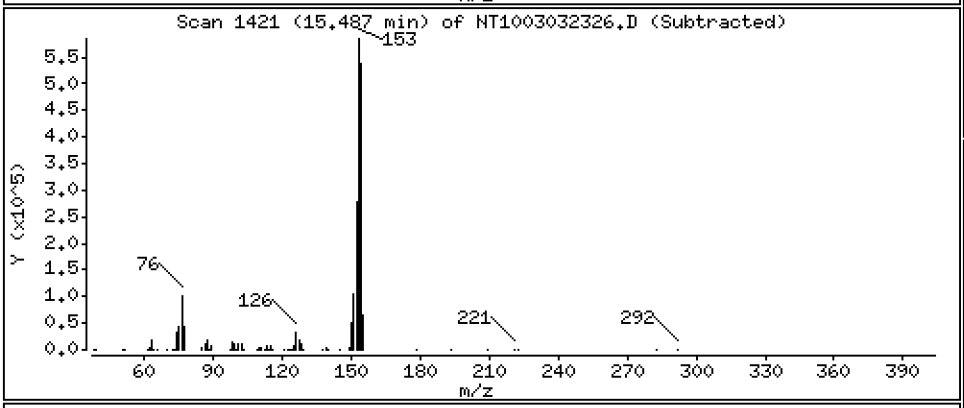
Column diameter: 0.25

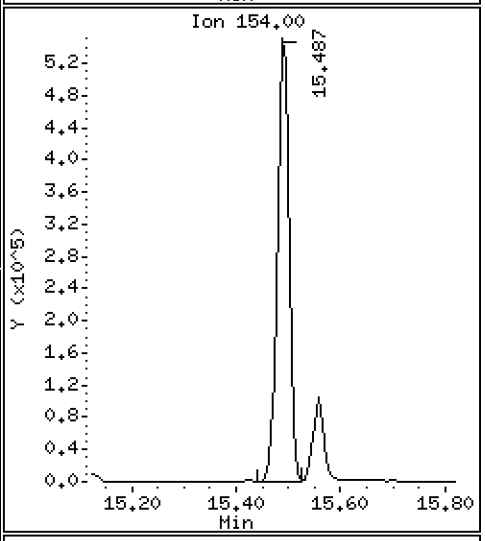
44 Acenaphthene

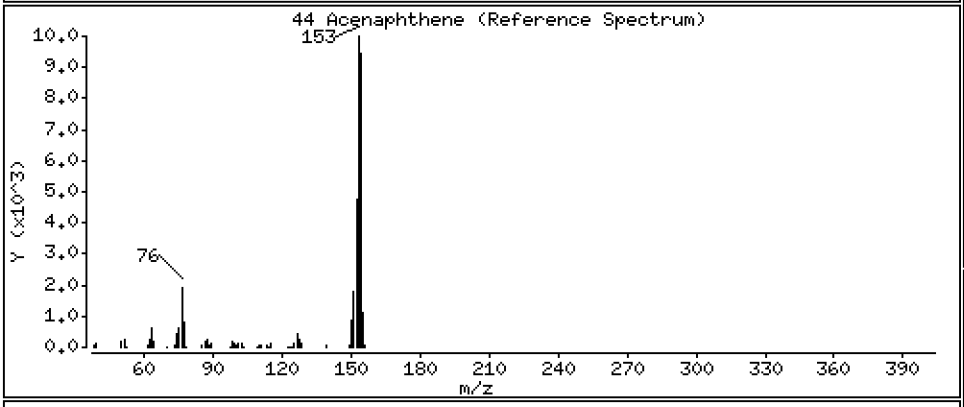
Concentration: 4.853 ug/ml

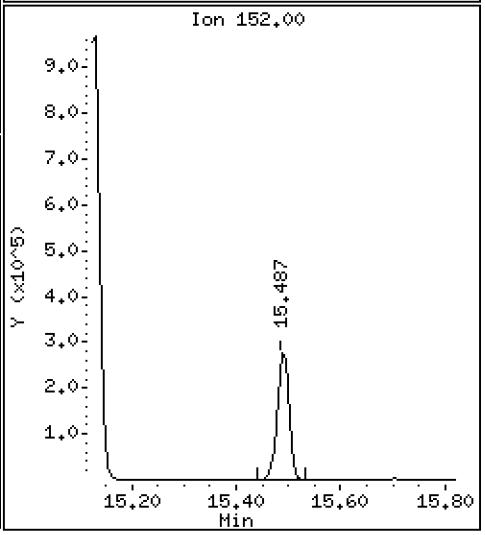


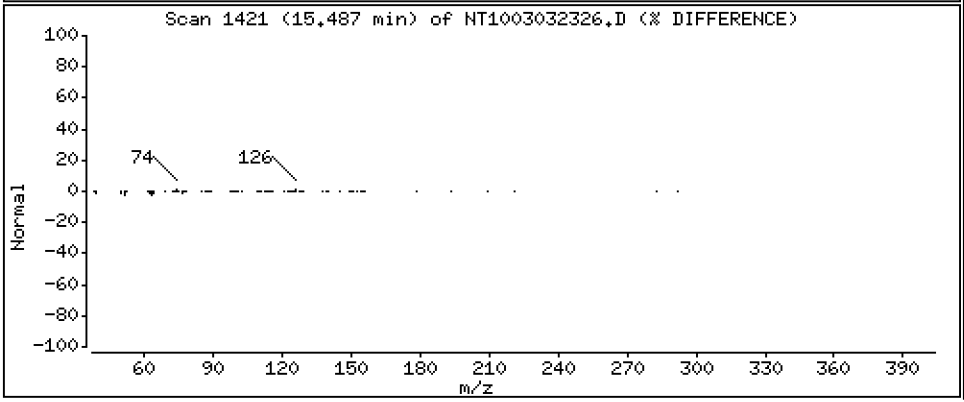












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

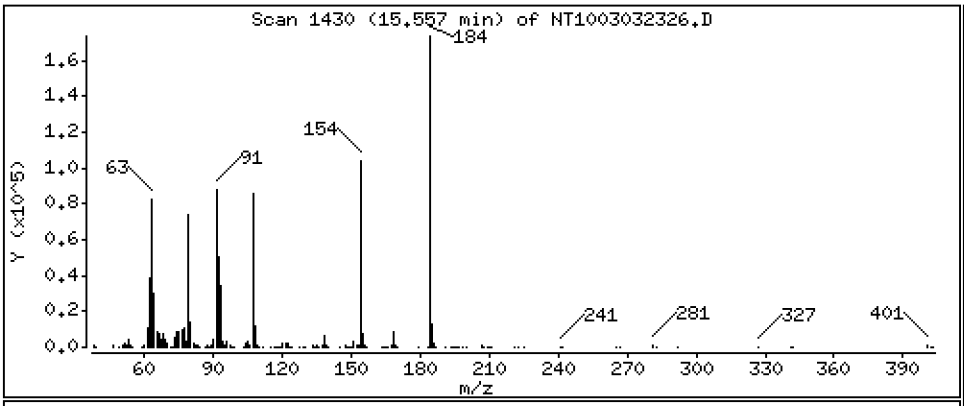
Operator: VTS

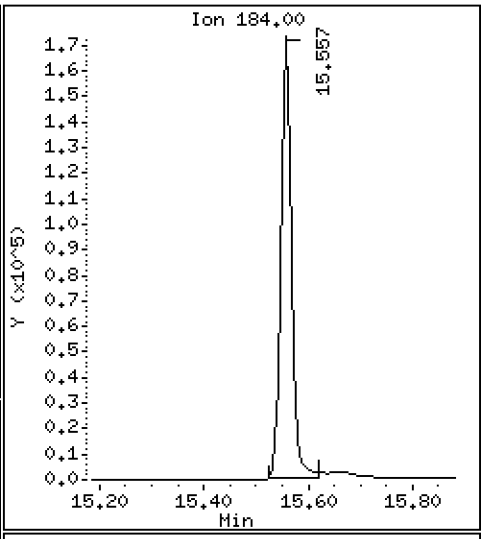
Column phase: ZB-5msi

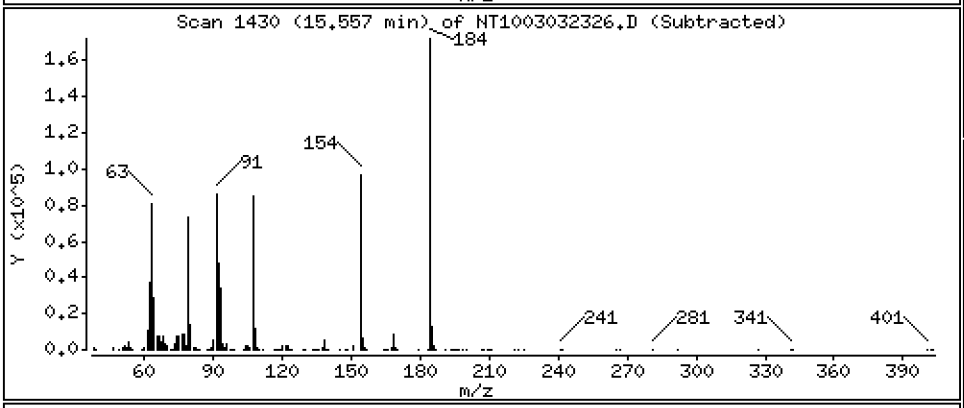
Column diameter: 0.25

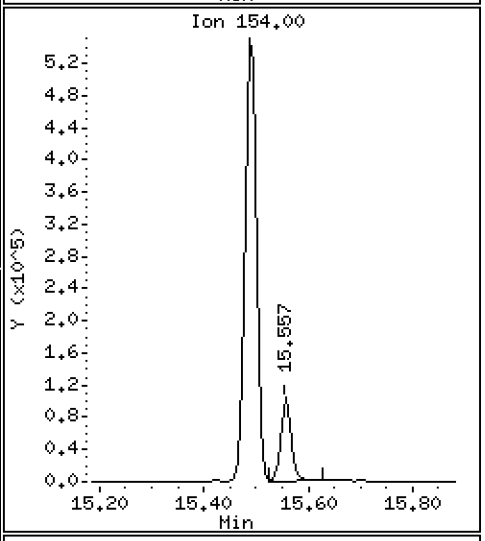
45 2,4-Dinitrophenol

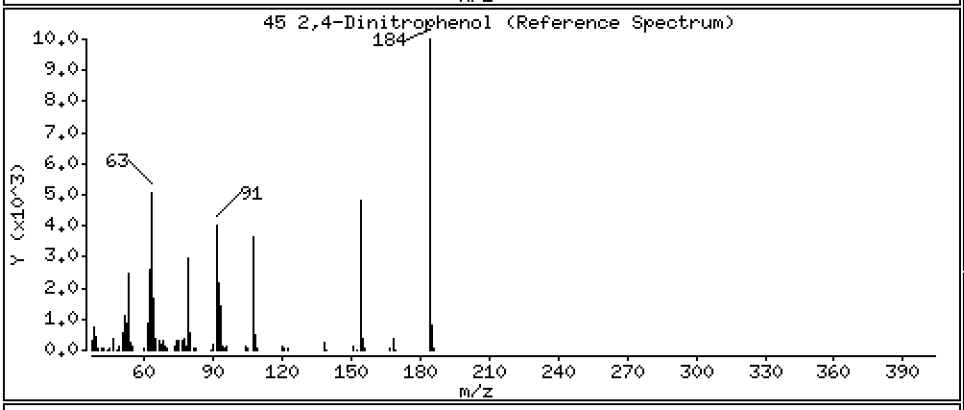
Concentration: 21.91 ug/ml

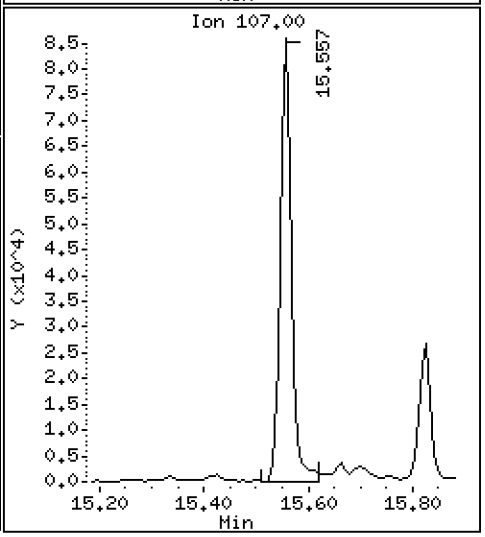


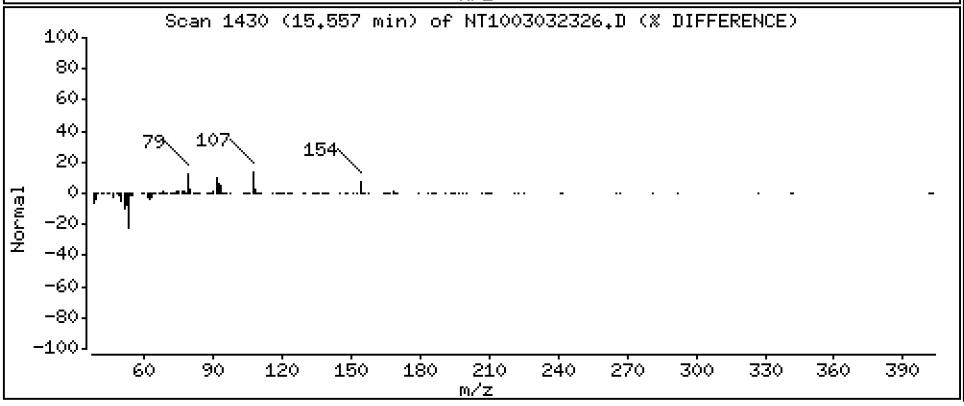












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

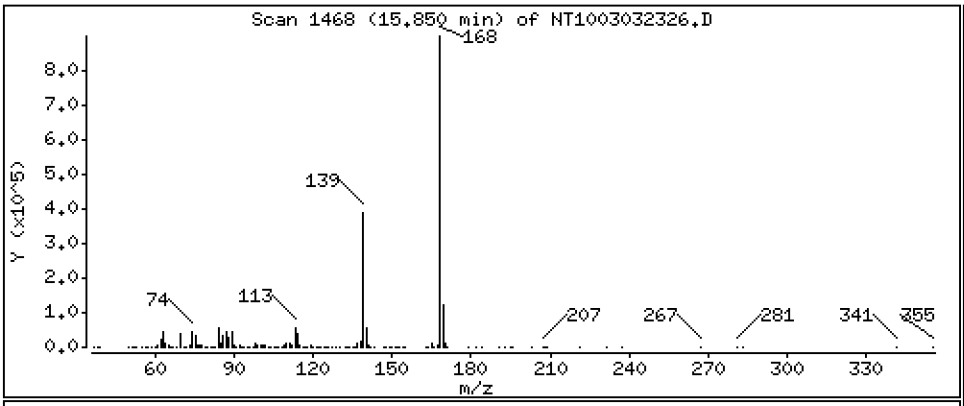
Operator: VTS

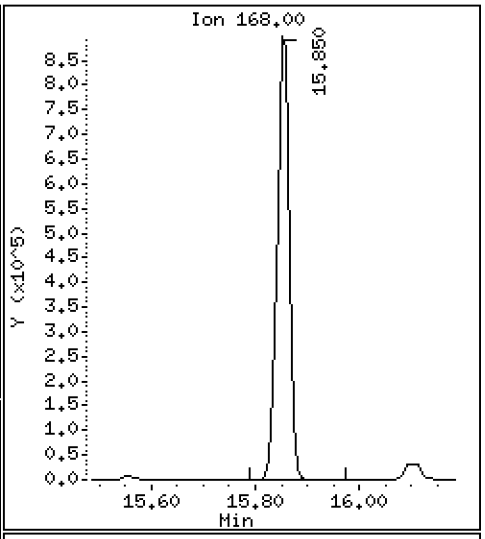
Column phase: ZB-5msi

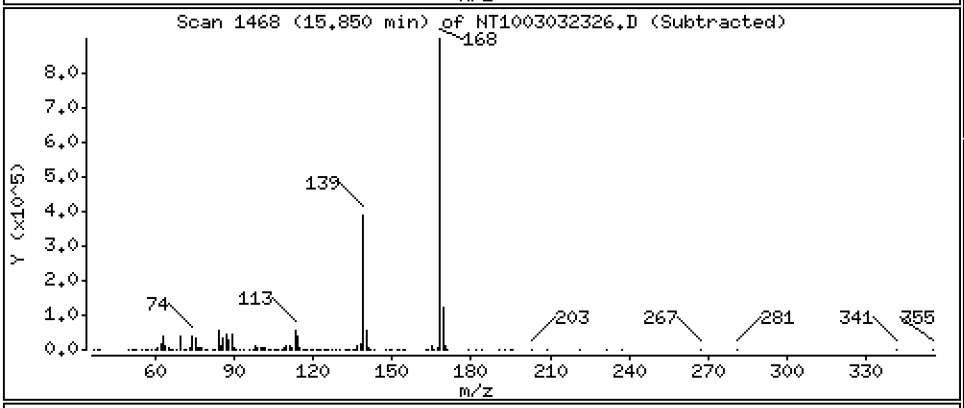
Column diameter: 0.25

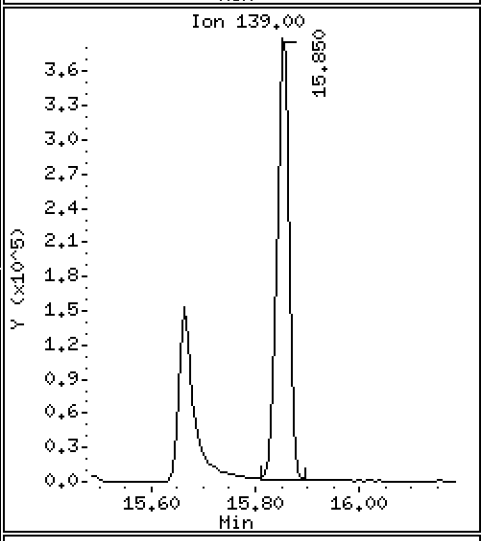
46 Dibenzofuran

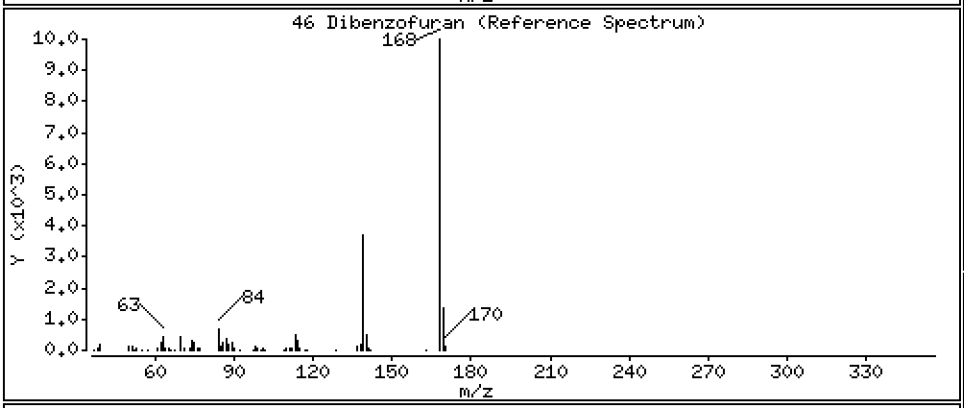
Concentration: 5.001 ug/ml

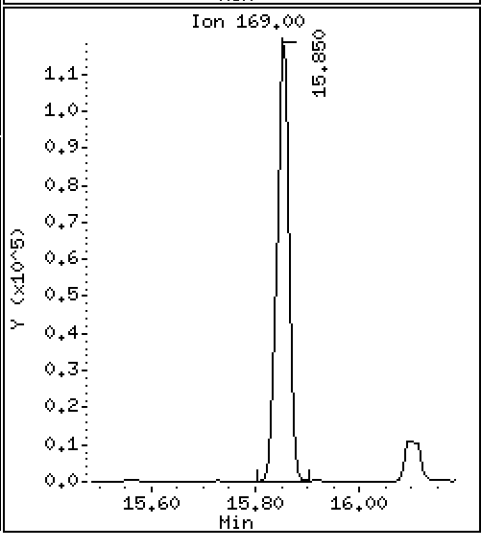


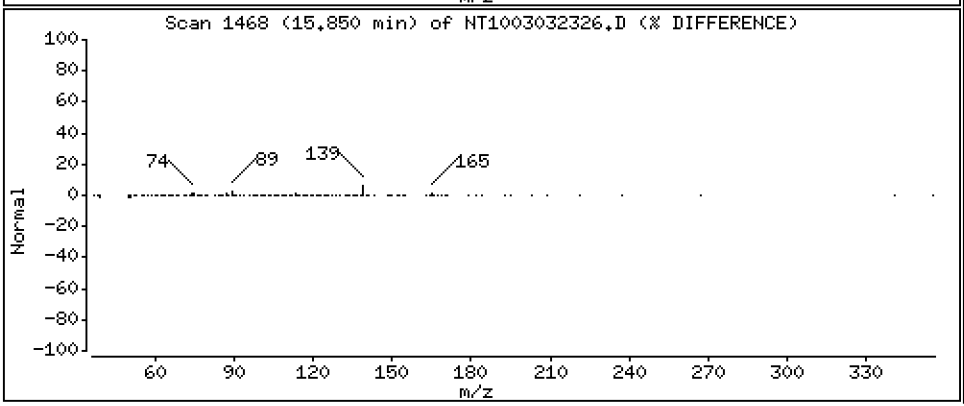












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

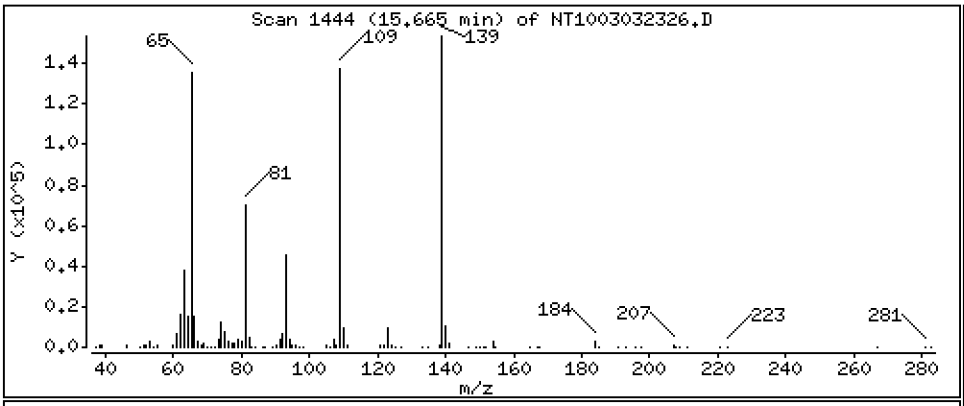
Operator: VTS

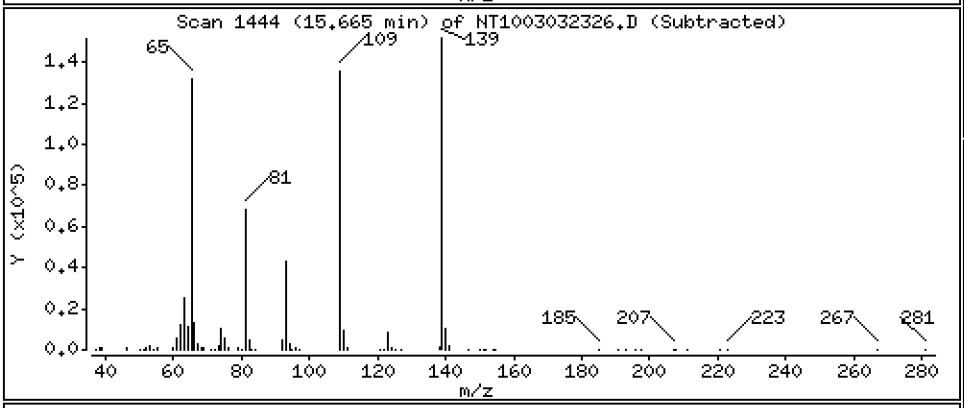
Column phase: ZB-5msi

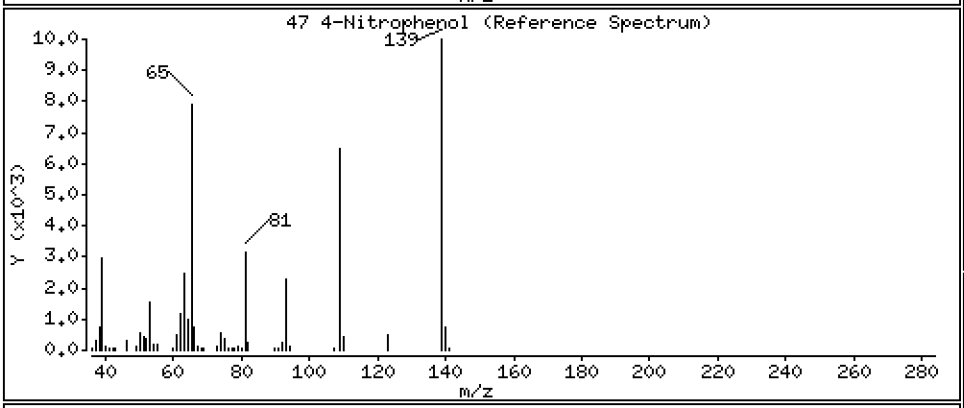
Column diameter: 0.25

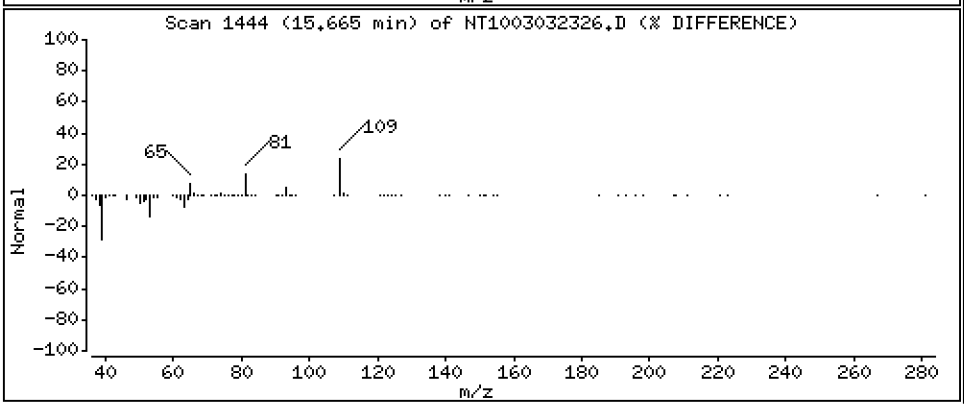
47 4-Nitrophenol

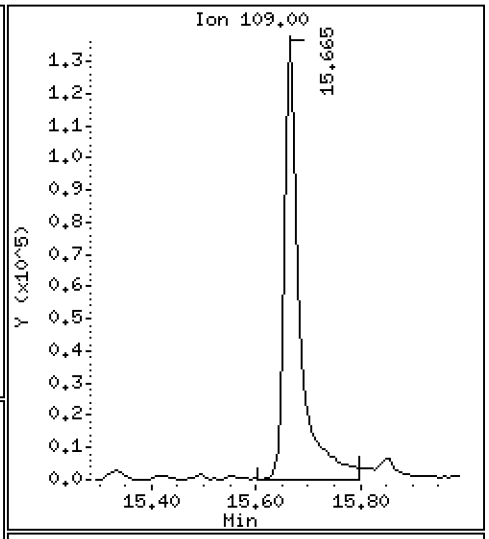
Concentration: 7.360 ug/ml

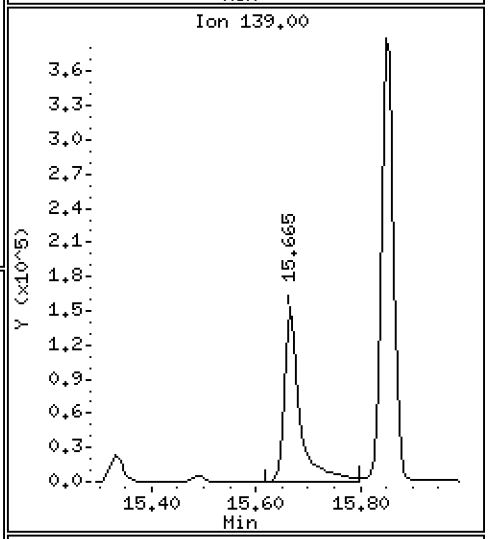


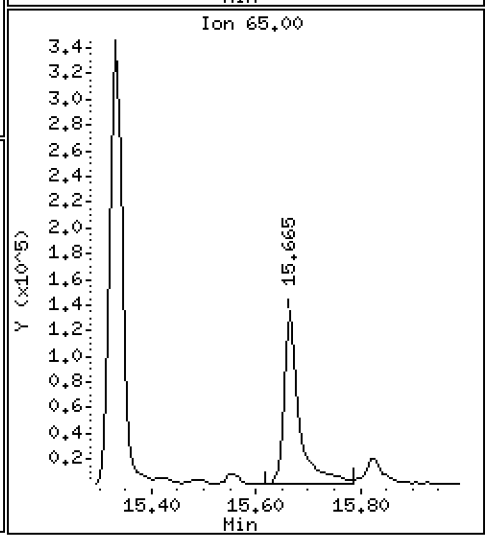












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

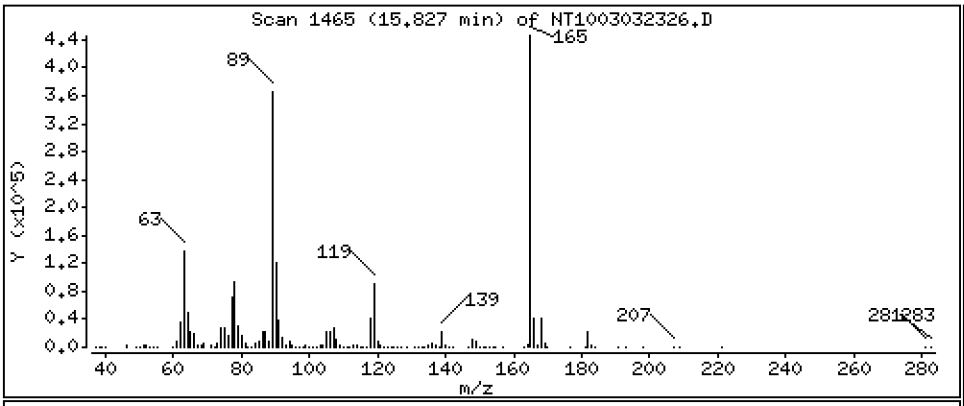
Operator: VTS

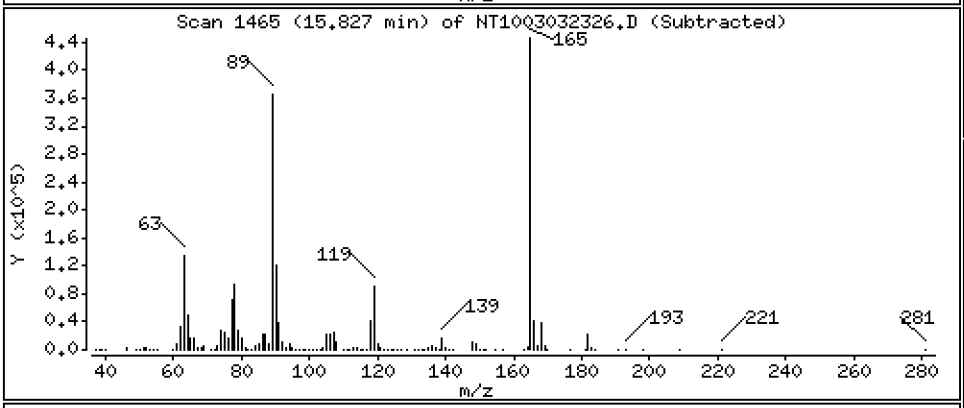
Column phase: ZB-5msi

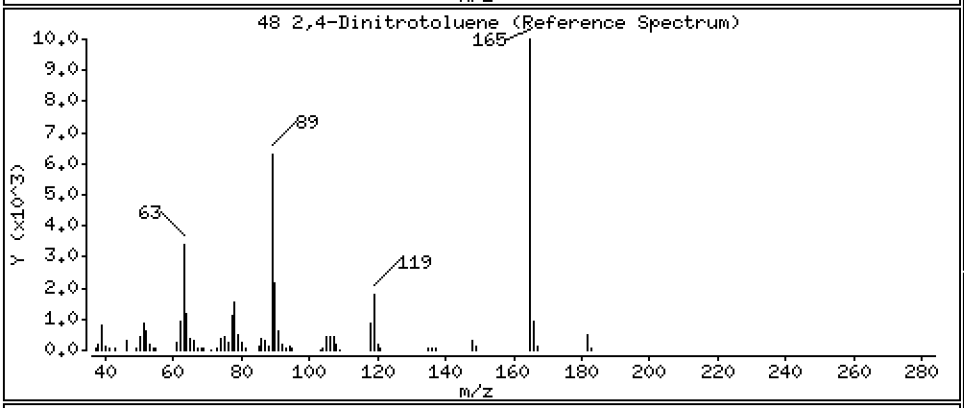
Column diameter: 0.25

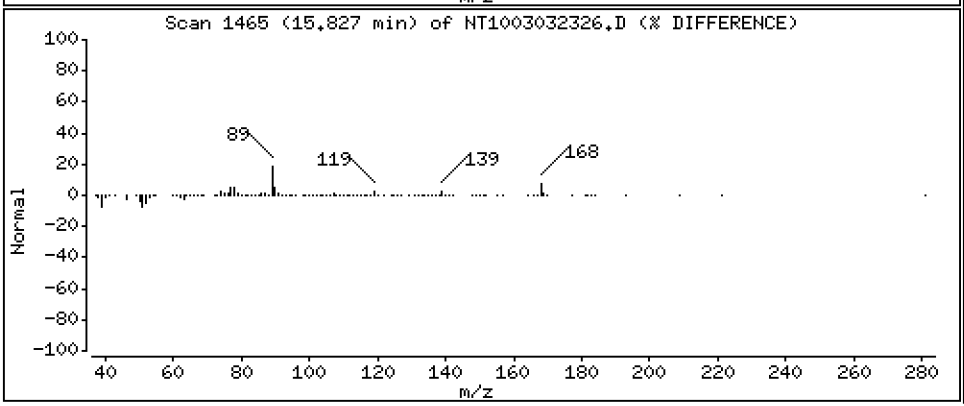
48 2,4-Dinitrotoluene

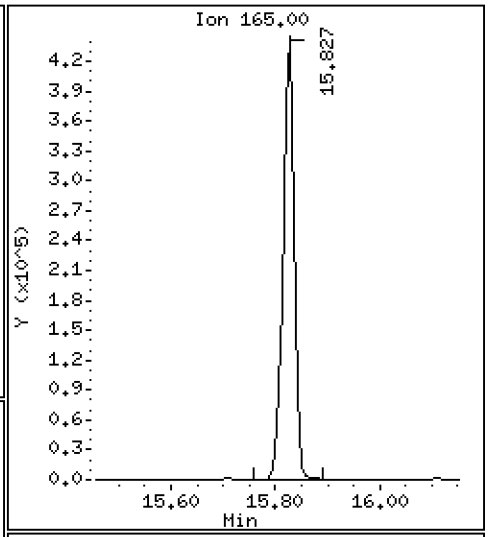
Concentration: 9.284 ug/ml

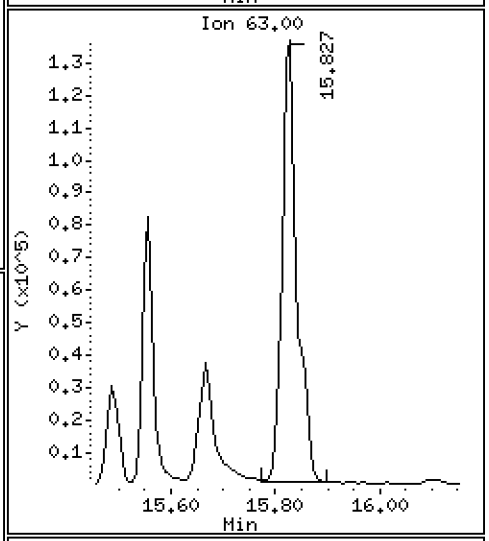


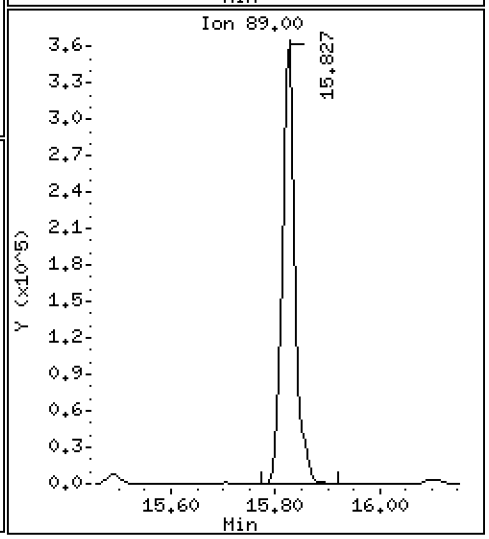












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

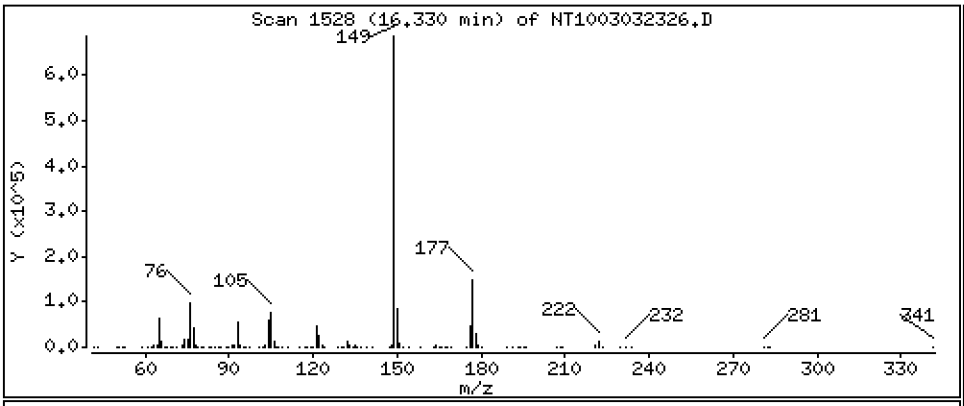
Operator: VTS

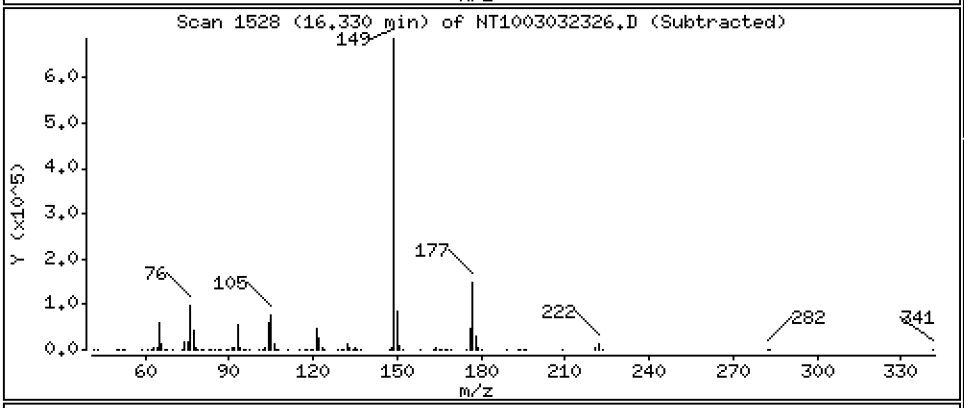
Column phase: ZB-5msi

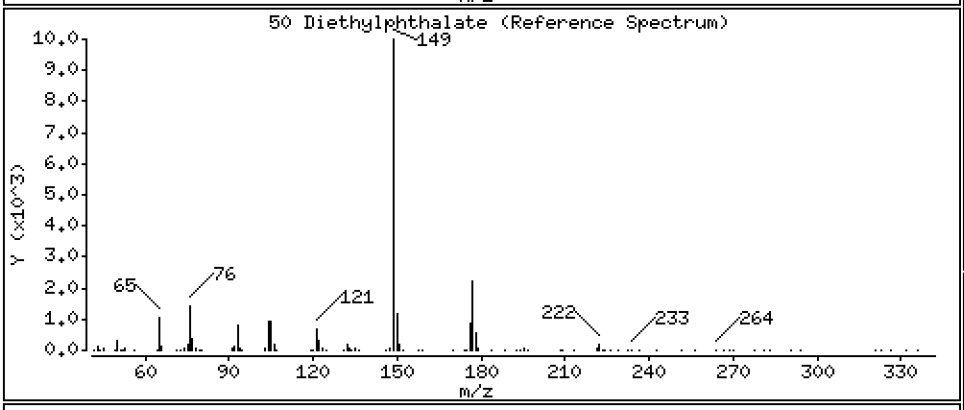
Column diameter: 0.25

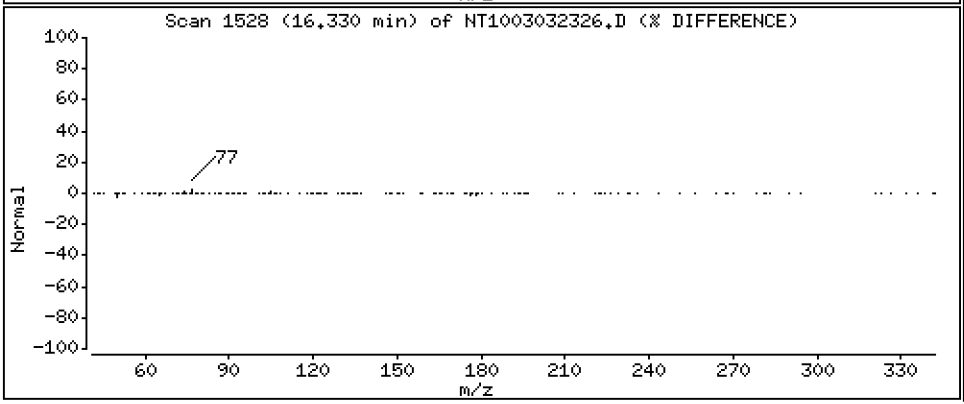
50 Diethylphthalate

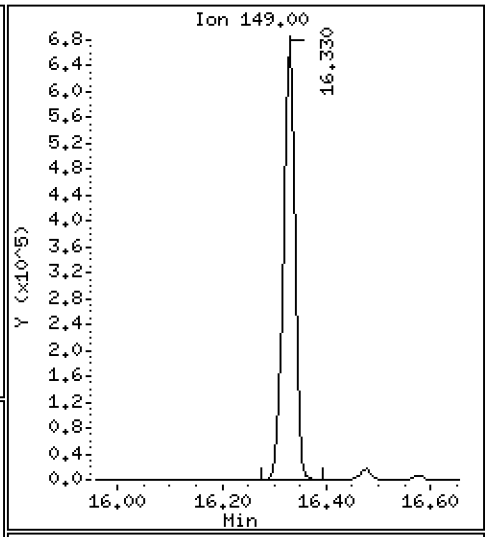
Concentration: 4.622 ug/ml

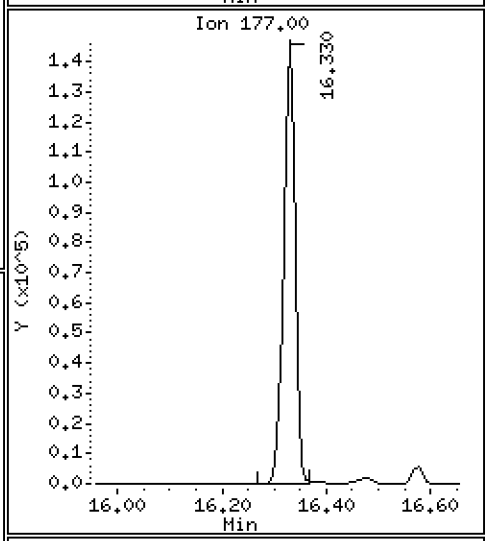


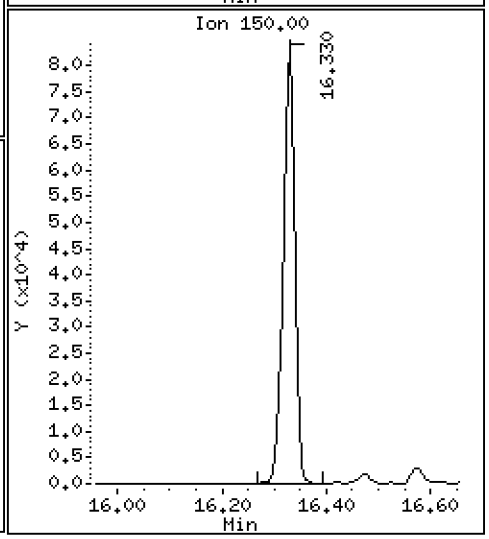












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

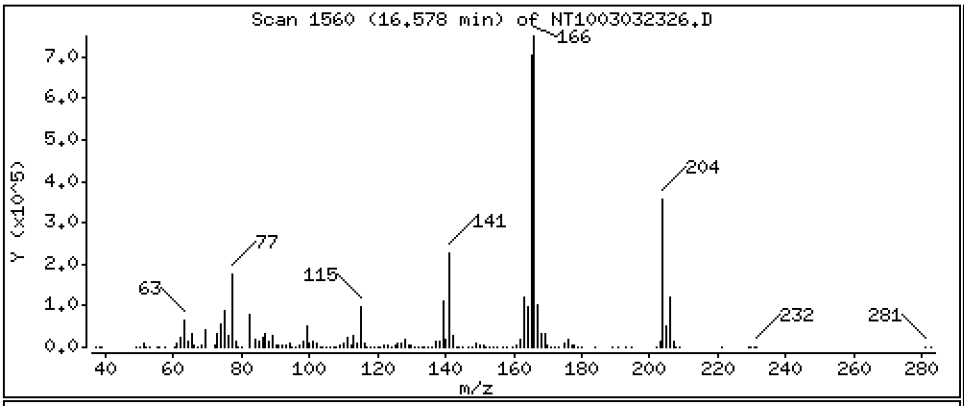
Operator: VTS

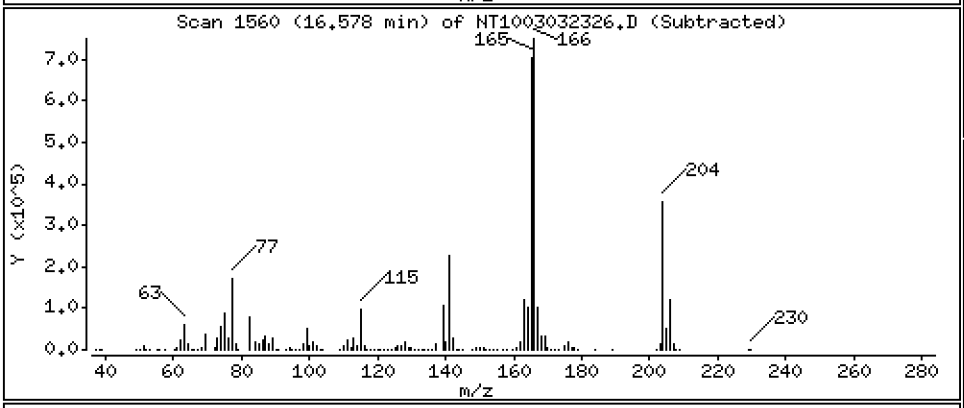
Column phase: ZB-5msi

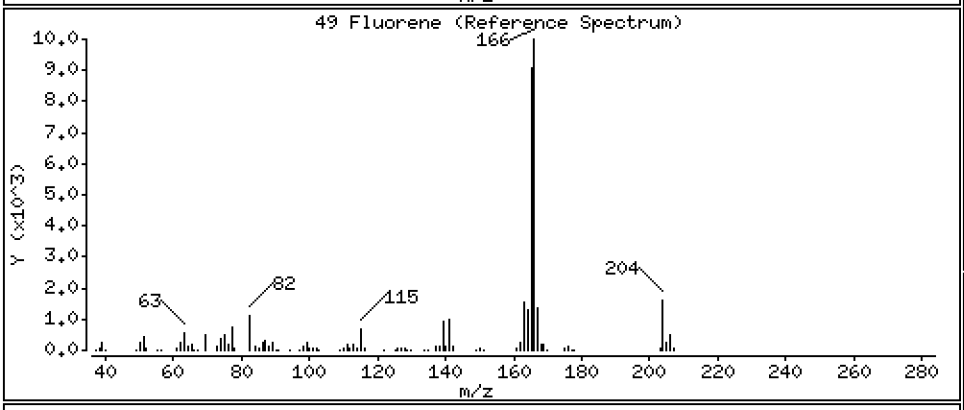
Column diameter: 0.25

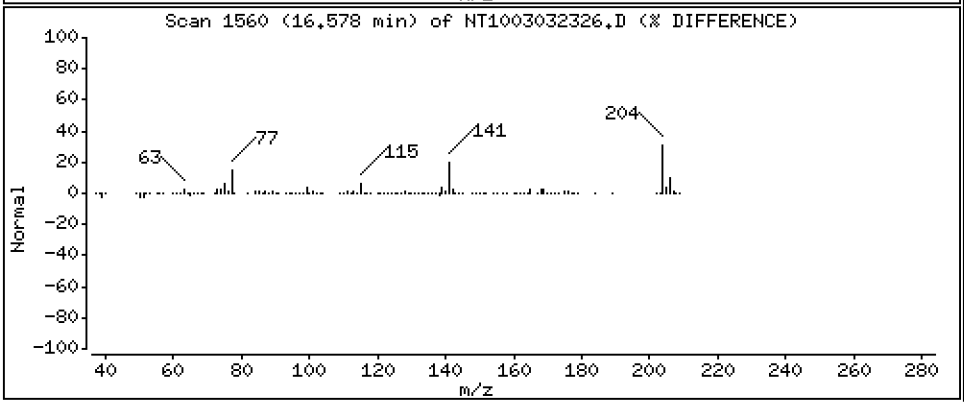
49 Fluorene

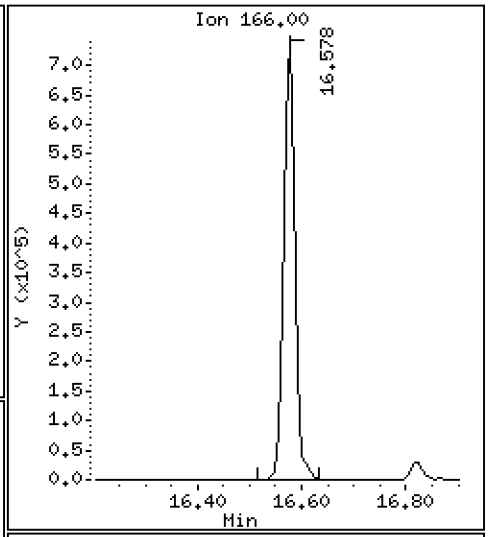
Concentration: 5.432 ug/ml

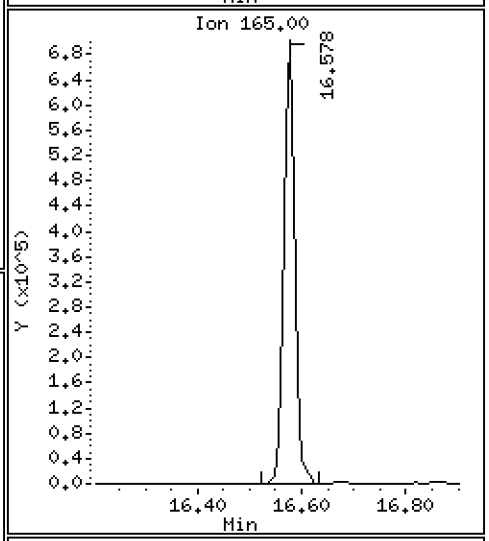


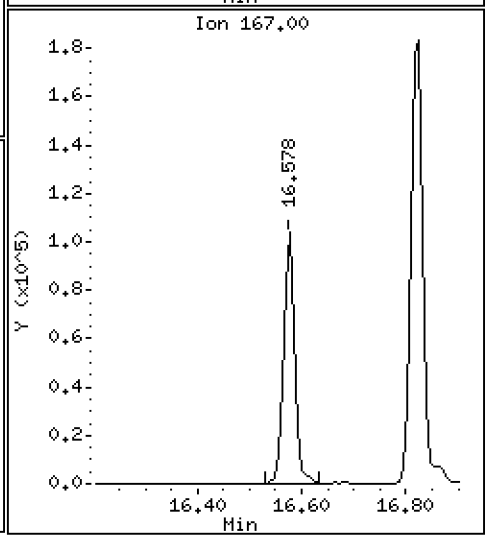












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

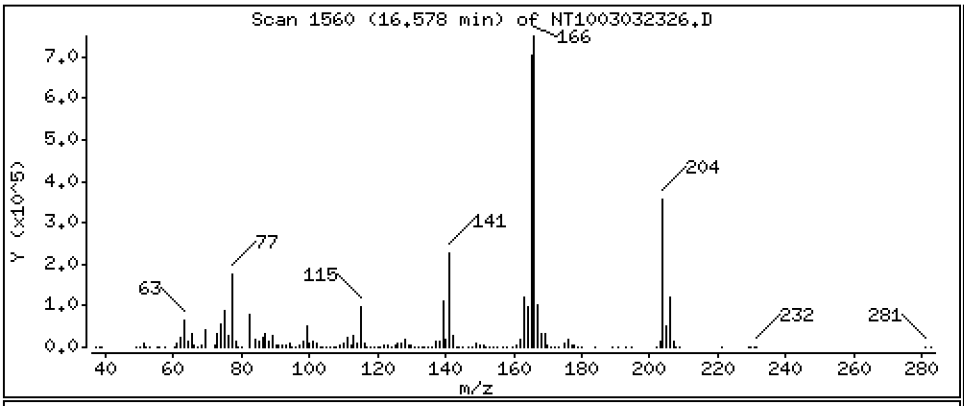
Operator: VTS

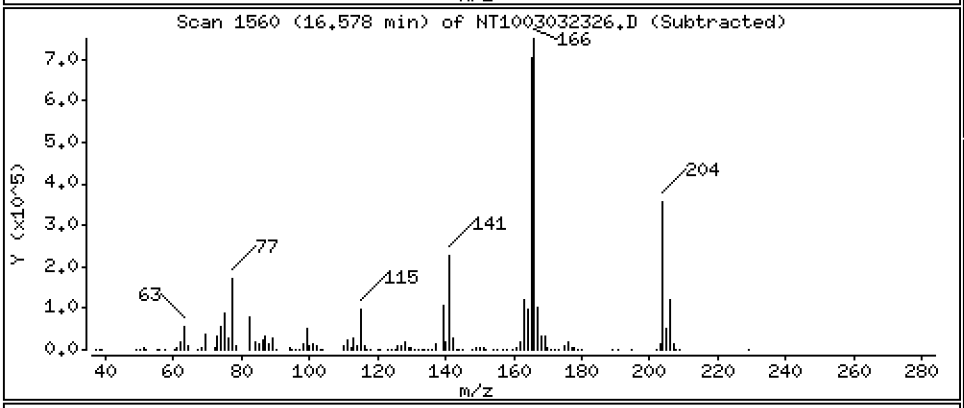
Column phase: ZB-5msi

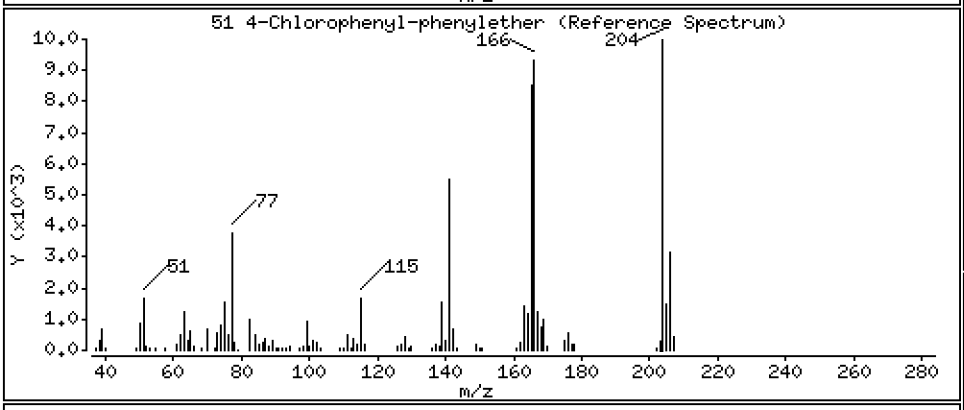
Column diameter: 0.25

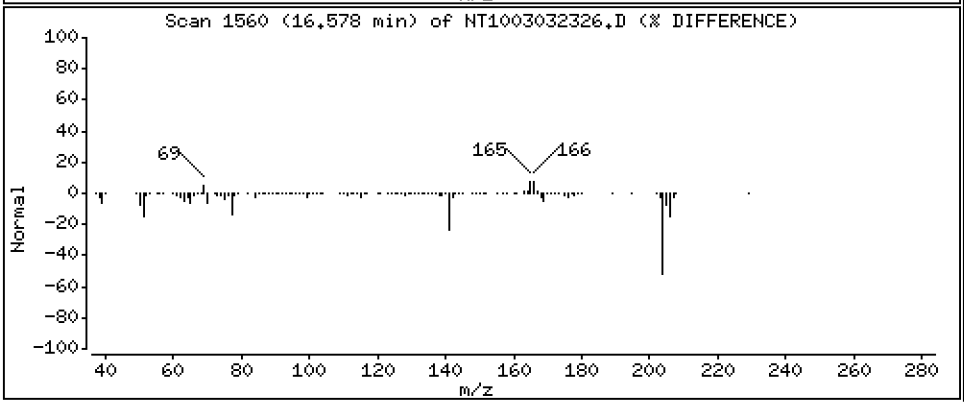
51 4-Chlorophenyl-phenylether

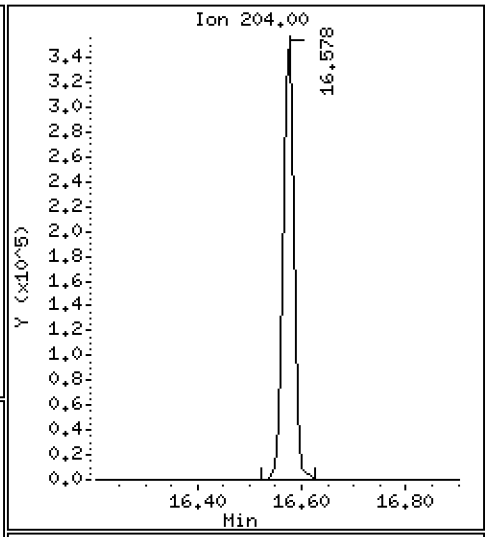
Concentration: 5.696 ug/ml

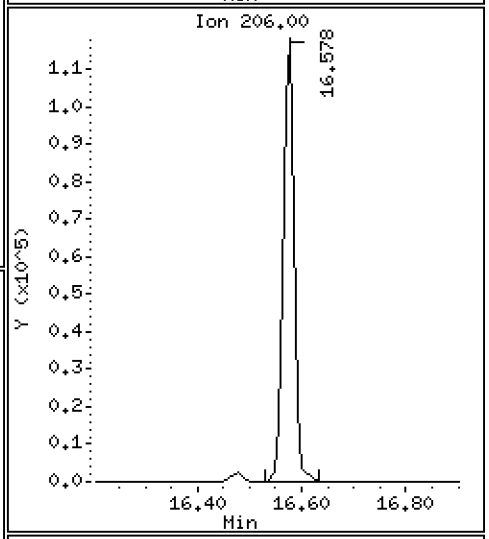


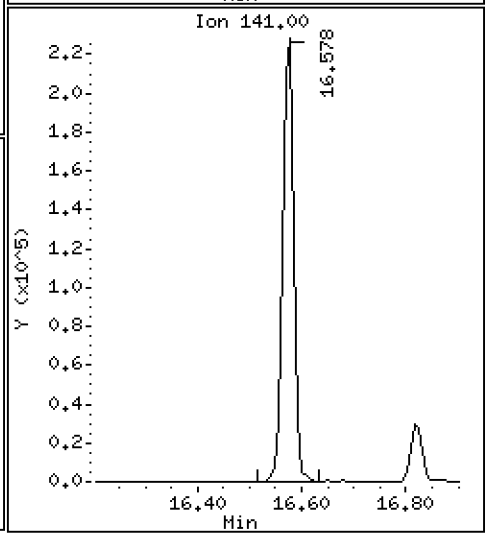












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

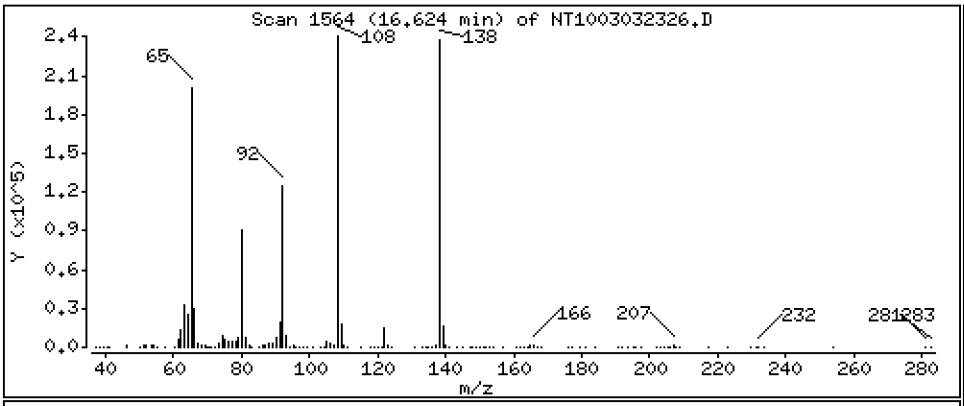
Operator: VTS

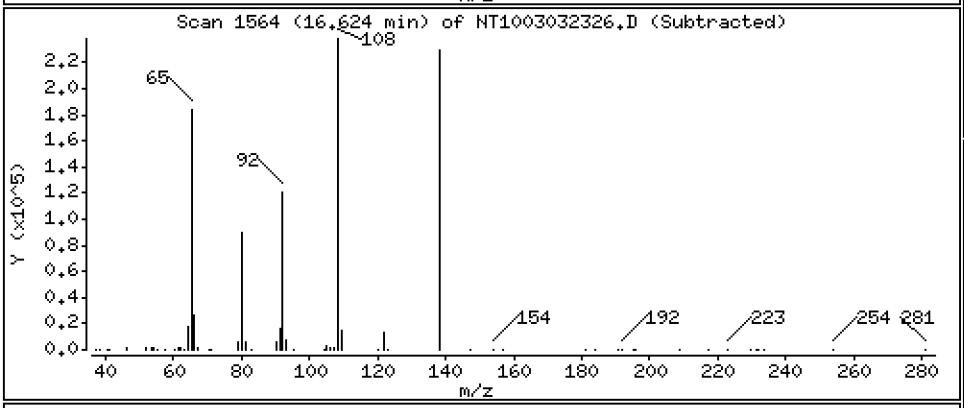
Column phase: ZB-5msi

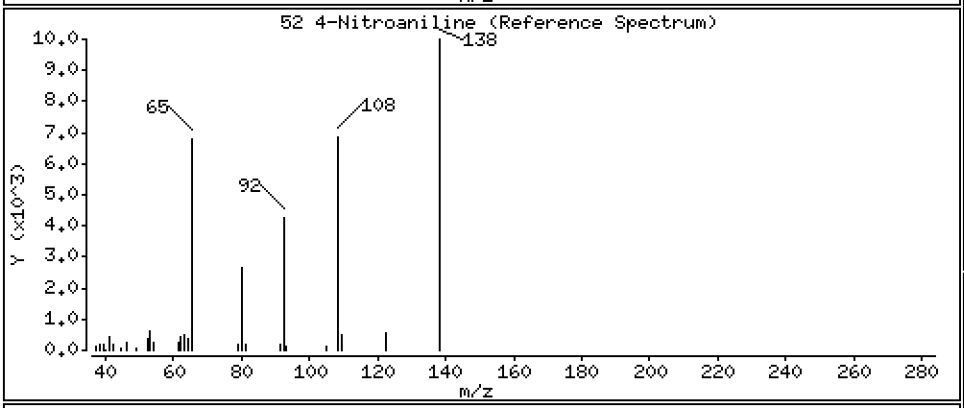
Column diameter: 0.25

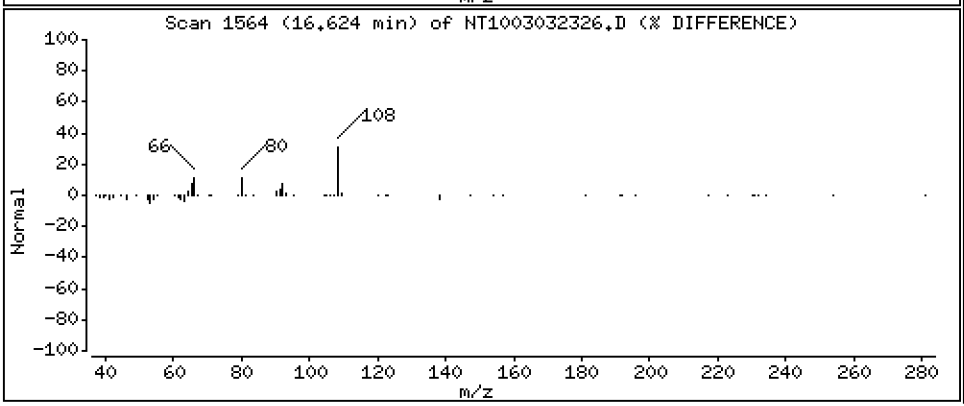
52 4-Nitroaniline

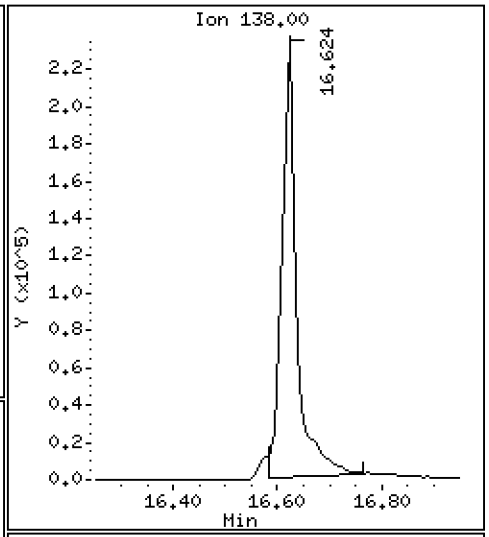
Concentration: 6.163 ug/ml

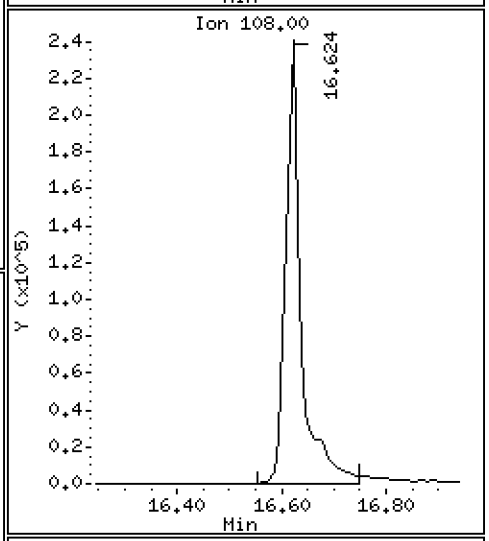


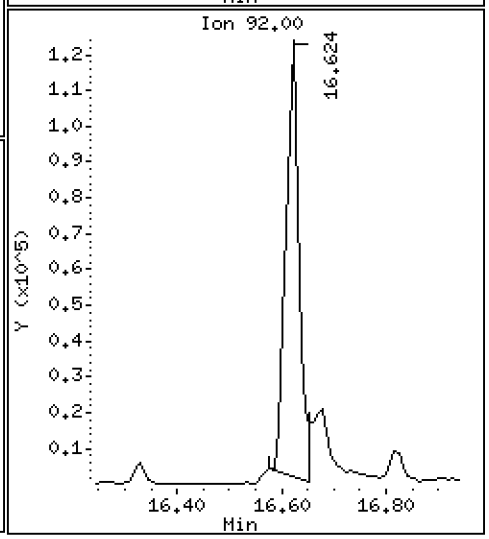












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

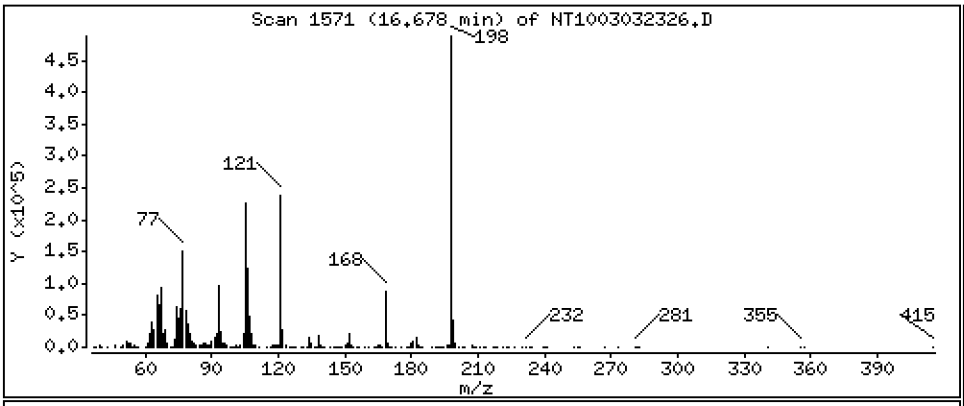
Operator: VTS

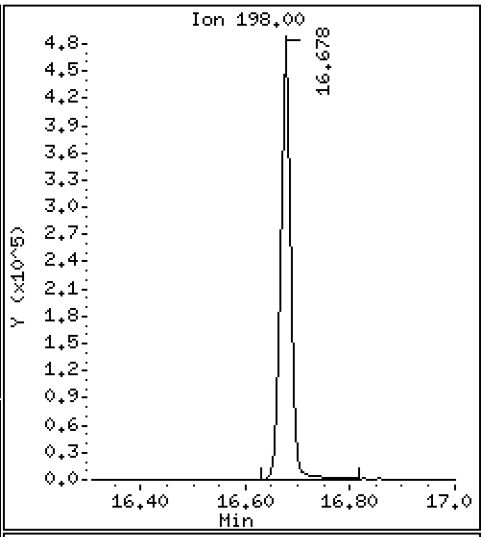
Column phase: ZB-5msi

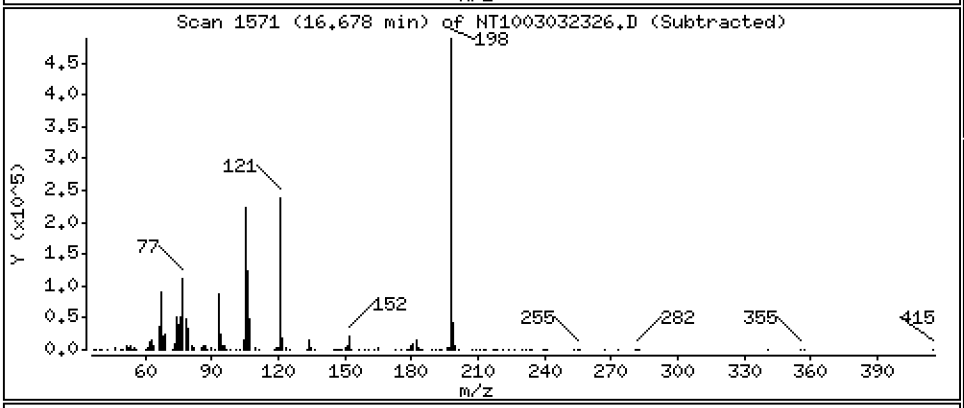
Column diameter: 0.25

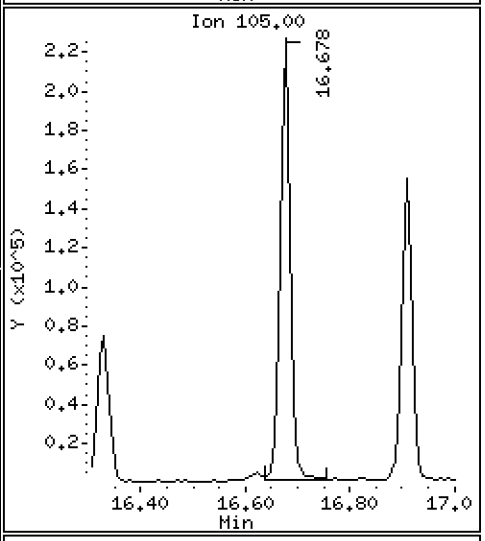
53 4,6-Dinitro-2-methylphenol

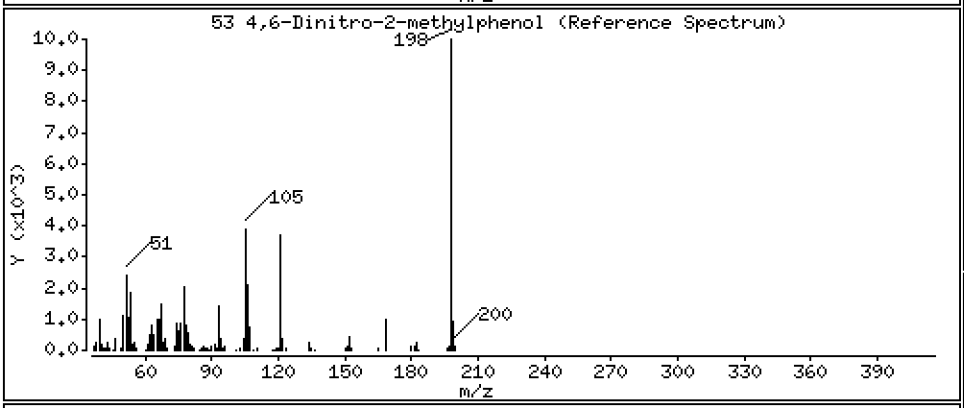
Concentration: 22.66 ug/ml

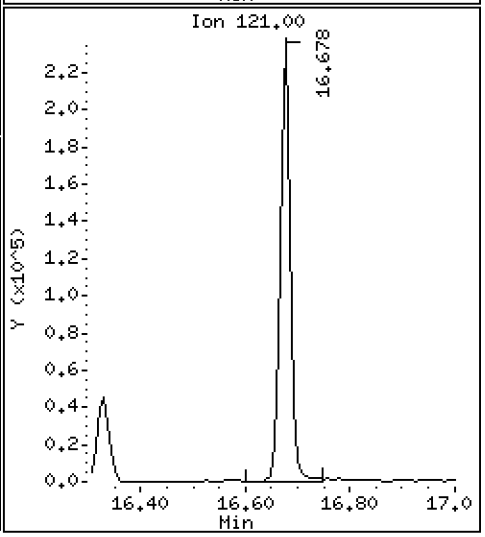


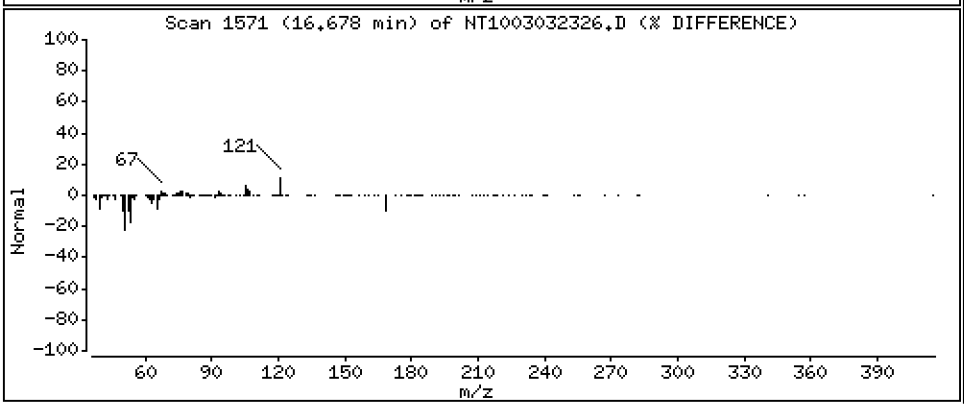












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

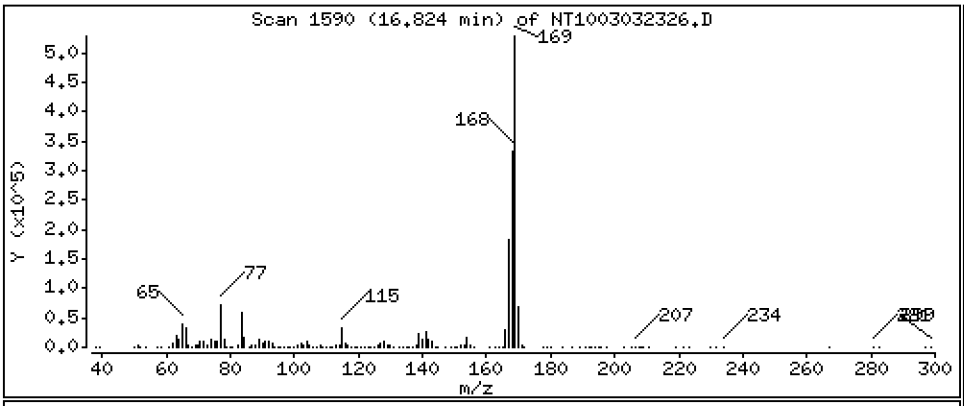
Operator: VTS

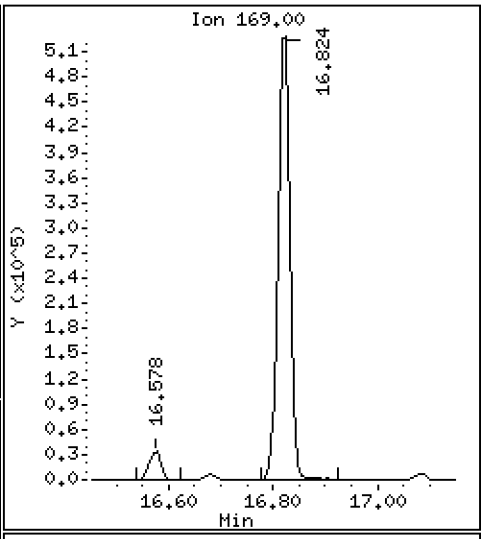
Column phase: ZB-5msi

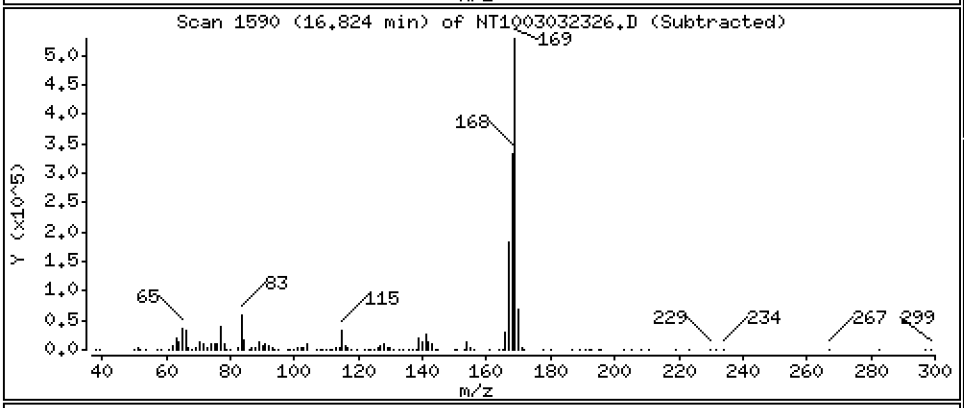
Column diameter: 0.25

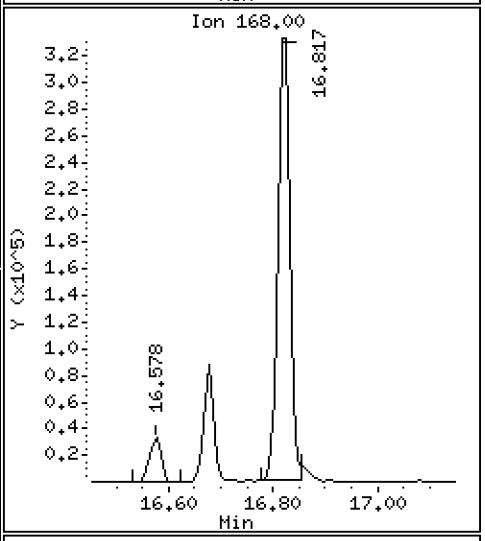
54 N-Nitrosodiphenylamine

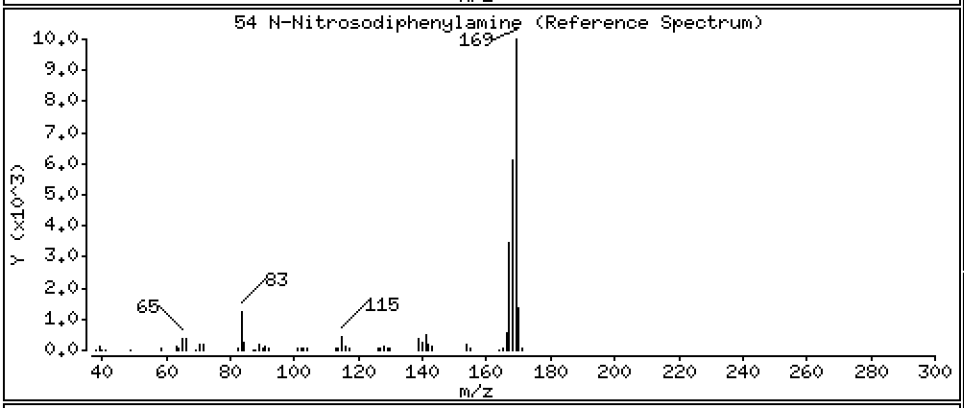
Concentration: 4.929 ug/ml

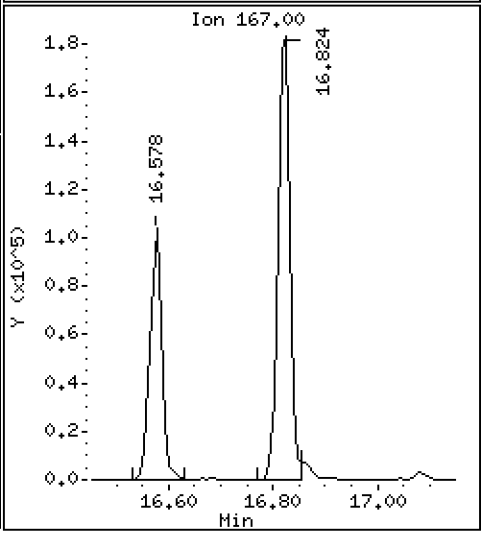


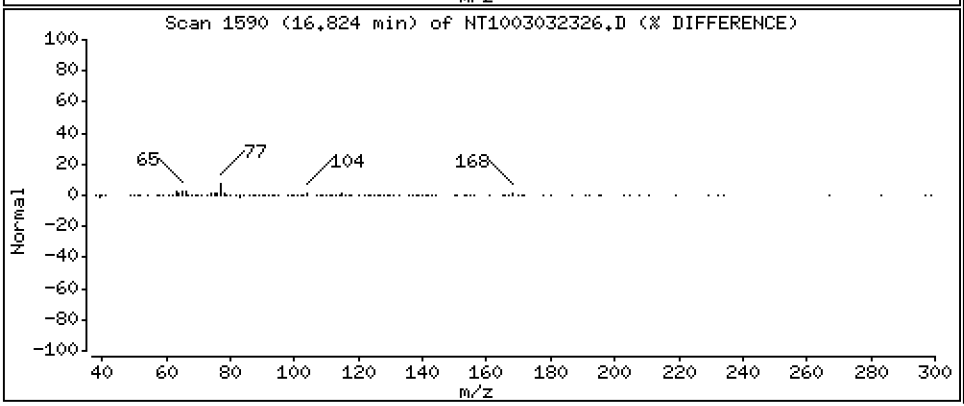












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

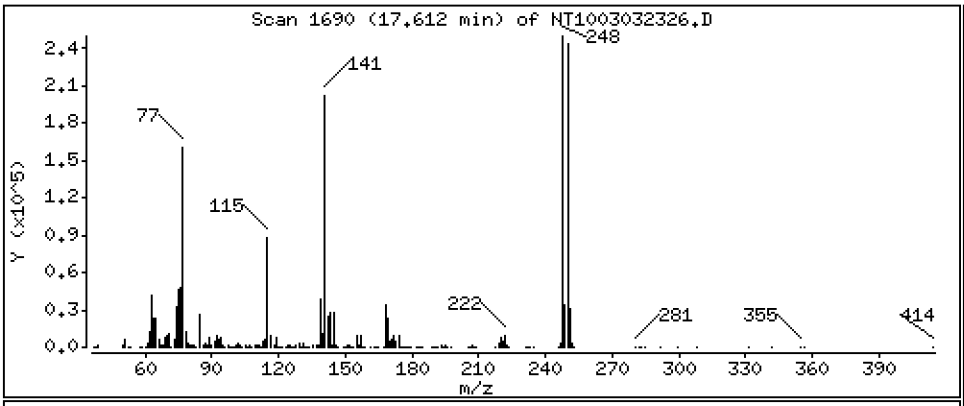
Operator: VTS

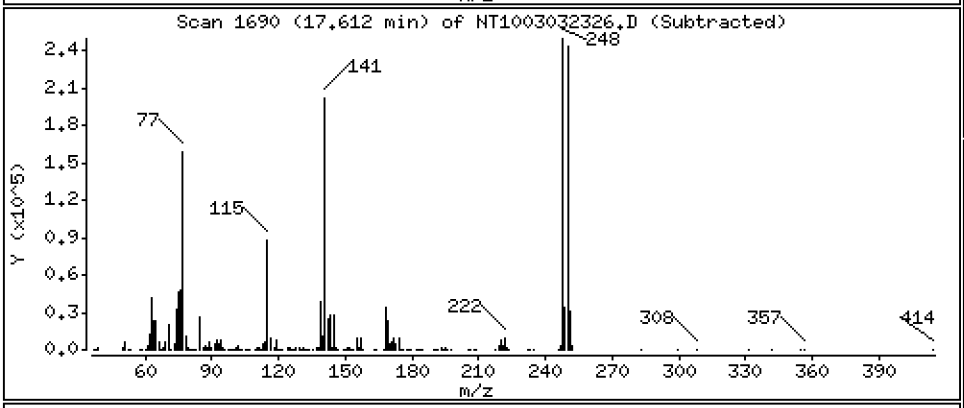
Column phase: ZB-5msi

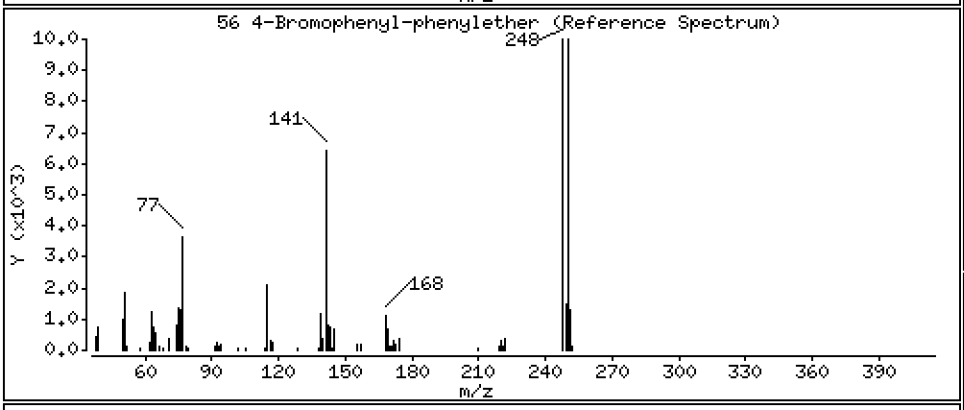
Column diameter: 0.25

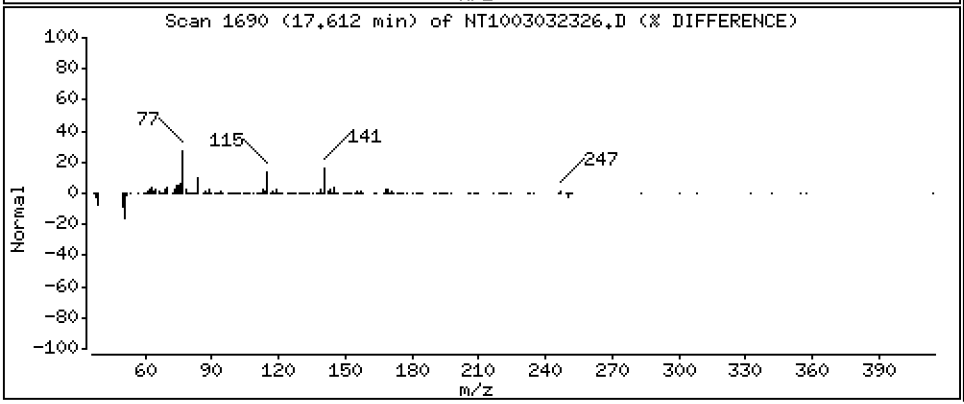
56 4-Bromophenyl-phenylether

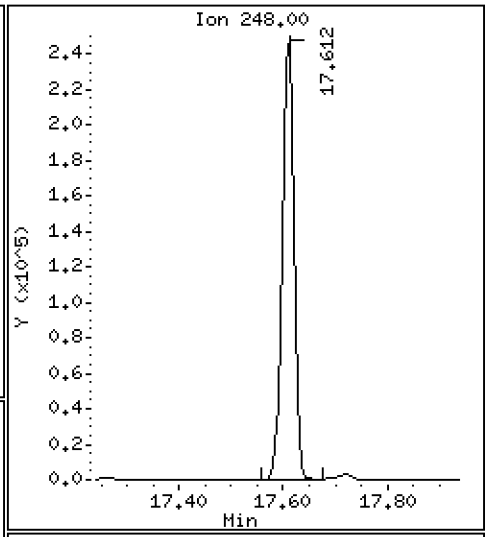
Concentration: 5.713 ug/ml

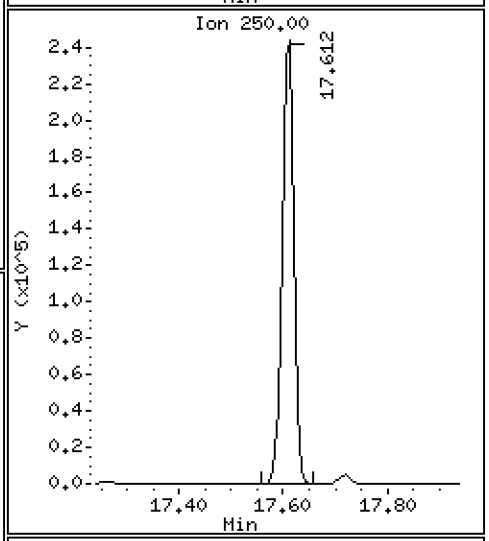


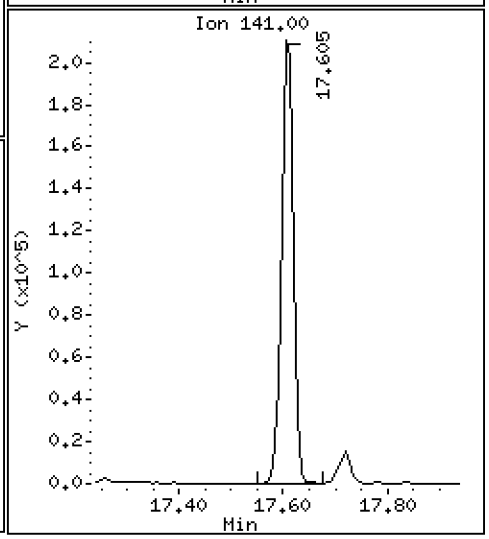












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

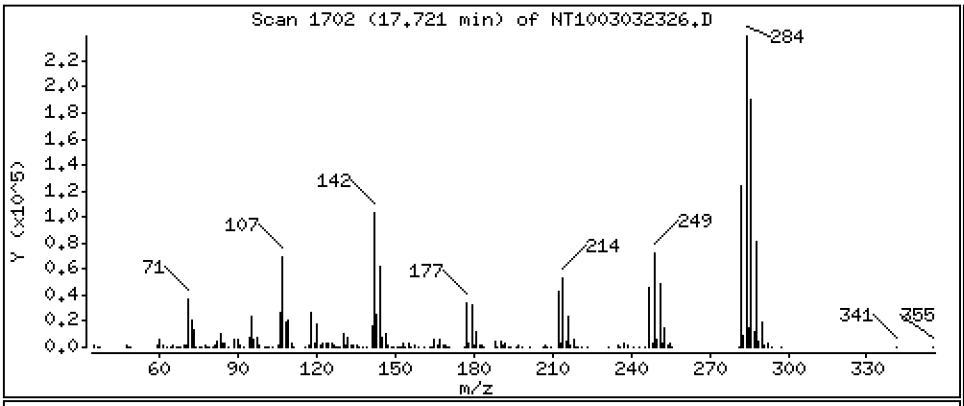
Operator: VTS

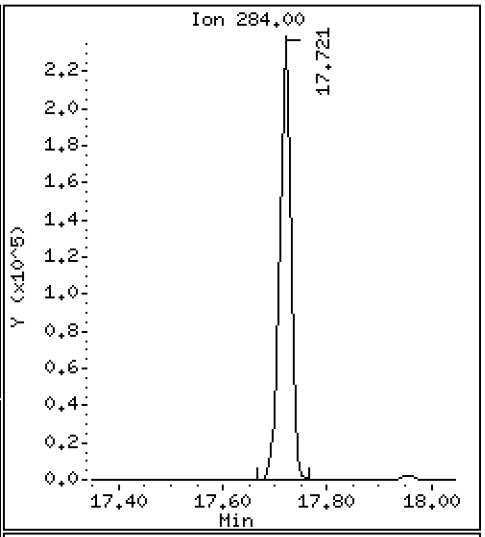
Column phase: ZB-5msi

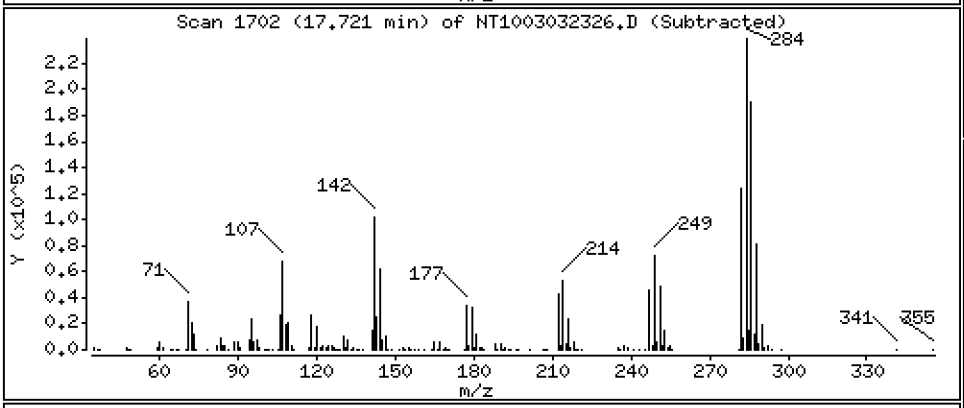
Column diameter: 0.25

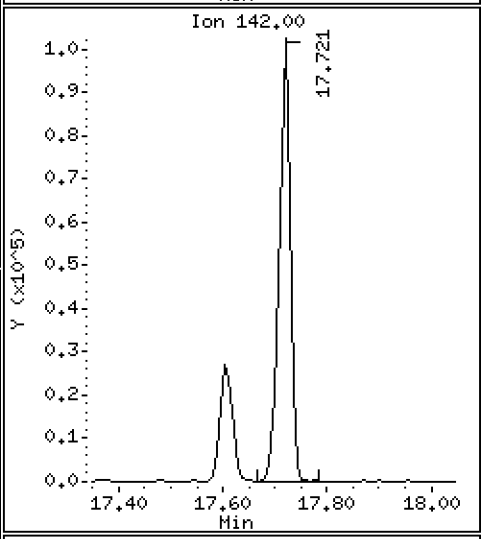
57 Hexachlorobenzene

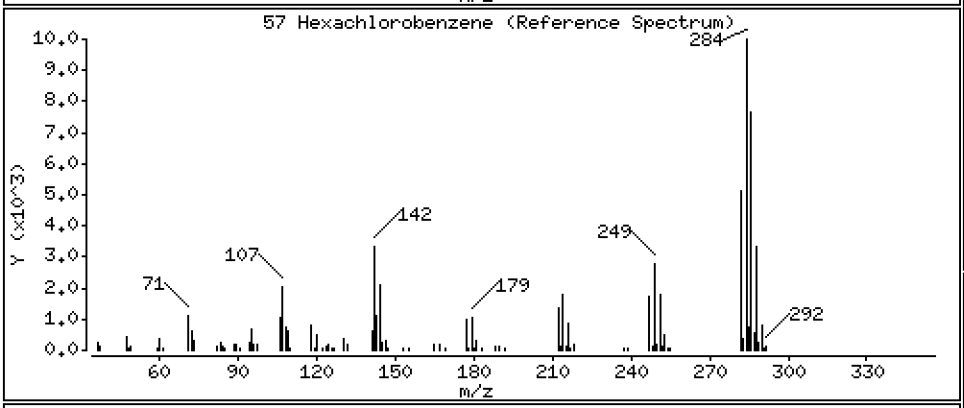
Concentration: 3.603 ug/ml

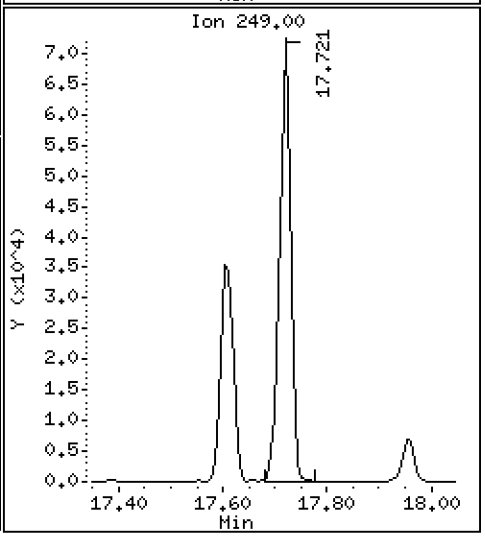


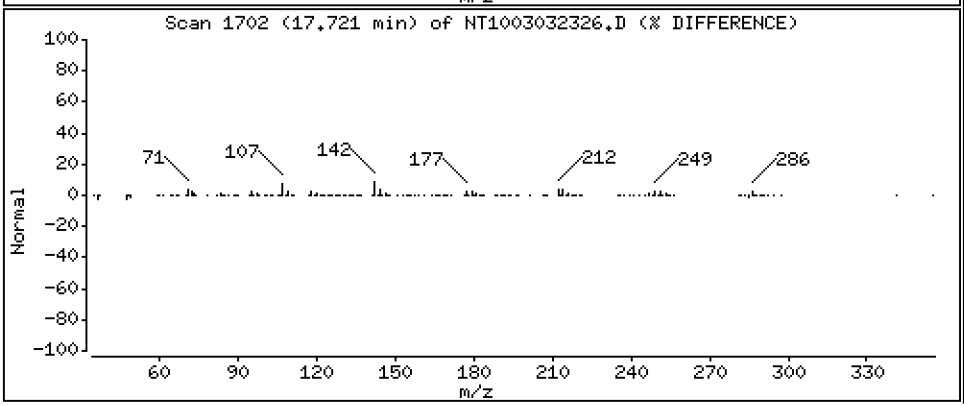












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

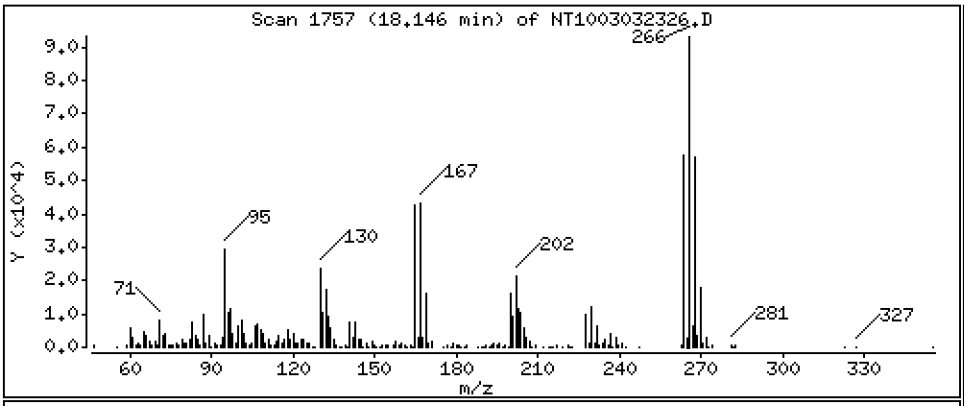
Operator: VTS

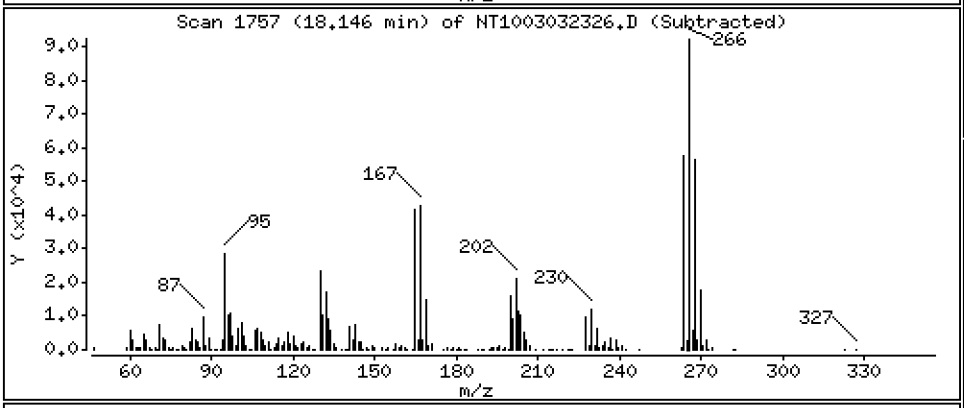
Column phase: ZB-5msi

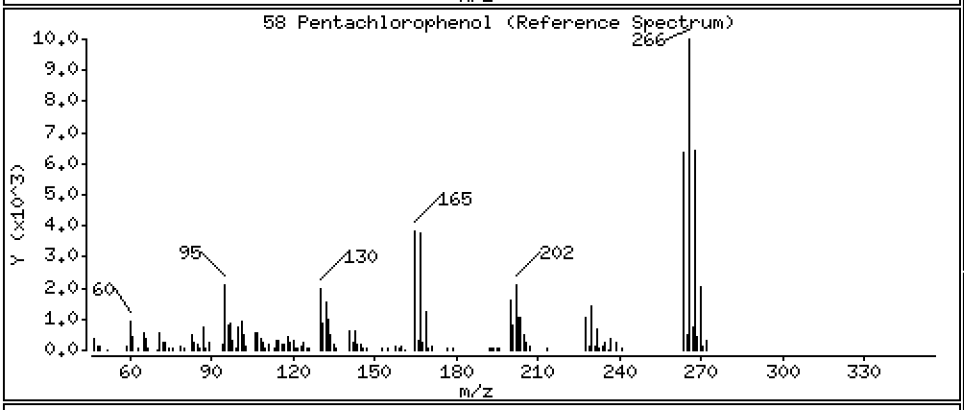
Column diameter: 0.25

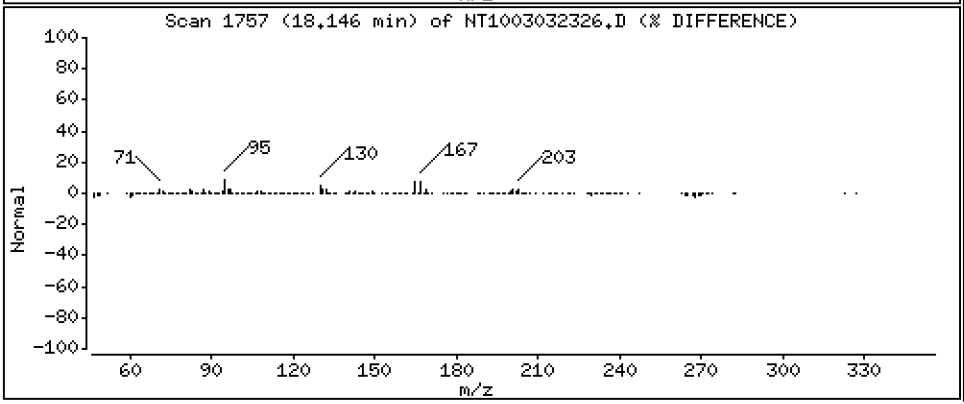
58 Pentachlorophenol

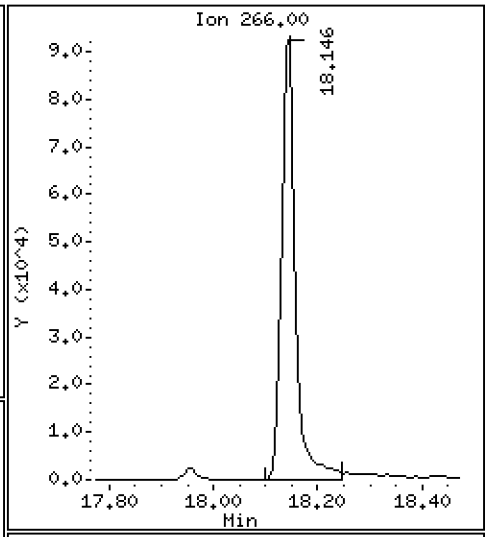
Concentration: 4.563 ug/ml

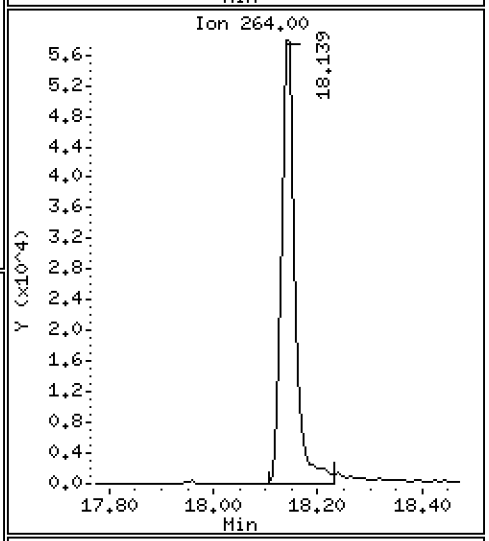


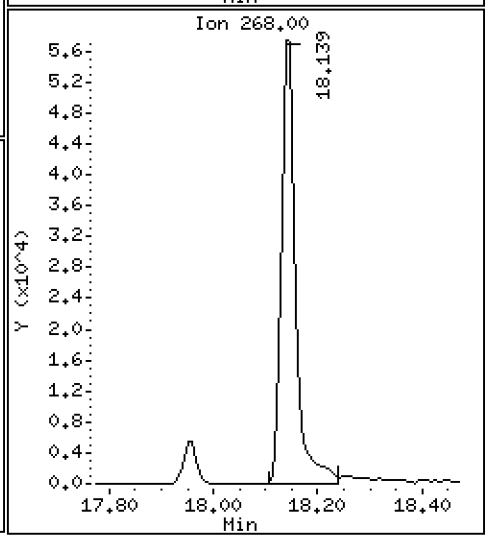












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

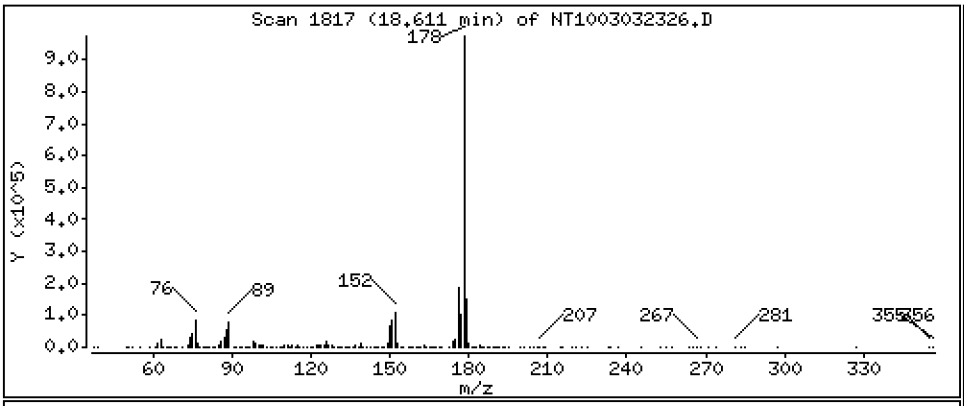
Operator: VTS

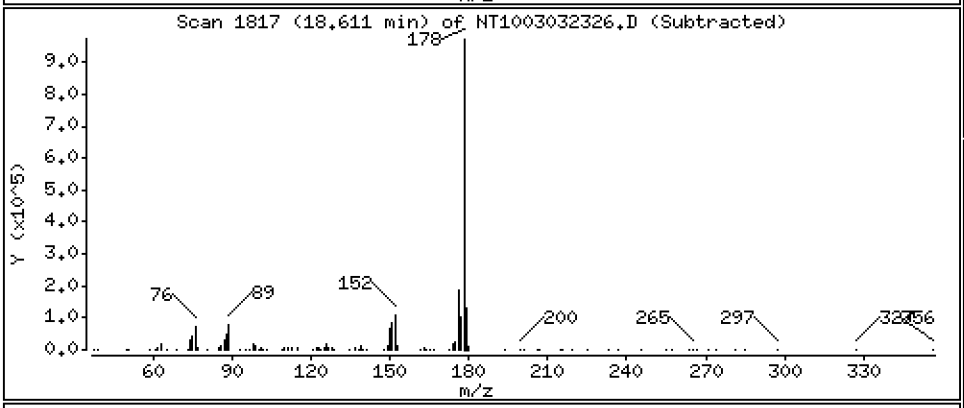
Column phase: ZB-5msi

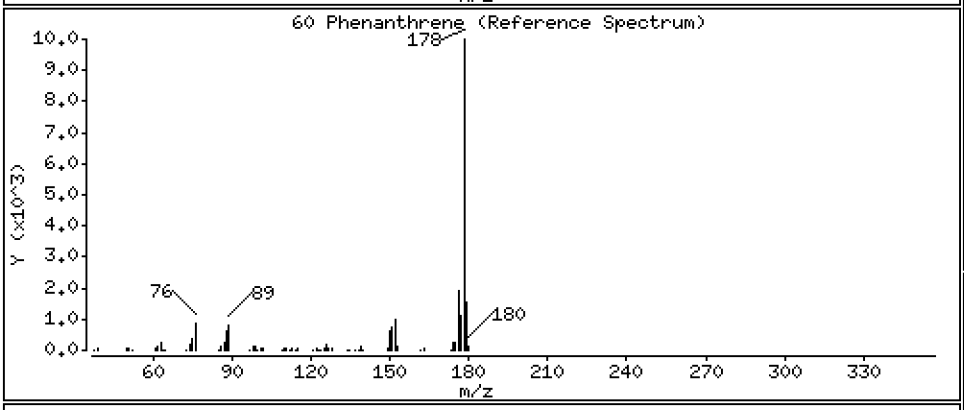
Column diameter: 0.25

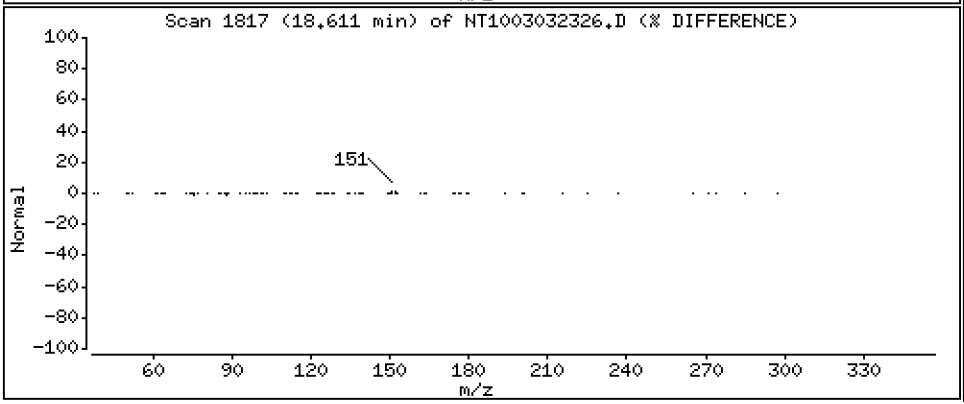
60 Phenanthrene

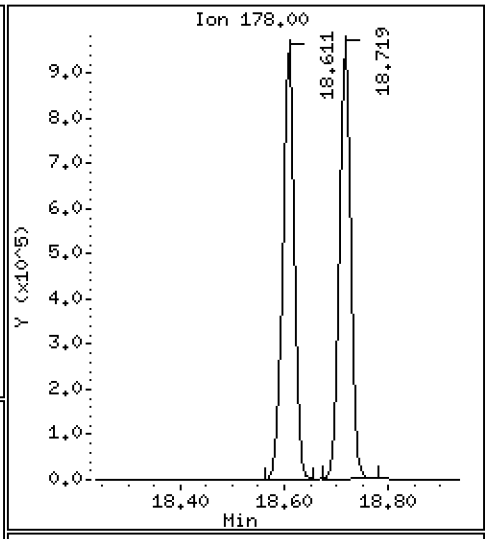
Concentration: 4.903 ug/ml

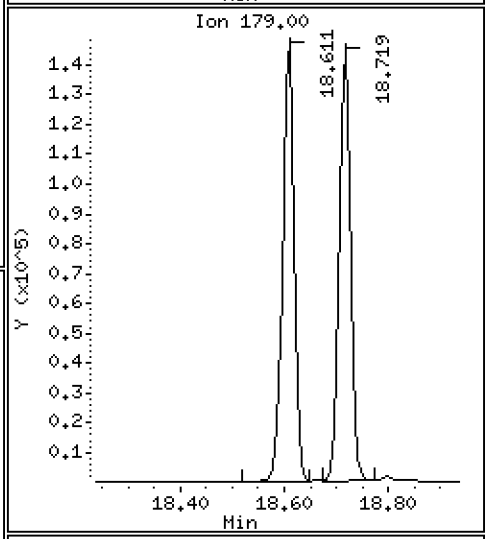


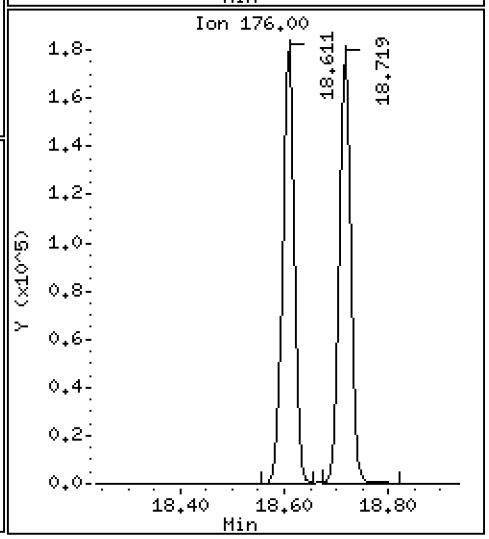












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

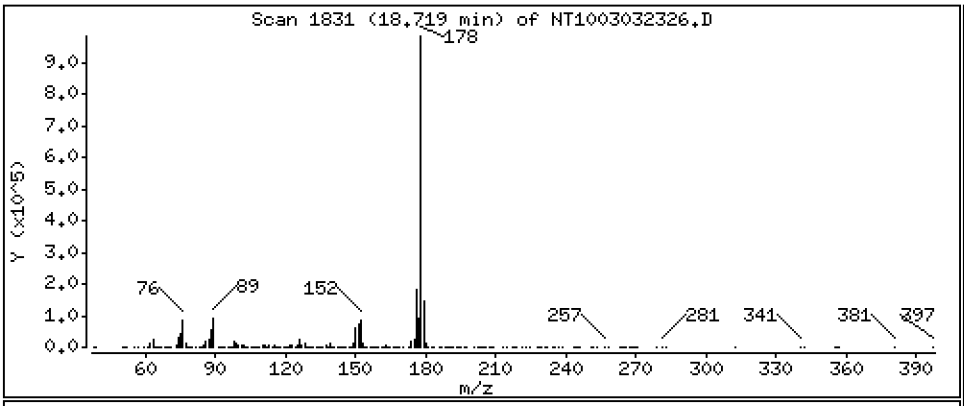
Operator: VTS

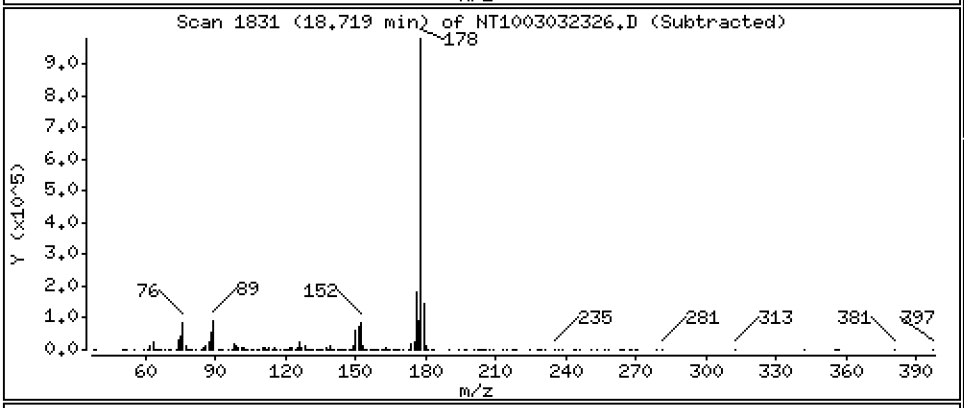
Column phase: ZB-5msi

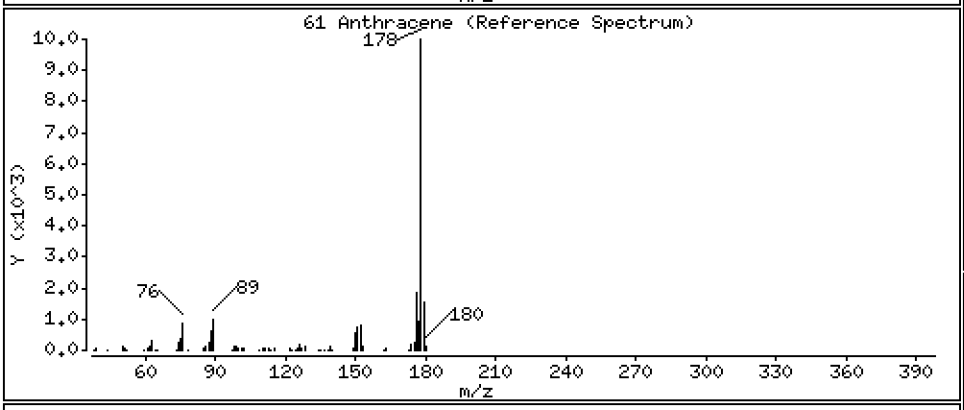
Column diameter: 0.25

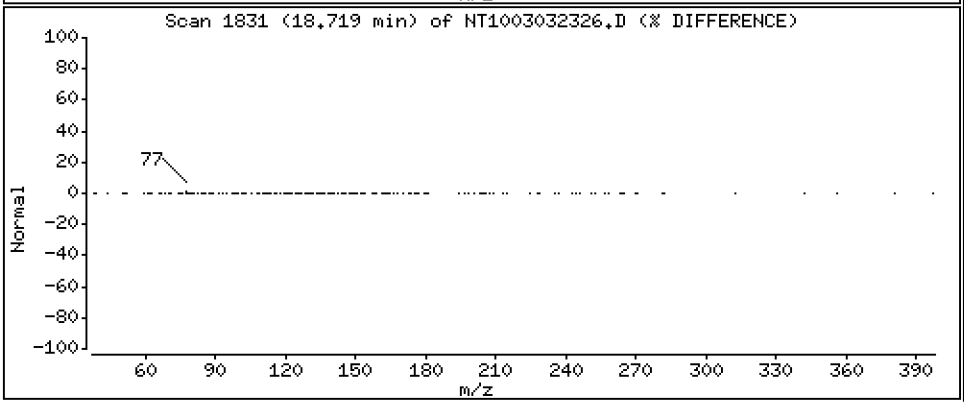
61 Anthracene

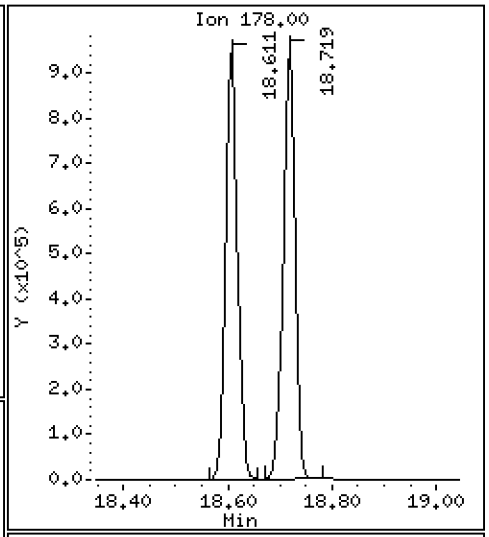
Concentration: 5.173 ug/ml

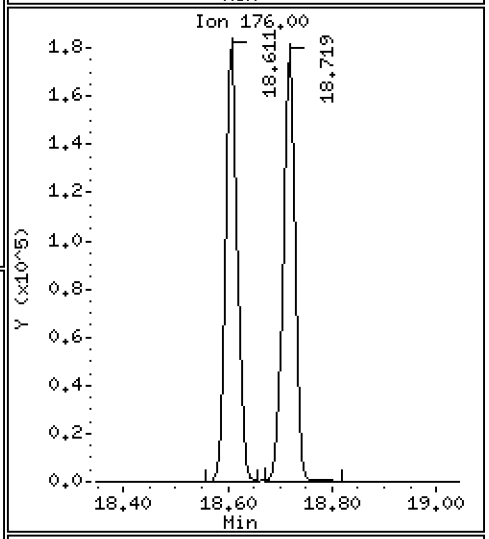


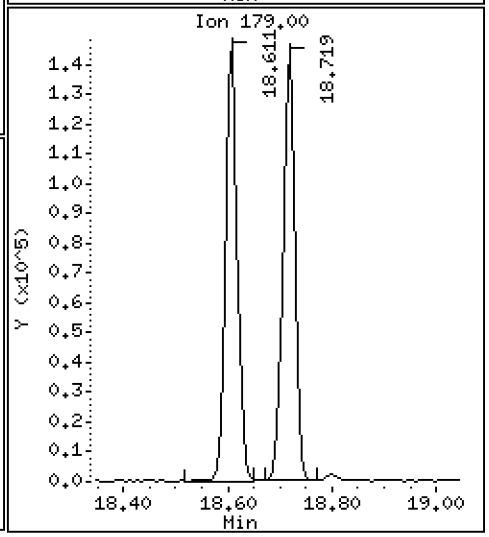












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

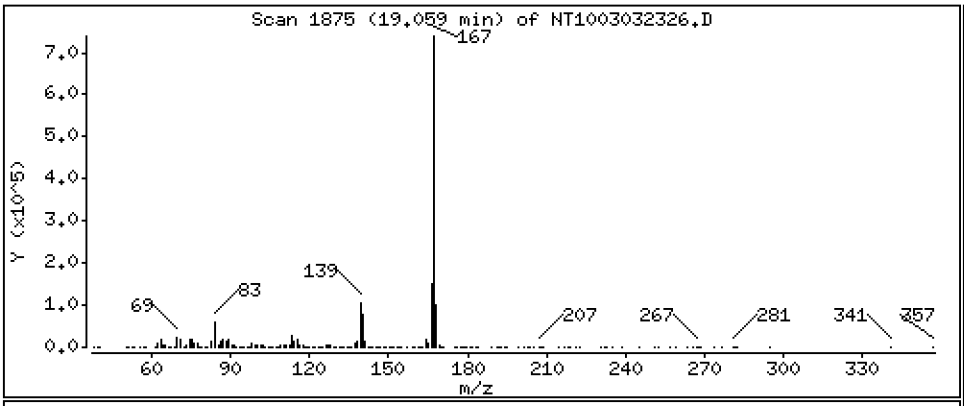
Operator: VTS

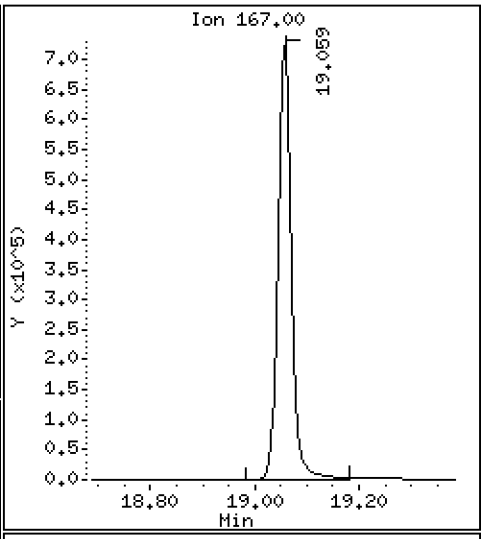
Column phase: ZB-5msi

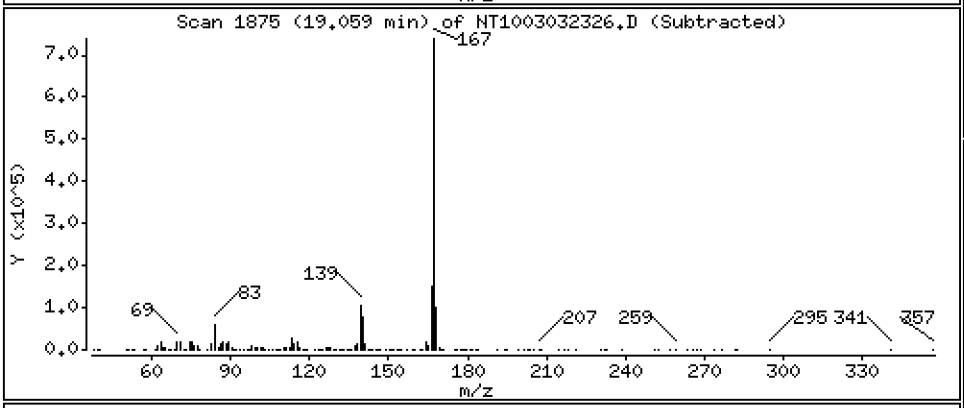
Column diameter: 0.25

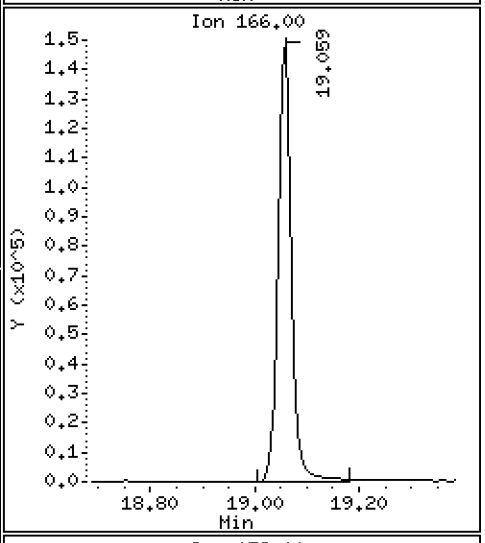
62 Carbazole

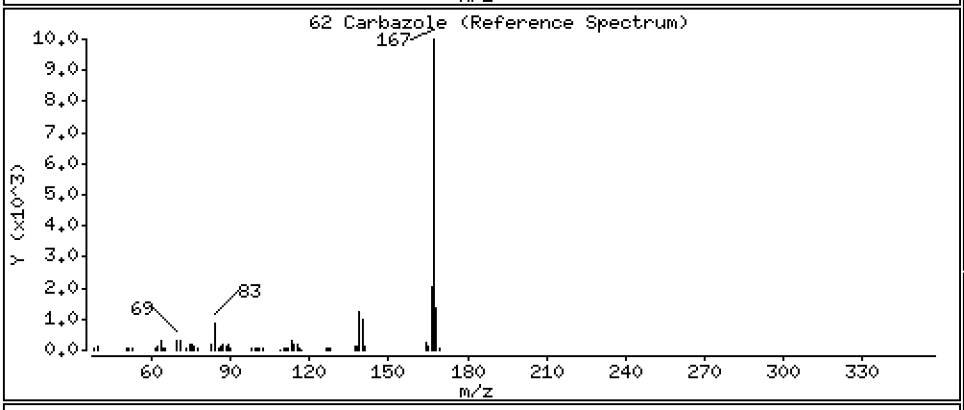
Concentration: 4.981 ug/ml

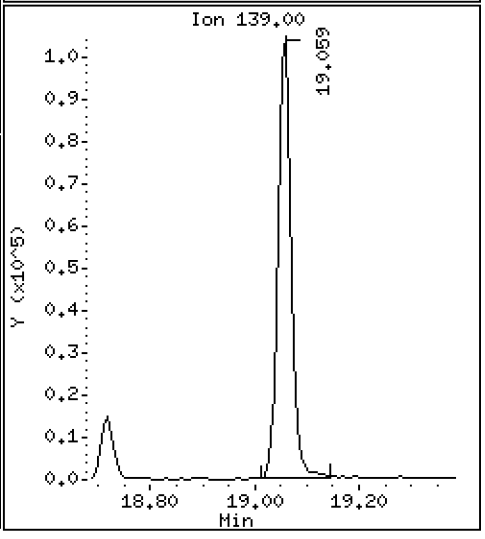


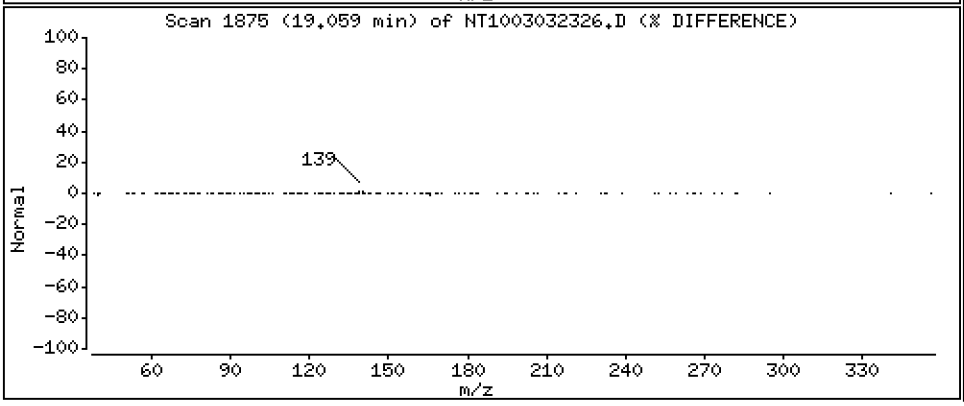












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

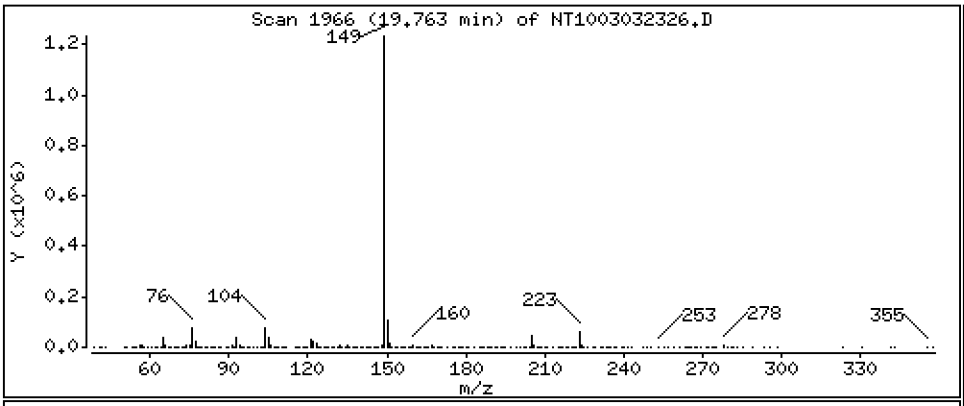
Operator: VTS

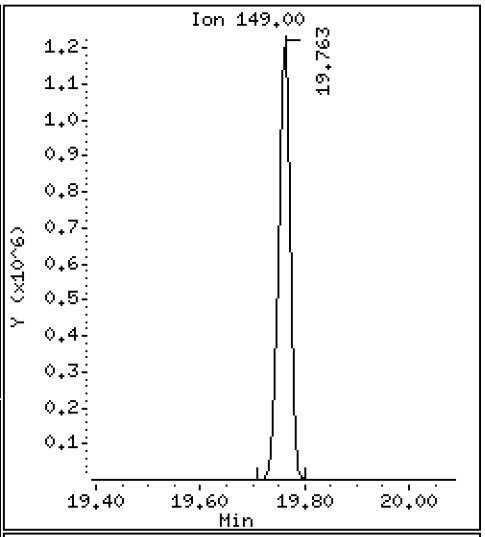
Column phase: ZB-5msi

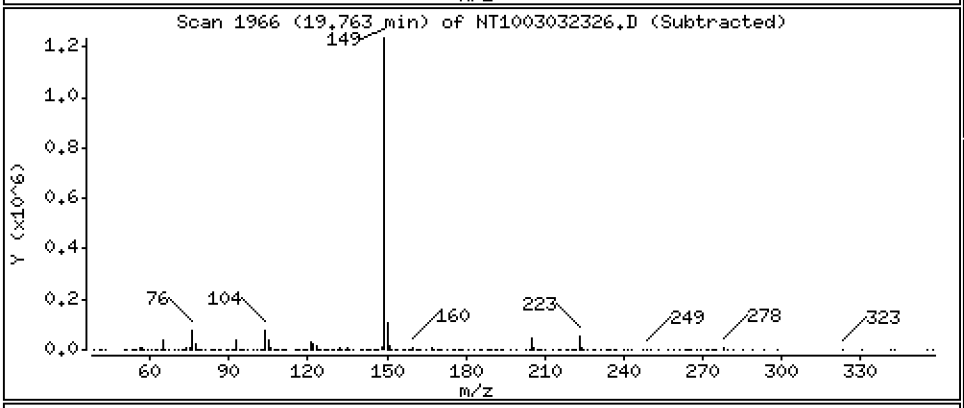
Column diameter: 0.25

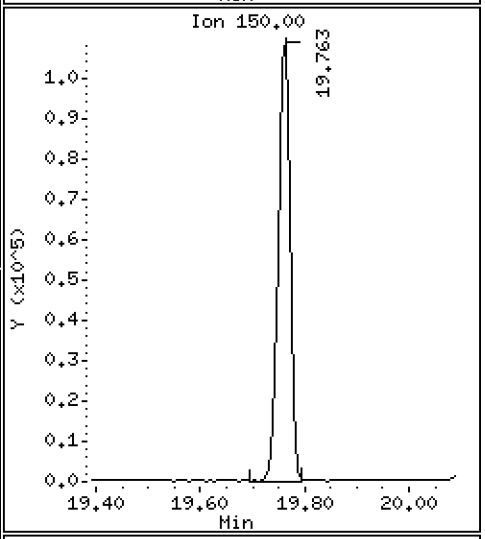
63 Di-n-butylphthalate

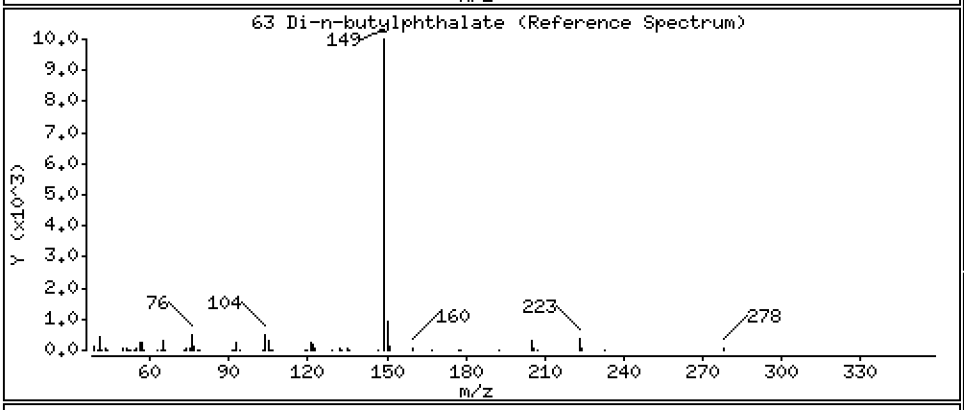
Concentration: 5.066 ug/ml

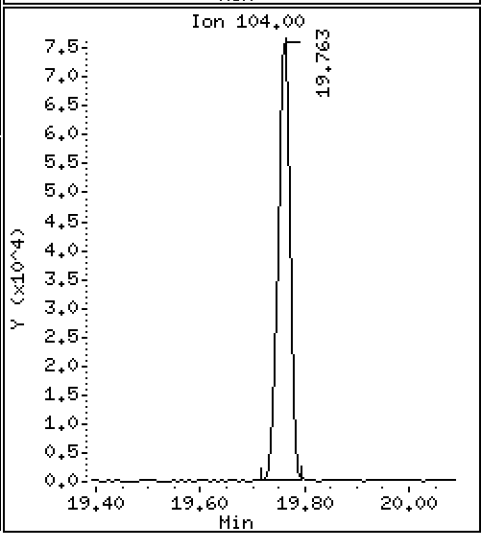


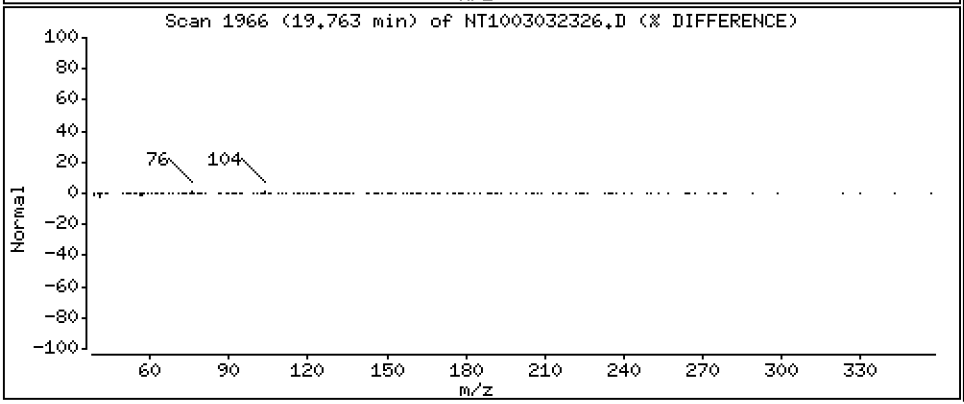












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

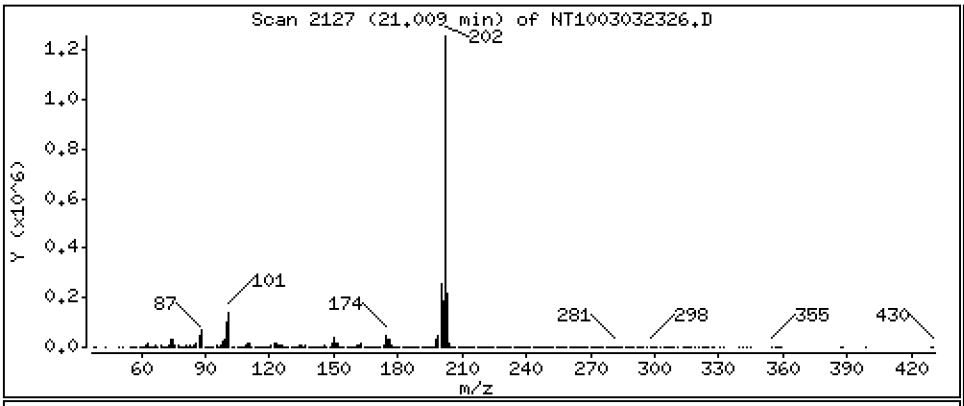
Operator: VTS

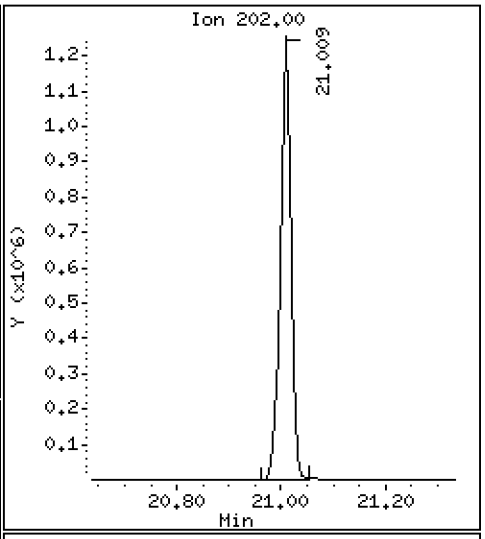
Column phase: ZB-5msi

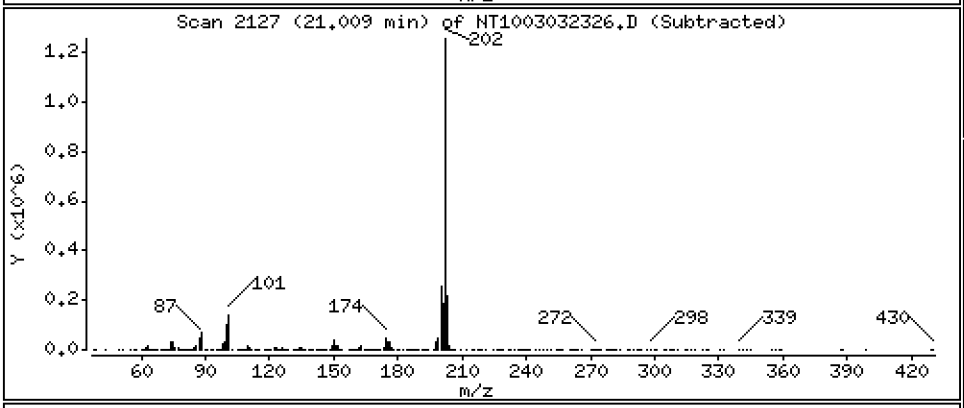
Column diameter: 0.25

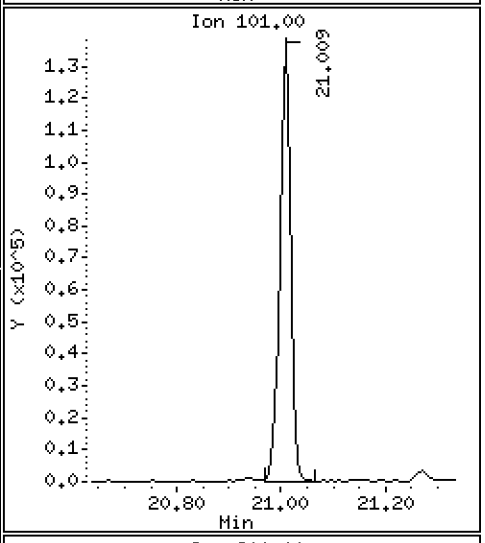
64 Fluoranthene

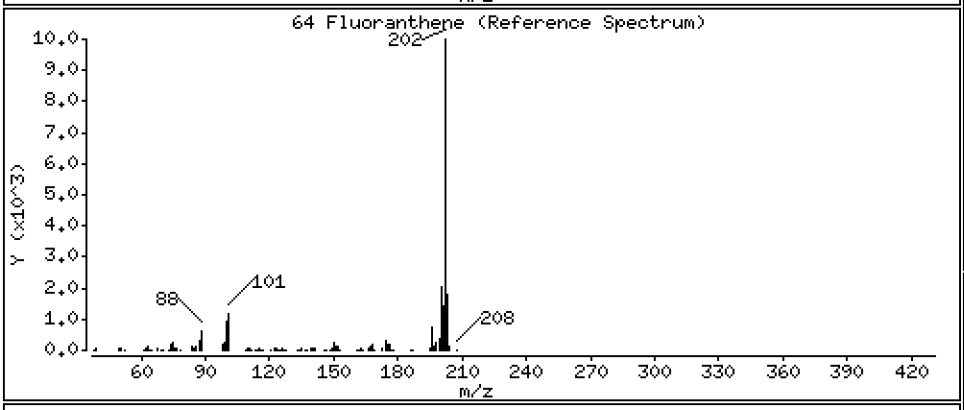
Concentration: 4.269 ug/ml

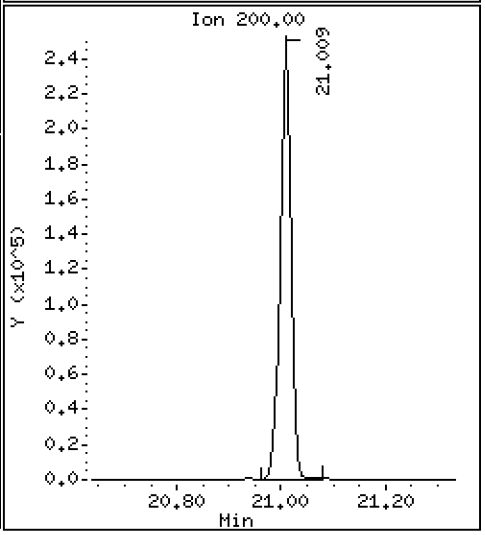


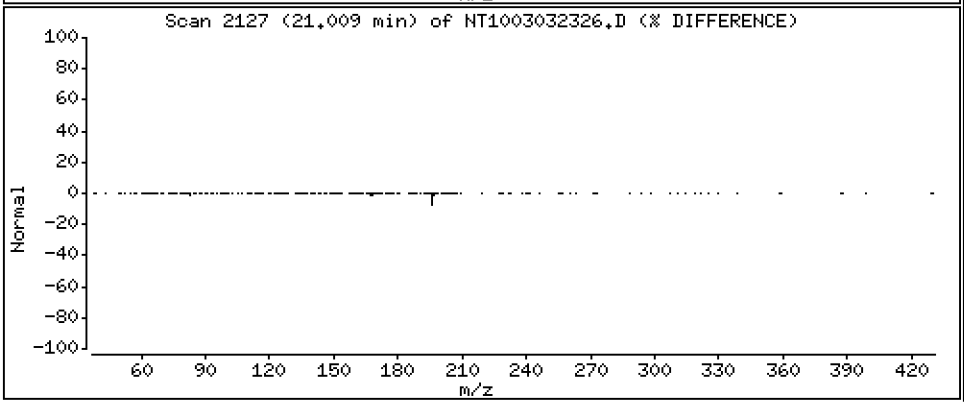












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

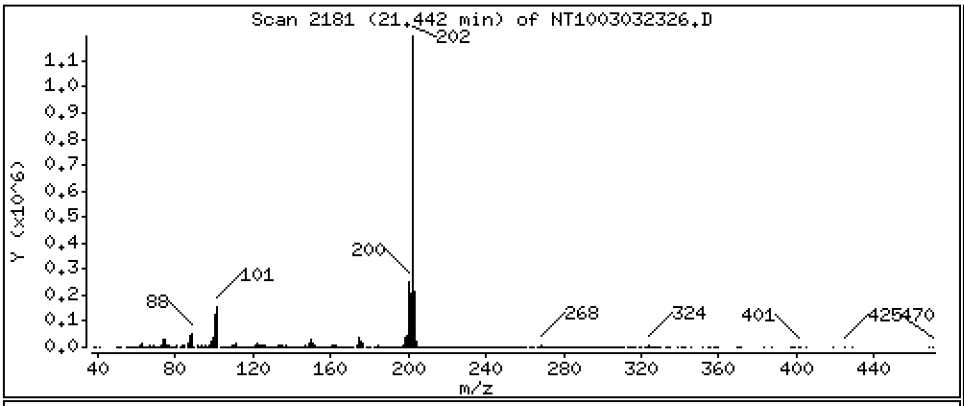
Operator: VTS

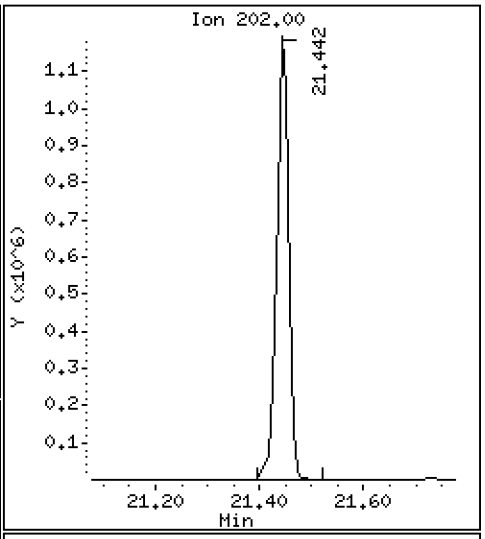
Column phase: ZB-5msi

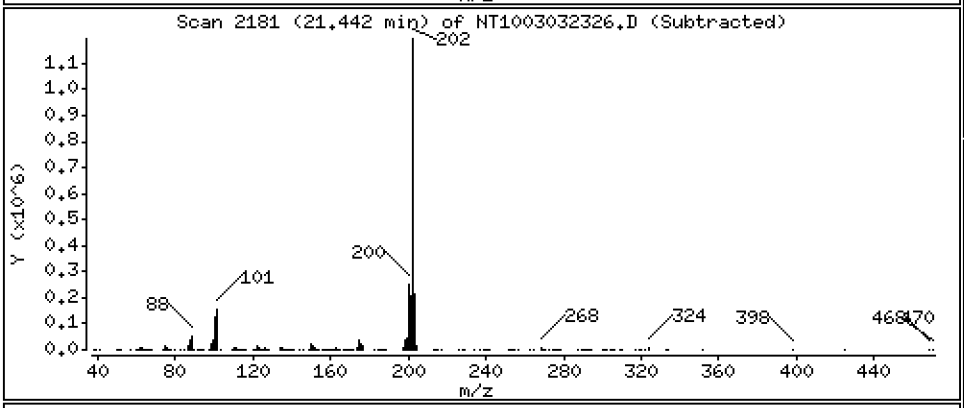
Column diameter: 0.25

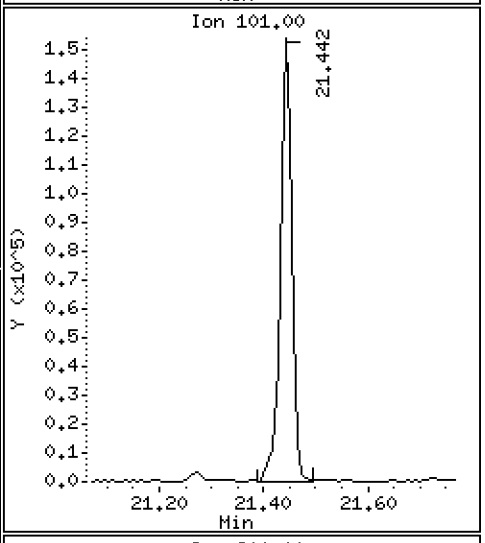
65 Pyrene

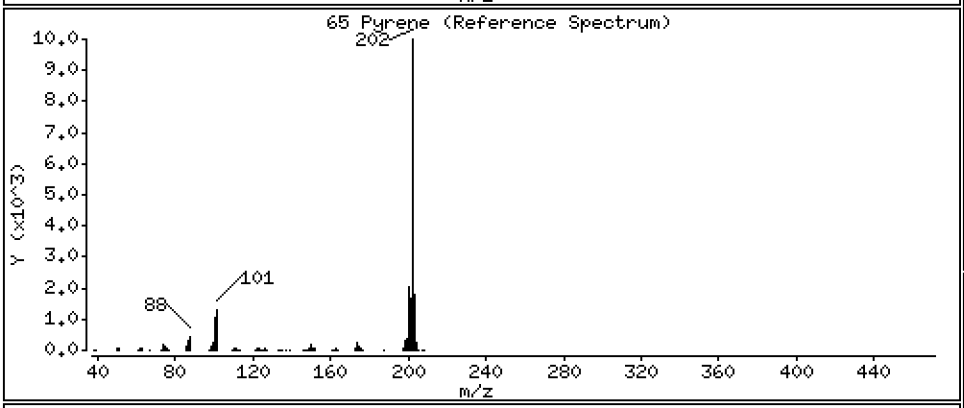
Concentration: 4.973 ug/ml

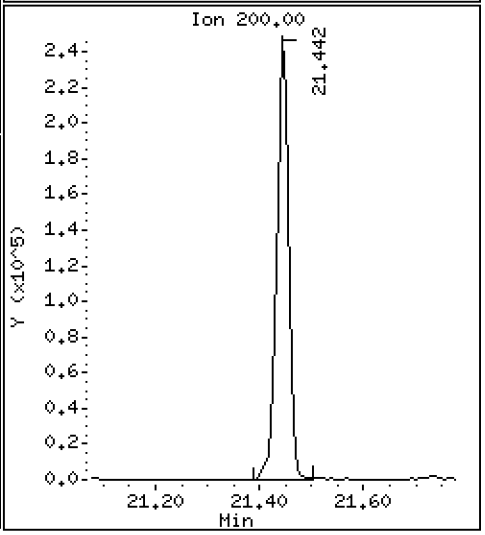


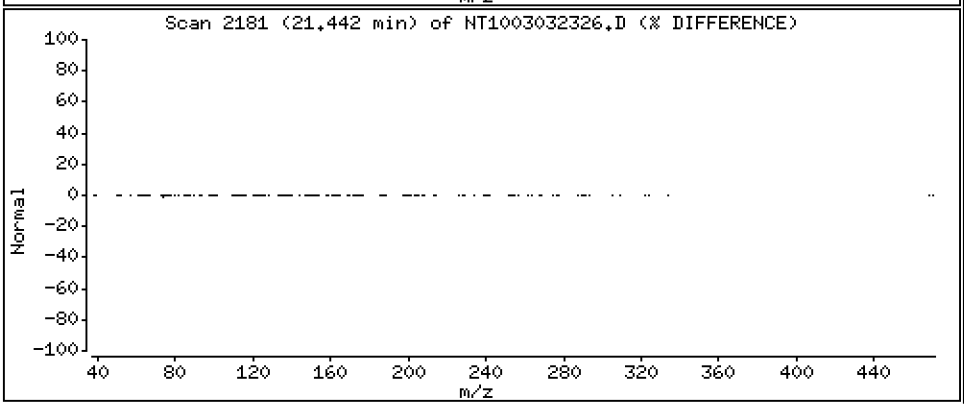












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

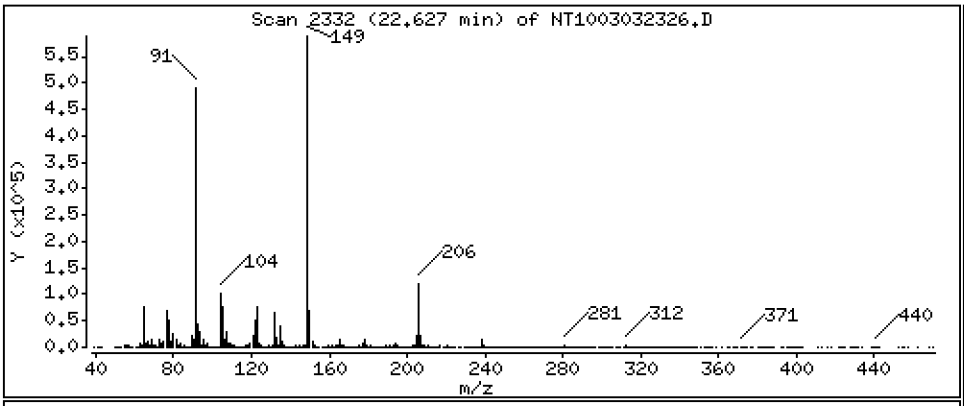
Operator: VTS

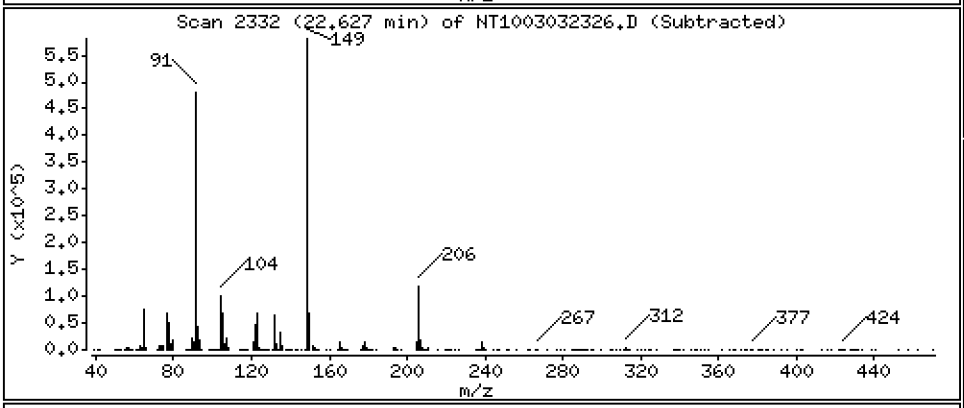
Column phase: ZB-5msi

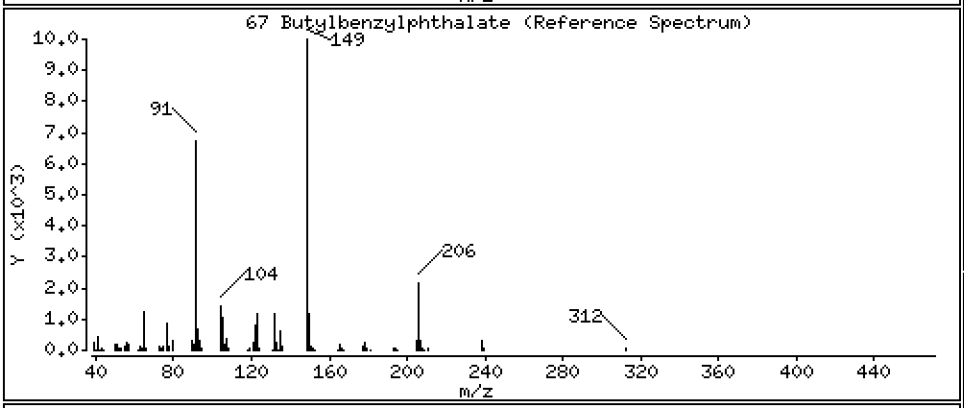
Column diameter: 0.25

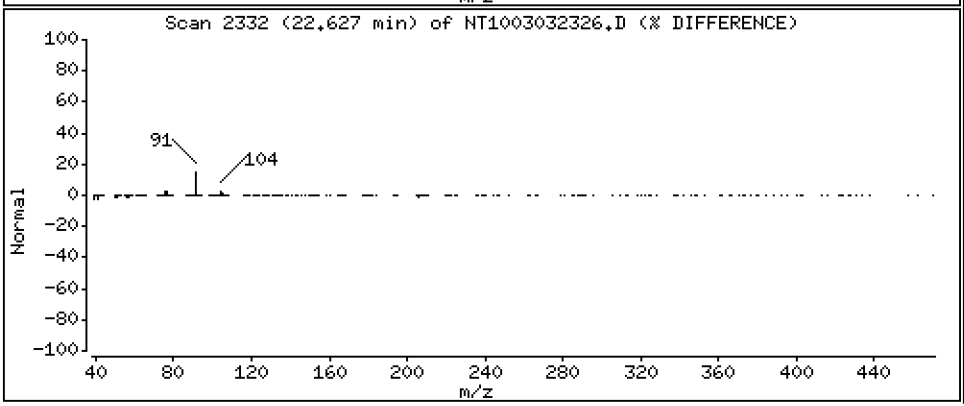
67 Butylbenzylphthalate

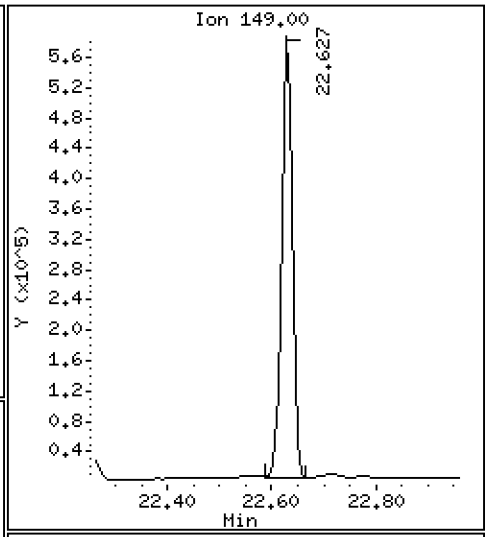
Concentration: 3.778 ug/ml

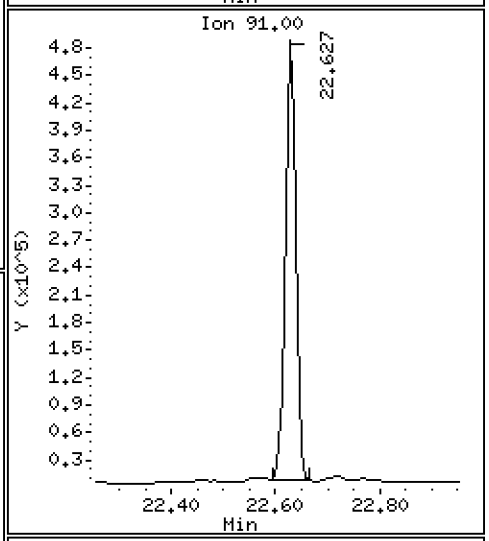


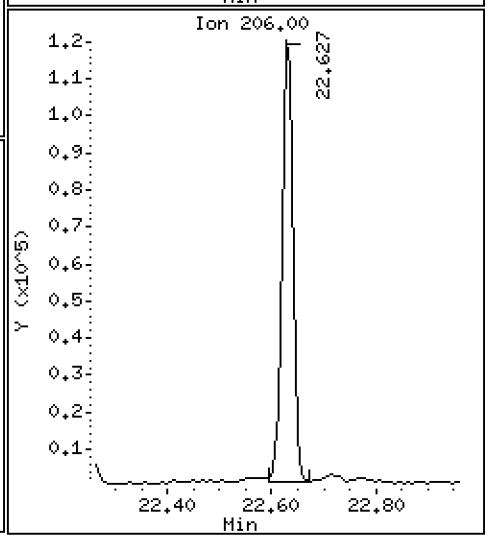












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

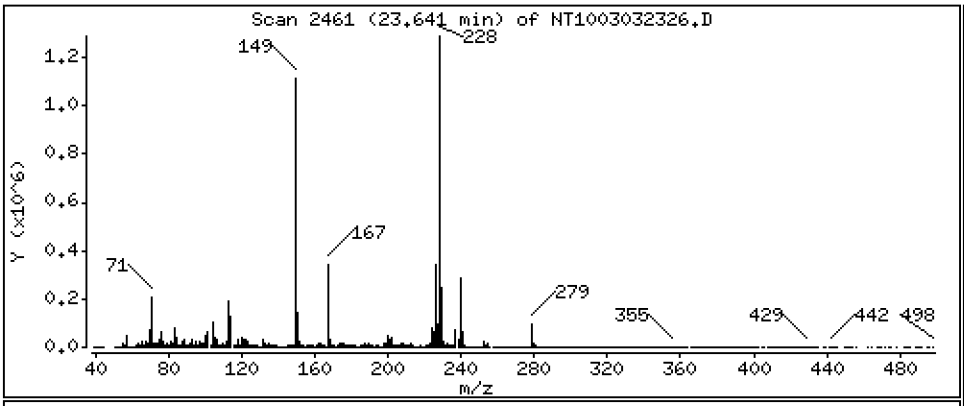
Operator: VTS

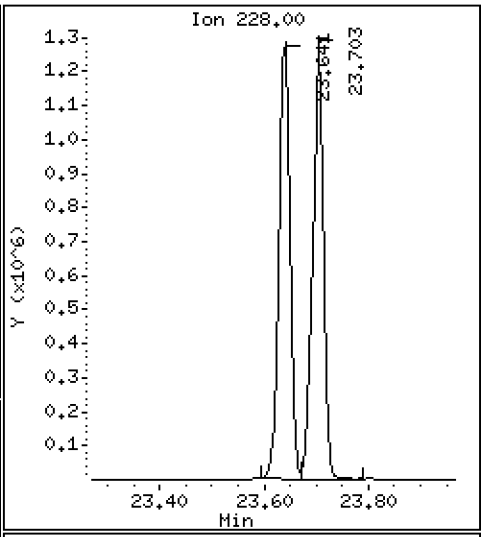
Column phase: ZB-5msi

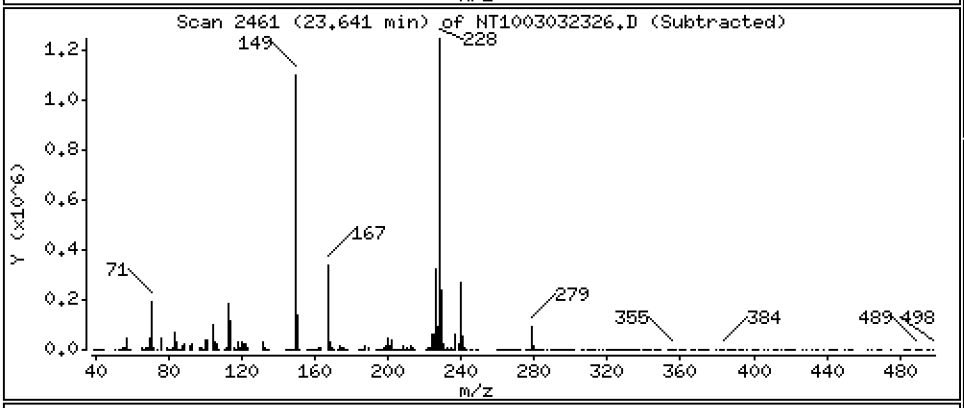
Column diameter: 0.25

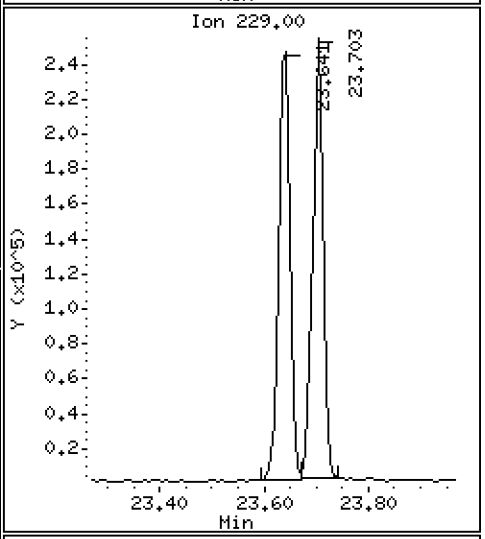
68 Benzo(a)anthracene

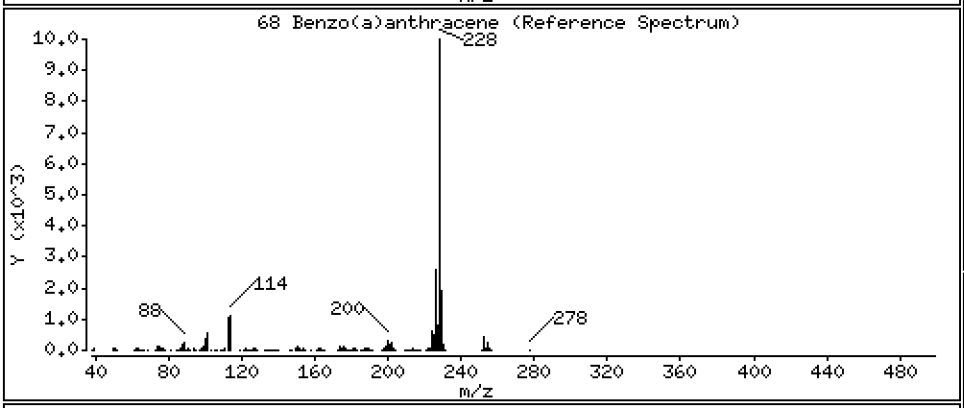
Concentration: 4.673 ug/ml

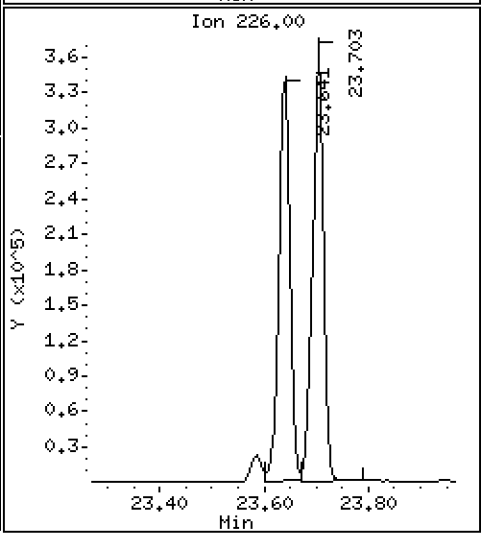


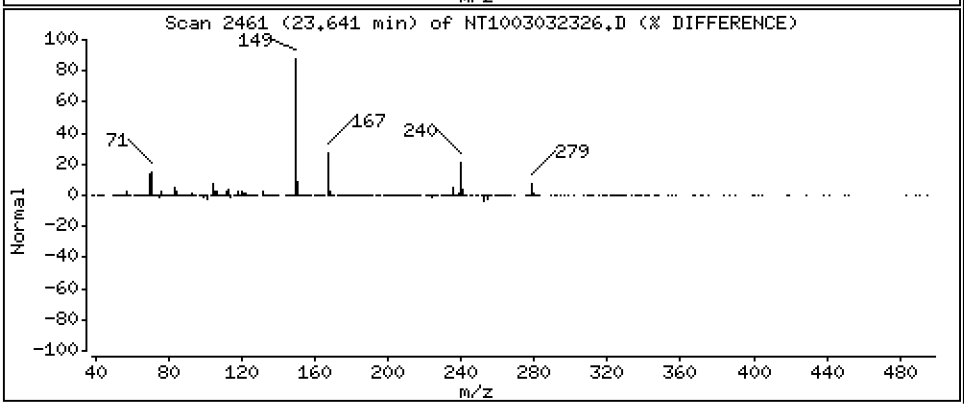












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

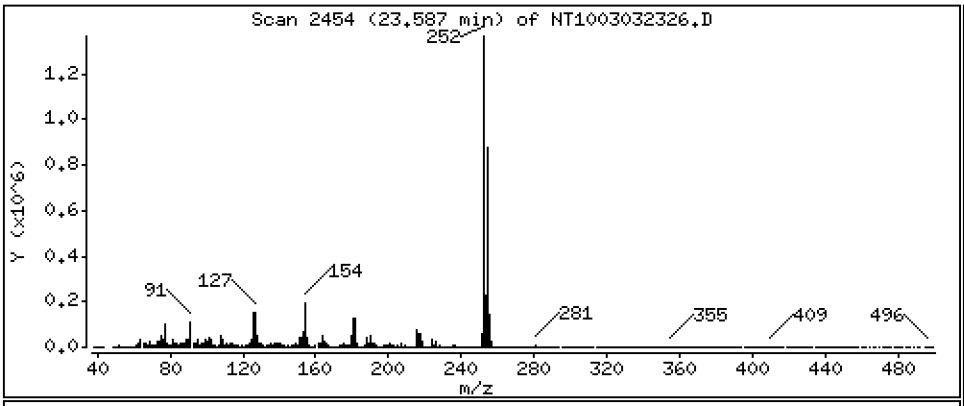
Operator: VTS

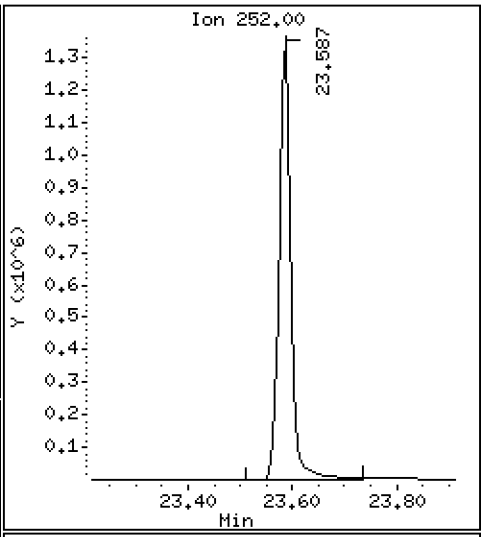
Column phase: ZB-5msi

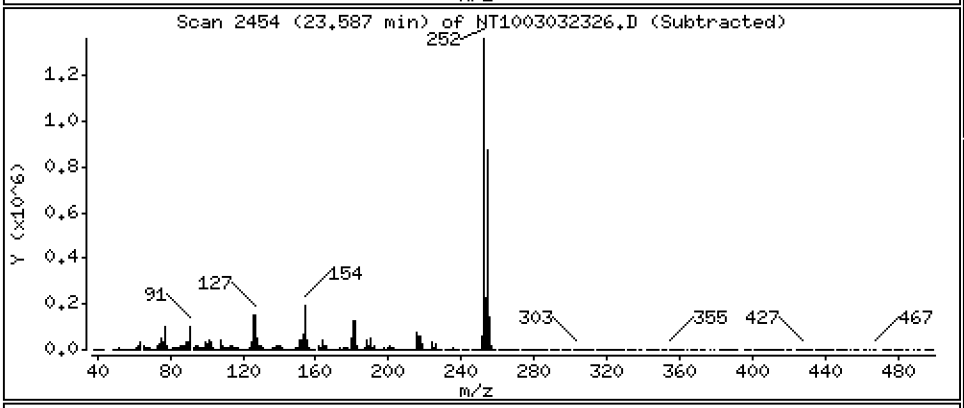
Column diameter: 0.25

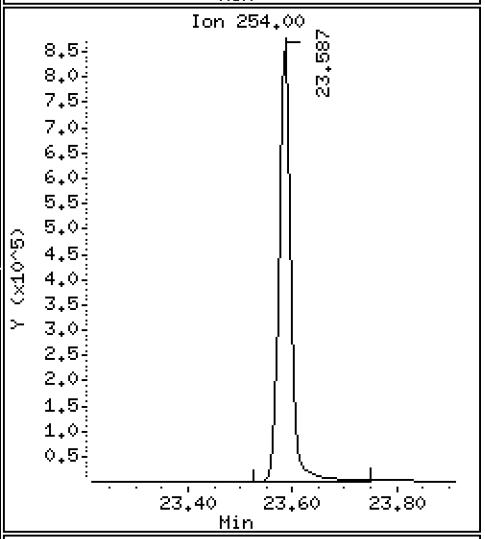
70 3,3'-Dichlorobenzidine

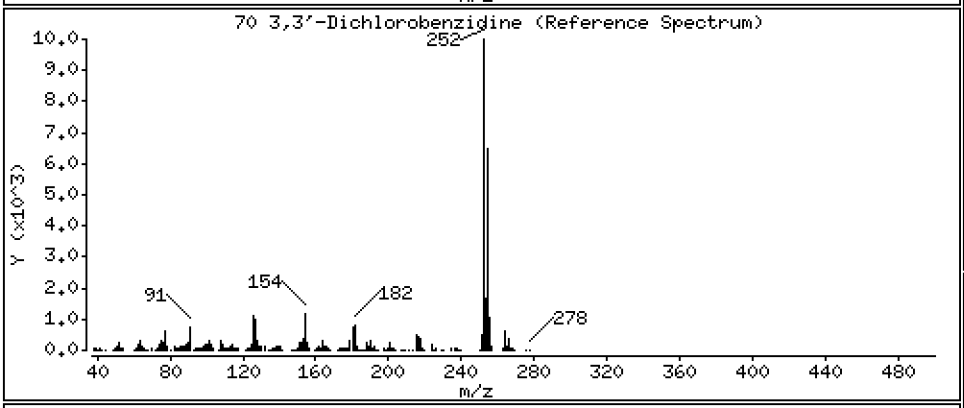
Concentration: 11.14 ug/ml

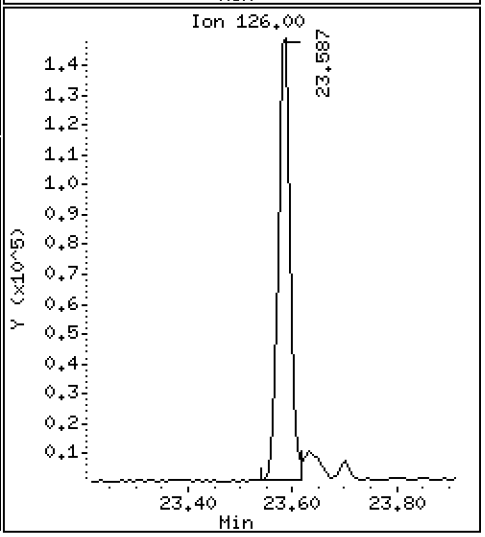


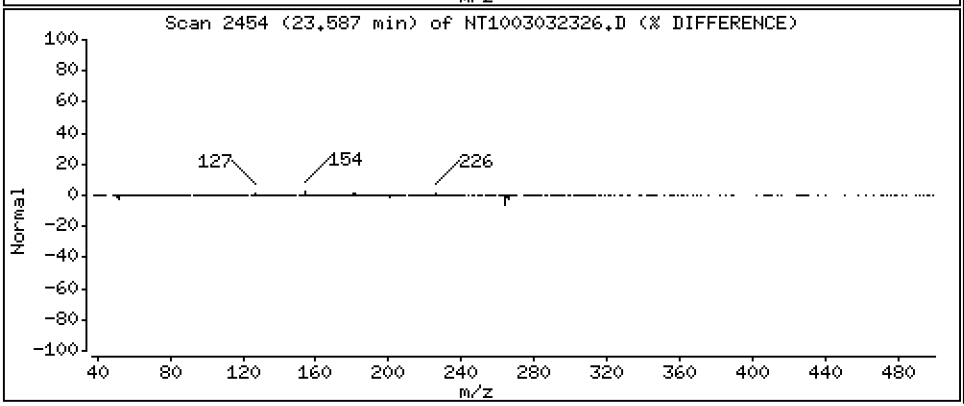












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

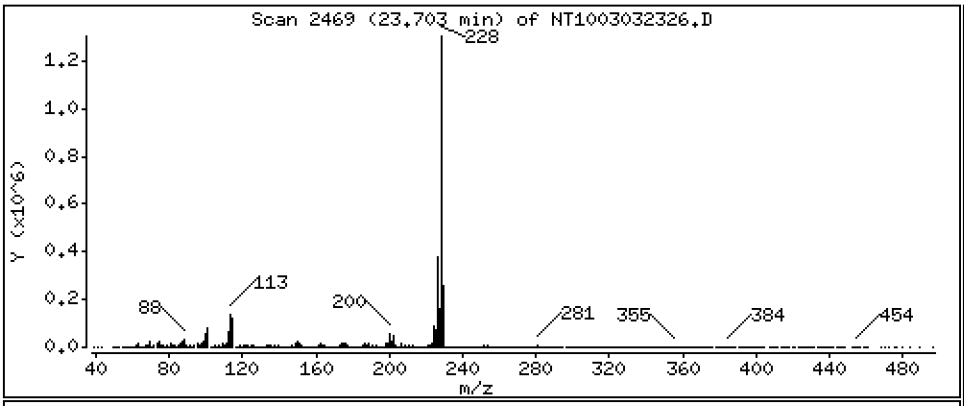
Operator: VTS

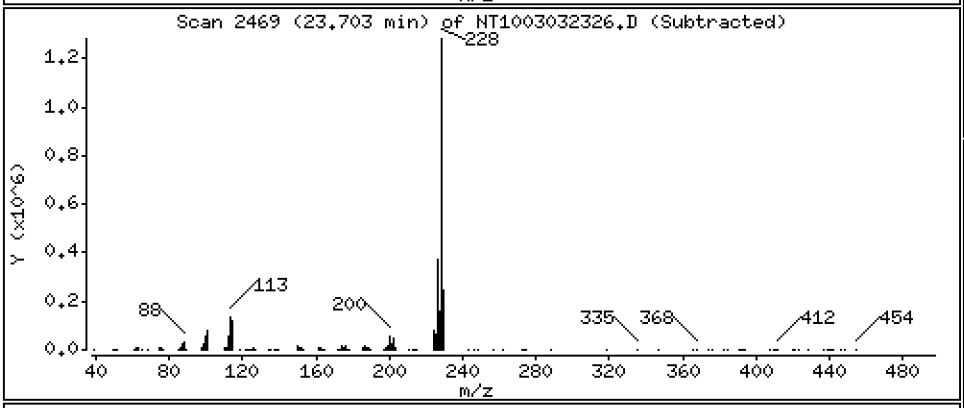
Column phase: ZB-5msi

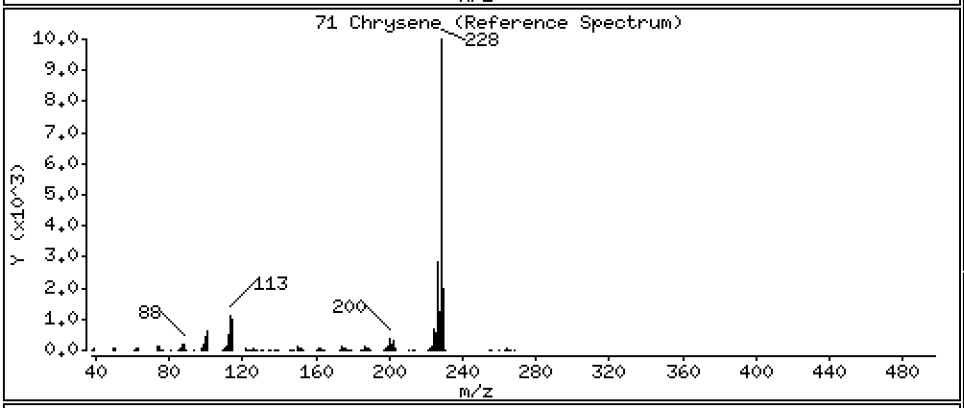
Column diameter: 0.25

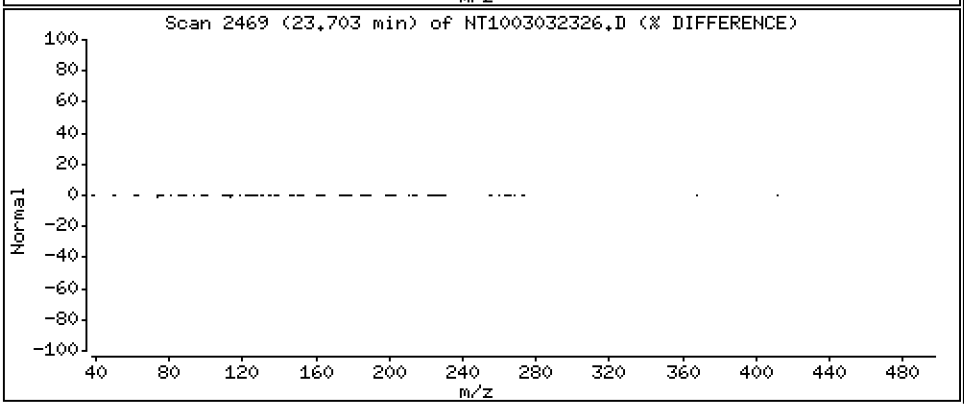
71 Chrysene

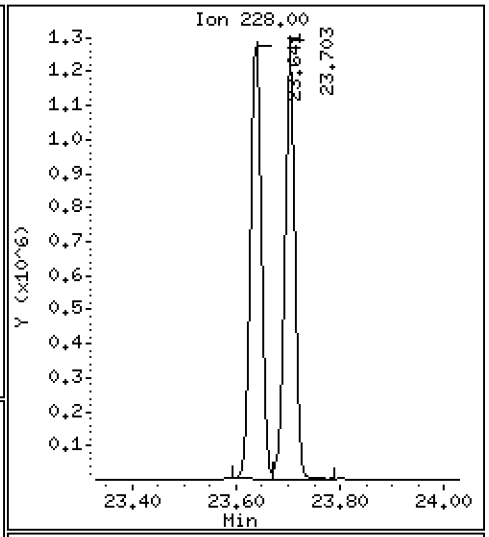
Concentration: 5.113 ug/ml

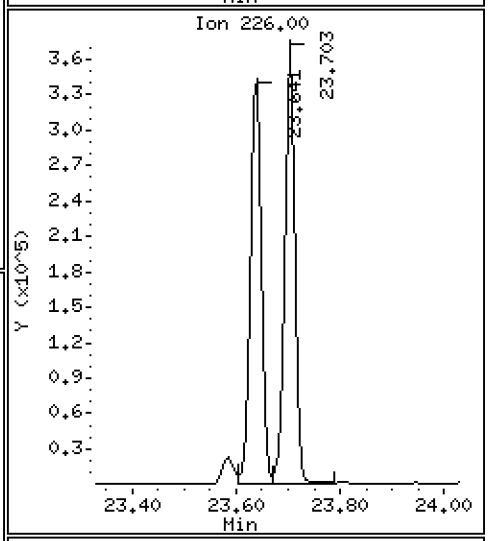


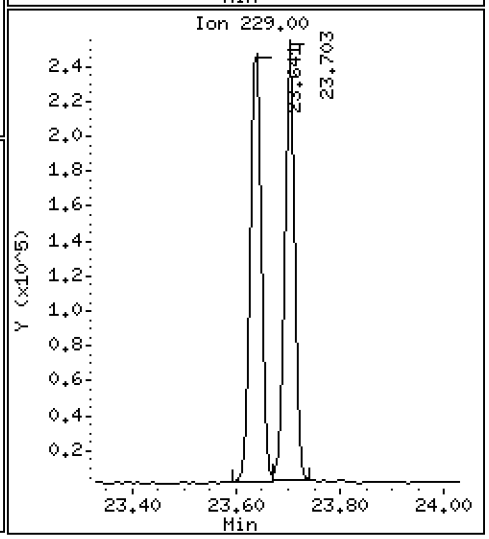












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

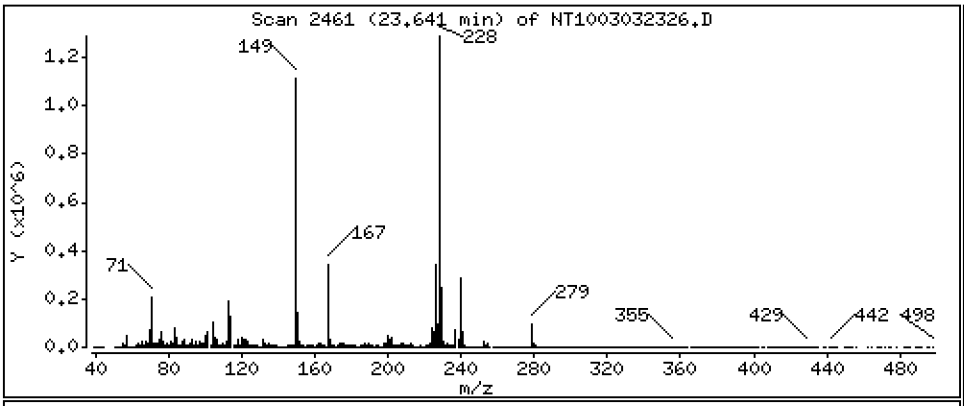
Operator: VTS

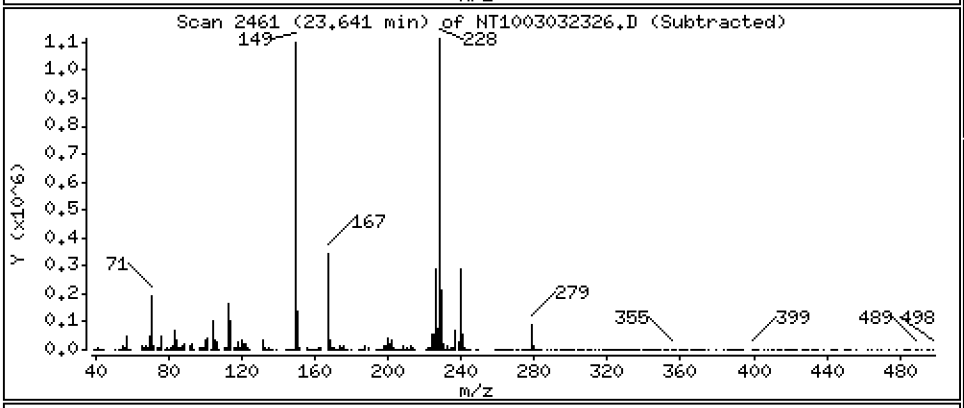
Column phase: ZB-5msi

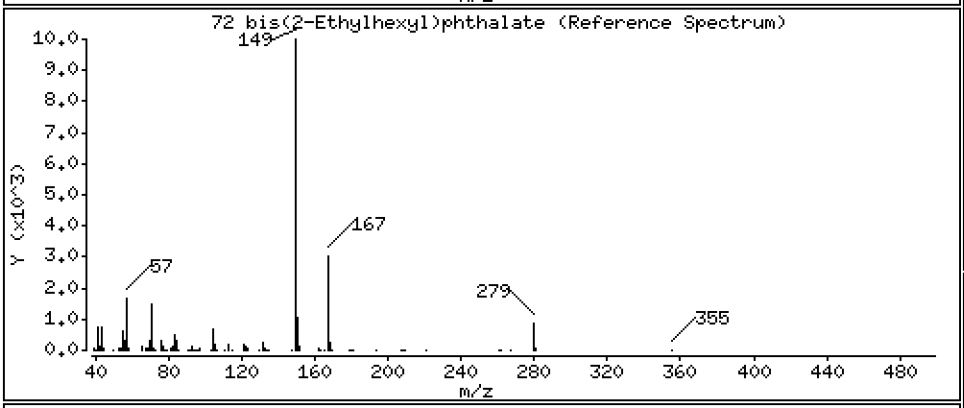
Column diameter: 0.25

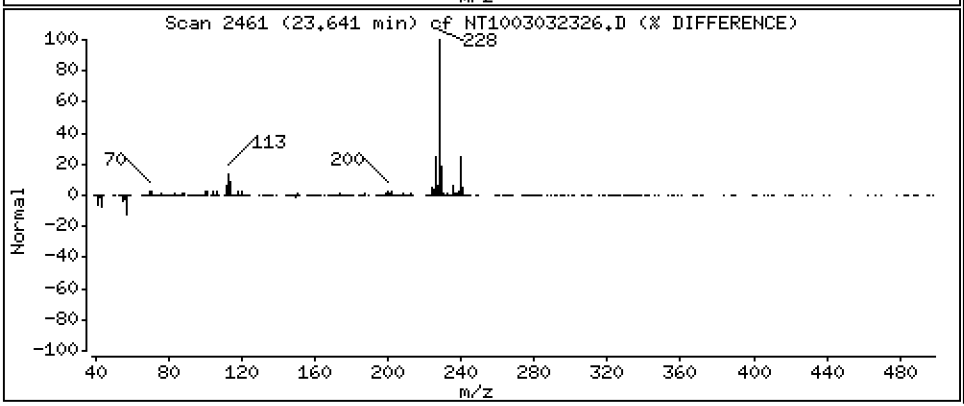
72 bis(2-Ethylhexyl)phthalate

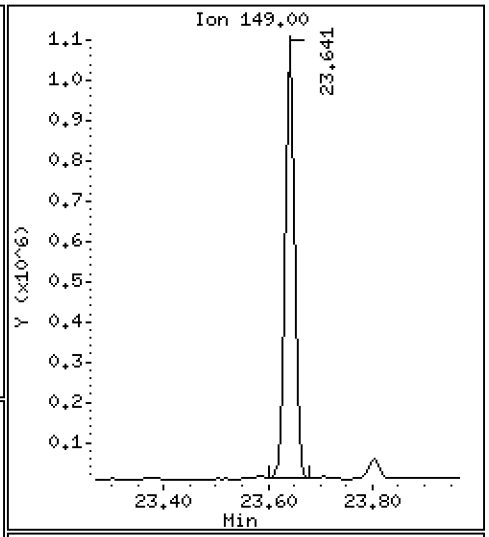
Concentration: 4.780 ug/ml

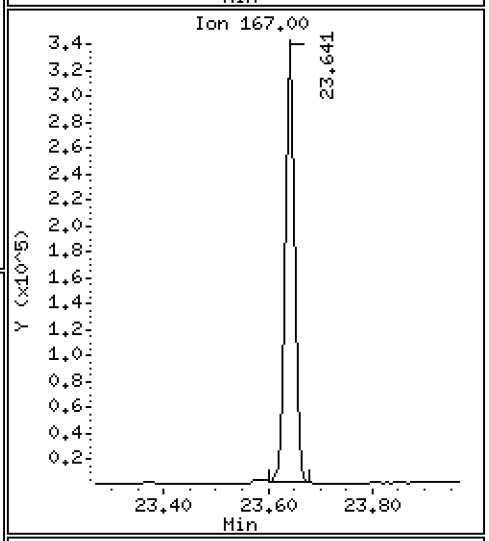


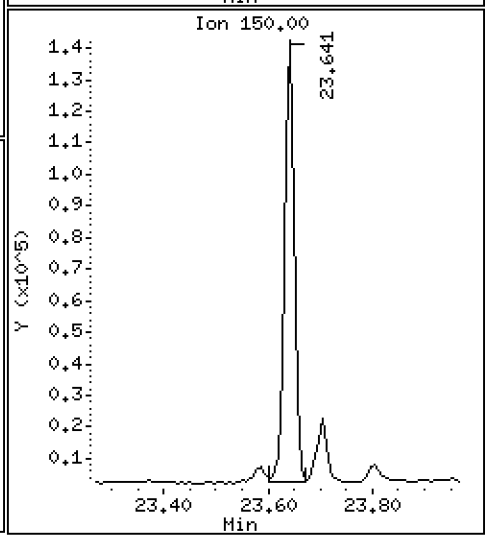












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

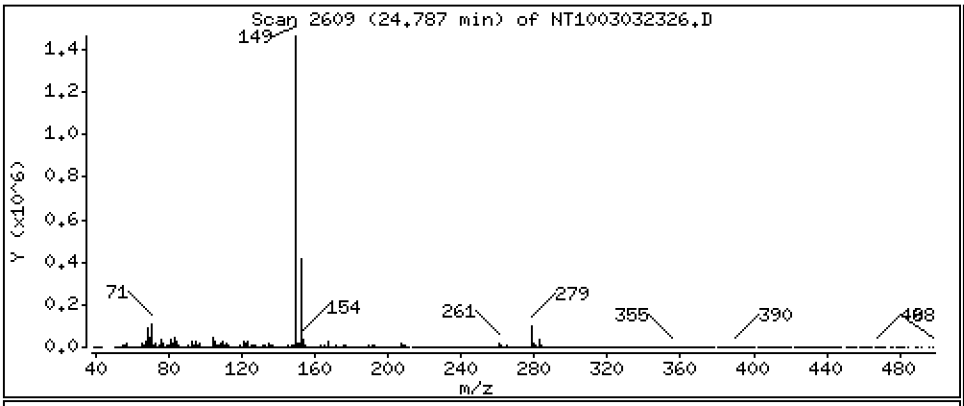
Operator: VTS

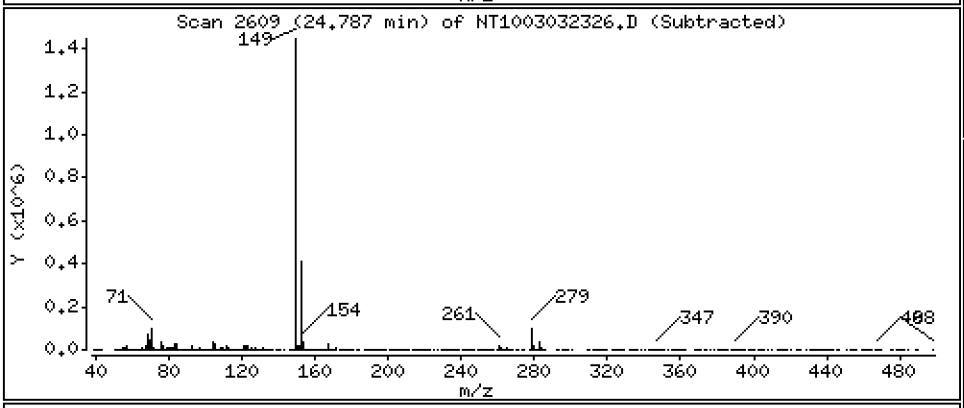
Column phase: ZB-5msi

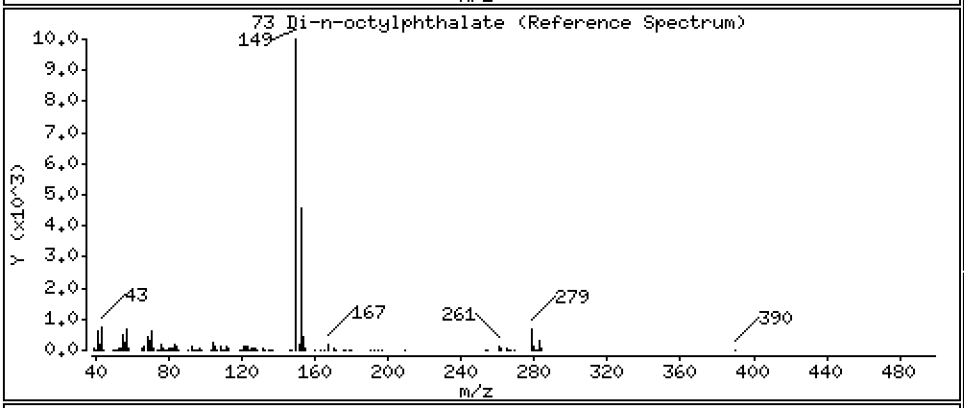
Column diameter: 0.25

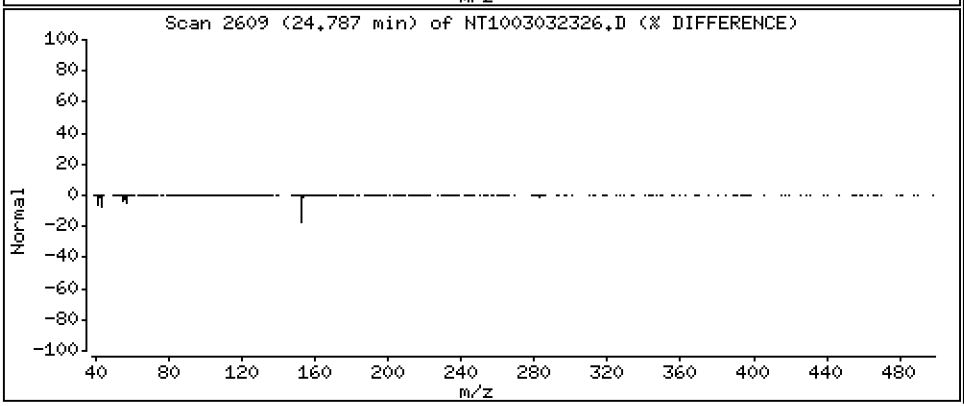
73 Di-n-octylphthalate

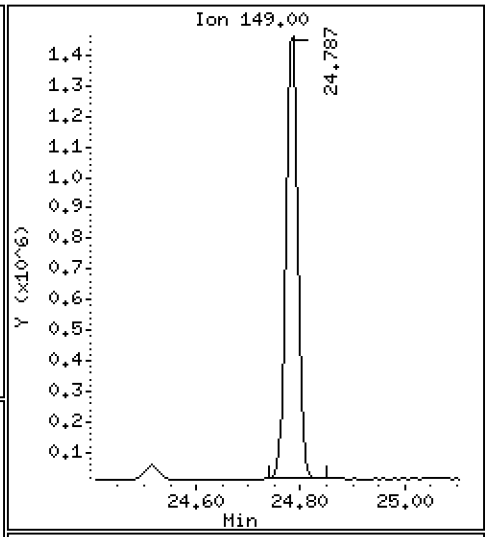
Concentration: 5.192 ug/ml

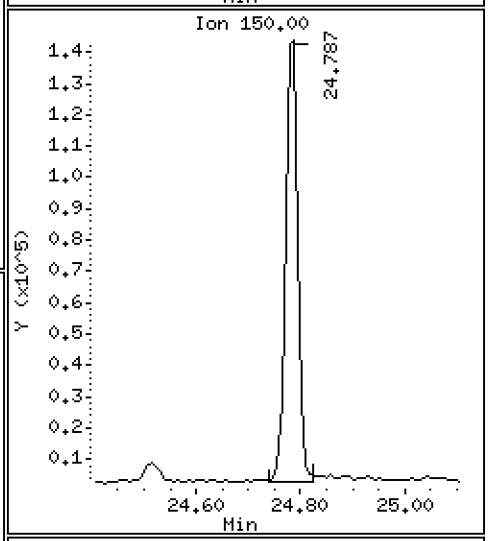


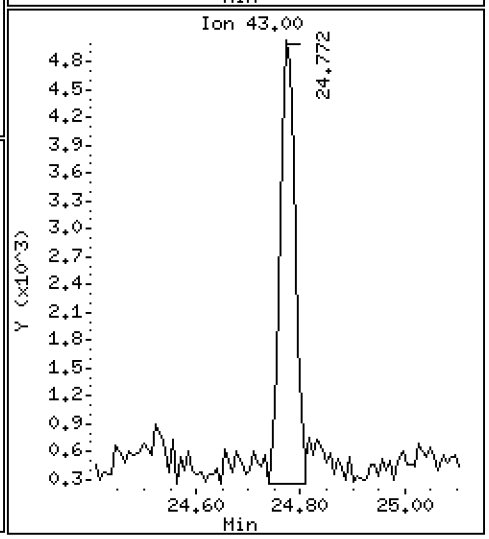












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

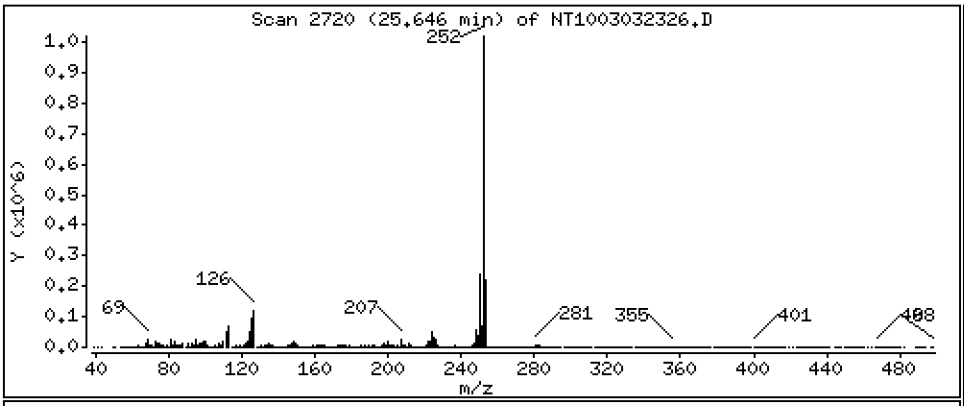
Operator: VTS

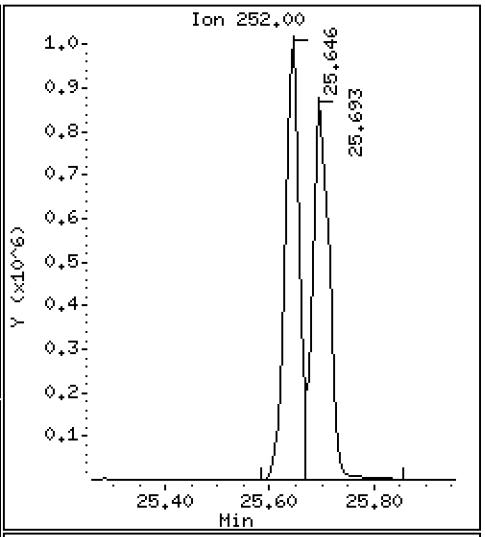
Column phase: ZB-5msi

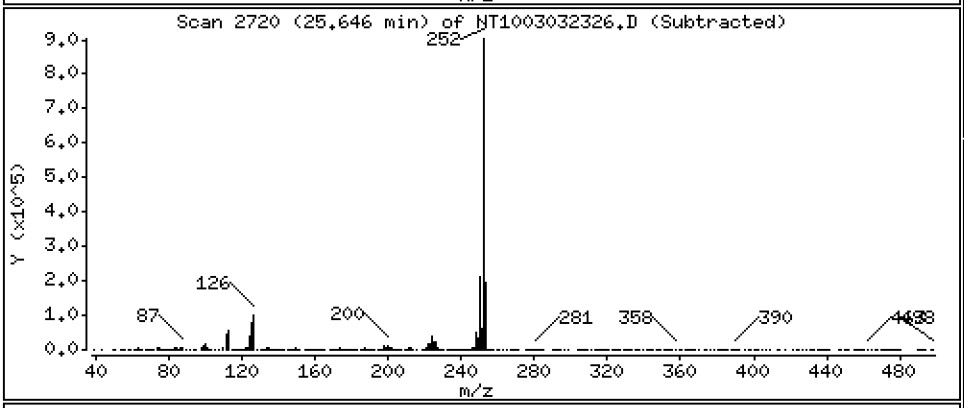
Column diameter: 0.25

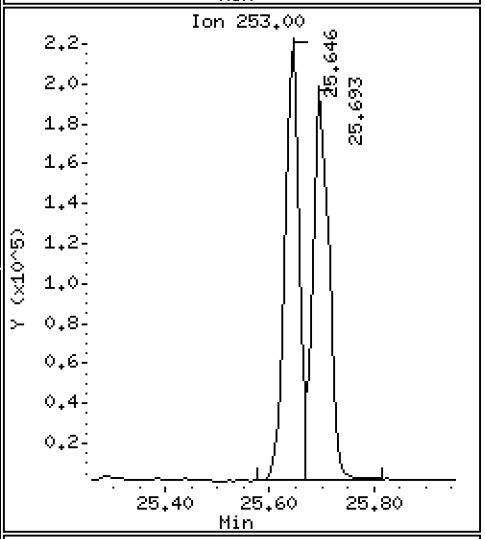
74 Benzo(b)fluoranthene

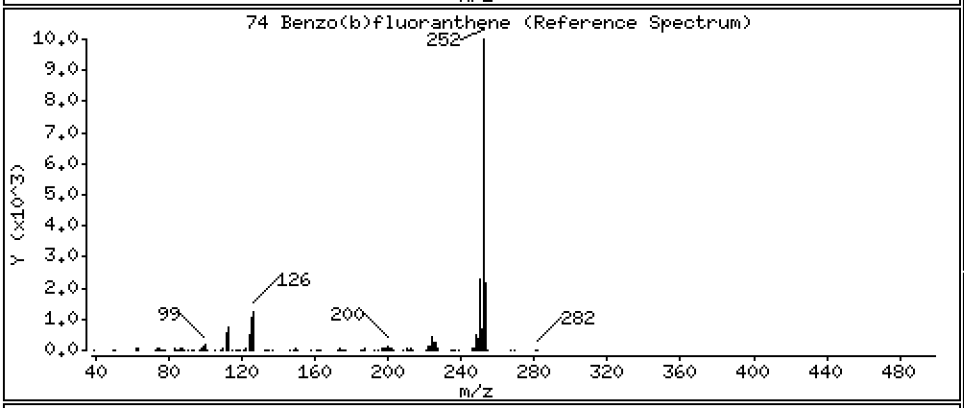
Concentration: 4.104 ug/ml

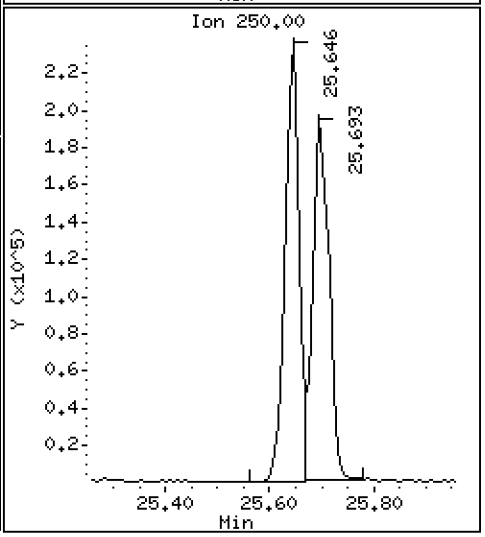


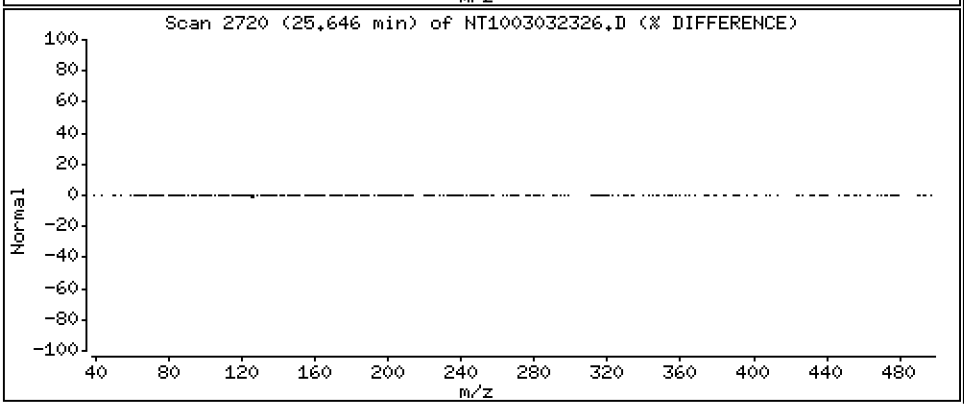












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

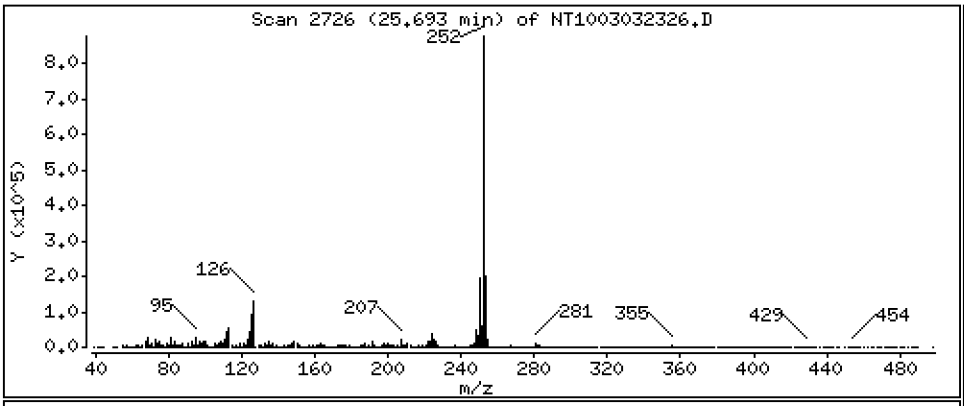
Operator: VTS

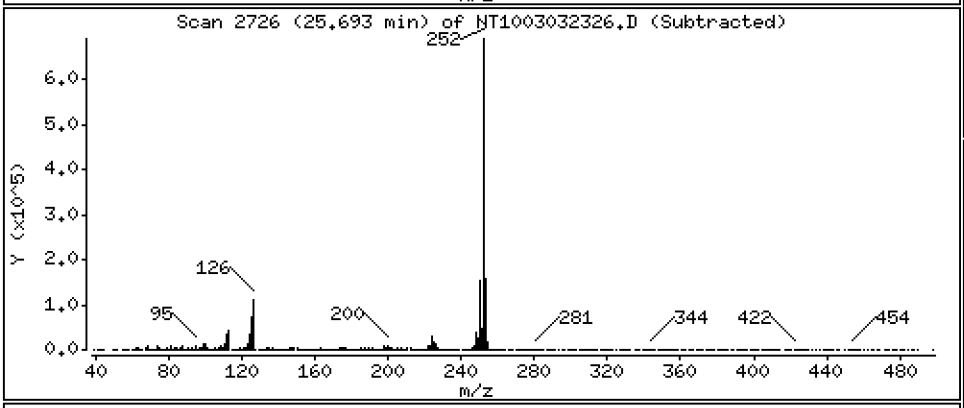
Column phase: ZB-5msi

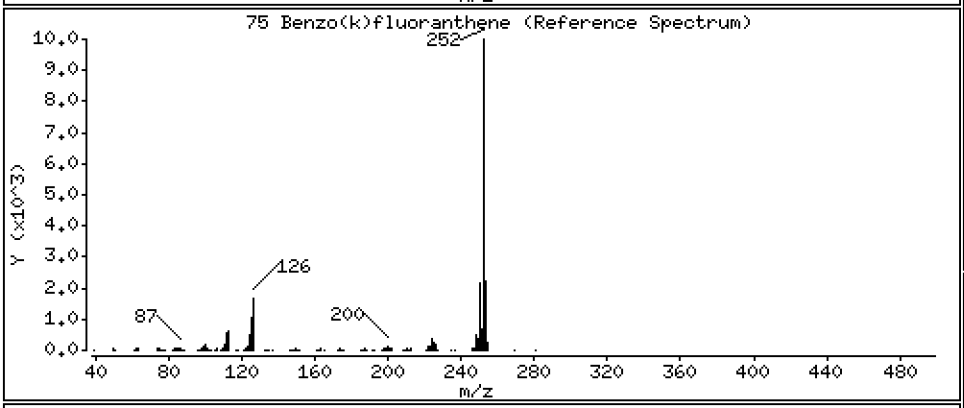
Column diameter: 0.25

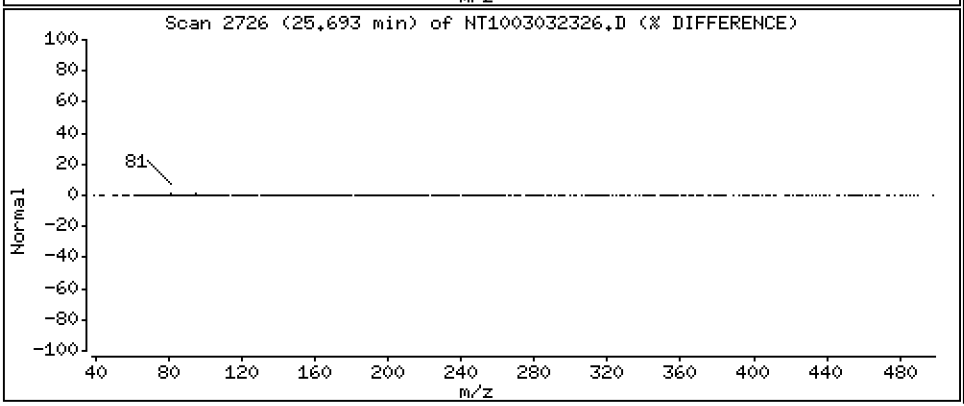
75 Benzo(k)fluoranthene

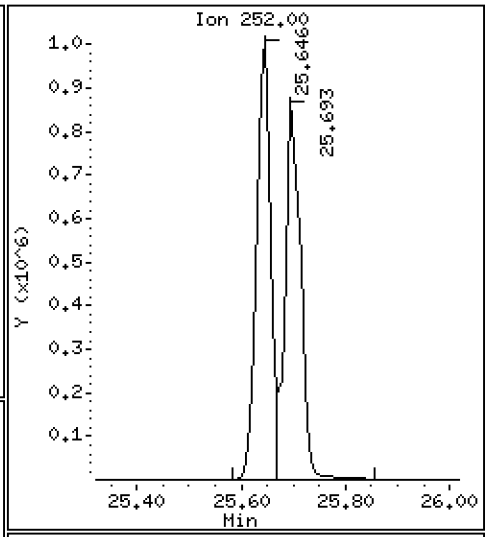
Concentration: 2.909 ug/ml

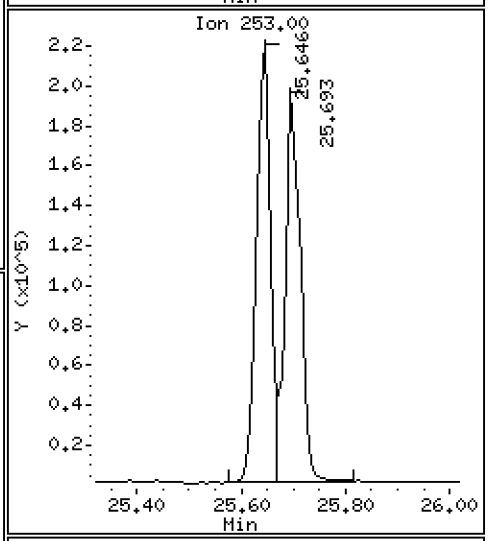


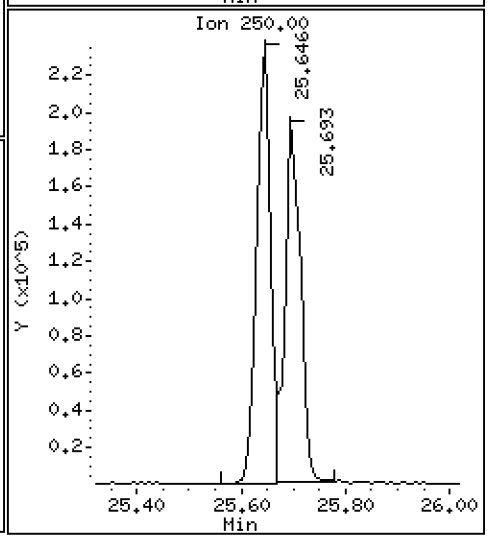












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

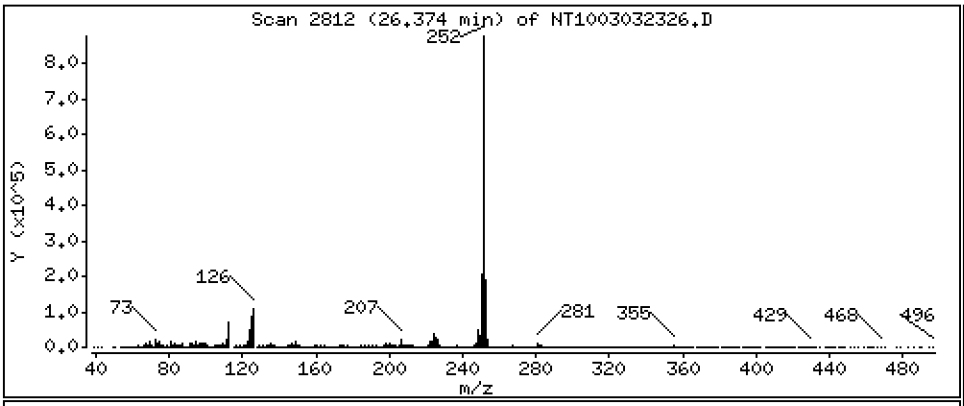
Operator: VTS

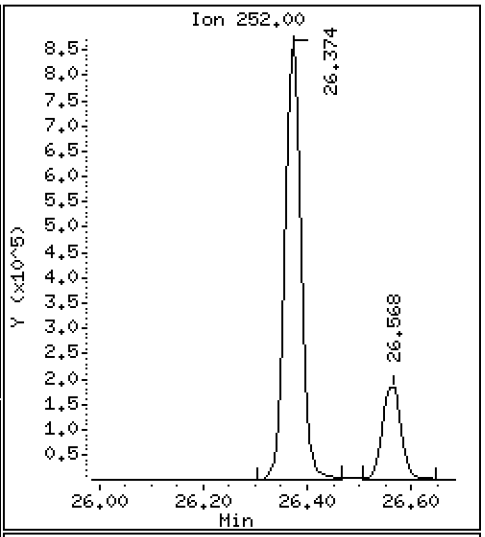
Column phase: ZB-5msi

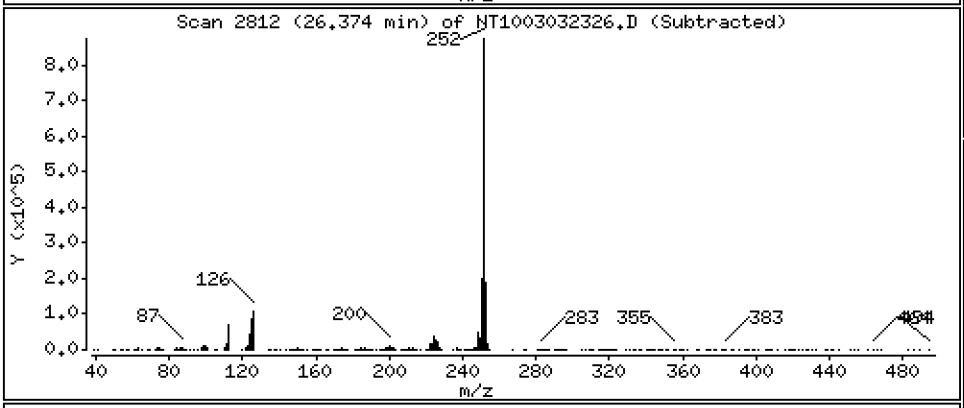
Column diameter: 0.25

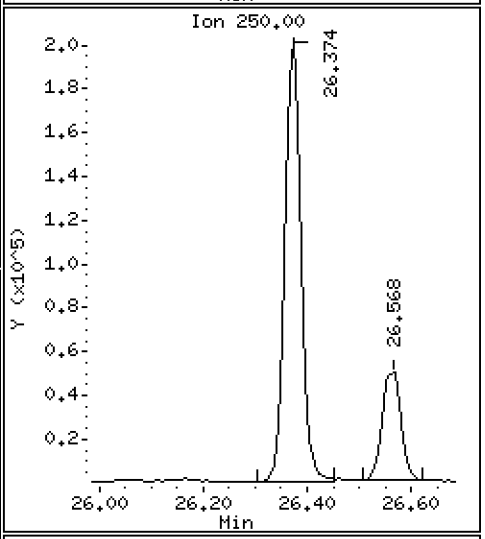
76 Benzo(a)pyrene

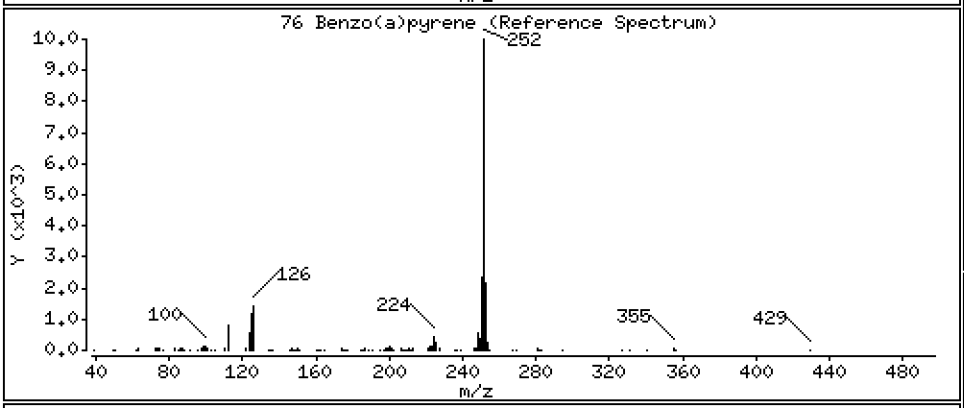
Concentration: 4.445 ug/ml

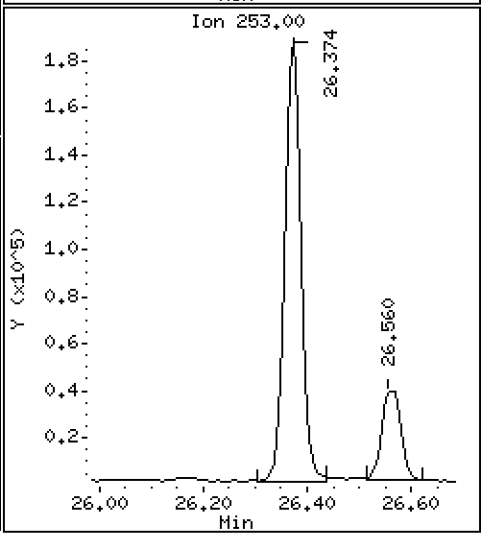


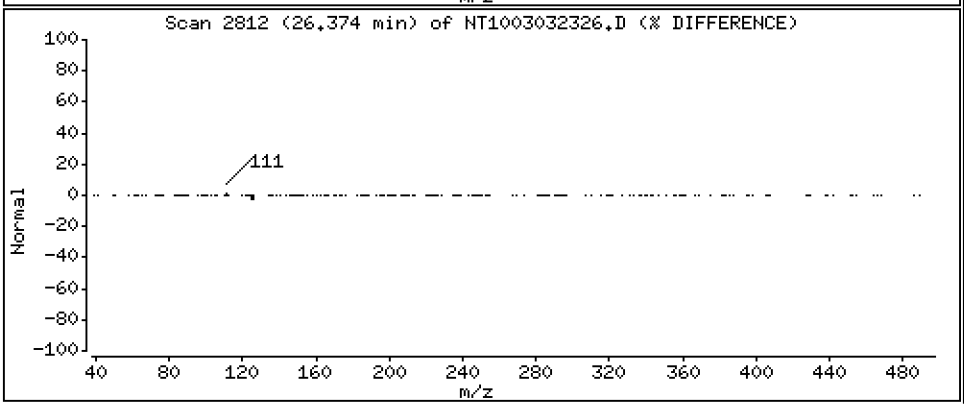












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

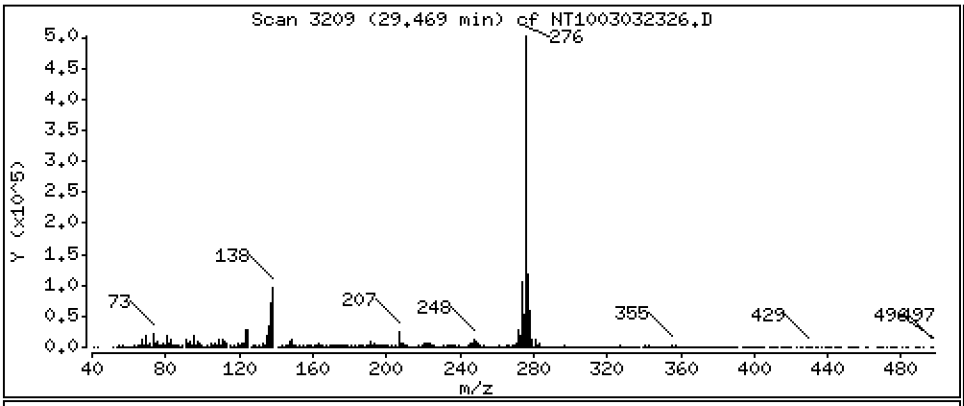
Operator: VTS

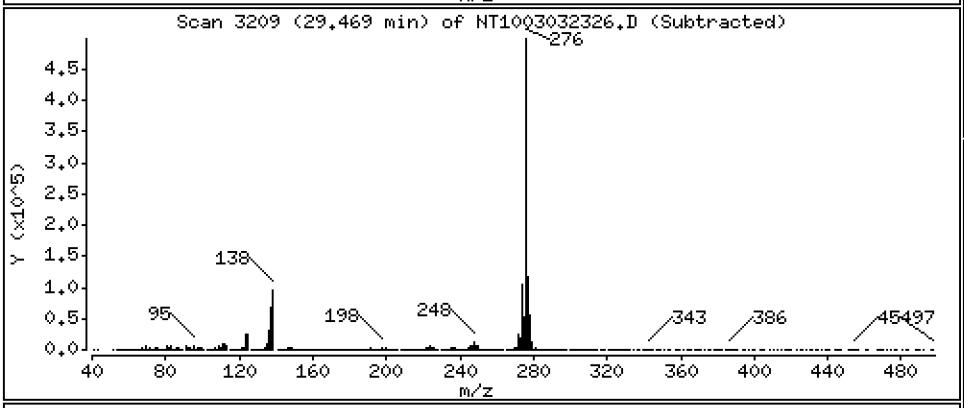
Column phase: ZB-5msi

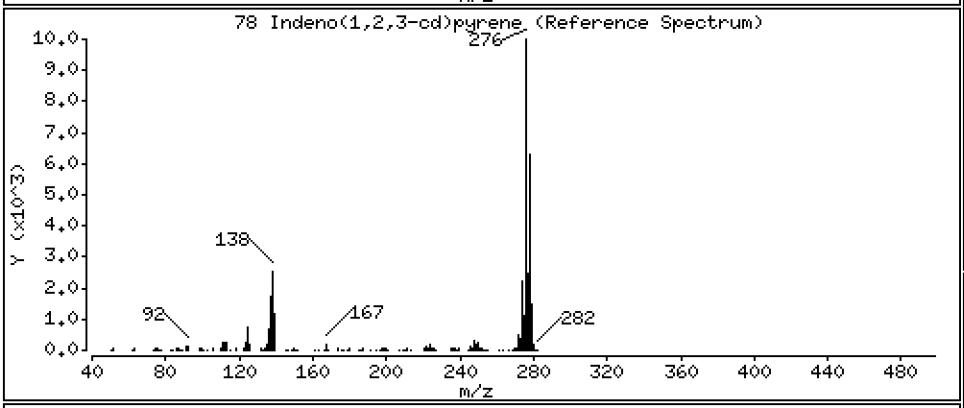
Column diameter: 0.25

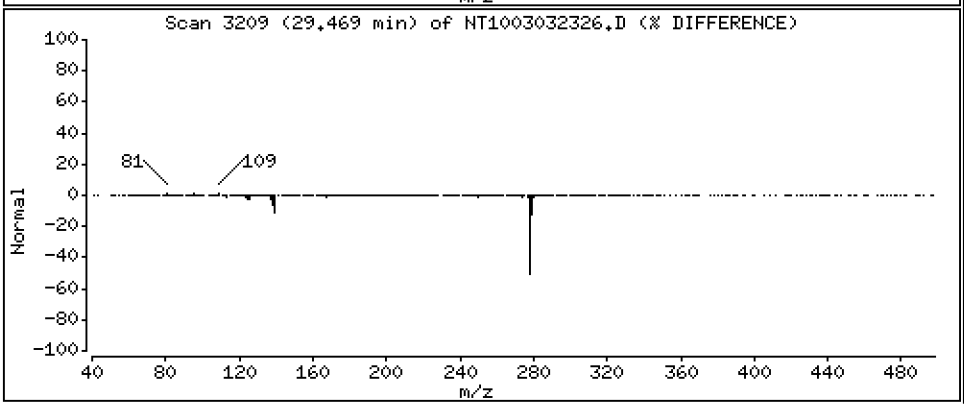
78 Indeno(1,2,3-cd)pyrene

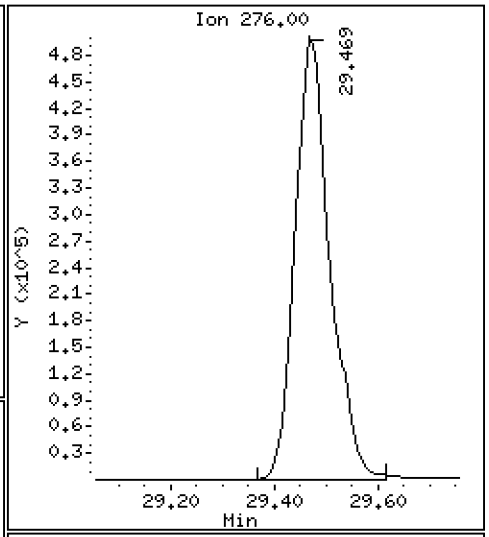
Concentration: 4.565 ug/ml

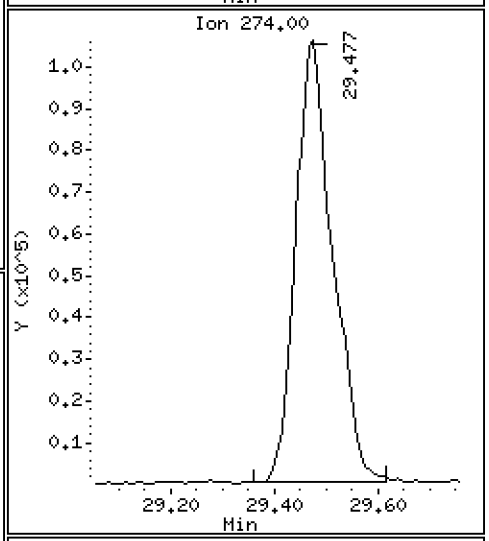


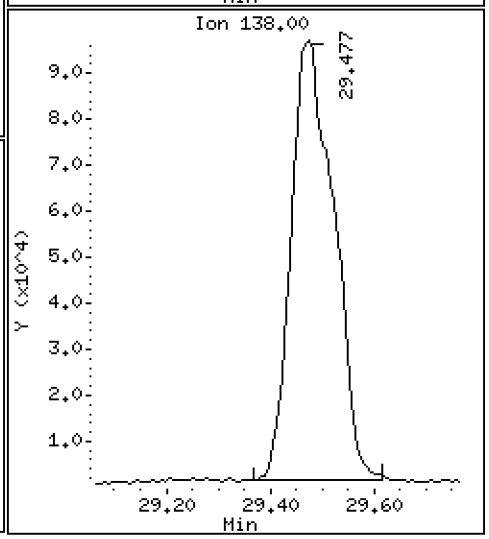












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

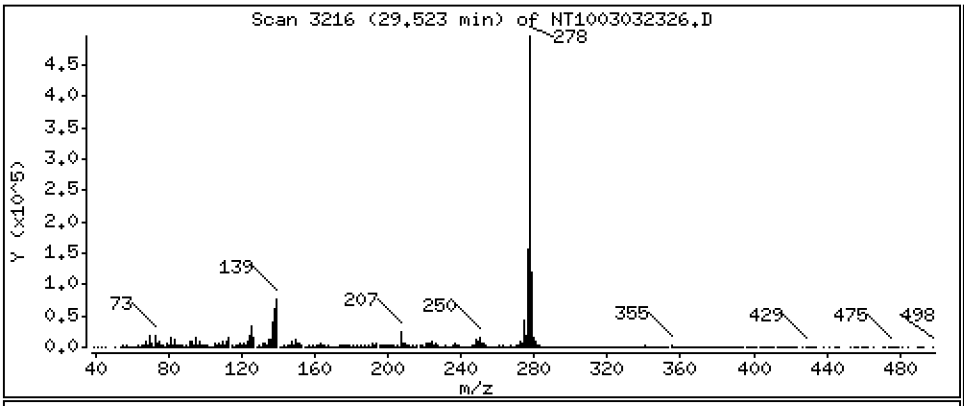
Operator: VTS

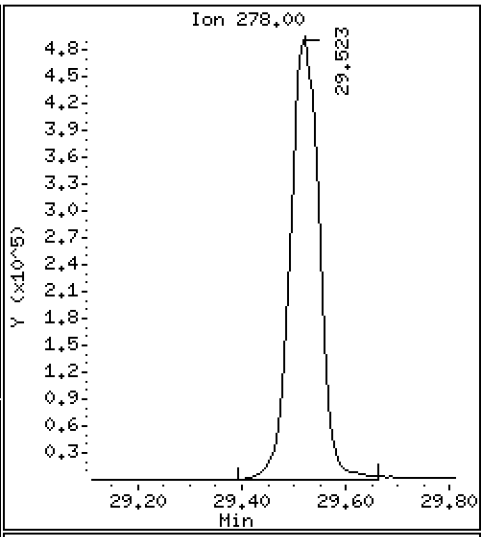
Column phase: ZB-5msi

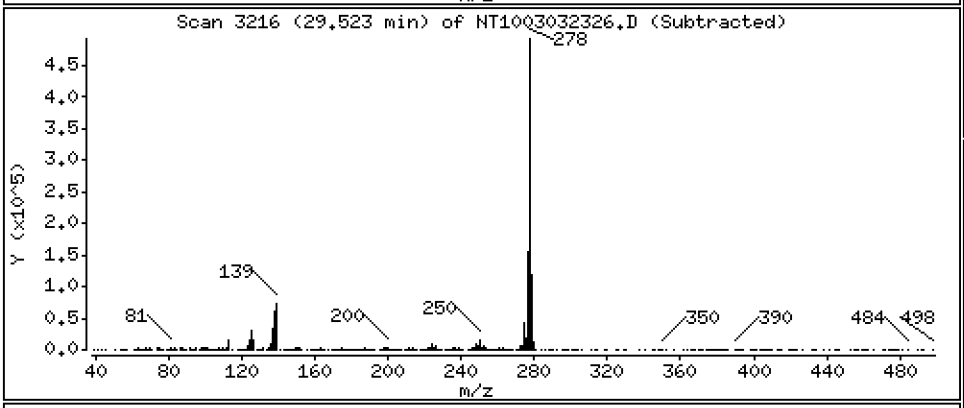
Column diameter: 0.25

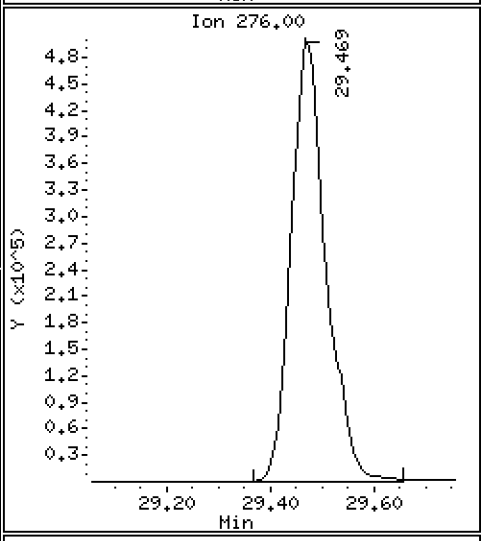
79 Dibenzo(a,h)anthracene

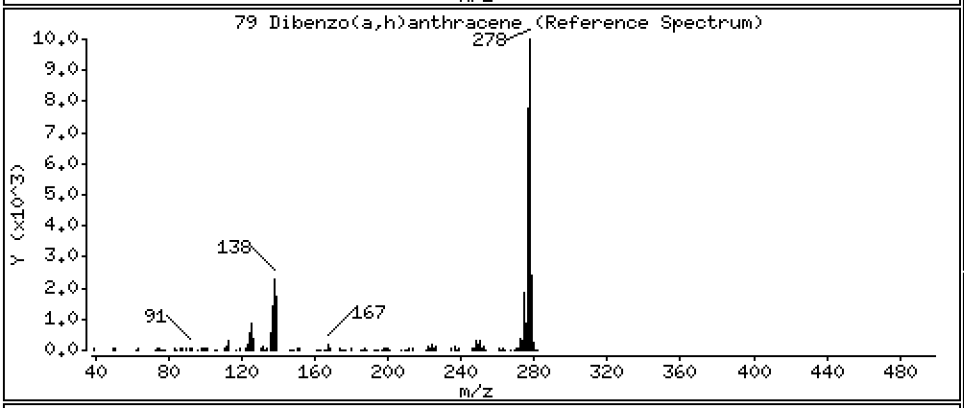
Concentration: 4.933 ug/ml

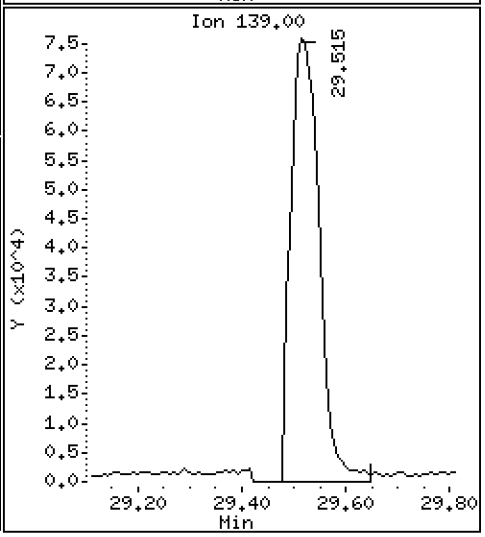


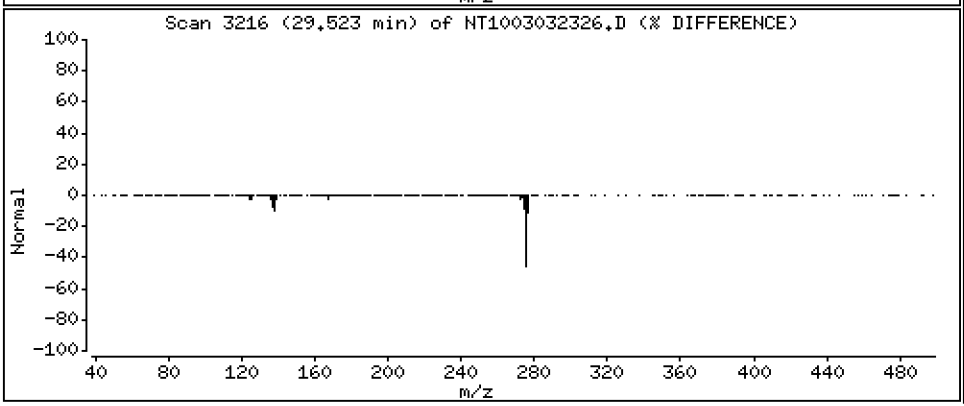












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

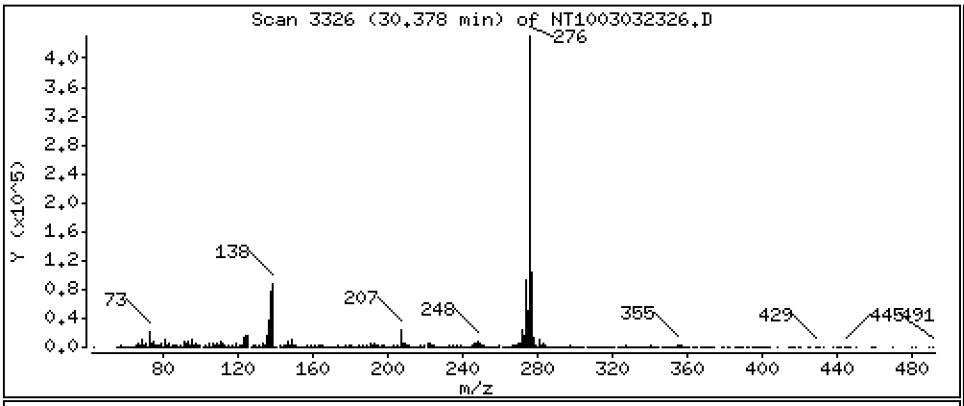
Operator: VTS

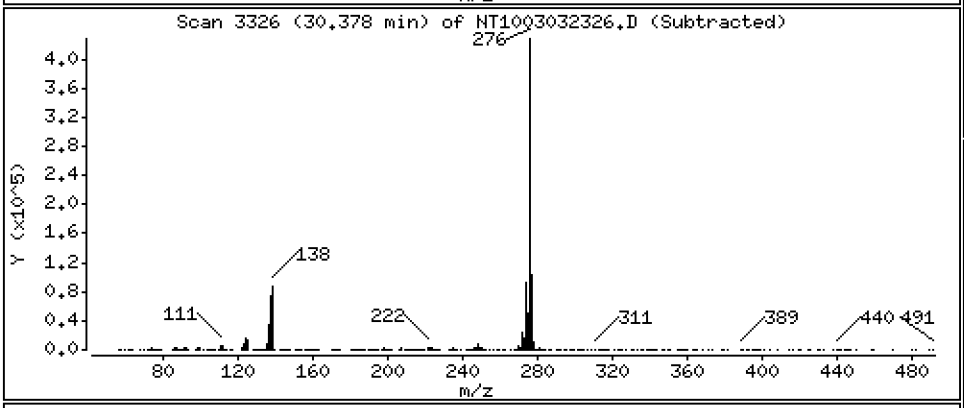
Column phase: ZB-5msi

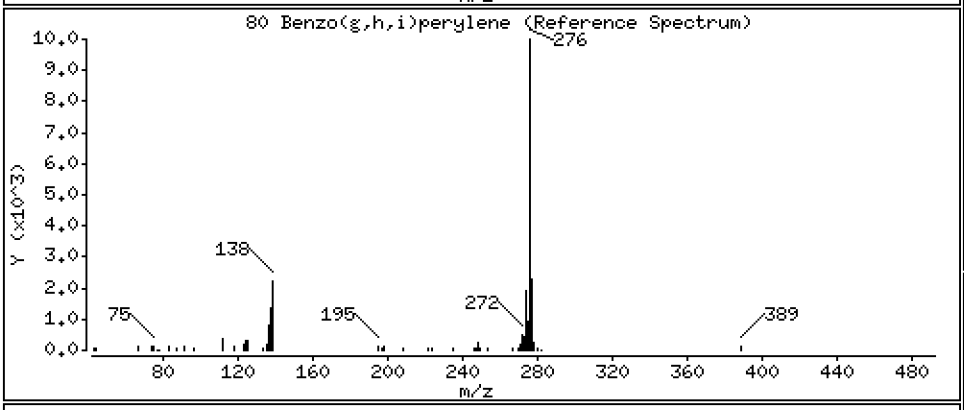
Column diameter: 0.25

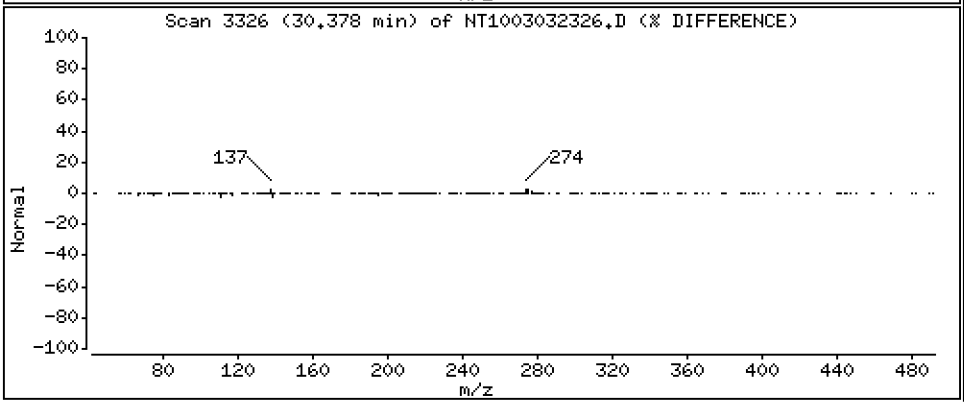
80 Benzo(g,h,i)perylene

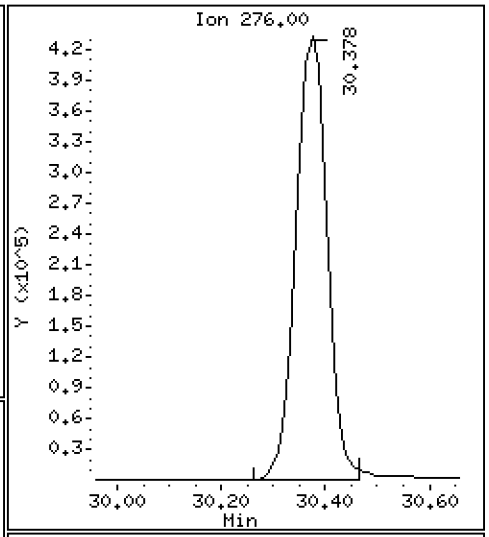
Concentration: 4.476 ug/ml

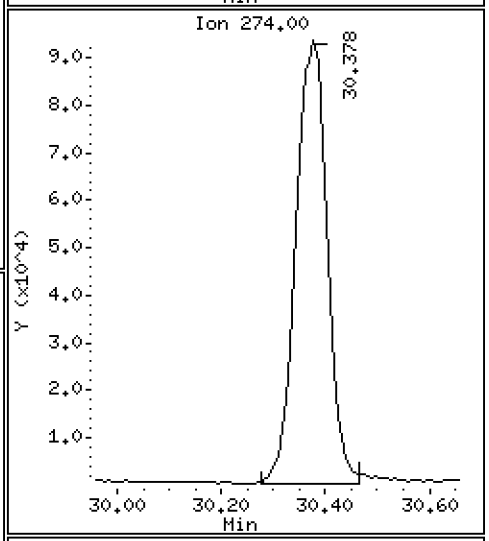


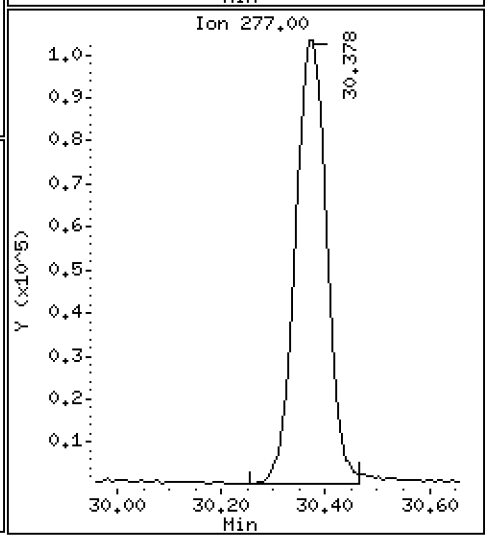












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

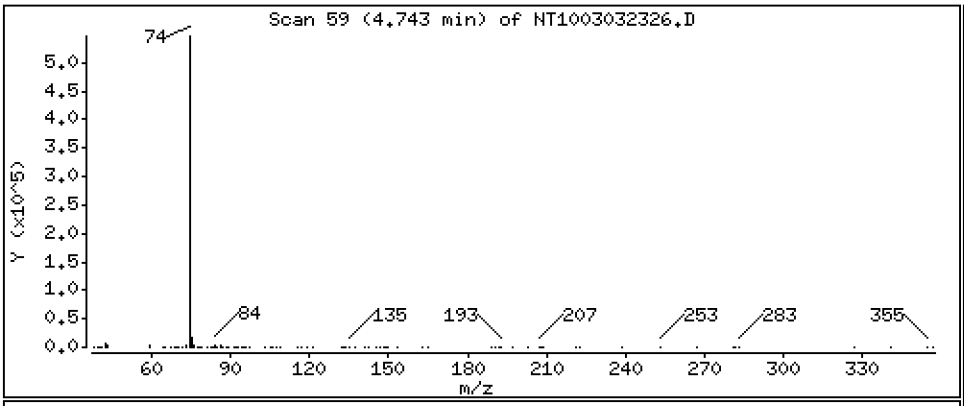
Operator: VTS

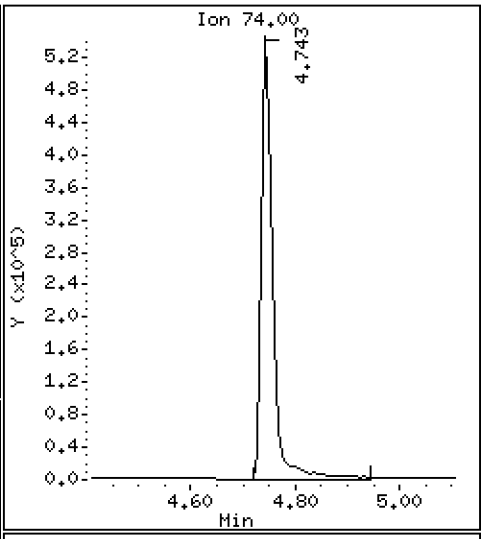
Column phase: ZB-5msi

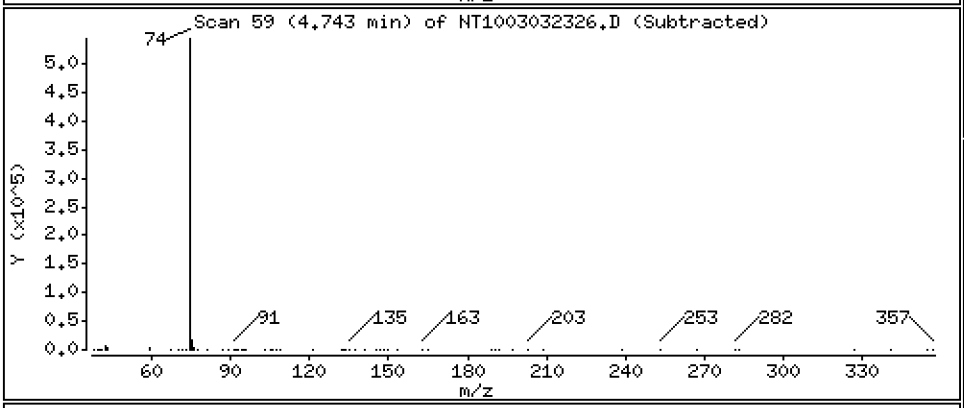
Column diameter: 0.25

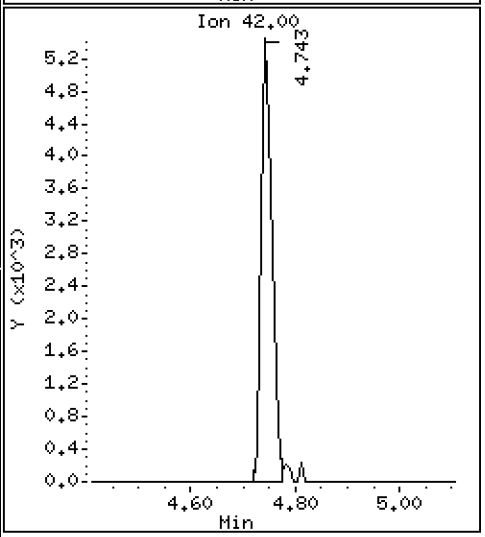
90 N-Nitrosodimethylamine

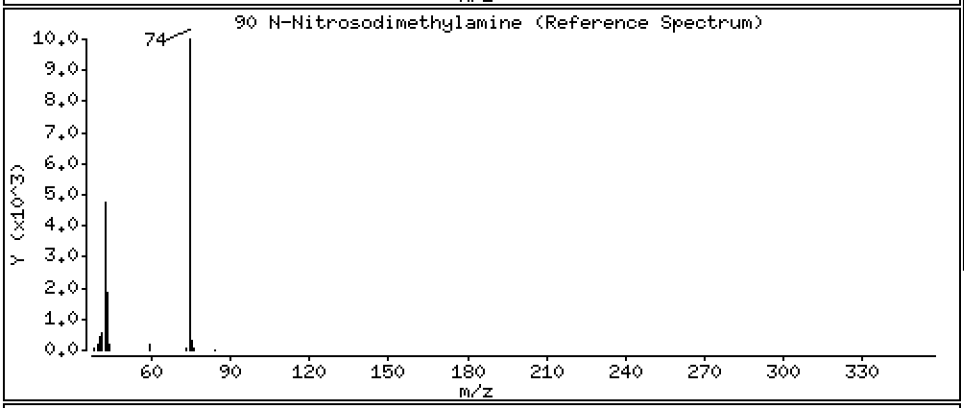
Concentration: 10.75 ug/ml

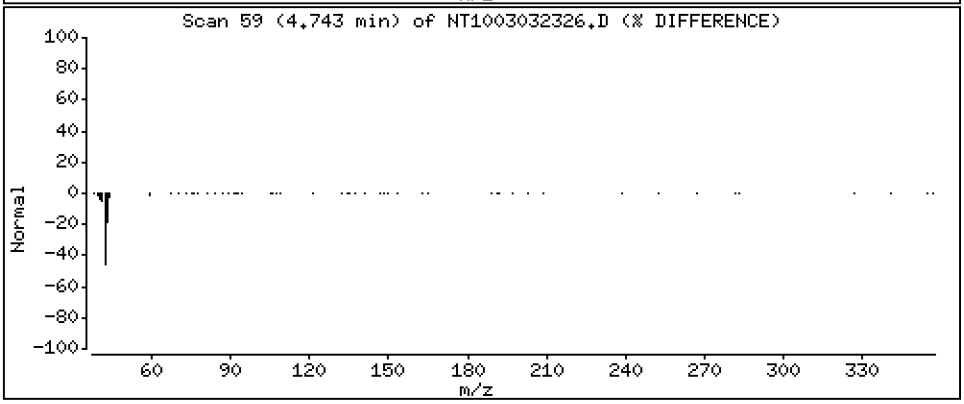












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

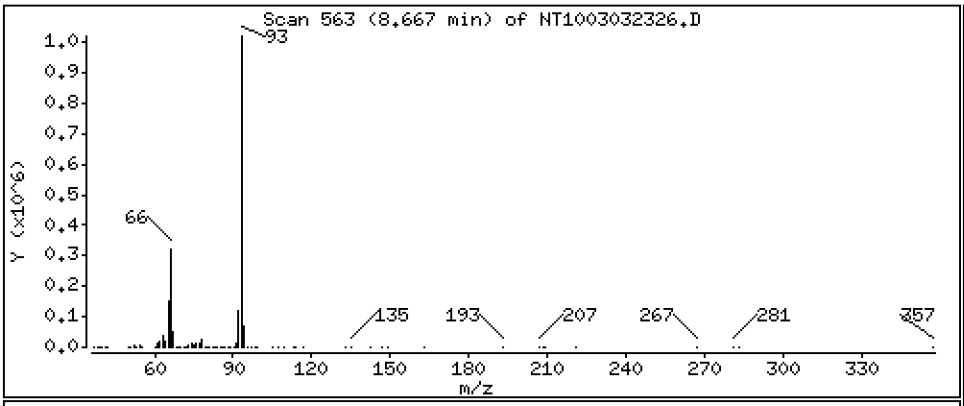
Operator: VTS

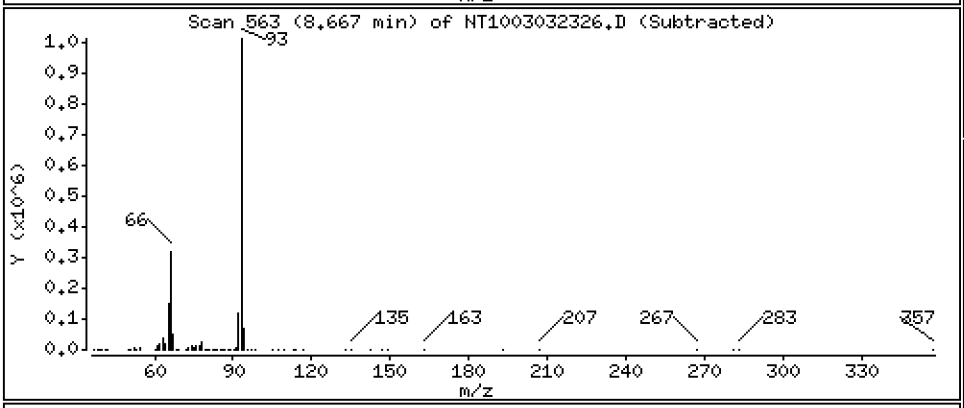
Column phase: ZB-5msi

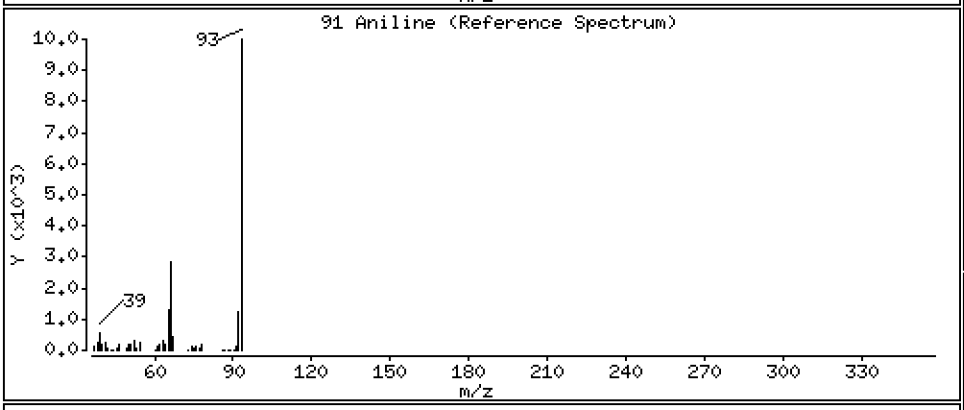
Column diameter: 0.25

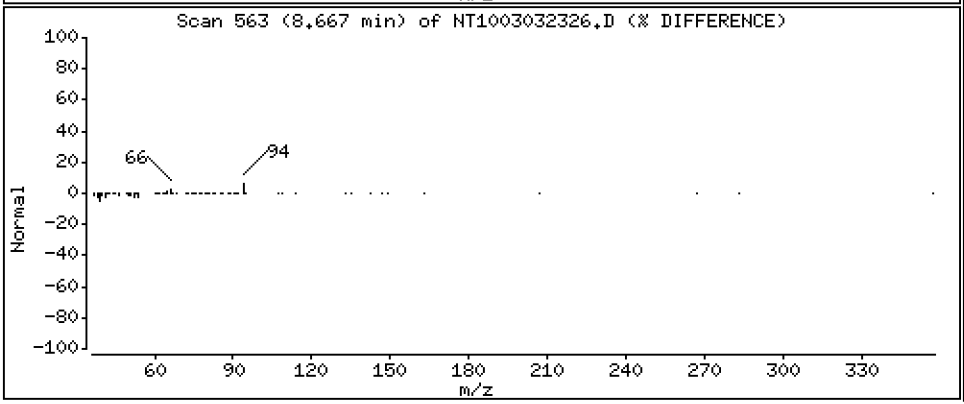
91 Aniline

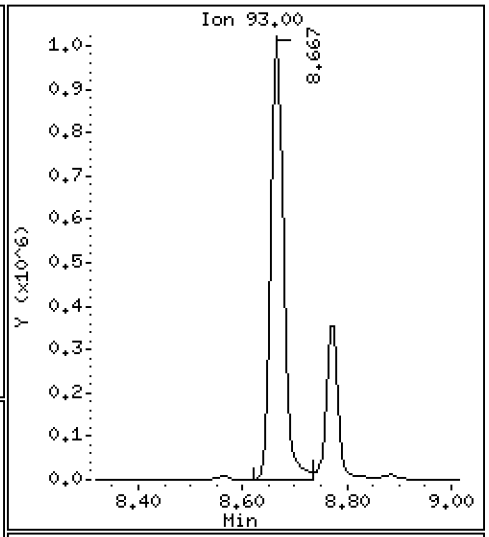
Concentration: 9.909 ug/ml

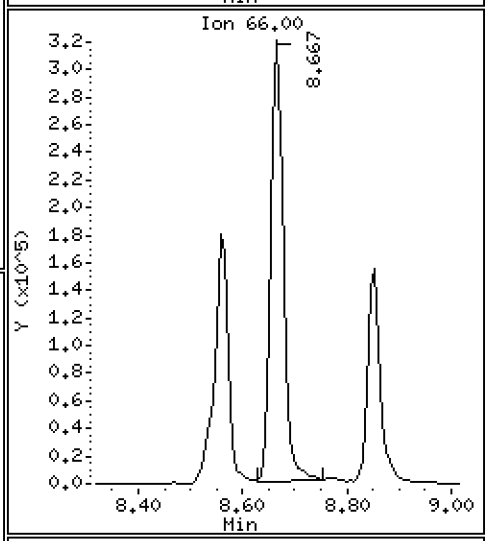


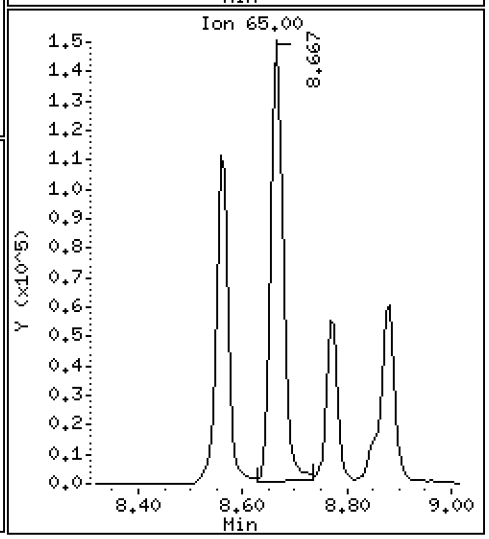












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

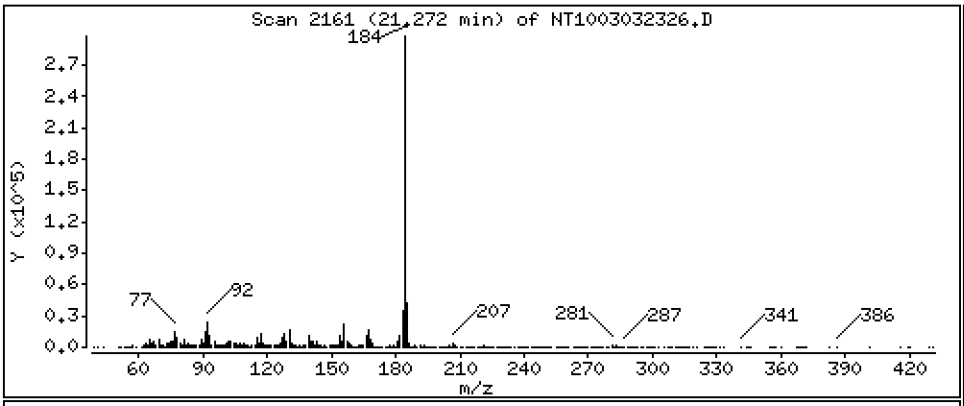
Operator: VTS

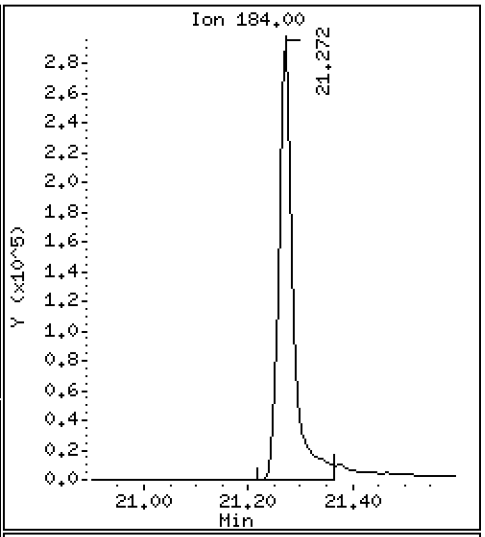
Column phase: ZB-5msi

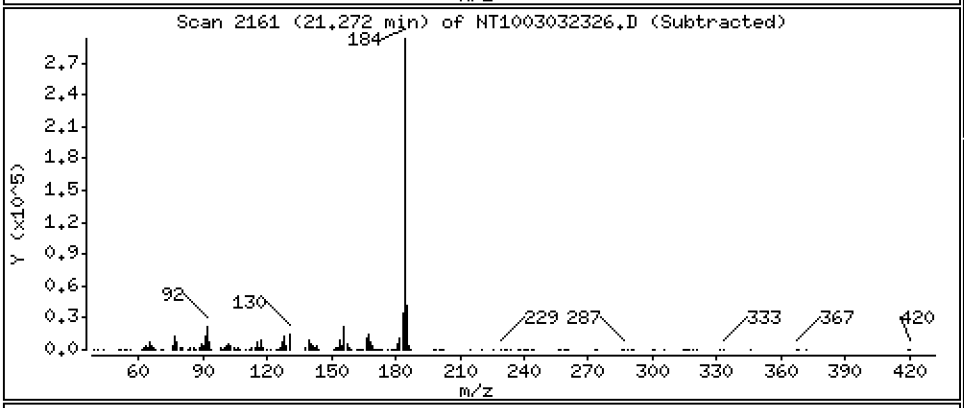
Column diameter: 0.25

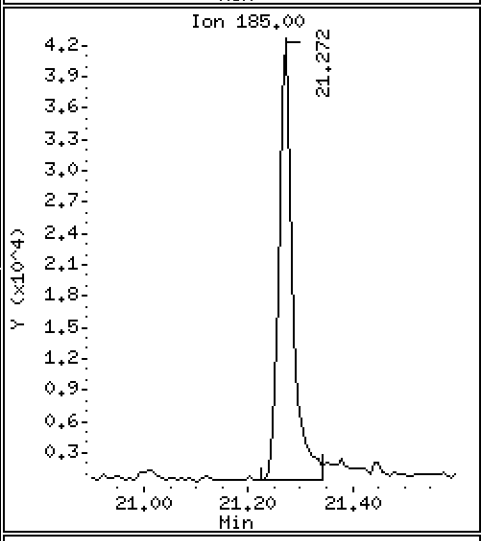
93 Benzidine

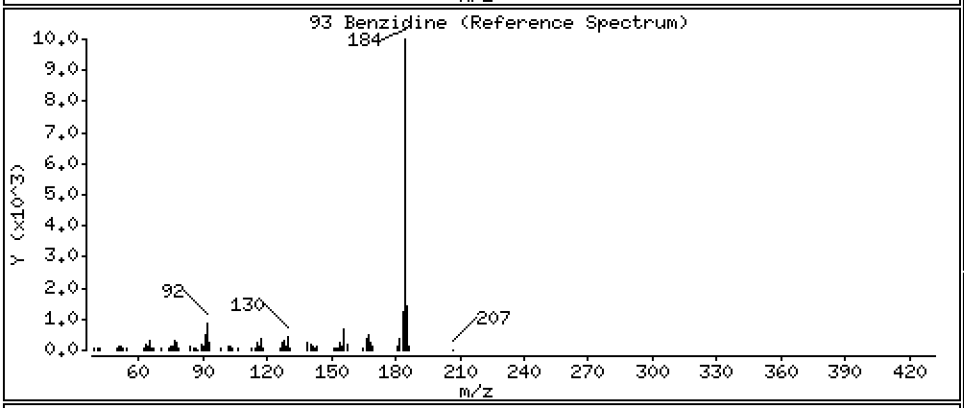
Concentration: 3.087 ug/ml

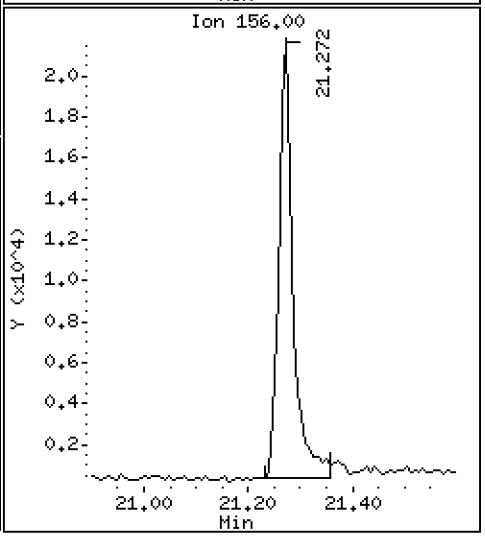


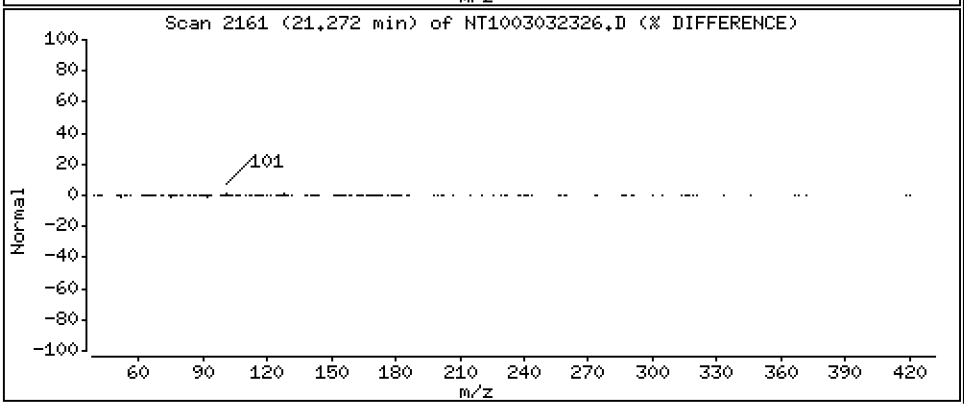












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

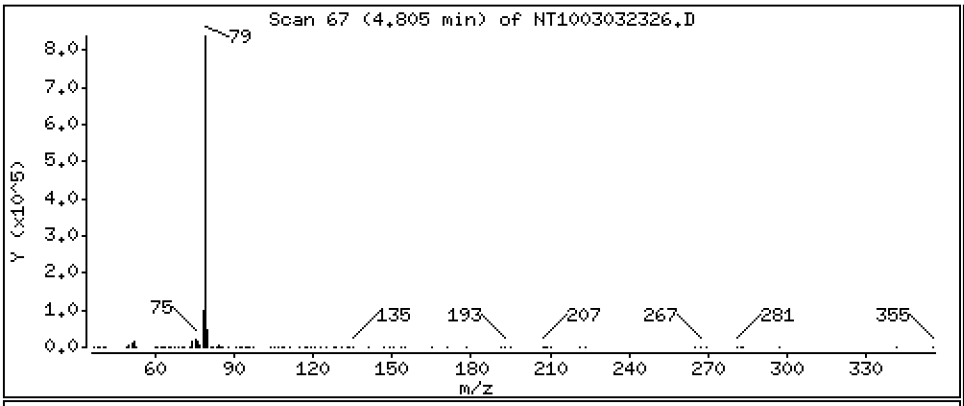
Operator: VTS

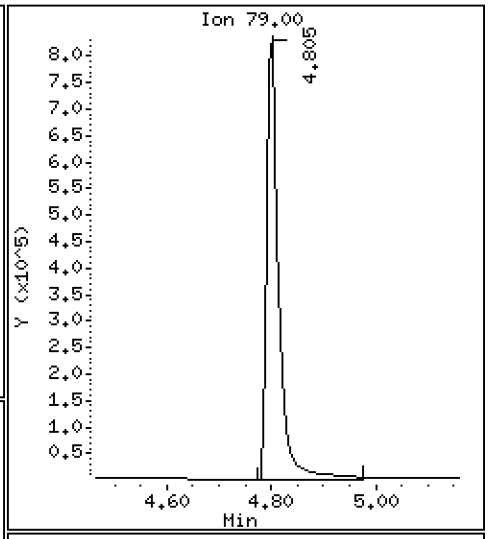
Column phase: ZB-5msi

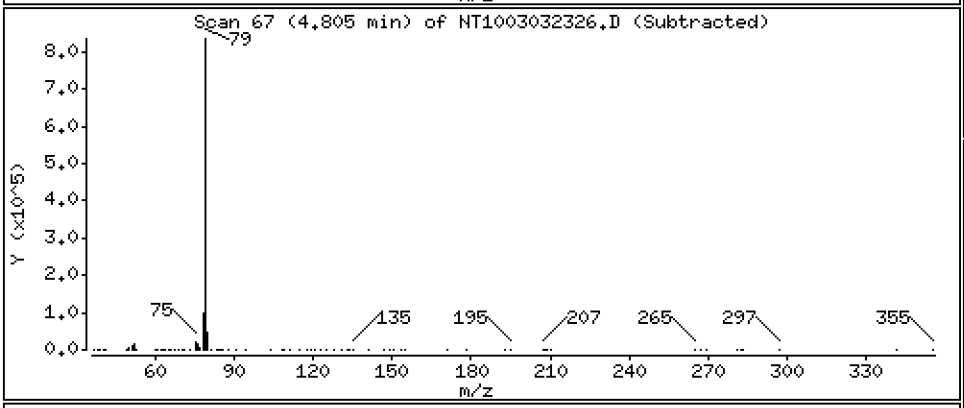
Column diameter: 0.25

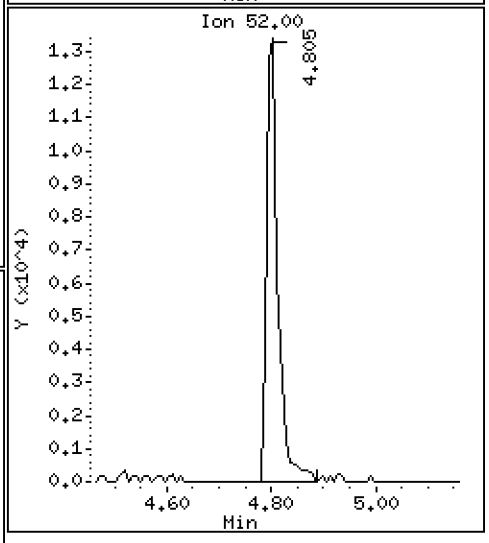
103 Pyridine

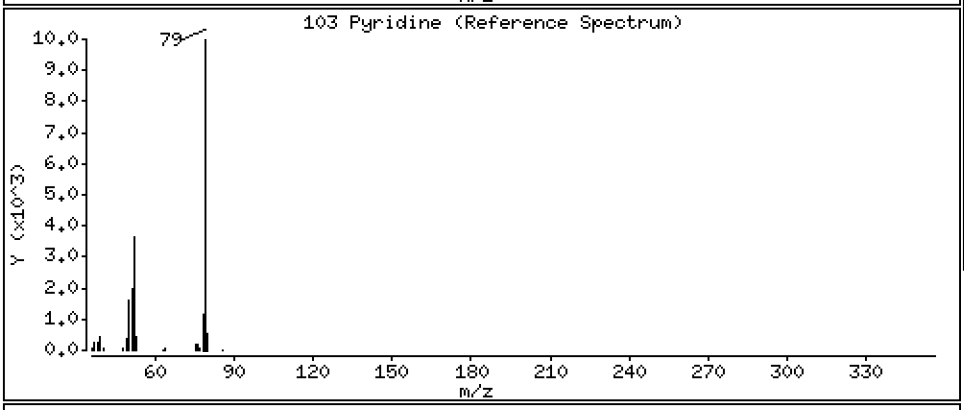
Concentration: 10.02 ug/ml

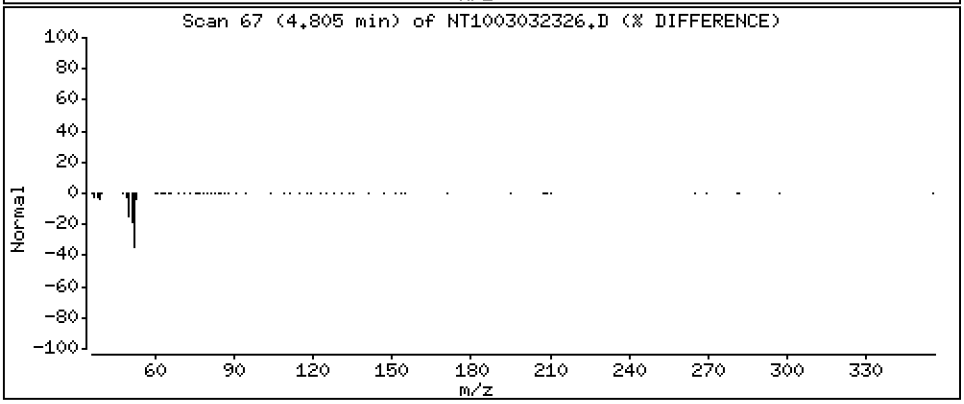












Data File: \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D

Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

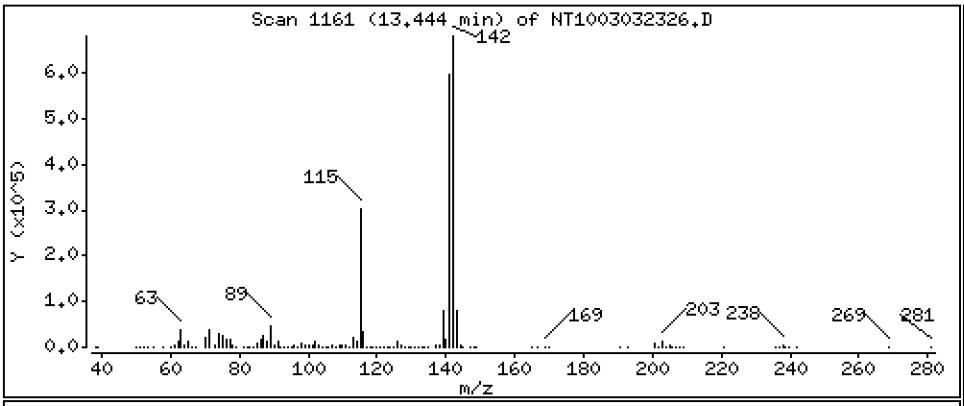
Operator: VTS

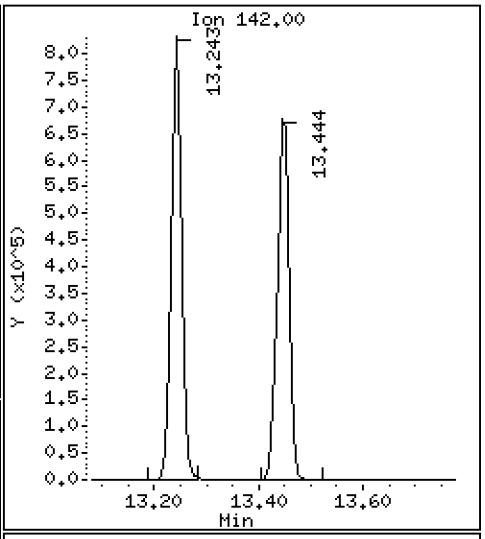
Column phase: ZB-5msi

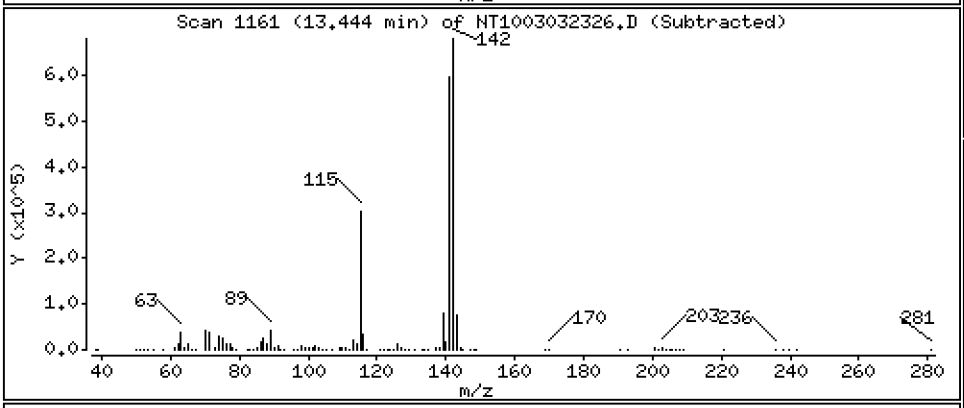
Column diameter: 0.25

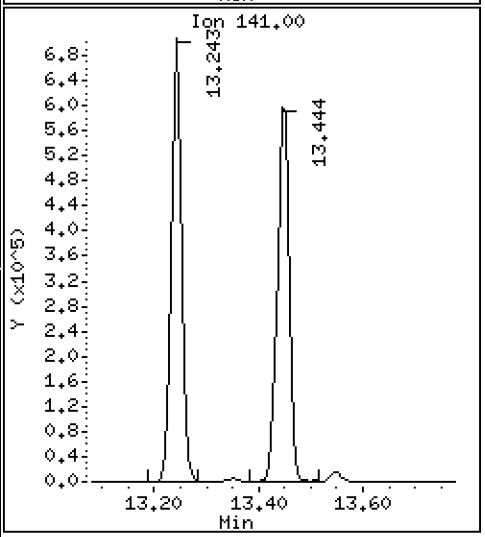
105 1-methylnaphthalene

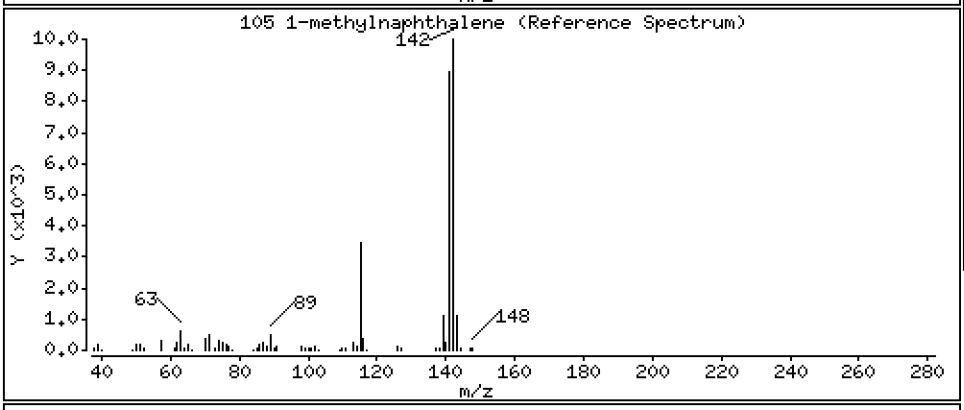
Concentration: 4.989 ug/ml

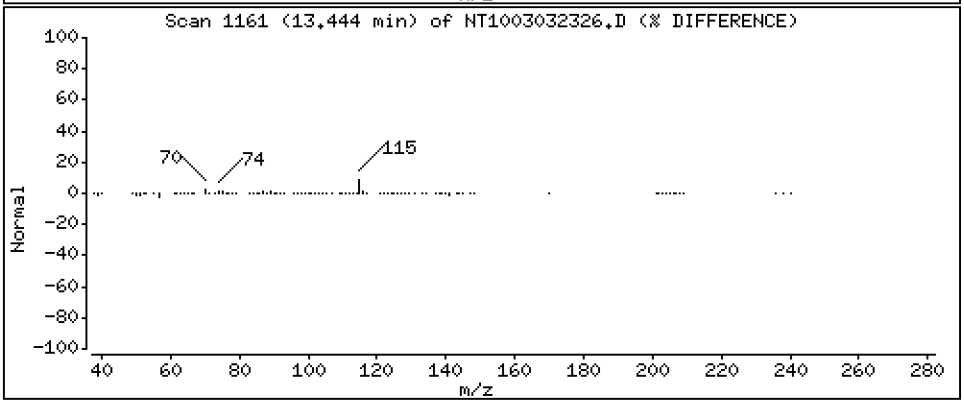












Date : 04-MAR-2023 09:39

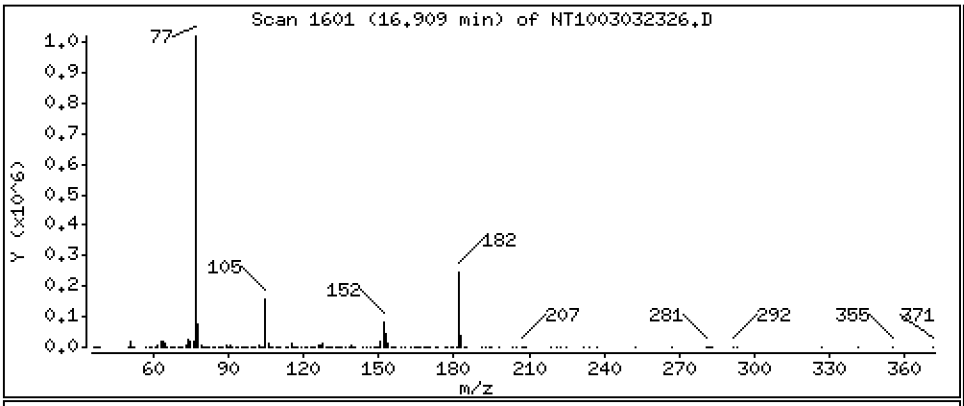
Client ID: Instrument: nt10.i

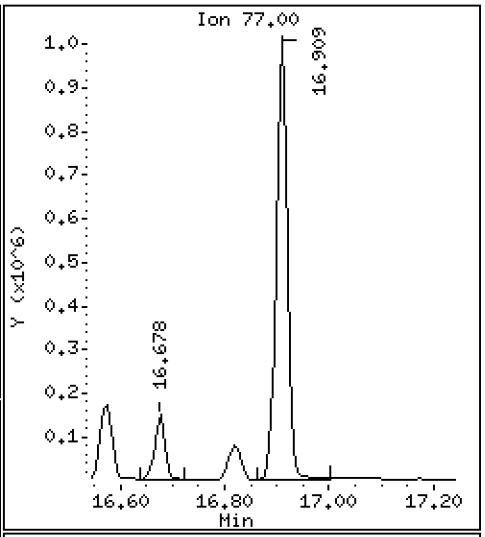
Sample Info: SEQ-CCVFULL

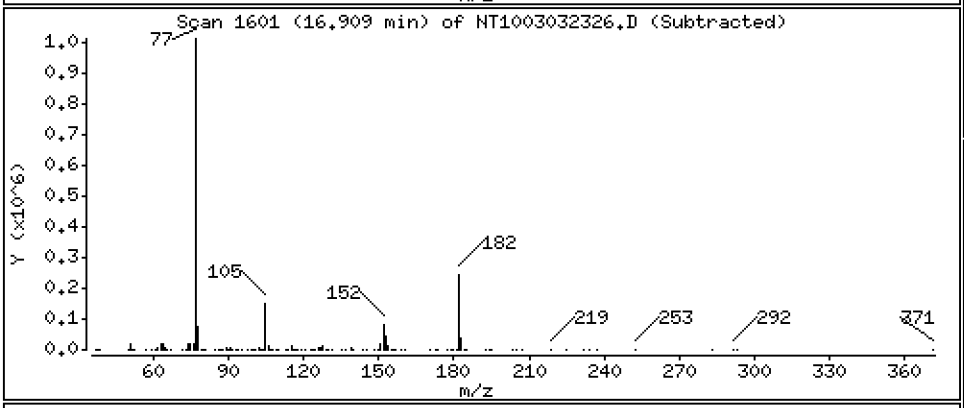
Volume Injected (uL): 1.0 Operator: VTS

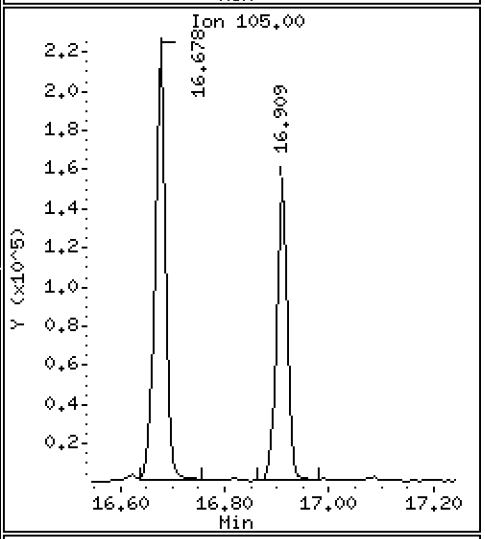
Column phase: ZB-5msi Column diameter: 0.25

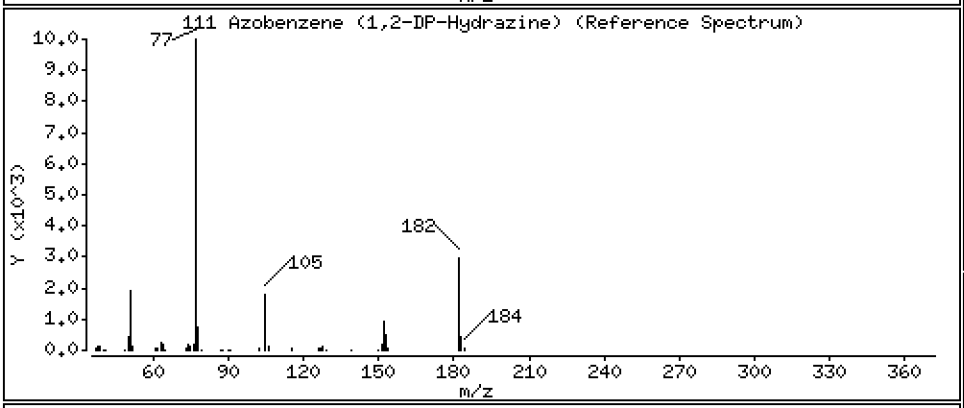
111 Azobenzene (1,2-DP-Hydrazine) Concentration: 4.417 ug/ml

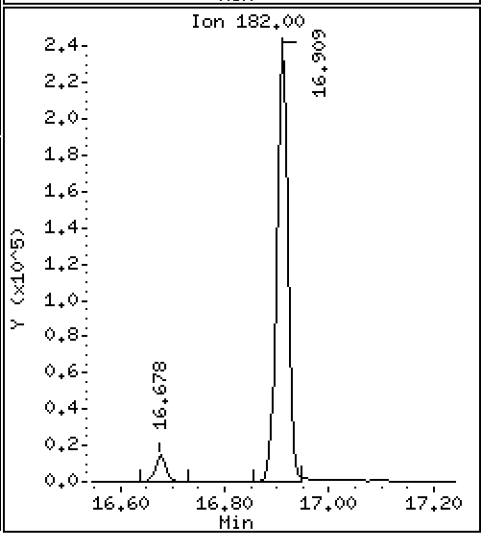


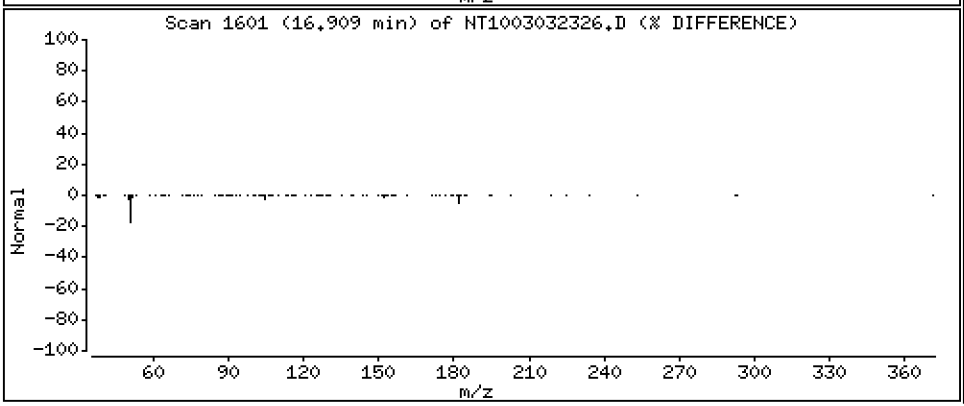












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

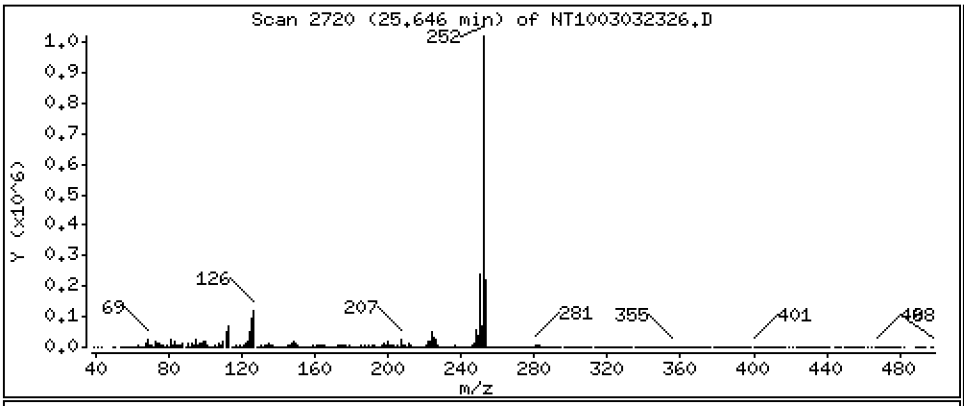
Operator: VTS

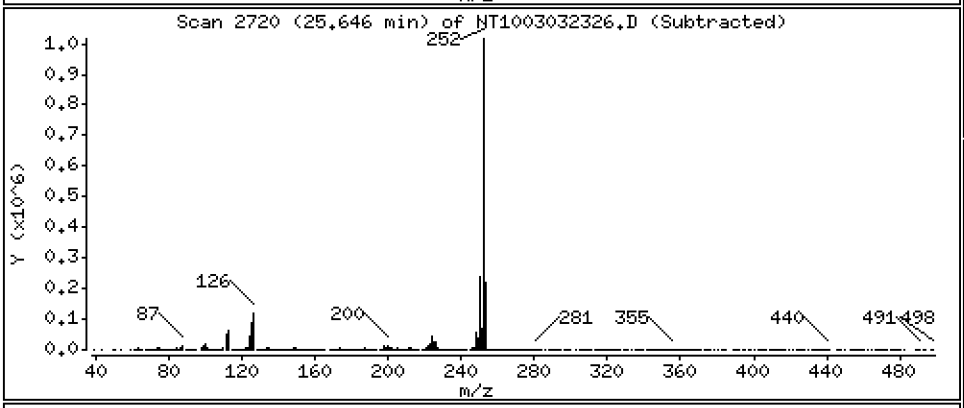
Column phase: ZB-5msi

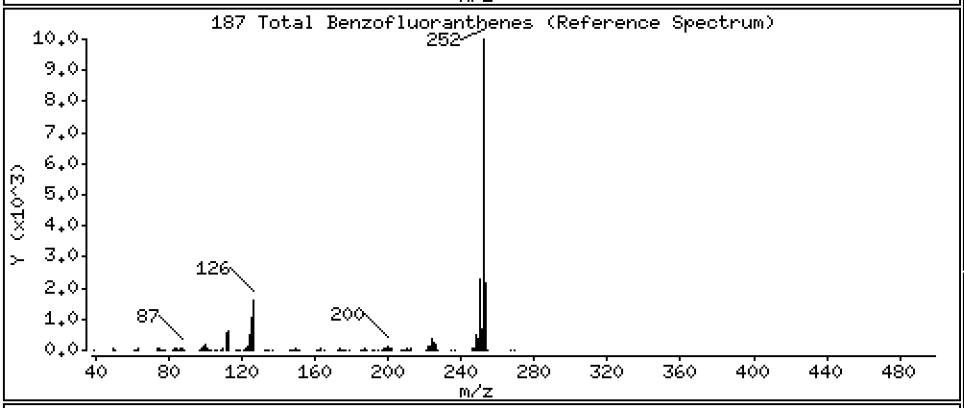
Column diameter: 0.25

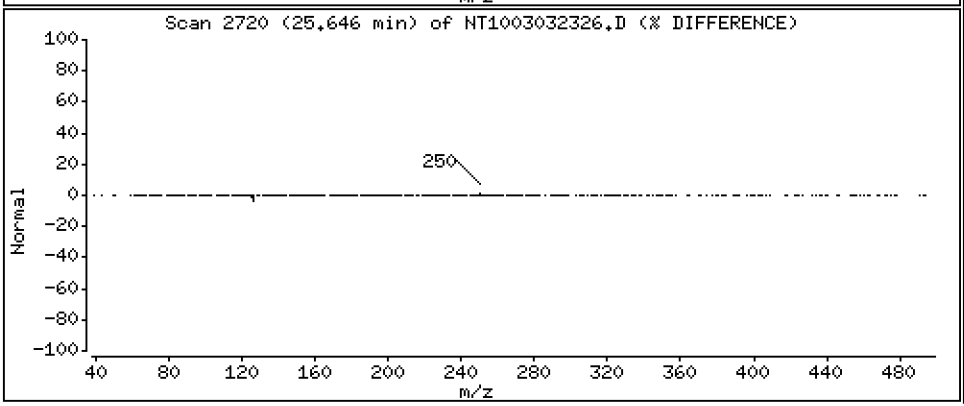
187 Total Benzofluoranthenes

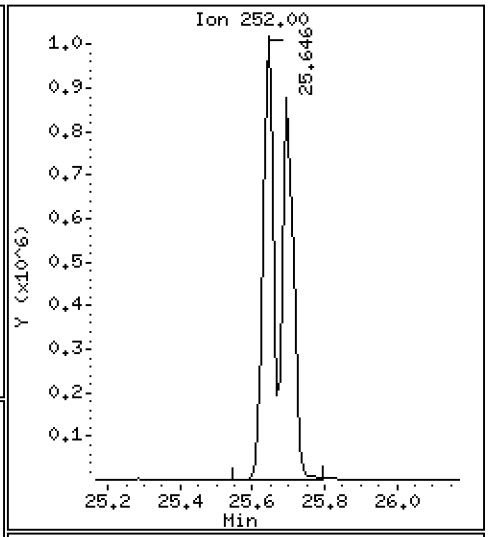
Concentration: 7.211 ug/ml

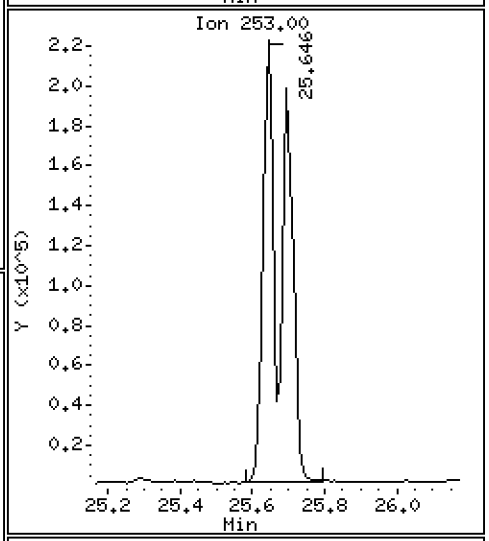


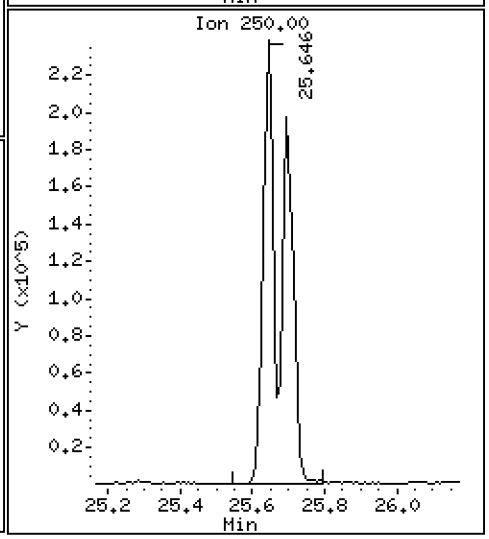












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Date : 04-MAR-2023 09:39

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVFULL

Volume Injected (uL): 1.0

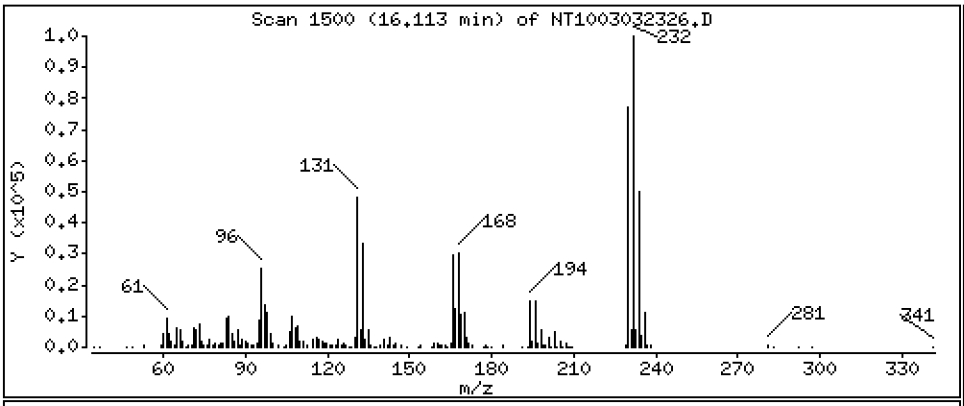
Operator: VTS

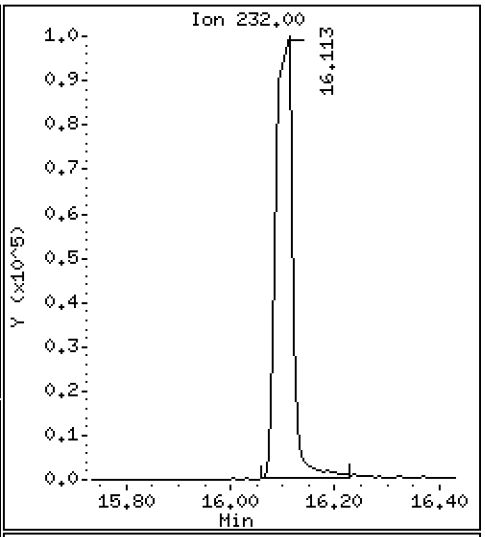
Column phase: ZB-5msi

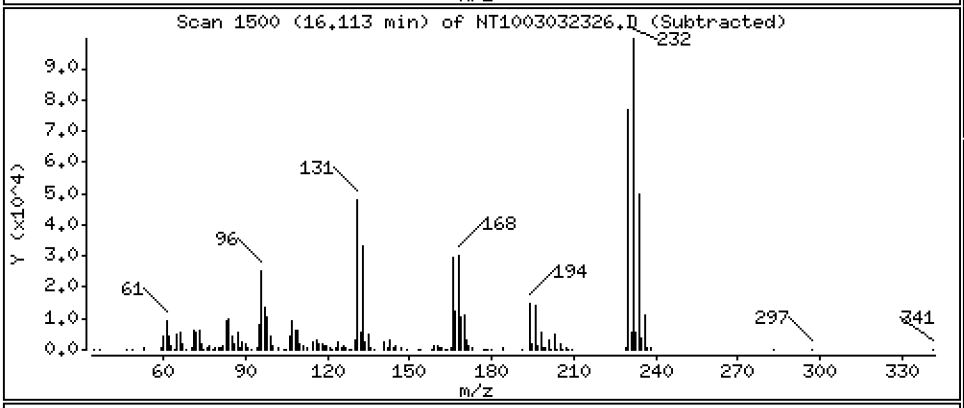
Column diameter: 0.25

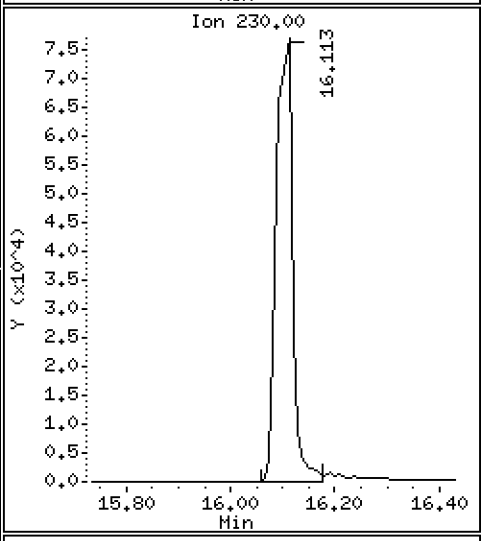
120 2,3,4,6-Tetrachlorophenol

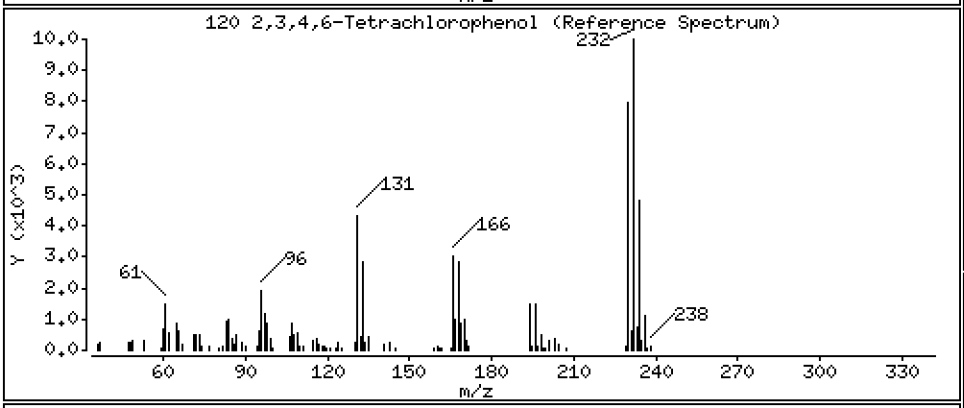
Concentration: 2.534 ug/ml

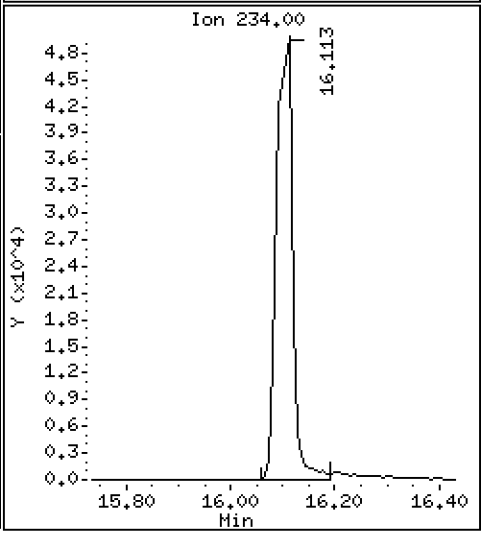


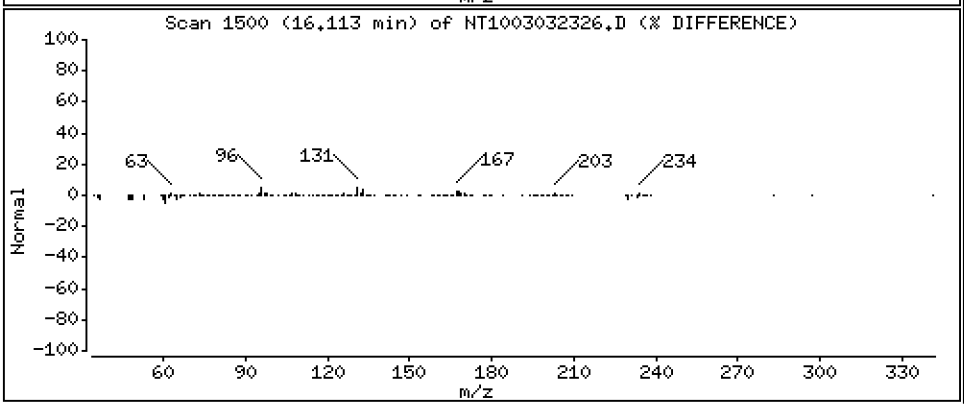












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt10.i\20230303A.b\NT1003032326.D
Lab Smp Id: SLC0162-CCV1
Inj Date : 04-MAR-2023 09:39
Operator : VTS Inst ID: nt10.i
Smp Info : SEQ-CCVFULL
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Meth Date : 26-Apr-2023 10:41 van Quant Type: ISTD
Cal Date : 01-MAR-2023 18:37 Cal File: NT1003012306.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/ml)
$	1 2-Fluorophenol	112	6.920	6.920	(0.745)	901416	7.76348	7.763
$	2 Phenol-d5	99	8.535	8.535	(0.919)	1140074	8.45737	8.457
	3 Phenol	94	8.558	8.558	(0.922)	767294	5.35365	5.354
$	5 2-Chlorophenol-d4	132	8.852	8.852	(0.953)	929913	8.08550	8.086
	4 Bis(2-Chloroethyl)ether	93	8.775	8.767	(0.945)	562390	5.13503	5.135
	6 2-Chlorophenol	128	8.883	8.883	(0.957)	682744	5.71430	5.714
	7 1,3-Dichlorobenzene	146	9.177	9.169	(0.988)	630252	4.78439	4.784
*	8 1,4-Dichlorobenzene-d4	152	9.285	9.278	(1.000)	369039	4.00000	
	9 1,4-Dichlorobenzene	146	9.317	9.316	(1.003)	676165	5.16753	5.168
$	10 1,2-Dichlorobenzene-d4	152	9.573	9.572	(1.031)	411351	4.78724	4.787
	12 1,2-Dichlorobenzene	146	9.604	9.604	(1.034)	594532	4.69427	4.694
	11 Benzyl alcohol	108	9.526	9.518	(1.026)	340653	4.52898	4.529
	14 2,2'-oxybis(1-Chloropropane)	121	9.775	9.767	(1.053)	132192	3.62036	3.620
	13 2-Methylphenol	108	9.705	9.704	(1.045)	560639	4.93482	4.935
	17 Hexachloroethane	117	10.256	10.248	(1.104)	265308	4.93983	4.940
	16 N-Nitroso-di-n-propylamine	70	10.031	10.023	(1.080)	448645	5.18754	5.188
	15 4-Methylphenol	108	10.000	9.992	(1.077)	592846	4.30192	4.302
$	18 Nitrobenzene-d5	82	10.349	10.341	(0.878)	759983	5.28614	5.286
	19 Nitrobenzene	77	10.388	10.380	(0.881)	694328	5.14842	5.148
	20 Isophorone	82	10.853	10.845	(0.921)	961090	5.58282	5.583
	21 2-Nitrophenol	139	11.009	11.001	(0.934)	303964	4.17667	4.177
	22 2,4-Dimethylphenol	107	11.069	11.052	(0.939)	1184122	8.97533	8.975

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
	23 Bis(2-Chloroethoxy)methane	93	11.272	11.264	(0.956)	545337	5.12599	5.126
	24 Benzoic acid	105	11.256	11.238	(0.955)	802012	10.2606	10.26
	25 2,4-Dichlorophenol	162	11.485	11.467	(0.974)	1027255	9.84437	9.844
	26 1,2,4-Trichlorobenzene	180	11.665	11.649	(0.990)	509022	5.09686	5.097
*	27 Naphthalene-d8	136	11.788	11.772	(1.000)	1309707	4.00000	
	28 Naphthalene	128	11.834	11.819	(1.004)	1603215	4.76930	4.769
	29 4-Chloroaniline	127	11.927	11.911	(1.012)	1362446	8.98623	8.986
	30 Hexachlorobutadiene	225	12.058	12.043	(1.023)	318461	4.32119	4.321
	31 4-Chloro-3-methylphenol	107	12.894	12.871	(1.094)	1033717	9.30812	9.308
	32 2-Methylnaphthalene	142	13.243	13.227	(1.123)	1181475	4.97512	4.975
	33 Hexachlorocyclopentadiene	237	13.552	13.529	(0.879)	149052	6.44249	6.442
	34 2,4,6-Trichlorophenol	196	13.815	13.800	(0.896)	693752	10.3657	10.37
	35 2,4,5-Trichlorophenol	196	13.885	13.869	(0.901)	726909	10.1633	10.16
$	36 2-Fluorobiphenyl	172	14.001	13.978	(0.908)	1277335	5.31993	5.320
	37 2-Chloronaphthalene	162	14.256	14.241	(0.925)	1013316	5.37604	5.376
	38 2-Nitroaniline	65	14.473	14.450	(0.939)	522886	9.81191	9.812
	39 Dimethylphthalate	163	14.845	14.821	(0.963)	1038424	4.77666	4.777
	40 Acenaphthylene	152	15.131	15.115	(0.981)	1646844	5.06790	5.068
	41 2,6-Dinitrotoluene	165	14.976	14.961	(0.971)	477353	9.69574	9.696
*	42 Acenaphthene-d10	164	15.417	15.401	(1.000)	673159	4.00000	
	43 3-Nitroaniline	138	15.332	15.316	(0.994)	499170	8.85544	8.855
	44 Acenaphthene	153	15.487	15.471	(1.004)	951047	4.85284	4.853
	45 2,4-Dinitrophenol	184	15.556	15.533	(1.009)	250626	21.9097	21.91
	46 Dibenzofuran	168	15.850	15.834	(1.028)	1454574	5.00095	5.001
	47 4-Nitrophenol	109	15.664	15.641	(1.016)	289440	7.36003	7.360
	48 2,4-Dinitrotoluene	165	15.827	15.803	(1.027)	665441	9.28434	9.284
	50 Diethylphthalate	149	16.329	16.306	(1.059)	1064496	4.62217	4.622
	49 Fluorene	166	16.577	16.554	(1.075)	1314573	5.43217	5.432
	51 4-Chlorophenyl-phenylether	204	16.577	16.554	(1.075)	636892	5.69587	5.696
	52 4-Nitroaniline	138	16.623	16.600	(1.078)	363195	6.16317	6.163
	53 4,6-Dinitro-2-methylphenol	198	16.677	16.654	(0.899)	674115	22.6583	22.66
	54 N-Nitrosodiphenylamine	169	16.824	16.801	(0.907)	863431	4.92927	4.929
$	55 2,4,6-Tribromophenol	330	17.078	17.063	(1.108)	282372	6.52357	6.524
	56 4-Bromophenyl-phenylether	248	17.612	17.588	(0.949)	405462	5.71266	5.713
	57 Hexachlorobenzene	284	17.720	17.697	(0.955)	287961	3.60287	3.603
	58 Pentachlorophenol	266	18.146	18.122	(0.978)	172476	4.56285	4.563
*	59 Phenanthrene-d10	188	18.556	18.533	(1.000)	1183891	4.00000	
	60 Phenanthrene	178	18.610	18.587	(1.003)	1485609	4.90334	4.903
	61 Anthracene	178	18.718	18.695	(1.009)	1519718	5.17282	5.173
	62 Carbazole	167	19.059	19.035	(1.027)	1340701	4.98133	4.981
	63 Di-n-butylphthalate	149	19.763	19.739	(1.065)	1918608	5.06574	5.066
	64 Fluoranthene	202	21.008	20.985	(0.888)	1779380	4.26872	4.269
	65 Pyrene	202	21.442	21.426	(0.906)	2110716	4.97280	4.973
$	66 Terphenyl-d14	244	21.728	21.705	(0.919)	1548104	4.50761	4.508
	67 Butylbenzylphthalate	149	22.626	22.611	(0.956)	851007	3.77759	3.778
	68 Benzo(a)anthracene	228	23.641	23.617	(0.999)	1996556	4.67298	4.673
*	69 Chrysene-d12	240	23.656	23.633	(1.000)	1211720	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.587	23.563	(0.997)	2148465	11.1357	11.14
	71 Chrysene	228	23.703	23.679	(1.002)	1769104	5.11342	5.113
	72 bis(2-Ethylhexyl)phthalate	149	23.641	23.617	(0.954)	1429298	4.78006	4.780
*	134 Di-n-octylphthalate-d4	153	24.771	24.748	(1.000)	2070454	4.00000	
	73 Di-n-octylphthalate	149	24.787	24.755	(1.001)	2383768	5.19196	5.192
	74 Benzo(b)fluoranthene	252	25.646	25.607	(0.968)	1999780	4.10399	4.104(H)
	75 Benzo(k)fluoranthene	252	25.692	25.669	(0.970)	1346895	2.90899	2.909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/ml)
76	Benzo(a)pyrene	252	26.374	26.335	(0.995)	1943327	4.44472	4.445
* 77	Perylene-d12	264	26.498	26.459	(1.000)	1367687	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	29.468	29.406	(1.112)	2335343	4.56501	4.565
79	Dibenzo(a,h)anthracene	278	29.523	29.460	(1.114)	1934545	4.93349	4.933
80	Benzo(g,h,i)perylene	276	30.377	30.307	(1.146)	1807247	4.47634	4.476
90	N-Nitrosodimethylamine	74	4.743	4.758	(0.511)	805436	10.7455	10.75
91	Aniline	93	8.666	8.666	(0.933)	1646732	9.90940	9.909
93	Benzidine	184	21.272	21.248	(0.899)	571183	3.08669	3.087
103	Pyridine	79	4.804	4.812	(0.517)	1332242	10.0220	10.02
105	1-methylnaphthalene	142	13.444	13.428	(1.140)	1072326	4.98899	4.989
111	Azobenzene (1,2-DP-Hydrazine)	77	16.909	16.893	(1.097)	1519204	4.41743	4.417
187	Total Benzofluoranthenes	252	25.646	25.669	(0.968)	3357890	7.21096	7.211
120	2,3,4,6-Tetrachlorophenol	232	16.113	16.082	(1.045)	150115	2.53389	2.534

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032326.D
Lab Smp Id: SLC0162-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt10.i\20230303A.b\ABN.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:02
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	514090	257045	1028180	369039	-28.22
27 Naphthalene-d8	1833847	916924	3667694	1309707	-28.58
42 Acenaphthene-d10	935282	467641	1870564	673159	-28.03
59 Phenanthrene-d10	1597882	798941	3195764	1183891	-25.91
69 Chrysene-d12	1549718	774859	3099436	1211720	-21.81
134 Di-n-octylphthala	2731644	1365822	5463288	2070454	-24.20
77 Perylene-d12	1727703	863852	3455406	1367687	-20.84

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.29	0.09
27 Naphthalene-d8	11.77	11.27	12.27	11.79	0.13
42 Acenaphthene-d10	15.40	14.90	15.90	15.42	0.10
59 Phenanthrene-d10	18.53	18.03	19.03	18.56	0.13
69 Chrysene-d12	23.63	23.13	24.13	23.66	0.10
134 Di-n-octylphthala	24.75	24.25	25.25	24.77	0.09
77 Perylene-d12	26.46	25.96	26.96	26.50	0.15

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

REVIEW SUMMARY FOR FILE - NT1003032326.D

Lab ID: SLC0162-CCV1
nt10.i, 20230303A.b\ABN.m,   04-MAR-2023 09:39

RT	CO-ELUTION COMPOUNDS
23.641	bis(2-Ethylhexyl)phthalate and Benzo(a)anthracene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
NONE			

RRT check based on Ccal File: NT1003032314ICV.D

On Column LOD for nt10.i, 20230303A.b\ABN.m, ICAL.sub = 0.0000

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

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0084
Instrument: NT10
Calibration: GC00019

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0084-TUN1	NT1003012301.D	NA	03/01/23 15:49
CAL 20	SLC0084-CAL7	NT1003012302.D	NA	03/01/23 16:04
CAL 10	SLC0084-CAL6	NT1003012303.D	NA	03/01/23 16:42
CAL 5	SLC0084-CAL5	NT1003012304.D	NA	03/01/23 17:21
CAL 2.5	SLC0084-CAL4	NT1003012305.D	NA	03/01/23 17:59
CAL 1.0	SLC0084-CAL3	NT1003012306.D	NA	03/01/23 18:37
CAL 0.5	SLC0084-CAL2	NT1003012307.D	NA	03/01/23 19:15
CAL 0.2	SLC0084-CAL1	NT1003012308.D	NA	03/01/23 19:53
SCV 5.0	SLC0084-SCV1	NT1003012311.D	NA	03/01/23 21:46
Initial Cal Blank	SLC0084-ICB1	NT1003012312.D	NA	03/01/23 22:24

ANALYSIS SEQUENCE

SLC0084

Instrument: NT10
Calibration ID: UNASSIGNED

Printed: 3/7/2023 1:01:11PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0084-TUN1	QC		1		K004775			
SLC0084-CAL1	QC		2		K011105	K010831		
SLC0084-CAL2	QC		3		K011106	K010831		
SLC0084-CAL3	QC		4		K011107	K010831		
SLC0084-CAL4	QC		5		K011108	K010831		
SLC0084-CAL5	QC		6		K011109	K010831		
SLC0084-CAL6	QC		7		K011110	K010831		
SLC0084-CAL7	QC		8		K011111	K010831		
SLC0084-SCV1	QC		9		K010066	K010831		
SLC0084-ICB1	QC		10		K005156	K010831		

Samples Loaded By Date

Data Processed By Date

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

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

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

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

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

Security Status Report

Date: 07-Mar-2023 12:54

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0161	Instrument:	NT10
		Calibration:	GC00019

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0161-TUN1	NT1003032301.D	NA	03/03/23 18:12
SICV1	SLC0161-ICV1	NT1003032302.D	NA	03/03/23 18:27
Blank	BLA0673-BLK1	NT1003032306.D	Solid	03/03/23 20:59
LCS	BLA0673-BS1	NT1003032307.D	Solid	03/03/23 21:37
LCS Dup	BLA0673-BSD1	NT1003032308.D	Solid	03/03/23 22:15
Reference	BLA0673-SRM1	NT1003032311.D	Solid	03/04/23 00:08
ABN 5	SLC0161-CCV1	NT1003032314.D	NA	03/04/23 02:02

ANALYSIS SEQUENCE

SLC0161

Instrument: NT10
Calibration ID: GB00019

Printed: 3/12/2023 2:02:51PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0161-TUN1	QC		1		K004775			
SLC0161-ICV1	QC		2		K010825	K010831		
BLA0673-BLK1	QC		3			K010831		
BLA0673-BS1	QC		4			K010831		
BLA0673-BSD1	QC		5			K010831		
BLA0673-SRM1	QC		6			K010831		
BLA0673-MS1	QC		7			K010831		
BLA0673-MSD1	QC		8			K010831		
SLC0161-CCV1	QC		9		K011109	K010831		

Samples Loaded By Date

Data Processed By Date

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230303.b

	Time	Filename	LabID	ClientId	DF																
1	1827	NT1003032302.D	SLC0161-ICV1		1	9.28	505000	11.77	1846542	15.39	936949	18.53	1548373	23.62	1352261	26.44	1445020	24.73	2300648	
2	1905	NT1003032303.D	SEQ-ICVSIM		1	9.28	544114	11.77	1898784	15.39	963409	18.52	1601728	23.62	1258913	26.44	1525635	24.73	2024707	
3	1943	NT1003032304.D	SEQ-LCV200		1	9.28	481508	11.77	1657811	15.39	832135	18.53	1379084	23.62	1076525	26.44	1304955	24.73	1672481	
4	2021	NT1003032305.D	SEQ-LCV100		1	9.27	508865	11.77	1658513	15.39	889868	18.51	1409481	23.60	1078608	26.42	1264993	24.71	1746168	
5	2059	NT1003032306.D	BLA0673-BLK1		1	9.27	463117	11.77	1648284	15.39	860407	18.51	1438155	23.59	1211221	26.40	1253955	24.69	1669420	
6	2137	NT1003032307.D	BLA0673-BS1		1	9.28	510753	11.77	1883535	15.40	984162	18.53	1636921	23.63	1432936	26.45	1361351	24.74	2215401	
7	2215	NT1003032308.D	BLA0673-BSD1		1	9.28	527824	11.77	1940361	15.39	991239	18.53	1640403	23.62	1308296	26.44	1470537	24.73	2233087	
8	2252	NT1003032309.D	BLA0673-MS1		1	9.28	547345	11.77	1975659	15.39	1017278	18.52	1691335	23.62	1385937	26.44	1482259	24.73	2475383	
9	2330	NT1003032310.D	BLA0673-MSD1		1	9.28	503310	11.77	1825551	15.39	924185	18.52	1537246	23.62	1260781	26.44	1389648	24.73	2219744	
10	0008	NT1003032311.D	BLA0673-SRM1		1	9.29	467355	11.78	1687034	15.40	856066	18.53	1416982	23.63	1155812	26.45	1185167	24.74	2059316	
11	0046	NT1003032312.D	BLA0624-MS1		1	9.28	421420	11.77	1522914	15.39	809866	18.53	1473476	23.63	1519174	26.47	1586003	24.75	2562869	
12	0124	NT1003032313.D	BLA0624-MSD1		1	9.28	414003	11.77	1477739	15.39	767672	18.53	1436861	23.64	1455629	26.48	1552322	24.76	2514992	
13	0202	NT1003032314.D	SLC0161-CCV1		1	9.28	514090	11.77	1833847	15.40	935282	18.53	1597882	23.63	1549718	26.46	1727703	24.75	2731644	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230303.b

ARI Job No.: SLC0 Method: DFTPP8270E.m Instrument: nt10.i Date: 03-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1812	NT1003032301.D	SLC0161-TUN1		1	NO MANUAL INTEGRATION
1827	NT1003032302.D	SLC0161-ICV1		1	NO MANUAL INTEGRATION
1905	NT1003032303.D	SEQ-ICVSIM		1	NO MANUAL INTEGRATION
1943	NT1003032304.D	SEQ-LCV200		1	NO MANUAL INTEGRATION
2021	NT1003032305.D	SEQ-LCV100		1	NO MANUAL INTEGRATION
2059	NT1003032306.D	BLA0673-BLK1		1	NO MANUAL INTEGRATION
2137	NT1003032307.D	BLA0673-BS1		1	NO MANUAL INTEGRATION
2215	NT1003032308.D	BLA0673-BSD1		1	NO MANUAL INTEGRATION
2252	NT1003032309.D	BLA0673-MS1		1	NO MANUAL INTEGRATION
2330	NT1003032310.D	BLA0673-MSD1		1	NO MANUAL INTEGRATION
0008	NT1003032311.D	BLA0673-SRM1		1	NO MANUAL INTEGRATION
0046	NT1003032312.D	BLA0624-MS1		1	NO MANUAL INTEGRATION
0124	NT1003032313.D	BLA0624-MSD1		1	NO MANUAL INTEGRATION
0202	NT1003032314.D	SLC0161-CCV1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 14-Mar-2023 13:19

NT1003032301.D	Data Locked	yev, 14-
NT1003032302.D	Data Locked	yev, 14-
NT1003032303.D	Data Locked	yev, 14-
NT1003032304.D	Data Locked	yev, 14-
NT1003032305.D	Data Locked	yev, 14-
NT1003032306.D	Data Locked	yev, 14-
NT1003032307.D	Data Locked	yev, 14-
NT1003032308.D	Data Locked	yev, 14-
NT1003032309.D	Data Locked	yev, 14-
NT1003032310.D	Data Locked	yev, 14-
NT1003032311.D	Data Locked	yev, 14-
NT1003032312.D	Data Locked	yev, 14-
NT1003032313.D	Data Locked	yev, 14-
NT1003032314.D	Data Locked	yev, 14-

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0162	Instrument:	NT10
		Calibration:	GC00019

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ABN 5	SLC0162-ICV1	NT1003032314ICV.D	NA	03/04/23 02:02
LDW23-SC1083	23A0249-02	NT1003032318.D	Solid	03/04/23 04:34
LDW23-SC1018	23A0249-03	NT1003032319.D	Solid	03/04/23 05:12
LDW23-SC1084	23A0249-04	NT1003032320.D	Solid	03/04/23 05:50
LDW23-SC1025	23A0249-05	NT1003032321.D	Solid	03/04/23 06:28
LDW23-SC1024	23A0249-08	NT1003032322.D	Solid	03/04/23 07:06
LDW23-SC1020	23A0249-11	NT1003032323.D	Solid	03/04/23 07:45
ZZZZZ	23A0295-01	NT1003032324.D	Solid	03/04/23 08:23
ZZZZZ	23A0295-02	NT1003032325.D	Solid	03/04/23 09:01
ABN 5	SLC0162-CCV1	NT1003032326.D	NA	03/04/23 09:39

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLC0162

Instrument: NT10
Calibration ID: GB00019

Printed: 3/14/2023 3:44:54PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0162-ICV1	QC		1		K010066	K010831		
23A0249-02	(20ug/kg solid or 0.2ug/L lo	A 02	2			K010831	Anchor QEA, LLC	
23A0249-03	(20ug/kg solid or 0.2ug/L lo	A 02	3			K010831	Anchor QEA, LLC	
23A0249-04	(20ug/kg solid or 0.2ug/L lo	A 02	4			K010831	Anchor QEA, LLC	
23A0249-05	(20ug/kg solid or 0.2ug/L lo	A 02	5			K010831	Anchor QEA, LLC	
23A0249-08	(20ug/kg solid or 0.2ug/L lo	A 02	6			K010831	Anchor QEA, LLC	
23A0249-11	(20ug/kg solid or 0.2ug/L lo	A 02	7			K010831	Anchor QEA, LLC	
23A0295-01	(20ug/kg solid or 0.2ug/L lo	A 02	8			K010831	Anchor QEA, LLC	
23A0295-02	(20ug/kg solid or 0.2ug/L lo	A 02	9			K010831	Anchor QEA, LLC	
SLC0162-CCV1	QC		10		K011109	K010831		

Samples Loaded By Date

Data Processed By Date

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230303A.b

	Time	Filename	LabID	ClientId	DF																	
1	0202	NT1003032314ICV.D	SLC0162-ICV1		1	9.28	514090	11.77	1833847	15.40	935282	18.53	1597882	23.63	1549718	26.46	1727703	24.75	2731644			
2	0240	NT1003032315.D	SEQ-CCVSIM		1	9.28	491077	11.77	1563091	15.39	785467	18.53	1303921	23.63	1190347	26.46	1458174	24.74	2122999			
3	0318	NT1003032316.D	SEQ-LCV200		1	9.28	473486	11.77	1688328	15.39	820580	18.53	1393624	23.63	1225945	26.46	1515259	24.74	2118872			
4	0356	NT1003032317.D	SEQ-LCV100		1	9.29	509260	11.80	1612617	15.42	783542	18.56	1315011	23.65	1109298	26.49	1362177	24.77	1920301			
5	0434	NT1003032318.D	23A0249-02		1	9.29	426726	11.80	1356145	15.43	708178	18.57	1225429	23.66	1073830	26.52	1349748	24.79	1986957			
6	0512	NT1003032319.D	23A0249-03		1	9.29	495562	11.80	1586712	15.43	826513	18.56	1367370	23.66	1304659	26.51	1458990	24.78	2269043			
7	0550	NT1003032320.D	23A0249-04		1	9.29	467936	11.79	1622132	15.42	837679	18.56	1390077	23.66	1128136	26.51	1484111	24.78	2031116			
8	0628	NT1003032321.D	23A0249-05		1	9.28	481672	11.79	1573632	15.42	797519	18.56	1414757	23.66	1158020	26.51	1524634	24.78	2273670			
9	0706	NT1003032322.D	23A0249-08		1	9.28	398453	11.79	1414960	15.42	736573	18.56	1282606	23.66	1006944	26.51	1322990	24.78	2030611			
10	0745	NT1003032323.D	23A0249-11		1	9.29	371507	11.79	1310907	15.42	671749	18.56	1133532	23.66	965803	26.51	1244104	24.78	1814723			
11	0823	NT1003032324.D	23A0295-01		1	9.28	375254	11.79	1313931	15.42	710368	18.56	1246907	23.67	1100913	26.52	1383569	24.78	2070947			
12	0901	NT1003032325.D	23A0295-02		1	9.29	356719	11.79	1277561	15.43	701895	18.56	1247115	23.67	1013404	26.52	1296973	24.78	2026135			
13	0939	NT1003032326.D	SLC0162-CCV1		1	9.29	369039	11.79	1309707	15.42	673159	18.56	1183891	23.66	1211720	26.50	1367687	24.77	2070454			

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230303A.b

ARI Job No.: SLC0 Method: ABN.m Instrument: nt10.i Date: 04-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0202	NT1003032314ICV.D	SLC0162-ICV1		1	NO MANUAL INTEGRATION
0240	NT1003032315.D	SEQ-CCVSIM		1	NO MANUAL INTEGRATION
0318	NT1003032316.D	SEQ-LCV200		1	NO MANUAL INTEGRATION
0356	NT1003032317.D	SEQ-LCV100		1	NO MANUAL INTEGRATION
0434	NT1003032318.D	23A0249-02		1	NO MANUAL INTEGRATION
0512	NT1003032319.D	23A0249-03		1	Benzo(k)fluoranthene,
0550	NT1003032320.D	23A0249-04		1	Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0628	NT1003032321.D	23A0249-05		1	Dibenzo(a,h)anthracene,
0706	NT1003032322.D	23A0249-08		1	NO MANUAL INTEGRATION
0745	NT1003032323.D	23A0249-11		1	NO MANUAL INTEGRATION
0823	NT1003032324.D	23A0295-01		1	Dibenzo(a,h)anthracene,
0901	NT1003032325.D	23A0295-02		1	Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0939	NT1003032326.D	SLC0162-CCV1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 14-Mar-2023 15:43

NT1003032314ICV.D	Data Locked	yev, 14-
NT1003032315.D	Data Locked	yev, 14-
NT1003032316.D	Data Locked	yev, 14-
NT1003032317.D	Data Locked	yev, 14-
NT1003032318.D	Data Locked	yev, 14-
NT1003032319.D	Data Locked	yev, 14-
NT1003032320.D	Data Locked	yev, 14-
NT1003032321.D	Data Locked	yev, 14-
NT1003032322.D	Data Locked	yev, 14-
NT1003032323.D	Data Locked	yev, 14-
NT1003032324.D	Data Locked	yev, 14-
NT1003032325.D	Data Locked	yev, 14-
NT1003032326.D	Data Locked	yev, 14-

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0084
Instrument: NT10
Calibration: GC00019
Calibration Date: 03/01/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0084-SCV1 (Water)			Lab File ID: NT1003012311.D			Analyzed: 03/01/23 21:46		
2-Fluorophenol	7.5000		80 - 120		6.898143	-6.8981	N/A	*
Phenol-d5	7.5000		80 - 120		8.491857	-8.4919	N/A	*
2-Chlorophenol-d4	7.5000		80 - 120		8.814143	-8.8141	N/A	*
1,2-Dichlorobenzene-d4	5.0000	85.9	80 - 120	9.247	9.534572	-0.2876	N/A	
Nitrobenzene-d5	5.0000		80 - 120		10.29314	-10.2931	N/A	*
2-Fluorobiphenyl	5.0000		80 - 120		13.91014	-13.9101	N/A	*
2,4,6-Tribromophenol	7.5000		80 - 120		16.947	-16.9470	N/A	*
p-Terphenyl-d14	5.0000	0.392	80 - 120	21.519	21.52357	-0.0046	N/A	*
SLC0084-ICB1 (Water)			Lab File ID: NT1003012312.D			Analyzed: 03/01/23 22:24		
2-Fluorophenol	7.5000	100	30 - 160	6.897	6.898143	-0.0011	N/A	
Phenol-d5	7.5000	95.7	30 - 160	8.489	8.491857	-0.0029	N/A	
2-Chlorophenol-d4	7.5000	98.9	30 - 160	8.813	8.814143	-0.0011	N/A	
1,2-Dichlorobenzene-d4	5.0000	94.9	30 - 160	9.534	9.534572	-0.0006	N/A	
Nitrobenzene-d5	5.0000	100	30 - 160	10.294	10.29314	0.0009	N/A	
2-Fluorobiphenyl	5.0000	98.2	30 - 160	13.908	13.91014	-0.0021	N/A	
2,4,6-Tribromophenol	7.5000	74.9	30 - 160	16.947	16.947	0.0000	N/A	
p-Terphenyl-d14	5.0000	96.4	30 - 160	21.527	21.52357	0.0034	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0161	Instrument:	NT10
Calibration:	GC00019	Calibration Date:	03/01/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0161-ICV1 (Solid)			Lab File ID: NT1003032302.D			Analyzed: 03/03/23 18:27		
2-Fluorophenol	7.5000	106	80 - 120	6.912	6.898143	0.0139	N/A	
Phenol-d5	7.5000	115	80 - 120	8.527	8.491857	0.0351	N/A	
2-Chlorophenol-d4	7.5000	108	80 - 120	8.844	8.814143	0.0299	N/A	
1,2-Dichlorobenzene-d4	5.0000	97.0	80 - 120	9.565	9.534572	0.0304	N/A	
Nitrobenzene-d5	5.0000	103	80 - 120	10.333	10.29314	0.0399	N/A	
2-Fluorobiphenyl	5.0000	106	80 - 120	13.978	13.91014	0.0679	N/A	
2,4,6-Tribromophenol	7.5000	88.1	80 - 120	17.047	16.947	0.1000	N/A	
p-Terphenyl-d14	5.0000	89.8	80 - 120	21.689	21.52357	0.1654	N/A	
BLA0673-BLK1 (Solid)			Lab File ID: NT1003032306.D			Analyzed: 03/03/23 20:59		
2-Fluorophenol	750.00	67.5	27 - 120	6.912	6.898143	0.0139	N/A	
Phenol-d5	750.00	78.4	29 - 120	8.519	8.491857	0.0271	N/A	
2-Chlorophenol-d4	750.00	78.9	31 - 120	8.836	8.814143	0.0219	N/A	
1,2-Dichlorobenzene-d4	500.00	75.2	32 - 120	9.565	9.534572	0.0304	N/A	
Nitrobenzene-d5	500.00	76.2	30 - 120	10.333	10.29314	0.0399	N/A	
2-Fluorobiphenyl	500.00	84.4	35 - 120	13.97	13.91014	0.0599	N/A	
2,4,6-Tribromophenol	750.00	51.2	24 - 134	17.04	16.947	0.0930	N/A	
p-Terphenyl-d14	500.00	104	37 - 120	21.674	21.52357	0.1504	N/A	
BLA0673-BS1 (Solid)			Lab File ID: NT1003032307.D			Analyzed: 03/03/23 21:37		
2-Fluorophenol	750.00	77.0	27 - 120	6.92	6.898143	0.0219	N/A	
Phenol-d5	750.00	91.0	29 - 120	8.535	8.491857	0.0431	N/A	
2-Chlorophenol-d4	750.00	84.4	31 - 120	8.852	8.814143	0.0379	N/A	
1,2-Dichlorobenzene-d4	500.00	72.7	32 - 120	9.572	9.534572	0.0374	N/A	
Nitrobenzene-d5	500.00	80.0	30 - 120	10.341	10.29314	0.0479	N/A	
2-Fluorobiphenyl	500.00	85.4	35 - 120	13.978	13.91014	0.0679	N/A	
2,4,6-Tribromophenol	750.00	83.2	24 - 134	17.055	16.947	0.1080	N/A	
p-Terphenyl-d14	500.00	86.6	37 - 120	21.705	21.52357	0.1814	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0161	Instrument:	NT10
Calibration:	GC00019	Calibration Date:	03/01/2023

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLA0673-BSD1 (Solid)			Lab File ID: NT1003032308.D			Analyzed: 03/03/23 22:15		
2-Fluorophenol	750.00	73.9	27 - 120	6.928	6.898143	0.0299	N/A	
Phenol-d5	750.00	88.5	29 - 120	8.535	8.491857	0.0431	N/A	
2-Chlorophenol-d4	750.00	83.0	31 - 120	8.852	8.814143	0.0379	N/A	
1,2-Dichlorobenzene-d4	500.00	70.6	32 - 120	9.565	9.534572	0.0304	N/A	
Nitrobenzene-d5	500.00	79.7	30 - 120	10.341	10.29314	0.0479	N/A	
2-Fluorobiphenyl	500.00	83.2	35 - 120	13.978	13.91014	0.0679	N/A	
2,4,6-Tribromophenol	750.00	80.1	24 - 134	17.047	16.947	0.1000	N/A	
p-Terphenyl-d14	500.00	98.5	37 - 120	21.697	21.52357	0.1734	N/A	
BLA0673-SRM1 (Solid)			Lab File ID: NT1003032311.D			Analyzed: 03/04/23 00:08		
2-Fluorophenol	7500.0	78.8	27 - 120	6.92	6.898143	0.0219	N/A	
Phenol-d5	7500.0	93.2	29 - 120	8.535	8.491857	0.0431	N/A	
2-Chlorophenol-d4	7500.0	93.5	31 - 120	8.852	8.814143	0.0379	N/A	
1,2-Dichlorobenzene-d4	5000.0	74.5	32 - 120	9.573	9.534572	0.0384	N/A	
Nitrobenzene-d5	5000.0	82.9	30 - 120	10.341	10.29314	0.0479	N/A	
2-Fluorobiphenyl	5000.0	88.8	35 - 120	13.986	13.91014	0.0759	N/A	
2,4,6-Tribromophenol	7500.0	86.7	24 - 134	17.063	16.947	0.1160	N/A	
p-Terphenyl-d14	5000.0	93.6	37 - 120	21.705	21.52357	0.1814	N/A	
SLC0161-CCV1 (Solid)			Lab File ID: NT1003032314.D			Analyzed: 03/04/23 02:02		
2-Fluorophenol	7.5000	105	50 - 150	6.92	6.898143	0.0219	N/A	
Phenol-d5	7.5000	115	50 - 150	8.535	8.491857	0.0431	N/A	
2-Chlorophenol-d4	7.5000	118	50 - 150	8.852	8.814143	0.0379	N/A	
1,2-Dichlorobenzene-d4	5.0000	97.8	50 - 150	9.572	9.534572	0.0374	N/A	
Nitrobenzene-d5	5.0000	103	50 - 150	10.341	10.29314	0.0479	N/A	
2-Fluorobiphenyl	5.0000	107	50 - 150	13.978	13.91014	0.0679	N/A	
2,4,6-Tribromophenol	7.5000	91.0	50 - 150	17.063	16.947	0.1160	N/A	
p-Terphenyl-d14	5.0000	88.8	50 - 150	21.705	21.52357	0.1814	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0162
Instrument: NT10
Calibration: GC00019
Calibration Date: 03/01/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0162-ICV1 (Solid)			Lab File ID: NT1003032314ICV.D			Analyzed: 03/04/23 02:02		
2-Fluorophenol	7.5000	105	80 - 120	6.92	6.898143	0.0219	N/A	
Phenol-d5	7.5000	115	80 - 120	8.535	8.491857	0.0431	N/A	
2-Chlorophenol-d4	7.5000	118	80 - 120	8.852	8.814143	0.0379	N/A	
1,2-Dichlorobenzene-d4	5.0000	97.8	80 - 120	9.572	9.534572	0.0374	N/A	
Nitrobenzene-d5	5.0000	103	80 - 120	10.341	10.29314	0.0479	N/A	
2-Fluorobiphenyl	5.0000	107	80 - 120	13.978	13.91014	0.0679	N/A	
2,4,6-Tribromophenol	7.5000	90.9	80 - 120	17.063	16.947	0.1160	N/A	
p-Terphenyl-d14	5.0000	88.8	80 - 120	21.705	21.52357	0.1814	N/A	
23A0249-02 (Solid)			Lab File ID: NT1003032318.D			Analyzed: 03/04/23 04:34		
2-Fluorophenol	719.07	67.2	27 - 120	6.928	6.898143	0.0299	N/A	
Phenol-d5	719.07	76.2	29 - 120	8.543	8.491857	0.0511	N/A	
2-Chlorophenol-d4	719.07	74.5	31 - 120	8.859	8.814143	0.0449	N/A	
1,2-Dichlorobenzene-d4	479.38	65.2	32 - 120	9.58	9.534572	0.0454	N/A	
Nitrobenzene-d5	479.38	80.0	30 - 120	10.356	10.29314	0.0629	N/A	
2-Fluorobiphenyl	479.38	84.8	35 - 120	14.008	13.91014	0.0979	N/A	
2,4,6-Tribromophenol	719.07	71.1	24 - 134	17.094	16.947	0.1470	N/A	
p-Terphenyl-d14	479.38	96.9	37 - 120	21.743	21.52357	0.2194	N/A	
23A0249-03 (Solid)			Lab File ID: NT1003032319.D			Analyzed: 03/04/23 05:12		
2-Fluorophenol	728.41	72.3	27 - 120	6.928	6.898143	0.0299	N/A	
Phenol-d5	728.41	81.6	29 - 120	8.543	8.491857	0.0511	N/A	
2-Chlorophenol-d4	728.41	80.8	31 - 120	8.859	8.814143	0.0449	N/A	
1,2-Dichlorobenzene-d4	485.61	70.1	32 - 120	9.58	9.534572	0.0454	N/A	
Nitrobenzene-d5	485.61	85.1	30 - 120	10.357	10.29314	0.0639	N/A	
2-Fluorobiphenyl	485.61	91.8	35 - 120	14.009	13.91014	0.0989	N/A	
2,4,6-Tribromophenol	728.41	73.6	24 - 134	17.086	16.947	0.1390	N/A	
p-Terphenyl-d14	485.61	83.2	37 - 120	21.736	21.52357	0.2124	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0162
Instrument: NT10
Calibration: GC00019
Calibration Date: 03/01/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0249-04 (Solid)			Lab File ID: NT1003032320.D				Analyzed: 03/04/23 05:50	
2-Fluorophenol	744.77	61.1	27 - 120	6.92	6.898143	0.0219	N/A	
Phenol-d5	744.77	62.9	29 - 120	8.535	8.491857	0.0431	N/A	
2-Chlorophenol-d4	744.77	69.9	31 - 120	8.851	8.814143	0.0369	N/A	
1,2-Dichlorobenzene-d4	496.52	61.8	32 - 120	9.572	9.534572	0.0374	N/A	
Nitrobenzene-d5	496.52	68.1	30 - 120	10.348	10.29314	0.0549	N/A	
2-Fluorobiphenyl	496.52	74.3	35 - 120	14.001	13.91014	0.0909	N/A	
2,4,6-Tribromophenol	744.77	54.7	24 - 134	17.078	16.947	0.1310	N/A	
p-Terphenyl-d14	496.52	77.7	37 - 120	21.728	21.52357	0.2044	N/A	
23A0249-05 (Solid)			Lab File ID: NT1003032321.D				Analyzed: 03/04/23 06:28	
2-Fluorophenol	721.99	68.5	27 - 120	6.92	6.898143	0.0219	N/A	
Phenol-d5	721.99	76.5	29 - 120	8.535	8.491857	0.0431	N/A	
2-Chlorophenol-d4	721.99	75.5	31 - 120	8.852	8.814143	0.0379	N/A	
1,2-Dichlorobenzene-d4	481.32	66.5	32 - 120	9.573	9.534572	0.0384	N/A	
Nitrobenzene-d5	481.32	78.2	30 - 120	10.341	10.29314	0.0479	N/A	
2-Fluorobiphenyl	481.32	88.9	35 - 120	13.993	13.91014	0.0829	N/A	
2,4,6-Tribromophenol	721.99	78.9	24 - 134	17.078	16.947	0.1310	N/A	
p-Terphenyl-d14	481.32	83.4	37 - 120	21.744	21.52357	0.2204	N/A	
23A0249-08 (Solid)			Lab File ID: NT1003032322.D				Analyzed: 03/04/23 07:06	
2-Fluorophenol	723.65	74.5	27 - 120	6.92	6.898143	0.0219	N/A	
Phenol-d5	723.65	81.1	29 - 120	8.535	8.491857	0.0431	N/A	
2-Chlorophenol-d4	723.65	83.2	31 - 120	8.852	8.814143	0.0379	N/A	
1,2-Dichlorobenzene-d4	482.43	72.4	32 - 120	9.572	9.534572	0.0374	N/A	
Nitrobenzene-d5	482.43	80.5	30 - 120	10.341	10.29314	0.0479	N/A	
2-Fluorobiphenyl	482.43	86.4	35 - 120	13.993	13.91014	0.0829	N/A	
2,4,6-Tribromophenol	723.65	79.0	24 - 134	17.078	16.947	0.1310	N/A	
p-Terphenyl-d14	482.43	82.2	37 - 120	21.743	21.52357	0.2194	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0162	Instrument:	NT10
Calibration:	GC00019	Calibration Date:	03/01/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0249-11 (Solid)			Lab File ID: NT1003032323.D			Analyzed: 03/04/23 07:45		
2-Fluorophenol	735.26	57.4	27 - 120	6.92	6.898143	0.0219	N/A	
Phenol-d5	735.26	61.2	29 - 120	8.535	8.491857	0.0431	N/A	
2-Chlorophenol-d4	735.26	62.7	31 - 120	8.852	8.814143	0.0379	N/A	
1,2-Dichlorobenzene-d4	490.17	54.5	32 - 120	9.573	9.534572	0.0384	N/A	
Nitrobenzene-d5	490.17	61.9	30 - 120	10.349	10.29314	0.0559	N/A	
2-Fluorobiphenyl	490.17	65.8	35 - 120	14.001	13.91014	0.0909	N/A	
2,4,6-Tribromophenol	735.26	52.4	24 - 134	17.078	16.947	0.1310	N/A	
p-Terphenyl-d14	490.17	65.2	37 - 120	21.728	21.52357	0.2044	N/A	
SLC0162-CCV1 (Solid)			Lab File ID: NT1003032326.D			Analyzed: 03/04/23 09:39		
2-Fluorophenol	7.5000	104	50 - 150	6.92	6.898143	0.0219	N/A	
Phenol-d5	7.5000	113	50 - 150	8.535	8.491857	0.0431	N/A	
2-Chlorophenol-d4	7.5000	108	50 - 150	8.852	8.814143	0.0379	N/A	
1,2-Dichlorobenzene-d4	5.0000	95.7	50 - 150	9.573	9.534572	0.0384	N/A	
Nitrobenzene-d5	5.0000	106	50 - 150	10.349	10.29314	0.0559	N/A	
2-Fluorobiphenyl	5.0000	106	50 - 150	14.001	13.91014	0.0909	N/A	
2,4,6-Tribromophenol	7.5000	87.0	50 - 150	17.078	16.947	0.1310	N/A	
p-Terphenyl-d14	5.0000	90.2	50 - 150	21.728	21.52357	0.2044	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0084	Instrument:	NT10
		Calibration:	GC00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLC0084-SCV1)		(Water)		Lab File ID: NT1003012311.D				Analyzed: 03/01/23 21:46	
1,4-Dichlorobenzene-d4	283537	9.247	337641	9.246	84	50 - 200	0.001	+/-0.50	
Naphthalene-d8	1089120	11.719	1265187	11.718	86	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	607772	15.317	692385	15.308	88	50 - 200	0.009	+/-0.50	
Phenanthrene-d10	1205858	18.401	1376777	18.401	88	50 - 200	0.000	+/-0.50	
Chrysene-d12	1219436	23.416	1019524	23.416	120	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	2317357	24.485	2027111	24.484	114	50 - 200	0.001	+/-0.50	
Perylene-d12	1289108	26.103	1027409	26.102	125	50 - 200	0.001	+/-0.50	
Initial Cal Blank (SLC0084-ICB1)		(Water)		Lab File ID: NT1003012312.D				Analyzed: 03/01/23 22:24	
1,4-Dichlorobenzene-d4	480761	9.246	337641	9.246	142	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1681746	11.718	1265187	11.718	133	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	836849	15.308	692385	15.308	121	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1648281	18.401	1376777	18.401	120	50 - 200	0.000	+/-0.50	
Chrysene-d12	1391477	23.416	1019524	23.416	136	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	2481481	24.484	2027111	24.484	122	50 - 200	0.000	+/-0.50	
Perylene-d12	1542419	26.102	1027409	26.102	150	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0161	Instrument:	NT10
		Calibration:	GC00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0161-ICV1)		(Solid)	Lab File ID: NT1003032302.D				Analyzed: 03/03/23 18:27		
1,4-Dichlorobenzene-d4	505000	9.278	505000	9.278	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1846542	11.772	1846542	11.772	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	936949	15.394	936949	15.394	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1548373	18.525	1548373	18.525	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	1352261	23.617	1352261	23.617	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	2300648	24.732	2300648	24.732	100	50 - 200	0.000	+/-0.50	
Perylene-d12	1445020	26.443	1445020	26.443	100	50 - 200	0.000	+/-0.50	
Blank (BLA0673-BLK1)		(Solid)	Lab File ID: NT1003032306.D				Analyzed: 03/03/23 20:59		
1,4-Dichlorobenzene-d4	463117	9.27	505000	9.278	92	50 - 200	-0.008	+/-0.50	
Naphthalene-d8	1648284	11.765	1846542	11.772	89	50 - 200	-0.007	+/-0.50	
Acenaphthene-d10	860407	15.386	936949	15.394	92	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	1438155	18.509	1548373	18.525	93	50 - 200	-0.016	+/-0.50	
Chrysene-d12	1211221	23.586	1352261	23.617	90	50 - 200	-0.031	+/-0.50	
Di-n-Octylphthalate-d4	1669420	24.693	2300648	24.732	73	50 - 200	-0.039	+/-0.50	
Perylene-d12	1253955	26.397	1445020	26.443	87	50 - 200	-0.046	+/-0.50	
LCS (BLA0673-BS1)		(Solid)	Lab File ID: NT1003032307.D				Analyzed: 03/03/23 21:37		
1,4-Dichlorobenzene-d4	510753	9.278	505000	9.278	101	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1883535	11.772	1846542	11.772	102	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	984162	15.401	936949	15.394	105	50 - 200	0.007	+/-0.50	
Phenanthrene-d10	1636921	18.533	1548373	18.525	106	50 - 200	0.008	+/-0.50	
Chrysene-d12	1432936	23.625	1352261	23.617	106	50 - 200	0.008	+/-0.50	
Di-n-Octylphthalate-d4	2215401	24.74	2300648	24.732	96	50 - 200	0.008	+/-0.50	
Perylene-d12	1361351	26.451	1445020	26.443	94	50 - 200	0.008	+/-0.50	
LCS Dup (BLA0673-BSD1)		(Solid)	Lab File ID: NT1003032308.D				Analyzed: 03/03/23 22:15		
1,4-Dichlorobenzene-d4	527824	9.278	505000	9.278	105	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1940361	11.773	1846542	11.772	105	50 - 200	0.001	+/-0.50	
Acenaphthene-d10	991239	15.394	936949	15.394	106	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1640403	18.525	1548373	18.525	106	50 - 200	0.000	+/-0.50	
Chrysene-d12	1308296	23.617	1352261	23.617	97	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	2233087	24.732	2300648	24.732	97	50 - 200	0.000	+/-0.50	
Perylene-d12	1470537	26.444	1445020	26.443	102	50 - 200	0.001	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0161	Instrument:	NT10
		Calibration:	GC00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Reference (BLA0673-SRM1)		(Solid)		Lab File ID: NT1003032311.D				Analyzed: 03/04/23 00:08	
1,4-Dichlorobenzene-d4	467355	9.286	505000	9.278	93	50 - 200	0.008	+/-0.50	
Naphthalene-d8	1687034	11.78	1846542	11.772	91	50 - 200	0.008	+/-0.50	
Acenaphthene-d10	856066	15.402	936949	15.394	91	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1416982	18.533	1548373	18.525	92	50 - 200	0.008	+/-0.50	
Chrysene-d12	1155812	23.625	1352261	23.617	85	50 - 200	0.008	+/-0.50	
Di-n-Octylphthalate-d4	2059316	24.74	2300648	24.732	90	50 - 200	0.008	+/-0.50	
Perylene-d12	1185167	26.451	1445020	26.443	82	50 - 200	0.008	+/-0.50	
Calibration Check (SLC0161-CCV1)		(Water)		Lab File ID: NT1003032314.D				Analyzed: 03/04/23 02:02	
1,4-Dichlorobenzene-d4	514090	9.278	505000	9.278	102	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1833847	11.772	1846542	11.772	99	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	935282	15.401	936949	15.394	100	50 - 200	0.007	+/-0.50	
Phenanthrene-d10	1597882	18.533	1548373	18.525	103	50 - 200	0.008	+/-0.50	
Chrysene-d12	1549718	23.633	1352261	23.617	115	50 - 200	0.016	+/-0.50	
Di-n-Octylphthalate-d4	2731644	24.748	2300648	24.732	119	50 - 200	0.016	+/-0.50	
Perylene-d12	1727703	26.459	1445020	26.443	120	50 - 200	0.016	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0162	Instrument:	NT10
		Calibration:	GC00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0162-ICV1)		(Solid)	Lab File ID: NT1003032314ICV.D				Analyzed: 03/04/23 02:02		
1,4-Dichlorobenzene-d4	514090	9.278	514090	9.278	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1833847	11.772	1833847	11.772	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	935282	15.401	935282	15.401	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1597882	18.533	1597882	18.533	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	1549718	23.633	1549718	23.633	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	2731644	24.748	2731644	24.748	100	50 - 200	0.000	+/-0.50	
Perylene-d12	1727703	26.459	1727703	26.459	100	50 - 200	0.000	+/-0.50	
LDW23-SC1083 (23A0249-02)		(Solid)	Lab File ID: NT1003032318.D				Analyzed: 03/04/23 04:34		
1,4-Dichlorobenzene-d4	426726	9.293	514090	9.278	83	50 - 200	0.015	+/-0.50	
Naphthalene-d8	1356145	11.795	1833847	11.772	74	50 - 200	0.023	+/-0.50	
Acenaphthene-d10	708178	15.432	935282	15.401	76	50 - 200	0.031	+/-0.50	
Phenanthrene-d10	1225429	18.571	1597882	18.533	77	50 - 200	0.038	+/-0.50	
Chrysene-d12	1073830	23.664	1549718	23.633	69	50 - 200	0.031	+/-0.50	
Di-n-Octylphthalate-d4	1986957	24.786	2731644	24.748	73	50 - 200	0.038	+/-0.50	
Perylene-d12	1349748	26.521	1727703	26.459	78	50 - 200	0.062	+/-0.50	
LDW23-SC1018 (23A0249-03)		(Solid)	Lab File ID: NT1003032319.D				Analyzed: 03/04/23 05:12		
1,4-Dichlorobenzene-d4	495562	9.293	514090	9.278	96	50 - 200	0.015	+/-0.50	
Naphthalene-d8	1586712	11.796	1833847	11.772	87	50 - 200	0.024	+/-0.50	
Acenaphthene-d10	826513	15.425	935282	15.401	88	50 - 200	0.024	+/-0.50	
Phenanthrene-d10	1367370	18.564	1597882	18.533	86	50 - 200	0.031	+/-0.50	
Chrysene-d12	1304659	23.664	1549718	23.633	84	50 - 200	0.031	+/-0.50	
Di-n-Octylphthalate-d4	2269043	24.779	2731644	24.748	83	50 - 200	0.031	+/-0.50	
Perylene-d12	1458990	26.513	1727703	26.459	84	50 - 200	0.054	+/-0.50	
LDW23-SC1084 (23A0249-04)		(Solid)	Lab File ID: NT1003032320.D				Analyzed: 03/04/23 05:50		
1,4-Dichlorobenzene-d4	467936	9.285	514090	9.278	91	50 - 200	0.007	+/-0.50	
Naphthalene-d8	1622132	11.788	1833847	11.772	88	50 - 200	0.016	+/-0.50	
Acenaphthene-d10	837679	15.417	935282	15.401	90	50 - 200	0.016	+/-0.50	
Phenanthrene-d10	1390077	18.556	1597882	18.533	87	50 - 200	0.023	+/-0.50	
Chrysene-d12	1128136	23.656	1549718	23.633	73	50 - 200	0.023	+/-0.50	
Di-n-Octylphthalate-d4	2031116	24.778	2731644	24.748	74	50 - 200	0.030	+/-0.50	
Perylene-d12	1484111	26.505	1727703	26.459	86	50 - 200	0.046	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0162	Instrument:	NT10
		Calibration:	GC00019

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1025 (23A0249-05)		(Solid)		Lab File ID: NT1003032321.D				Analyzed: 03/04/23 06:28	
1,4-Dichlorobenzene-d4	481672	9.278	514090	9.278	94	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1573632	11.788	1833847	11.772	86	50 - 200	0.016	+/-0.50	
Acenaphthene-d10	797519	15.417	935282	15.401	85	50 - 200	0.016	+/-0.50	
Phenanthrene-d10	1414757	18.556	1597882	18.533	89	50 - 200	0.023	+/-0.50	
Chrysene-d12	1158020	23.664	1549718	23.633	75	50 - 200	0.031	+/-0.50	
Di-n-Octylphthalate-d4	2273670	24.779	2731644	24.748	83	50 - 200	0.031	+/-0.50	
Perylene-d12	1524634	26.513	1727703	26.459	88	50 - 200	0.054	+/-0.50	
LDW23-SC1024 (23A0249-08)		(Solid)		Lab File ID: NT1003032322.D				Analyzed: 03/04/23 07:06	
1,4-Dichlorobenzene-d4	398453	9.277	514090	9.278	78	50 - 200	-0.001	+/-0.50	
Naphthalene-d8	1414960	11.788	1833847	11.772	77	50 - 200	0.016	+/-0.50	
Acenaphthene-d10	736573	15.417	935282	15.401	79	50 - 200	0.016	+/-0.50	
Phenanthrene-d10	1282606	18.556	1597882	18.533	80	50 - 200	0.023	+/-0.50	
Chrysene-d12	1006944	23.664	1549718	23.633	65	50 - 200	0.031	+/-0.50	
Di-n-Octylphthalate-d4	2030611	24.778	2731644	24.748	74	50 - 200	0.030	+/-0.50	
Perylene-d12	1322990	26.513	1727703	26.459	77	50 - 200	0.054	+/-0.50	
LDW23-SC1020 (23A0249-11)		(Solid)		Lab File ID: NT1003032323.D				Analyzed: 03/04/23 07:45	
1,4-Dichlorobenzene-d4	371507	9.285	514090	9.278	72	50 - 200	0.007	+/-0.50	
Naphthalene-d8	1310907	11.788	1833847	11.772	71	50 - 200	0.016	+/-0.50	
Acenaphthene-d10	671749	15.417	935282	15.401	72	50 - 200	0.016	+/-0.50	
Phenanthrene-d10	1133532	18.556	1597882	18.533	71	50 - 200	0.023	+/-0.50	
Chrysene-d12	965803	23.656	1549718	23.633	62	50 - 200	0.023	+/-0.50	
Di-n-Octylphthalate-d4	1814723	24.779	2731644	24.748	66	50 - 200	0.031	+/-0.50	
Perylene-d12	1244104	26.506	1727703	26.459	72	50 - 200	0.047	+/-0.50	
Calibration Check (SLC0162-CCV1)		(Water)		Lab File ID: NT1003032326.D				Analyzed: 03/04/23 09:39	
1,4-Dichlorobenzene-d4	369039	9.285	514090	9.278	72	50 - 200	0.007	+/-0.50	
Naphthalene-d8	1309707	11.788	1833847	11.772	71	50 - 200	0.016	+/-0.50	
Acenaphthene-d10	673159	15.417	935282	15.401	72	50 - 200	0.016	+/-0.50	
Phenanthrene-d10	1183891	18.556	1597882	18.533	74	50 - 200	0.023	+/-0.50	
Chrysene-d12	1211720	23.656	1549718	23.633	78	50 - 200	0.023	+/-0.50	
Di-n-Octylphthalate-d4	2070454	24.771	2731644	24.748	76	50 - 200	0.023	+/-0.50	
Perylene-d12	1367687	26.498	1727703	26.459	79	50 - 200	0.039	+/-0.50	

HOLDING TIME SUMMARY

Analysis: EPA 8270E

Laboratory: Analytical Resources, LLC SDG: 23A0249

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1083 23A0249-02	01/12/23 08:38	01/12/23 16:38	01/30/23 14:02	18	365	03/04/23 04:34	33	40	
LDW23-SC1018 23A0249-03	01/12/23 10:21	01/12/23 16:38	01/30/23 14:02	18	365	03/04/23 05:12	33	40	
LDW23-SC1084 23A0249-04	01/12/23 09:47	01/12/23 16:38	01/30/23 14:02	18	365	03/04/23 05:50	33	40	
LDW23-SC1025 23A0249-05	01/12/23 11:28	01/12/23 16:38	01/30/23 14:02	18	365	03/04/23 06:28	33	40	
LDW23-SC1024 23A0249-08	01/12/23 13:35	01/12/23 16:38	01/30/23 14:02	18	365	03/04/23 07:06	33	40	
LDW23-SC1020 23A0249-11	01/12/23 15:23	01/12/23 16:38	01/30/23 14:02	17	365	03/04/23 07:45	33	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: NT10

Analyte	MDL	RL	Units
Phenol	4.4	20.0	ug/kg
4-Methylphenol	7.4	20.0	ug/kg
Naphthalene	4.2	20.0	ug/kg
2-Methylnaphthalene	4.5	20.0	ug/kg
Acenaphthylene	6.2	20.0	ug/kg
Dimethylphthalate	4.4	20.0	ug/kg
Acenaphthene	5.2	20.0	ug/kg
Dibenzofuran	14.1	20.0	ug/kg
Fluorene	14.6	20.0	ug/kg
Phenanthrene	8.7	20.0	ug/kg
Anthracene	7.2	20.0	ug/kg
Fluoranthene	6.1	20.0	ug/kg
Pyrene	5.7	20.0	ug/kg
Butylbenzylphthalate	9.4	20.0	ug/kg
Benzo(a)anthracene	6.0	20.0	ug/kg
Chrysene	6.1	20.0	ug/kg
bis(2-Ethylhexyl)phthalate	14.1	50.0	ug/kg
Benzofluoranthenes, Total	21.0	40.0	ug/kg
Benzo(a)pyrene	4.2	20.0	ug/kg
Indeno(1,2,3-cd)pyrene	14.7	20.0	ug/kg
Dibenzo(a,h)anthracene	17.2	20.0	ug/kg
Benzo(g,h,i)perylene	13.6	20.0	ug/kg

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001941

Printed: 9/25/2013 1:45:31PM

Description:	SVOC 2,4-Dinitrophenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 13:45 by JZ
Vendor:	SIGMA	Lot #:	65H5021
Vendor Catalog #:			

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941
SVOA 2,4-Dinitrophenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: ____________________

Chemical: 2,4-Dinitrophenol

Manufacturer: Sigma

Product #: ____________________

Lot #: 6SH 5021

Purity: 90~95%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001945

Printed: 9/25/2013 3:23:22PM

Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945
SVOC Benzoic Acid
Expires 12/31/2029
Prepared By Jianqing Zhou 12/31/2012

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0214339

Purity: 98%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001948

Printed: 9/25/2013 3:37:51PM

Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948
SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: KB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002054

Printed: 10/4/2013 6:32:21PM

Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL

B002054
SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 67-53

Purity: 99%

Analyst: AZ

H000691

Data File: \\target\share\chem2\fid4a.i\20230317.b\423C1703.D

Page 1

Date : 17-MAR-2023 10:46

Client ID:

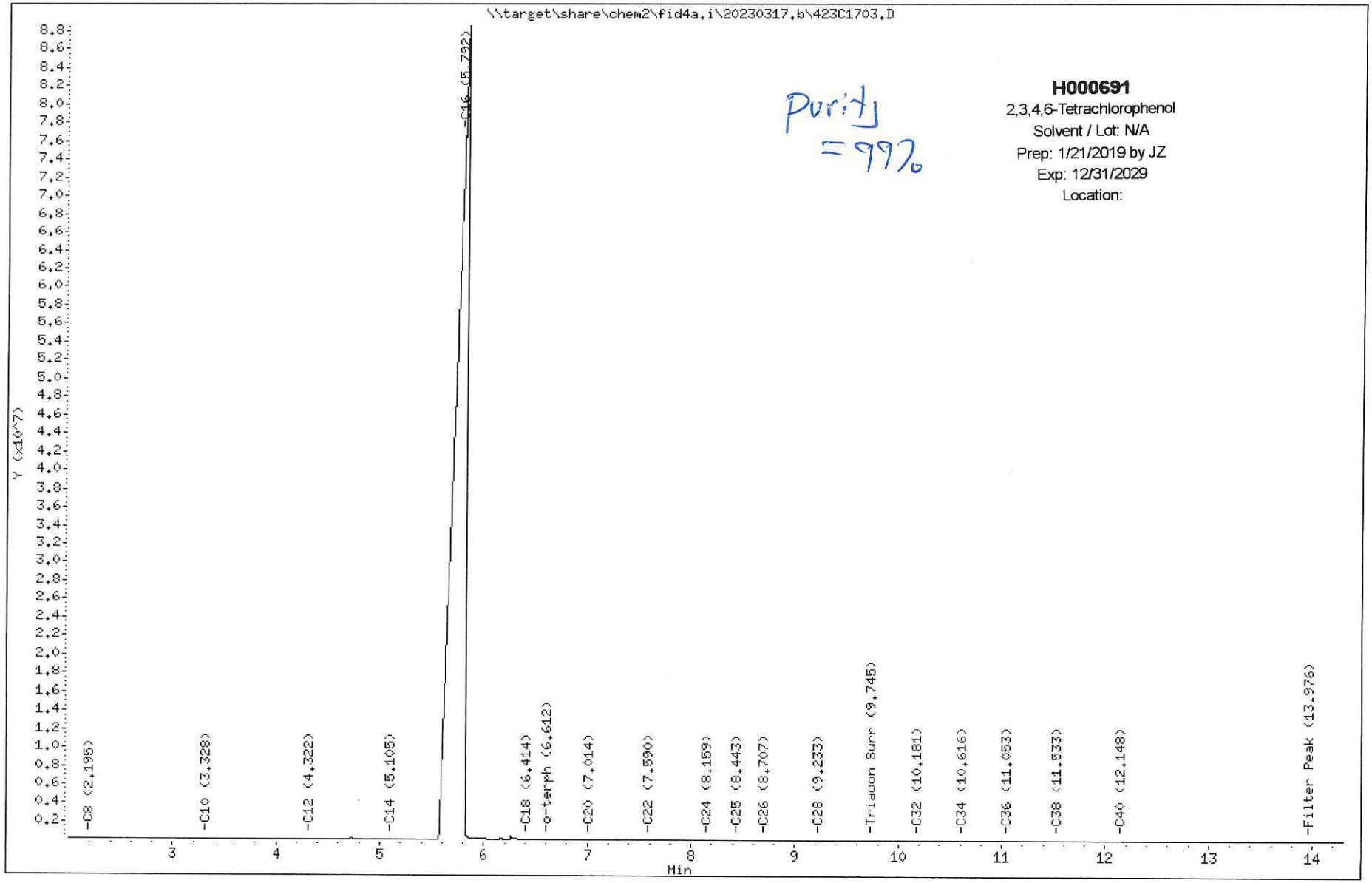
Instrument: fid4a.i

Sample Info: K007226

Operator: AA

Column phase: RTX-1

Column diameter: 0.25



Purity = 99%

H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:

ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
Lab Smp Id: K007226
Inj Date : 17-MAR-2023 10:46
Operator : AA Inst ID: fid4a.i
Smp Info : K007226
Misc Info :
Comment   :
Method   : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
Meth Date : 17-Mar-2023 16:58 alfonso Quant Type: AREA%
Cal Date : 18-AUG-2022 11:51 Cal File: 422H1803.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: tph.sub
Target Version: 4.14
Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
5.228	2027	2354	1.162	0.000	
5.276	4673	2682	0.574	0.000	
5.322	195	844	4.328	0.000	
5.331	977	1203	1.231	0.000	
5.356	490	993	2.027	0.000	
5.361	814	1044	1.283	0.000	
5.382	115	387	3.351	0.000	
5.399	619	960	1.551	0.000	
5.406	402	1035	2.576	0.000	
5.410	378	1122	2.968	0.000	
5.423	1663	1555	0.935	0.000	
5.452	5951	5020	0.844	0.000	
5.501	290	797	2.753	0.000	
5.523	2317	2472	1.067	0.000	
5.538	5946	6823	1.147	0.000	
5.792	501855376	76456669	0.152	74.449	6 C16
5.807	79757019	82319946	1.032	11.775	
5.823	77929961	88539160	1.136	11.505	
5.962	75333	84828	1.126	0.011	
5.986	474748	124326	0.262	0.070	
6.070	17103	57180	3.343	0.002	
6.074	120761	57565	0.477	0.017	
6.113	90233	47140	0.522	0.013	
6.165	407438	218439	0.536	0.060	
6.263	944101	374166	0.396	0.139	
6.414	114839	39498	0.344	0.016	7 C18
6.464	53190	31177	0.586	0.007	
6.523	31509	25870	0.821	0.004	
6.551	4785	23963	5.008	0.000	
6.559	51194	25409	0.496	0.007	
6.590	21354	21666	1.015	0.003	
6.612	35061	21127	0.603	0.005	$ 8 o-terph
6.638	17712	19934	1.125	0.002	
6.672	22159	19651	0.887	0.003	
6.683	26846	19268	0.718	0.003	
6.708	5413	18142	3.351	0.000	
6.713	24941	18247	0.732	0.003	
6.747	50657	18478	0.365	0.007	
6.795	23973	17444	0.728	0.003	
6.814	28457	17895	0.629	0.004	
6.837	10746	15445	1.437	0.001	
6.871	29974	21406	0.714	0.004	
6.874	4287	21471	5.009	0.000	
6.882	20520	21675	1.056	0.003	
6.944	32864	17445	0.531	0.004	
6.978	9138	15347	1.679	0.001	
7.014	4130	13830	3.348	0.000	9 C20
7.025	12567	14083	1.121	0.001	
7.038	4952	14274	2.882	0.000	
7.044	6508	14578	2.240	0.000	
7.050	25344	14736	0.581	0.003	
7.099	5531	12365	2.236	0.000	
7.108	16440	12371	0.752	0.002	
7.129	9415	11275	1.198	0.001	
7.175	3589	10327	2.878	0.000	
7.182	7285	10474	1.438	0.001	
7.212	11252	10002	0.889	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
	677340272	268782821		100.000	

Total unknown % area = 25.478

Supelco®

www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAC9813
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9813.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005199
SVOA-ABN BASE STOCK-200-800ug/ml
Expires 5/31/2023
Prepared By Jianqing Zhou 5/18/2021

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE CAS# 91-94-1	802	µg/mL	99.9	LC27068
2,4-DINITROTOLUENE CAS# 121-14-2	802	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	801	µg/mL	99.9	LB79891
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	802	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	801	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	201	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	803	µg/mL	100.0	10126MG
4-CHLOROANILINE CAS# 106-47-8	803	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	802	µg/mL	99.9	LC05068
3-NITROANILINE CAS# 99-09-2	802	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	802	µg/mL	99.9	LC11400
PYRIDINE (LOW WATER) CAS# 110-86-1	802	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

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Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 12-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9813.01	12-May-2021	Original Release Date

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Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

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Certificate of Composition - Analytical Standard

ACID STOC"

Product no.: 22523046
Lot no.: LRAC9812
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9812.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005200
SVOA-ABN ACID STOCK-200-800ug/ml
Solvent / Lot: DCM
Prep: 5/18/2021 by JZ
Exp: 5/31/2023
Location:

JZ 5/18/21

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2,4-DIMETHYLPHENOL CAS# 105-67-9	802	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	802	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	802	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1806	µg/mL	75.9	MKBP5833V
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	803	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	801	µg/mL	99.9	JS00013
4-NITROPHENOL CAS# 100-02-7	801	µg/mL	99.9	LC10889
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1804	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	803	µg/mL	98.7	MKCK8156
BENZOIC ACID CAS# 65-85-0	1805	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

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Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Agilent

Certificate of Analysis

J008074

SVOA PAH STD 2000ug/ml
Expires 6/30/2023
Prepared By Joshua Rains 8/5/2021

Product Name: PAH Standard

Product Number: US-106N-1

Lot Number: 0006540449

Lot Issue Date: 11-Jun-2020

Expiration Date: 30-Jun-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
acenaphthene	000083-32-9	RM10879	2008 ± 10 µg/mL
acenaphthylene	000208-96-8	RM10891	2003 ± 10 µg/mL
anthracene	000120-12-7	RM14212	2006 ± 10 µg/mL
benz[a]anthracene	000056-55-3	RM16072	2006 ± 10 µg/mL
benzo[b]fluoranthene	000205-99-2	RM14571	2005 ± 10 µg/mL
benzo[k]fluoranthene	000207-08-9	RM14321	2009 ± 10 µg/mL
benzo[ghi]perylene	000191-24-2	RM15761	2008 ± 10 µg/mL
benzo[a]pyrene	000050-32-8	RM12669	2009 ± 10 µg/mL
chrysene	000218-01-9	RM12260	2009 ± 10 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM06786	2009 ± 10 µg/mL
fluoranthene	000206-44-0	RM12277	2004 ± 10 µg/mL
fluorene	000086-73-7	RM09441	2009 ± 10 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM14192	2009 ± 10 µg/mL
naphthalene	000091-20-3	NT00970	2008 ± 10 µg/mL
phenanthrene	000085-01-8	RM10495	2009 ± 10 µg/mL
pyrene	000129-00-0	RM03479	2008 ± 10 µg/mL

Matrix: methylene chloride/benzene (1:1)

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 17025 Cert No. AT-1937

Certificate of Analysis

Product Number: US-106N-1 **Lot Number:** 0006540449

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ISO 17025 Cert
No. AT-1937

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16062
Certification Date: November 19, 2020
Expiration Date: November 30, 2030

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 2.740%
3,3'-Dichlorobenzidine	91-94-1	2000	± 3.229%

J008310
Benzidines std @2000ug/ml
Expires 11/30/2030
Prepared By Van Spohn 8/12/2021

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246
Description: Benzoic Acid
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16693
Certification Date: May 6, 2021
Expiration Date: April 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 4.383%

K3238

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Reference Material Producer
Certicate No. 2427.02

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 25 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101443
Description: Aniline
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17696
Certification Date: December 14, 2021
Expiration Date: December 31, 2029

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 0.760%

K 3239

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Certicate No. 2427.02

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Chemical Testing Laboratory
Certicate No. 2427.03

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2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	*Units*	*Certified Value* [1,4]
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	*Units*	*Suggested Acceptance Windows*	*Standard Deviation*
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4ºC.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4ºC. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4ºC.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID	CRM143-50G
Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.

Description

Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

***k*:** Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date	January 05, 2021
Version	0-152021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Certificate of Analysis

Phenova Certified Reference Materials are sold by Phenomenex.
411 Madrid Ave., Torrance, CA 90501 USA ▪ Tel: 310-212-0555 ▪ Fax: 310-328-7768 ▪ info@phenomenex.com
Access your MSDS and digital C of A at **www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards**

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101291	**Lot Number:**	CL11000
Description:	GC/MS Tuning Mix	**Certification Date:**	May 9, 2014
Storage:	4 °C	**Expiration Date:**	December 31, 2023
Provided As:	1 mL in 2 mL Ampoule in Methylene chloride	**Revision Date:**	August 5, 2015

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

K003891
GC/MS Tune solution-1000ug/ml
Solvent / Lot: CL11000
Prep: 4/22/2022 by VS
Exp: 12/31/2023
Location:

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL111106I3_us

Reference Materials Producer
Cert #2495.01

Certificate of Analysis

Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics**® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Mora

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory , please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i, where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Phone: 1-732-549-7144 • Fax 1-732-603-9647

Accredited to 17025 & Guide 34 ISO Certified to 9001

ACCREDITED
Reference Materials Producer
Cert #2495.01

ECS

Certificate of Analysis

ilac-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

K004542

Certificate of Reference Material

Catalog Number: ECS-A-030

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Lot No. AA210126005

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021

Certifying Officer: Shannon Nave

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-104N-1 **Lot Issue Date:** 02-Jul-2021

Lot Number: 0006620643 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
aniline	000062-53-3	RM12853	2005 ± 10 µg/mL
benzyl alcohol	000100-51-6	RM10547	2004 ± 10 µg/mL
4-chloroaniline	000106-47-8	RM01886	2002 ± 10 µg/mL
dibenzofuran	000132-64-9	RM02077	2002 ± 10 µg/mL
2-methylnaphthalene	000091-57-6	RM01258	2006 ± 10 µg/mL
2-nitroaniline	000088-74-4	RM02402	2003 ± 10 µg/mL
3-nitroaniline	000099-09-2	RM02424	2003 ± 10 µg/mL
4-nitroaniline	000100-01-6	RM02425	2003 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

K004544
toxic sub mix#2
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

05/11/22

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0181243

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

05/11/22

K004545
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO175316
Prep: 5/11/2022 by JZ
Exp: 10/20/2025
Location:

Elution Order	Compound	Gr (weig					
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ2508) **Purity** 99%	1,50					
				+/-	53.3632	µg/mL	Stressed
2	Phenol-d6 **CAS #** 13127-88-3 (Lot PR-31262) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,510.0	µg/mL	+/-	8.9689	µg/mL	Gravimetric
				+/-	44.1050	µg/mL	Unstressed
				+/-	53.5049	µg/mL	Stressed
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32542/022621DB1 **Purity** 99%	1,004.0	µg/mL	+/-	5.9635	µg/mL	Gravimetric
				+/-	29.3255	µg/mL	Unstressed
				+/-	35.5754	µg/mL	Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,008.0	µg/mL	+/-	5.9872	µg/mL	Gravimetric
				+/-	29.4423	µg/mL	Unstressed
				+/-	35.7172	µg/mL	Stressed
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 19169) **Purity** 99%	1,006.0	µg/mL	+/-	5.9753	µg/mL	Gravimetric
				+/-	29.3839	µg/mL	Unstressed
				+/-	35.6463	µg/mL	Stressed
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed

Certificate of Analysis

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Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246
Description: Benzoic Acid
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17953
Certification Date: January 31, 2022
Expiration Date: January 31, 2032

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603
Benzoic Acid @2000ug/ml
Solvent / Lot: N/A
Prep: 5/13/2022 by JZ
Exp: 1/31/2032
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018 us

Certificate of Analysis

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6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17662
Certification Date: December 2, 2021
Expiration Date: November 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604
Benzidines std @2000ug/ml
Solvent / Lot: MeCl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

phenova Certified Reference Materials | A Phenomenex Company

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64591018_us

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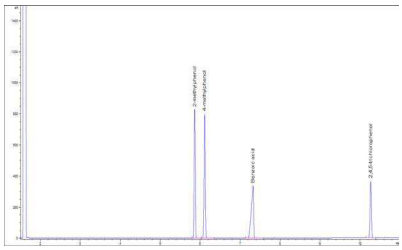
Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

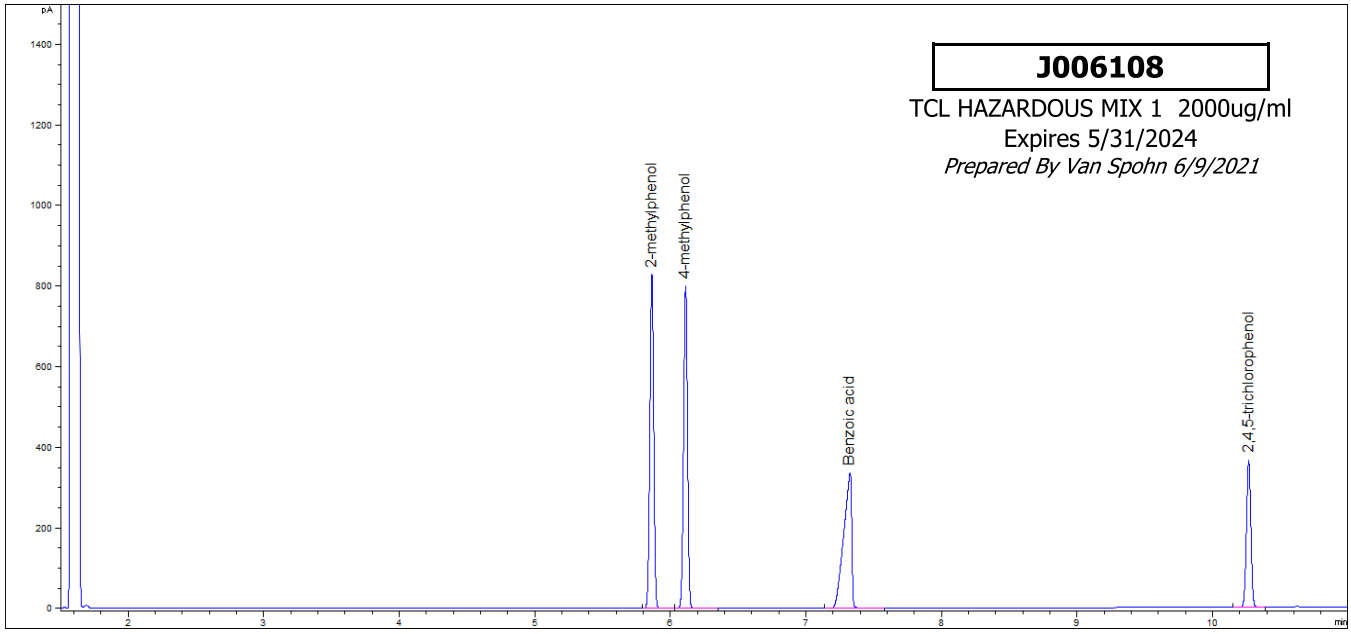
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Elution order*	*Raw Material Lot*
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:
Analytical Method Parameters:
Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
Carrier Gas: H2, Flow: 4.5 mL/min
Inlet Temperature: 170 °C, Injection Volume: 1 µL
Injection Mode: Split, Split Ratio: 20:1

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom}\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

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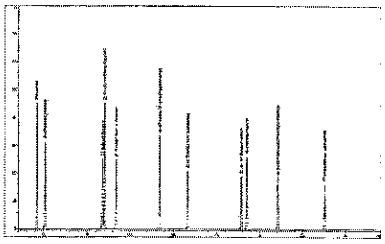
Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



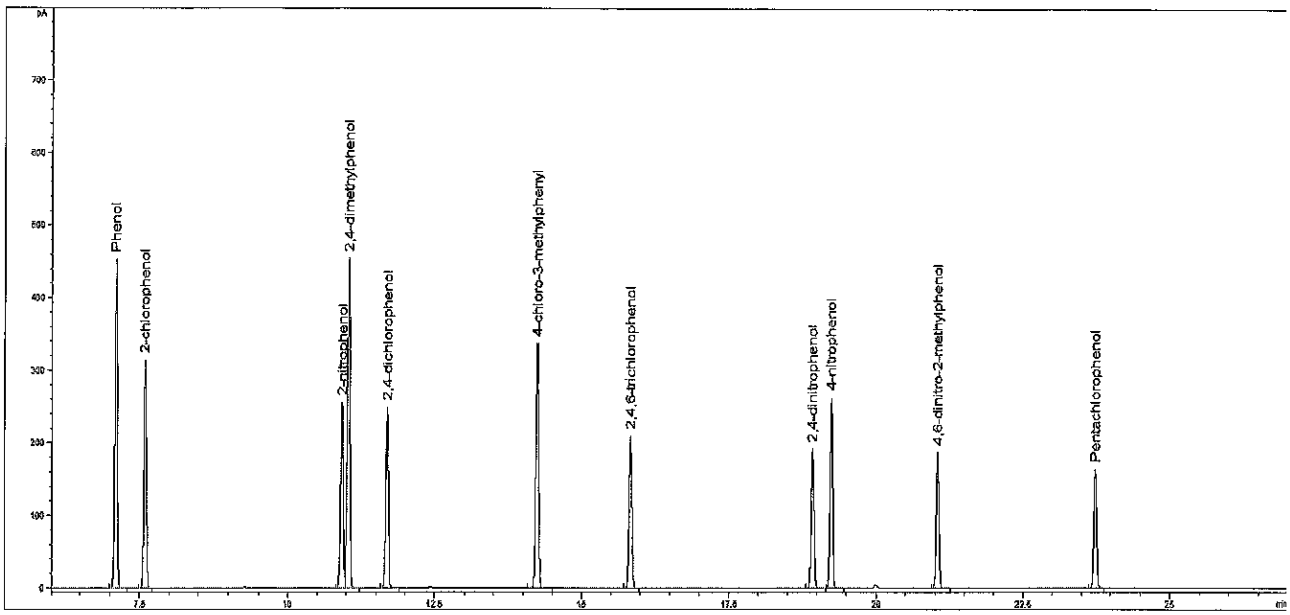
Certified Values:

Analyte	Certified Value	Units	Raw Material Purity,%	Raw Material Lot
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597
TCL Phenols Mix 2000ug/ml
Solvent / Lot: LRAD0139
Prep: 12/30/2021 by VS
Exp: 7/31/2024
Location:

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.



METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.5 mL/min
Inlet Temperature: 200 °C Injection Volume: 1.0 µL
Injection Mode: 25:1
Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)
Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorphenol
6	14.242	4-chloro-3-m3thylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{hom\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18355
Certification Date: July 25, 2022
Expiration Date: August 31, 2023

K007995
SVOA-8270 LCS MIX 1000ug/ml
Solvent / Lot: N/A
Prep: 8/29/2022 by JZ
Exp: 8/31/2023
Location: FREEZER 44

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

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Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

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Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroiospropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 03 JUN 2022

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1083

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

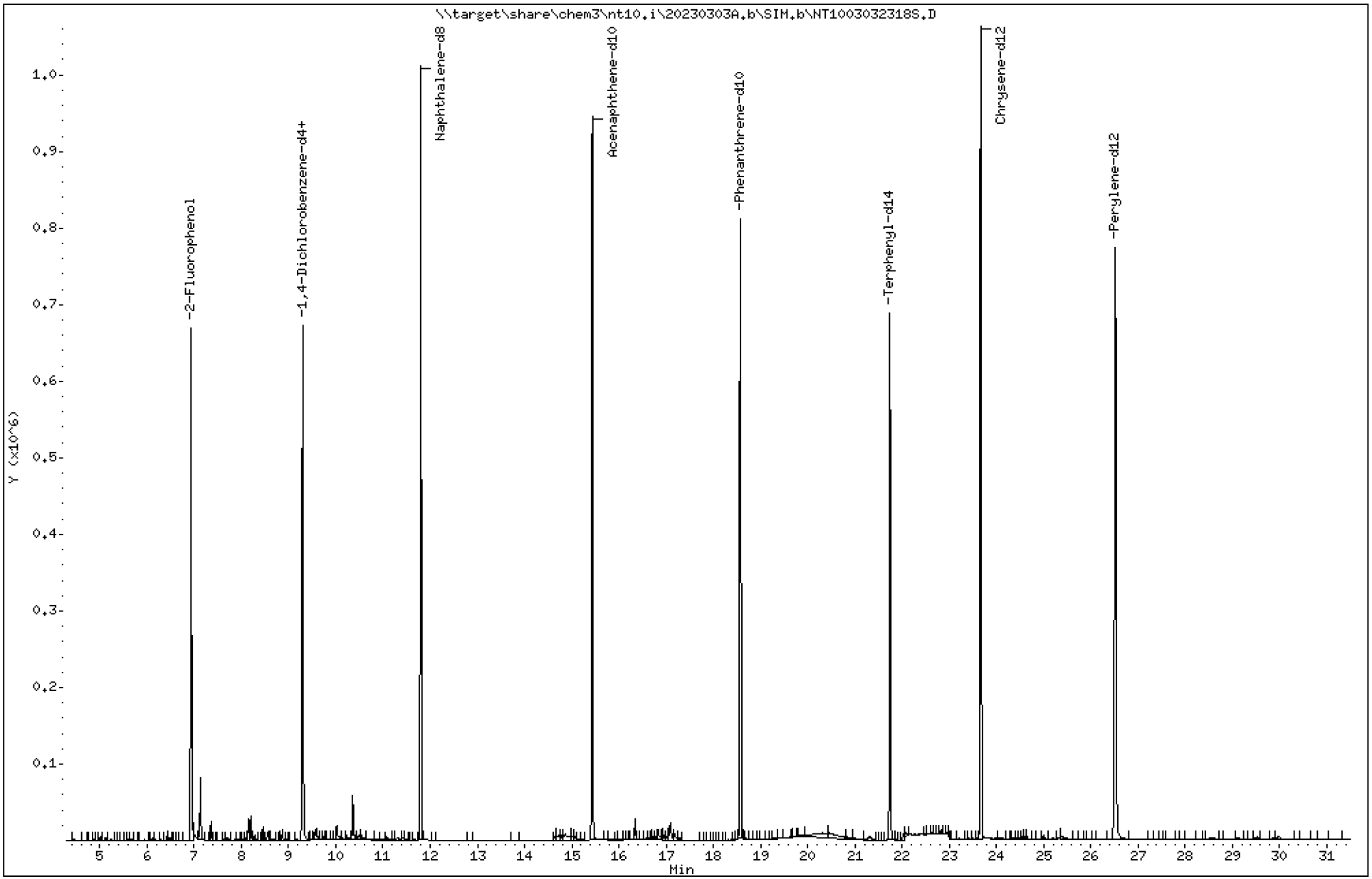
Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-02 A	SDG:	23A0249
Sampled:	01/12/23 08:38	Prepared:	01/30/23 14:02	File ID:	NT1003032318S.D
% Solids:	61.90	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 04:34
Batch:	BLA0673	Sequence:	SLC0253	Initial/Final:	16.85 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00032
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	2.1	J	0.6	4.8
95-50-1	1,2-Dichlorobenzene	1	1.2	J	0.7	4.8
100-51-6	Benzyl Alcohol	1	9.7	J	2.4	19.2
65-85-0	Benzoic acid	1	95.9	U	12.8	95.9
105-67-9	2,4-Dimethylphenol	1	3.4	J	2.1	19.2
120-82-1	1,2,4-Trichlorobenzene	1	4.8	U	2.6	4.8
86-30-6	N-Nitrosodiphenylamine	1	4.8	U	1.3	4.8
87-86-5	Pentachlorophenol	1	19.2	U	2.0	19.2

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	719.07	584	81.2	27 - 120	
p-Terphenyl-d14	479.38	822	172	37 - 120	*,Q

Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323185.D
Date : 04-MAR-2023 04:34
Client ID:
Sample Info: 23A0249-02
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

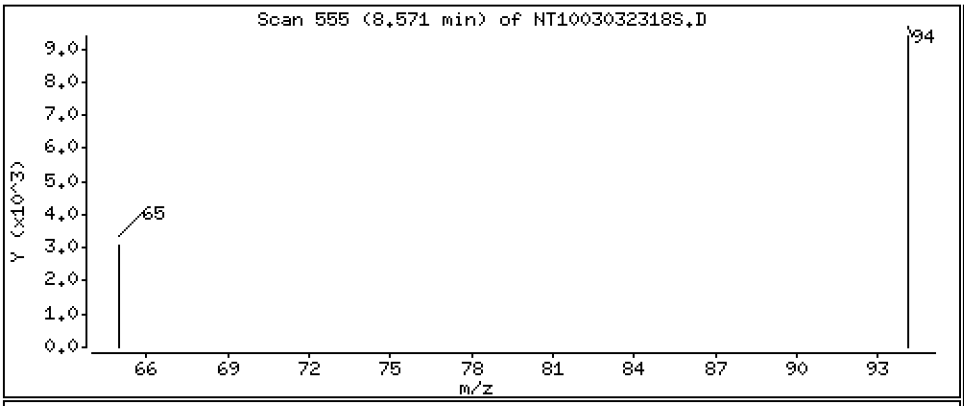
Operator: JGR

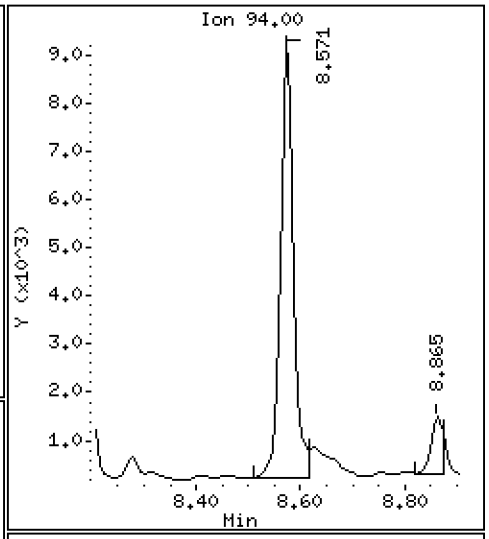
Column phase: ZB-5msi

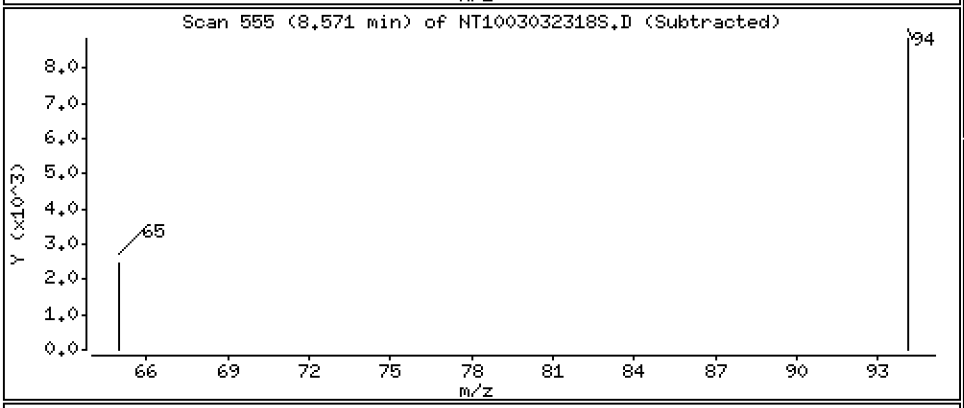
Column diameter: 0.25

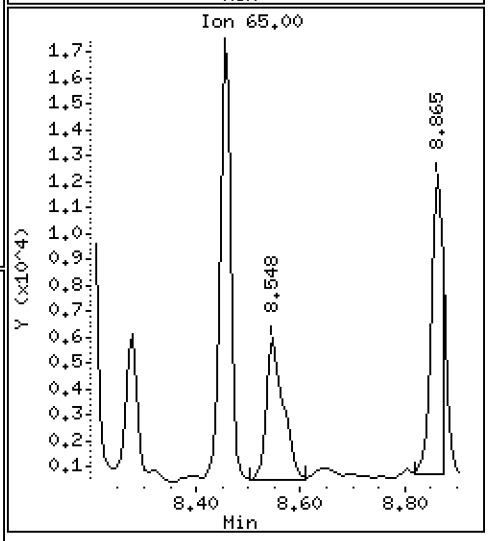
3 Phenol

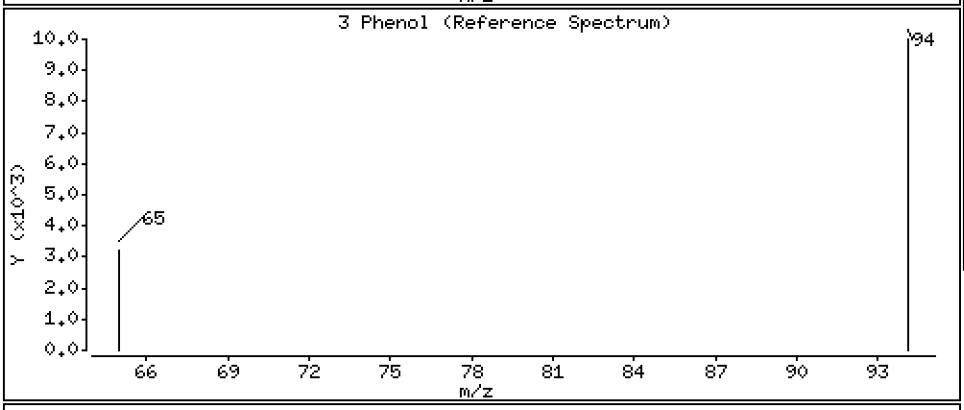
Concentration: 0.08414 ug/L

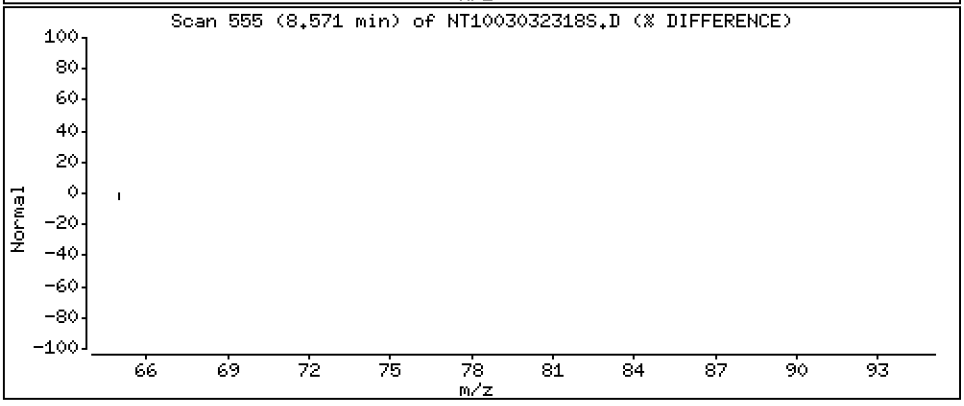












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

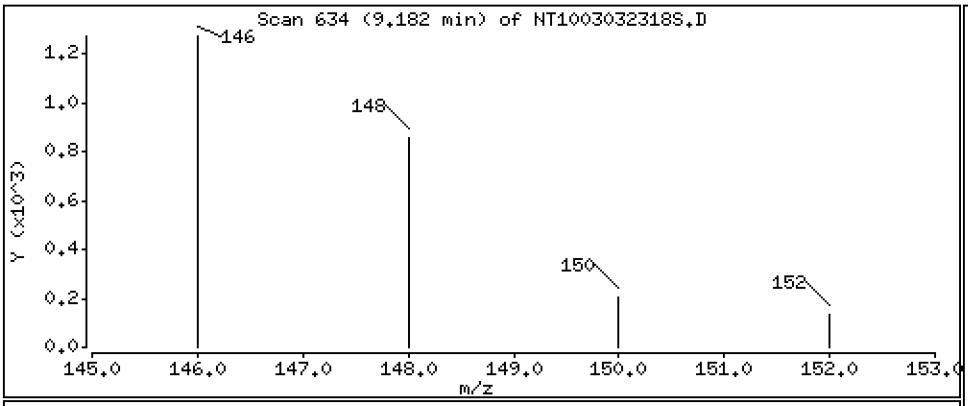
Operator: JGR

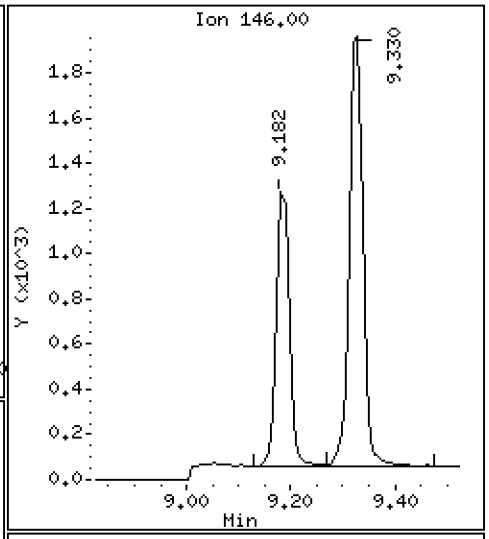
Column phase: ZB-5msi

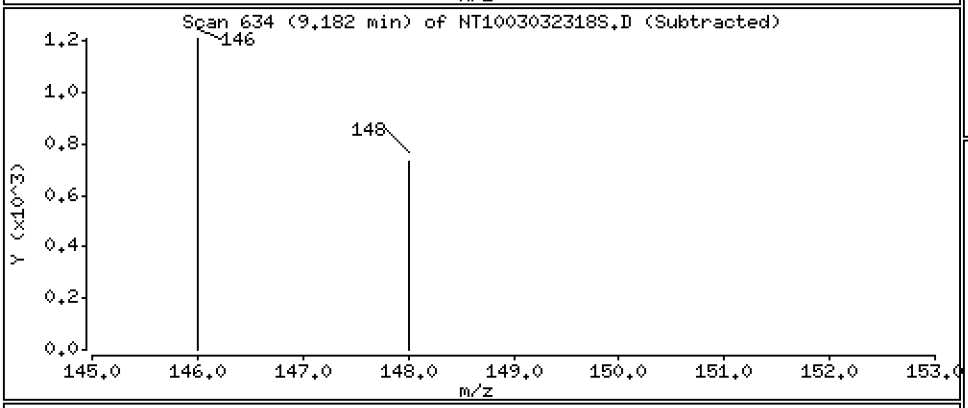
Column diameter: 0.25

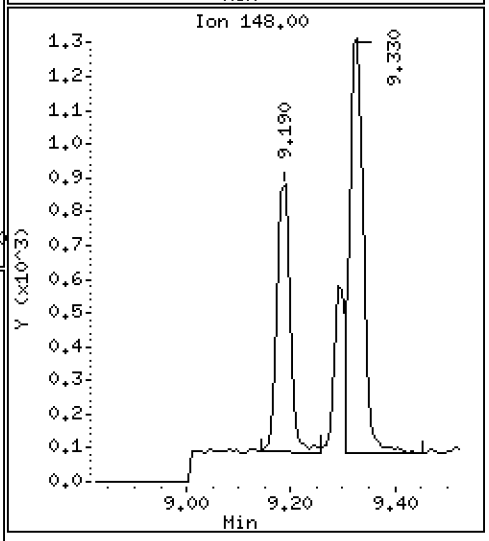
7 1,3-Dichlorobenzene

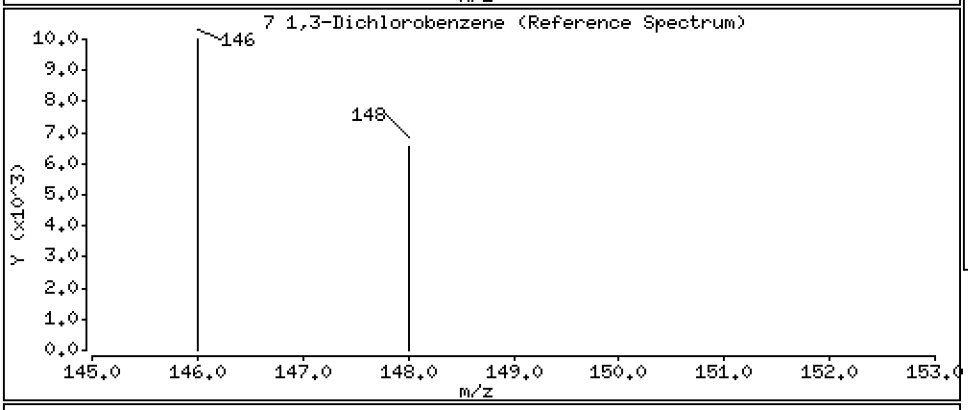
Concentration: 0.01272 ug/L

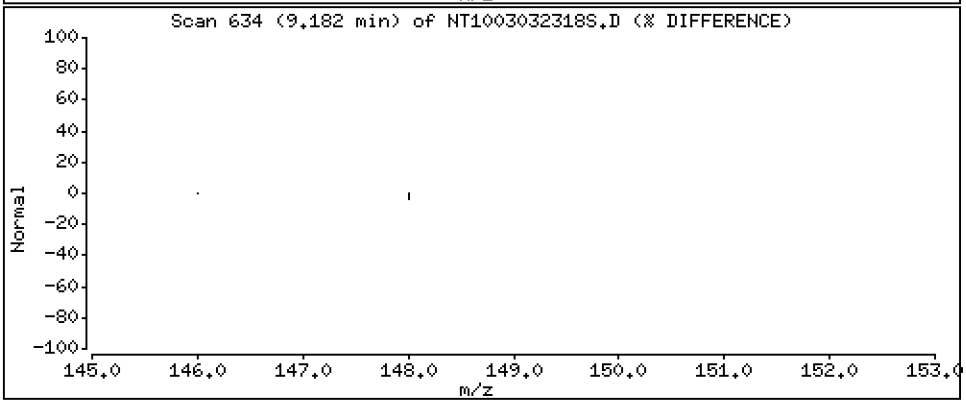












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323185.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

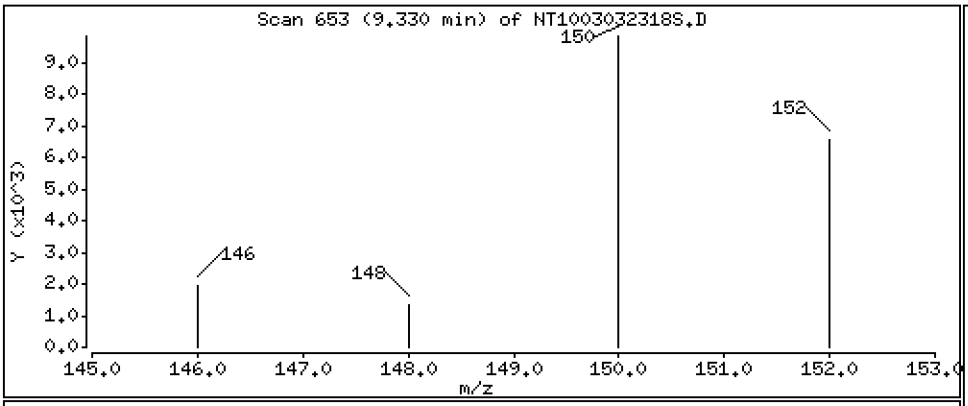
Operator: JGR

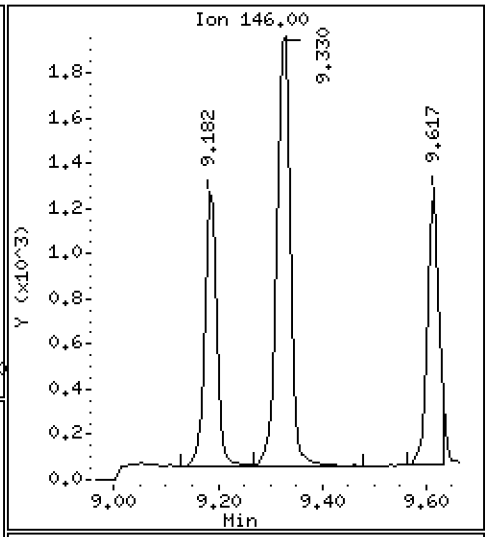
Column phase: ZB-5msi

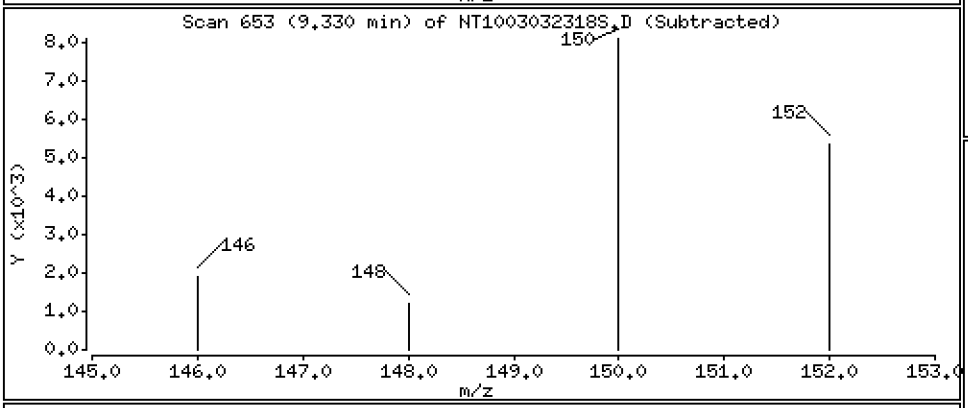
Column diameter: 0.25

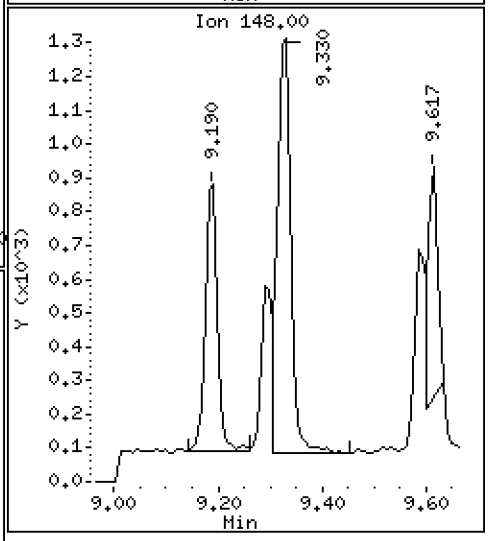
9 1,4-Dichlorobenzene

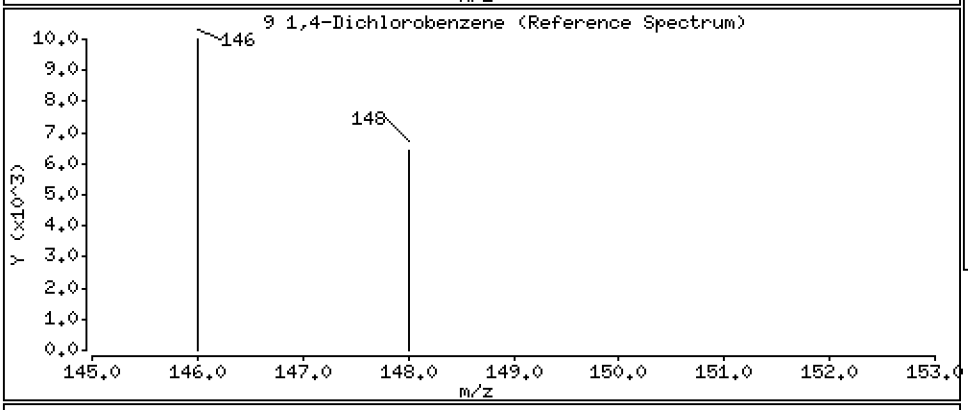
Concentration: 0.02165 ug/L

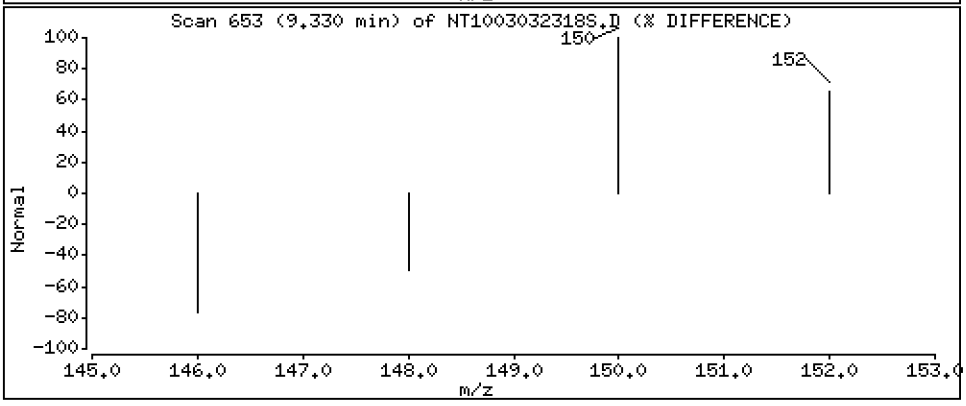












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323185.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

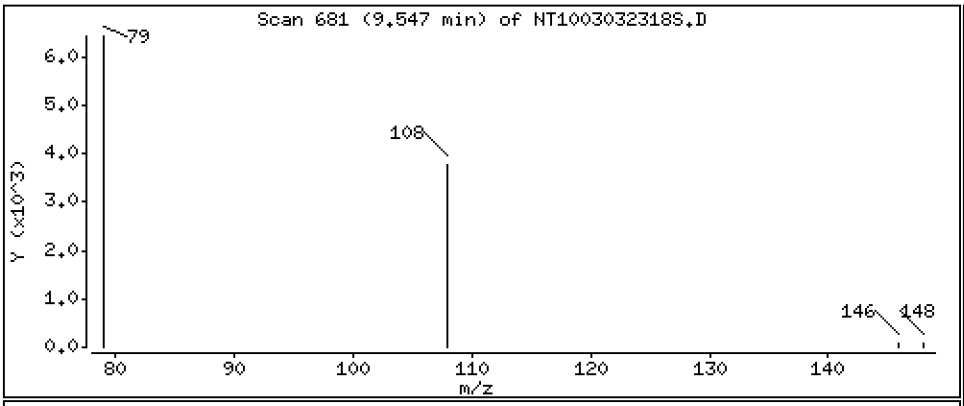
Operator: JGR

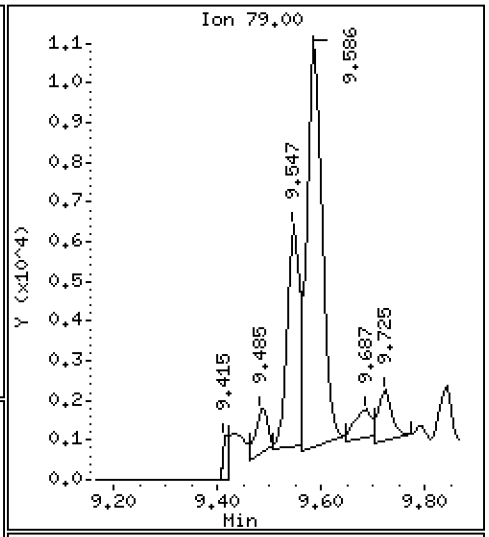
Column phase: ZB-5msi

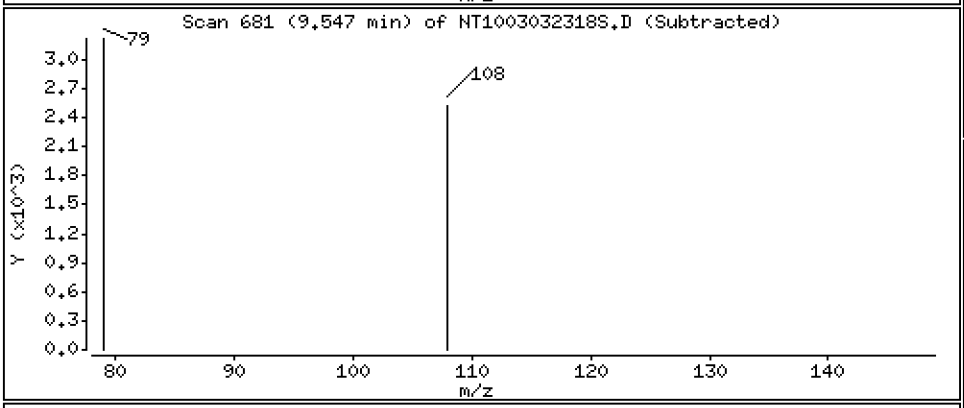
Column diameter: 0.25

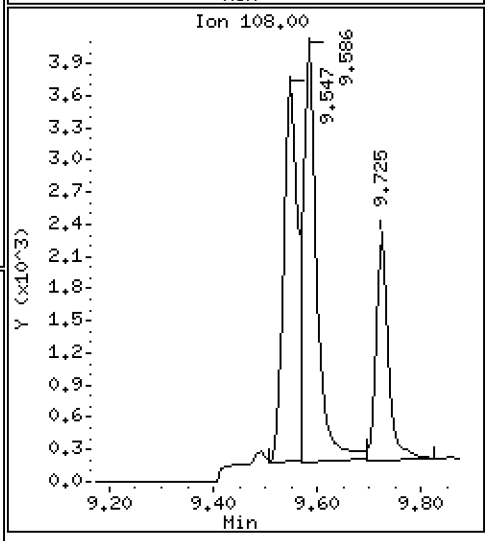
11 Benzyl alcohol

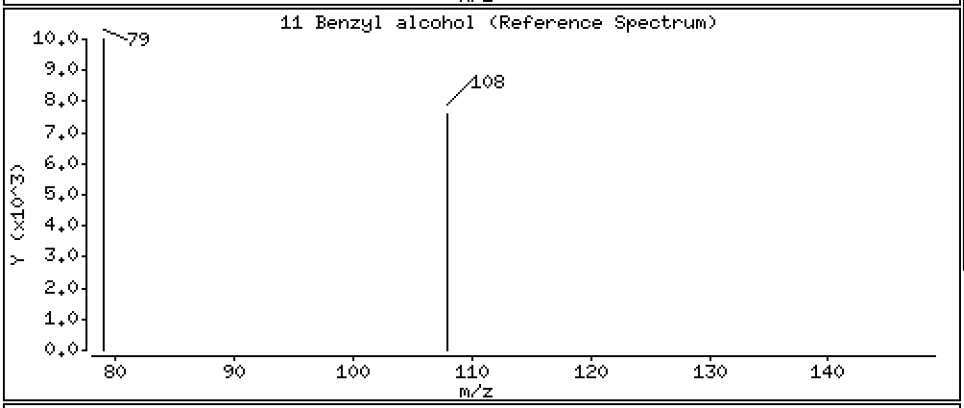
Concentration: 0.1007 ug/L

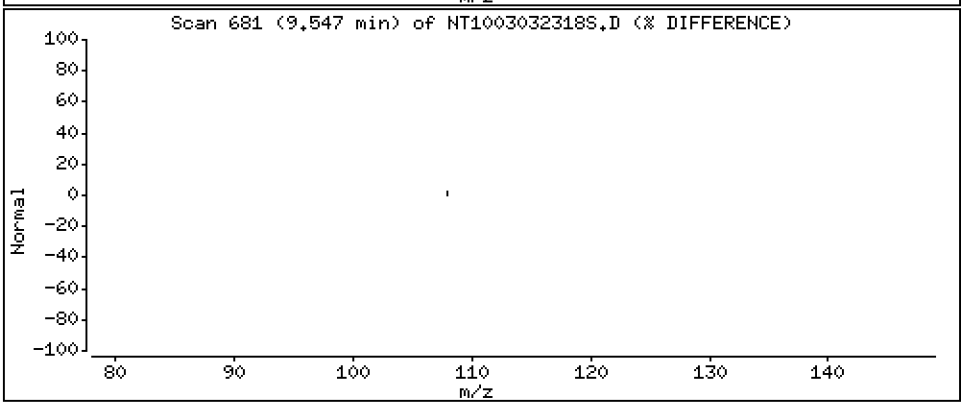












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323185.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

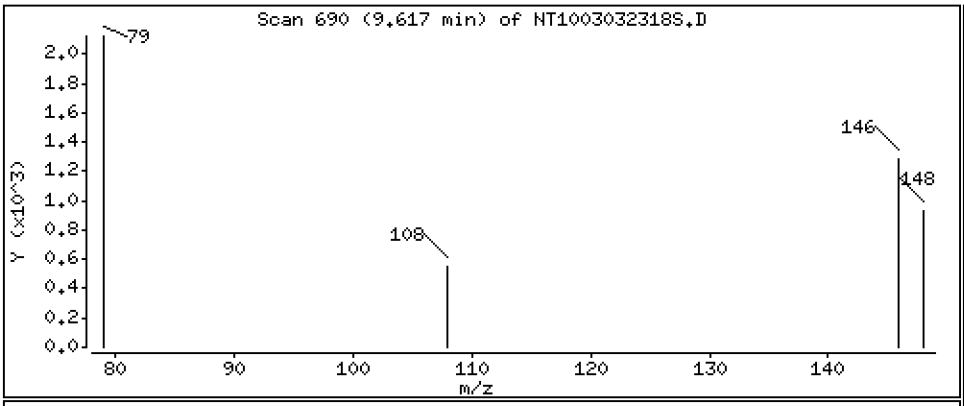
Operator: JGR

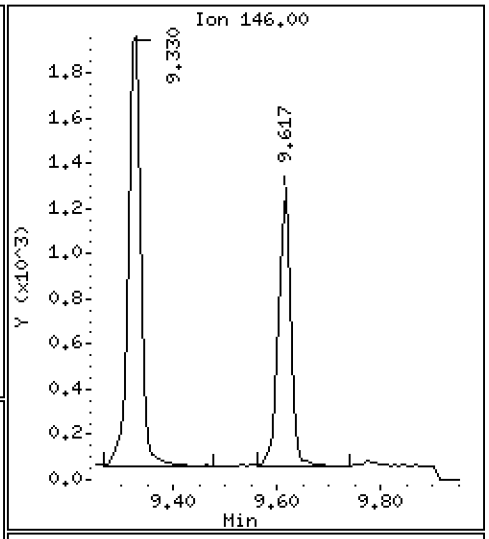
Column phase: ZB-5msi

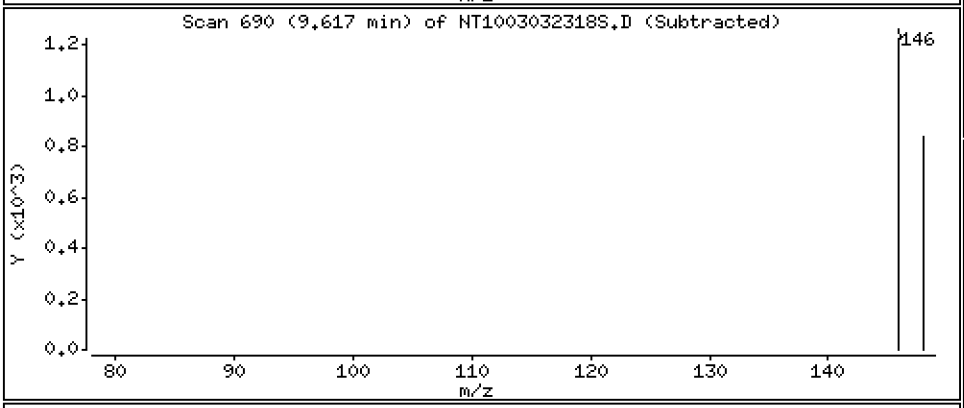
Column diameter: 0.25

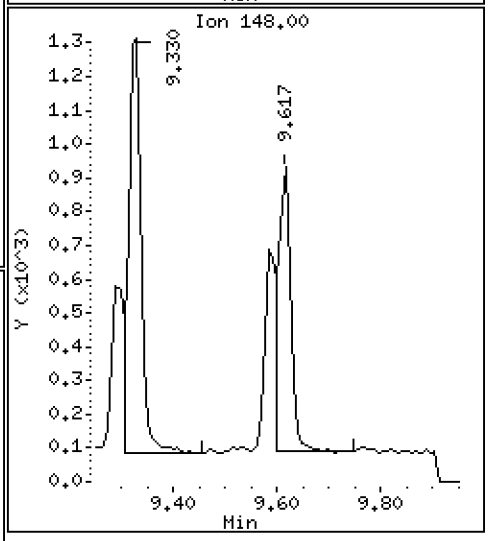
12 1,2-Dichlorobenzene

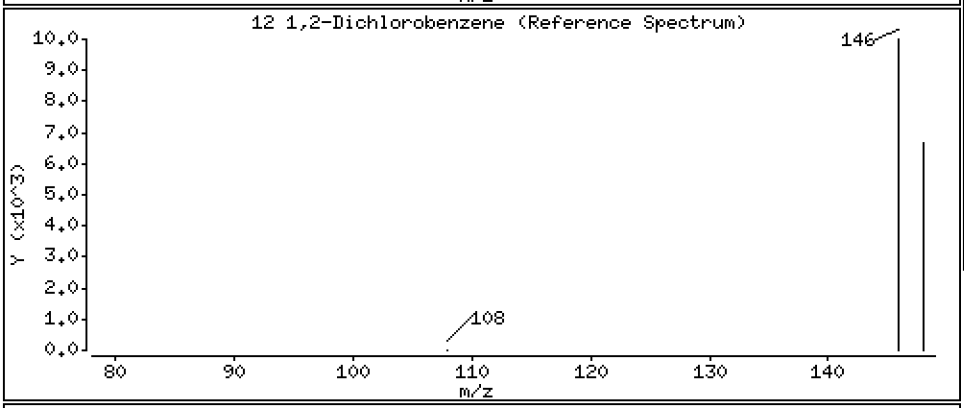
Concentration: 0.01287 ug/L

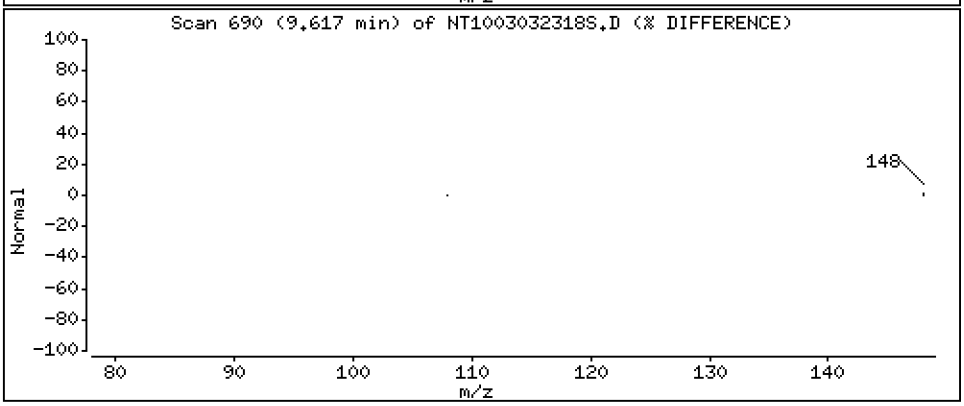












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323185.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

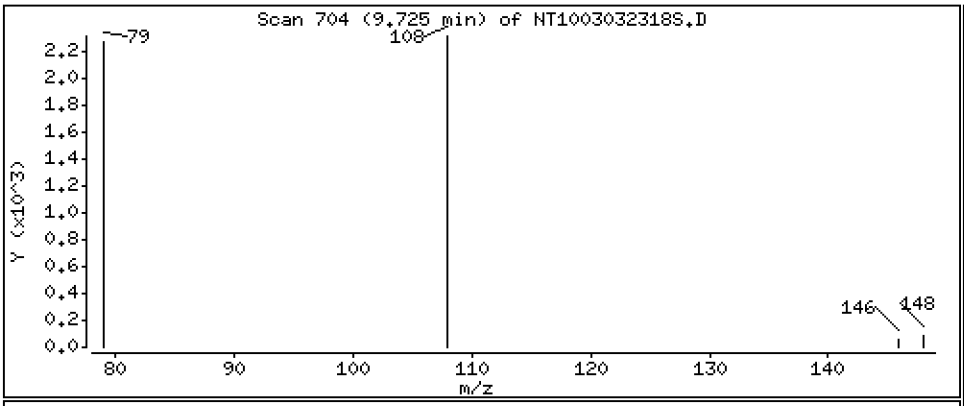
Operator: JGR

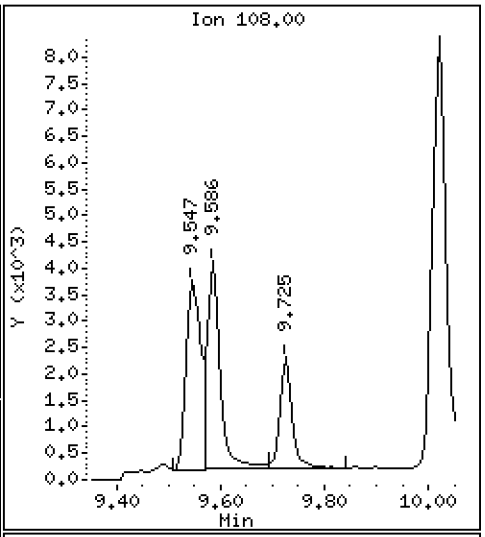
Column phase: ZB-5msi

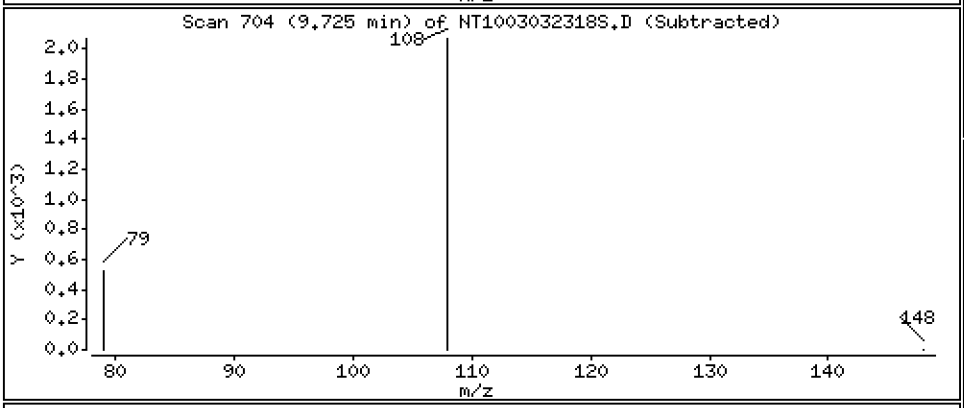
Column diameter: 0.25

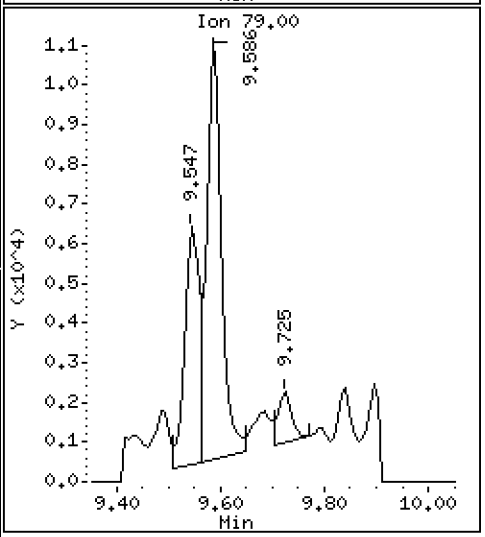
13 2-Methylphenol

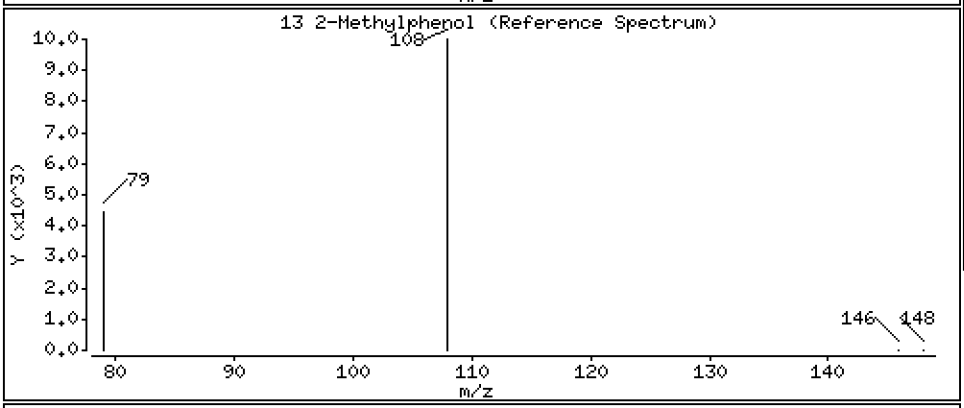
Concentration: 0.03243 ug/L

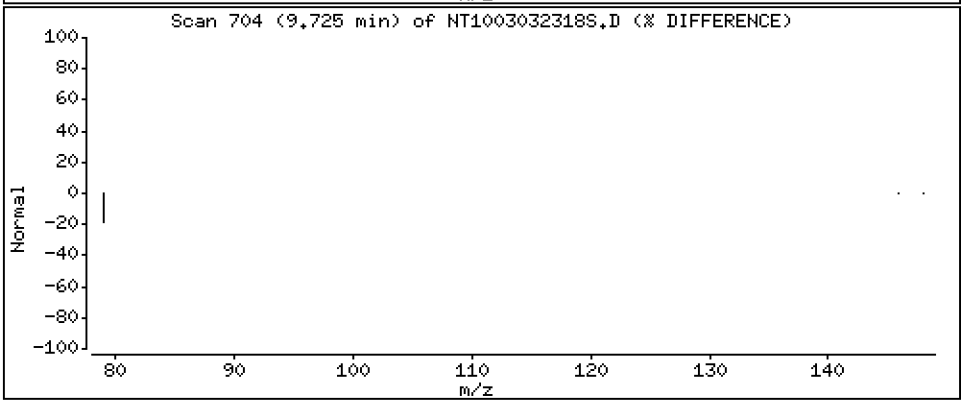












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323185.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

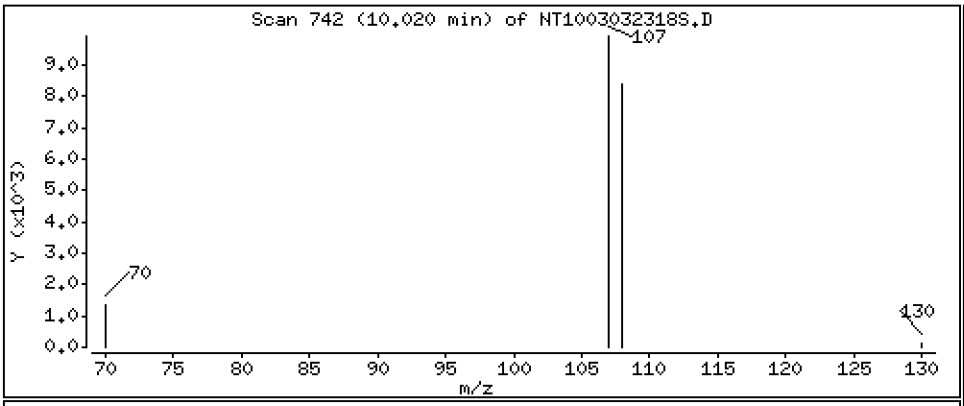
Operator: JGR

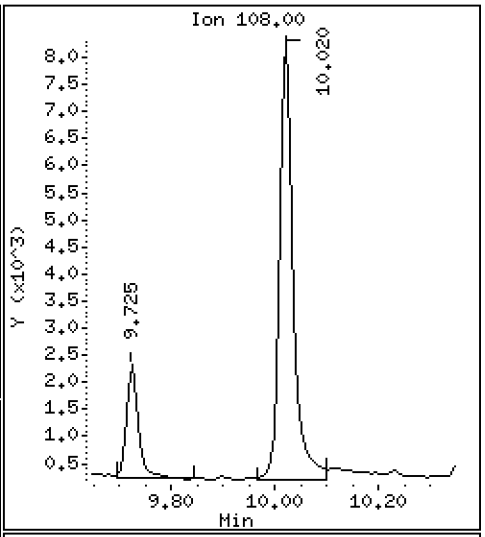
Column phase: ZB-5msi

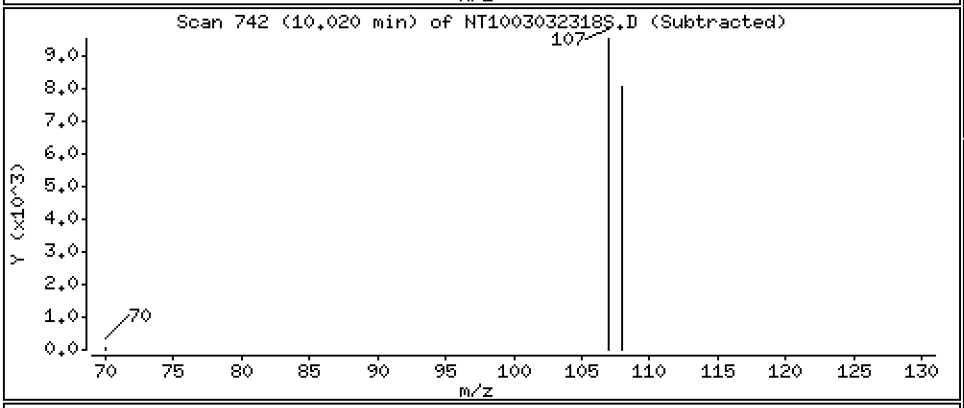
Column diameter: 0.25

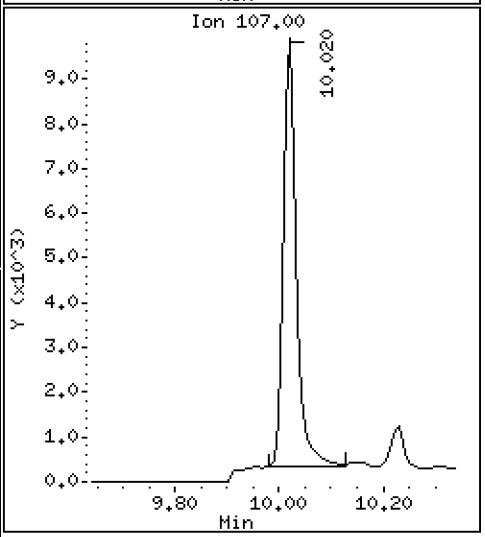
15 4-Methylphenol

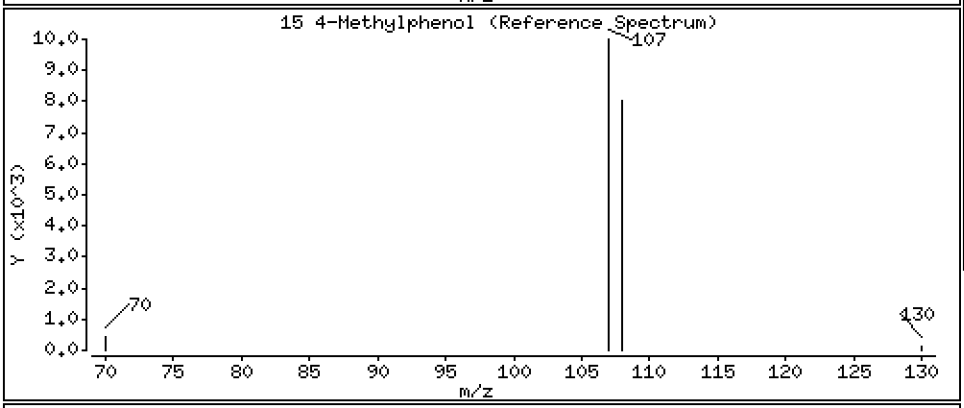
Concentration: 0.1330 ug/L

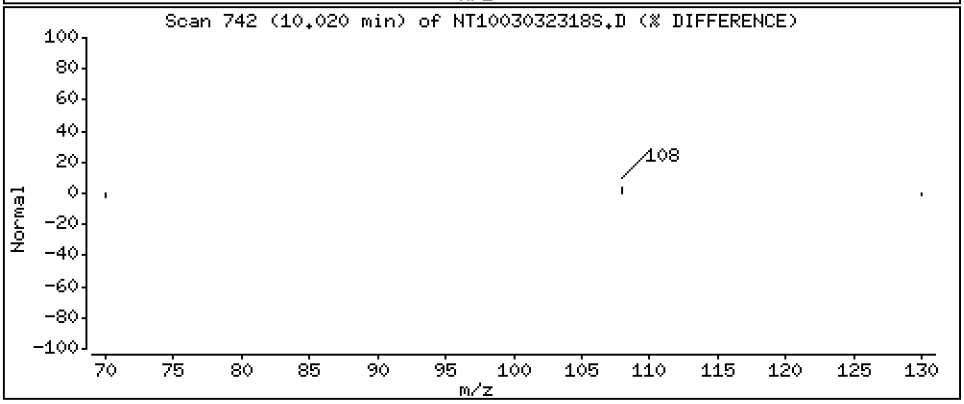












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323185.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

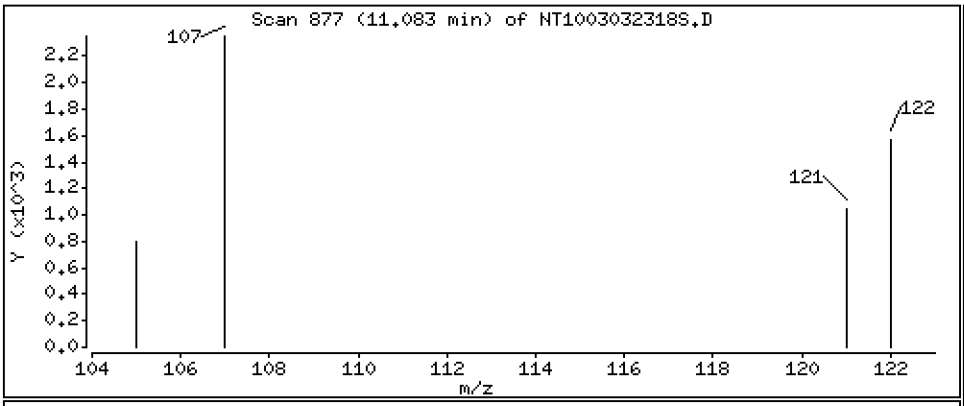
Operator: JGR

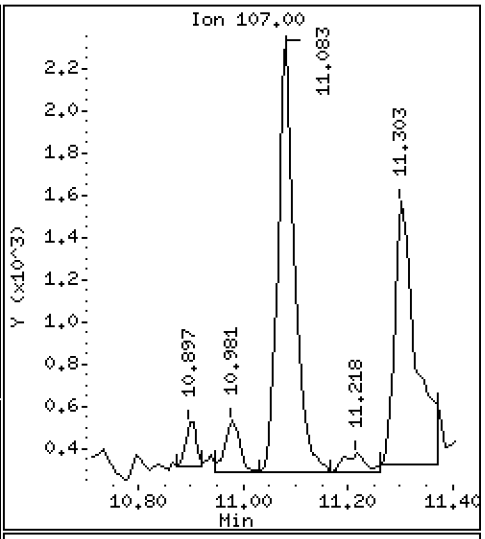
Column phase: ZB-5msi

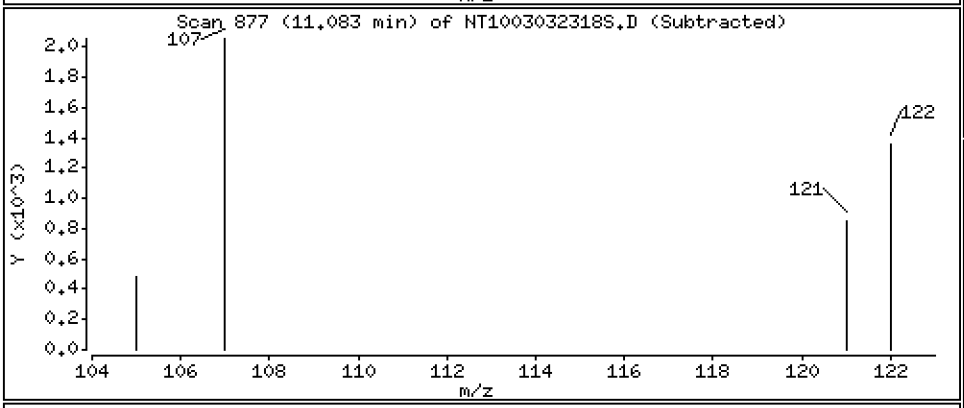
Column diameter: 0.25

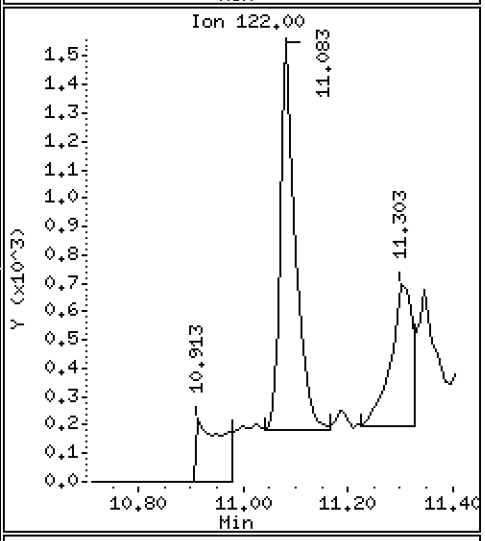
22 2,4-Dimethylphenol

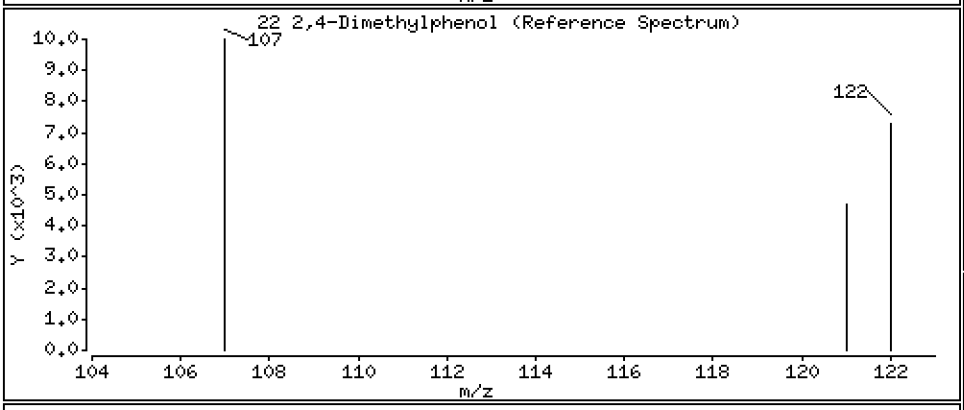
Concentration: 0.03591 ug/L

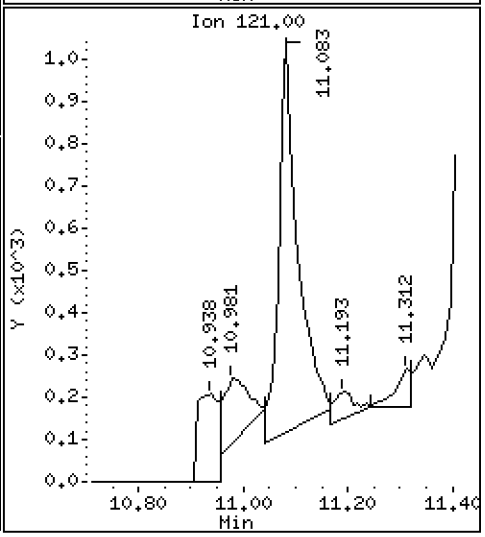


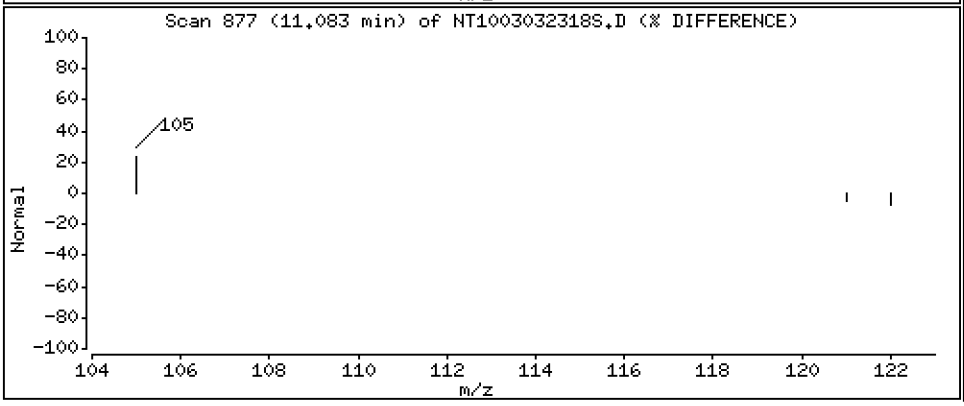












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Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

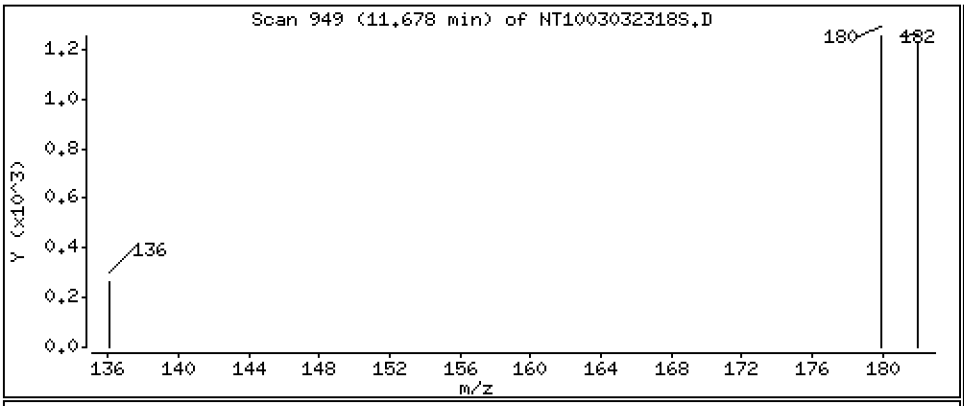
Operator: JGR

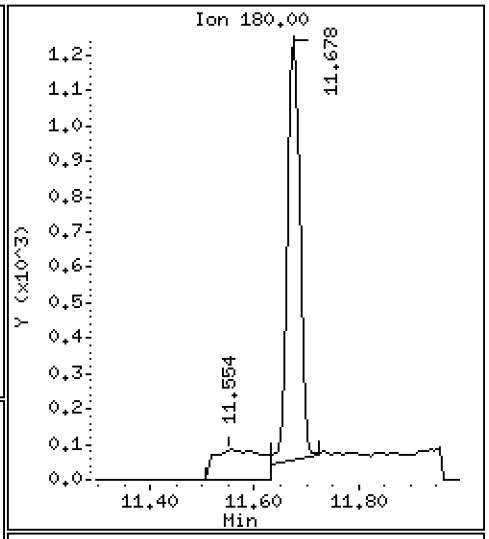
Column phase: ZB-5msi

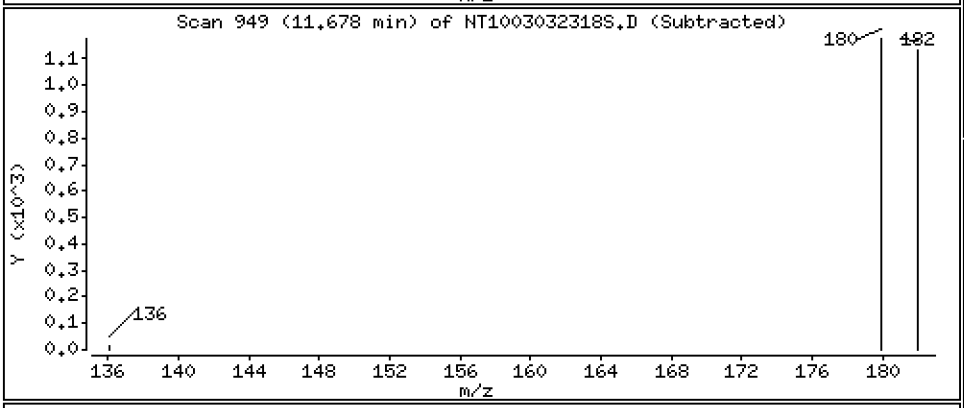
Column diameter: 0.25

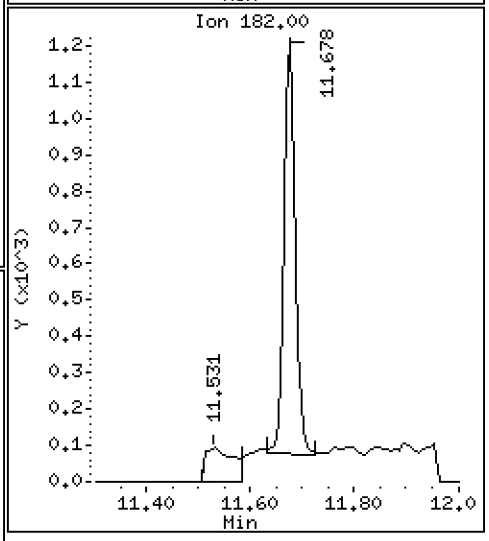
26 1,2,4-Trichlorobenzene

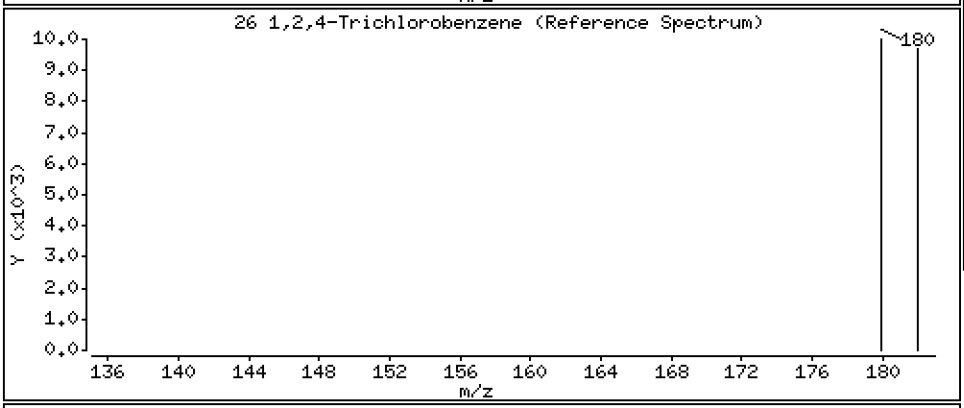
Concentration: 0.01706 ug/L

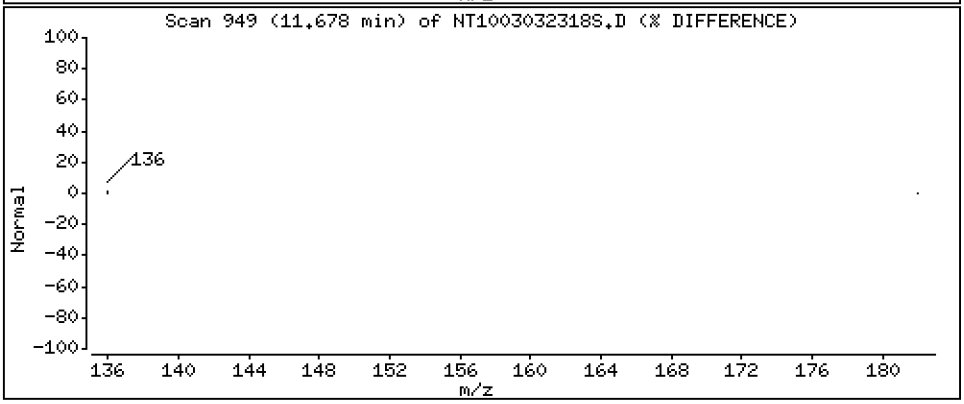












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323185.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

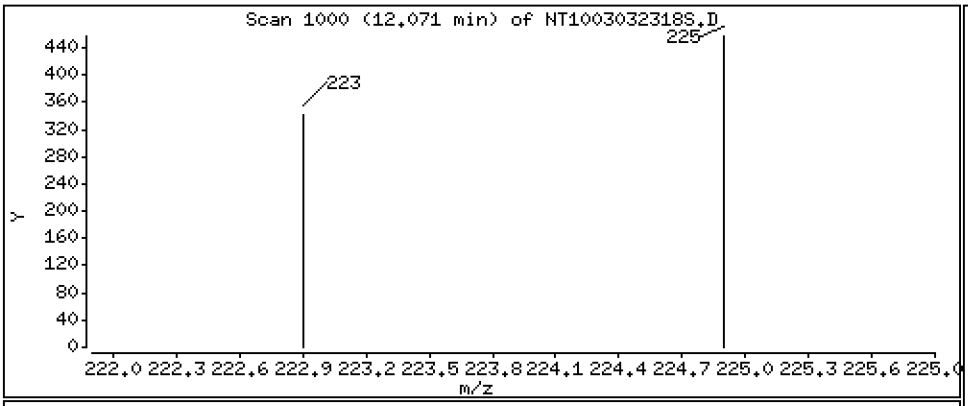
Operator: JGR

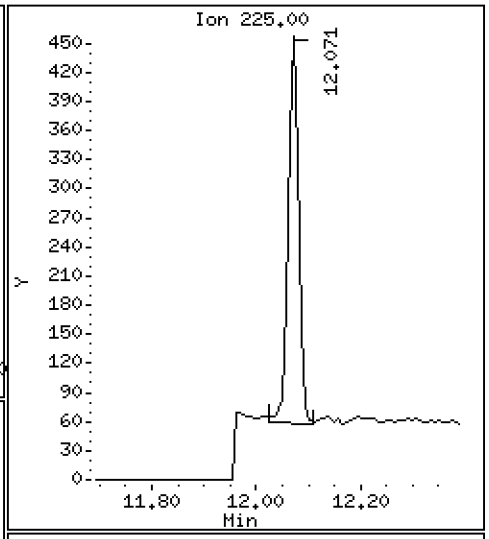
Column phase: ZB-5msi

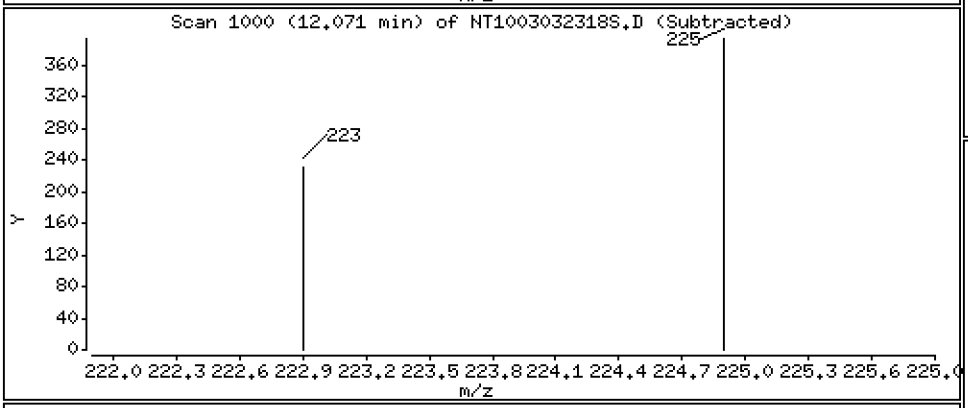
Column diameter: 0.25

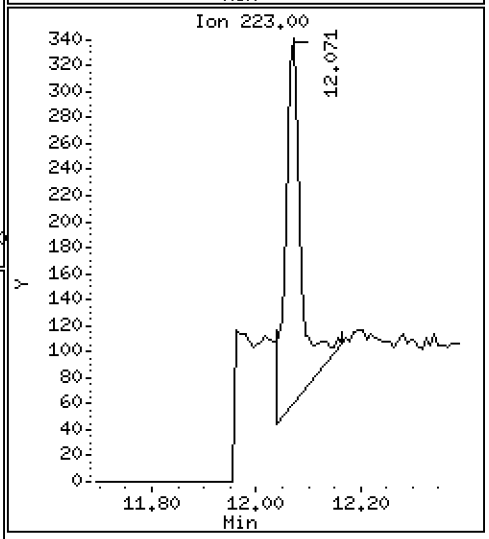
30 Hexachlorobutadiene

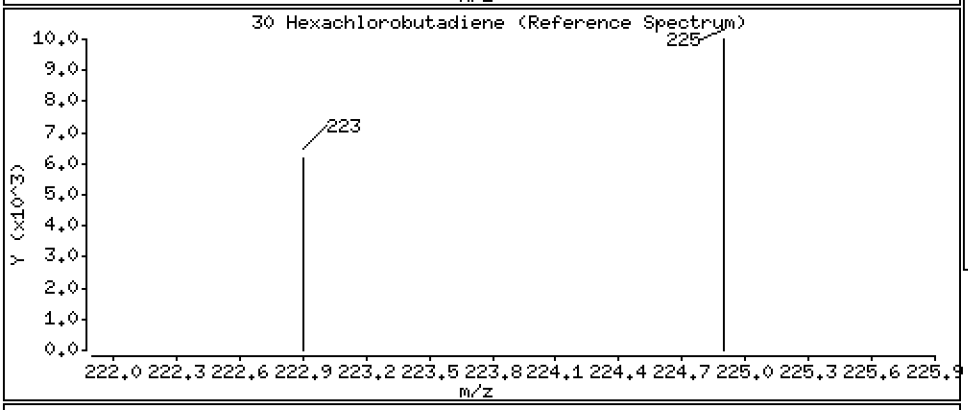
Concentration: 0.007456 ug/L

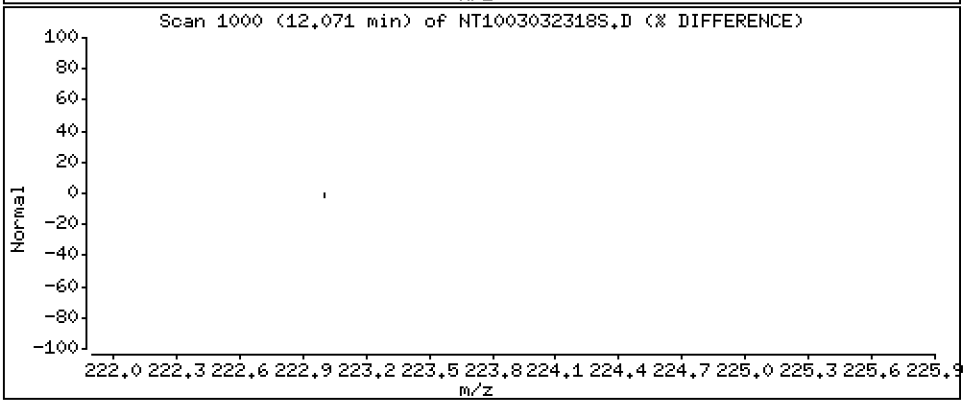












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323185.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

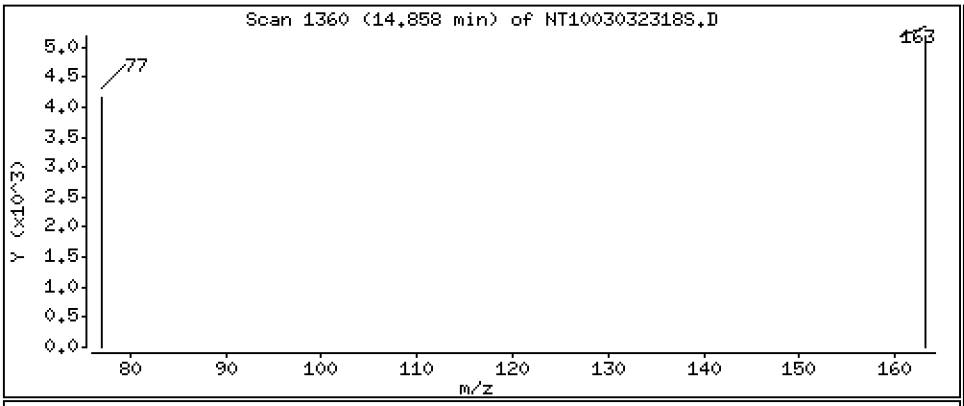
Operator: JGR

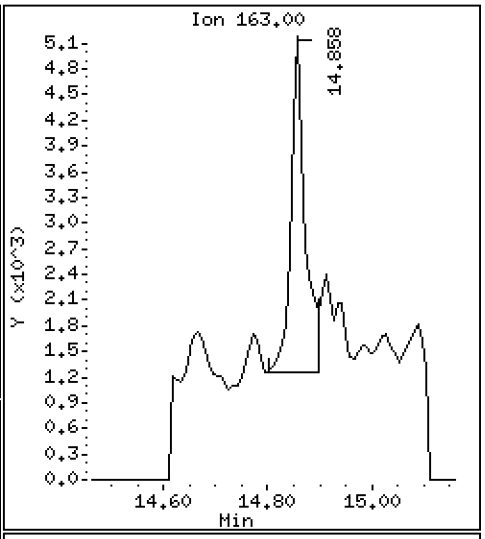
Column phase: ZB-5msi

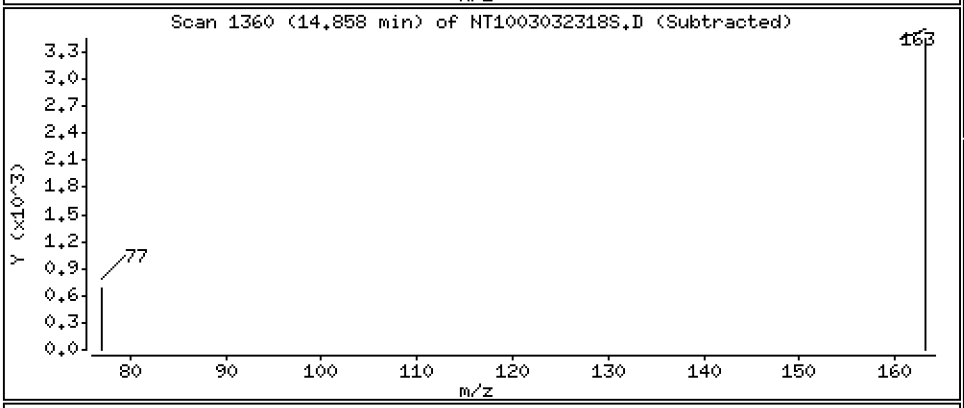
Column diameter: 0.25

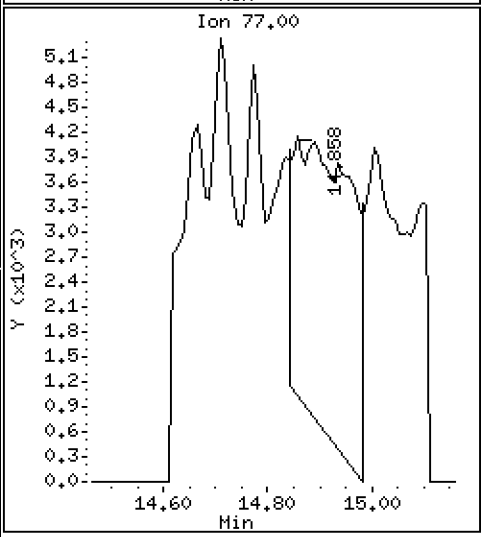
39 Dimethylphthalate

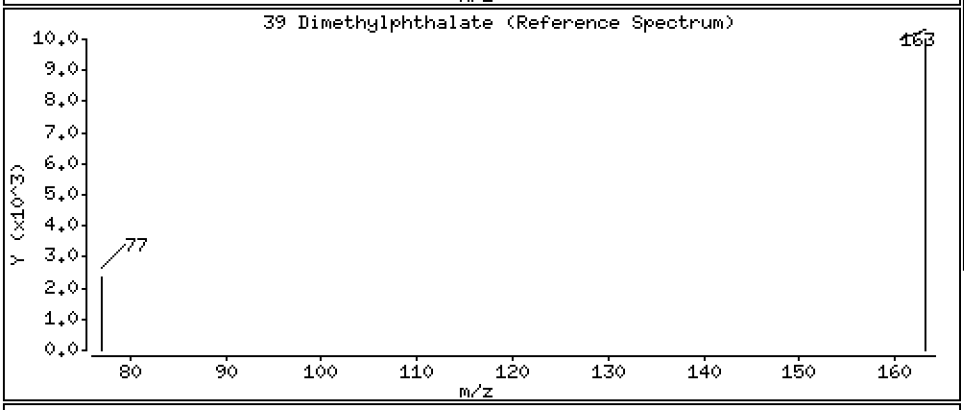
Concentration: 0.03262 ug/L

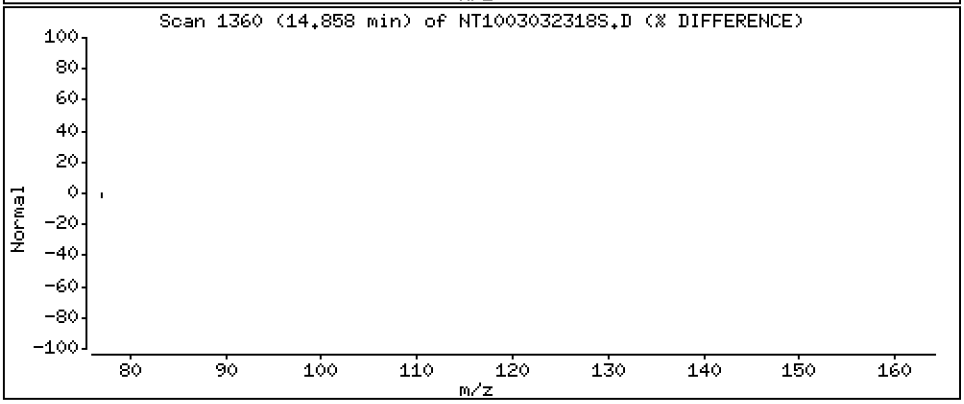












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323185.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

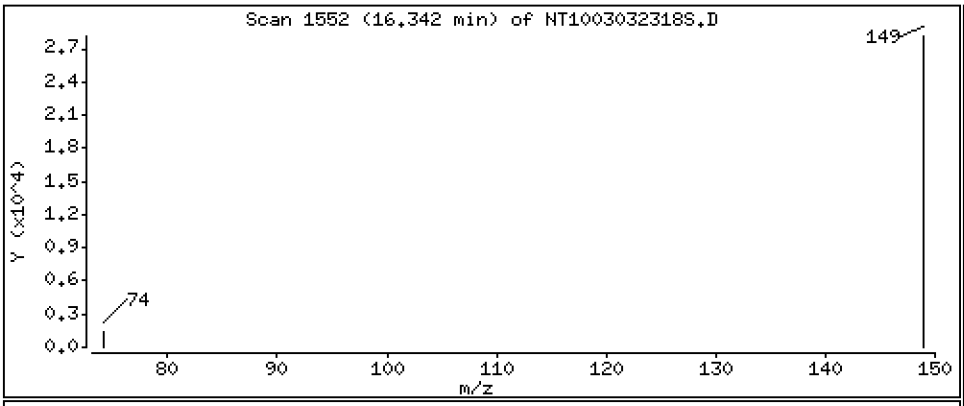
Operator: JGR

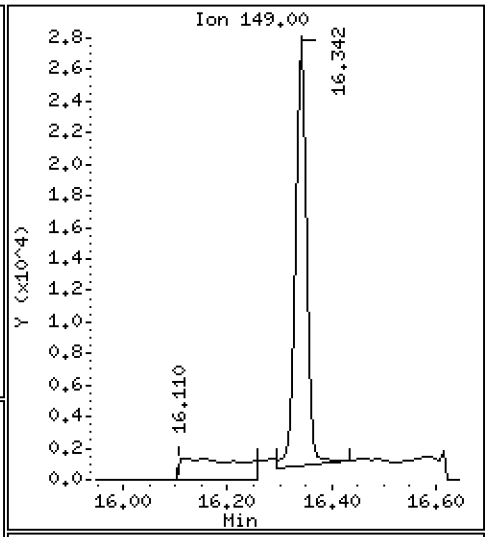
Column phase: ZB-5msi

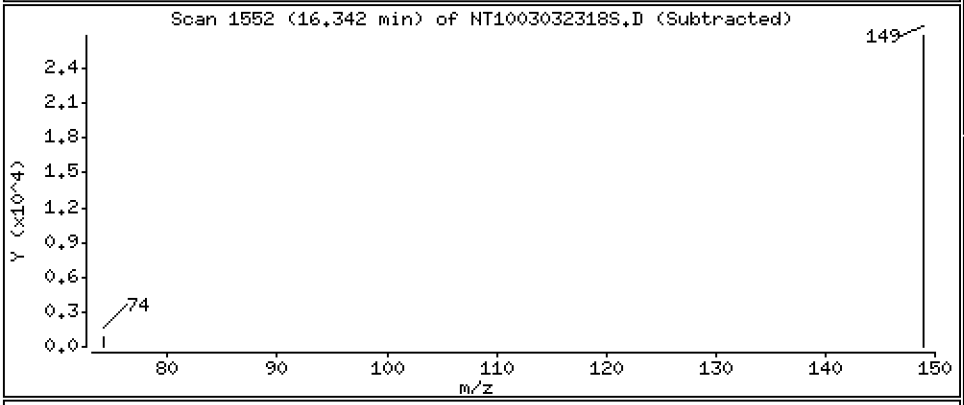
Column diameter: 0.25

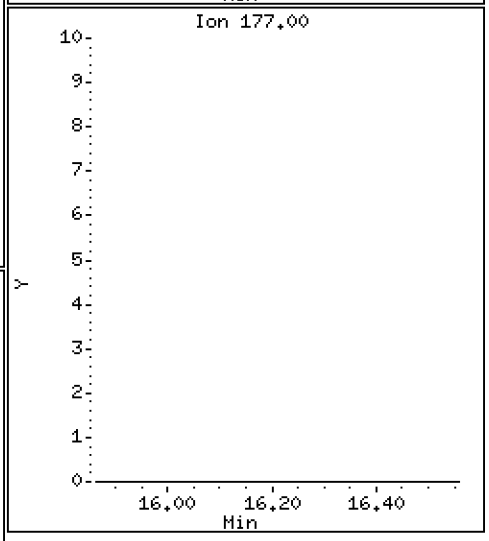
50 Diethylphthalate

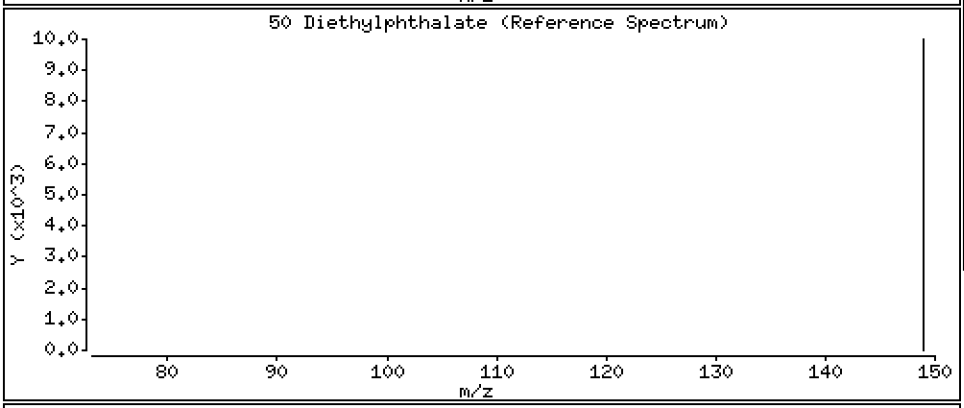
Concentration: 0.1916 ug/L

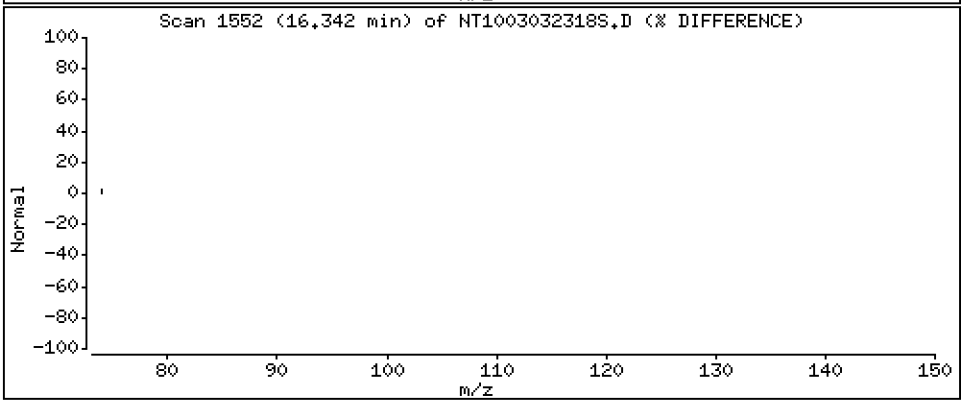












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323185.D

Date : 04-MAR-2023 04:34

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-02

Volume Injected (uL): 1.0

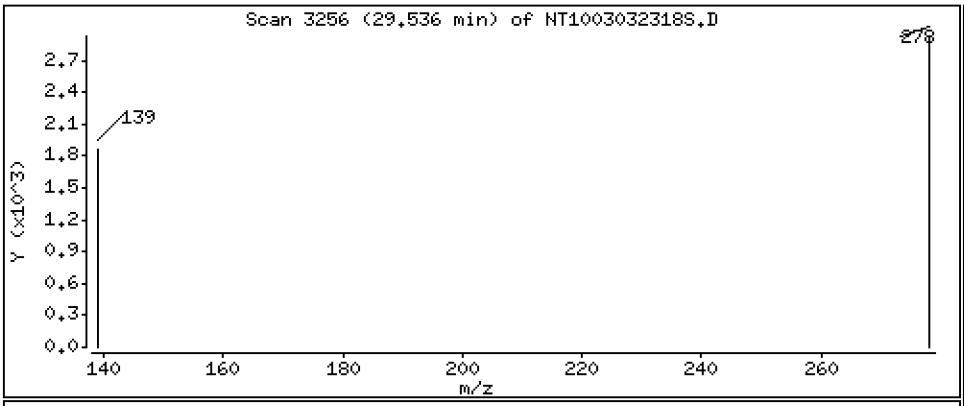
Operator: JGR

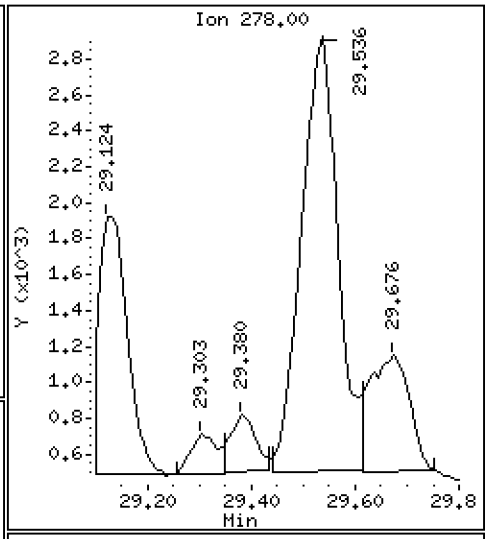
Column phase: ZB-5msi

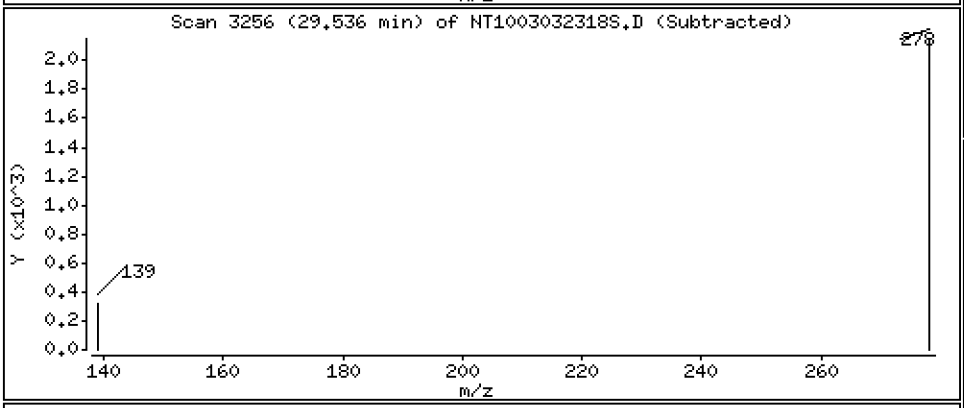
Column diameter: 0.25

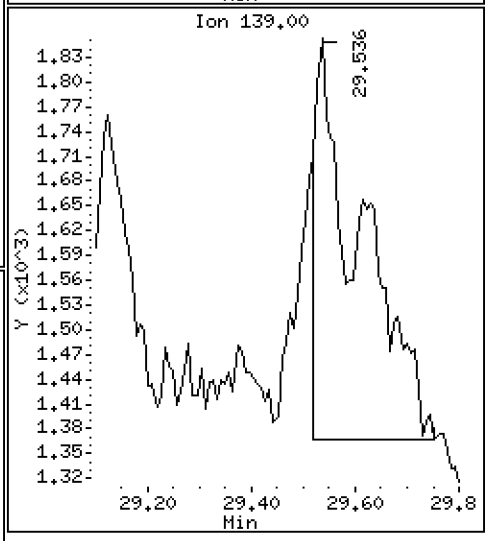
79 Dibenzo(a,h)anthracene

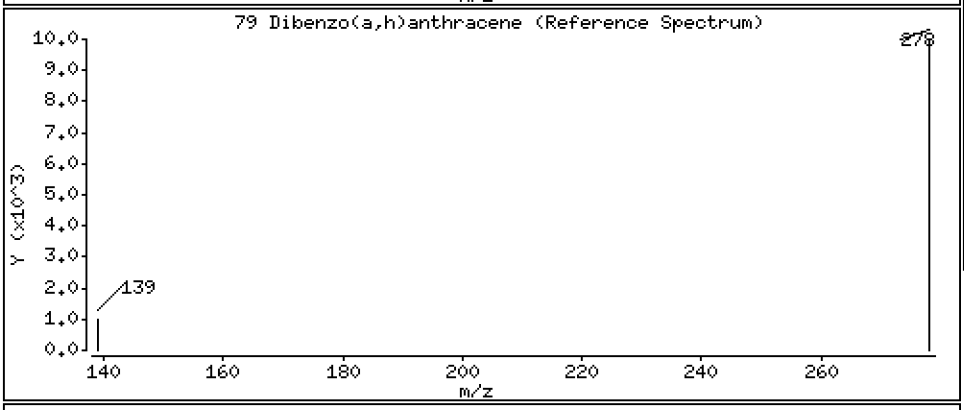
Concentration: 0.03287 ug/L

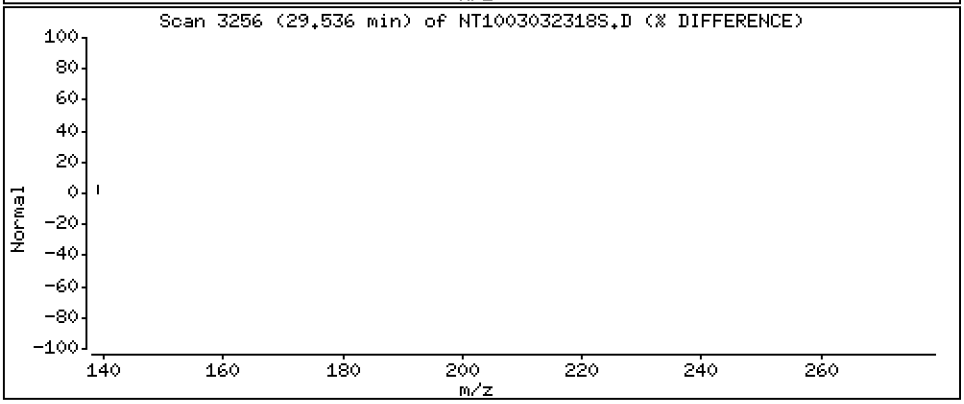












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT1003032318S.D
Lab Smp Id: 23A0249-02
Inj Date : 04-MAR-2023 04:34 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : 23A0249-02
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 11:26 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.933	6.917	(0.746)	755483	6.09244	6.092(R)
3	Phenol	94	8.571	8.556	(0.922)	15392	0.08414	0.08414
7	1,3-Dichlorobenzene	146	9.182	9.174	(0.987)	2048	0.01272	0.01272
* 8	1,4-Dichlorobenzene-d4	152	9.298	9.283	(1.000)	434346	4.00000	
9	1,4-Dichlorobenzene	146	9.329	9.314	(1.003)	3389	0.02165	0.02165
11	Benzyl alcohol	79	9.546	9.515	(1.027)	10219	0.10070	0.1007
12	1,2-Dichlorobenzene	146	9.616	9.601	(1.034)	1936	0.01287	0.01287
13	2-Methylphenol	108	9.725	9.702	(1.046)	3566	0.03243	0.03243
15	4-Methylphenol	108	10.020	9.997	(1.078)	15229	0.13303	0.1330
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22	2,4-Dimethylphenol	107	11.082	11.057	(0.939)	4673	0.03591	0.03591
24	Benzoic acid	105	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	11.677	11.646	(0.990)	1883	0.01706	0.01706
* 27	Naphthalene-d8	136	11.801	11.777	(1.000)	1533596	4.00000	
30	Hexachlorobutadiene	225	12.071	12.040	(1.023)	584	0.00746	0.007456(M)
39	Dimethylphthalate	163	14.857	14.811	(0.962)	7608	0.03262	0.03262(M)
* 42	Acenaphthene-d10	162	15.437	15.391	(1.000)	734499	4.00000	
50	Diethylphthalate	149	16.342	16.296	(1.059)	42148	0.19164	0.1916
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.576	18.530	(1.000)	1356563	4.00000	
$	66 Terphenyl-d14	244	21.748	21.702	(0.919)	861071	8.57706	8.577(R)
	67 Butylbenzylphthalate	149	Compound Not Detected.					
*	69 Chrysene-d12	240	23.669	23.630	(1.000)	1241453	4.00000	
*	77 Perylene-d12	264	26.526	26.456	(1.000)	1560866	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.535	29.450	(1.113)	11884	0.03287	0.03287(H)
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032318S.D
Lab Smp Id: 23A0249-02
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	502303	251152	1004606	434346	-13.53
27 Naphthalene-d8	1751418	875709	3502836	1533596	-12.44
42 Acenaphthene-d10	814551	407276	1629102	734499	-9.83
59 Phenanthrene-d10	1450747	725374	2901494	1356563	-6.49
69 Chrysene-d12	1335017	667509	2670034	1241453	-7.01
77 Perylene-d12	1691506	845753	3383012	1560866	-7.72

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.30	0.17
27 Naphthalene-d8	11.78	11.28	12.28	11.80	0.20
42 Acenaphthene-d10	15.39	14.89	15.89	15.44	0.30
59 Phenanthrene-d10	18.53	18.03	19.03	18.58	0.25
69 Chrysene-d12	23.63	23.13	24.13	23.67	0.16
77 Perylene-d12	26.46	25.96	26.96	26.53	0.26

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

REVIEW SUMMARY FOR FILE - NT1003032318S.D

Lab ID: 23A0249-02
nt10.i, 20230303A.b\SIM.b\SIMABN2.m,   04-MAR-2023 04:34

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1003032315ICVS.d

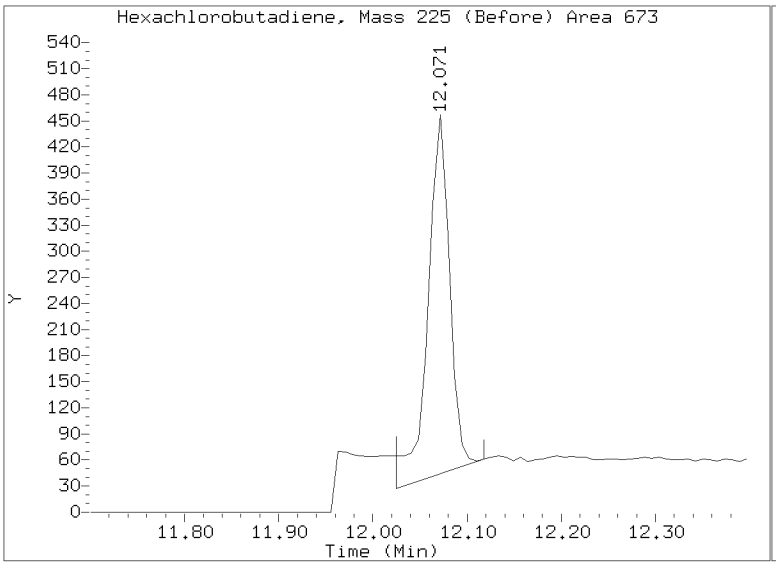
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

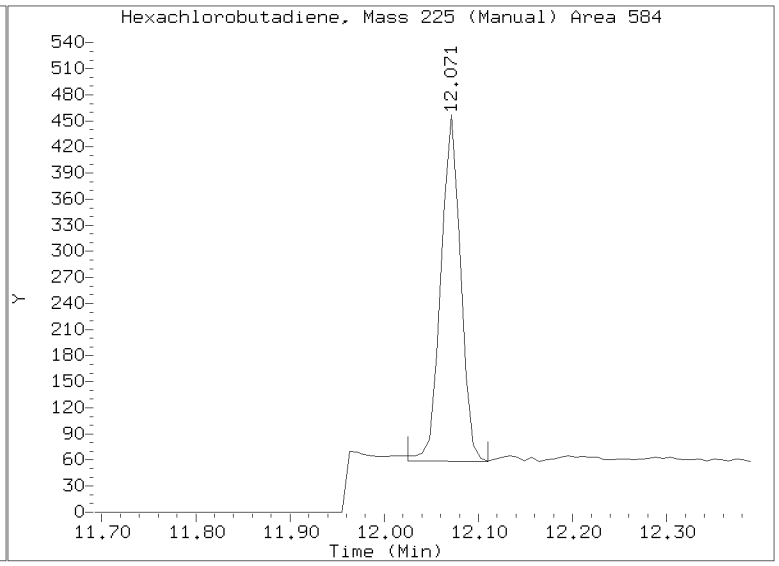
Exception: 1,2,4-Trichlorobenzene 0.0010

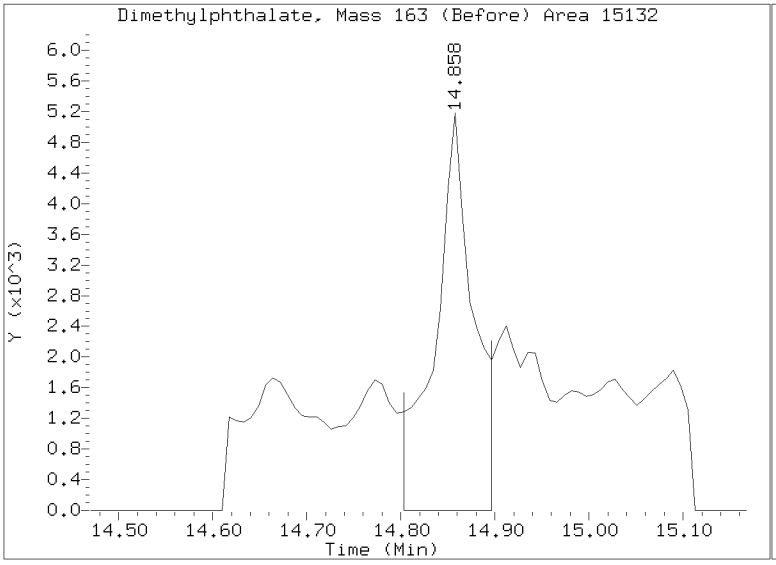
* Only compounds listed in the work order have been verified by the analyst *

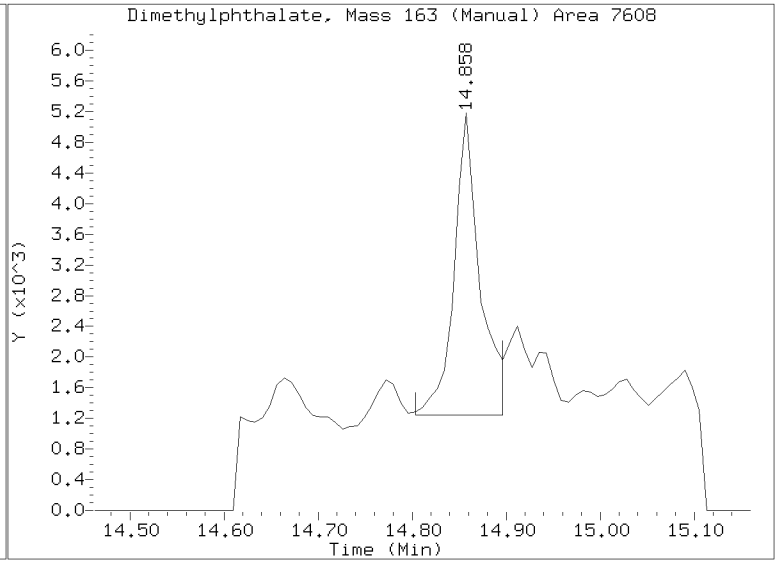
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230303A.b/SIM.b/NT1003032318S.D
Injection Date: 04-MAR-2023 04:34
Lab ID:23A0249-02 Client ID:
Report Date: 03/17/2023 11:26









LDW23-SC1018

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

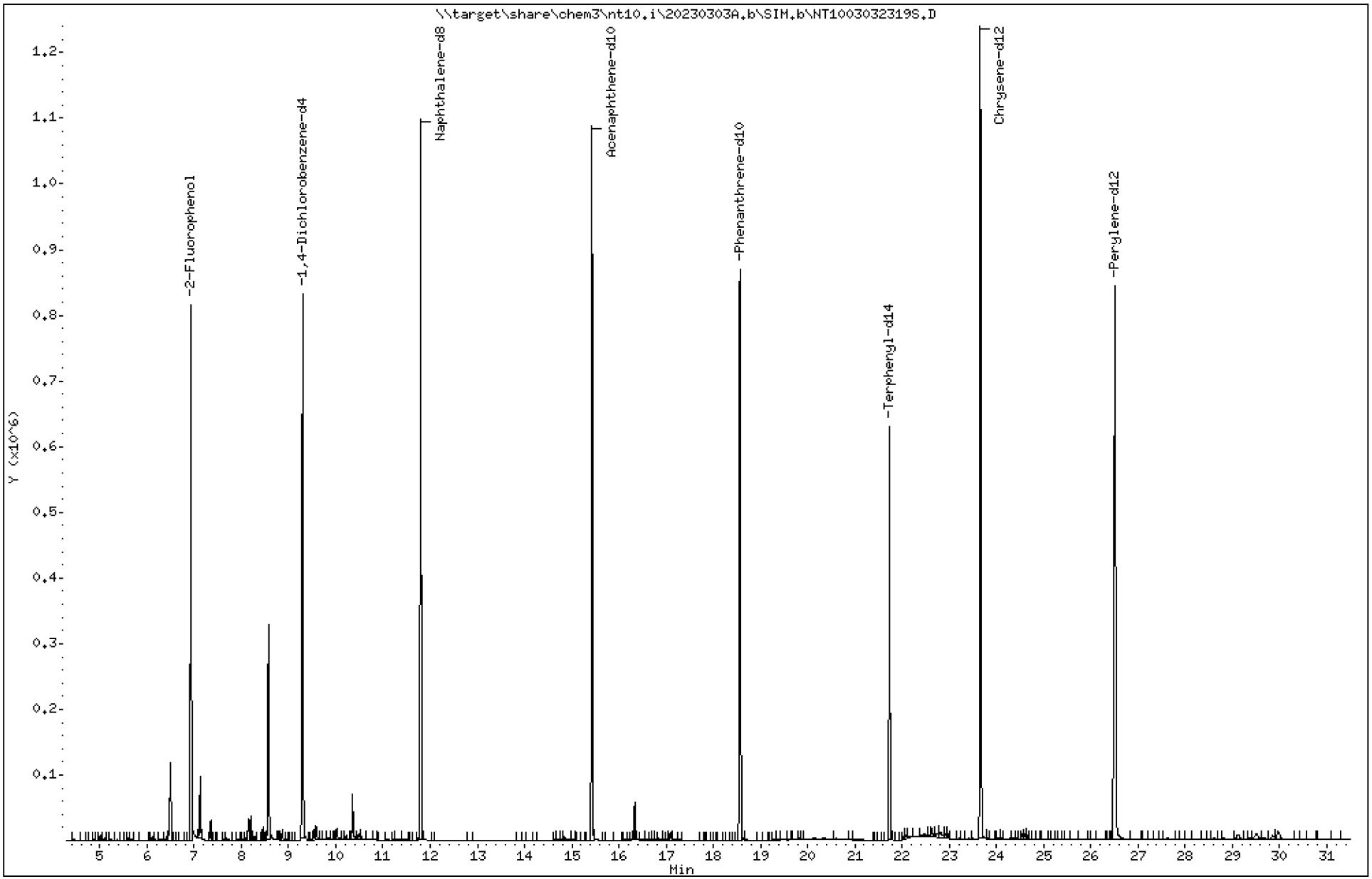
Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-03 A	SDG:	23A0249
Sampled:	01/12/23 10:21	Prepared:	01/30/23 14:02	File ID:	NT1003032319S.D
% Solids:	49.91	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 05:12
Batch:	BLA0673	Sequence:	SLC0253	Initial/Final:	20.63 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00032
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	4.9	U	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	4.9	U	0.7	4.9
100-51-6	Benzyl Alcohol	1	16.9	J	2.4	19.4
65-85-0	Benzoic acid	1	97.1	U	13.0	97.1
105-67-9	2,4-Dimethylphenol	1	19.4	U	2.1	19.4
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	1.3	J	1.3	4.9
87-86-5	Pentachlorophenol	1	19.4	U	2.1	19.4

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	728.41	644	88.5	27 - 120	
p-Terphenyl-d14	485.61	643	132	37 - 120	*,Q

Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323195.D
Date : 04-MAR-2023 05:12
Client ID:
Sample Info: 23A0249-03
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

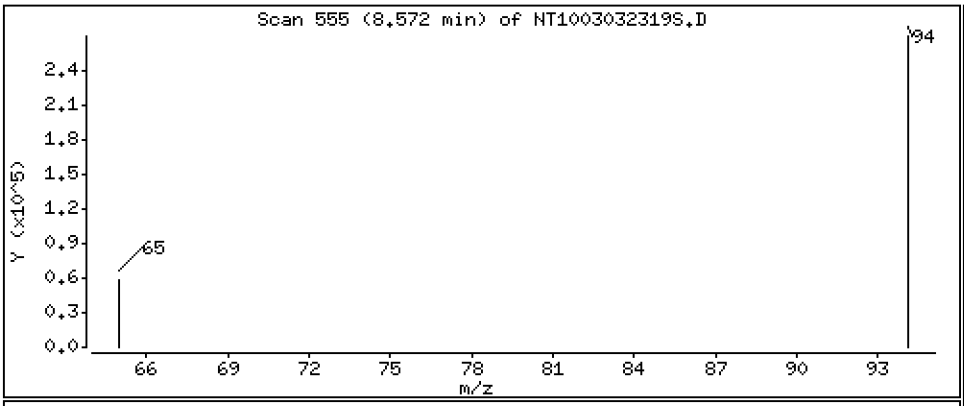
Operator: JGR

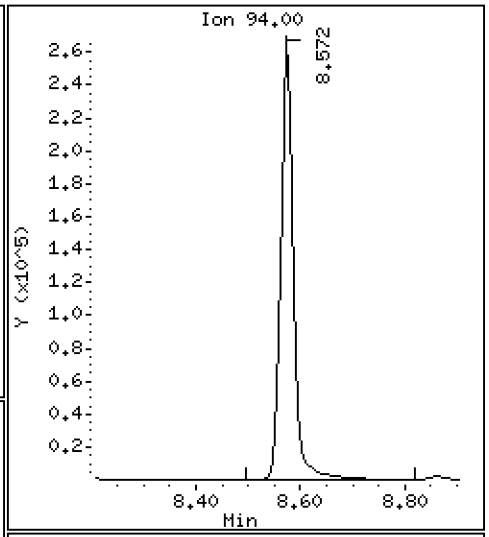
Column phase: ZB-5msi

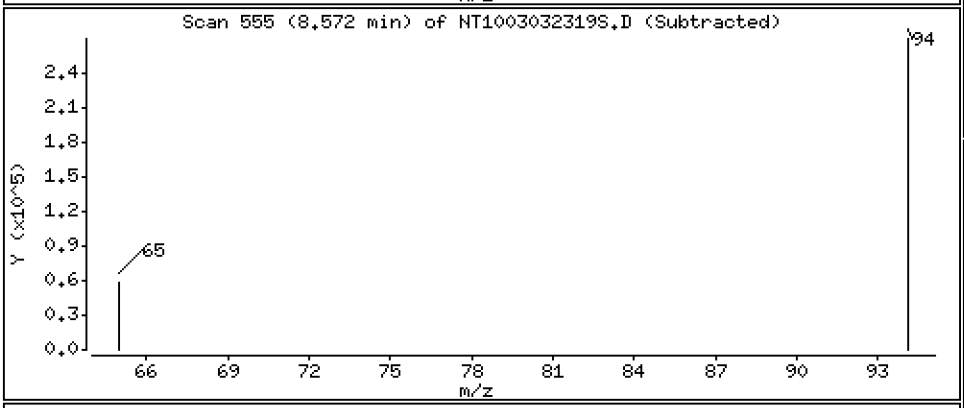
Column diameter: 0.25

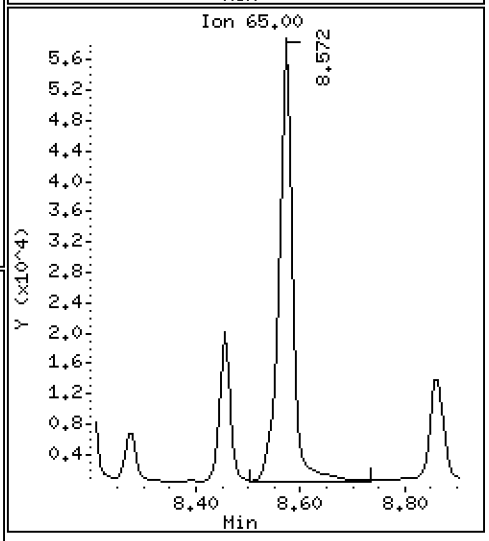
3 Phenol

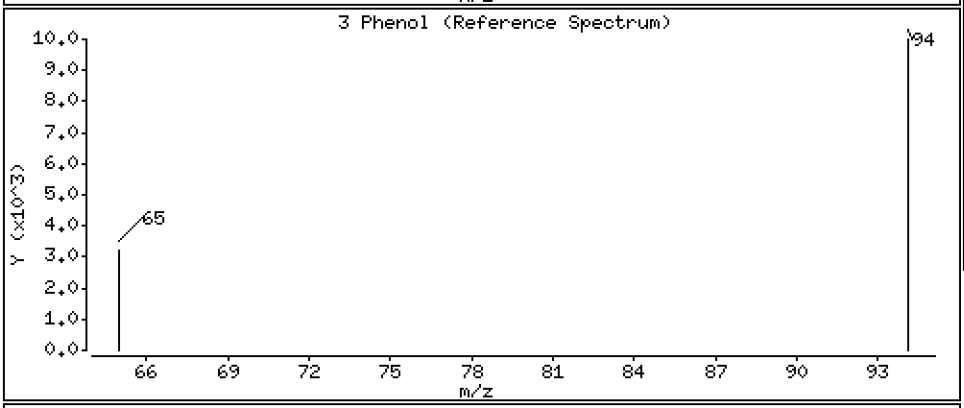
Concentration: 2.060 ug/L

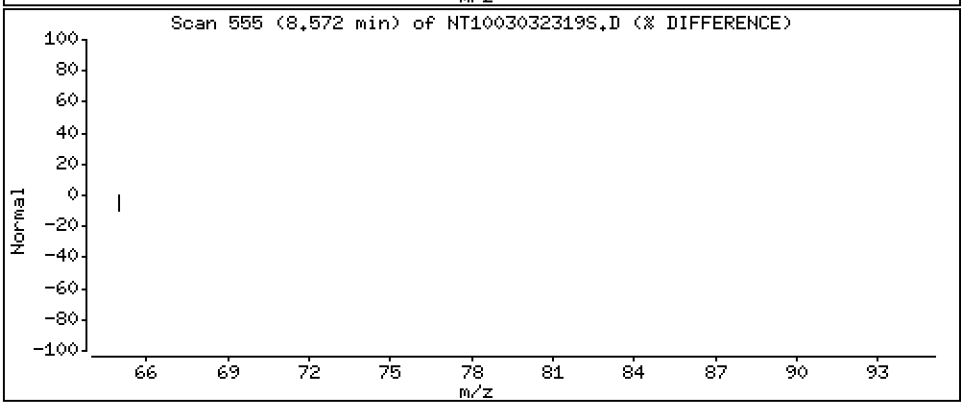












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323195.D

Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

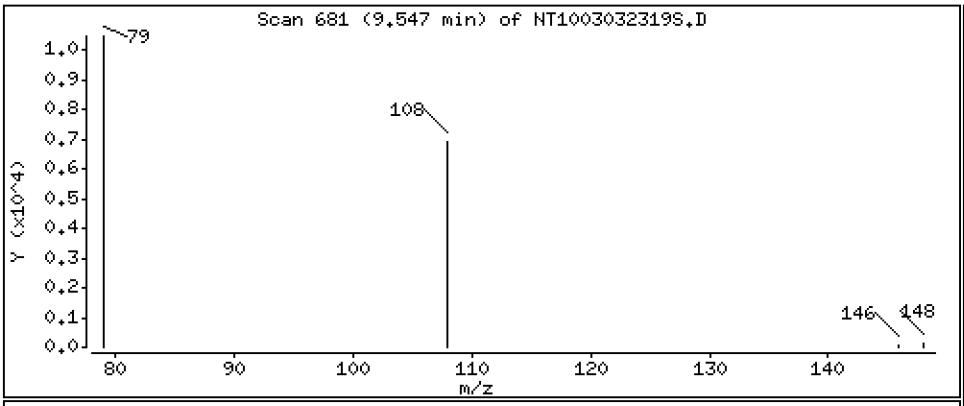
Operator: JGR

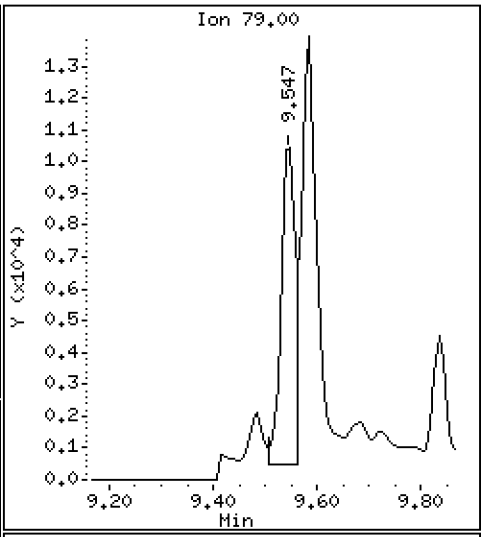
Column phase: ZB-5msi

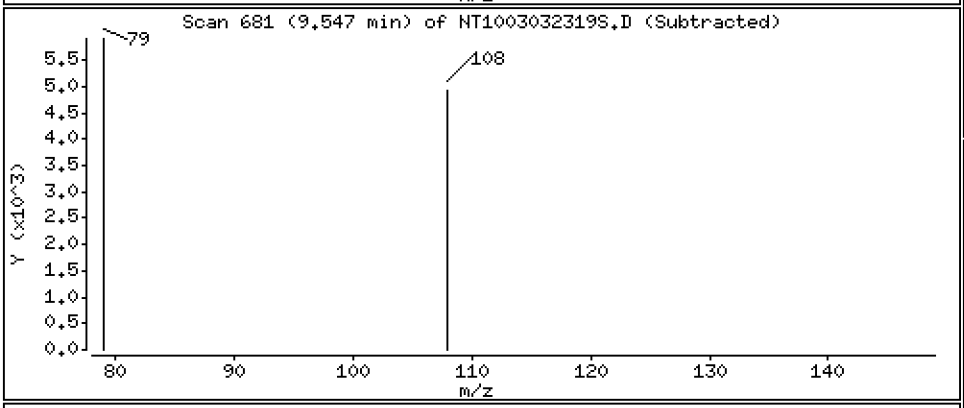
Column diameter: 0.25

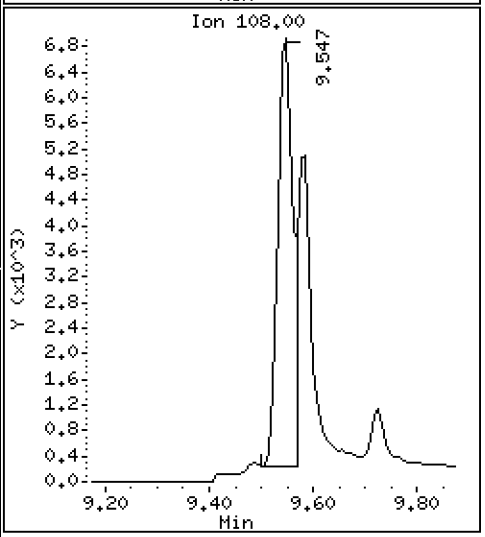
11 Benzyl alcohol

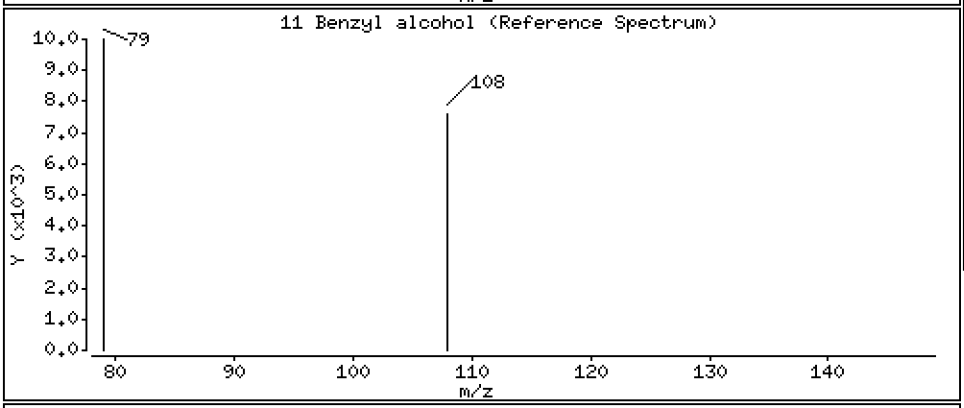
Concentration: 0.1736 ug/L

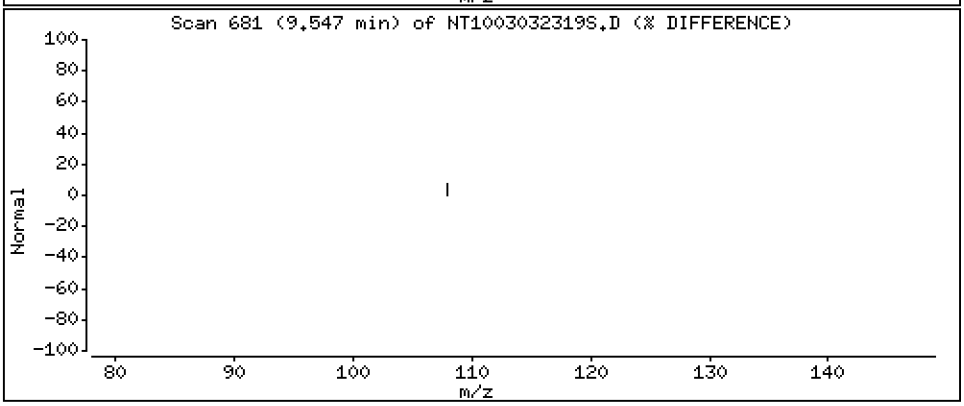












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323195.D

Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

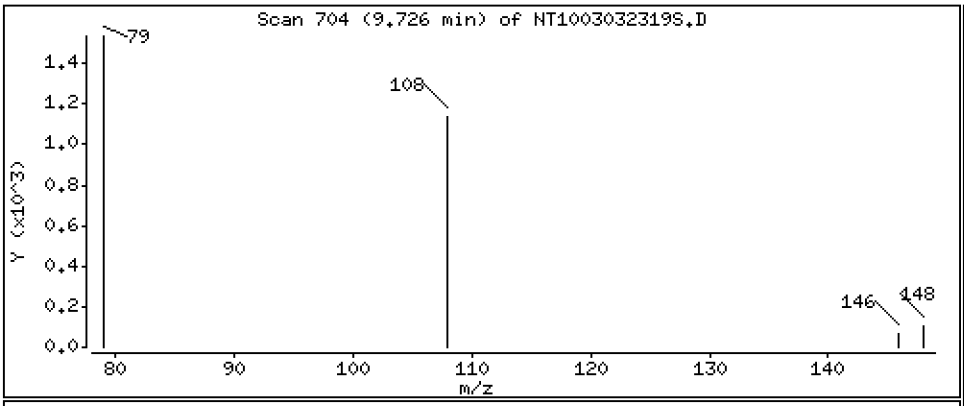
Operator: JGR

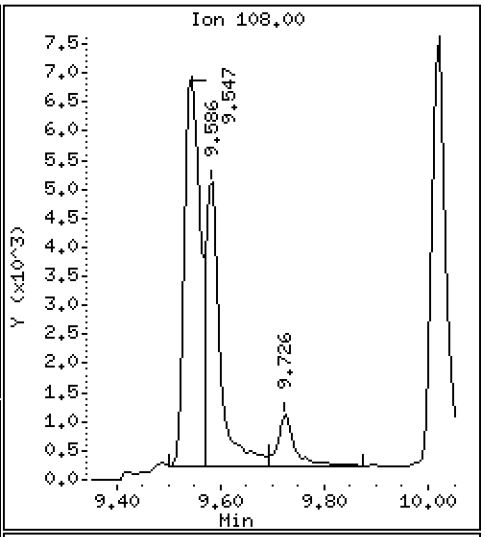
Column phase: ZB-5msi

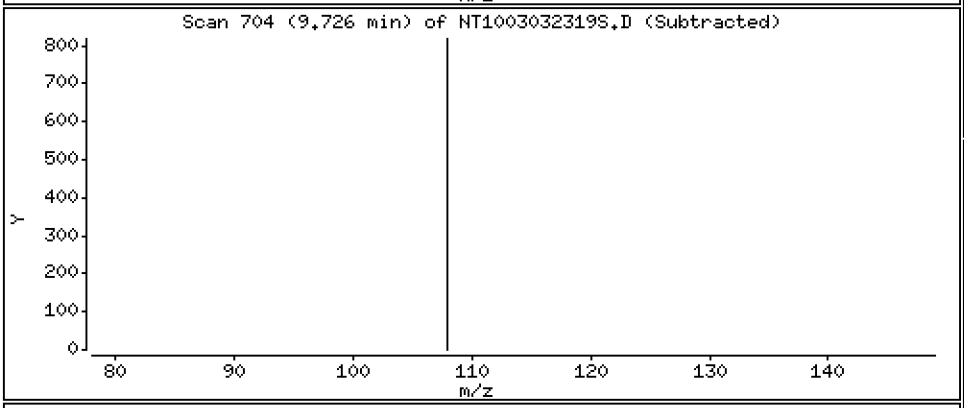
Column diameter: 0.25

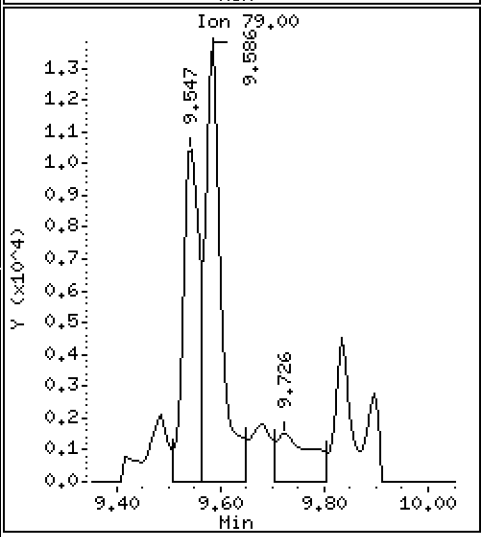
13 2-Methylphenol

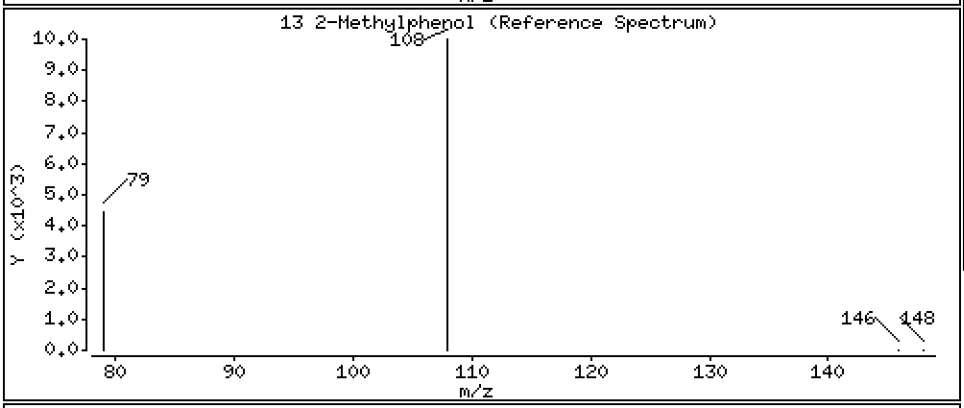
Concentration: 0.01723 ug/L

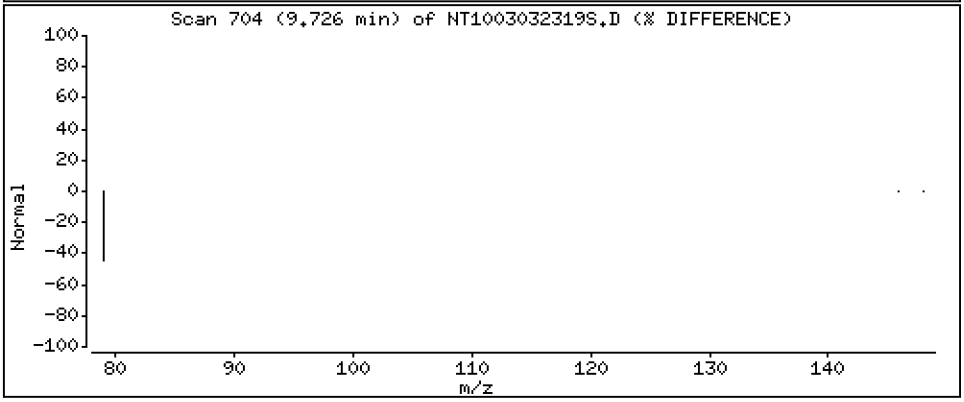












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

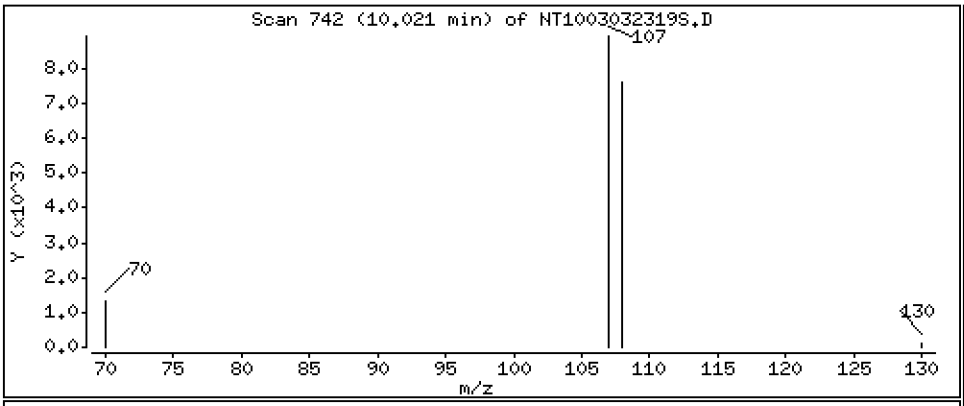
Operator: JGR

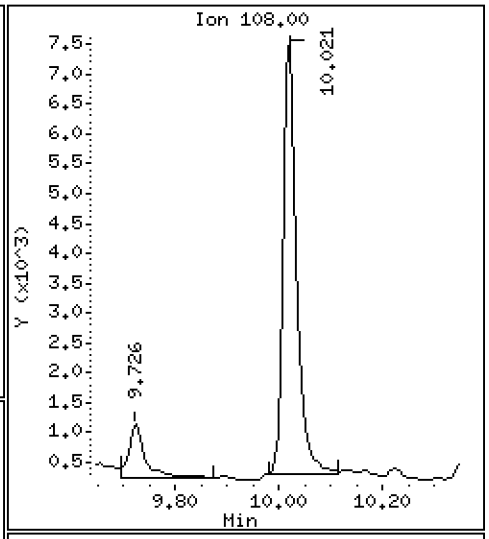
Column phase: ZB-5msi

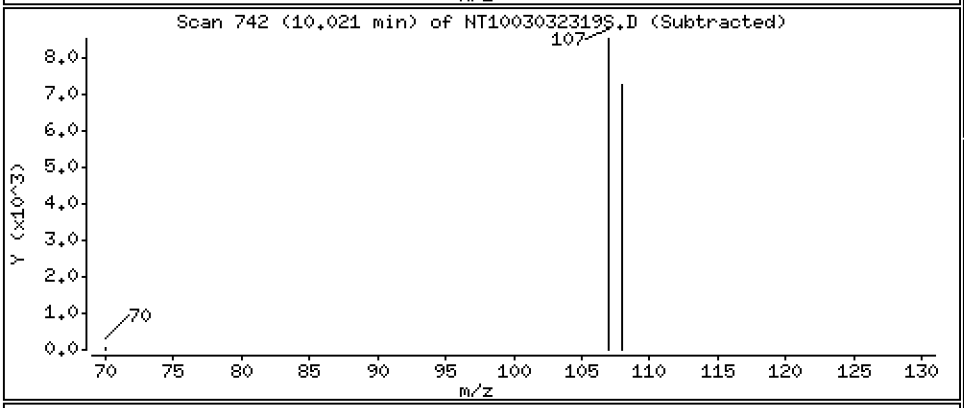
Column diameter: 0.25

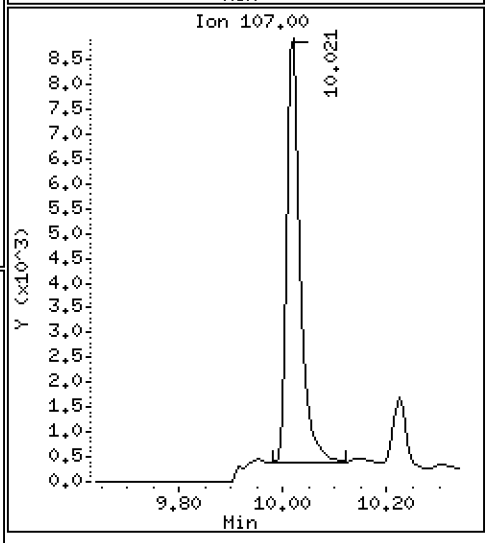
15 4-Methylphenol

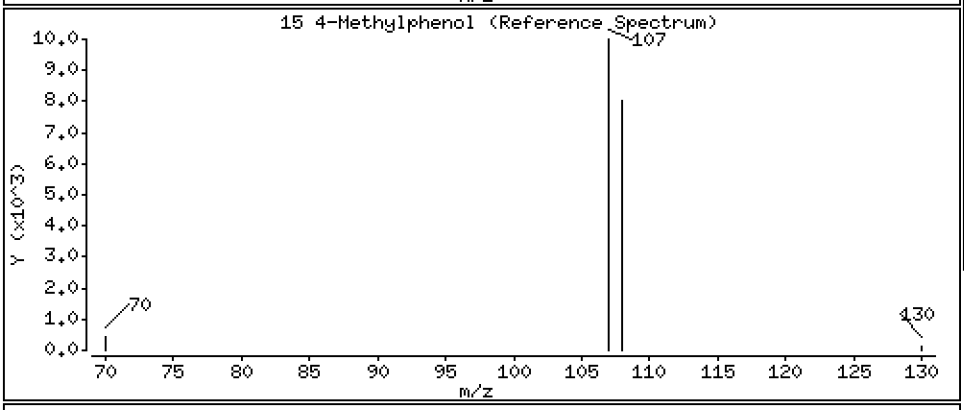
Concentration: 0.1016 ug/L

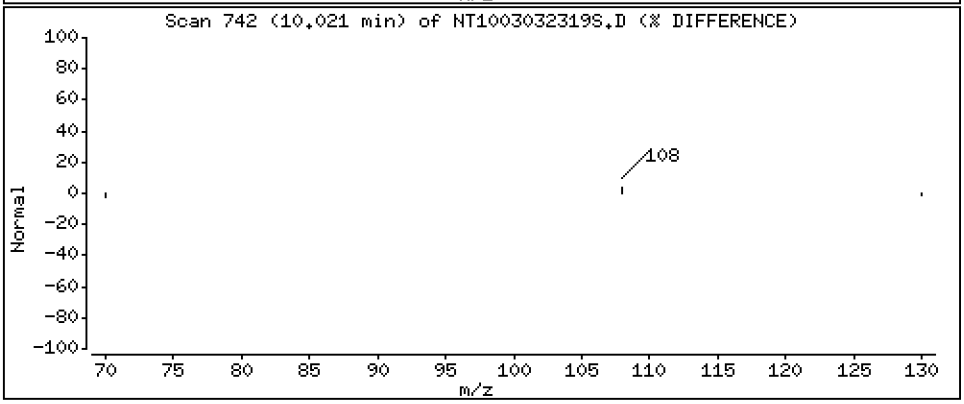












Date : 04-MAR-2023 05:12

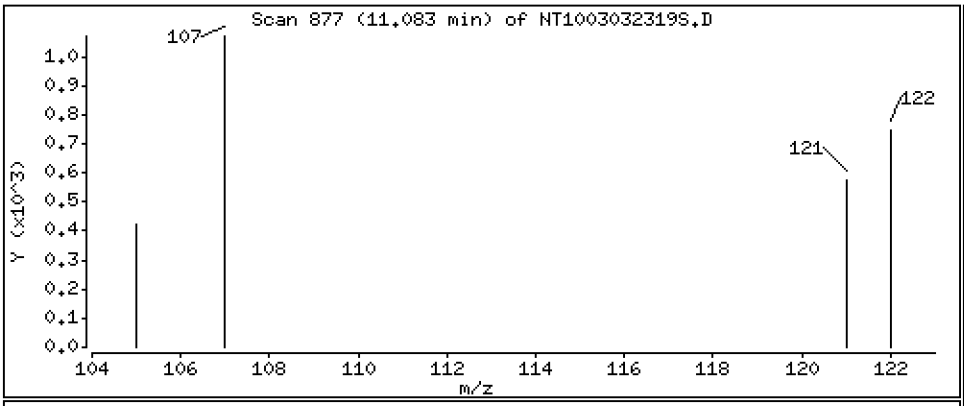
Client ID: Instrument: nt10.i

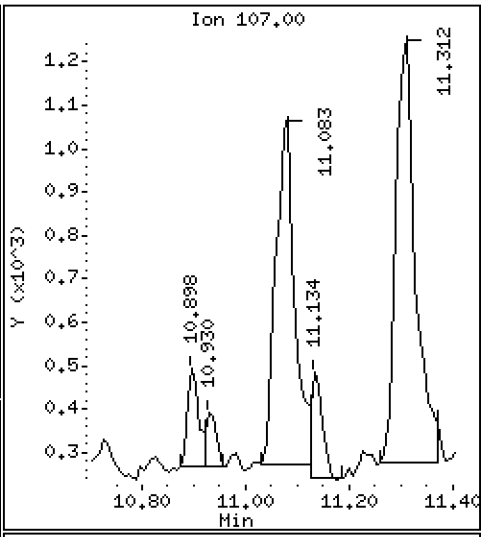
Sample Info: 23A0249-03

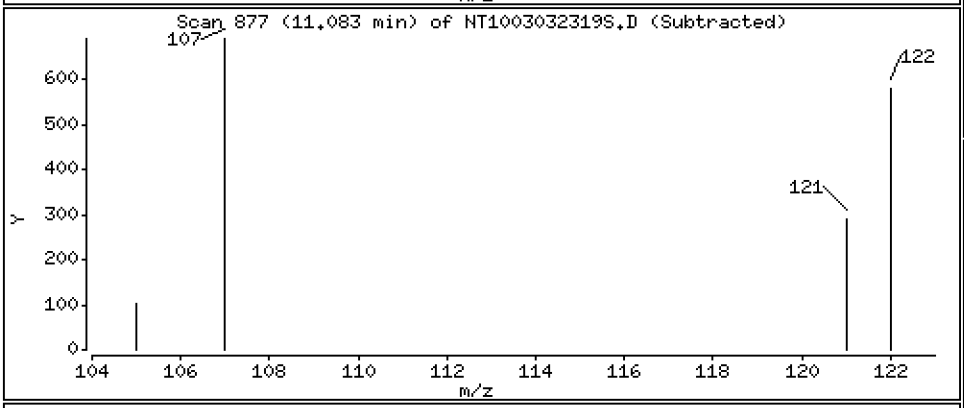
Volume Injected (uL): 1.0 Operator: JGR

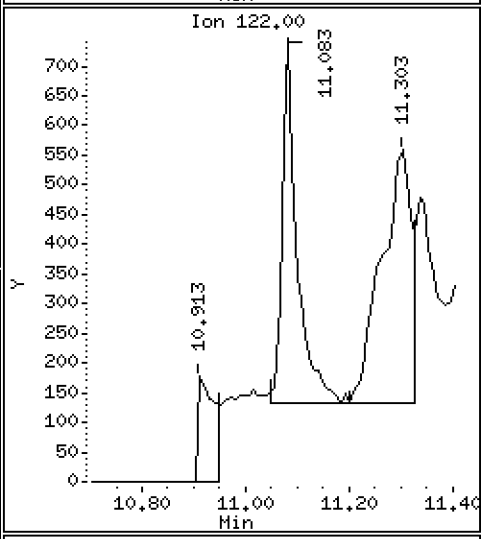
Column phase: ZB-5msi Column diameter: 0.25

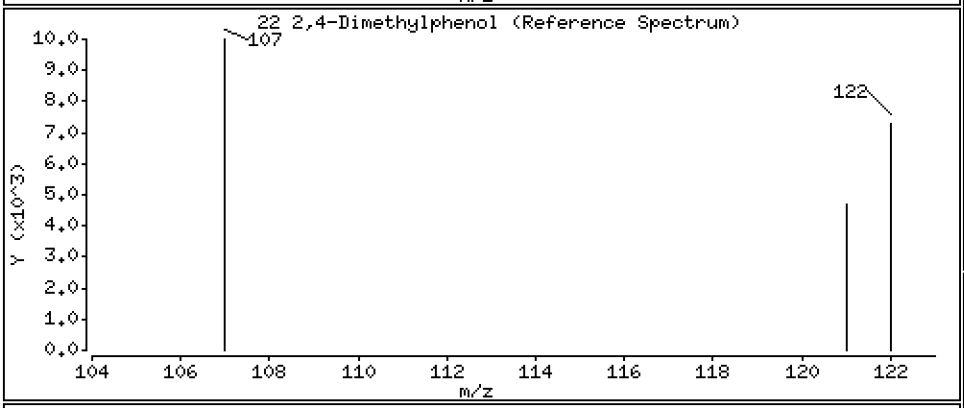
22 2,4-Dimethylphenol Concentration: 0.01383 ug/L

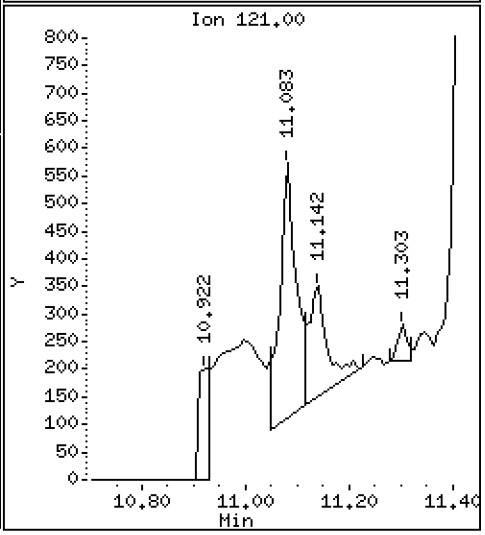


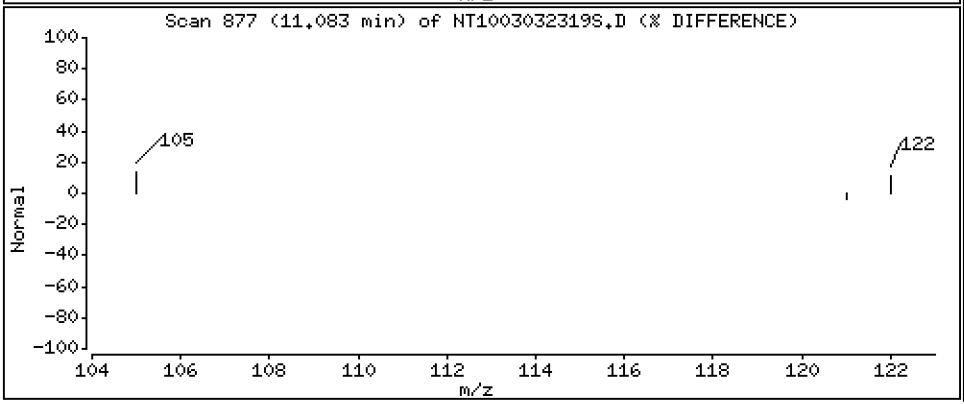












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

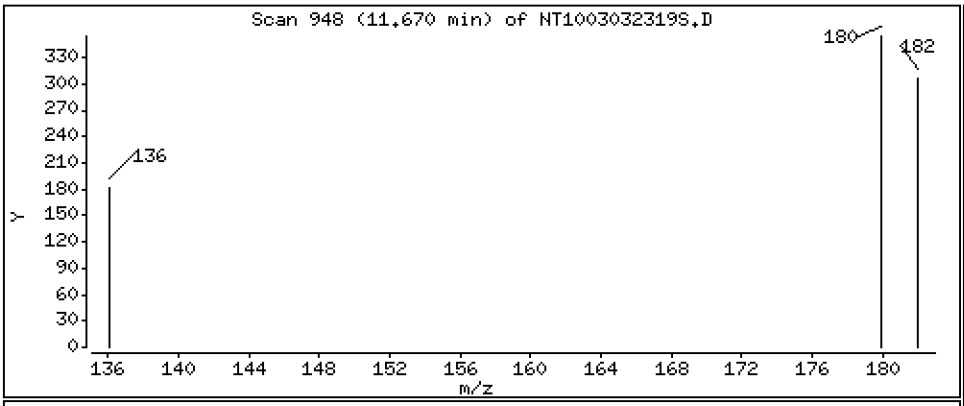
Operator: JGR

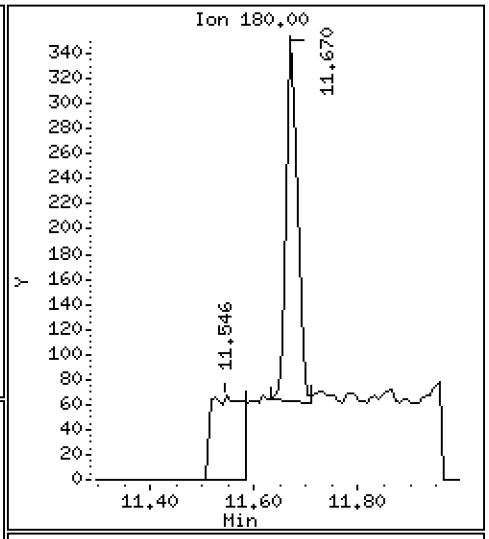
Column phase: ZB-5msi

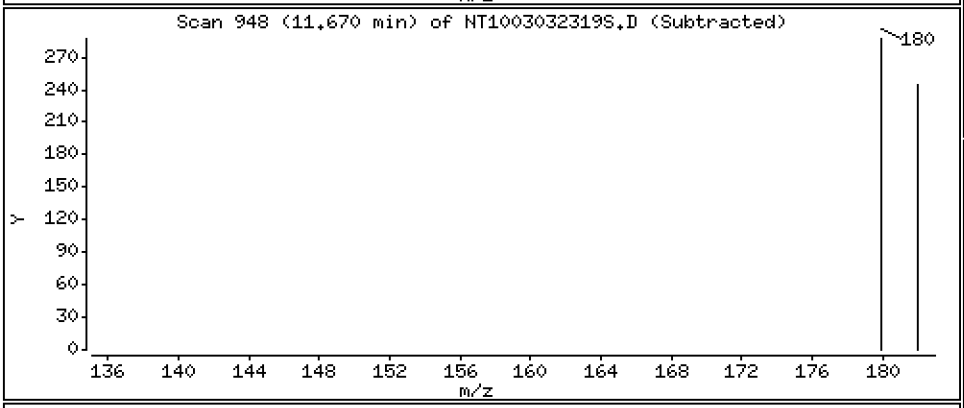
Column diameter: 0.25

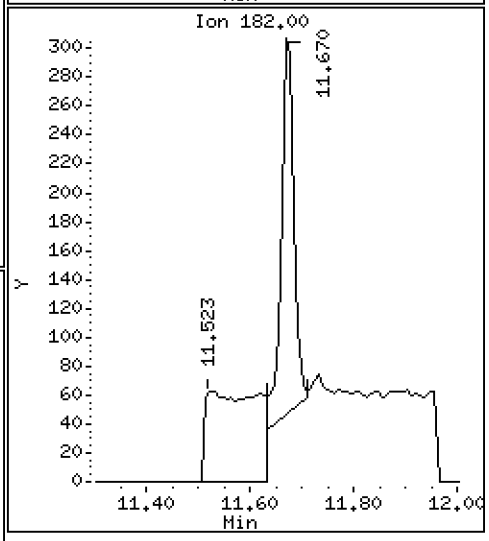
26 1,2,4-Trichlorobenzene

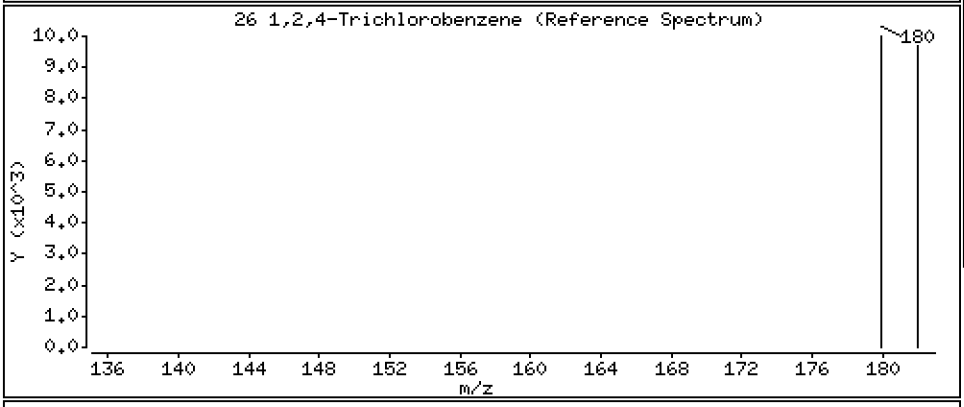
Concentration: 0.003288 ug/L

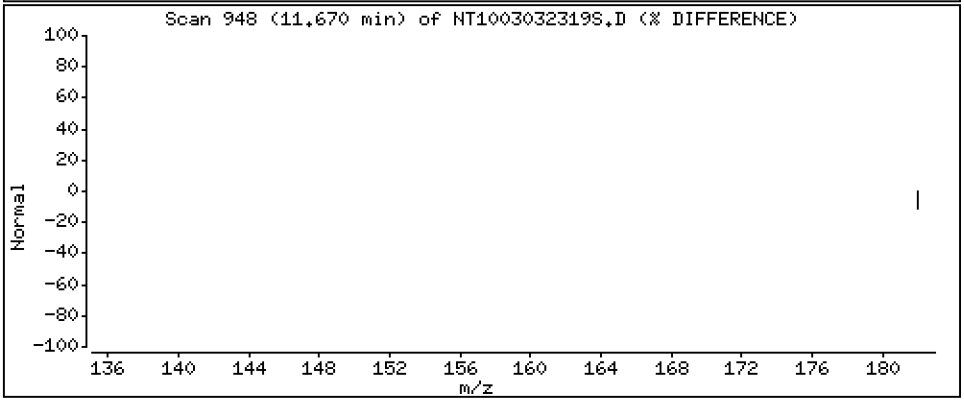












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

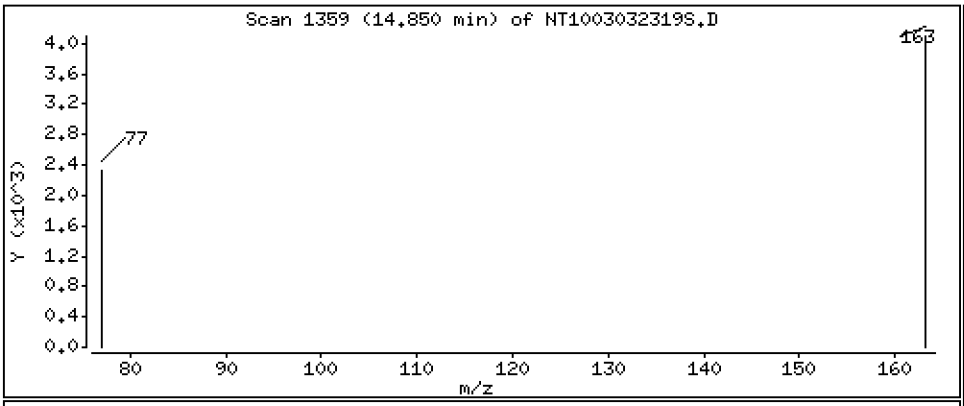
Operator: JGR

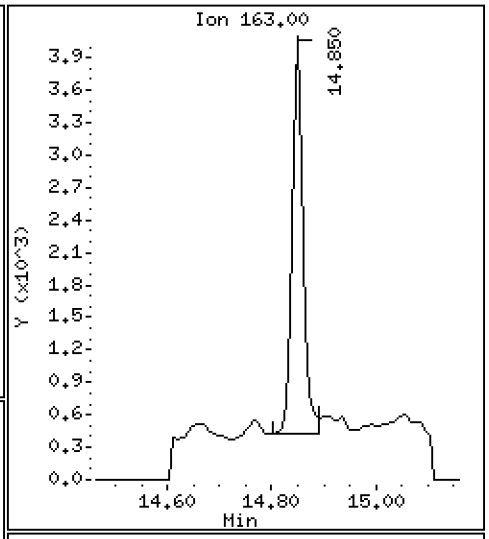
Column phase: ZB-5msi

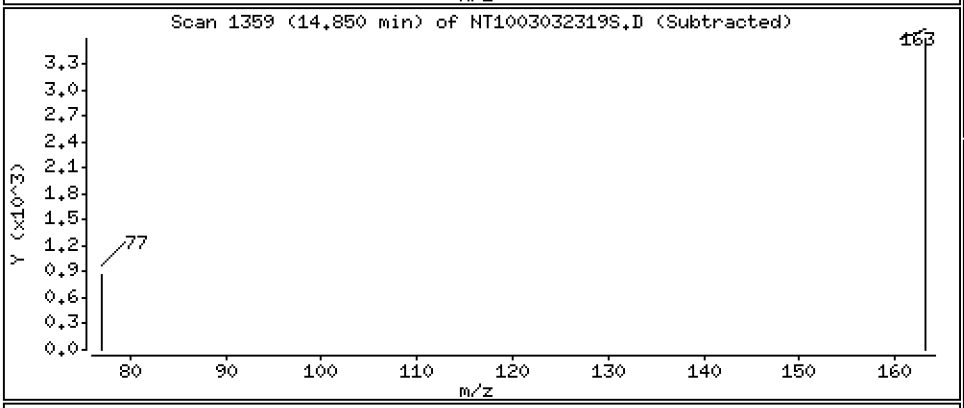
Column diameter: 0.25

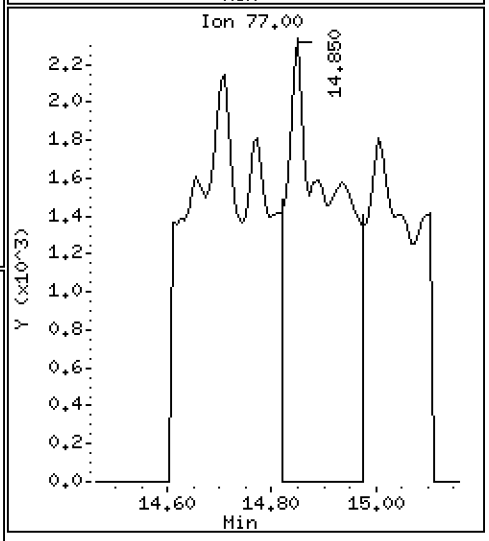
39 Dimethylphthalate

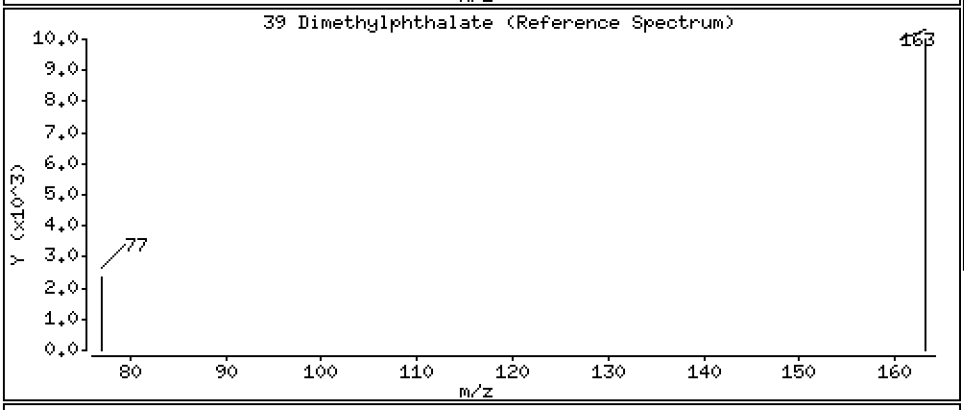
Concentration: 0.02111 ug/L

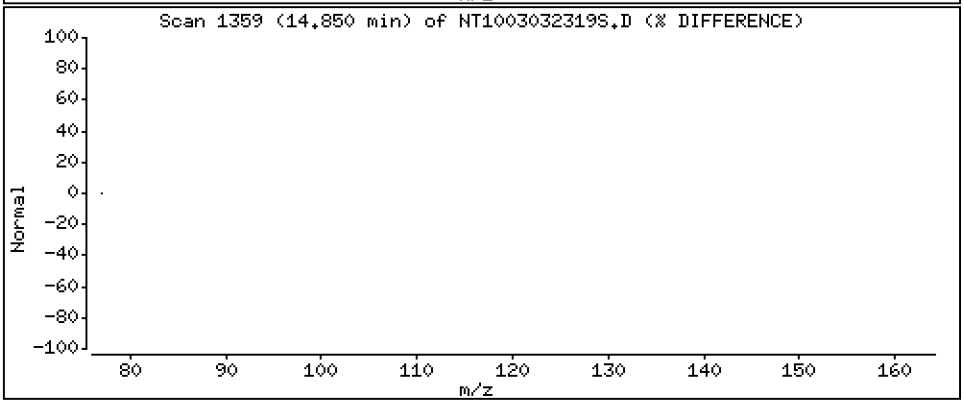












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Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

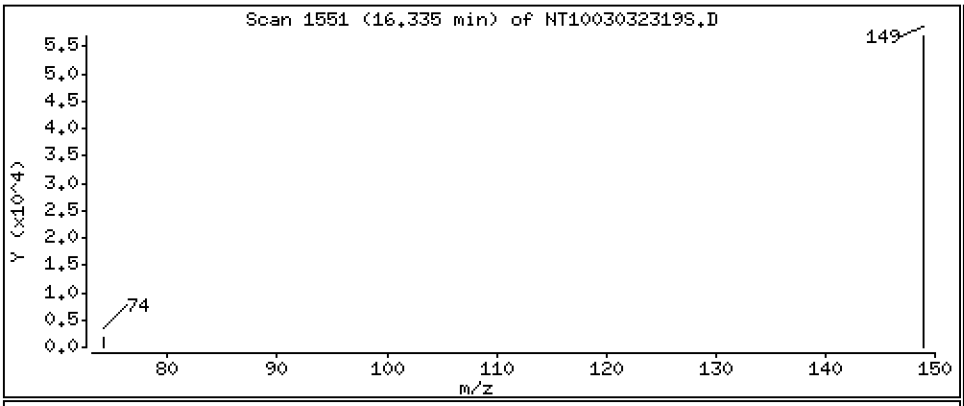
Operator: JGR

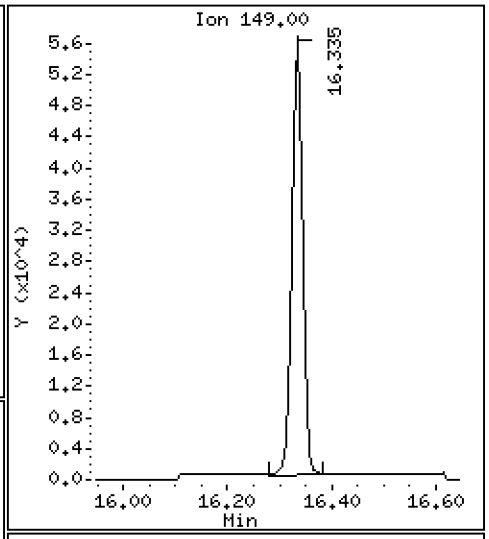
Column phase: ZB-5msi

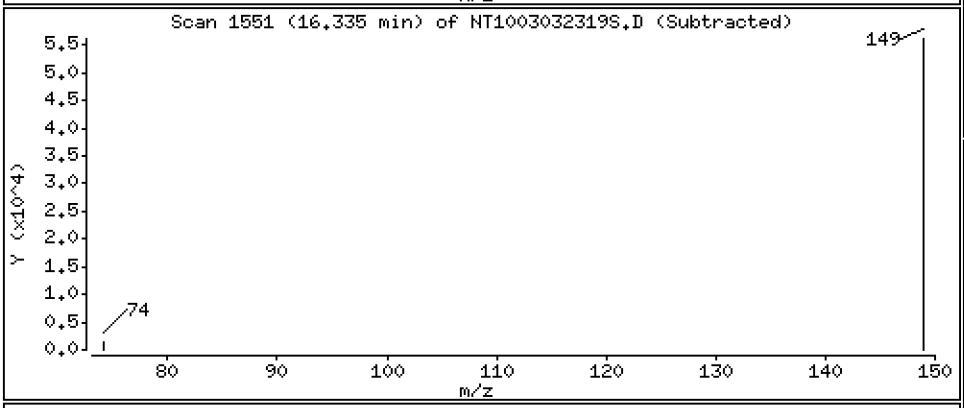
Column diameter: 0.25

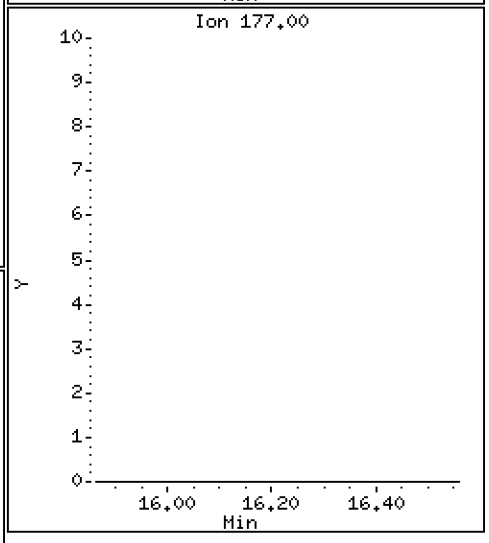
50 Diethylphthalate

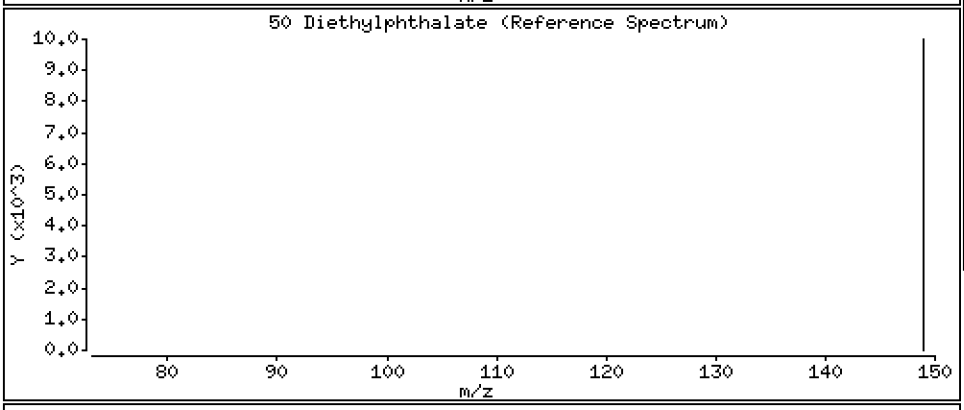
Concentration: 0.3398 ug/L

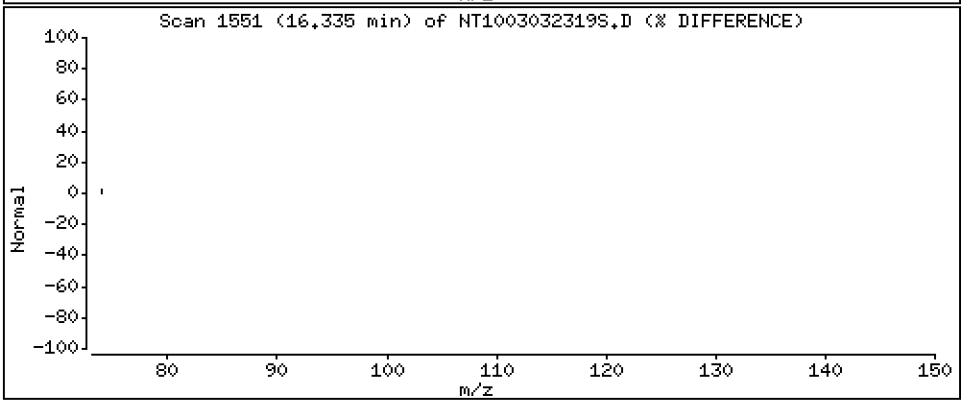












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323195.D

Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

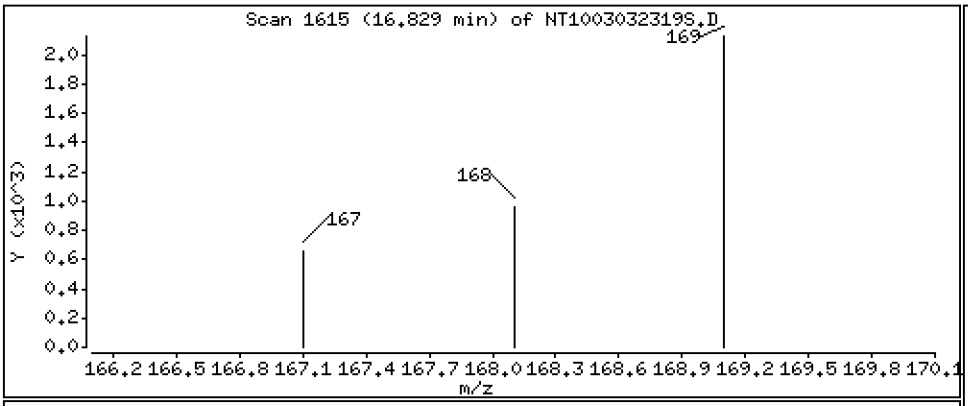
Operator: JGR

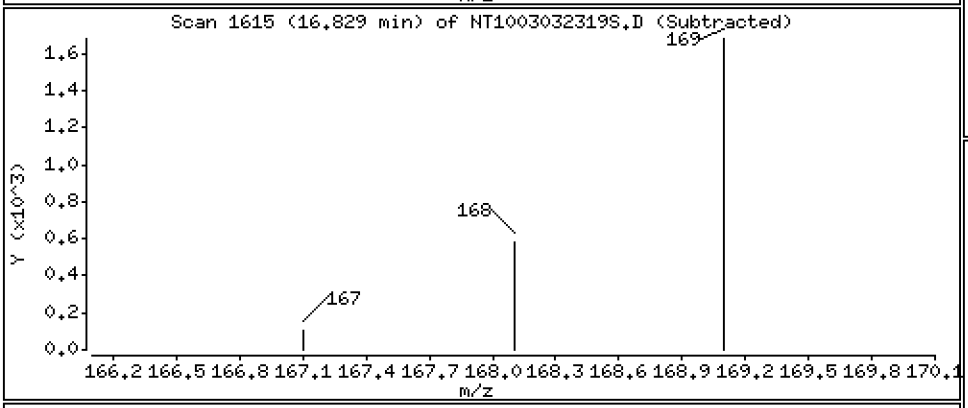
Column phase: ZB-5msi

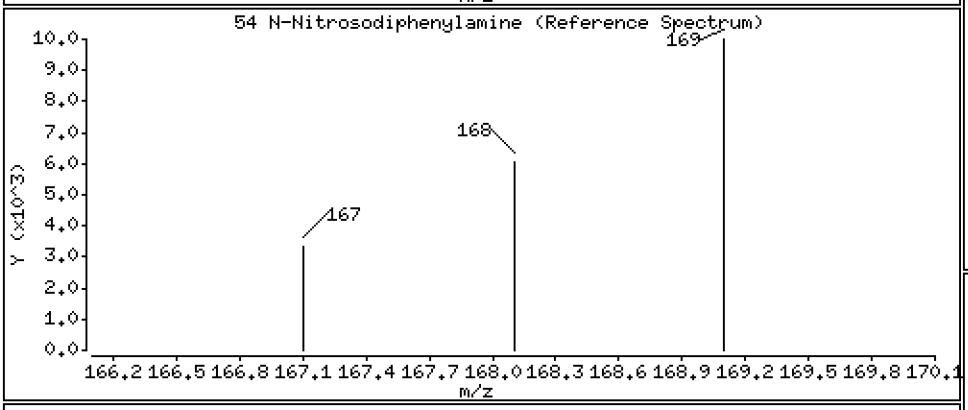
Column diameter: 0.25

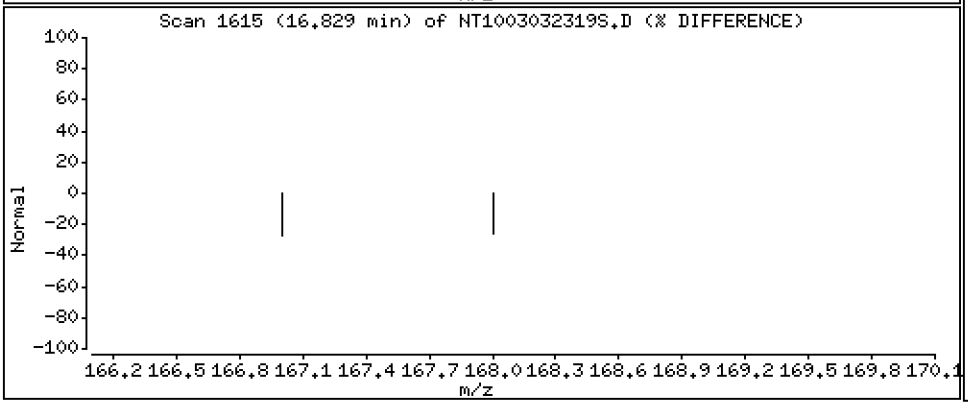
54 N-Nitrosodiphenylamine

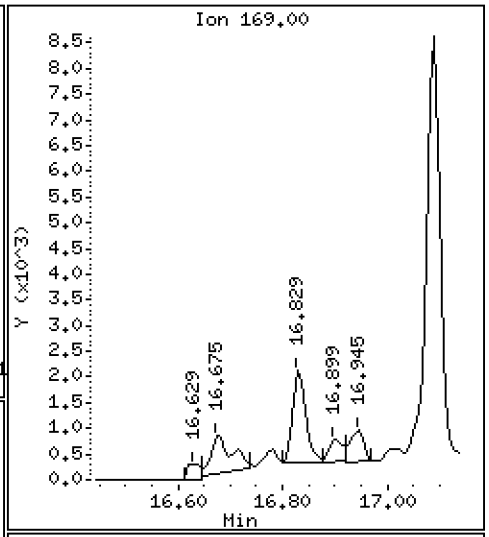
Concentration: 0.01333 ug/L

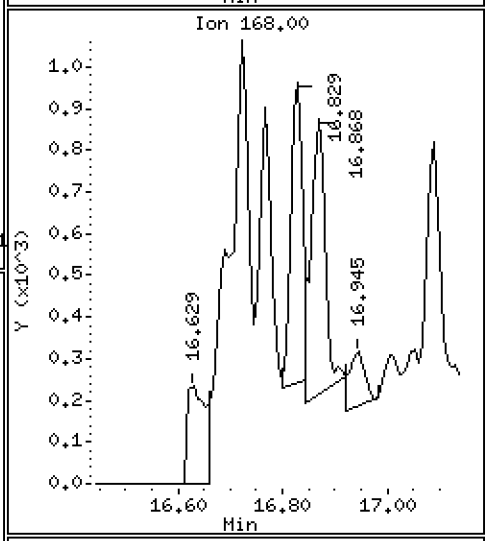


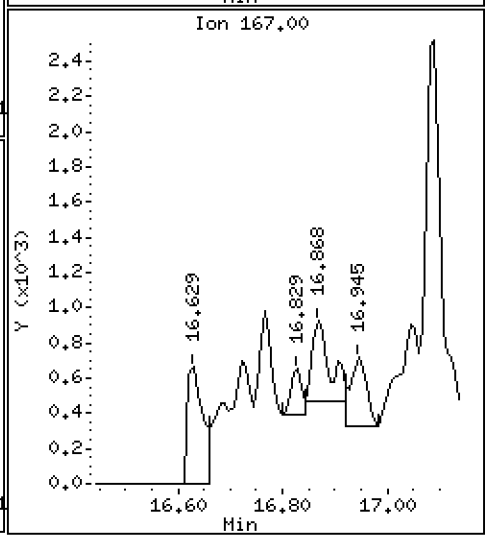












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT1003032319S.D

Date : 04-MAR-2023 05:12

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-03

Volume Injected (uL): 1.0

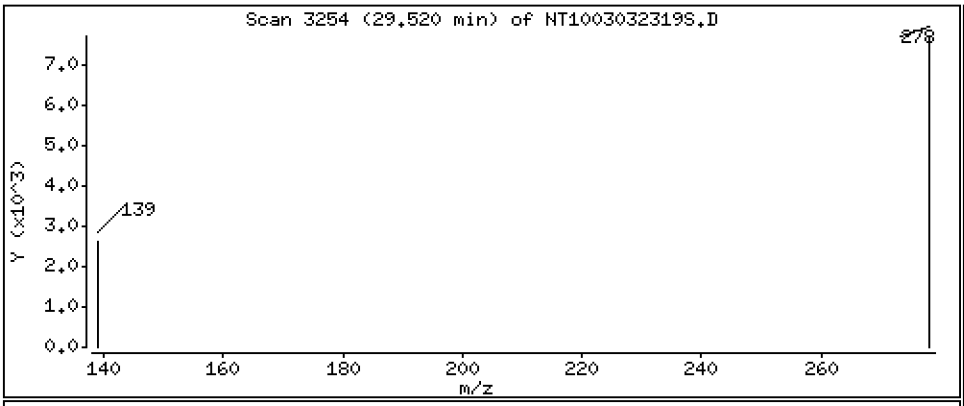
Operator: JGR

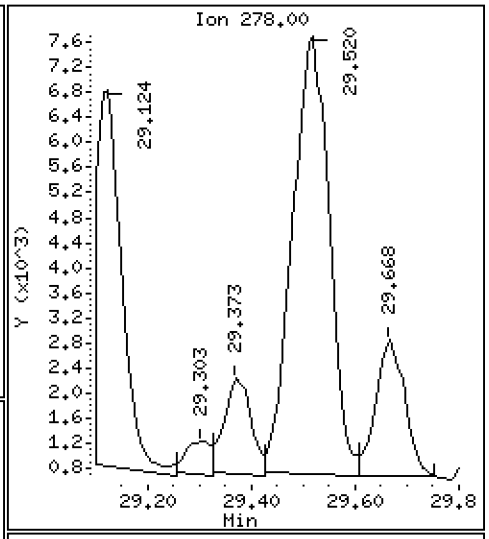
Column phase: ZB-5msi

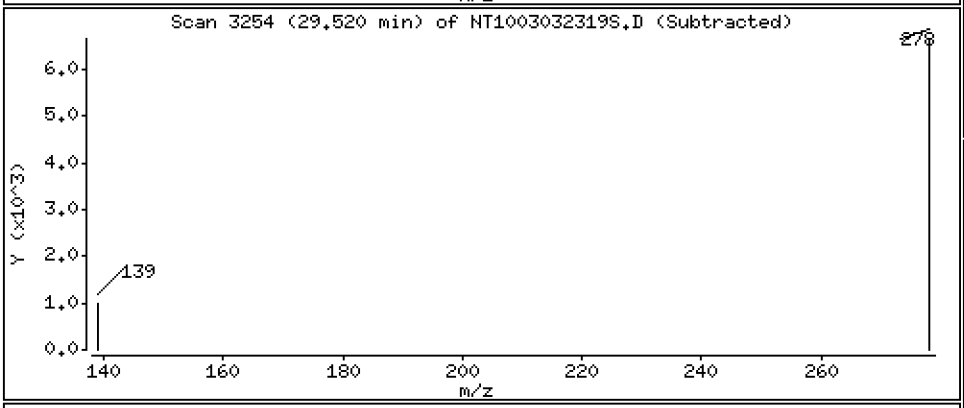
Column diameter: 0.25

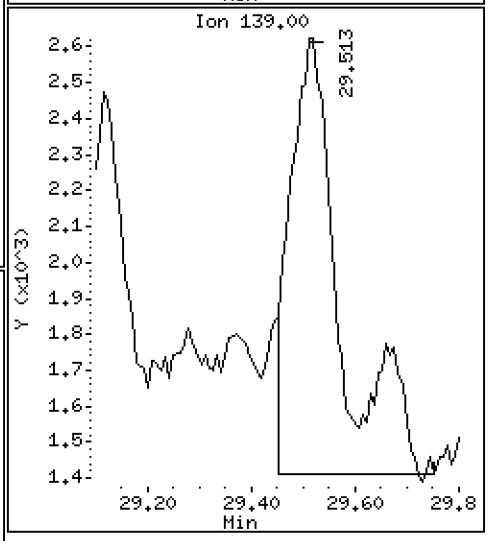
79 Dibenzo(a,h)anthracene

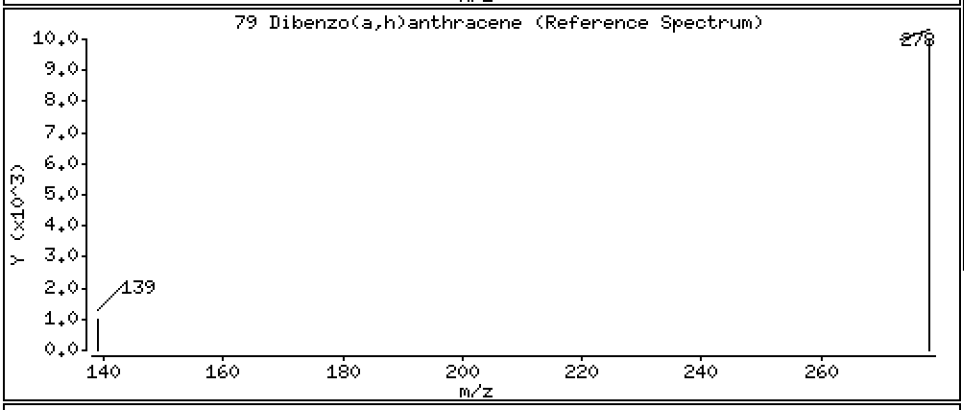
Concentration: 0.08839 ug/L

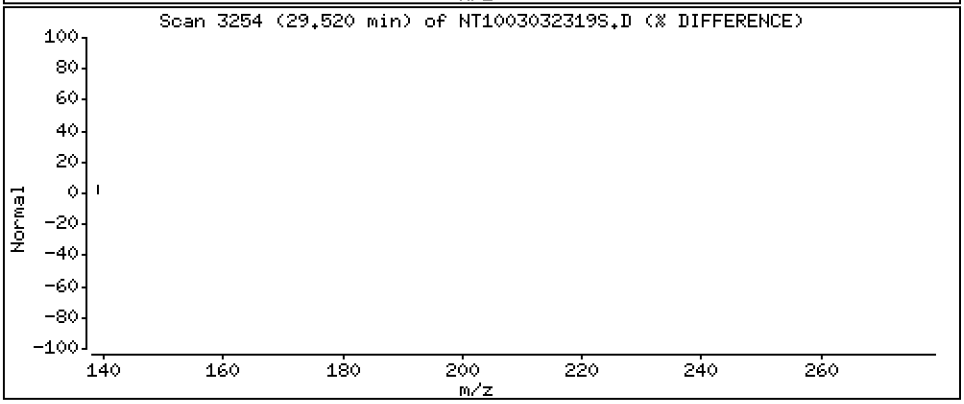












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT1003032319S.D
Lab Smp Id: 23A0249-03
Inj Date : 04-MAR-2023 05:12 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : 23A0249-03
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 11:26 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.925	6.917	(0.745)	956534	6.63601	6.636(R)
3	Phenol	94	8.571	8.556	(0.923)	442547	2.06006	2.060
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	9.290	9.283	(1.000)	504889	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	9.547	9.515	(1.028)	20499	0.17361	0.1736(M)
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	108	9.725	9.702	(1.047)	2202	0.01723	0.01723
15	4-Methylphenol	108	10.020	9.997	(1.079)	13511	0.10157	0.1016
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22	2,4-Dimethylphenol	107	11.082	11.057	(0.939)	2088	0.01383	0.01383
24	Benzoic acid	105	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	11.669	11.646	(0.989)	421	0.00329	0.003288
* 27	Naphthalene-d8	136	11.801	11.777	(1.000)	1779189	4.00000	
30	Hexachlorobutadiene	225	Compound Not Detected.					
39	Dimethylphthalate	163	14.850	14.811	(0.962)	5524	0.02111	0.02111(M)
* 42	Acenaphthene-d10	162	15.430	15.391	(1.000)	824129	4.00000	
50	Diethylphthalate	149	16.334	16.296	(1.059)	83843	0.33976	0.3398(M)
54	N-Nitrosodiphenylamine	169	16.829	16.790	(0.906)	3287	0.01333	0.01333
57	Hexachlorobenzene	284	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.569	18.530	(1.000)	1523281	4.00000	
$	66 Terphenyl-d14	244	21.733	21.702	(0.919)	797360	6.61949	6.619(R)
	67 Butylbenzylphthalate	149	Compound Not Detected.					
*	69 Chrysene-d12	240	23.661	23.630	(1.000)	1489566	4.00000	
*	77 Perylene-d12	264	26.511	26.456	(1.000)	1693189	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.520	29.450	(1.114)	34695	0.08839	0.08839(H)
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032319S.D
Lab Smp Id: 23A0249-03
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	502303	251152	1004606	504889	0.51
27 Naphthalene-d8	1751418	875709	3502836	1779189	1.59
42 Acenaphthene-d10	814551	407276	1629102	824129	1.18
59 Phenanthrene-d10	1450747	725374	2901494	1523281	5.00
69 Chrysene-d12	1335017	667509	2670034	1489566	11.58
77 Perylene-d12	1691506	845753	3383012	1693189	0.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.29	0.08
27 Naphthalene-d8	11.78	11.28	12.28	11.80	0.20
42 Acenaphthene-d10	15.39	14.89	15.89	15.43	0.25
59 Phenanthrene-d10	18.53	18.03	19.03	18.57	0.21
69 Chrysene-d12	23.63	23.13	24.13	23.66	0.13
77 Perylene-d12	26.46	25.96	26.96	26.51	0.21

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

REVIEW SUMMARY FOR FILE - NT1003032319S.D

Lab ID: 23A0249-03
nt10.i, 20230303A.b\SIM.b\SIMABN2.m,   04-MAR-2023 05:12

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1003032315ICVS.d

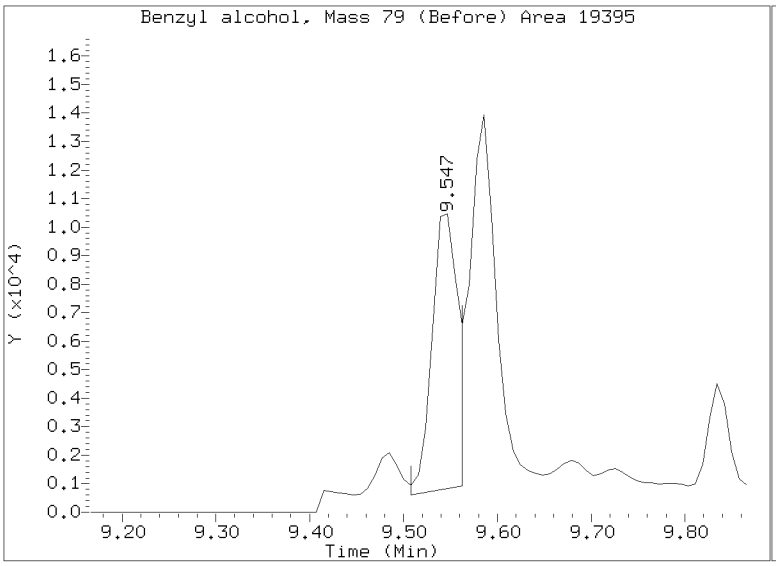
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

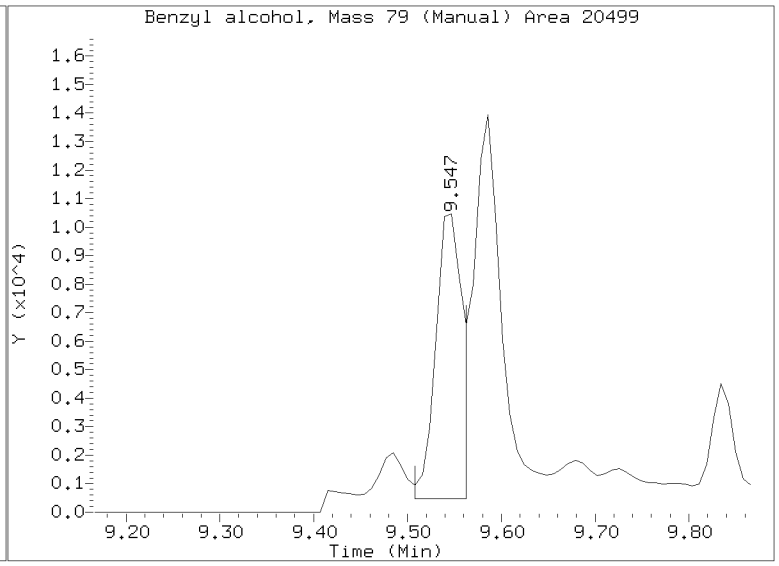
Exception: 1,2,4-Trichlorobenzene 0.0010

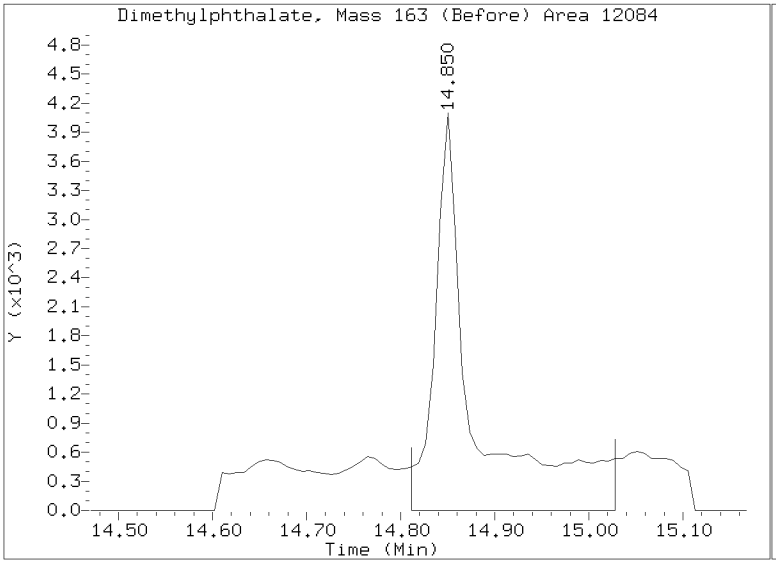
* Only compounds listed in the work order have been verified by the analyst *

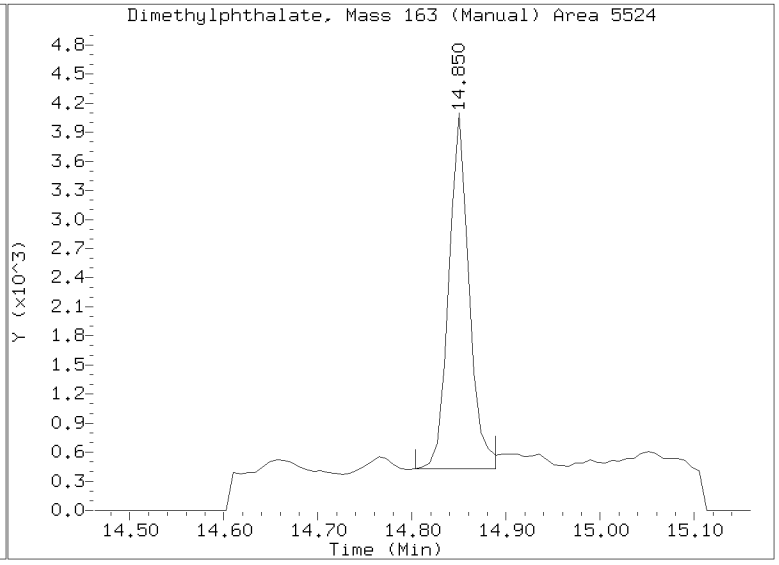
Quant Ion Manual Peak Adjustment Report

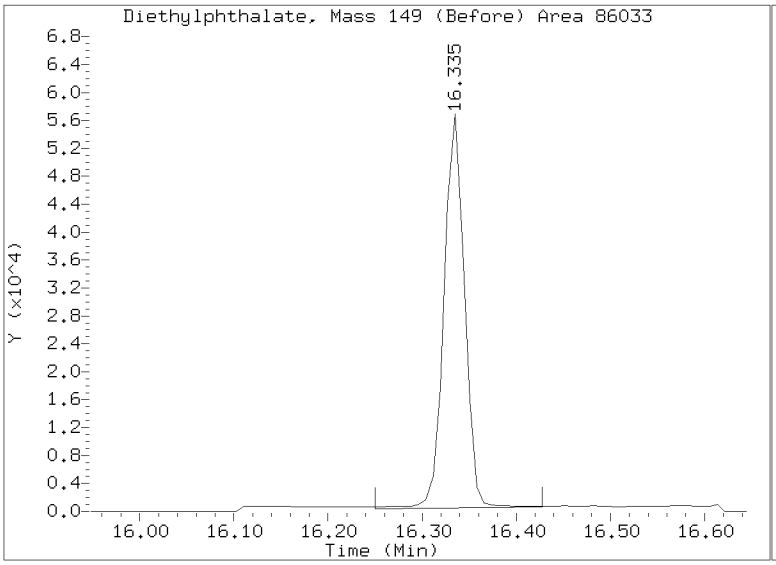
Datafile: //target/share/chem3/nt10.i/20230303A.b/SIM.b/NT1003032319S.D
Injection Date: 04-MAR-2023 05:12
Lab ID:23A0249-03 Client ID:
Report Date: 03/17/2023 11:26

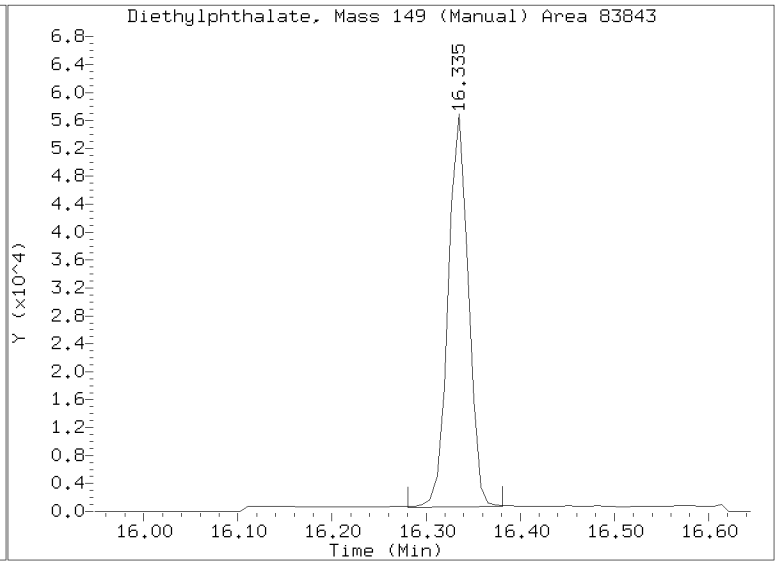












Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1084

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-04 A	SDG:	23A0249
Sampled:	01/12/23 09:47	Prepared:	01/30/23 14:02	File ID:	NT1003032320S.D
% Solids:	53.88	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 05:50
Batch:	BLA0673	Sequence:	SLC0253	Initial/Final:	18.69 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00032
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	5.0	U	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	19.9	U	2.5	19.9
65-85-0	Benzoic acid	1	99.3	U	13.3	99.3
105-67-9	2,4-Dimethylphenol	1	19.9	U	2.2	19.9
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	19.9	U	2.1	19.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	744.77	499	66.9	27 - 120	
p-Terphenyl-d14	496.52	610	123	37 - 120	*,Q

Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323205.D

Page 1

Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

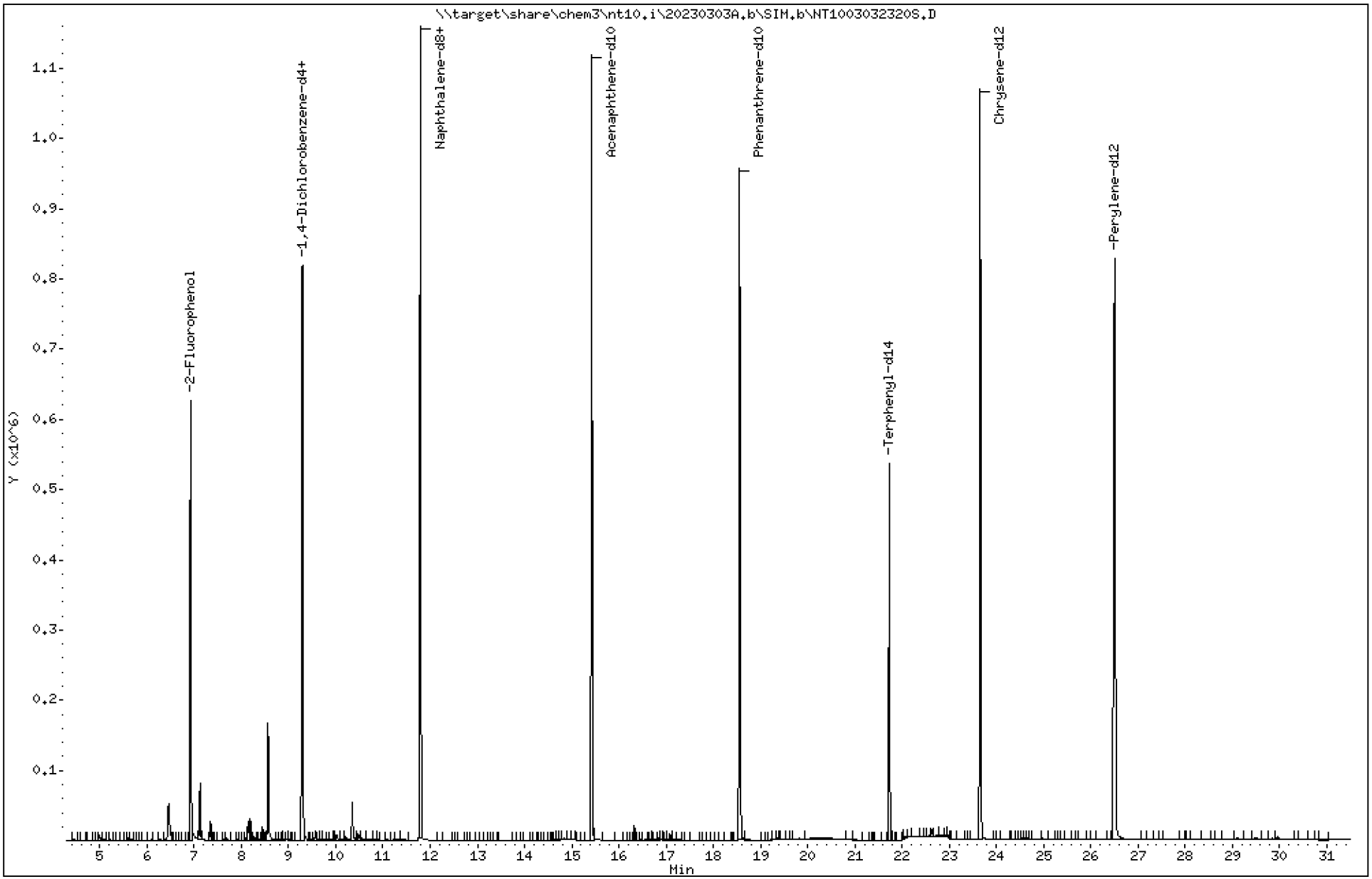
Sample Info: 23A0249-04

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

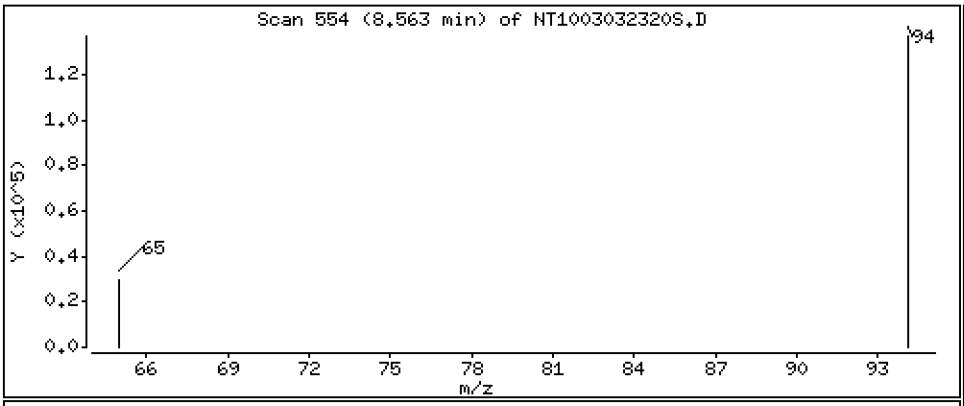
Operator: JGR

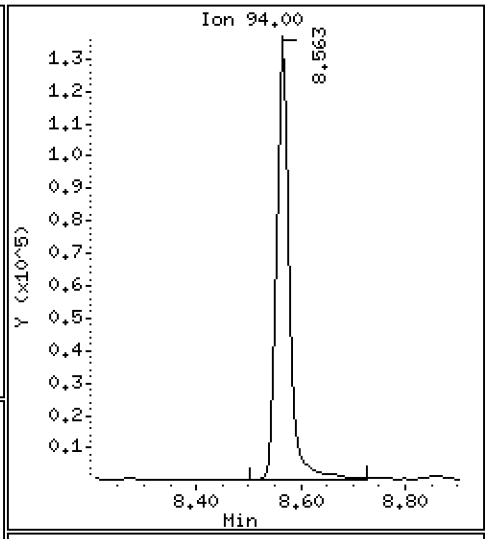
Column phase: ZB-5msi

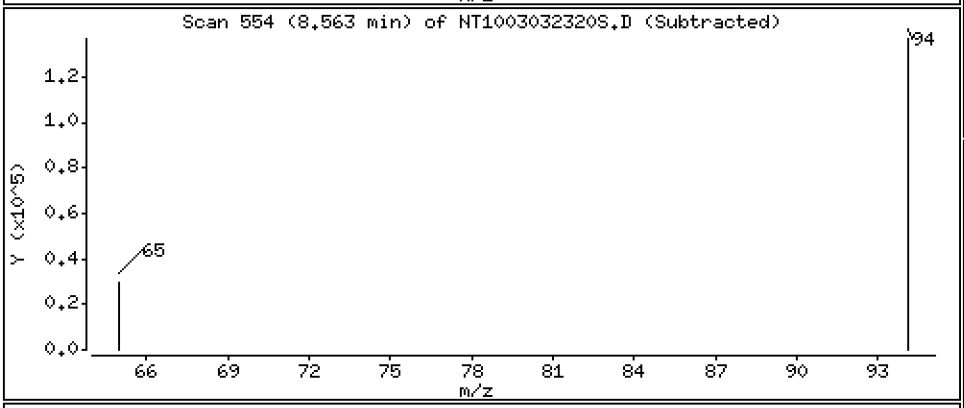
Column diameter: 0.25

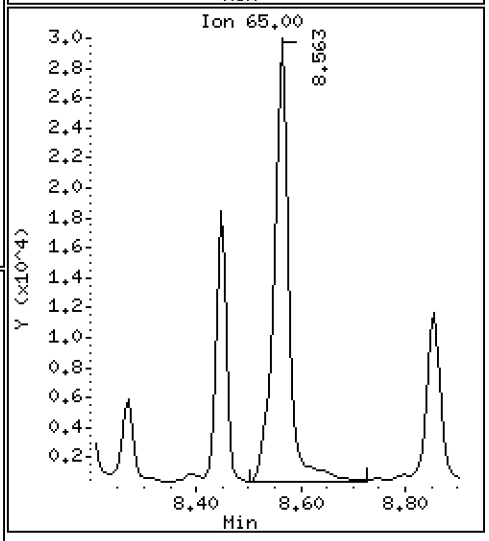
3 Phenol

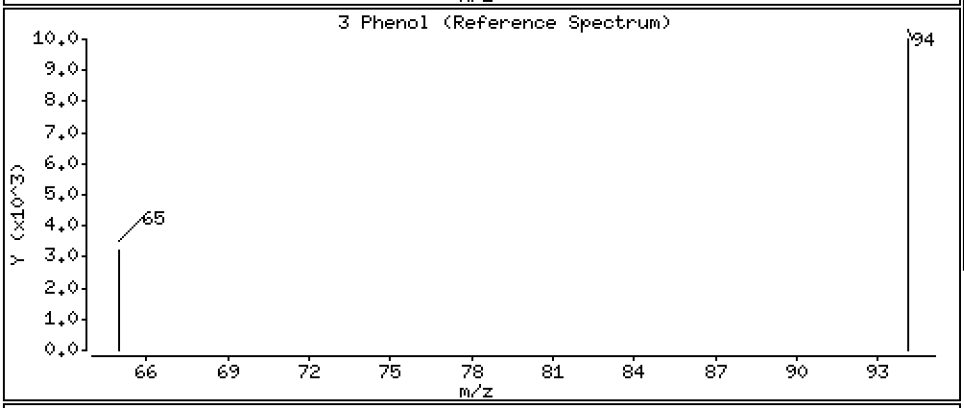
Concentration: 1.027 ug/L

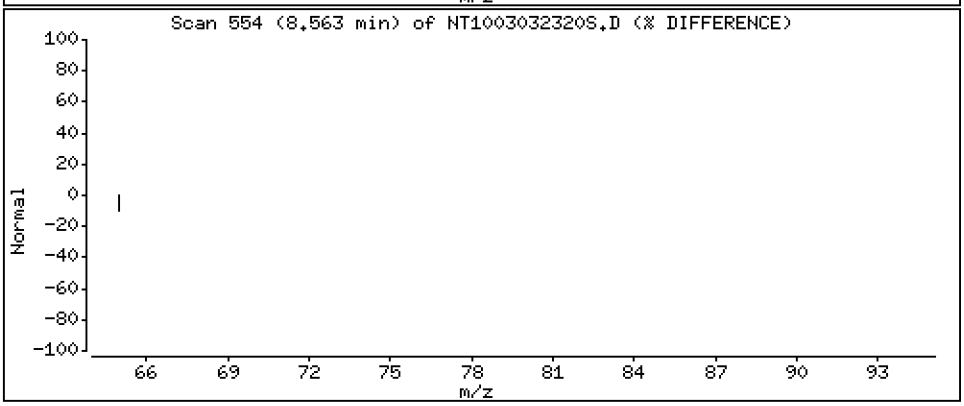












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

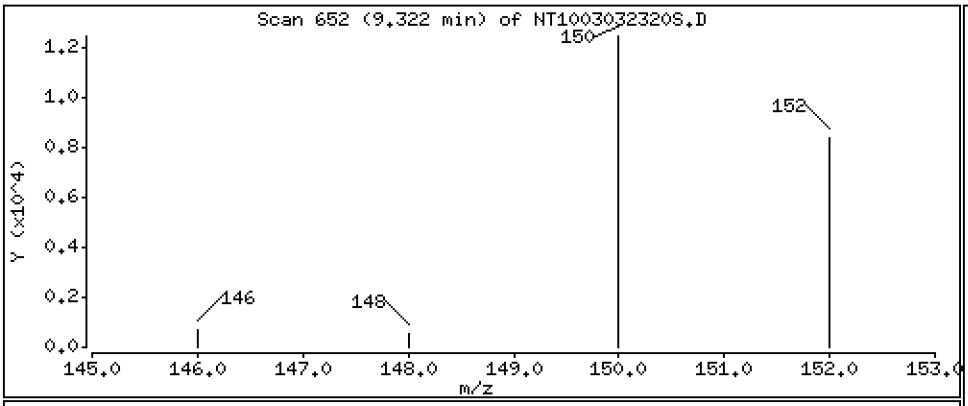
Operator: JGR

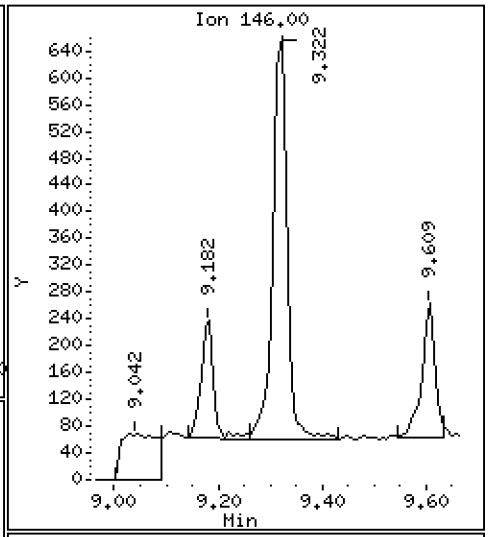
Column phase: ZB-5msi

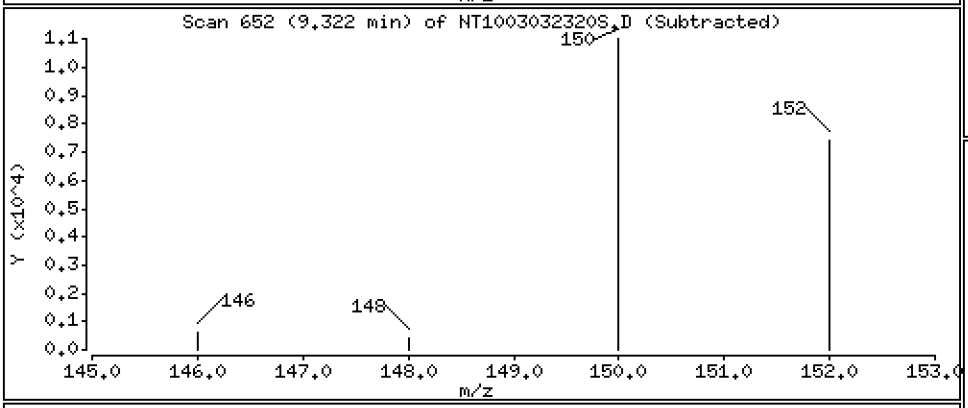
Column diameter: 0.25

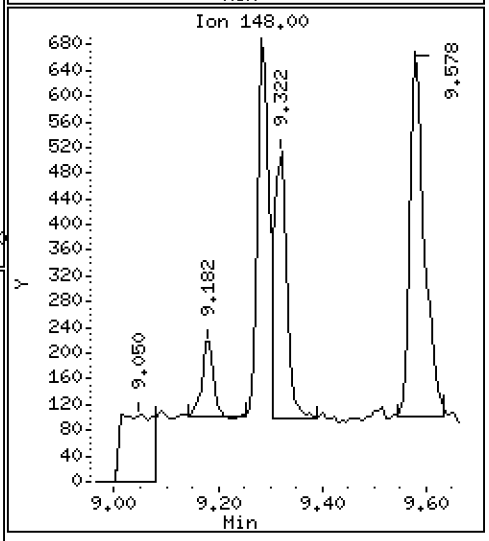
9 1,4-Dichlorobenzene

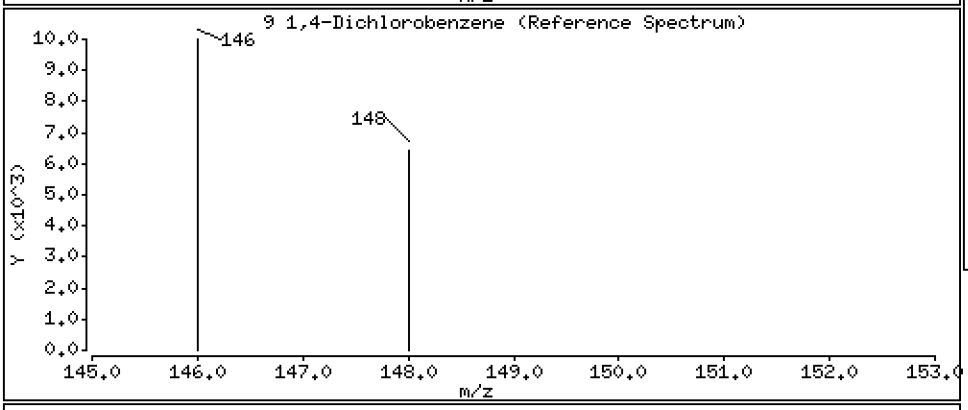
Concentration: 0.005848 ug/L

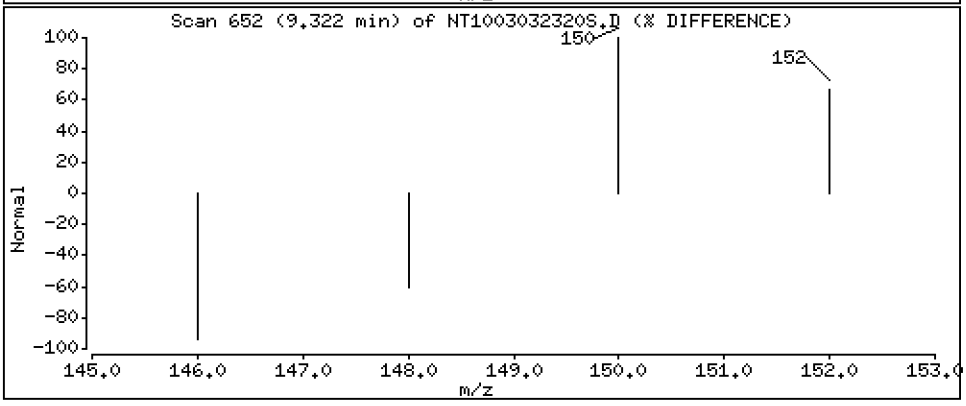












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323205.D

Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

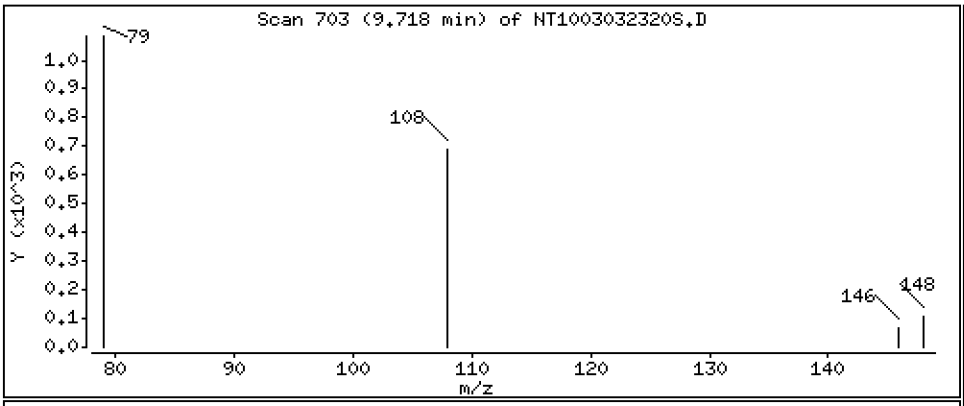
Operator: JGR

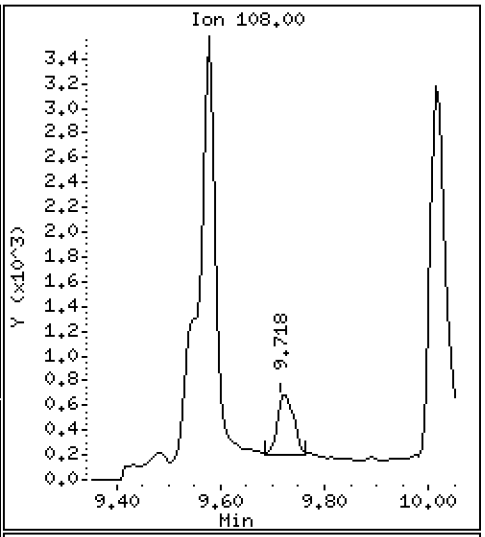
Column phase: ZB-5msi

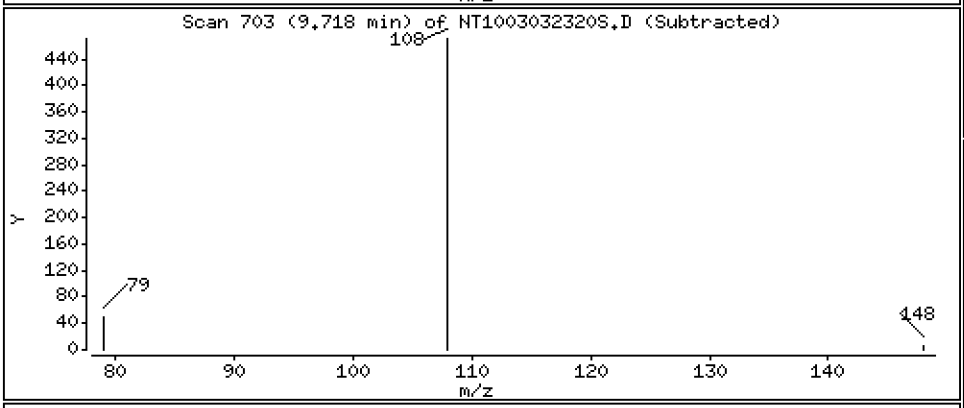
Column diameter: 0.25

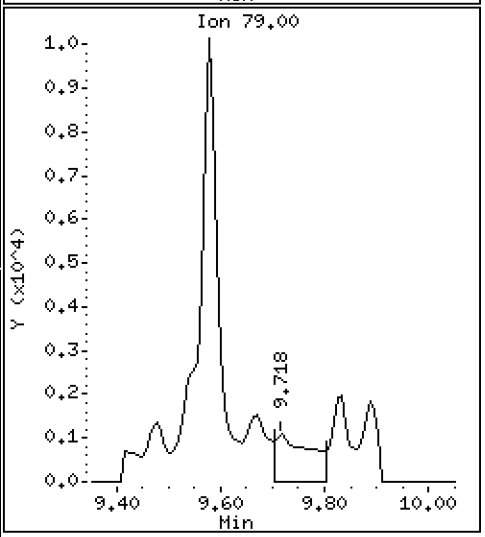
13 2-Methylphenol

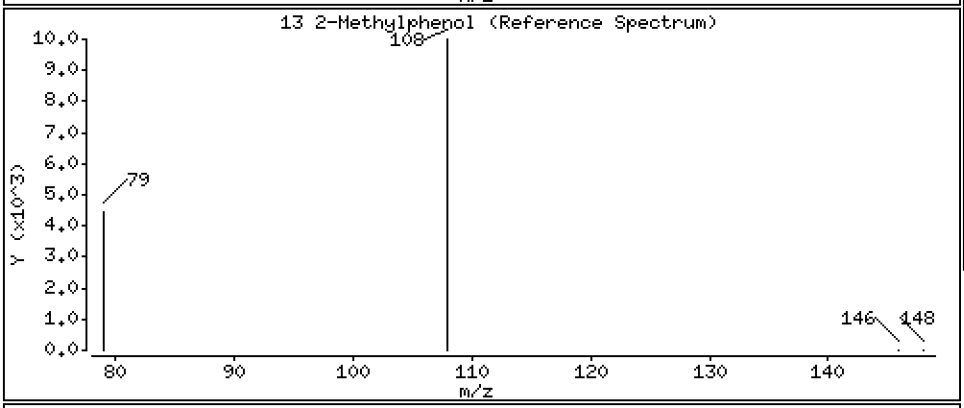
Concentration: 0.008296 ug/L

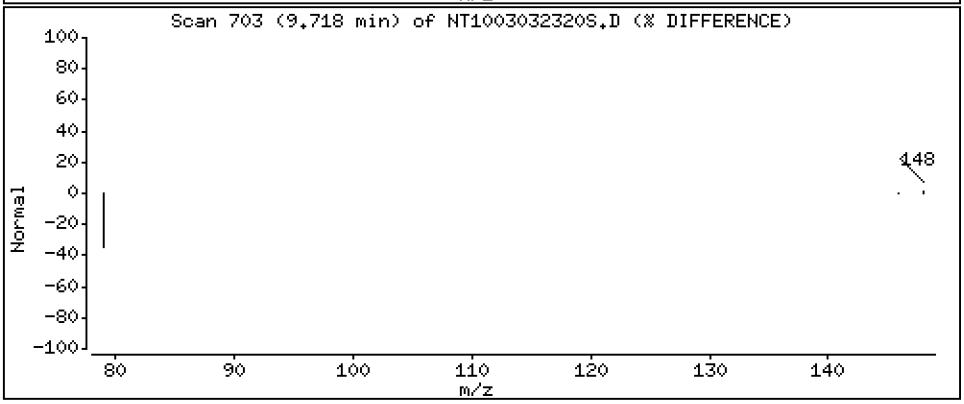












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

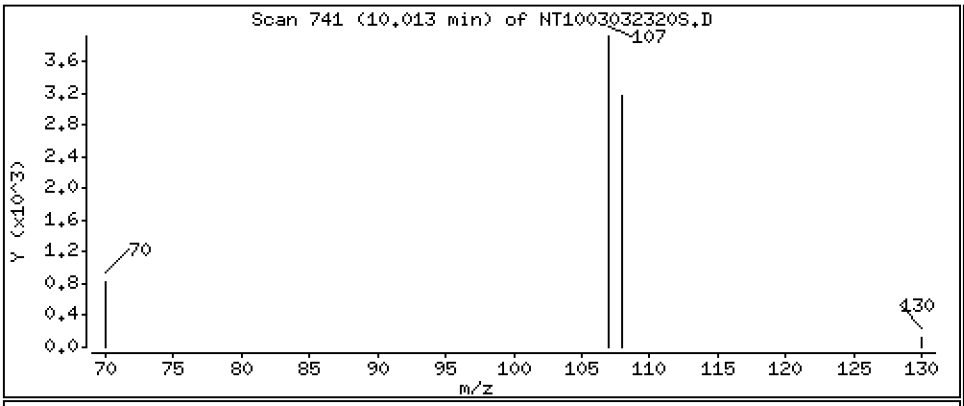
Operator: JGR

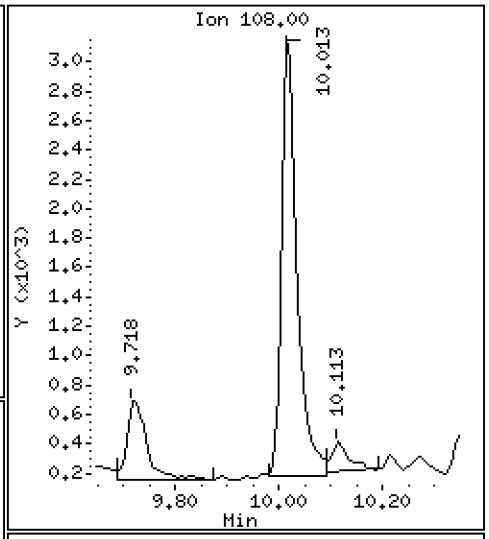
Column phase: ZB-5msi

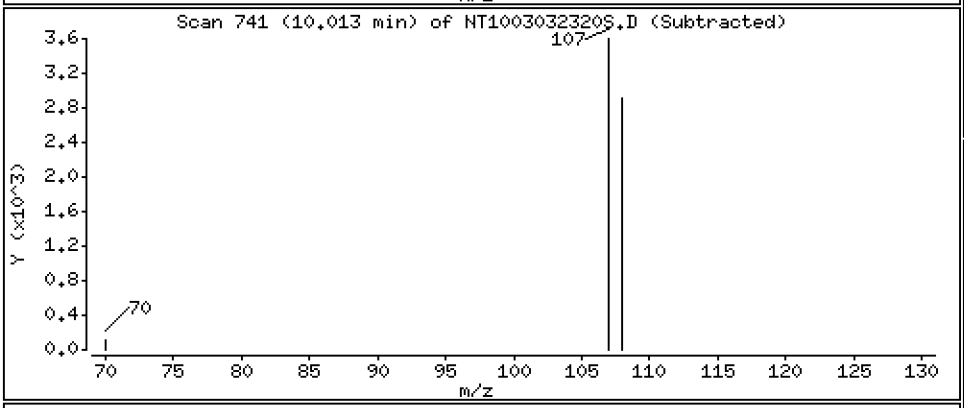
Column diameter: 0.25

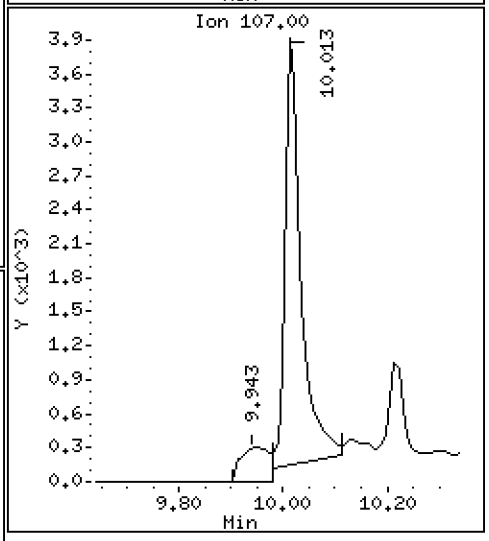
15 4-Methylphenol

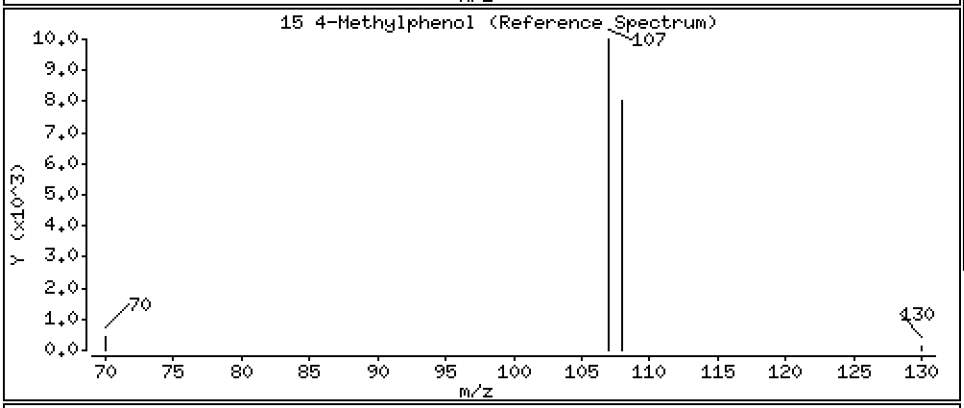
Concentration: 0.04558 ug/L

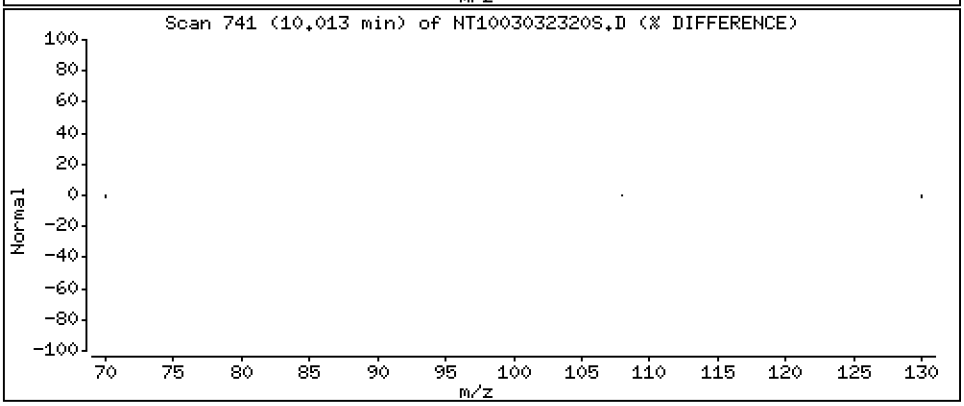












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

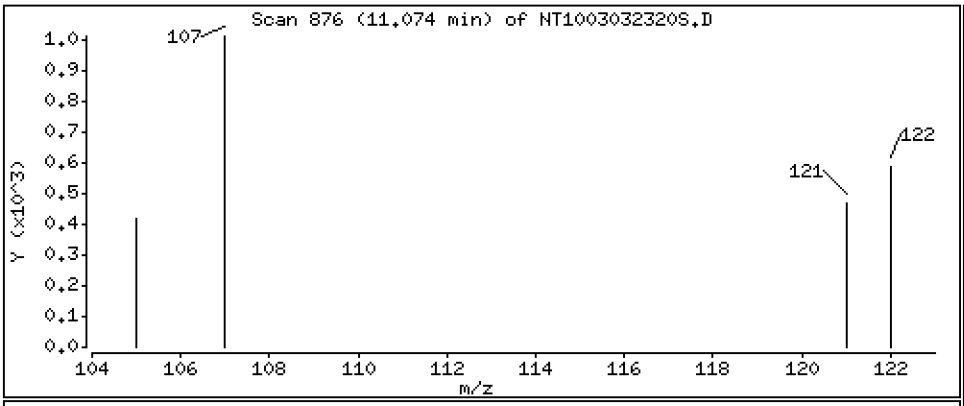
Operator: JGR

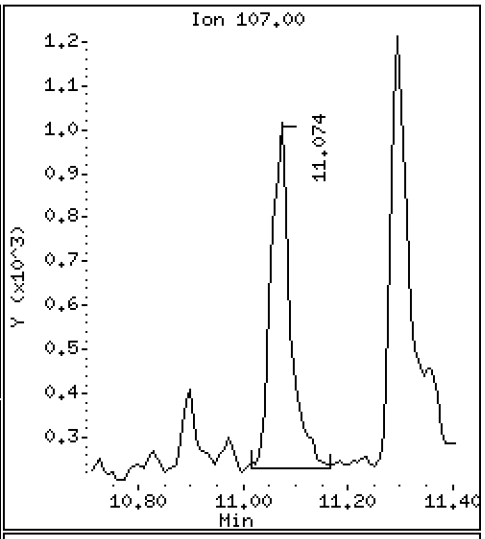
Column phase: ZB-5msi

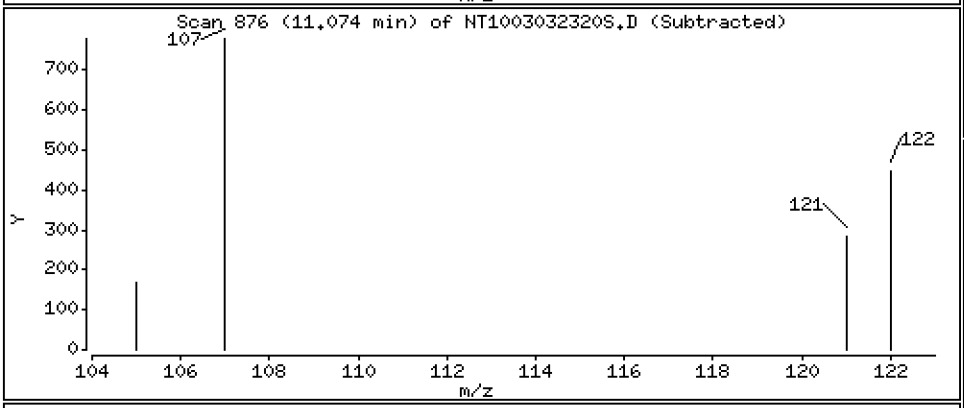
Column diameter: 0.25

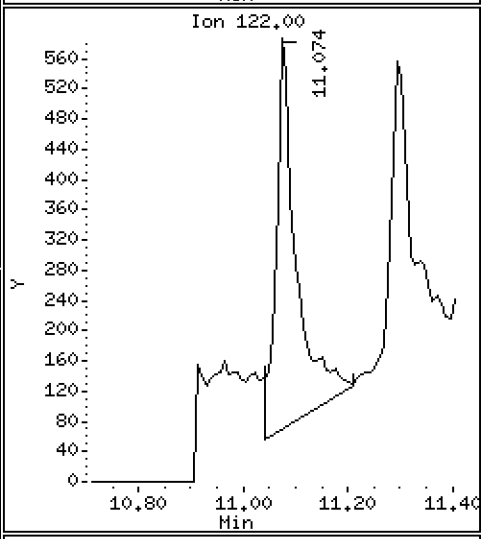
22 2,4-Dimethylphenol

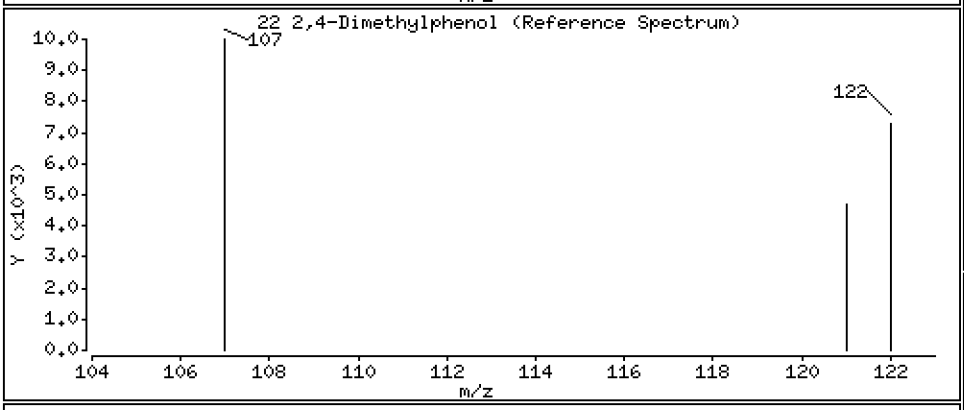
Concentration: 0.01340 ug/L

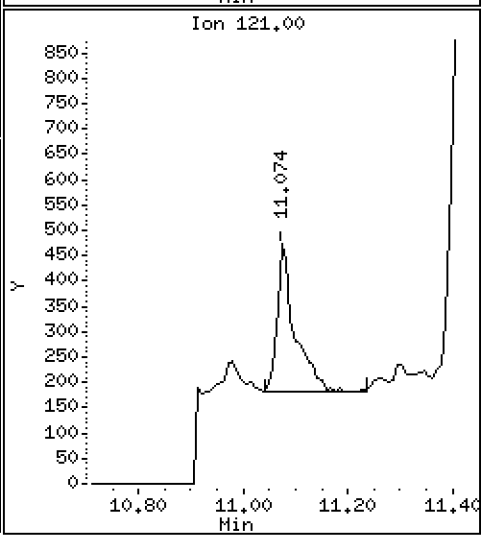


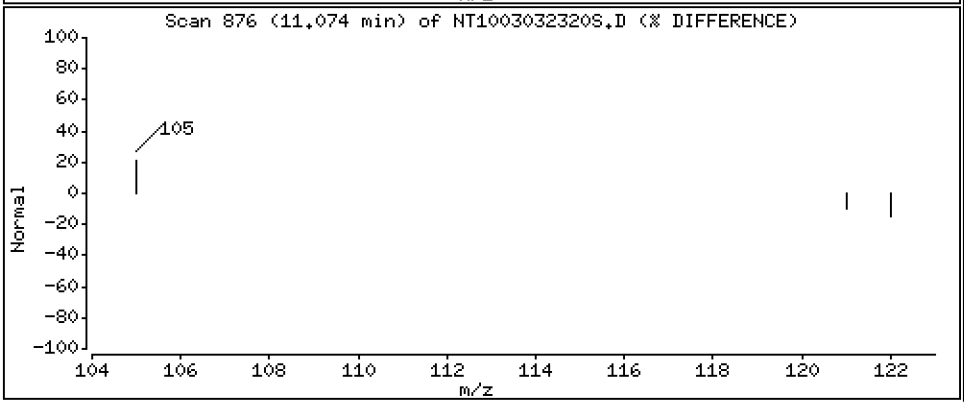












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323205.D

Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

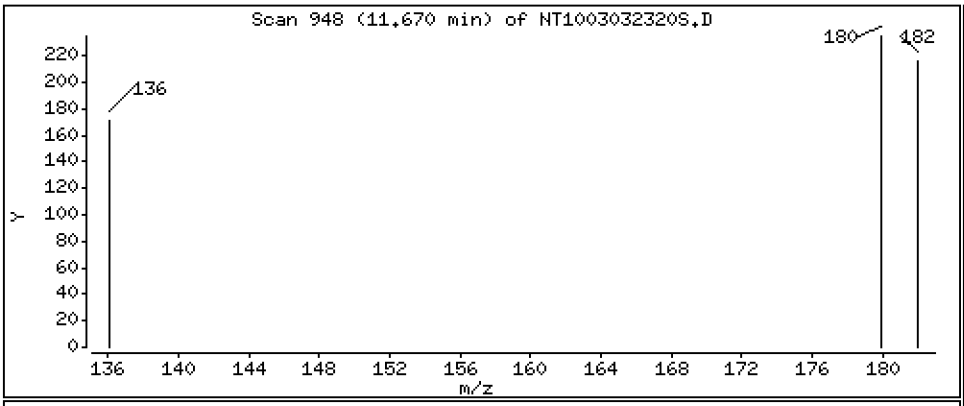
Operator: JGR

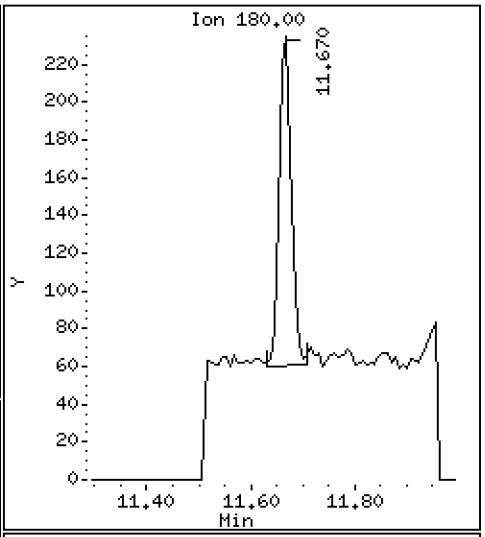
Column phase: ZB-5msi

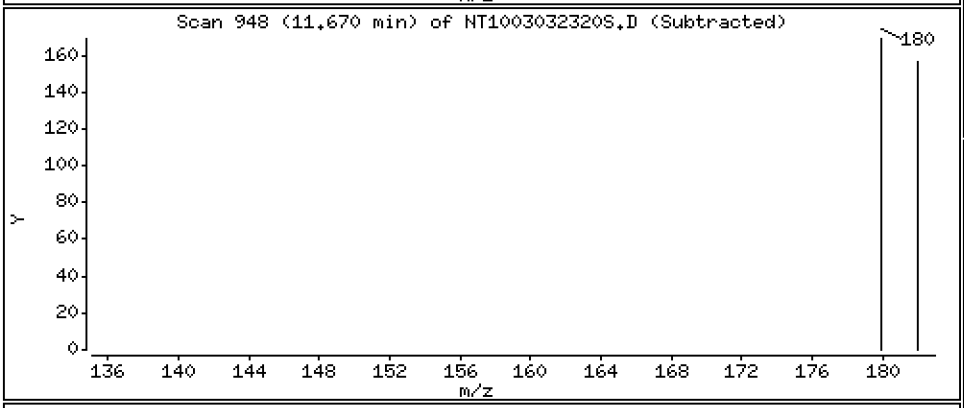
Column diameter: 0.25

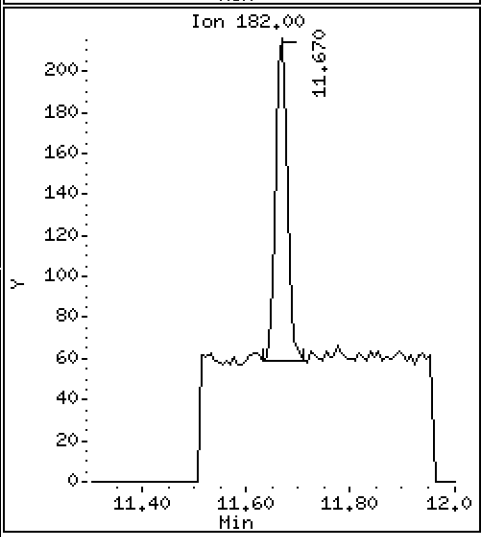
26 1,2,4-Trichlorobenzene

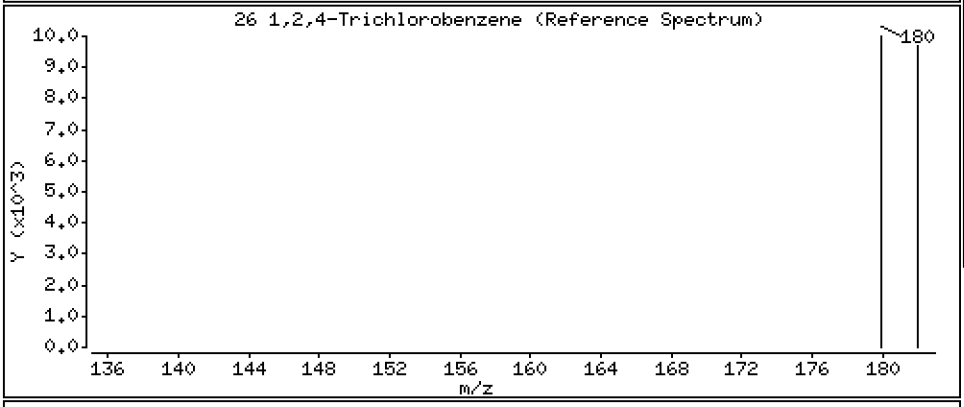
Concentration: 0.002132 ug/L

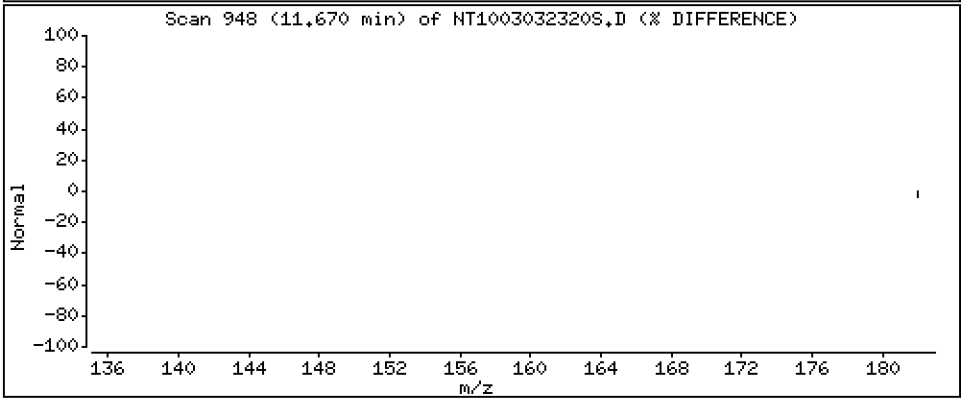












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

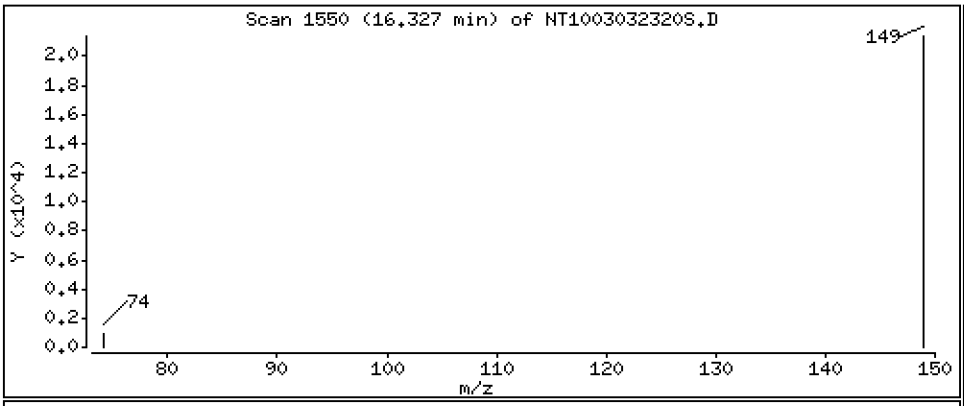
Operator: JGR

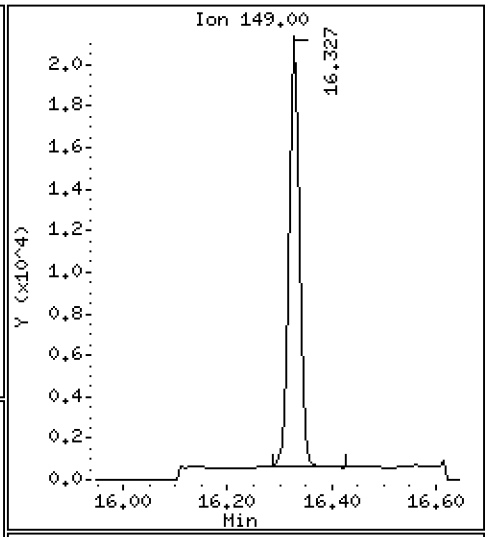
Column phase: ZB-5msi

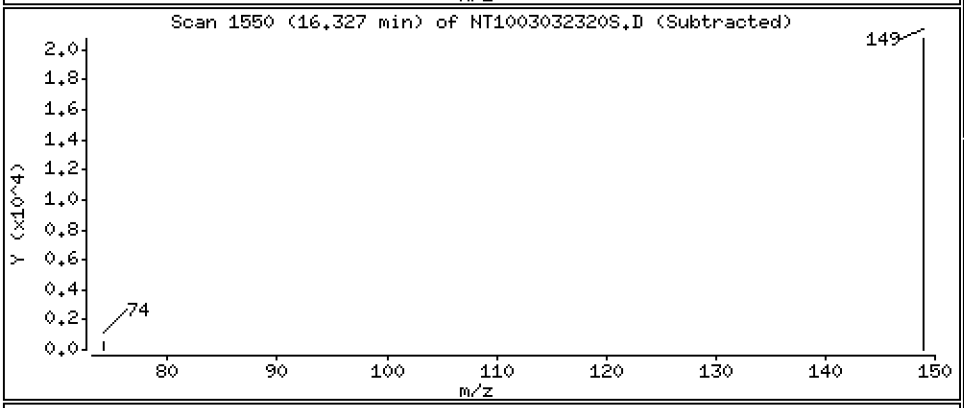
Column diameter: 0.25

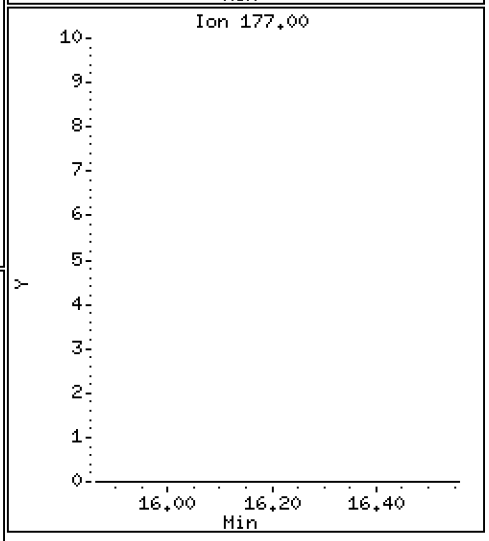
50 Diethylphthalate

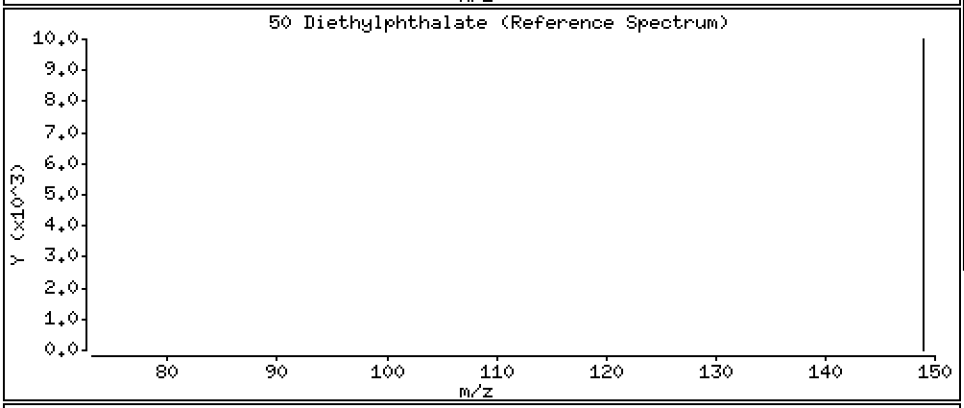
Concentration: 0.1183 ug/L

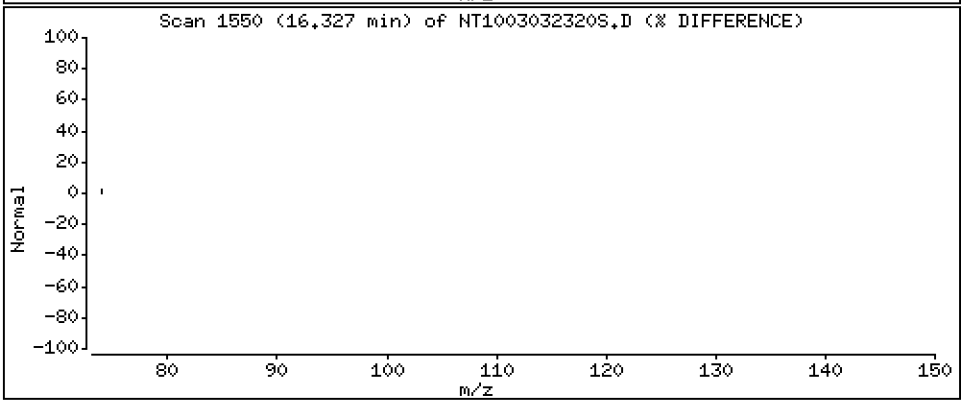












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Date : 04-MAR-2023 05:50

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-04

Volume Injected (uL): 1.0

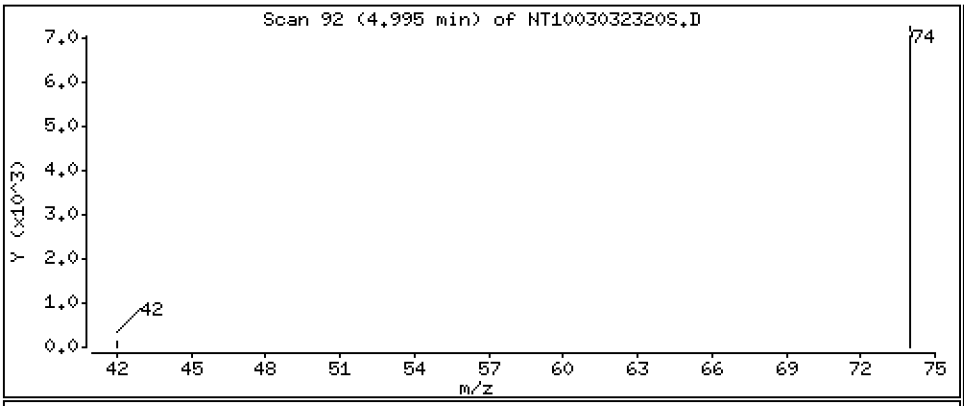
Operator: JGR

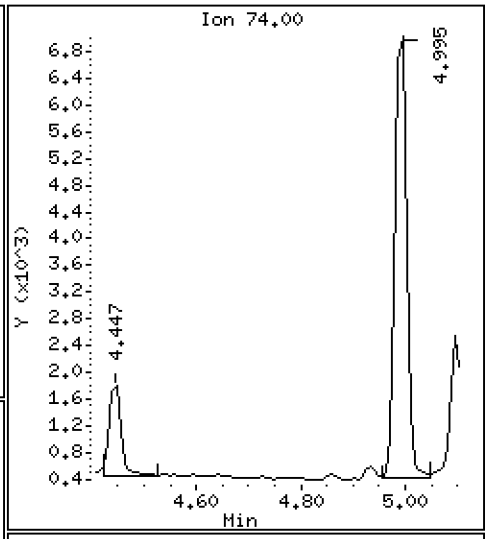
Column phase: ZB-5msi

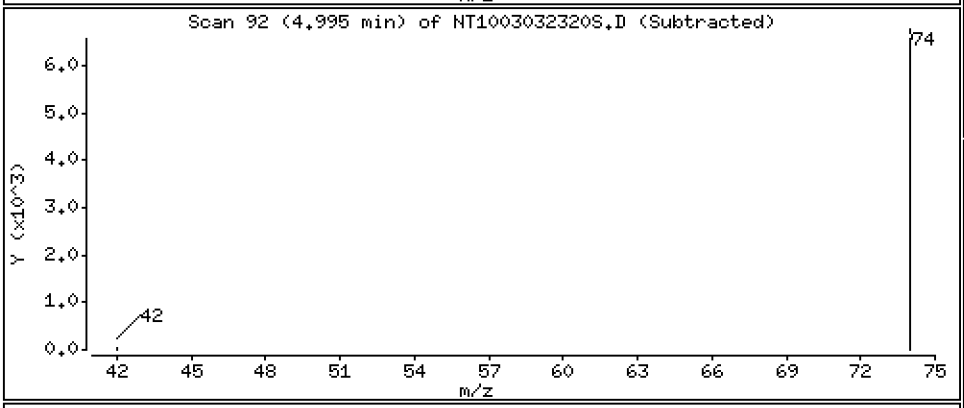
Column diameter: 0.25

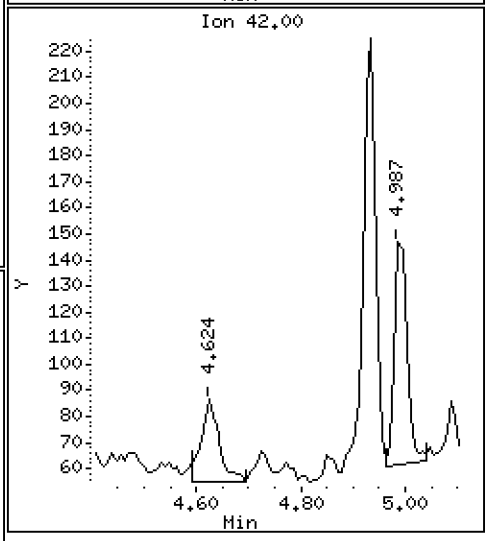
90 N-Nitrosodimethylamine

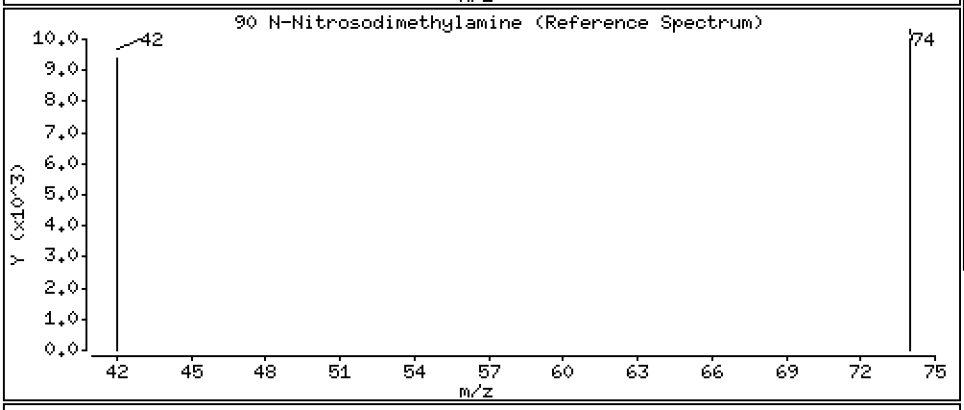
Concentration: 0.1116 ug/L

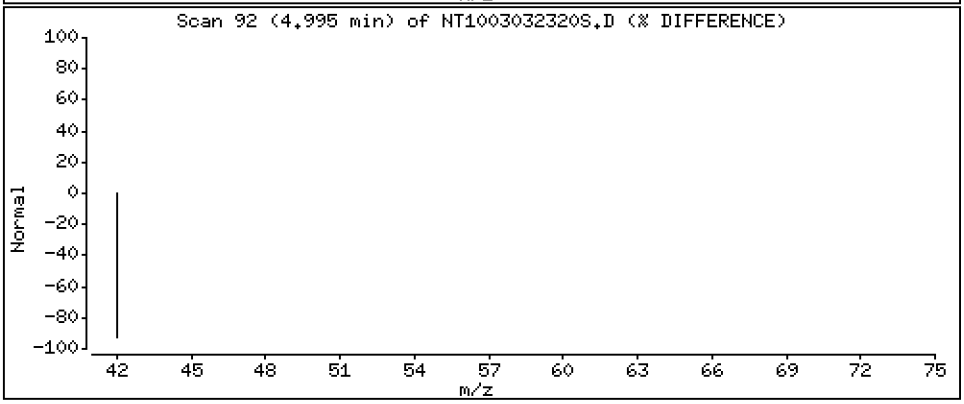












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT1003032320S.D
Lab Smp Id: 23A0249-04
Inj Date : 04-MAR-2023 05:50 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : 23A0249-04
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 11:26 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.917	6.917	(0.745)	752260	5.02031	5.020(R)
3	Phenol	94	8.563	8.556	(0.922)	228137	1.02706	1.027
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	9.290	9.283	(1.000)	524856	4.00000	
9	1,4-Dichlorobenzene	146	9.321	9.314	(1.003)	1106	0.00585	0.005848
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	108	9.717	9.702	(1.046)	1102	0.00830	0.008296(M)
15	4-Methylphenol	108	10.012	9.997	(1.078)	6299	0.04558	0.04558
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22	2,4-Dimethylphenol	107	11.073	11.057	(0.939)	2074	0.01340	0.01340(M)
24	Benzoic acid	105	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	11.669	11.646	(0.990)	280	0.00213	0.002132(M)
* 27	Naphthalene-d8	136	11.793	11.777	(1.000)	1824588	4.00000	
30	Hexachlorobutadiene	225	Compound Not Detected.					
39	Dimethylphthalate	163	Compound Not Detected.					
* 42	Acenaphthene-d10	162	15.422	15.391	(1.000)	848291	4.00000	
50	Diethylphthalate	149	16.326	16.296	(1.059)	30060	0.11834	0.1183
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.561	18.530	(1.000)	1534427	4.00000	
$	66 Terphenyl-d14	244	21.733	21.702	(0.919)	636243	6.13835	6.138(R)
	67 Butylbenzylphthalate	149	Compound Not Detected.					
*	69 Chrysene-d12	240	23.661	23.630	(1.000)	1281744	4.00000	
*	77 Perylene-d12	264	26.502	26.456	(1.000)	1698962	4.00000	
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	90 N-Nitrosodimethylamine	74	4.994	4.755	(0.538)	9901	0.11161	0.1116

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032320S.D
Lab Smp Id: 23A0249-04
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	502303	251152	1004606	524856	4.49
27 Naphthalene-d8	1751418	875709	3502836	1824588	4.18
42 Acenaphthene-d10	814551	407276	1629102	848291	4.14
59 Phenanthrene-d10	1450747	725374	2901494	1534427	5.77
69 Chrysene-d12	1335017	667509	2670034	1281744	-3.99
77 Perylene-d12	1691506	845753	3383012	1698962	0.44

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.29	0.08
27 Naphthalene-d8	11.78	11.28	12.28	11.79	0.13
42 Acenaphthene-d10	15.39	14.89	15.89	15.42	0.20
59 Phenanthrene-d10	18.53	18.03	19.03	18.56	0.17
69 Chrysene-d12	23.63	23.13	24.13	23.66	0.13
77 Perylene-d12	26.46	25.96	26.96	26.50	0.17

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

REVIEW SUMMARY FOR FILE - NT1003032320S.D

Lab ID: 23A0249-04
nt10.i, 20230303A.b\SIM.b\SIMABN2.m,   04-MAR-2023 05:50

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.538	0.512	0.0253	N-Nitrosodimethylamine

RRT check based on Ccal File: SIM.b/NT1003032315ICVS.d

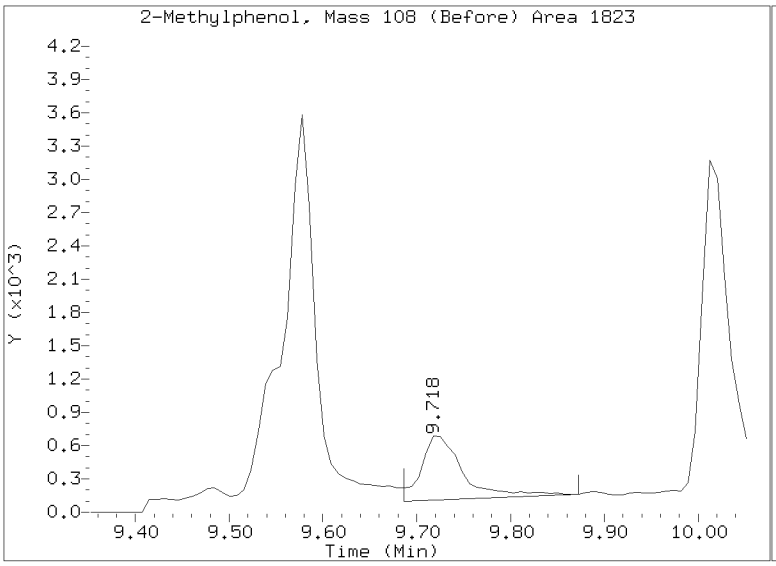
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

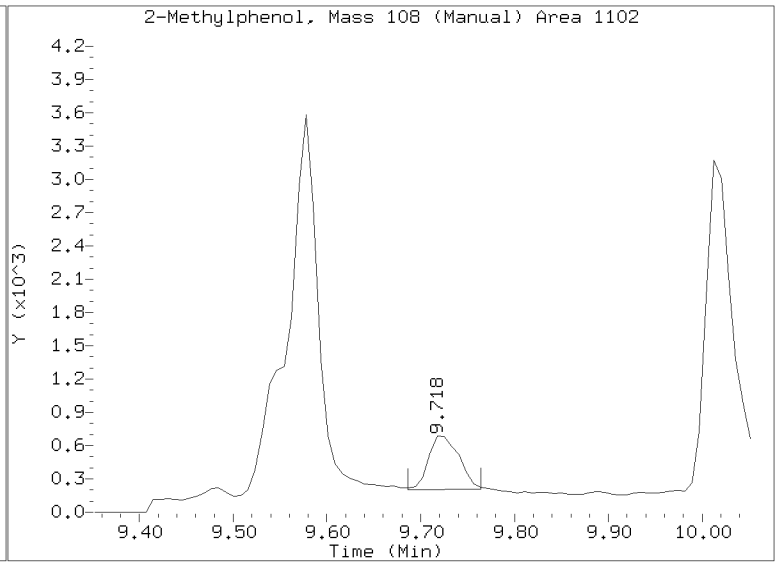
Exception: 1,2,4-Trichlorobenzene 0.0010

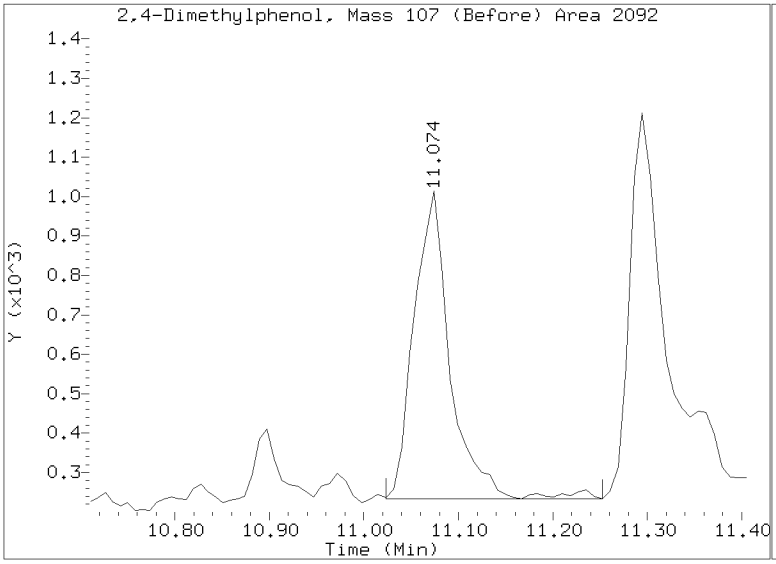
* Only compounds listed in the work order have been verified by the analyst *

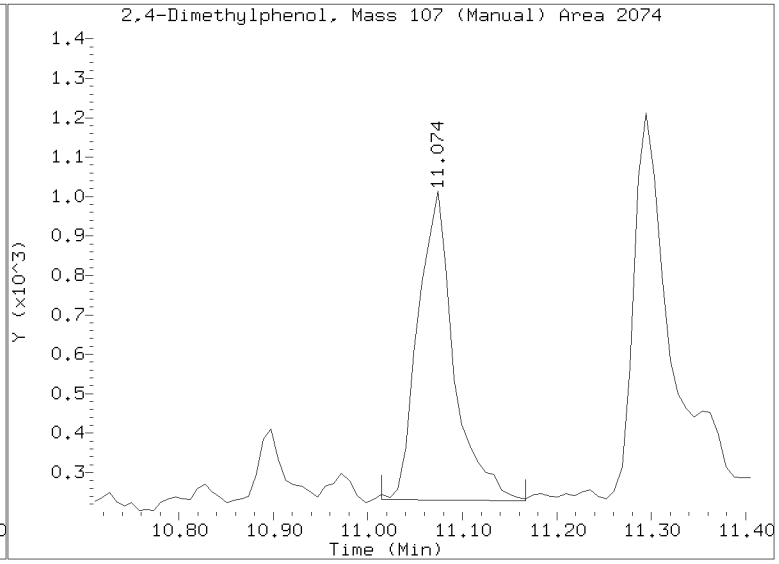
Quant Ion Manual Peak Adjustment Report

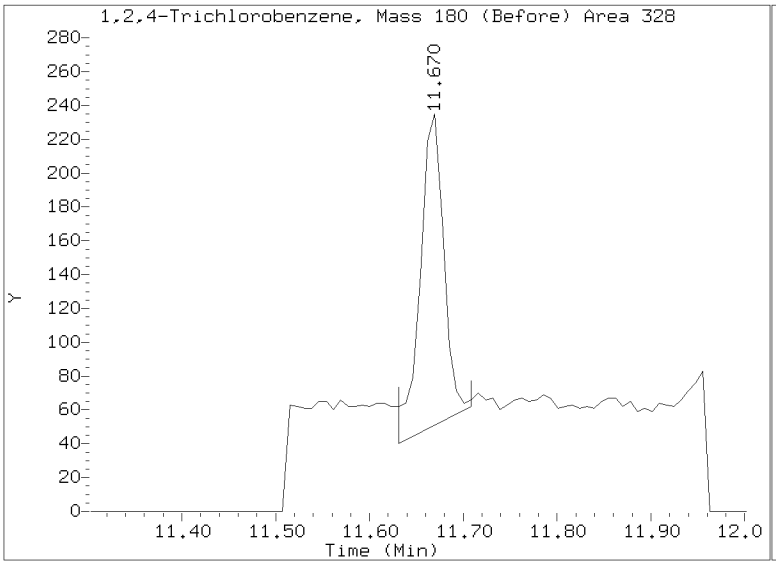
Datafile: //target/share/chem3/nt10.i/20230303A.b/SIM.b/NT1003032320S.D
Injection Date: 04-MAR-2023 05:50
Lab ID:23A0249-04 Client ID:
Report Date: 03/17/2023 11:26

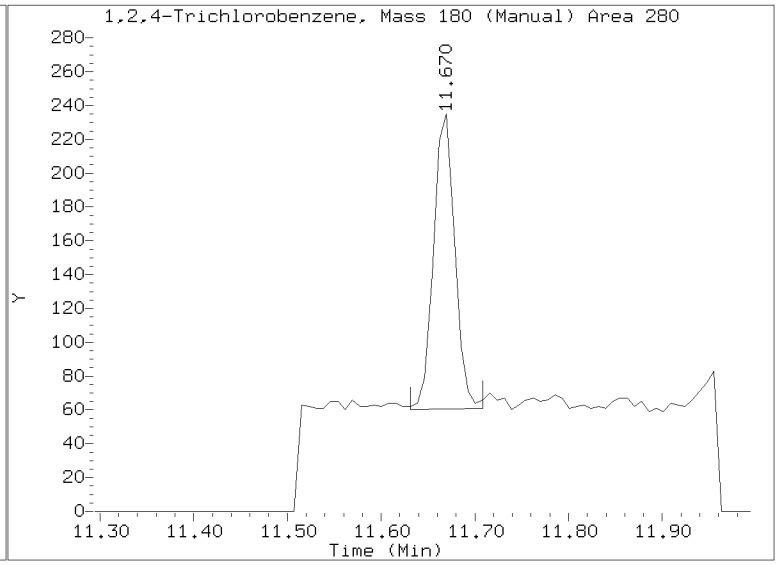












LDW23-SC1025

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-05 A	SDG:	23A0249
Sampled:	01/12/23 11:28	Prepared:	01/30/23 14:02	File ID:	NT1003032321S.D
% Solids:	59.36	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 06:28
Batch:	BLA0673	Sequence:	SLC0253	Initial/Final:	17.5 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00032
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	2.2	J	0.6	4.8
95-50-1	1,2-Dichlorobenzene	1	1.1	J	0.7	4.8
100-51-6	Benzyl Alcohol	1	19.3	U	2.4	19.3
65-85-0	Benzoic acid	1	96.3	U	12.9	96.3
105-67-9	2,4-Dimethylphenol	1	3.9	J	2.1	19.3
120-82-1	1,2,4-Trichlorobenzene	1	4.8	U	2.6	4.8
86-30-6	N-Nitrosodiphenylamine	1	4.8	U	1.3	4.8
87-86-5	Pentachlorophenol	1	19.3	U	2.1	19.3

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	721.99	600	83.1	27 - 120	
p-Terphenyl-d14	481.32	813	169	37 - 120	*,Q

Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323215.D

Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

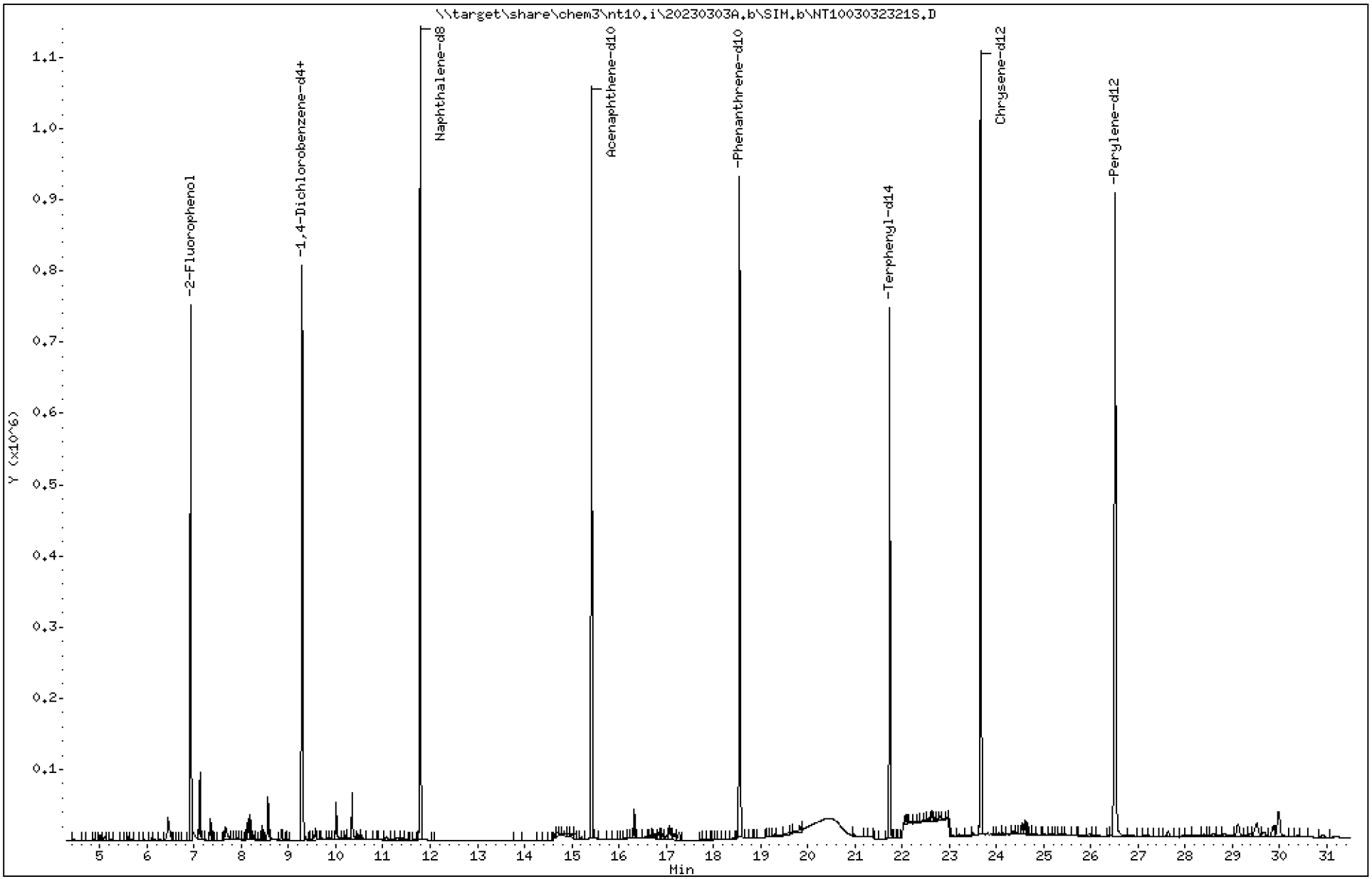
Sample Info: 23A0249-05

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

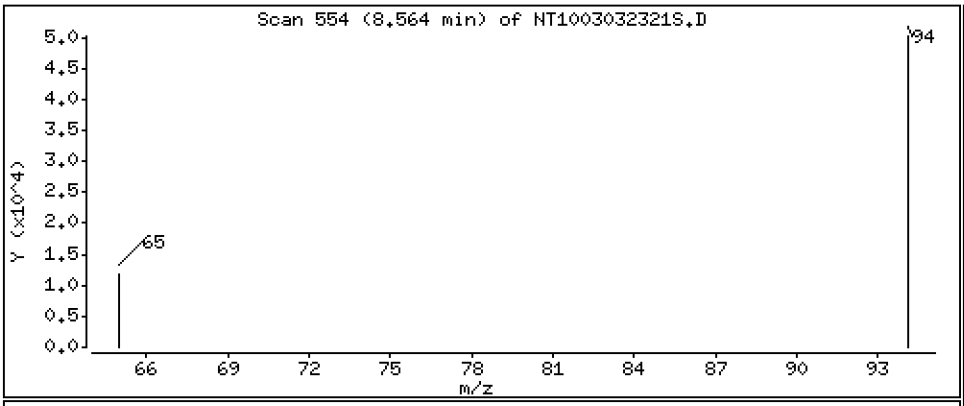
Operator: JGR

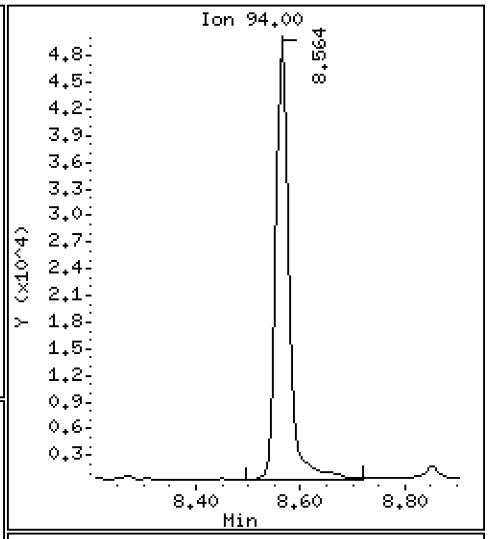
Column phase: ZB-5msi

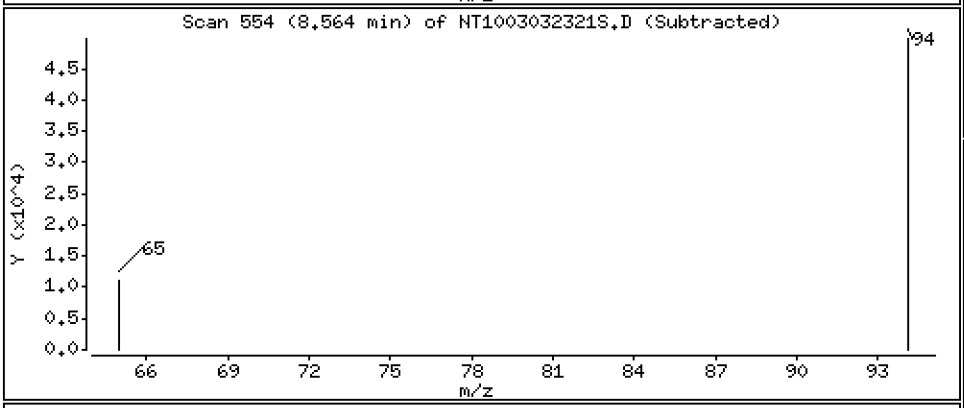
Column diameter: 0.25

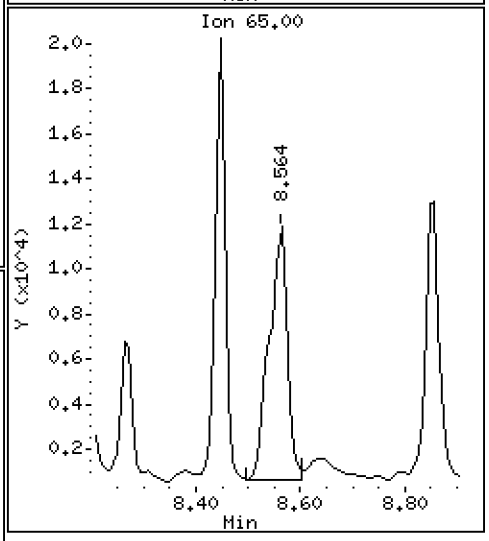
3 Phenol

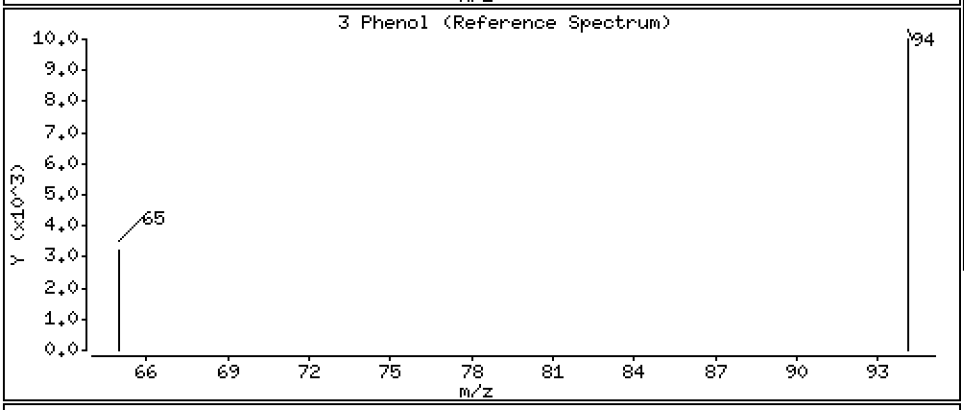
Concentration: 0.3983 ug/L

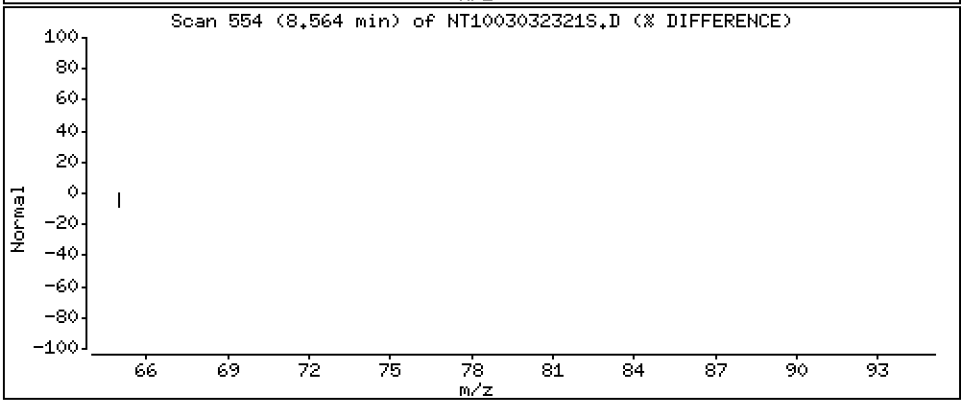












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

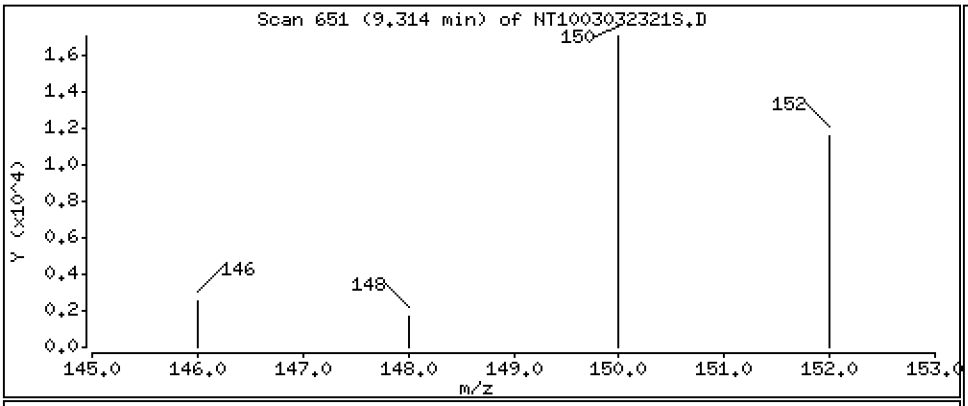
Operator: JGR

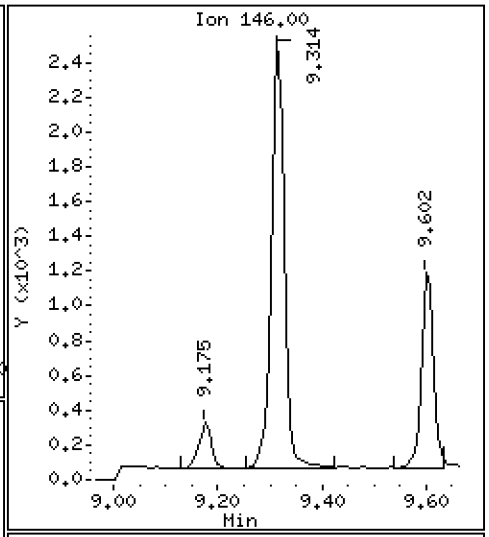
Column phase: ZB-5msi

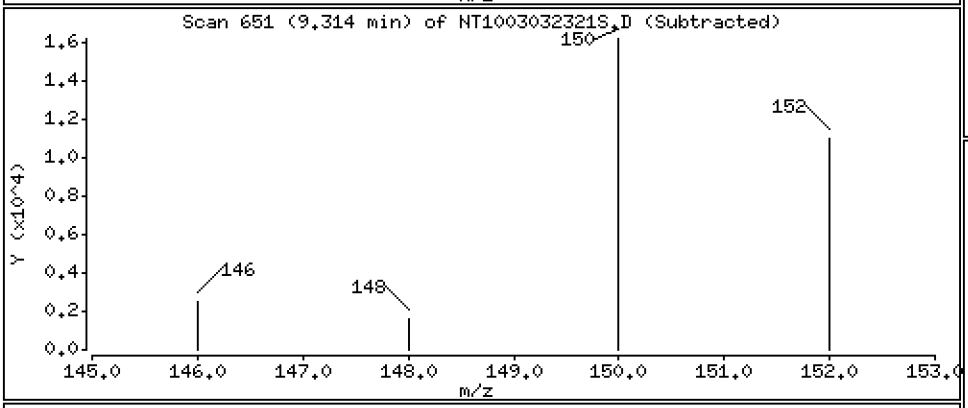
Column diameter: 0.25

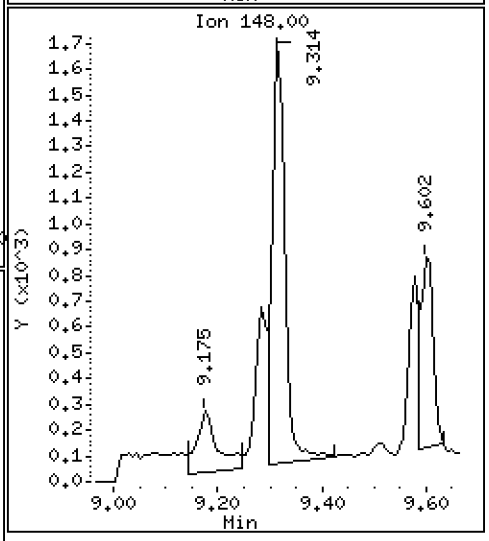
9 1,4-Dichlorobenzene

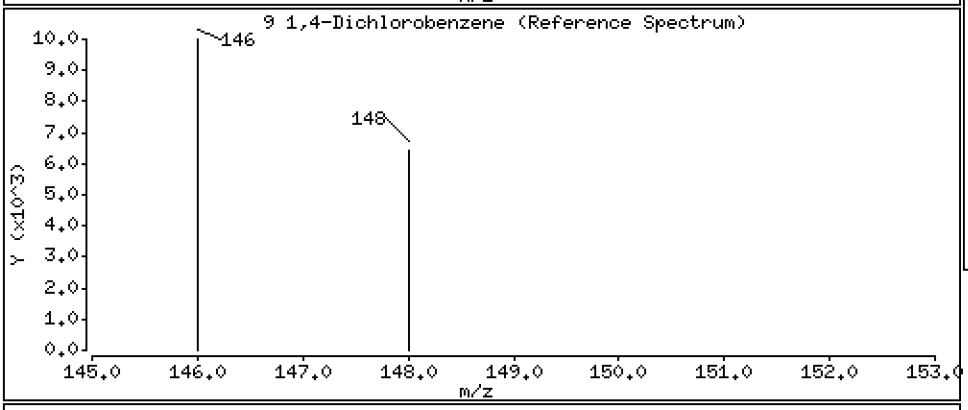
Concentration: 0.02249 ug/L

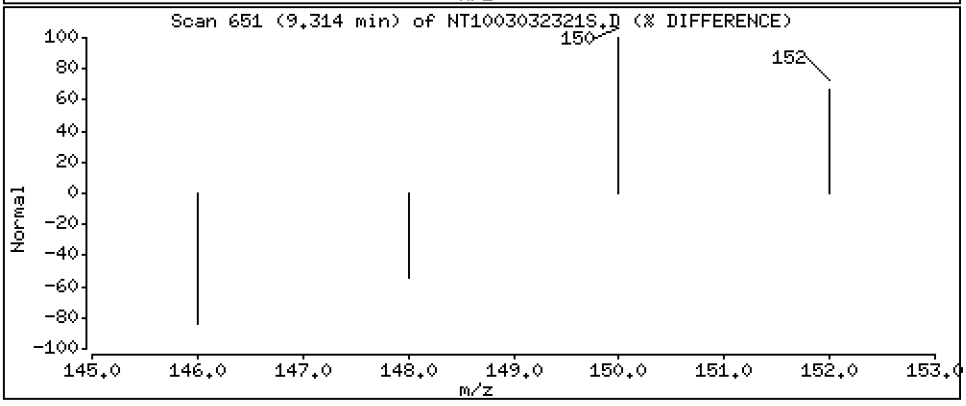












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

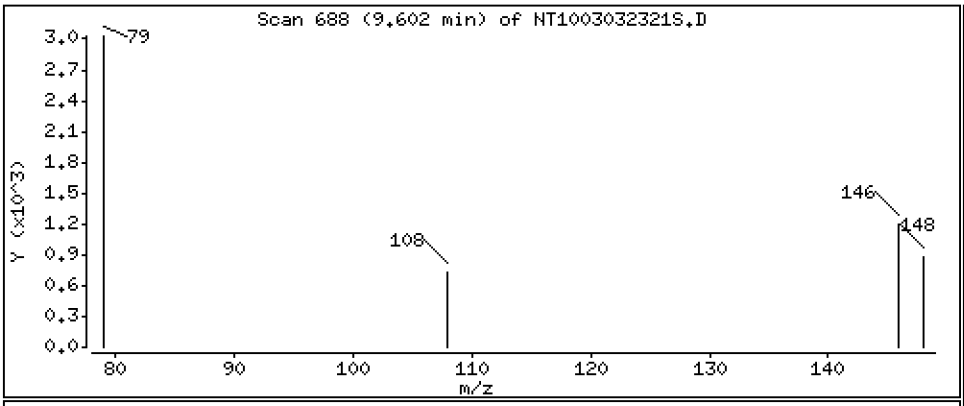
Operator: JGR

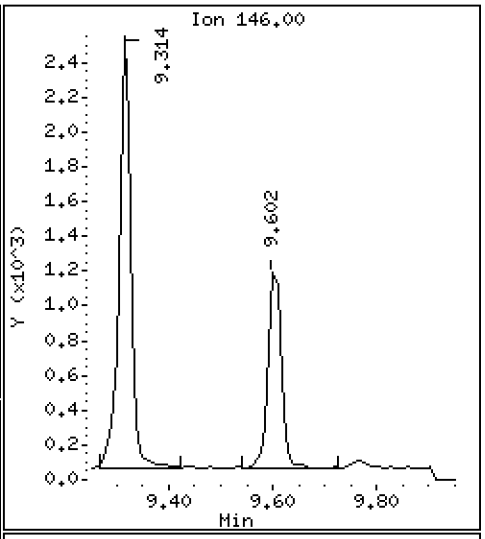
Column phase: ZB-5msi

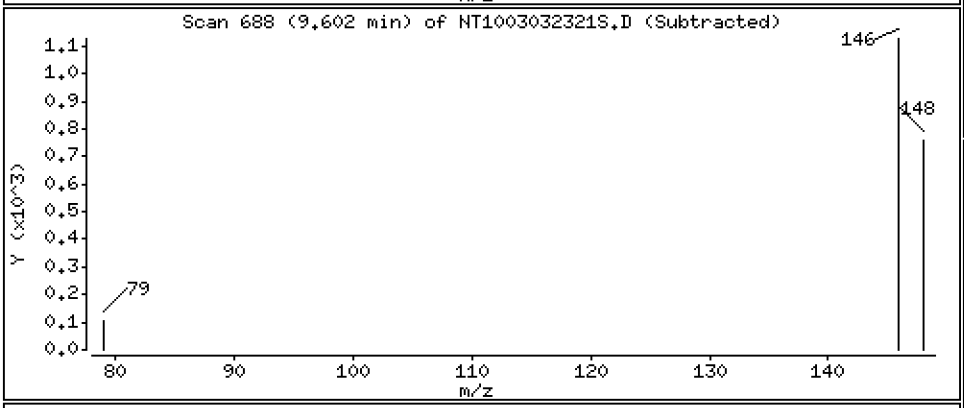
Column diameter: 0.25

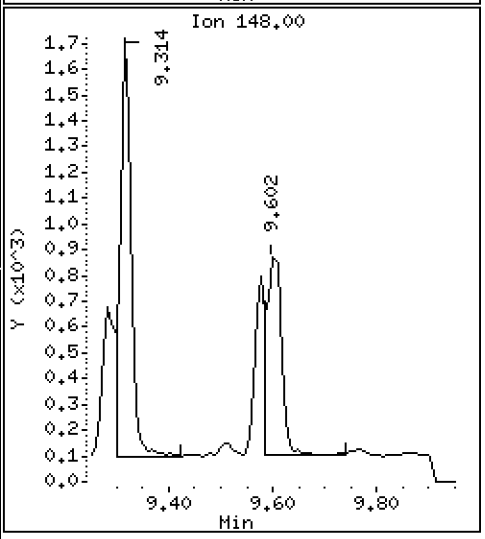
12 1,2-Dichlorobenzene

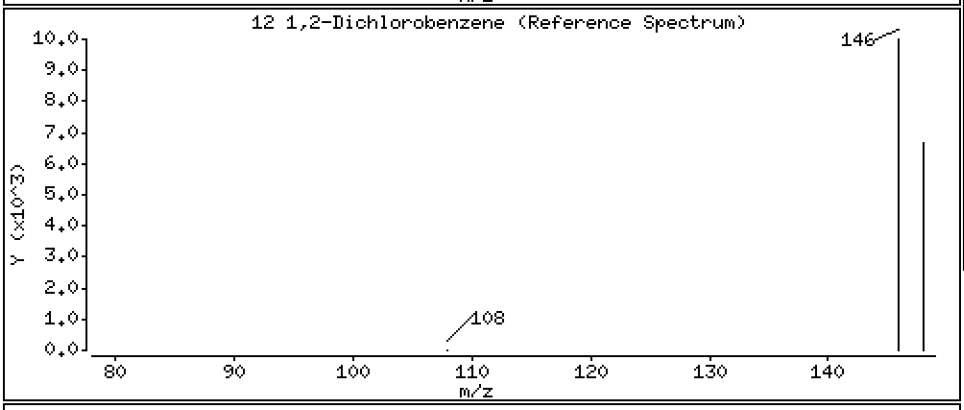
Concentration: 0.01119 ug/L

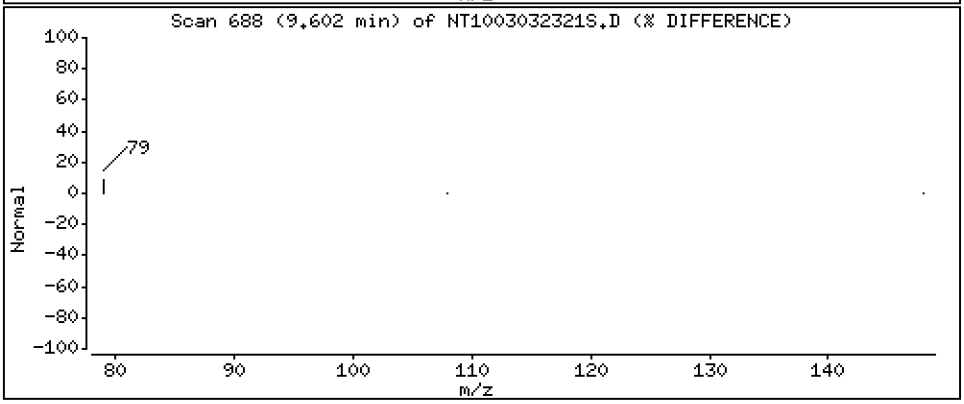












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

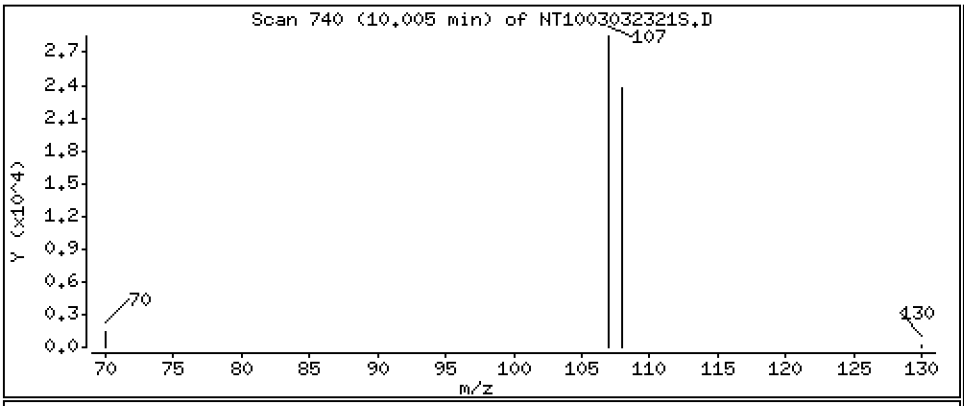
Operator: JGR

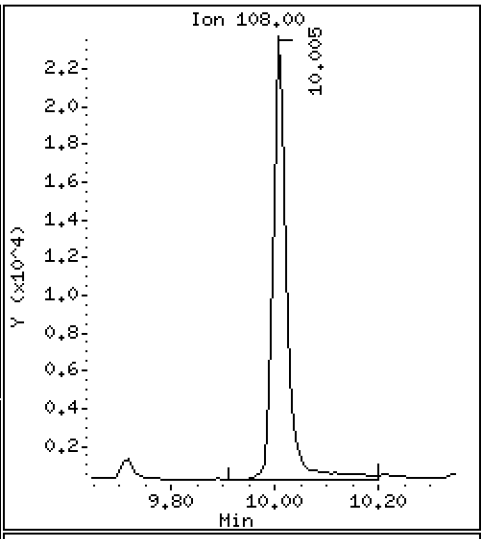
Column phase: ZB-5msi

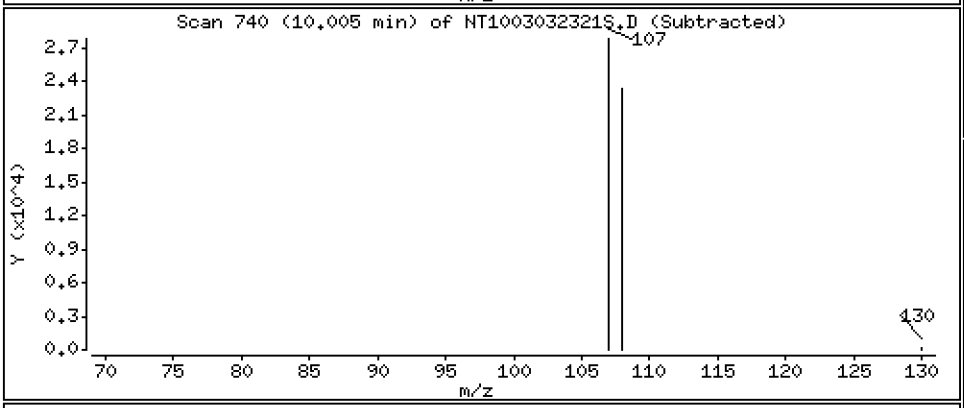
Column diameter: 0.25

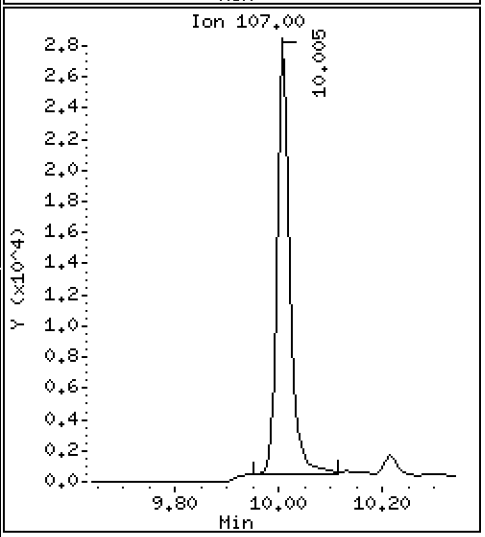
15 4-Methylphenol

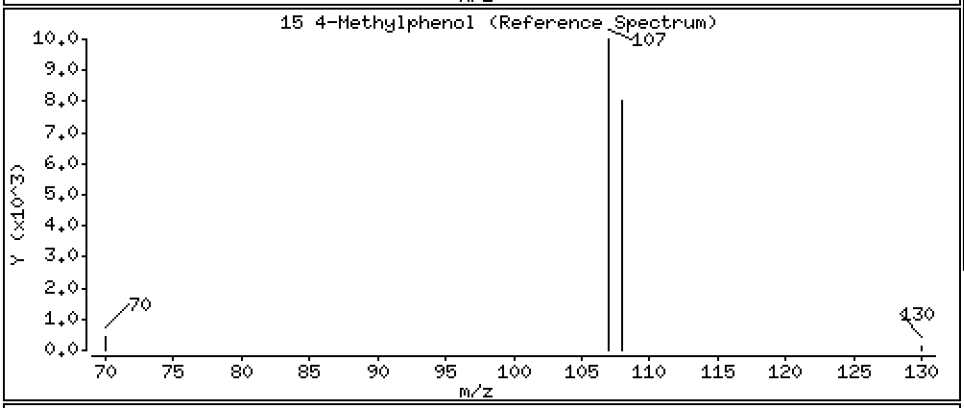
Concentration: 0.3320 ug/L

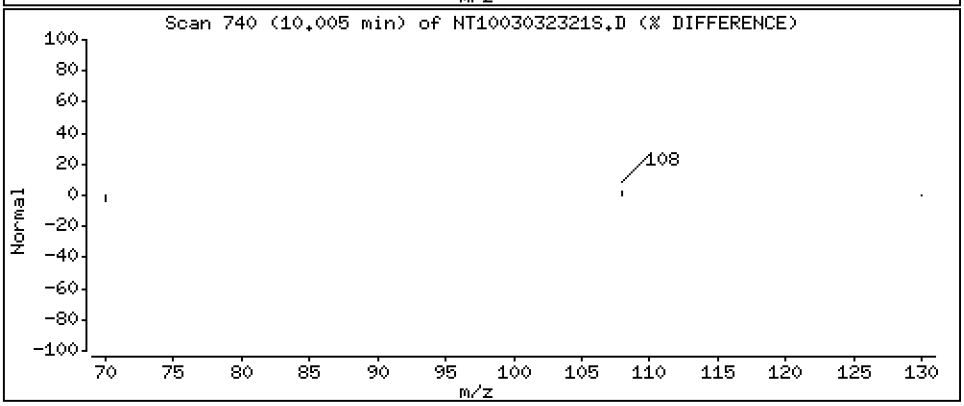












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

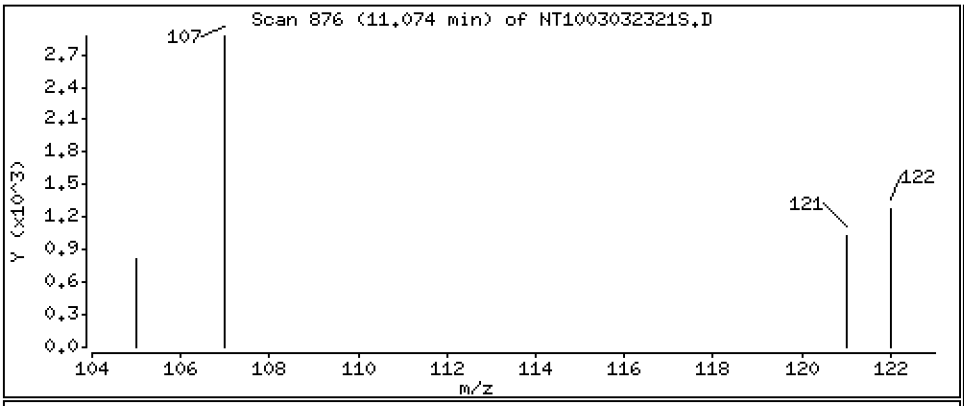
Operator: JGR

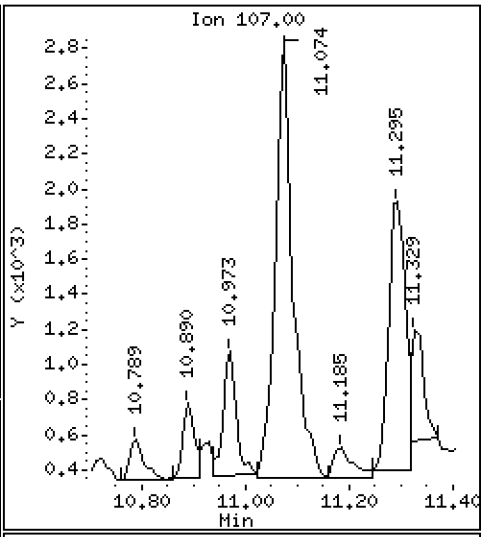
Column phase: ZB-5msi

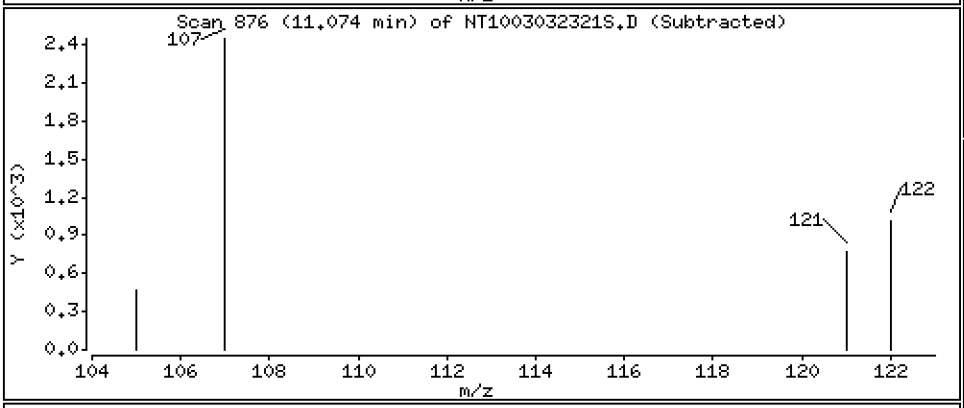
Column diameter: 0.25

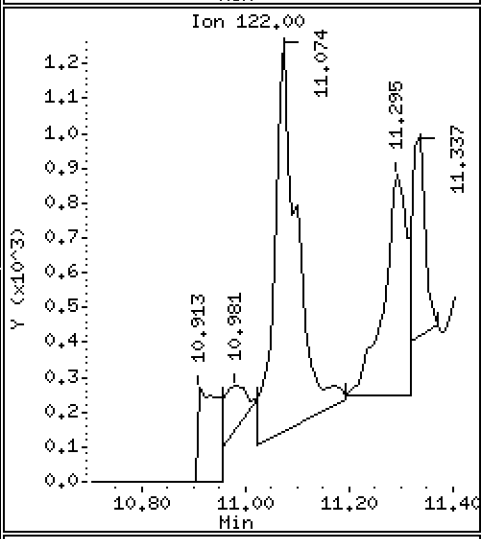
22 2,4-Dimethylphenol

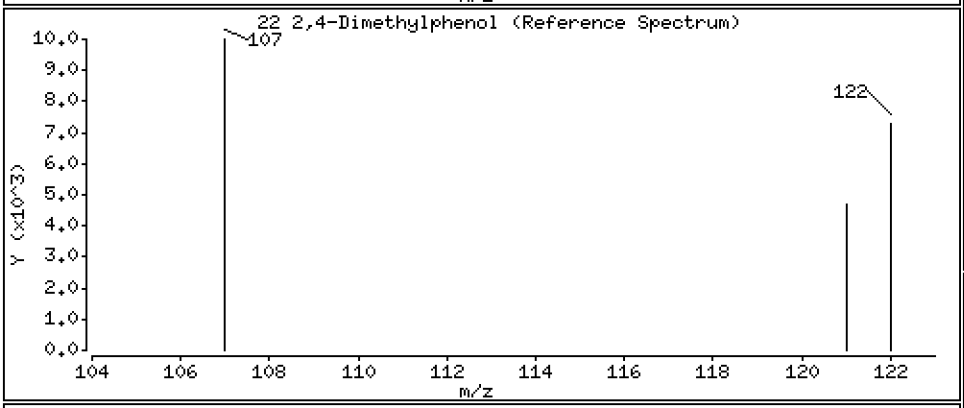
Concentration: 0.04035 ug/L

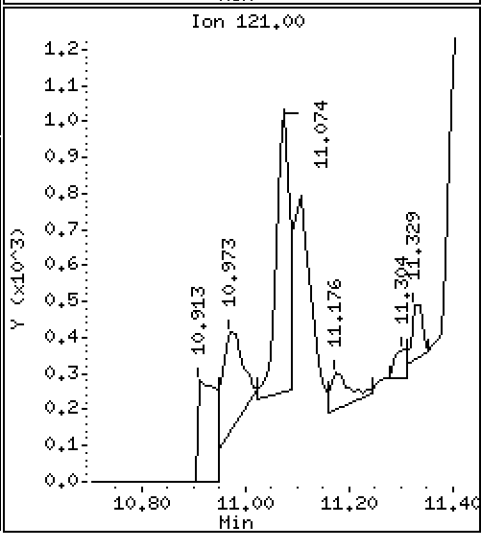


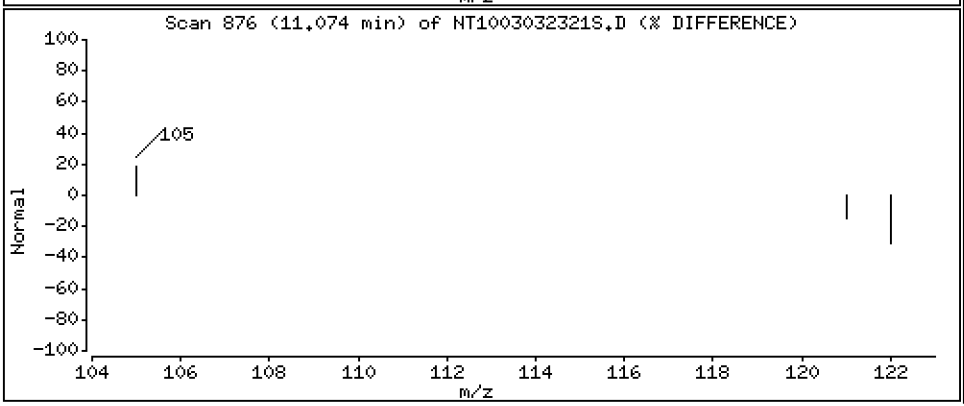












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Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

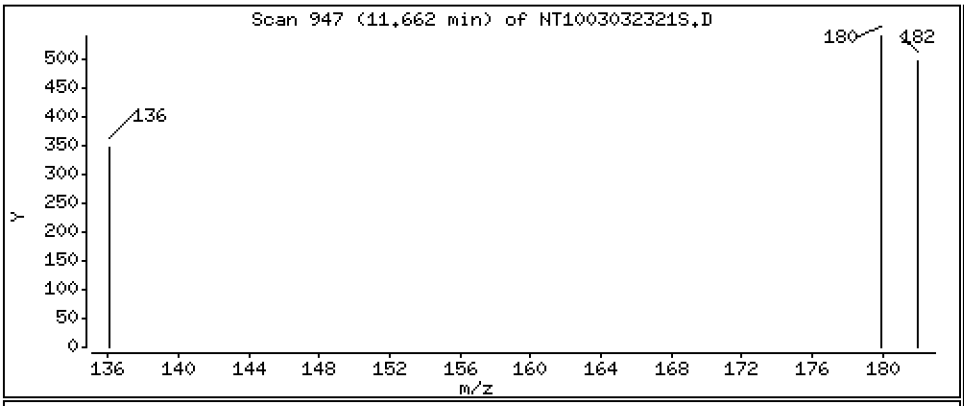
Operator: JGR

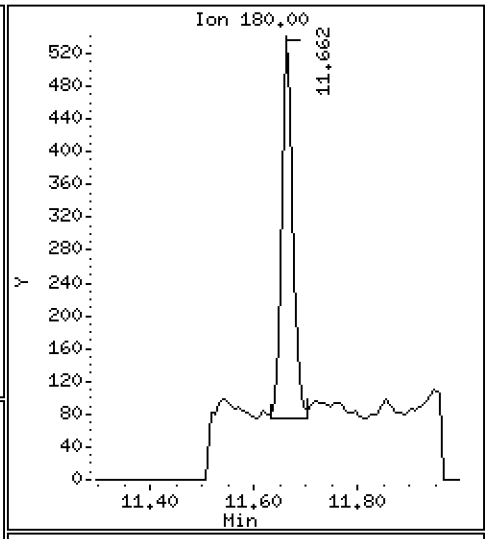
Column phase: ZB-5msi

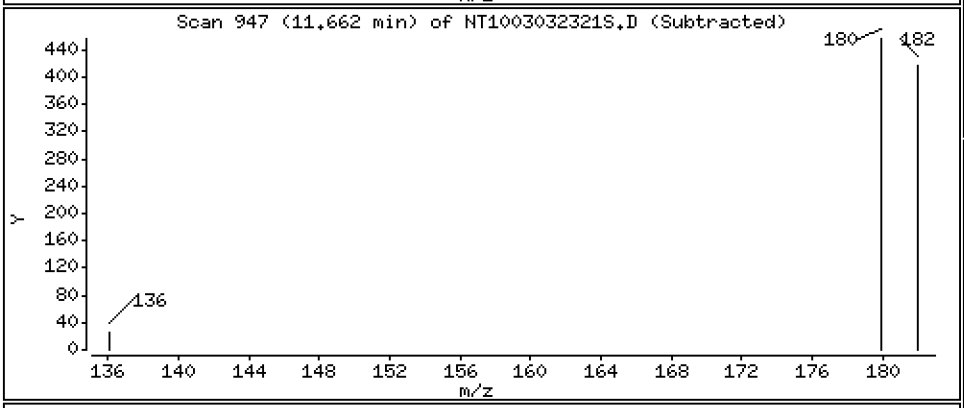
Column diameter: 0.25

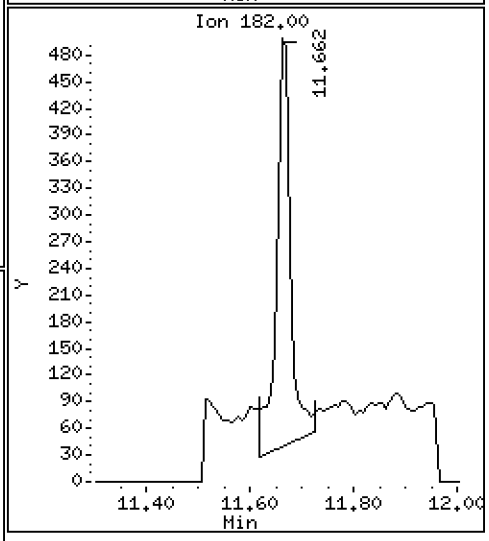
26 1,2,4-Trichlorobenzene

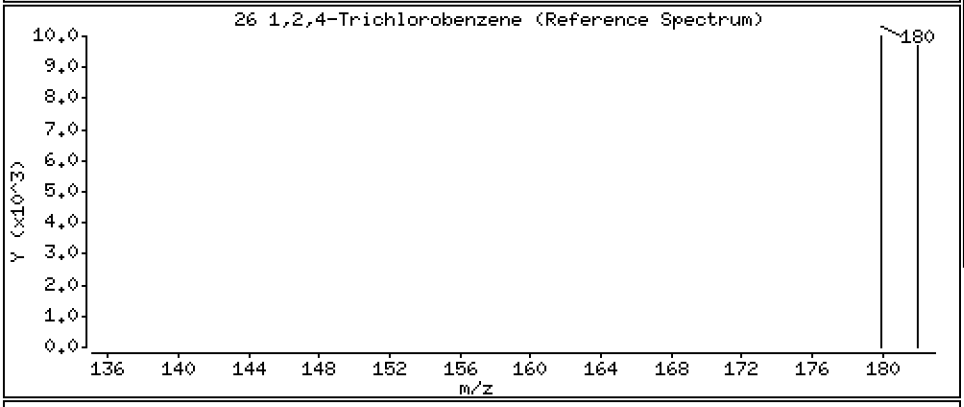
Concentration: 0.005485 ug/L

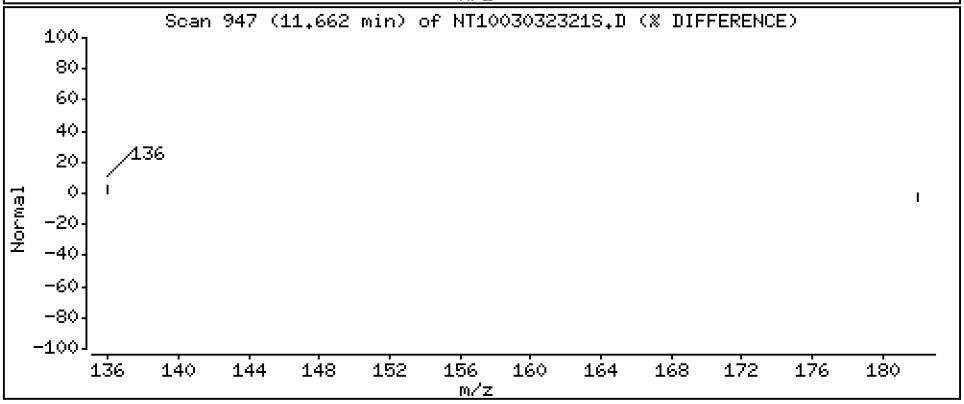












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323215.D

Date : 04-MAR-2023 06:28

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-05

Volume Injected (uL): 1.0

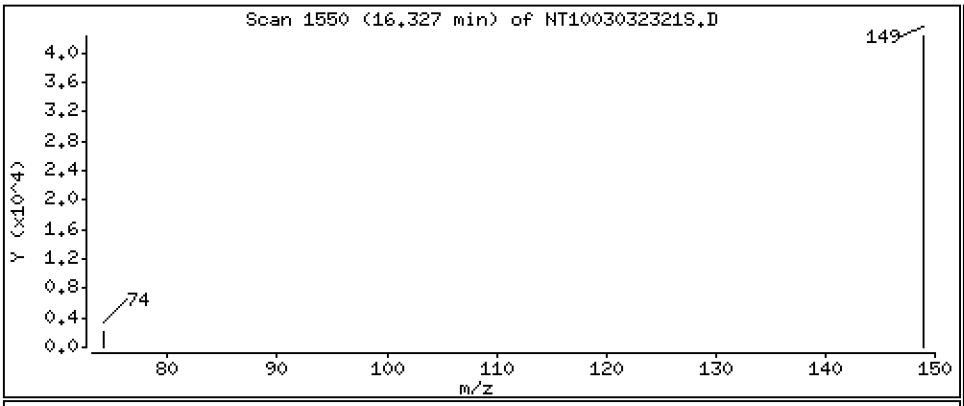
Operator: JGR

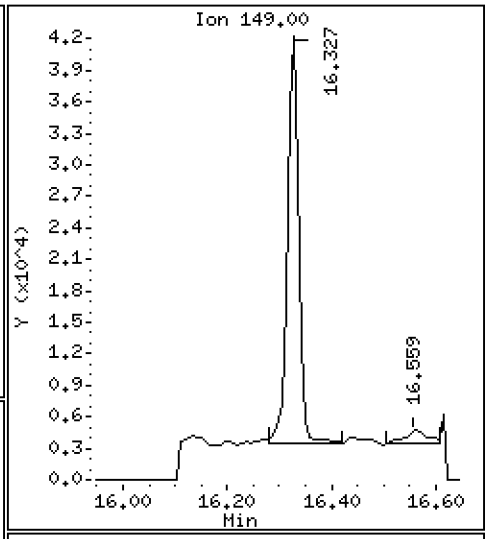
Column phase: ZB-5msi

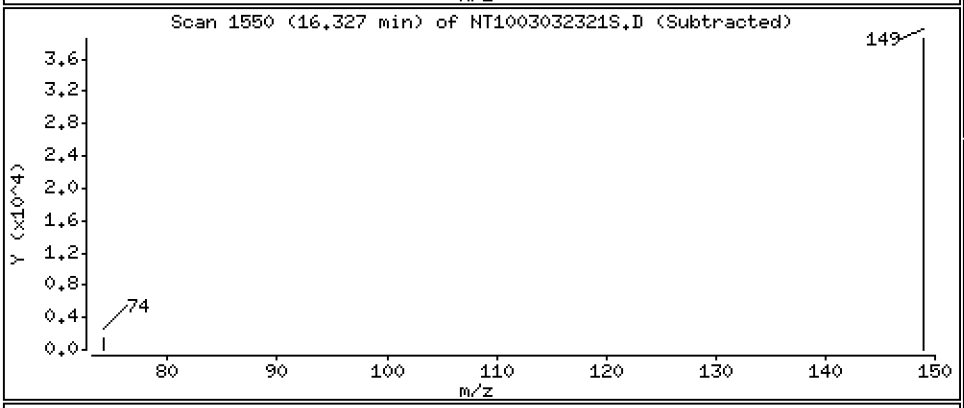
Column diameter: 0.25

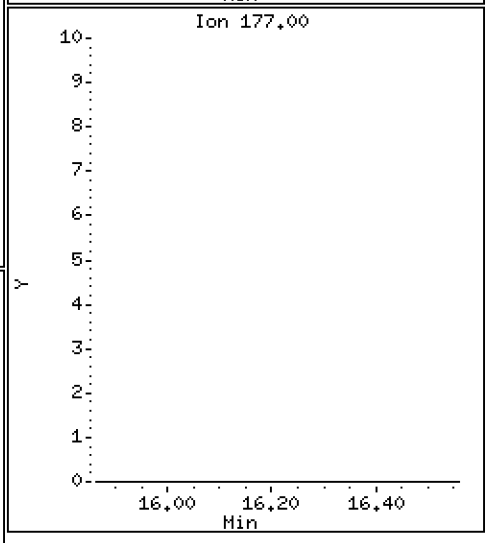
50 Diethylphthalate

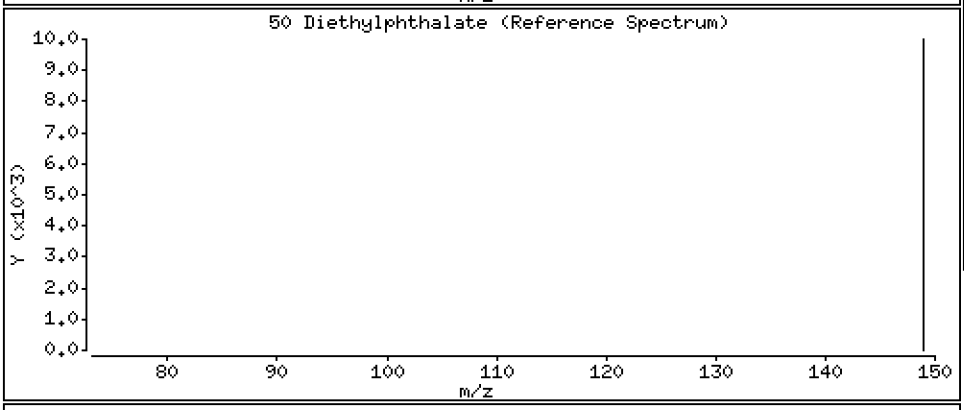
Concentration: 0.2511 ug/L

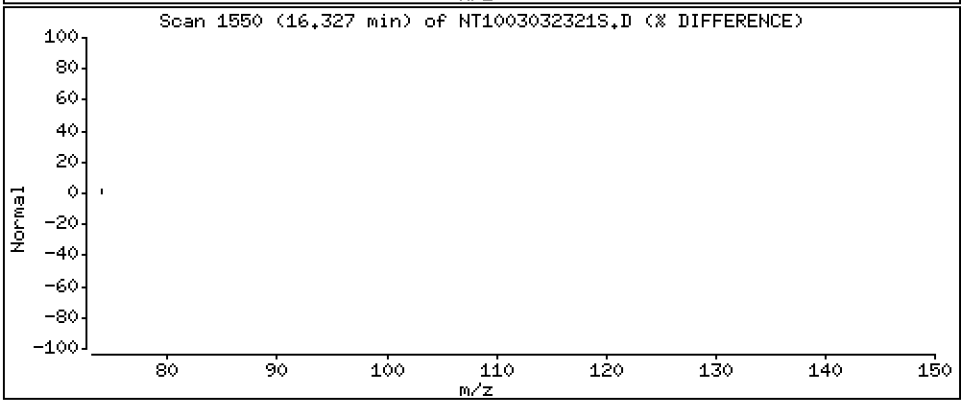












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT1003032321S.D
Lab Smp Id: 23A0249-05
Inj Date : 04-MAR-2023 06:28 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : 23A0249-05
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 11:26 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.925	6.917	(0.746)	881179	6.23457	6.235(R)
3	Phenol	94	8.563	8.556	(0.923)	83172	0.39825	0.3983
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	9.283	9.283	(1.000)	495062	4.00000	
9	1,4-Dichlorobenzene	146	9.314	9.314	(1.003)	4011	0.02249	0.02249
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	9.601	9.601	(1.034)	1918	0.01119	0.01119
13	2-Methylphenol	108	Compound Not Detected.					
15	4-Methylphenol	108	10.005	9.997	(1.078)	43413	0.33201	0.3320
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22	2,4-Dimethylphenol	107	11.074	11.057	(0.940)	6001	0.04035	0.04035
24	Benzoic acid	105	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	11.662	11.646	(0.990)	692	0.00549	0.005485(M)
* 27	Naphthalene-d8	136	11.785	11.777	(1.000)	1752747	4.00000	
30	Hexachlorobutadiene	225	Compound Not Detected.					
39	Dimethylphthalate	163	Compound Not Detected.					
* 42	Acenaphthene-d10	162	15.422	15.391	(1.000)	801852	4.00000	
50	Diethylphthalate	149	16.327	16.296	(1.059)	60291	0.25110	0.2511
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.561	18.530	(1.000)	1532752	4.00000	
$	66 Terphenyl-d14	244	21.741	21.702	(0.919)	913427	8.44476	8.445(R)
	67 Butylbenzylphthalate	149	Compound Not Detected.					
*	69 Chrysene-d12	240	23.669	23.630	(1.000)	1337569	4.00000	
*	77 Perylene-d12	264	26.518	26.456	(1.000)	1733835	4.00000	
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032321S.D
Lab Smp Id: 23A0249-05
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	502303	251152	1004606	495062	-1.44
27 Naphthalene-d8	1751418	875709	3502836	1752747	0.08
42 Acenaphthene-d10	814551	407276	1629102	801852	-1.56
59 Phenanthrene-d10	1450747	725374	2901494	1532752	5.65
69 Chrysene-d12	1335017	667509	2670034	1337569	0.19
77 Perylene-d12	1691506	845753	3383012	1733835	2.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.79	0.07
42 Acenaphthene-d10	15.39	14.89	15.89	15.42	0.20
59 Phenanthrene-d10	18.53	18.03	19.03	18.56	0.17
69 Chrysene-d12	23.63	23.13	24.13	23.67	0.16
77 Perylene-d12	26.46	25.96	26.96	26.52	0.23

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

REVIEW SUMMARY FOR FILE - NT1003032321S.D

Lab ID: 23A0249-05
nt10.i, 20230303A.b\SIM.b\SIMABN2.m,   04-MAR-2023 06:28

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1003032315ICVS.d

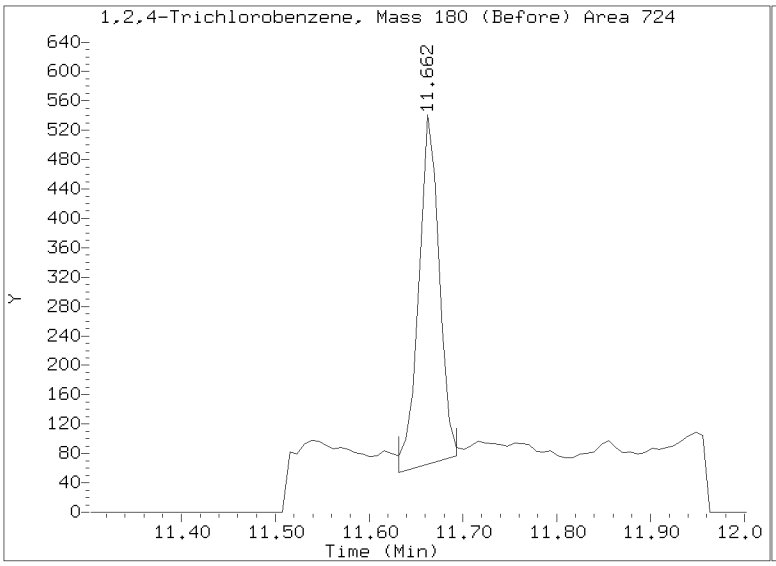
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

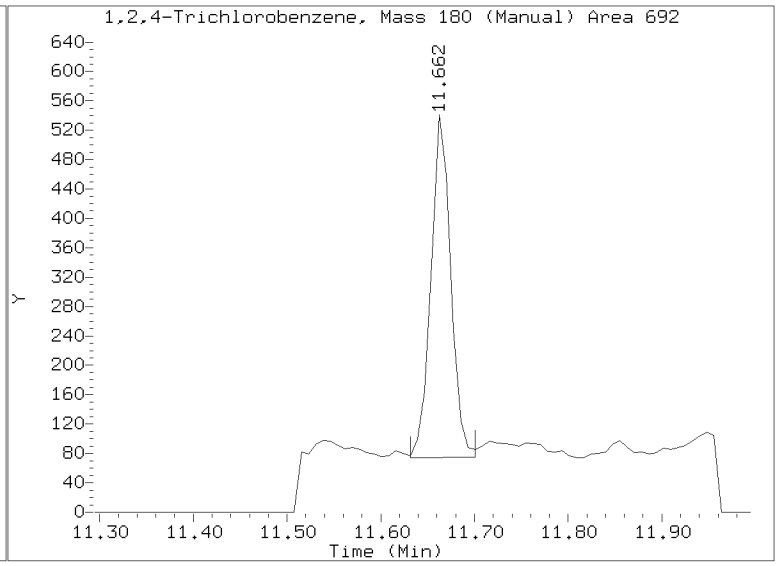
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230303A.b/SIM.b/NT1003032321S.D
Injection Date: 04-MAR-2023 06:28
Lab ID:23A0249-05 Client ID:
Report Date: 03/17/2023 11:26





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-IT1034

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

Polynuclear Aromatic Hydrocarbons

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-07 A	SDG:	23A0249
Sampled:	01/12/23 12:32	Prepared:	02/01/23 11:29	File ID:	N823020626.D
% Solids:	74.73	Preparation:	EPA 3546 (Microwave)	Analyzed:	02/07/23 00:01
Batch:	BLA0683	Sequence:	SLB0075	Initial/Final:	13.4 g Wet / 0.5 mL
Instrument:	NT8	Column:	RXI-17Sil ms	Calibration:	GA00050
Cleanups:	GPC, Silica Gel				

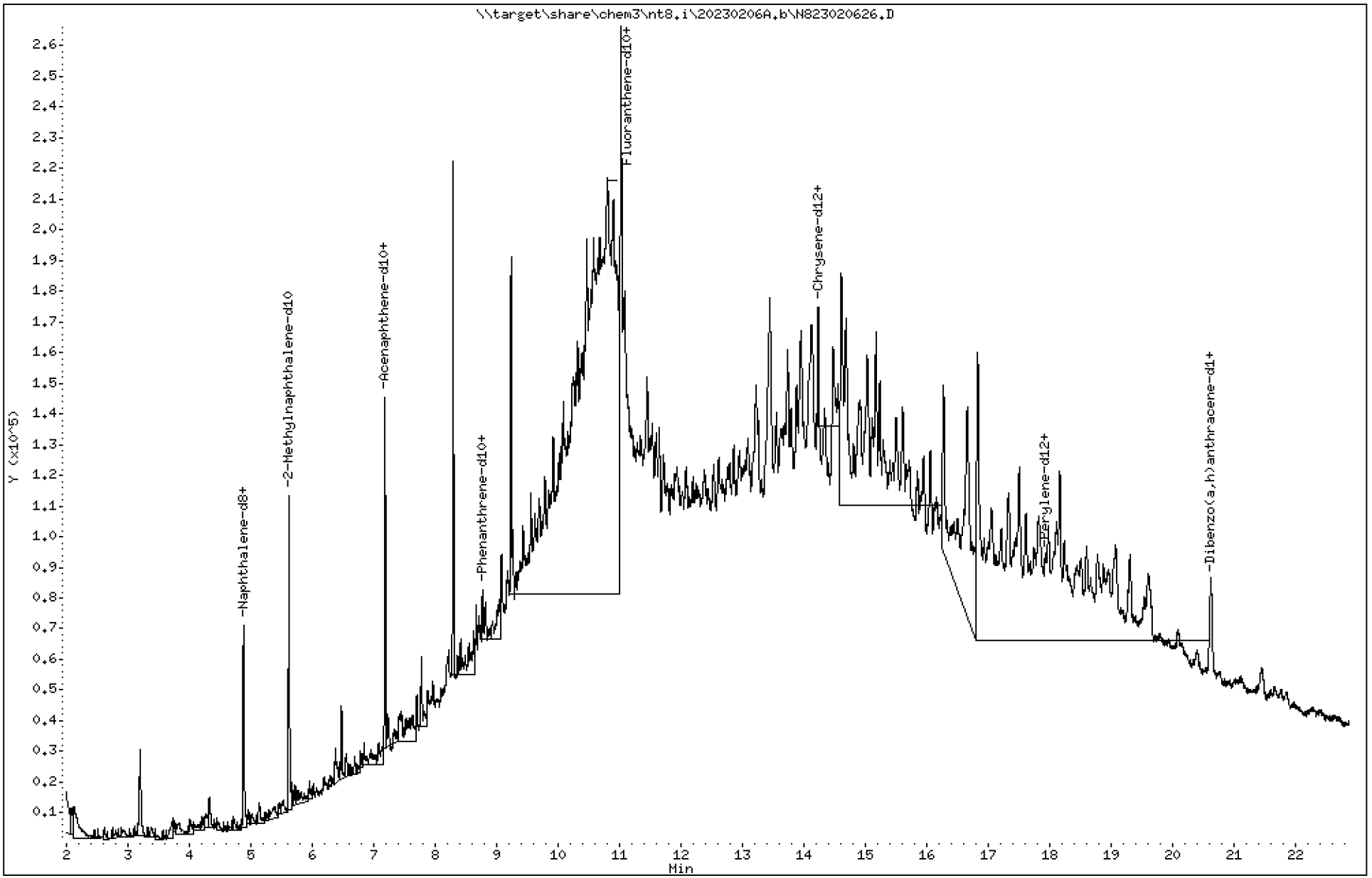
CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
56-55-3	Benzo(a)anthracene	1	11.1		0.82	4.99
218-01-9	Chrysene	1	16.9		1.05	4.99
205-99-2	Benzo(b)fluoranthene	1	13.0		1.37	4.99
207-08-9	Benzo(k)fluoranthene	1	5.83		0.76	4.99
50-32-8	Benzo(a)pyrene	1	17.3		0.61	4.99
193-39-5	Indeno(1,2,3-cd)pyrene	1	12.1		1.05	4.99
53-70-3	Dibenzo(a,h)anthracene	1	3.30	J	0.89	4.99

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Methylnaphthalene-d10	149.79	123	82.3	32 - 120	
Dibenzo[a,h]anthracene-d14	149.79	148	99.0	21 - 133	
Fluoranthene-d10	149.79	131	87.5	36 - 134	

Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020626.D
Date : 07-FEB-2023 00:01
Client ID:
Sample Info: 23A0249-07

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



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Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

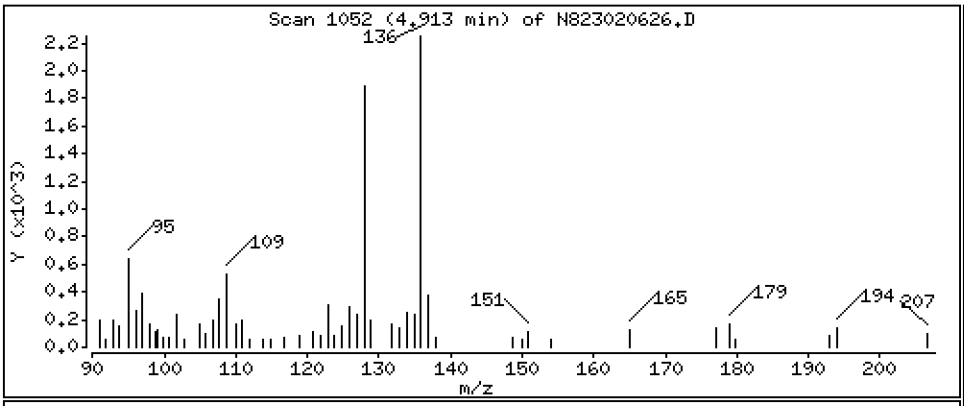
Operator: JZ

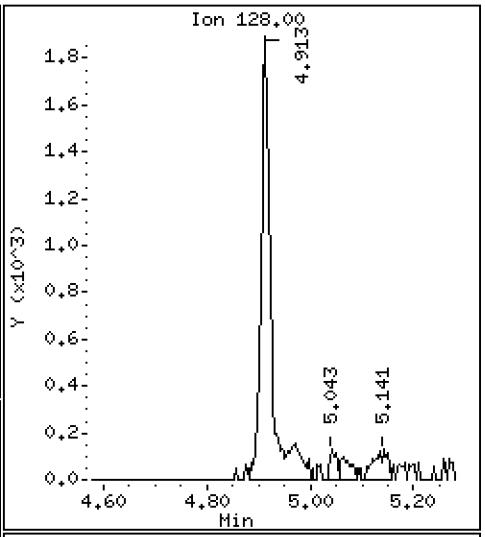
Column phase: Rxi-17sil

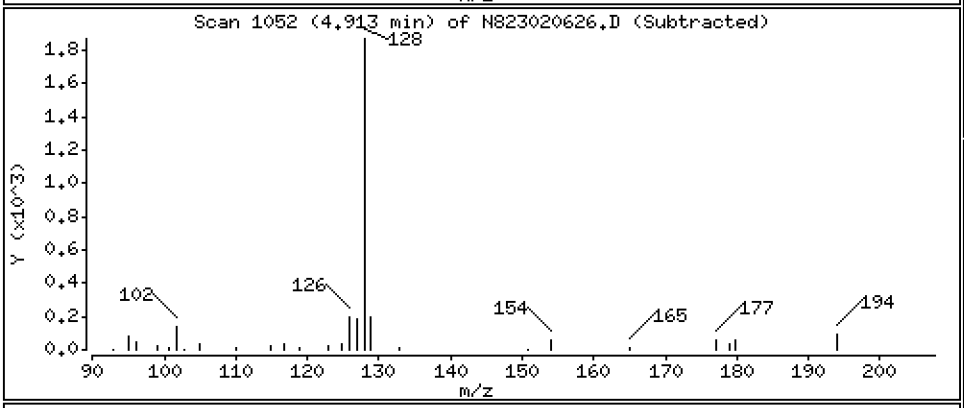
Column diameter: 0.25

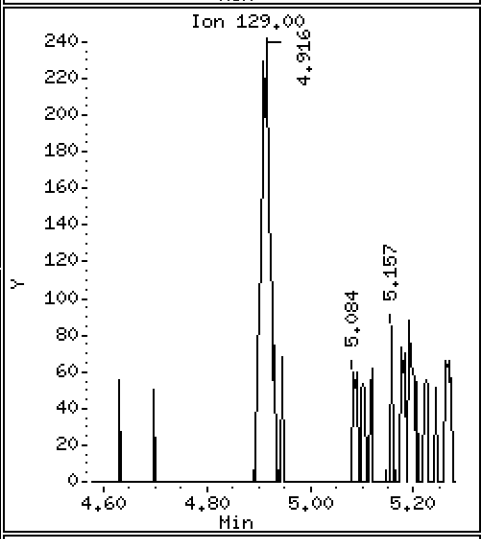
2 Naphthalene

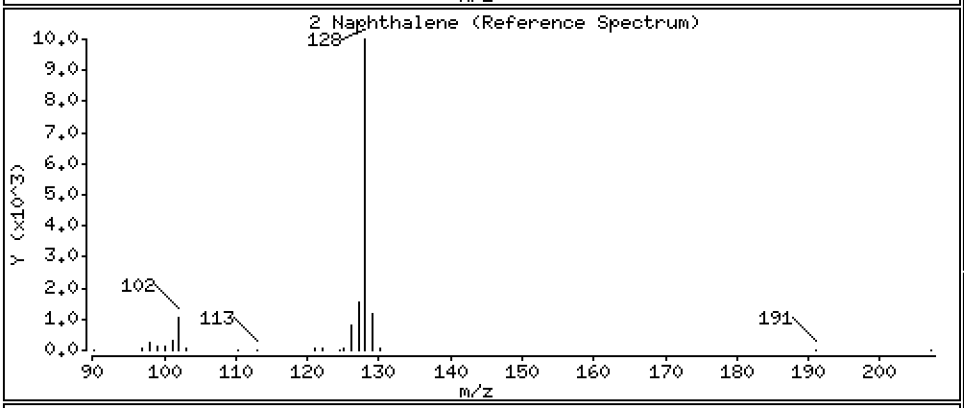
Concentration: 0.09871 ug/mL

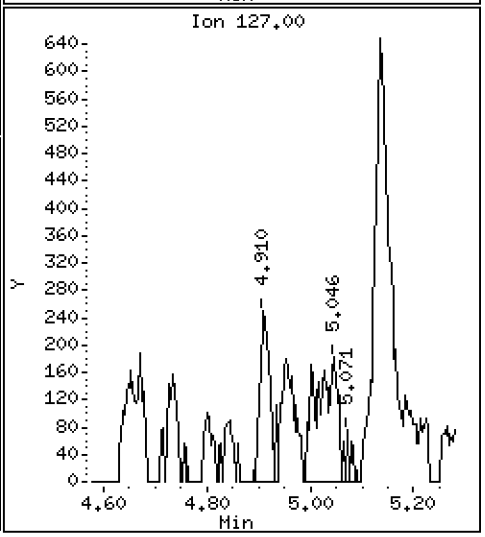


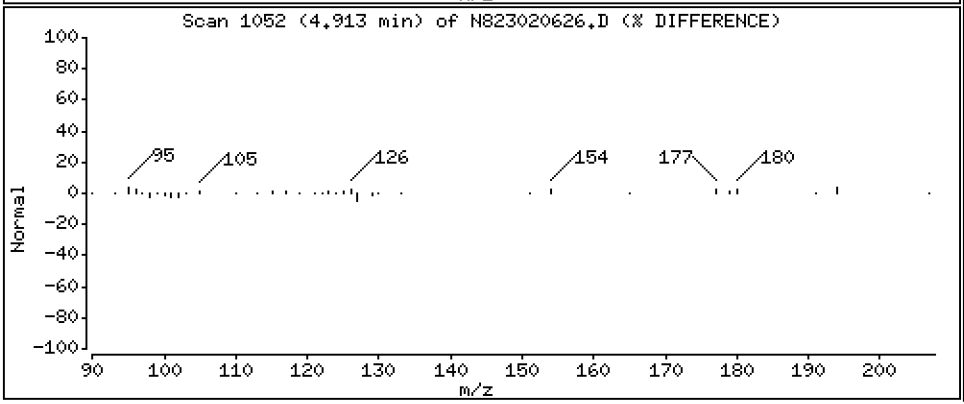












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Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

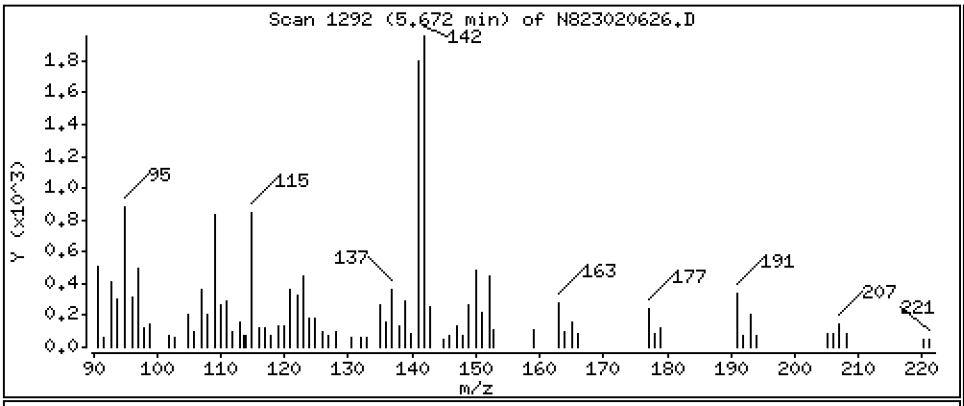
Operator: JZ

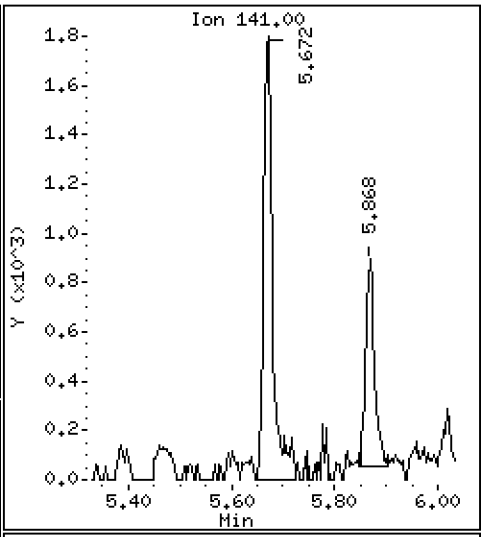
Column phase: Rxi-17sil

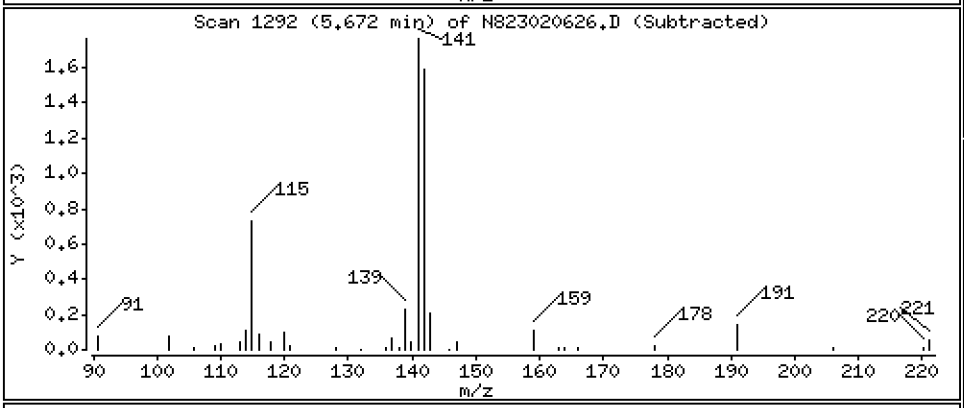
Column diameter: 0.25

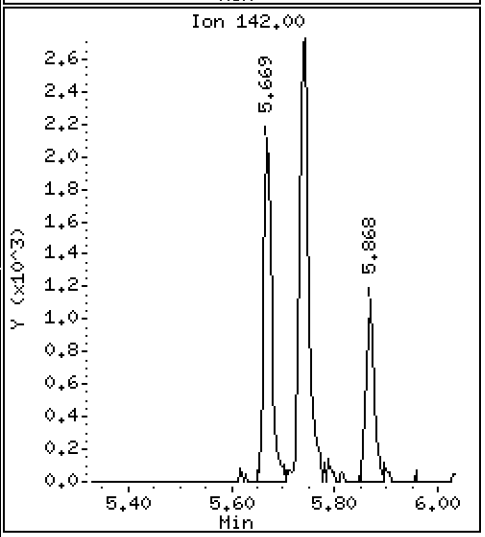
4 2-Methylnaphthalene

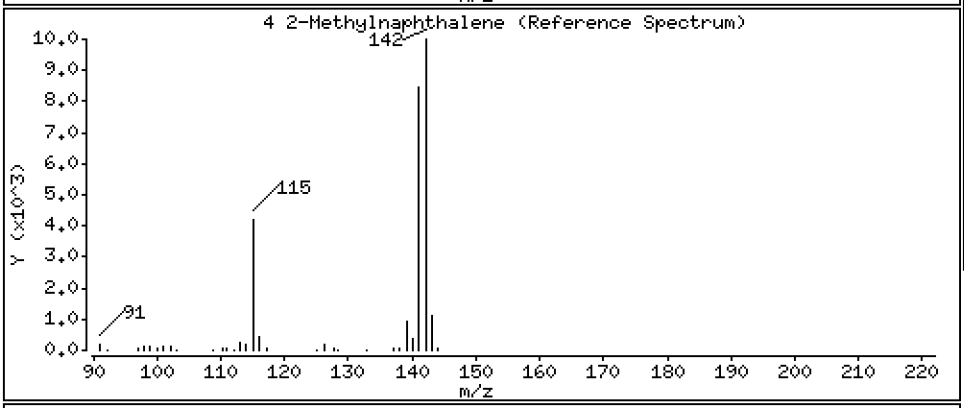
Concentration: 0.1508 ug/mL

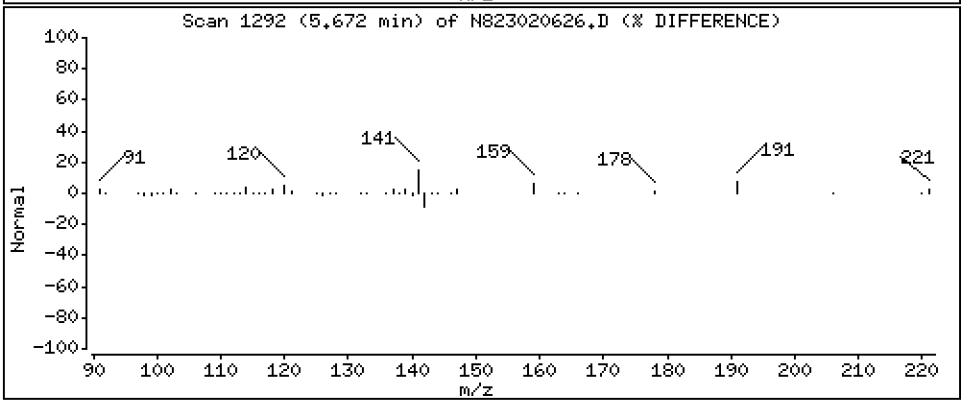












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020626.D

Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

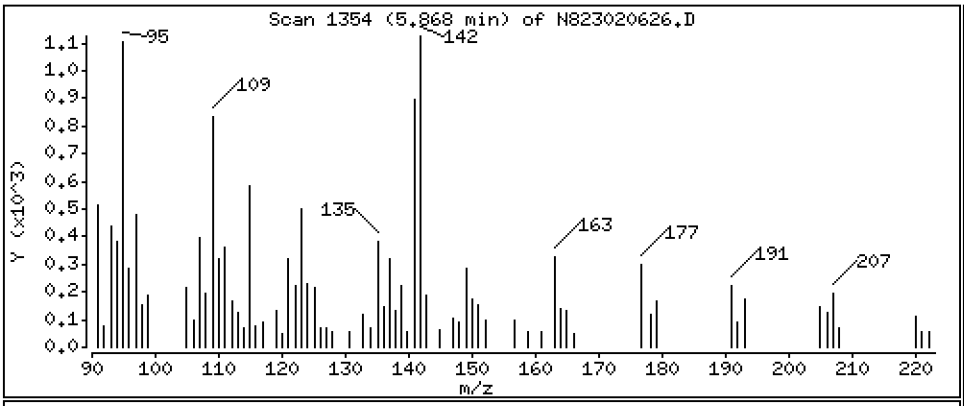
Operator: JZ

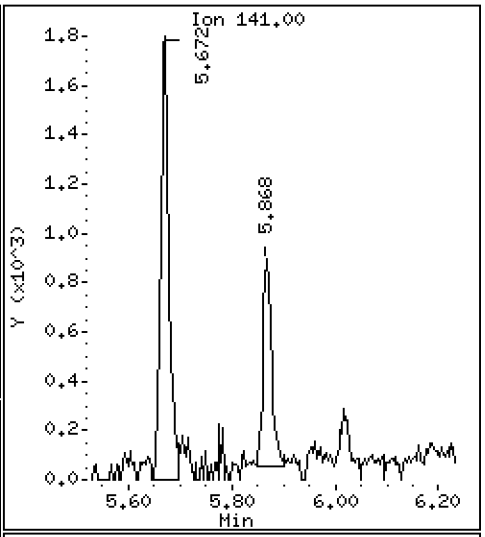
Column phase: Rxi-17sil

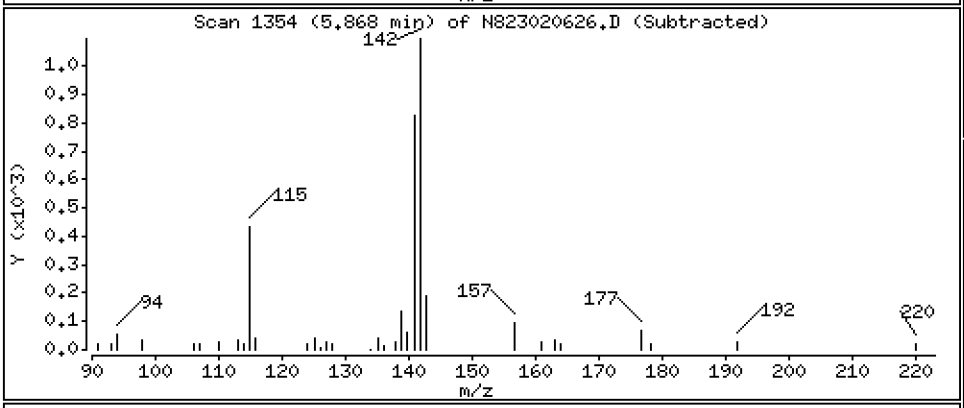
Column diameter: 0.25

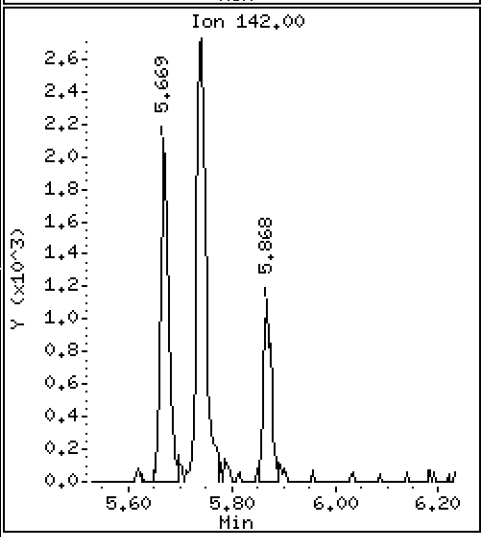
5 1-methylnaphthalene

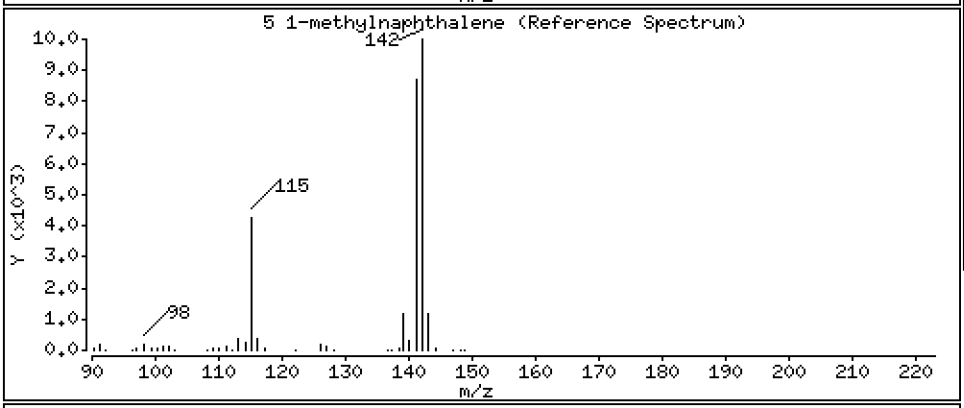
Concentration: 0.06666 ug/mL

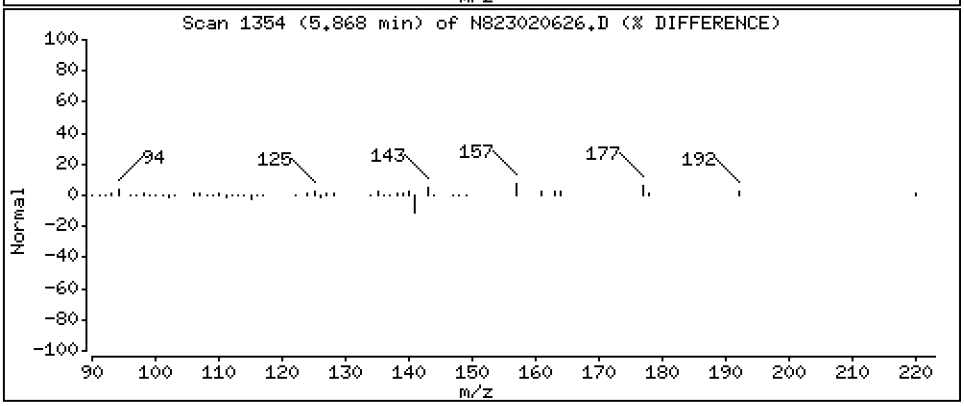












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Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

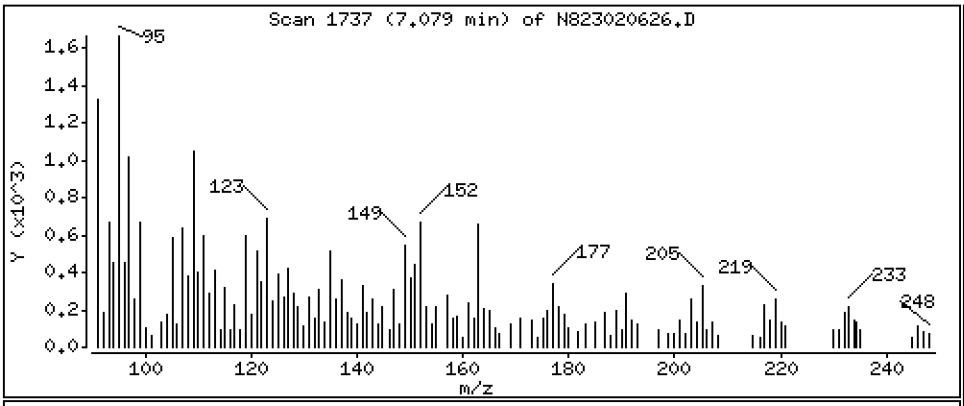
Operator: JZ

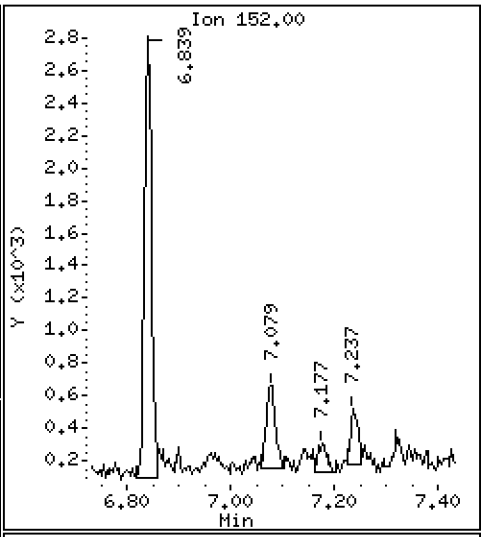
Column phase: Rxi-17sil

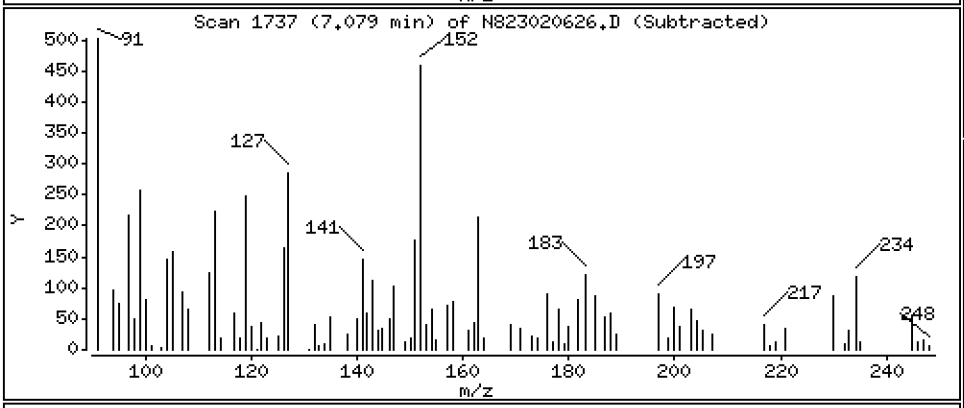
Column diameter: 0.25

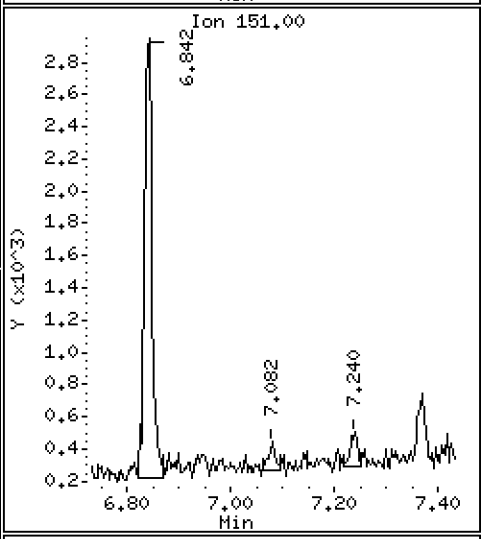
9 Acenaphthylene

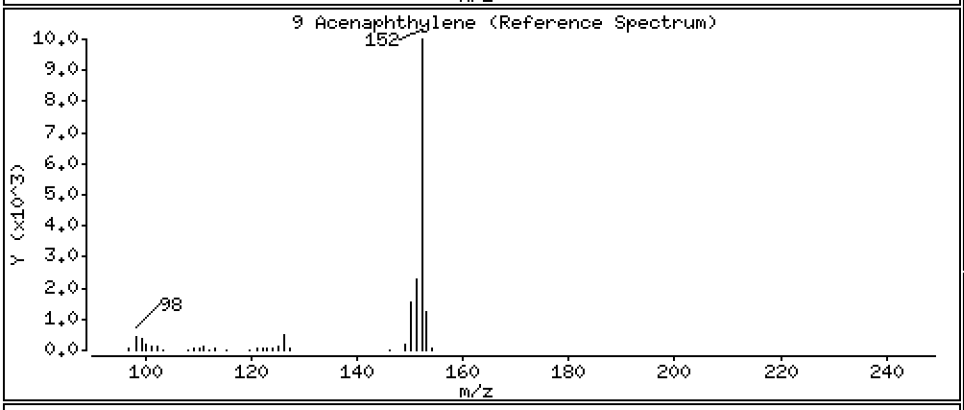
Concentration: 0.02548 ug/mL

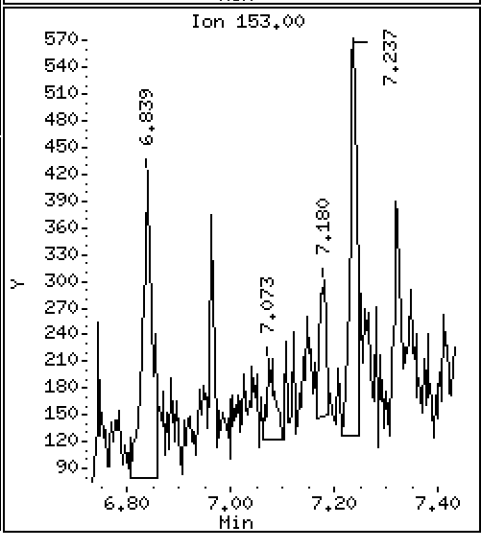


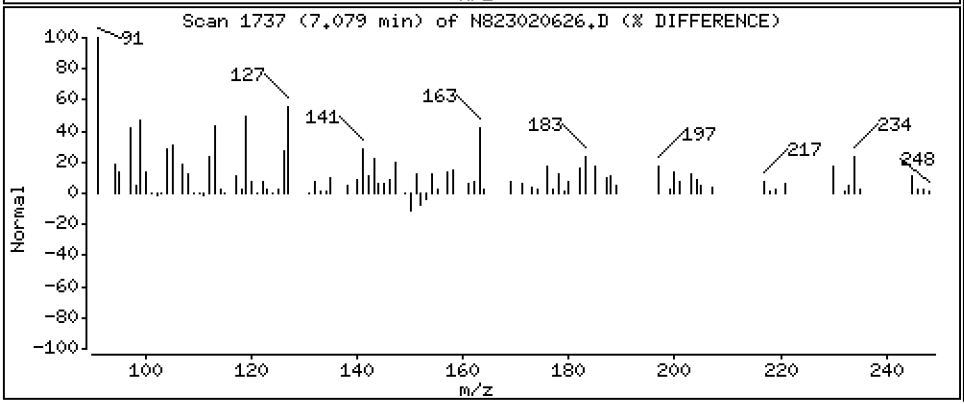












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Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

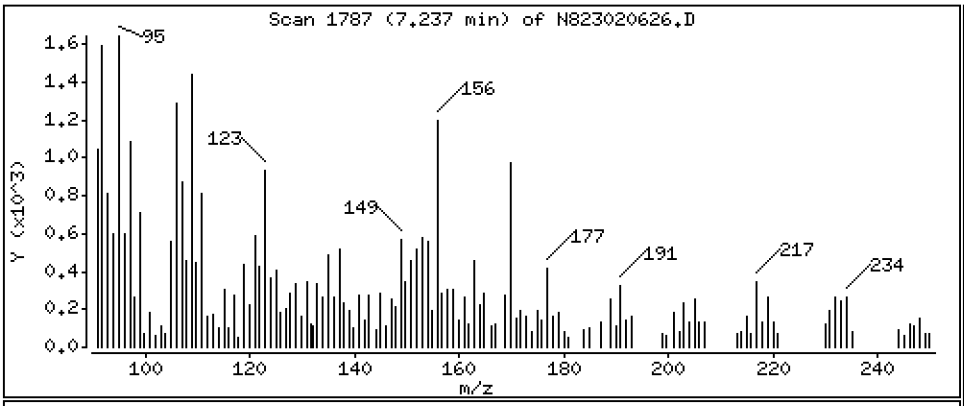
Operator: JZ

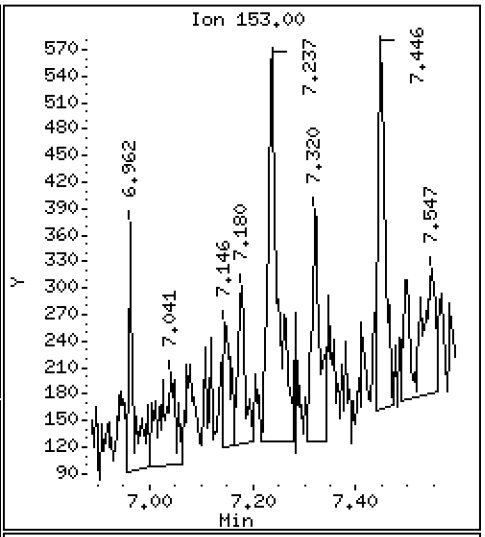
Column phase: Rxi-17sil

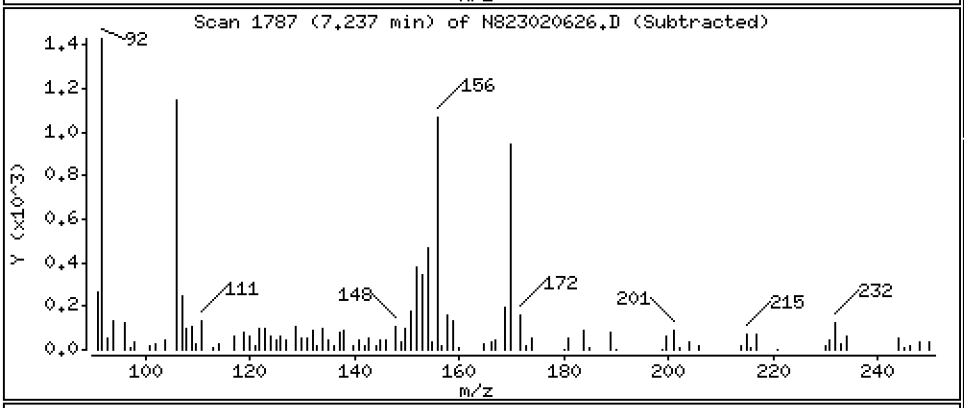
Column diameter: 0.25

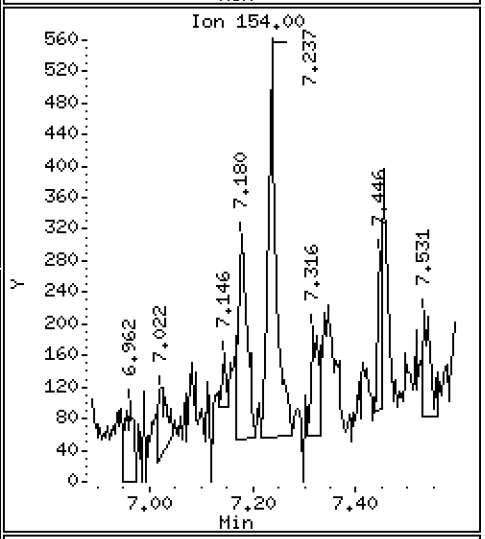
11 Acenaphthene

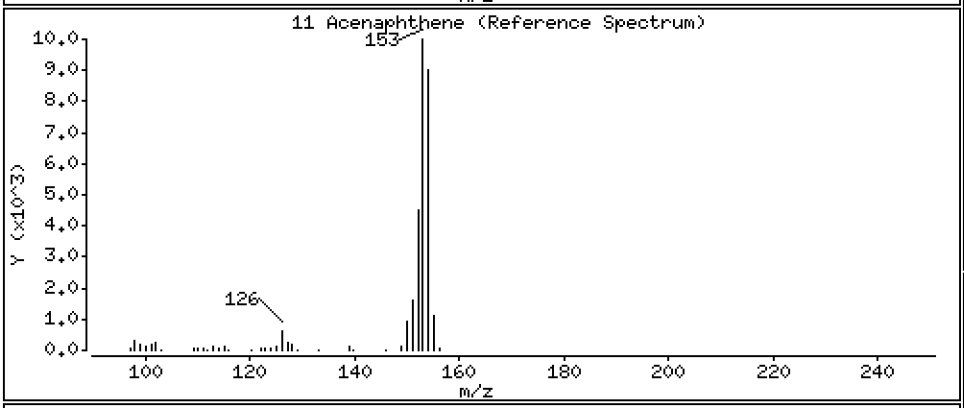
Concentration: 0.03661 ug/mL

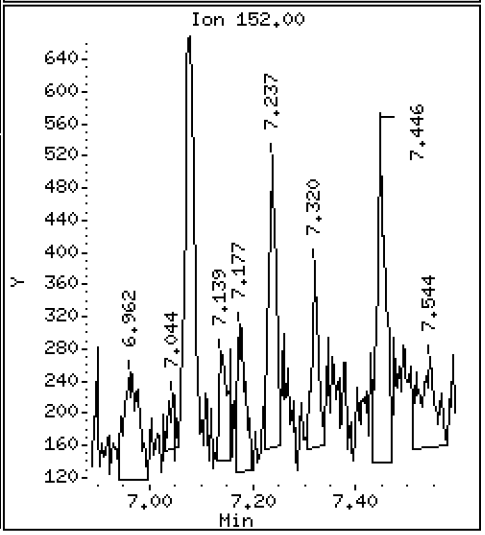


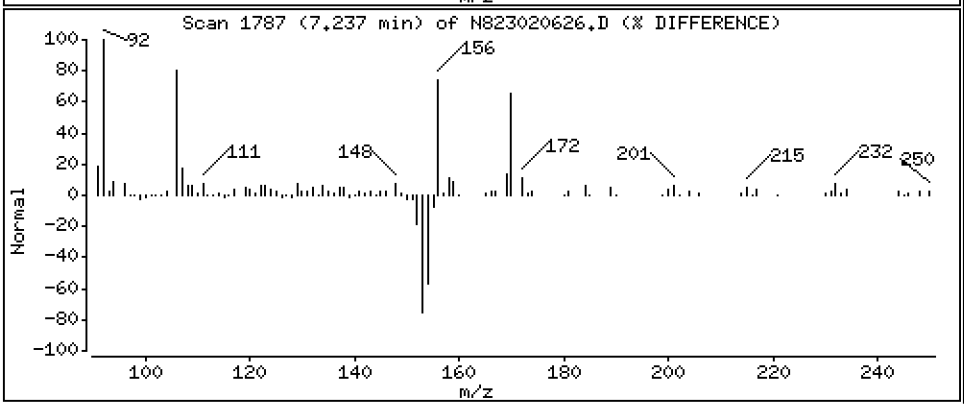












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Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

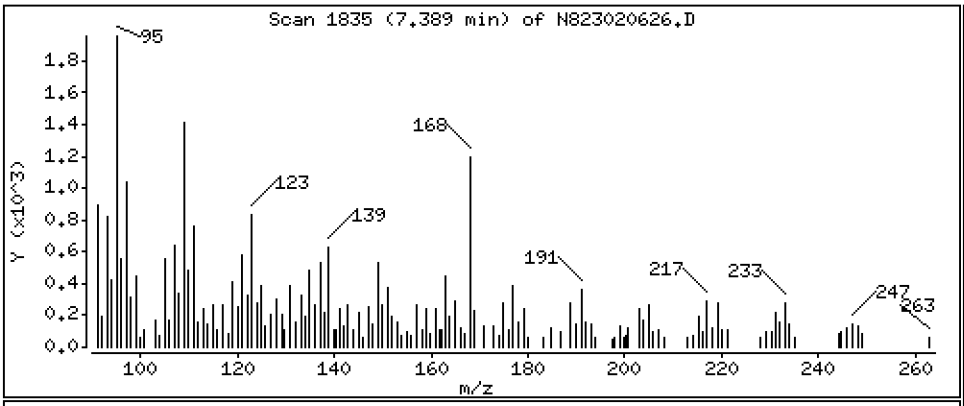
Operator: JZ

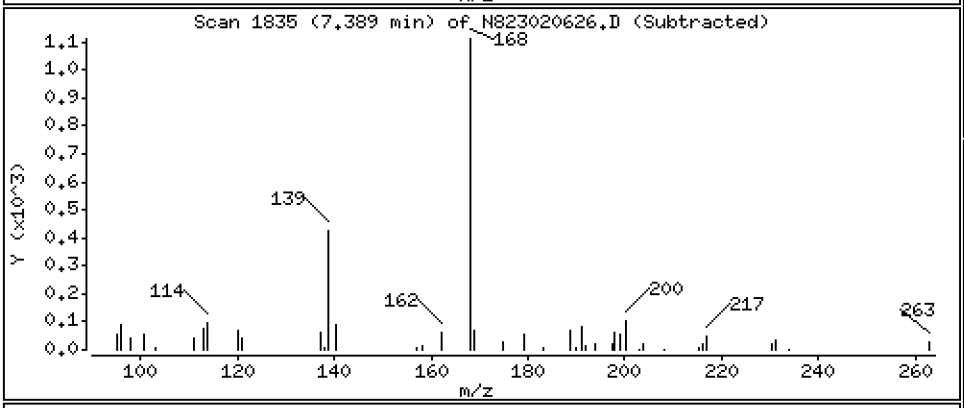
Column phase: Rxi-17sil

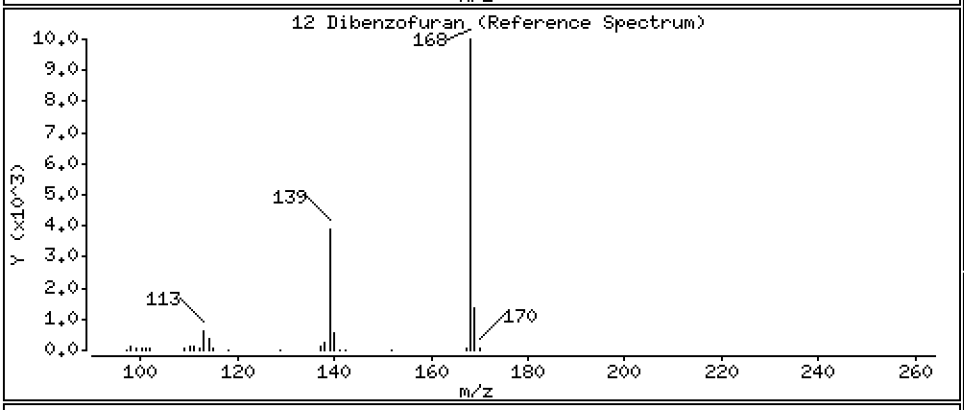
Column diameter: 0.25

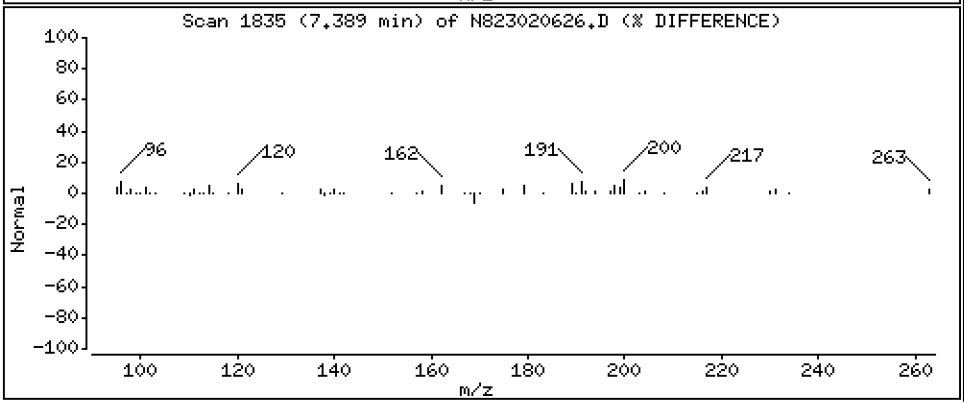
12 Dibenzofuran

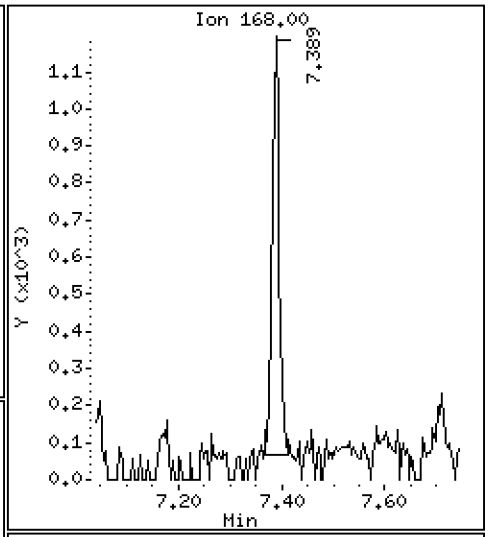
Concentration: 0.04102 ug/mL

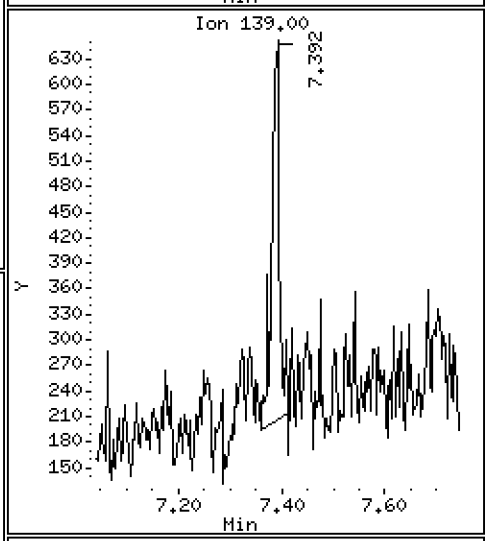


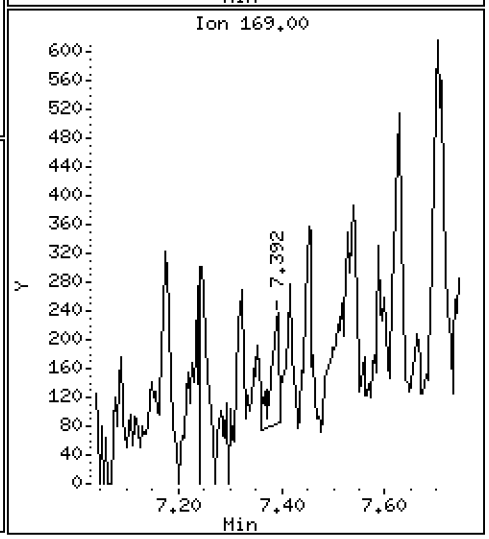












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Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

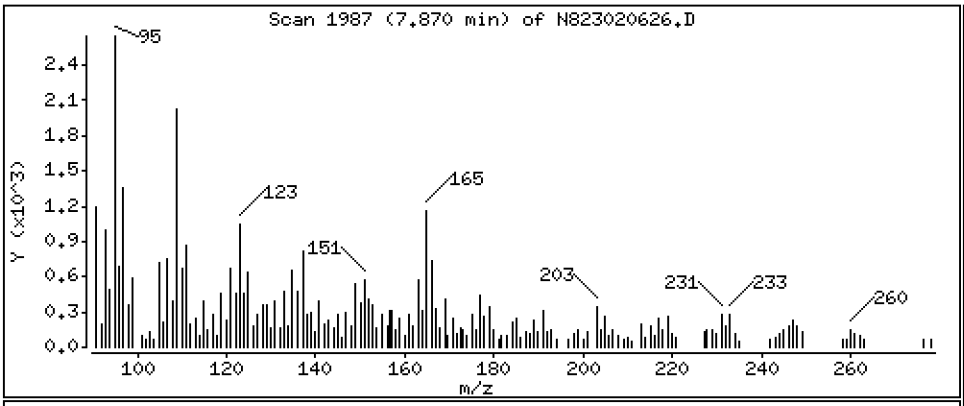
Operator: JZ

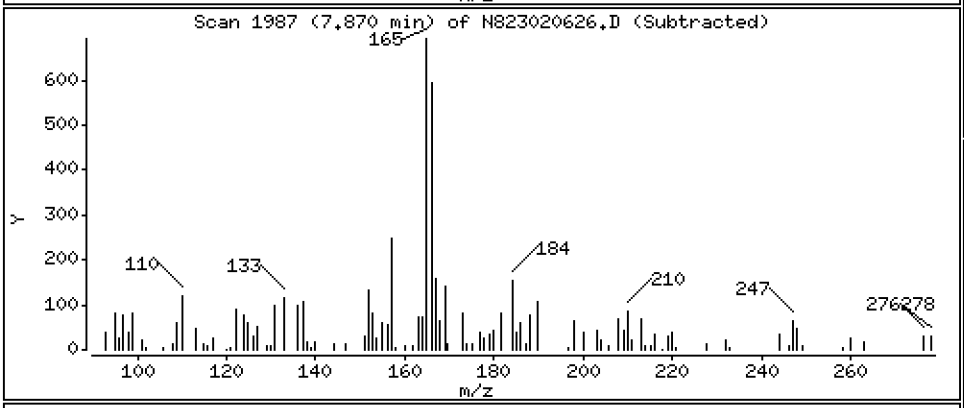
Column phase: Rxi-17sil

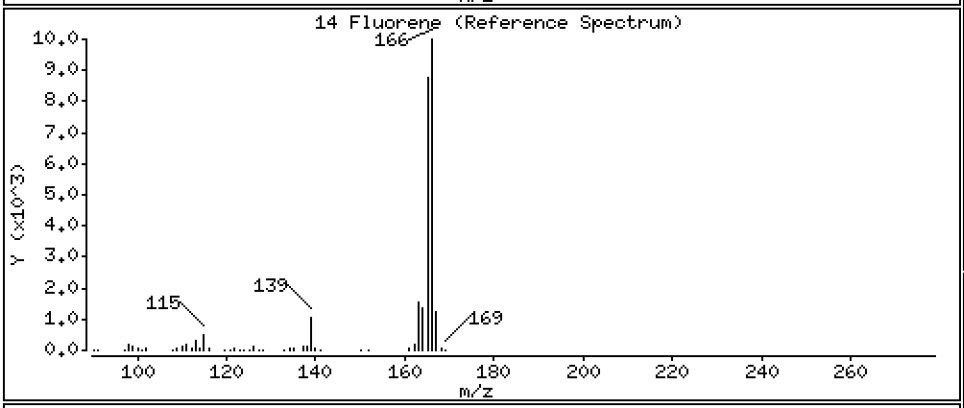
Column diameter: 0.25

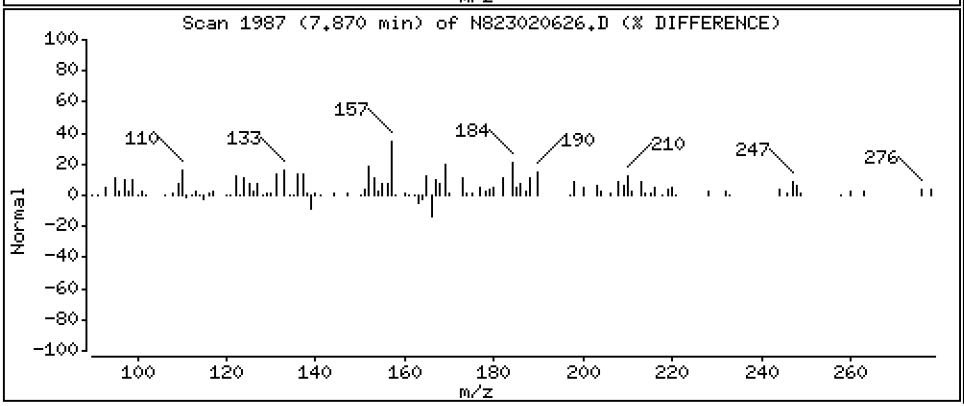
14 Fluorene

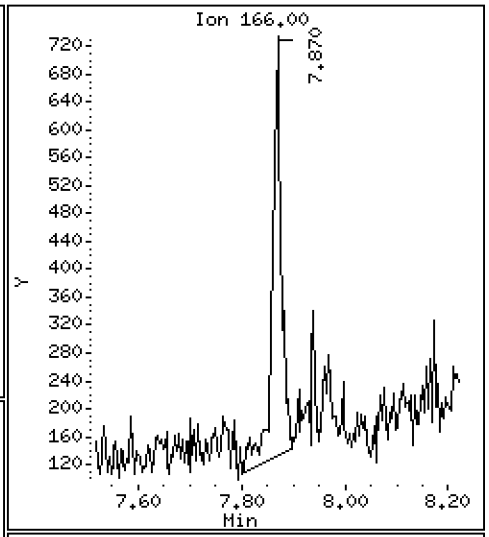
Concentration: 0.03798 ug/mL

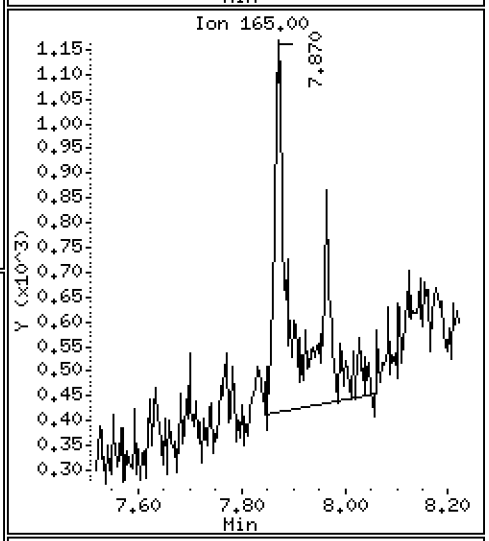


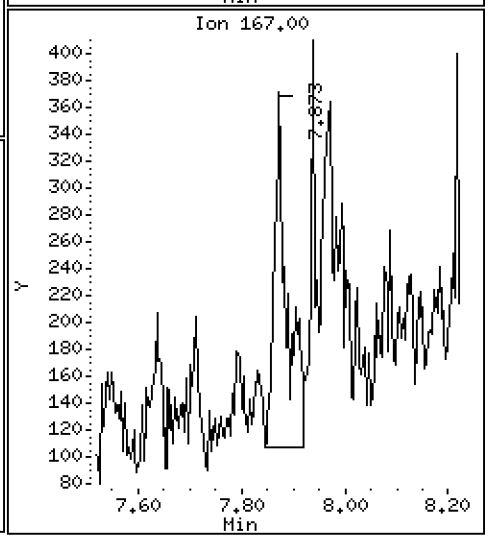












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Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

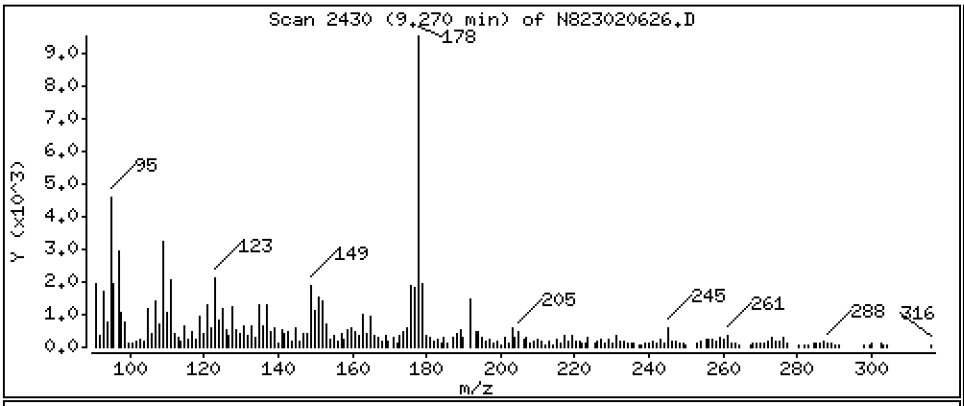
Operator: JZ

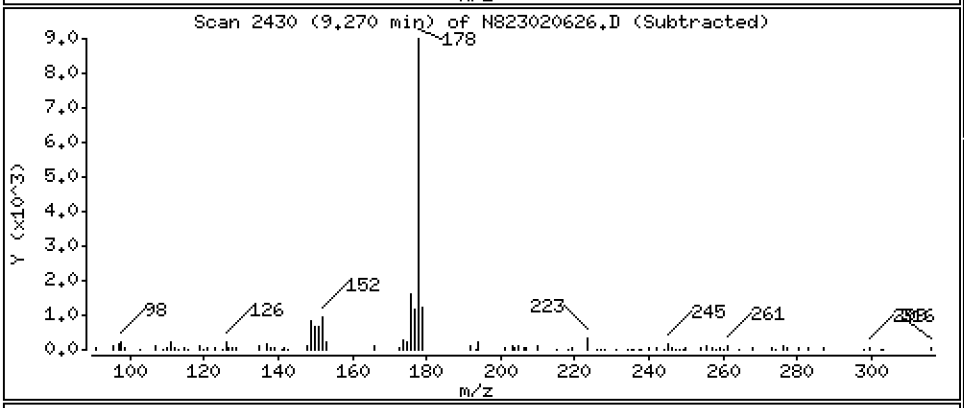
Column phase: Rxi-17sil

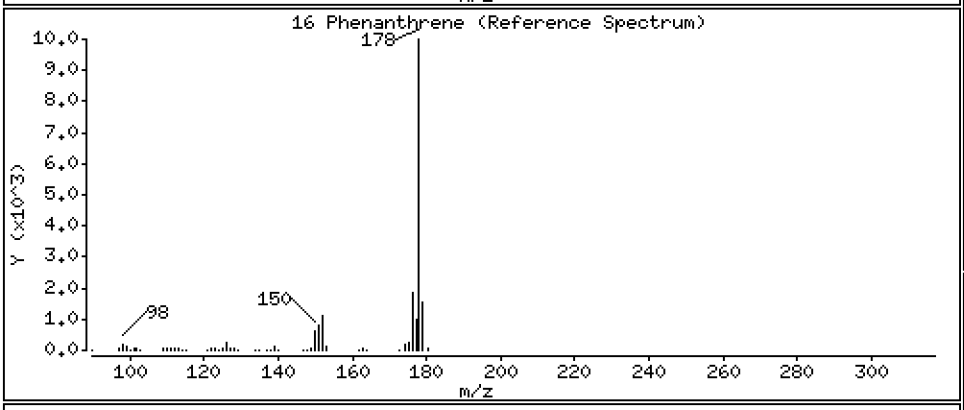
Column diameter: 0.25

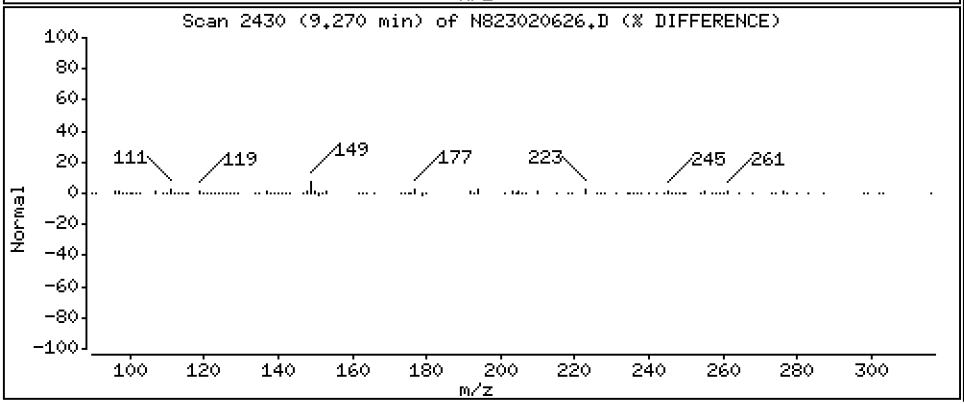
16 Phenanthrene

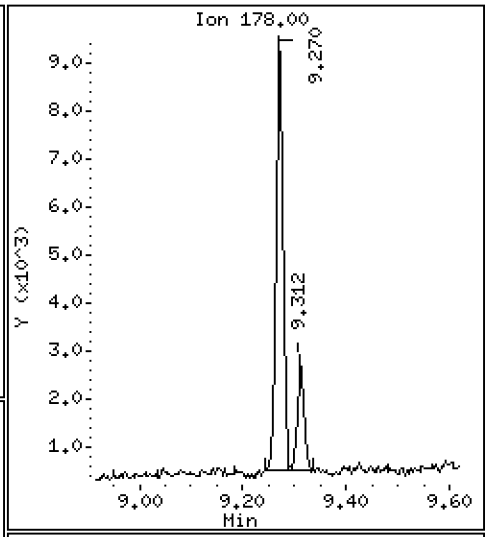
Concentration: 0.3513 ug/mL

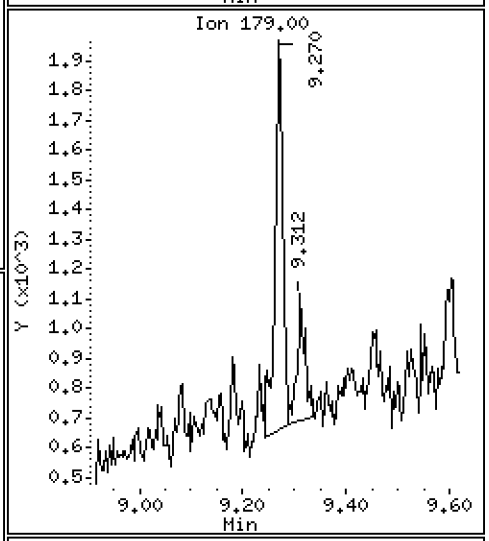


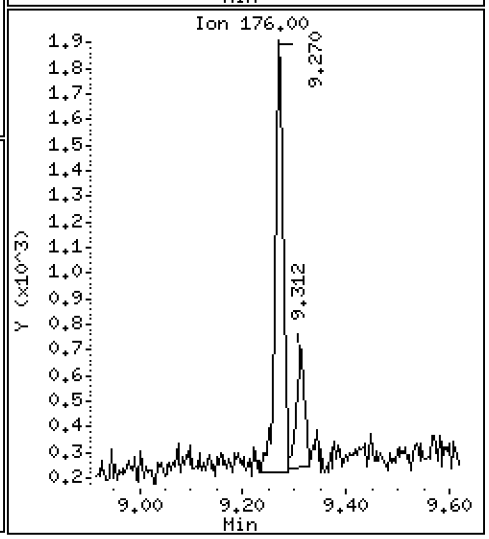












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Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

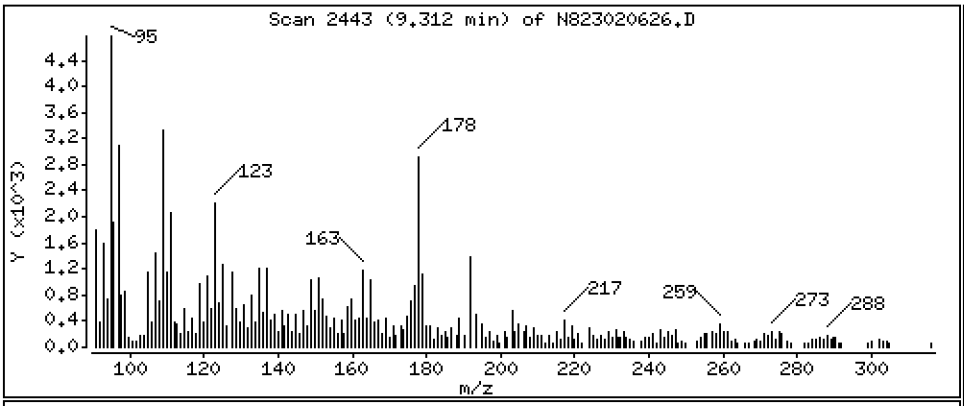
Operator: JZ

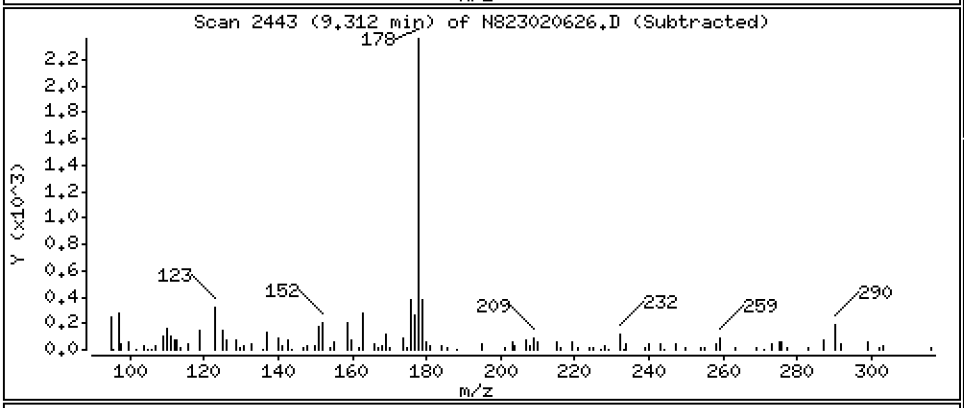
Column phase: Rxi-17sil

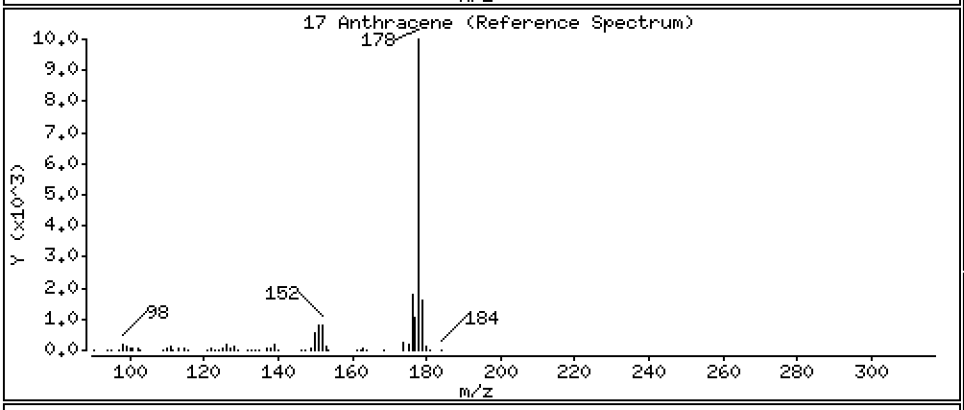
Column diameter: 0.25

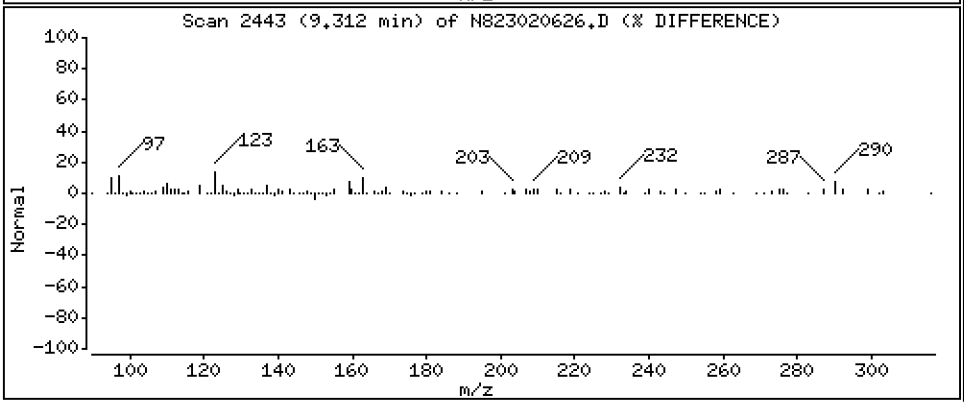
17 Anthracene

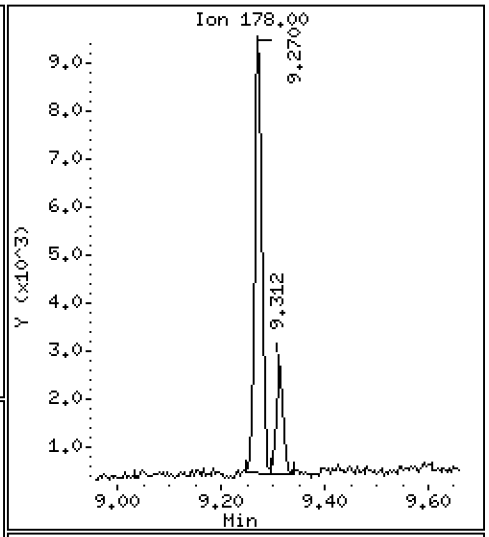
Concentration: 0.09893 ug/mL

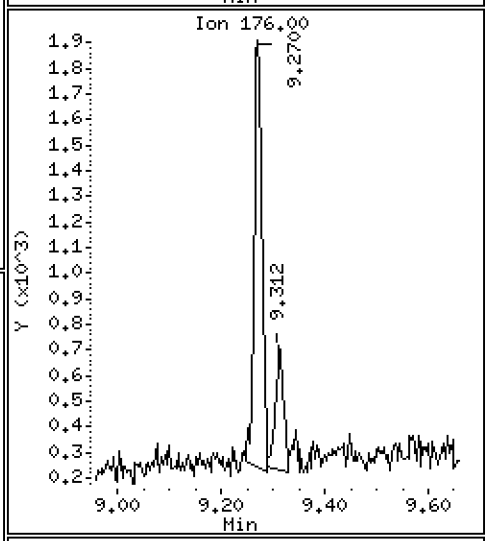


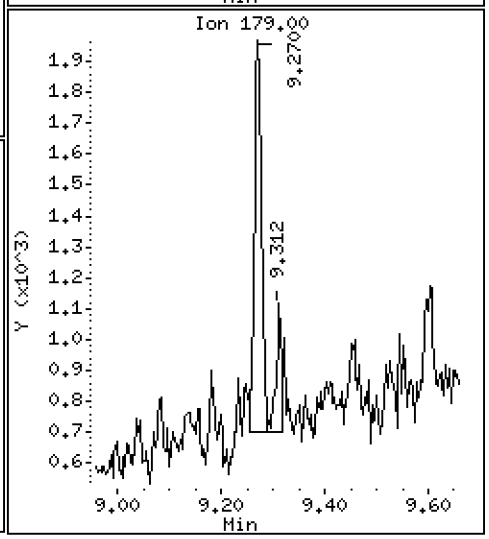












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Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

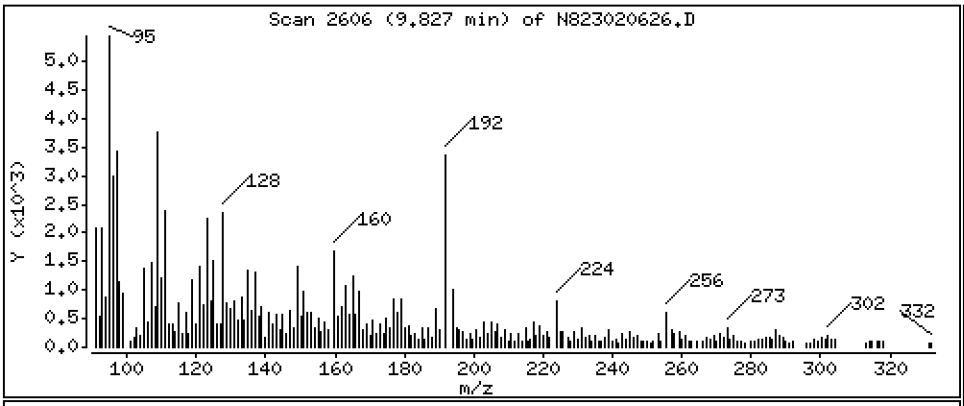
Operator: JZ

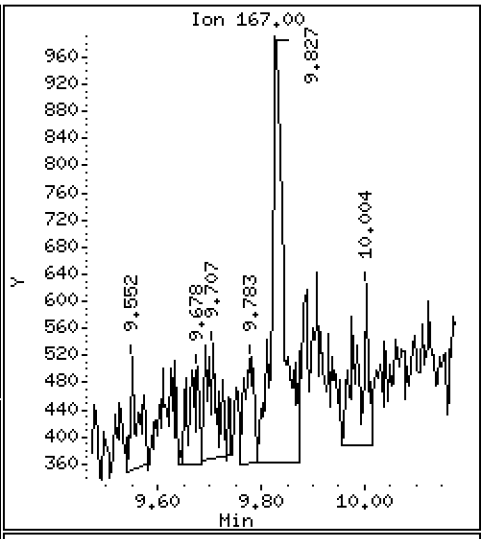
Column phase: Rxi-17sil

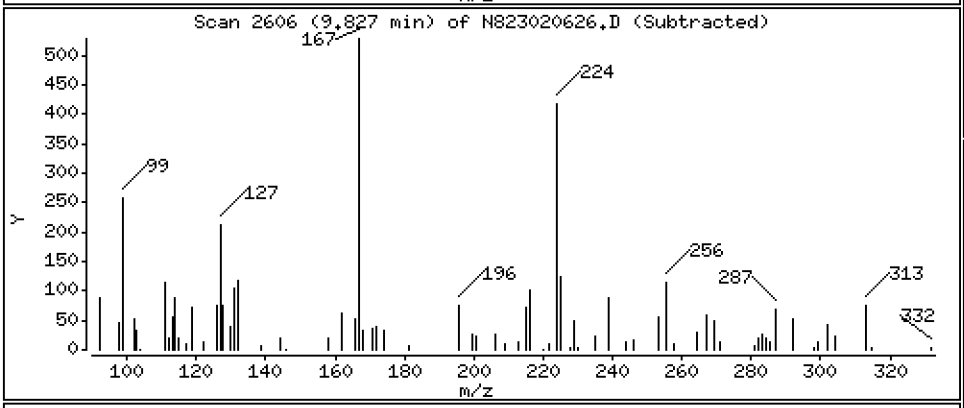
Column diameter: 0.25

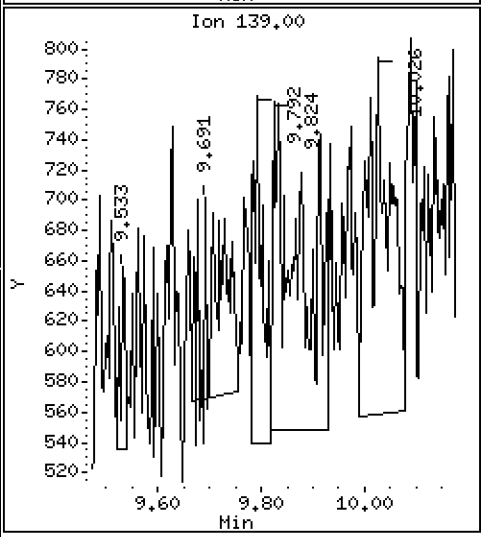
19 Carbazole

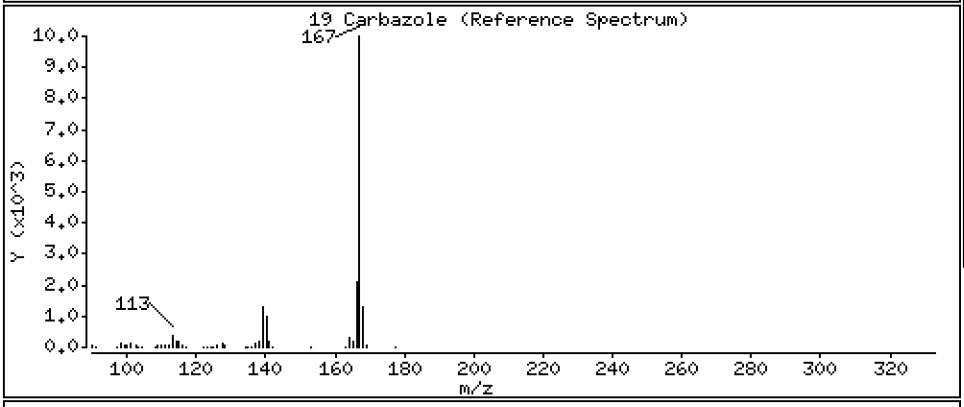
Concentration: 0.05349 ug/mL

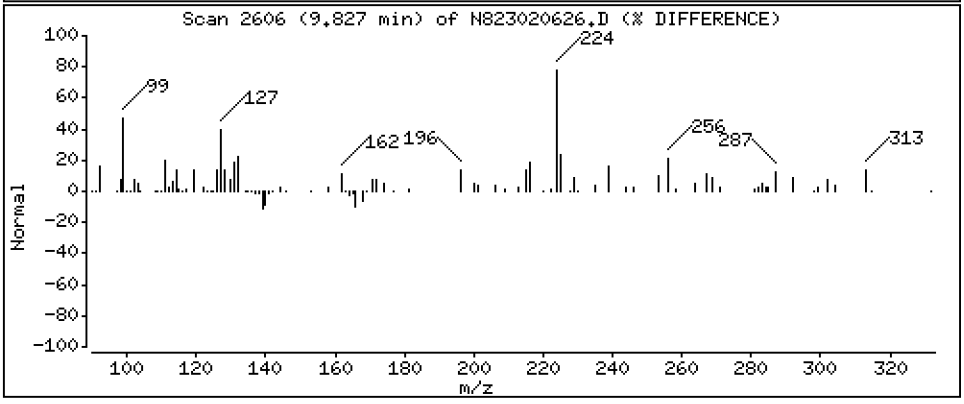












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020626.D

Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

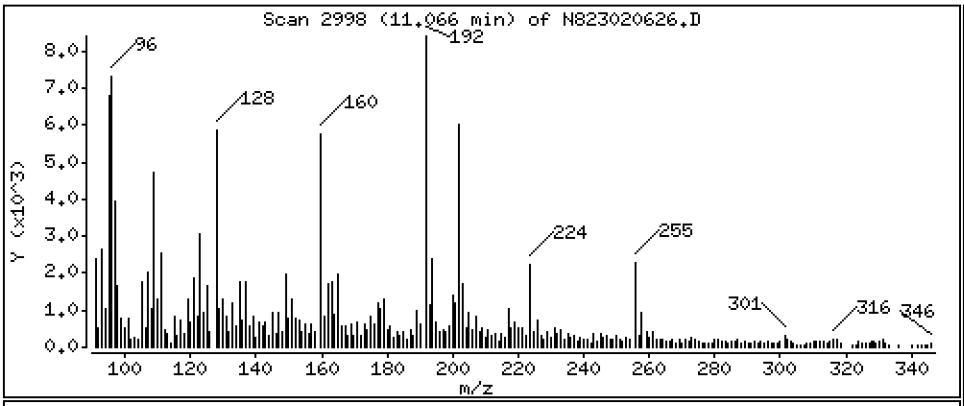
Operator: JZ

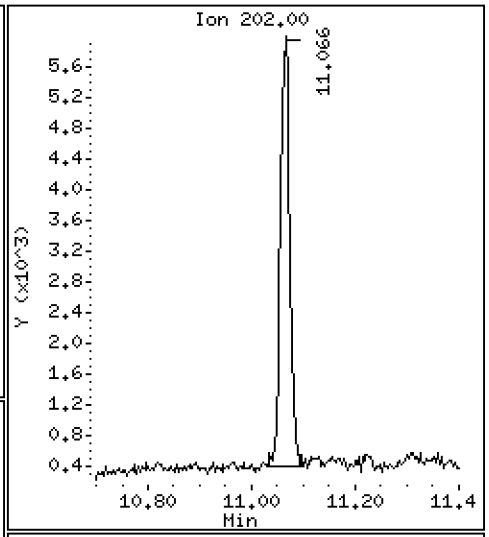
Column phase: Rxi-17sil

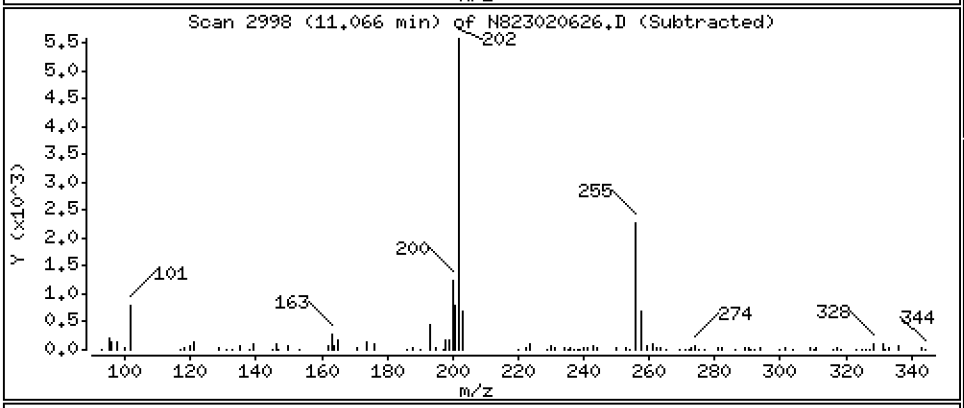
Column diameter: 0.25

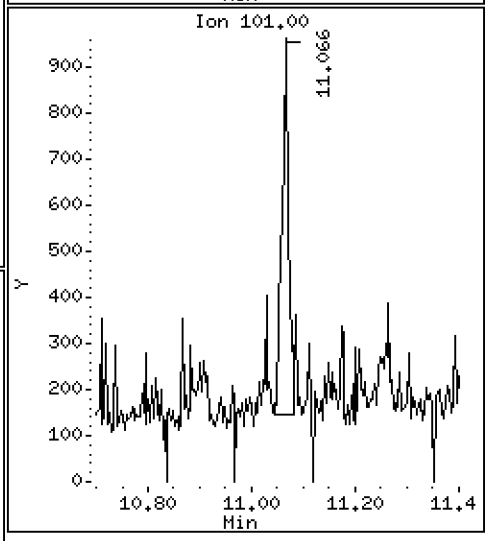
22 Fluoranthene

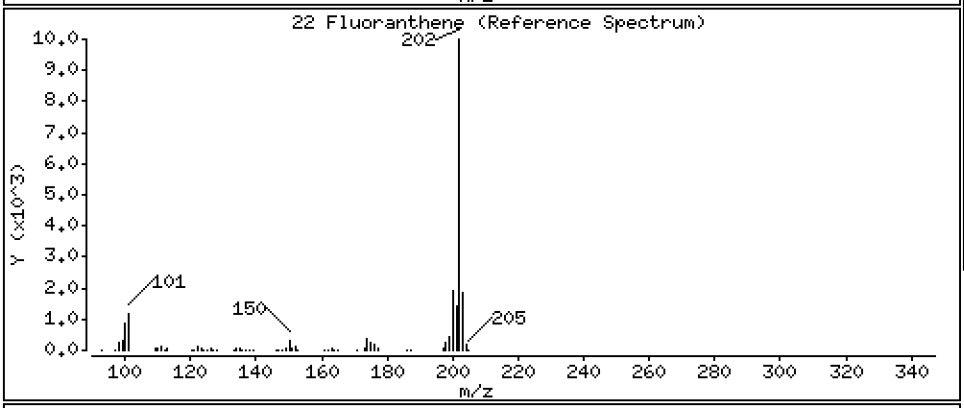
Concentration: 0.2734 ug/mL

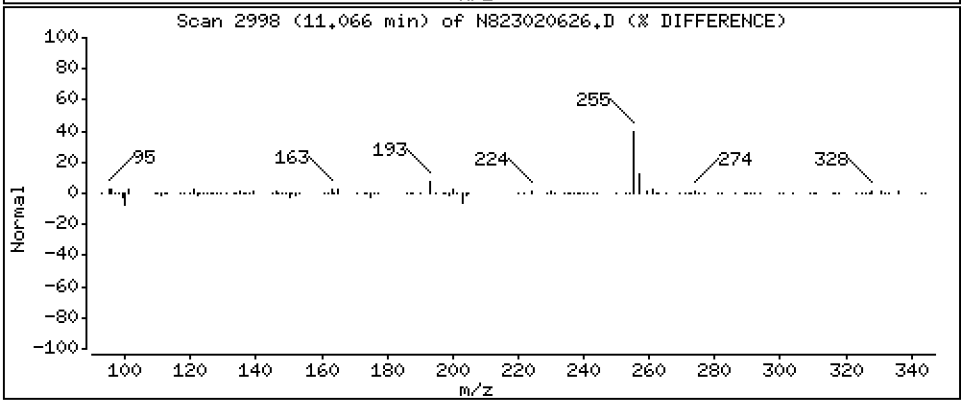












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020626.D

Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

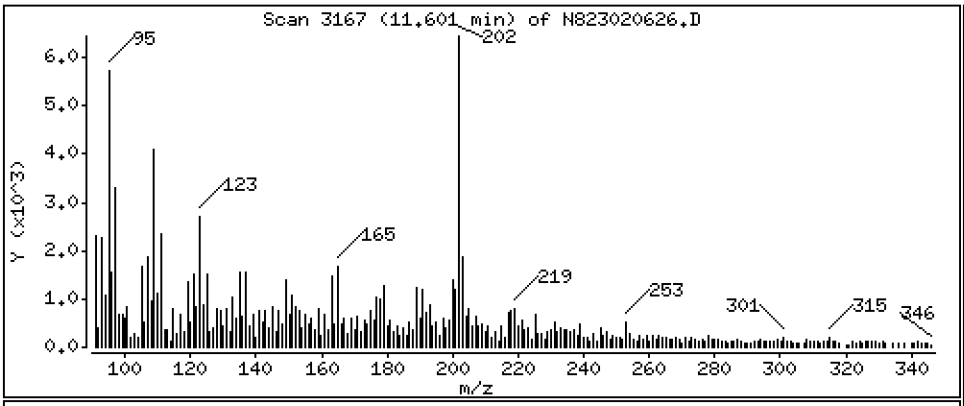
Operator: JZ

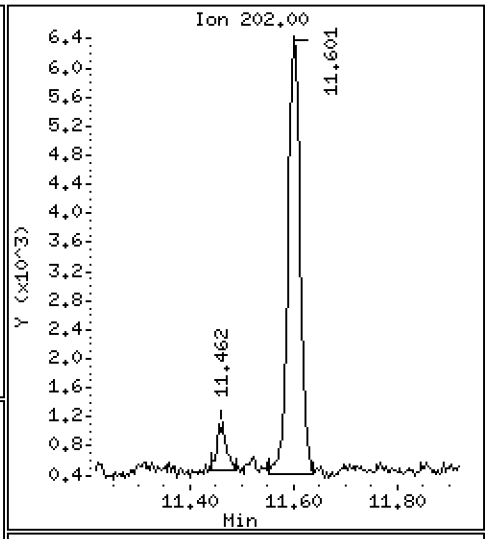
Column phase: Rxi-17sil

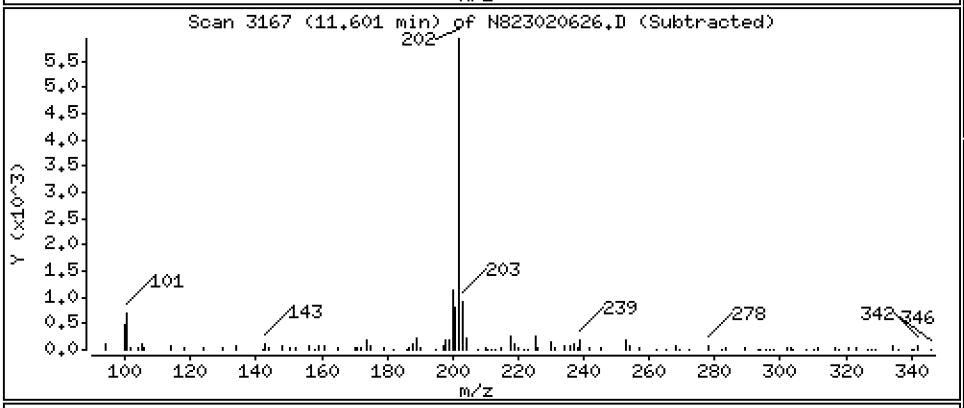
Column diameter: 0.25

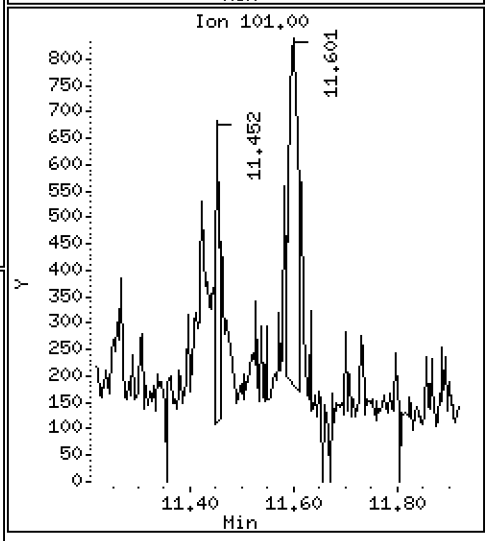
23 Pyrene

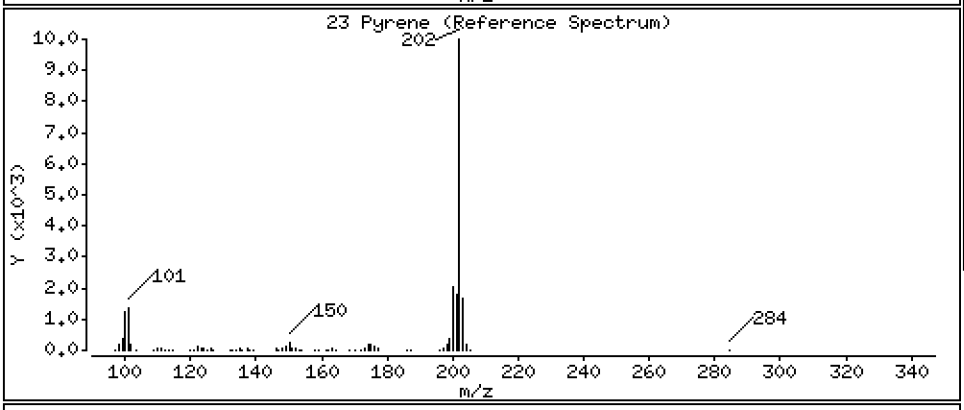
Concentration: 0.6883 ug/mL

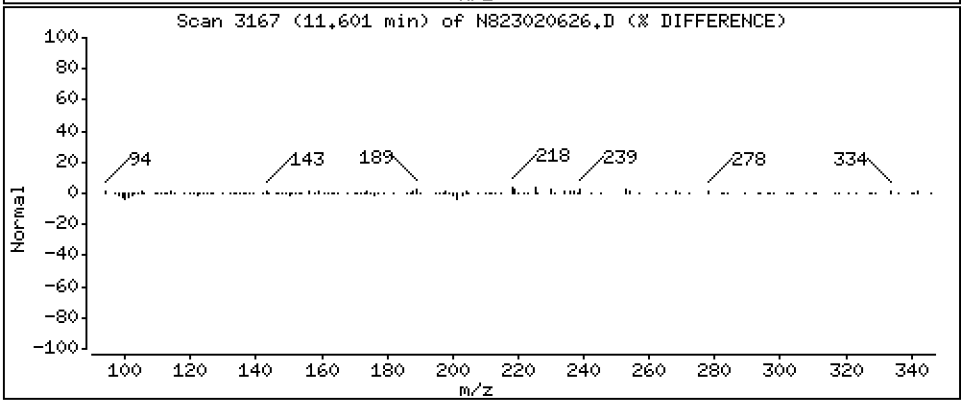












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020626.D

Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

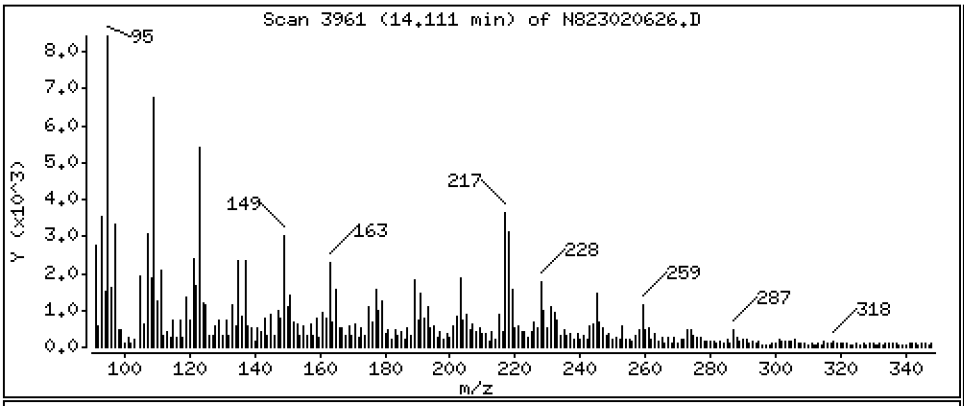
Operator: JZ

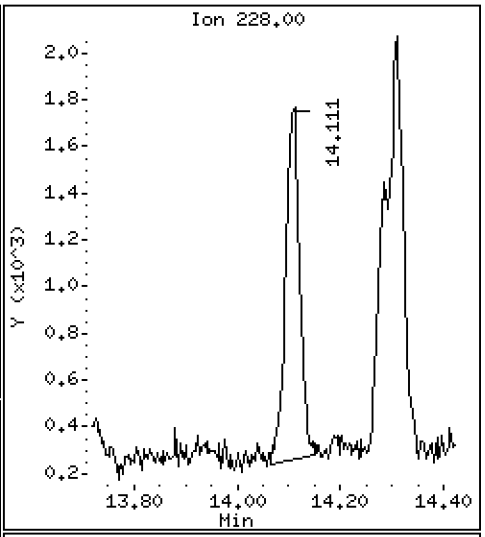
Column phase: Rxi-17sil

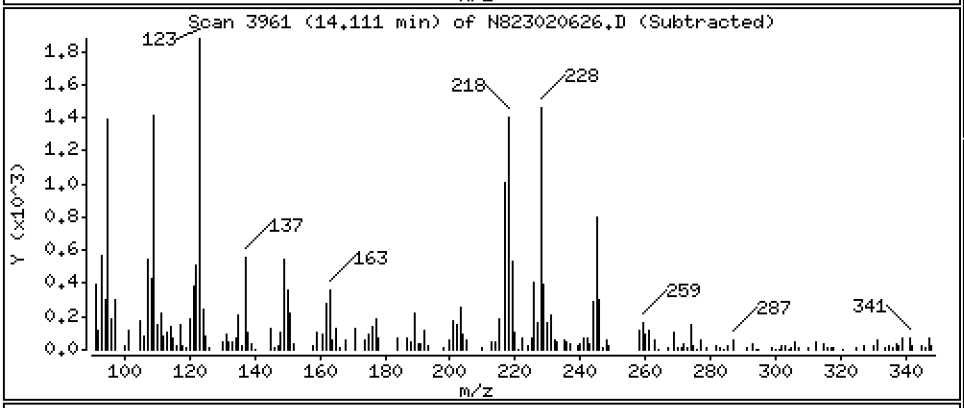
Column diameter: 0.25

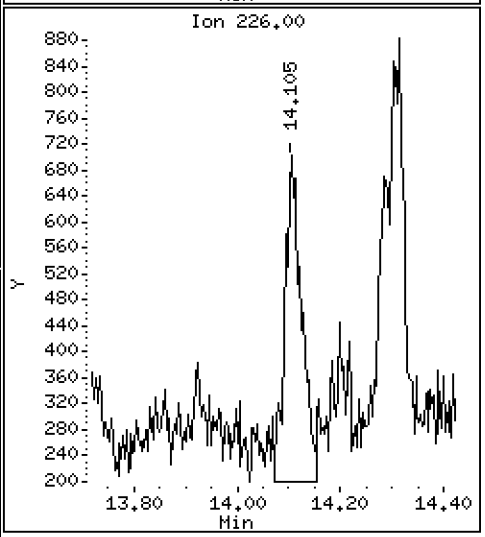
24 Benzo(a)anthracene

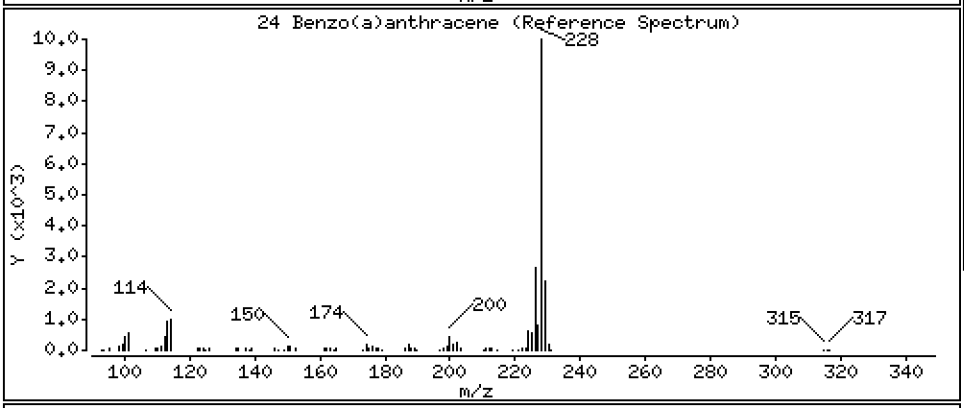
Concentration: 0.2221 ug/mL

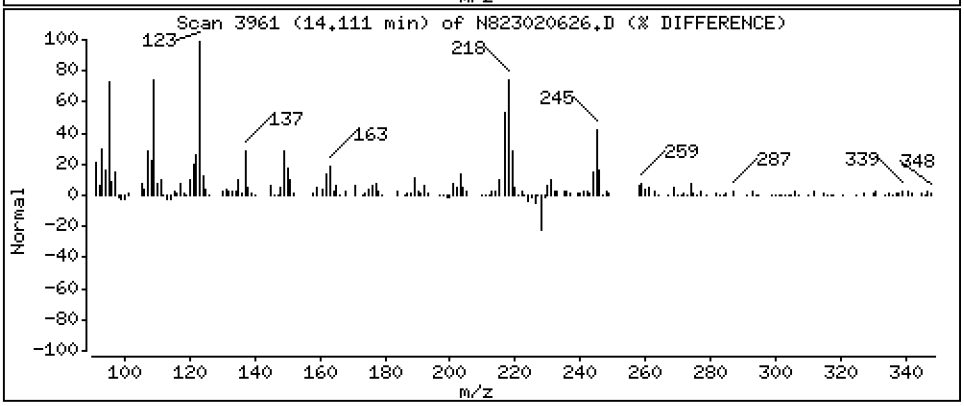












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020626.D

Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

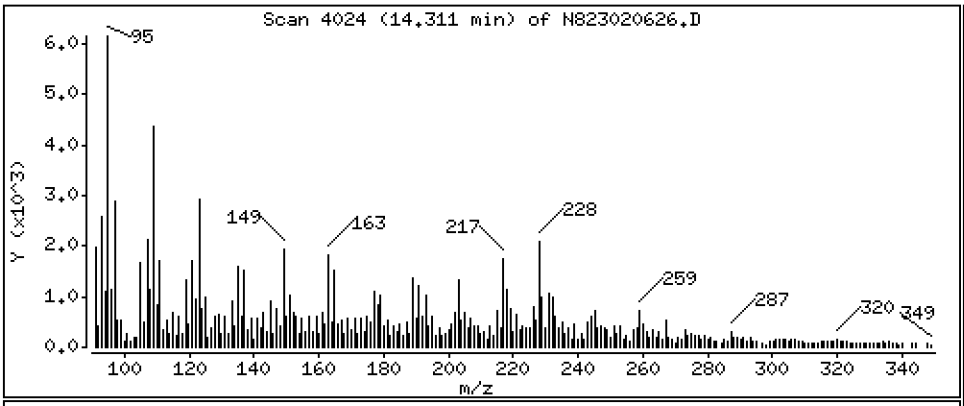
Operator: JZ

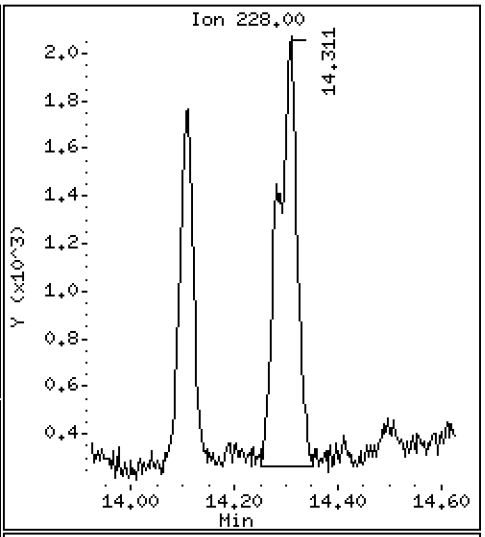
Column phase: Rxi-17sil

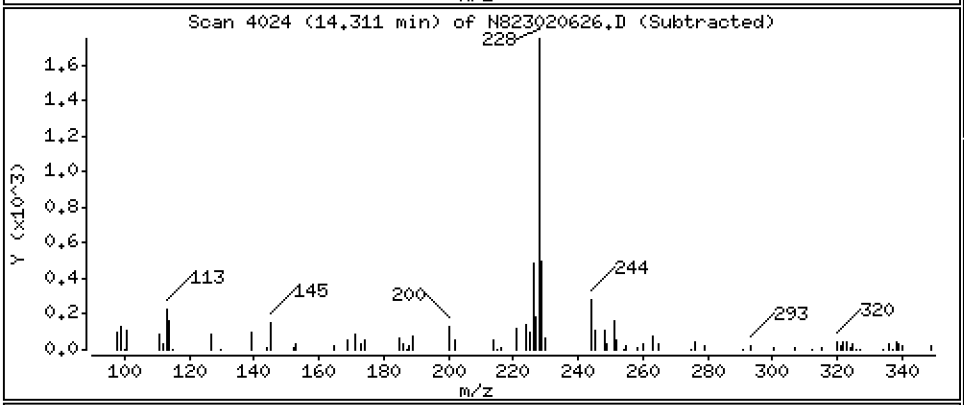
Column diameter: 0.25

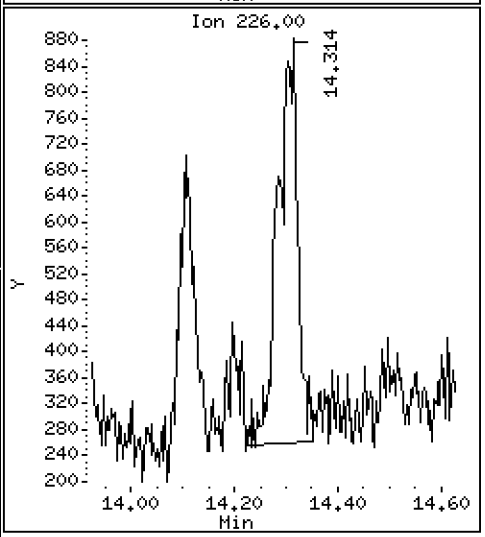
27 Chrysene

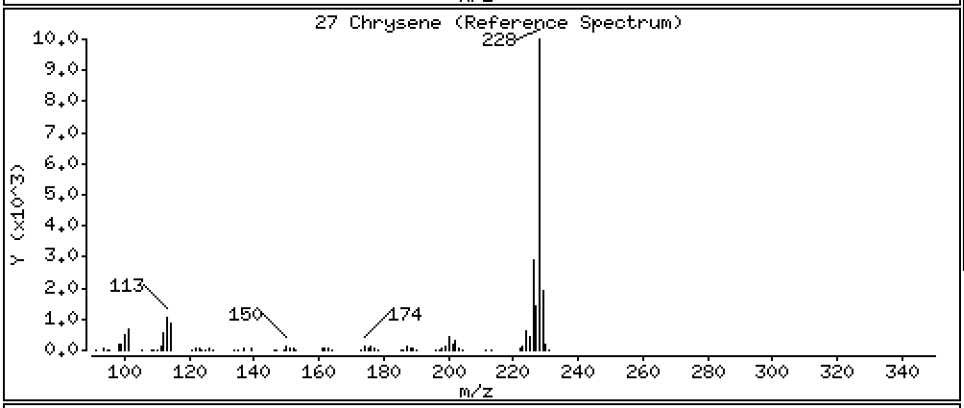
Concentration: 0.3387 ug/mL

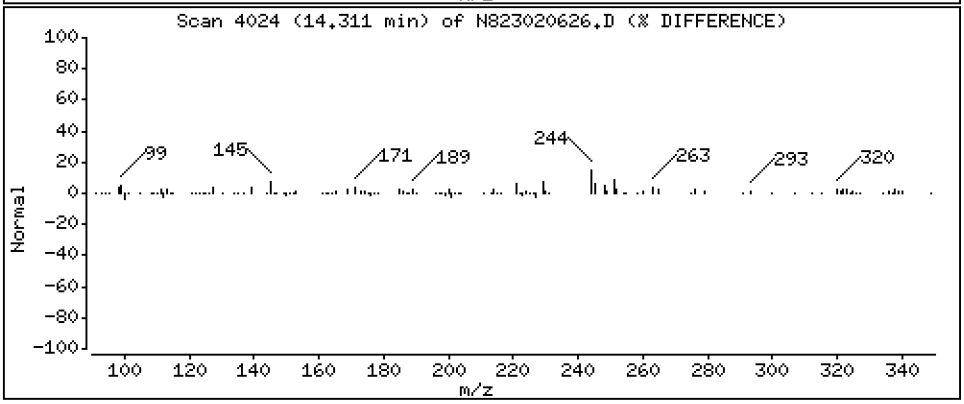












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020626.D

Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

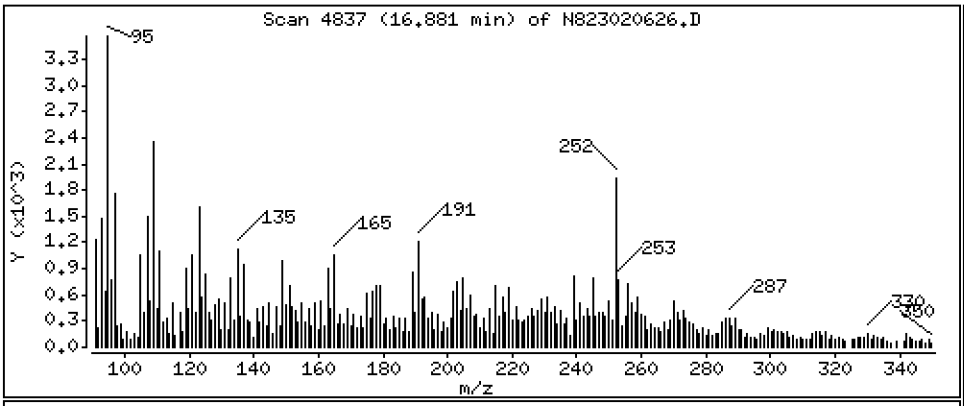
Operator: JZ

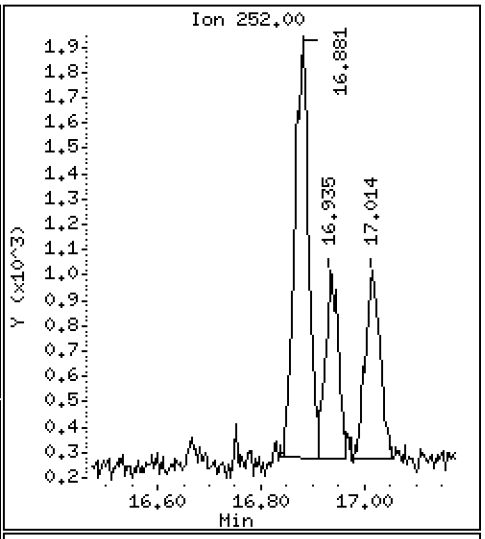
Column phase: Rxi-17sil

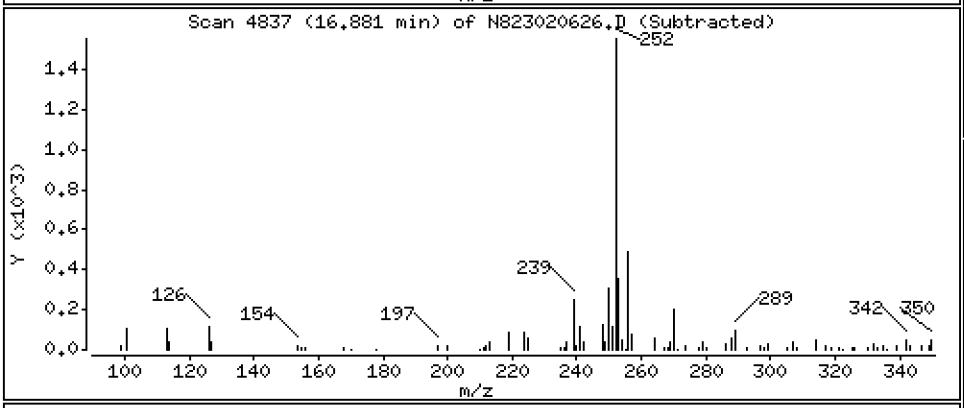
Column diameter: 0.25

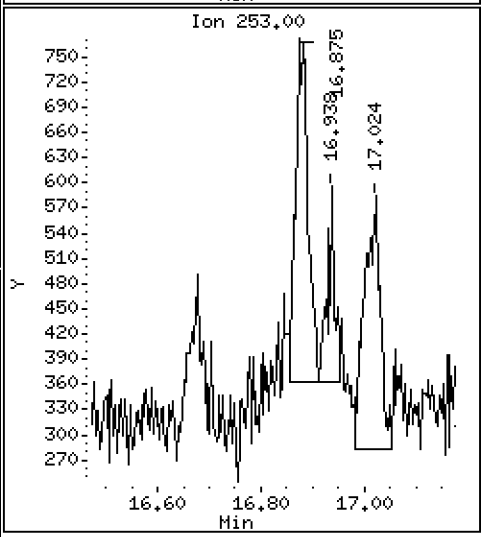
28 Benzo(b)fluoranthene

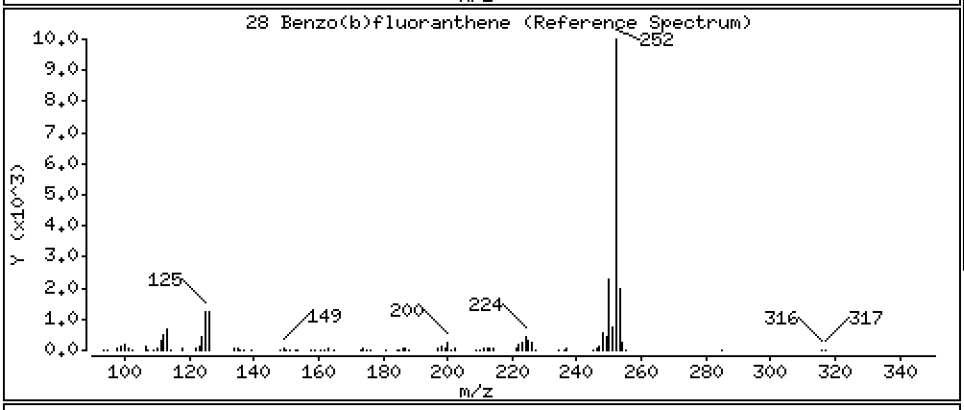
Concentration: 0.2605 ug/mL

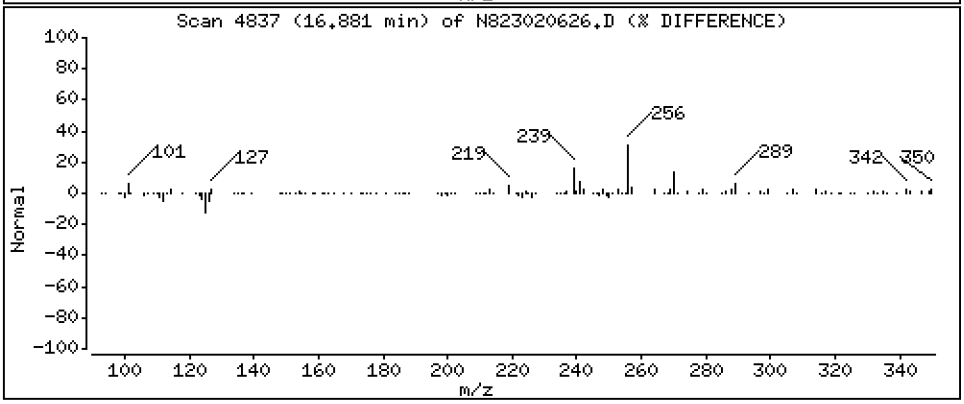












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020626.D

Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

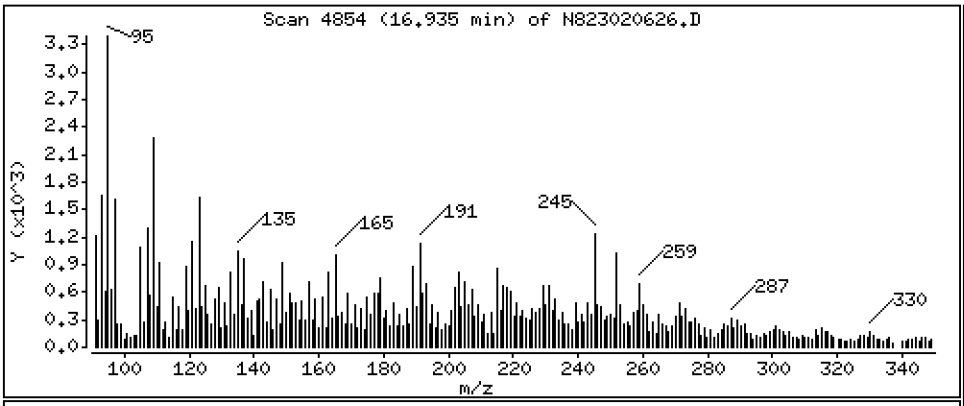
Operator: JZ

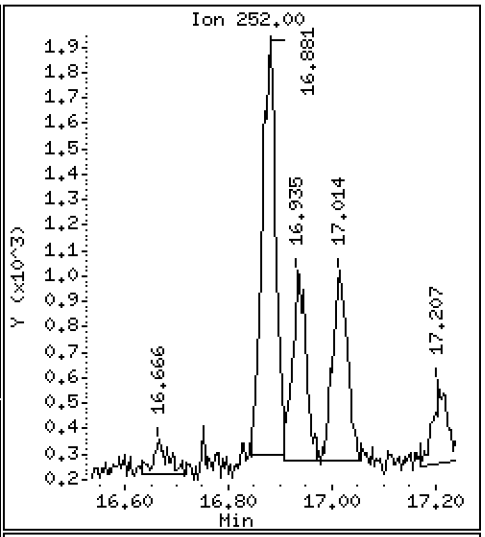
Column phase: Rxi-17sil

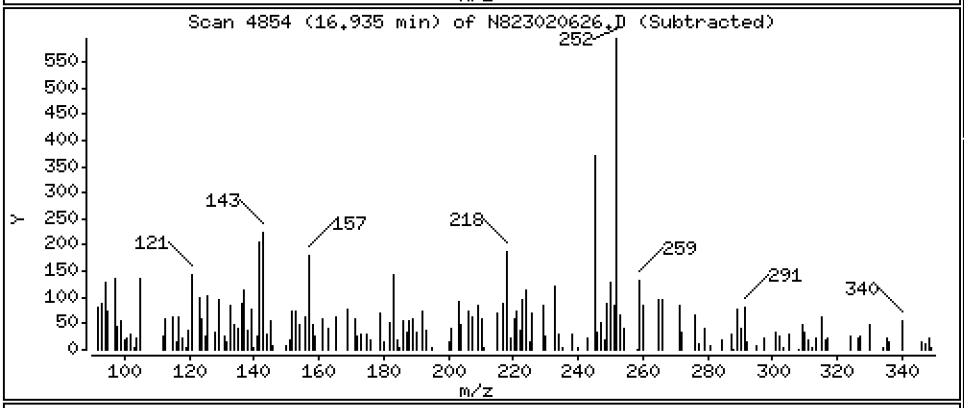
Column diameter: 0.25

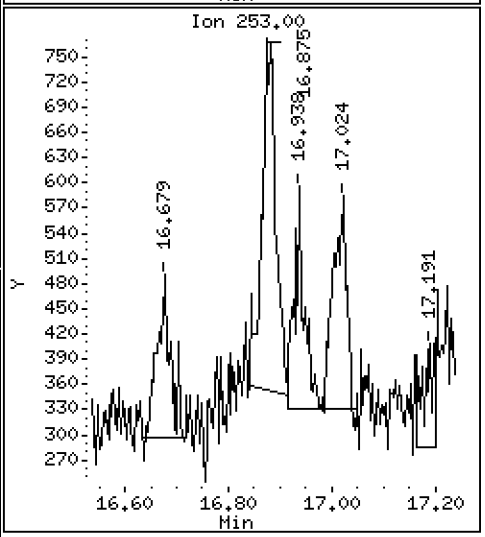
29 Benzo(k)fluoranthene

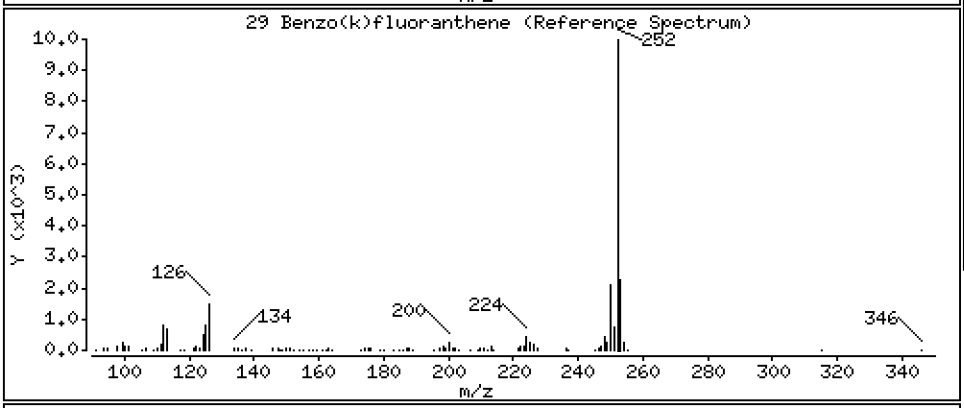
Concentration: 0.1168 ug/mL

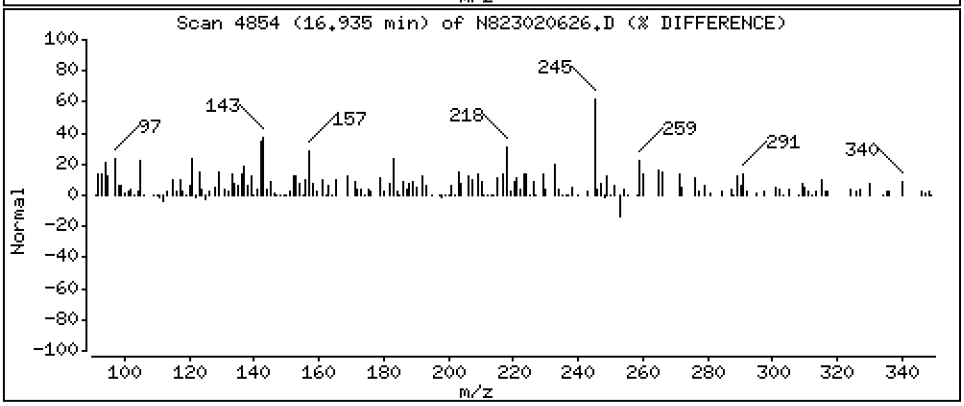












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020626.D

Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

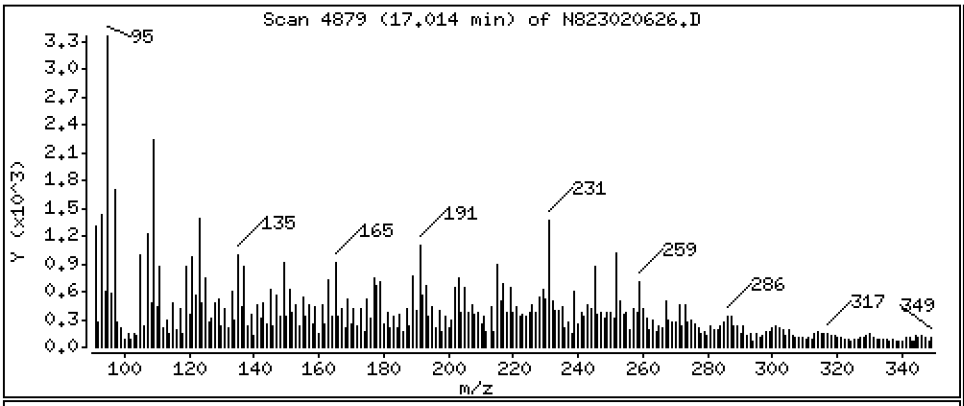
Operator: JZ

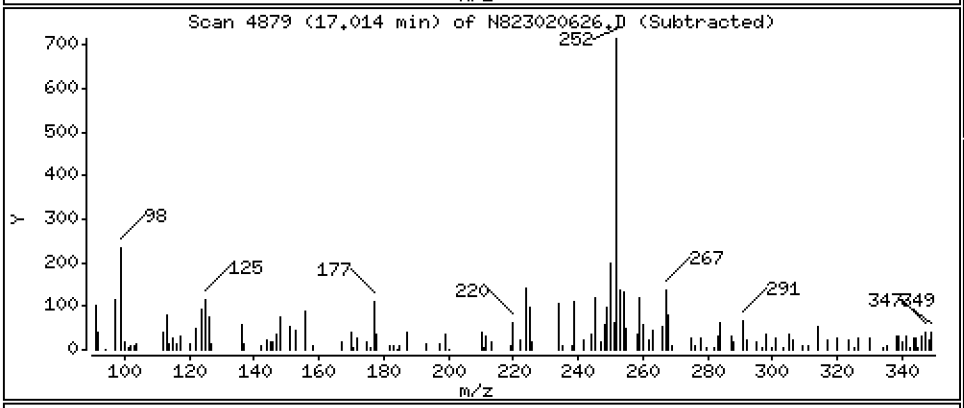
Column phase: Rxi-17sil

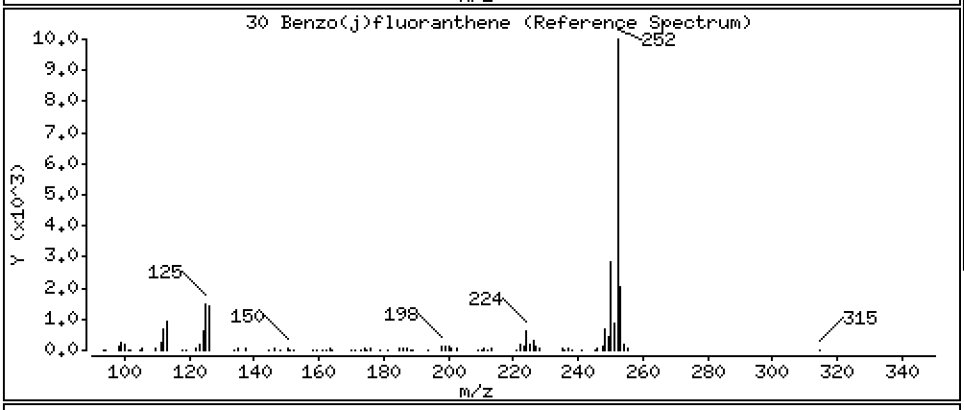
Column diameter: 0.25

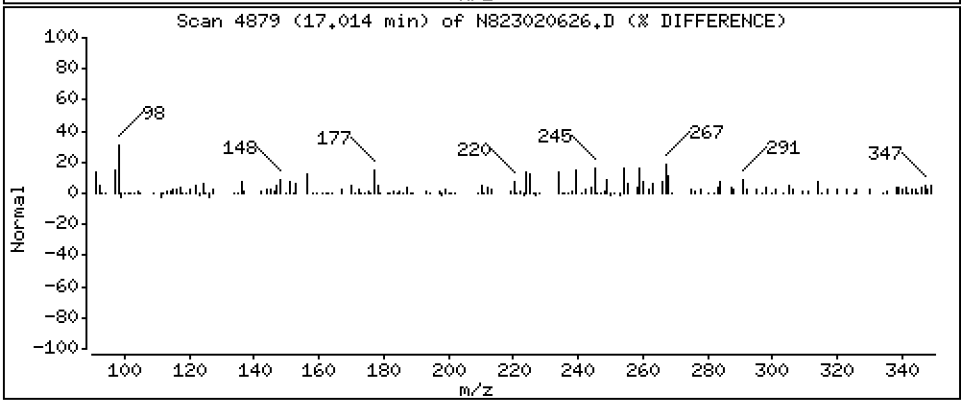
30 Benzo(j)fluoranthene

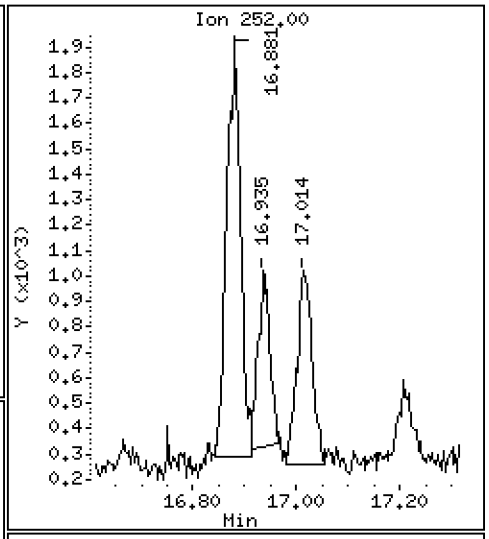
Concentration: 0.1427 ug/mL

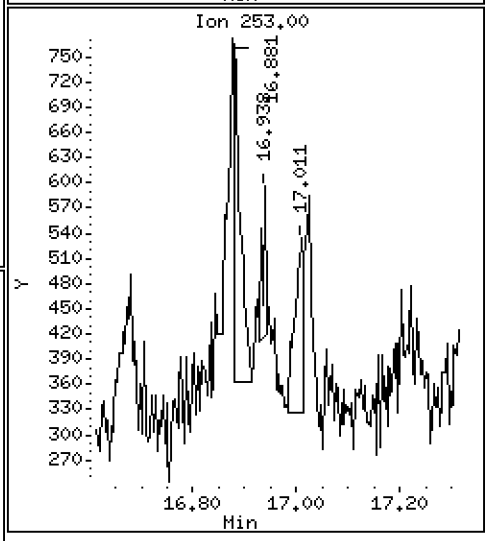












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020626.D

Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

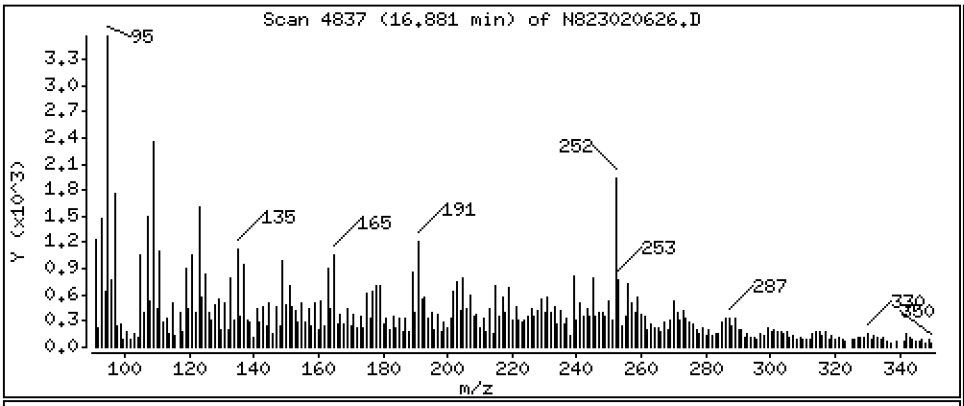
Operator: JZ

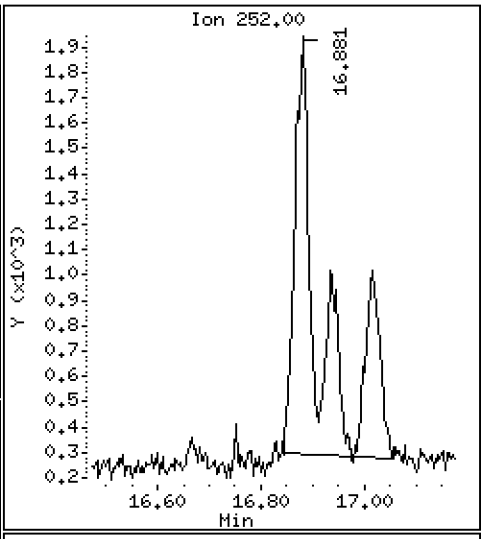
Column phase: Rxi-17sil

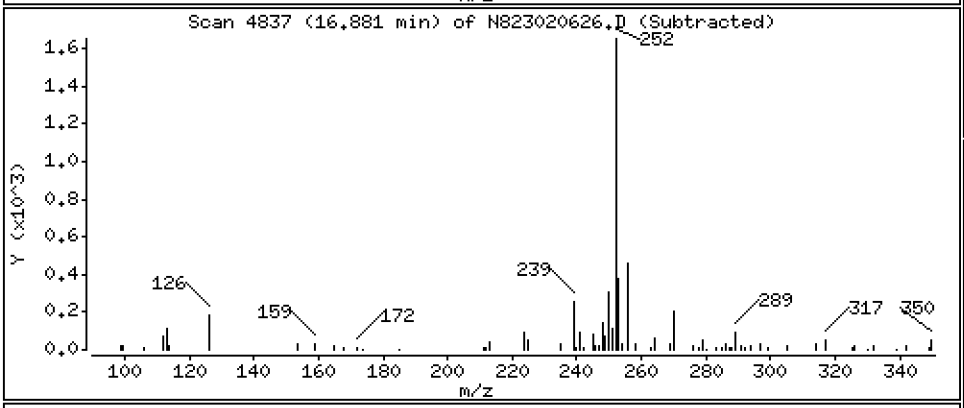
Column diameter: 0.25

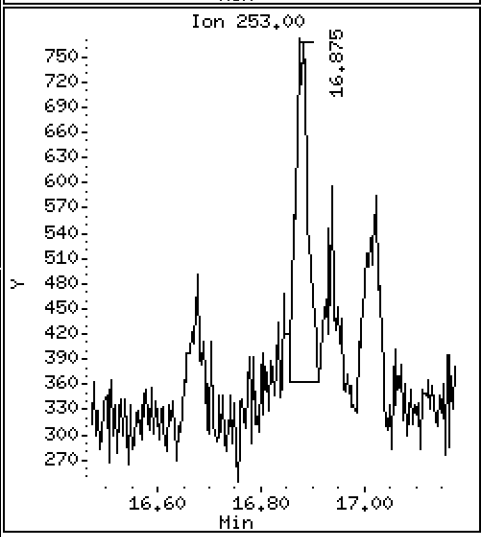
31 Total Benzofluoranthenes

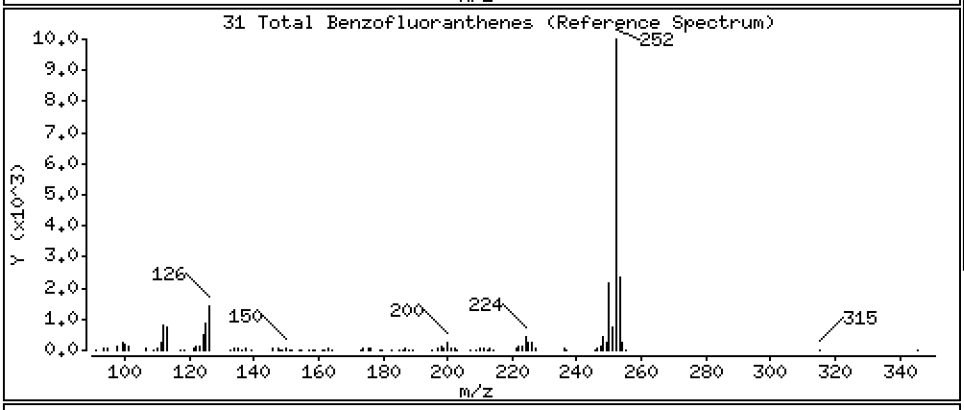
Concentration: 0.5050 ug/mL

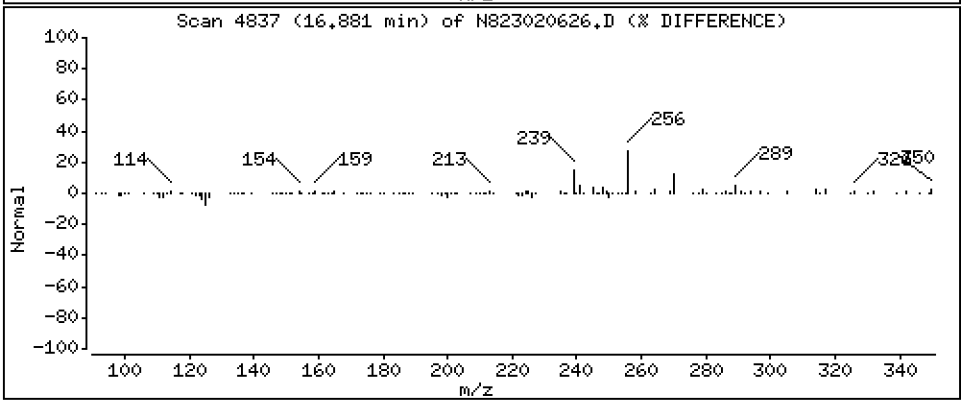












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020626.D

Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

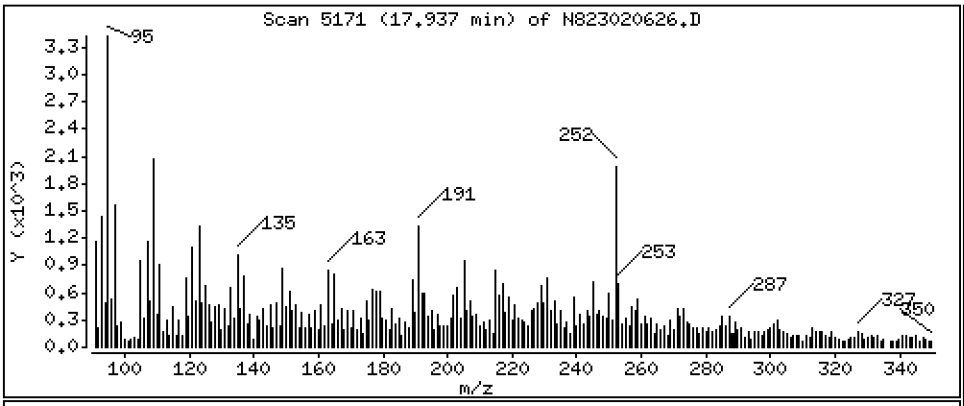
Operator: JZ

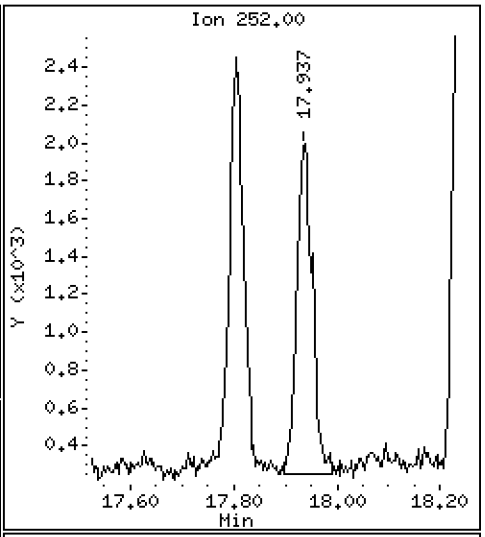
Column phase: Rxi-17sil

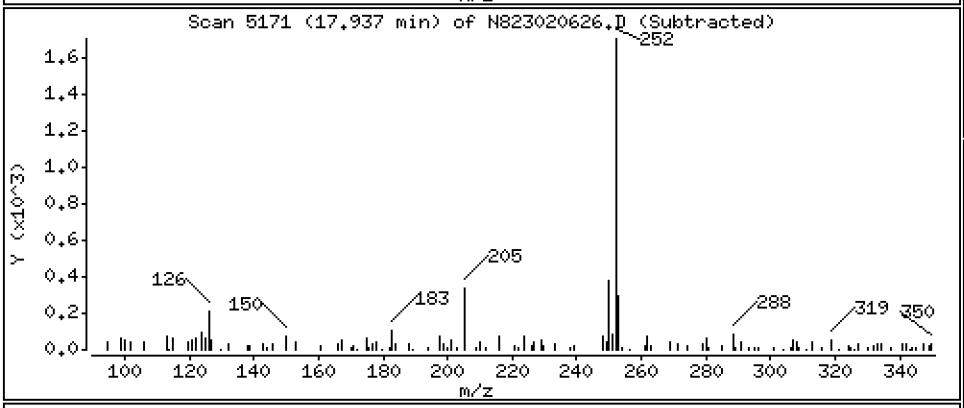
Column diameter: 0.25

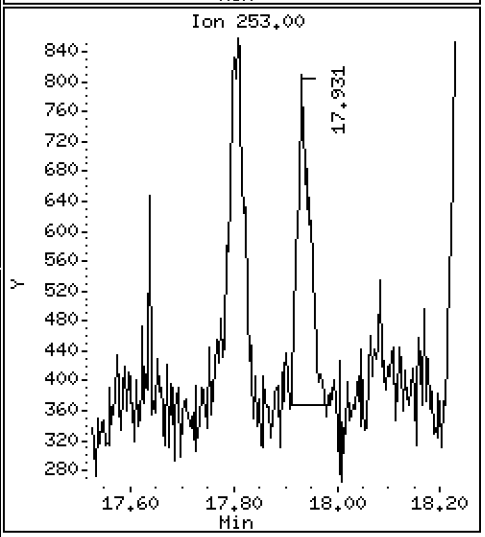
32 Benzo(a)pyrene

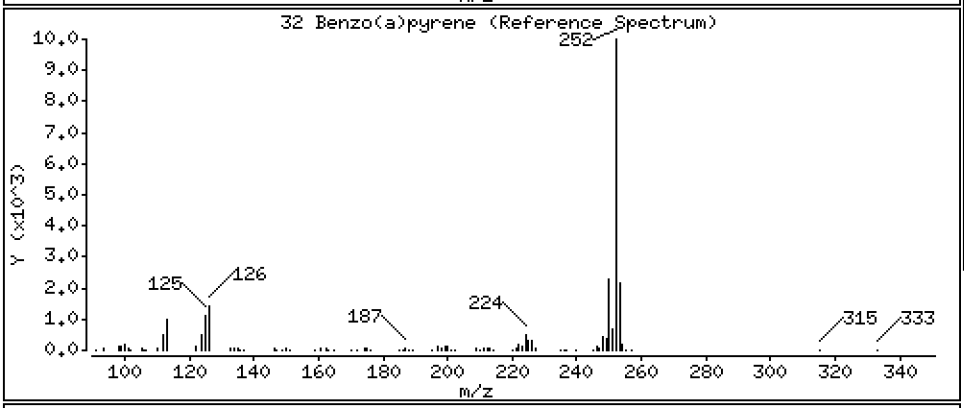
Concentration: 0.3462 ug/mL

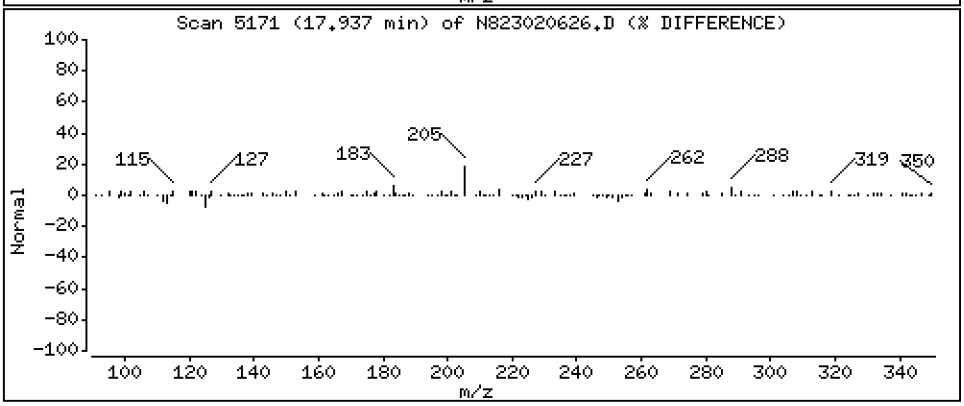












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020626.D

Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

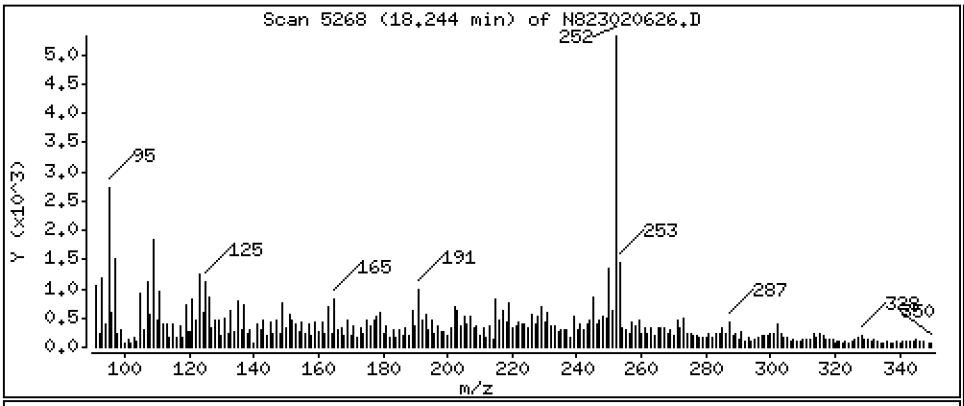
Operator: JZ

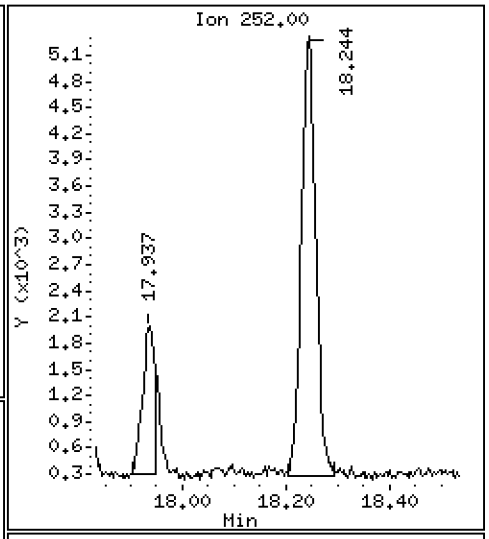
Column phase: Rxi-17sil

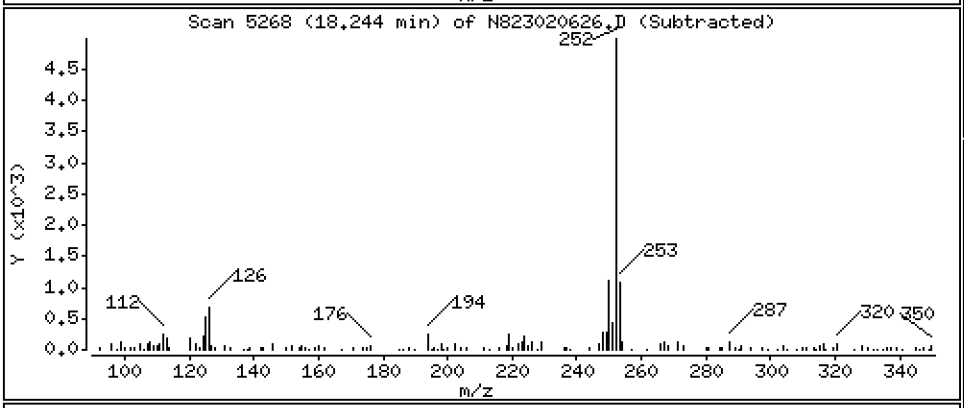
Column diameter: 0.25

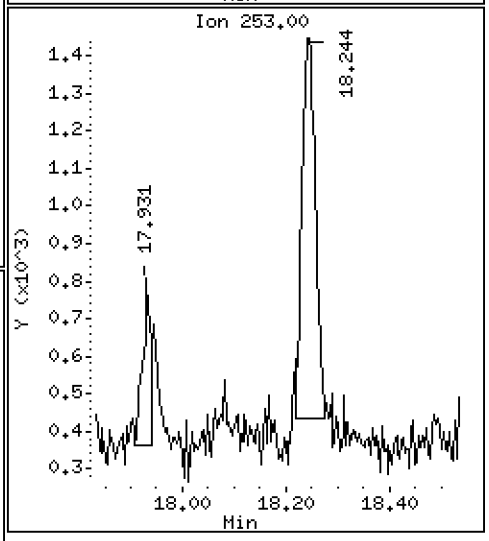
35 Perylene

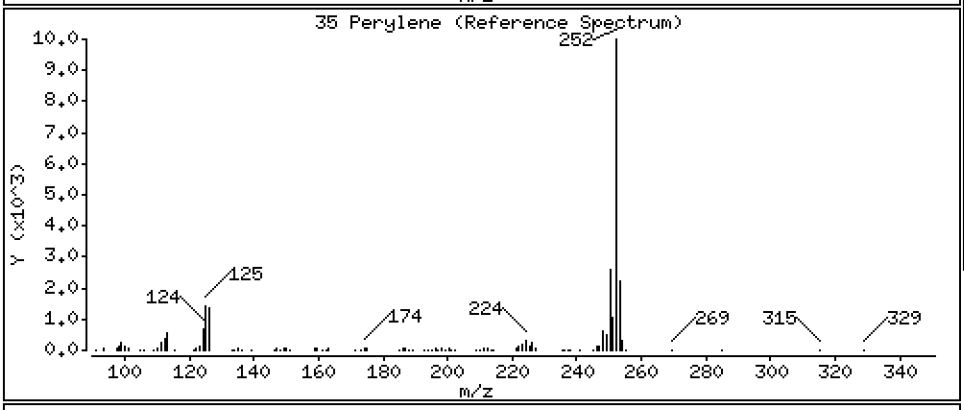
Concentration: 0.8558 ug/mL

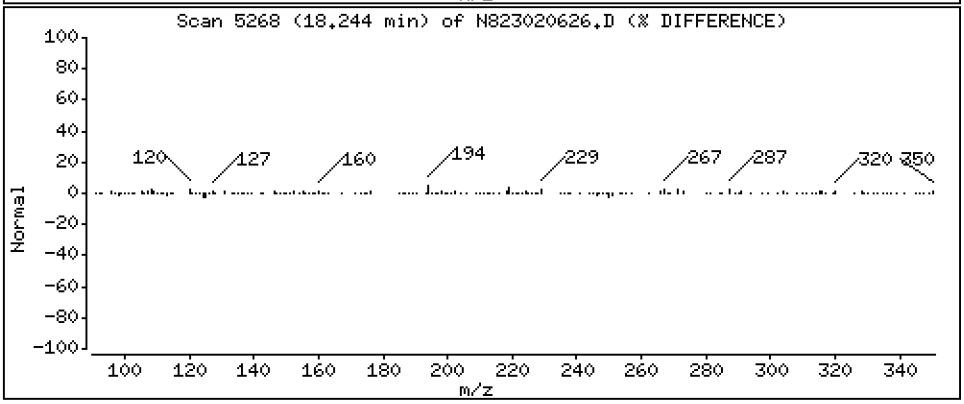












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020626.D

Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

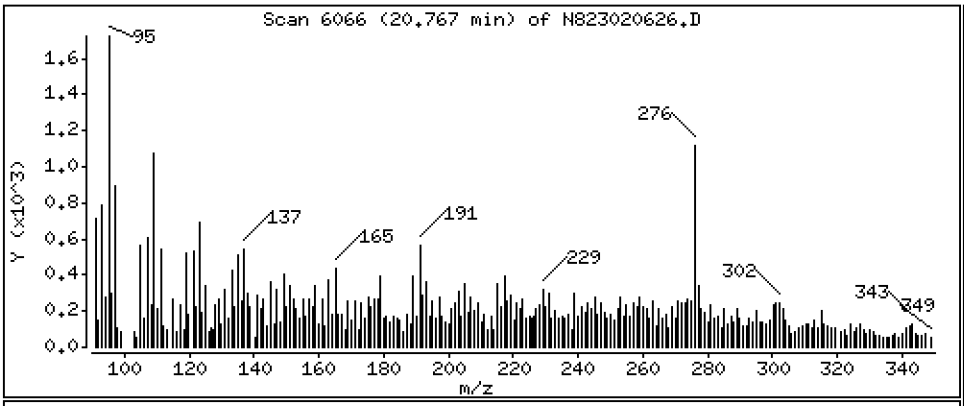
Operator: JZ

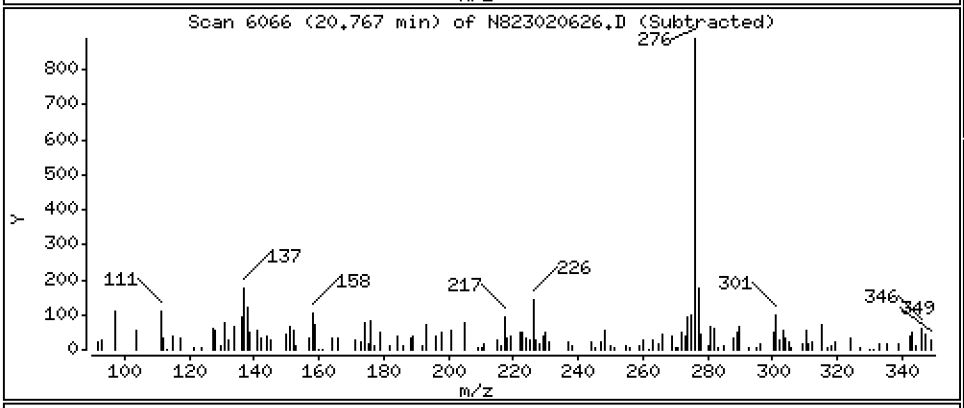
Column phase: Rxi-17sil

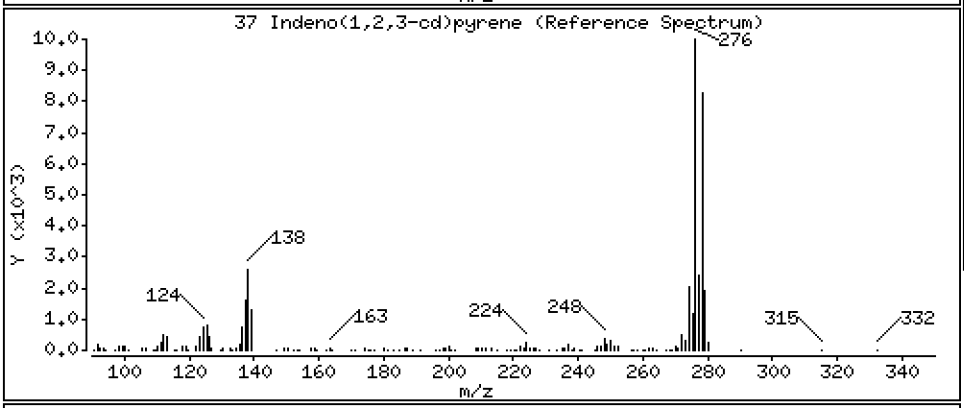
Column diameter: 0.25

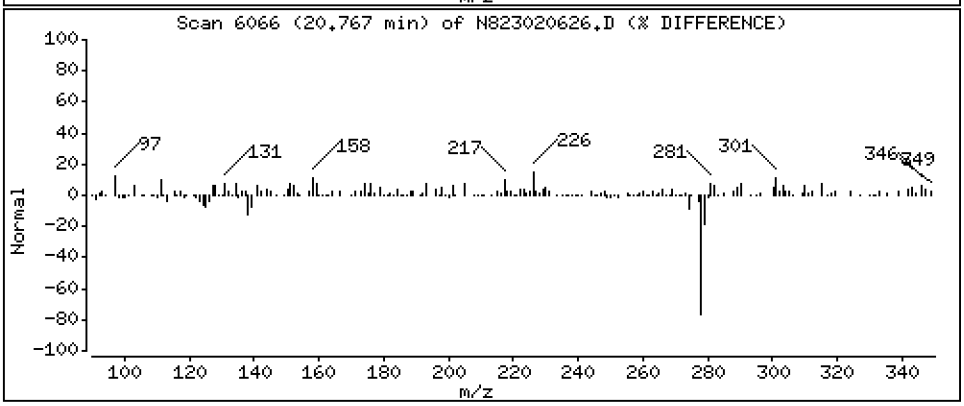
37 Indeno(1,2,3-cd)pyrene

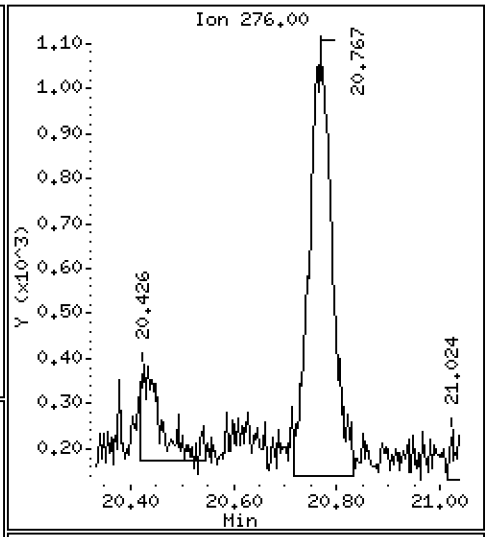
Concentration: 0.2421 ug/mL

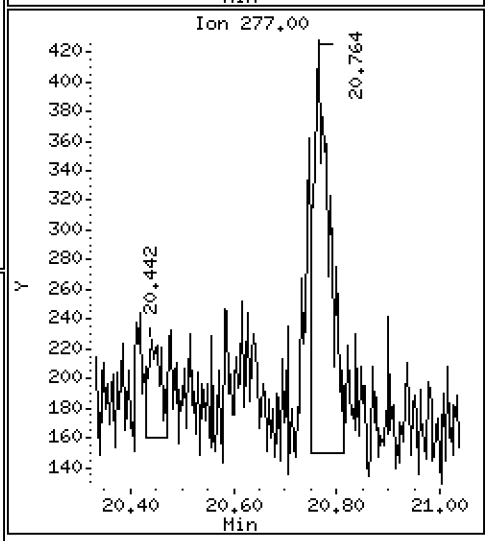












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020626.D

Date : 07-FEB-2023 00:01

Client ID:

Instrument: nt8.i

Sample Info: 23A0249-07

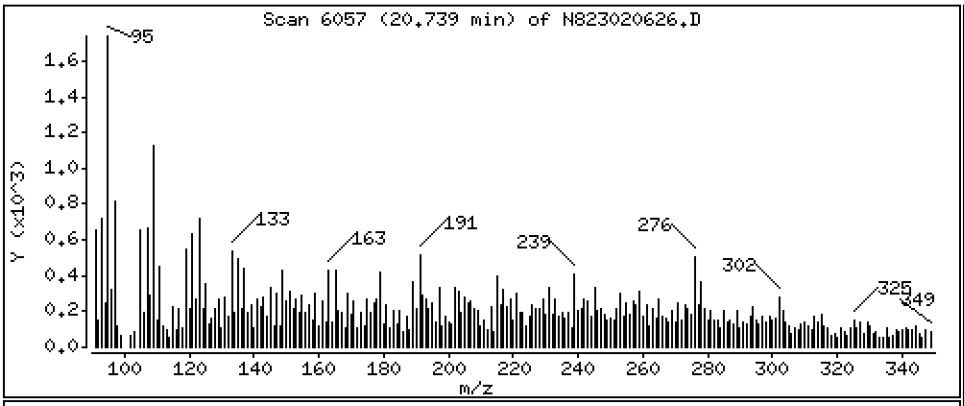
Operator: JZ

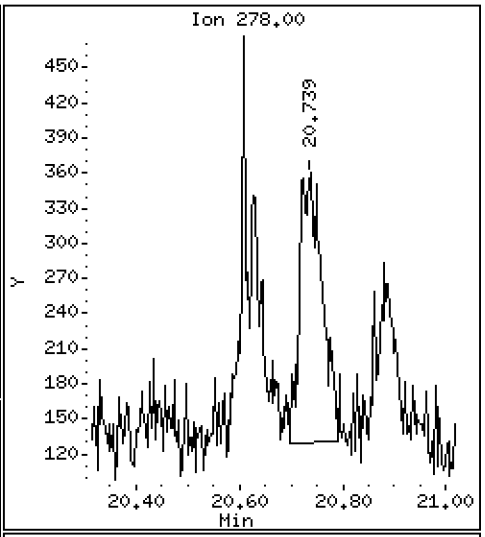
Column phase: Rxi-17sil

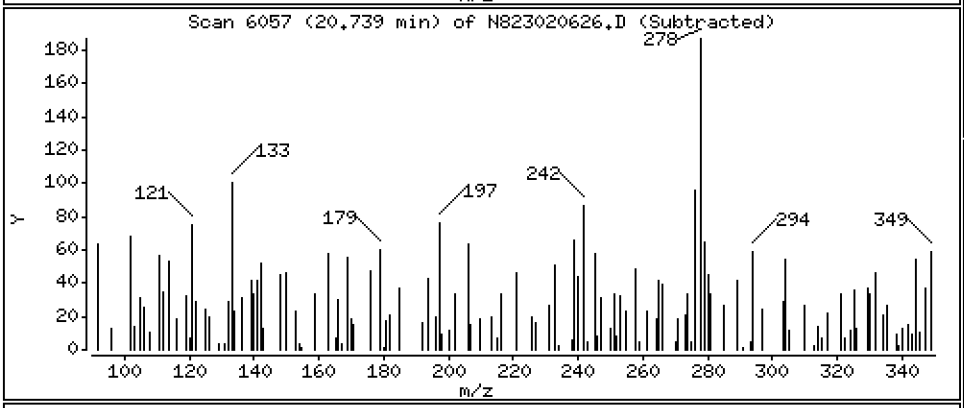
Column diameter: 0.25

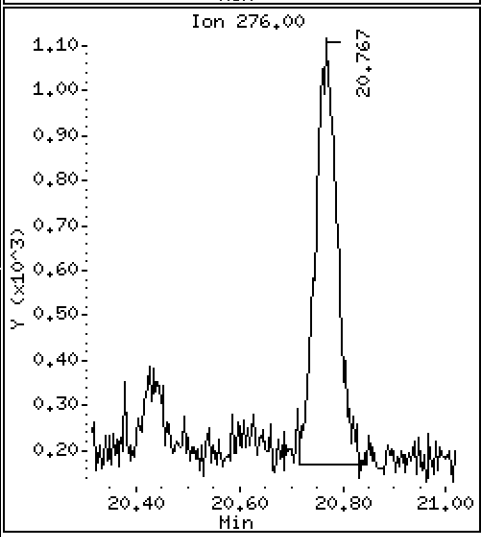
38 Dibenzo(a,h)anthracene

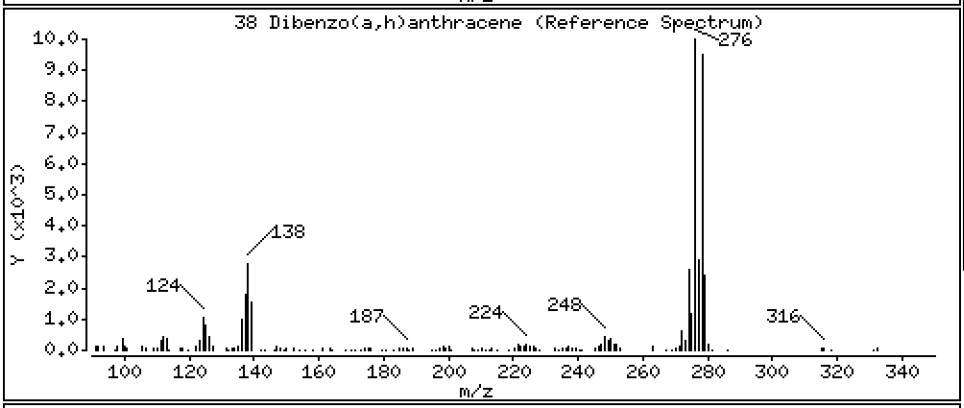
Concentration: 0.06613 ug/mL

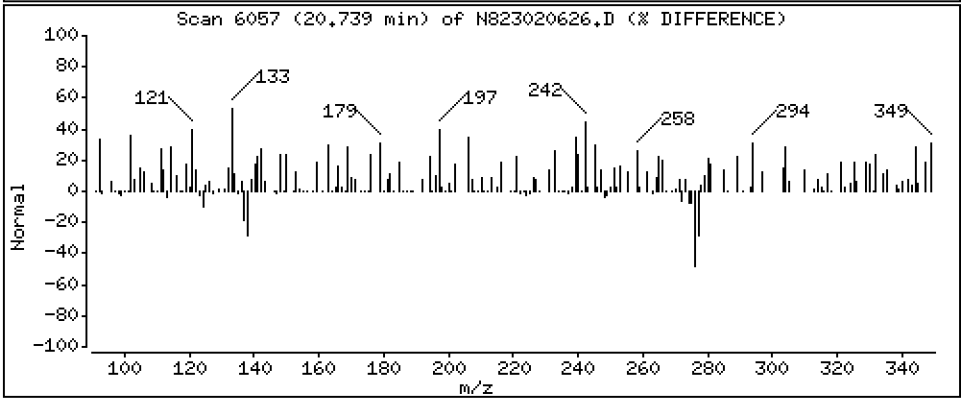












Date : 07-FEB-2023 00:01

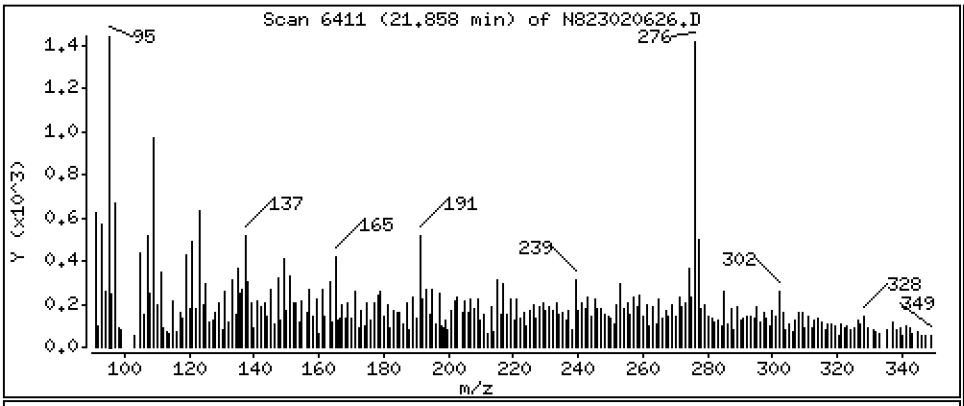
Client ID: Instrument: nt8.i

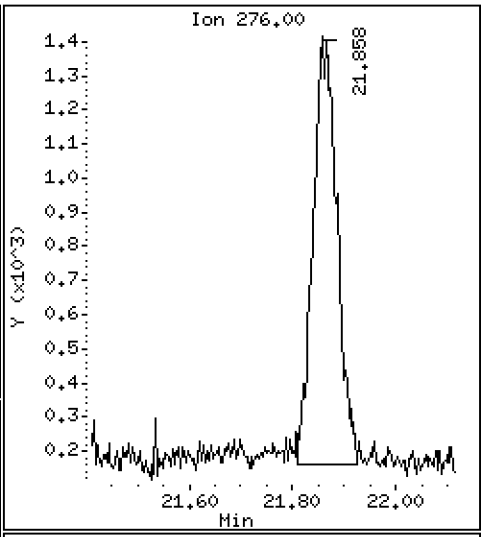
Sample Info: 23A0249-07

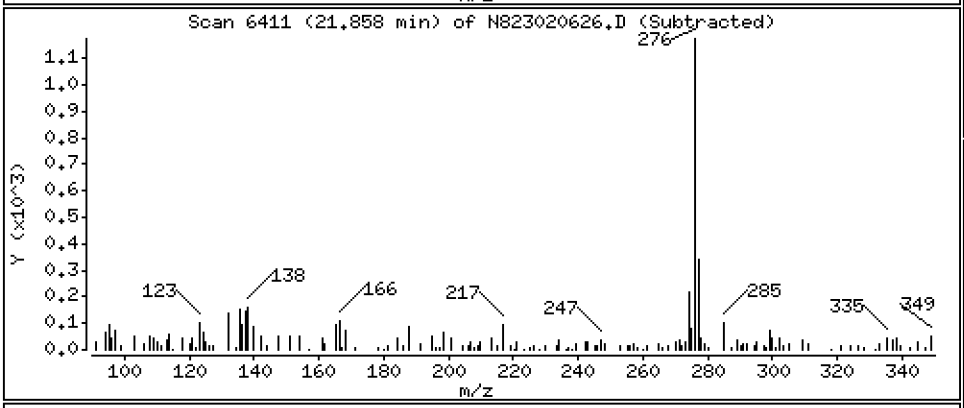
Operator: JZ

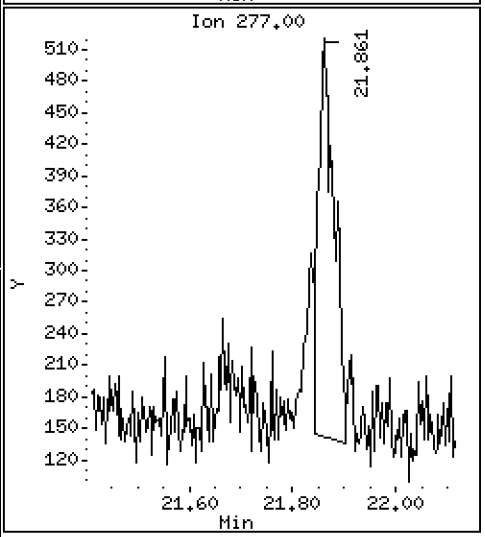
Column phase: Rxi-17sil Column diameter: 0.25

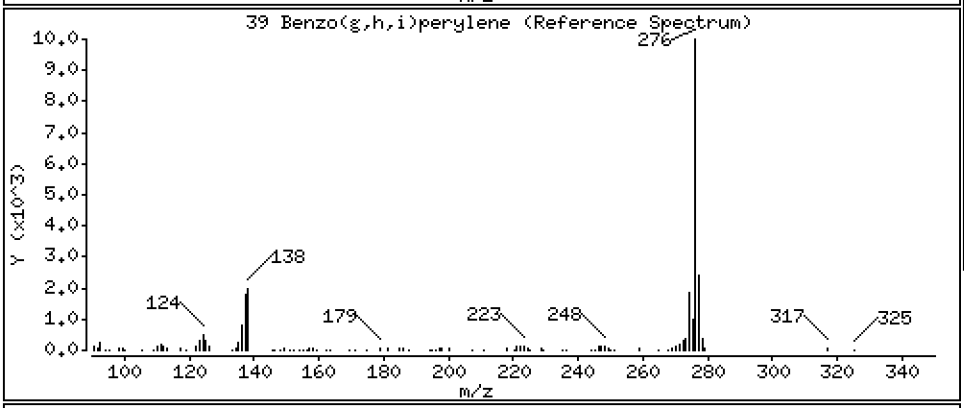
39 Benzo(g,h,i)perylene Concentration: 0.3653 ug/mL

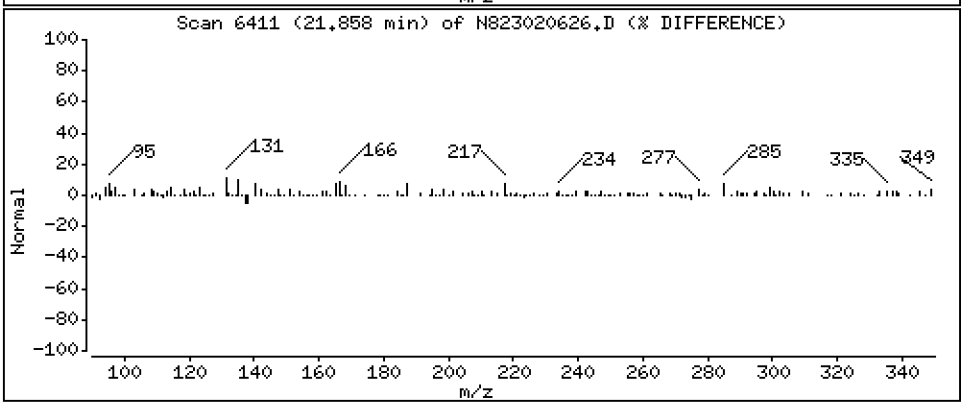












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020626.D
Lab Smp Id: 23A0249-07
Inj Date : 07-FEB-2023 00:01
Operator : JZ Inst ID: nt8.i
Smp Info : 23A0249-07
Misc Info : 23-
Comment : 1ul Injection
Method : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
Meth Date : 07-Feb-2023 13:04 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PNAXMDL.sub
Target Version: 4.14
Processing Host: JIANQING-202105

							CONCENTRATIONS	
		QUANT SIG					ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
*	1 Naphthalene-d8	136	4.881	4.900	(1.000)	57390	2.00000	
	2 Naphthalene	128	4.913	4.928	(1.006)	2634	0.09871	0.09871
$	3 2-Methylnaphthalene-d10	152	5.621	5.634	(1.152)	38635	2.46842	2.468
	4 2-Methylnaphthalene	141	5.672	5.681	(1.162)	2214	0.15084	0.1508
	5 1-methylnaphthalene	141	5.868	5.880	(1.202)	993	0.06666	0.06666
	9 Acenaphthylene	152	7.079	7.082	(0.985)	641	0.02548	0.02548
*	10 Acenaphthene-d10	164	7.186	7.189	(1.000)	33309	2.00000	
	11 Acenaphthene	153	7.237	7.240	(1.007)	617	0.03661	0.03661
	12 Dibenzofuran	168	7.389	7.392	(1.028)	1050	0.04102	0.04102
	14 Fluorene	166	7.869	7.869	(1.095)	755	0.03798	0.03798(M)
*	15 Phenanthrene-d10	188	9.235	9.232	(1.000)	50089	2.00000	
	16 Phenanthrene	178	9.270	9.267	(1.004)	8596	0.35132	0.3513
	17 Anthracene	178	9.311	9.308	(1.008)	2199	0.09893	0.09893
	19 Carbazole	167	9.826	9.823	(1.064)	1090	0.05349	0.05349
	22 Fluoranthene	202	11.066	11.050	(1.198)	7282	0.27342	0.2734
$	21 Fluoranthene-d10	212	11.025	11.009	(1.194)	58017	2.62531	2.625
	23 Pyrene	202	11.600	11.569	(0.815)	9805	0.68832	0.6883
	24 Benzo(a)anthracene	228	14.111	14.070	(0.991)	2868	0.22213	0.2221(M)
*	25 Chrysene-d12	240	14.237	14.202	(1.000)	22976	2.00000	
	27 Chrysene	228	14.310	14.275	(1.005)	4655	0.33868	0.3387(M)
	28 Benzo(b)fluoranthene	252	16.881	16.824	(0.929)	3164	0.26047	0.2605
	29 Benzo(k)fluoranthene	252	16.935	16.887	(0.932)	1390	0.11682	0.1168
	30 Benzo(j)fluoranthene	252	17.014	16.963	(0.936)	1529	0.14275	0.1427
	31 Total Benzofluoranthenes	252	16.881	16.824	(0.929)	5809	0.50495	0.5050(M)
	32 Benzo(a)pyrene	252	17.937	17.877	(0.987)	3701	0.34623	0.3462(M)
*	33 Perylene-d12	264	18.171	18.107	(1.000)	20857	2.00000	
	35 Perylene	252	18.244	18.183	(1.004)	9817	0.85582	0.8558
$	36 Dibenzo(a,h)anthracene-d14	292	20.631	20.549	(1.135)	24263	2.96896	2.969
	37 Indeno(1,2,3-cd)pyrene	276	20.767	20.684	(1.143)	2948	0.24208	0.2421
	38 Dibenzo(a,h)anthracene	278	20.738	20.666	(1.141)	693	0.06613	0.06613(M)
	39 Benzo(g,h,i)perylene	276	21.858	21.763	(1.203)	4030	0.36525	0.3653

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823020626.D
Lab Smp Id: 23A0249-07
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 06-FEB-2023
Calibration Time: 15:15
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44336	22168	88672	57390	29.44
10 Acenaphthene-d10	26127	13064	52254	33309	27.49
15 Phenanthrene-d10	47424	23712	94848	50089	5.62
25 Chrysene-d12	36794	18397	73588	22976	-37.56
33 Perylene-d12	36636	18318	73272	20857	-43.07

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.90	4.40	5.40	4.88	-0.38
10 Acenaphthene-d10	7.19	6.69	7.69	7.19	-0.04
15 Phenanthrene-d10	9.23	8.73	9.73	9.24	0.04
25 Chrysene-d12	14.20	13.70	14.70	14.24	0.25
33 Perylene-d12	18.11	17.61	18.61	18.17	0.35

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

REVIEW SUMMARY FOR FILE - N823020626.D

Lab ID: 23A0249-07
nt8.i, 20230206A.b\FSIMPNA230119.m,   07-FEB-2023 00:01

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

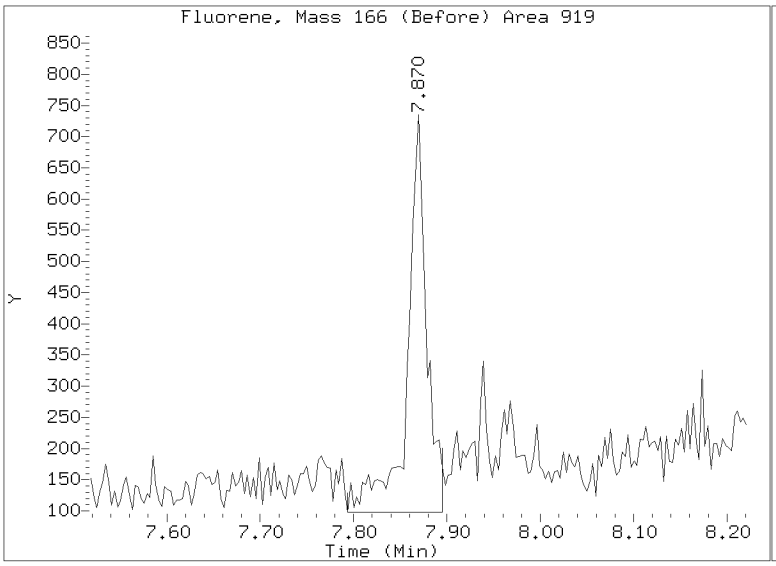
No RRT check performed

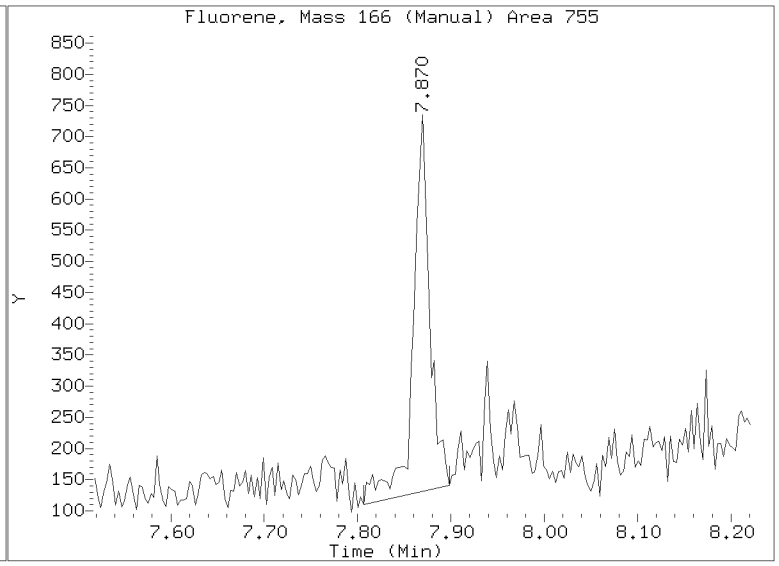
On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

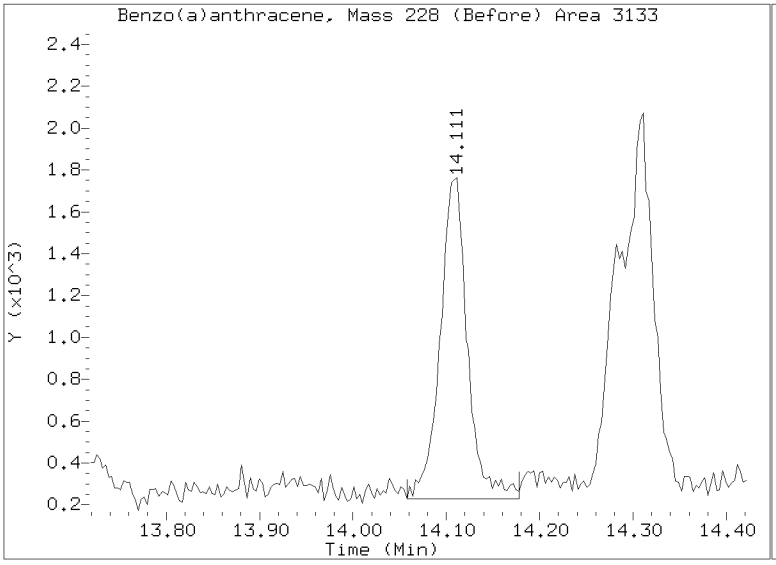
* Only compounds listed in the work order have been verified by the analyst *

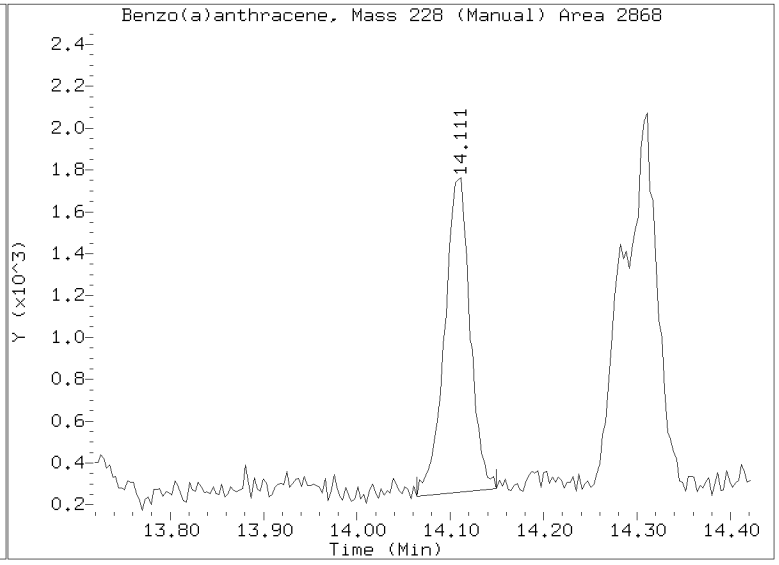
Quant Ion Manual Peak Adjustment Report

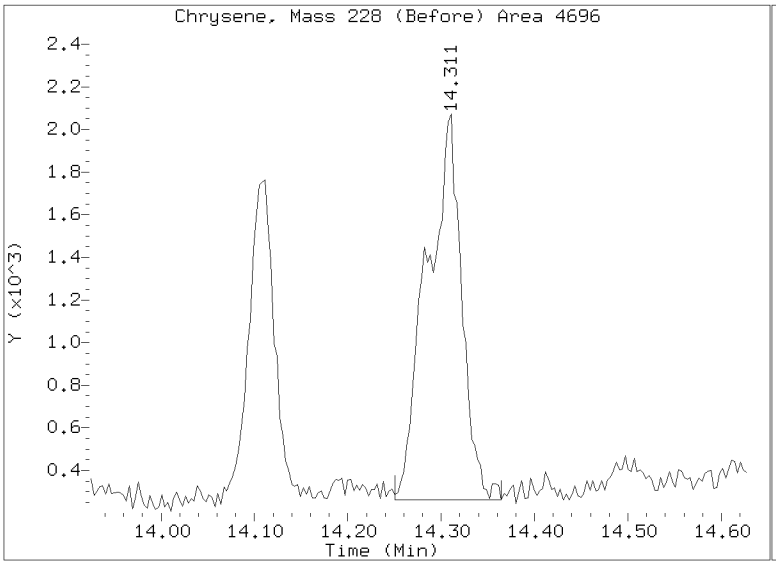
Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020626.D
Injection Date: 07-FEB-2023 00:01
Lab ID:23A0249-07 Client ID:
Report Date: 02/07/2023 19:47

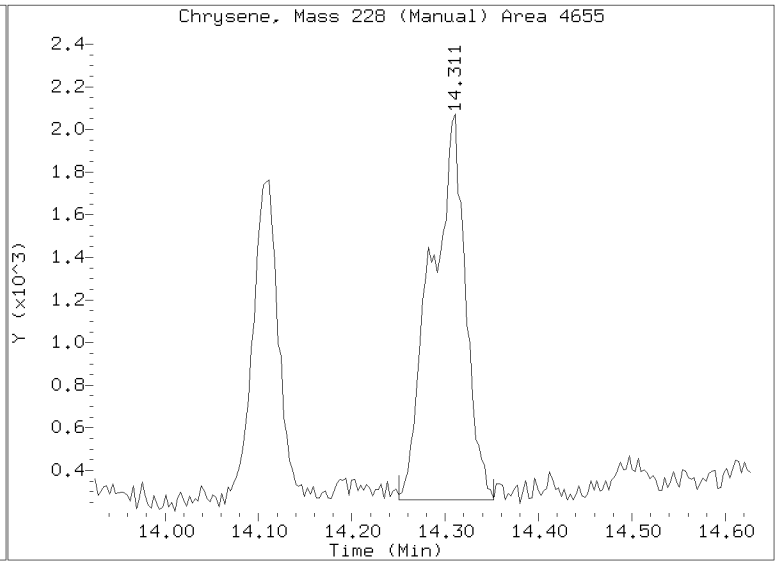












Quant Ion Manual Peak Adjustment Report

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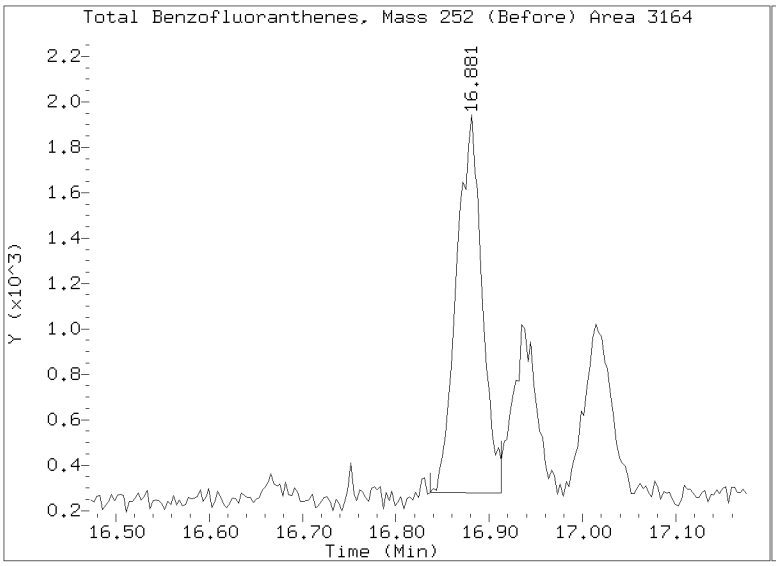
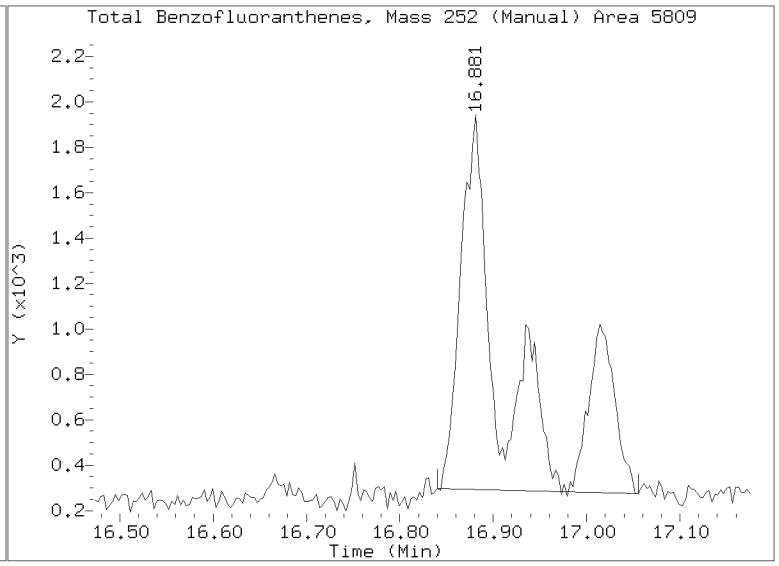
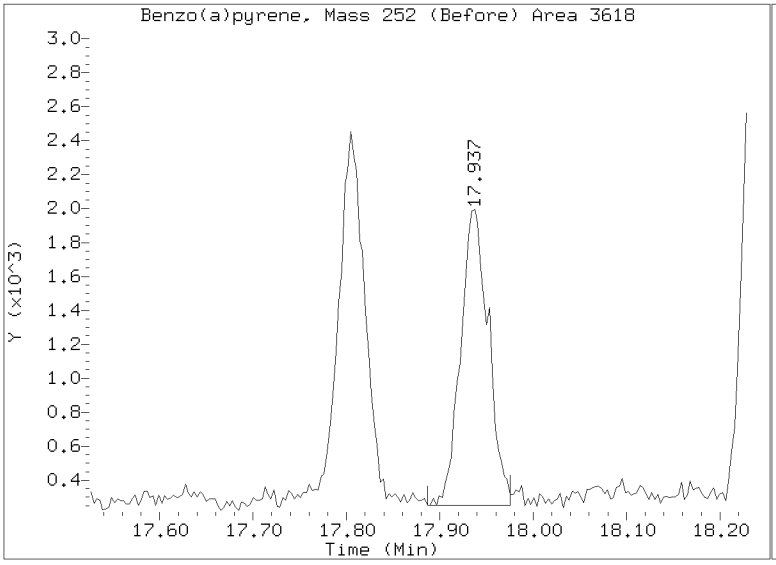
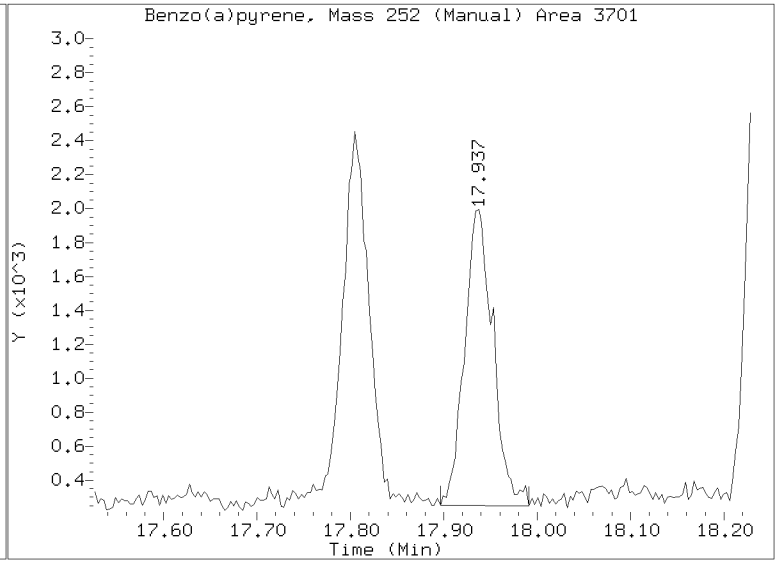
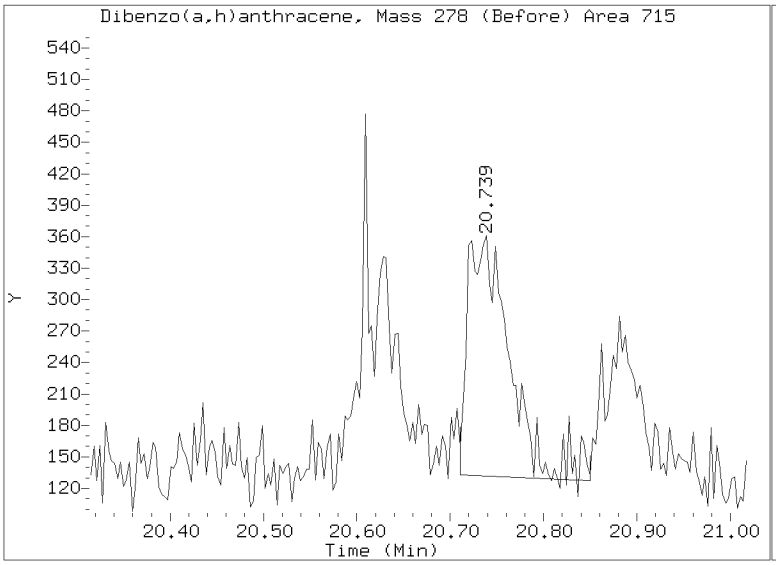
Injection Date: 07-FEB-2023 00:01
Lab ID:23A0249-07 Client ID:
Report Date: 02/07/2023 19:47

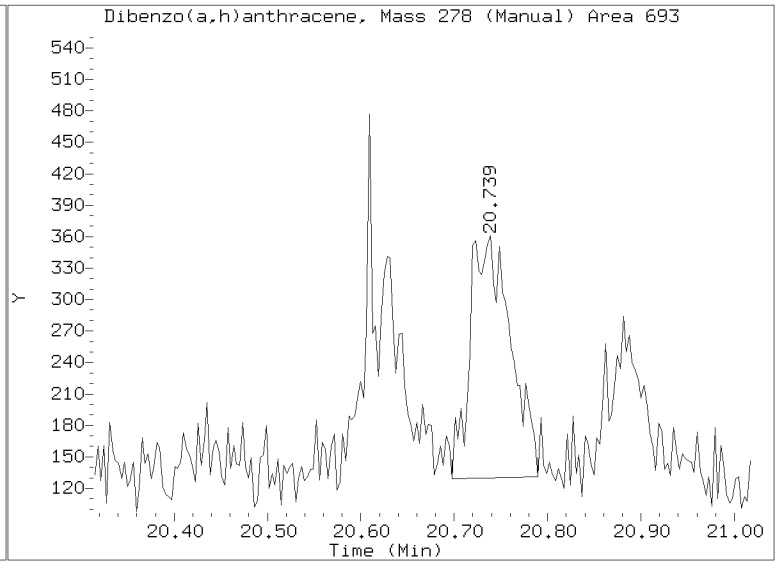












Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1024

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-08 A	SDG:	23A0249
Sampled:	01/12/23 13:35	Prepared:	01/30/23 14:02	File ID:	NT1003032322S.D
% Solids:	48.98	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 07:06
Batch:	BLA0673	Sequence:	SLC0253	Initial/Final:	21.16 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00032
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	2.8	J	0.6	4.8
95-50-1	1,2-Dichlorobenzene	1	4.8	U	0.7	4.8
100-51-6	Benzyl Alcohol	1	16.7	J	2.4	19.3
65-85-0	Benzoic acid	1	96.5	U	12.9	96.5
105-67-9	2,4-Dimethylphenol	1	2.9	J	2.1	19.3
120-82-1	1,2,4-Trichlorobenzene	1	4.8	U	2.6	4.8
86-30-6	N-Nitrosodiphenylamine	1	4.8	U	1.3	4.8
87-86-5	Pentachlorophenol	1	19.3	U	2.1	19.3

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	723.65	582	80.5	27 - 120	
p-Terphenyl-d14	482.43	801	166	37 - 120	*,Q

Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323225.D

Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

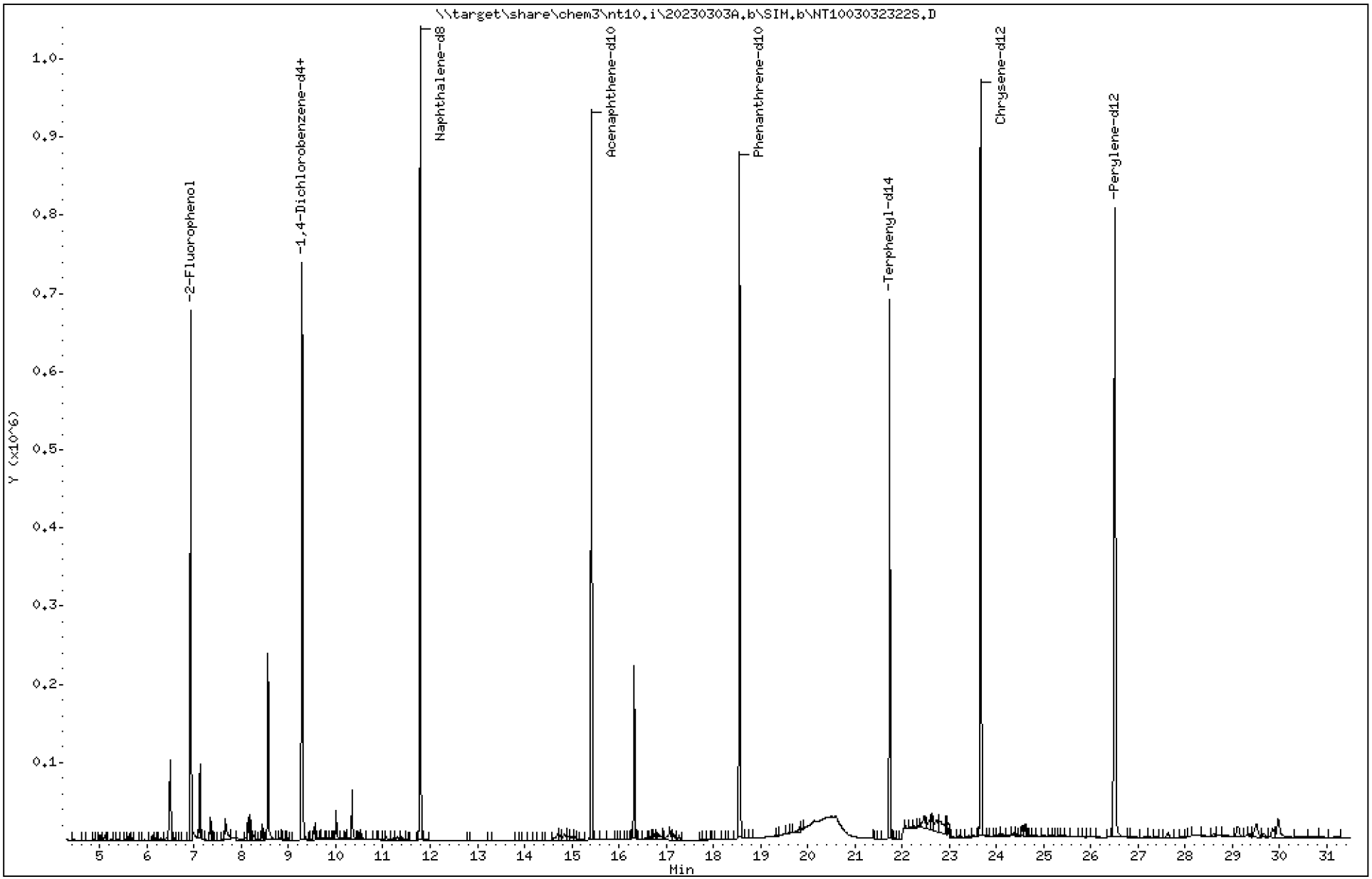
Sample Info: 23A0249-08

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

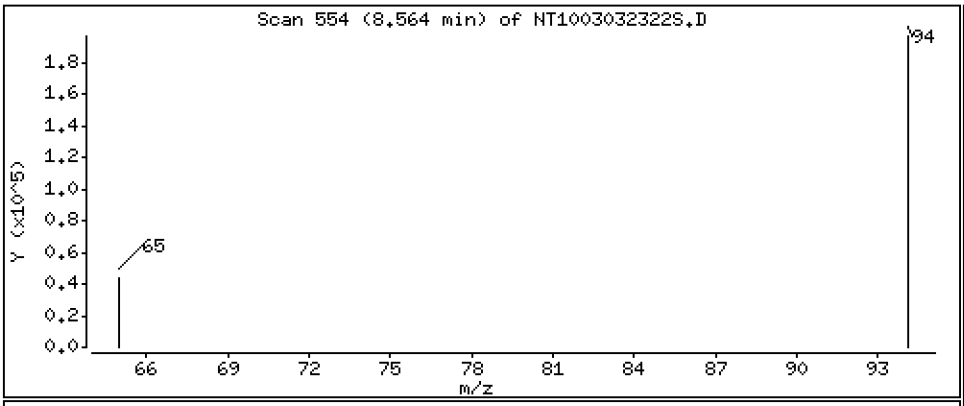
Operator: JGR

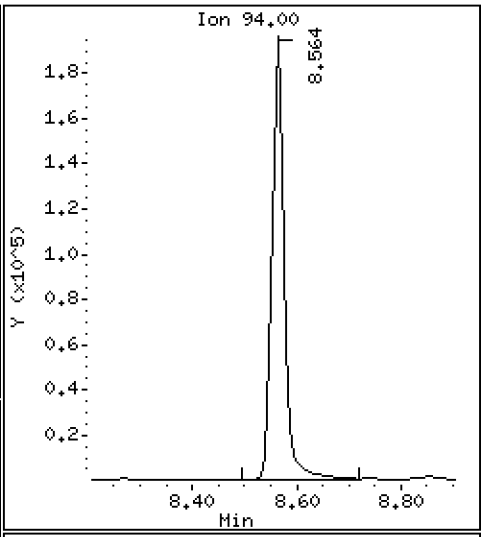
Column phase: ZB-5msi

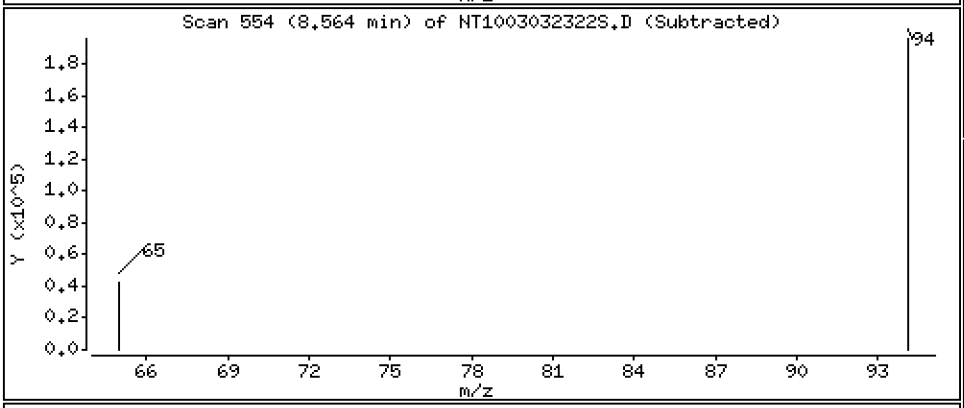
Column diameter: 0.25

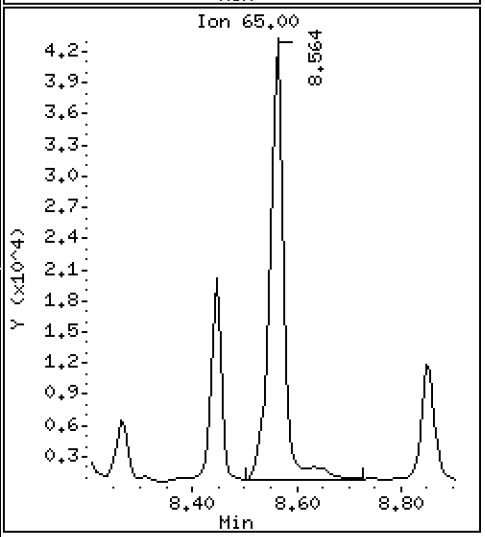
3 Phenol

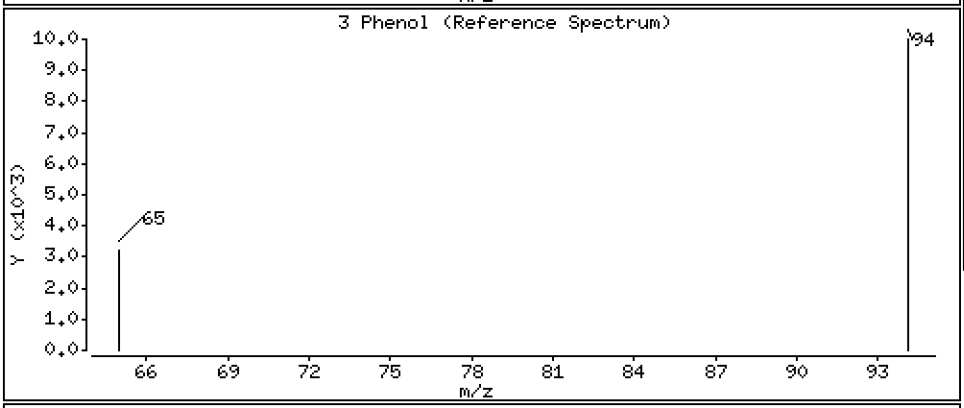
Concentration: 1.643 ug/L

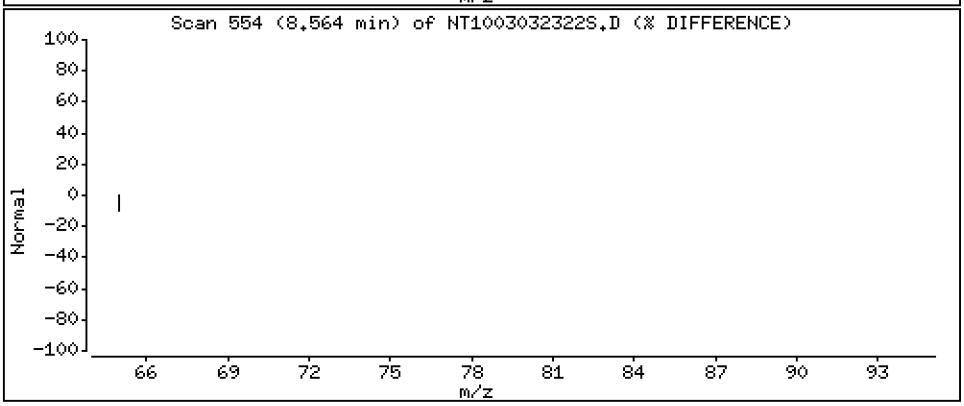












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

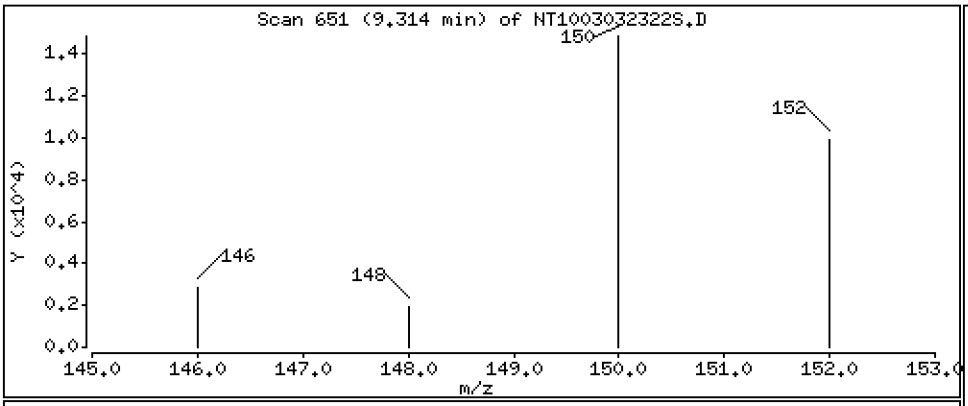
Operator: JGR

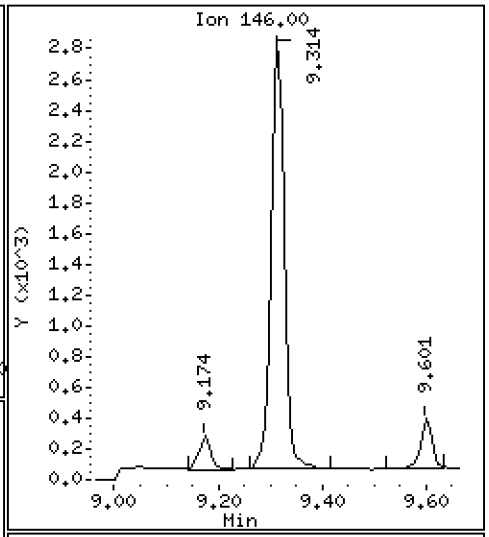
Column phase: ZB-5msi

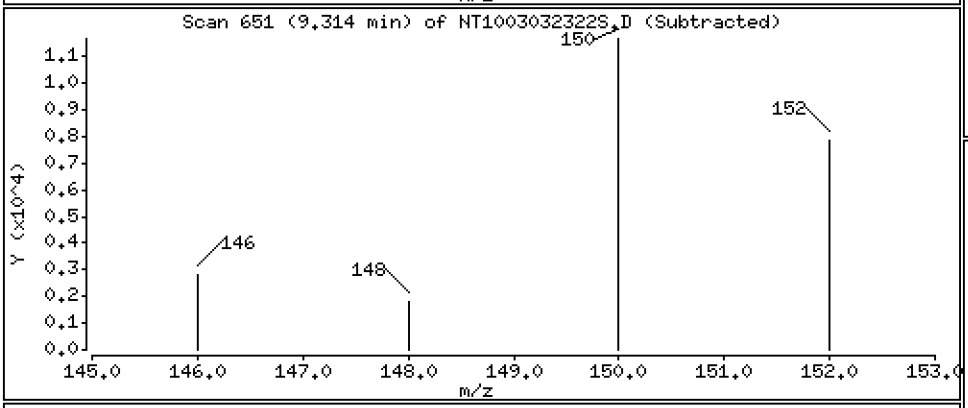
Column diameter: 0.25

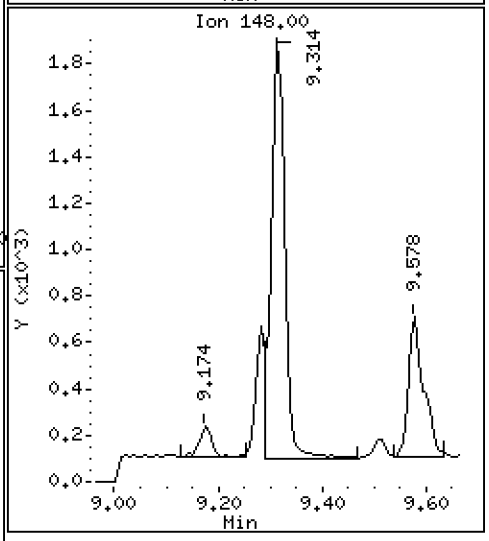
9 1,4-Dichlorobenzene

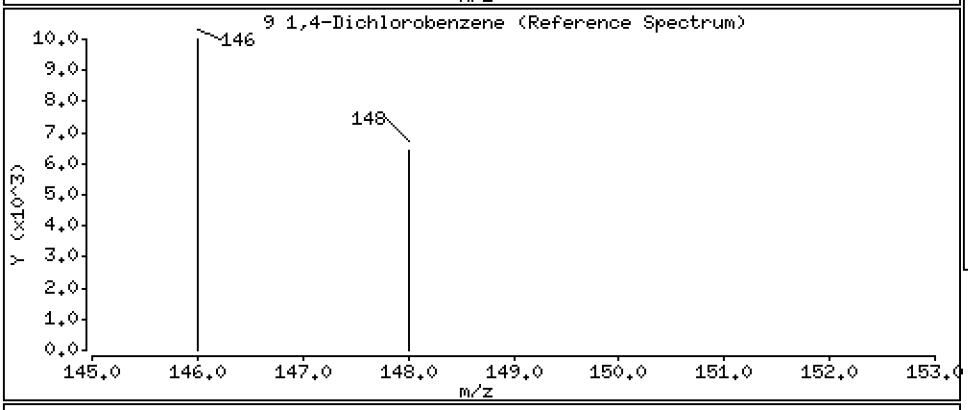
Concentration: 0.02858 ug/L

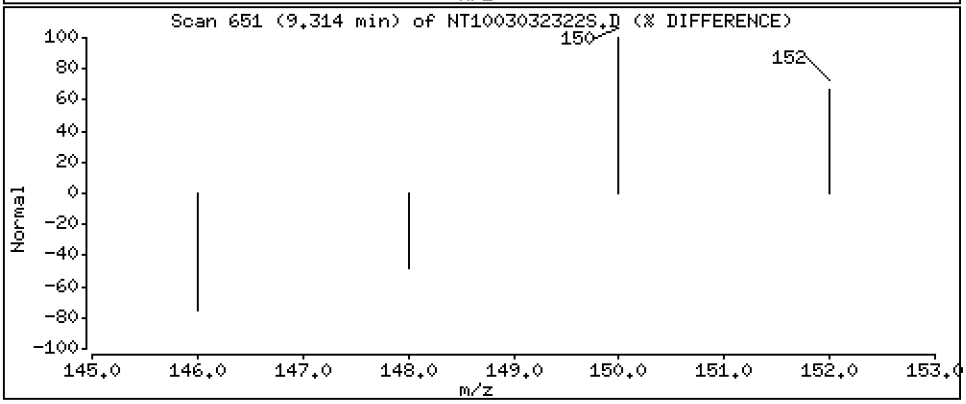












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

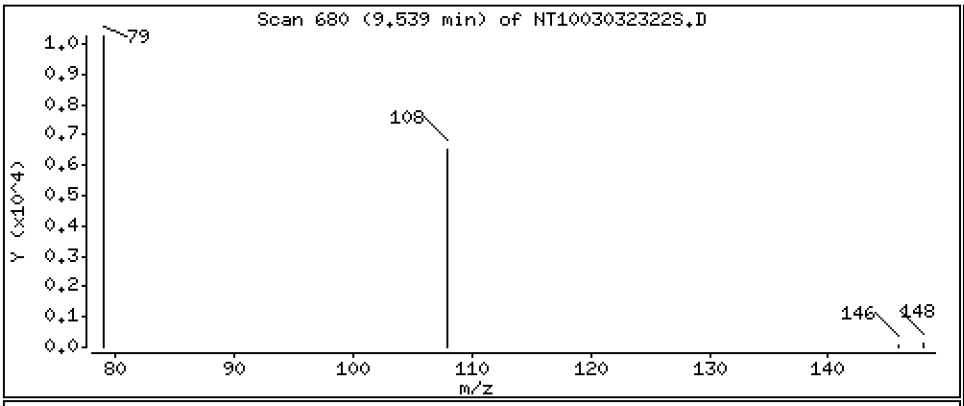
Operator: JGR

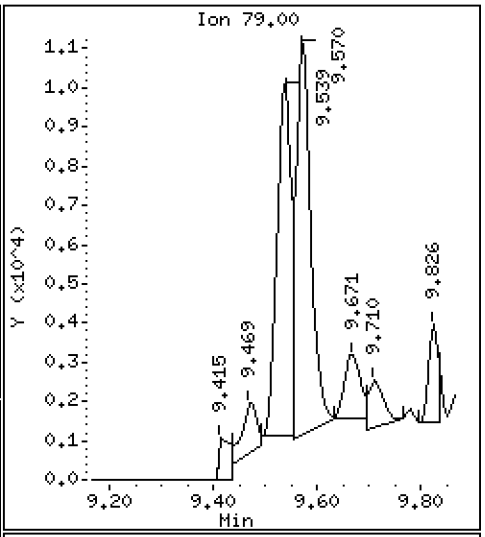
Column phase: ZB-5msi

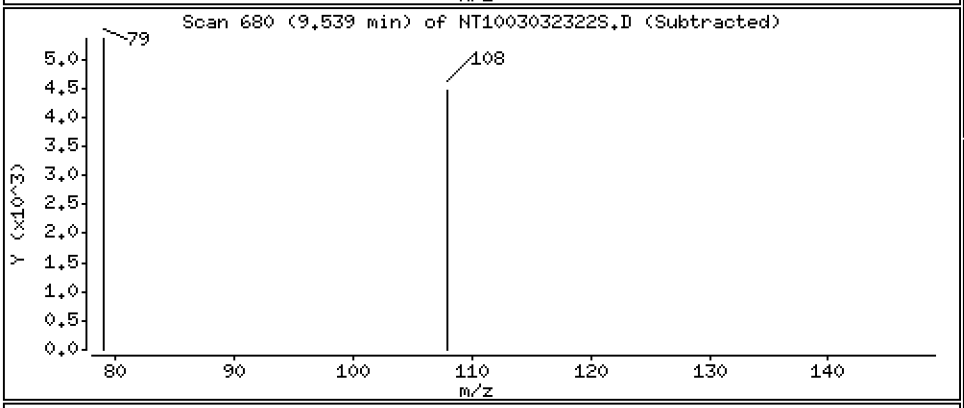
Column diameter: 0.25

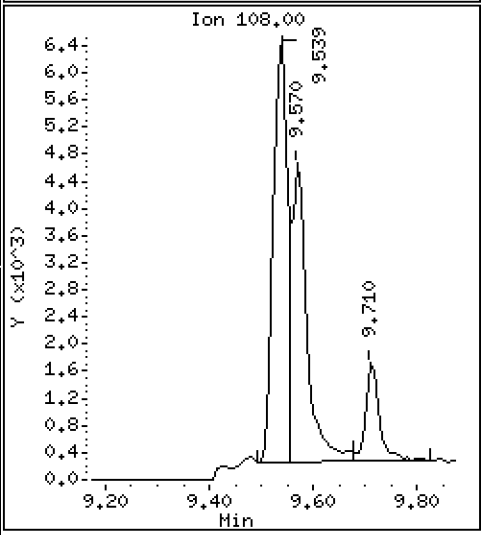
11 Benzyl alcohol

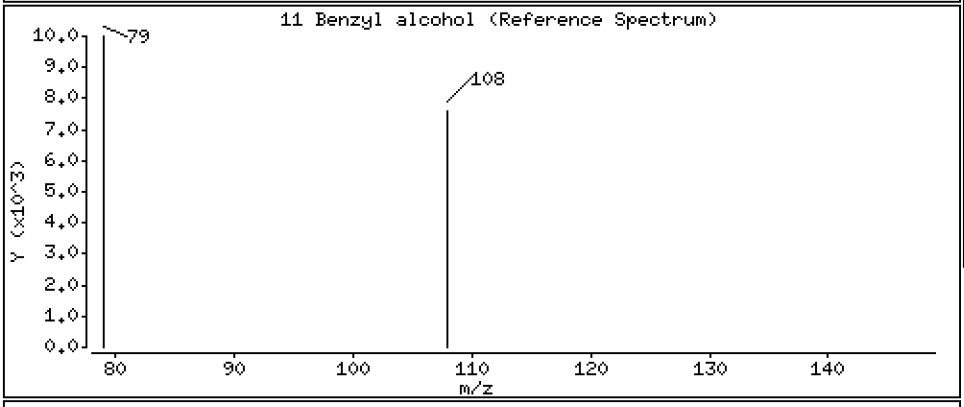
Concentration: 0.1729 ug/L

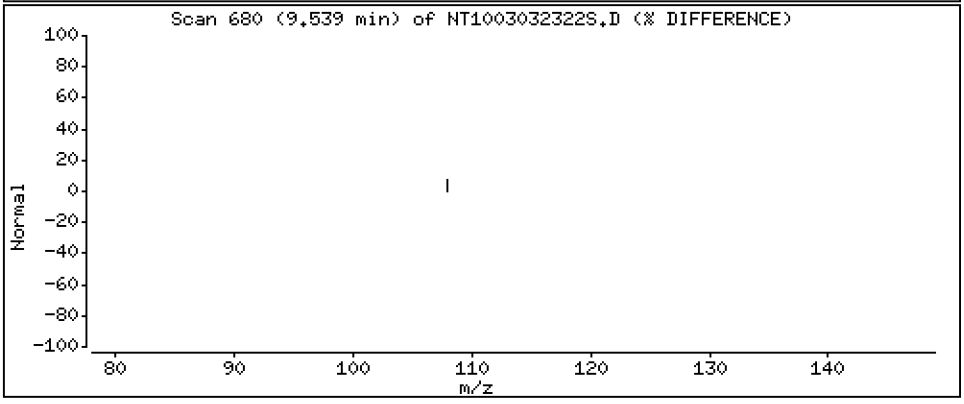












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

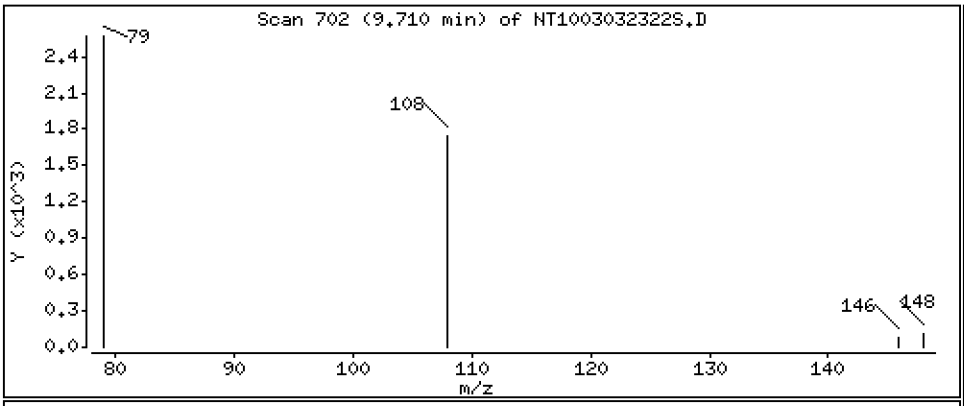
Operator: JGR

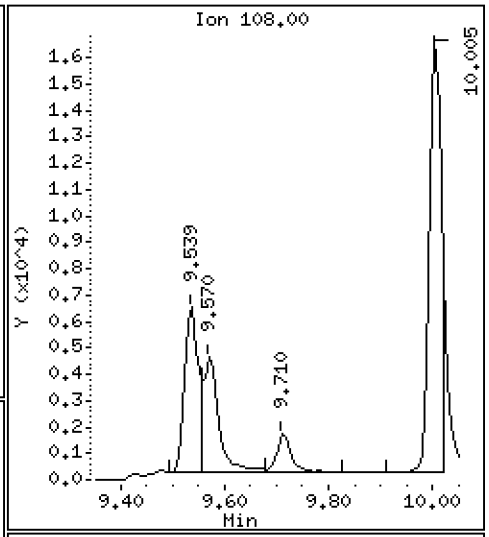
Column phase: ZB-5msi

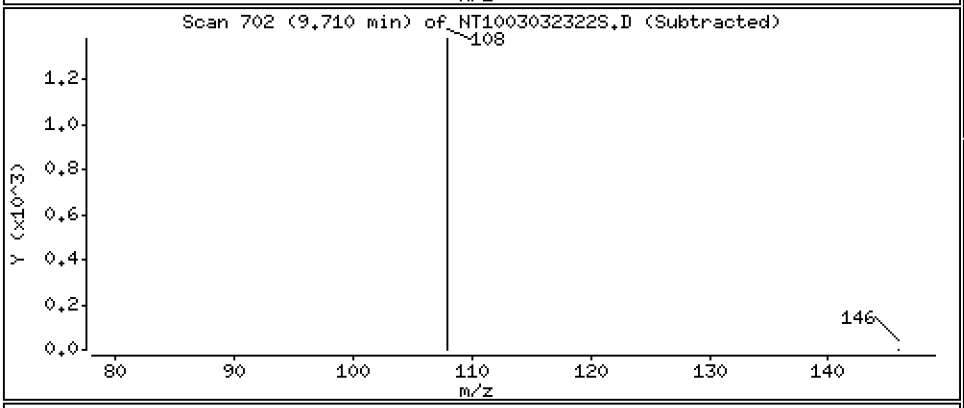
Column diameter: 0.25

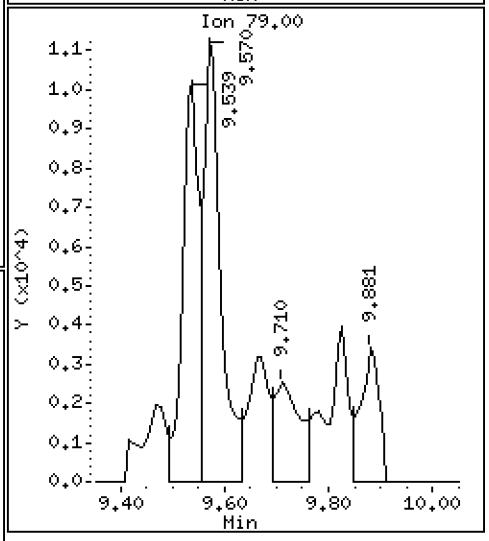
13 2-Methylphenol

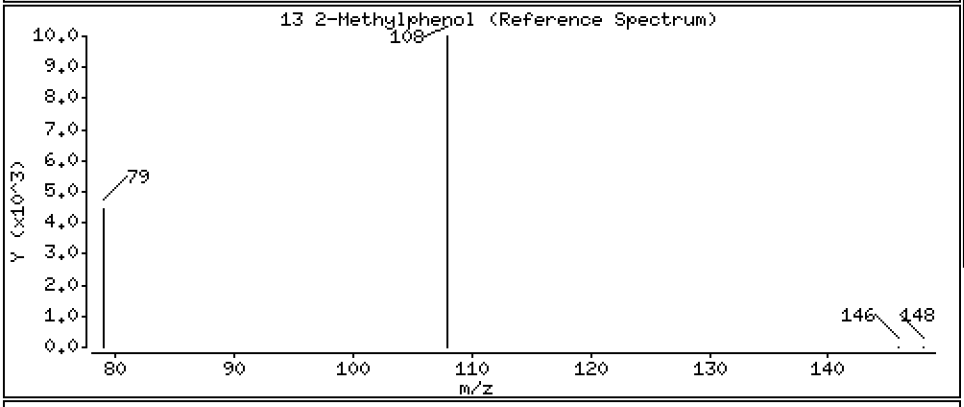
Concentration: 0.02475 ug/L

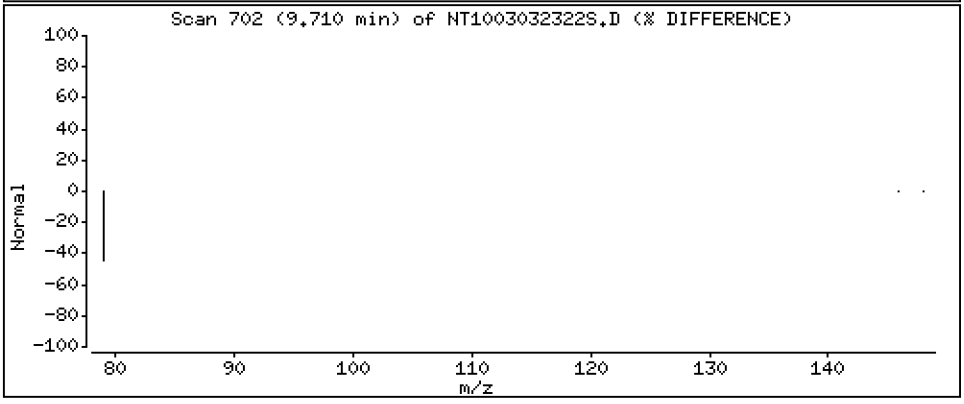












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

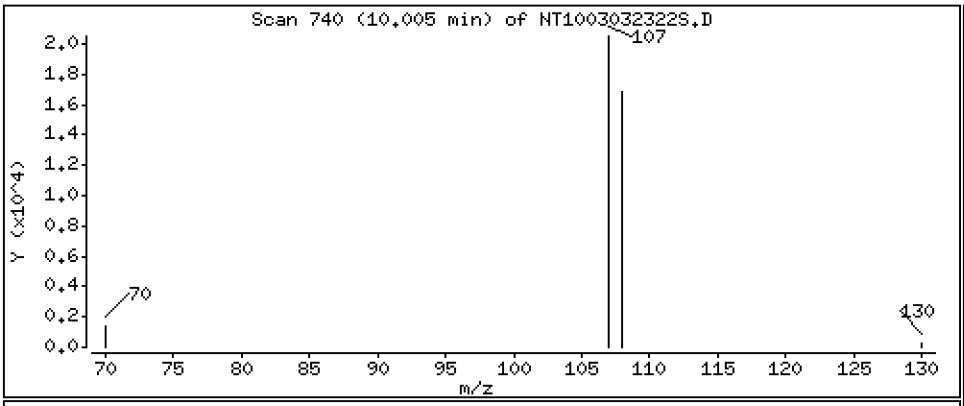
Operator: JGR

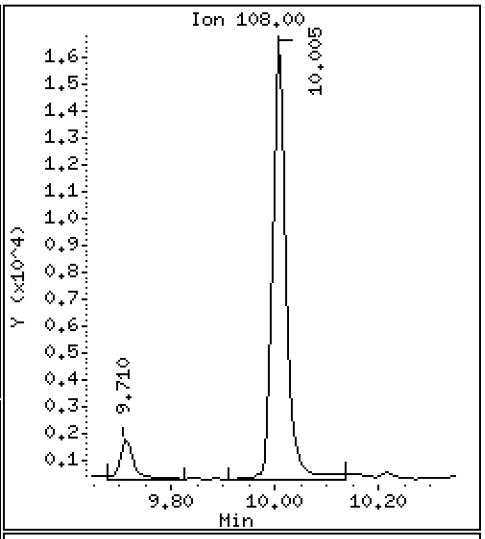
Column phase: ZB-5msi

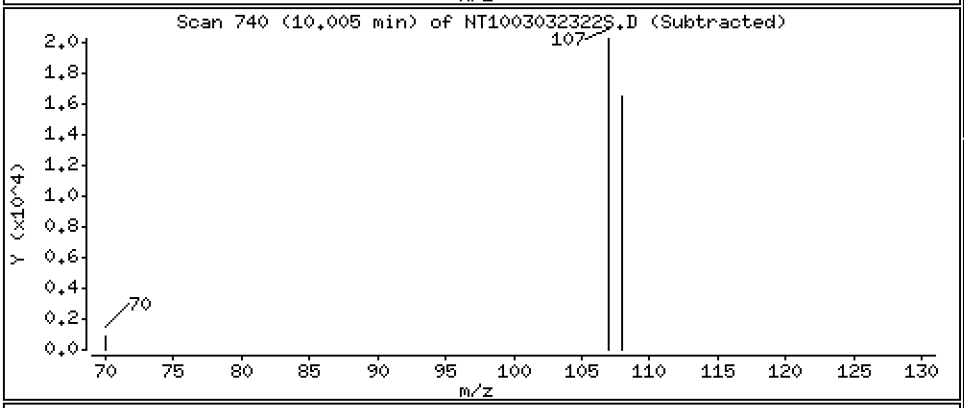
Column diameter: 0.25

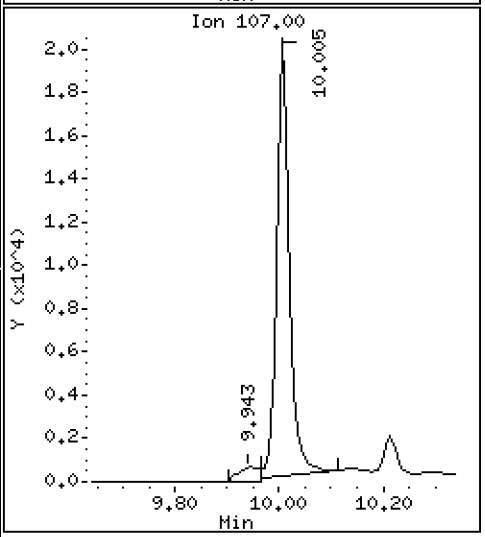
15 4-Methylphenol

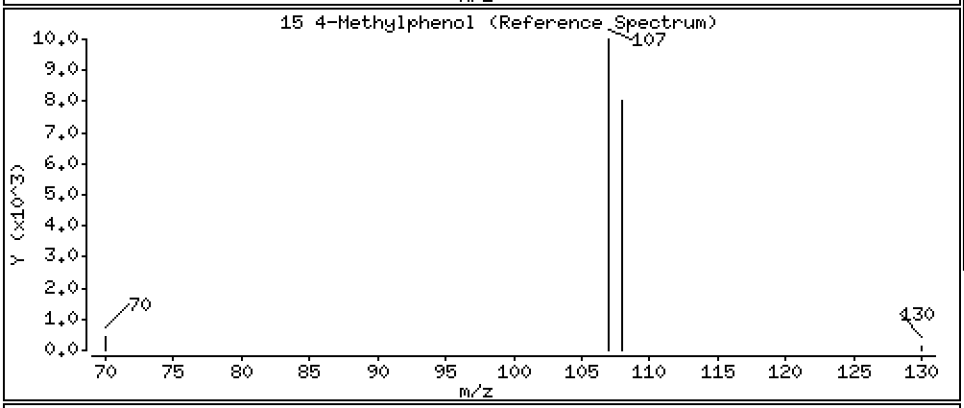
Concentration: 0.2504 ug/L

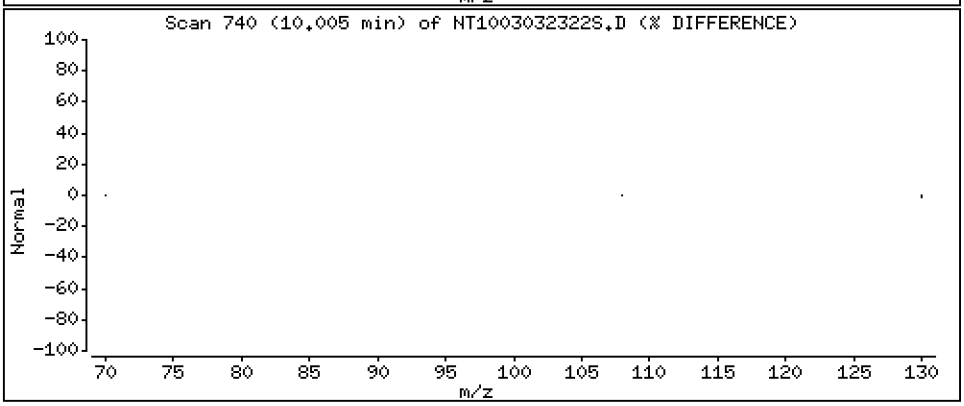












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

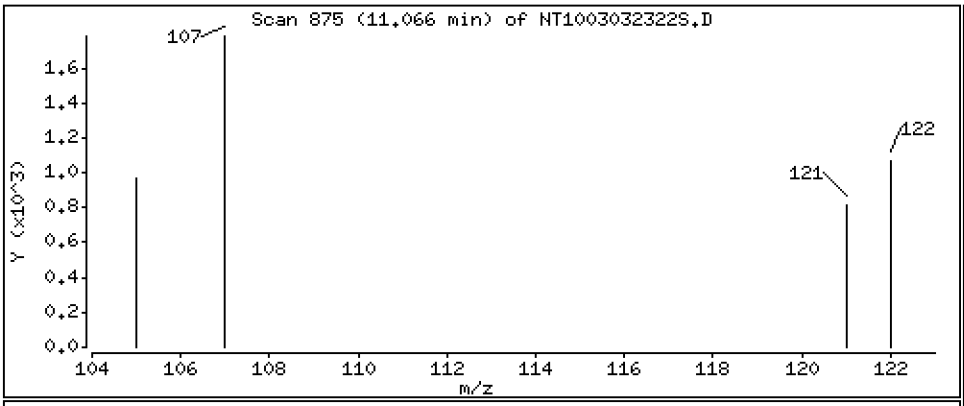
Operator: JGR

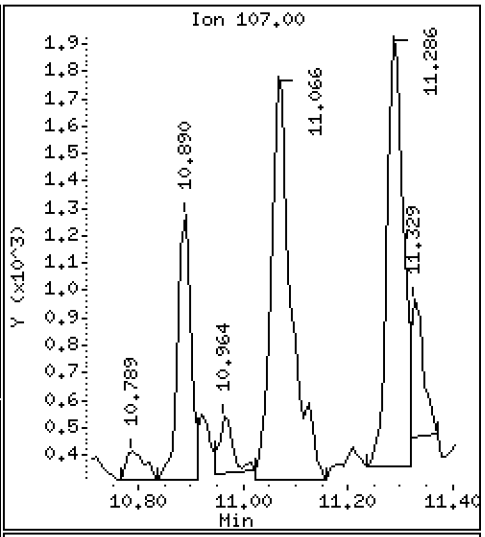
Column phase: ZB-5msi

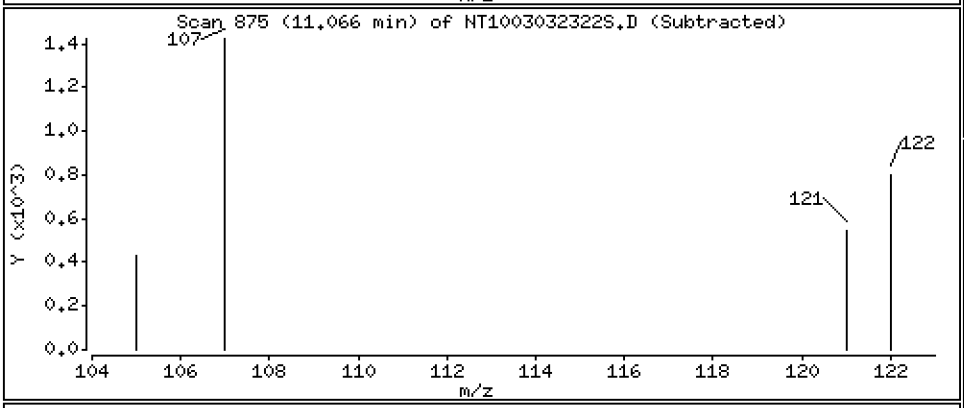
Column diameter: 0.25

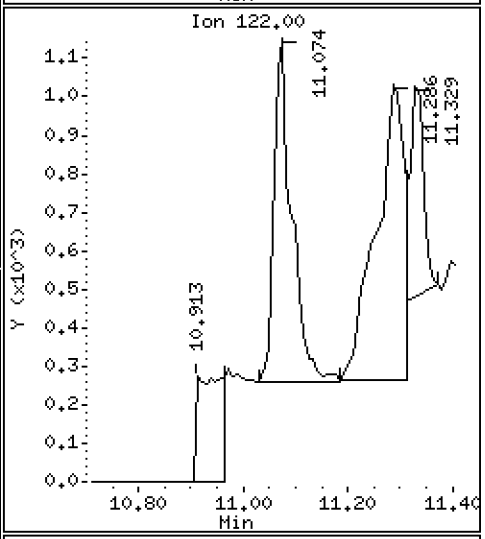
22 2,4-Dimethylphenol

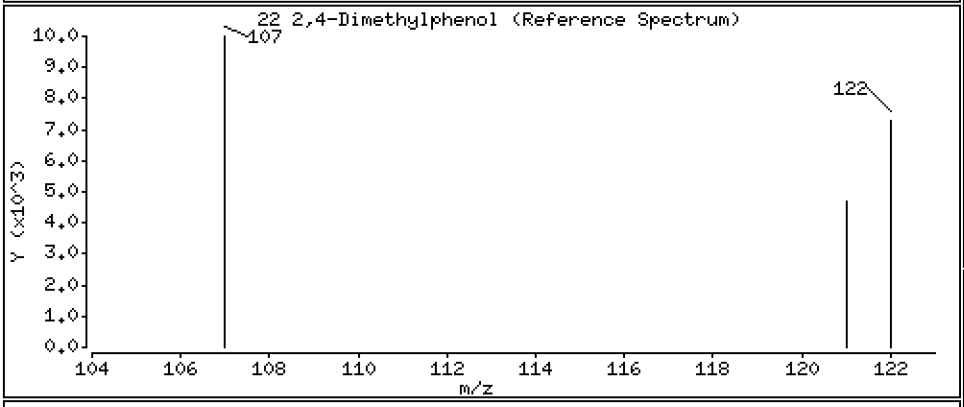
Concentration: 0.03016 ug/L

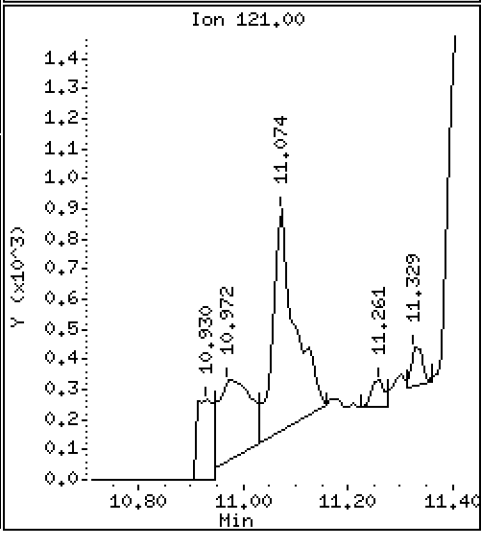


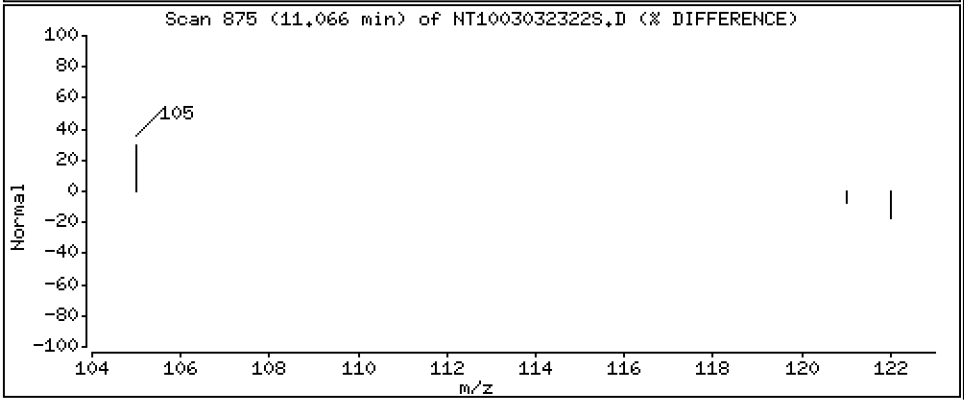












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323225.D

Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

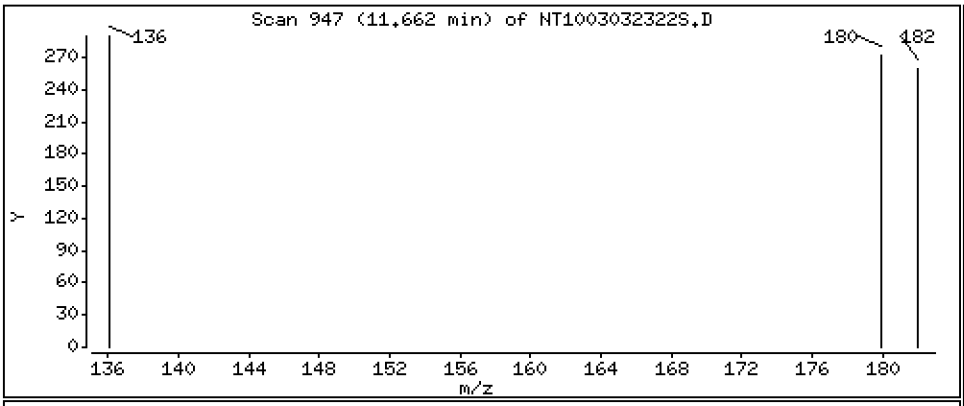
Operator: JGR

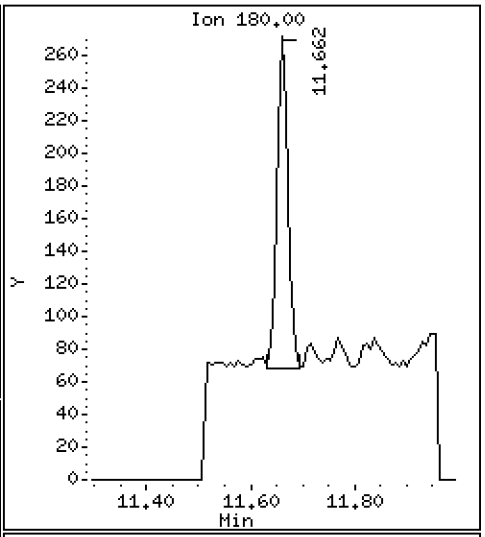
Column phase: ZB-5msi

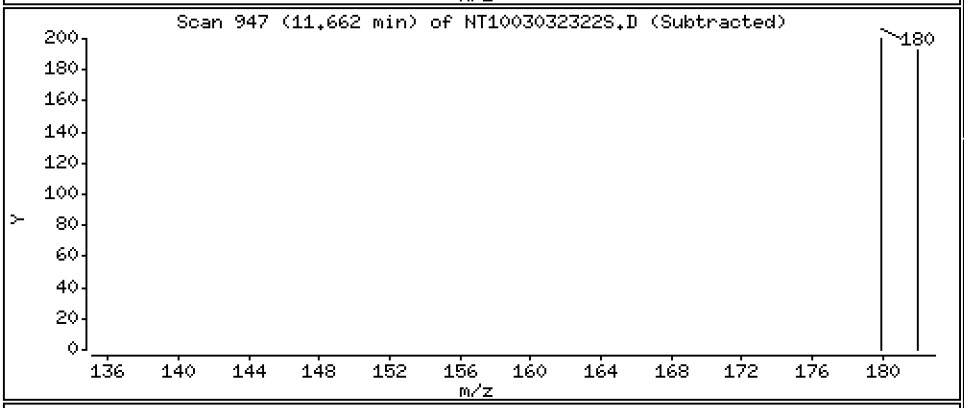
Column diameter: 0.25

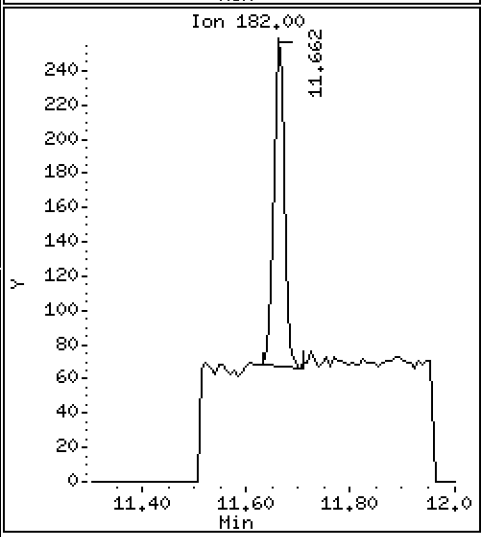
26 1,2,4-Trichlorobenzene

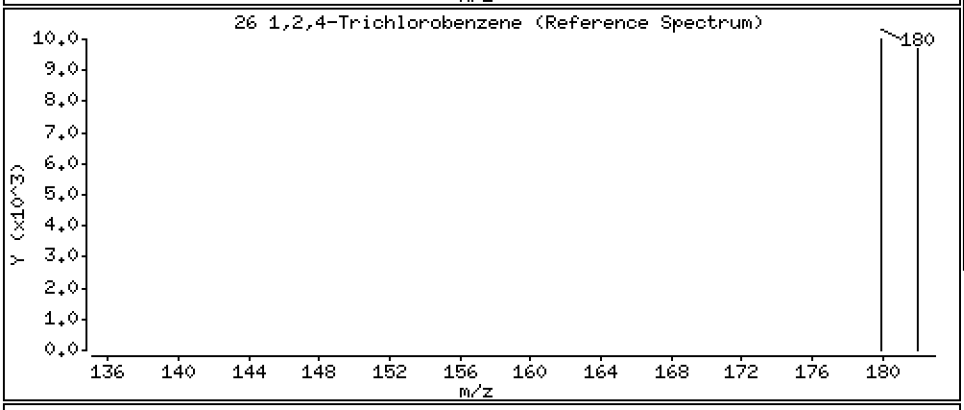
Concentration: 0.002686 ug/L

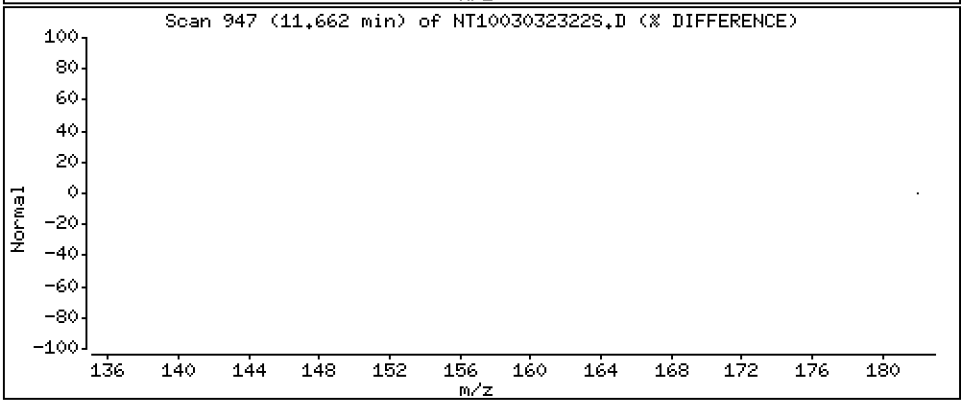












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323225.D

Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

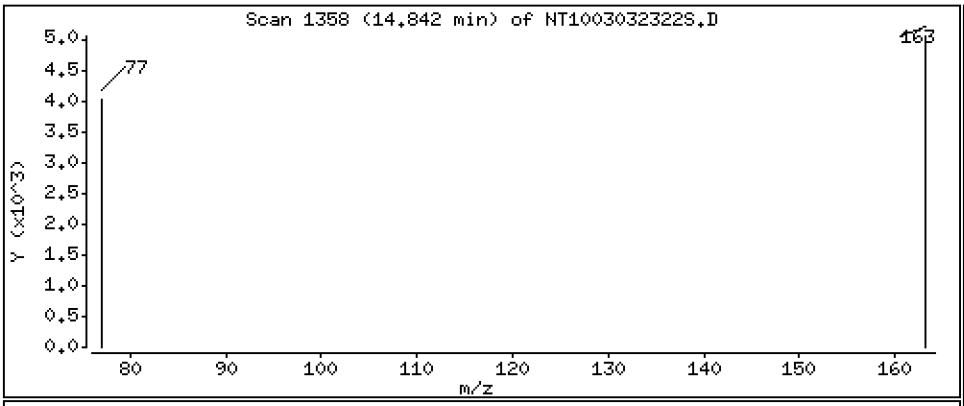
Operator: JGR

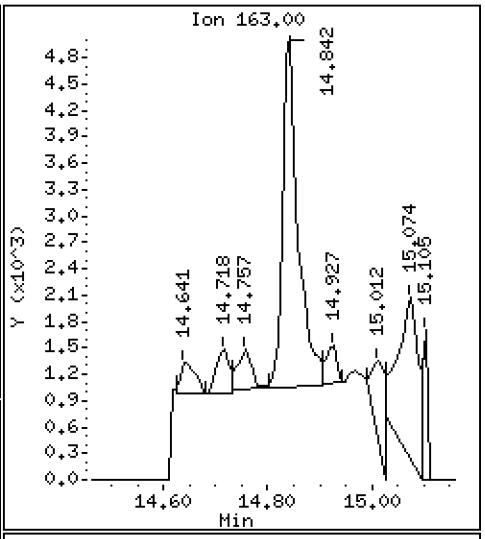
Column phase: ZB-5msi

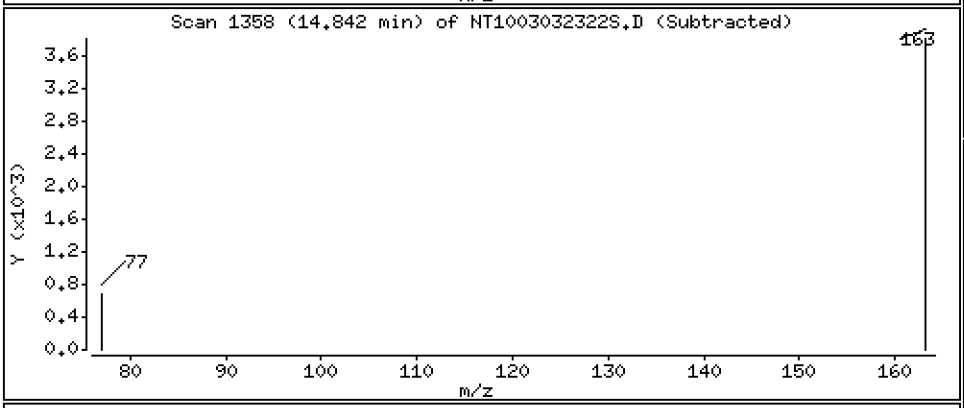
Column diameter: 0.25

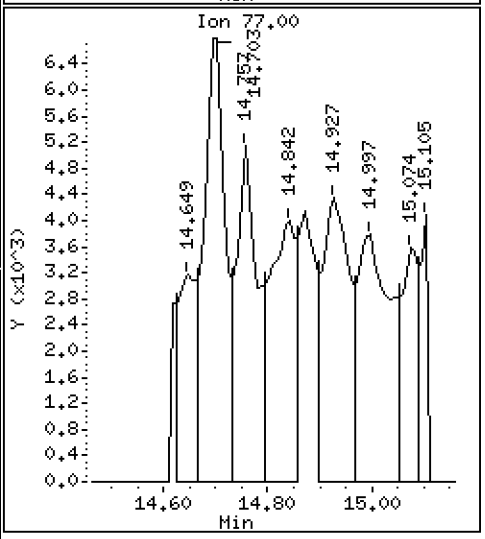
39 Dimethylphthalate

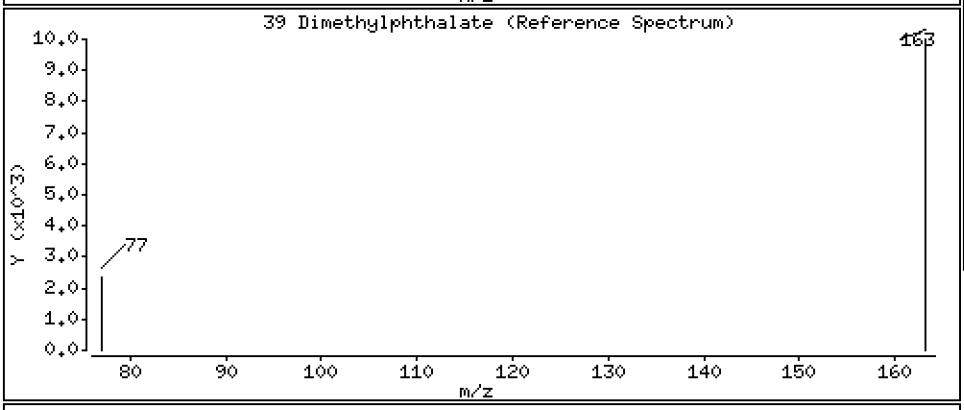
Concentration: 0.03556 ug/L

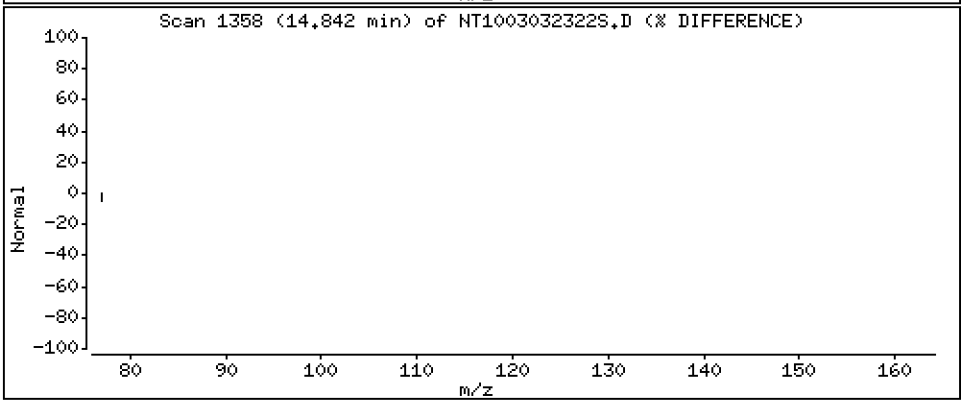












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323225.D

Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

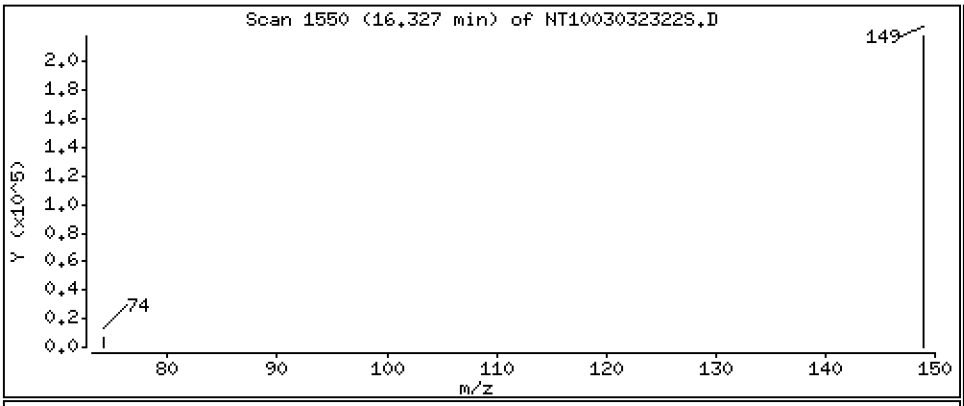
Operator: JGR

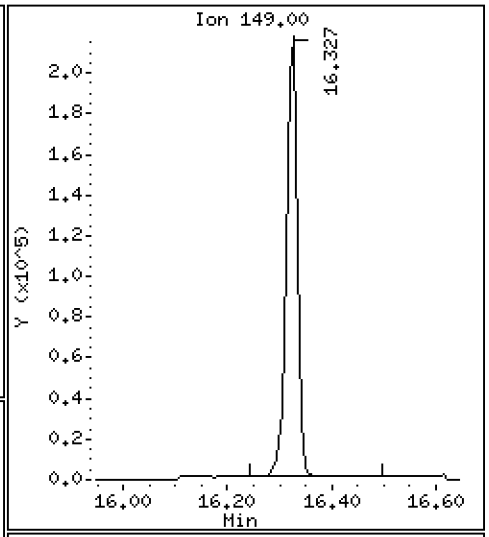
Column phase: ZB-5msi

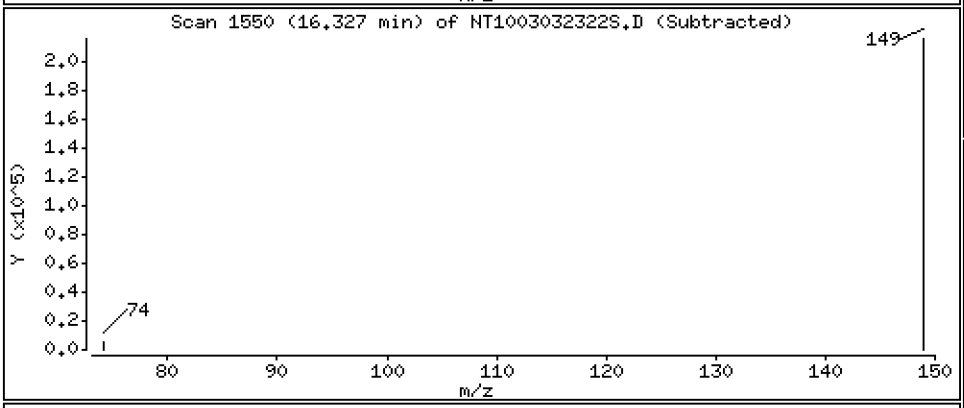
Column diameter: 0.25

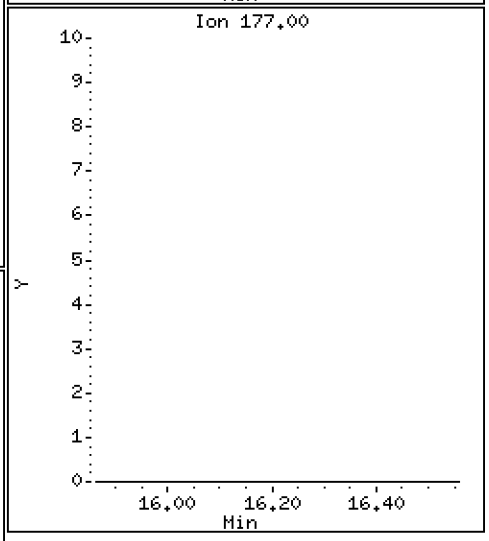
50 Diethylphthalate

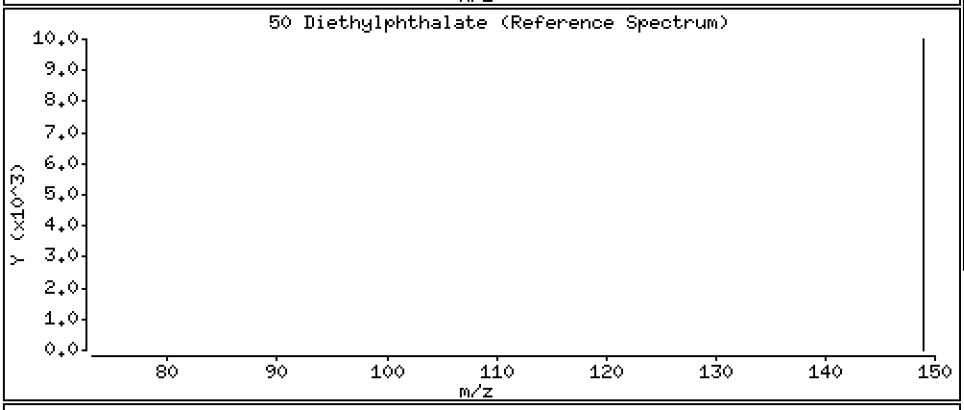
Concentration: 1.493 ug/L

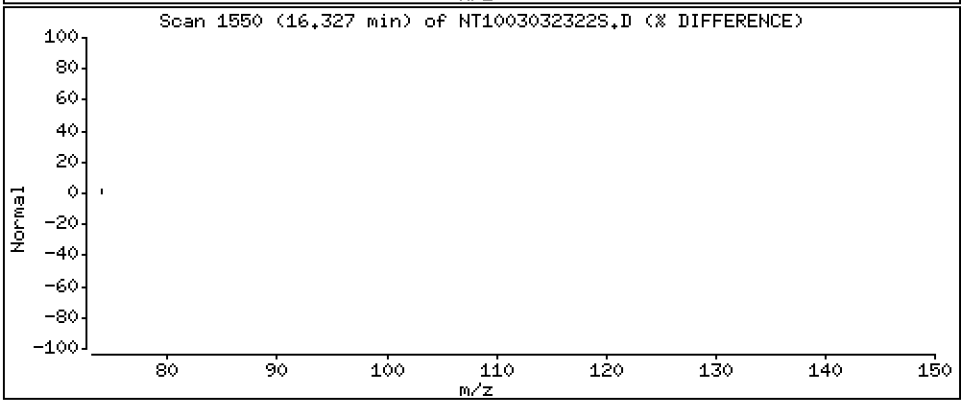












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323225.D

Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

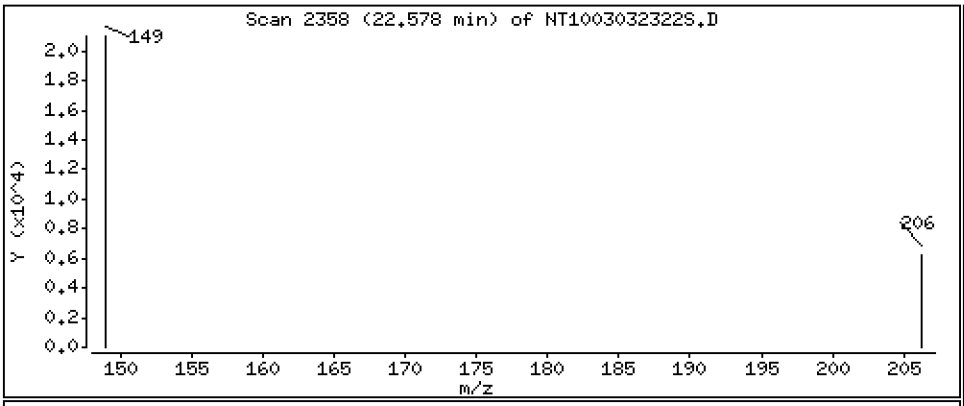
Operator: JGR

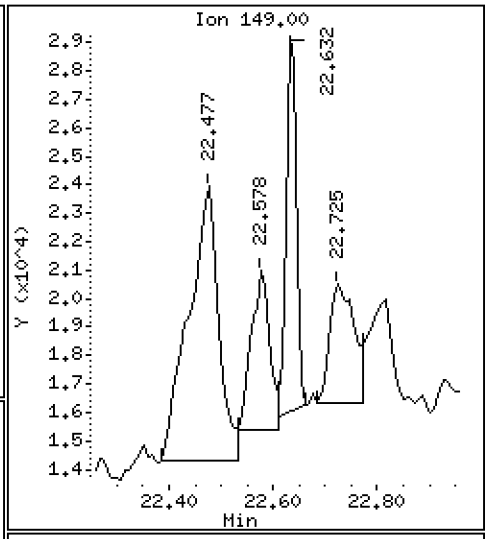
Column phase: ZB-5msi

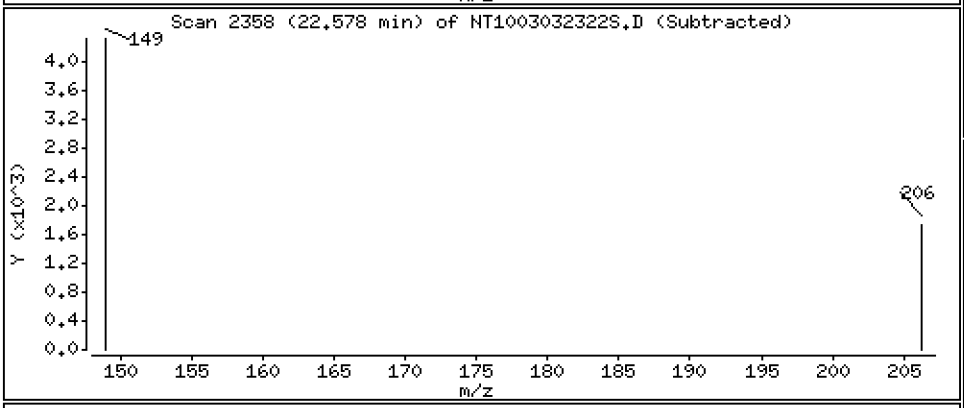
Column diameter: 0.25

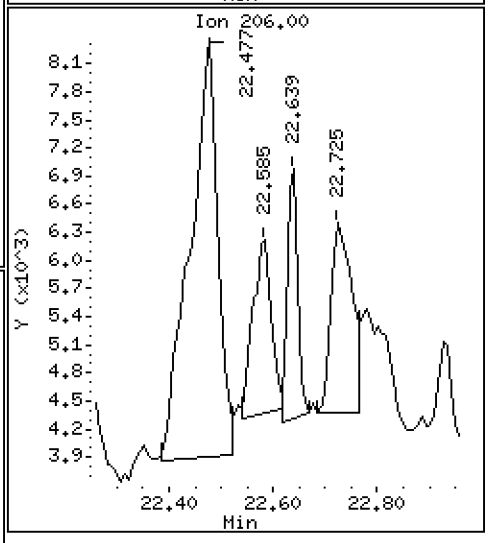
67 Butylbenzylphthalate

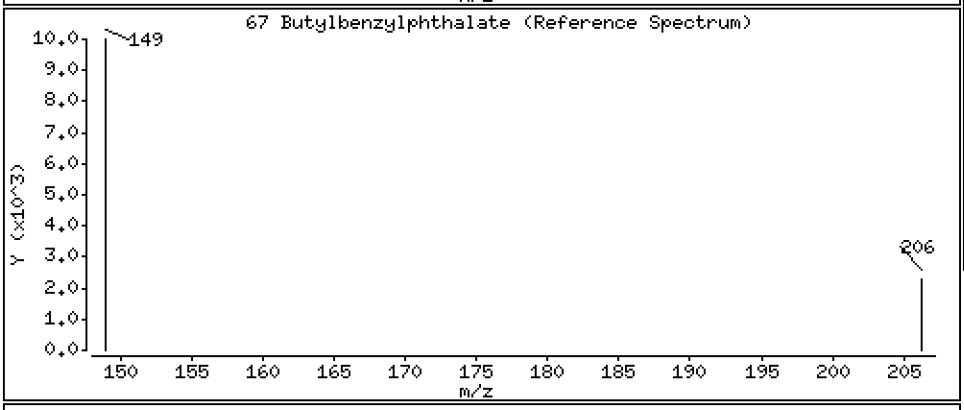
Concentration: 0.07074 ug/L

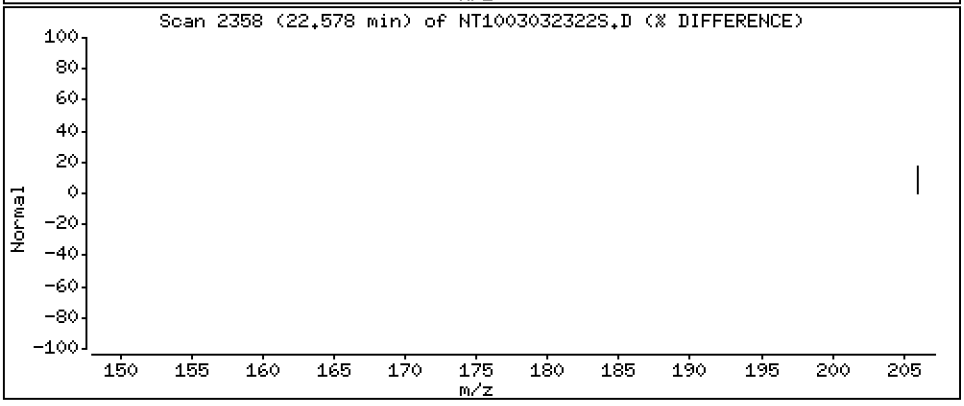












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Date : 04-MAR-2023 07:06

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-08

Volume Injected (uL): 1.0

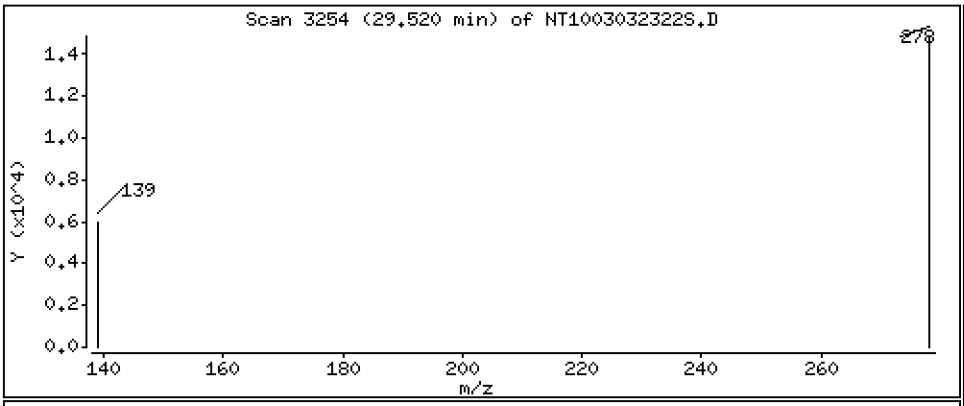
Operator: JGR

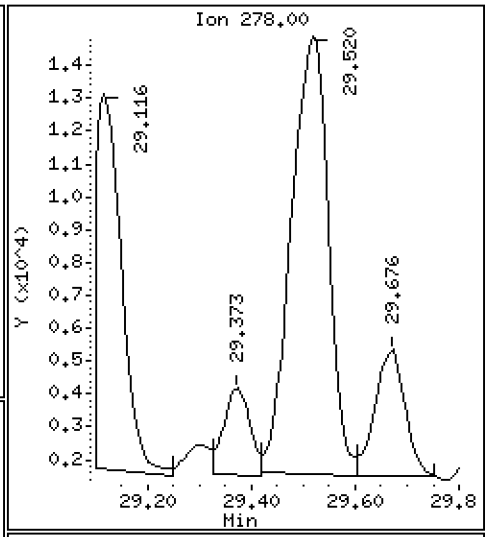
Column phase: ZB-5msi

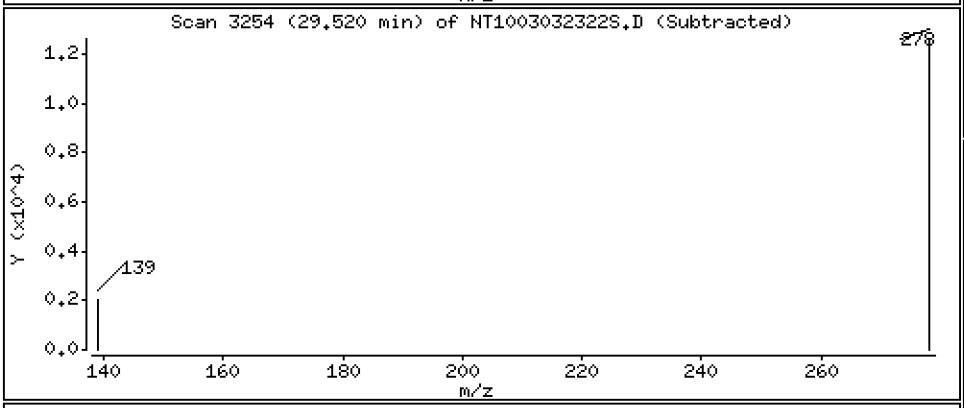
Column diameter: 0.25

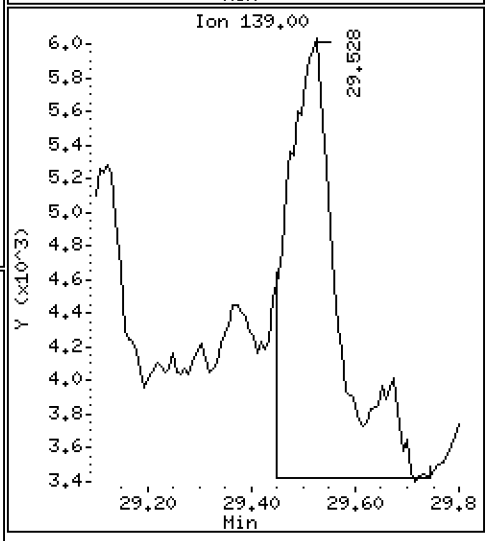
79 Dibenzo(a,h)anthracene

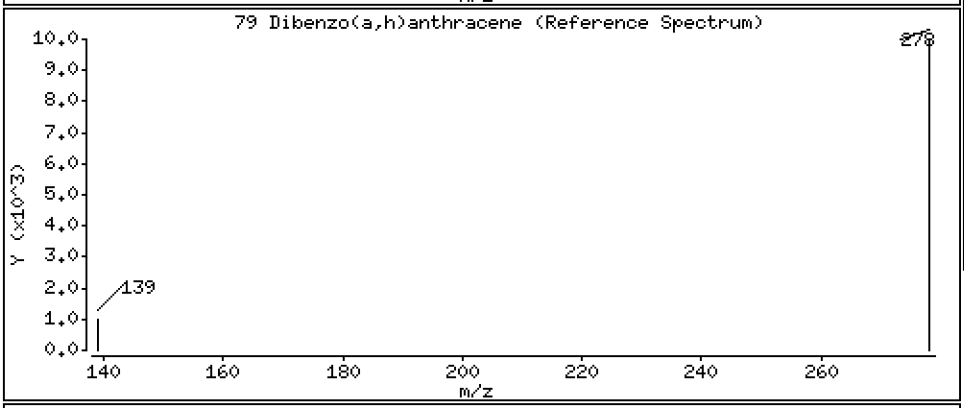
Concentration: 0.1837 ug/L

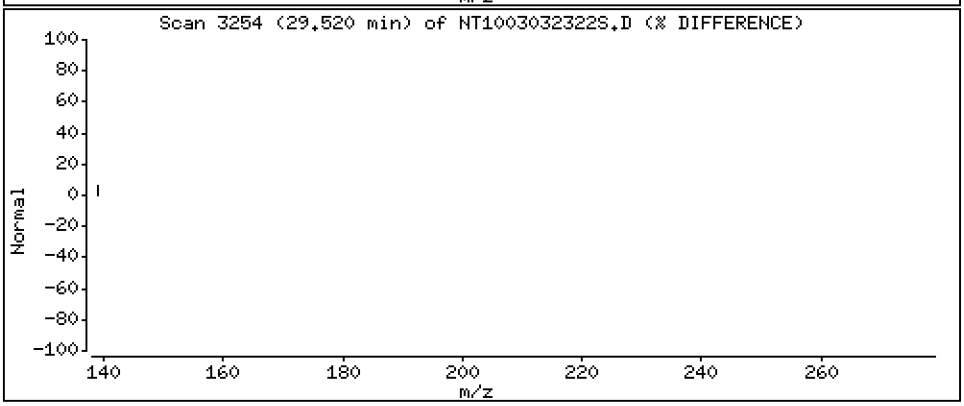












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT1003032322S.D
Lab Smp Id: 23A0249-08
Inj Date : 04-MAR-2023 07:06 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : 23A0249-08
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 11:26 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.925	6.917	(0.746)	772936	6.03467	6.035(R)
3	Phenol	94	8.563	8.556	(0.923)	313017	1.64337	1.643
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	9.282	9.283	(1.000)	448634	4.00000	
9	1,4-Dichlorobenzene	146	9.314	9.314	(1.003)	4620	0.02858	0.02858
11	Benzyl alcohol	79	9.539	9.515	(1.028)	18145	0.17294	0.1729
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	108	9.709	9.702	(1.046)	2811	0.02475	0.02475
15	4-Methylphenol	108	10.004	9.997	(1.078)	29647	0.25042	0.2504
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22	2,4-Dimethylphenol	107	11.065	11.057	(0.939)	4011	0.03016	0.03016
24	Benzoic acid	105	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	11.662	11.646	(0.990)	303	0.00269	0.002686(M)
* 27	Naphthalene-d8	136	11.785	11.777	(1.000)	1567414	4.00000	
30	Hexachlorobutadiene	225	Compound Not Detected.					
39	Dimethylphthalate	163	14.842	14.811	(0.963)	8425	0.03556	0.03556
* 42	Acenaphthene-d10	162	15.414	15.391	(1.000)	746171	4.00000	
50	Diethylphthalate	149	16.326	16.296	(1.059)	333649	1.49330	1.493
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.561	18.530	(1.000)	1440377	4.00000	
$	66 Terphenyl-d14	244	21.741	21.702	(0.919)	804036	8.29794	8.298(R)
	67 Butylbenzylphthalate	149	22.577	22.608	(0.954)	14310	0.07074	0.07074
*	69 Chrysene-d12	240	23.669	23.630	(1.000)	1198216	4.00000	
*	77 Perylene-d12	264	26.510	26.456	(1.000)	1559290	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.520	29.450	(1.114)	66483	0.18367	0.1837(H)
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032322S.D
Lab Smp Id: 23A0249-08
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	502303	251152	1004606	448634	-10.68
27 Naphthalene-d8	1751418	875709	3502836	1567414	-10.51
42 Acenaphthene-d10	814551	407276	1629102	746171	-8.39
59 Phenanthrene-d10	1450747	725374	2901494	1440377	-0.71
69 Chrysene-d12	1335017	667509	2670034	1198216	-10.25
77 Perylene-d12	1691506	845753	3383012	1559290	-7.82

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	-0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.79	0.06
42 Acenaphthene-d10	15.39	14.89	15.89	15.41	0.15
59 Phenanthrene-d10	18.53	18.03	19.03	18.56	0.17
69 Chrysene-d12	23.63	23.13	24.13	23.67	0.16
77 Perylene-d12	26.46	25.96	26.96	26.51	0.20

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

REVIEW SUMMARY FOR FILE - NT1003032322S.D

Lab ID: 23A0249-08
nt10.i, 20230303A.b\SIM.b\SIMABN2.m,   04-MAR-2023 07:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1003032315ICVS.d

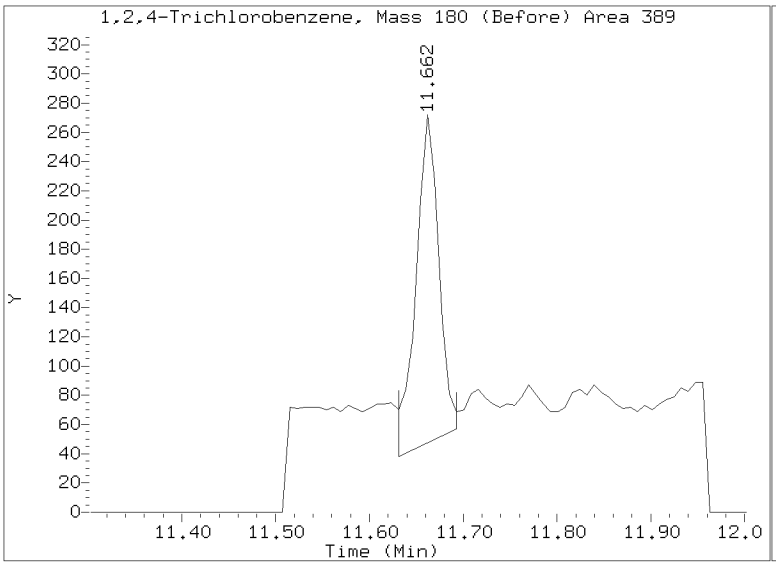
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

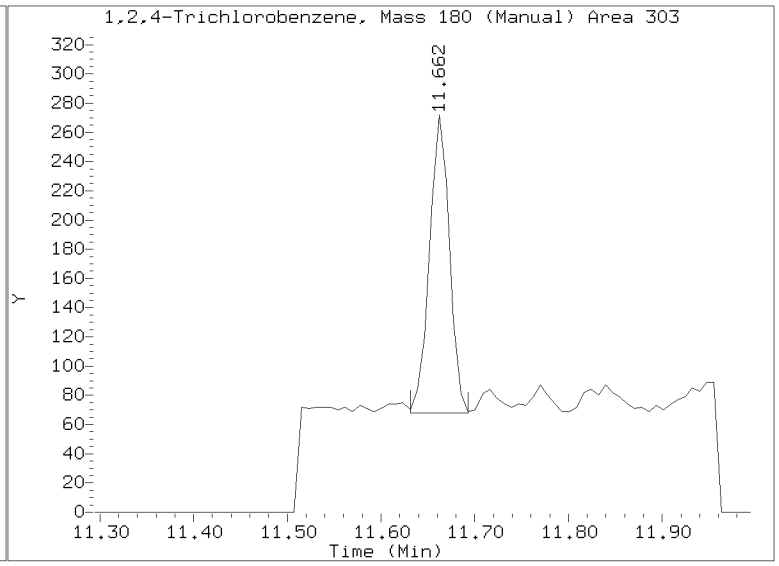
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230303A.b/SIM.b/NT1003032322S.D
Injection Date: 04-MAR-2023 07:06
Lab ID:23A0249-08 Client ID:
Report Date: 03/17/2023 11:26





Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1020

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-11 A	SDG:	23A0249
Sampled:	01/12/23 15:23	Prepared:	01/30/23 14:02	File ID:	NT1003032323S.D
% Solids:	70.01	Preparation:	EPA 3546 (Microwave)	Analyzed:	03/04/23 07:45
Batch:	BLA0673	Sequence:	SLC0253	Initial/Final:	14.57 g Wet / 1 mL
Instrument:	NT10	Column:	ZB-5MSi	Calibration:	GC00032
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	4.9	U	0.6	4.9
95-50-1	1,2-Dichlorobenzene	1	4.9	U	0.7	4.9
100-51-6	Benzyl Alcohol	1	2.5	J	2.4	19.6
65-85-0	Benzoic acid	1	98.0	U	13.1	98.0
105-67-9	2,4-Dimethylphenol	1	19.6	U	2.1	19.6
120-82-1	1,2,4-Trichlorobenzene	1	4.9	U	2.6	4.9
86-30-6	N-Nitrosodiphenylamine	1	4.9	U	1.3	4.9
87-86-5	Pentachlorophenol	1	19.6	U	2.1	19.6

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	735.26	464	63.1	27 - 120	
p-Terphenyl-d14	490.17	544	111	37 - 120	

Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323235.D

Page 1

Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

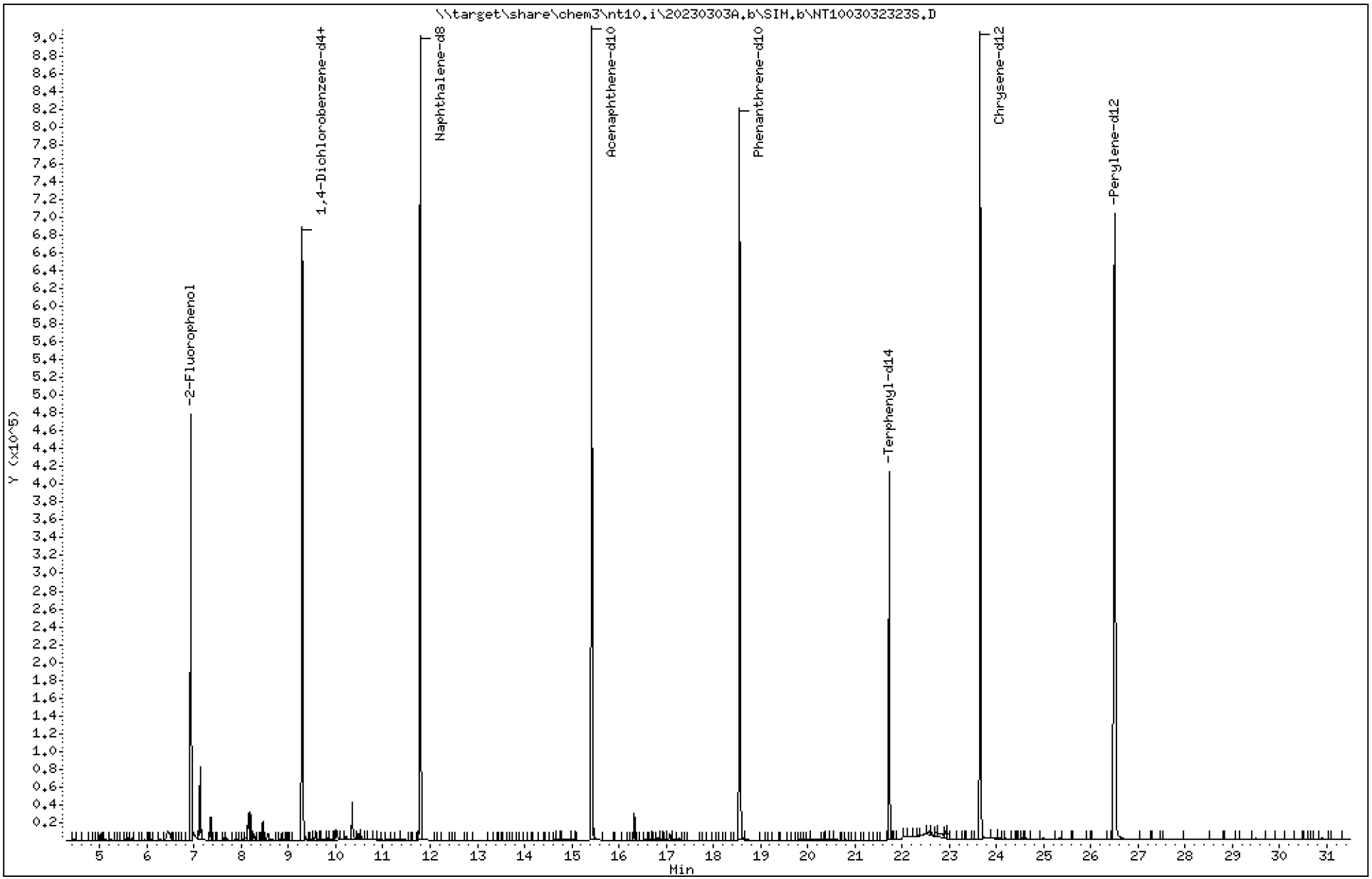
Sample Info: 23A0249-11

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

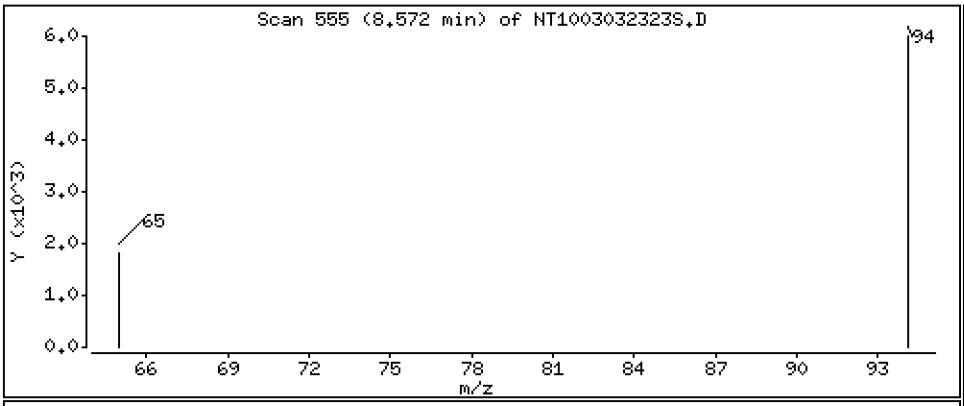
Operator: JGR

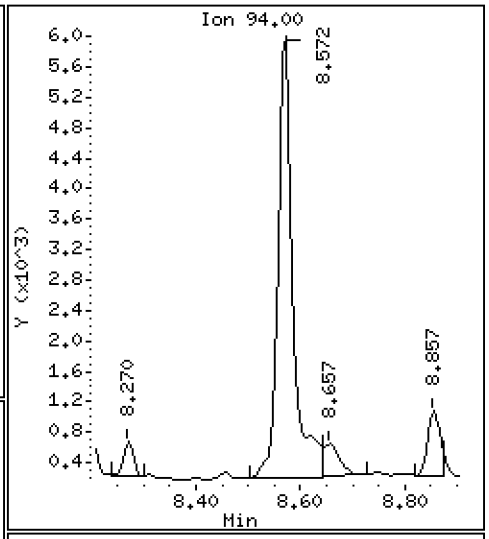
Column phase: ZB-5msi

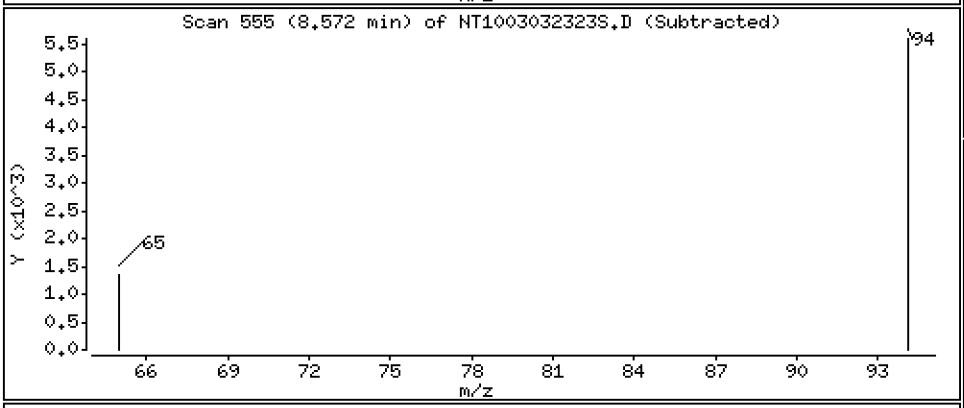
Column diameter: 0.25

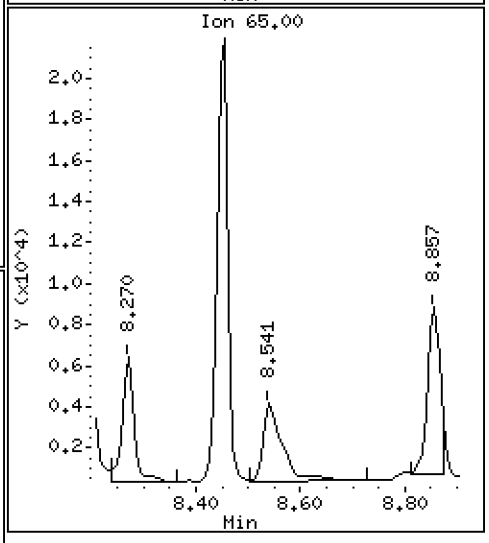
3 Phenol

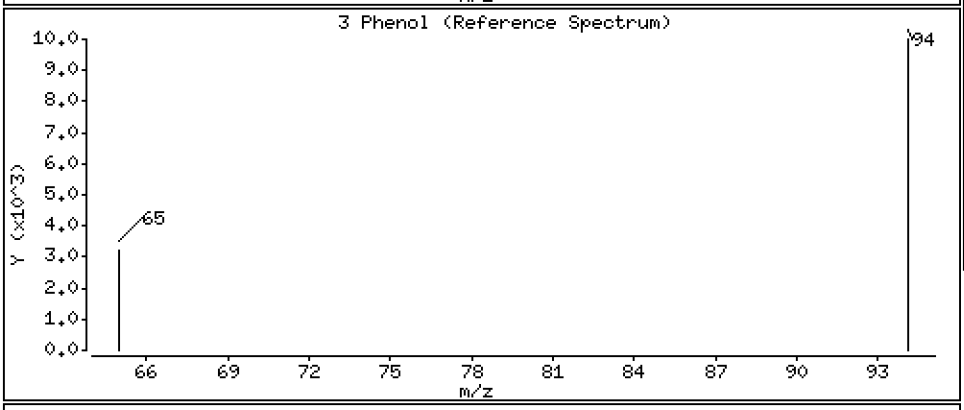
Concentration: 0.06607 ug/L

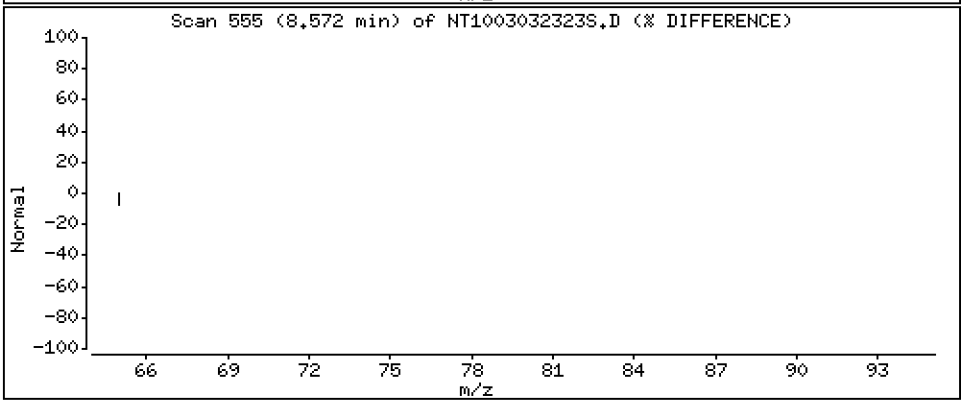












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

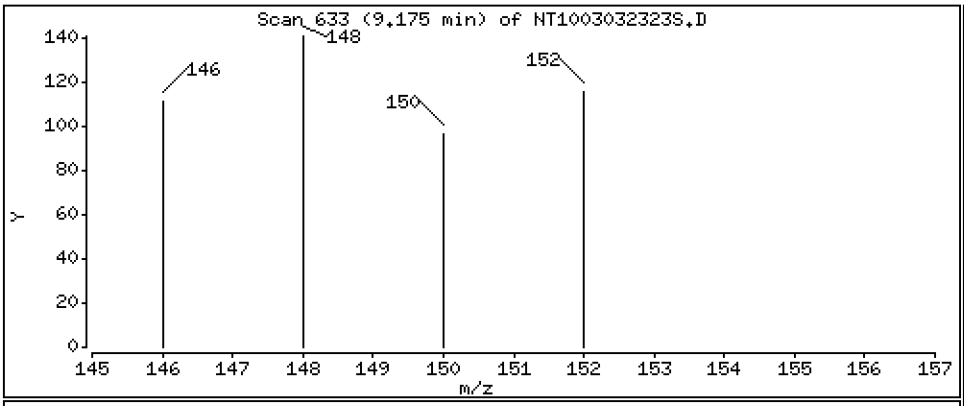
Operator: JGR

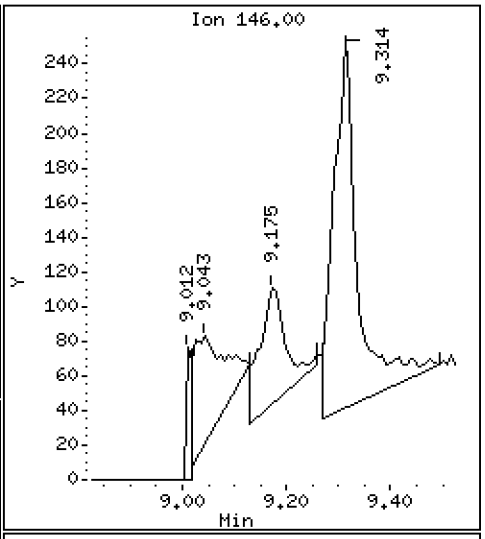
Column phase: ZB-5msi

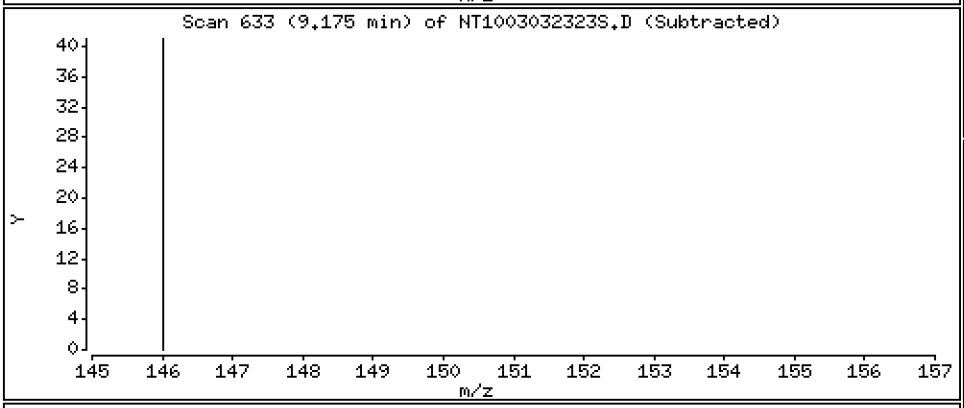
Column diameter: 0.25

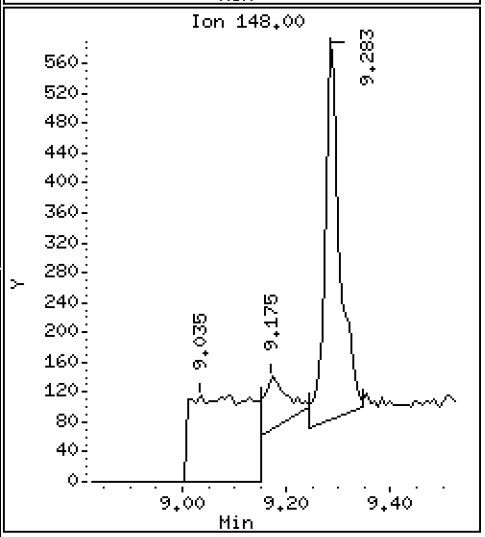
7 1,3-Dichlorobenzene

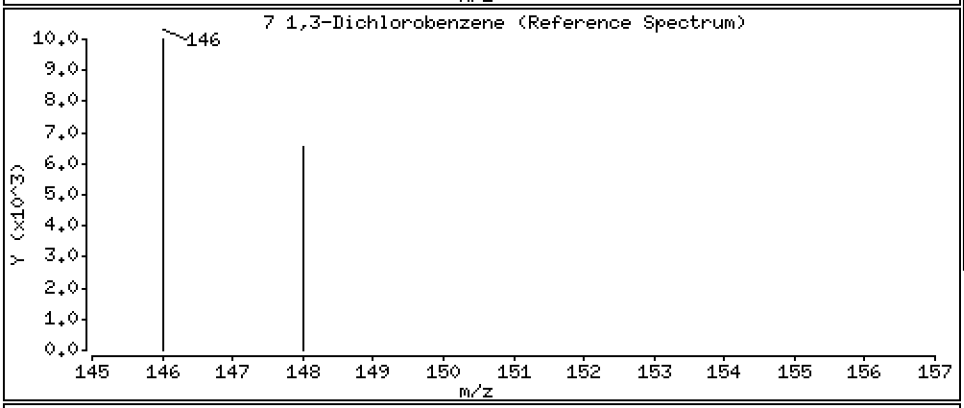
Concentration: 0.001528 ug/L

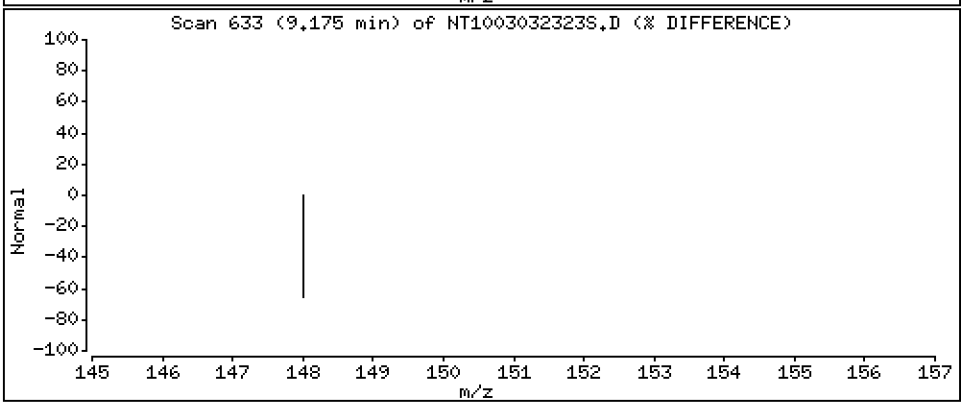












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

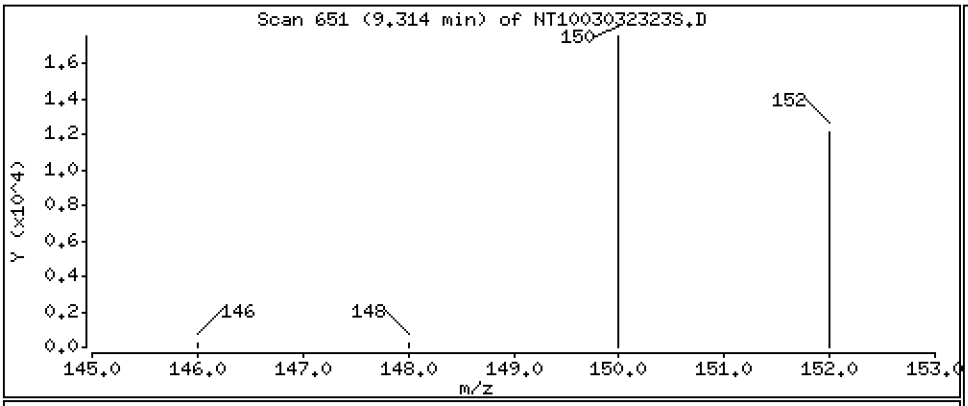
Operator: JGR

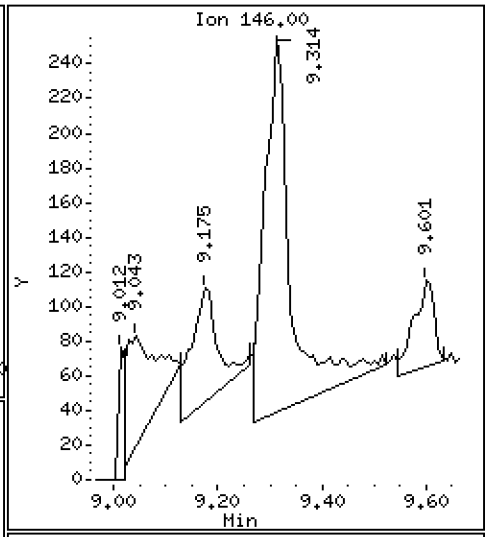
Column phase: ZB-5msi

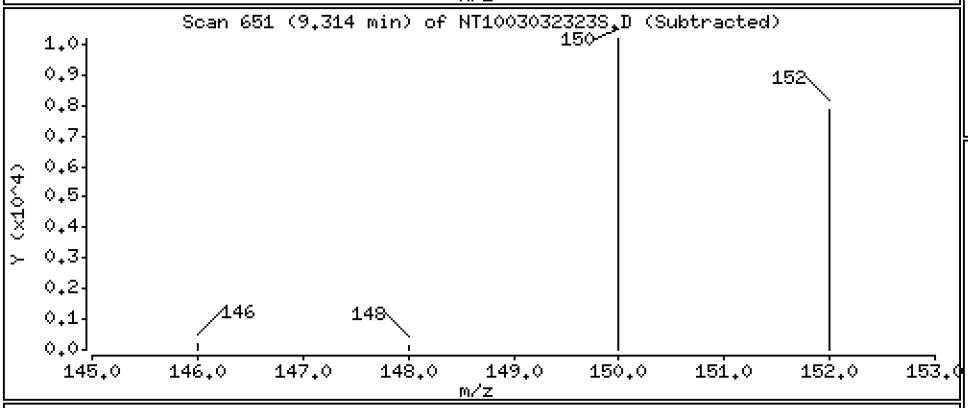
Column diameter: 0.25

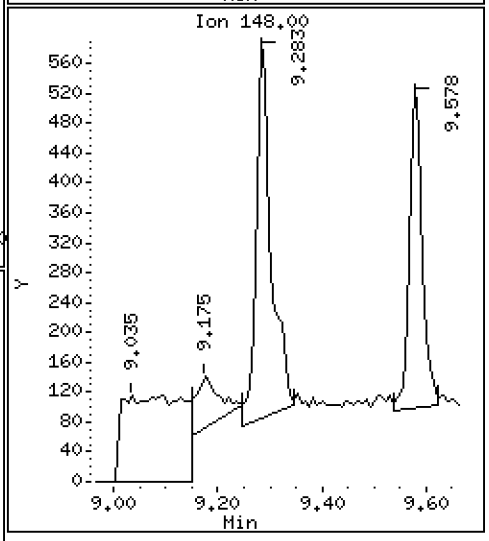
9 1,4-Dichlorobenzene

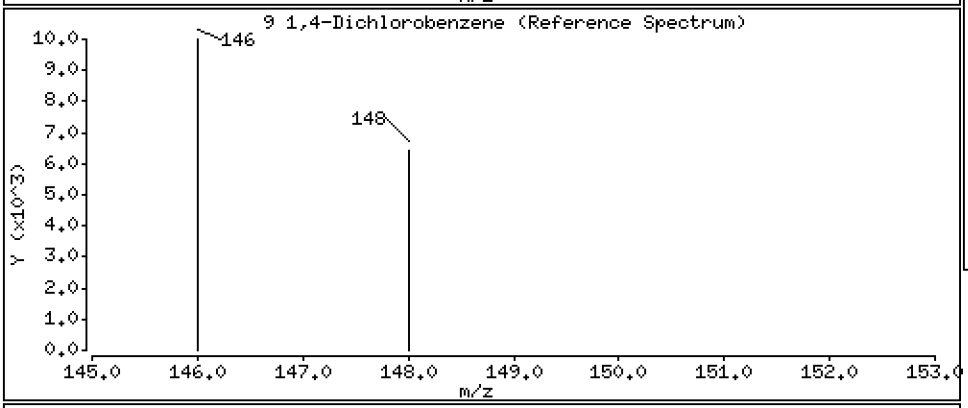
Concentration: 0.004947 ug/L

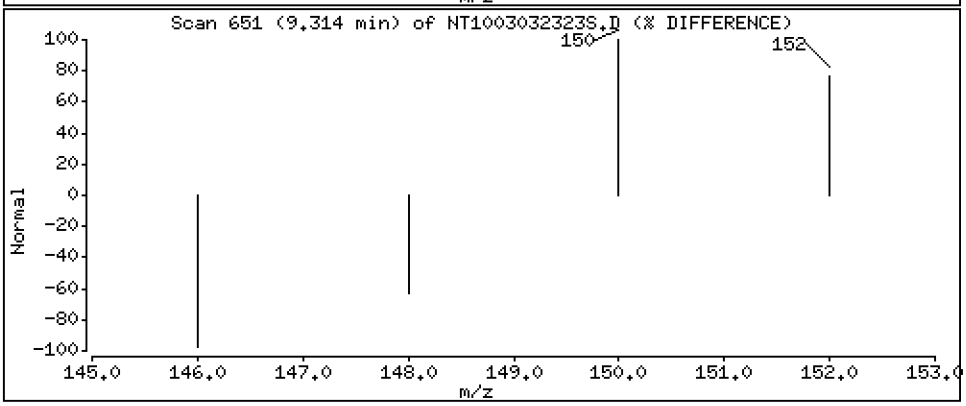












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

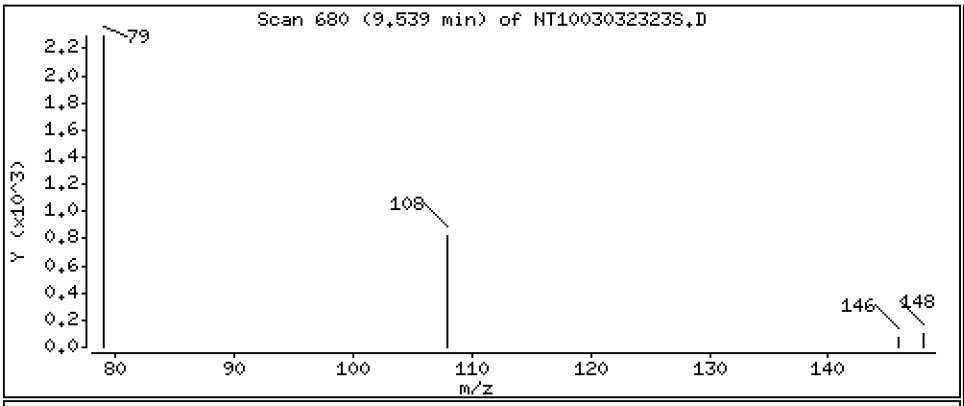
Operator: JGR

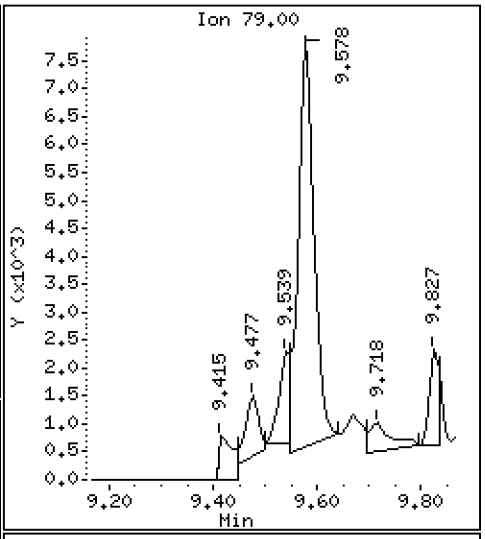
Column phase: ZB-5msi

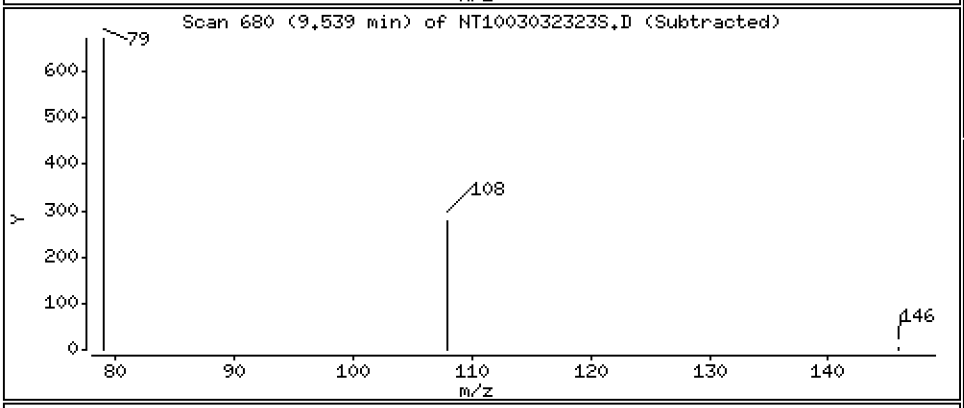
Column diameter: 0.25

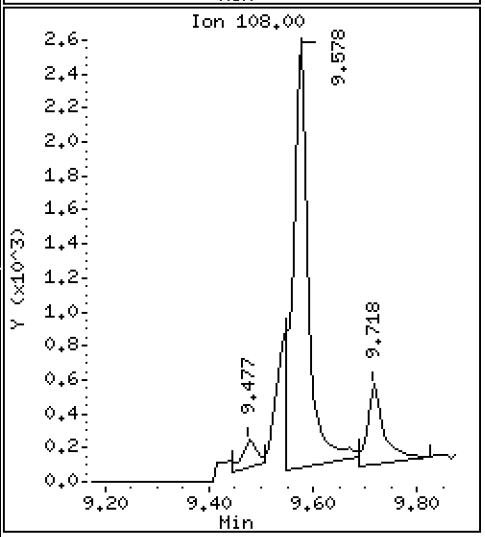
11 Benzyl alcohol

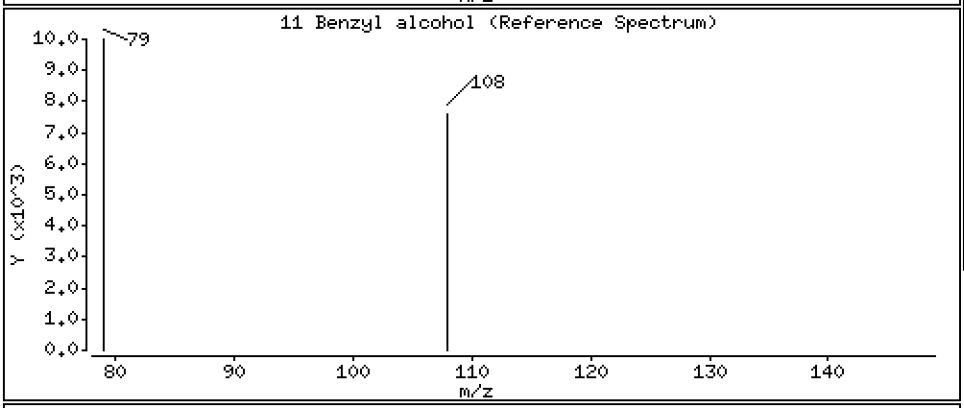
Concentration: 0.02591 ug/L

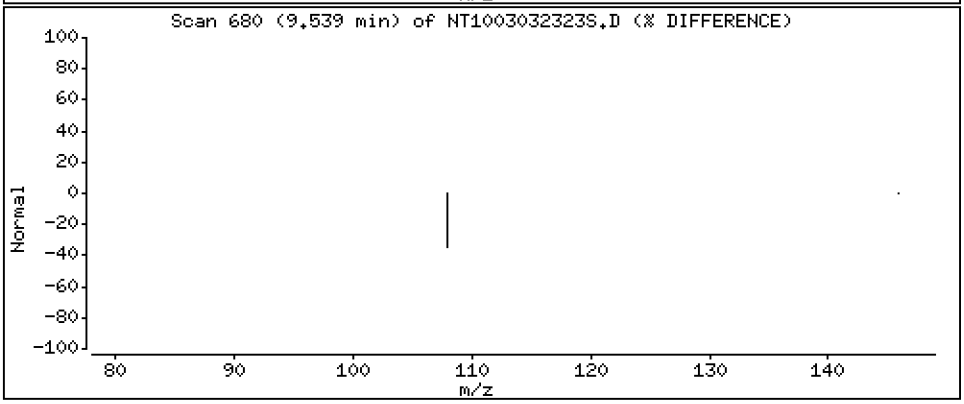












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

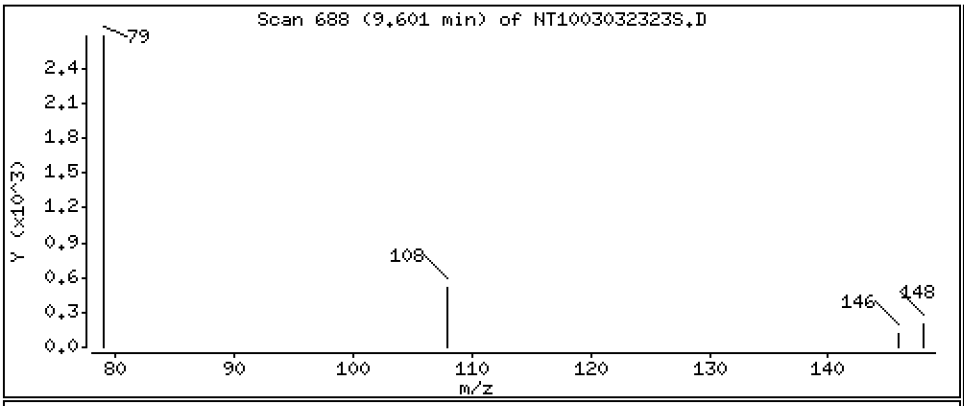
Operator: JGR

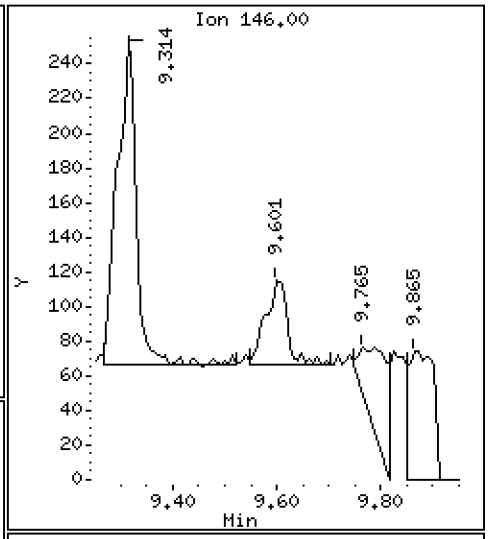
Column phase: ZB-5msi

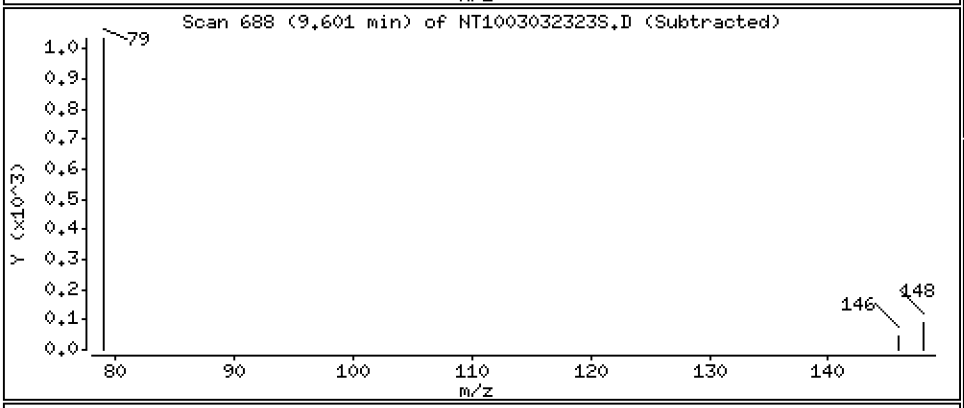
Column diameter: 0.25

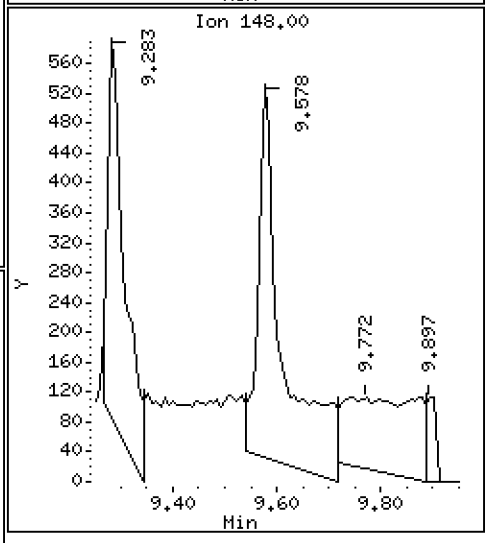
12 1,2-Dichlorobenzene

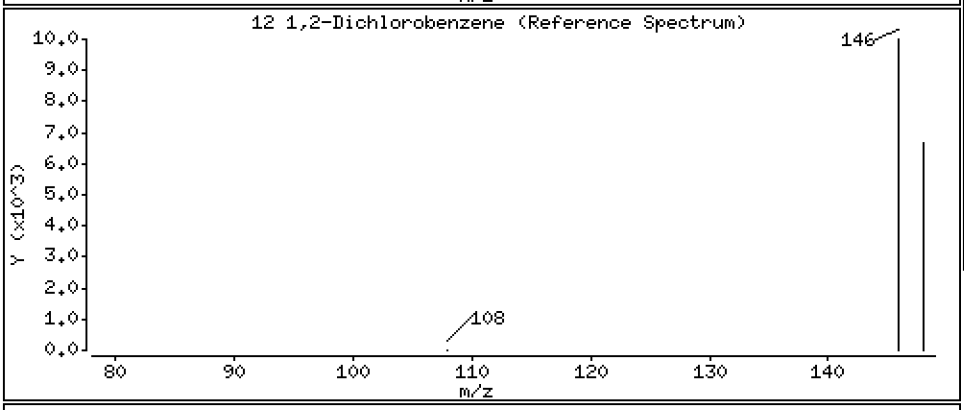
Concentration: 0.0009619 ug/L

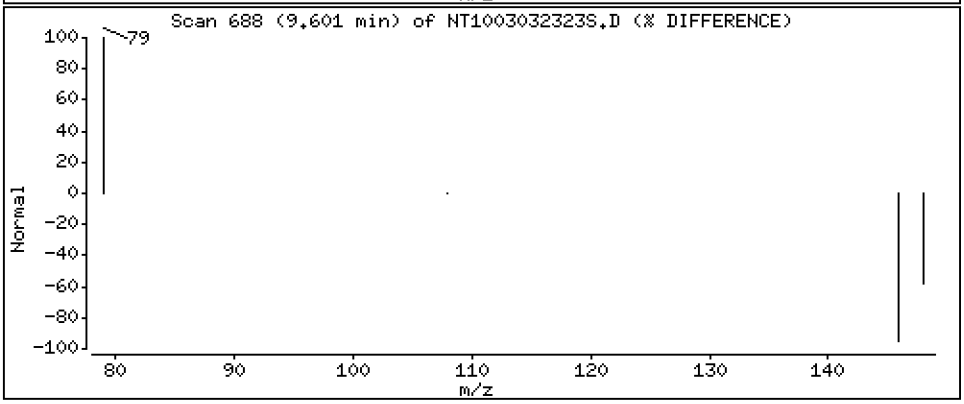












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

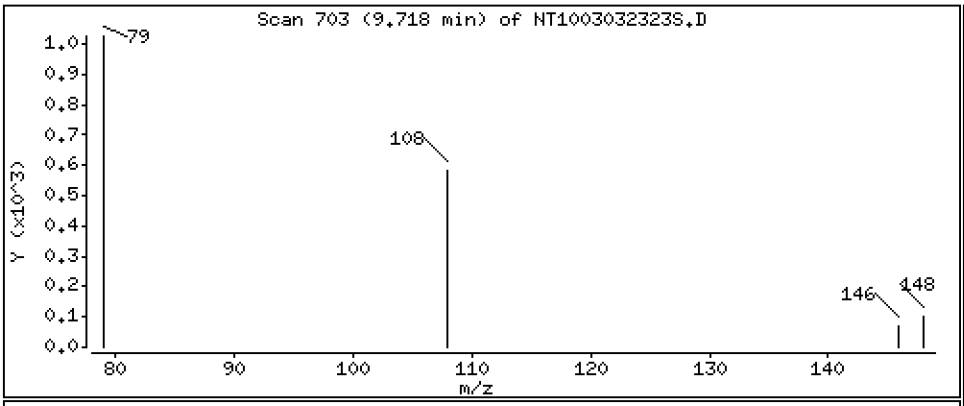
Operator: JGR

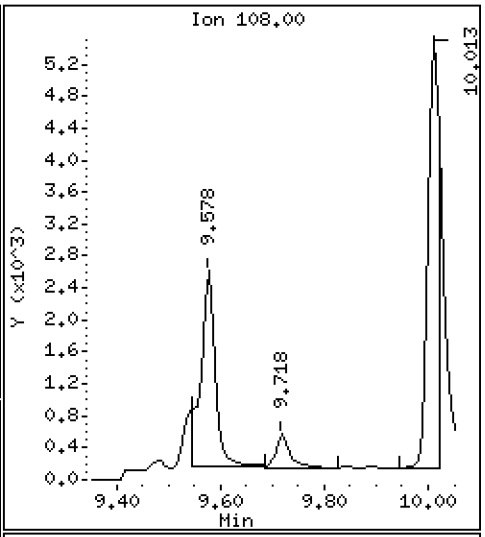
Column phase: ZB-5msi

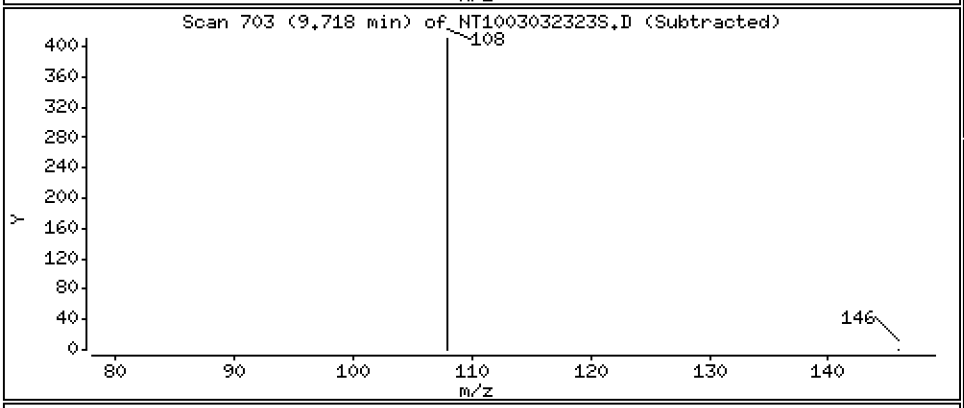
Column diameter: 0.25

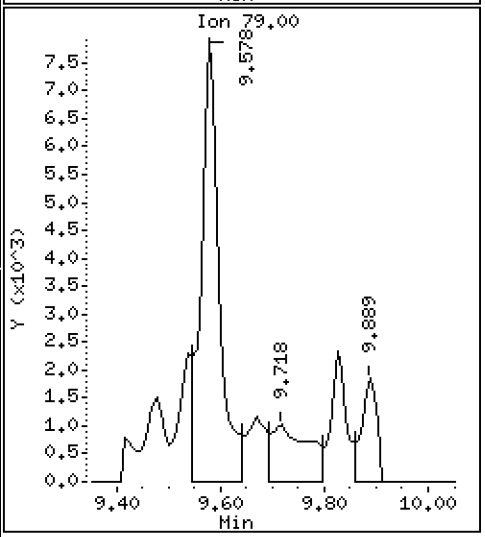
13 2-Methylphenol

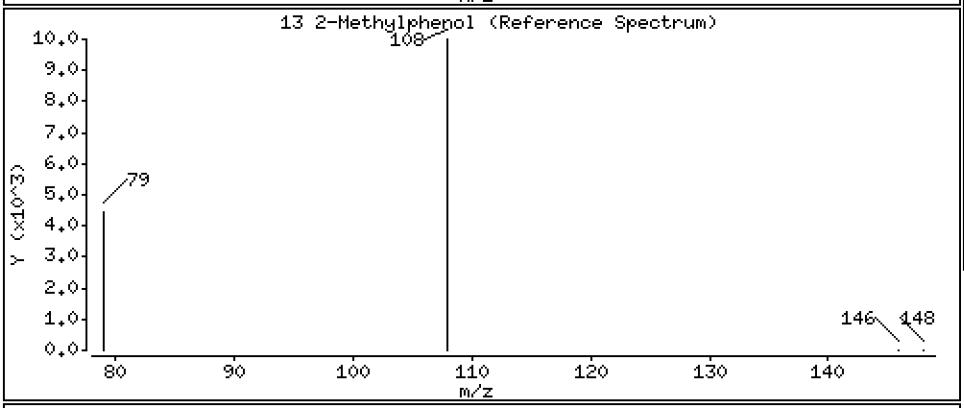
Concentration: 0.008142 ug/L

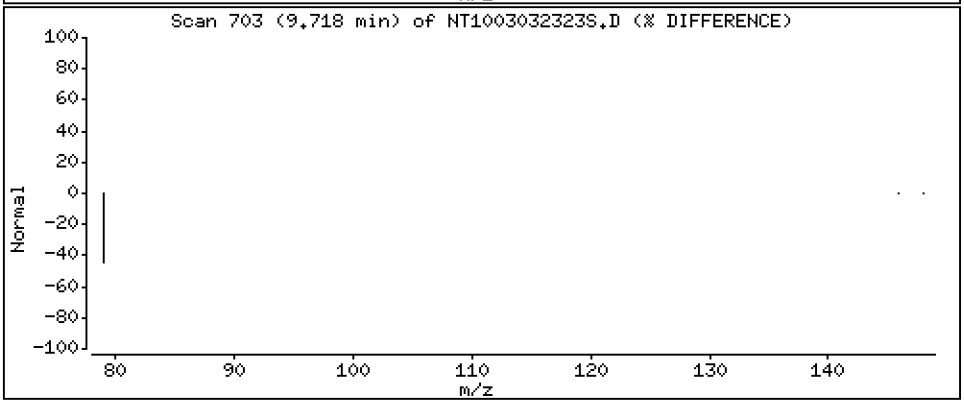












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323235.D

Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

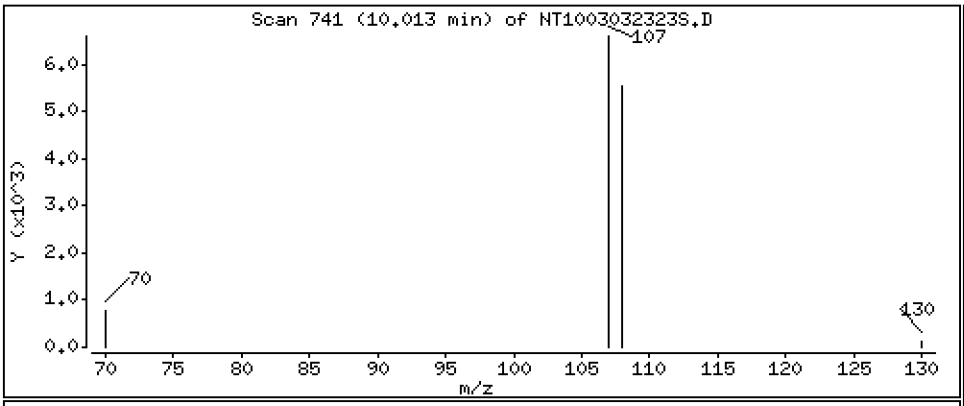
Operator: JGR

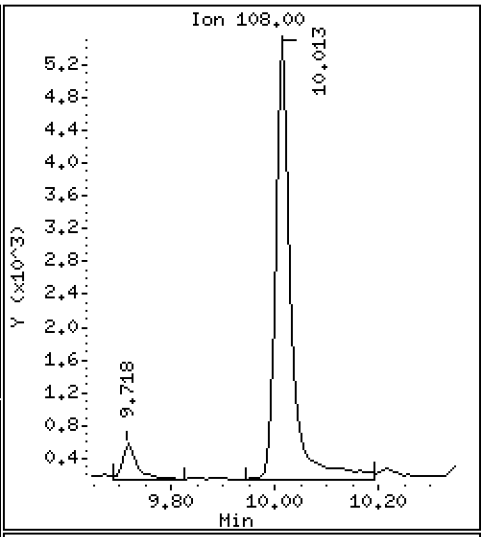
Column phase: ZB-5msi

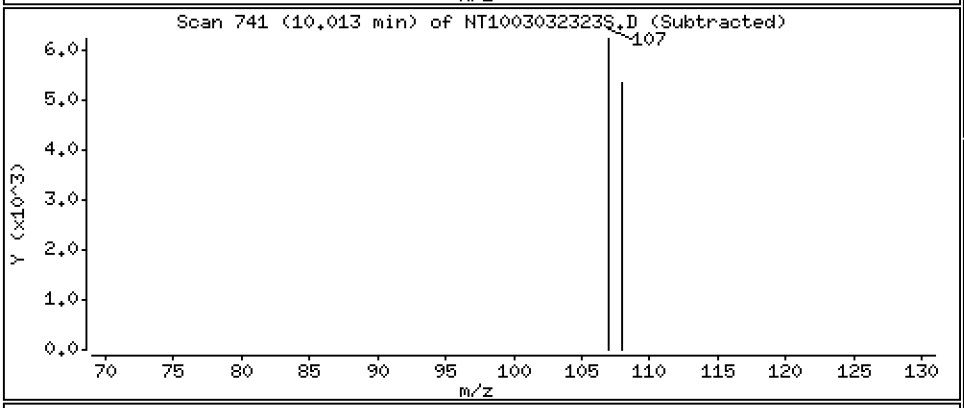
Column diameter: 0.25

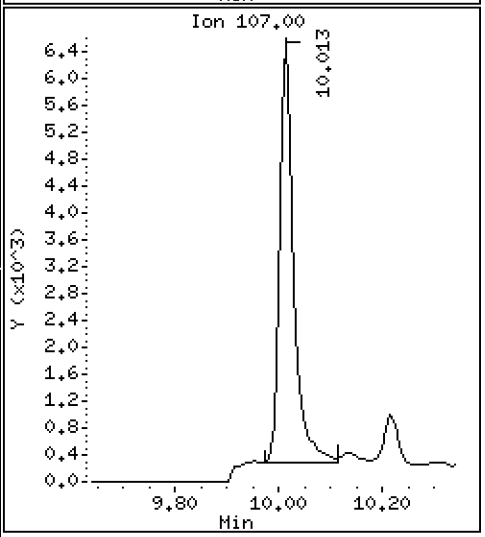
15 4-Methylphenol

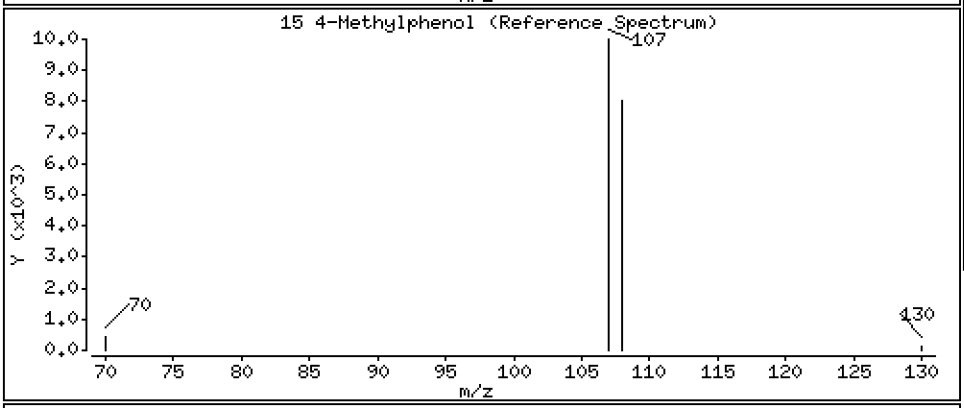
Concentration: 0.1008 ug/L

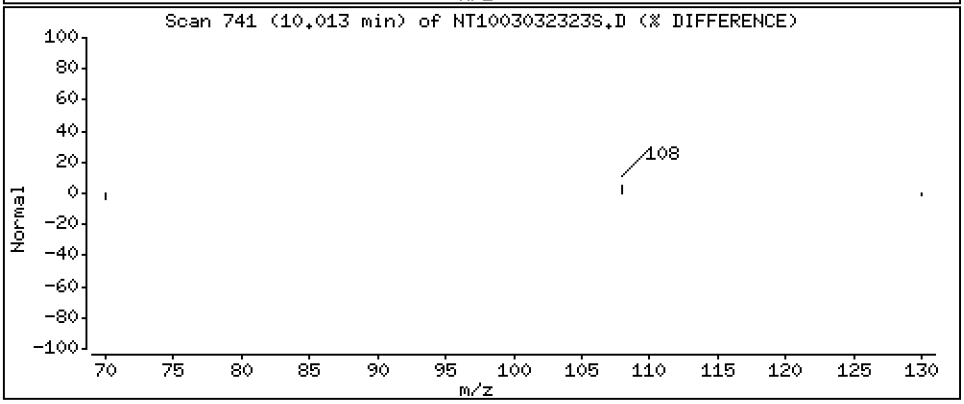












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323235.D

Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

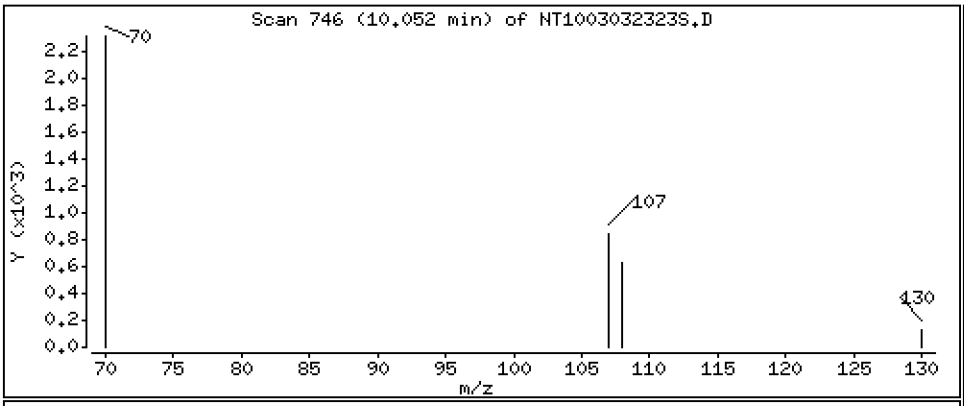
Operator: JGR

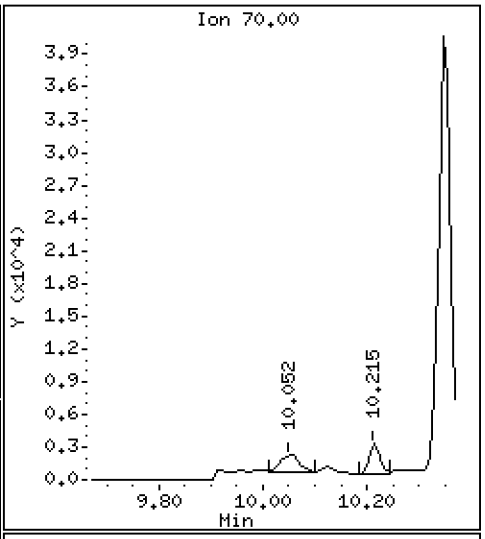
Column phase: ZB-5msi

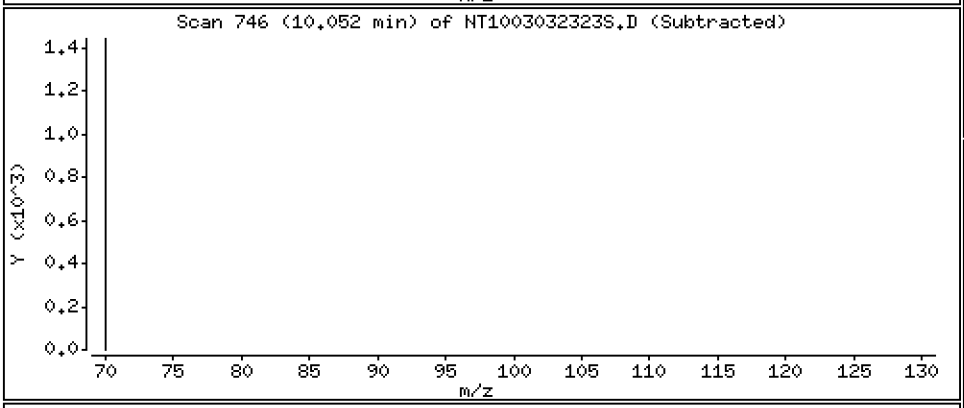
Column diameter: 0.25

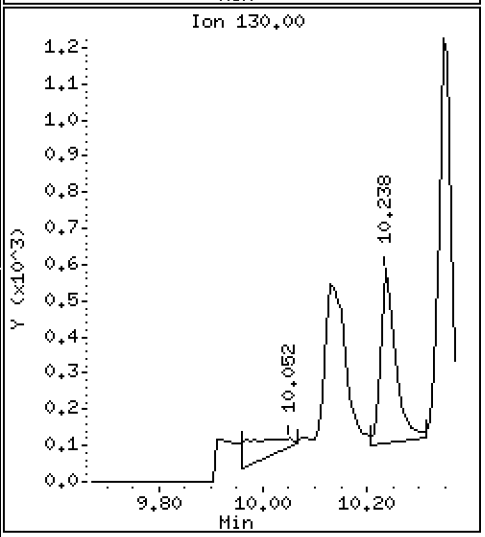
16 N-Nitroso-di-n-propylamine

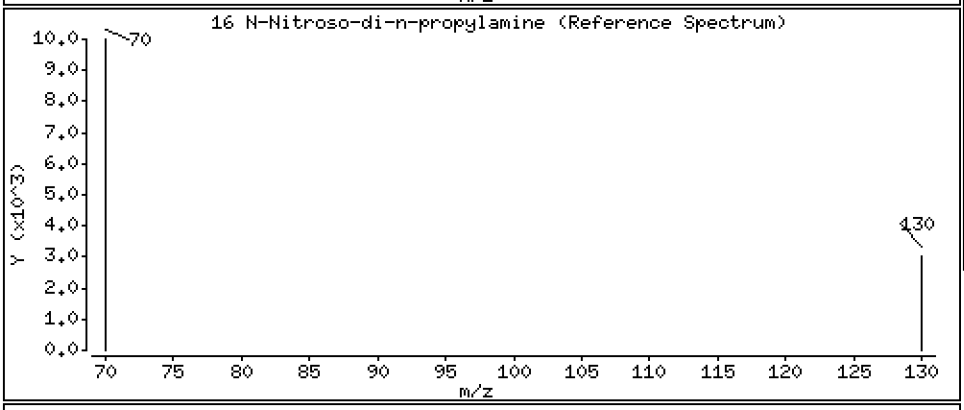
Concentration: 0.04786 ug/L

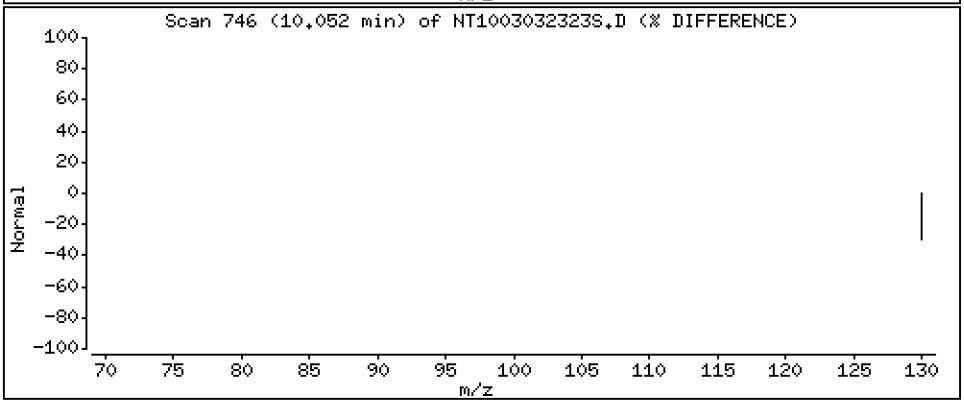












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

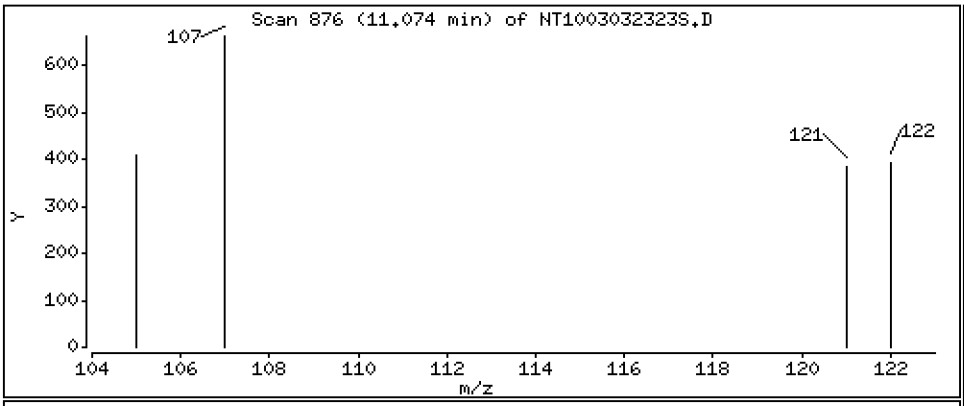
Operator: JGR

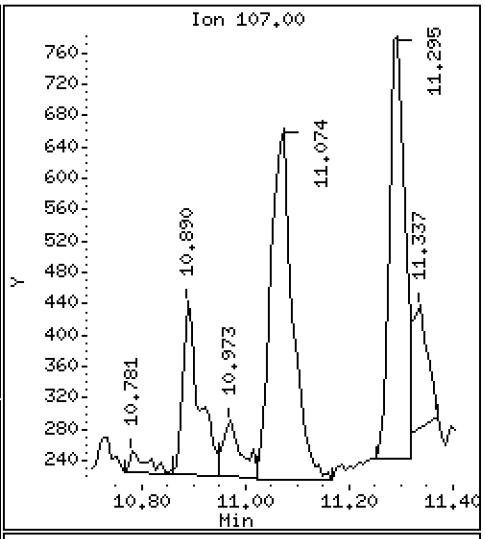
Column phase: ZB-5msi

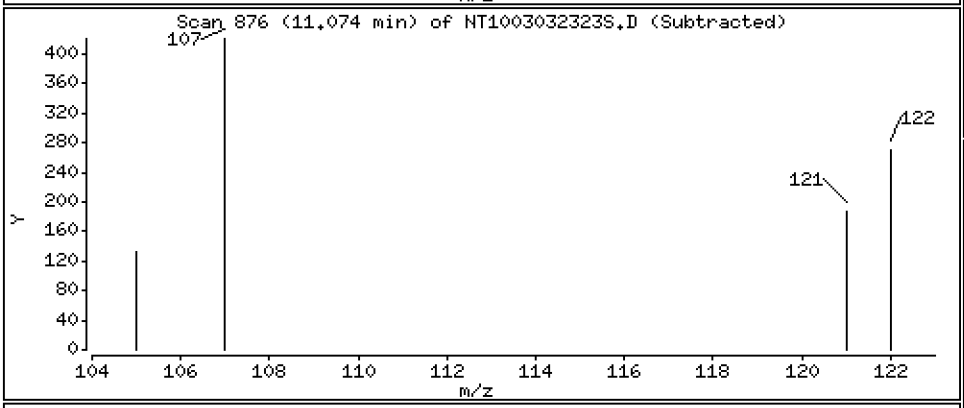
Column diameter: 0.25

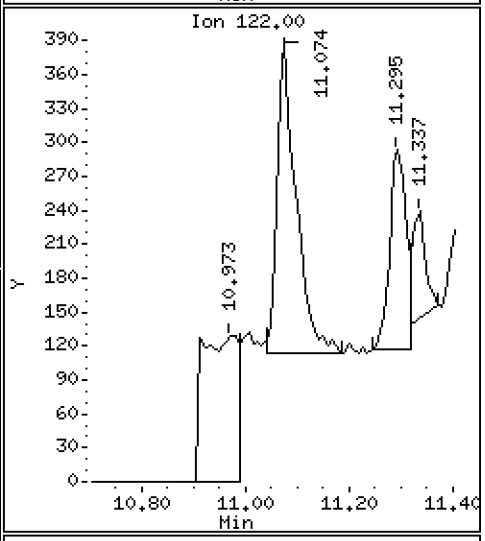
22 2,4-Dimethylphenol

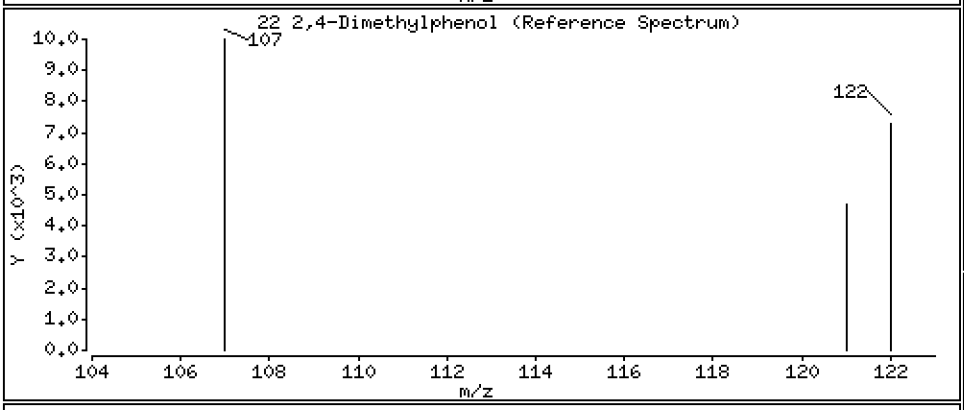
Concentration: 0.01067 ug/L

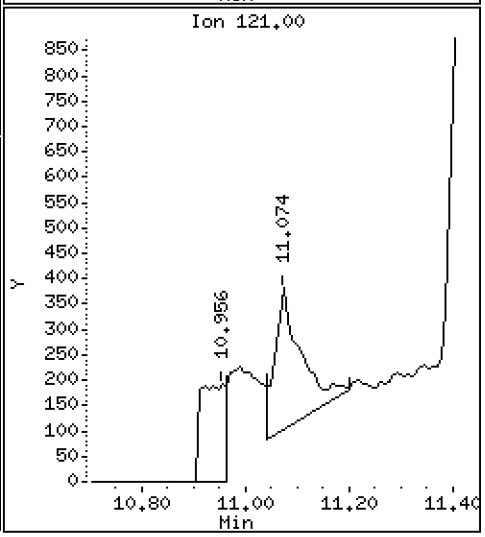


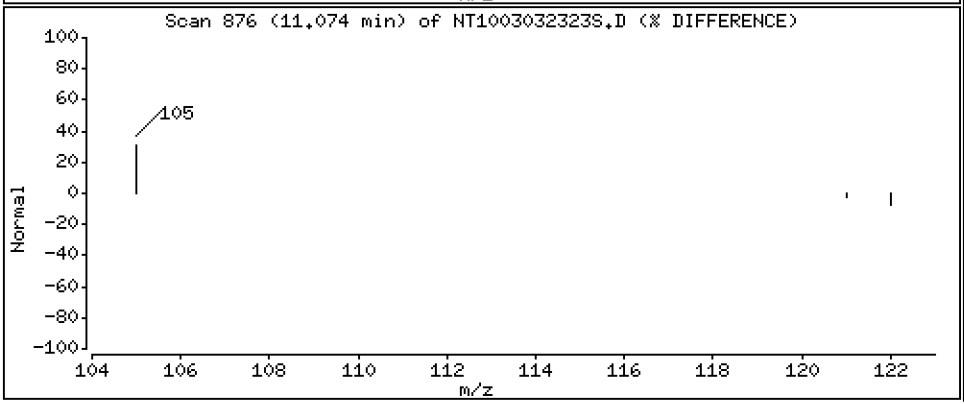












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

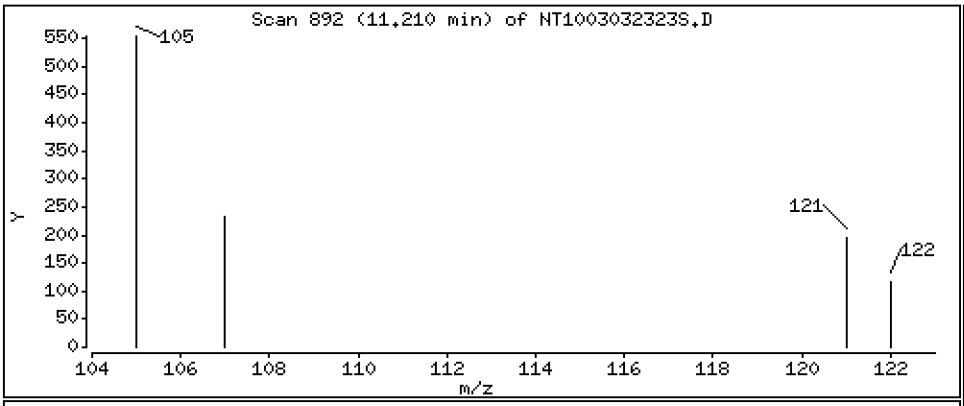
Operator: JGR

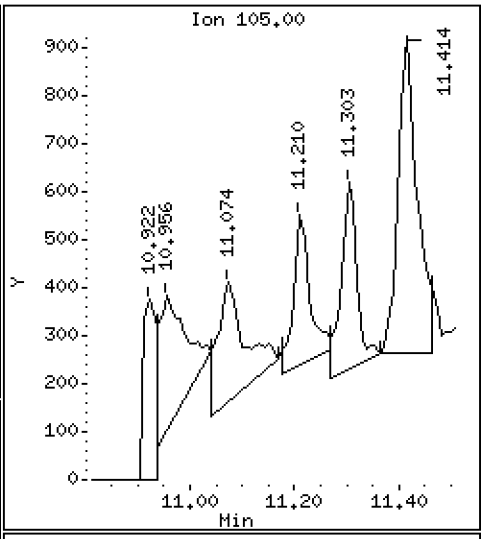
Column phase: ZB-5msi

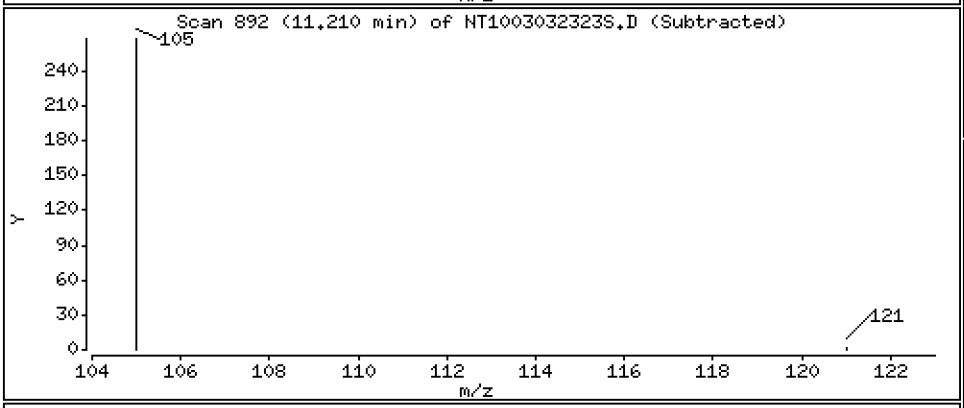
Column diameter: 0.25

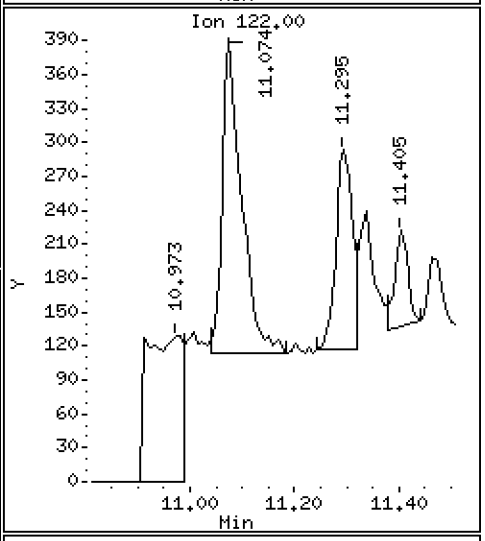
24 Benzoic acid

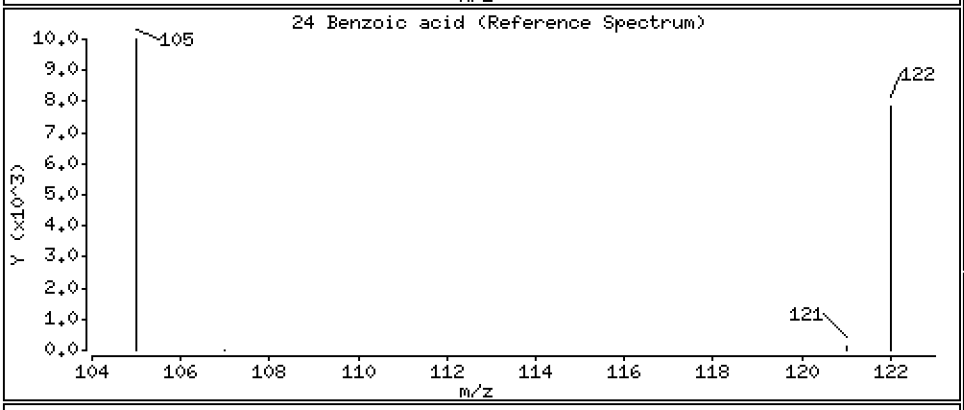
Concentration: 0.01016 ug/L

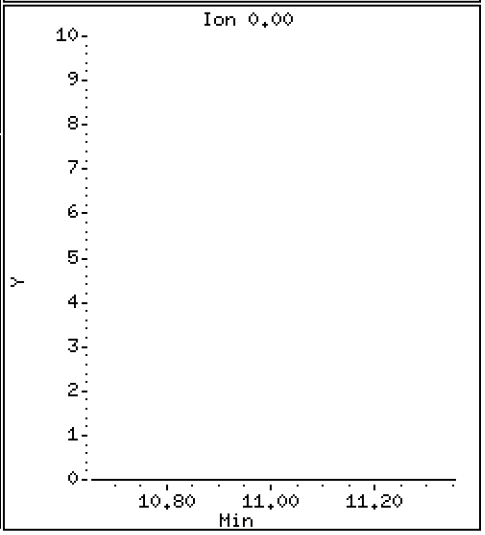


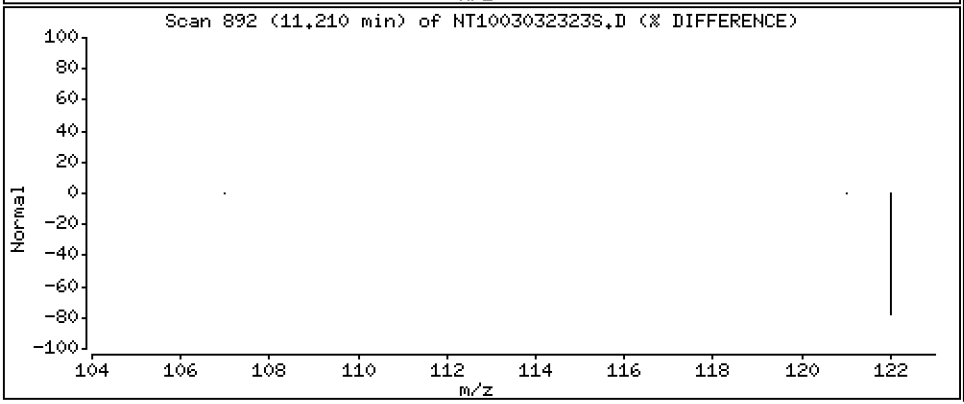












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323235.D

Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

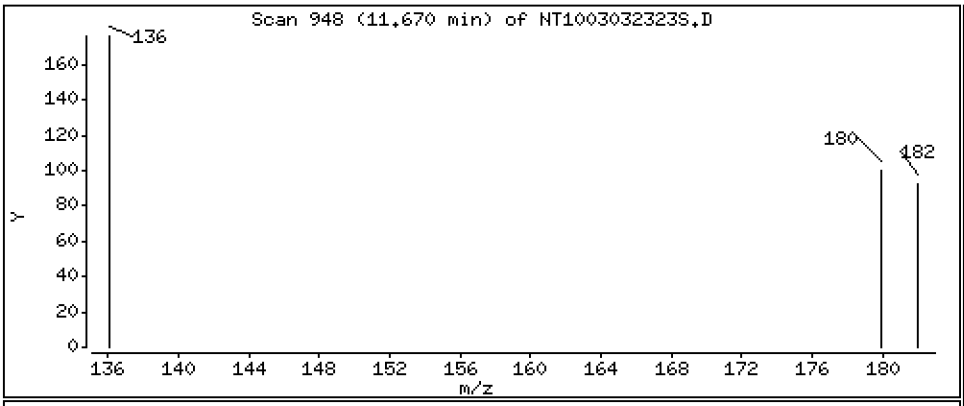
Operator: JGR

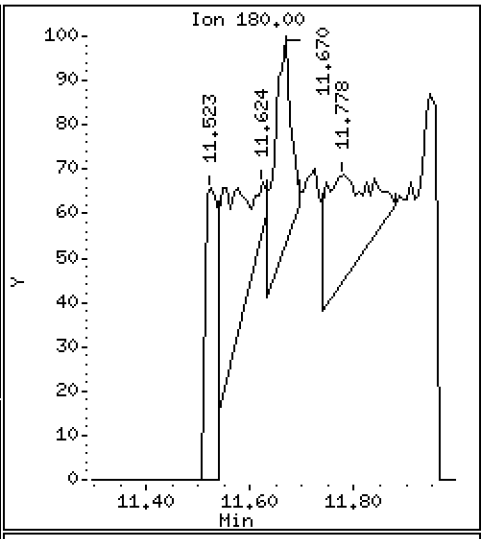
Column phase: ZB-5msi

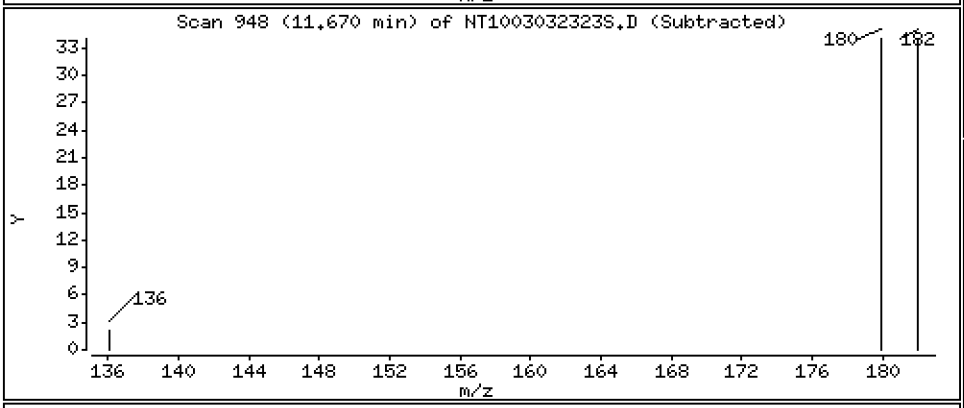
Column diameter: 0.25

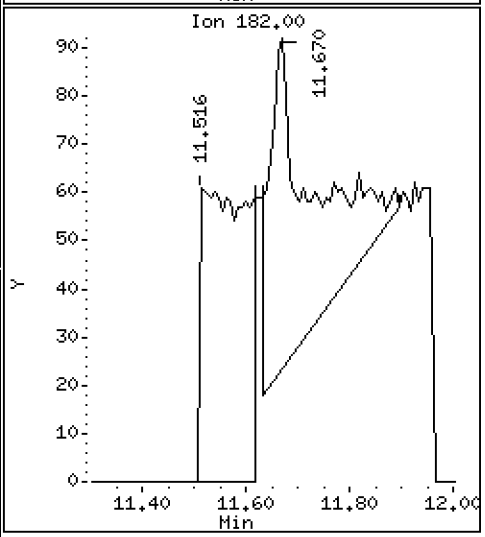
26 1,2,4-Trichlorobenzene

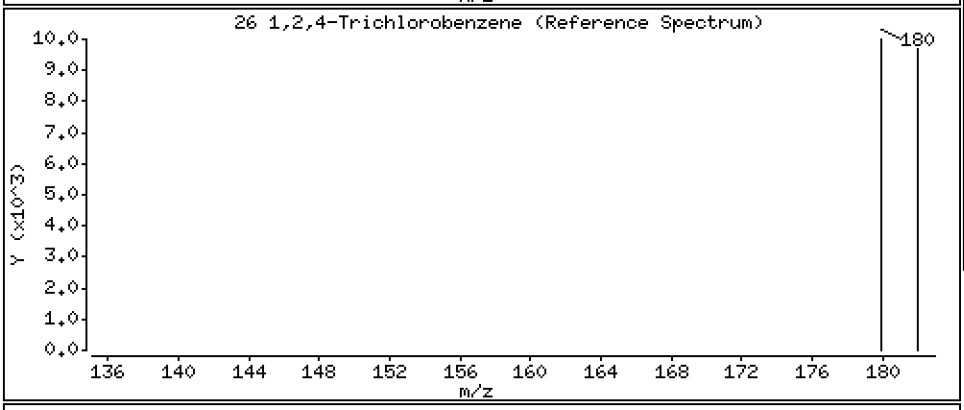
Concentration: 0.001050 ug/L

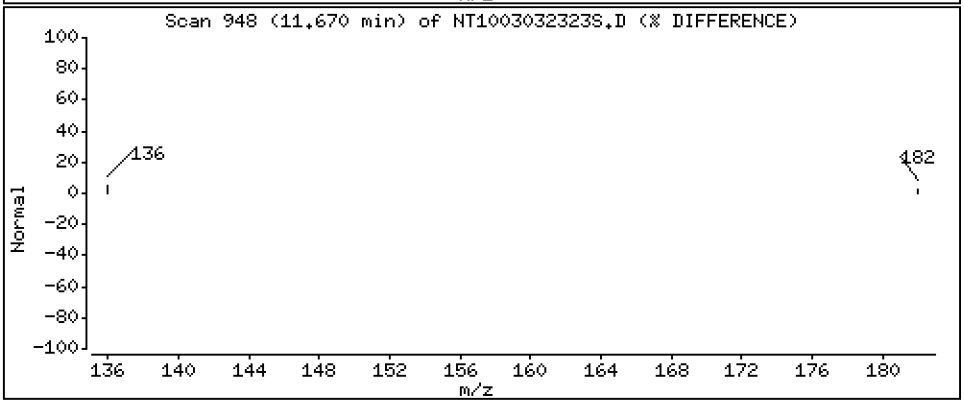












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

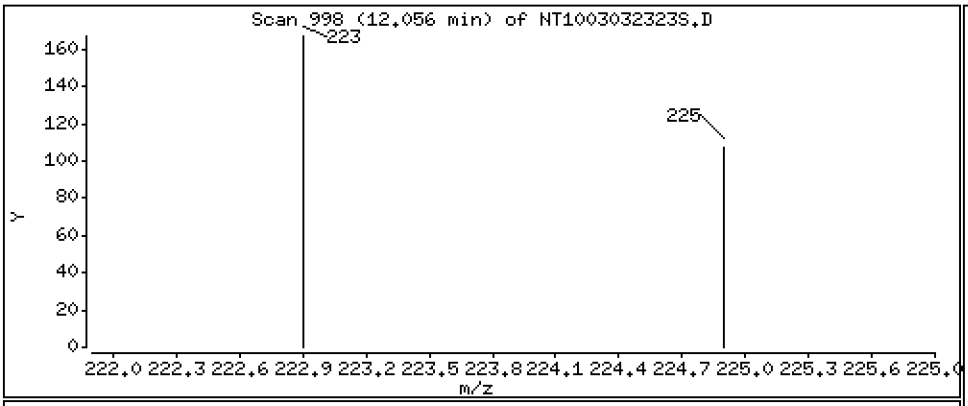
Operator: JGR

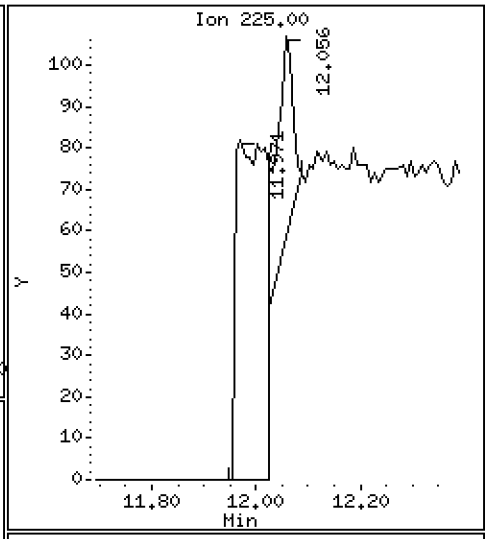
Column phase: ZB-5msi

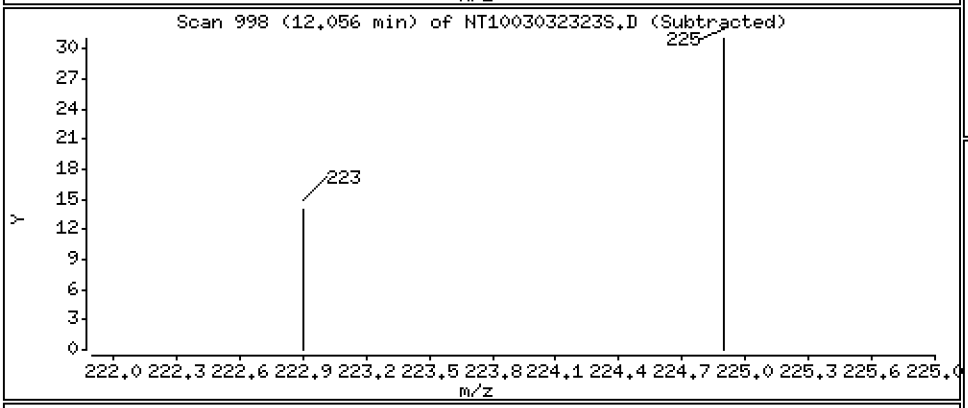
Column diameter: 0.25

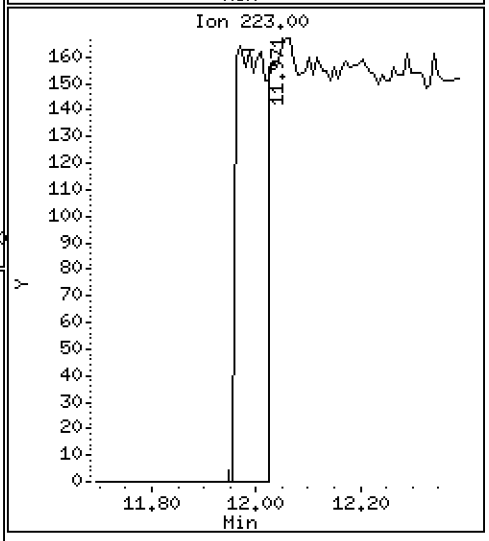
30 Hexachlorobutadiene

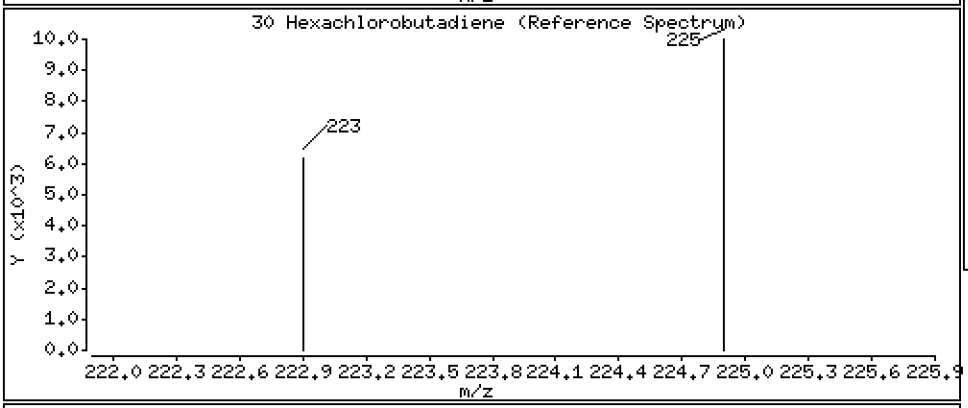
Concentration: 0.001533 ug/L

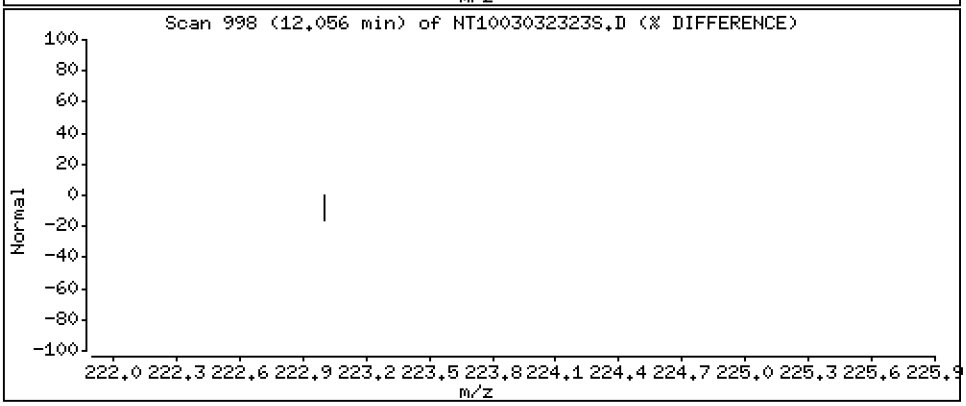












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Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

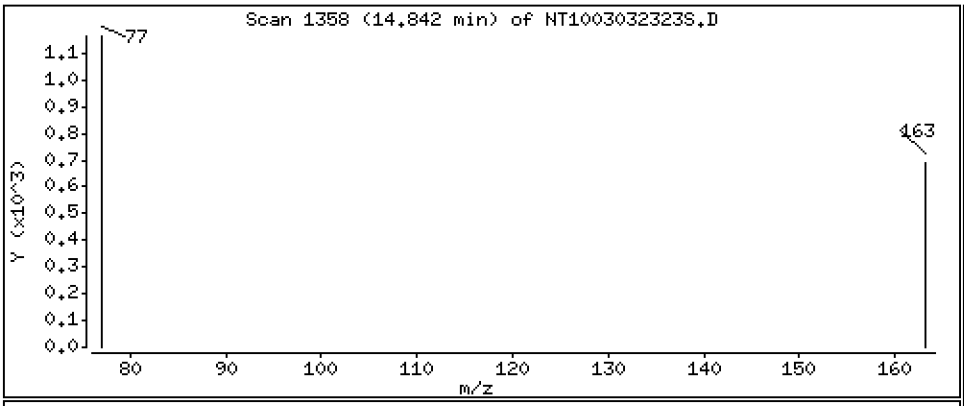
Operator: JGR

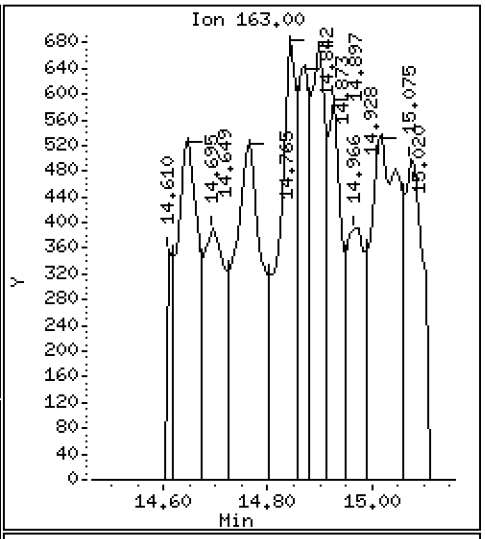
Column phase: ZB-5msi

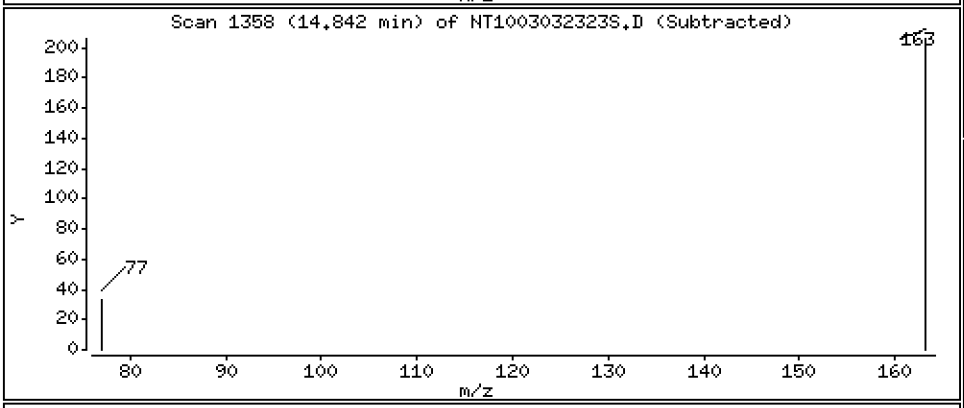
Column diameter: 0.25

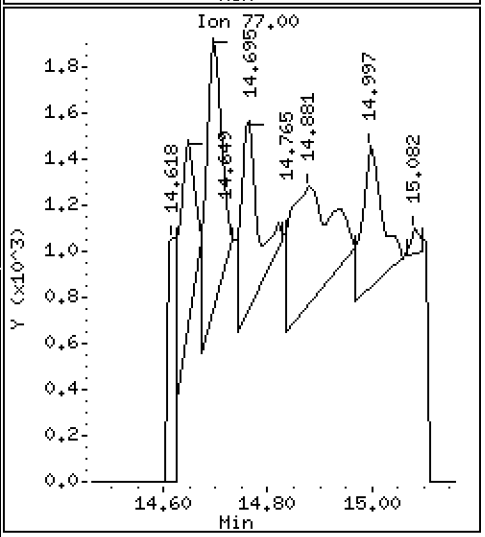
39 Dimethylphthalate

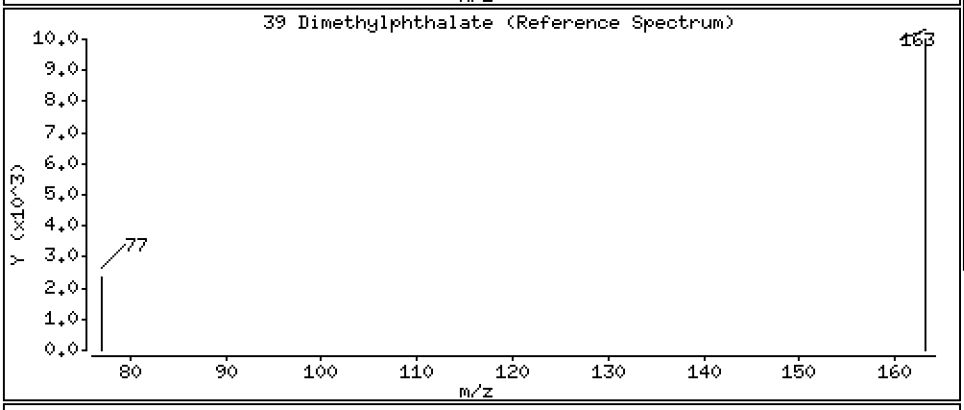
Concentration: 0.008307 ug/L

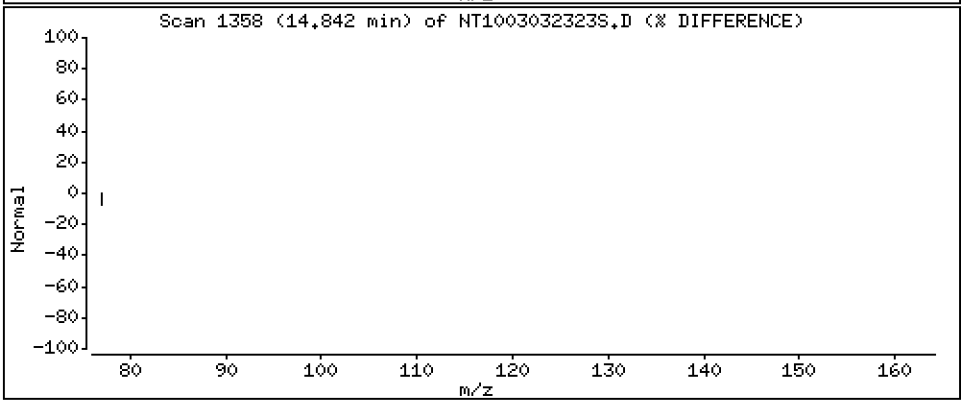












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323235.D

Date : 04-MAR-2023 07:45

Client ID:

Instrument: nt10.i

Sample Info: 23A0249-11

Volume Injected (uL): 1.0

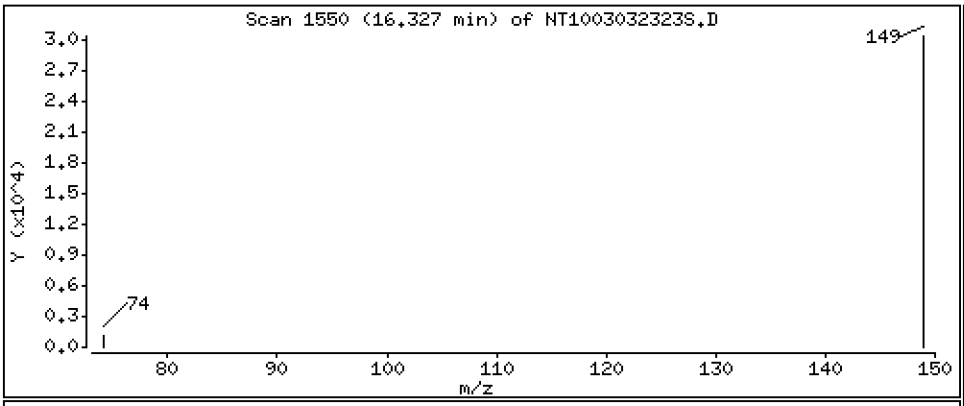
Operator: JGR

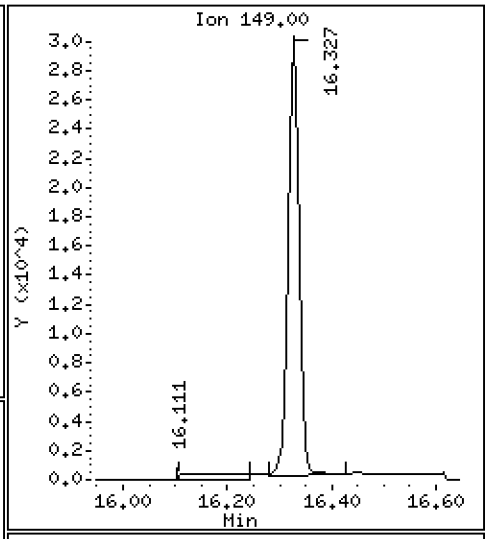
Column phase: ZB-5msi

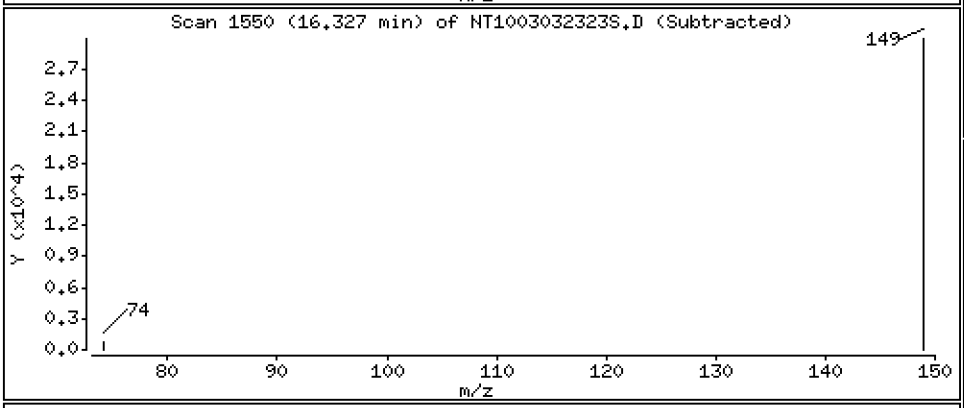
Column diameter: 0.25

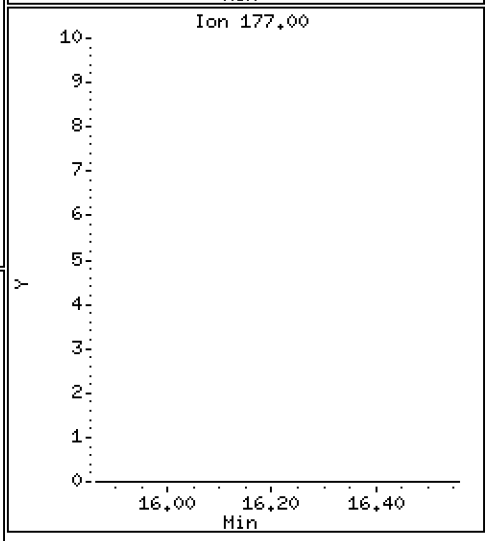
50 Diethylphthalate

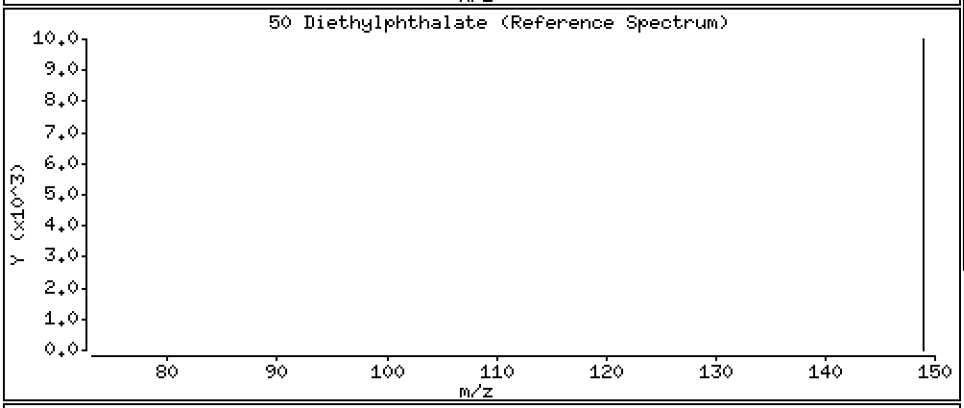
Concentration: 0.2217 ug/L

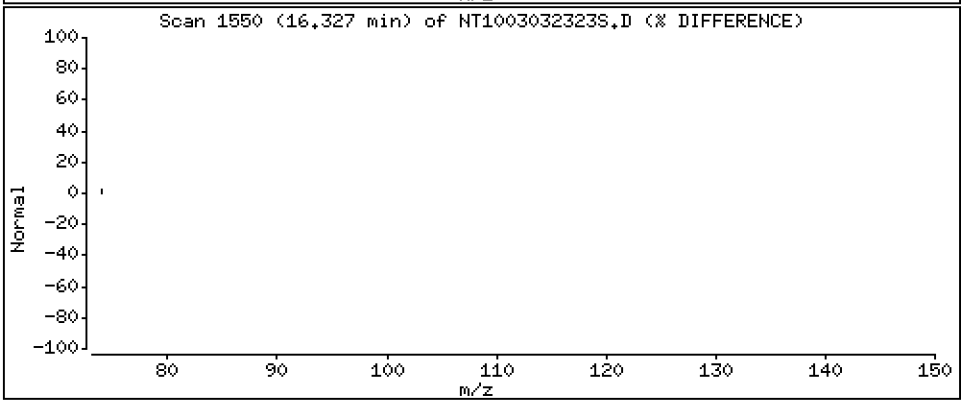












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT1003032323S.D
Lab Smp Id: 23A0249-11
Inj Date : 04-MAR-2023 07:45 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : 23A0249-11
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 11:26 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.925	6.917	(0.746)	568215	4.73618	4.736(R)
3	Phenol	94	8.571	8.556	(0.923)	11693	0.06607	0.06607
7	1,3-Dichlorobenzene	146	9.174	9.174	(0.988)	238	0.00153	0.001528
* 8	1,4-Dichlorobenzene-d4	152	9.283	9.283	(1.000)	420230	4.00000	
9	1,4-Dichlorobenzene	146	9.314	9.314	(1.003)	749	0.00495	0.004947
11	Benzyl alcohol	79	9.539	9.515	(1.028)	2542	0.02591	0.02591
12	1,2-Dichlorobenzene	146	9.601	9.601	(1.034)	140	1e-003	0.0009619
13	2-Methylphenol	108	9.717	9.702	(1.047)	866	0.00814	0.008142
15	4-Methylphenol	108	10.012	9.997	(1.079)	11159	0.10079	0.1008
16	N-Nitroso-di-n-propylamine	70	10.051	10.020	(1.083)	3771	0.04786	0.04786
22	2,4-Dimethylphenol	107	11.074	11.057	(0.940)	1330	0.01067	0.01067
24	Benzoic acid	105	11.210	11.159	(0.951)	694	0.01016	0.01016
26	1,2,4-Trichlorobenzene	180	11.670	11.646	(0.990)	111	0.00105	0.001050
* 27	Naphthalene-d8	136	11.785	11.777	(1.000)	1468708	4.00000	
30	Hexachlorobutadiene	225	12.056	12.040	(1.023)	115	0.00153	0.001533
39	Dimethylphthalate	163	14.842	14.811	(0.962)	1816	0.00831	0.008307
* 42	Acenaphthene-d10	162	15.422	15.391	(1.000)	688482	4.00000	
50	Diethylphthalate	149	16.327	16.296	(1.059)	45711	0.22173	0.2217
54	N-Nitrosodiphenylamine	169	16.775	16.790	(0.904)	411	0.00200	0.002001
57	Hexachlorobenzene	284	17.702	17.687	(0.954)	409	0.00426	0.004256

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.081	18.120	(0.974)	27	6e-004	0.0006422
*	59 Phenanthrene-d10	188	18.561	18.530	(1.000)	1268968	4.00000	
$	66 Terphenyl-d14	244	21.733	21.702	(0.919)	505040	5.54935	5.549(R)
	67 Butylbenzylphthalate	149	22.570	22.608	(0.954)	8065	0.04244	0.04244
*	69 Chrysene-d12	240	23.661	23.630	(1.000)	1125418	4.00000	
*	77 Perylene-d12	264	26.503	26.456	(1.000)	1441355	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.504	29.450	(1.113)	2117	0.00634	0.006343
	90 N-Nitrosodimethylamine	74	5.002	4.755	(0.539)	10386	0.14622	0.1462

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032323S.D
Lab Smp Id: 23A0249-11
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	502303	251152	1004606	420230	-16.34
27 Naphthalene-d8	1751418	875709	3502836	1468708	-16.14
42 Acenaphthene-d10	814551	407276	1629102	688482	-15.48
59 Phenanthrene-d10	1450747	725374	2901494	1268968	-12.53
69 Chrysene-d12	1335017	667509	2670034	1125418	-15.70
77 Perylene-d12	1691506	845753	3383012	1441355	-14.79

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.79	0.07
42 Acenaphthene-d10	15.39	14.89	15.89	15.42	0.20
59 Phenanthrene-d10	18.53	18.03	19.03	18.56	0.17
69 Chrysene-d12	23.63	23.13	24.13	23.66	0.13
77 Perylene-d12	26.46	25.96	26.96	26.50	0.18

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

REVIEW SUMMARY FOR FILE - NT1003032323S.D

Lab ID: 23A0249-11
nt10.i, 20230303A.b\SIM.b\SIMABN2.m,   04-MAR-2023 07:45

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.539	0.512	0.0266	N-Nitrosodimethylamine

RRT check based on Ccal File: SIM.b/NT1003032315ICVS.d

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

PREPARATION BATCH SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC SDG: 23A0249

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

Batch: BLA0673 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1083	23A0249-02	NT1003032318S.D	01/30/23 14:02	
LDW23-SC1018	23A0249-03	NT1003032319S.D	01/30/23 14:02	
LDW23-SC1084	23A0249-04	NT1003032320S.D	01/30/23 14:02	
LDW23-SC1025	23A0249-05	NT1003032321S.D	01/30/23 14:02	
LDW23-SC1024	23A0249-08	NT1003032322S.D	01/30/23 14:02	
LDW23-SC1020	23A0249-11	NT1003032323S.D	01/30/23 14:02	
Blank	BLA0673-BLK2	NT1003032306S.D	01/30/23 14:02	
LCS	BLA0673-BS2	NT1003032307S.D	01/30/23 14:02	
LCS Dup	BLA0673-BSD2	NT1003032308S.D	01/30/23 14:02	
Reference	BLA0673-SRM2	NT1003032311S.D	01/30/23 14:02	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0673

Prepared using: EPA 3546 (Microwave)

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

Matrix: Solid **Date Prepared:** 1/30/23 **Balance ID:** B139298002 **Set Up By:** CTO 1/27/23

WO Comments
23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

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

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

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet)	Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0249-02 A	61.9	(16.16)	16.35	(1:1)	1mL	1	0.5	
23A0249-03 A	49.9	(20.04)	20.63	(1:1)	1mL	1	0.5	
23A0249-04 A	53.9	(18.56)	18.69	(1:1)	1mL	1	0.5	
23A0249-05 A	59.4	(16.85)	12.50	(1:1)	1mL	1	0.5	
23A0249-08 A	49.0	(20.42)	21.16	(1:1)	1mL	1	0.5	
23A0249-11 A	70.0	(14.28)	14.57	(1:1)	1mL	1	0.5	
23A0295-01 A	54.5	(18.36)	18.77	(1:1)	1mL	1	0.5	
23A0295-02 A	54.1	(18.50)	18.81	(1:1)	1mL	1	0.5	
23A0295-03 A	58.3	(17.14)	17.93	(1:1)	1mL	1	0.5	
23A0295-04 A	52.9	(18.90)	18.98	(1:1)	1mL	1	0.5	
23A0295-05 A	60.1	(16.63)	16.97	(1:1)	1mL	1	0.5	
23A0295-06 A	54.4	(18.40)	18.96	(1:1)	1mL	1	0.5	
23A0295-07 A	77.6	(12.89)	13.03	(1:1)	1mL	1	0.5	
23A0295-09 A	66.5	(15.03)	15.55	(1:1)	1mL	1	0.5	
23A0295-10 A	78.1	(12.81)	12.81	(1:1)	1mL	1	0.5	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet)	Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0673-BLK1	100.0	(10.00)	10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0673-BS1	100.0	(10.00)	10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0673-BSD1	100.0	(10.00)	10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate for Blanks
BLA0673-MS1	78.1	(12.81)	12.81	(1:1)	1mL	1	0.5	Use 23A0295-10
BLA0673-MSD1	78.1	(12.81)	12.81	(1:1)	1mL	1	0.5	Use 23A0295-10
BLA0673-SRM1	100.0	~~(10.00)~~ (1.00)	1.00	(1:1)	1mL	1	0.5	Use K003477

+1g DI WATER

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0673

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Client ID verified By	Date	Preparation Reviewed By	Date	Extraction Date and Time
R	1/30/23	LJ	2/1/23	01/29/23 07 14:02

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0673

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
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23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps	Reagents Used	
Microwave 1 (2) 3 CR 1/30 Analyst/Date	**Station/Reagent**	**Standard ID**
	Microwave **Analyst:** CR **Date:** 1/30/23	
	Anhydrous Sodium Sulfate	LQQQ 759
	1:1 Methylene Chloride/Acetone	LQQQ 281
	Methylene Chloride	LQQQ 308
Pre-GPC KD 100°C Exchange to Hexane (add 10 mL to KD) 0 2 4 (5) 6 KV/LD 2/07 Analyst/Date	Pre-Deactivated Glass Wool	LQQQ 252
	Pre GPC KD **Analyst:** KV/LD **Date:** 02/07/23	
	Pre-Deactivated Glass Wool	N/A
	Anhydrous Sodium Sulfate	N/A
	Methylene Chloride	LQQQ 308
TurboVap **Pre GPC** 1 2 3 (4) 5 SH 2/7/23 Analyst/Date	Hexane	K011373
	GPC Filter Prep **Analyst:** SH **Date:** 2/7/23	
	Methylene Chloride	LQQQ808
Post GPC KD 80-85°C 0 (2) 4 5 (6) LD/KV 2-9-23 Analyst/Date	**GPC** **Analyst:** SH **Date:** 2/7/23	
	Methylene Chloride	LQQQ808
	GPC Calibration File	CLA QQ 86-GPC1
TurboVap 1 2 3 (4) 5 LJ 2/12/23 Analyst/Date	**Post GPC KD** **Analyst:** LD/KV **Date:** 2-9-23	
	Methylene Chloride	LQQQ808
Water Wash LJ 2/12/23 Analyst/Date	**Vialing** **Analyst:** LJ **Date:** 2/12/23	
	Methylene Chloride	LQQQ308

Surrogates & Spike Standards Used

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

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0673

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
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23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

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

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SVOA Extraction Batch: BLA0673

Total Solids Batch: BLA0590 Work Order(s): 23A0249

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 02-11	CR 1/26/23
☒ Standing Water Decanted (Not shared)= 03-06, 08, 10	CR 1/26/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 02-11	CR 1/26/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y (N)	CR 1/26/23
☒ Multiple Jars Y (N)	CR 1/26/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: _____ Extraction Batch _____

Total Solids Batch: BLA0590 Work Order(s): 23A0249

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
[X] No Anomalies (standard soil/wet sediment/sand/gravel)= 02-11	CR 1/26/23
[X] Standing Water Decanted (Not shared)= 03-06, 08, 10	CR 1/26/23
[ ] Standing Water Homogenized (Shared samples)=	
[ ] Clay/Clumps (Difficult to homogenize)=	
[ ] Rocks (%+size)?	
[ ] Organics (Leaves/sticks/grass)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Received in 32oz jar(s)=Homogenized in Pyrex dish=	
[X] Previously Frozen = 02-11	CR 1/26/23
[ ] Other (Details)=	
Aqueous:	
[ ] No Anomalies	
[ ] Turbid/Color=	
[ ] Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
[ ] Emulsions (%)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Other (Details)=	
[ ] Received in 1.0L Bottle(s)=No Bottle Rinse=	
[X] Other Notes/Comments= (Note problems, concerns, corrective actions).	
Unsure about Dual Seal's extract container. On GPC cleanup just left container as "A"	LS 2/12/23
[X] Share Samples Y (N)	CR 1/26/23
[X] Multiple Jars Y (N)	CR 1/26/23
[ ] Sample Pre-Screens indicate analyte activity=	
[ ] Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SVOA Extraction Batch BLA0673

Total Solids Batch: BLA0590 Work Order(s): 23A0295

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-10	CR 1/26/23
☒ Standing Water Decanted (Not shared)= 01,02,04,06,07	CR 1/26/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 01-10	CR 1/26/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	CR 1/26/23
☒ Multiple Jars Y / (N)	CR 1/26/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

PREPARATION BATCH SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0683 Batch Matrix: Solid
Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-IT1034	23A0249-07	N823020626.D	02/01/23 11:29	
Blank	BLA0683-BLK1	N823020608.D	02/01/23 11:29	
LCS	BLA0683-BS1	N823020609.D	02/01/23 11:29	
LCS Dup	BLA0683-BSD1	N823020610.D	02/01/23 11:29	
Reference	BLA0683-SRM1	N823020611.D	02/01/23 11:29	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0683

Prepared using: EPA 3546 (Microwave)

8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

WO Comments

23A0207: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0313: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0326: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Analysis: 8270E-SIM PAH (0.1ug/L or 5ug/kg)

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet)	Actual	(REQ/Opt) GPC C/U (1:1) 1 (2) 3	(REQ/Opt) Sulfur C/U (1:1) Y/N (Transfer Rinse)	(REQ/Opt) Silica Gel C/U (1:1) Y/N	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0207-01 A	78.4	(12.75)	12.78	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0207-02 A	78.6	(12.72)	12.77	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0207-03 A	80.0	(12.50)	12.50	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0207-04 A	73.6	(13.59)	13.60	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0207-05 A	71.3	(14.02)	14.07	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0207-06 A	79.0	(12.67)	12.69	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0207-07 A	78.8	(12.70)	12.75	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0207-08 A	72.8	(13.73)	13.79	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0207-09 A	73.0	(13.70)	13.78	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0207-15 A	77.8	(12.86)	12.88	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0207-16 A	62.7	(15.95)	15.98	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0207-17 A	63.2	(15.82)	15.83	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0249-07 A	74.7	(13.38)	13.40	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0295-08 A	78.0	(12.82)	12.82	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0313-03 A	62.7	(15.95)	15.97	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0313-04 A	69.6	(14.38)	14.39	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0313-12 A	50.0	(19.98)	19.99	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0326-08 A	75.5	(13.24)	13.27	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
23A0326-09 A	61.9	(16.15)	16.15	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet)	Actual	(REQ/Opt) GPC C/U (1:1) 1 (2) 3	(REQ/Opt) Sulfur C/U (1:1) Y/N (Transfer Rinse)	(REQ/Opt) Silica Gel C/U (1:1) Y/N	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0683-BLK1	100.0	(10.00)	10.00	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
BLA0683-BS1	100.0	(10.00)	10.00	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
BLA0683-BSD1	100.0	(10.00)	10.00	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	
BLA0683-MS1	80.0	(12.50)	12.50	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	Use 23A0207-03
BLA0683-MSD1	80.0	(12.50)	12.50	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	Use 23A0207-03

SRM IS ON 3RD PAGE!!!!!!

Printed: 1/28/2023 11:58:35AM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0683

Prepared using: EPA 3546 (Microwave)

8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

WO Comments

23A0207: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
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Prep Steps

Microwave
1 (2) 3
CT 2/1/23
Analyst/Date

Pre-GPC KD 100°C (No Exchange)
(0) 1 2 3 (4) (5) 6
GD 2/2/23
Analyst/Date

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

GPC
1 (2) 3
TWC 2/2/23
Analyst/Date

Post-GPC KD 80°C Hexane Exchange 2 x 20 mL 100°C
(0) 1 (2) (3) (4) (5) 6
TWC 2/4/23
Analyst/Date

Pre-Cleanup TurboVap
1 2 (3) (4)
GD 2/4/23
Analyst/Date

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: CT/MS Date: 02/01/23	
Pre-Deactivated Glass Wool	L000252
Anhydrous Sodium Sulfate	L000759
1:1 Methylene Chloride/Acetone	L000281
Methylene Chloride	L000808
Pre GPC KD Analyst: GD Date: 2/2/23	
Methylene Chloride	L000808
Hexane	K011373
GPC Filter Prep Analyst: TWC Date: 2/2/23	
Methylene Chloride	L000808
GPC Analyst: TWC Date: 2/2/23	
Methylene Chloride	L000803
GPC Calibration File	CLA0166
Post GPC KD Analyst: TWC Date: 2/4/23	
Methylene Chloride	L000808
Hexane	K011373
Vialing Analyst: GD Date: 2/6/23	
Hexane	K011373
Methylene Chloride	K000808
Silica Gel (SPE) darts	L001084

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate	B K009860 (V)	100µL		
15/75µg/mL	Exp Date: 9/28/2023		CT	MS
Spike	15 K009081 (V)	200µL		
15/75µg/mL	Exp Date: 8/4/2023		CT	MS

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0683

Prepared using: EPA 3546 (Microwave)

8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

WO Comments

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<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

BLA0683-SRM1	100.0	~~10.00~~ (5.00) 5.04	(1:1) Y / N	(1:1) Y / N	(1:1) Y / N	0.5 ____	0.5 ____	Use L000097

+1g DI WATER

Client ID verified By — 02/01/23 — Date

Preparation Reviewed By — 2/6/23 — Date

Extraction Date and Time — 02/01/23 11:29

Printed: 1/28/2023 11:58:35AM

3060F

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0683

Prepared using: EPA 3546 (Microwave)

8270E-SIM PAH (0.1ug/L or 5ug/kg) in Solid (Version:AOC4 cPAH)

Matrix: Solid **Date Prepared:** 02/01/23 **Balance ID:** B14646261 4 **Set Up By:** CTO 1/28/23

WO Comments

23A0207: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
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<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
QLS 4	QLS 4

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0683

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Post-Cleanup TurboVap 1 2 3 4 CP 1/6/23 Analyst/Date	Sodium Sulfite	N/A
	Tetrabutylammonium hydrogensulfate (TBAS)	N/A
Vialing CP 1/6/23 Analyst/Date		

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ORGANICS PREPARATION BENCH SHEET

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<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessel. 3. Add DCM ONLY to the vessels (until solvent is 3 inches above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot then let cool 10-15 min in Refridgerator 05. Re-homogenize while cool. 7. Decant DCM into Erlenmeyer flask with a funnel containing pre-deactivated glasswool. 8. Rinse with DCM 9. Microwave a 2nd time using 1:1 DCM/ACE. 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with DCM. 11. If GPC is Req add 10mL Hexane and KD to 5mL at 100°C (NO EXCHANGE) 12. If GPC is NOT Req = KD to 5mL at 100°C. Exchange to Hexane (2X with 10mL) to 5mL at 100°C. 13. TurboVap. 14. If no GPC then Sulfur clean is REQUIRED. 15. Sulfur clean = Hexane transfer rinse. 16. Silica Clean-up Any Color=REQ (All or none). 17. TurboVap 18. Vial in DCM. A. Need Total Solids Y [N] B. Archive/Freeze [Y] N	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SIM Extraction Batch: BLA0683

Total Solids Batch: BLA0589 Work Order(s): 23A0207

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 207-6,7,	DP 1/25/23
☒ Standing Water Decanted (Not shared)= 207-1,2,3,4,5,9,10,12,13,15,11	DP 1/25/23
☐ Standing Water Homogenized (Shared samples)=	
☒ Clay/Clumps (Difficult to homogenize)= 207-8	DP 1/25/23
☒ Rocks (%+size)? 30% ¼" - ½" = 207-3,9,100,12,14 60% ½" - ⅓" = 207-15	DP 1/25/23
☒ Organics (Leaves/sticks/grass)= 207-10,16	DP 1/25/23
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen =	CTO 1/26/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☐ Share Samples Y / N	
☐ Multiple Jars Y / N	
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SIM Extraction Batch DLA0683

Total Solids Batch: BLA0590 Work Order(s): 23A0249

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 02-11	CR 1/26/23
☒ Standing Water Decanted (Not shared)= 03-06, 08, 10	CR 1/26/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 02-11	CR 1/26/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y (N)	CR 1/26/23
☒ Multiple Jars Y (N)	CR 1/26/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

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Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SIM Extraction Batch: BLA0683

Total Solids Batch: BLA0590 Work Order(s): 23A0295

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-10	CR 1/26/23
☒ Standing Water Decanted (Not shared)= 01, 02, 04, 06, 07	CR 1/26/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 01-10	CR 1/26/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	CR 1/26/23
☒ Multiple Jars Y / (N)	CR 1/26/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SIM Extraction Batch: BLA0683

Total Solids Batch: BLA1019 Work Order(s): 23A0313

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 2, 11	NP 01/27/23
☒ Standing Water Decanted (Not shared)= #1, #2, #5=11, 13. 1/27/23	N NP 01/27/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☒ Oily, obvious fuel/sulfur odors= sulfur odor=#1, #2, #5—11, 13 #3, #4. Included	NP 01/27/23
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☐ Previously Frozen =	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / N?	N, 01/27/23
☒ Multiple Jars Y? N	N NP 01/27/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
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Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SIM Extraction Batch BLA0683

Total Solids Batch: BLA0320 Work Order(s): 23A0326

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
[X] No Anomalies (standard soil/wet sediment/sand/gravel)= ϕ7, ϕ8.	NJ ϕ 1/27/23
[X] Standing Water Decanted (Not shared)= ϕ1 – 12	NJ ϕ 1/27/23
[ ] Standing Water Homogenized (Shared samples)=	
[ ] Clay/Clumps (Difficult to homogenize)=	
[ ] Rocks (%+size)?	
[ ] Organics (Leaves/sticks/grass)=	
[X] Oily, obvious fuel/sulfur odors= ϕ1 – ϕ6, ϕ9 – 12.	NJ ϕ 1/27/23
[ ] Received in 32oz jar(s)=Homogenized in Pyrex dish=	
[ ] Previously Frozen =	
[ ] Other (Details)=	
Aqueous:	
[ ] No Anomalies	
[ ] Turbid/Color=	
[ ] Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
[ ] Emulsions (%)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Other (Details)=	
[ ] Received in 1.0L Bottle(s)=No Bottle Rinse=	
[ ] Other Notes/Comments= (Note problems, concerns, corrective actions).	
[X] Share Samples Y / N	
[X] Multiple Jars Y / N	NJ ϕ 1/27/23
[ ] Sample Pre-Screens indicate analyte activity=	NJ ϕ 1/27/23
[ ] Sample weights/volumes reduced based on Pre-Screen=	

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BLA0683 23A0207/249/295/313/326 ~~PSDDA SVOC~~

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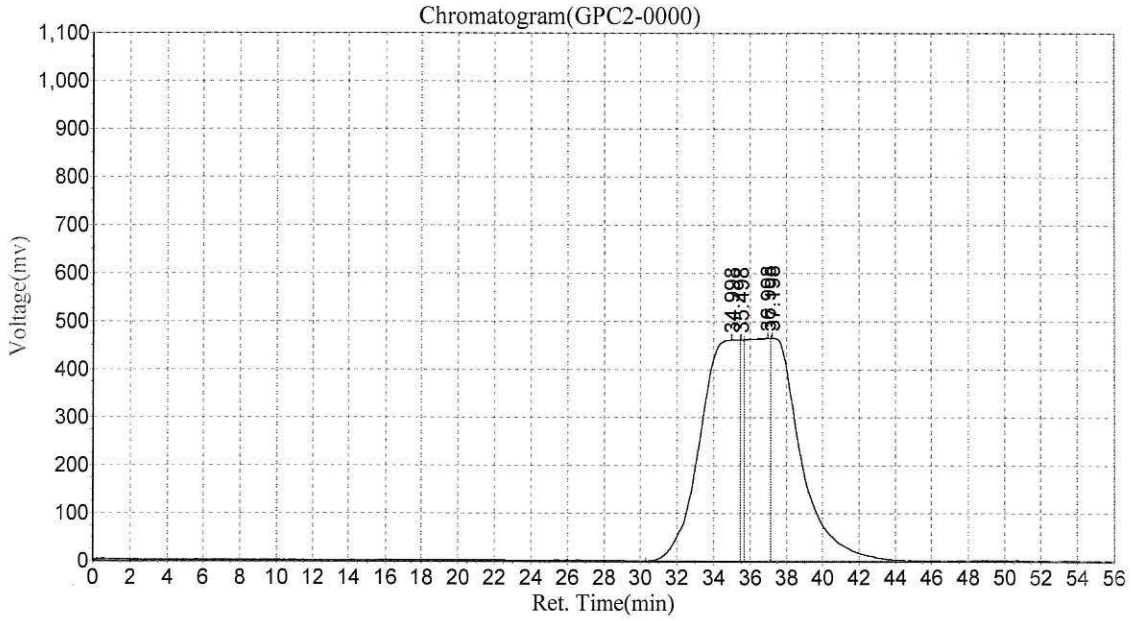
Analyst£ºTWC
Date/Time2023-02-02,8:21:39 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		34.998	462779.906	67250400.000	40.3226
2		35.498	462383.969	5546438.500	3.3256
3		36.998	465204.125	40820080.000	24.4753
4		37.198	465312.156	53164016.000	31.8766
Total			1855680.156	166780934.500	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 ~~PSDDA SVOC~~

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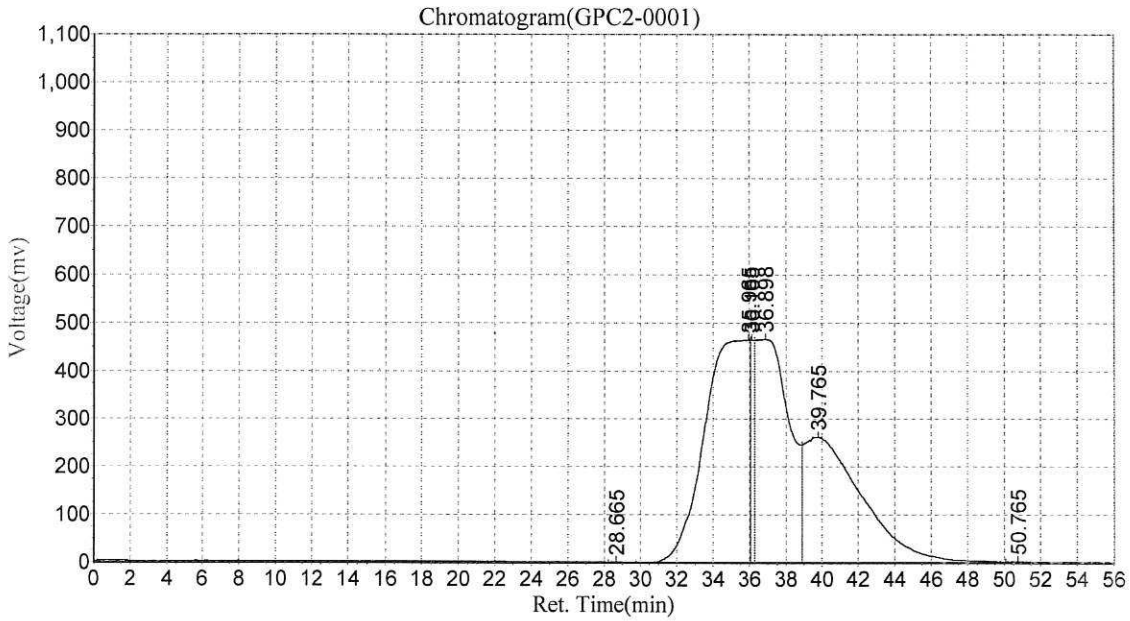

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		28.665	1929.831	106790.094	0.0523
2		35.965	466271.906	80026520.000	39.1944
3		36.165	466463.031	5595818.500	2.7406
4		36.898	467998.438	59461916.000	29.1225
5		39.765	263151.000	58778816.000	28.7879
6		50.765	2365.027	208814.094	0.1023
Total			1668179.233	204178674.688	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 ~~PSDDA SVOC~~

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Method File:E:\GPC2_InHouse.mtd

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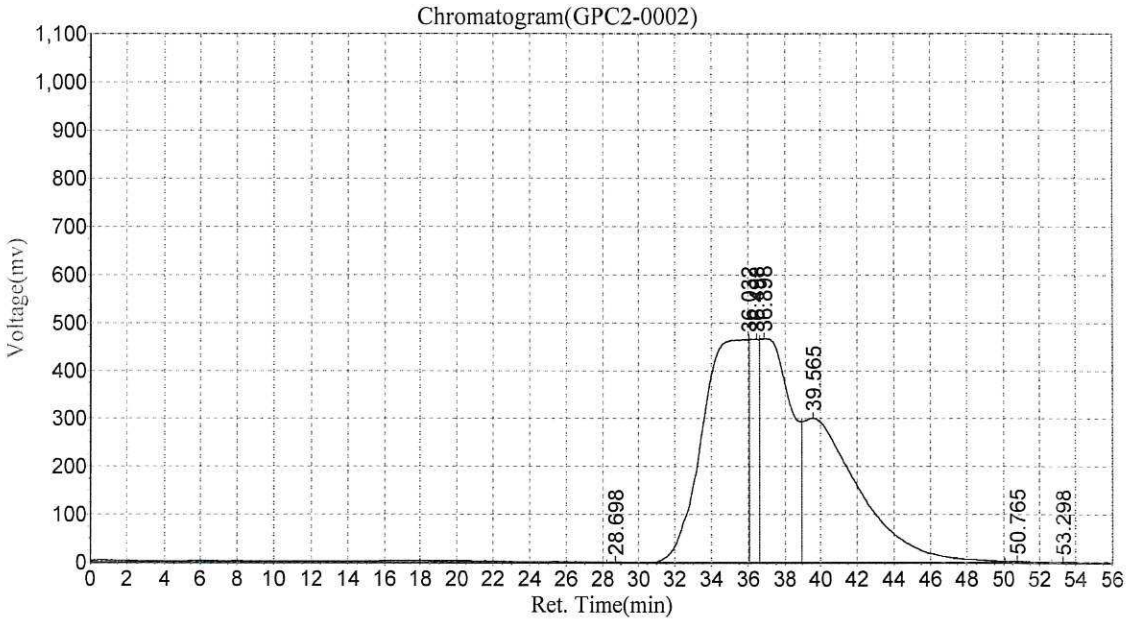

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		28.698	2463.859	143297.484	0.0663
2		36.032	467350.656	80045688.000	37.0349
3		36.498	468077.344	14966868.000	6.9247
4		36.898	469001.656	55208184.000	25.5433
5		39.565	301660.969	65301040.000	30.2129
6		50.765	3672.394	355260.875	0.1644
7		53.298	1939.964	115634.453	0.0535
Total			1714166.841	216135972.813	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 ~~PSDDA~~ SVOC

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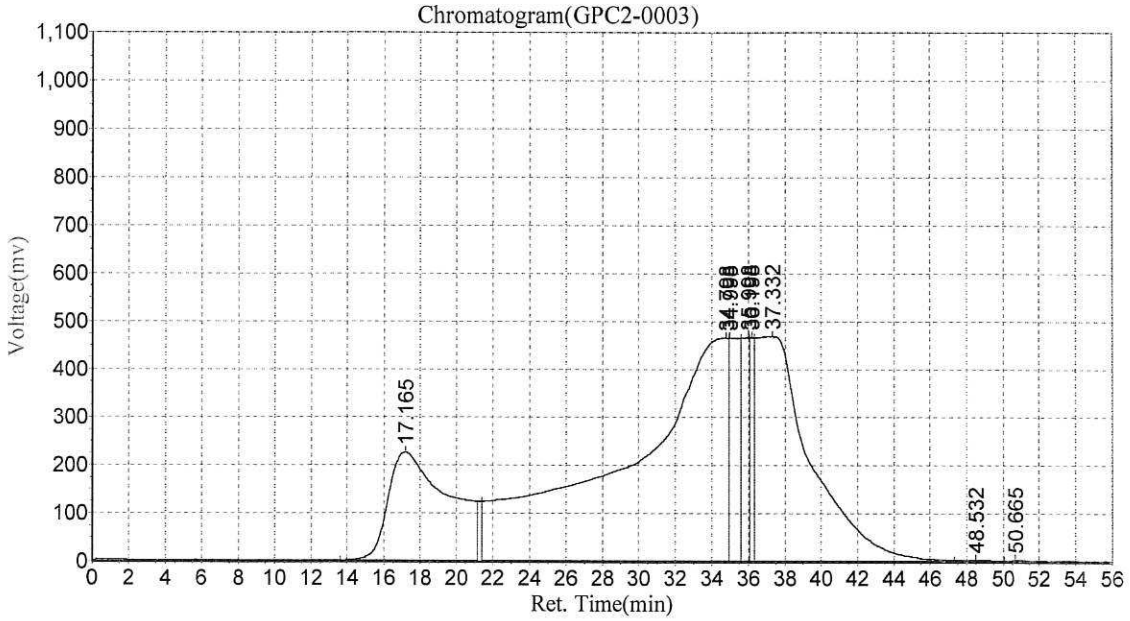

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.165	224601.266	51653576.000	14.0564
2		34.798	464461.281	179650384.000	48.8879
3		34.998	464240.656	18550414.000	5.0481
4		35.998	464909.531	13004145.000	3.5388
5		36.198	465242.906	7439951.000	2.0246
6		37.332	467331.688	96709328.000	26.3173
7		48.532	2622.546	321109.906	0.0874
8		50.665	2085.188	145165.078	0.0395
Total			2555495.063	367474072.984	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 ~~PSDDA SVOC~~

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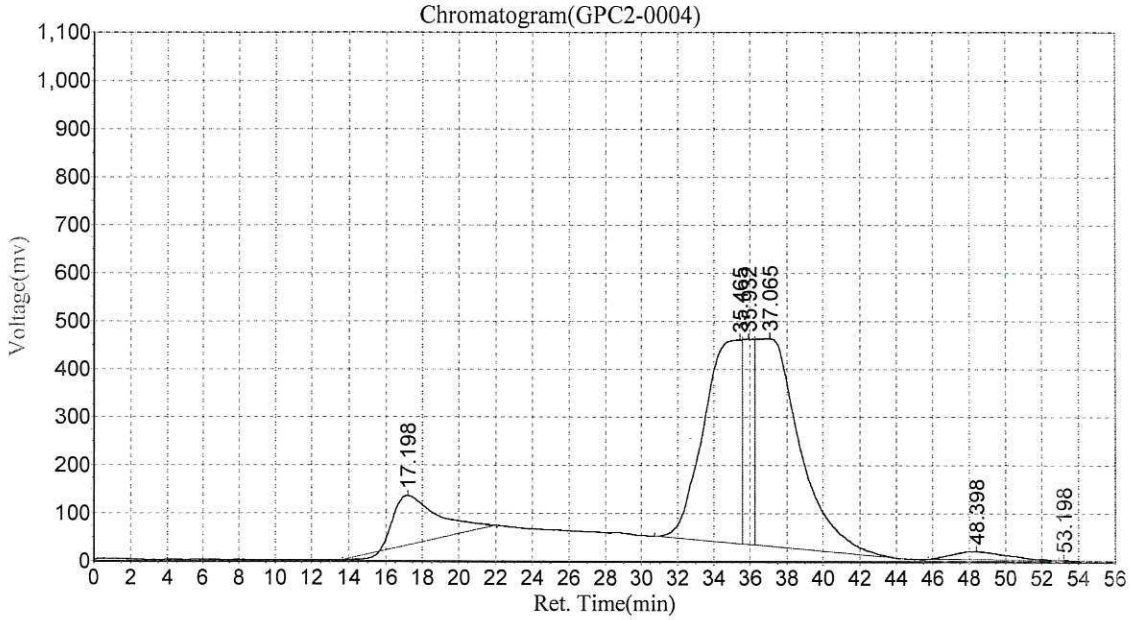

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.198	103859.641	16772050.000	9.9215
2		35.465	423849.281	59973016.000	35.4772
3		35.932	427541.000	17072136.000	10.0991
4		37.065	432420.375	71367624.000	42.2177
5		48.398	17561.232	3733371.000	2.2085
6		53.198	2032.452	128595.063	0.0761
Total			1407263.981	169046792.063	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,1:10:19 AM
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Method File:E:\GPC2_InHouse.mtd

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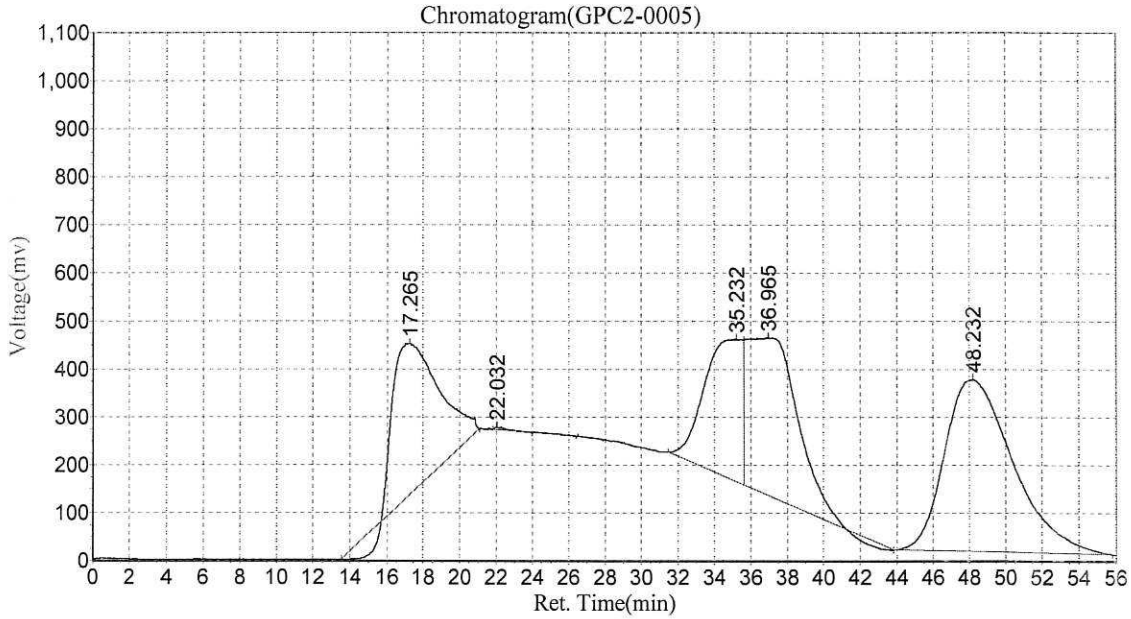

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.265	314913.031	52300416.000	20.8043
2		22.032	5661.474	282365.594	0.1123
3		35.232	297091.719	41670928.000	16.5760
4		36.965	328802.625	62632340.000	24.9142
5		48.232	358413.219	94506504.000	37.5932
Total			1304882.067	251392553.594	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,2:08:00 AM
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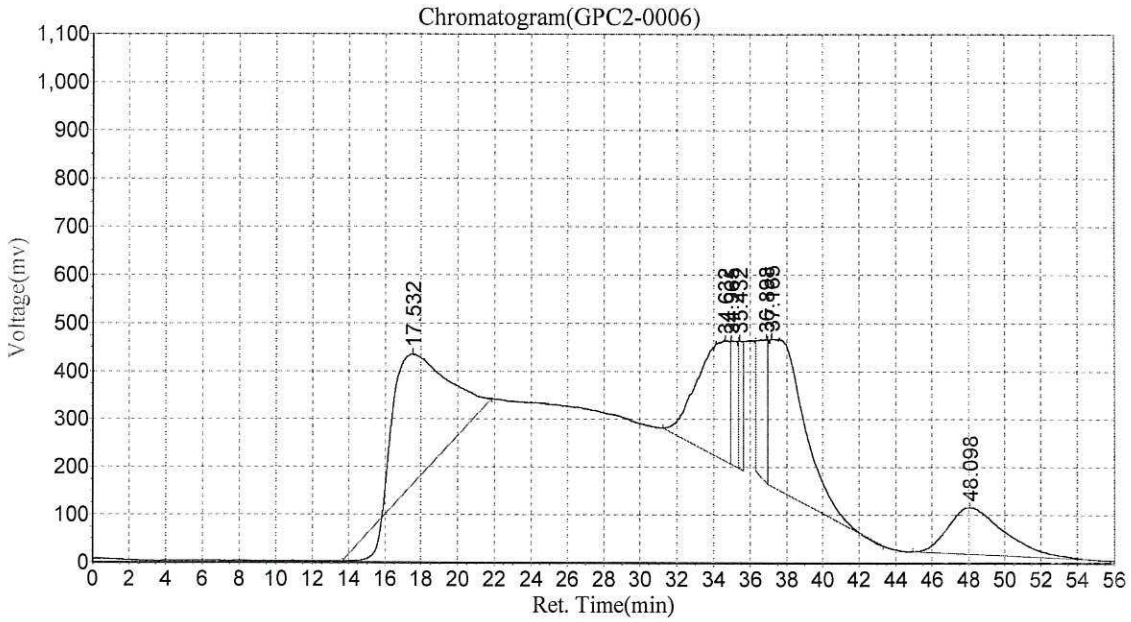

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.532	271902.906	49996660.000	30.1162
2		34.632	251321.703	28982862.000	17.4582
3		34.965	257266.750	7278267.500	4.3842
4		35.432	269060.219	4297007.000	2.5884
5		36.898	299770.844	11729887.000	7.0657
6		37.165	307776.688	42546676.000	25.6286
7		48.098	97117.070	21181228.000	12.7588
Total			1754216.180	166012587.500	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 ~~PSDDA SVOC~~

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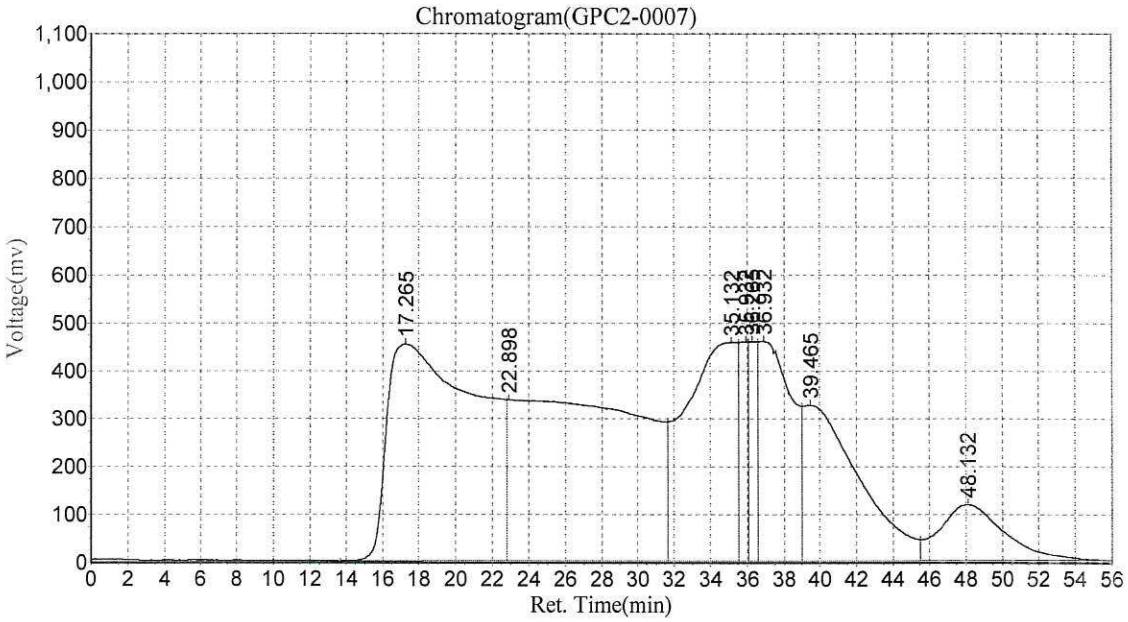

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.265	452407.938	156356352.000	26.0695
2		22.898	336108.969	169868304.000	28.3224
3		35.132	455910.875	89104992.000	14.8566
4		35.932	456753.531	14604799.000	2.4351
5		36.265	457339.969	14630709.000	2.4394
6		36.932	457927.844	57260720.000	9.5472
7		39.465	324297.594	69352872.000	11.5633
8		48.132	116227.008	28588052.000	4.7665
Total			3056973.727	599766800.000	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 ~~PSDDA~~ SVOC

Date:2023-02-03,4:03:24 AM
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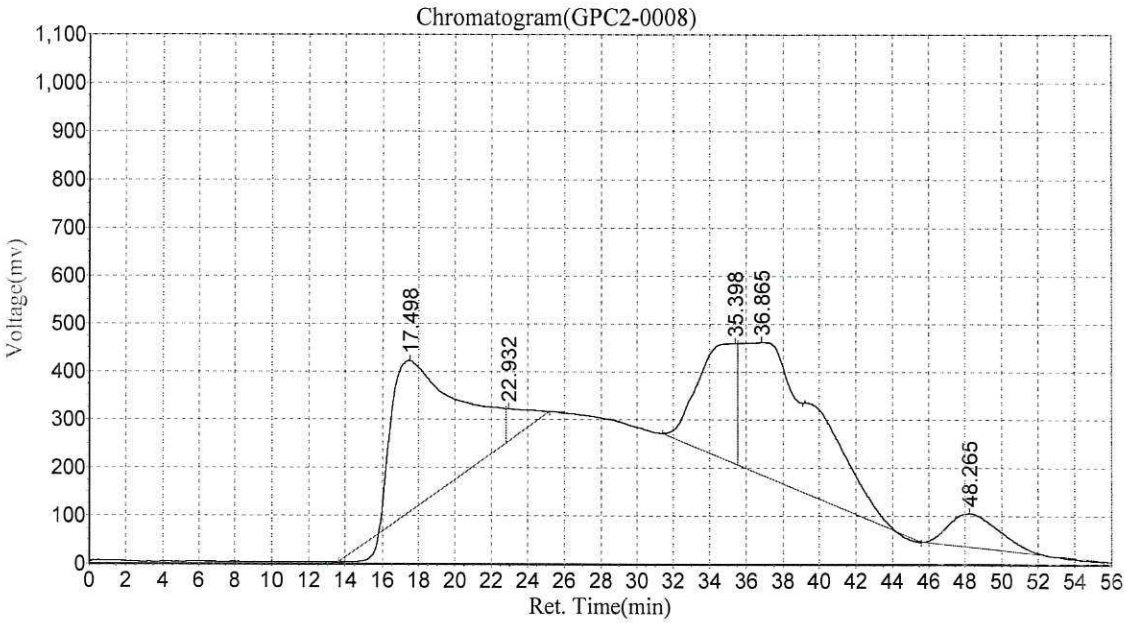

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.498	314550.094	74786392.000	35.3328
2		22.932	67745.508	5143057.500	2.4298
3		35.398	251036.063	34348928.000	16.2282
4		36.865	277122.625	83870256.000	39.6245
5		48.265	70504.664	13513937.000	6.3847
Total			980958.953	211662570.500	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,5:01:08 AM
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Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
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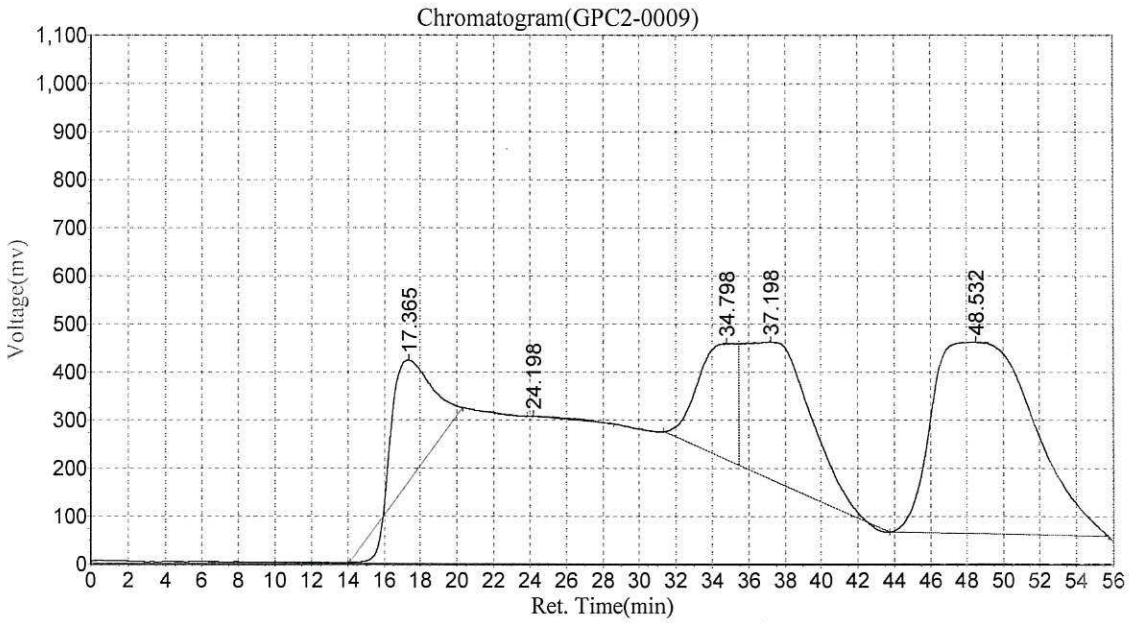

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	253076.938	34035368.000	11.4757
2		24.198	1548.352	551275.625	0.1859
3		34.798	241417.547	34753688.000	11.7179
4		37.198	285579.594	73586008.000	24.8110
5		48.532	396909.406	153659616.000	51.8095
Total			1178531.837	296585955.625	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,5:58:50 AM
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Method File:E:\GPC2_InHouse.mtd

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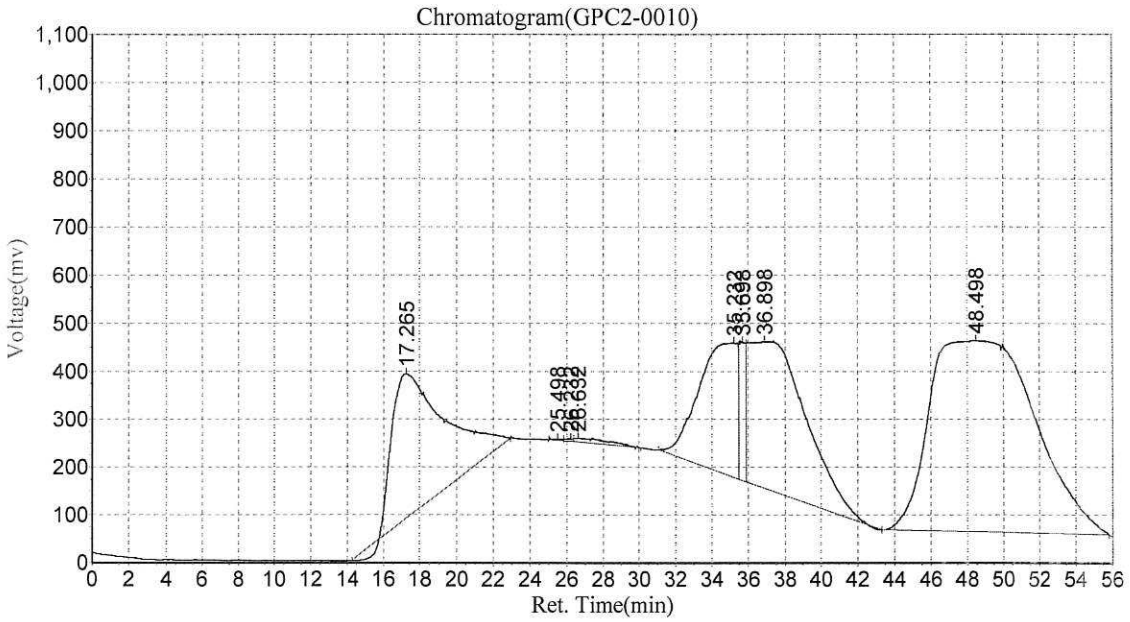

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.265	301585.656	58040020.000	17.2727
2		25.498	4945.564	211897.125	0.0631
3		26.232	7706.532	228023.844	0.0679
4		26.632	9703.787	1523924.250	0.4535
5		35.232	279869.375	40176824.000	11.9566
6		35.698	288066.219	6885327.500	2.0491
7		36.898	305517.188	67790240.000	20.1744
8		48.498	398102.656	161164608.000	47.9627
Total			1595496.977	336020864.719	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

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Method File:E:\GPC2_InHouse.mtd

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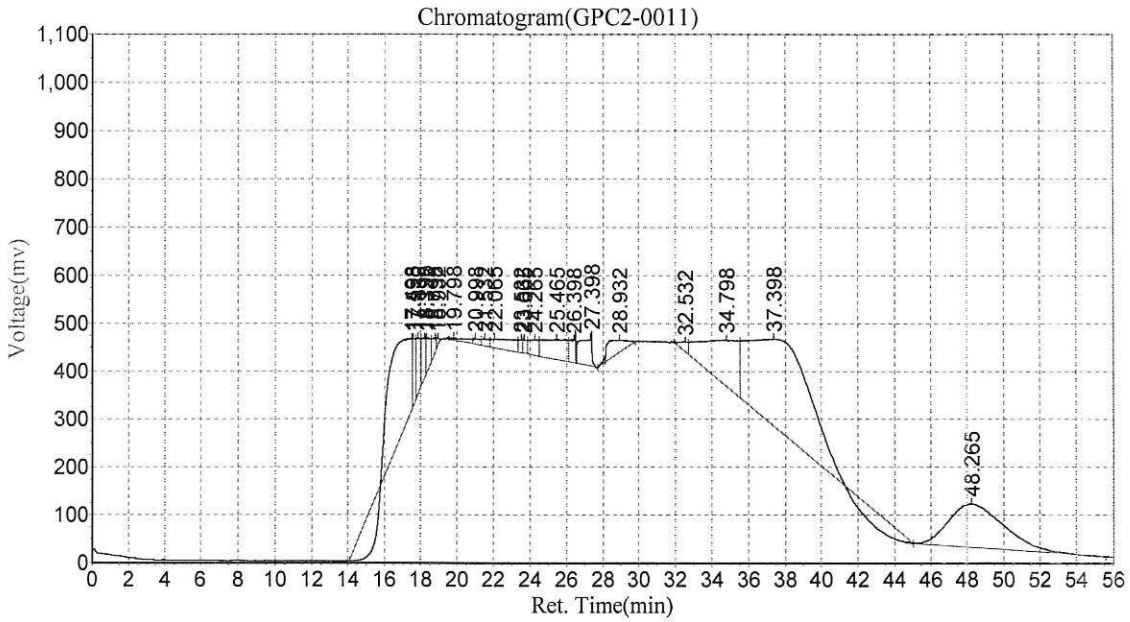

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.498	150156.766	12097292.000	11.4156
2		17.598	140476.156	1645478.500	1.5527
3		17.832	119357.398	2056264.875	1.9404
4		18.198	85322.492	1252242.750	1.1817
5		18.332	72737.344	1161352.625	1.0959
6		18.798	29226.830	654541.313	0.6177
7		18.932	17179.684	163270.047	0.1541
8		19.798	4424.072	503451.313	0.4751
9		20.998	11694.288	334645.313	0.3158
10		21.532	15486.384	427853.938	0.4037
11		22.065	19205.479	2003156.625	1.8903
12		23.532	28287.742	438005.344	0.4133
13		23.665	28841.768	461408.500	0.4354
14		24.265	33595.375	1295721.375	1.2227
15		25.465	42509.590	3904855.500	3.6848
16		26.398	49051.758	1208008.375	1.1399
17		27.398	60342.438	2605926.000	2.4591
18		28.932	29036.000	2720518.500	2.5672
19		32.532	20221.428	634607.125	0.5988
20		34.798	96254.375	12312502.000	11.6186
21		37.398	181448.219	39008568.000	36.8102

22		48.265	90207.734	19082378.000	18.0070
Total			1325063.318	105972048.016	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

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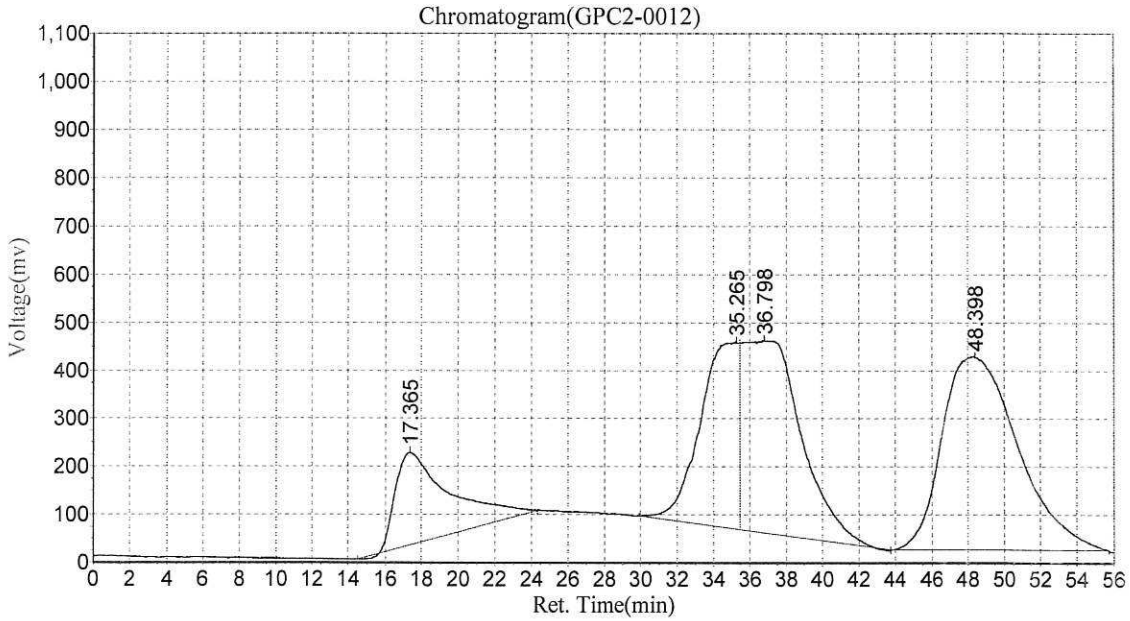

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	192764.609	39357356.000	12.9566
2		35.265	389684.469	56802572.000	18.6996
3		36.798	400426.688	90046592.000	29.6436
4		48.398	402658.625	117557240.000	38.7002
Total			1385534.391	303763760.000	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 ~~PSDDA SVOC~~

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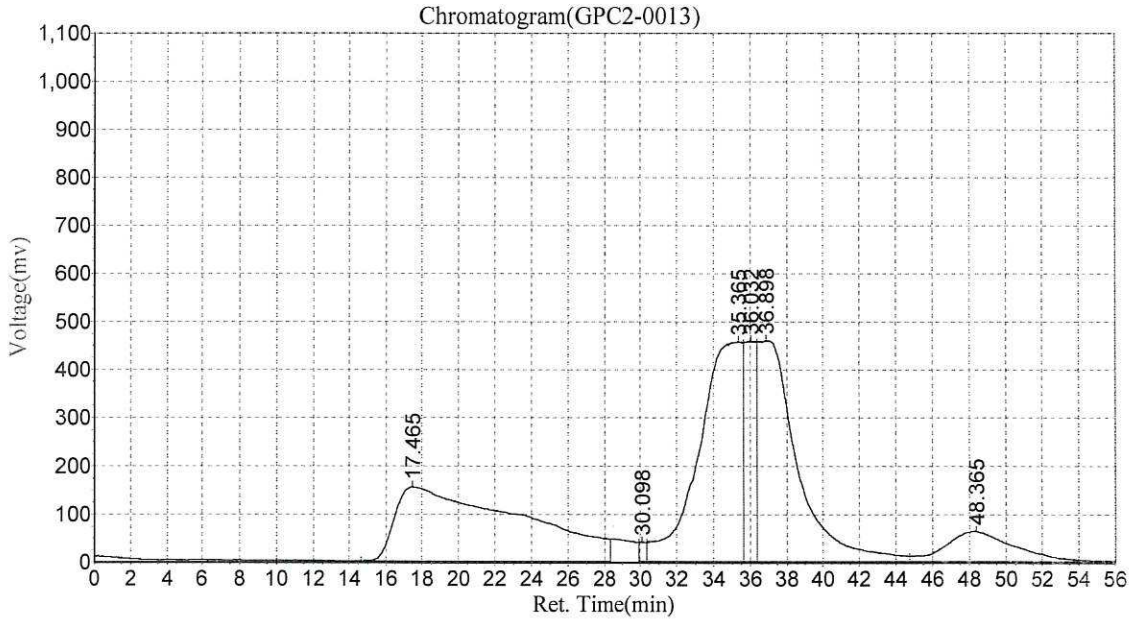

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.465	154916.563	73637648.000	29.1653
2		30.098	39966.410	1115042.750	0.4416
3		35.365	454919.375	73257320.000	29.0147
4		36.032	456558.688	20031644.000	7.9338
5		36.898	457025.906	68557808.000	27.1534
6		48.365	61729.695	15884059.000	6.2911
Total			1625116.637	252483521.750	100.000

Ingredient Table

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

PNA

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

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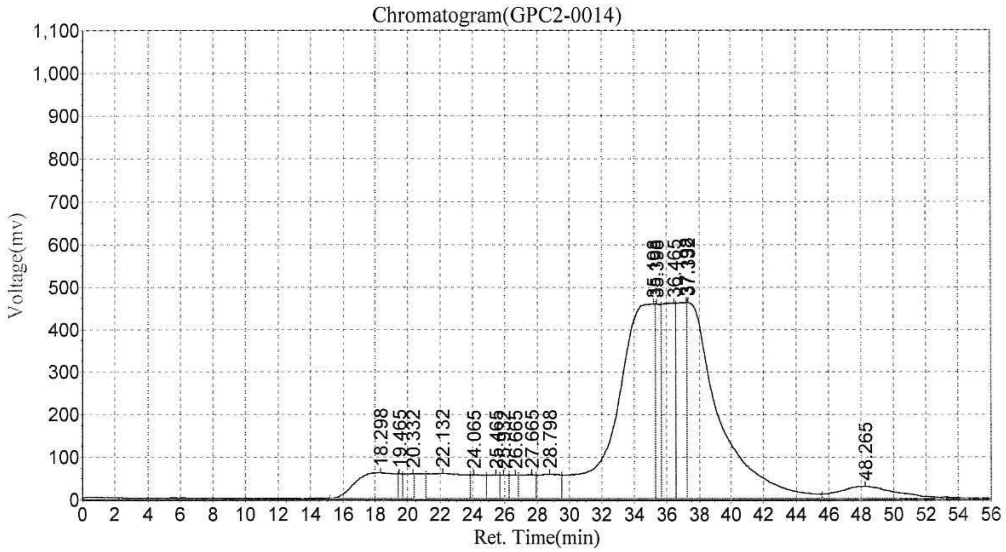

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		18.298	60048.105	9976911.000	4.1927
2		19.465	57496.121	1032012.313	0.4337
3		20.332	57767.902	2407162.250	1.0116
4		22.132	58504.297	9364249.000	3.9353
5		24.065	55681.348	3322191.000	1.3961
6		25.465	55570.766	2872310.500	1.2071
7		25.932	55568.574	1768891.500	0.7434
8		26.665	55674.695	1995675.875	0.8387
9		27.665	56416.137	3564821.250	1.4981
10		28.798	57244.238	5422950.500	2.2790
11		35.198	457051.875	73606272.000	30.9327
12		35.398	457298.344	9130736.000	3.8371
13		36.465	459425.625	25671926.000	10.7885
14		37.198	460735.750	18402272.000	7.7335
15		37.332	460656.406	62422432.000	26.2327
16		48.265	27794.424	6995441.500	2.9398
Total			2892934.607	237956254.688	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.

2023-02-03 Analytical Resources, Inc.

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

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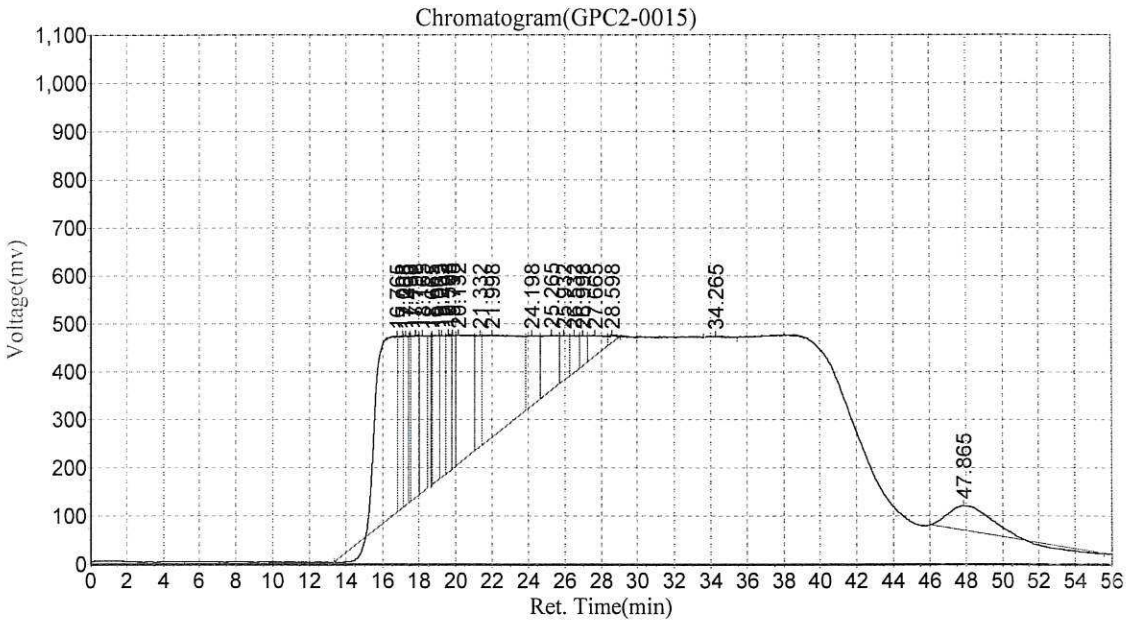

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.765	366755.031	27846530.000	16.6186
2		17.098	357504.188	6483723.000	3.8694
3		17.265	353105.281	6336659.500	3.7817
4		17.498	345865.625	2076042.250	1.2390
5		17.798	337955.188	10126274.000	6.0433
6		18.165	326858.969	8421210.000	5.0257
7		18.665	311410.250	1864343.500	1.1126
8		19.065	300170.656	7288757.000	4.3499
9		19.232	295165.750	5279274.500	3.1506
10		19.598	284403.531	5684591.500	3.3925
11		19.798	279446.250	3864737.750	2.3064
12		20.132	268987.438	16419343.000	9.7990
13		21.332	232315.672	5617237.500	3.3523
14		21.998	212943.031	27656592.000	16.5053
15		24.198	146117.797	6902572.000	4.1194
16		25.265	115453.578	7447817.000	4.4448
17		25.932	94808.930	2958746.250	1.7658
18		26.532	76900.055	2443072.500	1.4580
19		26.998	62582.703	1717754.750	1.0251
20		27.665	43160.063	2543189.000	1.5178
21		28.598	15553.361	426100.313	0.2543

2023-02-03

Analytical Resources, Inc.

22		34.265	1755.064	112754.148	0.0673
23		47.865	51972.305	8044898.500	4.8011
Total			4881190.714	167562219.961	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 ~~PSDDA SVOC~~

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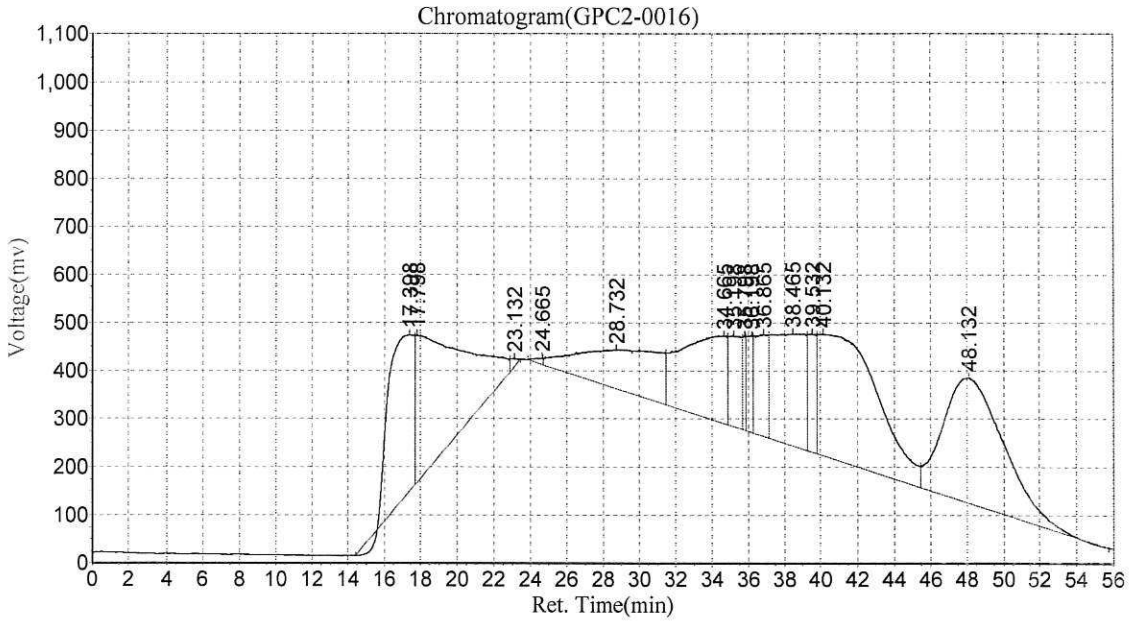

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	324336.125	32039514.000	9.9187
2		17.798	305546.000	50962064.000	15.7767
3		23.132	16512.959	516093.500	0.1598
4		24.665	12271.665	353445.594	0.1094
5		28.732	79824.297	26664902.000	8.2549
6		34.665	181378.484	30154842.000	9.3353
7		35.198	187763.922	8999736.000	2.7861
8		35.798	194910.672	2327127.500	0.7204
9		36.198	199988.500	4749149.500	1.4702
10		36.865	211014.563	10773333.000	3.3352
11		38.465	231982.891	29139394.000	9.0209
12		39.532	244471.781	7808018.500	2.4172
13		40.132	251630.516	58841484.000	18.2160
14		48.132	257314.172	59691644.000	18.4792
Total			2698946.546	323020747.594	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2						
3						

4	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

-1617 PNA

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,12:42:48 PM
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Analyst£°TWC
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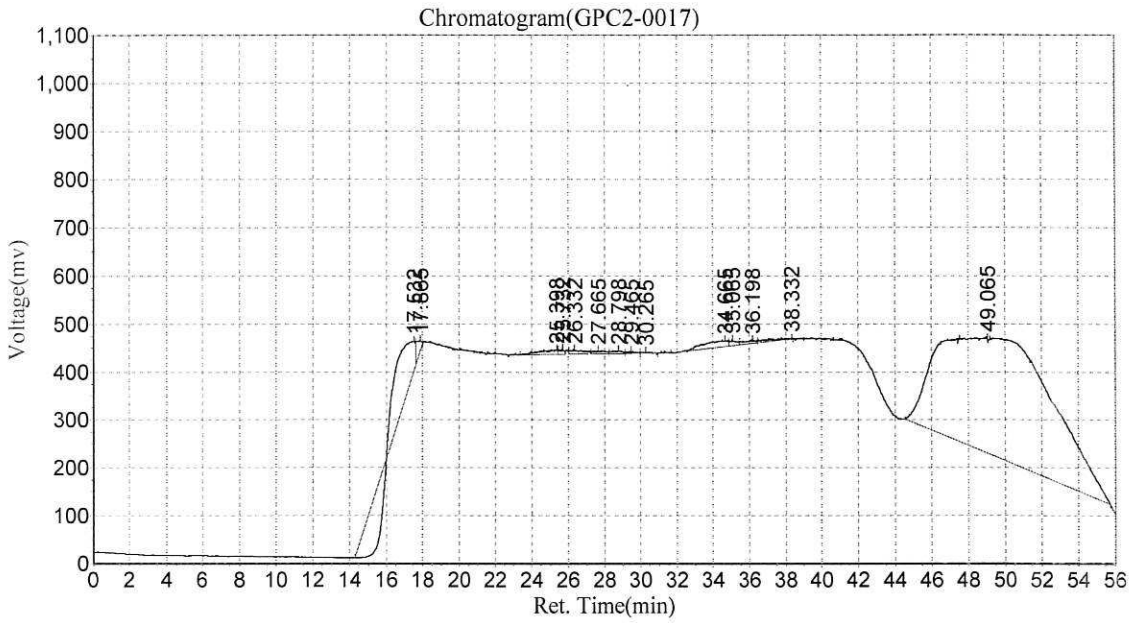

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.532	62962.734	2069155.875	1.8043
2		17.865	23356.572	640010.125	0.5581
3		25.398	9312.584	698289.563	0.6089
4		25.732	9808.682	208419.906	0.1817
5		26.332	8977.257	440951.313	0.3845
6		27.665	6698.646	345836.688	0.3016
7		28.798	5973.177	269666.188	0.2352
8		29.465	4193.372	166344.641	0.1451
9		30.265	2563.805	106823.953	0.0932
10		34.665	13693.869	1498502.000	1.3067
11		35.065	12427.252	388743.188	0.3390
12		36.198	8756.669	483430.156	0.4216
13		38.332	4223.042	692287.750	0.6037
14		49.065	238951.469	106668840.000	93.0165
Total			411899.131	114677301.344	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2						
3						

4	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

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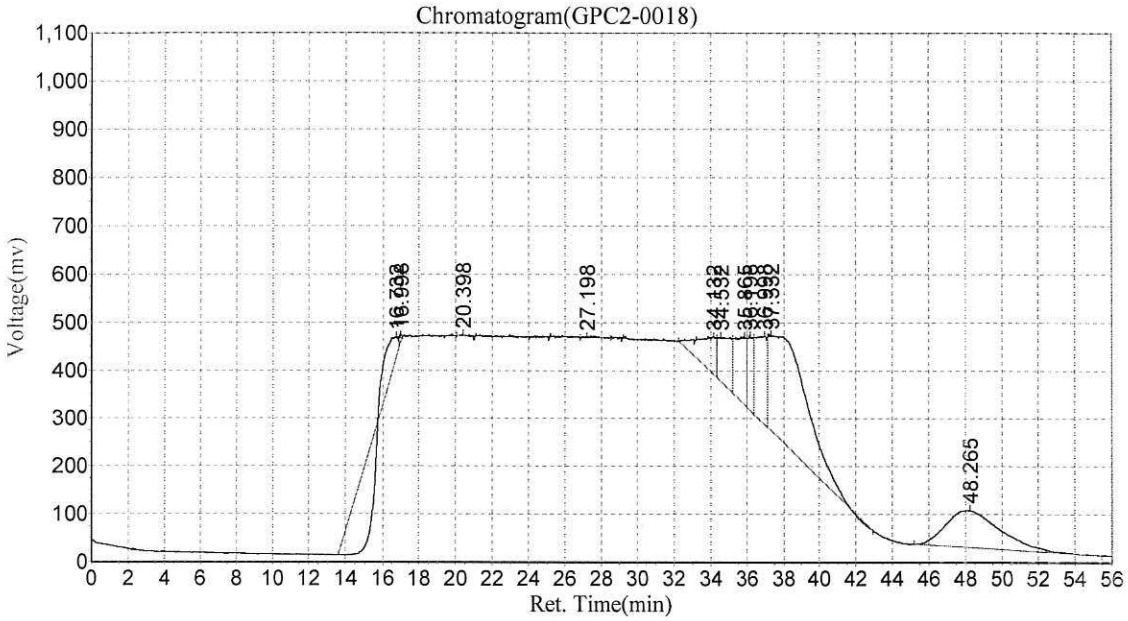

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		16.732	45919.352	8523812.000	10.0726
2		16.998	15925.276	155252.969	0.1835
3		20.398	3516.694	143889.734	0.1700
4		27.198	2094.000	163273.594	0.1929
5		34.132	76292.023	5178846.500	6.1199
6		34.532	90319.391	5111082.000	6.0398
7		35.865	139968.266	6171932.000	7.2934
8		36.198	153349.234	3645020.000	4.3073
9		36.998	183074.953	7632789.500	9.0197
10		37.332	197526.922	31824870.000	37.6077
11		48.265	77143.633	16072590.000	18.9931
Total			985129.744	84623358.297	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

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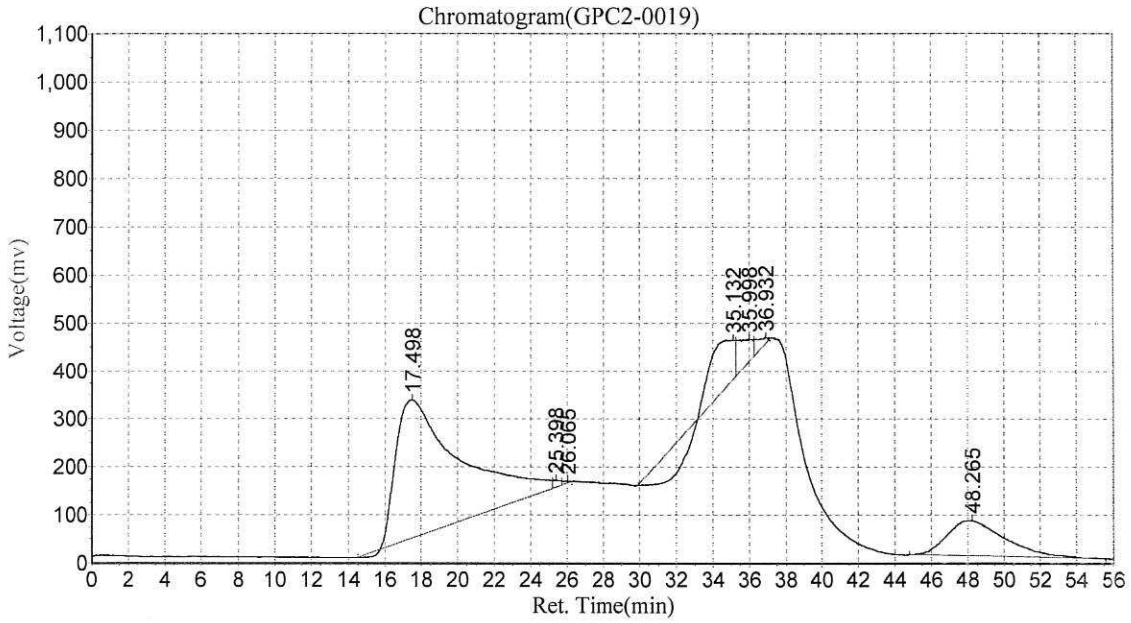

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.498	288790.219	69298784.000	74.3576
2		25.398	14576.957	418597.844	0.4492
3		26.065	3898.218	139971.906	0.1502
4		35.132	82011.219	2749233.500	2.9499
5		35.998	46565.590	3319897.250	3.5622
6		36.932	9886.218	931136.250	0.9991
7		48.265	73244.594	16339092.000	17.5318
Total			518973.014	93196712.750	100.000

Ingredient Table

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

BLA0683 23A0207/249/295/313/326 ~~PSDDA SVOC~~

Date:2023-02-03,3:35:55 PM
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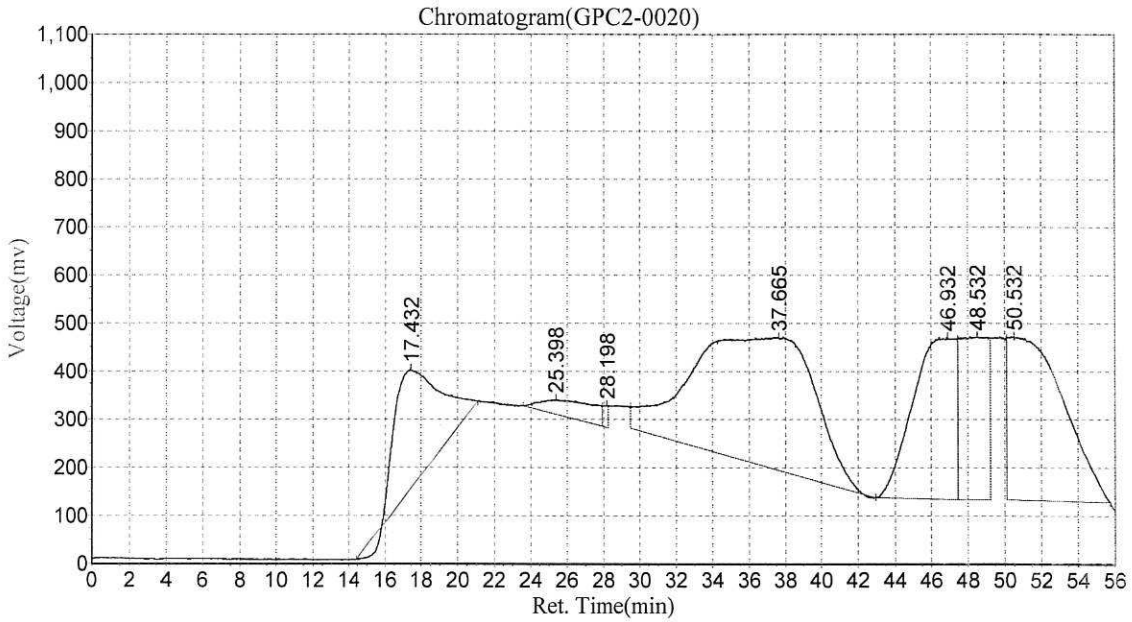


Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.432	246907.359	39977740.000	11.8431
2		25.398	29472.152	7166949.000	2.1232
3		28.198	45714.168	888203.500	0.2631
4		37.665	280352.594	130623968.000	38.6964
5		46.932	331494.438	54702460.000	16.2052
6		48.532	334813.813	34697888.000	10.2790
7		50.532	335731.531	69504168.000	20.5901
Total			1604486.055	337561376.500	100.000

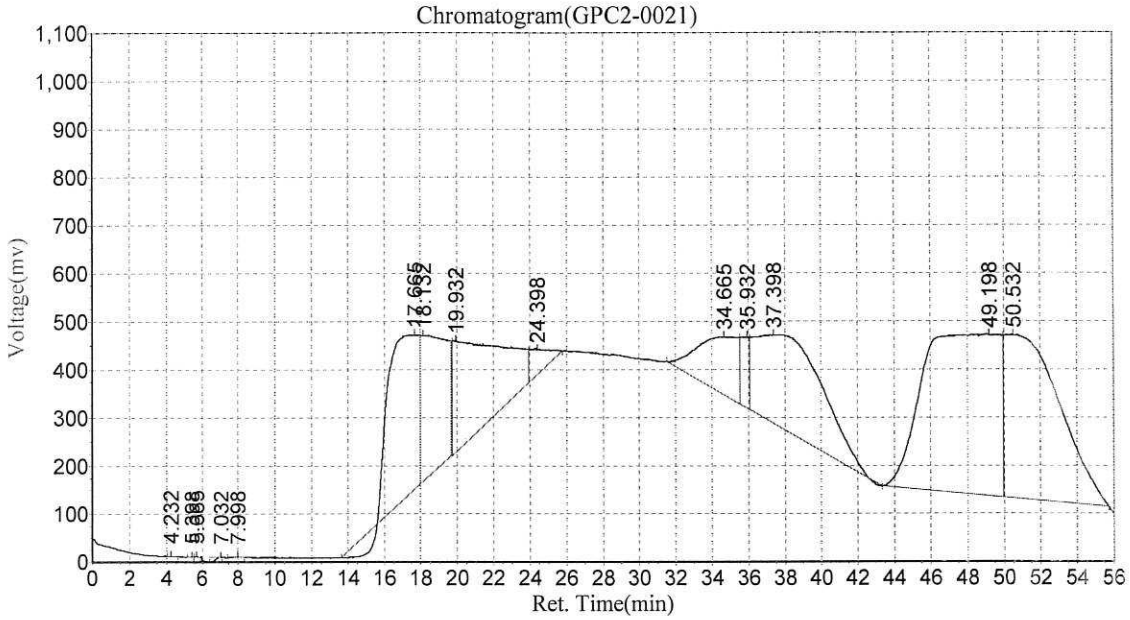
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,4:33:38 PM
Data File:c:\n2000\data\gpc2\020223\GPC2-0021
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-02-03,4:33:39 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		4.232	2923.735	102155.758	0.0296
2		5.398	6411.877	126159.086	0.0365
3		5.665	7692.510	166386.672	0.0481
4		7.032	6402.068	143318.547	0.0415
5		7.998	2383.118	145098.828	0.0420
6		17.665	320849.281	37015128.000	10.7086
7		18.132	303389.031	27385254.000	7.9227
8		19.932	228741.828	38189688.000	11.0484
9		24.398	53874.801	3971512.250	1.1490
10		34.665	119432.836	17935770.000	5.1889
11		35.932	147077.063	4601548.500	1.3312
12		37.398	182894.750	50871432.000	14.7173
13		49.198	332663.313	95740272.000	27.6980
14		50.532	336072.063	69263712.000	20.0383
Total			2050808.273	345657435.641	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2						
3						

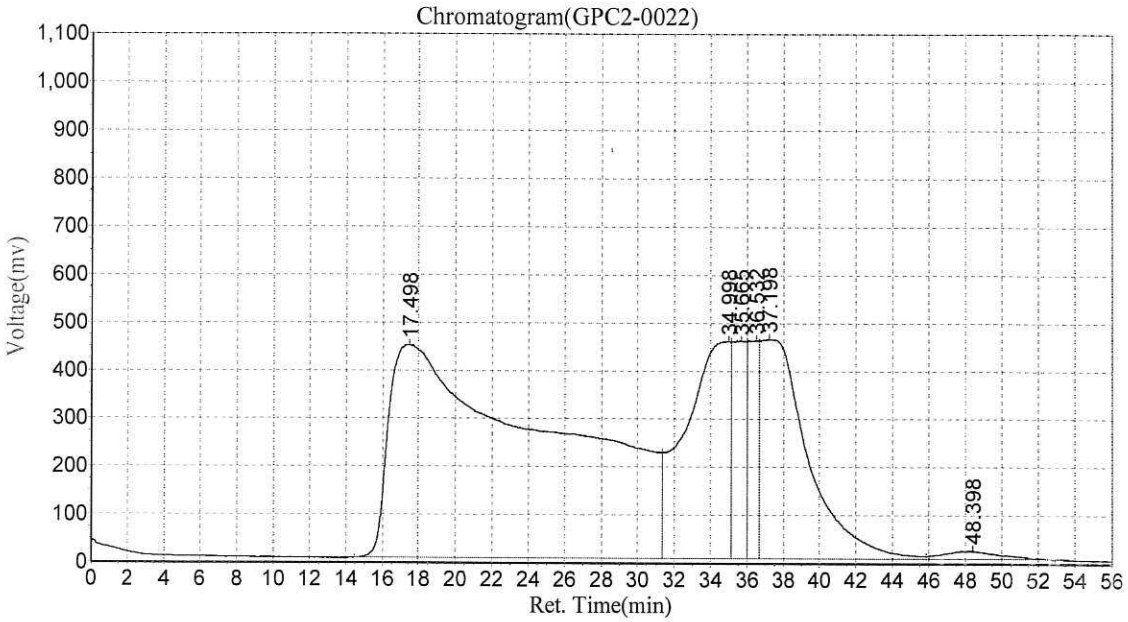
2023-02-03 **Analytical Resources, Inc.**

4	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,5:31:19 PM
Data File:c:\n2000\data\gpc2\020223\GPC2-0022
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-02-03,5:31:20 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.498	443615.781	273805472.000	57.0171
2		34.998	453027.906	77459216.000	16.1301
3		35.665	453917.656	23558834.000	4.9059
4		36.532	454958.625	18174318.000	3.7846
5		37.198	457432.375	83429976.000	17.3734
6		48.398	16758.920	3788306.750	0.7889
Total			2279711.264	480216122.750	100.000

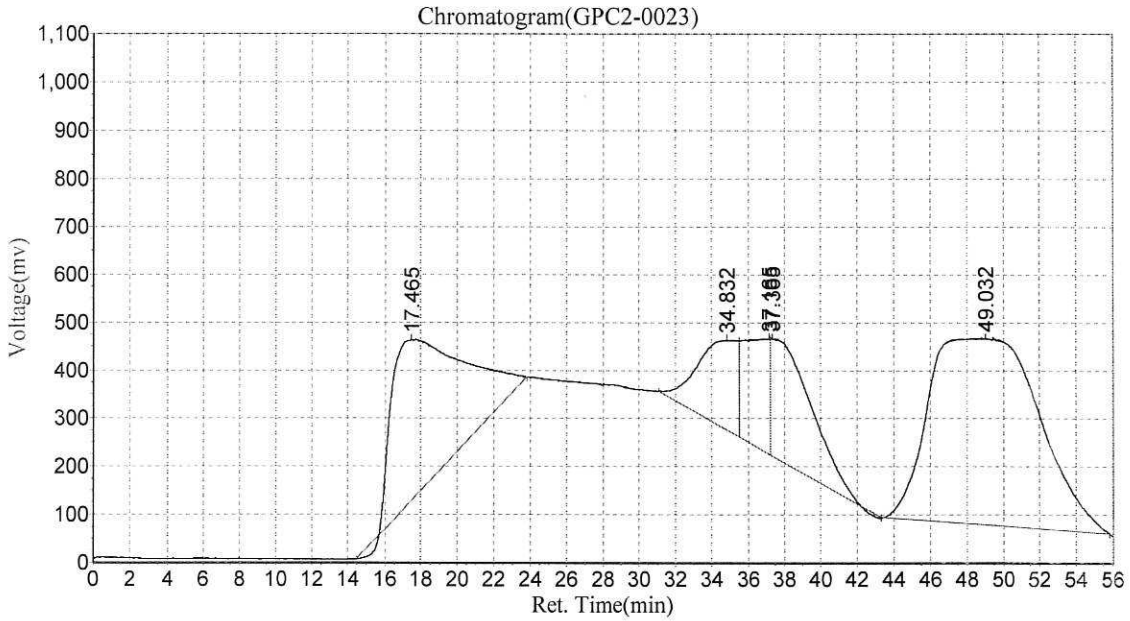
Ingredient Table

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

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,6:29:02 PM
Data File:c:\n2000\data\gpc2\020223\GPC2-0023
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-02-03,6:29:03 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.465	337520.375	88754104.000	25.9983
2		34.832	186786.047	27407800.000	8.0284
3		37.165	240168.063	23002038.000	6.7379
4		37.365	245067.641	39192672.000	11.4805
5		49.032	387579.313	163027232.000	47.7548
Total			1397121.438	341383846.000	100.000

Ingredient Table

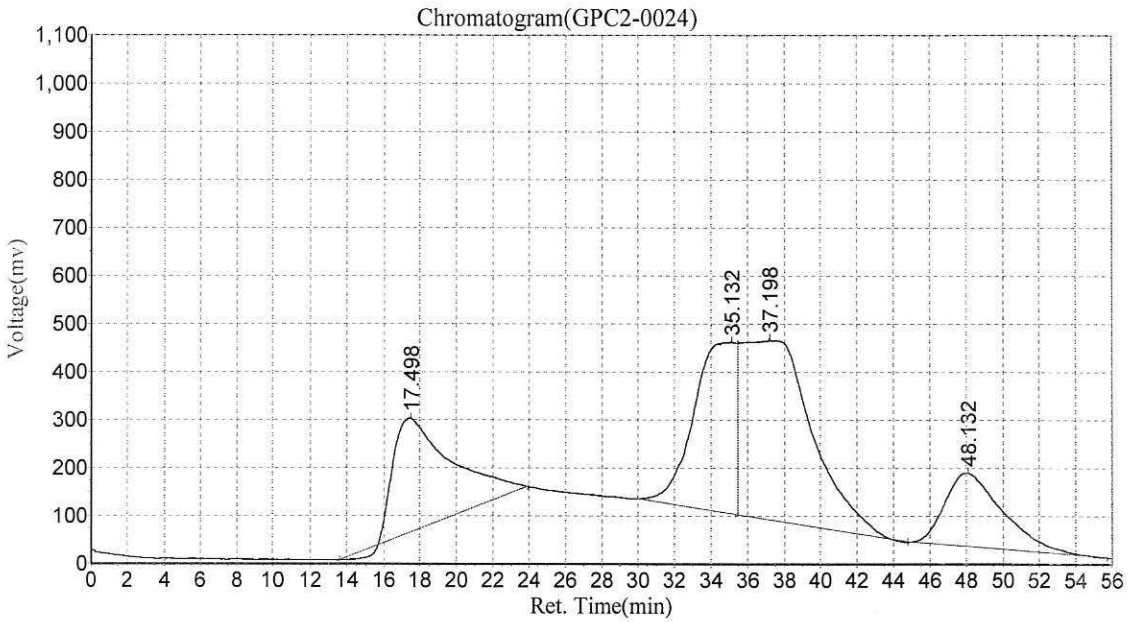
No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000
2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

-09 PNA

BLA0683 23A0207/249/295/313/326 PSDDA SVOC

Date:2023-02-03,7:26:44 PM
Data File:c:\n2000\data\gpc2\020223\GPC2-0024
Method File:E:\GPC2_InHouse.mtd

Analyst£ºTWC
Date/Time2023-02-03,7:26:45 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.498	237727.203	51635180.000	21.2819
2		35.132	357614.375	56225404.000	23.1738
3		37.198	373828.469	100445344.000	41.3994
4		48.132	153996.641	34318940.000	14.1449
Total			1123166.688	242624868.000	100.000

Ingredient Table

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

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0043	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-IT1034	23A0249-07	N823020626.D	02/06/2023	
Blank	BLA0683-BLK1	N823020608.D	02/06/2023	
LCS	BLA0683-BS1	N823020609.D	02/06/2023	
Reference	BLA0683-SRM1	N823020611.D	02/06/2023	
LCS Dup	BLA0683-BSD1	N823020610.D	02/06/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0043

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0166-GPC1** **Printed: 2/6/2023 3:58:25PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0207-01	A	LDW23-IT1088	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-02	A	LDW23-IT1089	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-03	A	LDW23-IT1079	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-04	A	LDW23-IT1080	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-05	A	LDW23-IT1080-FD	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-06	A	LDW23-IT1072	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-07	A	LDW23-IT1081	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-08	A	LDW23-IT1068	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-09	A	LDW23-IT1062	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-15	A	LDW23-IT1078	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-16	A	LDW23-IT1201	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-17	A	LDW23-IT1209	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0249-07	A	LDW23-IT1034	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0295-08	A	LDW23-IT1027	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0313-03	A	LDW23-IT1114	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0313-04	A	LDW23-IT1120	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0313-12	A	LDW23-IT1148	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0326-08	A	LDW23-IT1181	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0326-09	A	LDW23-IT1127	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
BLA0683-BLK1	-	Blank	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-BS1	-	LCS	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-BSD1	-	LCS Dup	-	0.5	0.5	-	2/6/2023	CTO	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0043

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0166-GPC1** **Printed: 2/6/2023 3:58:25PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLA0683-MS1	-	Matrix Spike	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-MSD1	-	Matrix Spike Dup	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-SRM1	-	Reference	-	0.5	0.5	-	2/6/2023	CTO	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0044	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-IT1034	23A0249-07	N823020626.D	02/06/2023	
LCS Dup	BLA0683-BSD1	N823020610.D	02/06/2023	
Blank	BLA0683-BLK1	N823020608.D	02/06/2023	
Reference	BLA0683-SRM1	N823020611.D	02/06/2023	
LCS	BLA0683-BS1	N823020609.D	02/06/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0044

Matrix: Solid **Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL** **Printed: 2/6/2023 3:58:56PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0207-01	A	LDW23-IT1088	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-02	A	LDW23-IT1089	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-03	A	LDW23-IT1079	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-04	A	LDW23-IT1080	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-05	A	LDW23-IT1080-FD	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-06	A	LDW23-IT1072	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-07	A	LDW23-IT1081	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-08	A	LDW23-IT1068	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-09	A	LDW23-IT1062	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-15	A	LDW23-IT1078	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-16	A	LDW23-IT1201	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0207-17	A	LDW23-IT1209	A 02	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0249-07	A	LDW23-IT1034	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0295-08	A	LDW23-IT1027	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0313-03	A	LDW23-IT1114	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0313-04	A	LDW23-IT1120	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0313-12	A	LDW23-IT1148	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0326-08	A	LDW23-IT1181	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
23A0326-09	A	LDW23-IT1127	A 01	0.5	0.5	270E-SIM PAH (0.1ug/L or 5ug/kg	2/6/2023	CTO	
BLA0683-BLK1	-	Blank	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-BS1	-	LCS	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-BSD1	-	LCS Dup	-	0.5	0.5	-	2/6/2023	CTO	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0044

Matrix: Solid **Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL** **Printed: 2/6/2023 3:58:56PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLA0683-MS1	-	Matrix Spike	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-MSD1	-	Matrix Spike Dup	-	0.5	0.5	-	2/6/2023	CTO	
BLA0683-SRM1	-	Reference	-	0.5	0.5	-	2/6/2023	CTO	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0095	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1018	23A0249-03	NT1003032319S.D	02/12/2023	
LDW23-SC1020	23A0249-11	NT1003032323S.D	02/12/2023	
LDW23-SC1024	23A0249-08	NT1003032322S.D	02/12/2023	
LDW23-SC1025	23A0249-05	NT1003032321S.D	02/12/2023	
LDW23-SC1083	23A0249-02	NT1003032318S.D	02/12/2023	
LDW23-SC1084	23A0249-04	NT1003032320S.D	02/12/2023	
Blank	BLA0673-BLK2	NT1003032306S.D	02/12/2023	
LCS	BLA0673-BS2	NT1003032307S.D	02/12/2023	
LCS Dup	BLA0673-BSD2	NT1003032308S.D	02/12/2023	
Reference	BLA0673-SRM2	NT1003032311S.D	02/12/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0095

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0086-GPC1** **Printed: 2/12/2023 10:24:02AM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0249-02	A	LDW23-SC1083	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0249-02	A	LDW23-SC1083	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0249-03	A	LDW23-SC1018	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0249-03	A	LDW23-SC1018	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0249-04	A	LDW23-SC1084	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0249-04	A	LDW23-SC1084	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0249-05	A	LDW23-SC1025	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0249-05	A	LDW23-SC1025	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0249-08	A	LDW23-SC1024	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0249-08	A	LDW23-SC1024	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0249-11	A	LDW23-SC1020	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0249-11	A	LDW23-SC1020	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-01	A	LDW23-SC1074	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-01	A	LDW23-SC1074	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-02	A	LDW23-SC1075	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-02	A	LDW23-SC1075	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-03	A	LDW23-SC1038B	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-03	A	LDW23-SC1038B	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-04	A	LDW23-SC1023B	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-04	A	LDW23-SC1023B	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-05	A	LDW23-SC1022A	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-05	A	LDW23-SC1022A	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0095

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLA0086-GPC1** **Printed: 2/12/2023 10:24:02AM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0295-06	A	LDW23-SC1017B	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-06	A	LDW23-SC1017B	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-07	A	LDW23-SC1019	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-07	A	LDW23-SC1019	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-09	A	LDW23-SC1026	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-09	A	LDW23-SC1026	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
23A0295-10	A	LDW23-IT1041	A	1	1	8270E-SIM Dual Scan SVOC	2/12/2023	LMJ	
23A0295-10	A	LDW23-IT1041	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	2/12/2023	LMJ	
BLA0673-BLK1	-	Blank	-	1	1	-	2/12/2023	LMJ	
BLA0673-BLK2	-	Blank	-	1	1	-	2/12/2023	LMJ	
BLA0673-BS1	-	LCS	-	1	1	-	2/12/2023	LMJ	
BLA0673-BS2	-	LCS	-	1	1	-	2/12/2023	LMJ	
BLA0673-BSD1	-	LCS Dup	-	1	1	-	2/12/2023	LMJ	
BLA0673-BSD2	-	LCS Dup	-	1	1	-	2/12/2023	LMJ	
BLA0673-MS1	-	Matrix Spike	-	1	1	-	2/12/2023	LMJ	
BLA0673-MS2	-	Matrix Spike	-	1	1	-	2/12/2023	LMJ	
BLA0673-MSD1	-	Matrix Spike Dup	-	1	1	-	2/12/2023	LMJ	
BLA0673-MSD2	-	Matrix Spike Dup	-	1	1	-	2/12/2023	LMJ	
BLA0673-SRM1	-	Reference	-	1	1	-	2/12/2023	LMJ	
BLA0673-SRM2	-	Reference	-	1	1	-	2/12/2023	LMJ	

Form I

METHOD BLANK DATA SHEET

EPA 8270E-SIM

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0673-BLK2	File ID:	NT1003032306S.D
Sampled:	N/A	Prepared:	01/30/23 14:02	Analyzed:	03/03/23 20:59
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 1 mL
Batch:	BLA0673	Sequence:	SLC0250	Calibration:	GC00032
Instrument:	NT10	Column:	ZB-5MSi	Cleanups:	GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	0.7	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	20.0	U	2.5	20.0
65-85-0	Benzoic acid	1	100	U	13.4	100
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	20.0	U	2.1	20.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	537	71.6	27 - 120	
p-Terphenyl-d14	500.00	706	141	37 - 120	*

Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323306S.D

Page 1

Date : 03-MAR-2023 20:59

Client ID:

Instrument: nt10.i

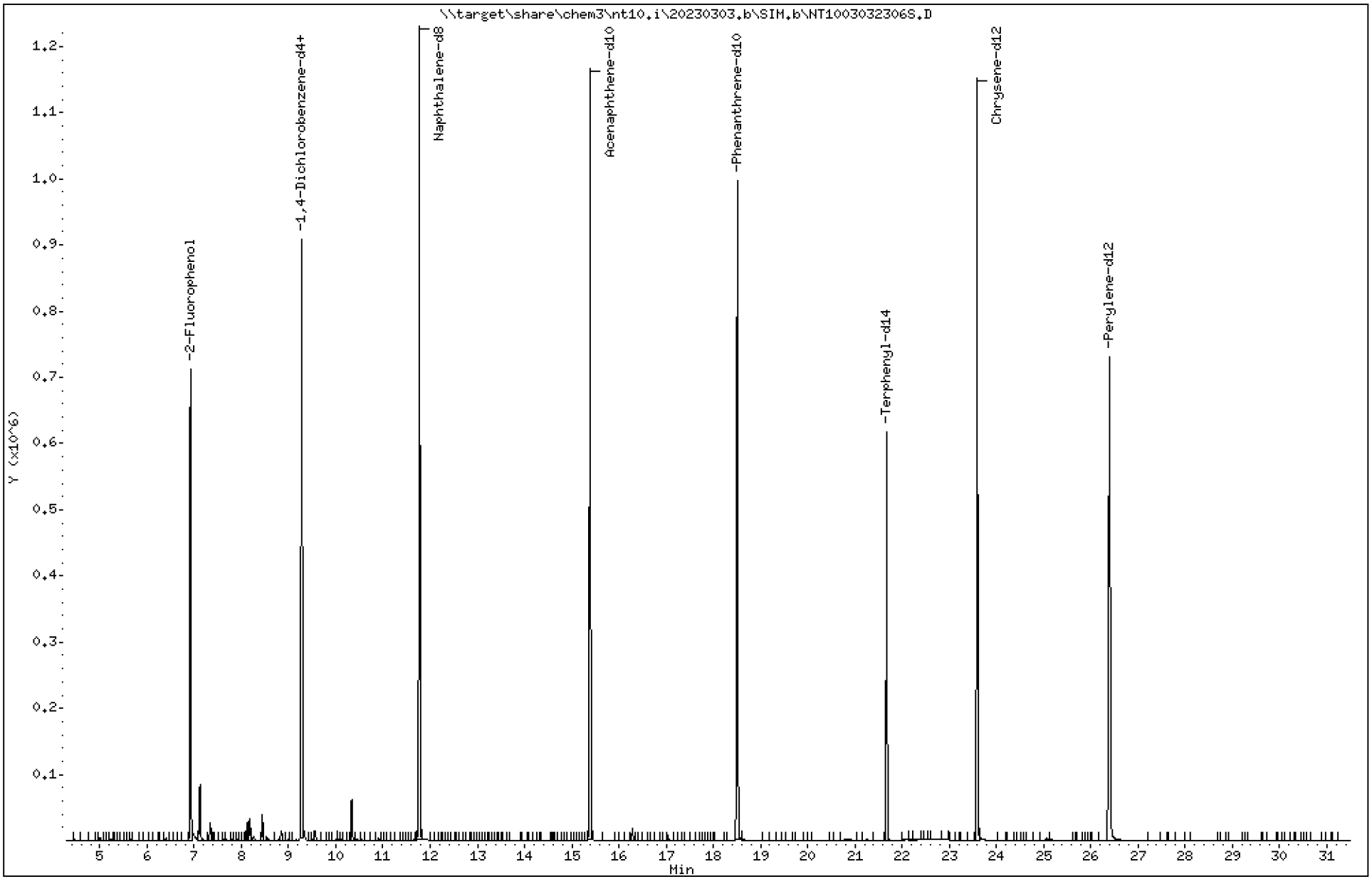
Sample Info: BLA0673-BLK1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 03-MAR-2023 20:59

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BLK1

Volume Injected (uL): 1.0

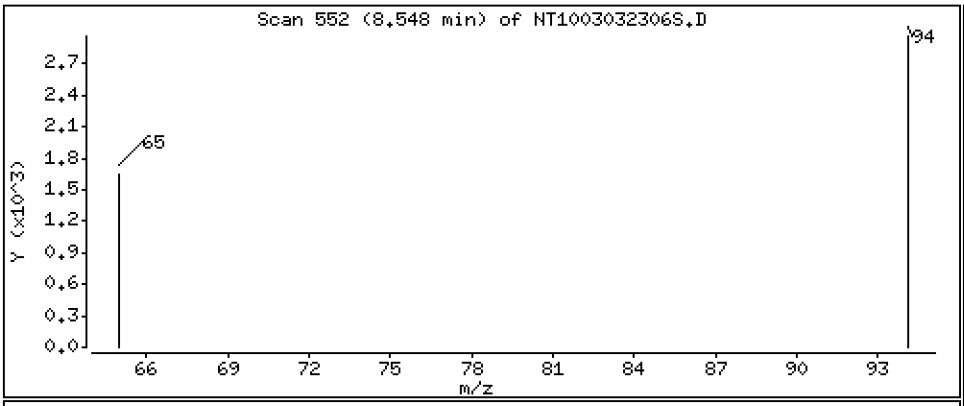
Operator: JGR

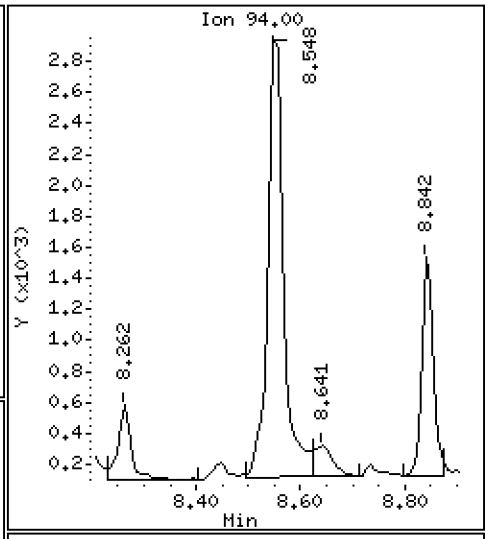
Column phase: ZB-5msi

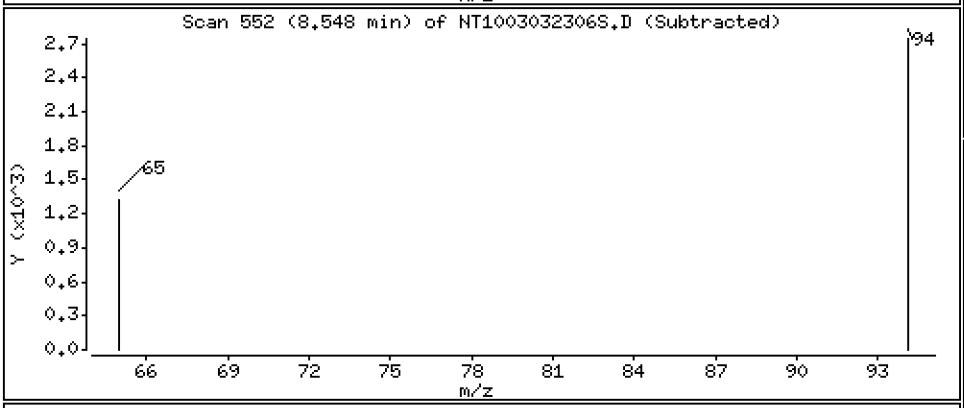
Column diameter: 0.25

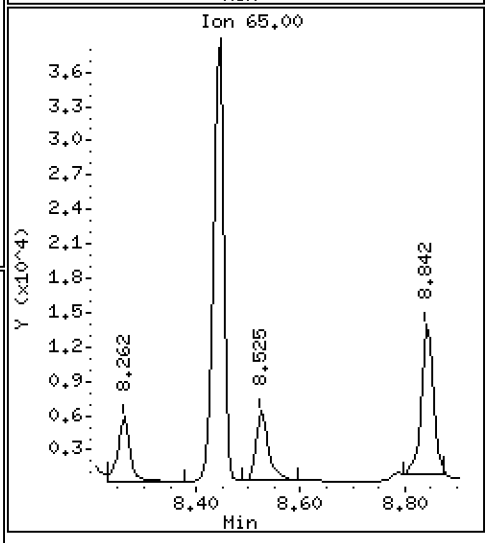
3 Phenol

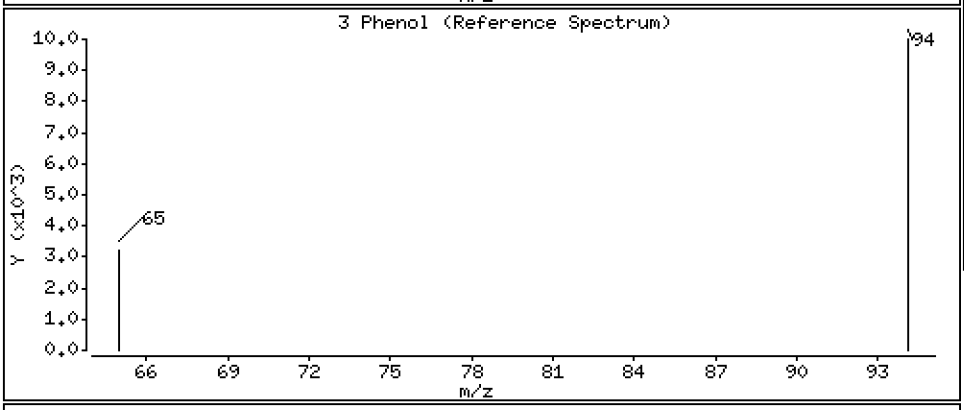
Concentration: 0.02560 ug/L

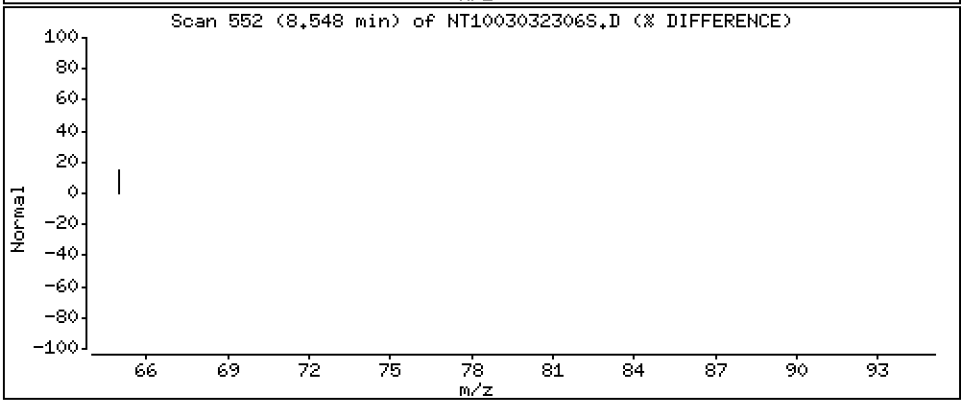












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Date : 03-MAR-2023 20:59

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BLK1

Volume Injected (uL): 1.0

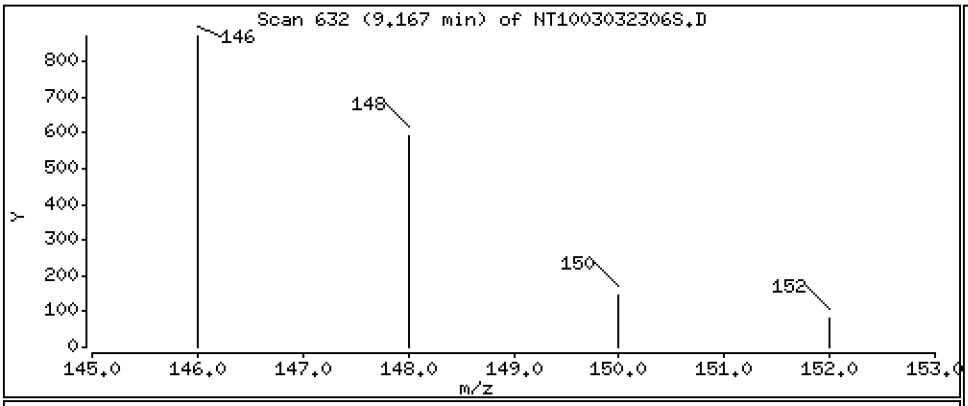
Operator: JGR

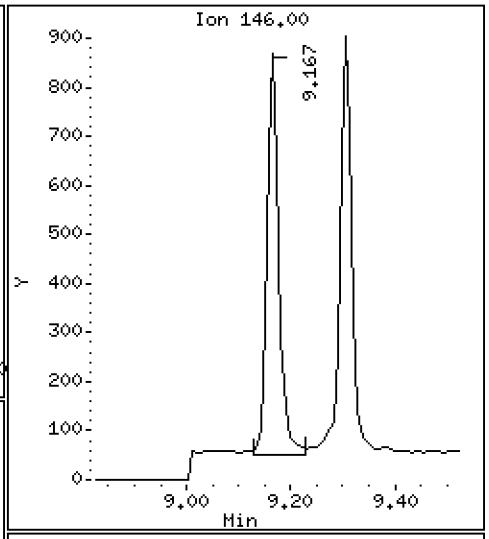
Column phase: ZB-5msi

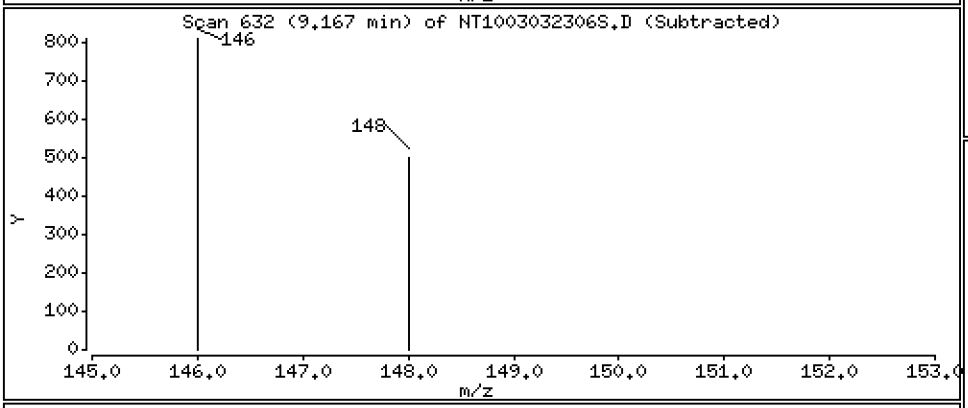
Column diameter: 0.25

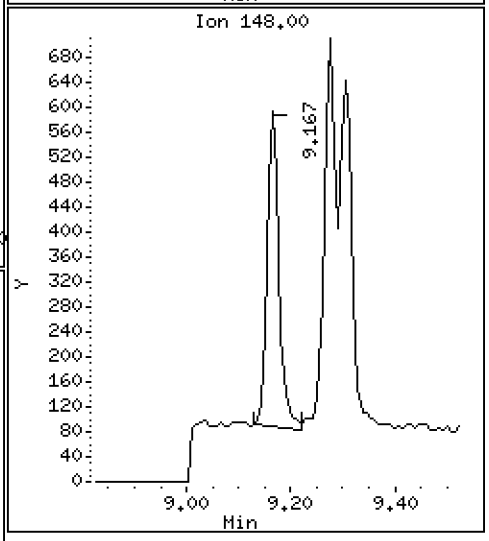
7 1,3-Dichlorobenzene

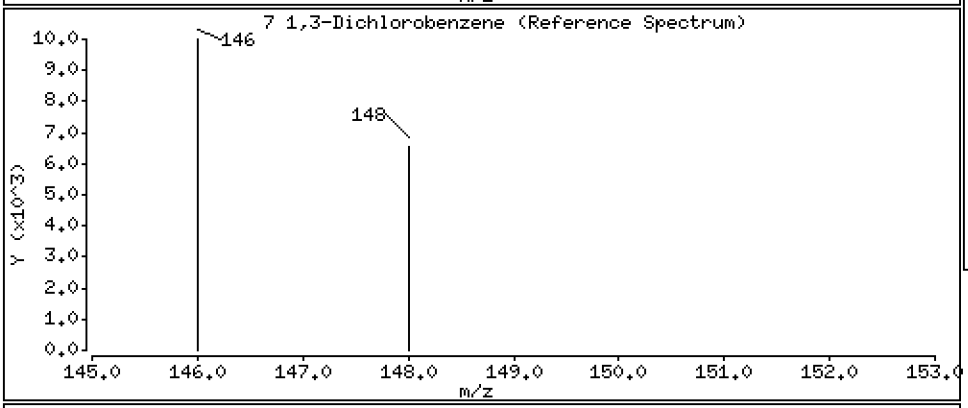
Concentration: 0.006669 ug/L

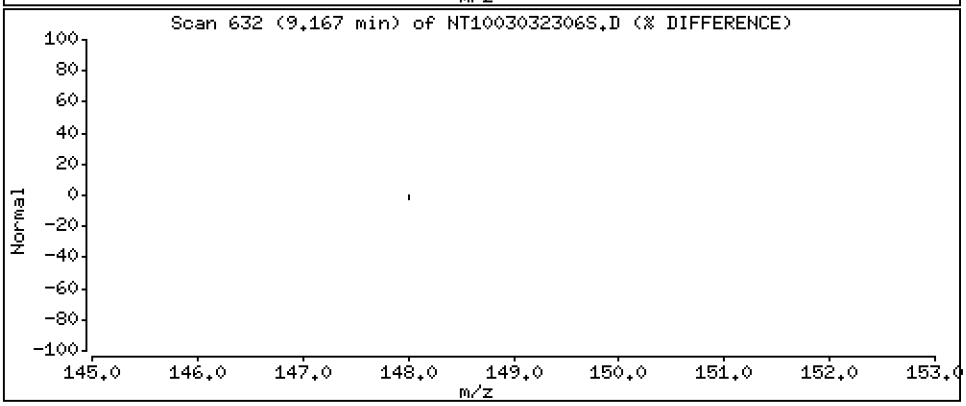












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Date : 03-MAR-2023 20:59

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BLK1

Volume Injected (uL): 1.0

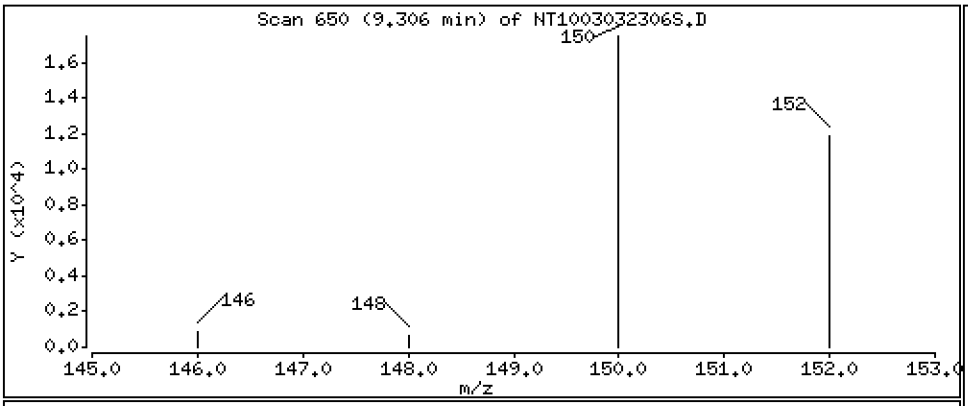
Operator: JGR

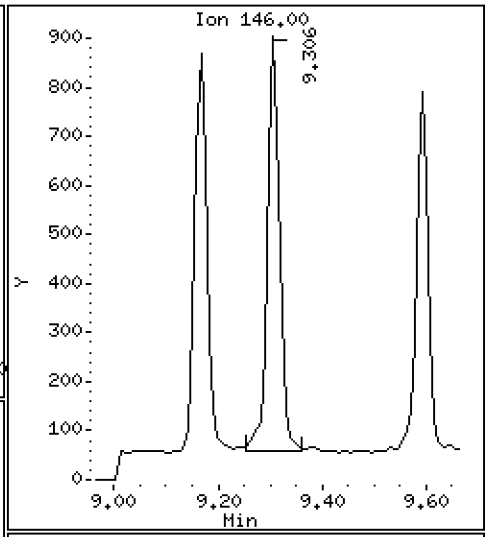
Column phase: ZB-5msi

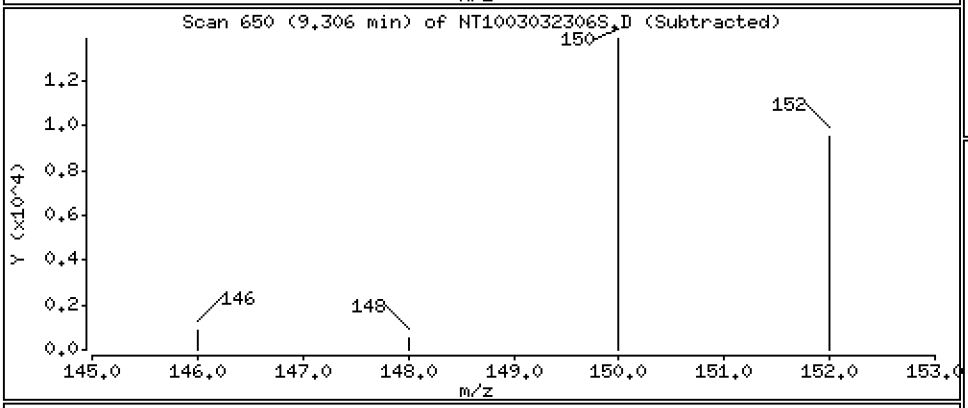
Column diameter: 0.25

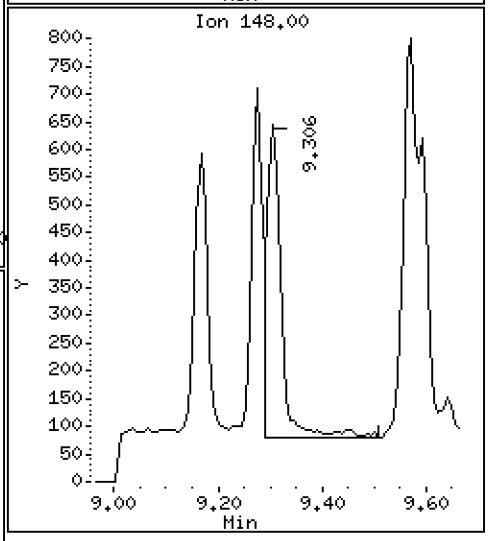
9 1,4-Dichlorobenzene

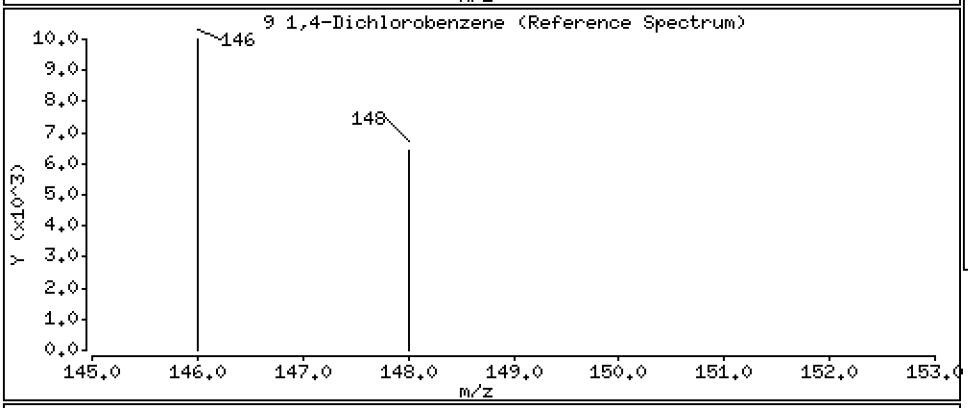
Concentration: 0.006927 ug/L

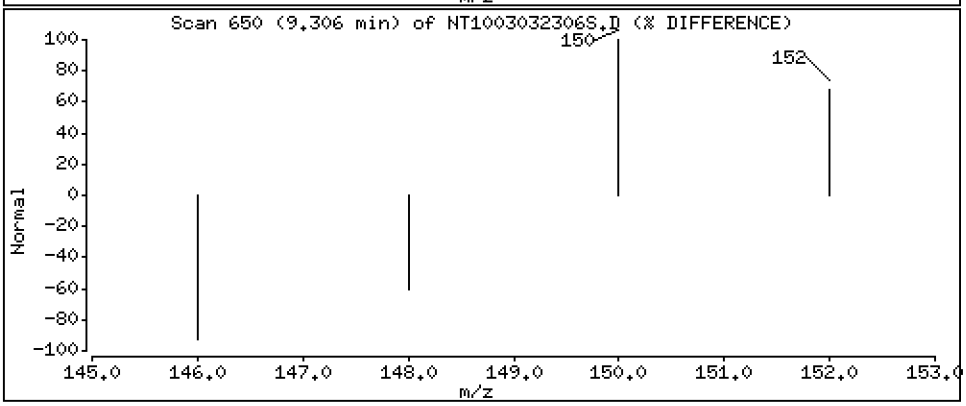












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Date : 03-MAR-2023 20:59

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BLK1

Volume Injected (uL): 1.0

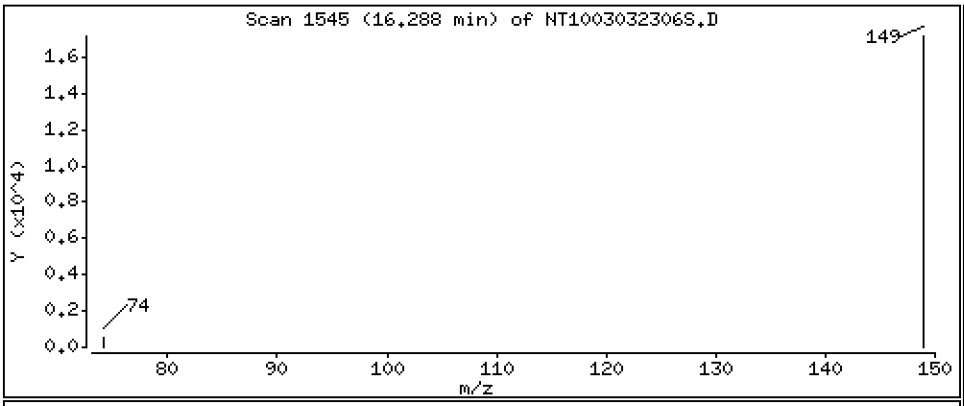
Operator: JGR

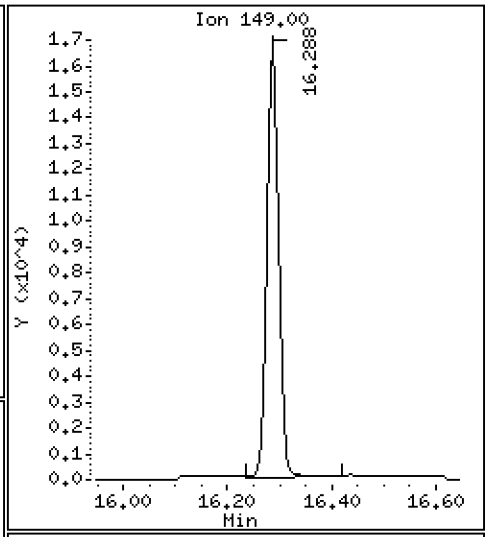
Column phase: ZB-5msi

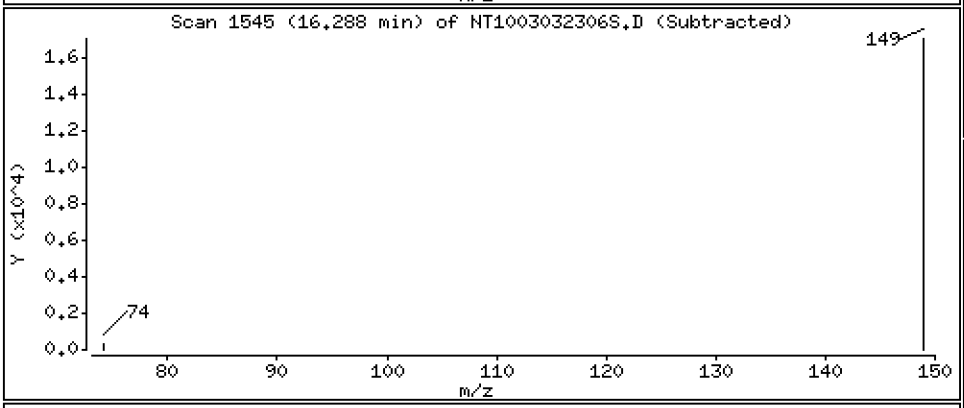
Column diameter: 0.25

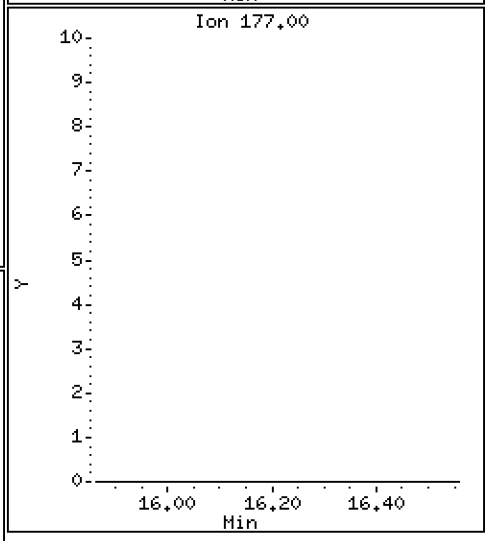
50 Diethylphthalate

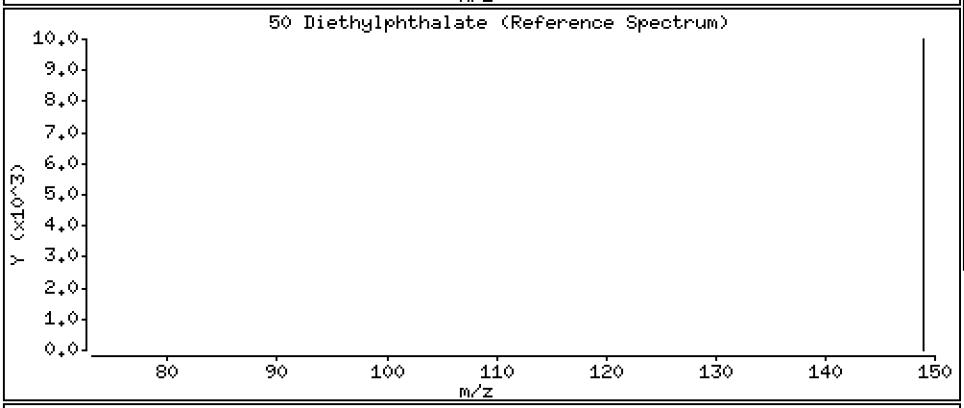
Concentration: 0.09855 ug/L

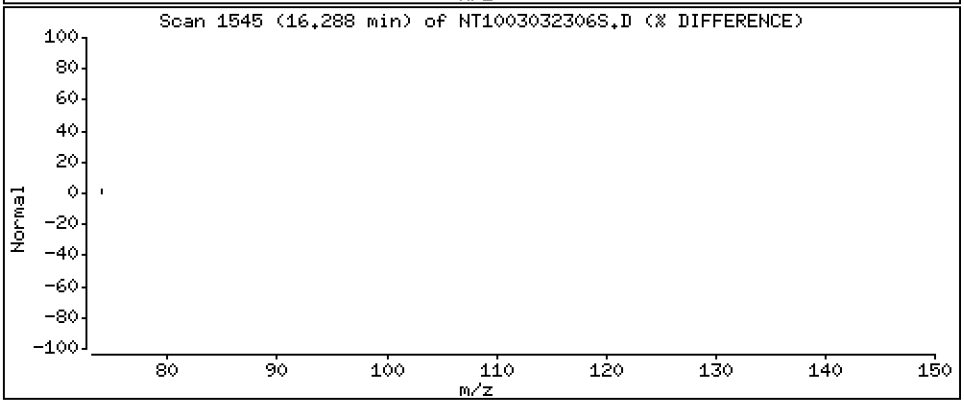












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Date : 03-MAR-2023 20:59

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BLK1

Volume Injected (uL): 1.0

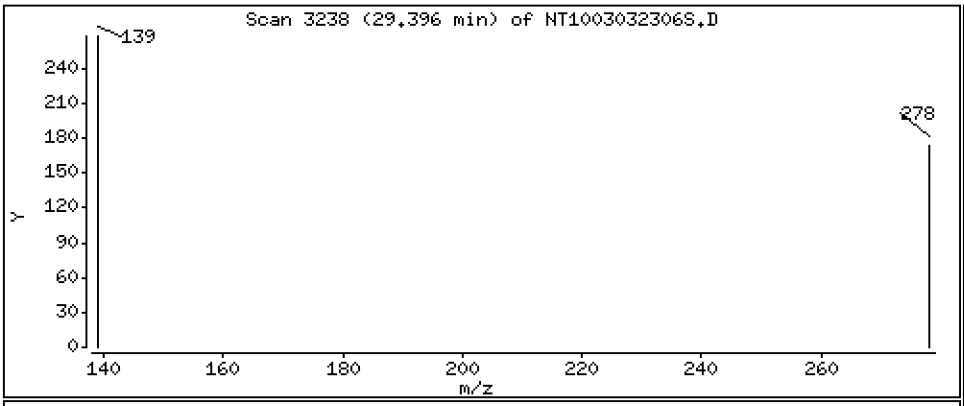
Operator: JGR

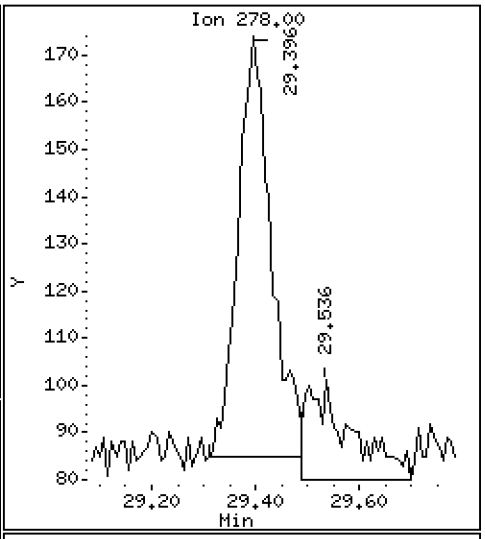
Column phase: ZB-5msi

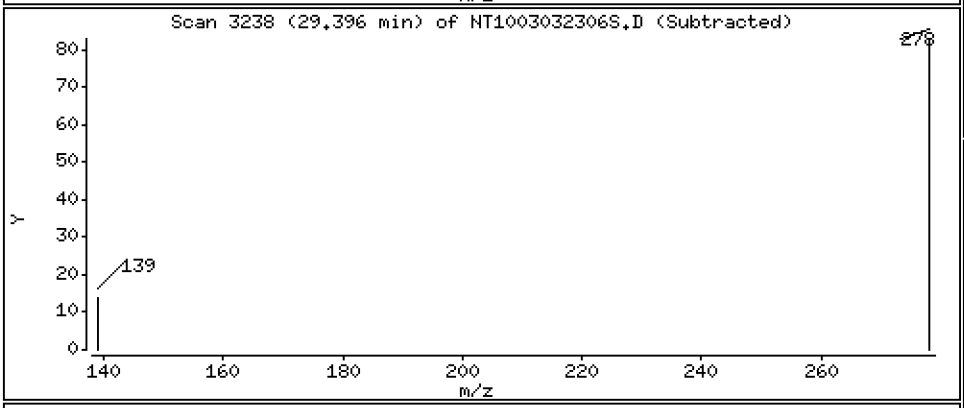
Column diameter: 0.25

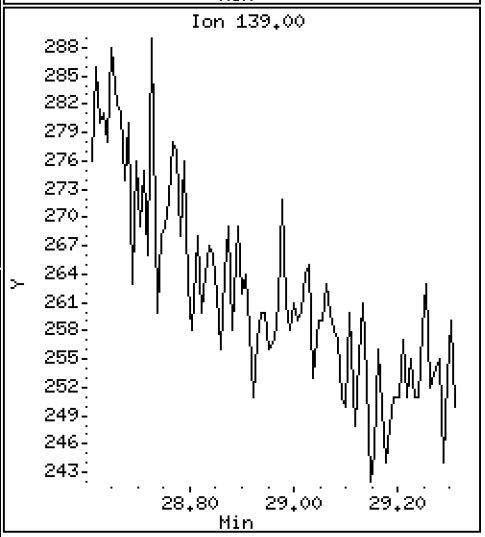
79 Dibenzo(a,h)anthracene

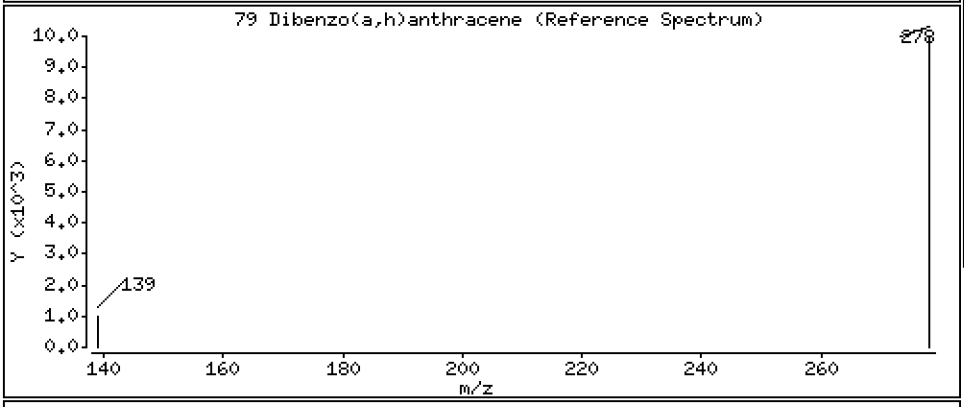
Concentration: 0.001189 ug/L

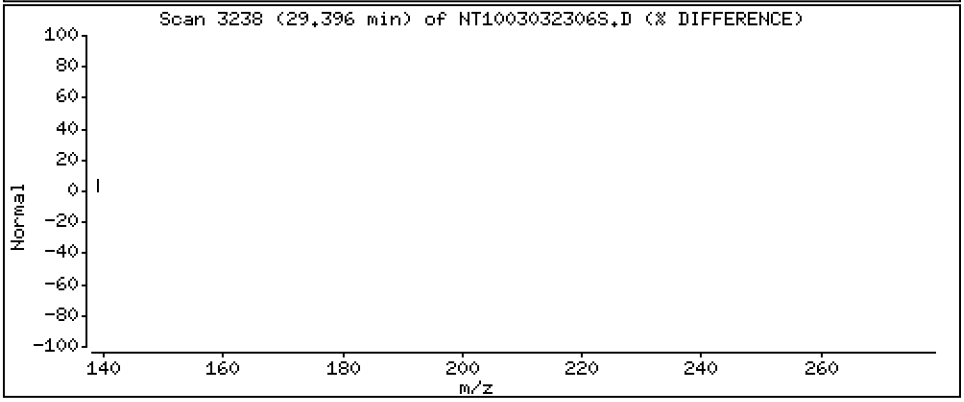












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032306S.D
Lab Smp Id: BLA0673-BLK2
Inj Date : 03-MAR-2023 20:59 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLA0673-BLK1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 10:19 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.917	6.918	(0.746)	818260	5.36685	5.367(R)
3	Phenol	94	8.548	8.556	(0.922)	5757	0.02560	0.02560
7	1,3-Dichlorobenzene	146	9.166	9.174	(0.988)	1320	0.00667	0.006669(M)
* 8	1,4-Dichlorobenzene-d4	152	9.275	9.283	(1.000)	534040	4.00000	
9	1,4-Dichlorobenzene	146	9.306	9.314	(1.003)	1333	0.00693	0.006927(M)
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					
24	Benzoic acid	105	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.770	11.778	(1.000)	1862417	4.00000	
30	Hexachlorobutadiene	225	Compound Not Detected.					
39	Dimethylphthalate	163	Compound Not Detected.					
* 42	Acenaphthene-d10	162	15.383	15.391	(1.000)	882262	4.00000	
50	Diethylphthalate	149	16.288	16.296	(1.059)	26035	0.09855	0.09855
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
57	Hexachlorobenzene	284	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.507	18.522	(1.000)	1597014	4.00000	
$	66 Terphenyl-d14	244	21.671	21.695	(0.919)	800962	7.06104	7.061(R)
	67 Butylbenzylphthalate	149	Compound Not Detected.					
*	69 Chrysene-d12	240	23.591	23.615	(1.000)	1402727	4.00000	
*	77 Perylene-d12	264	26.394	26.449	(1.000)	1445696	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.395	29.435	(1.114)	398	0.00119	0.001189
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 03-MAR-2023
Lab File ID: NT1003032306S.D Calibration Time: 19:05
Lab Smp Id: BLA0673-BLK2
Analysis Type: SV Level: LOW
Quant Type: ISTD Sample Type: AIR
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	602309	301155	1204618	534040	-11.33
27 Naphthalene-d8	2101699	1050850	4203398	1862417	-11.39
42 Acenaphthene-d10	1002910	501455	2005820	882262	-12.03
59 Phenanthrene-d10	1732061	866031	3464122	1597014	-7.80
69 Chrysene-d12	1410089	705045	2820178	1402727	-0.52
77 Perylene-d12	1732981	866491	3465962	1445696	-16.58

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	-0.09
27 Naphthalene-d8	11.78	11.28	12.28	11.77	-0.07
42 Acenaphthene-d10	15.39	14.89	15.89	15.38	-0.05
59 Phenanthrene-d10	18.52	18.02	19.02	18.51	-0.09
69 Chrysene-d12	23.62	23.12	24.12	23.59	-0.10
77 Perylene-d12	26.45	25.95	26.95	26.39	-0.21

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

REVIEW SUMMARY FOR FILE - NT1003032306S.D

Lab ID: BLA0673-BLK2
nt10.i, 20230303.b\SIM.b\SIMABN2.m,   03-MAR-2023 20:59

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.114	1.000	0.1137	Dibenzo(a,h)anthracene

RRT check based on Ccal File: SIM.b/NT1003032303S.D

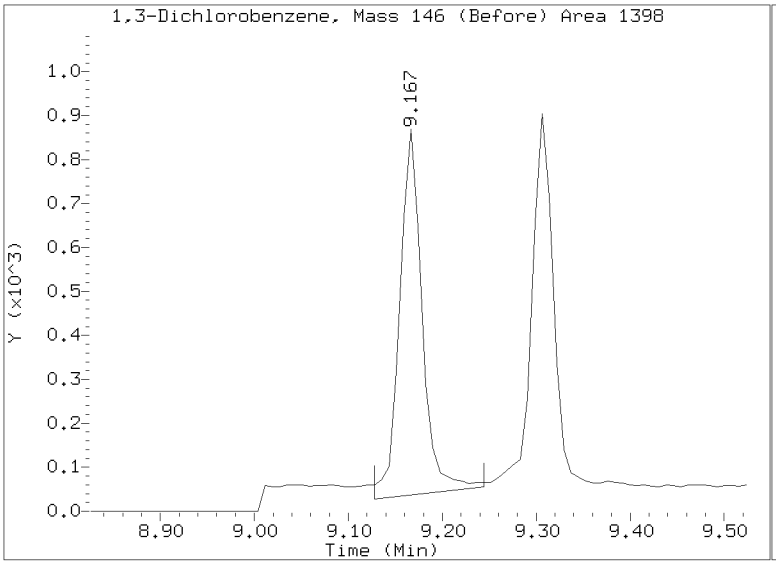
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

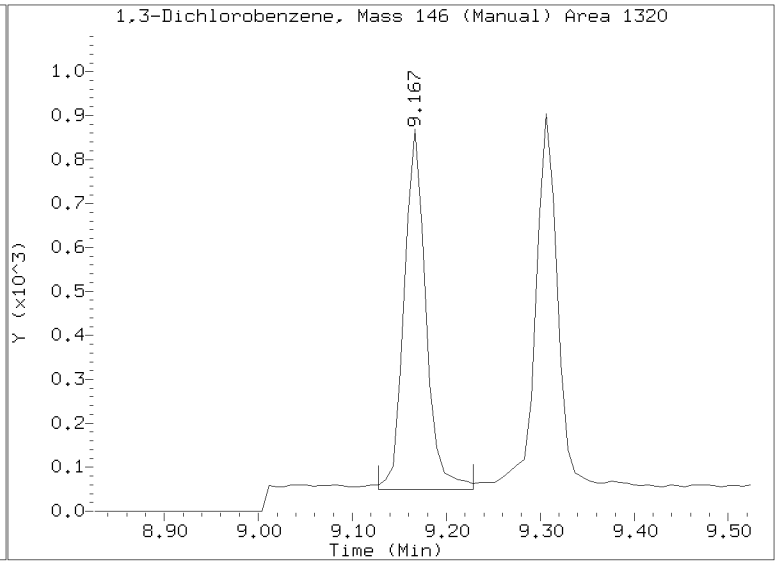
Exception: 1,2,4-Trichlorobenzene 0.0010

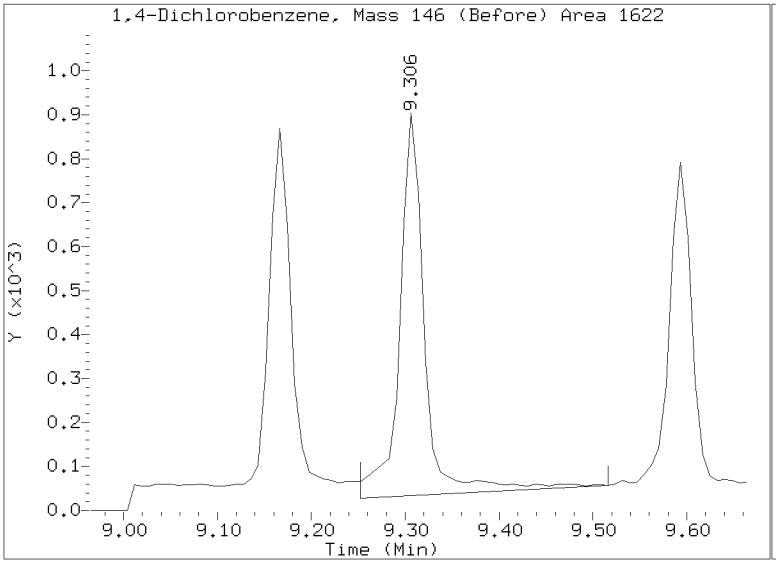
* Only compounds listed in the work order have been verified by the analyst *

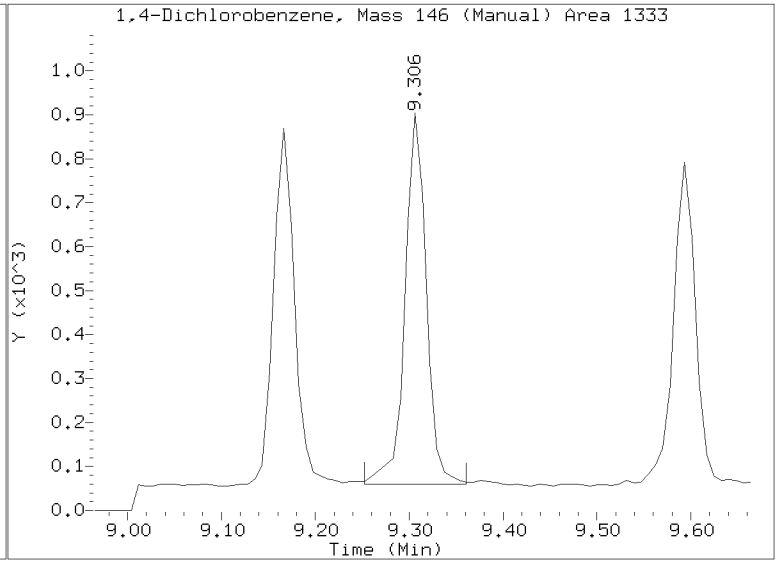
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230303.b/SIM.b/NT1003032306S.D
Injection Date: 03-MAR-2023 20:59
Lab ID:BLA0673-BLK2 Client ID:
Report Date: 03/17/2023 10:19









Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8270E-SIM

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0683-BLK1	File ID:	N823020608.D
Sampled:	N/A	Prepared:	02/01/23 11:29	Analyzed:	02/06/23 15:57
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 0.5 mL
Batch:	BLA0683	Sequence:	SLB0075	Calibration:	GA00050
Instrument:	NT8	Column:	RXI-17Sil ms	Cleanups:	GPC, Silica Gel

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
56-55-3	Benzo(a)anthracene	1	5.00	U	0.82	5.00
218-01-9	Chrysene	1	5.00	U	1.05	5.00
205-99-2	Benzo(b)fluoranthene	1	5.00	U	1.37	5.00
207-08-9	Benzo(k)fluoranthene	1	5.00	U	0.76	5.00
50-32-8	Benzo(a)pyrene	1	5.00	U	0.61	5.00
193-39-5	Indeno(1,2,3-cd)pyrene	1	5.00	U	1.05	5.00
53-70-3	Dibenzo(a,h)anthracene	1	5.00	U	0.89	5.00

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Methylnaphthalene-d10	150.00	125	83.2	32 - 120	
Dibenzo[a,h]anthracene-d14	150.00	232	154	21 - 133	*
Fluoranthene-d10	150.00	149	99.4	36 - 134	

Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020608.D

Date : 06-FEB-2023 15:57

Client ID:

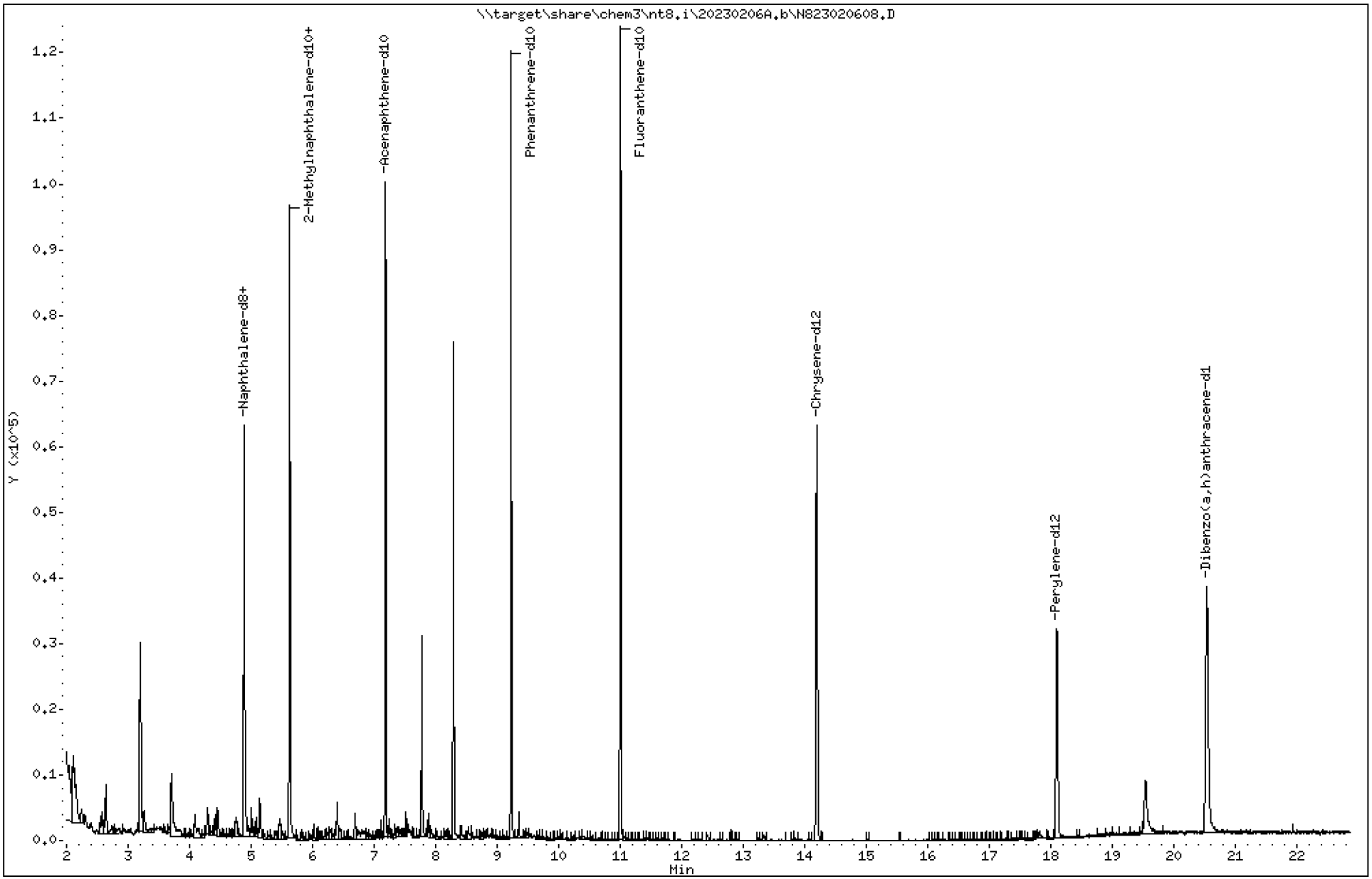
Instrument: nt8.i

Sample Info: BLA0683-BLK1,

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



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Date : 06-FEB-2023 15:57

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BLK1,

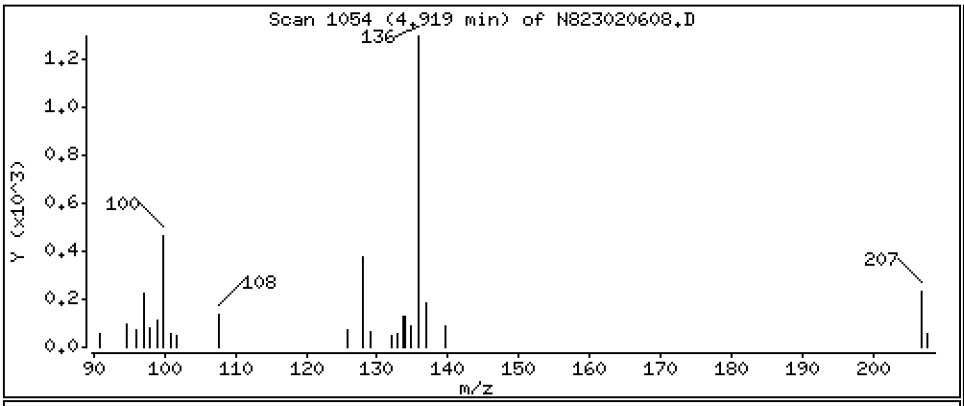
Operator: JZ

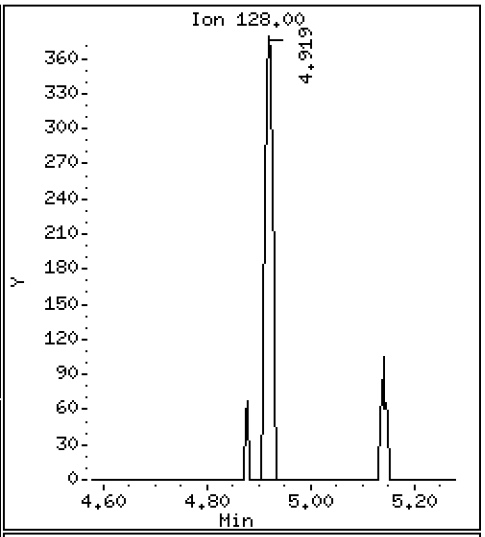
Column phase: Rxi-17sil

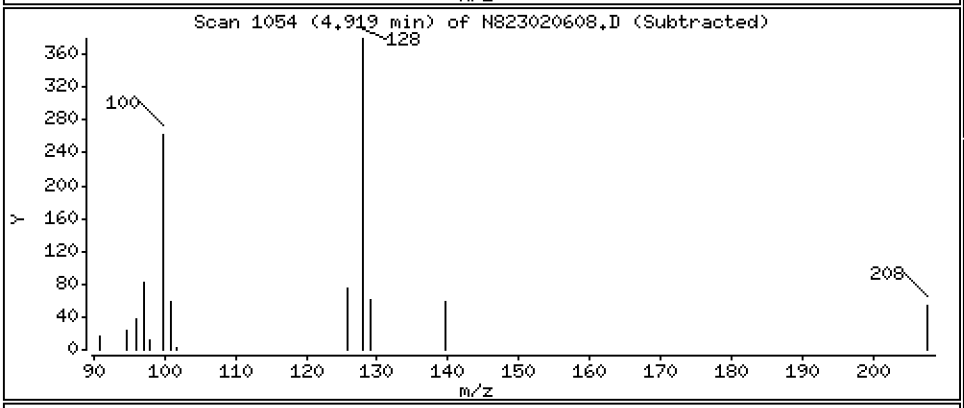
Column diameter: 0.25

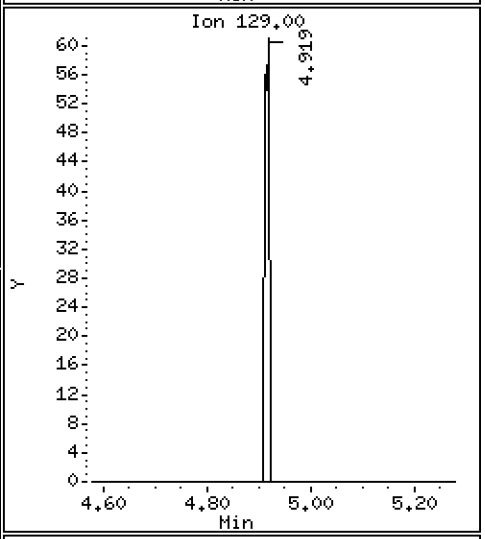
2 Naphthalene

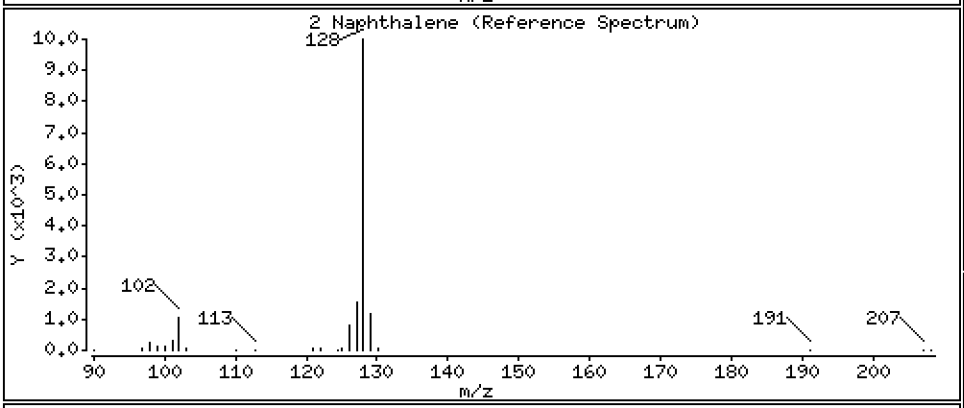
Concentration: 0.01704 ug/mL

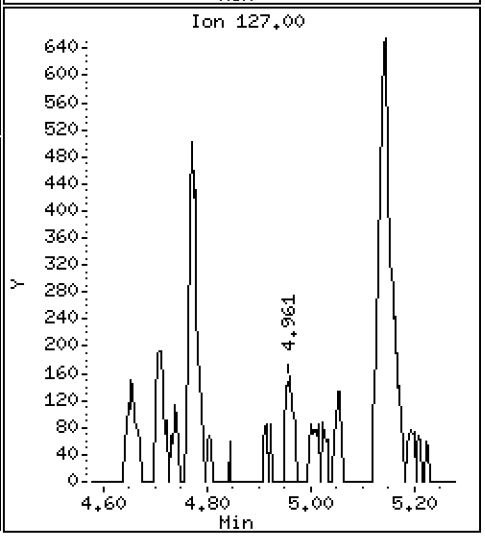


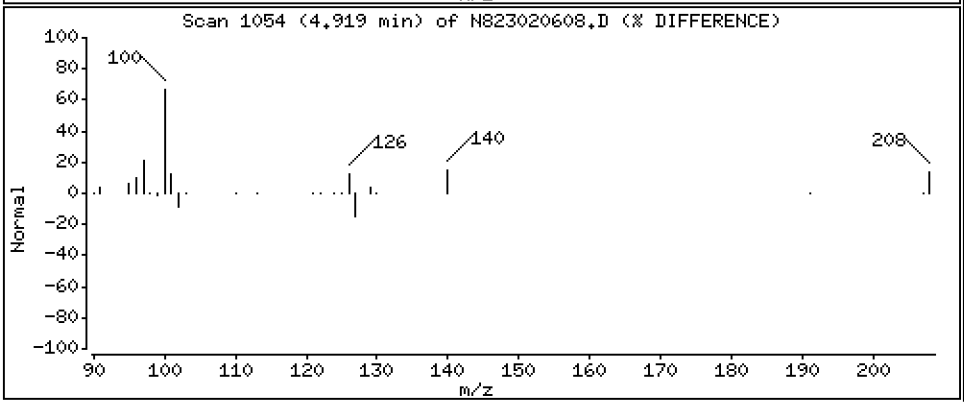












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Date : 06-FEB-2023 15:57

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BLK1,

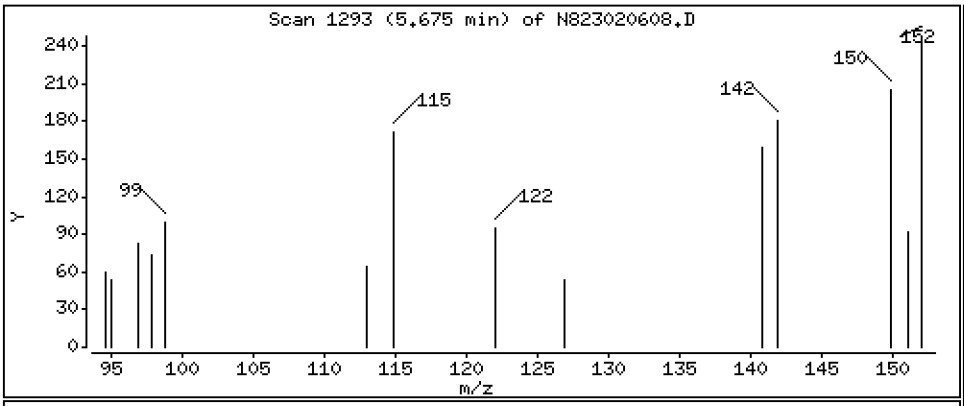
Operator: JZ

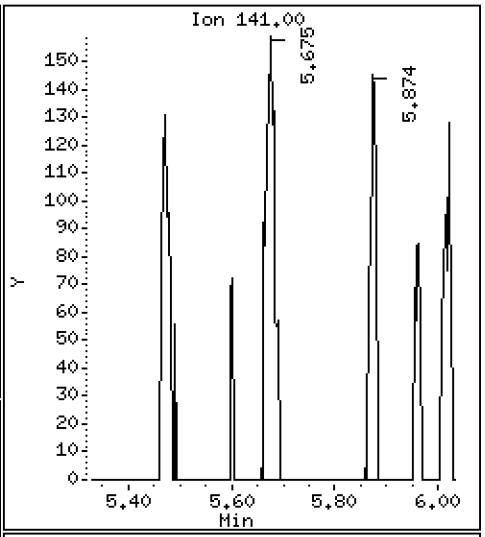
Column phase: Rxi-17sil

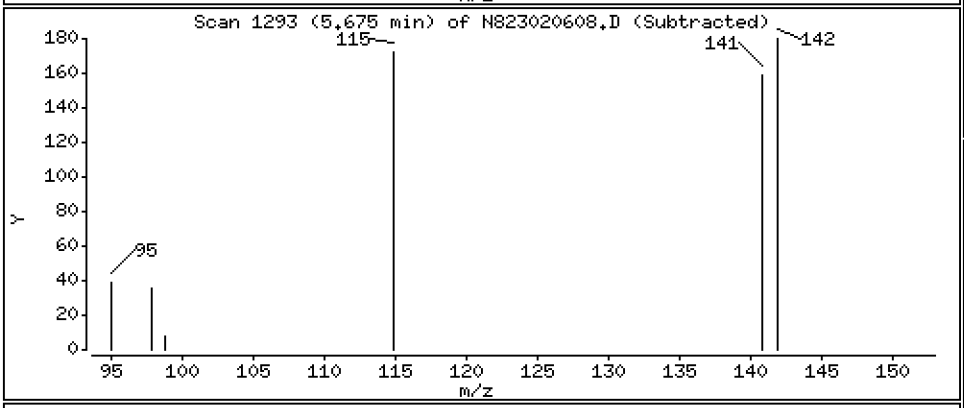
Column diameter: 0.25

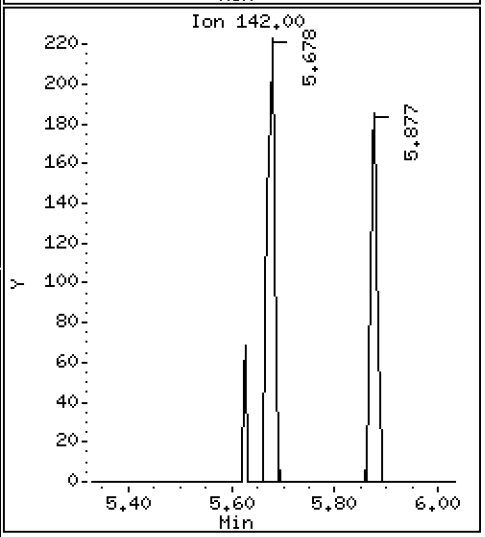
4 2-Methylnaphthalene

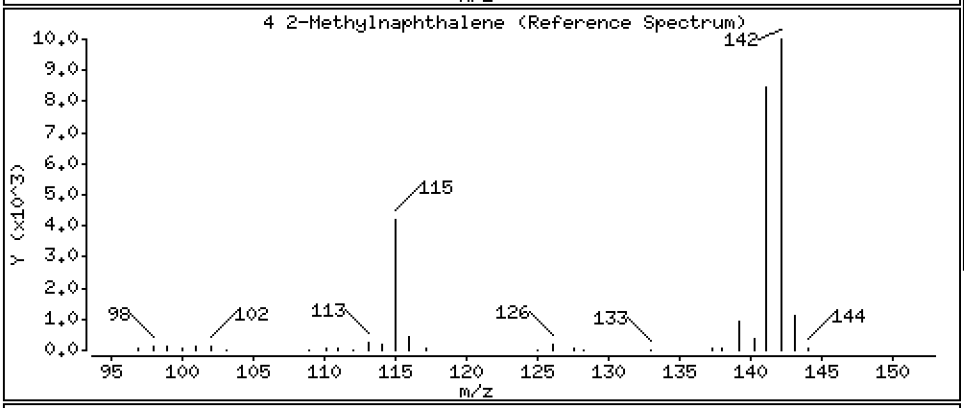
Concentration: 0.01541 ug/mL

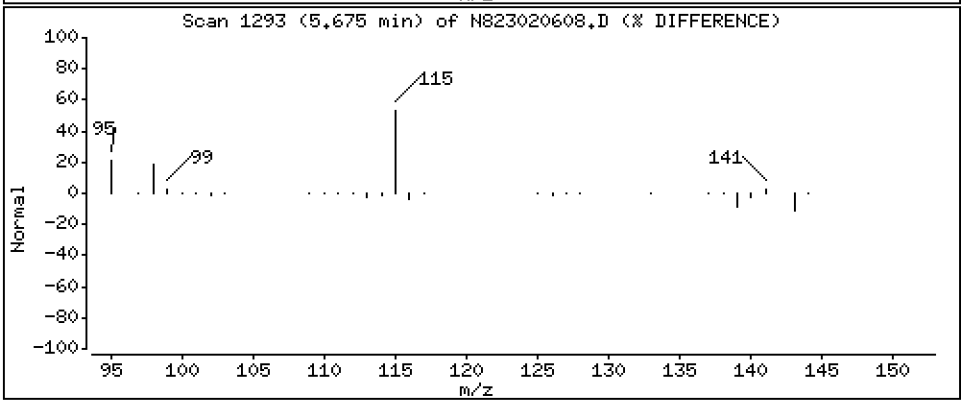












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Date : 06-FEB-2023 15:57

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BLK1,

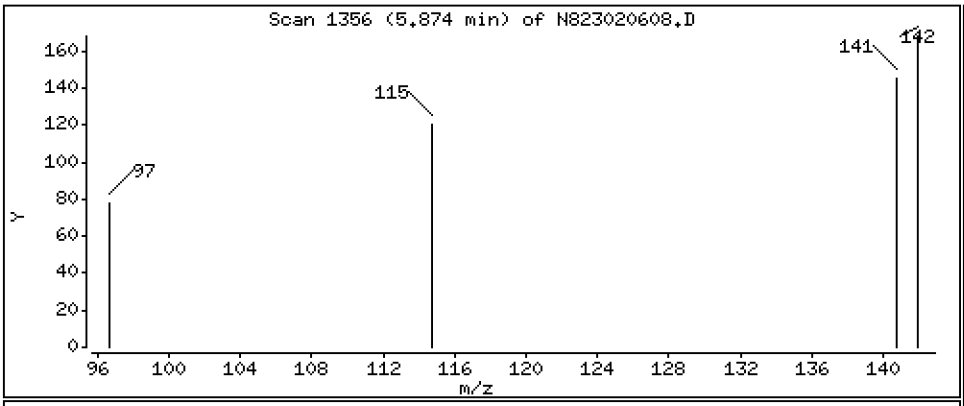
Operator: JZ

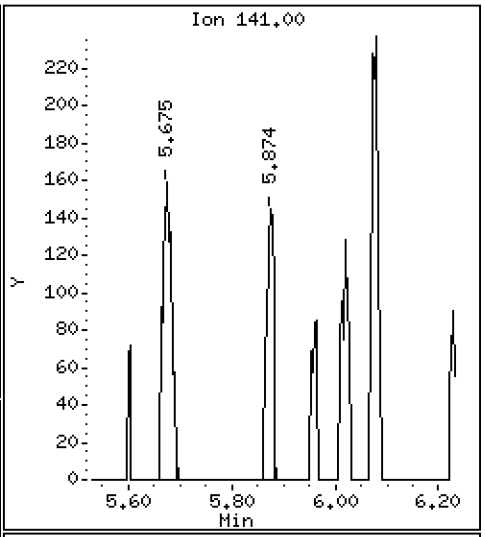
Column phase: Rxi-17sil

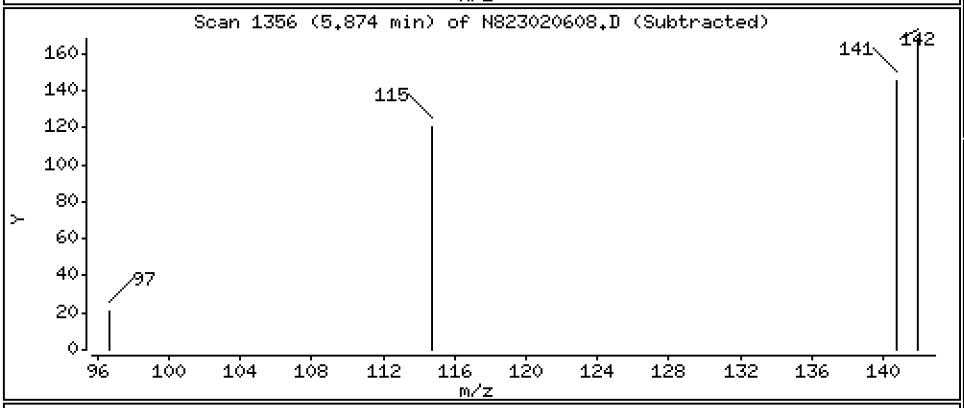
Column diameter: 0.25

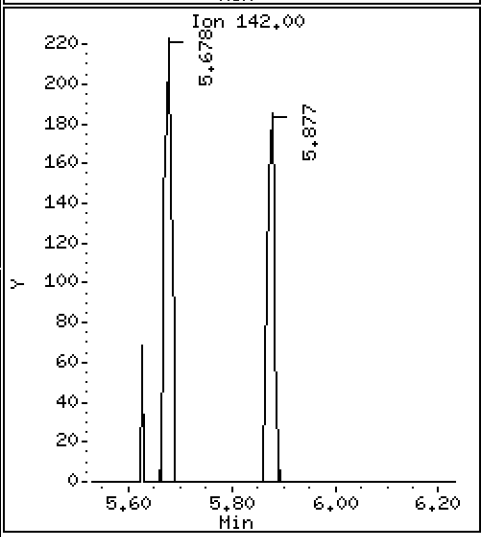
5 1-methylnaphthalene

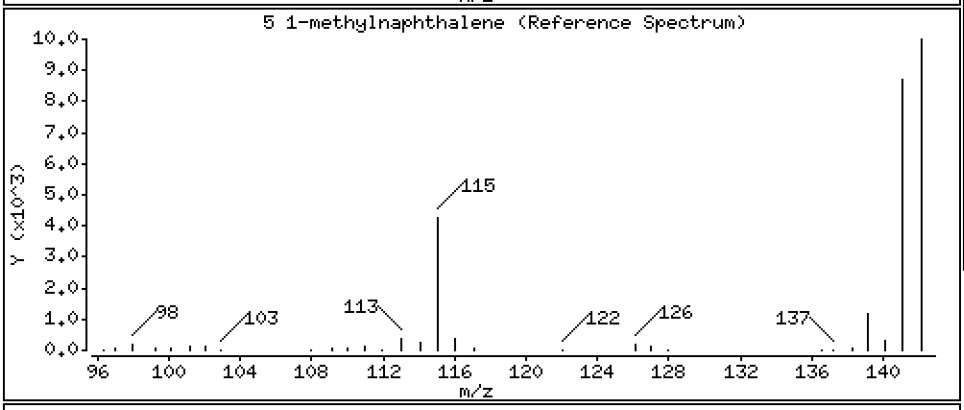
Concentration: 0.009910 ug/mL

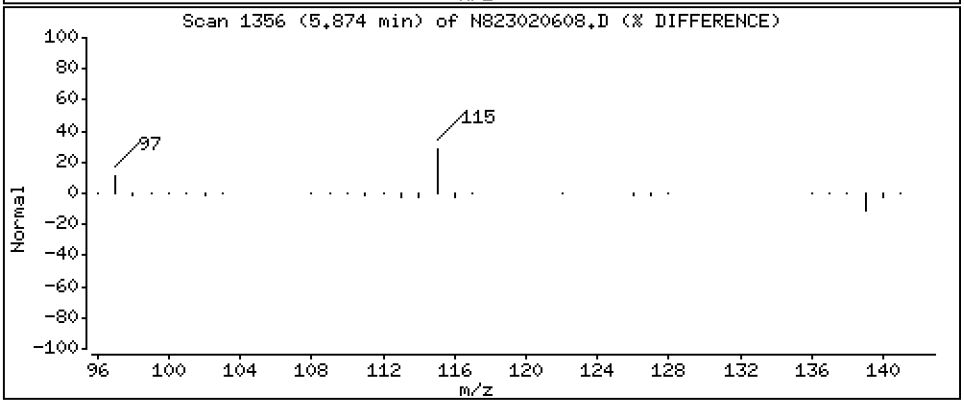












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Date : 06-FEB-2023 15:57

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BLK1,

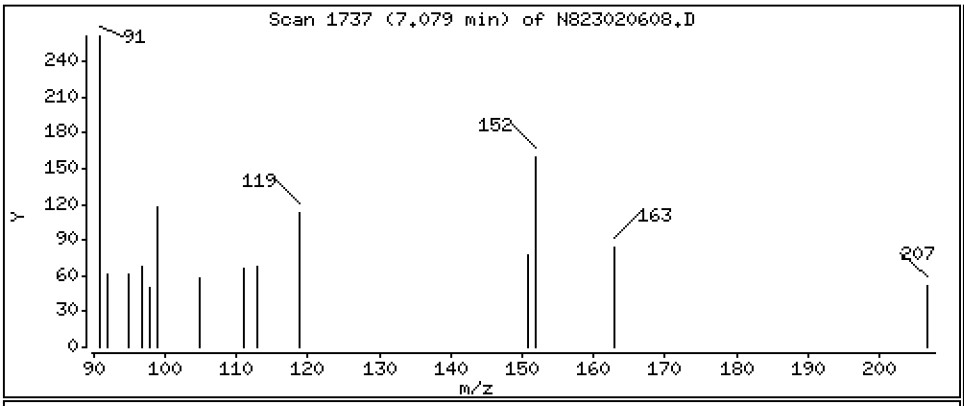
Operator: JZ

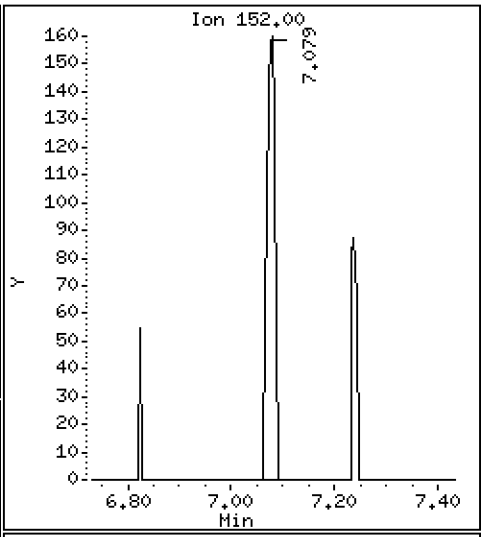
Column phase: Rxi-17sil

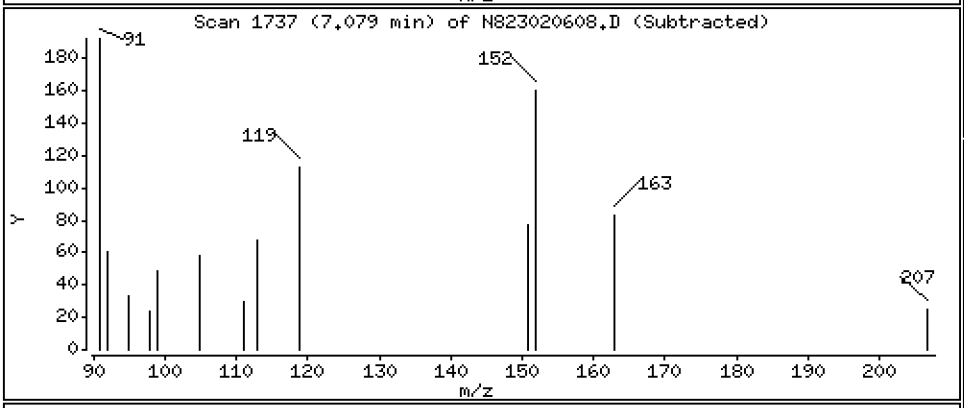
Column diameter: 0.25

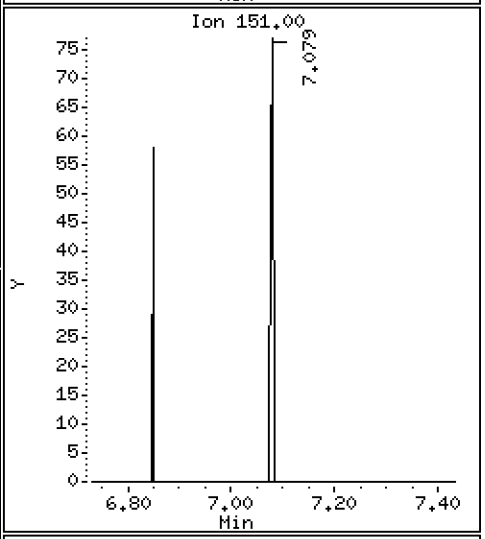
9 Acenaphthylene

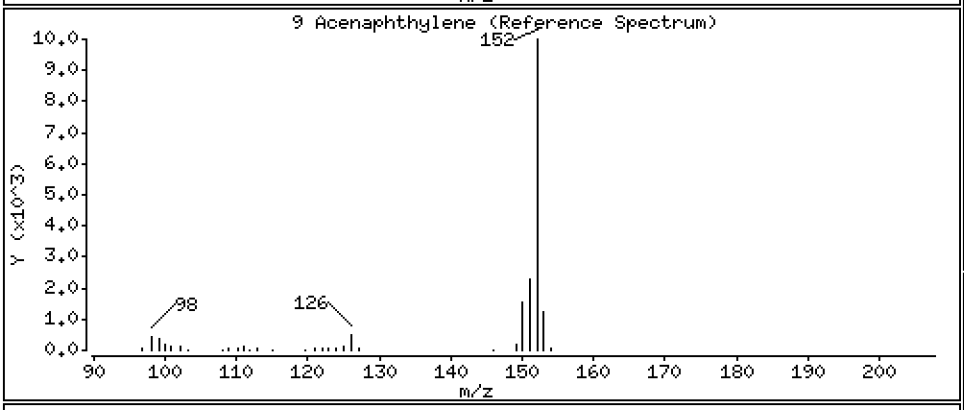
Concentration: 0.008068 ug/mL

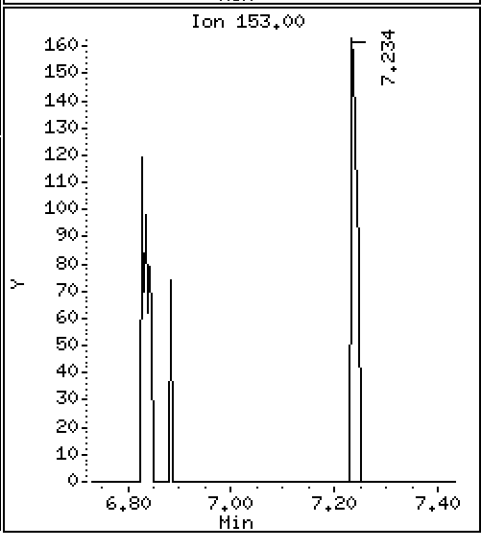


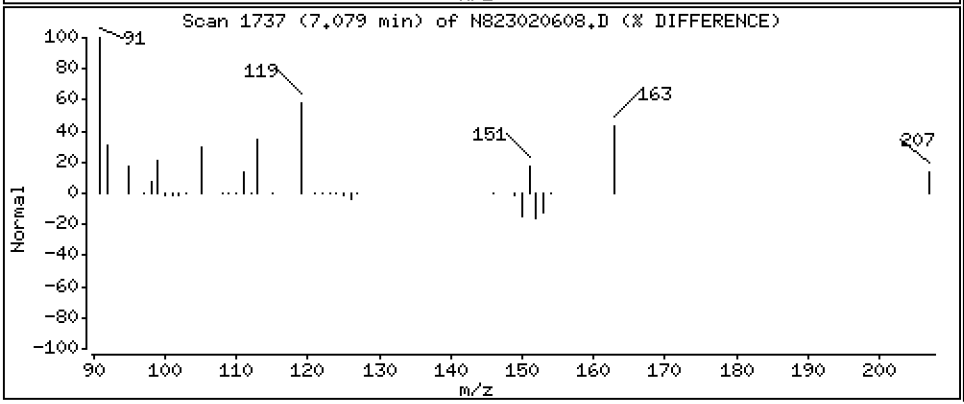












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Date : 06-FEB-2023 15:57

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BLK1,

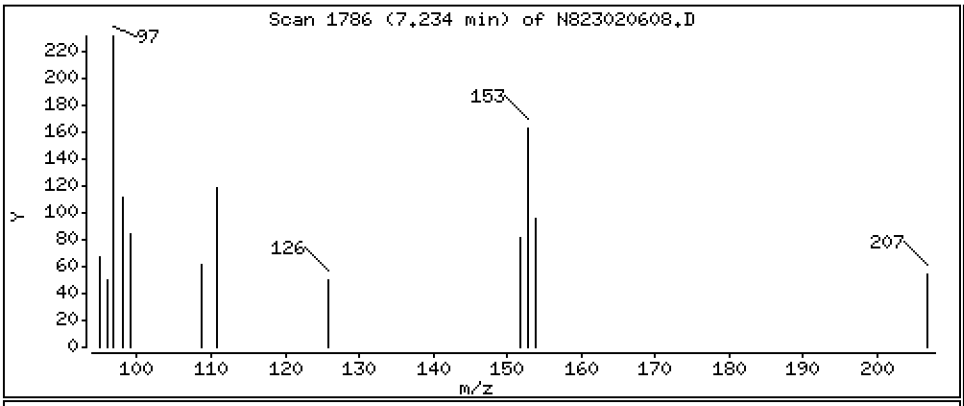
Operator: JZ

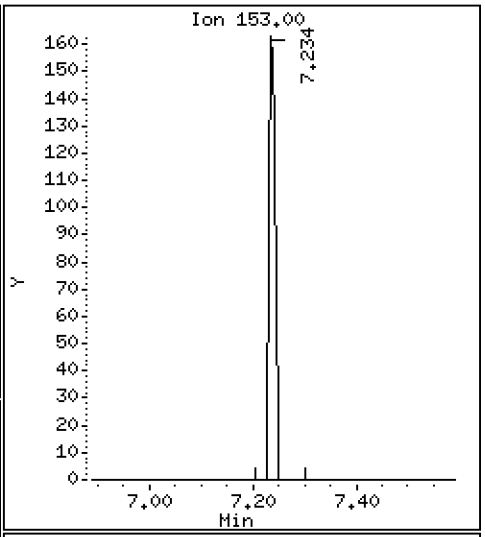
Column phase: Rxi-17sil

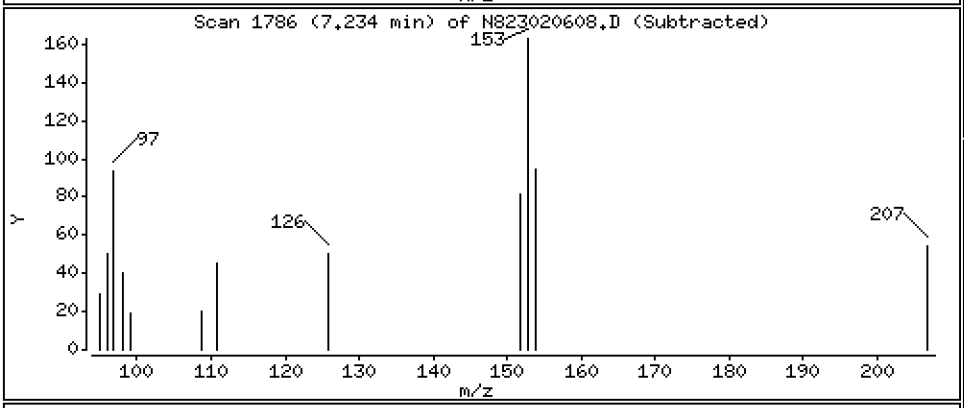
Column diameter: 0.25

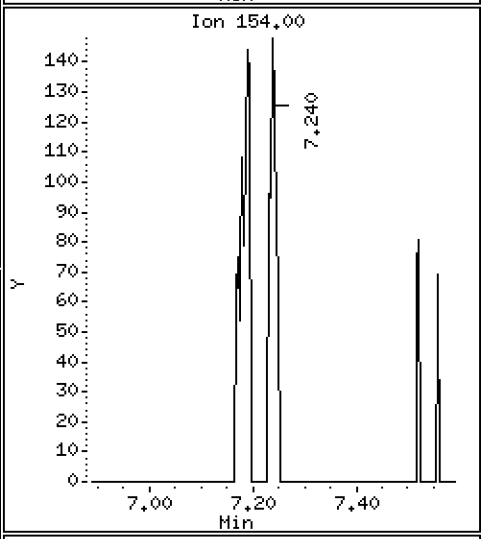
11 Acenaphthene

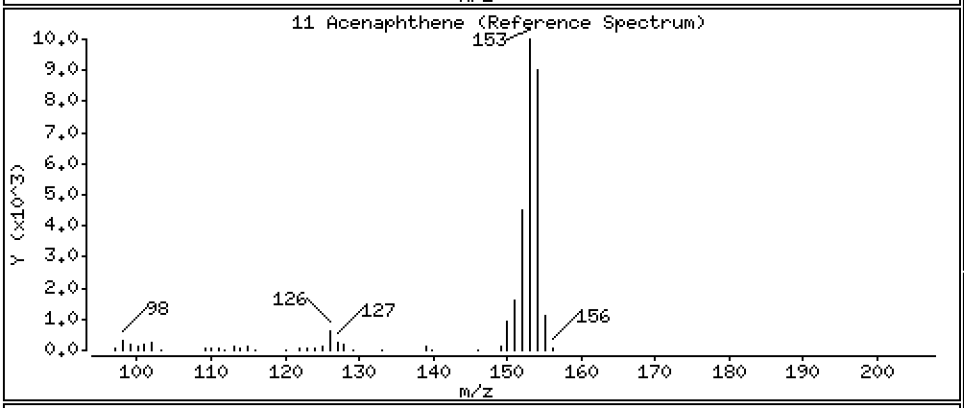
Concentration: 0.009619 ug/mL

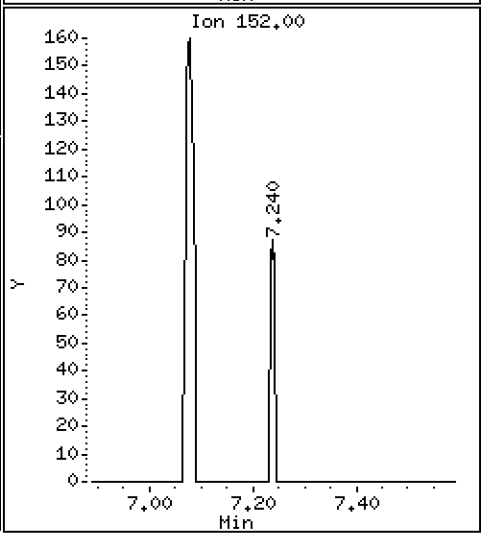


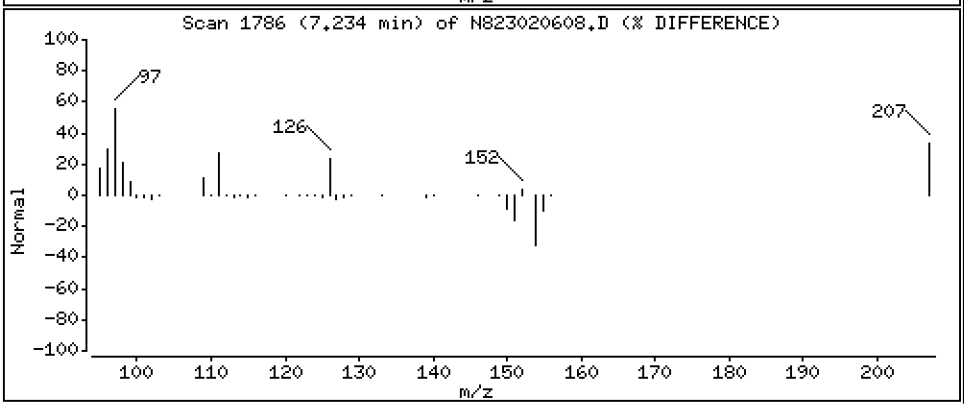












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020608.D

Date : 06-FEB-2023 15:57

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BLK1,

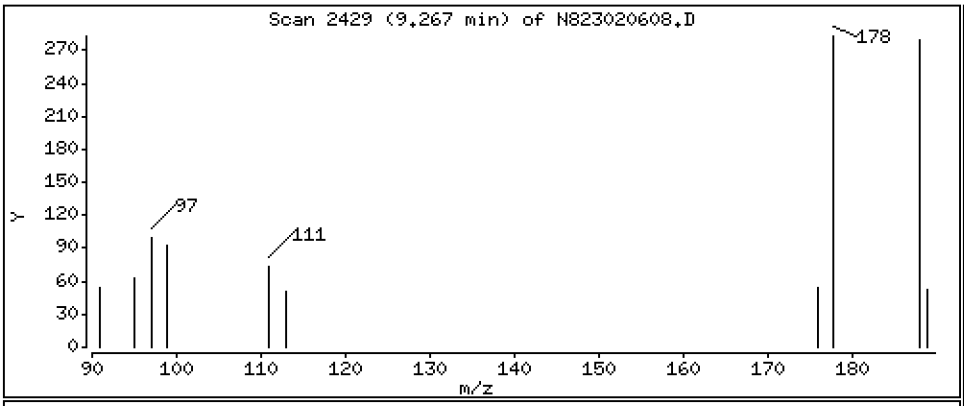
Operator: JZ

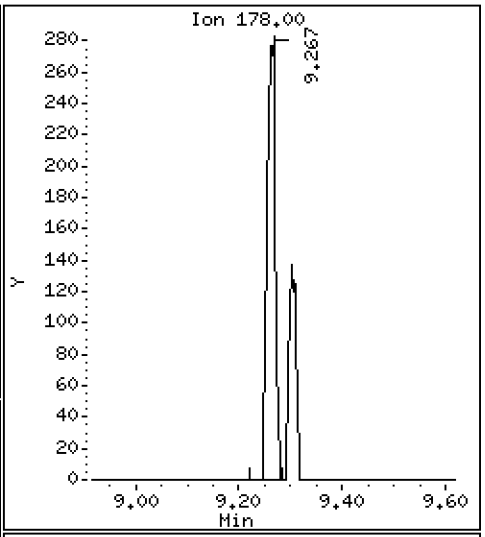
Column phase: Rxi-17sil

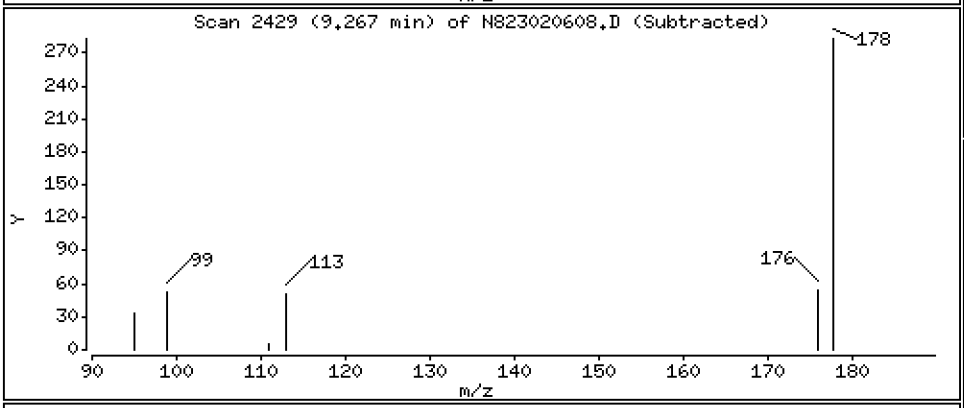
Column diameter: 0.25

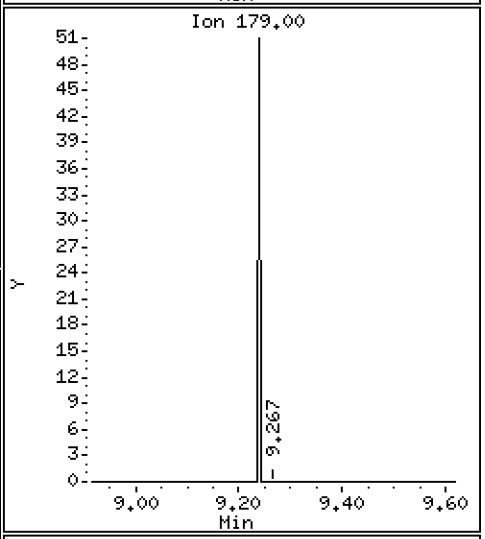
16 Phenanthrene

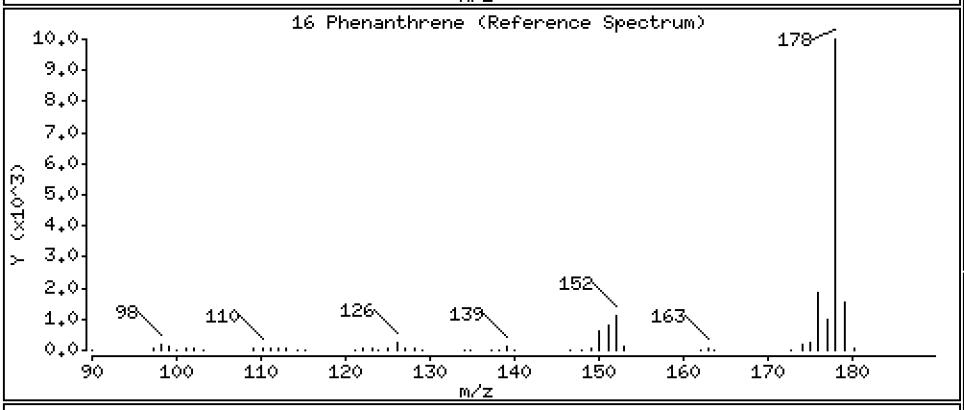
Concentration: 0.01235 ug/mL

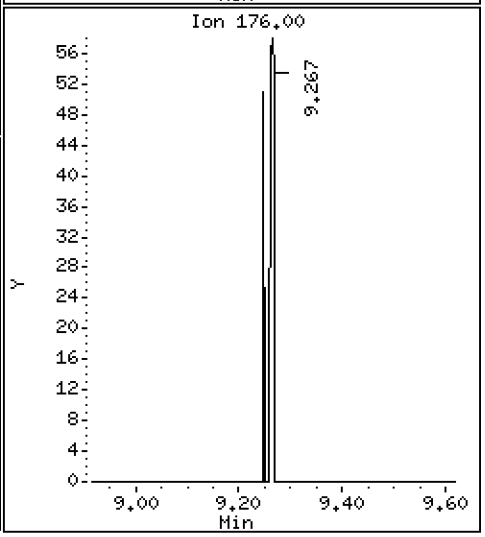


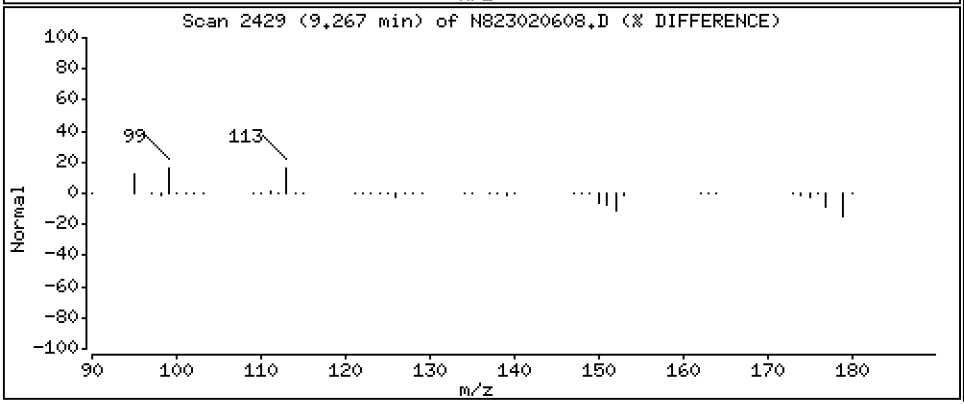












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020608.D
Lab Smp Id: BLA0683-BLK1
Inj Date : 06-FEB-2023 15:57
Operator : JZ Inst ID: nt8.i
Smp Info : BLA0683-BLK1,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
Meth Date : 07-Feb-2023 13:04 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PNAXMDL.sub
Target Version: 4.14
Processing Host: JIANQING-202105

								CONCENTRATIONS	
		QUANT SIG						ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
*	1 Naphthalene-d8	136	4.890	4.900	(1.000)	48985		2.00000	
	2 Naphthalene	128	4.919	4.928	(1.006)	388		0.01704	0.01704
$	3 2-Methylnaphthalene-d10	152	5.627	5.634	(1.151)	33328		2.49472	2.495
	4 2-Methylnaphthalene	141	5.675	5.681	(1.160)	193		0.01541	0.01541
	5 1-methylnaphthalene	141	5.874	5.880	(1.201)	126		0.00991	0.009910
	9 Acenaphthylene	152	7.079	7.082	(0.985)	174		0.00807	0.008068
*	10 Acenaphthene-d10	164	7.189	7.189	(1.000)	28561		2.00000	
	11 Acenaphthene	153	7.233	7.240	(1.006)	139		0.00962	0.009619(M)
	12 Dibenzofuran	168	Compound Not Detected.						
	14 Fluorene	166	Compound Not Detected.						
*	15 Phenanthrene-d10	188	9.229	9.232	(1.000)	52393		2.00000	
	16 Phenanthrene	178	9.267	9.267	(1.004)	316		0.01235	0.01235(M)
	17 Anthracene	178	Compound Not Detected.						
	19 Carbazole	167	Compound Not Detected.						
	22 Fluoranthene	202	Compound Not Detected.						
$	21 Fluoranthene-d10	212	11.009	11.009	(1.193)	68900		2.98067	2.981
	23 Pyrene	202	Compound Not Detected.						
	24 Benzo(a)anthracene	228	Compound Not Detected.						
*	25 Chrysene-d12	240	14.196	14.202	(1.000)	40654		2.00000	
	27 Chrysene	228	Compound Not Detected.						
	28 Benzo(b)fluoranthene	252	Compound Not Detected.						
	29 Benzo(k)fluoranthene	252	Compound Not Detected.						
	30 Benzo(j)fluoranthene	252	Compound Not Detected.						
	31 Total Benzofluoranthenes	252	Compound Not Detected.						
	32 Benzo(a)pyrene	252	Compound Not Detected.						
*	33 Perylene-d12	264	18.104	18.107	(1.000)	24723		2.00000	
	35 Perylene	252	Compound Not Detected.						
$	36 Dibenzo(a,h)anthracene-d14	292	20.545	20.549	(1.135)	44884		4.63342	4.633
	37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.						
	38 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
	39 Benzo(g,h,i)perylene	276	Compound Not Detected.						

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823020608.D
Lab Smp Id: BLA0683-BLK1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 06-FEB-2023
Calibration Time: 15:15
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44336	22168	88672	48985	10.49
10 Acenaphthene-d10	26127	13064	52254	28561	9.32
15 Phenanthrene-d10	47424	23712	94848	52393	10.48
25 Chrysene-d12	36794	18397	73588	40654	10.49
33 Perylene-d12	36636	18318	73272	24723	-32.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.90	4.40	5.40	4.89	-0.19
10 Acenaphthene-d10	7.19	6.69	7.69	7.19	0.00
15 Phenanthrene-d10	9.23	8.73	9.73	9.23	-0.03
25 Chrysene-d12	14.20	13.70	14.70	14.20	-0.04
33 Perylene-d12	18.11	17.61	18.61	18.10	-0.02

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

REVIEW SUMMARY FOR FILE - N823020608.D

Lab ID: BLA0683-BLK1
nt8.i, 20230206A.b\FSIMPNA230119.m,   06-FEB-2023 15:57

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

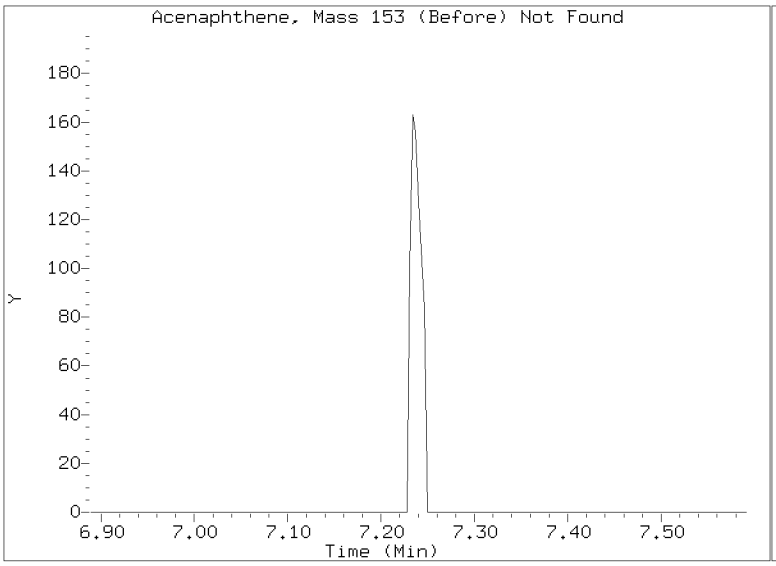
No RRT check performed

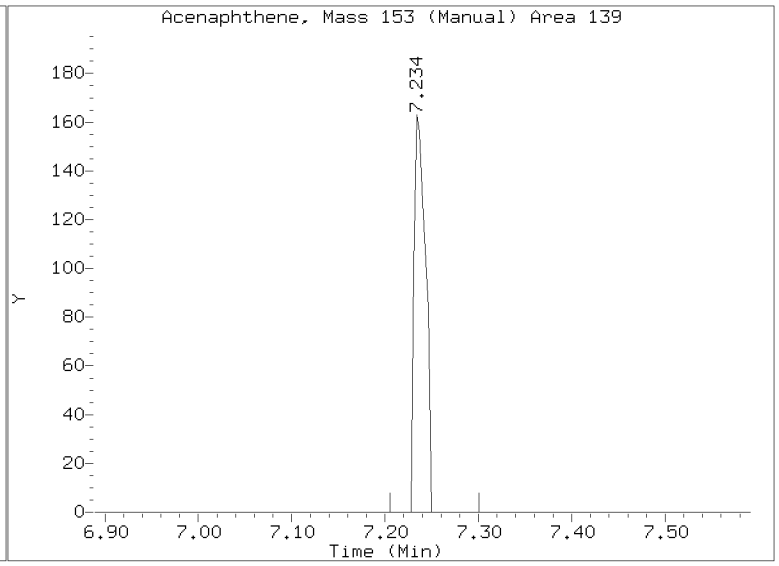
On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

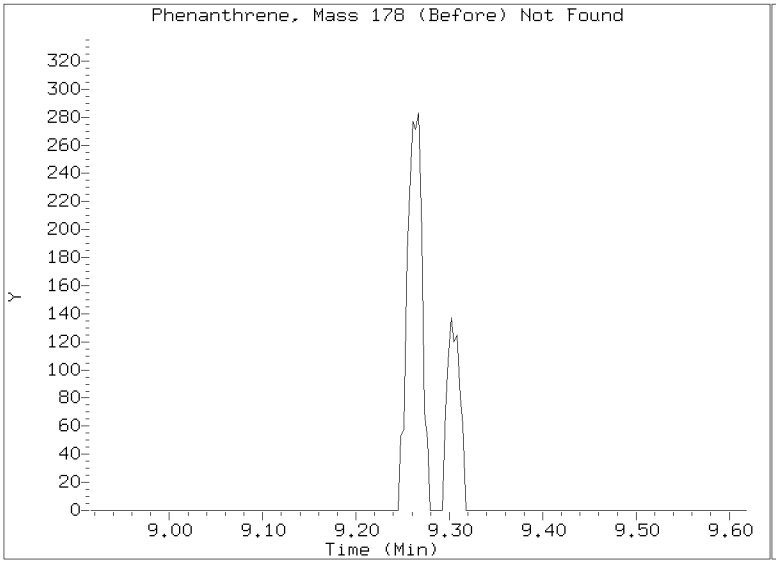
* Only compounds listed in the work order have been verified by the analyst *

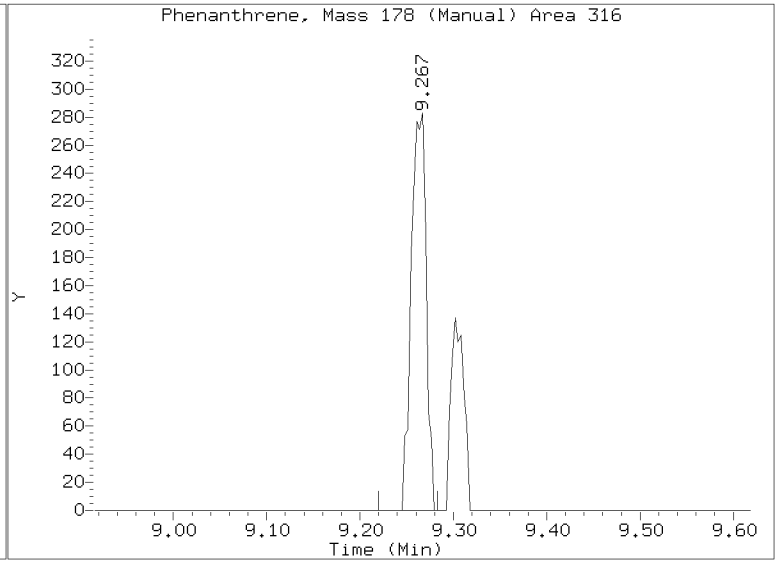
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020608.D
Injection Date: 06-FEB-2023 15:57
Lab ID:BLA0683-BLK1 Client ID:
Report Date: 02/07/2023 13:19









Analytical Resources, LLC
Analytical Chemists and Consultants

LCS / LCS DUPLICATE RECOVERY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/03/23 21:37
Batch:	BLA0673	Laboratory ID:	BLA0673-BS2
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	500	359		71.9	36 - 120
1,2-Dichlorobenzene	500	363		72.7	36 - 120
Benzyl Alcohol	500	411		82.3	25 - 123
Benzoic acid	2300	2540	Q	110	10 - 160
2,4-Dimethylphenol	1300	694		53.4	10 - 120
1,2,4-Trichlorobenzene	500	410		81.9	35 - 120
N-Nitrosodiphenylamine	500	371		74.1	27 - 120
Pentachlorophenol	1300	1200	Q	92.1	26 - 120

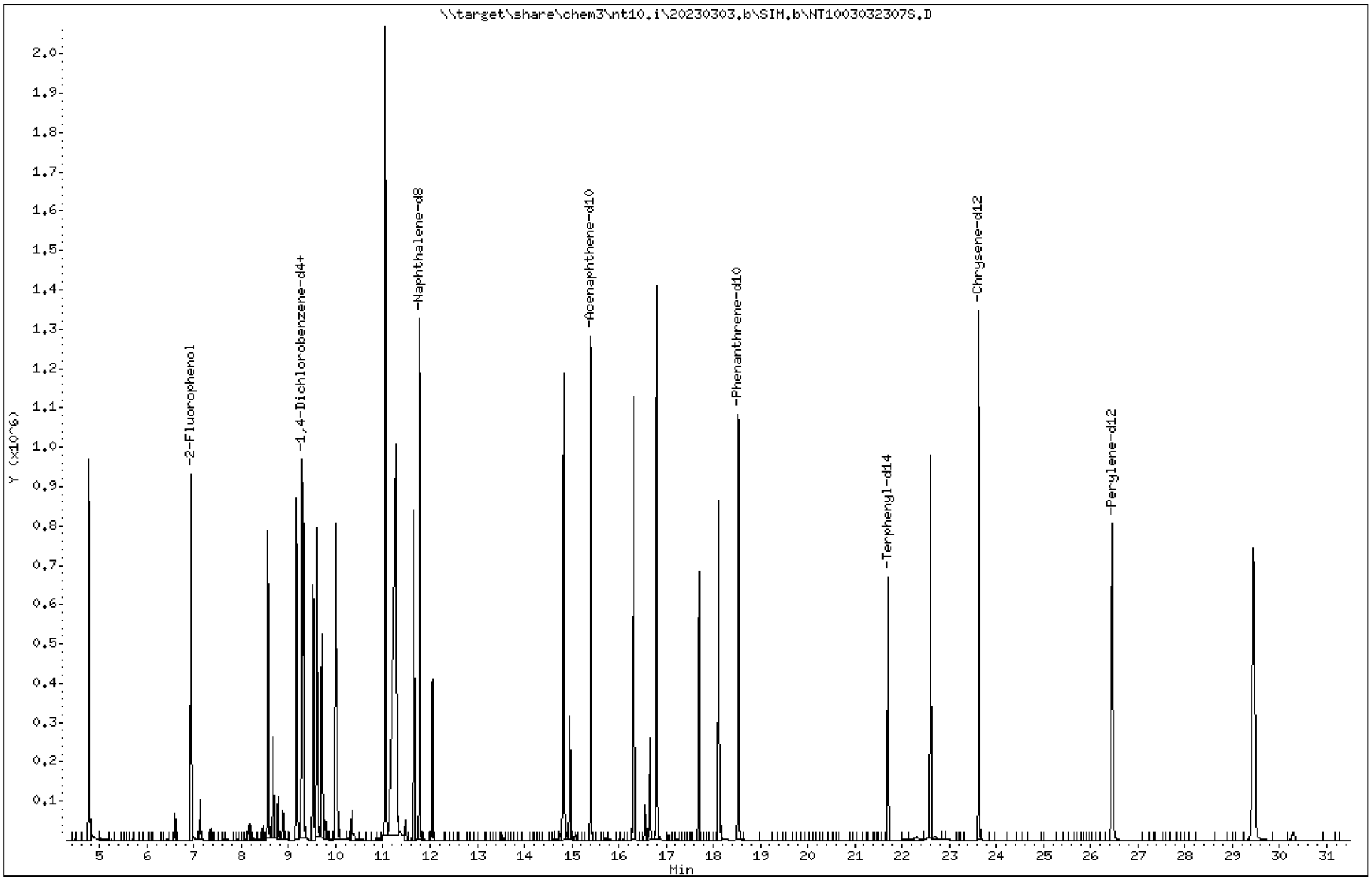
* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	500	348		69.6	3.15	30	36 - 120
1,2-Dichlorobenzene	500	354		70.8	2.64	30	36 - 120
Benzyl Alcohol	500	402		80.5	2.20	30	25 - 123
Benzoic acid	2300	2430	Q	106	4.37	30	10 - 160
2,4-Dimethylphenol	1300	620		47.7	11.3	30	10 - 120
1,2,4-Trichlorobenzene	500	396		79.1	3.46	30	35 - 120
N-Nitrosodiphenylamine	500	390		78.0	5.05	30	27 - 120
Pentachlorophenol	1300	1270	Q	97.7	5.85	30	26 - 120

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323075.D
Date : 03-MAR-2023 21:37
Client ID:
Sample Info: BLA0673-BS1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

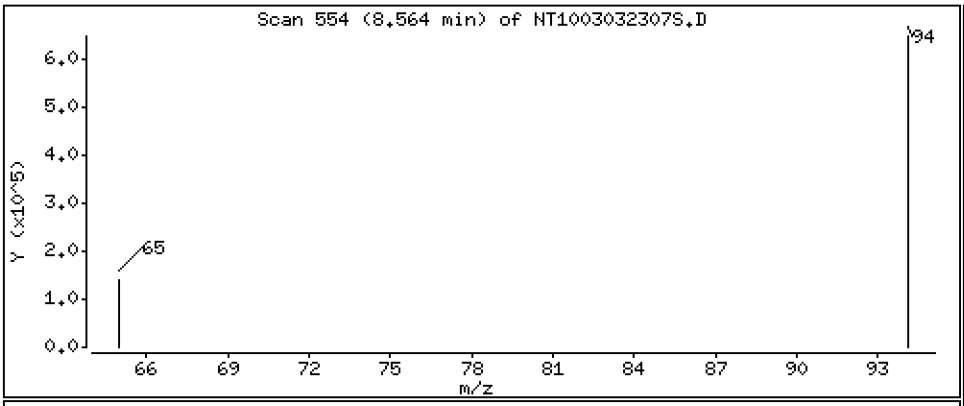
Operator: JGR

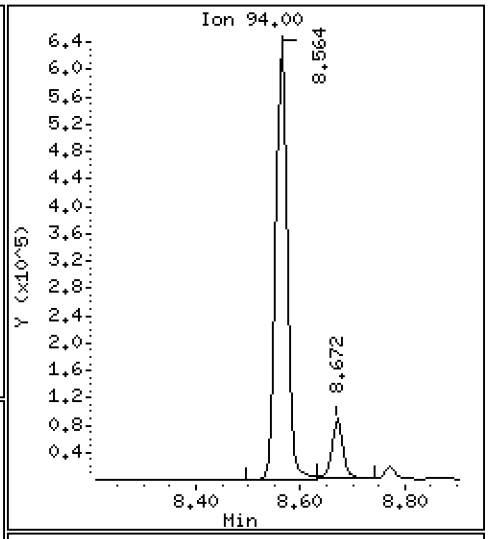
Column phase: ZB-5msi

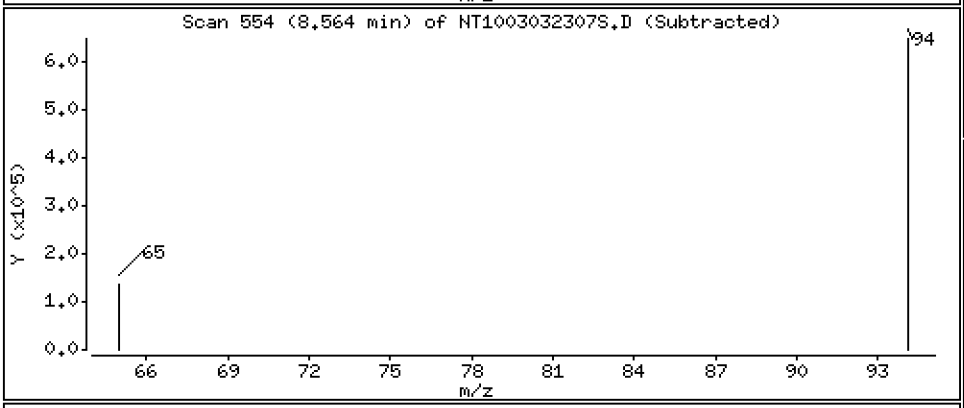
Column diameter: 0.25

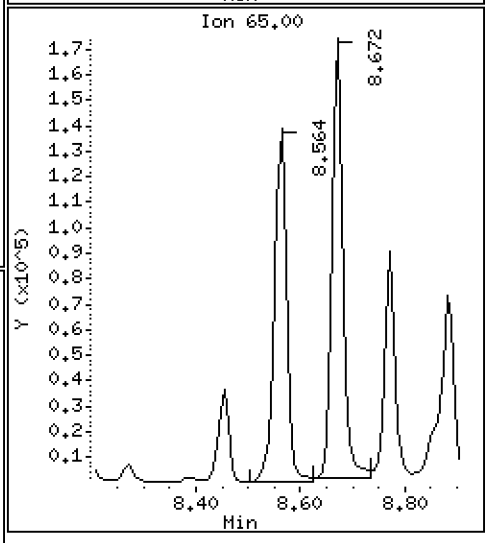
3 Phenol

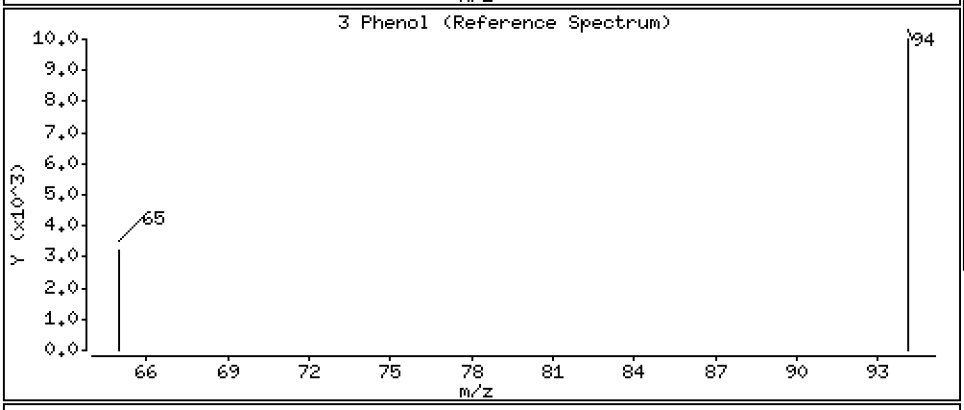
Concentration: 3.715 ug/L

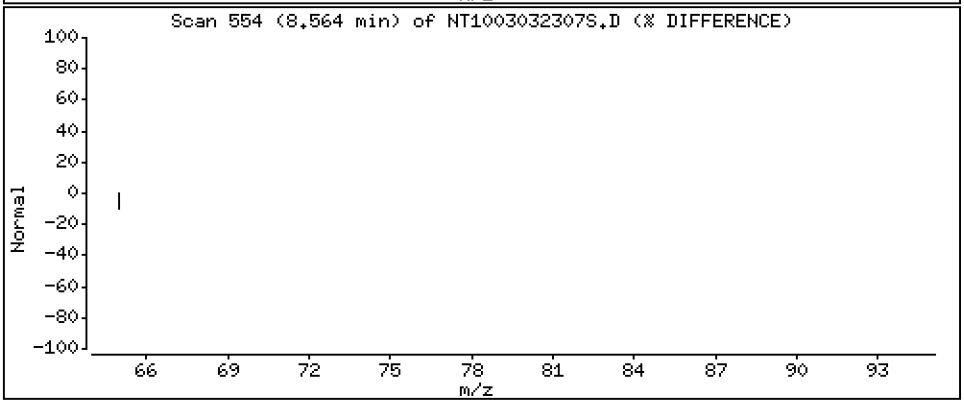












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

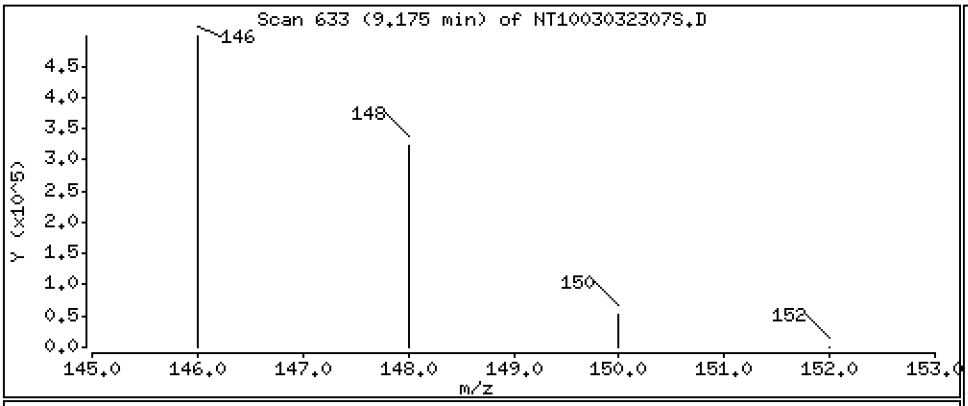
Operator: JGR

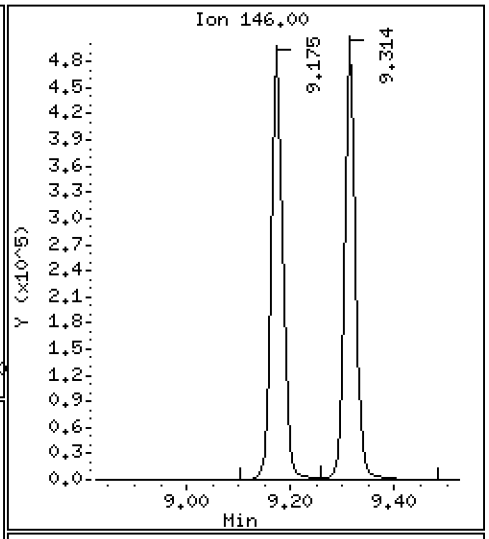
Column phase: ZB-5msi

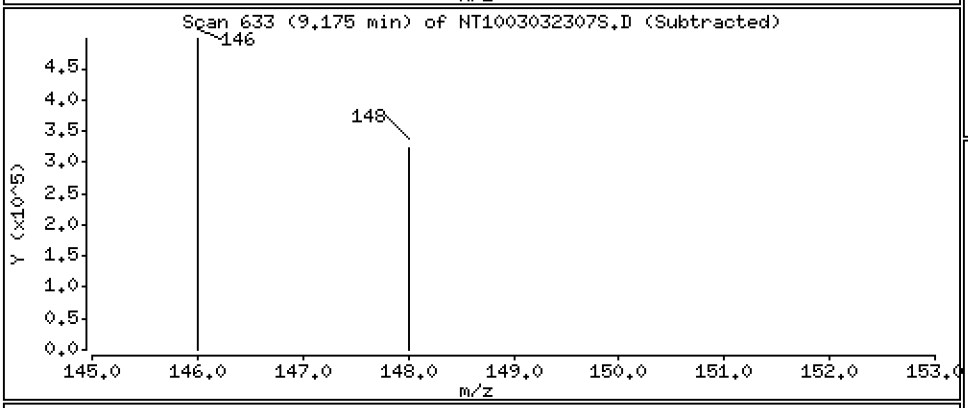
Column diameter: 0.25

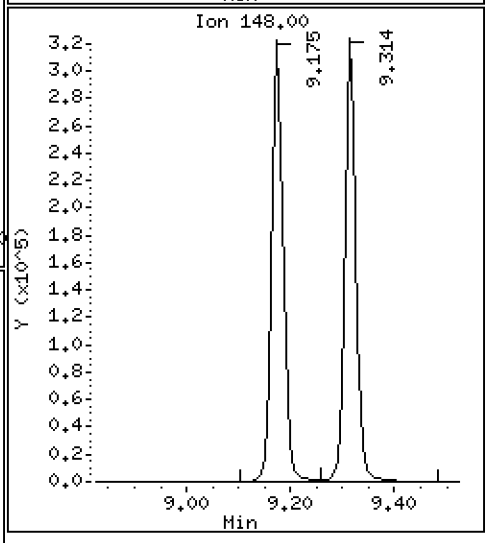
7 1,3-Dichlorobenzene

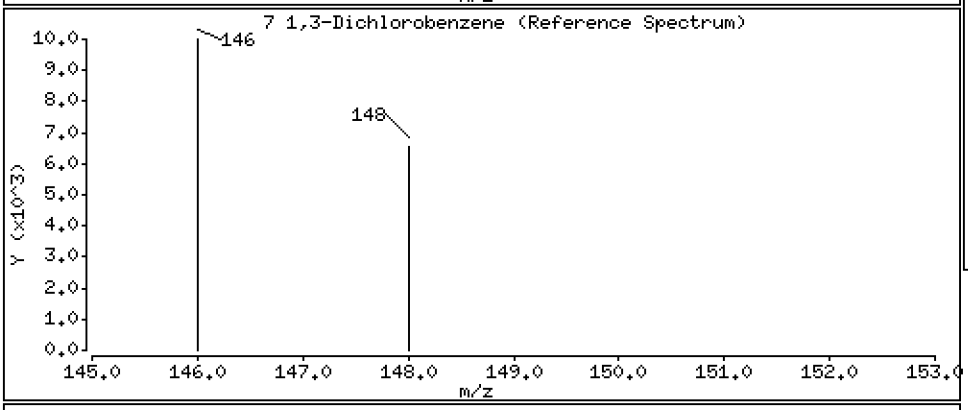
Concentration: 3.493 ug/L

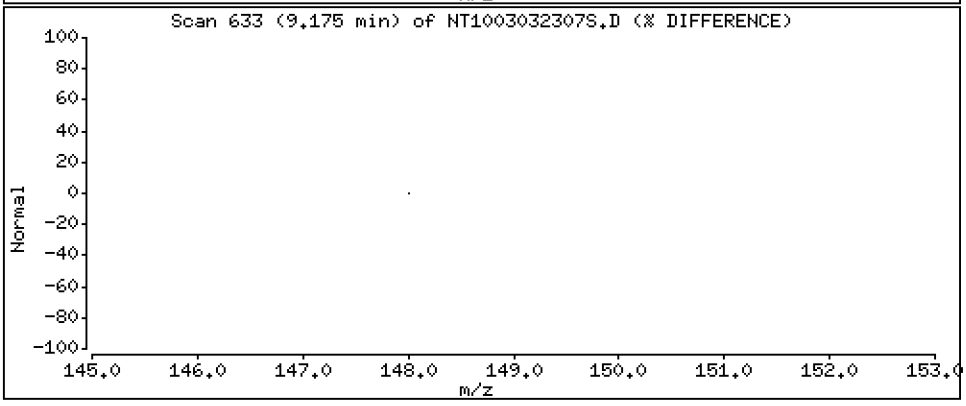












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

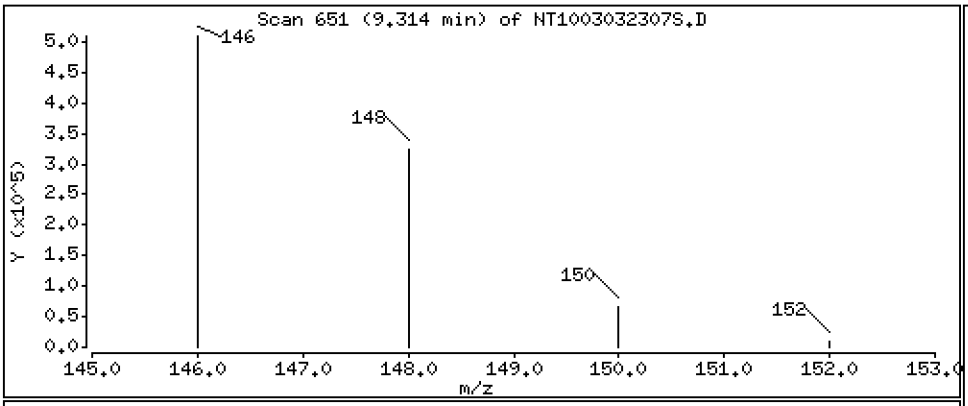
Operator: JGR

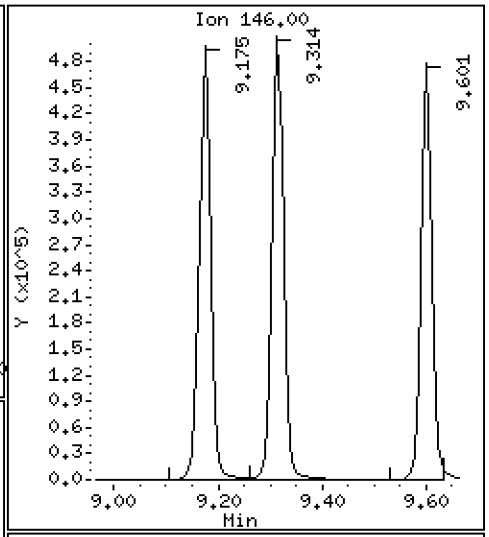
Column phase: ZB-5msi

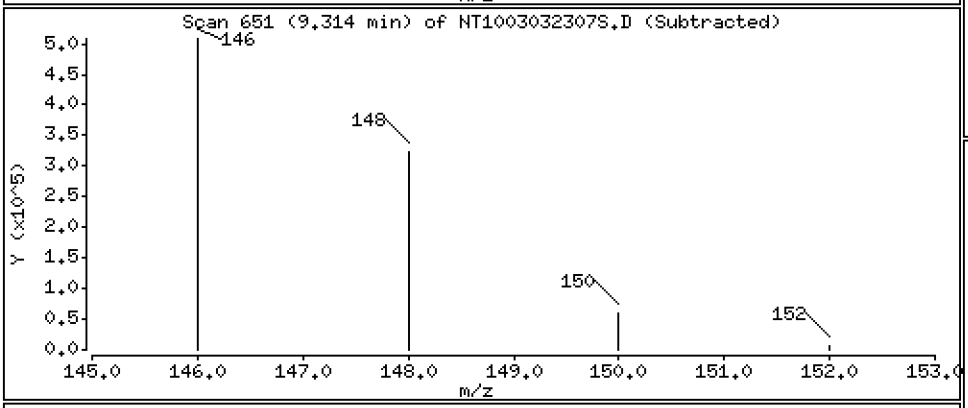
Column diameter: 0.25

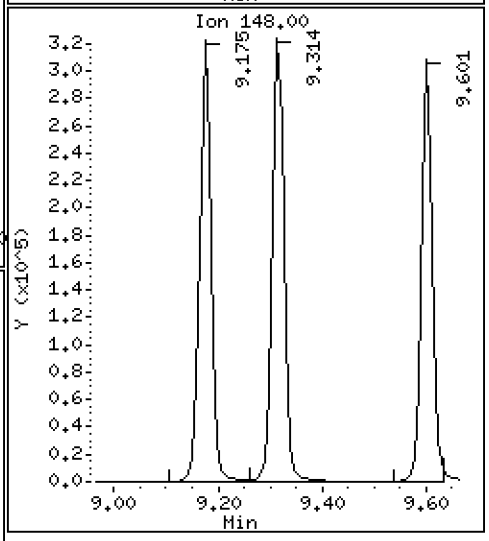
9 1,4-Dichlorobenzene

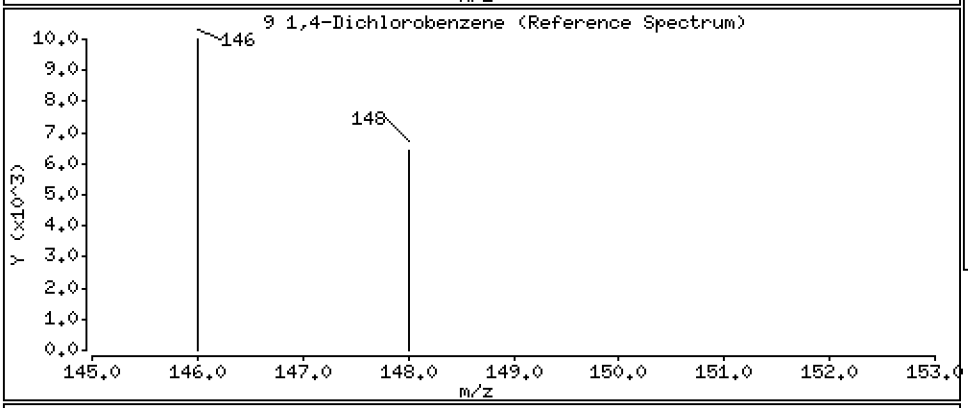
Concentration: 3.593 ug/L

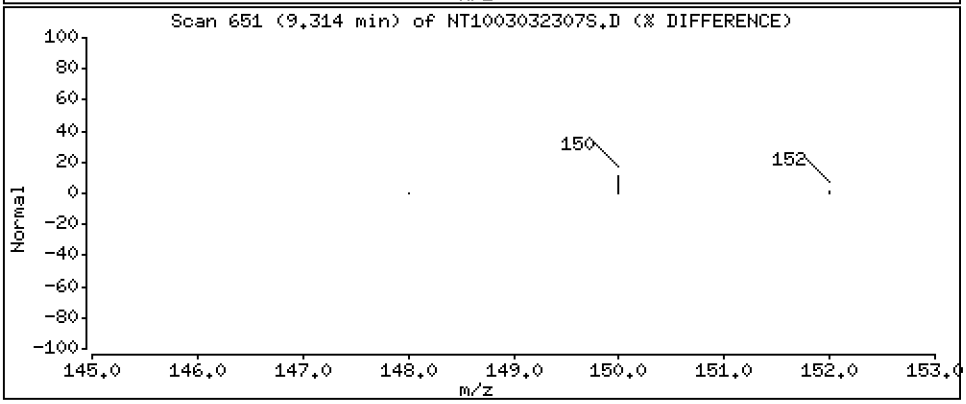












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

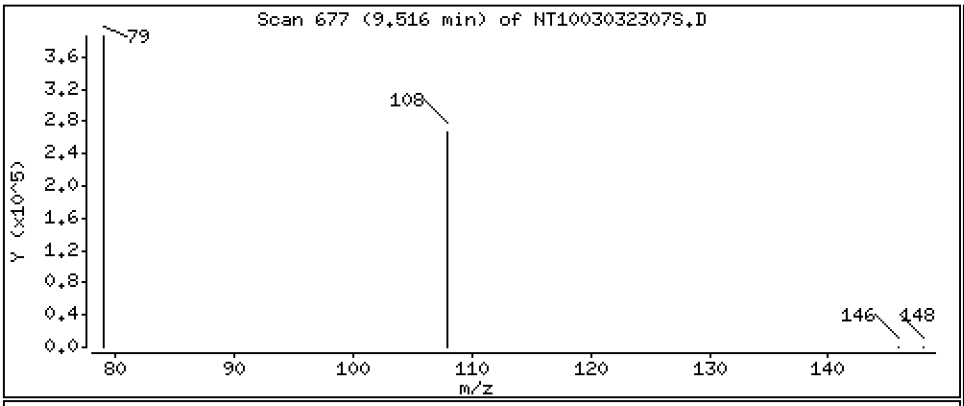
Operator: JGR

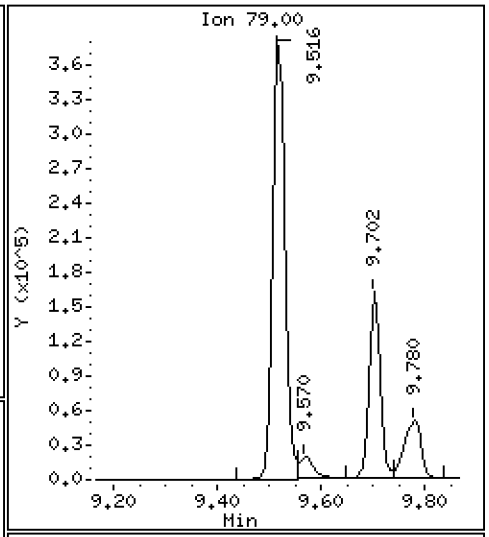
Column phase: ZB-5msi

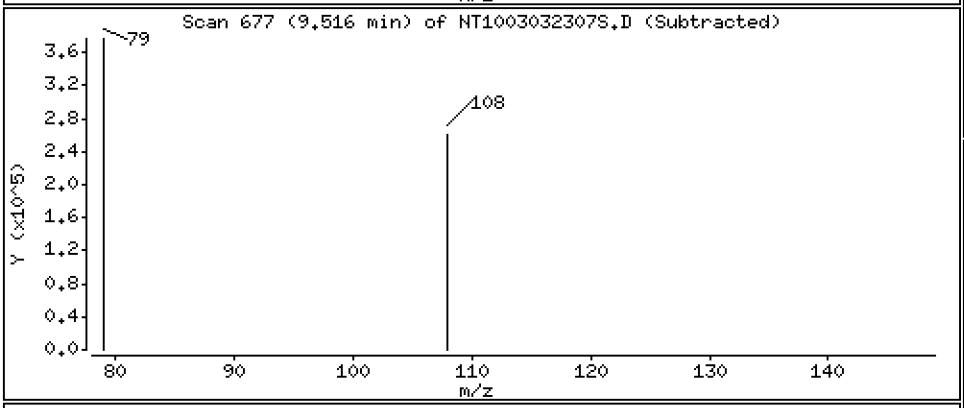
Column diameter: 0.25

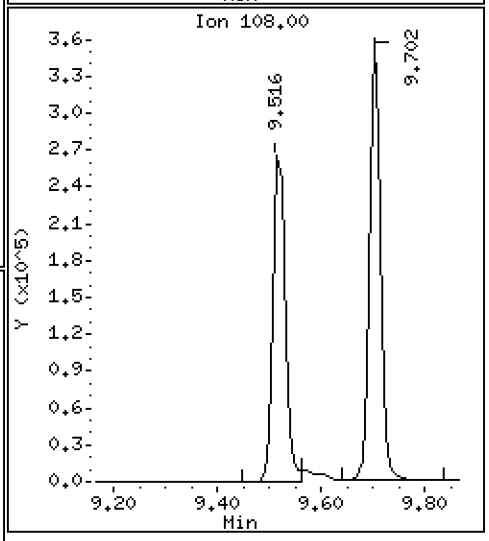
11 Benzyl alcohol

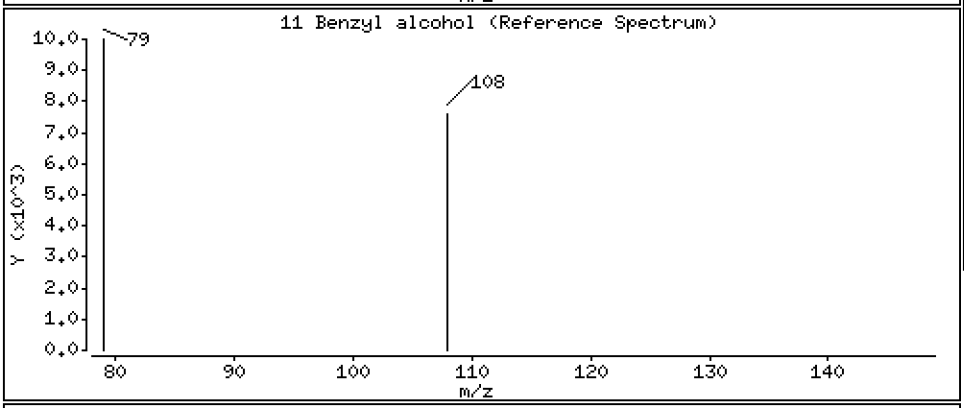
Concentration: 4.114 ug/L

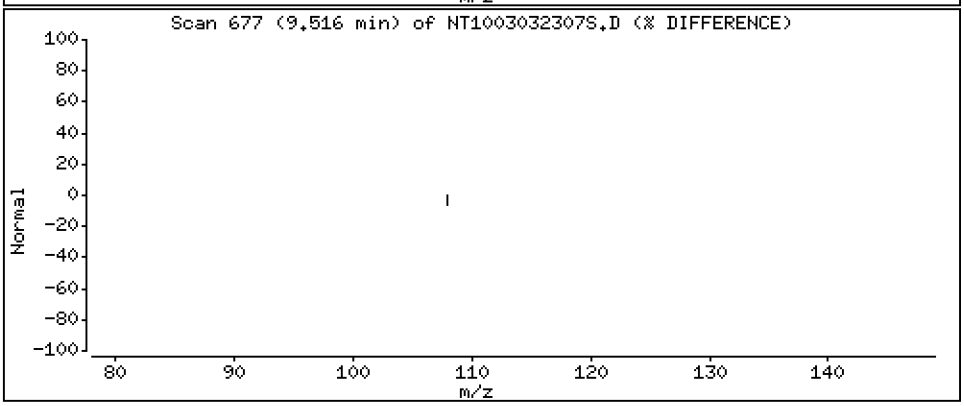












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323075.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

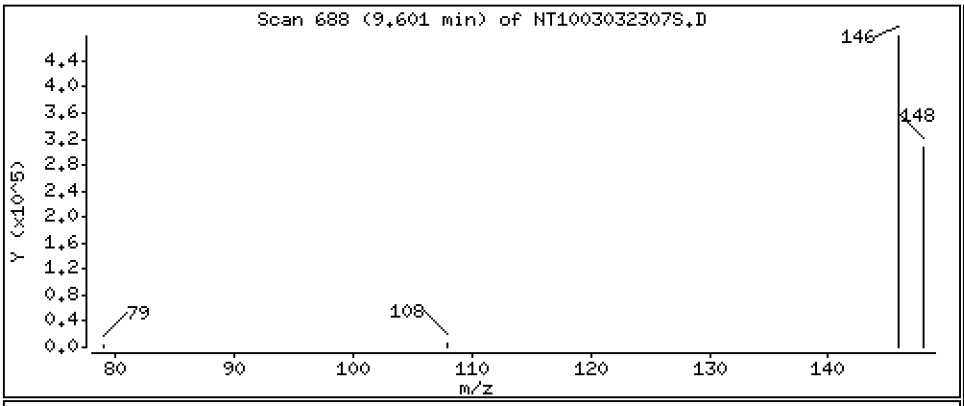
Operator: JGR

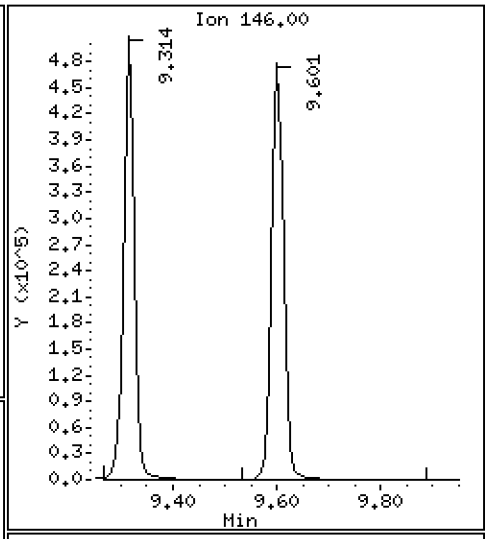
Column phase: ZB-5msi

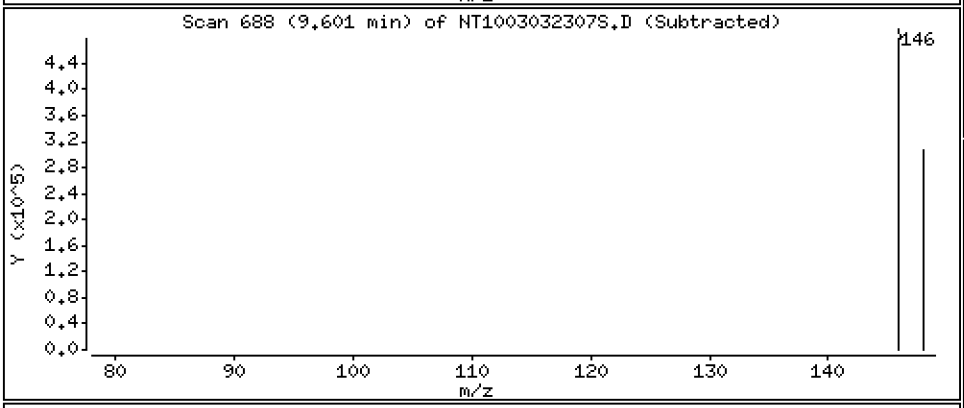
Column diameter: 0.25

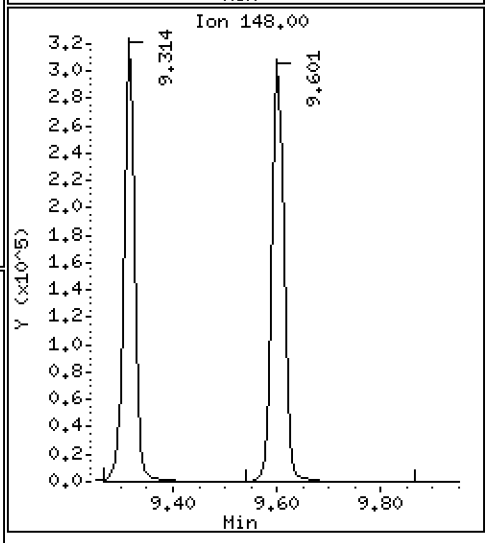
12 1,2-Dichlorobenzene

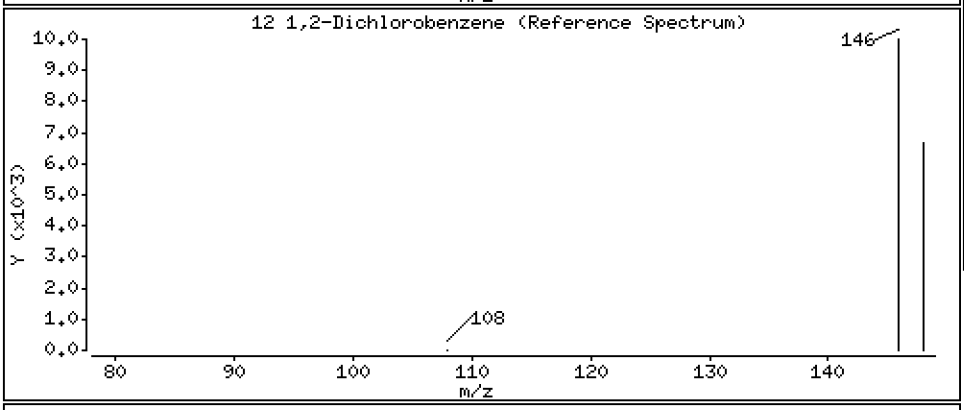
Concentration: 3.633 ug/L

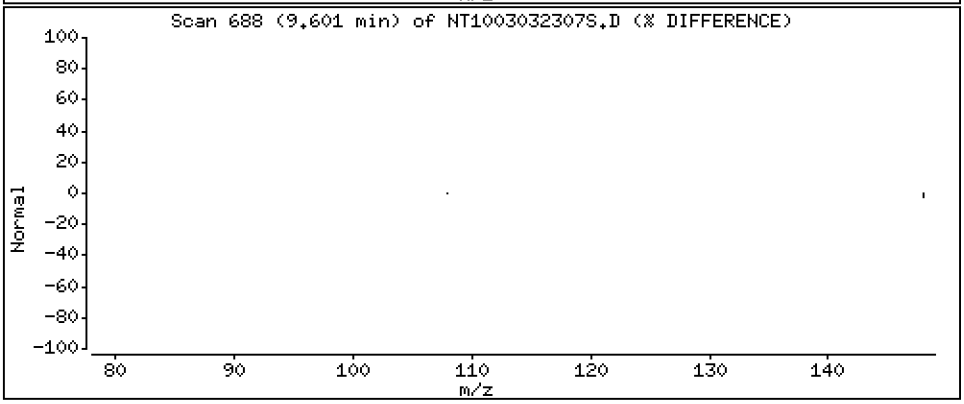












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323075.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

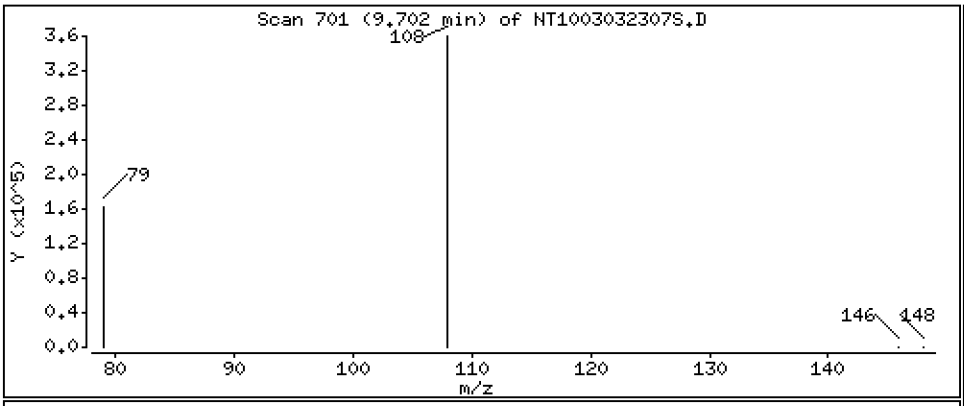
Operator: JGR

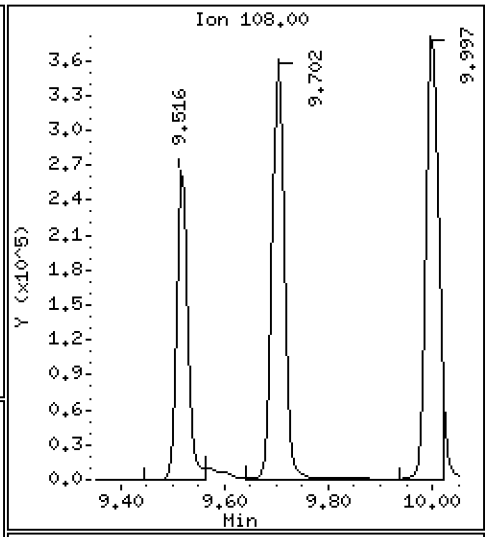
Column phase: ZB-5msi

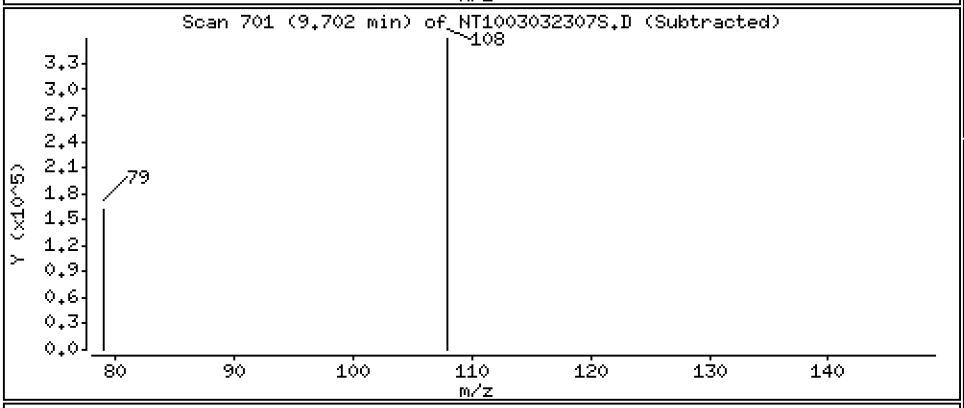
Column diameter: 0.25

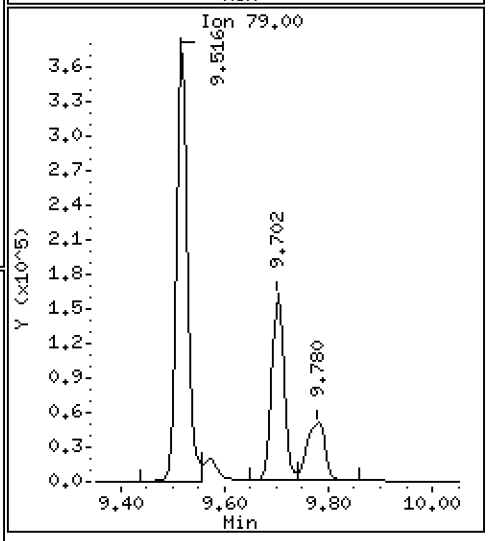
13 2-Methylphenol

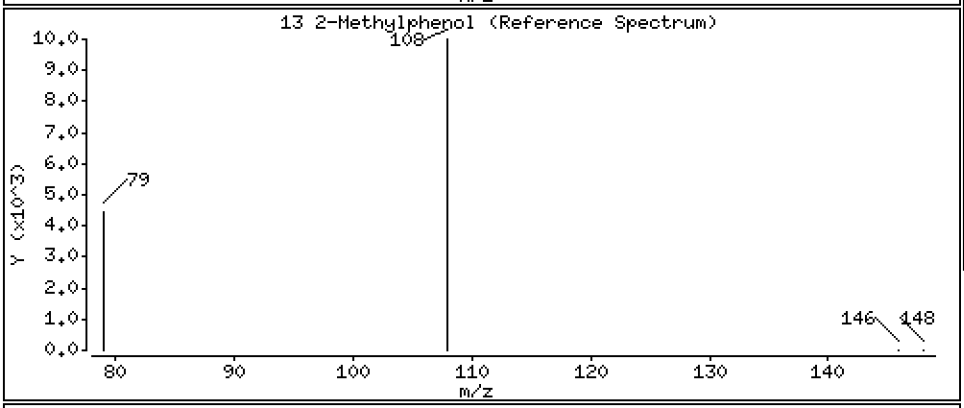
Concentration: 3.703 ug/L

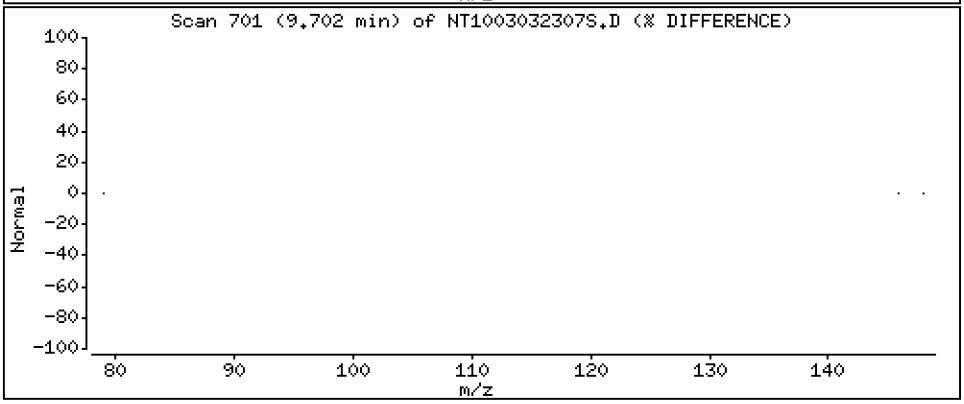












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323075.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

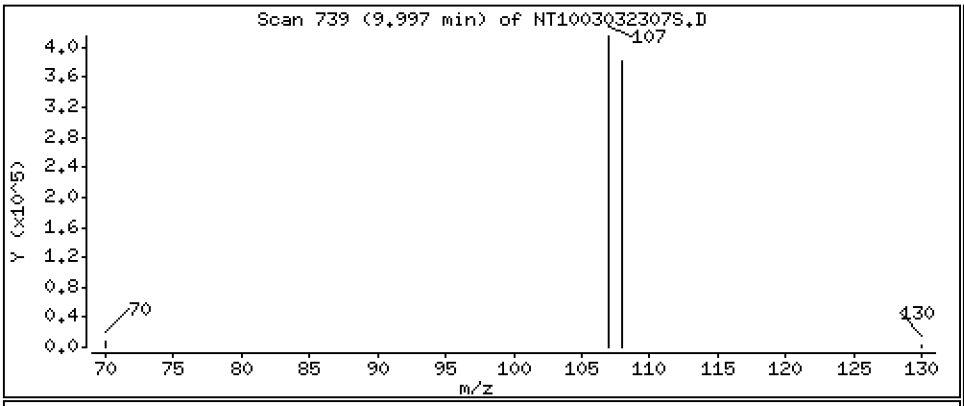
Operator: JGR

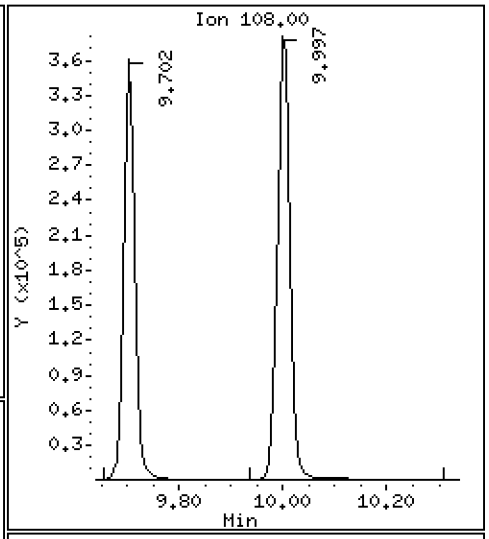
Column phase: ZB-5msi

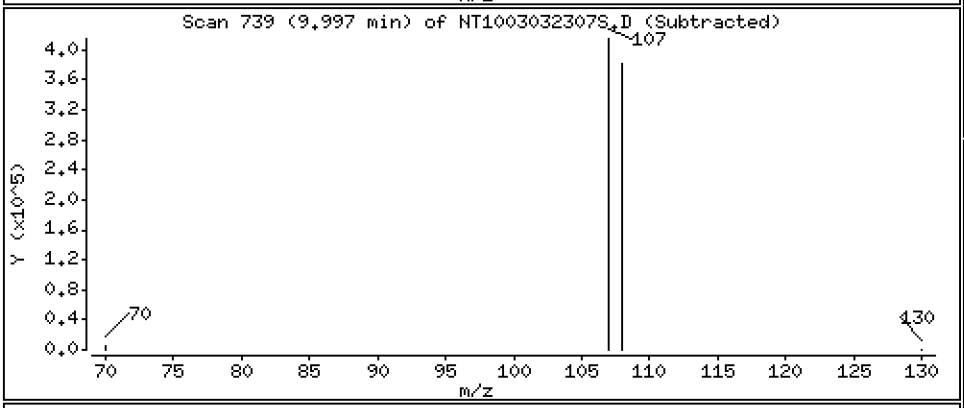
Column diameter: 0.25

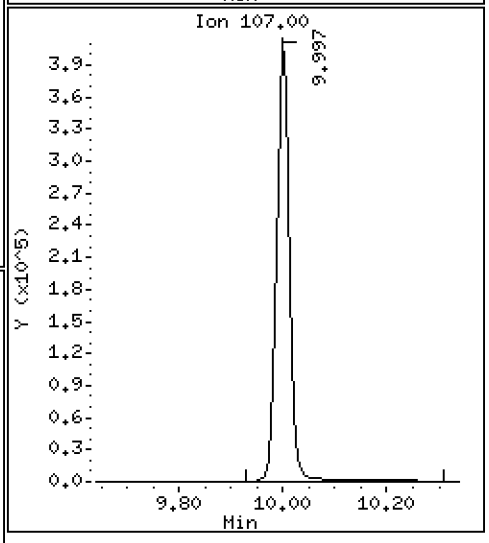
15 4-Methylphenol

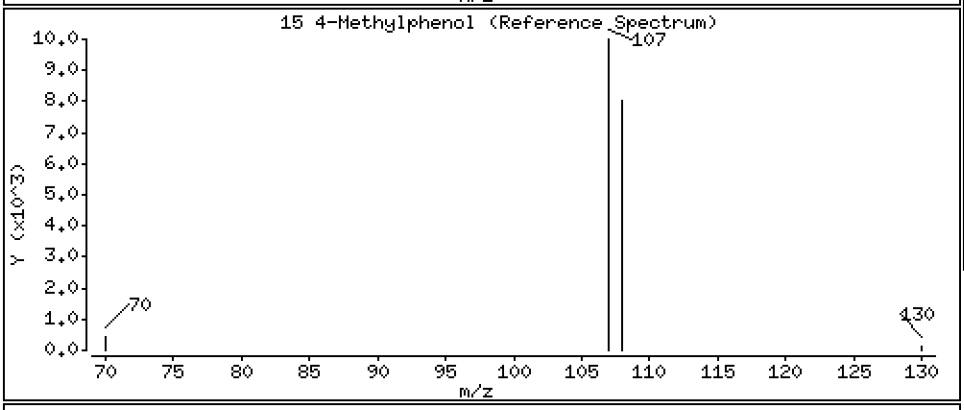
Concentration: 4.079 ug/L

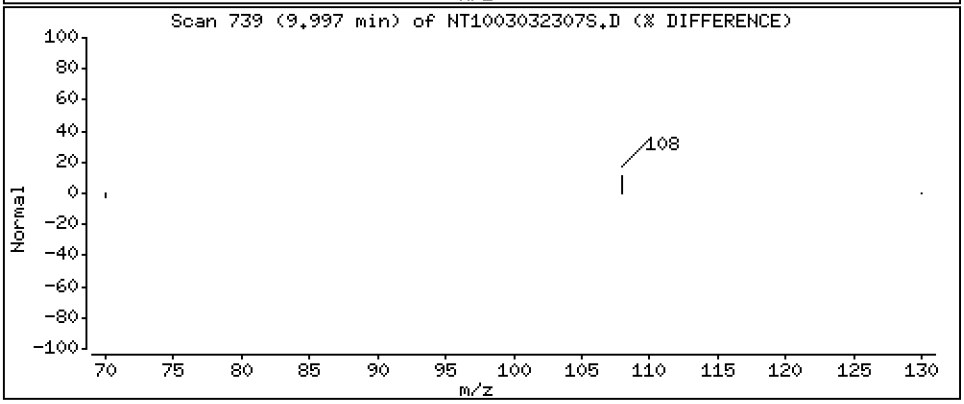












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323075.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

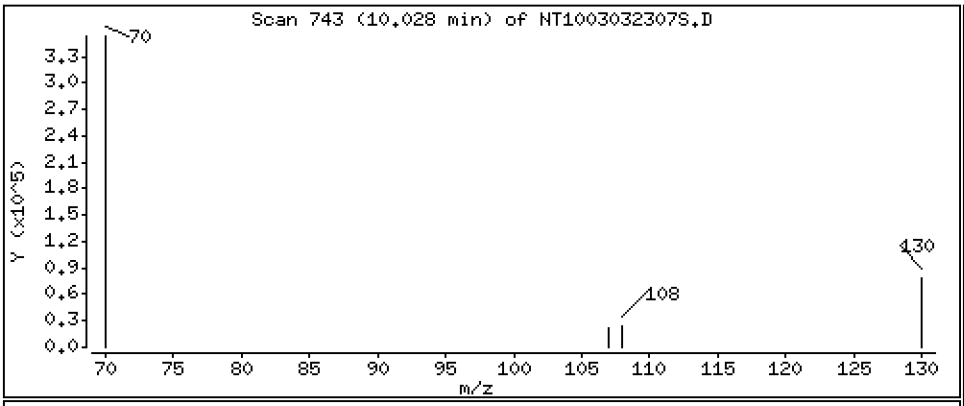
Operator: JGR

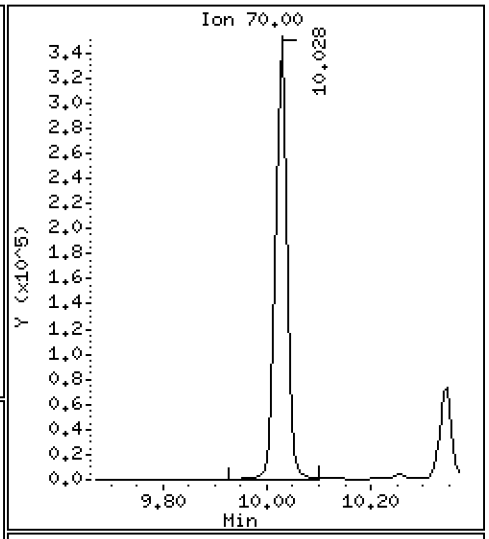
Column phase: ZB-5msi

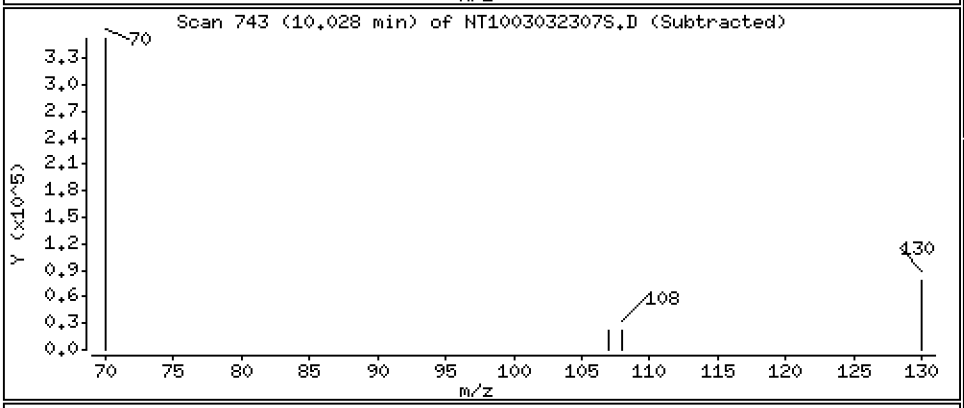
Column diameter: 0.25

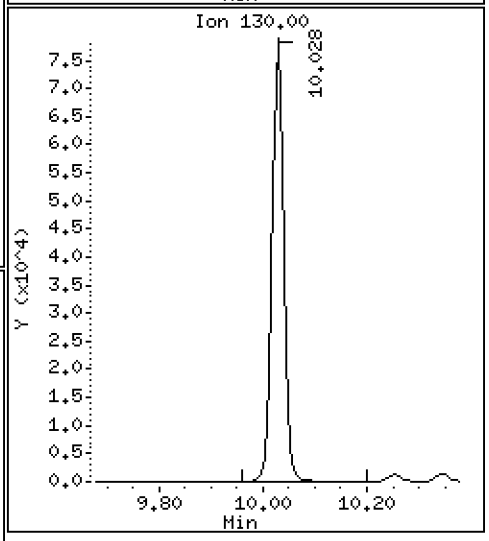
16 N-Nitroso-di-n-propylamine

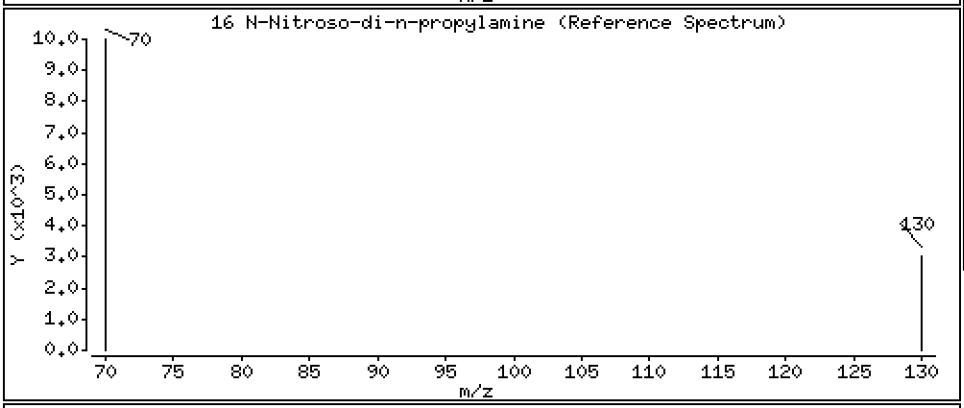
Concentration: 4.771 ug/L

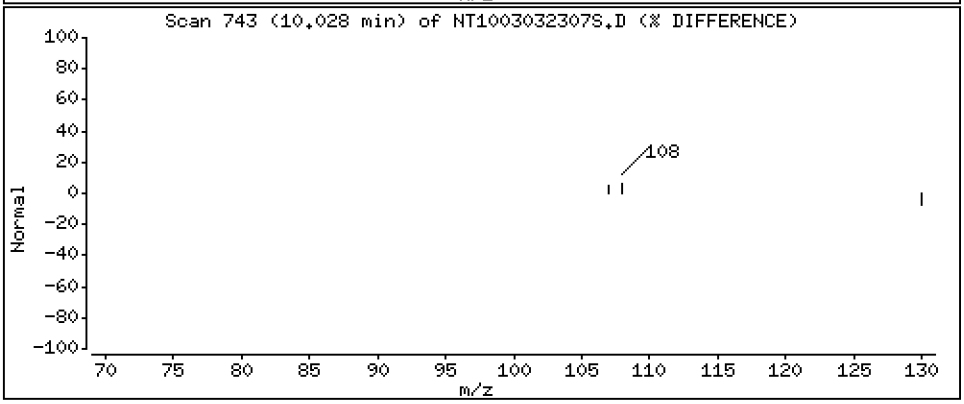












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

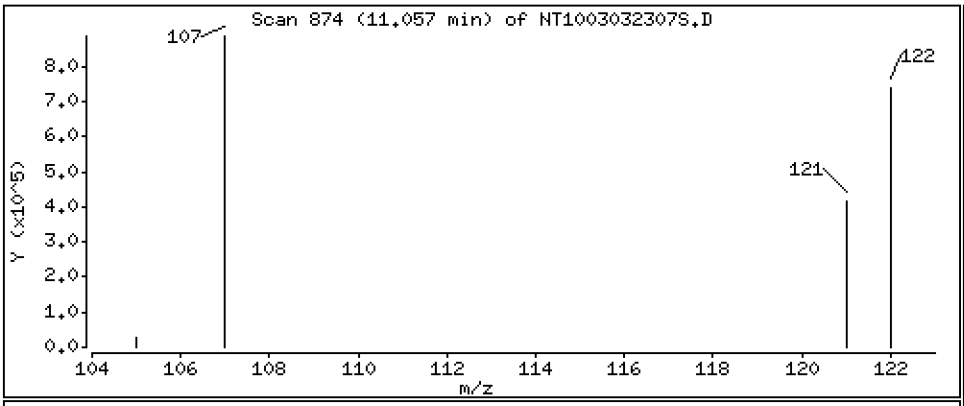
Operator: JGR

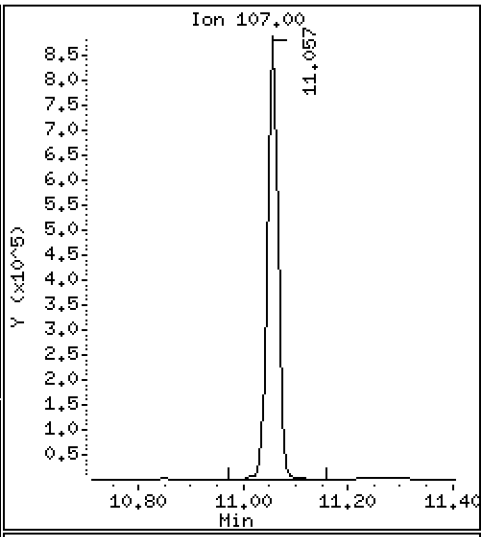
Column phase: ZB-5msi

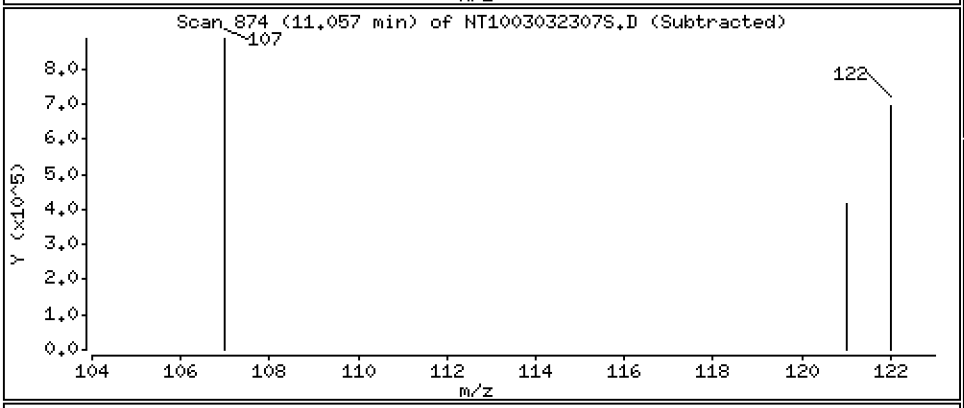
Column diameter: 0.25

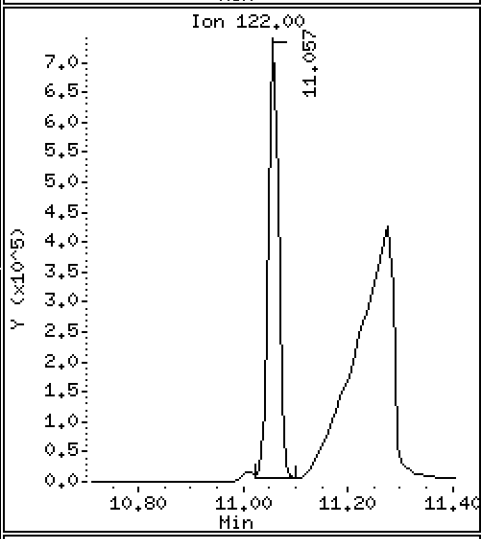
22 2,4-Dimethylphenol

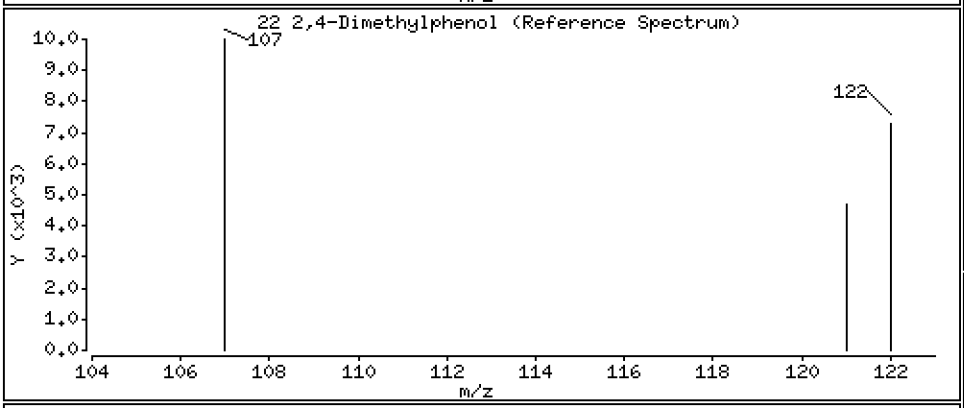
Concentration: 6.945 ug/L

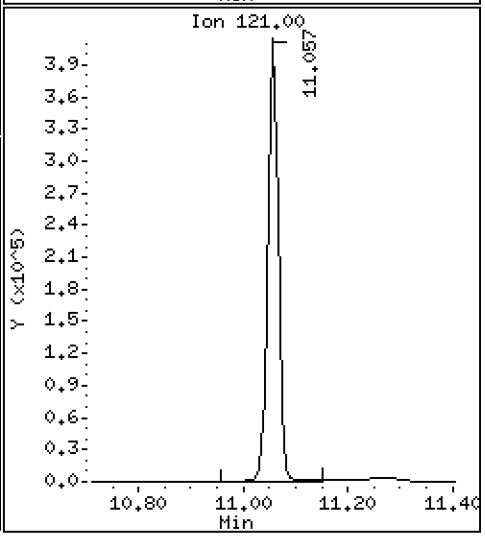


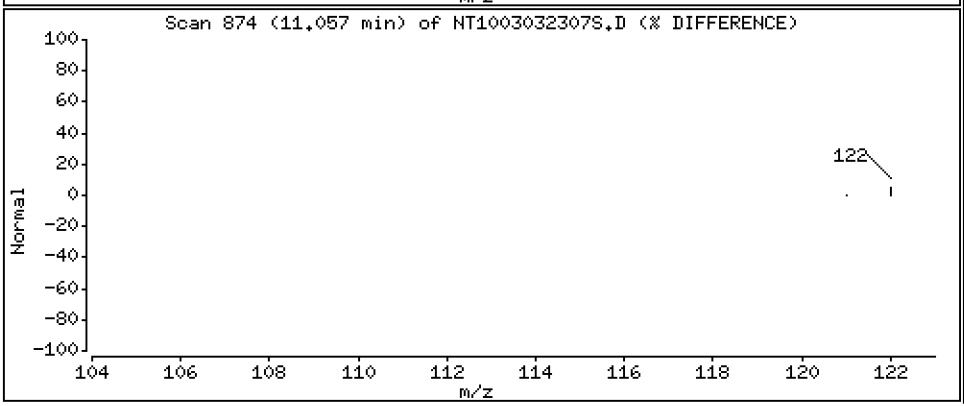












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Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

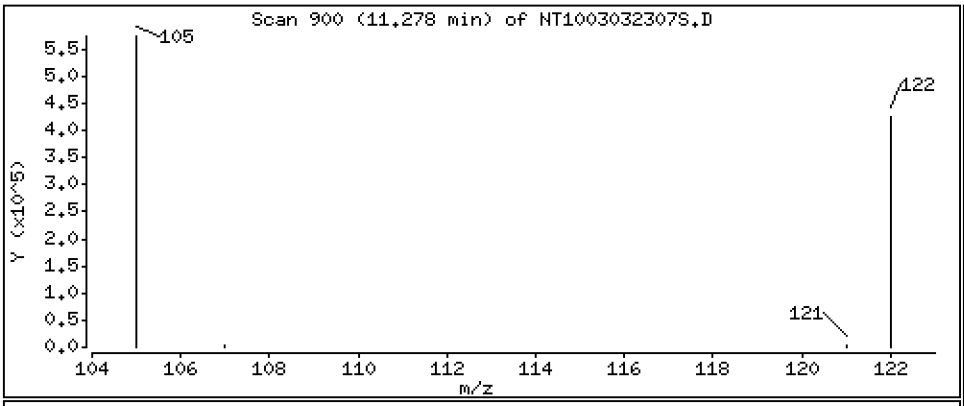
Operator: JGR

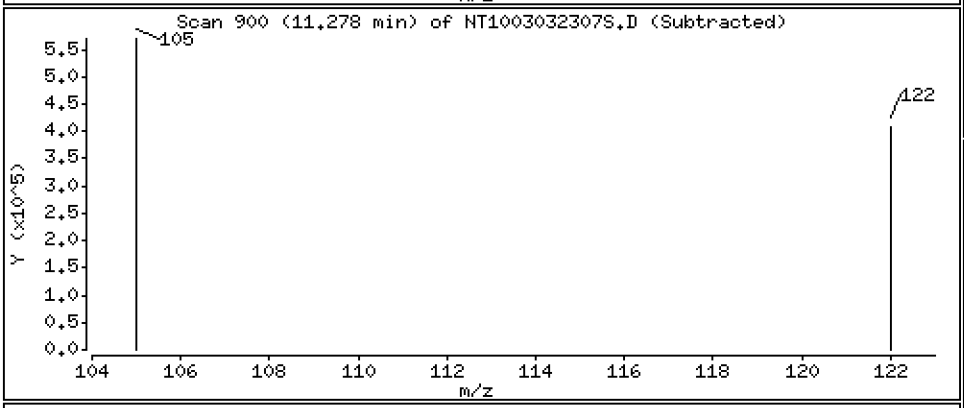
Column phase: ZB-5msi

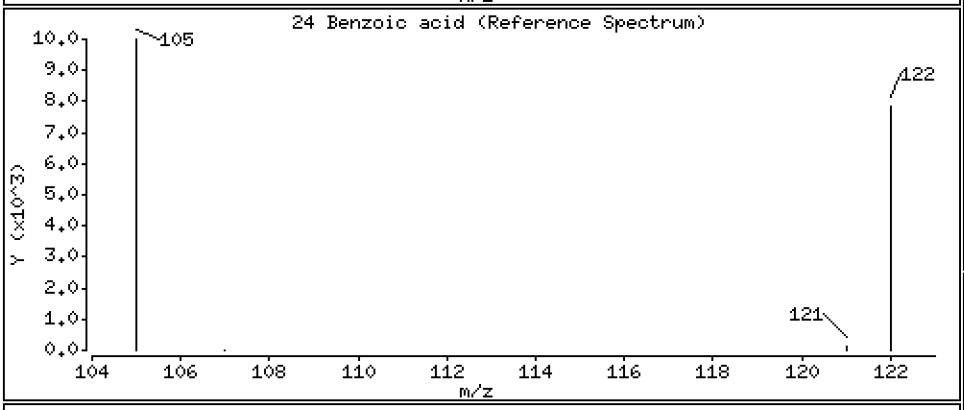
Column diameter: 0.25

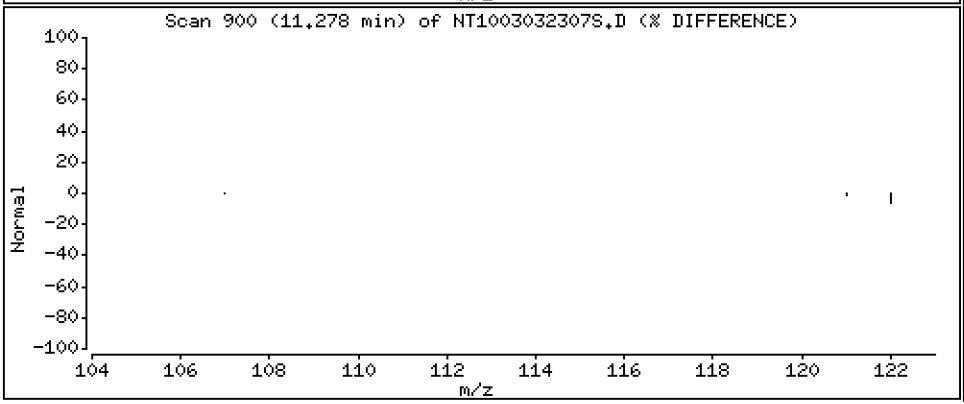
24 Benzoic acid

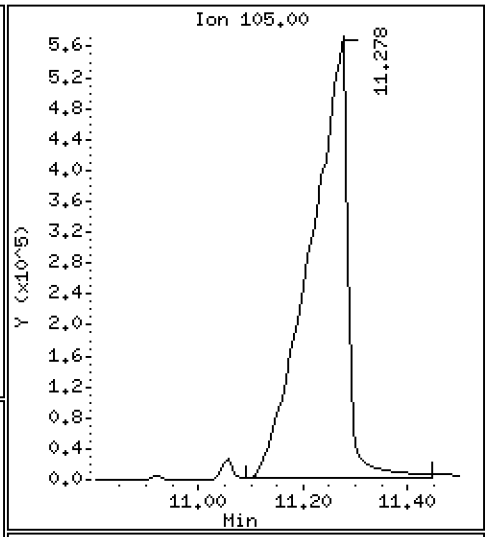
Concentration: 25.41 ug/L

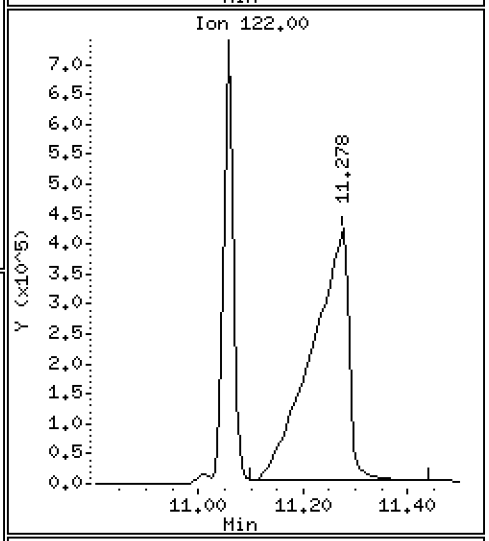


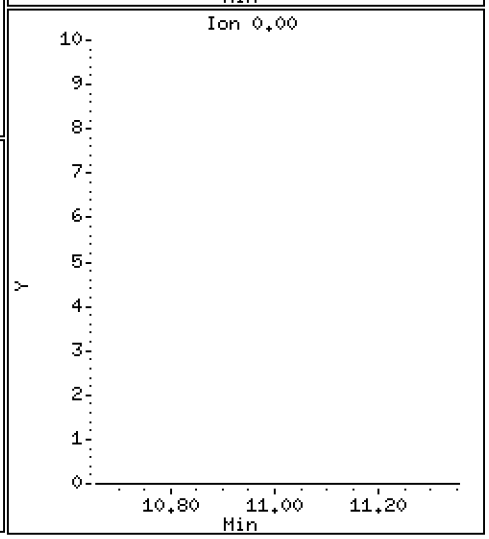












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323075.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

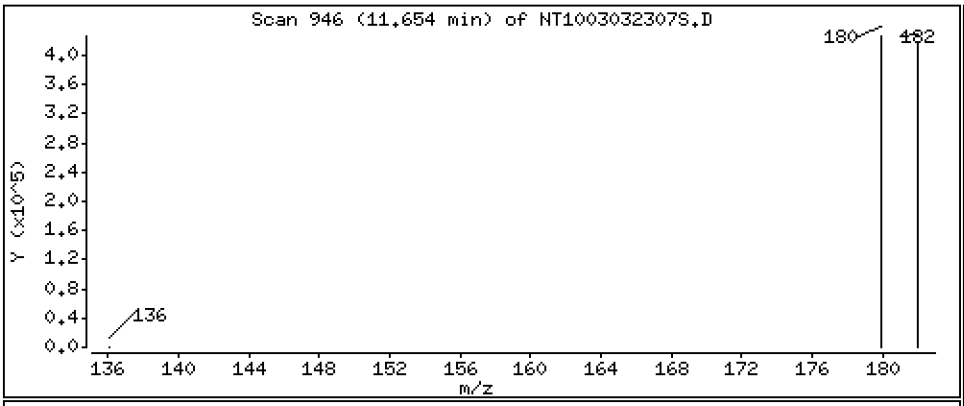
Operator: JGR

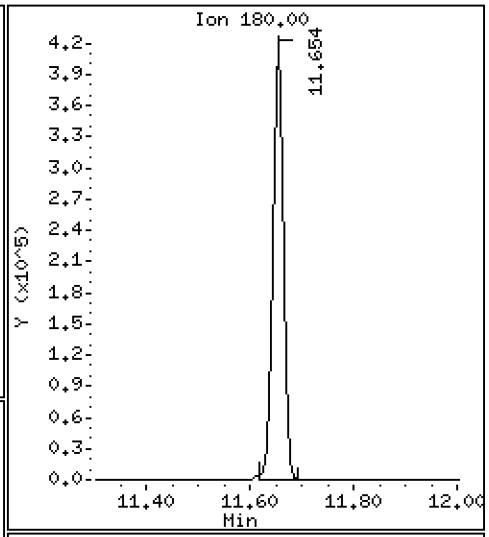
Column phase: ZB-5msi

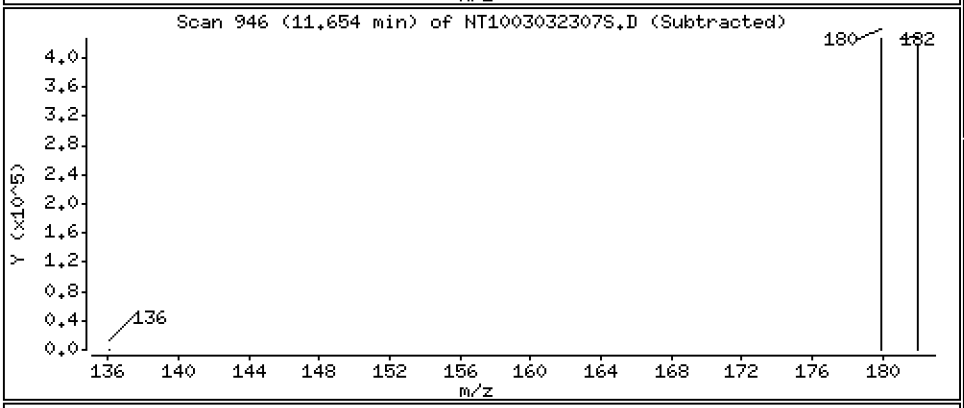
Column diameter: 0.25

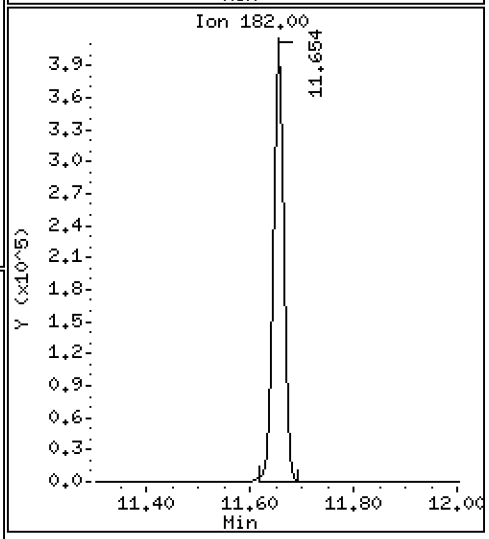
26 1,2,4-Trichlorobenzene

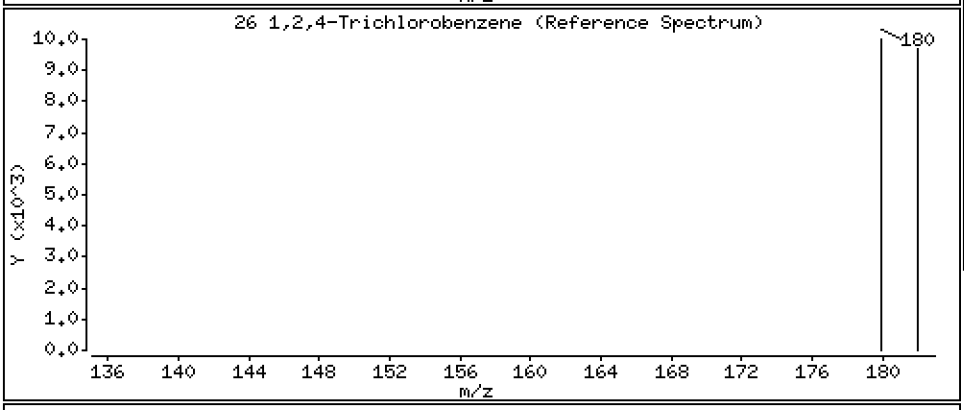
Concentration: 4.097 ug/L

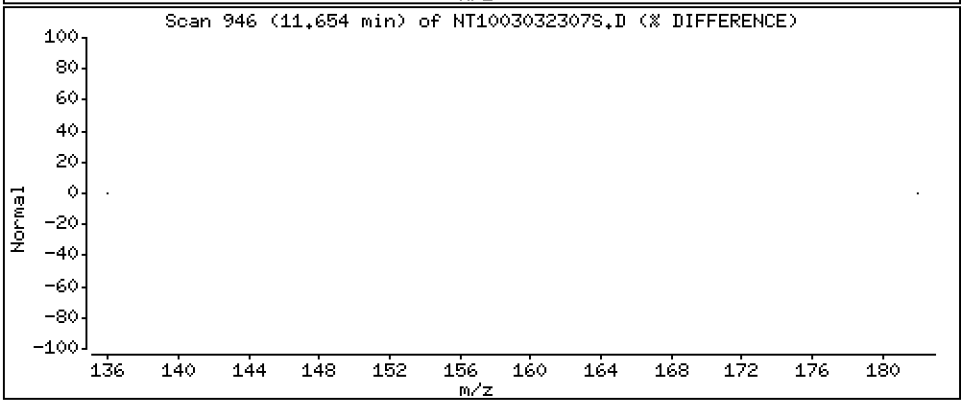












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323075.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

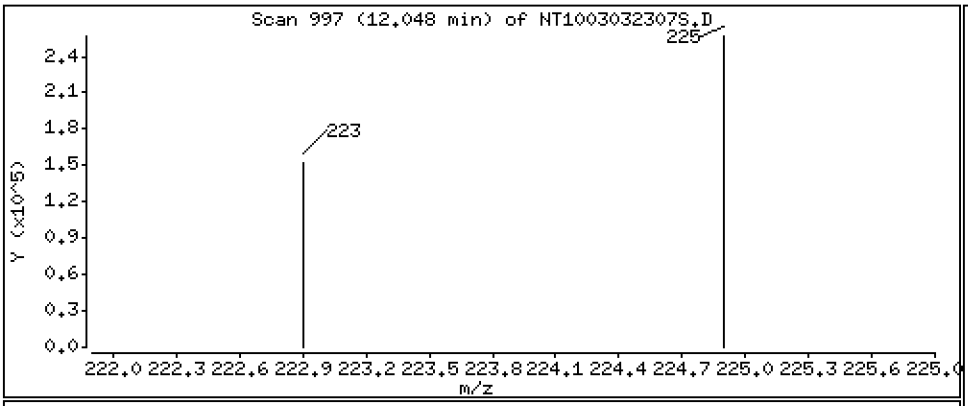
Operator: JGR

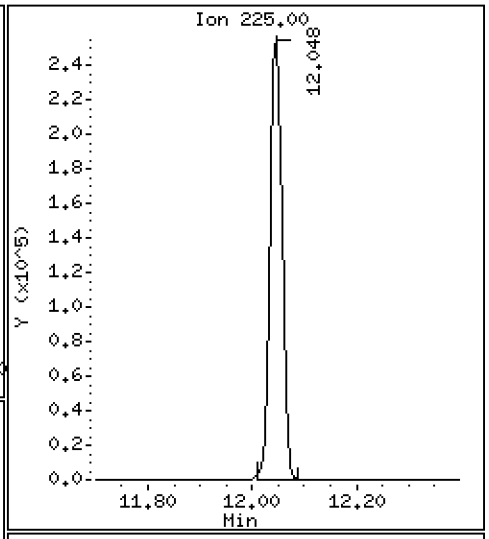
Column phase: ZB-5msi

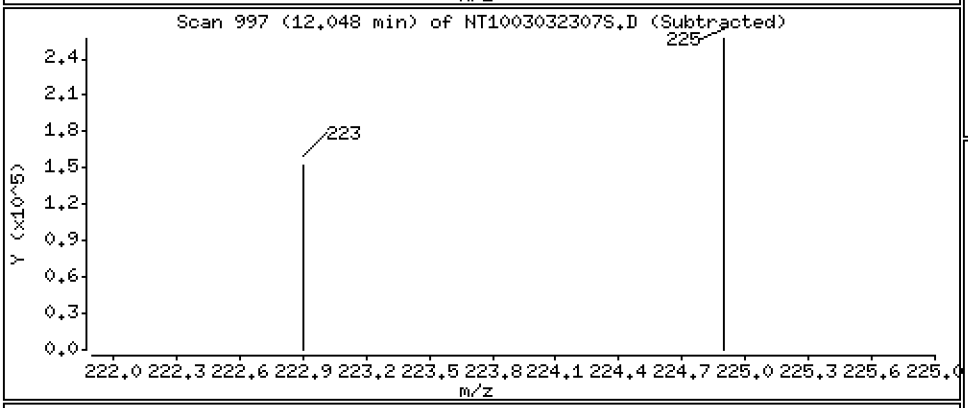
Column diameter: 0.25

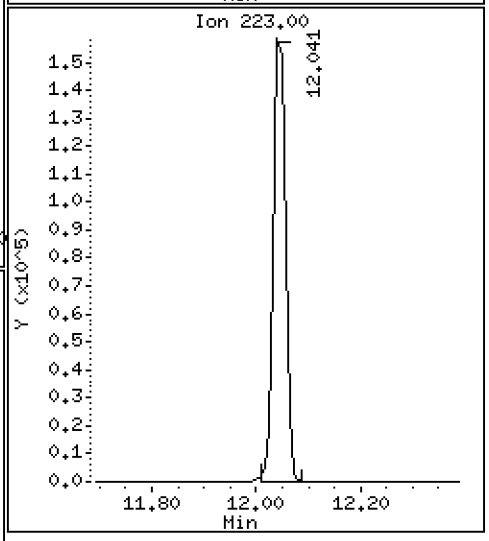
30 Hexachlorobutadiene

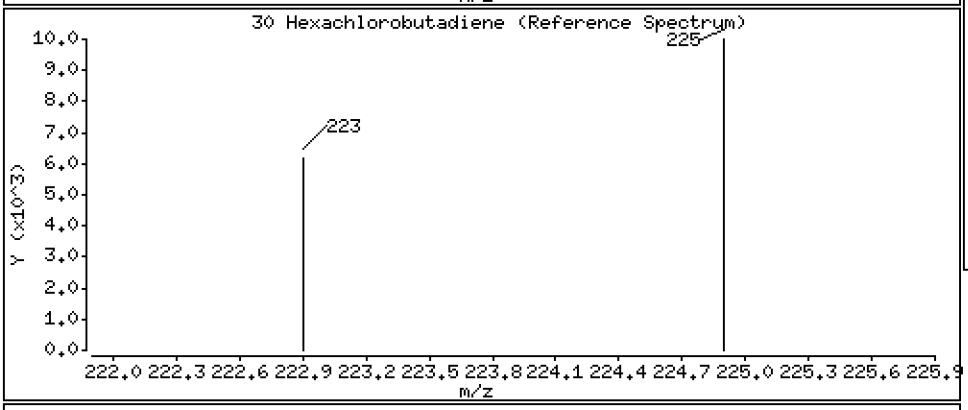
Concentration: 3.658 ug/L

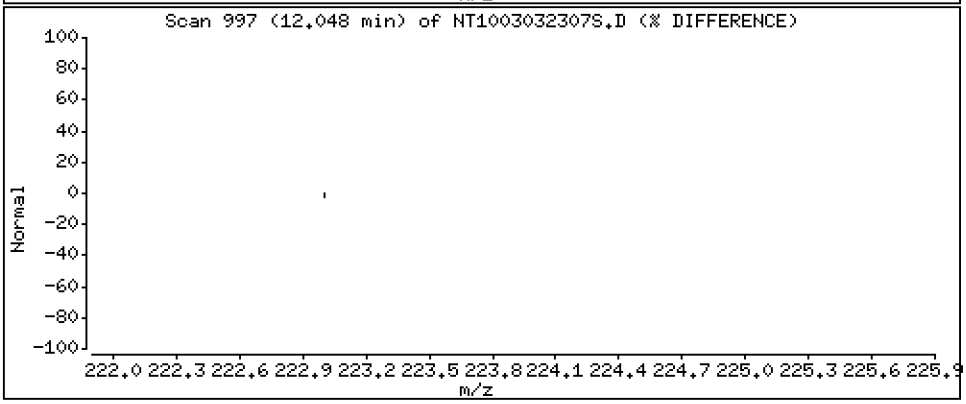












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032307S.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

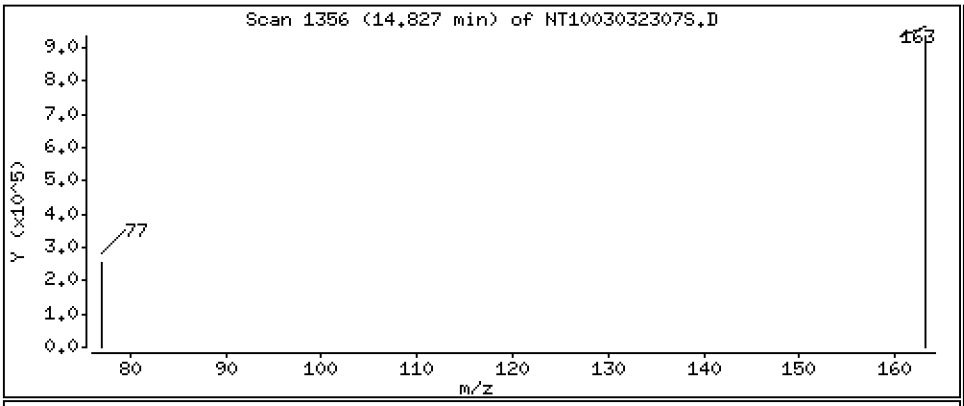
Operator: JGR

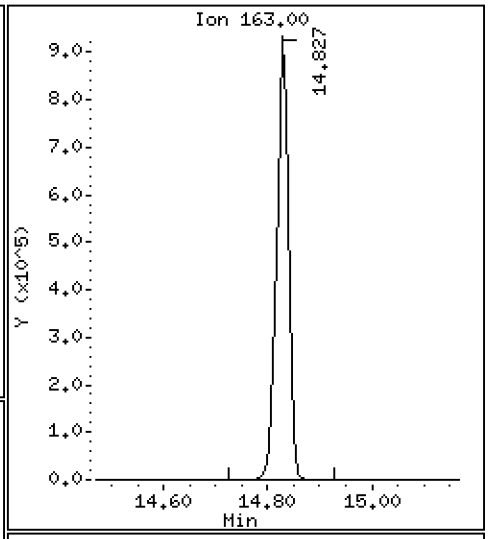
Column phase: ZB-5msi

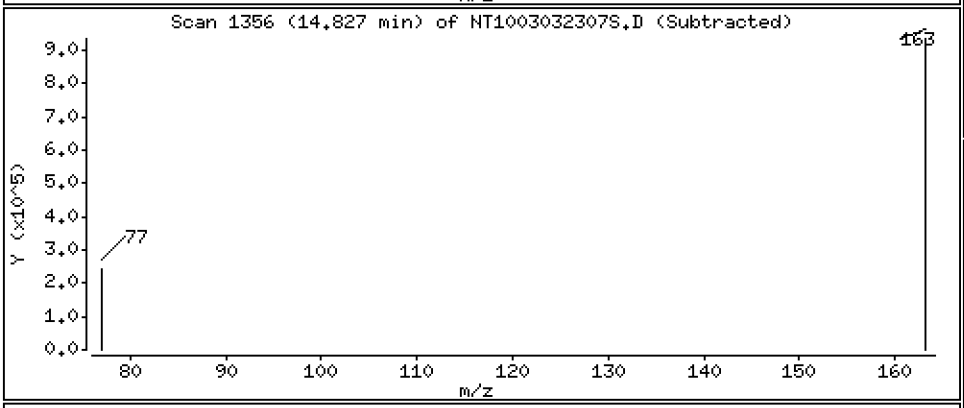
Column diameter: 0.25

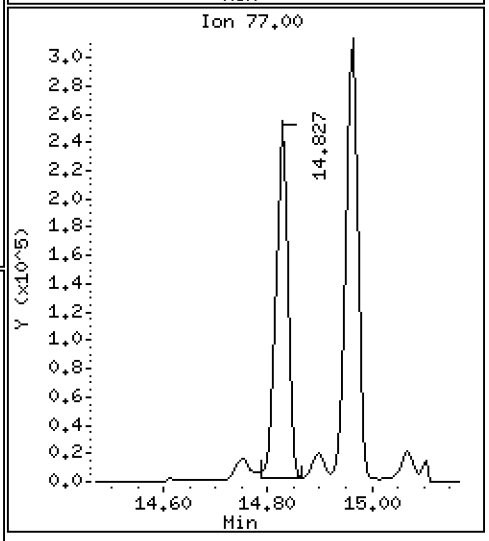
39 Dimethylphthalate

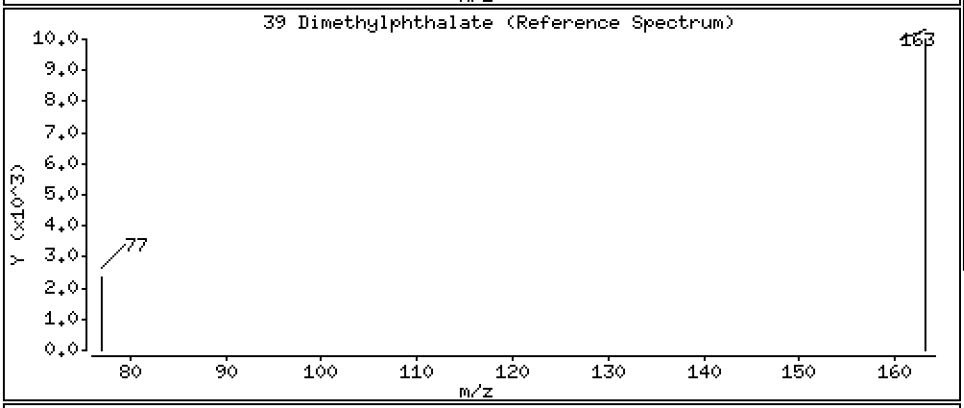
Concentration: 4.605 ug/L

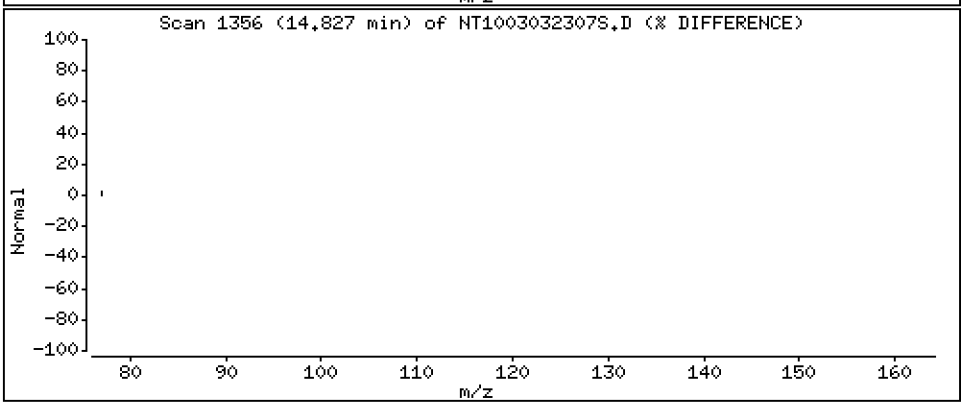












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032307S.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

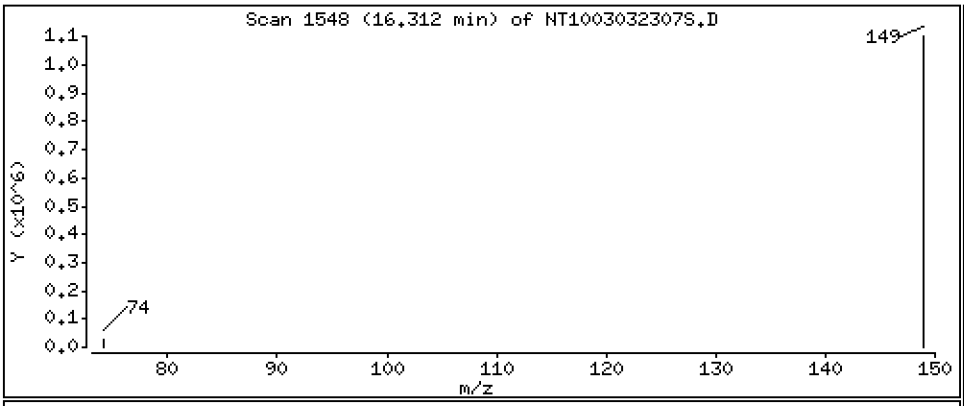
Operator: JGR

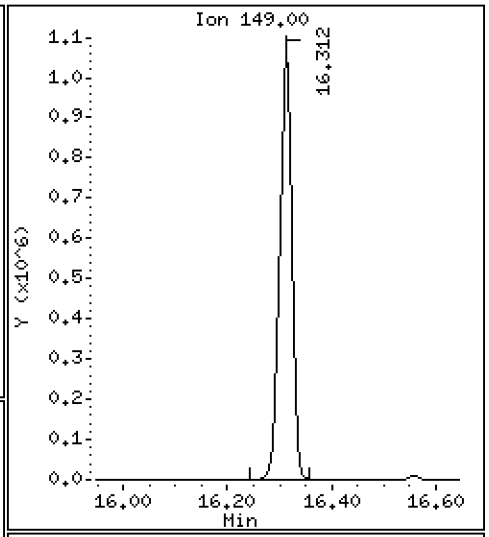
Column phase: ZB-5msi

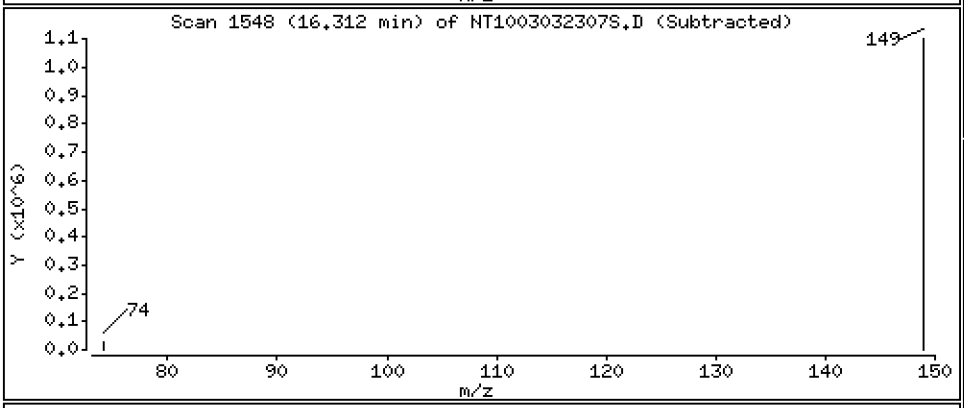
Column diameter: 0.25

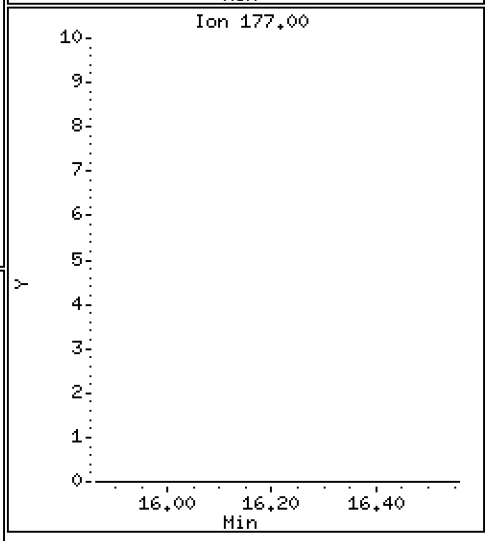
50 Diethylphthalate

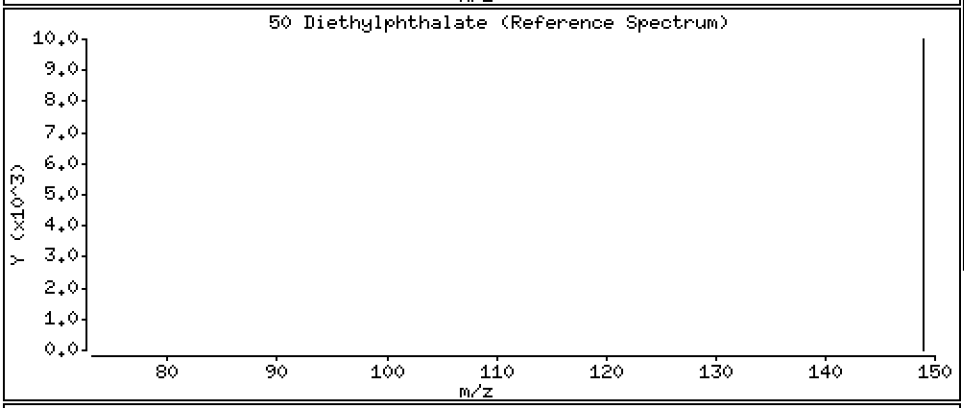
Concentration: 5.710 ug/L

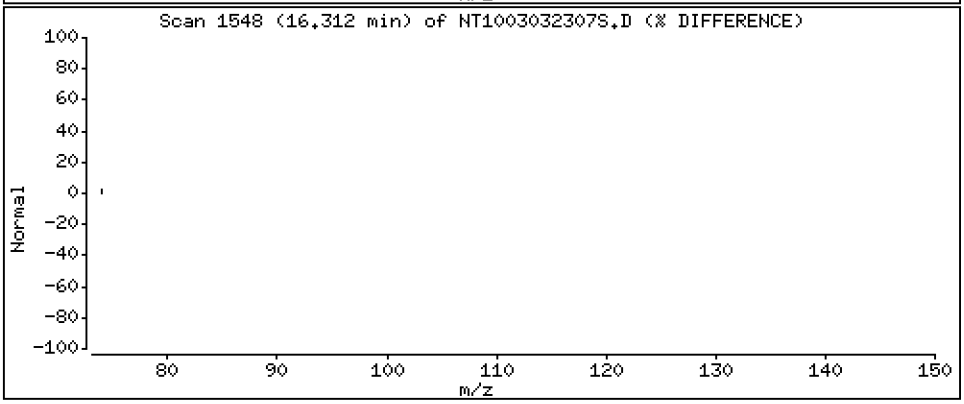












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032307S.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

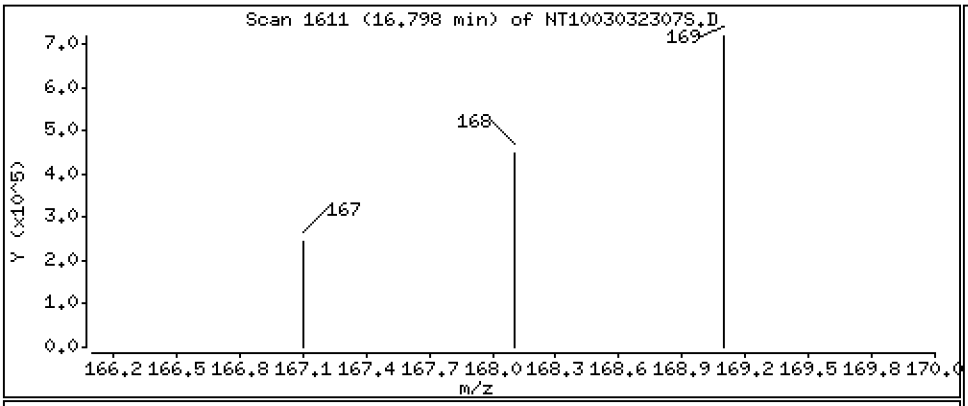
Operator: JGR

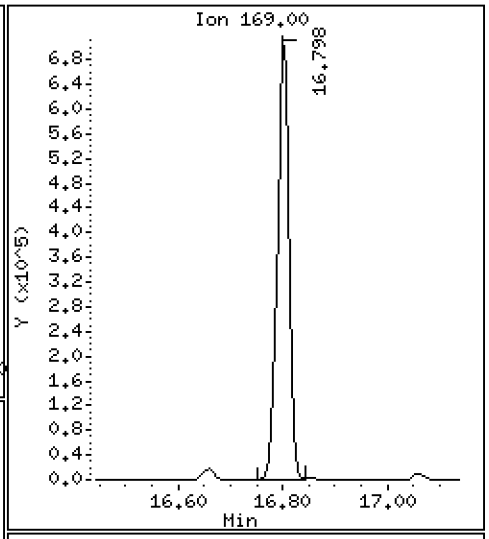
Column phase: ZB-5msi

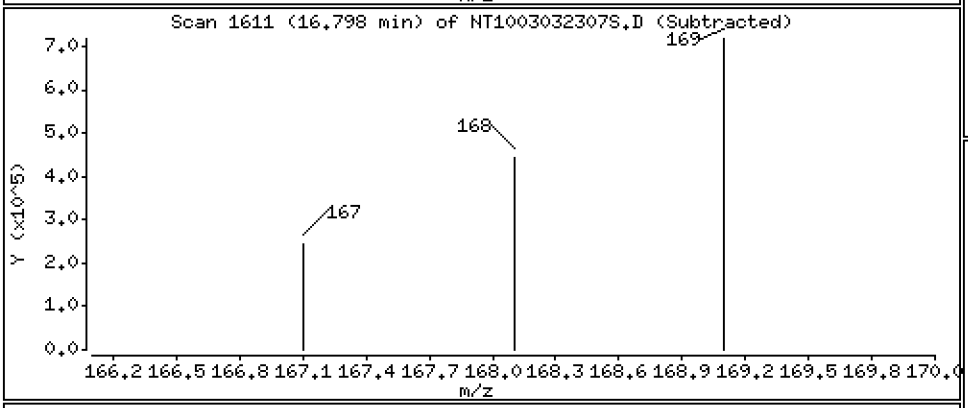
Column diameter: 0.25

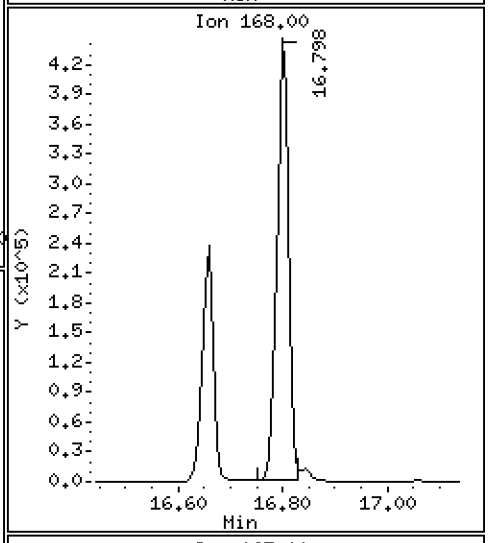
54 N-Nitrosodiphenylamine

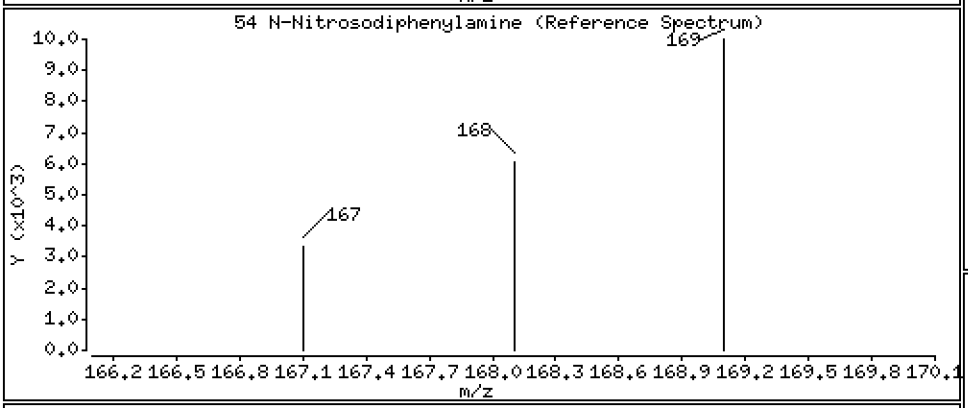
Concentration: 3.706 ug/L

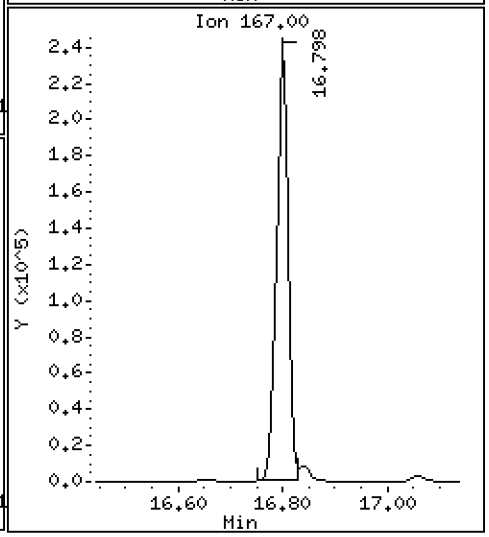


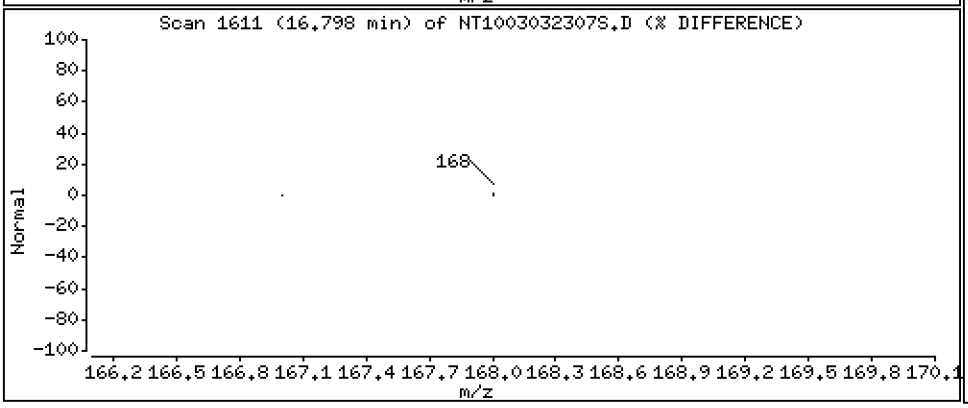












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032307S.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

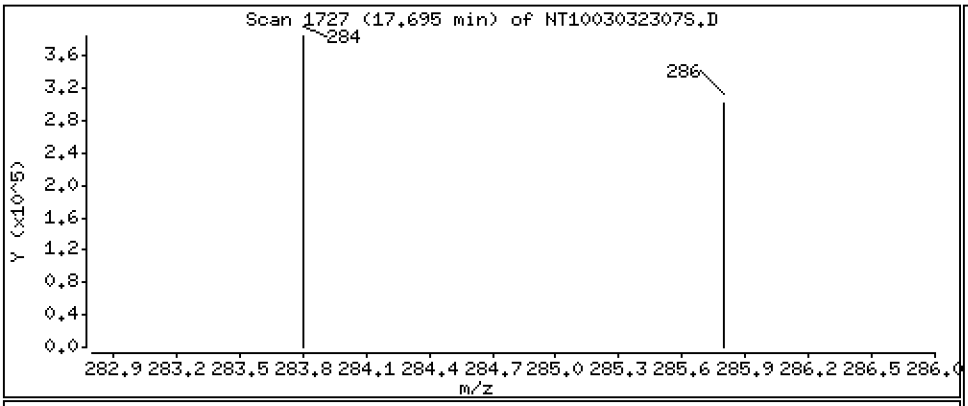
Operator: JGR

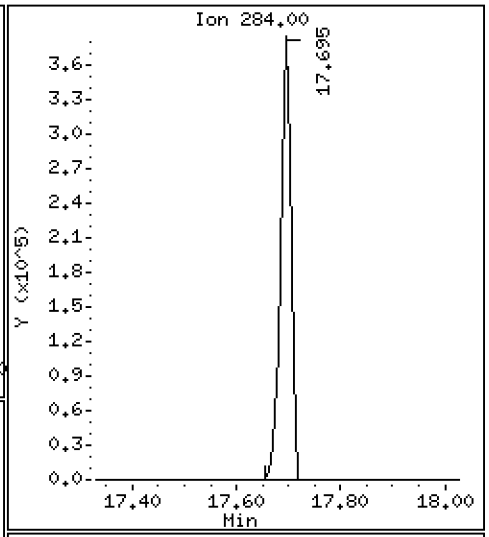
Column phase: ZB-5msi

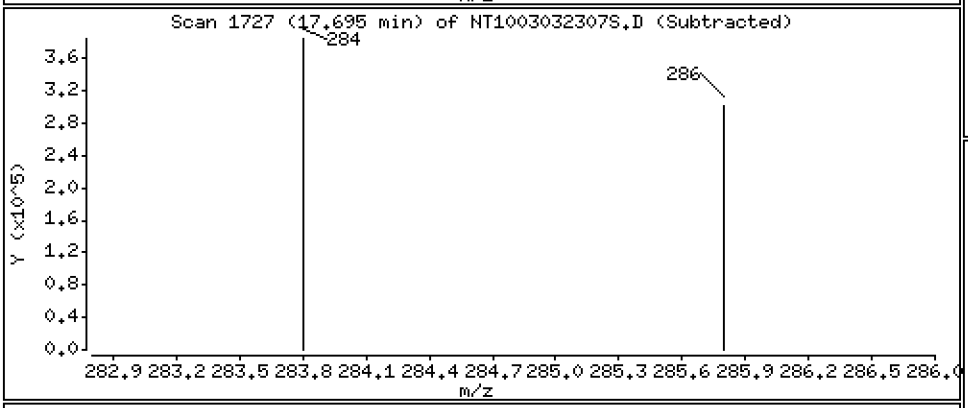
Column diameter: 0.25

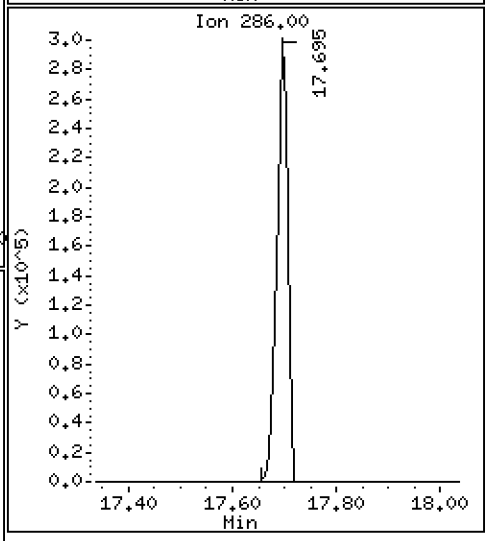
57 Hexachlorobenzene

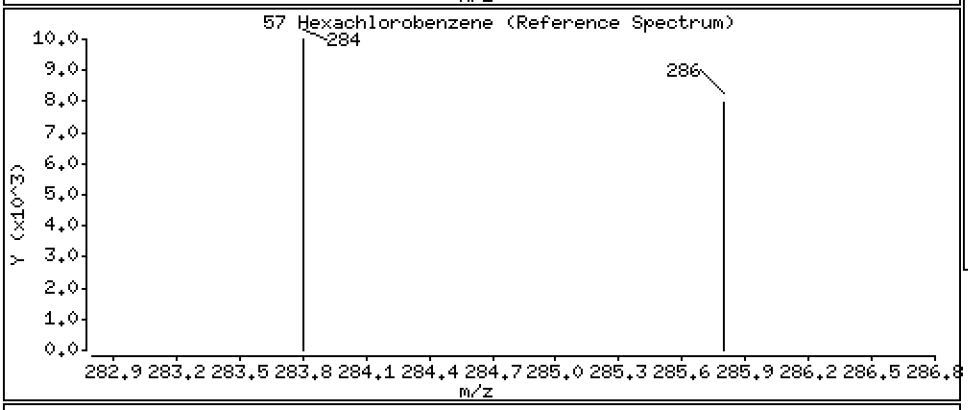
Concentration: 3.979 ug/L

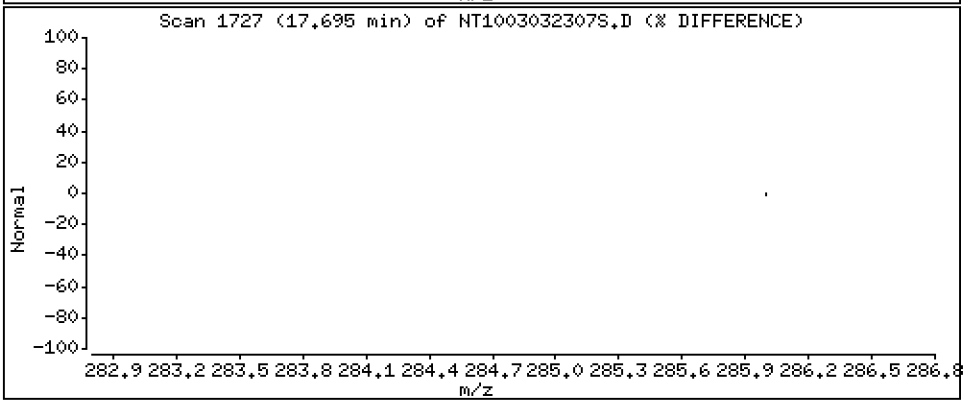












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032307S.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

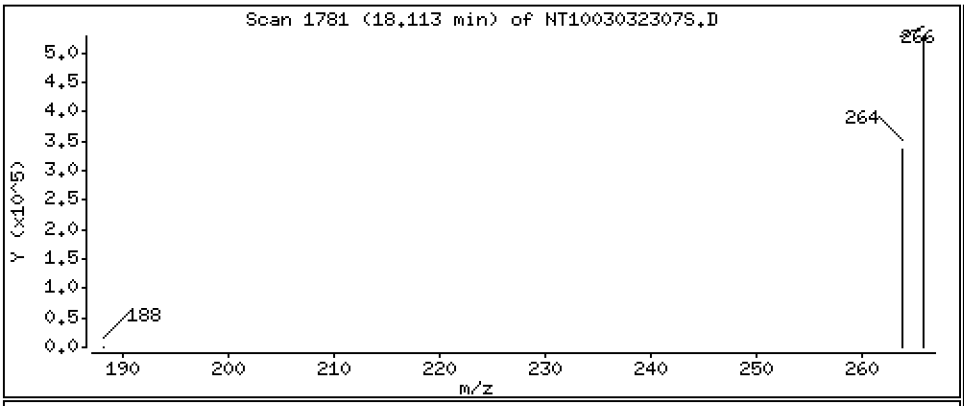
Operator: JGR

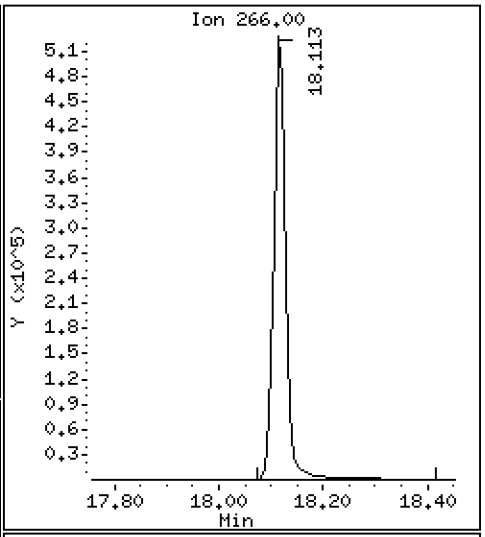
Column phase: ZB-5msi

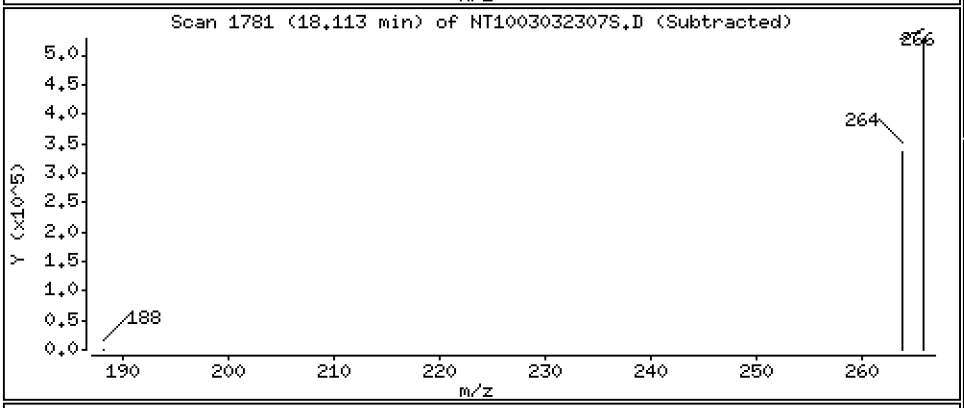
Column diameter: 0.25

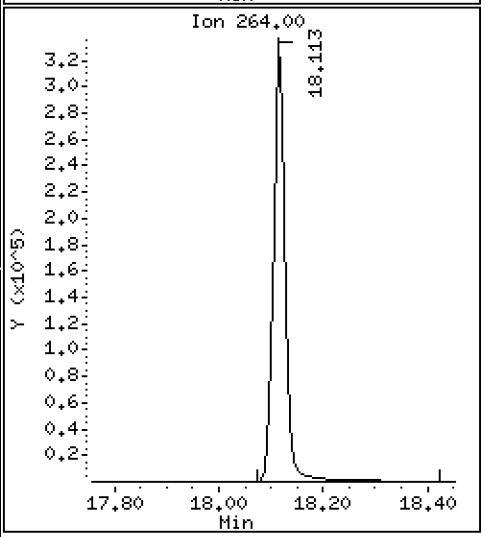
58 Pentachlorophenol

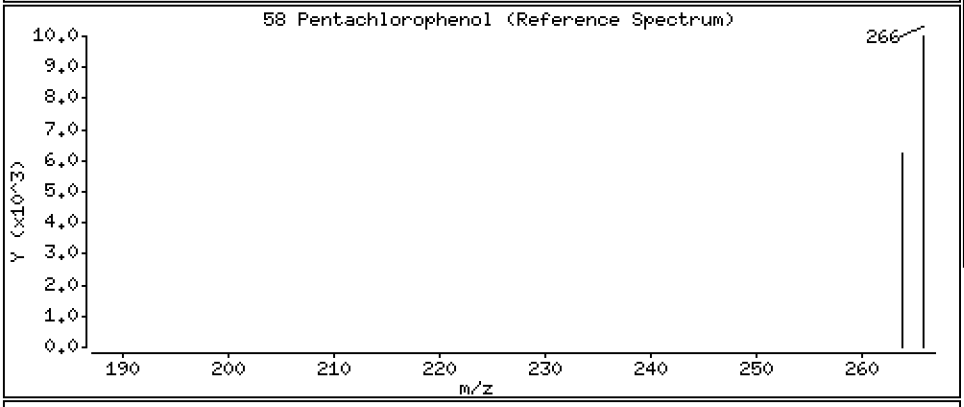
Concentration: 11.97 ug/L

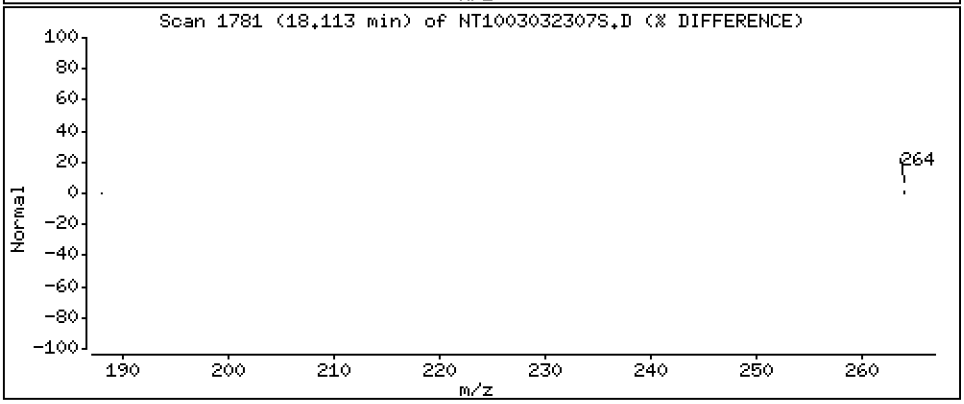












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032307S.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

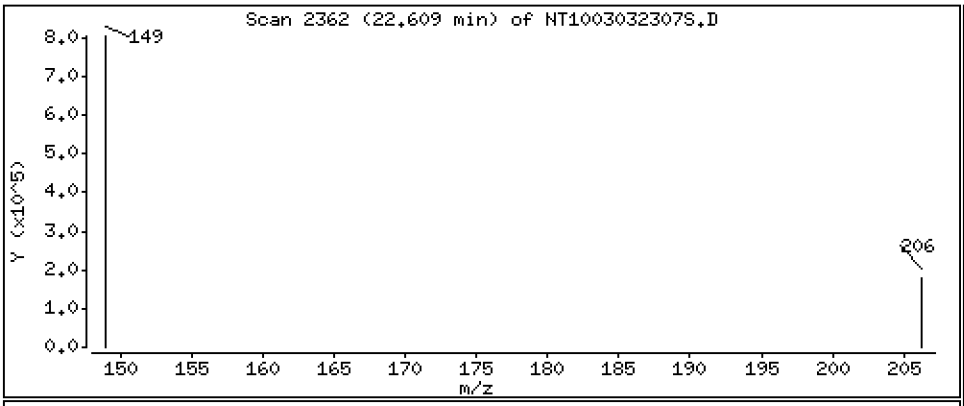
Operator: JGR

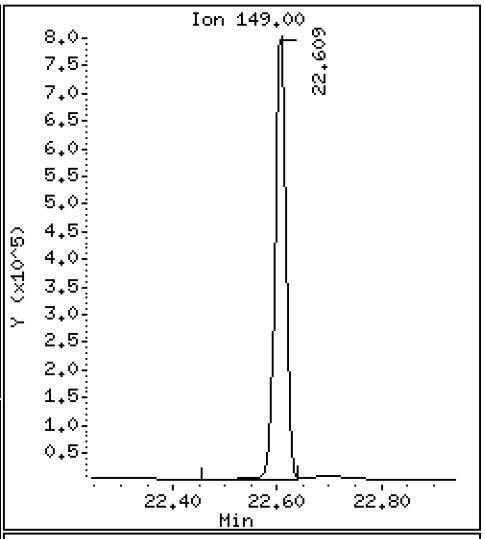
Column phase: ZB-5msi

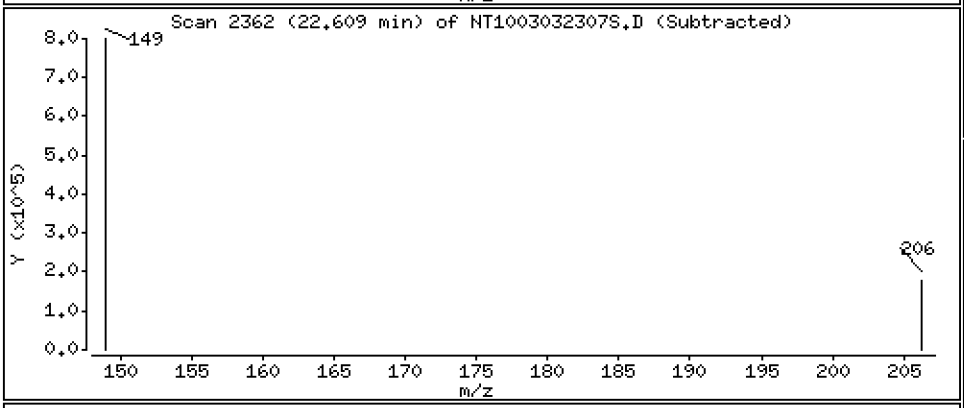
Column diameter: 0.25

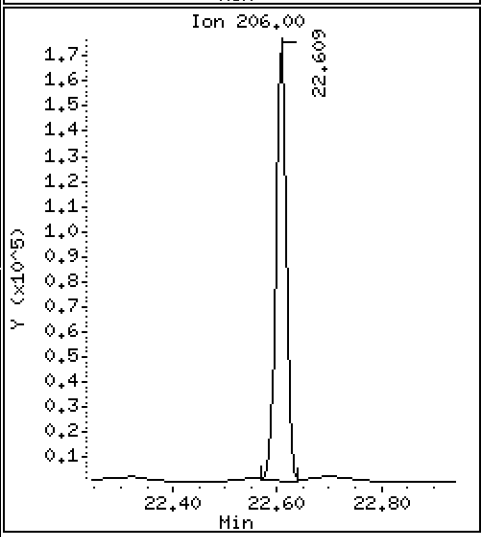
67 Butylbenzylphthalate

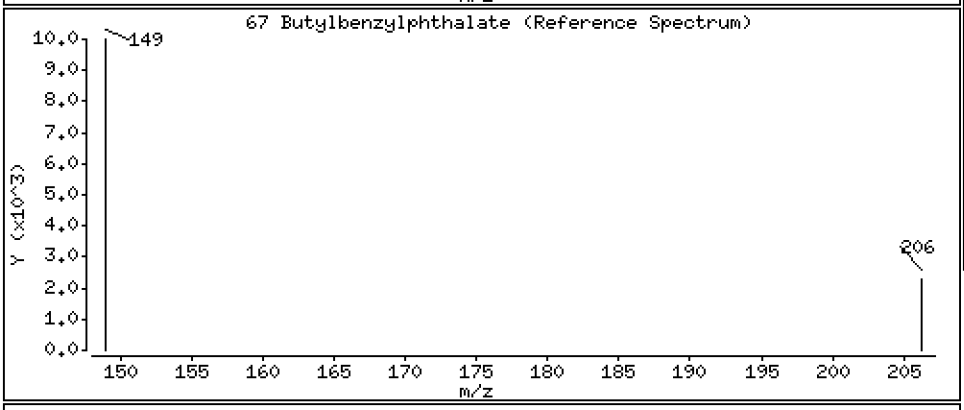
Concentration: 4.436 ug/L

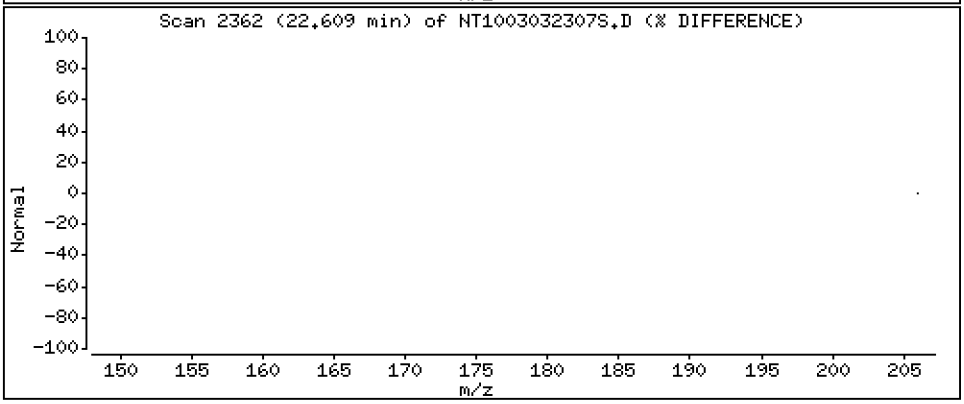












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032307S.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

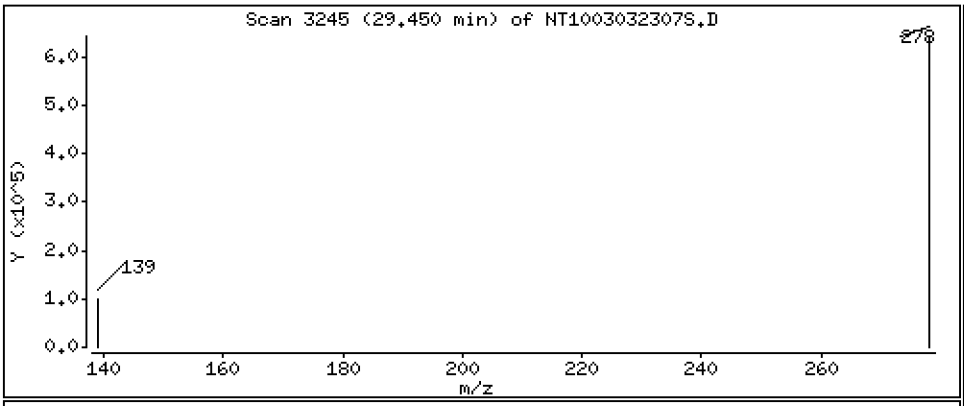
Operator: JGR

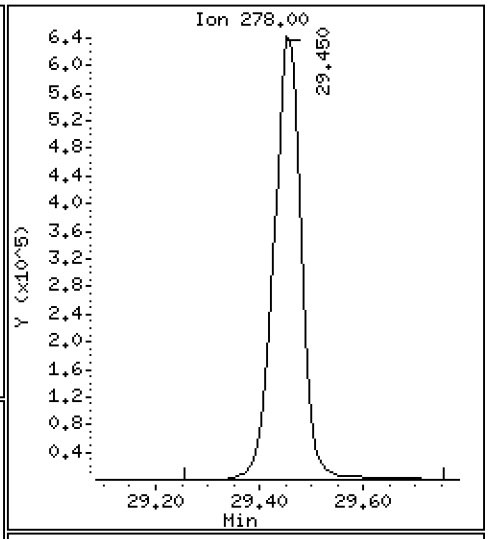
Column phase: ZB-5msi

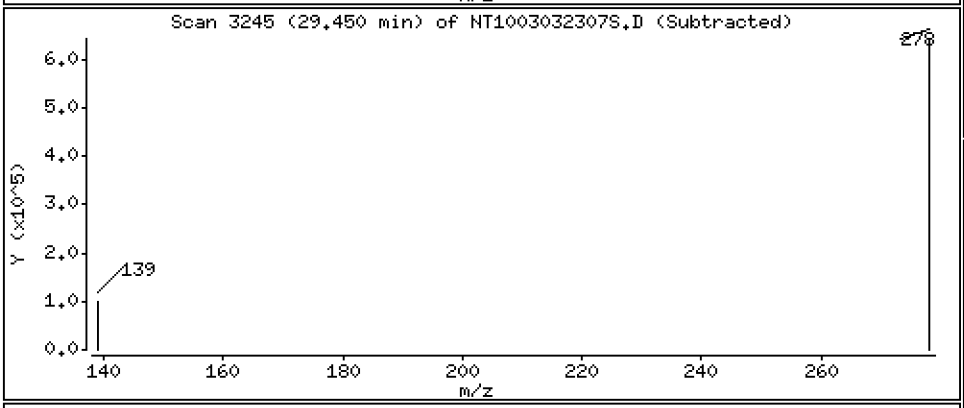
Column diameter: 0.25

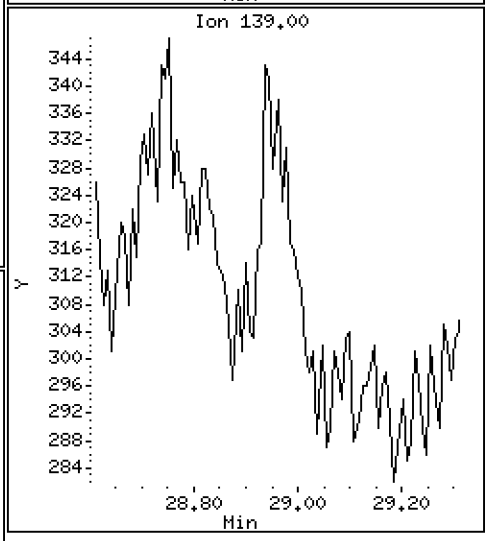
79 Dibenzo(a,h)anthracene

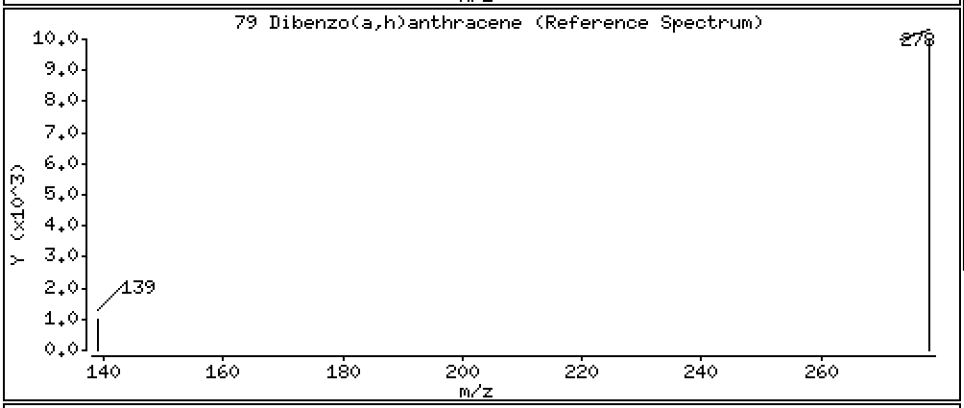
Concentration: 5.959 ug/L

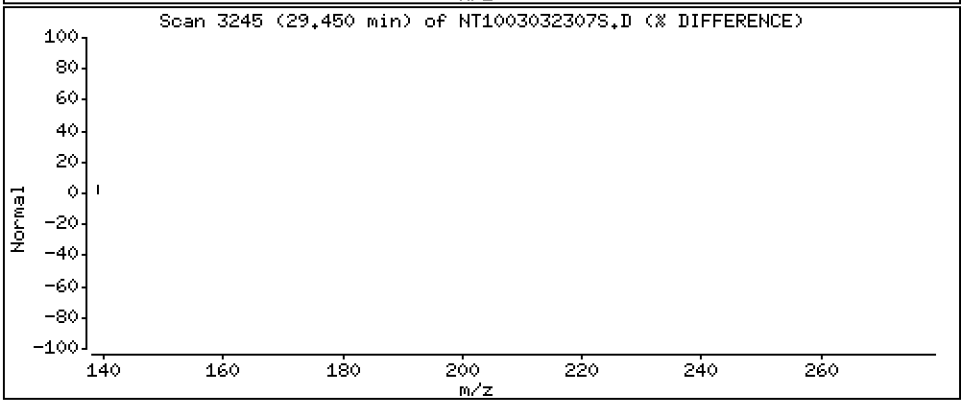












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323075.D

Date : 03-MAR-2023 21:37

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BS1

Volume Injected (uL): 1.0

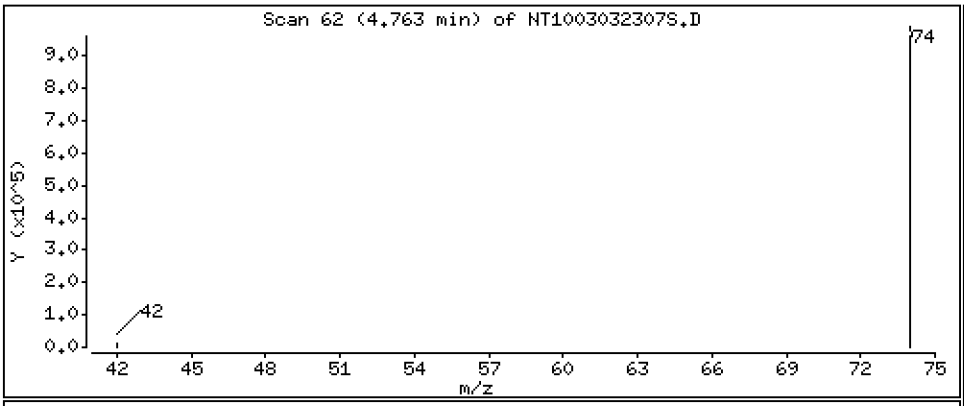
Operator: JGR

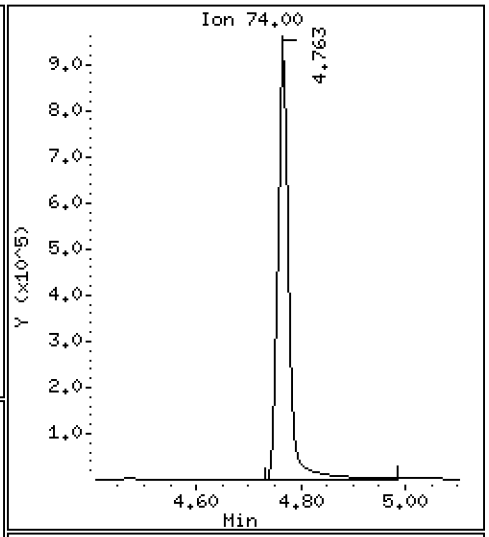
Column phase: ZB-5msi

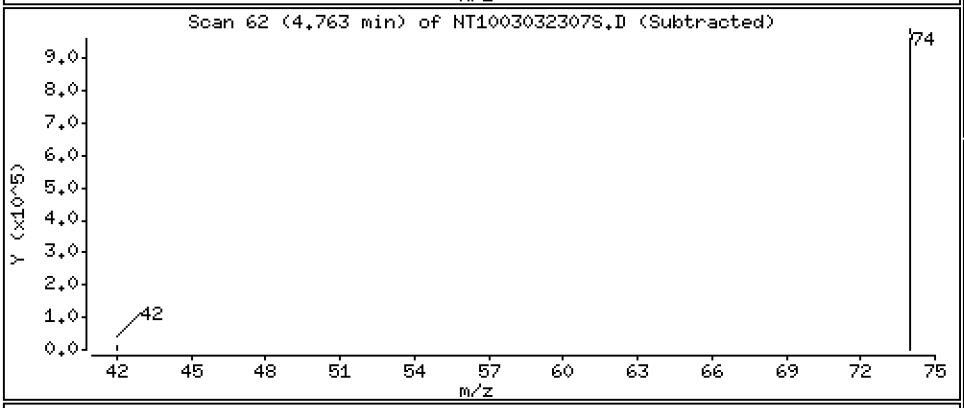
Column diameter: 0.25

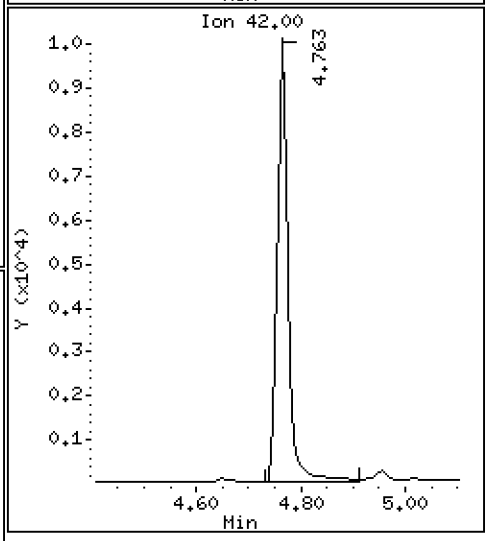
90 N-Nitrosodimethylamine

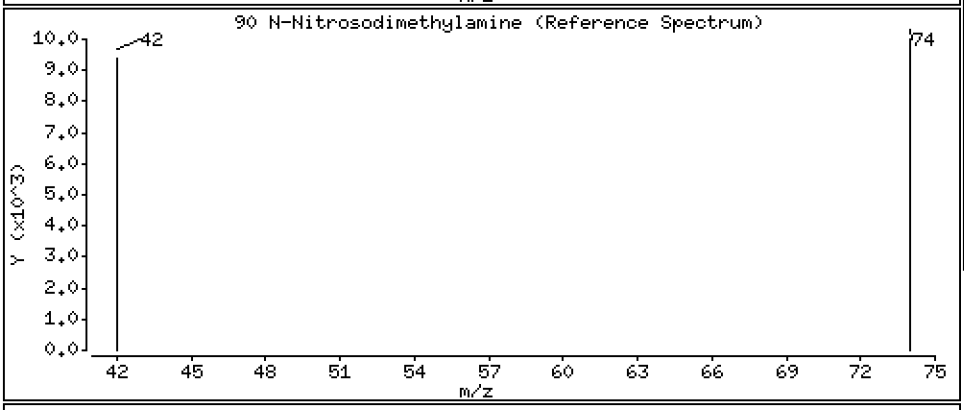
Concentration: 14.25 ug/L

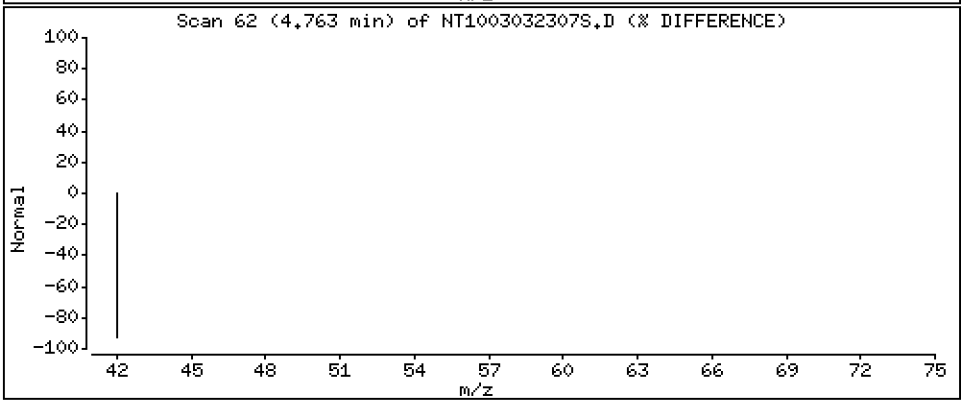












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032307S.D
Lab Smp Id: BLA0673-BS2
Inj Date : 03-MAR-2023 21:37 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLA0673-BS1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 10:19 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$	1 2-Fluorophenol	112	6.925	6.918	(0.746)	1016561	6.16777	6.168(R)
	3 Phenol	94	8.563	8.556	(0.923)	920640	3.71530	3.715
	7 1,3-Dichlorobenzene	146	9.174	9.174	(0.988)	747364	3.49308	3.493
*	8 1,4-Dichlorobenzene-d4	152	9.283	9.283	(1.000)	577308	4.00000	
	9 1,4-Dichlorobenzene	146	9.314	9.314	(1.003)	747461	3.59322	3.593
	11 Benzyl alcohol	79	9.515	9.516	(1.025)	586297	4.11354	4.114
	12 1,2-Dichlorobenzene	146	9.601	9.601	(1.034)	726392	3.63300	3.633
	13 2-Methylphenol	108	9.702	9.702	(1.045)	558416	3.70286	3.703
	15 4-Methylphenol	108	9.997	9.989	(1.077)	649240	4.07877	4.079
	16 N-Nitroso-di-n-propylamine	70	10.028	10.020	(1.080)	525862	4.77065	4.771
	22 2,4-Dimethylphenol	107	11.057	11.057	(0.939)	1252341	6.94472	6.945
	24 Benzoic acid	105	11.277	11.150	(0.958)	2890868	25.4145	25.41
	26 1,2,4-Trichlorobenzene	180	11.654	11.654	(0.990)	614409	4.09683	4.097
*	27 Naphthalene-d8	136	11.777	11.778	(1.000)	2083646	4.00000	
	30 Hexachlorobutadiene	225	12.048	12.048	(1.023)	389315	3.65809	3.658
	39 Dimethylphthalate	163	14.826	14.819	(0.963)	1458910	4.60518	4.605
*	42 Acenaphthene-d10	162	15.399	15.391	(1.000)	997712	4.00000	
	50 Diethylphthalate	149	16.311	16.296	(1.059)	1705982	5.71037	5.710
	54 N-Nitrosodiphenylamine	169	16.798	16.790	(0.907)	1094868	3.70624	3.706
	57 Hexachlorobenzene	284	17.694	17.679	(0.955)	550152	3.97944	3.979

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.112	18.105	(0.977)	838627	11.9741	11.97
*	59 Phenanthrene-d10	188	18.530	18.522	(1.000)	1825372	4.00000	
$	66 Terphenyl-d14	244	21.702	21.695	(0.918)	795399	6.07051	6.071(R)
	67 Butylbenzylphthalate	149	22.608	22.593	(0.957)	1194243	4.43603	4.436
*	69 Chrysene-d12	240	23.630	23.615	(1.000)	1620278	4.00000	
*	77 Perylene-d12	264	26.456	26.449	(1.000)	1583846	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.450	29.435	(1.113)	2407954	5.95935	5.959
	90 N-Nitrosodimethylamine	74	4.763	4.755	(0.513)	1390134	14.2461	14.25

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 03-MAR-2023
Lab File ID: NT1003032307S.D Calibration Time: 19:05
Lab Smp Id: BLA0673-BS2
Analysis Type: SV Level: LOW
Quant Type: ISTD Sample Type: AIR
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	602309	301155	1204618	577308	-4.15
27 Naphthalene-d8	2101699	1050850	4203398	2083646	-0.86
42 Acenaphthene-d10	1002910	501455	2005820	997712	-0.52
59 Phenanthrene-d10	1732061	866031	3464122	1825372	5.39
69 Chrysene-d12	1410089	705045	2820178	1620278	14.91
77 Perylene-d12	1732981	866491	3465962	1583846	-8.61

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	-0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	-0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.40	0.05
59 Phenanthrene-d10	18.52	18.02	19.02	18.53	0.04
69 Chrysene-d12	23.62	23.12	24.12	23.63	0.06
77 Perylene-d12	26.45	25.95	26.95	26.46	0.03

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

REVIEW SUMMARY FOR FILE - NT1003032307S.D

Lab ID: BLA0673-BS2
nt10.i, 20230303.b\SIM.b\SIMABN2.m,   03-MAR-2023 21:37

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.958	0.947	0.0108	Benzoic acid
1.113	1.000	0.1132	Dibenzo(a,h)anthracene

RRT check based on Ccal File: SIM.b/NT1003032303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323085.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

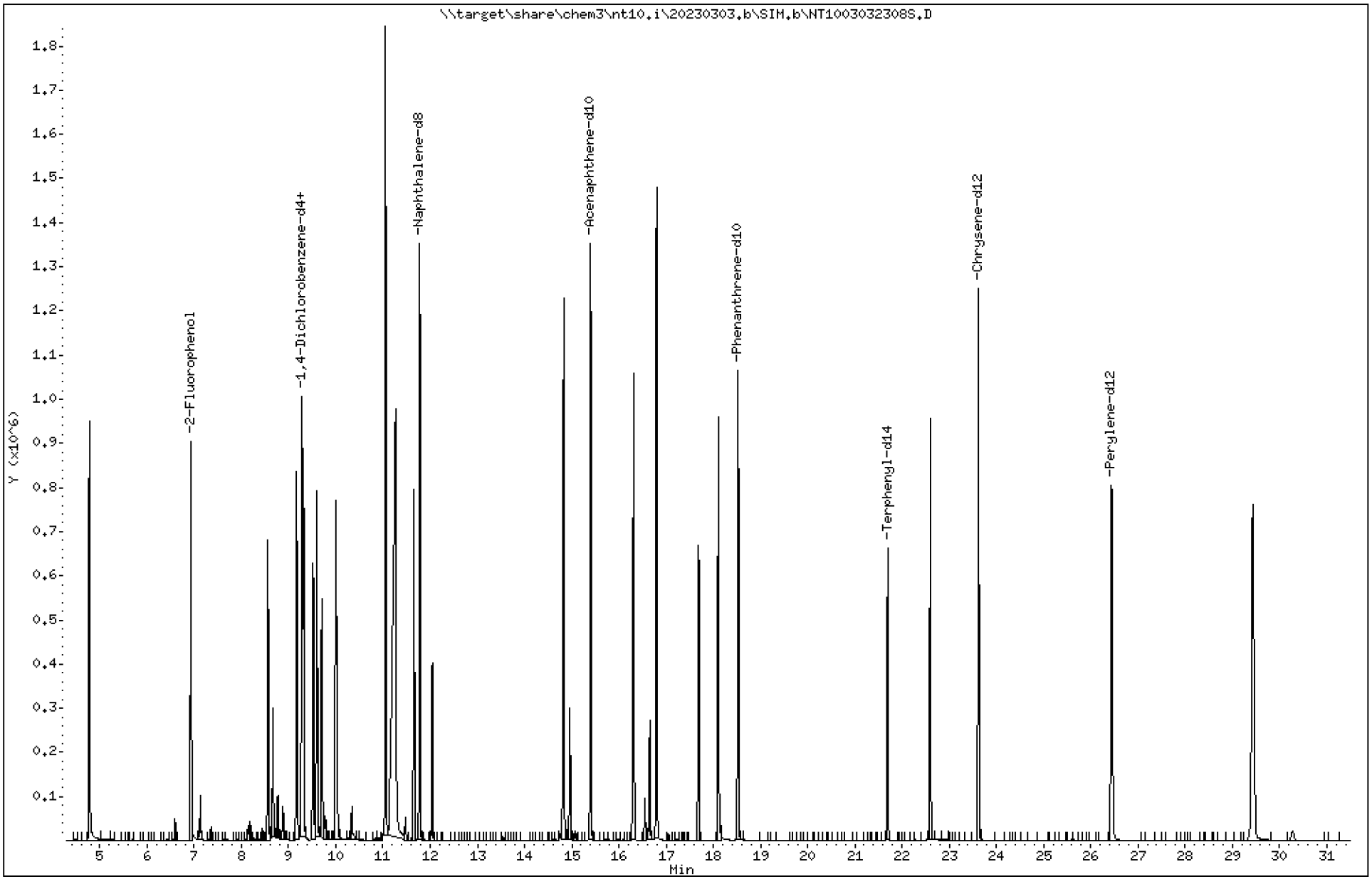
Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

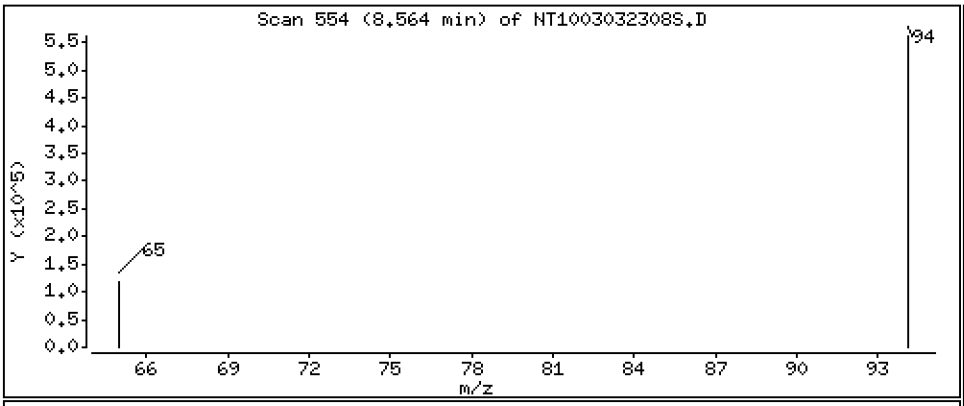
Operator: JGR

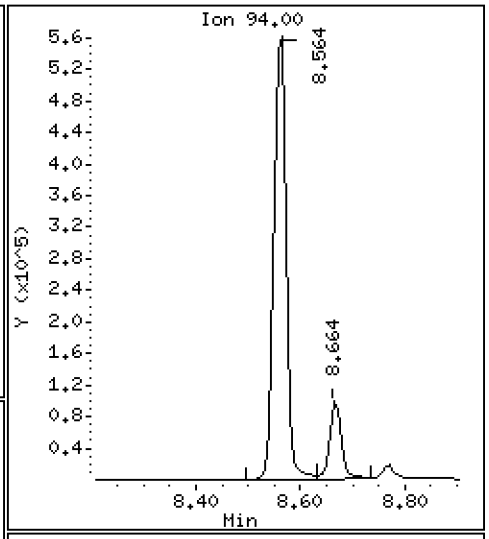
Column phase: ZB-5msi

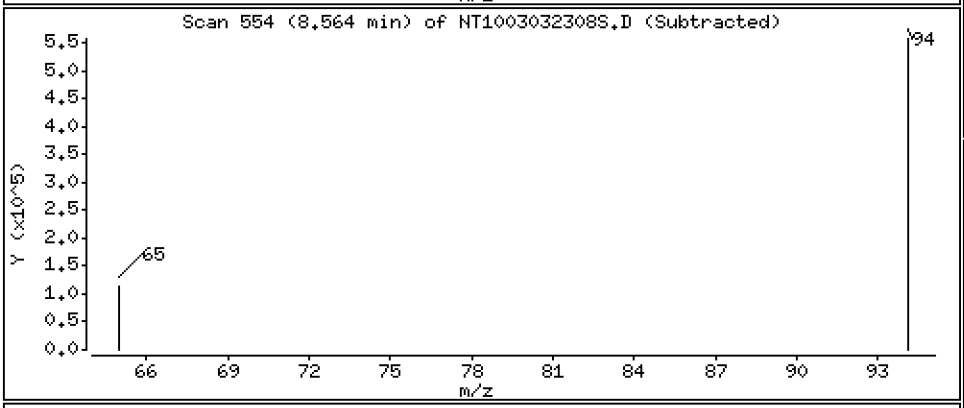
Column diameter: 0.25

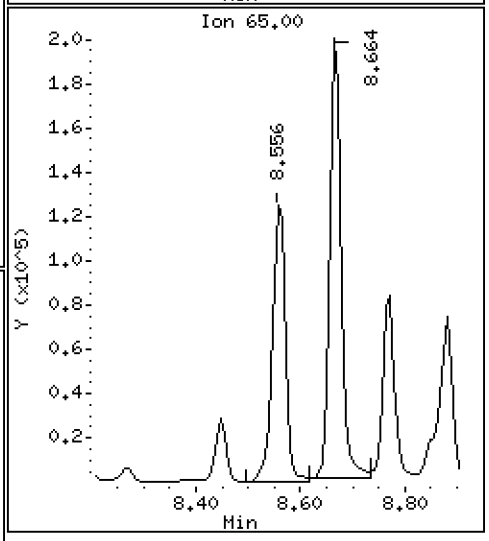
3 Phenol

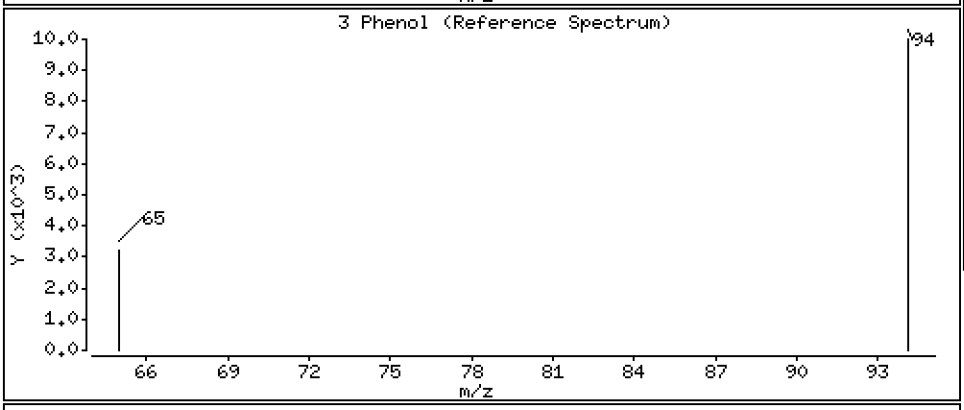
Concentration: 3.486 ug/L

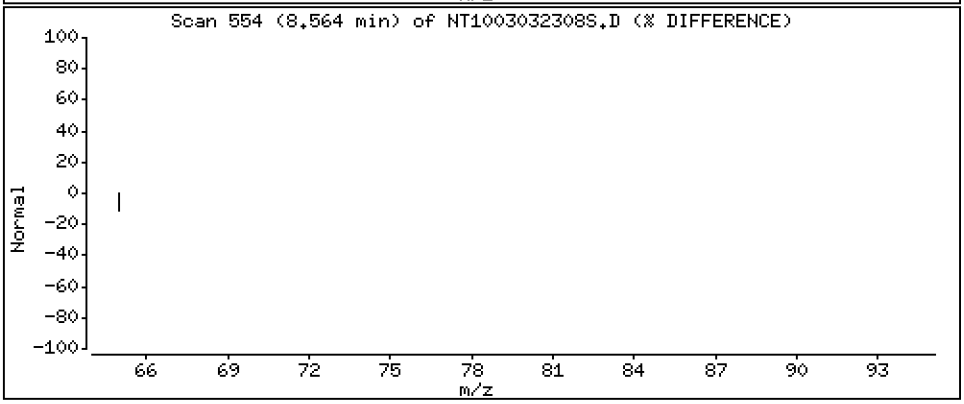












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Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

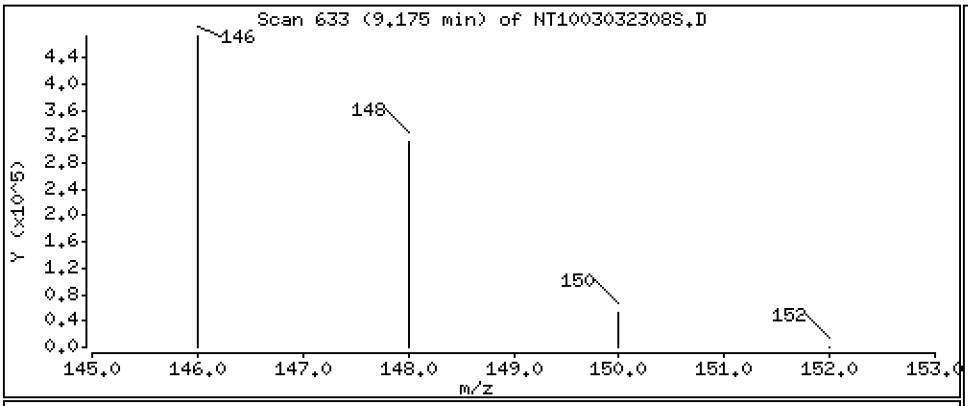
Operator: JGR

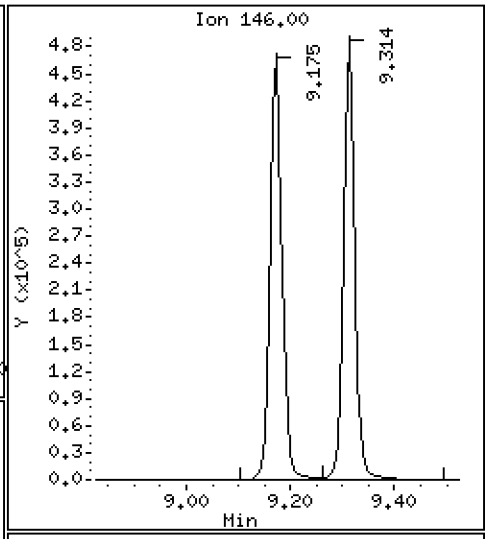
Column phase: ZB-5msi

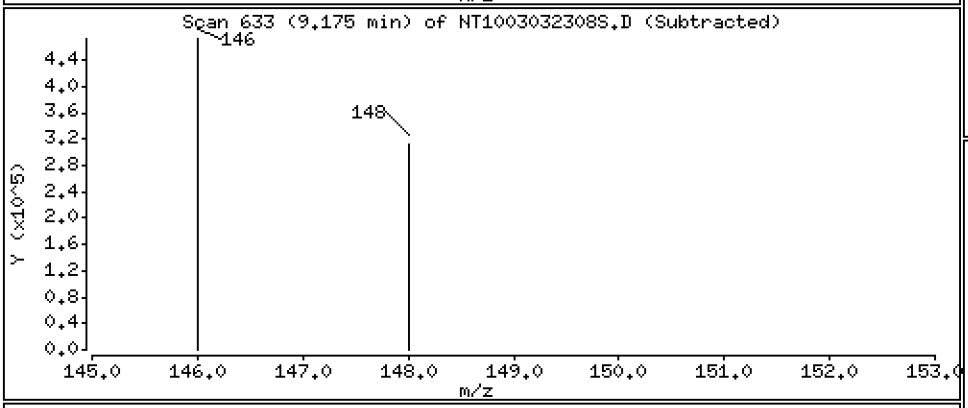
Column diameter: 0.25

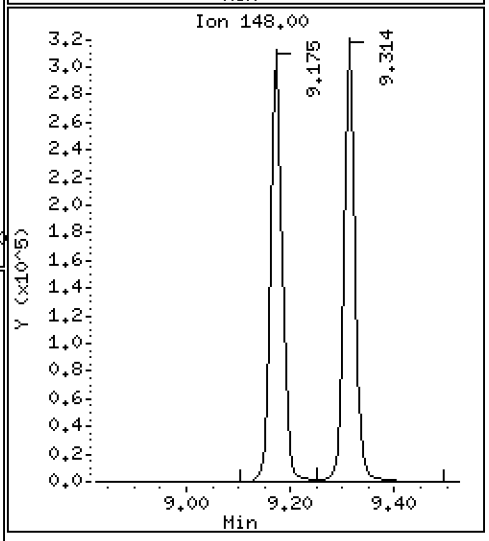
7 1,3-Dichlorobenzene

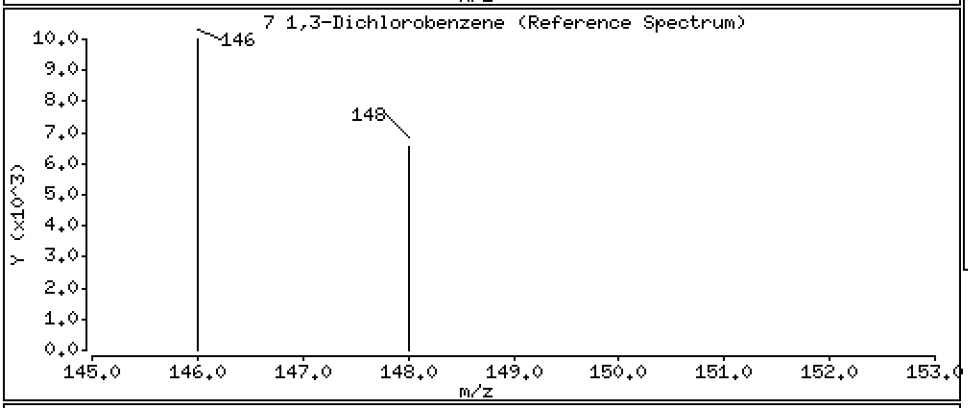
Concentration: 3.377 ug/L

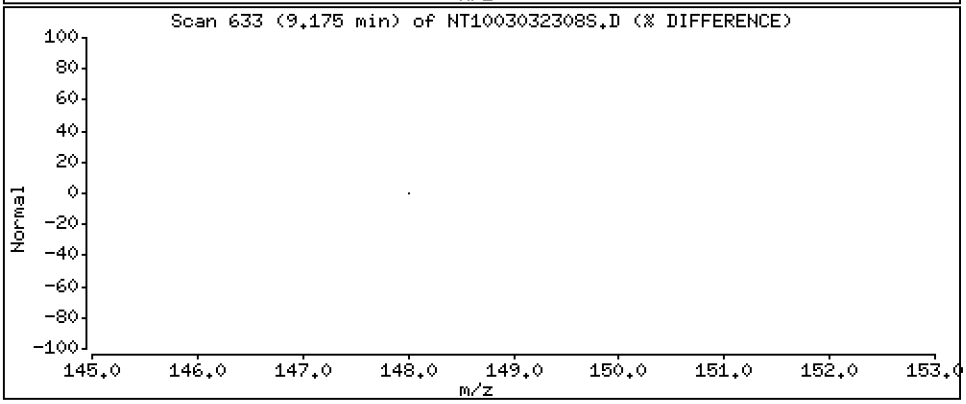












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323085.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

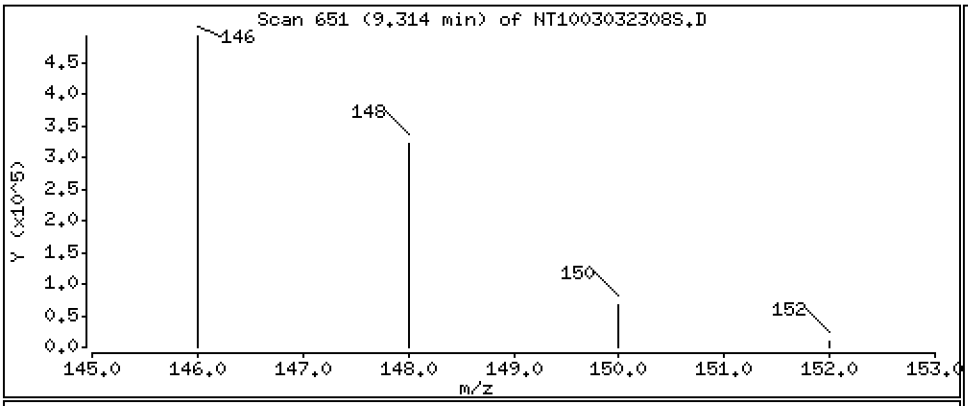
Operator: JGR

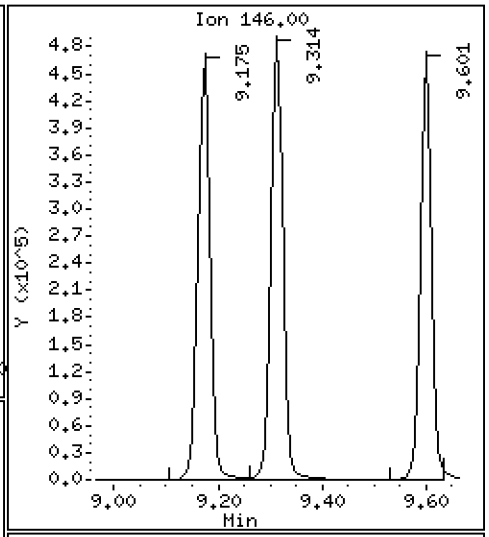
Column phase: ZB-5msi

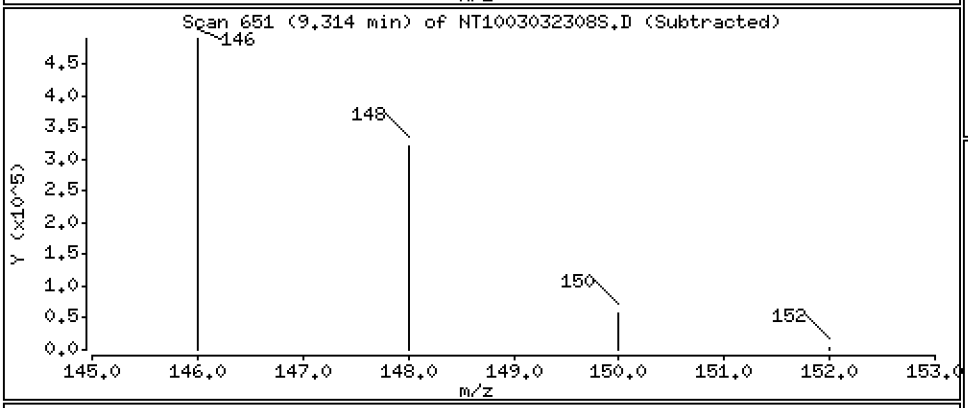
Column diameter: 0.25

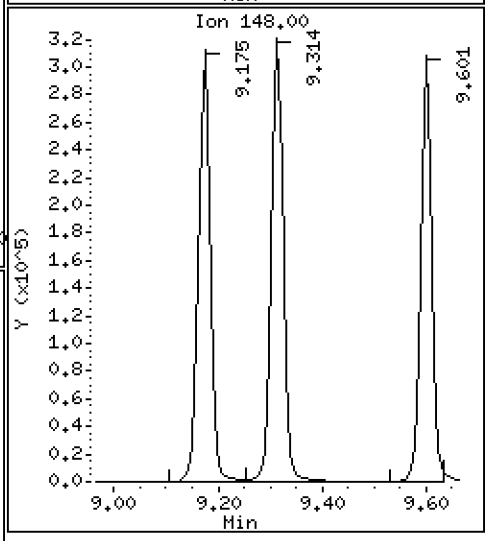
9 1,4-Dichlorobenzene

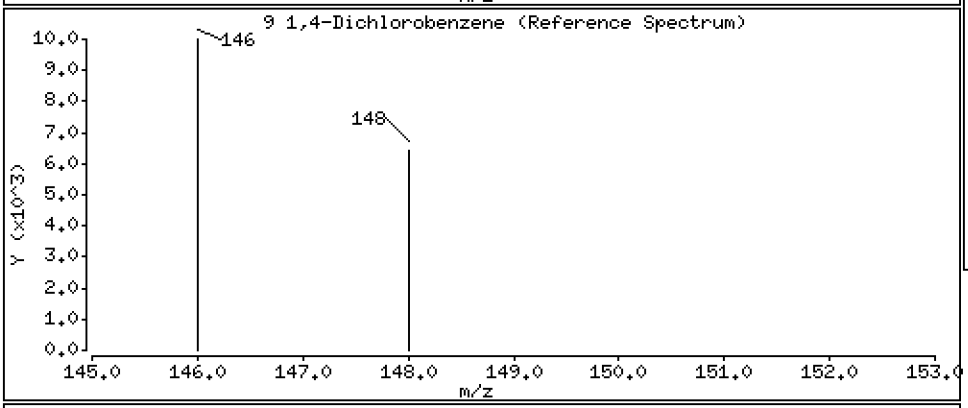
Concentration: 3.482 ug/L

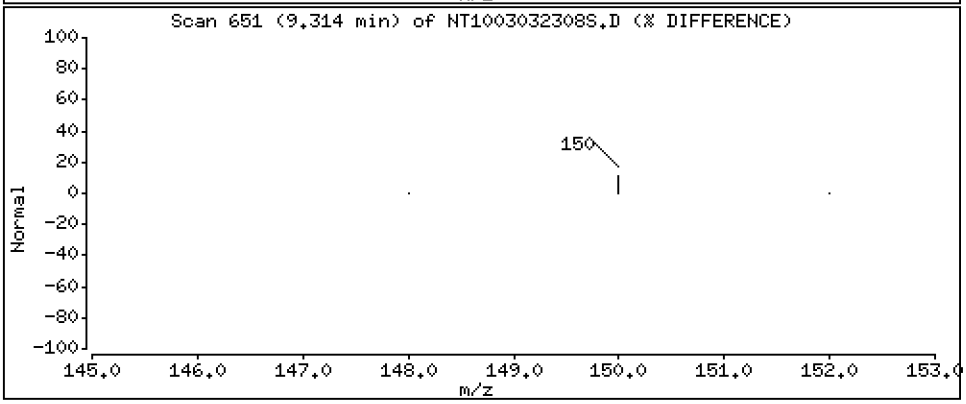












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323085.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

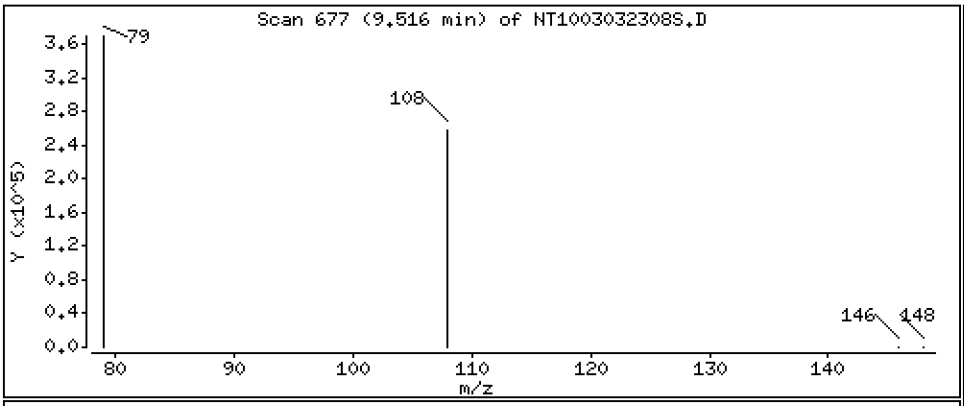
Operator: JGR

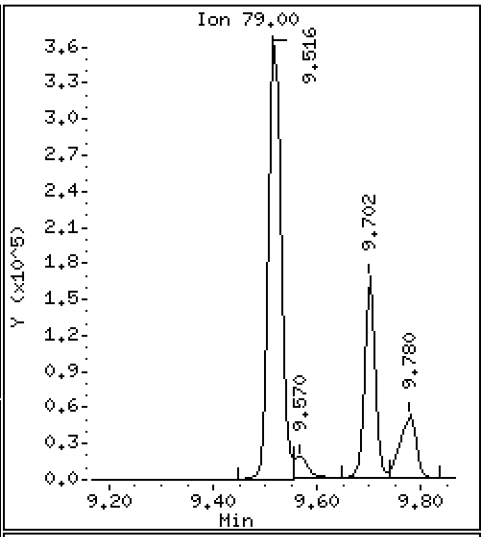
Column phase: ZB-5msi

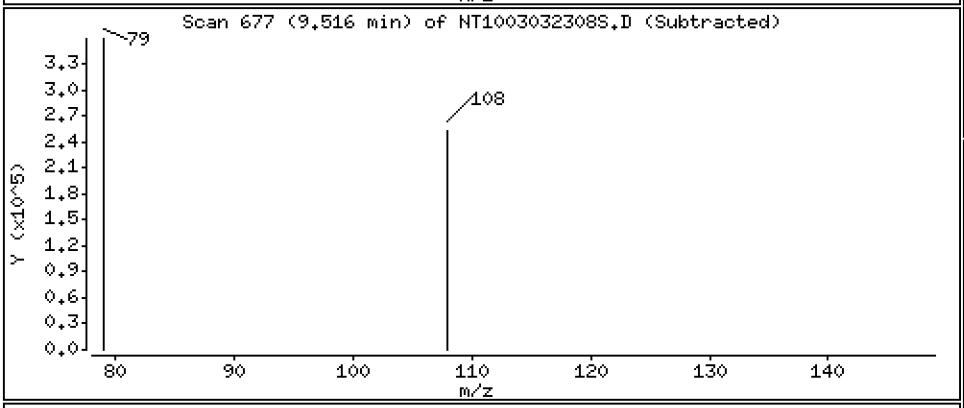
Column diameter: 0.25

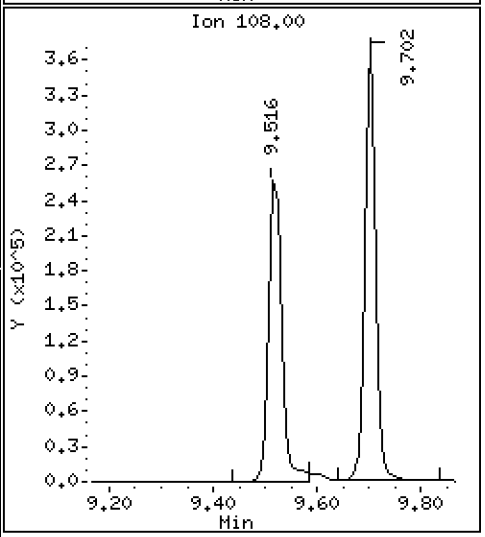
11 Benzyl alcohol

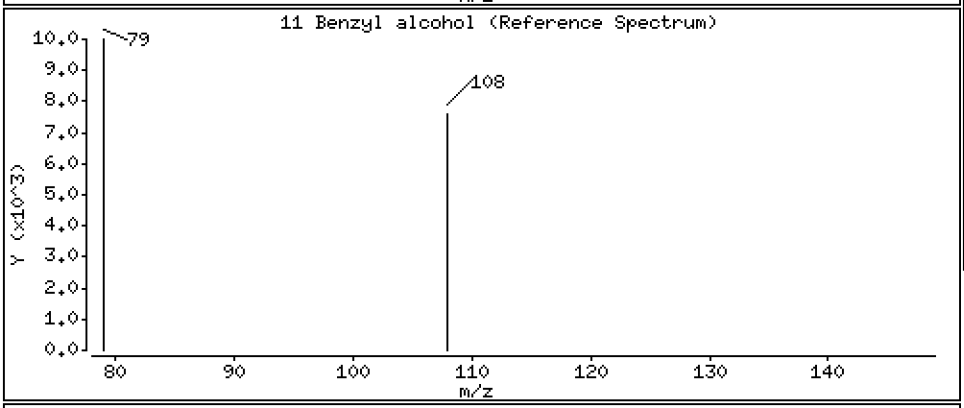
Concentration: 4.024 ug/L

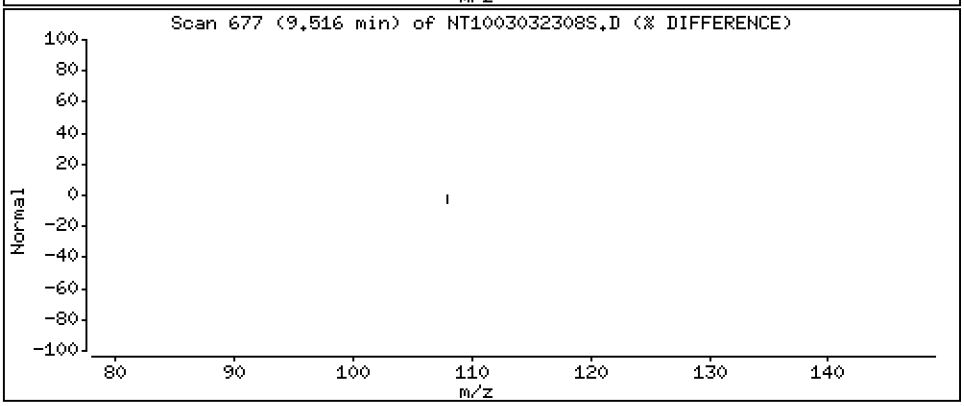












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323085.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

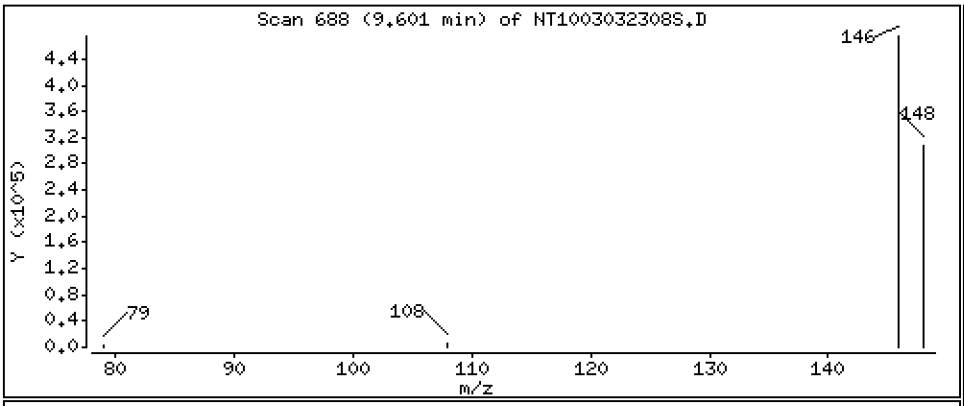
Operator: JGR

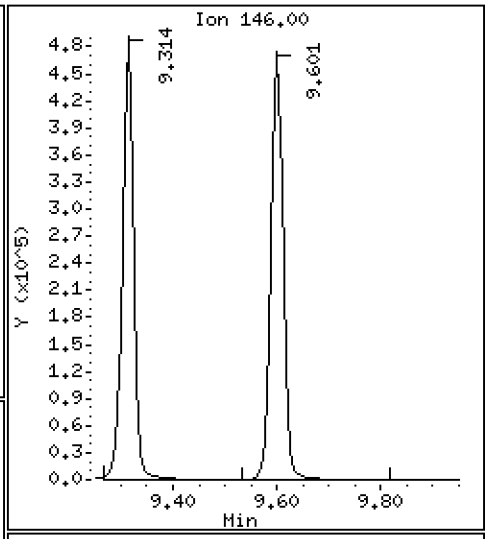
Column phase: ZB-5msi

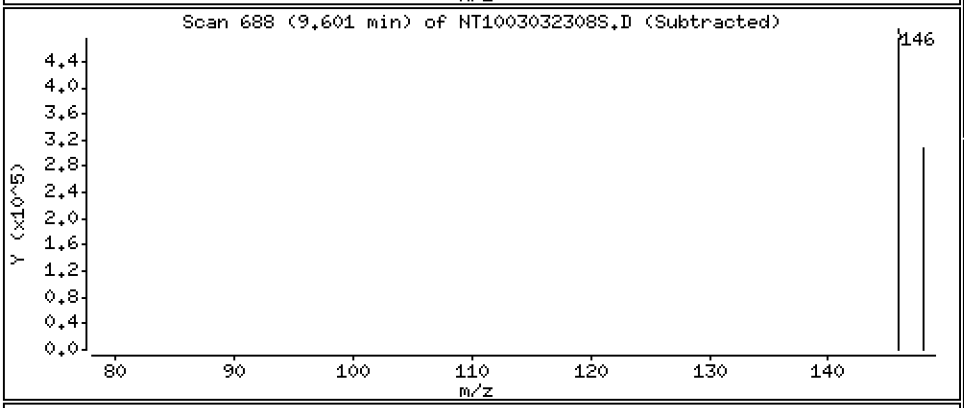
Column diameter: 0.25

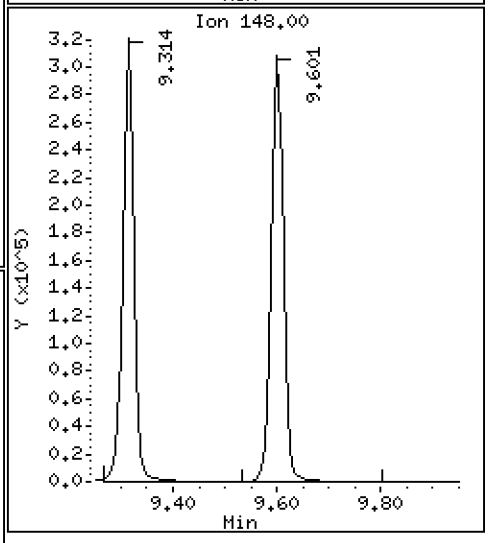
12 1,2-Dichlorobenzene

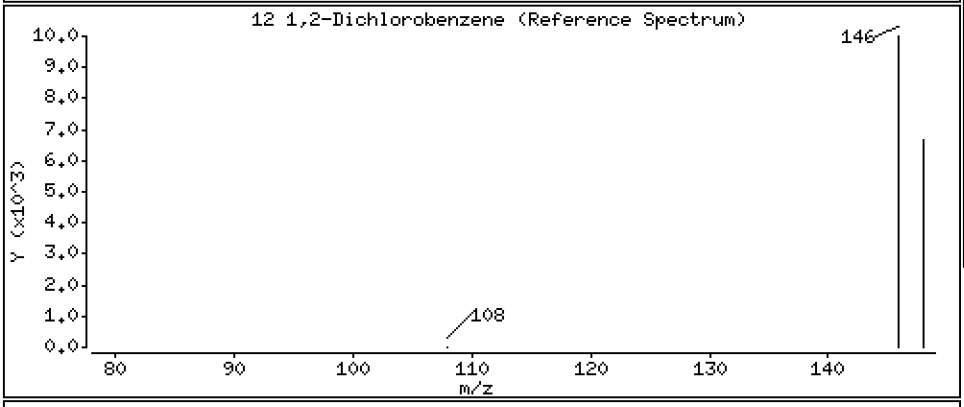
Concentration: 3.538 ug/L

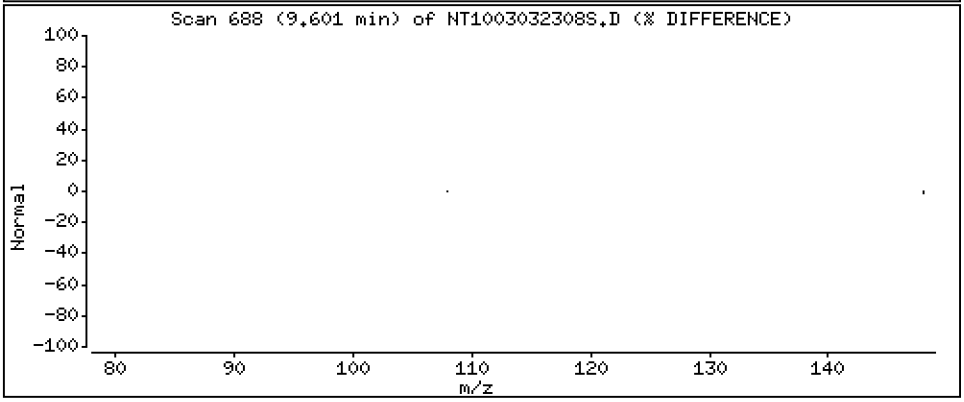












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032308S.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

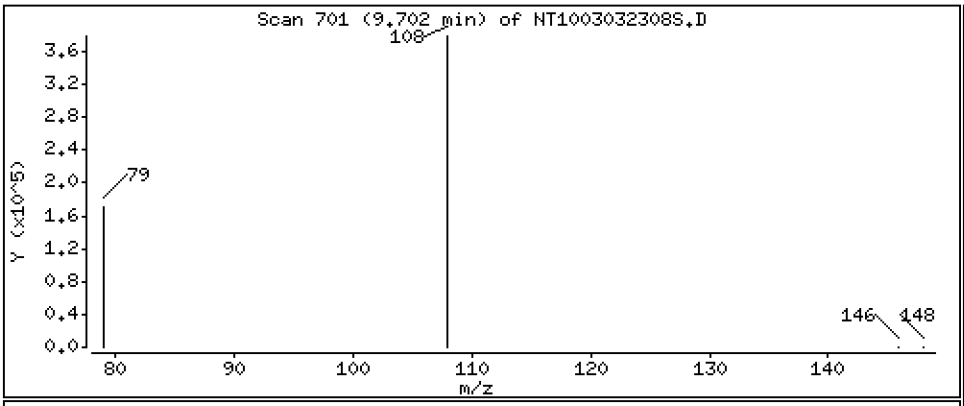
Operator: JGR

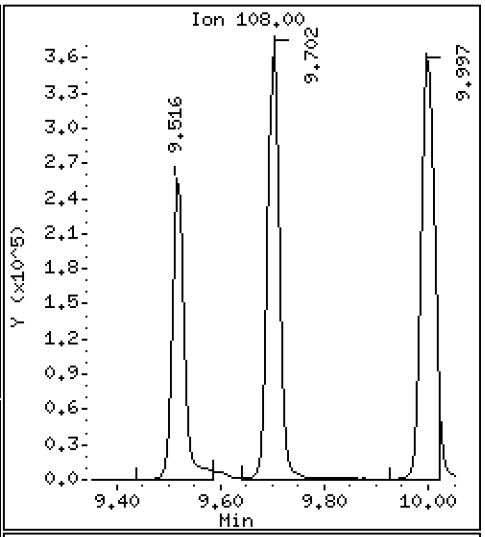
Column phase: ZB-5msi

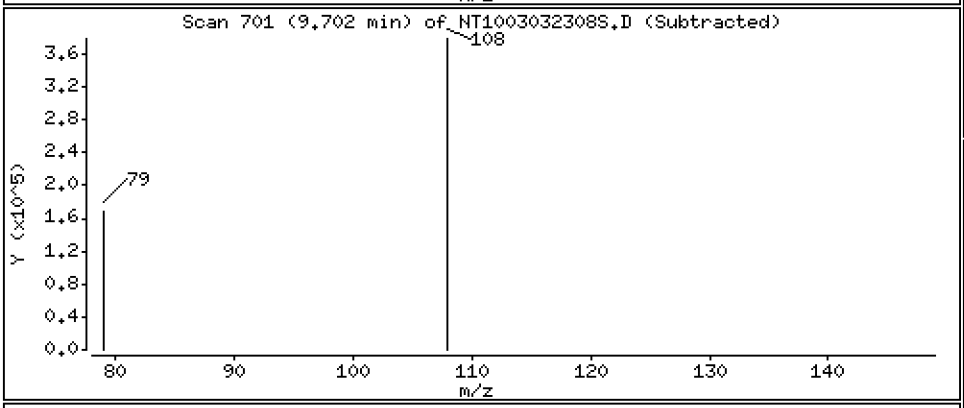
Column diameter: 0.25

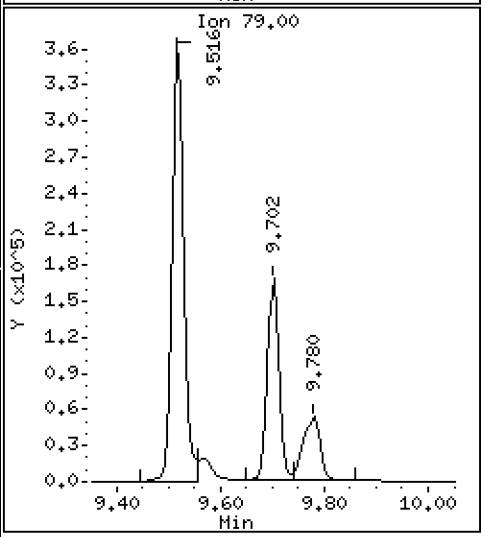
13 2-Methylphenol

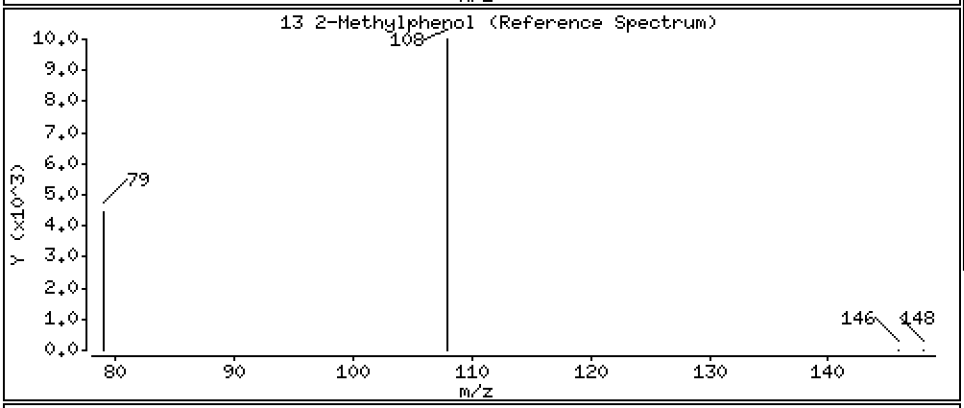
Concentration: 3.593 ug/L

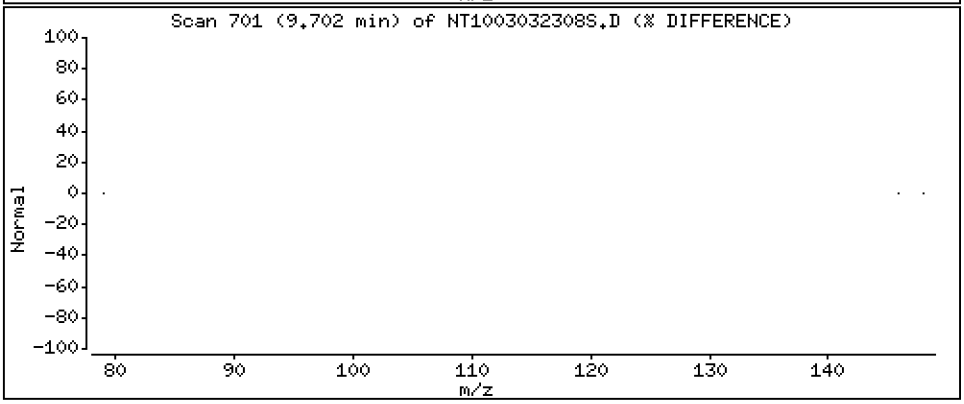












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032308S.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

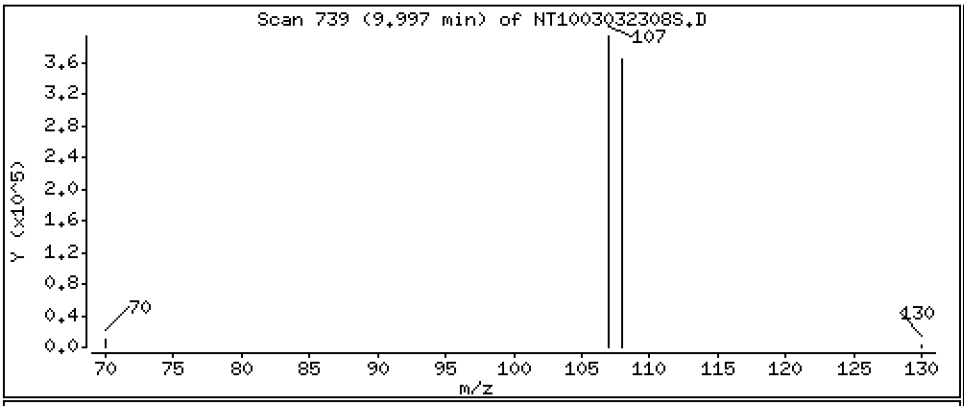
Operator: JGR

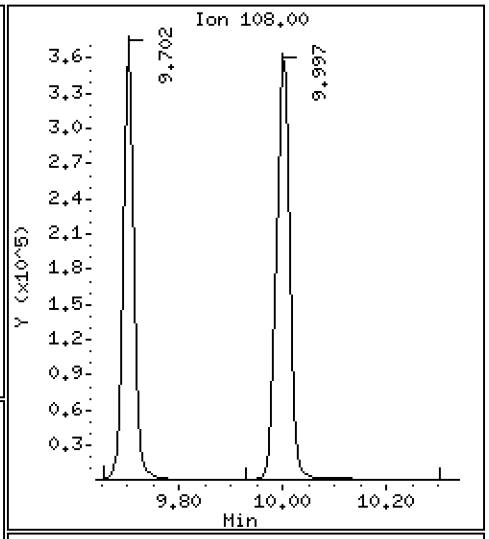
Column phase: ZB-5msi

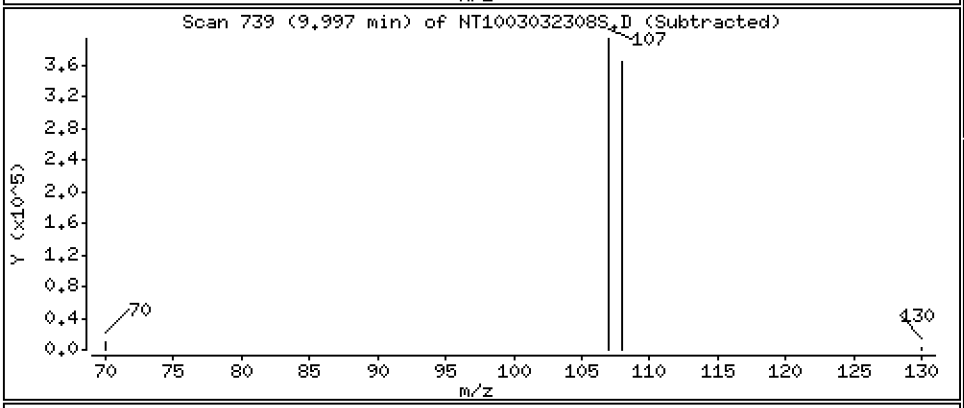
Column diameter: 0.25

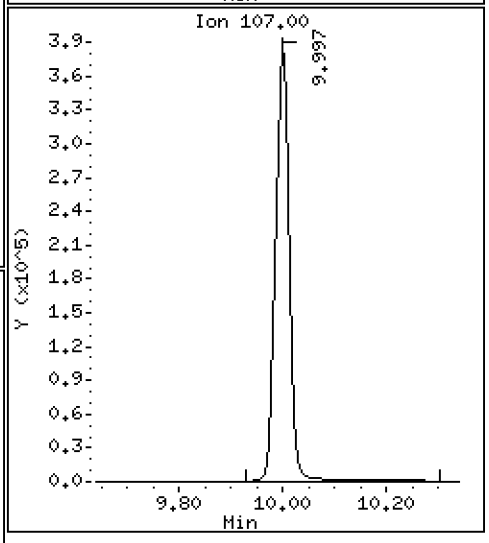
15 4-Methylphenol

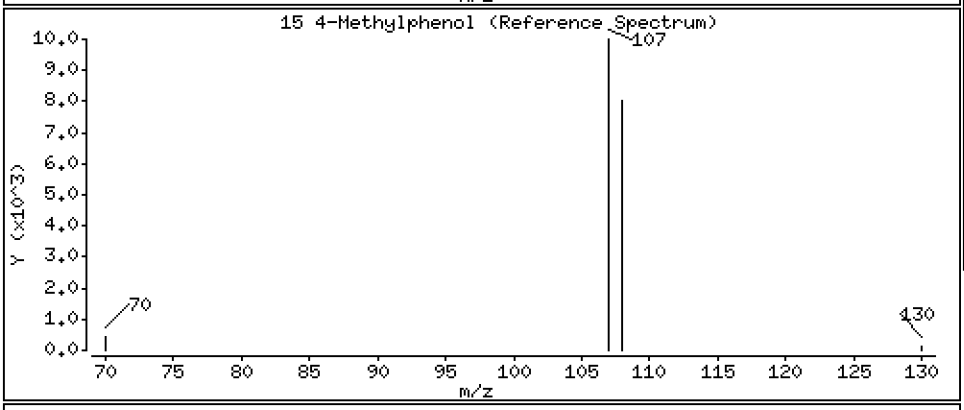
Concentration: 3.983 ug/L

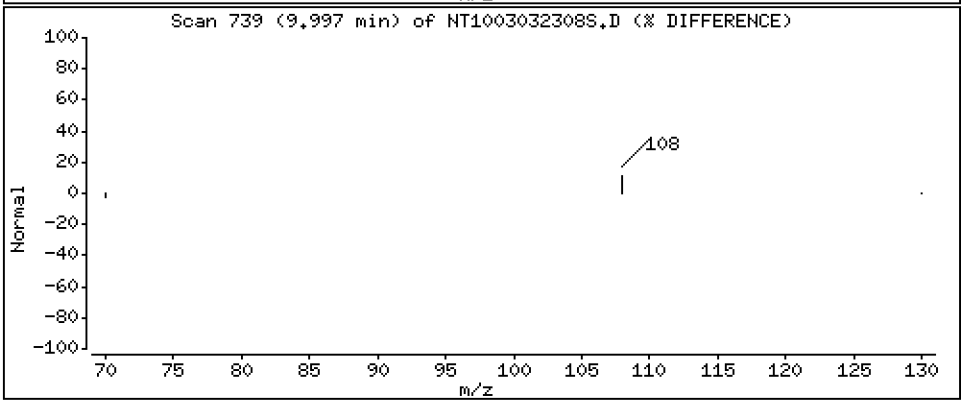












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323085.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

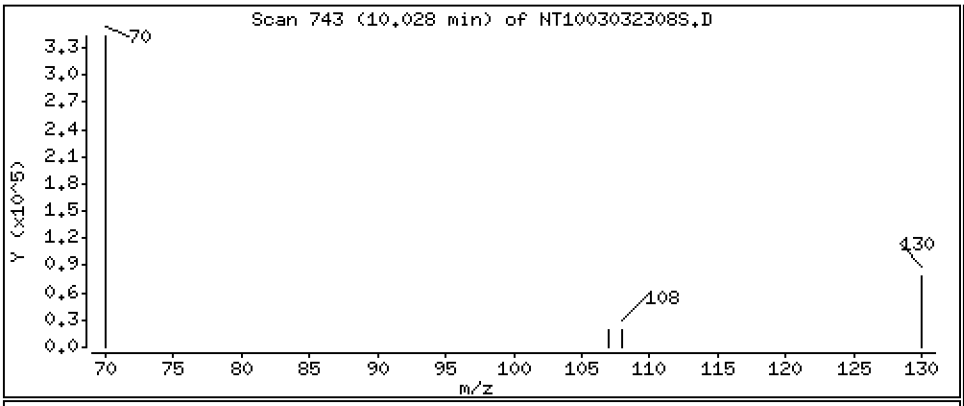
Operator: JGR

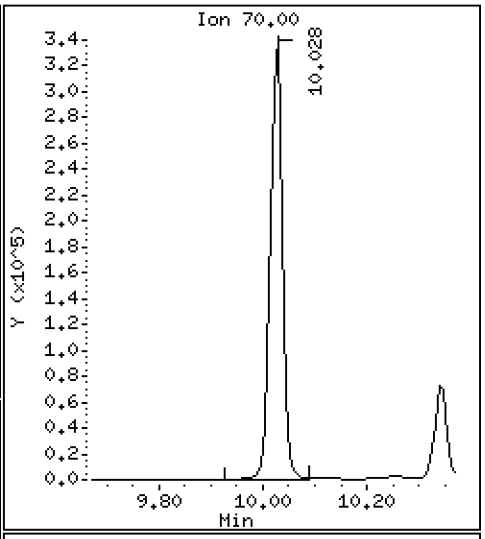
Column phase: ZB-5msi

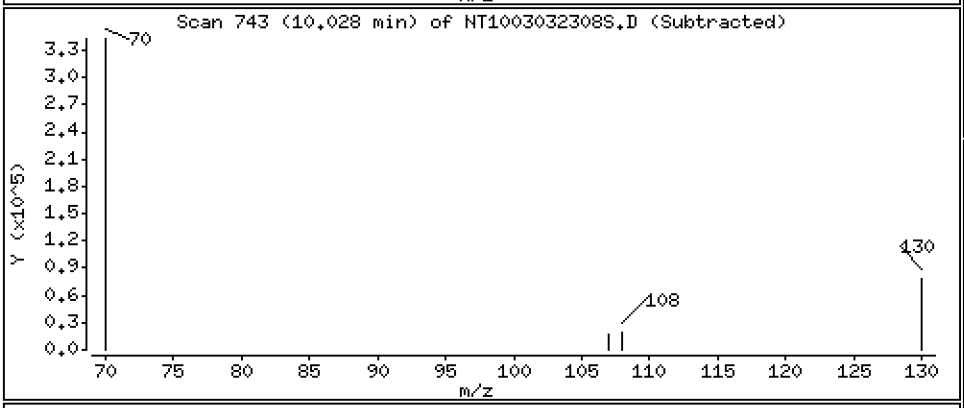
Column diameter: 0.25

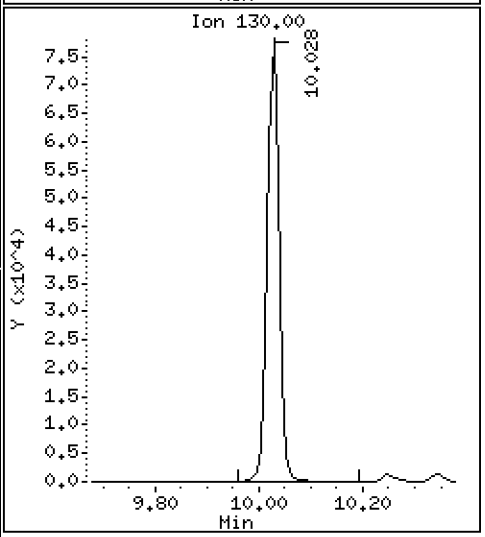
16 N-Nitroso-di-n-propylamine

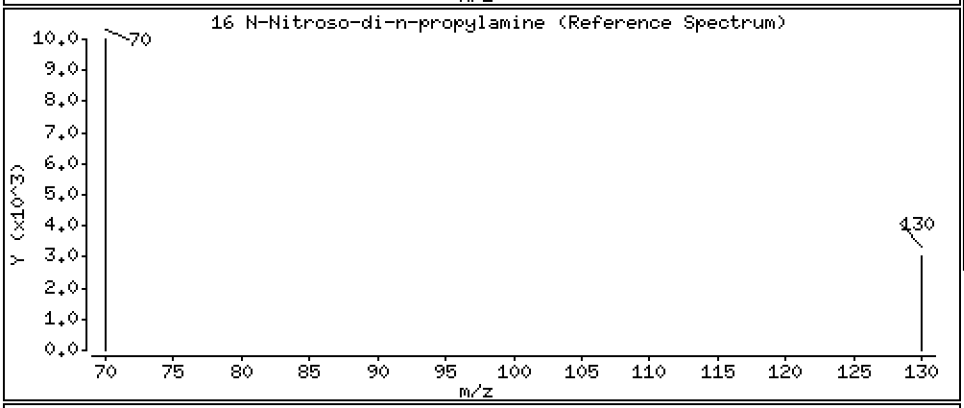
Concentration: 4.674 ug/L

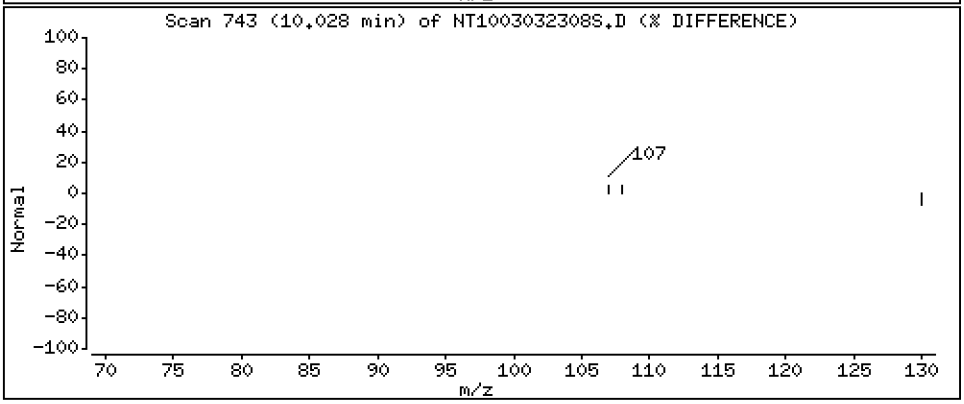












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323085.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

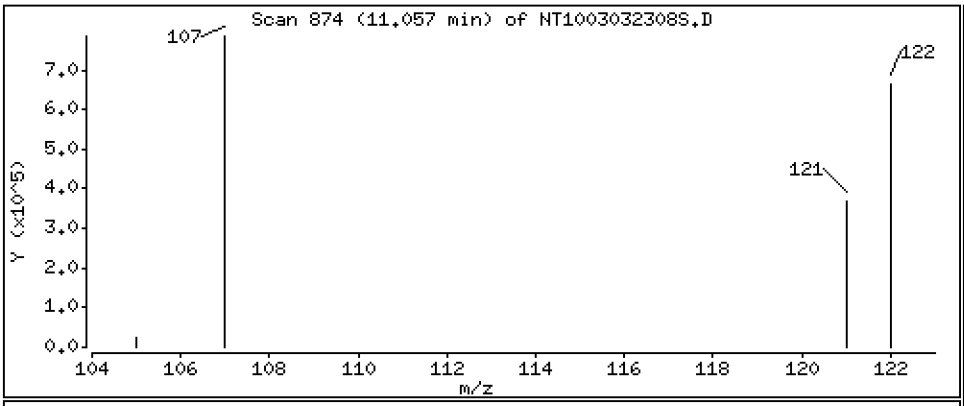
Operator: JGR

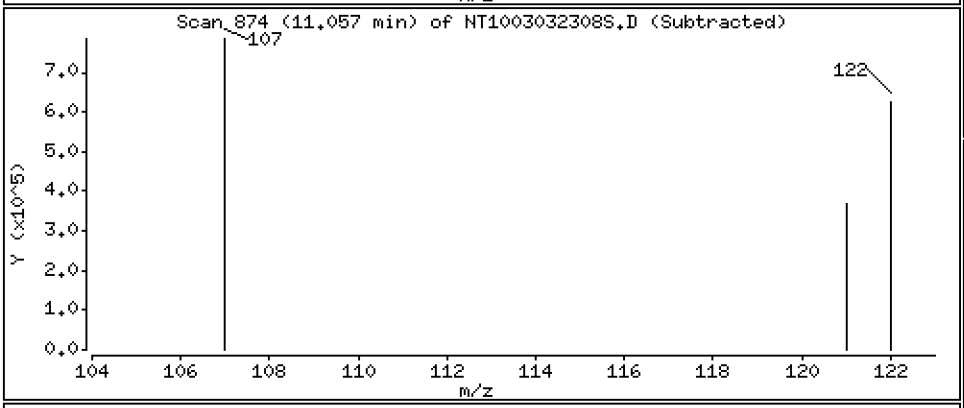
Column phase: ZB-5msi

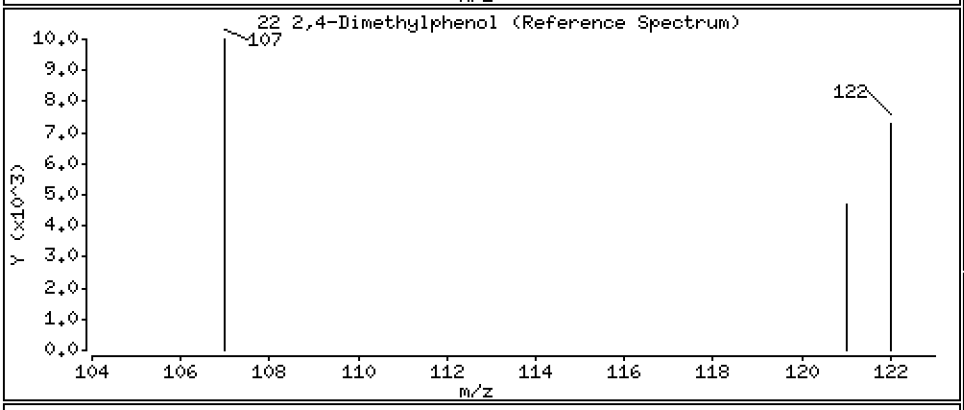
Column diameter: 0.25

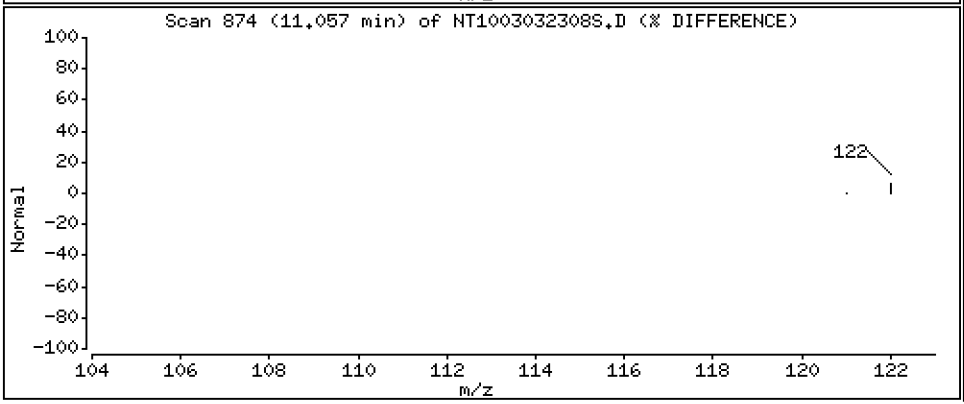
22 2,4-Dimethylphenol

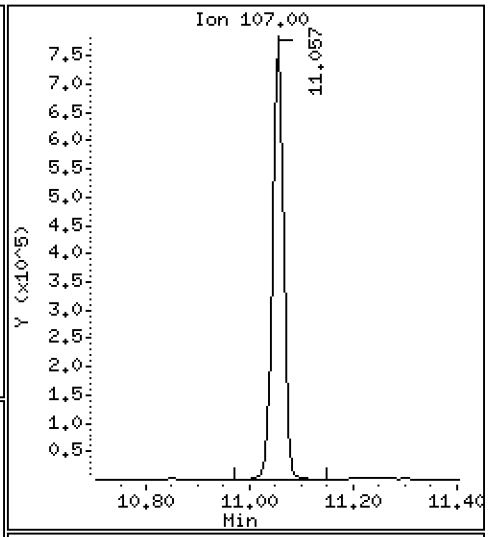
Concentration: 6.202 ug/L

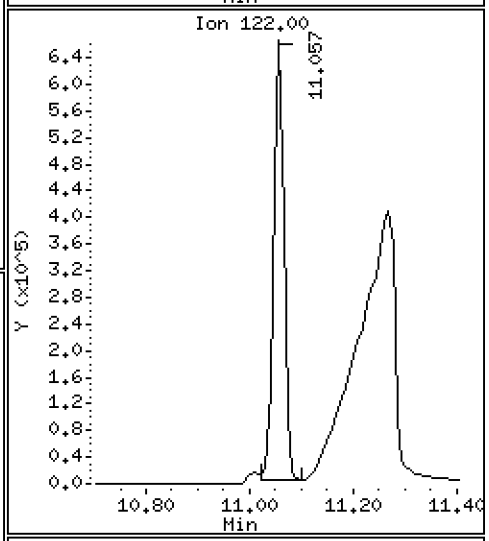


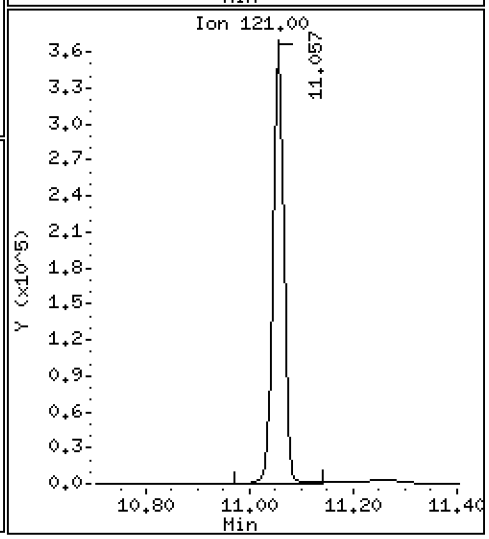












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323085.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

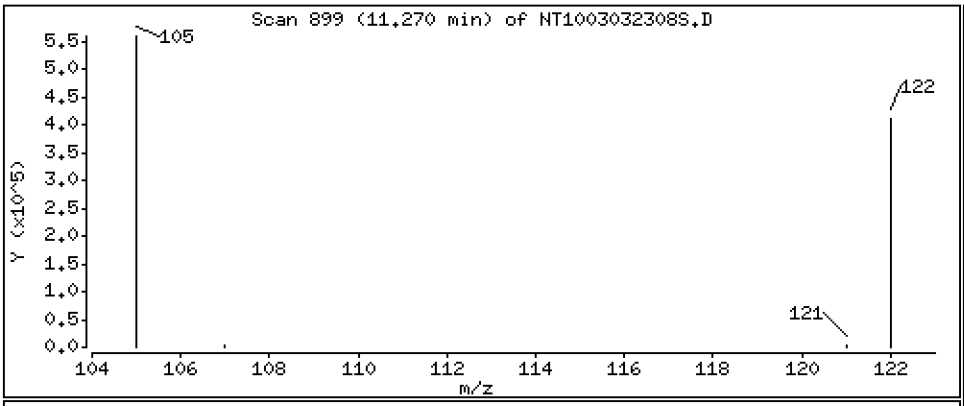
Operator: JGR

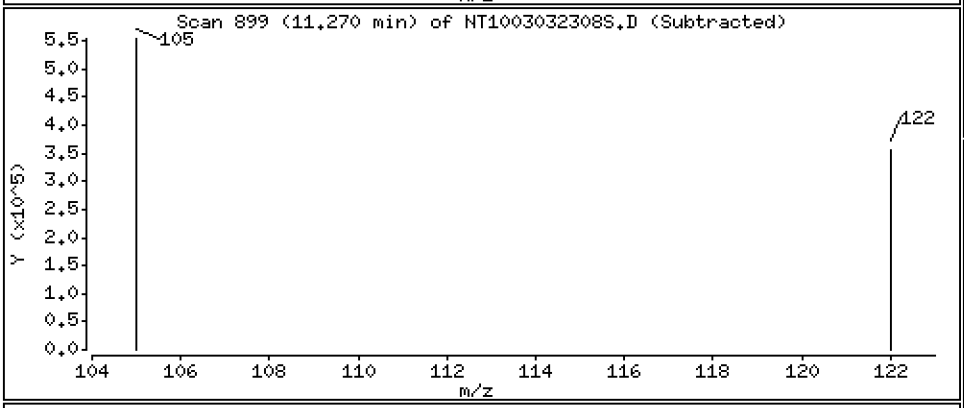
Column phase: ZB-5msi

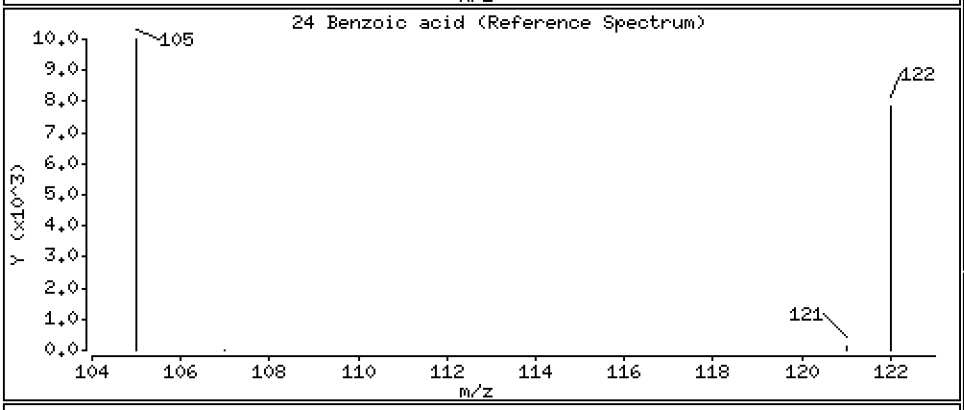
Column diameter: 0.25

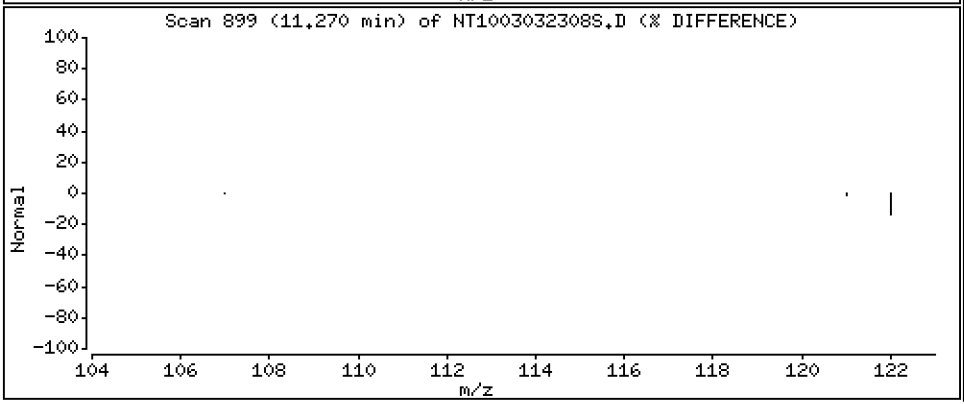
24 Benzoic acid

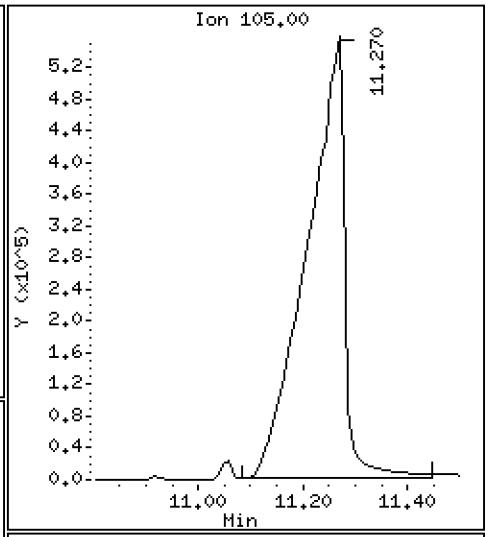
Concentration: 24.33 ug/L

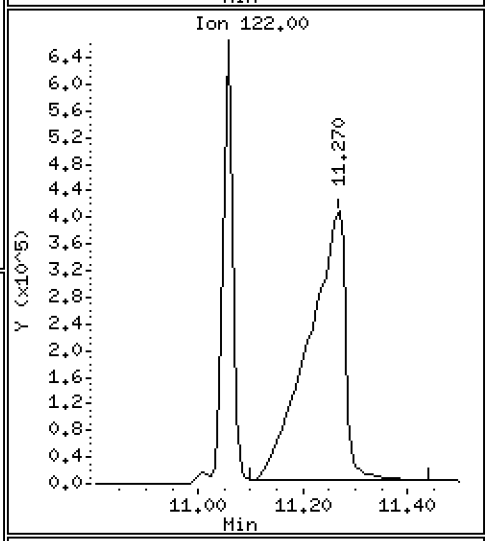


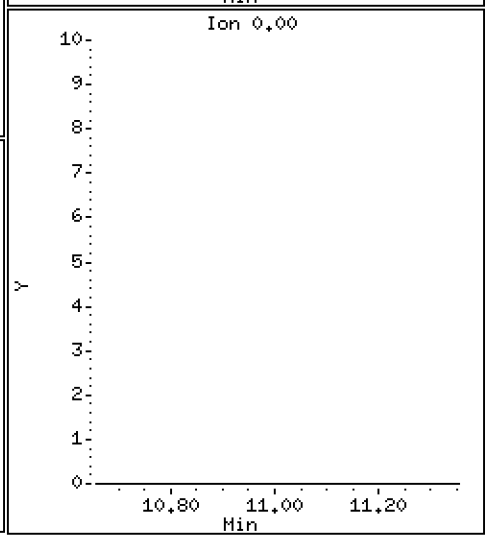












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323085.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

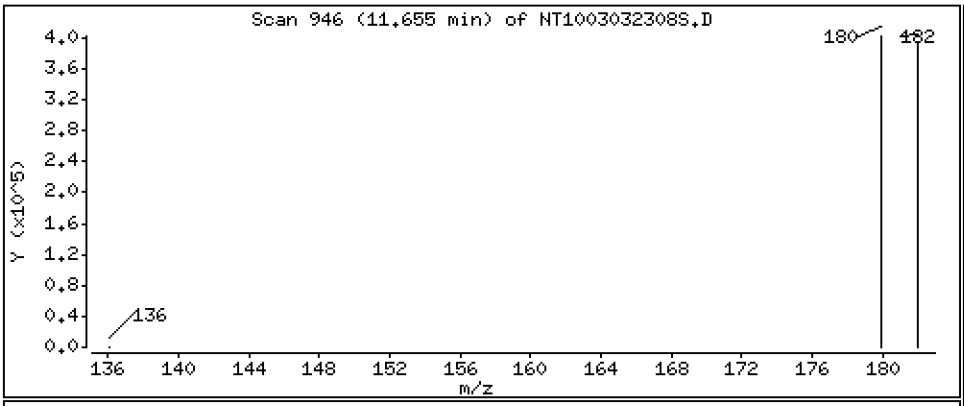
Operator: JGR

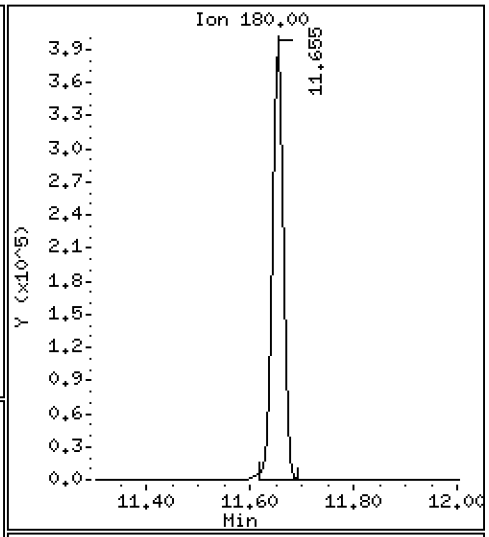
Column phase: ZB-5msi

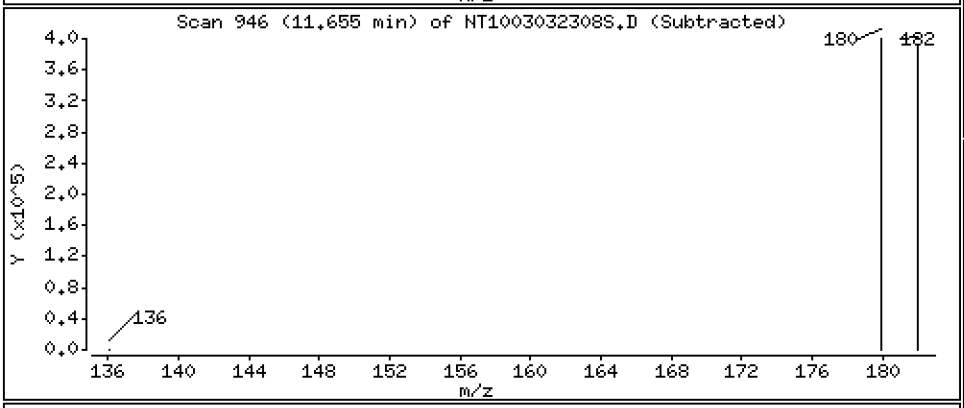
Column diameter: 0.25

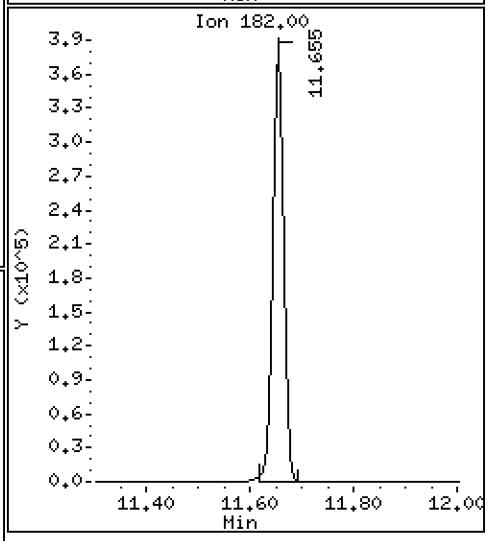
26 1,2,4-Trichlorobenzene

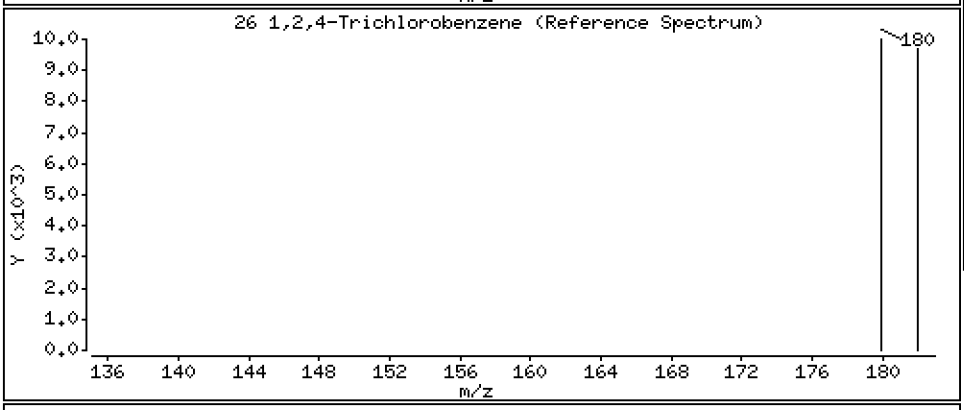
Concentration: 3.957 ug/L

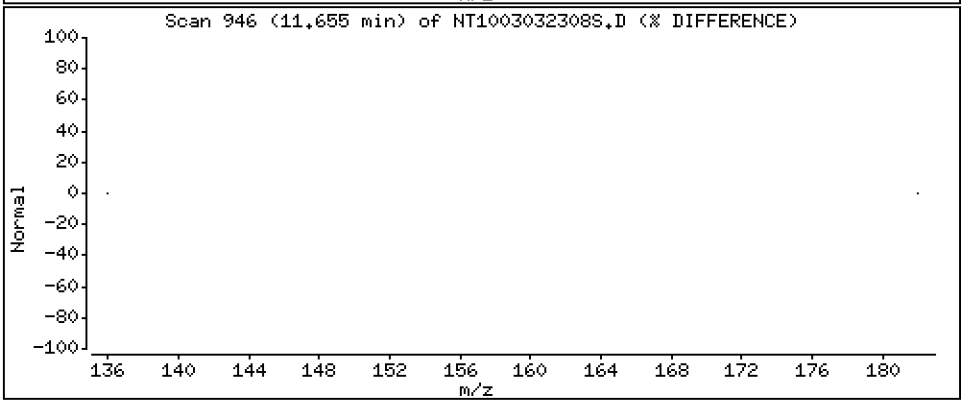












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032308S.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

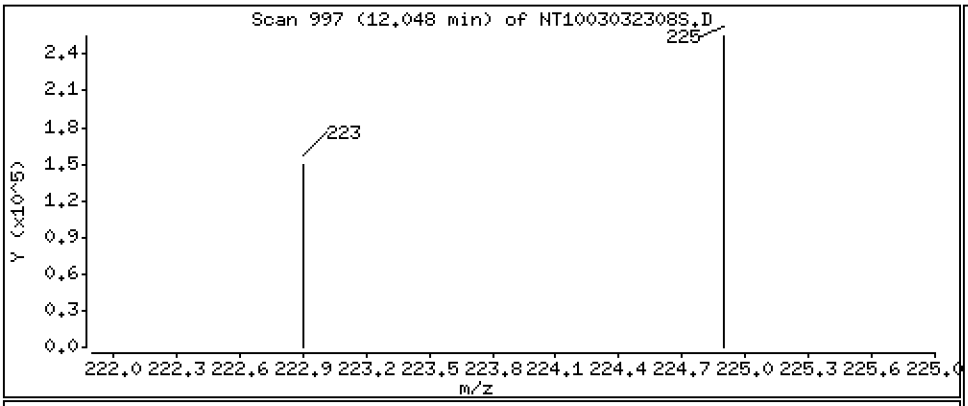
Operator: JGR

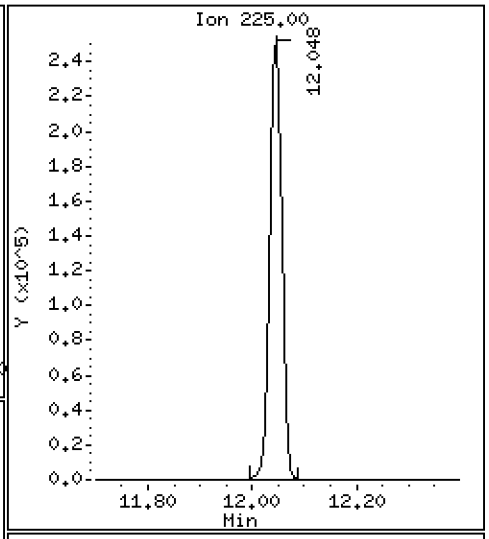
Column phase: ZB-5msi

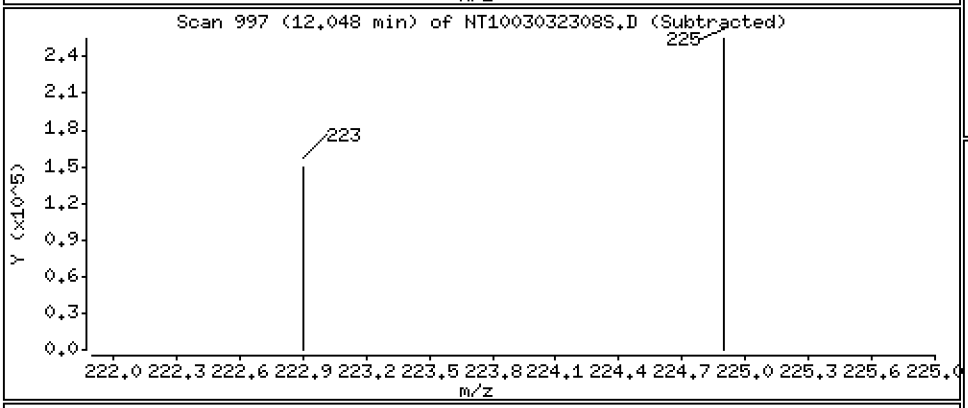
Column diameter: 0.25

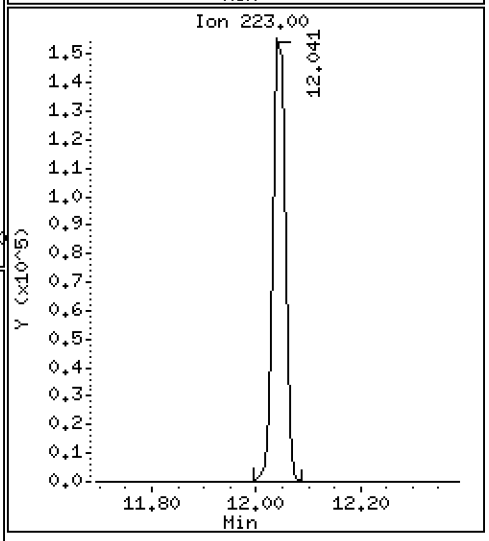
30 Hexachlorobutadiene

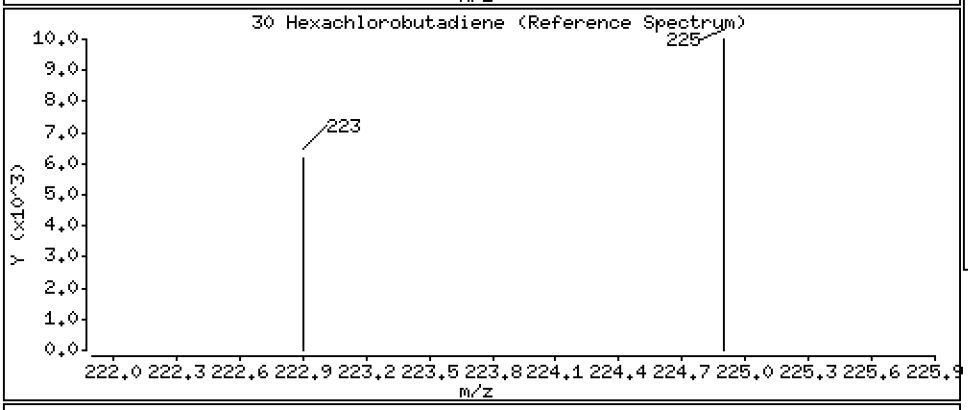
Concentration: 3.558 ug/L

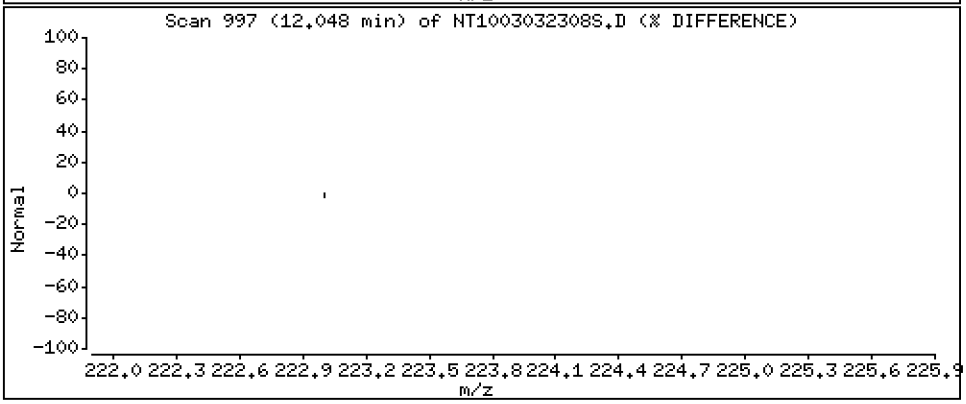












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032308S.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

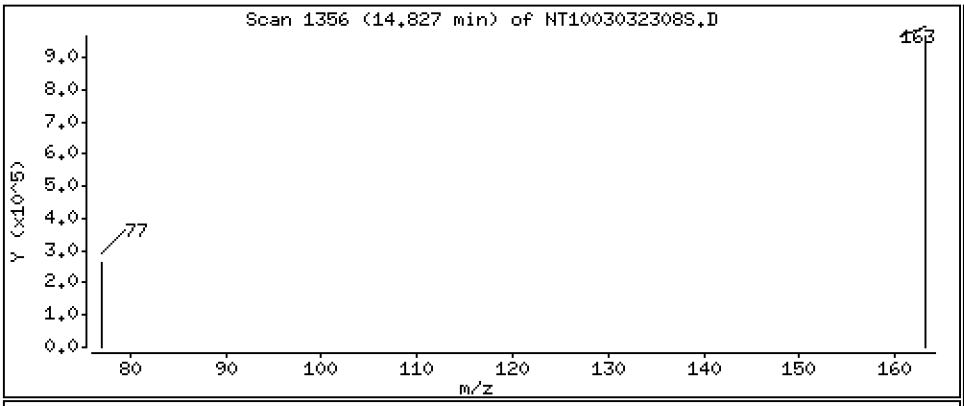
Operator: JGR

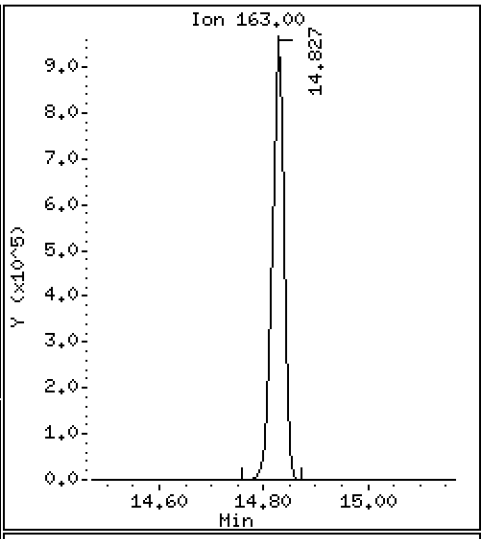
Column phase: ZB-5msi

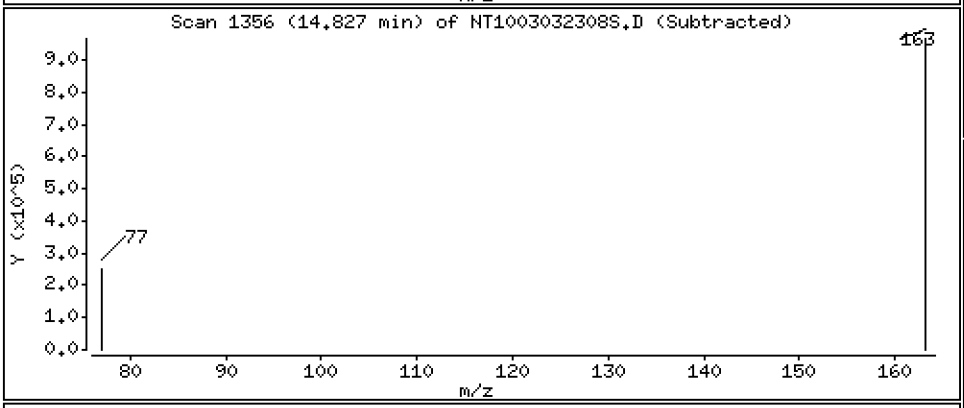
Column diameter: 0.25

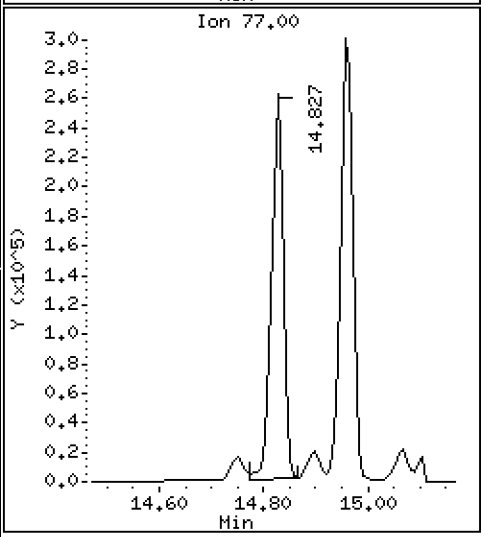
39 Dimethylphthalate

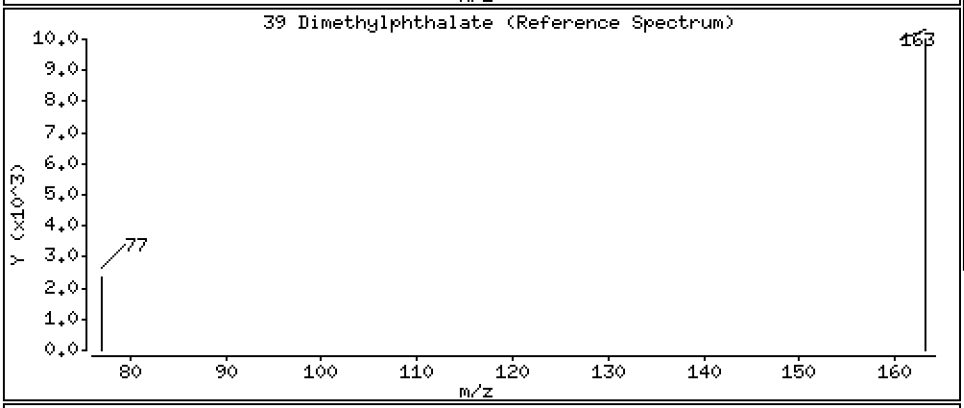
Concentration: 4.672 ug/L

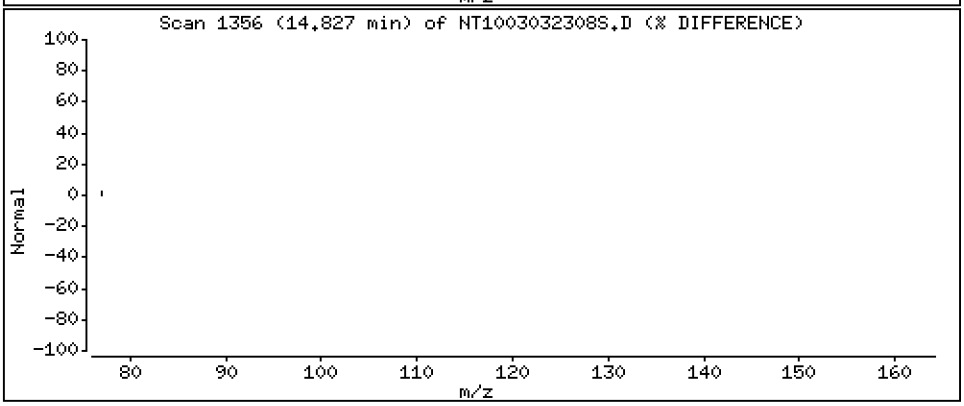












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032308S.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

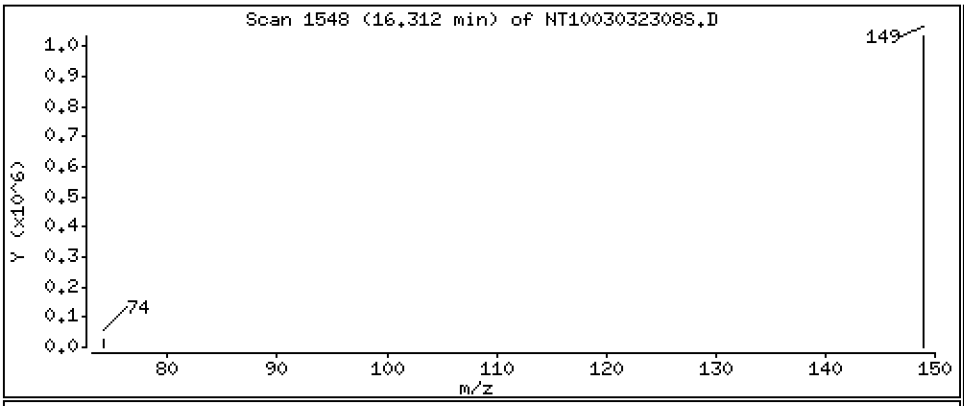
Operator: JGR

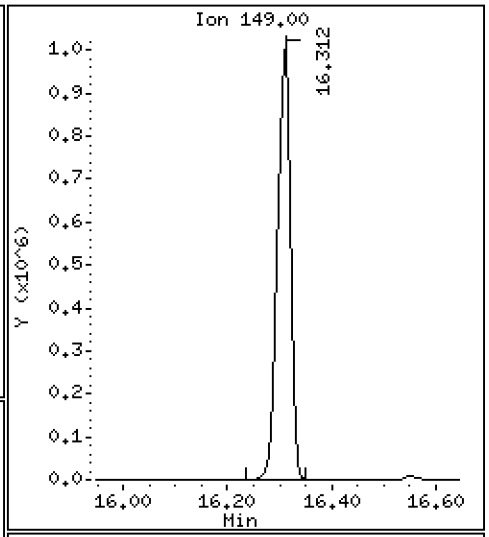
Column phase: ZB-5msi

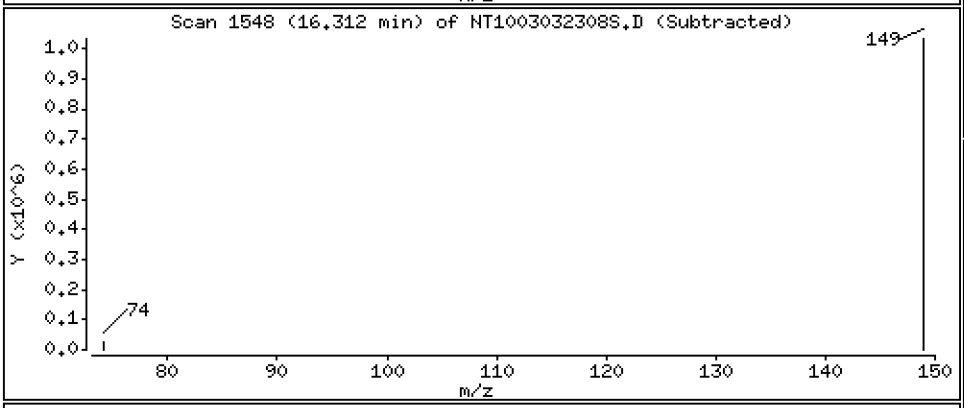
Column diameter: 0.25

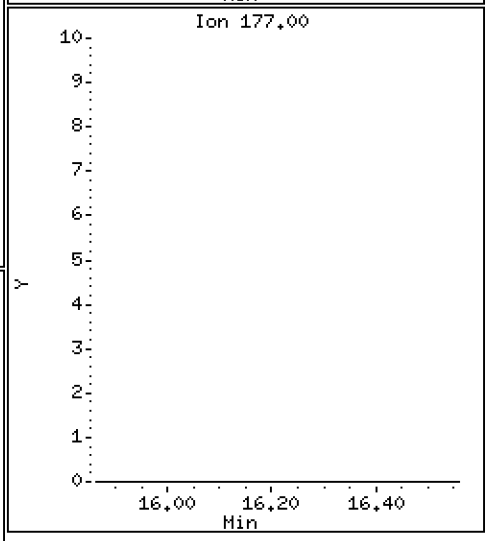
50 Diethylphthalate

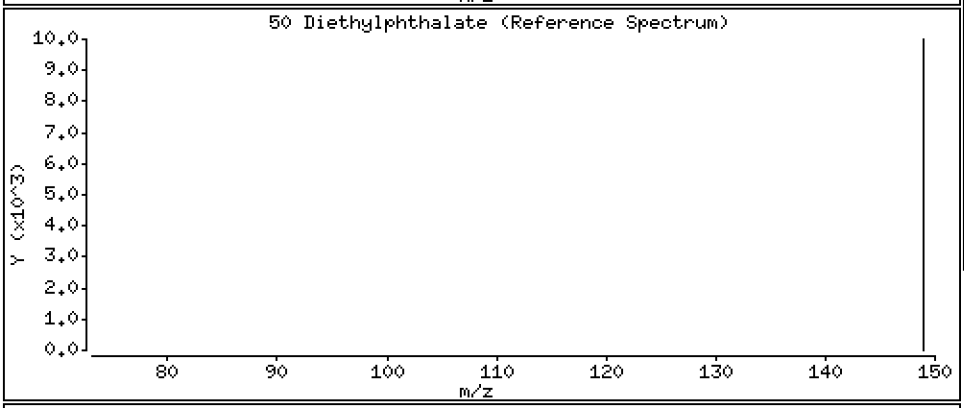
Concentration: 5.644 ug/L

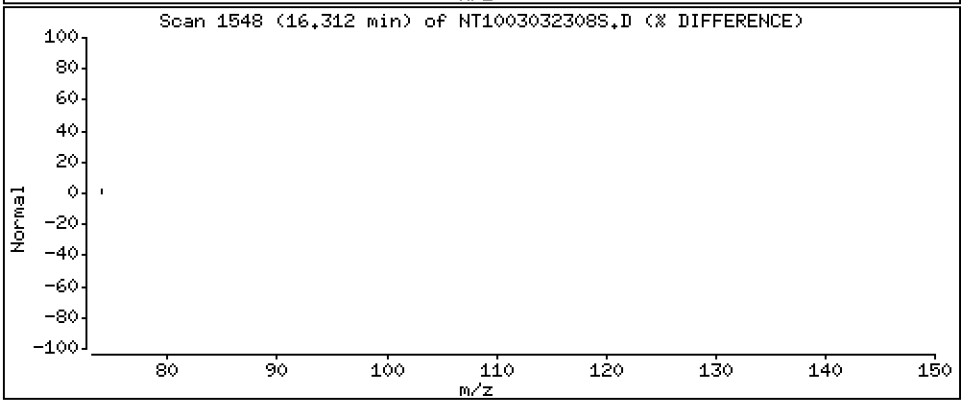












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032308S.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

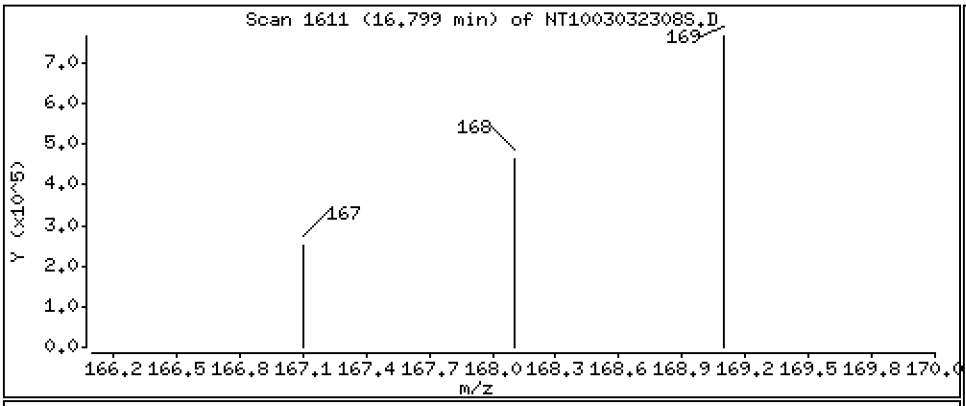
Operator: JGR

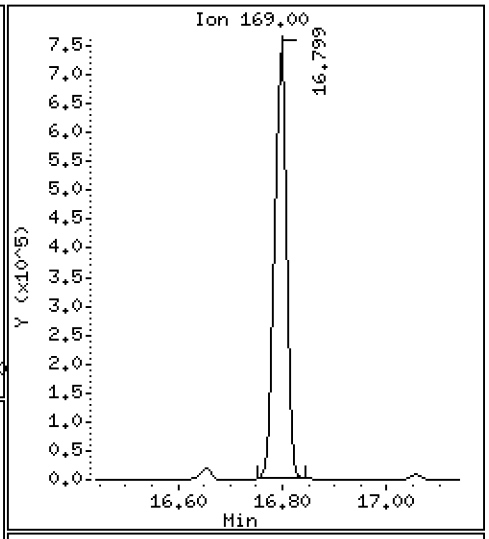
Column phase: ZB-5msi

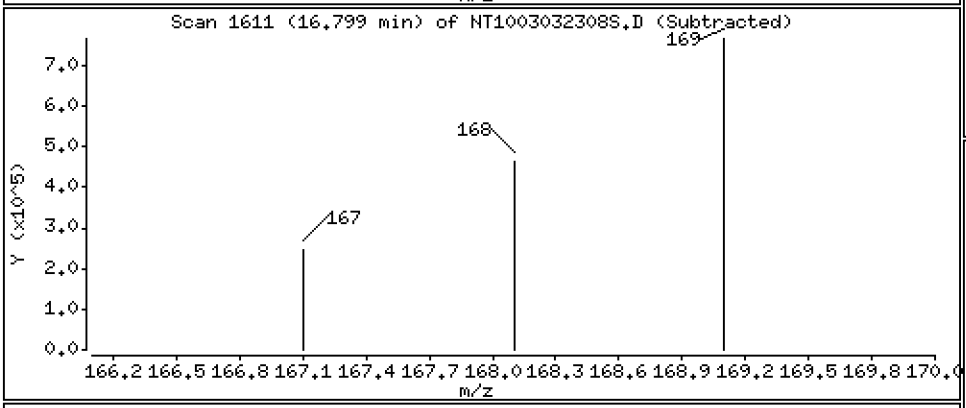
Column diameter: 0.25

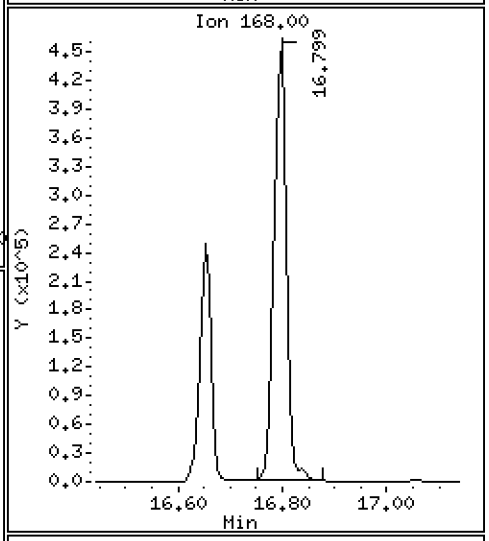
54 N-Nitrosodiphenylamine

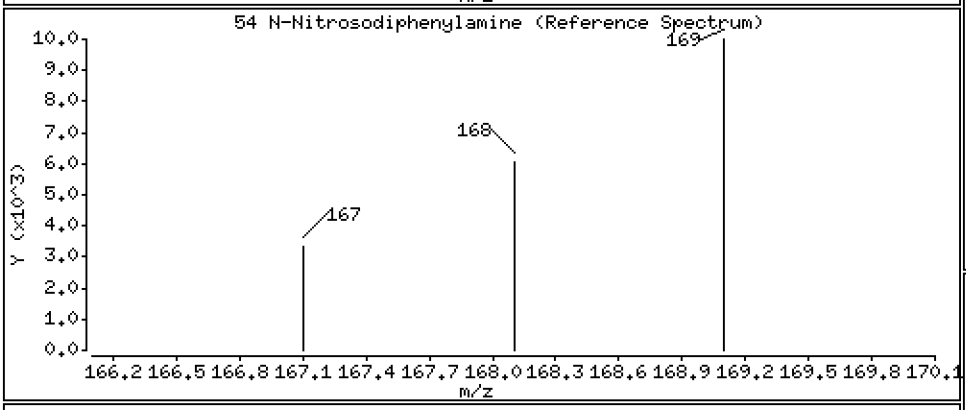
Concentration: 3.898 ug/L

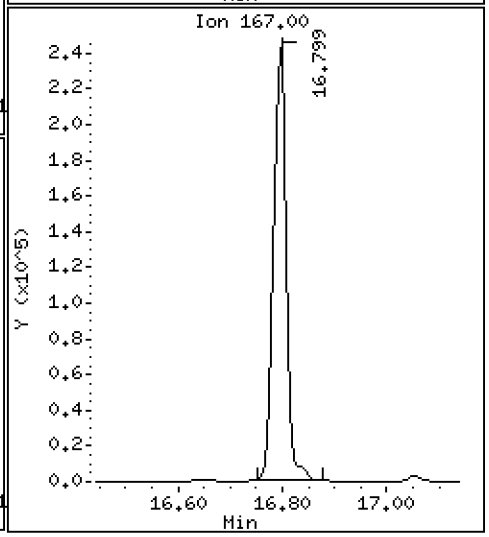


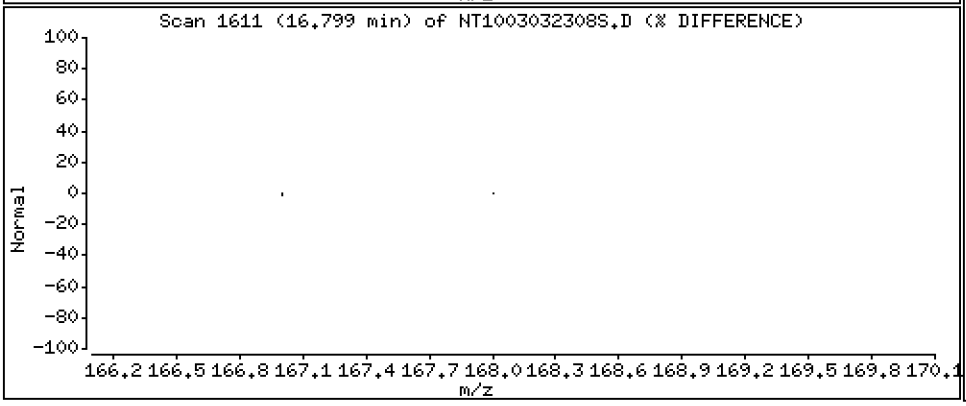












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032308S.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

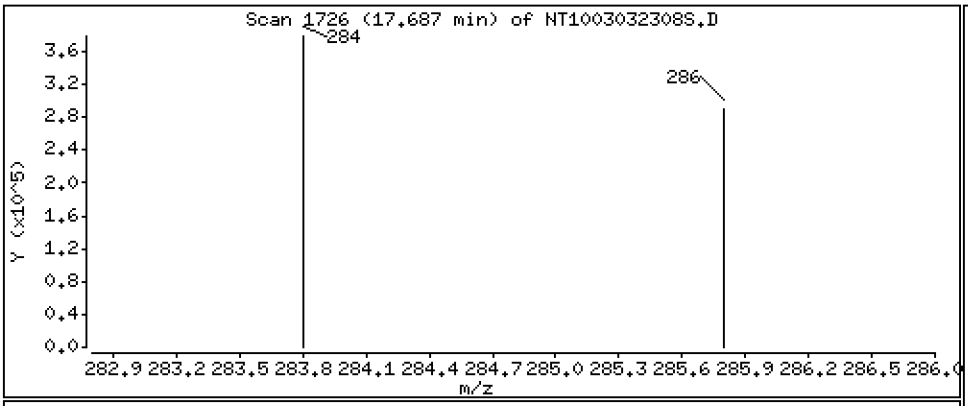
Operator: JGR

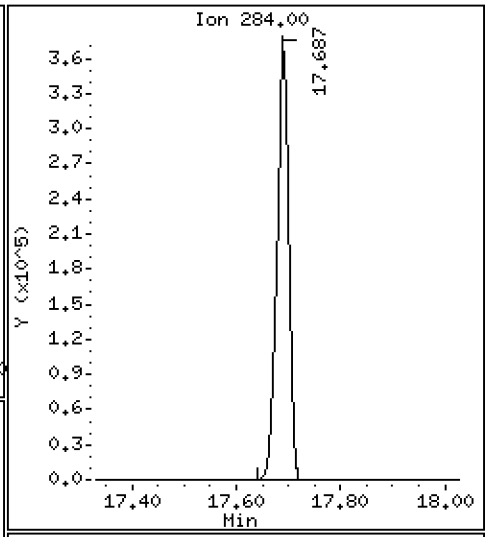
Column phase: ZB-5msi

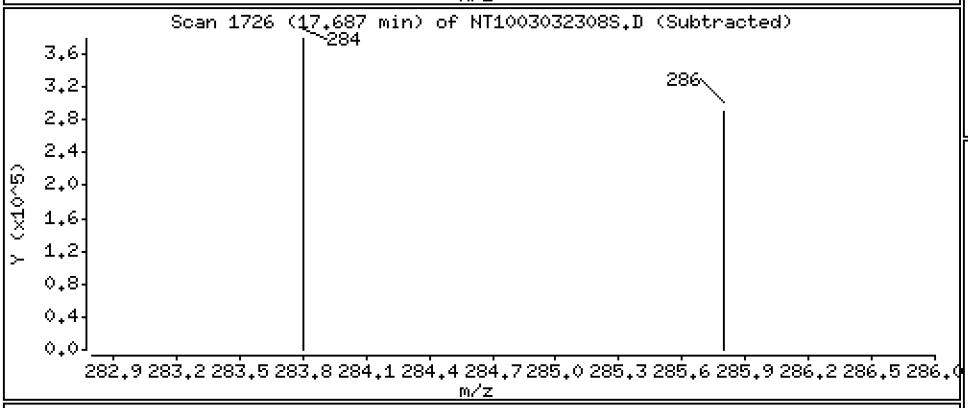
Column diameter: 0.25

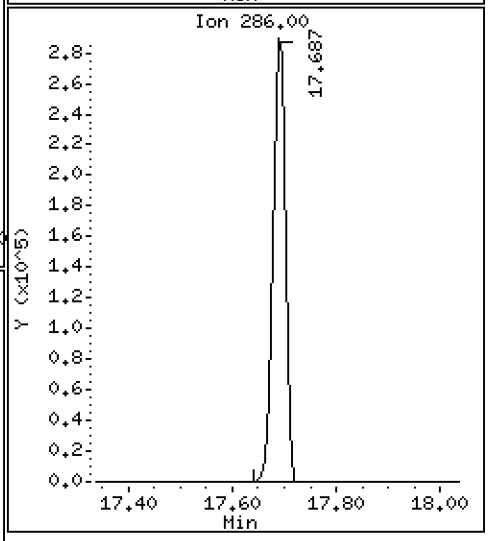
57 Hexachlorobenzene

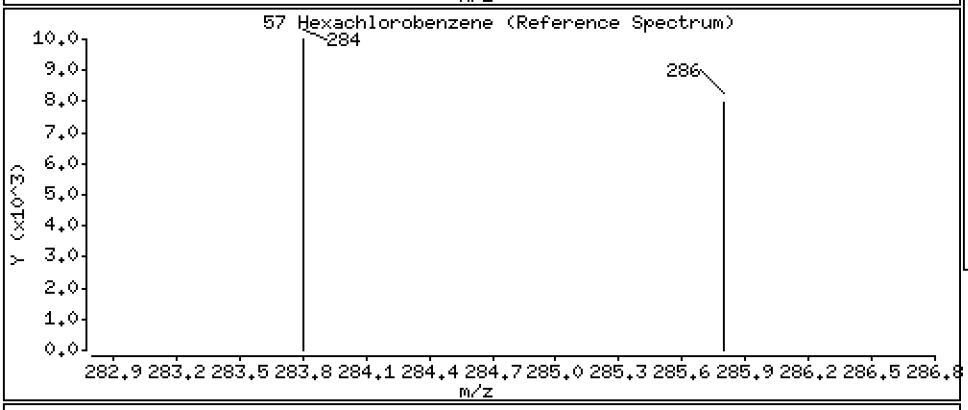
Concentration: 4.198 ug/L

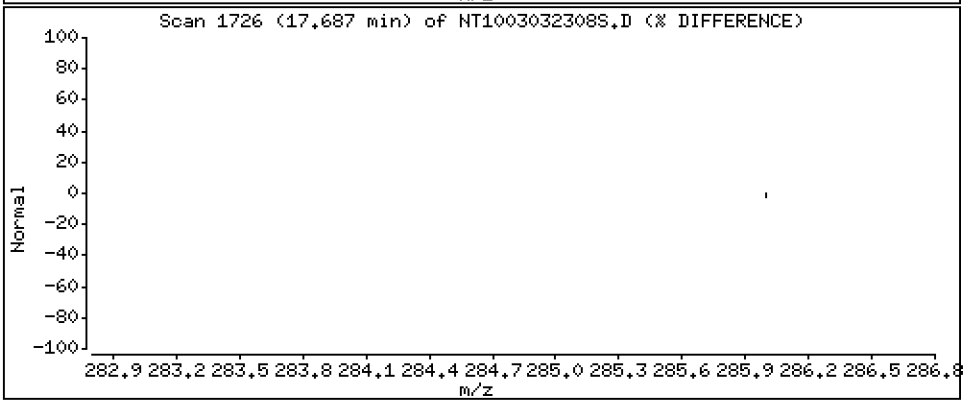












Date : 03-MAR-2023 22:15

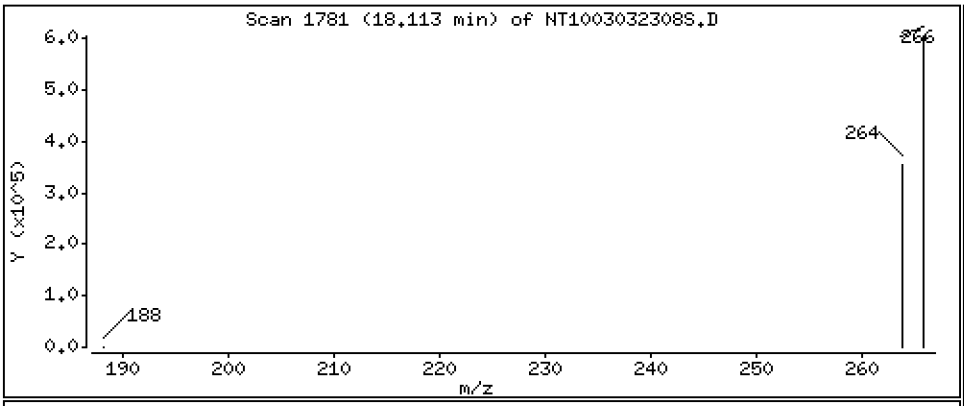
Client ID: Instrument: nt10.i

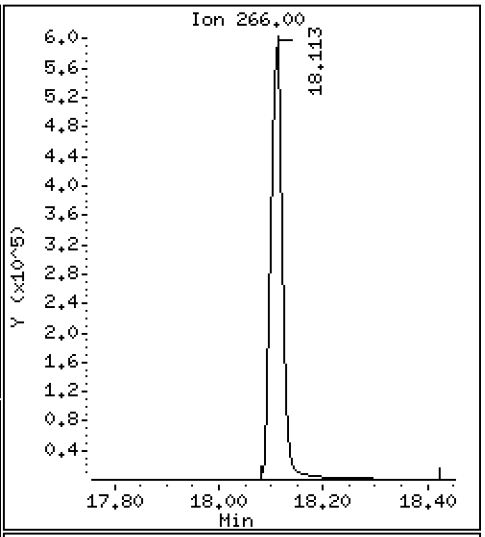
Sample Info: BLA0673-BSD1

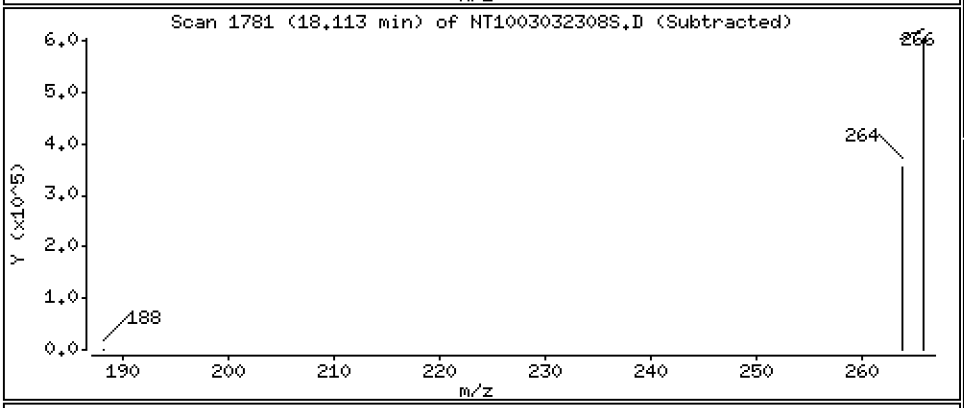
Volume Injected (uL): 1.0 Operator: JGR

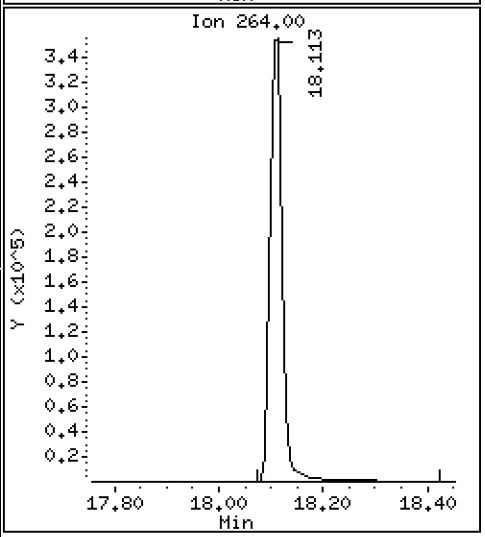
Column phase: ZB-5msi Column diameter: 0.25

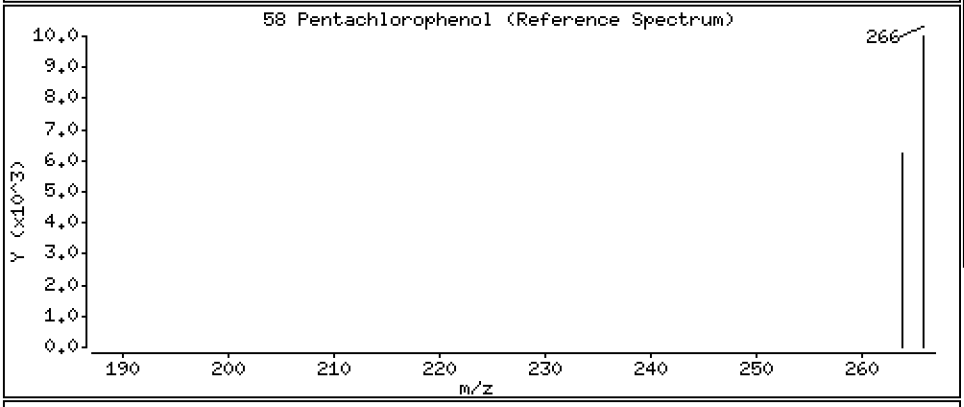
58 Pentachlorophenol Concentration: 12.70 ug/L

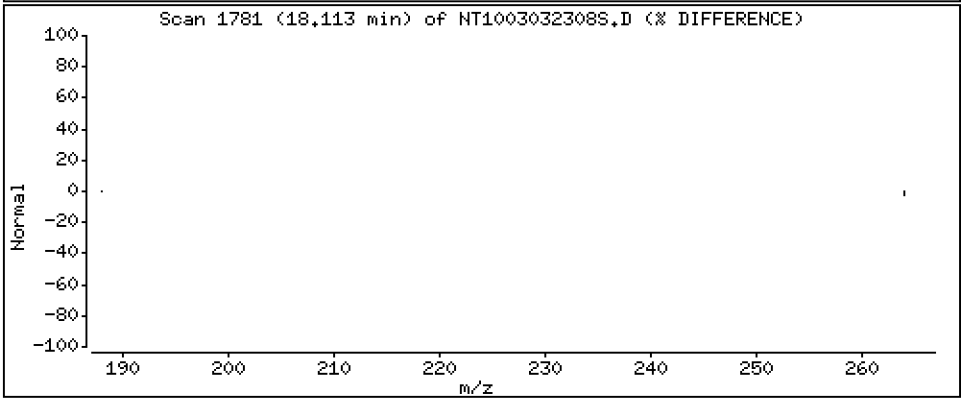












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032308S.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

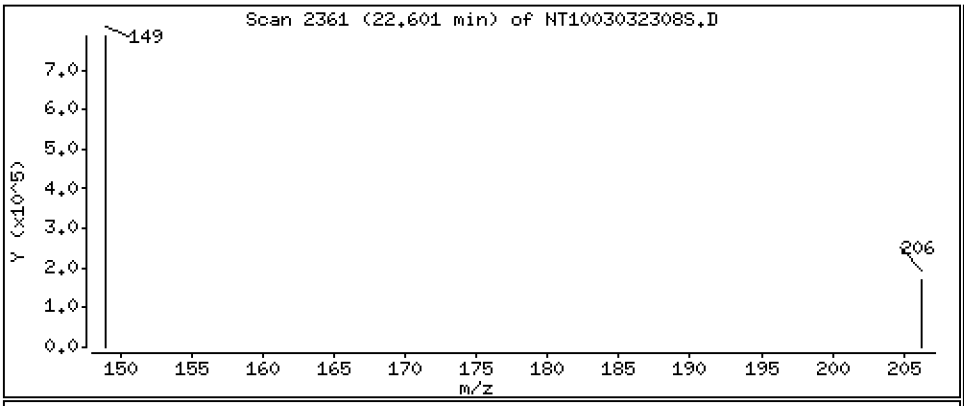
Operator: JGR

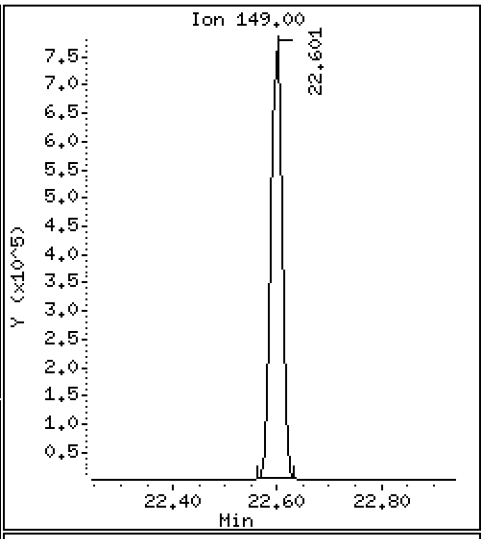
Column phase: ZB-5msi

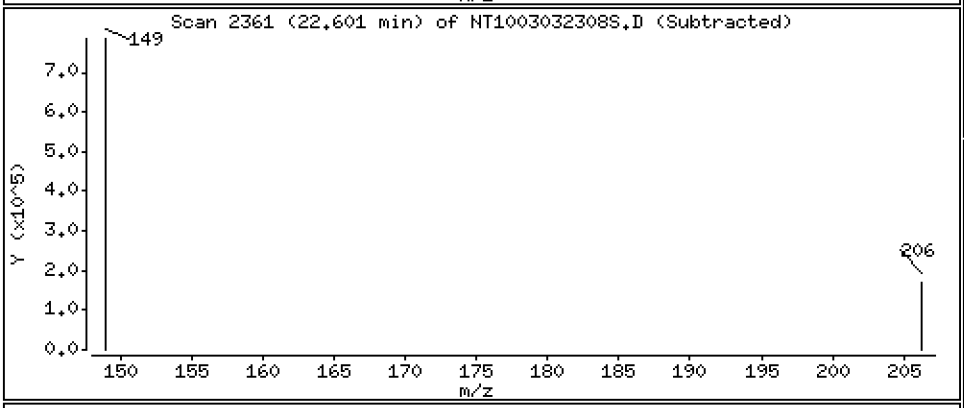
Column diameter: 0.25

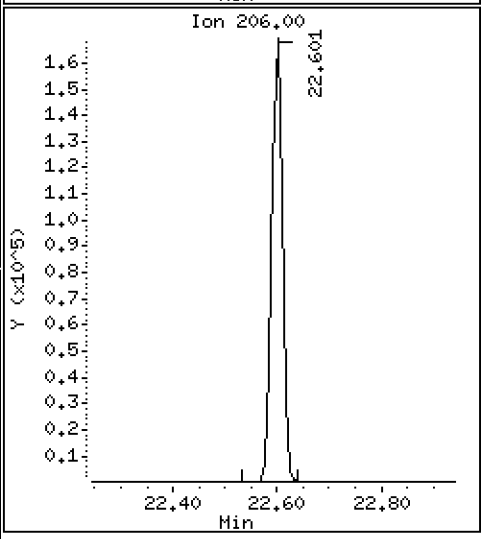
67 Butylbenzylphthalate

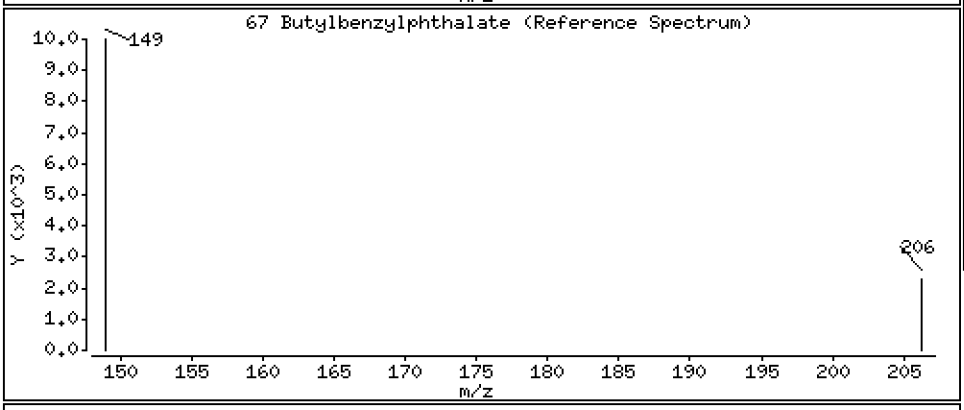
Concentration: 4.278 ug/L

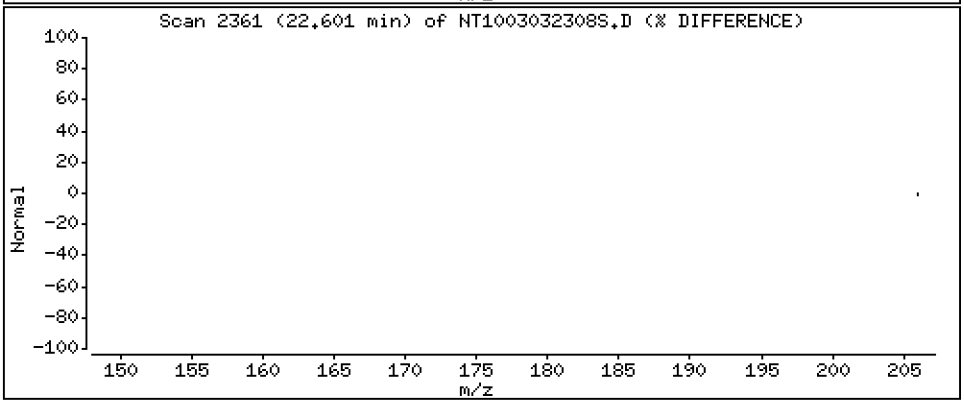












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032308S.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

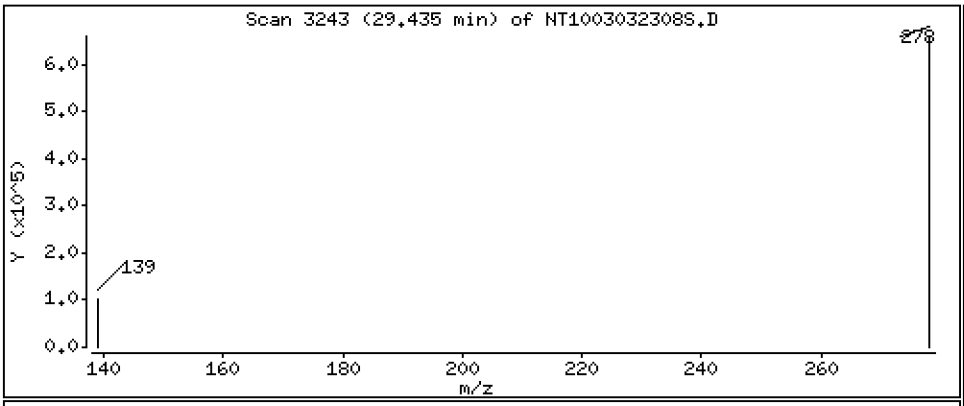
Operator: JGR

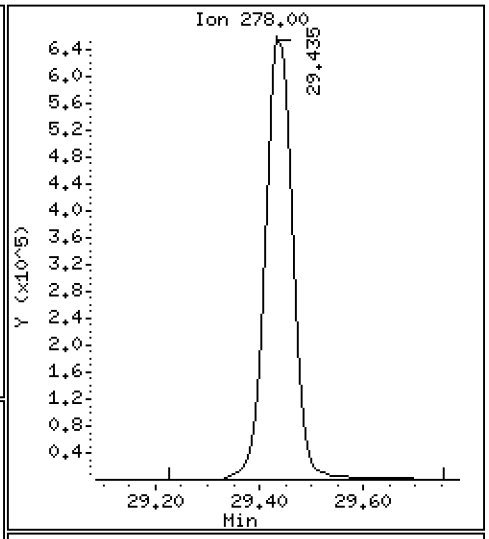
Column phase: ZB-5msi

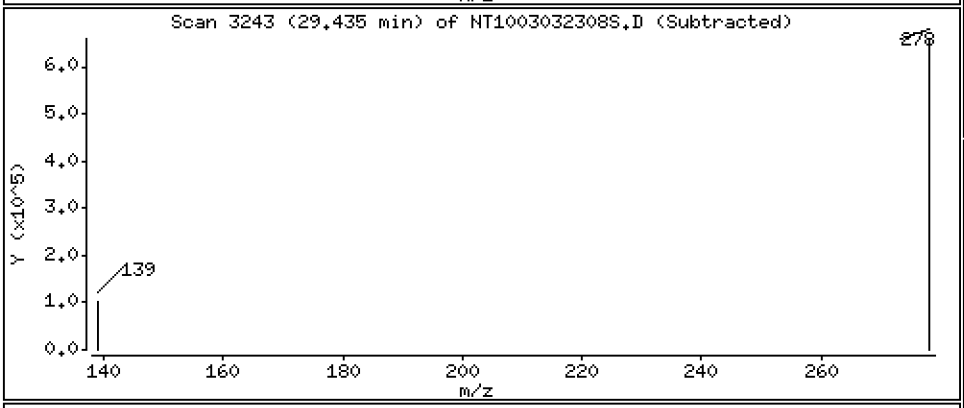
Column diameter: 0.25

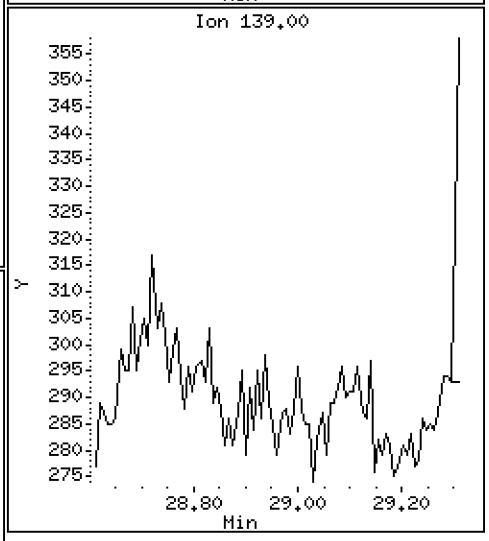
79 Dibenzo(a,h)anthracene

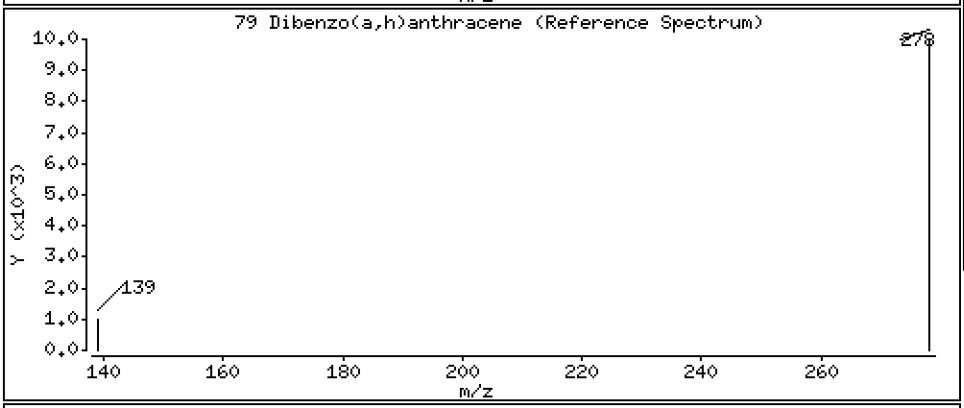
Concentration: 5.699 ug/L

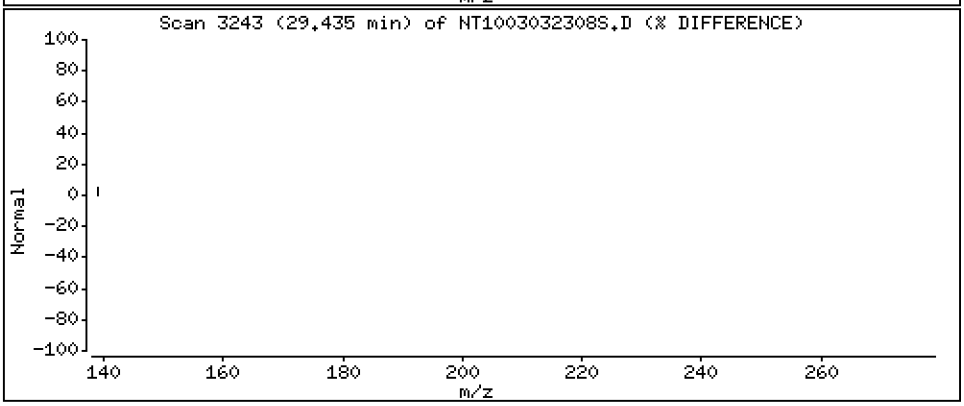












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323085.D

Date : 03-MAR-2023 22:15

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-BSD1

Volume Injected (uL): 1.0

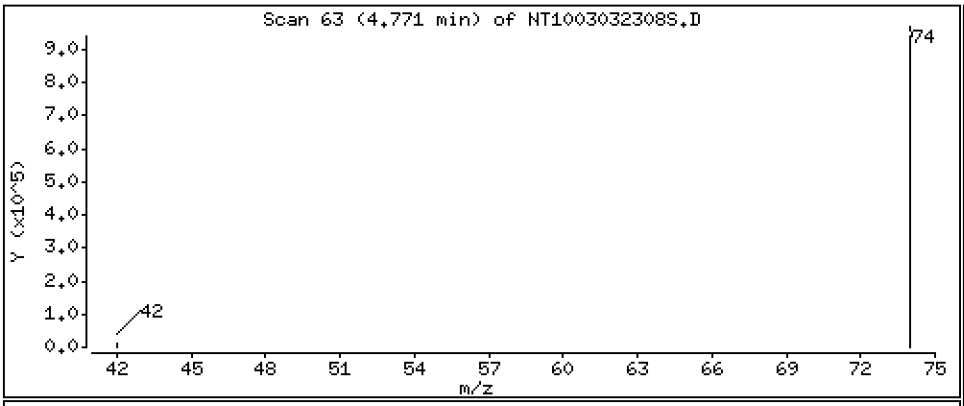
Operator: JGR

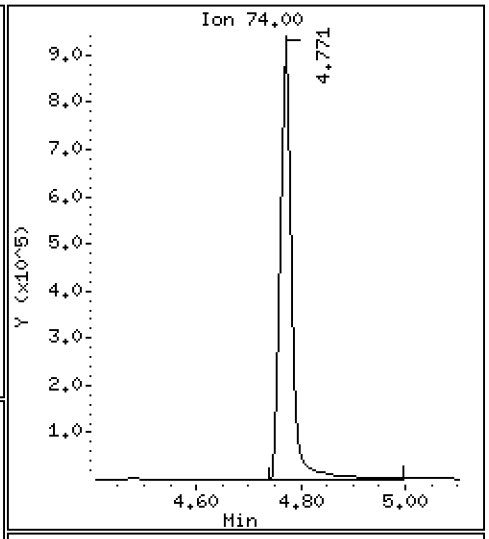
Column phase: ZB-5msi

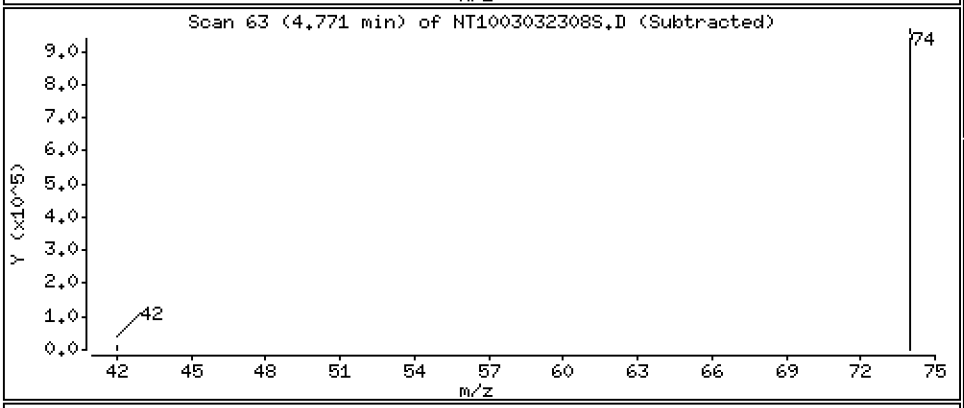
Column diameter: 0.25

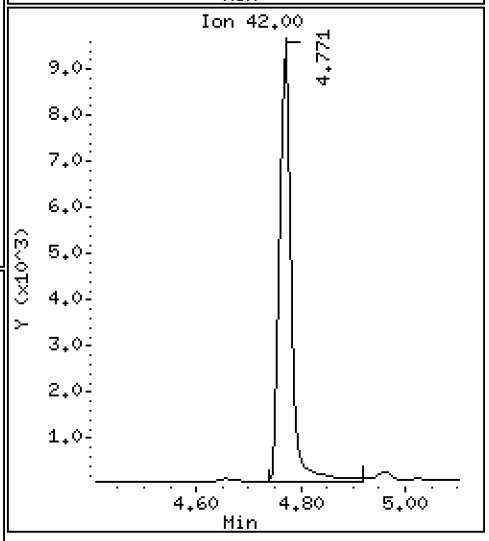
90 N-Nitrosodimethylamine

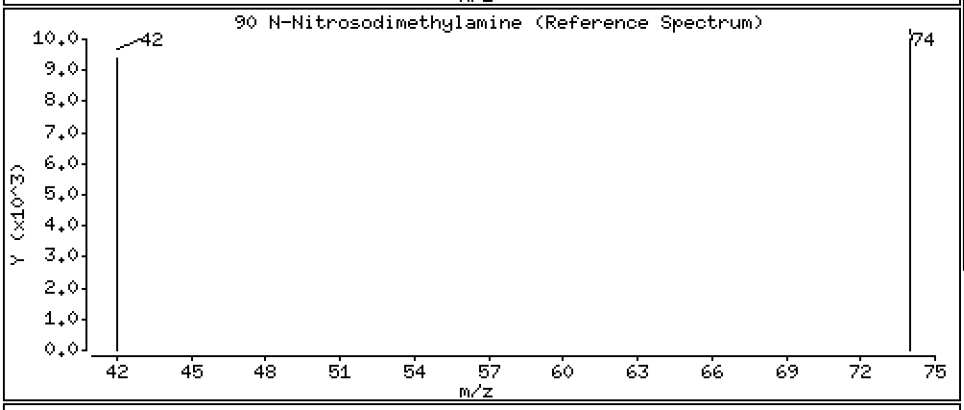
Concentration: 13.87 ug/L

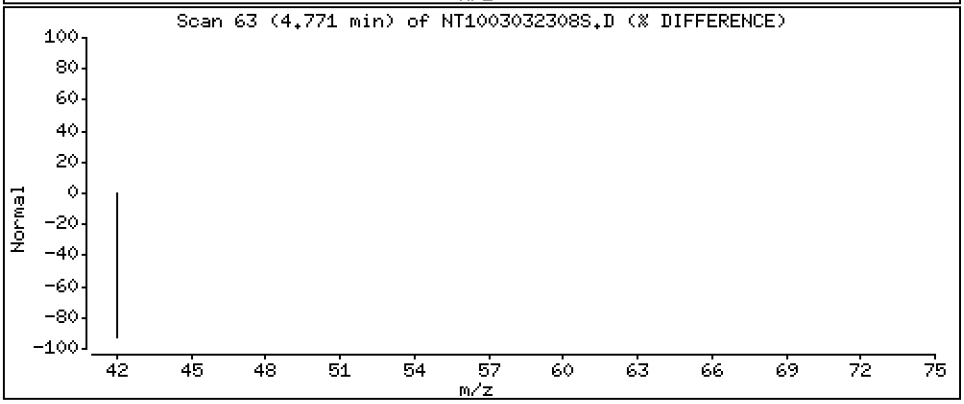












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032308S.D
Lab Smp Id: BLA0673-BSD2
Inj Date : 03-MAR-2023 22:15 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLA0673-BSD1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 10:19 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.925	6.918	(0.746)	1036253	6.10834	6.108(R)
3	Phenol	94	8.563	8.556	(0.923)	888144	3.48644	3.486
7	1,3-Dichlorobenzene	146	9.174	9.174	(0.988)	743739	3.37722	3.377
* 8	1,4-Dichlorobenzene-d4	152	9.283	9.283	(1.000)	594217	4.00000	
9	1,4-Dichlorobenzene	146	9.314	9.314	(1.003)	745495	3.48179	3.482
11	Benzyl alcohol	79	9.516	9.516	(1.025)	589520	4.02384	4.024
12	1,2-Dichlorobenzene	146	9.601	9.601	(1.034)	728173	3.53827	3.538
13	2-Methylphenol	108	9.702	9.702	(1.045)	557153	3.59289	3.593
15	4-Methylphenol	108	9.997	9.989	(1.077)	651761	3.98277	3.983
16	N-Nitroso-di-n-propylamine	70	10.028	10.020	(1.080)	530132	4.67431	4.674
22	2,4-Dimethylphenol	107	11.057	11.057	(0.939)	1139701	6.20242	6.202
24	Benzoic acid	105	11.269	11.150	(0.957)	2801141	24.3287	24.33
26	1,2,4-Trichlorobenzene	180	11.654	11.654	(0.990)	606084	3.95739	3.957
* 27	Naphthalene-d8	136	11.778	11.778	(1.000)	2127836	4.00000	
30	Hexachlorobutadiene	225	12.048	12.048	(1.023)	386734	3.55837	3.558
39	Dimethylphthalate	163	14.826	14.819	(0.963)	1484832	4.67233	4.672
* 42	Acenaphthene-d10	162	15.399	15.391	(1.000)	1000846	4.00000	
50	Diethylphthalate	149	16.311	16.296	(1.059)	1691343	5.64364	5.644
54	N-Nitrosodiphenylamine	169	16.798	16.790	(0.907)	1149122	3.89828	3.898
57	Hexachlorobenzene	284	17.687	17.679	(0.954)	579116	4.19798	4.198

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.112	18.105	(0.977)	897596	12.6963	12.70
*	59 Phenanthrene-d10	188	18.530	18.522	(1.000)	1821443	4.00000	
$	66 Terphenyl-d14	244	21.695	21.695	(0.918)	808534	6.63869	6.639(R)
	67 Butylbenzylphthalate	149	22.601	22.593	(0.957)	1071123	4.27798	4.278
*	69 Chrysene-d12	240	23.623	23.615	(1.000)	1506073	4.00000	
*	77 Perylene-d12	264	26.441	26.449	(1.000)	1668749	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.435	29.435	(1.113)	2414299	5.69899	5.699
	90 N-Nitrosodimethylamine	74	4.771	4.755	(0.514)	1392591	13.8652	13.87

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032308S.D
Lab Smp Id: BLA0673-BSD2
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 03-MAR-2023
Calibration Time: 19:05
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	602309	301155	1204618	594217	-1.34
27 Naphthalene-d8	2101699	1050850	4203398	2127836	1.24
42 Acenaphthene-d10	1002910	501455	2005820	1000846	-0.21
59 Phenanthrene-d10	1732061	866031	3464122	1821443	5.16
69 Chrysene-d12	1410089	705045	2820178	1506073	6.81
77 Perylene-d12	1732981	866491	3465962	1668749	-3.71

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	-0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	-0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.40	0.05
59 Phenanthrene-d10	18.52	18.02	19.02	18.53	0.04
69 Chrysene-d12	23.62	23.12	24.12	23.62	0.03
77 Perylene-d12	26.45	25.95	26.95	26.44	-0.03

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

REVIEW SUMMARY FOR FILE - NT1003032308S.D

Lab ID: BLA0673-BSD2
nt10.i, 20230303.b\SIM.b\SIMABN2.m,   03-MAR-2023 22:15

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.947	0.0101	Benzoic acid
1.113	1.000	0.1132	Dibenzo(a,h)anthracene

RRT check based on Ccal File: SIM.b/NT1003032303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

LCS / LCS DUPLICATE RECOVERY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/06/23 16:24
Batch:	BLA0683	Laboratory ID:	BLA0683-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 0.5 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Benzo(a)anthracene	300	167		55.7	42 - 120
Chrysene	300	167		55.6	48 - 120
Benzo(b)fluoranthene	300	233		77.7	52 - 137
Benzo(k)fluoranthene	300	222		74.1	37 - 129
Benzo(a)pyrene	300	154		51.4	36 - 120
Indeno(1,2,3-cd)pyrene	300	213		71.0	67 - 132
Dibenzo(a,h)anthracene	300	235		78.4	66 - 139

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzo(a)anthracene	300	200		66.8	18.1	30	42 - 120
Chrysene	300	199		66.3	17.6	30	48 - 120
Benzo(b)fluoranthene	300	278		92.7	17.7	30	52 - 137
Benzo(k)fluoranthene	300	265		88.2	17.4	30	37 - 129
Benzo(a)pyrene	300	186		62.1	18.9	30	36 - 120
Indeno(1,2,3-cd)pyrene	300	249		83.1	15.7	30	67 - 132
Dibenzo(a,h)anthracene	300	280		93.2	17.3	30	66 - 139

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

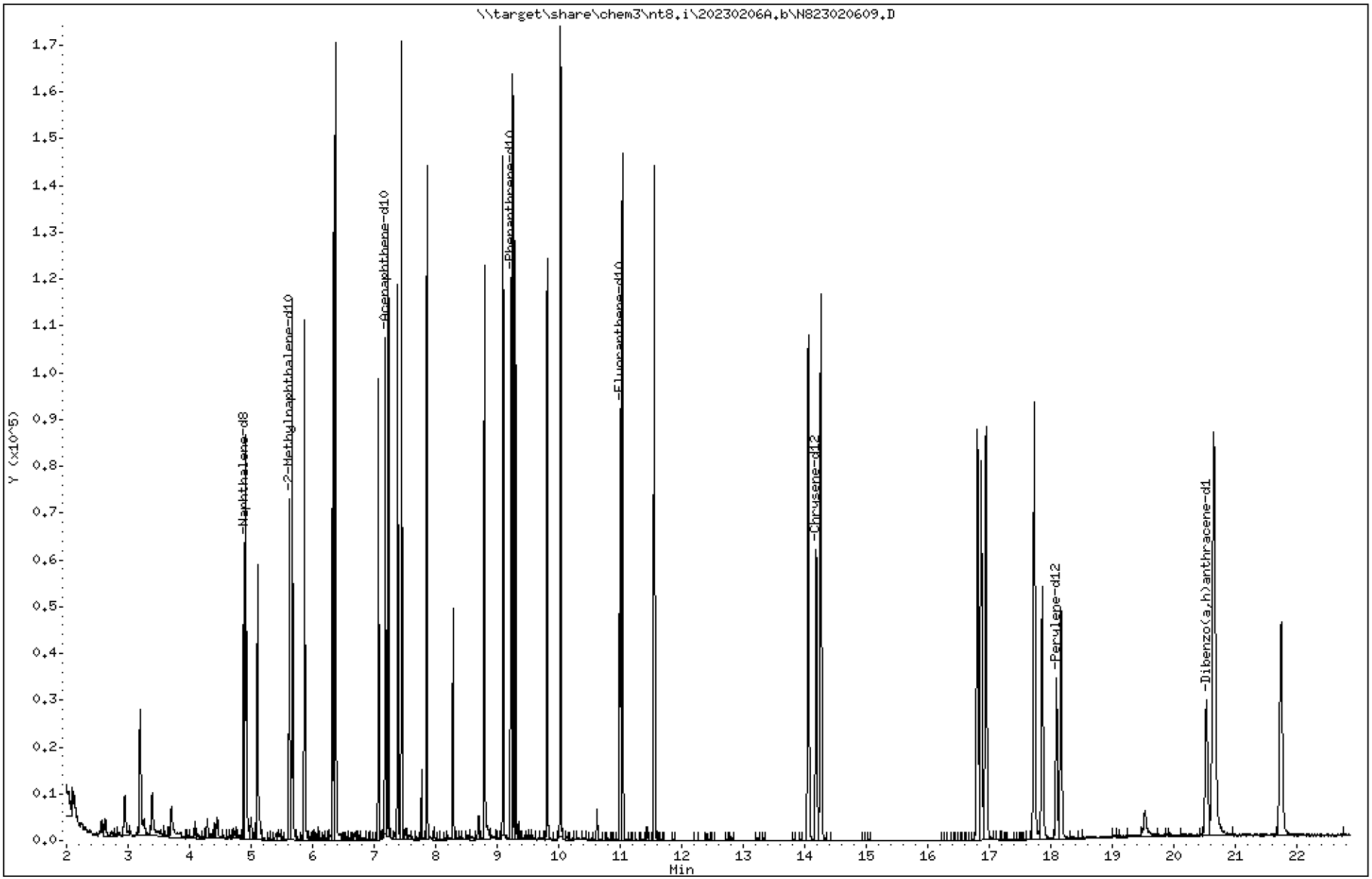
Instrument: nt8.i

Sample Info: BLA0683-BS1,

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

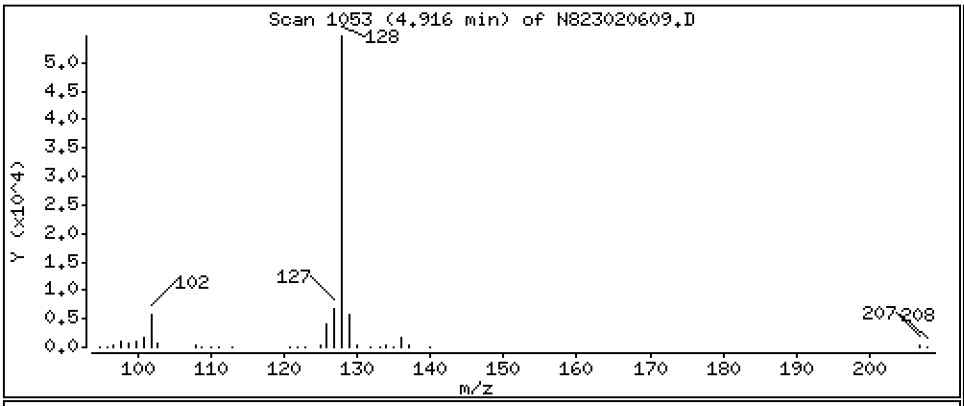
Operator: JZ

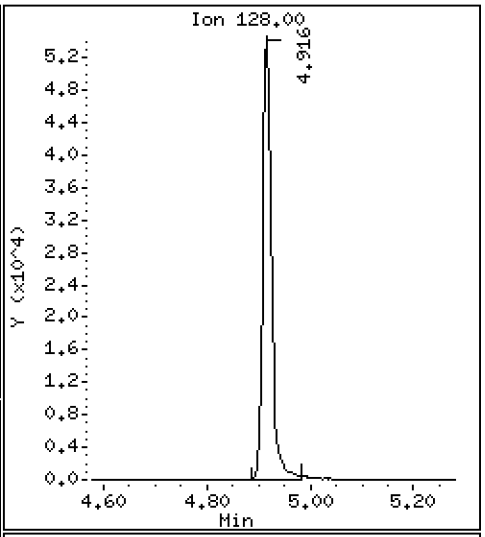
Column phase: Rxi-17sil

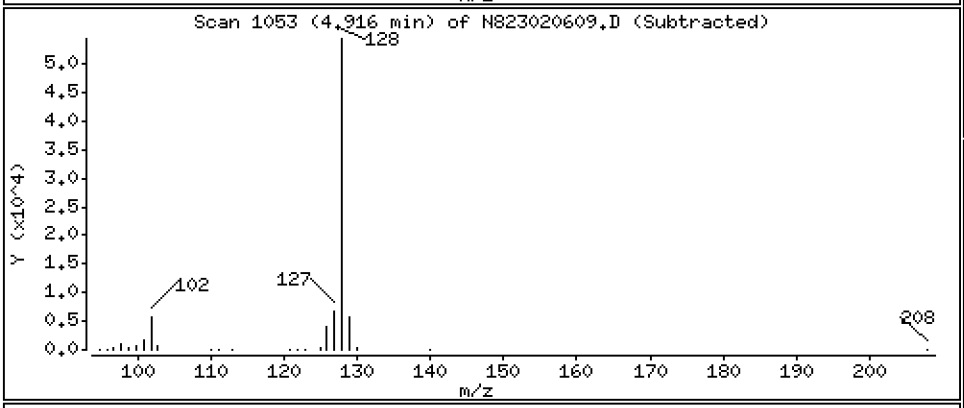
Column diameter: 0.25

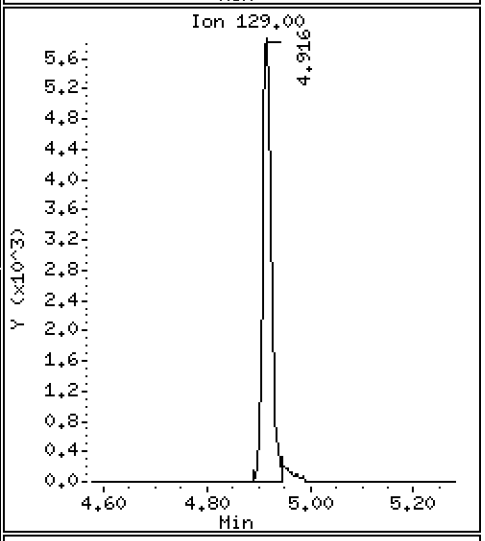
2 Naphthalene

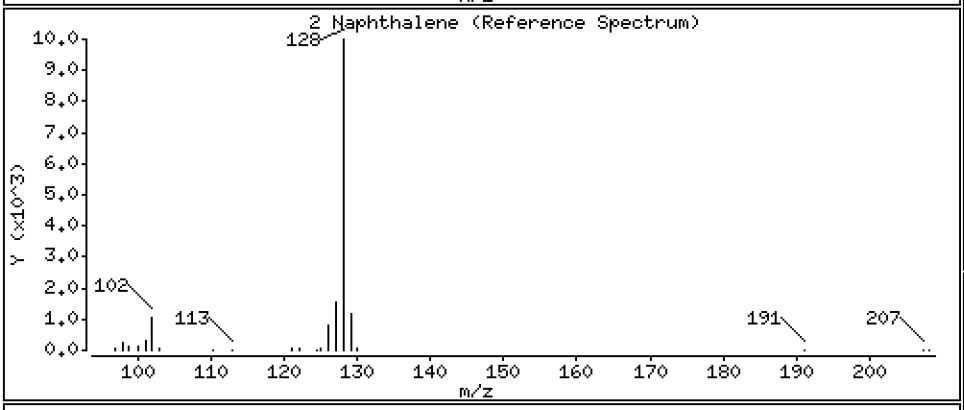
Concentration: 2.731 ug/mL

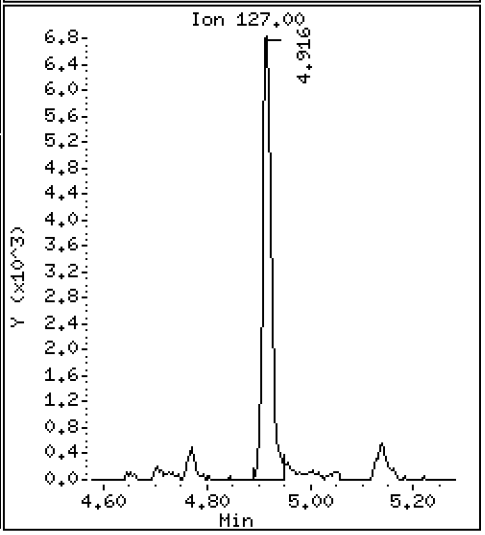


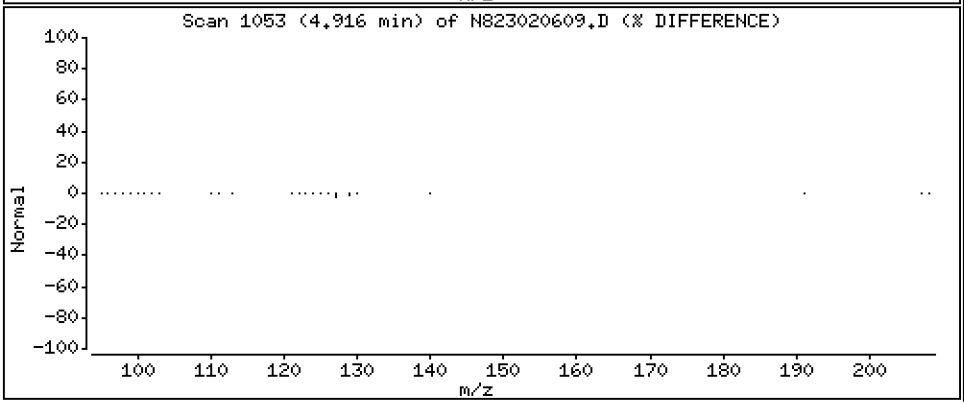












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

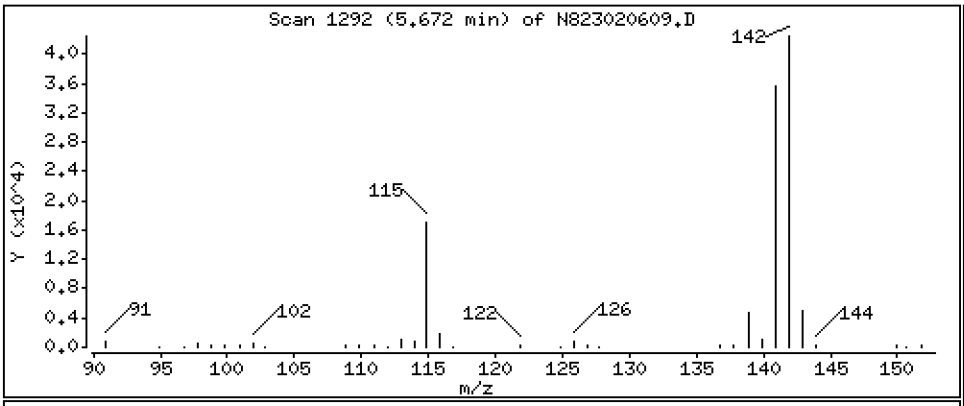
Operator: JZ

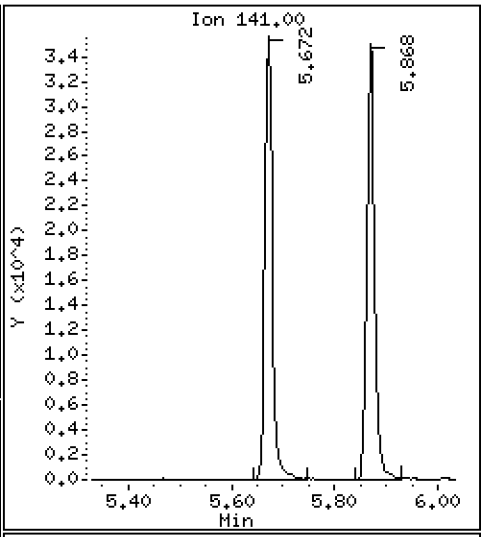
Column phase: Rxi-17sil

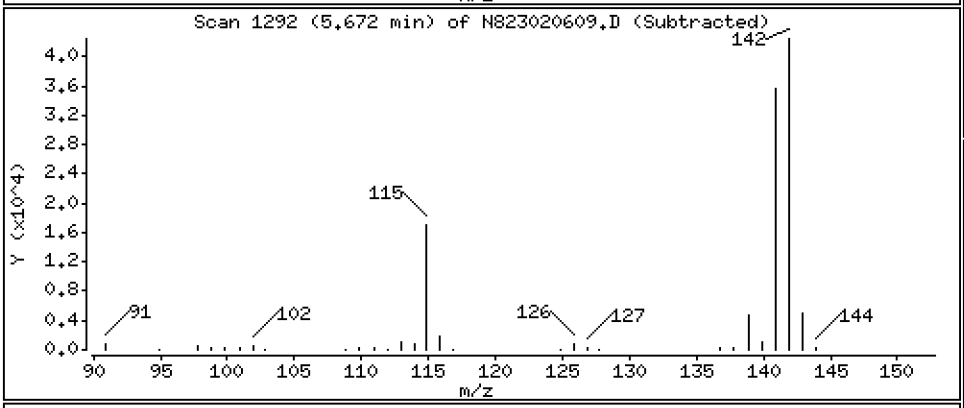
Column diameter: 0.25

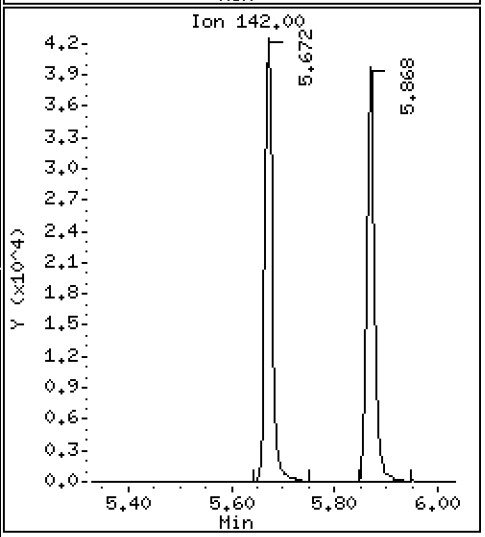
4 2-Methylnaphthalene

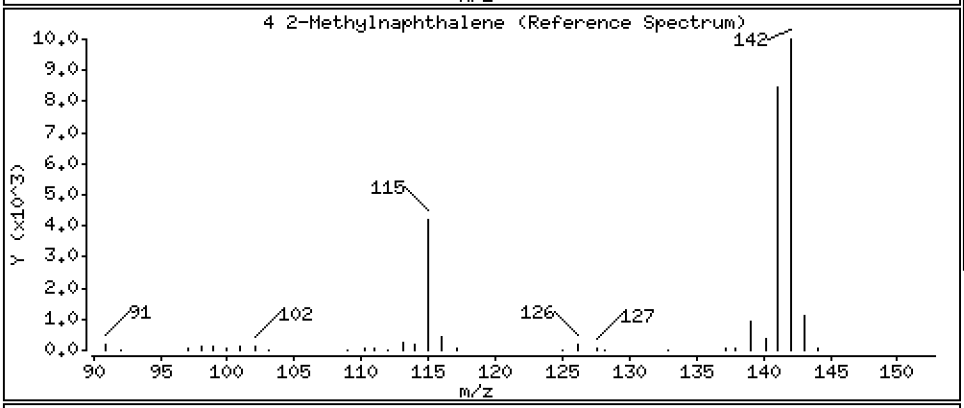
Concentration: 2.825 ug/mL

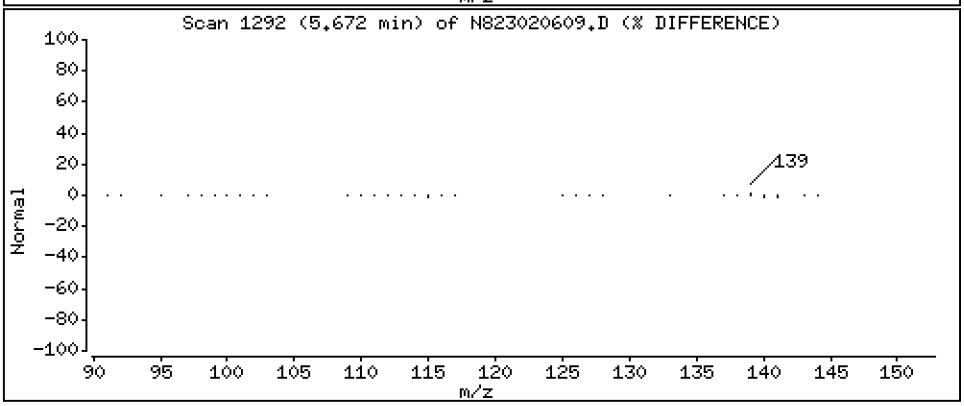












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

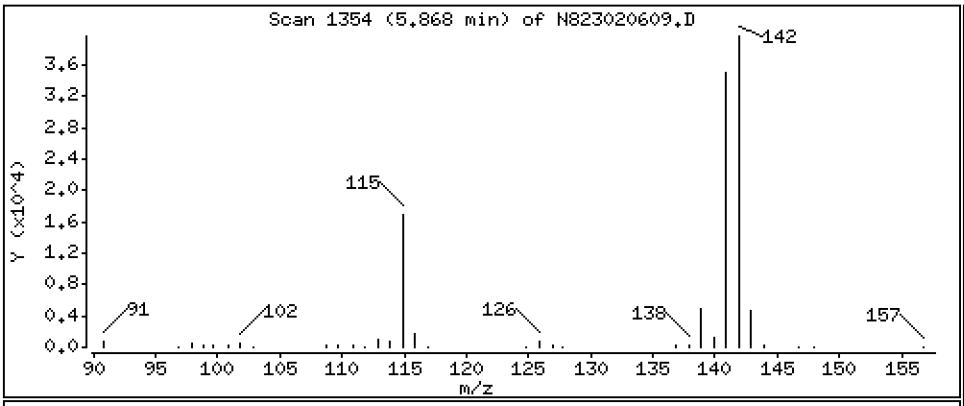
Operator: JZ

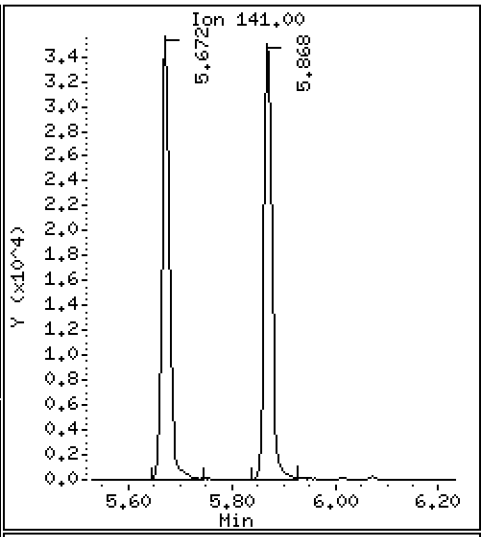
Column phase: Rxi-17sil

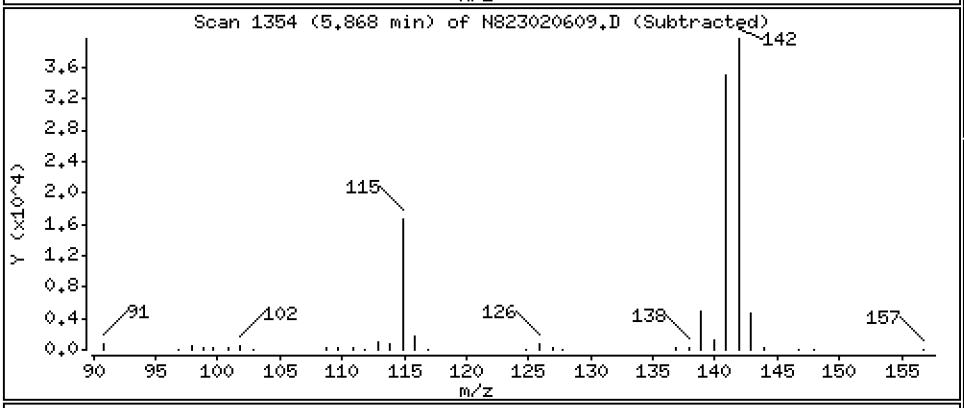
Column diameter: 0.25

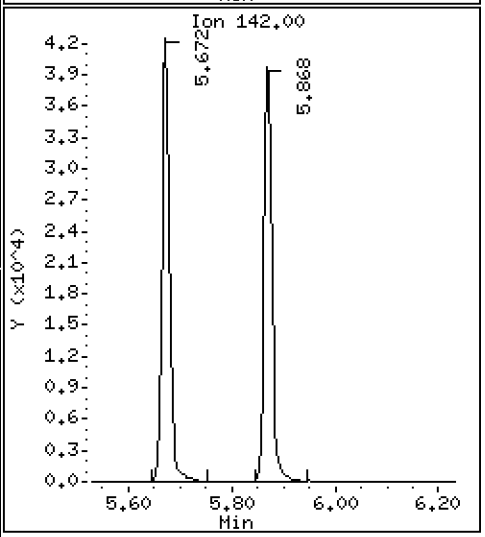
5 1-methylnaphthalene

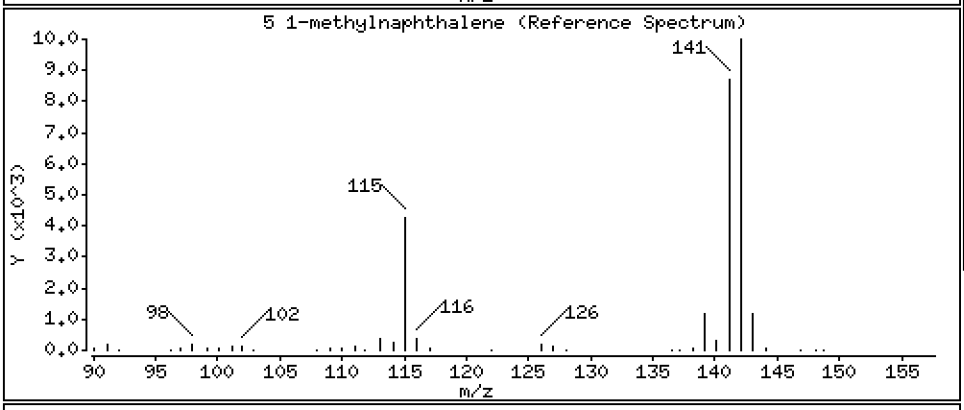
Concentration: 2.796 ug/mL

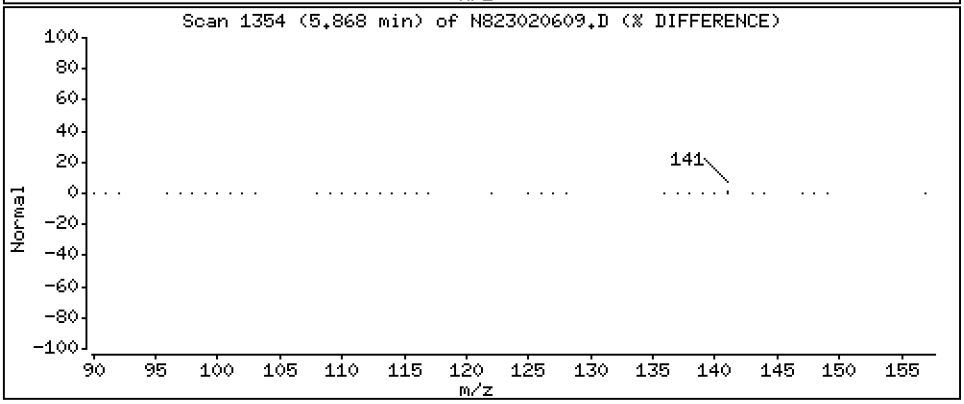












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Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

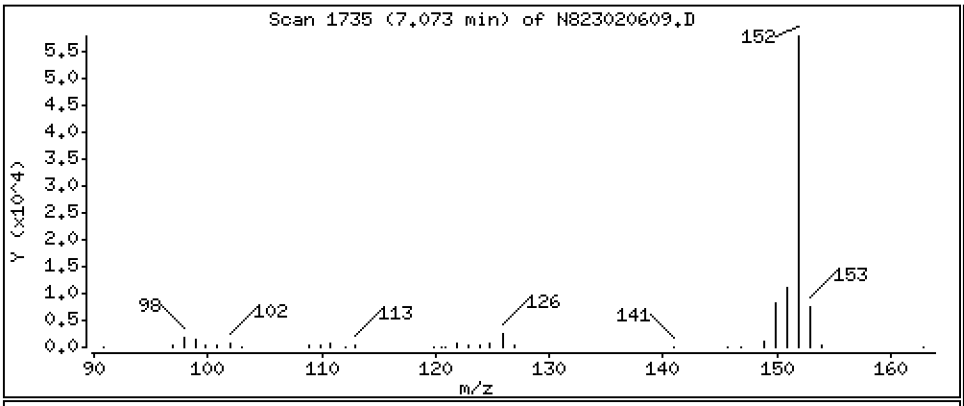
Operator: JZ

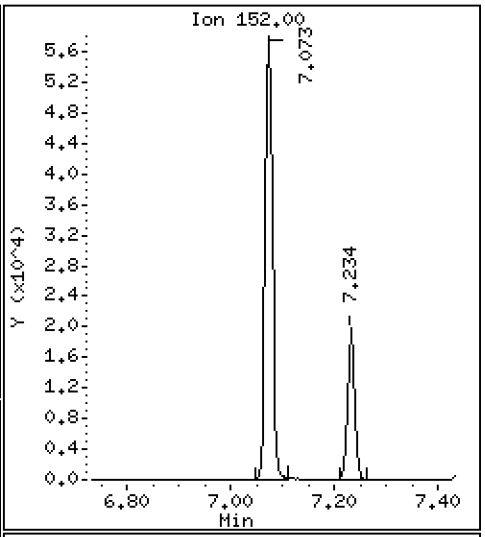
Column phase: Rxi-17sil

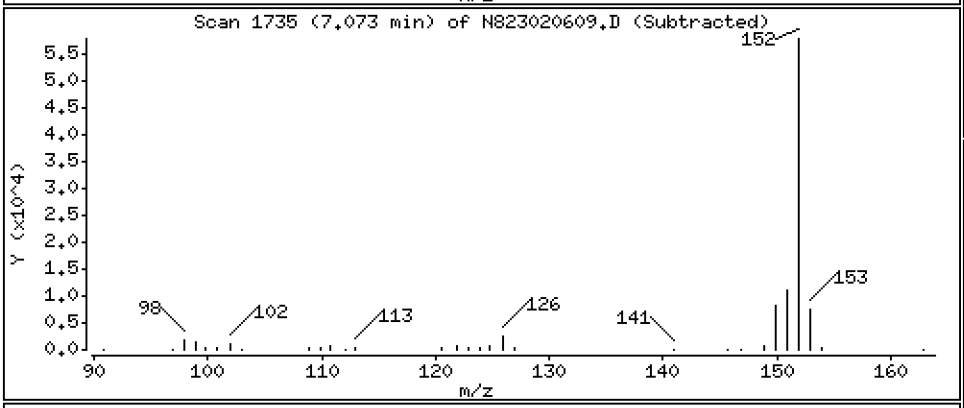
Column diameter: 0.25

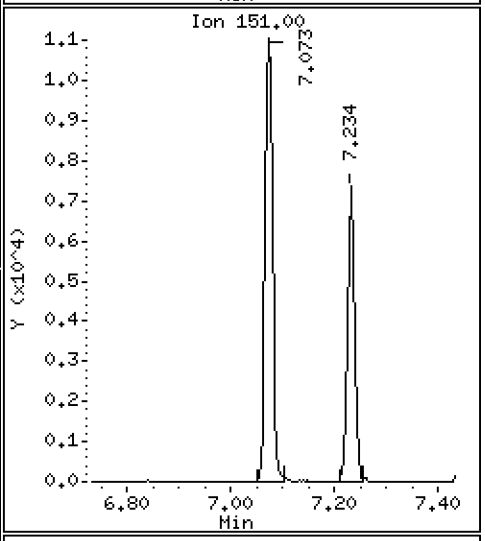
9 Acenaphthylene

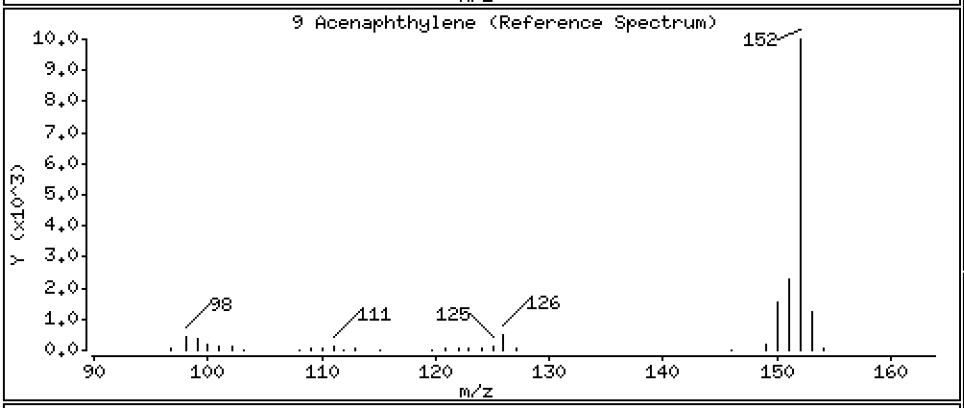
Concentration: 2.446 ug/mL

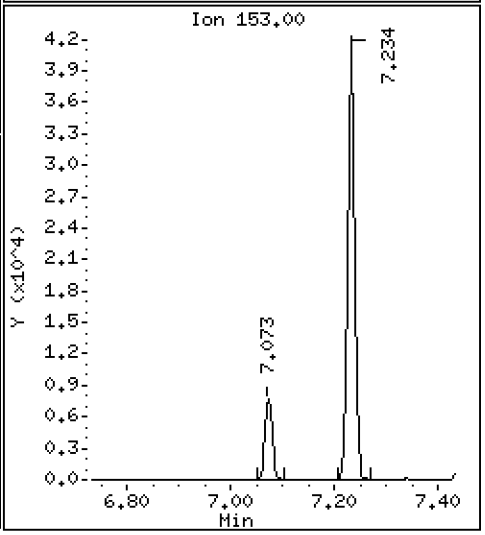


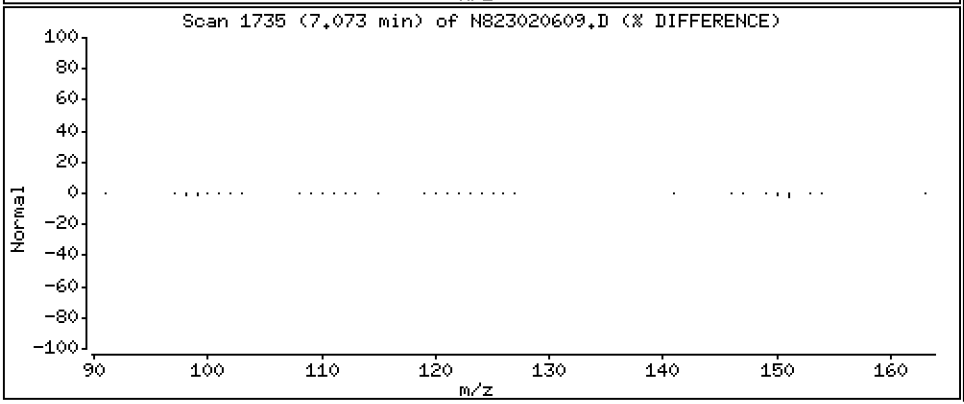












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Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

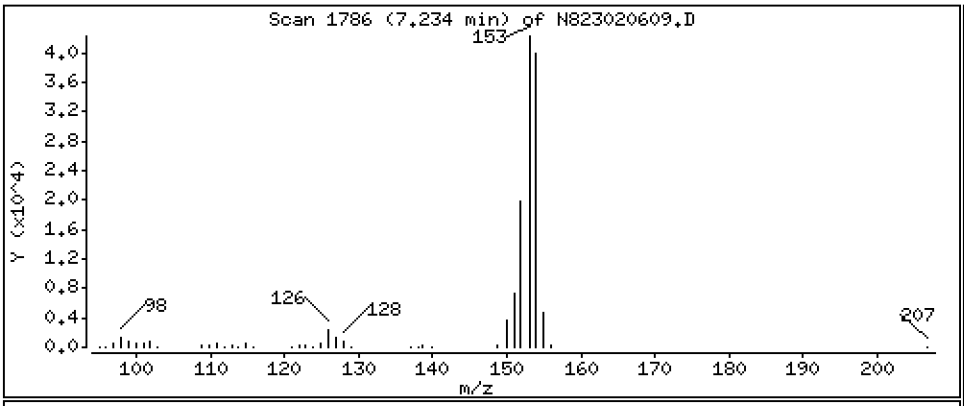
Operator: JZ

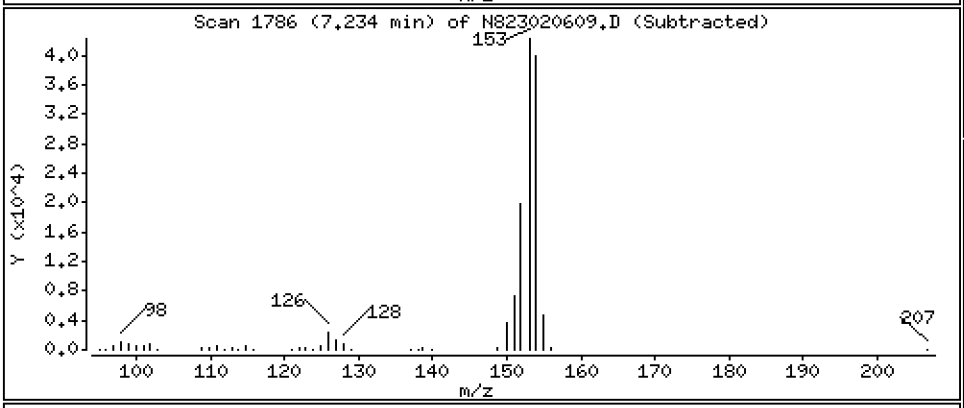
Column phase: Rxi-17sil

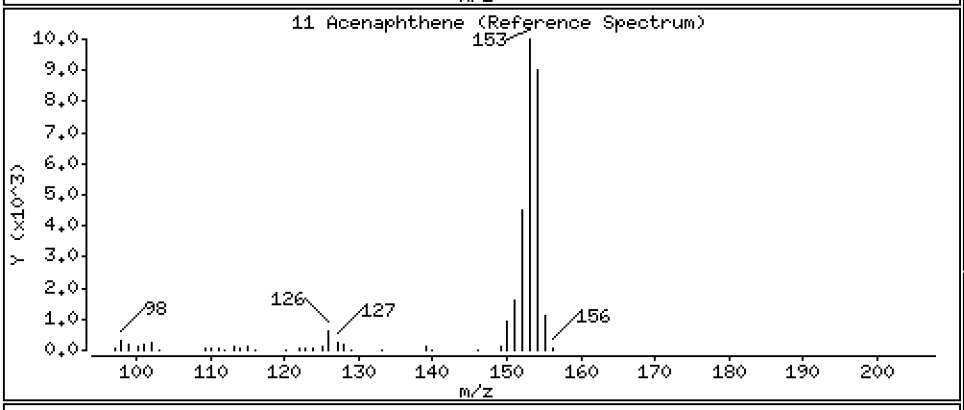
Column diameter: 0.25

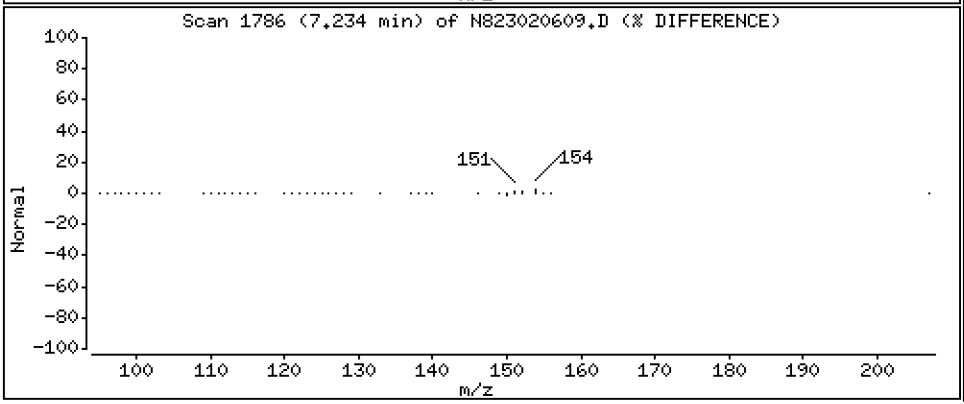
11 Acenaphthene

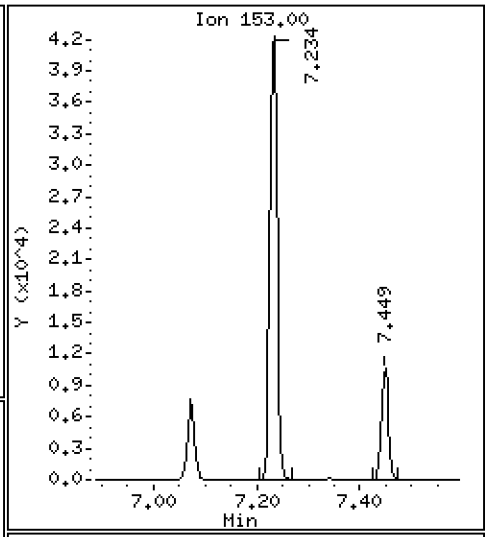
Concentration: 2.690 ug/mL

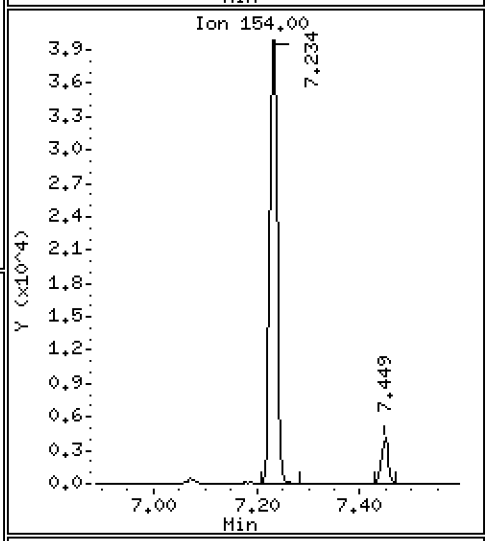


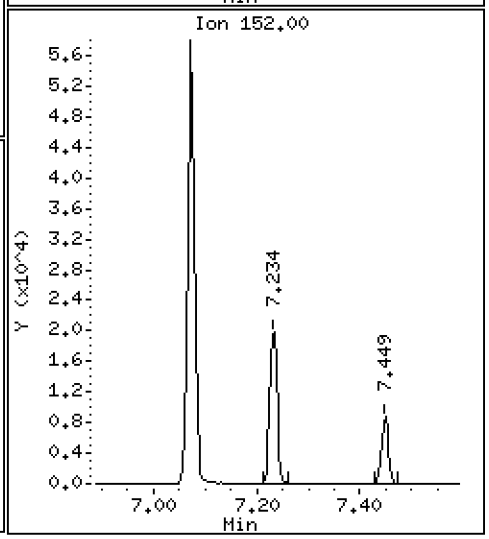












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Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

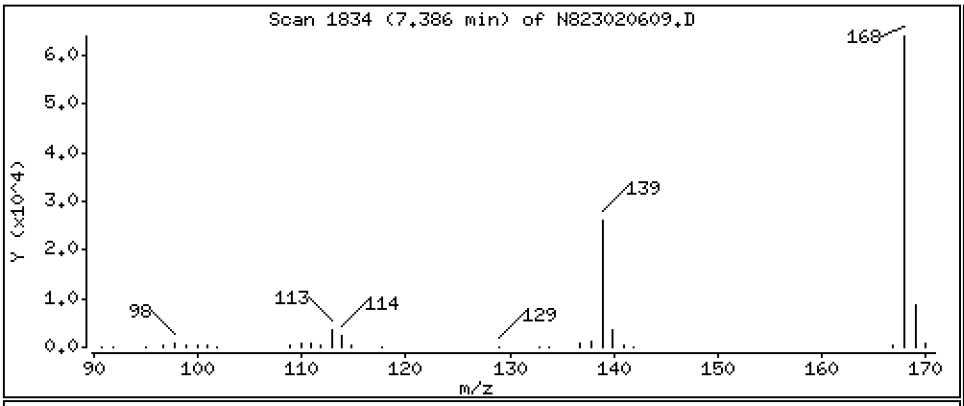
Operator: JZ

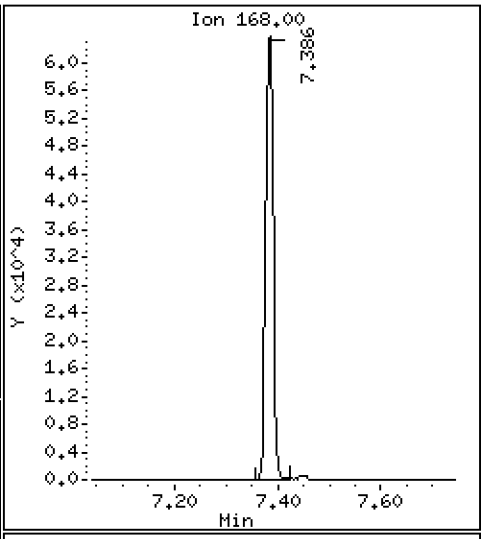
Column phase: Rxi-17sil

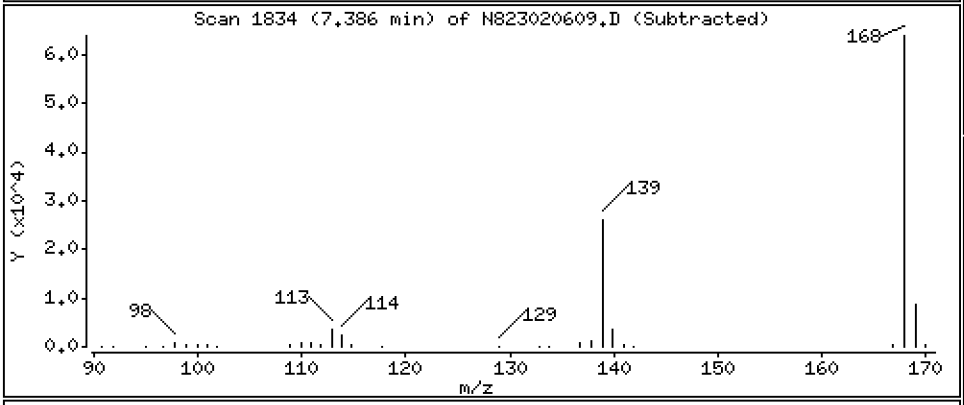
Column diameter: 0.25

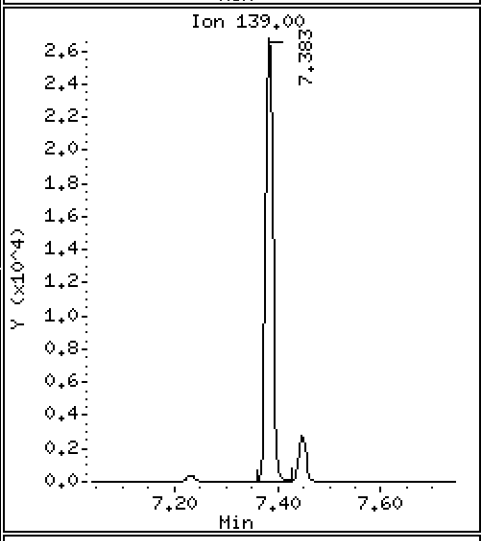
12 Dibenzofuran

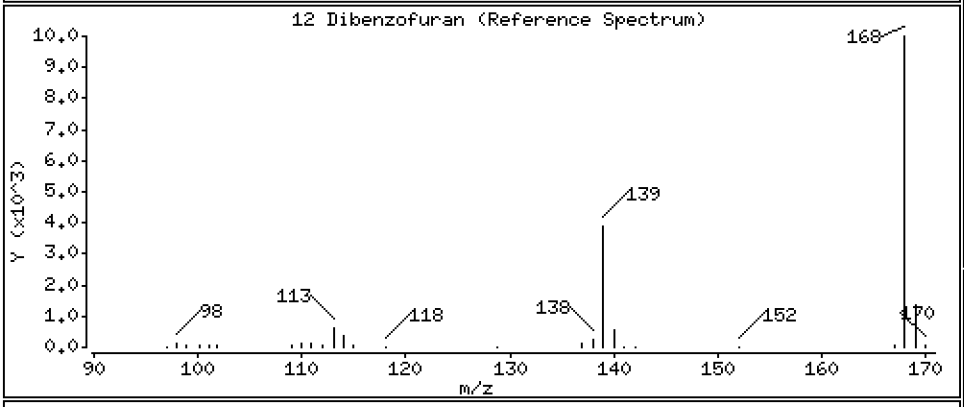
Concentration: 2.696 ug/mL

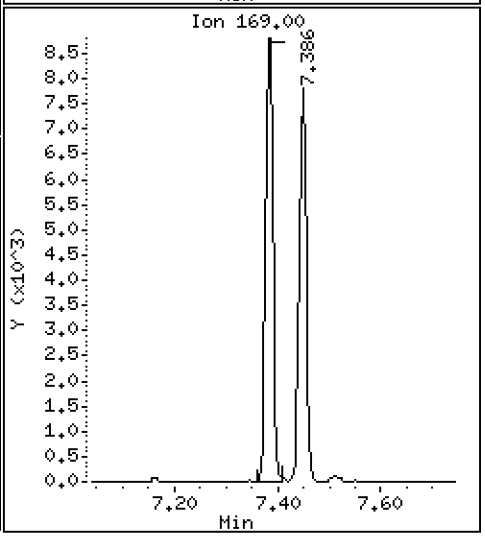


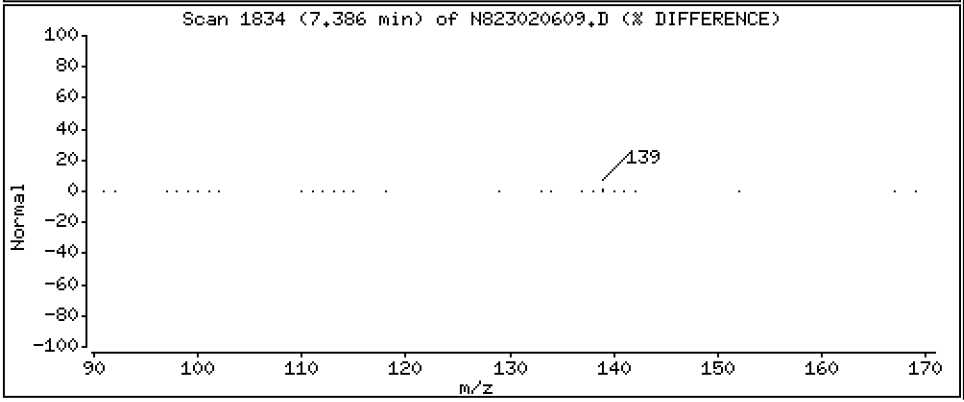












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Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

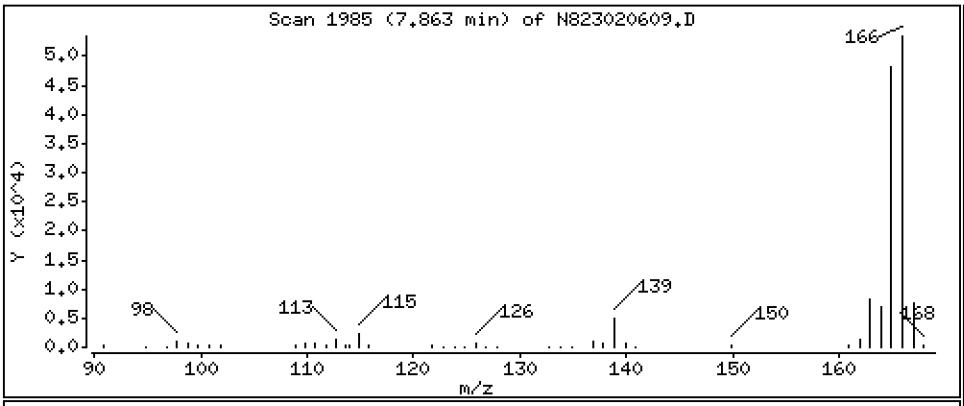
Operator: JZ

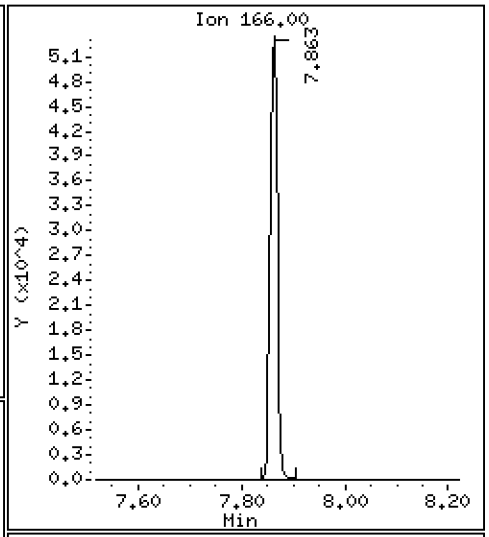
Column phase: Rxi-17sil

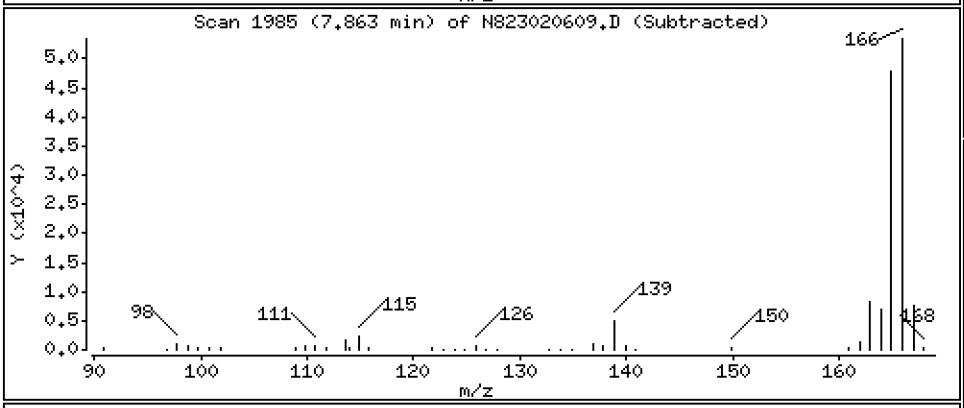
Column diameter: 0.25

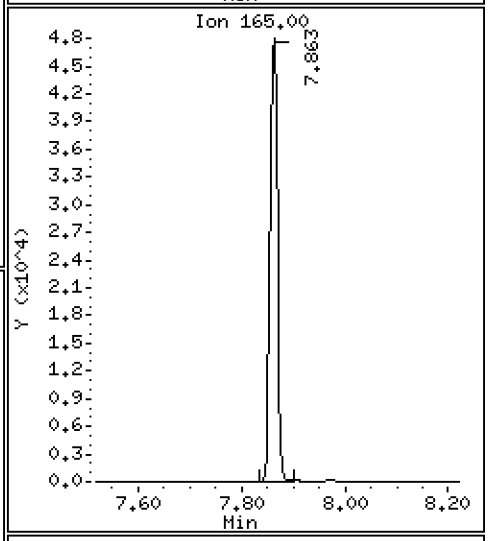
14 Fluorene

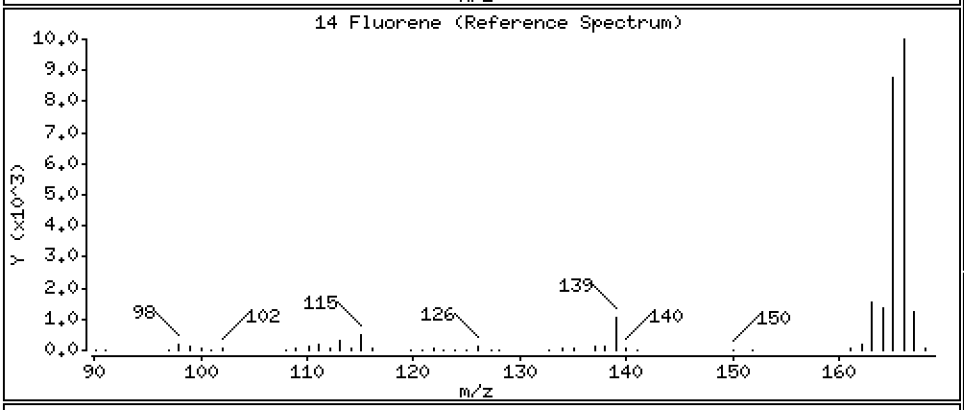
Concentration: 2.828 ug/mL

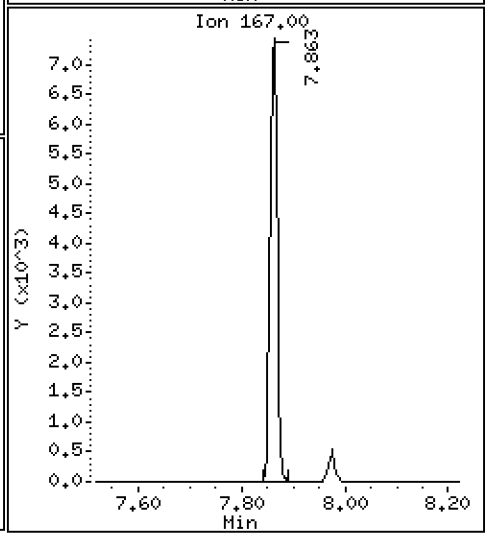


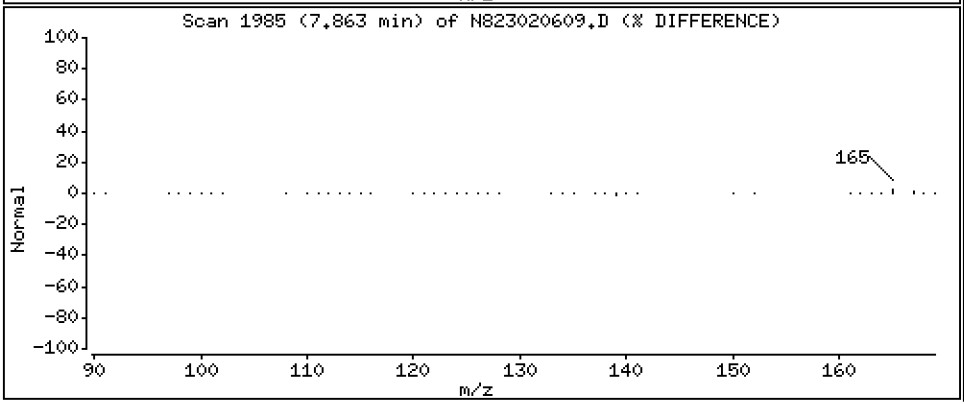












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Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

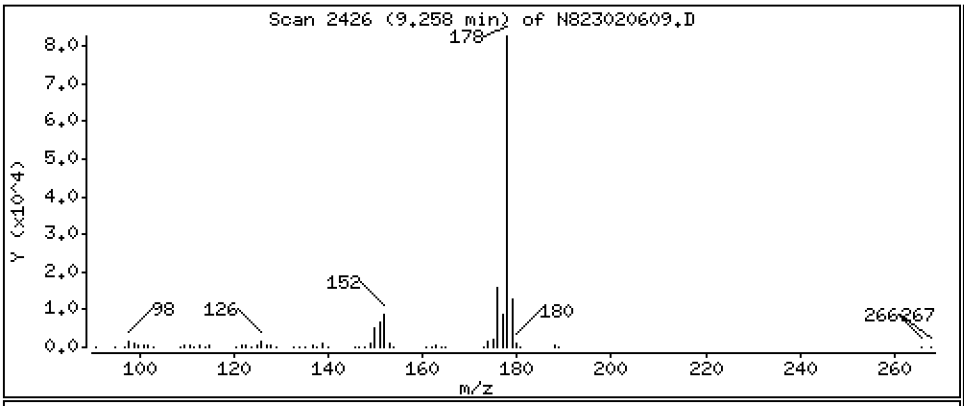
Operator: JZ

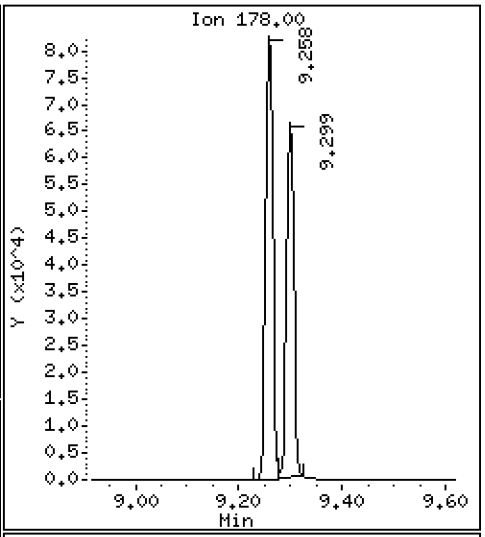
Column phase: Rxi-17sil

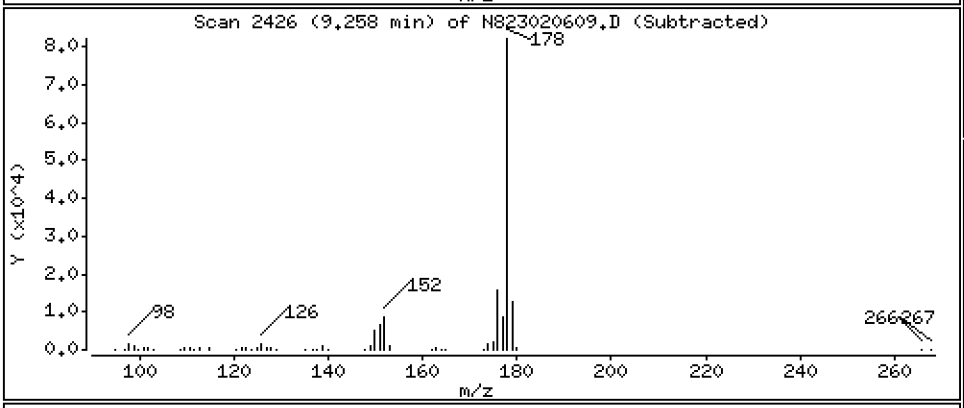
Column diameter: 0.25

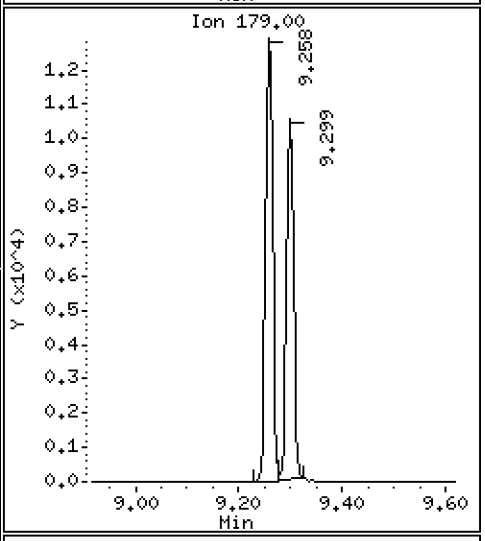
16 Phenanthrene

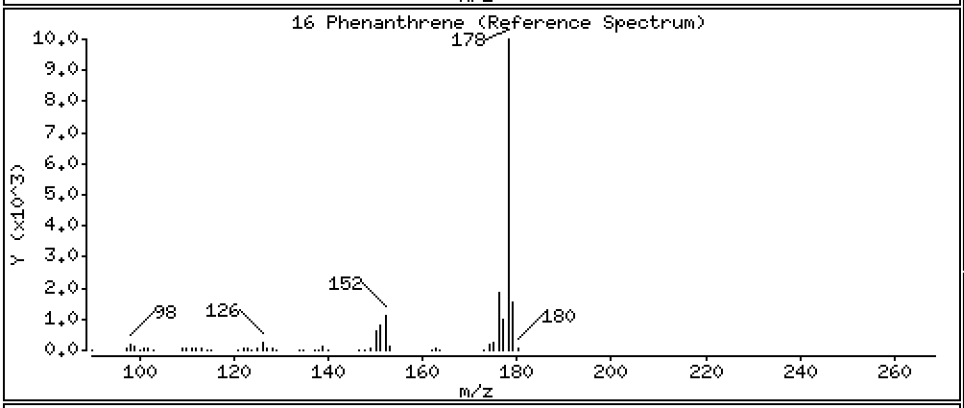
Concentration: 2.914 ug/mL

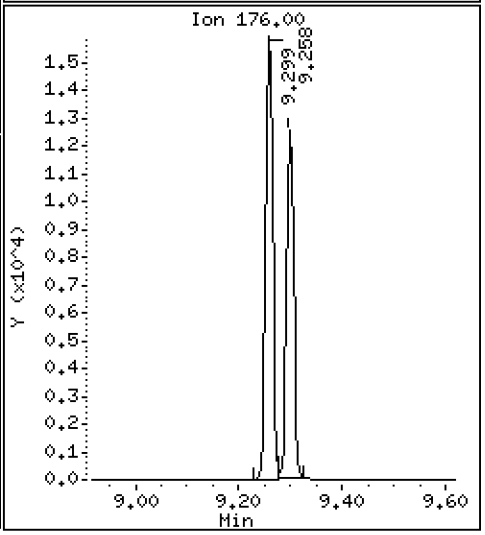


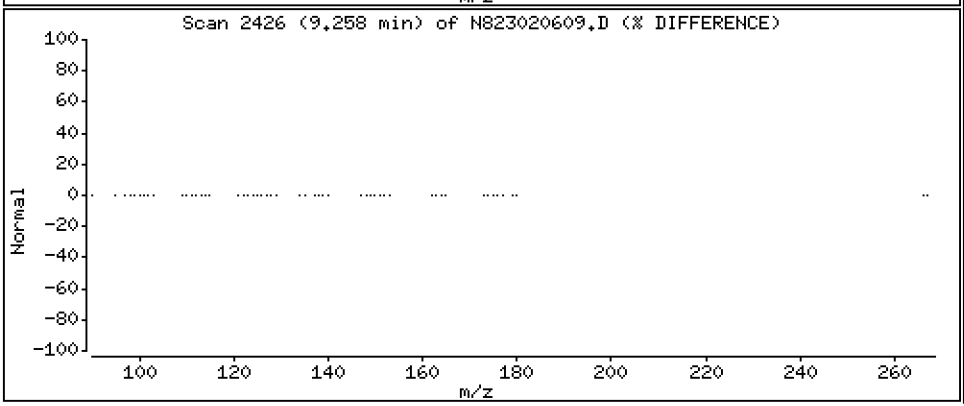












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Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

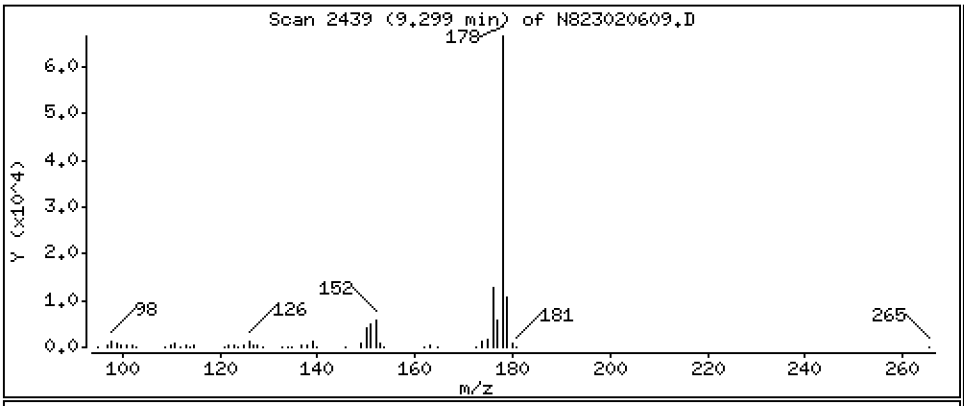
Operator: JZ

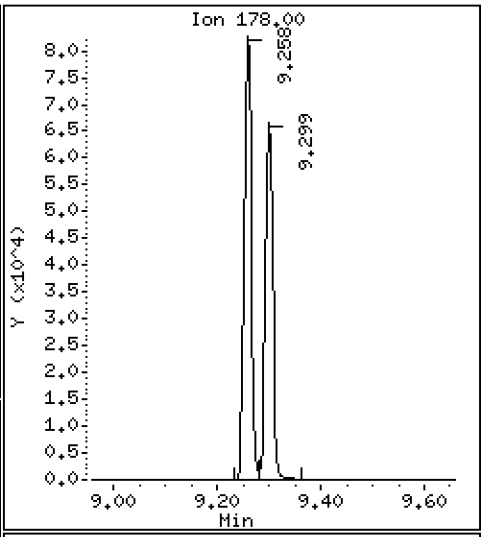
Column phase: Rxi-17sil

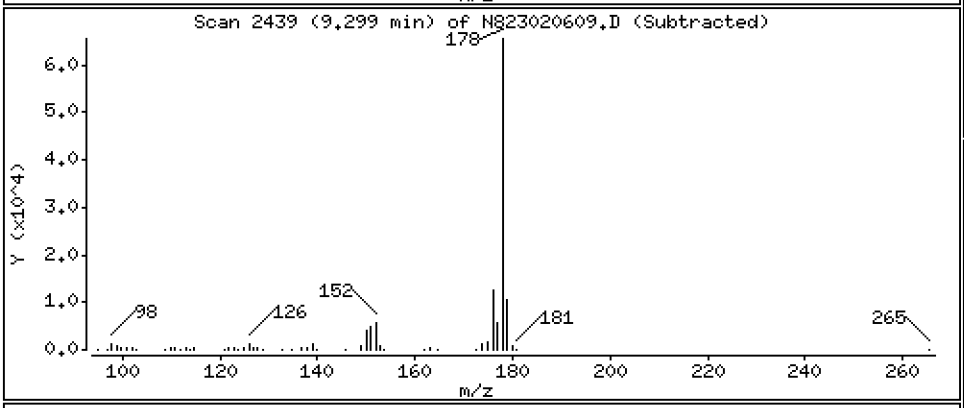
Column diameter: 0.25

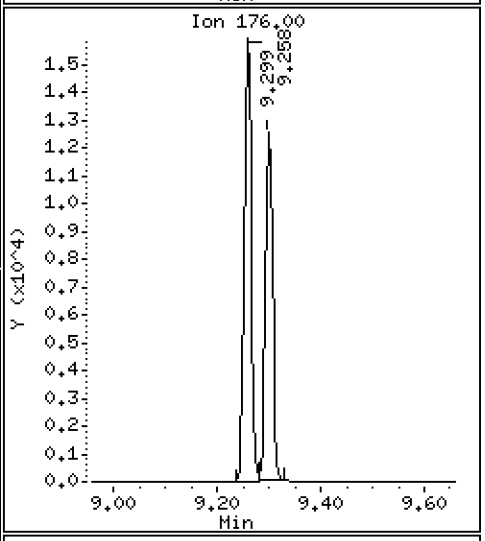
17 Anthracene

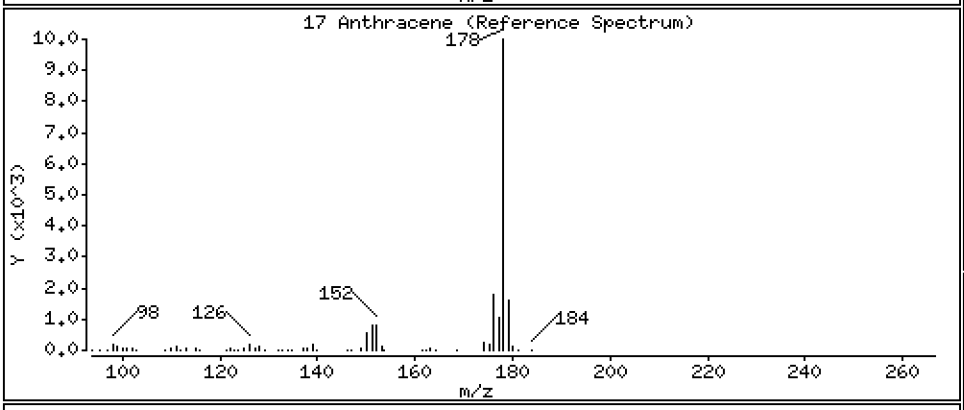
Concentration: 2.654 ug/mL

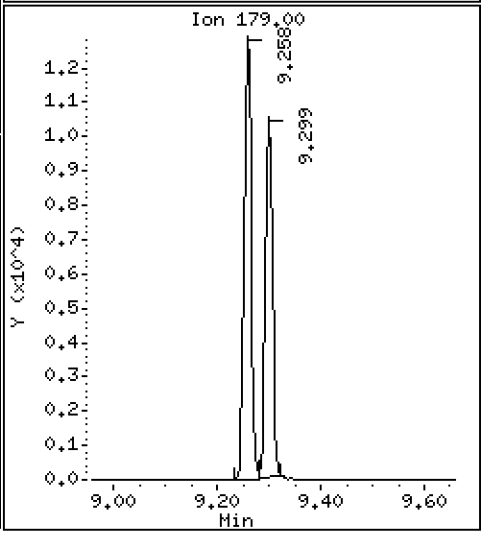


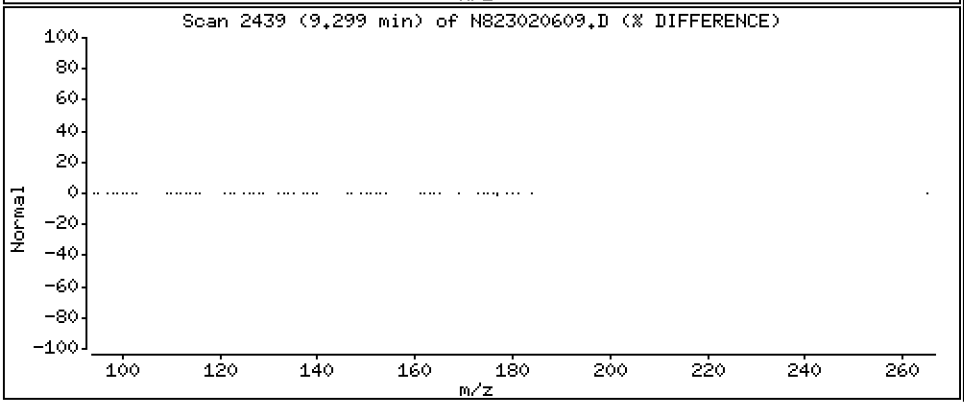












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Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

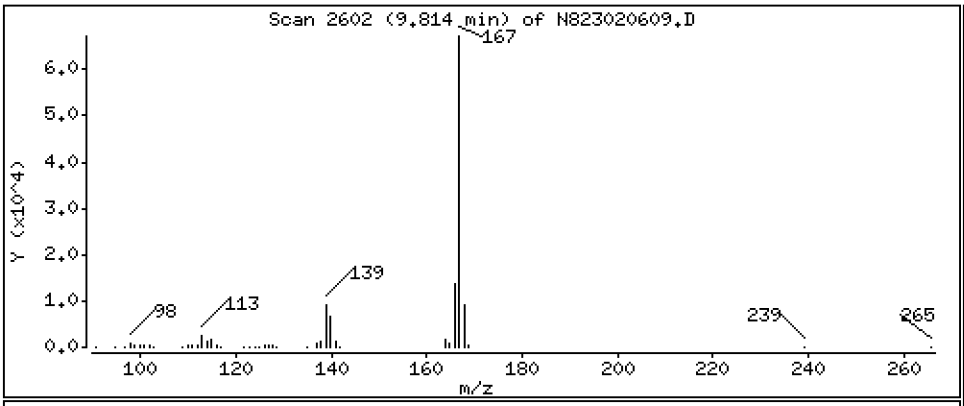
Operator: JZ

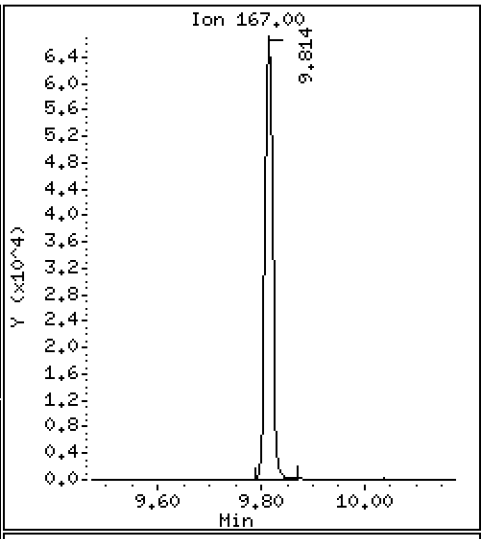
Column phase: Rxi-17sil

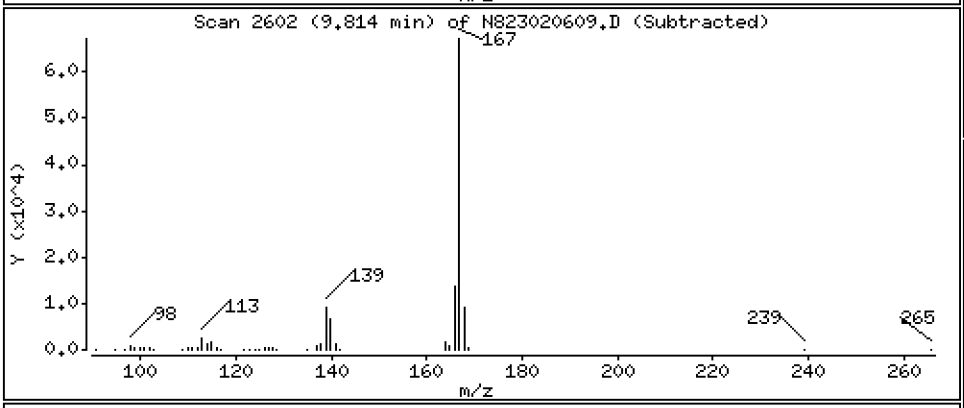
Column diameter: 0.25

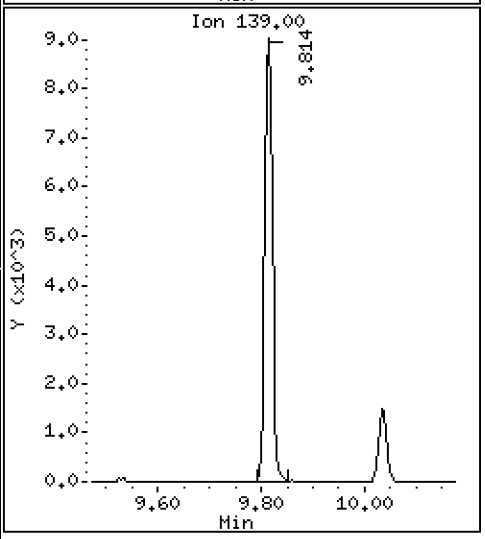
19 Carbazole

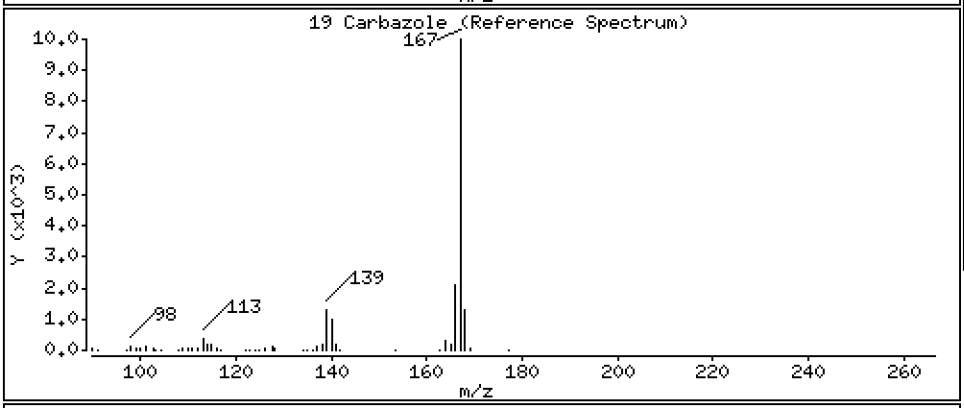
Concentration: 3.038 ug/mL

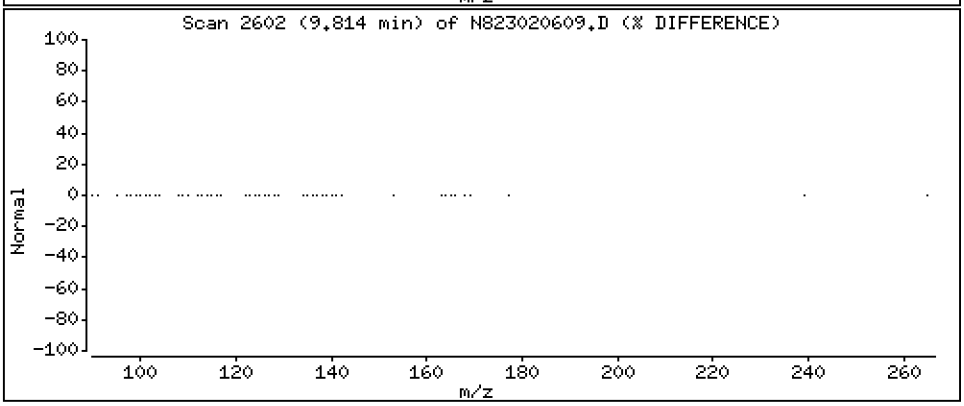












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

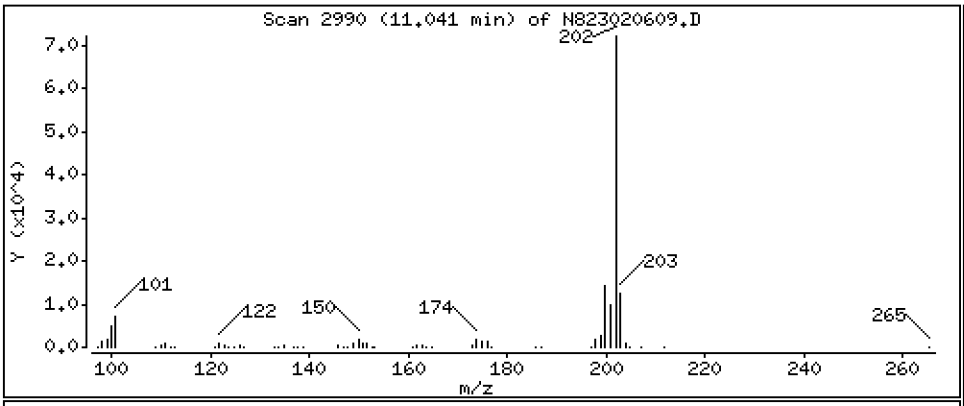
Operator: JZ

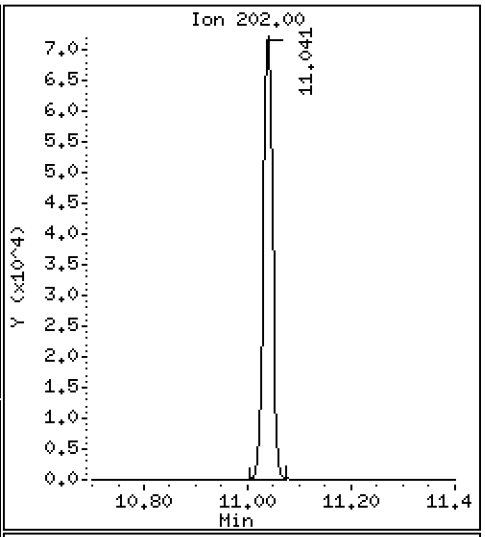
Column phase: Rxi-17sil

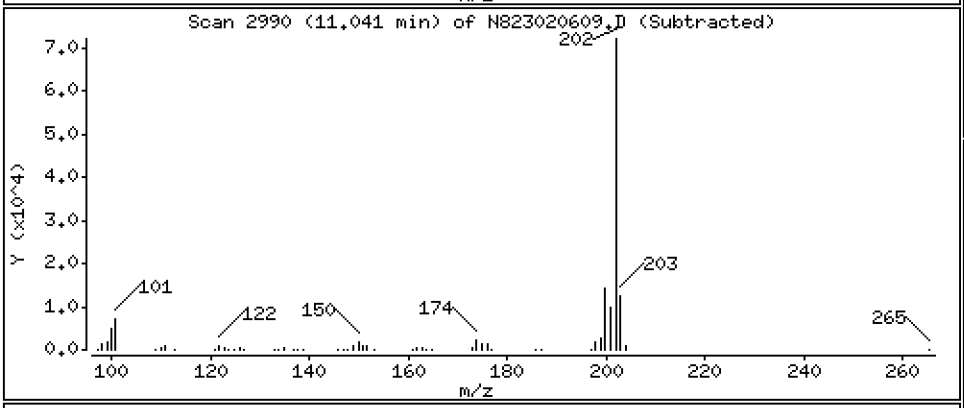
Column diameter: 0.25

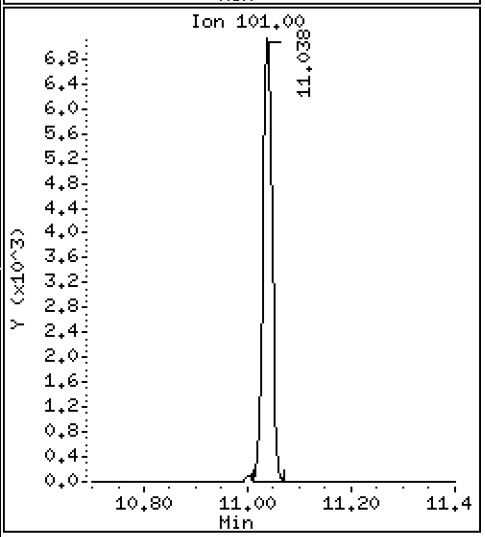
22 Fluoranthene

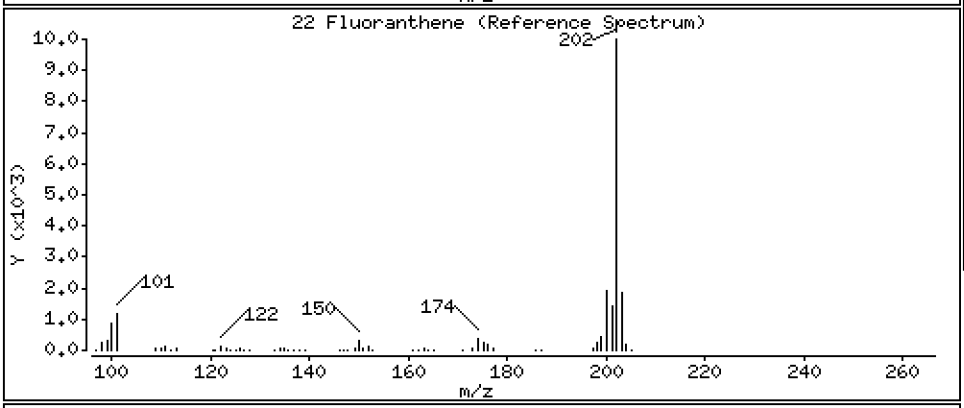
Concentration: 3.073 ug/mL

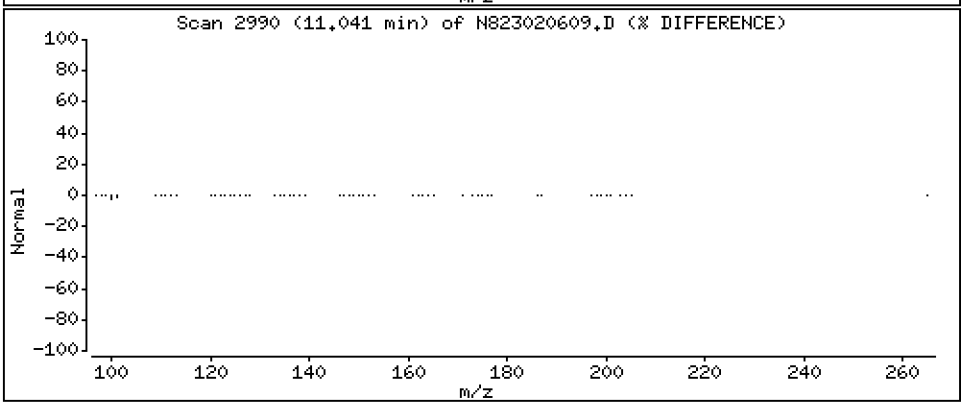












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

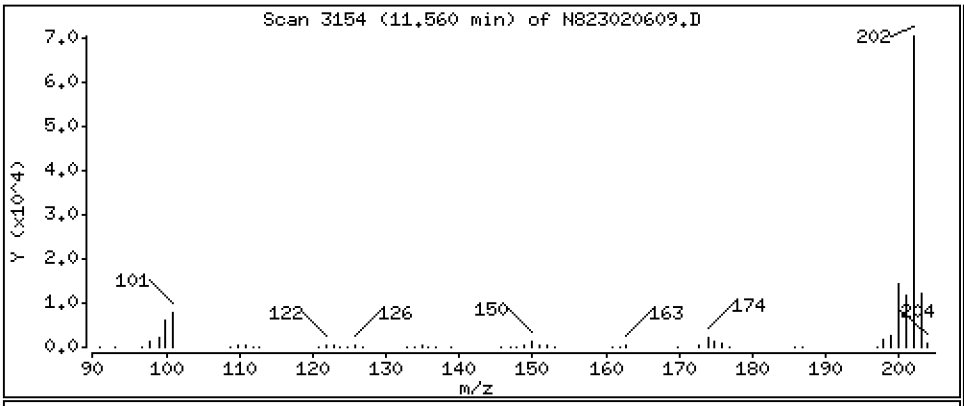
Operator: JZ

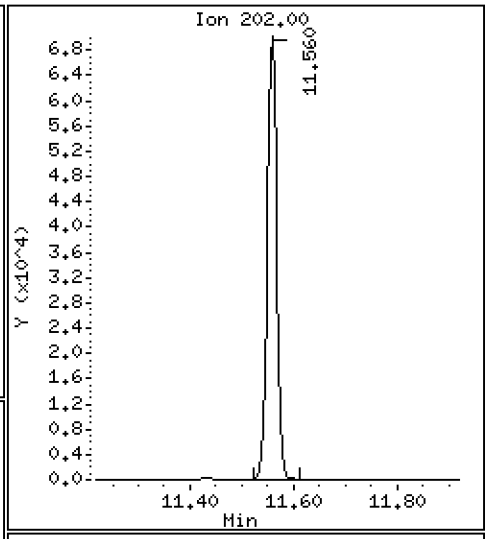
Column phase: Rxi-17sil

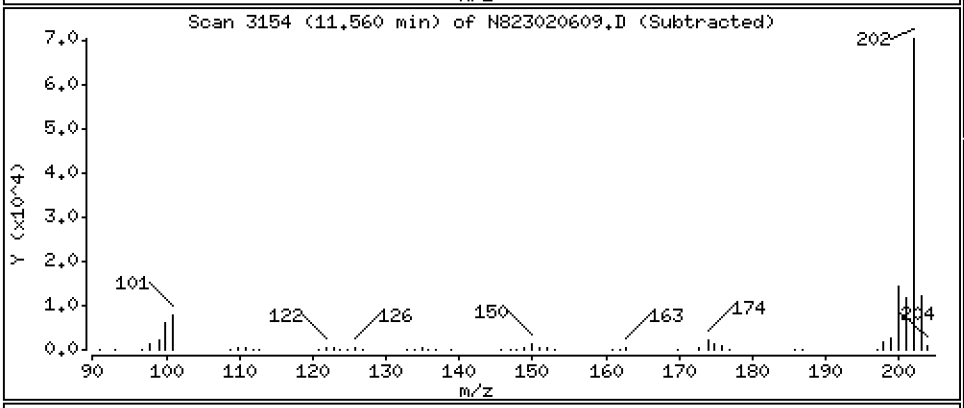
Column diameter: 0.25

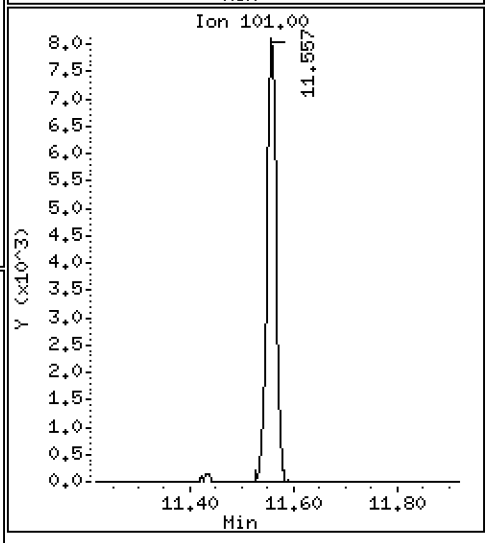
23 Pyrene

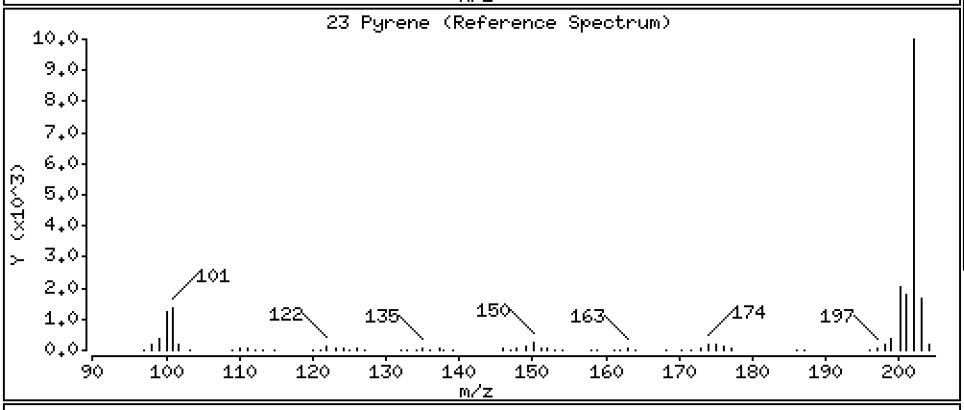
Concentration: 3.566 ug/mL

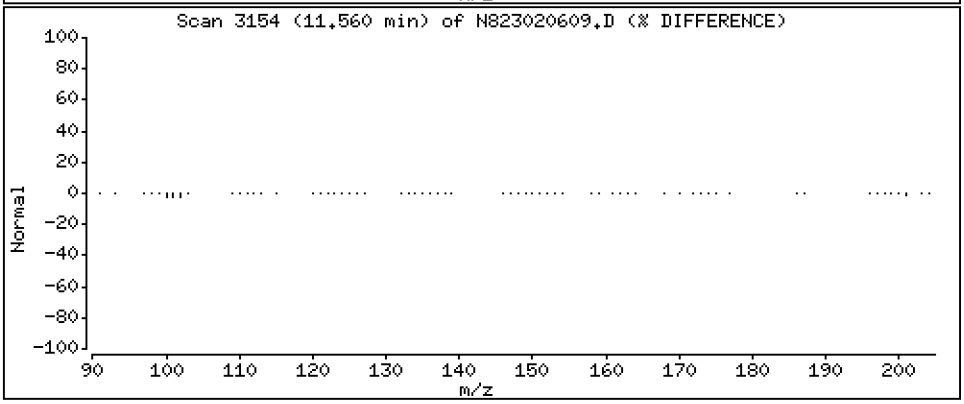












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

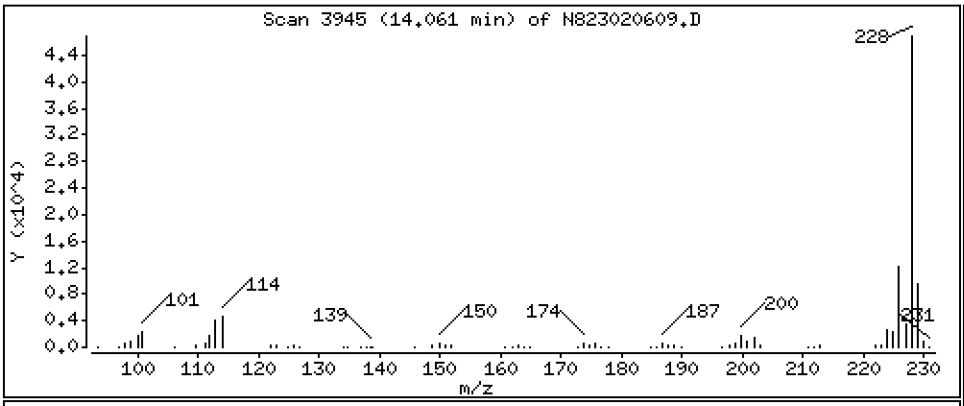
Operator: JZ

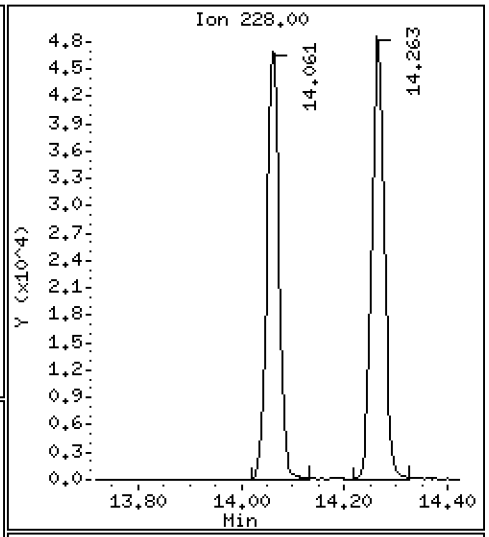
Column phase: Rxi-17sil

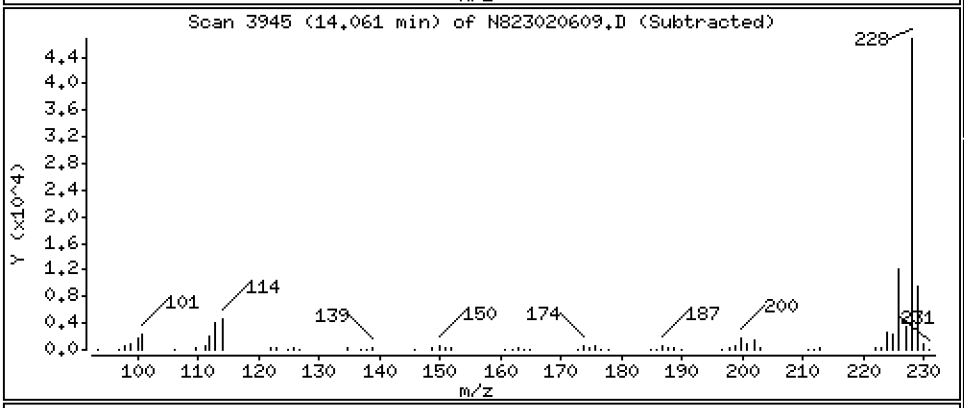
Column diameter: 0.25

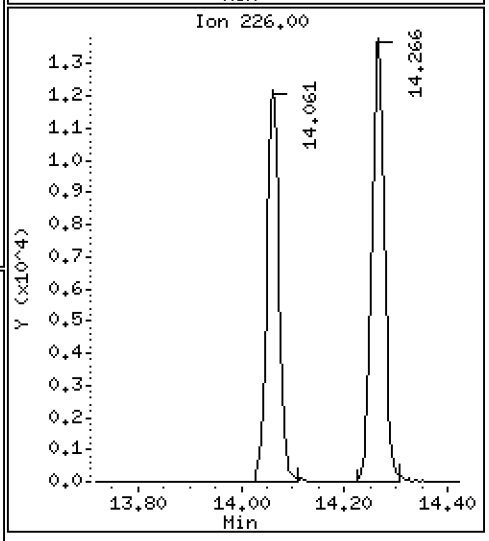
24 Benzo(a)anthracene

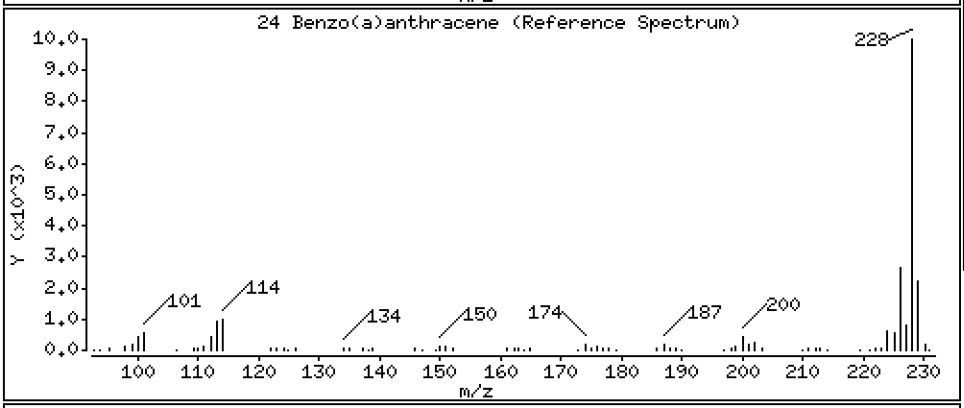
Concentration: 3.343 ug/mL

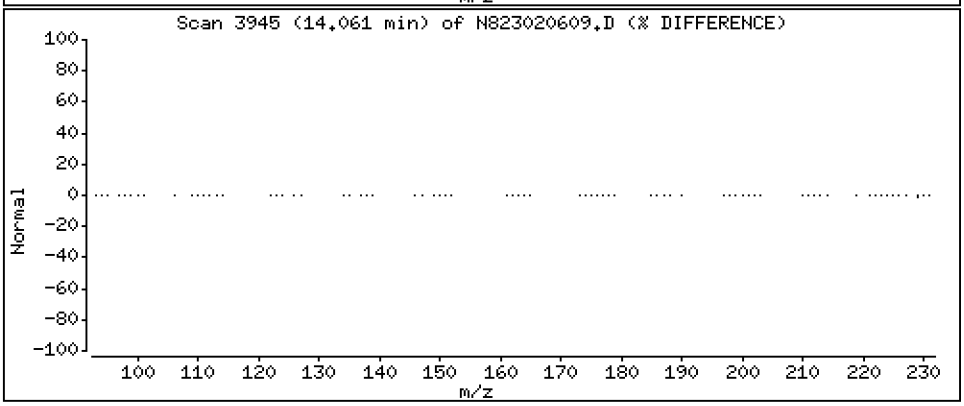












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

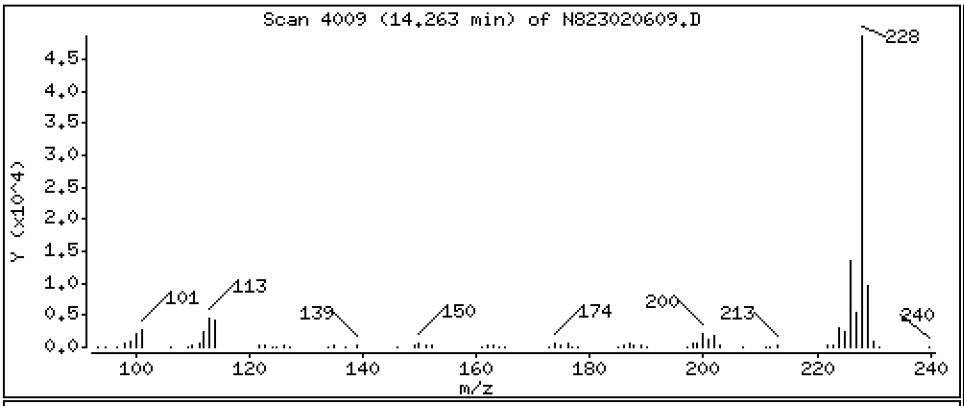
Operator: JZ

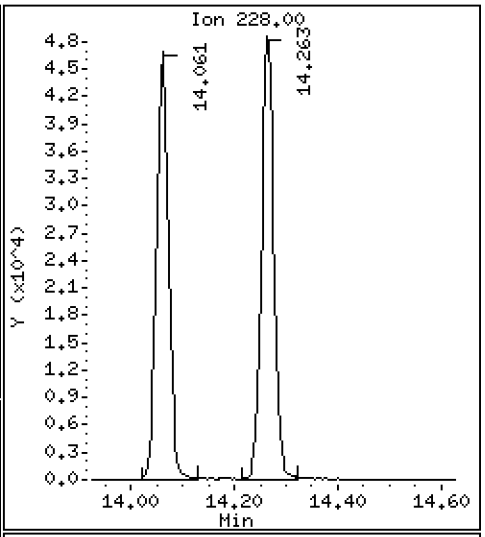
Column phase: Rxi-17sil

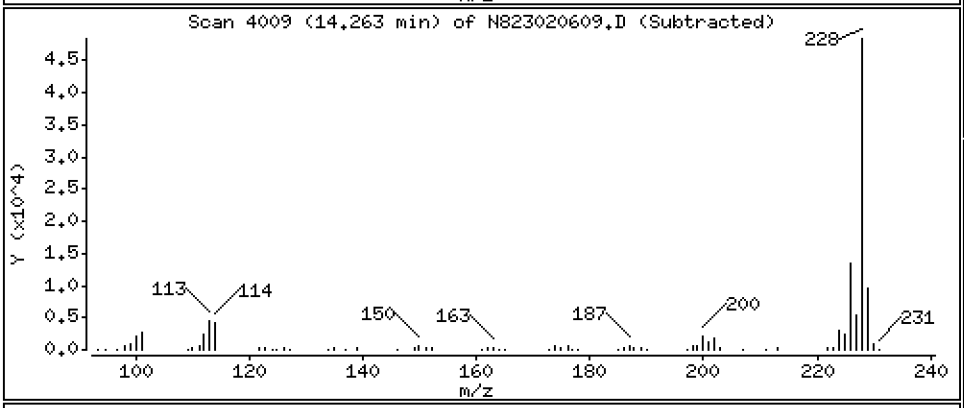
Column diameter: 0.25

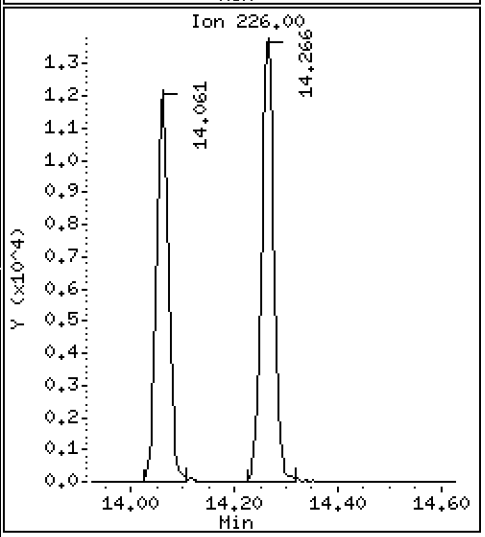
27 Chrysene

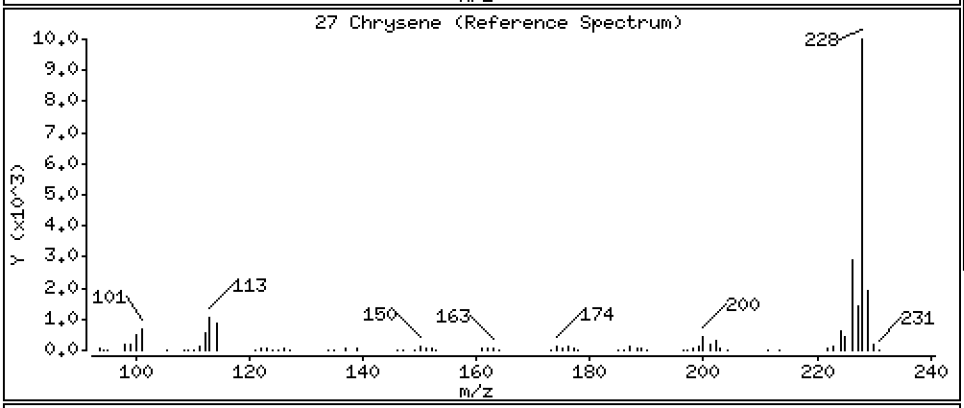
Concentration: 3.335 ug/mL

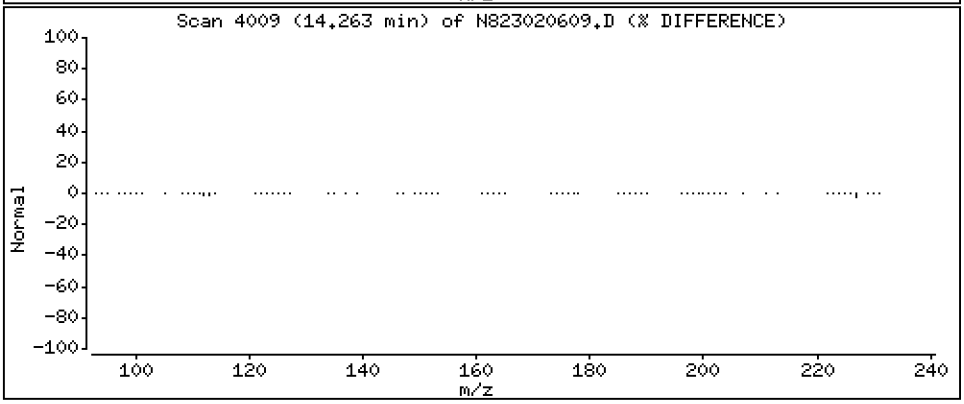












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

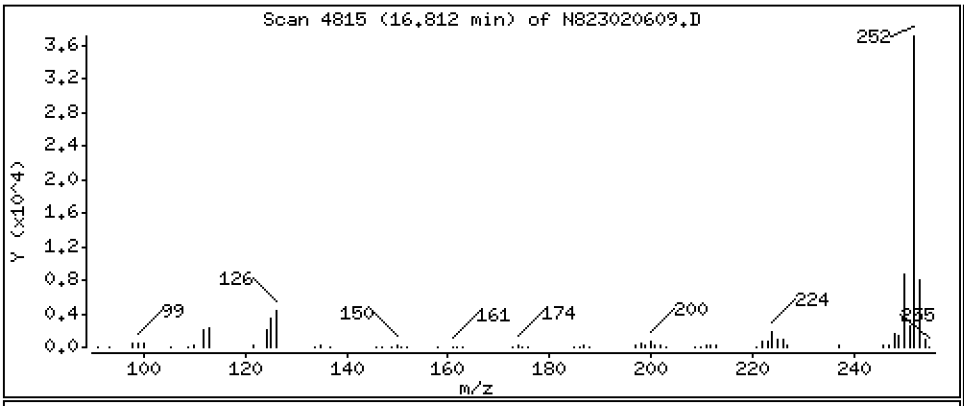
Operator: JZ

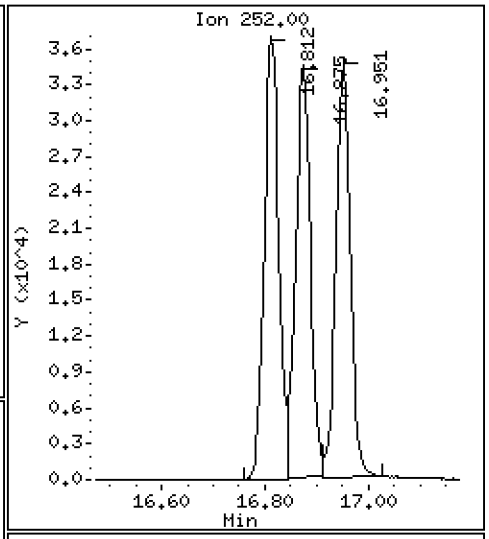
Column phase: Rxi-17sil

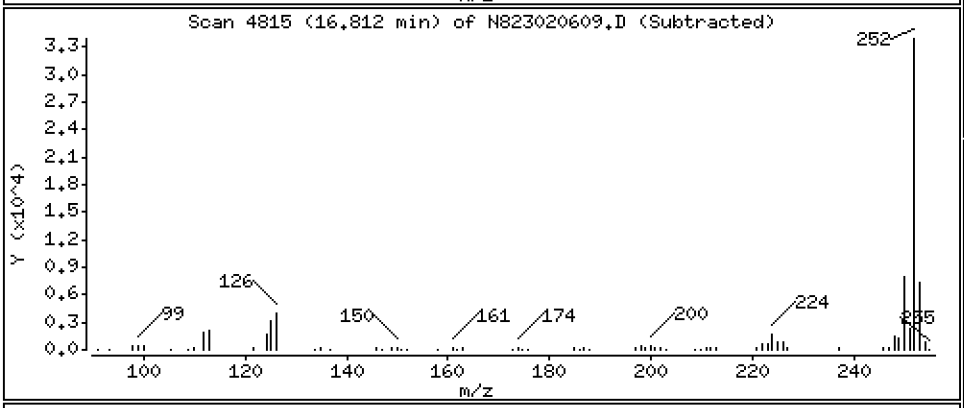
Column diameter: 0.25

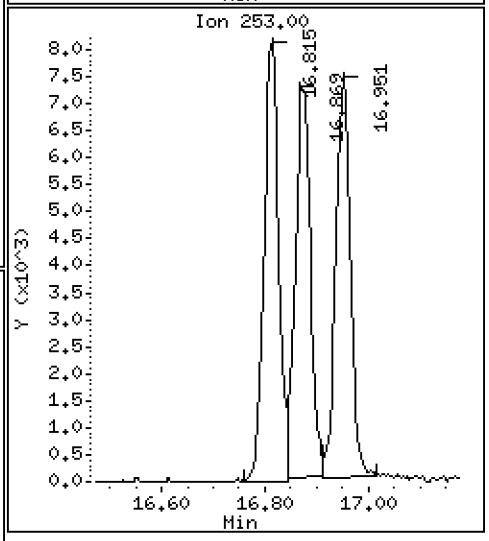
28 Benzo(b)fluoranthene

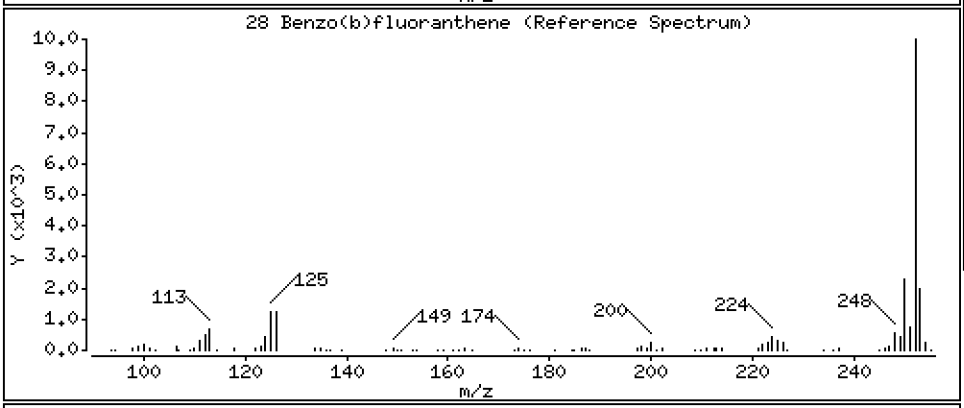
Concentration: 4.661 ug/mL

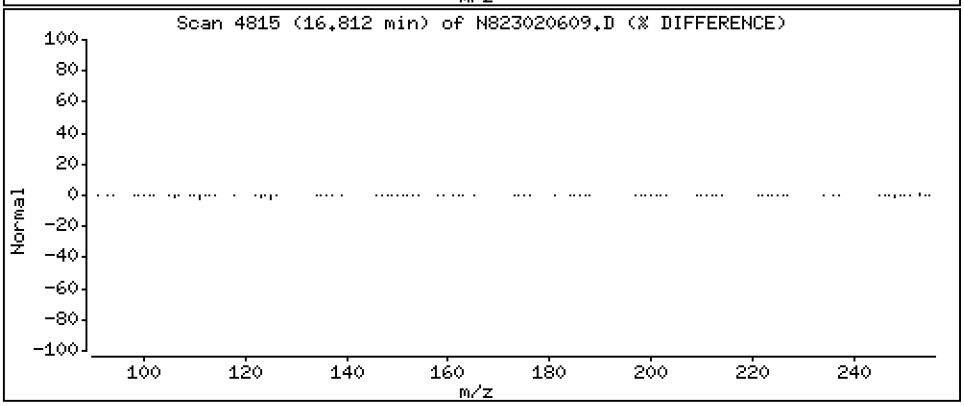












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

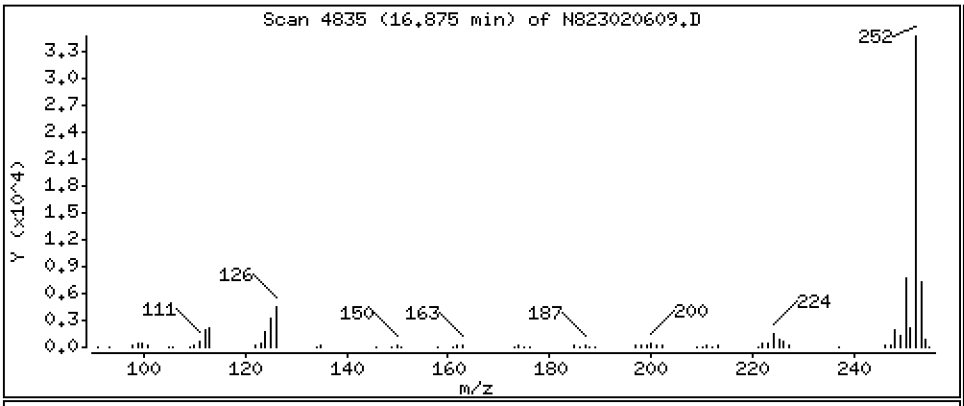
Operator: JZ

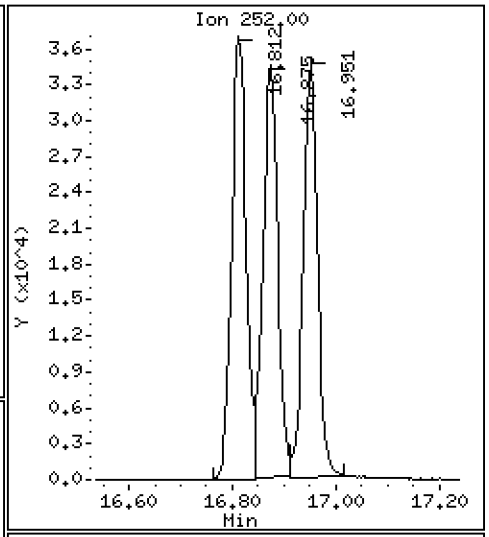
Column phase: Rxi-17sil

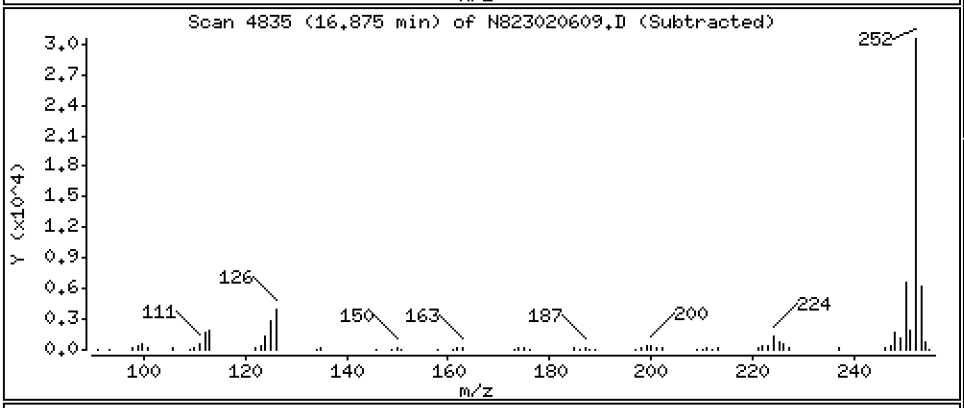
Column diameter: 0.25

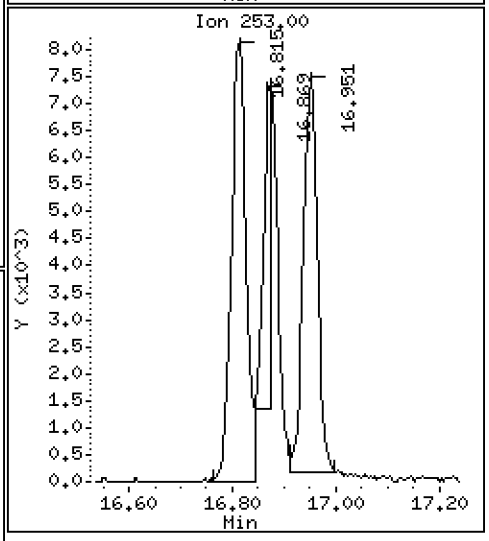
29 Benzo(k)fluoranthene

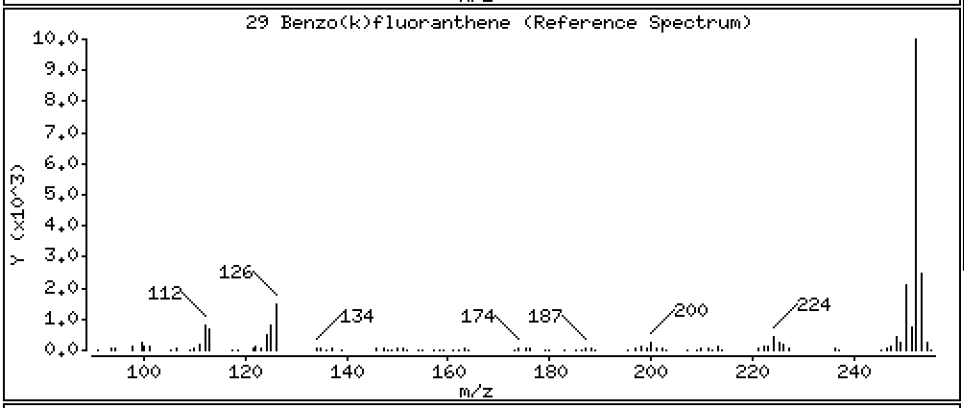
Concentration: 4.445 ug/mL

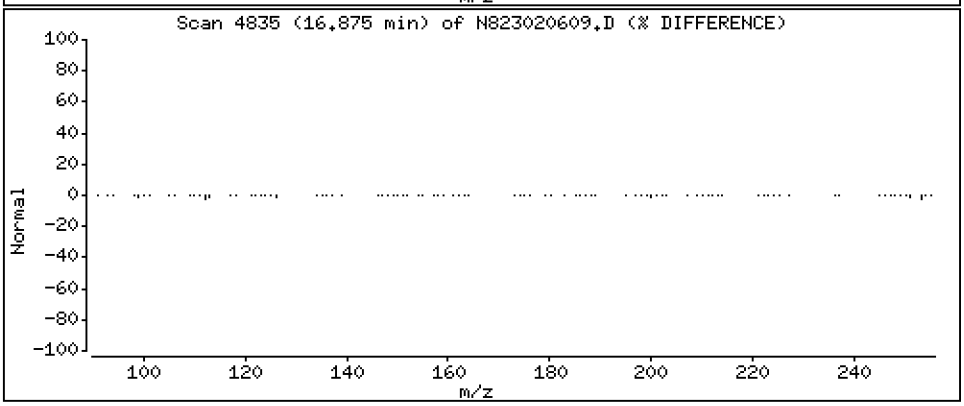












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

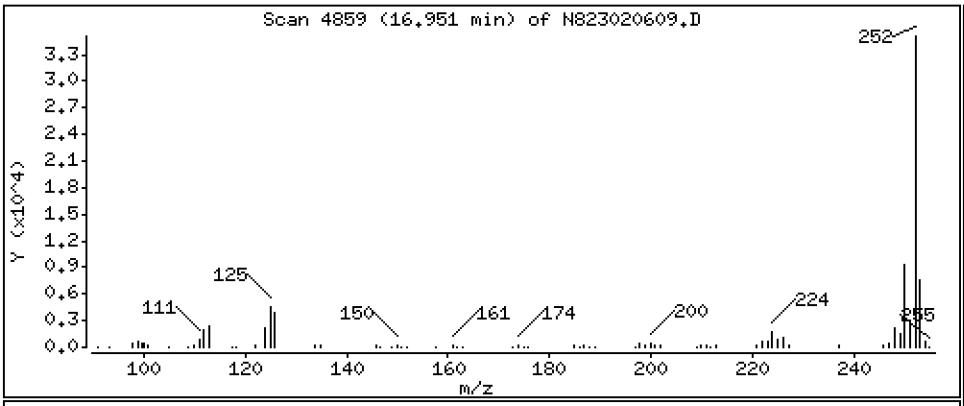
Operator: JZ

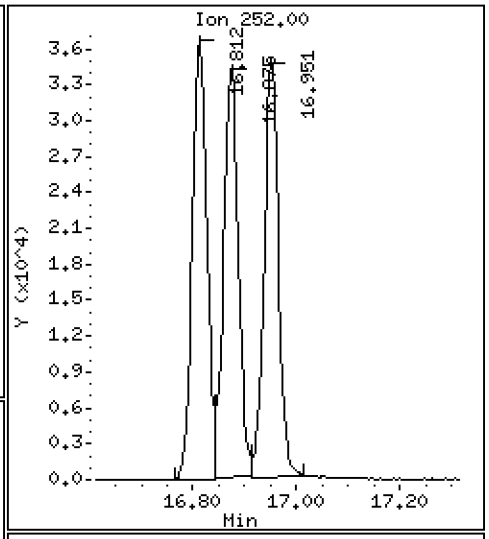
Column phase: Rxi-17sil

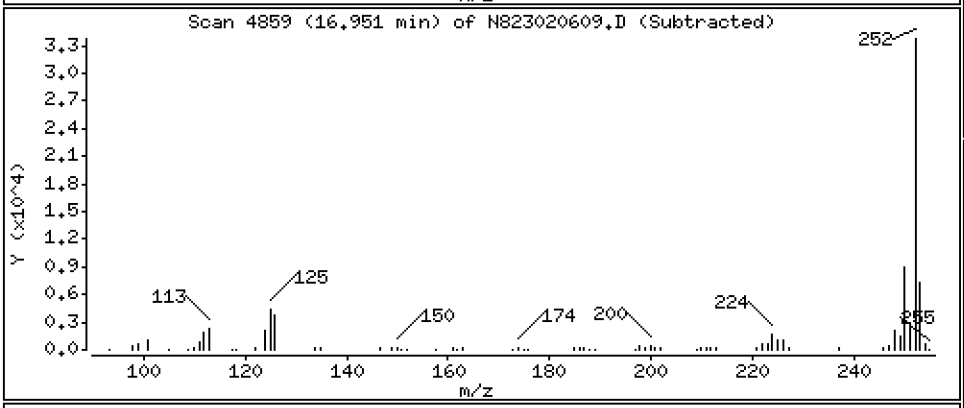
Column diameter: 0.25

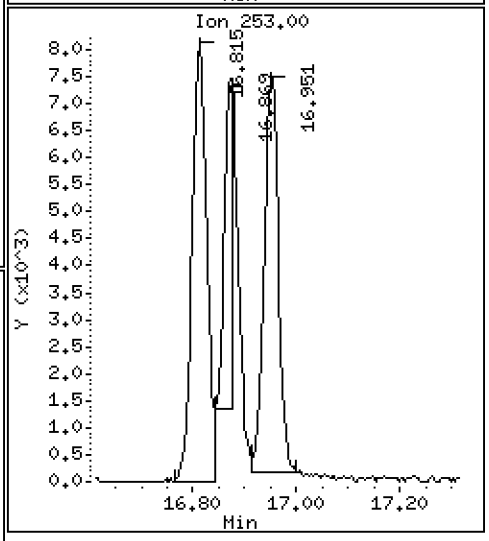
30 Benzo(j)fluoranthene

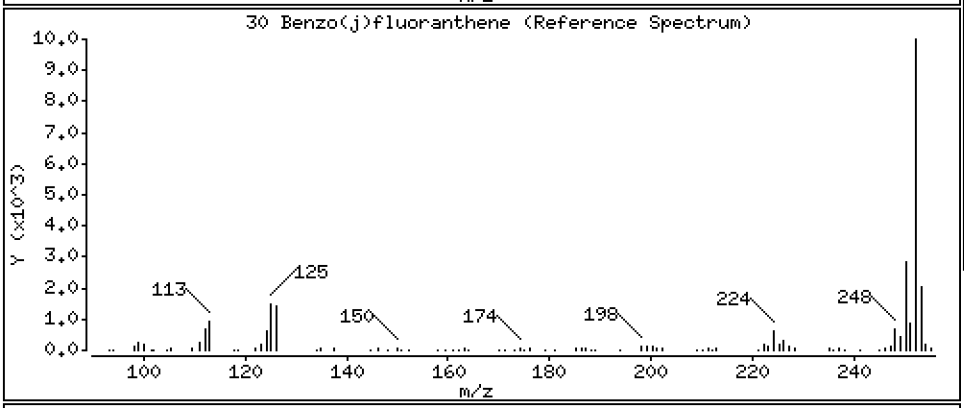
Concentration: 4.826 ug/mL

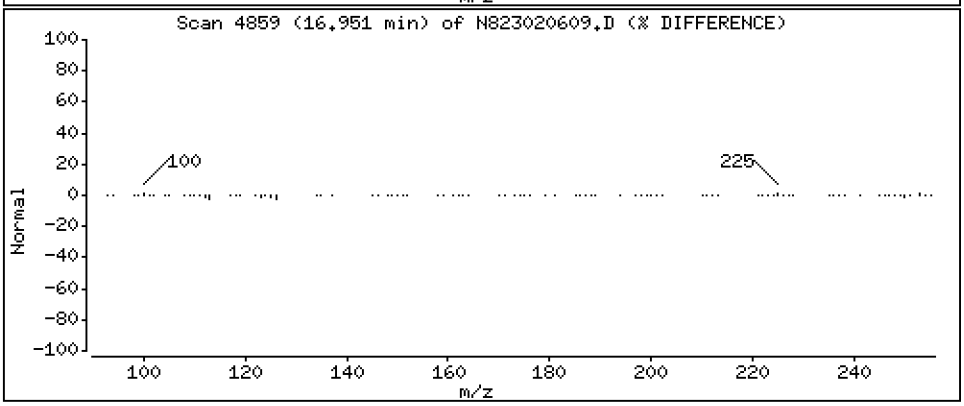












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

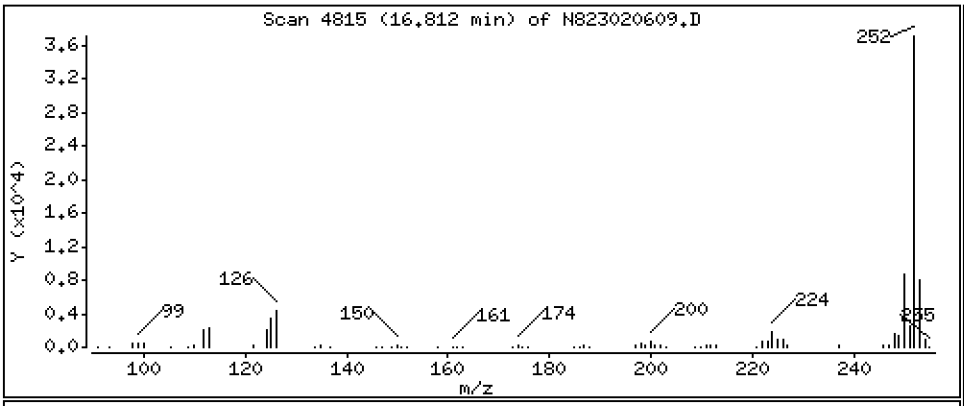
Operator: JZ

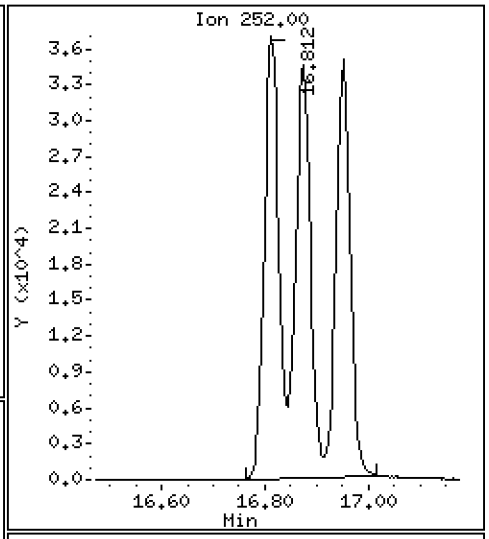
Column phase: Rxi-17sil

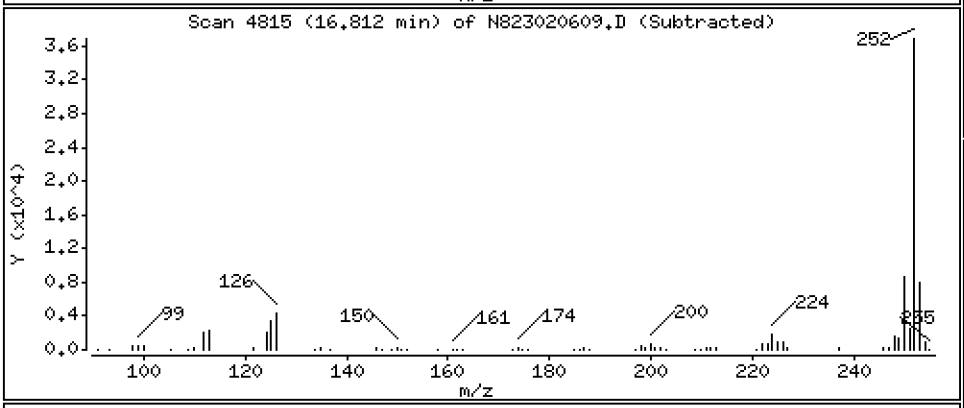
Column diameter: 0.25

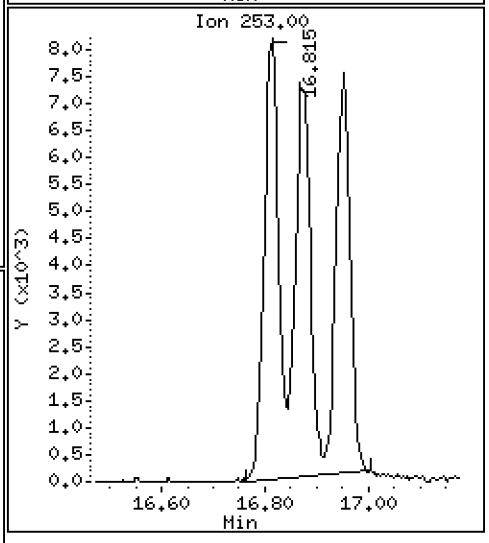
31 Total Benzofluoranthenes

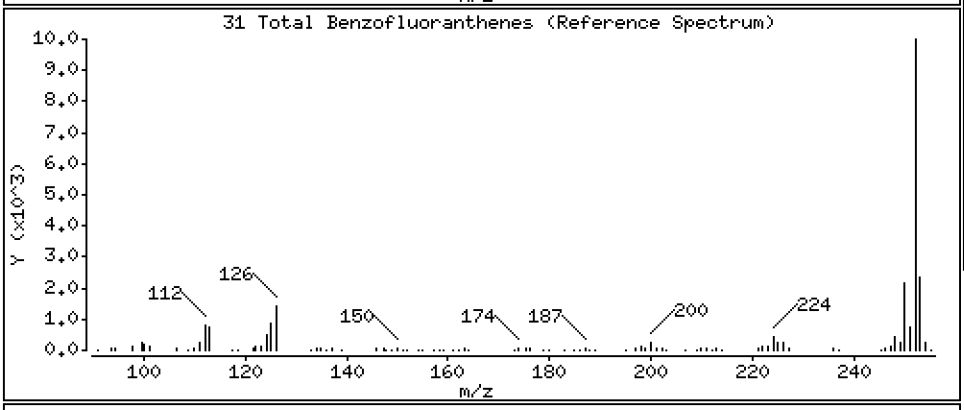
Concentration: 13.91 ug/mL

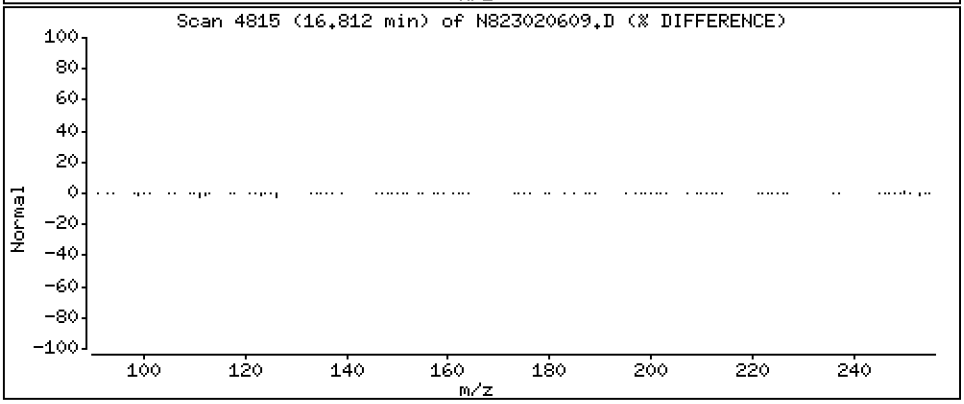












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

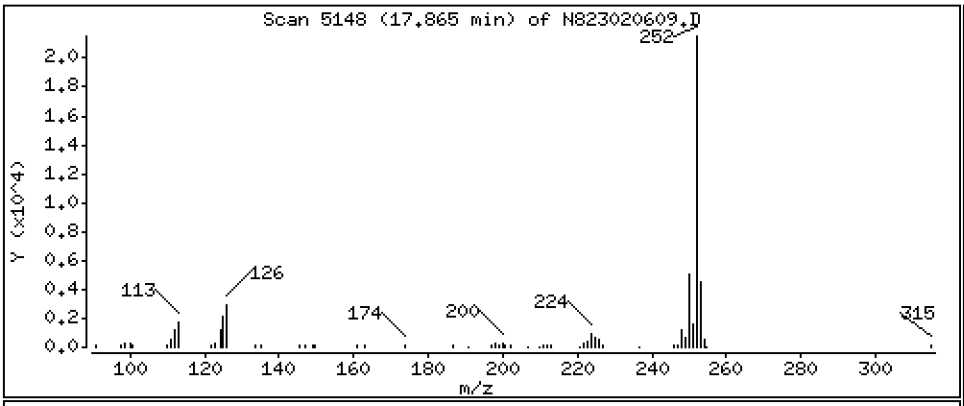
Operator: JZ

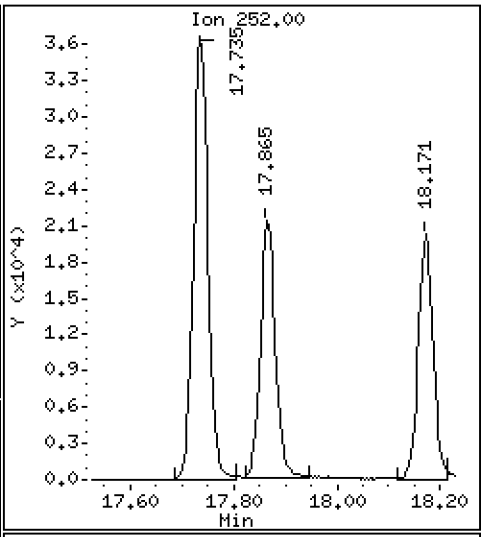
Column phase: Rxi-17sil

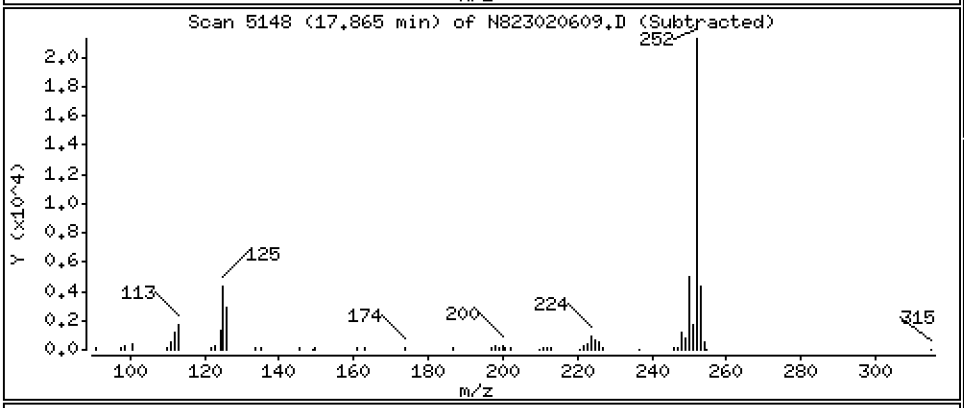
Column diameter: 0.25

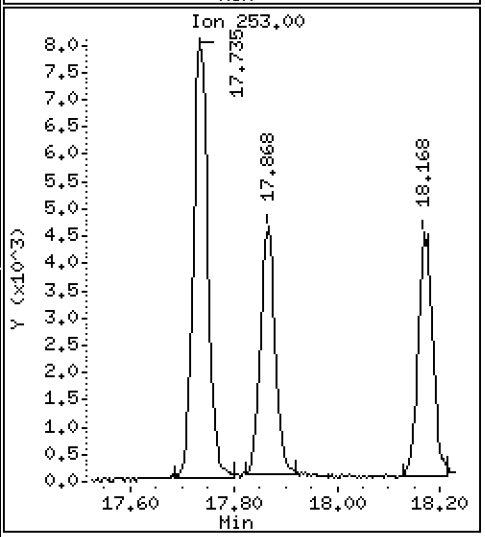
32 Benzo(a)pyrene

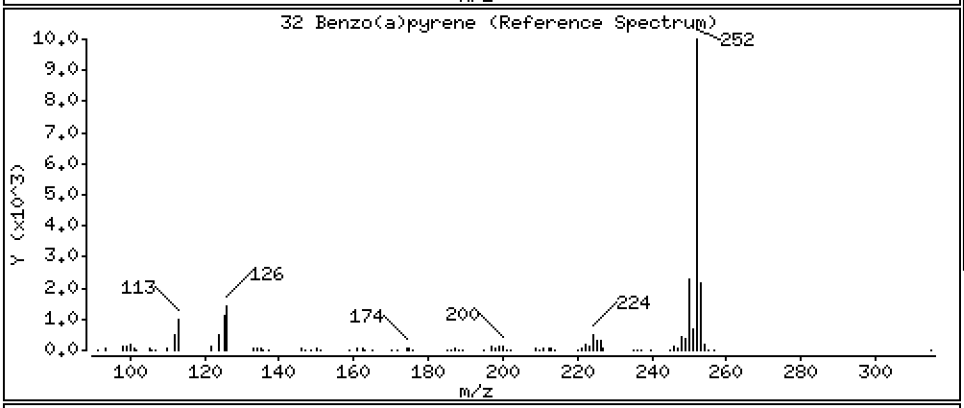
Concentration: 3.084 ug/mL

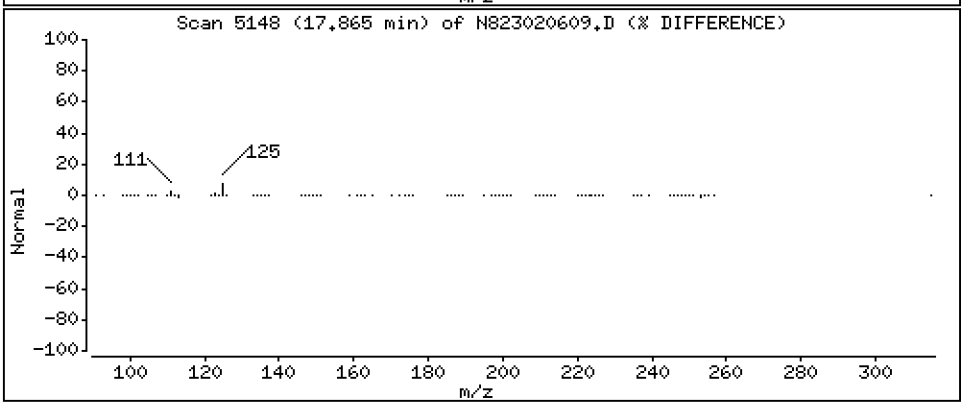












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

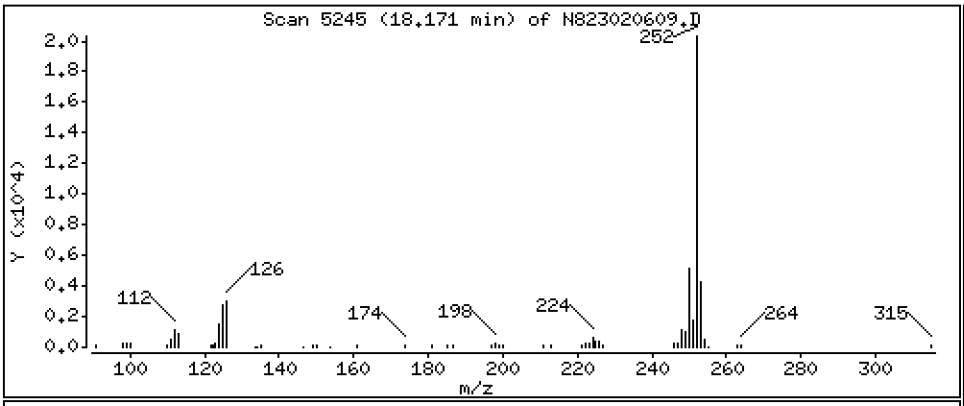
Operator: JZ

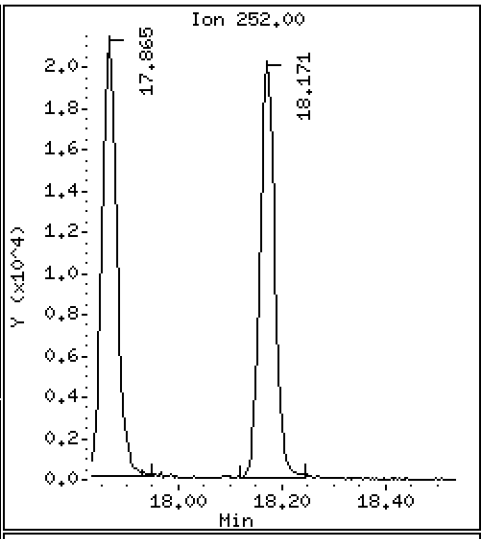
Column phase: Rxi-17sil

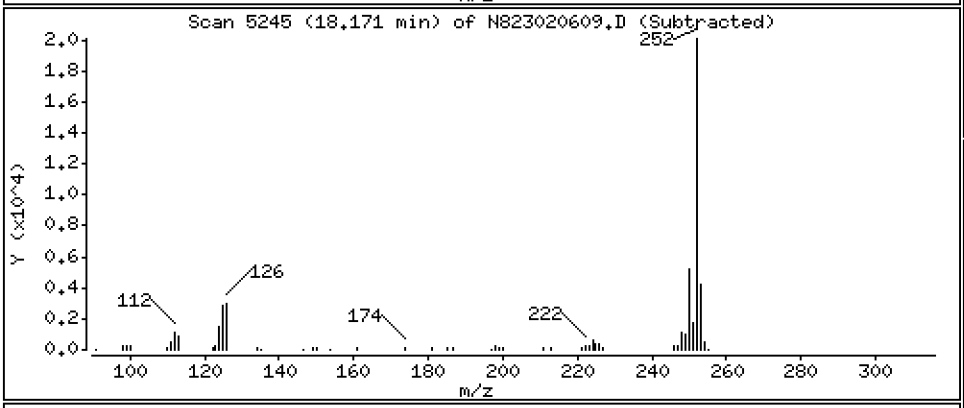
Column diameter: 0.25

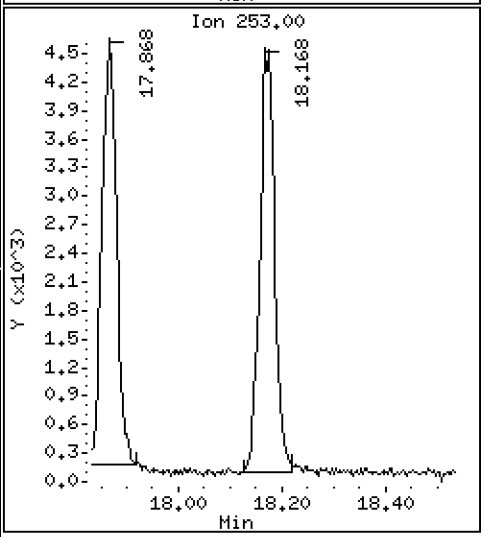
35 Perylene

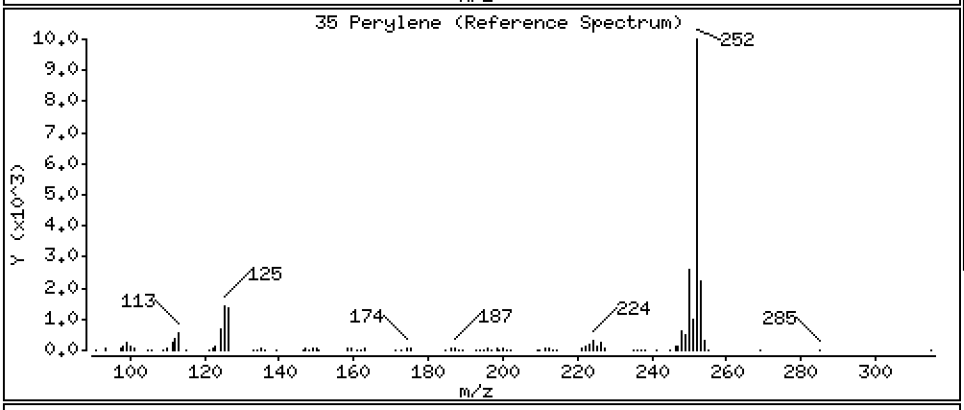
Concentration: 2.727 ug/mL

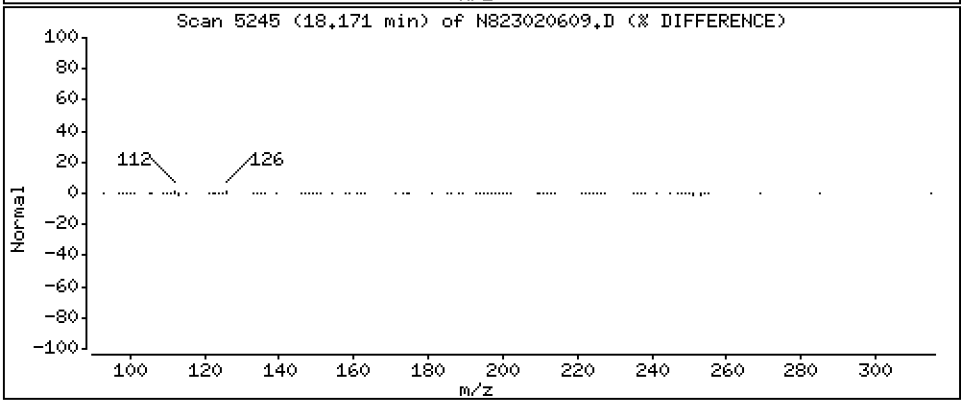












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

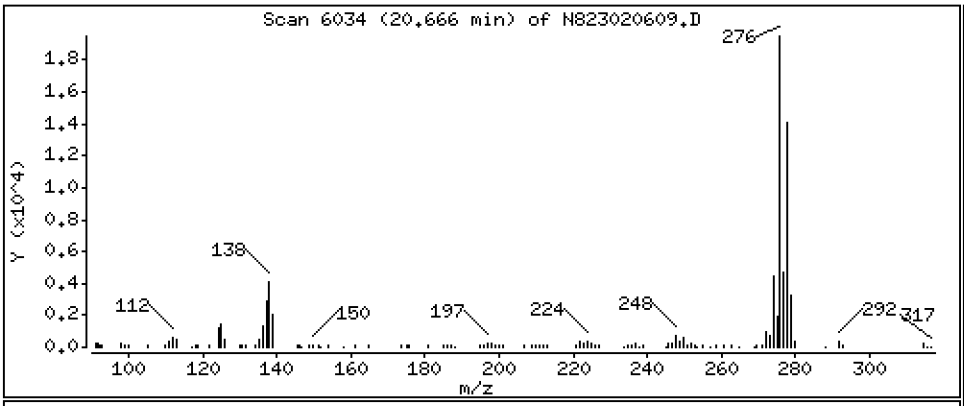
Operator: JZ

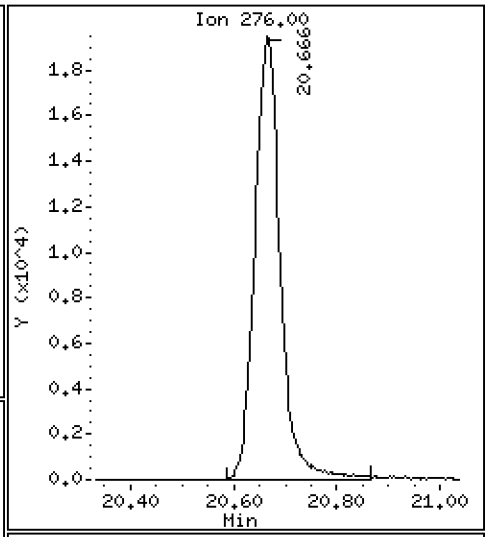
Column phase: Rxi-17sil

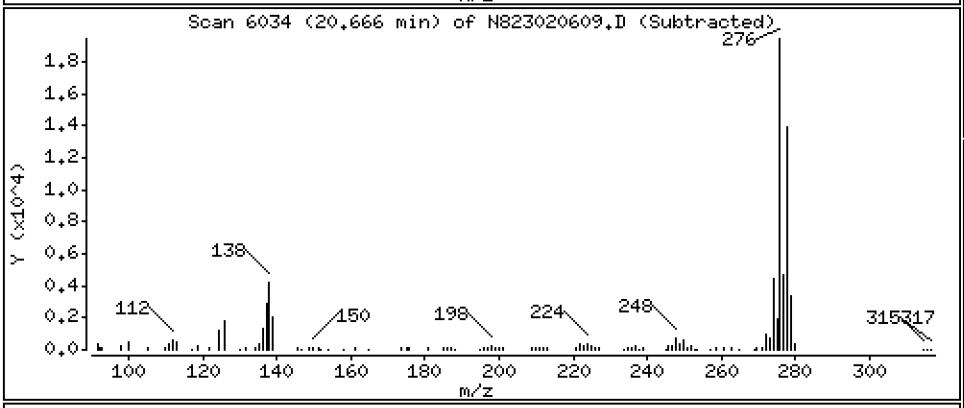
Column diameter: 0.25

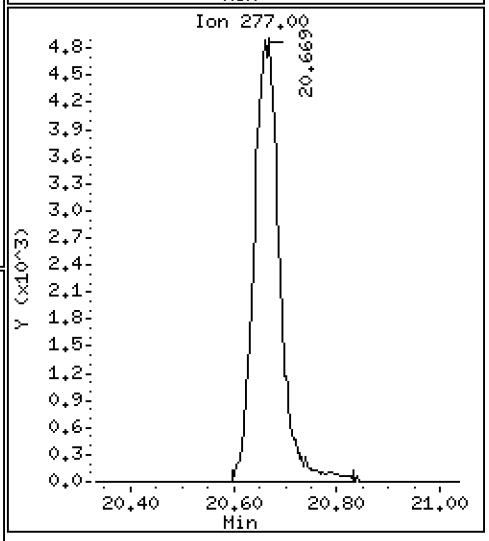
37 Indeno(1,2,3-cd)pyrene

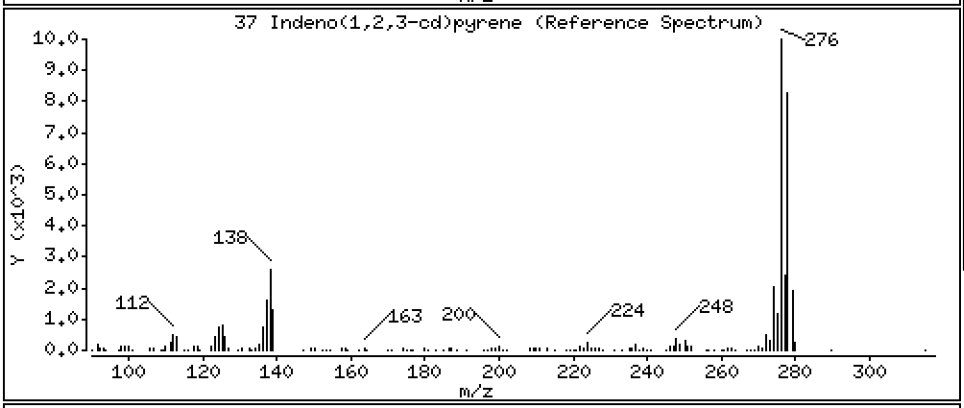
Concentration: 4.258 ug/mL

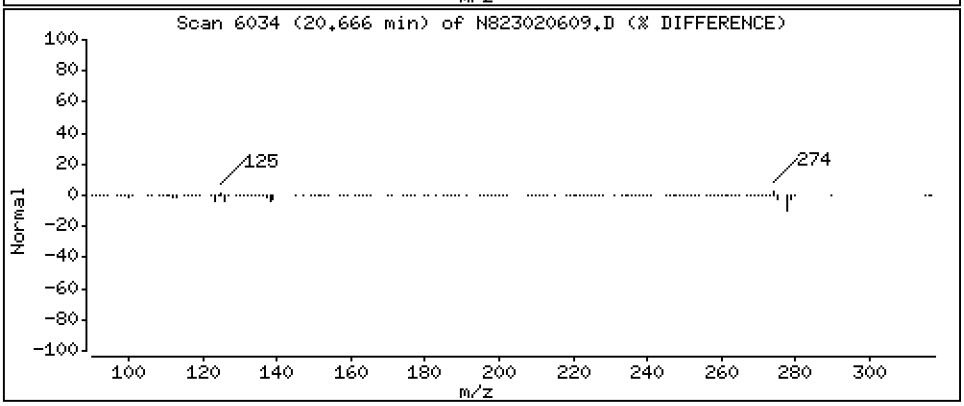












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

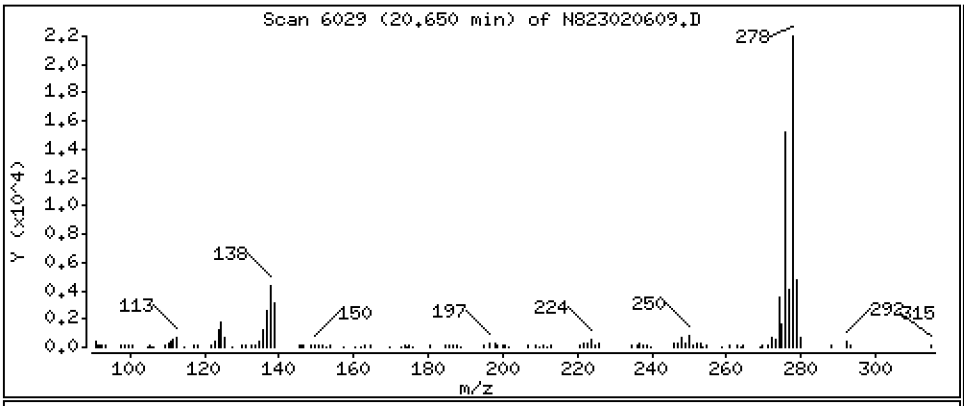
Operator: JZ

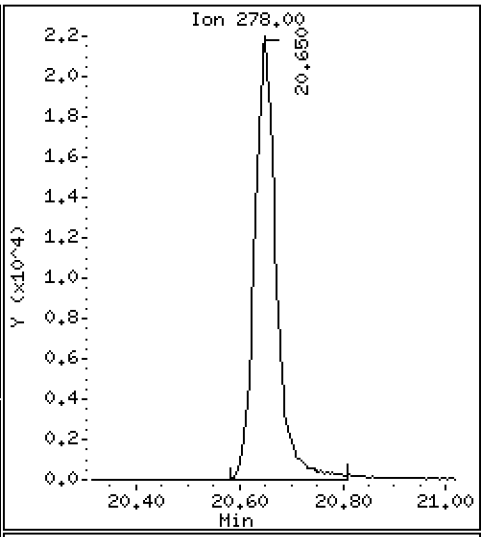
Column phase: Rxi-17sil

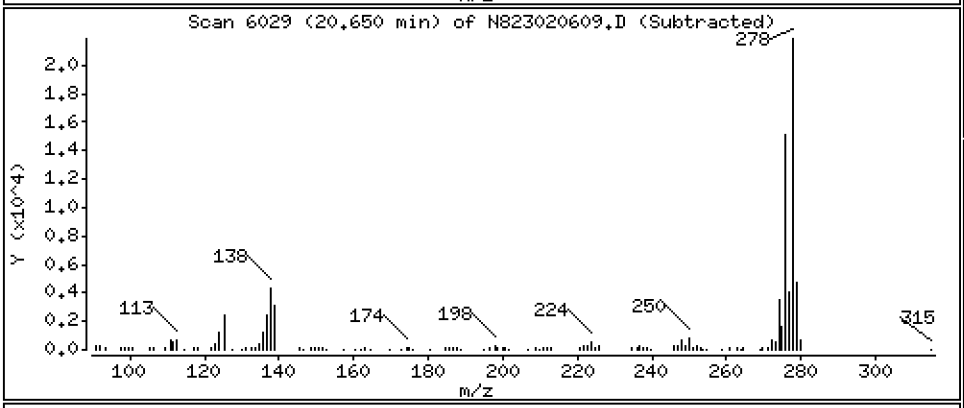
Column diameter: 0.25

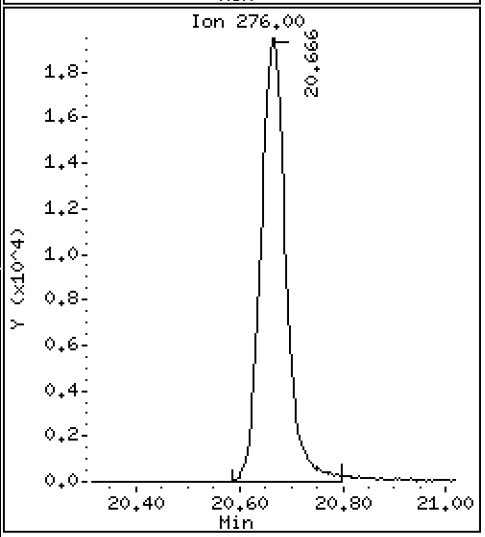
38 Dibenzo(a,h)anthracene

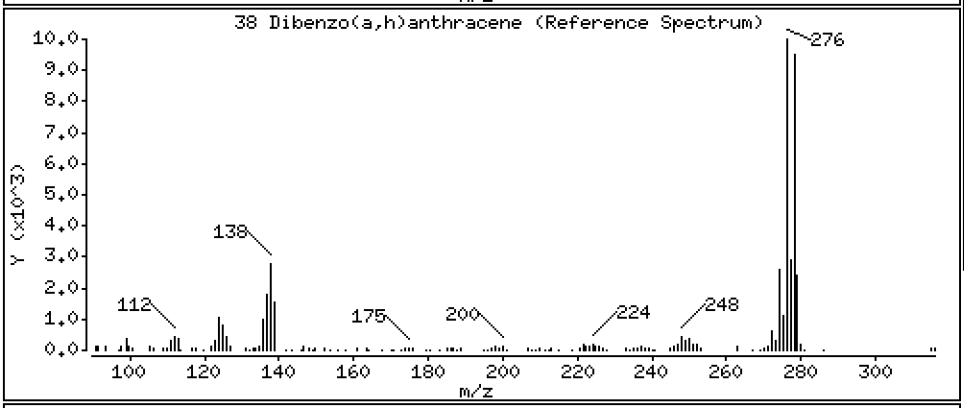
Concentration: 4.702 ug/mL

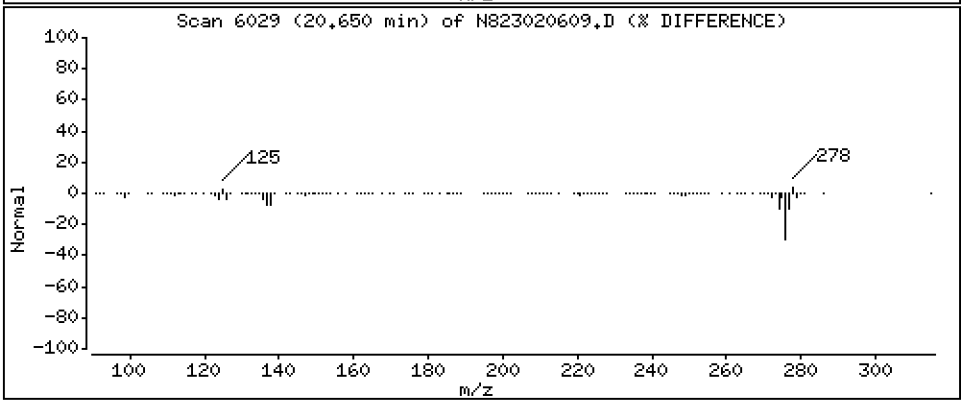












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020609.D

Date : 06-FEB-2023 16:24

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BS1,

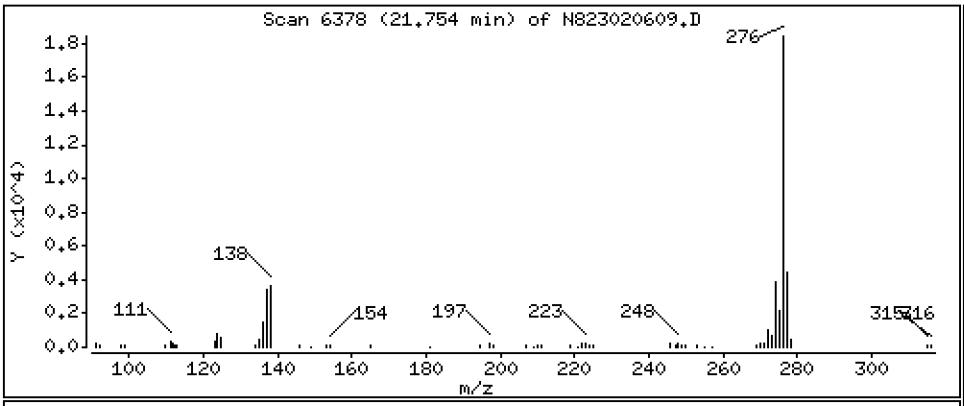
Operator: JZ

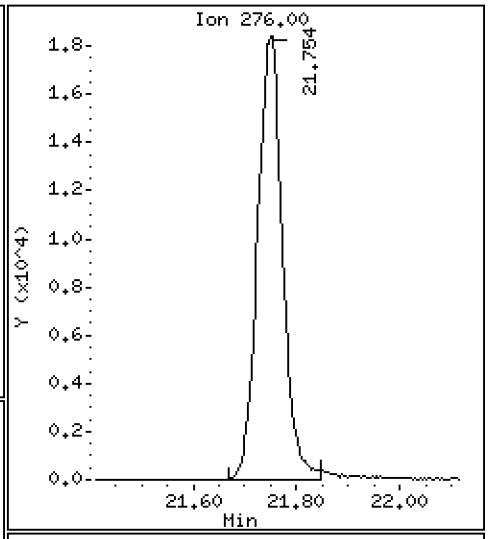
Column phase: Rxi-17sil

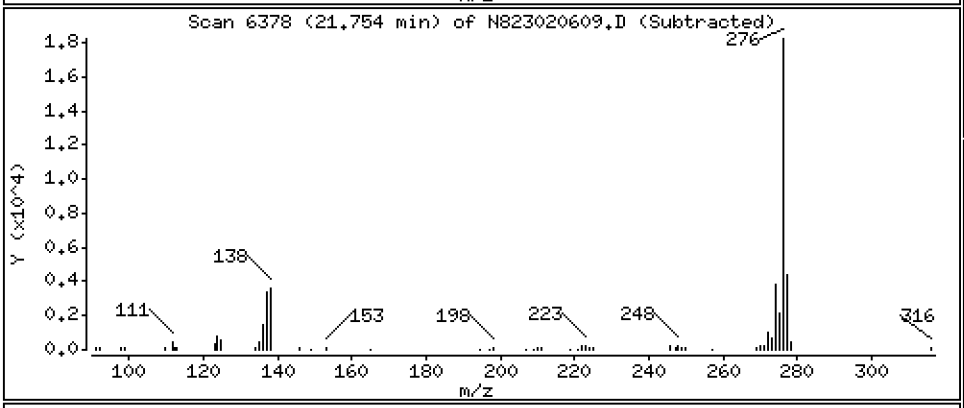
Column diameter: 0.25

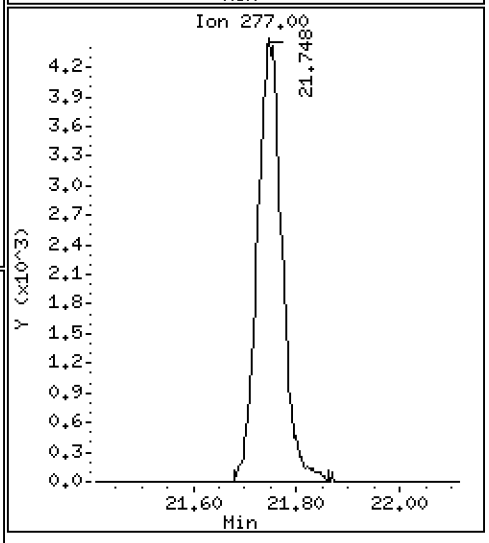
39 Benzo(g,h,i)perylene

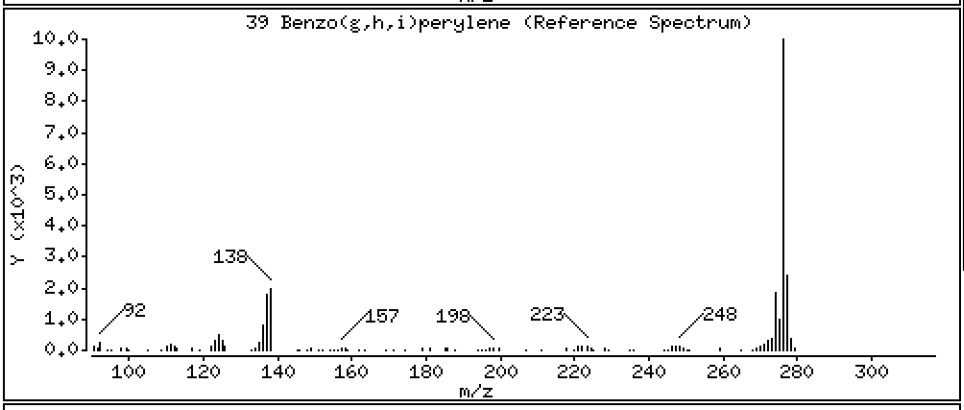
Concentration: 4.340 ug/mL

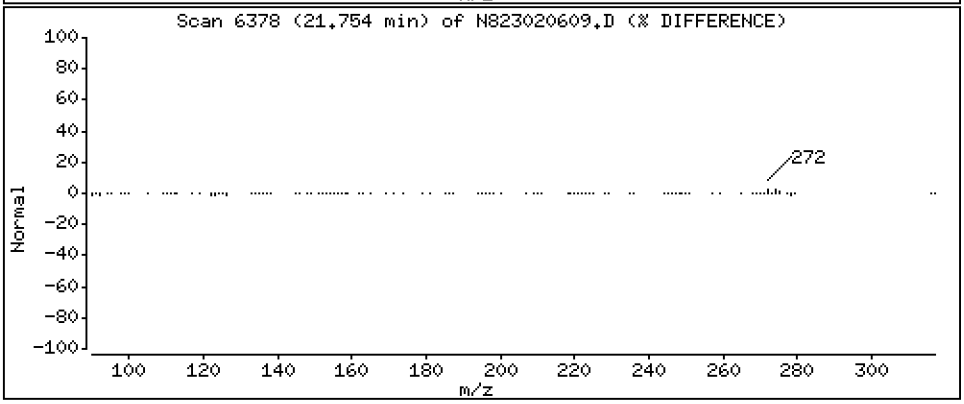












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020609.D
Lab Smp Id: BLA0683-BS1
Inj Date : 06-FEB-2023 16:24
Operator : JZ Inst ID: nt8.i
Smp Info : BLA0683-BS1,
Misc Info : 23-
Comment : 1ul Injection
Method : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
Meth Date : 07-Feb-2023 13:04 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PNAXMDL.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.884	4.900	(1.000)	50596	2.00000	
	2 Naphthalene	128	4.916	4.928	(1.006)	64251	2.73117	2.731
$	3 2-Methylnaphthalene-d10	152	5.624	5.634	(1.151)	26212	1.89959	1.900
	4 2-Methylnaphthalene	141	5.672	5.681	(1.161)	36550	2.82457	2.825
	5 1-methylnaphthalene	141	5.868	5.880	(1.201)	36725	2.79639	2.796
	9 Acenaphthylene	152	7.072	7.082	(0.985)	55125	2.44558	2.446
*	10 Acenaphthene-d10	164	7.183	7.189	(1.000)	29850	2.00000	
	11 Acenaphthene	153	7.234	7.240	(1.007)	40621	2.68963	2.690
	12 Dibenzofuran	168	7.385	7.392	(1.028)	61844	2.69599	2.696
	14 Fluorene	166	7.863	7.869	(1.095)	50388	2.82819	2.828
*	15 Phenanthrene-d10	188	9.222	9.232	(1.000)	54061	2.00000	
	16 Phenanthrene	178	9.257	9.267	(1.004)	76953	2.91404	2.914
	17 Anthracene	178	9.298	9.308	(1.008)	63665	2.65387	2.654
	19 Carbazole	167	9.814	9.823	(1.064)	66808	3.03779	3.038
	22 Fluoranthene	202	11.041	11.050	(1.197)	88334	3.07303	3.073
$	21 Fluoranthene-d10	212	11.000	11.009	(1.193)	52525	2.20217	2.202
	23 Pyrene	202	11.559	11.569	(0.815)	90758	3.56642	3.566
	24 Benzo(a)anthracene	228	14.060	14.070	(0.991)	77098	3.34257	3.343
*	25 Chrysene-d12	240	14.190	14.202	(1.000)	41046	2.00000	
	27 Chrysene	228	14.263	14.275	(1.005)	81897	3.33532	3.335
	28 Benzo(b)fluoranthene	252	16.811	16.824	(0.929)	73568	4.66065	4.661
	29 Benzo(k)fluoranthene	252	16.874	16.887	(0.932)	68729	4.44520	4.445
	30 Benzo(j)fluoranthene	252	16.950	16.963	(0.937)	67176	4.82624	4.826
	31 Total Benzofluoranthenes	252	16.811	16.824	(0.929)	207984	13.9128	13.91(M)
	32 Benzo(a)pyrene	252	17.864	17.877	(0.987)	42834	3.08366	3.084
*	33 Perylene-d12	264	18.098	18.107	(1.000)	27103	2.00000	
	35 Perylene	252	18.171	18.183	(1.004)	40651	2.72714	2.727
$	36 Dibenzo(a,h)anthracene-d14	292	20.536	20.549	(1.135)	36282	3.41653	3.417
	37 Indeno(1,2,3-cd)pyrene	276	20.666	20.684	(1.142)	67386	4.25826	4.258
	38 Dibenzo(a,h)anthracene	278	20.650	20.666	(1.141)	64030	4.70170	4.702
	39 Benzo(g,h,i)perylene	276	21.753	21.763	(1.202)	62220	4.33963	4.340

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823020609.D
Lab Smp Id: BLA0683-BS1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 06-FEB-2023
Calibration Time: 15:15
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44336	22168	88672	50596	14.12
10 Acenaphthene-d10	26127	13064	52254	29850	14.25
15 Phenanthrene-d10	47424	23712	94848	54061	14.00
25 Chrysene-d12	36794	18397	73588	41046	11.56
33 Perylene-d12	36636	18318	73272	27103	-26.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.90	4.40	5.40	4.88	-0.32
10 Acenaphthene-d10	7.19	6.69	7.69	7.18	-0.09
15 Phenanthrene-d10	9.23	8.73	9.73	9.22	-0.10
25 Chrysene-d12	14.20	13.70	14.70	14.19	-0.09
33 Perylene-d12	18.11	17.61	18.61	18.10	-0.05

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

REVIEW SUMMARY FOR FILE - N823020609.D

Lab ID: BLA0683-BS1
nt8.i, 20230206A.b\FSIMPNA230119.m,   06-FEB-2023 16:24

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

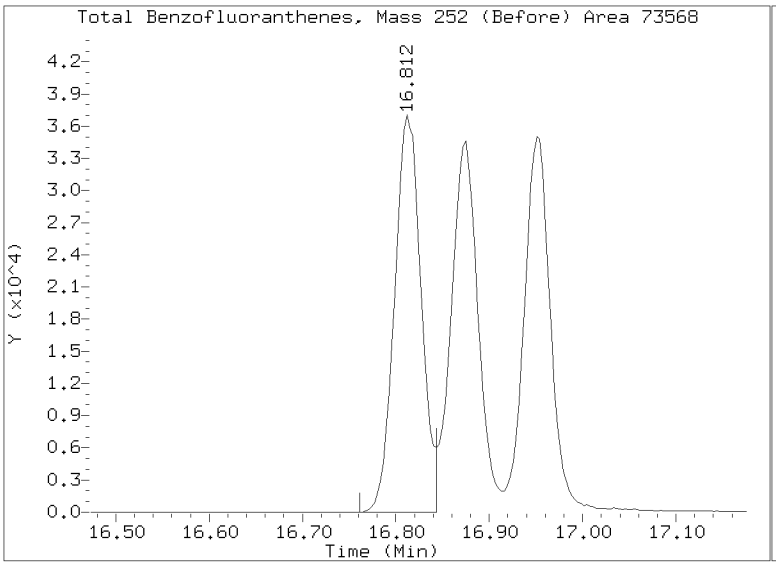
No RRT check performed

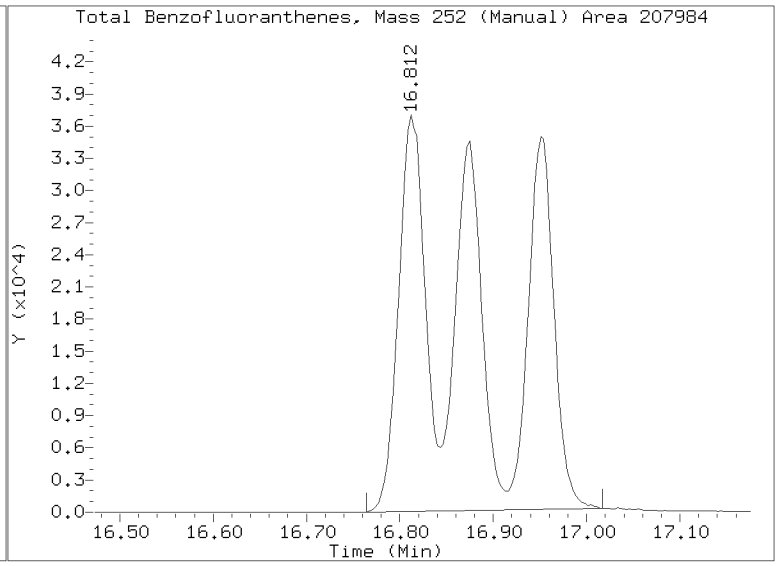
On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020609.D
Injection Date: 06-FEB-2023 16:24
Lab ID:BLA0683-BS1 Client ID:
Report Date: 02/07/2023 13:19





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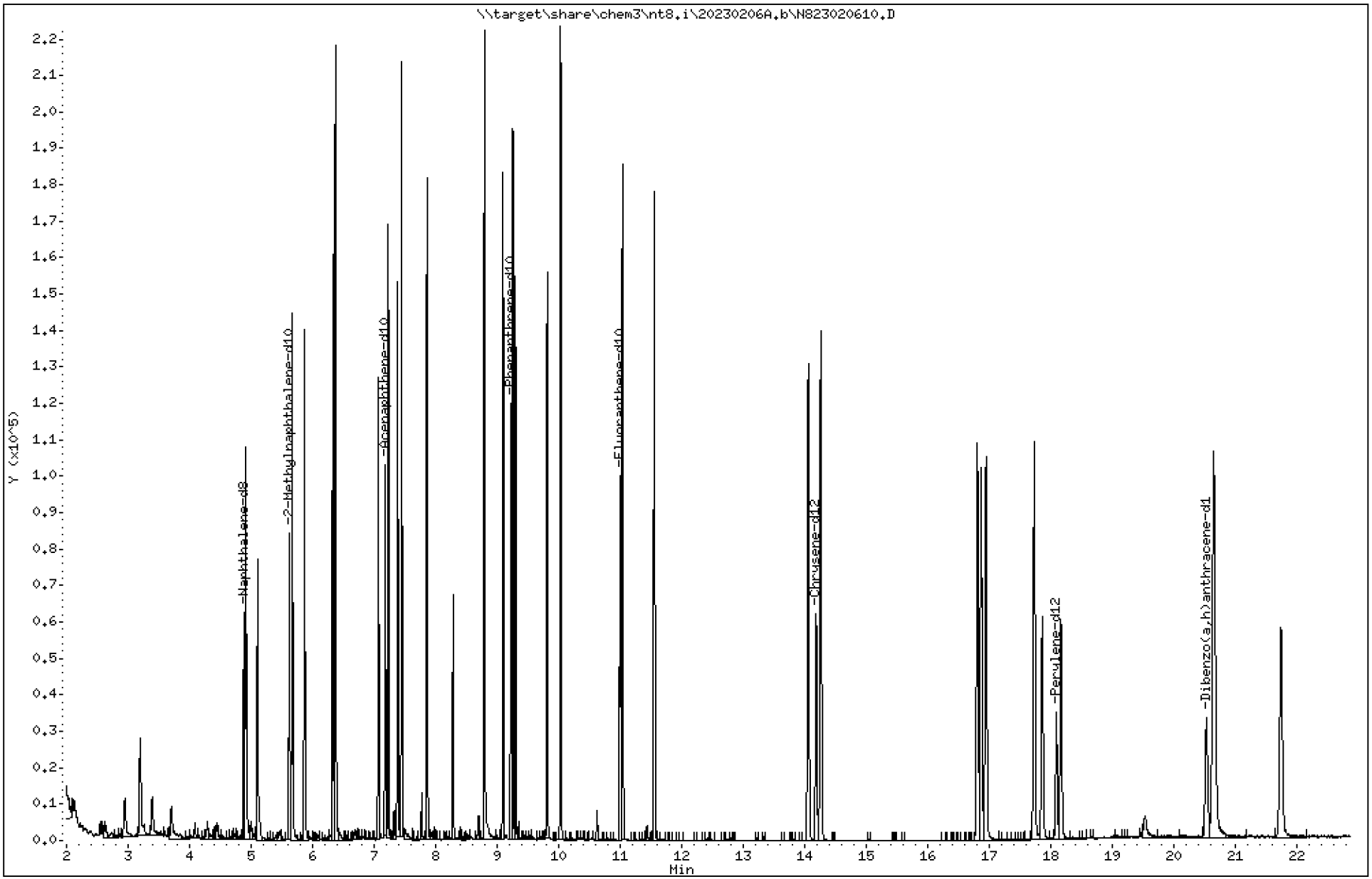
Date : 06-FEB-2023 16:51
Client ID:
Sample Info: BLA0683-BSD1,

Instrument: nt8.i
Operator: JZ
Column phase: Rxi-17sil
Column diameter: 0.25



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Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

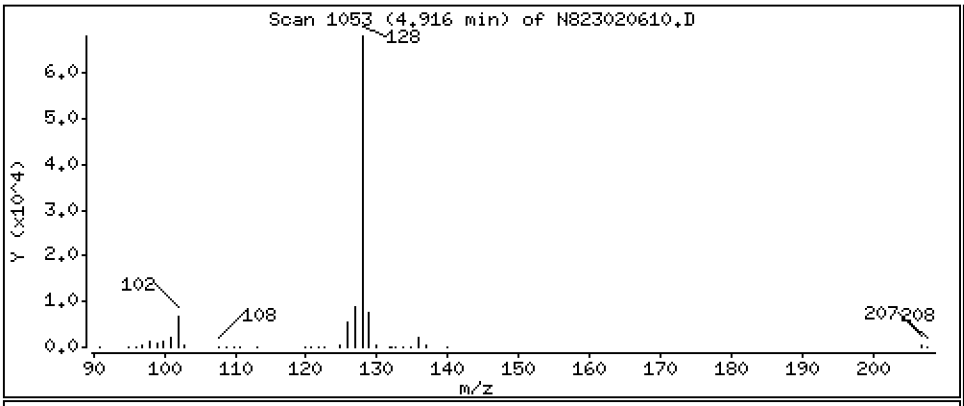
Operator: JZ

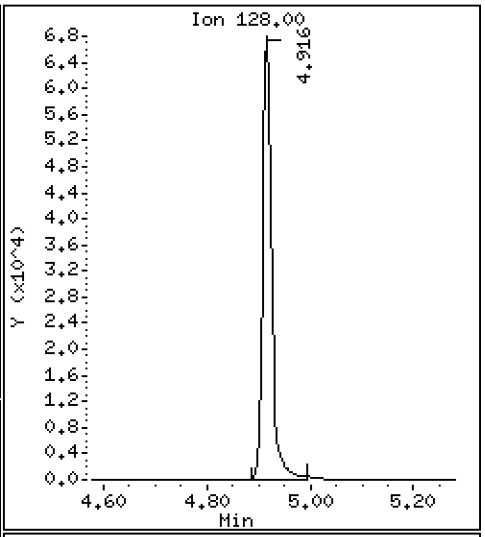
Column phase: Rxi-17sil

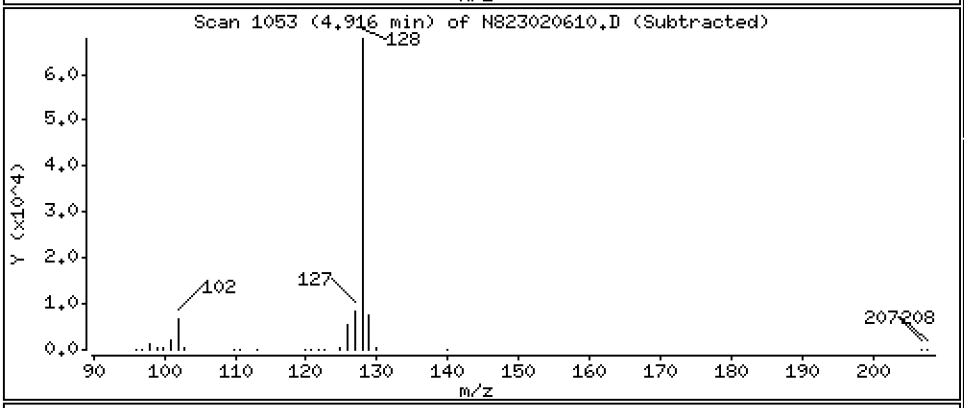
Column diameter: 0.25

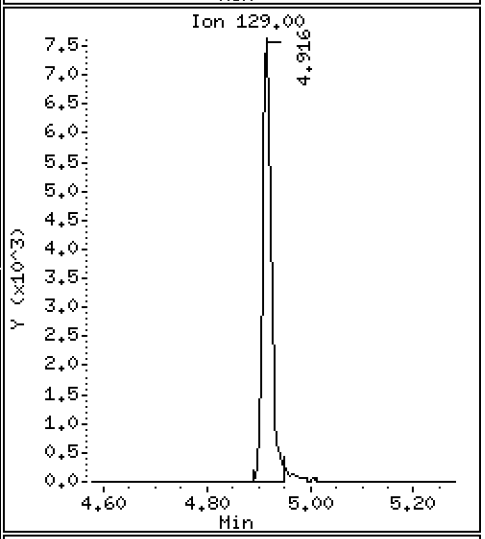
2 Naphthalene

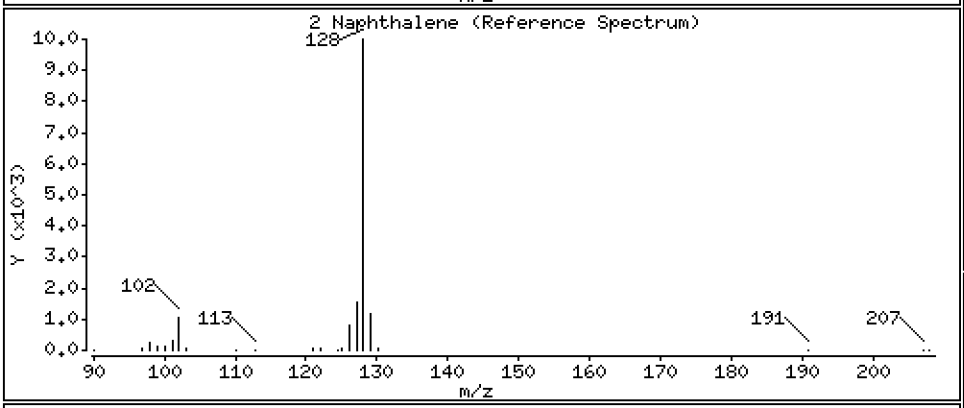
Concentration: 3.398 ug/mL

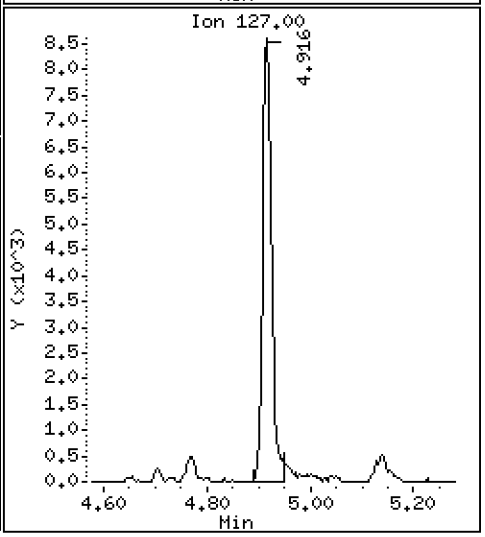


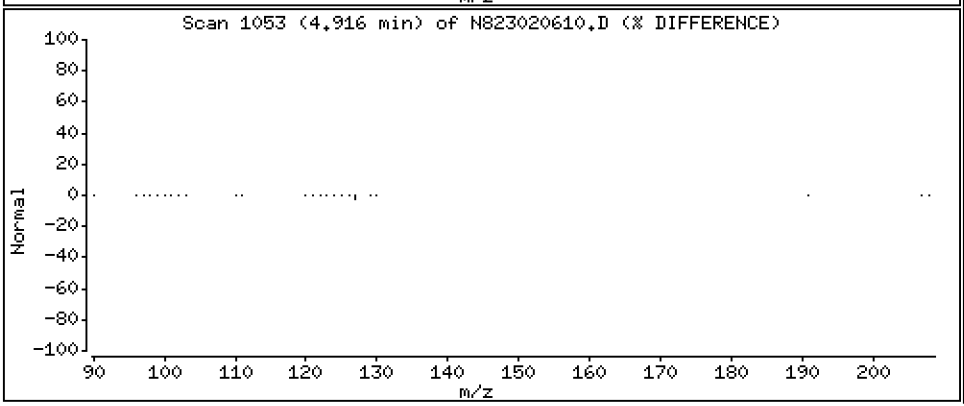












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Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

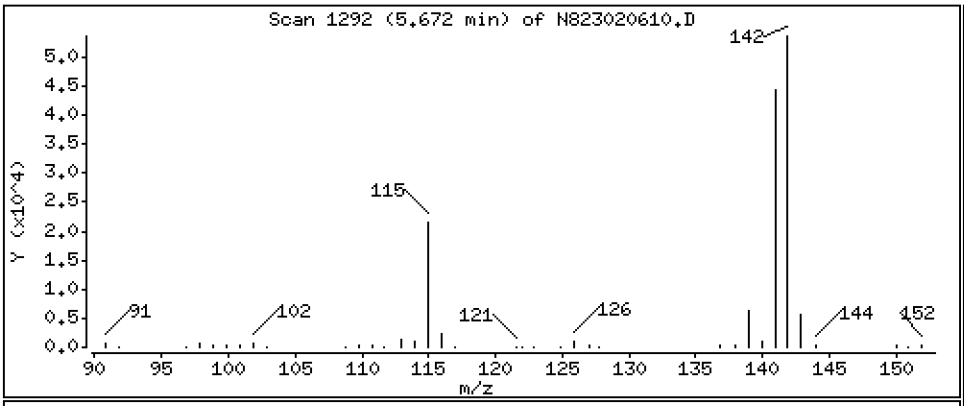
Operator: JZ

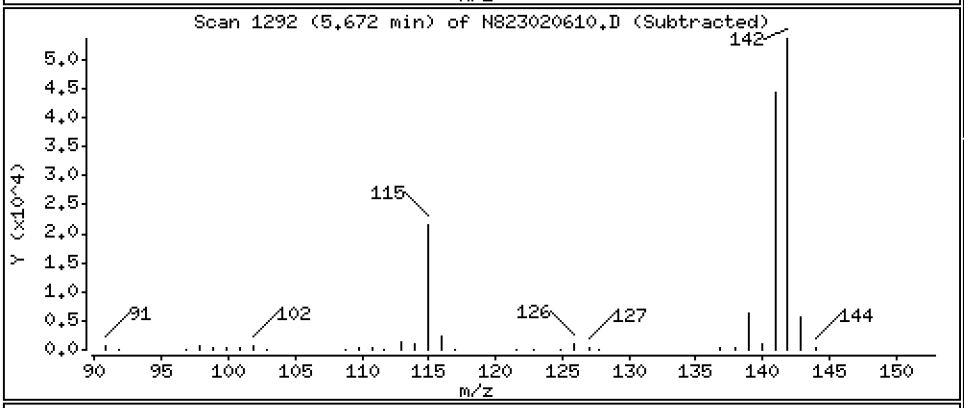
Column phase: Rxi-17sil

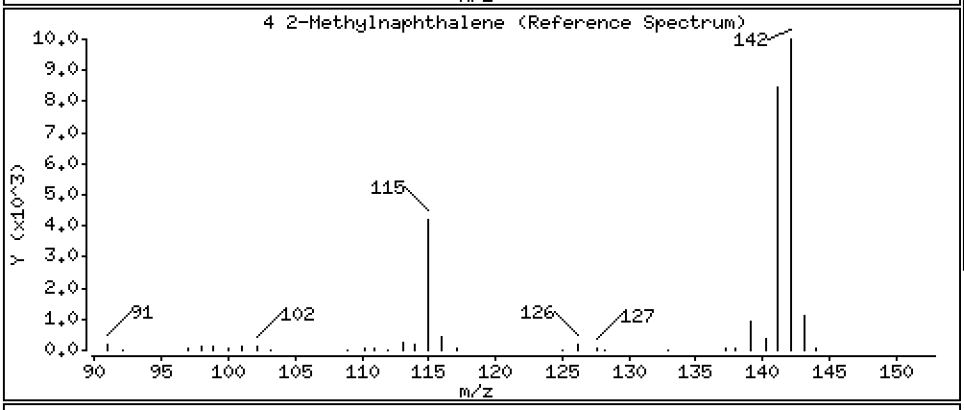
Column diameter: 0.25

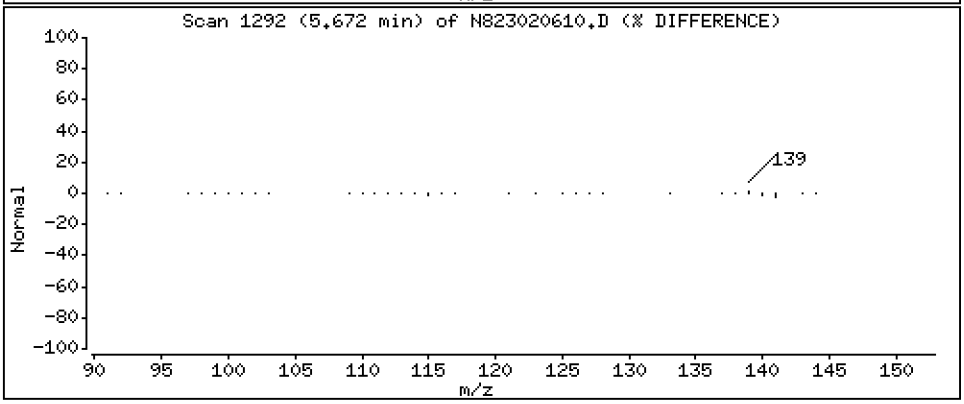
4 2-Methylnaphthalene

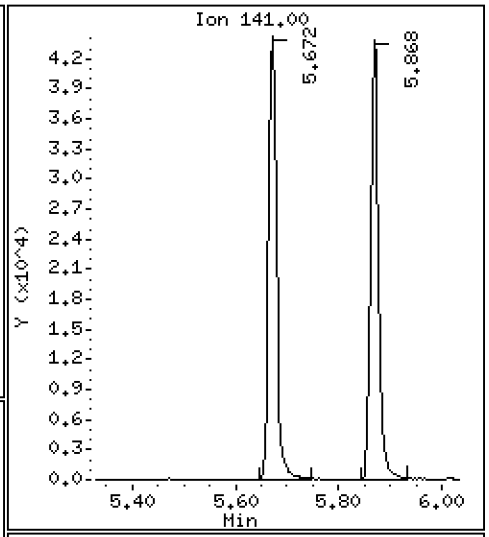
Concentration: 3.501 ug/mL

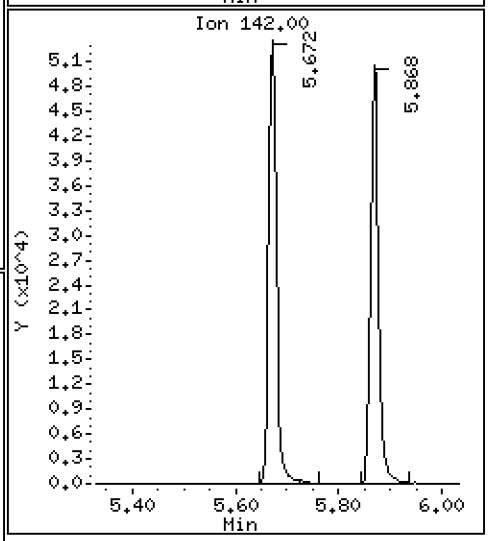












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Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

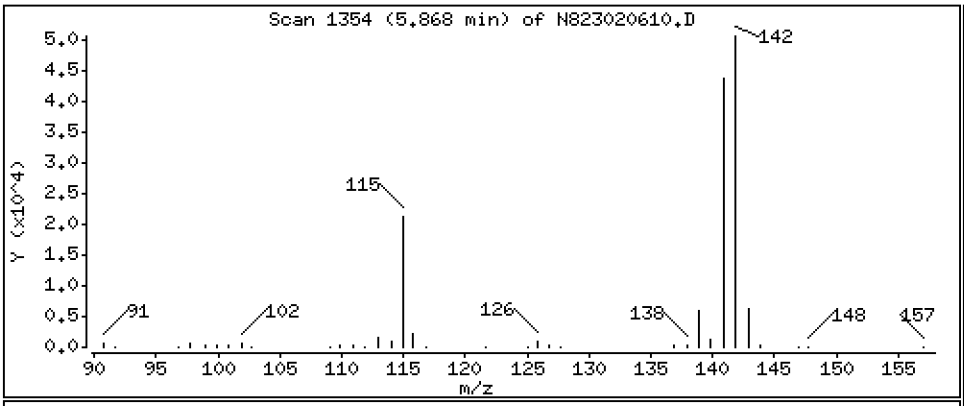
Operator: JZ

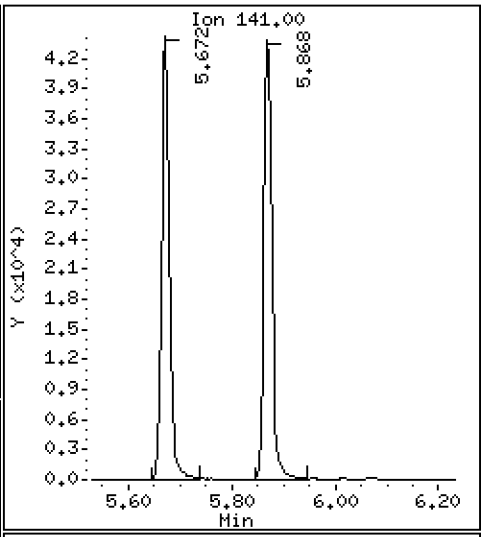
Column phase: Rxi-17sil

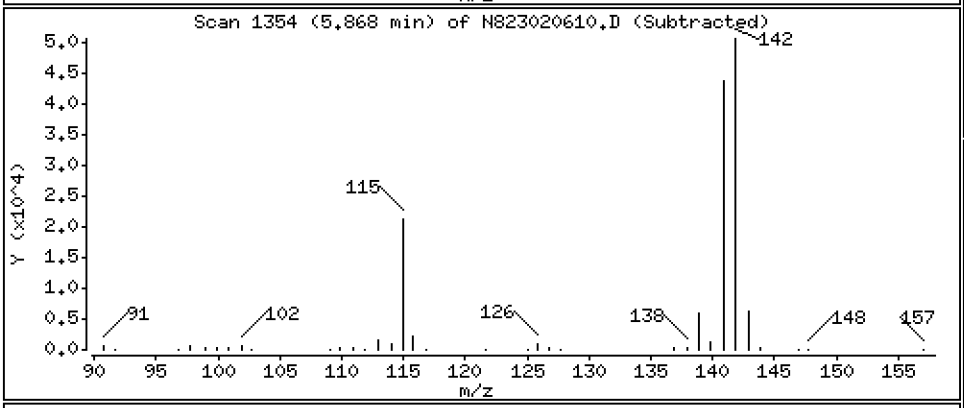
Column diameter: 0.25

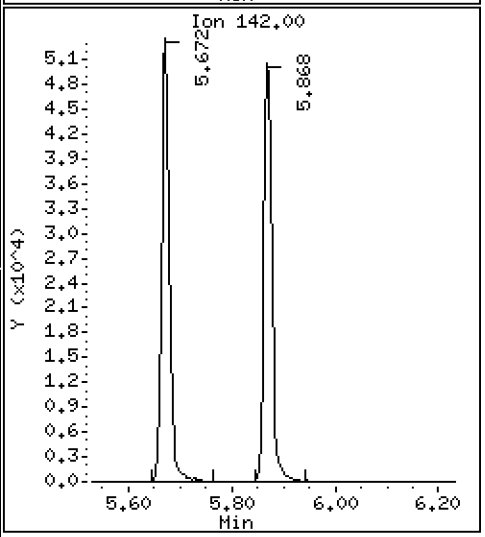
5 1-methylnaphthalene

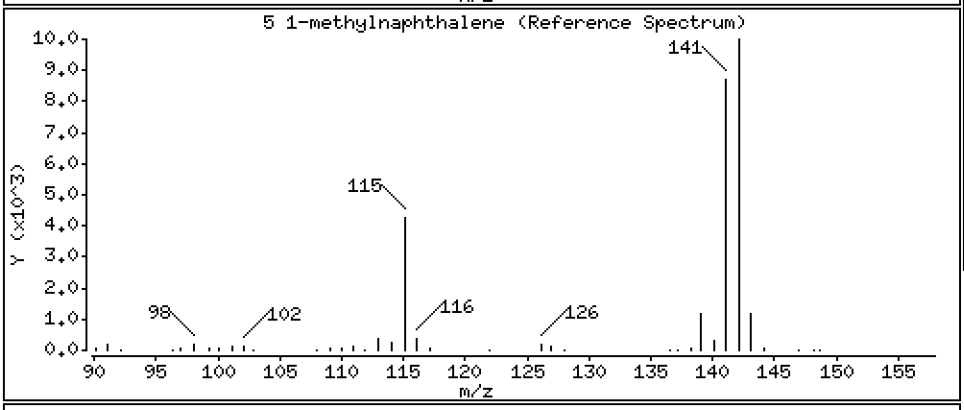
Concentration: 3.468 ug/mL

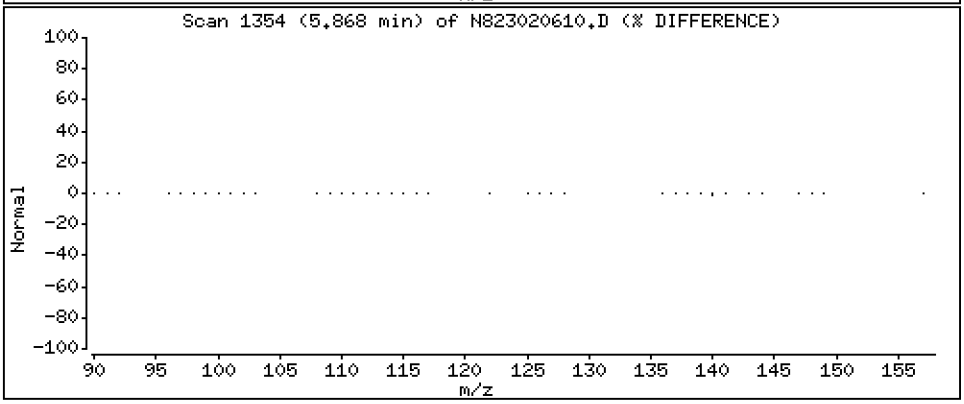












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Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

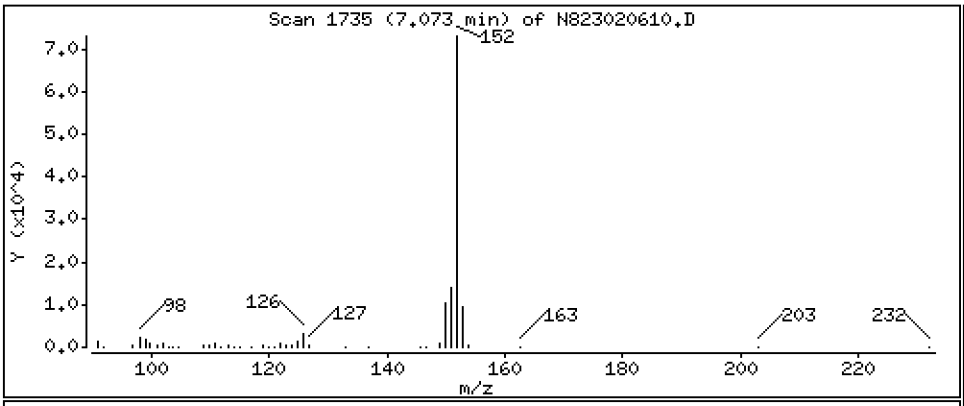
Operator: JZ

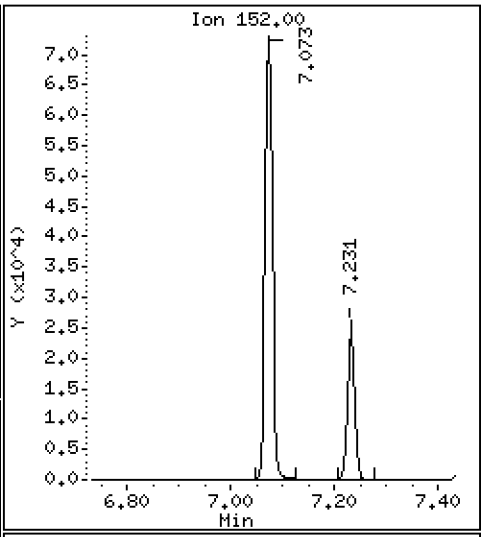
Column phase: Rxi-17sil

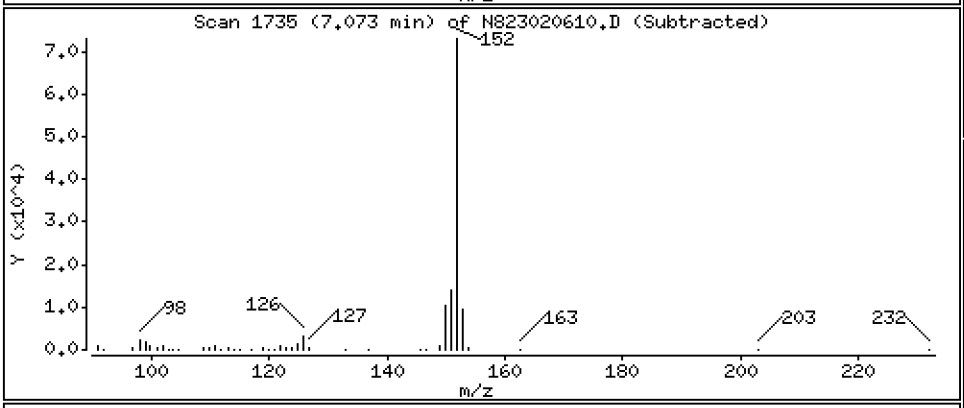
Column diameter: 0.25

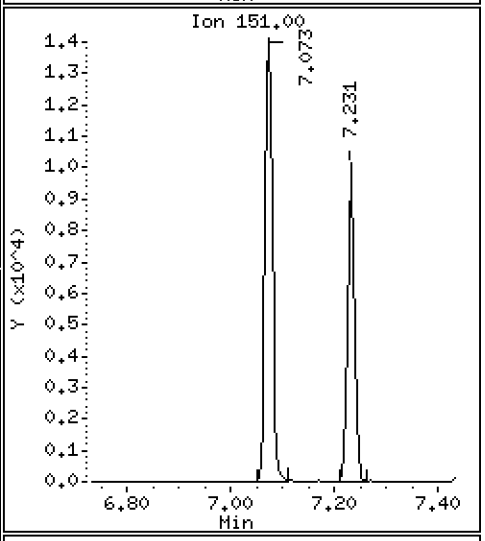
9 Acenaphthylene

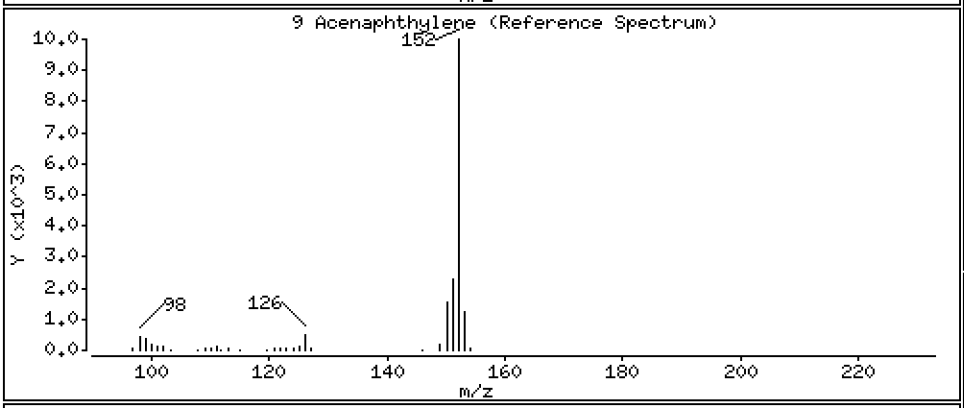
Concentration: 3.121 ug/mL

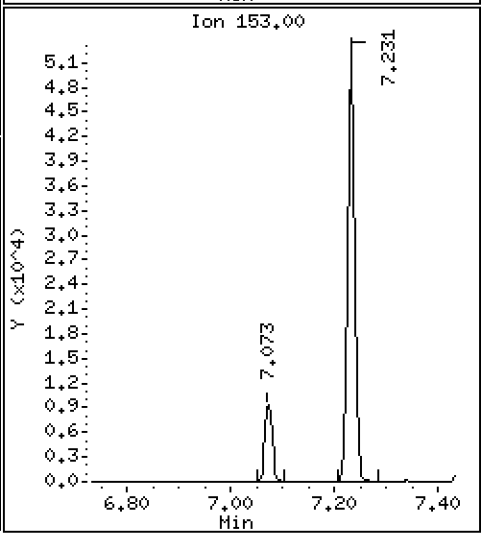


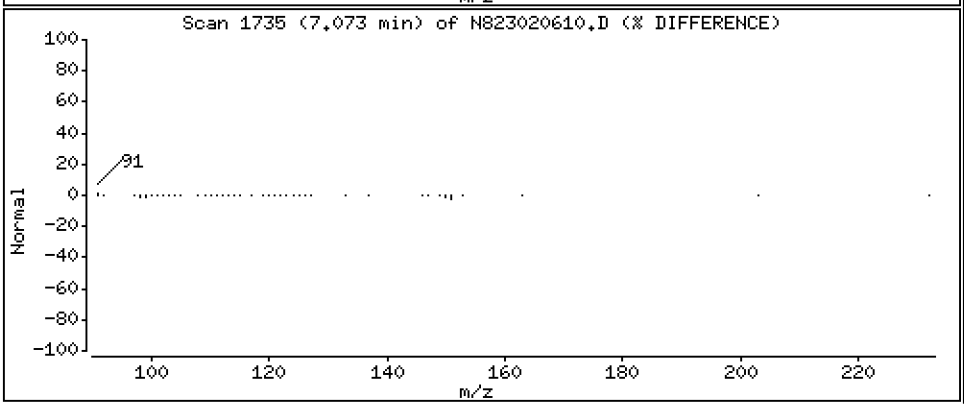












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Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

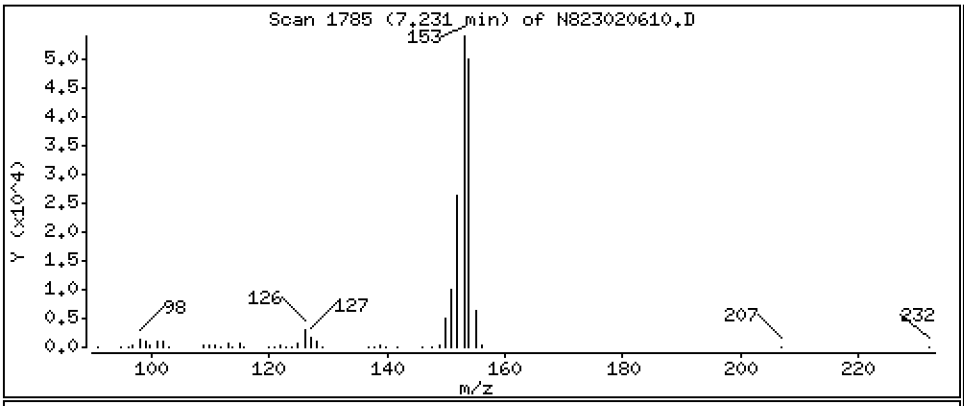
Operator: JZ

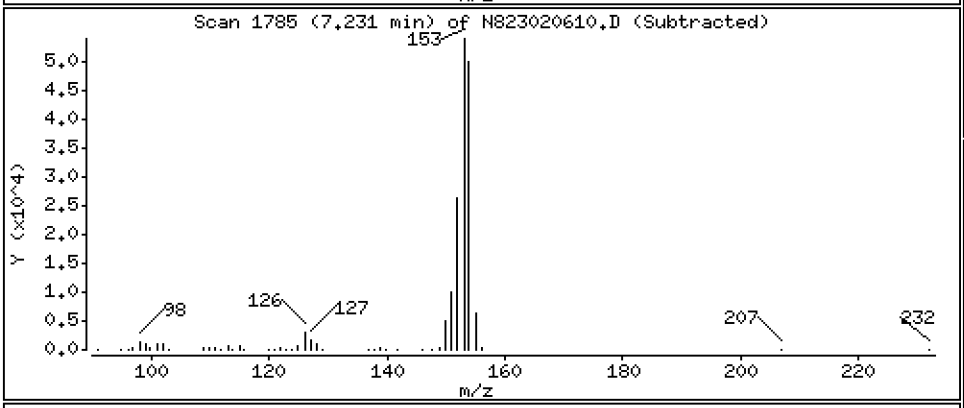
Column phase: Rxi-17sil

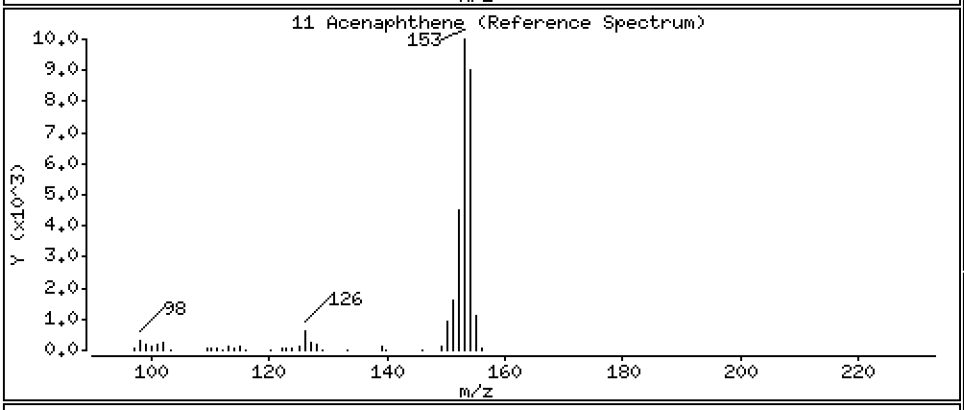
Column diameter: 0.25

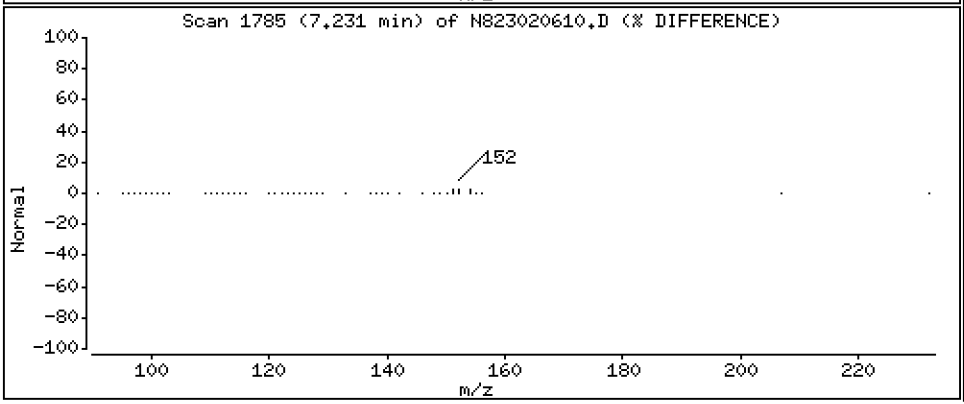
11 Acenaphthene

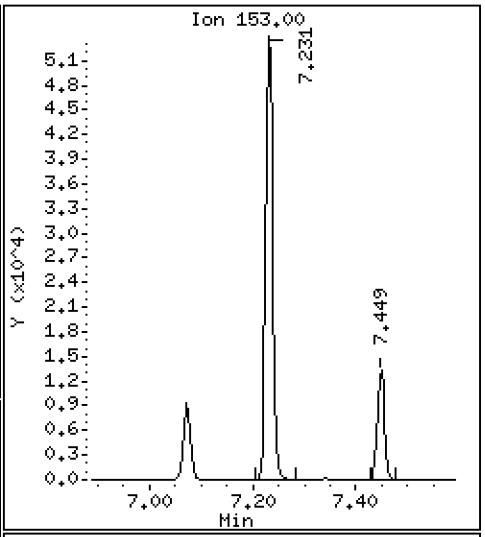
Concentration: 3.432 ug/mL

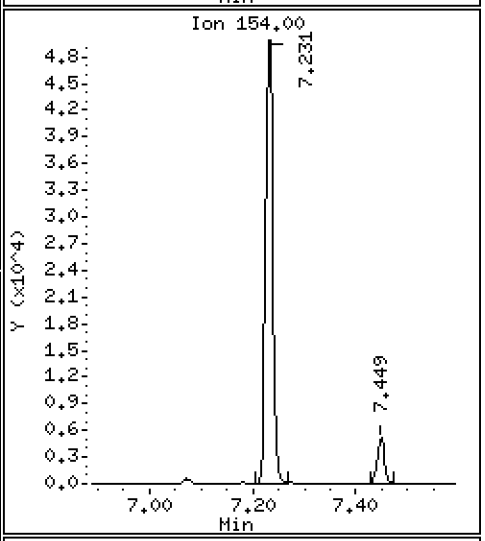


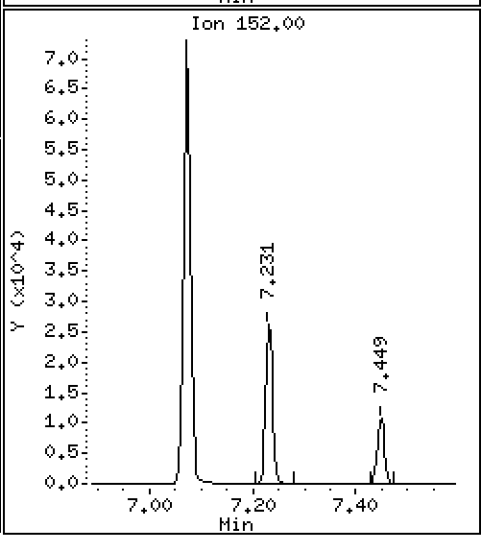












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Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

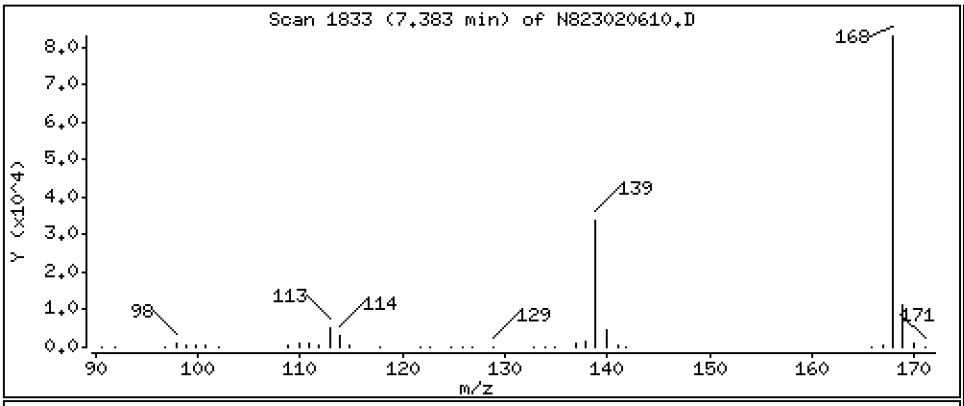
Operator: JZ

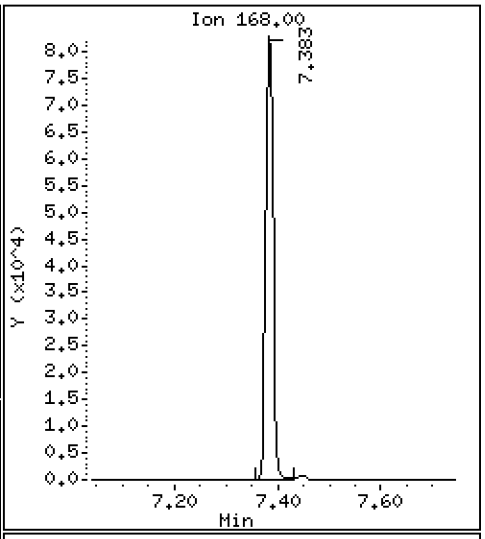
Column phase: Rxi-17sil

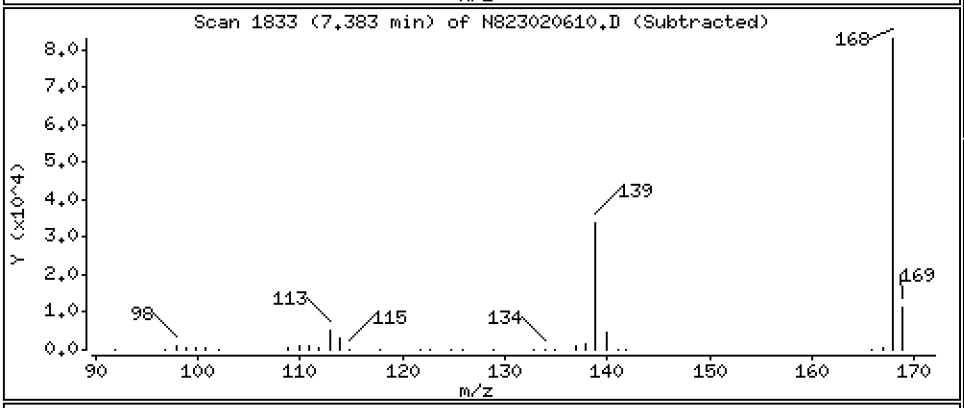
Column diameter: 0.25

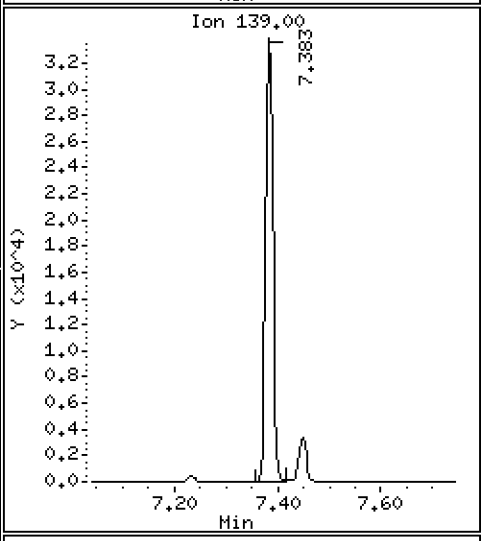
12 Dibenzofuran

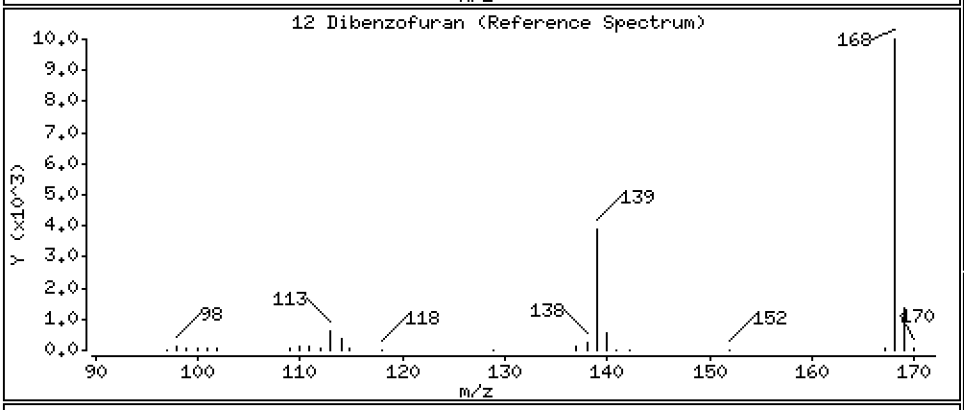
Concentration: 3.432 ug/mL

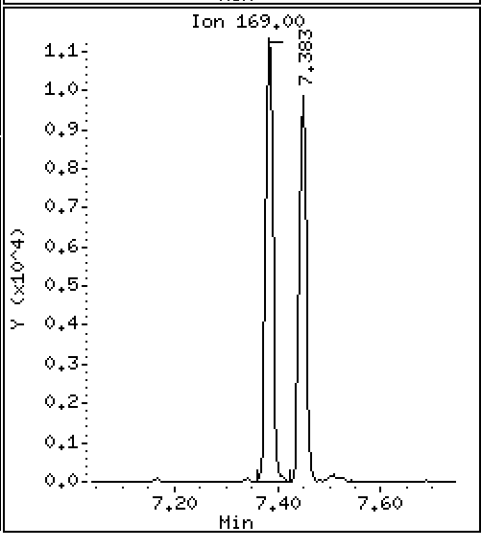


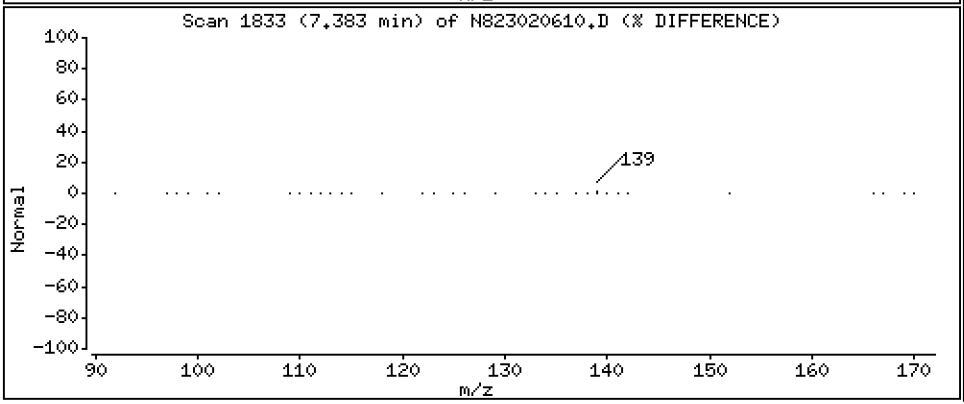












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Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

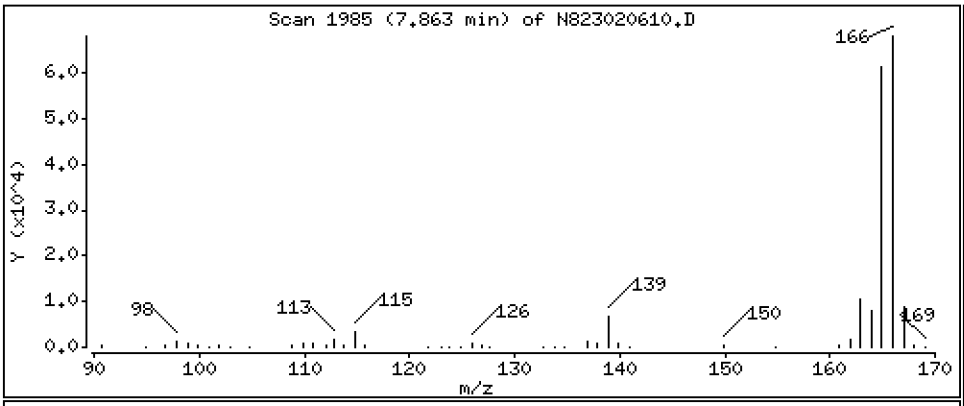
Operator: JZ

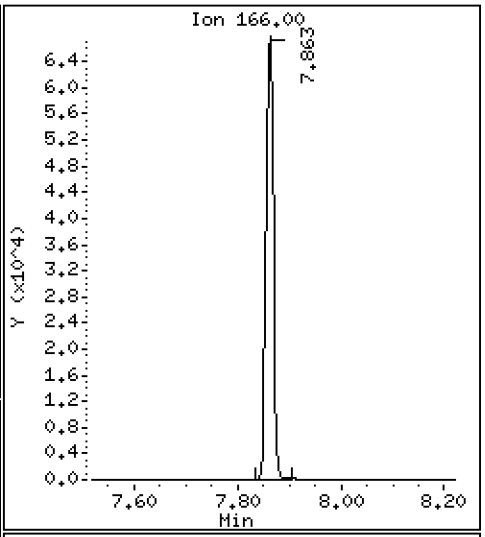
Column phase: Rxi-17sil

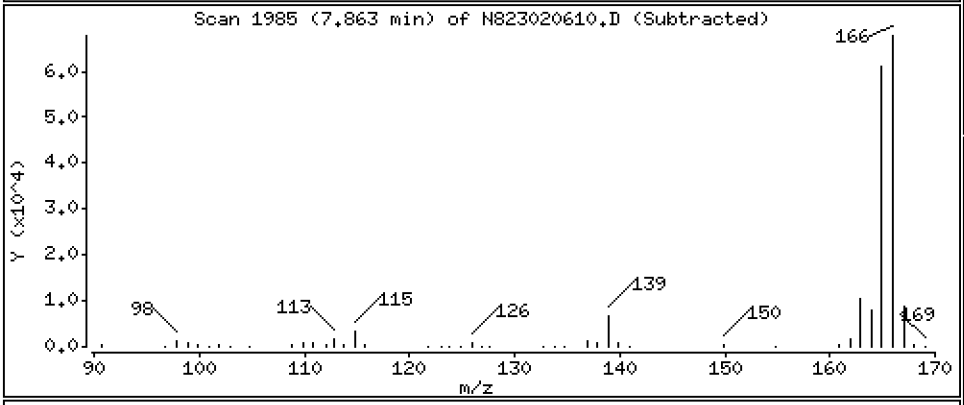
Column diameter: 0.25

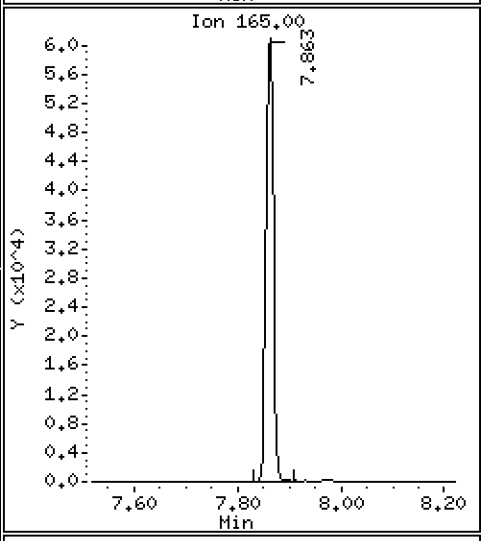
14 Fluorene

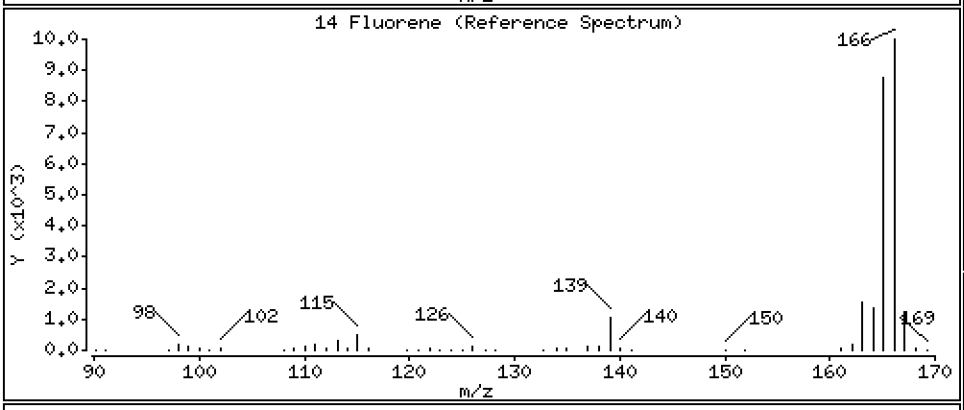
Concentration: 3.602 ug/mL

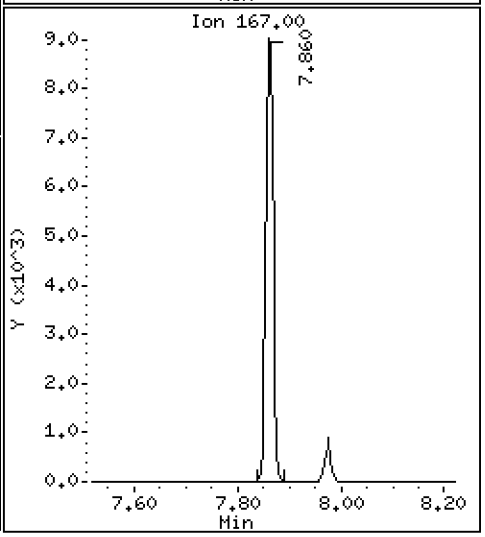


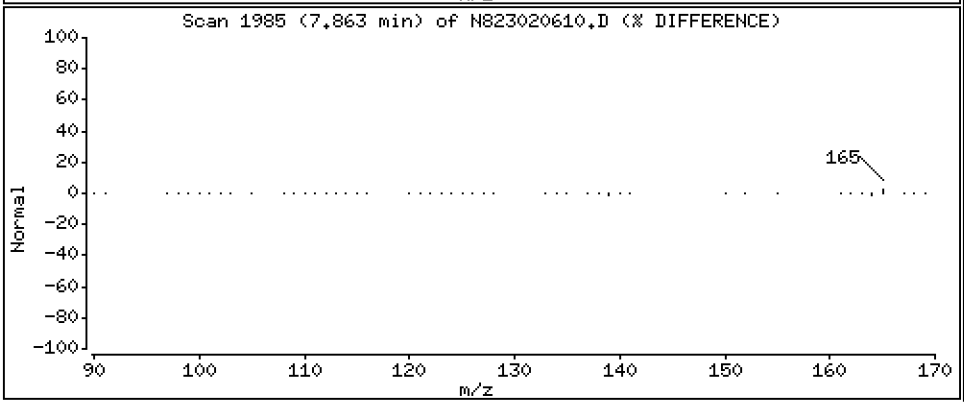












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

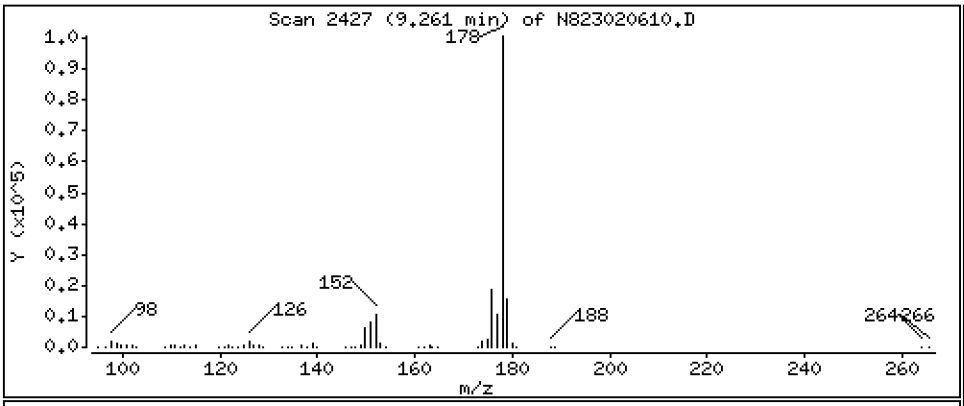
Operator: JZ

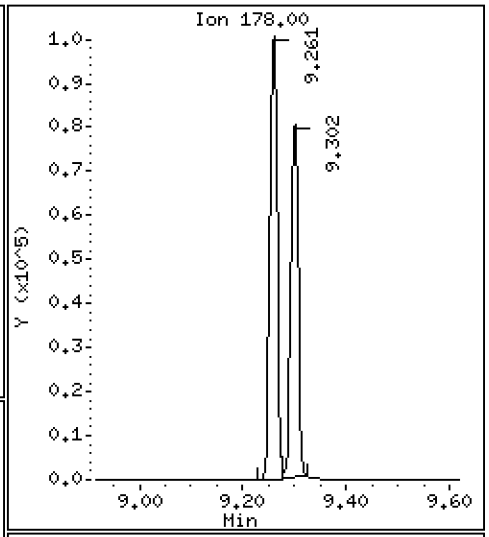
Column phase: Rxi-17sil

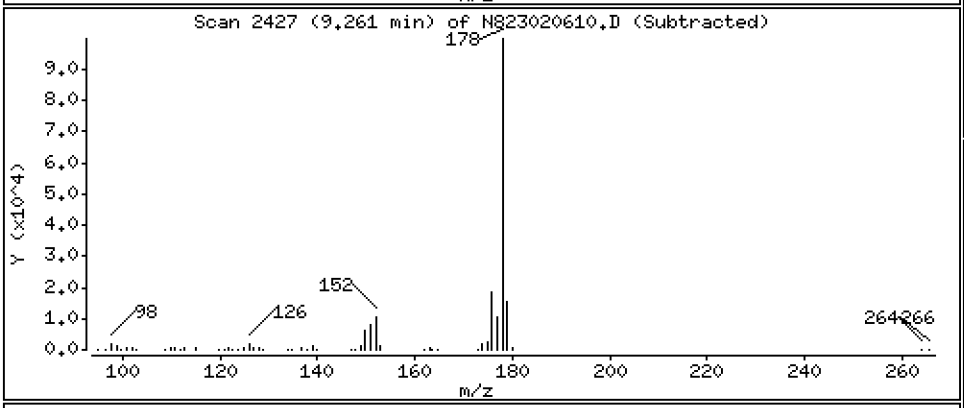
Column diameter: 0.25

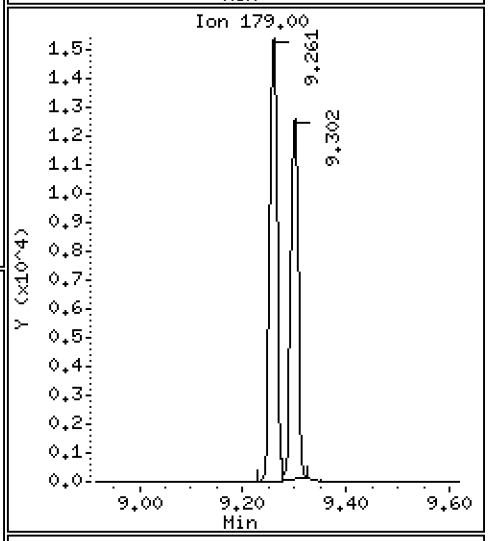
16 Phenanthrene

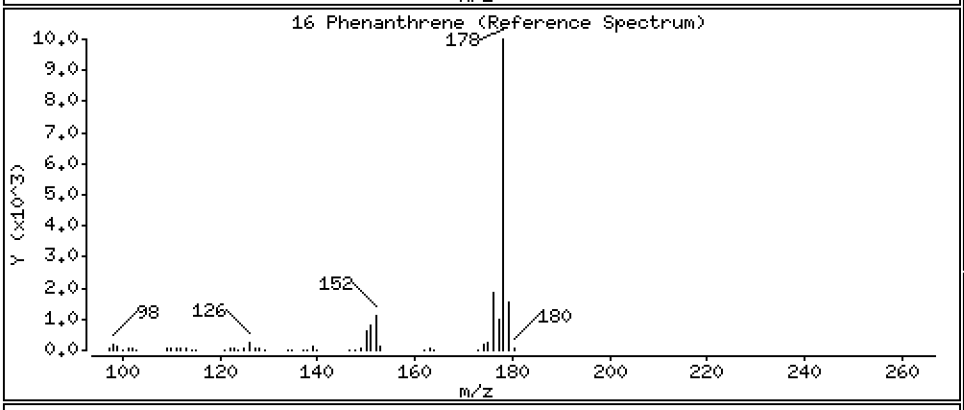
Concentration: 3.573 ug/mL

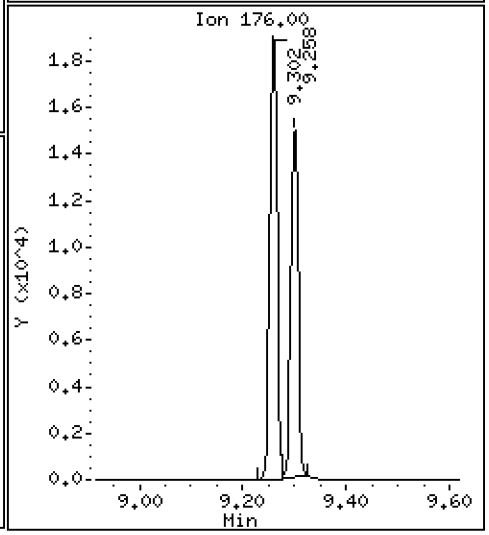


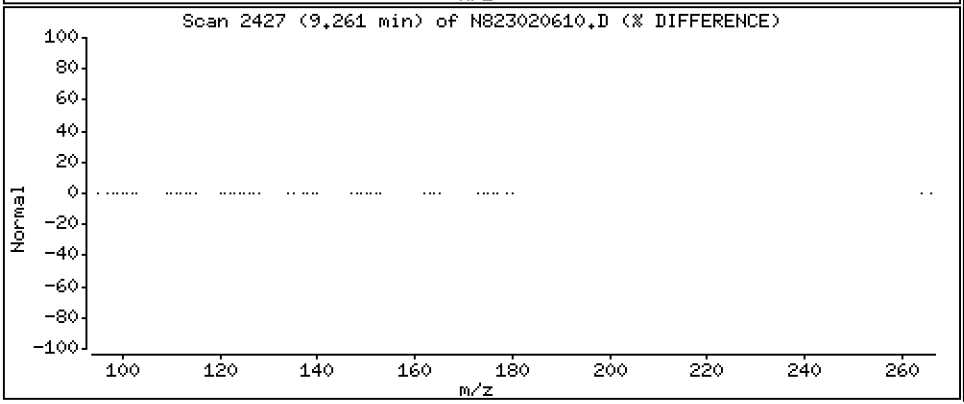












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

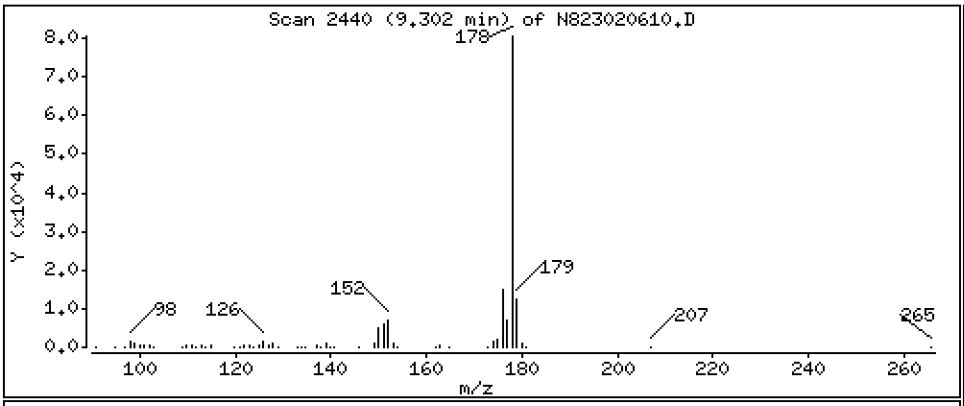
Operator: JZ

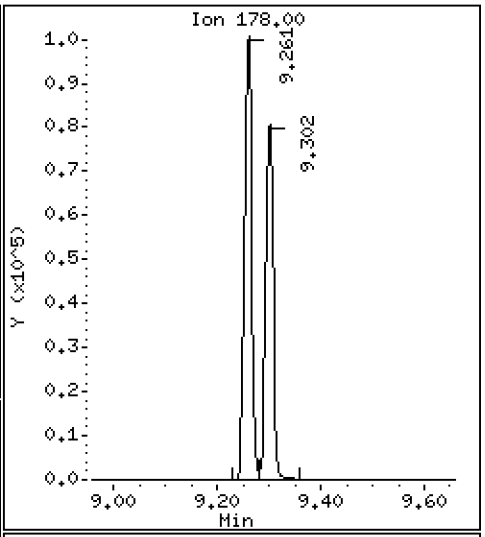
Column phase: Rxi-17sil

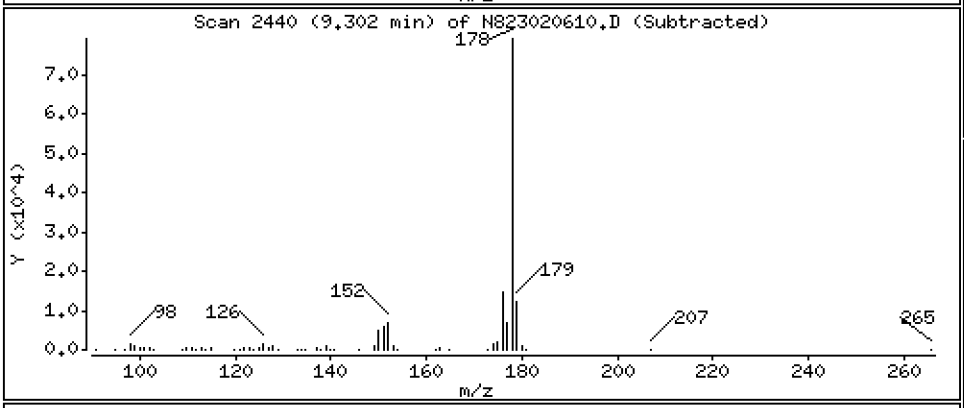
Column diameter: 0.25

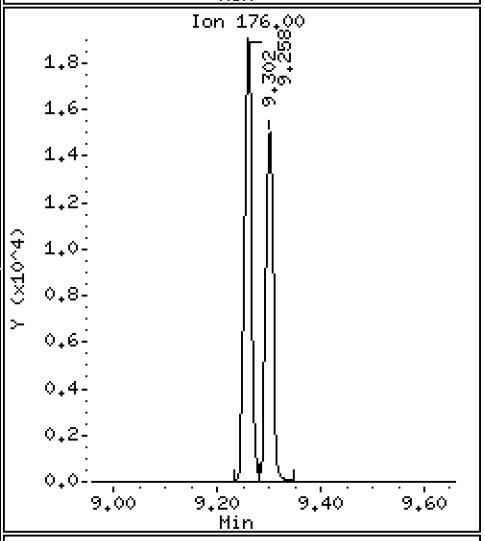
17 Anthracene

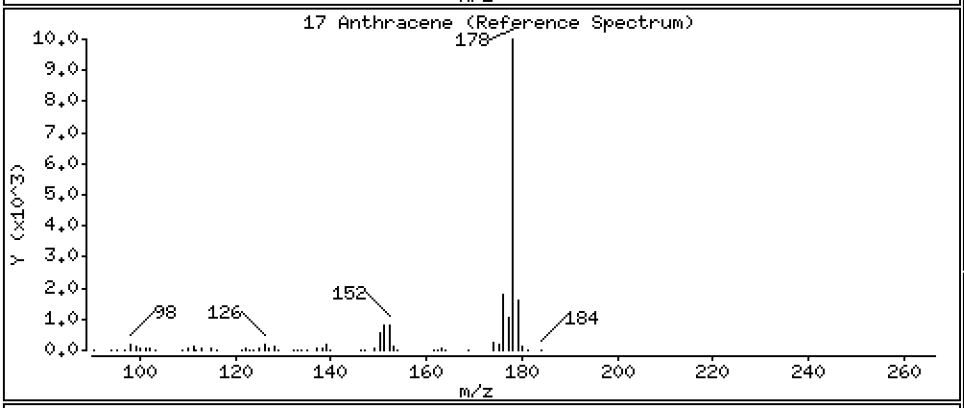
Concentration: 3.237 ug/mL

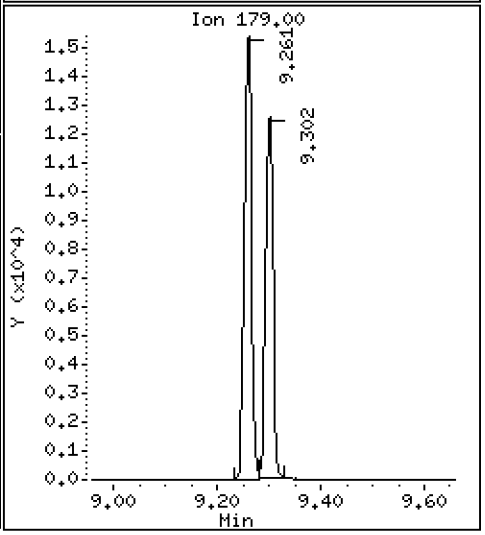


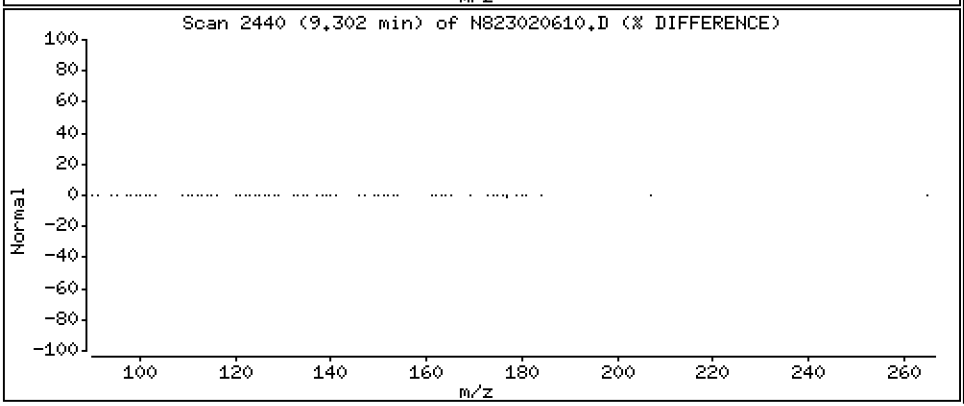












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

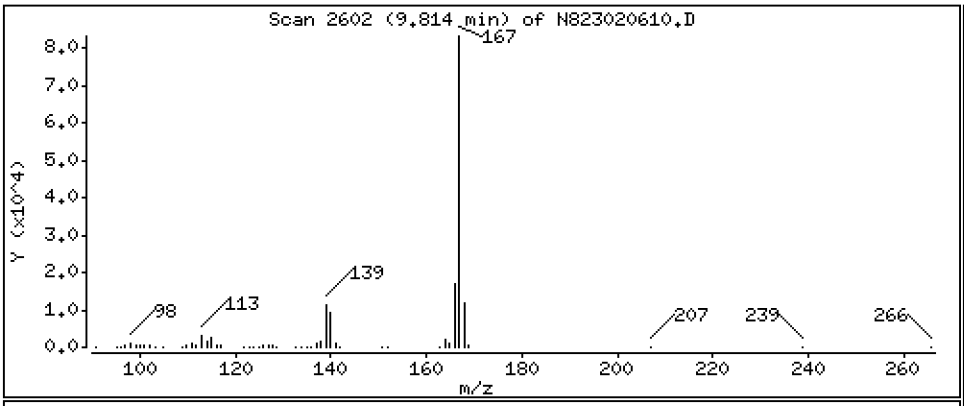
Operator: JZ

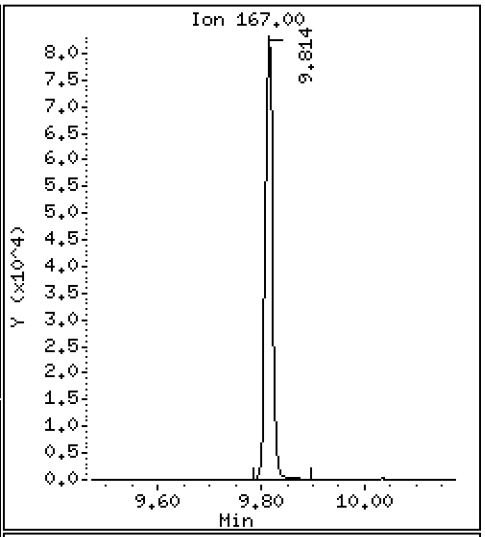
Column phase: Rxi-17sil

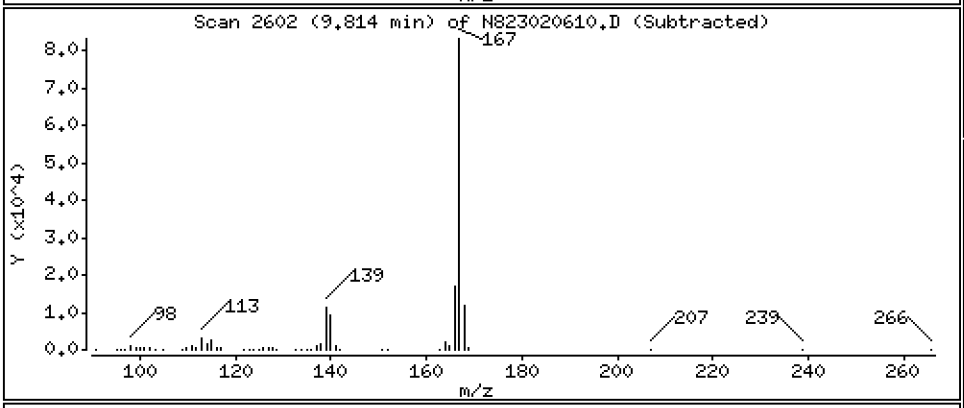
Column diameter: 0.25

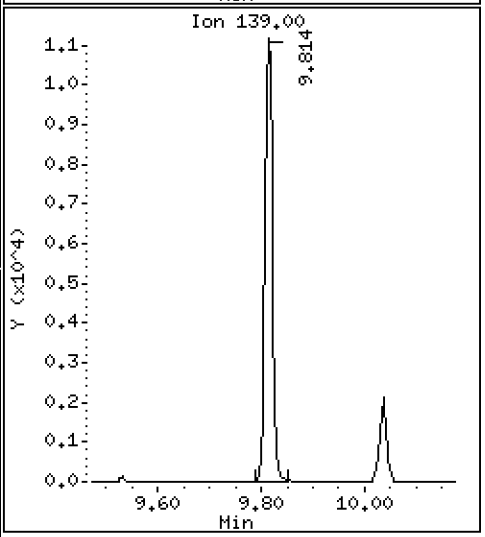
19 Carbazole

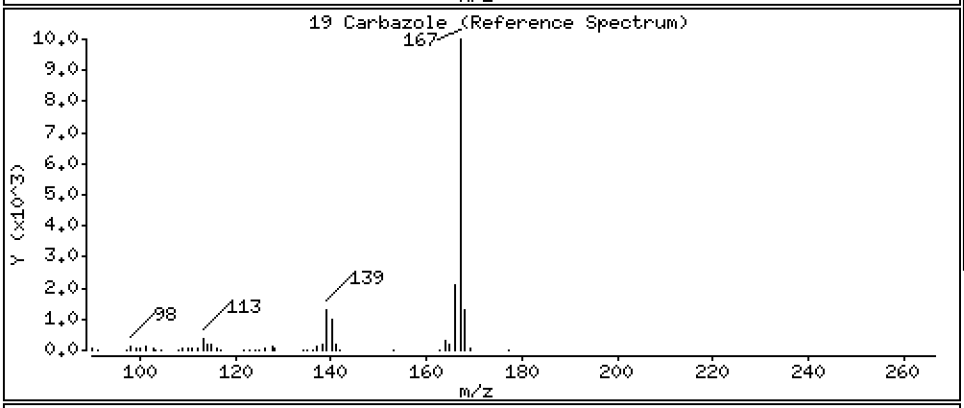
Concentration: 3.739 ug/mL

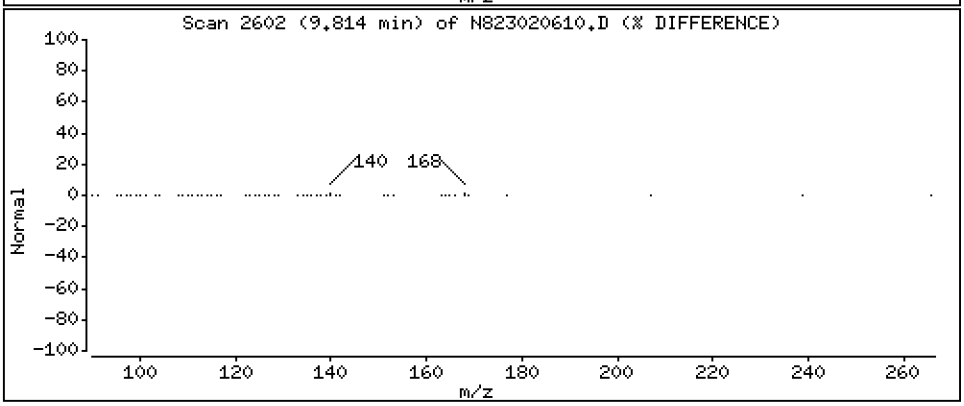












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

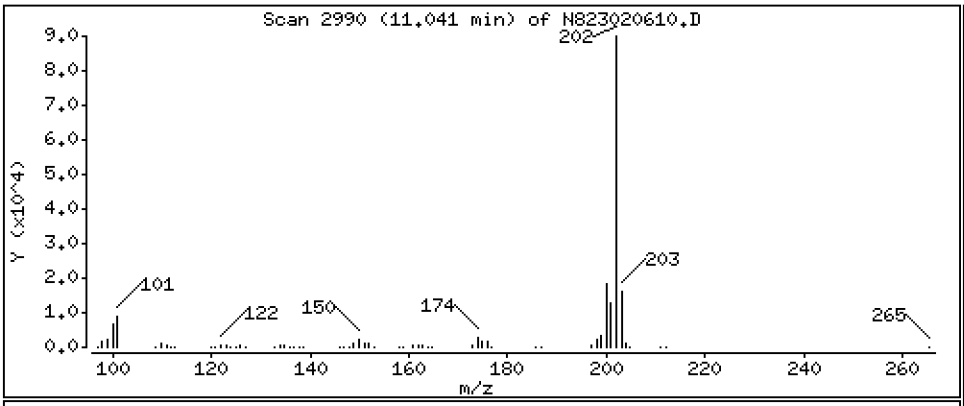
Operator: JZ

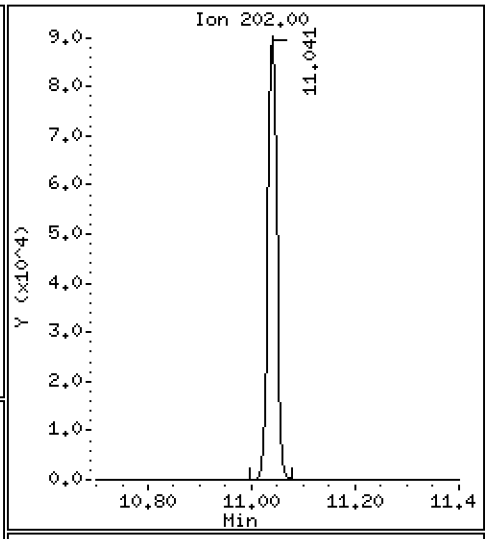
Column phase: Rxi-17sil

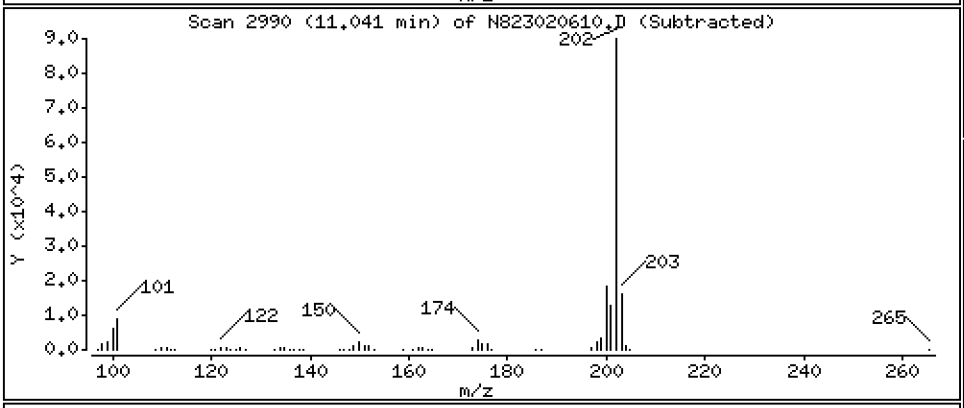
Column diameter: 0.25

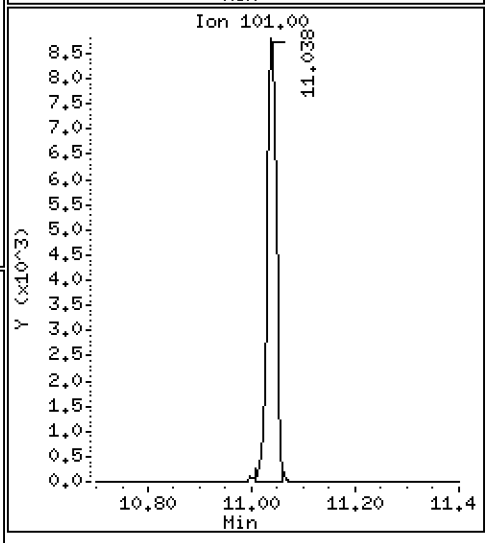
22 Fluoranthene

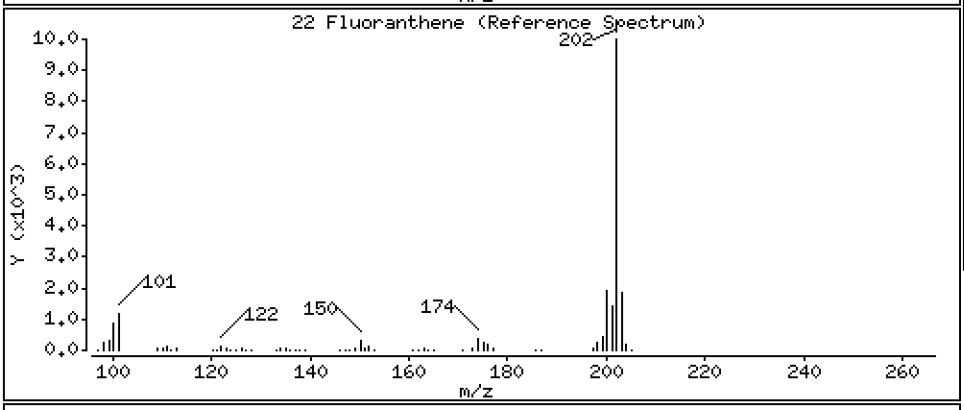
Concentration: 3.715 ug/mL

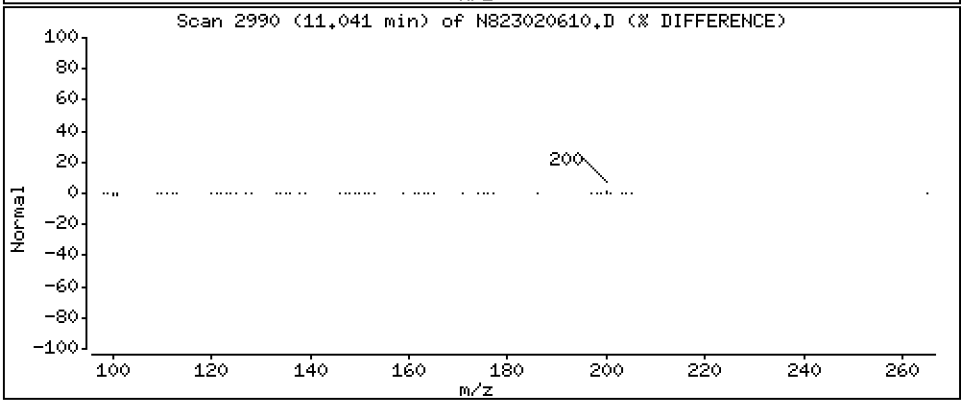












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

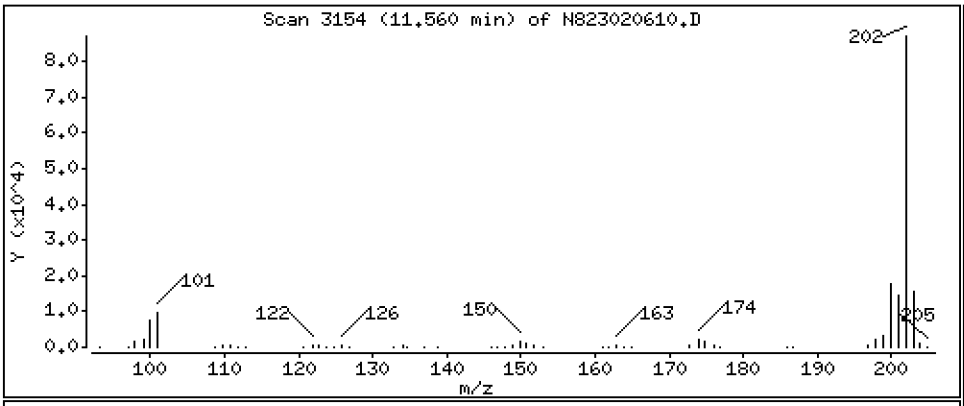
Operator: JZ

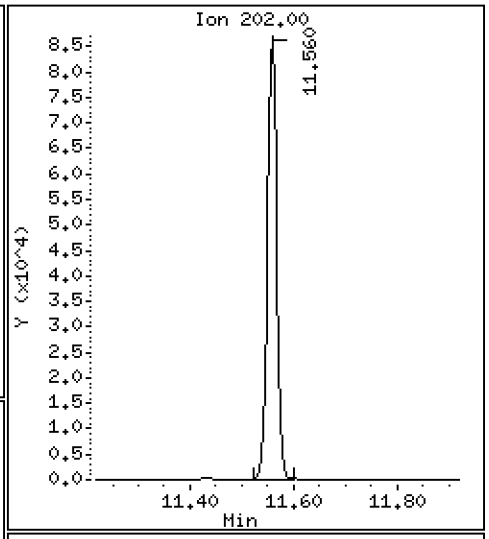
Column phase: Rxi-17sil

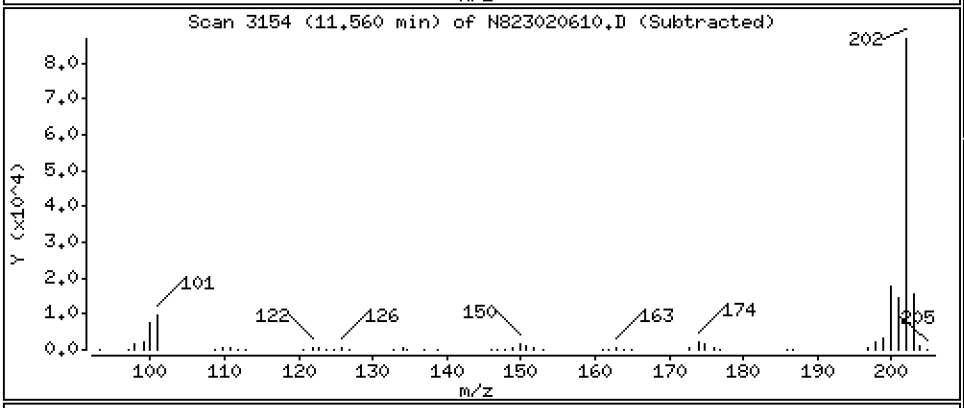
Column diameter: 0.25

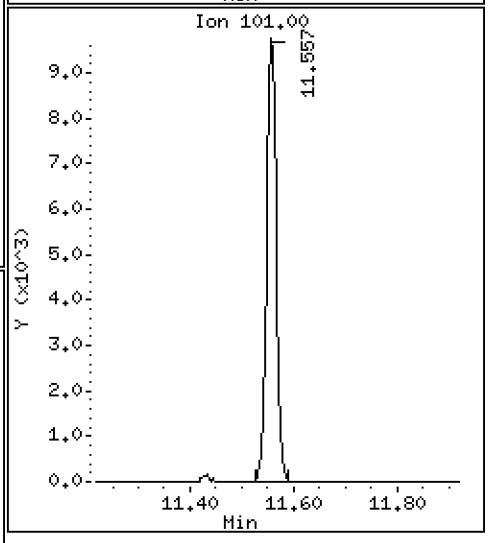
23 Pyrene

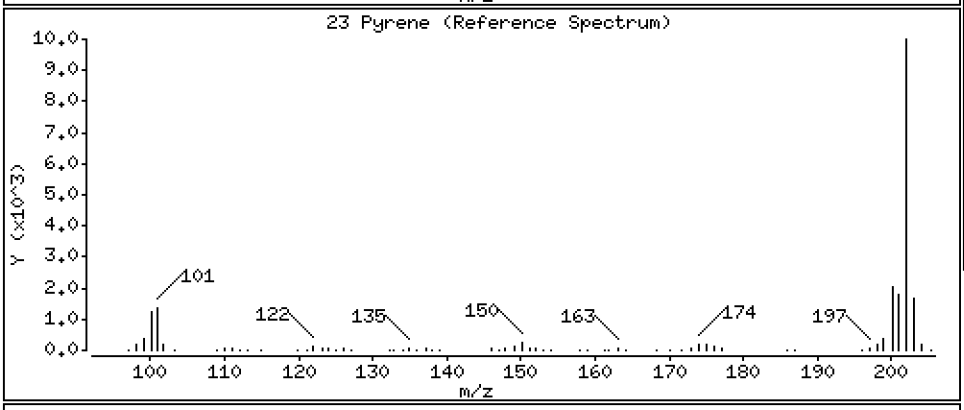
Concentration: 4.283 ug/mL

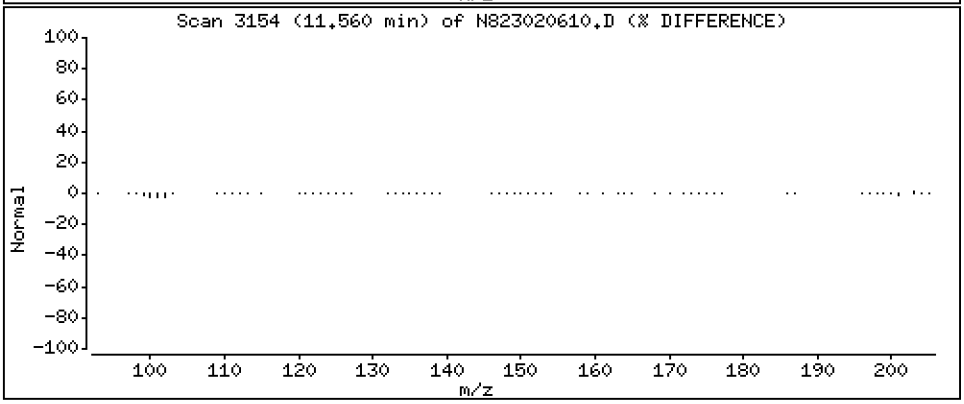












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

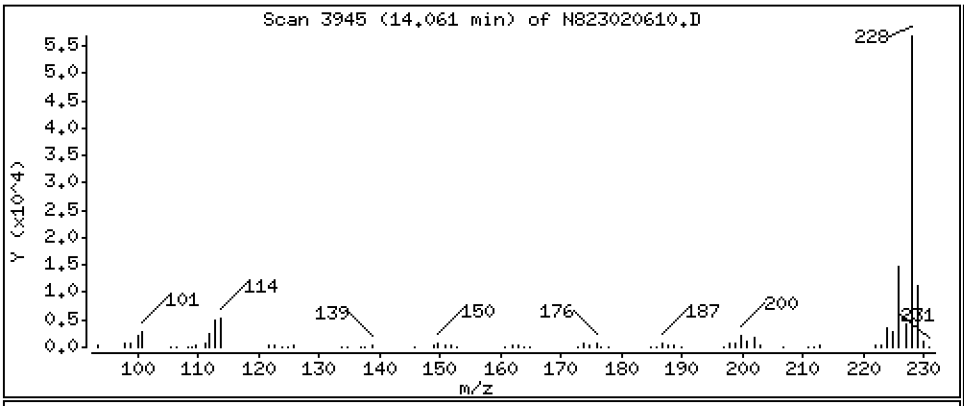
Operator: JZ

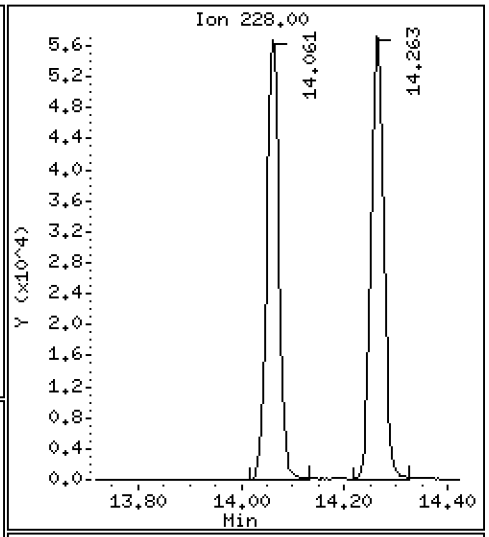
Column phase: Rxi-17sil

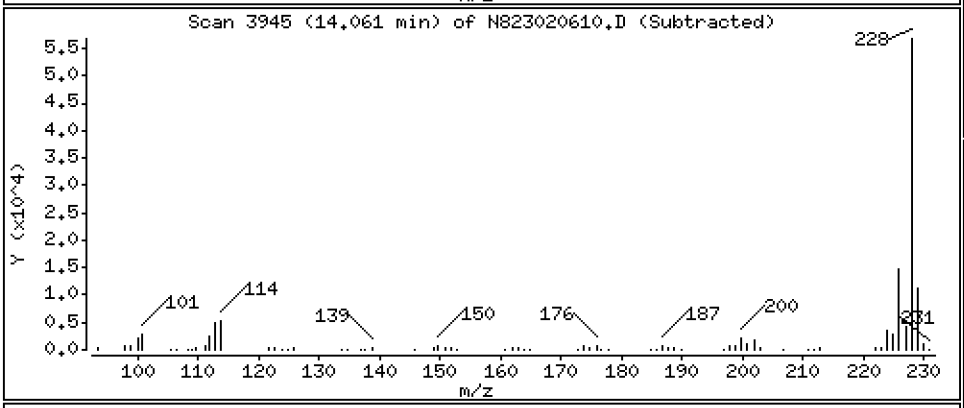
Column diameter: 0.25

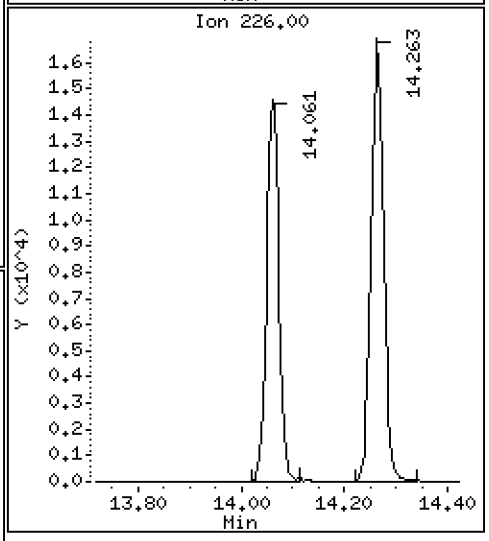
24 Benzo(a)anthracene

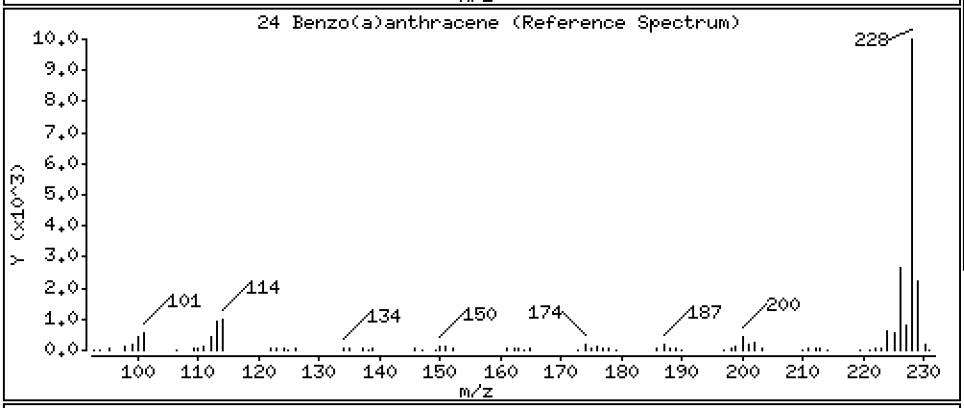
Concentration: 4.009 ug/mL

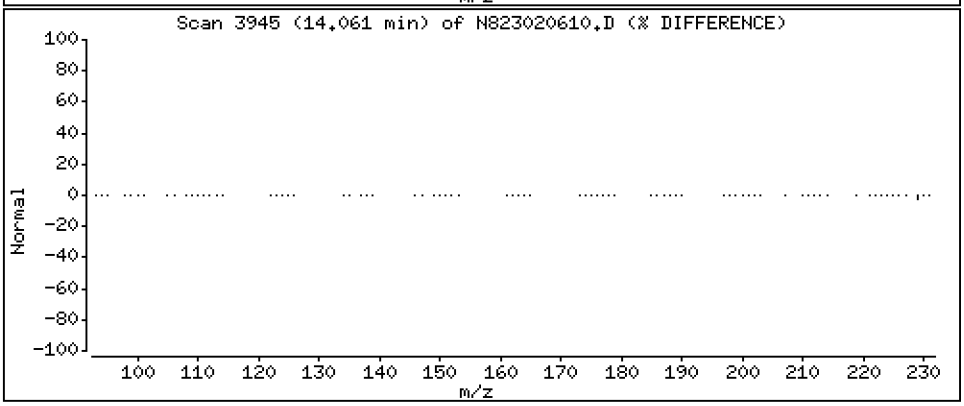












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

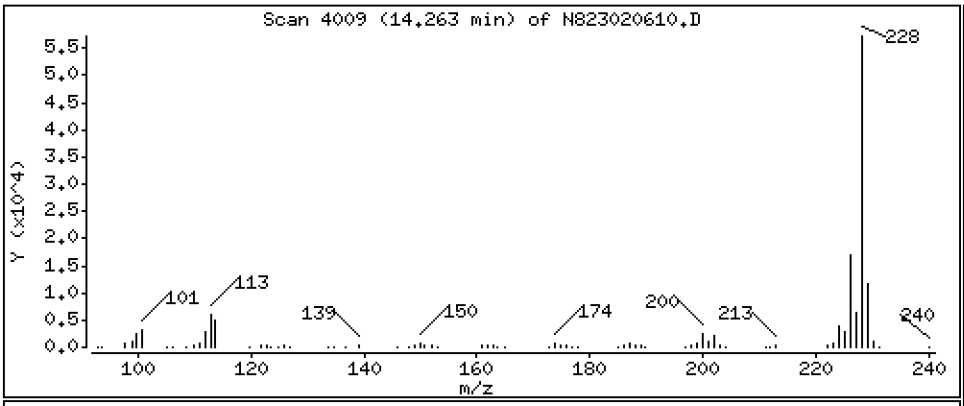
Operator: JZ

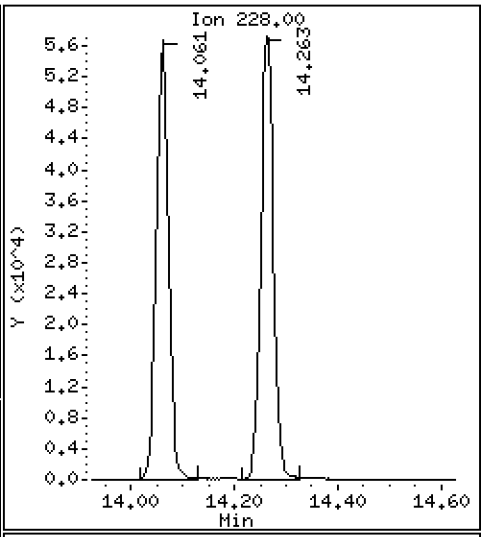
Column phase: Rxi-17sil

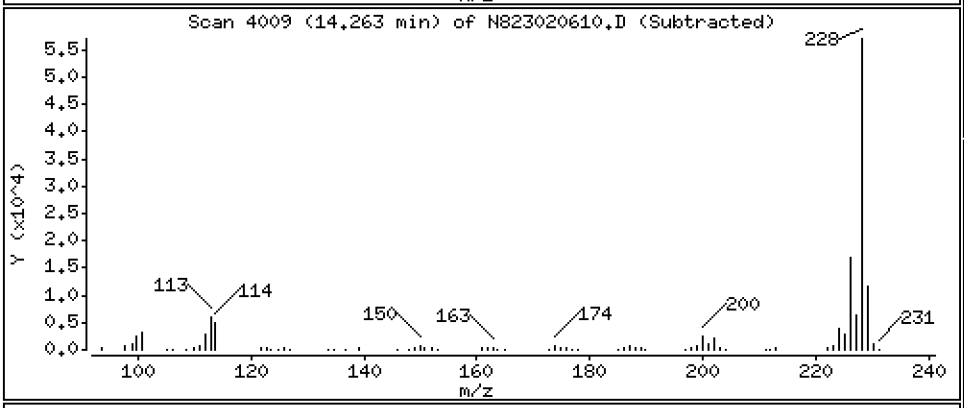
Column diameter: 0.25

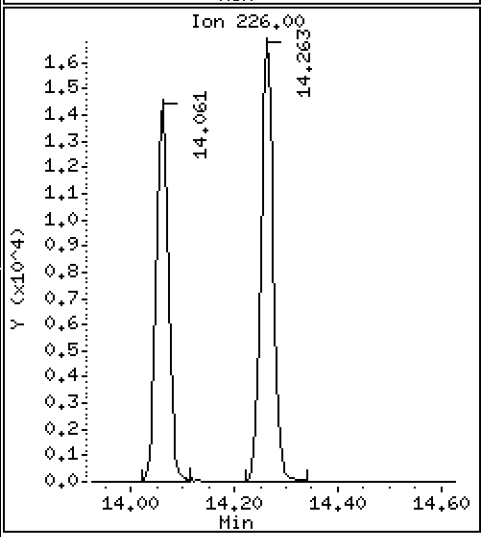
27 Chrysene

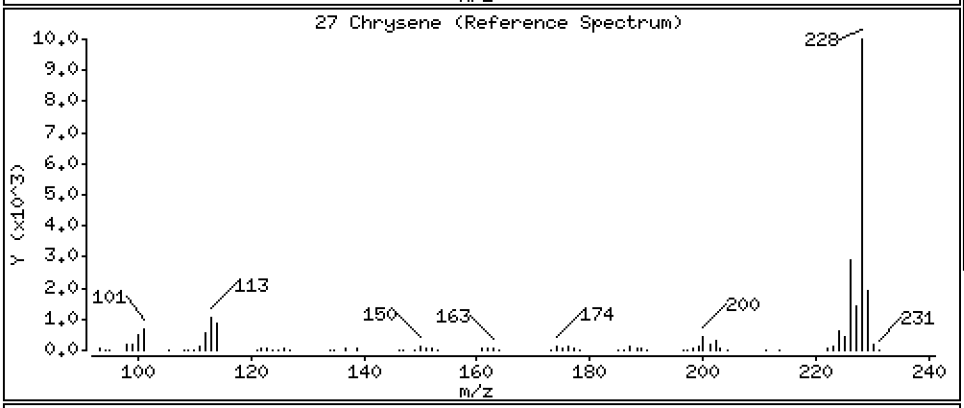
Concentration: 3.980 ug/mL

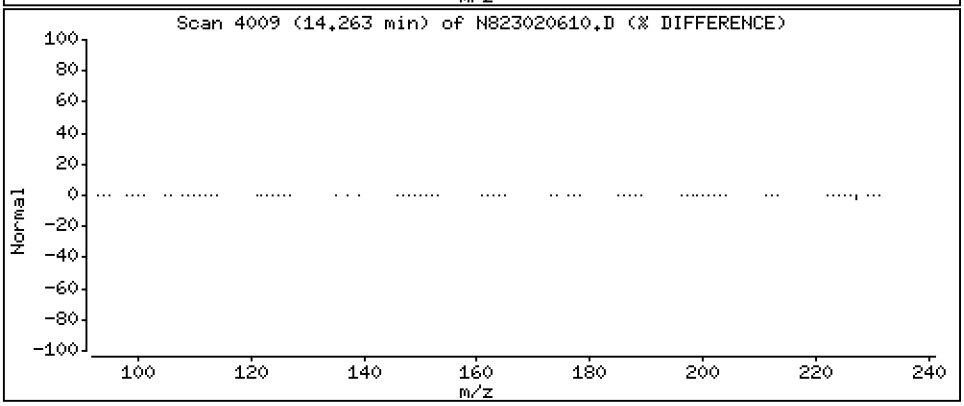












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

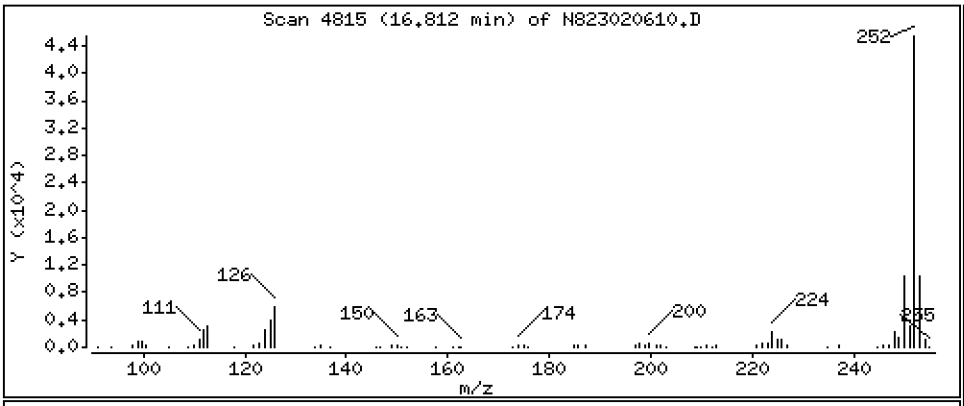
Operator: JZ

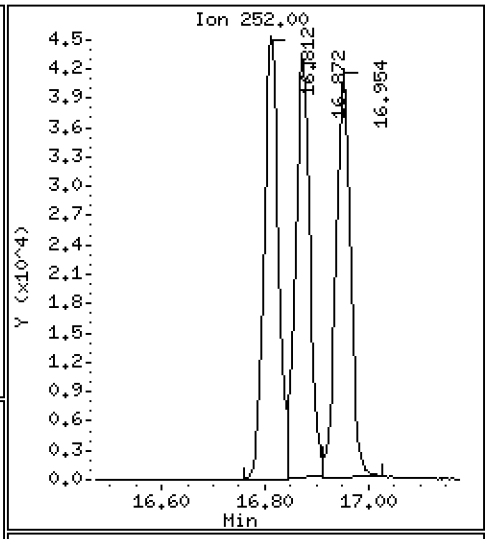
Column phase: Rxi-17sil

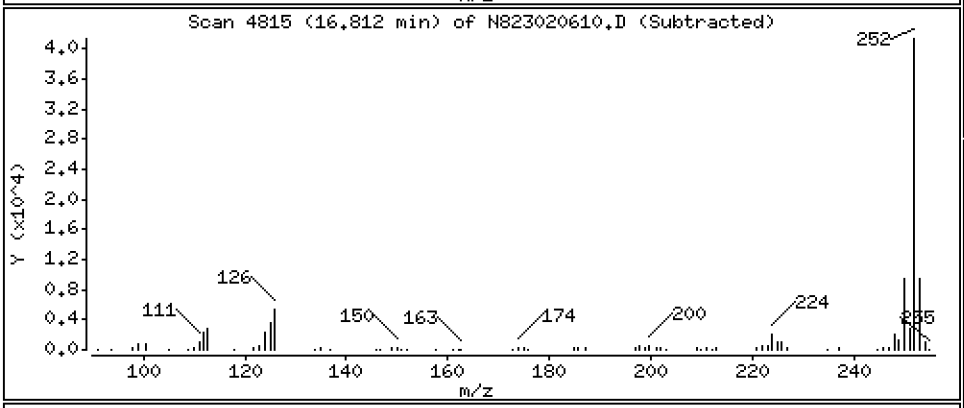
Column diameter: 0.25

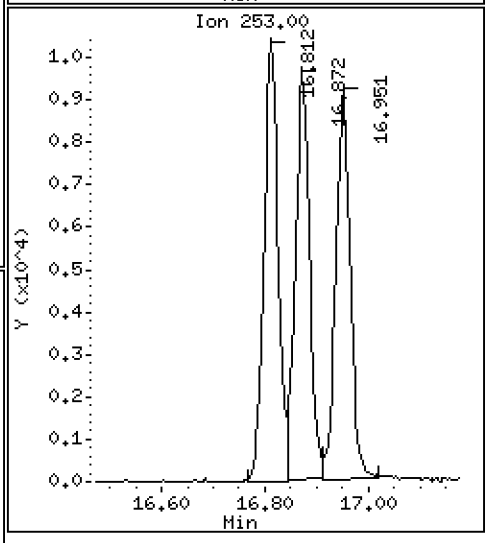
28 Benzo(b)fluoranthene

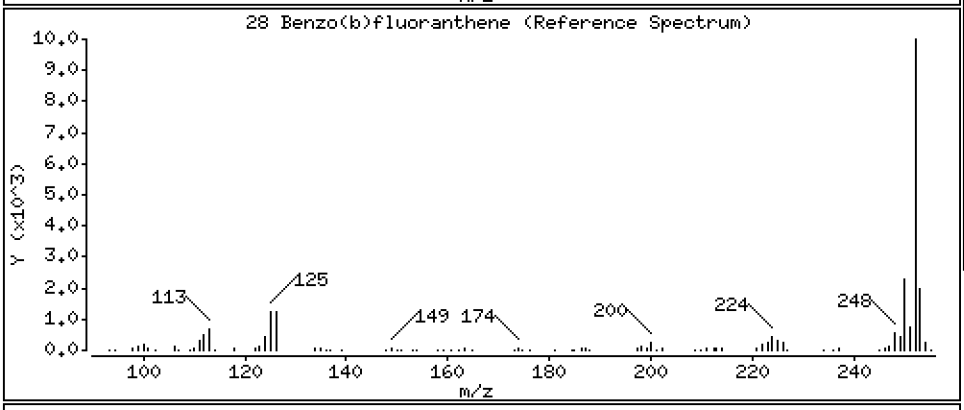
Concentration: 5.565 ug/mL

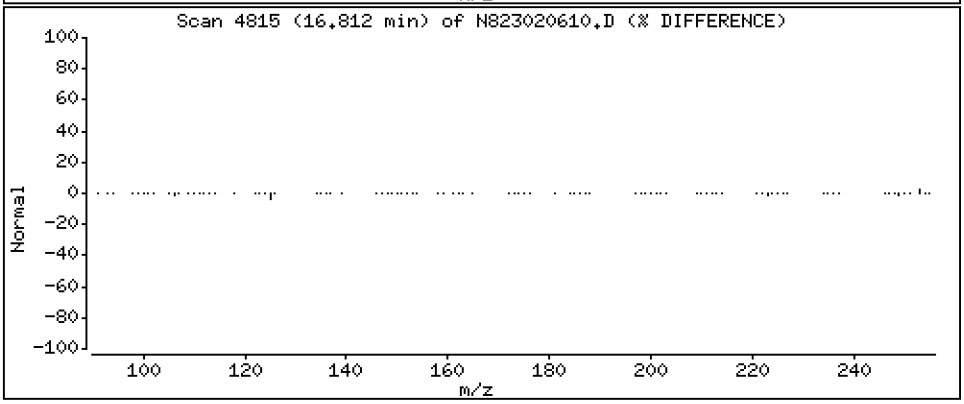












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

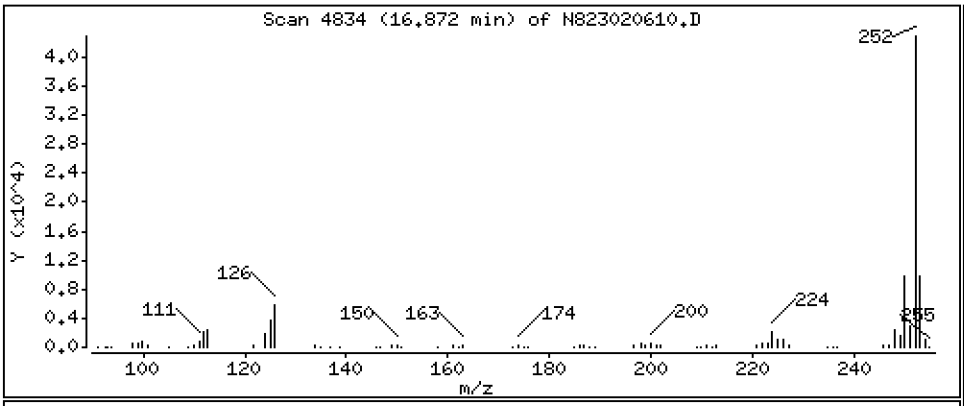
Operator: JZ

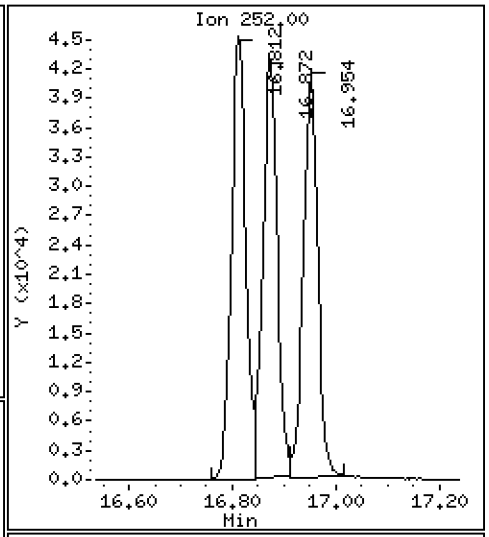
Column phase: Rxi-17sil

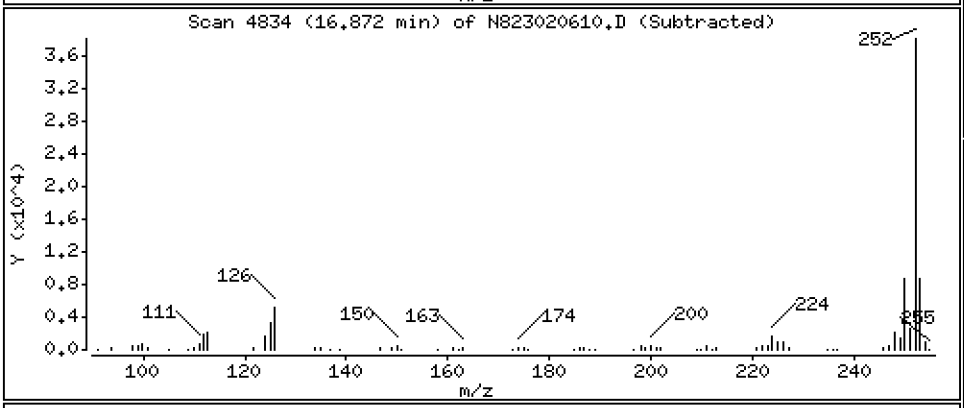
Column diameter: 0.25

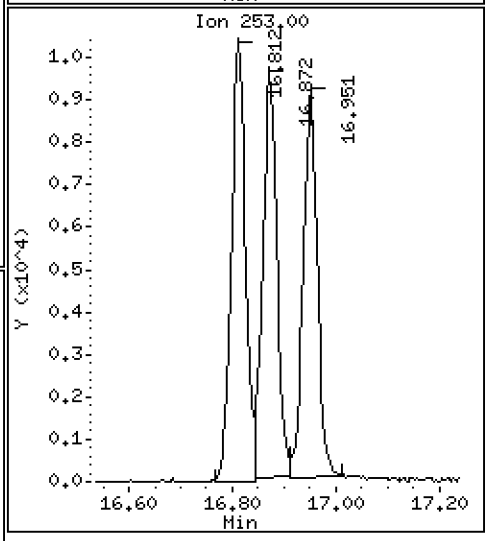
29 Benzo(k)fluoranthene

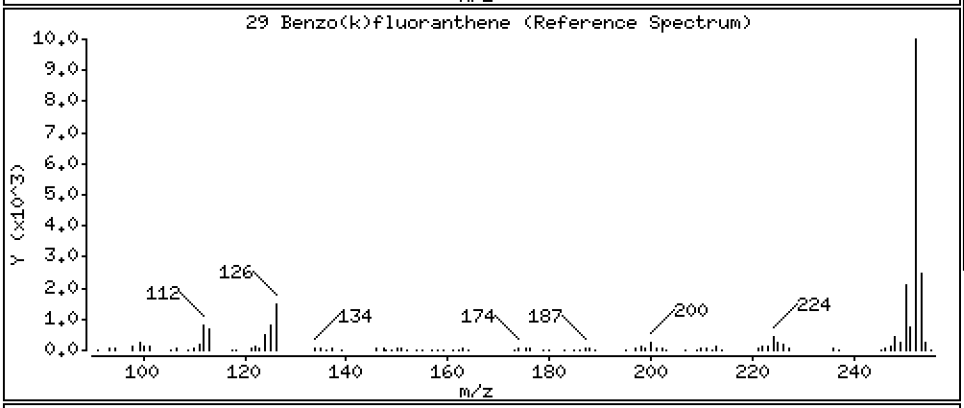
Concentration: 5.294 ug/mL

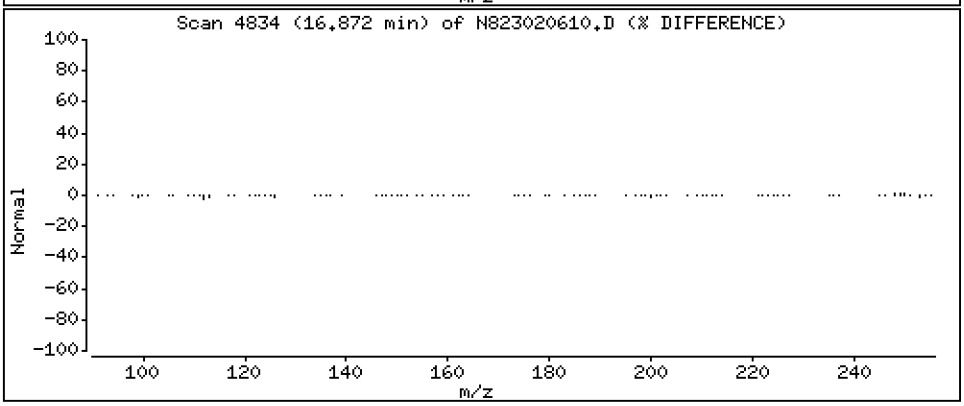












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

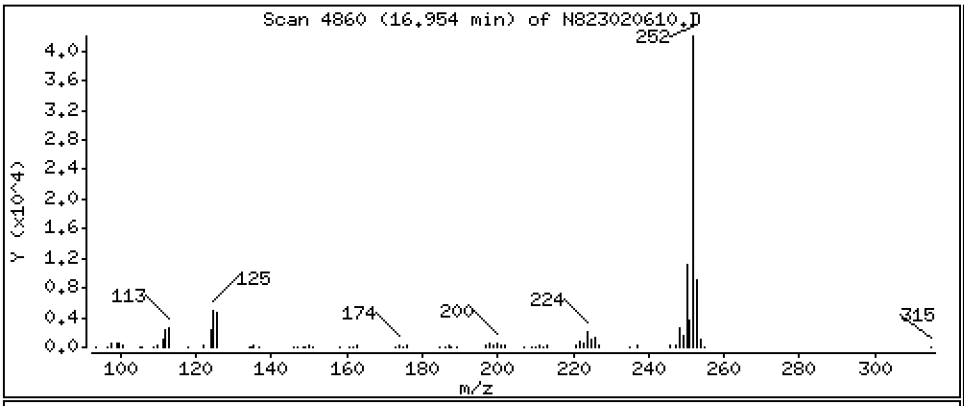
Operator: JZ

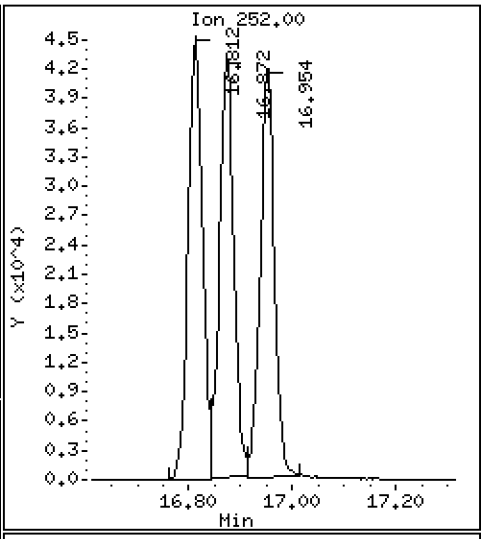
Column phase: Rxi-17sil

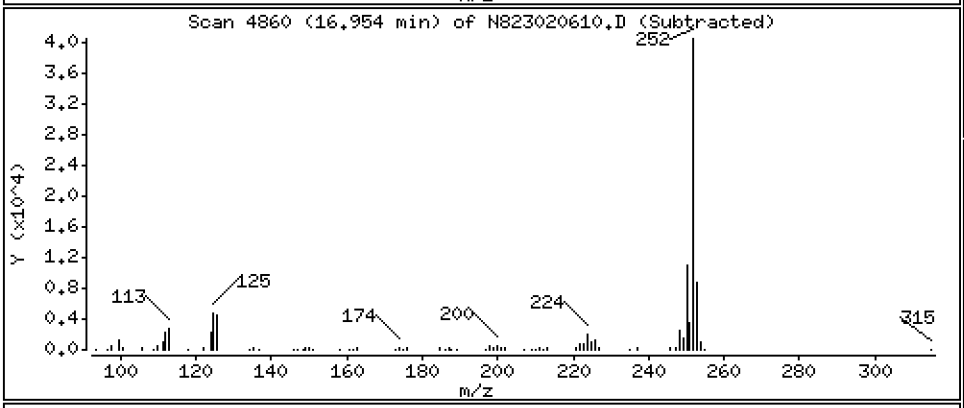
Column diameter: 0.25

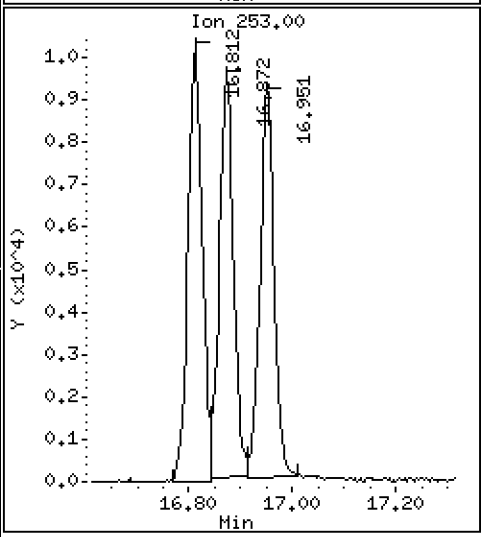
30 Benzo(j)fluoranthene

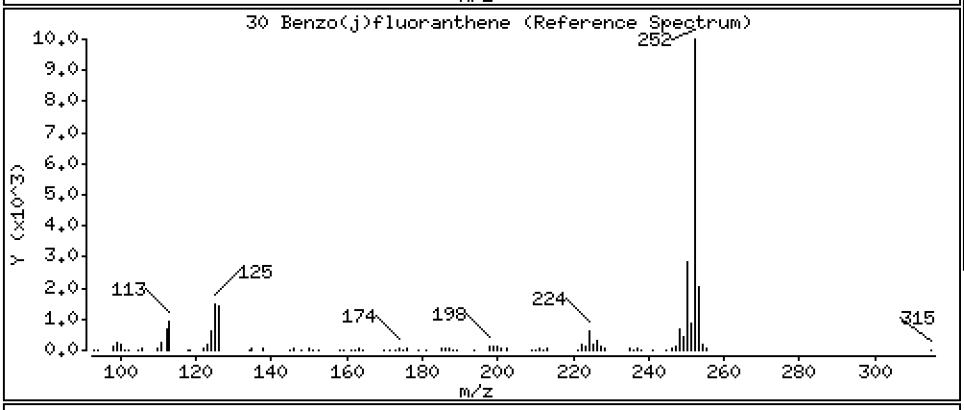
Concentration: 5.699 ug/mL

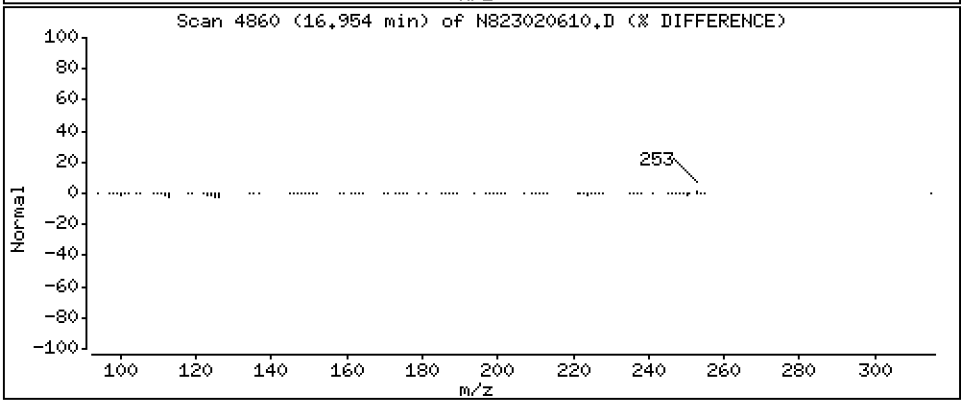












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

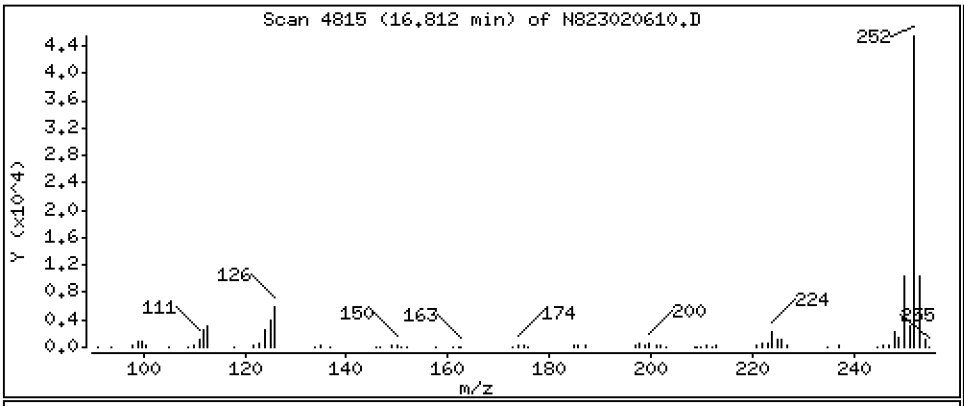
Operator: JZ

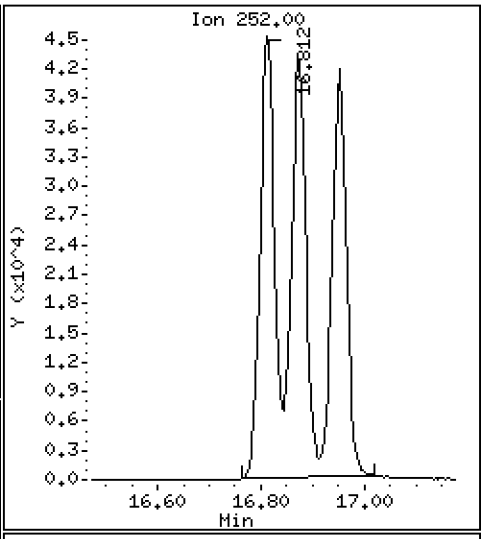
Column phase: Rxi-17sil

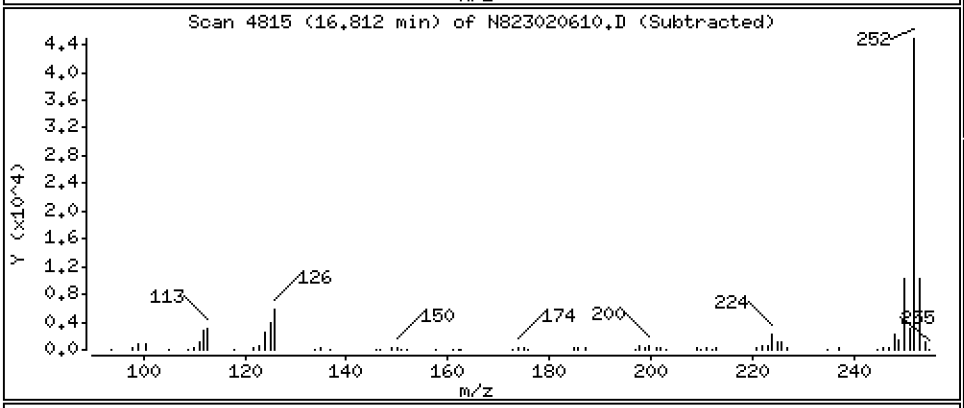
Column diameter: 0.25

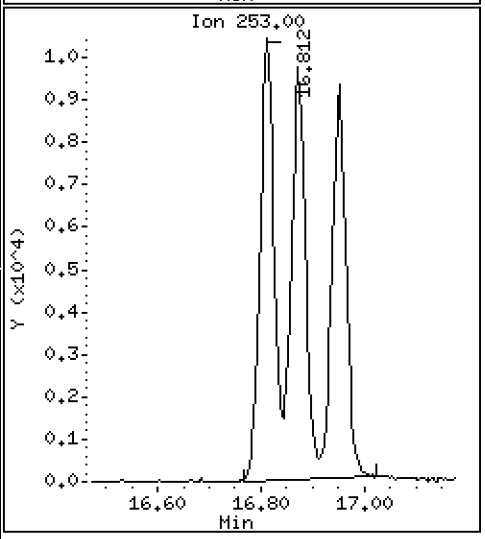
31 Total Benzofluoranthenes

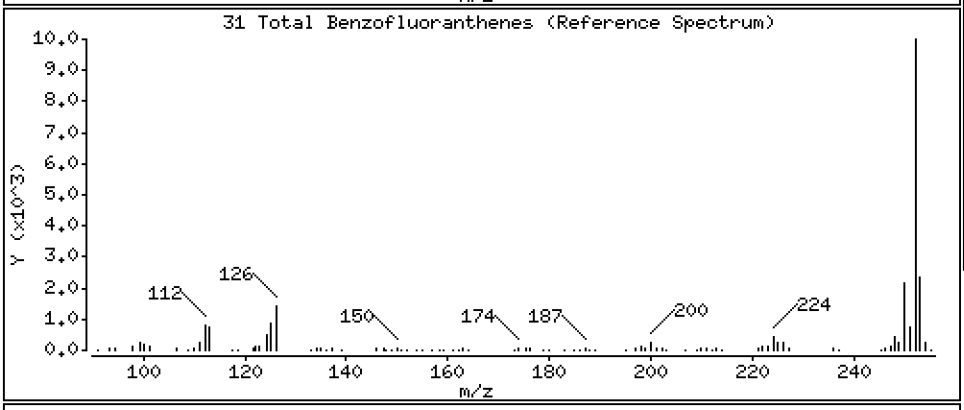
Concentration: 16.54 ug/mL

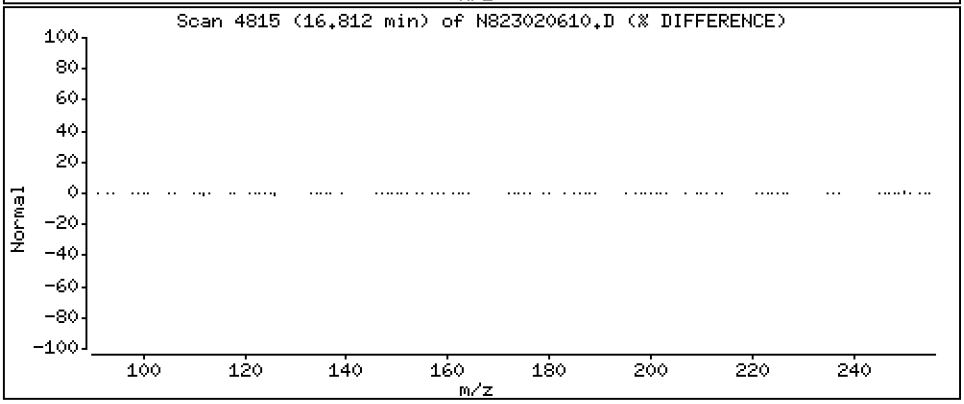












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

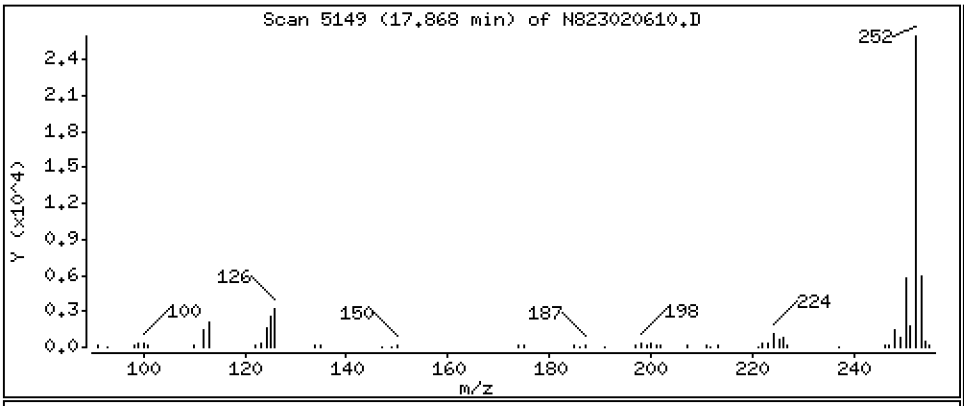
Operator: JZ

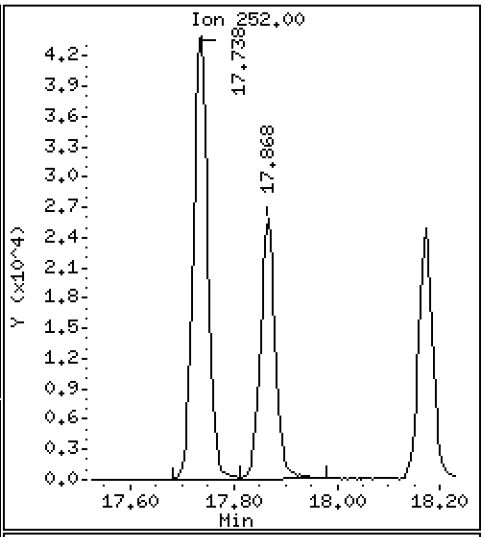
Column phase: Rxi-17sil

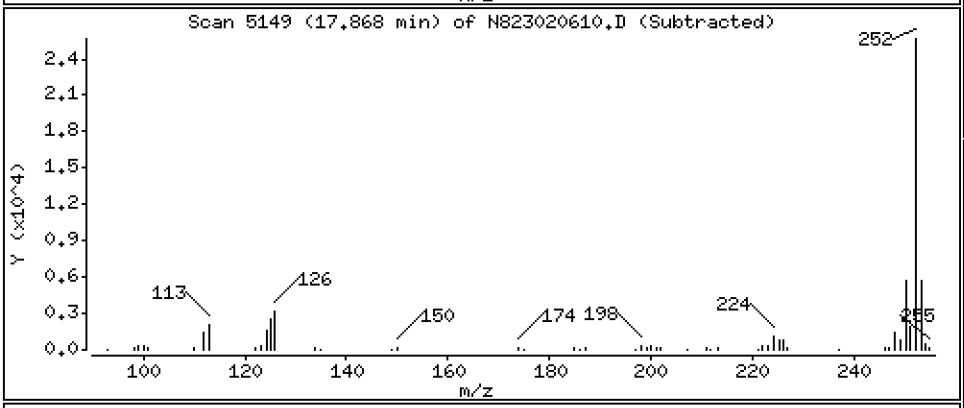
Column diameter: 0.25

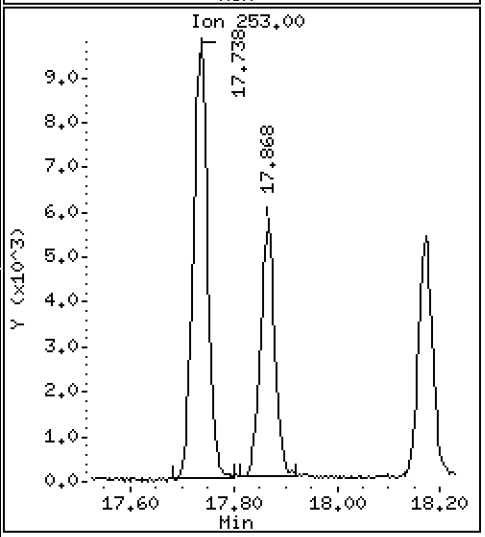
32 Benzo(a)pyrene

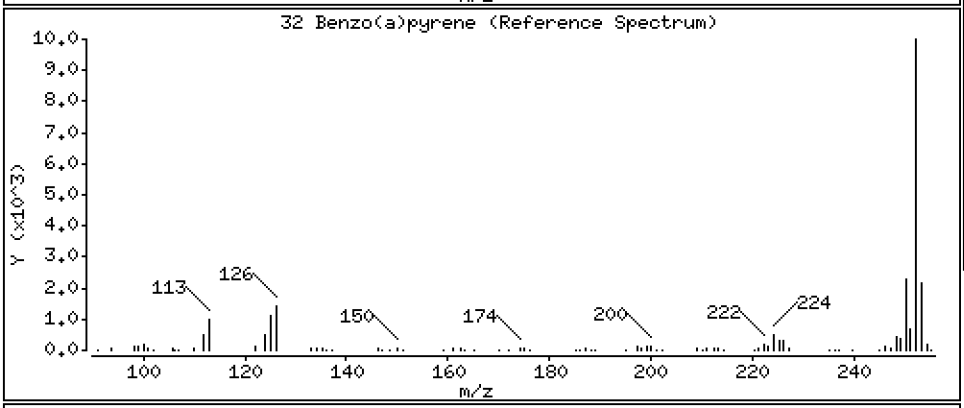
Concentration: 3.726 ug/mL

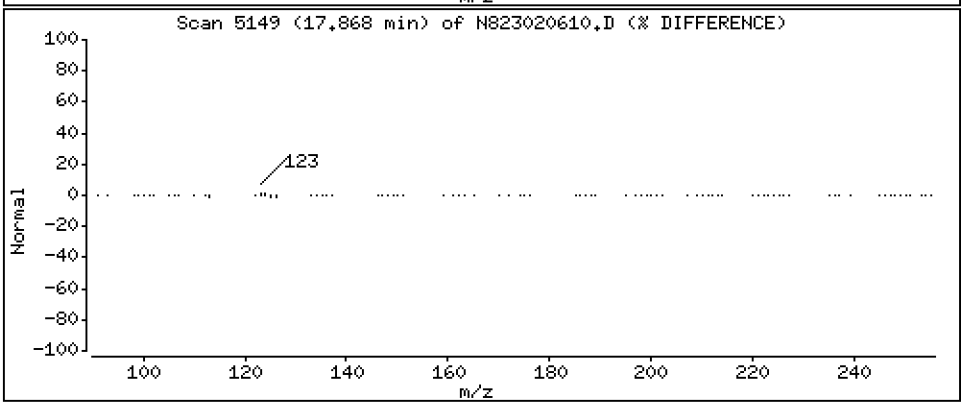












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

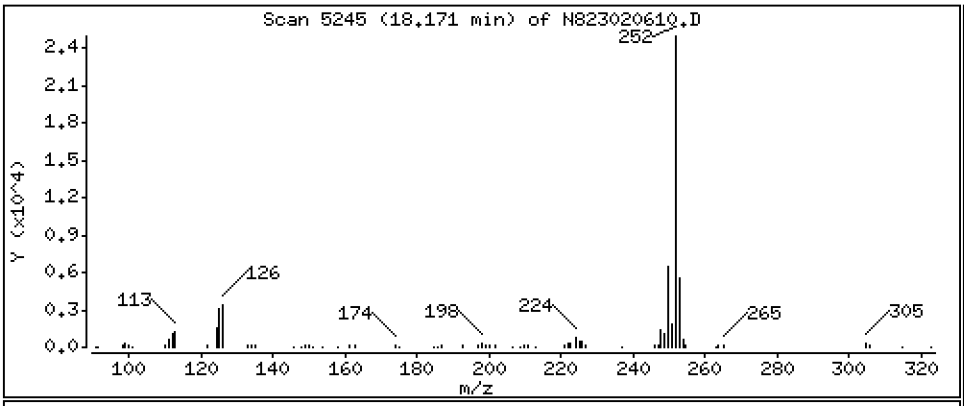
Operator: JZ

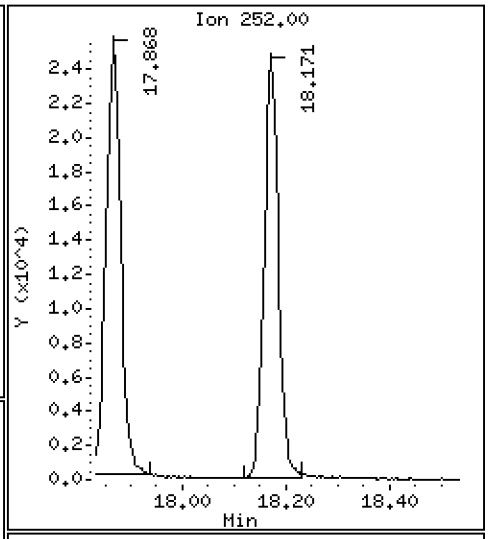
Column phase: Rxi-17sil

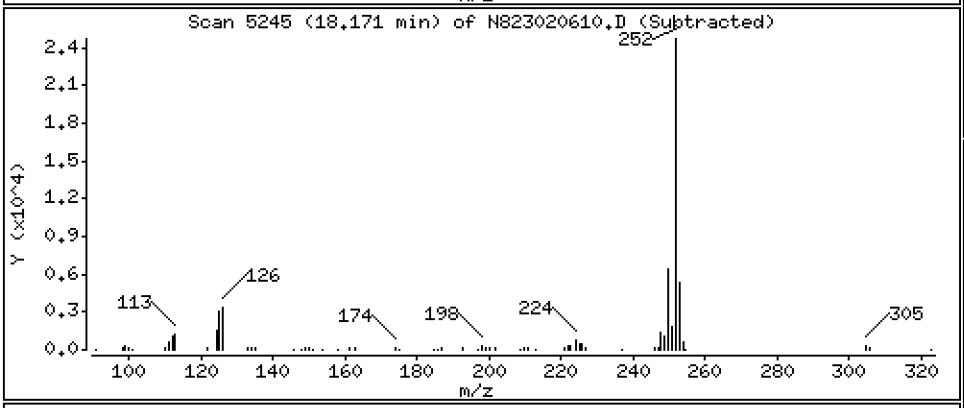
Column diameter: 0.25

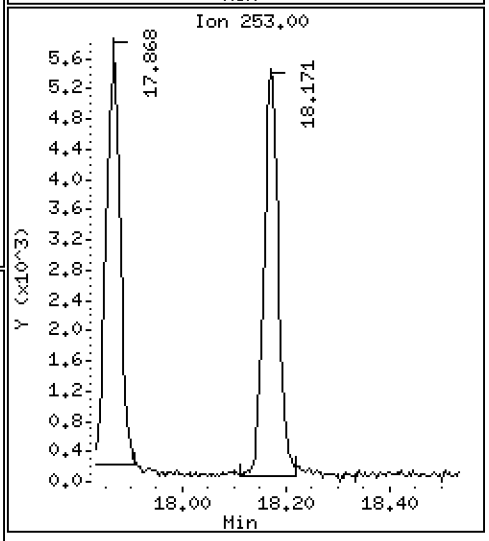
35 Perylene

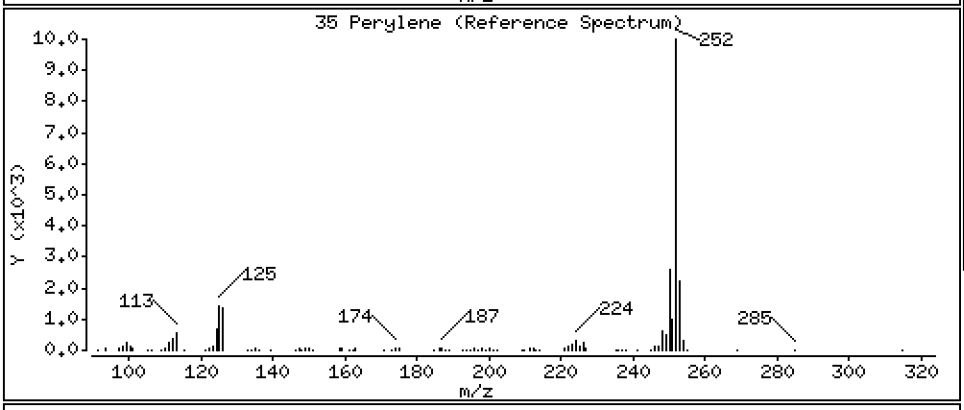
Concentration: 3.115 ug/mL

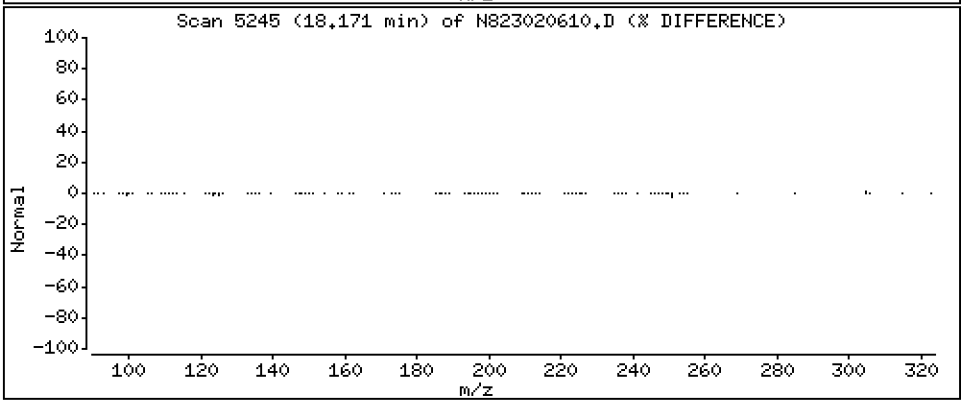












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

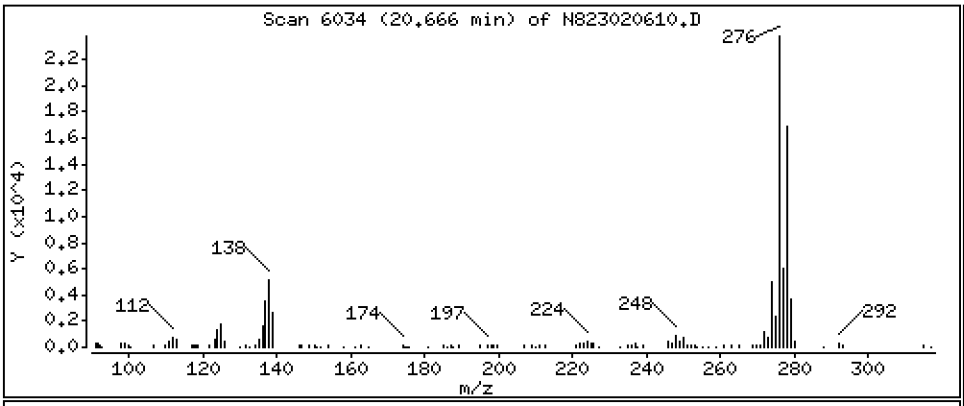
Operator: JZ

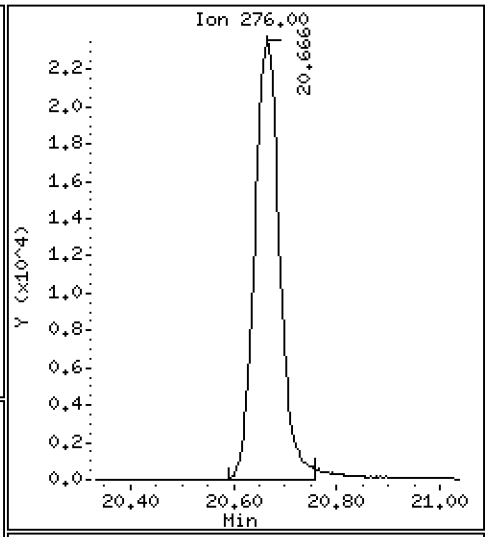
Column phase: Rxi-17sil

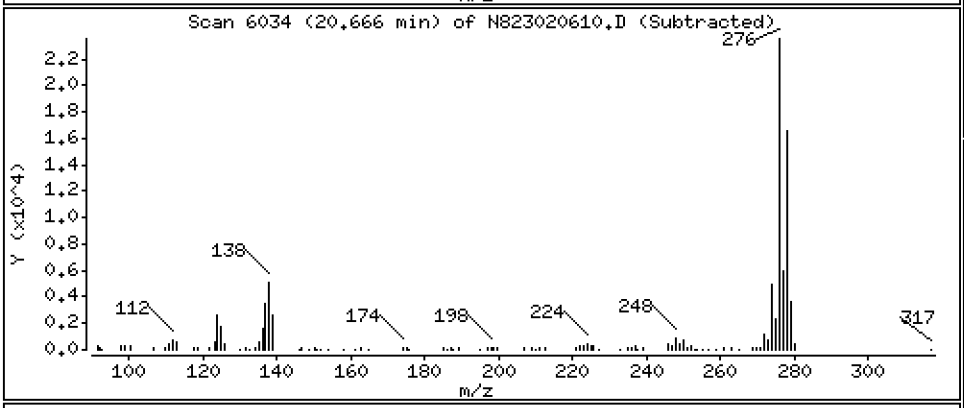
Column diameter: 0.25

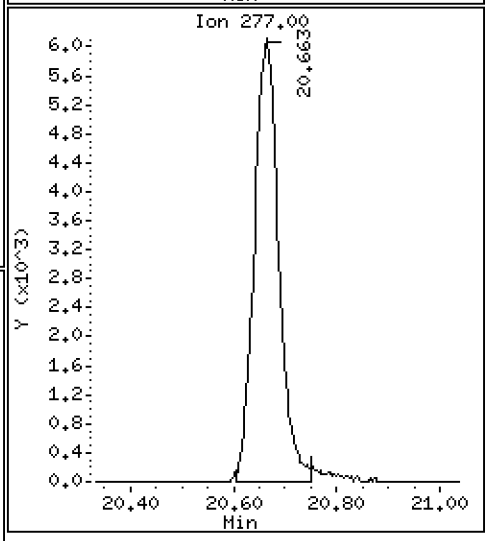
37 Indeno(1,2,3-cd)pyrene

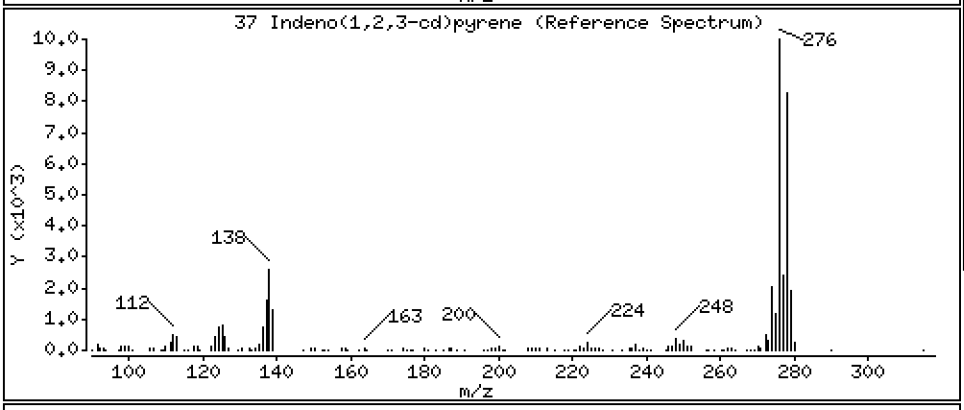
Concentration: 4.985 ug/mL

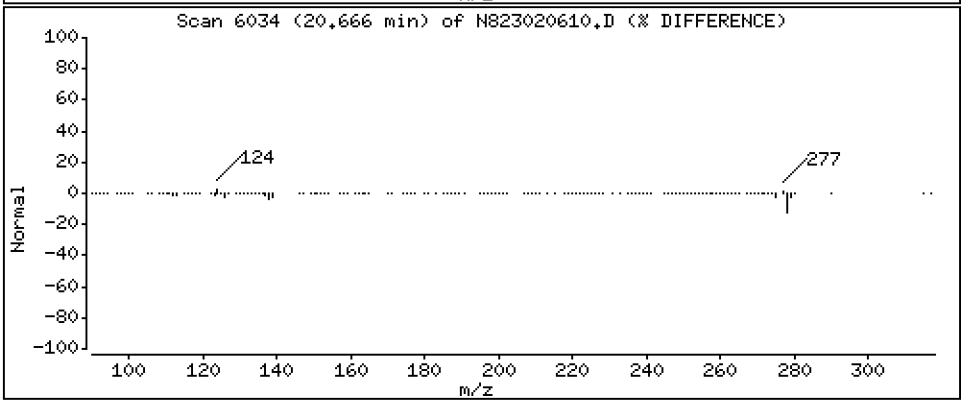












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

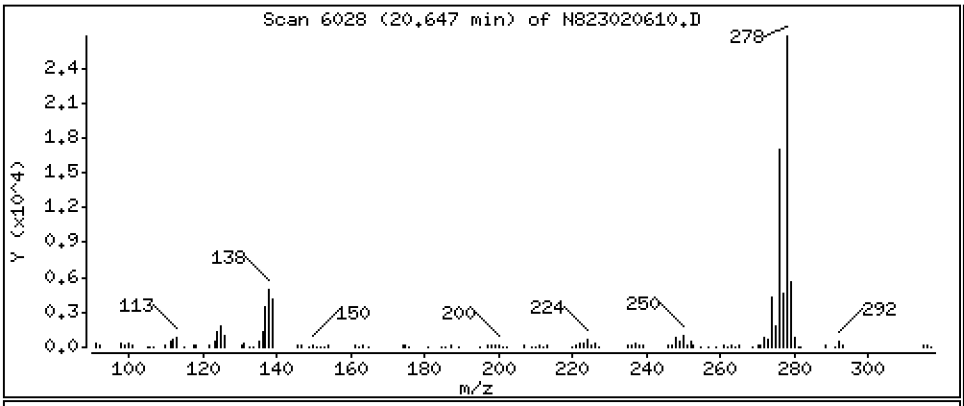
Operator: JZ

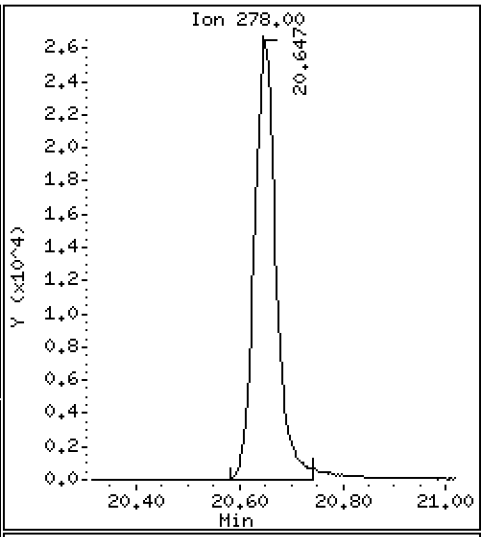
Column phase: Rxi-17sil

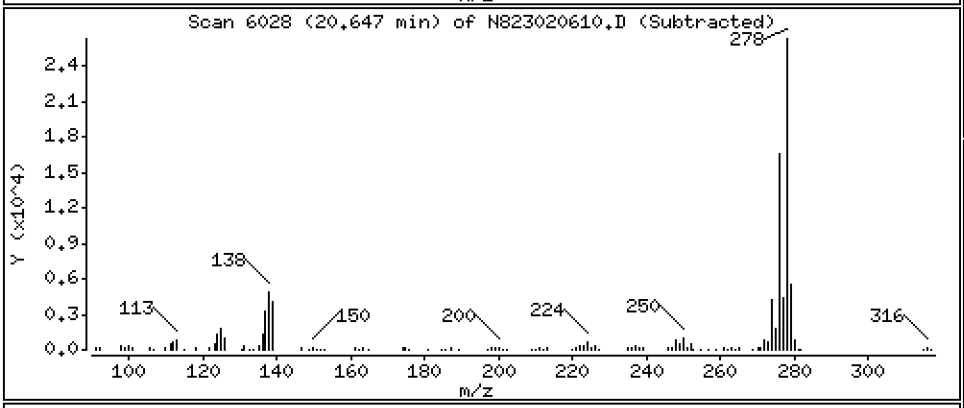
Column diameter: 0.25

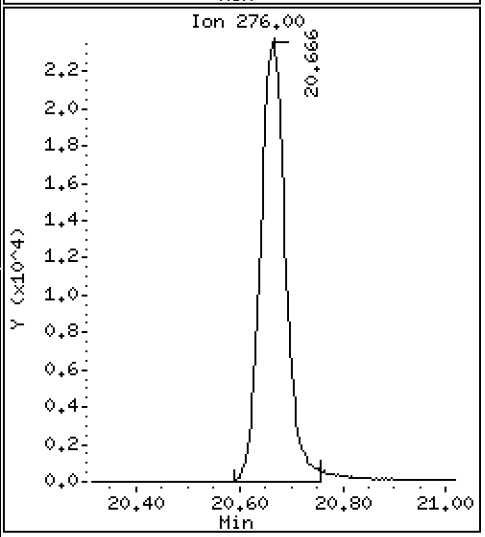
38 Dibenzo(a,h)anthracene

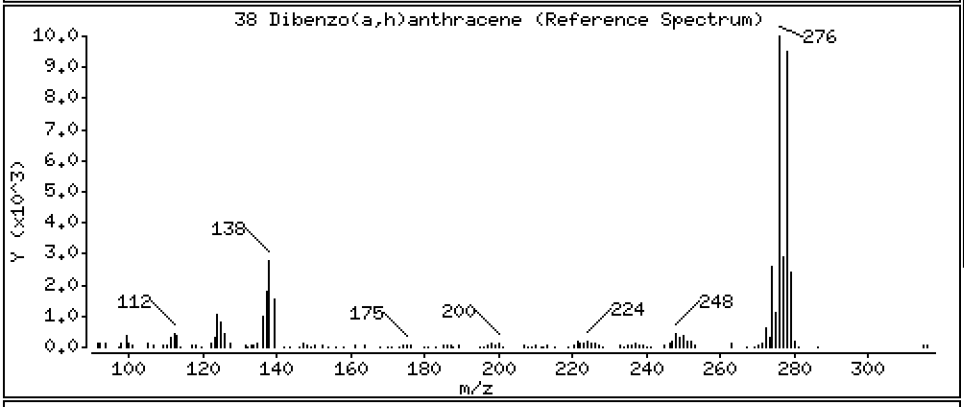
Concentration: 5.593 ug/mL

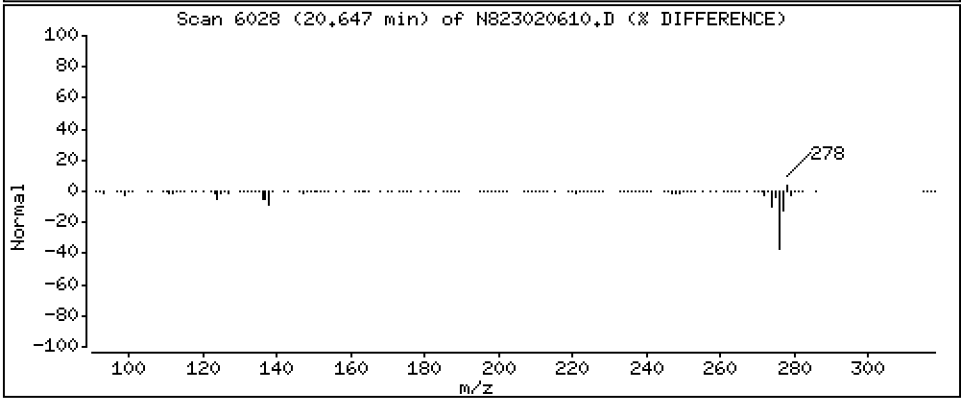












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020610.D

Date : 06-FEB-2023 16:51

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-BSD1,

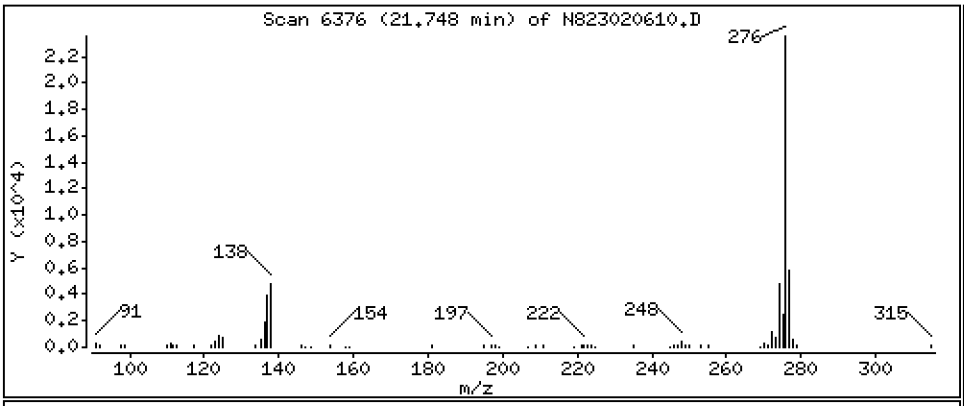
Operator: JZ

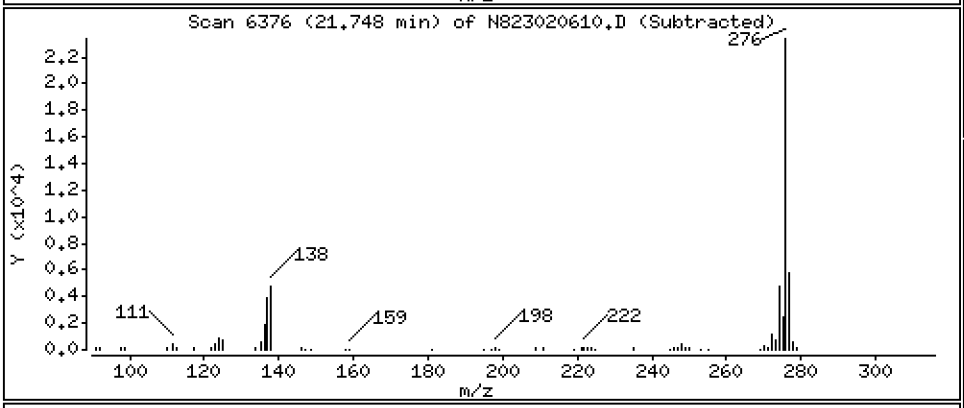
Column phase: Rxi-17sil

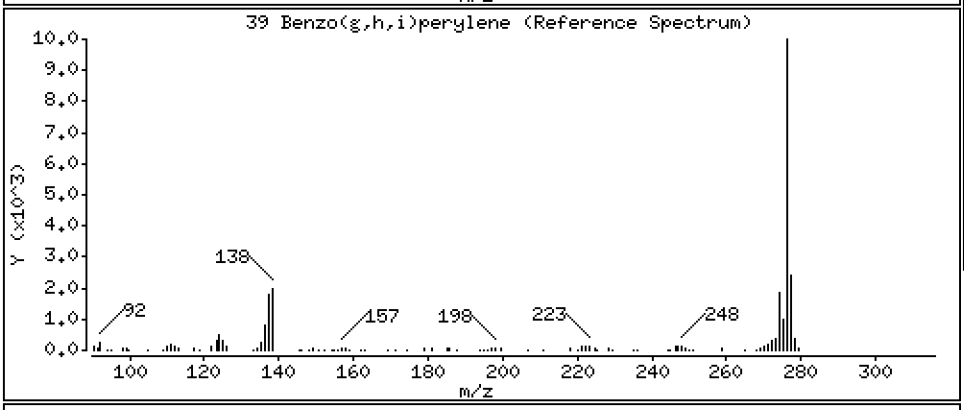
Column diameter: 0.25

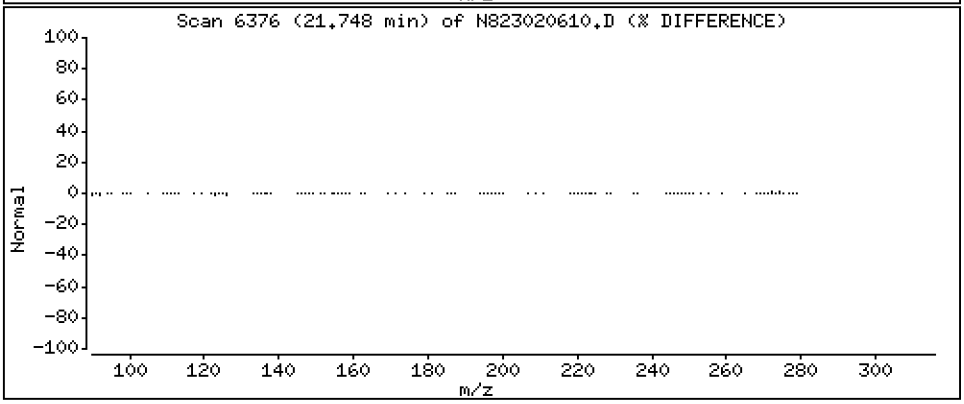
39 Benzo(g,h,i)perylene

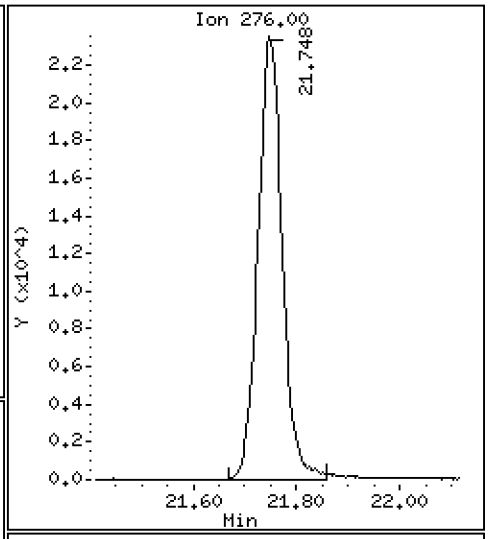
Concentration: 5.263 ug/mL

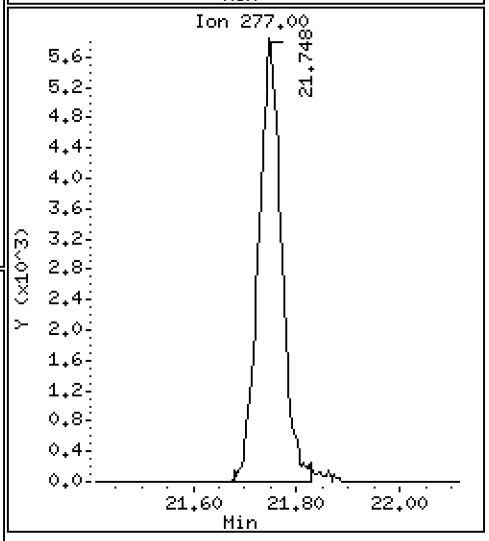












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020610.D
Lab Smp Id: BLA0683-BSD1
Inj Date : 06-FEB-2023 16:51
Operator : JZ Inst ID: nt8.i
Smp Info : BLA0683-BSD1,
Misc Info : 23-
Comment : 1ul Injection
Method : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
Meth Date : 07-Feb-2023 13:04 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PNAXMDL.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.887	4.900	(1.000)	52018	2.00000	
	2 Naphthalene	128	4.916	4.928	(1.006)	82183	3.39792	3.398
$	3 2-Methylnaphthalene-d10	152	5.624	5.634	(1.151)	30576	2.15527	2.155
	4 2-Methylnaphthalene	141	5.672	5.681	(1.160)	46582	3.50143	3.501
	5 1-methylnaphthalene	141	5.868	5.880	(1.201)	46831	3.46842	3.468
	9 Acenaphthylene	152	7.072	7.082	(0.985)	70701	3.12134	3.121
*	10 Acenaphthene-d10	164	7.183	7.189	(1.000)	29996	2.00000	
	11 Acenaphthene	153	7.230	7.240	(1.007)	52081	3.43164	3.432
	12 Dibenzofuran	168	7.382	7.392	(1.028)	79103	3.43158	3.432
	14 Fluorene	166	7.863	7.869	(1.095)	64484	3.60176	3.602
*	15 Phenanthrene-d10	188	9.223	9.232	(1.000)	54697	2.00000	
	16 Phenanthrene	178	9.260	9.267	(1.004)	95476	3.57343	3.573
	17 Anthracene	178	9.302	9.308	(1.009)	78566	3.23694	3.237
	19 Carbazole	167	9.814	9.823	(1.064)	83189	3.73866	3.739
	22 Fluoranthene	202	11.041	11.050	(1.197)	108034	3.71467	3.715
$	21 Fluoranthene-d10	212	11.003	11.009	(1.193)	57921	2.40016	2.400
	23 Pyrene	202	11.559	11.569	(0.815)	110605	4.28330	4.283
	24 Benzo(a)anthracene	228	14.060	14.070	(0.991)	93819	4.00851	4.009
*	25 Chrysene-d12	240	14.187	14.202	(1.000)	41650	2.00000	
	27 Chrysene	228	14.263	14.275	(1.005)	99165	3.98001	3.980
	28 Benzo(b)fluoranthene	252	16.811	16.824	(0.929)	89367	5.56463	5.565
	29 Benzo(k)fluoranthene	252	16.871	16.887	(0.932)	83285	5.29444	5.294
	30 Benzo(j)fluoranthene	252	16.954	16.963	(0.937)	80710	5.69933	5.699
	31 Total Benzofluoranthenes	252	16.811	16.824	(0.929)	251601	16.5424	16.54(M)
	32 Benzo(a)pyrene	252	17.867	17.877	(0.987)	52656	3.72586	3.726
*	33 Perylene-d12	264	18.098	18.107	(1.000)	27575	2.00000	
	35 Perylene	252	18.171	18.183	(1.004)	47243	3.11513	3.115
$	36 Dibenzo(a,h)anthracene-d14	292	20.533	20.549	(1.135)	38676	3.57963	3.580
	37 Indeno(1,2,3-cd)pyrene	276	20.666	20.684	(1.142)	80264	4.98523	4.985
	38 Dibenzo(a,h)anthracene	278	20.647	20.666	(1.141)	77498	5.59324	5.593
	39 Benzo(g,h,i)perylene	276	21.747	21.763	(1.202)	76779	5.26340	5.263

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823020610.D
Lab Smp Id: BLA0683-BSD1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 06-FEB-2023
Calibration Time: 15:15
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44336	22168	88672	52018	17.33
10 Acenaphthene-d10	26127	13064	52254	29996	14.81
15 Phenanthrene-d10	47424	23712	94848	54697	15.34
25 Chrysene-d12	36794	18397	73588	41650	13.20
33 Perylene-d12	36636	18318	73272	27575	-24.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.90	4.40	5.40	4.89	-0.25
10 Acenaphthene-d10	7.19	6.69	7.69	7.18	-0.09
15 Phenanthrene-d10	9.23	8.73	9.73	9.22	-0.10
25 Chrysene-d12	14.20	13.70	14.70	14.19	-0.11
33 Perylene-d12	18.11	17.61	18.61	18.10	-0.05

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

REVIEW SUMMARY FOR FILE - N823020610.D

Lab ID: BLA0683-BSD1
nt8.i, 20230206A.b\FSIMPNA230119.m,   06-FEB-2023 16:51

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

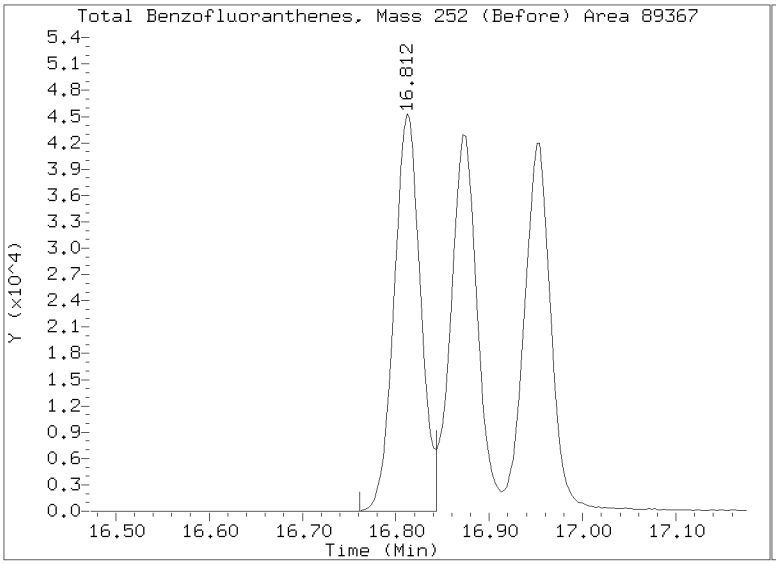
No RRT check performed

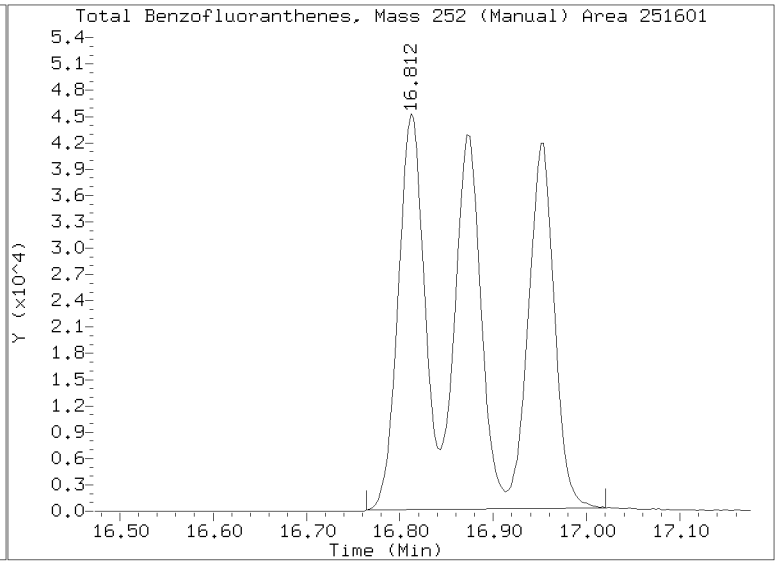
On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020610.D
Injection Date: 06-FEB-2023 16:51
Lab ID:BLA0683-BSD1 Client ID:
Report Date: 02/07/2023 13:19





Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0673-SRM2
Batch: BLA0673
Initial/Final: 1 g / 1 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 03/04/2023 0:08
Standard ID: K003477
Expires: 01/31/2024
Standard Lot#: CRM 143 (LRAC8918)
Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
2,4-Dimethylphenol	6357.0	4500	21.7	200		70.8	0 - 220
1,2,4-Trichlorobenzene	1477.0	1100	26.8	50.0		74.2	10 - 193
N-Nitrosodiphenylamine	2854.0	3340	13.1	50.0		117	40 - 160
Pentachlorophenol	3411.0	1740	21.3	200	Q	50.9	10 - 206

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323115.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

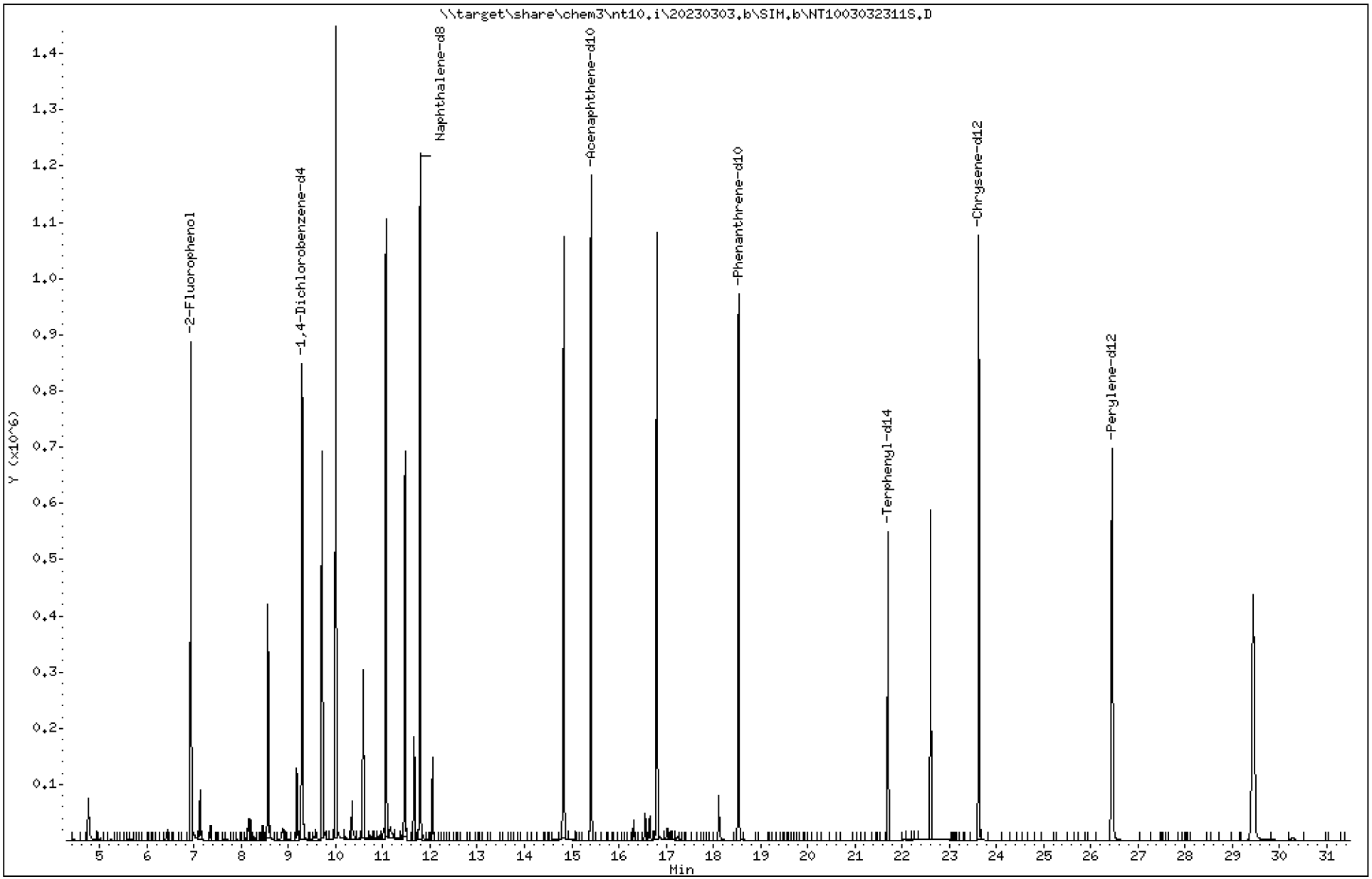
Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

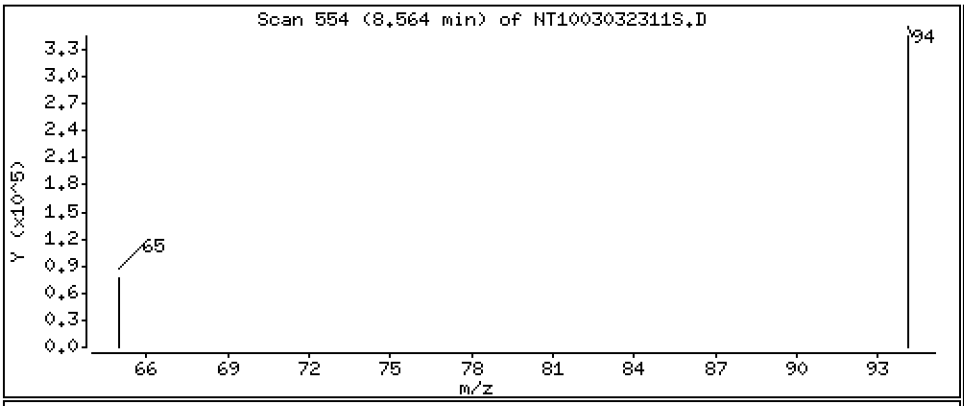
Operator: JGR

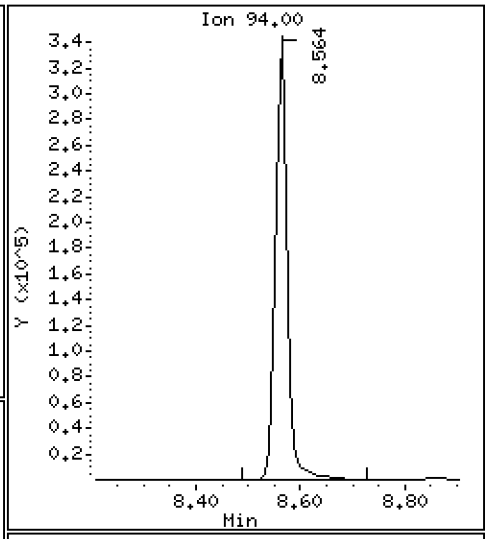
Column phase: ZB-5msi

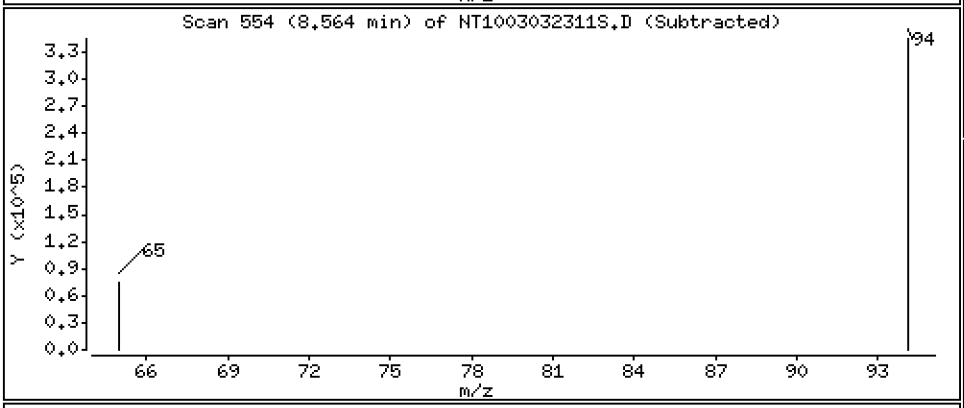
Column diameter: 0.25

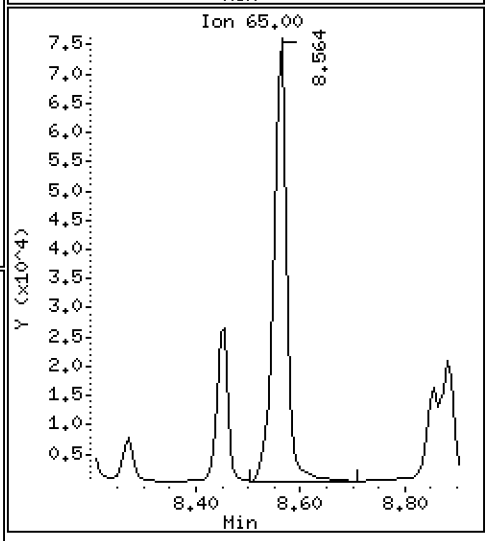
3 Phenol

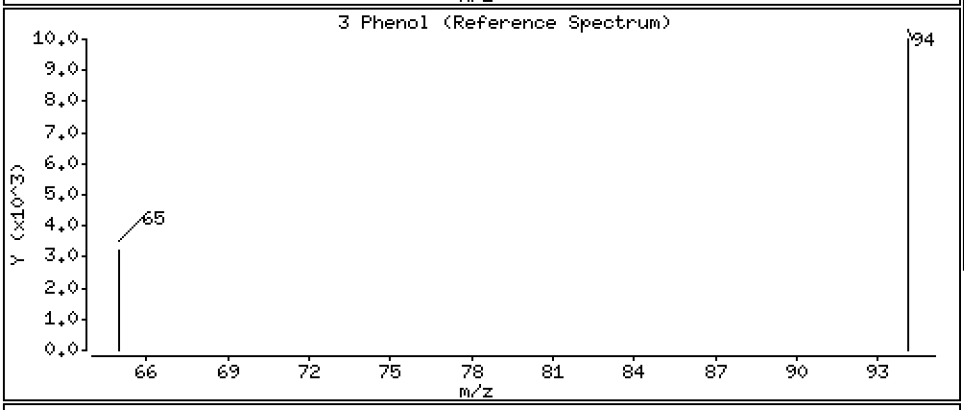
Concentration: 2.343 ug/L

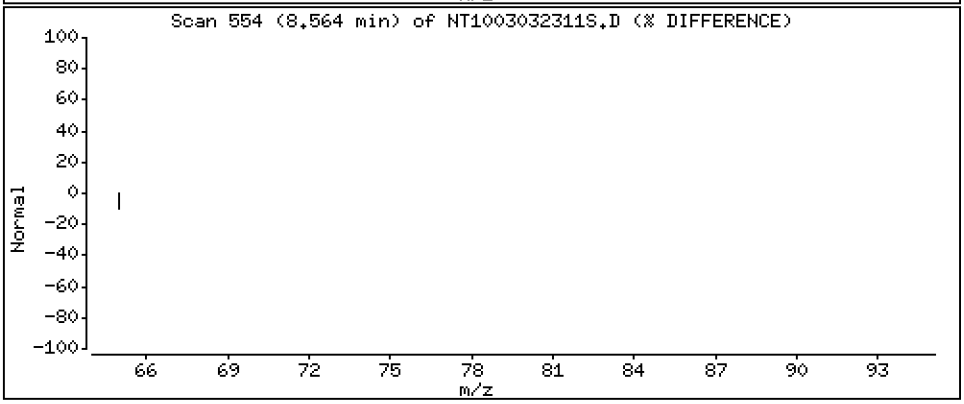












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

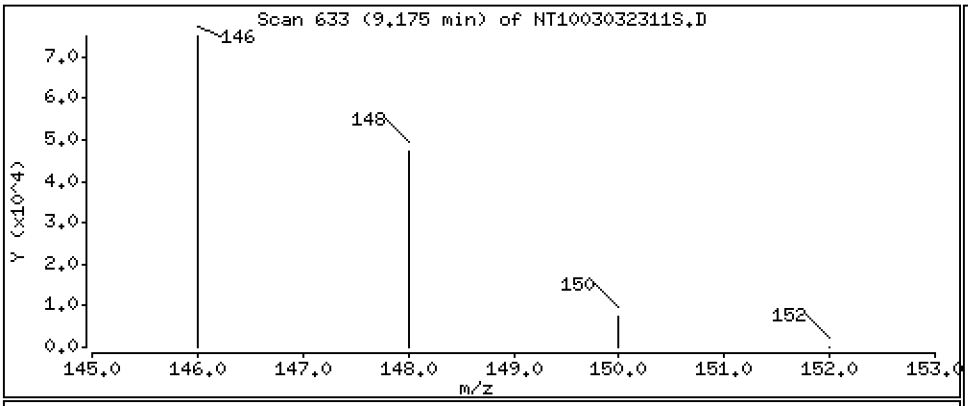
Operator: JGR

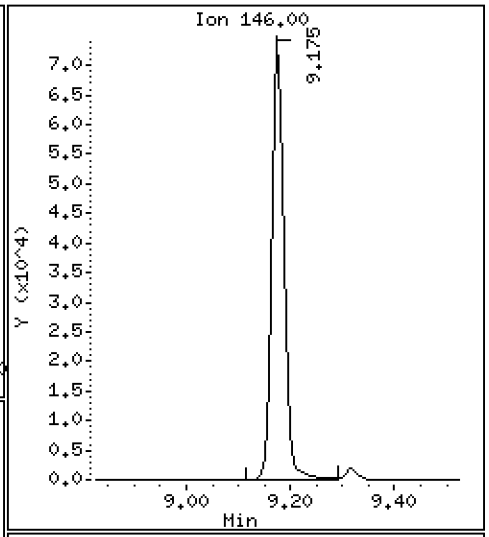
Column phase: ZB-5msi

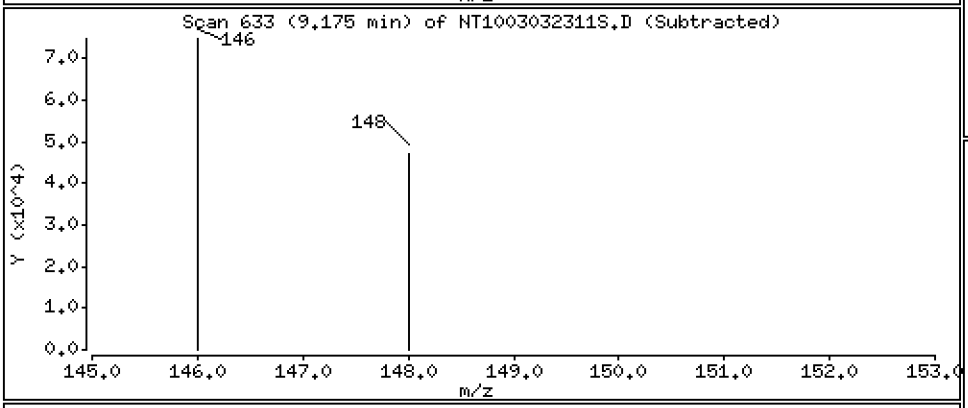
Column diameter: 0.25

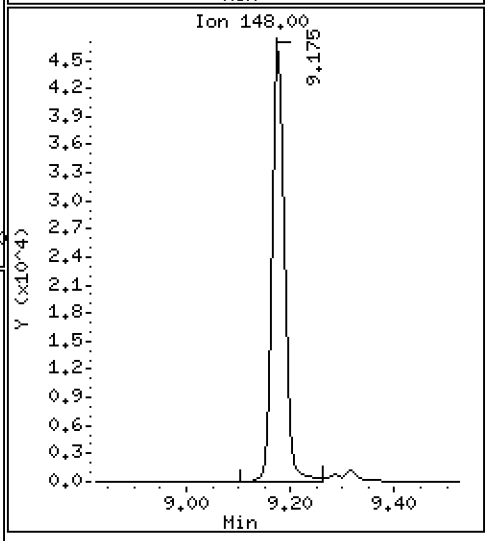
7 1,3-Dichlorobenzene

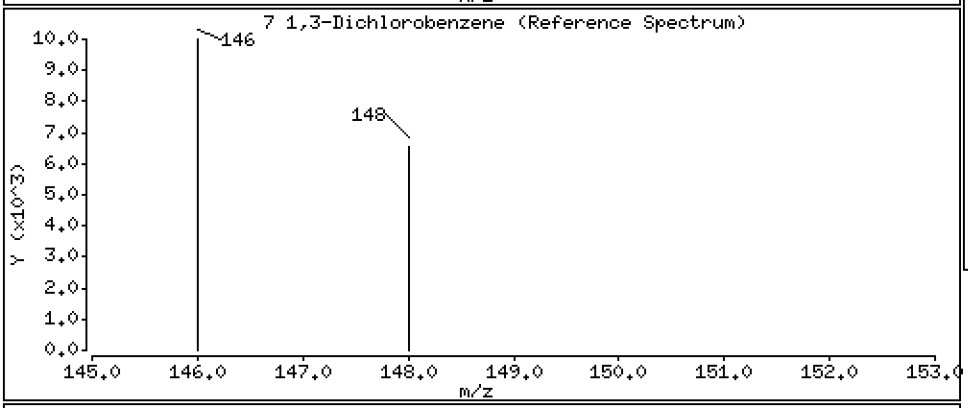
Concentration: 0.6033 ug/L

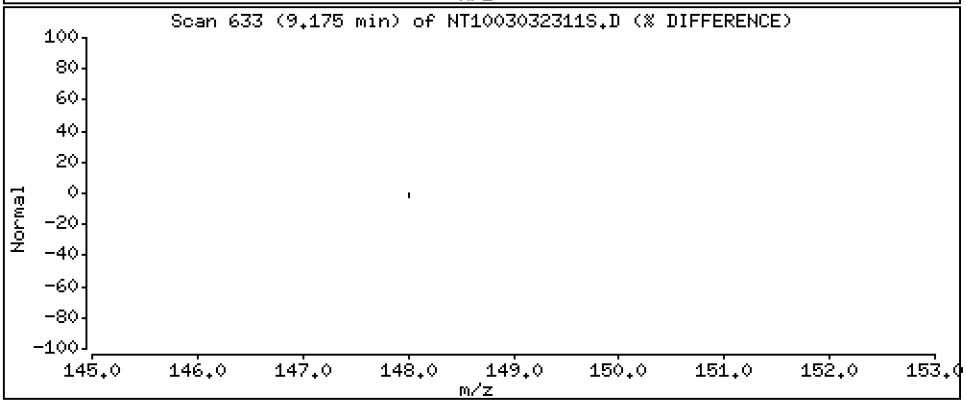












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

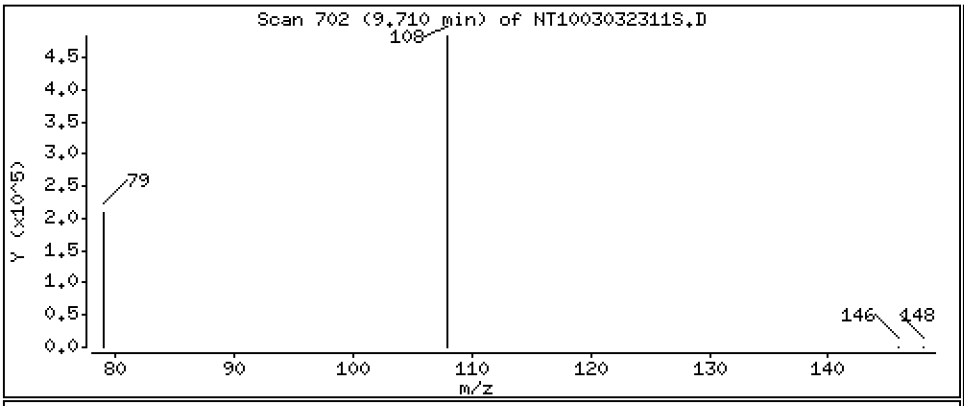
Operator: JGR

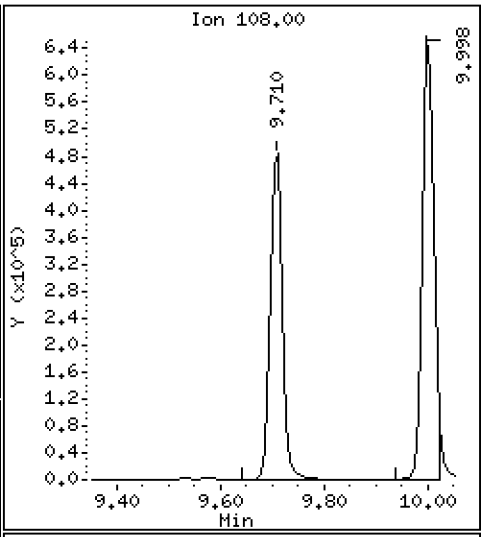
Column phase: ZB-5msi

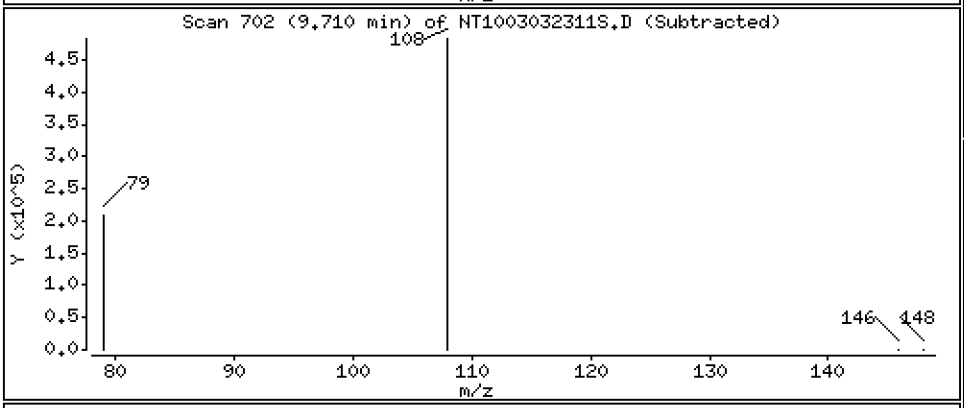
Column diameter: 0.25

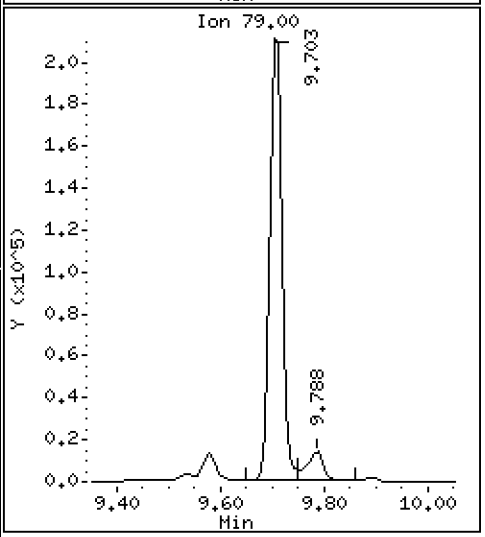
13 2-Methylphenol

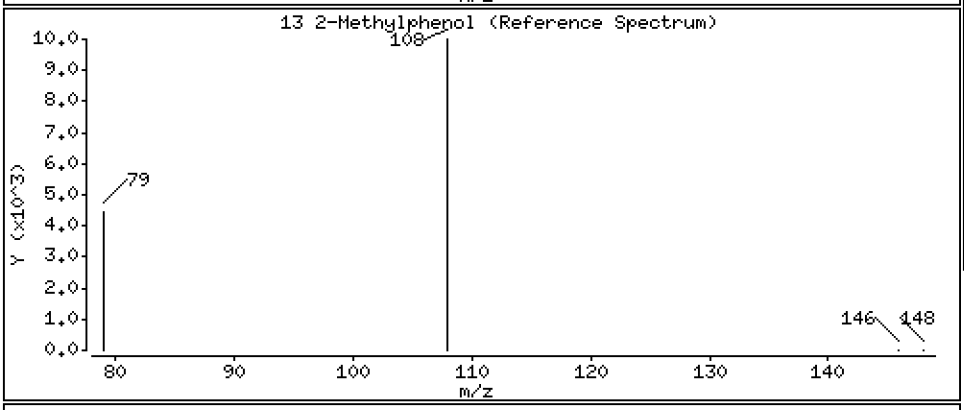
Concentration: 5.482 ug/L

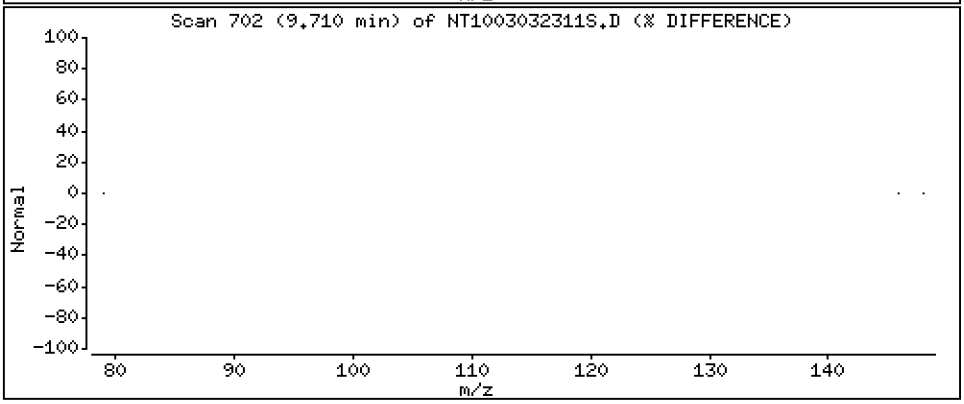












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323115.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

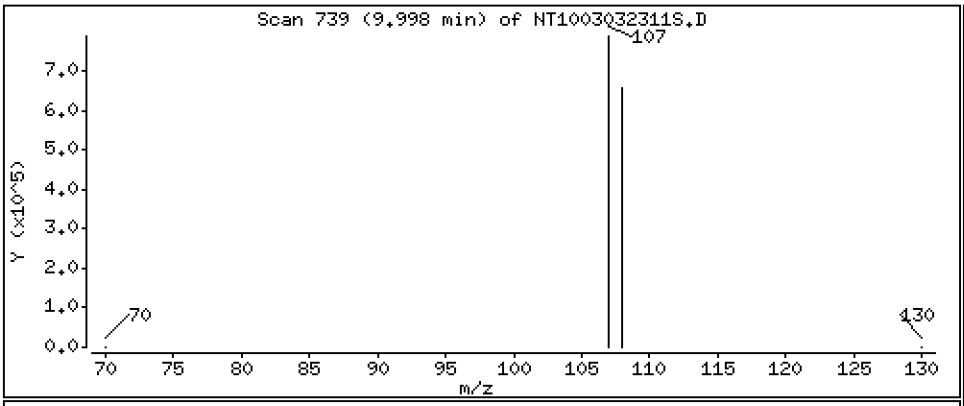
Operator: JGR

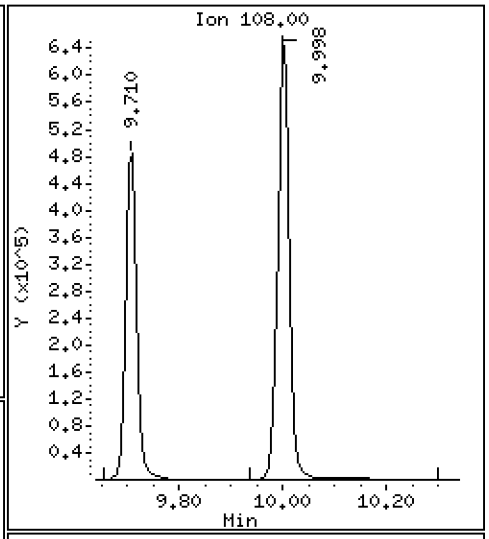
Column phase: ZB-5msi

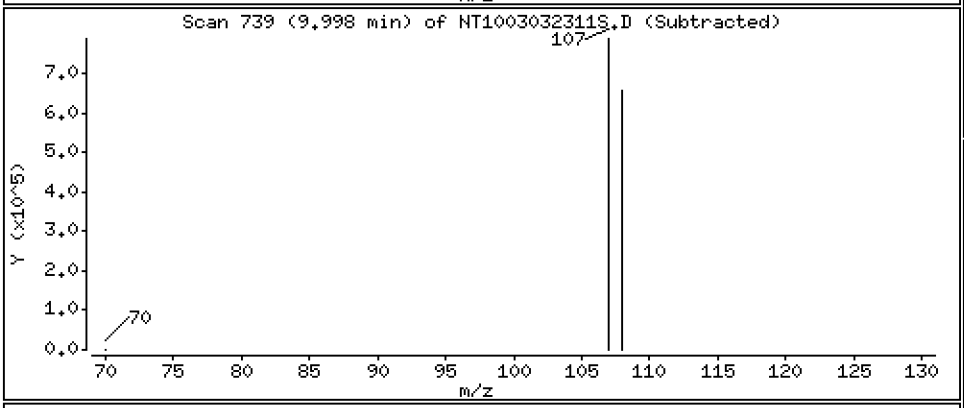
Column diameter: 0.25

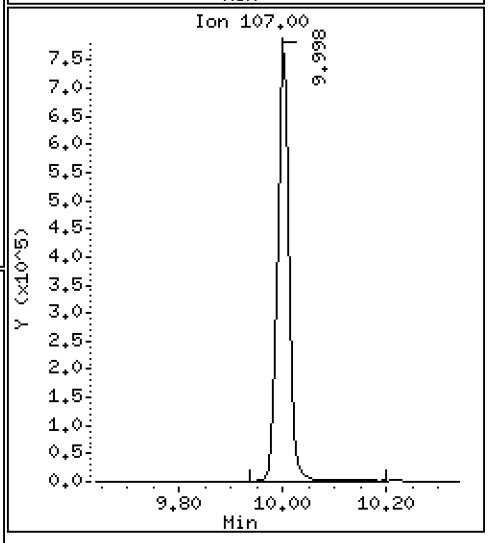
15 4-Methylphenol

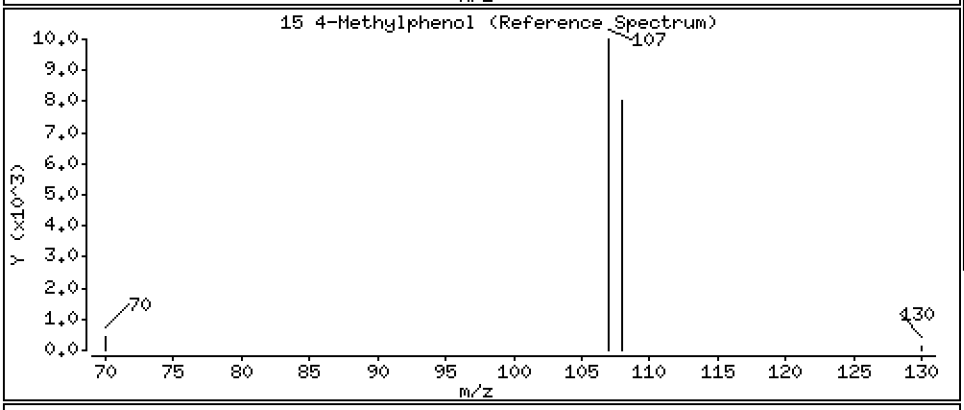
Concentration: 6.813 ug/L

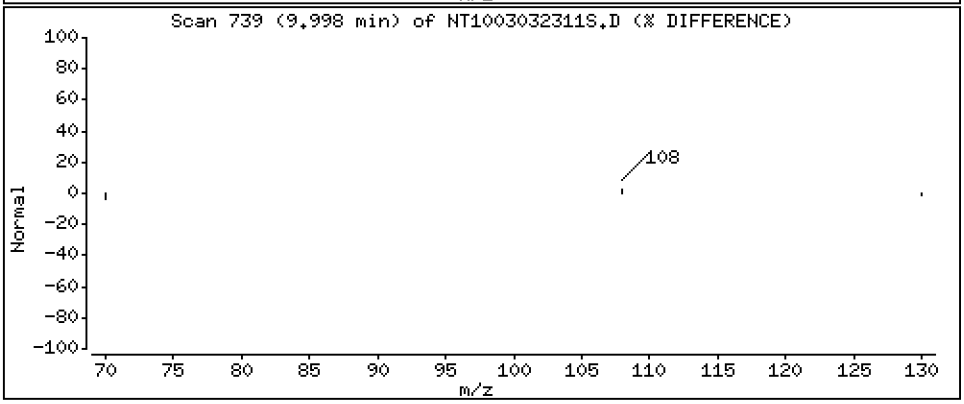












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

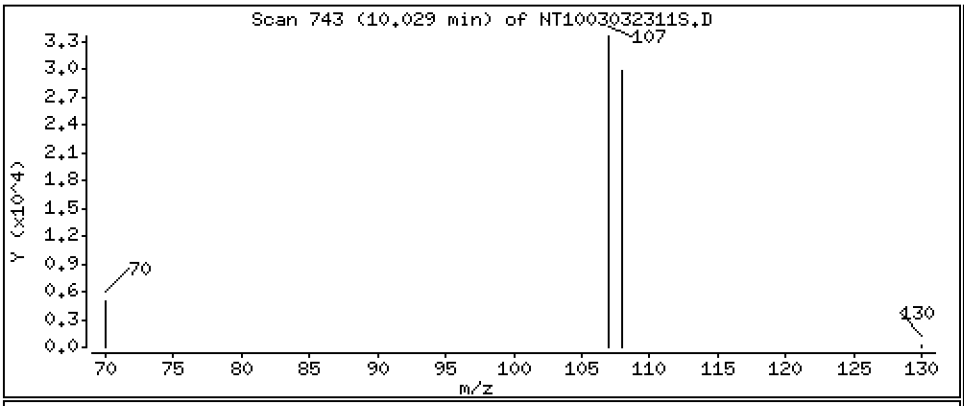
Operator: JGR

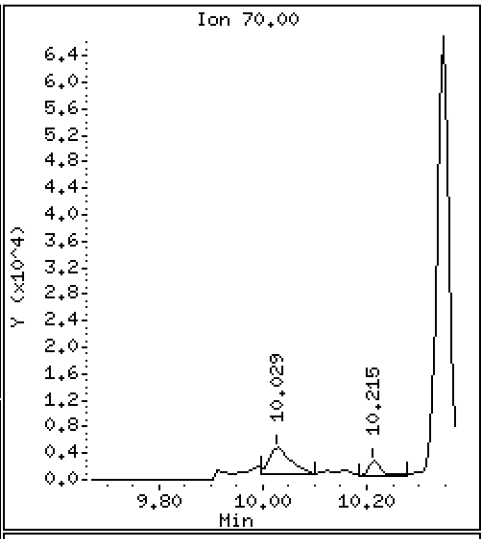
Column phase: ZB-5msi

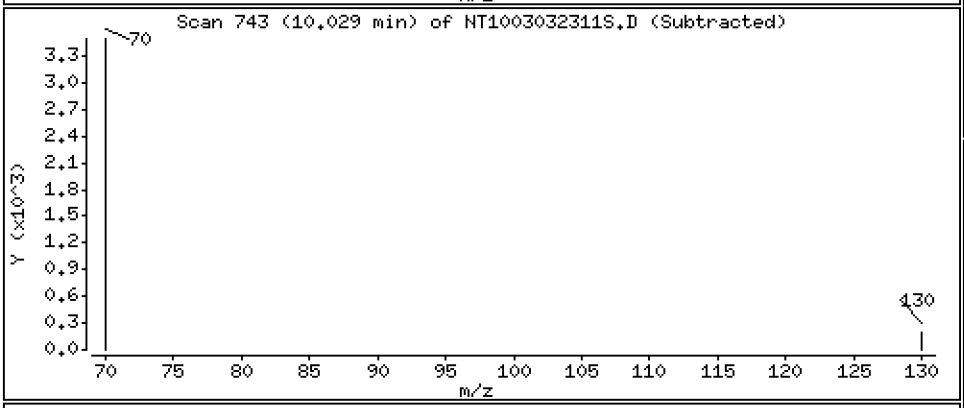
Column diameter: 0.25

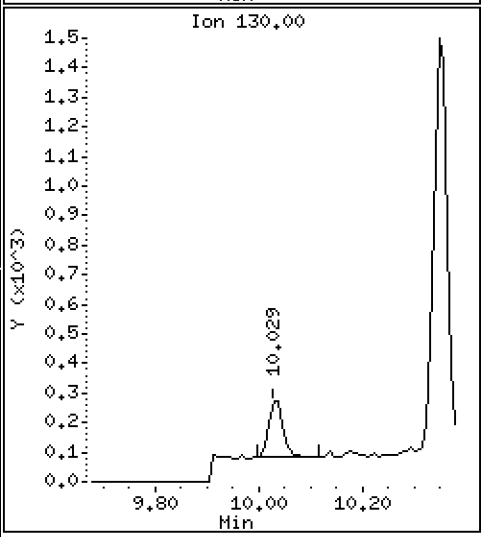
16 N-Nitroso-di-n-propylamine

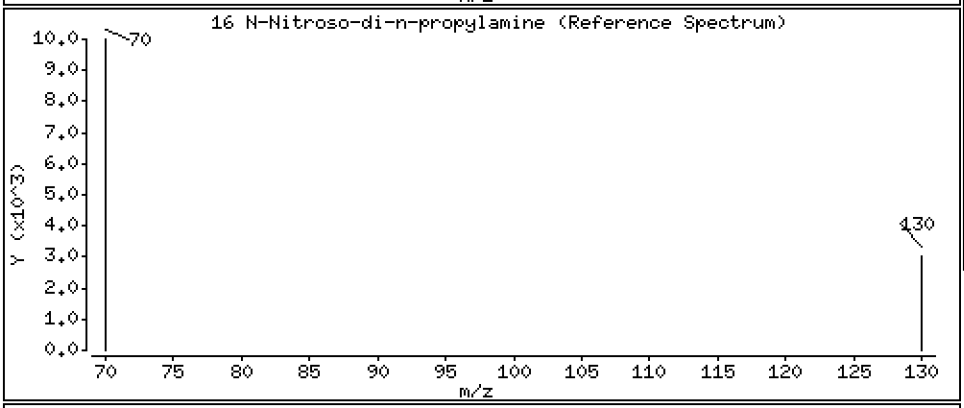
Concentration: 0.1100 ug/L

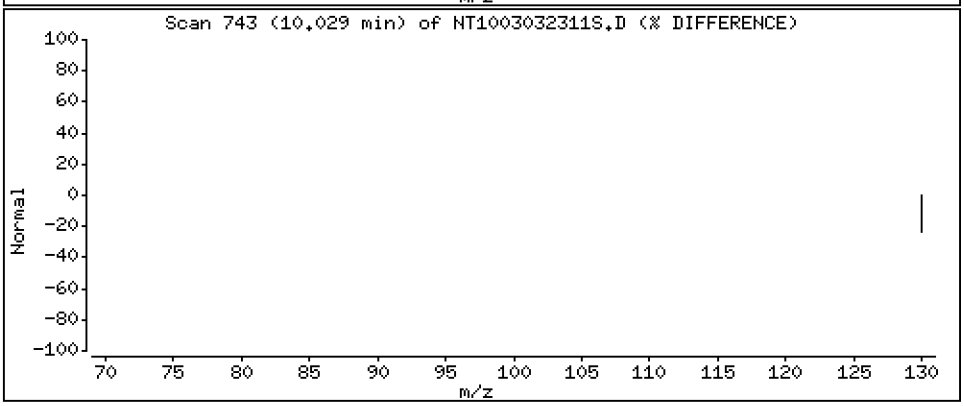












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

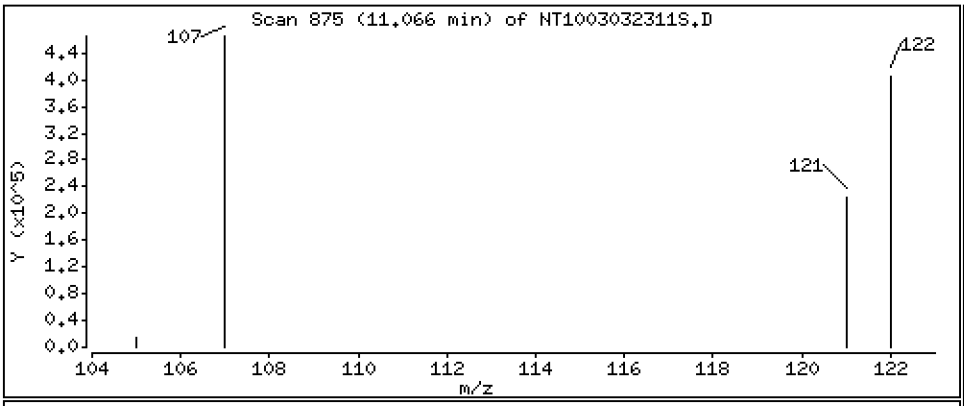
Operator: JGR

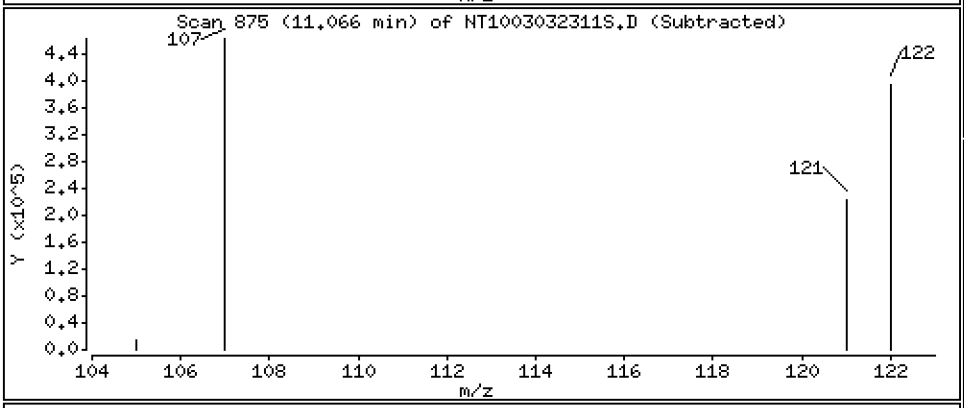
Column phase: ZB-5msi

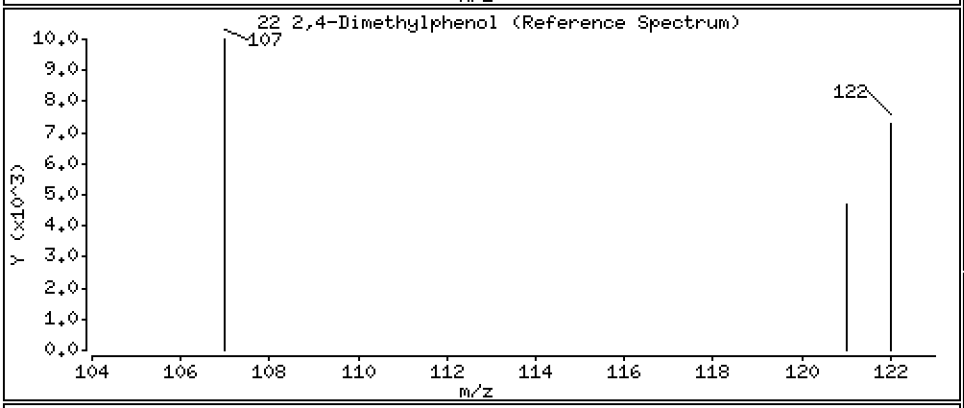
Column diameter: 0.25

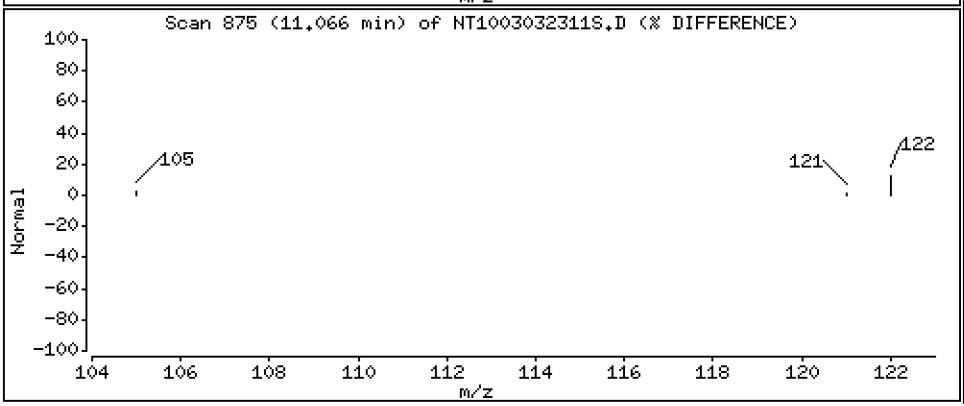
22 2,4-Dimethylphenol

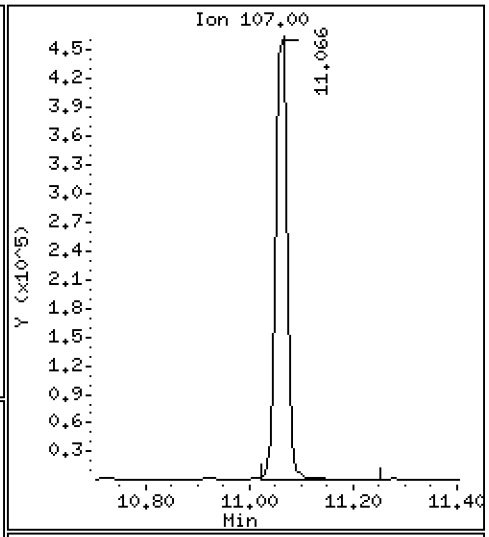
Concentration: 4.499 ug/L

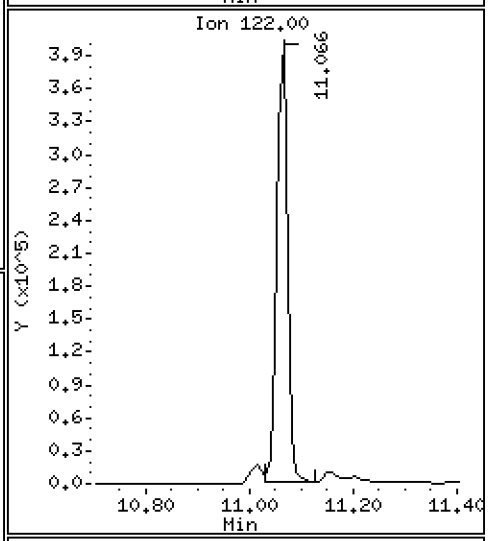


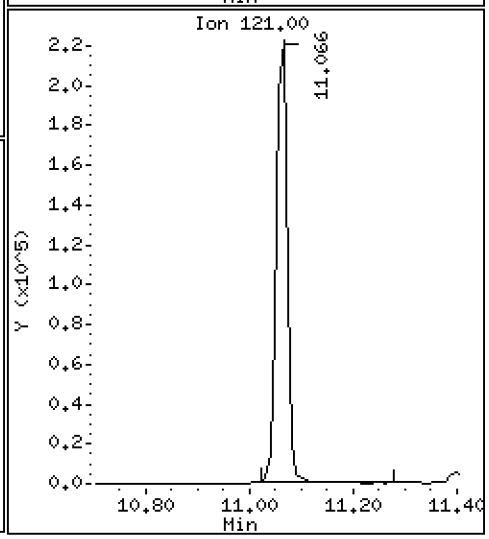












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

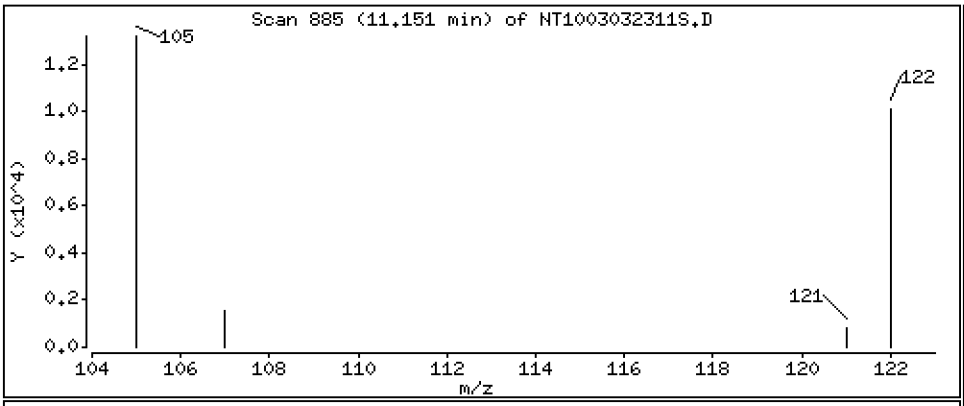
Operator: JGR

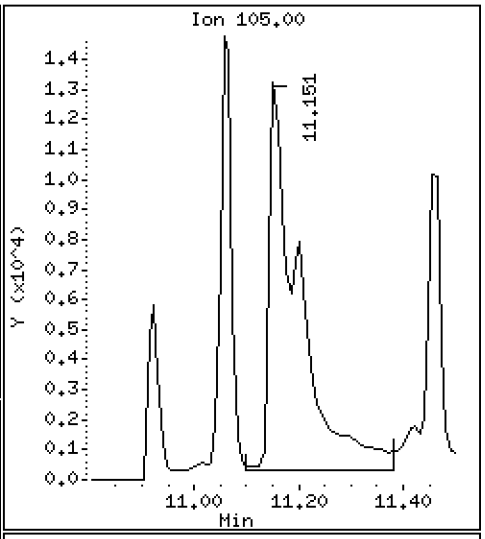
Column phase: ZB-5msi

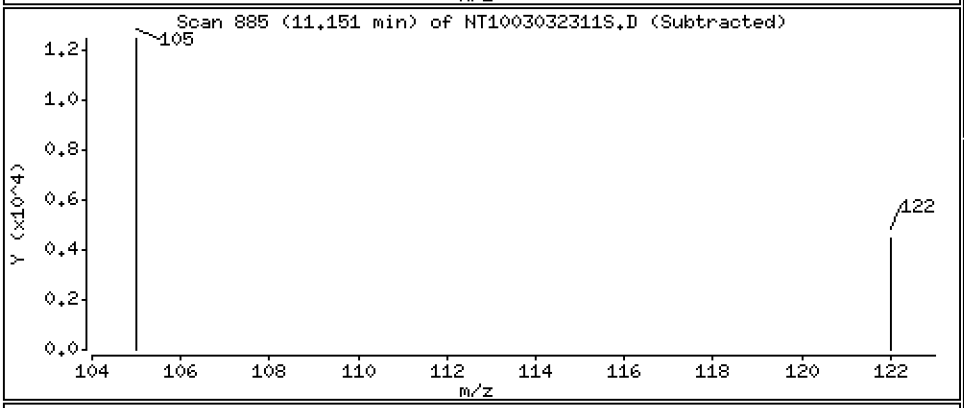
Column diameter: 0.25

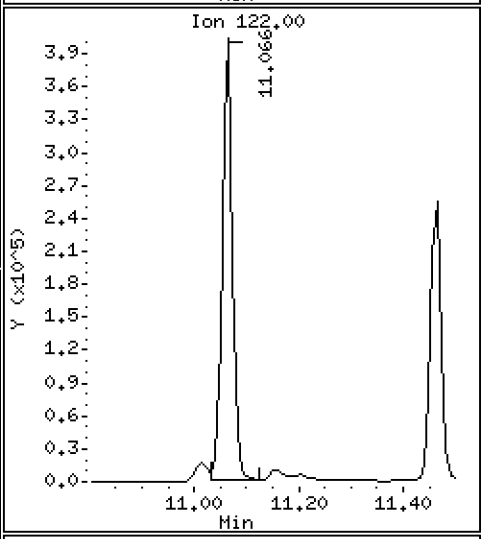
24 Benzoic acid

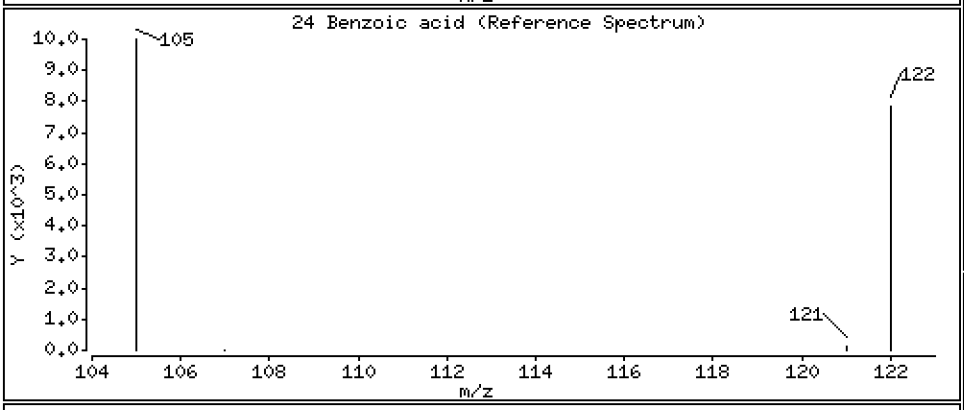
Concentration: 0.5888 ug/L

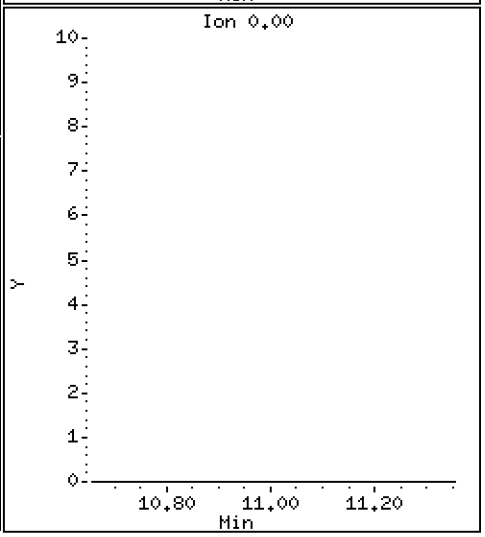


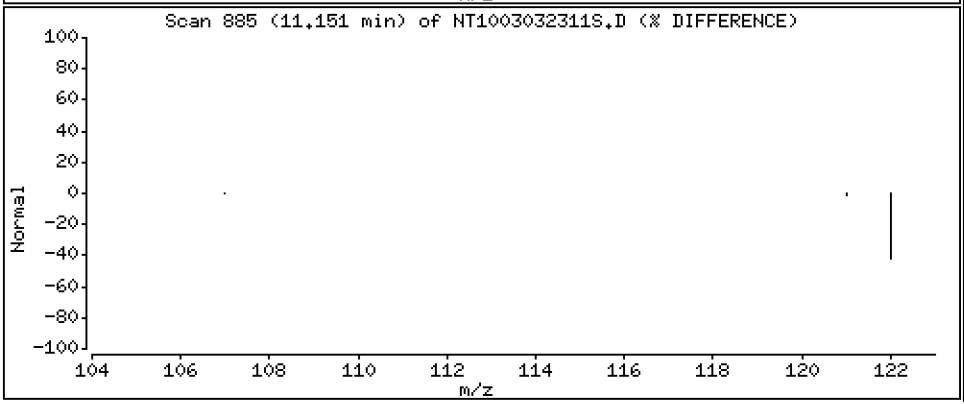












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

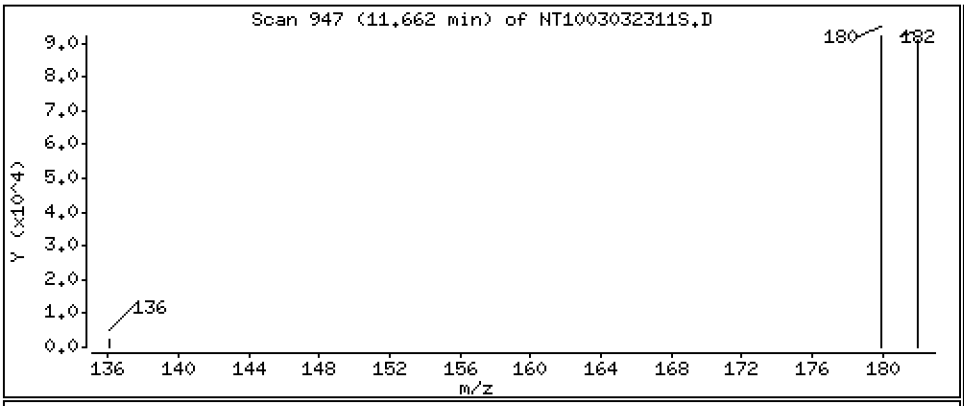
Operator: JGR

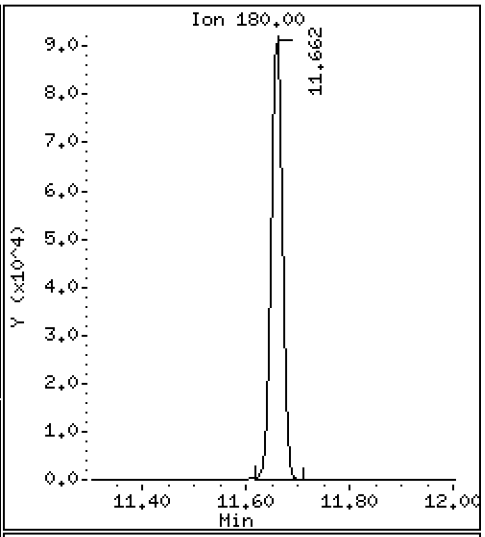
Column phase: ZB-5msi

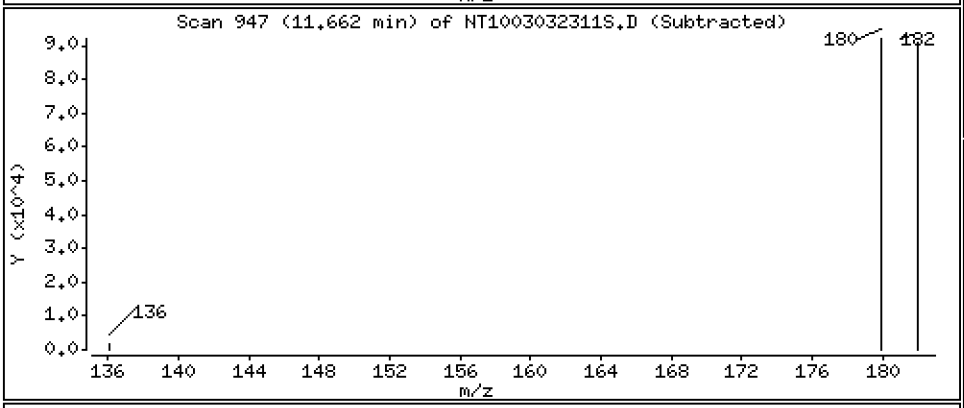
Column diameter: 0.25

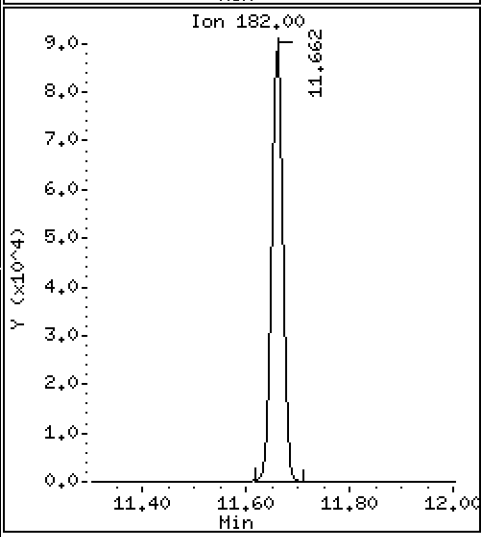
26 1,2,4-Trichlorobenzene

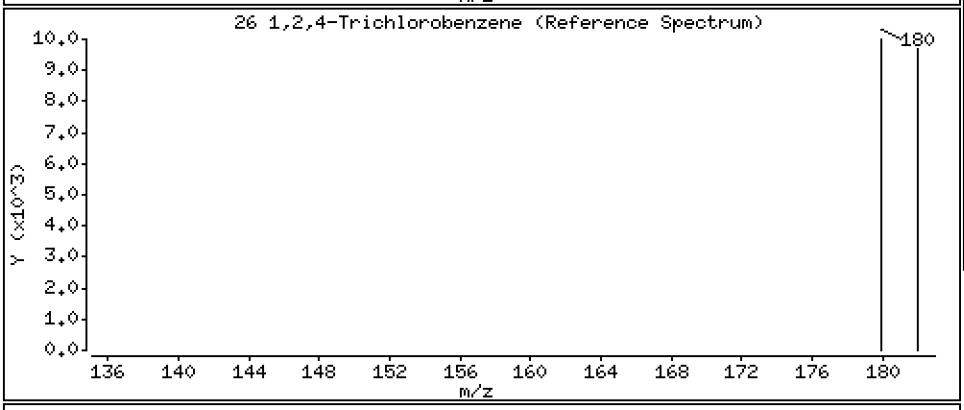
Concentration: 1.096 ug/L

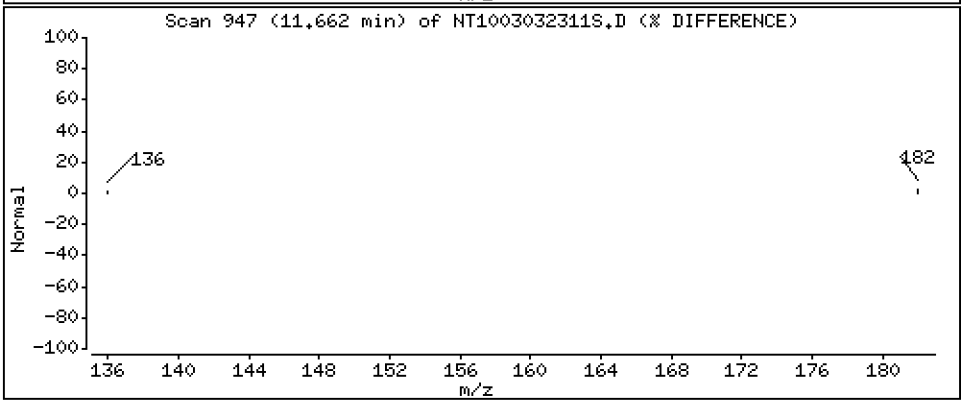












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

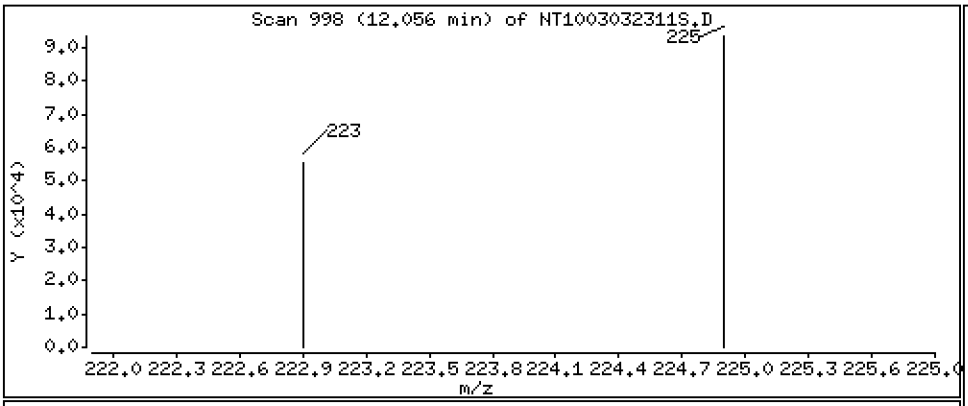
Operator: JGR

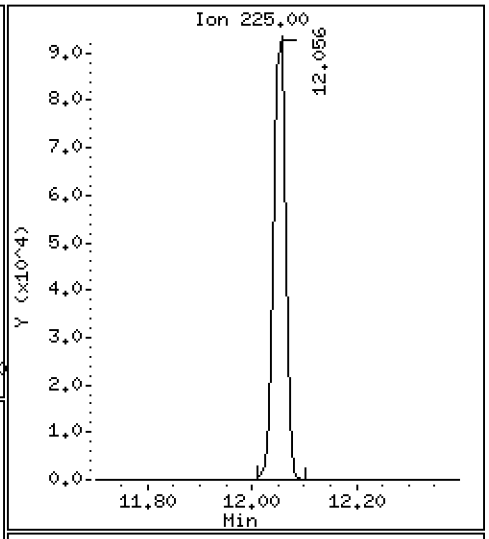
Column phase: ZB-5msi

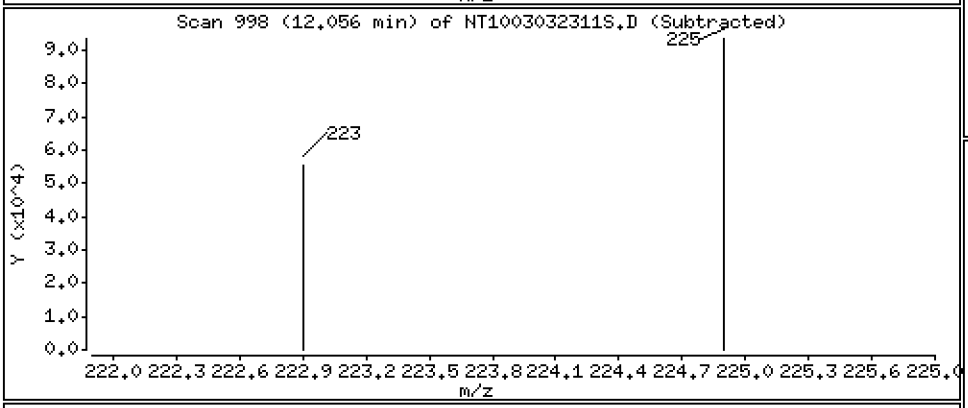
Column diameter: 0.25

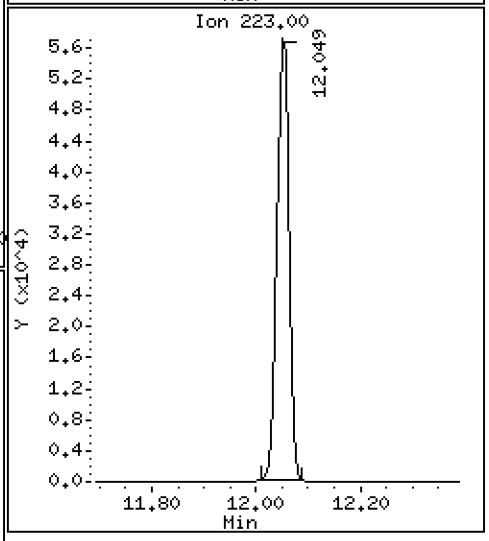
30 Hexachlorobutadiene

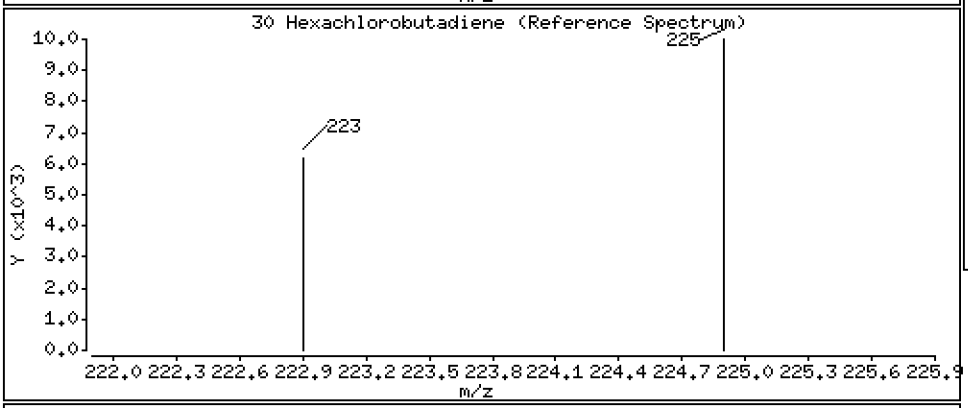
Concentration: 1.490 ug/L

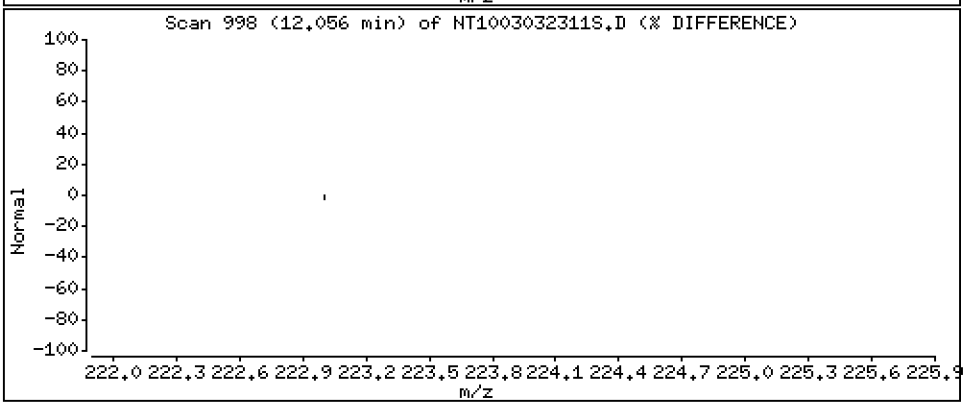












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Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

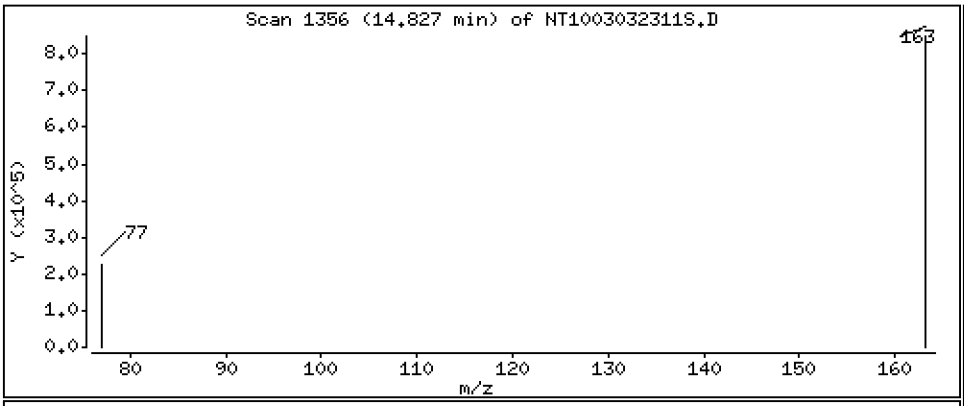
Operator: JGR

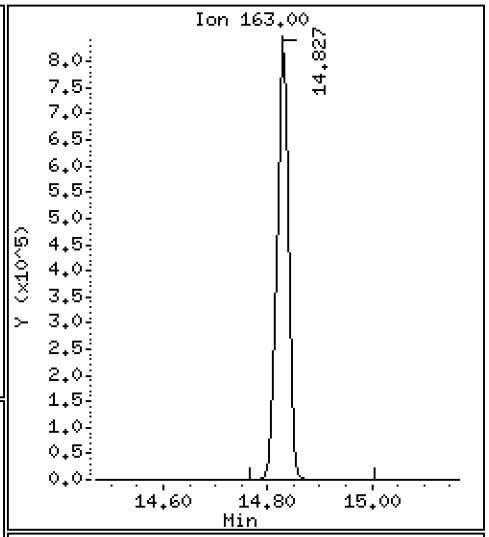
Column phase: ZB-5msi

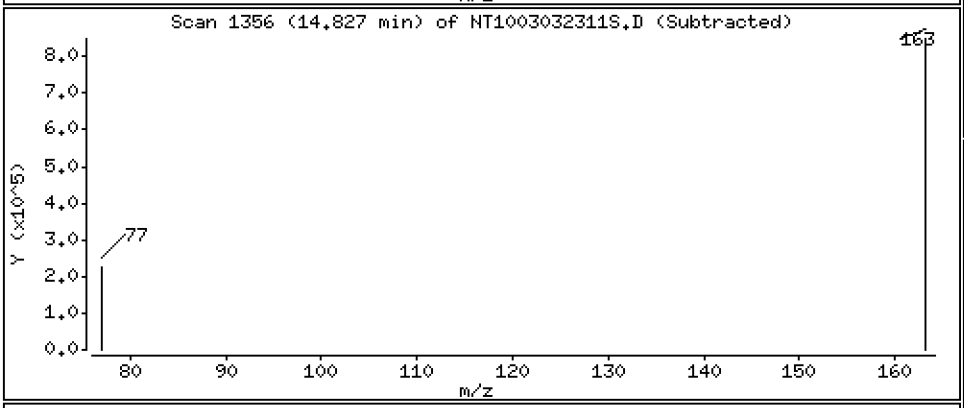
Column diameter: 0.25

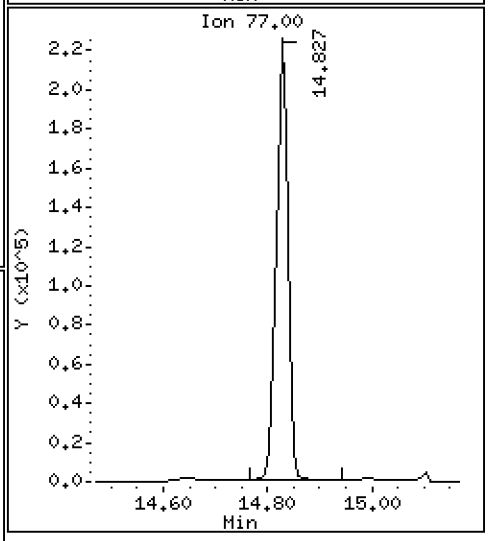
39 Dimethylphthalate

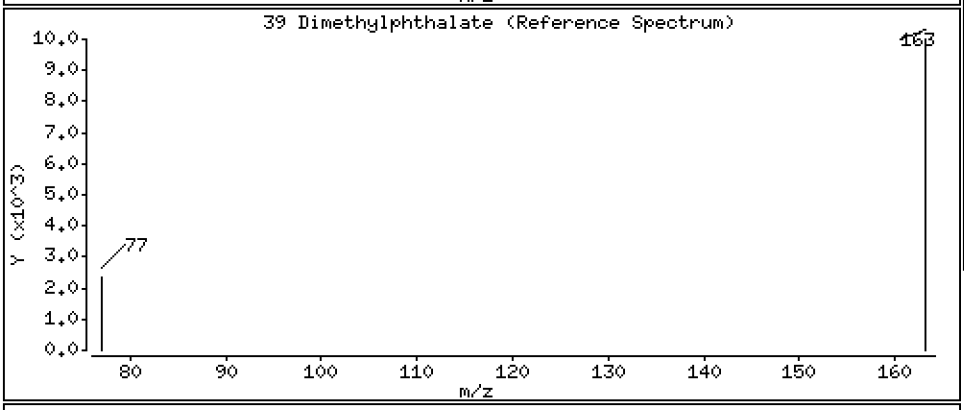
Concentration: 4.593 ug/L

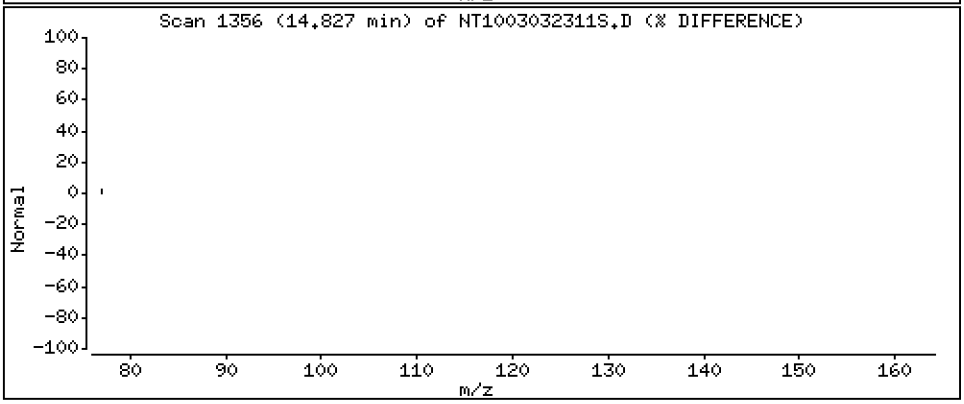












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323115.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

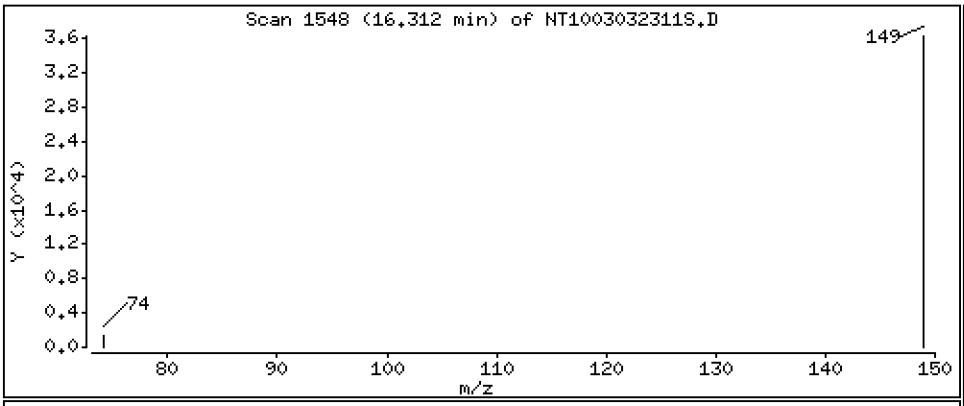
Operator: JGR

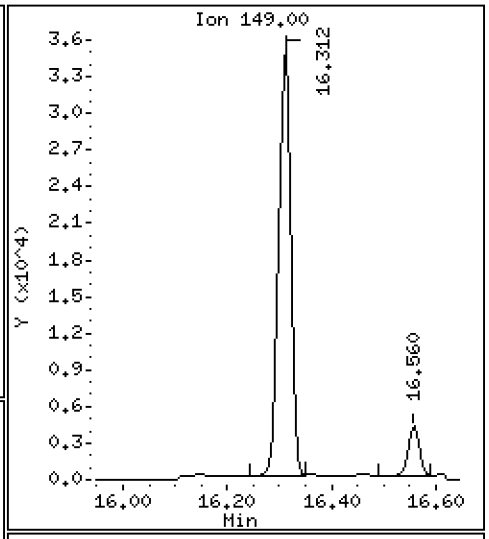
Column phase: ZB-5msi

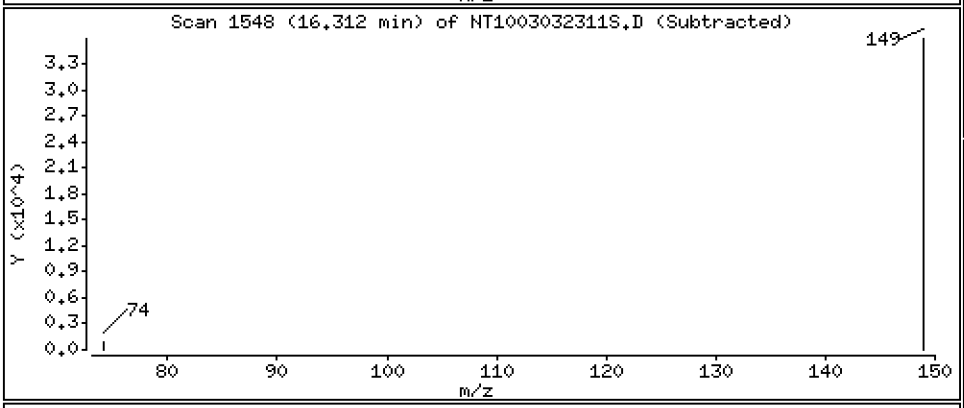
Column diameter: 0.25

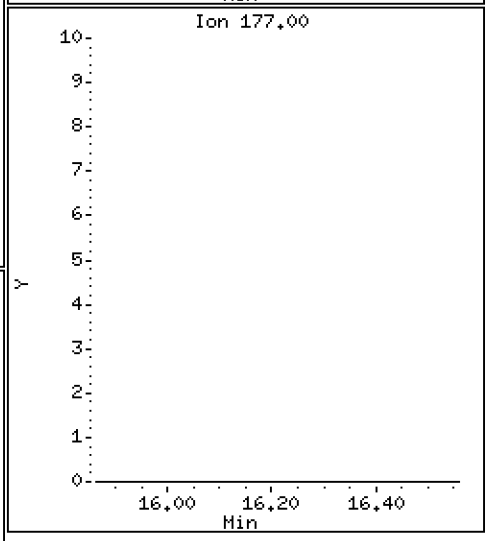
50 Diethylphthalate

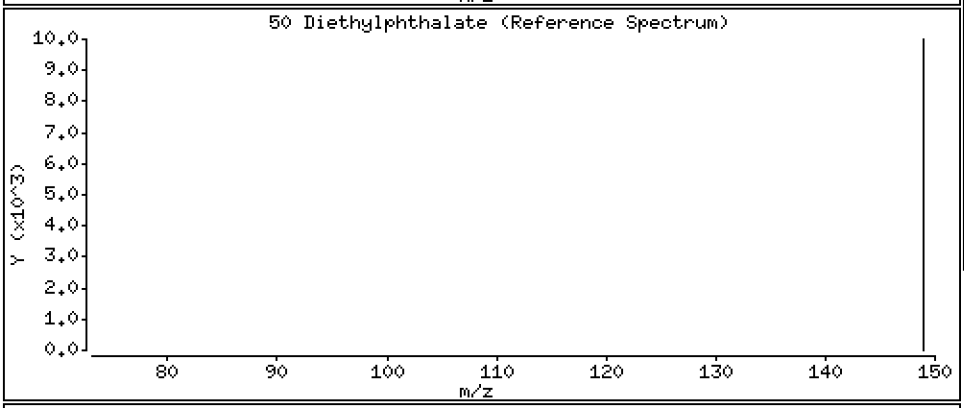
Concentration: 0.2084 ug/L

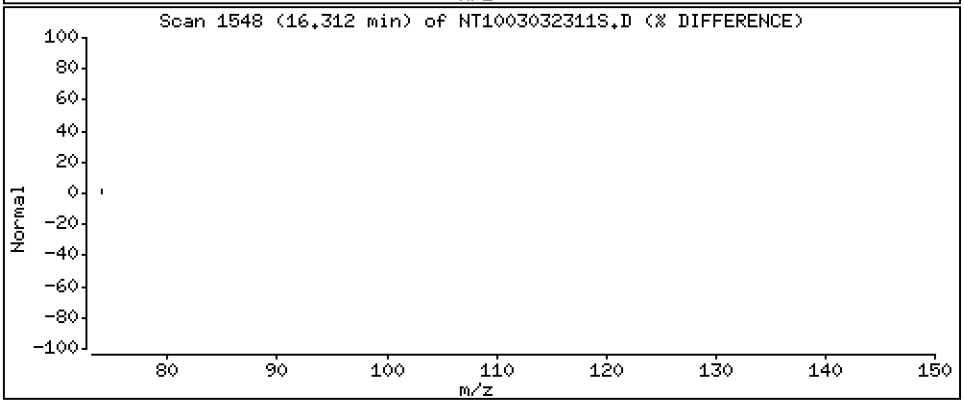












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323115.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

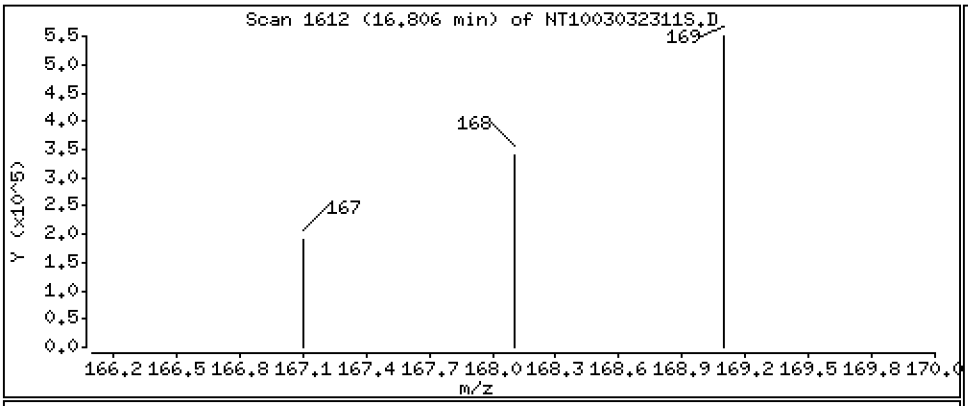
Operator: JGR

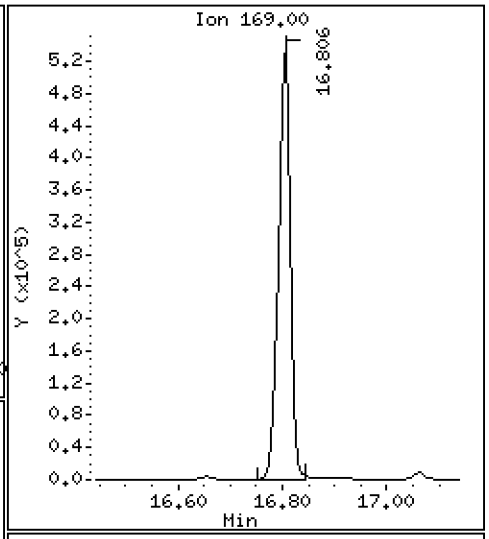
Column phase: ZB-5msi

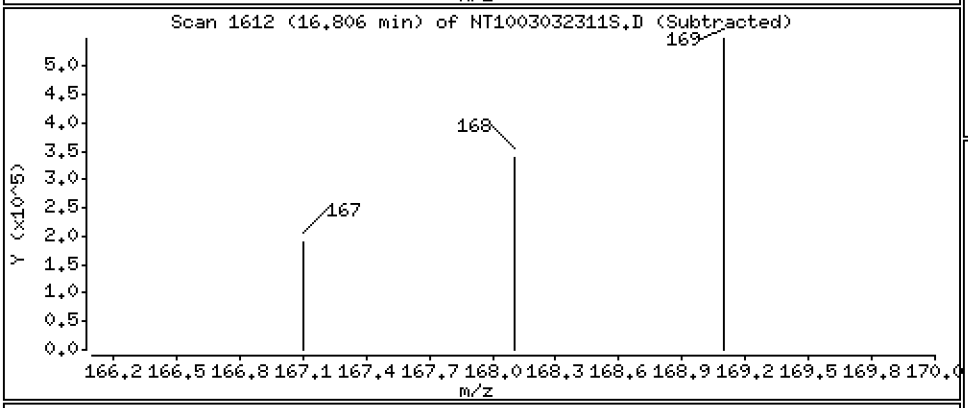
Column diameter: 0.25

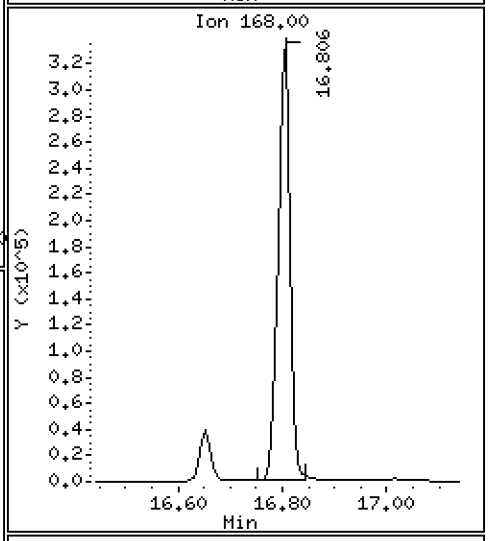
54 N-Nitrosodiphenylamine

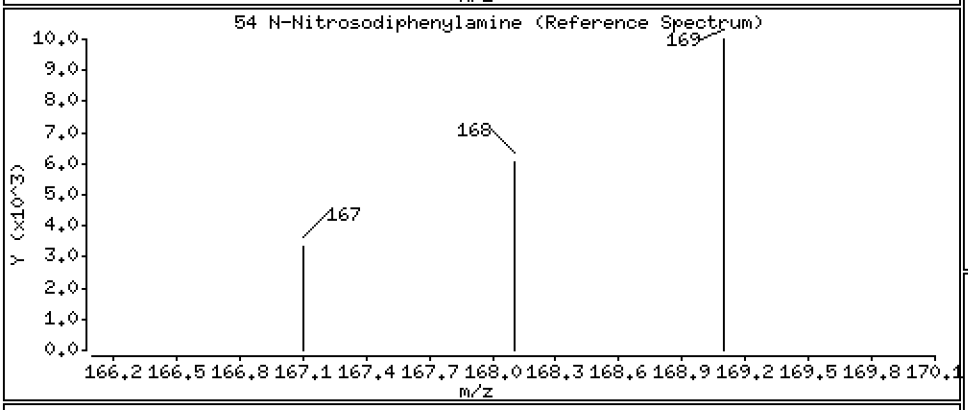
Concentration: 3.345 ug/L

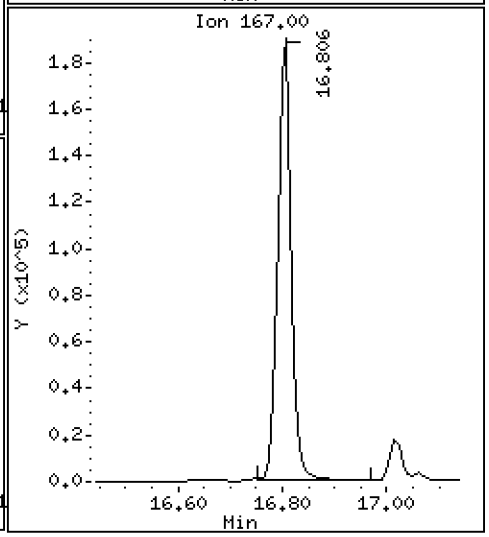


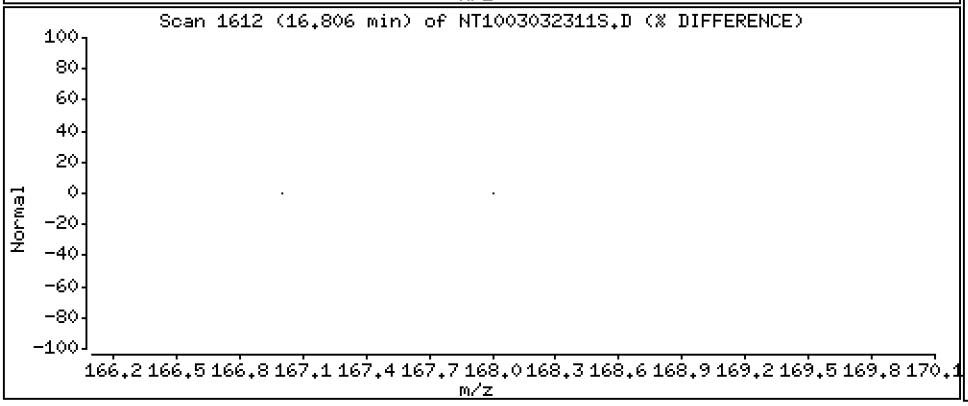












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323115.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

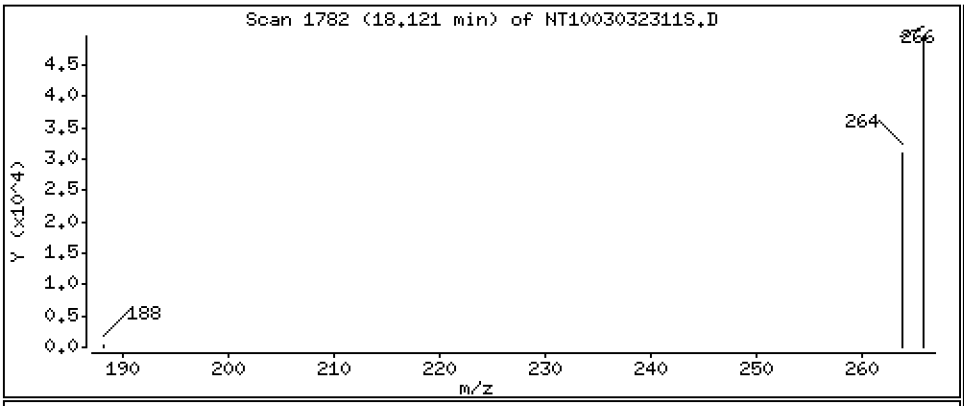
Operator: JGR

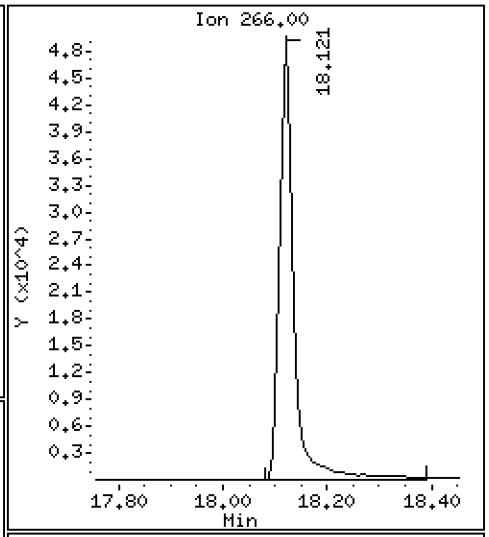
Column phase: ZB-5msi

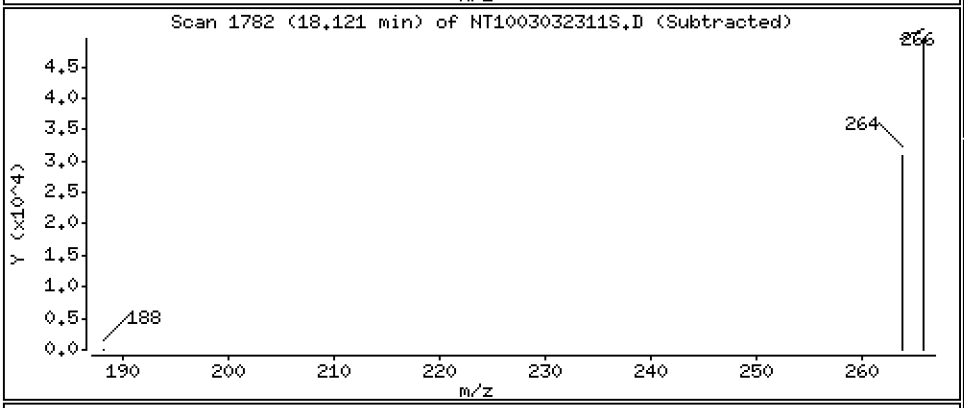
Column diameter: 0.25

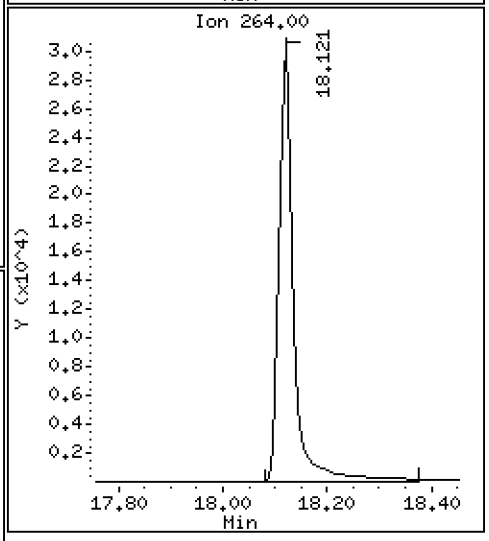
58 Pentachlorophenol

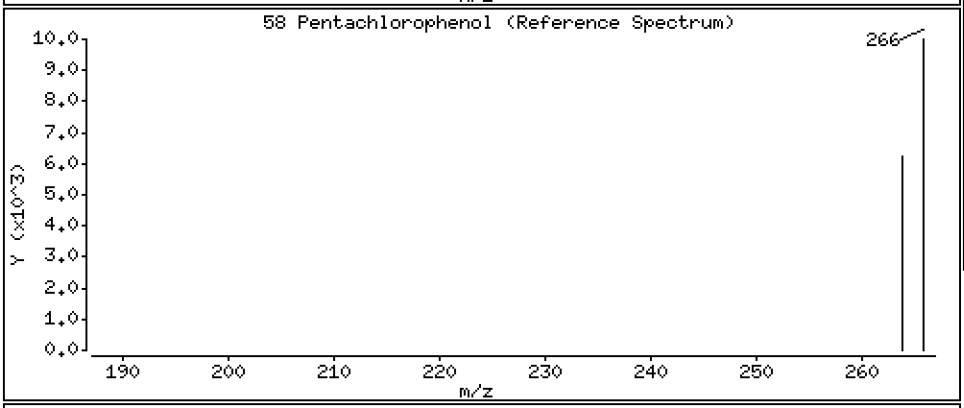
Concentration: 1.736 ug/L

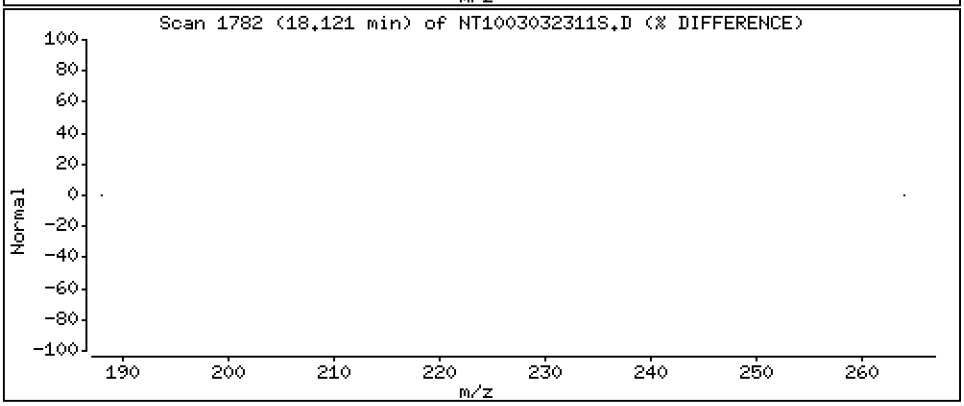












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323115.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

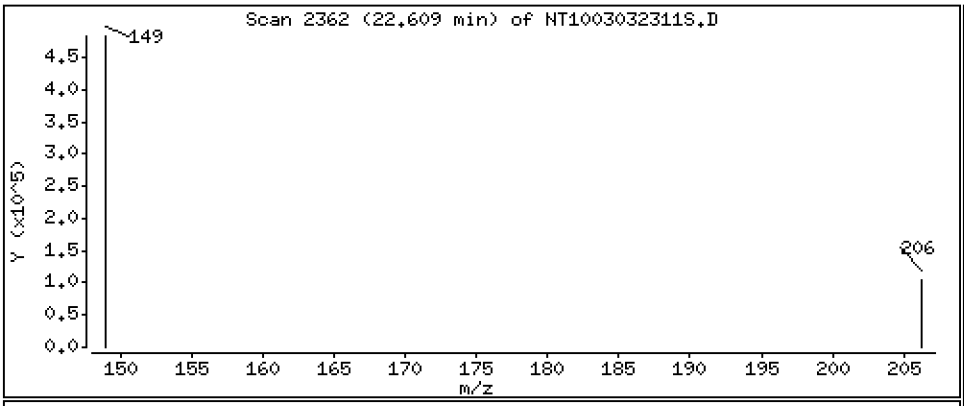
Operator: JGR

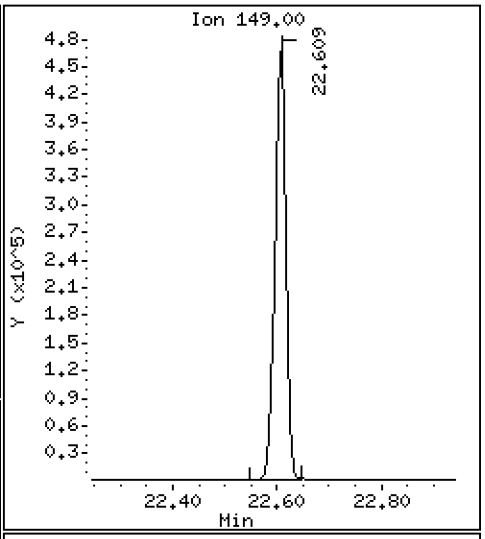
Column phase: ZB-5msi

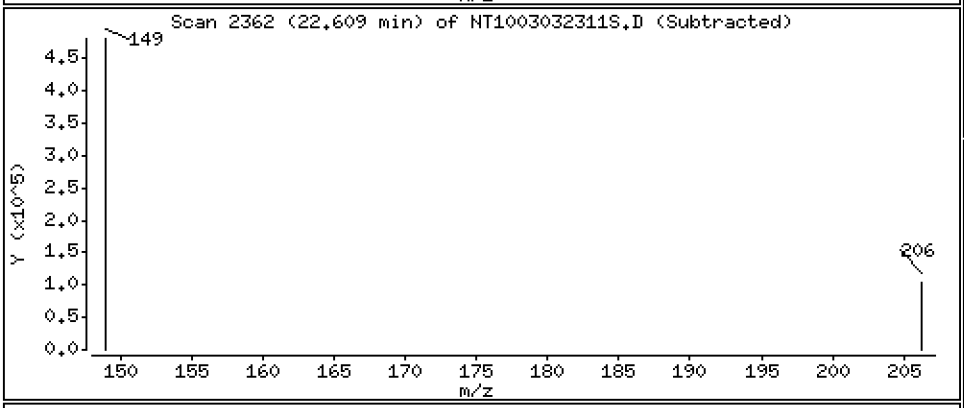
Column diameter: 0.25

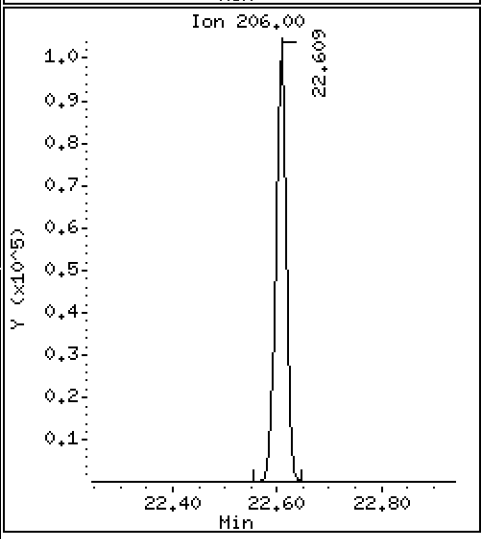
67 Butylbenzylphthalate

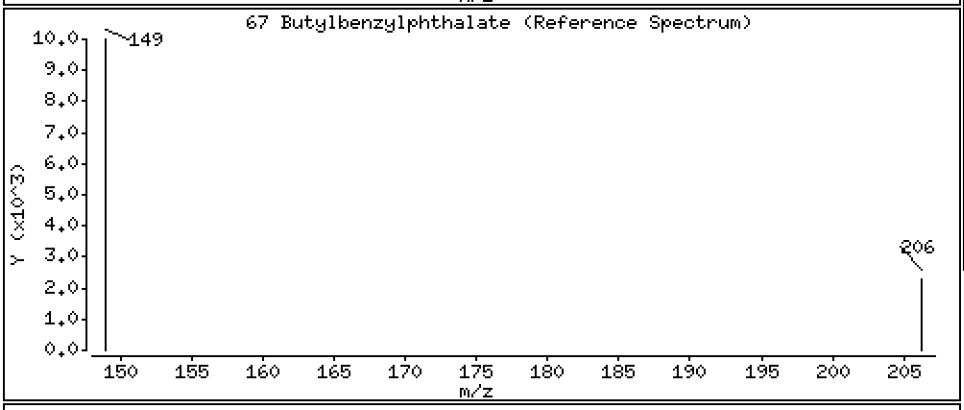
Concentration: 3.148 ug/L

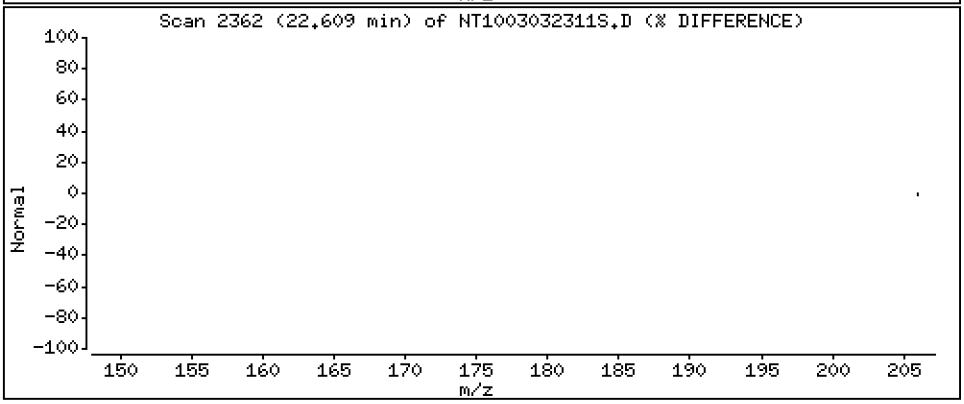












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032311S.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

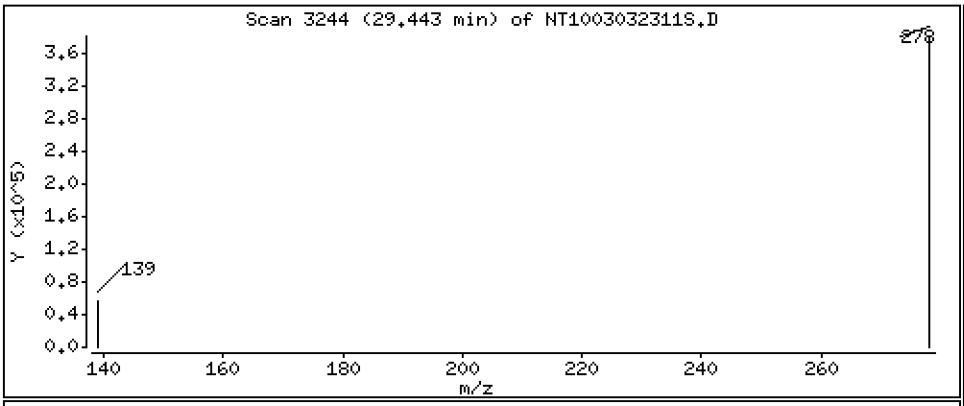
Operator: JGR

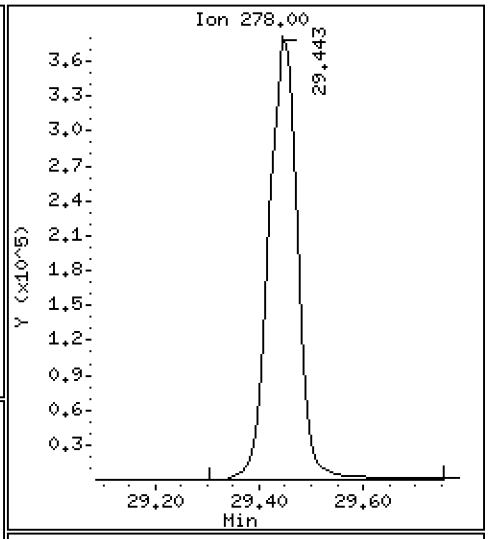
Column phase: ZB-5msi

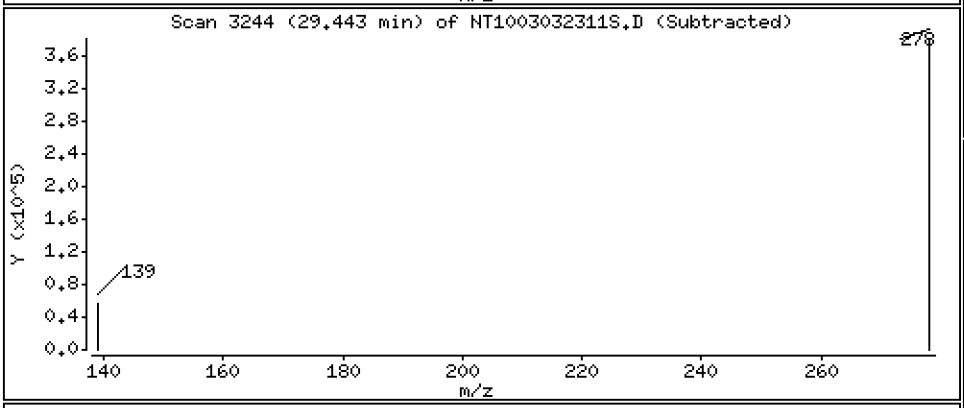
Column diameter: 0.25

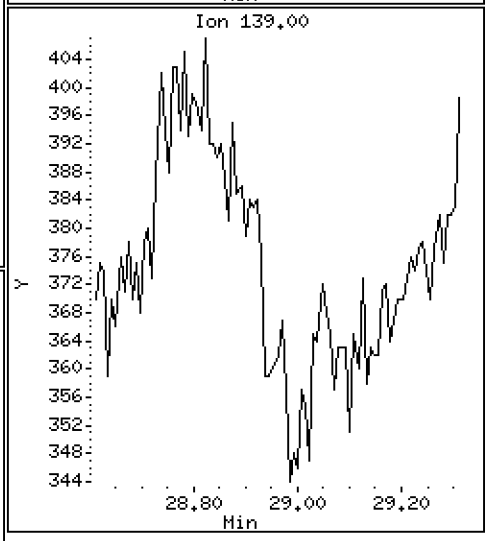
79 Dibenzo(a,h)anthracene

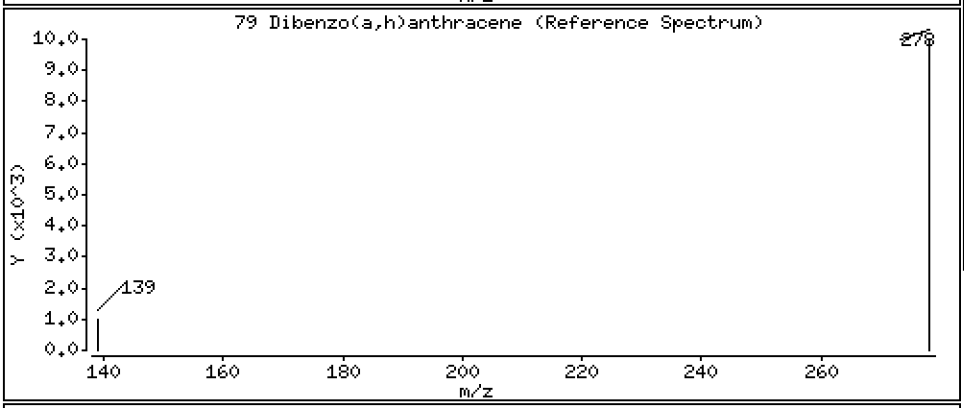
Concentration: 4.386 ug/L

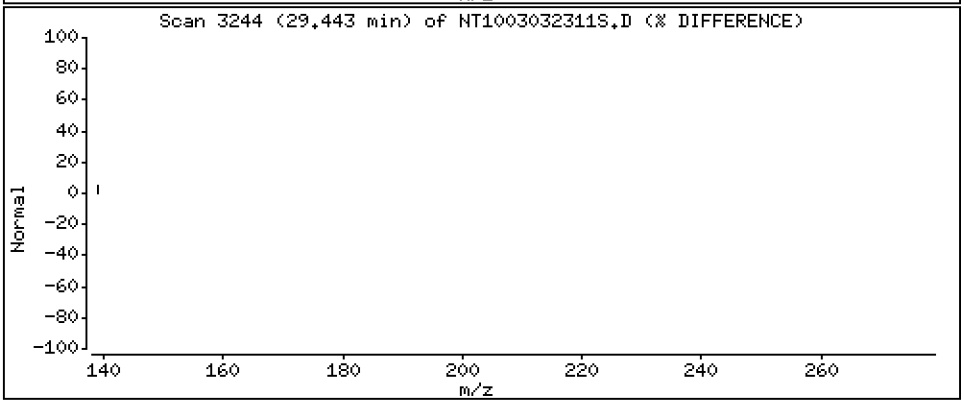












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323115.D

Date : 04-MAR-2023 00:08

Client ID:

Instrument: nt10.i

Sample Info: BLA0673-SRM1

Volume Injected (uL): 1.0

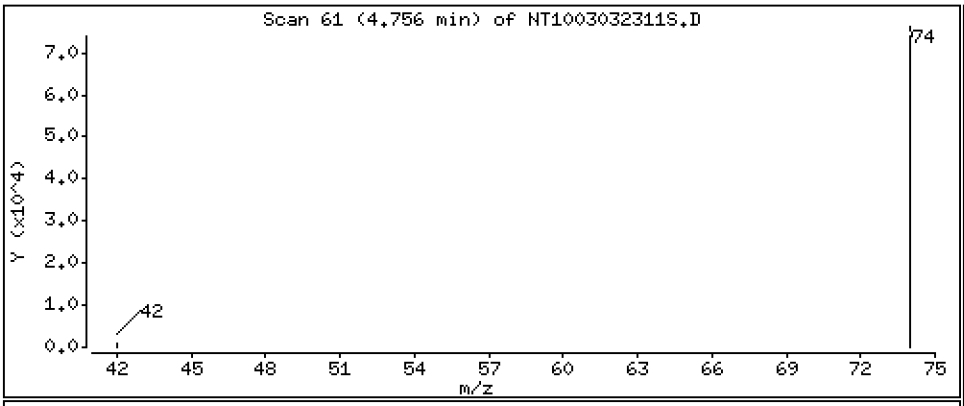
Operator: JGR

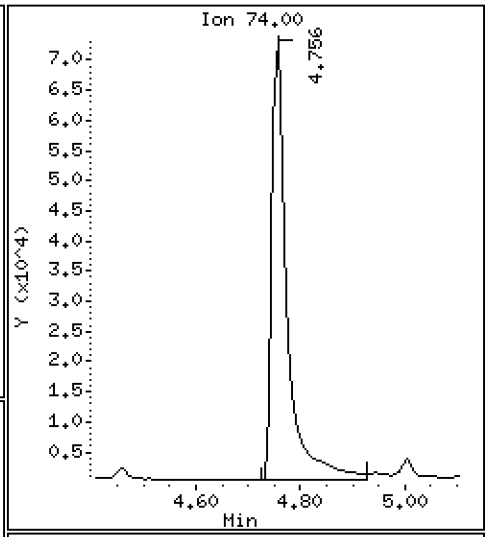
Column phase: ZB-5msi

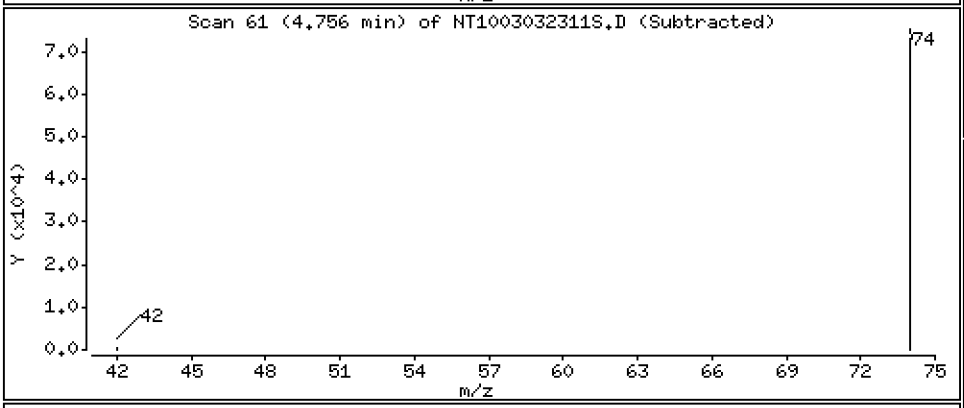
Column diameter: 0.25

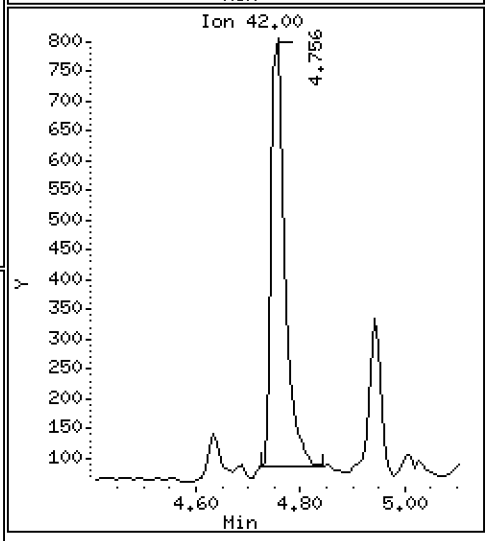
90 N-Nitrosodimethylamine

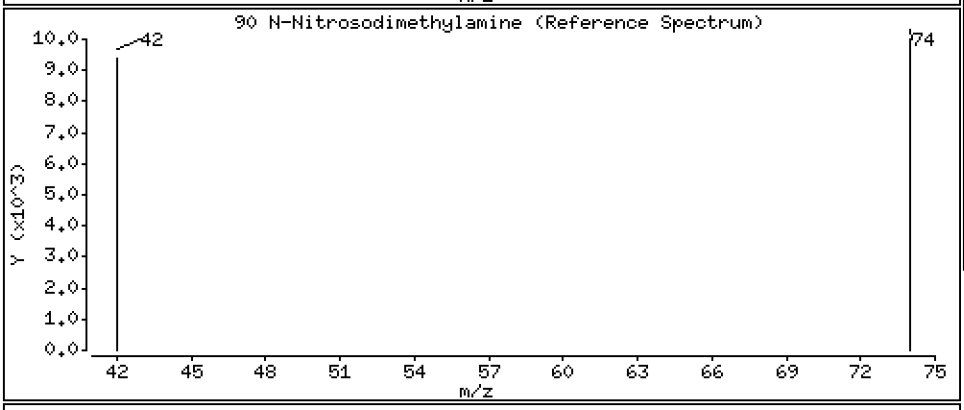
Concentration: 1.605 ug/L

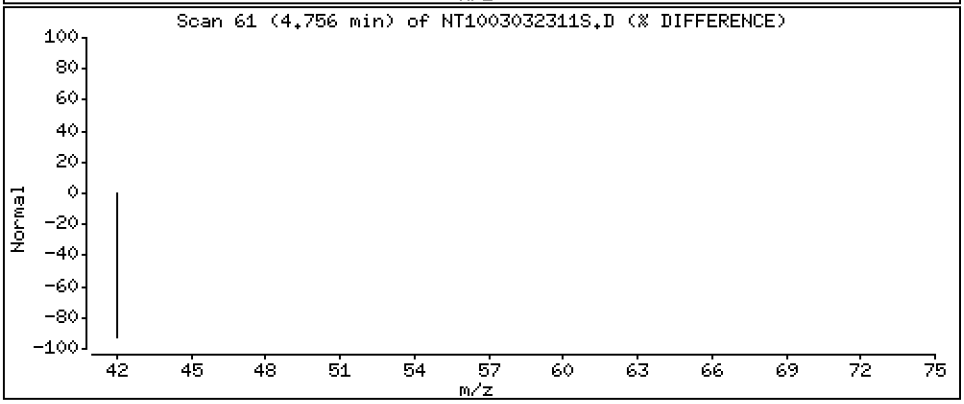












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032311S.D
Lab Smp Id: BLA0673-SRM2
Inj Date : 04-MAR-2023 00:08 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLA0673-SRM1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 10:19 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.925	6.918	(0.746)	966582	6.49045	6.490(R)
3	Phenol	94	8.564	8.556	(0.923)	520687	2.34253	2.343
7	1,3-Dichlorobenzene	146	9.174	9.174	(0.988)	116627	0.60328	0.6033
* 8	1,4-Dichlorobenzene-d4	152	9.283	9.283	(1.000)	521634	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	108	9.710	9.702	(1.046)	759382	5.48241	5.482
15	4-Methylphenol	108	9.997	9.989	(1.077)	1015275	6.81348	6.813
16	N-Nitroso-di-n-propylamine	70	10.028	10.020	(1.080)	10765	0.11003	0.1100
22	2,4-Dimethylphenol	107	11.066	11.057	(0.939)	713363	4.49870	4.499
24	Benzoic acid	105	11.150	11.150	(0.946)	50681	0.58878	0.5888(M)
26	1,2,4-Trichlorobenzene	180	11.662	11.654	(0.990)	145594	1.09613	1.096
* 27	Naphthalene-d8	136	11.786	11.778	(1.000)	1845415	4.00000	
30	Hexachlorobutadiene	225	12.056	12.048	(1.023)	140450	1.49006	1.490
39	Dimethylphthalate	163	14.827	14.819	(0.962)	1286255	4.59322	4.593
* 42	Acenaphthene-d10	162	15.407	15.391	(1.000)	881928	4.00000	
50	Diethylphthalate	149	16.311	16.296	(1.059)	55037	0.20841	0.2084
54	N-Nitrosodiphenylamine	169	16.806	16.790	(0.907)	847764	3.34487	3.345
57	Hexachlorobenzene	284	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.120	18.105	(0.977)	91664	1.73597	1.736
*	59 Phenanthrene-d10	188	18.538	18.522	(1.000)	1566096	4.00000	
$	66 Terphenyl-d14	244	21.702	21.695	(0.918)	661943	6.22143	6.221(R)
	67 Butylbenzylphthalate	149	22.608	22.593	(0.957)	691450	3.14834	3.148
*	69 Chrysene-d12	240	23.630	23.615	(1.000)	1315710	4.00000	
*	77 Perylene-d12	264	26.457	26.449	(1.000)	1362792	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.443	29.435	(1.113)	1482024	4.38631	4.386
	90 N-Nitrosodimethylamine	74	4.755	4.755	(0.512)	141539	1.60531	1.605

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 03-MAR-2023
Lab File ID: NT1003032311S.D Calibration Time: 19:05
Lab Smp Id: BLA0673-SRM2
Analysis Type: SV Level: LOW
Quant Type: ISTD Sample Type: AIR
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	602309	301155	1204618	521634	-13.39
27 Naphthalene-d8	2101699	1050850	4203398	1845415	-12.19
42 Acenaphthene-d10	1002910	501455	2005820	881928	-12.06
59 Phenanthrene-d10	1732061	866031	3464122	1566096	-9.58
69 Chrysene-d12	1410089	705045	2820178	1315710	-6.69
77 Perylene-d12	1732981	866491	3465962	1362792	-21.36

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.79	0.07
42 Acenaphthene-d10	15.39	14.89	15.89	15.41	0.10
59 Phenanthrene-d10	18.52	18.02	19.02	18.54	0.08
69 Chrysene-d12	23.62	23.12	24.12	23.63	0.07
77 Perylene-d12	26.45	25.95	26.95	26.46	0.03

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

REVIEW SUMMARY FOR FILE - NT1003032311S.D

Lab ID: BLA0673-SRM2
nt10.i, 20230303.b\SIM.b\SIMABN2.m,   04-MAR-2023 00:08

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.113	1.000	0.1128	Dibenzo(a,h)anthracene

RRT check based on Ccal File: SIM.b/NT1003032303S.D

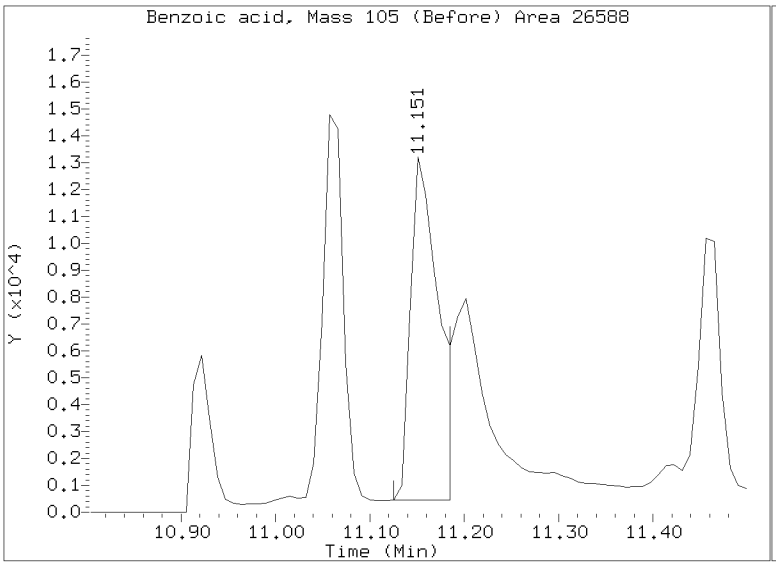
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

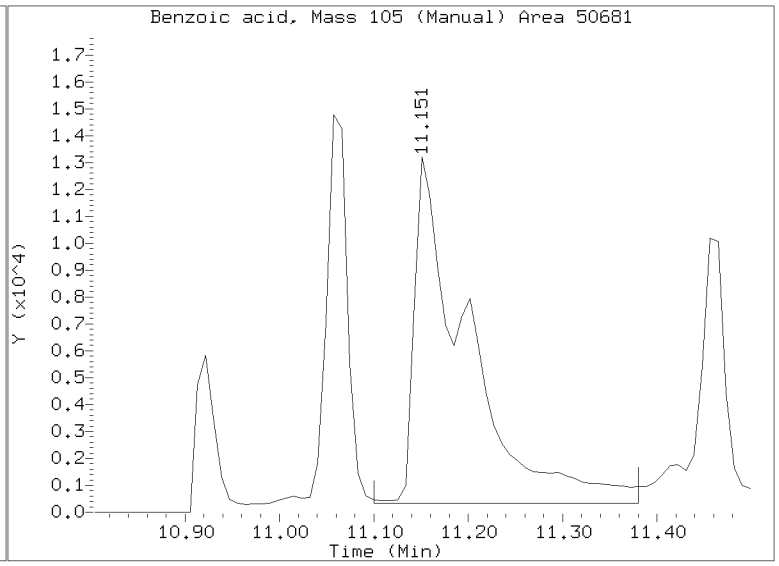
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230303.b/SIM.b/NT1003032311S.D
Injection Date: 04-MAR-2023 00:08
Lab ID:BLA0673-SRM2 Client ID:
Report Date: 03/17/2023 10:19





Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E-SIM

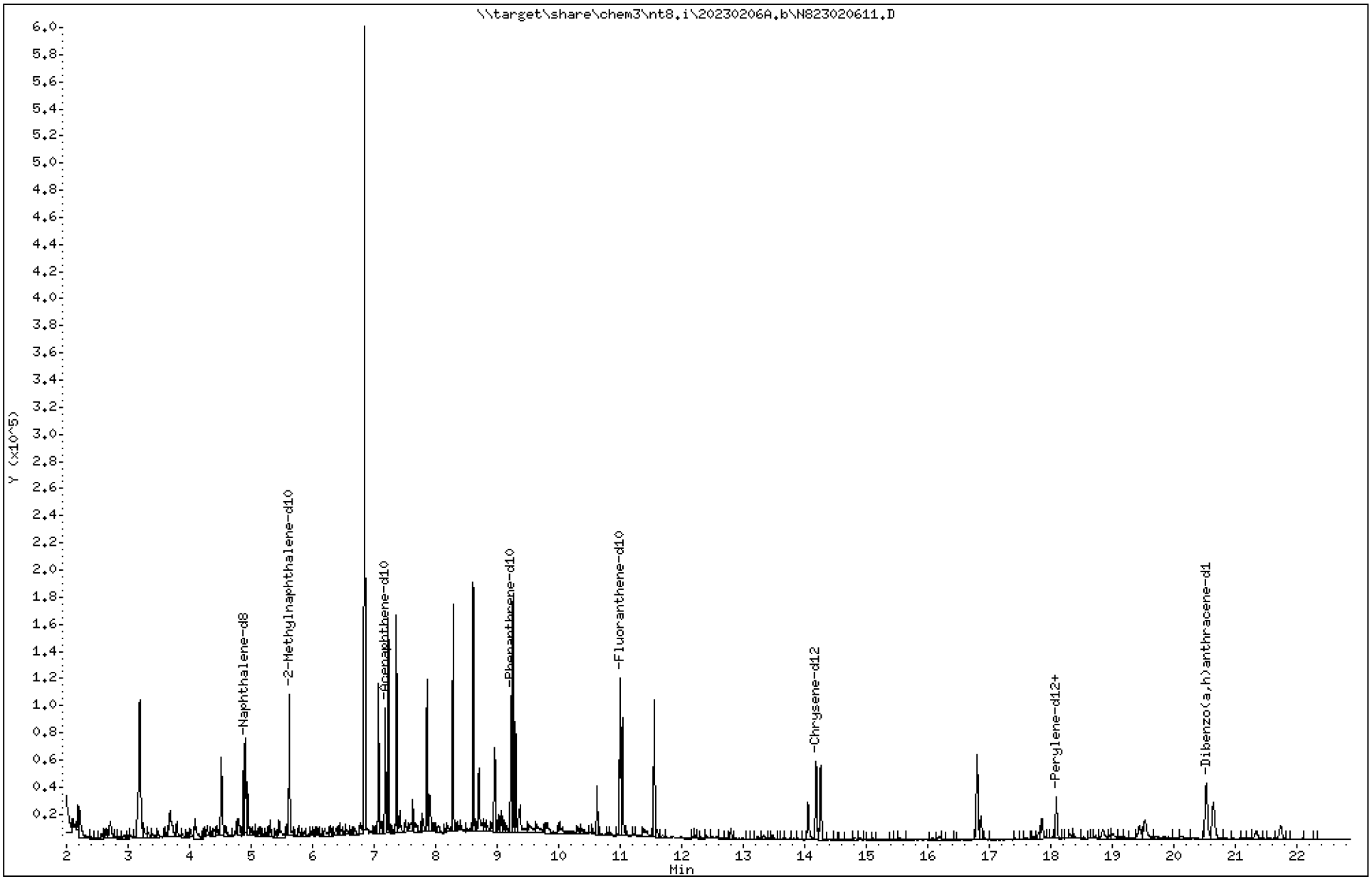
Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0683-SRM1
Batch: BLA0683
Initial/Final: 5 g / 0.5 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 02/06/2023 17:18
Standard ID: L000097
Expires: 10/31/2025
Standard Lot#: SQC017 (LRAD3953)
Description: SQC017-40G PAHs by HPLC40g

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Benzo(a)anthracene	110.00	88.7	1.65	10.0		80.6	26 - 174
Chrysene	231.00	176	2.11	10.0		76.3	43 - 156
Benzo(b)fluoranthene	318.00	383	2.74	10.0		120	0 - 211
Benzo(k)fluoranthene	95.100	109	1.52	10.0		114	0 - 226
Benzo(a)pyrene	159.00	109	1.23	10.0		68.8	0 - 206
Indeno(1,2,3-cd)pyrene	119.00	106	2.10	10.0		88.7	44 - 155
Dibenzo(a,h)anthracene	220.00	226	1.78	10.0		103	45 - 155

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020611.D
Date : 06-FEB-2023 17:18
Client ID:
Sample Info: BLA0683-SRM1,

Instrument: nt8.i
Operator: JZ
Column phase: Rxi-17sil
Column diameter: 0.25



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Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

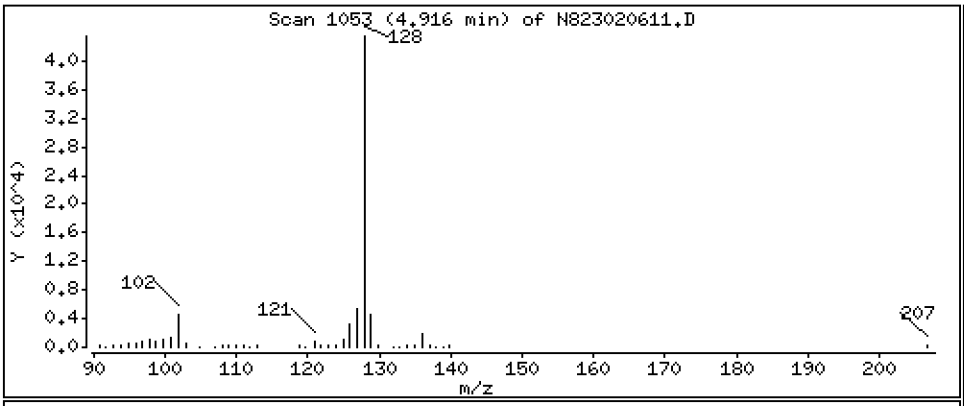
Operator: JZ

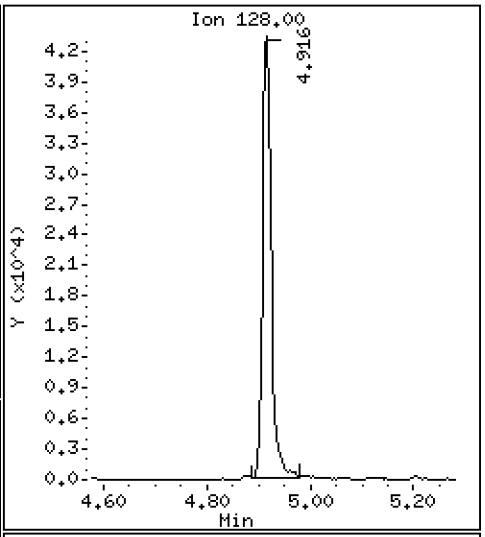
Column phase: Rxi-17sil

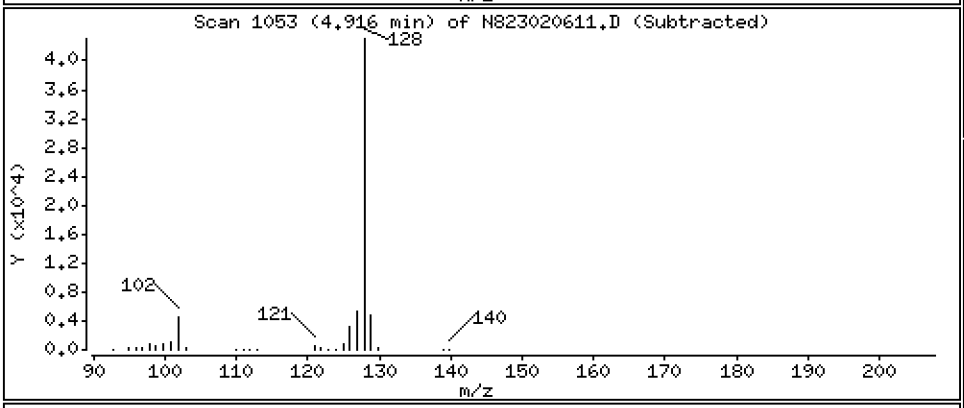
Column diameter: 0.25

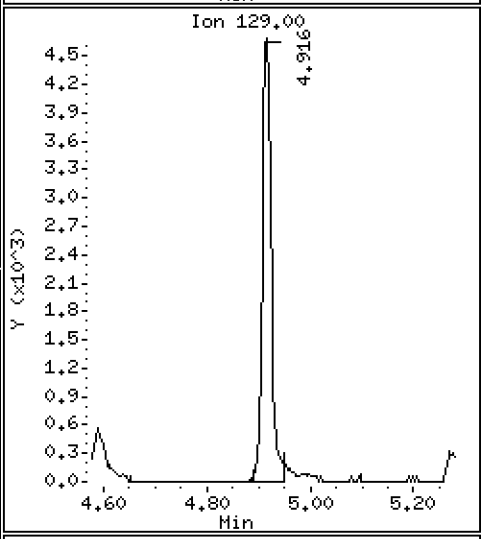
2 Naphthalene

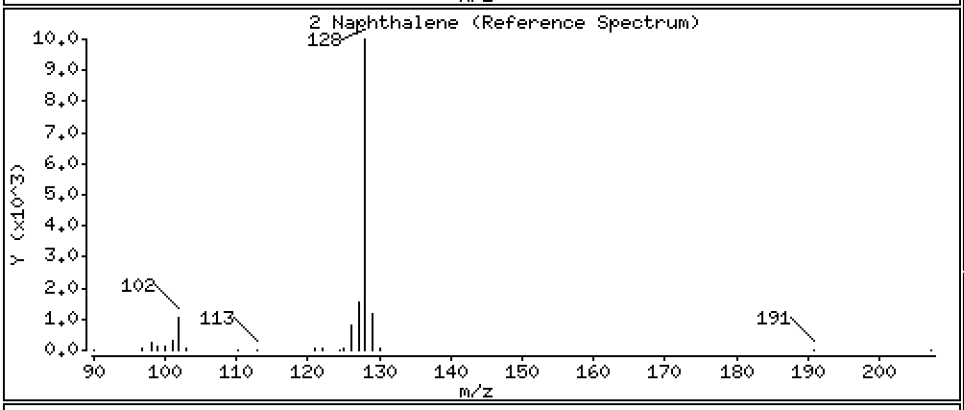
Concentration: 2.317 ug/mL

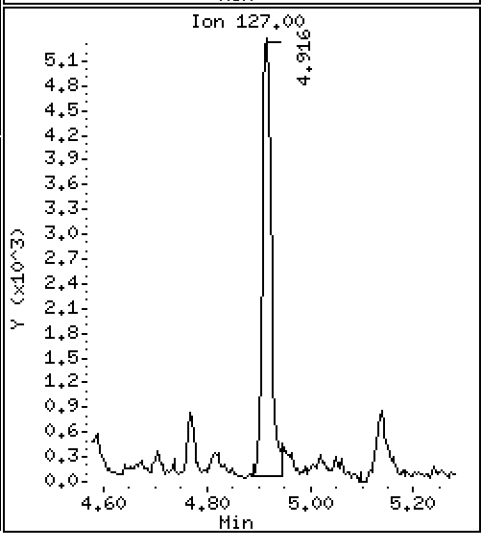


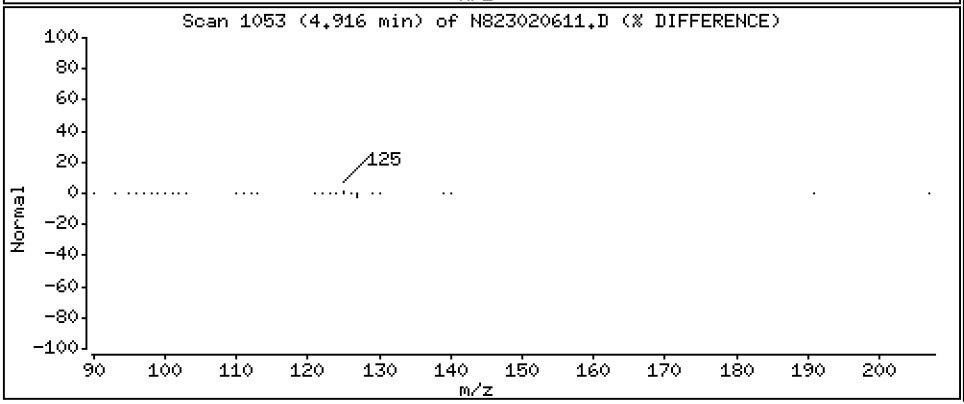












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Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

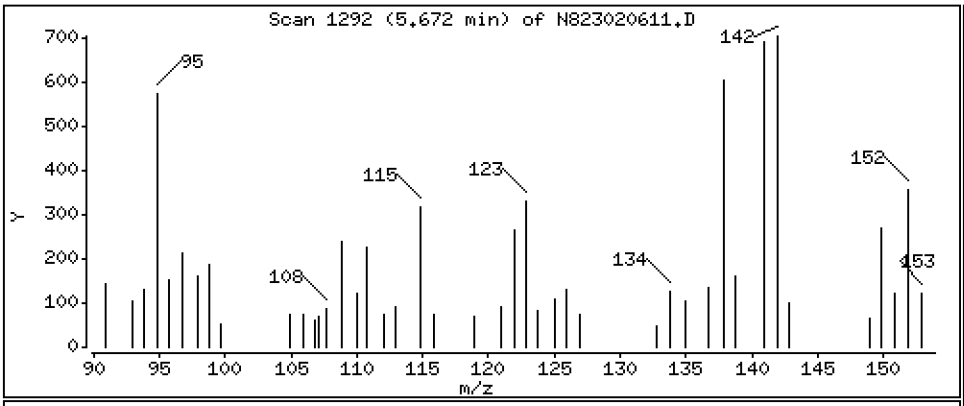
Operator: JZ

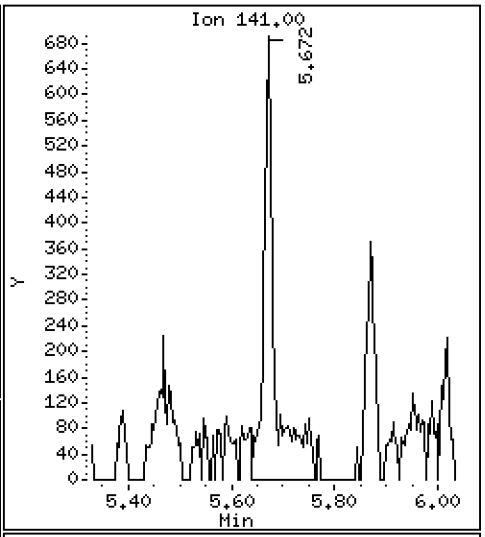
Column phase: Rxi-17sil

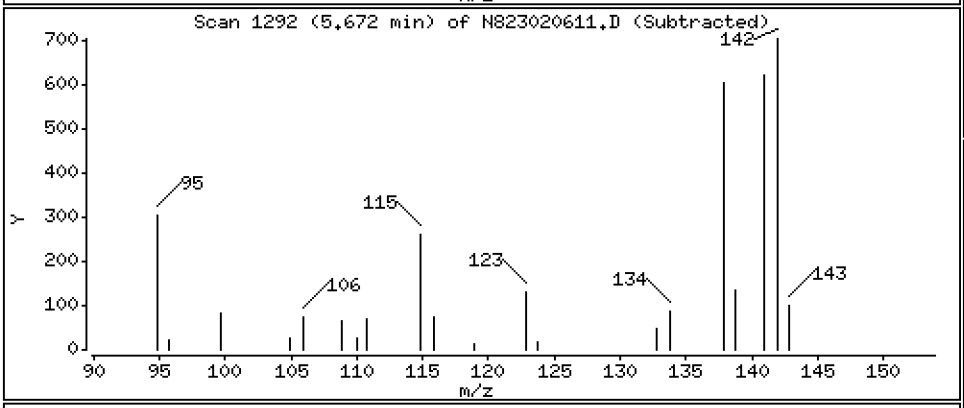
Column diameter: 0.25

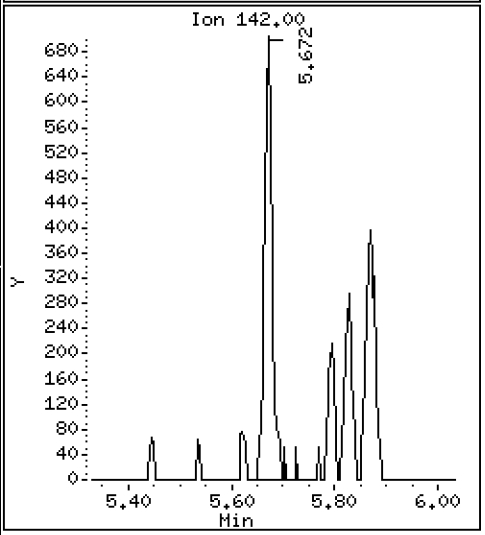
4 2-Methylnaphthalene

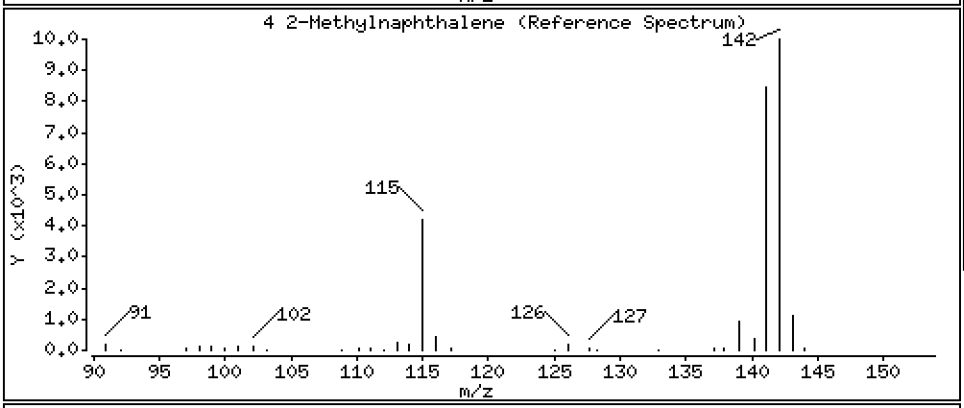
Concentration: 0.08433 ug/mL

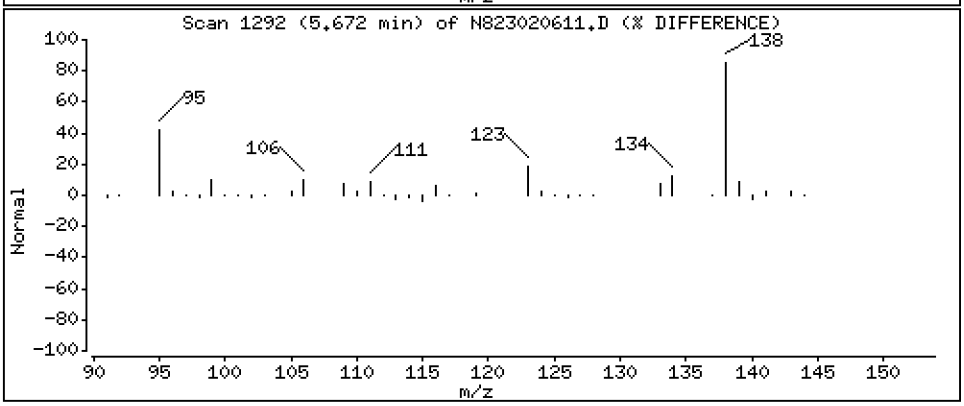












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Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

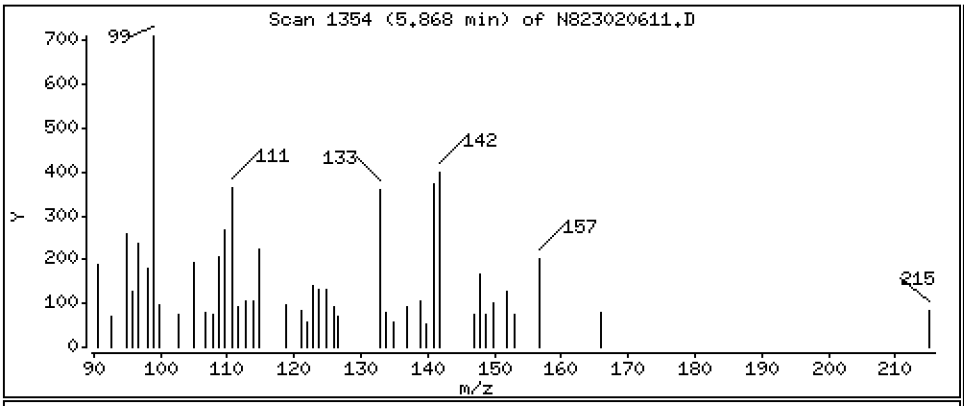
Operator: JZ

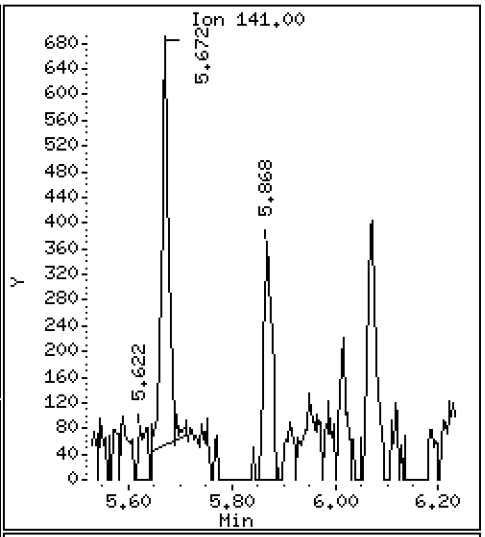
Column phase: Rxi-17sil

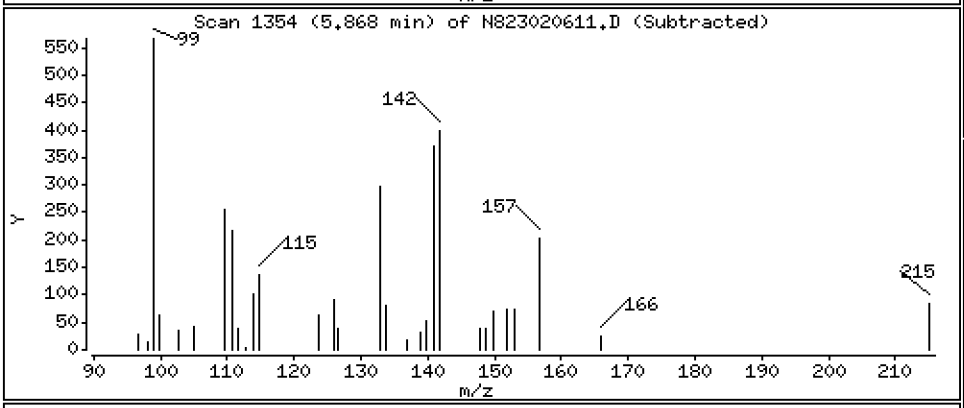
Column diameter: 0.25

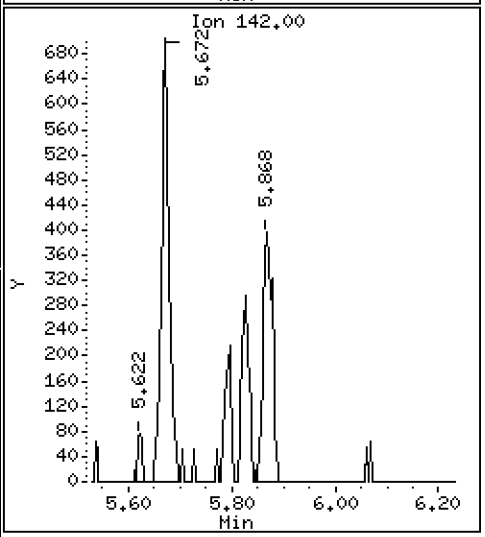
5 1-methylnaphthalene

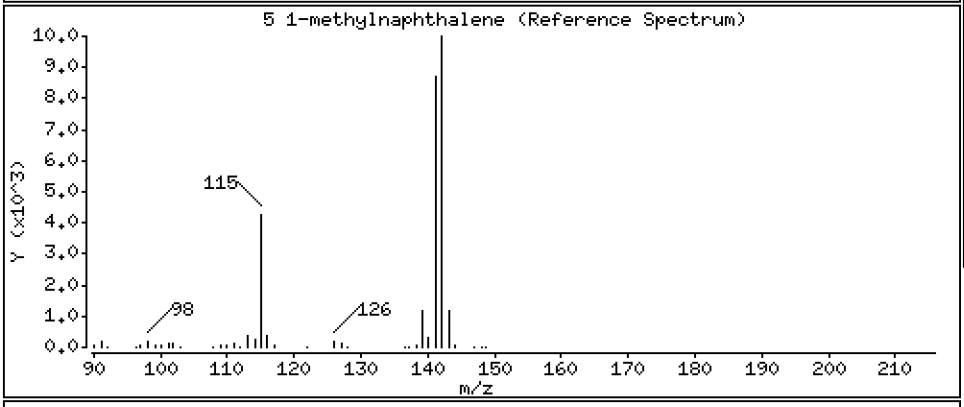
Concentration: 0.03258 ug/mL

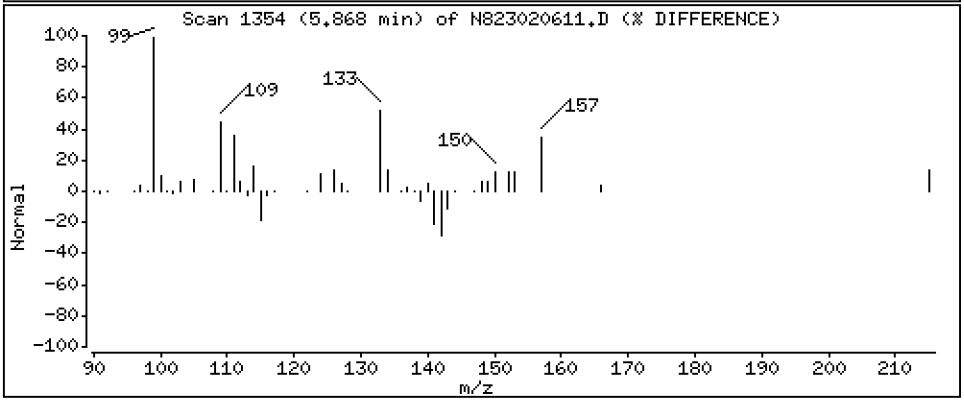












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Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

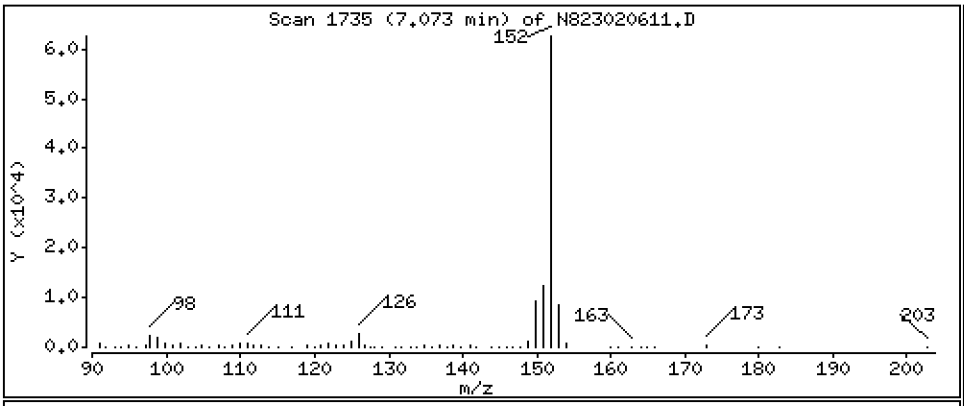
Operator: JZ

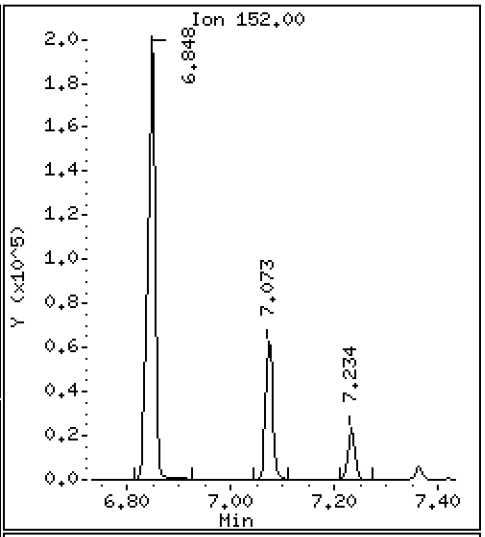
Column phase: Rxi-17sil

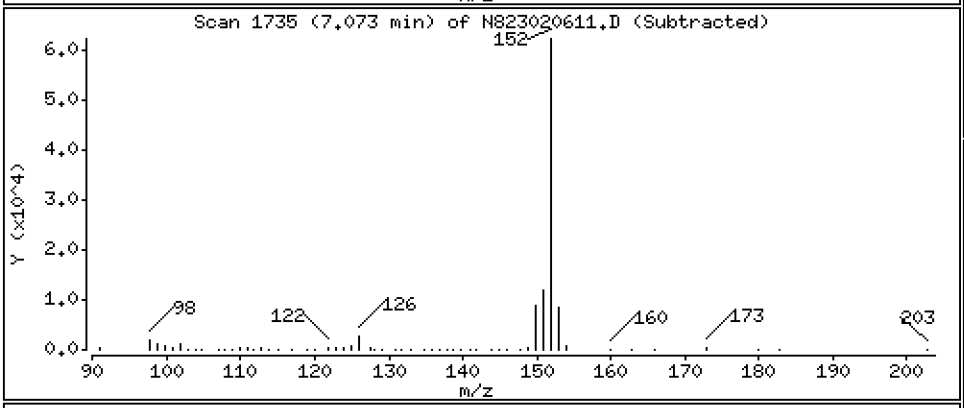
Column diameter: 0.25

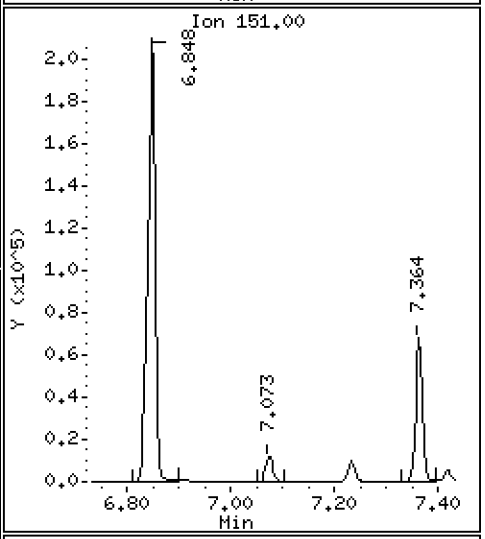
9 Acenaphthylene

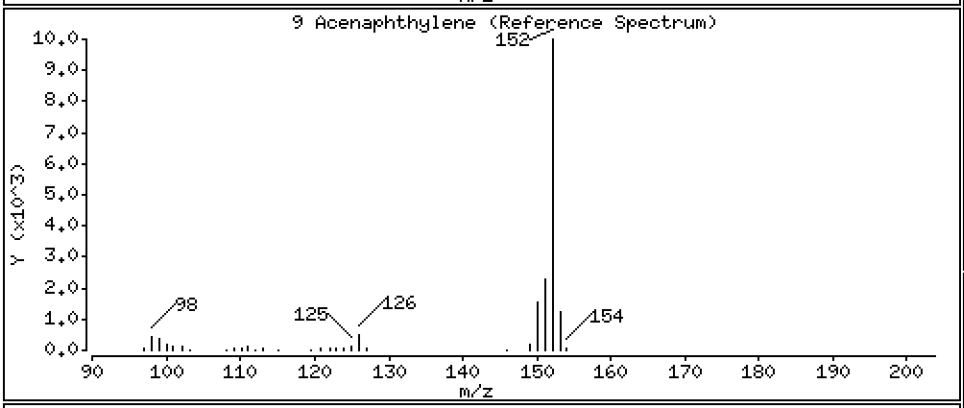
Concentration: 3.068 ug/mL

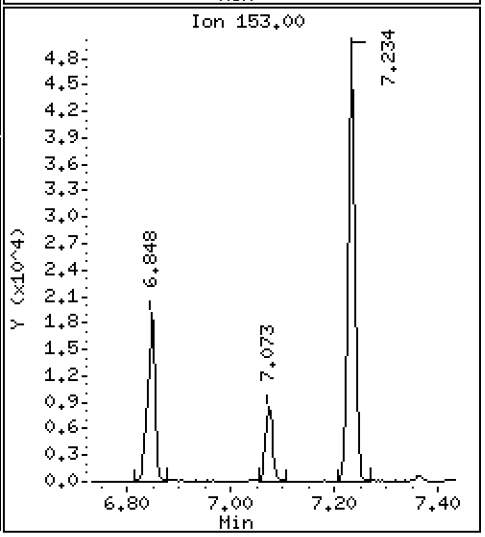


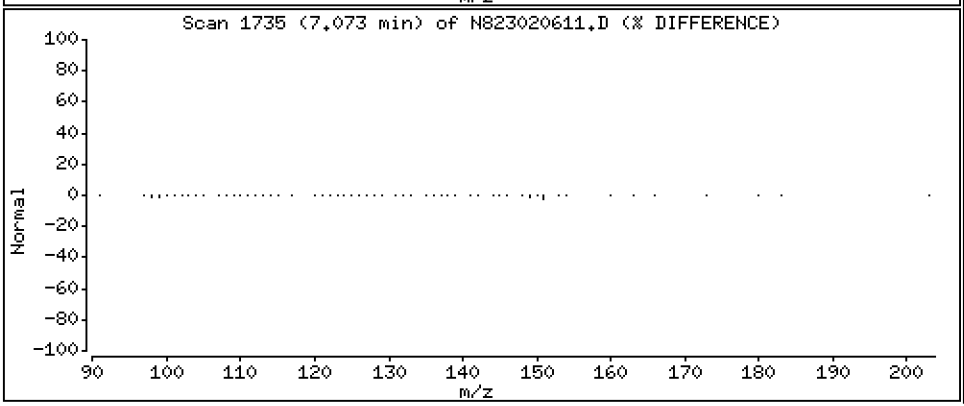












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Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

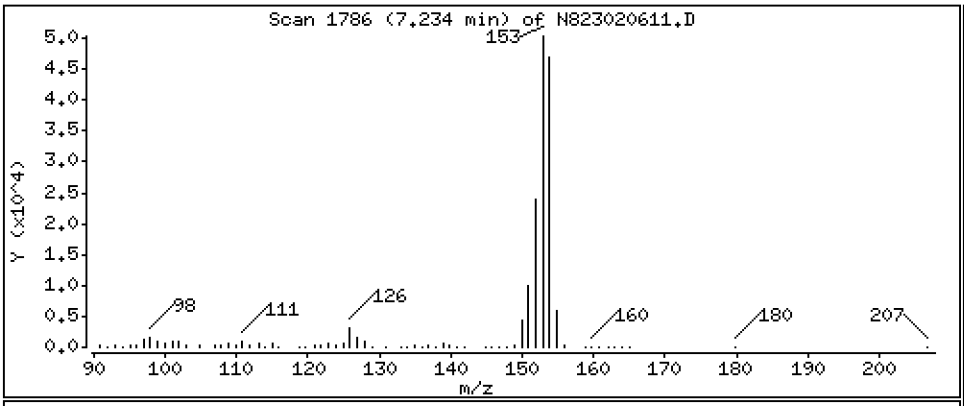
Operator: JZ

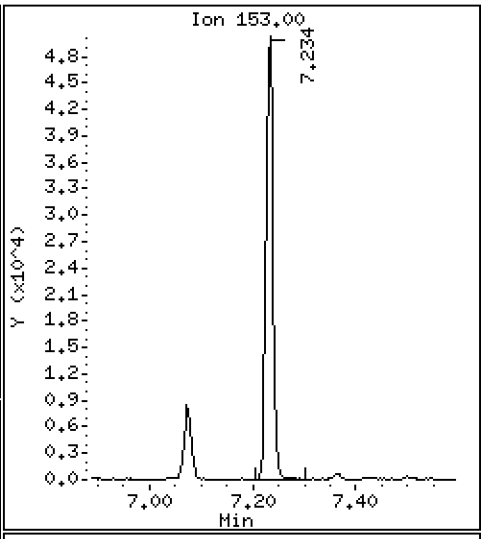
Column phase: Rxi-17sil

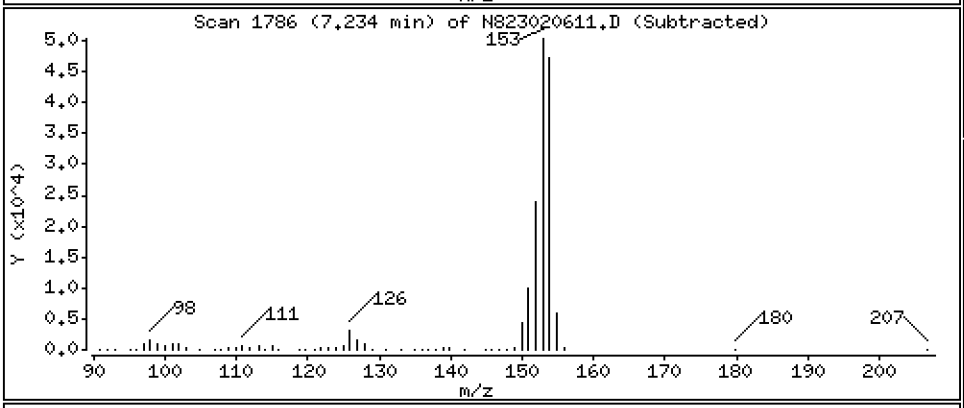
Column diameter: 0.25

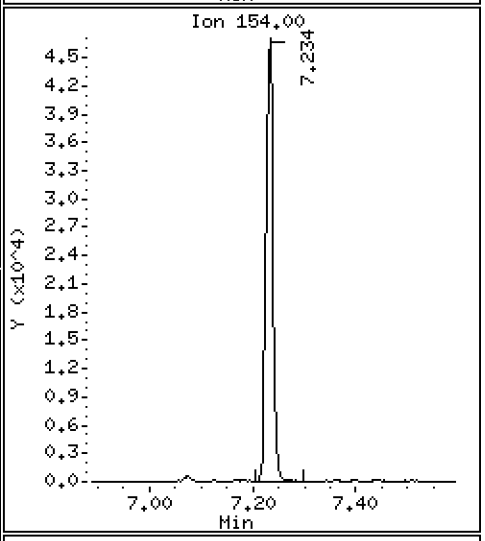
11 Acenaphthene

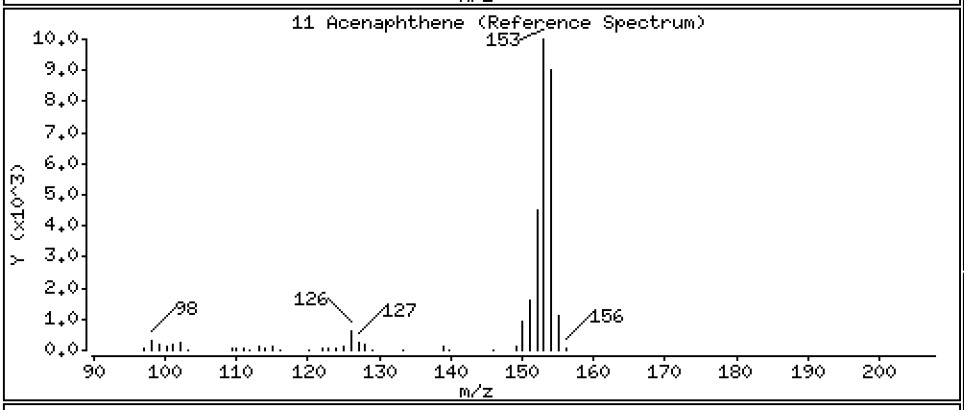
Concentration: 3.505 ug/mL

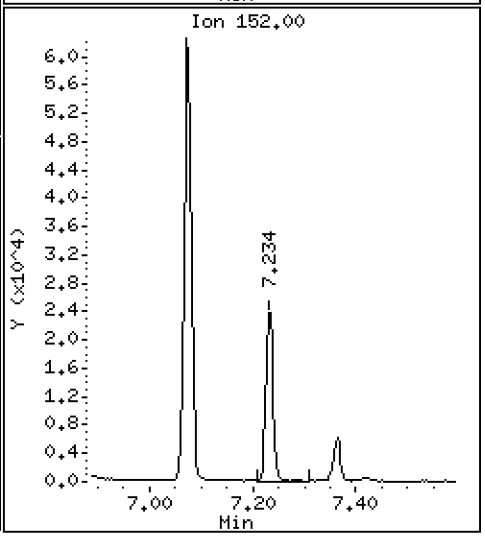


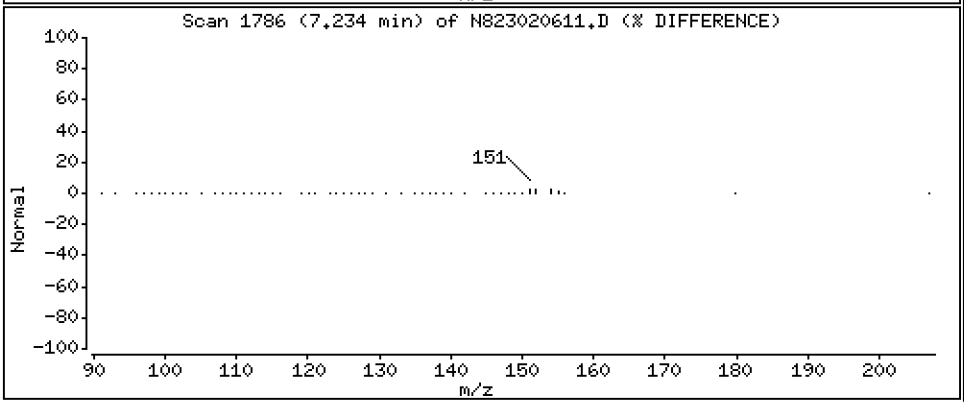












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Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

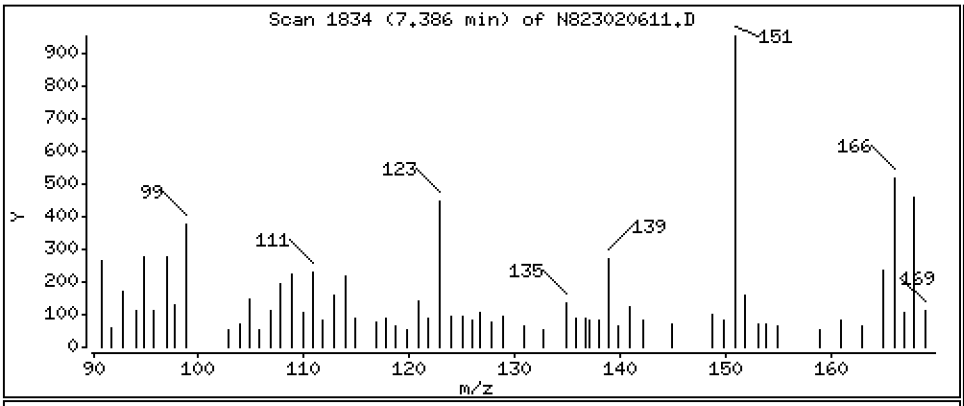
Operator: JZ

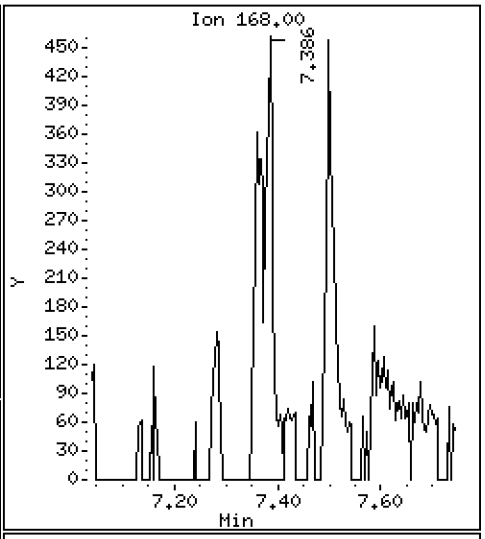
Column phase: Rxi-17sil

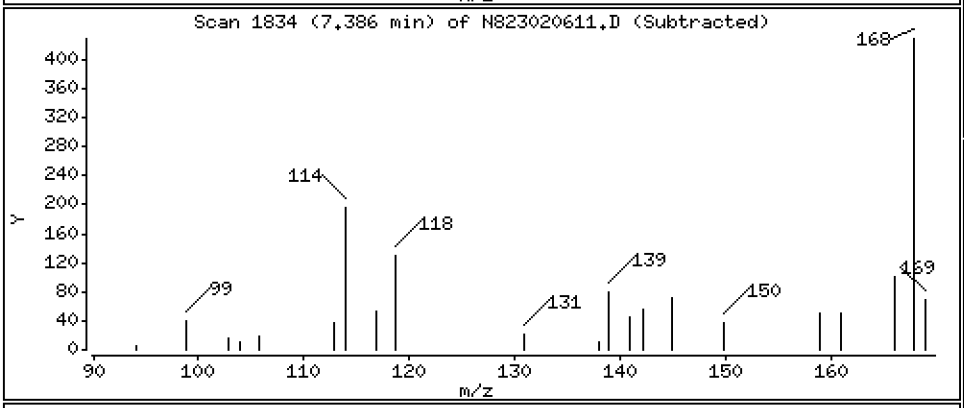
Column diameter: 0.25

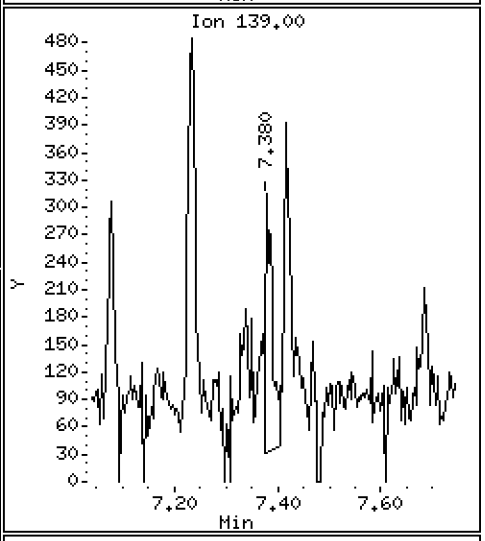
12 Dibenzofuran

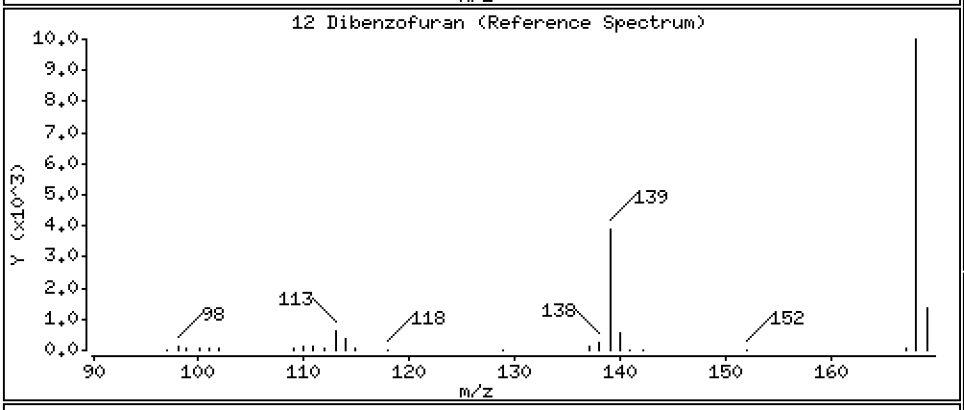
Concentration: 0.04013 ug/mL

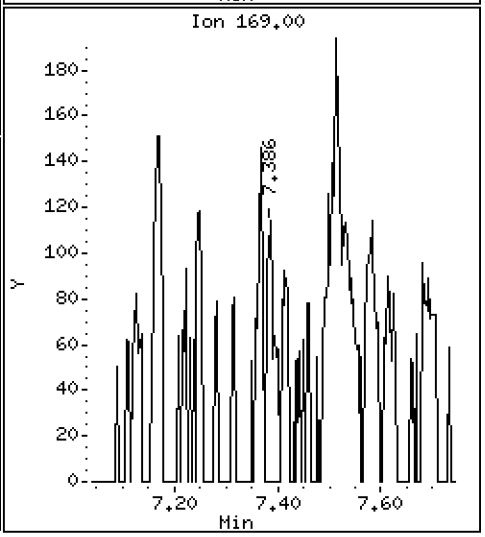


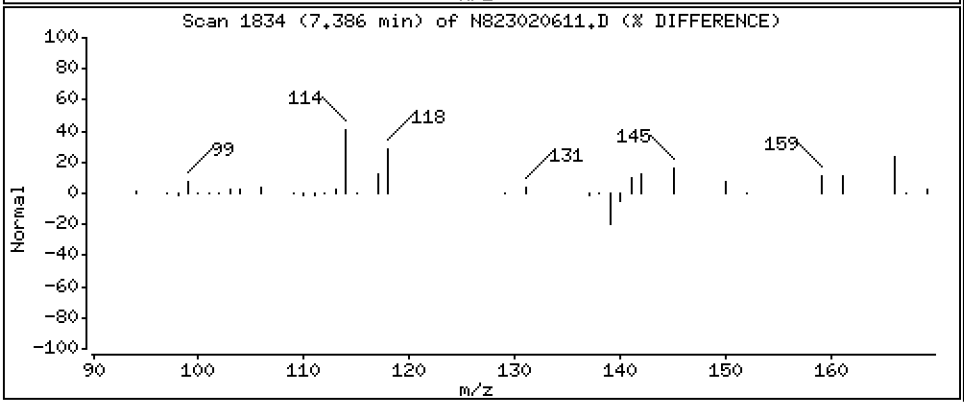












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Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

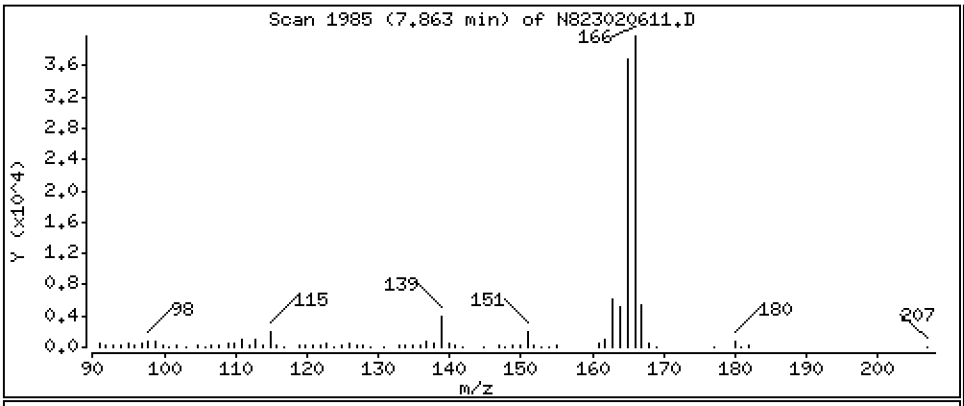
Operator: JZ

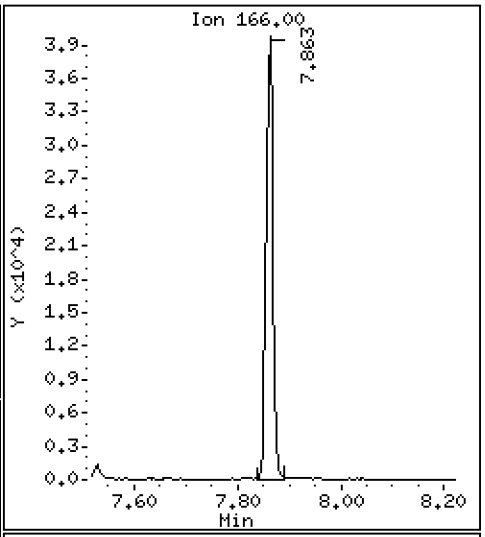
Column phase: Rxi-17sil

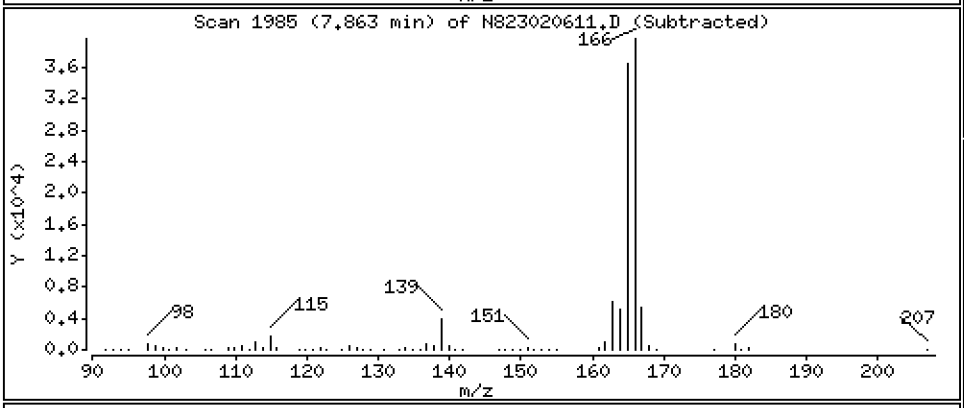
Column diameter: 0.25

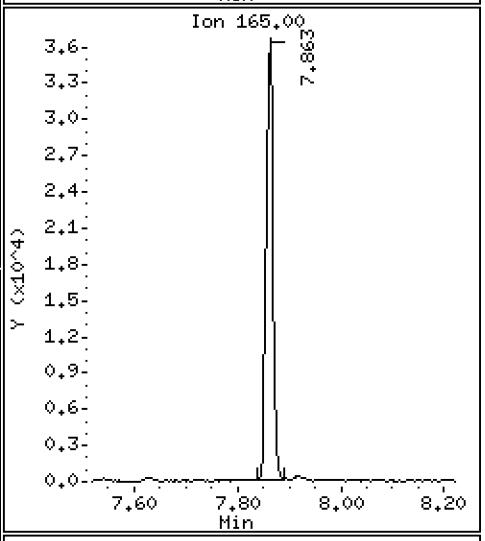
14 Fluorene

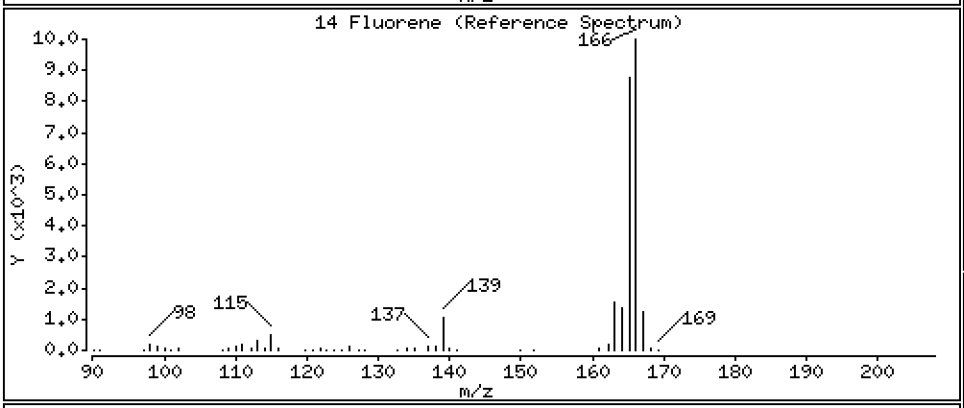
Concentration: 2.306 ug/mL

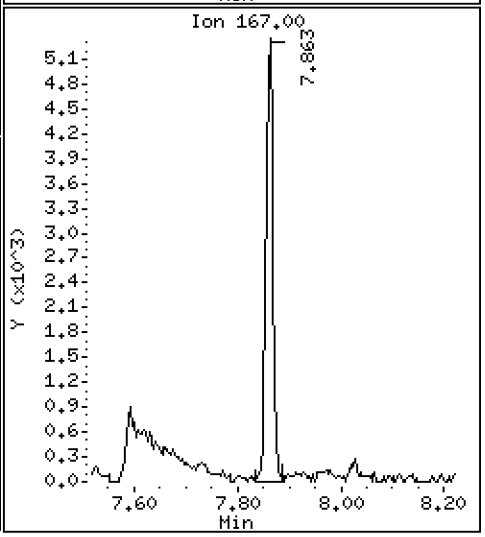


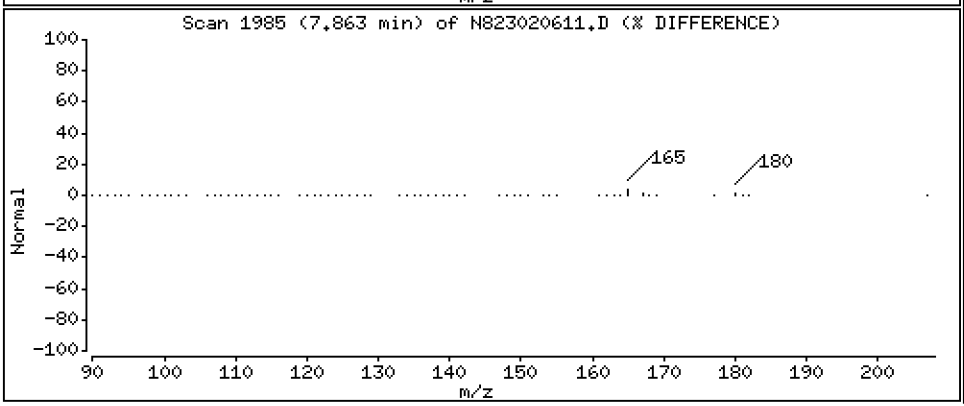












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020611.D

Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

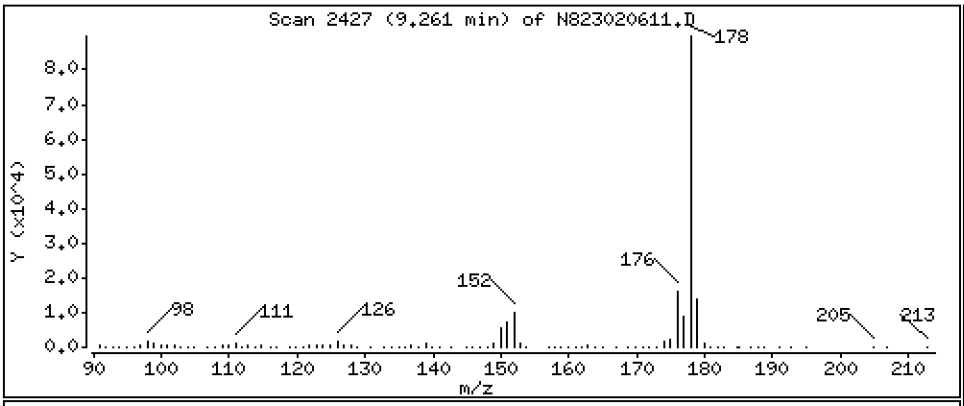
Operator: JZ

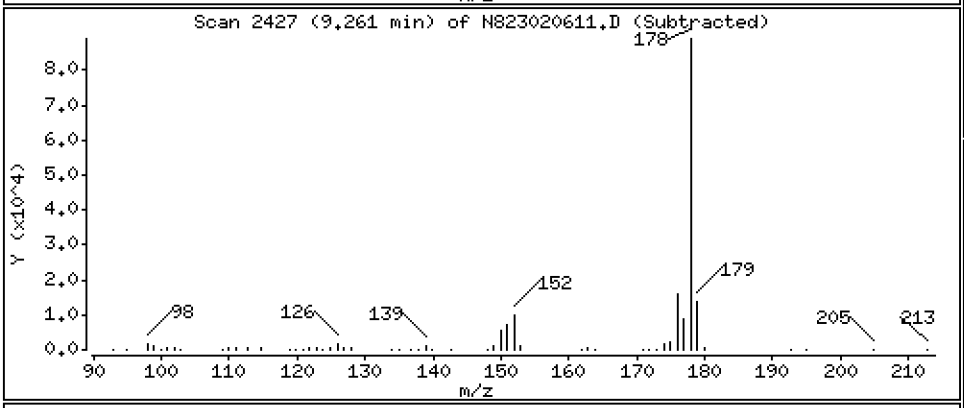
Column phase: Rxi-17sil

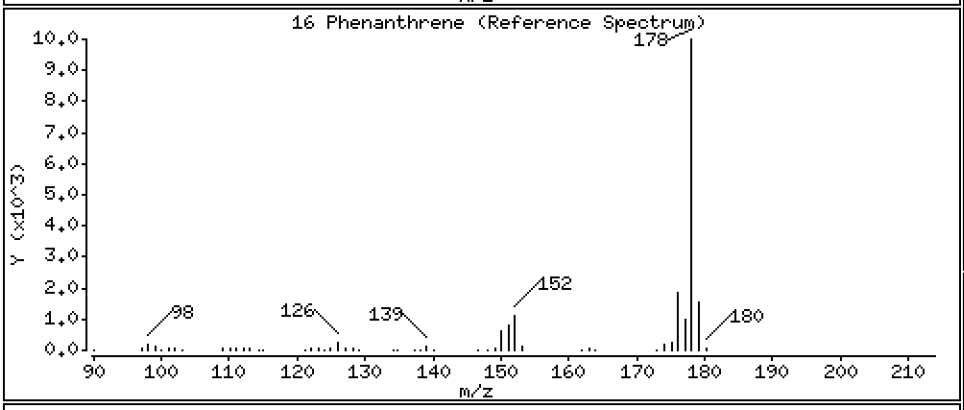
Column diameter: 0.25

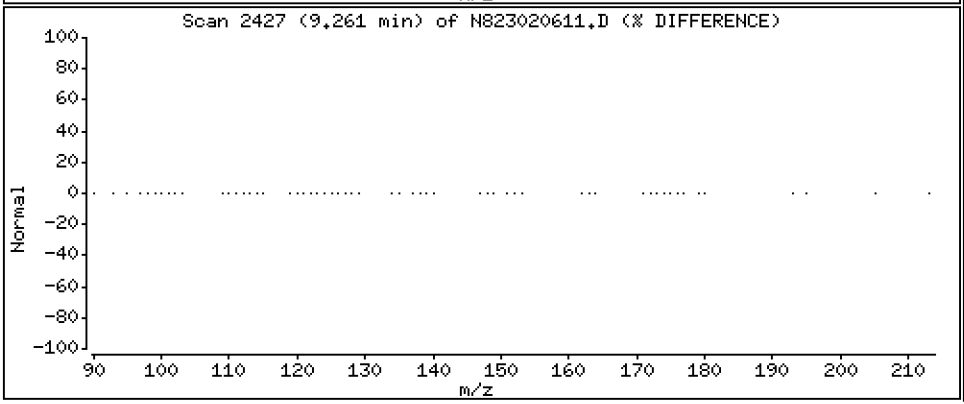
16 Phenanthrene

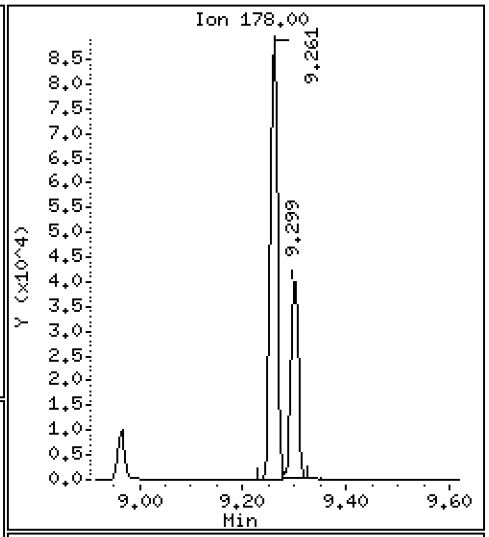
Concentration: 3.781 ug/mL

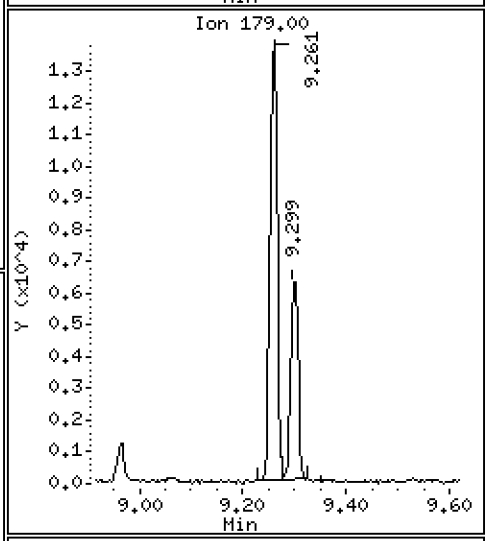


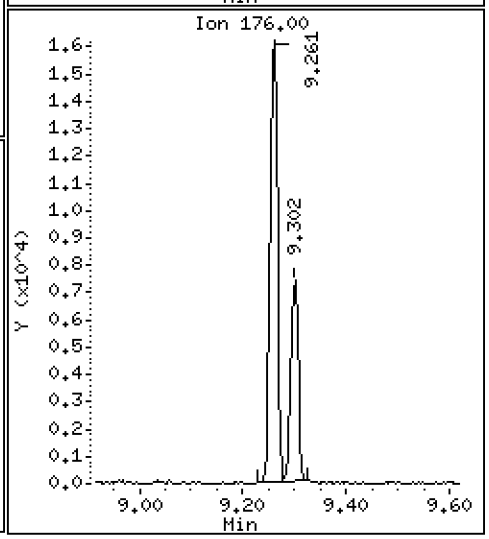












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Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

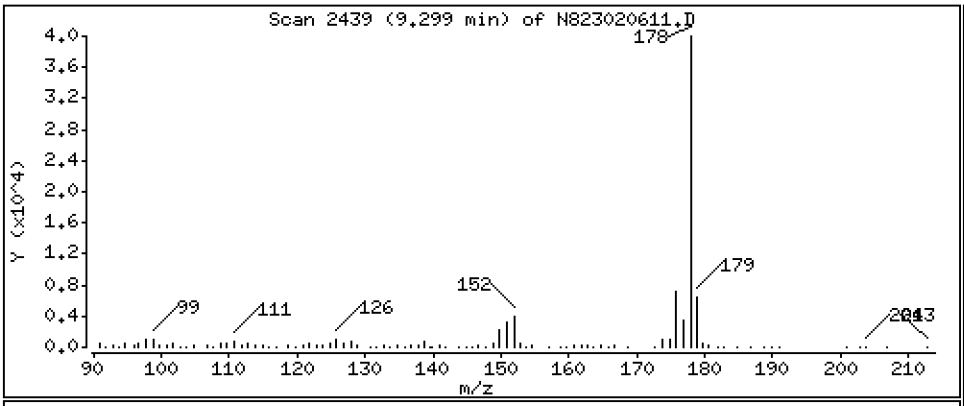
Operator: JZ

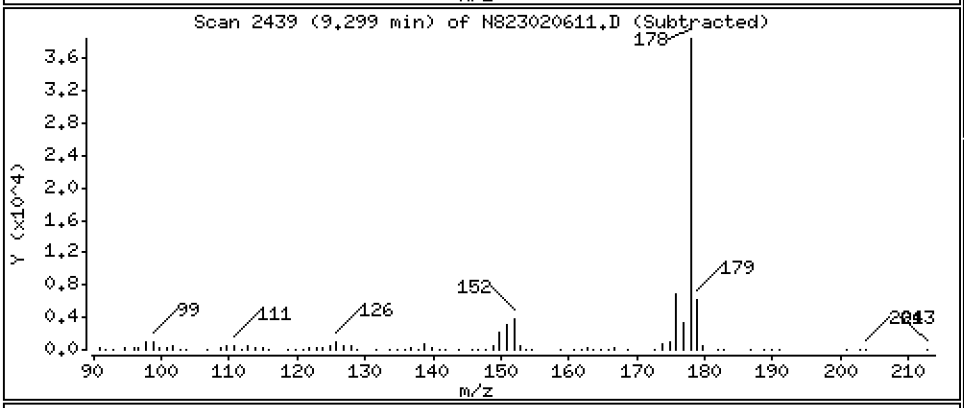
Column phase: Rxi-17sil

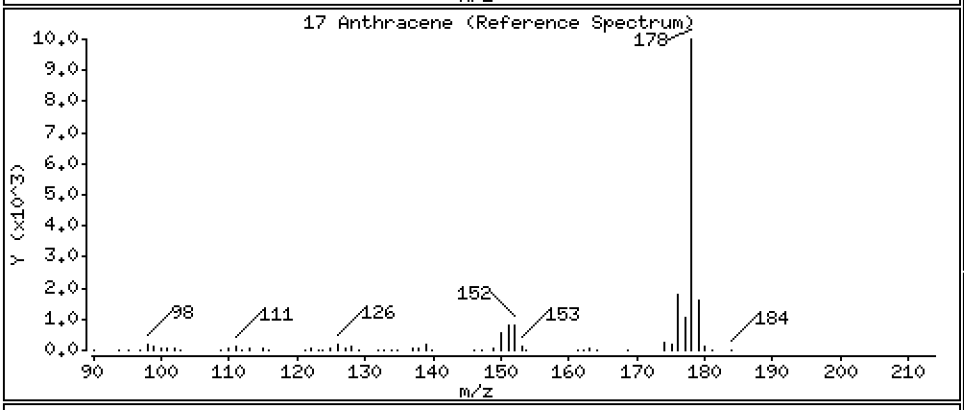
Column diameter: 0.25

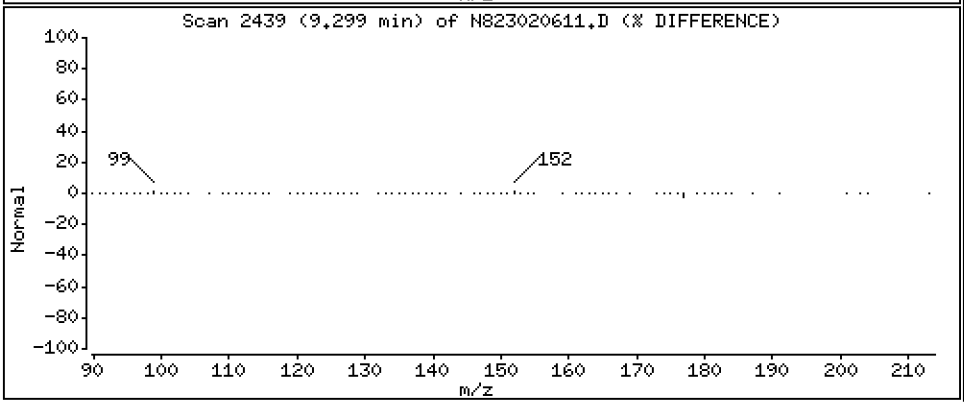
17 Anthracene

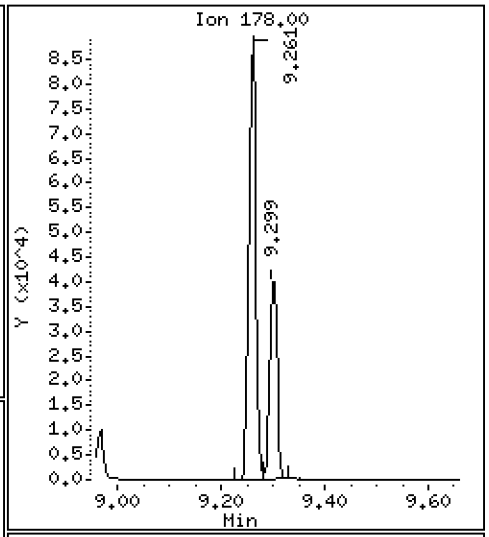
Concentration: 1.932 ug/mL

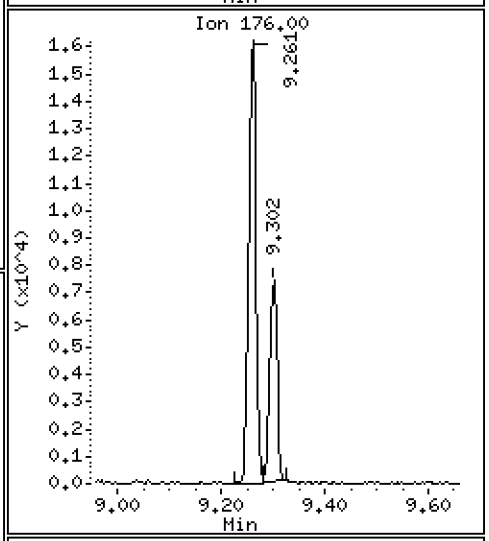


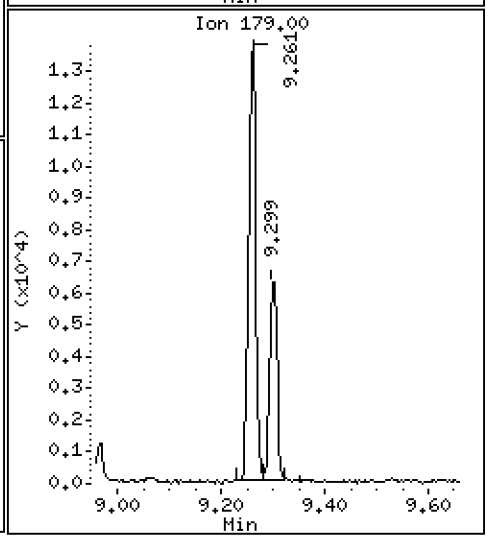












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020611.D

Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

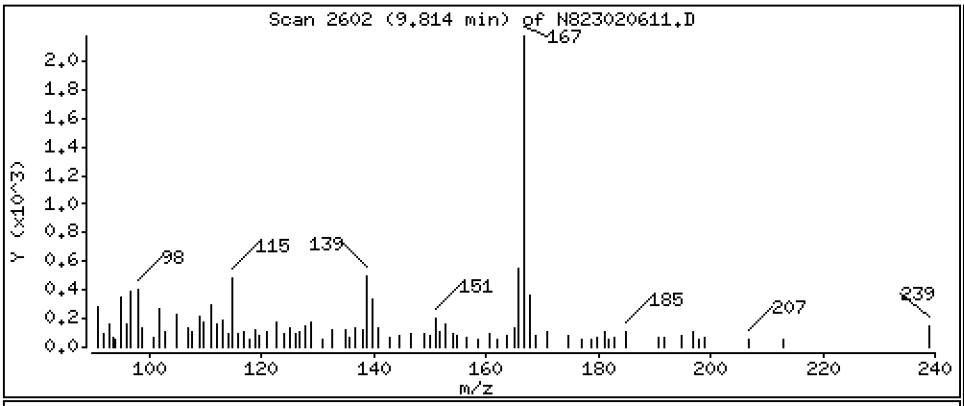
Operator: JZ

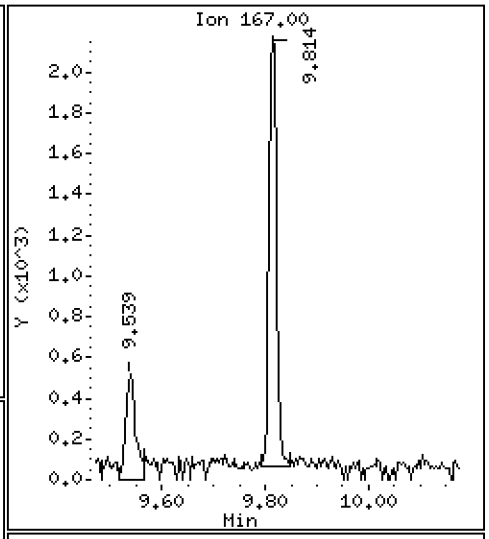
Column phase: Rxi-17sil

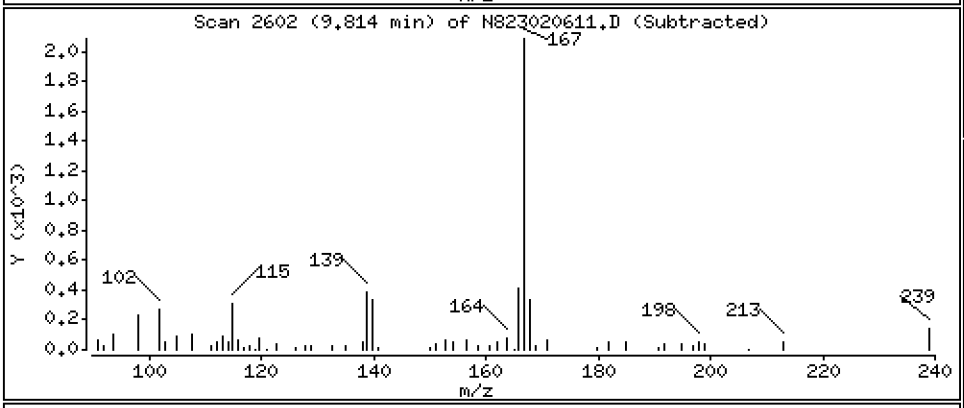
Column diameter: 0.25

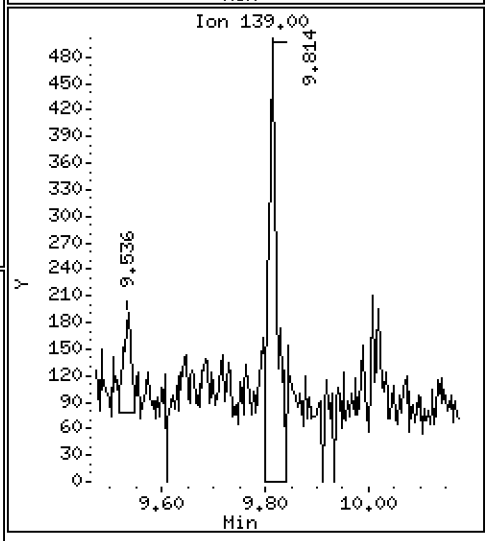
19 Carbazole

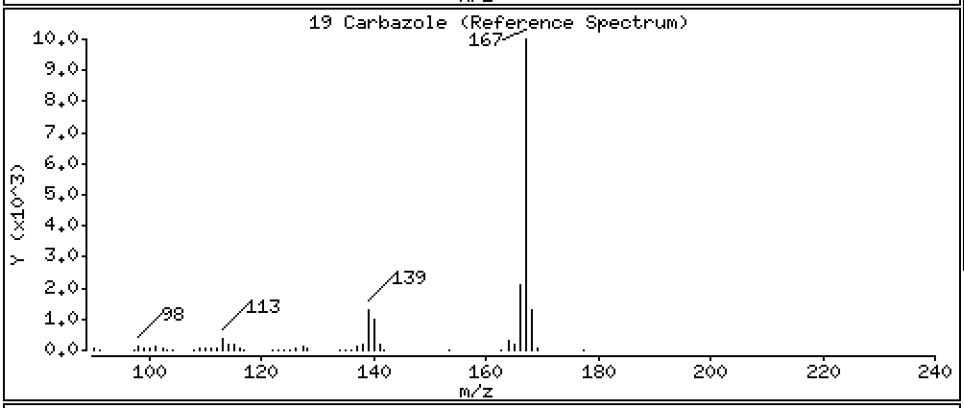
Concentration: 0.1191 ug/mL

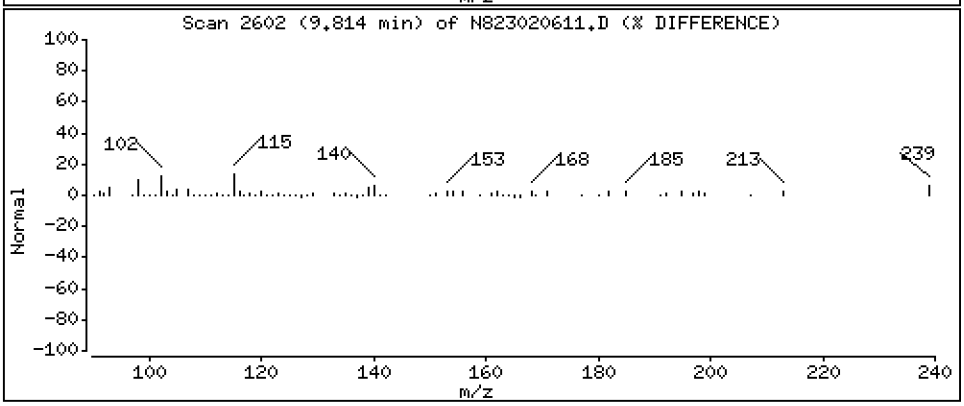












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020611.D

Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

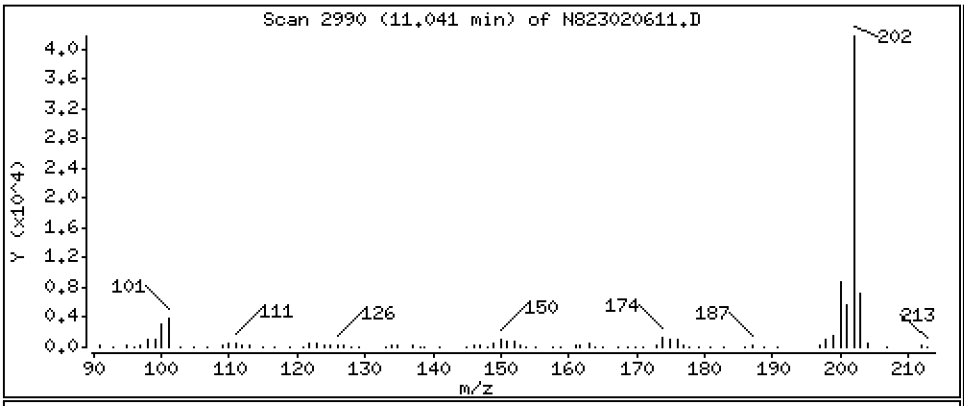
Operator: JZ

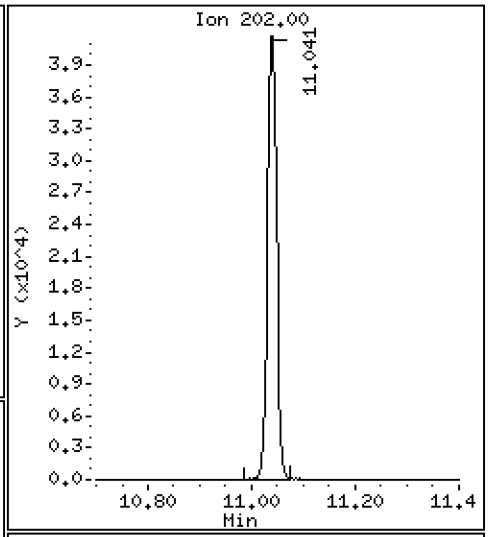
Column phase: Rxi-17sil

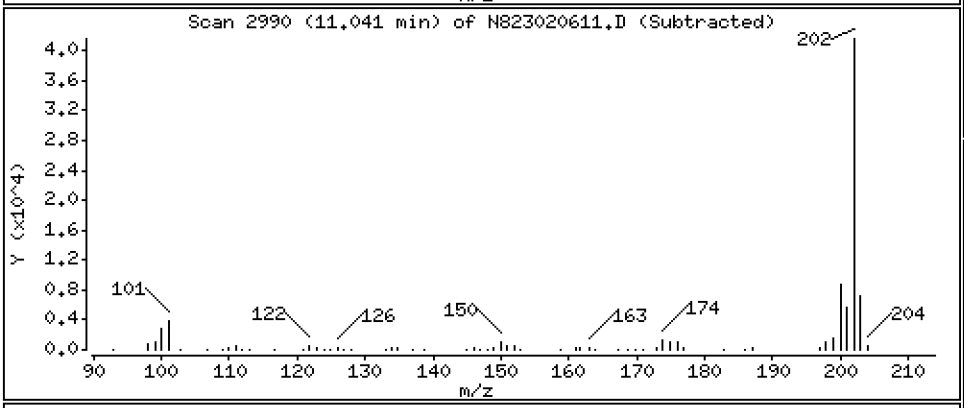
Column diameter: 0.25

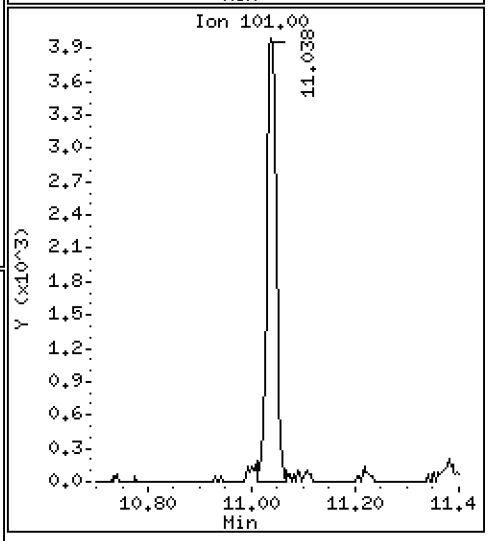
22 Fluoranthene

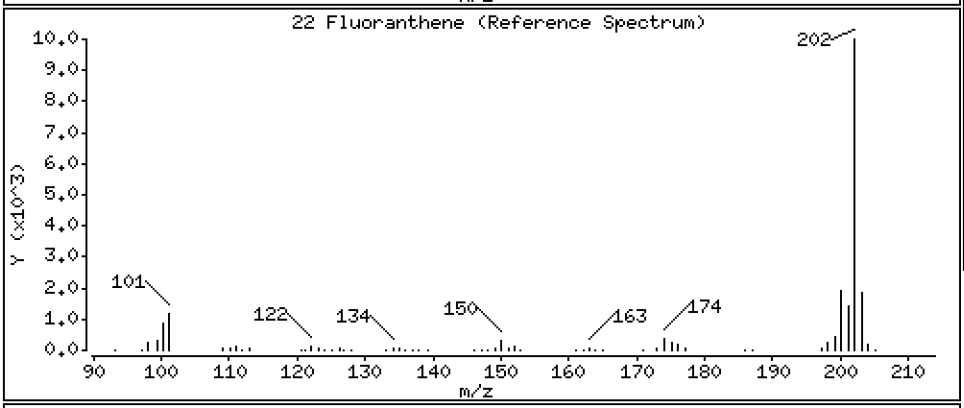
Concentration: 2.131 ug/mL

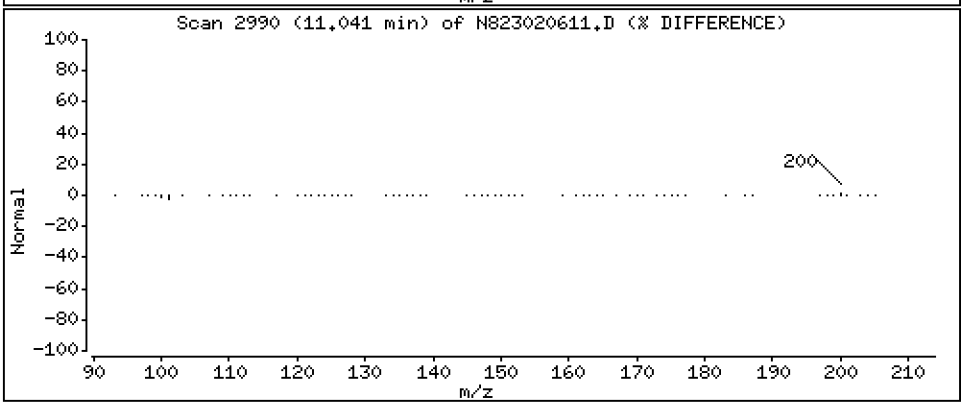












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020611.D

Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

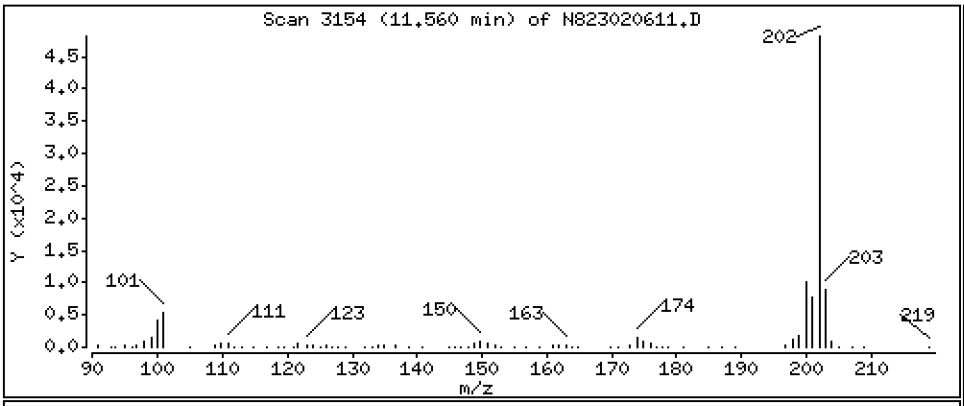
Operator: JZ

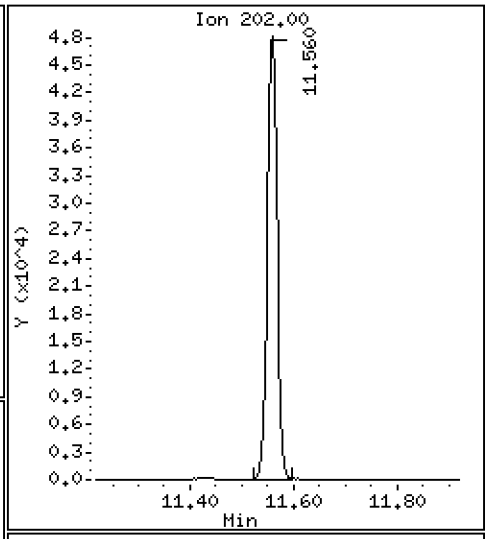
Column phase: Rxi-17sil

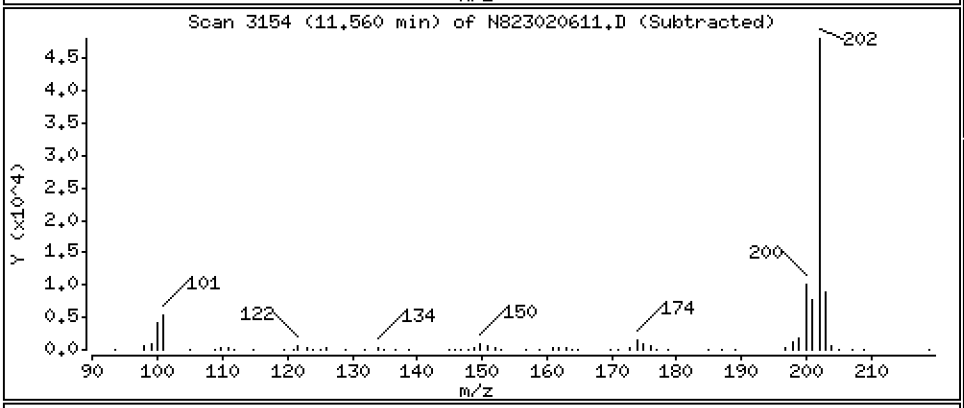
Column diameter: 0.25

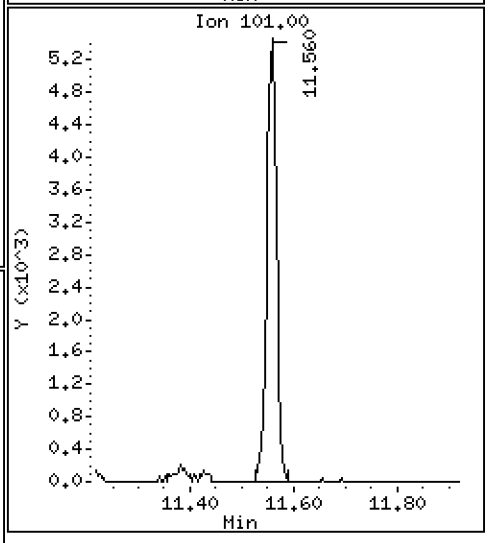
23 Pyrene

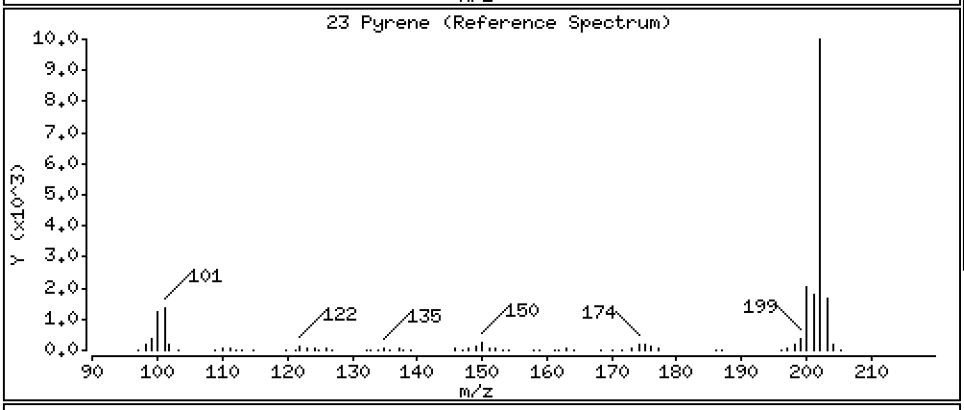
Concentration: 2.777 ug/mL

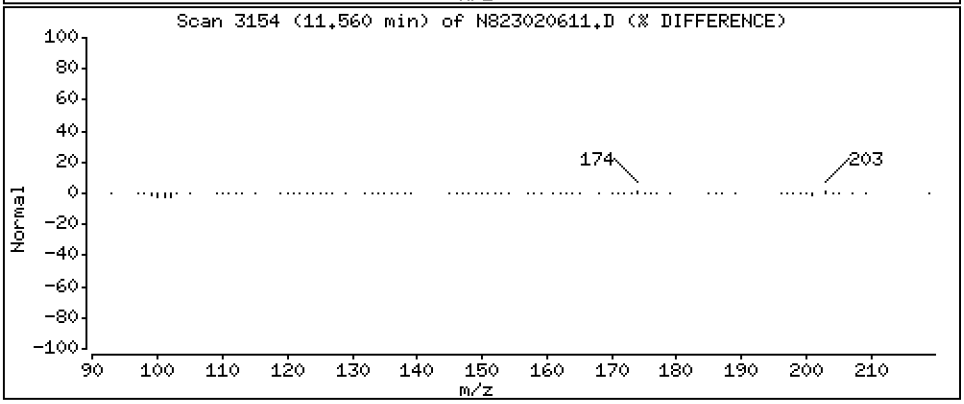












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Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

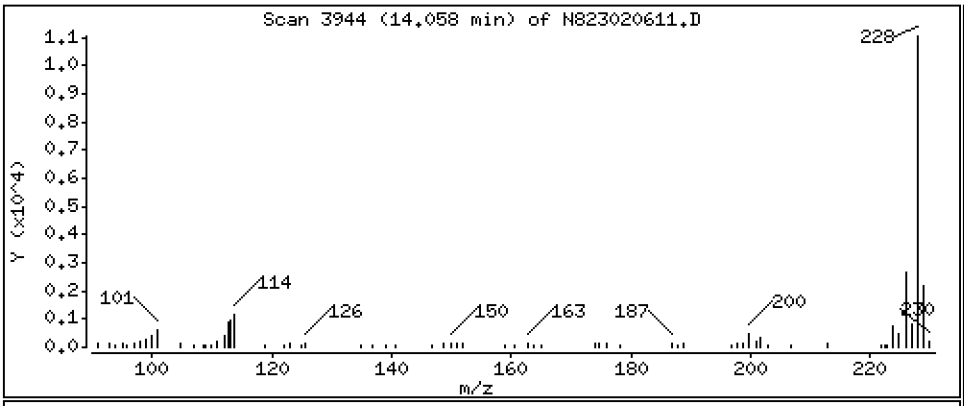
Operator: JZ

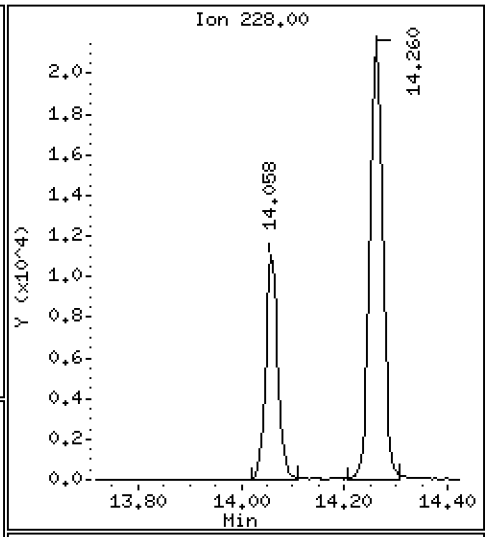
Column phase: Rxi-17sil

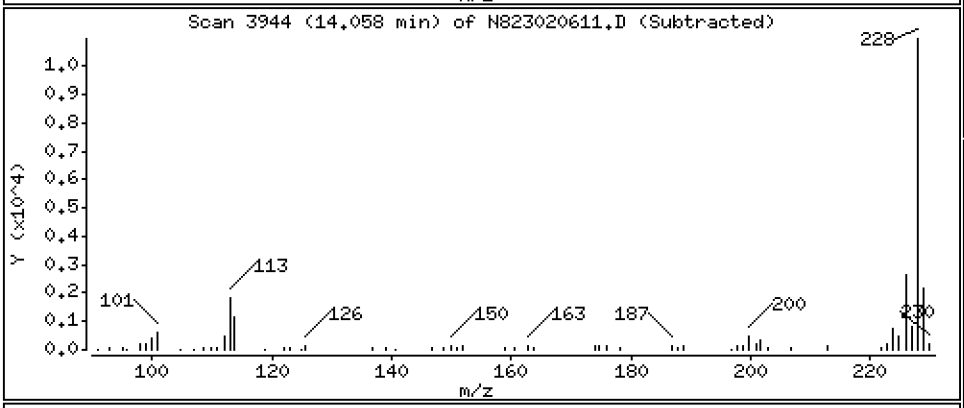
Column diameter: 0.25

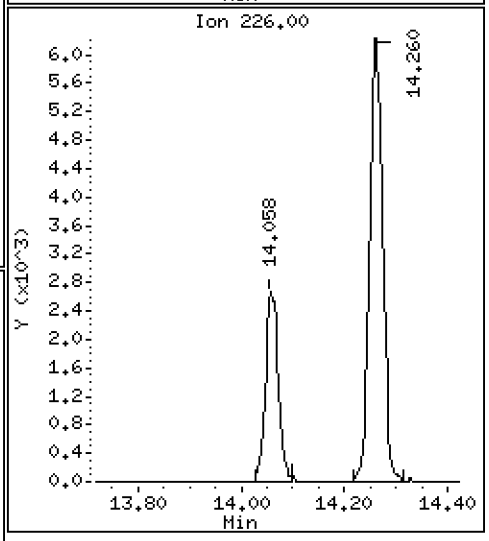
24 Benzo(a)anthracene

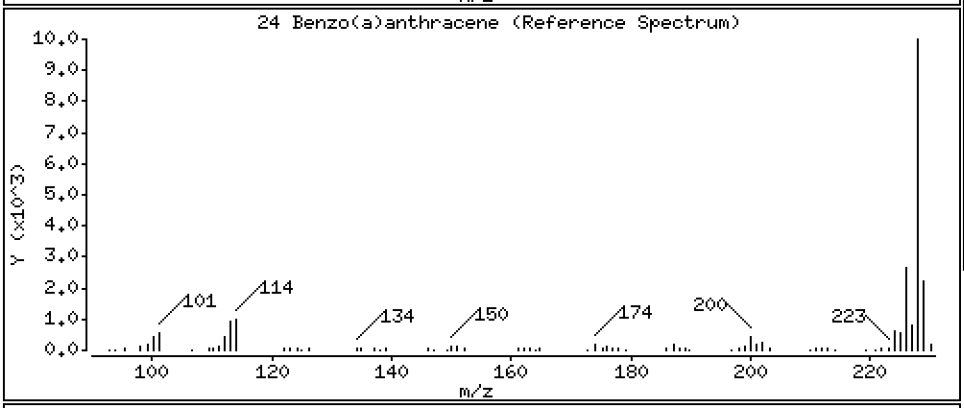
Concentration: 0.8869 ug/mL

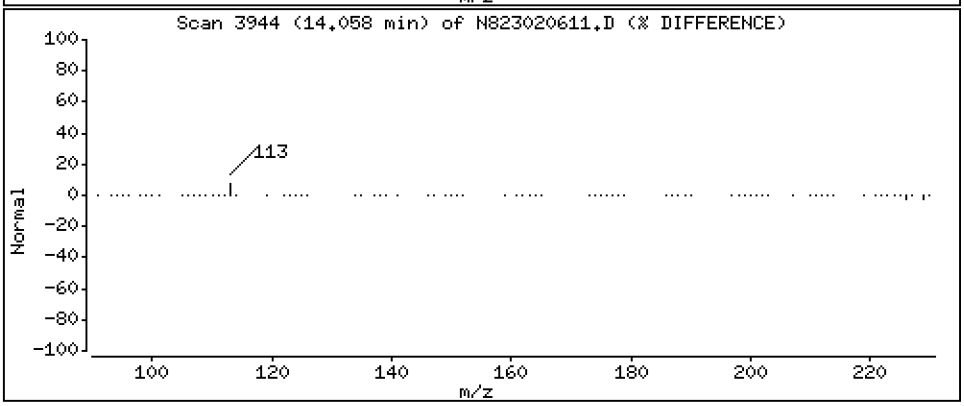












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020611.D

Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

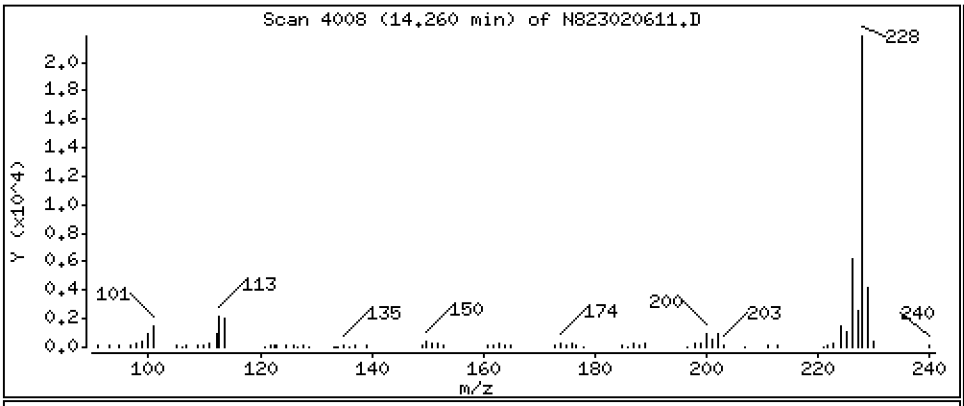
Operator: JZ

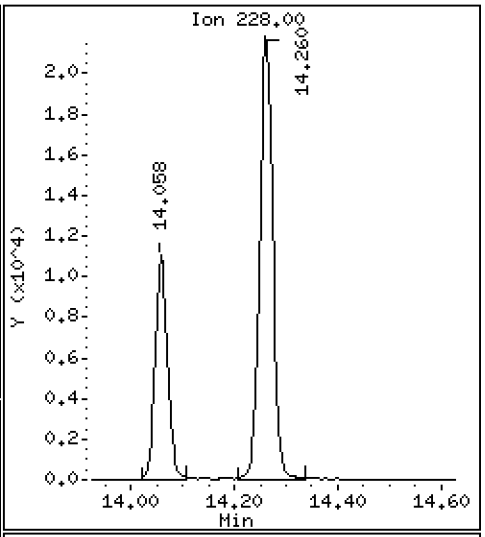
Column phase: Rxi-17sil

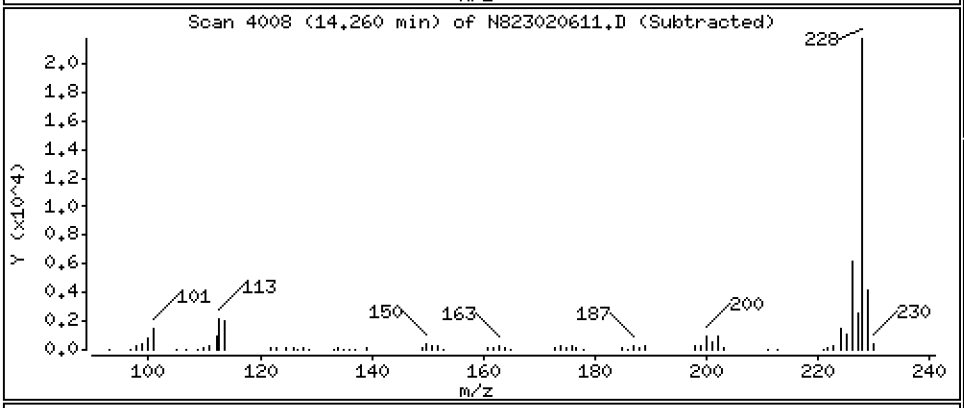
Column diameter: 0.25

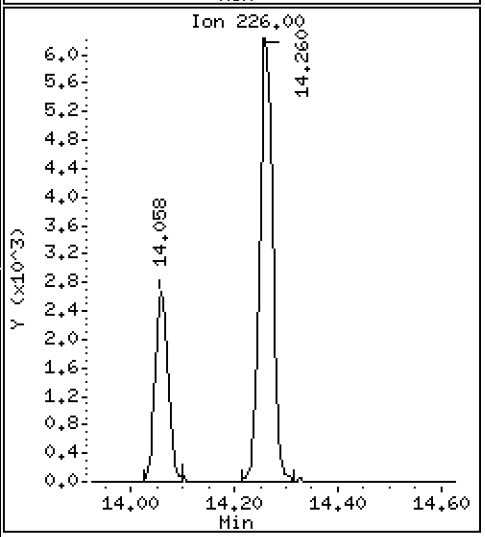
27 Chrysene

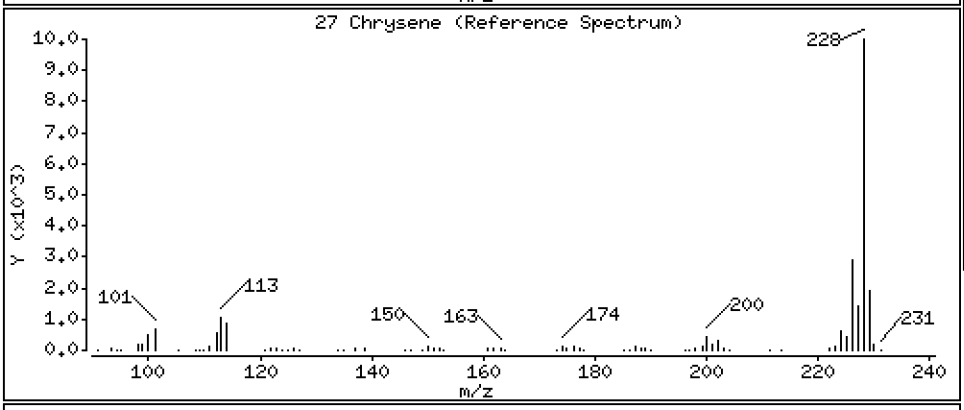
Concentration: 1.762 ug/mL

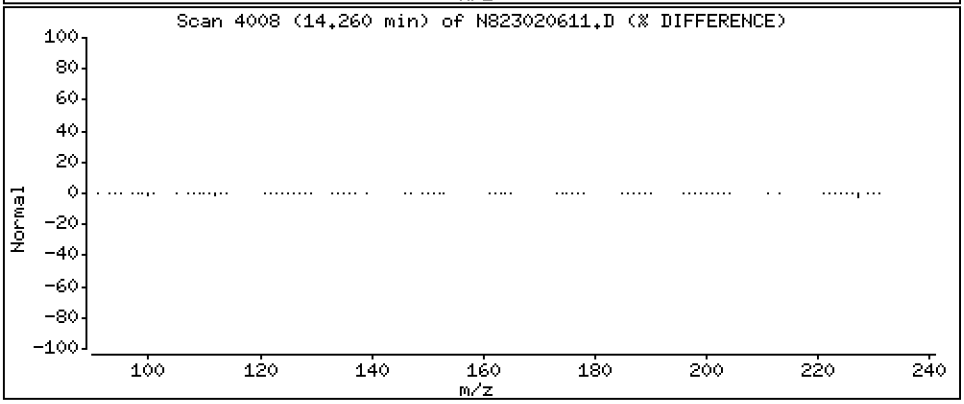












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020611.D

Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

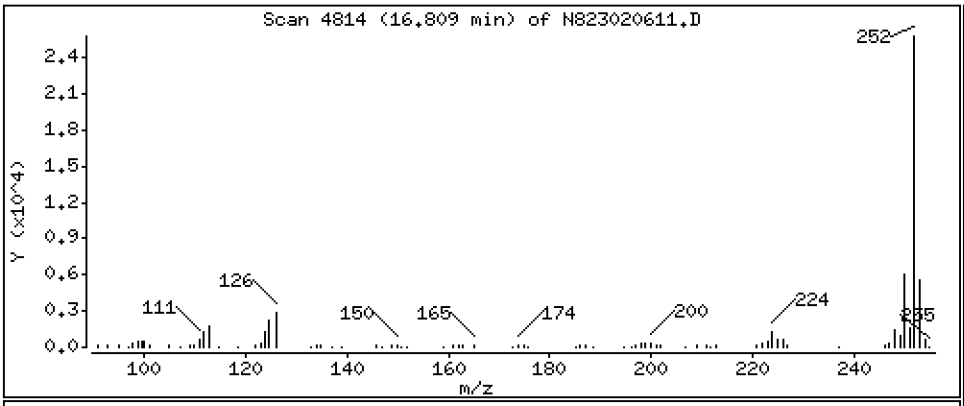
Operator: JZ

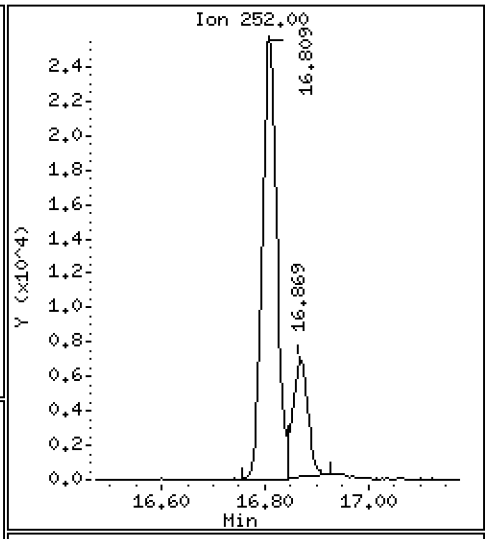
Column phase: Rxi-17sil

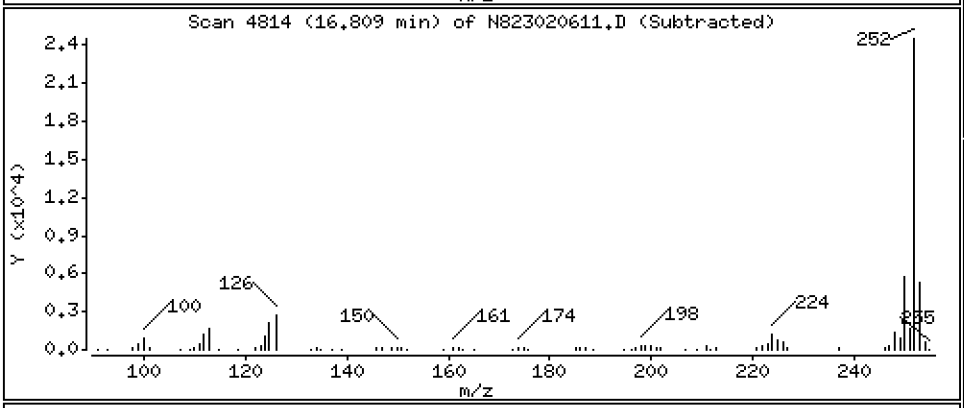
Column diameter: 0.25

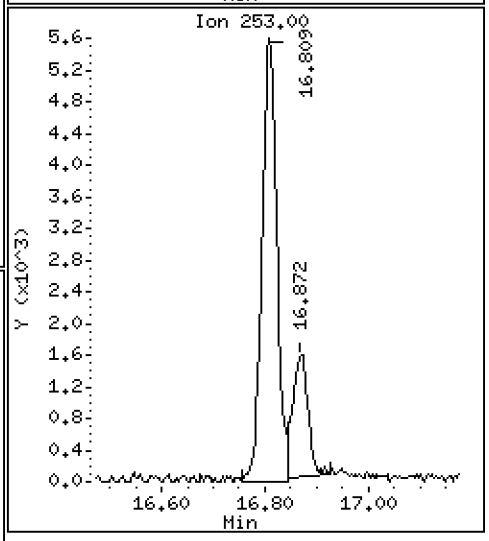
28 Benzo(b)fluoranthene

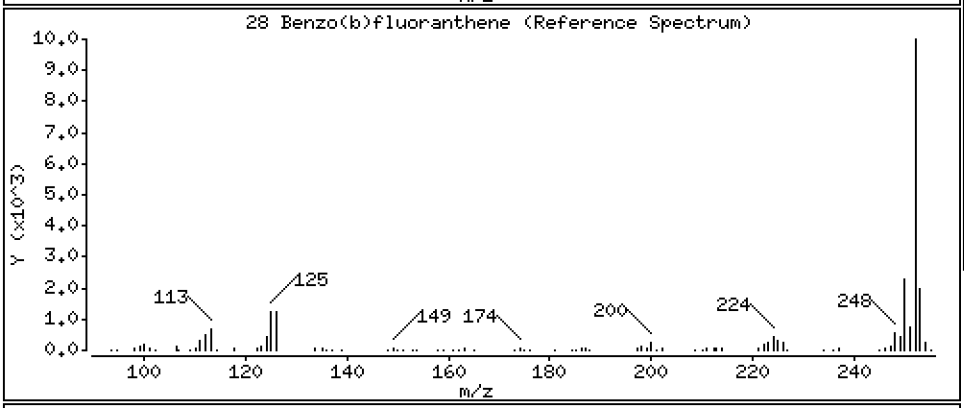
Concentration: 3.832 ug/mL

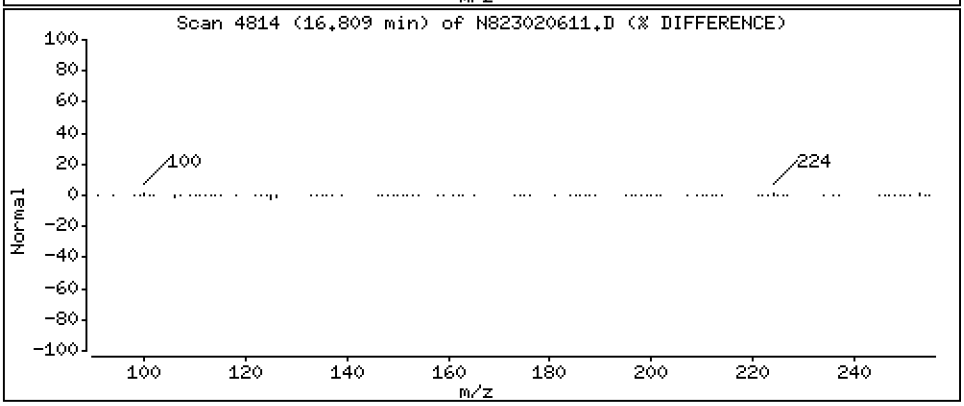












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020611.D

Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

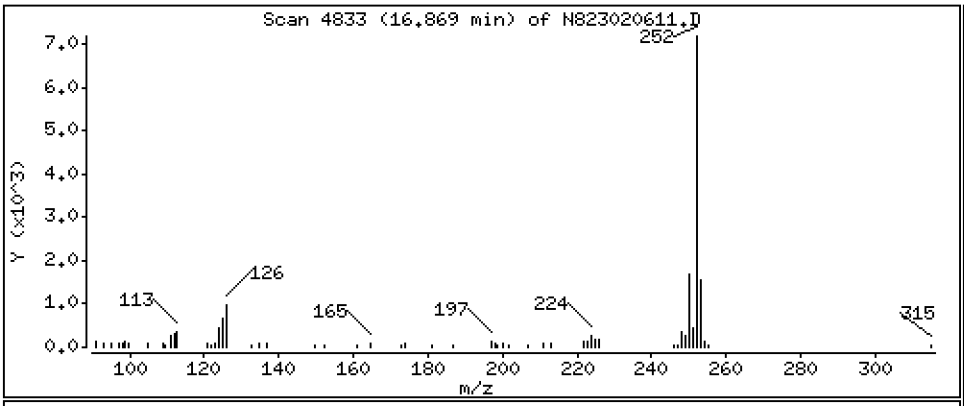
Operator: JZ

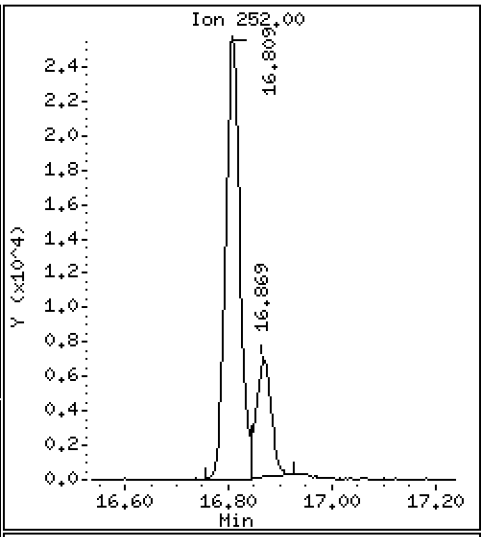
Column phase: Rxi-17sil

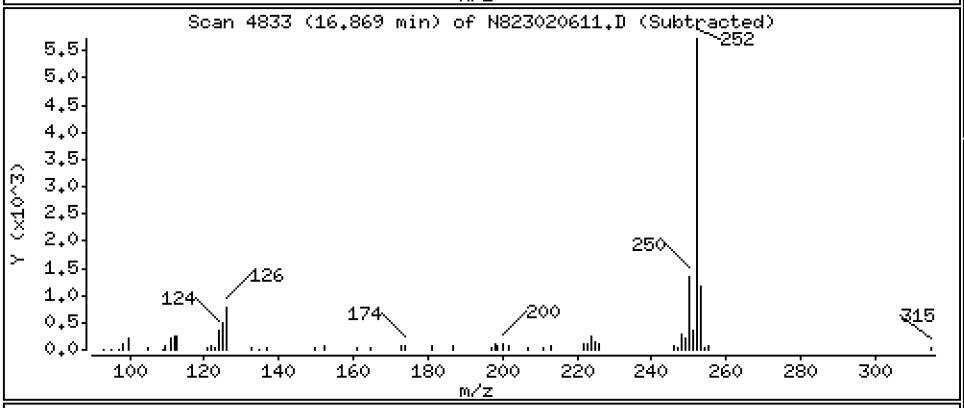
Column diameter: 0.25

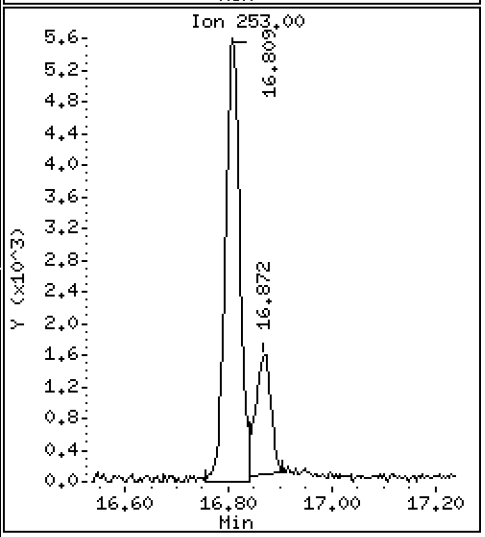
29 Benzo(k)fluoranthene

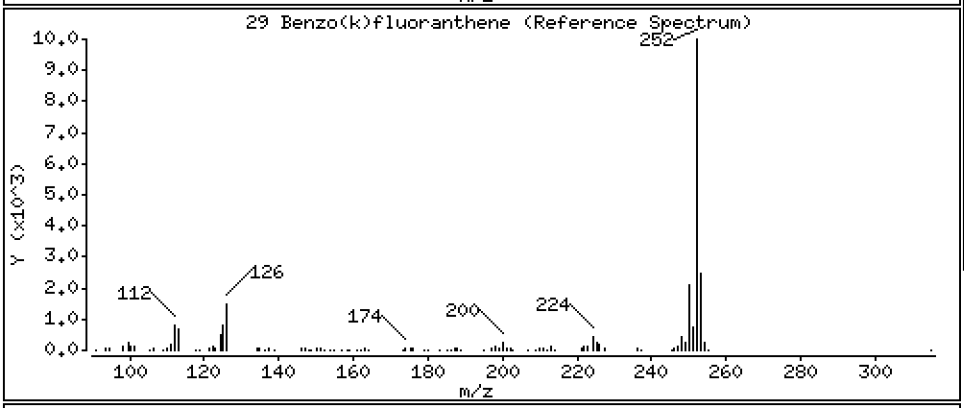
Concentration: 1.085 ug/mL

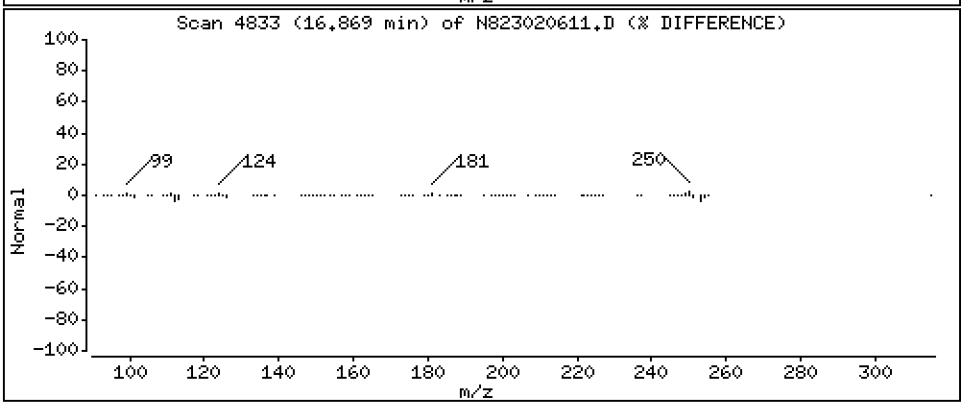












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020611.D

Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

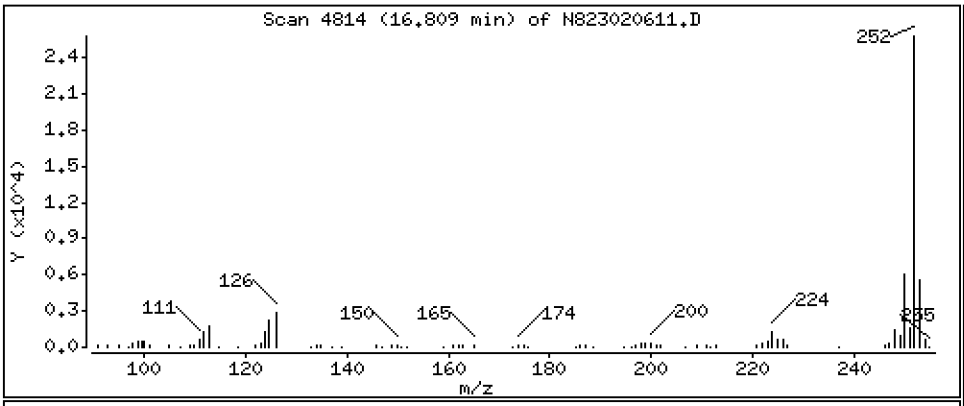
Operator: JZ

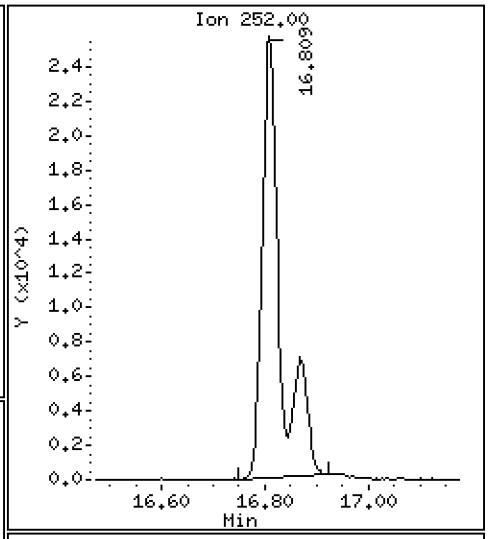
Column phase: Rxi-17sil

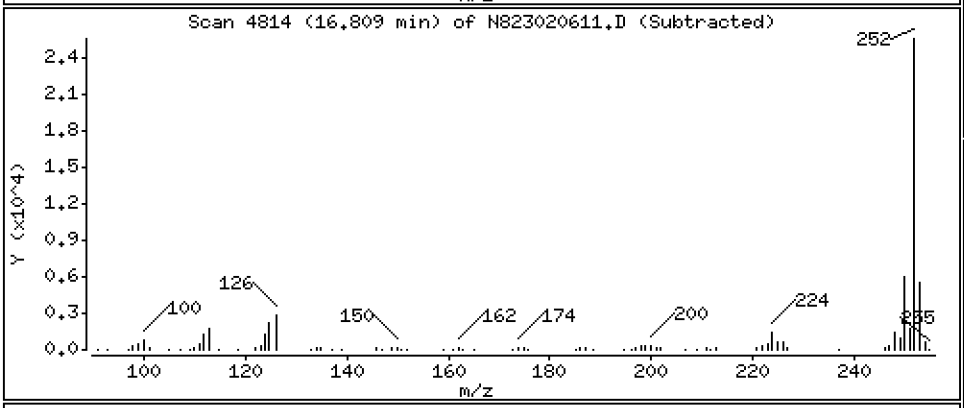
Column diameter: 0.25

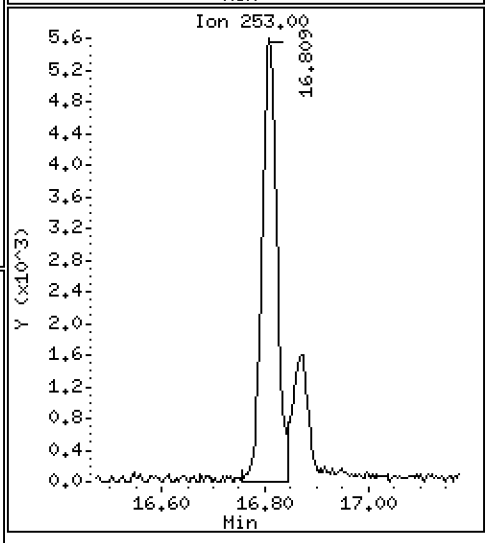
31 Total Benzofluoranthenes

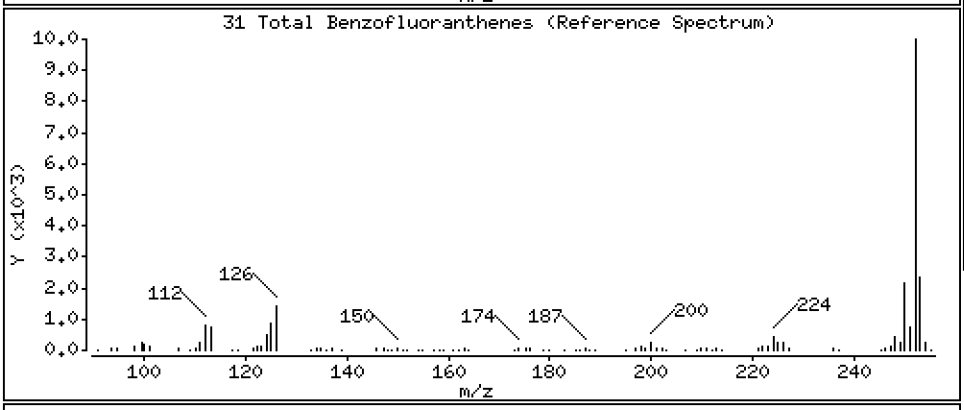
Concentration: 5.092 ug/mL

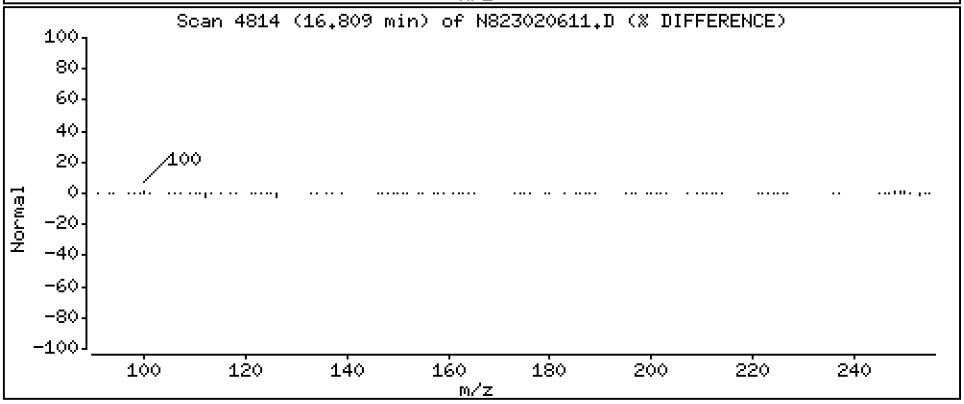












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020611.D

Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

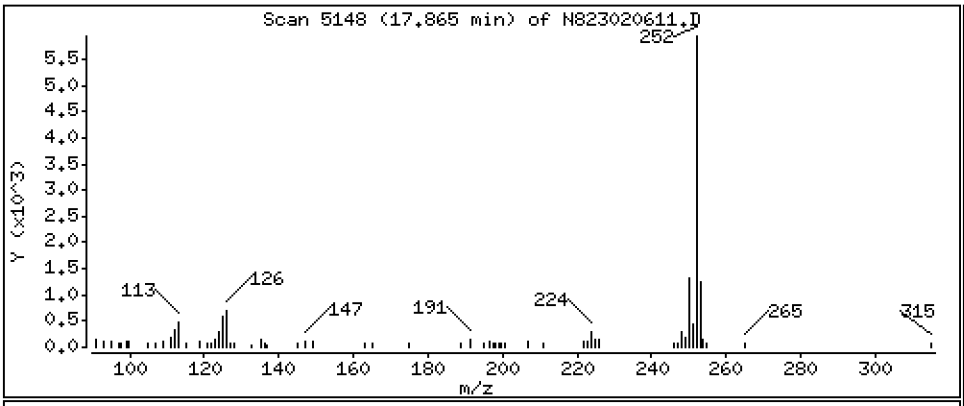
Operator: JZ

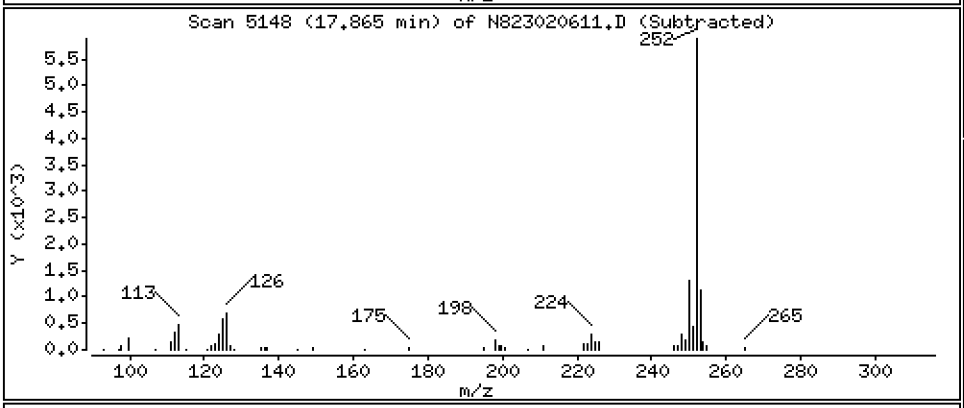
Column phase: Rxi-17sil

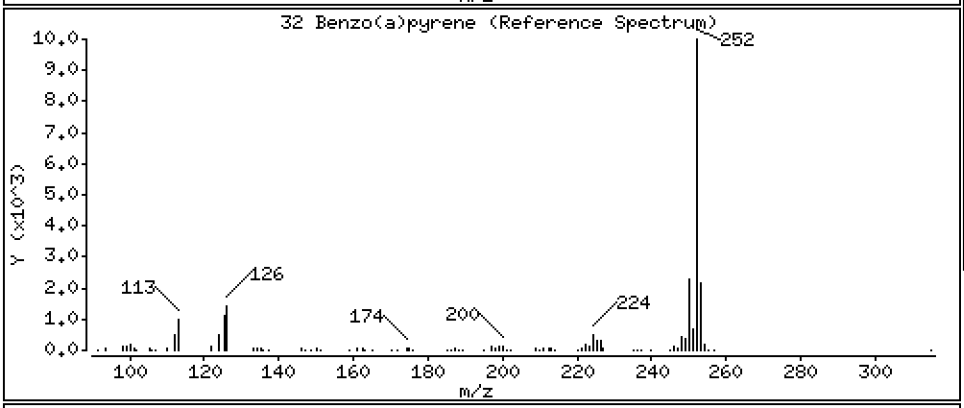
Column diameter: 0.25

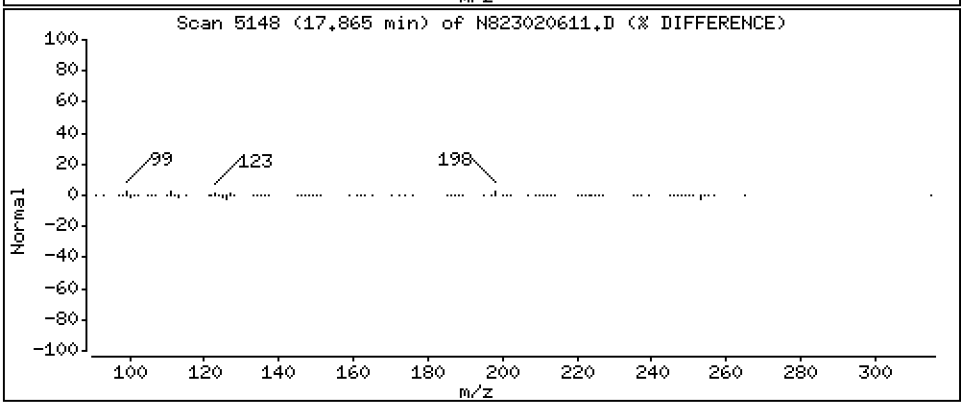
32 Benzo(a)pyrene

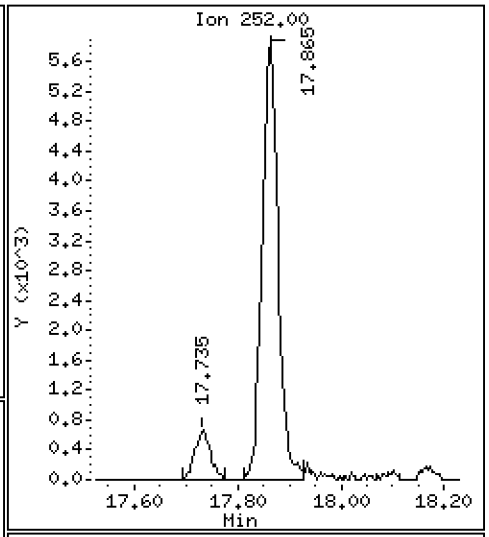
Concentration: 1.094 ug/mL

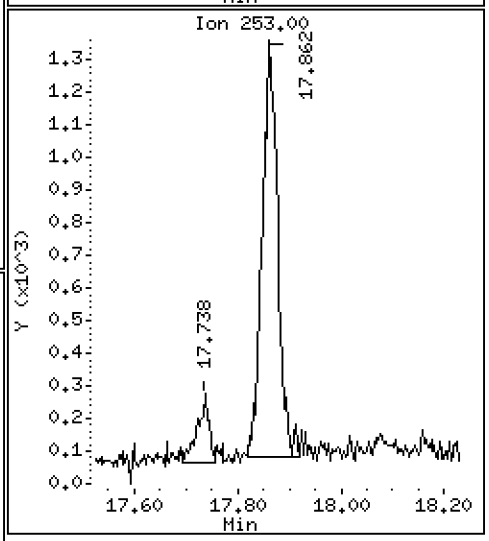












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020611.D

Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

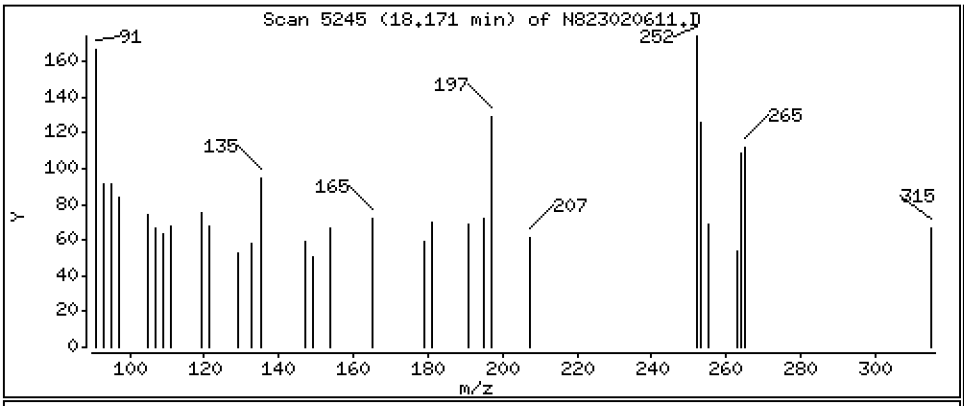
Operator: JZ

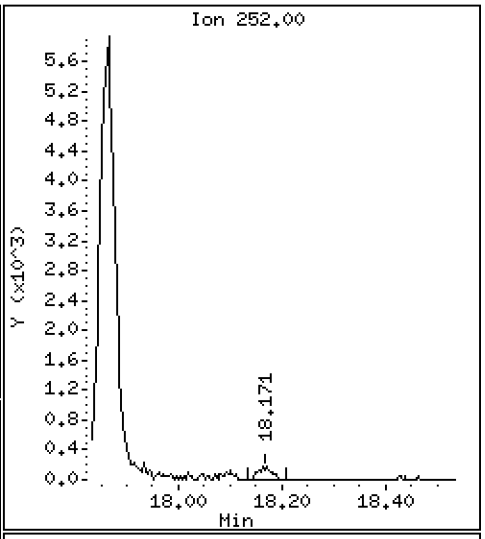
Column phase: Rxi-17sil

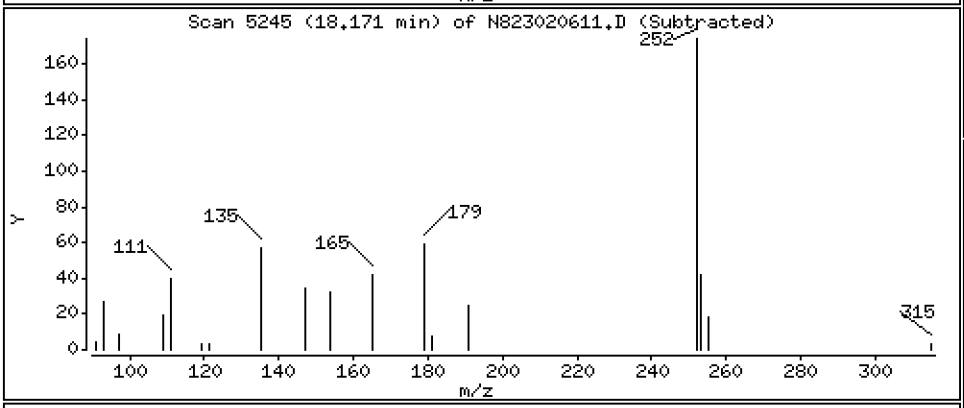
Column diameter: 0.25

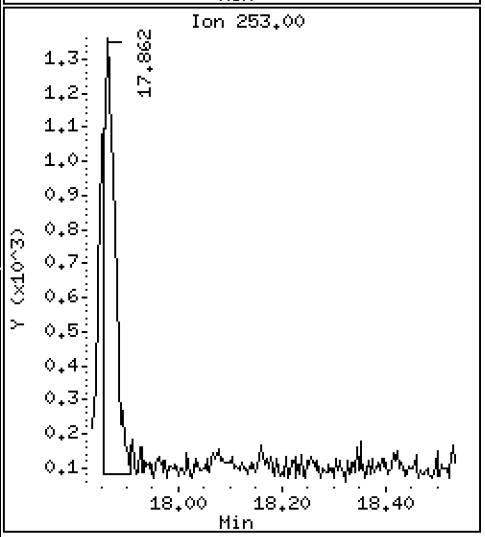
35 Perylene

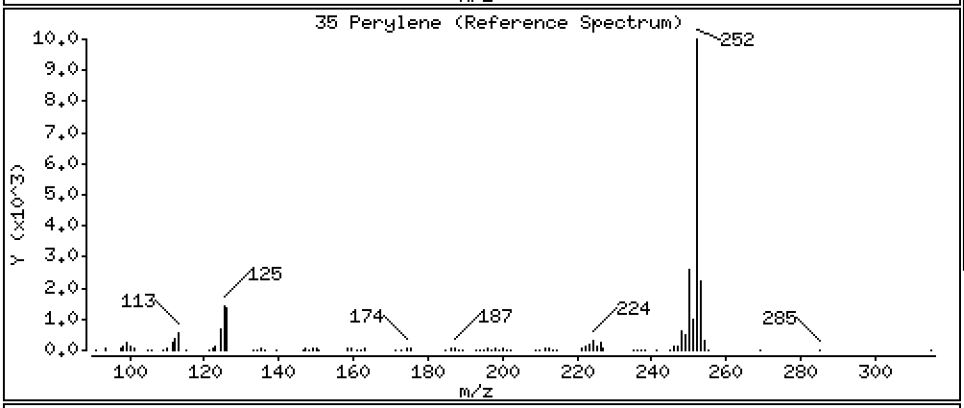
Concentration: 0.02446 ug/mL

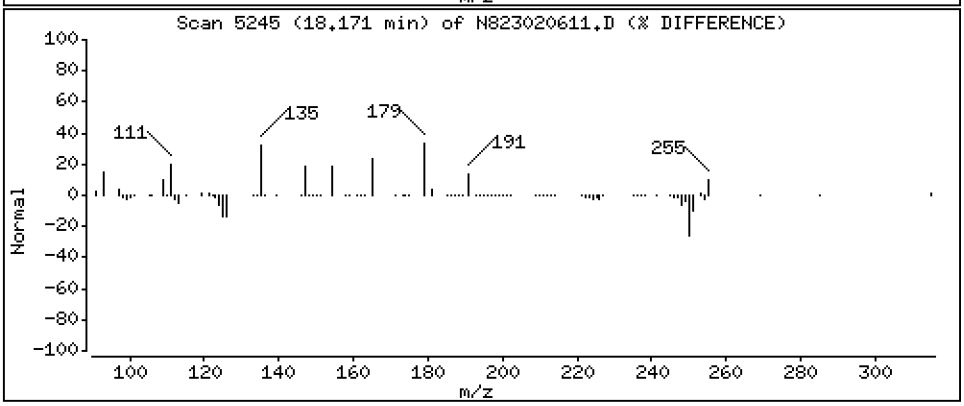












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Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

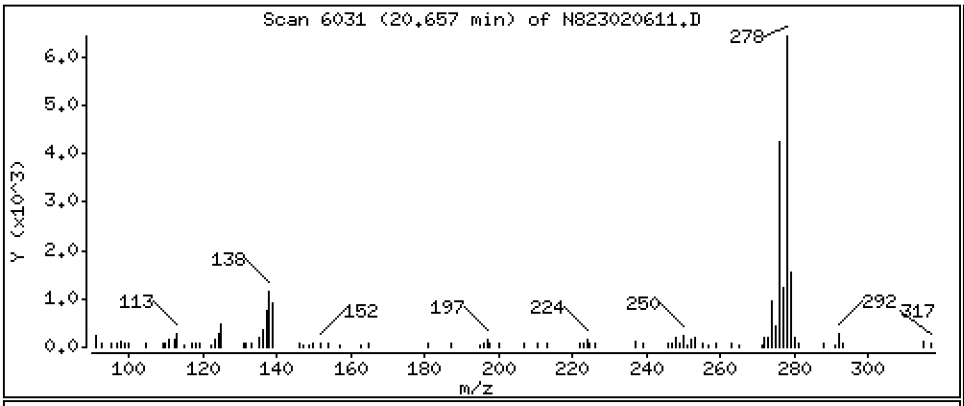
Operator: JZ

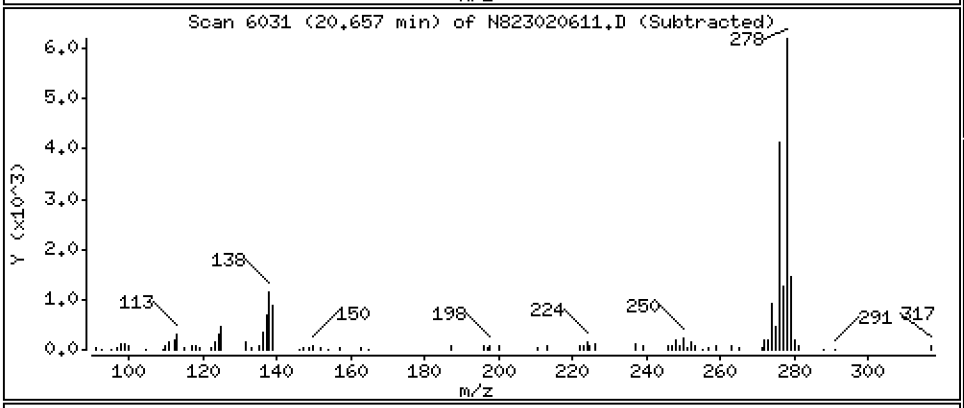
Column phase: Rxi-17sil

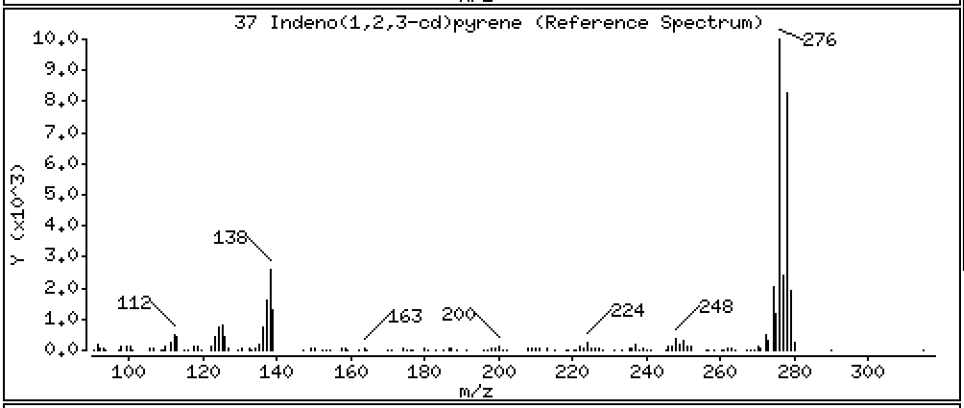
Column diameter: 0.25

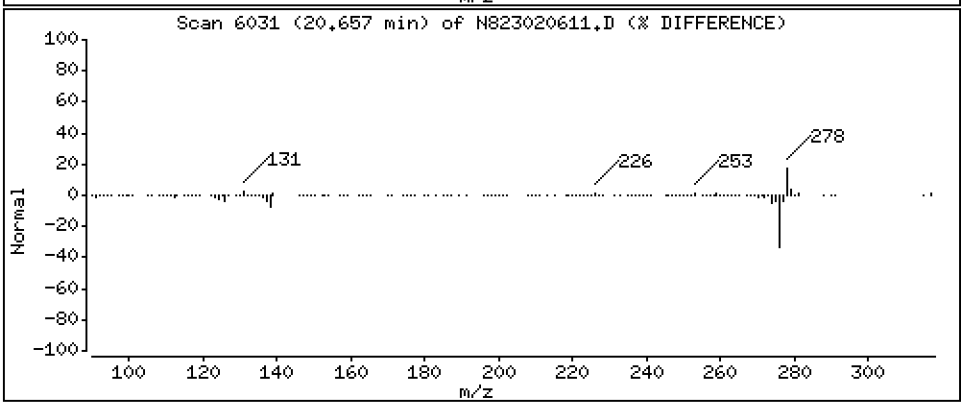
37 Indeno(1,2,3-cd)pyrene

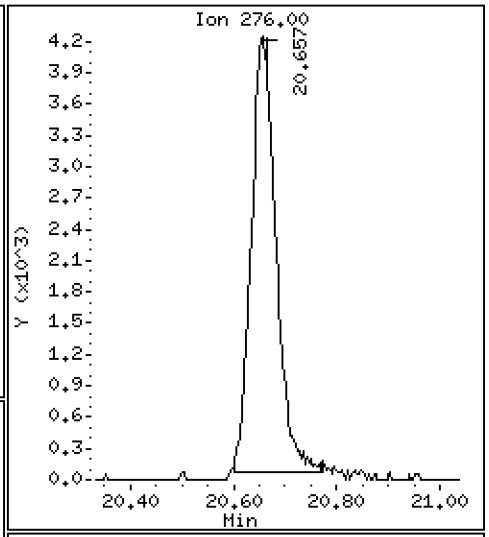
Concentration: 1.056 ug/mL

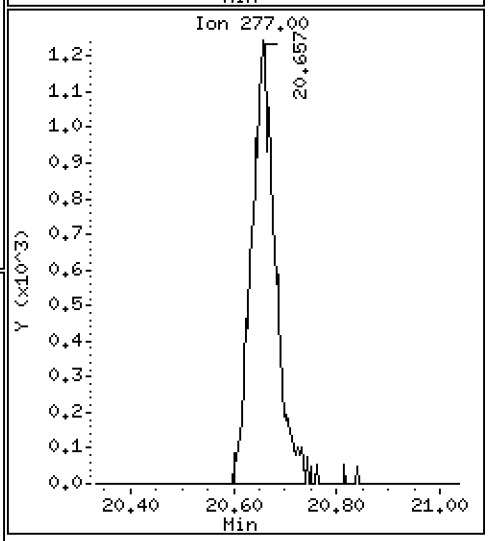












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Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

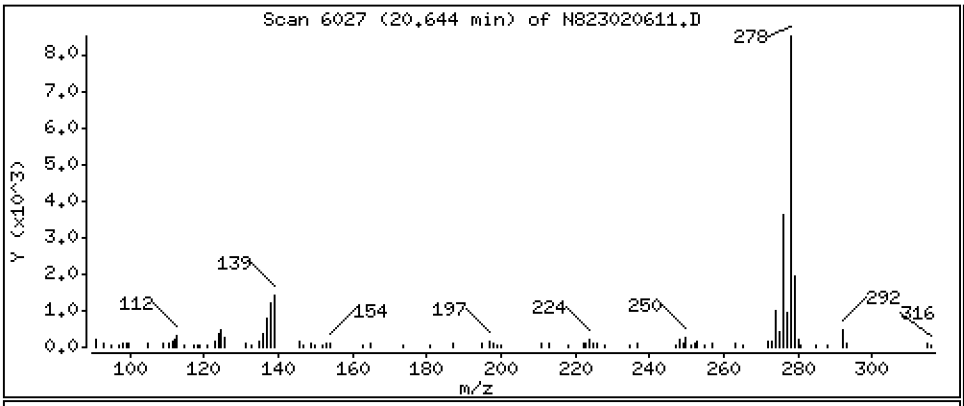
Operator: JZ

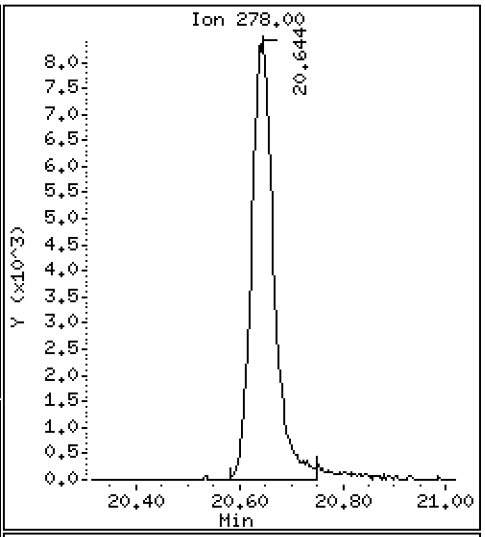
Column phase: Rxi-17sil

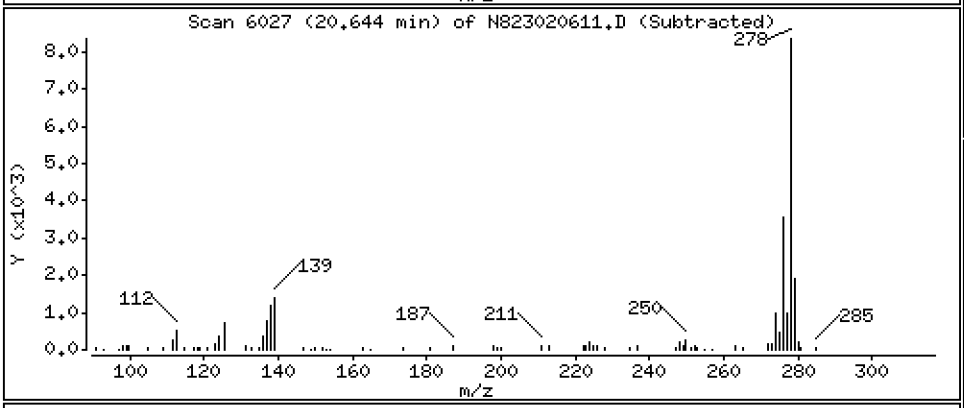
Column diameter: 0.25

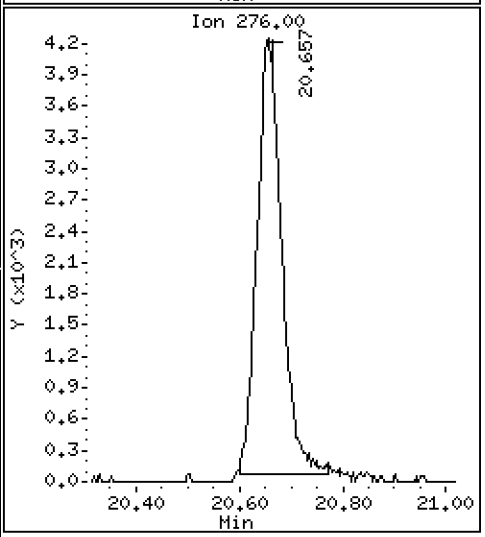
38 Dibenzo(a,h)anthracene

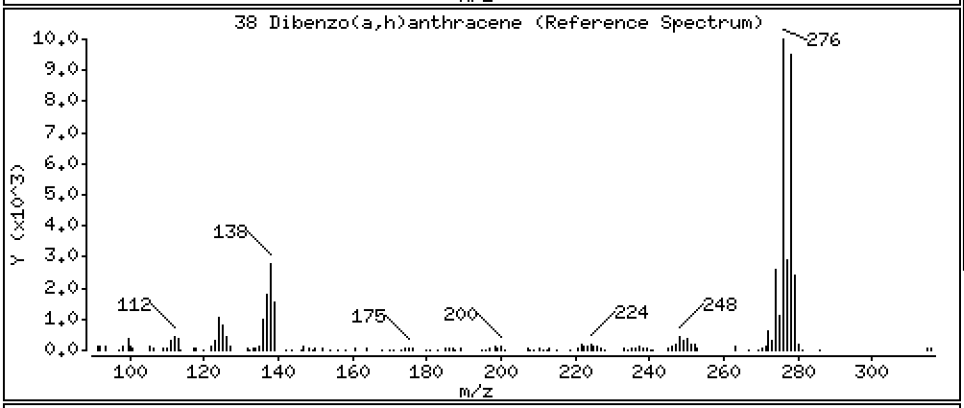
Concentration: 2.259 ug/mL

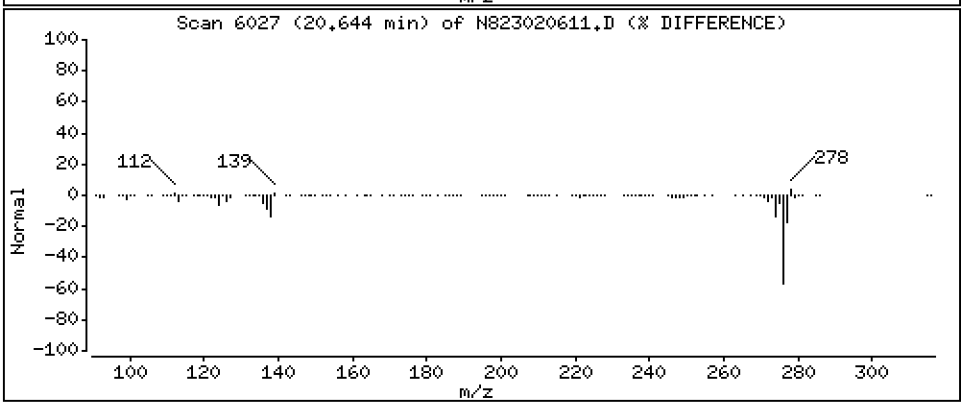












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020611.D

Date : 06-FEB-2023 17:18

Client ID:

Instrument: nt8.i

Sample Info: BLA0683-SRM1,

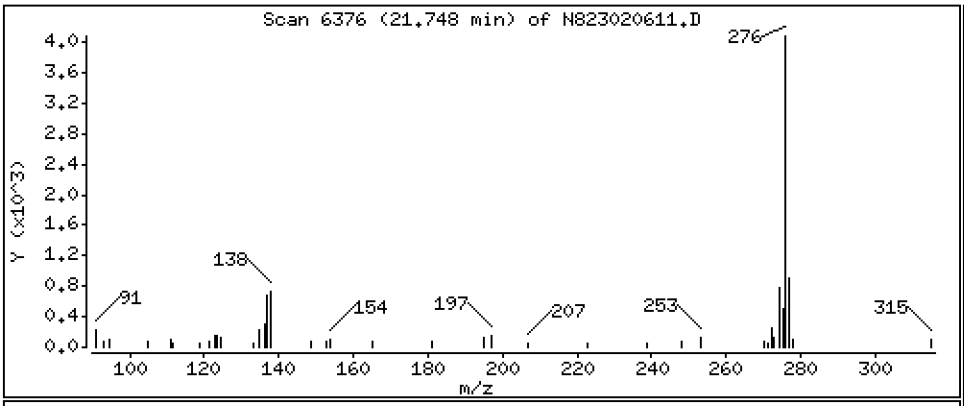
Operator: JZ

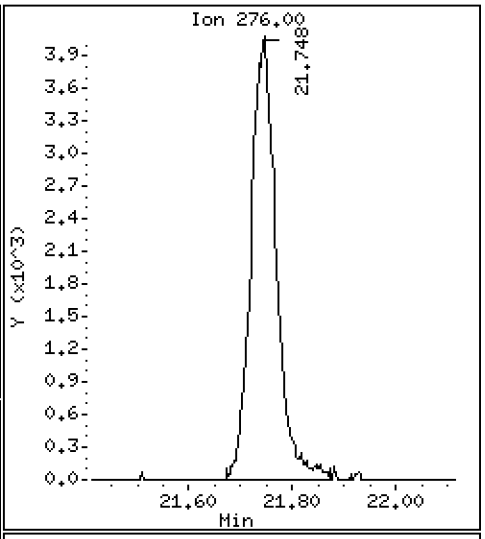
Column phase: Rxi-17sil

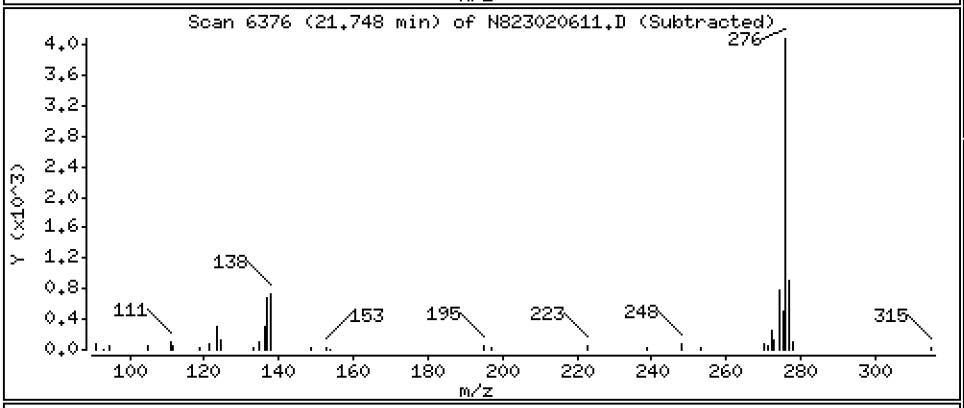
Column diameter: 0.25

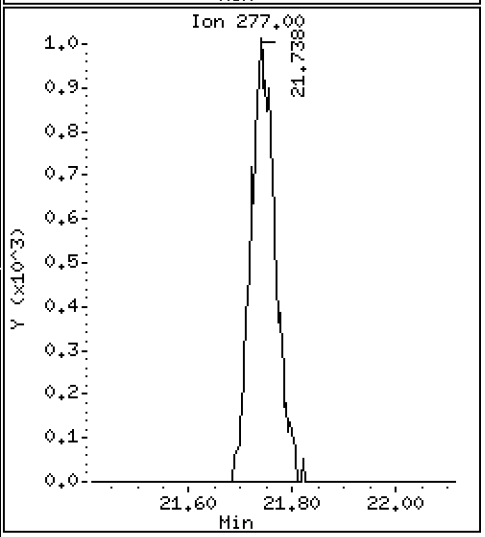
39 Benzo(g,h,i)perylene

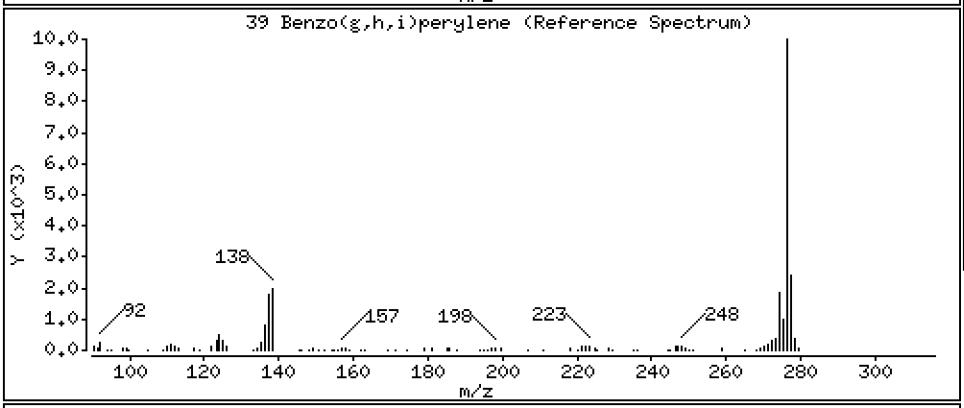
Concentration: 1.173 ug/mL

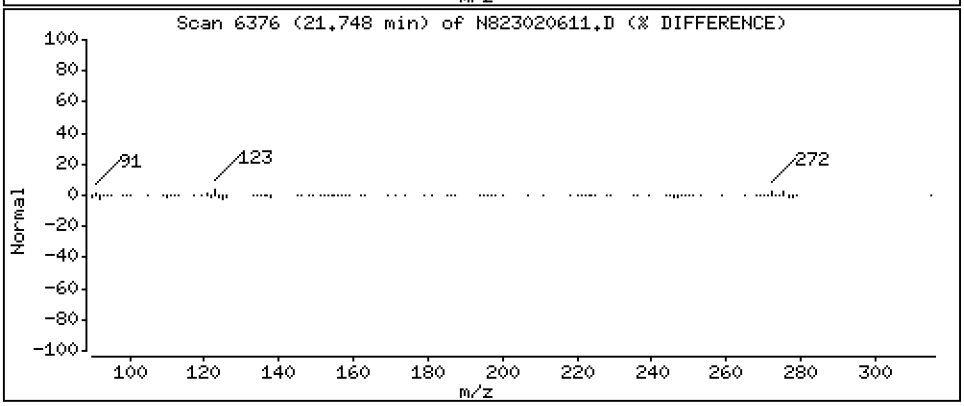












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020611.D
Lab Smp Id: BLA0683-SRM1
Inj Date : 06-FEB-2023 17:18
Operator : JZ Inst ID: nt8.i
Smp Info : BLA0683-SRM1,
Misc Info : 23-
Comment : 1ul Injection
Method : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
Meth Date : 07-Feb-2023 13:04 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PNAXMDL.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.884	4.900	(1.000)	47898	2.00000	
	2 Naphthalene	128	4.916	4.928	(1.006)	51592	2.31660	2.317
$	3 2-Methylnaphthalene-d10	152	5.624	5.634	(1.151)	37554	2.87484	2.875
	4 2-Methylnaphthalene	141	5.672	5.681	(1.161)	1033	0.08433	0.08433(M)
	5 1-methylnaphthalene	141	5.868	5.880	(1.201)	405	0.03258	0.03258
	9 Acenaphthylene	152	7.072	7.082	(0.985)	61602	3.06777	3.068
*	10 Acenaphthene-d10	164	7.183	7.189	(1.000)	26592	2.00000	
	11 Acenaphthene	153	7.234	7.240	(1.007)	47159	3.50509	3.505
	12 Dibenzofuran	168	7.385	7.392	(1.028)	820	0.04013	0.04013(M)
	14 Fluorene	166	7.863	7.869	(1.095)	36596	2.30573	2.306
*	15 Phenanthrene-d10	188	9.223	9.232	(1.000)	44776	2.00000	
	16 Phenanthrene	178	9.261	9.267	(1.004)	82696	3.78089	3.781
	17 Anthracene	178	9.298	9.308	(1.008)	38382	1.93173	1.932
	19 Carbazole	167	9.814	9.823	(1.064)	2170	0.11913	0.1191
	22 Fluoranthene	202	11.041	11.050	(1.197)	50733	2.13092	2.131
$	21 Fluoranthene-d10	212	11.003	11.009	(1.193)	64973	3.28894	3.289
	23 Pyrene	202	11.559	11.569	(0.815)	62928	2.77685	2.777
	24 Benzo(a)anthracene	228	14.057	14.070	(0.991)	18218	0.88695	0.8869
*	25 Chrysene-d12	240	14.190	14.202	(1.000)	36552	2.00000	
	27 Chrysene	228	14.260	14.275	(1.005)	38533	1.76223	1.762
	28 Benzo(b)fluoranthene	252	16.808	16.824	(0.929)	50267	3.83154	3.832
	29 Benzo(k)fluoranthene	252	16.868	16.887	(0.932)	13946	1.08526	1.085
	30 Benzo(j)fluoranthene	252	Compound Not Detected.					
	31 Total Benzofluoranthenes	252	16.808	16.824	(0.929)	63266	5.09198	5.092(M)
	32 Benzo(a)pyrene	252	17.864	17.877	(0.987)	12629	1.09390	1.094
*	33 Perylene-d12	264	18.092	18.107	(1.000)	22526	2.00000	
	35 Perylene	252	18.171	18.183	(1.004)	303	0.02446	0.02446(M)
$	36 Dibenzo(a,h)anthracene-d14	292	20.530	20.549	(1.135)	45685	5.17608	5.176
	37 Indeno(1,2,3-cd)pyrene	276	20.656	20.684	(1.142)	13884	1.05563	1.056
	38 Dibenzo(a,h)anthracene	278	20.644	20.666	(1.141)	25570	2.25910	2.259
	39 Benzo(g,h,i)perylene	276	21.747	21.763	(1.202)	13979	1.17309	1.173

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823020611.D
Lab Smp Id: BLA0683-SRM1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 06-FEB-2023
Calibration Time: 15:15
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44336	22168	88672	47898	8.03
10 Acenaphthene-d10	26127	13064	52254	26592	1.78
15 Phenanthrene-d10	47424	23712	94848	44776	-5.58
25 Chrysene-d12	36794	18397	73588	36552	-0.66
33 Perylene-d12	36636	18318	73272	22526	-38.51

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.90	4.40	5.40	4.88	-0.32
10 Acenaphthene-d10	7.19	6.69	7.69	7.18	-0.08
15 Phenanthrene-d10	9.23	8.73	9.73	9.22	-0.10
25 Chrysene-d12	14.20	13.70	14.70	14.19	-0.09
33 Perylene-d12	18.11	17.61	18.61	18.09	-0.09

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

REVIEW SUMMARY FOR FILE - N823020611.D

Lab ID: BLA0683-SRM1
nt8.i, 20230206A.b\FSIMPNA230119.m,   06-FEB-2023 17:18

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

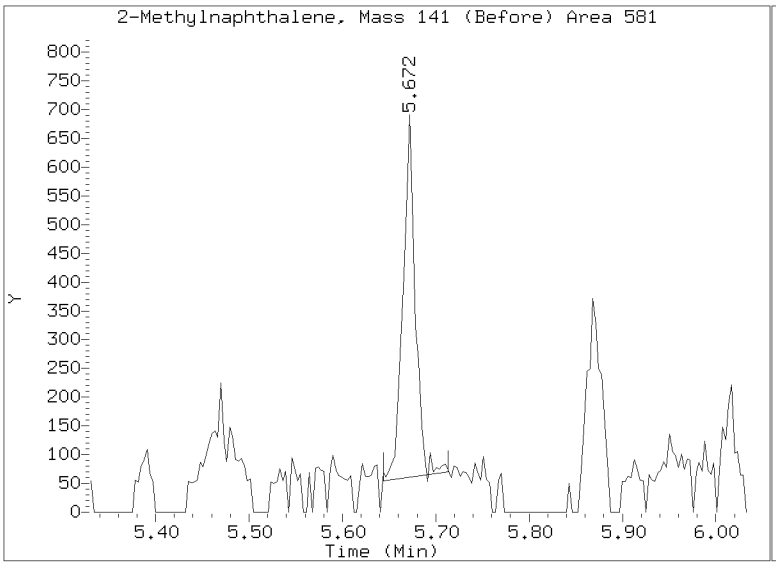
No RRT check performed

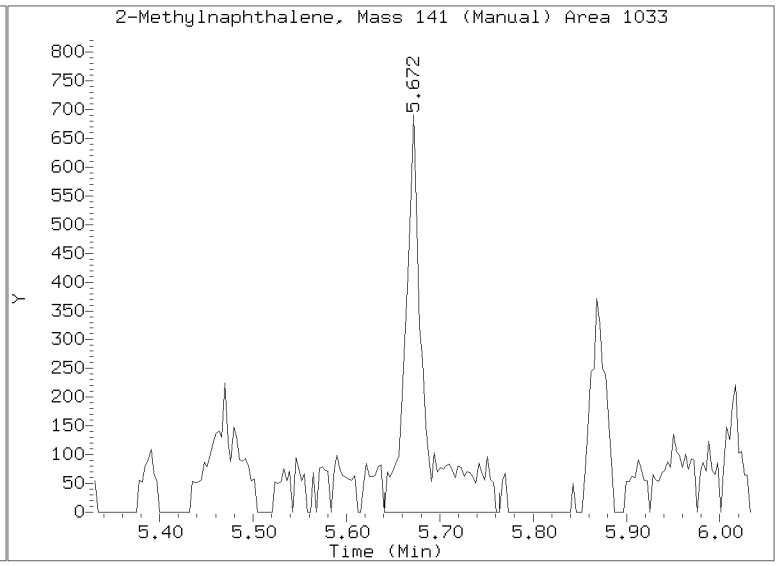
On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, PNAXMDL.sub = 0.0080

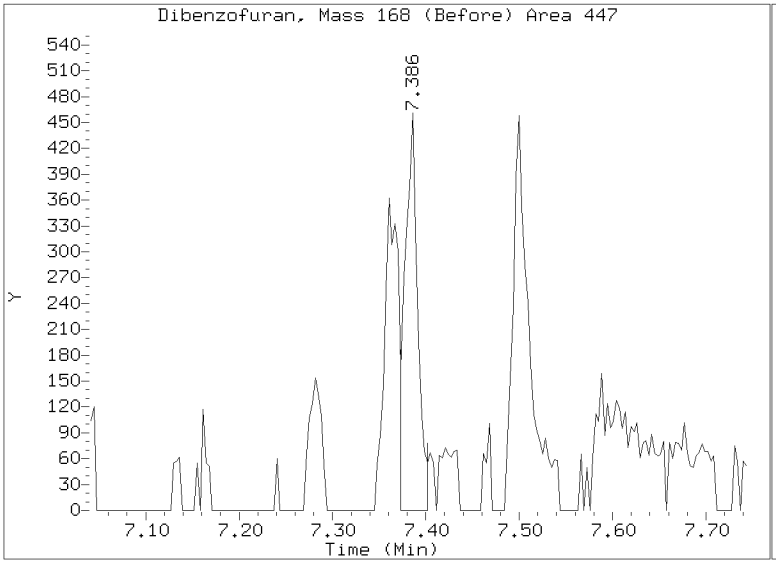
* Only compounds listed in the work order have been verified by the analyst *

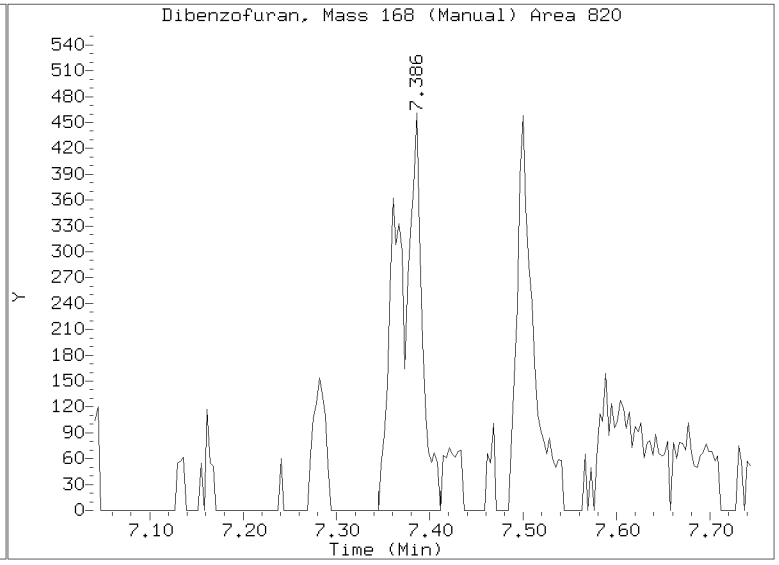
Quant Ion Manual Peak Adjustment Report

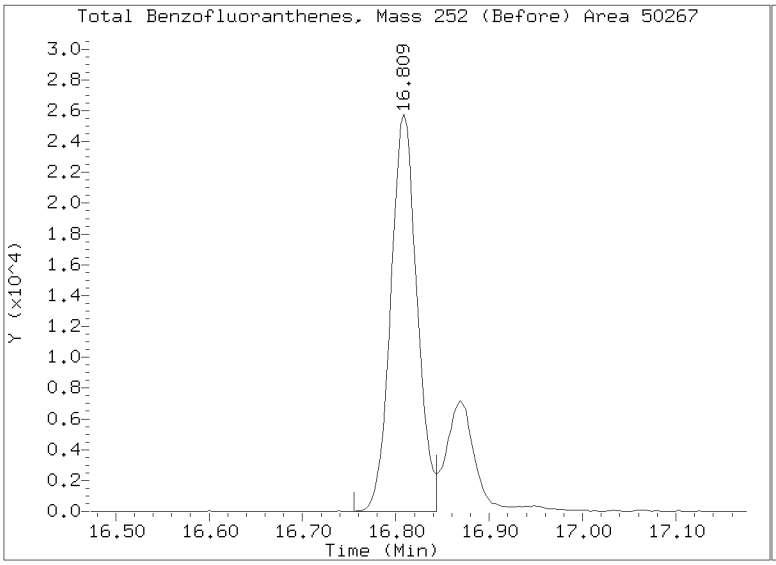
Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020611.D
Injection Date: 06-FEB-2023 17:18
Lab ID:BLA0683-SRM1 Client ID:
Report Date: 02/07/2023 13:19

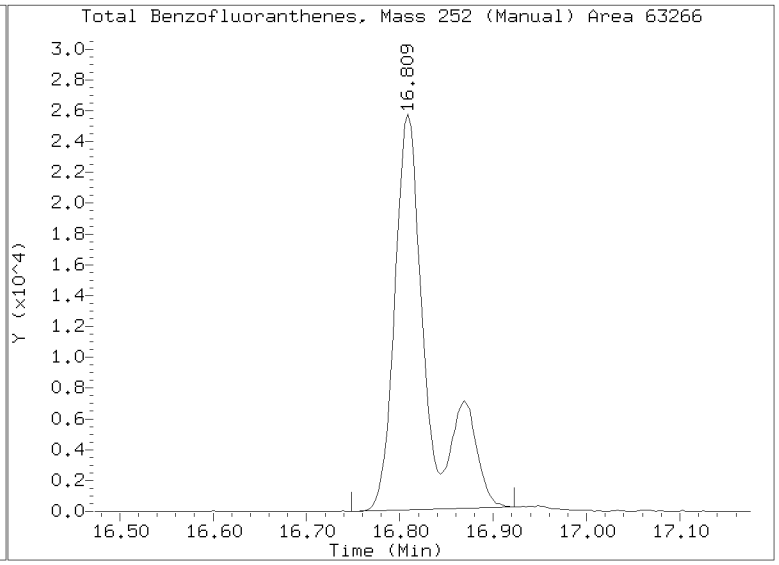






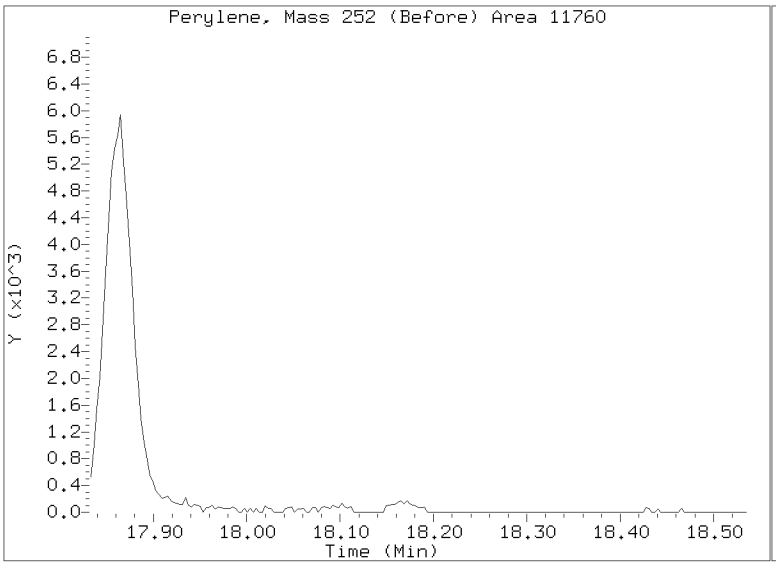


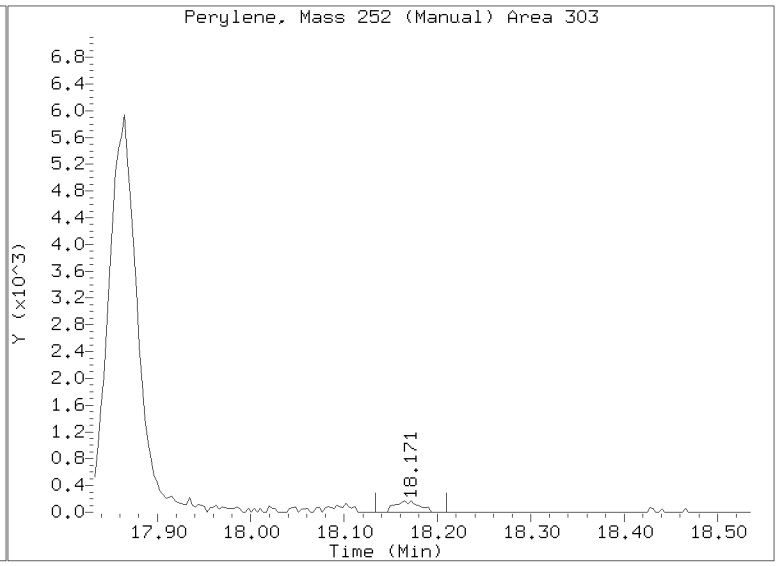




Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020611.D
Injection Date: 06-FEB-2023 17:18
Lab ID:BLA0683-SRM1 Client ID:
Report Date: 02/07/2023 13:19





Analytical Resources, LLC
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E-SIM

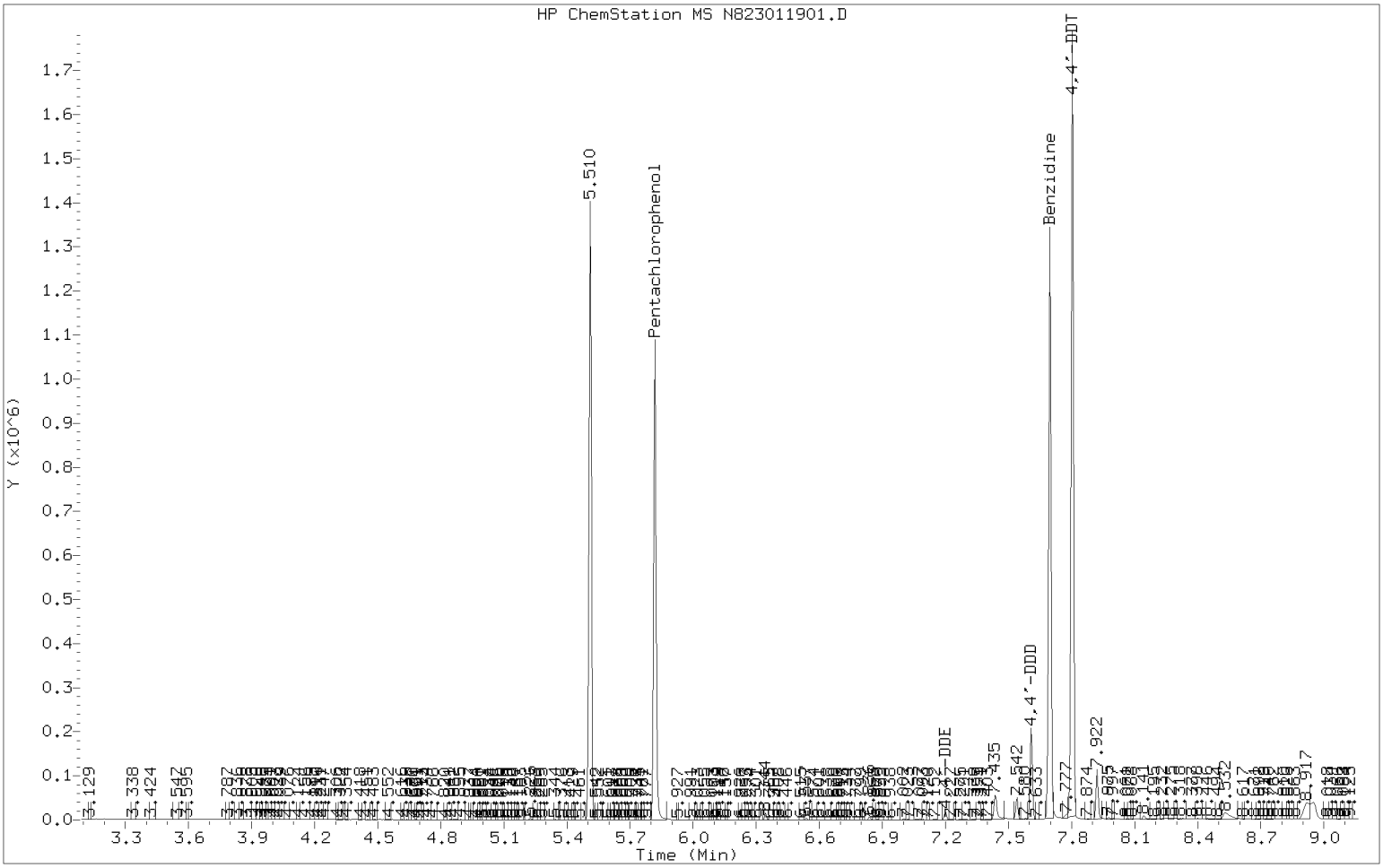
Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Lab File ID:	N823011901.D	Injection Date:	01/19/23
Instrument ID:	NT8	Injection Time:	10:28
Sequence:	SLA0213	Lab Sample ID:	SLA0213-TUN1

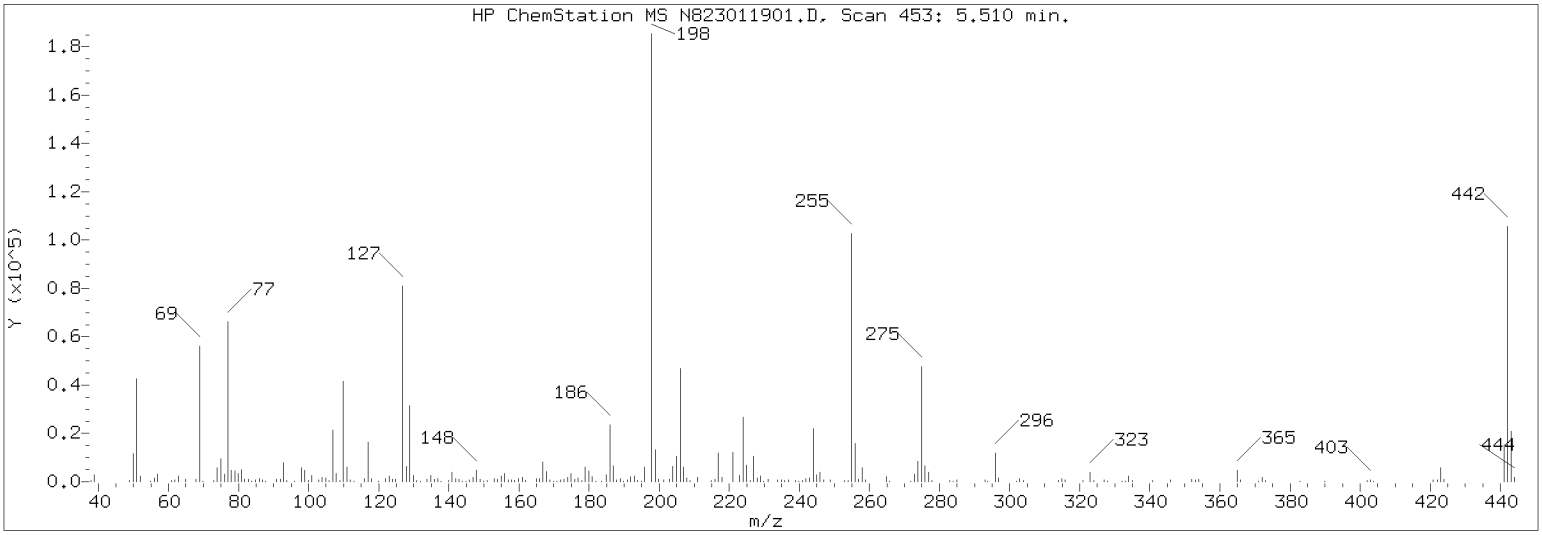
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	1.25	PASS
69	Less than 100% of 198	30.9	PASS
70	Less than 2% of 69	0.208	PASS
197	Less than 2% of 198	0.168	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.89	PASS
365	1 - 100% of 198	2.85	PASS
441	Less than 150% of 443	72.9	PASS
442	1 - 200% of 198	67.9	PASS
443	15 - 24% of 442	19.6	PASS
4,4'-DDD	Less than 20% of		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Less than 200% of		

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLA0213-TUN1	N823011901.D	01/19/2023	10:28
Initial Cal Blank	SLA0213-ICB1	N823011902.D	01/19/2023	10:59
Cal Standard	SLA0213-CAL1	N823011903.D	01/19/2023	11:26
Cal Standard	SLA0213-CAL2	N823011904.D	01/19/2023	11:58
Cal Standard	SLA0213-CAL3	N823011905.D	01/19/2023	12:25
Cal Standard	SLA0213-CAL4	N823011906.D	01/19/2023	12:52
Cal Standard	SLA0213-CAL5	N823011907.D	01/19/2023	13:19
Cal Standard	SLA0213-CAL6	N823011908.D	01/19/2023	13:46
Secondary Cal Check	SLA0213-SCV1	N823011909.D	01/19/2023	14:58

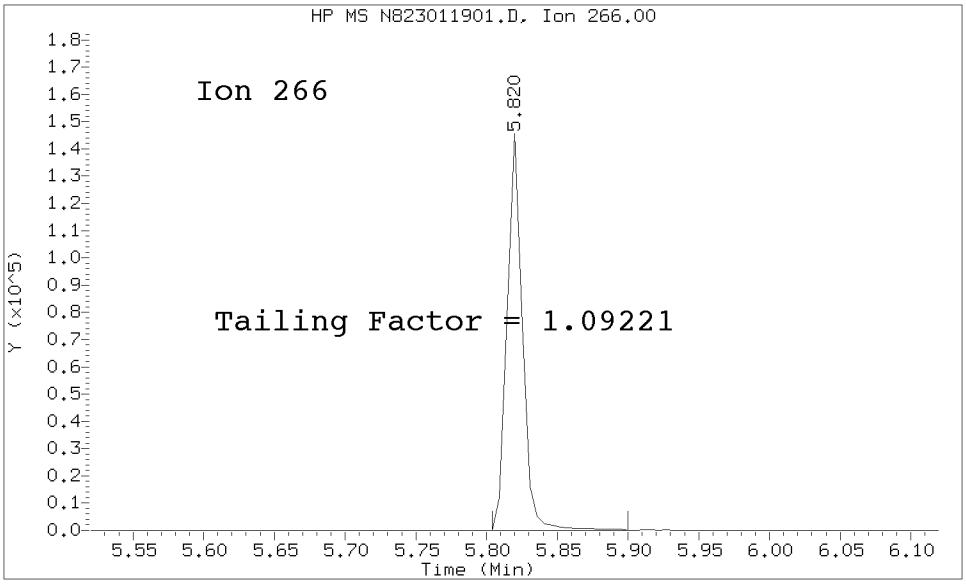
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: SLA0213-TUN1 DFTPP230119
Report Date: 01/19/2023 20:14



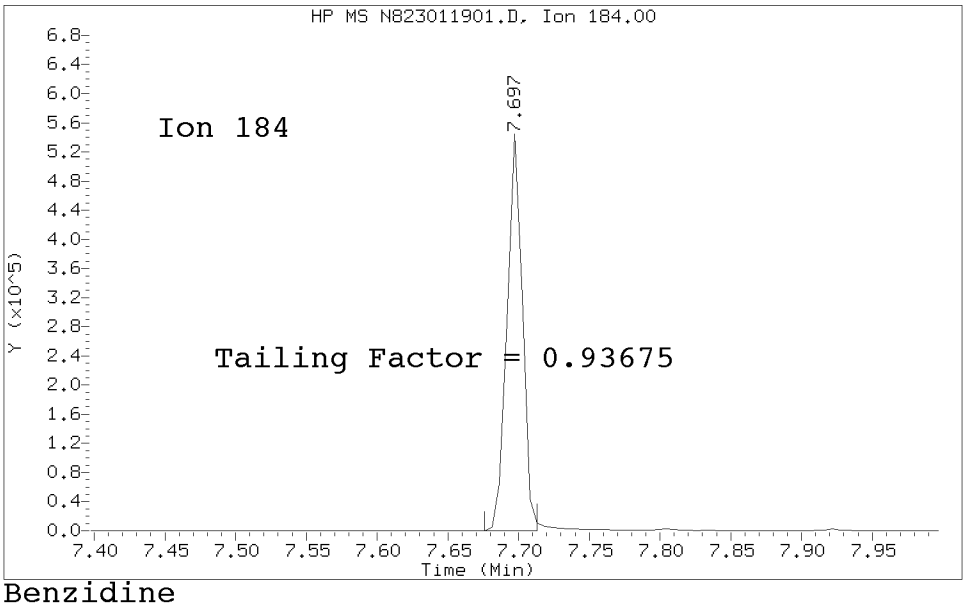


Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m\sw846ddt.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: DFTPP230119
Report Date: 01/19/2023 20:14



Pentachlorophenol
==========
Exp. RT = 5.825
Found RT = 5.820

Tail Factor = 1.092 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 7.703
Found RT = 7.697

Tail Factor = 0.937 Maximum Allowed = 2.0

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	23.71
68	Less than 2.00% of mass 69	0.39 (1.25)
69	Mass 69 relative abundance	30.92
70	Less than 2.00% of mass 69	0.06 (0.21)
127	10.00 - 80.00% of mass 198	44.20
197	Less than 2.00% of mass 198	0.17
199	5.00 - 9.00% of mass 198	6.89
275	10.00 - 60.00% of mass 198	26.96
365	Greater than 1.00% of mass 198	2.85
441	0.01 - 24.00% of mass 442	9.72 (14.32)
442	50.00 - 200.00% of mass 198	67.89
443	15.00 - 24.00% of mass 442	13.33 (19.64)

Data File: N823011901.D
Spectrum: Avg. Scans 452-454 (5.51), Background Scan 448
Location of Maximum: 198.00
Number of points: 228

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	424	124.00	727	188.00	466	265.00	1738
39.00	2285	125.00	694	189.00	1088	266.00	231
49.00	389	127.00	59064	190.00	92	272.00	97
50.00	8567	128.00	4618	191.00	538	273.00	2435
51.00	31688	129.00	23208	192.00	1501	274.00	6434
52.00	1694	130.00	1967	193.00	1652	275.00	36032
55.00	89	131.00	387	194.00	339	276.00	4936
56.00	1081	132.00	92	195.00	108	277.00	3133
57.00	2353	134.00	695	196.00	4417	278.00	496
61.00	487	135.00	1887	197.00	224	283.00	243
62.00	511	136.00	770	198.00	133632	284.00	200
63.00	1627	137.00	979	199.00	9210	285.00	536
65.00	865	138.00	101	200.00	711	293.00	678
68.00	518	140.00	220	201.00	653	294.00	83
69.00	41320	141.00	2913	203.00	891	296.00	9364
70.00	86	142.00	931	204.00	4715	297.00	1310
73.00	274	143.00	728	205.00	8070	302.00	96
74.00	4327	144.00	83	206.00	34104	303.00	1146
75.00	6885	145.00	91	207.00	4557	304.00	262
76.00	2362	146.00	508	208.00	1177	314.00	364
77.00	48072	147.00	1540	209.00	387	315.00	1068
78.00	3441	148.00	3391	210.00	236	316.00	588
79.00	3296	149.00	690	211.00	1430	321.00	250
80.00	2464	150.00	90	215.00	376	323.00	3145
81.00	3741	151.00	458	216.00	746	324.00	501
82.00	872	152.00	181	217.00	9085	327.00	540
83.00	845	153.00	893	218.00	1189	328.00	201
84.00	287	154.00	764	221.00	8442	332.00	178
85.00	621	155.00	1756	223.00	2039	333.00	129
86.00	1039	156.00	2503	224.00	19544	334.00	1893
87.00	481	157.00	527	225.00	5122	335.00	518
88.00	91	158.00	516	226.00	502	341.00	275
91.00	866	159.00	410	227.00	8274	346.00	674
92.00	878	160.00	955	228.00	1174	352.00	945
93.00	5816	161.00	1421	229.00	1712	353.00	630
94.00	409	162.00	445	230.00	111	354.00	910
96.00	203	165.00	1085	231.00	685	365.00	3802
98.00	4243	166.00	1023	234.00	538	366.00	580
99.00	3501	167.00	5993	235.00	568	371.00	91
100.00	344	168.00	3082	236.00	394	372.00	1475
101.00	1983	169.00	490	237.00	657	373.00	292
103.00	704	170.00	94	239.00	327	383.00	290
104.00	1275	171.00	194	240.00	187	390.00	177
105.00	1230	172.00	595	241.00	468	402.00	468
106.00	379	173.00	732	242.00	1090	403.00	736
107.00	15826	174.00	1319	243.00	1102	404.00	243
108.00	2447	175.00	2491	244.00	16206	421.00	649
109.00	331	176.00	751	245.00	2245	422.00	226
110.00	30008	177.00	1175	246.00	3000	423.00	4860

111.00	4456	178.00	288	247.00	624	424.00	978
112.00	513	179.00	4561	249.00	587	441.00	12991
113.00	89	180.00	3271	253.00	239	442.00	90720
116.00	935	181.00	1513	254.00	438	443.00	17816
117.00	12513	182.00	106	255.00	76904	444.00	1584
118.00	931	184.00	333	256.00	11699		
120.00	104	185.00	2153	257.00	880		
122.00	1003	186.00	17336	258.00	4539		
123.00	1682	187.00	4916	259.00	746		

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E-SIM

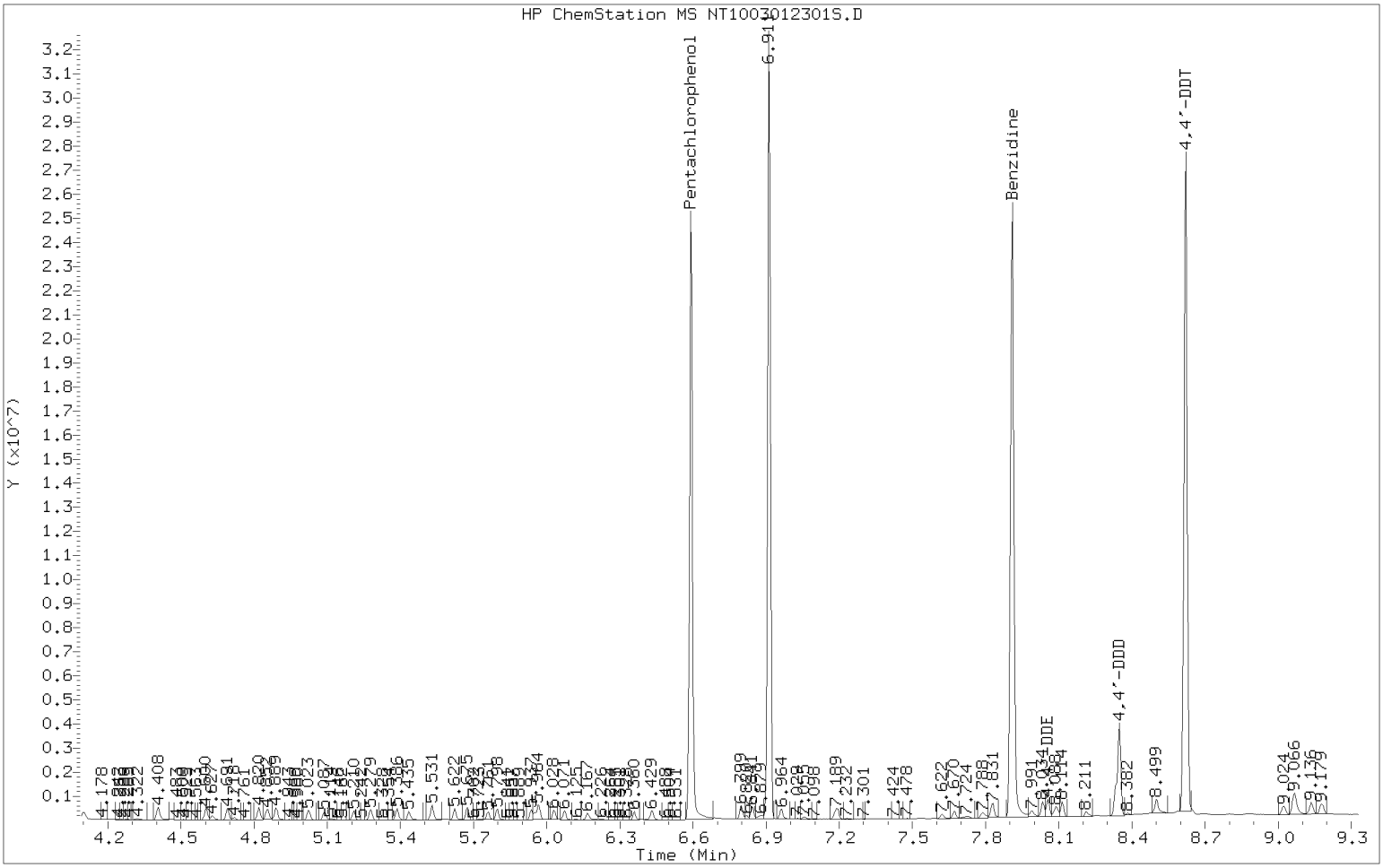
Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Lab File ID:	NT1003012301S.D	Injection Date:	03/01/23
Instrument ID:	NT10	Injection Time:	15:49
Sequence:	SLC0143	Lab Sample ID:	SLC0143-TUN1

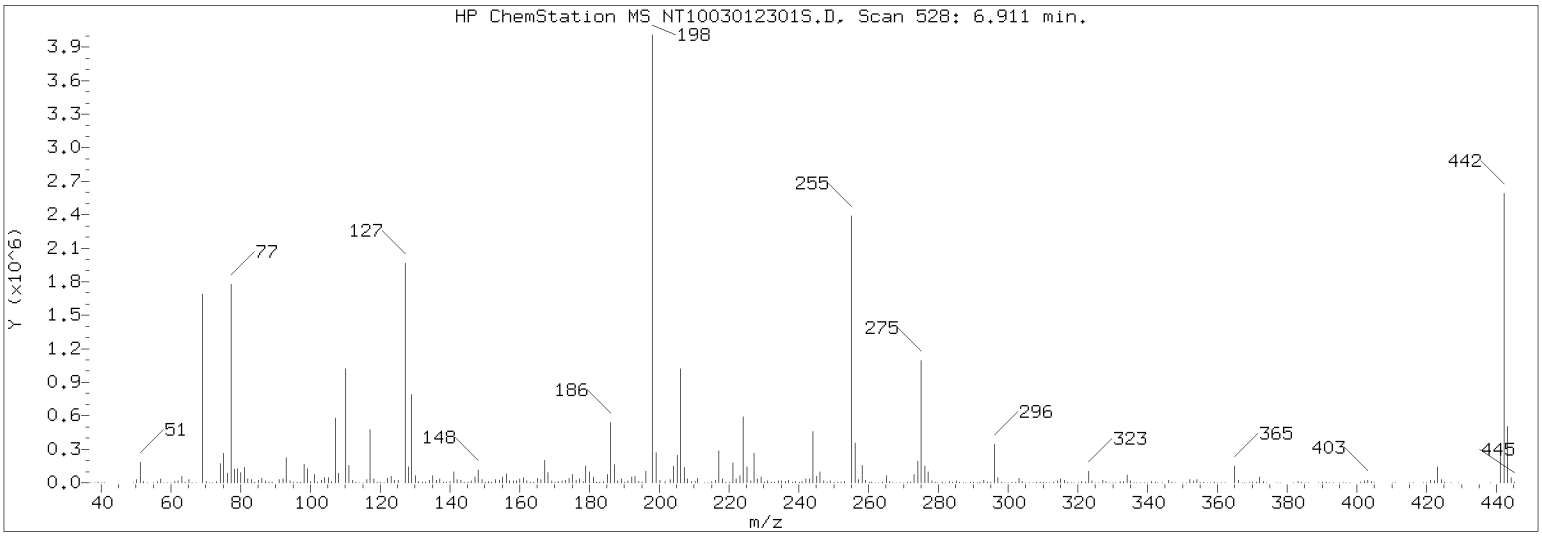
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	0.793	PASS
69	Less than 100% of 198	41.1	PASS
70	Less than 2% of 69	0.366	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.67	PASS
365	1 - 100% of 198	4.33	PASS
441	Less than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

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLC0143-TUN1	NT1003012301S.D	03/01/2023	15:49
Cal Standard	SLC0143-CAL8	NT1003012303S.D	03/01/2023	16:42
Cal Standard	SLC0143-CAL7	NT1003012304S.D	03/01/2023	17:21
Cal Standard	SLC0143-CAL6	NT1003012305S.D	03/01/2023	17:59
Cal Standard	SLC0143-CAL5	NT1003012306S.D	03/01/2023	18:37
Cal Standard	SLC0143-CAL4	NT1003012307S.D	03/01/2023	19:15
Cal Standard	SLC0143-CAL3	NT1003012308S.D	03/01/2023	19:53
Cal Standard	SLC0143-CAL2	NT1003012309S.D	03/01/2023	20:30
Cal Standard	SLC0143-CAL1	NT1003012310S.D	03/01/2023	21:09
Secondary Cal Check	SLC0143-SCV1	NT1003012311S.D	03/01/2023	21:46
Initial Cal Blank	SLC0143-ICB1	NT1003012312S.D	03/01/2023	22:24

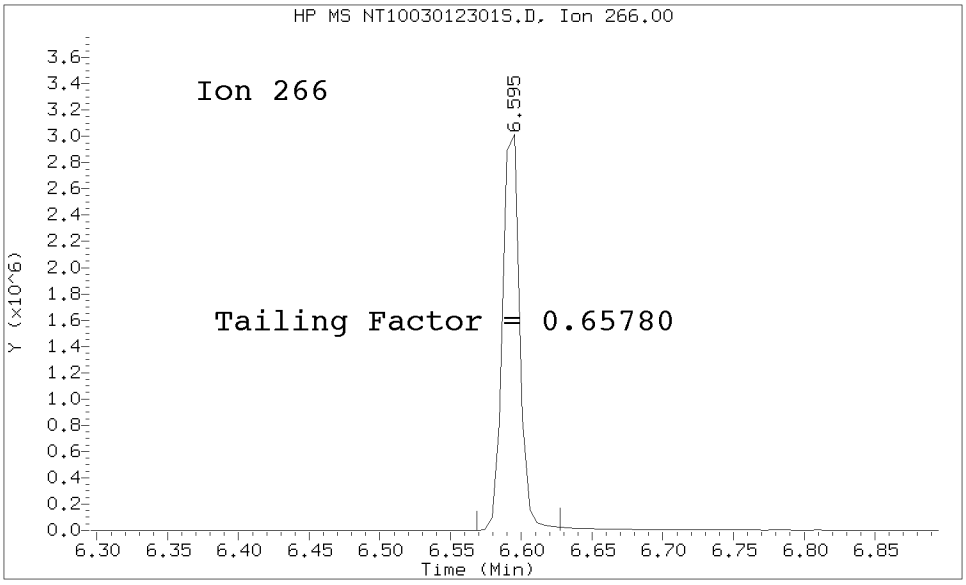
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230301.b/SIM.b/NT1003012301S.D/NT1003012301S.D
Method Used: \20230301.b\SIM.b\DFTPP8270E.m Inst: nt10
Injection Date: 01-MAR-2023 15:49 Operator: JGR
Sample Info: SLC0143-TUN1 SLC0143-TUN1
Report Date: 07/05/2023 09:35



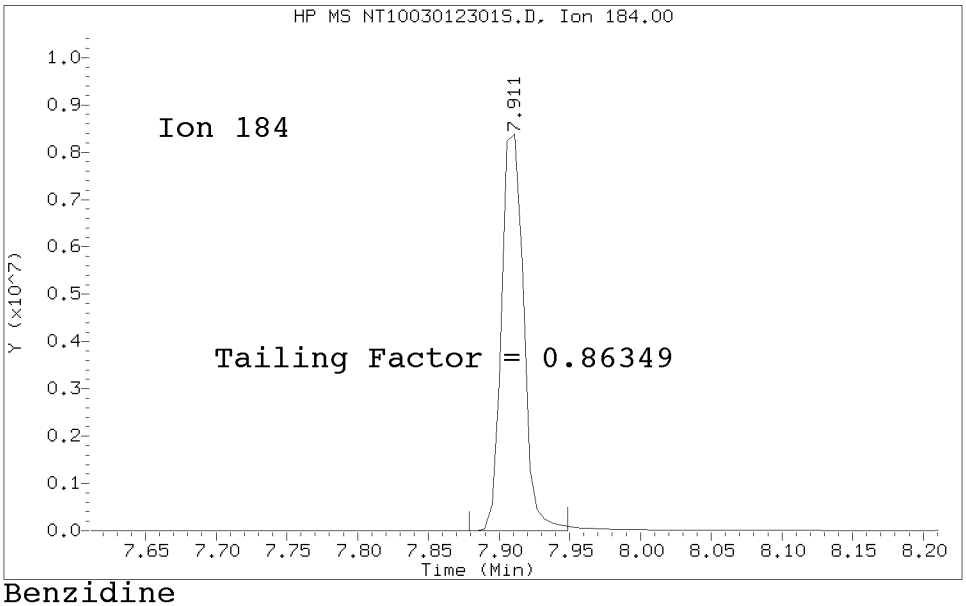


Datafile Analyzed: /20230301.b/SIM.b/NT1003012301S.D/NT1003012301S.D
Method Used: \20230301.b\DFTPP8270E.m\sw846ddt.m Inst: nt10
Injection Date: 01-MAR-2023 15:49 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 07/05/2023 09:35



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

Tail Factor = 0.658 Maximum Allowed = 2.0



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

Tail Factor = 0.863 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

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

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

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

Tuning Sample, nt10.i/20230301.b/SIM.b/NT1003012301S.D, *** PASSED ***

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

Data File: NT1003012301S.D
Spectrum: Avg. Scans 527-529 (6.91), Background Scan 522
Location of Maximum: 198.00
Number of points: 369

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

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

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00050	Instrument:	NT8
Calibration Date:	01/19/2023	Column (1):	RXI-17Sil ms

Calibration Comments: SS, Dibenzo(a,h)anthracene-d14, highest point included. Changed curve fit from "AVG" to "LRO" on 1/25/23 by JZ.

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
Naphthalene	0.1	1.051331	0.5	0.8804155	1	0.9140738	2.5	0.9442377	5	0.9059688	10	0.8834817
2-Methylnaphthalene	0.1	0.5583976	0.5	0.483576	1	0.4966087	2.5	0.5321582	5	0.5081776	10	0.490102
1-Methylnaphthalene	0.1	0.567502	0.5	0.4881925	1	0.5073336	2.5	0.5386185	5	0.5123544	10	0.5007901
Acenaphthylene	0.1	1.569275	0.5	1.288567	1	1.419627	2.5	1.612722	5	1.573862	10	1.597505
Acenaphthene	0.1	1.159165	0.5	0.9399536	1	0.9690137	2.5	1.040021	5	0.9826181	10	0.9807186
Dibenzofuran	0.1	1.856131	0.5	1.449189	1	1.468766	2.5	1.539056	5	1.458398	10	1.450275
Fluorene	0.1	1.333774	0.5	1.066627	1	1.134936	2.5	1.226731	5	1.19285	10	1.207426
Phenanthrene	0.1	1.200199	0.5	0.9068737	1	0.925967	2.5	0.9922048	5	0.9288855	10	0.90761
Anthracene	0.1	0.9900686	0.5	0.7891408	1	0.8362482	2.5	0.9415647	5	0.895227	10	0.8727266
Fluoranthene	0.1	1.200966	0.5	0.9720444	1	1.022937	2.5	1.114343	5	1.05358	10	1.016684
Pyrene	0.1	1.416146	0.5	1.066416	1	1.156217	2.5	1.294823	5	1.256828	10	1.249389
Benzo(a)anthracene	0.1	1.200365	0.5	0.9419141	1	1.006861	2.5	1.18718	5	1.184592	10	1.222407
Chrysene	0.1	1.382333	0.5	1.081643	1	1.128342	2.5	1.227241	5	1.185771	10	1.173282
Benzo(b)fluoranthene	0.1	1.335895	0.5	0.9774708	1	1.022944	2.5	1.220494	5	1.192377	10	1.239686
Benzo(k)fluoranthene	0.1	1.327249	0.5	0.9937275	1	1.005899	2.5	1.178993	5	1.164539	10	1.175213
Benzo(j)fluoranthene	0.1	1.092831	0.5	0.9205253	1	0.9228699	2.5	1.084778	5	1.075203	10	1.066465
Benzofluoranthenes, Total	0.3	1.255354	1.5	0.9344954	3	0.9716584	7.5	1.159079	15	1.142352	30	1.155882
Benzo(a)pyrene	0.1	1.139906	0.5	0.8777692	1	0.8951488	2.5	1.077374	5	1.063086	10	1.096879
Indeno(1,2,3-cd)pyrene	0.1	1.208599	0.5	0.995325	1	1.072555	2.5	1.257473	5	1.228578	10	1.24398
Dibenzo(a,h)anthracene	0.1	1.049117	0.5	0.8348251	1	0.8950591	2.5	1.081382	5	1.068557	10	1.100721
Benzo(g,h,i)perylene	0.1	1.162964	0.5	0.9102826	1	0.9409469	2.5	1.106673	5	1.088733	10	1.138469
2-Methylnaphthalene-d10	0.1	0.5857106	0.5	0.4932528	1	0.5345061	2.5	0.5674481	5	0.5504276	10	0.5413545
Dibenzo[a,h]anthracene-d14	0.1	0.580281	0.5	0.5471844	1	0.6076211	2.5	0.7324975	5	0.7420675	10	0.7980029
Fluoranthene-d10	0.1	0.9007247	0.5	0.754546	1	0.8247891	2.5	0.9550254	5	0.9291815	10	0.930087

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00050	Instrument:	NT8
Calibration Date:	01/19/2023	Column (1):	RXI-17Sil ms

Calibration Comments: SS, Dibenzo(a,h)anthracene-d14, highest point included. Changed curve fit from "AVG" to "LRO" on 1/25/23 by JZ.

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Naphthalene	0.9299181	6.9			RSD (15)	
2-Methylnaphthalene	0.5115033	5.6			RSD (15)	
1-Methylnaphthalene	0.5191318	5.6			RSD (15)	
Acenaphthylene	1.51026	8.5			RSD (15)	
Acenaphthene	1.011915	7.8			RSD (15)	
Dibenzofuran	1.536969	10.4			RSD (15)	
Fluorene	1.193724	7.5			RSD (15)	
Phenanthrene	0.9769567	11.6			RSD (15)	
Anthracene	0.887496	8.1			RSD (15)	
Fluoranthene	1.063426	7.7			RSD (15)	
Pyrene	1.23997	9.6			RSD (15)	
Benzo(a)anthracene	1.123887	10.5			RSD (15)	
Chrysene	1.196435	8.7			RSD (15)	
Benzo(b)fluoranthene	1.164811	11.8			RSD (15)	
Benzo(k)fluoranthene	1.140937	10.9			RSD (15)	
Benzo(j)fluoranthene	1.027112	8.0			RSD (15)	
Benzofluoranthenes, Total	1.103137	11.2			RSD (15)	
Benzo(a)pyrene	1.025027	10.8			RSD (15)	
Indeno(1,2,3-cd)pyrene	1.167752	9.2			RSD (15)	
Dibenzo(a,h)anthracene	1.004944	11.1			RSD (15)	
Benzo(g,h,i)perylene	1.058011	10.0			RSD (15)	
2-Methylnaphthalene-d10	0.5454499	5.8			RSD (15)	
Dibenzo[a,h]anthracene-d14	0.6679424	15.3	0.9971		LCOD (0.99)	
Fluoranthene-d10	0.8823923	8.7			RSD (15)	

Printed: 1/19/2023 8:45:16PM

ANALYSIS SEQUENCE

SLA0213

Instrument: NT8 Element Column ID: J006458
Calibration ID: GA00050

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SLA0213-TUN1	MS Tune	QC		1	K004775			
SLA0213-ICB1	Initial Cal Blank	QC		2		K008540		
SLA0213-CAL1	8270 SIM PNA 0.1	QC		3	L000603	K008540		
SLA0213-CAL2	8270 SIM PNA 0.5	QC		4	L000604	K008540		
SLA0213-CAL3	8270 SIM PNA 1.0	QC		5	L000605	K008540		
SLA0213-CAL4	8270 SIM PNA 2.5	QC		6	L000606	K008540		
SLA0213-CAL5	8270 SIM PNA 5	QC		7	L000607	K008540		
SLA0213-CAL6	8270 SIM PNA 10	QC		8	L000608	K008540		
SLA0213-SCV1	8270 SIM PNA SCV	QC		9	L000686	K008540		

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

	Time	Filename	LabID	ClientId	DF									
1	1028	N823011901.D	SLA0213-TUN1		1	NO ISTDS FOUND								
2	1059	N823011902.D	SLA0213-ICB1		1	4.92	52082	7.20	30936	9.24	59030	14.22	50944	18.12	47418
3	1126	N823011903.D	SLA0213-CAL1		1	4.91	46132	7.20	27261	9.24	52158	14.20	44953	18.11	41635
4	1158	N823011904.D	SLA0213-CAL2		1	4.91	45056	7.20	26746	9.24	50759	14.21	44658	18.11	42567
5	1225	N823011905.D	SLA0213-CAL3		1	4.91	47180	7.20	28206	9.24	53233	14.20	46493	18.11	44587
6	1252	N823011906.D	SLA0213-CAL4		1	4.91	44704	7.20	26411	9.24	49210	14.20	42994	18.11	40520
7	1319	N823011907.D	SLA0213-CAL5		1	4.91	46542	7.20	27638	9.23	51351	14.20	44781	18.11	42187
8	1346	N823011908.D	SLA0213-CAL6		1	4.91	46070	7.20	26689	9.24	50683	14.21	43880	18.11	40659
9	1458	N823011909.D	SLA0213-SCV1		1	4.91	46346	7.20	27709	9.24	51685	14.21	46582	18.12	41743

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

ARI Job No.: SLA0 Method: FSIMPNA230119.m Instrument: nt8.i Date: 19-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1059	N823011902.D	SLA0213-ICB1		1	NO MANUAL INTEGRATION
1126	N823011903.D	SLA0213-CAL1		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene-d14,
1158	N823011904.D	SLA0213-CAL2		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene, Dibenzo(a,h)anthracene-d14,
1225	N823011905.D	SLA0213-CAL3		1	Total Benzofluoranthenes,
1252	N823011906.D	SLA0213-CAL4		1	Total Benzofluoranthenes,
1319	N823011907.D	SLA0213-CAL5		1	Total Benzofluoranthenes,
1346	N823011908.D	SLA0213-CAL6		1	Total Benzofluoranthenes,
1458	N823011909.D	SLA0213-SCV1		1	Total Benzofluoranthenes,

Security Status Report

Date: 19-Jan-2023 20:43

N823011901.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011902.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011903.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011904.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011905.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011906.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011907.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011908.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011909.D	Data Locked	jianqing, 19-Jan-2023 20:43

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JAN-2023 11:26
End Cal Date : 19-JAN-2023 13:46
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Last Edit : 19-Jan-2023 20:20 jianqing
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem3\nt8.i\20230119.b\N823011903.D
Level 2: \\target\share\chem3\nt8.i\20230119.b\N823011904.D
Level 3: \\target\share\chem3\nt8.i\20230119.b\N823011905.D
Level 4: \\target\share\chem3\nt8.i\20230119.b\N823011906.D
Level 5: \\target\share\chem3\nt8.i\20230119.b\N823011907.D
Level 6: \\target\share\chem3\nt8.i\20230119.b\N823011908.D

	0.10000	0.50000	1.000	2.500	5.000	10.000	___	
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	% RSD
2 Naphthalene	1.05133	0.88042	0.91407	0.94424	0.90597	0.88348	0.92992	6.865
4 2-Methylnaphthalene	0.55840	0.48358	0.49661	0.53216	0.50818	0.49010	0.51150	5.596
5 1-methylnaphthalene	0.56750	0.48819	0.50733	0.53862	0.51235	0.50079	0.51913	5.582
6 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 Biphenyl	1.53553	1.22381	1.26186	1.35447	1.27381	1.26708	1.31943	8.655
8 2,6-Dimethylnaphthalene	1.00657	0.84902	0.90342	0.98129	0.93327	0.92936	0.93382	5.997
9 Acenaphthylene	1.56927	1.28857	1.41963	1.61272	1.57386	1.59750	1.51026	8.531
11 Acenaphthene	1.15917	0.93995	0.96901	1.04002	0.98262	0.98072	1.01192	7.822
12 Dibenzofuran	1.85613	1.44919	1.46877	1.53906	1.45840	1.45028	1.53697	10.407
13 1,6,7-Trimethylnaphthalene	1.10194	0.88028	0.91555	1.00758	0.95392	0.95592	0.96920	8.030
14 Fluorene	1.33377	1.06663	1.13494	1.22673	1.19285	1.20743	1.19372	7.540
16 Phenanthrene	1.20020	0.90687	0.92597	0.99220	0.92889	0.90761	0.97696	11.644
17 Anthracene	0.99007	0.78914	0.83625	0.94156	0.89523	0.87273	0.88750	8.129
18 Dibenzothiophene	1.00464	0.81097	0.83858	0.91687	0.87432	0.85731	0.88378	7.813
19 Carbazole	0.89689	0.71317	0.75168	0.85950	0.83159	0.82882	0.81361	8.430
20 1-Methylphenanthrene	0.79489	0.62625	0.65095	0.73891	0.70849	0.70462	0.70402	8.607

22 Fluoranthene	1.20097	0.97204	1.02294	1.11434	1.05358	1.01668	1.06343	7.729
23 Pyrene	1.41615	1.06642	1.15622	1.29482	1.25683	1.24939	1.23997	9.648
24 Benzo(a)anthracene	1.20036	0.94191	1.00686	1.18718	1.18459	1.22241	1.12389	10.532
27 Chrysene	1.38233	1.08164	1.12834	1.22724	1.18577	1.17328	1.19644	8.684
28 Benzo(b)fluoranthene	1.33590	0.97747	1.02294	1.22049	1.19238	1.23969	1.16481	11.769
29 Benzo(k)fluoranthene	1.32725	0.99373	1.00590	1.17899	1.16454	1.17521	1.14094	10.933
30 Benzo(j)fluoranthene	1.09283	0.92053	0.92287	1.08478	1.07520	1.06646	1.02711	7.997
31 Total Benzofluoranthenes	1.25535	0.93450	0.97166	1.15908	1.14235	1.15588	1.10314	11.202
32 Benzo(a)pyrene	1.13991	0.87777	0.89515	1.07737	1.06309	1.09688	1.02503	10.785
34 Benzo(e)pyrene	1.38633	1.02276	1.03286	1.18813	1.15641	1.18275	1.16154	11.391
35 Perylene	1.28978	0.96103	0.98751	1.14448	1.10241	1.11455	1.09996	10.771
37 Indeno(1,2,3-cd)pyrene	1.20860	0.99533	1.07255	1.25747	1.22858	1.24398	1.16775	9.225

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JAN-2023 11:26
End Cal Date : 19-JAN-2023 13:46
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Last Edit : 19-Jan-2023 20:20 jianqing
Curve Type : Average

	Compound	0.10000 Level 1	0.50000 Level 2	1.000 Level 3	2.500 Level 4	5.000 Level 5	10.000 Level 6	RRF	% RSD
	38 Dibenzo(a,h)anthracene	1.04912	0.83483	0.89506	1.08138	1.06856	1.10072	1.00494	11.083
	39 Benzo(g,h,i)perylene	1.16296	0.91028	0.94095	1.10667	1.08873	1.13847	1.05801	10.032
$	3 2-Methylnaphthalene-d10	0.58571	0.49325	0.53451	0.56745	0.55043	0.54135	0.54545	5.792
$	21 Fluoranthene-d10	0.90072	0.75455	0.82479	0.95503	0.92918	0.93009	0.88239	8.740
$	36 Dibenzo(a,h)anthracene-d14	0.58028	0.54718	0.60762	0.73250	0.74207	+++++	0.64193	13.973

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Batch File: \\target\share\chem3\nt8.i\20230119.b
Inst ID: nt8.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	N823011903	N823011904	N823011905	N823011906	N823011907	N823011908
INJ.DATE:	19-JAN-2023	19-JAN-2023	19-JAN-2023	19-JAN-2023	19-JAN-2023	19-JAN-2023
INJ.TIME:	11:26	11:58	12:25	12:52	13:19	13:46

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 1 Naphthalene-d8	4.907	4.913	4.907	4.907	4.910	4.907	4.907	1.907-7.907	4.908	0.003
2 Naphthalene	4.939	4.942	4.939	4.938	4.938	4.938	4.938	1.938-7.938	4.939	0.001
$ 3 2-Methylnaphthalene-d1	5.644	5.647	5.640	5.640	5.640	5.640	5.640	2.640-8.640	5.642	0.003
4 2-Methylnaphthalene	5.691	5.694	5.688	5.688	5.688	5.688	5.688	2.688-8.688	5.689	0.003
5 1-methylnaphthalene	5.884	5.890	5.887	5.884	5.887	5.887	5.887	2.887-8.887	5.887	0.002
6 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	6.377	3.377-9.377	+++++	+++++
7 Biphenyl	6.346	6.352	6.346	6.345	6.346	6.349	6.349	3.349-9.349	6.347	0.003
8 2,6-Dimethylnaphthalen	6.390	6.396	6.390	6.390	6.390	6.393	6.393	3.393-9.393	6.391	0.003
9 Acenaphthylene	7.086	7.092	7.085	7.085	7.085	7.089	7.089	4.089-10.089	7.087	0.003
* 10 Acenaphthene-d10	7.196	7.199	7.196	7.196	7.196	7.196	7.196	4.196-10.196	7.197	0.001
11 Acenaphthene	7.247	7.250	7.247	7.247	7.247	7.247	7.247	4.247-10.247	7.247	0.001
12 Dibenzofuran	7.395	7.402	7.395	7.395	7.395	7.398	7.398	4.398-10.398	7.397	0.003
13 1,6,7-Trimethylnaphtha	7.462	7.465	7.462	7.462	7.462	7.465	7.465	4.465-10.465	7.463	0.002
14 Fluorene	7.876	7.879	7.876	7.873	7.876	7.876	7.876	4.876-10.876	7.876	0.002
* 15 Phenanthrene-d10	9.236	9.239	9.236	9.236	9.232	9.236	9.236	6.236-12.236	9.236	0.002
16 Phenanthrene	9.270	9.273	9.270	9.270	9.270	9.274	9.274	6.274-12.274	9.271	0.002
17 Anthracene	9.312	9.315	9.312	9.311	9.311	9.315	9.315	6.315-12.315	9.313	0.002

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

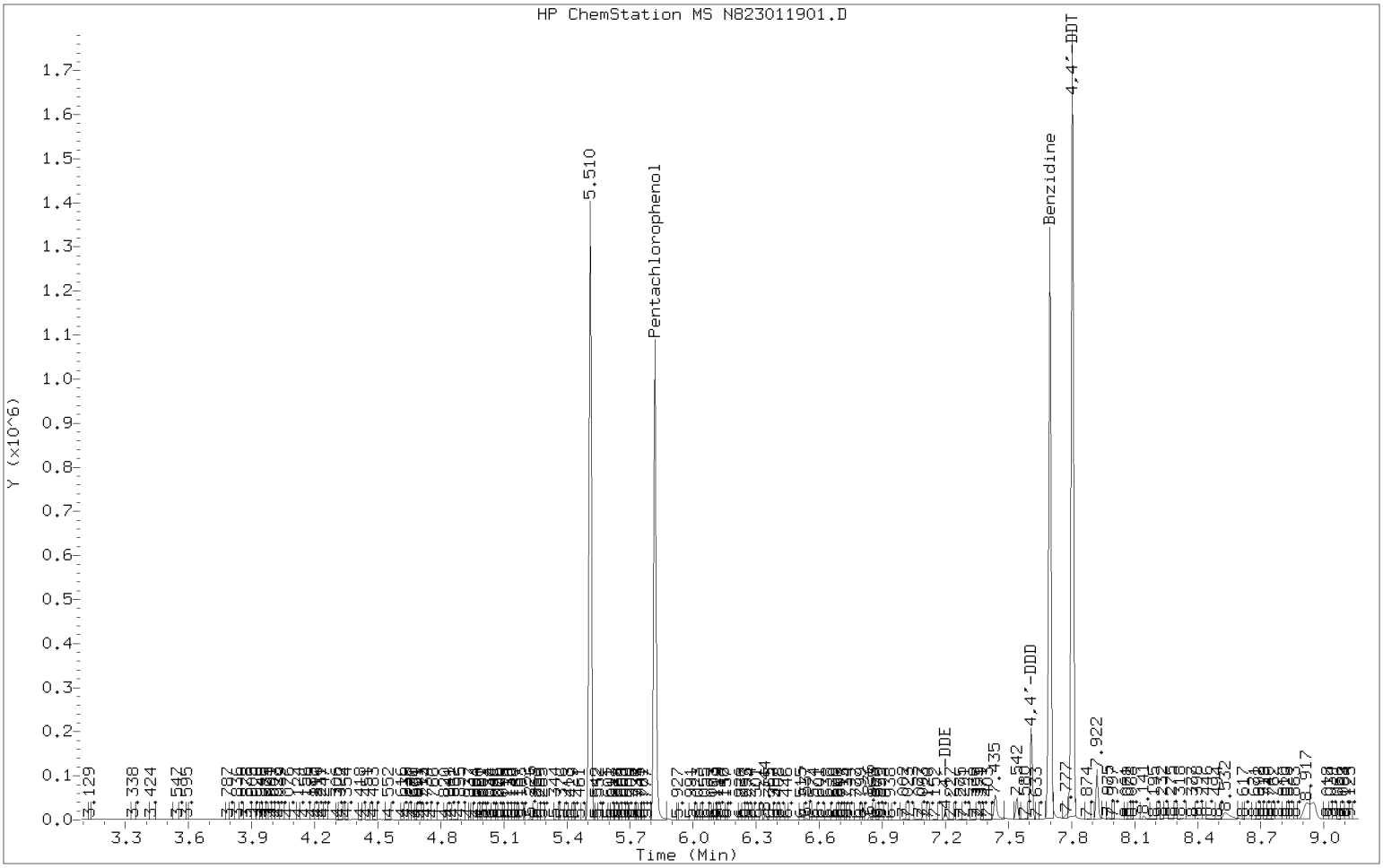
ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

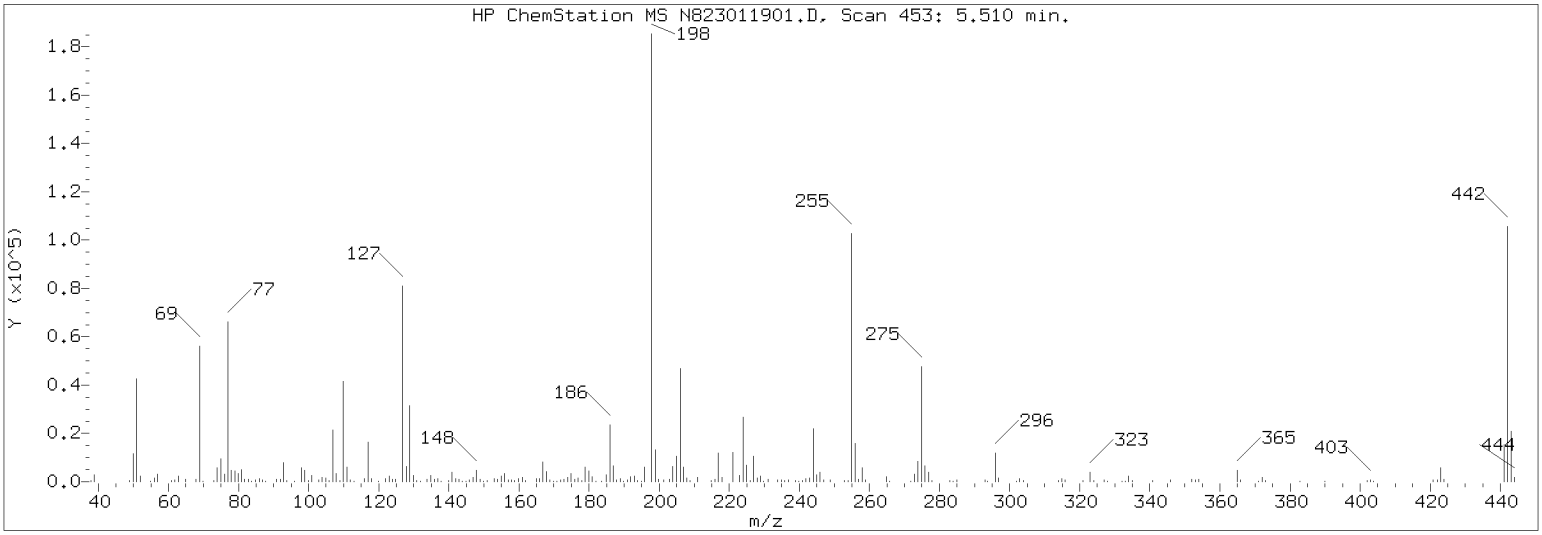
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Batch File: \\target\share\chem3\nt8.i\20230119.b
Inst ID: nt8.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 Dibenzothiophene	9.109	9.112	9.109	9.109	9.109	9.112	9.112	6.112-12.112	9.110	0.002
	19 Carbazole	9.824	9.830	9.824	9.824	9.824	9.827	9.827	6.827-12.827	9.825	0.003
	20 1-Methylphenanthrene	10.048	10.051	10.048	10.048	10.048	10.051	10.051	7.051-13.051	10.049	0.002
$	21 Fluoranthene-d10	11.016	11.019	11.016	11.016	11.016	11.019	11.019	8.019-14.019	11.017	0.002
	22 Fluoranthene	11.054	11.057	11.051	11.054	11.054	11.057	11.057	8.057-14.057	11.054	0.002
	23 Pyrene	11.572	11.575	11.572	11.572	11.572	11.575	11.575	8.575-14.575	11.573	0.002
	24 Benzo(a)anthracene	14.073	14.080	14.077	14.077	14.077	14.080	14.080	11.080-17.080	14.077	0.002
*	25 Chrysene-d12	14.203	14.209	14.203	14.203	14.203	14.206	14.206	11.206-17.206	14.205	0.003
	27 Chrysene	14.276	14.279	14.276	14.279	14.279	14.282	14.282	11.282-17.282	14.278	0.002
	28 Benzo(b)fluoranthene	16.821	16.827	16.824	16.821	16.827	16.834	16.834	13.834-19.834	16.826	0.005
	29 Benzo(k)fluoranthene	16.881	16.887	16.881	16.884	16.888	16.897	16.897	13.897-19.897	16.886	0.006
	30 Benzo(j)fluoranthene	16.960	16.963	16.960	16.963	16.967	16.973	16.973	13.973-19.973	16.964	0.005
	31 Total Benzofluoranthen	16.821	16.827	16.824	16.821	16.827	16.834	16.834	13.834-19.834	16.826	0.005
	32 Benzo(a)pyrene	17.874	17.883	17.877	17.877	17.884	17.890	17.890	14.890-20.890	17.881	0.006
*	33 Perylene-d12	18.111	18.114	18.111	18.111	18.111	18.114	18.114	15.114-21.114	18.112	0.002
	34 Benzo(e)pyrene	17.748	17.754	17.751	17.748	17.751	17.760	17.760	14.760-20.760	17.752	0.005
	35 Perylene	18.184	18.187	18.184	18.184	18.187	18.193	18.193	15.193-21.193	18.187	0.004
$	36 Dibenzo(a,h)anthracene	20.546	20.549	20.549	20.552	20.555	20.565	20.565	17.565-23.565	20.553	0.007
	37 Indeno(1,2,3-cd)pyrene	20.666	20.676	20.672	20.676	20.682	20.691	20.691	17.691-23.691	20.677	0.009
	38 Dibenzo(a,h)anthracene	20.666	20.666	20.657	20.663	20.669	20.685	20.685	17.685-23.685	20.668	0.010
	39 Benzo(g,h,i)perylene	21.757	21.760	21.748	21.757	21.763	21.782	21.782	18.782-24.782	21.761	0.012

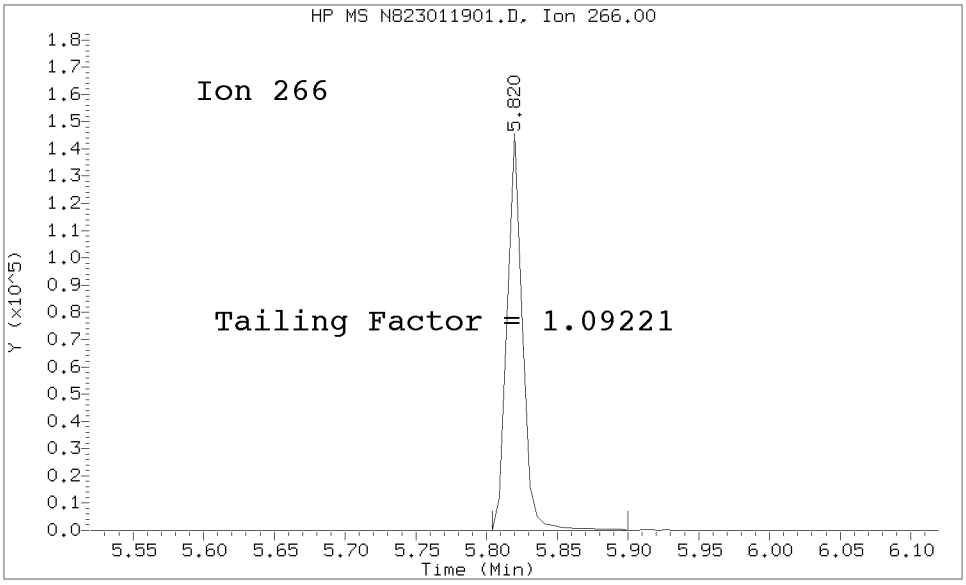
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: SLA0213-TUN1 DFTPP230119
Report Date: 01/19/2023 20:14



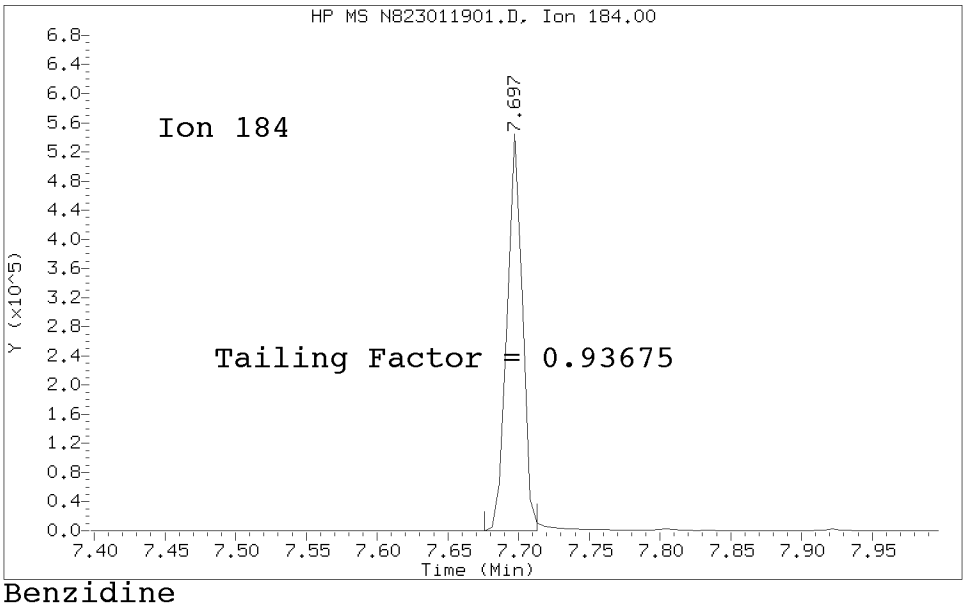


Datafile Analyzed: /20230119.b/tune.b/N823011901.D/N823011901.D
Method Used: \20230119.b\tune.b\DFTPP.m\sw846ddt.m Inst: nt8
Injection Date: 19-JAN-2023 10:28 Operator: JZ
Sample Info: DFTPP230119
Report Date: 01/19/2023 20:14



Pentachlorophenol
==========
Exp. RT = 5.825
Found RT = 5.820

Tail Factor = 1.092 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 7.703
Found RT = 7.697

Tail Factor = 0.937 Maximum Allowed = 2.0

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	23.71
68	Less than 2.00% of mass 69	0.39 (1.25)
69	Mass 69 relative abundance	30.92
70	Less than 2.00% of mass 69	0.06 (0.21)
127	10.00 - 80.00% of mass 198	44.20
197	Less than 2.00% of mass 198	0.17
199	5.00 - 9.00% of mass 198	6.89
275	10.00 - 60.00% of mass 198	26.96
365	Greater than 1.00% of mass 198	2.85
441	0.01 - 24.00% of mass 442	9.72 (14.32)
442	50.00 - 200.00% of mass 198	67.89
443	15.00 - 24.00% of mass 442	13.33 (19.64)

Data File: N823011901.D
Spectrum: Avg. Scans 452-454 (5.51), Background Scan 448
Location of Maximum: 198.00
Number of points: 228

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	424	124.00	727	188.00	466	265.00	1738
39.00	2285	125.00	694	189.00	1088	266.00	231
49.00	389	127.00	59064	190.00	92	272.00	97
50.00	8567	128.00	4618	191.00	538	273.00	2435
51.00	31688	129.00	23208	192.00	1501	274.00	6434
52.00	1694	130.00	1967	193.00	1652	275.00	36032
55.00	89	131.00	387	194.00	339	276.00	4936
56.00	1081	132.00	92	195.00	108	277.00	3133
57.00	2353	134.00	695	196.00	4417	278.00	496
61.00	487	135.00	1887	197.00	224	283.00	243
62.00	511	136.00	770	198.00	133632	284.00	200
63.00	1627	137.00	979	199.00	9210	285.00	536
65.00	865	138.00	101	200.00	711	293.00	678
68.00	518	140.00	220	201.00	653	294.00	83
69.00	41320	141.00	2913	203.00	891	296.00	9364
70.00	86	142.00	931	204.00	4715	297.00	1310
73.00	274	143.00	728	205.00	8070	302.00	96
74.00	4327	144.00	83	206.00	34104	303.00	1146
75.00	6885	145.00	91	207.00	4557	304.00	262
76.00	2362	146.00	508	208.00	1177	314.00	364
77.00	48072	147.00	1540	209.00	387	315.00	1068
78.00	3441	148.00	3391	210.00	236	316.00	588
79.00	3296	149.00	690	211.00	1430	321.00	250
80.00	2464	150.00	90	215.00	376	323.00	3145
81.00	3741	151.00	458	216.00	746	324.00	501
82.00	872	152.00	181	217.00	9085	327.00	540
83.00	845	153.00	893	218.00	1189	328.00	201
84.00	287	154.00	764	221.00	8442	332.00	178
85.00	621	155.00	1756	223.00	2039	333.00	129
86.00	1039	156.00	2503	224.00	19544	334.00	1893
87.00	481	157.00	527	225.00	5122	335.00	518
88.00	91	158.00	516	226.00	502	341.00	275
91.00	866	159.00	410	227.00	8274	346.00	674
92.00	878	160.00	955	228.00	1174	352.00	945
93.00	5816	161.00	1421	229.00	1712	353.00	630
94.00	409	162.00	445	230.00	111	354.00	910
96.00	203	165.00	1085	231.00	685	365.00	3802
98.00	4243	166.00	1023	234.00	538	366.00	580
99.00	3501	167.00	5993	235.00	568	371.00	91
100.00	344	168.00	3082	236.00	394	372.00	1475
101.00	1983	169.00	490	237.00	657	373.00	292
103.00	704	170.00	94	239.00	327	383.00	290
104.00	1275	171.00	194	240.00	187	390.00	177
105.00	1230	172.00	595	241.00	468	402.00	468
106.00	379	173.00	732	242.00	1090	403.00	736
107.00	15826	174.00	1319	243.00	1102	404.00	243
108.00	2447	175.00	2491	244.00	16206	421.00	649
109.00	331	176.00	751	245.00	2245	422.00	226
110.00	30008	177.00	1175	246.00	3000	423.00	4860

111.00	4456	178.00	288	247.00	624	424.00	978
112.00	513	179.00	4561	249.00	587	441.00	12991
113.00	89	180.00	3271	253.00	239	442.00	90720
116.00	935	181.00	1513	254.00	438	443.00	17816
117.00	12513	182.00	106	255.00	76904	444.00	1584
118.00	931	184.00	333	256.00	11699		
120.00	104	185.00	2153	257.00	880		
122.00	1003	186.00	17336	258.00	4539		
123.00	1682	187.00	4916	259.00	746		

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011902.D

Date : 19-JAN-2023 10:59

Client ID:

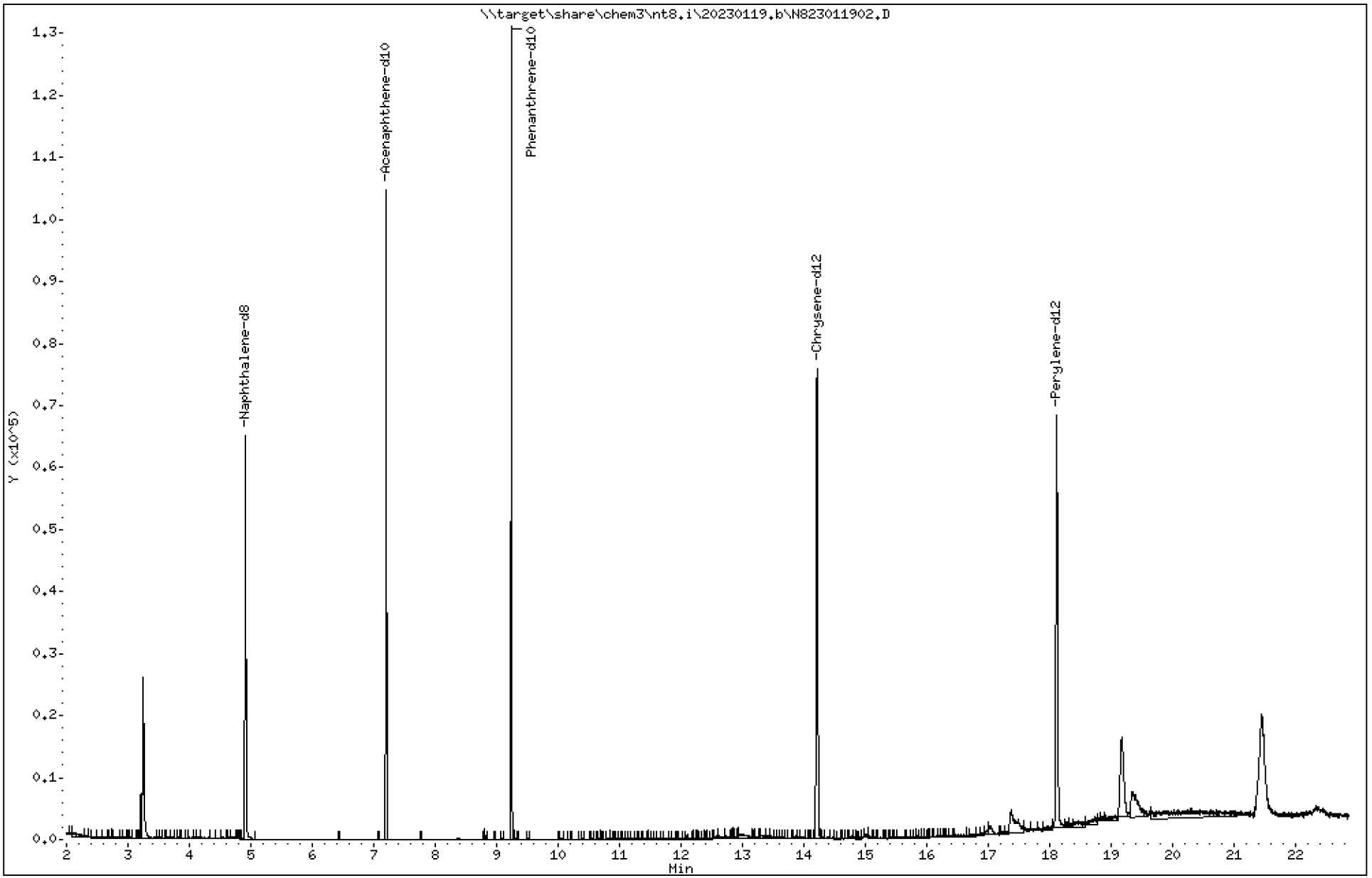
Instrument: nt8.i

Sample Info: ICB230119

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011902.D
Lab Smp Id: SLA0213-ICB1
Inj Date : 19-JAN-2023 10:59
Operator : JZ Inst ID: nt8.i
Smp Info : ICB230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:20 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.916	4.906	(1.000)	52082	2.00000	
	2 Naphthalene	128	Compound Not Detected.					
$	3 2-Methylnaphthalene-d10	152	Compound Not Detected.					
	4 2-Methylnaphthalene	141	Compound Not Detected.					
	5 1-methylnaphthalene	141	Compound Not Detected.					
	7 Biphenyl	154	Compound Not Detected.					
	8 2,6-Dimethylnaphthalene	156	Compound Not Detected.					
	9 Acenaphthylene	152	Compound Not Detected.					
*	10 Acenaphthene-d10	164	7.202	7.196	(1.000)	30936	2.00000	
	11 Acenaphthene	153	Compound Not Detected.					
	12 Dibenzofuran	168	Compound Not Detected.					
	13 1,6,7-Trimethylnaphthalene	170	Compound Not Detected.					
	14 Fluorene	166	Compound Not Detected.					
	18 Dibenzothiophene	184	Compound Not Detected.					
*	15 Phenanthrene-d10	188	9.241	9.235	(1.000)	59030	2.00000	
	16 Phenanthrene	178	Compound Not Detected.					
	17 Anthracene	178	Compound Not Detected.					
	19 Carbazole	167	Compound Not Detected.					
	20 1-Methylphenanthrene	192	Compound Not Detected.					
	22 Fluoranthene	202	Compound Not Detected.					
$	21 Fluoranthene-d10	212	Compound Not Detected.					
	23 Pyrene	202	Compound Not Detected.					
	24 Benzo(a)anthracene	228	Compound Not Detected.					
*	25 Chrysene-d12	240	14.215	14.202	(1.000)	50944	2.00000	
	27 Chrysene	228	Compound Not Detected.					
	28 Benzo(b)fluoranthene	252	Compound Not Detected.					
	29 Benzo(k)fluoranthene	252	Compound Not Detected.					
	30 Benzo(j)fluoranthene	252	Compound Not Detected.					
	31 Total Benzofluoranthenes	252	Compound Not Detected.					
	34 Benzo(e)pyrene	252	Compound Not Detected.					
	32 Benzo(a)pyrene	252	Compound Not Detected.					
*	33 Perylene-d12	264	18.120	18.111	(1.000)	47418	2.00000	
	35 Perylene	252	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
38 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
39 Benzo(g,h,i)perylene	276	Compound Not Detected.					

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011902.D
Lab Smp Id: SLA0213-ICB1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	52082	16.50
10 Acenaphthene-d10	26411	13206	52822	30936	17.13
15 Phenanthrene-d10	49210	24605	98420	59030	19.96
25 Chrysene-d12	42994	21497	85988	50944	18.49
33 Perylene-d12	40520	20260	81040	47418	17.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.92	0.19
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.07
25 Chrysene-d12	14.20	13.70	14.70	14.22	0.09
33 Perylene-d12	18.11	17.61	18.61	18.12	0.05

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

REVIEW SUMMARY FOR FILE - N823011902.D

Lab ID: SLA0213-ICB1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 10:59

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

No RRT check performed

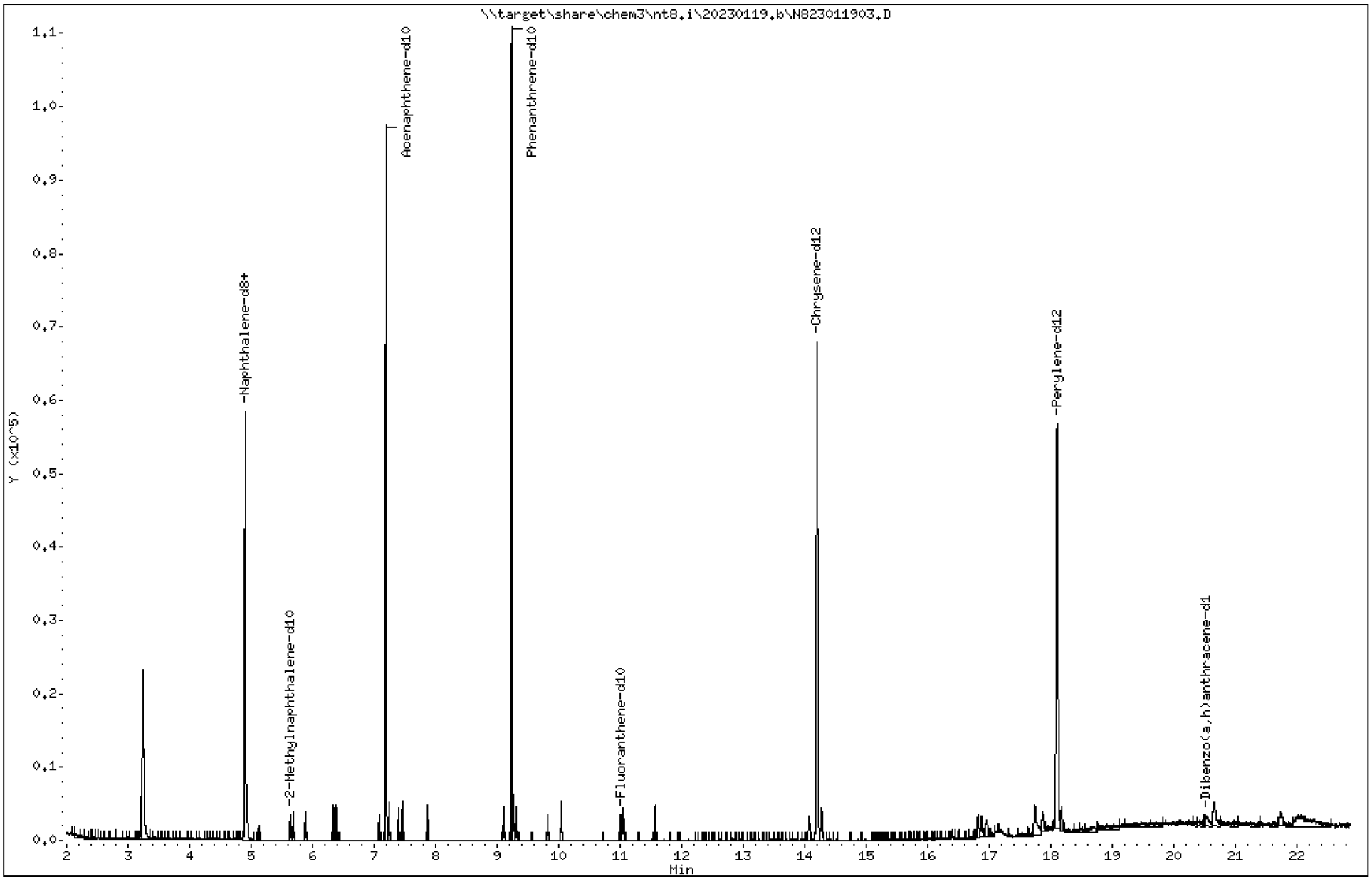
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011903.D
Date : 19-JAN-2023 11:26
Client ID:
Sample Info: IC01230119,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011903.D
Lab Smp Id: SLA0213-CAL1
Inj Date : 19-JAN-2023 11:26
Operator : JZ Inst ID: nt8.i
Smp Info : IC01230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	46132	2.00000	
	2 Naphthalene	128	4.938	4.938	(1.006)	2425	0.10000	0.1131
$	3 2-Methylnaphthalene-d10	152	5.643	5.640	(1.150)	1351	0.10000	0.1074
	4 2-Methylnaphthalene	141	5.691	5.687	(1.160)	1288	0.10000	0.1092
	5 1-methylnaphthalene	141	5.883	5.887	(1.199)	1309	0.10000	0.1093
	7 Biphenyl	154	6.345	6.348	(0.882)	2093	0.10000	0.1164
	8 2,6-Dimethylnaphthalene	156	6.389	6.392	(0.888)	1372	0.10000	0.1078
	9 Acenaphthylene	152	7.085	7.088	(0.985)	2139	0.10000	0.1039
*	10 Acenaphthene-d10	164	7.196	7.196	(1.000)	27261	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	1580	0.10000	0.1146
	12 Dibenzofuran	168	7.395	7.398	(1.028)	2530	0.10000	0.1208
	13 1,6,7-Trimethylnaphthalene	170	7.461	7.464	(1.037)	1502	0.10000	0.1137
	14 Fluorene	166	7.876	7.875	(1.094)	1818	0.10000	0.1117
	18 Dibenzothiophene	184	9.109	9.112	(0.986)	2620	0.10000	0.1137
*	15 Phenanthrene-d10	188	9.235	9.235	(1.000)	52158	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	3130	0.10000	0.1229
	17 Anthracene	178	9.311	9.314	(1.008)	2582	0.10000	0.1116
	19 Carbazole	167	9.823	9.826	(1.064)	2339	0.10000	0.1102
	20 1-Methylphenanthrene	192	10.048	10.051	(1.088)	2073	0.10000	0.1129
	22 Fluoranthene	202	11.053	11.056	(1.197)	3132	0.10000	0.1129
$	21 Fluoranthene-d10	212	11.015	11.018	(1.193)	2349	0.10000	0.1021
	23 Pyrene	202	11.572	11.575	(0.815)	3183	0.10000	0.1142
	24 Benzo(a)anthracene	228	14.073	14.079	(0.991)	2698	0.10000	0.1068
*	25 Chrysene-d12	240	14.203	14.206	(1.000)	44953	2.00000	
	27 Chrysene	228	14.275	14.282	(1.005)	3107	0.10000	0.1155
	28 Benzo(b)fluoranthene	252	16.821	16.833	(0.929)	2781	0.10000	0.1147
	29 Benzo(k)fluoranthene	252	16.881	16.897	(0.932)	2763	0.10000	0.1163
	30 Benzo(j)fluoranthene	252	16.960	16.972	(0.936)	2275	0.10000	0.1064
	31 Total Benzofluoranthenes	252	16.821	16.833	(0.929)	7840	0.30000	0.3414(M)
	34 Benzo(e)pyrene	252	17.747	17.760	(0.980)	2886	0.10000	0.1194
	32 Benzo(a)pyrene	252	17.874	17.889	(0.987)	2373	0.10000	0.1112
*	33 Perylene-d12	264	18.111	18.114	(1.000)	41635	2.00000	
	35 Perylene	252	18.184	18.193	(1.004)	2685	0.10000	0.1173

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.546	20.565	(1.134)	1208	0.10000	0.09040(M)
37 Indeno(1,2,3-cd)pyrene	276	20.666	20.691	(1.141)	2516	0.10000	0.1035
38 Dibenzo(a,h)anthracene	278	20.666	20.685	(1.141)	2184	0.10000	0.1044
39 Benzo(g,h,i)perylene	276	21.757	21.782	(1.201)	2421	0.10000	0.1099

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011903.D
Lab Smp Id: SLA0213-CAL1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46132	3.19
10 Acenaphthene-d10	26411	13206	52822	27261	3.22
15 Phenanthrene-d10	49210	24605	98420	52158	5.99
25 Chrysene-d12	42994	21497	85988	44953	4.56
33 Perylene-d12	40520	20260	81040	41635	2.75

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

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

REVIEW SUMMARY FOR FILE - N823011903.D

Lab ID: SLA0213-CAL1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 11:26

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

Quant Method: ICAL

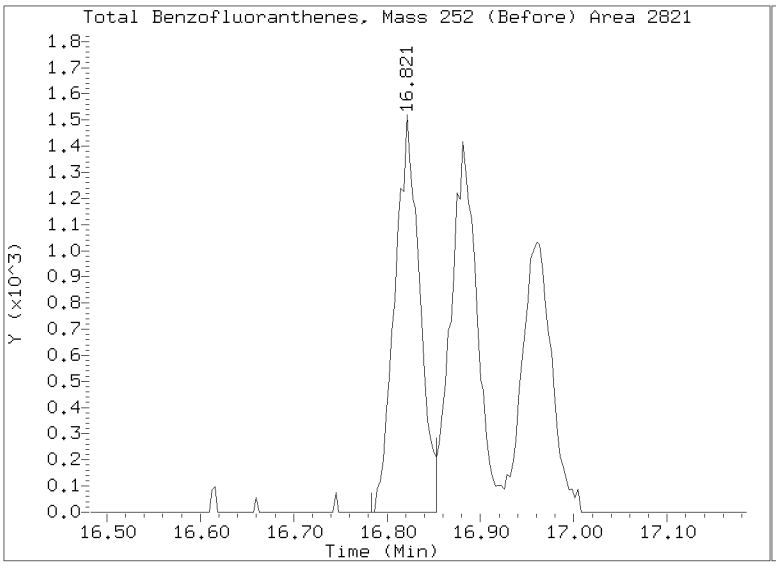
No RRT check performed

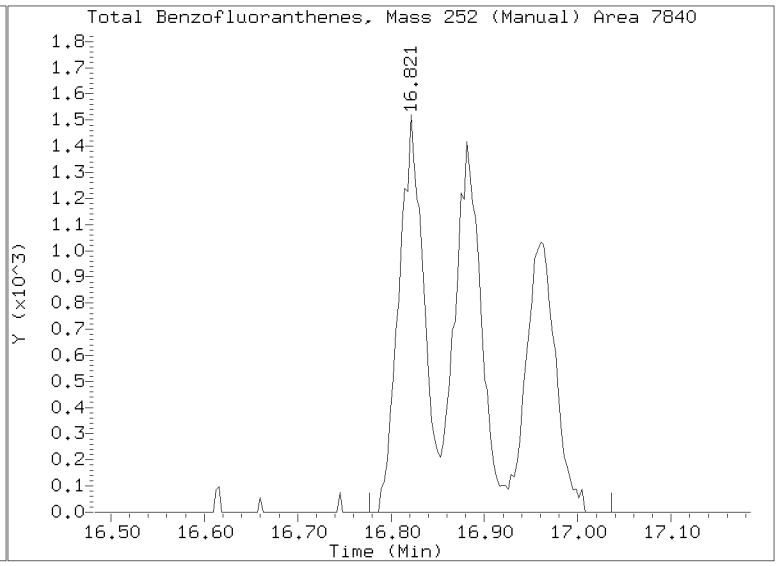
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

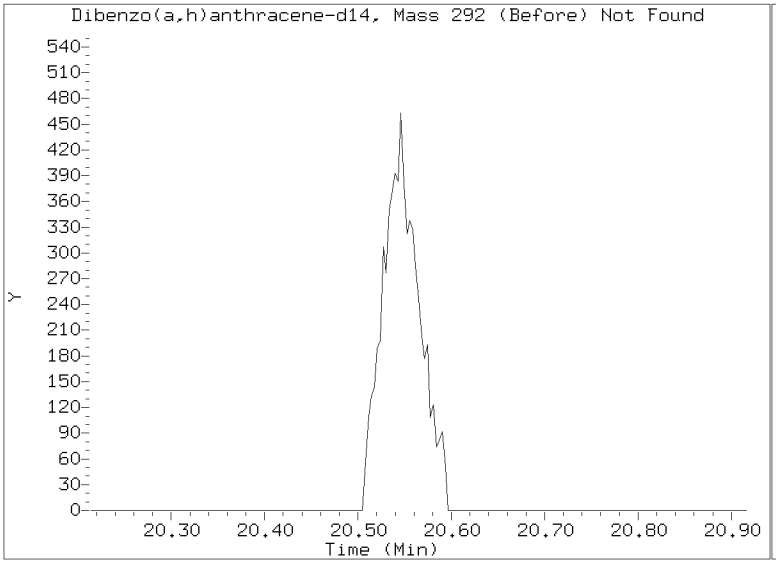
* Only compounds listed in the work order have been verified by the analyst *

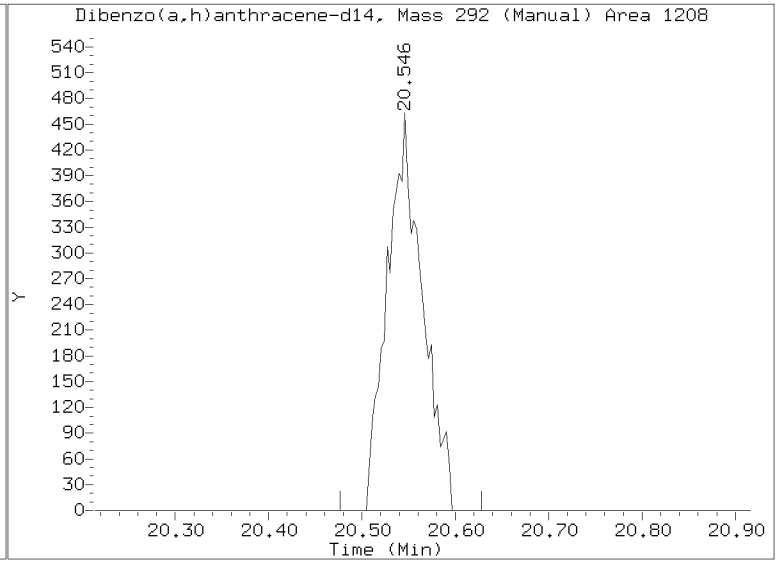
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011903.D
Injection Date: 19-JAN-2023 11:26
Lab ID:SLA0213-CAL1 Client ID:
Report Date: 01/19/2023 20:12





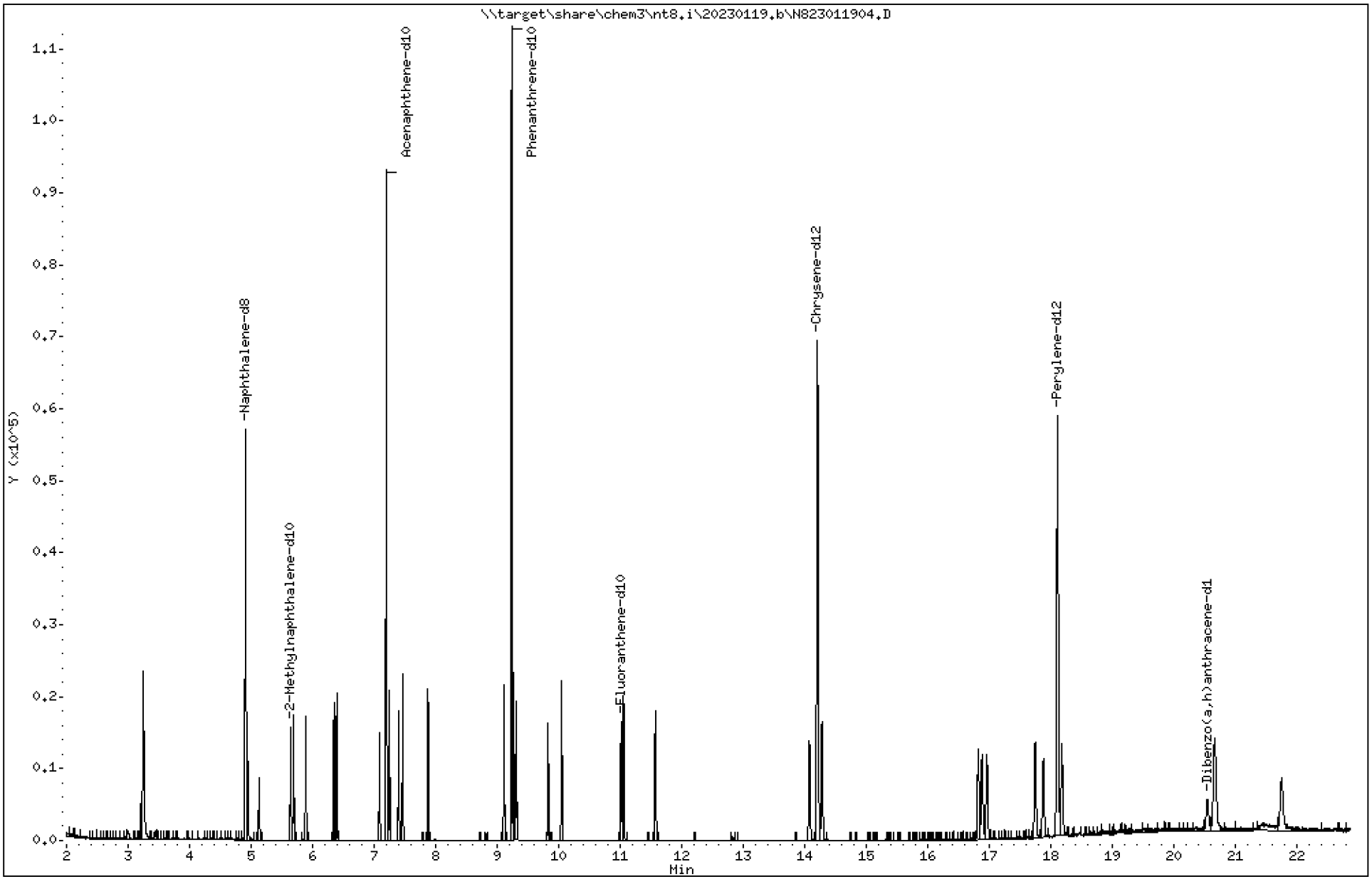




Data File: \\target\share\chem3\nt8.i\20230119.b\N823011904.D
Date : 19-JAN-2023 11:58
Client ID:
Sample Info: IC05230119,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011904.D
Lab Smp Id: SLA0213-CAL2
Inj Date : 19-JAN-2023 11:58
Operator : JZ Inst ID: nt8.i
Smp Info : IC05230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1	Naphthalene-d8	136	4.913	4.906	(1.000)	45056	2.00000	
	2	Naphthalene	128	4.941	4.938	(1.006)	9917	0.50000	0.4734
$	3	2-Methylnaphthalene-d10	152	5.646	5.640	(1.149)	5556	0.50000	0.4522
	4	2-Methylnaphthalene	141	5.694	5.687	(1.159)	5447	0.50000	0.4727
	5	1-methylnaphthalene	141	5.890	5.887	(1.199)	5499	0.50000	0.4702
	7	Biphenyl	154	6.351	6.348	(0.882)	8183	0.50000	0.4638
	8	2,6-Dimethylnaphthalene	156	6.396	6.392	(0.888)	5677	0.50000	0.4546
	9	Acenaphthylene	152	7.091	7.088	(0.985)	8616	0.50000	0.4266
*	10	Acenaphthene-d10	164	7.199	7.196	(1.000)	26746	2.00000	
	11	Acenaphthene	153	7.249	7.246	(1.007)	6285	0.50000	0.4644
	12	Dibenzofuran	168	7.401	7.398	(1.028)	9690	0.50000	0.4714
	13	1,6,7-Trimethylnaphthalene	170	7.464	7.464	(1.037)	5886	0.50000	0.4541
	14	Fluorene	166	7.879	7.875	(1.094)	7132	0.50000	0.4468
	18	Dibenzothiophene	184	9.112	9.112	(0.986)	10291	0.50000	0.4588
*	15	Phenanthrene-d10	188	9.238	9.235	(1.000)	50759	2.00000	
	16	Phenanthrene	178	9.273	9.273	(1.004)	11508	0.50000	0.4641
	17	Anthracene	178	9.314	9.314	(1.008)	10014	0.50000	0.4446
	19	Carbazole	167	9.829	9.826	(1.064)	9050	0.50000	0.4383
	20	1-Methylphenanthrene	192	10.051	10.051	(1.088)	7947	0.50000	0.4448
	22	Fluoranthene	202	11.056	11.056	(1.197)	12335	0.50000	0.4570
$	21	Fluoranthene-d10	212	11.018	11.018	(1.193)	9575	0.50000	0.4276
	23	Pyrene	202	11.575	11.575	(0.815)	11906	0.50000	0.4300
	24	Benzo(a)anthracene	228	14.079	14.079	(0.991)	10516	0.50000	0.4190
*	25	Chrysene-d12	240	14.209	14.206	(1.000)	44658	2.00000	
	27	Chrysene	228	14.278	14.282	(1.005)	12076	0.50000	0.4520
	28	Benzo(b)fluoranthene	252	16.827	16.833	(0.929)	10402	0.50000	0.4196
	29	Benzo(k)fluoranthene	252	16.887	16.897	(0.932)	10575	0.50000	0.4355
	30	Benzo(j)fluoranthene	252	16.963	16.972	(0.936)	9796	0.50000	0.4481
	31	Total Benzofluoranthenes	252	16.827	16.833	(0.929)	29834	1.50000	1.271(M)
	34	Benzo(e)pyrene	252	17.753	17.760	(0.980)	10884	0.50000	0.4403
	32	Benzo(a)pyrene	252	17.883	17.889	(0.987)	9341	0.50000	0.4282
*	33	Perylene-d12	264	18.114	18.114	(1.000)	42567	2.00000	
	35	Perylene	252	18.187	18.193	(1.004)	10227	0.50000	0.4368

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.549	20.565	(1.134)	5823	0.50000	0.4262(M)
37 Indeno(1,2,3-cd)pyrene	276	20.675	20.691	(1.141)	10592	0.50000	0.4262
38 Dibenzo(a,h)anthracene	278	20.666	20.685	(1.141)	8884	0.50000	0.4154(M)
39 Benzo(g,h,i)perylene	276	21.760	21.782	(1.201)	9687	0.50000	0.4302

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011904.D
Lab Smp Id: SLA0213-CAL2
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	45056	0.79
10 Acenaphthene-d10	26411	13206	52822	26746	1.27
15 Phenanthrene-d10	49210	24605	98420	50759	3.15
25 Chrysene-d12	42994	21497	85988	44658	3.87
33 Perylene-d12	40520	20260	81040	42567	5.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.04
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.04
33 Perylene-d12	18.11	17.61	18.61	18.11	0.02

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

REVIEW SUMMARY FOR FILE - N823011904.D

Lab ID: SLA0213-CAL2
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 11:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

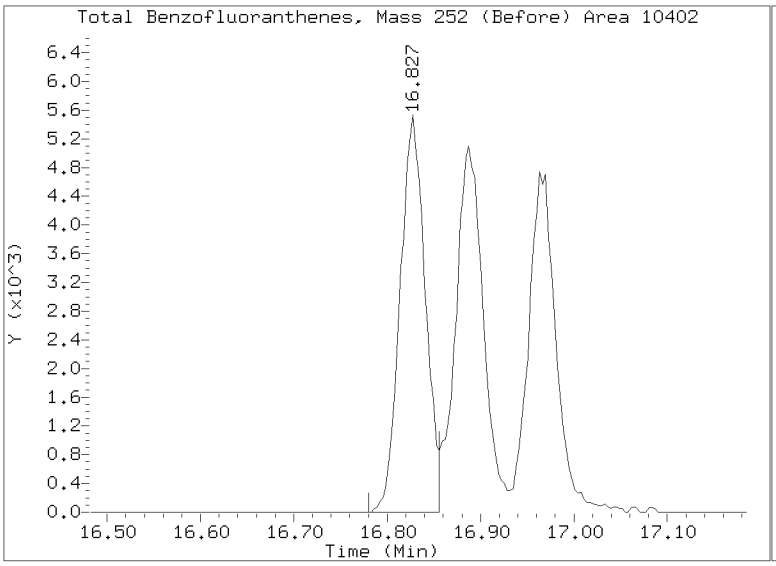
No RRT check performed

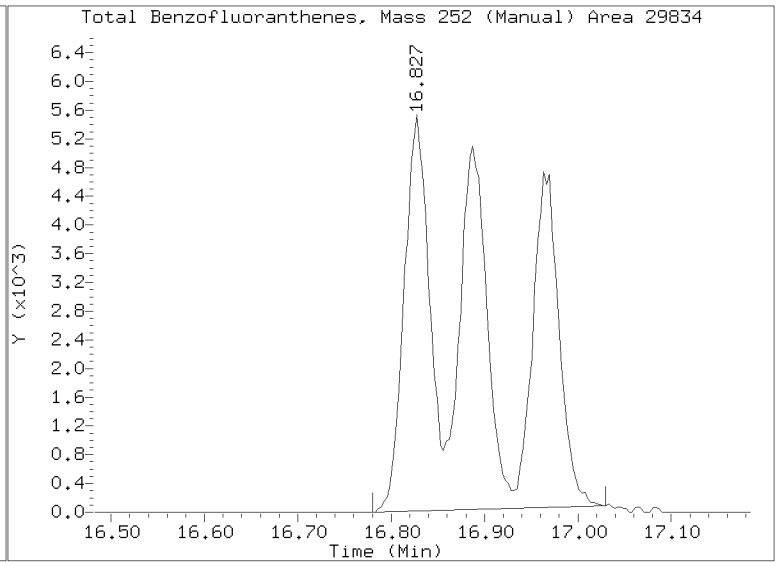
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

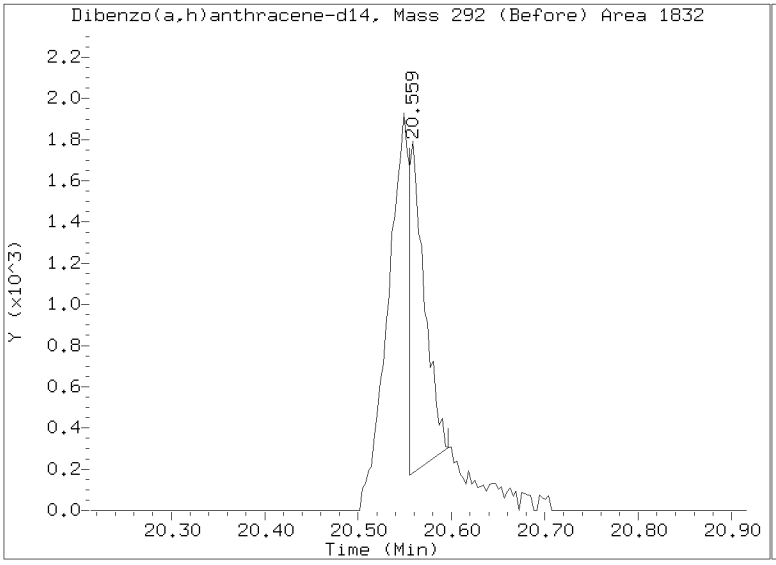
* Only compounds listed in the work order have been verified by the analyst *

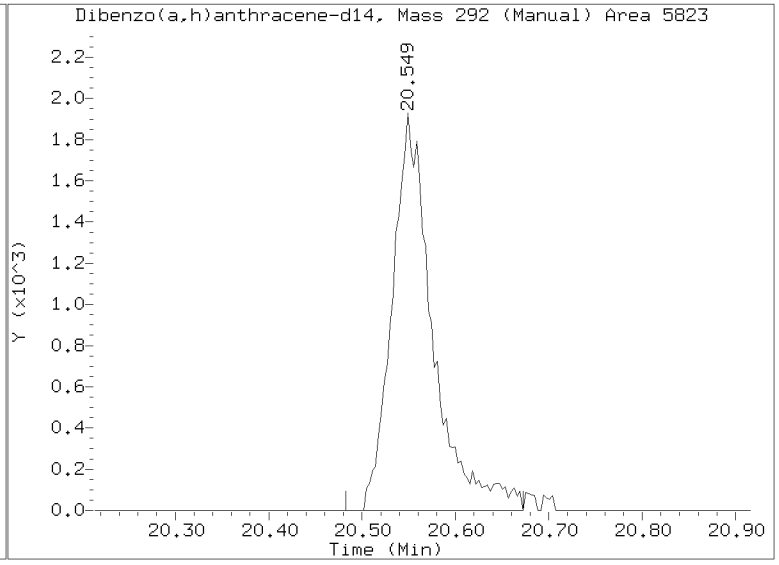
Quant Ion Manual Peak Adjustment Report

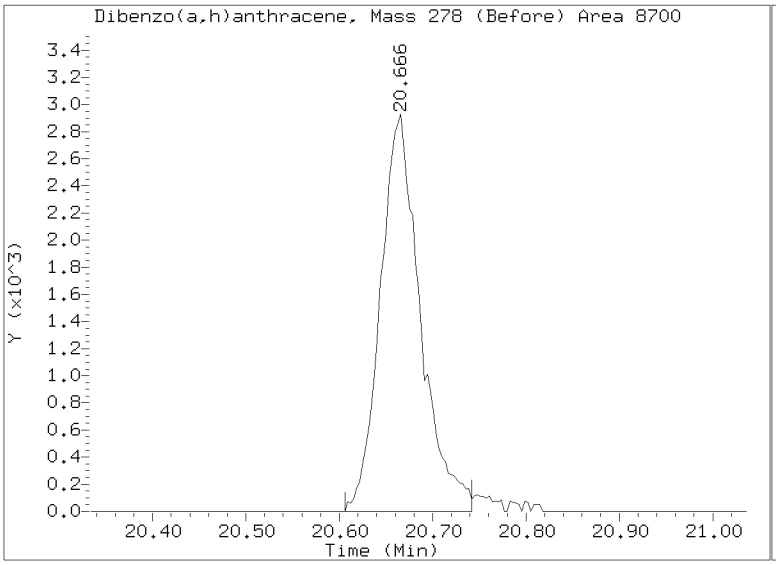
Datafile: //target/share/chem3/nt8.i/20230119.b/N823011904.D
Injection Date: 19-JAN-2023 11:58
Lab ID:SLA0213-CAL2 Client ID:
Report Date: 01/19/2023 20:12

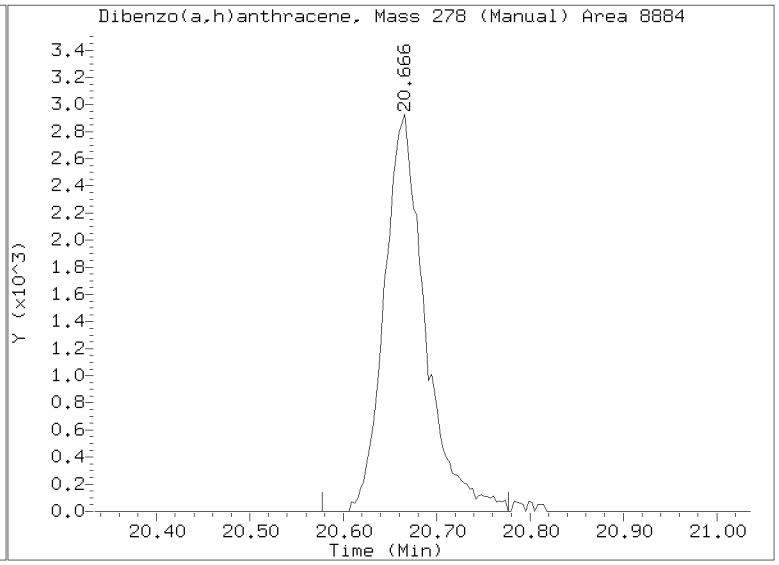






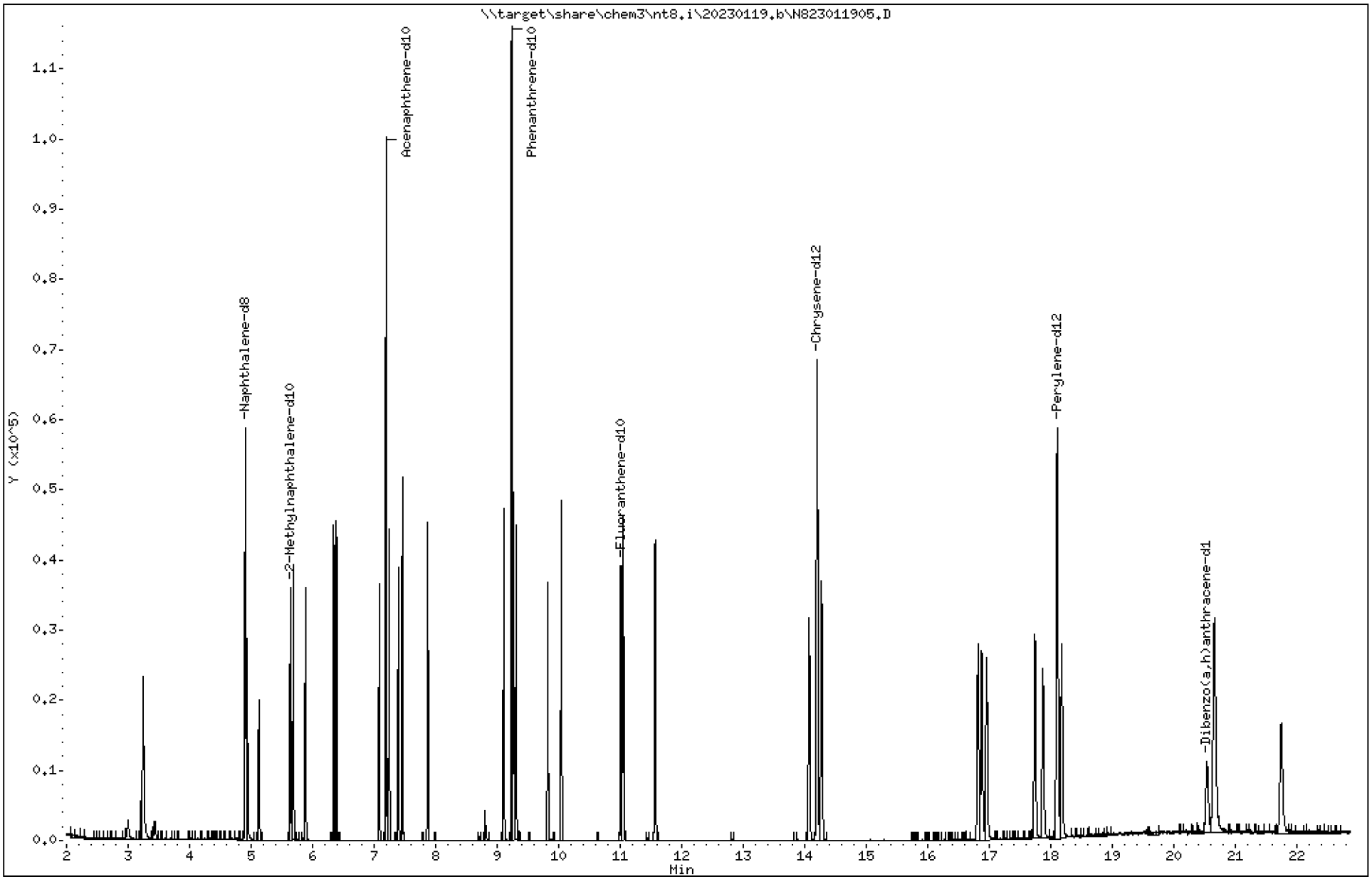






Data File: \\target\share\chem3\nt8.i\20230119.b\N823011905.D
Date : 19-JAN-2023 12:25
Client ID:
Sample Info: IC1230119,

Instrument: nt8.i
Operator: JZ
Column phase: Rxi-17sil
Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011905.D
Lab Smp Id: SLA0213-CAL3
Inj Date : 19-JAN-2023 12:25
Operator : JZ Inst ID: nt8.i
Smp Info : IC1230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	47180	2.00000	
	2 Naphthalene	128	4.938	4.938	(1.006)	21563	1.00000	0.9830
$	3 2-Methylnaphthalene-d10	152	5.640	5.640	(1.150)	12609	1.00000	0.9799
	4 2-Methylnaphthalene	141	5.687	5.687	(1.159)	11715	1.00000	0.9709
	5 1-methylnaphthalene	141	5.887	5.887	(1.200)	11968	1.00000	0.9773
	7 Biphenyl	154	6.345	6.348	(0.882)	17796	1.00000	0.9564
	8 2,6-Dimethylnaphthalene	156	6.389	6.392	(0.888)	12741	1.00000	0.9674
	9 Acenaphthylene	152	7.085	7.088	(0.985)	20021	1.00000	0.9400
*	10 Acenaphthene-d10	164	7.196	7.196	(1.000)	28206	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	13666	1.00000	0.9576
	12 Dibenzofuran	168	7.395	7.398	(1.028)	20714	1.00000	0.9556
	13 1,6,7-Trimethylnaphthalene	170	7.461	7.464	(1.037)	12912	1.00000	0.9446
	14 Fluorene	166	7.875	7.875	(1.094)	16006	1.00000	0.9508
	18 Dibenzothiophene	184	9.109	9.112	(0.986)	22320	1.00000	0.9489
*	15 Phenanthrene-d10	188	9.235	9.235	(1.000)	53233	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	24646	1.00000	0.9478
	17 Anthracene	178	9.311	9.314	(1.008)	22258	1.00000	0.9423
	19 Carbazole	167	9.823	9.826	(1.064)	20007	1.00000	0.9239
	20 1-Methylphenanthrene	192	10.048	10.051	(1.088)	17326	1.00000	0.9246
	22 Fluoranthene	202	11.050	11.056	(1.197)	27227	1.00000	0.9619
$	21 Fluoranthene-d10	212	11.015	11.018	(1.193)	21953	1.00000	0.9347
	23 Pyrene	202	11.572	11.575	(0.815)	26878	1.00000	0.9325
	24 Benzo(a)anthracene	228	14.076	14.079	(0.991)	23406	1.00000	0.8959
*	25 Chrysene-d12	240	14.203	14.206	(1.000)	46493	2.00000	
	27 Chrysene	228	14.275	14.282	(1.005)	26230	1.00000	0.9431
	28 Benzo(b)fluoranthene	252	16.824	16.833	(0.929)	22805	1.00000	0.8782
	29 Benzo(k)fluoranthene	252	16.881	16.897	(0.932)	22425	1.00000	0.8816
	30 Benzo(j)fluoranthene	252	16.960	16.972	(0.936)	20574	1.00000	0.8985
	31 Total Benzofluoranthenes	252	16.824	16.833	(0.929)	64985	3.00000	2.642(M)
	34 Benzo(e)pyrene	252	17.750	17.760	(0.980)	23026	1.00000	0.8892
	32 Benzo(a)pyrene	252	17.877	17.889	(0.987)	19956	1.00000	0.8733
*	33 Perylene-d12	264	18.111	18.114	(1.000)	44587	2.00000	
	35 Perylene	252	18.184	18.193	(1.004)	22015	1.00000	0.8978

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.549	20.565	(1.135)	13546	1.00000	0.9466
37 Indeno(1,2,3-cd)pyrene	276	20.672	20.691	(1.141)	23911	1.00000	0.9185
38 Dibenzo(a,h)anthracene	278	20.656	20.685	(1.141)	19954	1.00000	0.8907
39 Benzo(g,h,i)perylene	276	21.747	21.782	(1.201)	20977	1.00000	0.8894

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011905.D
Lab Smp Id: SLA0213-CAL3
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	47180	5.54
10 Acenaphthene-d10	26411	13206	52822	28206	6.80
15 Phenanthrene-d10	49210	24605	98420	53233	8.18
25 Chrysene-d12	42994	21497	85988	46493	8.14
33 Perylene-d12	40520	20260	81040	44587	10.04

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

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

REVIEW SUMMARY FOR FILE - N823011905.D

Lab ID: SLA0213-CAL3
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 12:25

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

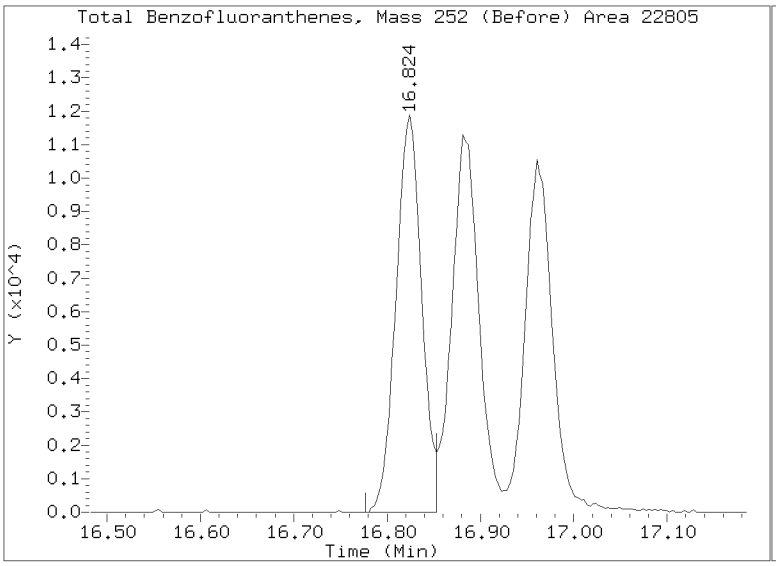
No RRT check performed

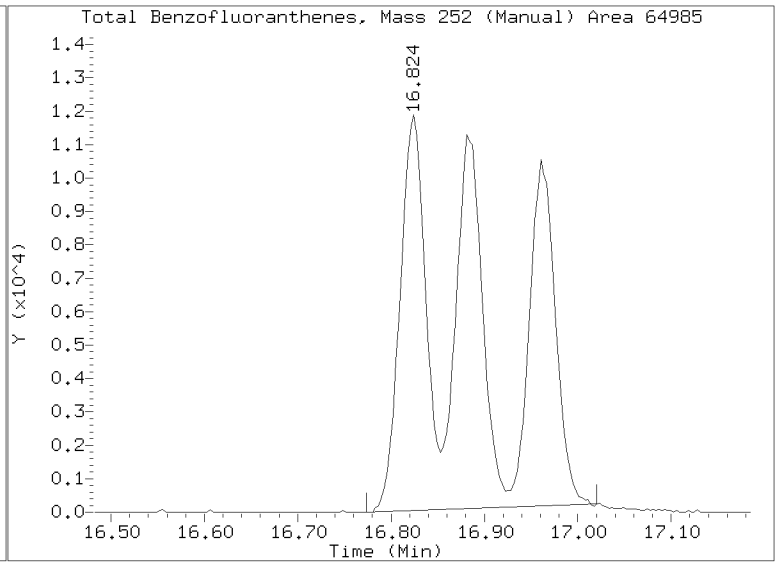
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011905.D
Injection Date: 19-JAN-2023 12:25
Lab ID:SLA0213-CAL3 Client ID:
Report Date: 01/19/2023 20:12

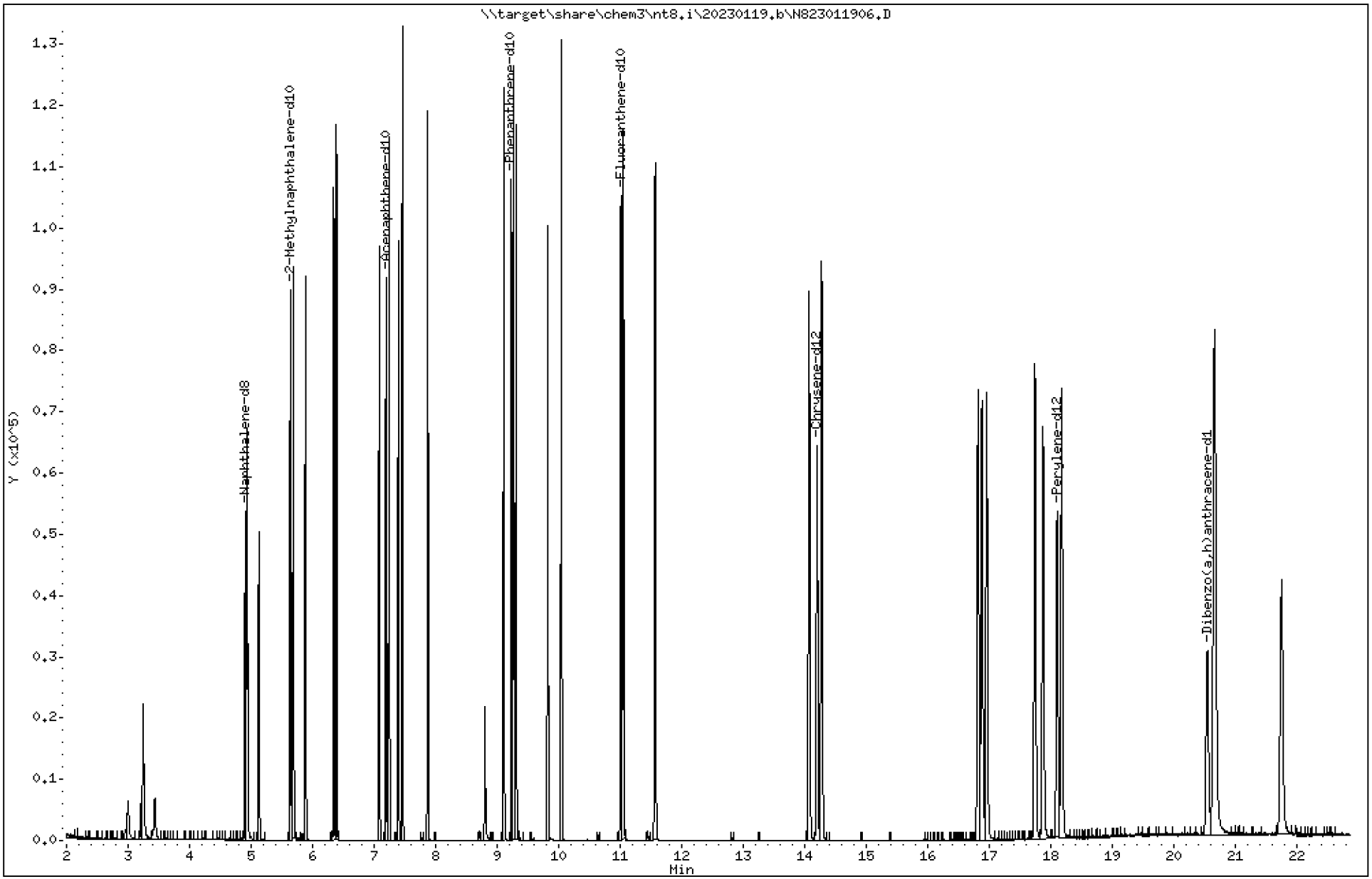




Data File: \\target\share\chem3\nt8.i\20230119.b\N823011906.D
Date : 19-JAN-2023 12:52
Client ID:
Sample Info: IC25230119,

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011906.D
Lab Smp Id: SLA0213-CAL4
Inj Date : 19-JAN-2023 12:52
Operator : JZ Inst ID: nt8.i
Smp Info : IC25230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	44704	2.00000	
	2 Naphthalene	128	4.938	4.938	(1.006)	52764	2.50000	2.538
$	3 2-Methylnaphthalene-d10	152	5.640	5.640	(1.150)	31709	2.50000	2.601
	4 2-Methylnaphthalene	141	5.687	5.687	(1.159)	29737	2.50000	2.601
	5 1-methylnaphthalene	141	5.883	5.887	(1.199)	30098	2.50000	2.594
	7 Biphenyl	154	6.345	6.348	(0.882)	44716	2.50000	2.566
	8 2,6-Dimethylnaphthalene	156	6.389	6.392	(0.888)	32396	2.50000	2.627
	9 Acenaphthylene	152	7.085	7.088	(0.985)	53242	2.50000	2.670
*	10 Acenaphthene-d10	164	7.196	7.196	(1.000)	26411	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	34335	2.50000	2.569
	12 Dibenzofuran	168	7.395	7.398	(1.028)	50810	2.50000	2.503
	13 1,6,7-Trimethylnaphthalene	170	7.461	7.464	(1.037)	33264	2.50000	2.599
	14 Fluorene	166	7.872	7.875	(1.094)	40499	2.50000	2.569
	18 Dibenzothiophene	184	9.109	9.112	(0.986)	56399	2.50000	2.594
*	15 Phenanthrene-d10	188	9.235	9.235	(1.000)	49210	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	61033	2.50000	2.539
	17 Anthracene	178	9.311	9.314	(1.008)	57918	2.50000	2.652
	19 Carbazole	167	9.823	9.826	(1.064)	52870	2.50000	2.641
	20 1-Methylphenanthrene	192	10.048	10.051	(1.088)	45452	2.50000	2.624
	22 Fluoranthene	202	11.053	11.056	(1.197)	68546	2.50000	2.620
$	21 Fluoranthene-d10	212	11.015	11.018	(1.193)	58746	2.50000	2.706
	23 Pyrene	202	11.572	11.575	(0.815)	69587	2.50000	2.611
	24 Benzo(a)anthracene	228	14.076	14.079	(0.991)	63802	2.50000	2.641
*	25 Chrysene-d12	240	14.202	14.206	(1.000)	42994	2.00000	
	27 Chrysene	228	14.278	14.282	(1.005)	65955	2.50000	2.564
	28 Benzo(b)fluoranthene	252	16.821	16.833	(0.929)	61818	2.50000	2.620
	29 Benzo(k)fluoranthene	252	16.884	16.897	(0.932)	59716	2.50000	2.583
	30 Benzo(j)fluoranthene	252	16.963	16.972	(0.937)	54944	2.50000	2.640
	31 Total Benzofluoranthenes	252	16.821	16.833	(0.929)	176122	7.50000	7.880(M)
	34 Benzo(e)pyrene	252	17.747	17.760	(0.980)	60179	2.50000	2.557
	32 Benzo(a)pyrene	252	17.877	17.889	(0.987)	54569	2.50000	2.628
*	33 Perylene-d12	264	18.111	18.114	(1.000)	40520	2.00000	
	35 Perylene	252	18.183	18.193	(1.004)	57968	2.50000	2.601

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.552	20.565	(1.135)	37101	2.50000	2.853
37 Indeno(1,2,3-cd)pyrene	276	20.675	20.691	(1.142)	63691	2.50000	2.692
38 Dibenzo(a,h)anthracene	278	20.662	20.685	(1.141)	54772	2.50000	2.690
39 Benzo(g,h,i)perylene	276	21.756	21.782	(1.201)	56053	2.50000	2.615

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011906.D
Lab Smp Id: SLA0213-CAL4
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	44704	0.00
10 Acenaphthene-d10	26411	13206	52822	26411	0.00
15 Phenanthrene-d10	49210	24605	98420	49210	0.00
25 Chrysene-d12	42994	21497	85988	42994	0.00
33 Perylene-d12	40520	20260	81040	40520	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

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

REVIEW SUMMARY FOR FILE - N823011906.D

Lab ID: SLA0213-CAL4
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 12:52

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

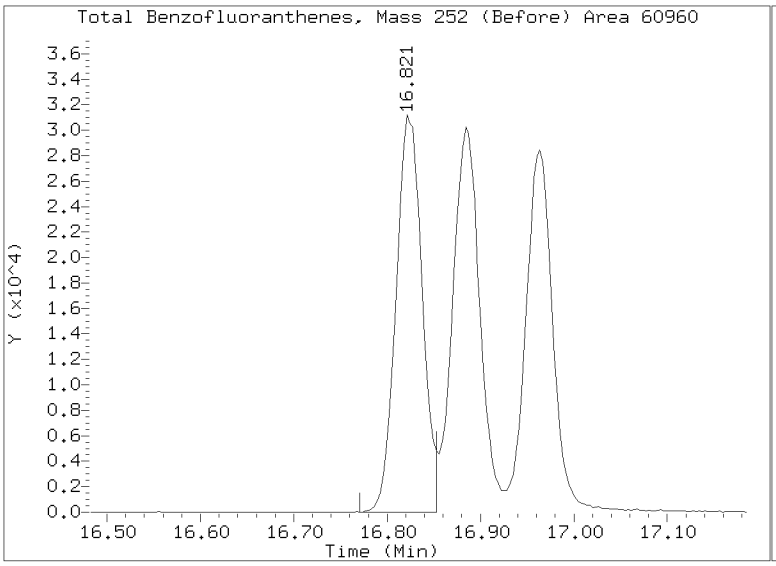
No RRT check performed

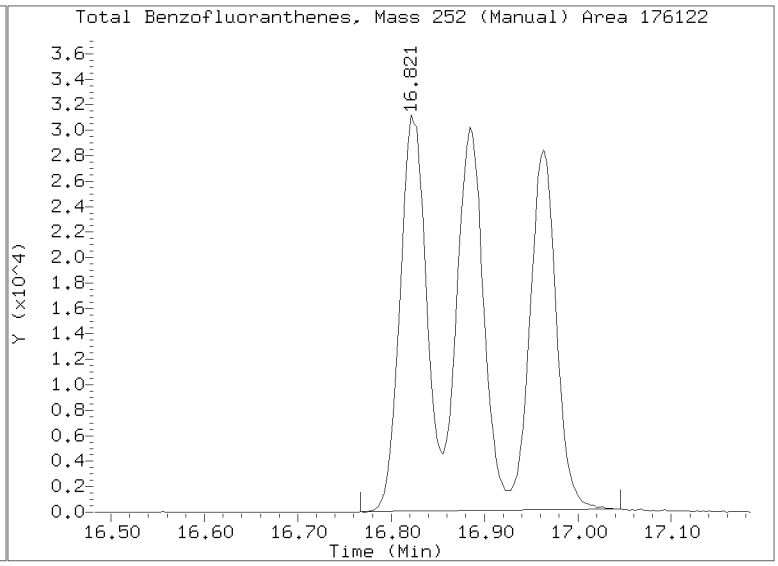
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

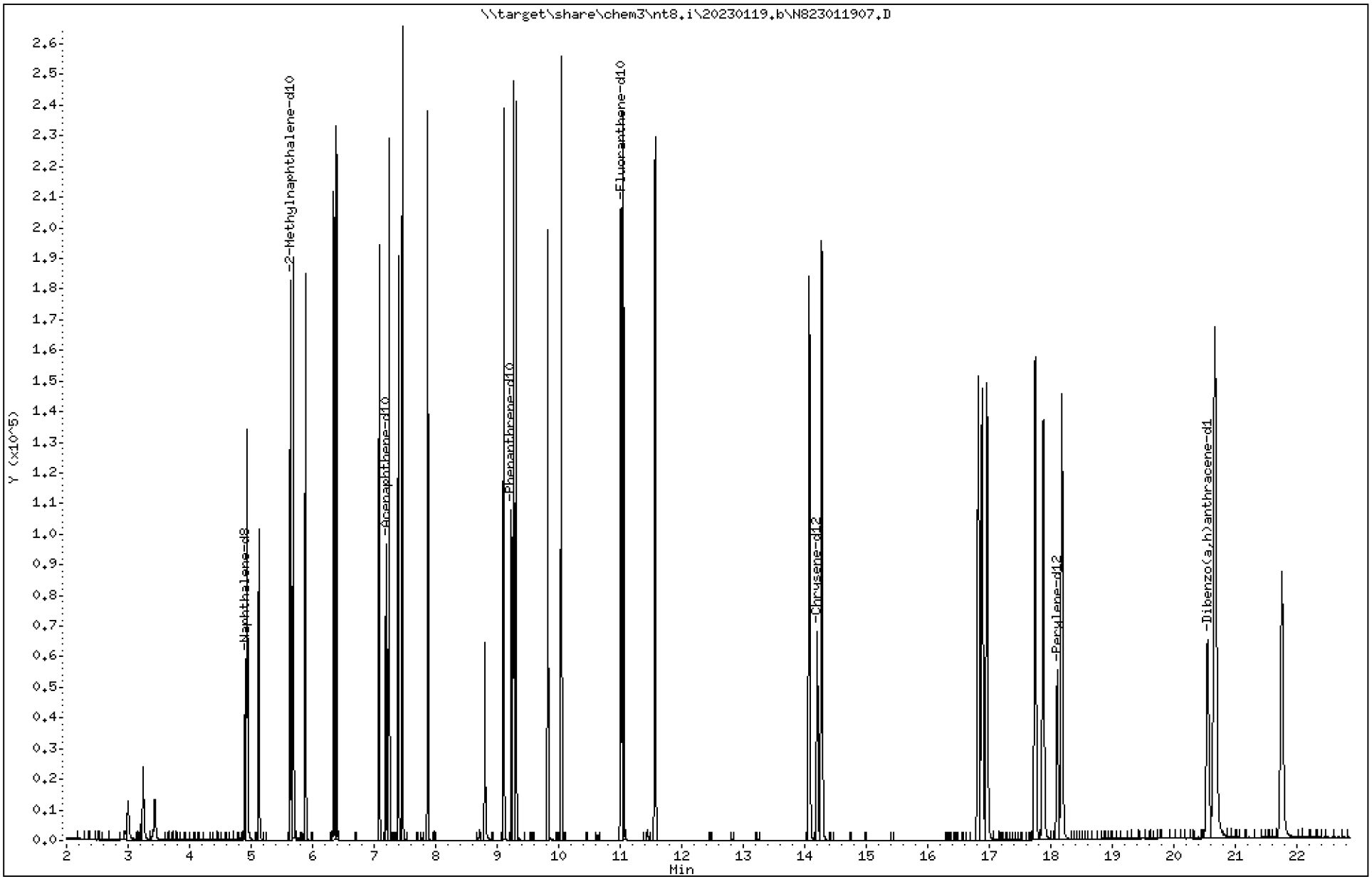
Datafile: //target/share/chem3/nt8.i/20230119.b/N823011906.D
Injection Date: 19-JAN-2023 12:52
Lab ID:SLA0213-CAL4 Client ID:
Report Date: 01/19/2023 20:12





Data File: \\target\share\chem3\nt8.i\20230119.b\N823011907.D
Date : 19-JAN-2023 13:19
Client ID:
Sample Info: IC5230119,

Instrument: nt8.i
Operator: JZ
Column phase: Rxi-17sil
Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011907.D
Lab Smp Id: SLA0213-CAL5
Inj Date : 19-JAN-2023 13:19
Operator : JZ Inst ID: nt8.i
Smp Info : IC5230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.909	4.906	(1.000)	46542	2.00000	
	2 Naphthalene	128	4.938	4.938	(1.006)	105414	5.00000	4.871
$	3 2-Methylnaphthalene-d10	152	5.640	5.640	(1.149)	64045	5.00000	5.046
	4 2-Methylnaphthalene	141	5.687	5.687	(1.158)	59129	5.00000	4.967
	5 1-methylnaphthalene	141	5.887	5.887	(1.199)	59615	5.00000	4.935
	7 Biphenyl	154	6.345	6.348	(0.882)	88014	5.00000	4.827
	8 2,6-Dimethylnaphthalene	156	6.389	6.392	(0.888)	64484	5.00000	4.997
	9 Acenaphthylene	152	7.085	7.088	(0.985)	108746	5.00000	5.211
*	10 Acenaphthene-d10	164	7.196	7.196	(1.000)	27638	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	67894	5.00000	4.855
	12 Dibenzofuran	168	7.395	7.398	(1.028)	100768	5.00000	4.744
	13 1,6,7-Trimethylnaphthalene	170	7.461	7.464	(1.037)	65911	5.00000	4.921
	14 Fluorene	166	7.875	7.875	(1.094)	82420	5.00000	4.996
	18 Dibenzothiophene	184	9.109	9.112	(0.987)	112243	5.00000	4.946
*	15 Phenanthrene-d10	188	9.232	9.235	(1.000)	51351	2.00000	
	16 Phenanthrene	178	9.270	9.273	(1.004)	119248	5.00000	4.754
	17 Anthracene	178	9.311	9.314	(1.009)	114927	5.00000	5.044
	19 Carbazole	167	9.823	9.826	(1.064)	106758	5.00000	5.111
	20 1-Methylphenanthrene	192	10.048	10.051	(1.088)	90954	5.00000	5.032
	22 Fluoranthene	202	11.053	11.056	(1.197)	135256	5.00000	4.954
$	21 Fluoranthene-d10	212	11.015	11.018	(1.193)	119286	5.00000	5.265
	23 Pyrene	202	11.572	11.575	(0.815)	140705	5.00000	5.068
	24 Benzo(a)anthracene	228	14.076	14.079	(0.991)	132618	5.00000	5.270
*	25 Chrysene-d12	240	14.203	14.206	(1.000)	44781	2.00000	
	27 Chrysene	228	14.278	14.282	(1.005)	132750	5.00000	4.955
	28 Benzo(b)fluoranthene	252	16.827	16.833	(0.929)	125757	5.00000	5.118
	29 Benzo(k)fluoranthene	252	16.887	16.897	(0.932)	122821	5.00000	5.103
	30 Benzo(j)fluoranthene	252	16.966	16.972	(0.937)	113399	5.00000	5.234
	31 Total Benzofluoranthenes	252	16.827	16.833	(0.929)	361443	15.0000	15.53(M)
	34 Benzo(e)pyrene	252	17.750	17.760	(0.980)	121964	5.00000	4.978
	32 Benzo(a)pyrene	252	17.883	17.889	(0.987)	112121	5.00000	5.186
*	33 Perylene-d12	264	18.111	18.114	(1.000)	42187	2.00000	
	35 Perylene	252	18.187	18.193	(1.004)	116268	5.00000	5.011

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.555	20.565	(1.135)	78264	5.00000	5.780
37 Indeno(1,2,3-cd)pyrene	276	20.681	20.691	(1.142)	129575	5.00000	5.260
38 Dibenzo(a,h)anthracene	278	20.669	20.685	(1.141)	112698	5.00000	5.317
39 Benzo(g,h,i)perylene	276	21.763	21.782	(1.202)	114826	5.00000	5.145

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011907.D
Lab Smp Id: SLA0213-CAL5
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46542	4.11
10 Acenaphthene-d10	26411	13206	52822	27638	4.65
15 Phenanthrene-d10	49210	24605	98420	51351	4.35
25 Chrysene-d12	42994	21497	85988	44781	4.16
33 Perylene-d12	40520	20260	81040	42187	4.11

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.06
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.23	-0.03
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

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

REVIEW SUMMARY FOR FILE - N823011907.D

Lab ID: SLA0213-CAL5
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 13:19

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

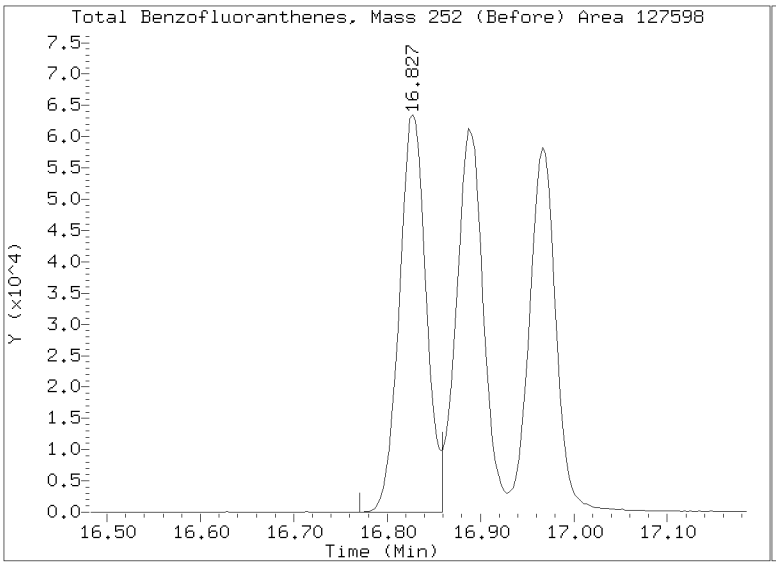
No RRT check performed

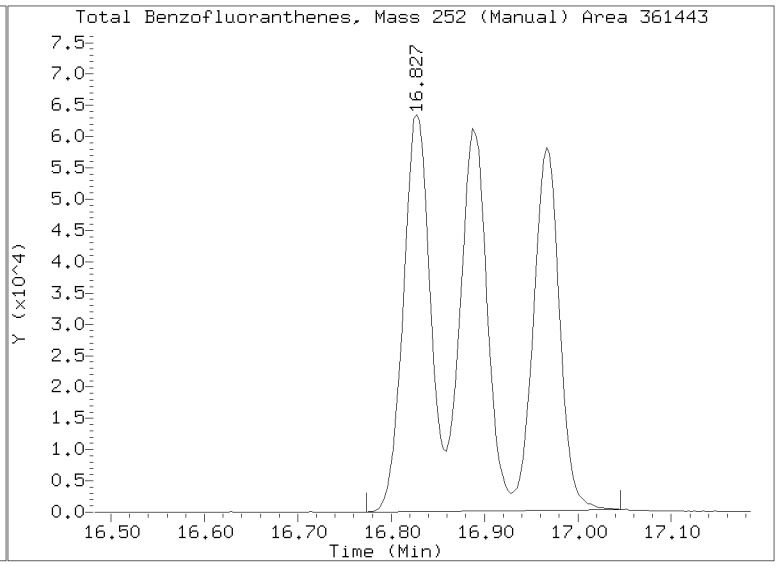
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

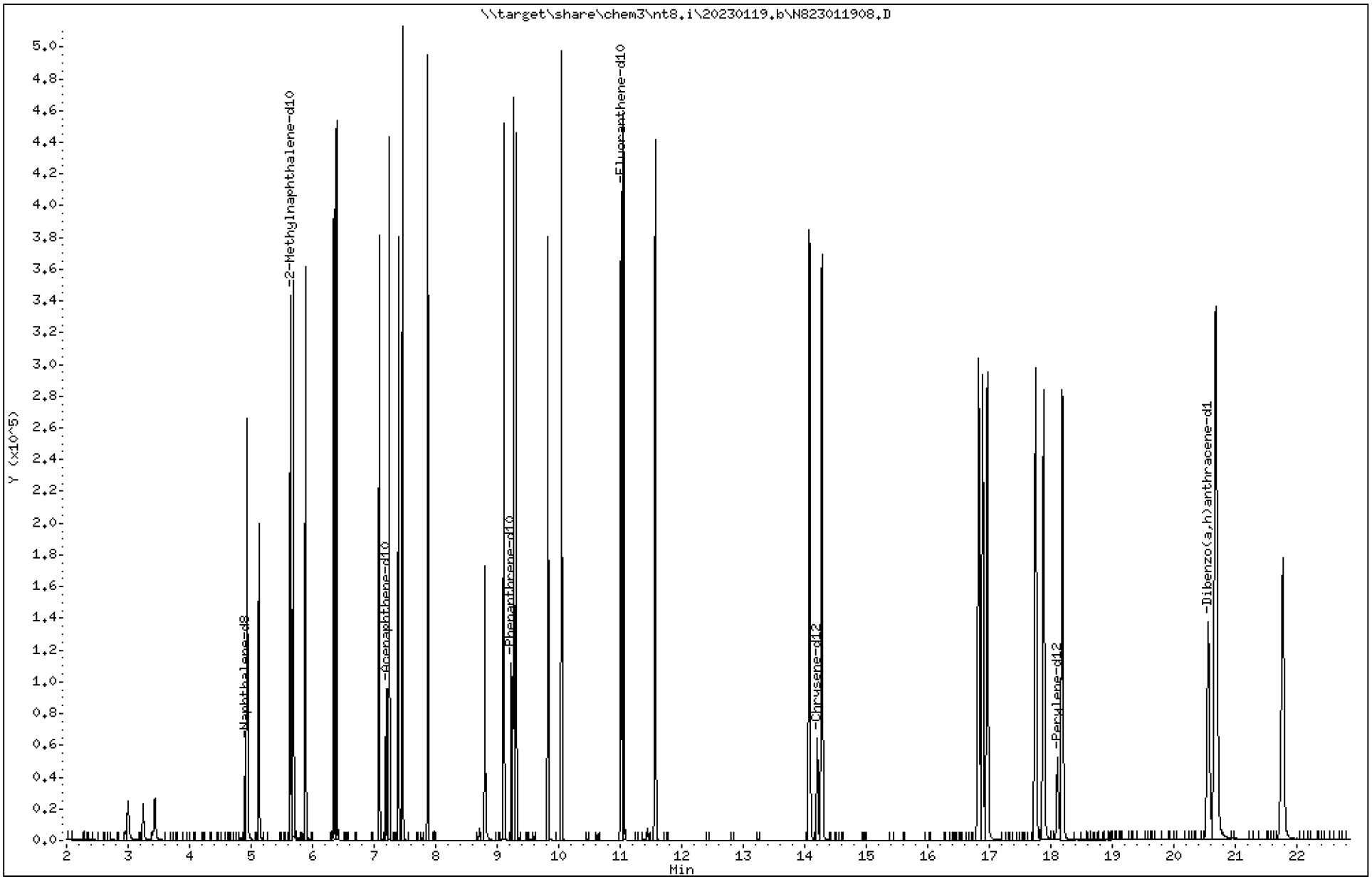
Datafile: //target/share/chem3/nt8.i/20230119.b/N823011907.D
Injection Date: 19-JAN-2023 13:19
Lab ID:SLA0213-CAL5 Client ID:
Report Date: 01/19/2023 20:12





Data File: \\target\share\chem3\nt8.i\20230119.b\N823011908.D
Date : 19-JAN-2023 13:46
Client ID:
Sample Info: IC10230119,

Instrument: nt8.i
Operator: JZ
Column phase: Rxi-17sil
Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011908.D
Lab Smp Id: SLA0213-CAL6
Inj Date : 19-JAN-2023 13:46
Operator : JZ Inst ID: nt8.i
Smp Info : IC10230119,
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:10 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.906	4.906	(1.000)	46070	2.00000	
	2 Naphthalene	128	4.938	4.938	(1.006)	203510	10.0000	9.501
$	3 2-Methylnaphthalene-d10	152	5.640	5.640	(1.149)	124701	10.0000	9.925
	4 2-Methylnaphthalene	141	5.687	5.687	(1.159)	112895	10.0000	9.582
	5 1-methylnaphthalene	141	5.887	5.887	(1.200)	115357	10.0000	9.647
	7 Biphenyl	154	6.348	6.348	(0.882)	169086	10.0000	9.603
	8 2,6-Dimethylnaphthalene	156	6.392	6.392	(0.888)	124019	10.0000	9.952
	9 Acenaphthylene	152	7.088	7.088	(0.985)	213179	10.0000	10.58
*	10 Acenaphthene-d10	164	7.196	7.196	(1.000)	26689	2.00000	
	11 Acenaphthene	153	7.246	7.246	(1.007)	130872	10.0000	9.692
	12 Dibenzofuran	168	7.398	7.398	(1.028)	193532	10.0000	9.436
	13 1,6,7-Trimethylnaphthalene	170	7.464	7.464	(1.037)	127563	10.0000	9.863
	14 Fluorene	166	7.875	7.875	(1.094)	161125	10.0000	10.11
	18 Dibenzothiophene	184	9.112	9.112	(0.987)	217256	10.0000	9.701
*	15 Phenanthrene-d10	188	9.235	9.235	(1.000)	50683	2.00000	
	16 Phenanthrene	178	9.273	9.273	(1.004)	230002	10.0000	9.290
	17 Anthracene	178	9.314	9.314	(1.009)	221162	10.0000	9.834
	19 Carbazole	167	9.826	9.826	(1.064)	210036	10.0000	10.19
	20 1-Methylphenanthrene	192	10.051	10.051	(1.088)	178561	10.0000	10.01
	22 Fluoranthene	202	11.056	11.056	(1.197)	257643	10.0000	9.560
$	21 Fluoranthene-d10	212	11.018	11.018	(1.193)	235698	10.0000	10.54
	23 Pyrene	202	11.575	11.575	(0.815)	274116	10.0000	10.08
	24 Benzo(a)anthracene	228	14.079	14.079	(0.991)	268196	10.0000	10.88
*	25 Chrysene-d12	240	14.206	14.206	(1.000)	43880	2.00000	
	27 Chrysene	228	14.282	14.282	(1.005)	257418	10.0000	9.806
	28 Benzo(b)fluoranthene	252	16.833	16.833	(0.929)	252022	10.0000	10.64
	29 Benzo(k)fluoranthene	252	16.897	16.897	(0.933)	238915	10.0000	10.30
	30 Benzo(j)fluoranthene	252	16.972	16.972	(0.937)	216807	10.0000	10.38
	31 Total Benzofluoranthenes	252	16.833	16.833	(0.929)	704955	30.0000	31.43(M)
	34 Benzo(e)pyrene	252	17.760	17.760	(0.980)	240447	10.0000	10.18
	32 Benzo(a)pyrene	252	17.889	17.889	(0.988)	222990	10.0000	10.70
*	33 Perylene-d12	264	18.114	18.114	(1.000)	40659	2.00000	
	35 Perylene	252	18.193	18.193	(1.004)	226582	10.0000	10.13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.564	20.565	(1.135)	162230	10.0000	12.43
37 Indeno(1,2,3-cd)pyrene	276	20.691	20.691	(1.142)	252895	10.0000	10.65
38 Dibenzo(a,h)anthracene	278	20.685	20.685	(1.142)	223771	10.0000	10.95
39 Benzo(g,h,i)perylene	276	21.782	21.782	(1.202)	231445	10.0000	10.76

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011908.D
Lab Smp Id: SLA0213-CAL6
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46070	3.06
10 Acenaphthene-d10	26411	13206	52822	26689	1.05
15 Phenanthrene-d10	49210	24605	98420	50683	2.99
25 Chrysene-d12	42994	21497	85988	43880	2.06
33 Perylene-d12	40520	20260	81040	40659	0.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.00
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.00
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.02
33 Perylene-d12	18.11	17.61	18.61	18.11	0.02

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

REVIEW SUMMARY FOR FILE - N823011908.D

Lab ID: SLA0213-CAL6
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 13:46

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

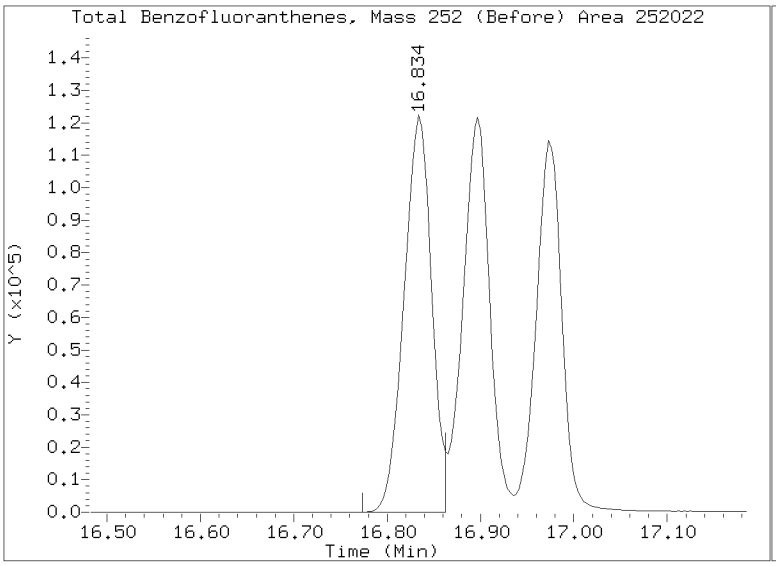
No RRT check performed

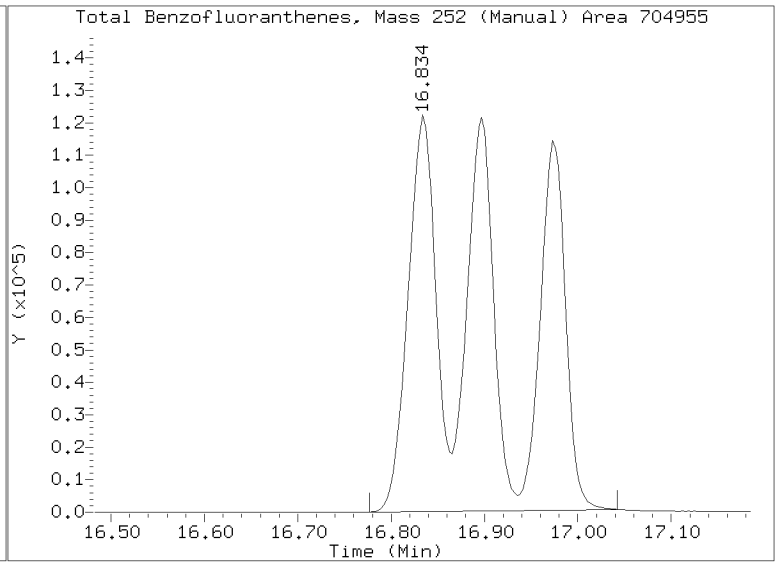
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011908.D
Injection Date: 19-JAN-2023 13:46
Lab ID:SLA0213-CAL6 Client ID:
Report Date: 01/19/2023 20:12





Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Page 1

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

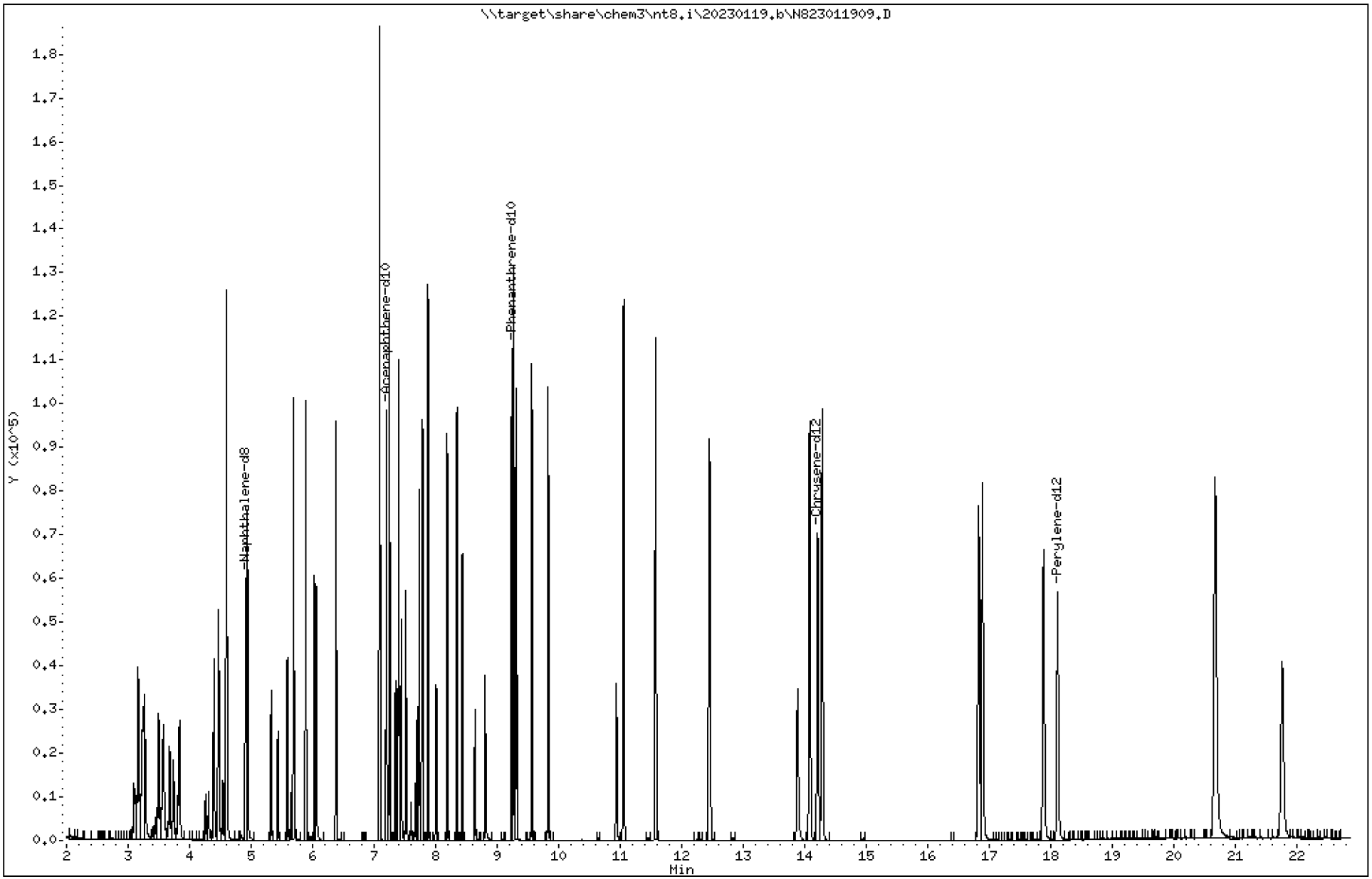
Sample Info: SCV230119

Volume Injected (uL): 1.0

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

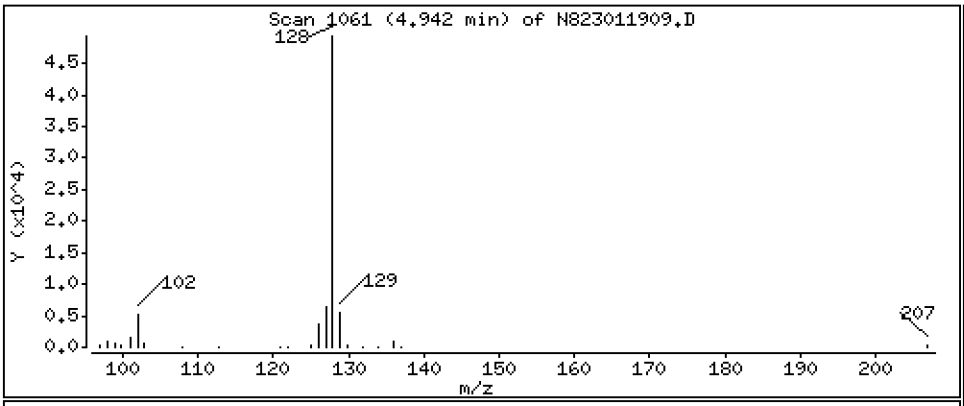
Operator: JZ

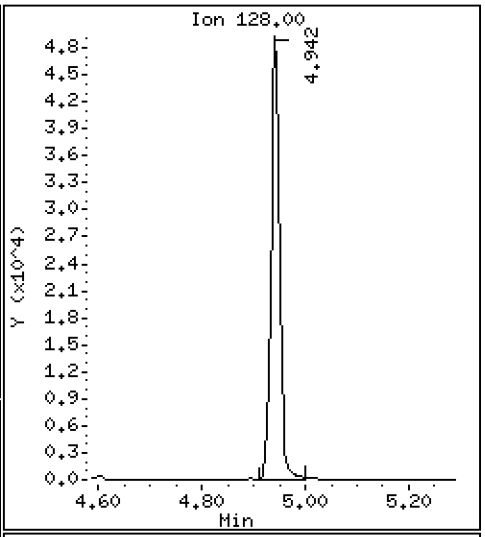
Column phase: Rxi-17sil

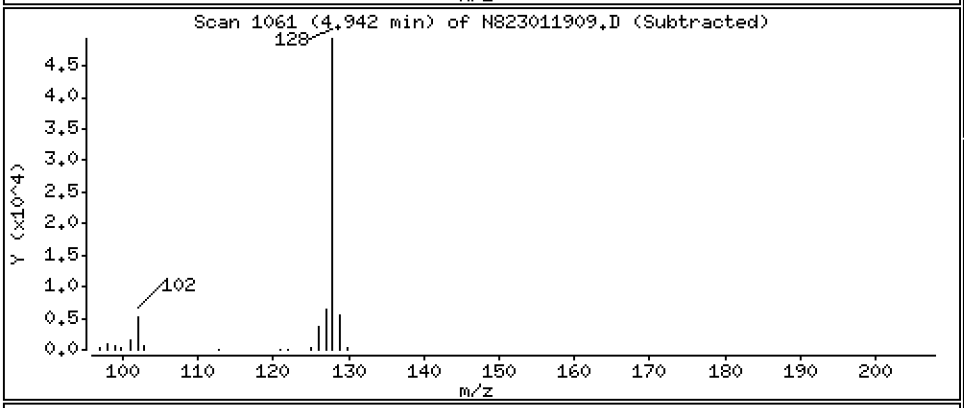
Column diameter: 0.25

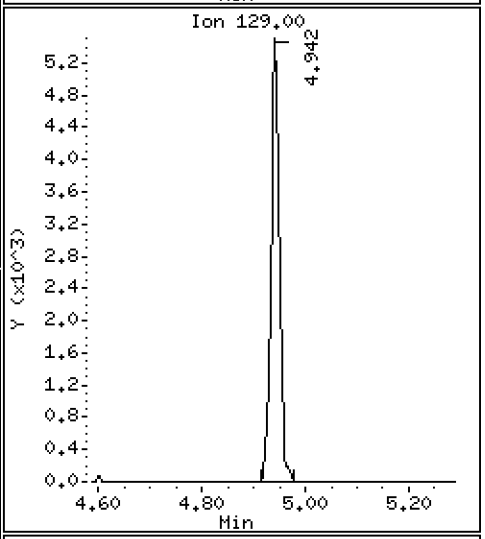
2 Naphthalene

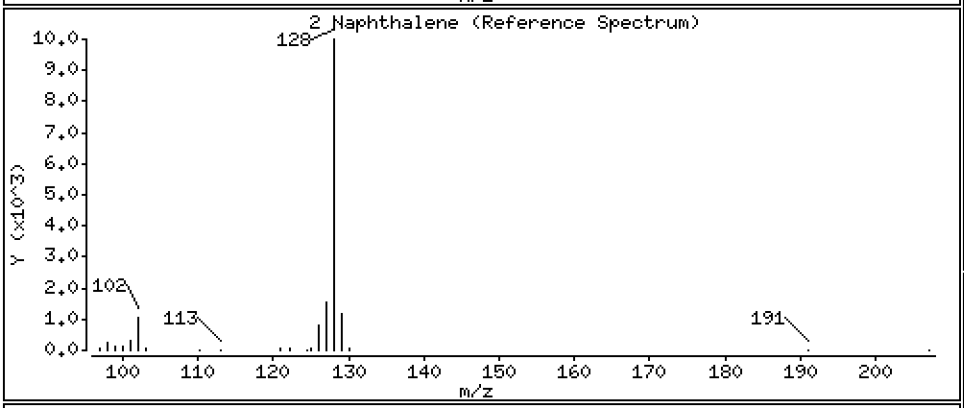
Concentration: 2.626 ug/L

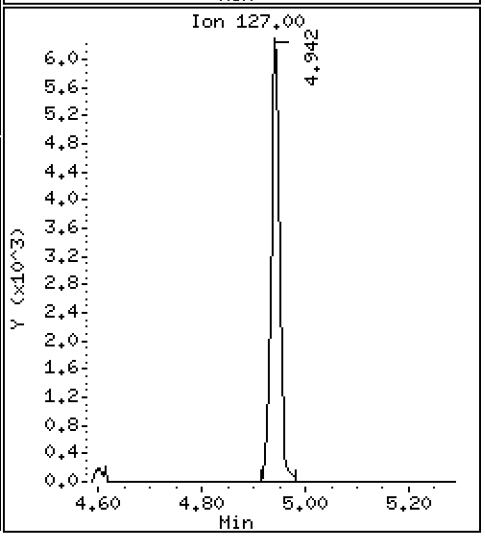


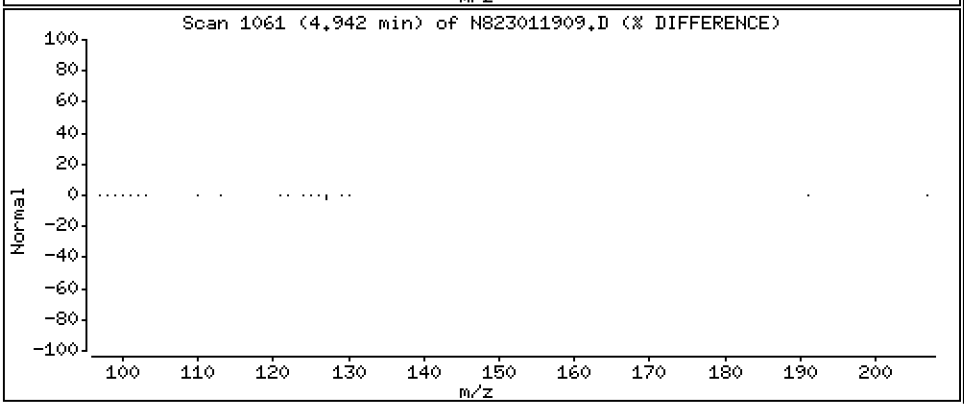












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

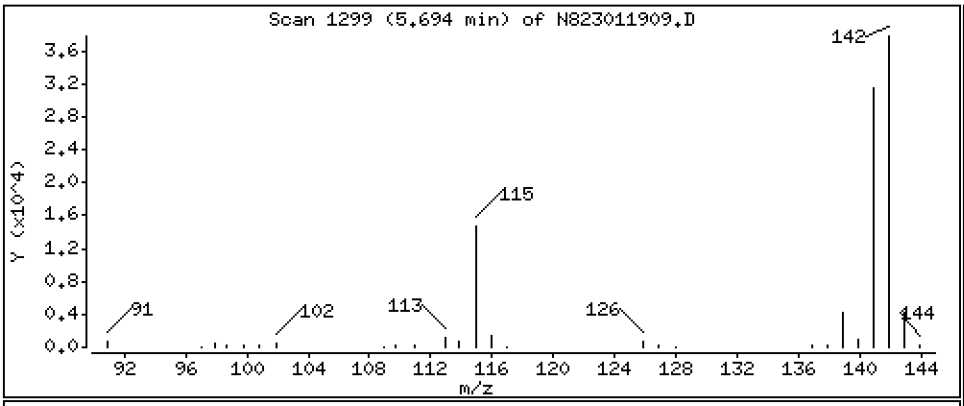
Operator: JZ

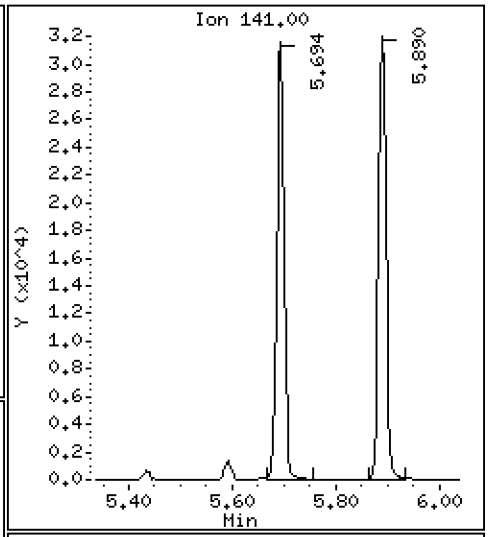
Column phase: Rxi-17sil

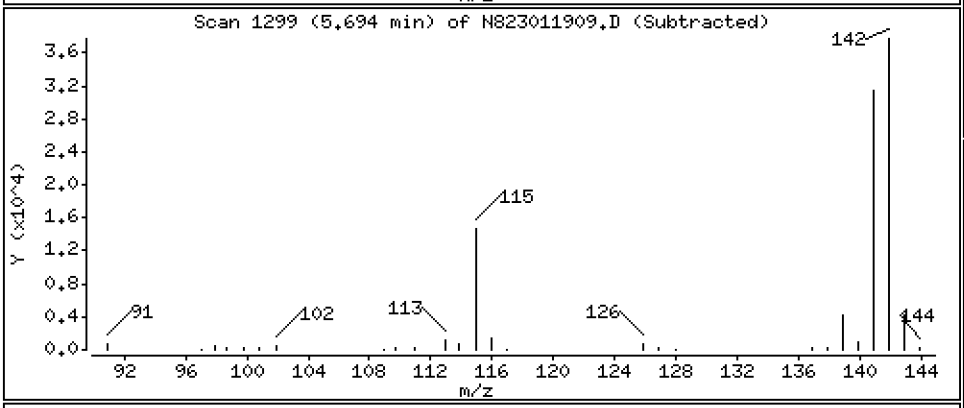
Column diameter: 0.25

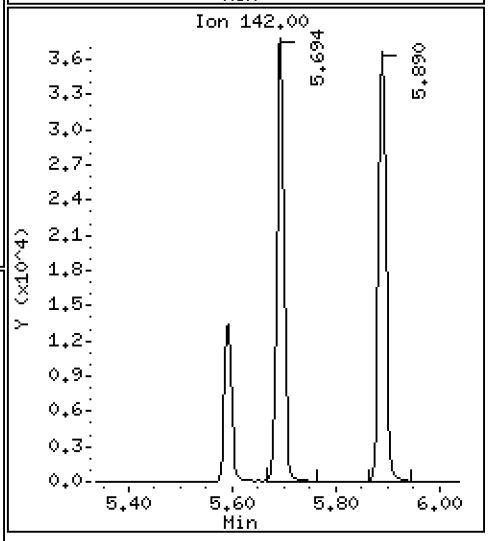
4 2-Methylnaphthalene

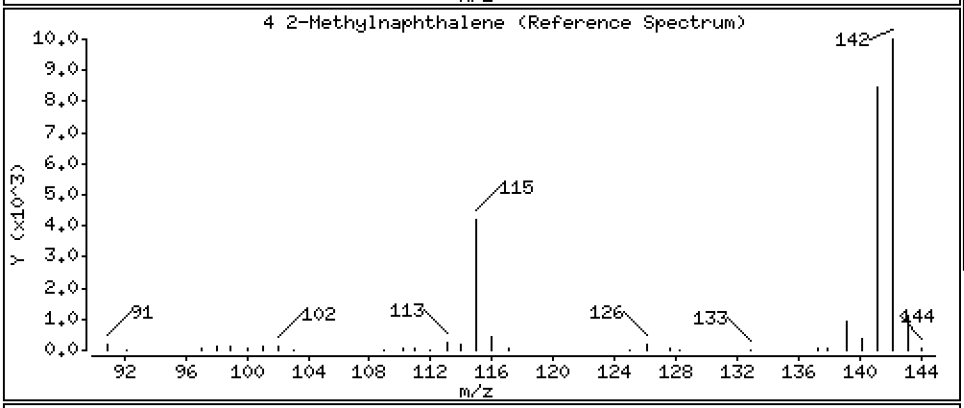
Concentration: 2.670 ug/L

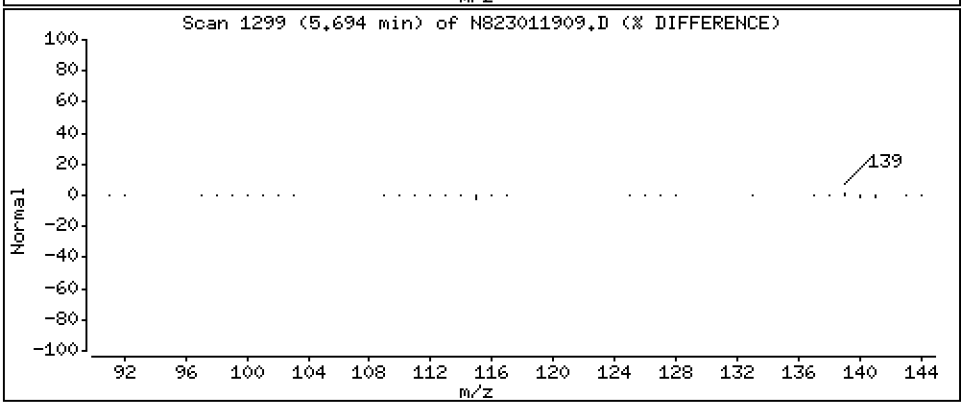












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

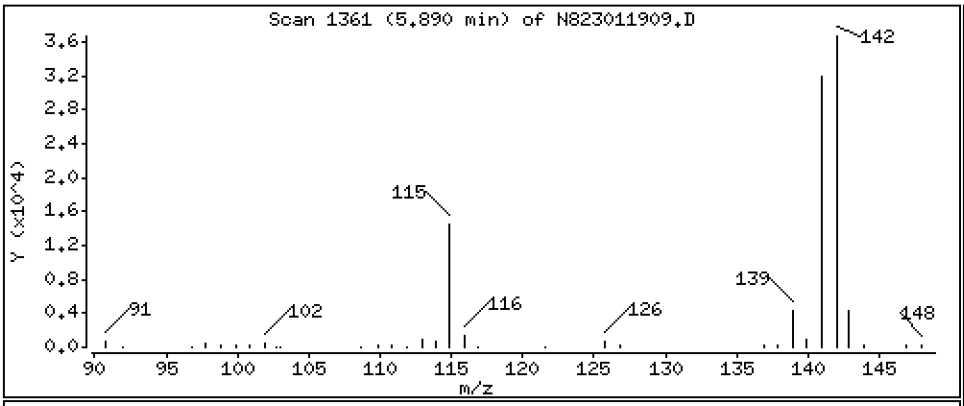
Operator: JZ

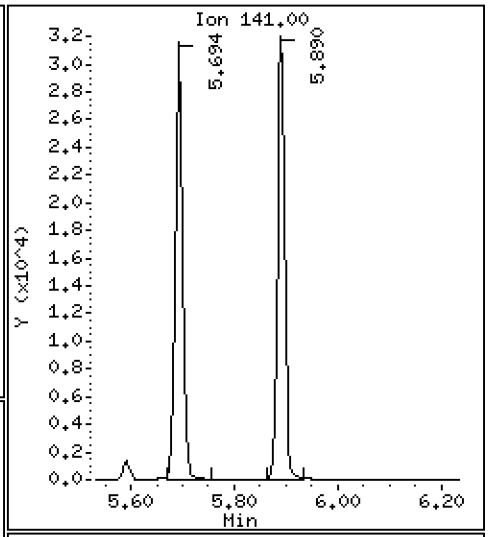
Column phase: Rxi-17sil

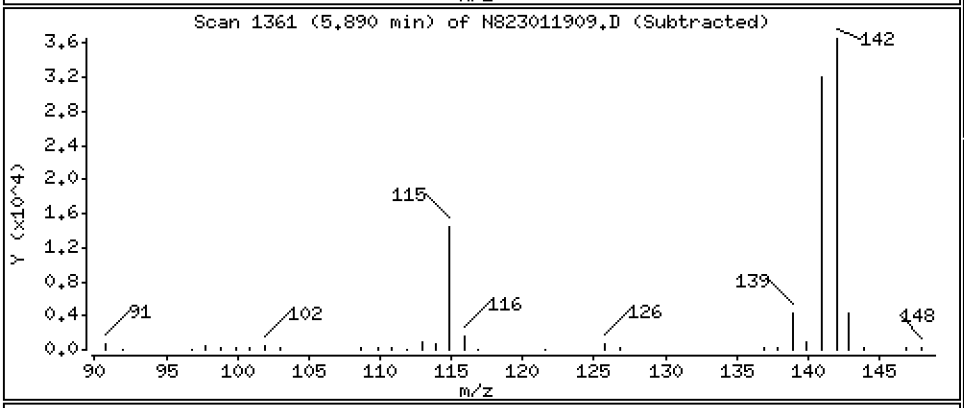
Column diameter: 0.25

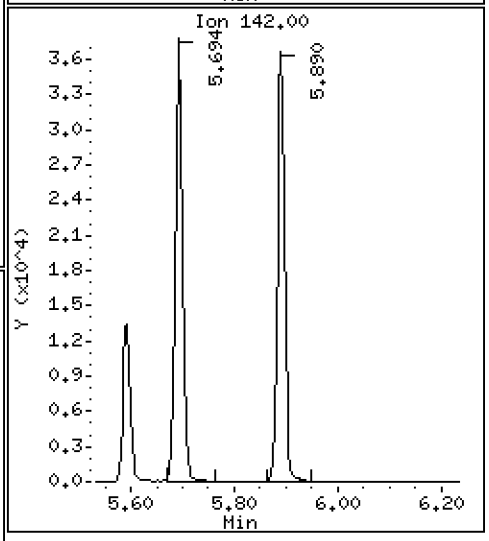
5 1-methylnaphthalene

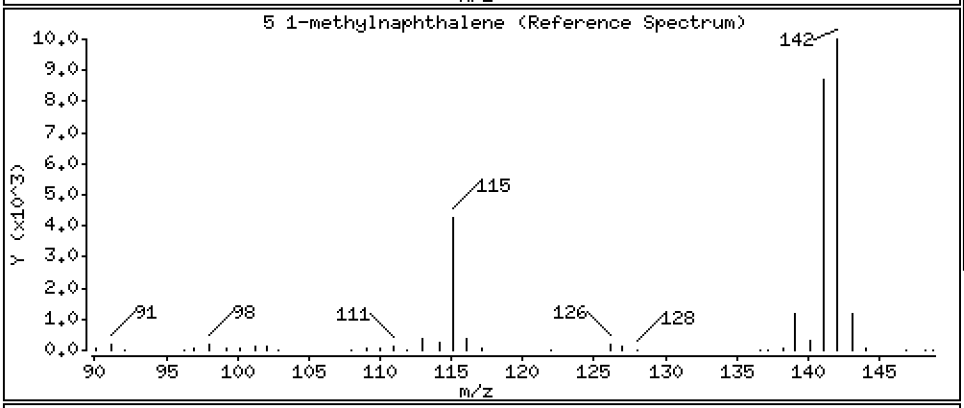
Concentration: 2.649 ug/L

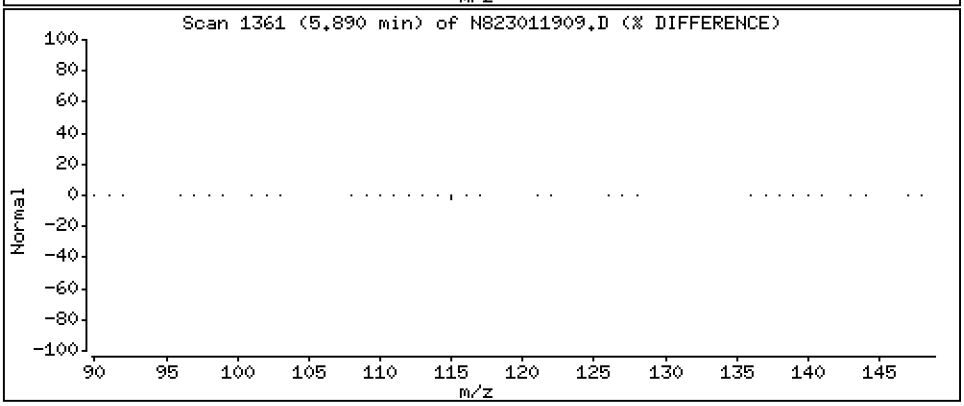












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

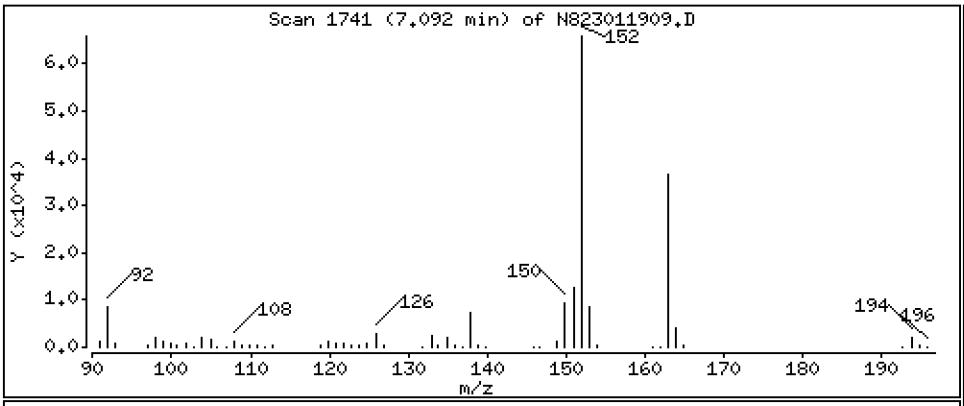
Operator: JZ

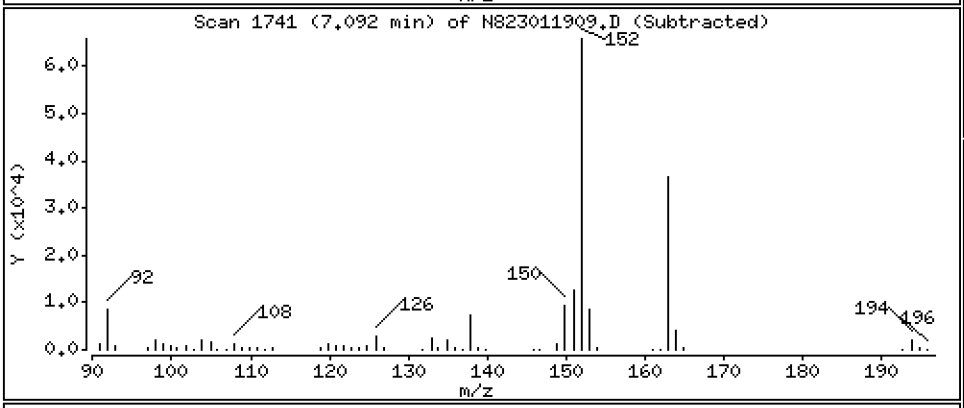
Column phase: Rxi-17sil

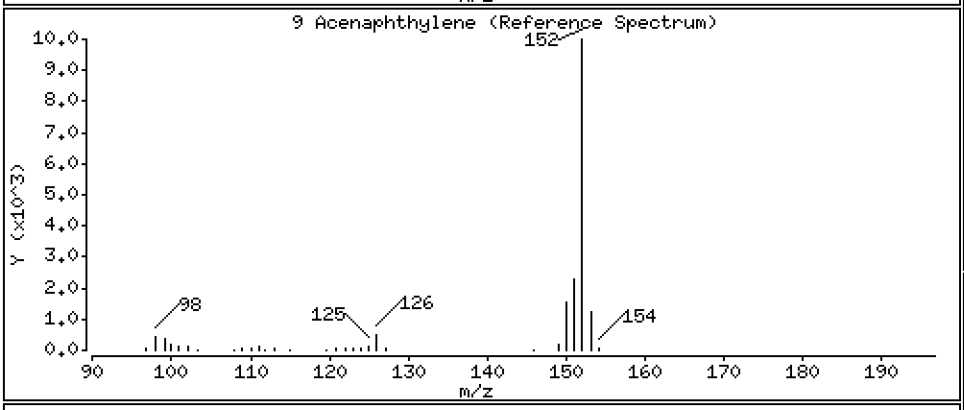
Column diameter: 0.25

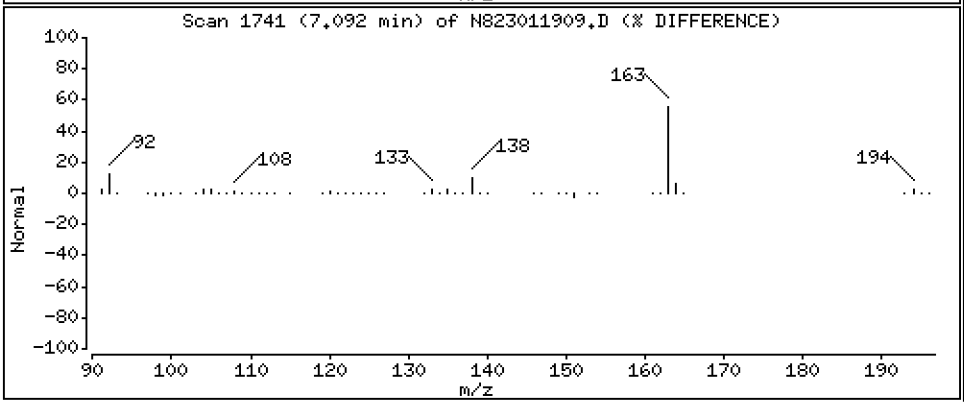
9 Acenaphthylene

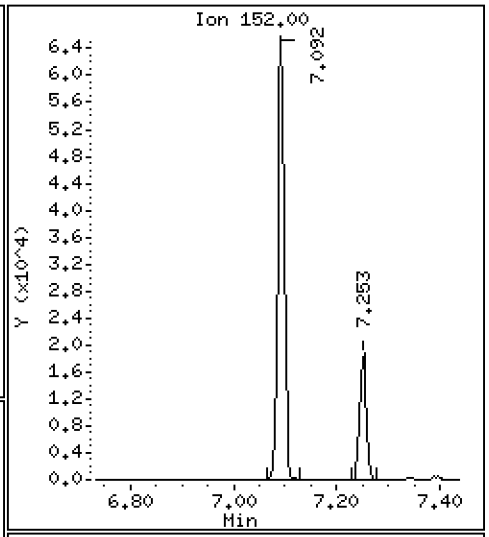
Concentration: 2.821 ug/L

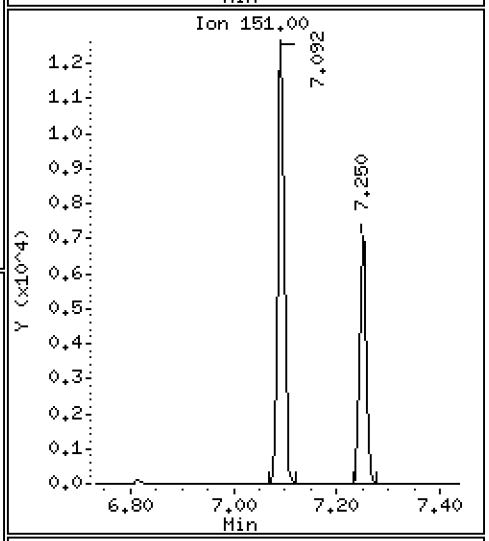


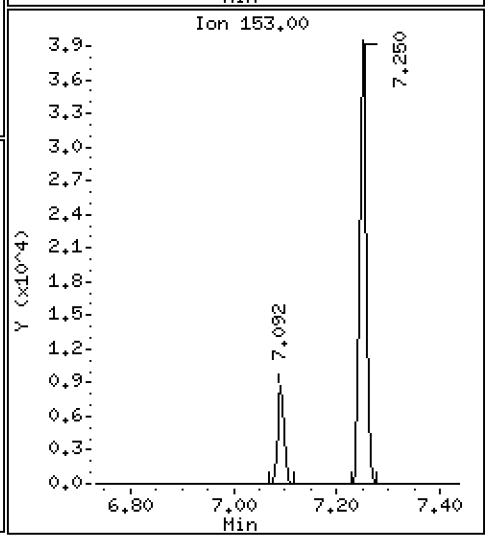












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

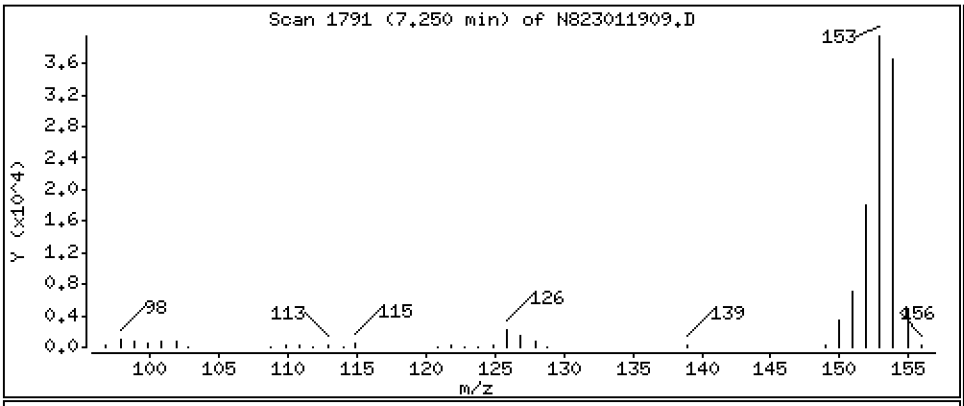
Operator: JZ

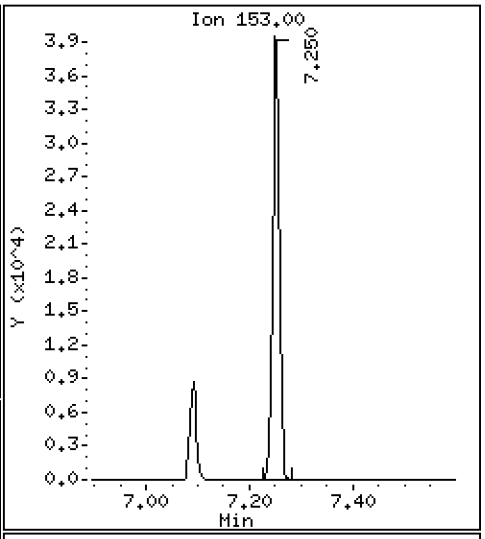
Column phase: Rxi-17sil

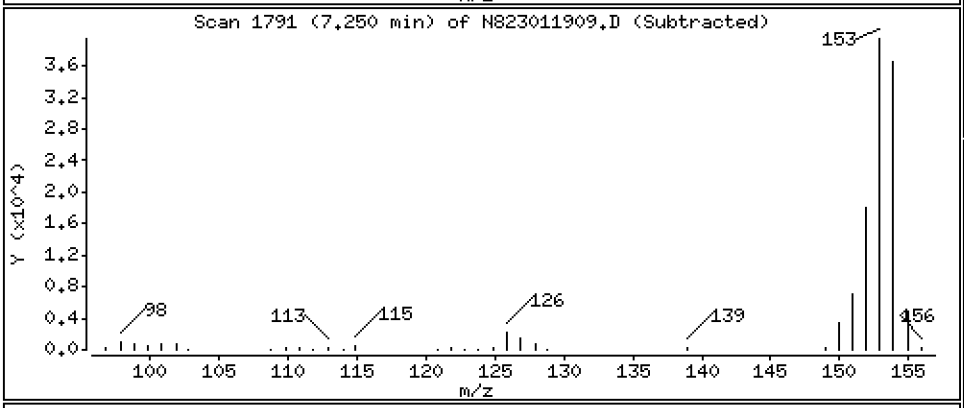
Column diameter: 0.25

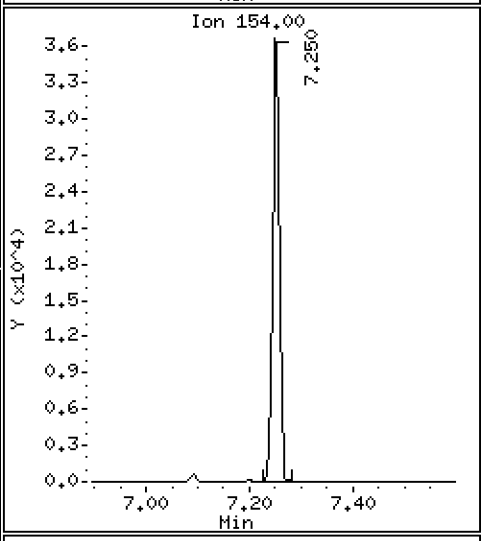
11 Acenaphthene

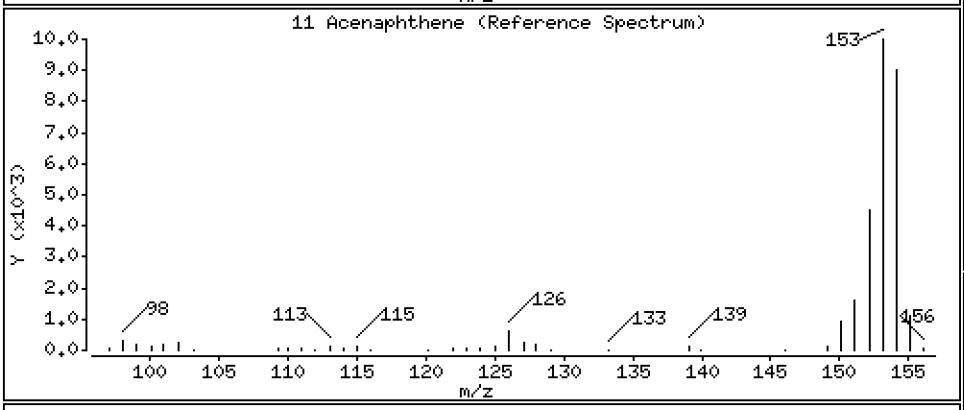
Concentration: 2.600 ug/L

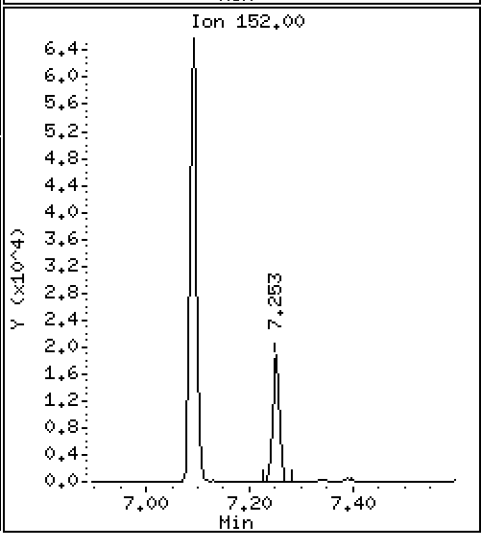


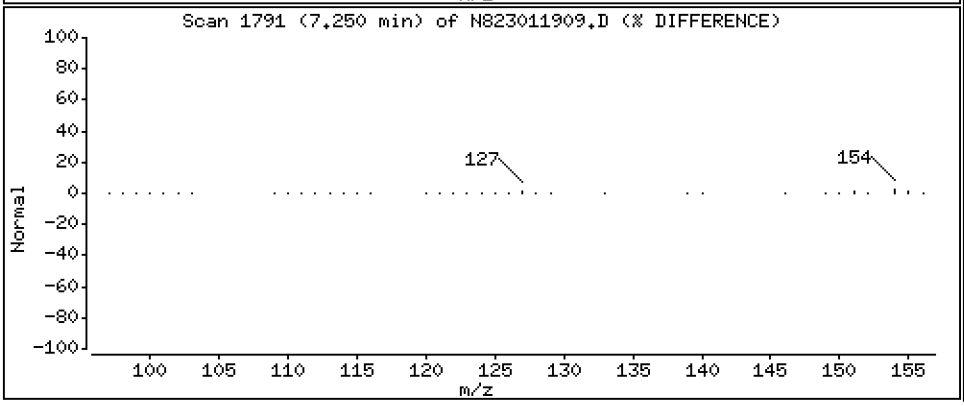












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

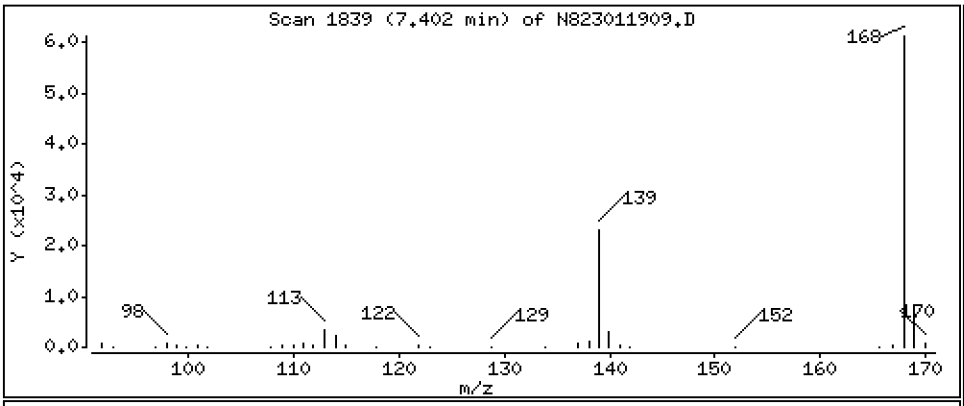
Operator: JZ

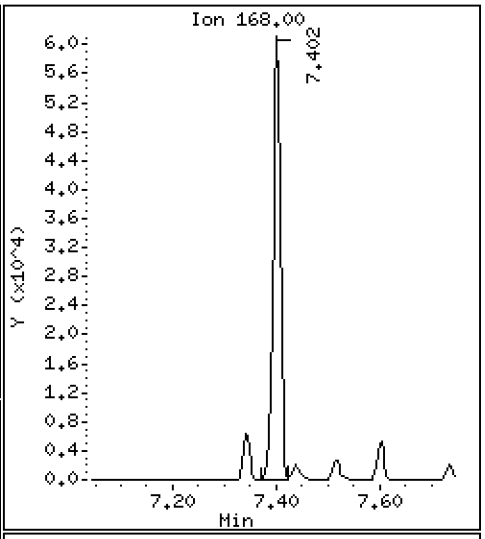
Column phase: Rxi-17sil

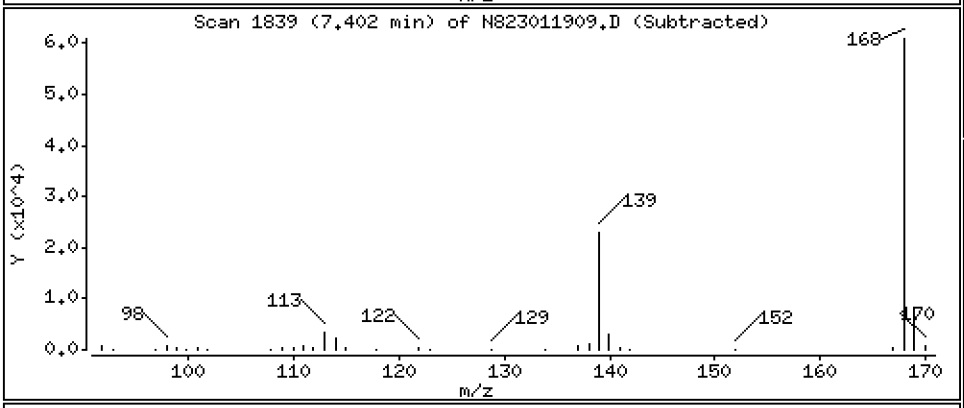
Column diameter: 0.25

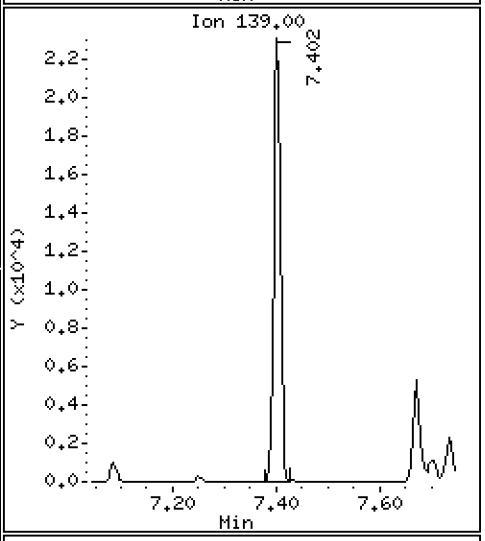
12 Dibenzofuran

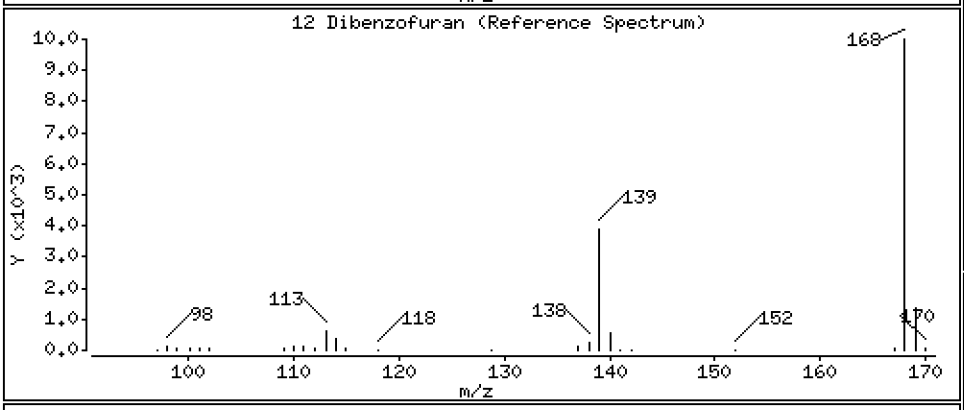
Concentration: 2.860 ug/L

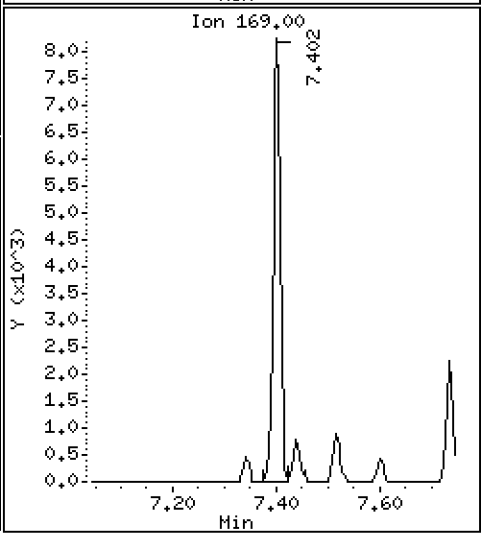


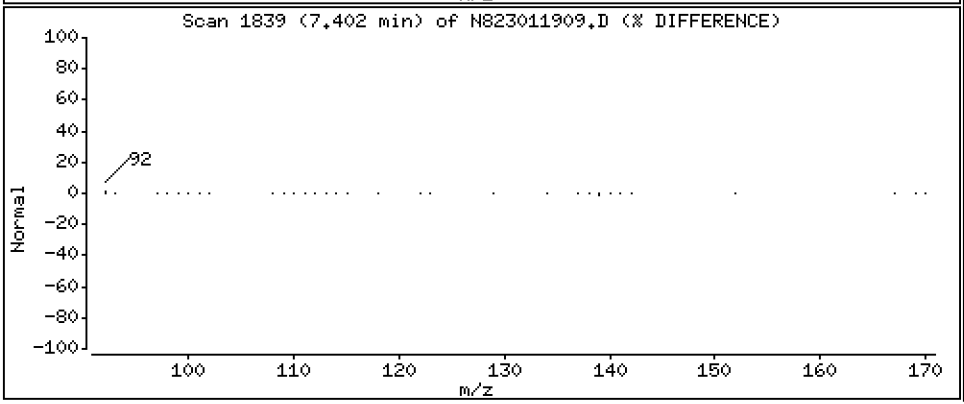












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

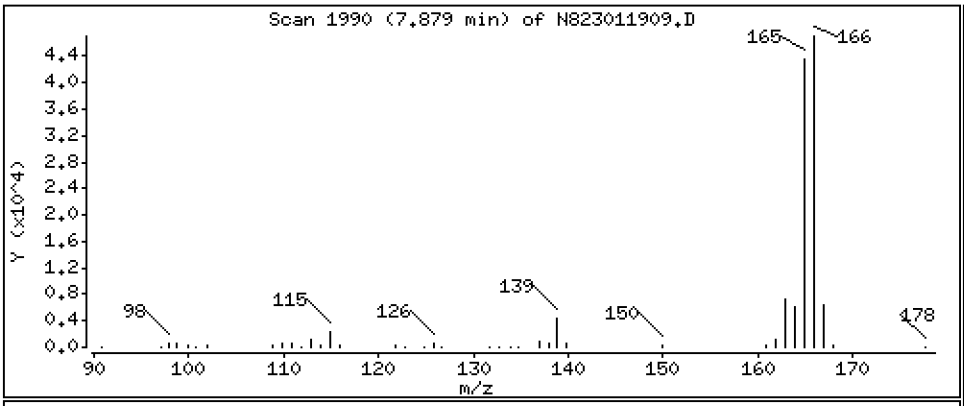
Operator: JZ

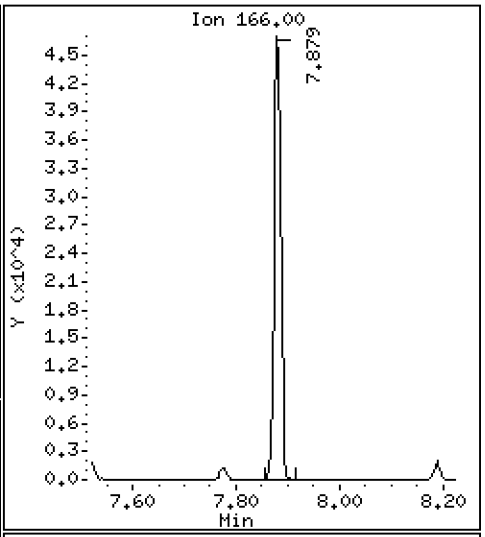
Column phase: Rxi-17sil

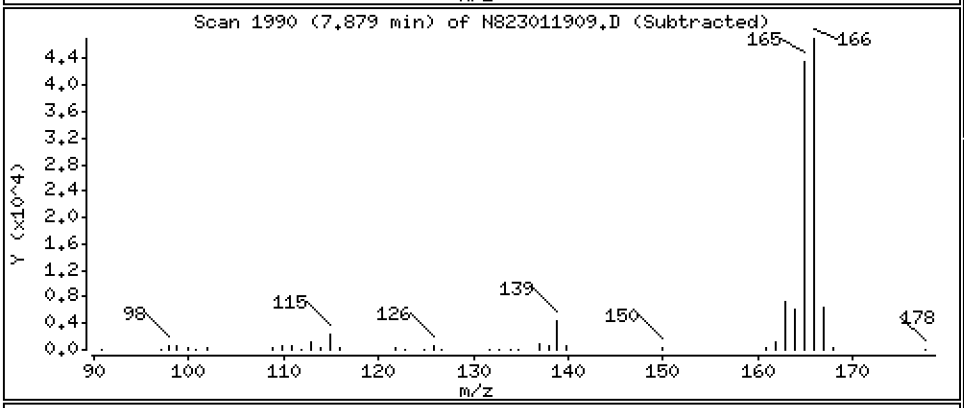
Column diameter: 0.25

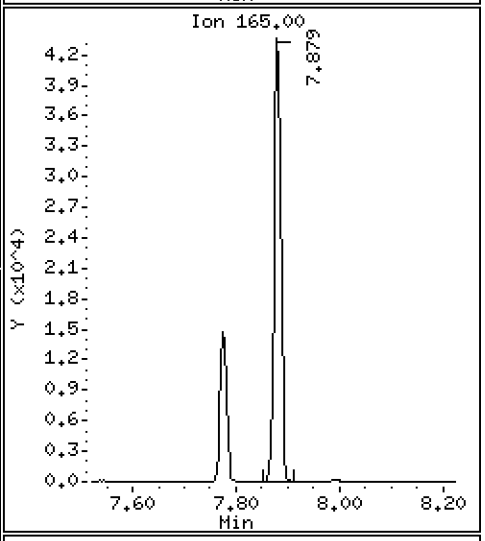
14 Fluorene

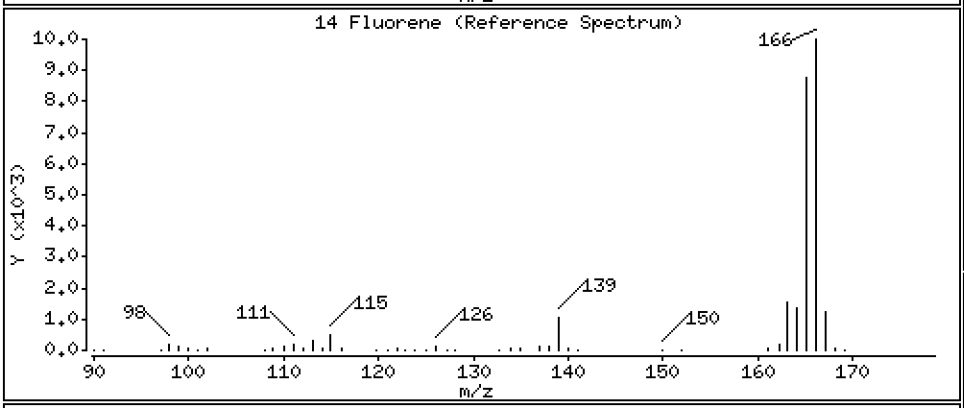
Concentration: 2.631 ug/L

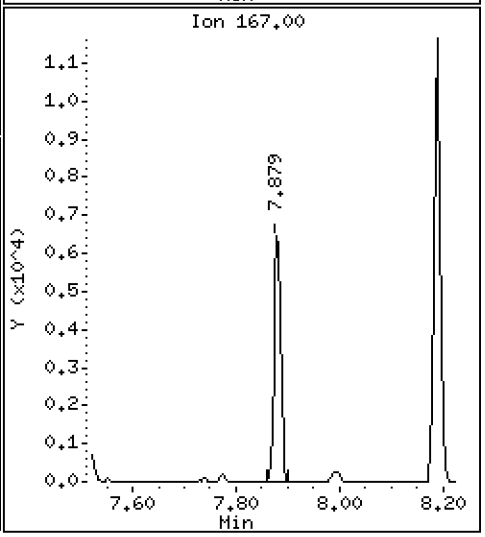


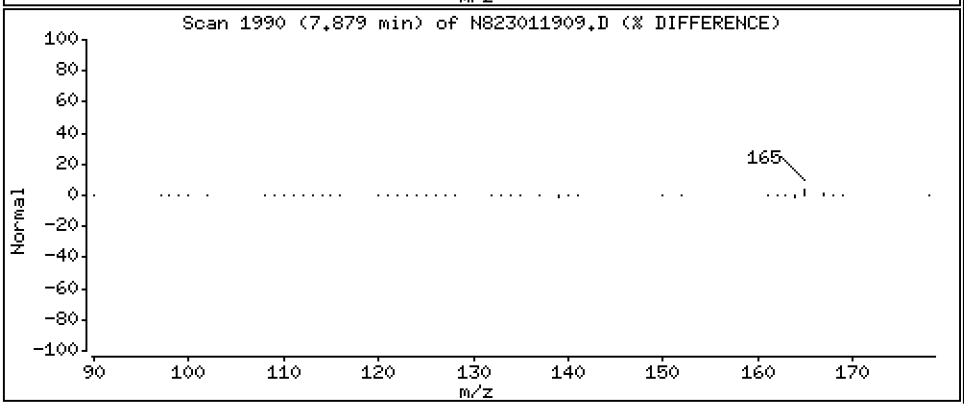












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

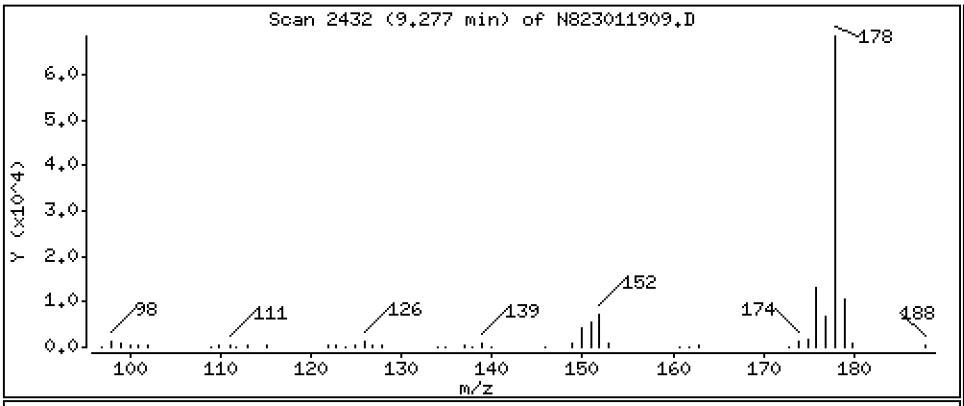
Operator: JZ

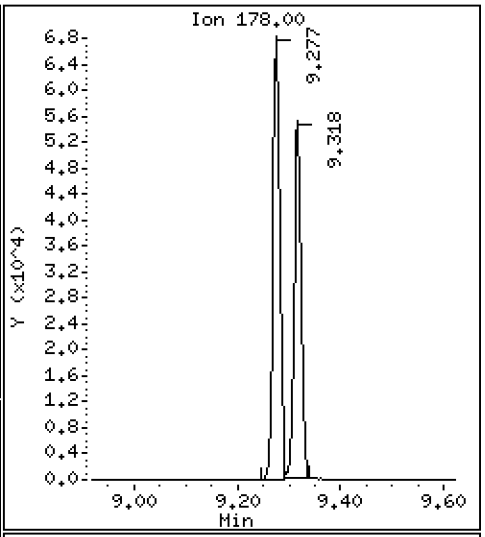
Column phase: Rxi-17sil

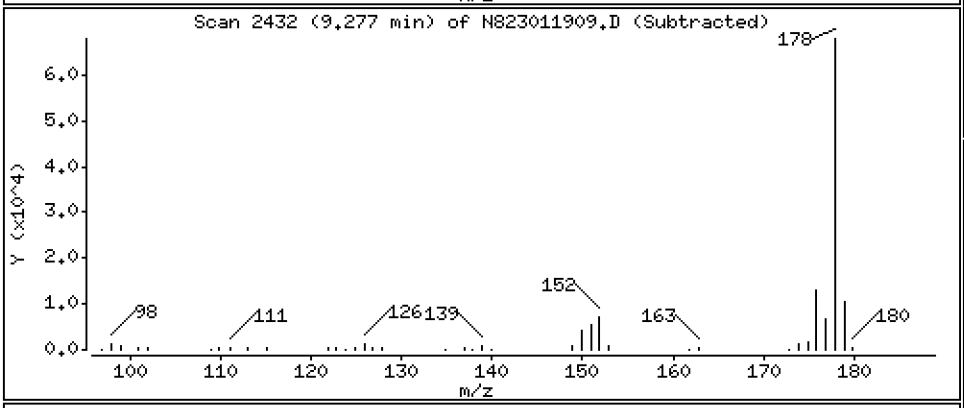
Column diameter: 0.25

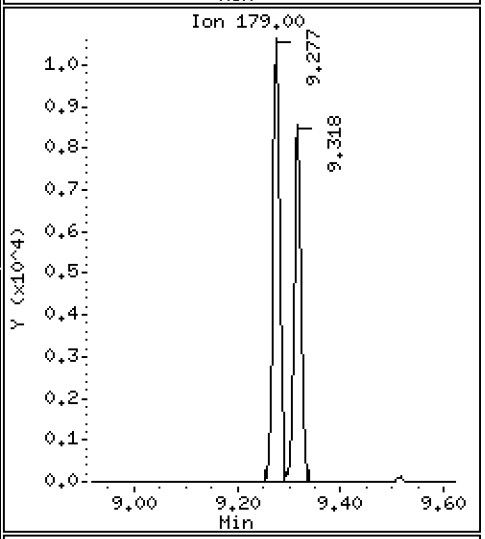
16 Phenanthrene

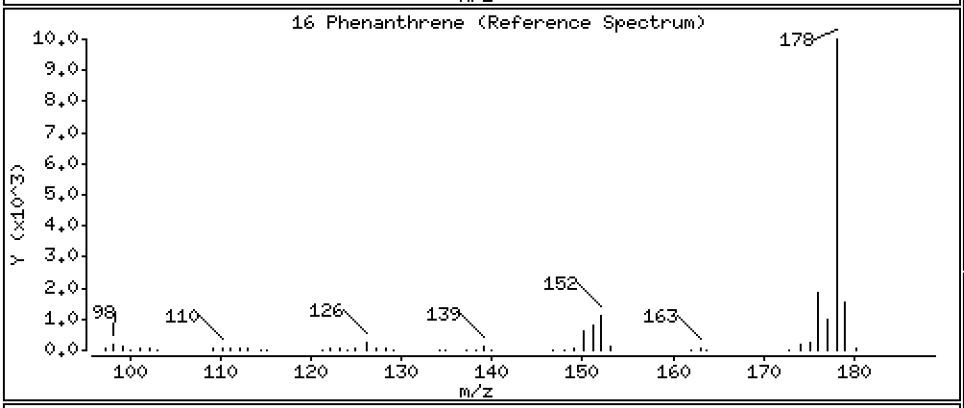
Concentration: 2.448 ug/L

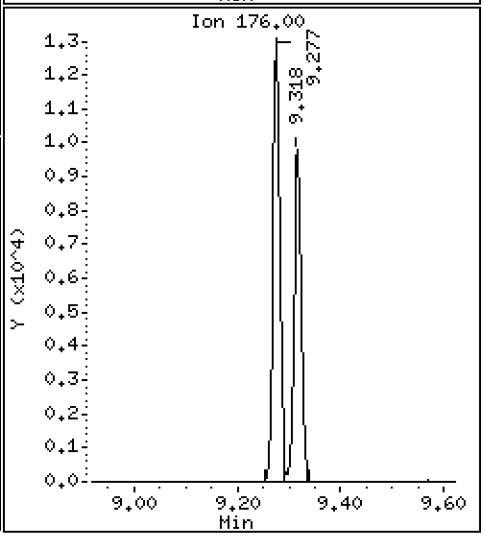


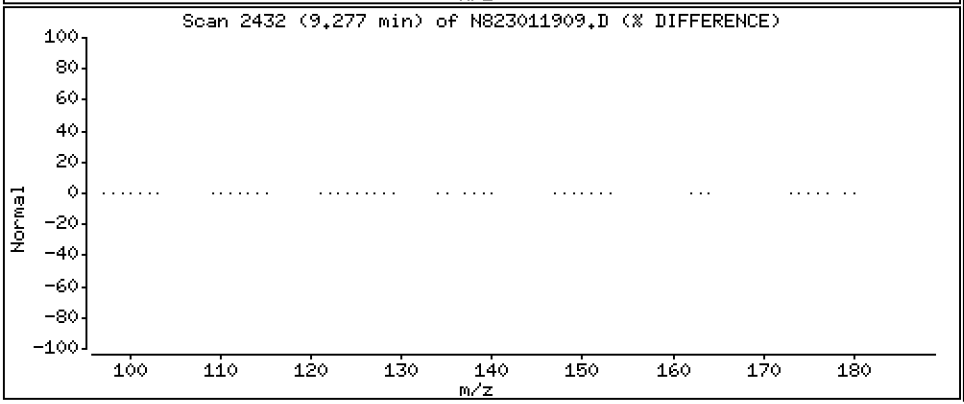












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

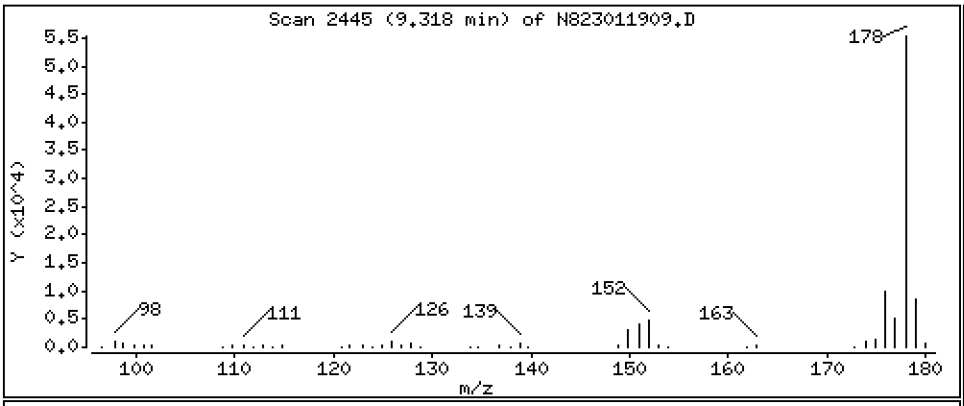
Operator: JZ

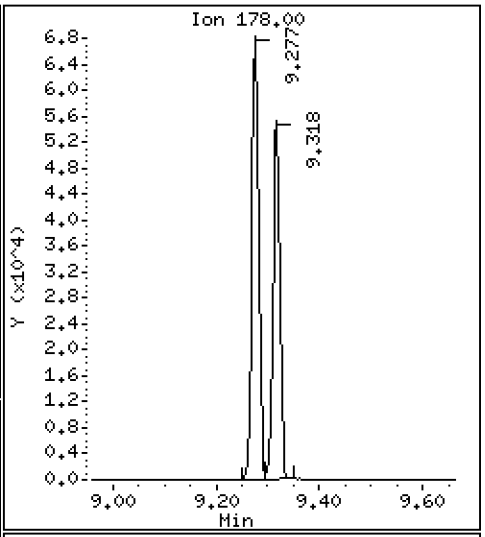
Column phase: Rxi-17sil

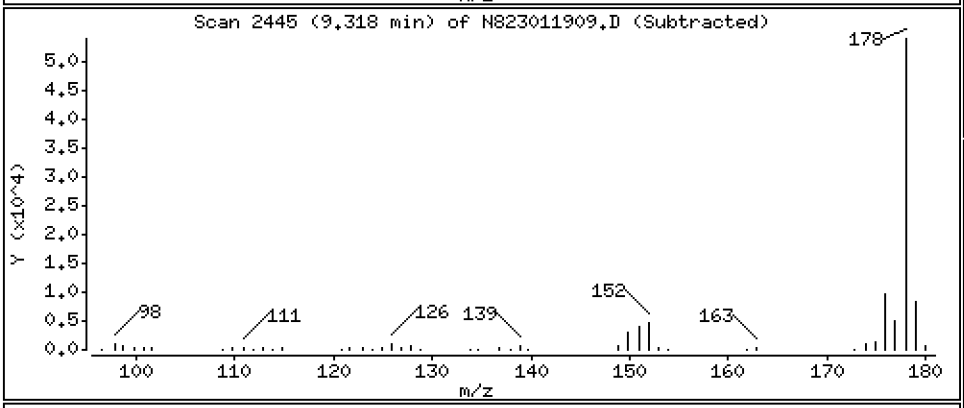
Column diameter: 0.25

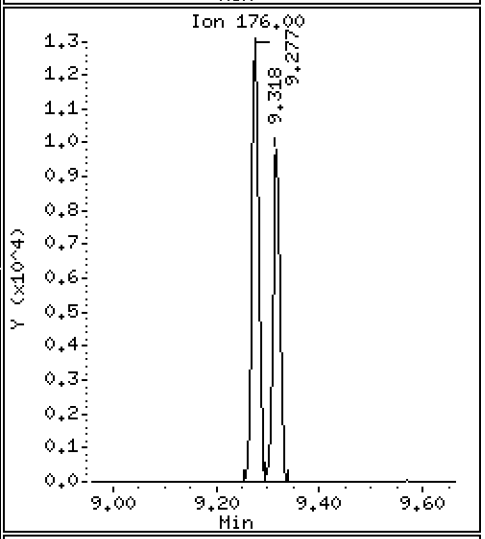
17 Anthracene

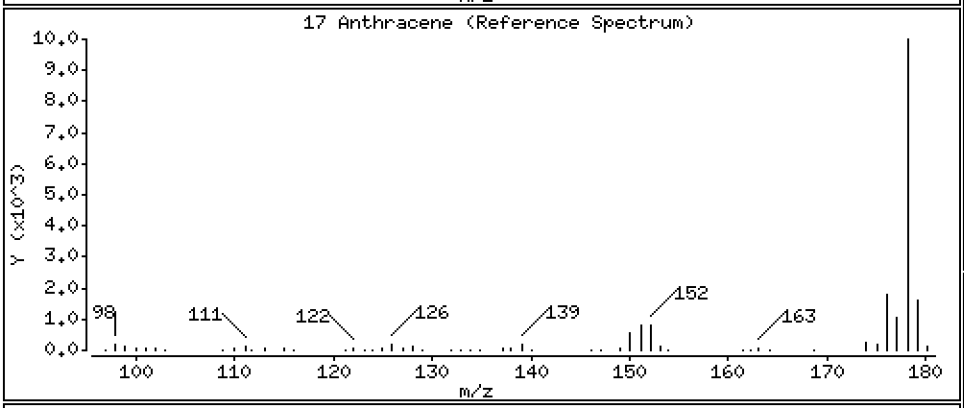
Concentration: 2.270 ug/L

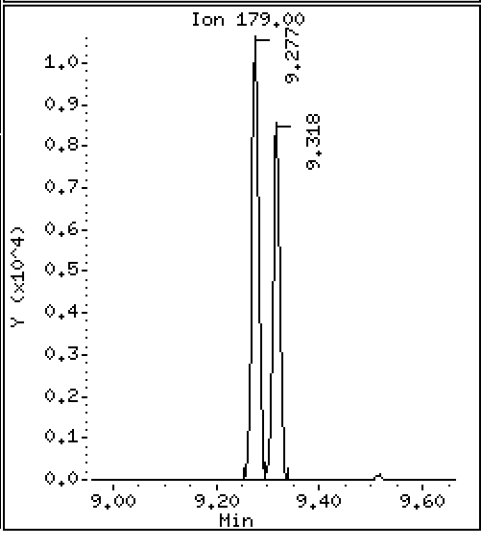


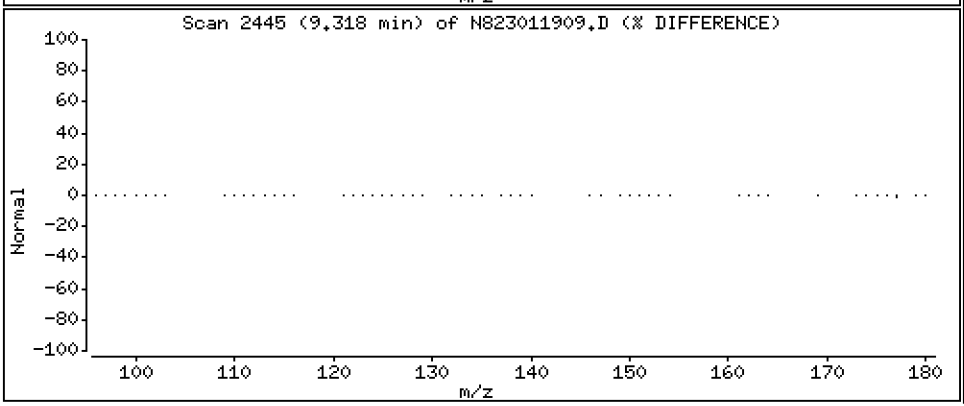












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

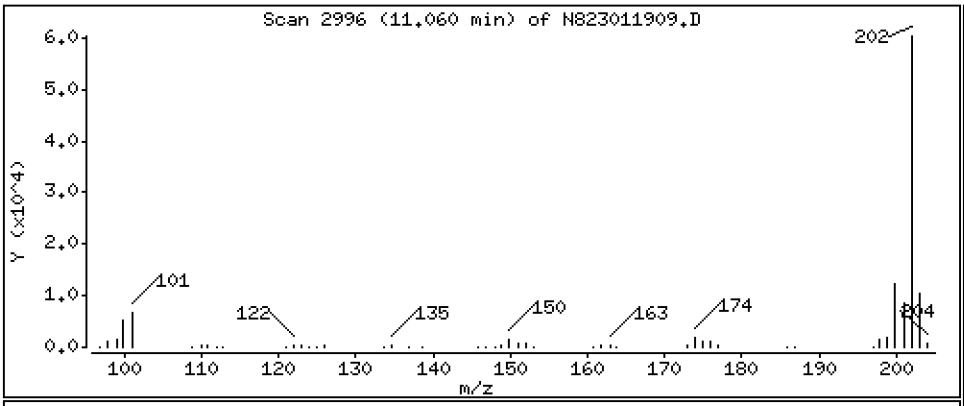
Operator: JZ

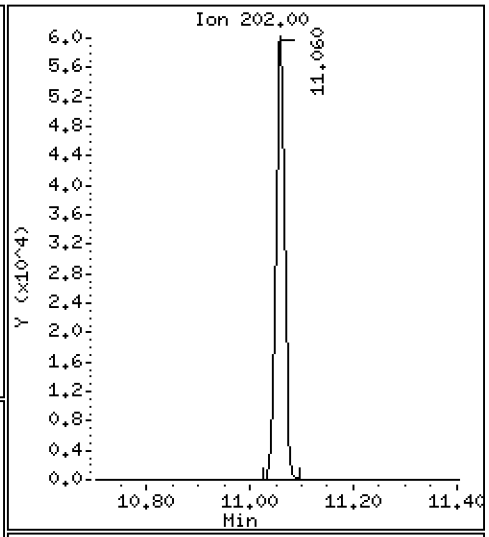
Column phase: Rxi-17sil

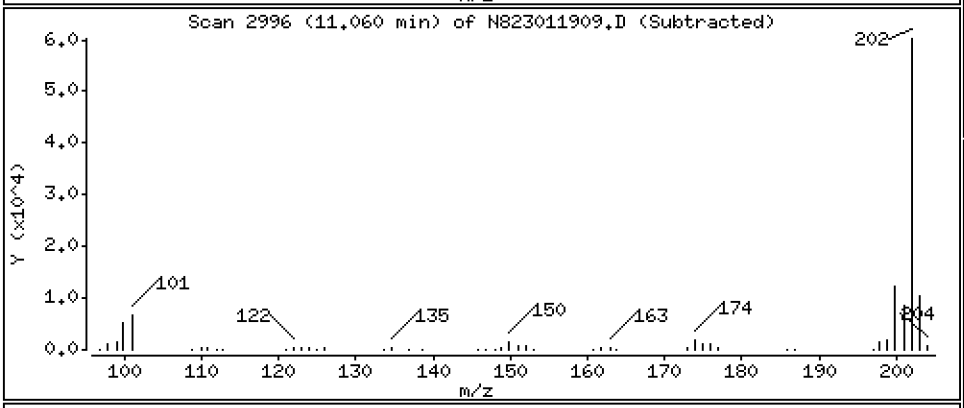
Column diameter: 0.25

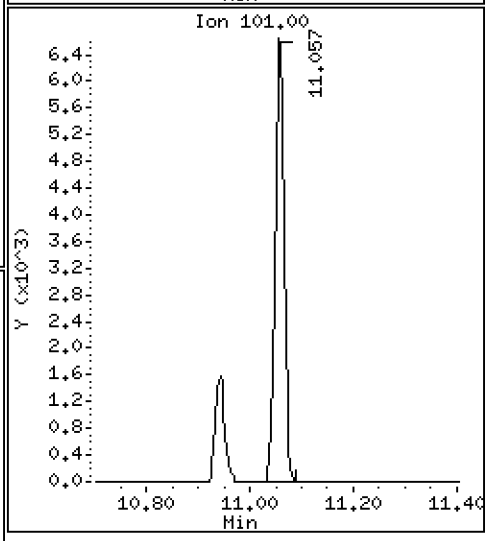
22 Fluoranthene

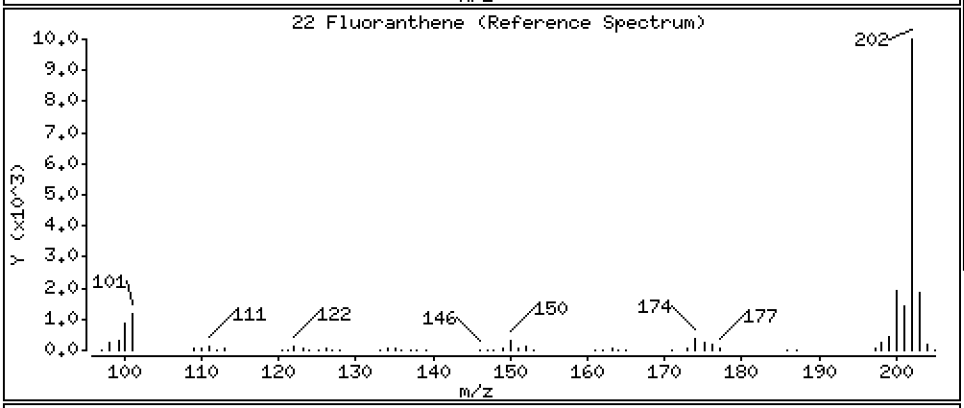
Concentration: 2.653 ug/L

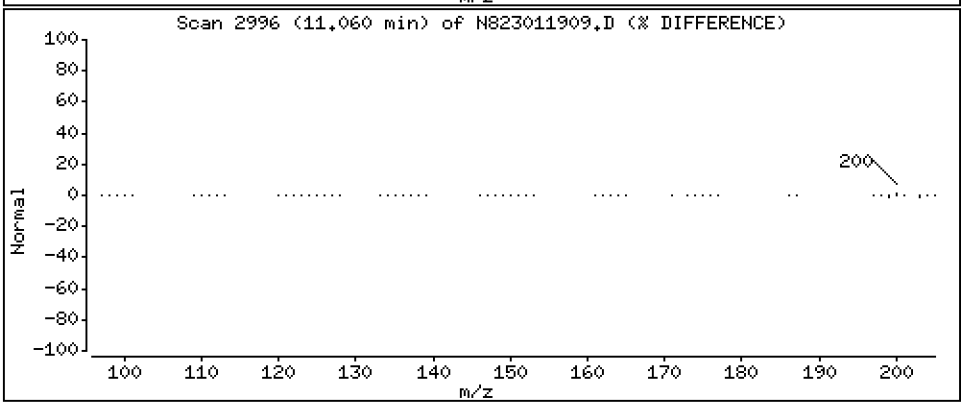












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

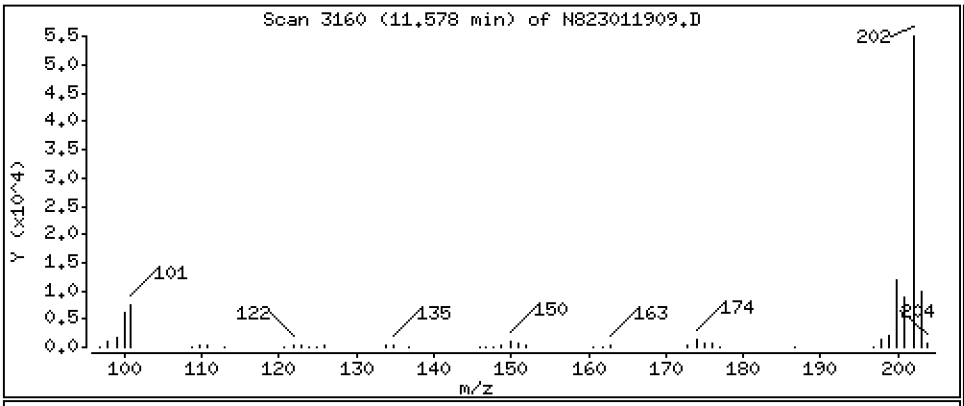
Operator: JZ

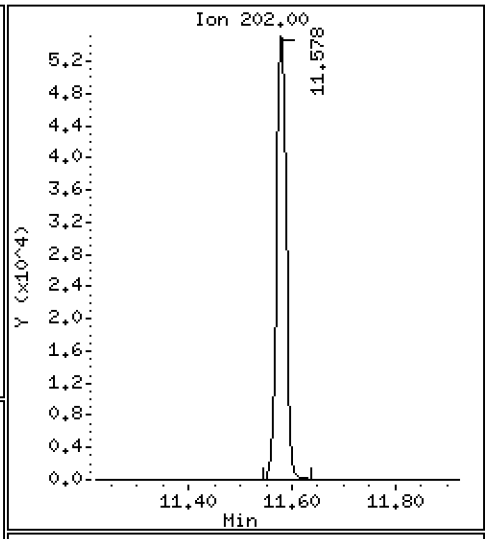
Column phase: Rxi-17sil

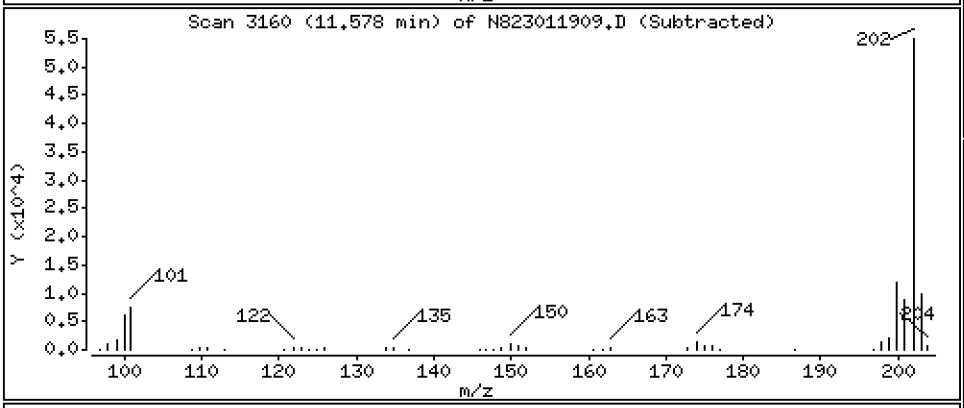
Column diameter: 0.25

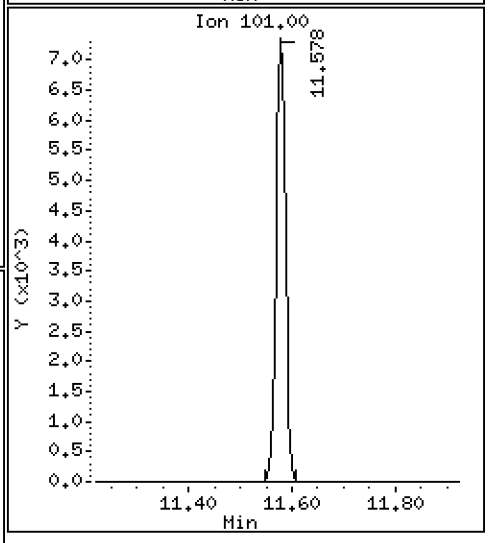
23 Pyrene

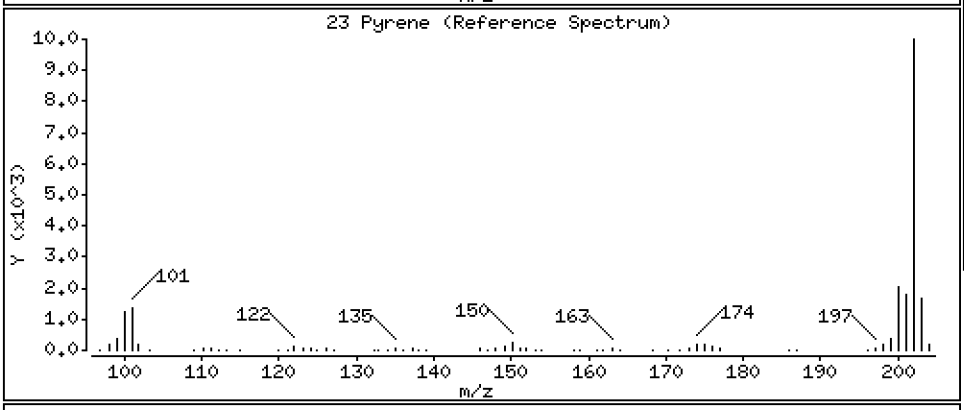
Concentration: 2.462 ug/L

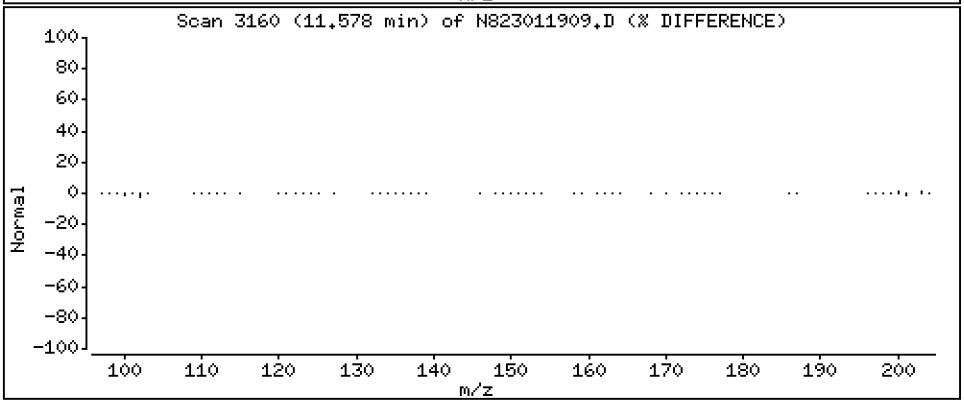












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

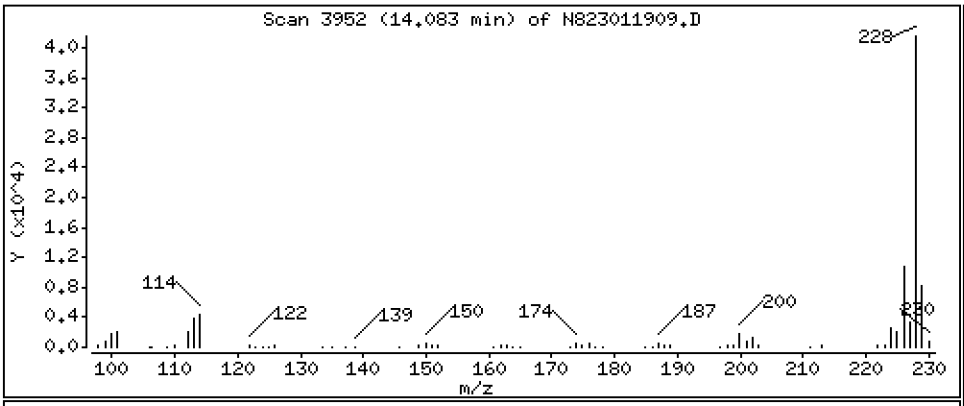
Operator: JZ

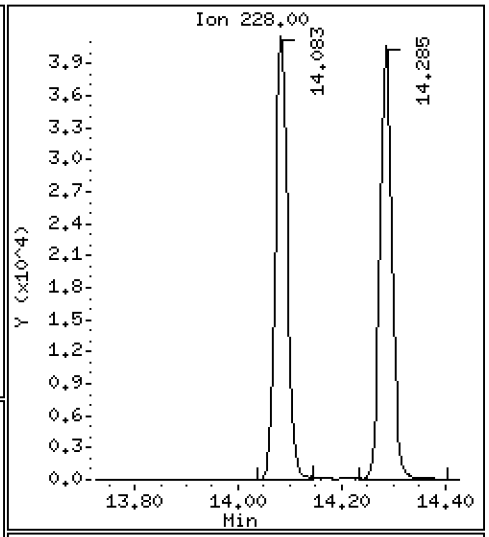
Column phase: Rxi-17sil

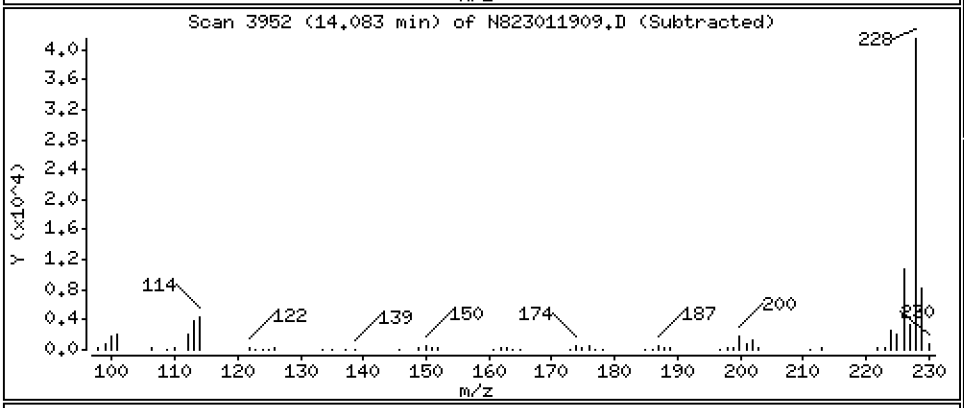
Column diameter: 0.25

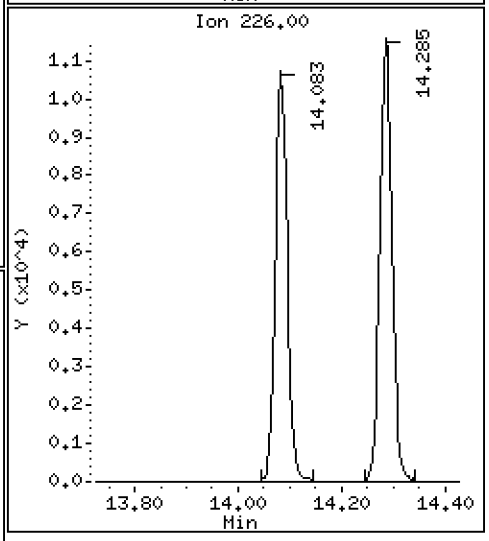
24 Benzo(a)anthracene

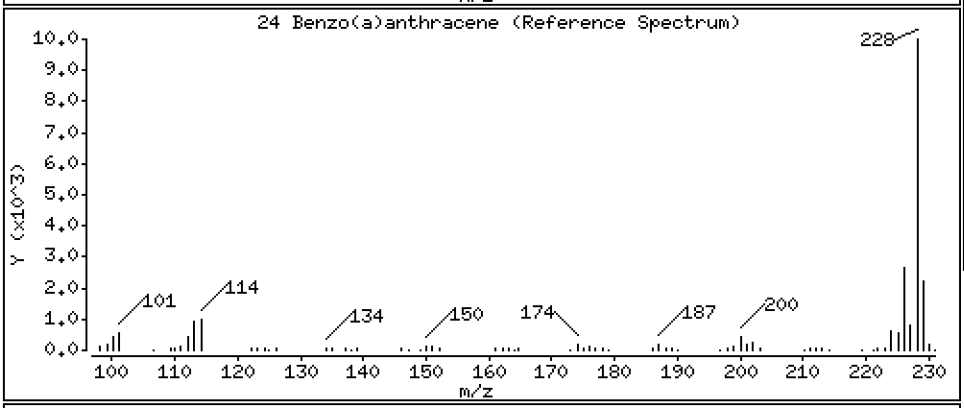
Concentration: 2.587 ug/L

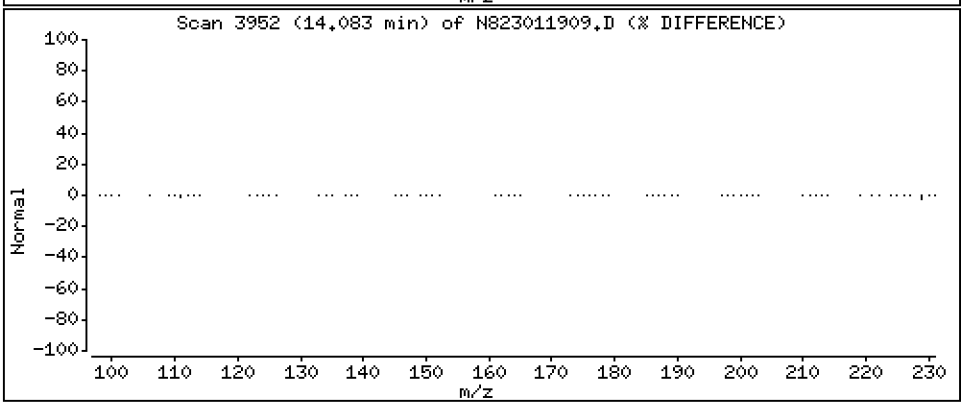












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

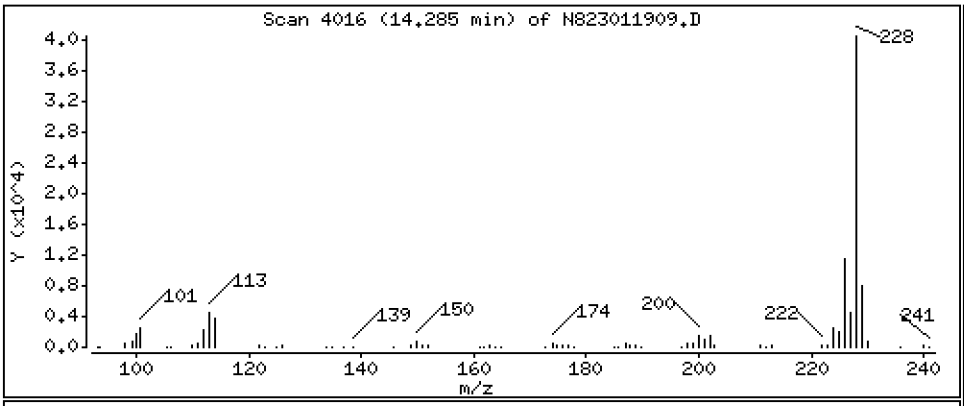
Operator: JZ

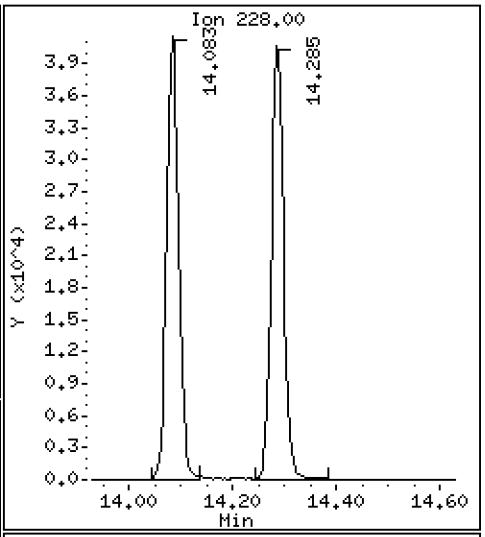
Column phase: Rxi-17sil

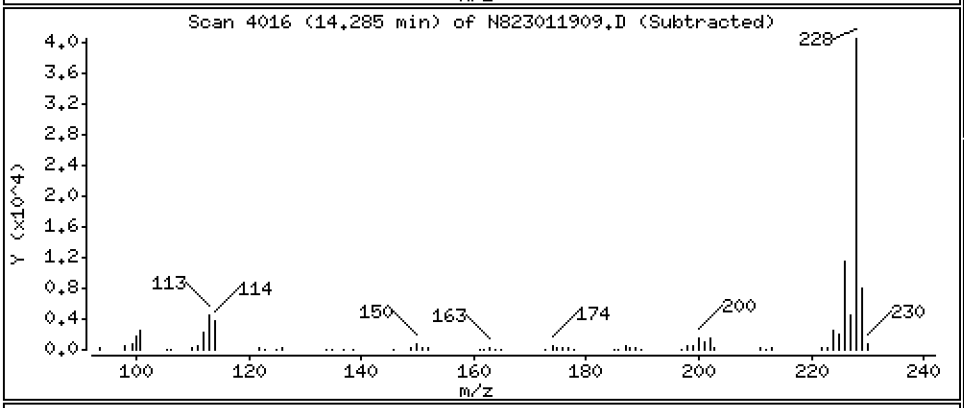
Column diameter: 0.25

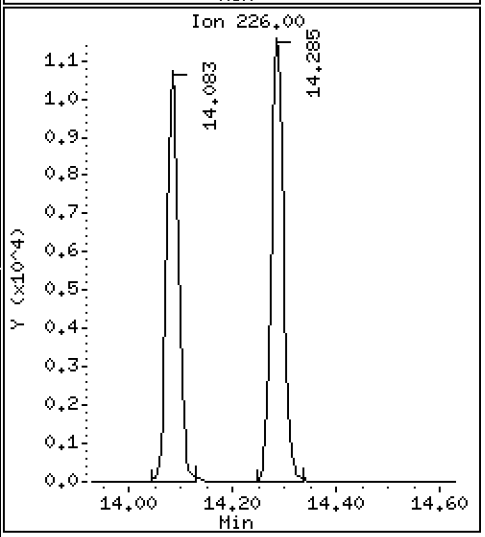
27 Chrysene

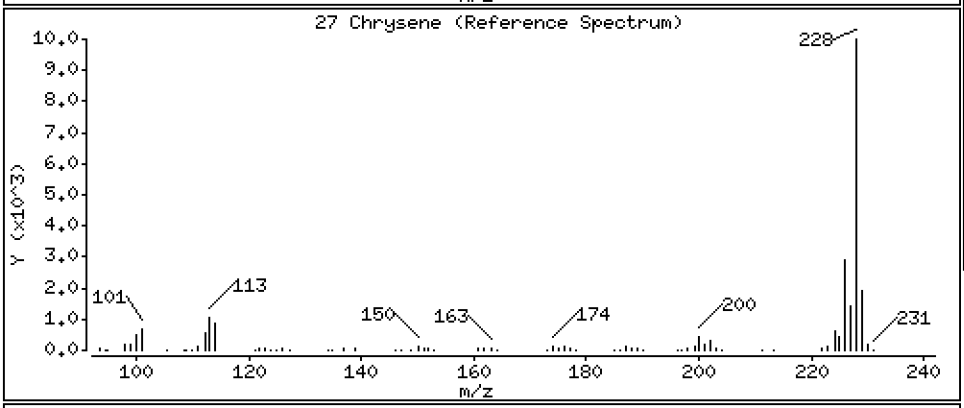
Concentration: 2.400 ug/L

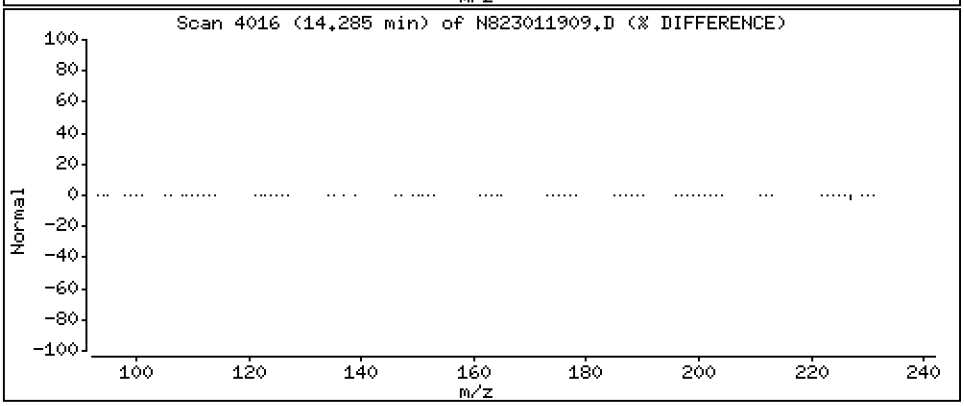












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

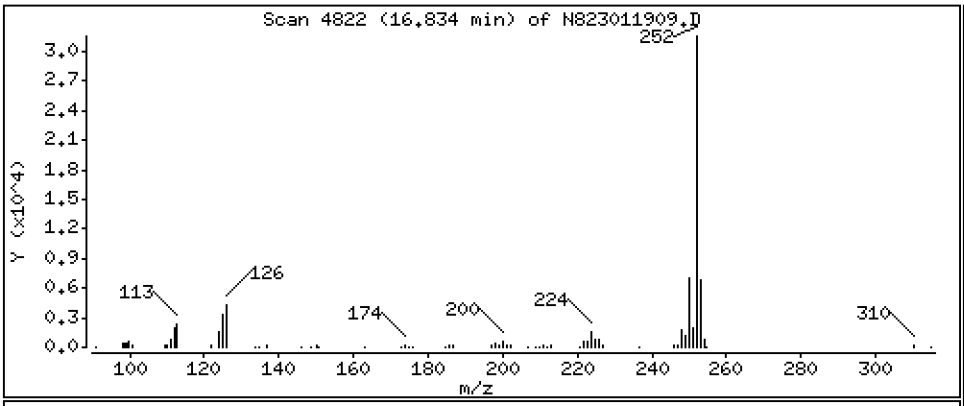
Operator: JZ

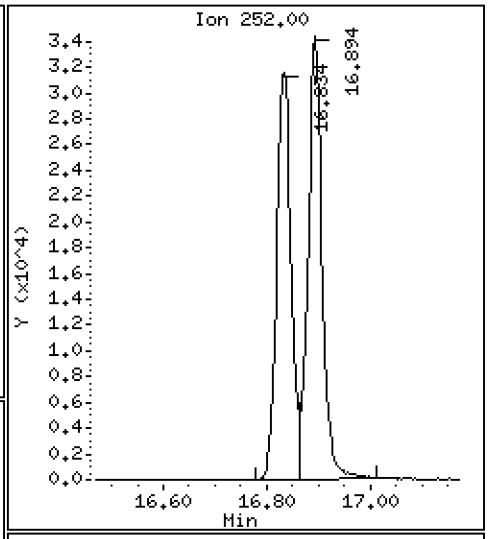
Column phase: Rxi-17sil

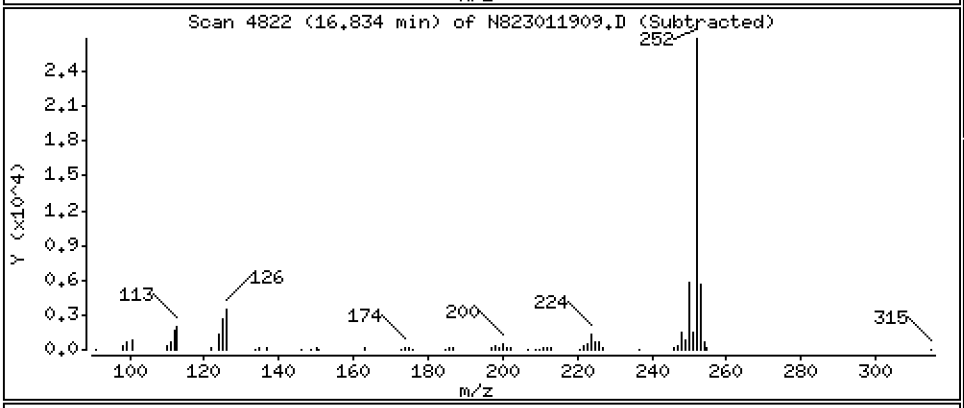
Column diameter: 0.25

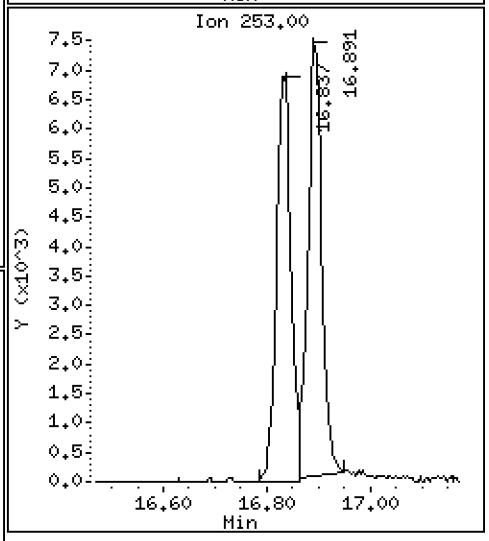
28 Benzo(b)fluoranthene

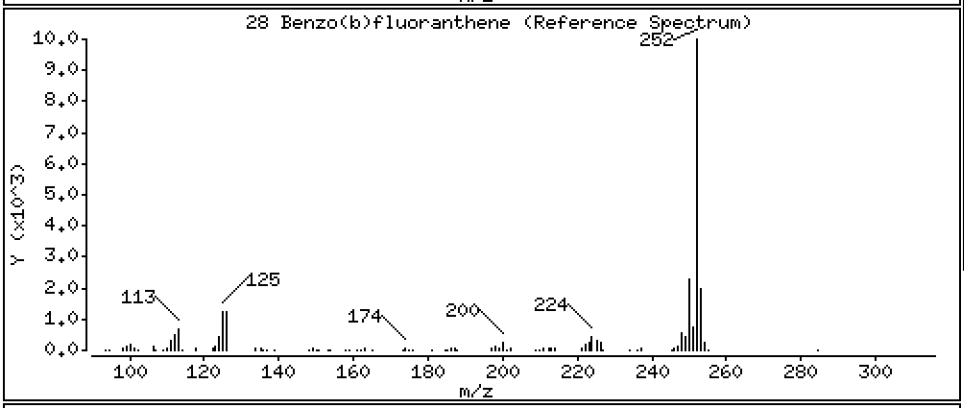
Concentration: 2.507 ug/L

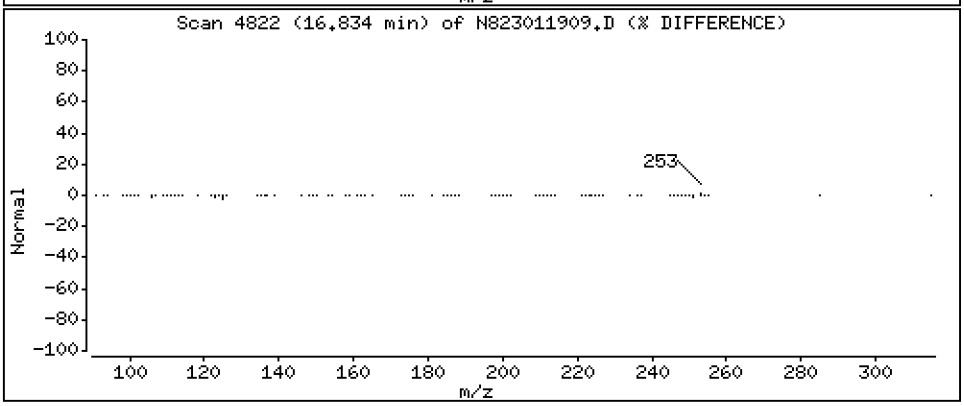












Date : 19-JAN-2023 14:58

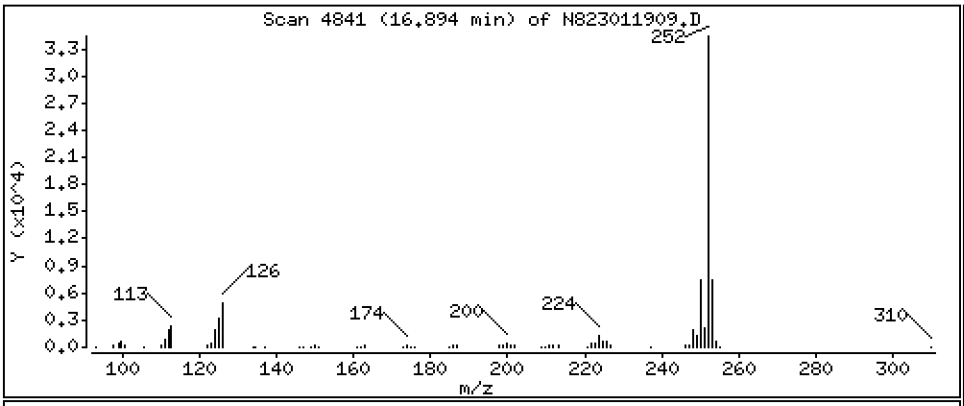
Client ID: Instrument: nt8.i

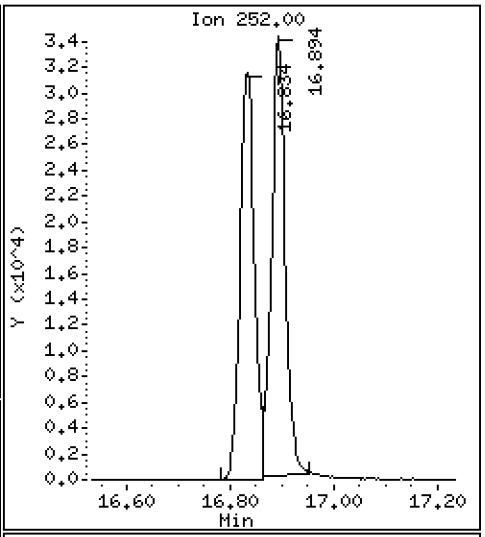
Sample Info: SCV230119

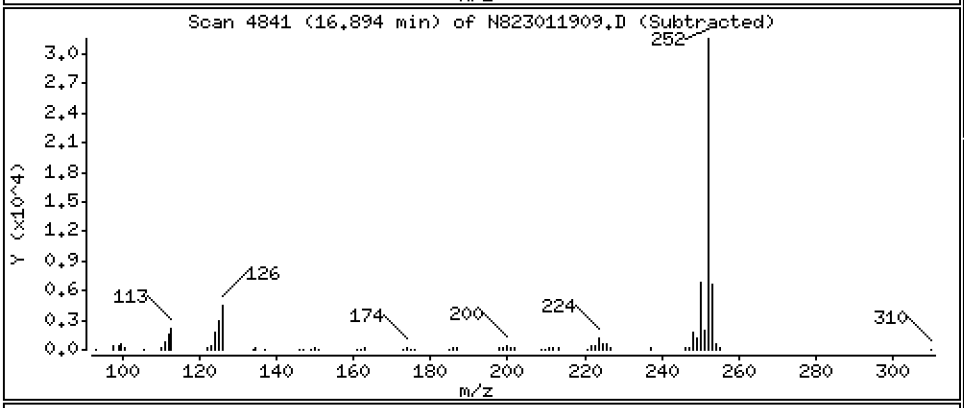
Volume Injected (uL): 1.0 Operator: JZ

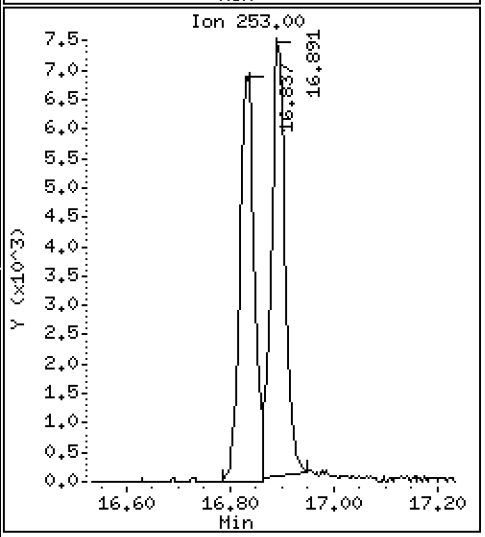
Column phase: Rxi-17sil Column diameter: 0.25

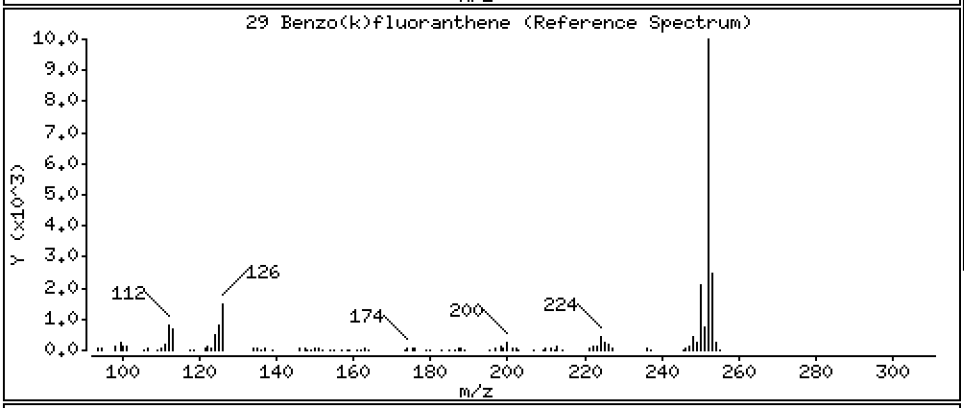
29 Benzo(k)fluoranthene Concentration: 2.656 ug/L

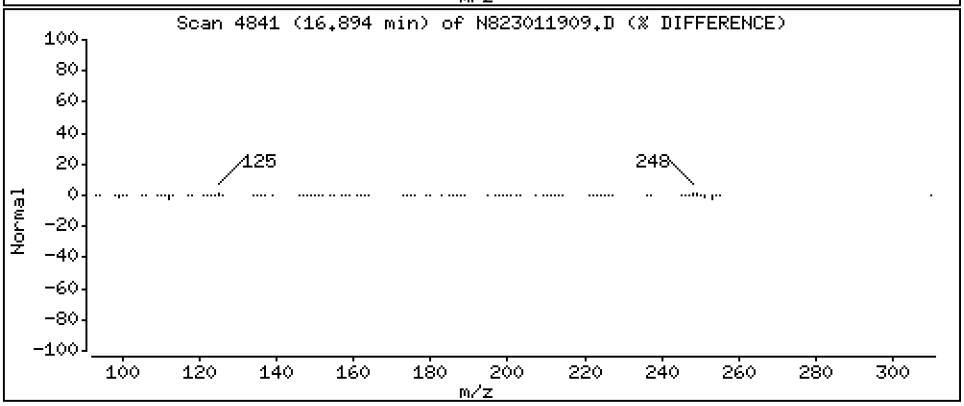












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

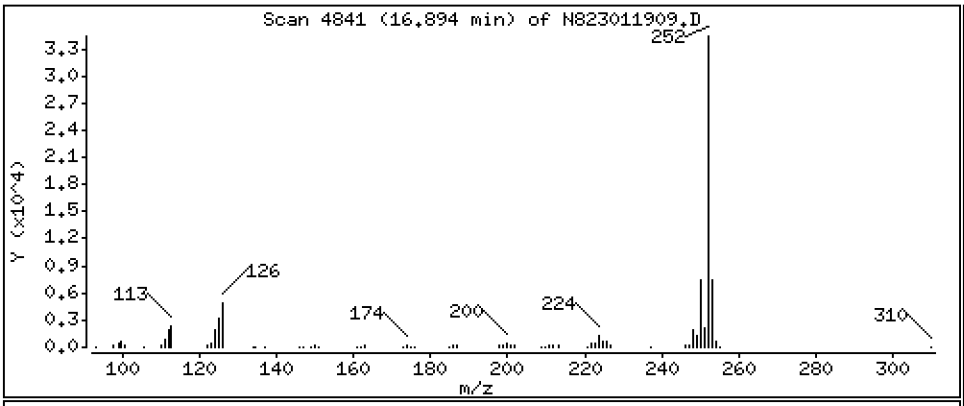
Operator: JZ

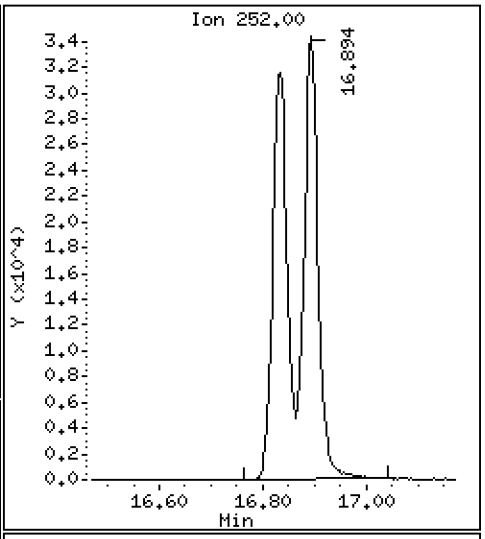
Column phase: Rxi-17sil

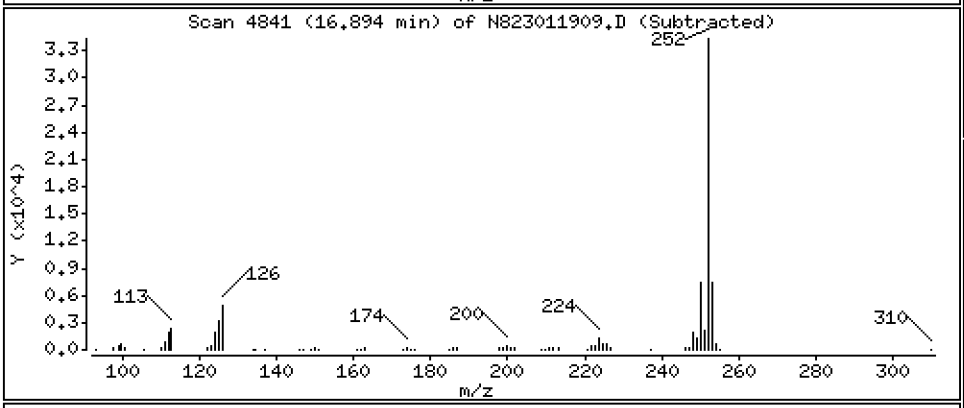
Column diameter: 0.25

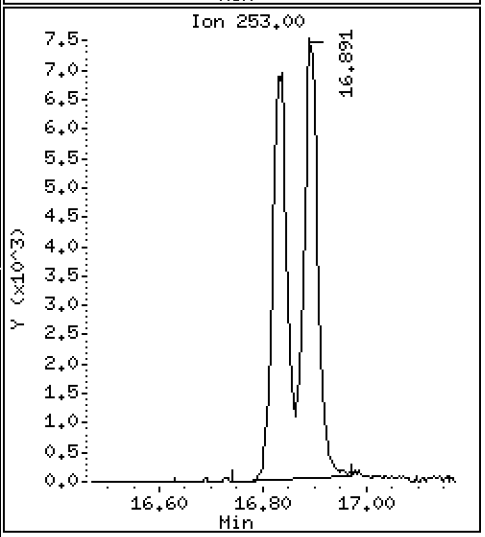
31 Total Benzofluoranthenes

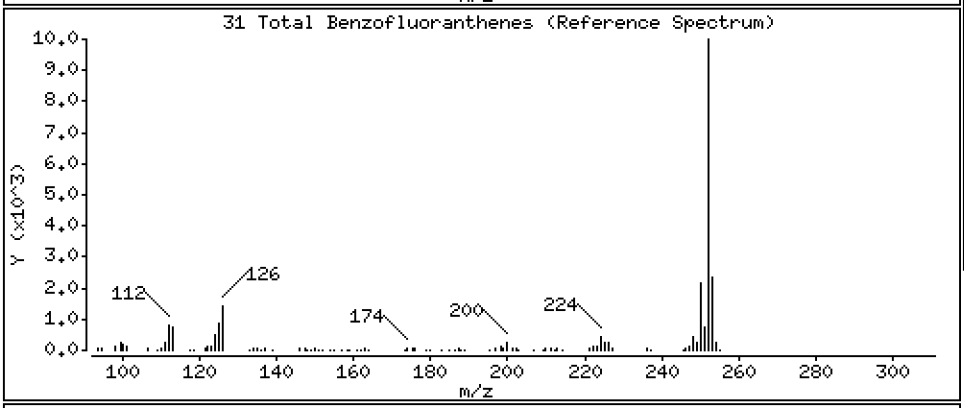
Concentration: 5.480 ug/L

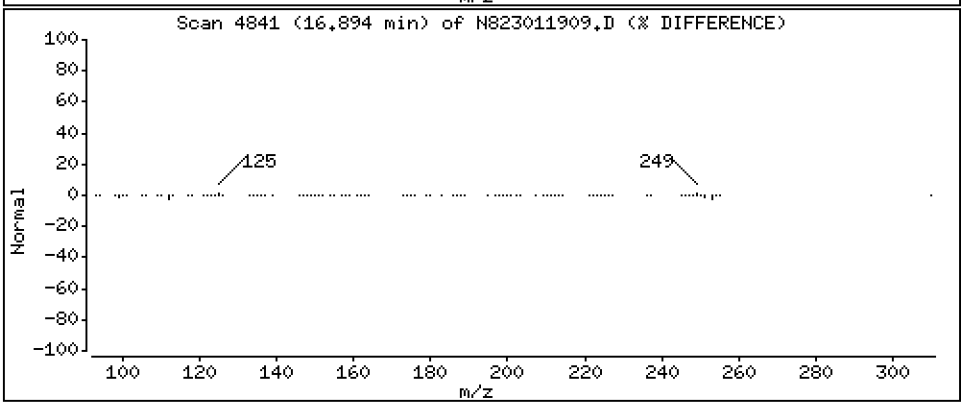












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

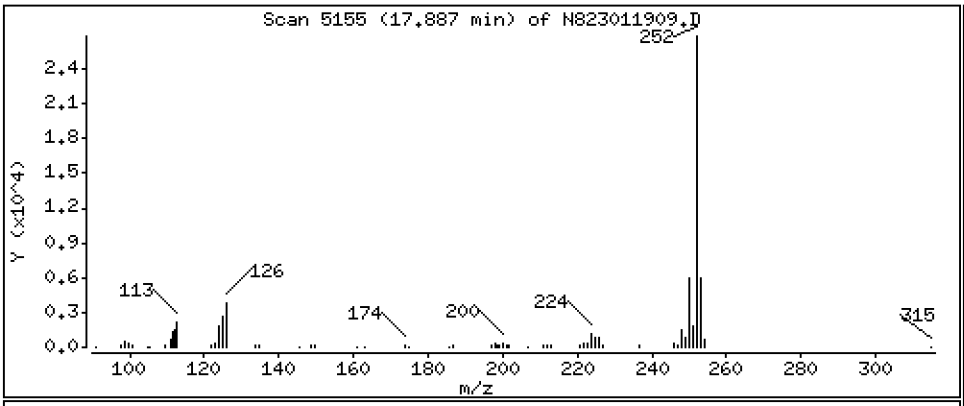
Operator: JZ

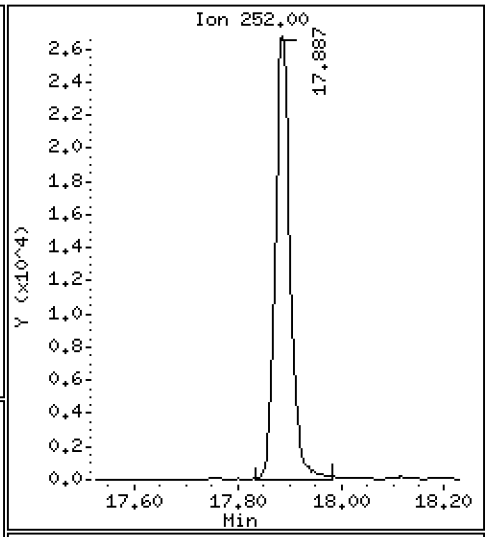
Column phase: Rxi-17sil

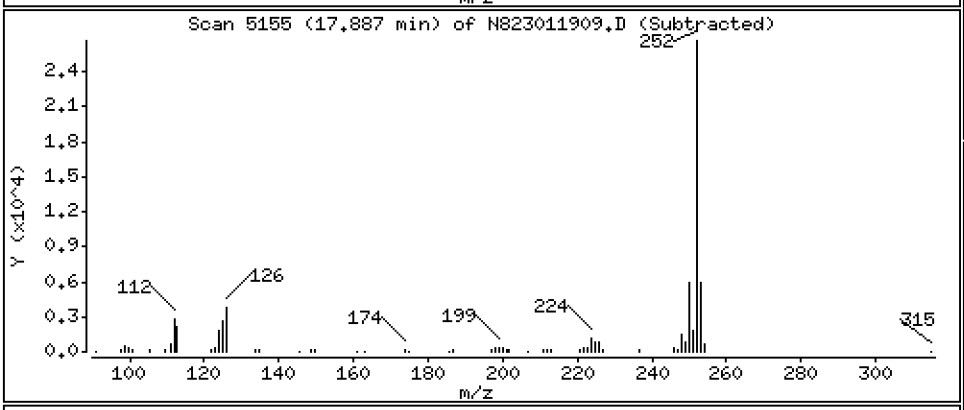
Column diameter: 0.25

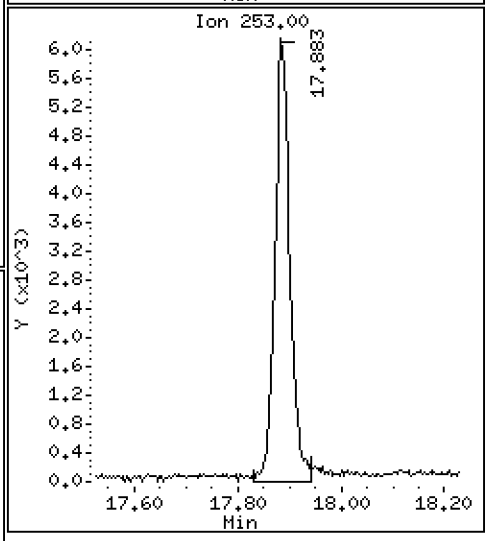
32 Benzo(a)pyrene

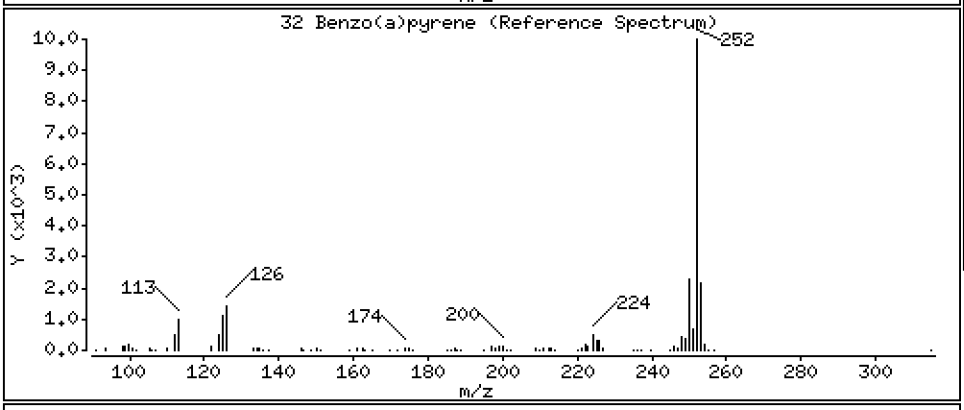
Concentration: 2.572 ug/L

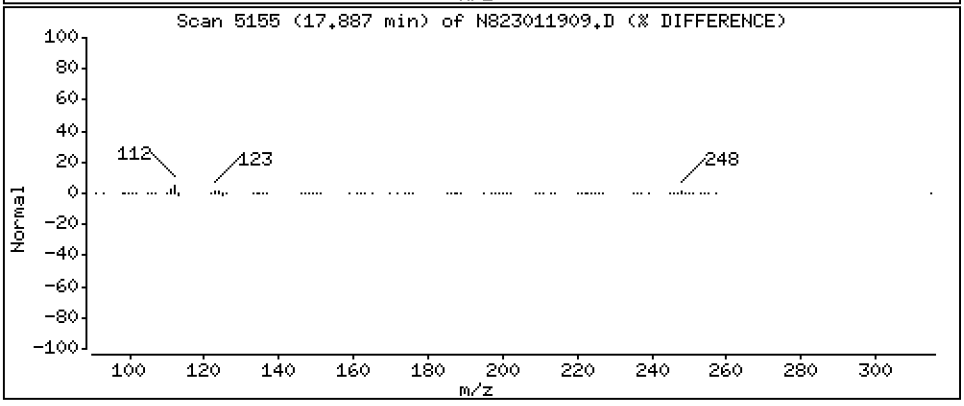












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

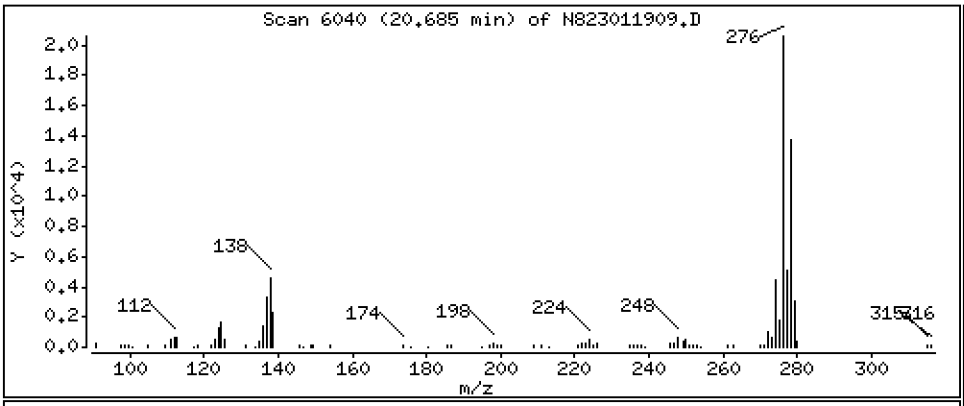
Operator: JZ

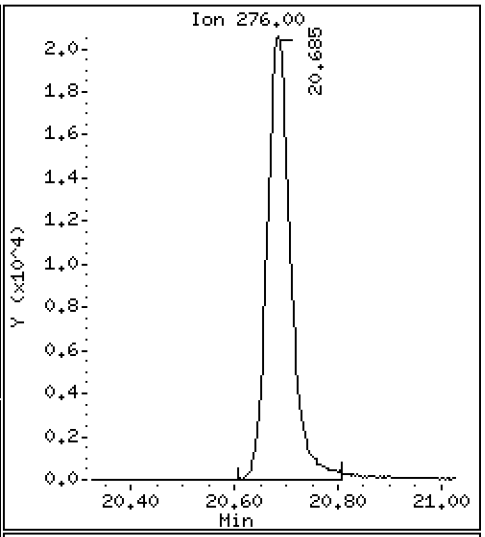
Column phase: Rxi-17sil

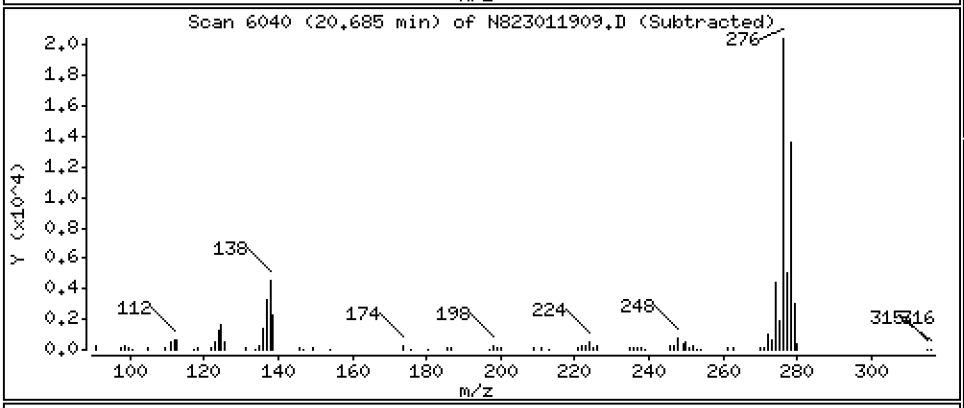
Column diameter: 0.25

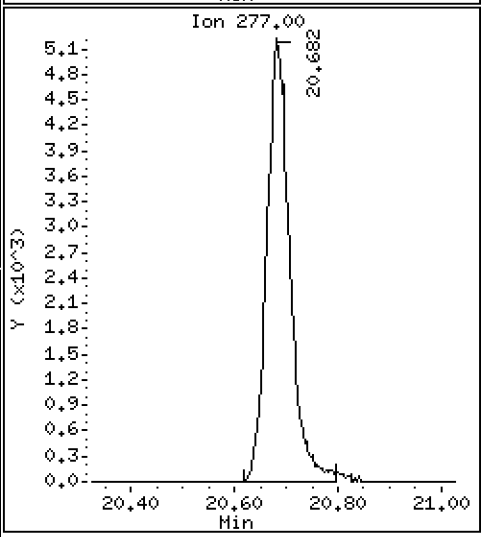
37 Indeno(1,2,3-cd)pyrene

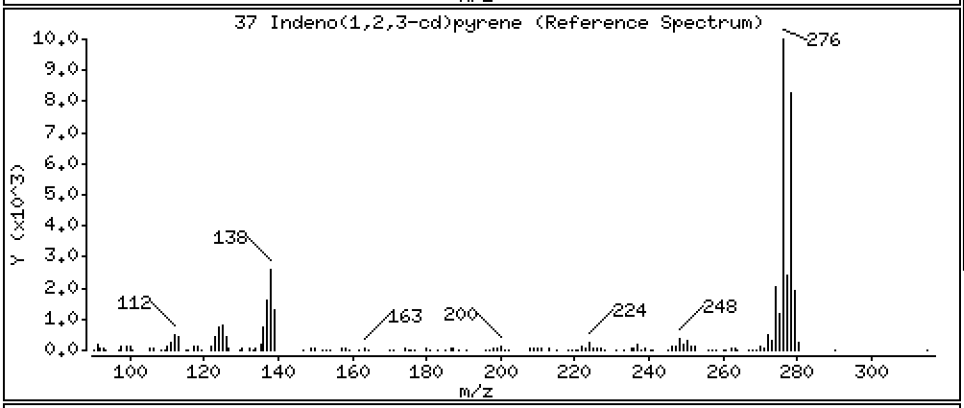
Concentration: 2.689 ug/L

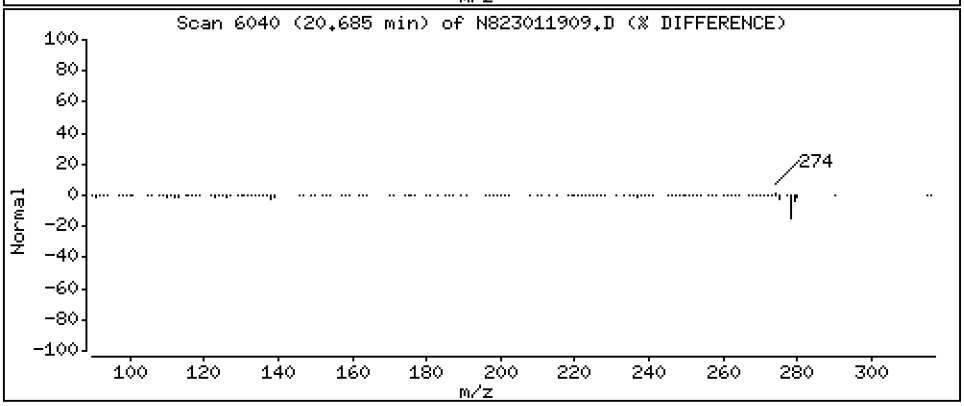












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

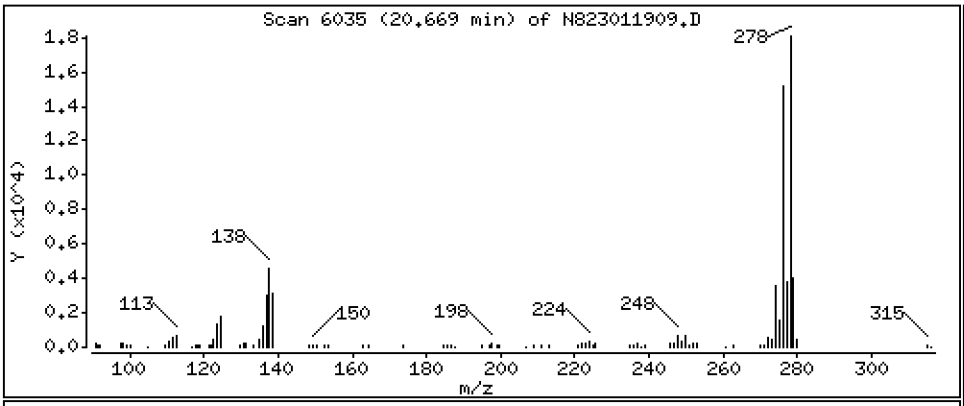
Operator: JZ

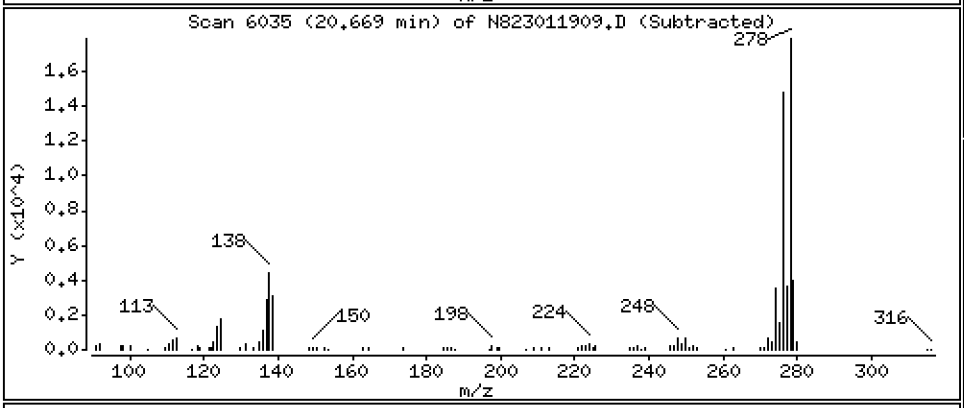
Column phase: Rxi-17sil

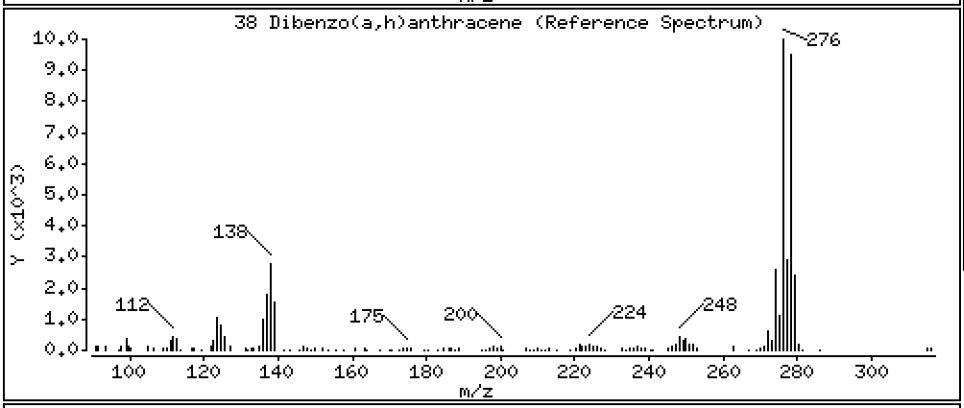
Column diameter: 0.25

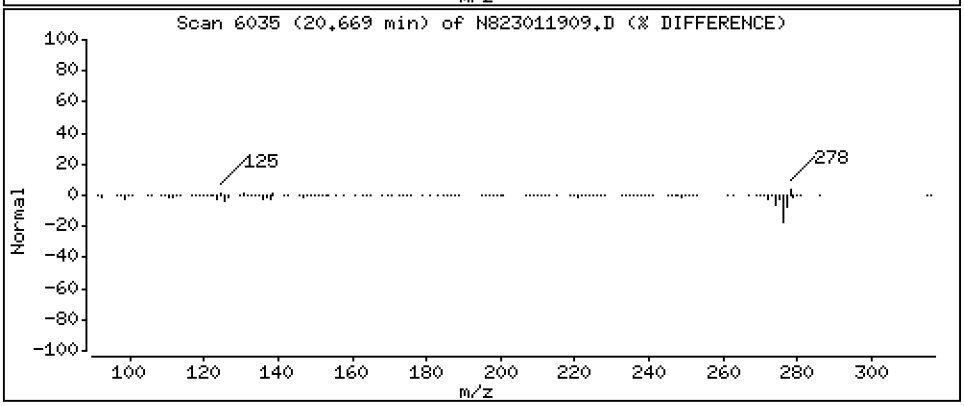
38 Dibenzo(a,h)anthracene

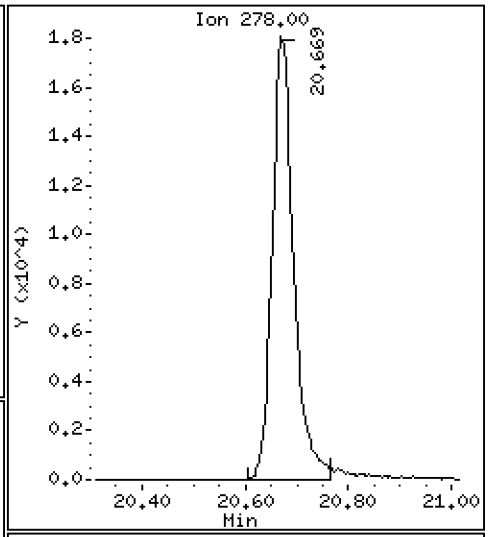
Concentration: 2.493 ug/L

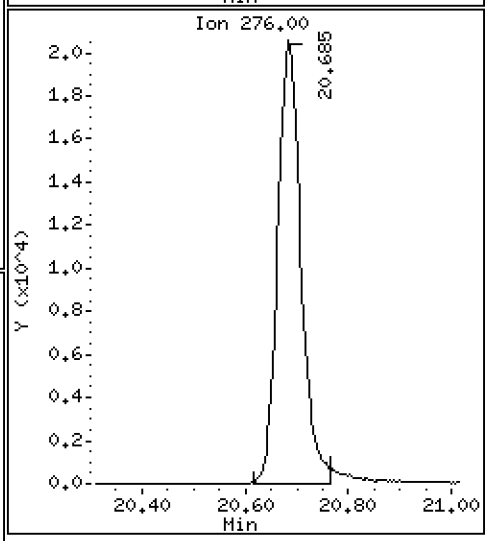












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

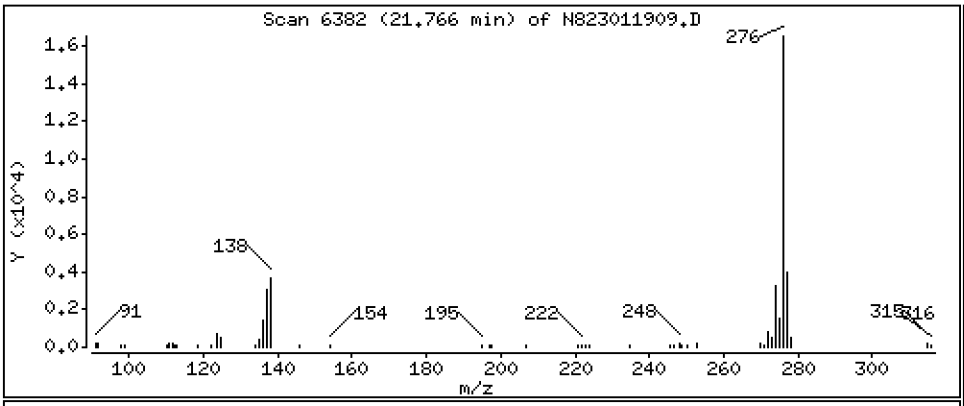
Operator: JZ

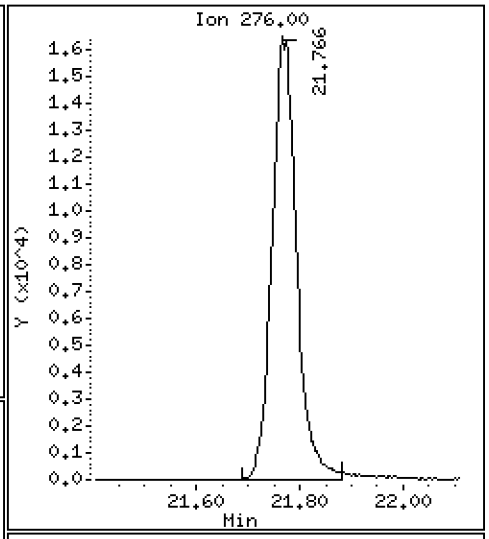
Column phase: Rxi-17sil

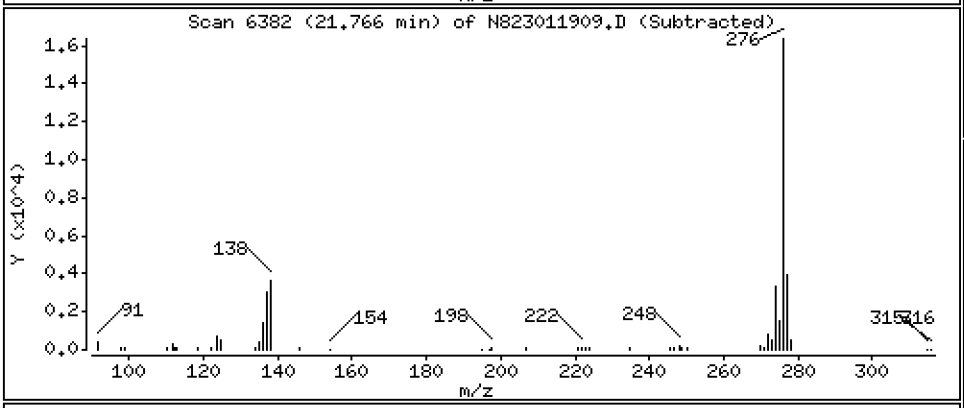
Column diameter: 0.25

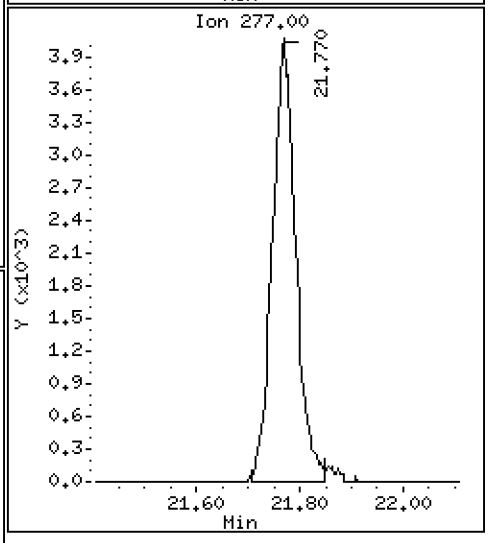
39 Benzo(g,h,i)perylene

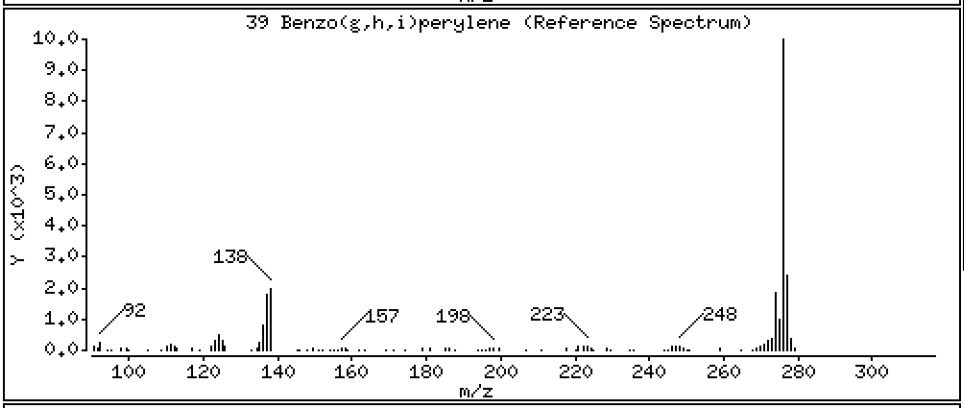
Concentration: 2.483 ug/L

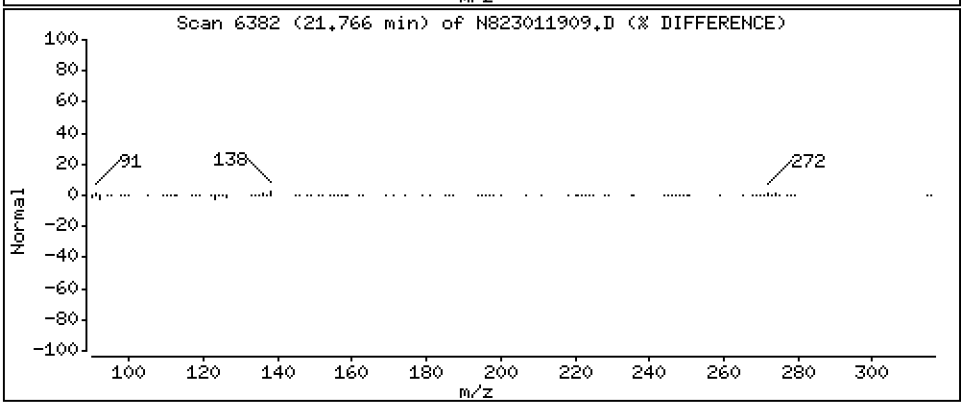












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Lab Smp Id: SLA0213-SCV1
Inj Date : 19-JAN-2023 14:58
Operator : JZ Inst ID: nt8.i
Smp Info : SCV230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 19-Jan-2023 20:20 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnascv.sub
Target Version: 4.14
Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 1 Naphthalene-d8	136	4.913	4.906	(1.000)	46346	2.00000	
2 Naphthalene	128	4.941	4.938	(1.006)	56587	2.62597	2.626
$ 3 2-Methylnaphthalene-d10	152	Compound Not Detected.					
4 2-Methylnaphthalene	141	5.694	5.687	(1.159)	31650	2.67019	2.670
5 1-methylnaphthalene	141	5.890	5.883	(1.199)	31873	2.64949	2.649
9 Acenaphthylene	152	7.091	7.085	(0.985)	59018	2.82060	2.821
* 10 Acenaphthene-d10	164	7.202	7.196	(1.000)	27709	2.00000	
11 Acenaphthene	153	7.249	7.246	(1.007)	36454	2.60022	2.600
12 Dibenzofuran	168	7.401	7.395	(1.028)	60898	2.85987	2.860
14 Fluorene	166	7.878	7.872	(1.094)	43507	2.63066	2.631
* 15 Phenanthrene-d10	188	9.238	9.235	(1.000)	51685	2.00000	
16 Phenanthrene	178	9.276	9.270	(1.004)	61815	2.44841	2.448
17 Anthracene	178	9.317	9.311	(1.009)	52064	2.27006	2.270
22 Fluoranthene	202	11.059	11.053	(1.197)	72902	2.65276	2.653
$ 21 Fluoranthene-d10	212	Compound Not Detected.					
23 Pyrene	202	11.578	11.572	(0.815)	71115	2.46242	2.462
24 Benzo(a)anthracene	228	14.082	14.076	(0.991)	67725	2.58725	2.587
* 25 Chrysene-d12	240	14.212	14.202	(1.000)	46582	2.00000	
27 Chrysene	228	14.285	14.278	(1.005)	66872	2.39976	2.400
28 Benzo(b)fluoranthene	252	16.833	16.821	(0.929)	60946	2.50689	2.507
29 Benzo(k)fluoranthene	252	16.893	16.884	(0.932)	63249	2.65606	2.656
31 Total Benzofluoranthenes	252	16.893	16.821	(0.932)	126178	5.48025	5.480(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572
*	33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000	
	37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689
$	36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493
	39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483
	35 Perylene	252	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011909.D
Lab Smp Id: SLA0213-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

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

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 14:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

No RRT check performed

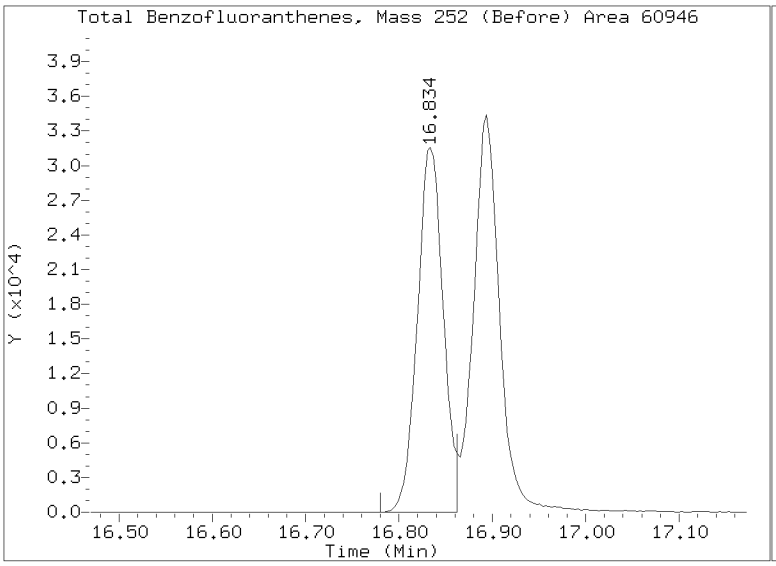
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

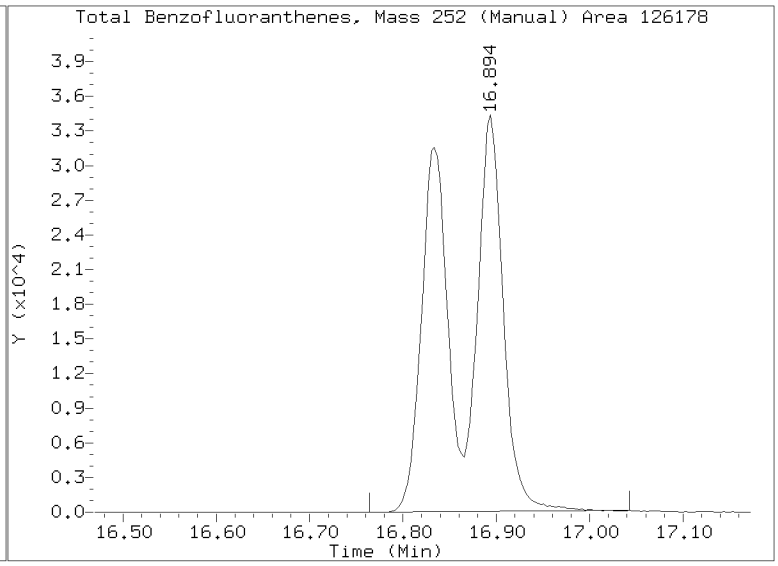
Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D
Injection Date: 19-JAN-2023 14:58
Lab ID:SLA0213-SCV1 Client ID:
Report Date: 01/19/2023 20:27





Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00032	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

Calibration Comments: DS
VTS: added third PDF for raw tune data

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
1,4-Dichlorobenzene	0.05	1.509234	0.1	1.475802	0.2	1.433728	0.5	1.463954	1	1.407538	2.5	1.403914
1,2-Dichlorobenzene	0.05	1.433632	0.1	1.404559	0.2	1.361924	0.5	1.41	1	1.363267	2.5	1.366655
Benzyl Alcohol	0.05	0.2980883	0.1	0.4078131	0.2	0.6563487	0.5	0.7516883	1	0.8131324	2.5	0.9577245
Benzoic acid					0.8	3.369162E-02	2	6.431557E-02	4	0.1113925	10	0.1735407
2,4-Dimethylphenol	0.1	0.1951669	0.2	0.2260486	0.4	0.2540649	1	0.3054349	2	0.3273273	5	0.3475379
1,2,4-Trichlorobenzene	0.05	0.2888686	0.1	0.2867934	0.2	0.282521	0.5	0.2946068	1	0.2833685	2.5	0.2832806
N-Nitrosodiphenylamine	0.05	0.524197	0.1	0.5824673	0.2	0.622888	0.5	0.6812778	1	0.6451821	2.5	0.6870282
Pentachlorophenol			0.2	2.689676E-02	0.4	3.579405E-02	1	0.0582107	2	8.194985E-02	5	0.1253843
2-Fluorophenol	0.075	1.021853	0.15	1.055547	0.3	1.088445	0.75	1.178357	1.5	1.175199	3.75	1.215826
p-Terphenyl-d14	0.05	0.2668155	0.1	0.2858166	0.2	0.2844553	0.5	0.3178566	1	0.3330721	2.5	0.3637872

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00032	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

Calibration Comments: DS
VTS: added third PDF for raw tune data

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
1,4-Dichlorobenzene	5	1.398394	10	1.437899								
1,2-Dichlorobenzene	5	1.363348	10	1.379386								
Benzyl Alcohol	5	1.015627	10	1.093596								
Benzoic acid	20	0.2213574	40	0.2543998								
2,4-Dimethylphenol	10	0.3499605	20	0.3606322								
1,2,4-Trichlorobenzene	5	0.2885383	10	0.2952467								
N-Nitrosodiphenylamine	5	0.7094703	10	0.726266								
Pentachlorophenol	10	0.1569964	20	0.1804073								
2-Fluorophenol	7.5	1.182888	15	1.217708								
p-Terphenyl-d14	5	0.3763732	10	0.3595608								

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GC00032	Instrument:	NT10
Calibration Date:	03/01/2023	Column (1):	ZB-5MSi

Calibration Comments: DS
VTS: added third PDF for raw tune data

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
1,4-Dichlorobenzene	1.441308	2.7			RSD (15)	
1,2-Dichlorobenzene	1.385346	2.0			RSD (15)	
Benzyl Alcohol	0.7492523	37.9		0.9995	QCOD (0.99)	
Benzoic acid	0.1431163	61.4		0.9938	QCOD (0.99)	
2,4-Dimethylphenol	0.2957717	21.2		0.9999	QCOD (0.99)	
1,2,4-Trichlorobenzene	0.287903	1.7			RSD (15)	
N-Nitrosodiphenylamine	0.6473471	10.6			RSD (15)	
Pentachlorophenol	9.509134E-02	63.3		0.9953	QCOD (0.99)	
2-Fluorophenol	1.141978	6.6			RSD (15)	
p-Terphenyl-d14	0.3234672	12.8			RSD (15)	

ANALYSIS SEQUENCE

SLC0143

Instrument: NT10
Calibration ID: UNASSIGNED

Printed: 3/10/2023 10:34:45AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0143-CAL1	QC		1		K011453	K010831		
SLC0143-CAL2	QC		2		K011452	K010831		
SLC0143-CAL3	QC		3		K011105	K010831		
SLC0143-CAL4	QC		4		K011106	K010831		
SLC0143-CAL5	QC		5		K011107	K010831		
SLC0143-CAL6	QC		6		K011108	K010831		
SLC0143-CAL7	QC		7		K011109	K010831		
SLC0143-CAL8	QC		8		K011110	K010831		
SLC0143-ICB1	QC		9		K005156	K010831		
SLC0143-SCV1	QC		10		K010066	K010831		

Samples Loaded By Date

Data Processed By Date

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

	Time	Filename	LabID	ClientId	DF											
1	1642	NT1003012303S.D	SEQ-CAL8		1	9.25	358478	11.72	1302515	15.31	720687	18.40	1243145	23.42	1161833	26.11	1054384
2	1721	NT1003012304S.D	SEQ-CAL7		1	9.25	354441	11.72	1288295	15.31	739997	18.40	1248235	23.41	1079945	26.11	1086769
3	1759	NT1003012305S.D	SEQ-CAL6		1	9.24	334269	11.72	1202042	15.31	670352	18.40	1124281	23.41	948691	26.11	1004445
4	1837	NT1003012306S.D	SEQ-CAL5		1	9.24	320125	11.72	1136019	15.31	636993	18.40	1093620	23.41	1000300	26.10	1058448
5	1915	NT1003012307S.D	SEQ-CAL4		1	9.24	333617	11.72	1170292	15.31	639612	18.40	1094919	23.42	1048196	26.11	1117593
6	1953	NT1003012308S.D	SEQ-CAL3		1	9.25	314467	11.72	1088698	15.31	568154	18.40	979213	23.42	963807	26.11	1037909
7	2030	NT1003012309S.D	SEQ-CAL2		1	9.24	305434	11.72	1048978	15.31	536796	18.40	924275	23.42	947041	26.11	1060218
8	2109	NT1003012310S.D	SEQ-CAL1		1	9.25	370360	11.72	1262304	15.31	638059	18.40	1124768	23.42	1114478	26.11	1276260
9	2146	NT1003012311S.D	SEQ-SCV1		1	9.25	303734	11.72	1147551	15.31	645730	18.40	1151000	23.42	1297466	26.11	1394899
10	2224	NT1003012312S.D	SEQ-IBL1		1	9.25	515340	11.72	1787704	15.31	879316	18.40	1572306	23.42	1486349	26.11	1674195

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

ARI Job No.: SEQ- Method: SIM.b\SIMABN2.m Instrument: nt10.i Date: 01-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1642	NT1003012303S.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
1721	NT1003012304S.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
1759	NT1003012305S.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
1837	NT1003012306S.D	SEQ-CAL5		1	Pentachlorophenol,
1915	NT1003012307S.D	SEQ-CAL4		1	Pentachlorophenol,
1953	NT1003012308S.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2030	NT1003012309S.D	SEQ-CAL2		1	Benzyl alcohol, Benzoic acid,
2109	NT1003012310S.D	SEQ-CAL1		1	Benzyl alcohol, 2-Methylphenol, 4-Methylphenol, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Hexachlorobenzene,
2146	NT1003012311S.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
2224	NT1003012312S.D	SEQ-IBL1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 10-Mar-2023 11:02

NT1003012303S.D	Data Locked	yev, 10-
NT1003012304S.D	Data Locked	yev, 10-
NT1003012305S.D	Data Locked	yev, 10-
NT1003012306S.D	Data Locked	yev, 10-
NT1003012307S.D	Data Locked	yev, 10-
NT1003012308S.D	Data Locked	yev, 10-
NT1003012309S.D	Data Locked	yev, 10-
NT1003012310S.D	Data Locked	yev, 10-
NT1003012311S.D	Data Locked	yev, 10-
NT1003012312S.D	Data Locked	yev, 10-

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08
FILENAME:	NT1003012303S	NT1003012304S	NT1003012305S	NT1003012306S	NT1003012307S	NT1003012308S	NT1003012309S	NT1003012310S
INJ.DATE:	01-MAR-2023	01-MAR-2023	01-MAR-2023	01-MAR-2023	01-MAR-2023	01-MAR-2023	01-MAR-2023	01-MAR-2023
INJ.TIME:	16:42	17:21	17:59	18:37	19:15	19:53	20:30	21:09

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	6.902	6.902	6.895	6.895	6.895	6.902	6.903	6.902	6.902	6.402-7.402	6.900	0.004
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	33.580	33.080-34.080	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.873	30.373-31.373	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.300	30.800-31.800	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.300	30.800-31.800	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.496	14.996-15.996	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.428	19.928-20.928	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.471	19.971-20.971	+++++	+++++
137 NewCpnd_131	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.828	7.328-8.328	+++++	+++++
* 134 Di-n-octylphthalate-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.768	23.268-24.268	+++++	+++++
133 Butylatedhydroxytoluen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.190	13.690-14.690	+++++	+++++
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.262	30.762-31.762	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.954	29.454-30.454	+++++	+++++
146 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.752	23.252-24.252	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.717	27.217-28.217	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.566	20.066-21.066	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.796	19.296-20.296	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

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Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.349	22.849-23.849	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.474	21.974-22.974	+++++	+++++
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.191	10.691-11.691	+++++	+++++
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.779	17.279-18.279	+++++	+++++
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.310	15.810-16.810	+++++	+++++
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.707	17.207-18.207	+++++	+++++
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.921	8.421-9.421	+++++	+++++
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.736	3.236-4.236	+++++	+++++
$ 145 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.914	2.414-3.414	+++++	+++++
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.148	19.648-20.648	+++++	+++++
120 2,3,4,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.588	15.088-16.088	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.587	38.087-39.087	+++++	+++++
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.382	19.882-20.882	+++++	+++++
117 Butyl Diphenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.734	18.234-19.234	+++++	+++++
116 Dibutyl Phenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.987	16.487-17.487	+++++	+++++
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.204	14.704-15.704	+++++	+++++
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.586	21.086-22.086	+++++	+++++
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.692	17.192-18.192	+++++	+++++
111 Azobenzene (1,2-DP-Hyd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.268	15.768-16.768	+++++	+++++
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.055	17.555-18.555	+++++	+++++
109 3,4,5-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.228	16.728-17.728	+++++	+++++

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Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	108 4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.517	16.017-17.017	+++++	+++++
	107 4,5-Dichloro-2-Methoxy	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.803	14.303-15.303	+++++	+++++
	106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.843	11.343-12.343	+++++	+++++
	105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.927	12.427-13.427	+++++	+++++
$	2 Phenol-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.235	7.735-8.735	+++++	+++++
	3 Phenol	8.525	8.517	8.517	8.518	8.518	8.525	8.525	8.533	8.533	8.033-9.033	8.522	0.006
	4 Bis(2-Chloroethyl)ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.397	7.897-8.897	+++++	+++++
$	5 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.490	7.990-8.990	+++++	+++++
	6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.521	8.021-9.021	+++++	+++++
	7 1,3-Dichlorobenzene	9.143	9.143	9.136	9.136	9.136	9.143	9.144	9.136	9.136	8.636-9.636	9.140	0.004
*	8 1,4-Dichlorobenzene-d4	9.252	9.252	9.244	9.245	9.245	9.252	9.245	9.252	9.252	8.752-9.752	9.248	0.004
	9 1,4-Dichlorobenzene	9.283	9.283	9.275	9.276	9.276	9.275	9.276	9.275	9.275	8.775-9.775	9.277	0.003
$	10 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.230	8.730-9.730	+++++	+++++
	11 Benzyl alcohol	9.477	9.477	9.469	9.477	9.477	9.485	9.485	9.508	9.508	9.008-10.008	9.482	0.012
	12 1,2-Dichlorobenzene	9.562	9.562	9.562	9.563	9.563	9.562	9.563	9.563	9.563	9.063-10.063	9.562	0.000
	13 2-Methylphenol	9.656	9.655	9.656	9.656	9.656	9.663	9.664	9.671	9.671	9.171-10.171	9.660	0.006
	14 2,2'-oxybis(1-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.413	8.913-9.913	+++++	+++++
	15 4-Methylphenol	9.943	9.943	9.943	9.943	9.951	9.950	9.959	9.966	9.966	9.466-10.466	9.950	0.009
	16 N-Nitroso-di-n-propyla	9.982	9.982	9.974	9.974	9.974	9.974	9.974	9.982	9.982	9.482-10.482	9.977	0.004
	17 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.809	9.309-10.309	+++++	+++++
$	18 Nitrobenzene-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.917	9.417-10.417	+++++	+++++
	19 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.948	9.448-10.448	+++++	+++++
	20 Isophorone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.399	9.899-10.899	+++++	+++++
	21 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.575	10.075-11.075	+++++	+++++

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Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	22 2,4-Dimethylphenol	11.006	10.998	10.998	10.998	10.998	10.998	11.007	11.006	11.006	10.506-11.506	11.001	0.004
	23 Bis(2-Chloroethoxy)met	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.830	10.330-11.330	+++++	+++++
	24 Benzoic acid	11.218	11.159	11.108	11.074	11.058	11.074	11.007	+++++	11.007	10.507-11.507	11.100	0.070
	25 2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.033	10.533-11.533	+++++	+++++
	26 1,2,4-Trichlorobenzene	11.600	11.600	11.600	11.601	11.601	11.600	11.601	11.600	11.600	11.100-12.100	11.600	0.000
*	27 Naphthalene-d8	11.724	11.724	11.724	11.724	11.724	11.724	11.724	11.724	11.724	11.224-12.224	11.724	0.000
	28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.326	10.826-11.826	+++++	+++++
	29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.457	10.957-11.957	+++++	+++++
	30 Hexachlorobutadiene	11.994	11.994	11.994	11.994	11.994	11.994	11.994	11.994	11.994	11.494-12.494	11.994	0.000
	31 4-Chloro-3-methylpheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.432	11.932-12.932	+++++	+++++
	32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.710	12.210-13.210	+++++	+++++
	33 Hexachlorocyclopentadi	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.182	12.682-13.682	+++++	+++++
	34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.330	12.830-13.830	+++++	+++++
	35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.415	12.915-13.915	+++++	+++++
$	36 2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.484	12.984-13.984	+++++	+++++
	37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.686	13.186-14.186	+++++	+++++
	38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.941	13.441-14.441	+++++	+++++
	39 Dimethylphthalate	14.749	14.741	14.741	14.742	14.742	14.741	14.742	14.749	14.749	14.249-15.249	14.744	0.004
	40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.545	14.045-15.045	+++++	+++++
	41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.506	14.006-15.006	+++++	+++++
*	42 Acenaphthene-d10	15.314	15.314	15.314	15.314	15.314	15.314	15.314	15.314	15.314	14.814-15.814	15.314	0.000
	43 3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.785	14.285-15.285	+++++	+++++
	44 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.924	14.424-15.424	+++++	+++++

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Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.001	14.501-15.501	+++++	+++++
	46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.248	14.748-15.748	+++++	+++++
	47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.171	14.671-15.671	+++++	+++++
	48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.302	14.802-15.802	+++++	+++++
	49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.952	15.452-16.452	+++++	+++++
	50 Diethylphthalate	16.219	16.211	16.203	16.203	16.203	16.203	16.211	16.211	16.211	15.711-16.711	16.208	0.006
	51 4-Chlorophenyl-phenyle	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.952	15.452-16.452	+++++	+++++
	52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.037	15.537-16.537	+++++	+++++
	53 4,6-Dinitro-2-methylph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.145	15.645-16.645	+++++	+++++
	54 N-Nitrosodiphenylamine	16.698	16.690	16.690	16.691	16.691	16.698	16.698	16.706	16.706	16.206-17.206	16.695	0.006
$	55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.477	15.977-16.977	+++++	+++++
	56 4-Bromophenyl-phenylet	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.939	16.439-17.439	+++++	+++++
	57 Hexachlorobenzene	17.578	17.578	17.578	17.579	17.579	17.578	17.579	17.579	17.579	17.079-18.079	17.579	0.000
	58 Pentachlorophenol	17.989	17.981	17.989	17.989	17.989	17.996	18.004	18.012	18.012	17.512-18.512	17.994	0.010
*	59 Phenanthrene-d10	18.399	18.399	18.399	18.399	18.399	18.399	18.399	18.399	18.399	17.899-18.899	18.399	0.000
	60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.899	17.399-18.399	+++++	+++++
	61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.991	17.491-18.491	+++++	+++++
	62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.324	17.824-18.824	+++++	+++++
	63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.152	18.652-19.652	+++++	+++++
	64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.289	19.789-20.789	+++++	+++++
	65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.715	20.215-21.215	+++++	+++++
$	66 Terphenyl-d14	21.524	21.524	21.524	21.525	21.525	21.524	21.525	21.532	21.532	21.032-22.032	21.526	0.003
	67 Butylbenzylphthalate	22.407	22.407	22.407	22.407	22.415	22.415	22.407	22.415	22.415	21.915-22.915	22.410	0.004
	68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.875	22.375-23.375	+++++	+++++

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	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
*	69 Chrysene-d12	23.421	23.414	23.414	23.414	23.422	23.421	23.422	23.422	23.422	22.922-23.922	23.419	0.004
	70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.844	22.344-23.344	+++++	+++++
	71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.952	22.452-23.452	+++++	+++++
	72 bis(2-Ethylhexyl)phtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.007	22.507-23.507	+++++	+++++
	73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.990	23.490-24.490	+++++	+++++
	74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.687	24.187-25.187	+++++	+++++
	75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.725	24.225-25.225	+++++	+++++
	76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.283	24.783-25.783	+++++	+++++
*	77 Perylene-d12	26.108	26.108	26.108	26.101	26.108	26.108	26.108	26.108	26.108	25.608-26.608	26.107	0.003
	78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.794	27.294-28.294	+++++	+++++
	79 Dibenzo(a,h)anthracene	28.930	28.914	28.914	28.915	28.930	28.938	28.946	28.946	28.946	28.446-29.446	28.929	0.013
	80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	28.494	27.994-28.994	+++++	+++++
$	85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.238	16.738-17.738	+++++	+++++
$	86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.316	28.816-29.816	+++++	+++++
$	87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.007	25.507-26.507	+++++	+++++
$	88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	44.609	44.109-45.109	+++++	+++++
$	89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.085	15.585-16.585	+++++	+++++
	90 N-Nitrosodimethylamine	4.732	4.724	4.717	4.725	4.725	4.740	4.740	4.756	4.756	4.256-5.256	4.732	0.012
	91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.305	7.805-8.805	+++++	+++++
	92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.615	21.115-22.115	+++++	+++++
	93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.529	20.029-21.029	+++++	+++++
$	95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.686	17.186-18.186	+++++	+++++
	96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
	97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.957	26.457-27.457	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.609	19.109-20.109	+++++	+++++
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.438	24.938-25.938	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.384	25.884-26.884	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.881	43.381-44.381	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	45.573	45.073-46.073	+++++	+++++
103 Pyridine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.535	4.035-5.035	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
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Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

Calibration File Names:
Level 1: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012310S.D
Level 2: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012309S.D
Level 3: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012308S.D
Level 4: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012307S.D
Level 5: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012306S.D
Level 6: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012305S.D
Level 7: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012304S.D
Level 8: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012303S.D

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
141 Diallate B	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
142 1,2-Dibromo-3-Chloropropane	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
135 2,3,5,6-Tetrachlorophenol	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
136 2,3,4,5-tetrachlorophenol	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
137 NewCpnd_131	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
133 Butylatedhydroxytoluene	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
132 3,6-Dimethylphenanthrene	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
146 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1 / 5.0000 Level 7	0.1000000 Level 2 / 10.0000 Level 8	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
144 alpha-Terpineol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
125 Safrole	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
124 3,4-Dimethylphenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
123 Acetophenone	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
122 Furfuraldehyde	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
143 1,4-Dioxane	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
121 Quinoline	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1 / 5.0000 Level 7	0.1000000 Level 2 / 10.0000 Level 8	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
120 2,3,4,6-Tetrachlorophenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
119 7,12-Dimethylbenz(a)anthracen	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
118 Triphenyl Phosphate	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
117 Butyl Diphenyl Phosphate	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
116 Dibutyl Phenyl Phosphate	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
115 Tributyl Phosphate	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
114 Beta-Pinene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
111 Azobenzene (1,2-DP-Hydrazine)	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
109 3,4,5-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
108 4,5,6-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
107 4,5-Dichloro-2-Methoxyphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

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Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
3 Phenol	3599	8264	19568	61458	128497	360891					
	767247	1593896					QUAD	0.000e+000	0.59382	-0.00714	0.99994
4 Bis(2-Chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
7 1,3-Dichlorobenzene	1.56799	1.52570	1.49198	1.51309	1.44269	1.43612					
	1.43451	1.44742					AVRG		1.48244		3.36989
9 1,4-Dichlorobenzene	1.50923	1.47580	1.43373	1.46395	1.40754	1.40391					
	1.39839	1.43790					AVRG		1.44131		2.72097

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
11 Benzyl alcohol	1380	3114	10320	31347	65076	200086					
	449975	980075					QUAD	0.000e+000	1.07135	-0.05783	0.99978
12 1,2-Dichlorobenzene	1.43363	1.40456	1.36192	1.41000	1.36327	1.36665					
	1.36335	1.37939					AVRG		1.38535		1.96993
13 2-Methylphenol	1789	4548	11161	35755	75957	215648					
	472415	995533					QUAD	0.000e+000	0.98781	-0.03181	0.99992
14 2,2'-oxybis(1-Chloropropane)	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
15 4-Methylphenol	2062	3746	9608	34768	75243	225735					
	500092	1071975					QUAD	0.000e+000	0.94989	-0.03839	0.99982
16 N-Nitroso-di-n-propylamine	1965	4218	10242	27908	57866	160503					
	338518	699099					QUAD	0.000e+000	1.33351	-0.02653	0.99995
17 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
19 Nitrobenzene	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
20 Isophorone	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
21 2-Nitrophenol	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
22 2,4-Dimethylphenol	6159	11856	27660	89362	185925	522194					
	1127131	2348644					QUAD	0.000e+000	2.94692	-0.09695	0.99996
23 Bis(2-Chloroethoxy)methane	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
24 Benzoic acid	#####	#####	7336	37634	126544	521508					
	1425868	3313595					QUAD	0.000e+000	5.37547	-0.57371	0.99759
25 2,4-Dichlorophenol	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1 / 5.0000 Level 7	0.1000000 Level 2 / 10.0000 Level 8	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
26 1,2,4-Trichlorobenzene	0.28887	0.28679	0.28252	0.29461	0.28337	0.28328					
	0.28854	0.29525					AVRG		0.28790		1.72341
28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
30 Hexachlorobutadiene	0.21833	0.20386	0.19805	0.20413	0.19707	0.19656					
	0.20447	0.21198					AVRG		0.20431		3.73354
31 4-Chloro-3-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
33 Hexachlorocyclopentadiene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
39 Dimethylphthalate	1.17306	1.13674	1.17700	1.32015	1.33033	1.34291					
	1.32177	1.35881					AVRG		1.27010		7.15698
40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
End Cal Date : 01-MAR-2023 21:09
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
43 3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
44 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
50 Diethylphthalate	1.10372	1.06260	1.10882	1.22577	1.23779	1.26204					
	1.26512	1.31611					AVRG		1.19775		7.73514
51 4-Chlorophenyl-phenylether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
53 4,6-Dinitro-2-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
54 N-Nitrosodiphenylamine	0.52420	0.58247	0.62289	0.68128	0.64518	0.68703					
	0.70947	0.72627					AVRG		0.64735		10.57293
56 4-Bromophenyl-phenylether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
57 Hexachlorobenzene	0.29659	0.29809	0.29705	0.31056	0.29828	0.29945					
	0.31009	0.31346					AVRG		0.30295		2.34116

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Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1 / 5.0000 Level 7	0.1000000 Level 2 / 10.0000 Level 8	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
58 Pentachlorophenol	+++++ / 489921	1243 / 1121362	3505	15934	44811	176209	QUAD	0.000e+000	7.54611	-2.24262	0.99782
60 Phenanthrene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
61 Anthracene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
62 Carbazole	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
63 Di-n-butylphthalate	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
64 Fluoranthene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
65 Pyrene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
67 Butylbenzylphthalate	4671	8617	19744	65574	144786	387221					
	915766	1888709					QUAD	0.000e+000	1.48043	0.03284	0.99960
68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
72 bis(2-Ethylhexyl)phthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
79 Dibenzo(a,h)anthracene	10824	20472	39856	120142	236566	599679					
	1371633	2937326					QUAD	0.000e+000	1.07973	-0.06563	0.99996
80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
90 N-Nitrosodimethylamine	0.58127	0.59640	0.65358	0.68722	0.70407	0.73905					
	0.71236	0.73487					AVRG		0.67610		8.92506
91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

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Start Cal Date : 01-MAR-2023 16:42
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Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
101 Cholesterol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
102 beta-Sitosterol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
103 Pyridine	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 1 2-Fluorophenol	1.02185	1.05555	1.08844	1.17836	1.17520	1.21583					
	1.18289	1.21771					AVRG		1.14198		6.62406
$ 145 d8-1,4-Dioxane	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 2 Phenol-d5	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 5 2-Chlorophenol-d4	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

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Target Version : 4.14
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Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
$ 10 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 18 Nitrobenzene-d5	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 36 2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 66 Terphenyl-d14	0.26682	0.28582	0.28446	0.31786	0.33307	0.36379					
	0.37637	0.35956					AVRG		0.32347		12.80012
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Start Cal Date : 01-MAR-2023 16:42
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Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1 / 5.0000 Level 7	0.1000000 Level 2 / 10.0000 Level 8	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
$ 87 Fluoranthene-d10	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 88 Dibenz(a,h)anthracene-d14	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 89 Diphenyl-d10	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 95 D10-1-methylnaphthalene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000

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Last Edit : 08-Mar-2023 14:14 yev

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

Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223033.D

Page 1

Date : 02-MAR-2023 14:13

Client ID:

Instrument: nt10.i

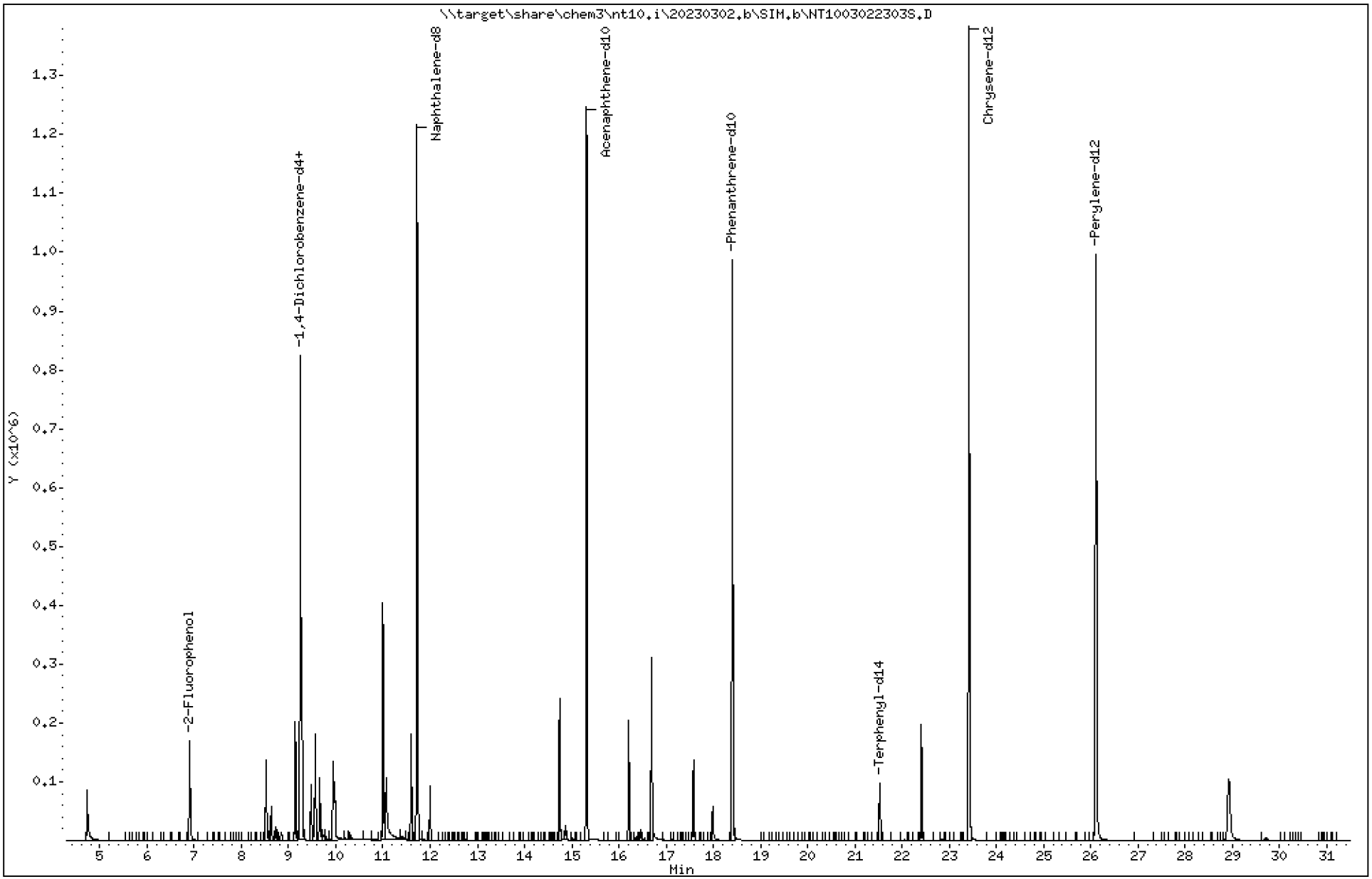
Sample Info: SEQ-ICVSIM

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022303S.D
Lab Smp Id: SEQ-ICVSIM
Inj Date : 02-MAR-2023 14:13 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-ICVSIM
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:01 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.902	6.902	(0.746)	226474	1.50000	1.608
	3 Phenol	94	8.517	8.517	(0.921)	198101	1.00000	0.9490
	7 1,3-Dichlorobenzene	146	9.143	9.143	(0.988)	182702	1.00000	0.9991
*	8 1,4-Dichlorobenzene-d4	152	9.251	9.251	(1.000)	493417	4.00000	
	9 1,4-Dichlorobenzene	146	9.282	9.282	(1.003)	176275	1.00000	0.9915
	11 Benzyl alcohol	79	9.476	9.476	(1.024)	102049	1.00000	0.8764
	12 1,2-Dichlorobenzene	146	9.562	9.562	(1.034)	172200	1.00000	1.008
	13 2-Methylphenol	108	9.655	9.655	(1.044)	122736	1.00000	0.9750
	15 4-Methylphenol	108	9.942	9.942	(1.075)	121561	1.00000	0.9268
	16 N-Nitroso-di-n-propylamine	70	9.981	9.981	(1.079)	89772	1.00000	0.9670
	22 2,4-Dimethylphenol	107	10.997	10.997	(0.938)	279299	2.00000	1.841
	24 Benzoic acid	105	11.074	11.074	(0.945)	162548	4.00000	1.945
	26 1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	127996	1.00000	0.9996
*	27 Naphthalene-d8	136	11.723	11.723	(1.000)	1779056	4.00000	
	30 Hexachlorobutadiene	225	11.994	11.994	(1.023)	84635	1.00000	0.9314
	39 Dimethylphthalate	163	14.741	14.741	(0.963)	301592	1.00000	0.9950
*	42 Acenaphthene-d10	162	15.314	15.314	(1.000)	954569	4.00000	
	50 Diethylphthalate	149	16.203	16.203	(1.058)	287740	1.00000	1.007
	54 N-Nitrosodiphenylamine	169	16.690	16.690	(0.907)	256566	1.00000	0.9931
	57 Hexachlorobenzene	284	17.578	17.578	(0.955)	119208	1.00000	0.9860

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
58	Pentachlorophenol	266	17.988	17.988	(0.977)	71995	2.00000	1.343
* 59	Phenanthrene-d10	188	18.406	18.406	(1.000)	1596290	4.00000	
$ 66	Terphenyl-d14	244	21.532	21.532	(0.919)	125655	1.00000	0.9422
67	Butylbenzylphthalate	149	22.414	22.414	(0.957)	198566	1.00000	0.7149
* 69	Chrysene-d12	240	23.421	23.421	(1.000)	1649110	4.00000	
* 77	Perylene-d12	264	26.115	26.115	(1.000)	1901958	4.00000	
79	Dibenzo(a,h)anthracene	278	28.929	28.929	(1.108)	380310	1.00000	0.8531
90	N-Nitrosodimethylamine	74	4.732	4.732	(0.511)	187791	2.00000	2.252

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
Lab File ID: NT1003022303S.D Calibration Time: 18:37
Lab Smp Id: SEQ-ICVSIM
Analysis Type: SV Level: LOW
Quant Type: ISTD Sample Type: AIR
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	493417	246709	986834	493417	0.00
27 Naphthalene-d8	1779056	889528	3558112	1779056	0.00
42 Acenaphthene-d10	954569	477285	1909138	954569	0.00
59 Phenanthrene-d10	1596290	798145	3192580	1596290	0.00
69 Chrysene-d12	1649110	824555	3298220	1649110	0.00
77 Perylene-d12	1901958	950979	3803916	1901958	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
77 Perylene-d12	26.12	25.62	26.62	26.12	0.00

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

REVIEW SUMMARY FOR FILE - NT1003022303S.D

Lab ID: SEQ-ICVSIM
nt10.i, 20230302.b\SIM.b\SIMABN2.m,   02-MAR-2023 14:13

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230302.b\SIM.b

Instrument: nt10.i Date: 02-MAR-2023 Method: SIM.b\SIMABN2.m

INITIAL CAL: 01-MAR-2023

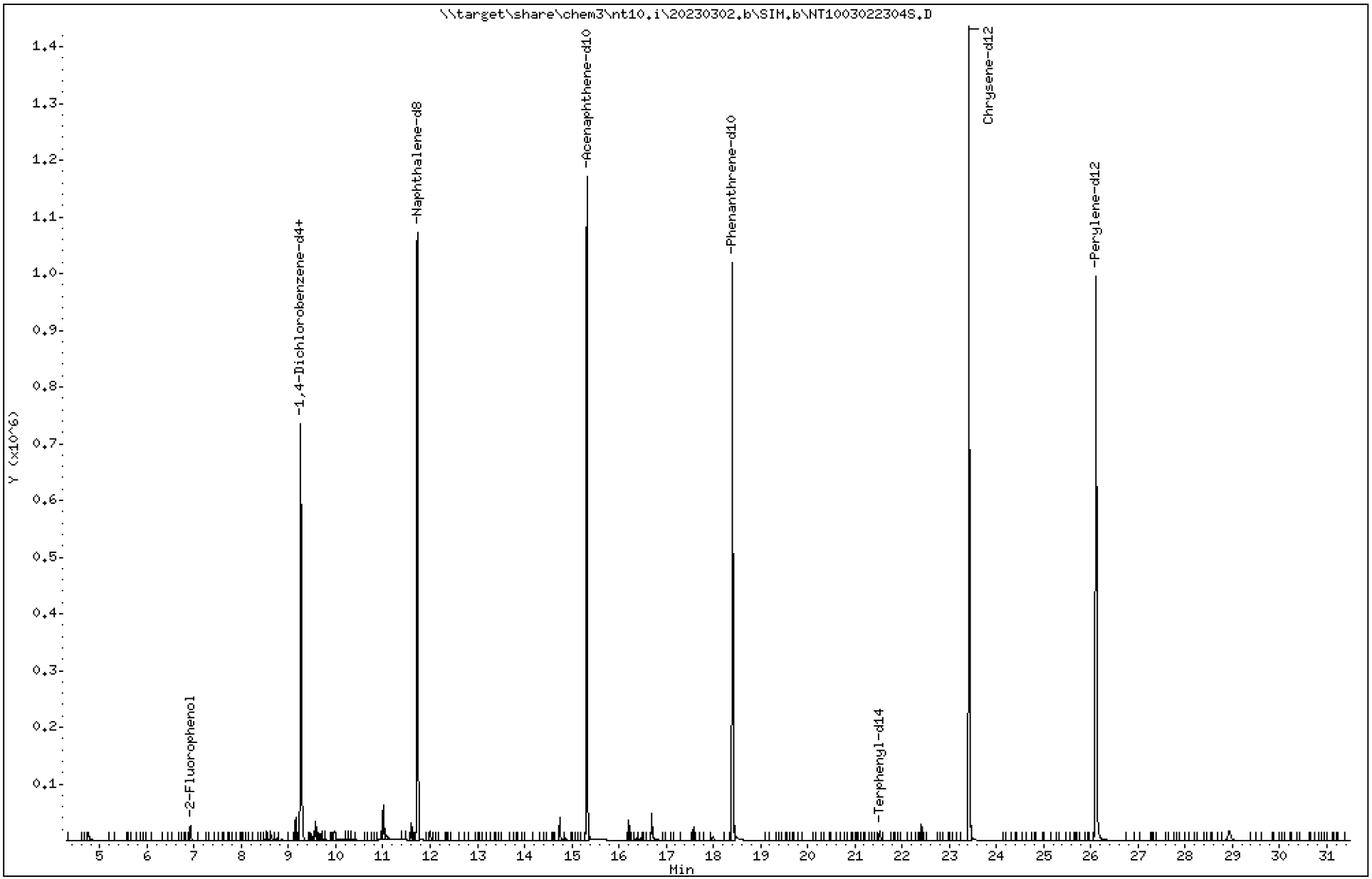
Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1003022303S.D 02-MAR-2023 14:13

Compound	%D
Benzoic acid	-51.4
Pentachlorophenol	-32.8
Butylbenzylphthalate	-28.5

Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223045.D
Date : 02-MAR-2023 16:17
Client ID:
Sample Info: SEQ-LCV200
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D

Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

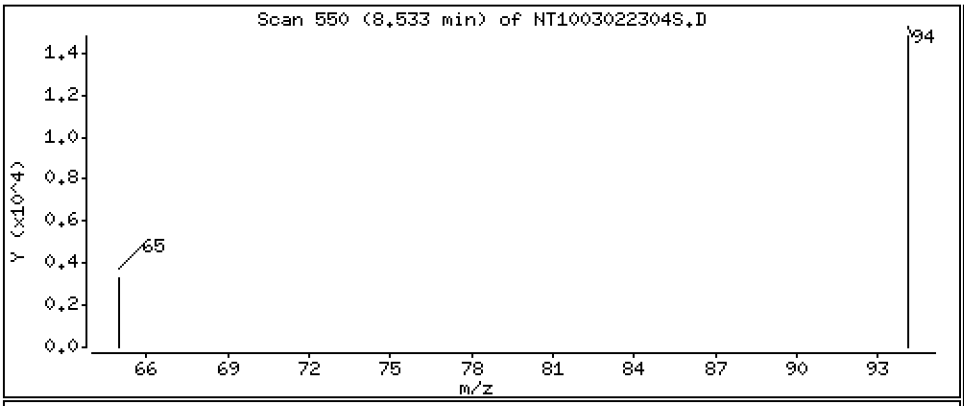
Operator: JGR

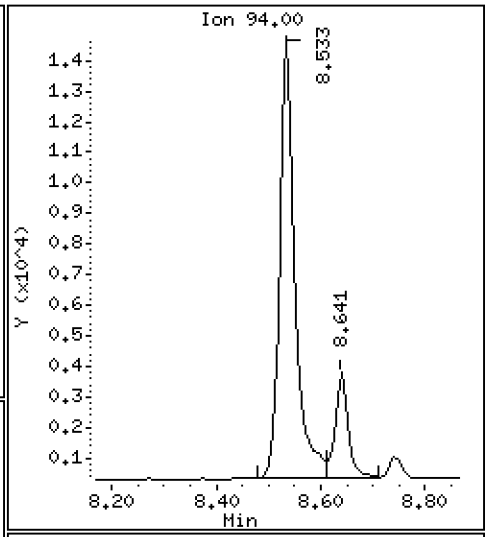
Column phase: ZB-5msi

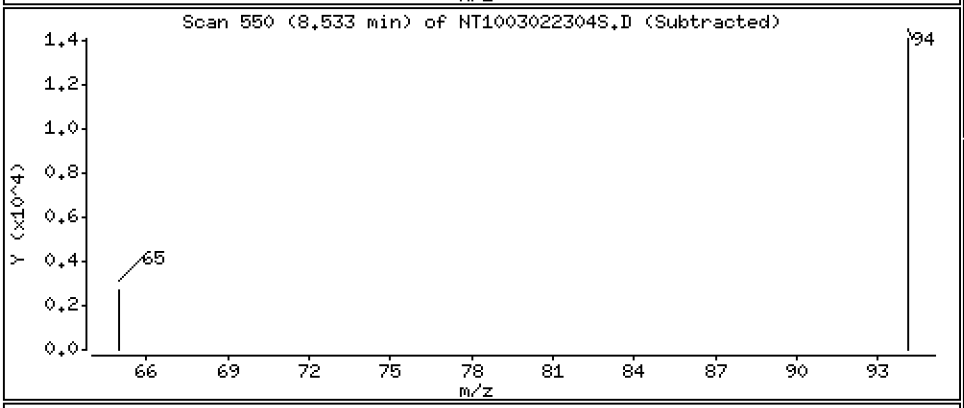
Column diameter: 0.25

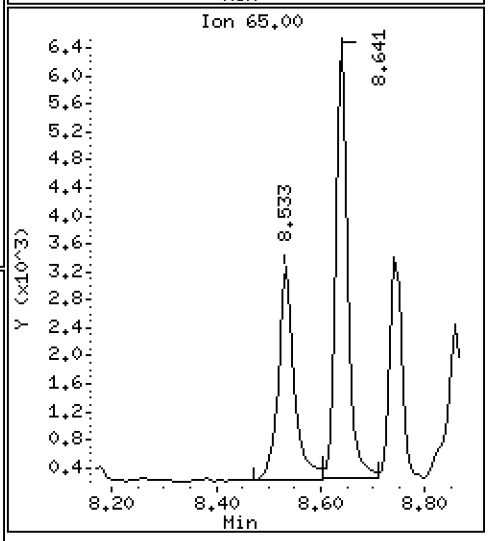
3 Phenol

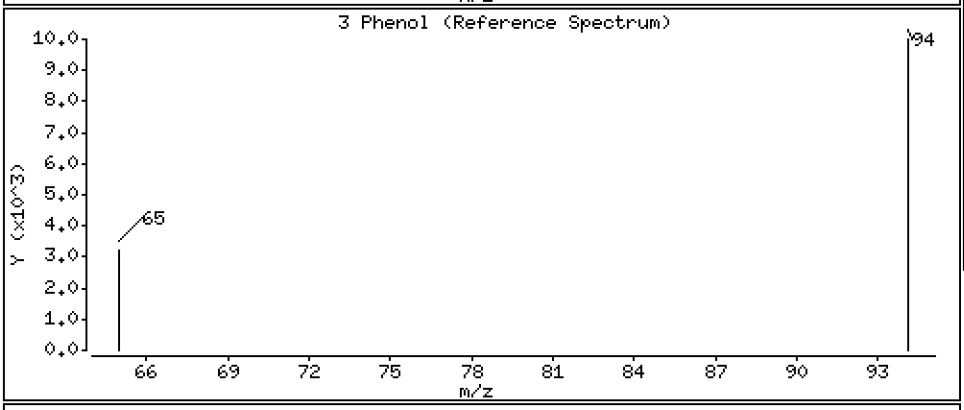
Concentration: 0.1516 ug/L

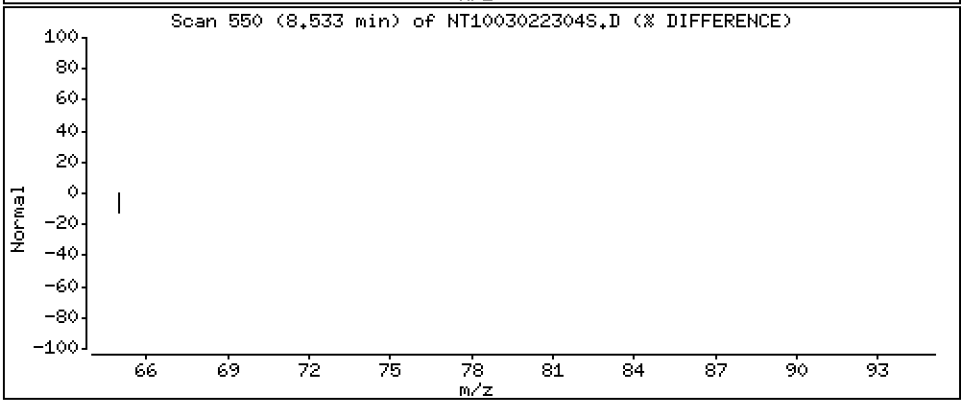












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D

Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

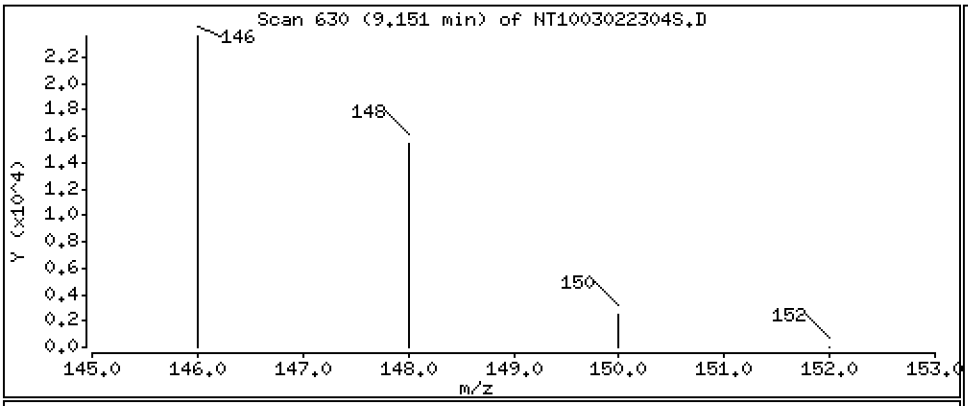
Operator: JGR

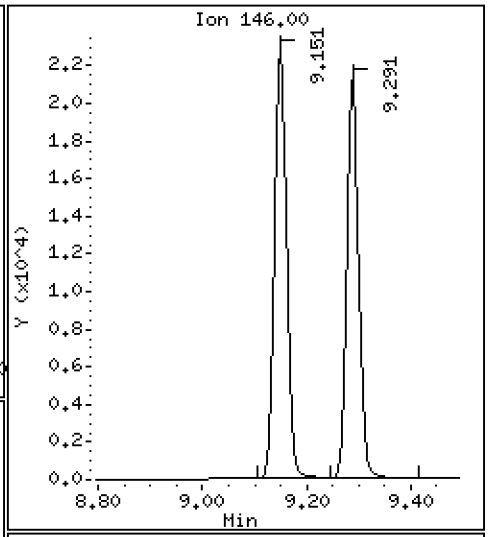
Column phase: ZB-5msi

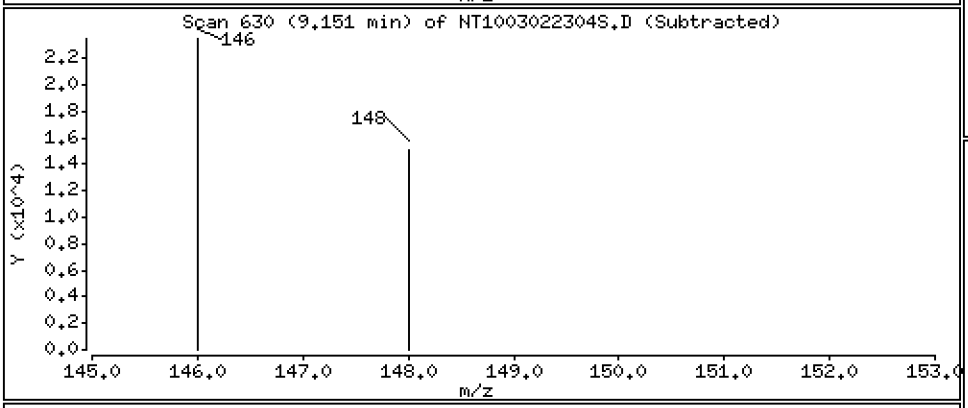
Column diameter: 0.25

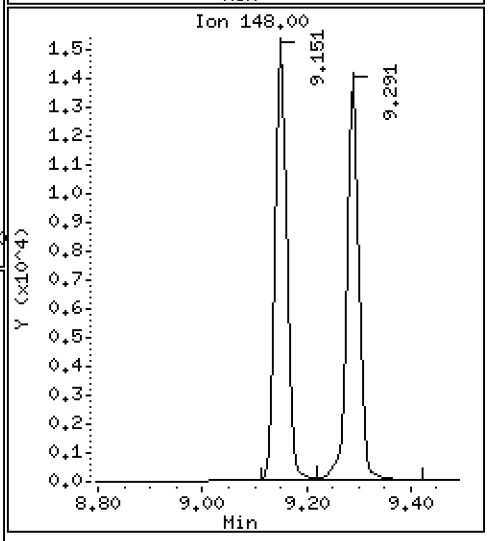
7 1,3-Dichlorobenzene

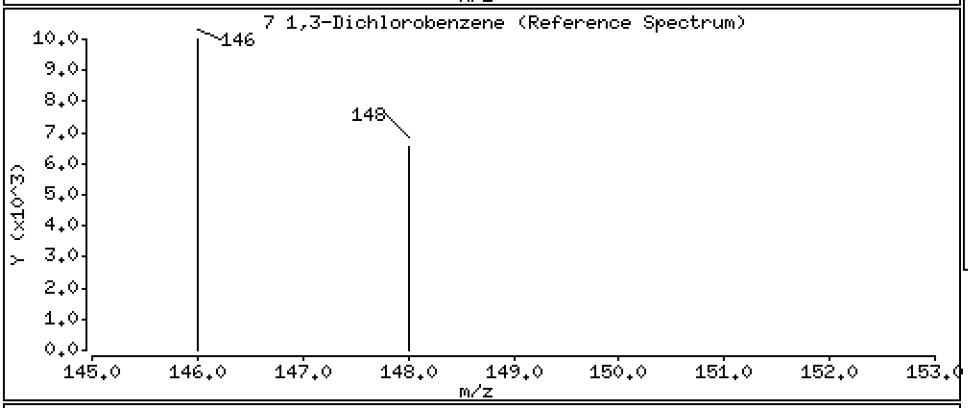
Concentration: 0.2034 ug/L

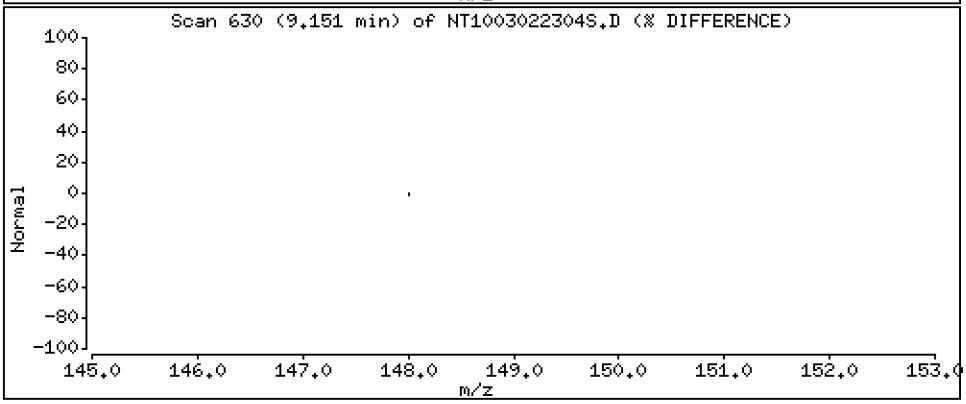












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D

Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

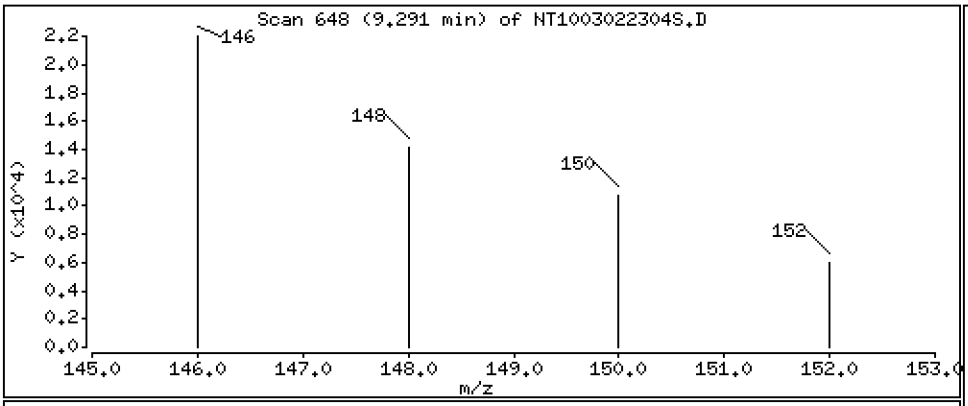
Operator: JGR

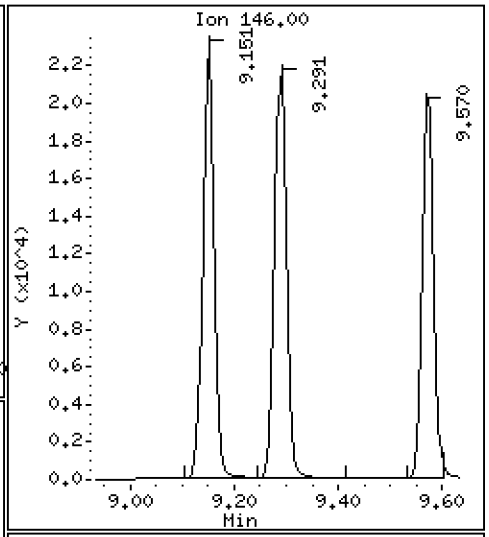
Column phase: ZB-5msi

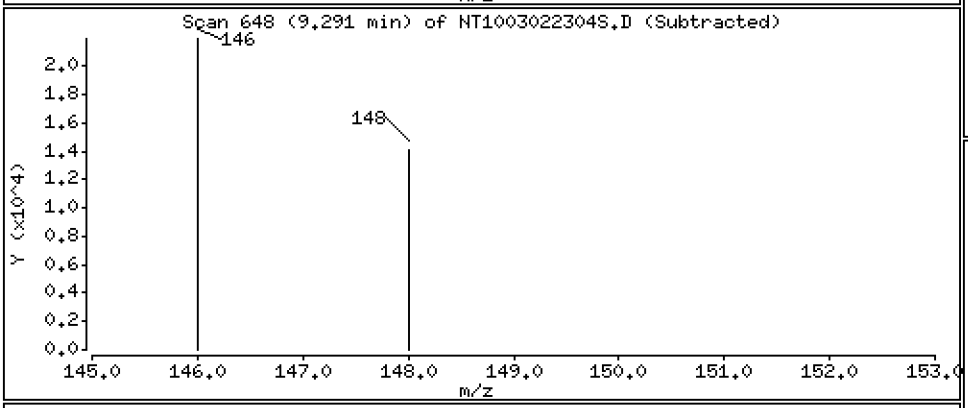
Column diameter: 0.25

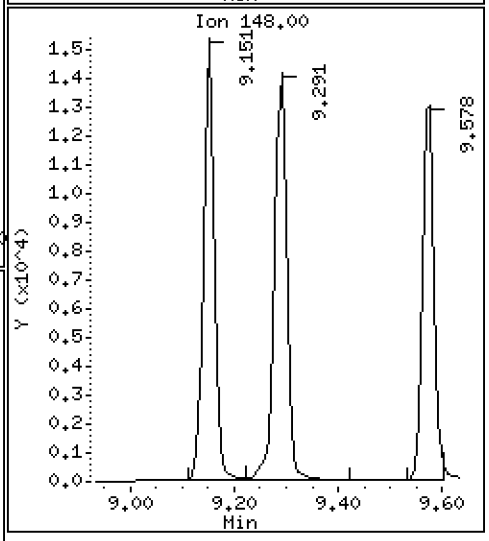
9 1,4-Dichlorobenzene

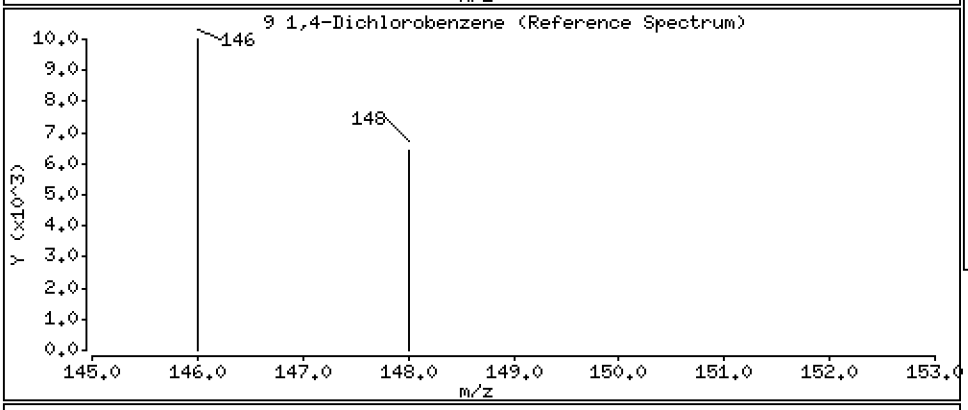
Concentration: 0.1998 ug/L

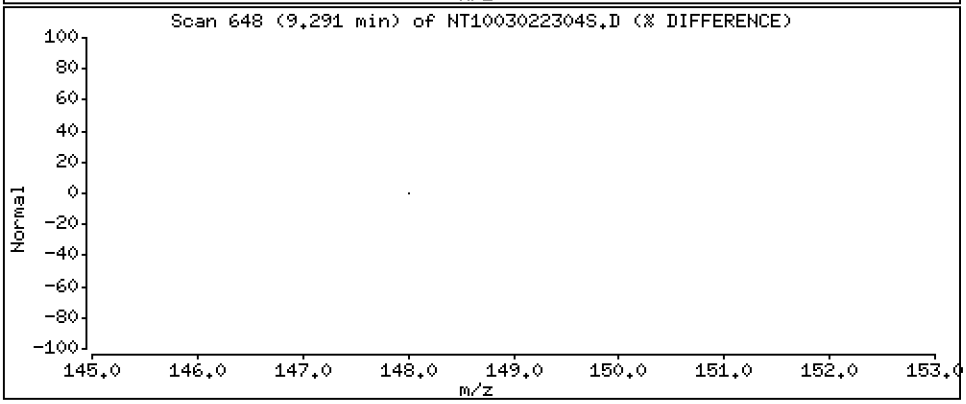












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D

Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

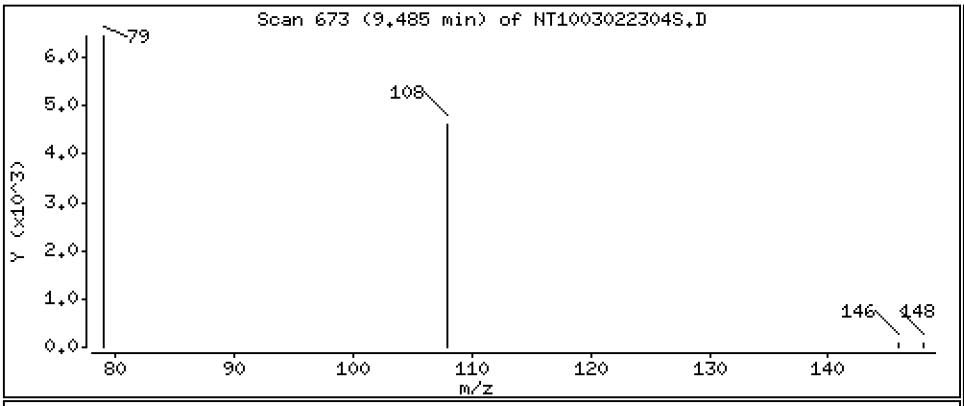
Operator: JGR

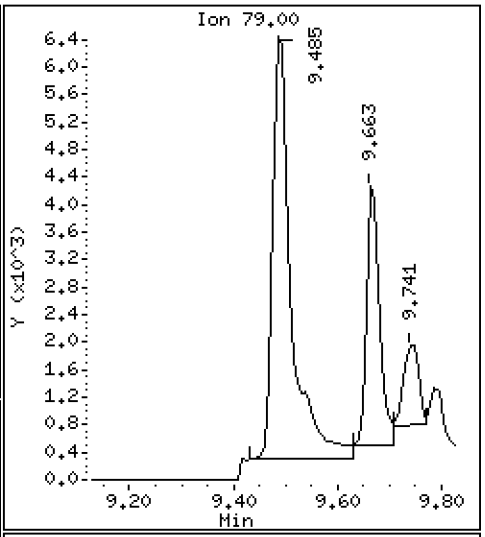
Column phase: ZB-5msi

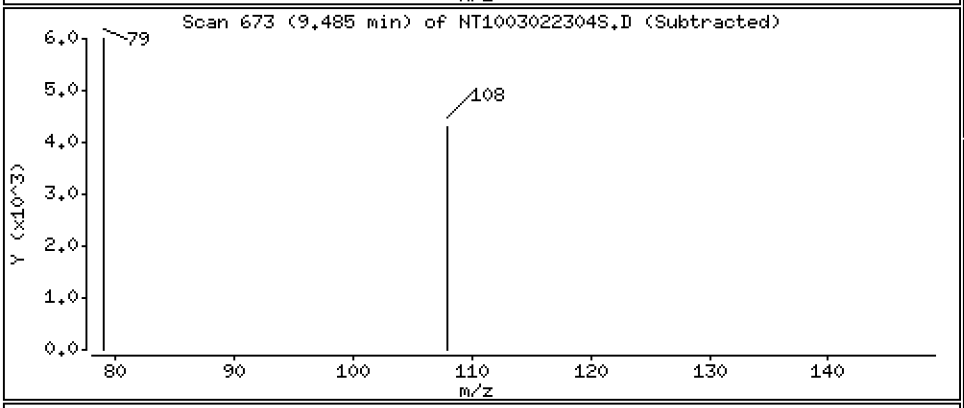
Column diameter: 0.25

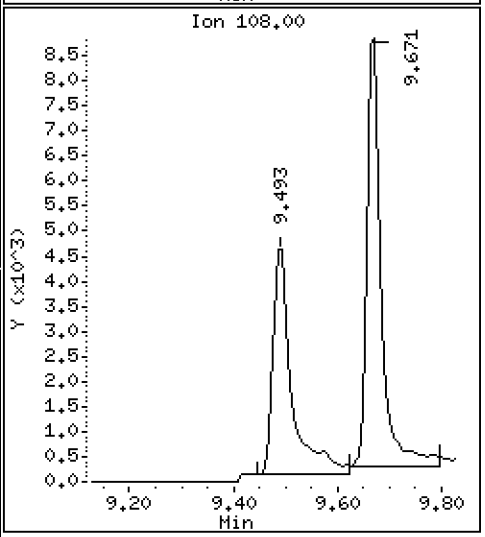
11 Benzyl alcohol

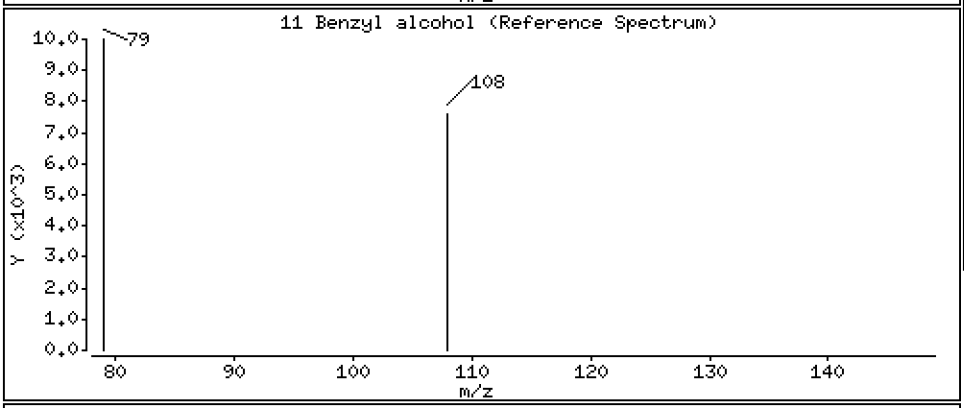
Concentration: 0.1392 ug/L

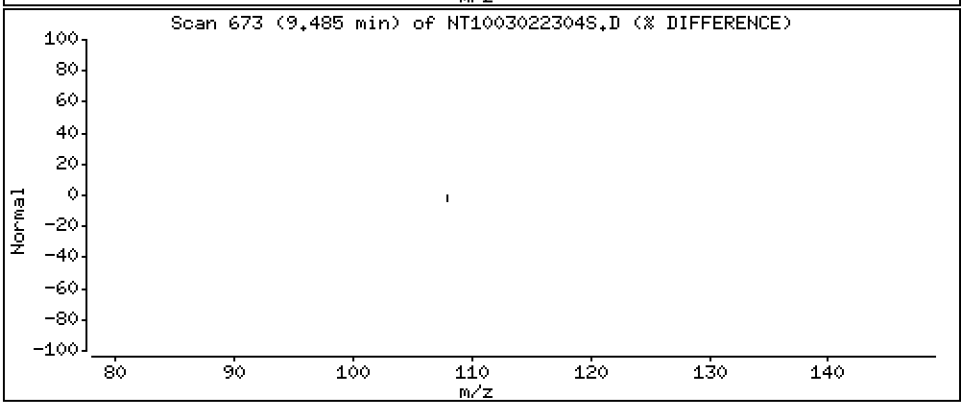












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D

Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

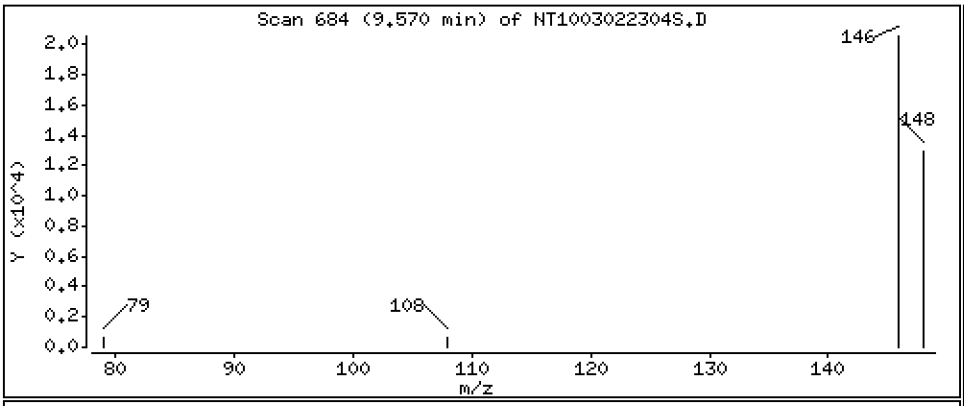
Operator: JGR

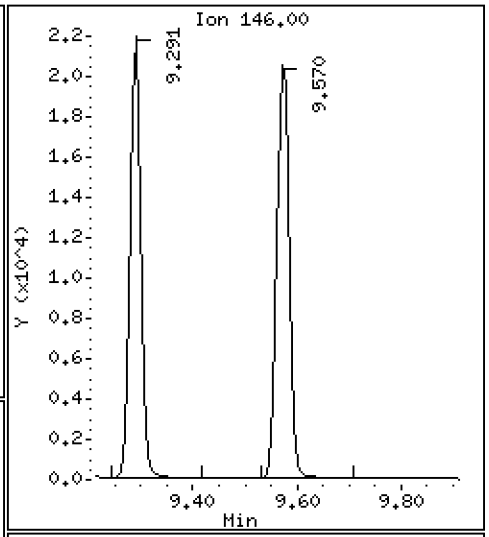
Column phase: ZB-5msi

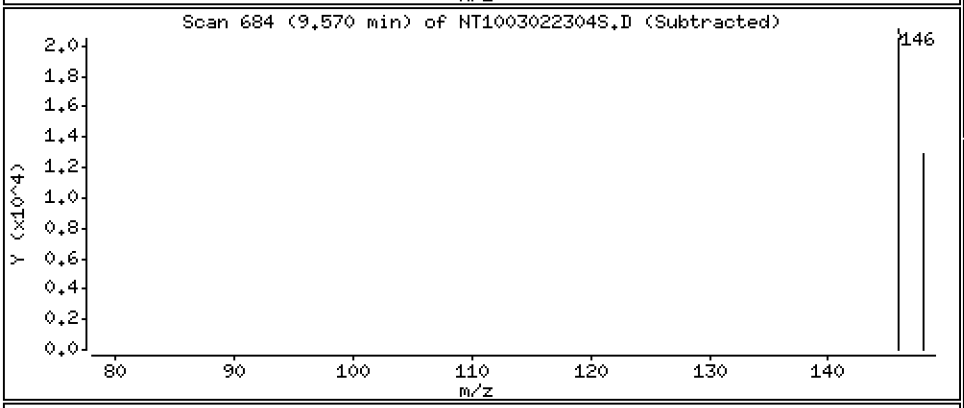
Column diameter: 0.25

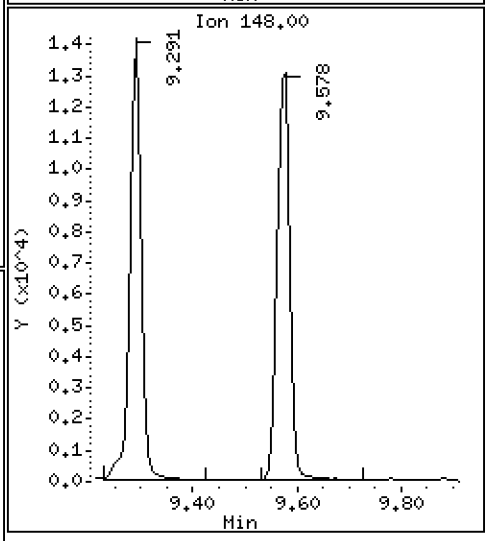
12 1,2-Dichlorobenzene

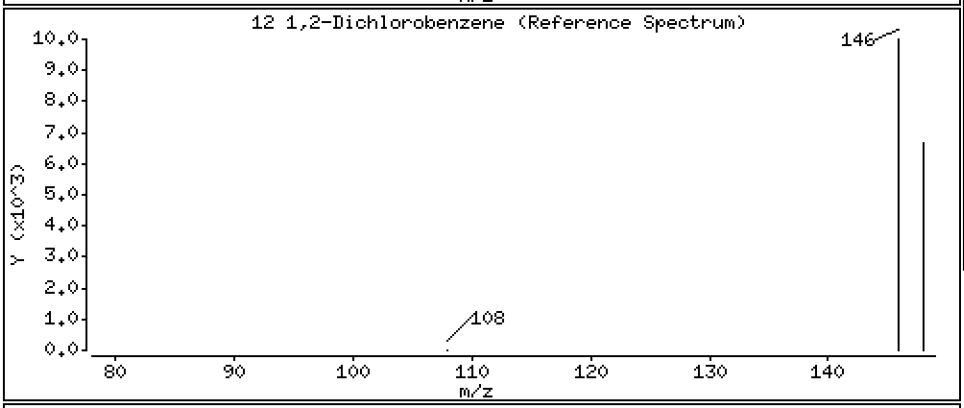
Concentration: 0.2027 ug/L

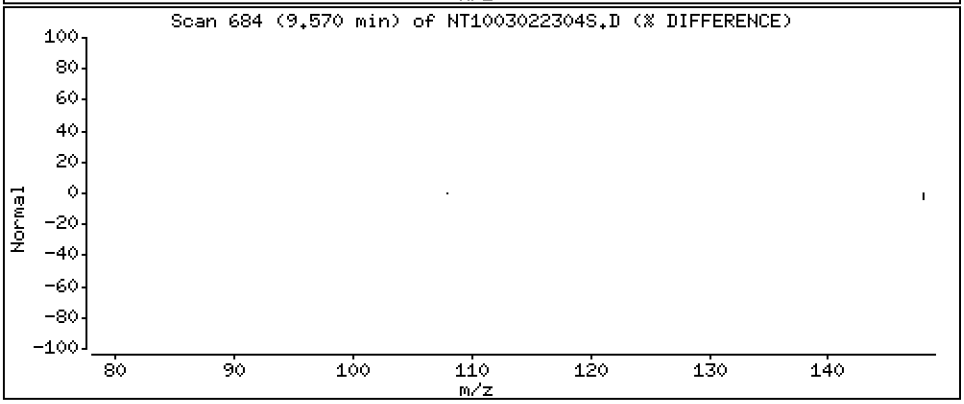












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D

Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

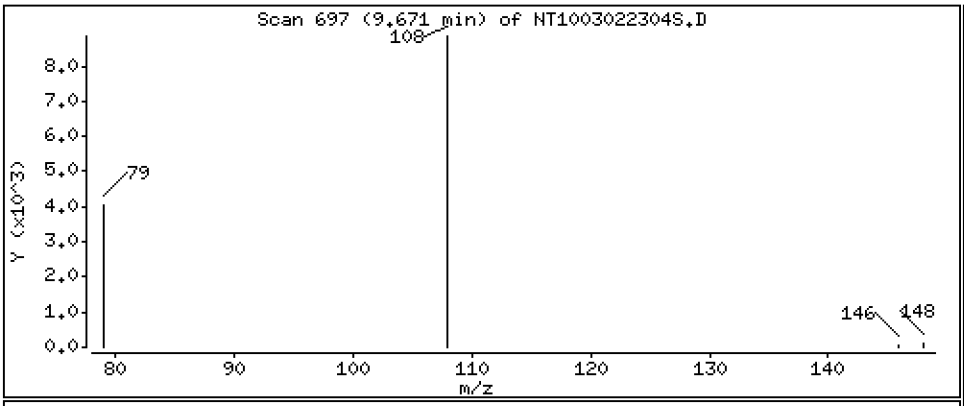
Operator: JGR

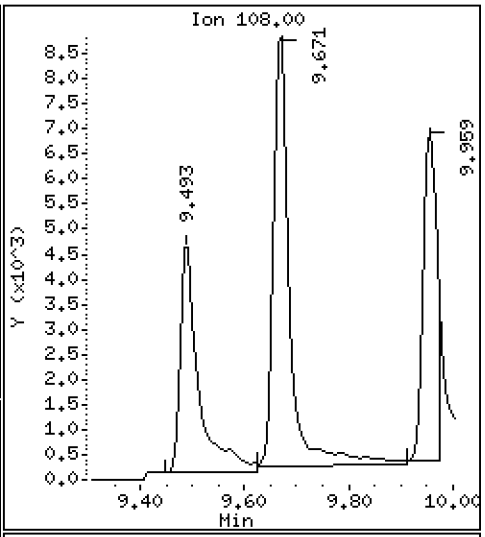
Column phase: ZB-5msi

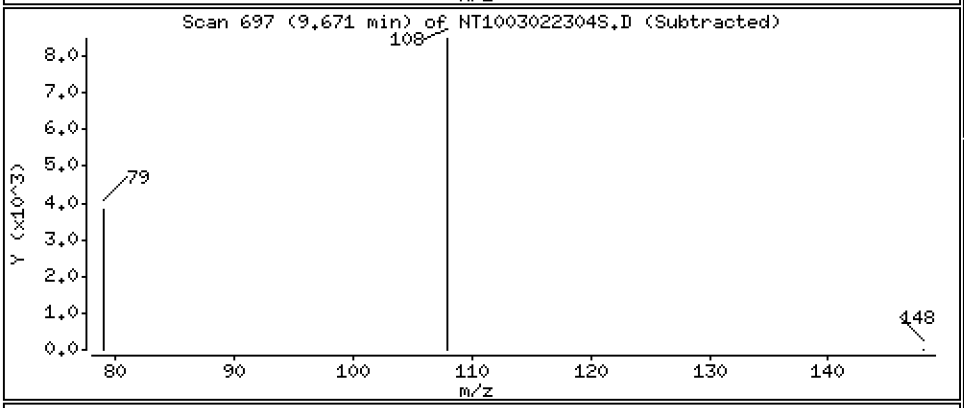
Column diameter: 0.25

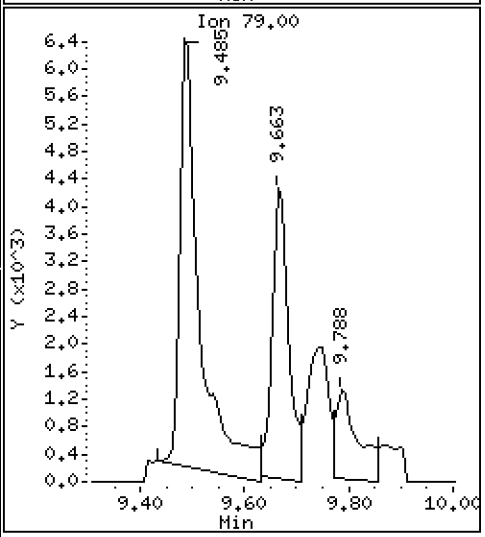
13 2-Methylphenol

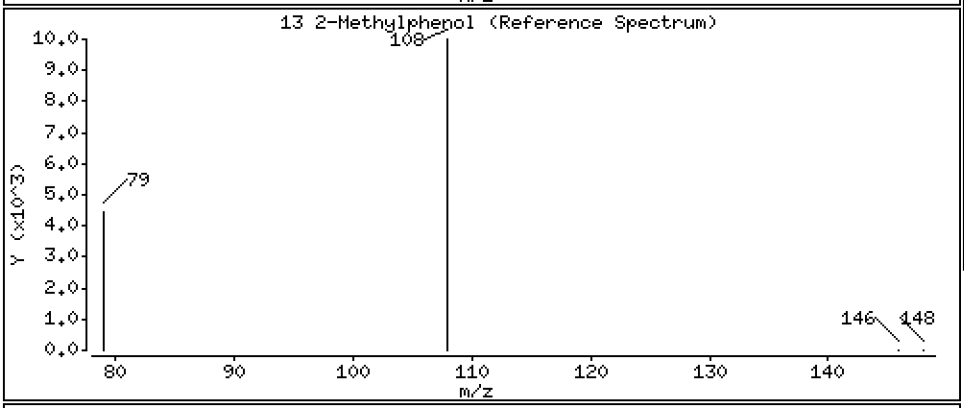
Concentration: 0.1561 ug/L

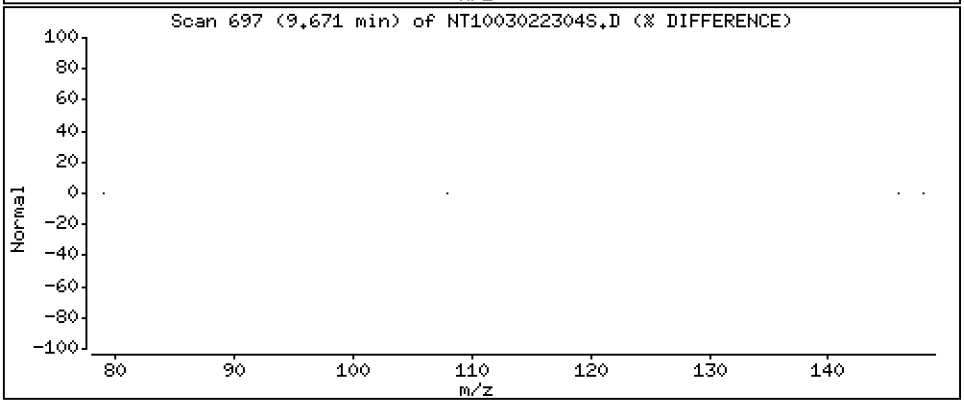












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D

Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

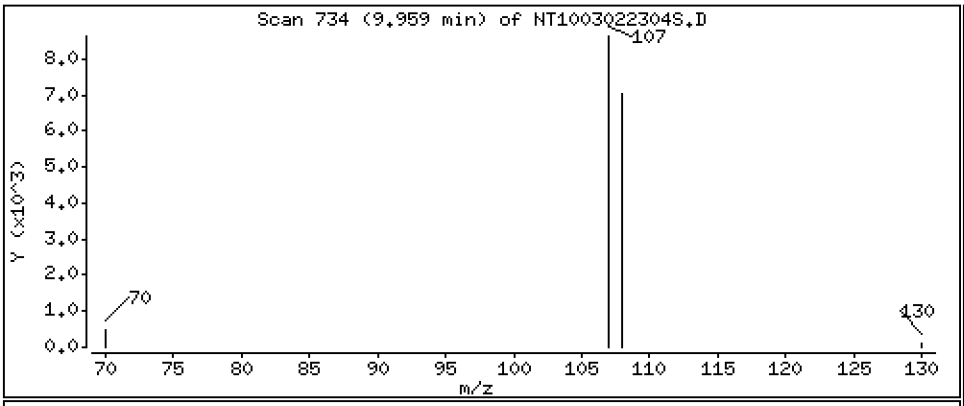
Operator: JGR

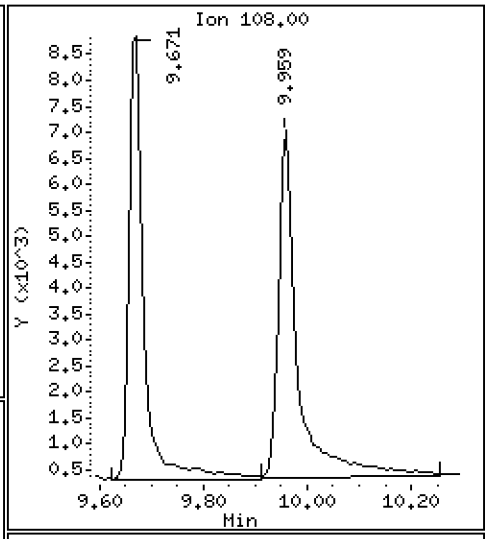
Column phase: ZB-5msi

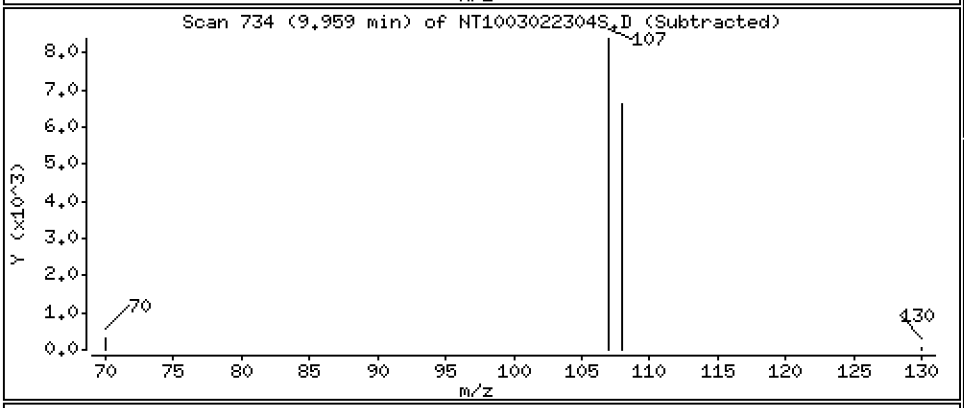
Column diameter: 0.25

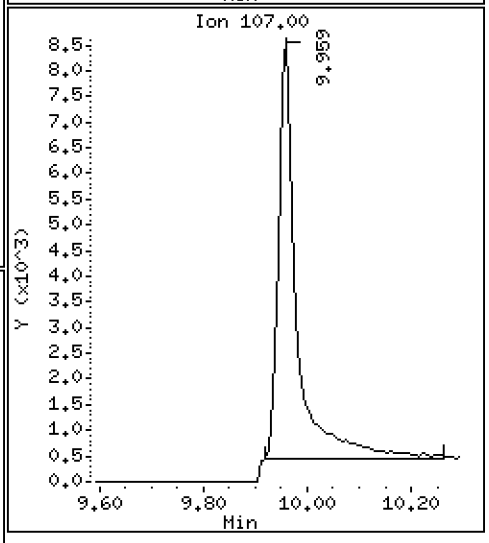
15 4-Methylphenol

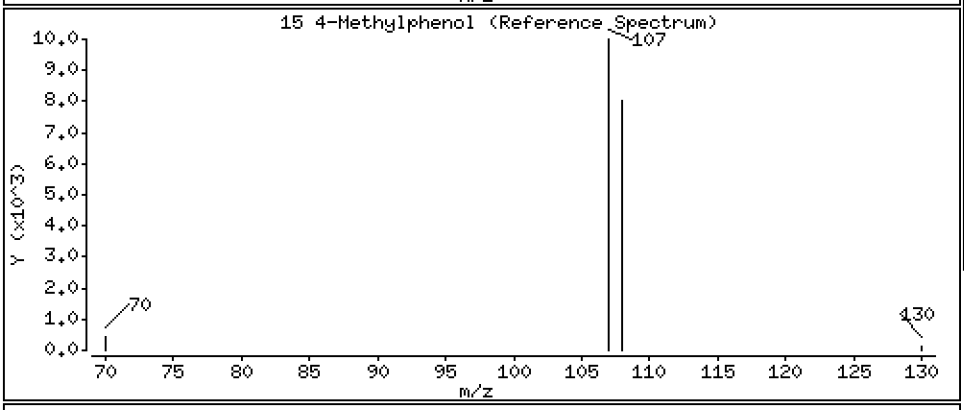
Concentration: 0.1404 ug/L

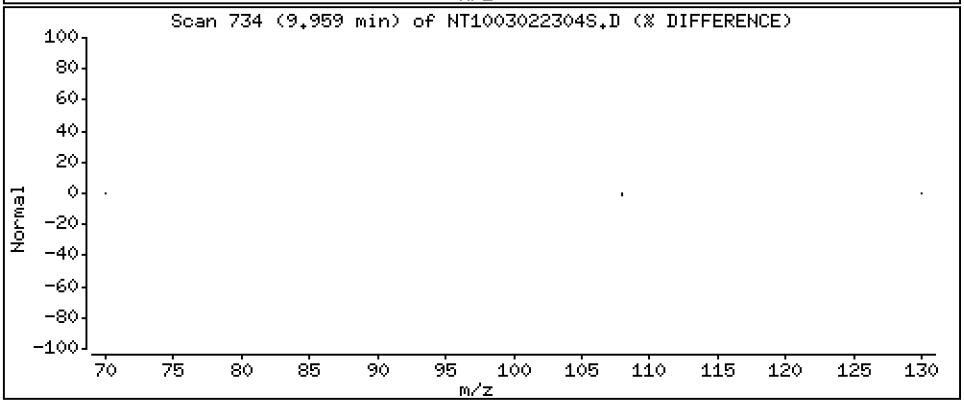












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D

Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

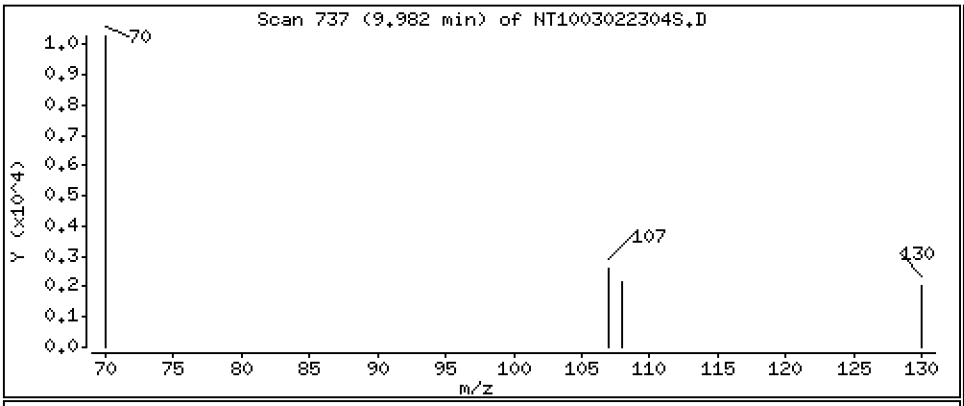
Operator: JGR

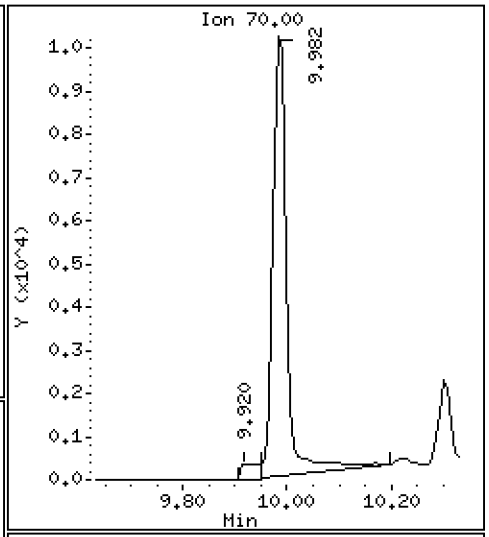
Column phase: ZB-5msi

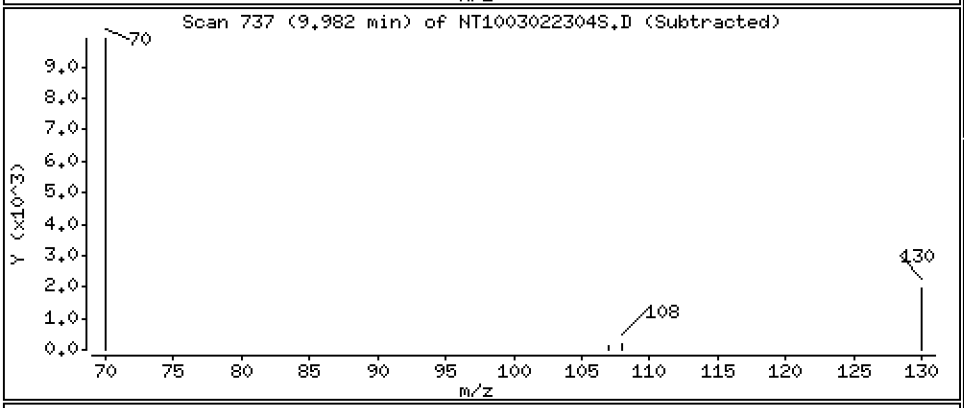
Column diameter: 0.25

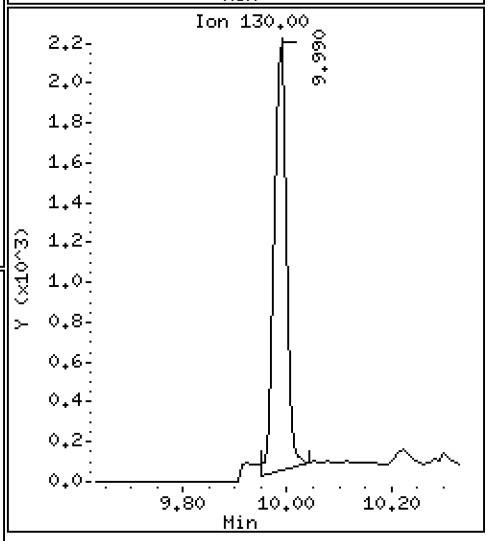
16 N-Nitroso-di-n-propylamine

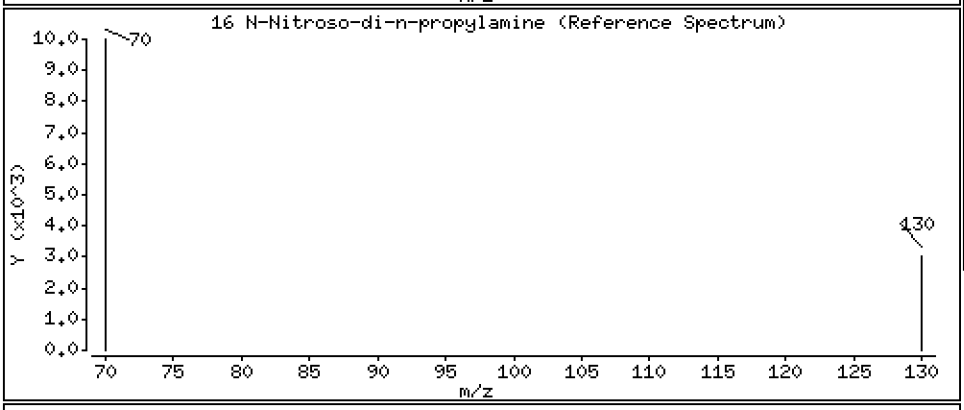
Concentration: 0.2077 ug/L

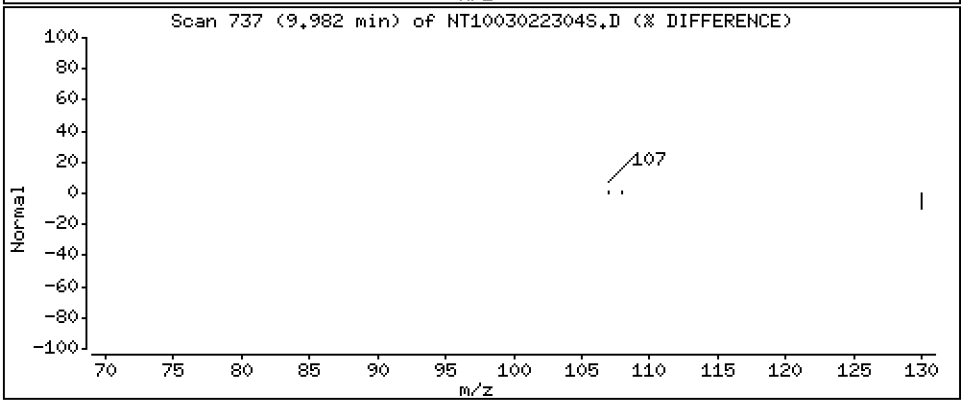












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Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

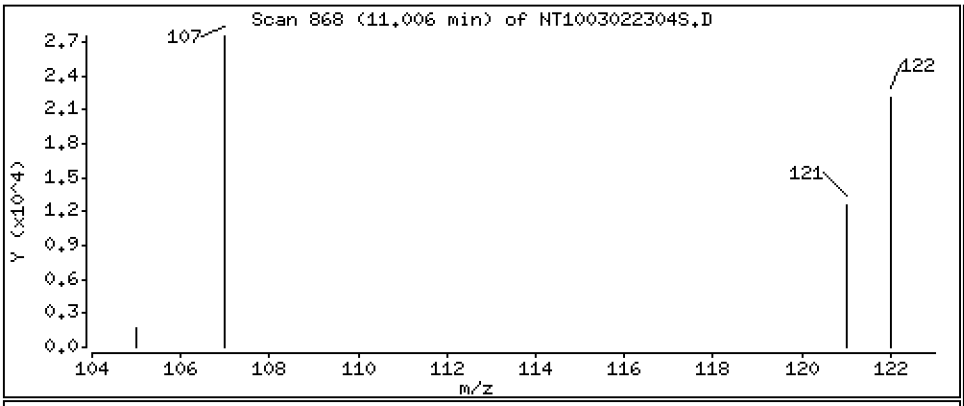
Operator: JGR

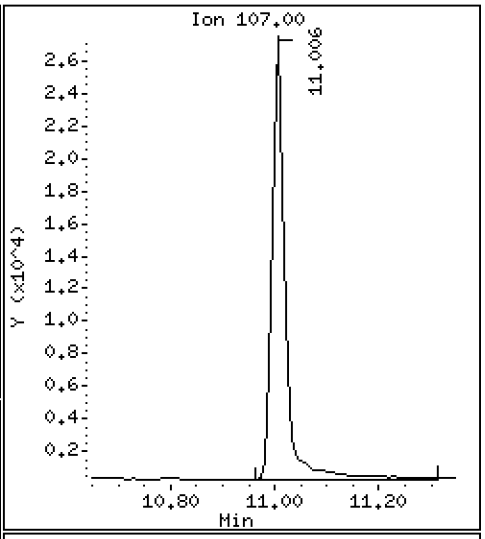
Column phase: ZB-5msi

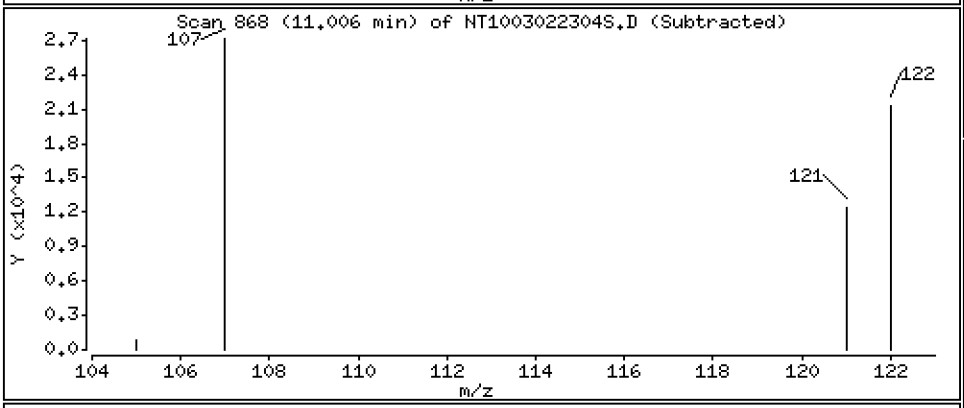
Column diameter: 0.25

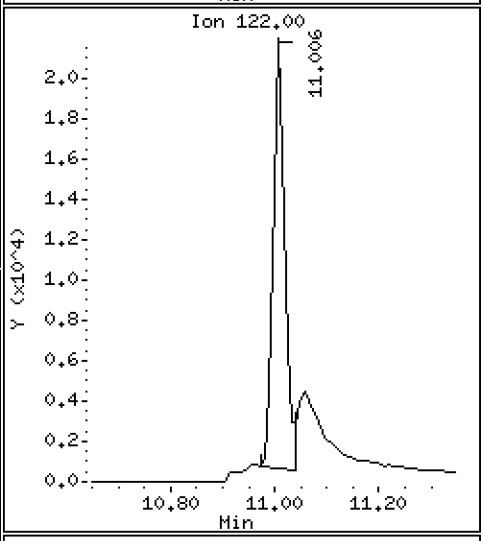
22 2,4-Dimethylphenol

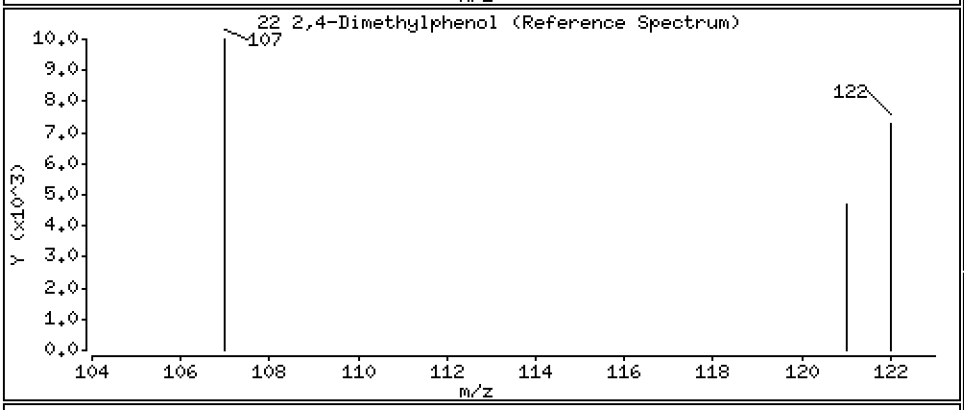
Concentration: 0.3273 ug/L

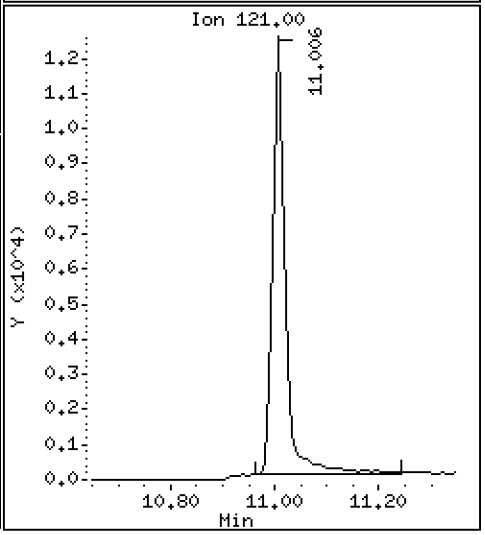


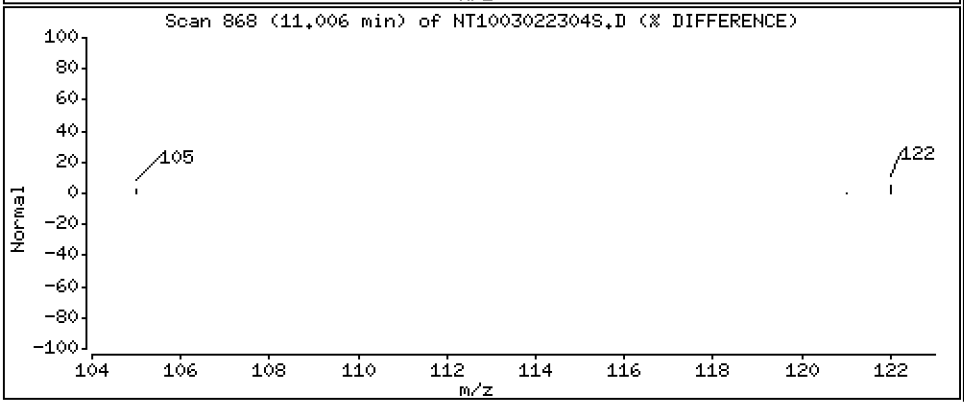












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Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

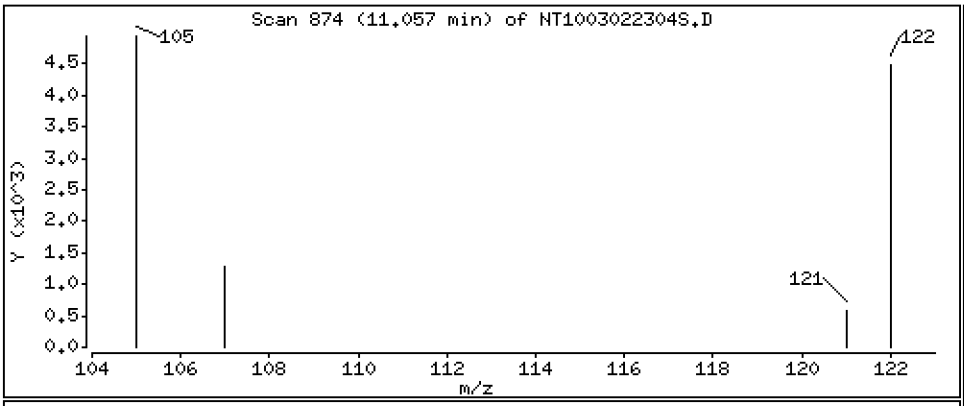
Operator: JGR

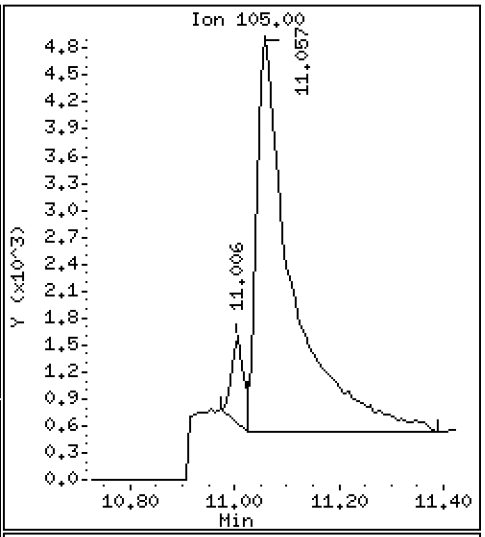
Column phase: ZB-5msi

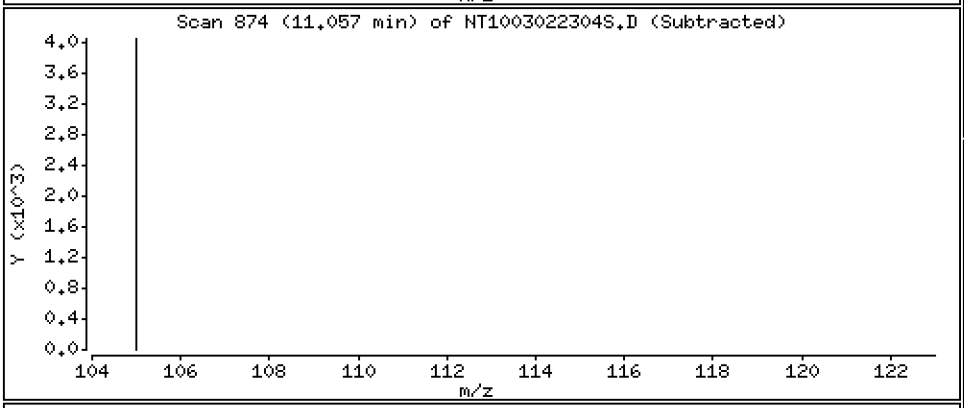
Column diameter: 0.25

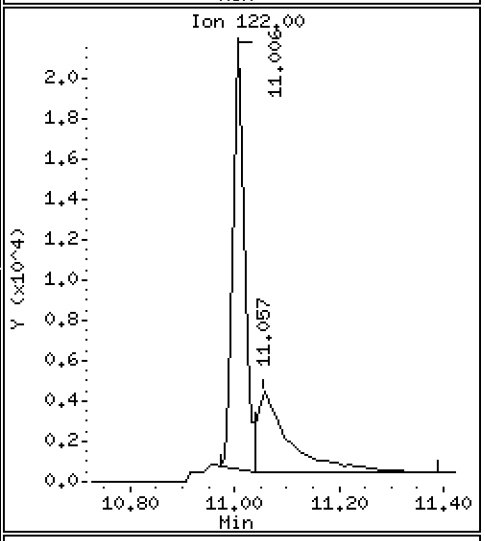
24 Benzoic acid

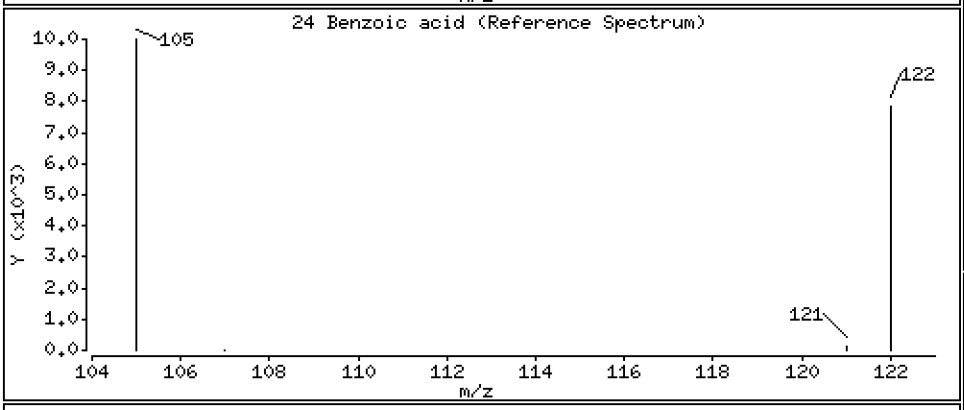
Concentration: 0.2670 ug/L

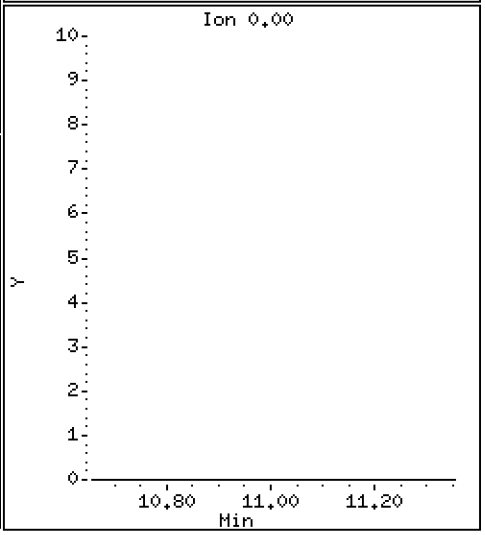


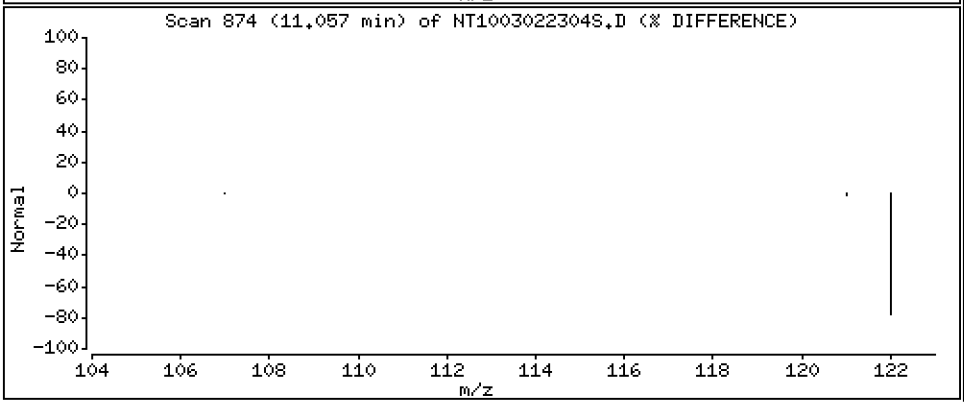












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Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

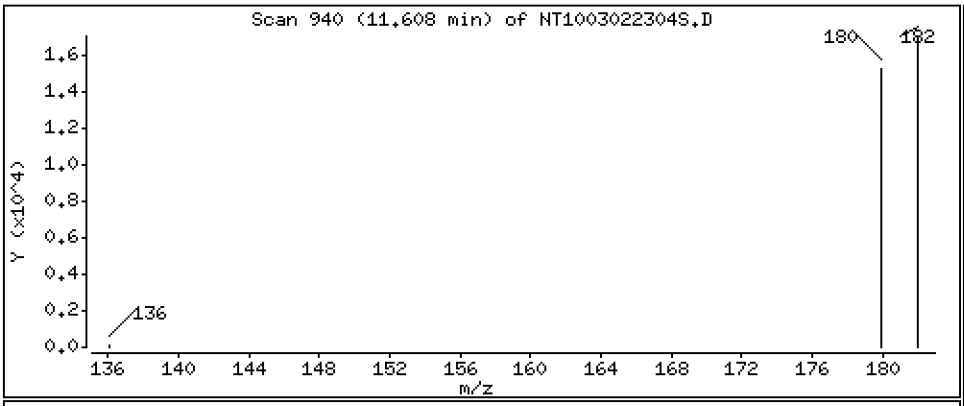
Operator: JGR

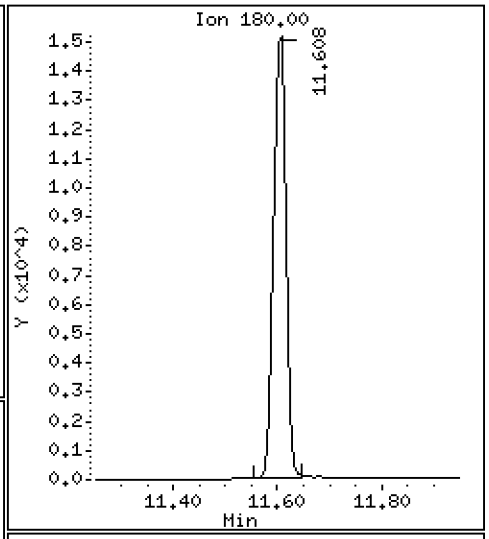
Column phase: ZB-5msi

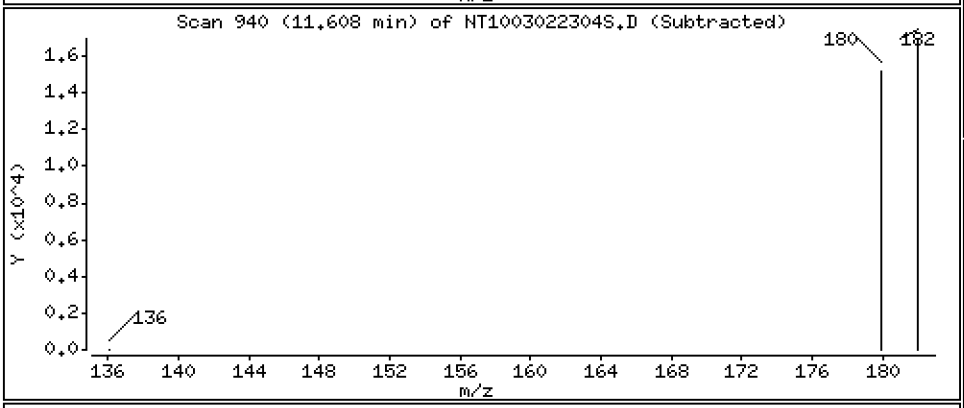
Column diameter: 0.25

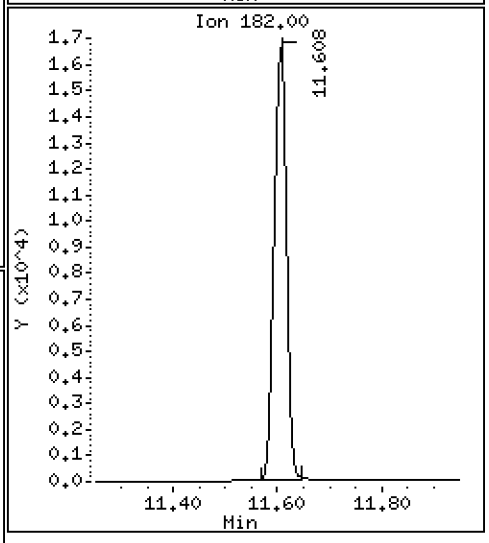
26 1,2,4-Trichlorobenzene

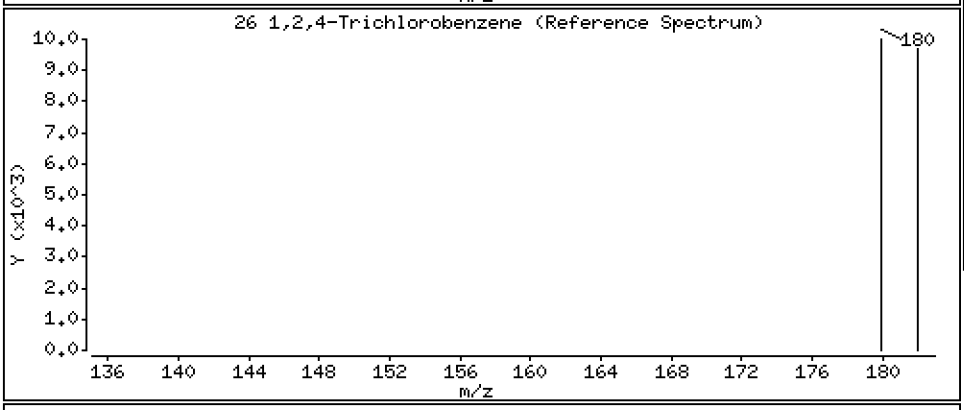
Concentration: 0.1965 ug/L

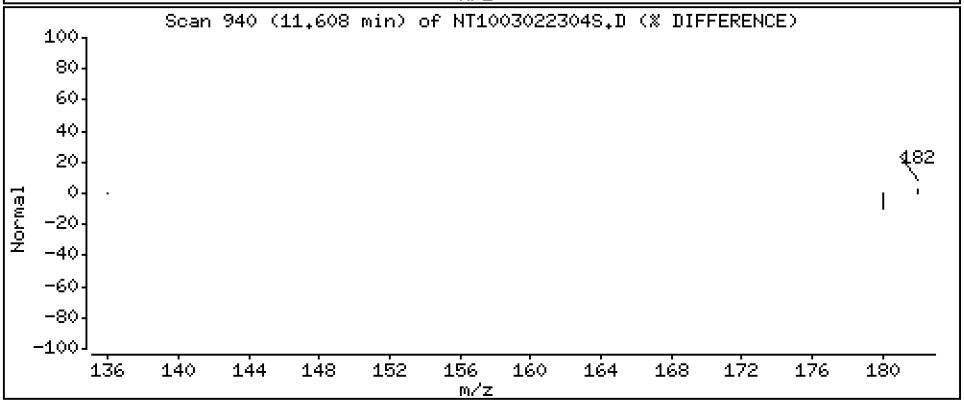












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D

Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

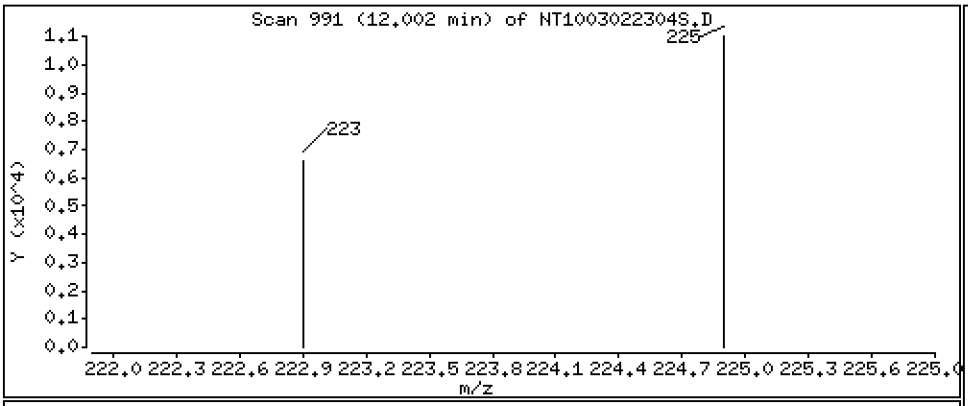
Operator: JGR

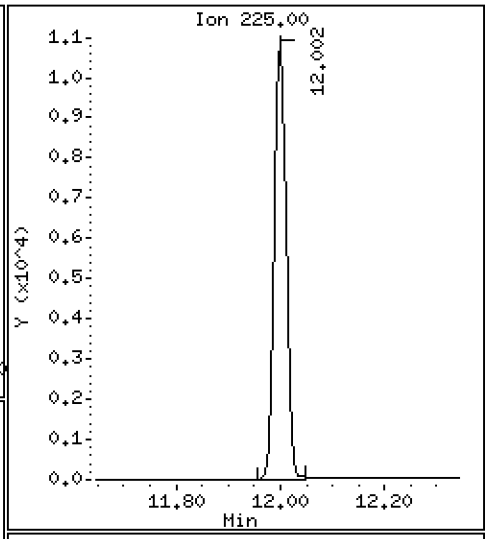
Column phase: ZB-5msi

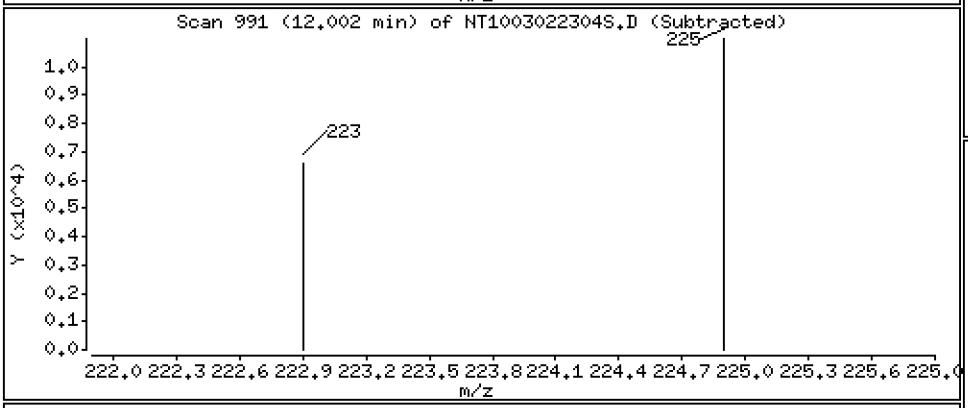
Column diameter: 0.25

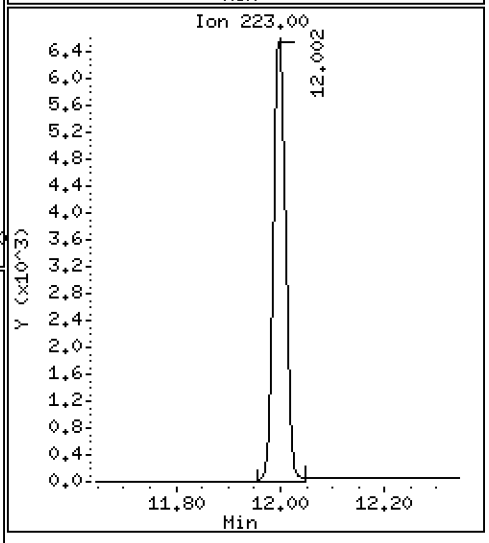
30 Hexachlorobutadiene

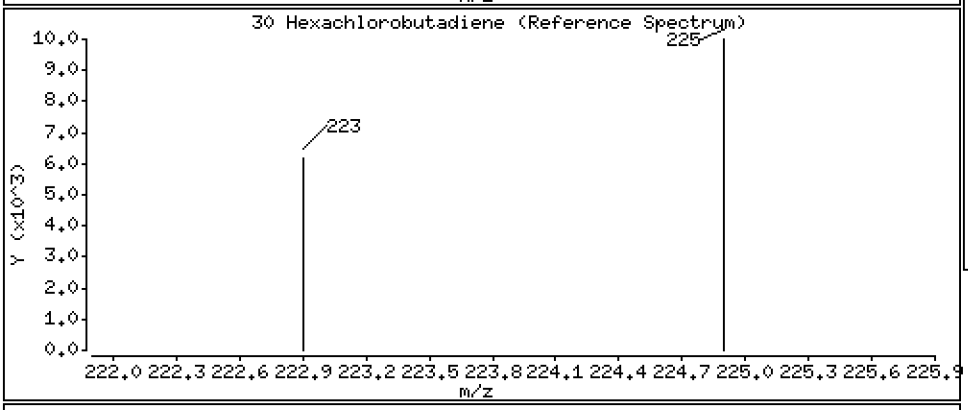
Concentration: 0.1890 ug/L

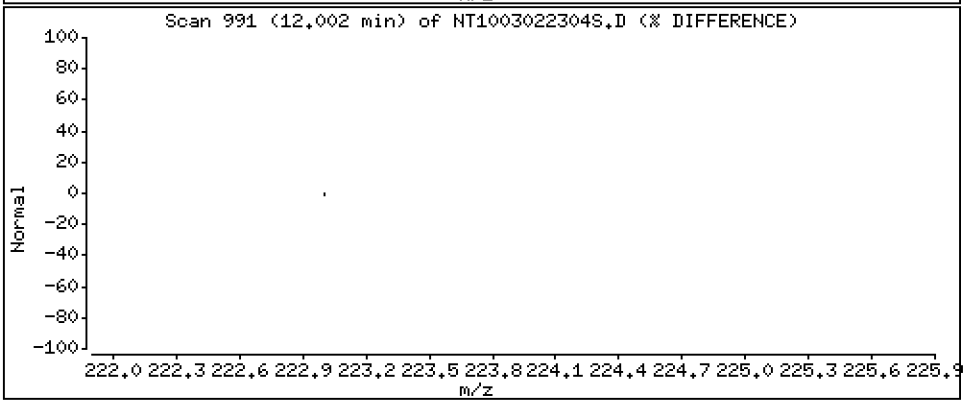












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Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

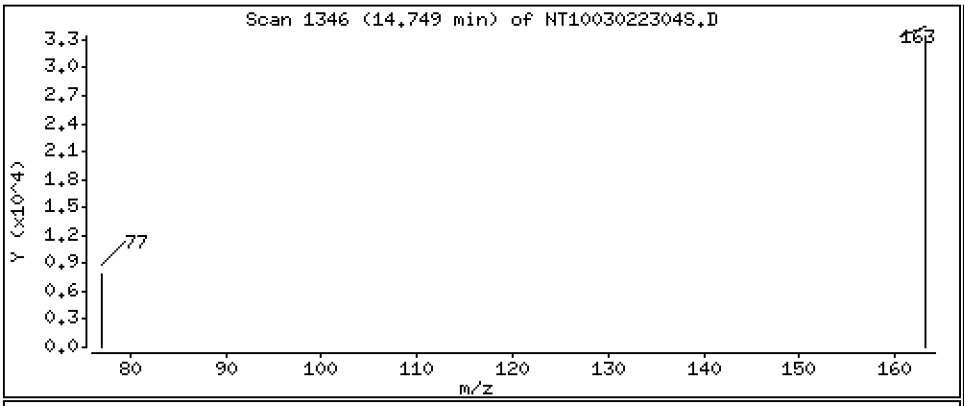
Operator: JGR

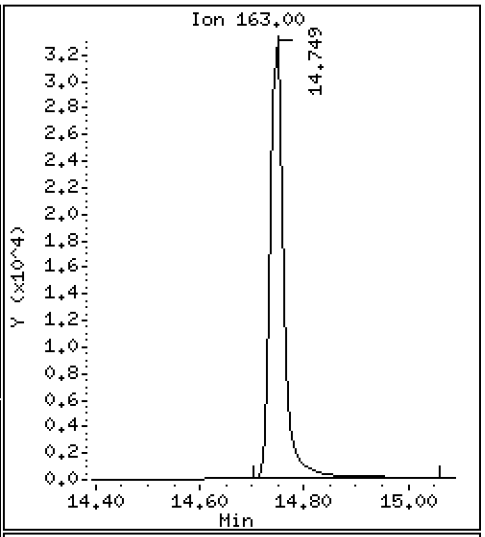
Column phase: ZB-5msi

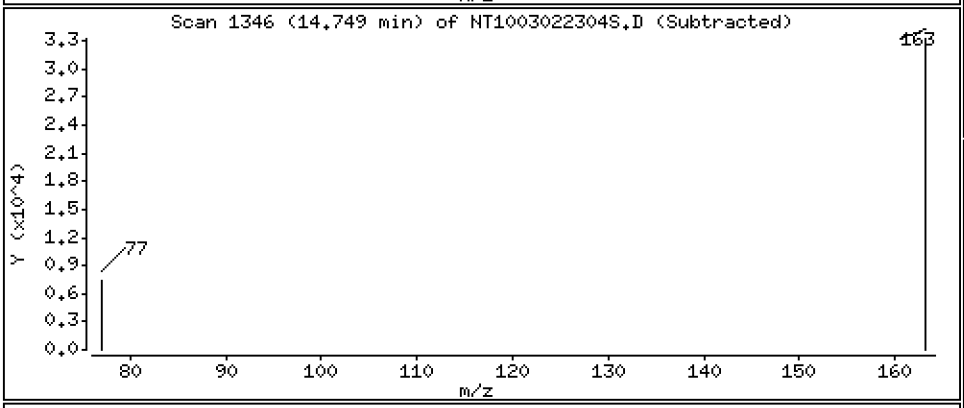
Column diameter: 0.25

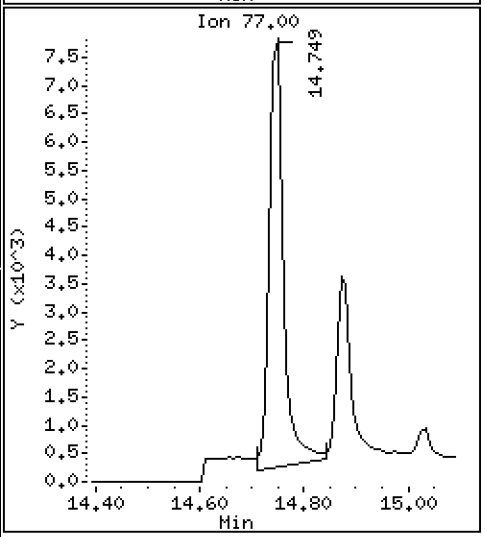
39 Dimethylphthalate

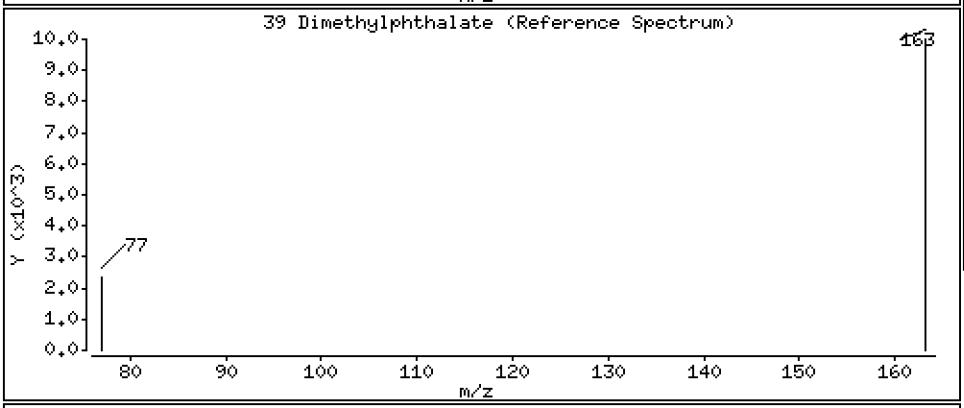
Concentration: 0.1960 ug/L

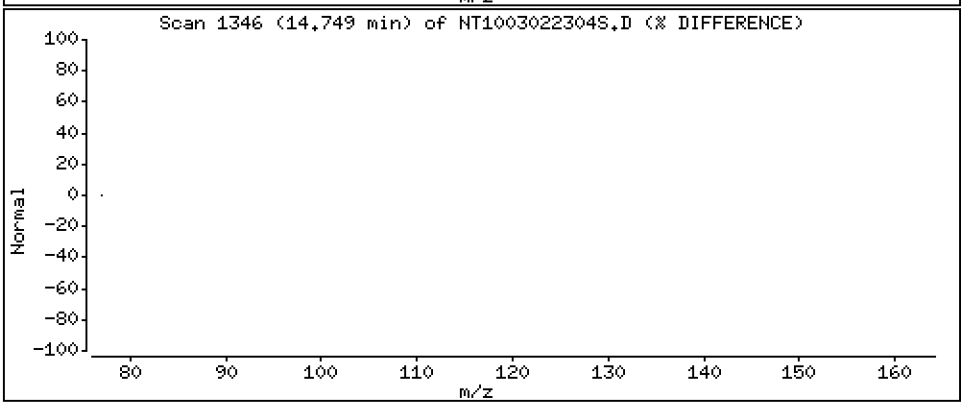












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Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

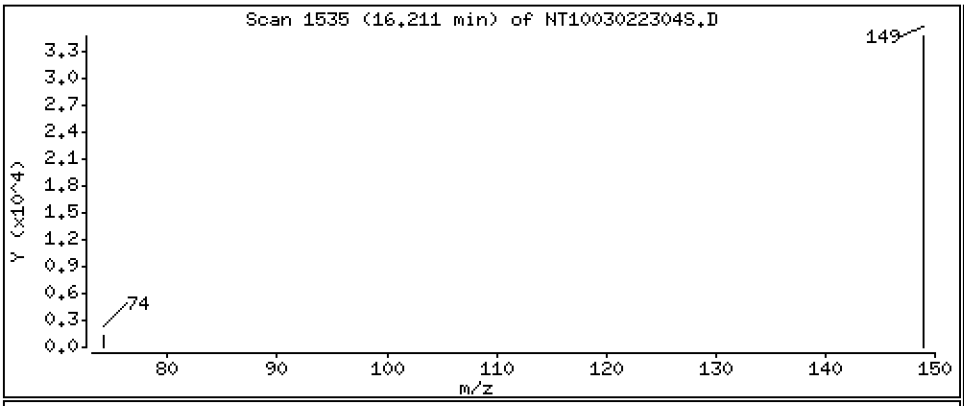
Operator: JGR

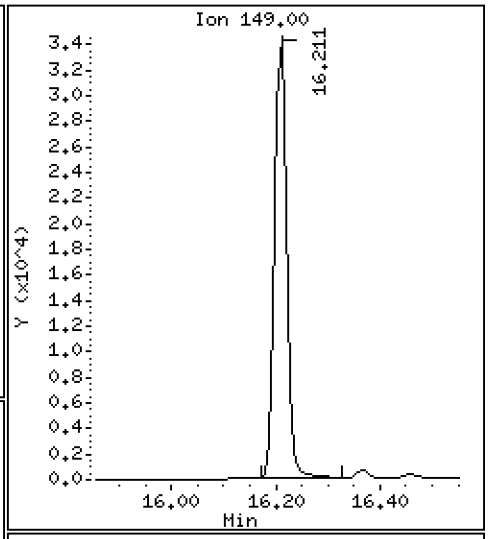
Column phase: ZB-5msi

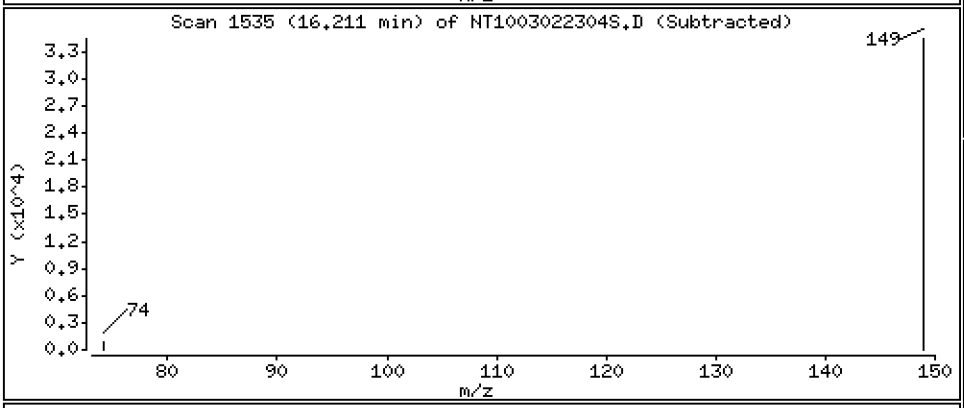
Column diameter: 0.25

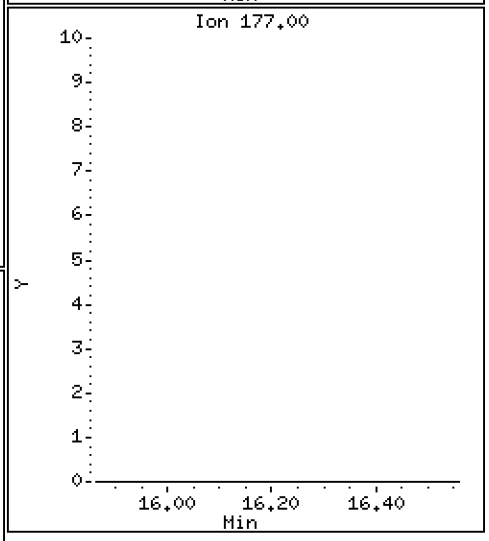
50 Diethylphthalate

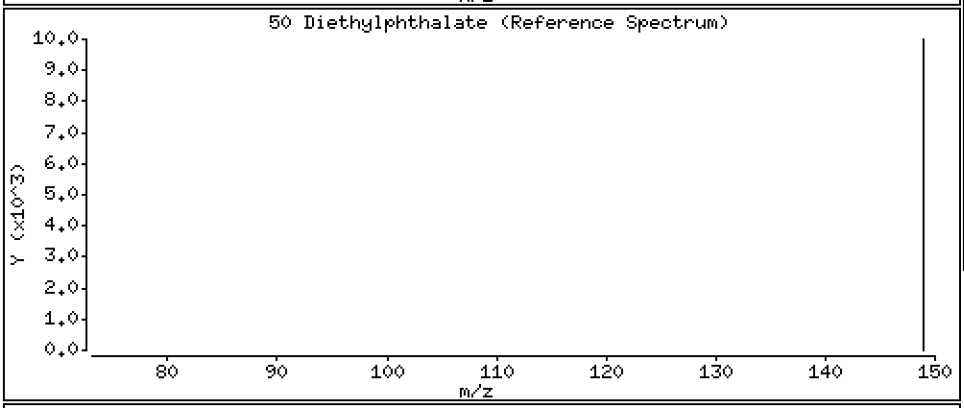
Concentration: 0.1894 ug/L

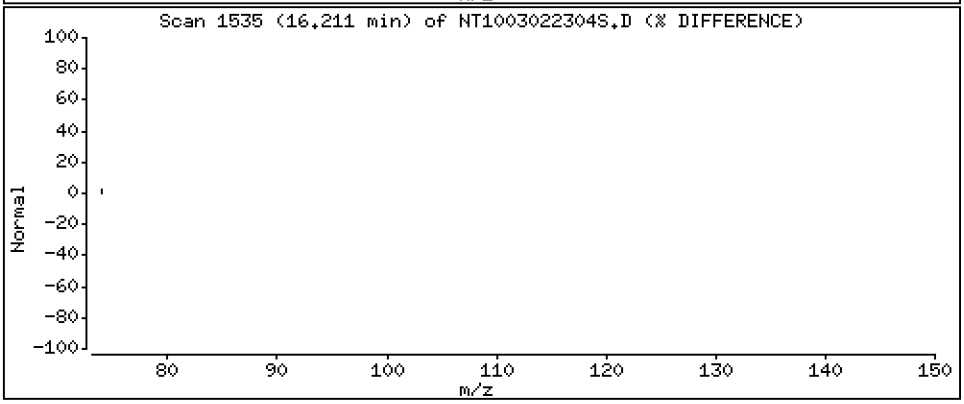












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Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

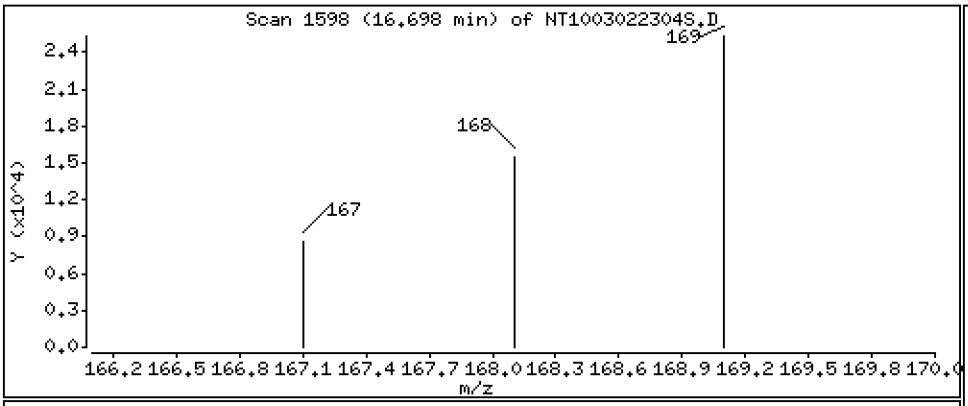
Operator: JGR

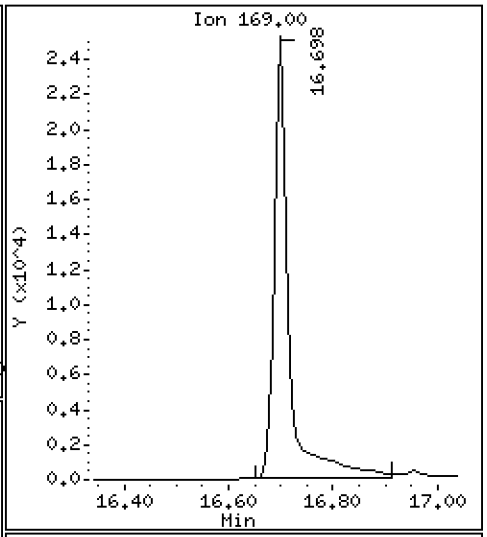
Column phase: ZB-5msi

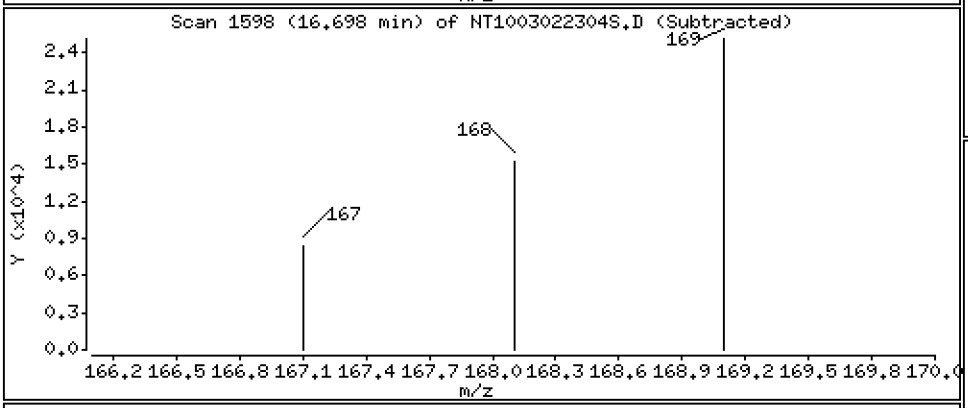
Column diameter: 0.25

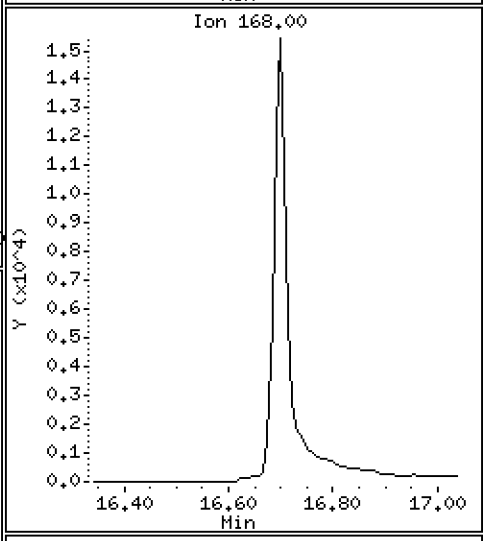
54 N-Nitrosodiphenylamine

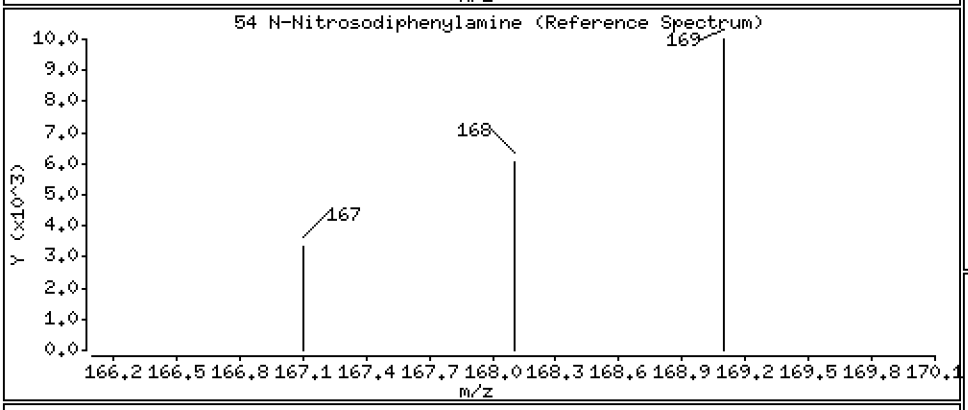
Concentration: 0.1900 ug/L

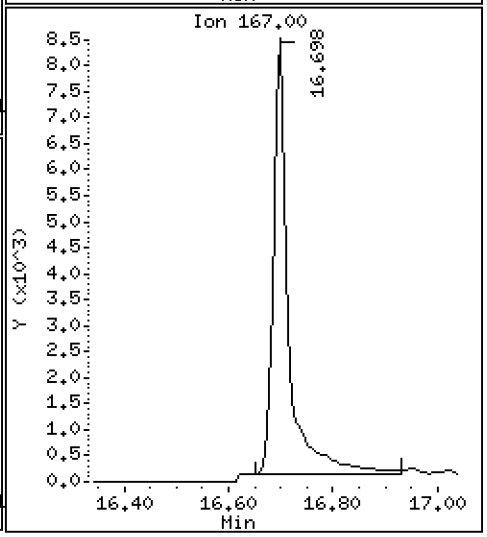


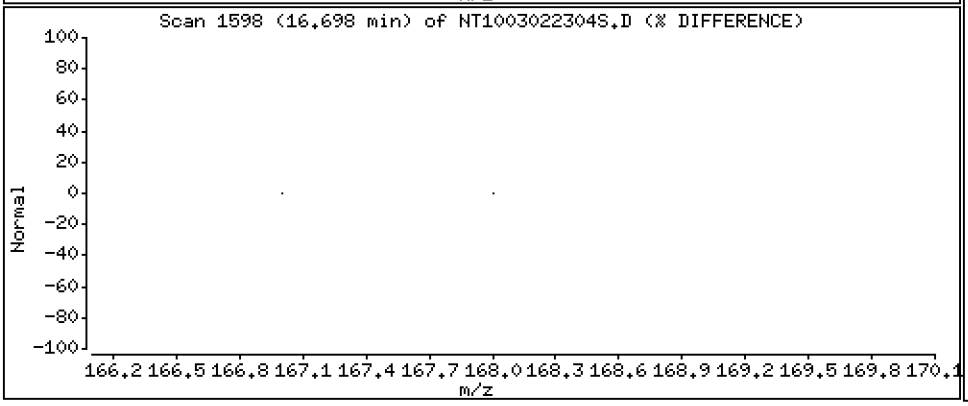












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D

Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

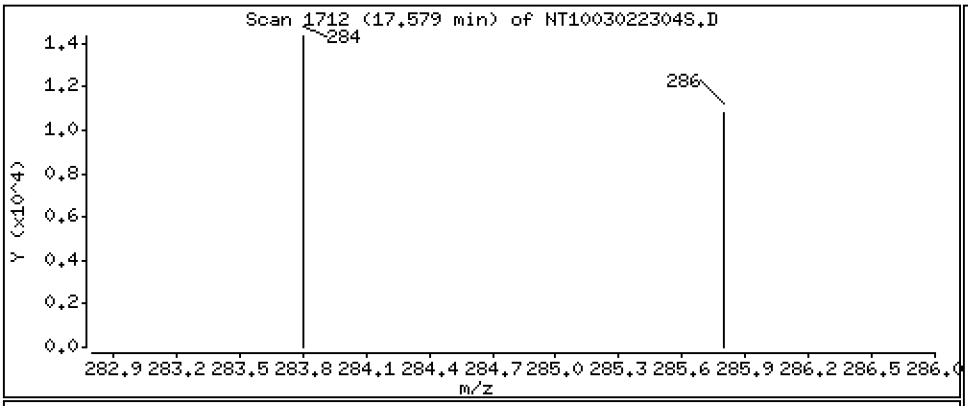
Operator: JGR

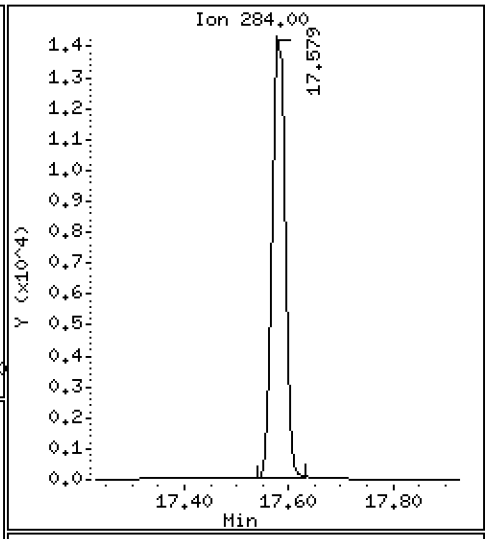
Column phase: ZB-5msi

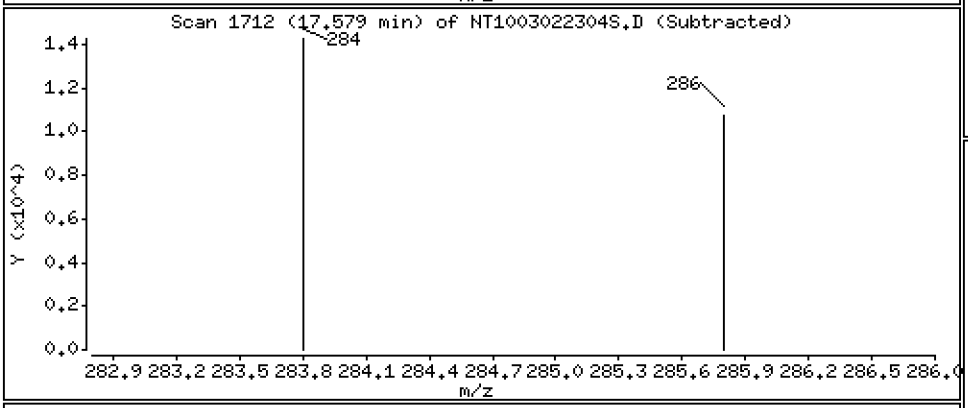
Column diameter: 0.25

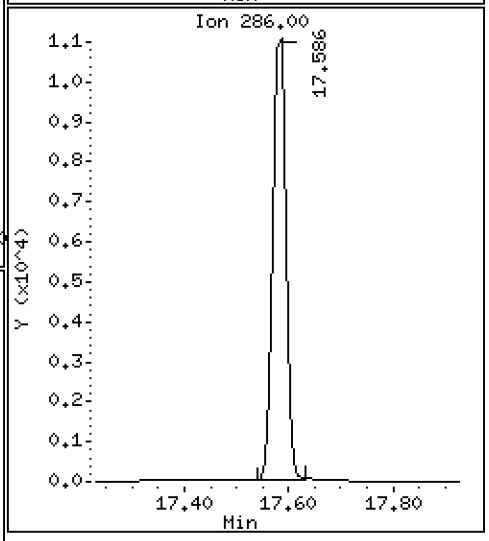
57 Hexachlorobenzene

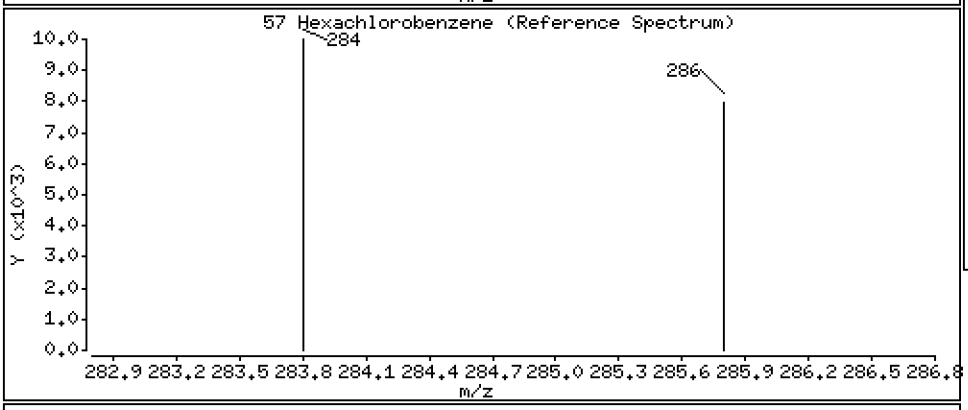
Concentration: 0.1915 ug/L

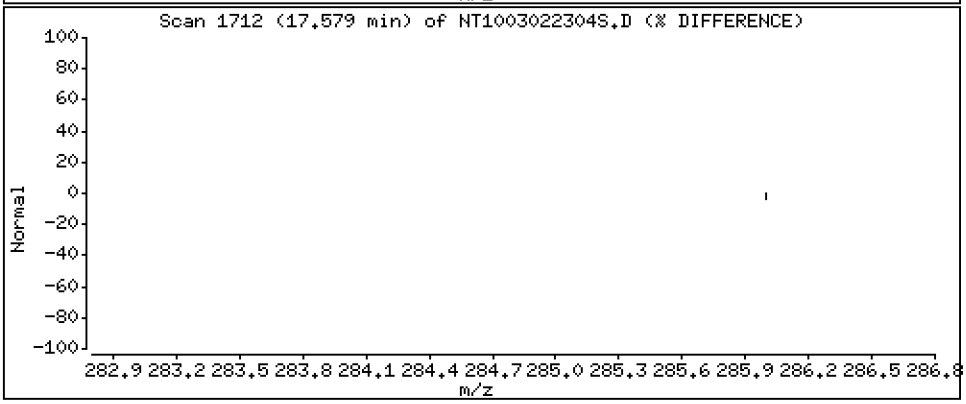












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D

Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

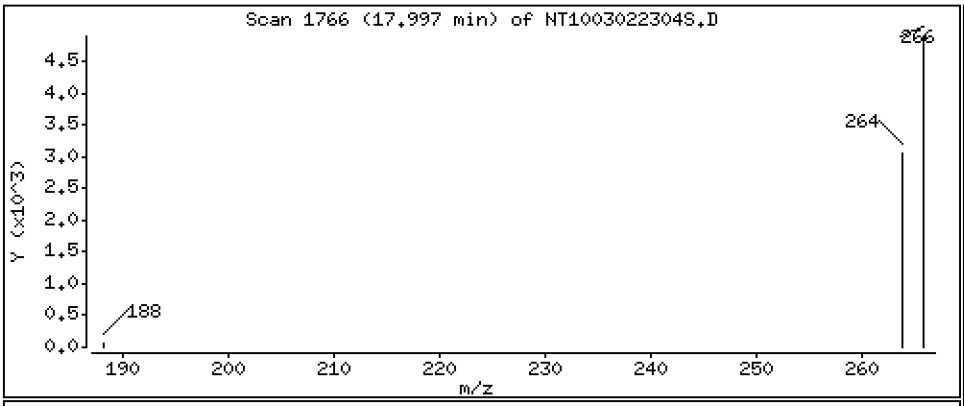
Operator: JGR

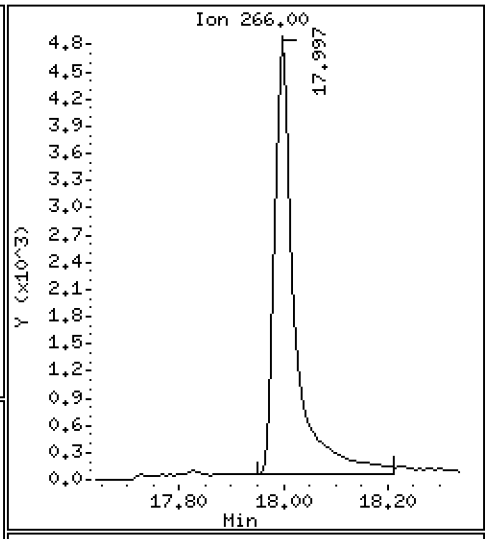
Column phase: ZB-5msi

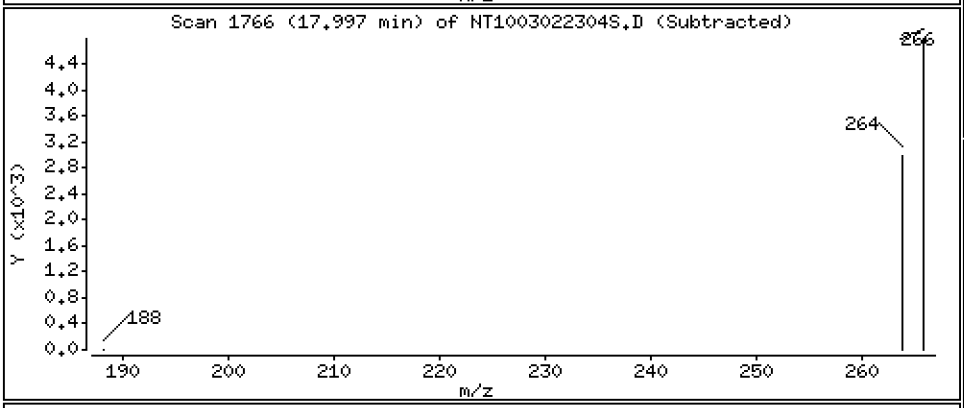
Column diameter: 0.25

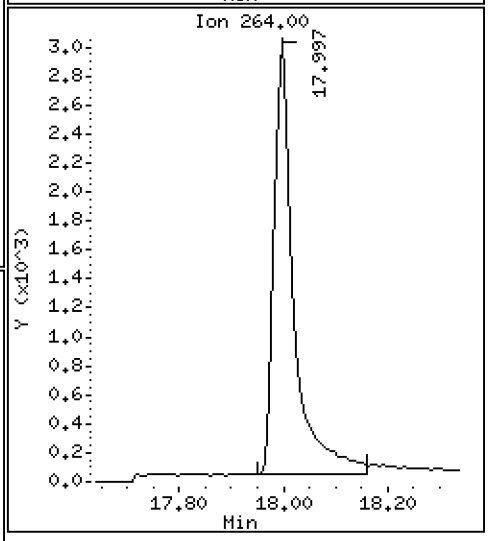
58 Pentachlorophenol

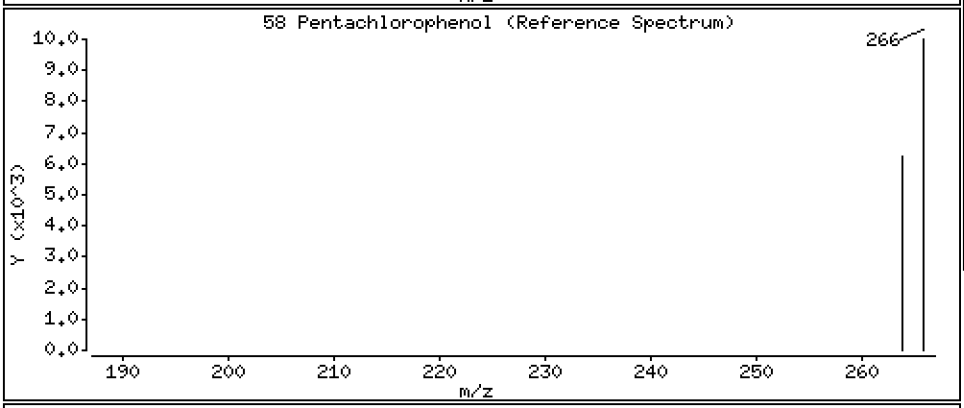
Concentration: 0.2411 ug/L

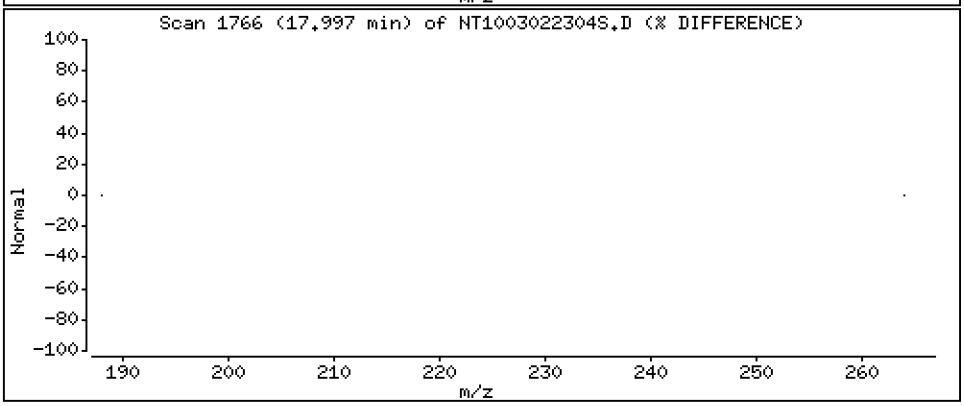












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D

Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

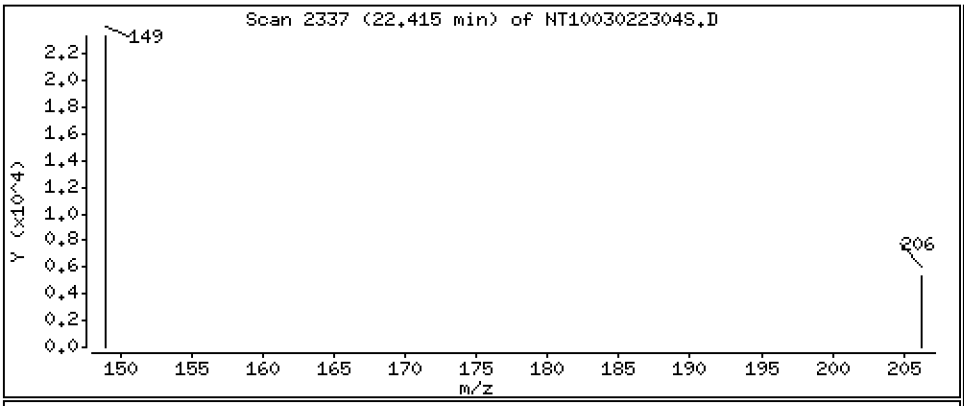
Operator: JGR

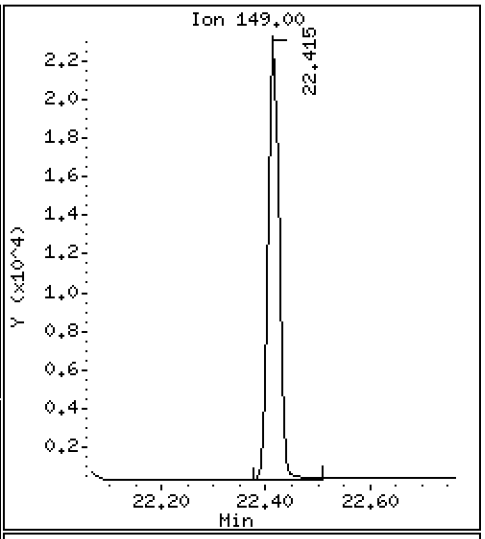
Column phase: ZB-5msi

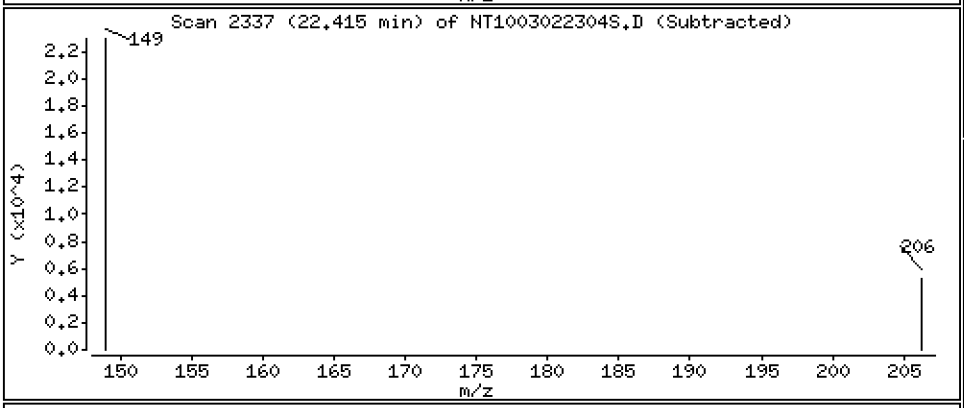
Column diameter: 0.25

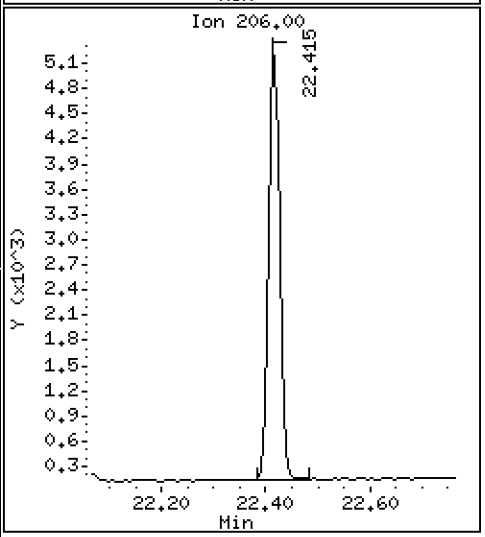
67 Butylbenzylphthalate

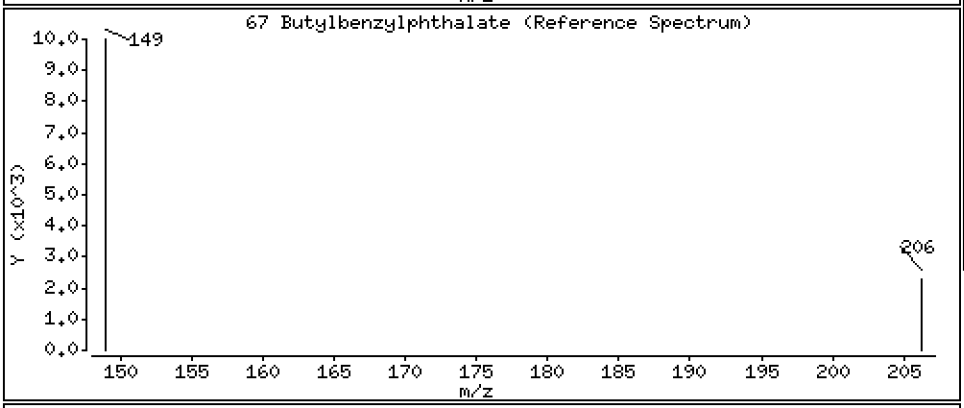
Concentration: 0.1126 ug/L

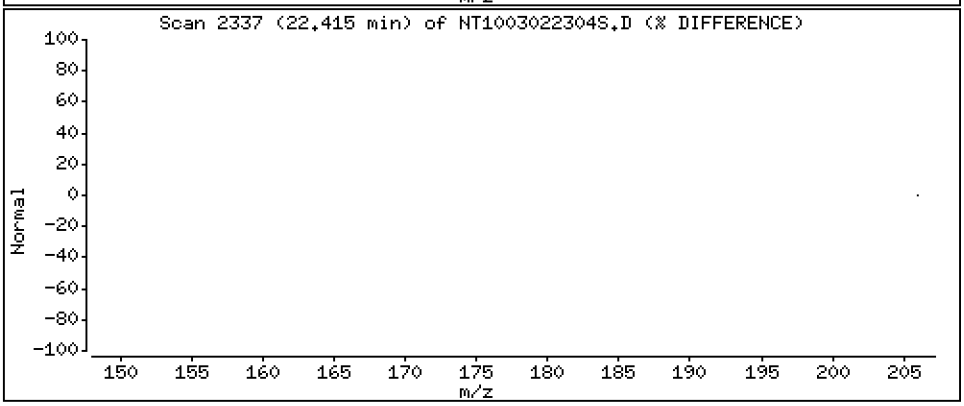












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D

Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

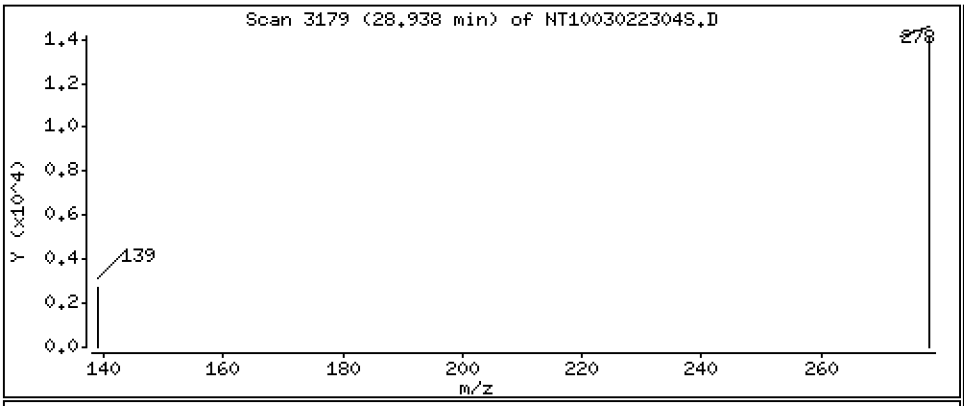
Operator: JGR

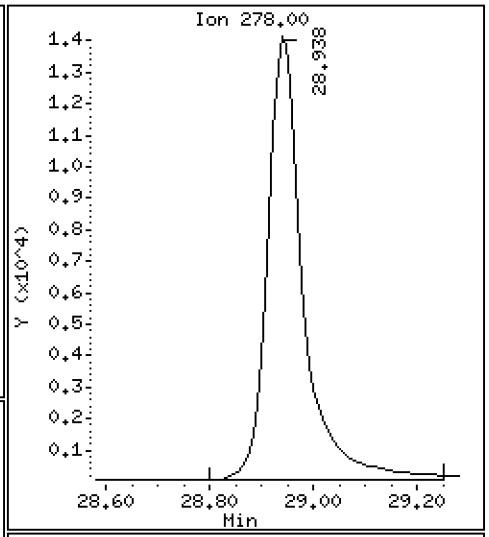
Column phase: ZB-5msi

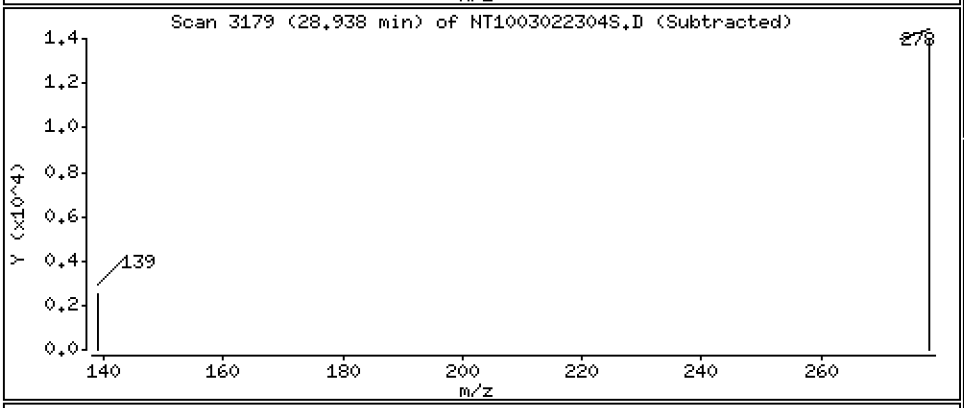
Column diameter: 0.25

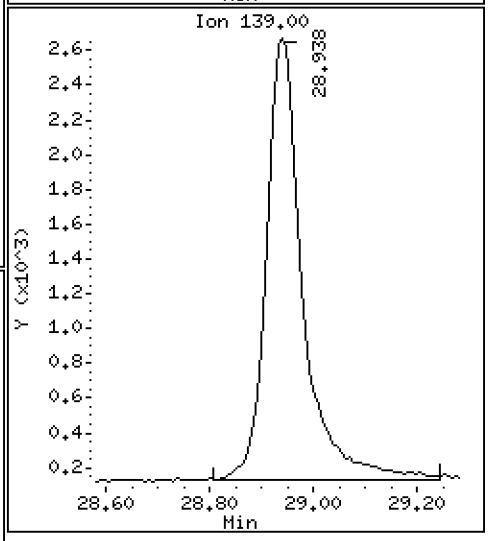
79 Dibenzo(a,h)anthracene

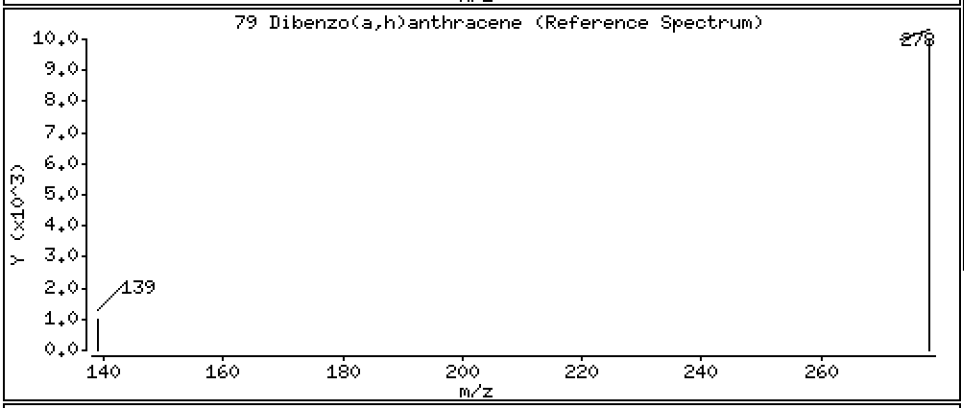
Concentration: 0.1592 ug/L

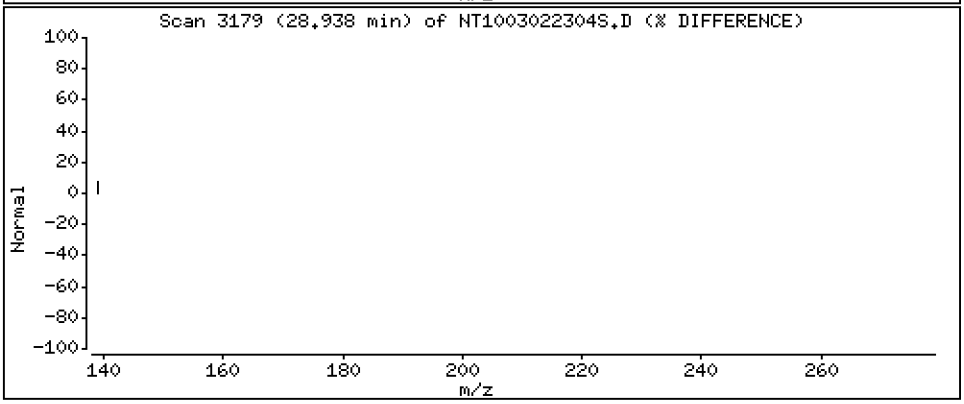












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D

Date : 02-MAR-2023 16:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

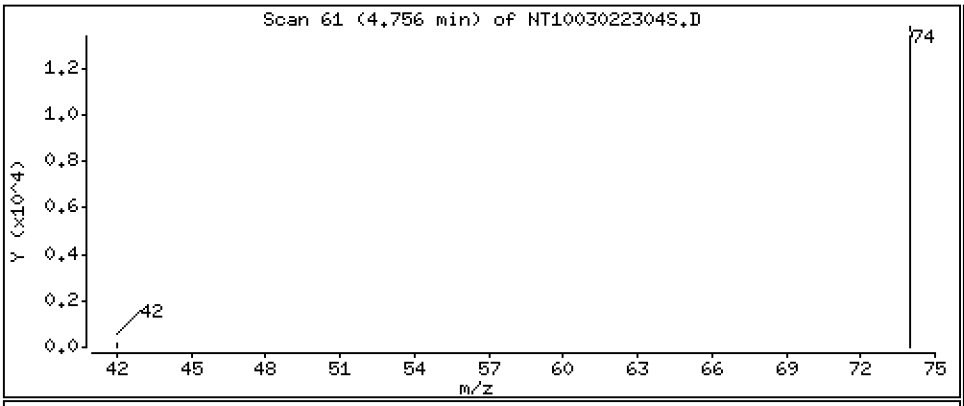
Operator: JGR

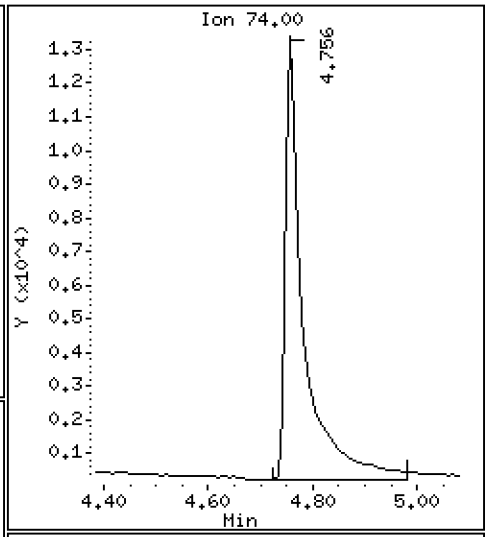
Column phase: ZB-5msi

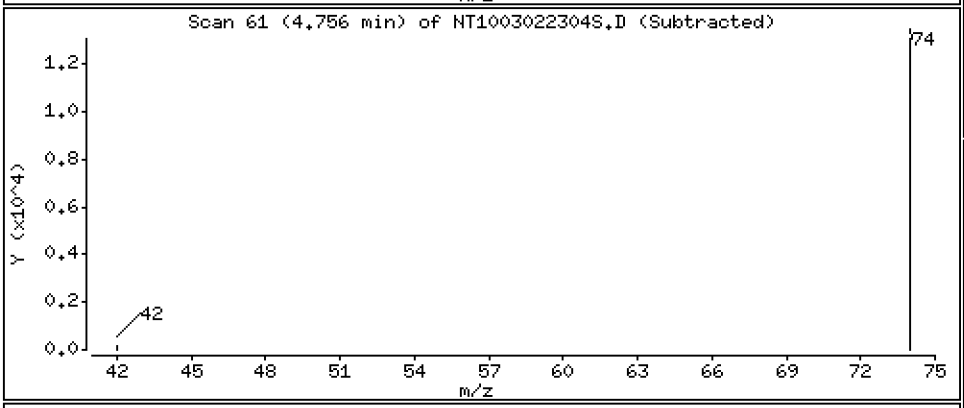
Column diameter: 0.25

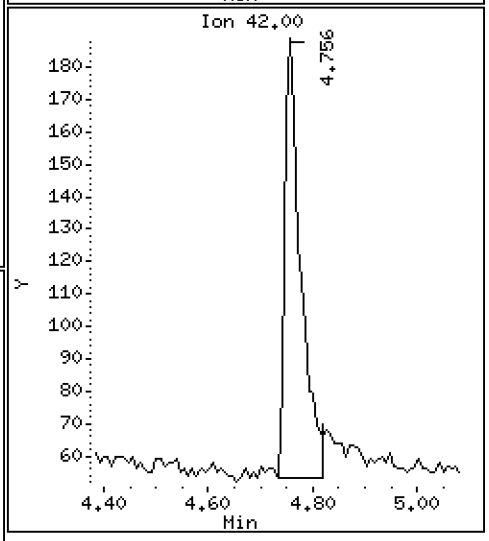
90 N-Nitrosodimethylamine

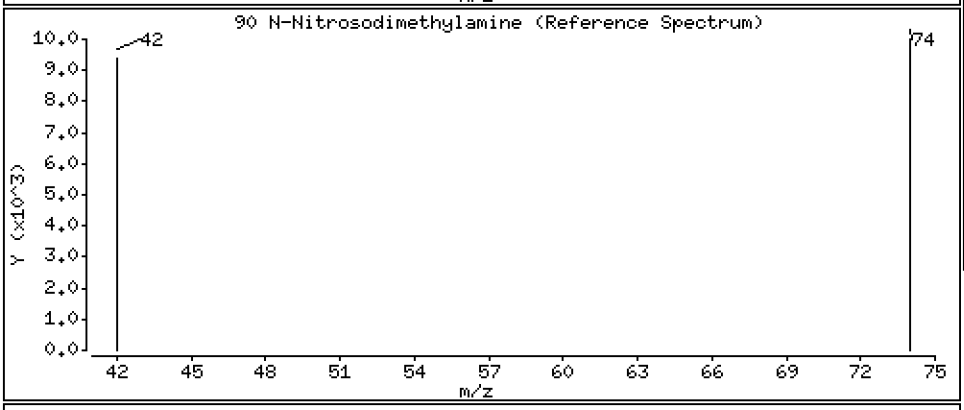
Concentration: 0.4218 ug/L

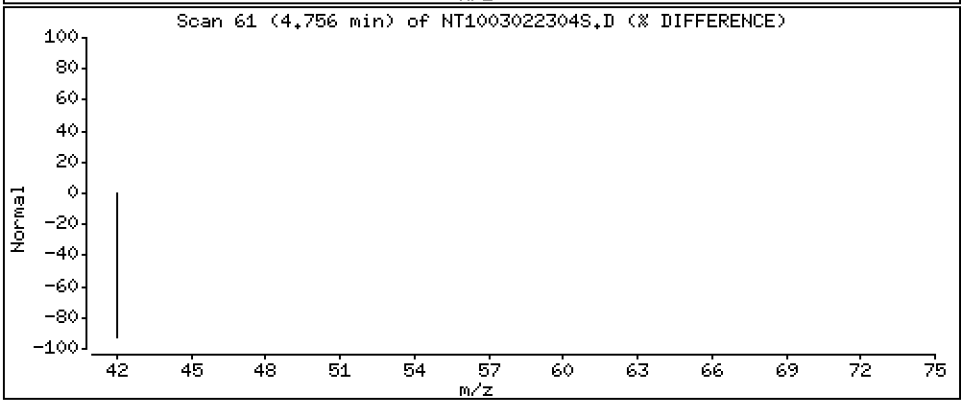












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022304S.D
Lab Smp Id: SEQ-LCV200
Inj Date : 02-MAR-2023 16:17 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-LCV200
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:01 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$	1 2-Fluorophenol	112	6.917	6.902	(0.747)	37782	0.28489	0.2849(R)
	3 Phenol	94	8.532	8.517	(0.921)	29661	0.15155	0.1516
	7 1,3-Dichlorobenzene	146	9.151	9.143	(0.988)	35012	0.20337	0.2034
*	8 1,4-Dichlorobenzene-d4	152	9.259	9.251	(1.000)	464527	4.00000	
	9 1,4-Dichlorobenzene	146	9.290	9.282	(1.003)	33436	0.19976	0.1998
	11 Benzyl alcohol	79	9.484	9.476	(1.024)	15113	0.13918	0.1392
	12 1,2-Dichlorobenzene	146	9.570	9.562	(1.034)	32614	0.20272	0.2027
	13 2-Methylphenol	108	9.671	9.655	(1.044)	18381	0.15615	0.1561
	15 4-Methylphenol	108	9.958	9.942	(1.075)	17186	0.14036	0.1404
	16 N-Nitroso-di-n-propylamine	70	9.981	9.981	(1.078)	18106	0.20774	0.2077
	22 2,4-Dimethylphenol	107	11.006	10.997	(0.938)	46903	0.32731	0.3273
	24 Benzoic acid	105	11.057	11.074	(0.943)	20985	0.26701	0.2670
	26 1,2,4-Trichlorobenzene	180	11.608	11.600	(0.989)	23866	0.19648	0.1965
*	27 Naphthalene-d8	136	11.731	11.723	(1.000)	1687615	4.00000	
	30 Hexachlorobutadiene	225	12.001	11.994	(1.023)	16292	0.18901	0.1890
	39 Dimethylphthalate	163	14.749	14.741	(0.963)	56888	0.19600	0.1960
*	42 Acenaphthene-d10	162	15.321	15.314	(1.000)	914095	4.00000	
	50 Diethylphthalate	149	16.211	16.203	(1.058)	51849	0.18943	0.1894
	54 N-Nitrosodiphenylamine	169	16.698	16.690	(0.907)	49282	0.19003	0.1900
	57 Hexachlorobenzene	284	17.578	17.578	(0.955)	23243	0.19151	0.1915

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	17.996	17.988	(0.978)	12831	0.24111	0.2411
*	59 Phenanthrene-d10	188	18.406	18.406	(1.000)	1602467	4.00000	
$	66 Terphenyl-d14	244	21.532	21.532	(0.919)	23197	0.17600	0.1760(R)
	67 Butylbenzylphthalate	149	22.415	22.414	(0.957)	30986	0.11263	0.1126
*	69 Chrysene-d12	240	23.421	23.421	(1.000)	1629844	4.00000	
*	77 Perylene-d12	264	26.115	26.115	(1.000)	1824689	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.937	28.929	(1.108)	67394	0.15916	0.1592
	90 N-Nitrosodimethylamine	74	4.755	4.732	(0.514)	33119	0.42181	0.4218

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003022304S.D
Lab Smp Id: SEQ-LCV200
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 02-MAR-2023
Calibration Time: 14:13
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	493417	246709	986834	464527	-5.86
27 Naphthalene-d8	1779056	889528	3558112	1687615	-5.14
42 Acenaphthene-d10	954569	477285	1909138	914095	-4.24
59 Phenanthrene-d10	1596290	798145	3192580	1602467	0.39
69 Chrysene-d12	1649110	824555	3298220	1629844	-1.17
77 Perylene-d12	1901958	950979	3803916	1824689	-4.06

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.26	0.09
27 Naphthalene-d8	11.72	11.22	12.22	11.73	0.07
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
77 Perylene-d12	26.12	25.62	26.62	26.12	0.00

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

REVIEW SUMMARY FOR FILE - NT1003022304S.D

Lab ID: SEQ-LCV200
nt10.i, 20230302.b\SIM.b\SIMABN2.m,   02-MAR-2023 16:17

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1003022303S.D

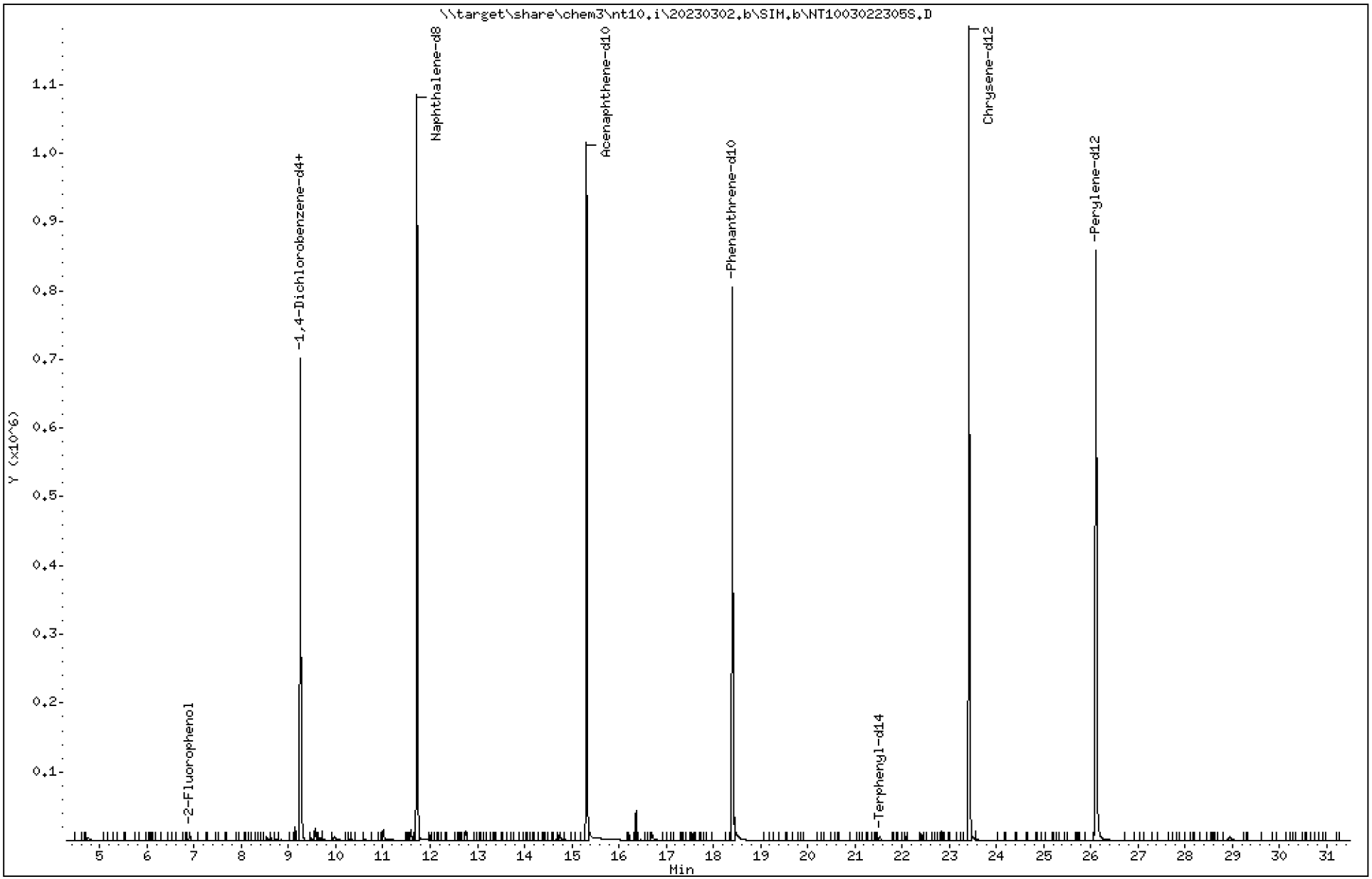
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223058.D
Date : 02-MAR-2023 16:56
Client ID:
Sample Info: SEQ-LCV100
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

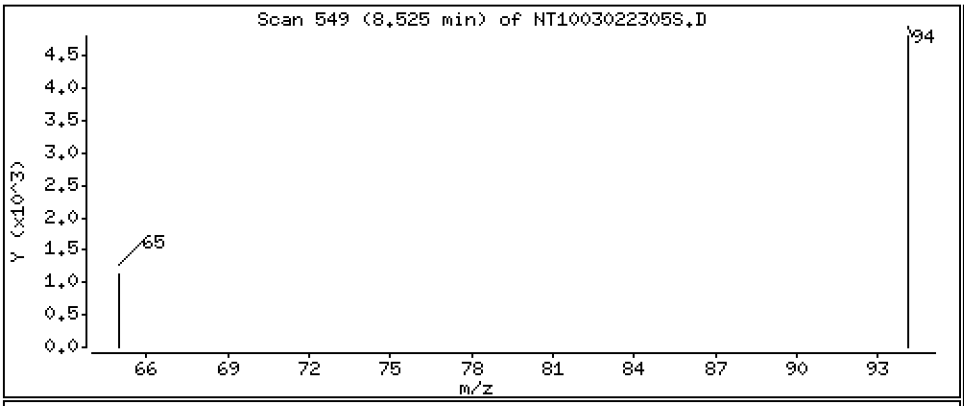
Operator: JGR

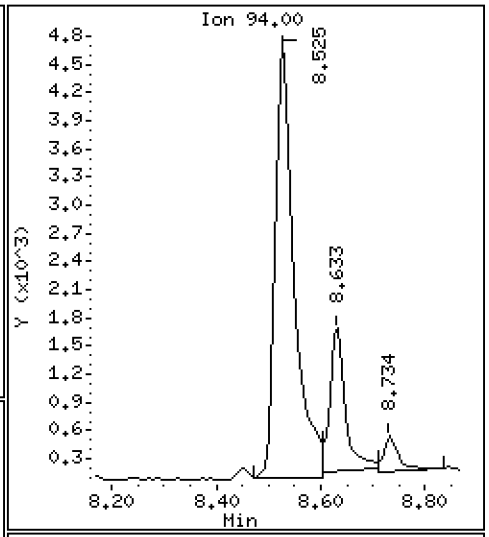
Column phase: ZB-5msi

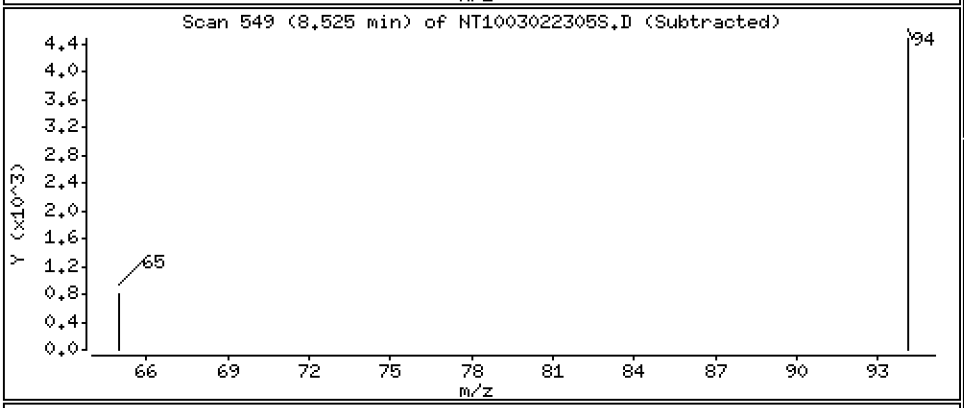
Column diameter: 0.25

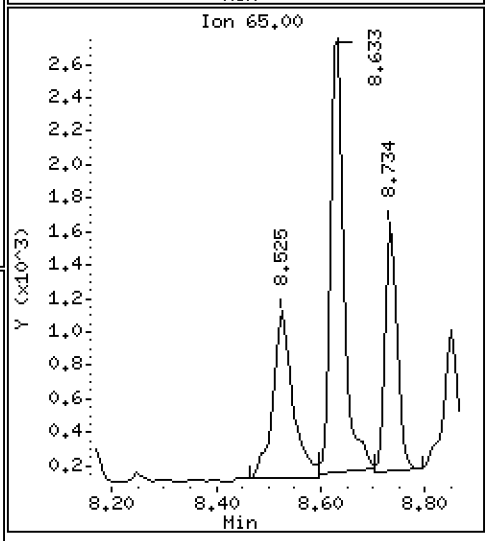
3 Phenol

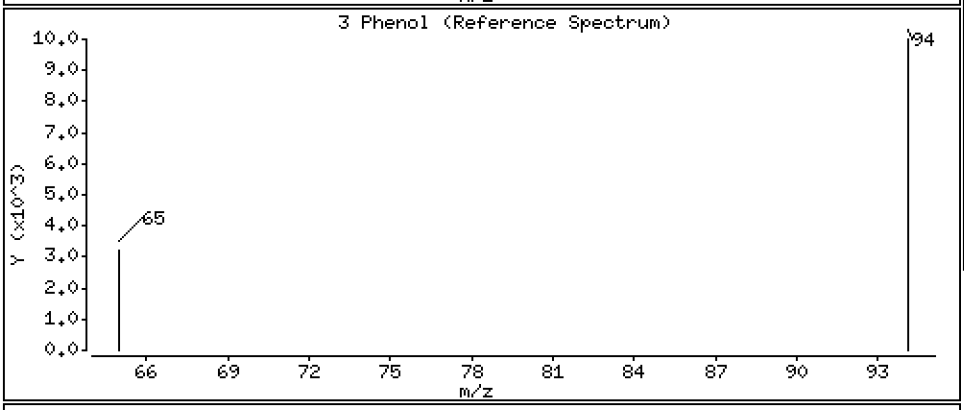
Concentration: 0.06121 ug/L

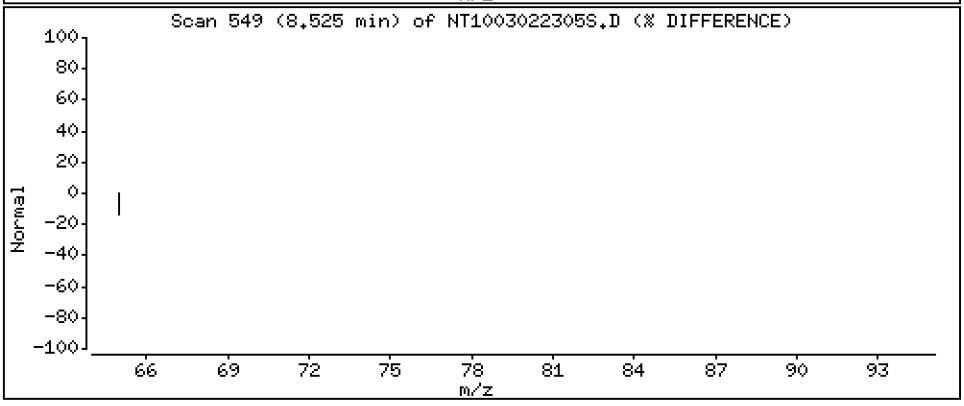












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

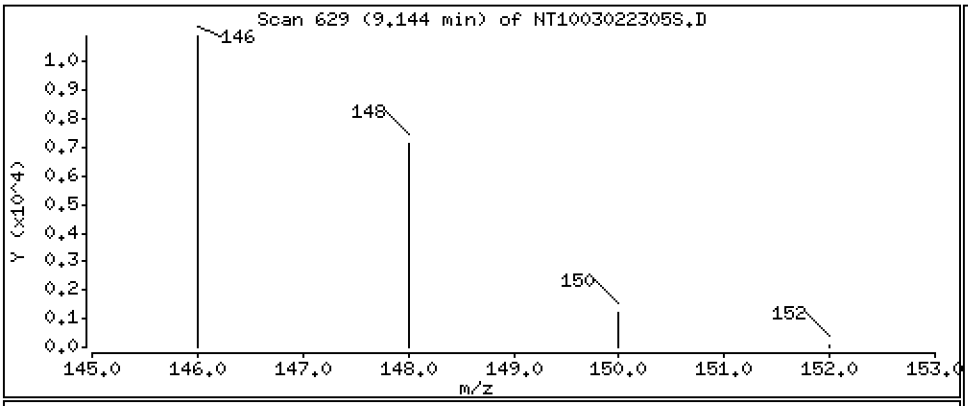
Operator: JGR

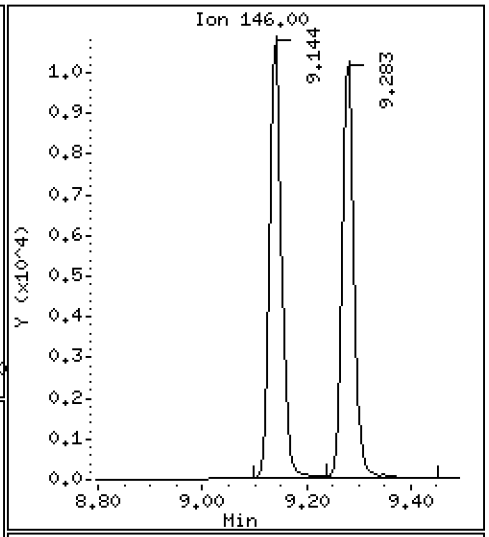
Column phase: ZB-5msi

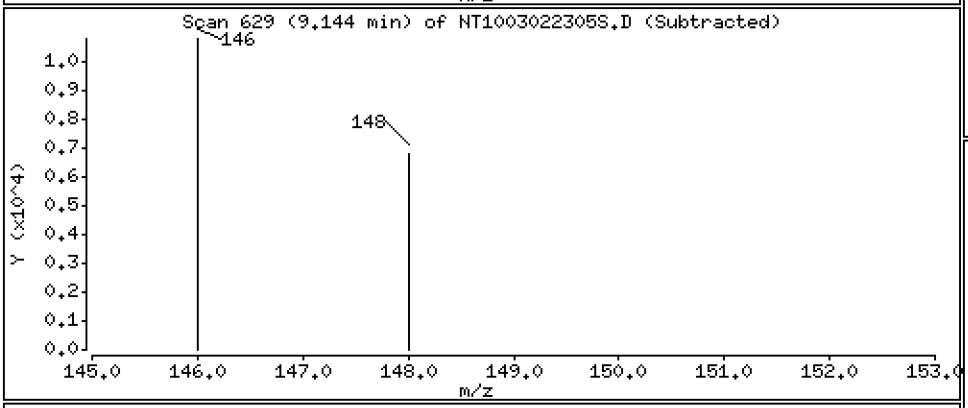
Column diameter: 0.25

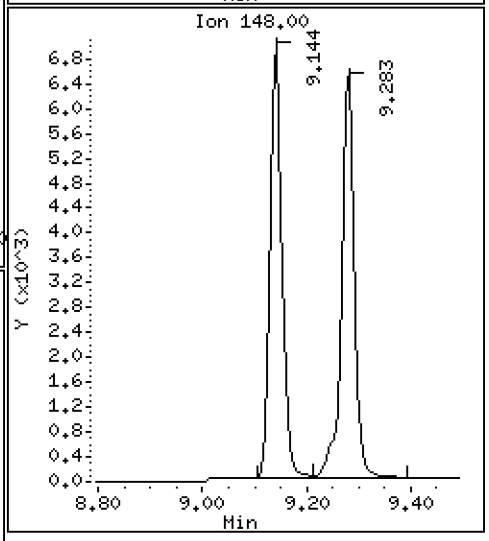
7 1,3-Dichlorobenzene

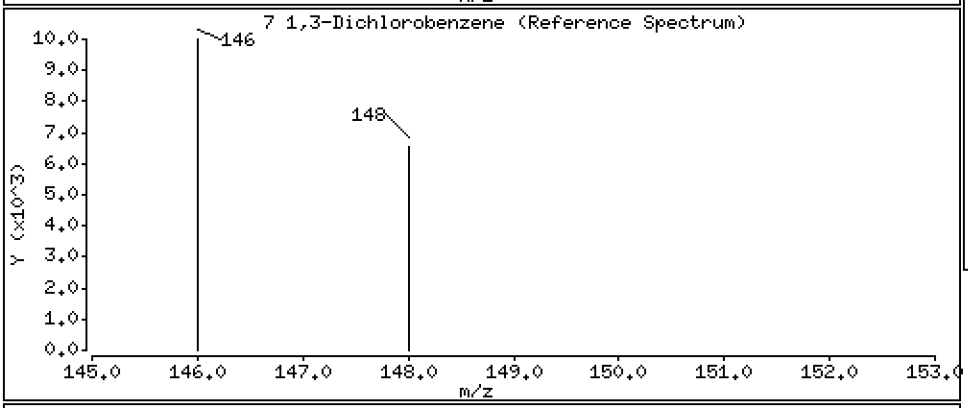
Concentration: 0.1034 ug/L

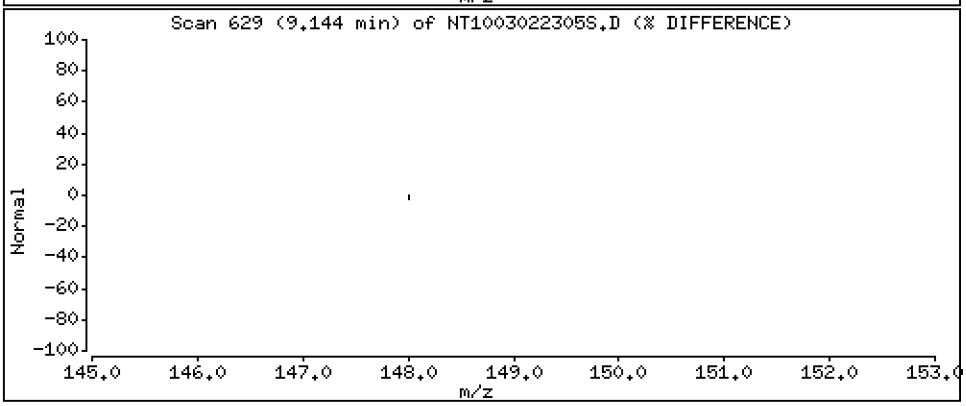












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

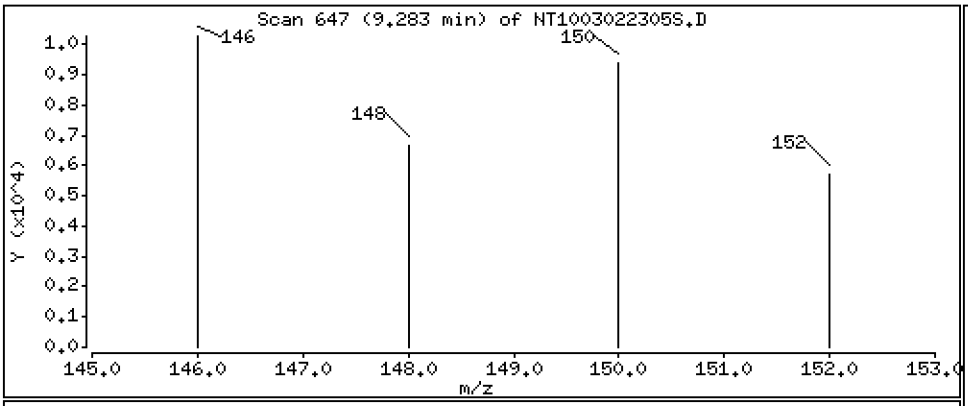
Operator: JGR

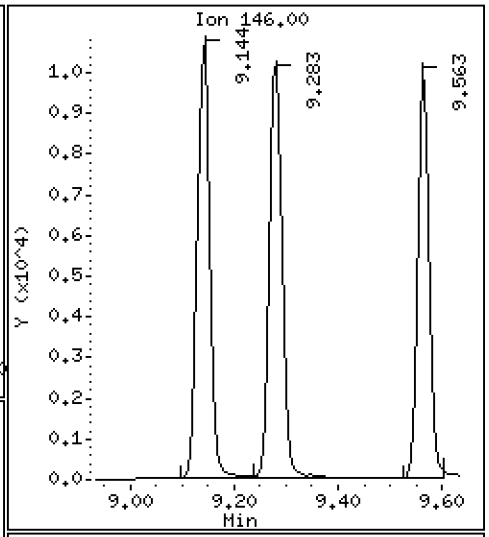
Column phase: ZB-5msi

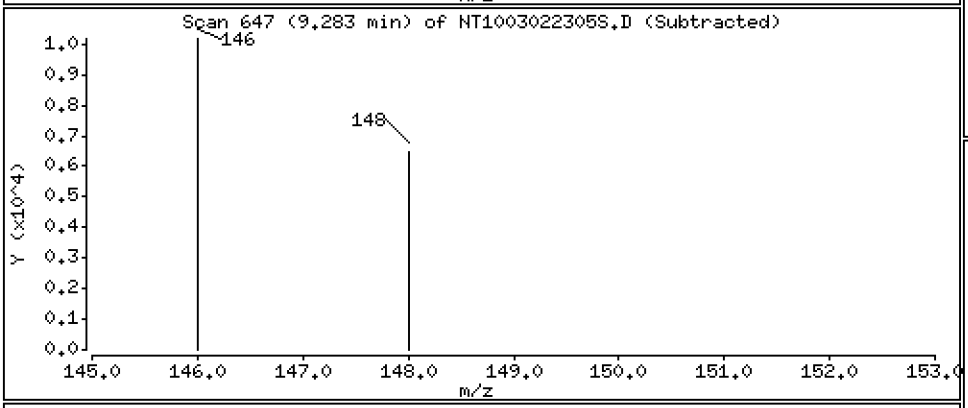
Column diameter: 0.25

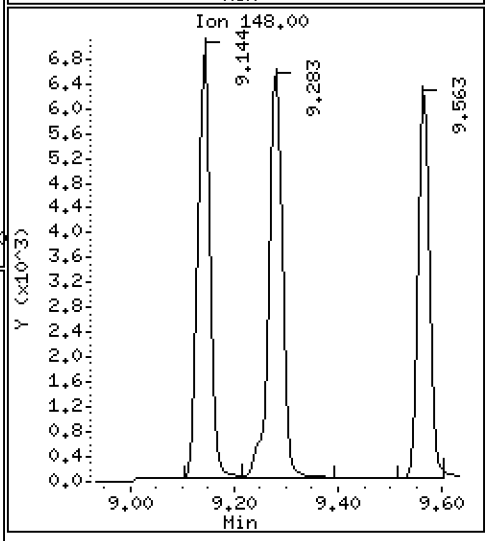
9 1,4-Dichlorobenzene

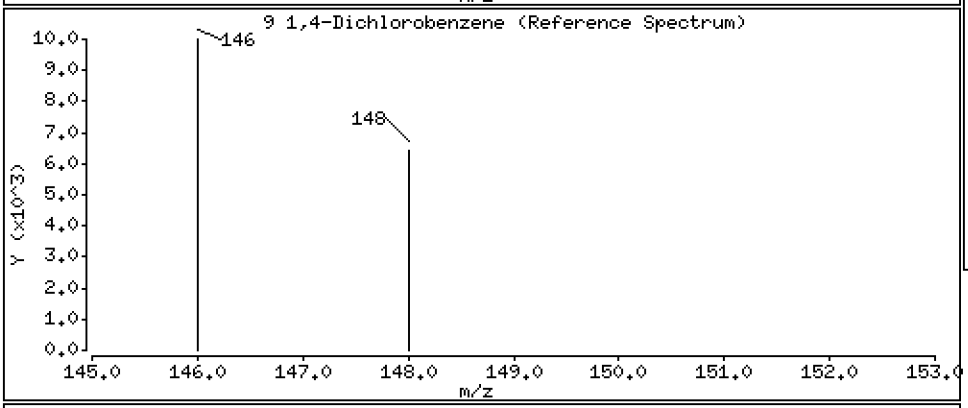
Concentration: 0.1031 ug/L

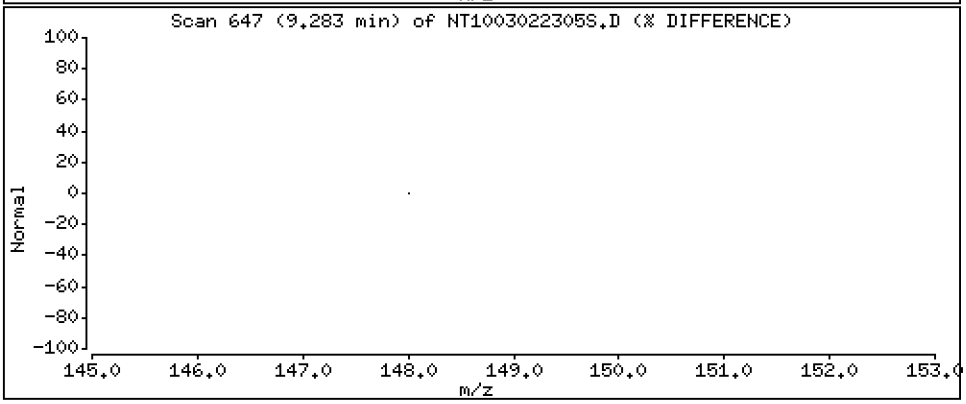












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

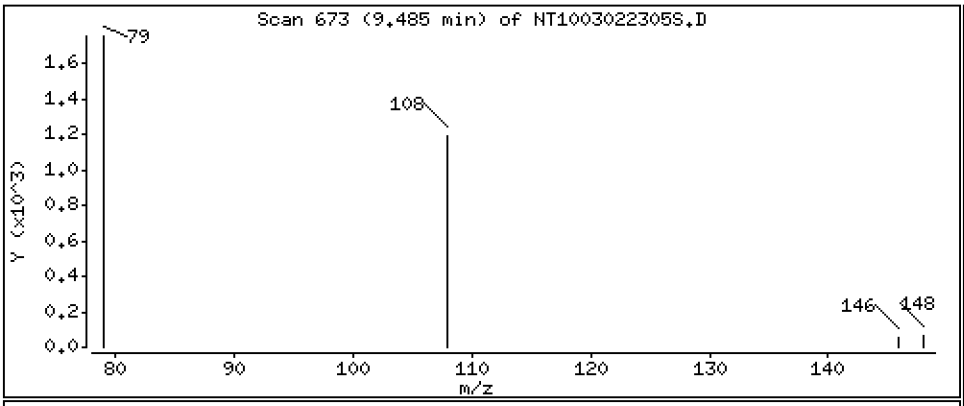
Operator: JGR

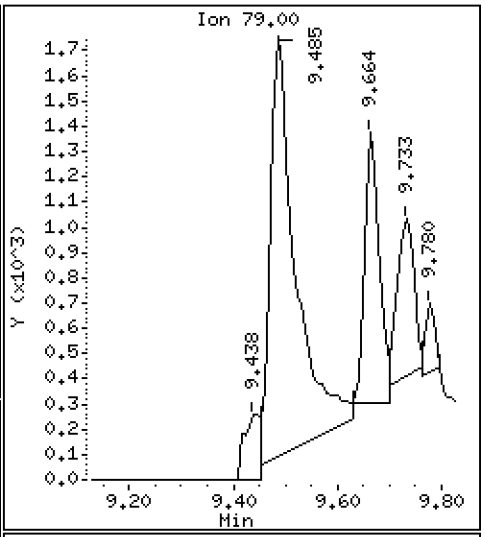
Column phase: ZB-5msi

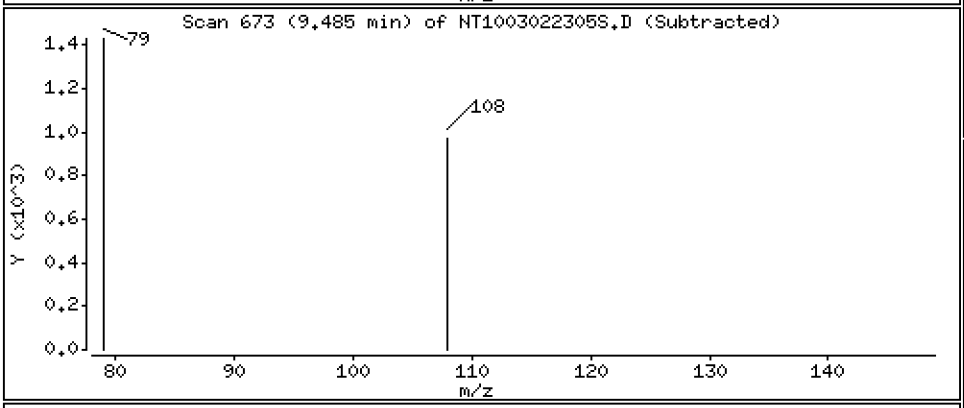
Column diameter: 0.25

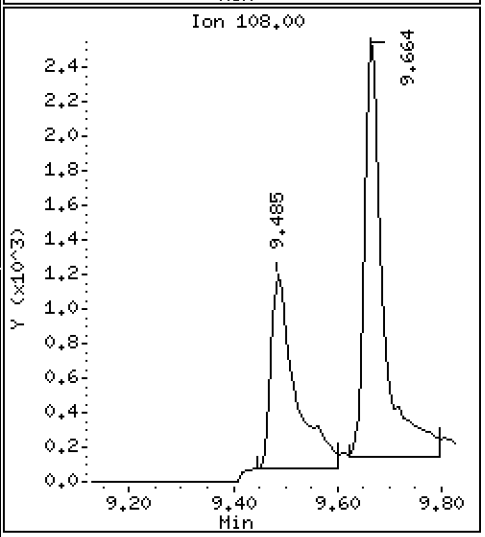
11 Benzyl alcohol

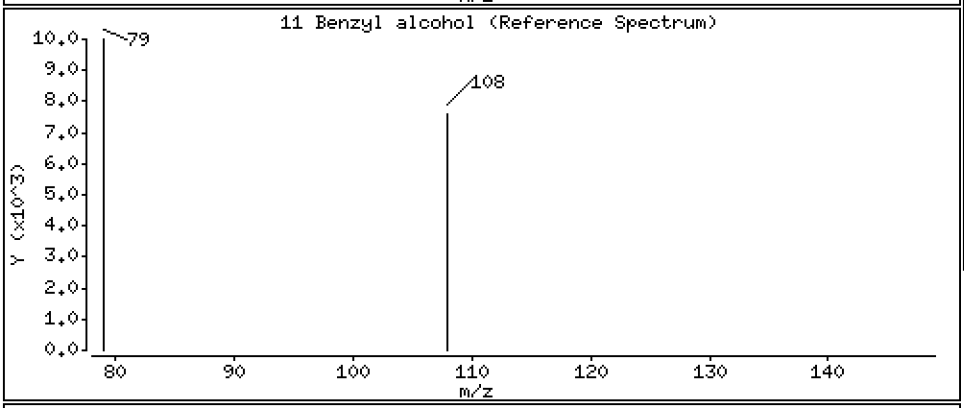
Concentration: 0.05313 ug/L

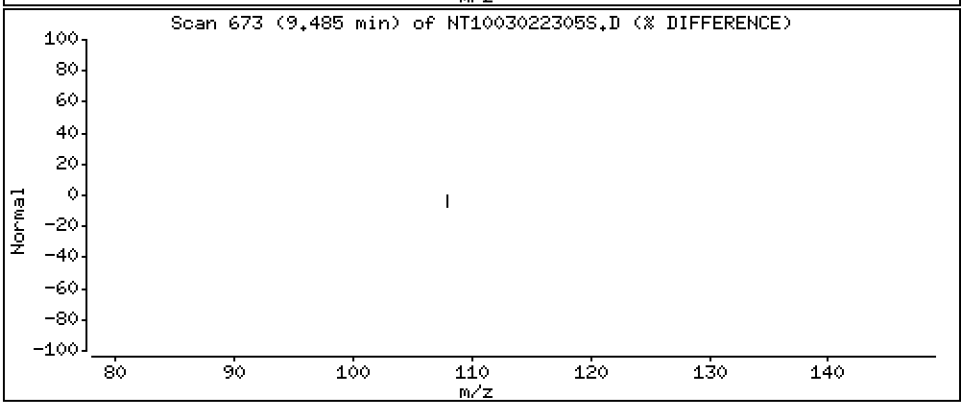












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

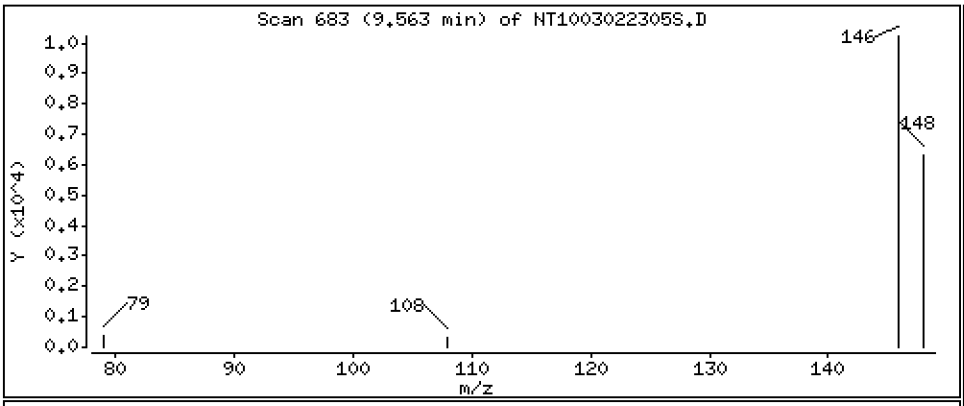
Operator: JGR

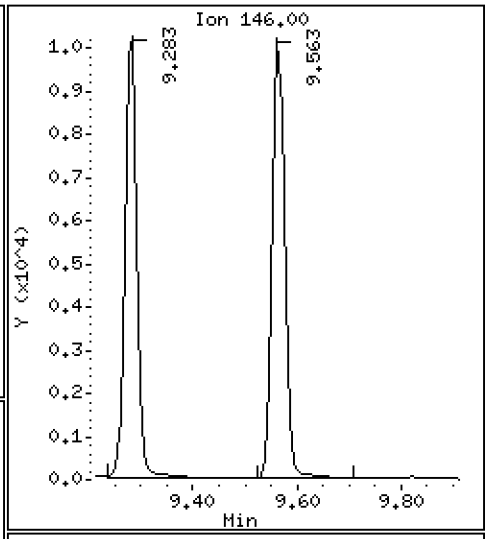
Column phase: ZB-5msi

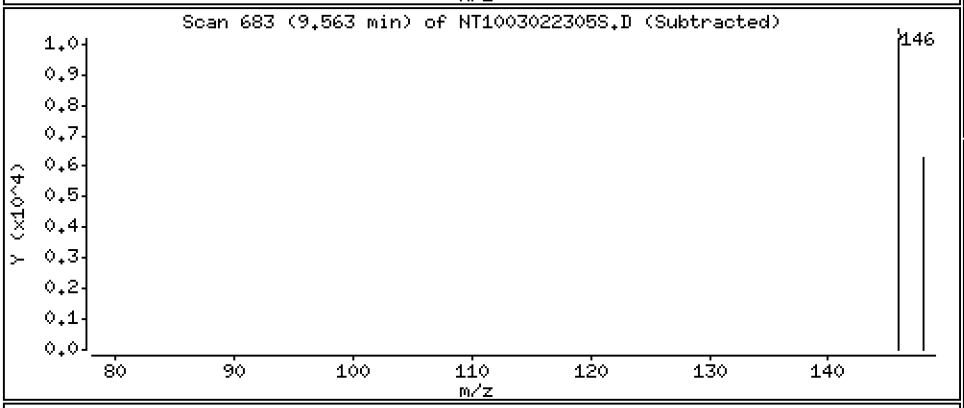
Column diameter: 0.25

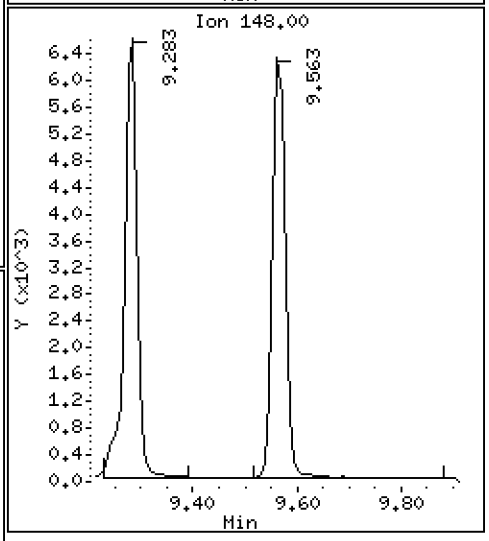
12 1,2-Dichlorobenzene

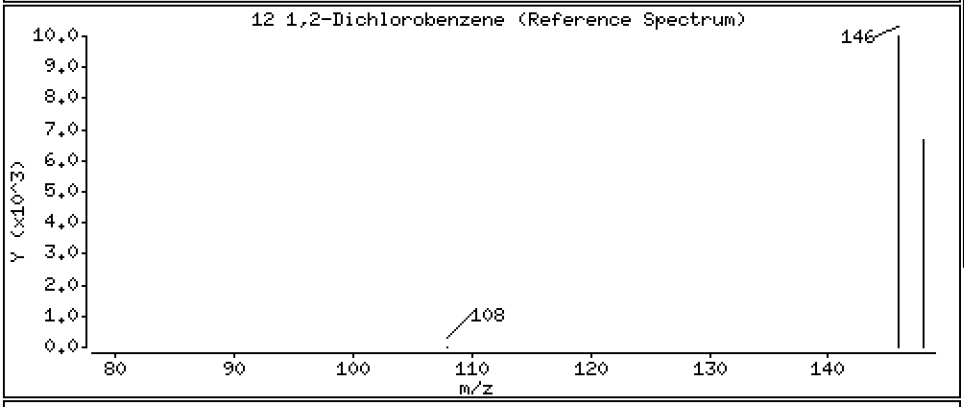
Concentration: 0.1026 ug/L

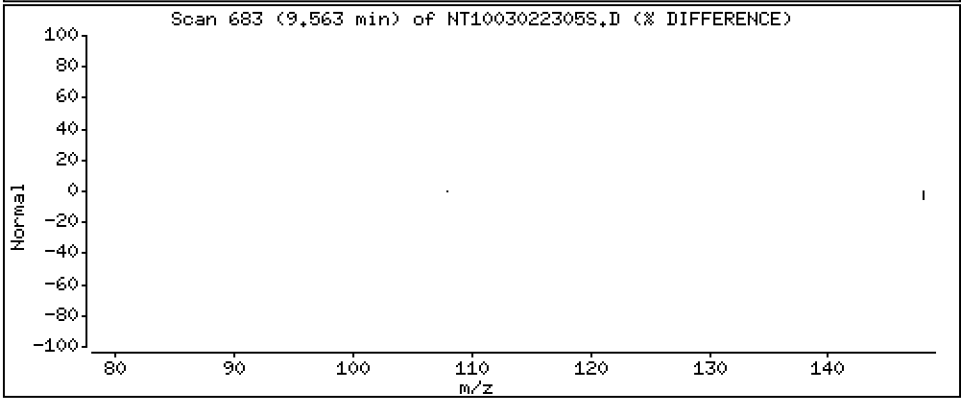












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

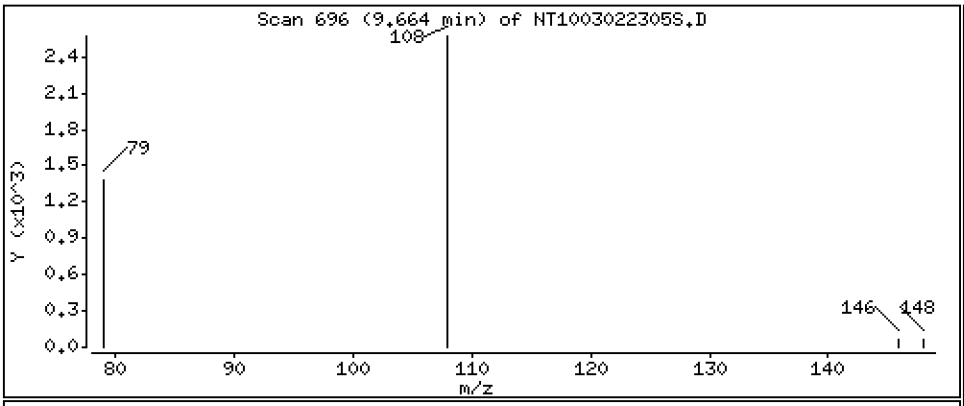
Operator: JGR

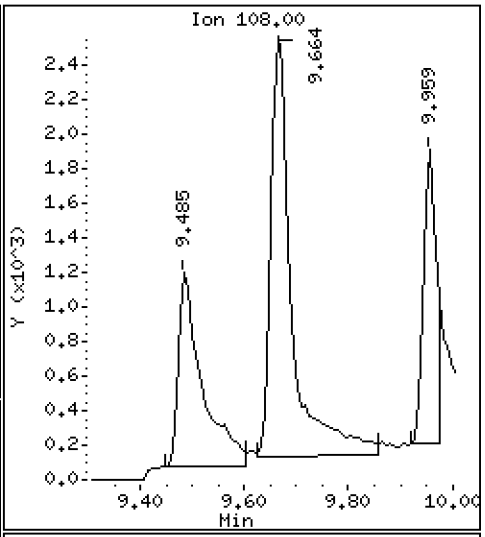
Column phase: ZB-5msi

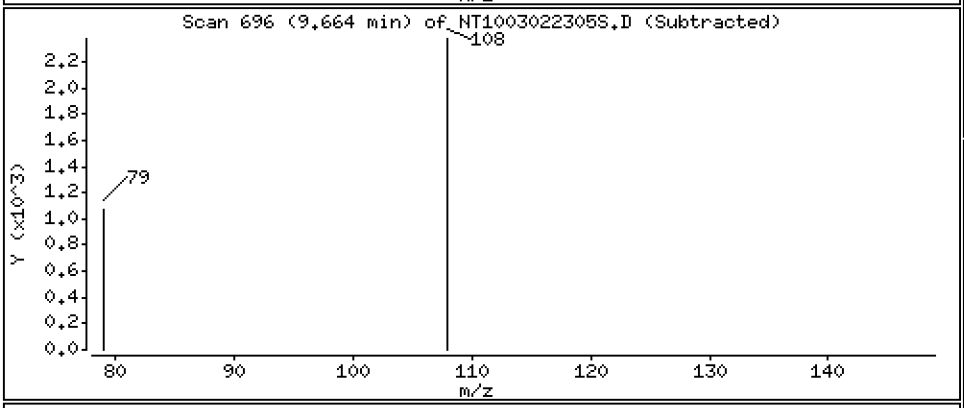
Column diameter: 0.25

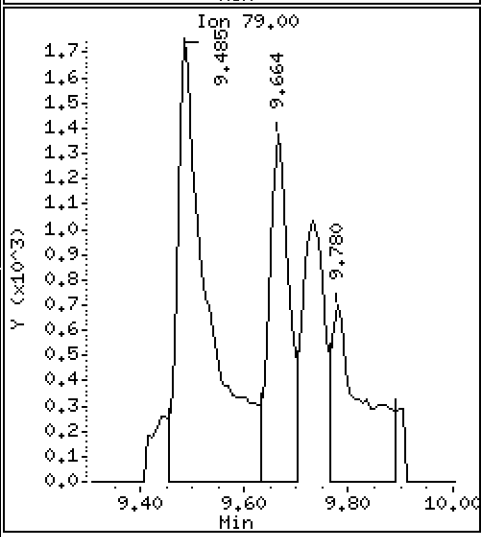
13 2-Methylphenol

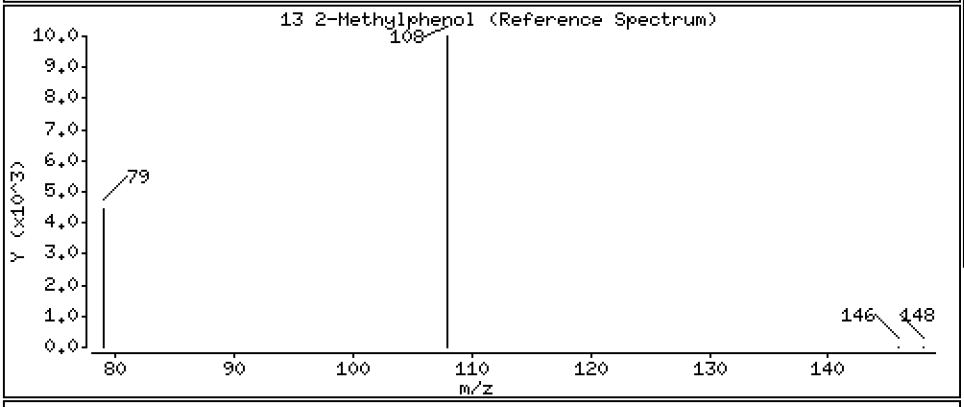
Concentration: 0.05859 ug/L

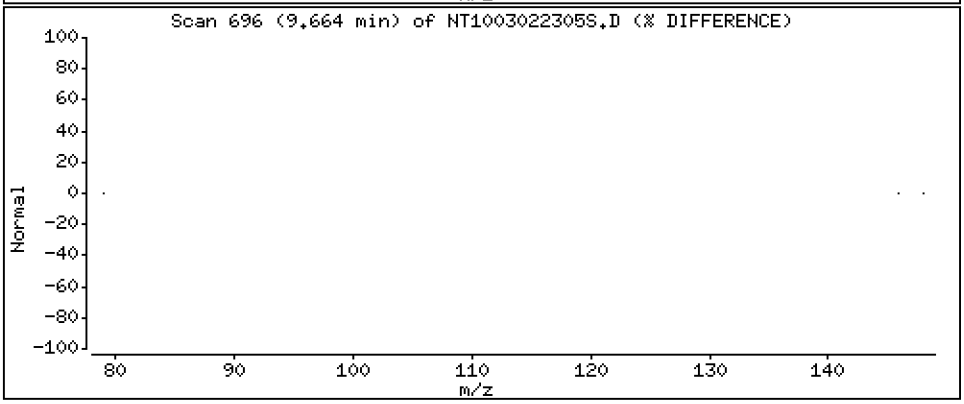












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

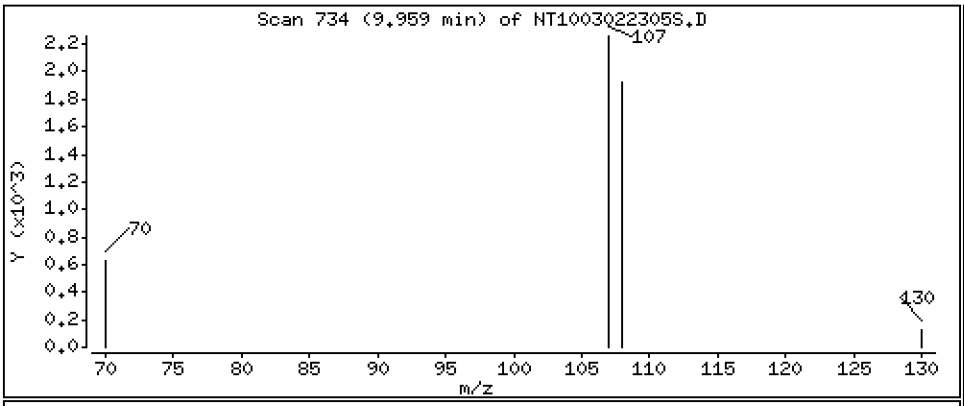
Operator: JGR

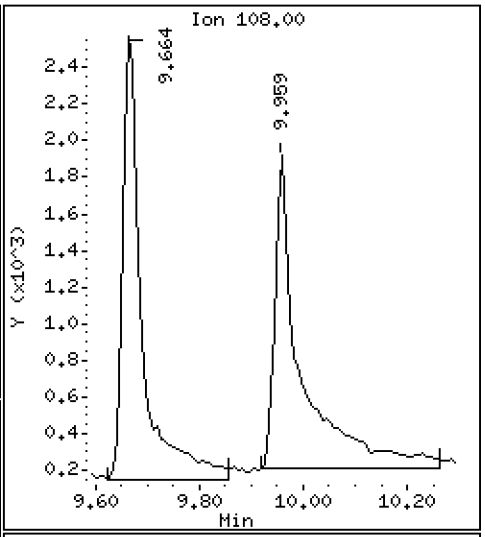
Column phase: ZB-5msi

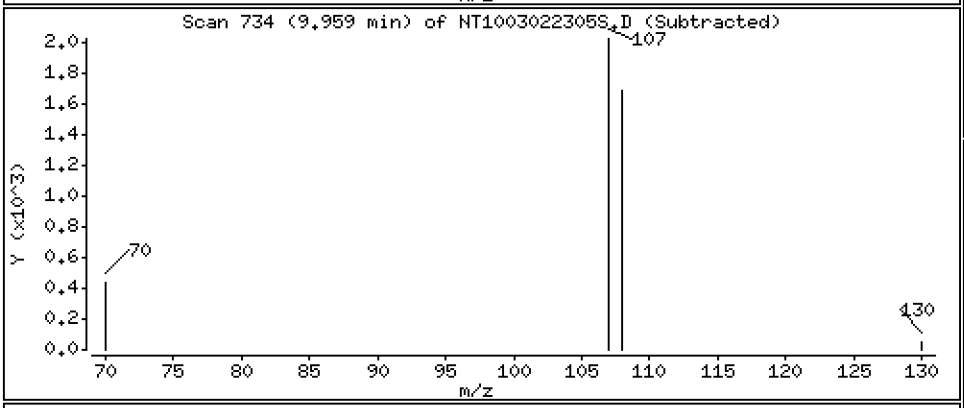
Column diameter: 0.25

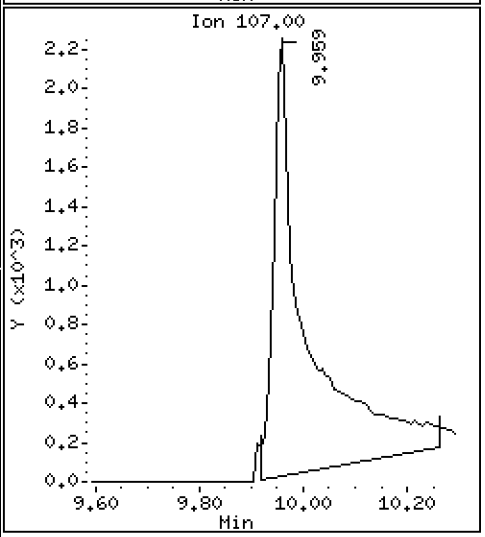
15 4-Methylphenol

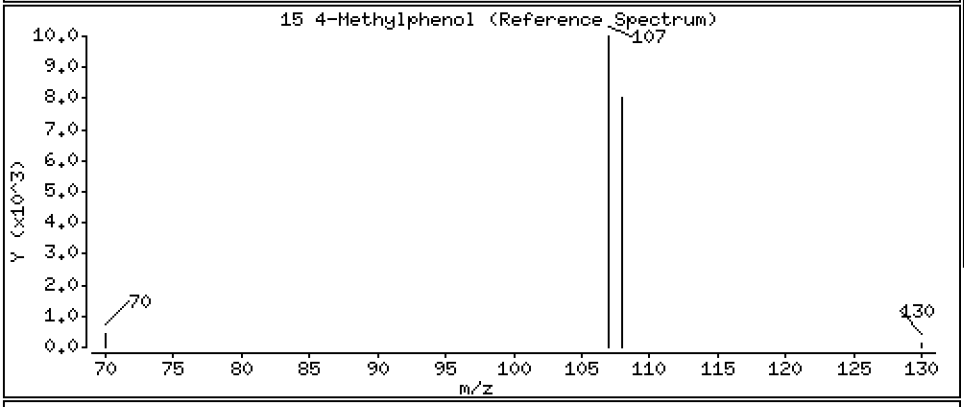
Concentration: 0.05077 ug/L

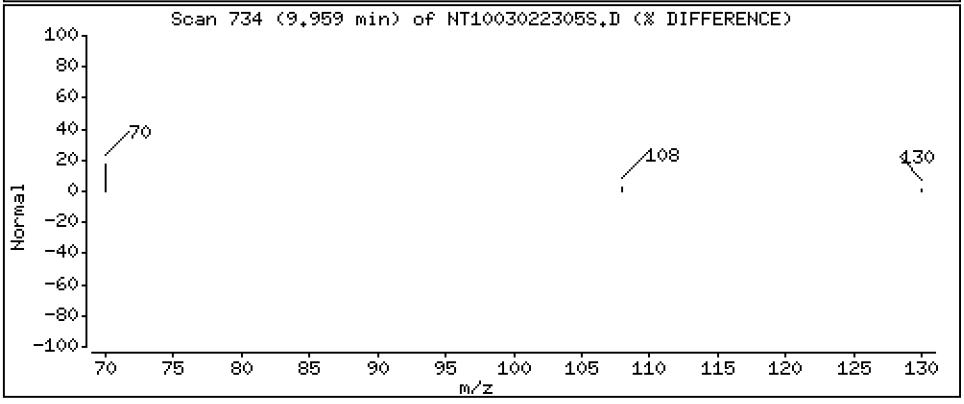












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

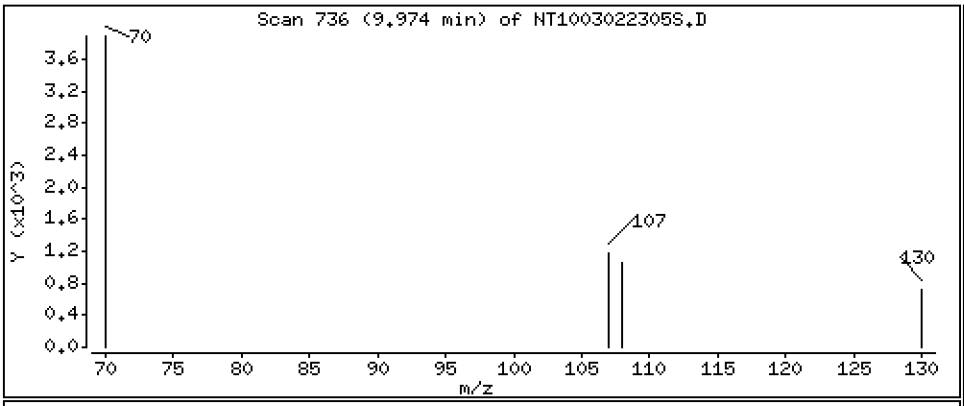
Operator: JGR

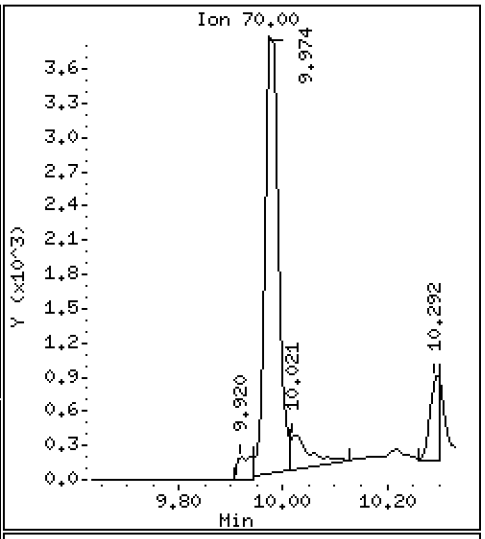
Column phase: ZB-5msi

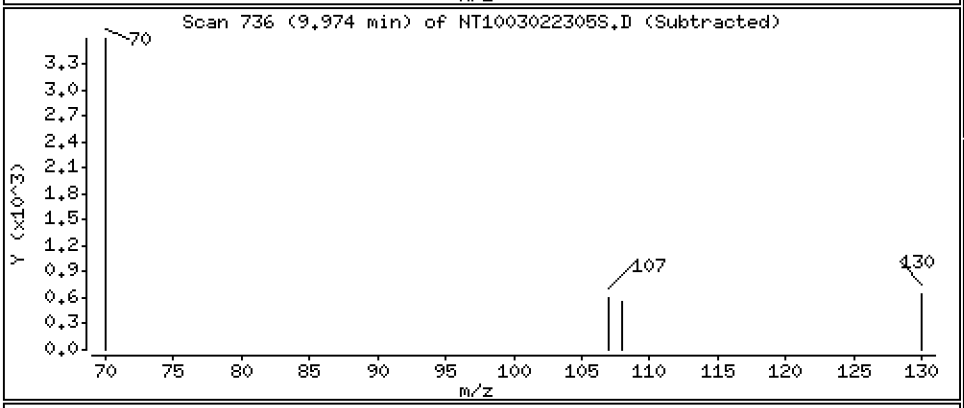
Column diameter: 0.25

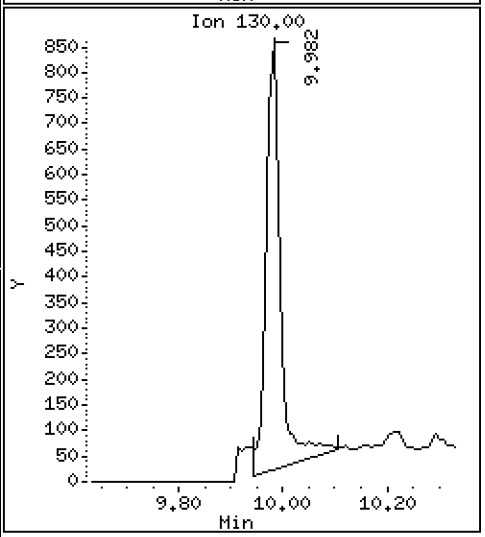
16 N-Nitroso-di-n-propylamine

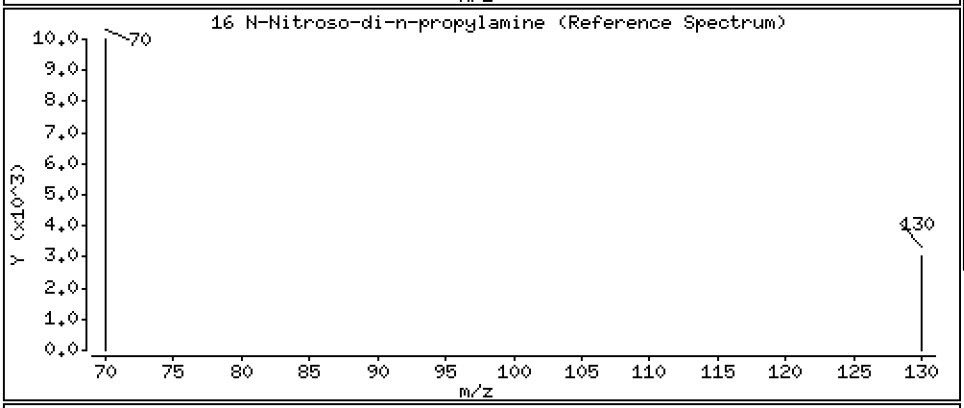
Concentration: 0.07785 ug/L

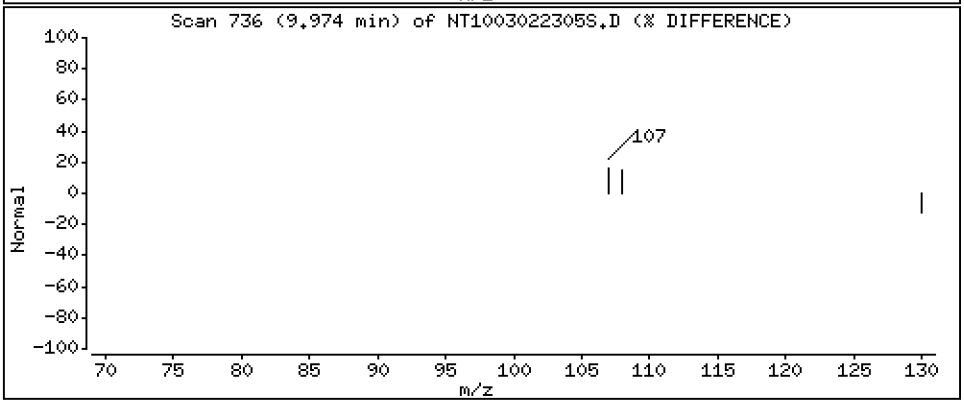












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

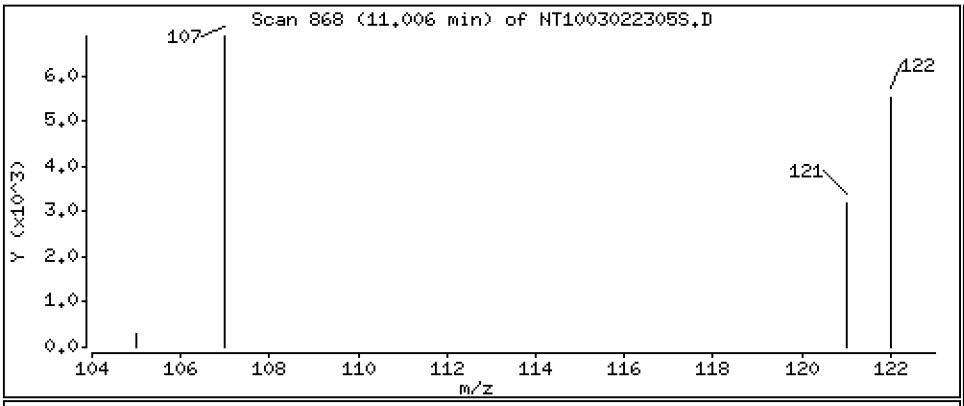
Operator: JGR

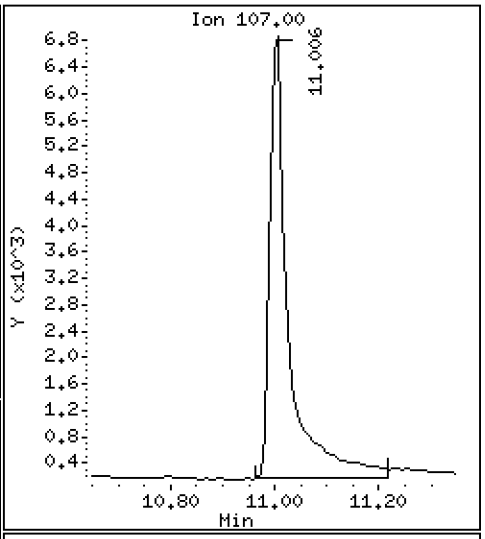
Column phase: ZB-5msi

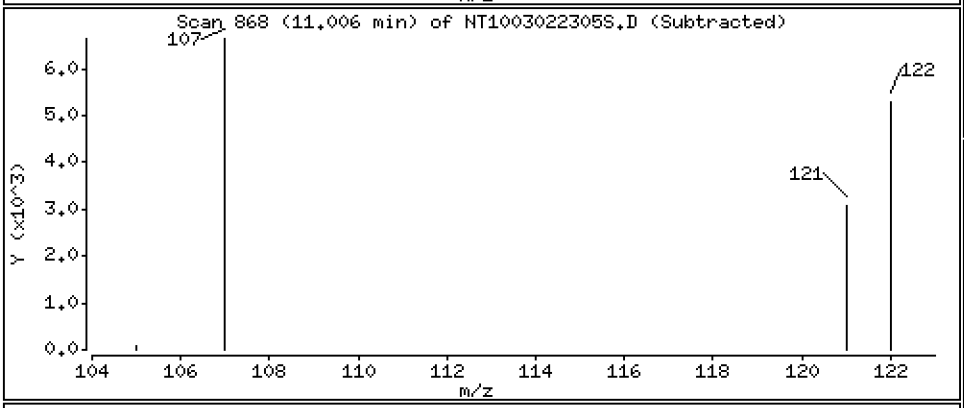
Column diameter: 0.25

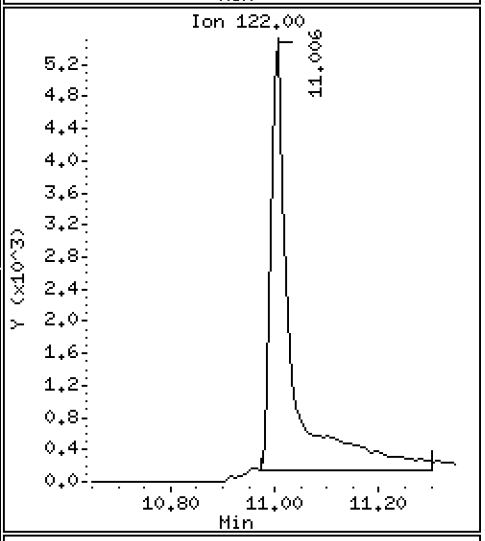
22 2,4-Dimethylphenol

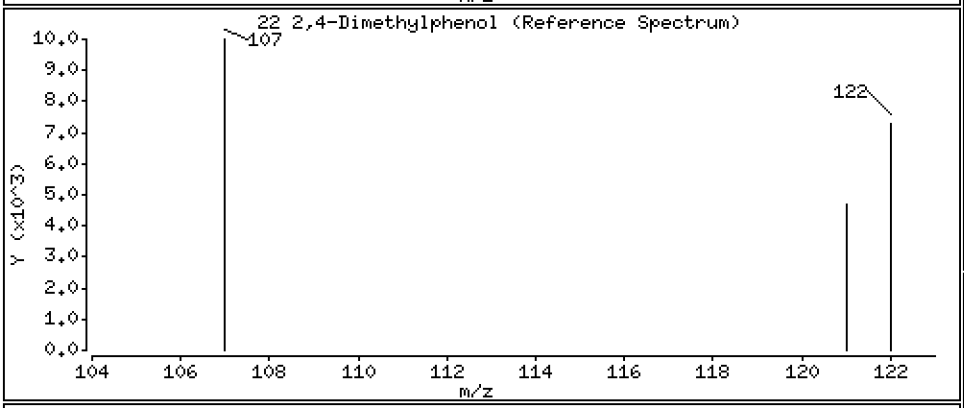
Concentration: 0.1242 ug/L

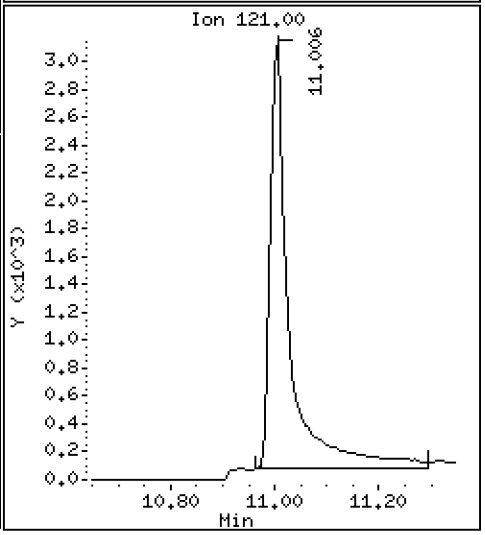


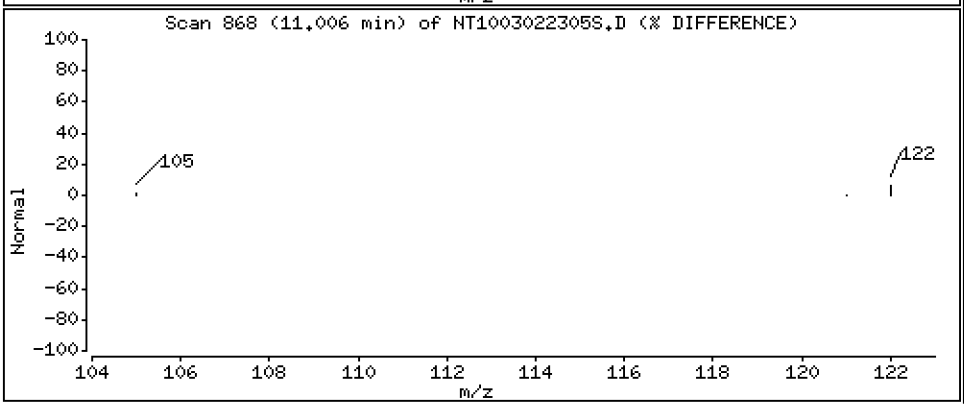












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

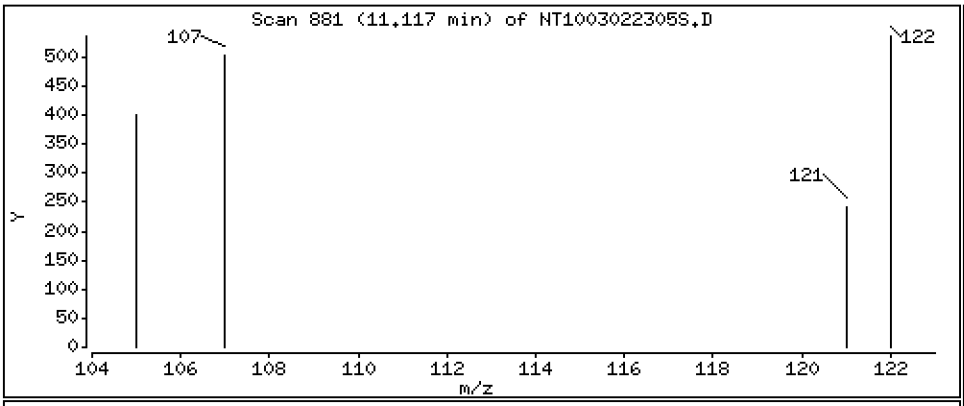
Operator: JGR

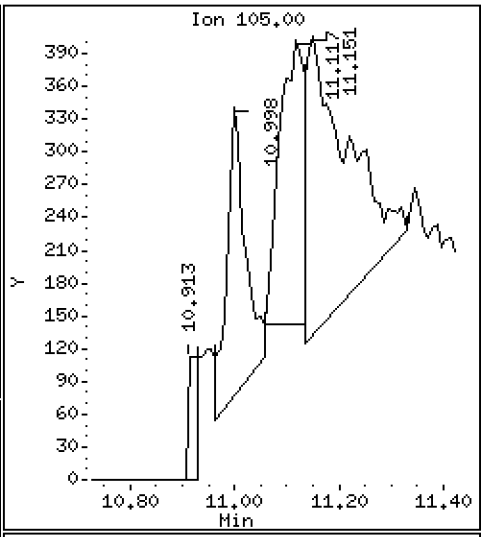
Column phase: ZB-5msi

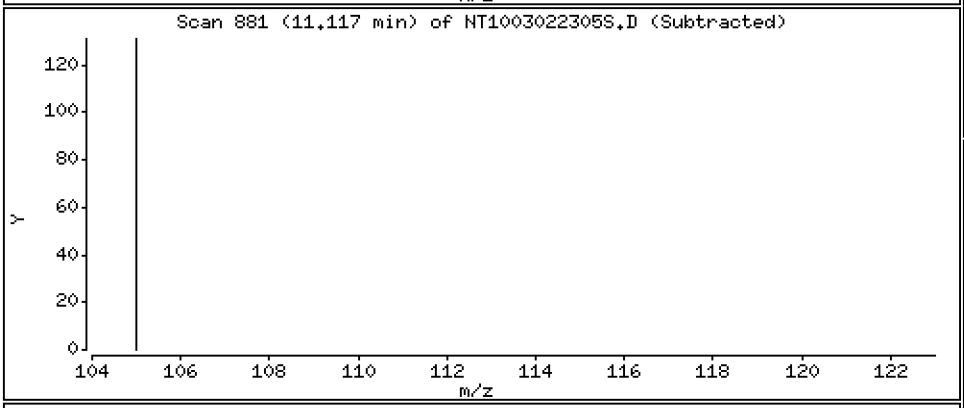
Column diameter: 0.25

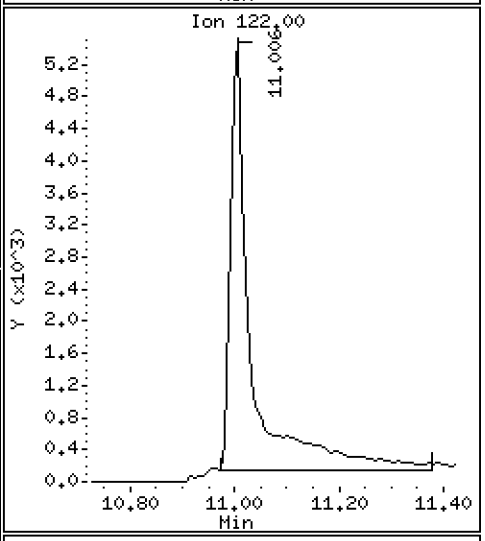
24 Benzoic acid

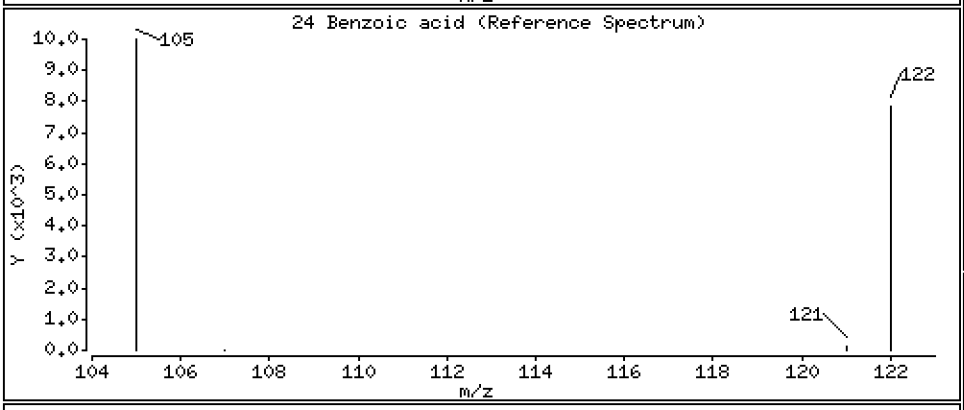
Concentration: 0.01144 ug/L

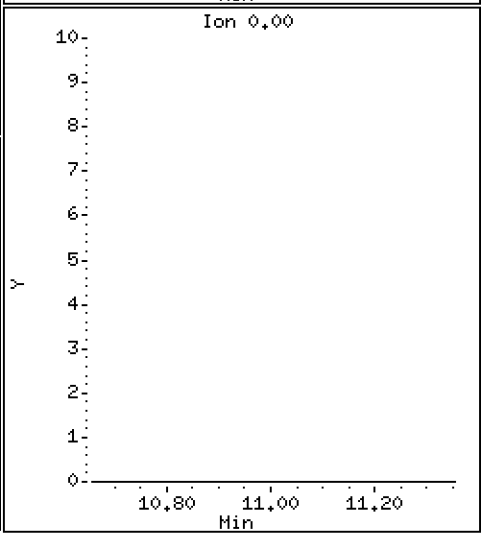


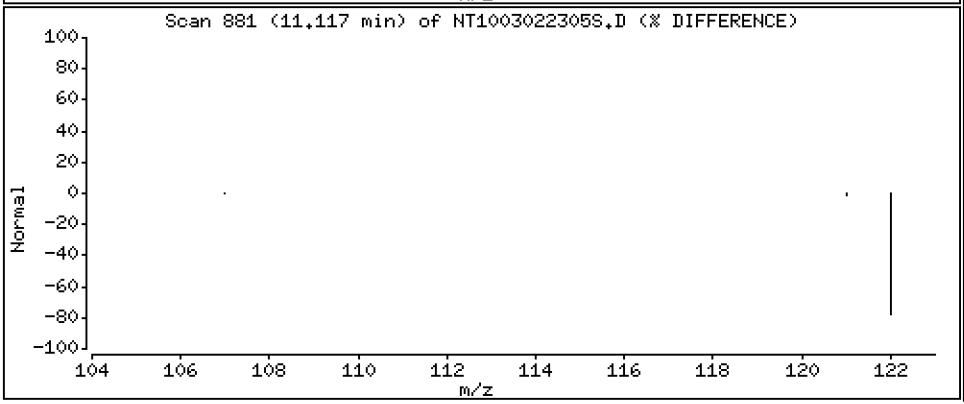












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Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

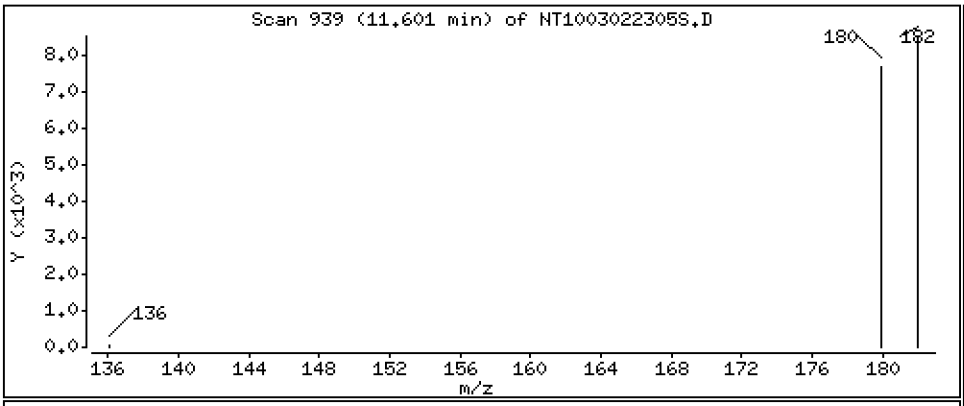
Operator: JGR

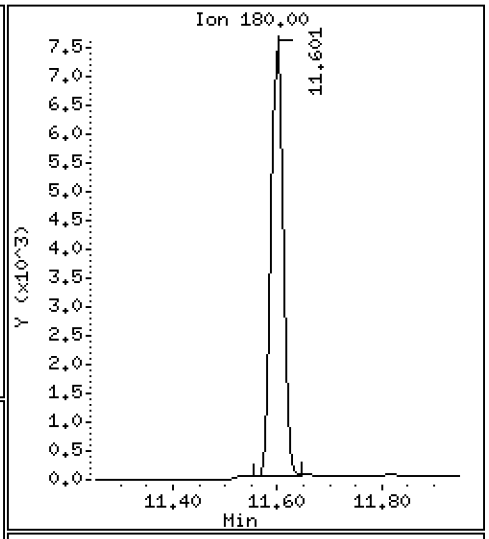
Column phase: ZB-5msi

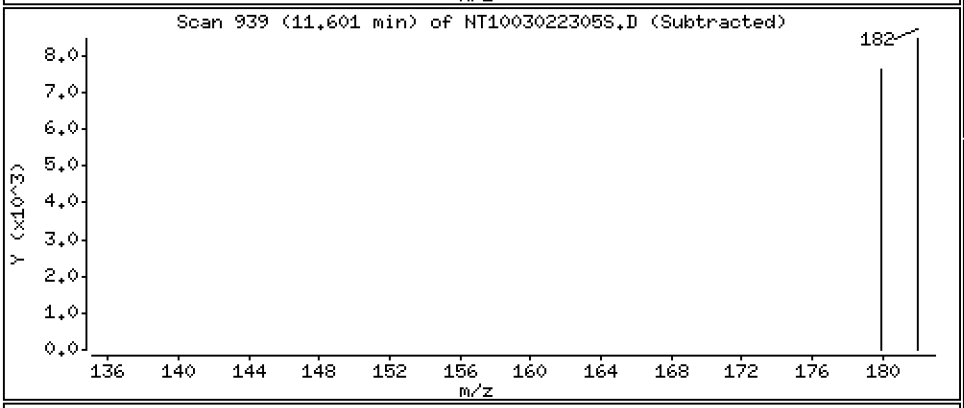
Column diameter: 0.25

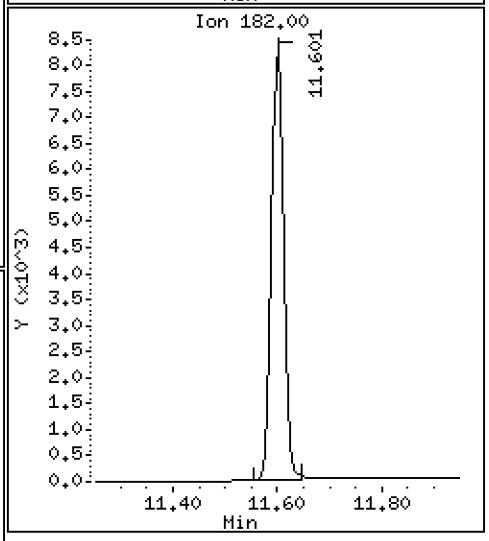
26 1,2,4-Trichlorobenzene

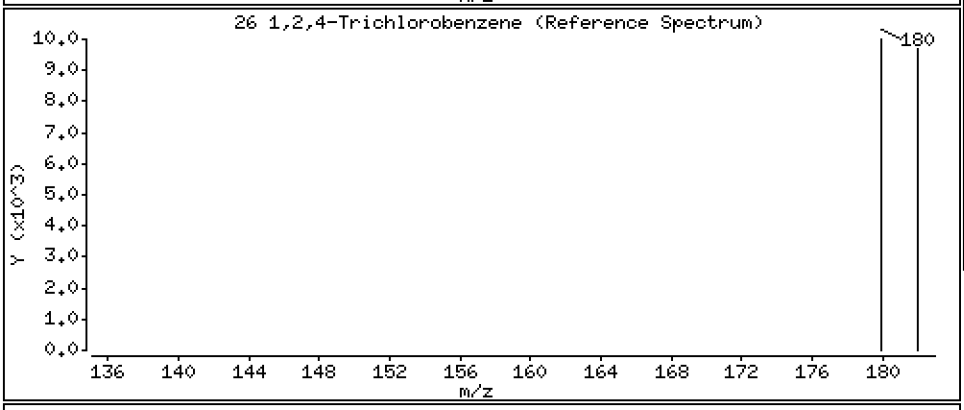
Concentration: 0.09977 ug/L

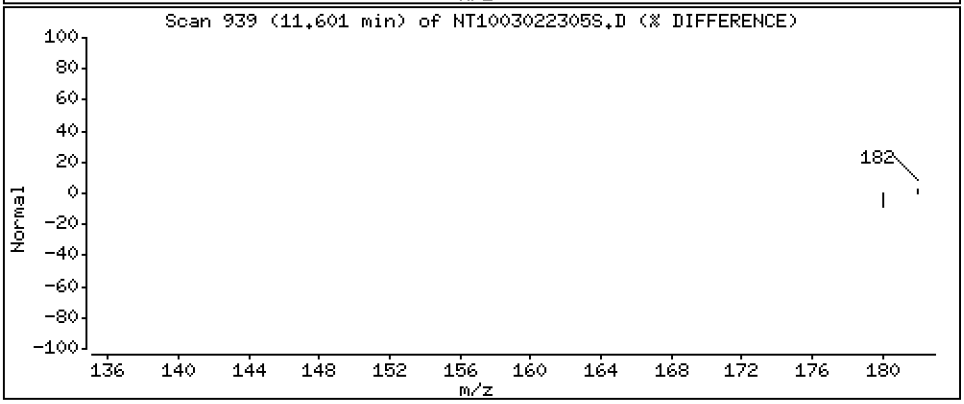












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

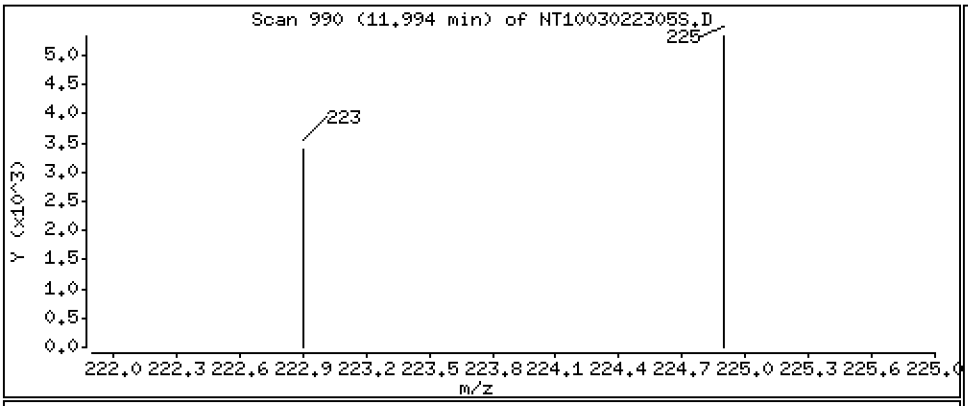
Operator: JGR

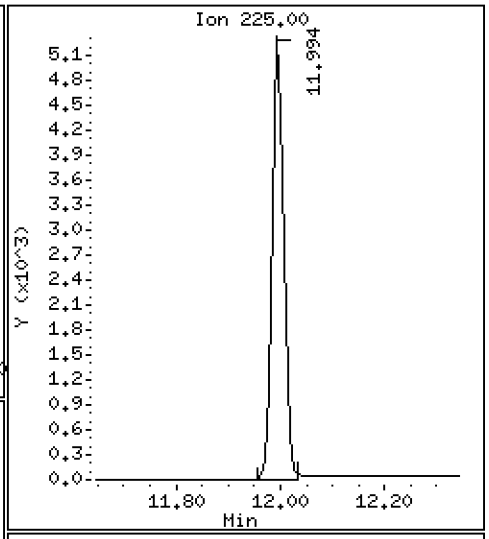
Column phase: ZB-5msi

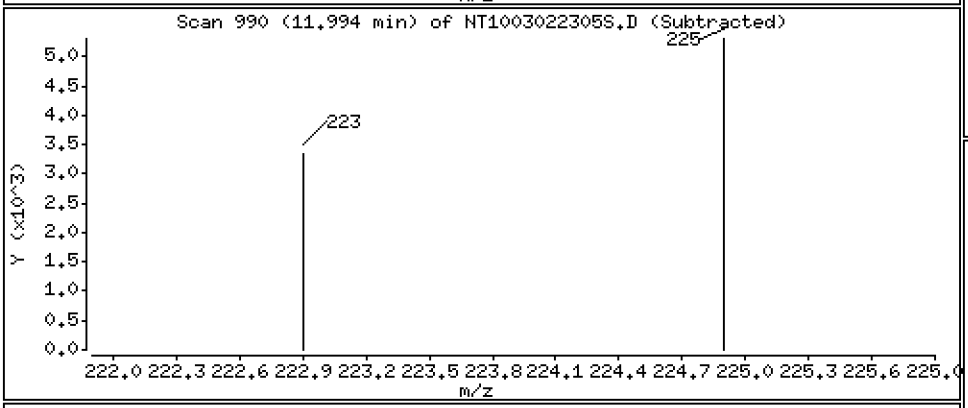
Column diameter: 0.25

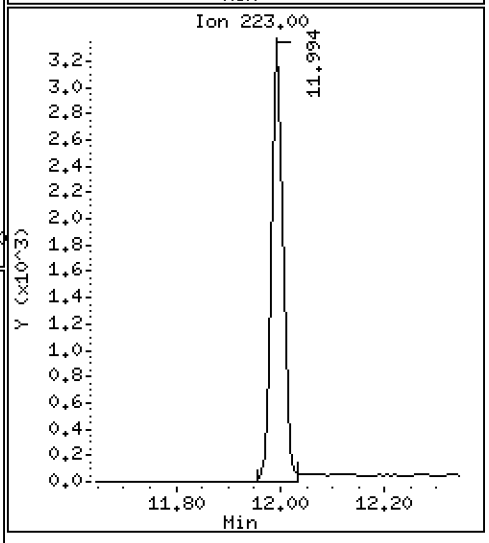
30 Hexachlorobutadiene

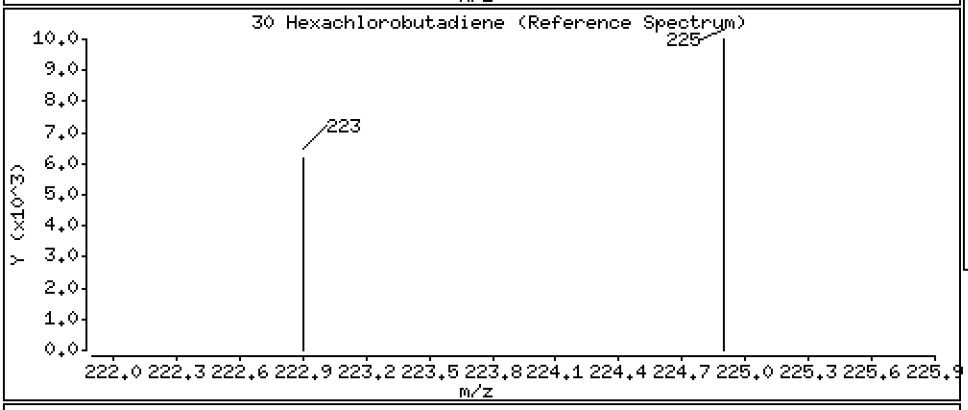
Concentration: 0.09705 ug/L

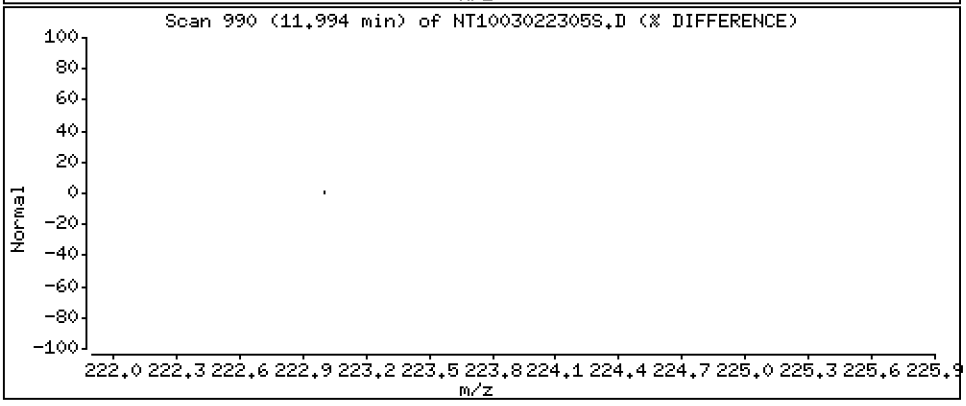












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

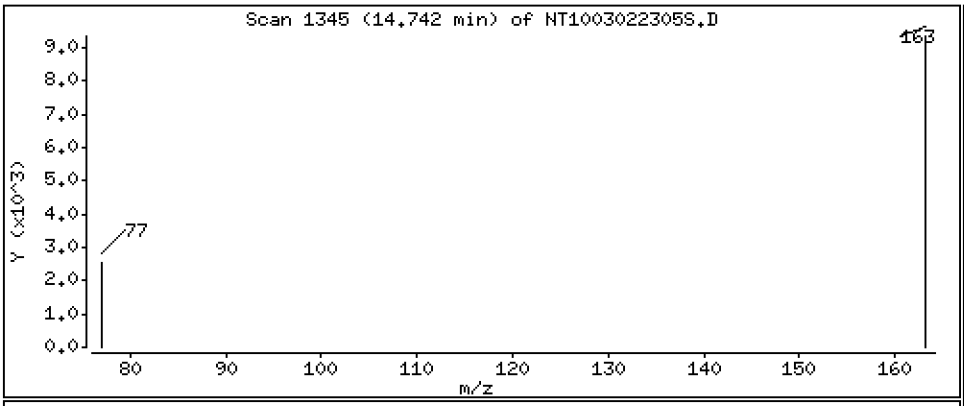
Operator: JGR

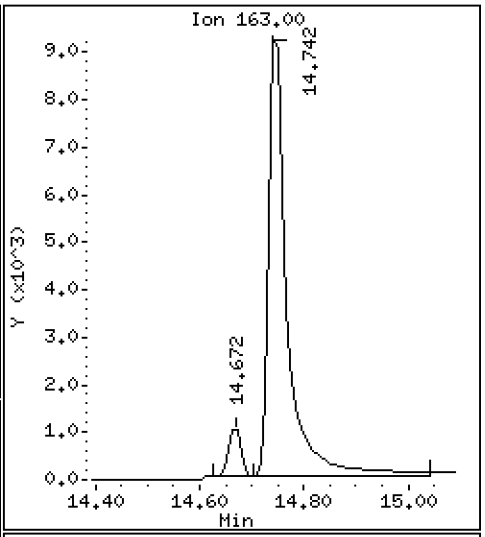
Column phase: ZB-5msi

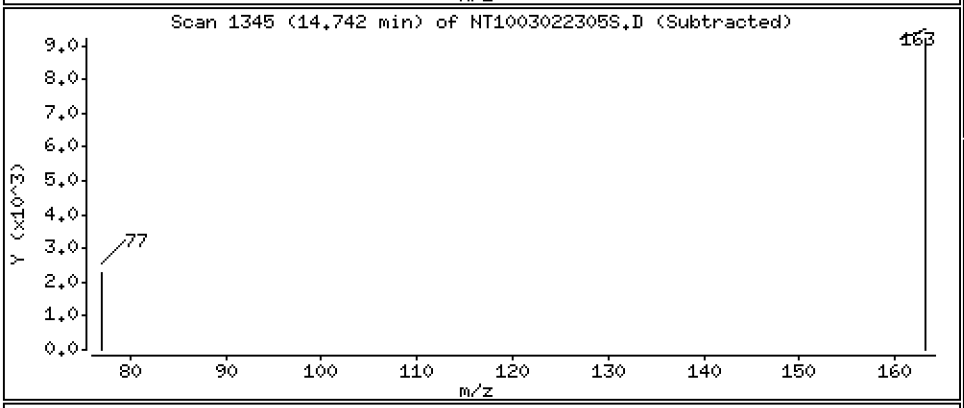
Column diameter: 0.25

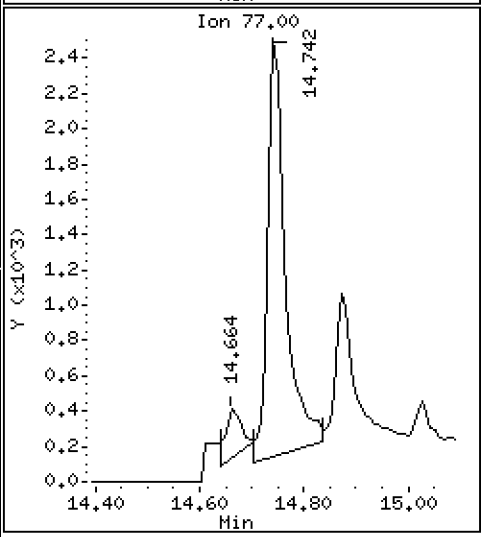
39 Dimethylphthalate

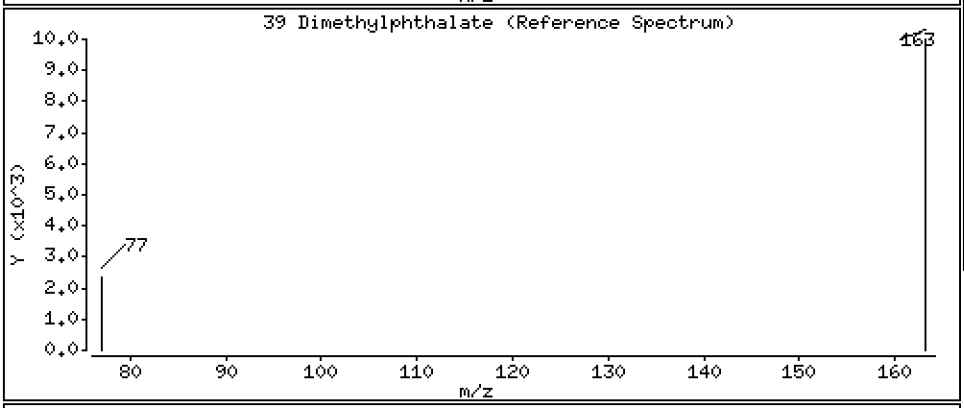
Concentration: 0.08456 ug/L

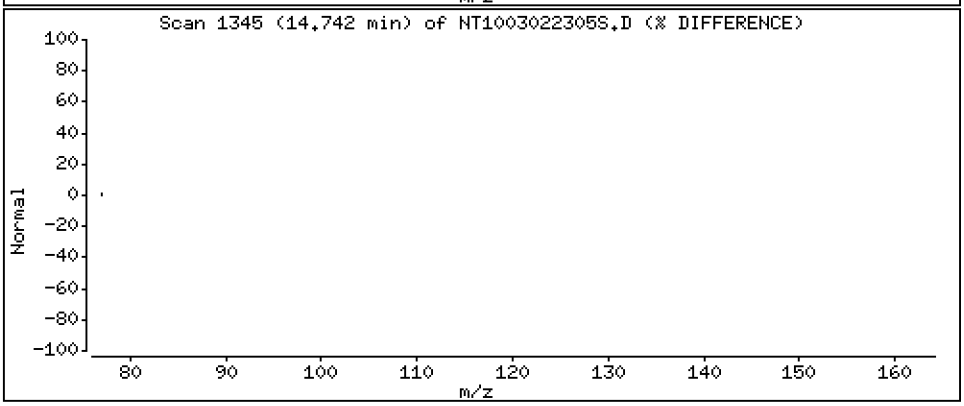












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Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

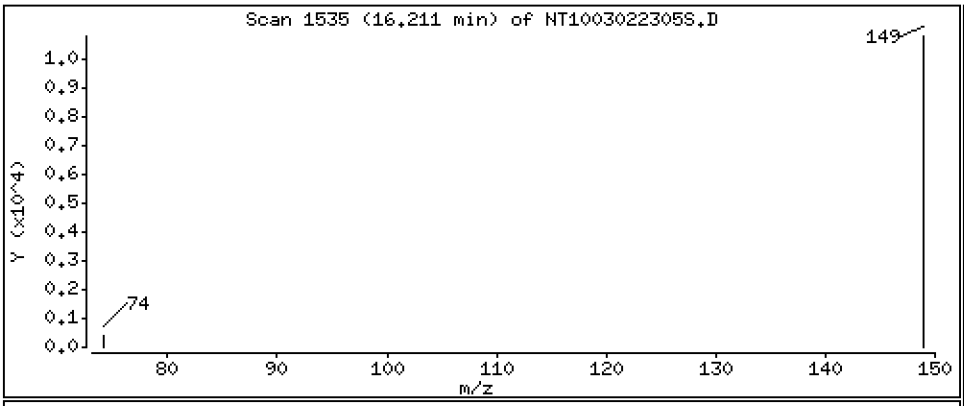
Operator: JGR

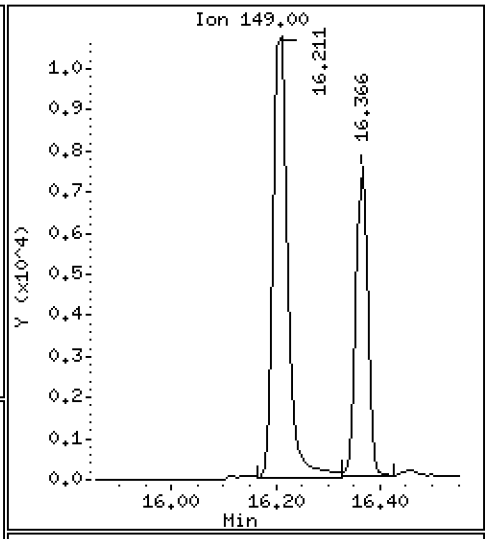
Column phase: ZB-5msi

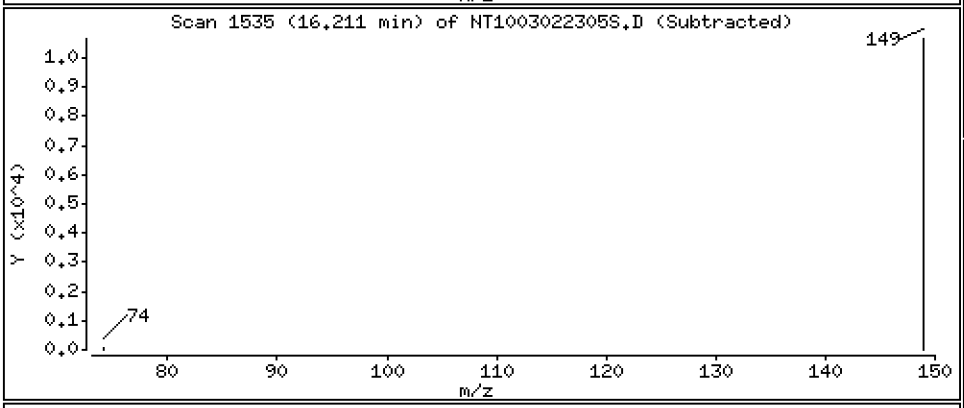
Column diameter: 0.25

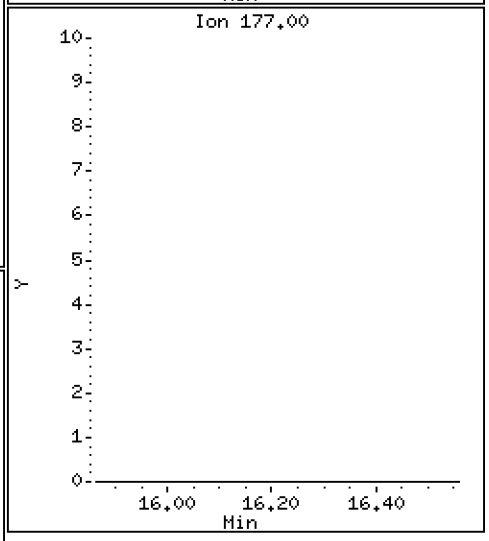
50 Diethylphthalate

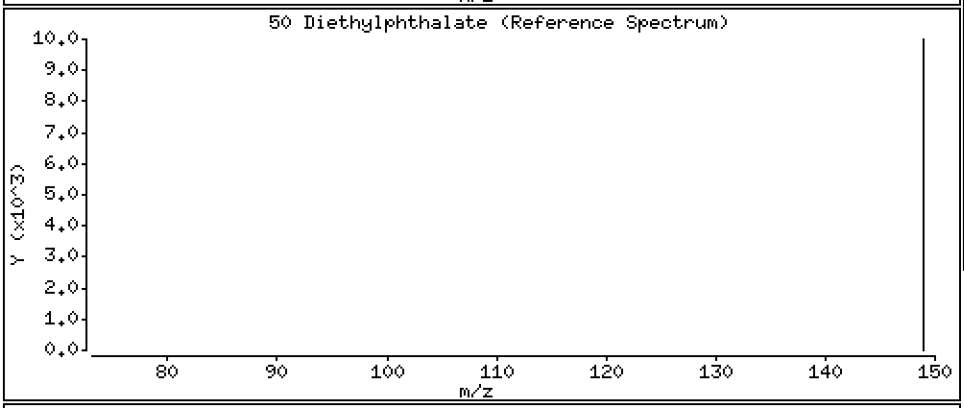
Concentration: 0.08088 ug/L

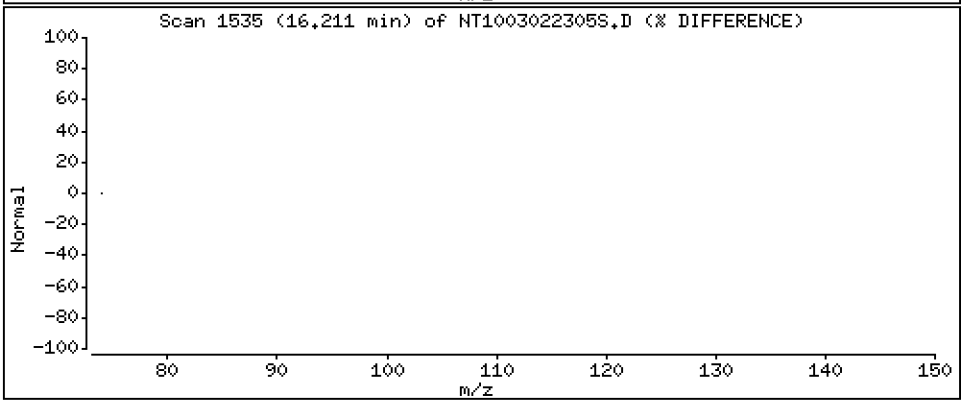












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Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

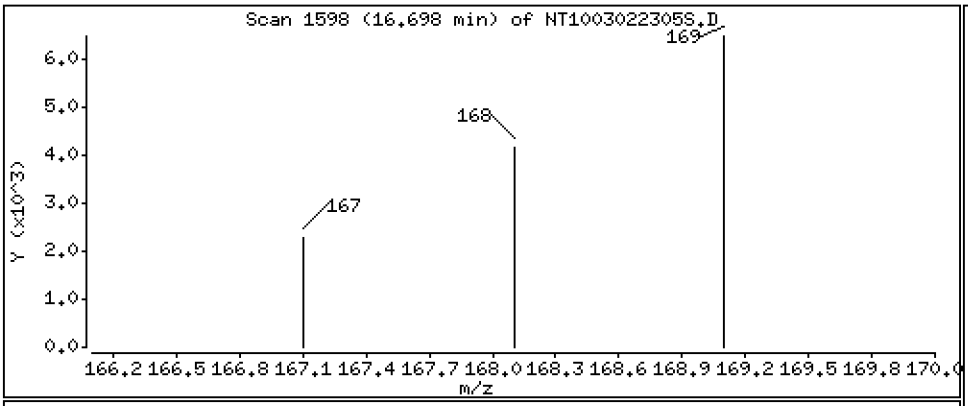
Operator: JGR

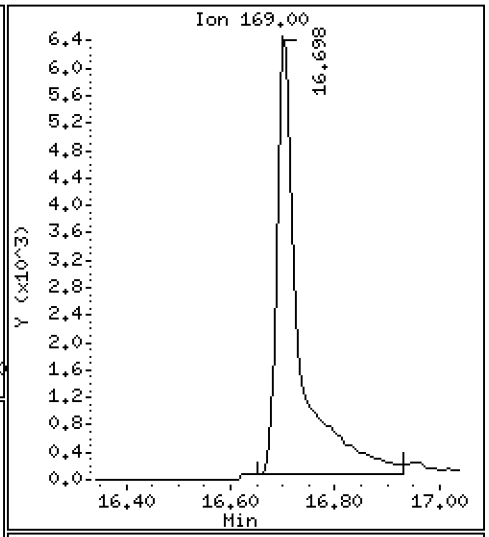
Column phase: ZB-5msi

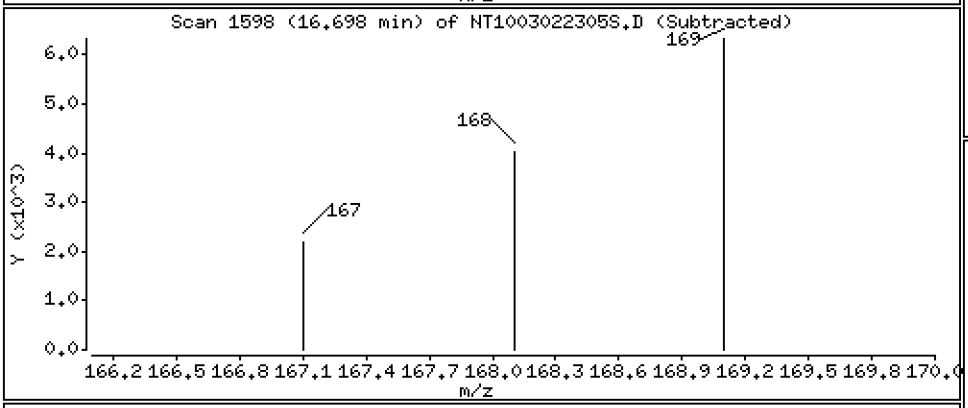
Column diameter: 0.25

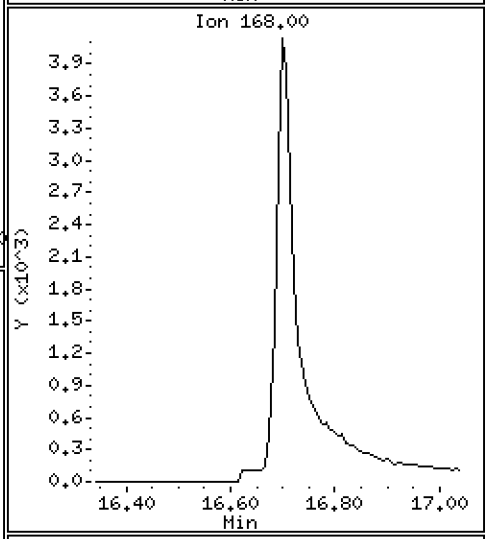
54 N-Nitrosodiphenylamine

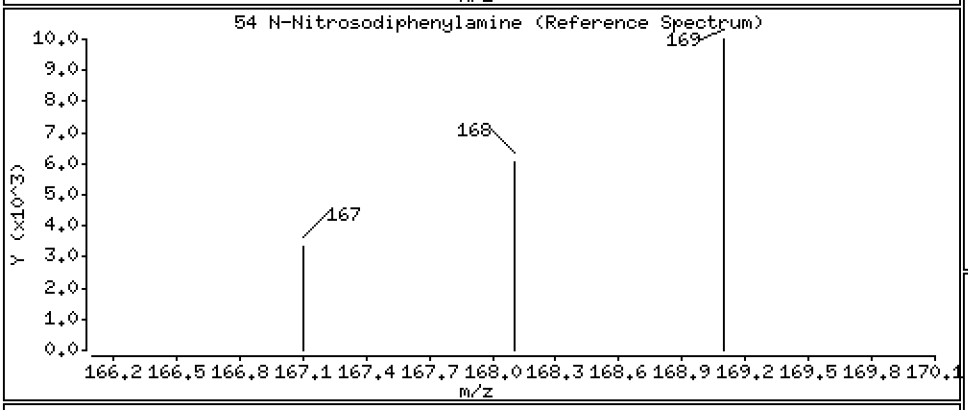
Concentration: 0.08415 ug/L

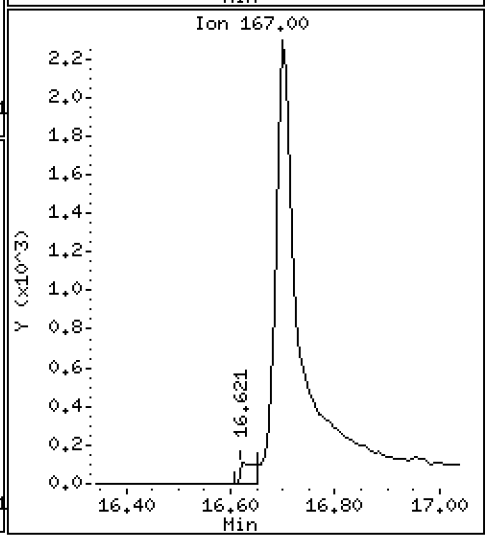


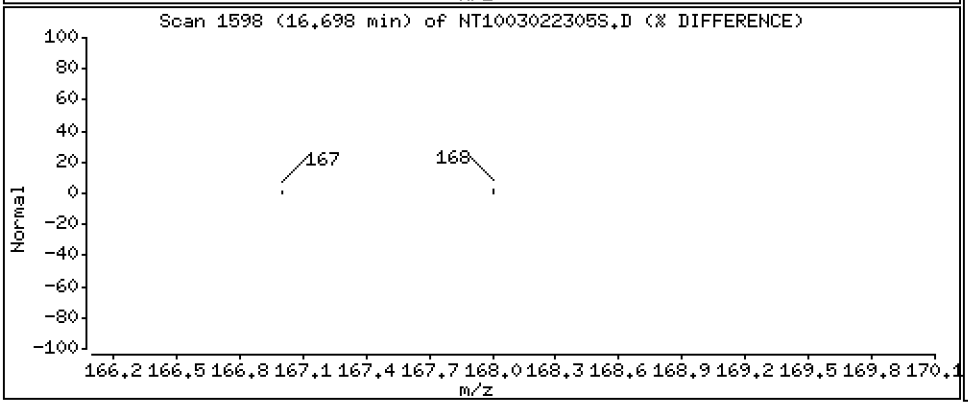












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

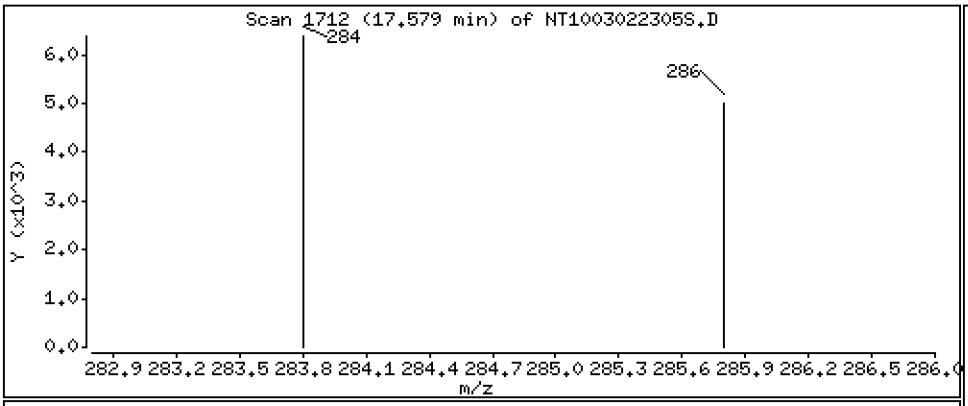
Operator: JGR

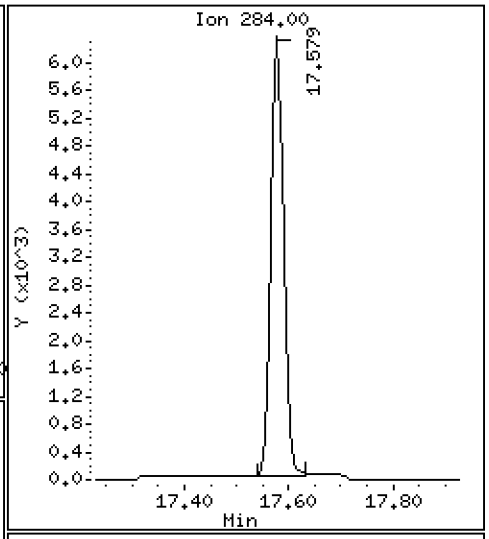
Column phase: ZB-5msi

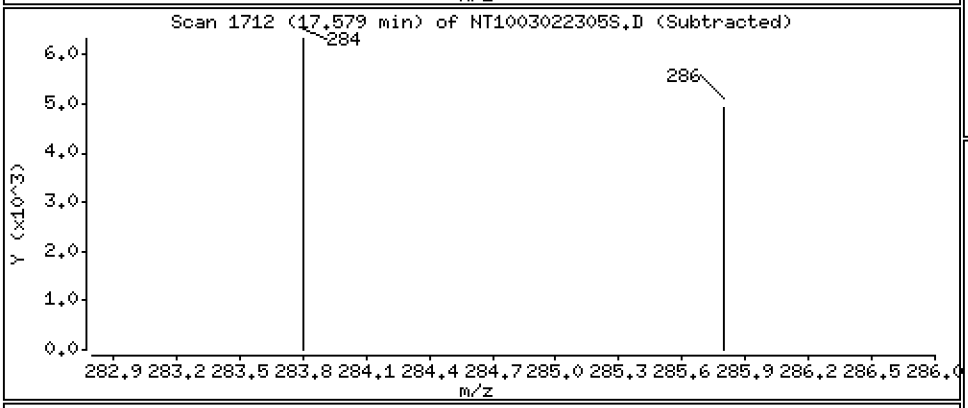
Column diameter: 0.25

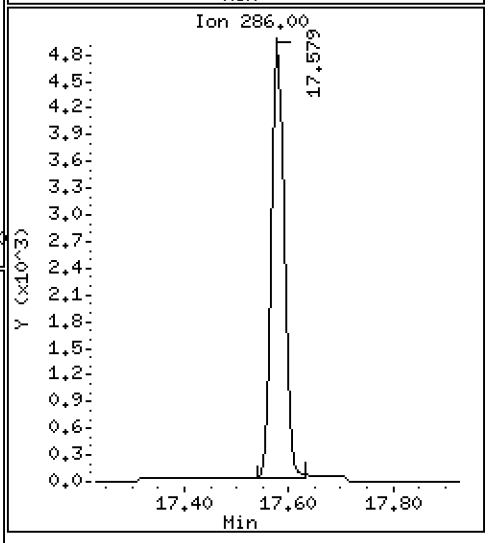
57 Hexachlorobenzene

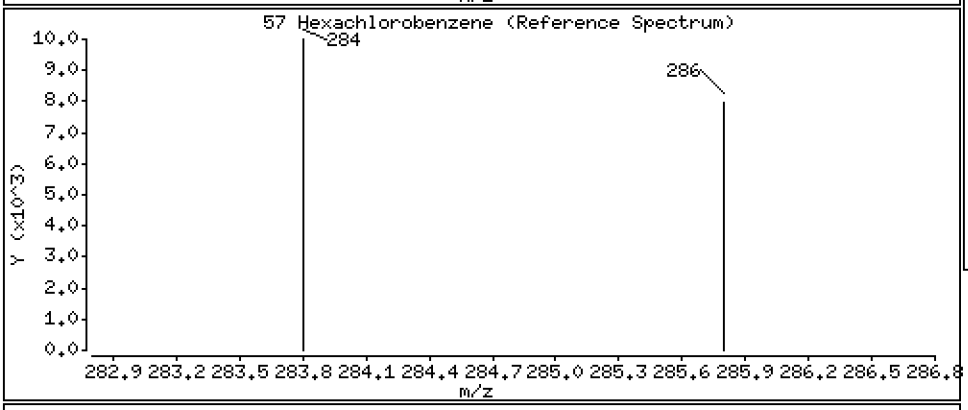
Concentration: 0.09423 ug/L

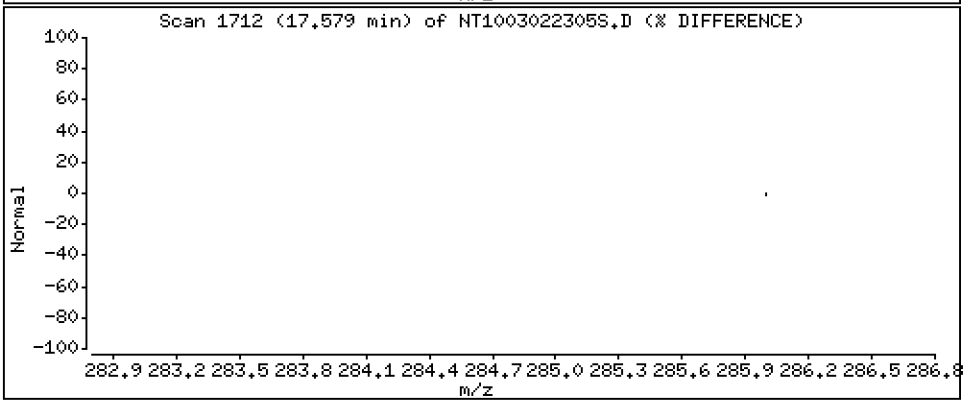












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

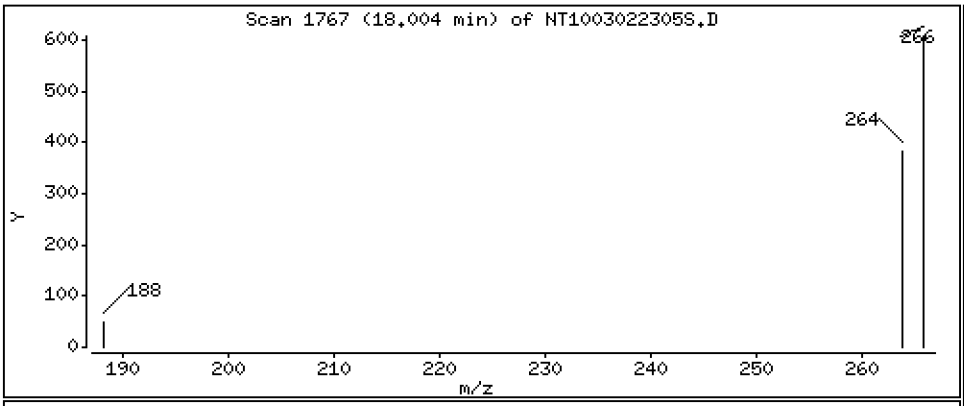
Operator: JGR

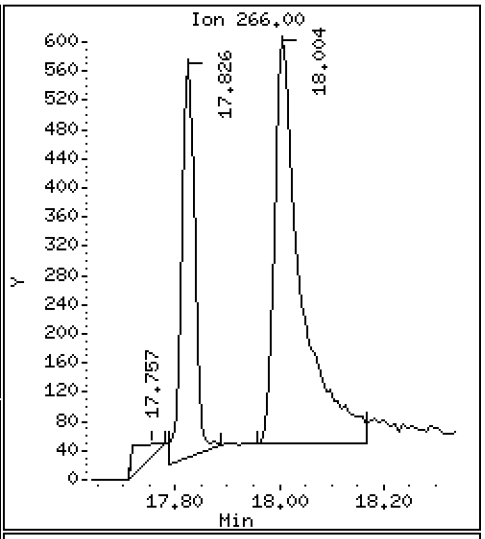
Column phase: ZB-5msi

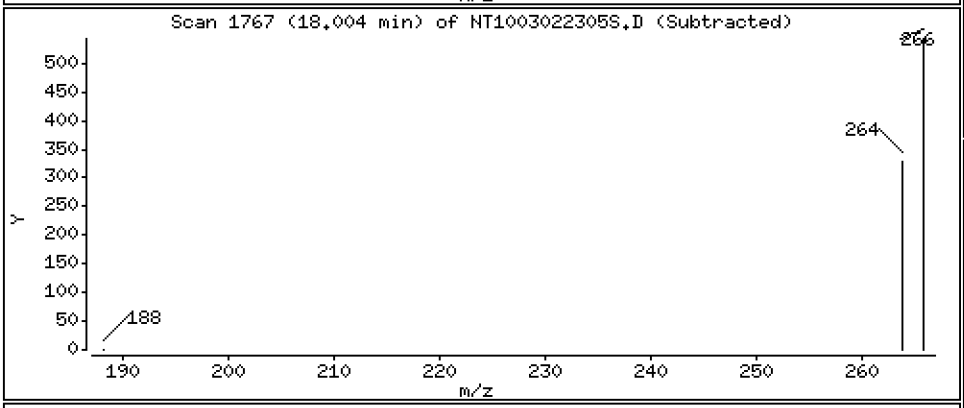
Column diameter: 0.25

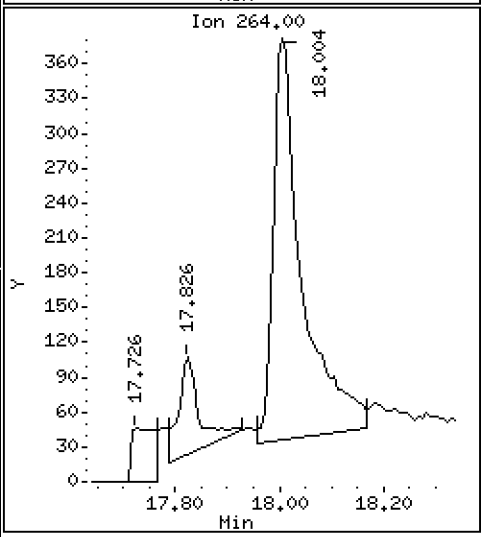
58 Pentachlorophenol

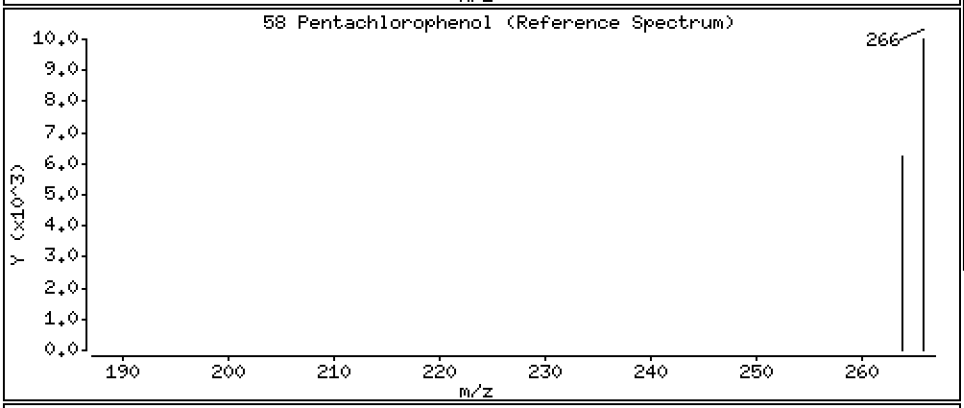
Concentration: 0.04209 ug/L

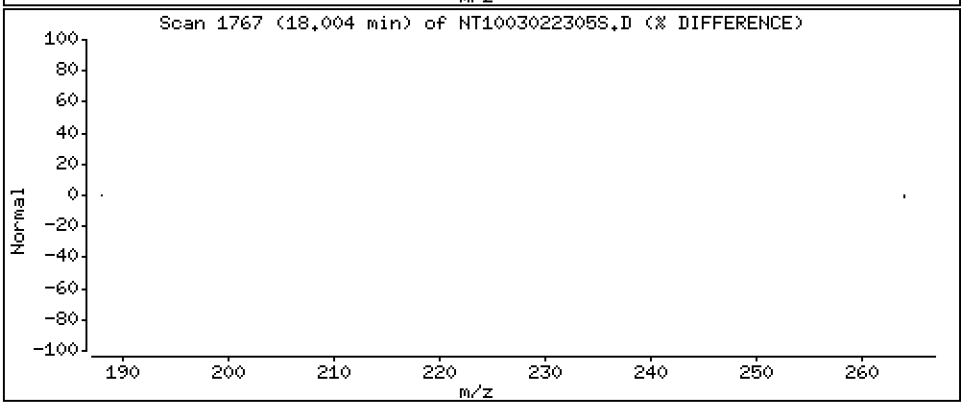












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

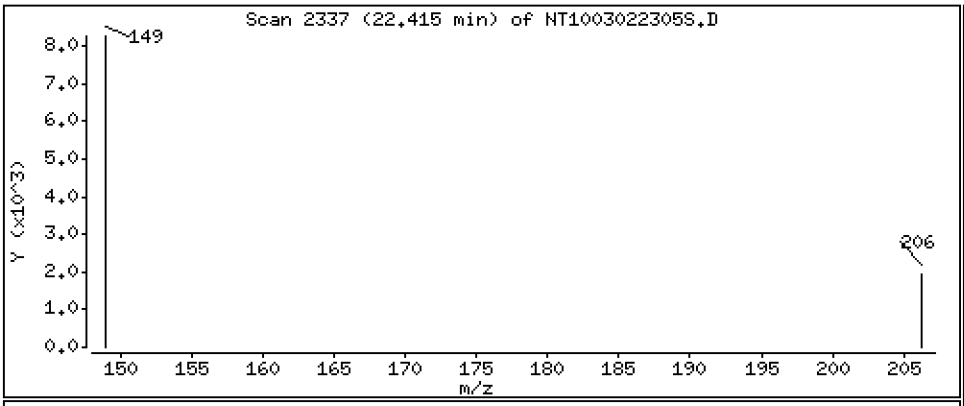
Operator: JGR

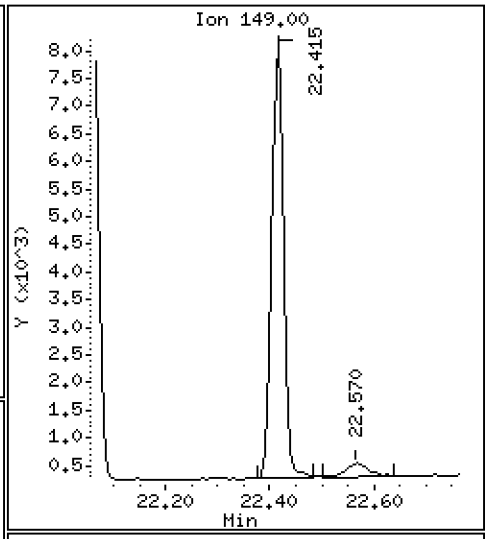
Column phase: ZB-5msi

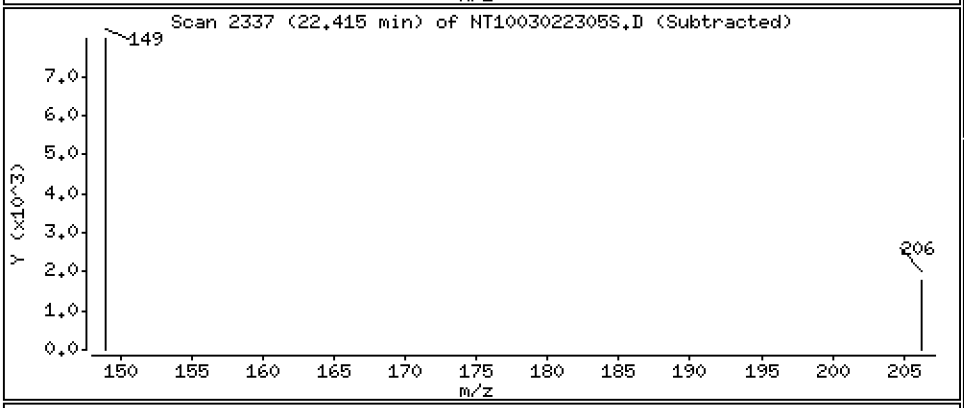
Column diameter: 0.25

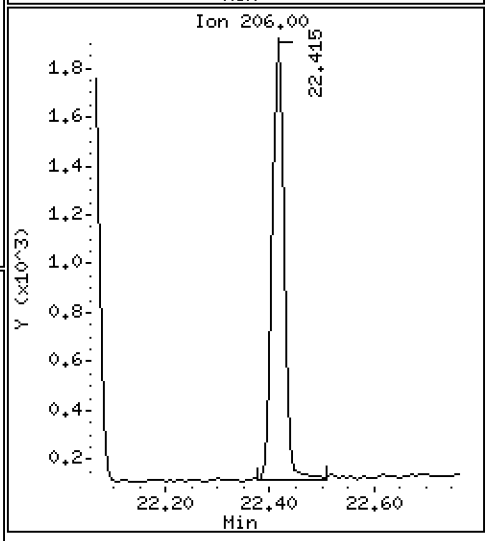
67 Butylbenzylphthalate

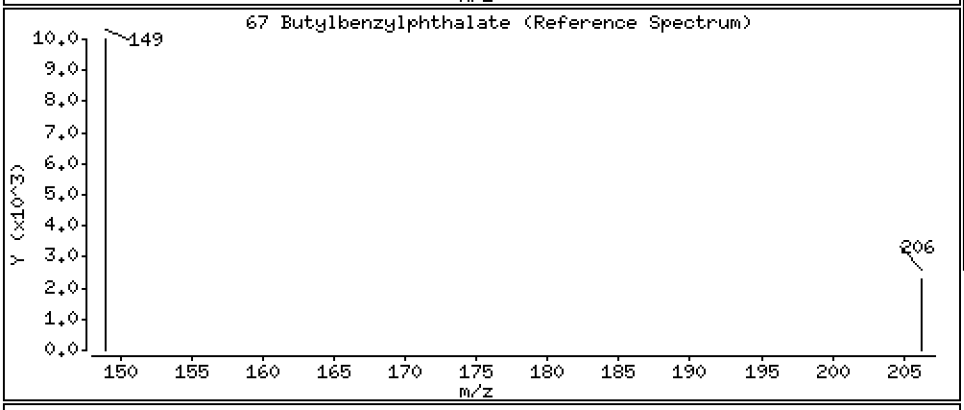
Concentration: 0.04745 ug/L

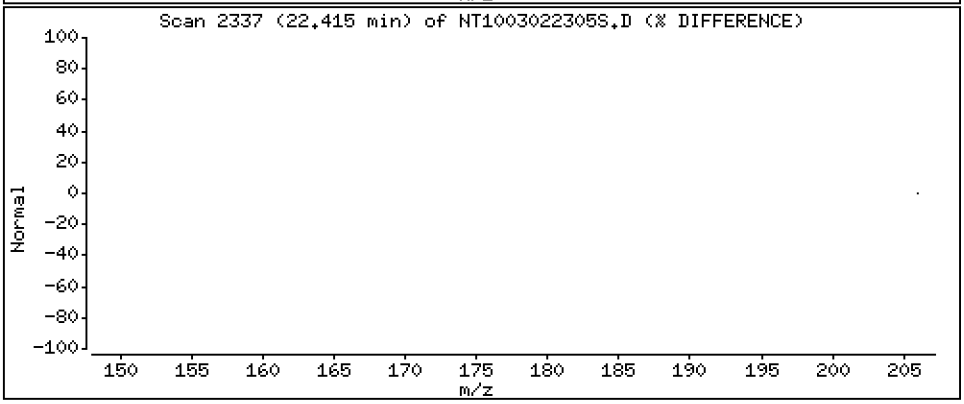












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

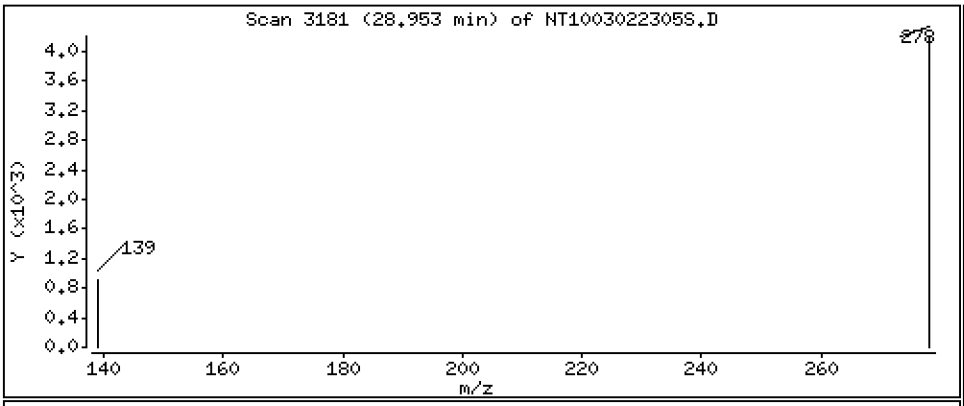
Operator: JGR

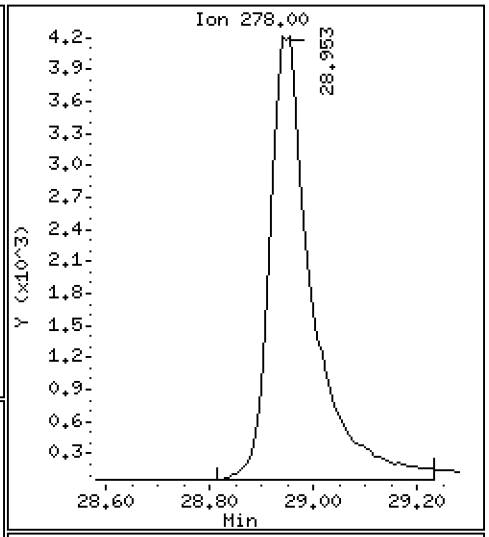
Column phase: ZB-5msi

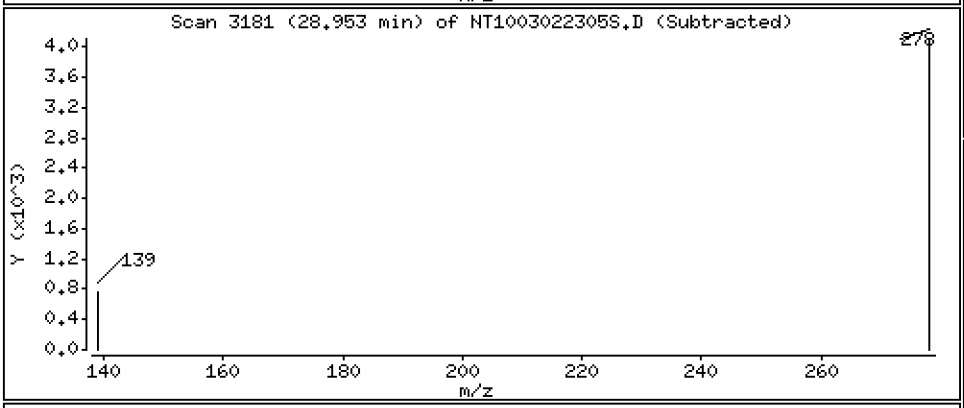
Column diameter: 0.25

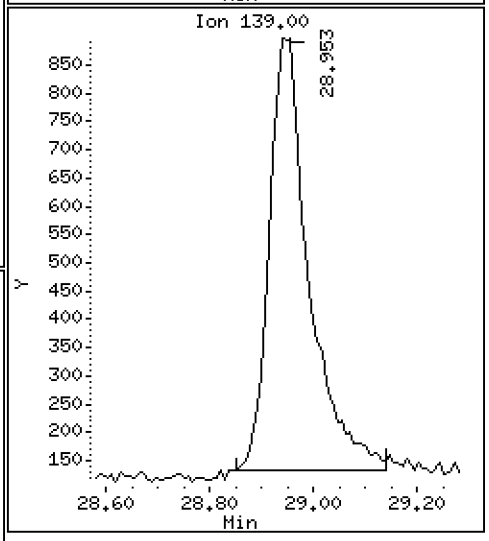
79 Dibenzo(a,h)anthracene

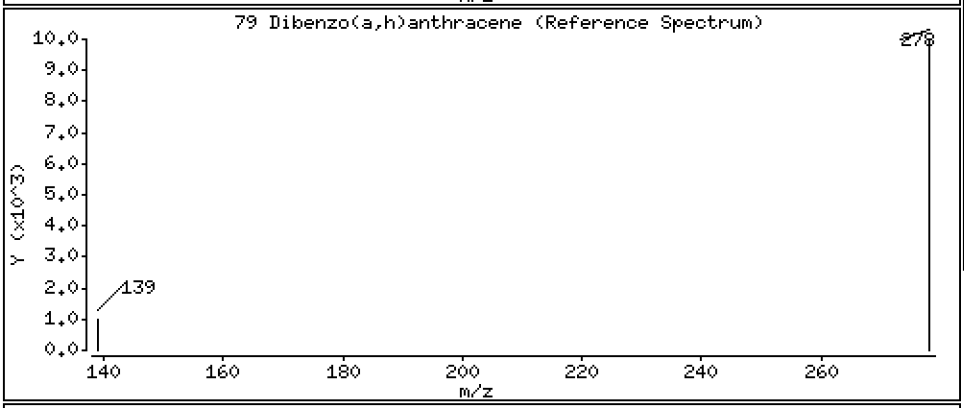
Concentration: 0.05927 ug/L

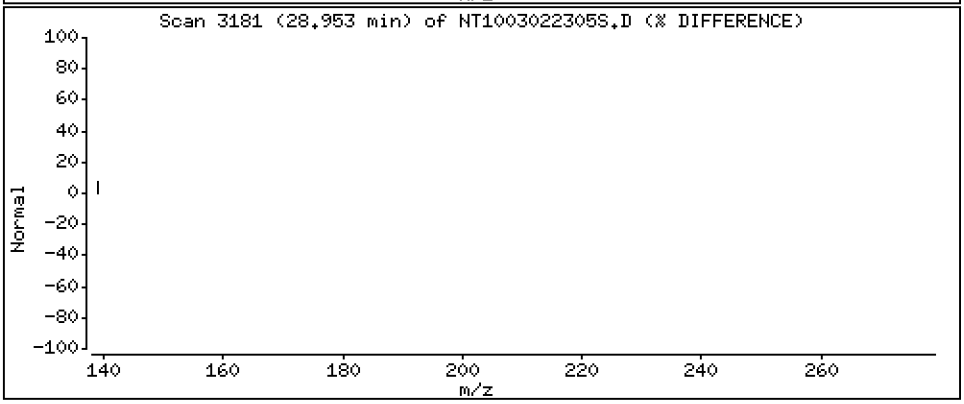












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D

Date : 02-MAR-2023 16:56

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV100

Volume Injected (uL): 1.0

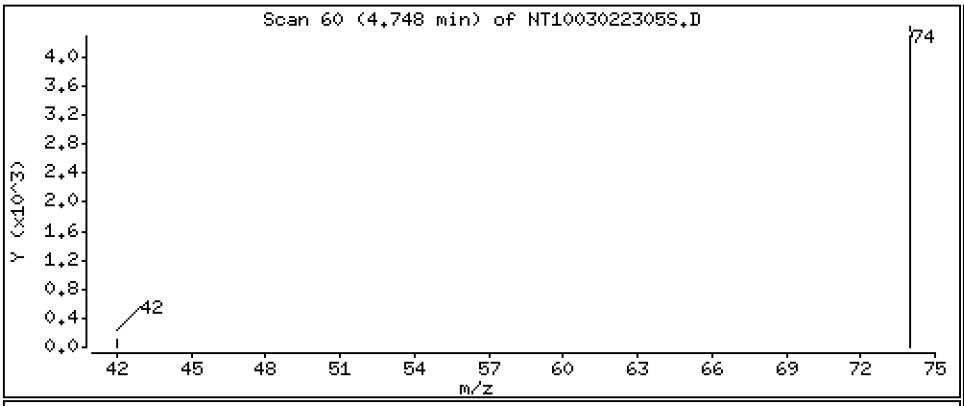
Operator: JGR

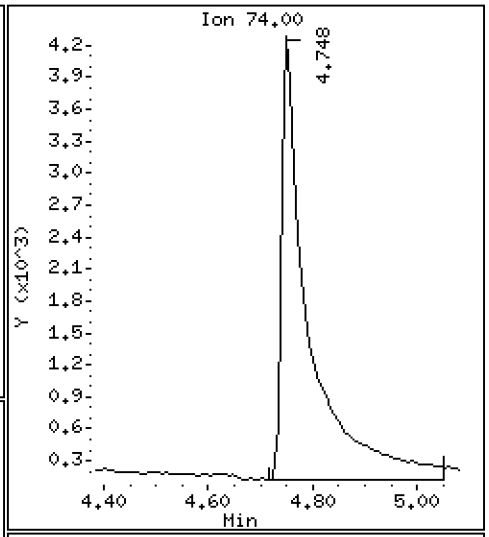
Column phase: ZB-5msi

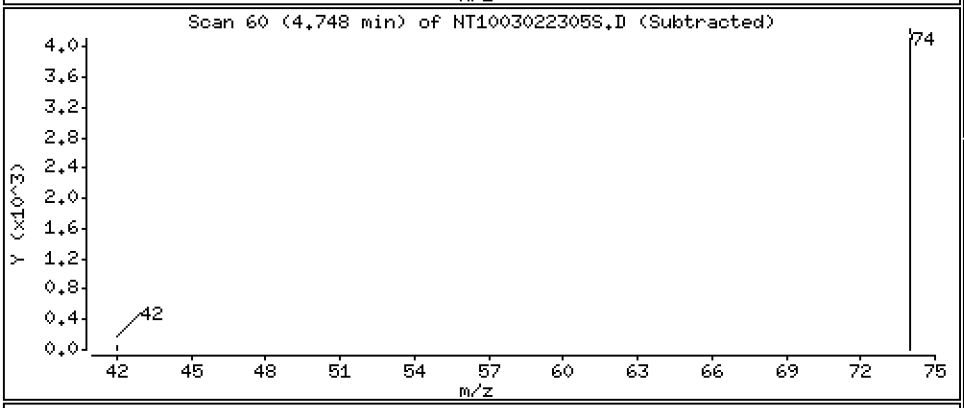
Column diameter: 0.25

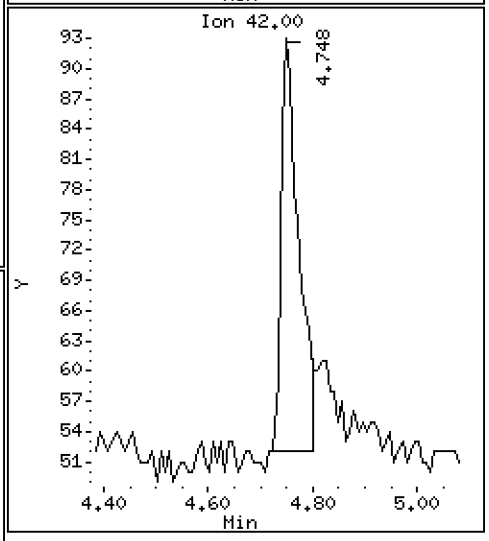
90 N-Nitrosodimethylamine

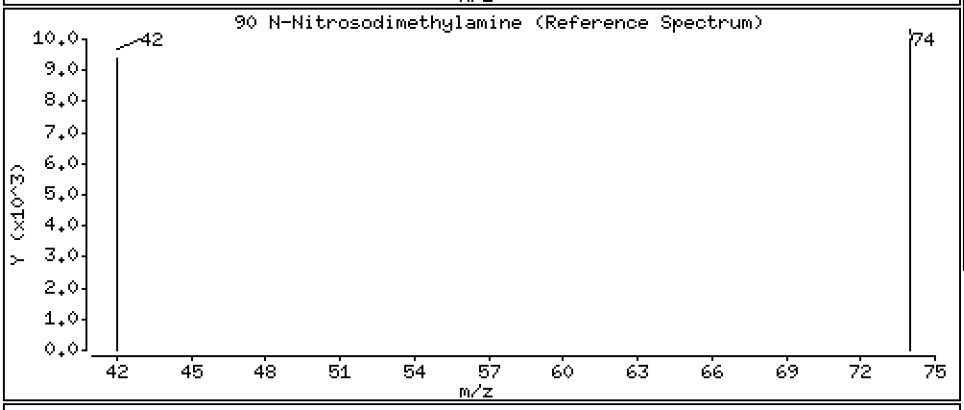
Concentration: 0.2020 ug/L

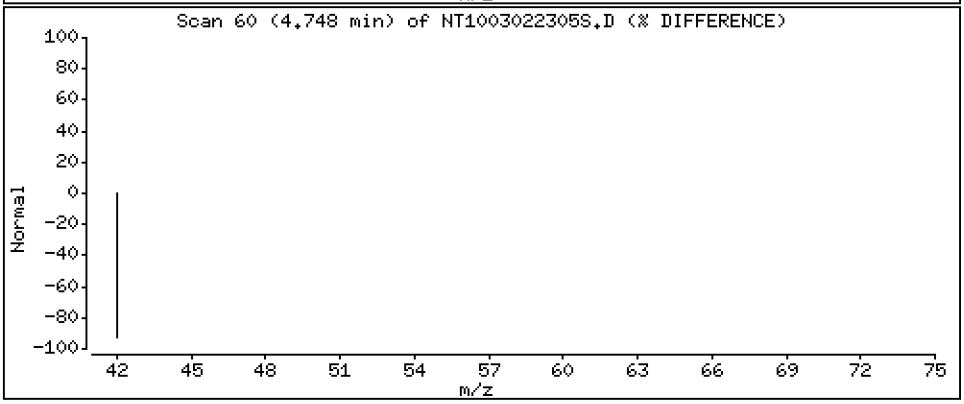












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022305S.D
Lab Smp Id: SEQ-LCV100
Inj Date : 02-MAR-2023 16:56 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-LCV100
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:01 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.902	6.902	(0.746)	16841	0.13125	0.1313(R)
3	Phenol	94	8.525	8.517	(0.921)	11585	0.06121	0.06121
7	1,3-Dichlorobenzene	146	9.143	9.143	(0.988)	17226	0.10342	0.1034
* 8	1,4-Dichlorobenzene-d4	152	9.252	9.251	(1.000)	449433	4.00000	
9	1,4-Dichlorobenzene	146	9.283	9.282	(1.003)	16689	0.10305	0.1031
11	Benzyl alcohol	79	9.485	9.476	(1.025)	5576	0.05313	0.05313
12	1,2-Dichlorobenzene	146	9.562	9.562	(1.034)	15971	0.10261	0.1026
13	2-Methylphenol	108	9.663	9.655	(1.044)	6667	0.05859	0.05859
15	4-Methylphenol	108	9.958	9.942	(1.076)	6008	0.05077	0.05077
16	N-Nitroso-di-n-propylamine	70	9.974	9.981	(1.078)	6561	0.07785	0.07785
22	2,4-Dimethylphenol	107	11.006	10.997	(0.939)	16823	0.12421	0.1242
24	Benzoic acid	105	11.116	11.074	(0.948)	849	0.01144	0.01144
26	1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	11460	0.09977	0.09977
* 27	Naphthalene-d8	136	11.724	11.723	(1.000)	1595952	4.00000	
30	Hexachlorobutadiene	225	11.994	11.994	(1.023)	7911	0.09705	0.09705
39	Dimethylphthalate	163	14.741	14.741	(0.963)	22082	0.08456	0.08456
* 42	Acenaphthene-d10	162	15.314	15.314	(1.000)	822385	4.00000	
50	Diethylphthalate	149	16.211	16.203	(1.059)	19916	0.08088	0.08088
54	N-Nitrosodiphenylamine	169	16.698	16.690	(0.907)	19183	0.08415	0.08415
57	Hexachlorobenzene	284	17.578	17.578	(0.955)	10053	0.09423	0.09423

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.004	17.988	(0.978)	1965	0.04209	0.04209
*	59 Phenanthrene-d10	188	18.406	18.406	(1.000)	1408565	4.00000	
$	66 Terphenyl-d14	244	21.532	21.532	(0.919)	9829	0.08388	0.08388(R)
	67 Butylbenzylphthalate	149	22.415	22.414	(0.957)	11608	0.04745	0.04745
*	69 Chrysene-d12	240	23.421	23.421	(1.000)	1449074	4.00000	
*	77 Perylene-d12	264	26.116	26.115	(1.000)	1721904	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.953	28.929	(1.109)	23649	0.05927	0.05927
	90 N-Nitrosodimethylamine	74	4.748	4.732	(0.513)	15343	0.20197	0.2020

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003022305S.D
Lab Smp Id: SEQ-LCV100
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 02-MAR-2023
Calibration Time: 14:13
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	493417	246709	986834	449433	-8.91
27 Naphthalene-d8	1779056	889528	3558112	1595952	-10.29
42 Acenaphthene-d10	954569	477285	1909138	822385	-13.85
59 Phenanthrene-d10	1596290	798145	3192580	1408565	-11.76
69 Chrysene-d12	1649110	824555	3298220	1449074	-12.13
77 Perylene-d12	1901958	950979	3803916	1721904	-9.47

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
77 Perylene-d12	26.12	25.62	26.62	26.12	0.00

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

REVIEW SUMMARY FOR FILE - NT1003022305S.D

Lab ID: SEQ-LCV100
nt10.i, 20230302.b\SIM.b\SIMABN2.m,   02-MAR-2023 16:56

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1003022303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223306S.D

Page 1

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

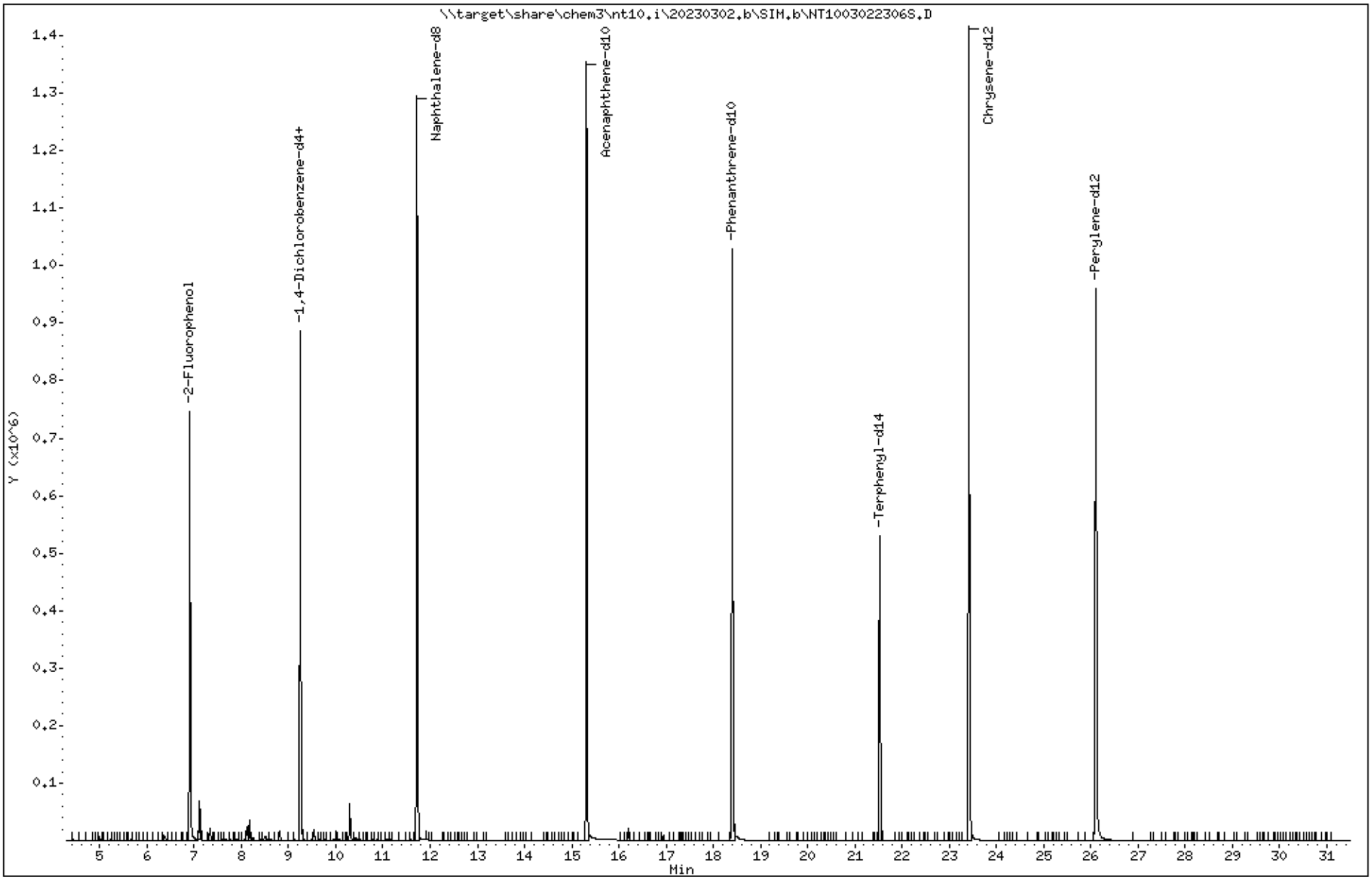
Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

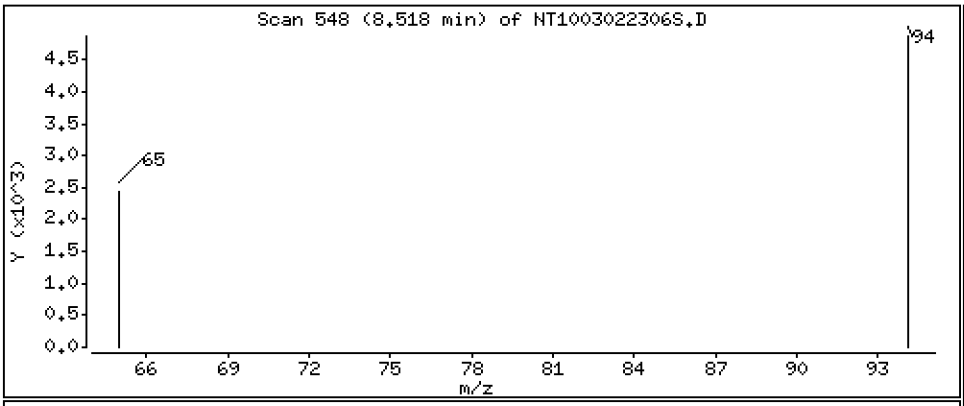
Operator: JGR

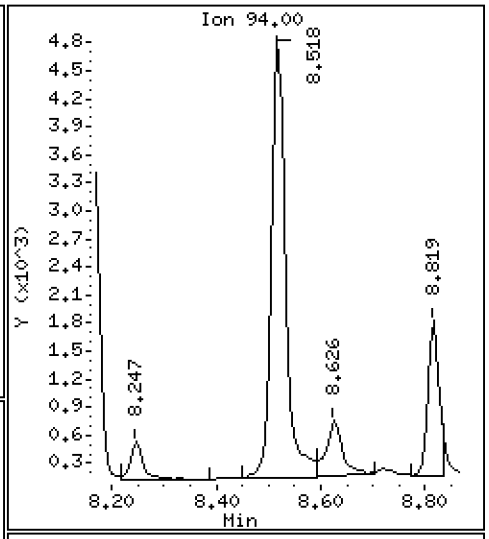
Column phase: ZB-5msi

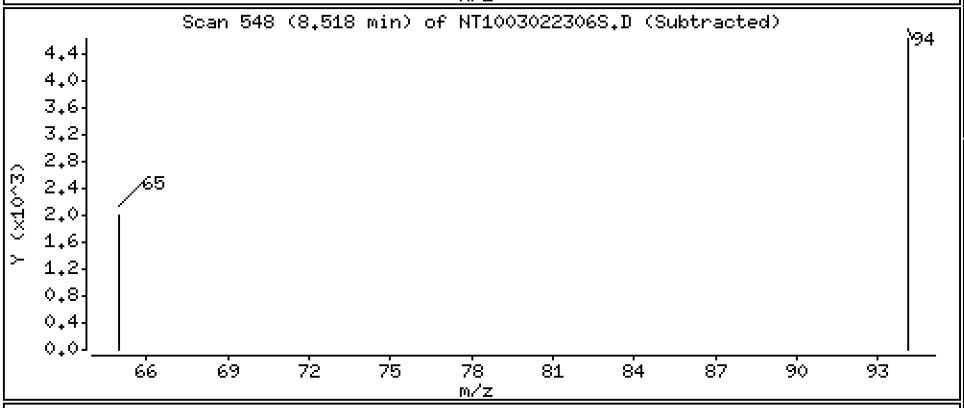
Column diameter: 0.25

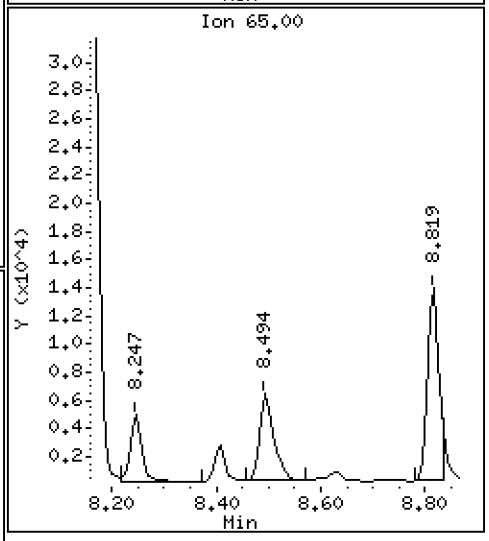
3 Phenol

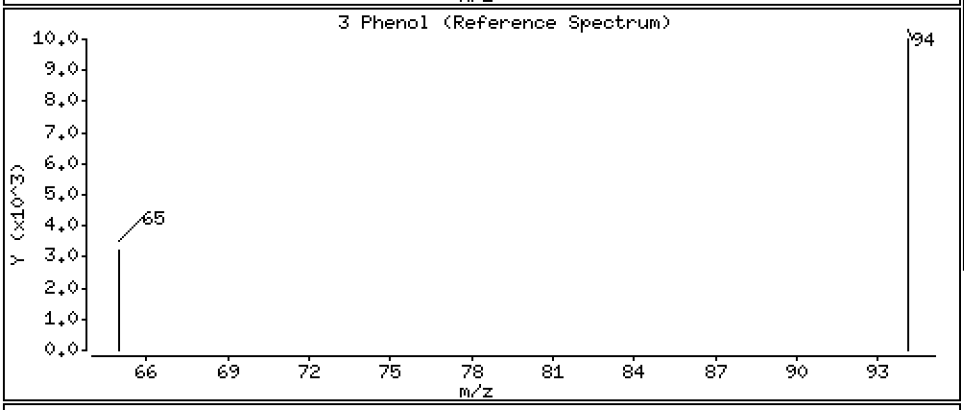
Concentration: 0.03723 ug/L

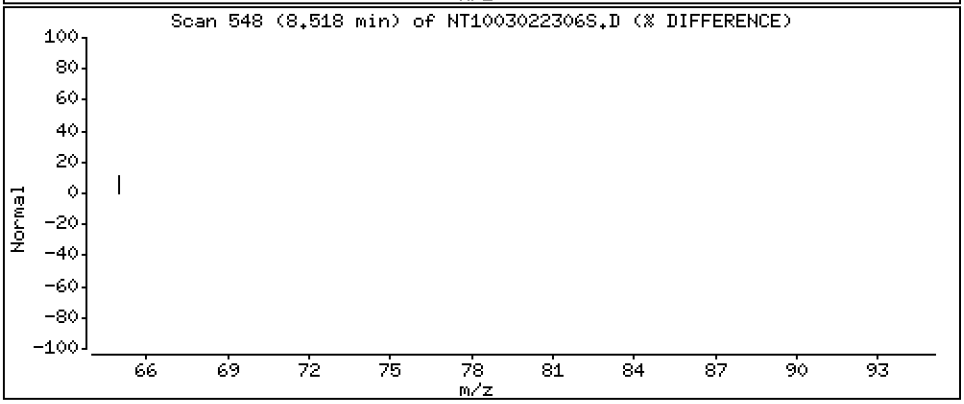












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

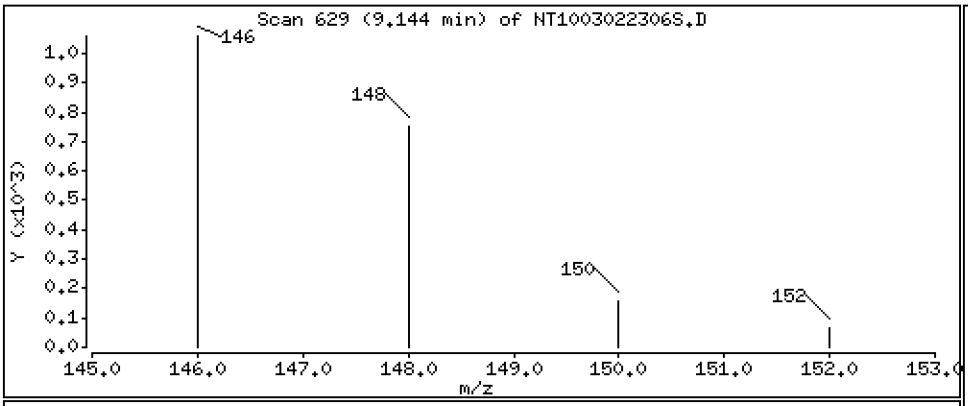
Operator: JGR

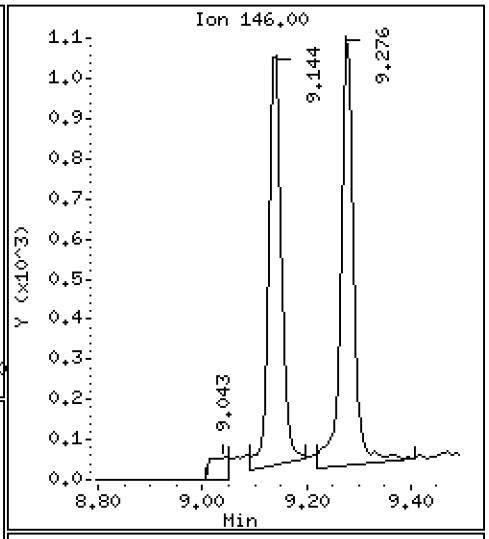
Column phase: ZB-5msi

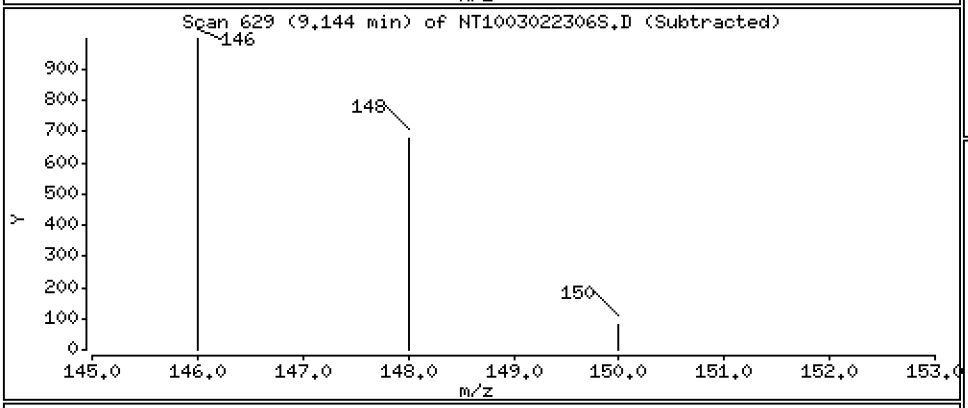
Column diameter: 0.25

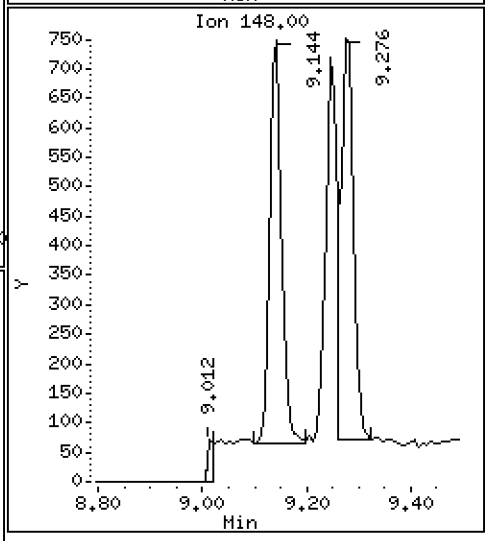
7 1,3-Dichlorobenzene

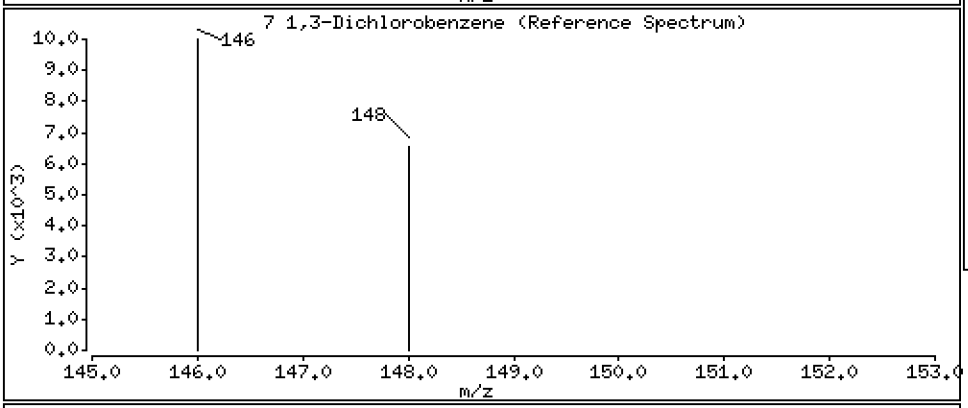
Concentration: 0.008781 ug/L

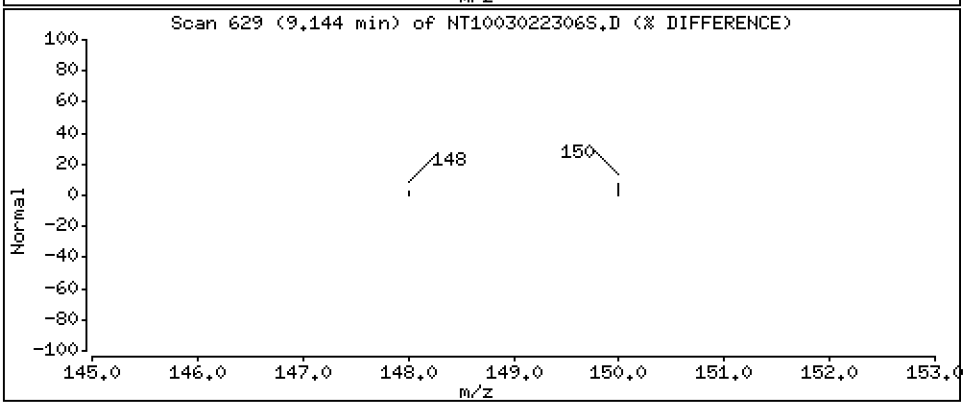












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

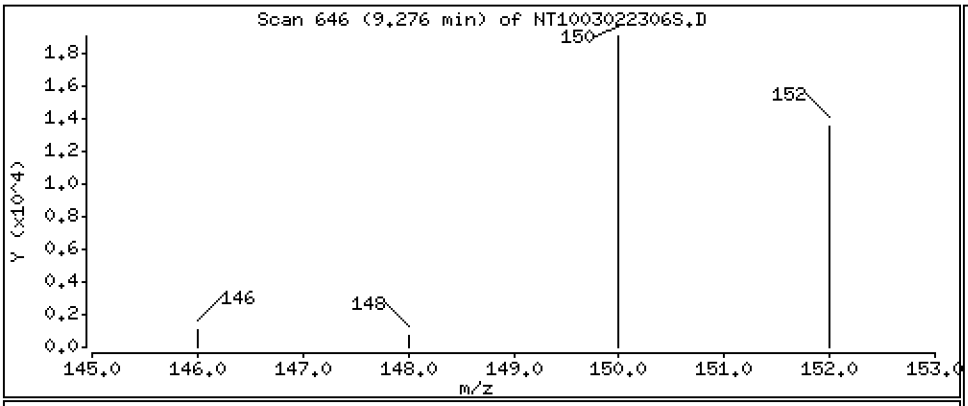
Operator: JGR

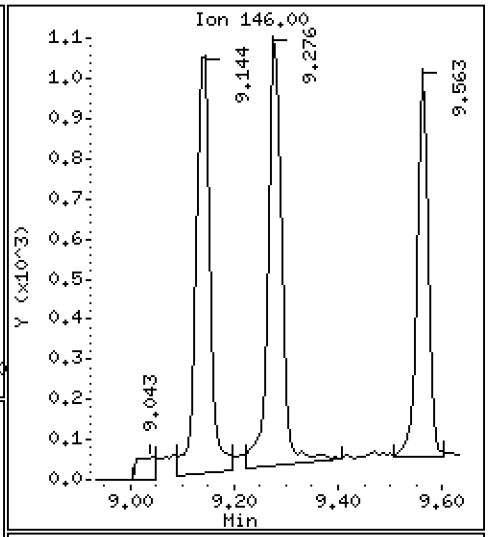
Column phase: ZB-5msi

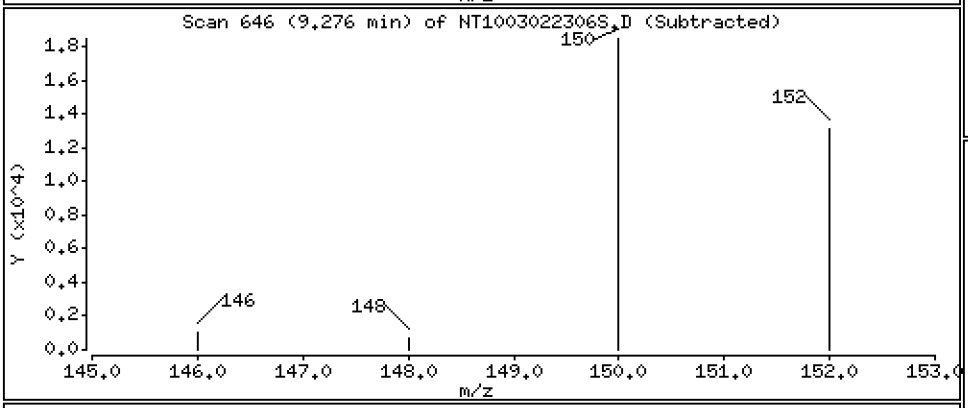
Column diameter: 0.25

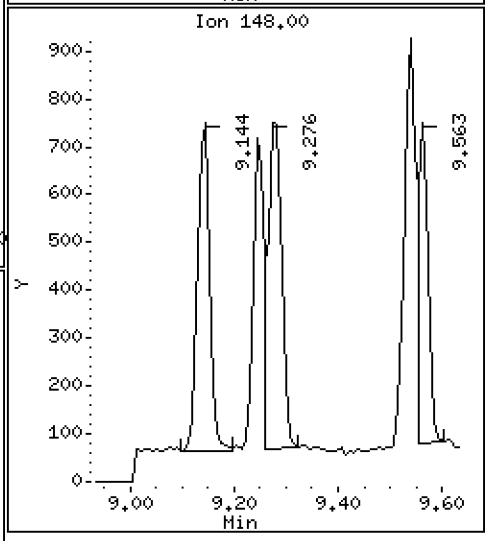
9 1,4-Dichlorobenzene

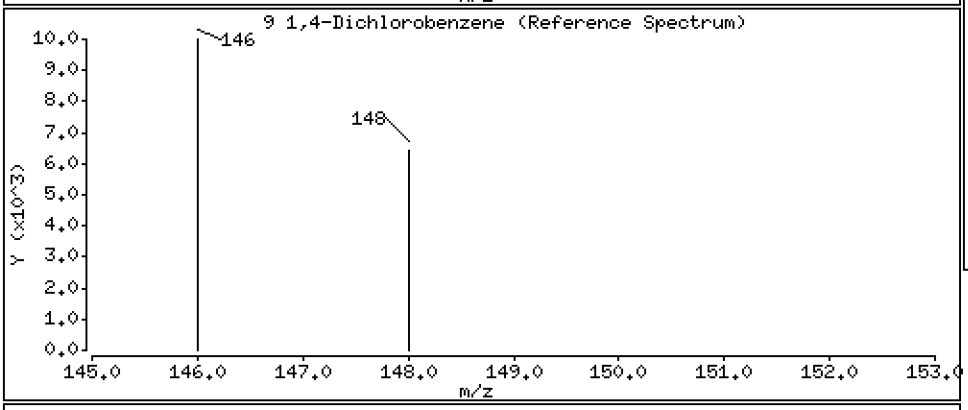
Concentration: 0.009746 ug/L

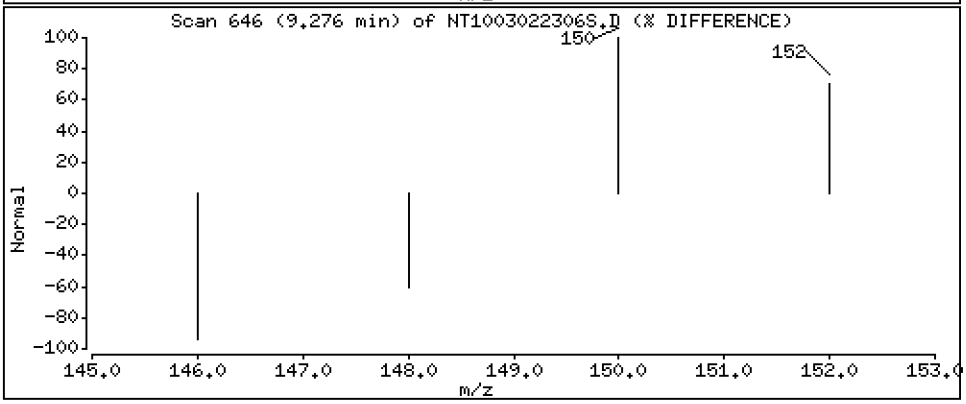












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

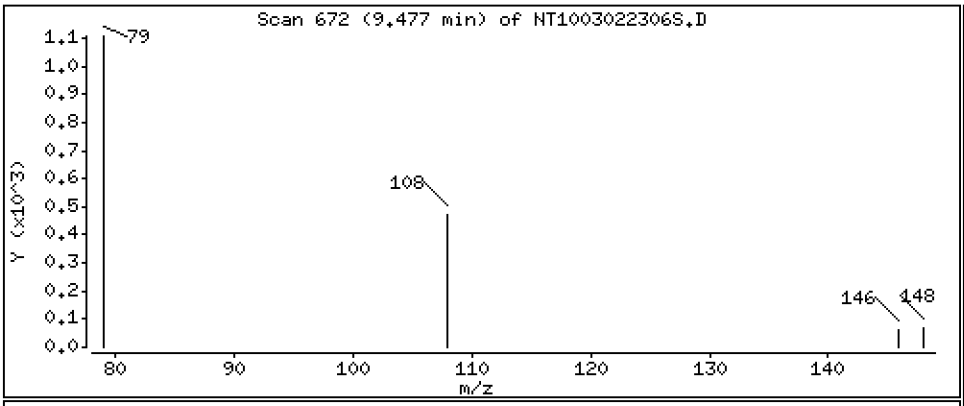
Operator: JGR

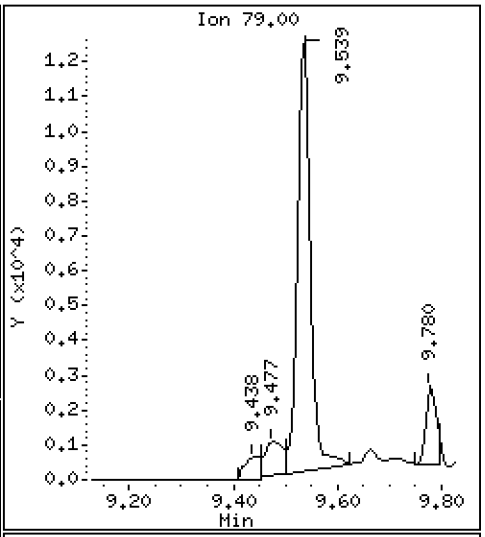
Column phase: ZB-5msi

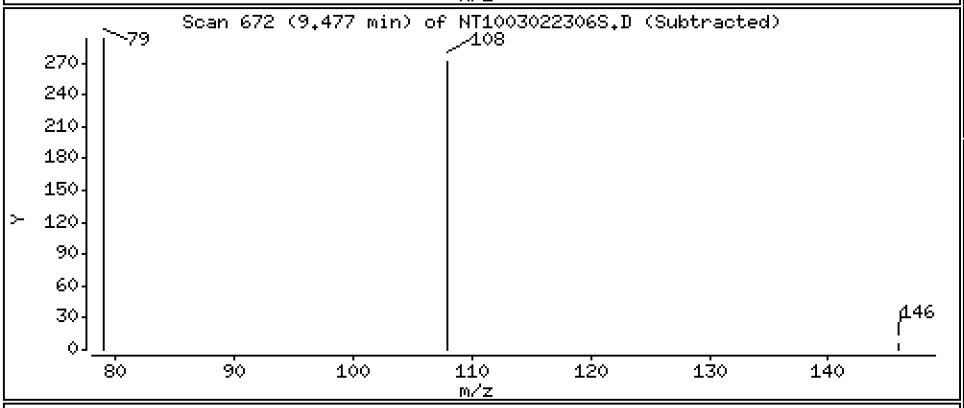
Column diameter: 0.25

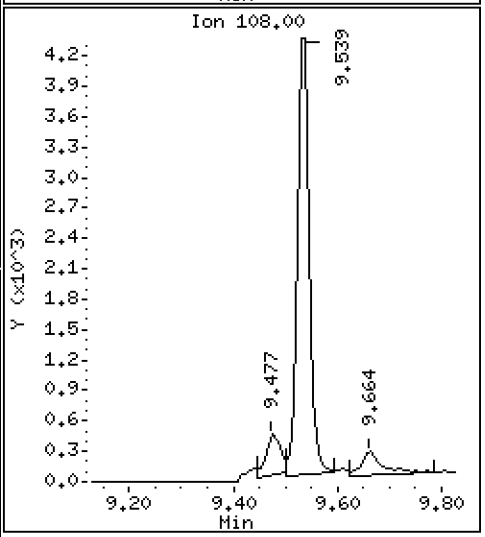
11 Benzyl alcohol

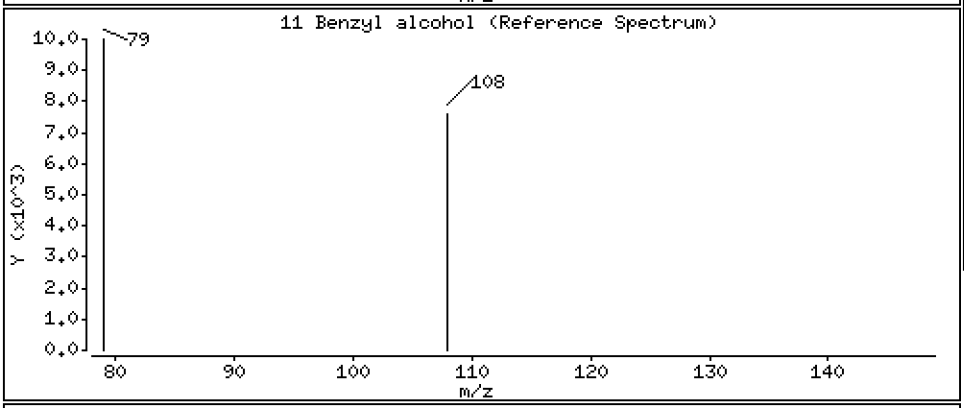
Concentration: 0.01992 ug/L

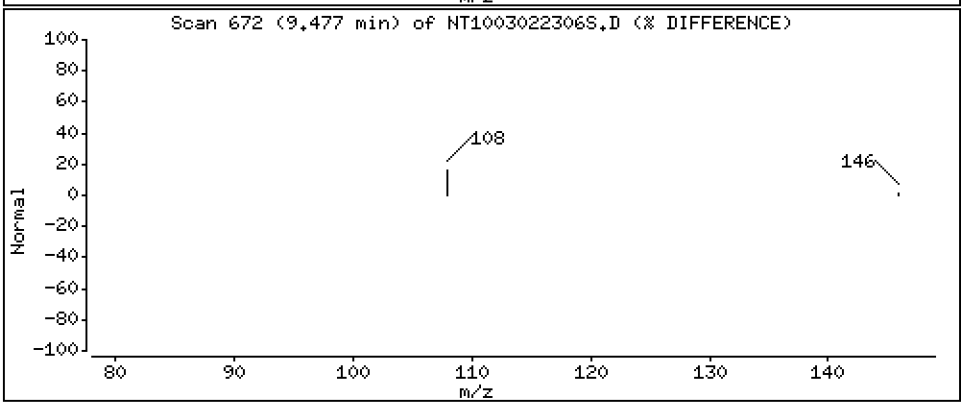












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

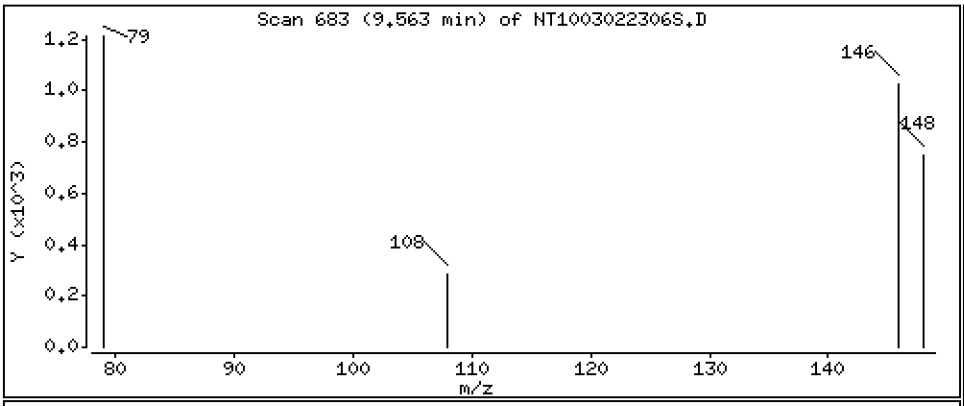
Operator: JGR

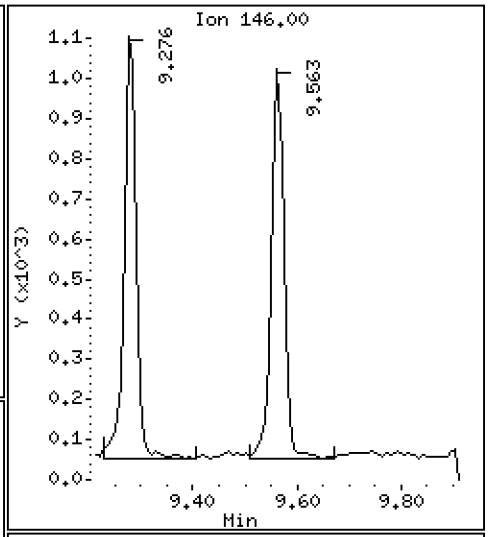
Column phase: ZB-5msi

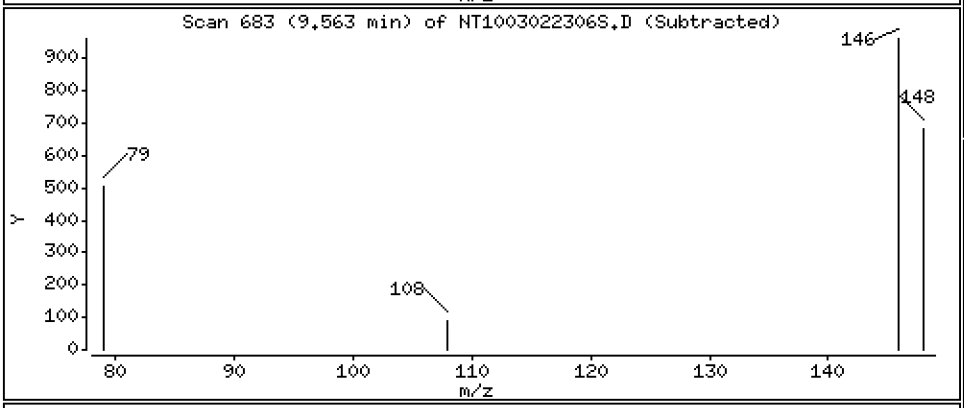
Column diameter: 0.25

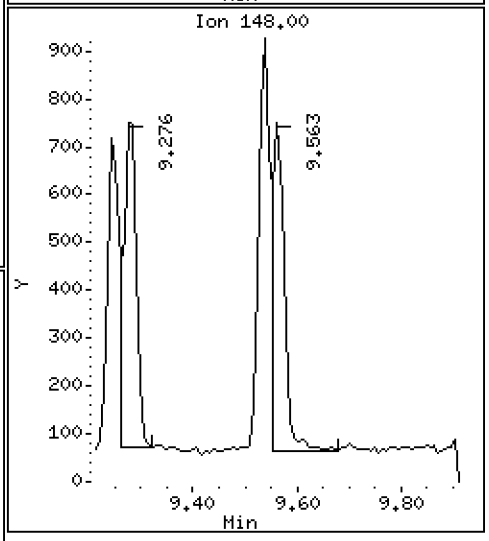
12 1,2-Dichlorobenzene

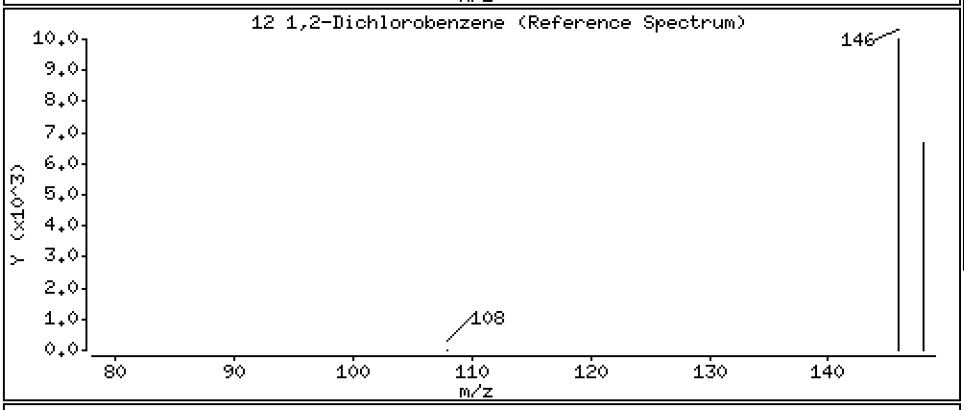
Concentration: 0.008196 ug/L

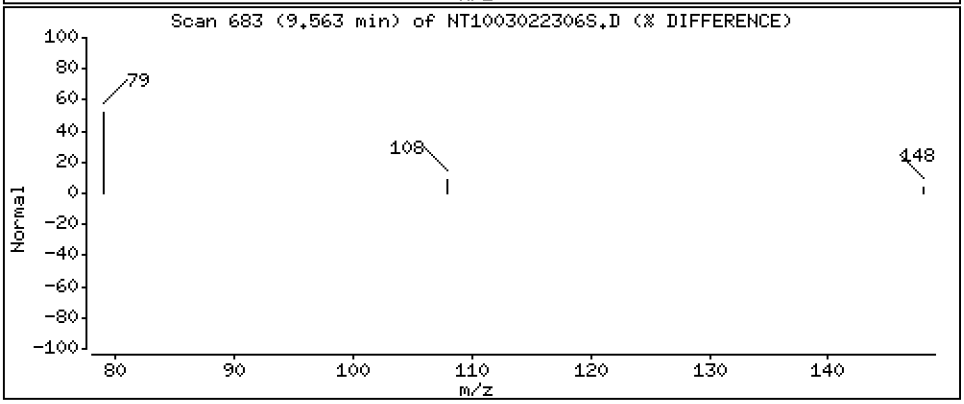












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

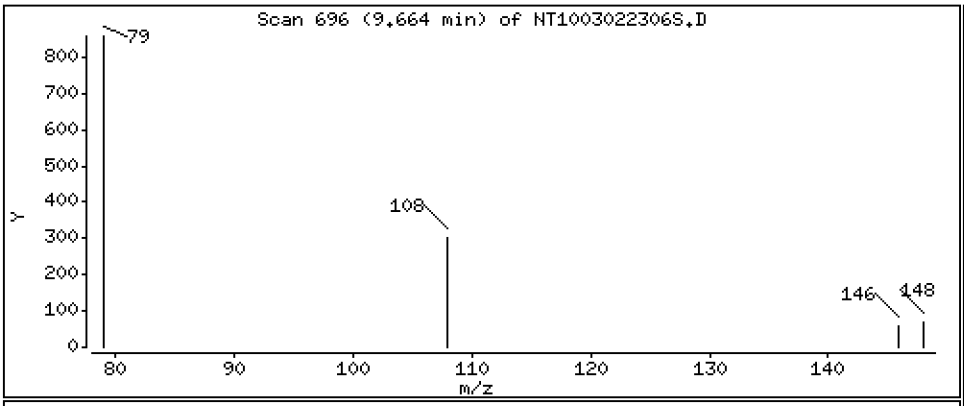
Operator: JGR

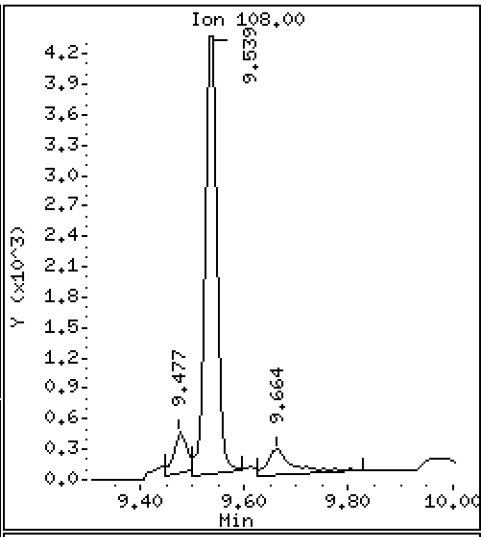
Column phase: ZB-5msi

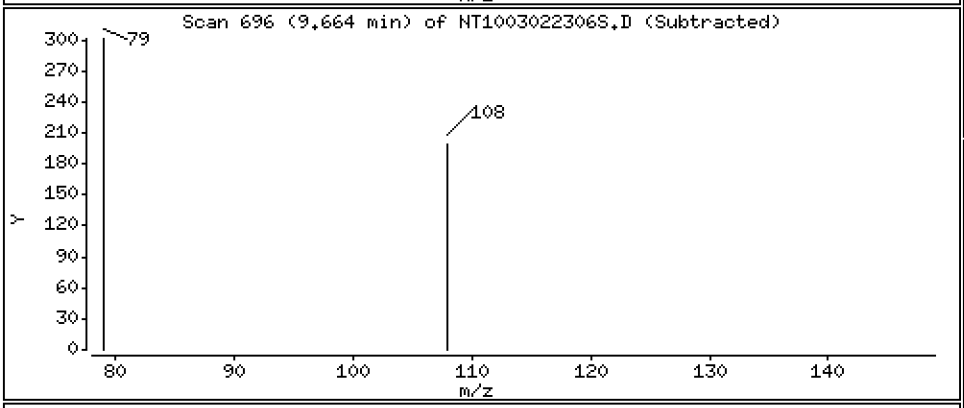
Column diameter: 0.25

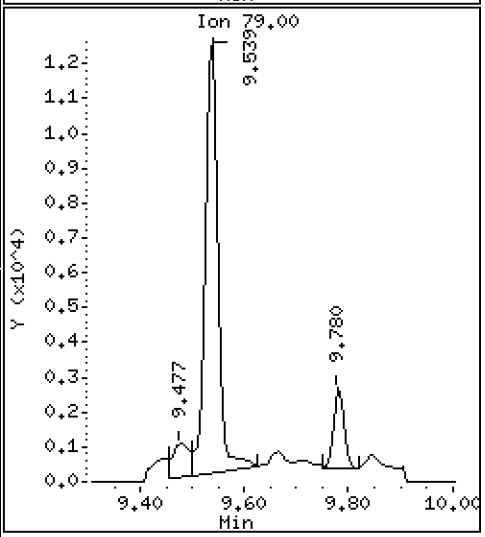
13 2-Methylphenol

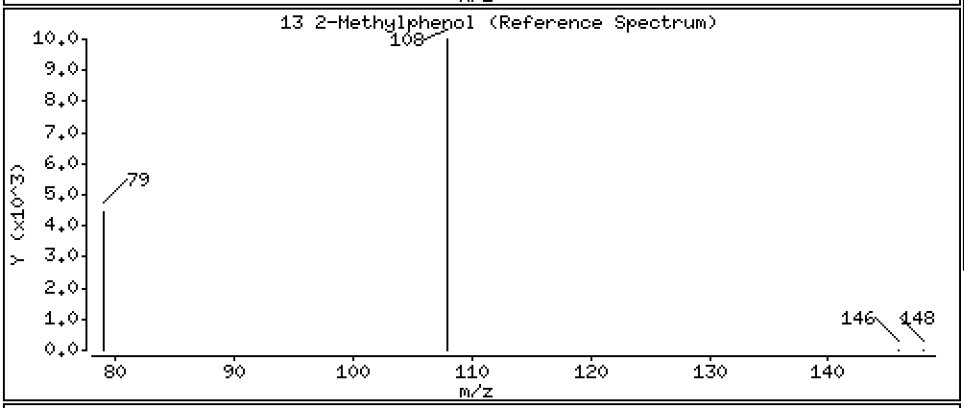
Concentration: 0.005974 ug/L

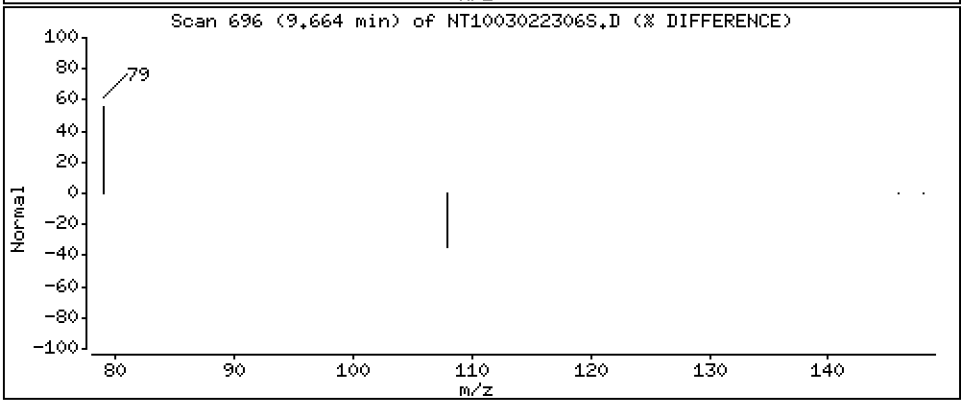












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

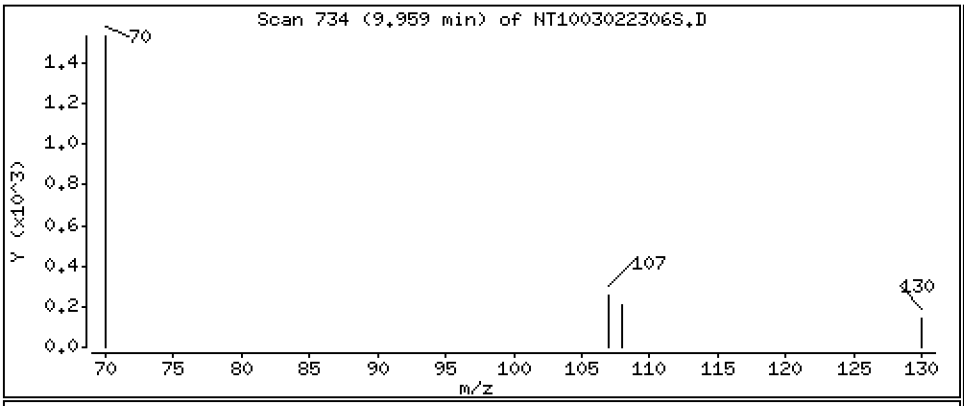
Operator: JGR

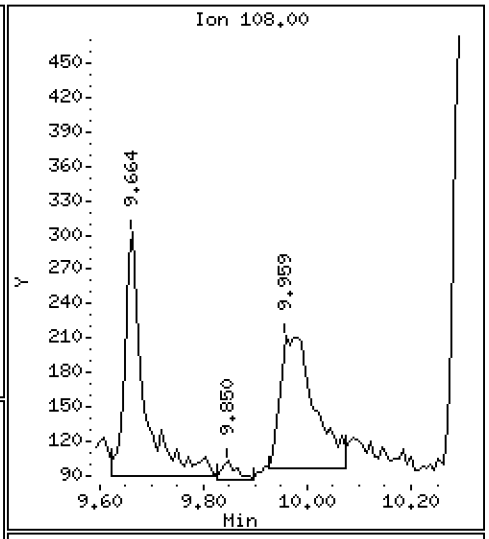
Column phase: ZB-5msi

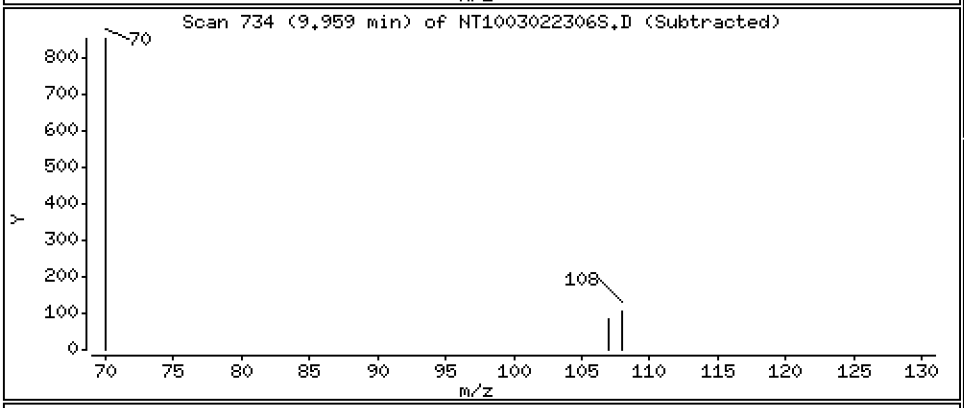
Column diameter: 0.25

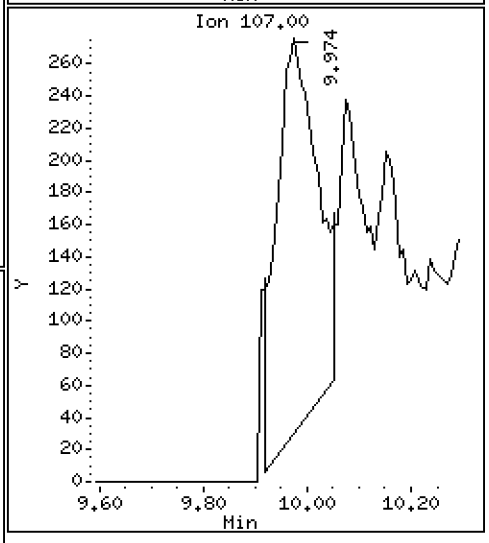
15 4-Methylphenol

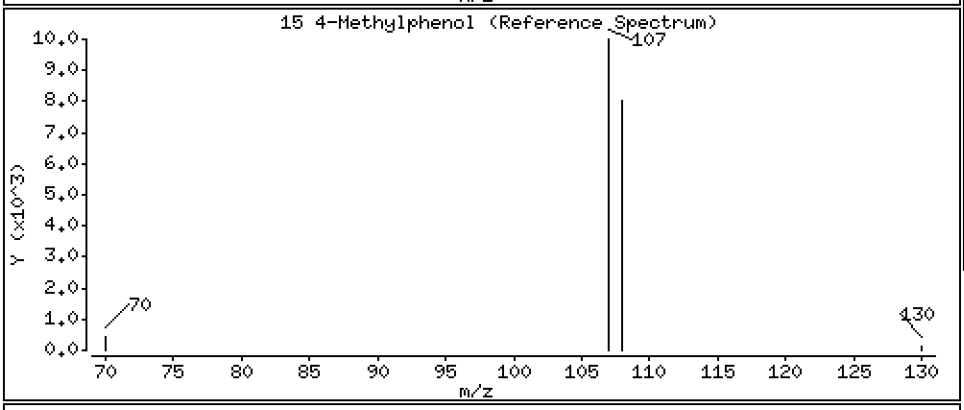
Concentration: 0.003753 ug/L

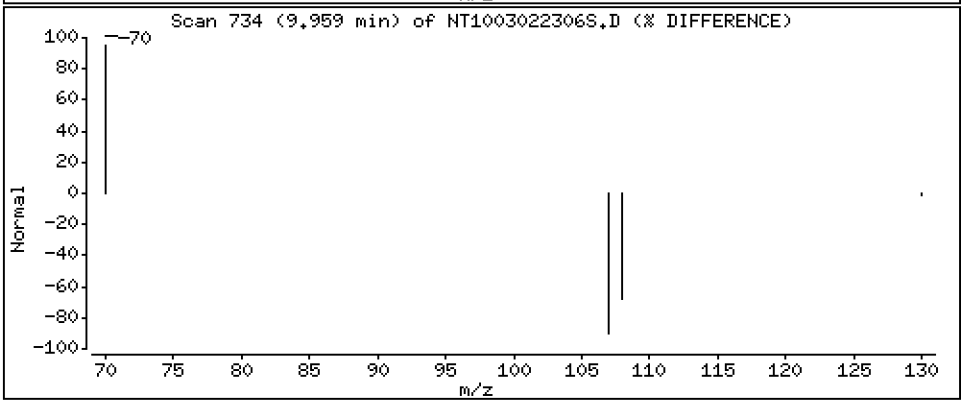












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223065.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

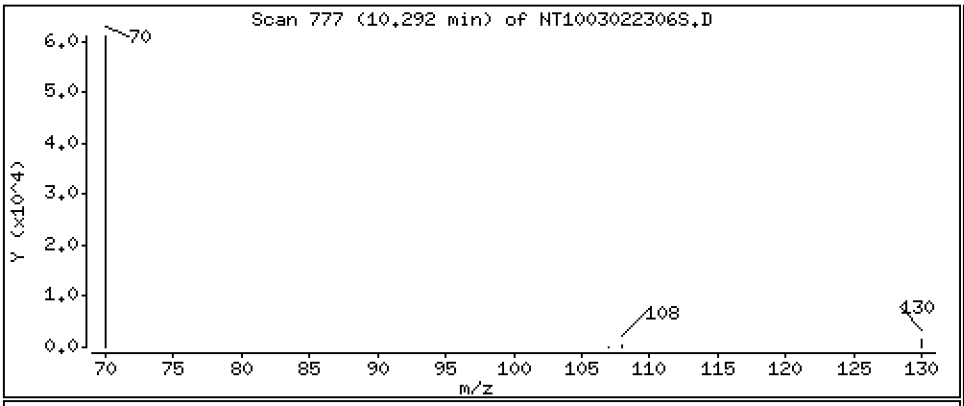
Operator: JGR

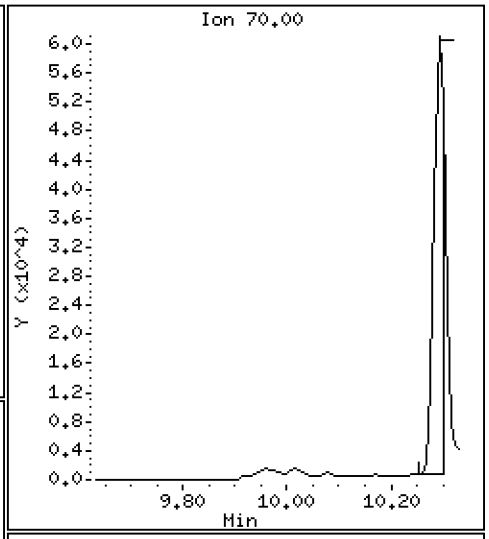
Column phase: ZB-5msi

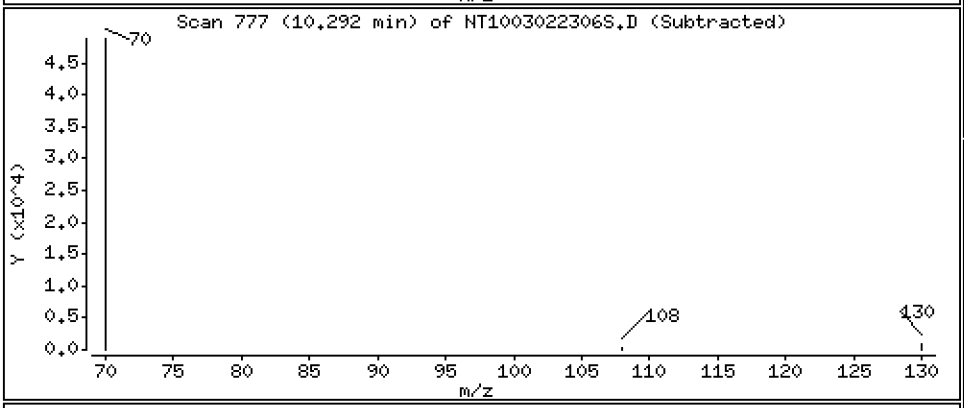
Column diameter: 0.25

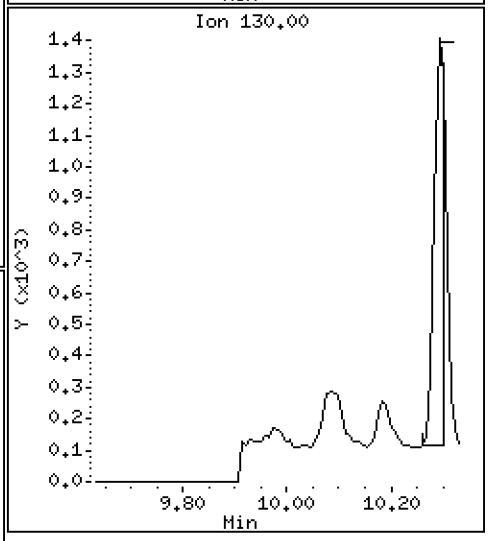
16 N-Nitroso-di-n-propylamine

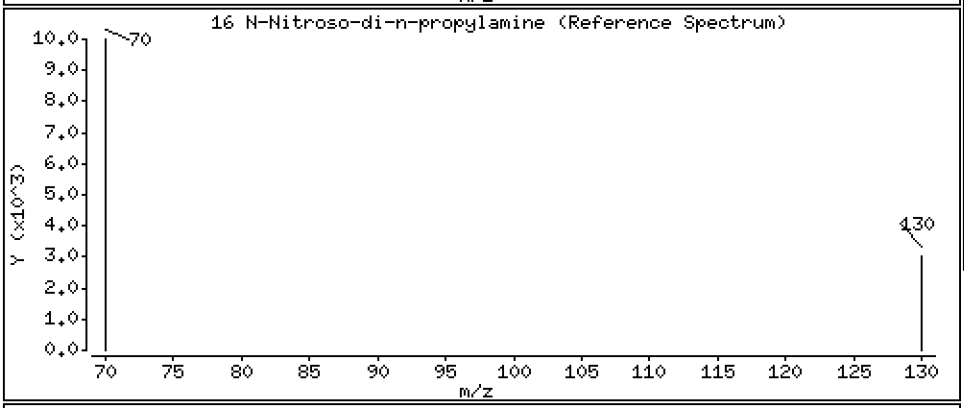
Concentration: 0.7468 ug/L

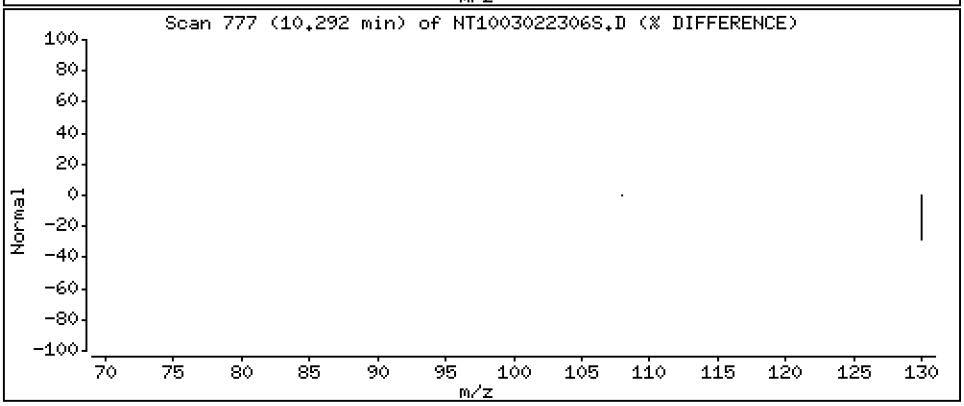












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223065.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

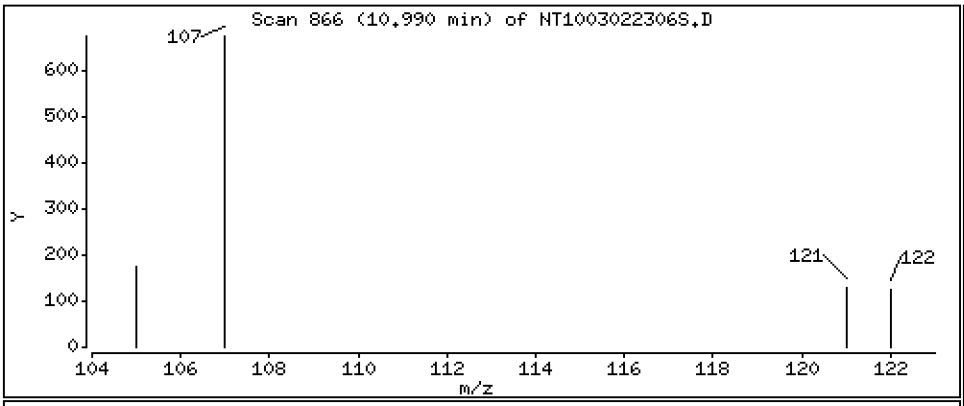
Operator: JGR

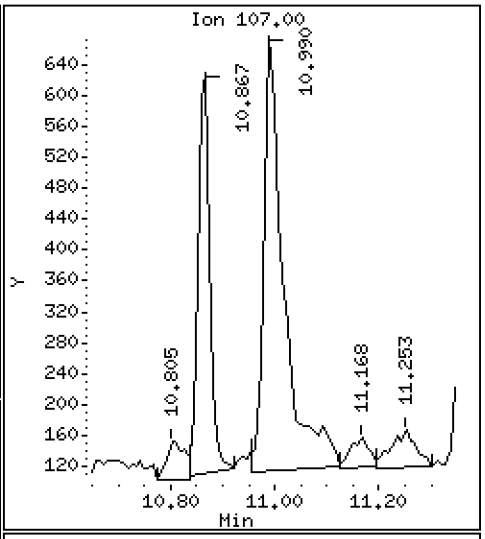
Column phase: ZB-5msi

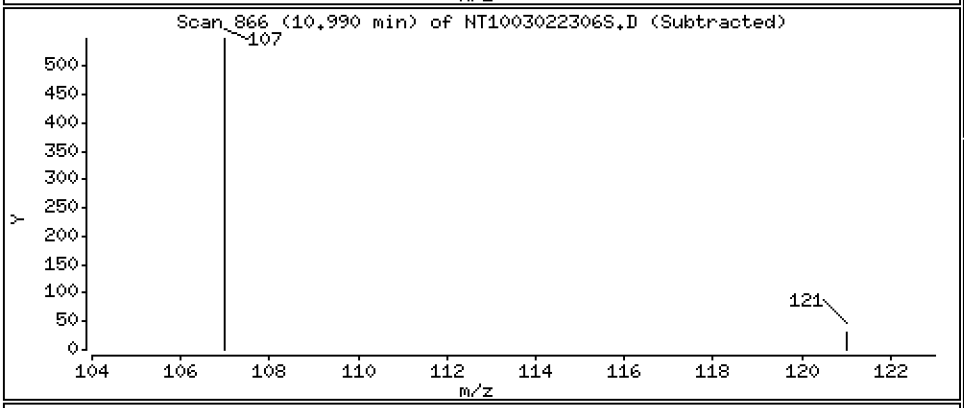
Column diameter: 0.25

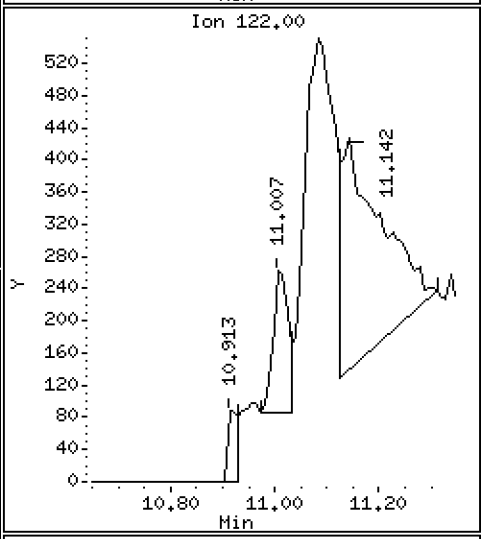
22 2,4-Dimethylphenol

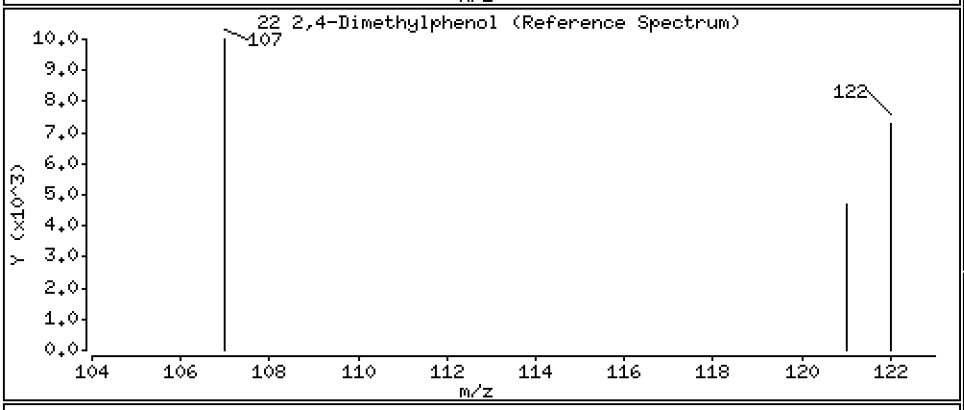
Concentration: 0.008969 ug/L

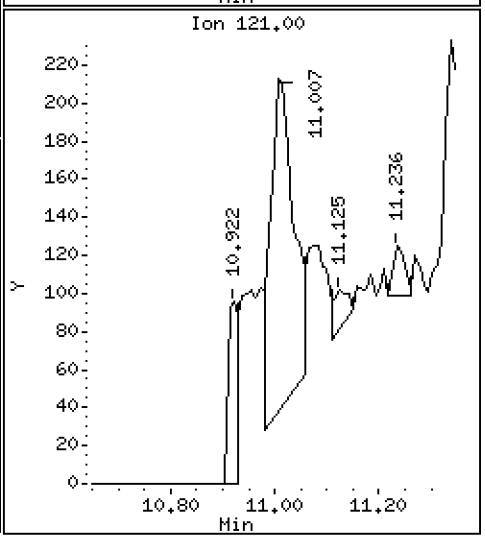


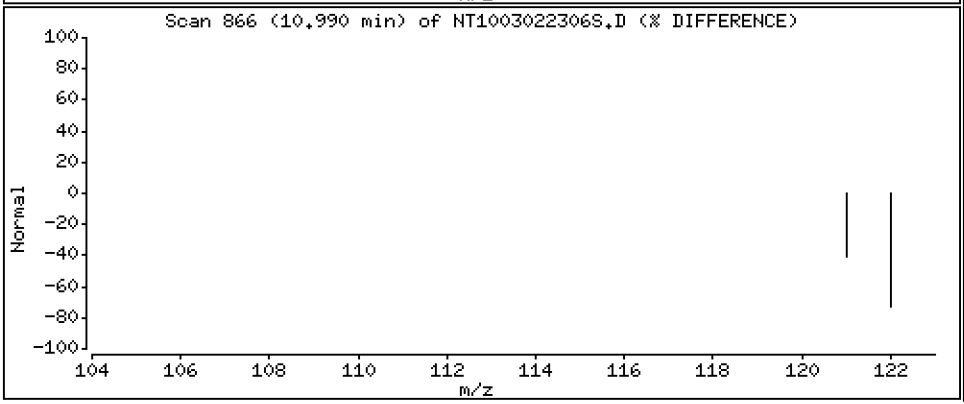












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

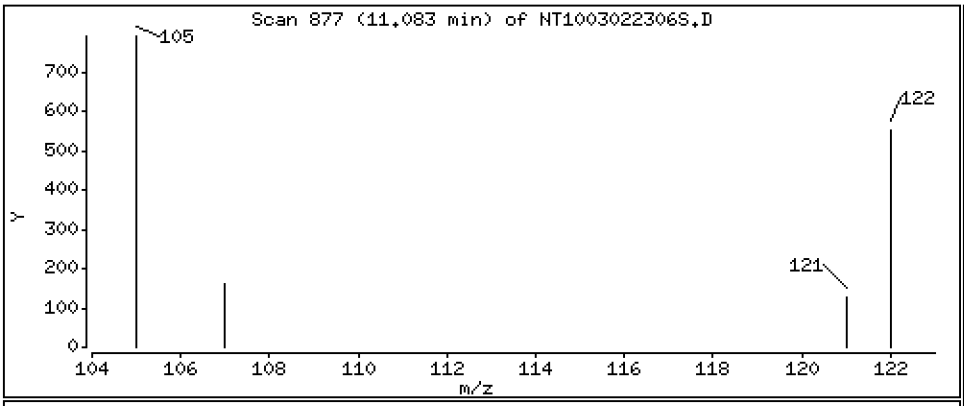
Operator: JGR

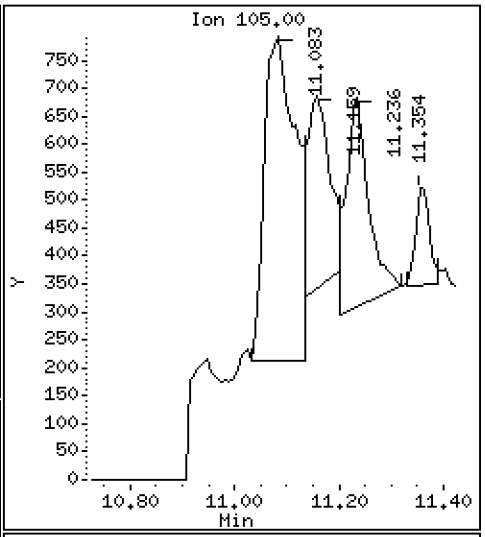
Column phase: ZB-5msi

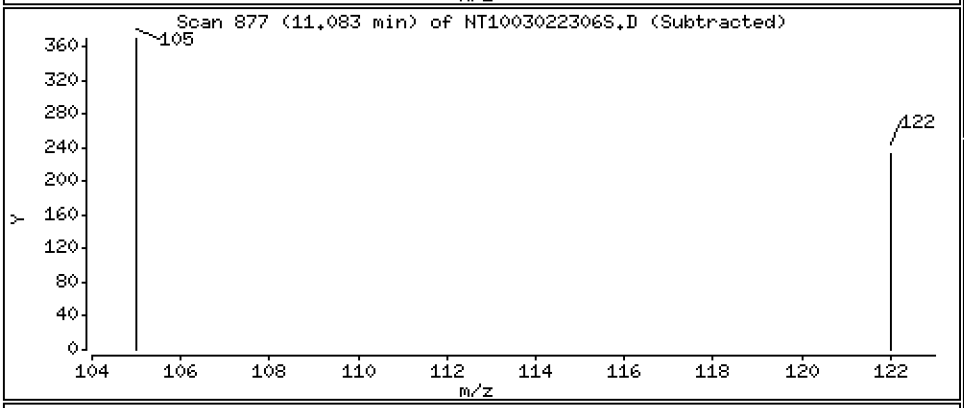
Column diameter: 0.25

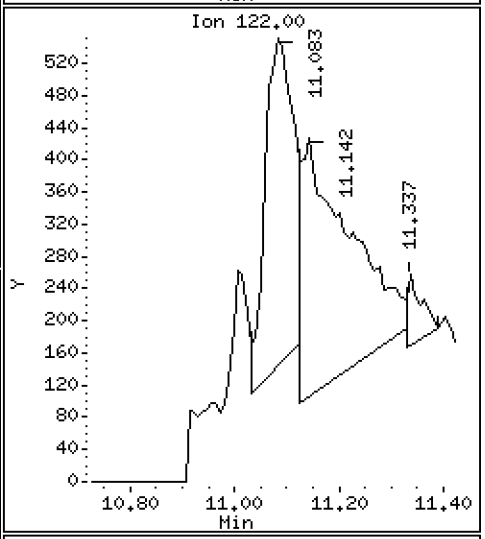
24 Benzoic acid

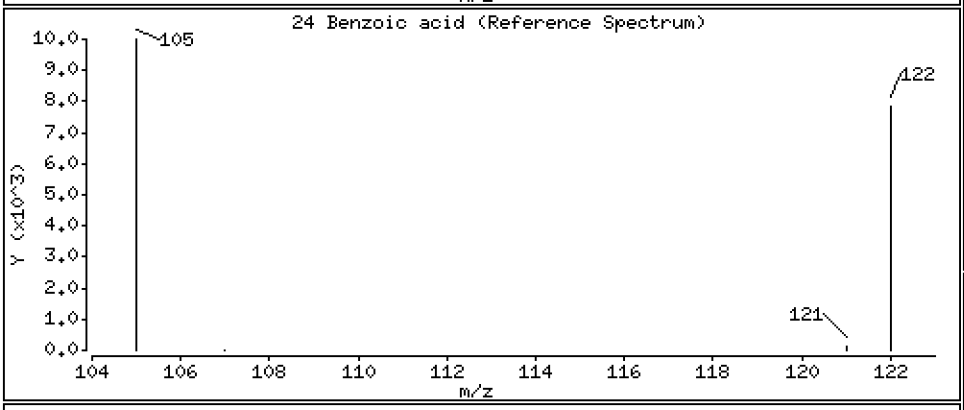
Concentration: 0.02740 ug/L

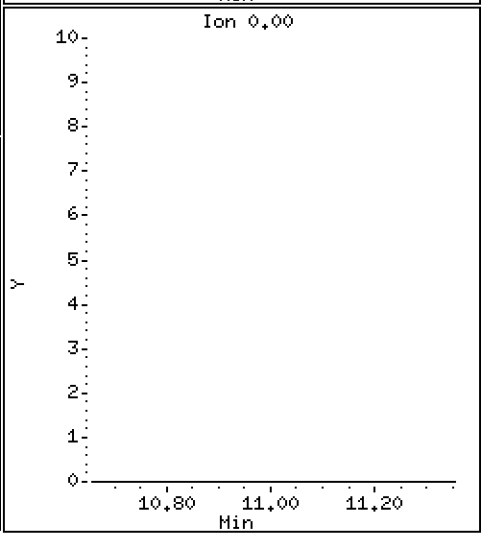


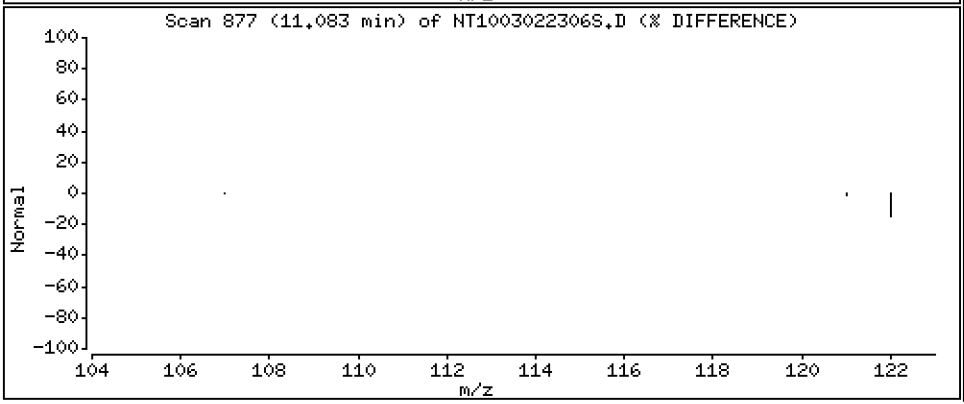












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Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

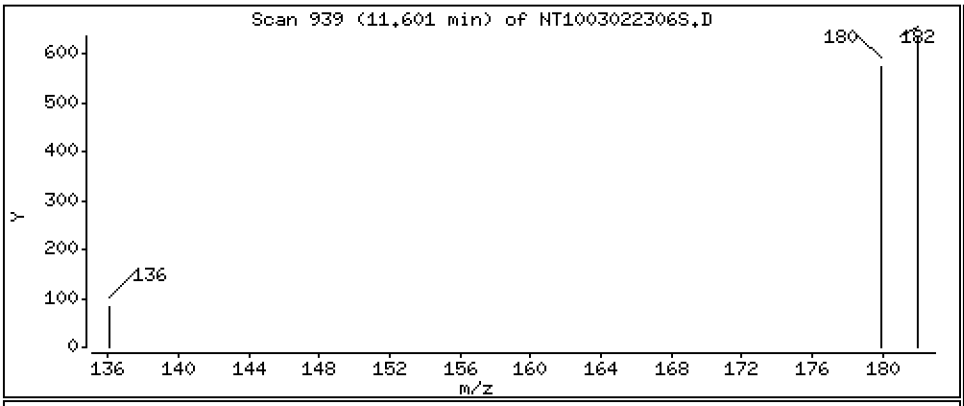
Operator: JGR

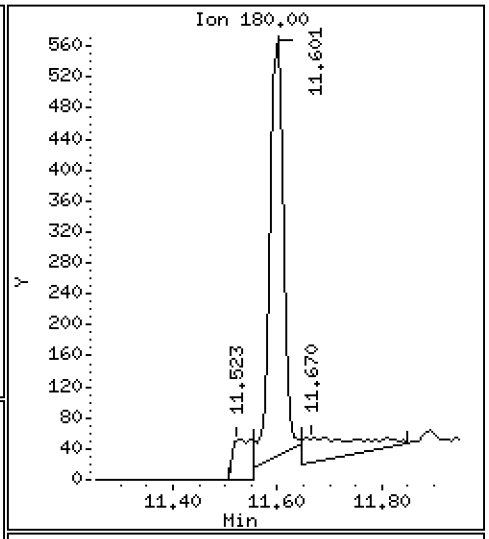
Column phase: ZB-5msi

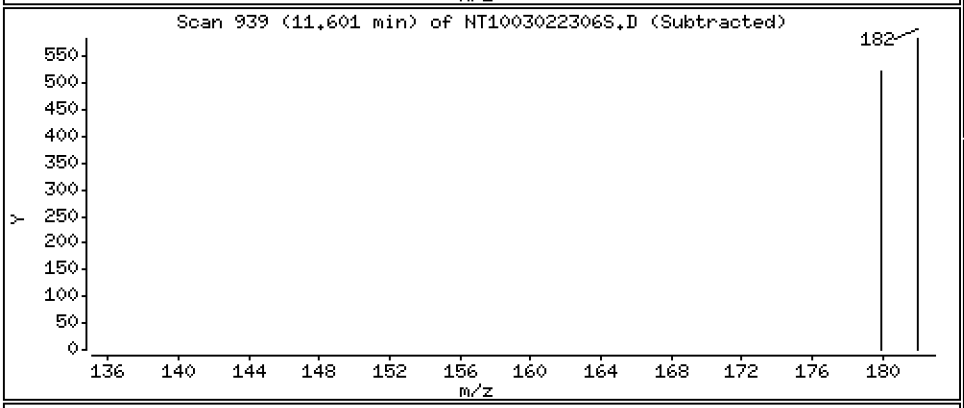
Column diameter: 0.25

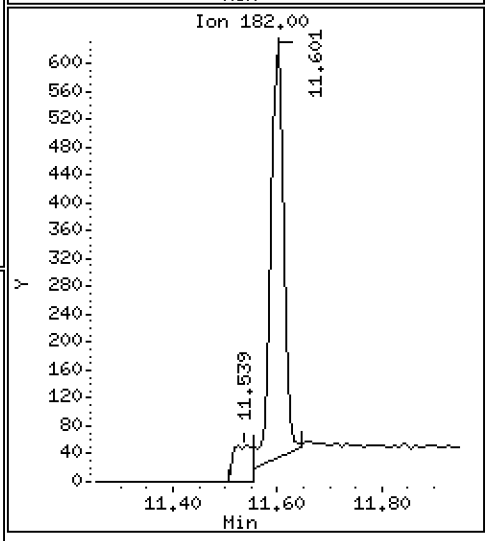
26 1,2,4-Trichlorobenzene

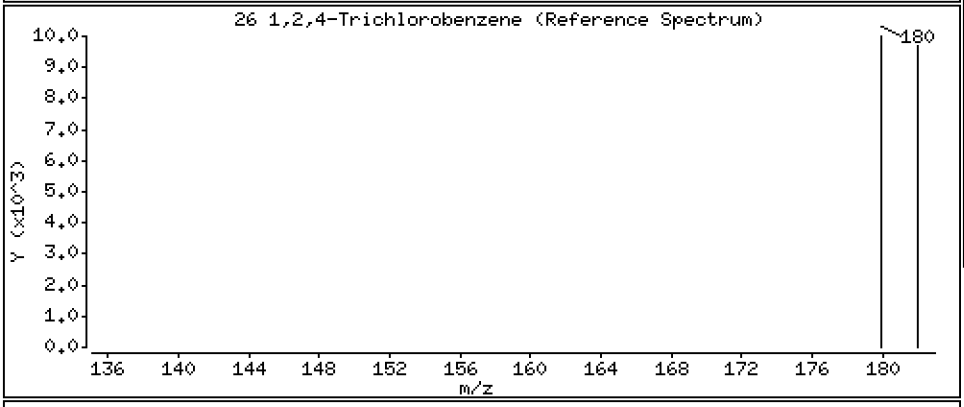
Concentration: 0.006579 ug/L

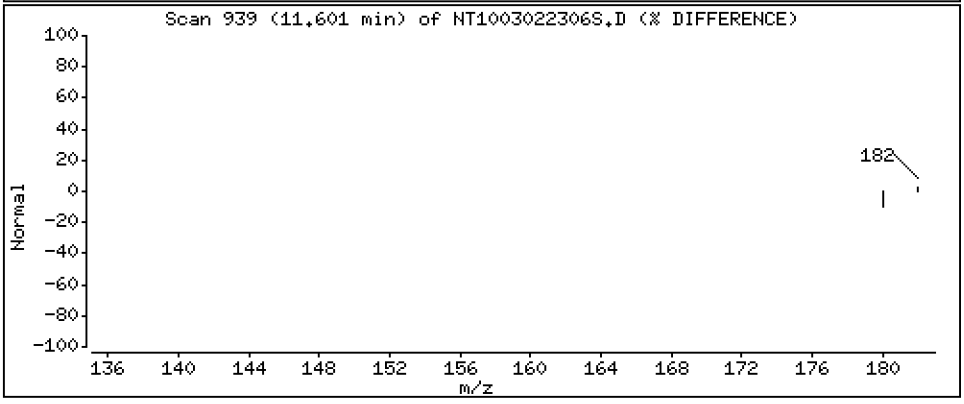












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

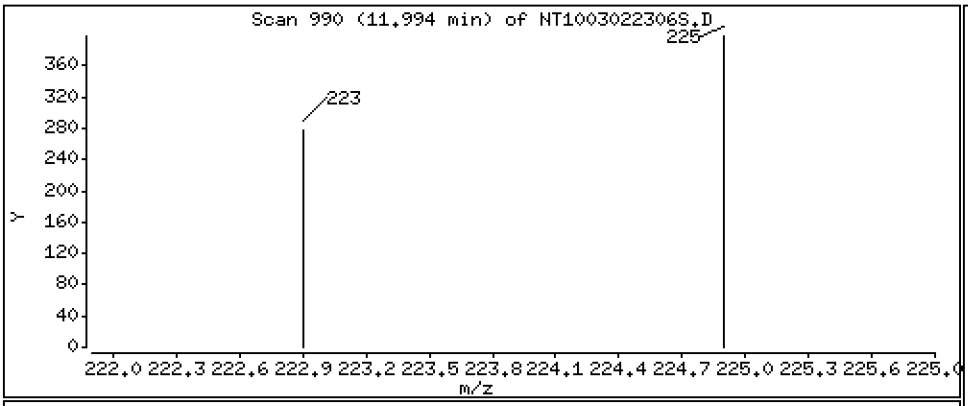
Operator: JGR

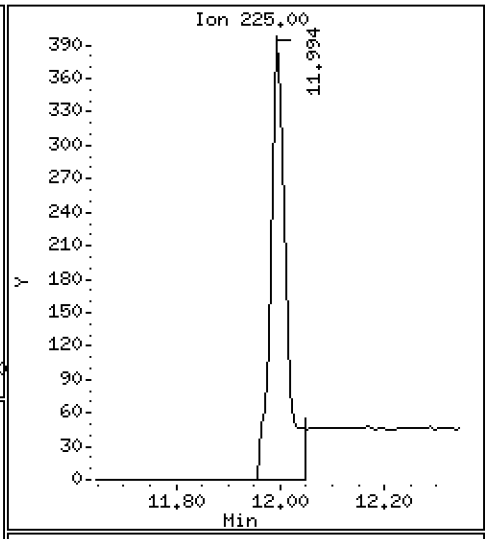
Column phase: ZB-5msi

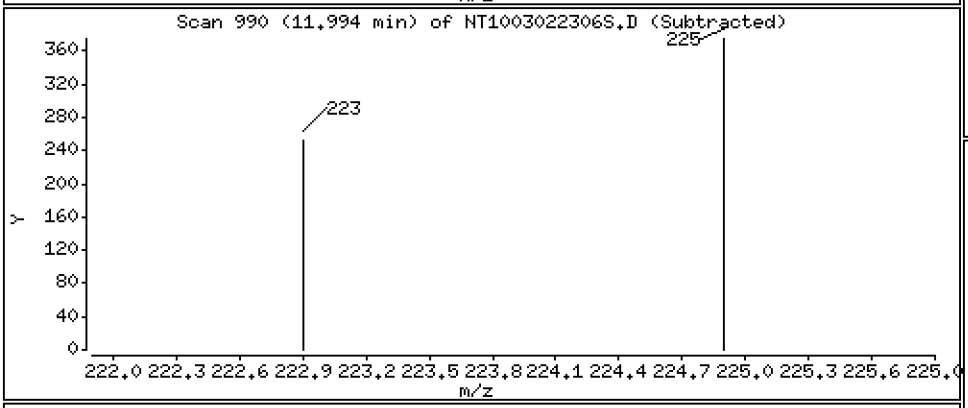
Column diameter: 0.25

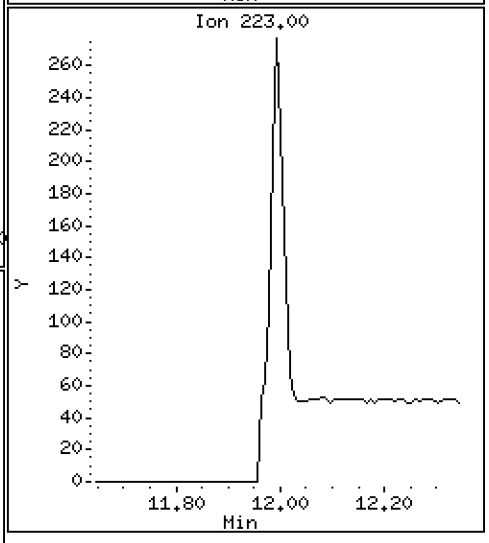
30 Hexachlorobutadiene

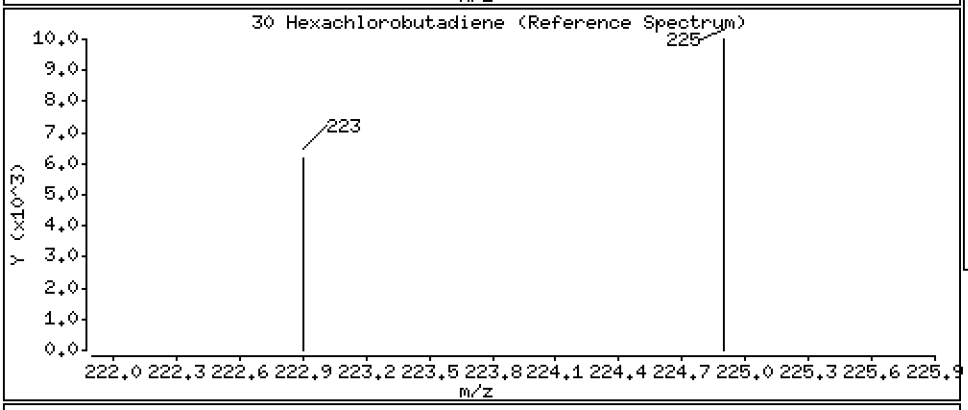
Concentration: 0.007847 ug/L

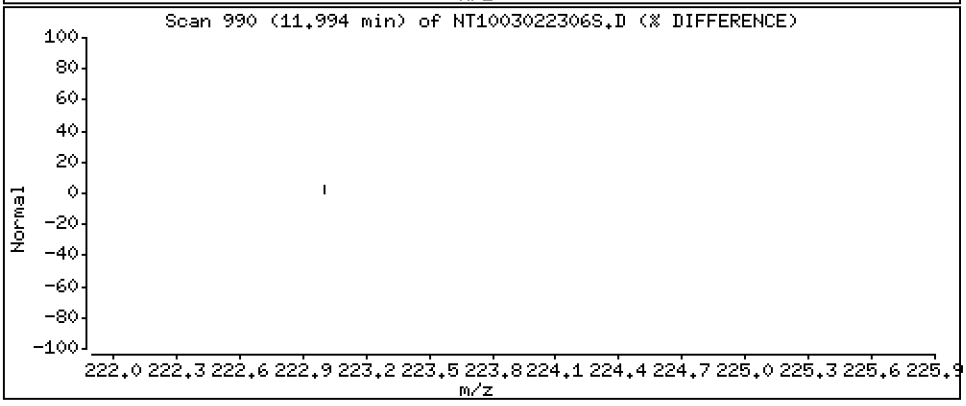












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

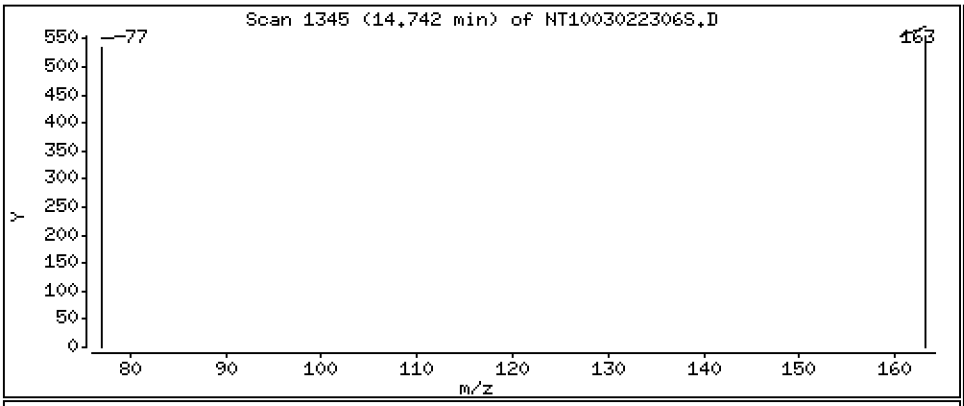
Operator: JGR

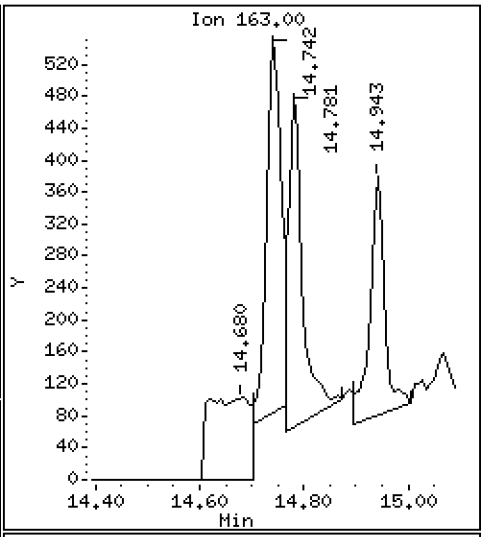
Column phase: ZB-5msi

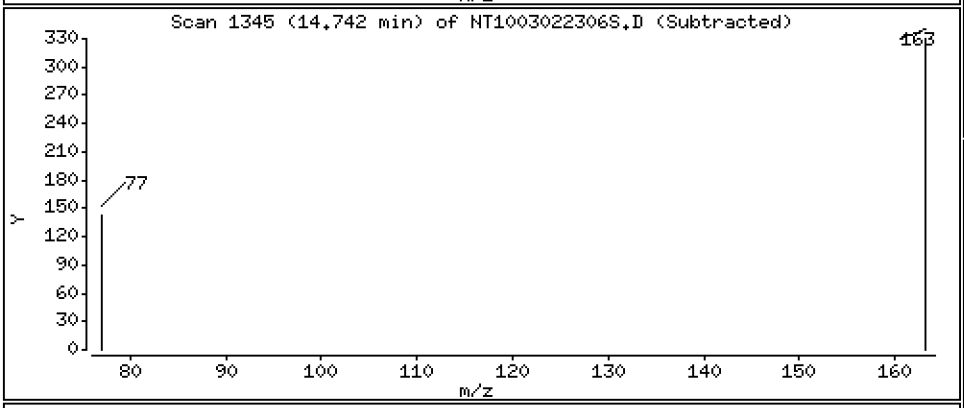
Column diameter: 0.25

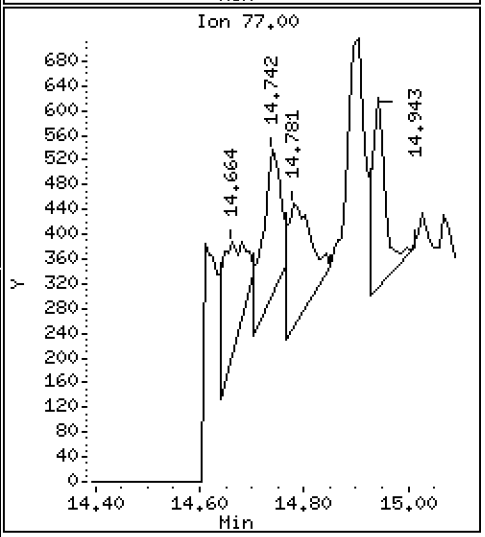
39 Dimethylphthalate

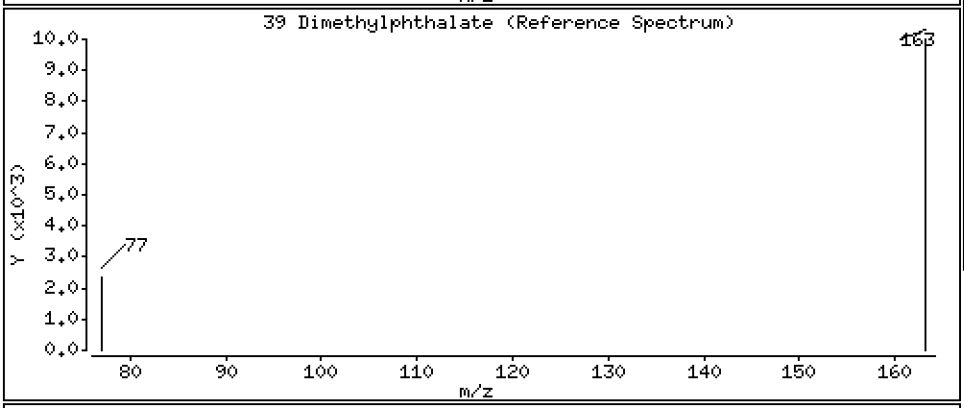
Concentration: 0.002775 ug/L

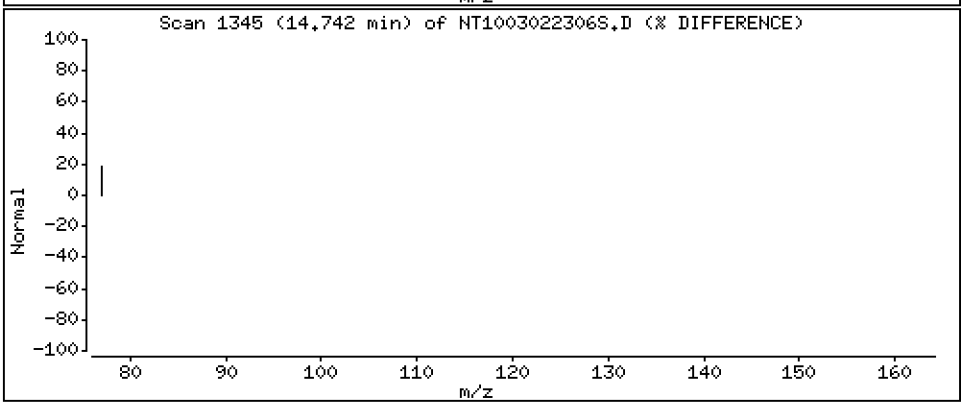












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Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

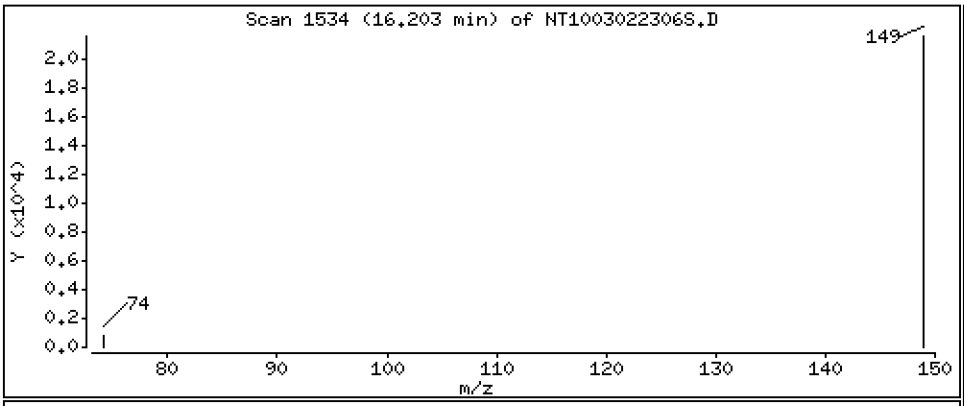
Operator: JGR

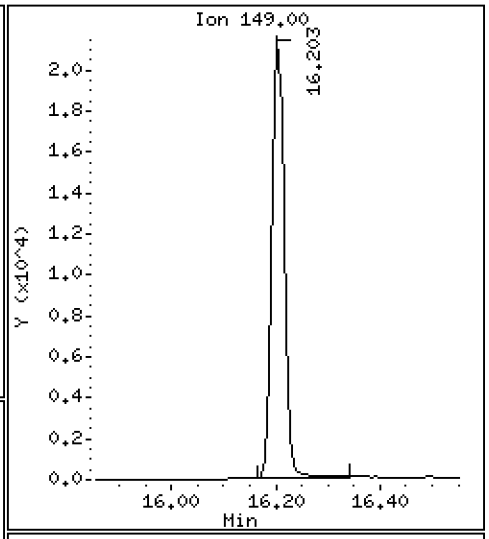
Column phase: ZB-5msi

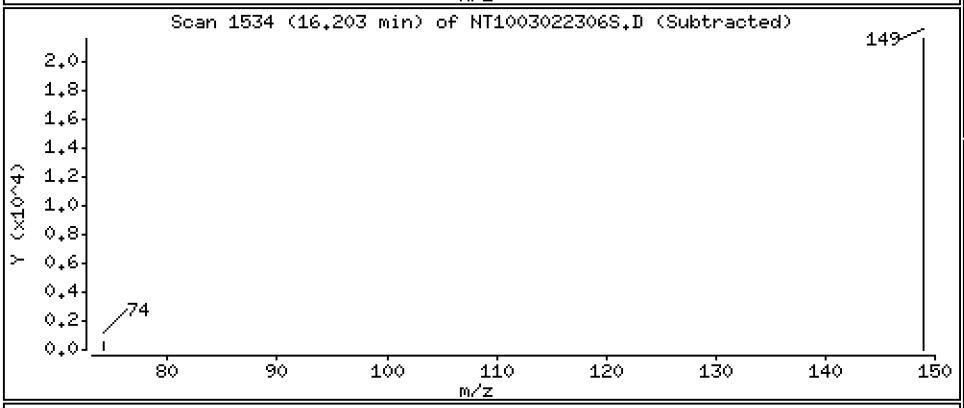
Column diameter: 0.25

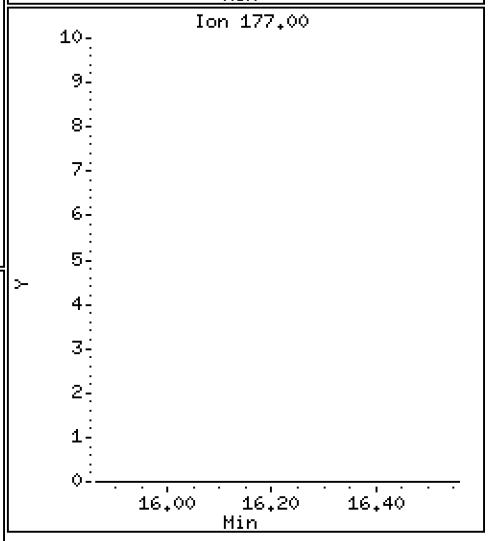
50 Diethylphthalate

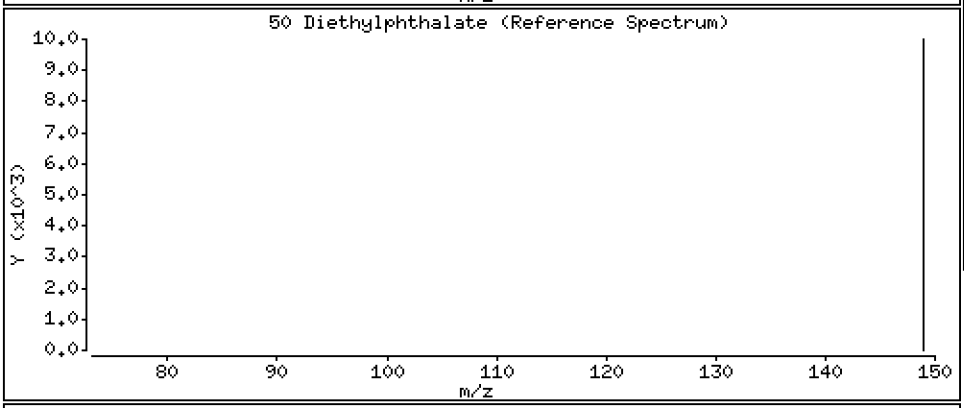
Concentration: 0.1080 ug/L

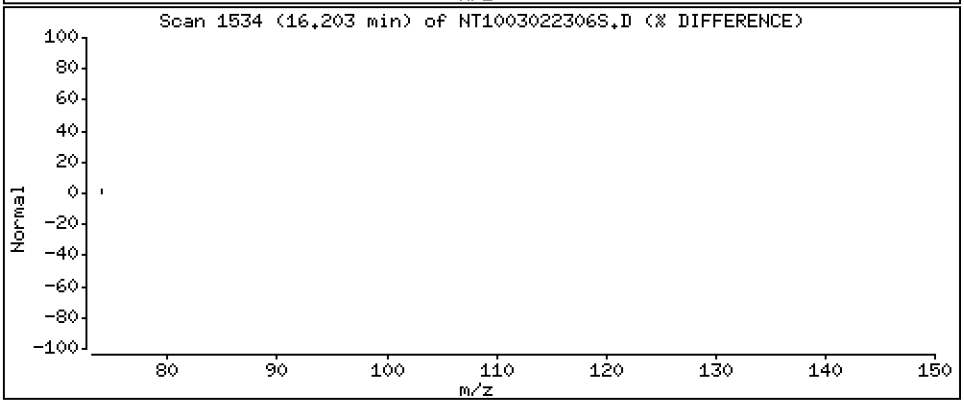












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Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

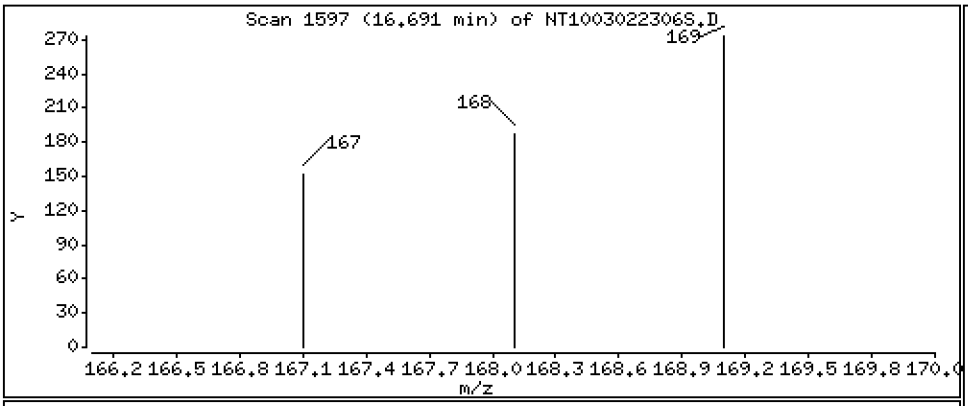
Operator: JGR

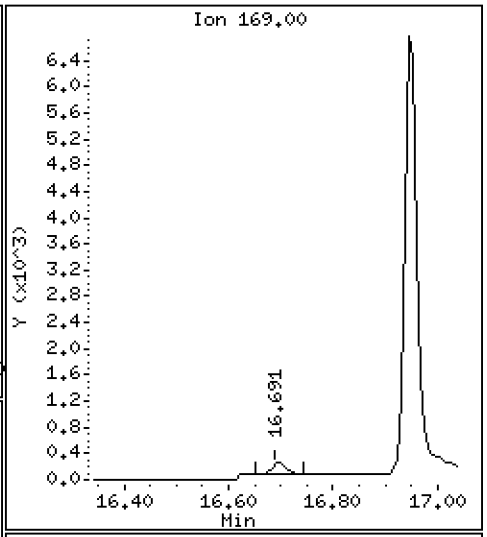
Column phase: ZB-5msi

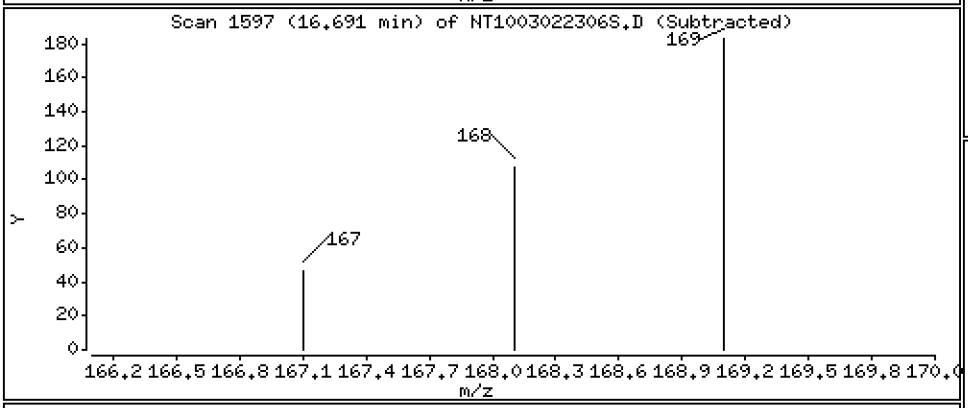
Column diameter: 0.25

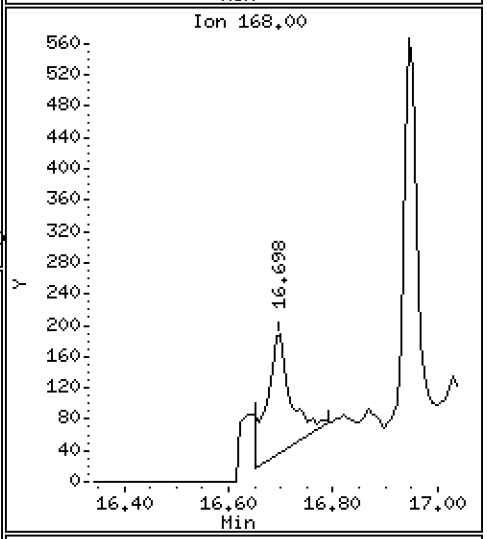
54 N-Nitrosodiphenylamine

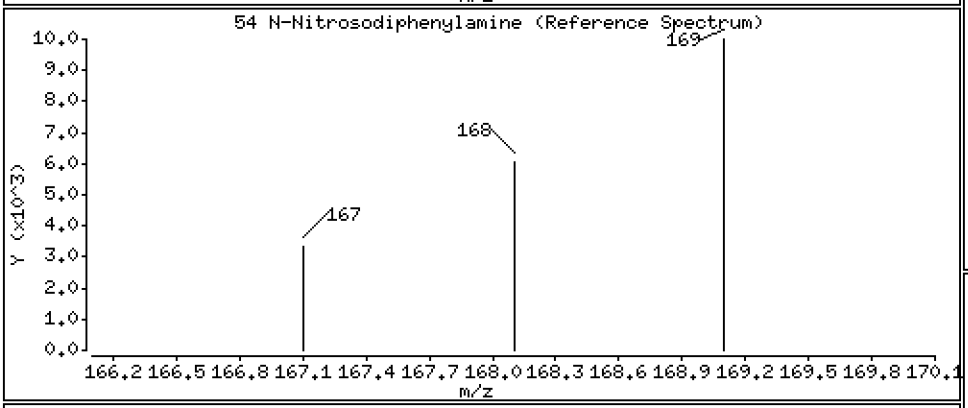
Concentration: 0.001198 ug/L

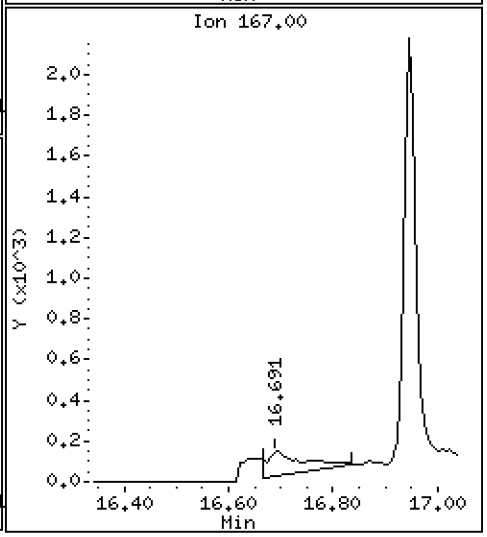


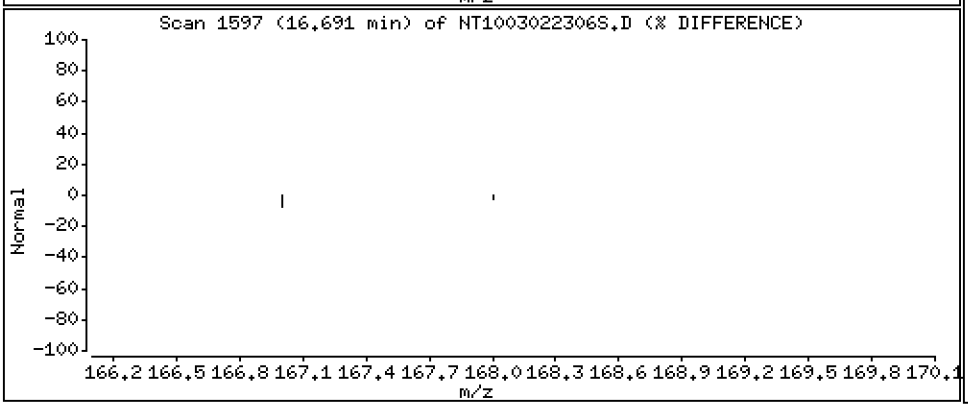












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Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

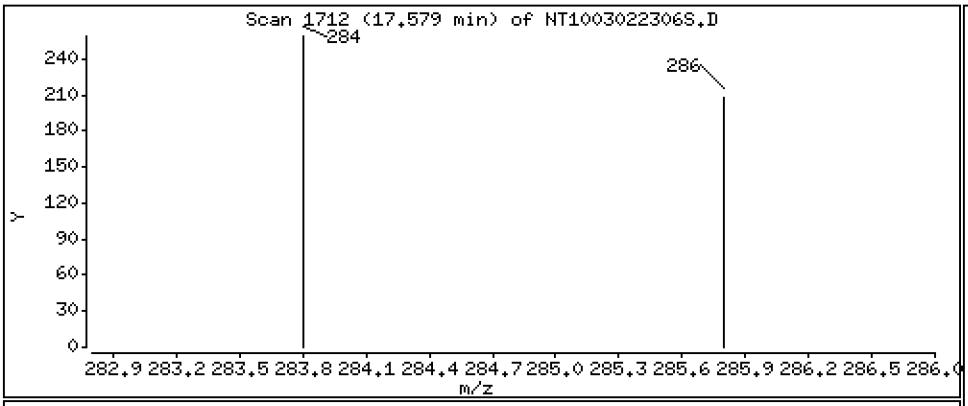
Operator: JGR

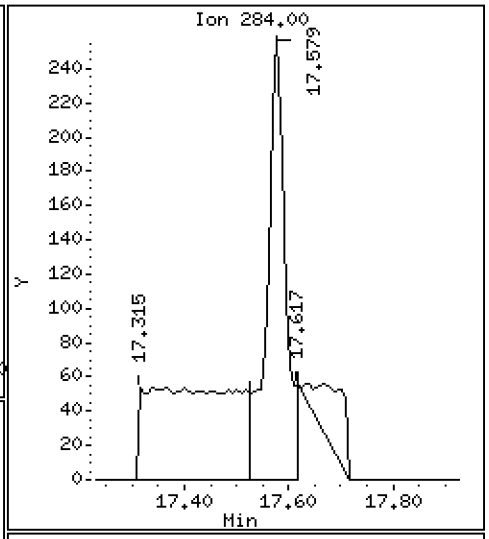
Column phase: ZB-5msi

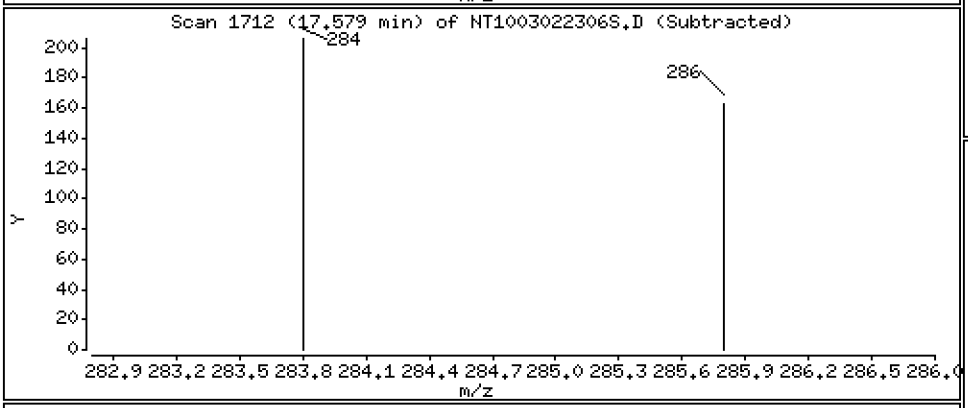
Column diameter: 0.25

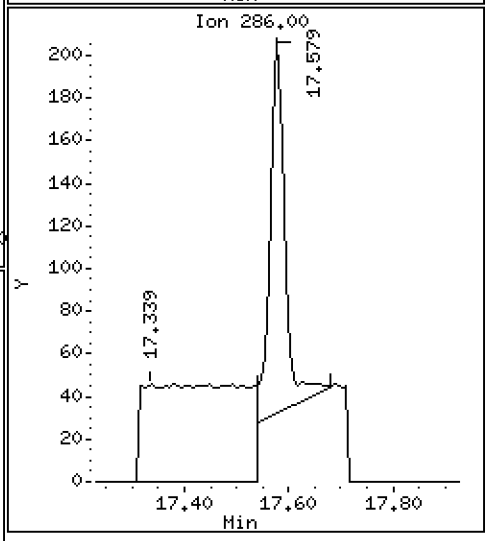
57 Hexachlorobenzene

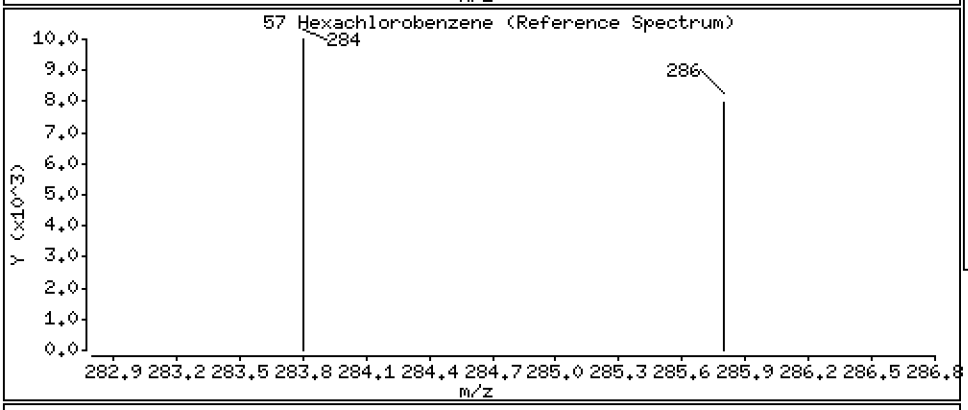
Concentration: 0.004555 ug/L

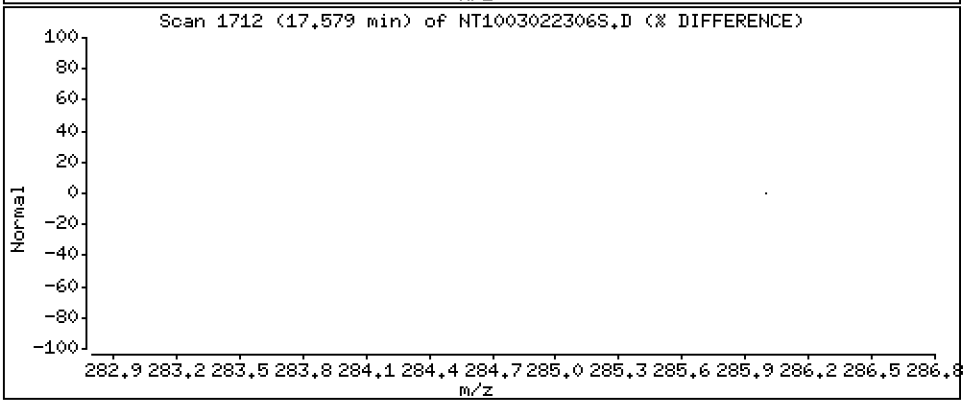












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

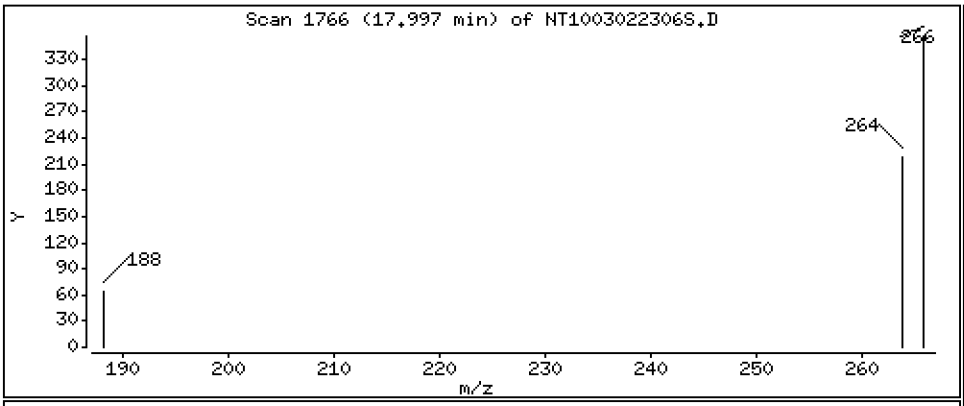
Operator: JGR

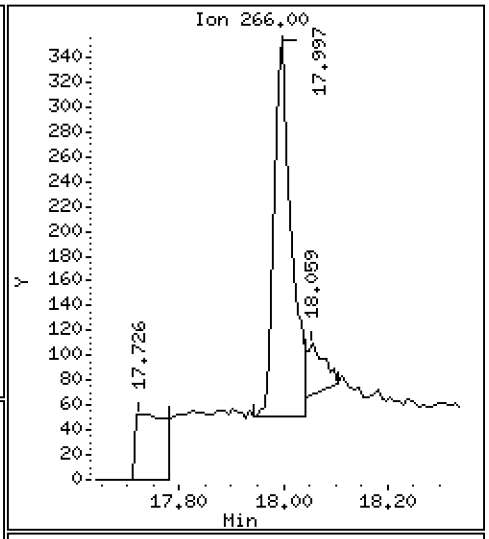
Column phase: ZB-5msi

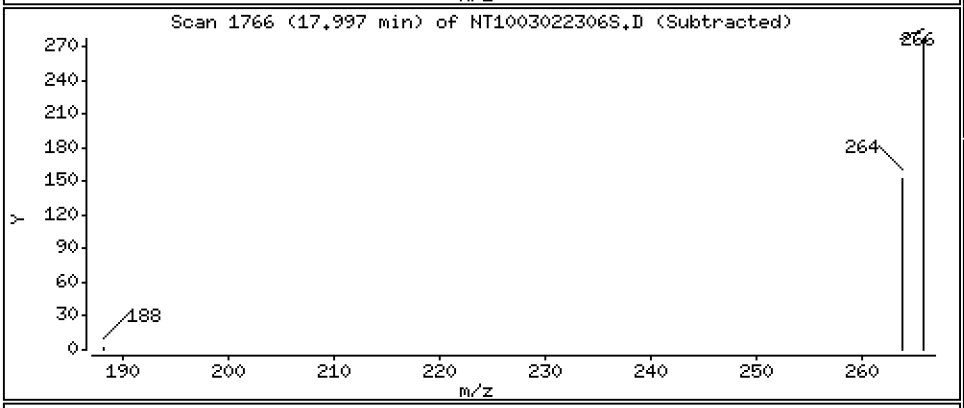
Column diameter: 0.25

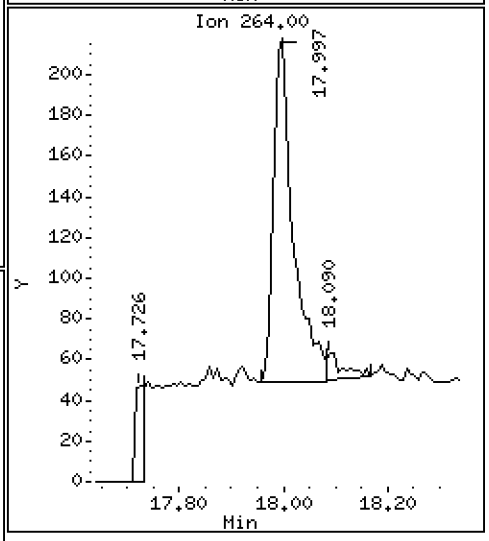
58 Pentachlorophenol

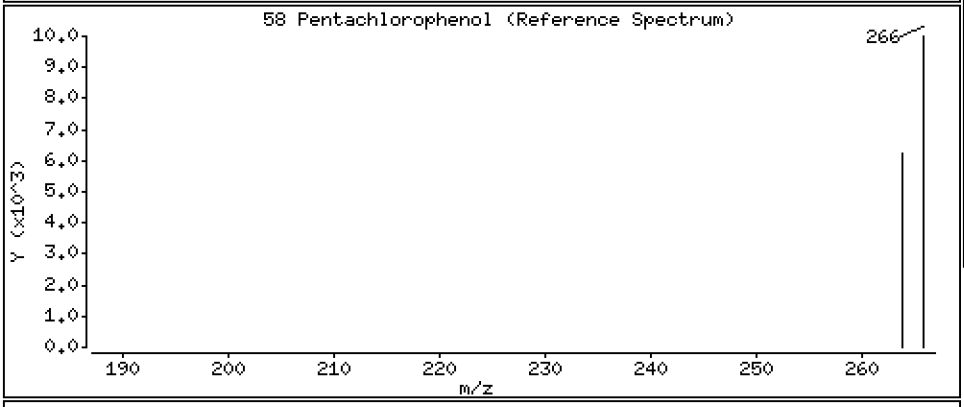
Concentration: 0.01137 ug/L

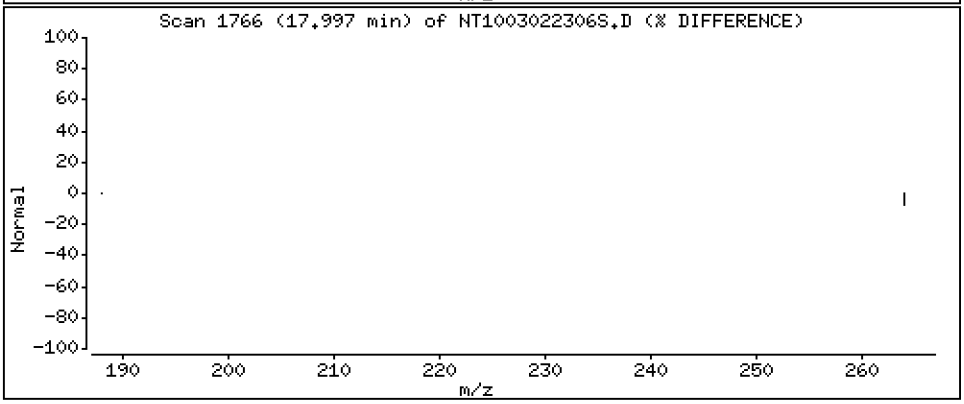












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

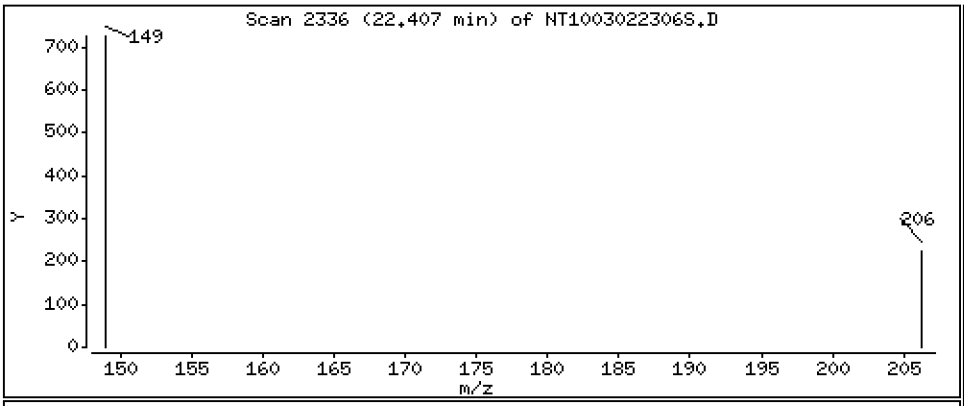
Operator: JGR

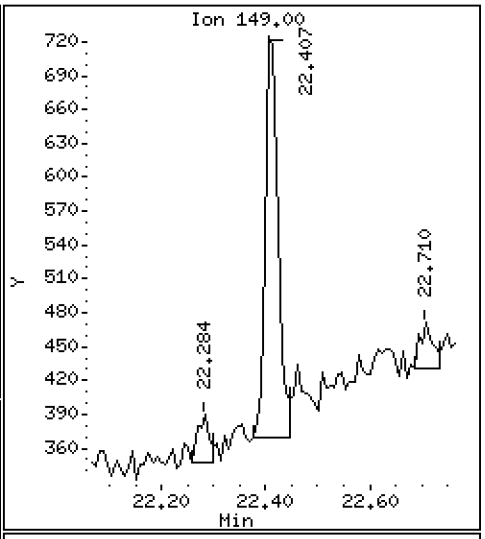
Column phase: ZB-5msi

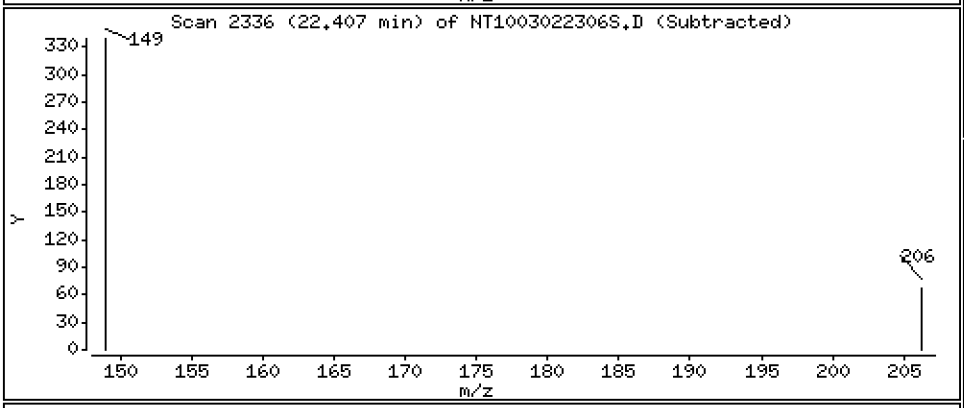
Column diameter: 0.25

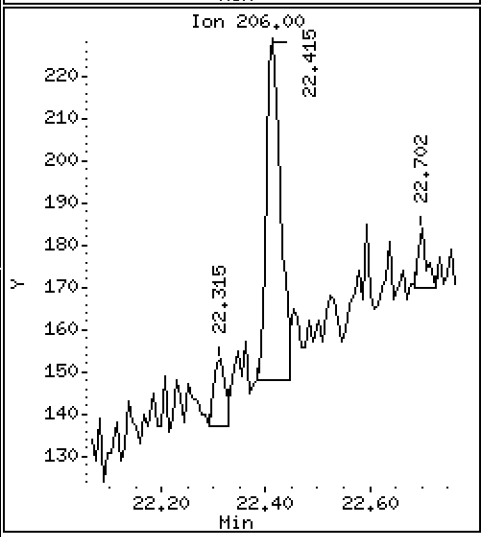
67 Butylbenzylphthalate

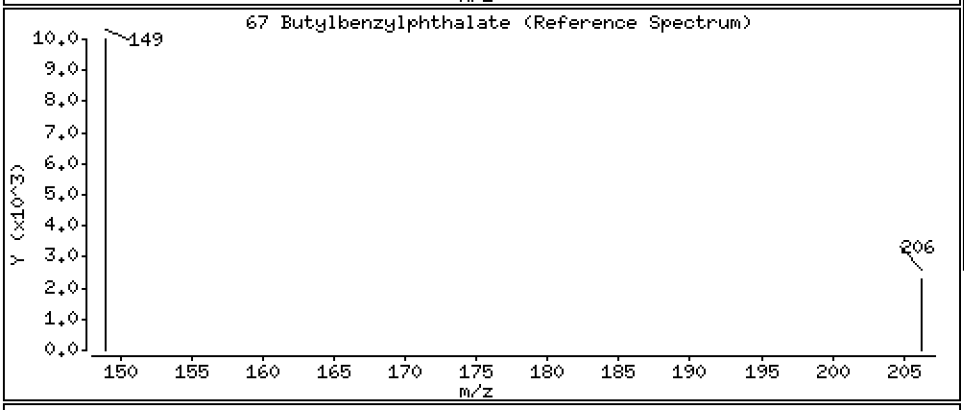
Concentration: 0.001877 ug/L

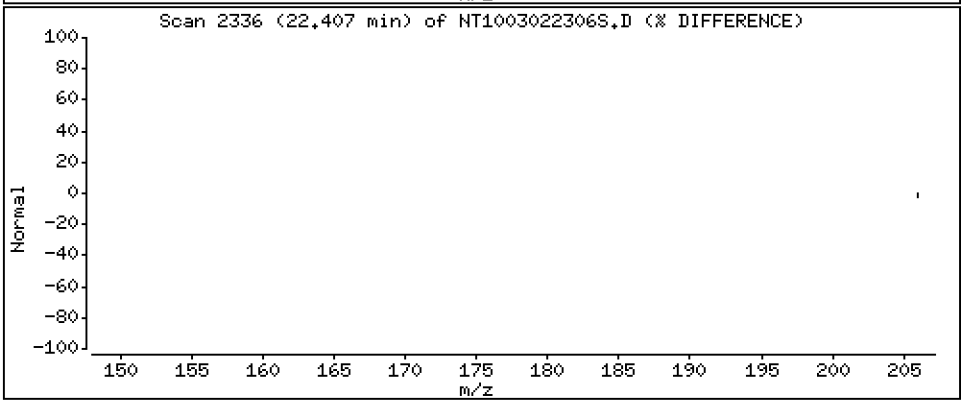












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

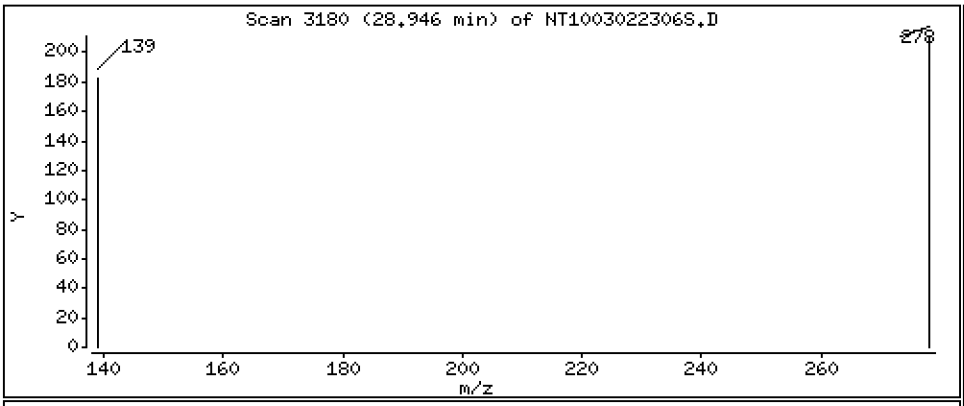
Operator: JGR

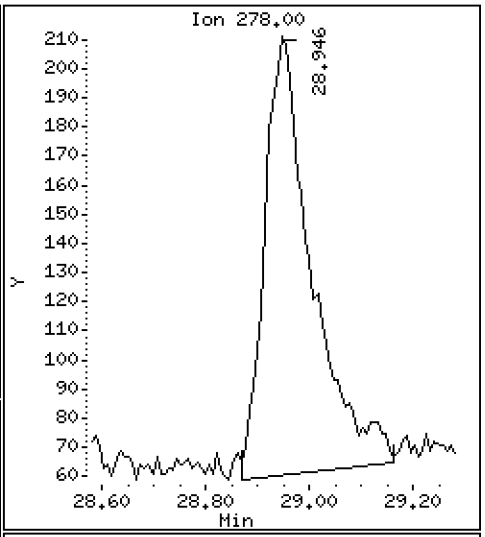
Column phase: ZB-5msi

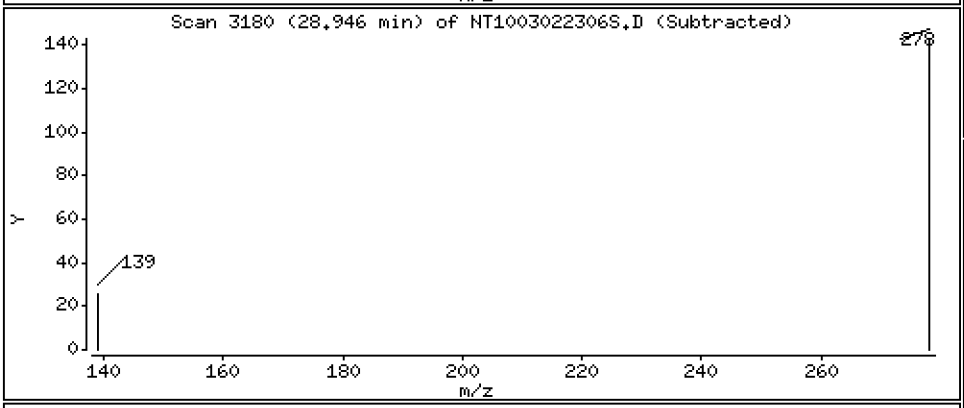
Column diameter: 0.25

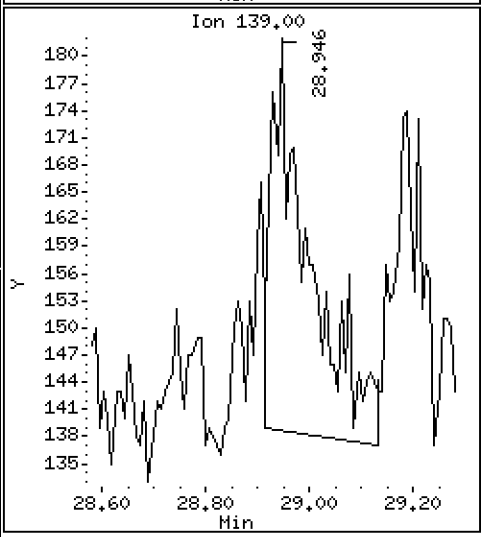
79 Dibenzo(a,h)anthracene

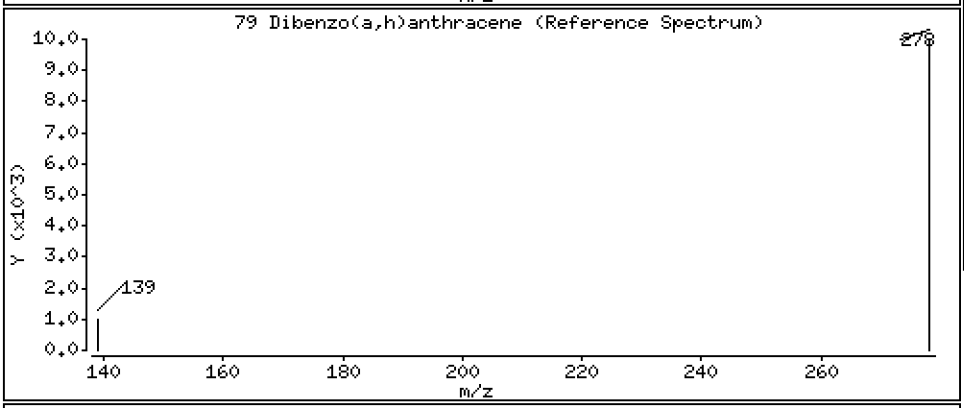
Concentration: 0.002137 ug/L

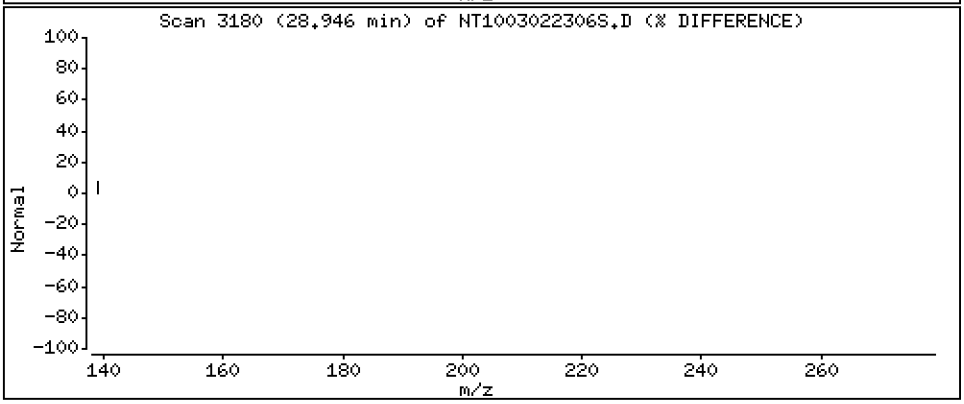












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D

Date : 02-MAR-2023 17:34

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BLK1

Volume Injected (uL): 1.0

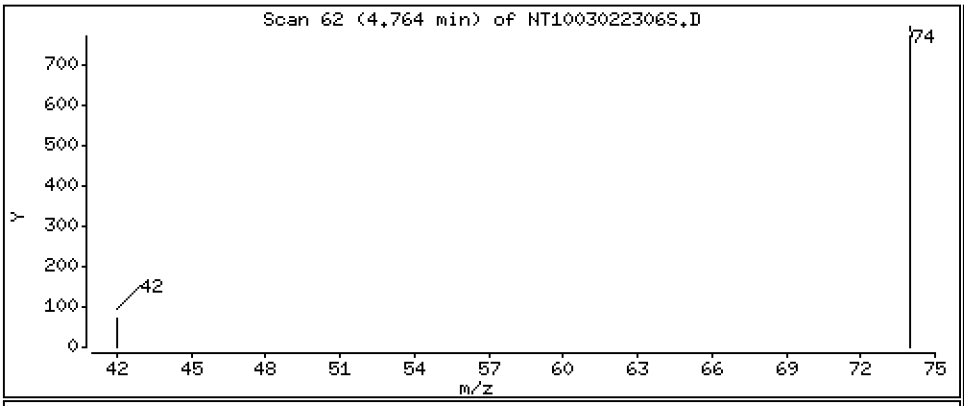
Operator: JGR

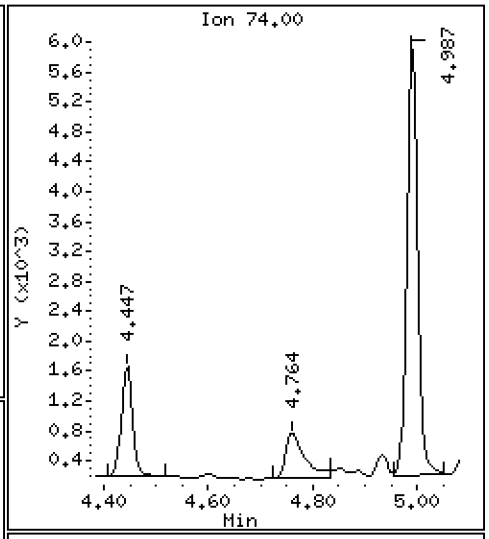
Column phase: ZB-5msi

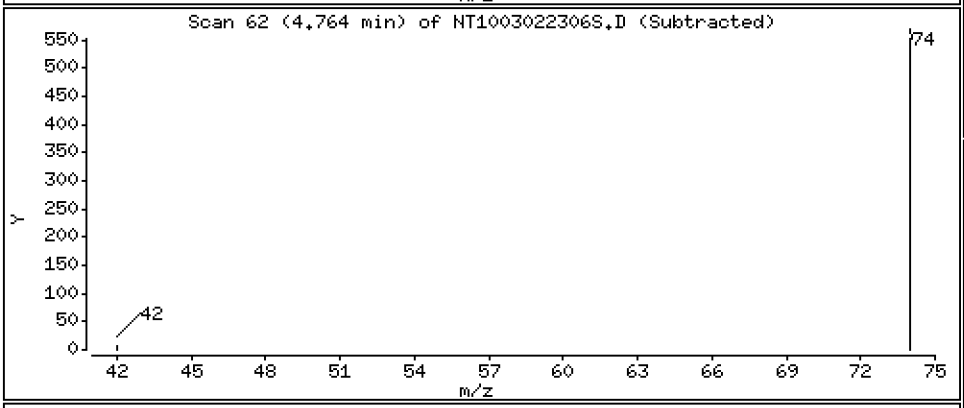
Column diameter: 0.25

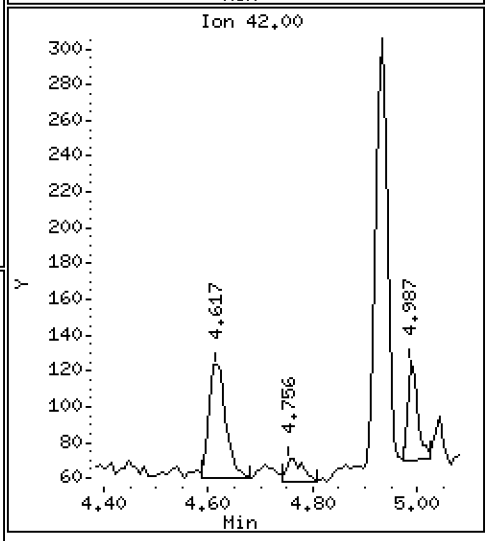
90 N-Nitrosodimethylamine

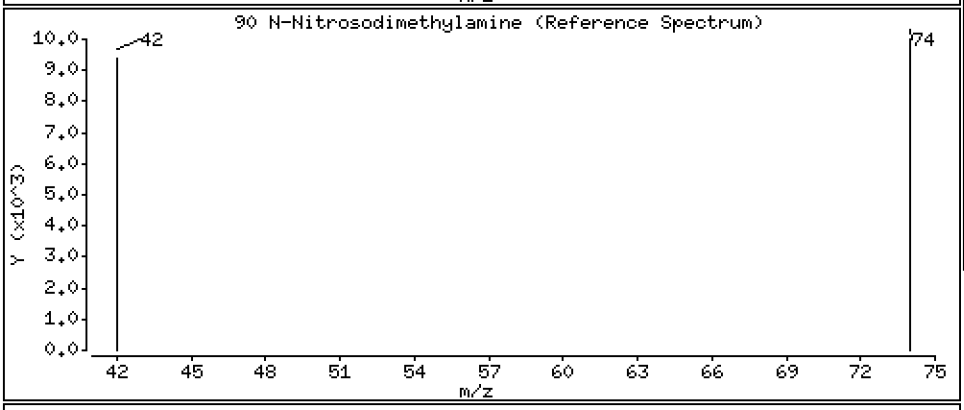
Concentration: 0.01729 ug/L

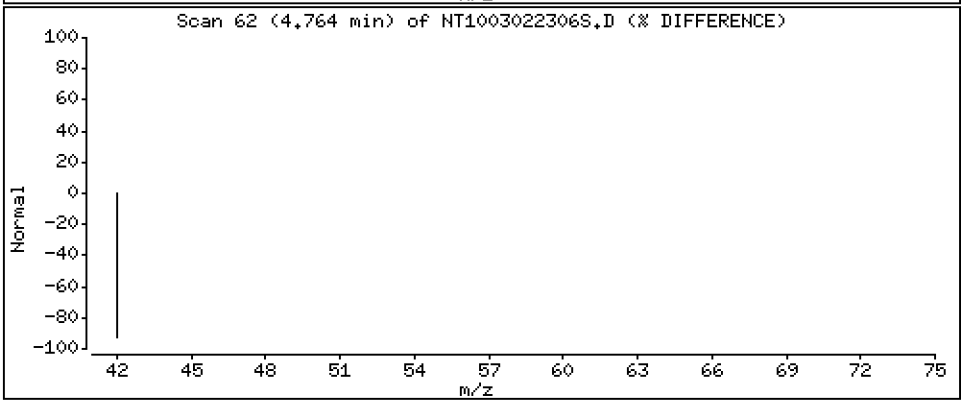












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022306S.D
Lab Smp Id: BLA0624-BLK1
Inj Date : 02-MAR-2023 17:34 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLA0624-BLK1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:01 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.902	6.902	(0.747)	862738	5.55899	5.559(R)
3	Phenol	94	8.517	8.517	(0.921)	8521	0.03723	0.03723
7	1,3-Dichlorobenzene	146	9.143	9.143	(0.989)	1769	0.00878	0.008781
* 8	1,4-Dichlorobenzene-d4	152	9.244	9.251	(1.000)	543607	4.00000	
9	1,4-Dichlorobenzene	146	9.275	9.282	(1.003)	1909	0.00975	0.009746
11	Benzyl alcohol	79	9.477	9.476	(1.025)	2528	0.01992	0.01992
12	1,2-Dichlorobenzene	146	9.562	9.562	(1.034)	1543	0.00820	0.008196
13	2-Methylphenol	108	9.663	9.655	(1.045)	822	0.00597	0.005974
15	4-Methylphenol	108	9.958	9.942	(1.077)	537	0.00375	0.003753
16	N-Nitroso-di-n-propylamine	70	10.292	9.981	(1.113)	76325	0.74683	0.7468
22	2,4-Dimethylphenol	107	10.989	10.997	(0.937)	1496	0.00897	0.008969
24	Benzoic acid	105	11.082	11.074	(0.945)	2506	0.02740	0.02740
26	1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	931	0.00658	0.006579
* 27	Naphthalene-d8	136	11.724	11.723	(1.000)	1966158	4.00000	
30	Hexachlorobutadiene	225	11.994	11.994	(1.023)	788	0.00785	0.007847
39	Dimethylphthalate	163	14.741	14.741	(0.963)	906	0.00277	0.002775
* 42	Acenaphthene-d10	162	15.314	15.314	(1.000)	1028261	4.00000	
50	Diethylphthalate	149	16.203	16.203	(1.058)	33257	0.10801	0.1080
54	N-Nitrosodiphenylamine	169	16.690	16.690	(0.907)	354	0.00120	0.001198
57	Hexachlorobenzene	284	17.578	17.578	(0.955)	630	0.00455	0.004555

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	17.996	17.988	(0.978)	688	0.01137	0.01137
*	59 Phenanthrene-d10	188	18.406	18.406	(1.000)	1826191	4.00000	
$	66 Terphenyl-d14	244	21.532	21.532	(0.919)	684314	4.58447	4.584(R)
	67 Butylbenzylphthalate	149	22.407	22.414	(0.957)	585	0.00188	0.001877
*	69 Chrysene-d12	240	23.421	23.421	(1.000)	1845847	4.00000	
*	77 Perylene-d12	264	26.108	26.115	(1.000)	1929666	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.945	28.929	(1.109)	955	0.00214	0.002137
	90 N-Nitrosodimethylamine	74	4.763	4.732	(0.515)	1589	0.01729	0.01729

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003022306S.D
Lab Smp Id: BLA0624-BLK1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 02-MAR-2023
Calibration Time: 14:13
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	493417	246709	986834	543607	10.17
27 Naphthalene-d8	1779056	889528	3558112	1966158	10.52
42 Acenaphthene-d10	954569	477285	1909138	1028261	7.72
59 Phenanthrene-d10	1596290	798145	3192580	1826191	14.40
69 Chrysene-d12	1649110	824555	3298220	1845847	11.93
77 Perylene-d12	1901958	950979	3803916	1929666	1.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.24	-0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
77 Perylene-d12	26.12	25.62	26.62	26.11	-0.03

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

REVIEW SUMMARY FOR FILE - NT1003022306S.D

Lab ID: BLA0624-BLK1
nt10.i, 20230302.b\SIM.b\SIMABN2.m,   02-MAR-2023 17:34

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.113	1.079	0.0345	N-Nitroso-di-n-propylamine

RRT check based on Ccal File: SIM.b/NT1003022303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223075.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

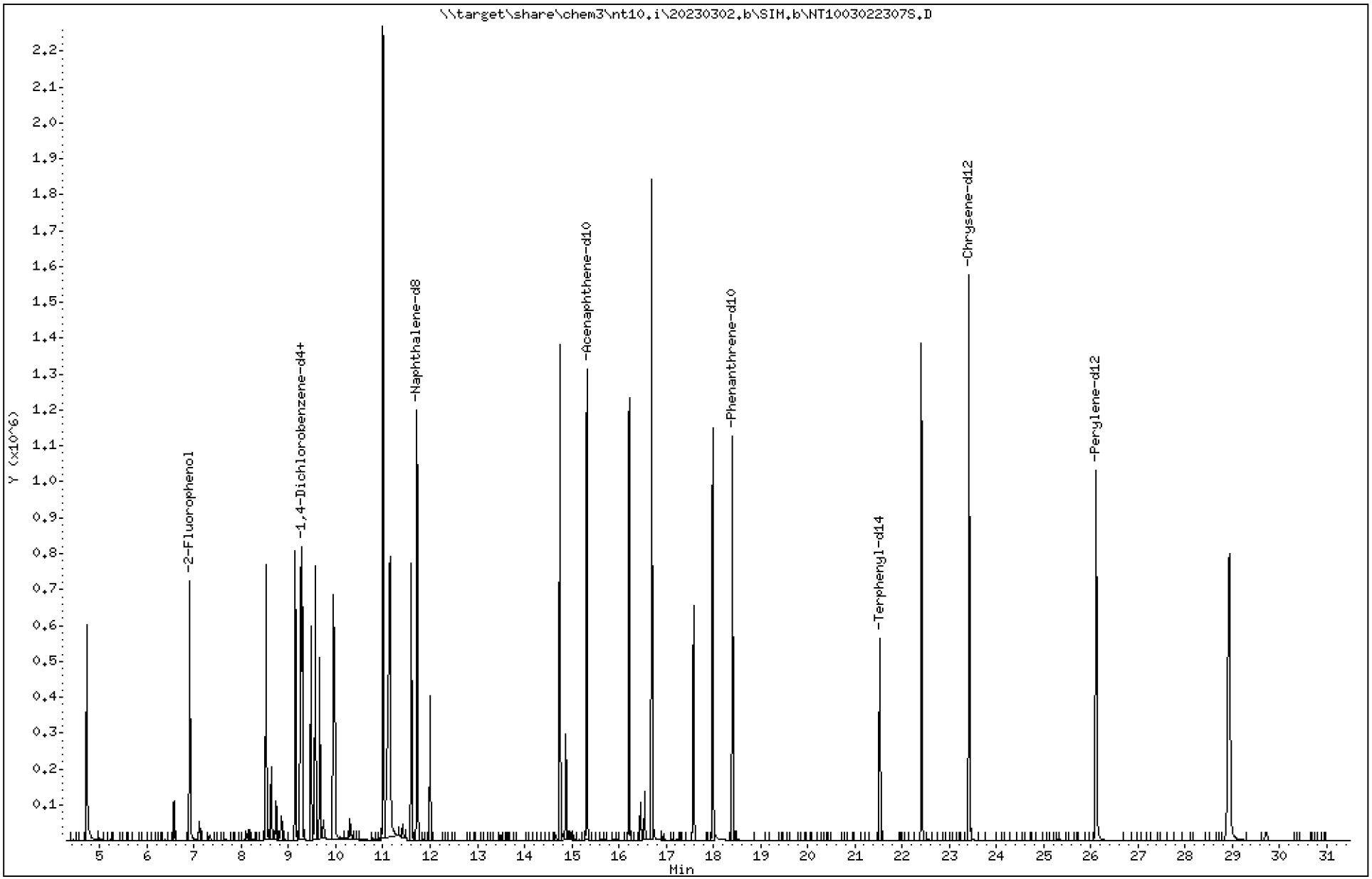
Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

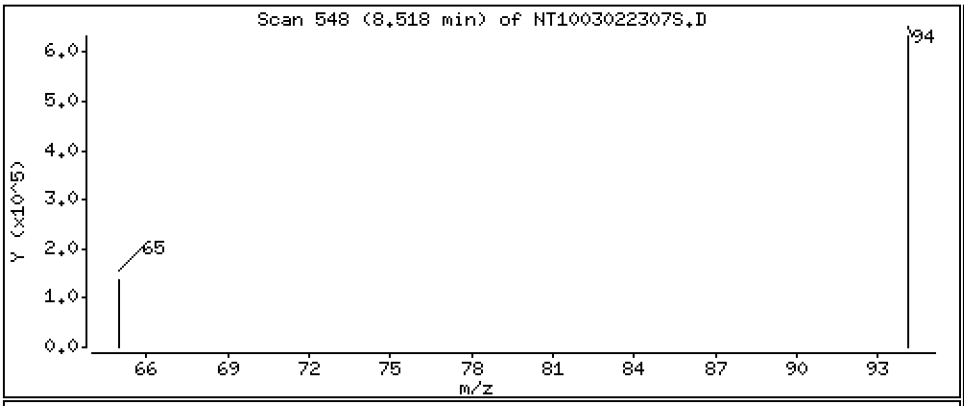
Operator: JGR

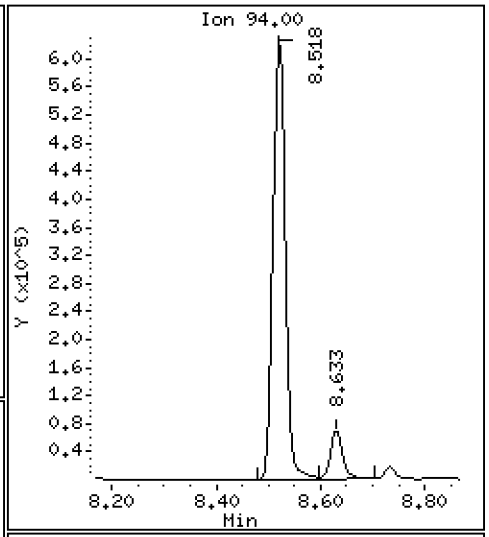
Column phase: ZB-5msi

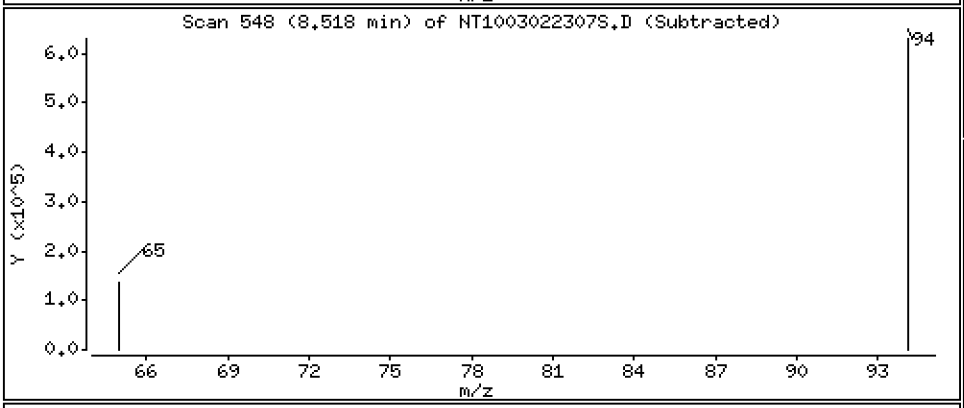
Column diameter: 0.25

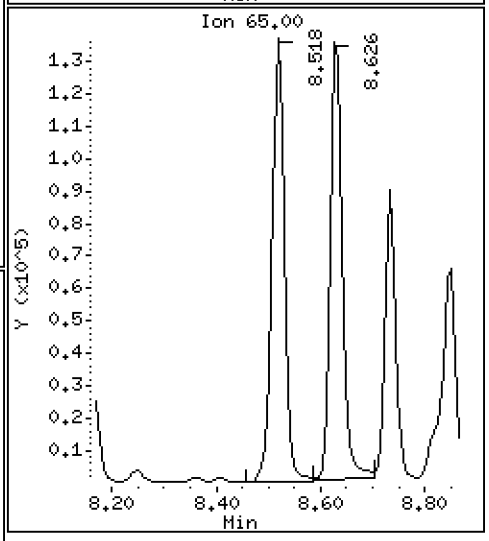
3 Phenol

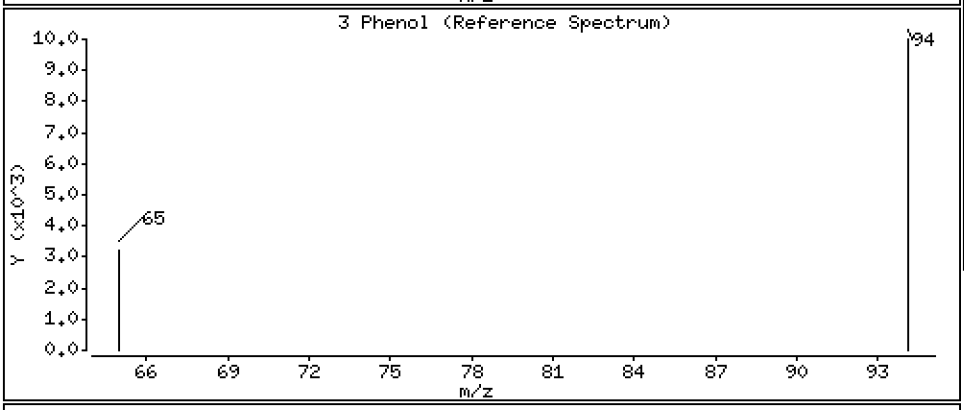
Concentration: 4.985 ug/L

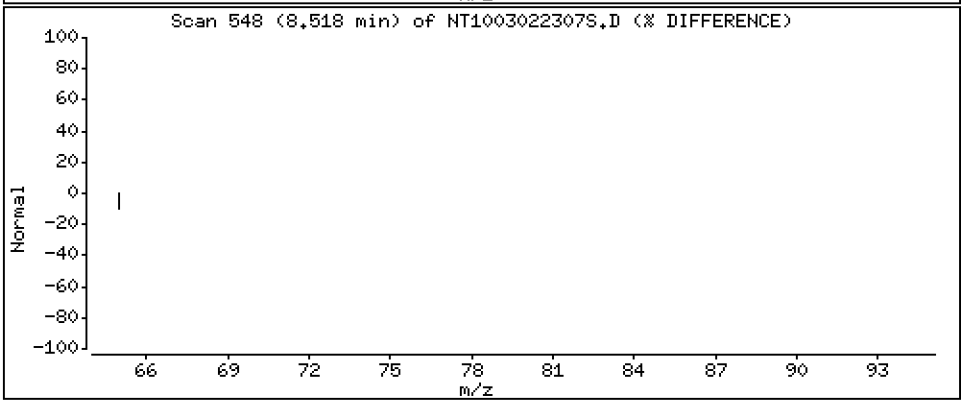












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022307S.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

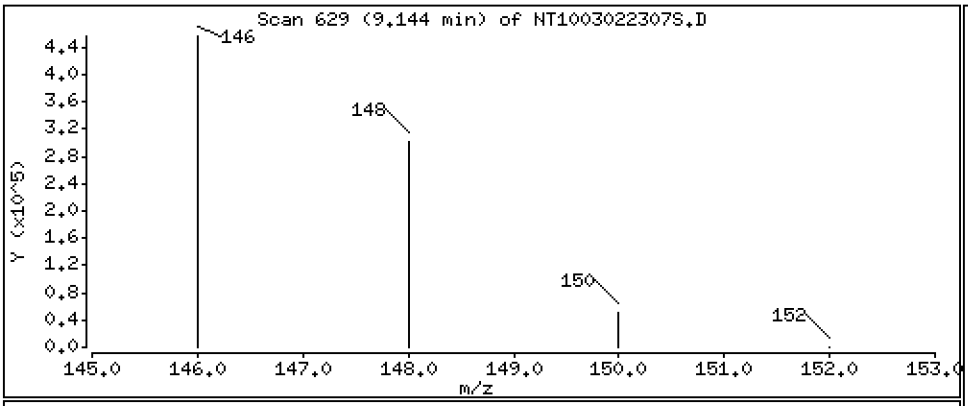
Operator: JGR

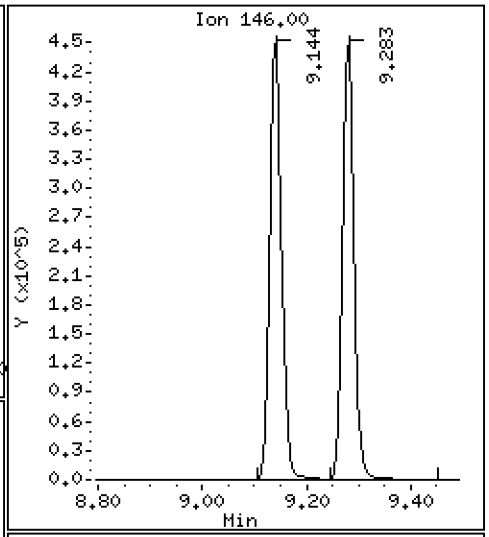
Column phase: ZB-5msi

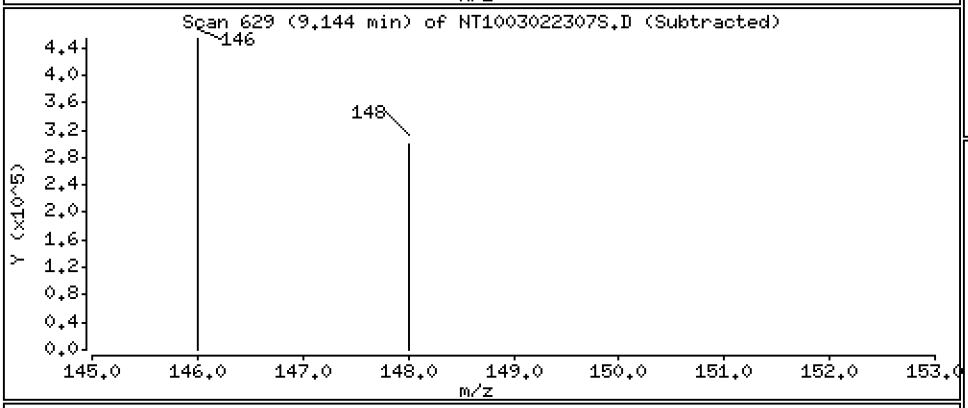
Column diameter: 0.25

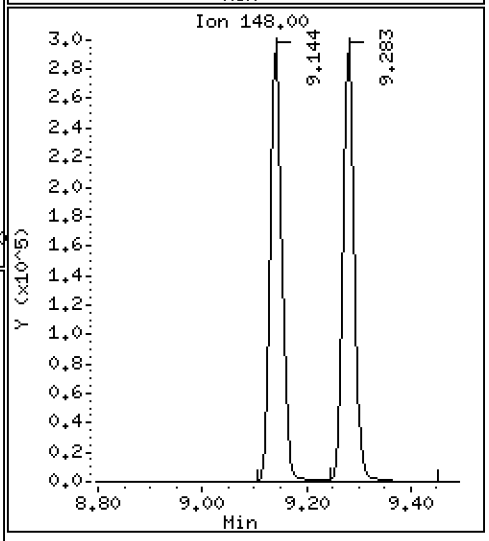
7 1,3-Dichlorobenzene

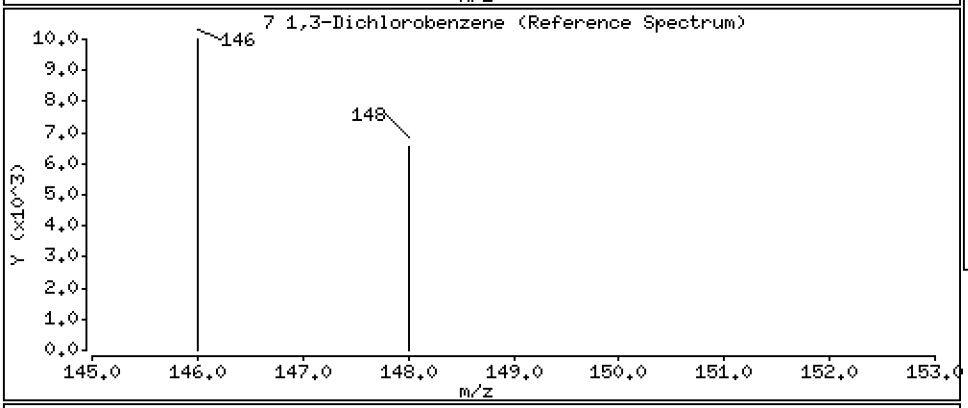
Concentration: 4.235 ug/L

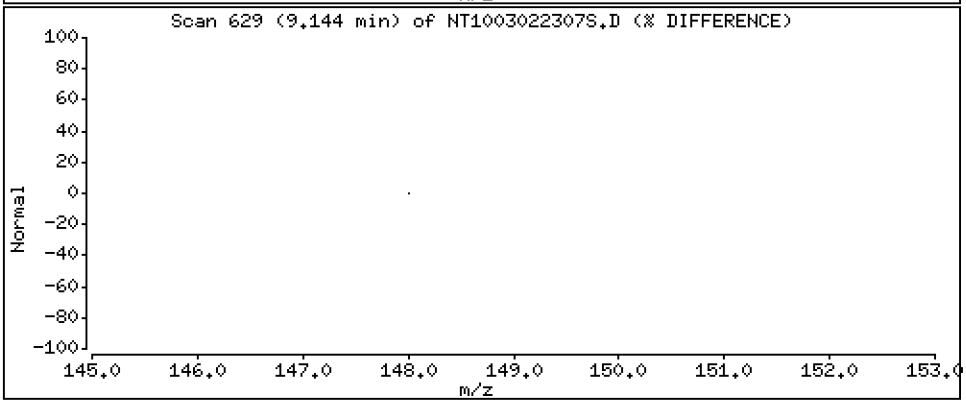












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022307S.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

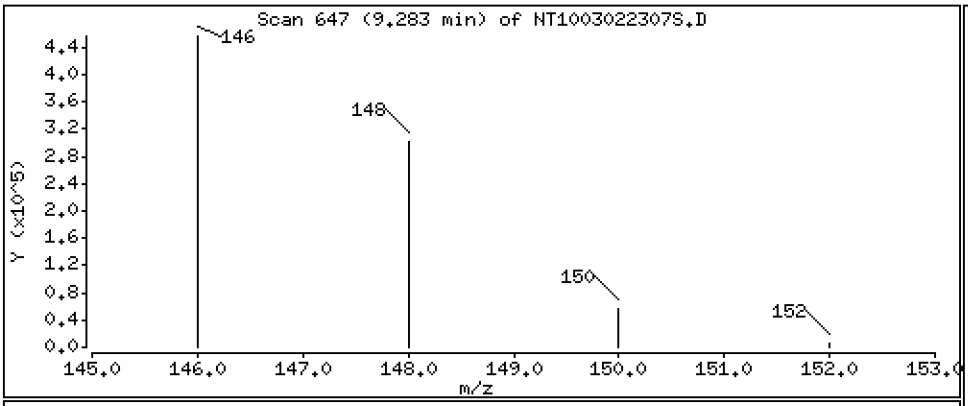
Operator: JGR

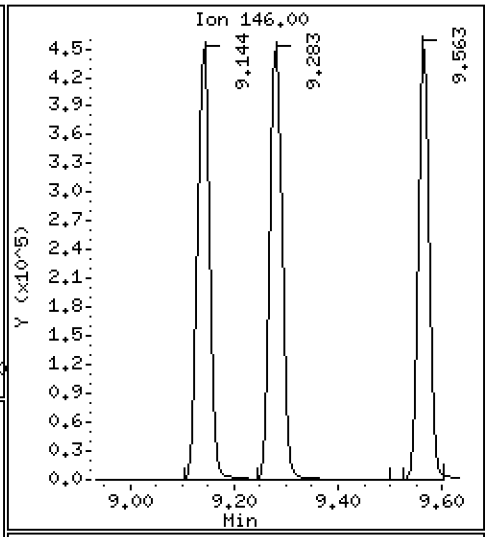
Column phase: ZB-5msi

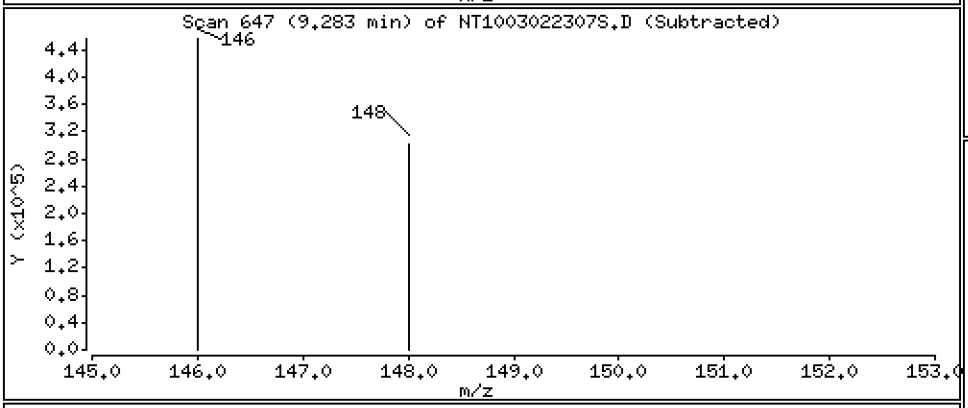
Column diameter: 0.25

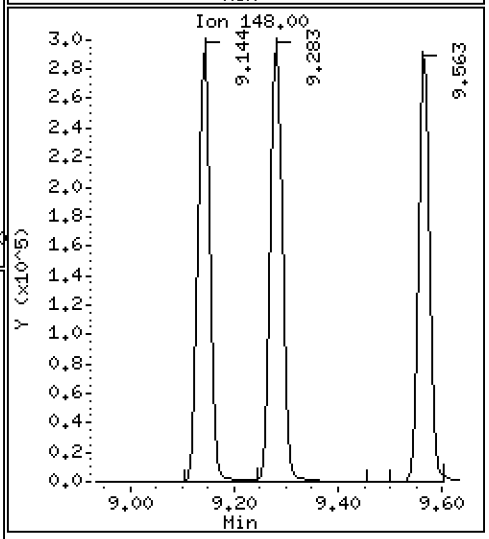
9 1,4-Dichlorobenzene

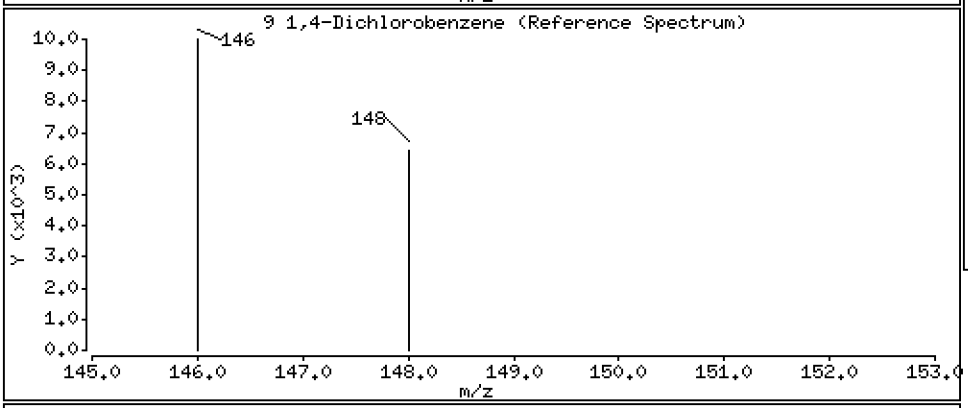
Concentration: 4.398 ug/L

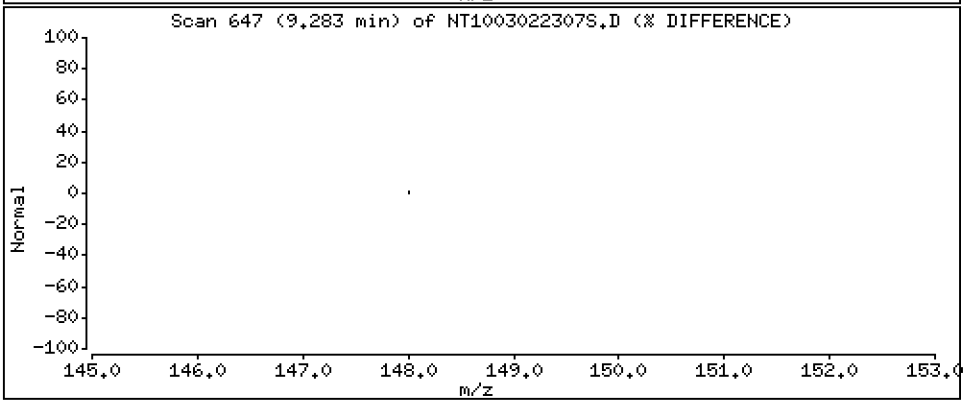












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022307S.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

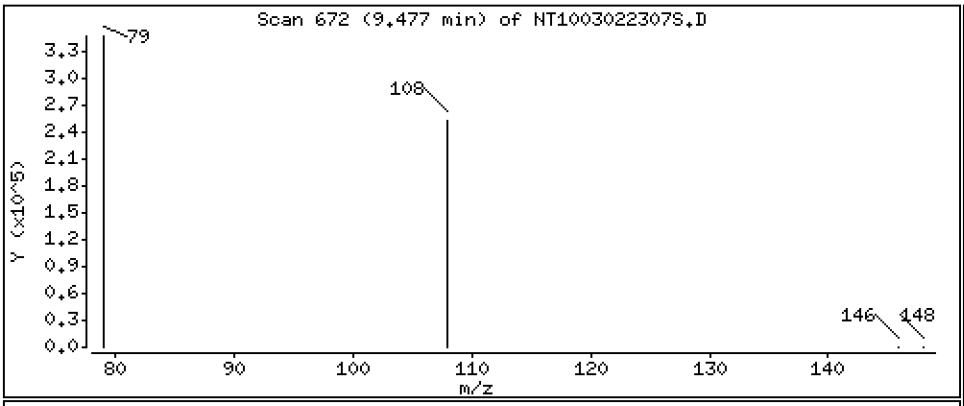
Operator: JGR

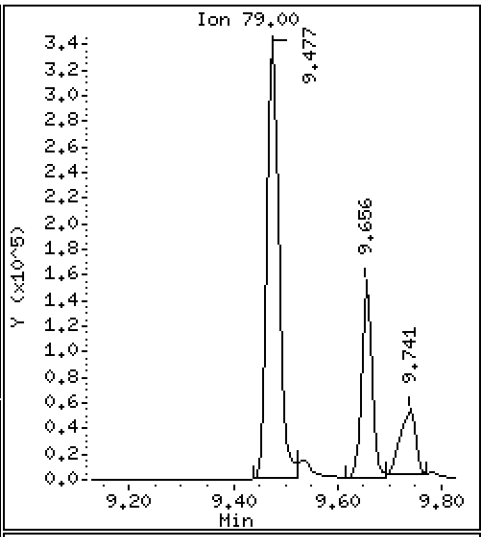
Column phase: ZB-5msi

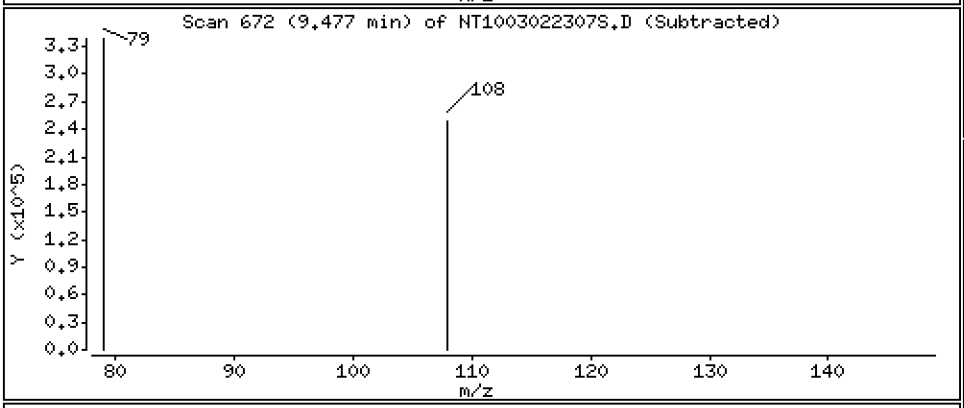
Column diameter: 0.25

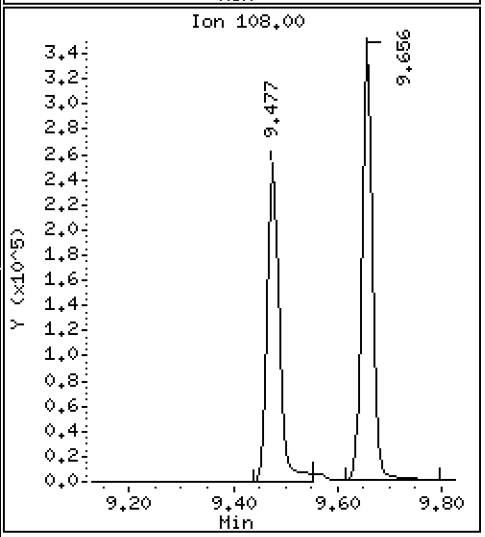
11 Benzyl alcohol

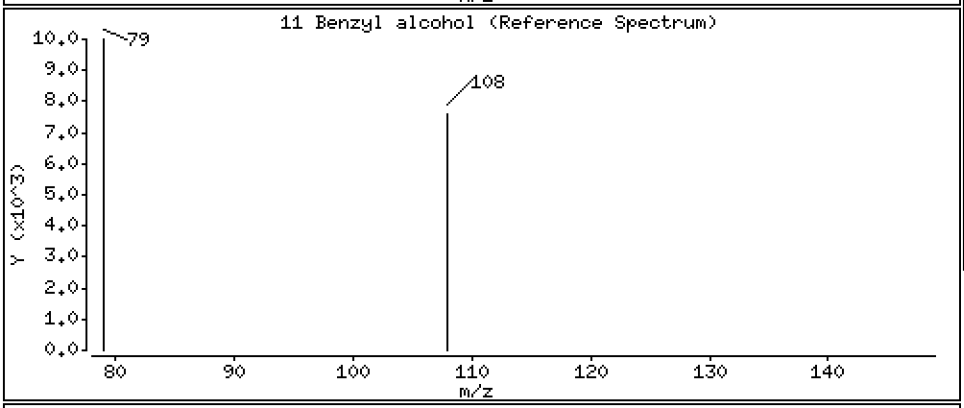
Concentration: 4.665 ug/L

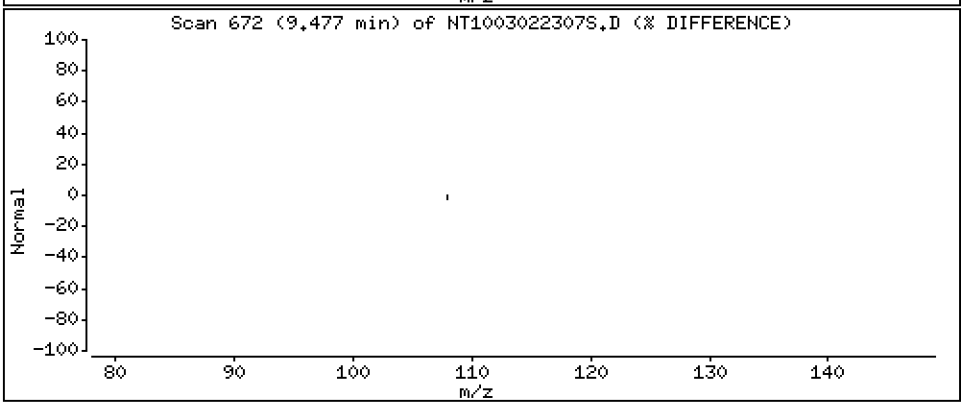












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022307S.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

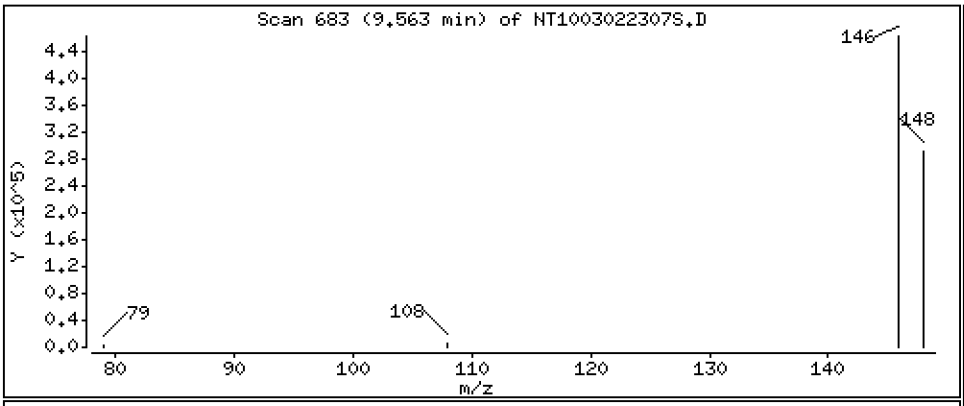
Operator: JGR

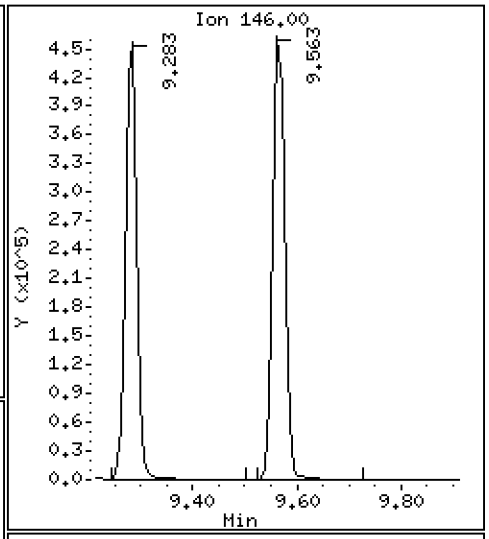
Column phase: ZB-5msi

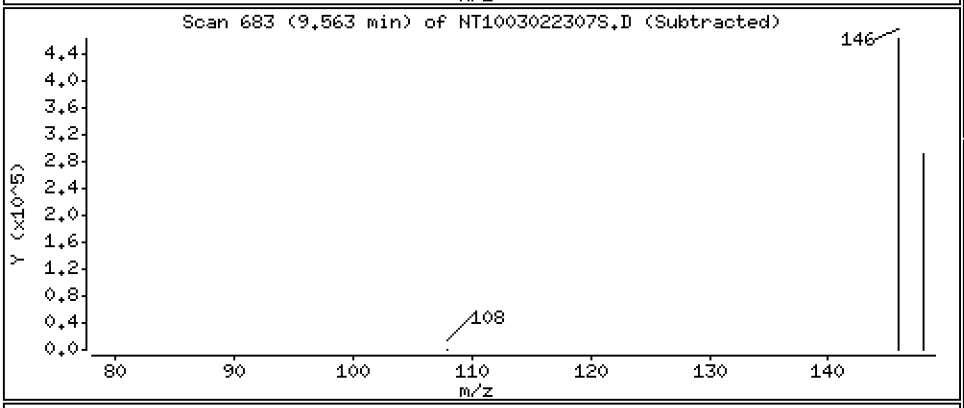
Column diameter: 0.25

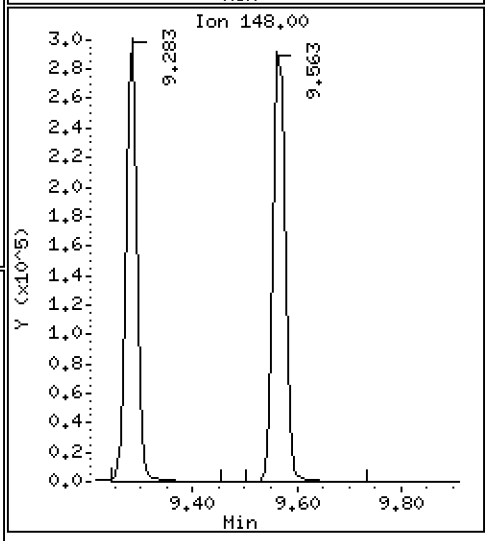
12 1,2-Dichlorobenzene

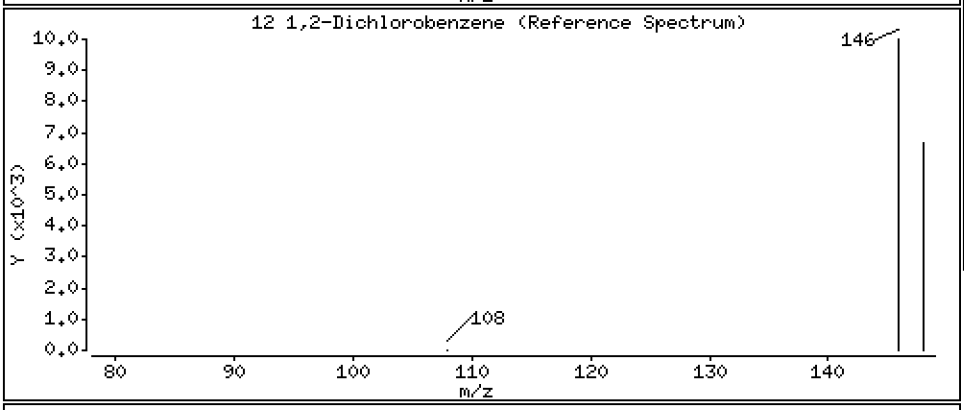
Concentration: 4.495 ug/L

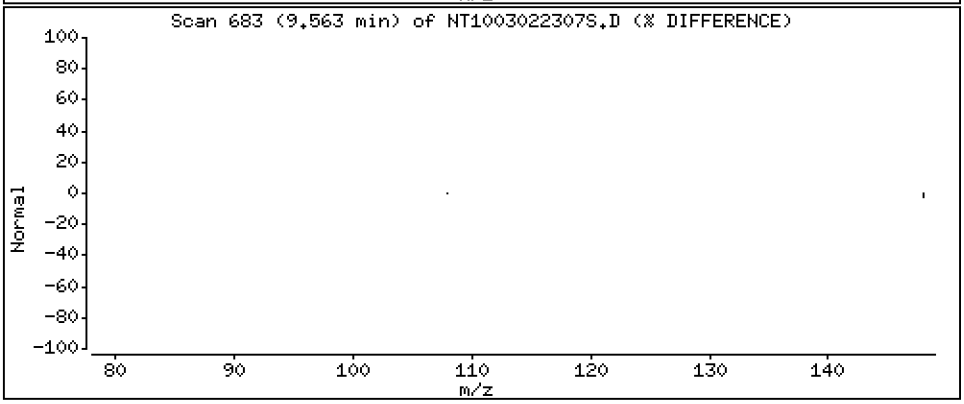












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223075.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

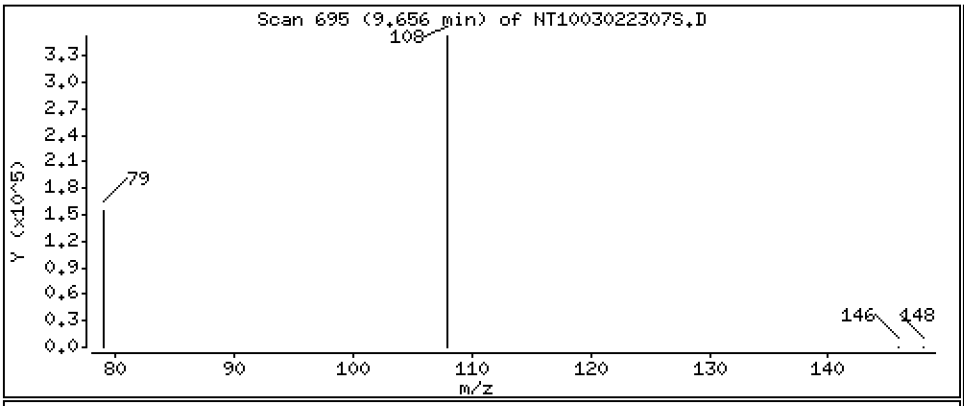
Operator: JGR

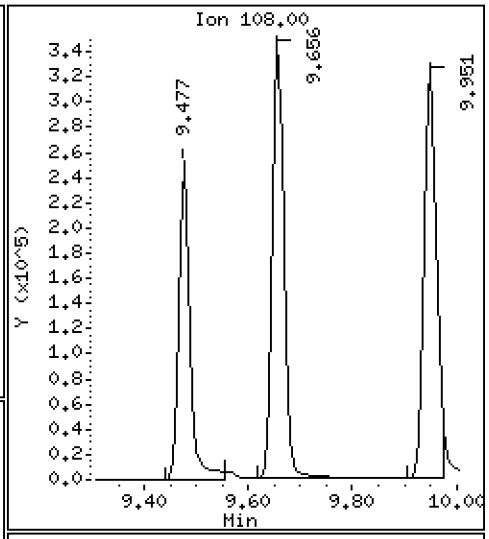
Column phase: ZB-5msi

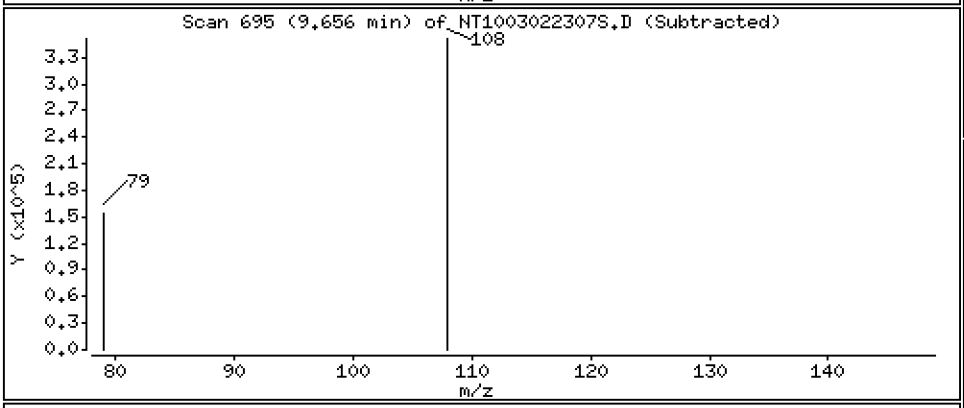
Column diameter: 0.25

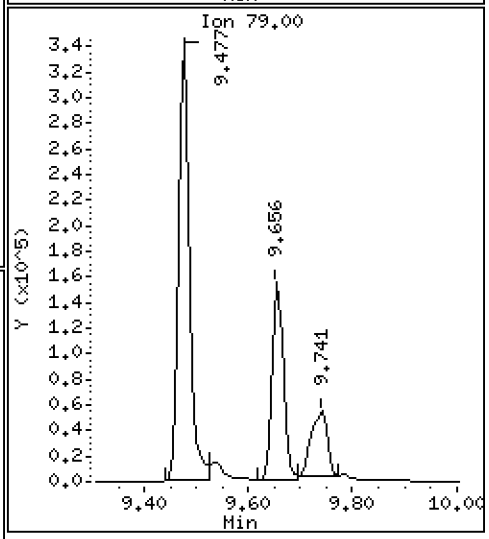
13 2-Methylphenol

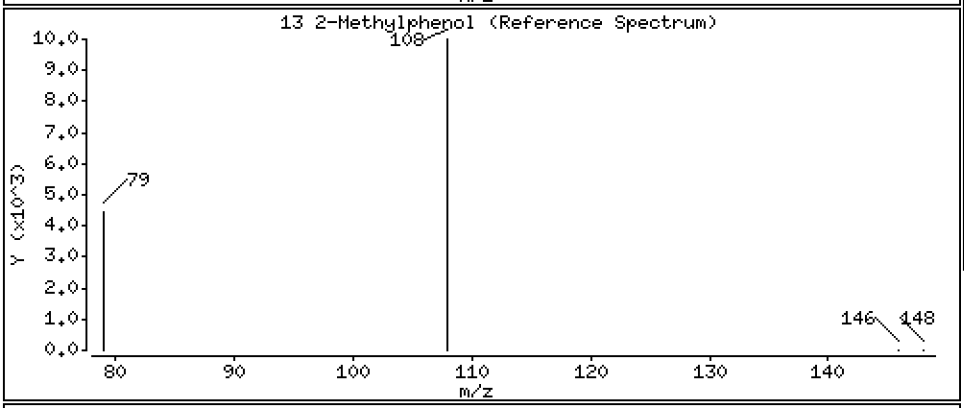
Concentration: 4.274 ug/L

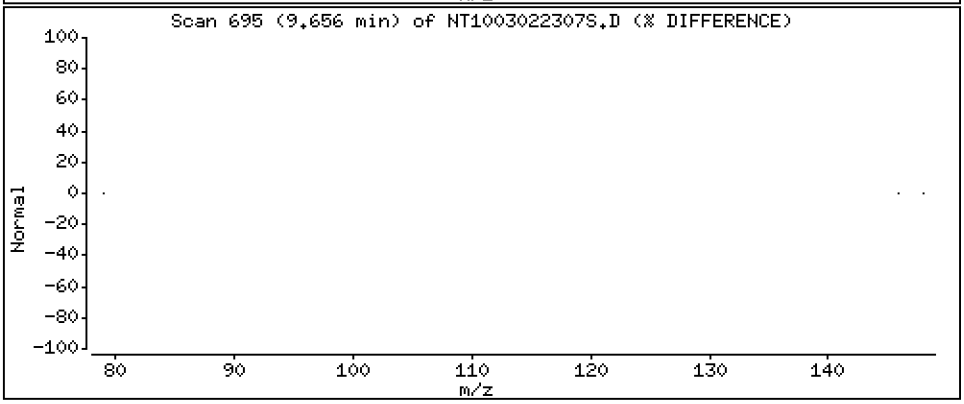












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022307S.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

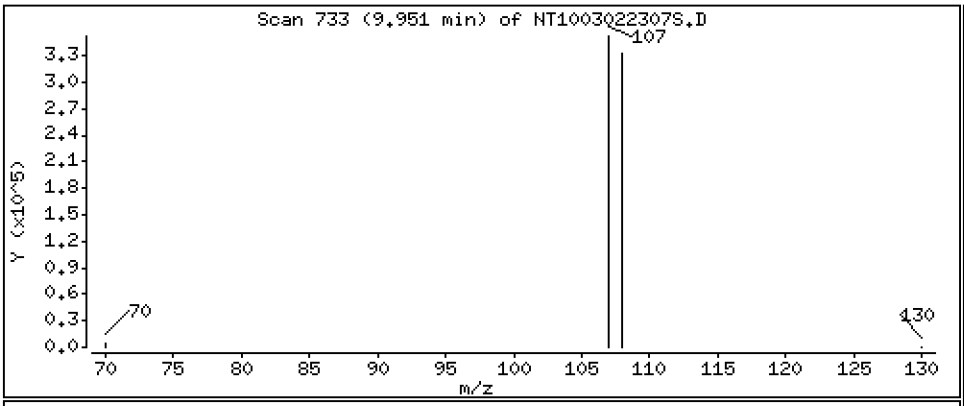
Operator: JGR

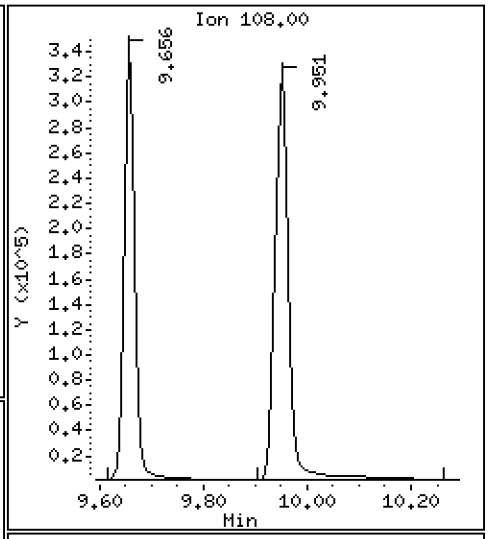
Column phase: ZB-5msi

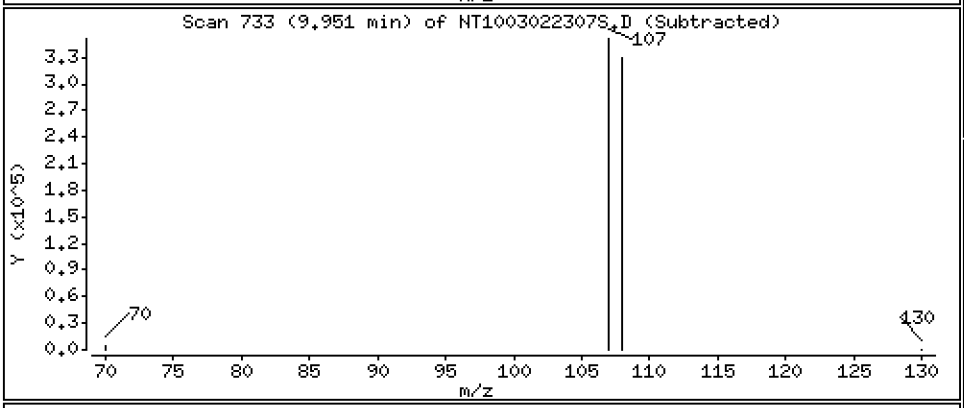
Column diameter: 0.25

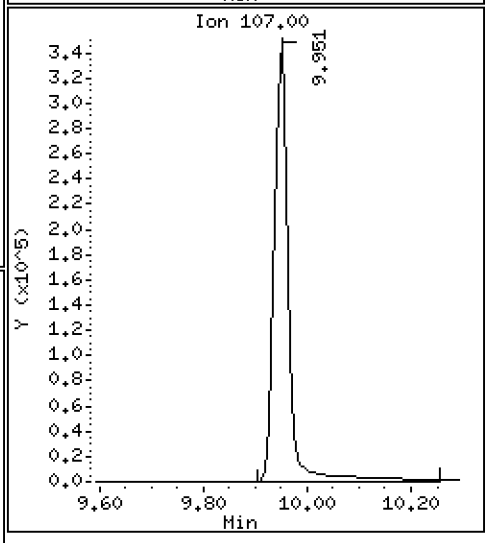
15 4-Methylphenol

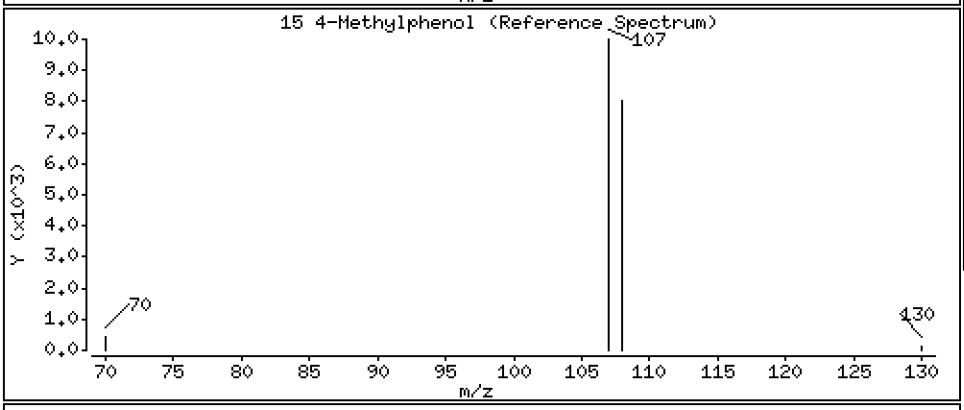
Concentration: 4.613 ug/L

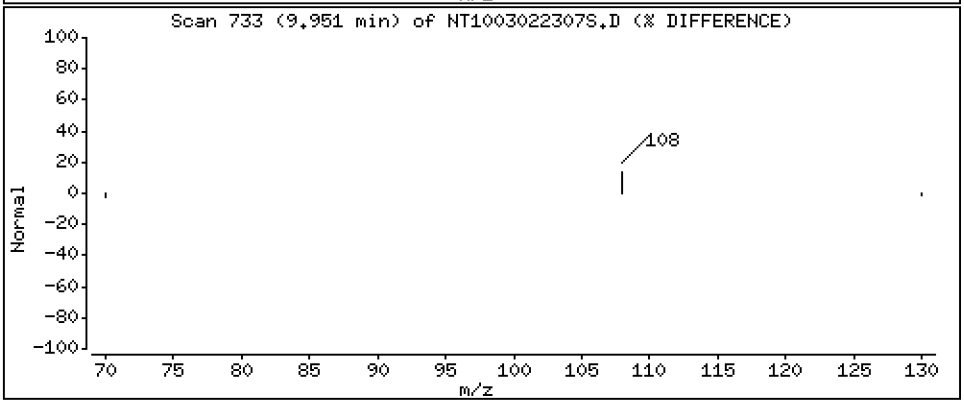












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022307S.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

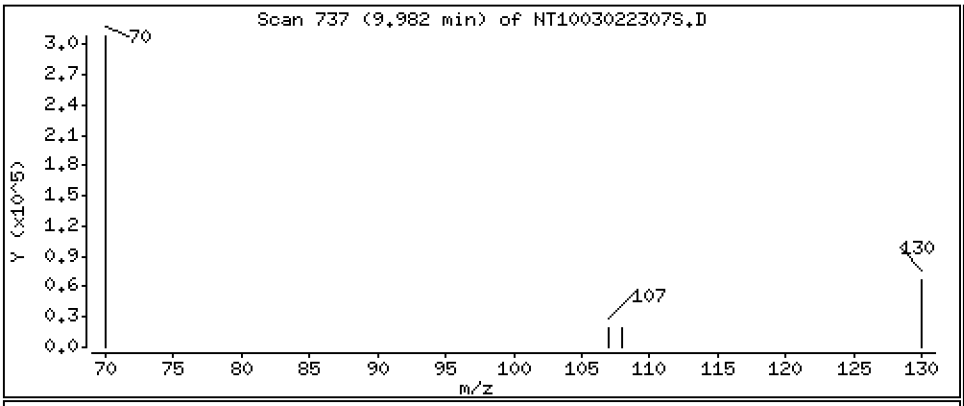
Operator: JGR

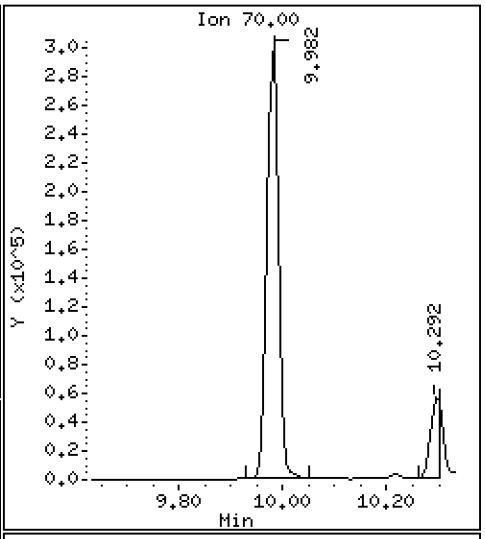
Column phase: ZB-5msi

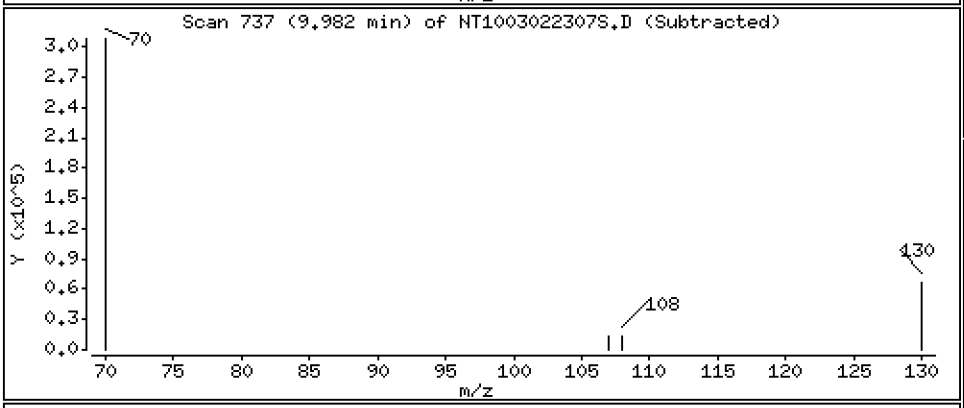
Column diameter: 0.25

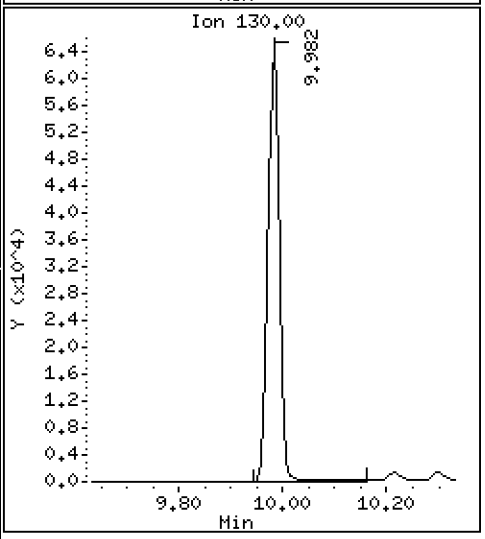
16 N-Nitroso-di-n-propylamine

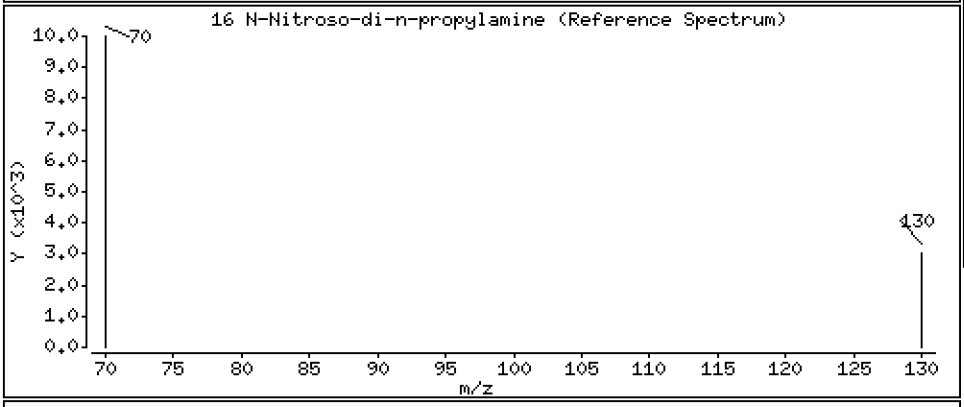
Concentration: 5.077 ug/L

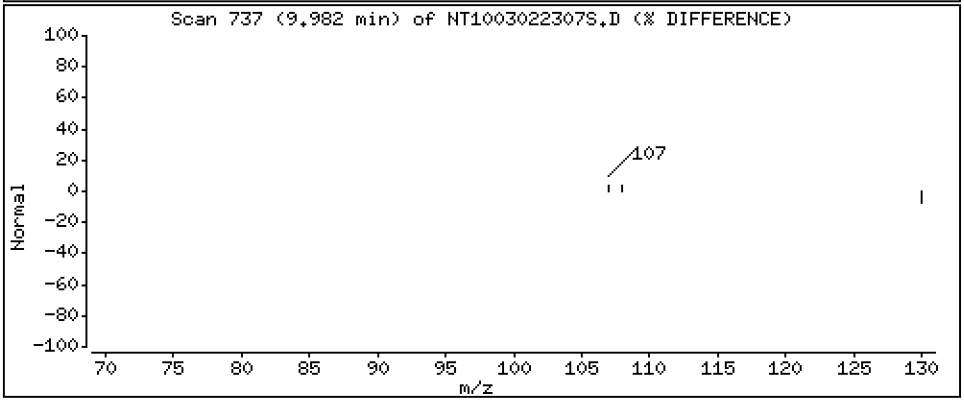












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223075.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

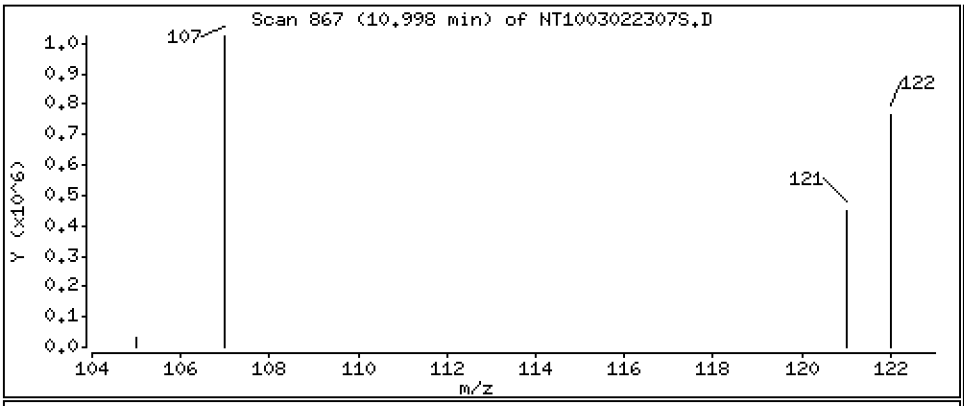
Operator: JGR

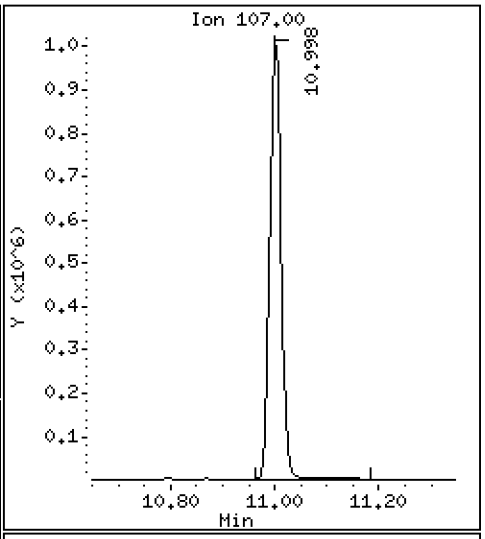
Column phase: ZB-5msi

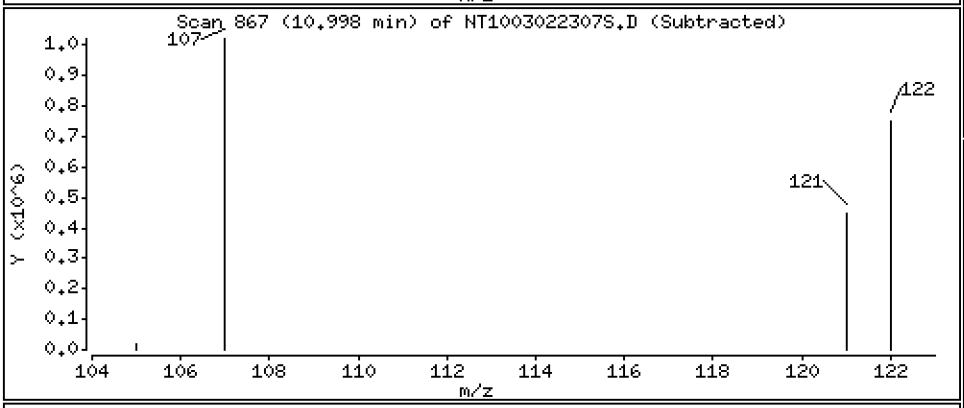
Column diameter: 0.25

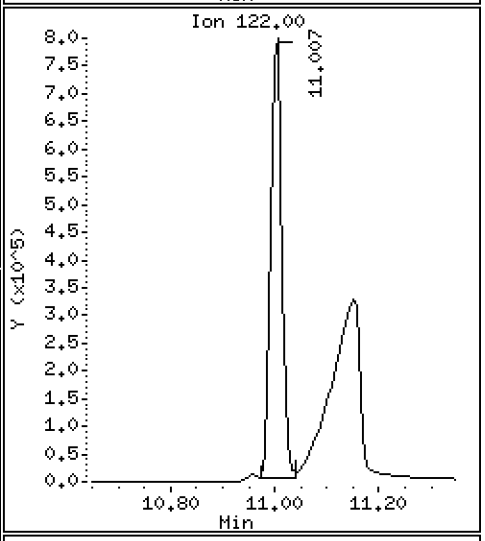
22 2,4-Dimethylphenol

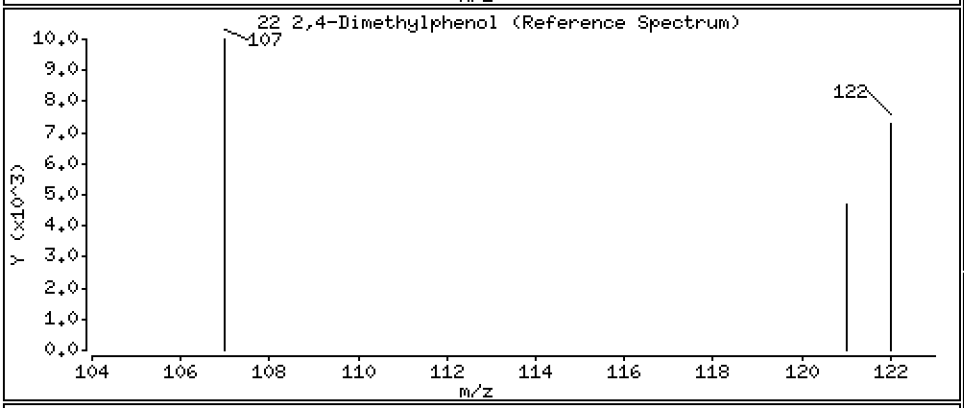
Concentration: 10.10 ug/L

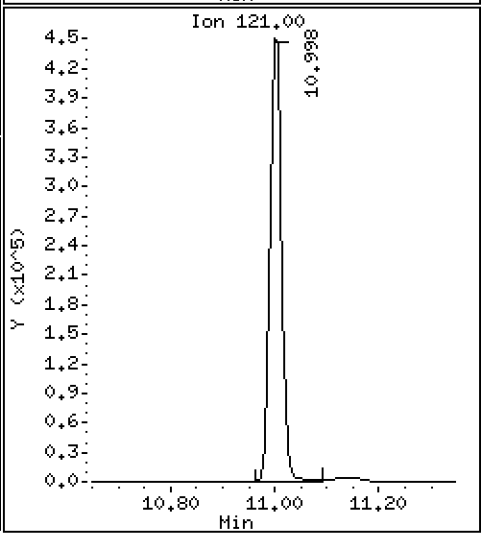


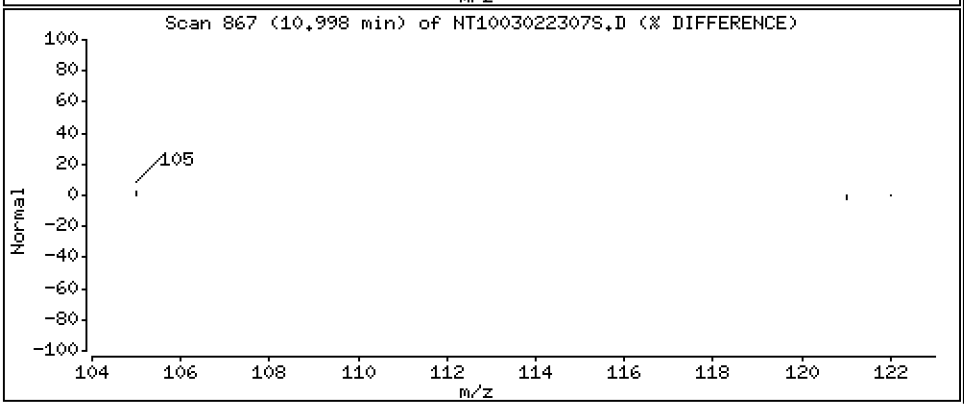












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223075.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

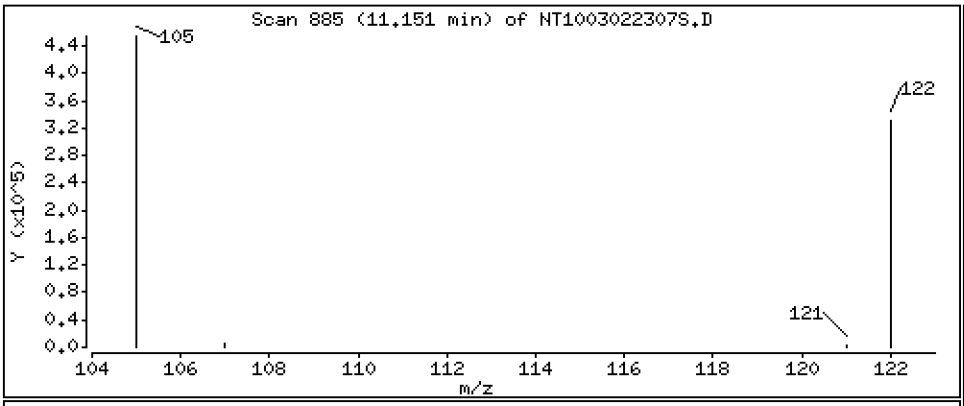
Operator: JGR

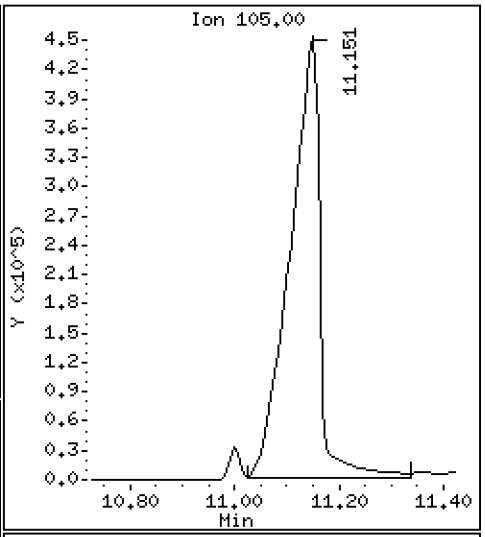
Column phase: ZB-5msi

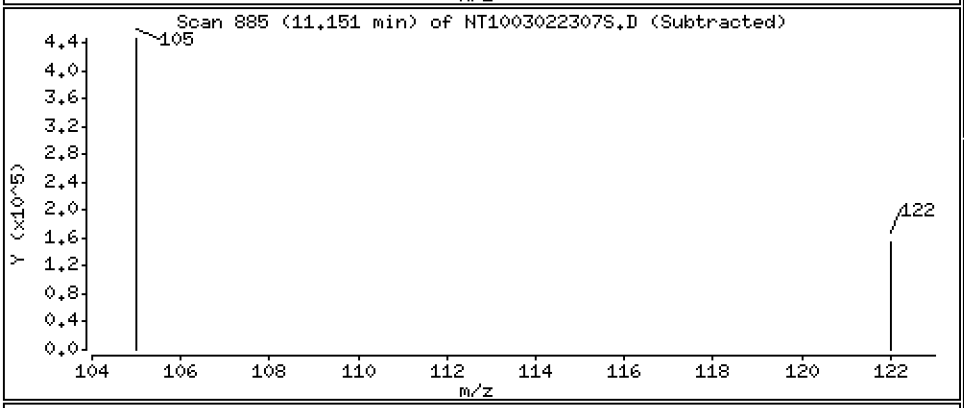
Column diameter: 0.25

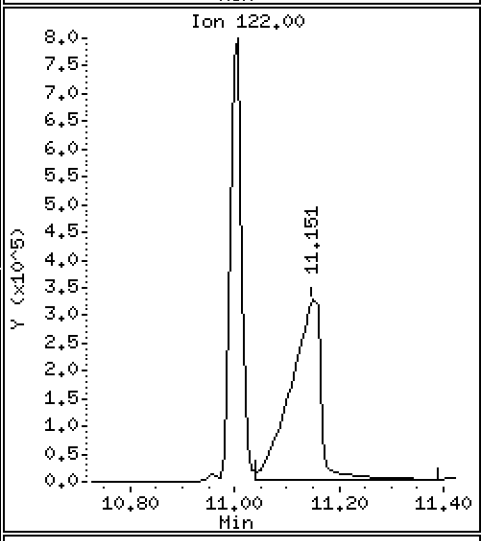
24 Benzoic acid

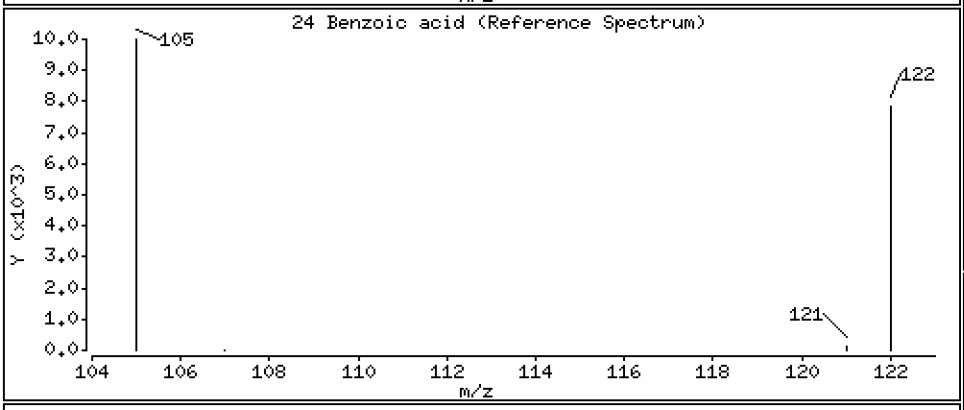
Concentration: 19.64 ug/L

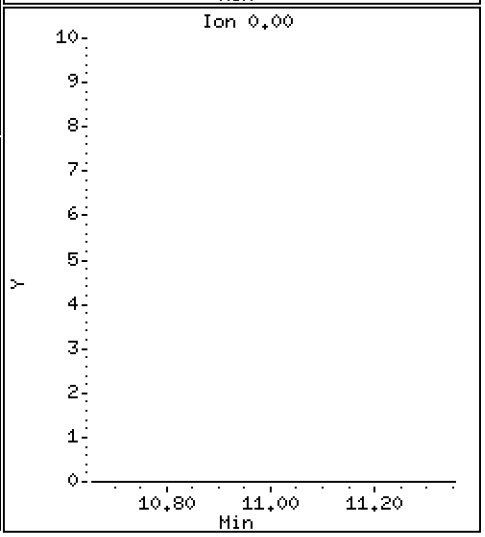


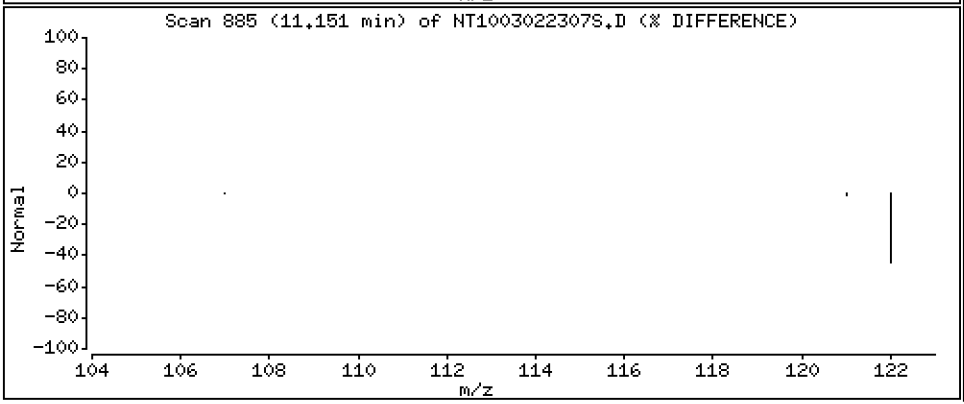












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Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

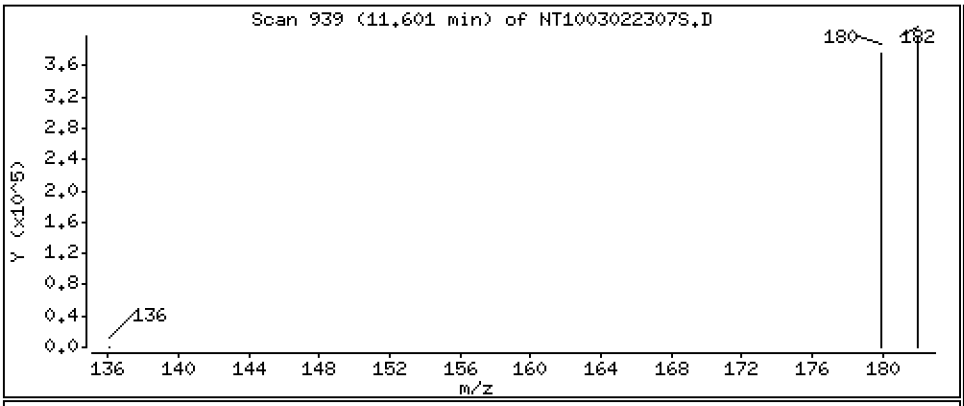
Operator: JGR

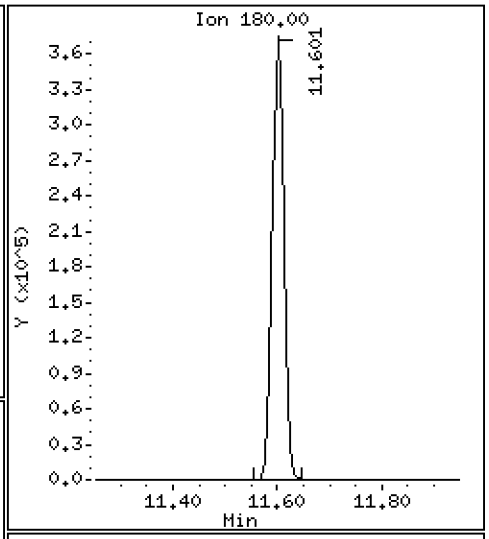
Column phase: ZB-5msi

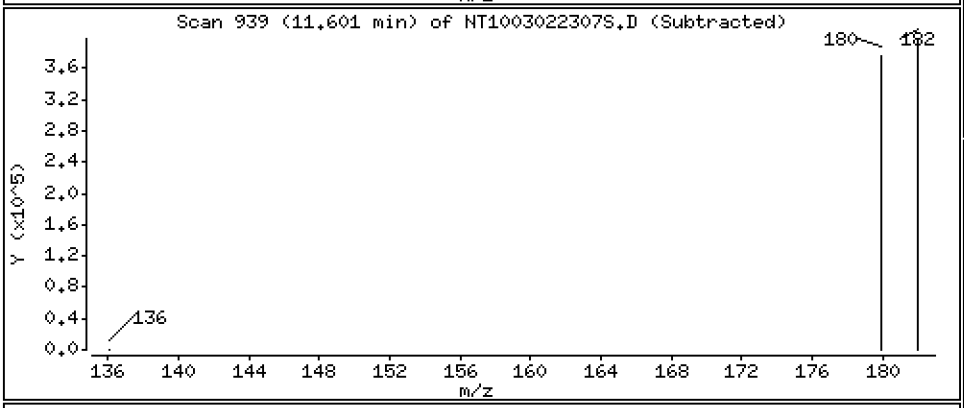
Column diameter: 0.25

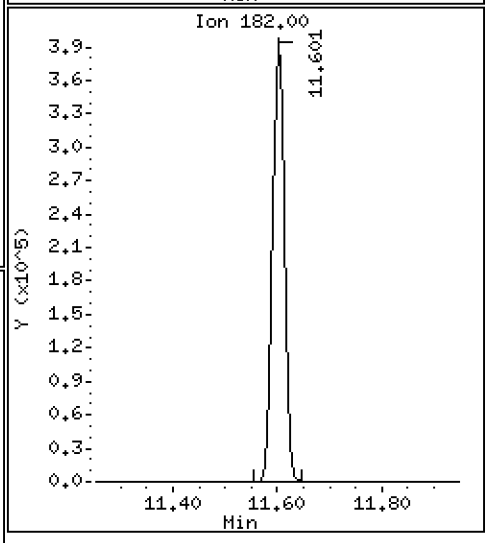
26 1,2,4-Trichlorobenzene

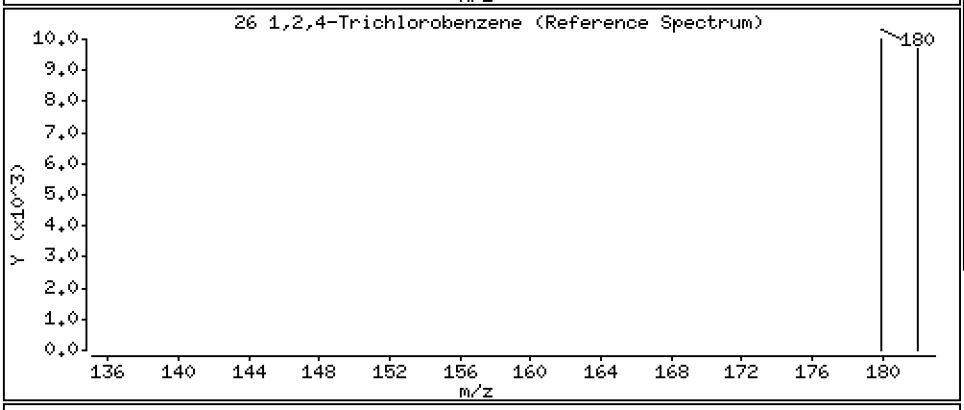
Concentration: 4.348 ug/L

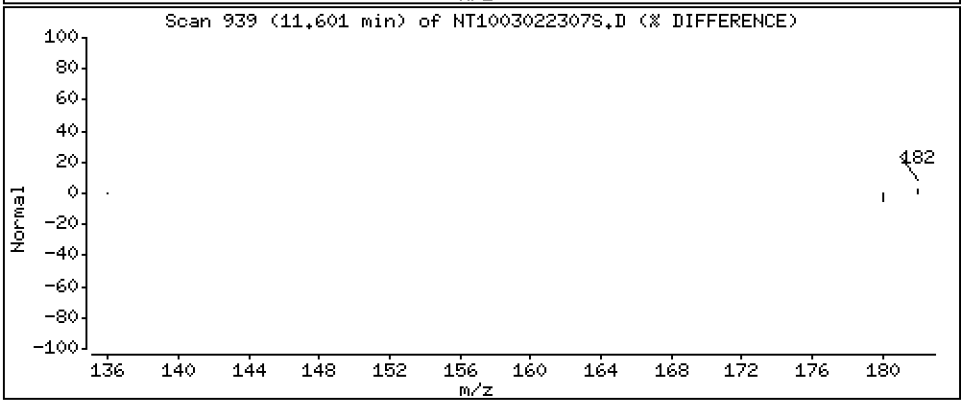












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223075.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

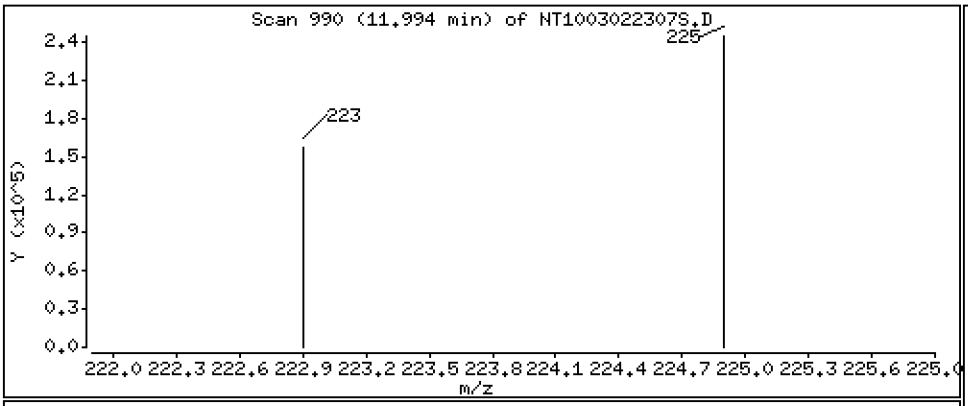
Operator: JGR

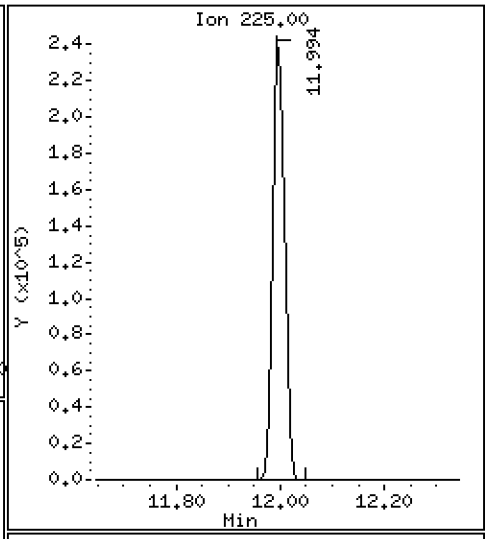
Column phase: ZB-5msi

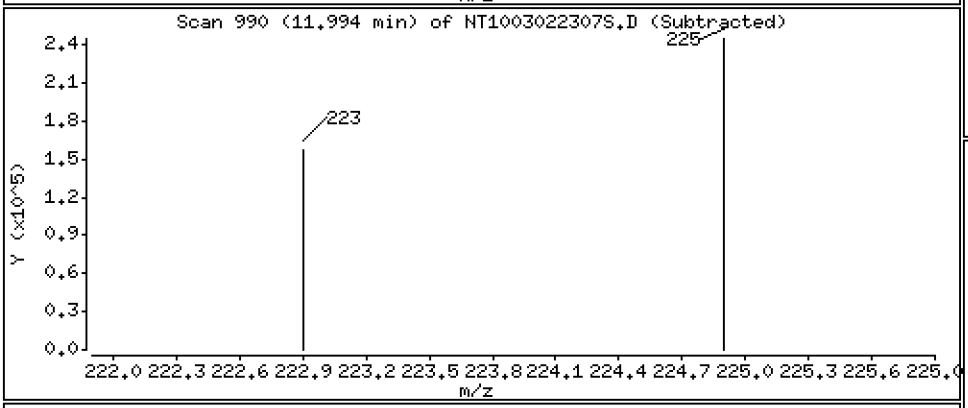
Column diameter: 0.25

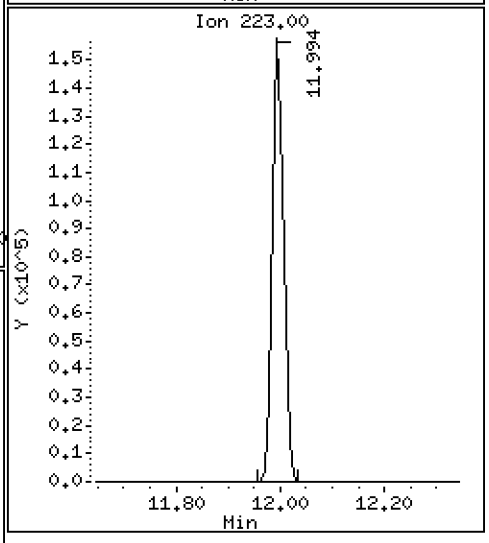
30 Hexachlorobutadiene

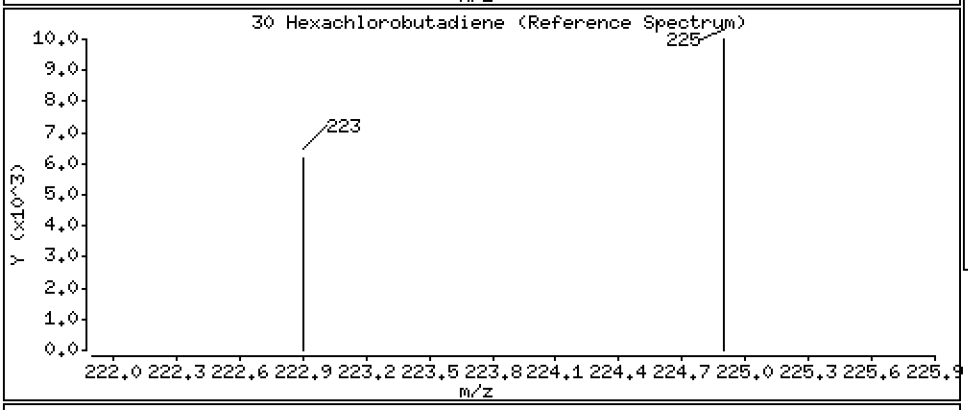
Concentration: 4.117 ug/L

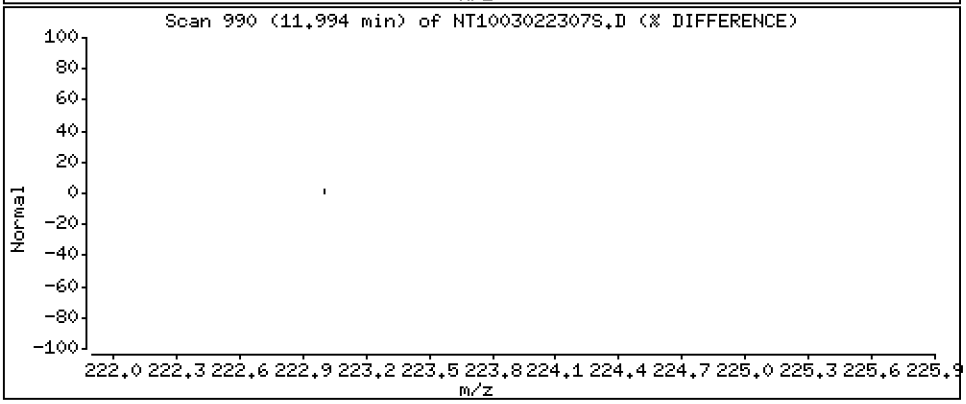












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022307S.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

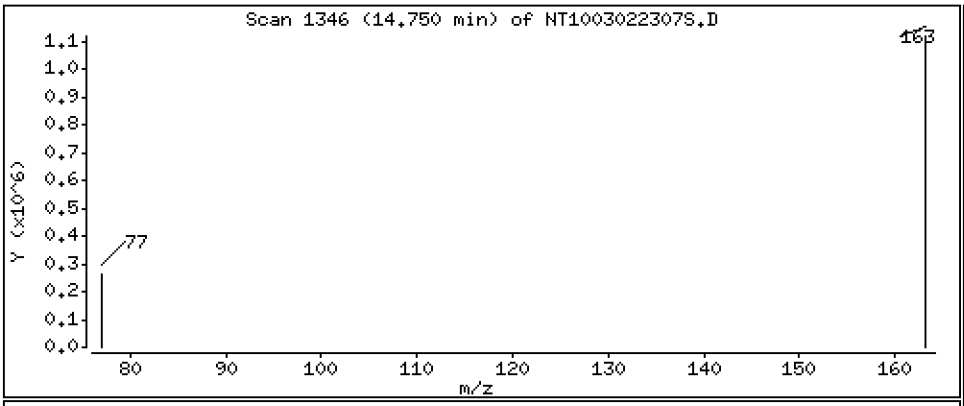
Operator: JGR

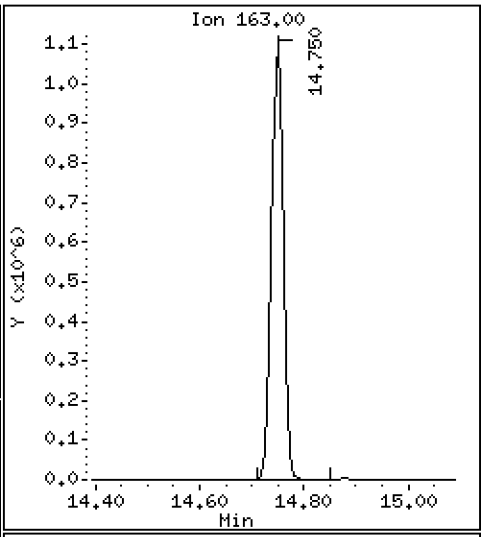
Column phase: ZB-5msi

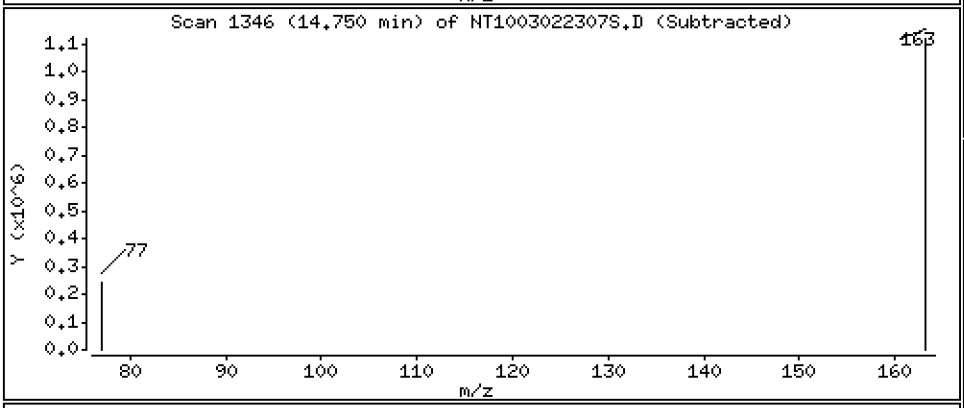
Column diameter: 0.25

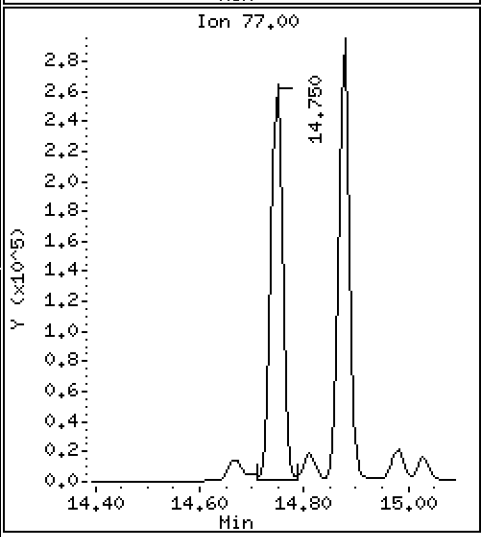
39 Dimethylphthalate

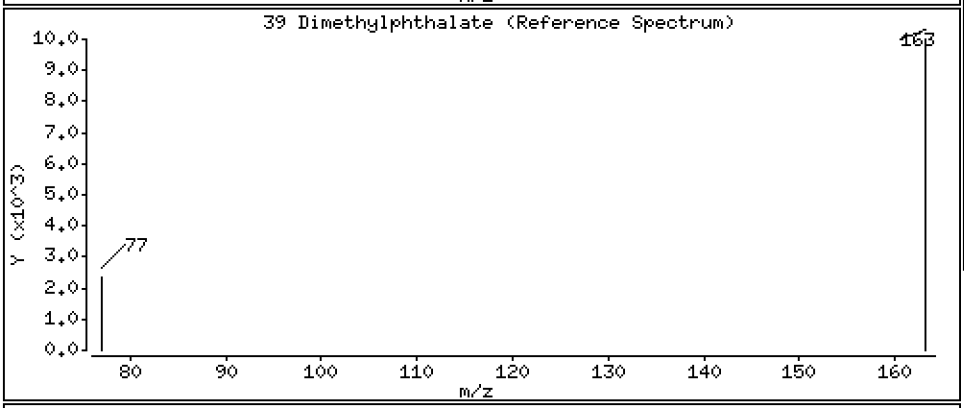
Concentration: 5.444 ug/L

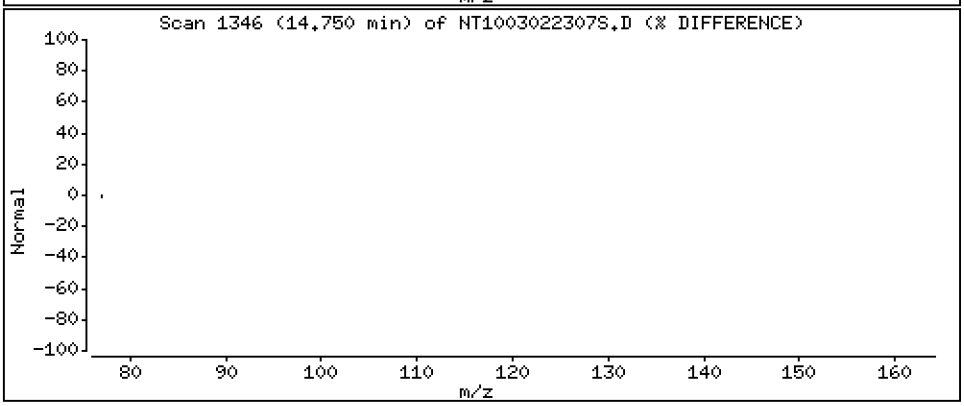












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Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

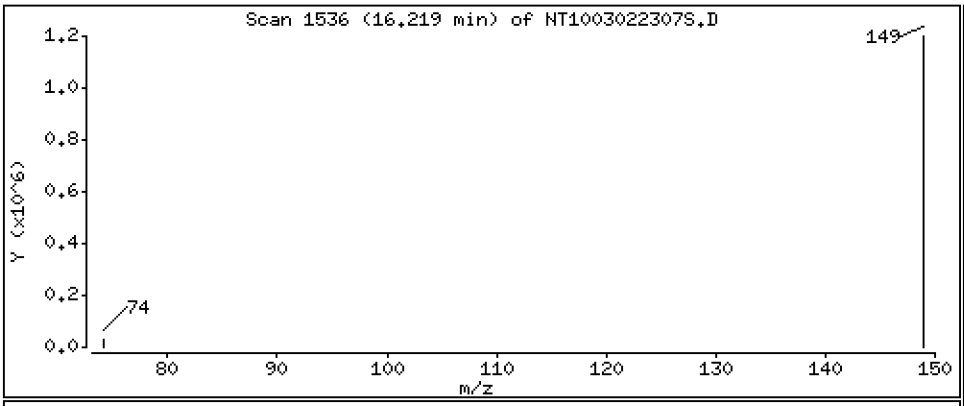
Operator: JGR

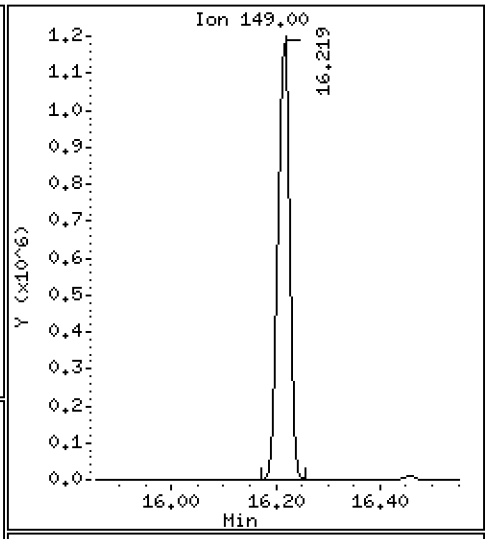
Column phase: ZB-5msi

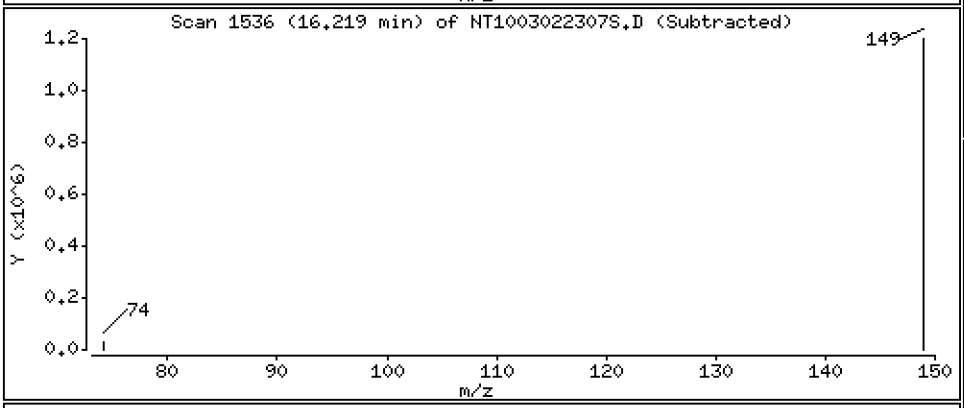
Column diameter: 0.25

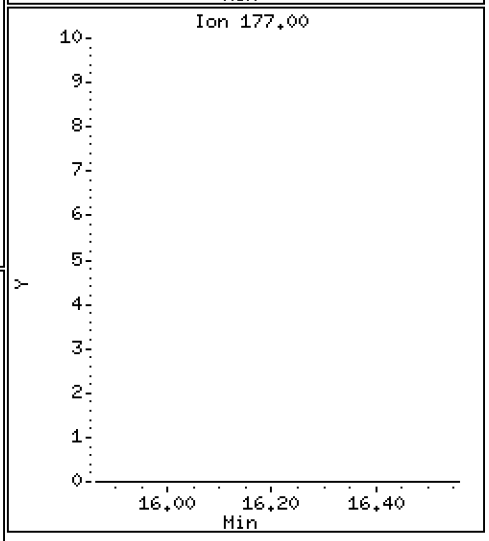
50 Diethylphthalate

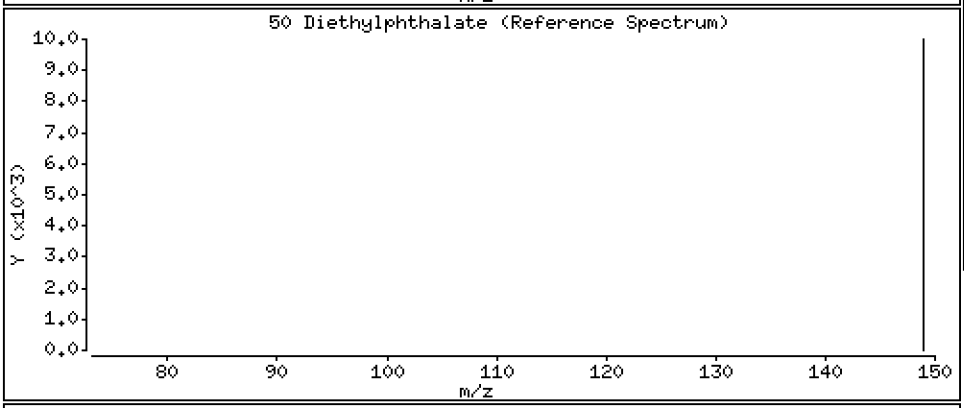
Concentration: 6.291 ug/L

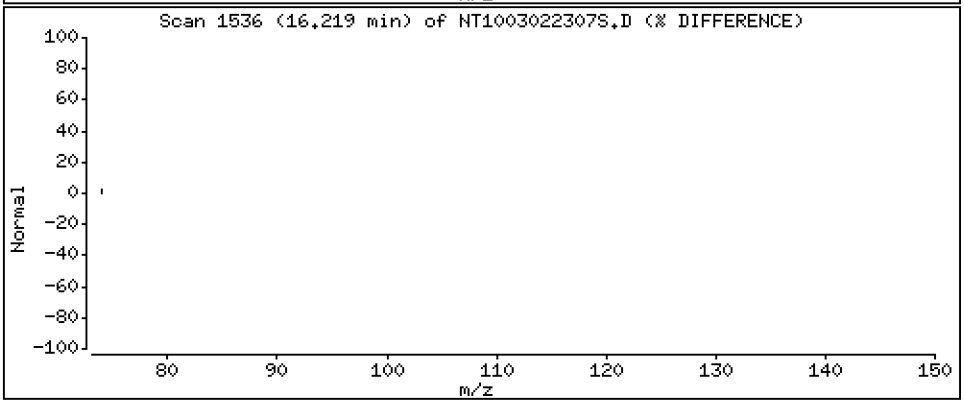












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Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

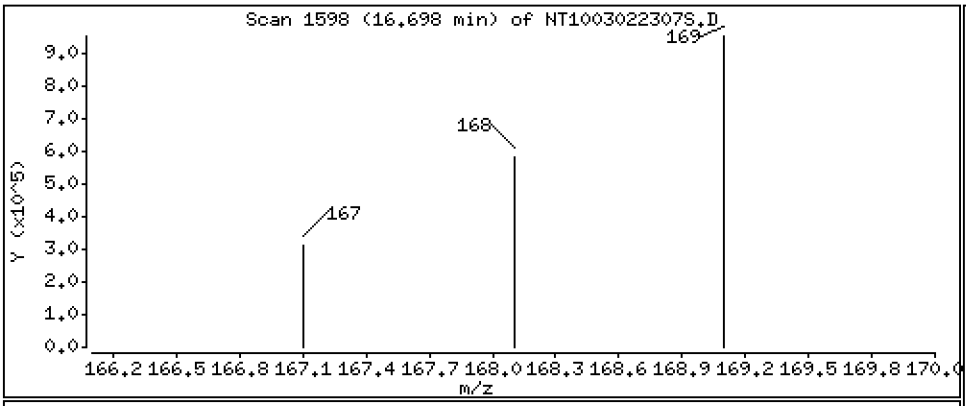
Operator: JGR

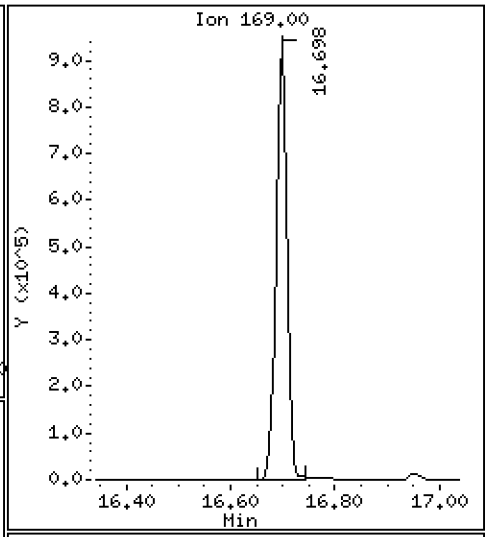
Column phase: ZB-5msi

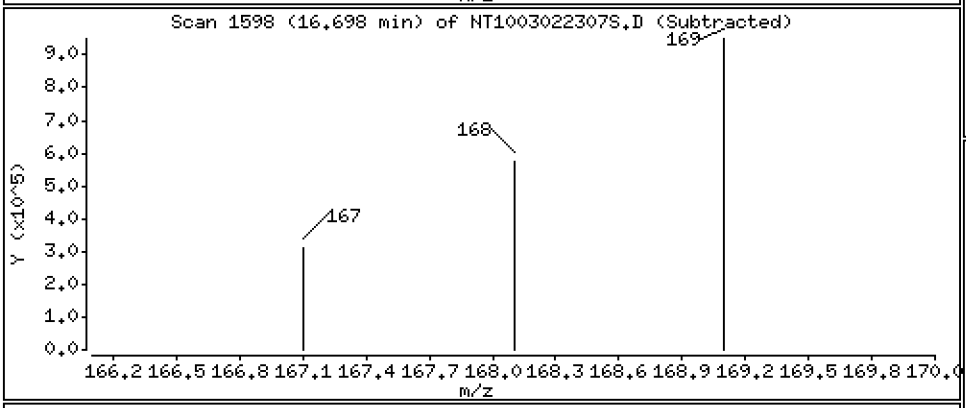
Column diameter: 0.25

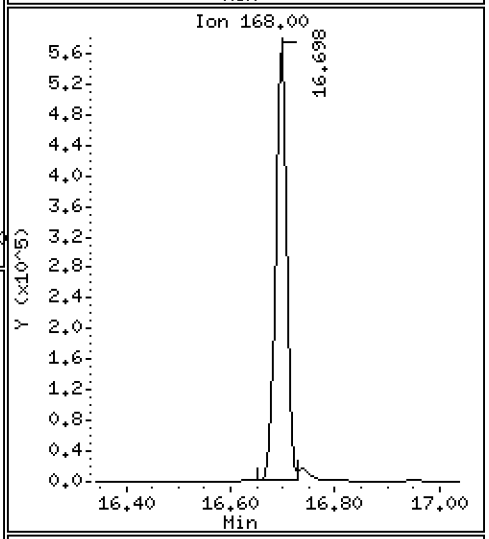
54 N-Nitrosodiphenylamine

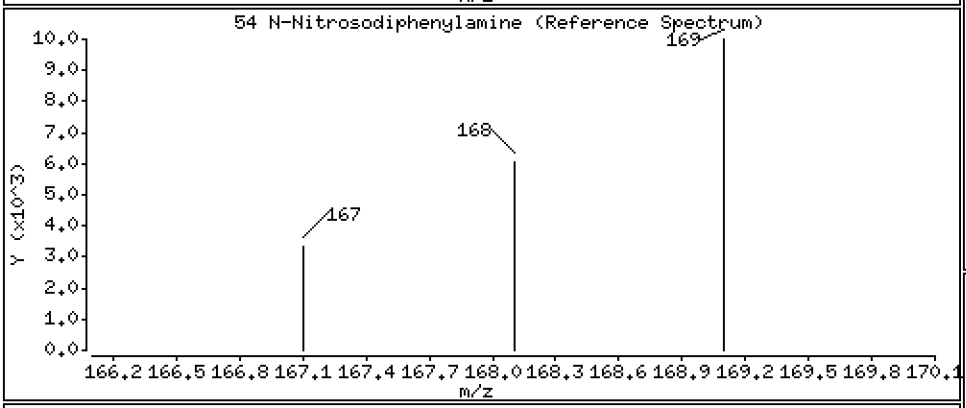
Concentration: 4.947 ug/L

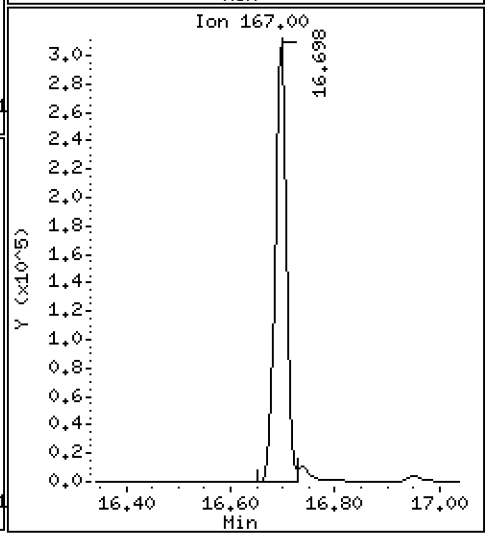


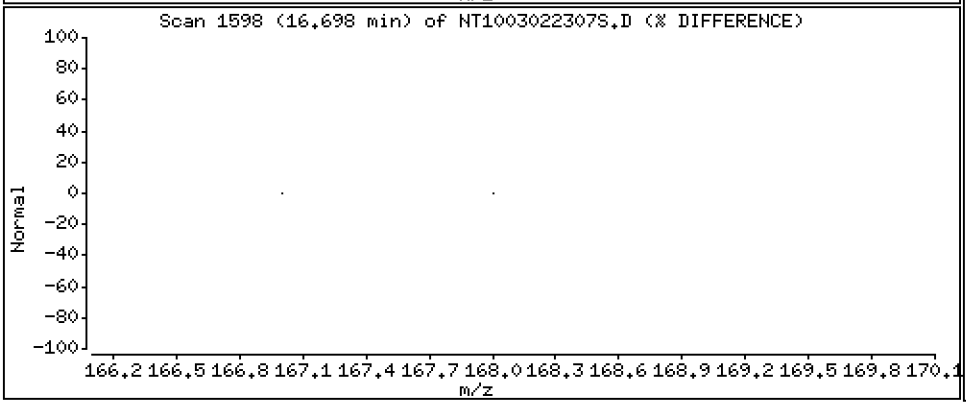












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Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

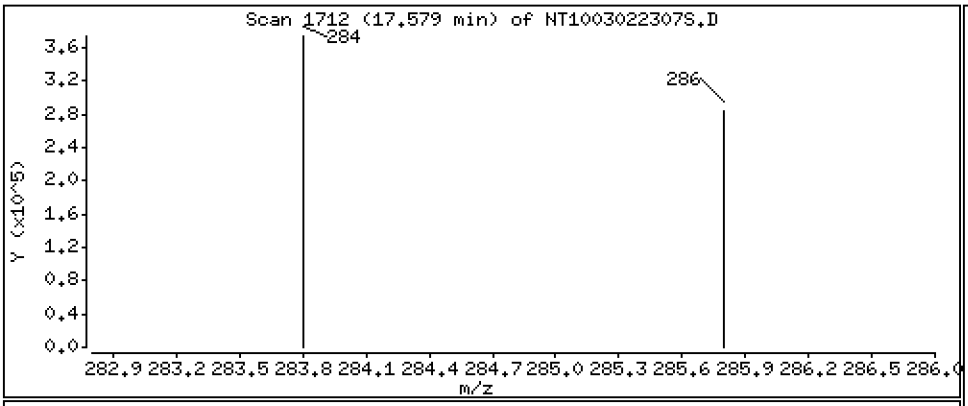
Operator: JGR

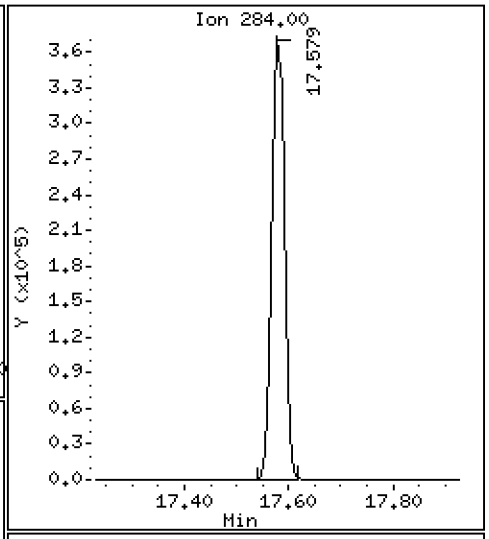
Column phase: ZB-5msi

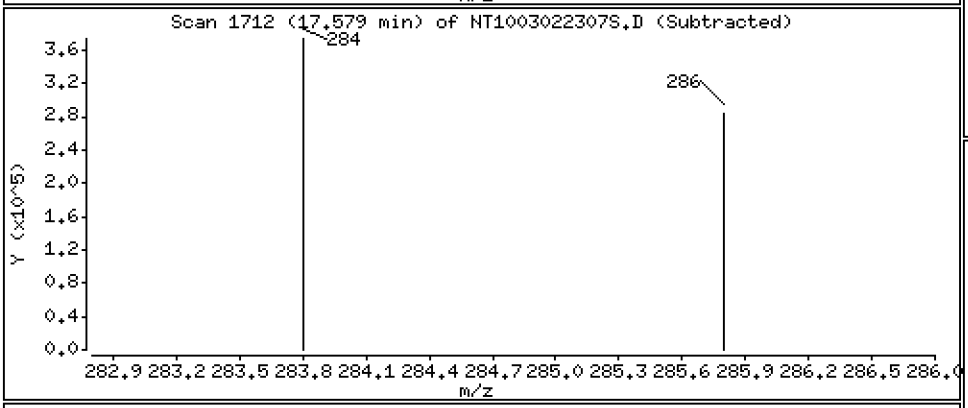
Column diameter: 0.25

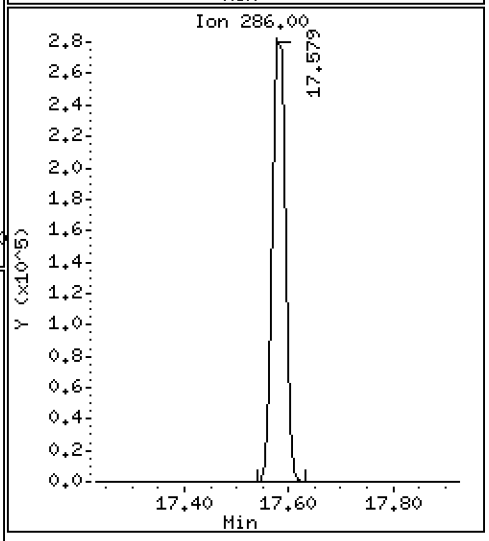
57 Hexachlorobenzene

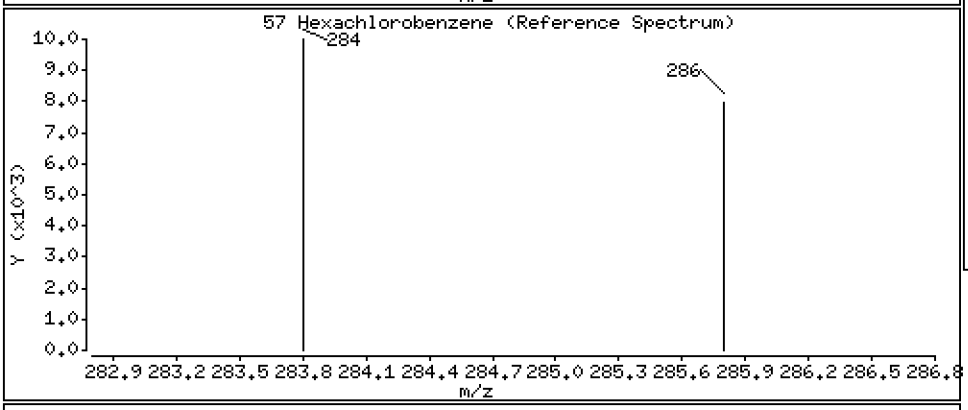
Concentration: 4.546 ug/L

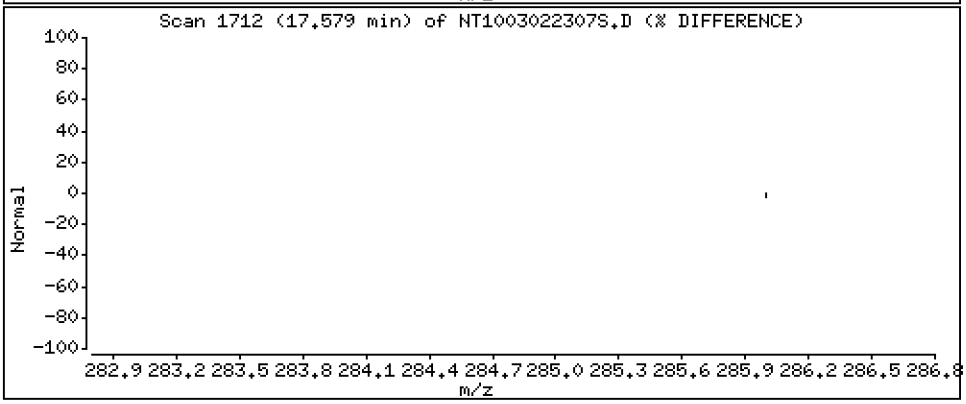












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022307S.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

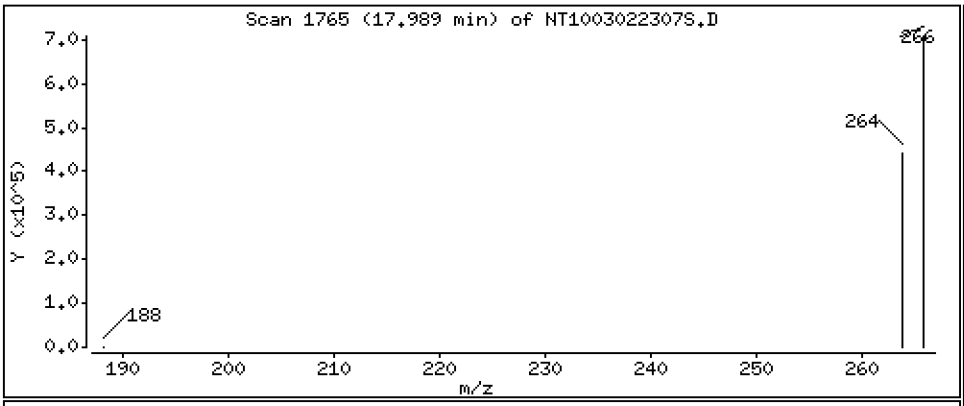
Operator: JGR

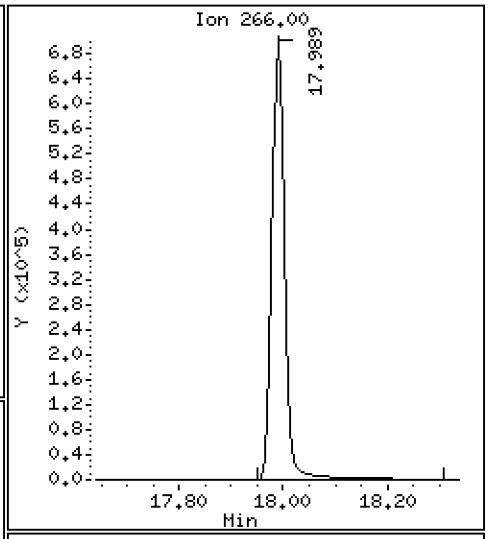
Column phase: ZB-5msi

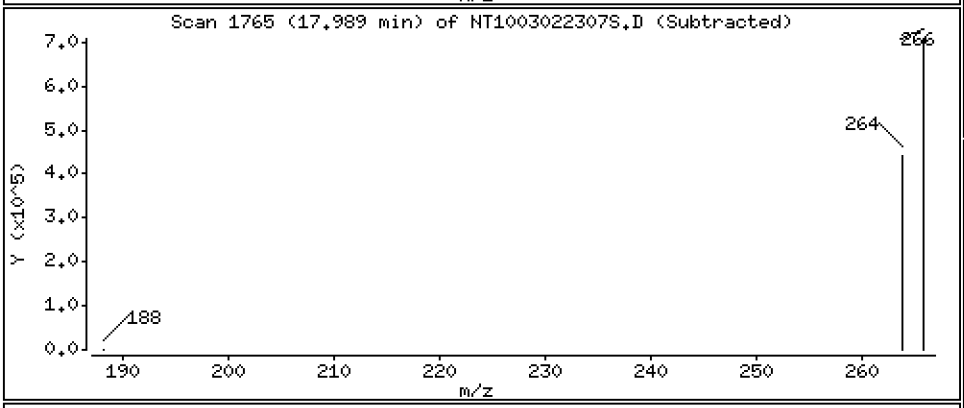
Column diameter: 0.25

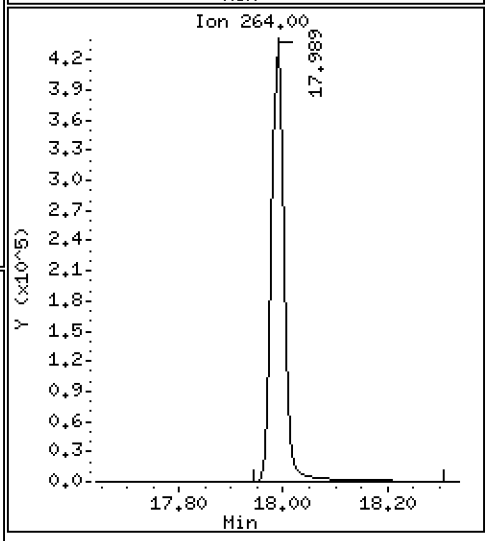
58 Pentachlorophenol

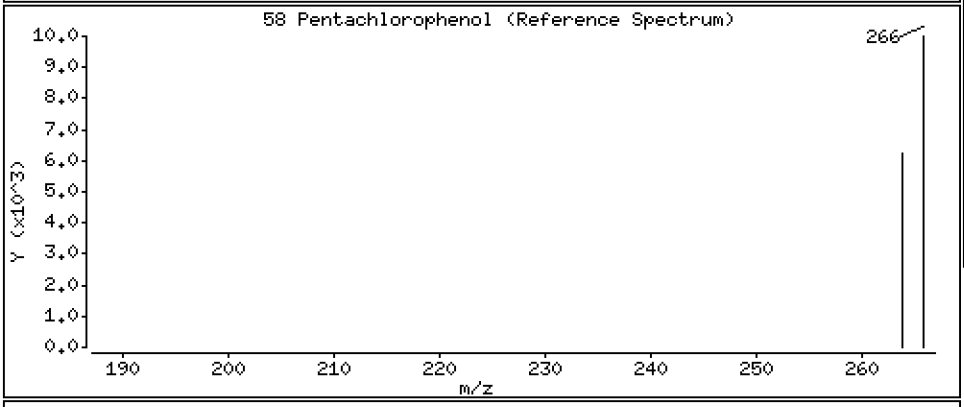
Concentration: 16.03 ug/L

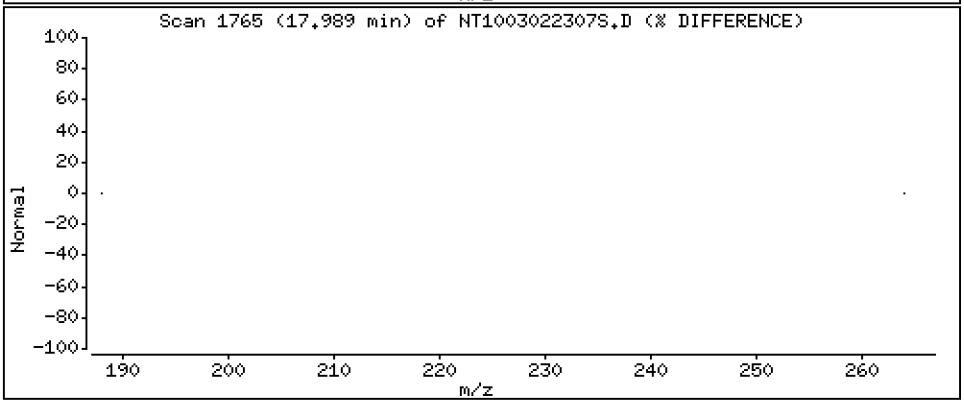












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022307S.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

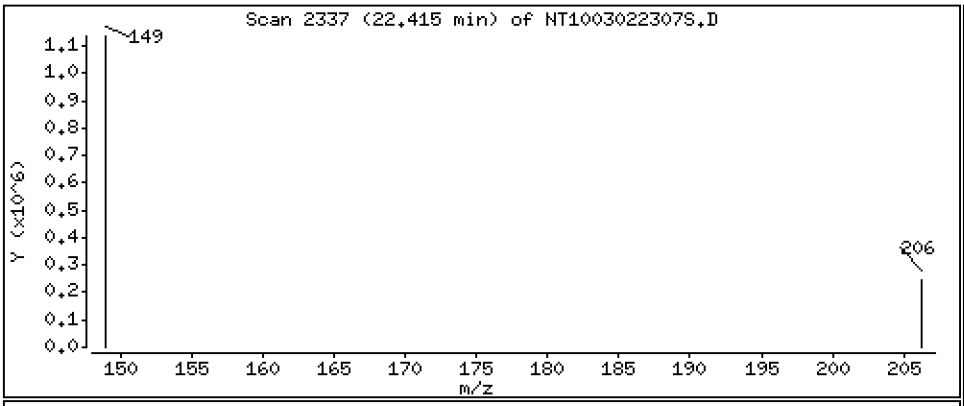
Operator: JGR

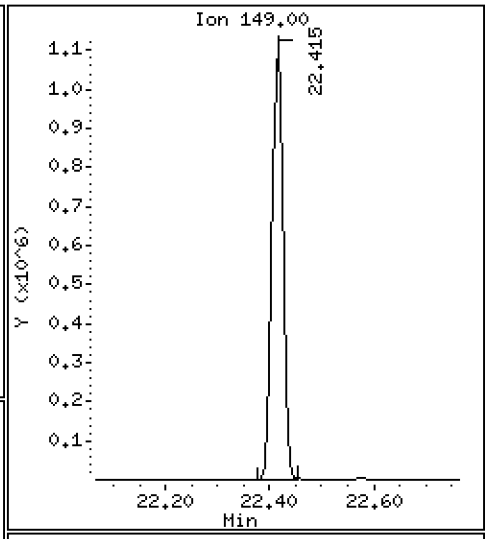
Column phase: ZB-5msi

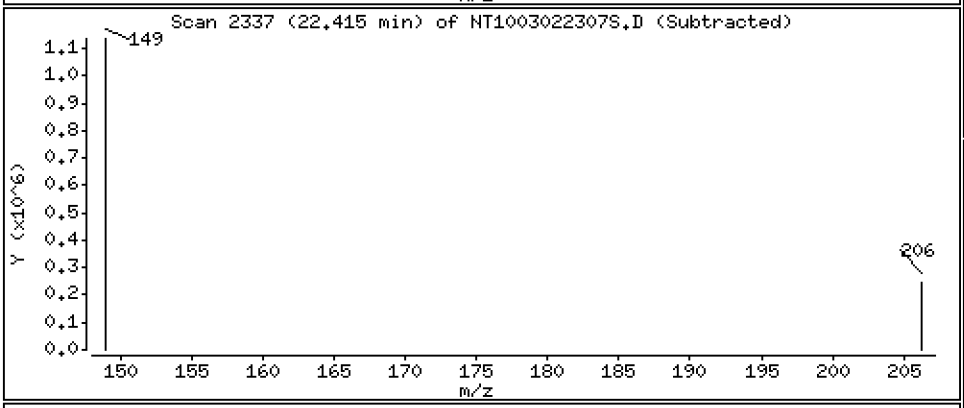
Column diameter: 0.25

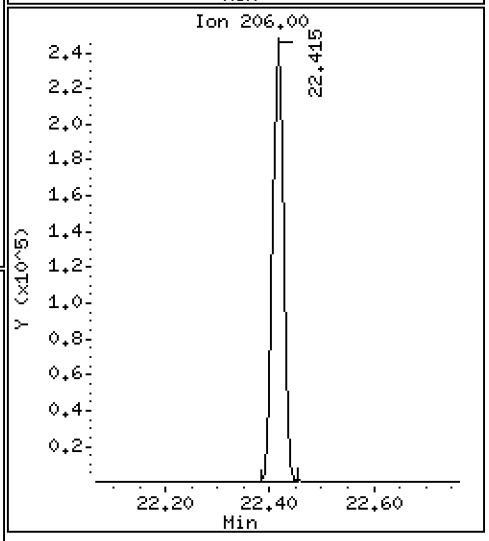
67 Butylbenzylphthalate

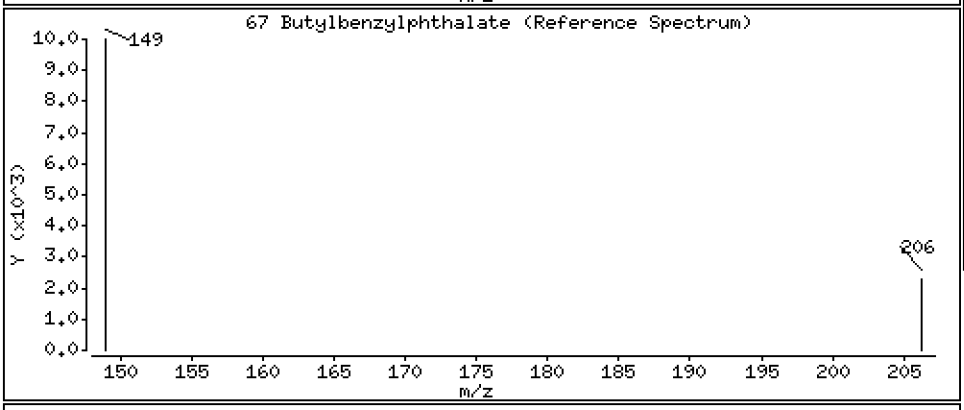
Concentration: 4.813 ug/L

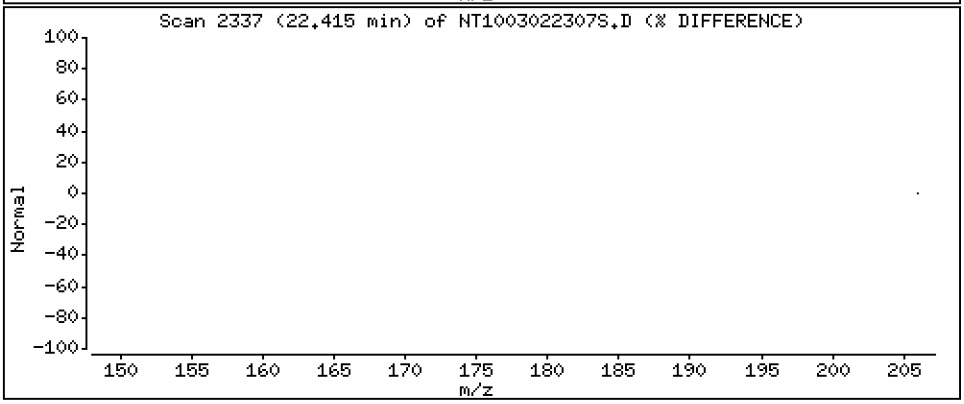












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022307S.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

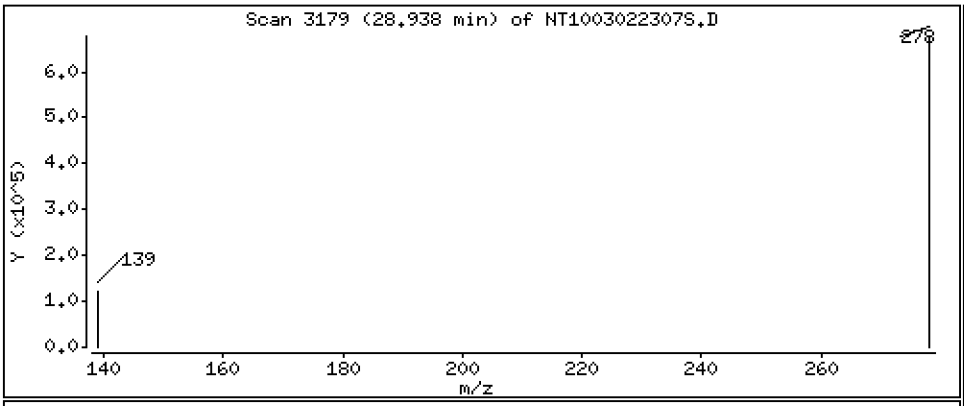
Operator: JGR

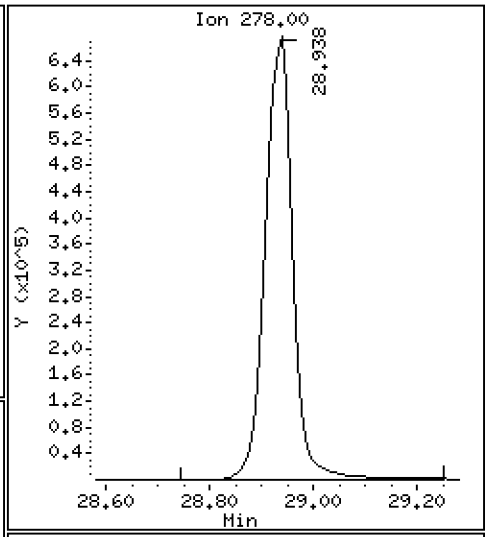
Column phase: ZB-5msi

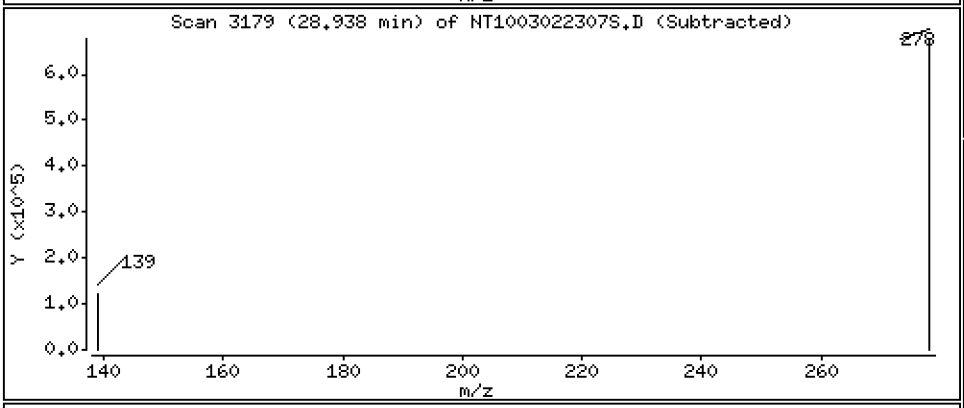
Column diameter: 0.25

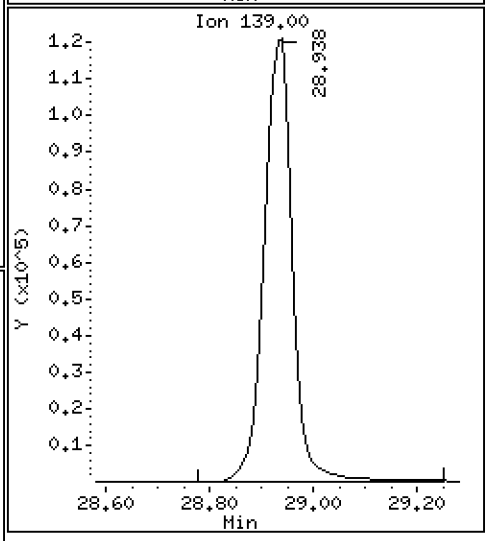
79 Dibenzo(a,h)anthracene

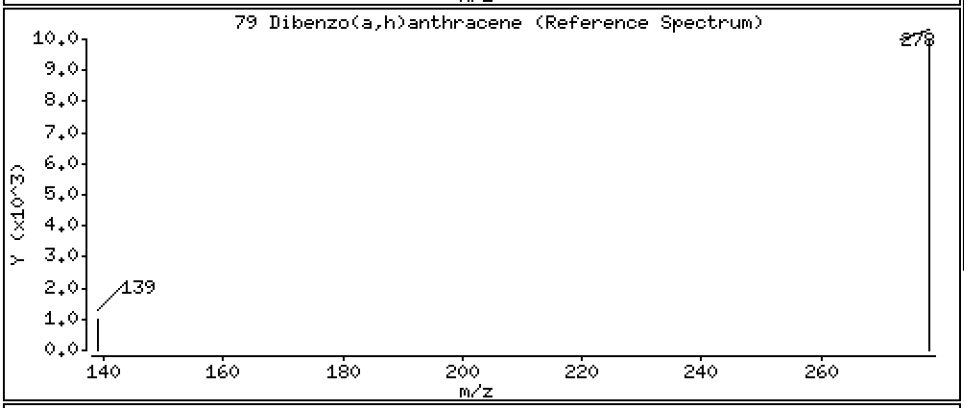
Concentration: 5.147 ug/L

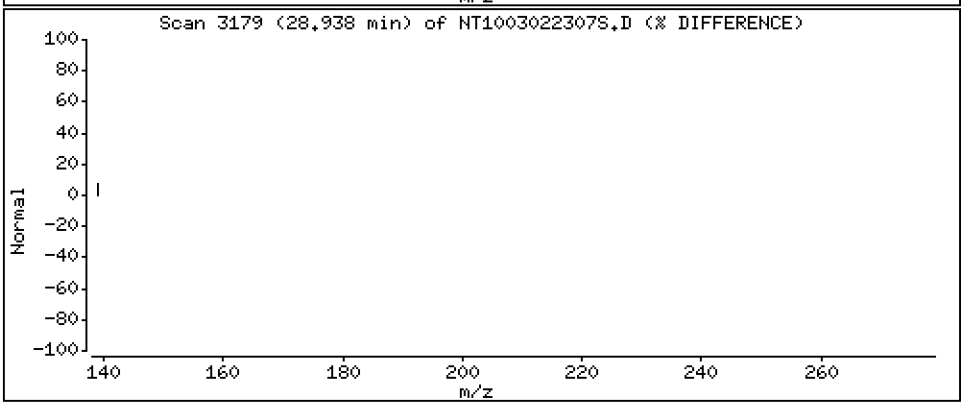












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223075.D

Date : 02-MAR-2023 18:12

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BS1

Volume Injected (uL): 1.0

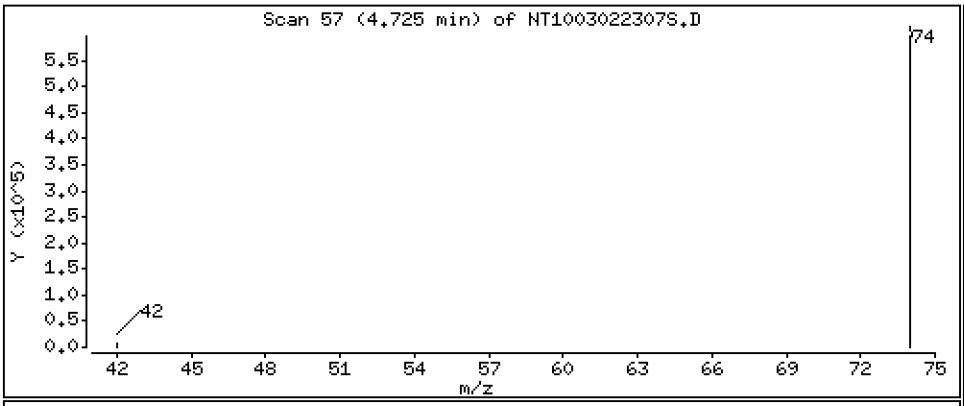
Operator: JGR

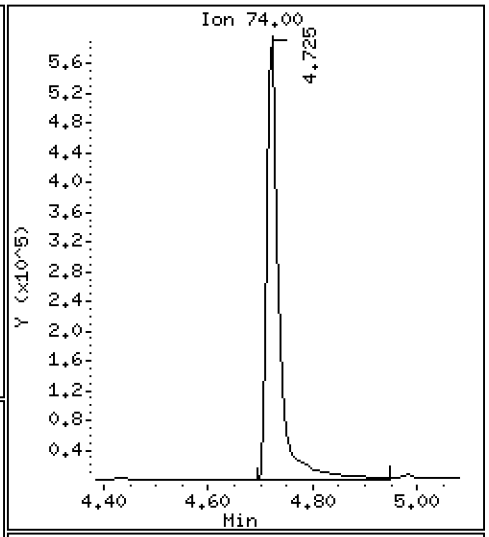
Column phase: ZB-5msi

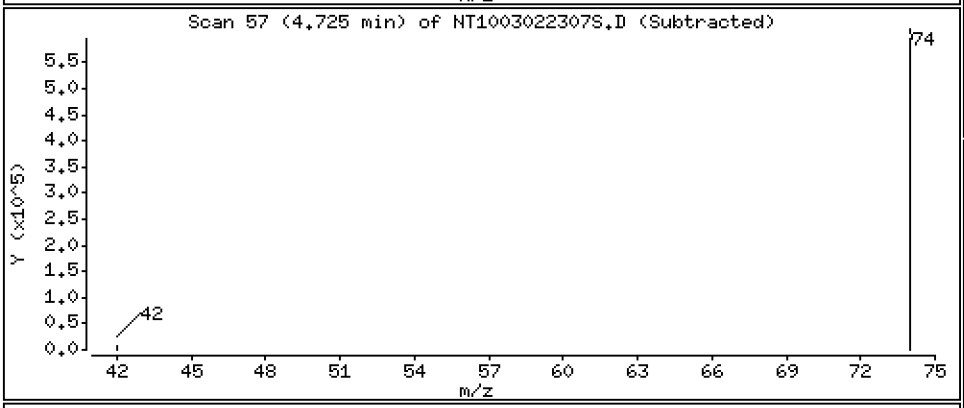
Column diameter: 0.25

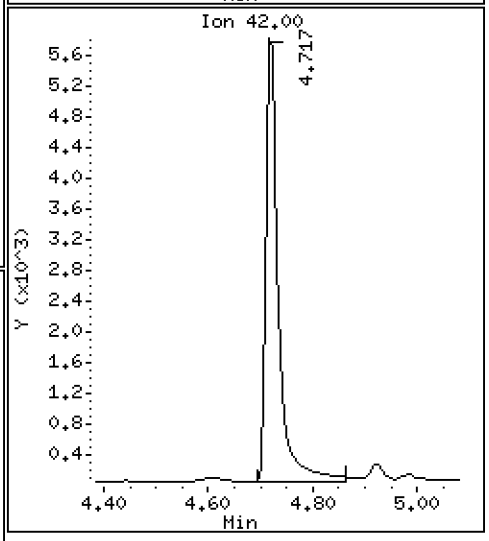
90 N-Nitrosodimethylamine

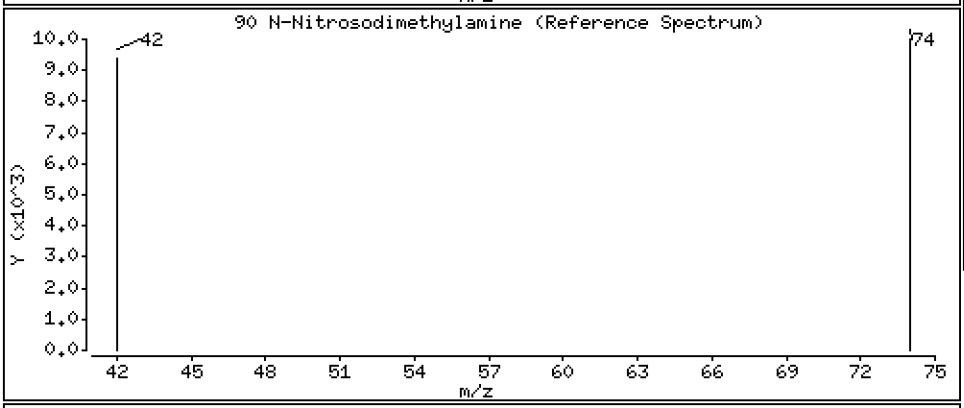
Concentration: 12.80 ug/L

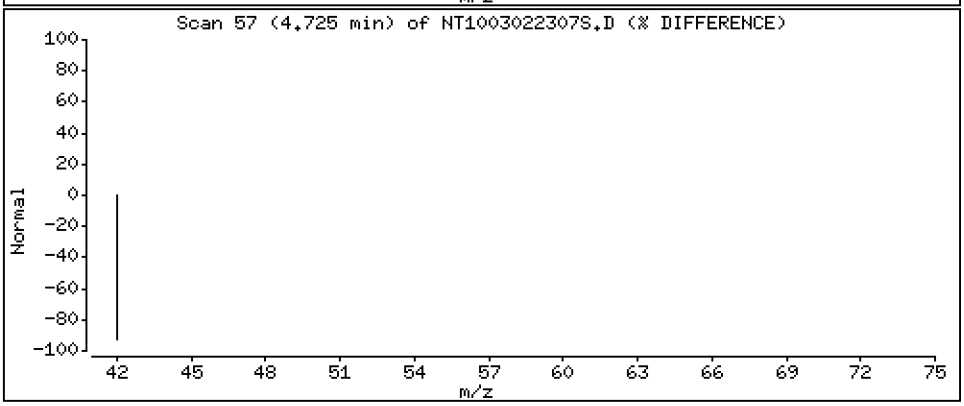












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022307S.D
Lab Smp Id: BLA0624-BS1
Inj Date : 02-MAR-2023 18:12 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLA0624-BS1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 14:53 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.902	6.902	(0.746)	841468	6.52398	6.524(R)
3	Phenol	94	8.517	8.517	(0.921)	973358	4.98503	4.985
7	1,3-Dichlorobenzene	146	9.143	9.143	(0.988)	709028	4.23468	4.235
* 8	1,4-Dichlorobenzene-d4	152	9.252	9.251	(1.000)	451780	4.00000	
9	1,4-Dichlorobenzene	146	9.283	9.282	(1.003)	715977	4.39820	4.398
11	Benzyl alcohol	79	9.477	9.476	(1.024)	524736	4.66536	4.665
12	1,2-Dichlorobenzene	146	9.562	9.562	(1.034)	703267	4.49464	4.495
13	2-Methylphenol	108	9.655	9.655	(1.044)	506956	4.27355	4.274
15	4-Methylphenol	108	9.950	9.942	(1.076)	578416	4.61288	4.613
16	N-Nitroso-di-n-propylamine	70	9.982	9.981	(1.079)	438478	5.07702	5.077
22	2,4-Dimethylphenol	107	10.998	10.997	(0.938)	1539522	10.1032	10.10
24	Benzoic acid	105	11.150	11.074	(0.951)	1789304	19.6444	19.64
26	1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	545737	4.34752	4.348
* 27	Naphthalene-d8	136	11.724	11.723	(1.000)	1744036	4.00000	
30	Hexachlorobutadiene	225	11.994	11.994	(1.023)	366703	4.11657	4.117
39	Dimethylphthalate	163	14.749	14.741	(0.963)	1632680	5.44413	5.444
* 42	Acenaphthene-d10	162	15.322	15.314	(1.000)	944486	4.00000	
50	Diethylphthalate	149	16.218	16.203	(1.059)	1779087	6.29067	6.291
54	N-Nitrosodiphenylamine	169	16.698	16.690	(0.907)	1377595	4.94651	4.947
57	Hexachlorobenzene	284	17.578	17.578	(0.955)	592498	4.54603	4.546

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	17.989	17.988	(0.977)	1137031	16.0277	16.03
*	59 Phenanthrene-d10	188	18.406	18.406	(1.000)	1720859	4.00000	
$	66 Terphenyl-d14	244	21.532	21.532	(0.919)	698523	4.50842	4.508(R)
	67 Butylbenzylphthalate	149	22.415	22.414	(0.957)	1529993	4.81256	4.813
*	69 Chrysene-d12	240	23.421	23.421	(1.000)	1915960	4.00000	
*	77 Perylene-d12	264	26.116	26.115	(1.000)	1919174	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.938	28.929	(1.108)	2482091	5.14660	5.147
	90 N-Nitrosodimethylamine	74	4.724	4.732	(0.511)	977355	12.7989	12.80

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003022307S.D
Lab Smp Id: BLA0624-BS1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 02-MAR-2023
Calibration Time: 14:13
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	493417	246709	986834	451780	-8.44
27 Naphthalene-d8	1779056	889528	3558112	1744036	-1.97
42 Acenaphthene-d10	954569	477285	1909138	944486	-1.06
59 Phenanthrene-d10	1596290	798145	3192580	1720859	7.80
69 Chrysene-d12	1649110	824555	3298220	1915960	16.18
77 Perylene-d12	1901958	950979	3803916	1919174	0.91

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
77 Perylene-d12	26.12	25.62	26.62	26.12	0.00

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

REVIEW SUMMARY FOR FILE - NT1003022307S.D

Lab ID: BLA0624-BS1
nt10.i, 20230302.b\SIM.b\SIMABN2.m,   02-MAR-2023 18:12

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.951	0.945	0.0065	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003022303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223085.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

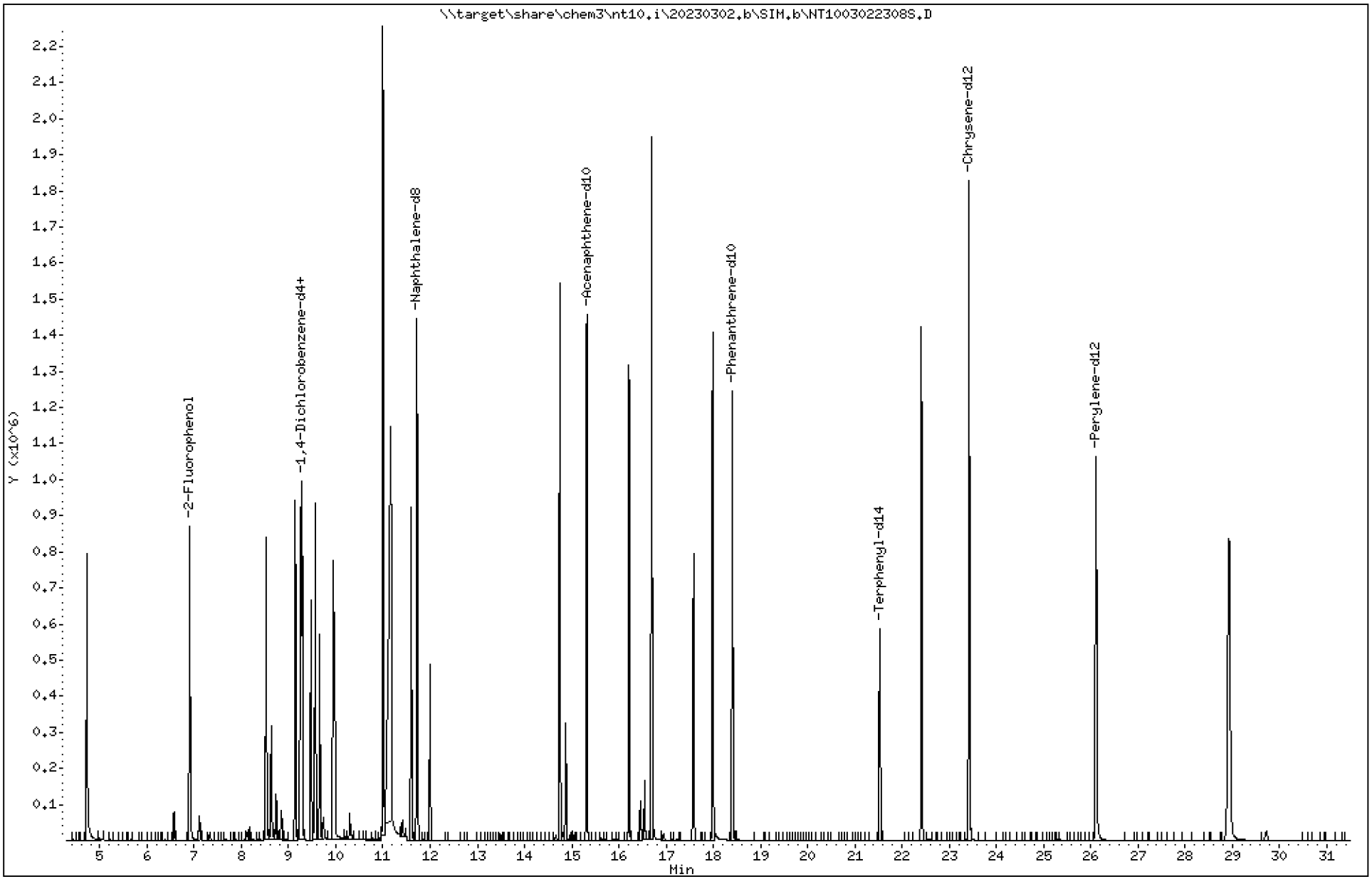
Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223085.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

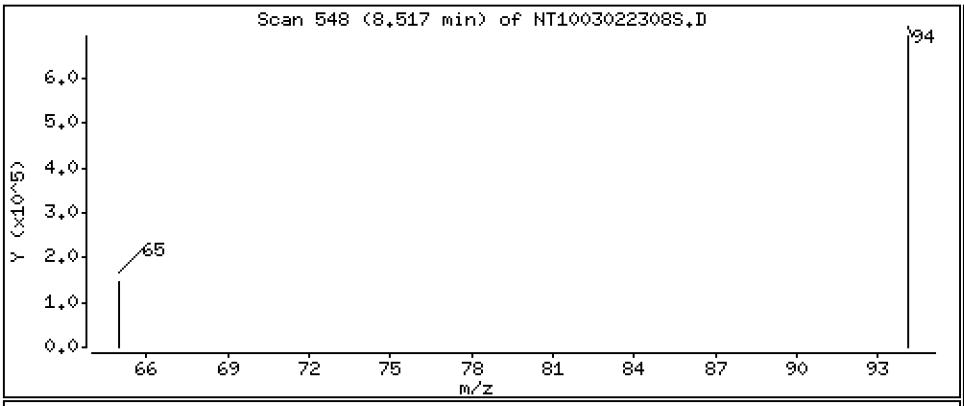
Operator: JGR

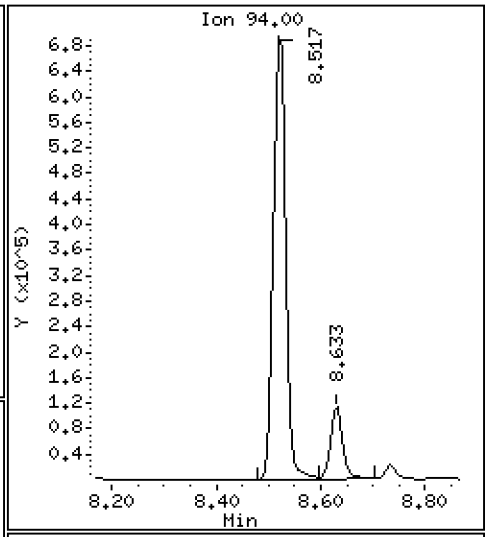
Column phase: ZB-5msi

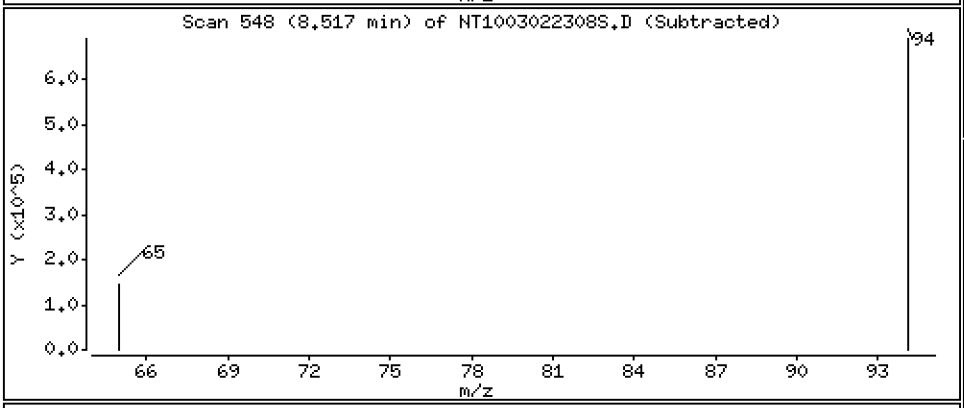
Column diameter: 0.25

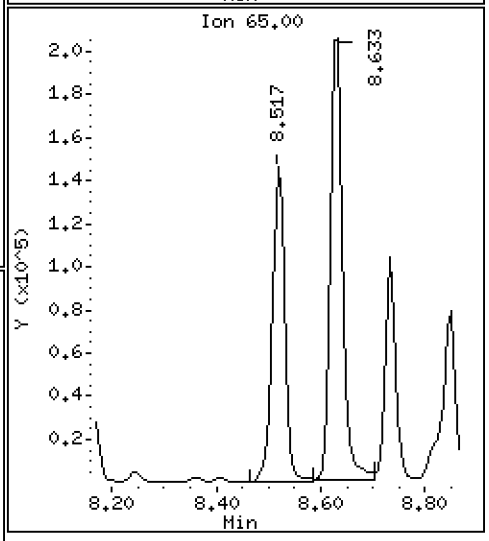
3 Phenol

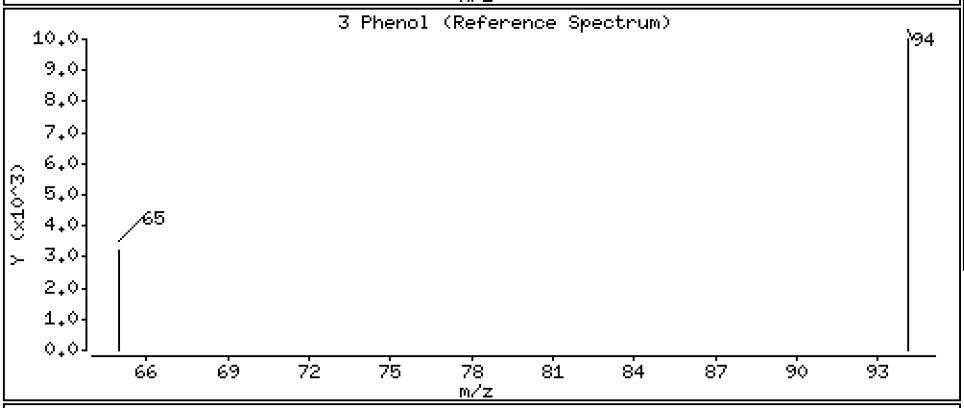
Concentration: 4.489 ug/L

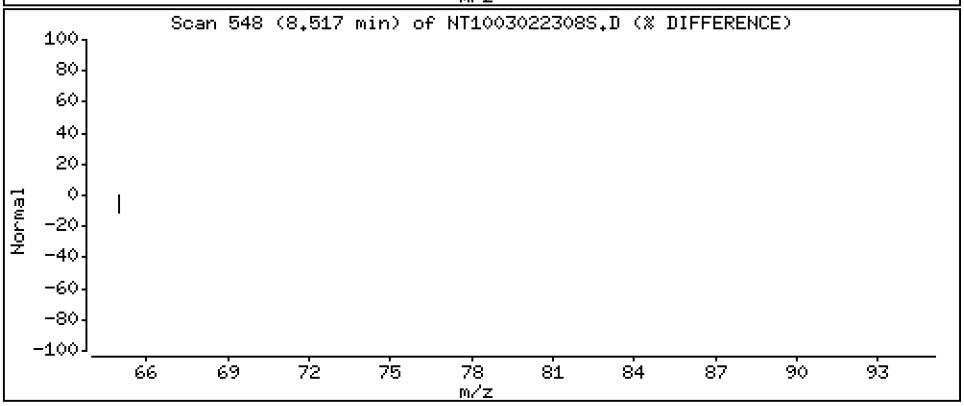












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

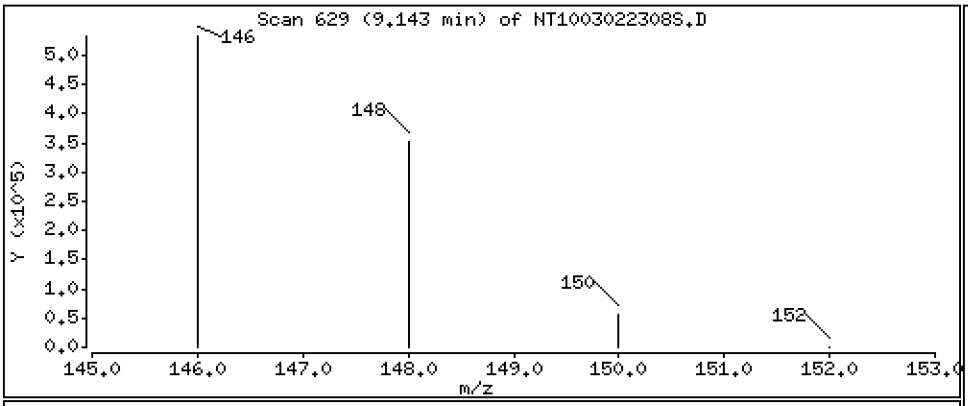
Operator: JGR

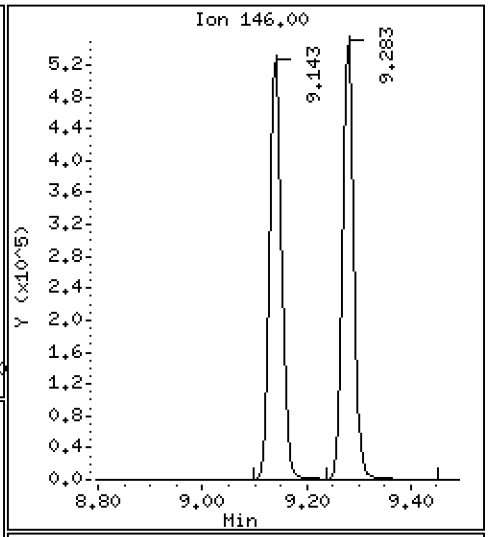
Column phase: ZB-5msi

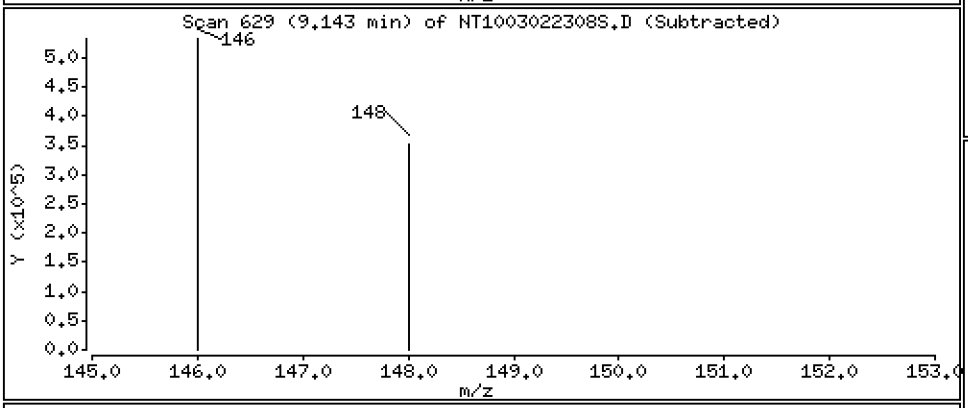
Column diameter: 0.25

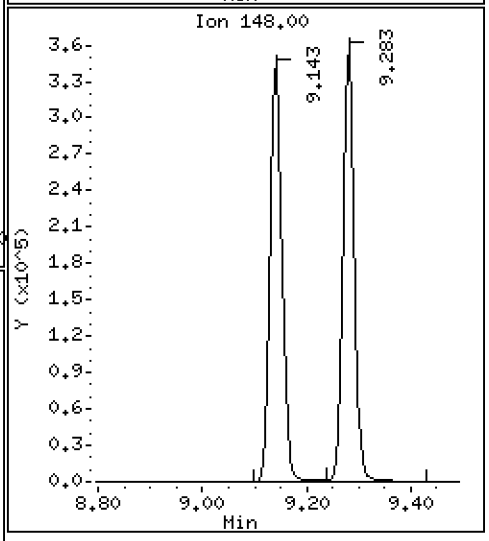
7 1,3-Dichlorobenzene

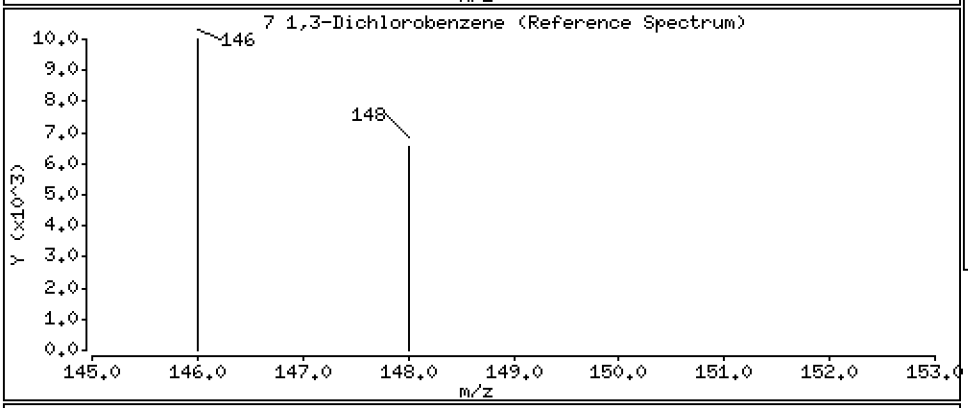
Concentration: 4.111 ug/L

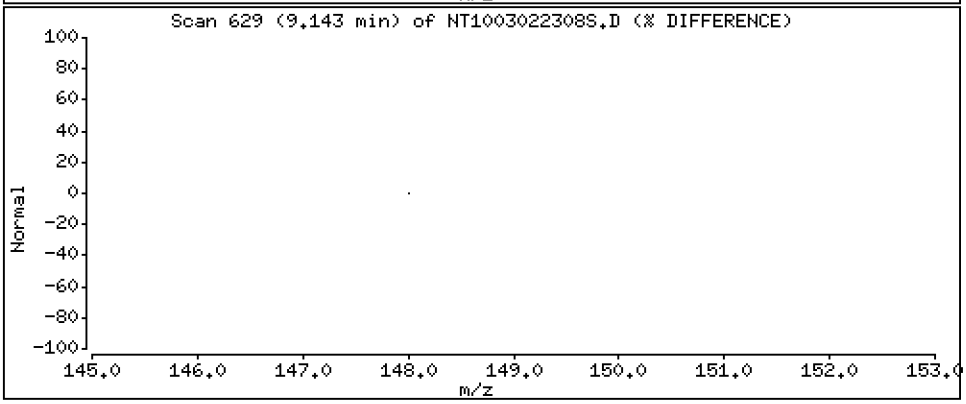












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

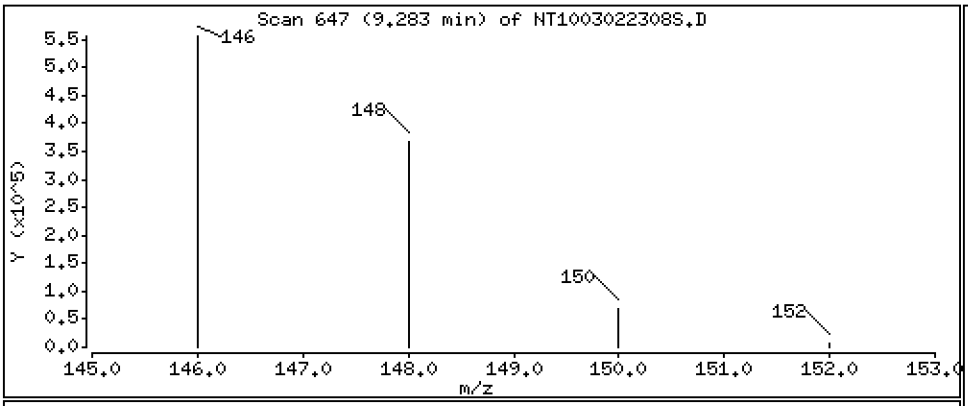
Operator: JGR

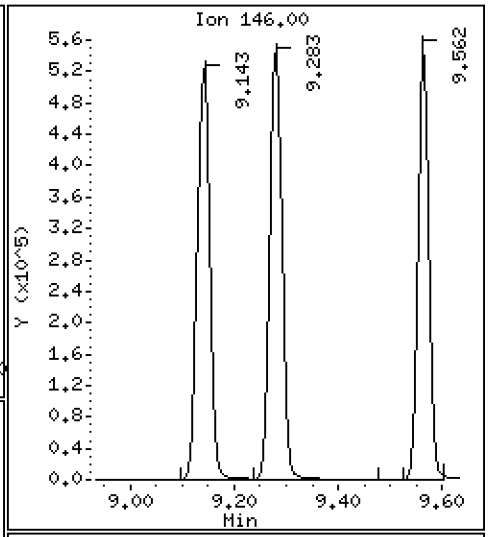
Column phase: ZB-5msi

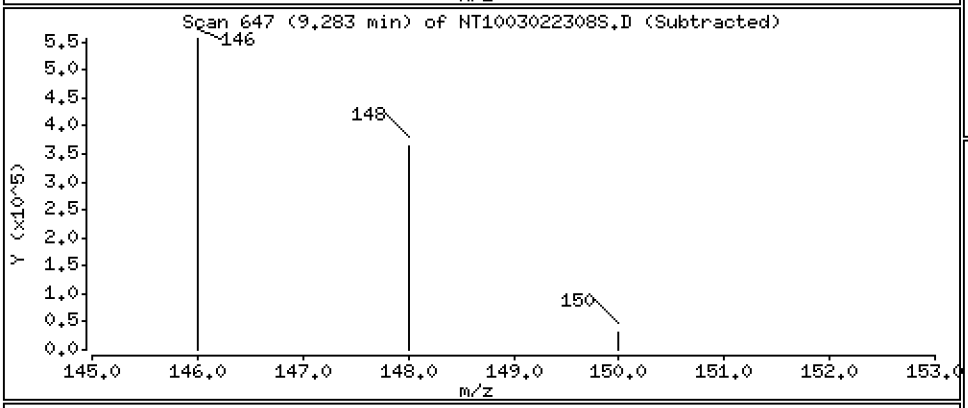
Column diameter: 0.25

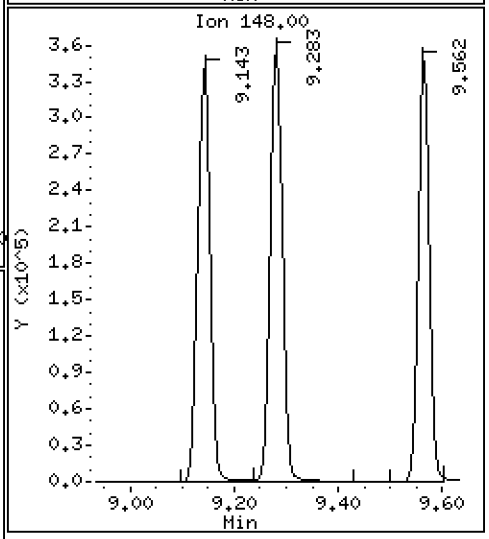
9 1,4-Dichlorobenzene

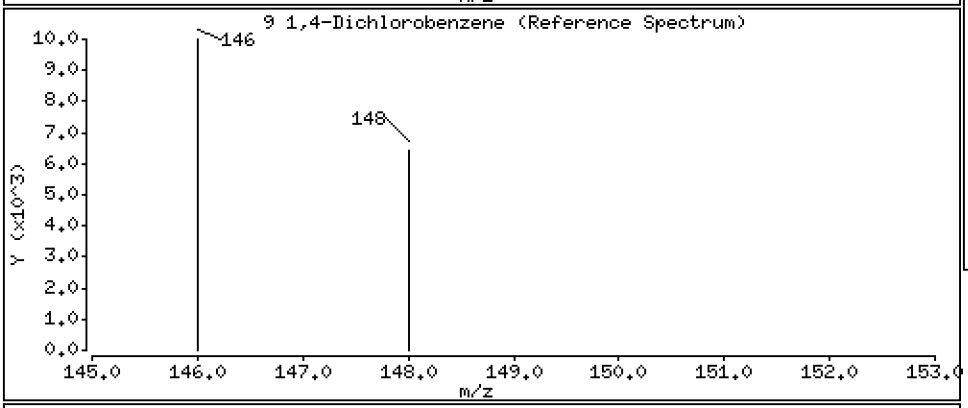
Concentration: 4.264 ug/L

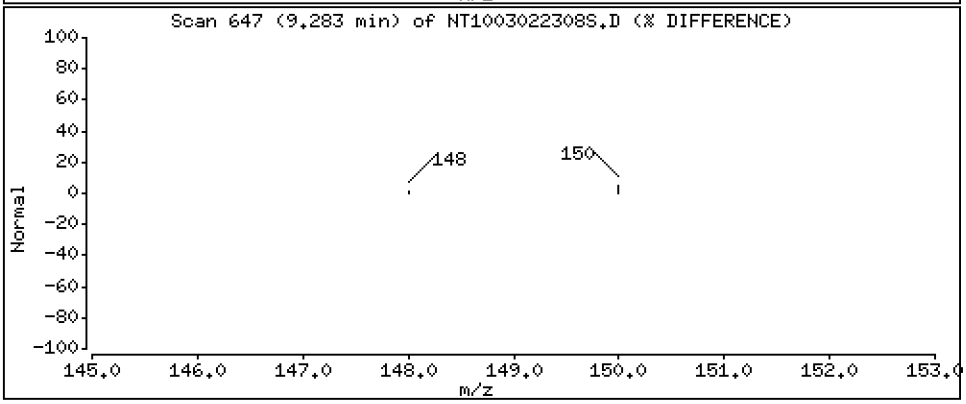












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

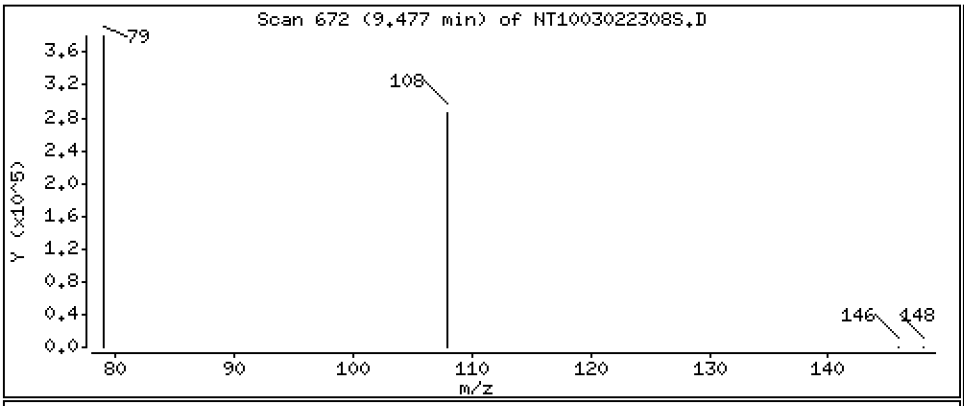
Operator: JGR

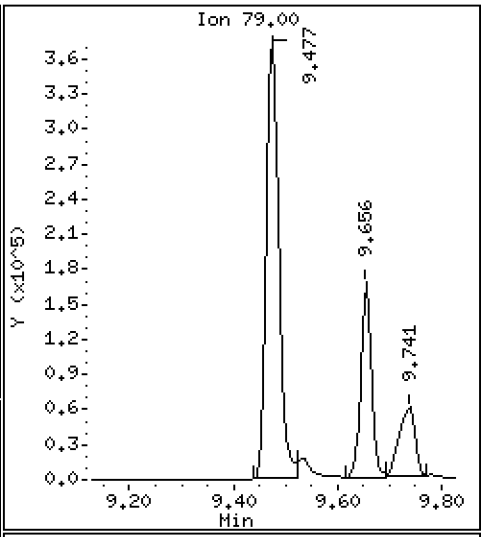
Column phase: ZB-5msi

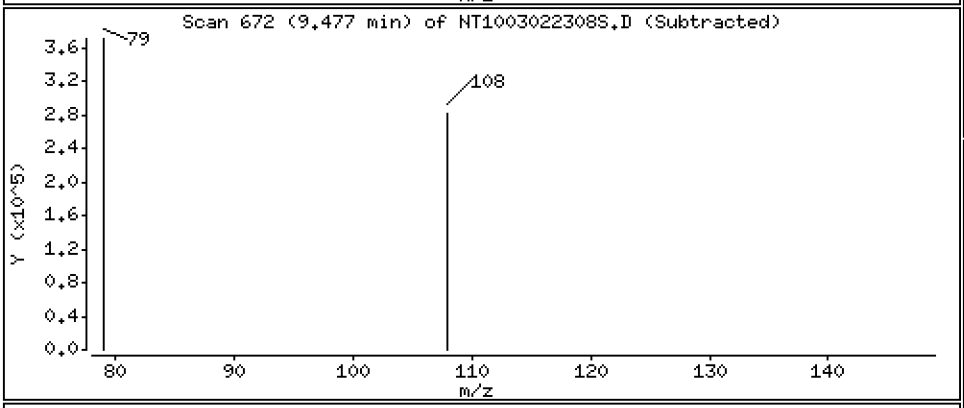
Column diameter: 0.25

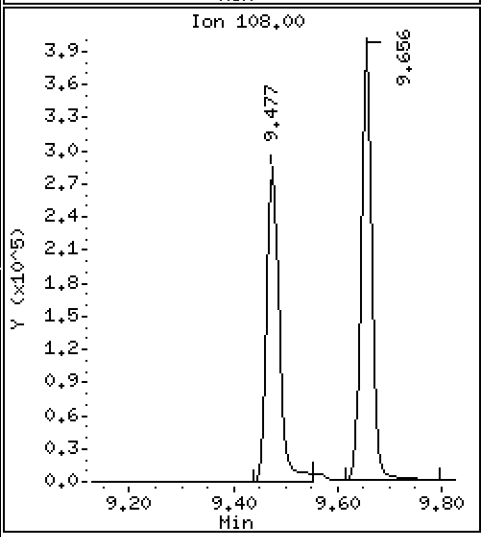
11 Benzyl alcohol

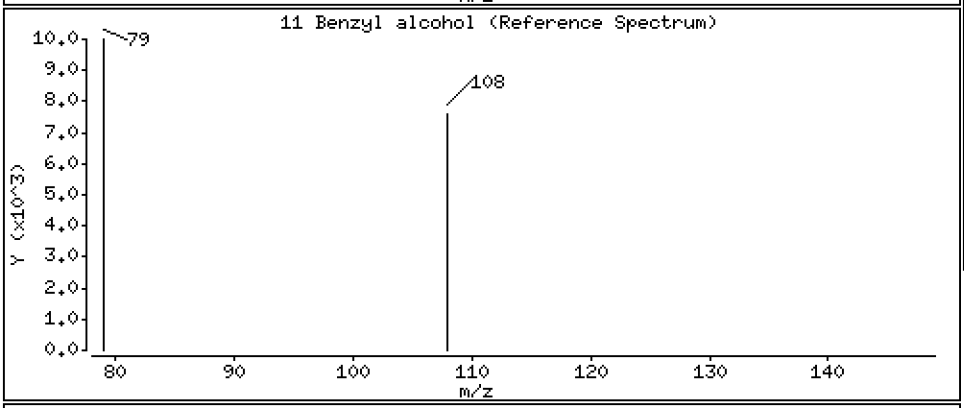
Concentration: 4.344 ug/L

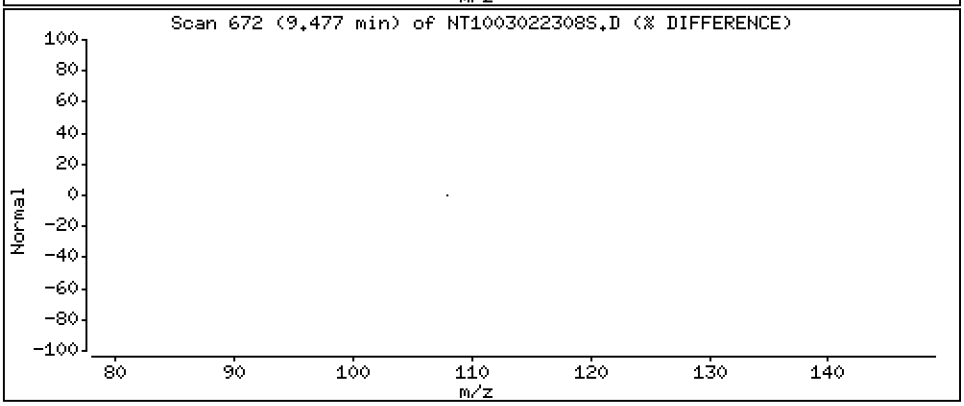












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

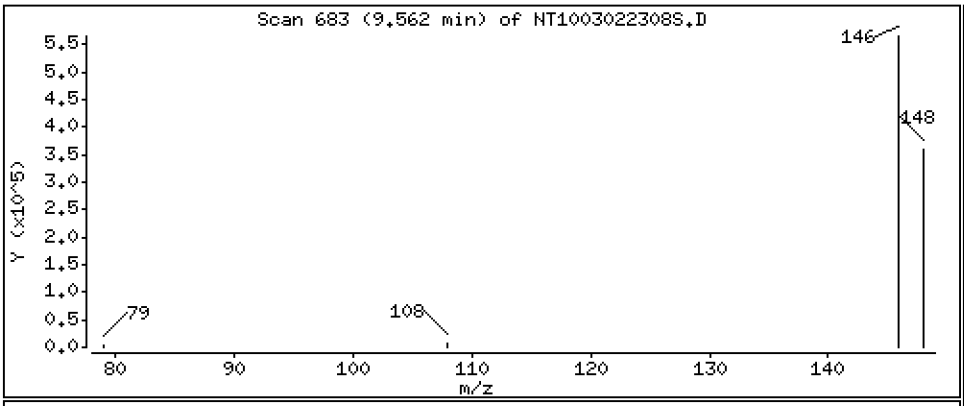
Operator: JGR

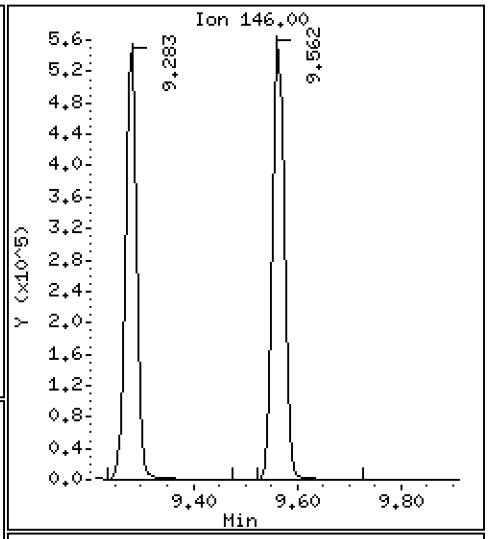
Column phase: ZB-5msi

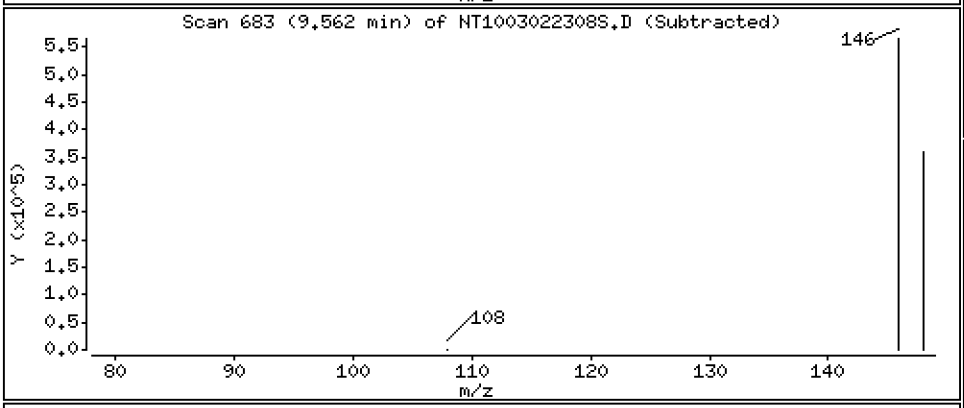
Column diameter: 0.25

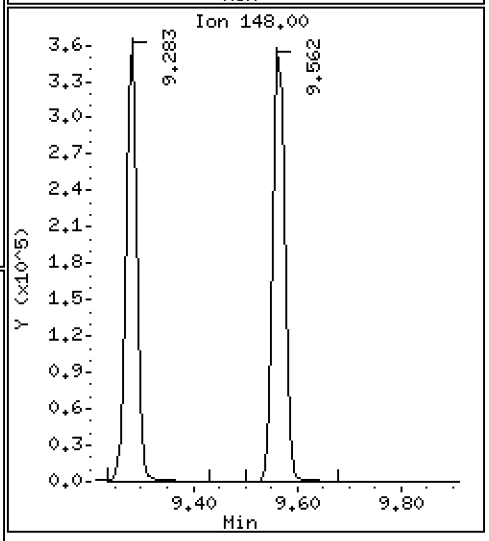
12 1,2-Dichlorobenzene

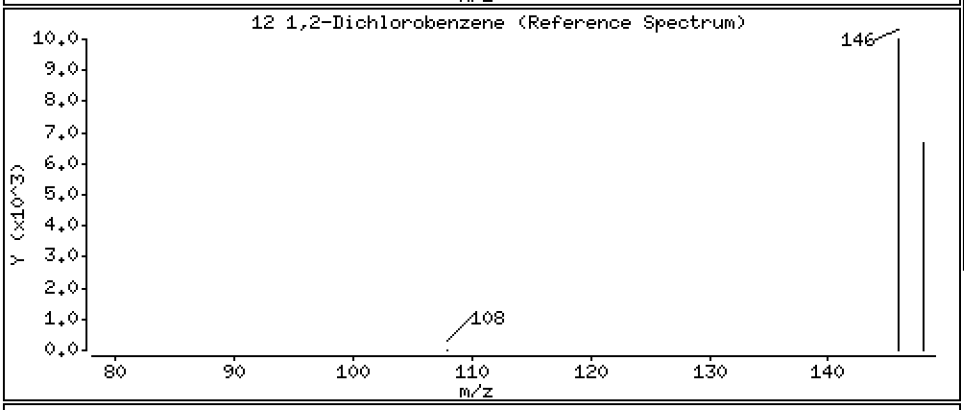
Concentration: 4.325 ug/L

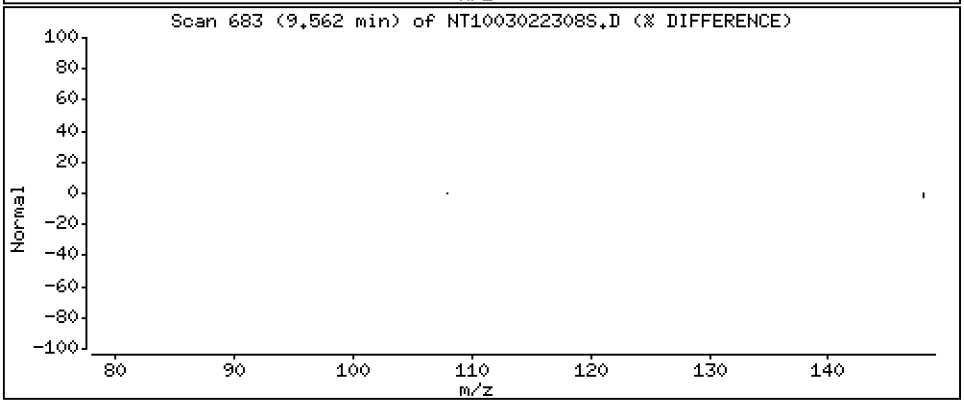












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

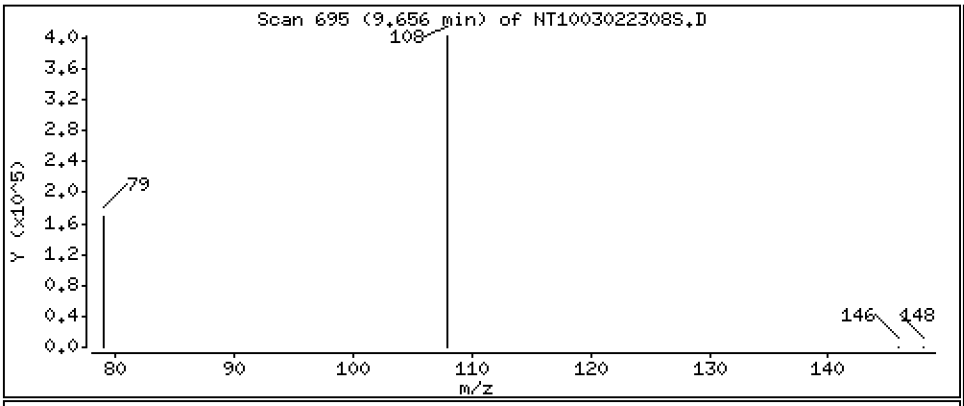
Operator: JGR

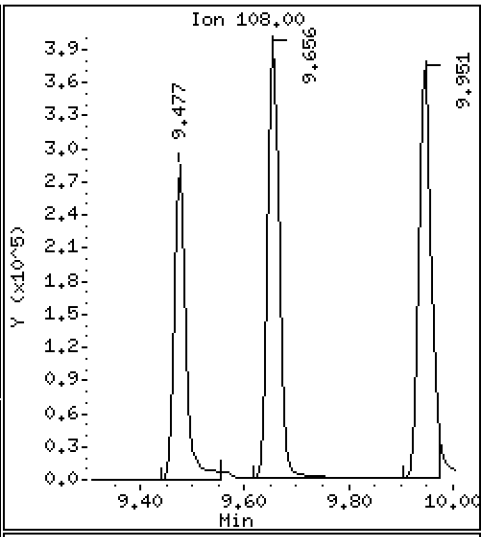
Column phase: ZB-5msi

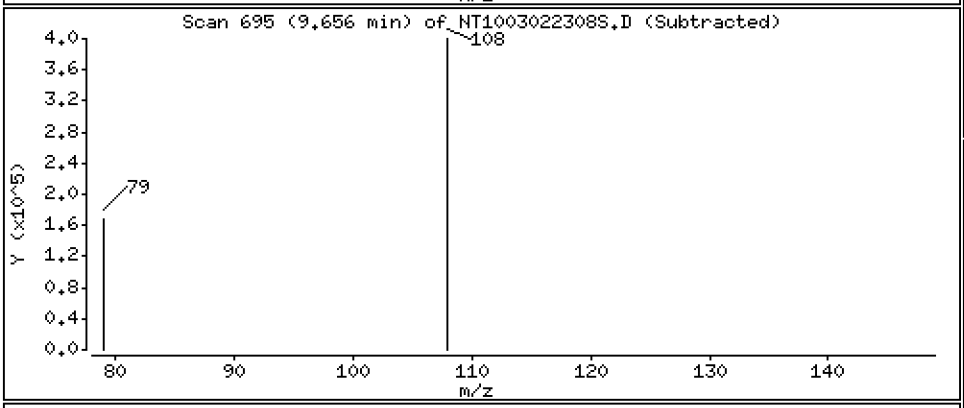
Column diameter: 0.25

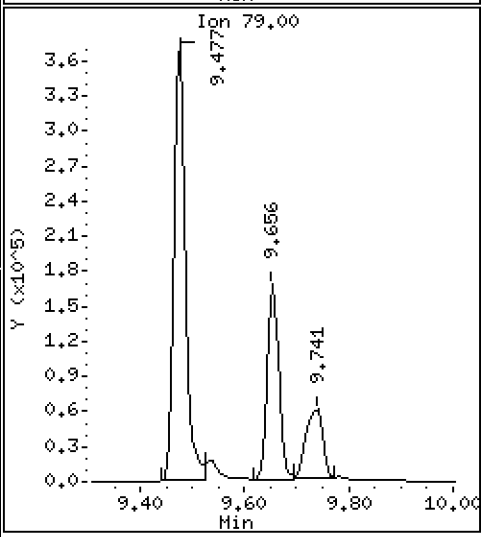
13 2-Methylphenol

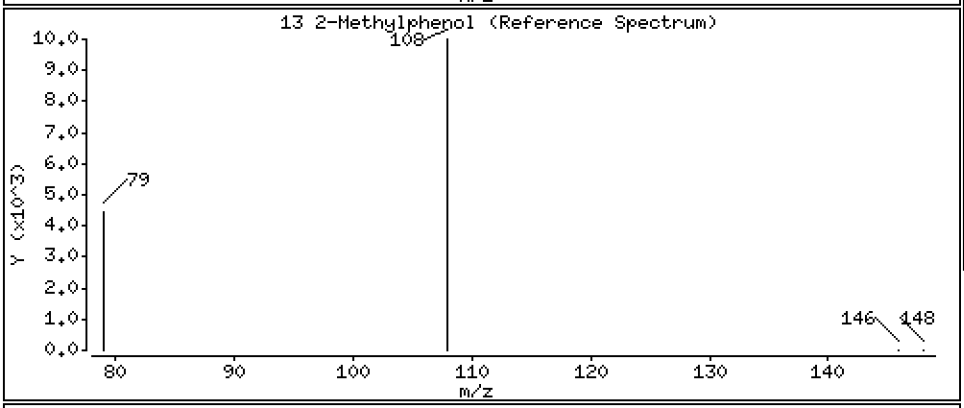
Concentration: 3.955 ug/L

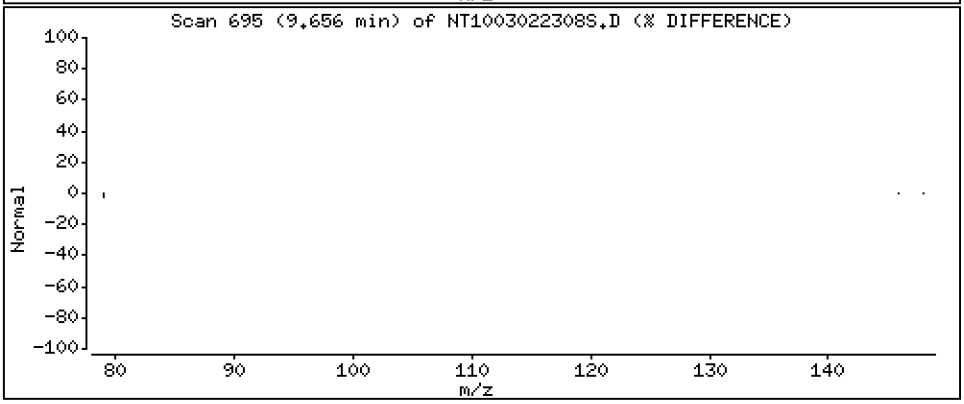












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

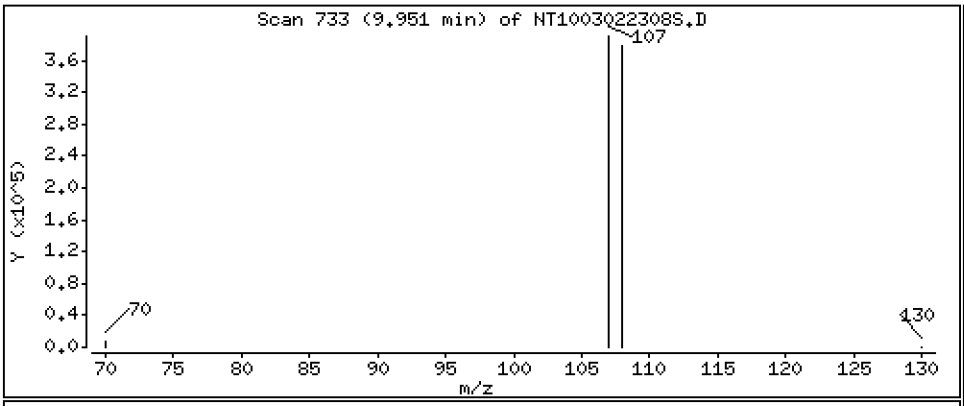
Operator: JGR

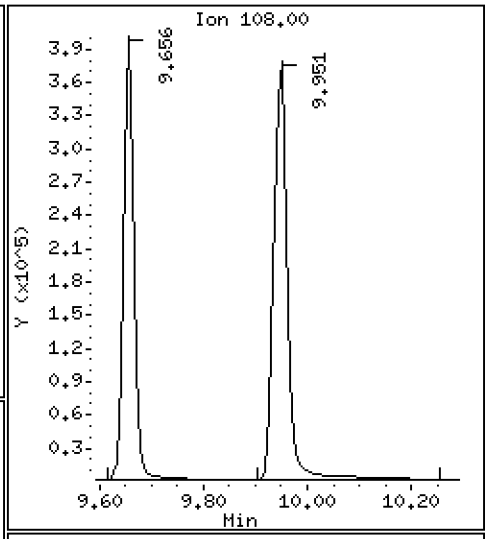
Column phase: ZB-5msi

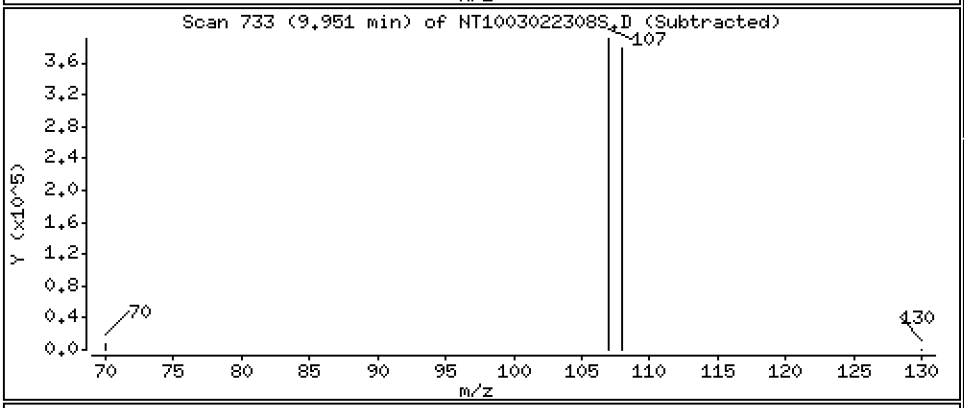
Column diameter: 0.25

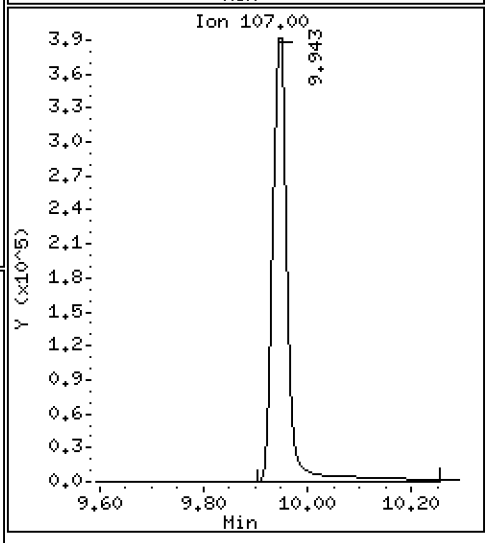
15 4-Methylphenol

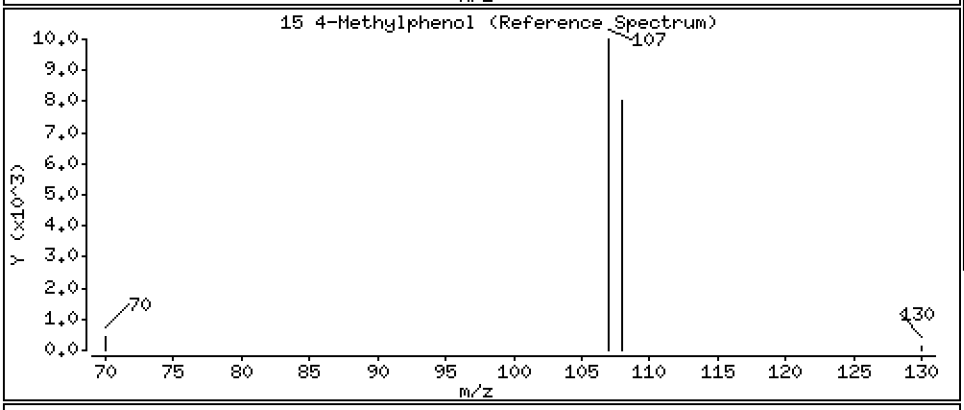
Concentration: 4.325 ug/L

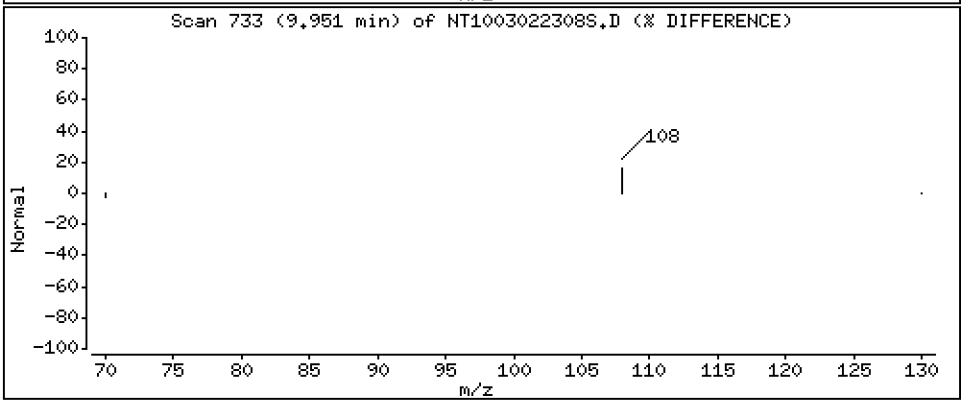












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

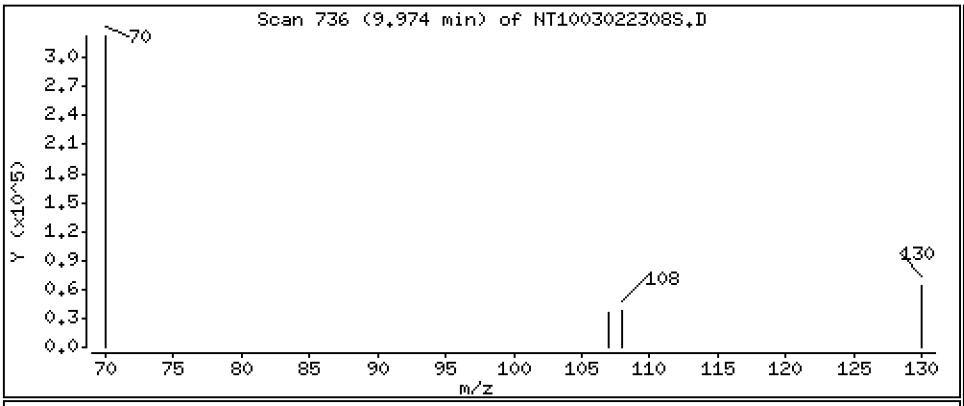
Operator: JGR

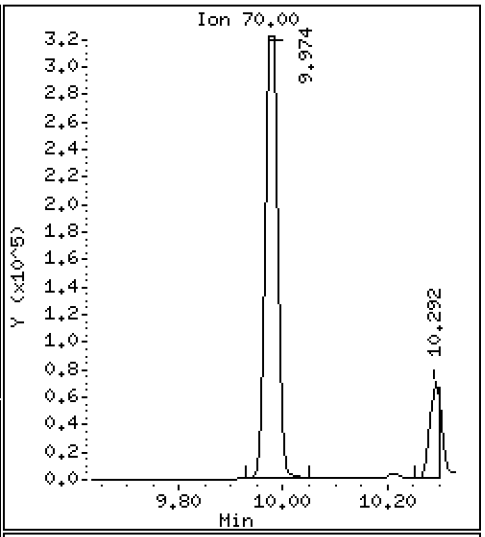
Column phase: ZB-5msi

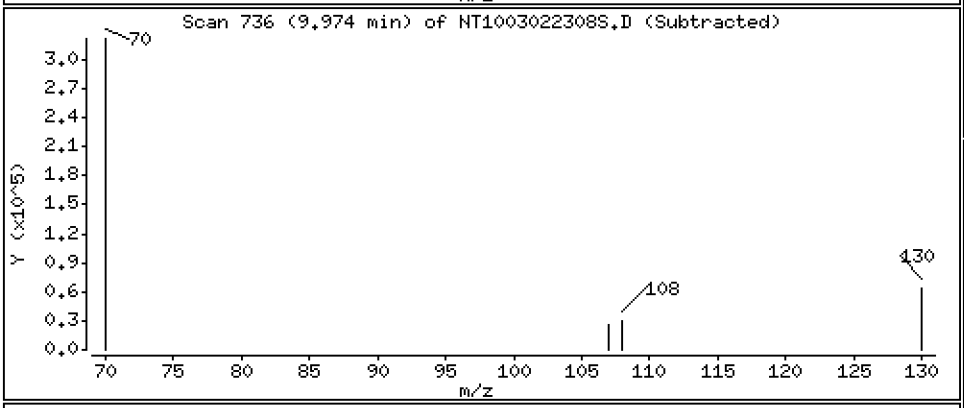
Column diameter: 0.25

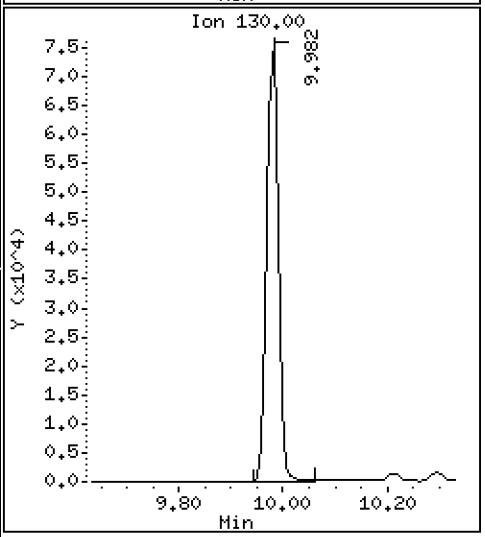
16 N-Nitroso-di-n-propylamine

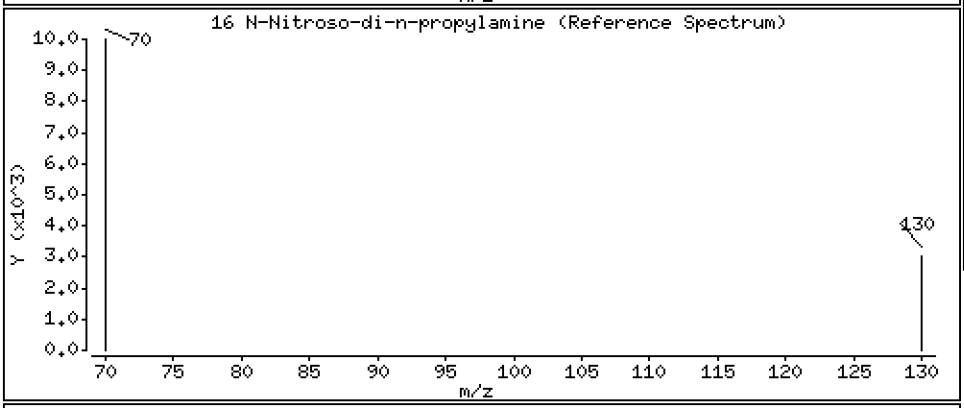
Concentration: 4.657 ug/L

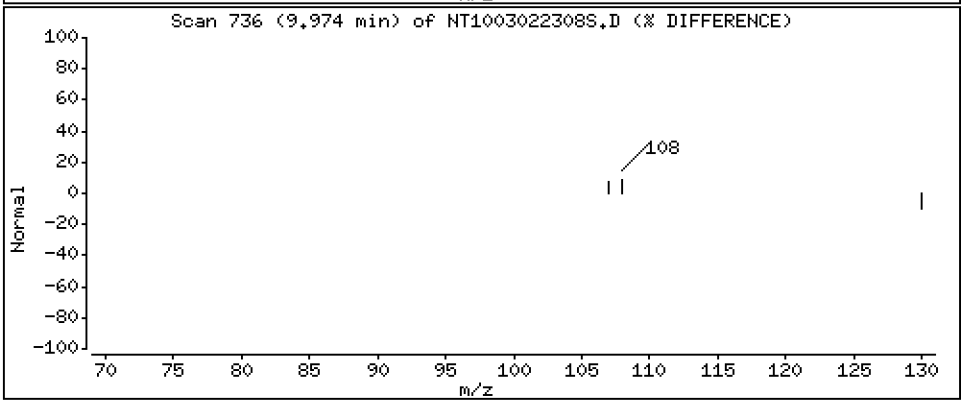












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223085.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

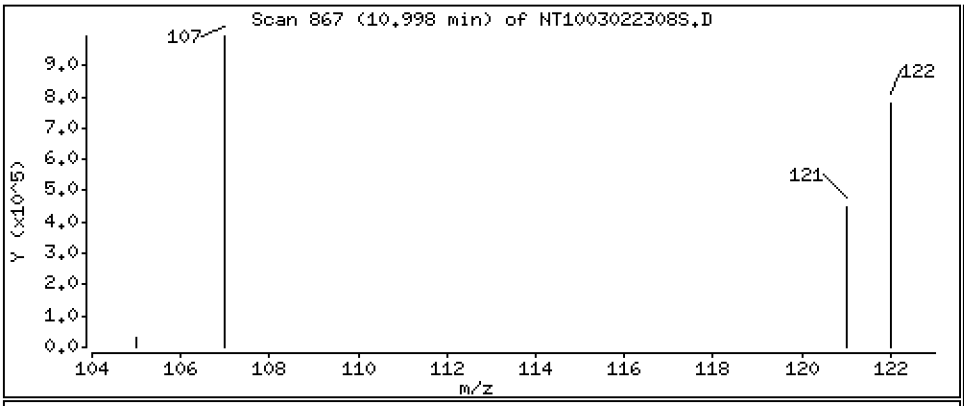
Operator: JGR

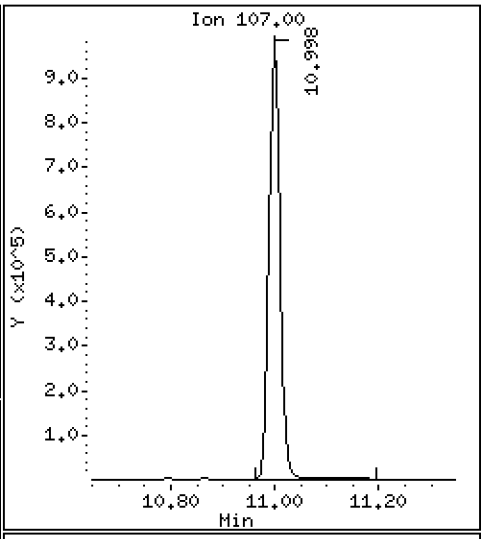
Column phase: ZB-5msi

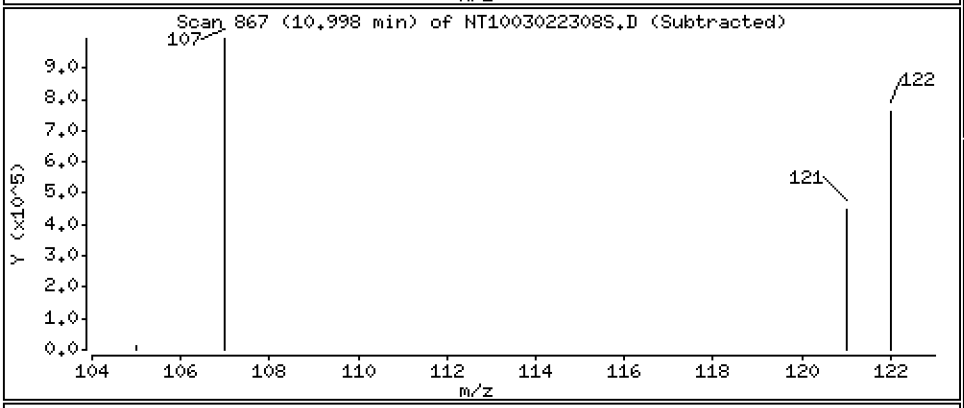
Column diameter: 0.25

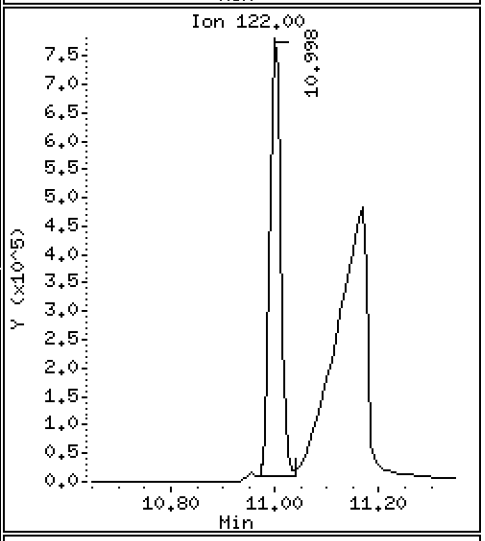
22 2,4-Dimethylphenol

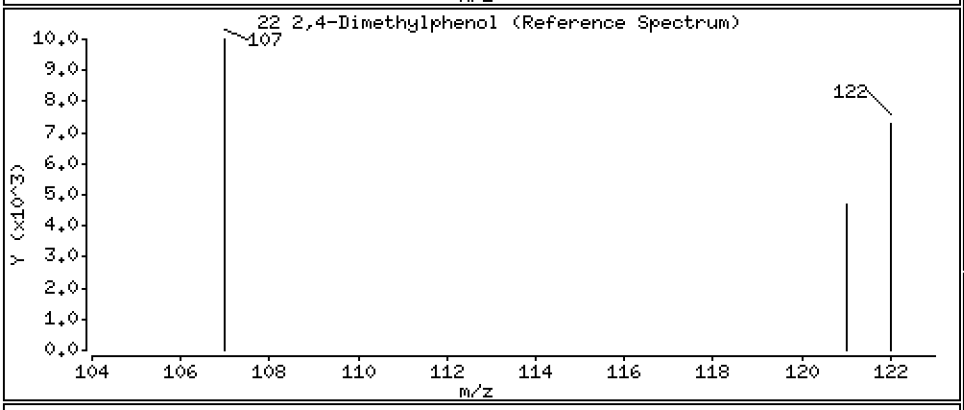
Concentration: 7.978 ug/L

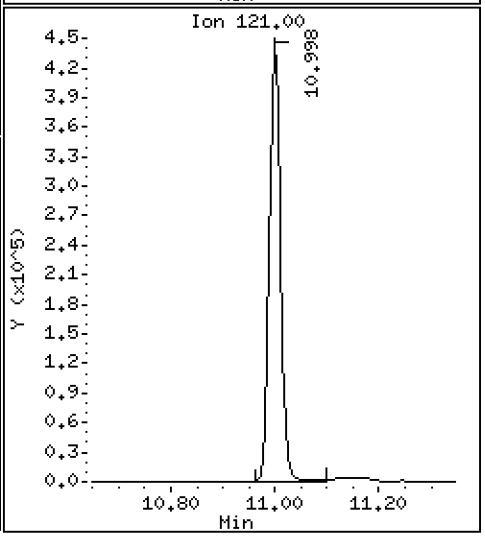


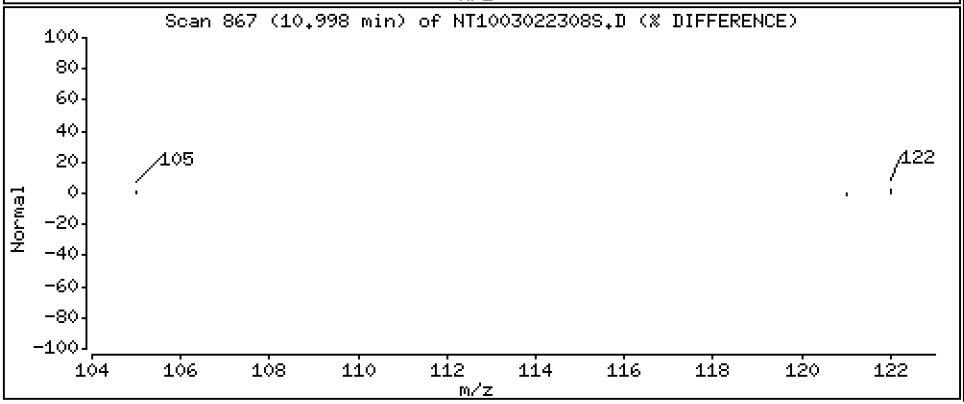












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223085.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

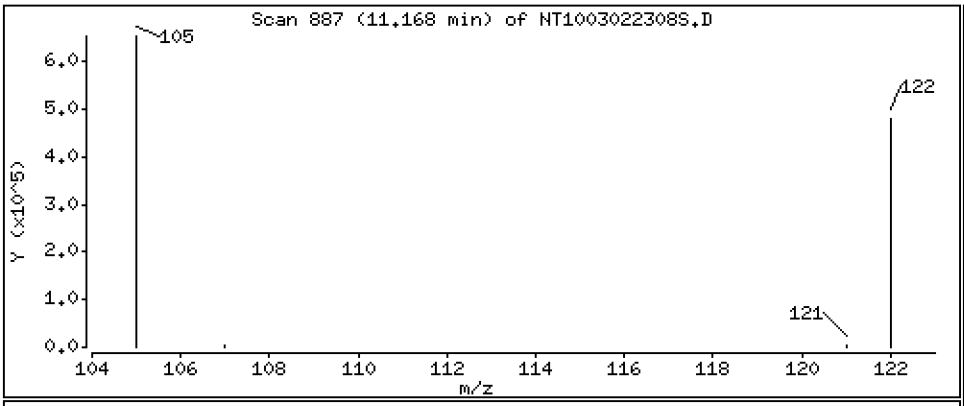
Operator: JGR

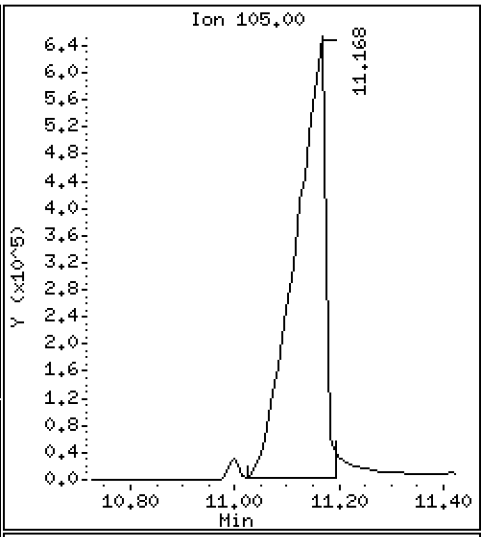
Column phase: ZB-5msi

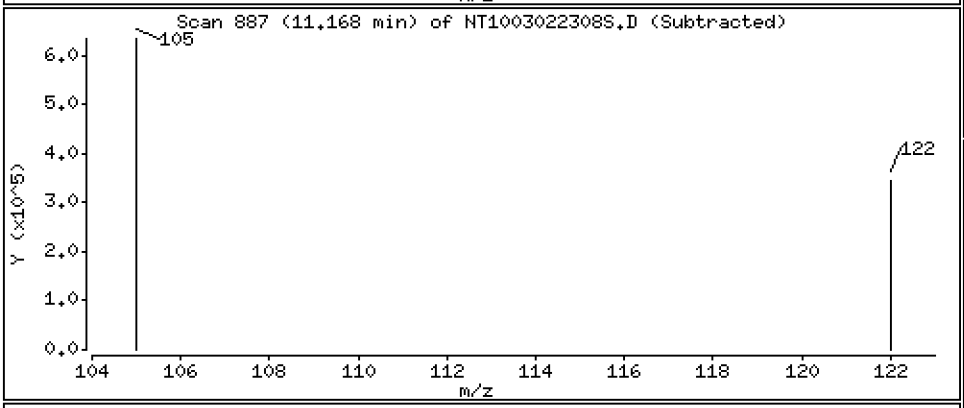
Column diameter: 0.25

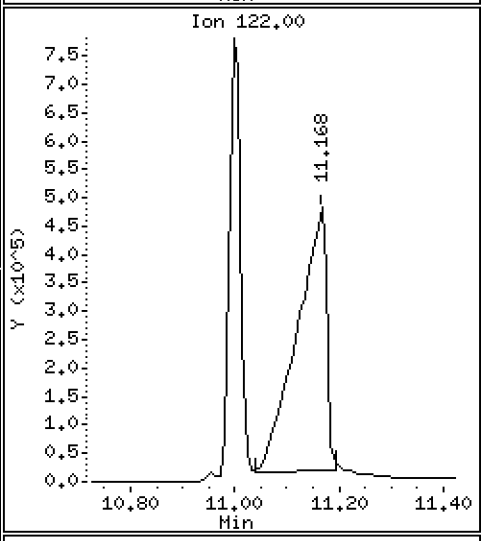
24 Benzoic acid

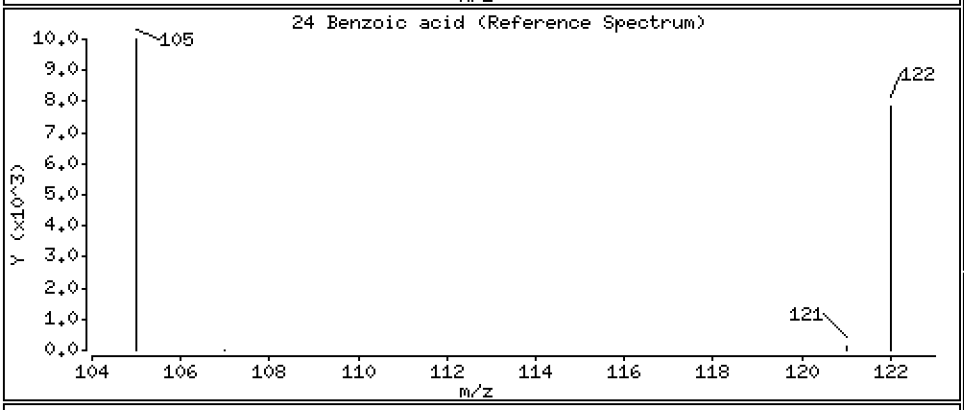
Concentration: 23.46 ug/L

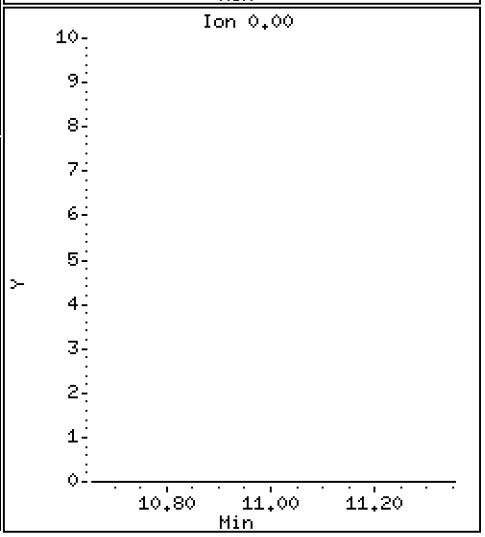


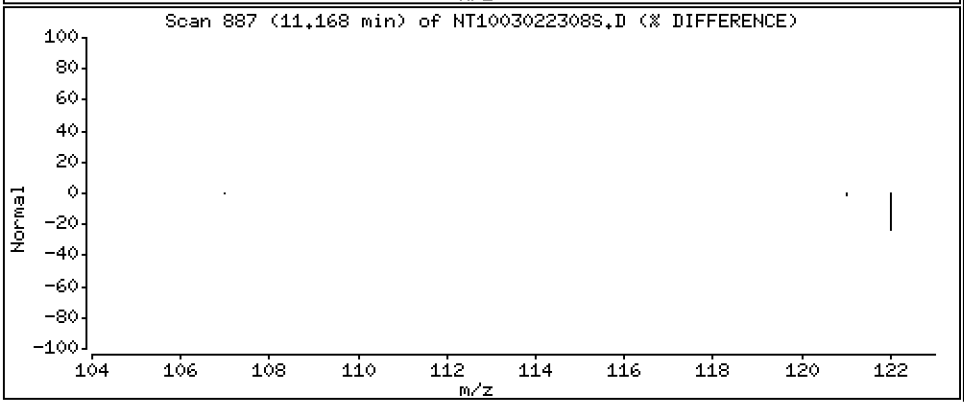












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

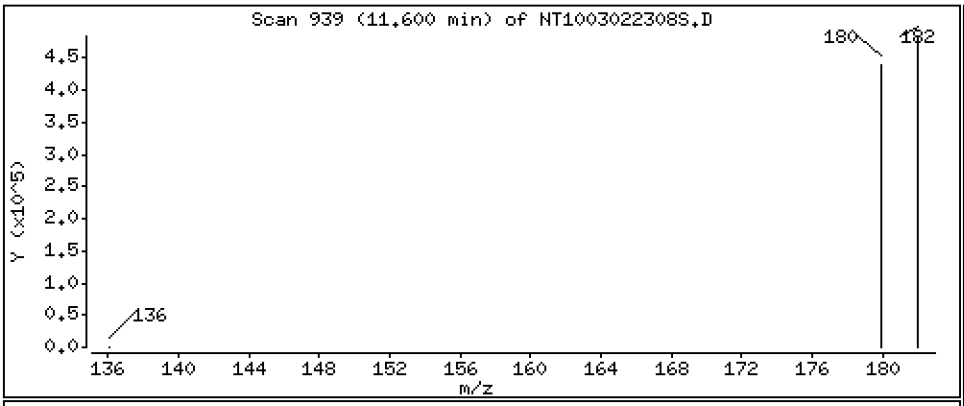
Operator: JGR

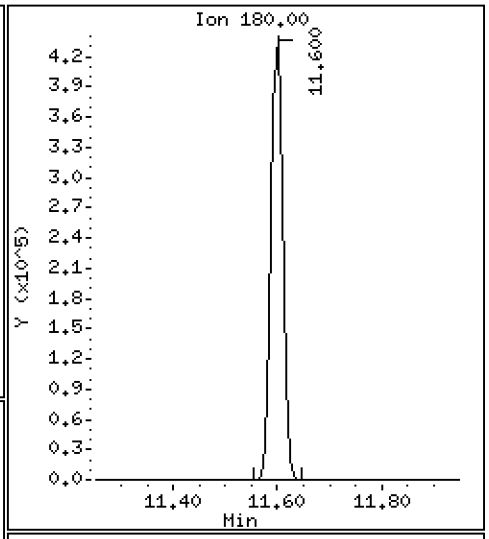
Column phase: ZB-5msi

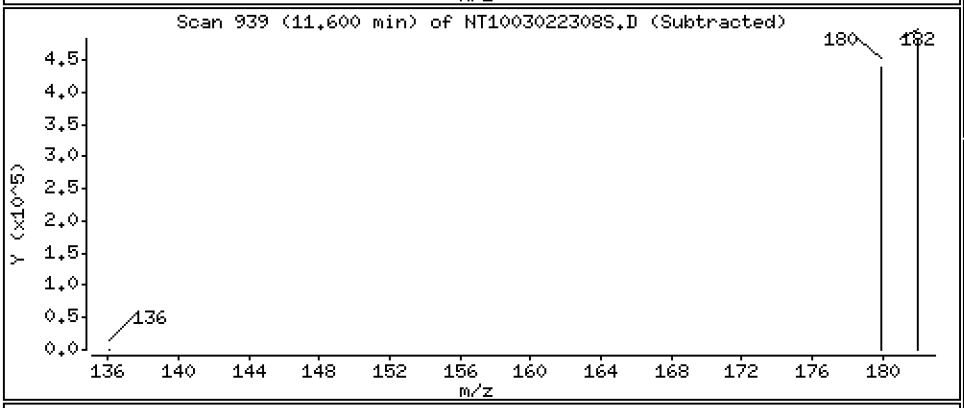
Column diameter: 0.25

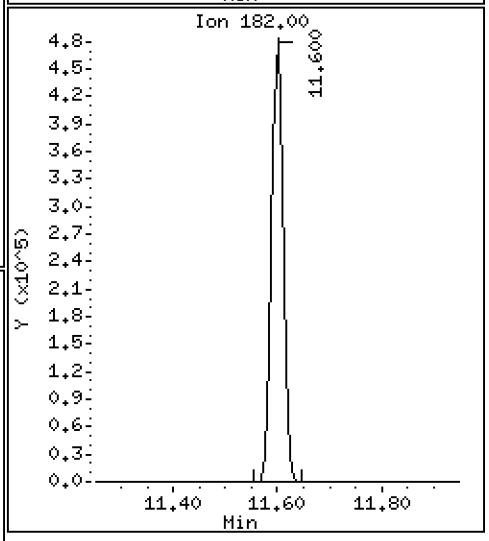
26 1,2,4-Trichlorobenzene

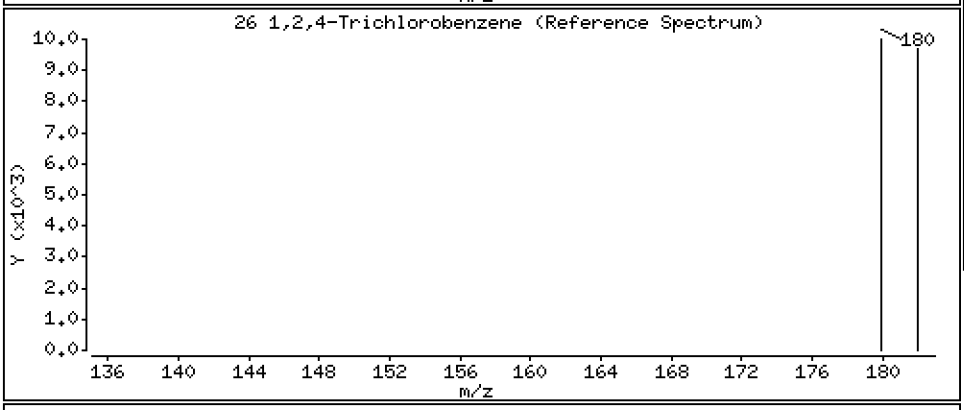
Concentration: 4.336 ug/L

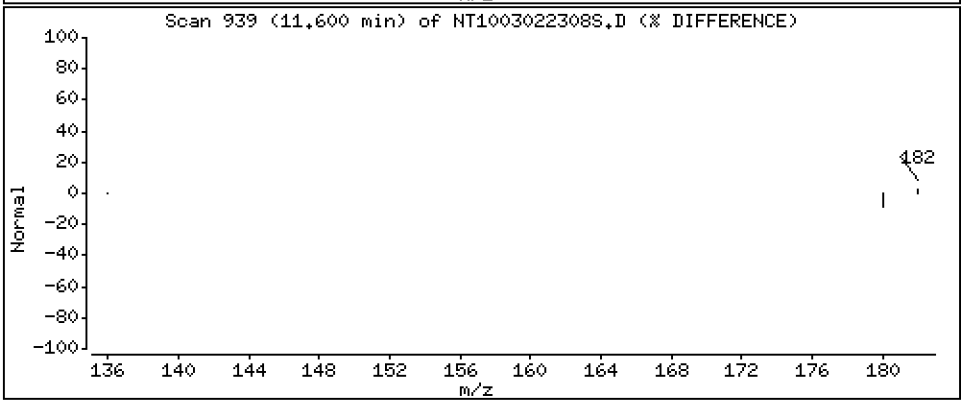












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

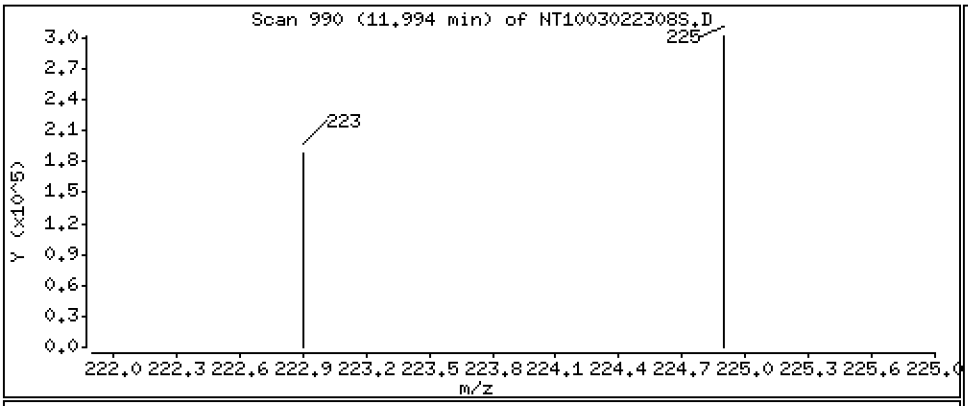
Operator: JGR

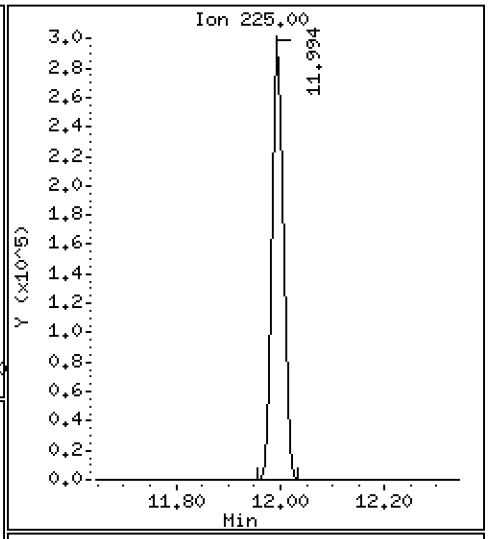
Column phase: ZB-5msi

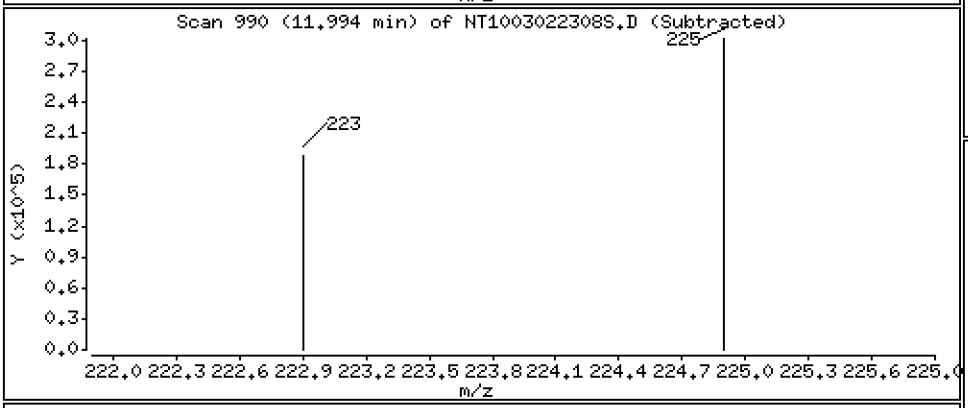
Column diameter: 0.25

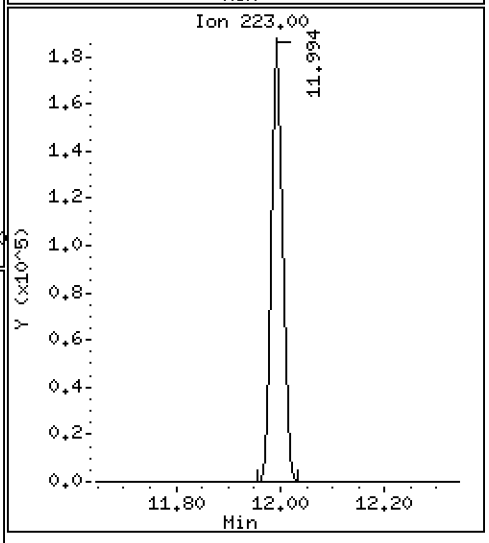
30 Hexachlorobutadiene

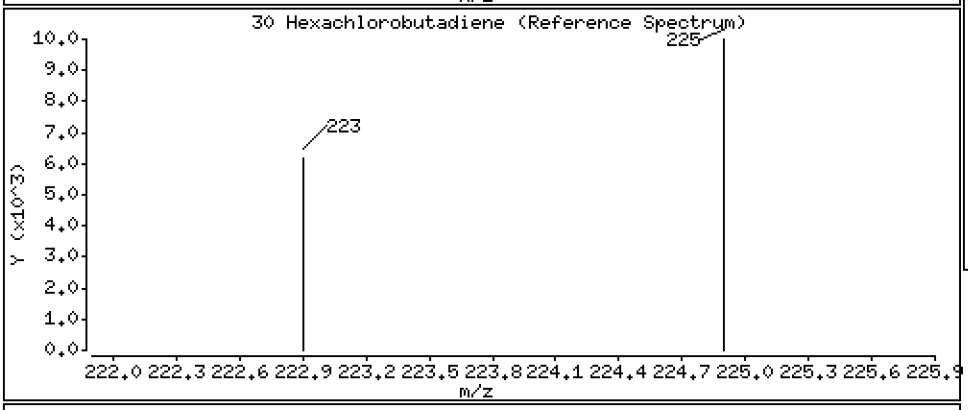
Concentration: 4.139 ug/L

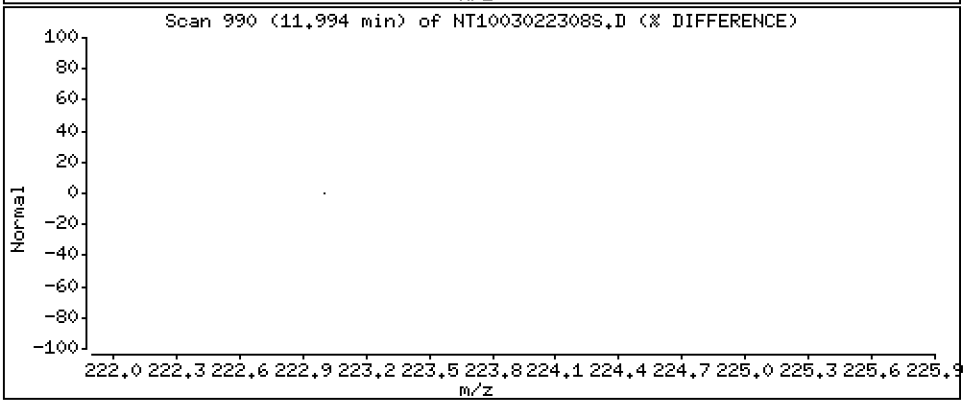












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

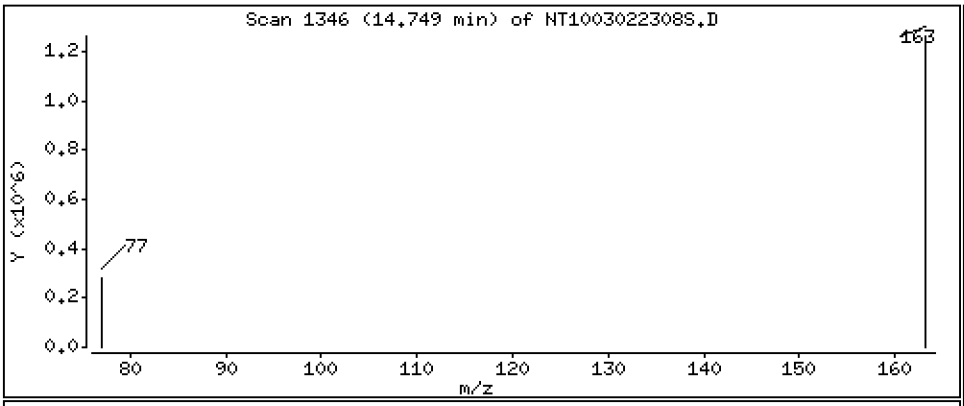
Operator: JGR

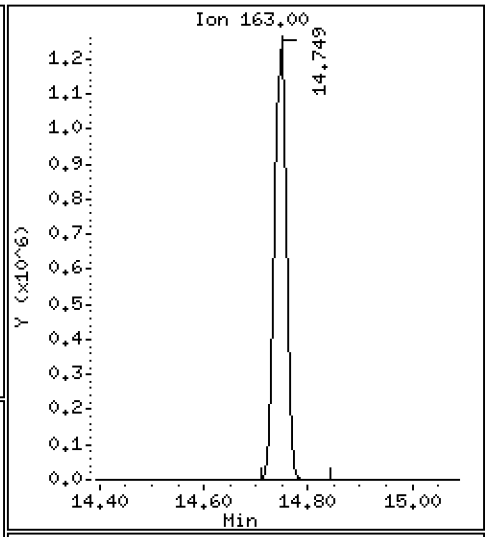
Column phase: ZB-5msi

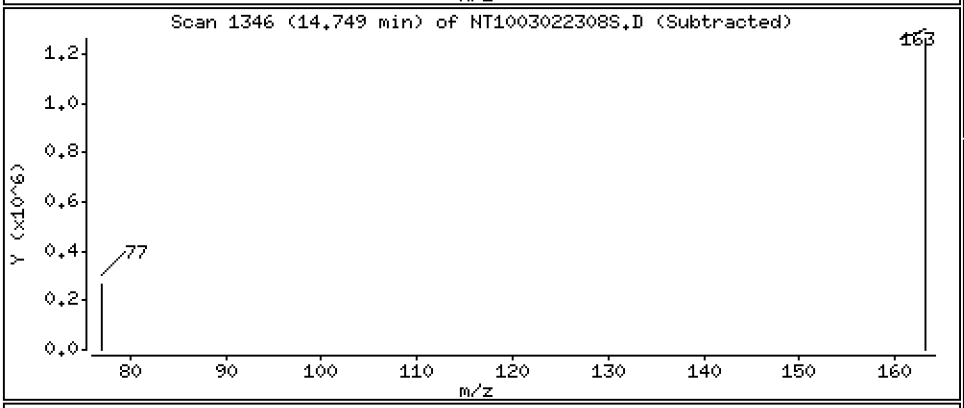
Column diameter: 0.25

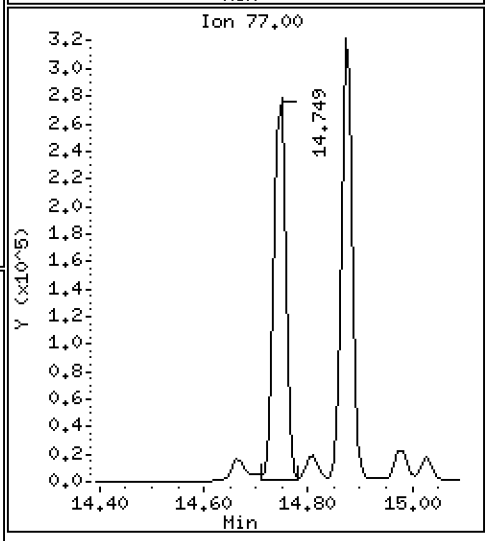
39 Dimethylphthalate

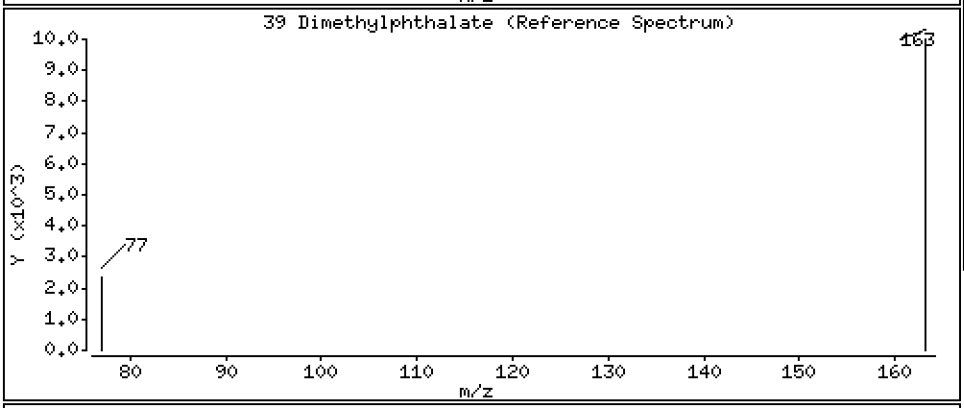
Concentration: 5.228 ug/L

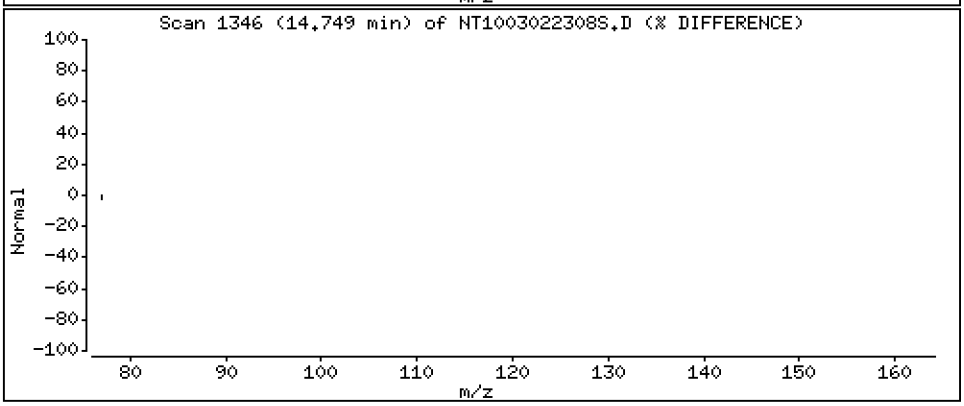












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

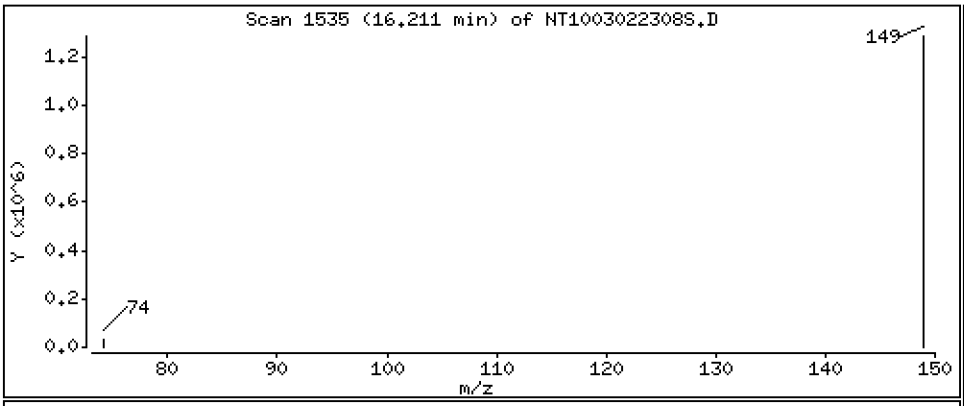
Operator: JGR

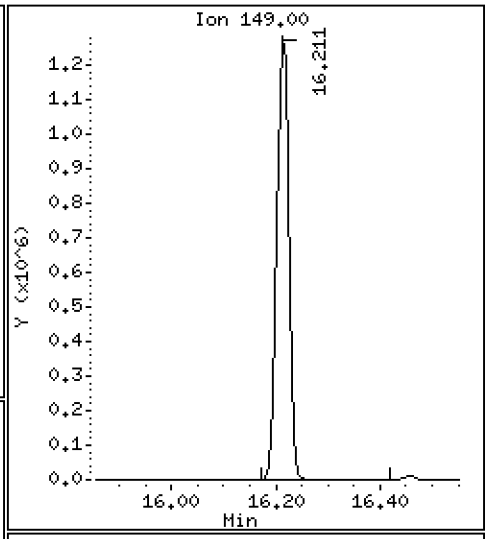
Column phase: ZB-5msi

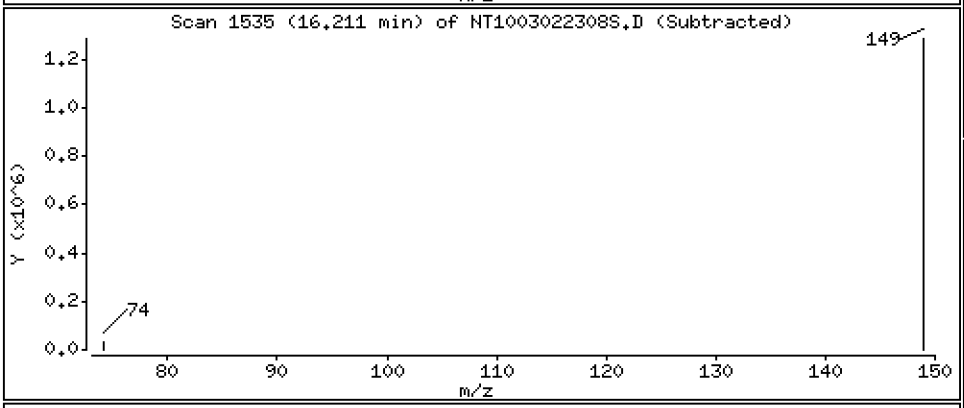
Column diameter: 0.25

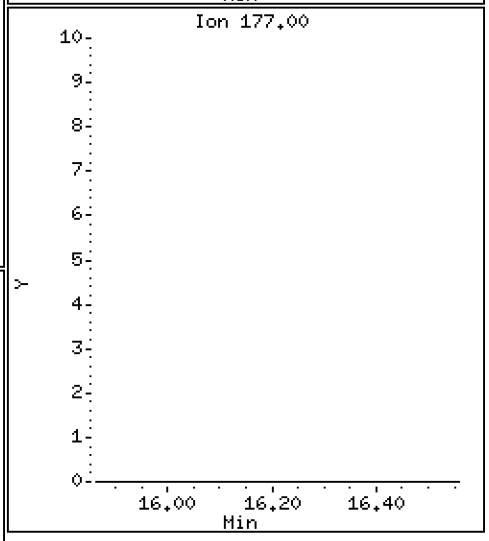
50 Diethylphthalate

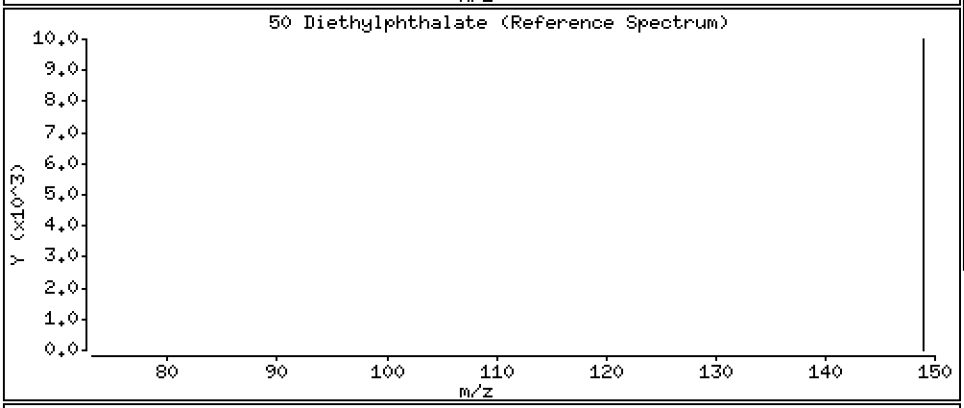
Concentration: 5.823 ug/L

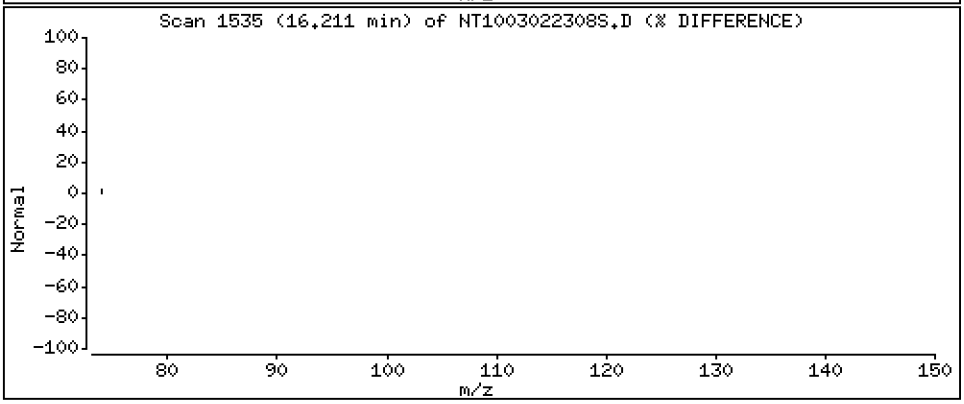












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

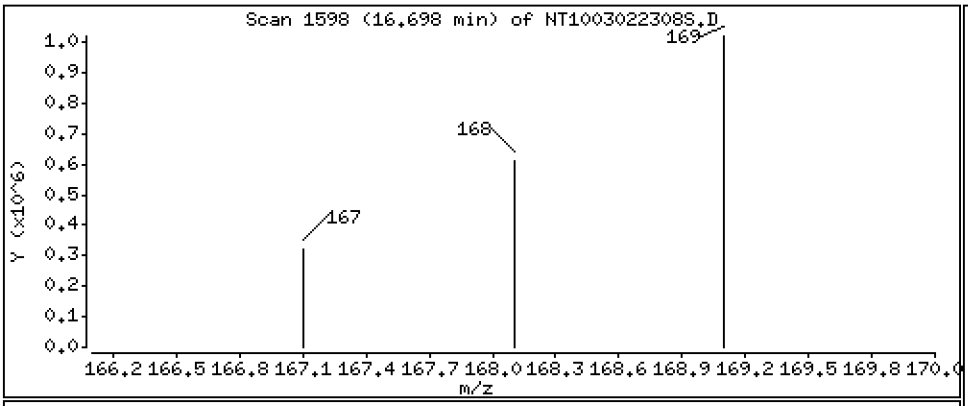
Operator: JGR

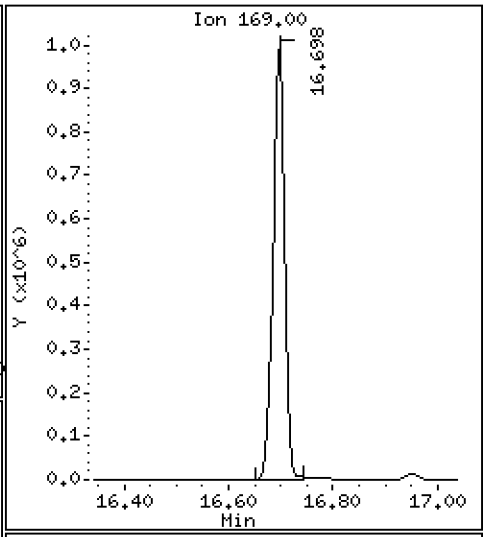
Column phase: ZB-5msi

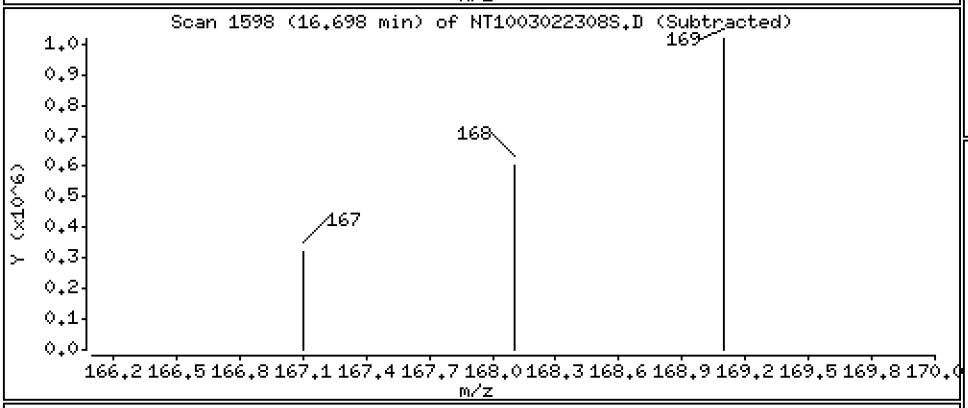
Column diameter: 0.25

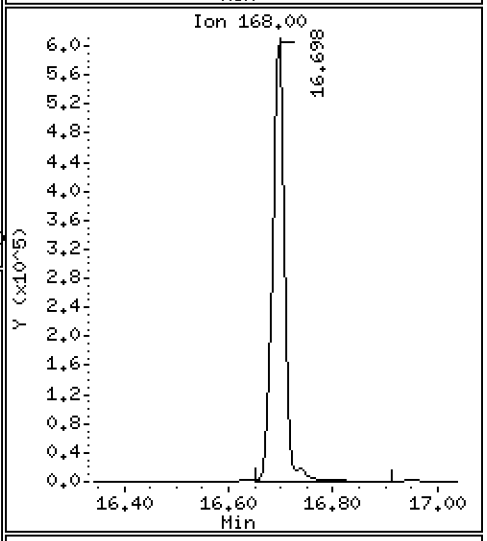
54 N-Nitrosodiphenylamine

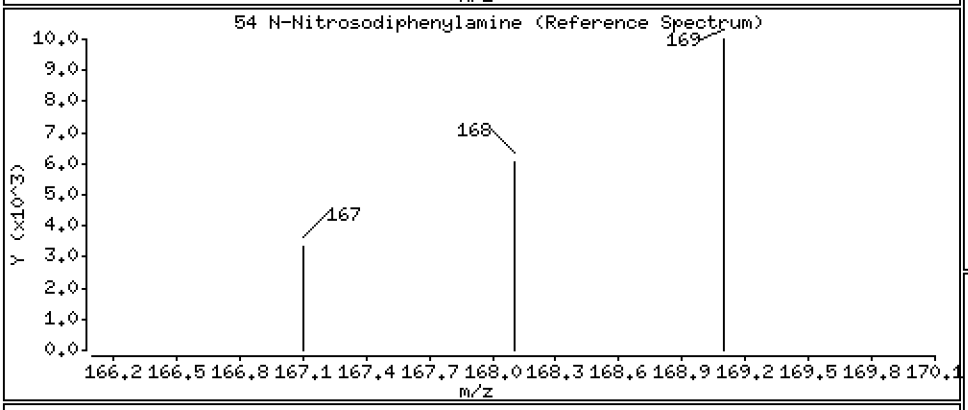
Concentration: 4.761 ug/L

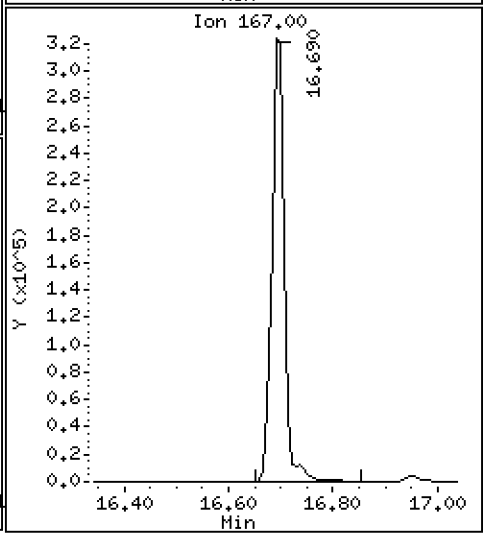


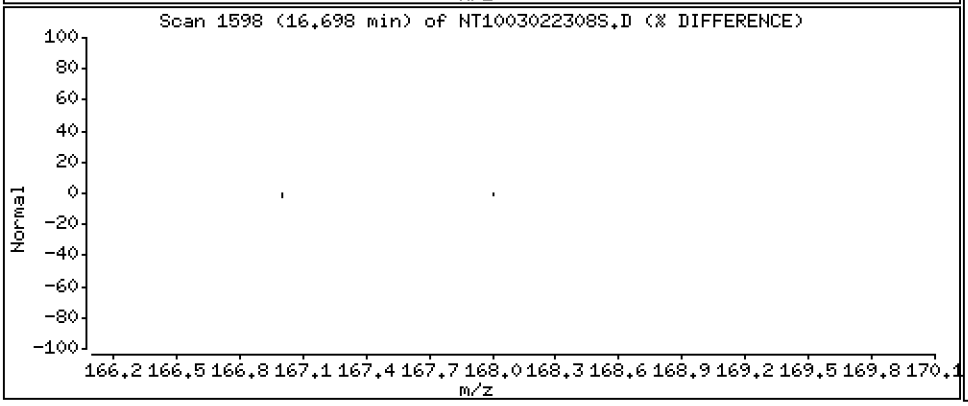












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

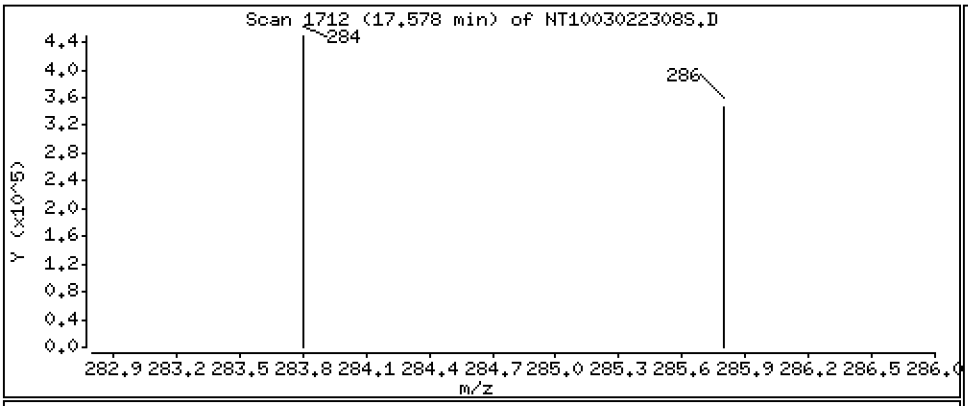
Operator: JGR

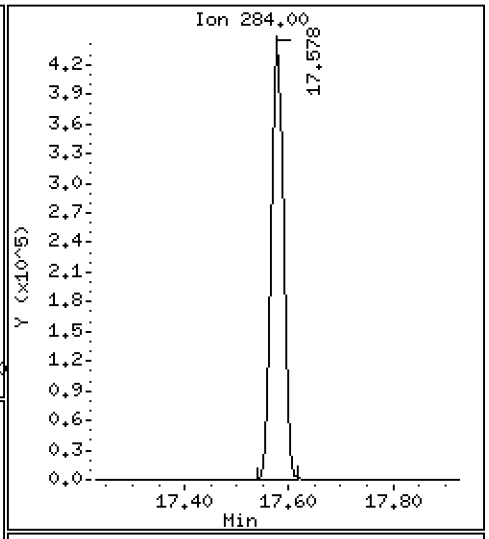
Column phase: ZB-5msi

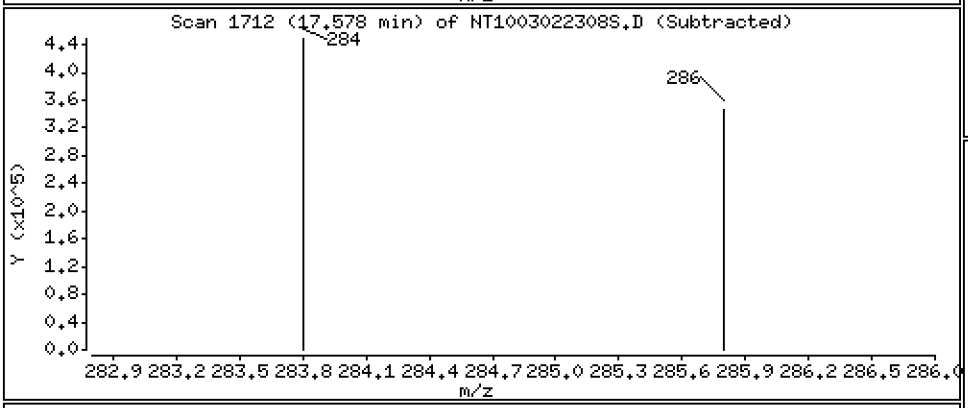
Column diameter: 0.25

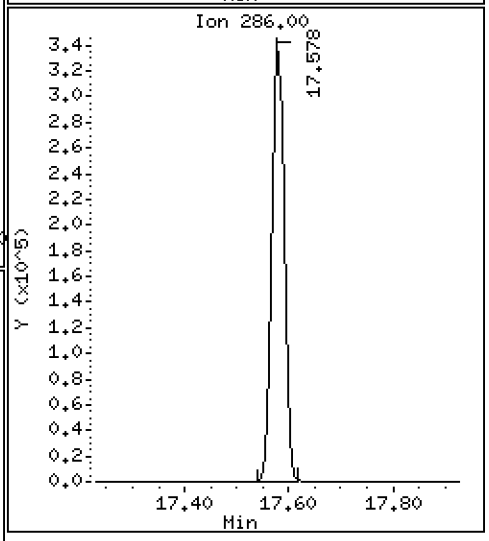
57 Hexachlorobenzene

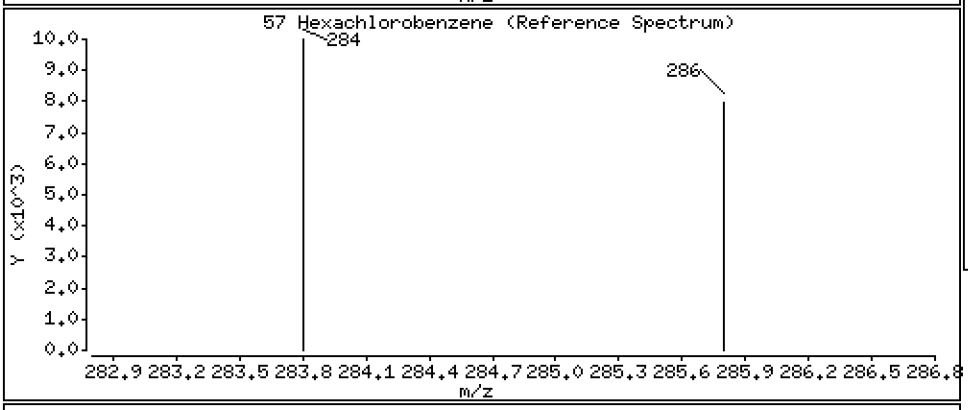
Concentration: 4.467 ug/L

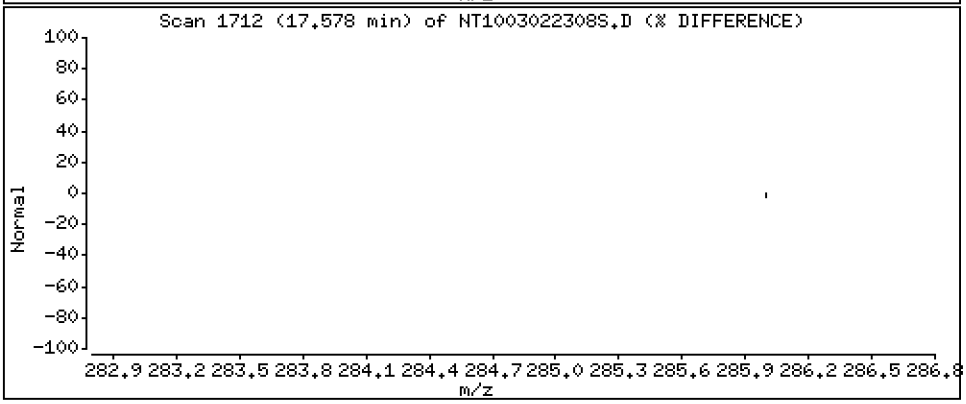












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

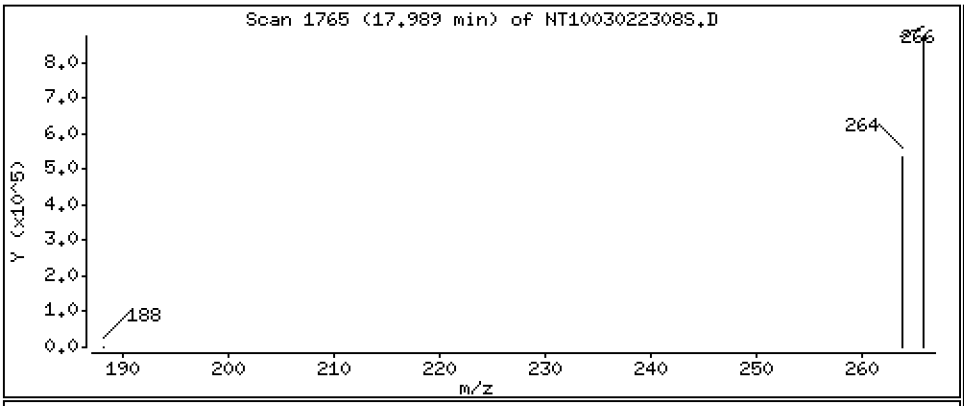
Operator: JGR

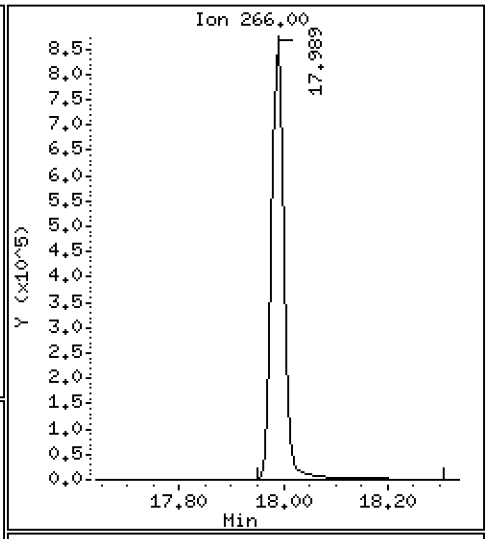
Column phase: ZB-5msi

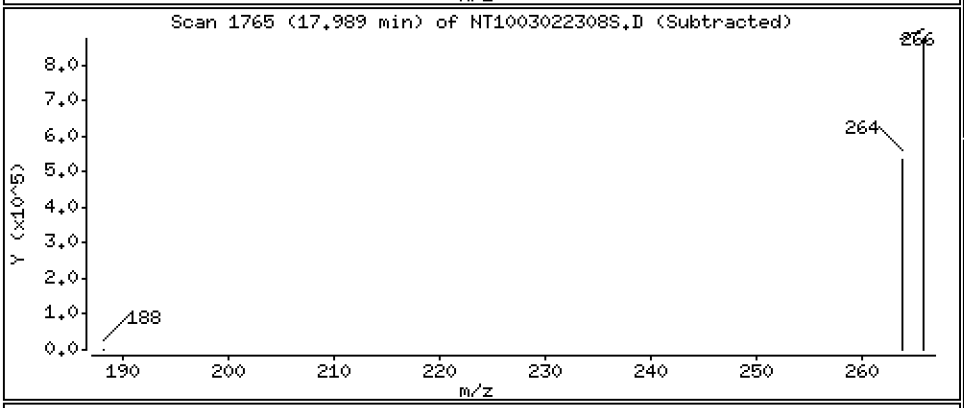
Column diameter: 0.25

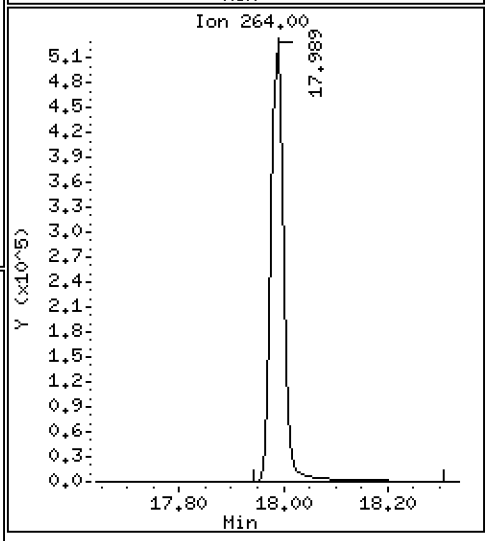
58 Pentachlorophenol

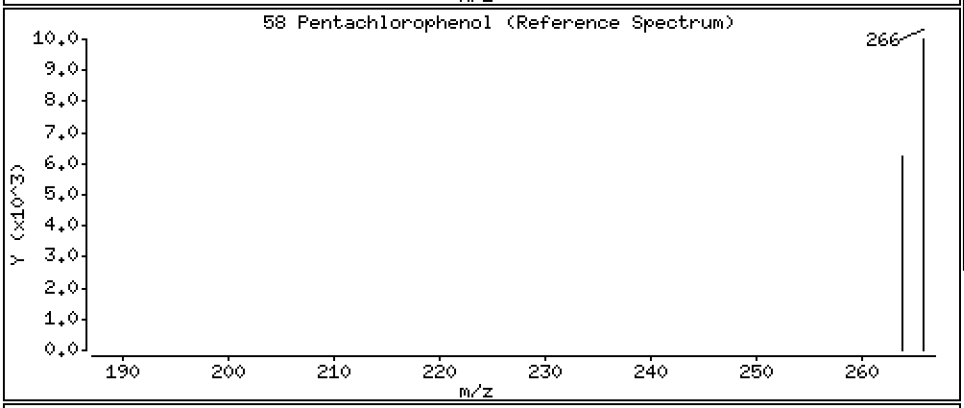
Concentration: 16.54 ug/L

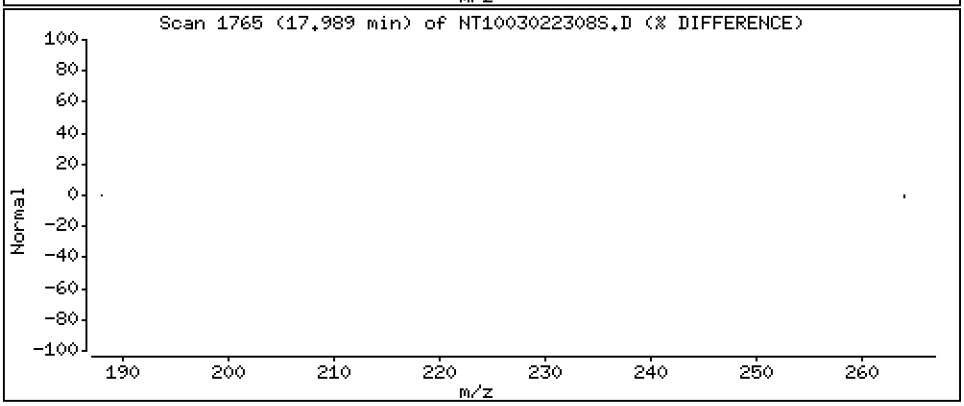












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

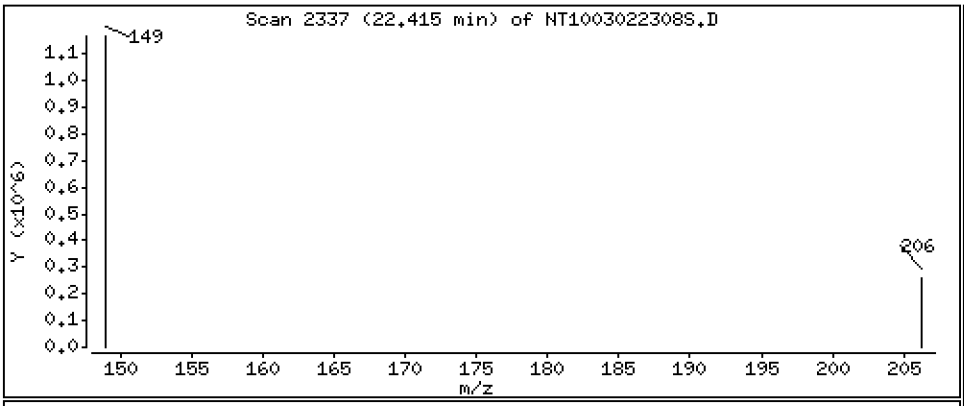
Operator: JGR

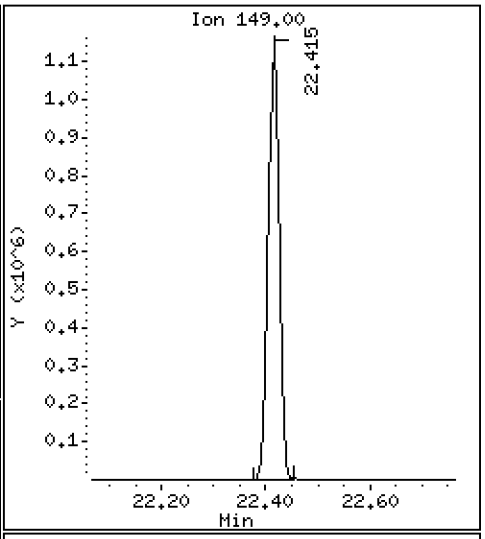
Column phase: ZB-5msi

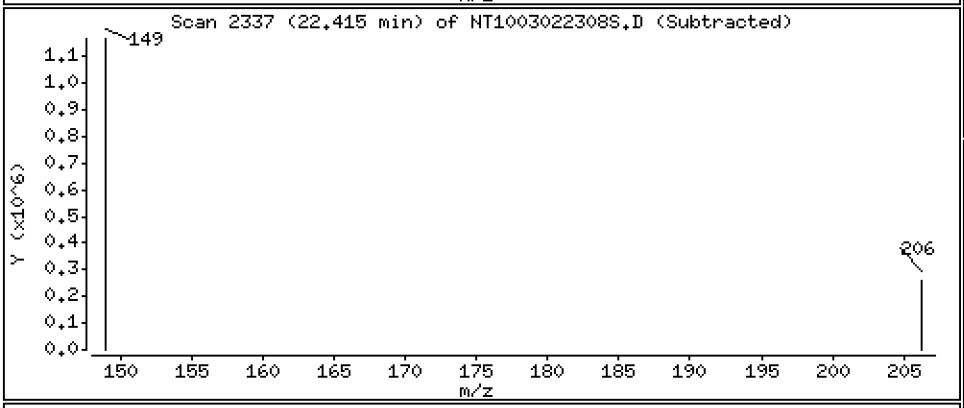
Column diameter: 0.25

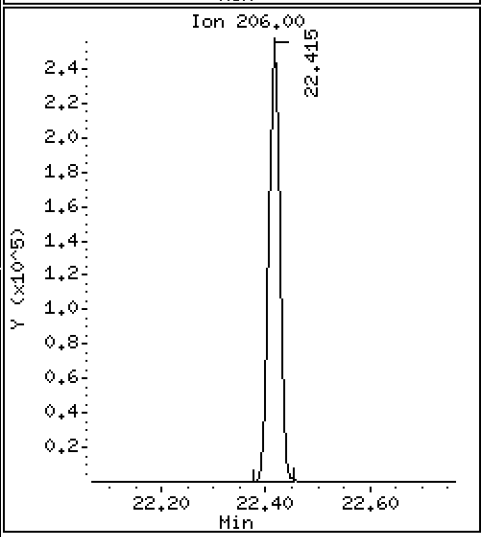
67 Butylbenzylphthalate

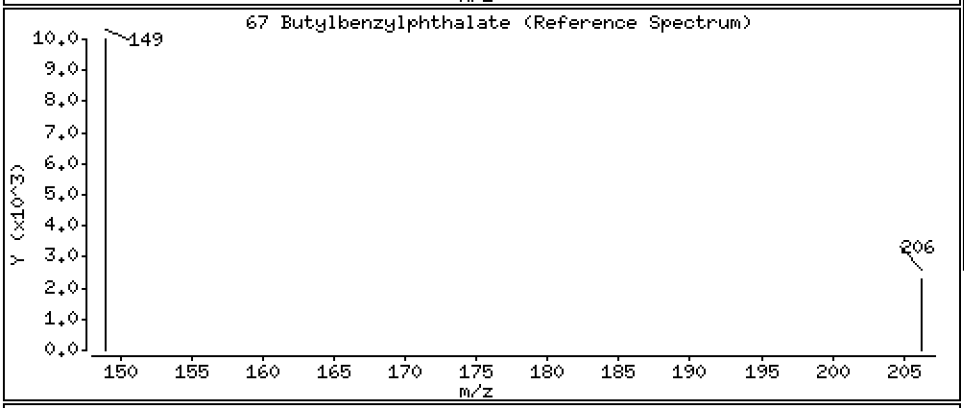
Concentration: 4.368 ug/L

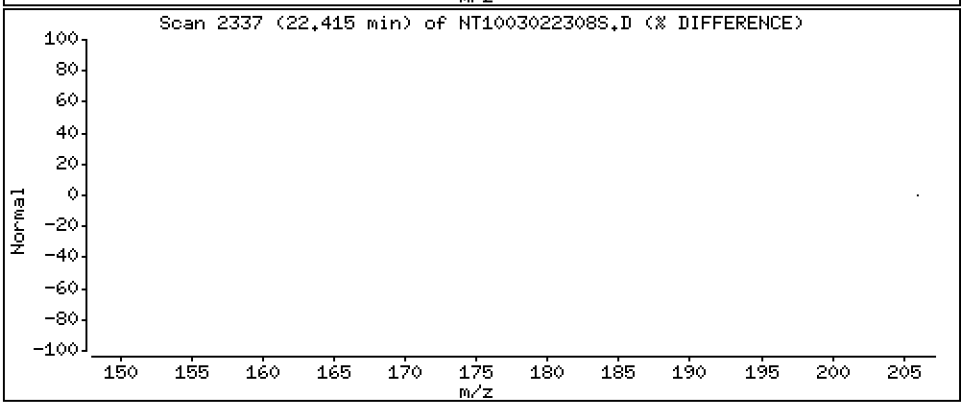












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

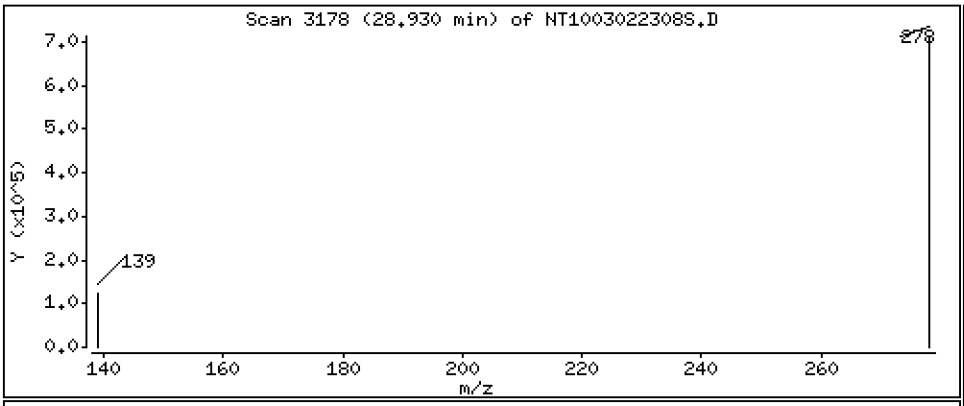
Operator: JGR

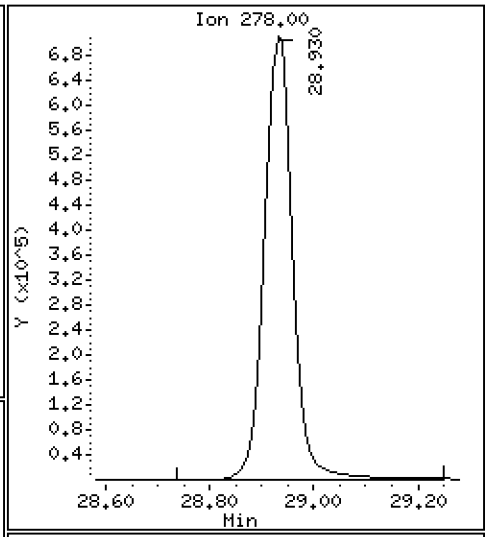
Column phase: ZB-5msi

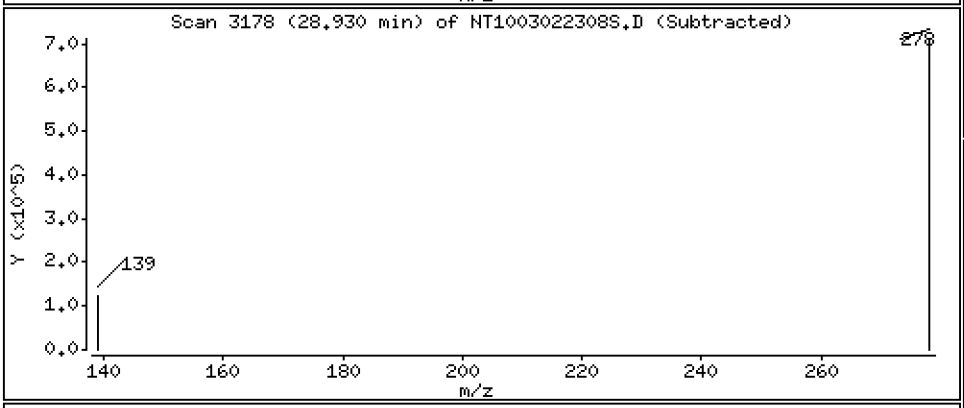
Column diameter: 0.25

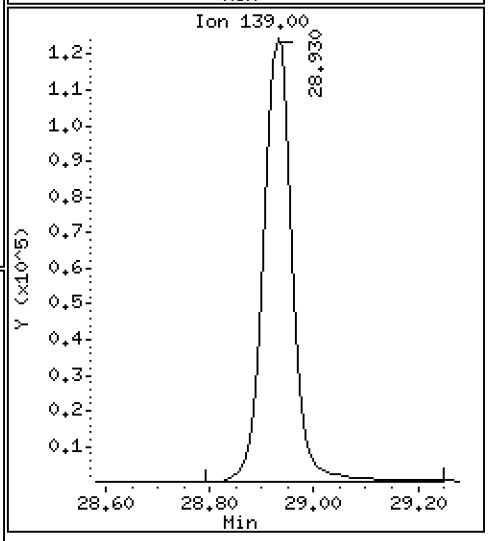
79 Dibenzo(a,h)anthracene

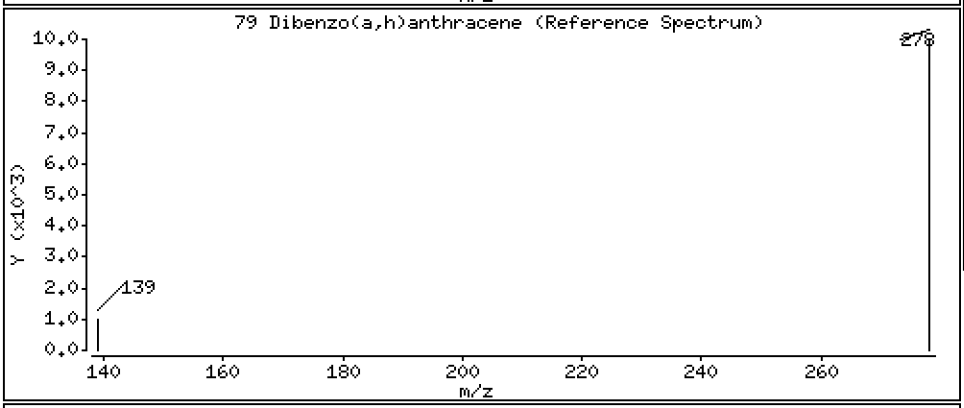
Concentration: 4.962 ug/L

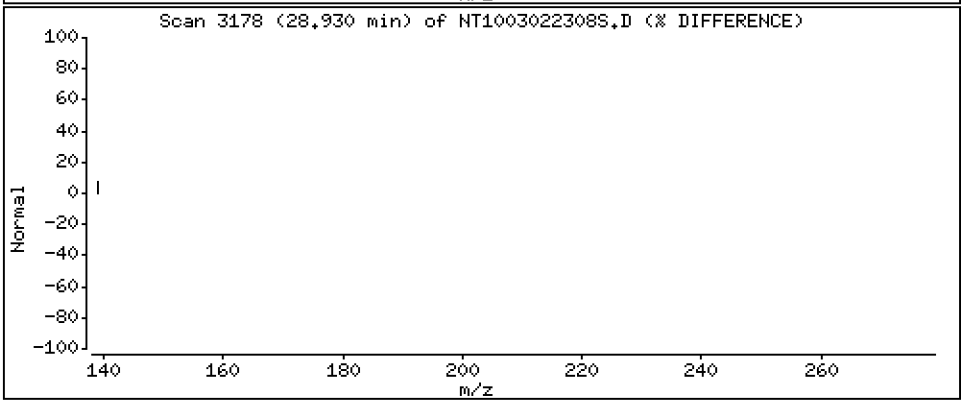












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D

Date : 02-MAR-2023 18:50

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-BSD1

Volume Injected (uL): 1.0

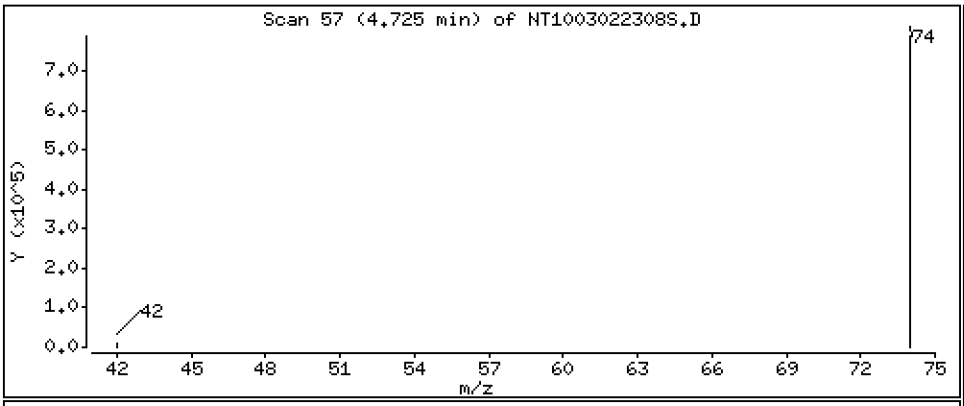
Operator: JGR

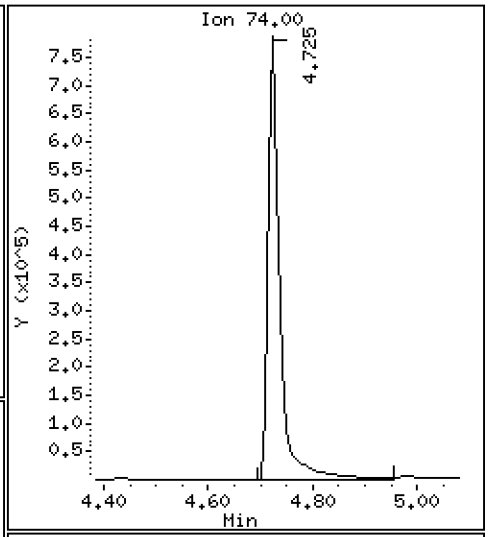
Column phase: ZB-5msi

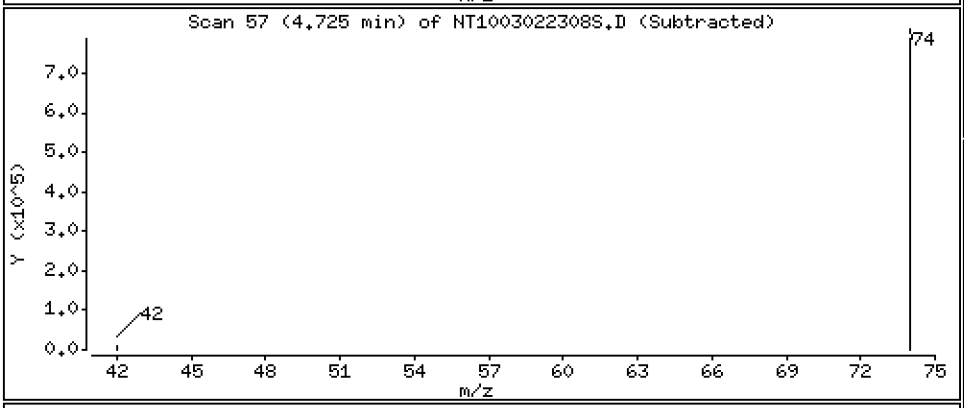
Column diameter: 0.25

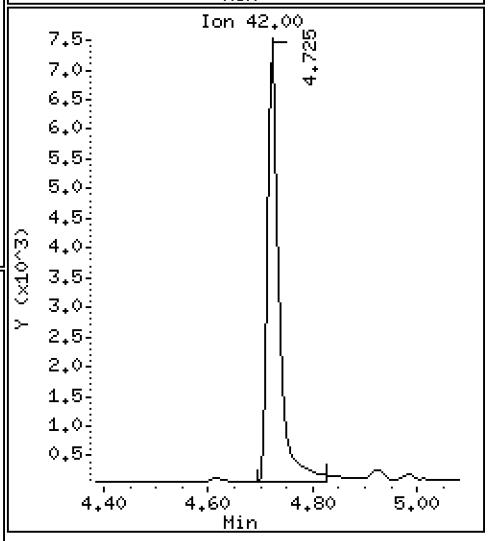
90 N-Nitrosodimethylamine

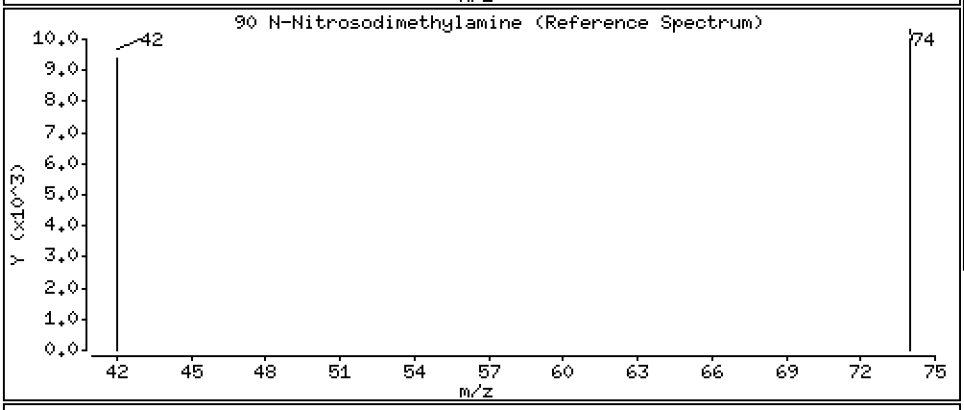
Concentration: 12.83 ug/L

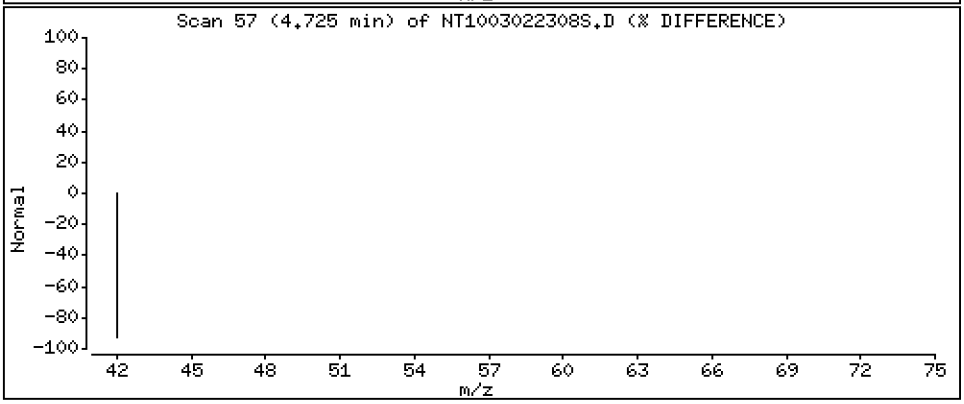












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022308S.D
Lab Smp Id: BLA0624-BSD1
Inj Date : 02-MAR-2023 18:50 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLA0624-BSD1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 14:53 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.902	6.902	(0.746)	1057332	6.60791	6.608(R)
3	Phenol	94	8.517	8.517	(0.921)	1084422	4.48897	4.489
7	1,3-Dichlorobenzene	146	9.143	9.143	(0.988)	853967	4.11127	4.111
* 8	1,4-Dichlorobenzene-d4	152	9.252	9.251	(1.000)	560466	4.00000	
9	1,4-Dichlorobenzene	146	9.283	9.282	(1.003)	861054	4.26368	4.264
11	Benzyl alcohol	79	9.477	9.476	(1.024)	603180	4.34406	4.344
12	1,2-Dichlorobenzene	146	9.562	9.562	(1.034)	839585	4.32531	4.325
13	2-Methylphenol	108	9.655	9.655	(1.044)	580325	3.95480	3.955
15	4-Methylphenol	108	9.950	9.942	(1.076)	670458	4.32548	4.325
16	N-Nitroso-di-n-propylamine	70	9.973	9.981	(1.078)	498084	4.65653	4.657
22	2,4-Dimethylphenol	107	10.997	10.997	(0.938)	1444074	7.97792	7.978
24	Benzoic acid	105	11.167	11.074	(0.953)	2629143	23.4639	23.46
26	1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	650704	4.33589	4.336
* 27	Naphthalene-d8	136	11.723	11.723	(1.000)	2085063	4.00000	
30	Hexachlorobutadiene	225	11.994	11.994	(1.023)	440778	4.13883	4.139
39	Dimethylphthalate	163	14.749	14.741	(0.963)	1848286	5.22825	5.228
* 42	Acenaphthene-d10	162	15.314	15.314	(1.000)	1113362	4.00000	
50	Diethylphthalate	149	16.210	16.203	(1.059)	1941262	5.82295	5.823
54	N-Nitrosodiphenylamine	169	16.698	16.690	(0.907)	1541071	4.76088	4.761
57	Hexachlorobenzene	284	17.578	17.578	(0.955)	676633	4.46668	4.467

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	17.988	17.988	(0.977)	1378551	16.5427	16.54
*	59 Phenanthrene-d10	188	18.406	18.406	(1.000)	2000131	4.00000	
$	66 Terphenyl-d14	244	21.532	21.532	(0.919)	763988	4.35620	4.356(R)
	67 Butylbenzylphthalate	149	22.414	22.414	(0.957)	1574214	4.36757	4.368
*	69 Chrysene-d12	240	23.421	23.421	(1.000)	2168746	4.00000	
*	77 Perylene-d12	264	26.115	26.115	(1.000)	2165910	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.929	28.929	(1.108)	2691548	4.96165	4.962
	90 N-Nitrosodimethylamine	74	4.724	4.732	(0.511)	1215136	12.8270	12.83

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003022308S.D
Lab Smp Id: BLA0624-BSD1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 02-MAR-2023
Calibration Time: 14:13
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	493417	246709	986834	560466	13.59
27 Naphthalene-d8	1779056	889528	3558112	2085063	17.20
42 Acenaphthene-d10	954569	477285	1909138	1113362	16.64
59 Phenanthrene-d10	1596290	798145	3192580	2000131	25.30
69 Chrysene-d12	1649110	824555	3298220	2168746	31.51
77 Perylene-d12	1901958	950979	3803916	2165910	13.88

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.42	0.00
77 Perylene-d12	26.12	25.62	26.62	26.12	0.00

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

REVIEW SUMMARY FOR FILE - NT1003022308S.D

Lab ID: BLA0624-BSD1
nt10.i, 20230302.b\SIM.b\SIMABN2.m,   02-MAR-2023 18:50

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.953	0.945	0.0080	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003022303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223095.D

Page 1

Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

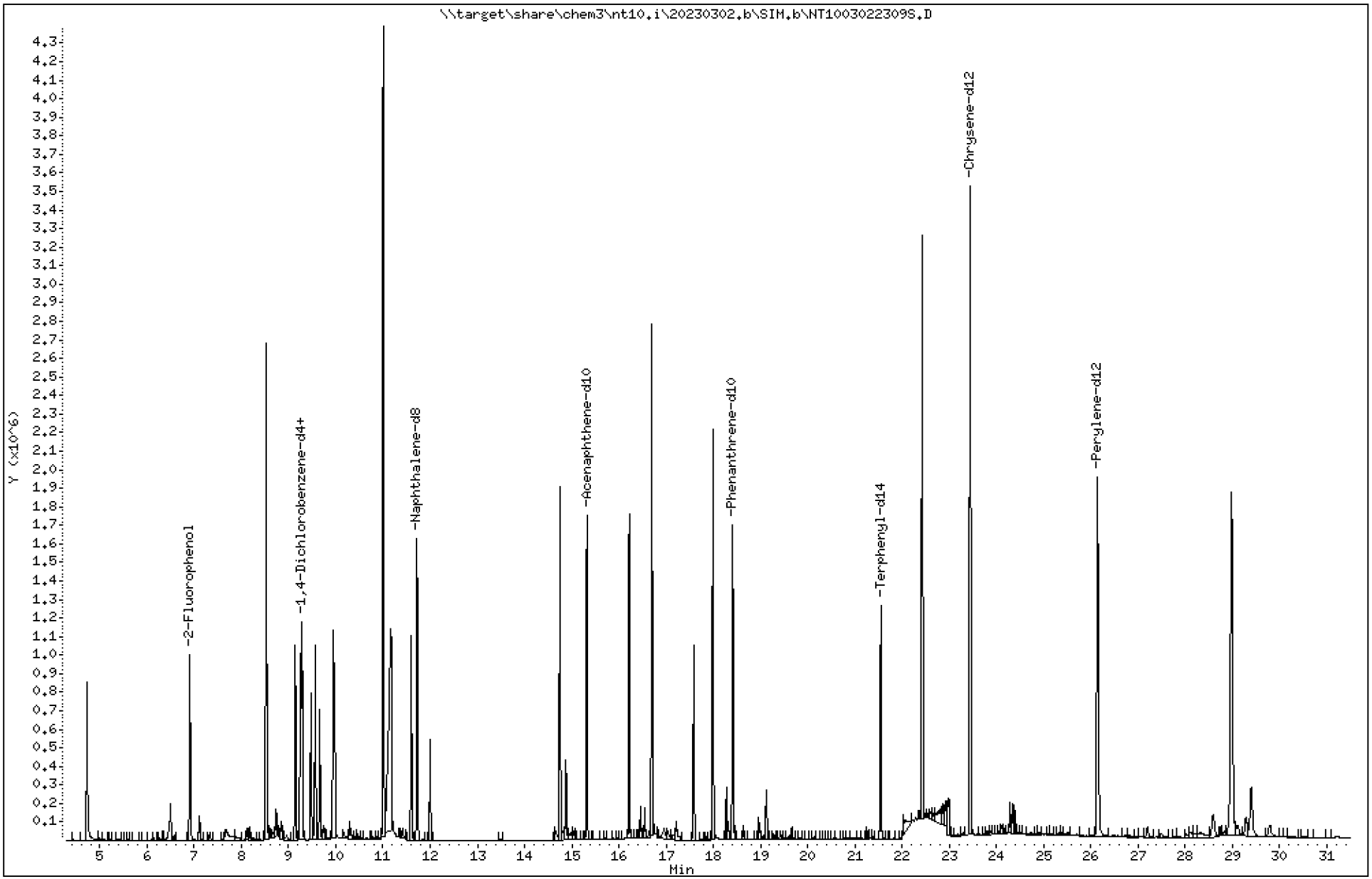
Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

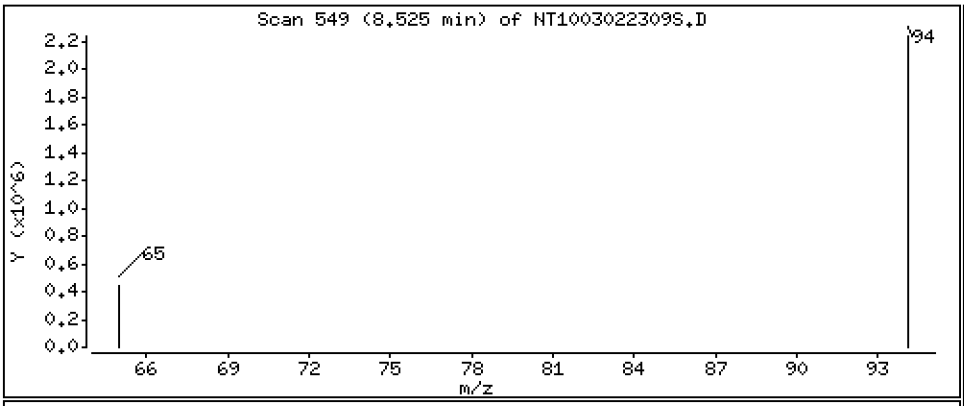
Operator: JGR

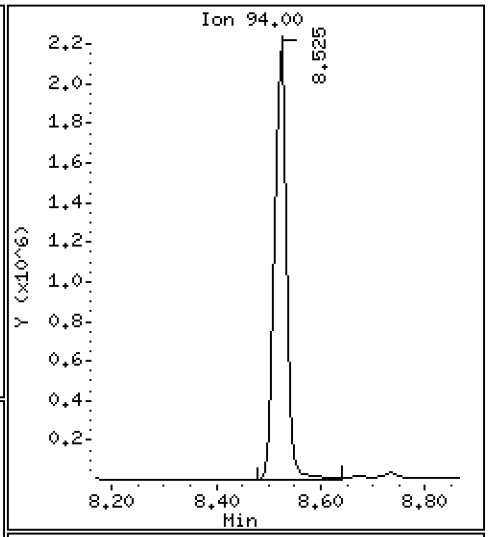
Column phase: ZB-5msi

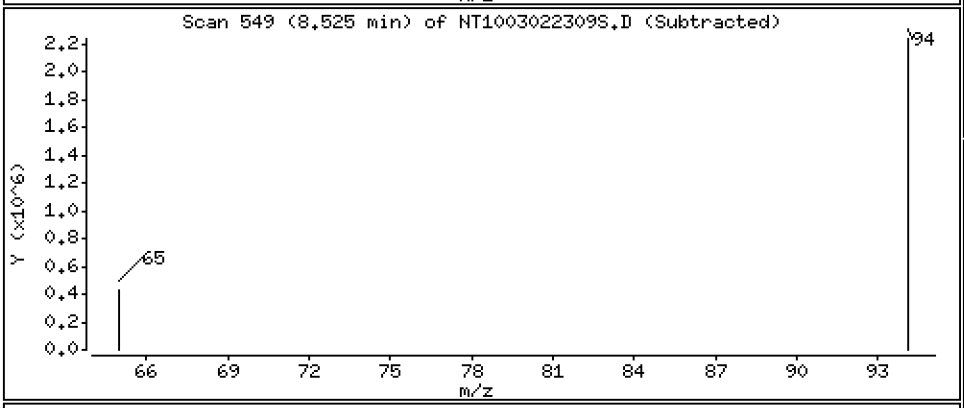
Column diameter: 0.25

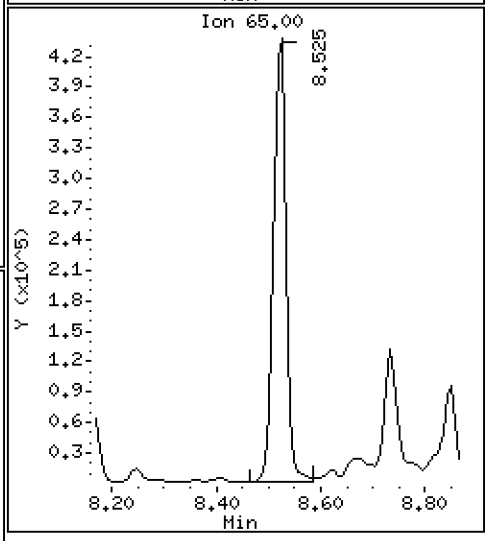
3 Phenol

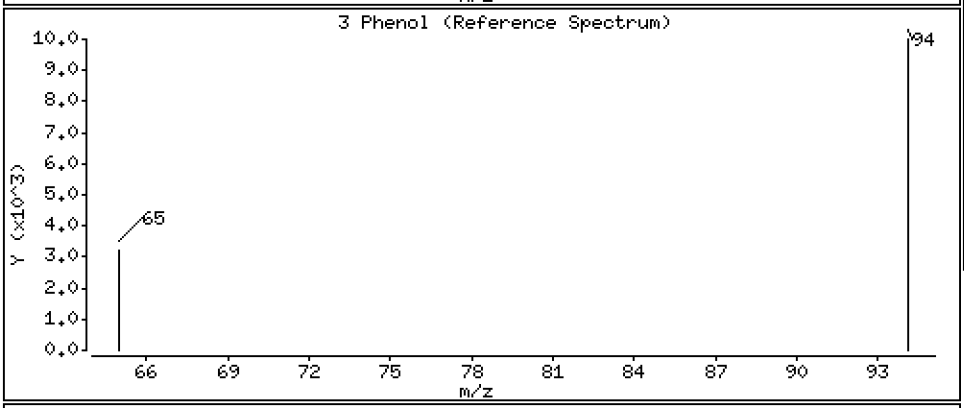
Concentration: 11.73 ug/L

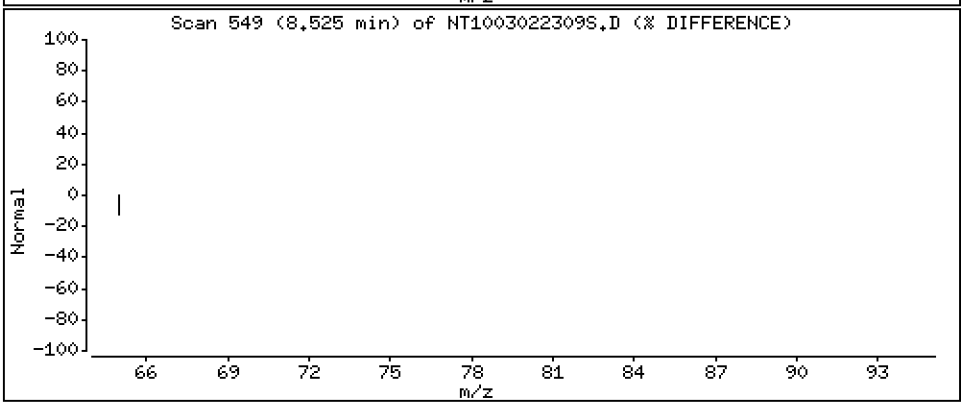












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022309S.D

Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

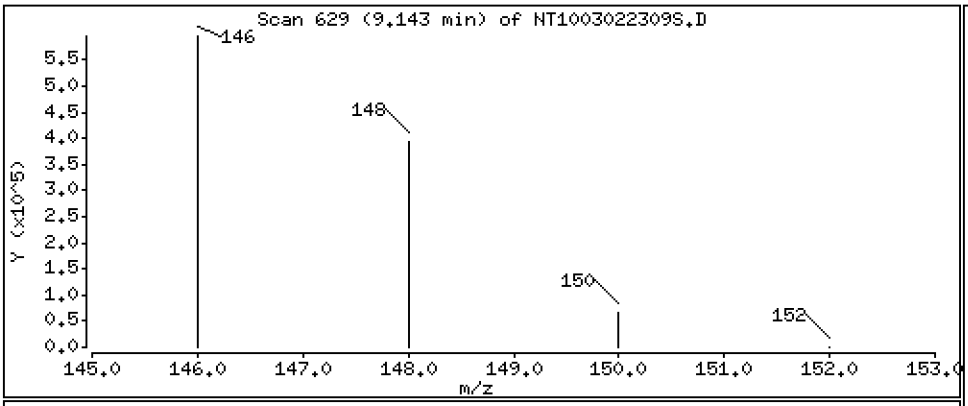
Operator: JGR

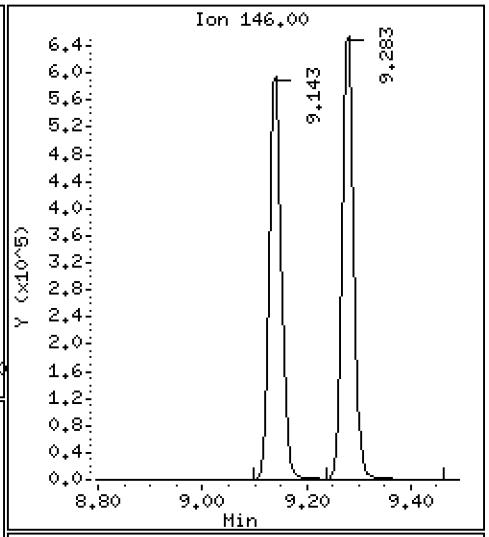
Column phase: ZB-5msi

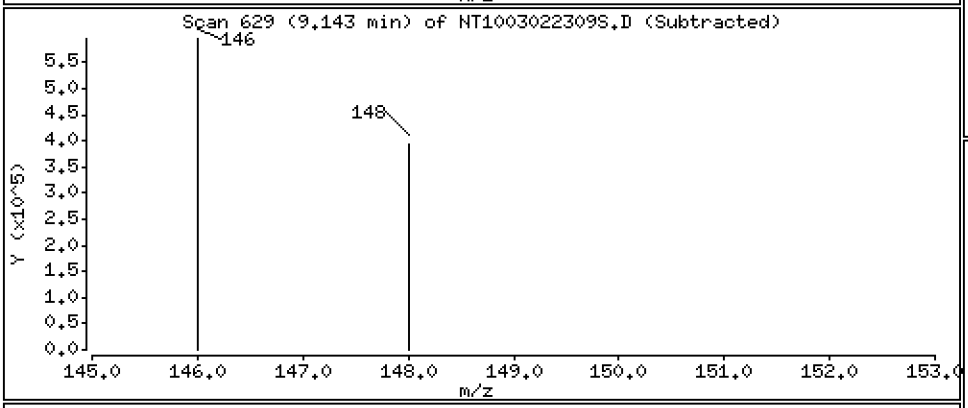
Column diameter: 0.25

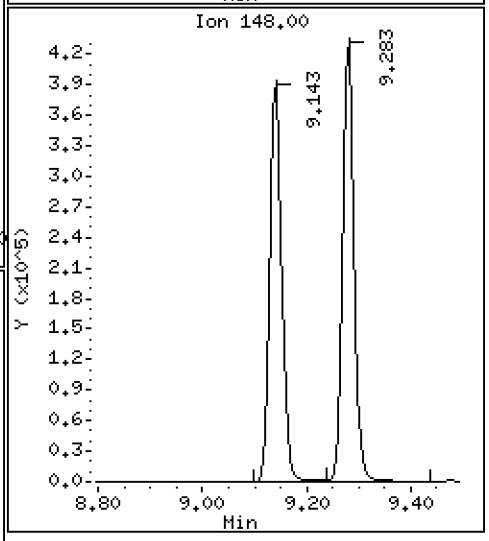
7 1,3-Dichlorobenzene

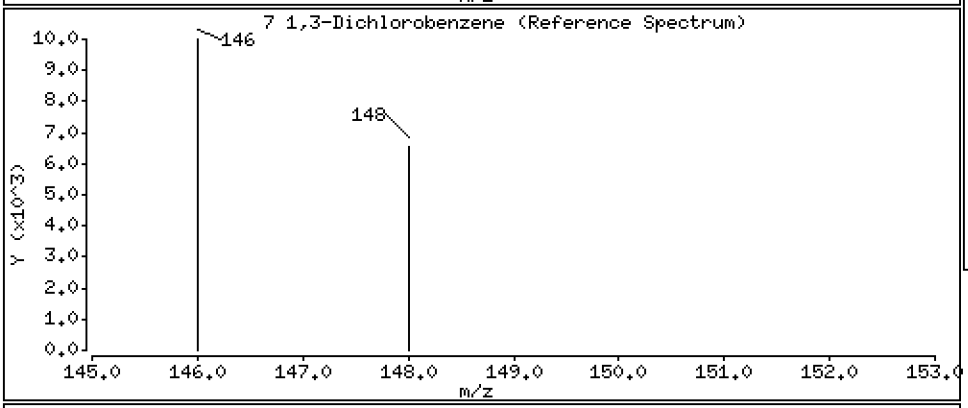
Concentration: 4.069 ug/L

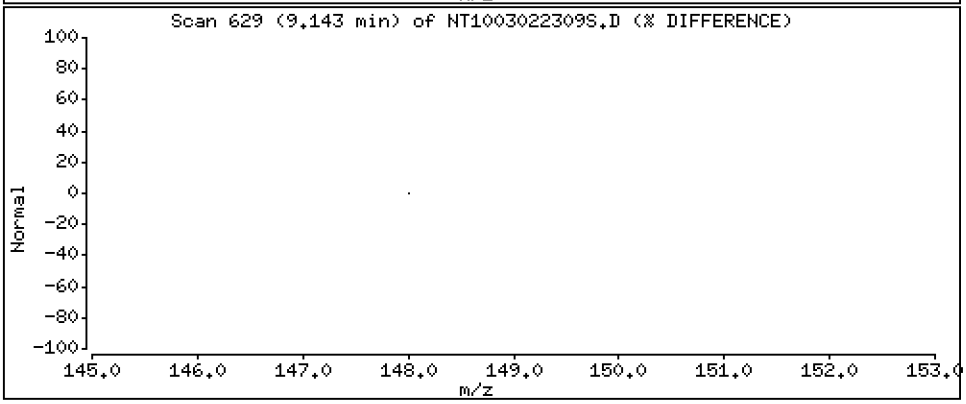












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022309S.D

Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

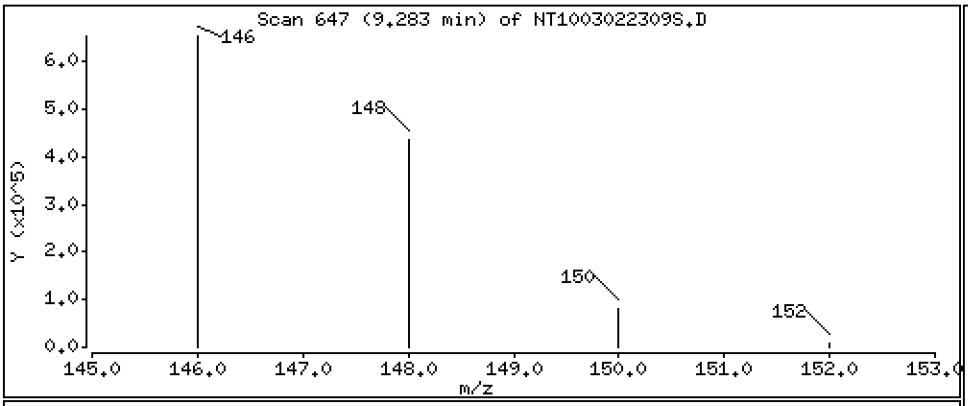
Operator: JGR

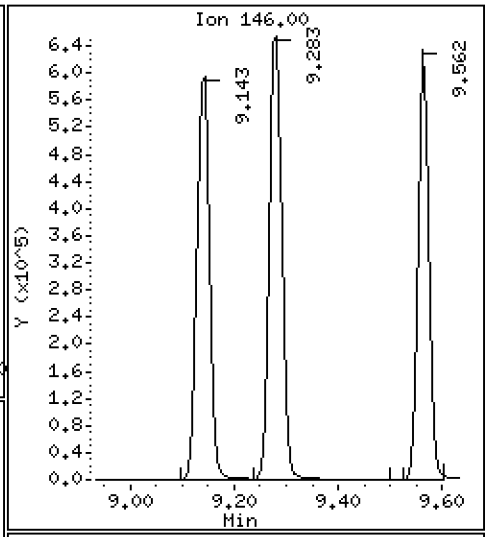
Column phase: ZB-5msi

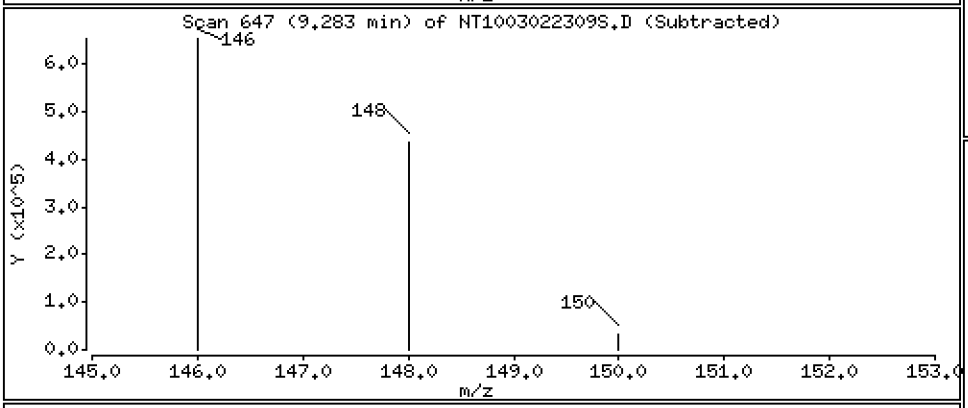
Column diameter: 0.25

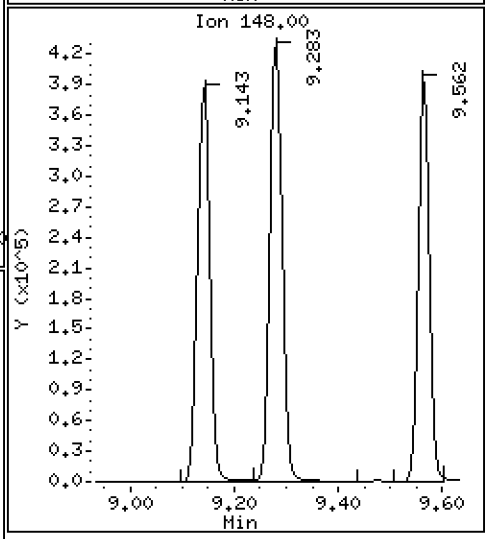
9 1,4-Dichlorobenzene

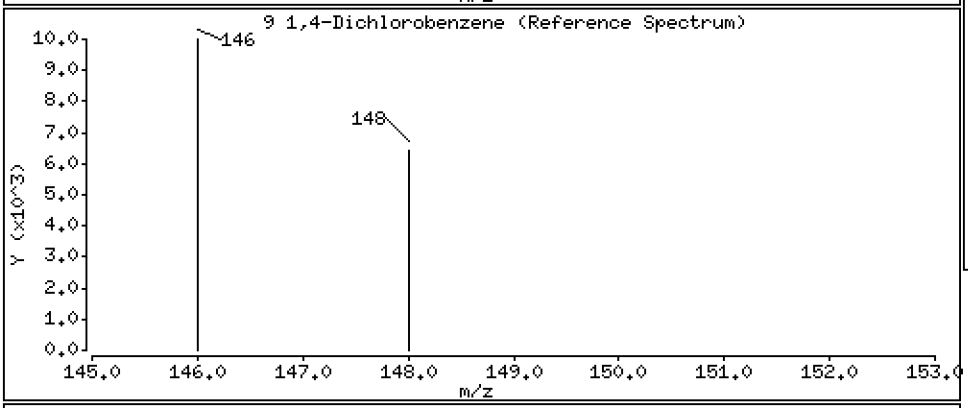
Concentration: 4.544 ug/L

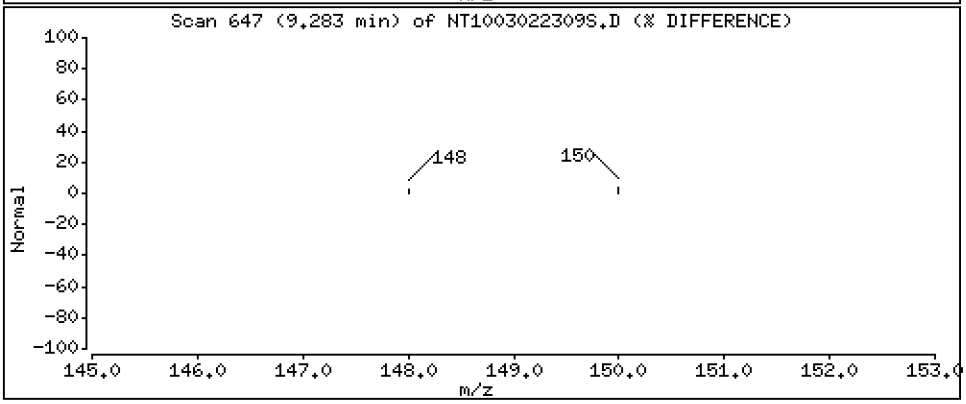












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022309S.D

Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

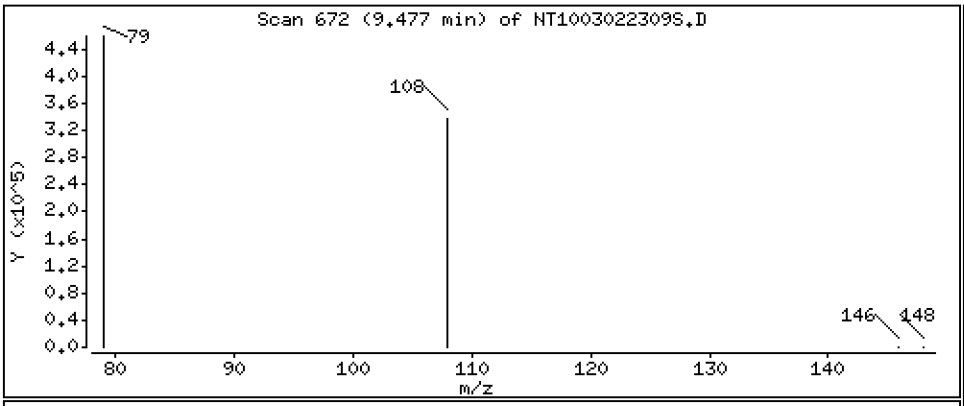
Operator: JGR

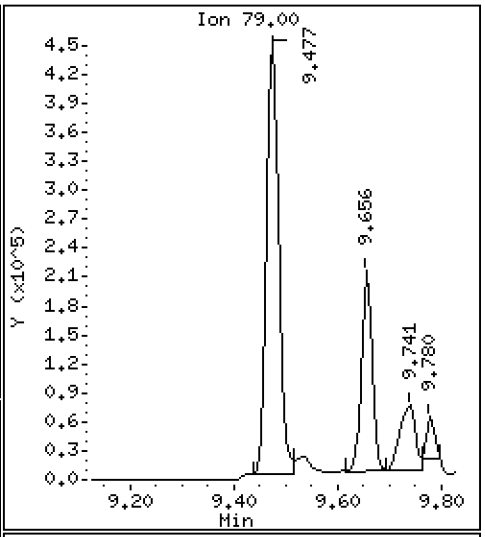
Column phase: ZB-5msi

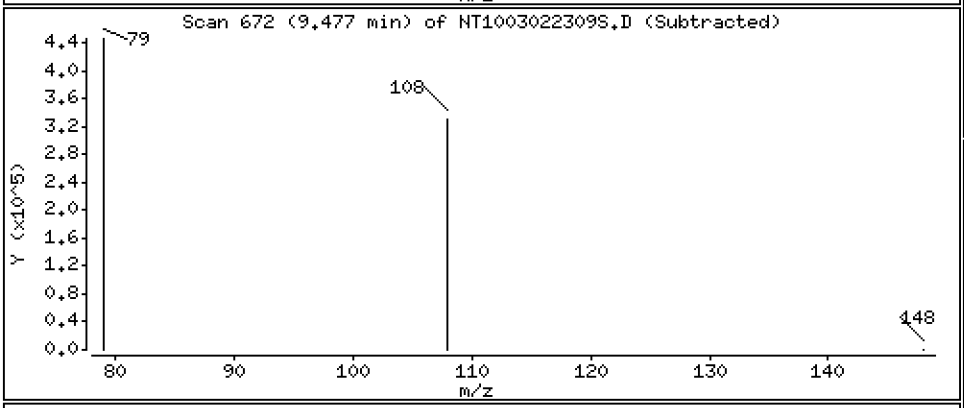
Column diameter: 0.25

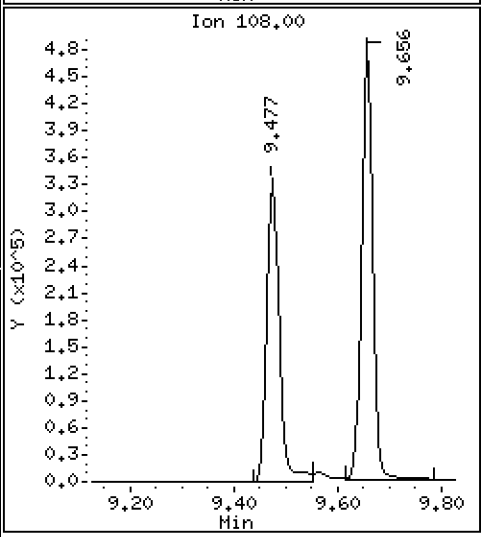
11 Benzyl alcohol

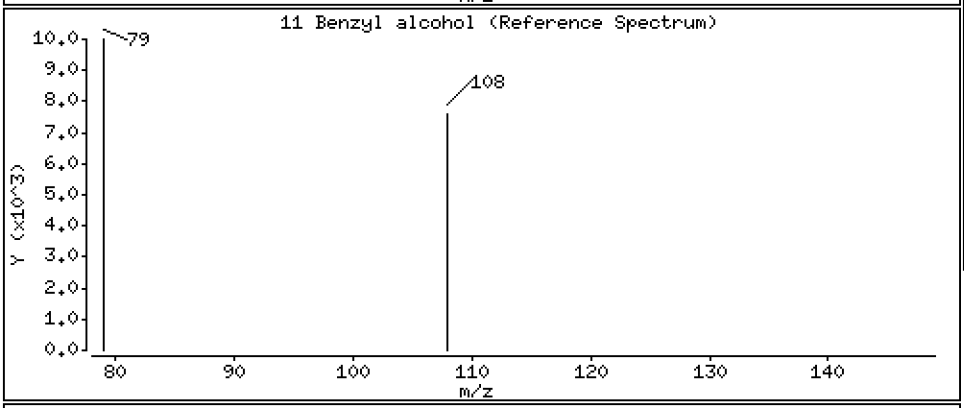
Concentration: 4.336 ug/L

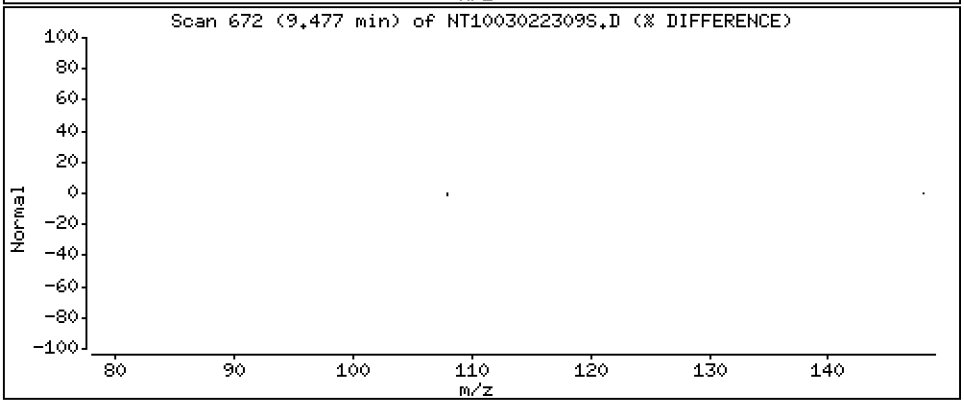












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022309S.D

Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

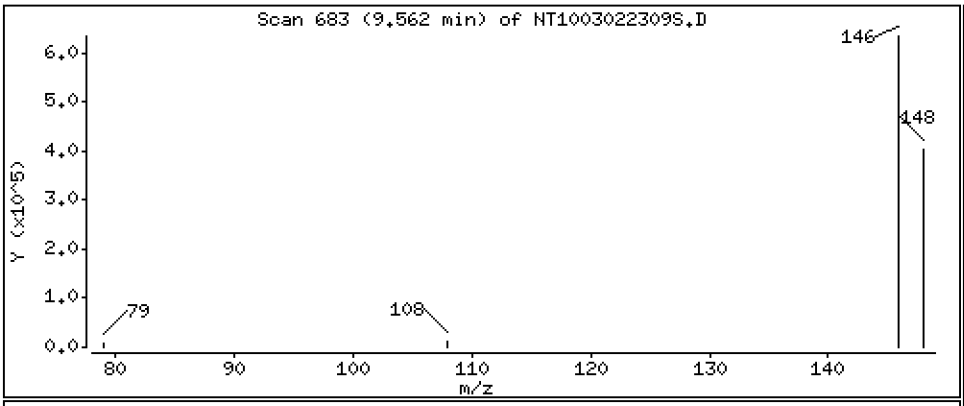
Operator: JGR

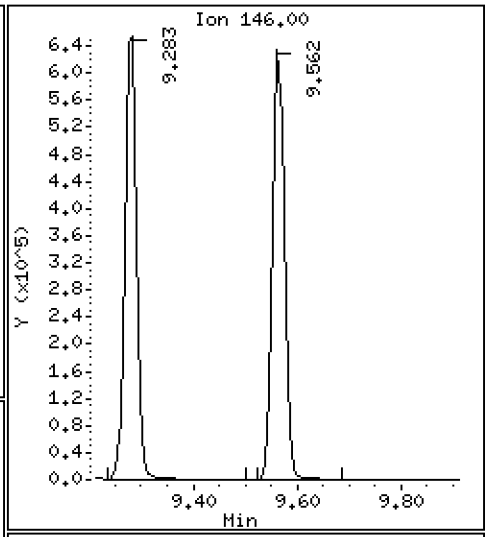
Column phase: ZB-5msi

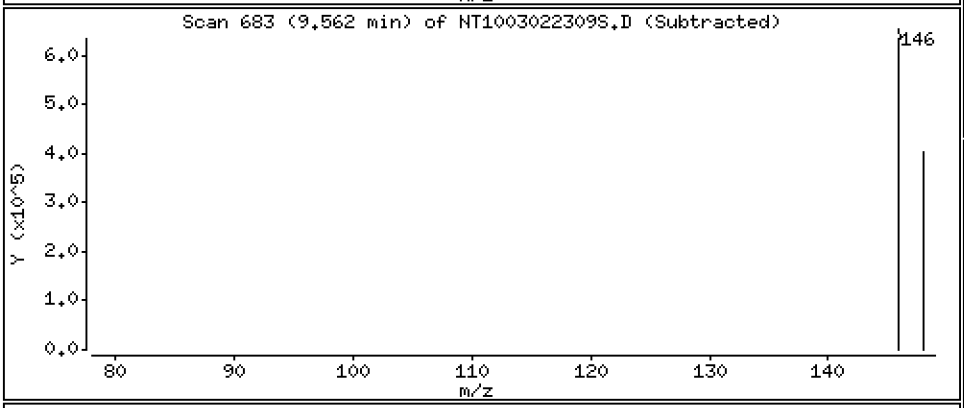
Column diameter: 0.25

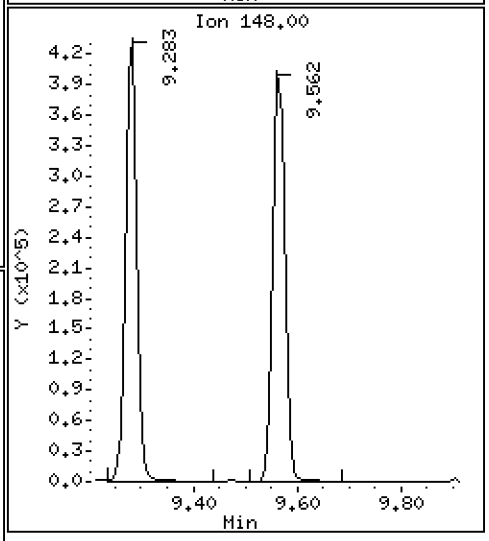
12 1,2-Dichlorobenzene

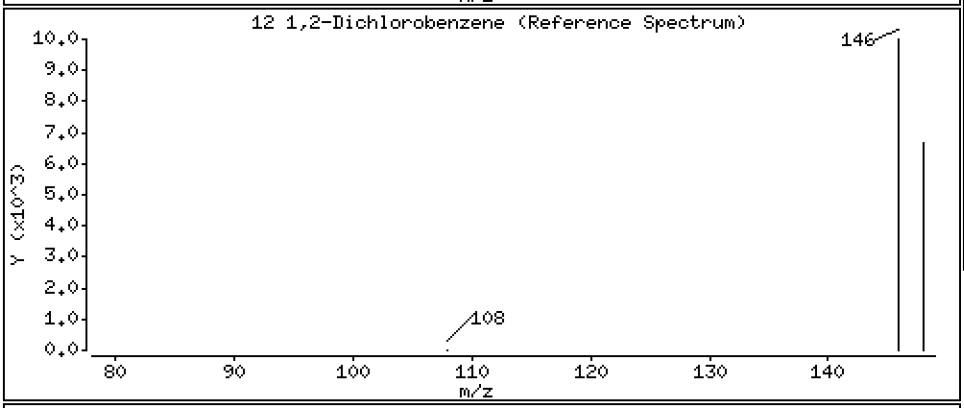
Concentration: 4.285 ug/L

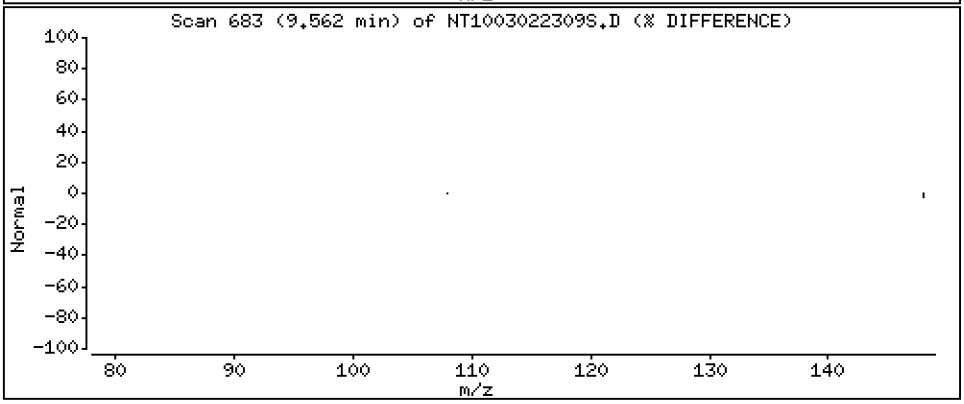












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022309S.D

Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

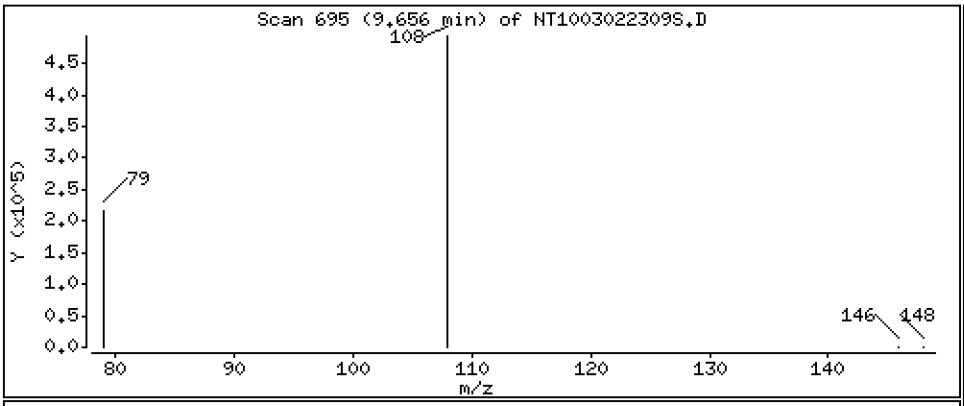
Operator: JGR

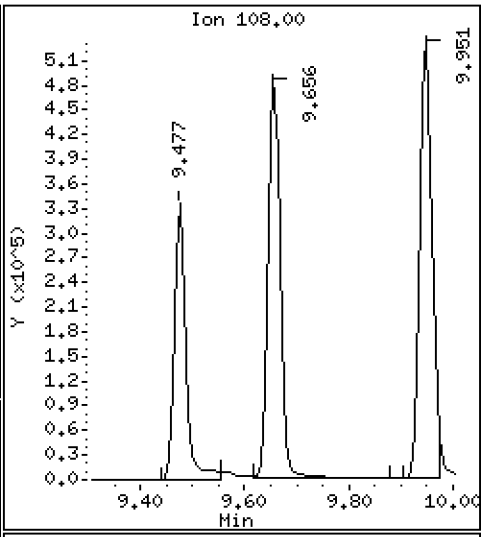
Column phase: ZB-5msi

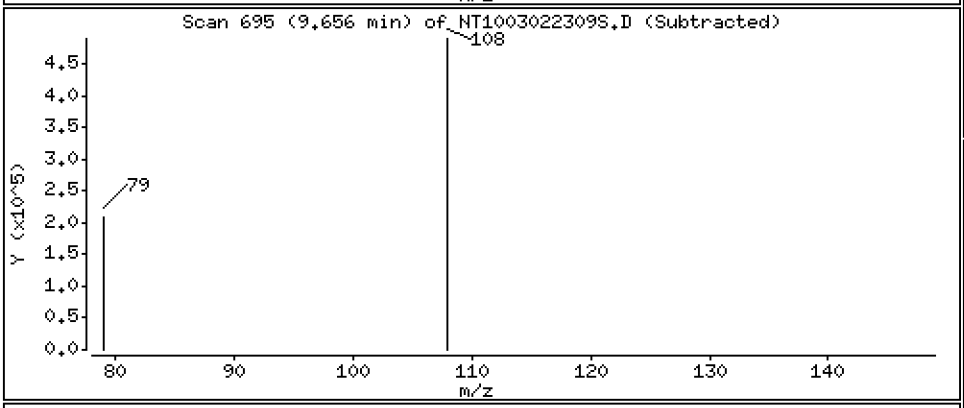
Column diameter: 0.25

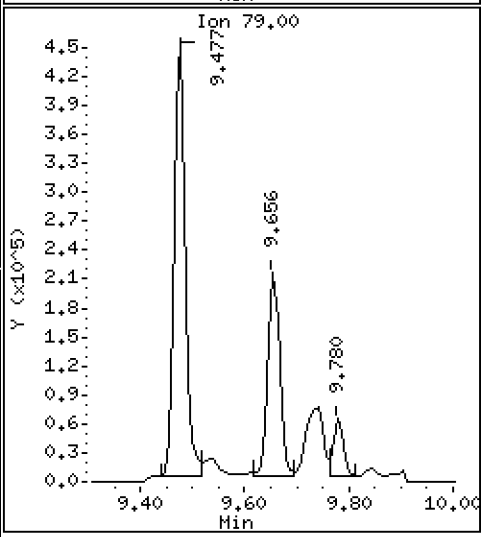
13 2-Methylphenol

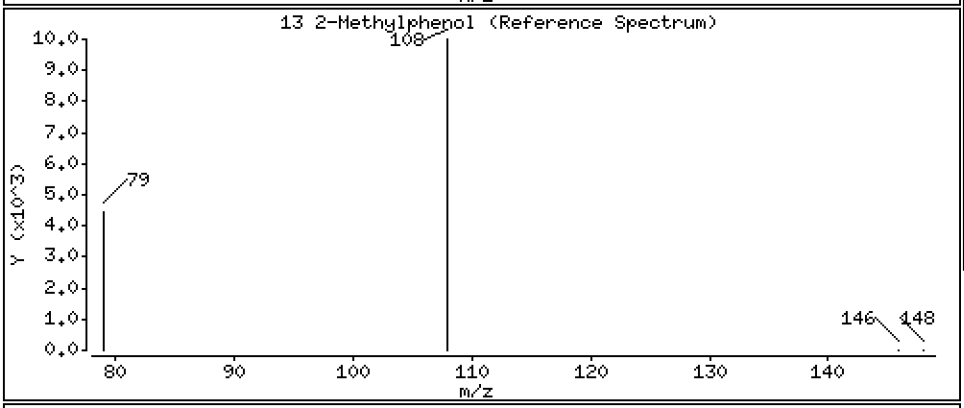
Concentration: 4.357 ug/L

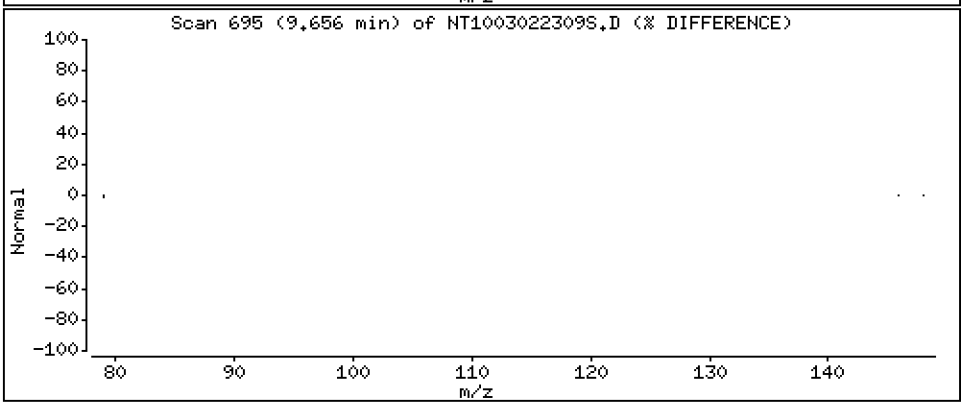












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022309S.D

Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

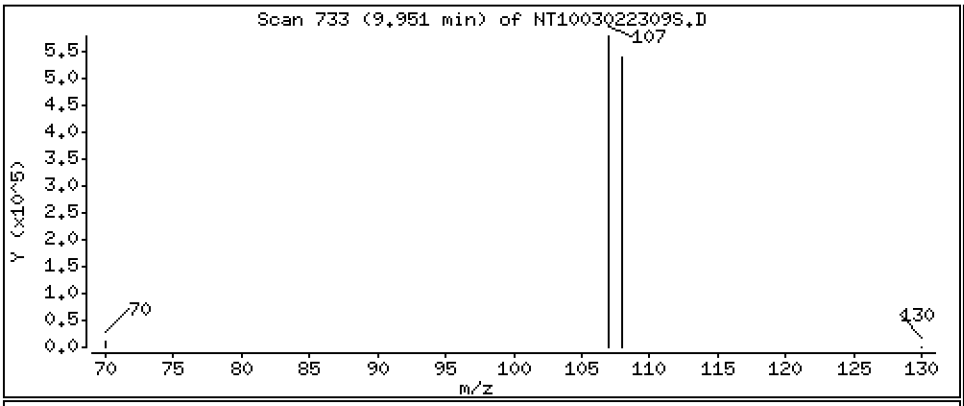
Operator: JGR

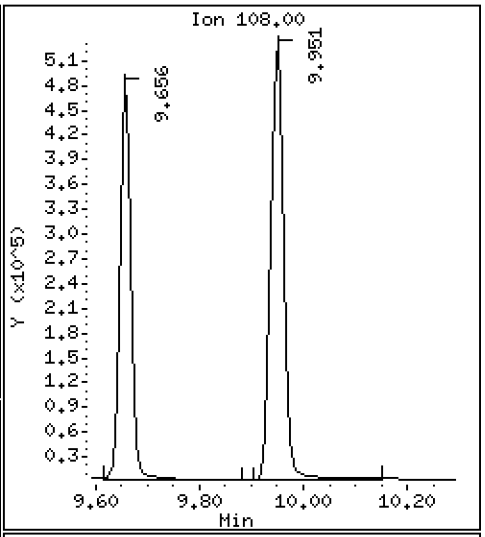
Column phase: ZB-5msi

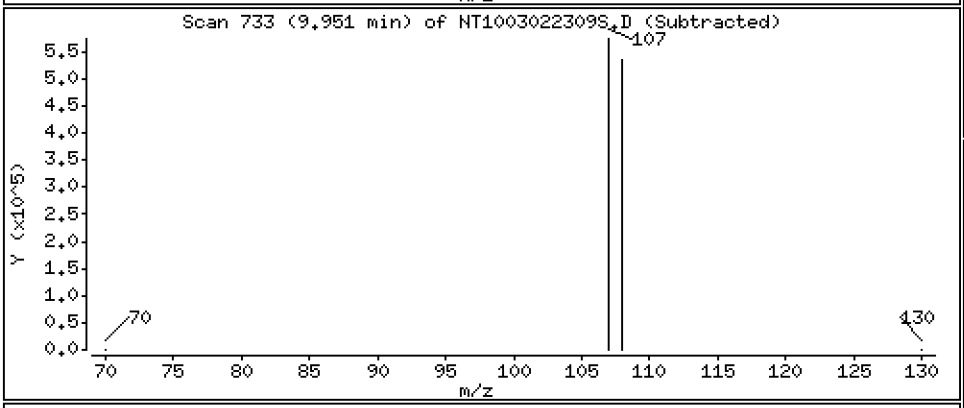
Column diameter: 0.25

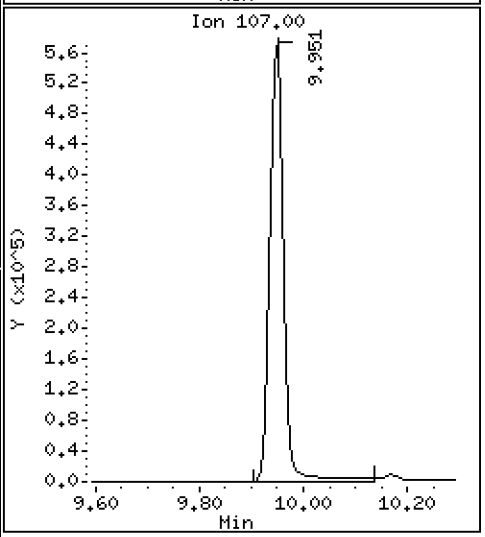
15 4-Methylphenol

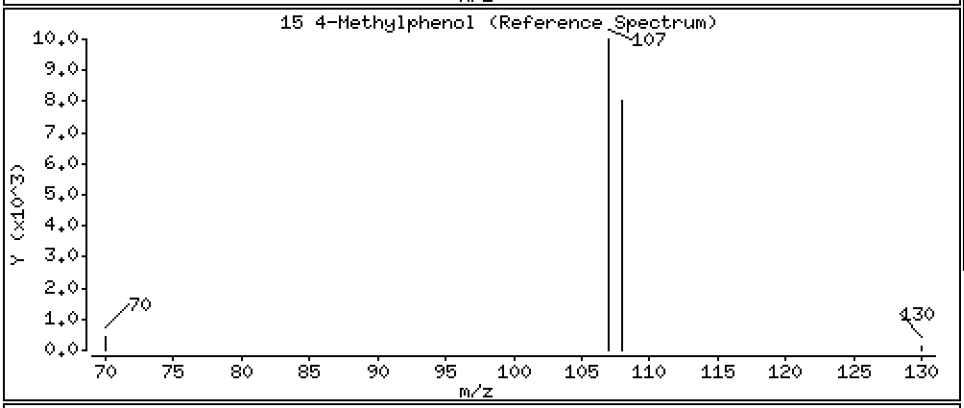
Concentration: 5.039 ug/L

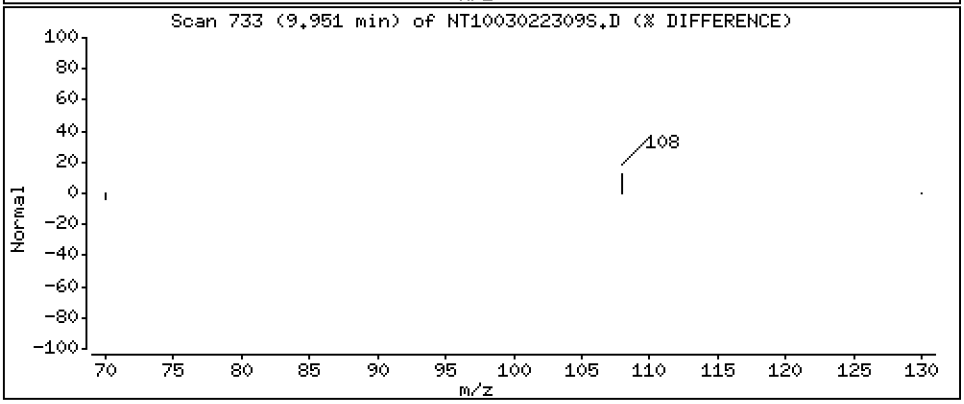












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022309S.D

Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

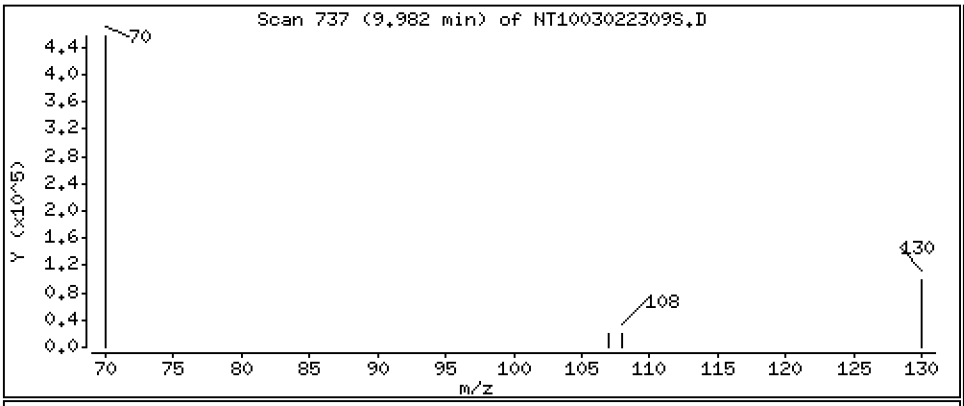
Operator: JGR

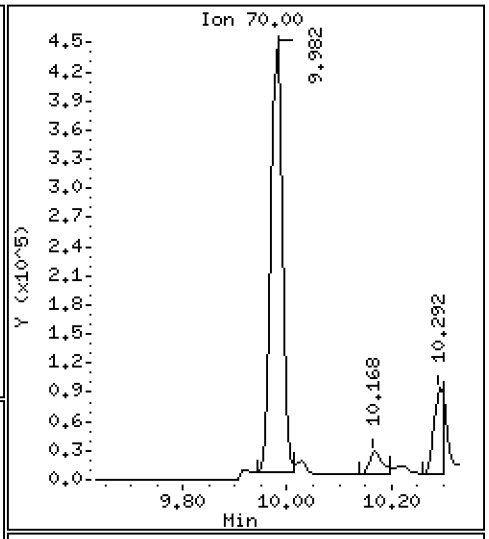
Column phase: ZB-5msi

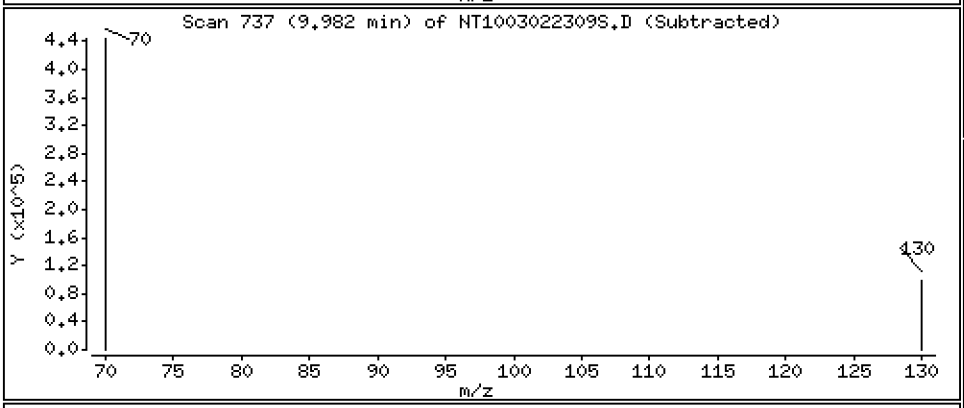
Column diameter: 0.25

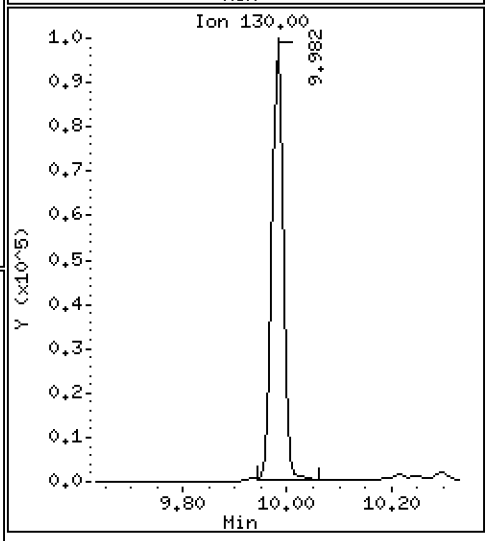
16 N-Nitroso-di-n-propylamine

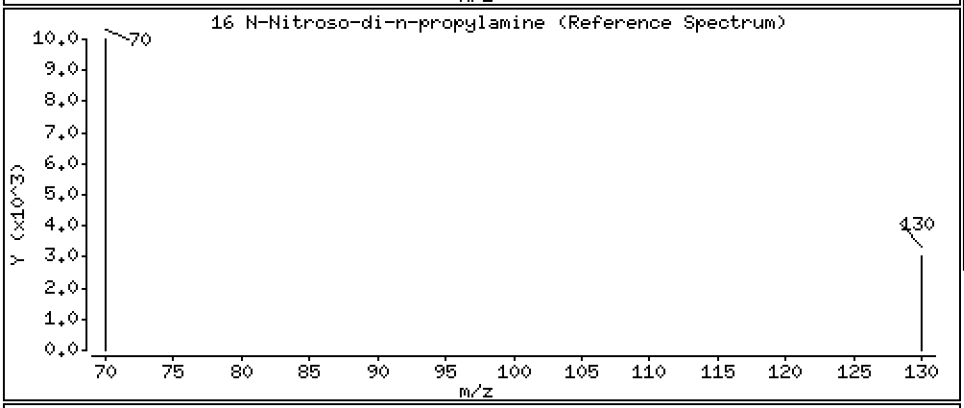
Concentration: 5.166 ug/L

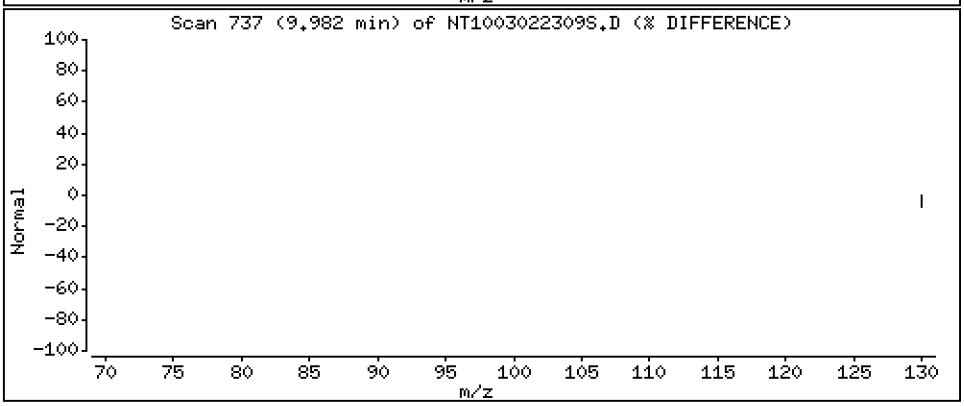












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223095.D

Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

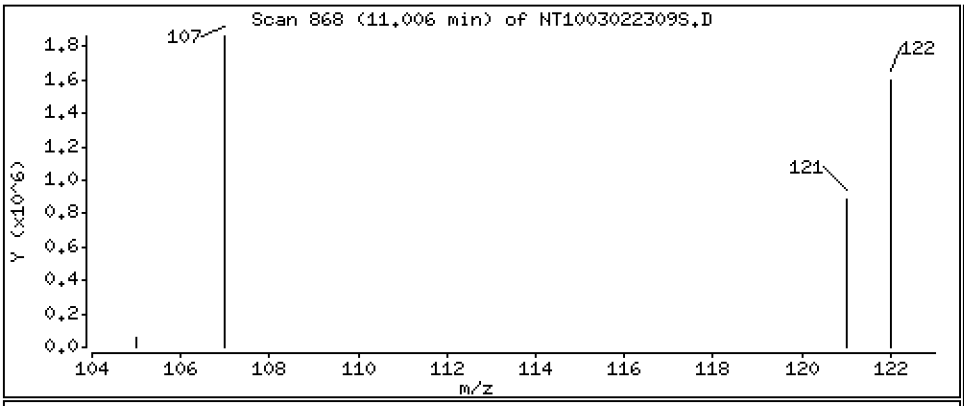
Operator: JGR

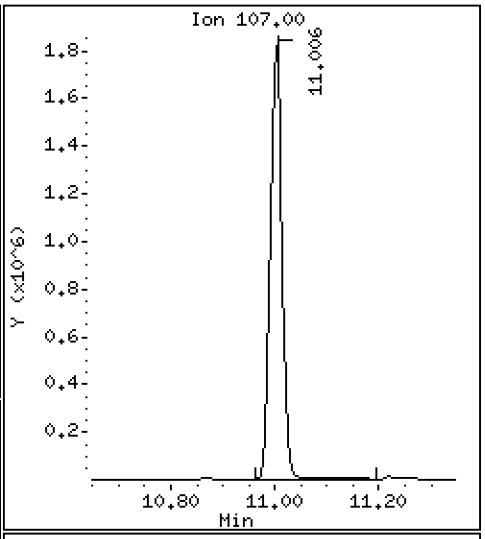
Column phase: ZB-5msi

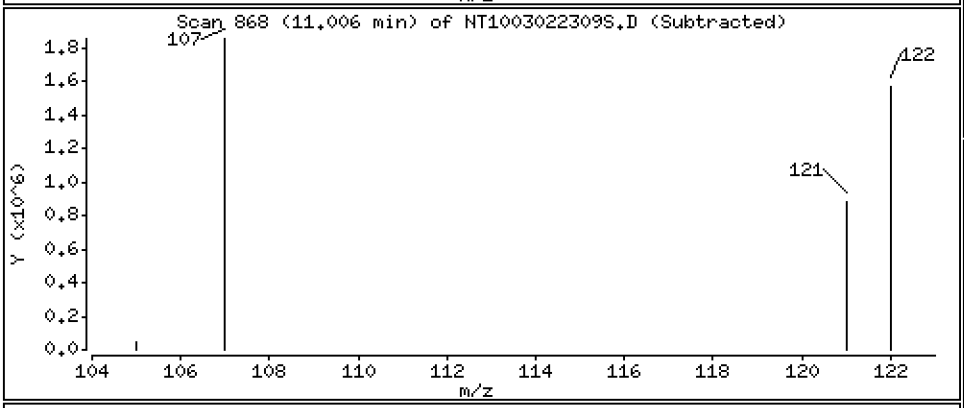
Column diameter: 0.25

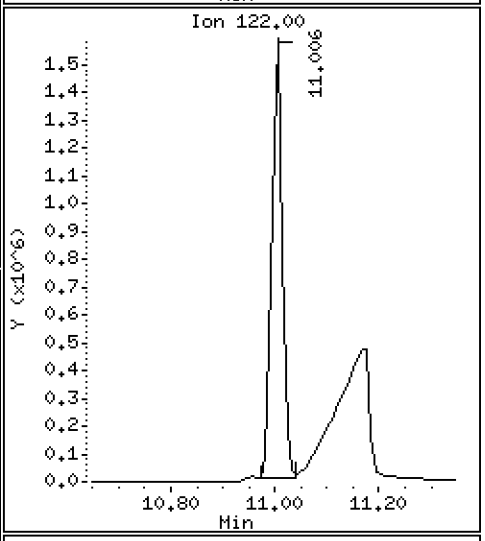
22 2,4-Dimethylphenol

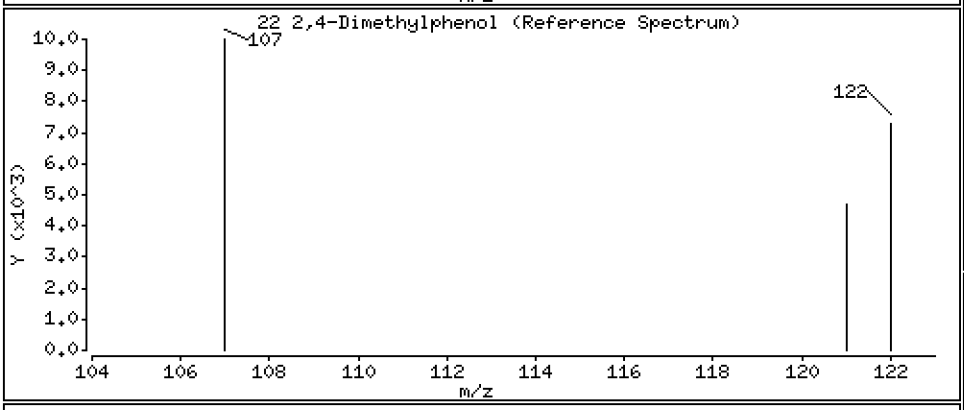
Concentration: 13.69 ug/L

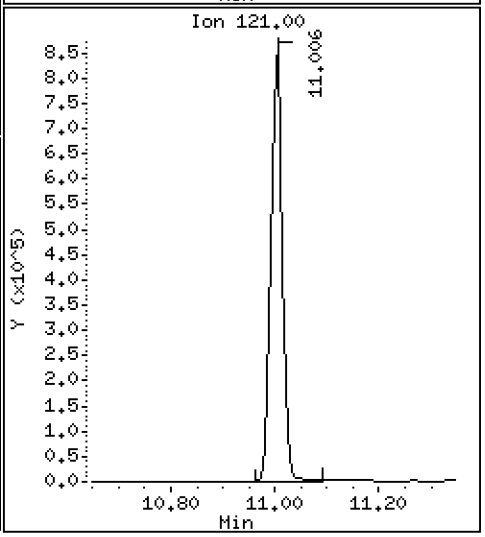


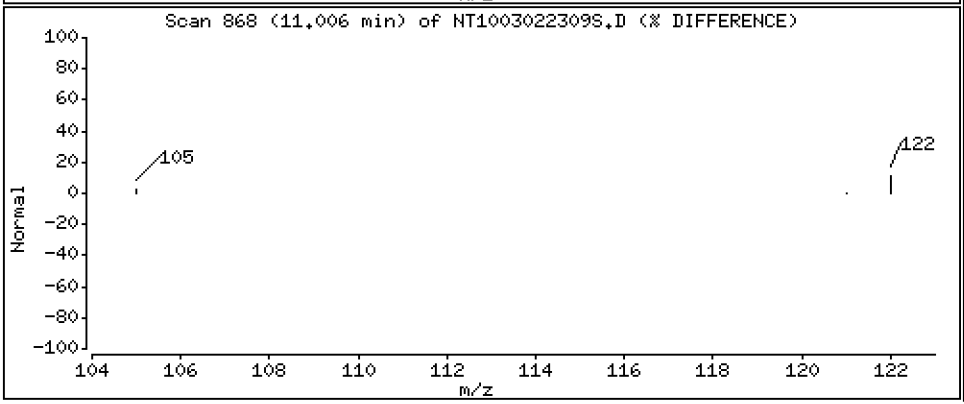












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Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

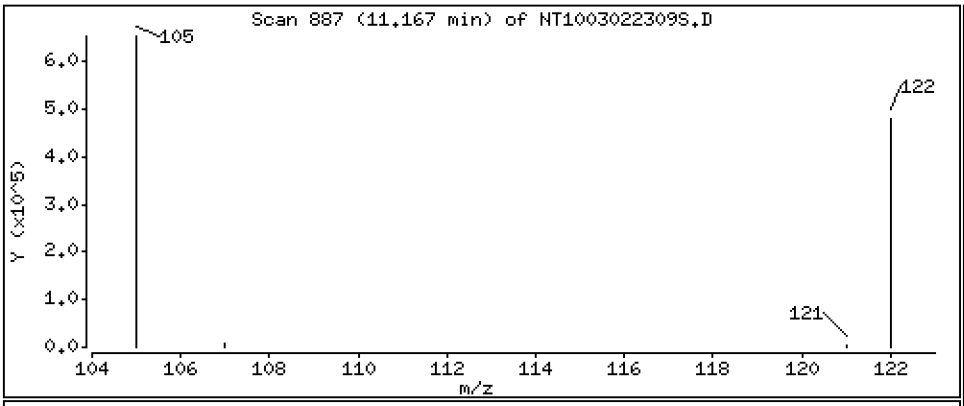
Operator: JGR

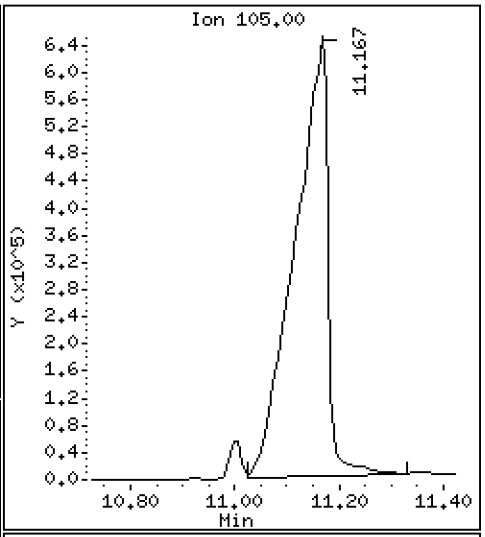
Column phase: ZB-5msi

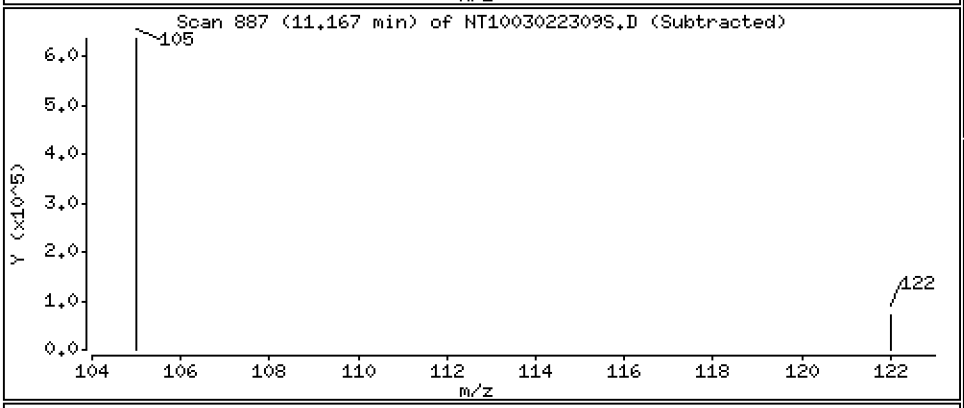
Column diameter: 0.25

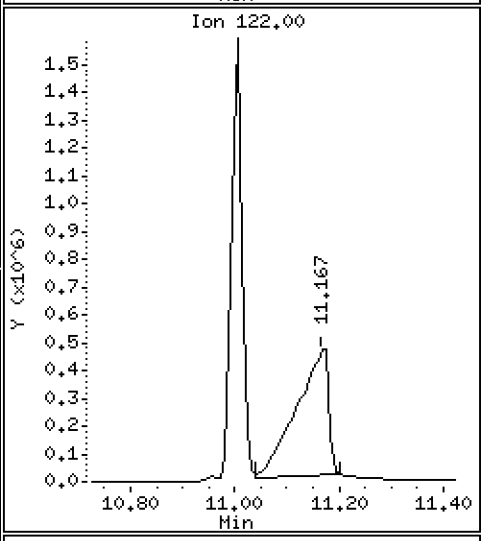
24 Benzoic acid

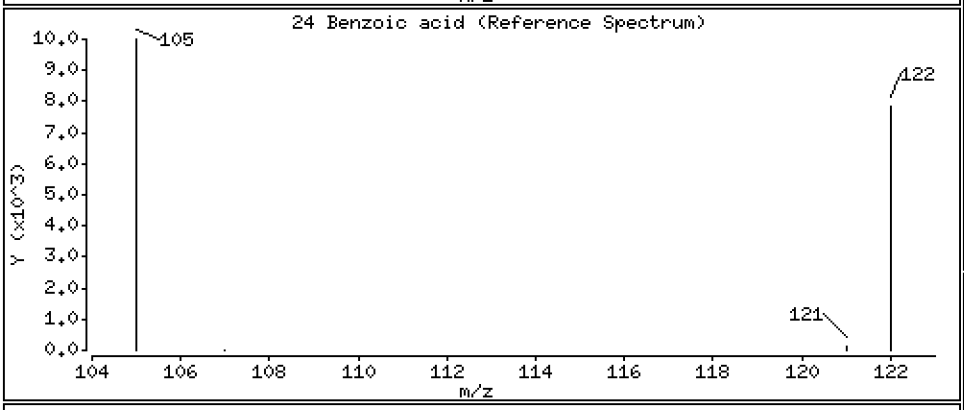
Concentration: 22.88 ug/L

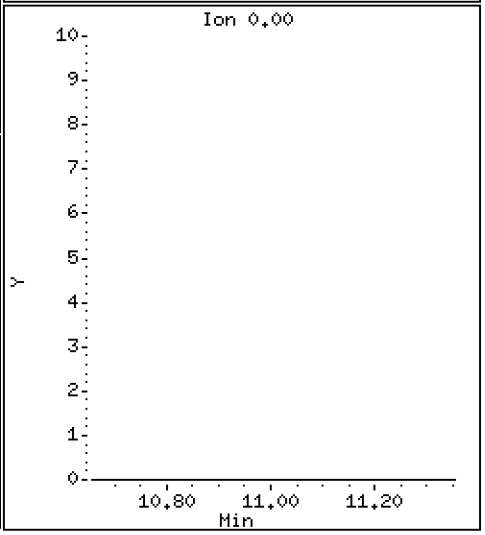


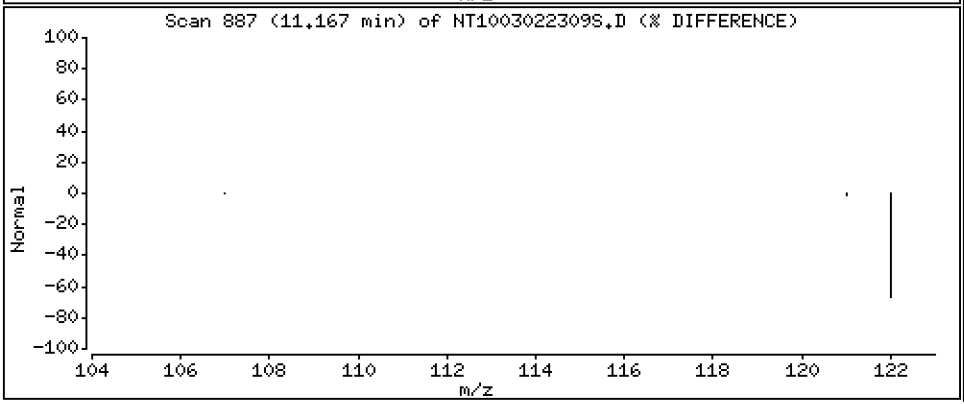












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Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

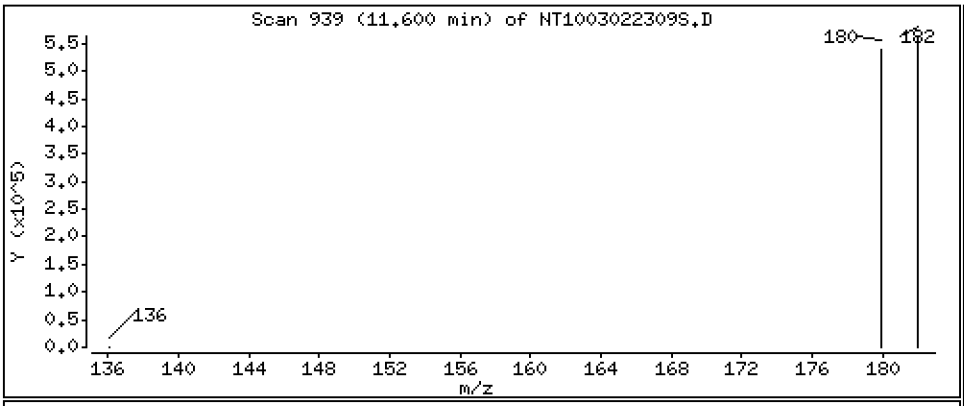
Operator: JGR

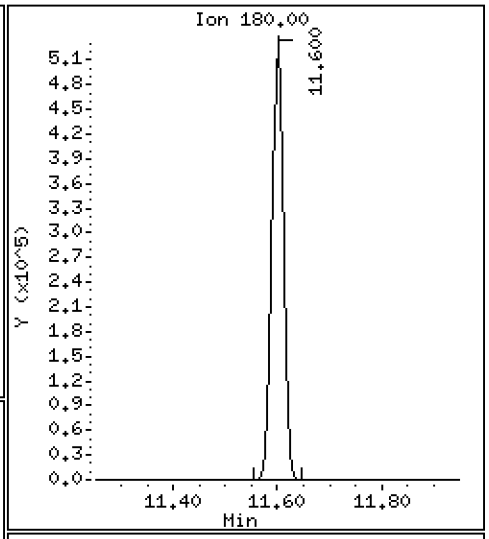
Column phase: ZB-5msi

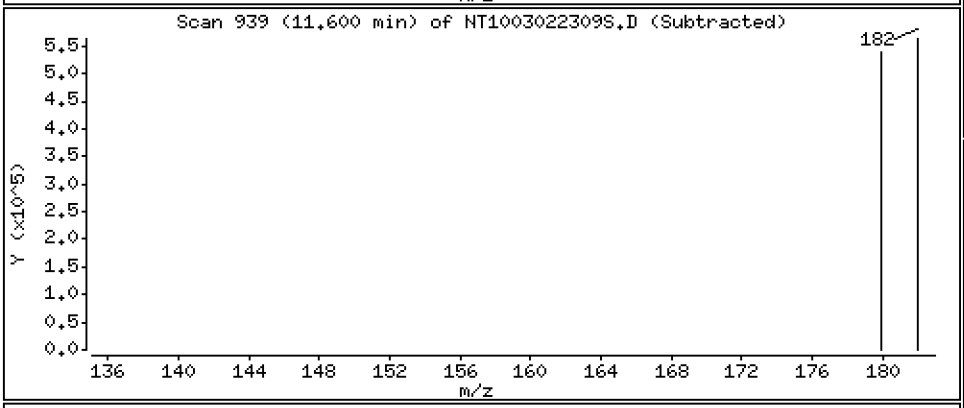
Column diameter: 0.25

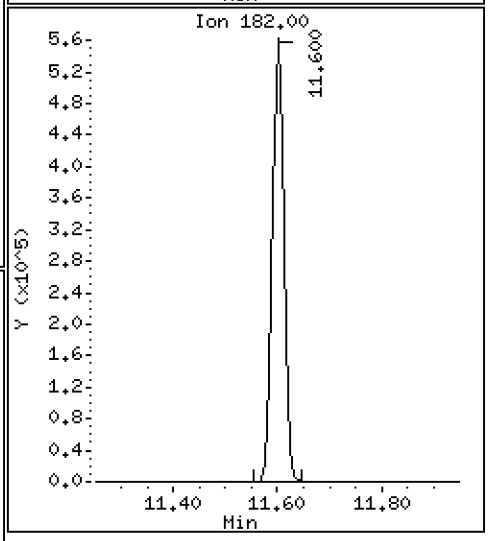
26 1,2,4-Trichlorobenzene

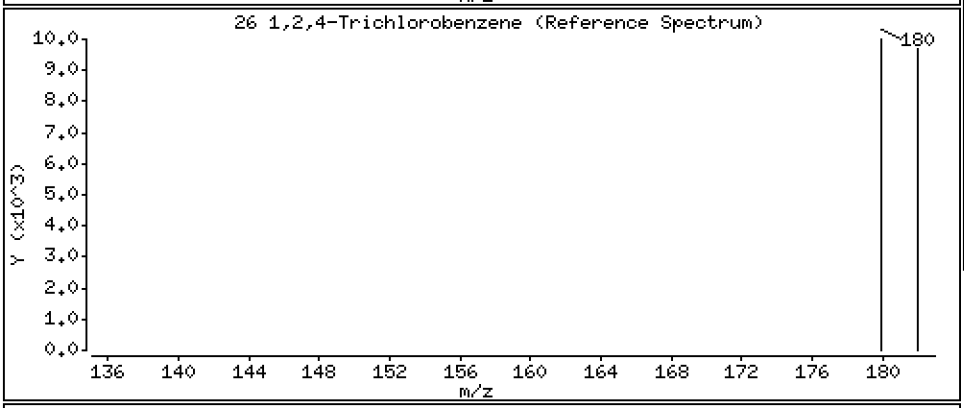
Concentration: 4.511 ug/L

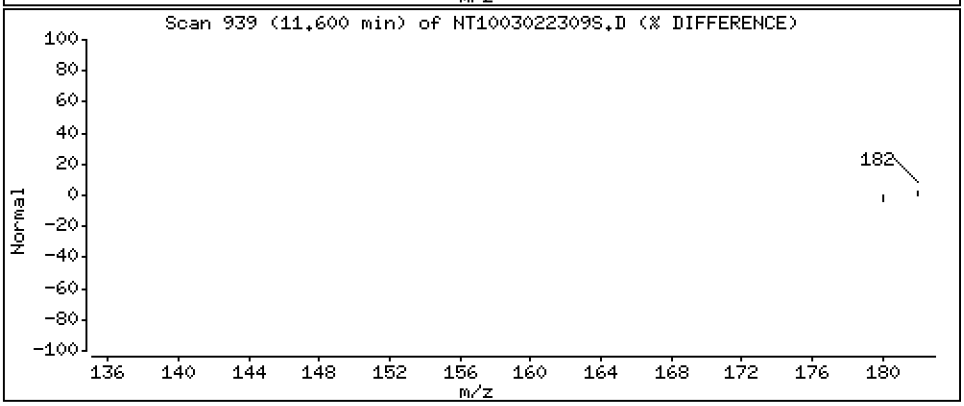












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022309S.D

Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

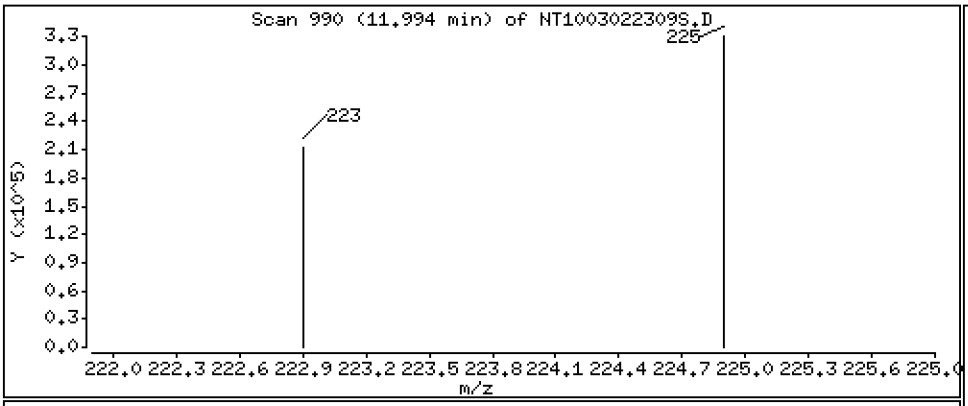
Operator: JGR

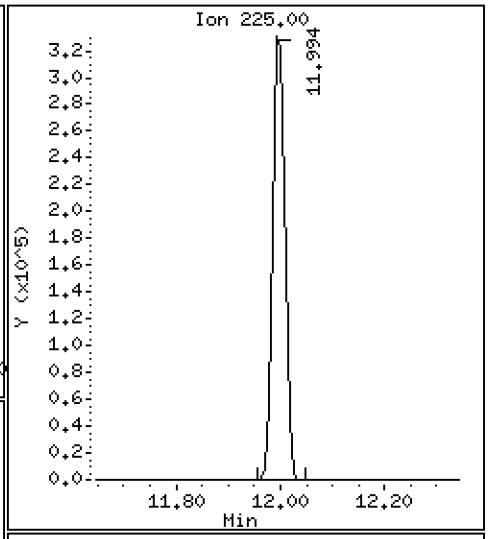
Column phase: ZB-5msi

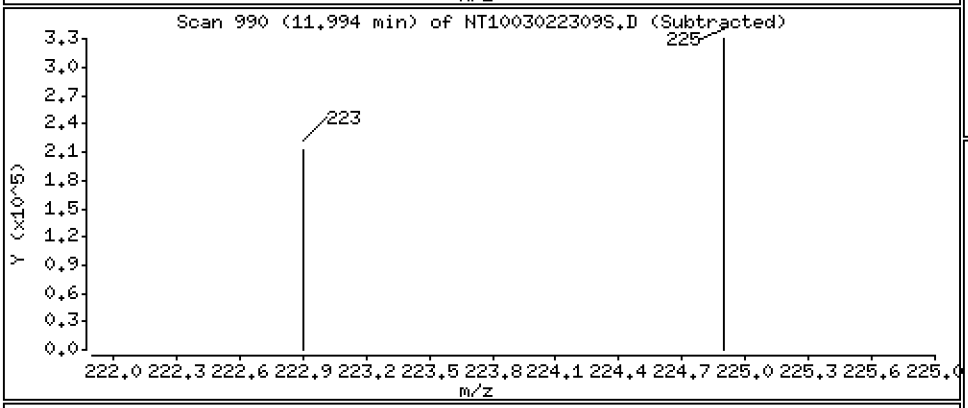
Column diameter: 0.25

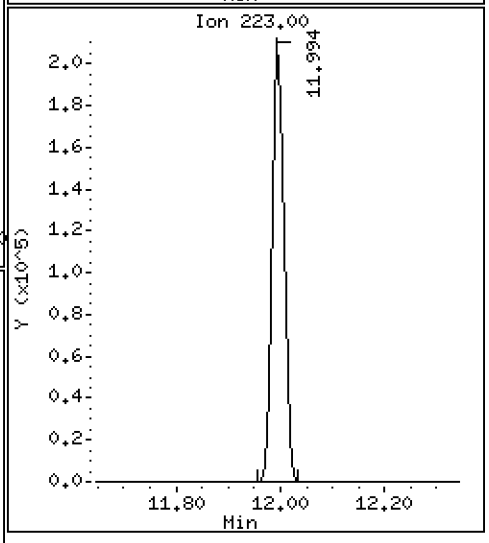
30 Hexachlorobutadiene

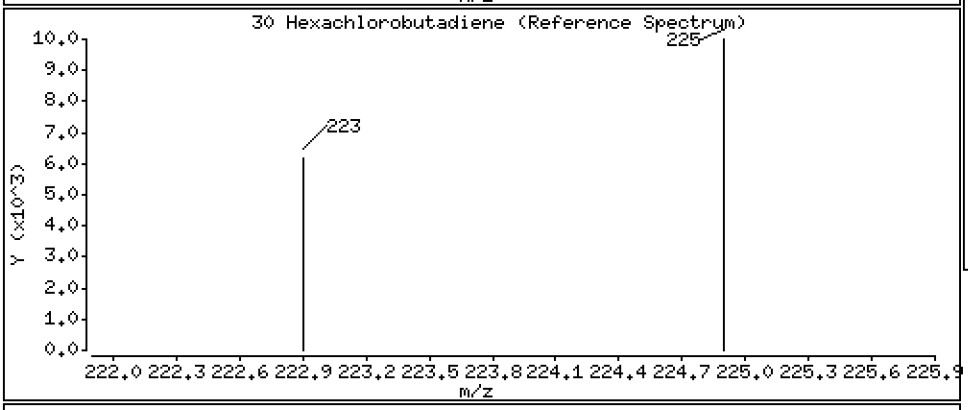
Concentration: 4.276 ug/L

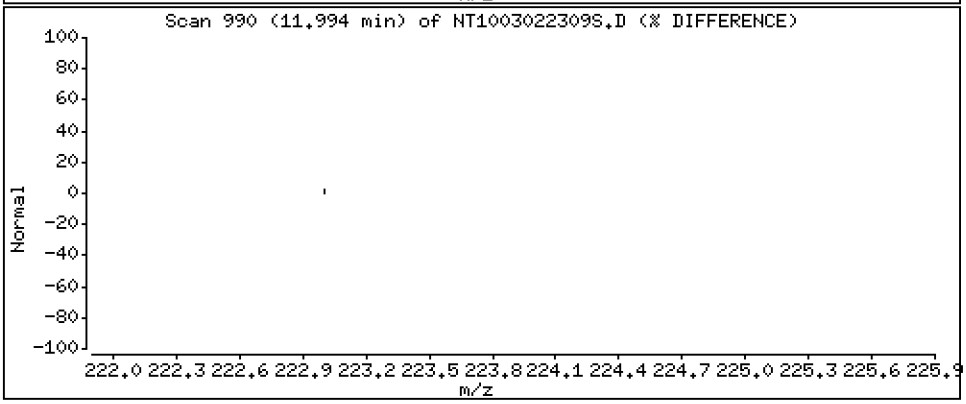












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Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

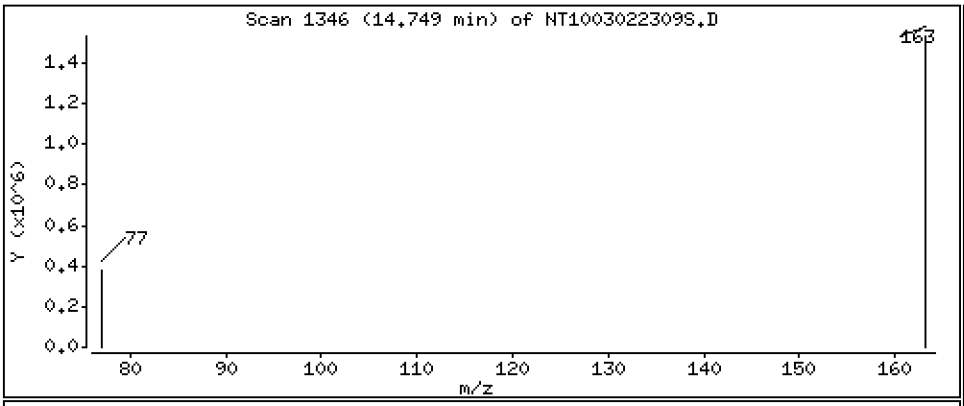
Operator: JGR

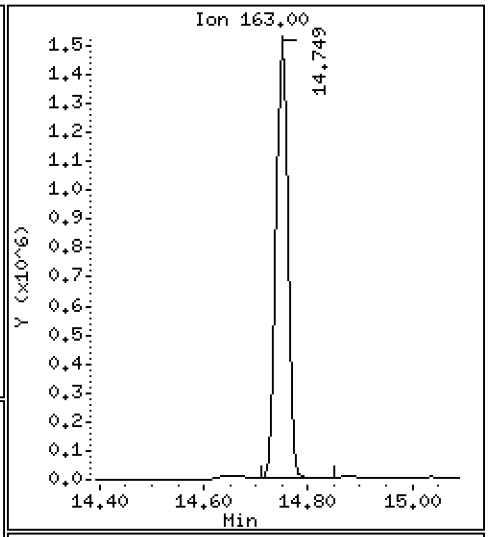
Column phase: ZB-5msi

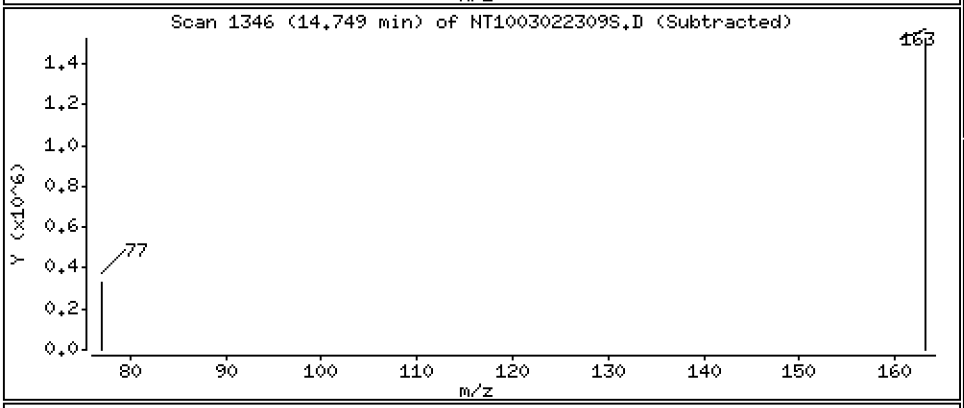
Column diameter: 0.25

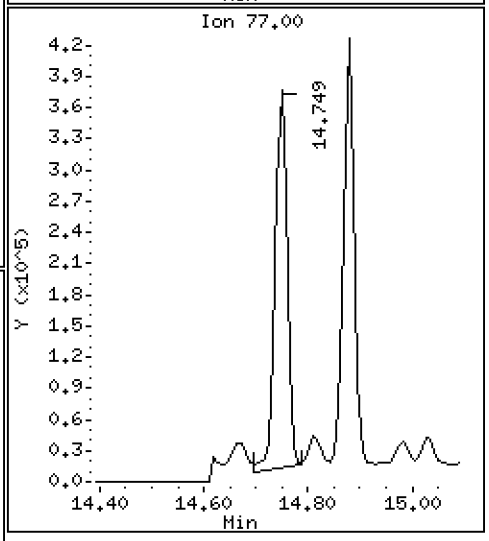
39 Dimethylphthalate

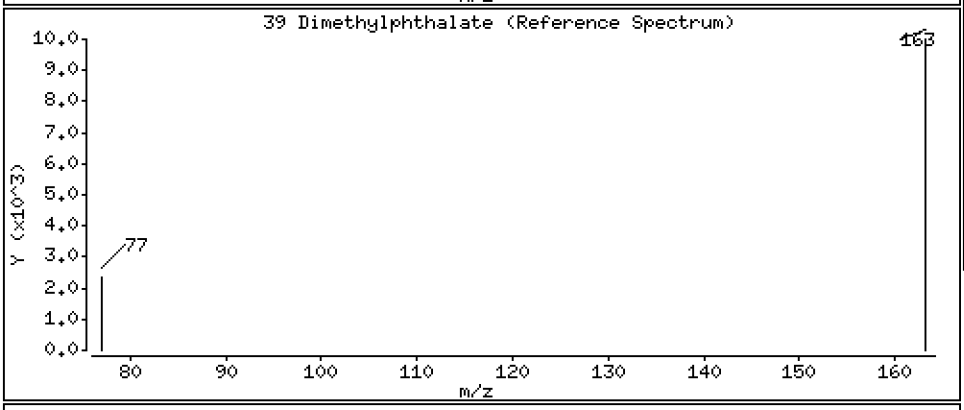
Concentration: 5.604 ug/L

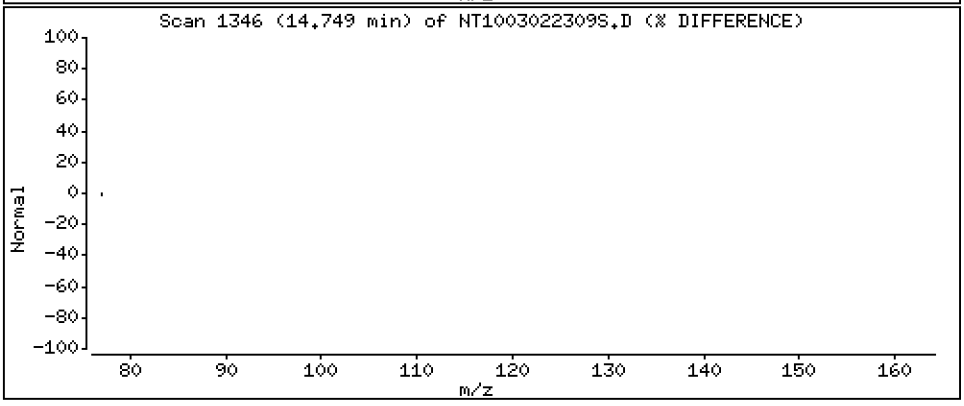












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Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

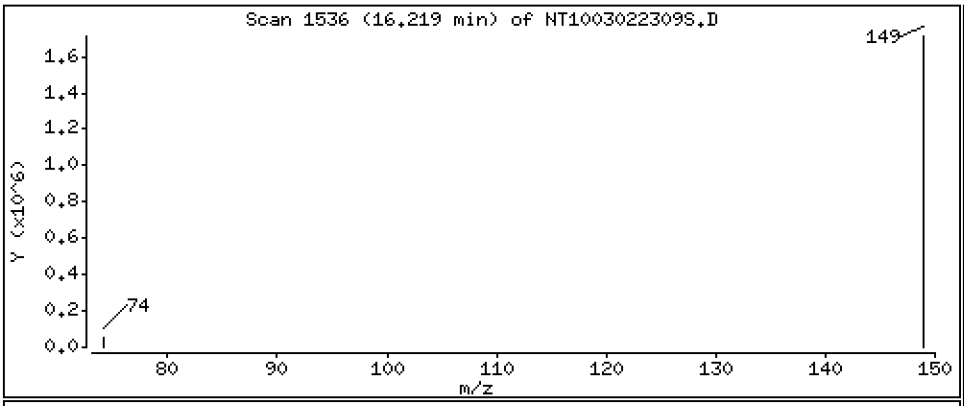
Operator: JGR

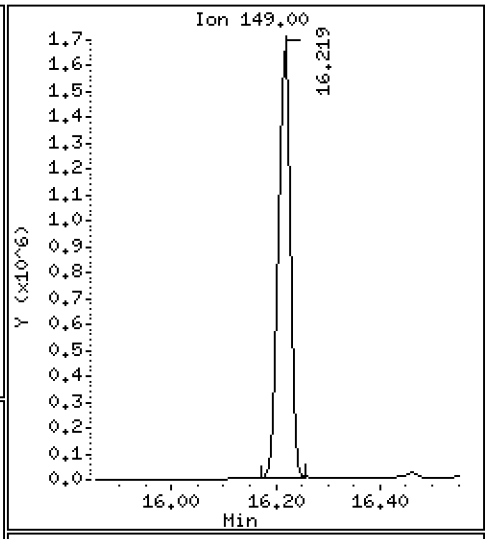
Column phase: ZB-5msi

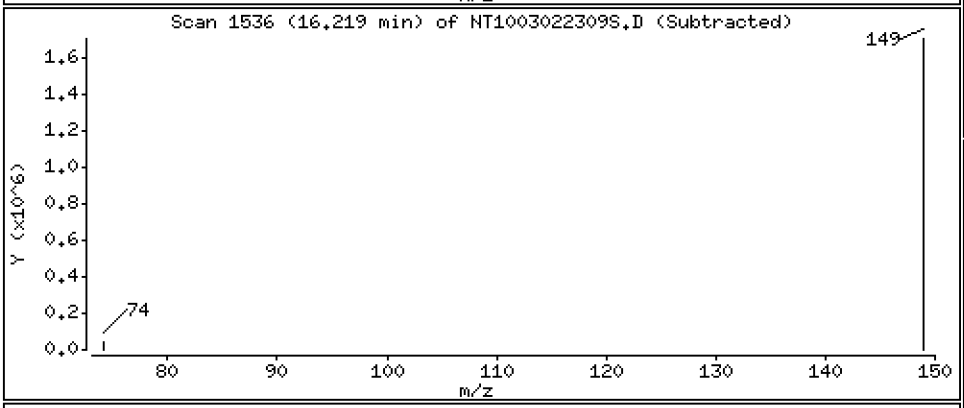
Column diameter: 0.25

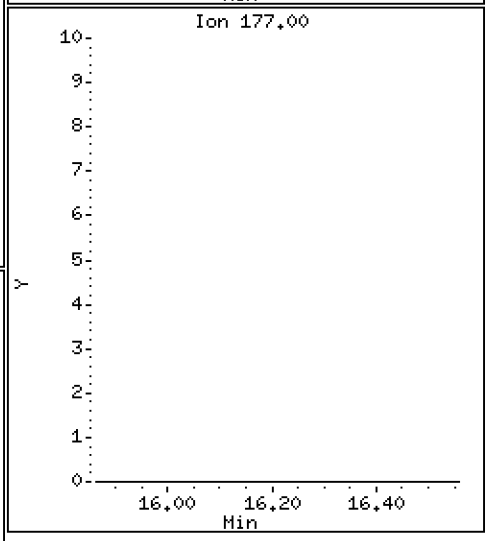
50 Diethylphthalate

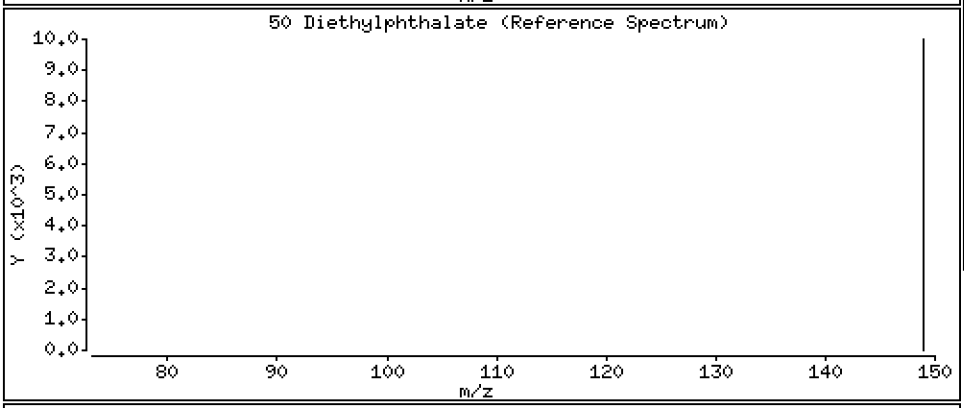
Concentration: 6.811 ug/L

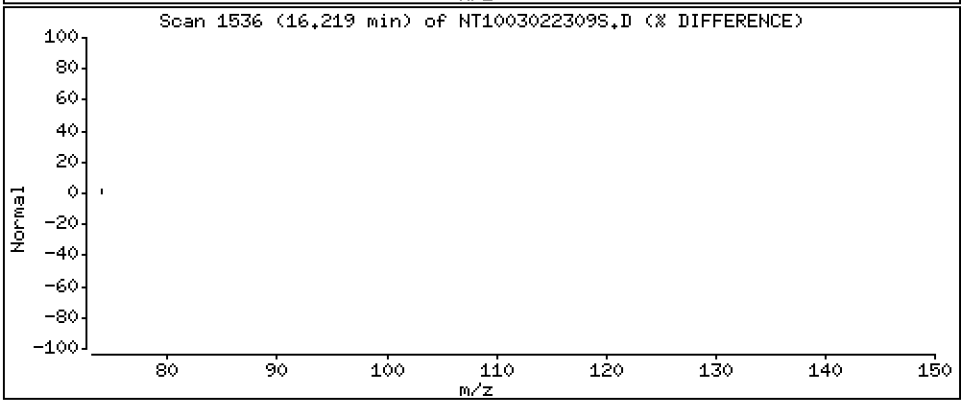












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Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

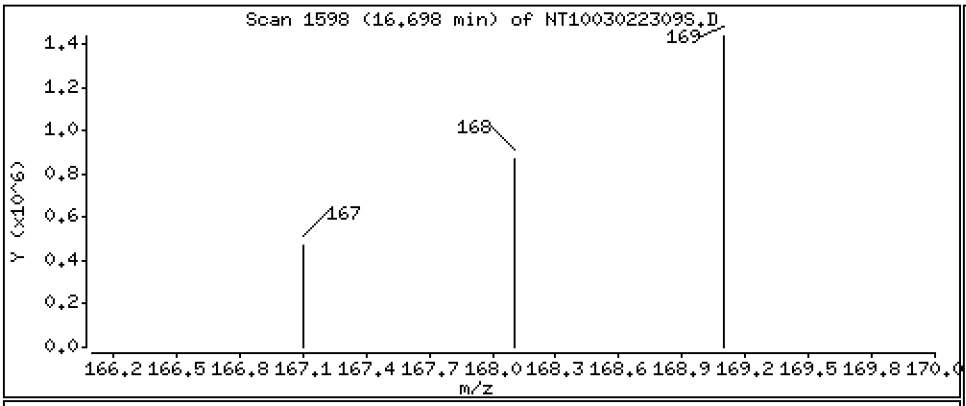
Operator: JGR

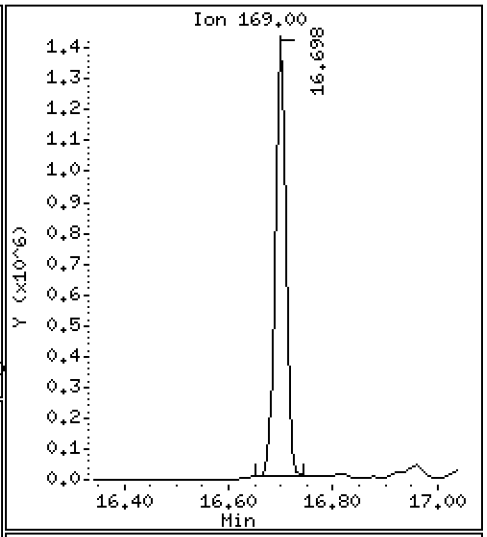
Column phase: ZB-5msi

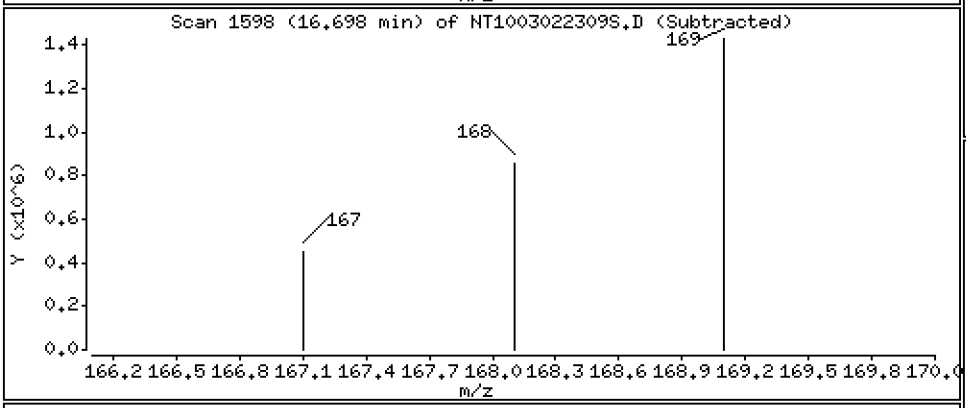
Column diameter: 0.25

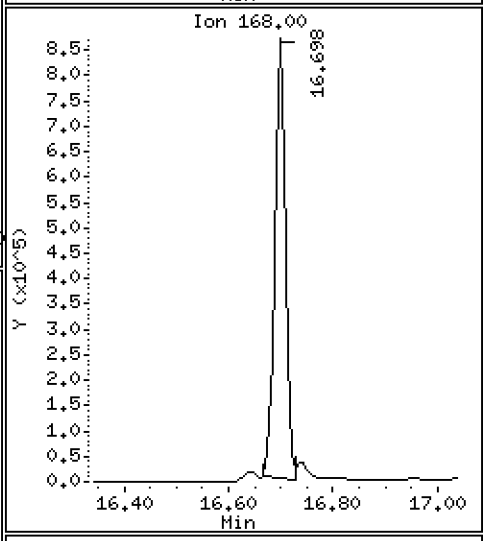
54 N-Nitrosodiphenylamine

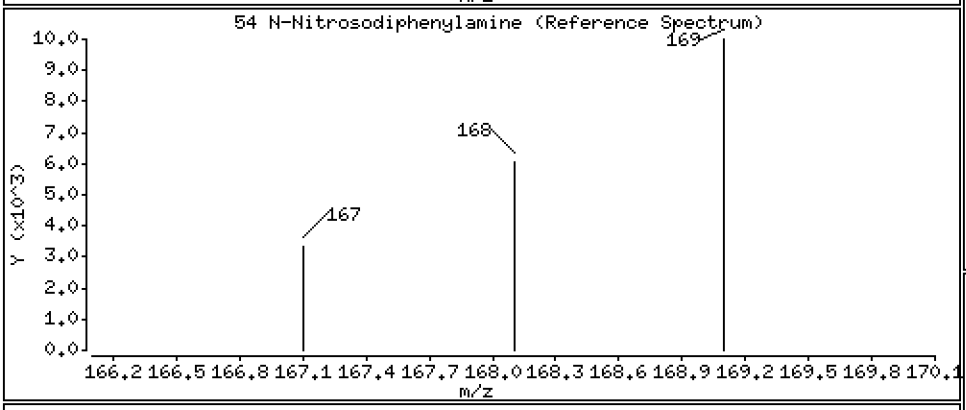
Concentration: 4.515 ug/L

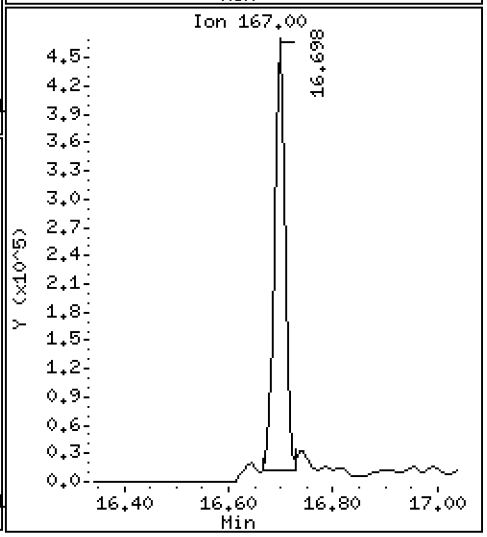


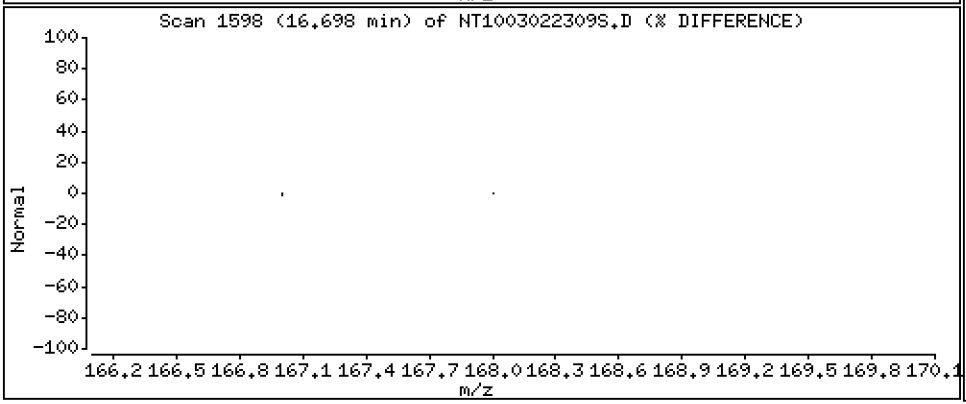












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Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

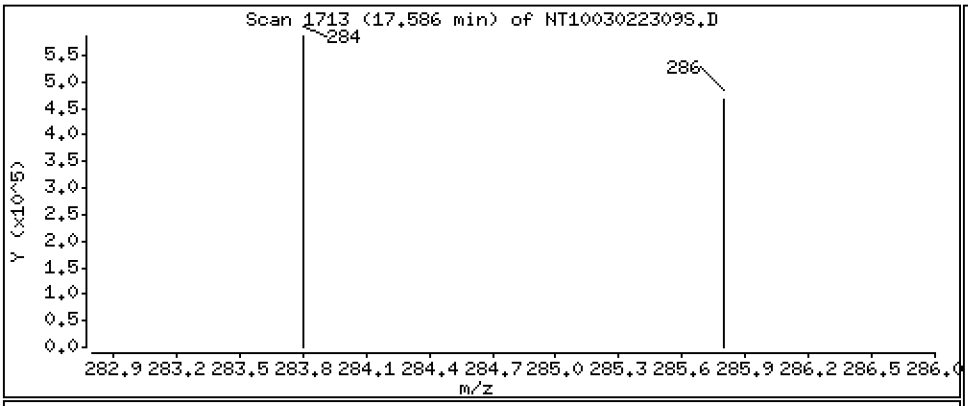
Operator: JGR

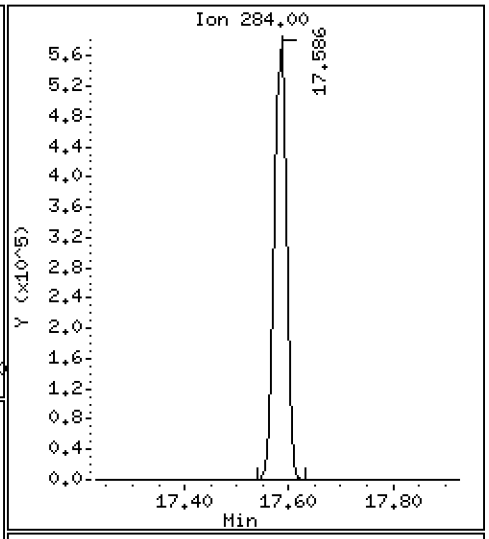
Column phase: ZB-5msi

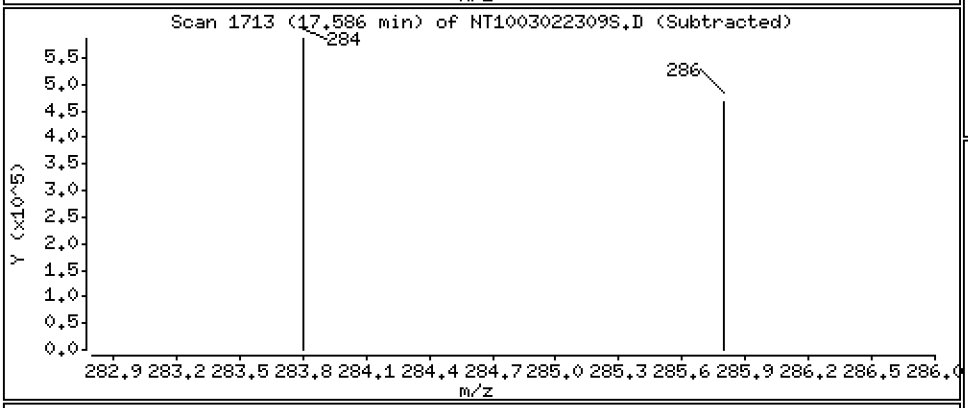
Column diameter: 0.25

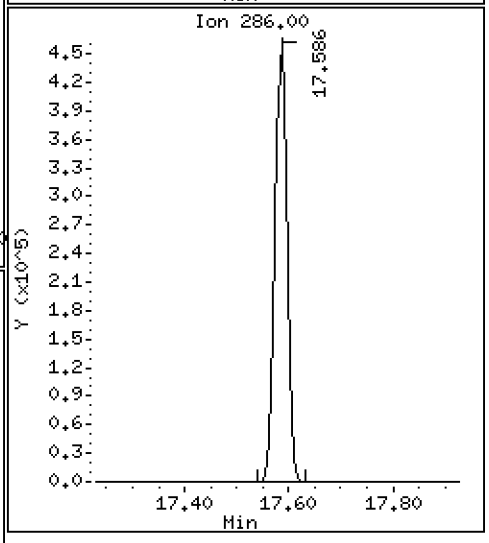
57 Hexachlorobenzene

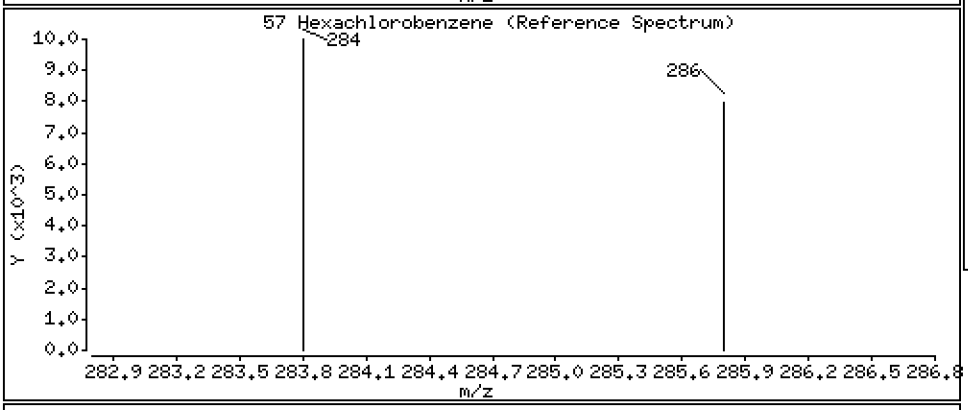
Concentration: 4.208 ug/L

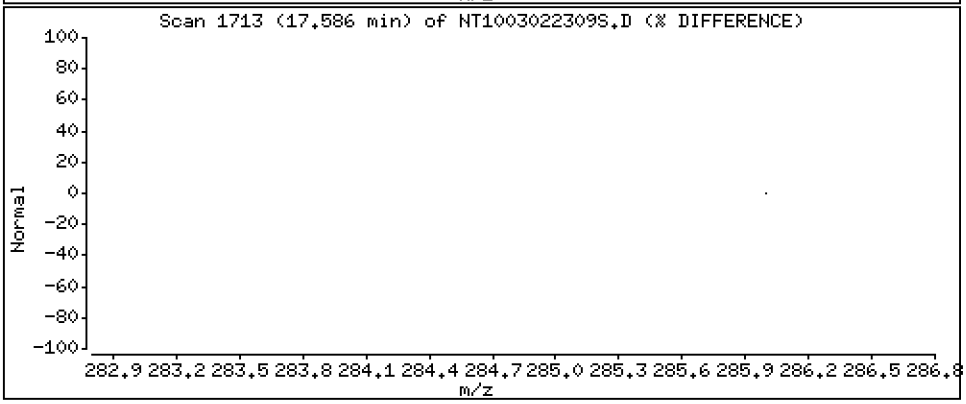












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022309S.D

Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

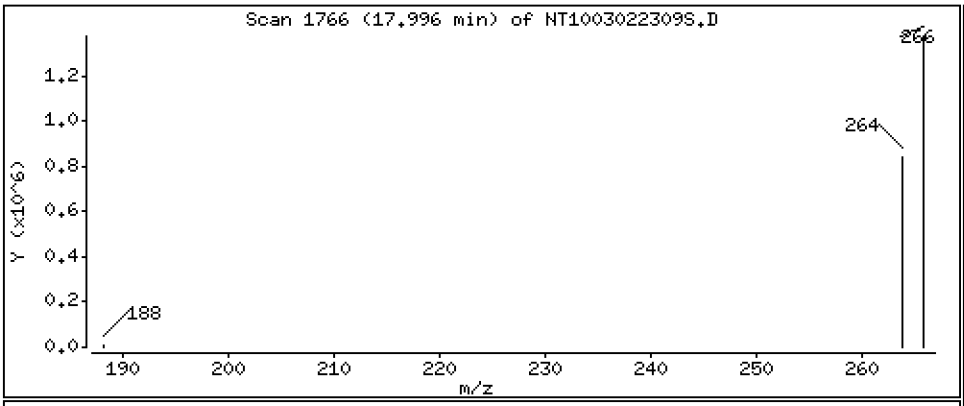
Operator: JGR

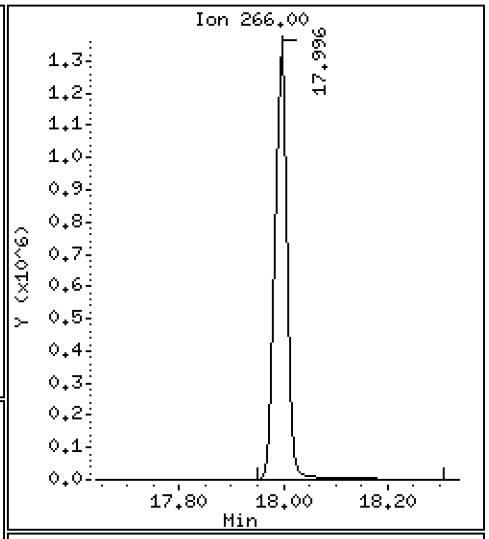
Column phase: ZB-5msi

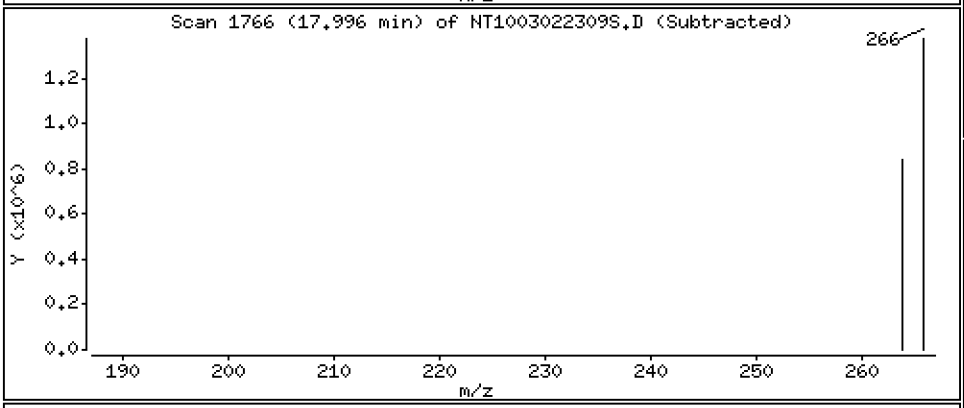
Column diameter: 0.25

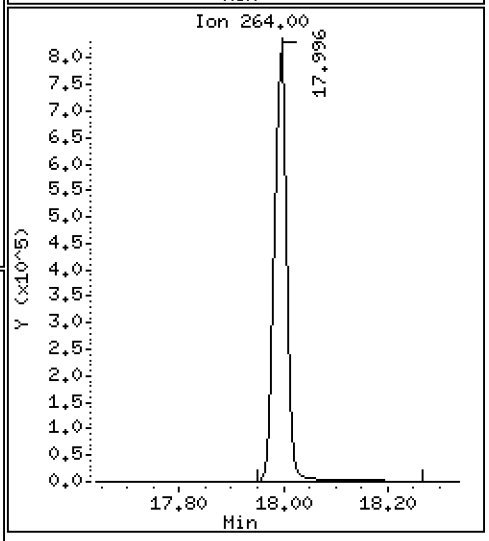
58 Pentachlorophenol

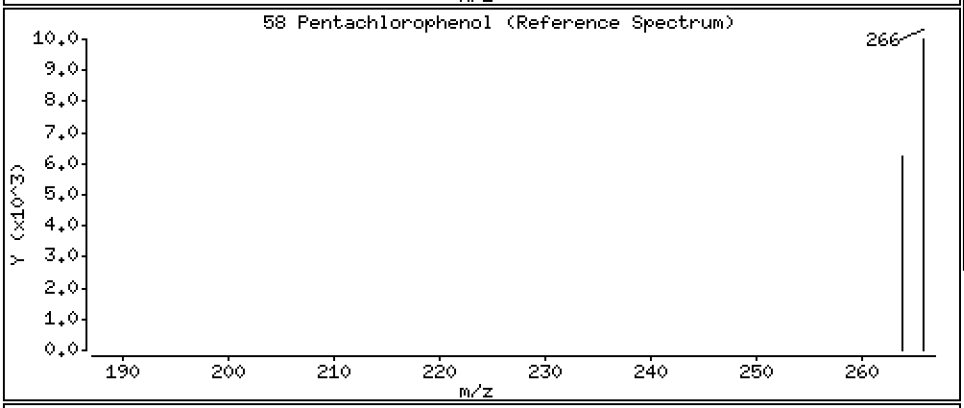
Concentration: 17.86 ug/L

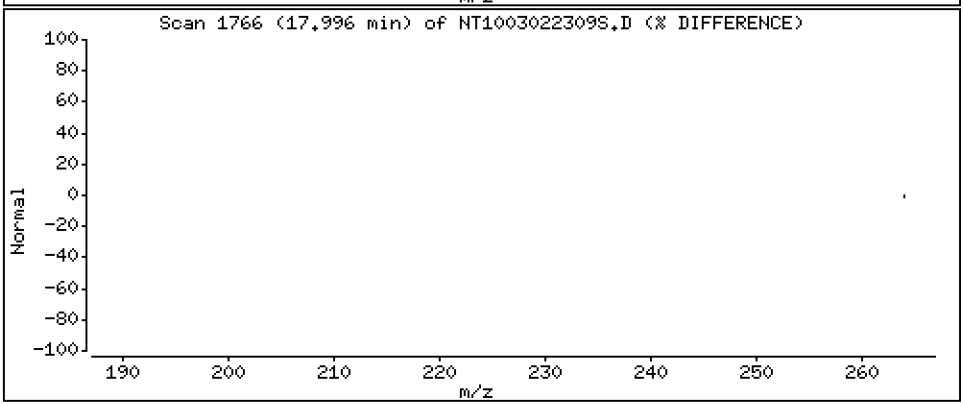












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022309S.D

Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

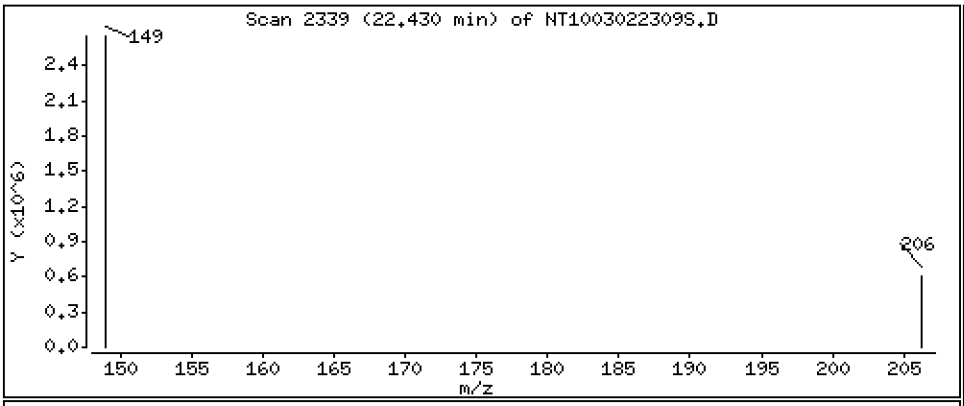
Operator: JGR

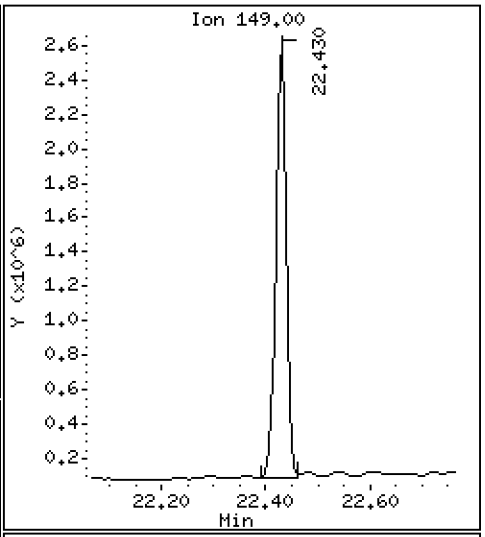
Column phase: ZB-5msi

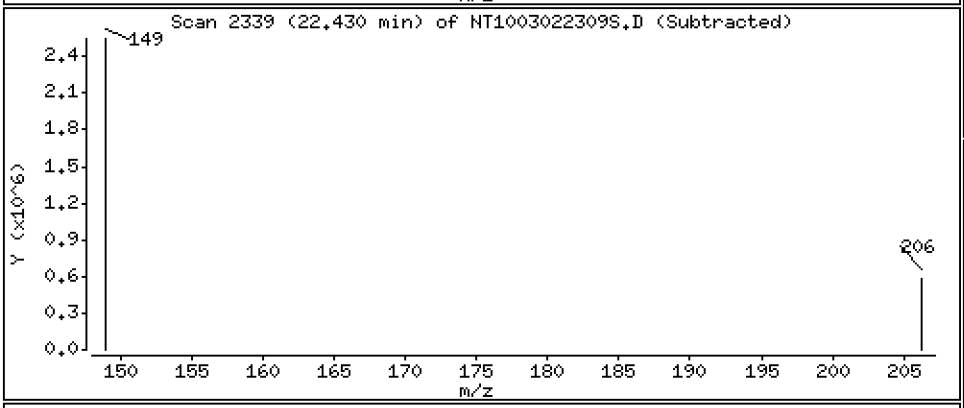
Column diameter: 0.25

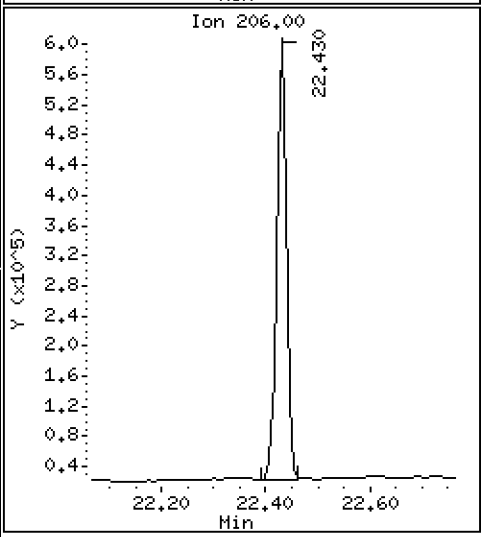
67 Butylbenzylphthalate

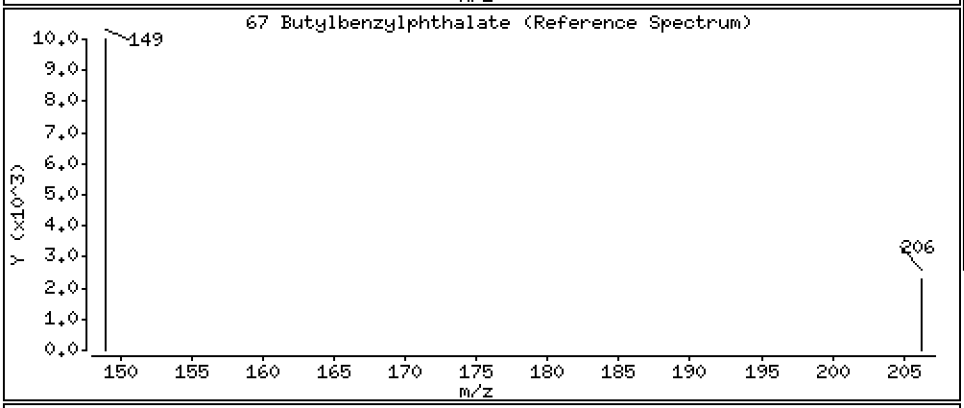
Concentration: 5.046 ug/L

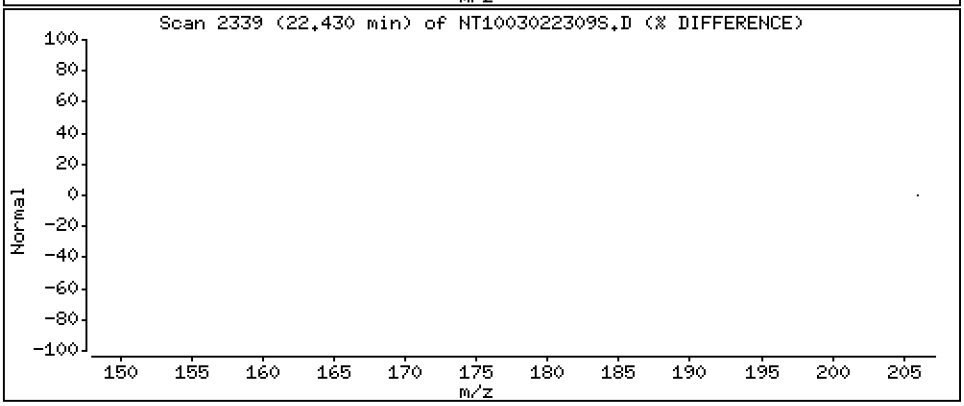












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022309S.D

Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

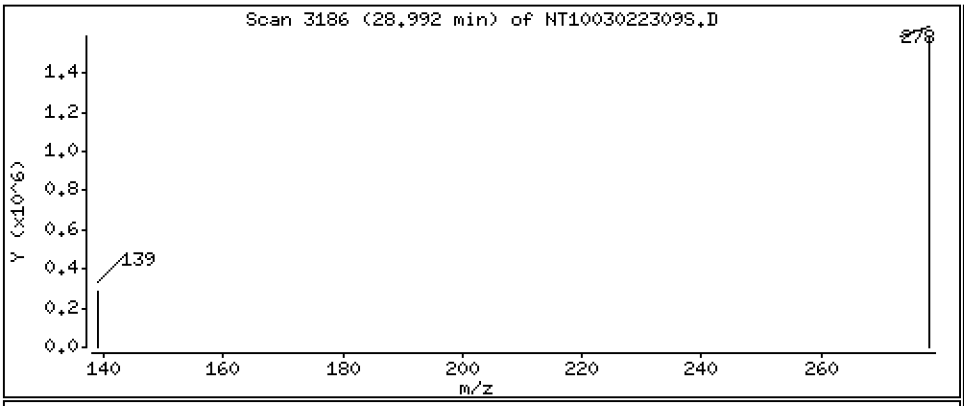
Operator: JGR

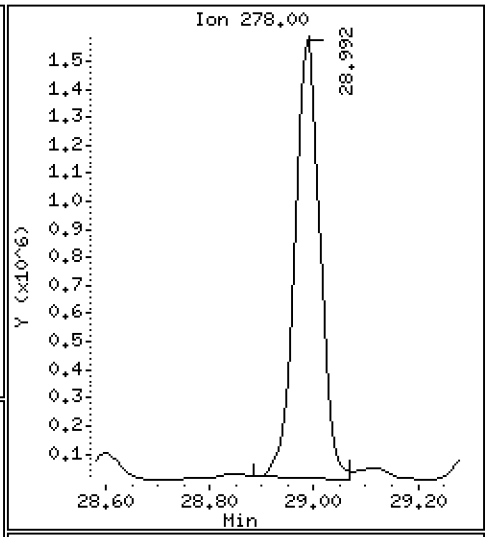
Column phase: ZB-5msi

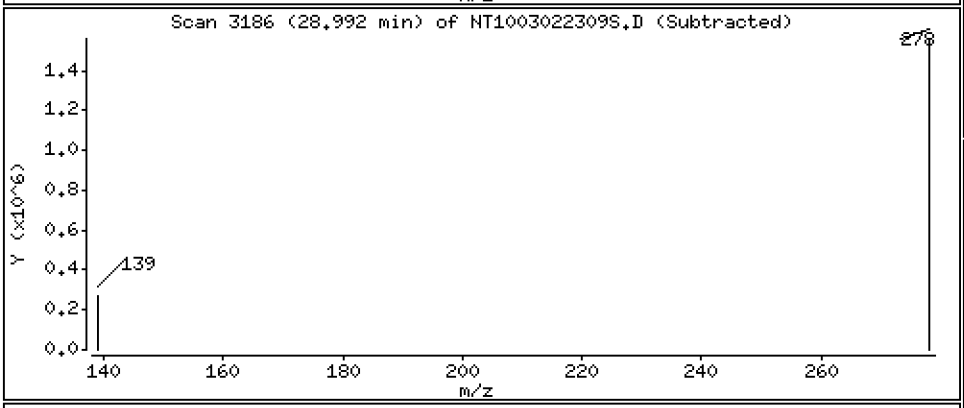
Column diameter: 0.25

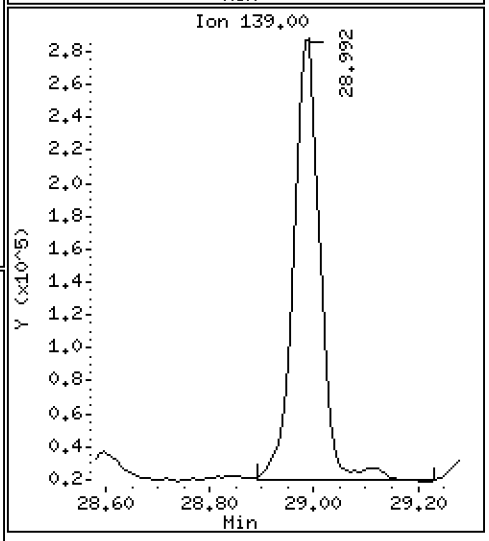
79 Dibenzo(a,h)anthracene

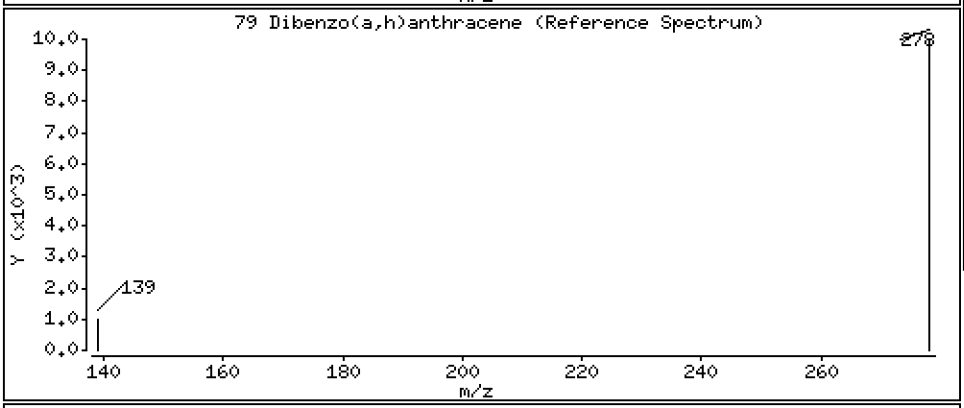
Concentration: 5.564 ug/L

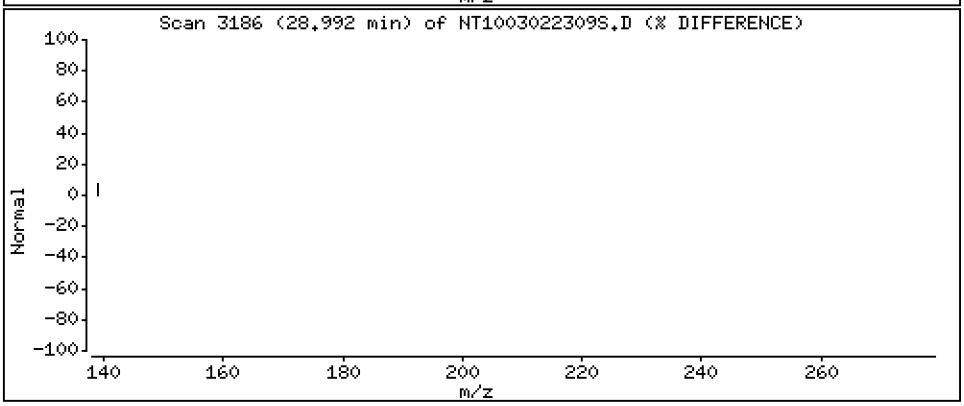












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022309S.D

Date : 02-MAR-2023 19:28

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MS1

Volume Injected (uL): 1.0

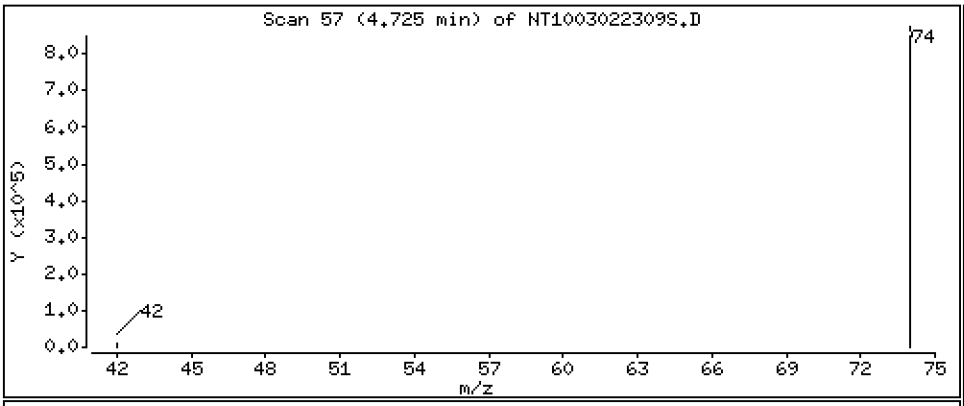
Operator: JGR

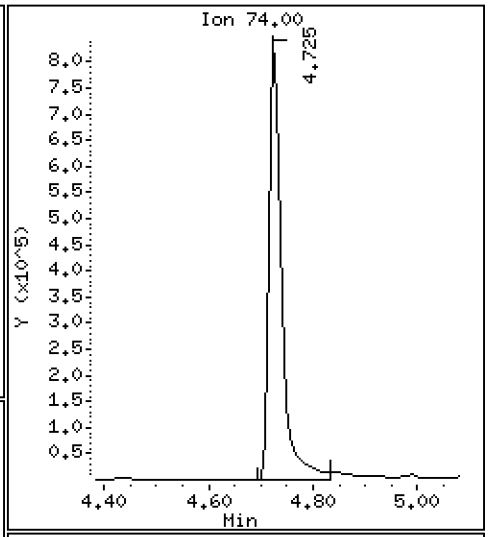
Column phase: ZB-5msi

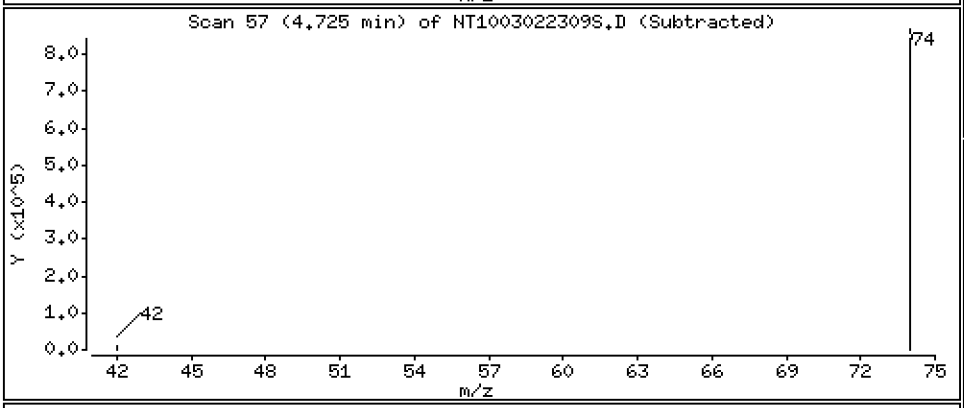
Column diameter: 0.25

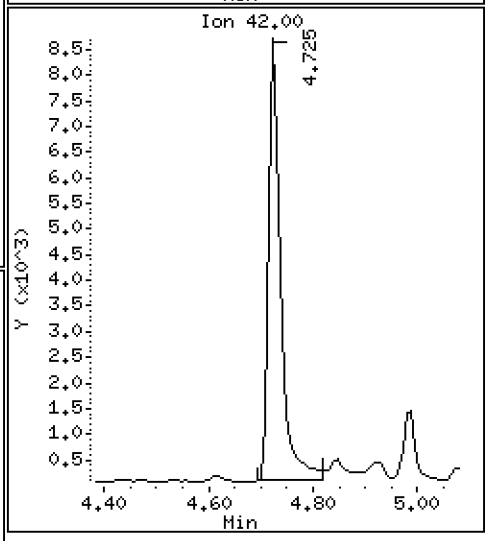
90 N-Nitrosodimethylamine

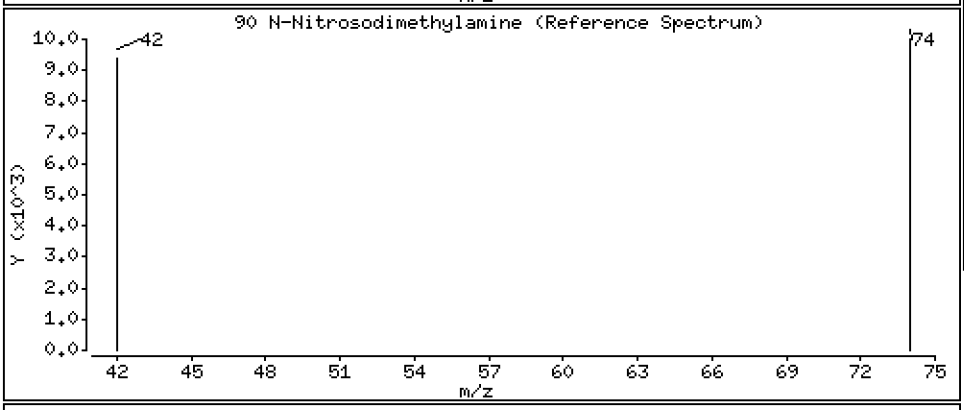
Concentration: 12.55 ug/L

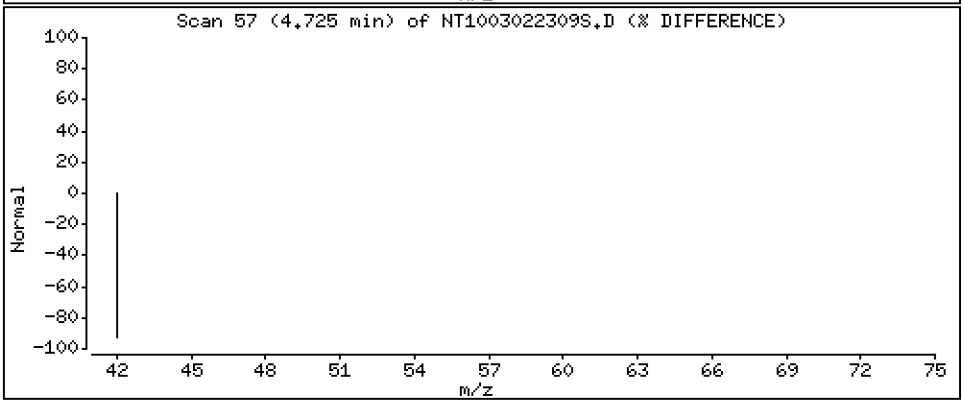












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022309S.D
Lab Smp Id: BLA0624-MS1
Inj Date : 02-MAR-2023 19:28 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLA0624-MS1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 14:53 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.902	6.902	(0.746)	1194756	6.49831	6.498(R)
3	Phenol	94	8.524	8.517	(0.921)	3395493	11.7302	11.73
7	1,3-Dichlorobenzene	146	9.143	9.143	(0.988)	971170	4.06910	4.069
* 8	1,4-Dichlorobenzene-d4	152	9.251	9.251	(1.000)	643993	4.00000	
9	1,4-Dichlorobenzene	146	9.283	9.282	(1.003)	1054529	4.54444	4.544
11	Benzyl alcohol	79	9.476	9.476	(1.024)	691784	4.33648	4.336
12	1,2-Dichlorobenzene	146	9.562	9.562	(1.034)	955792	4.28533	4.285
13	2-Methylphenol	108	9.655	9.655	(1.044)	737264	4.35670	4.357
15	4-Methylphenol	108	9.950	9.942	(1.076)	905455	5.03862	5.039
16	N-Nitroso-di-n-propylamine	70	9.981	9.981	(1.079)	636272	5.16650	5.166
22	2,4-Dimethylphenol	107	11.006	10.997	(0.939)	2870668	13.6862	13.69
24	Benzoic acid	105	11.167	11.074	(0.953)	2905227	22.8756	22.88
26	1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	770771	4.51064	4.511
* 27	Naphthalene-d8	136	11.723	11.723	(1.000)	2374110	4.00000	
30	Hexachlorobutadiene	225	11.994	11.994	(1.023)	518561	4.27638	4.276
39	Dimethylphthalate	163	14.749	14.741	(0.963)	2238742	5.60374	5.604
* 42	Acenaphthene-d10	162	15.321	15.314	(1.000)	1258198	4.00000	
50	Diethylphthalate	149	16.218	16.203	(1.059)	2566058	6.81103	6.811
54	N-Nitrosodiphenylamine	169	16.698	16.690	(0.907)	2048541	4.51502	4.515
57	Hexachlorobenzene	284	17.586	17.578	(0.955)	893428	4.20768	4.208

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	17.996	17.988	(0.977)	2148596	17.8641	17.86
*	59 Phenanthrene-d10	188	18.414	18.406	(1.000)	2803544	4.00000	
$	66 Terphenyl-d14	244	21.547	21.532	(0.919)	1562782	4.56601	4.566(R)
	67 Butylbenzylphthalate	149	22.430	22.414	(0.957)	3541090	5.04637	5.046
*	69 Chrysene-d12	240	23.444	23.421	(1.000)	4232445	4.00000	
*	77 Perylene-d12	264	26.146	26.115	(1.000)	3782979	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.992	28.929	(1.109)	5329678	5.56366	5.564
	90 N-Nitrosodimethylamine	74	4.724	4.732	(0.511)	1366021	12.5494	12.55

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003022309S.D
Lab Smp Id: BLA0624-MS1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 02-MAR-2023
Calibration Time: 14:13
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT				
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF	
8 1,4-Dichlorobenze	493417	246709	986834	643993	30.52	
27 Naphthalene-d8	1779056	889528	3558112	2374110	33.45	
42 Acenaphthene-d10	954569	477285	1909138	1258198	31.81	
59 Phenanthrene-d10	1596290	798145	3192580	2803544	75.63	
69 Chrysene-d12	1649110	824555	3298220	4232445	156.65	<-
77 Perylene-d12	1901958	950979	3803916	3782979	98.90	

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.04
69 Chrysene-d12	23.42	22.92	23.92	23.44	0.10
77 Perylene-d12	26.12	25.62	26.62	26.15	0.12

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

REVIEW SUMMARY FOR FILE - NT1003022309S.D

Lab ID: BLA0624-MS1
nt10.i, 20230302.b\SIM.b\SIMABN2.m,   02-MAR-2023 19:28

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.953	0.945	0.0080	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003022303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223105.D

Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

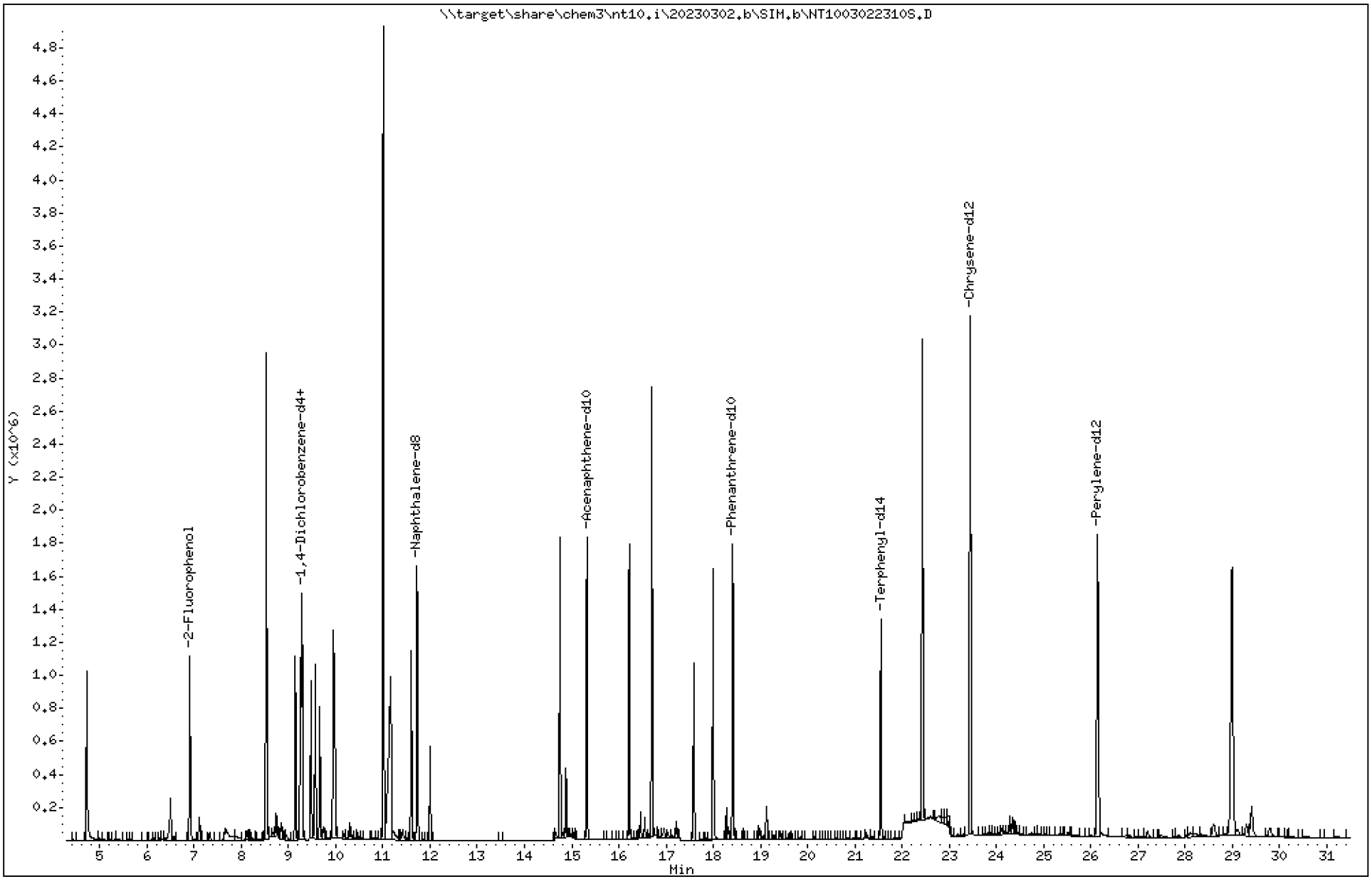
Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

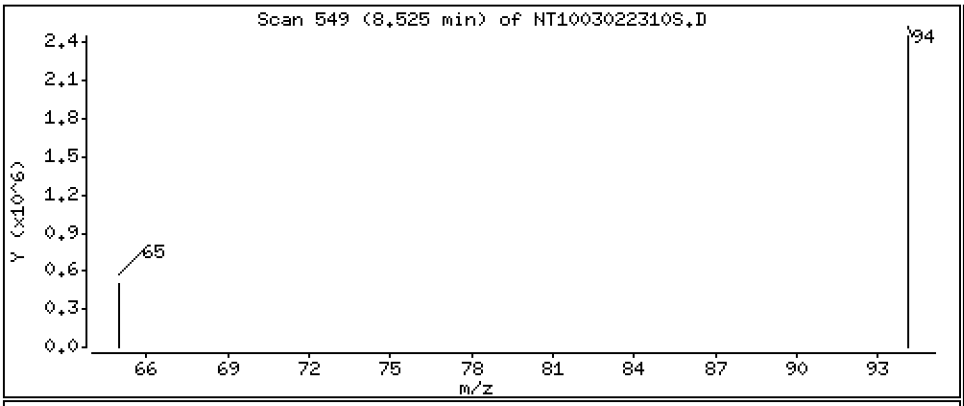
Operator: JGR

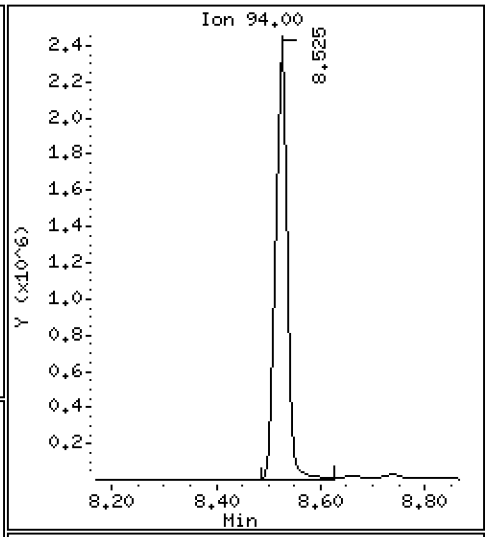
Column phase: ZB-5msi

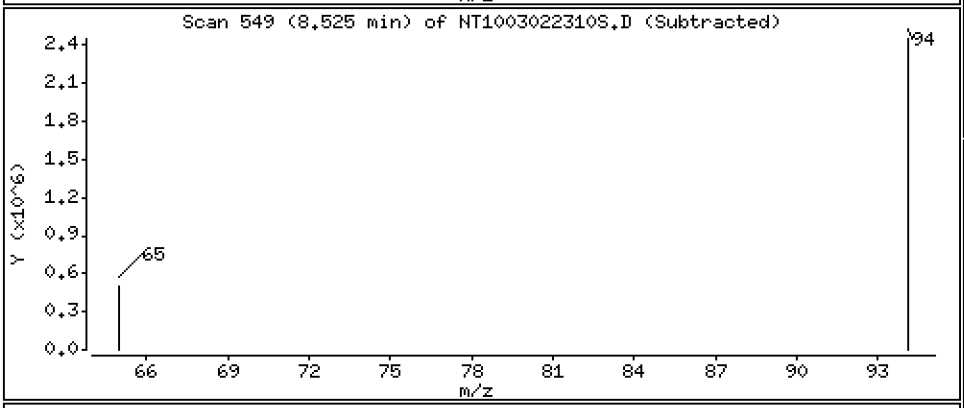
Column diameter: 0.25

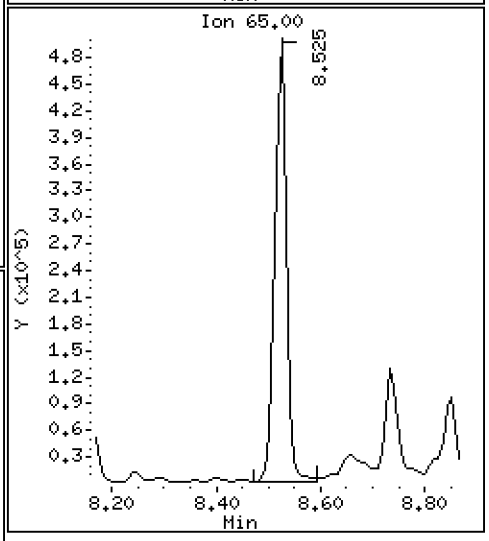
3 Phenol

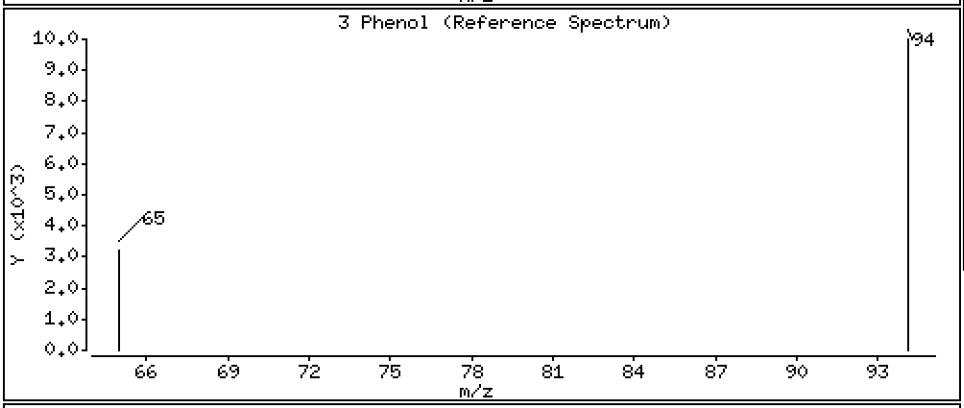
Concentration: 11.96 ug/L

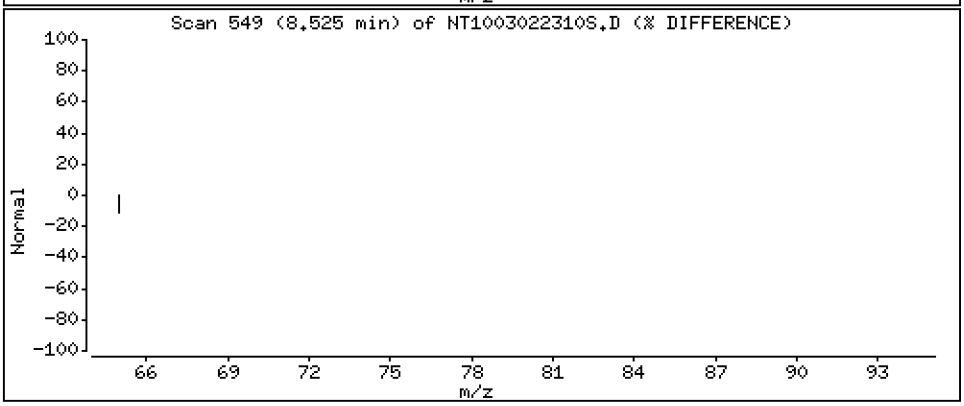












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223105.D

Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

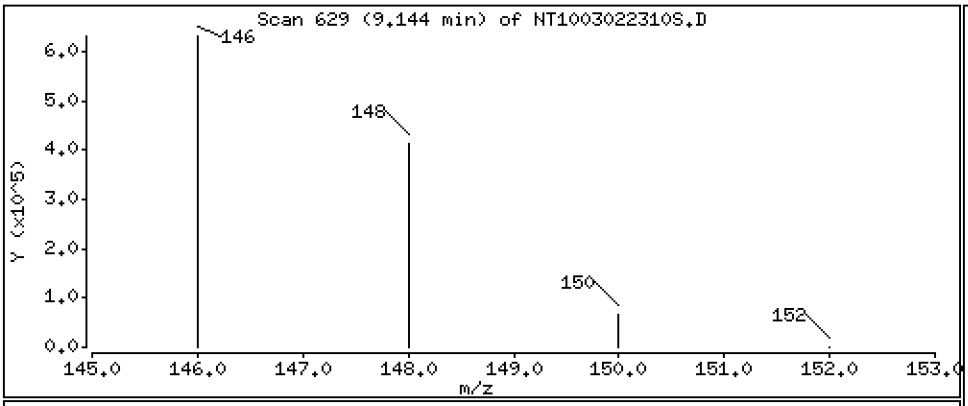
Operator: JGR

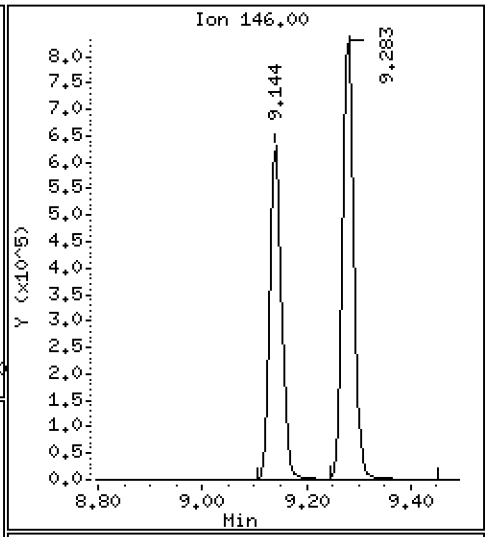
Column phase: ZB-5msi

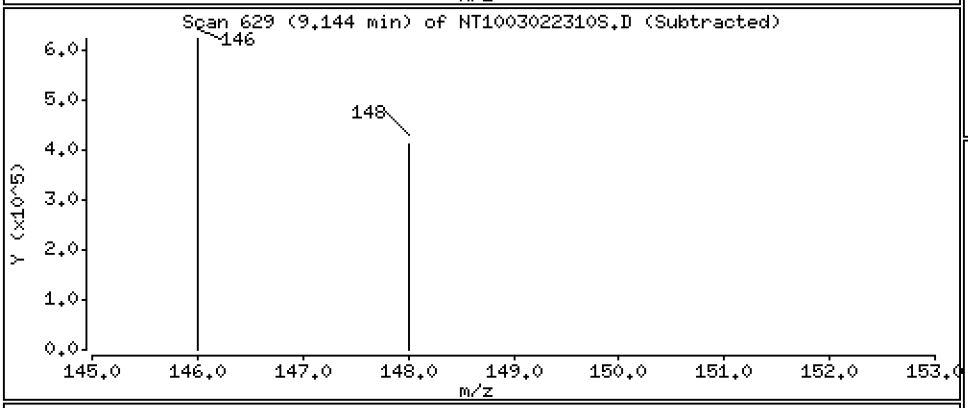
Column diameter: 0.25

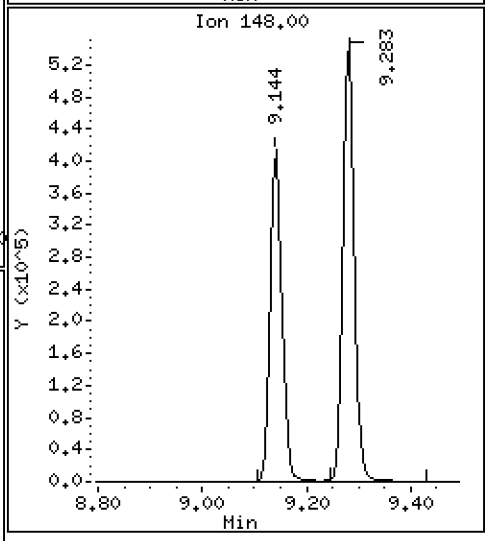
7 1,3-Dichlorobenzene

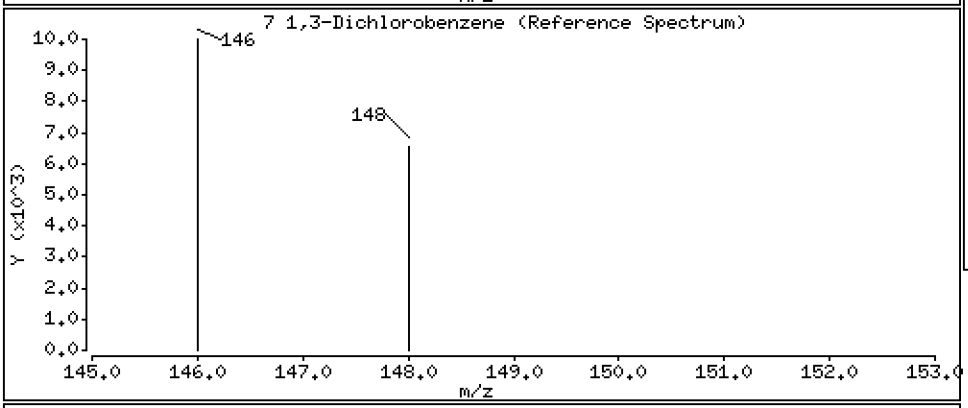
Concentration: 4.012 ug/L

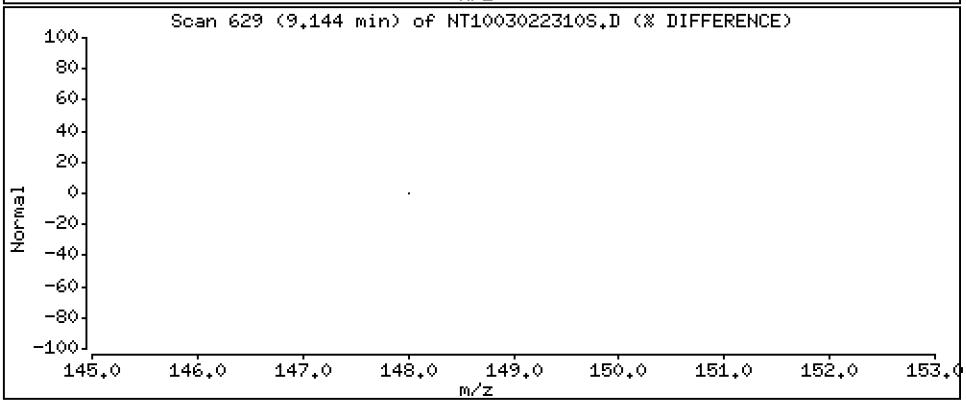












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223105.D

Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

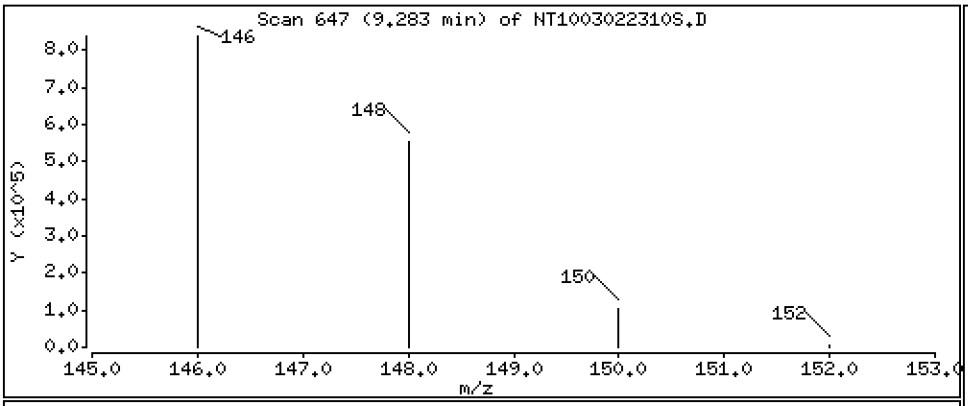
Operator: JGR

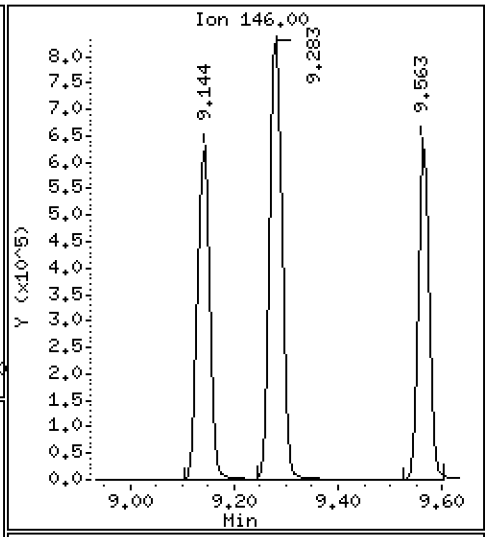
Column phase: ZB-5msi

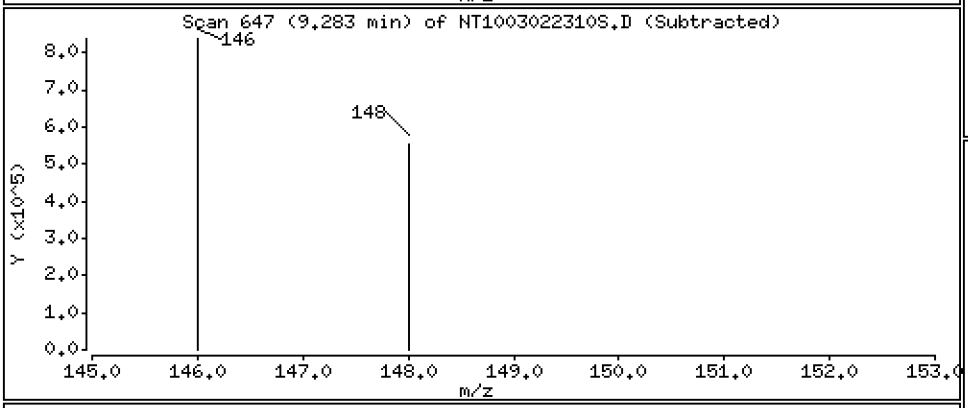
Column diameter: 0.25

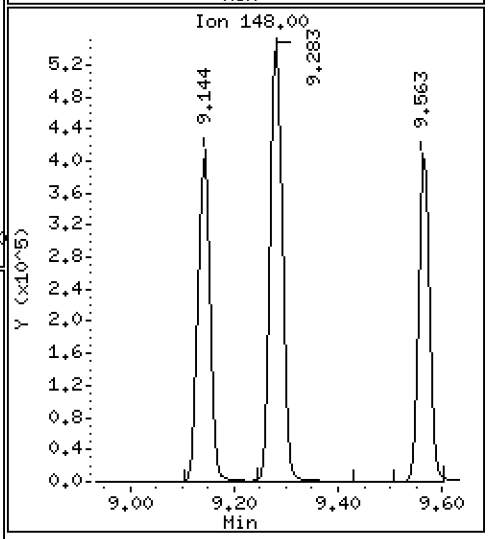
9 1,4-Dichlorobenzene

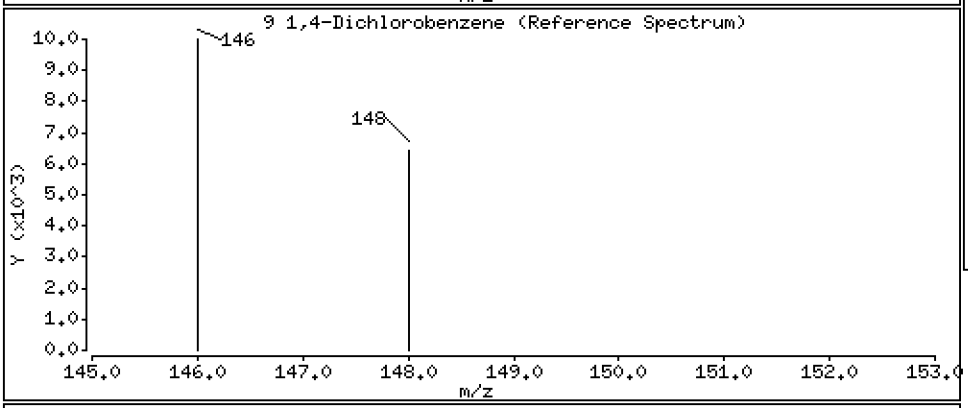
Concentration: 5.473 ug/L

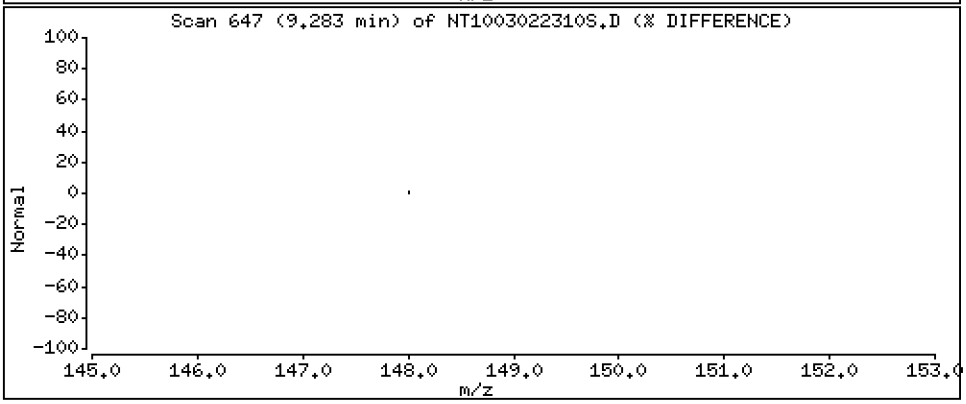












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223105.D

Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

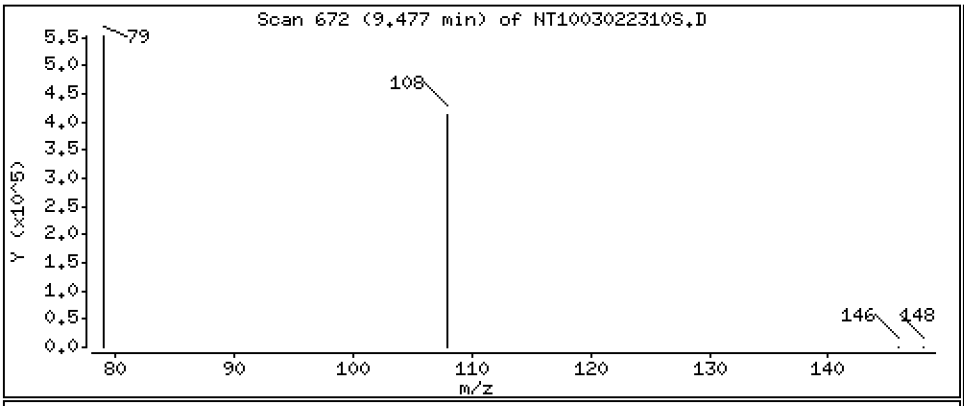
Operator: JGR

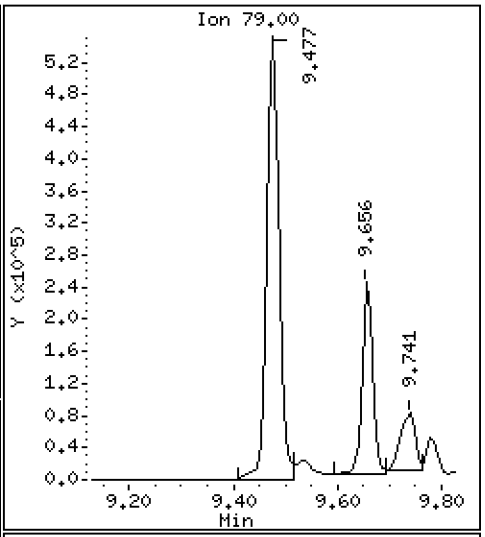
Column phase: ZB-5msi

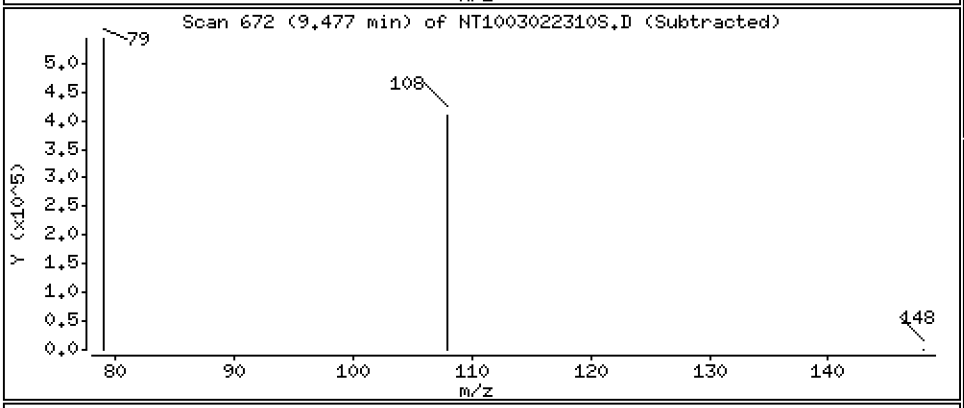
Column diameter: 0.25

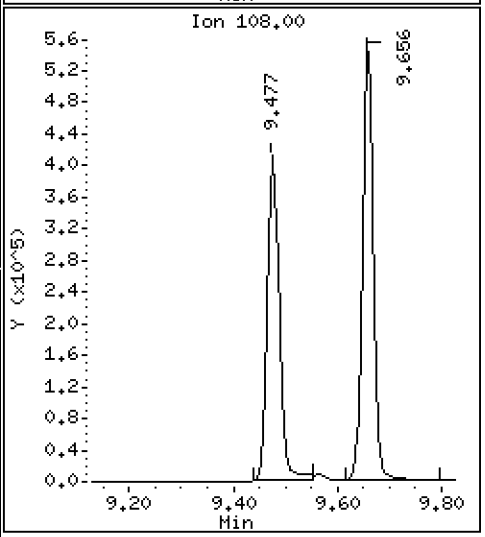
11 Benzyl alcohol

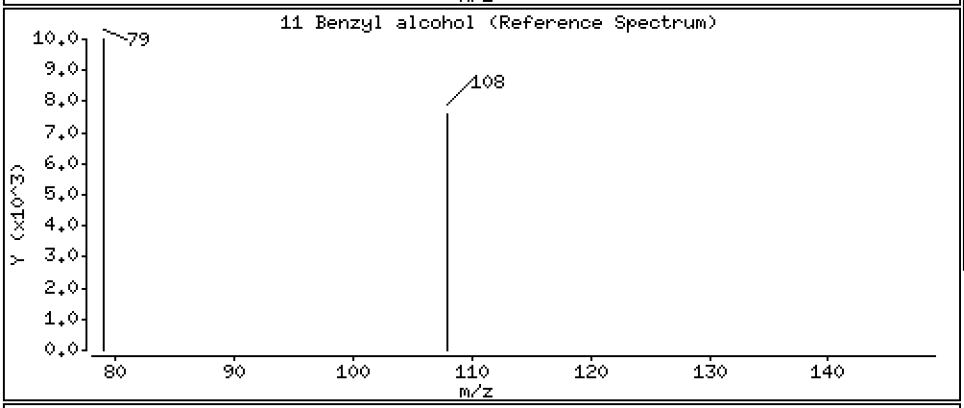
Concentration: 5.125 ug/L

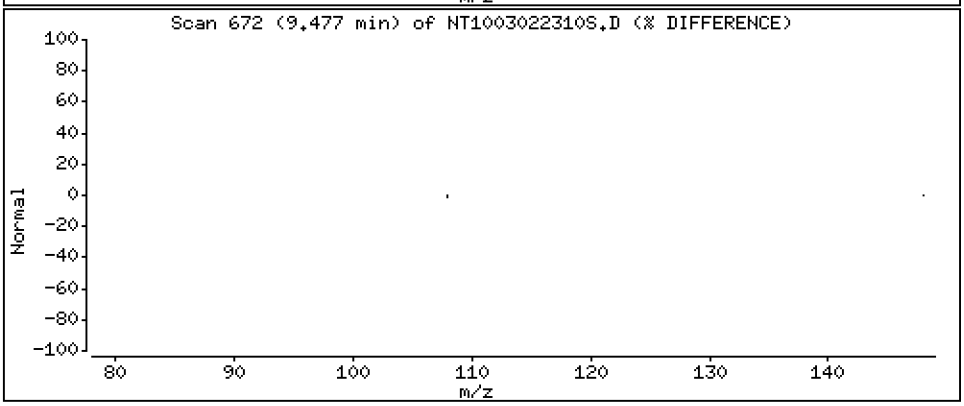












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223105.D

Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

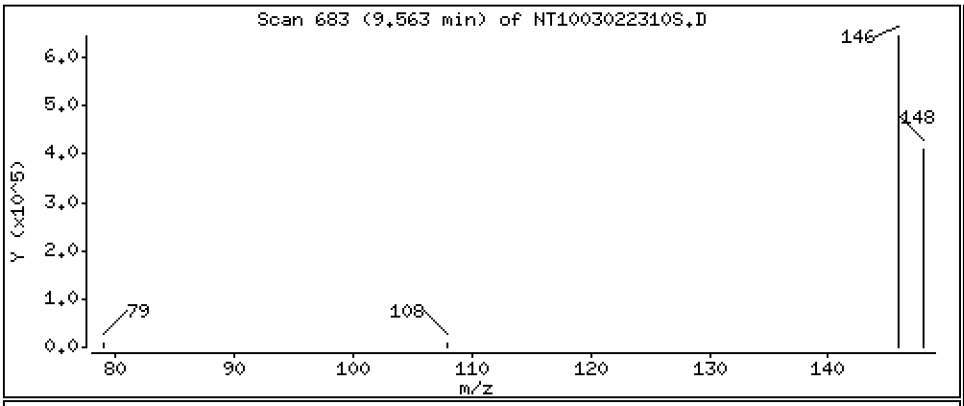
Operator: JGR

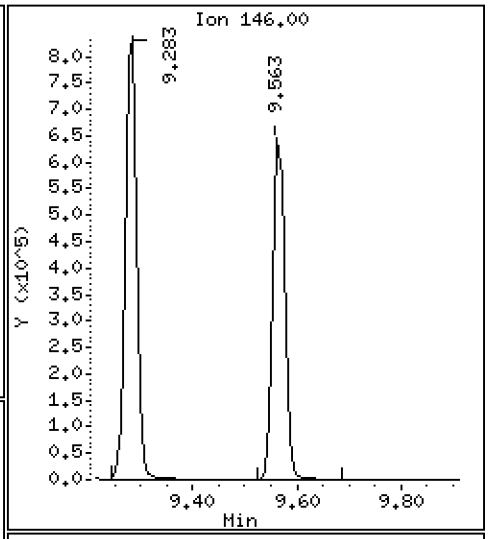
Column phase: ZB-5msi

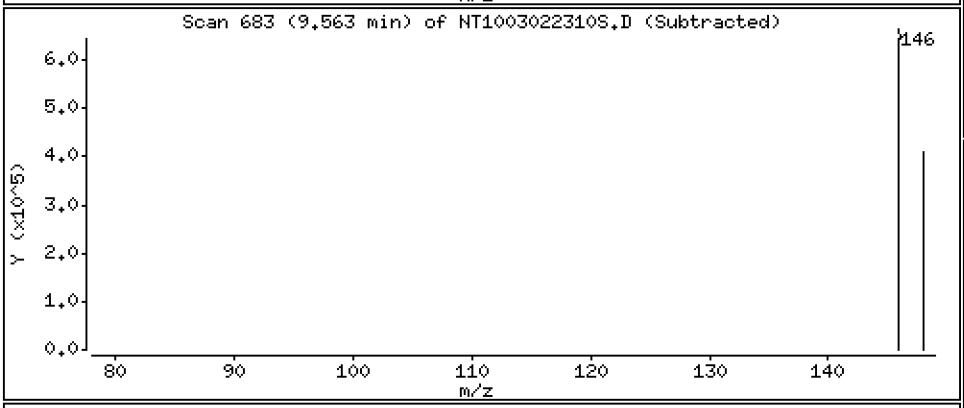
Column diameter: 0.25

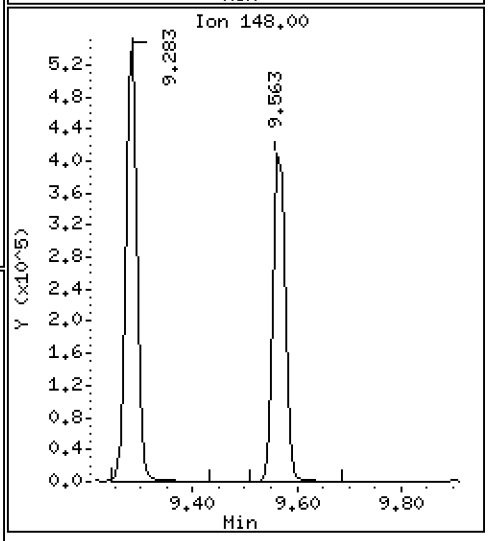
12 1,2-Dichlorobenzene

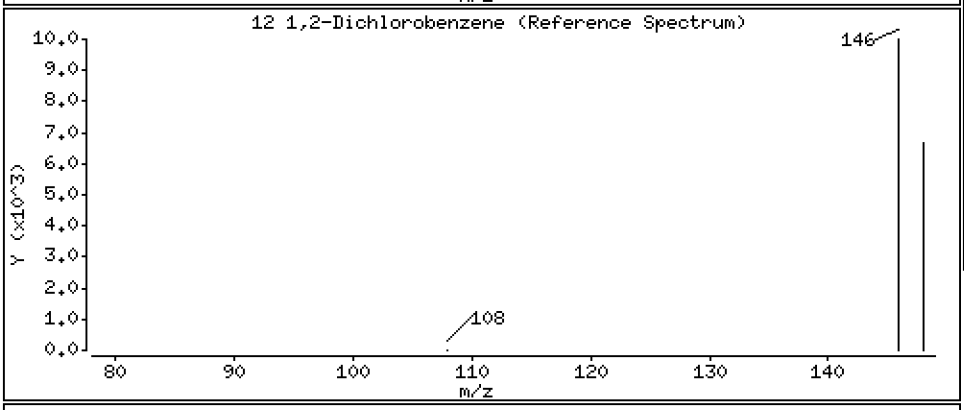
Concentration: 4.221 ug/L

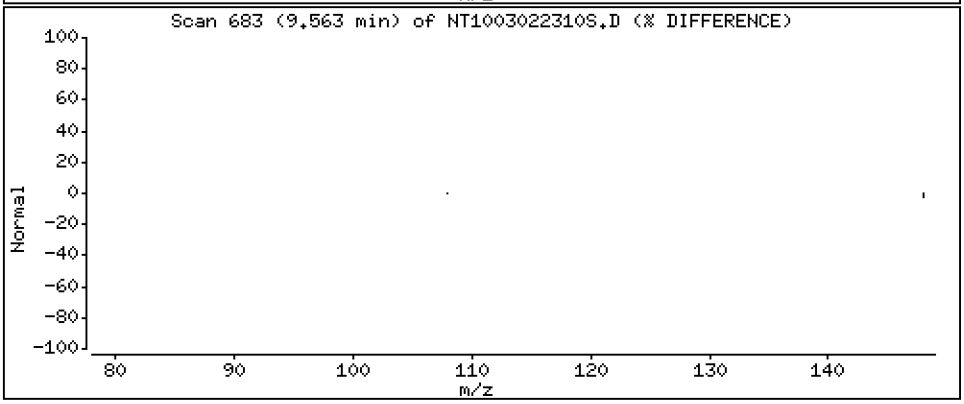












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223105.D

Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

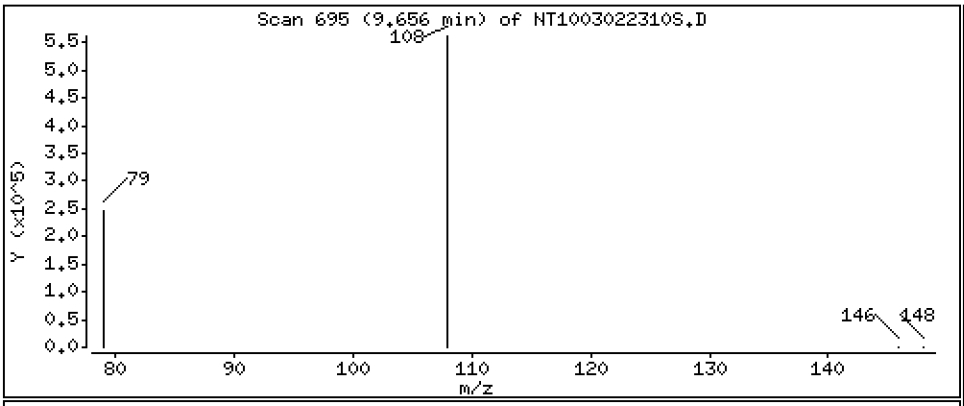
Operator: JGR

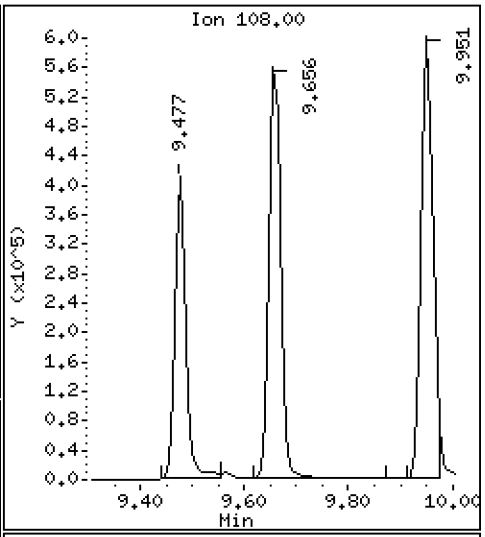
Column phase: ZB-5msi

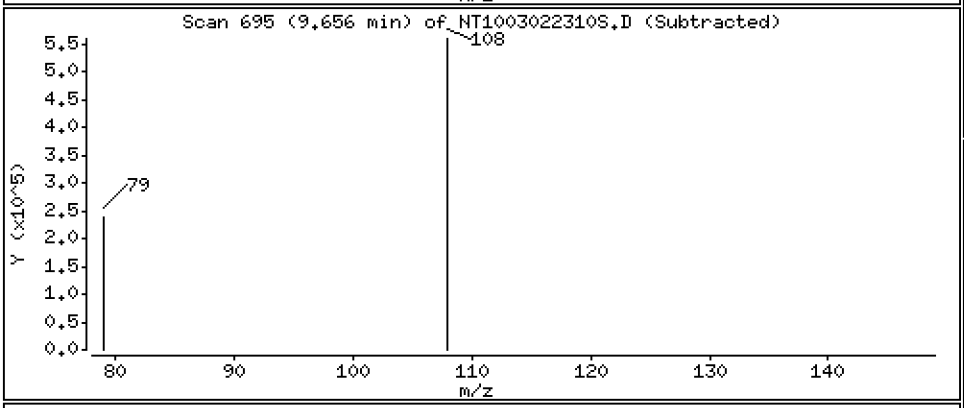
Column diameter: 0.25

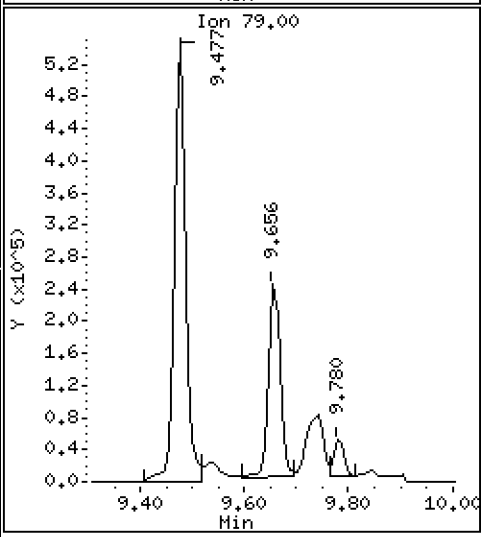
13 2-Methylphenol

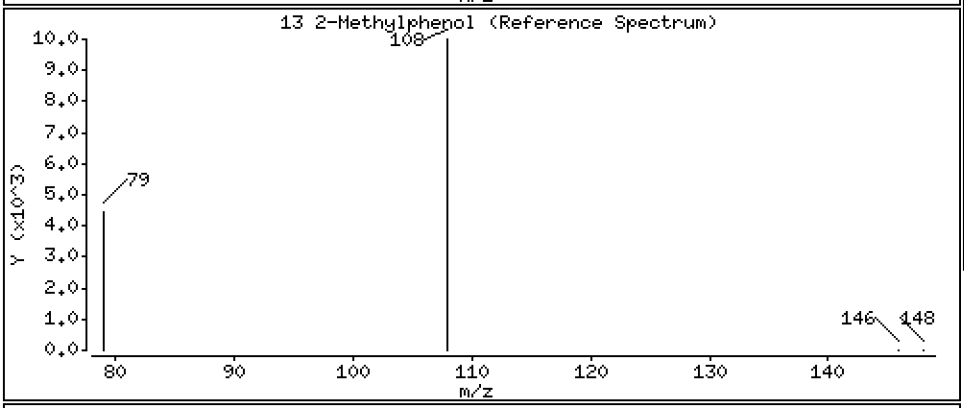
Concentration: 4.648 ug/L

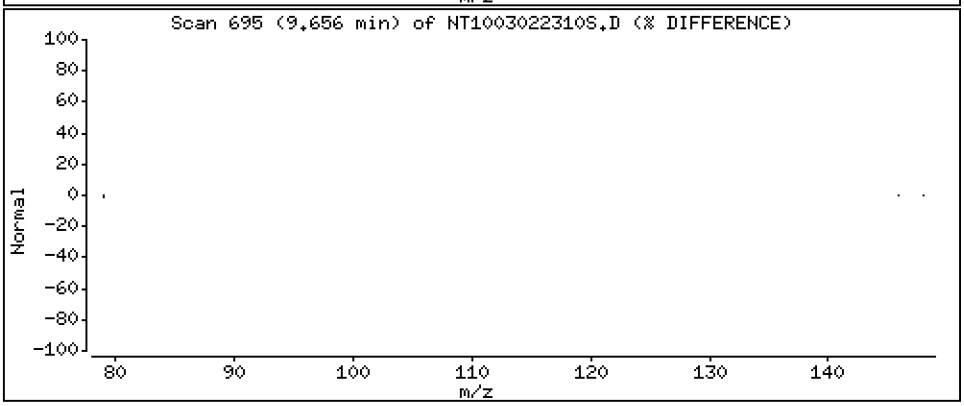












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Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

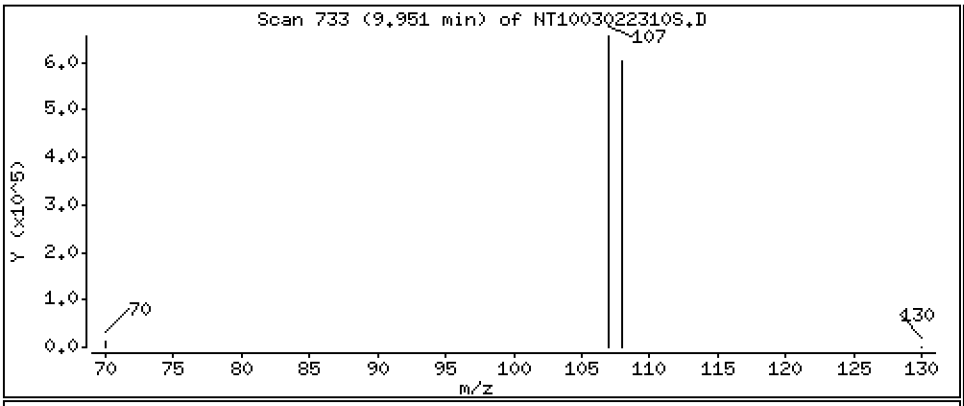
Operator: JGR

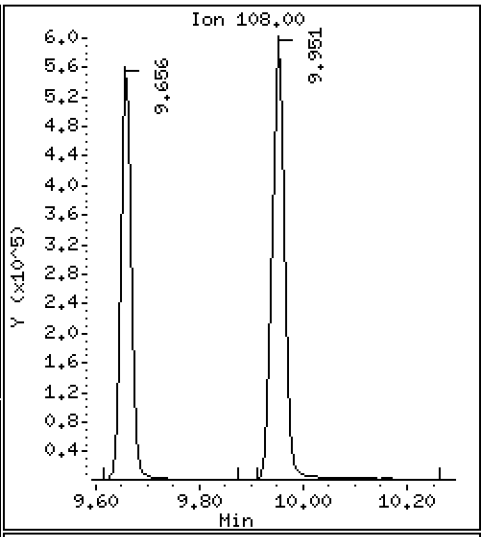
Column phase: ZB-5msi

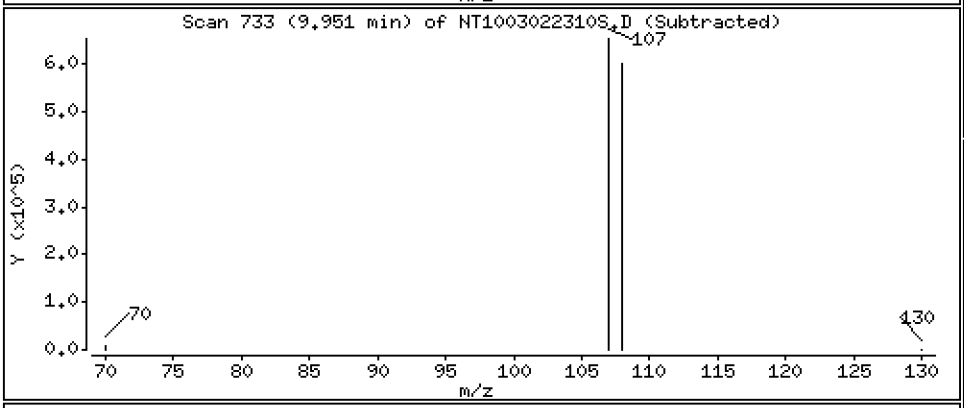
Column diameter: 0.25

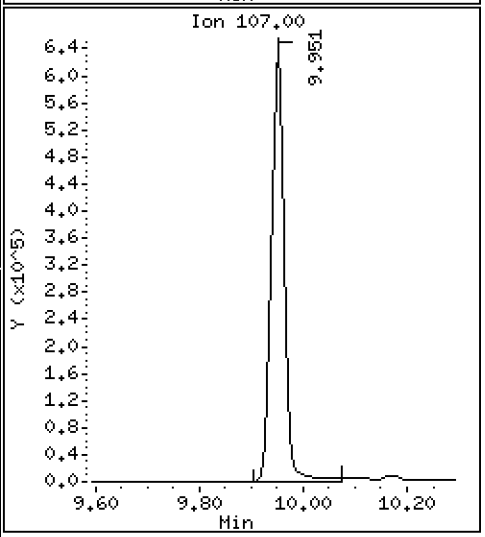
15 4-Methylphenol

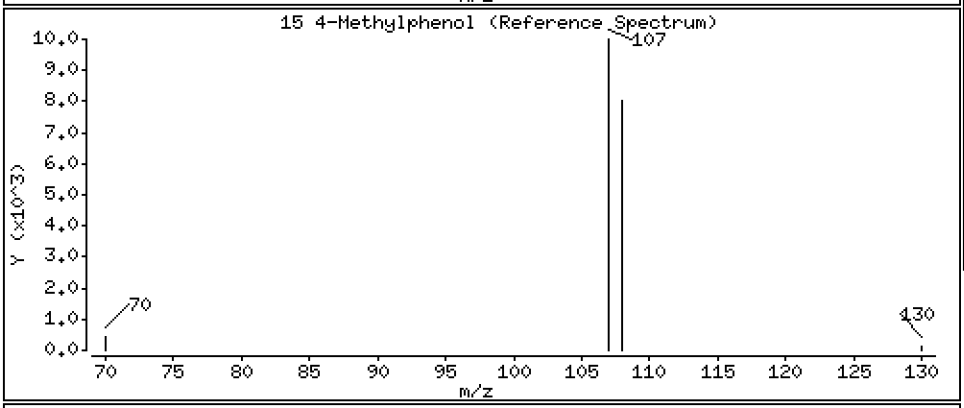
Concentration: 5.249 ug/L

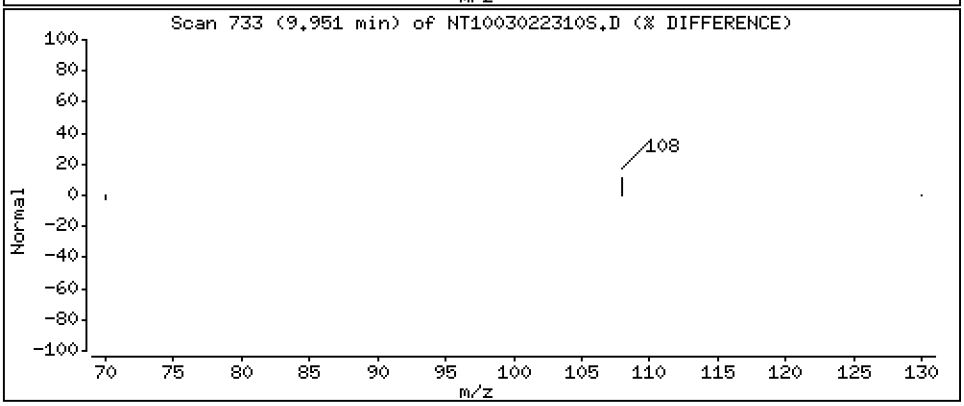












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223105.D

Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

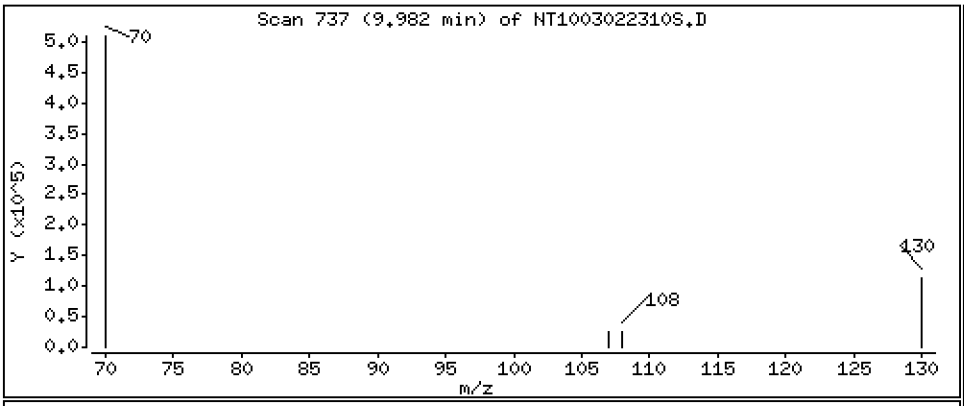
Operator: JGR

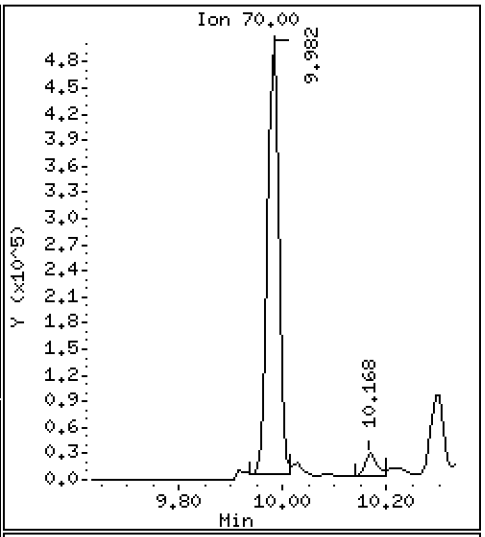
Column phase: ZB-5msi

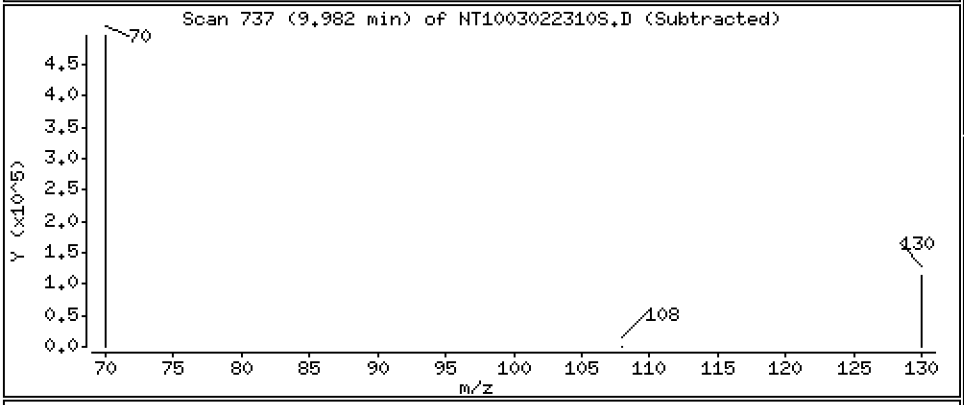
Column diameter: 0.25

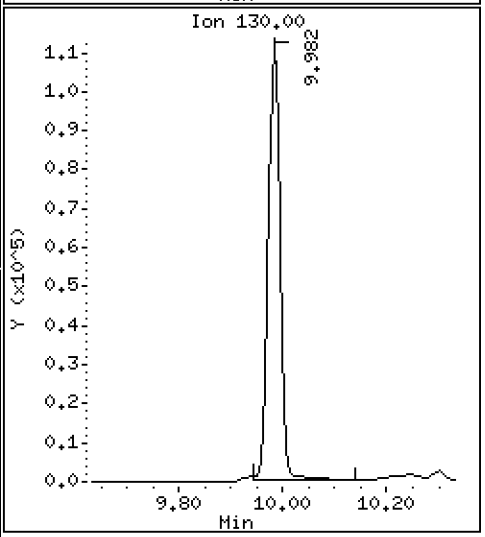
16 N-Nitroso-di-n-propylamine

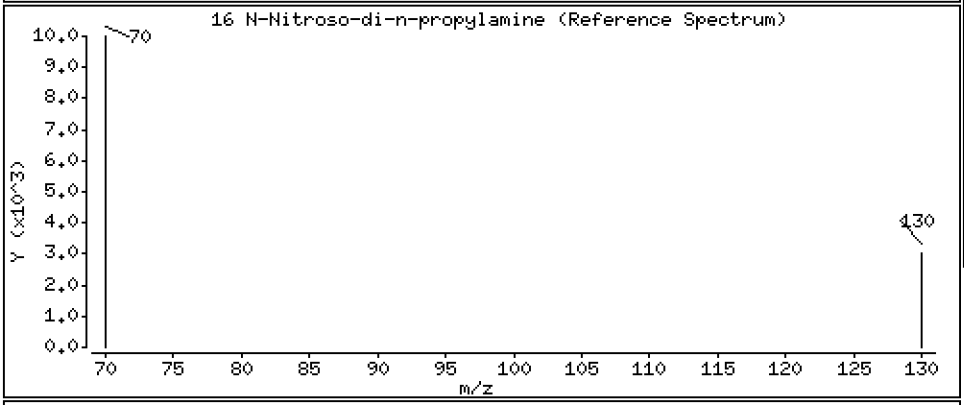
Concentration: 5.488 ug/L

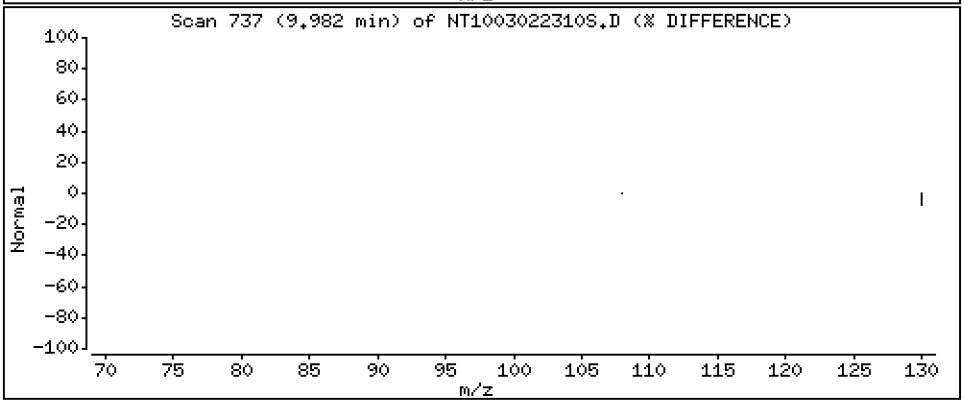












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223105.D

Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

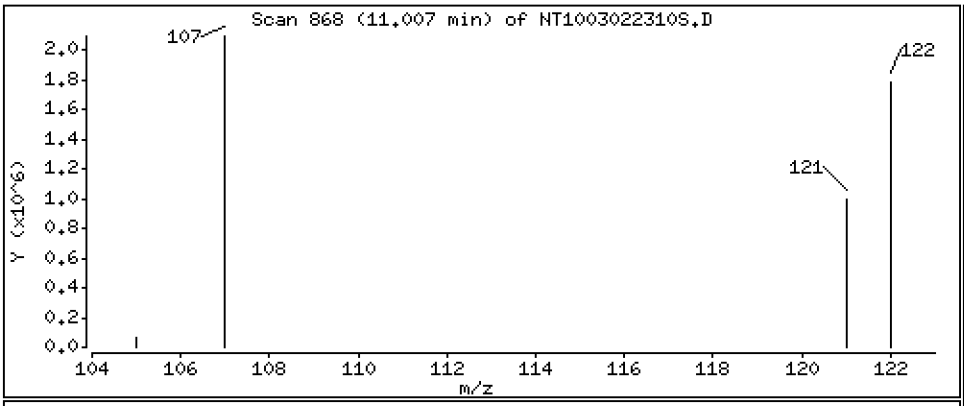
Operator: JGR

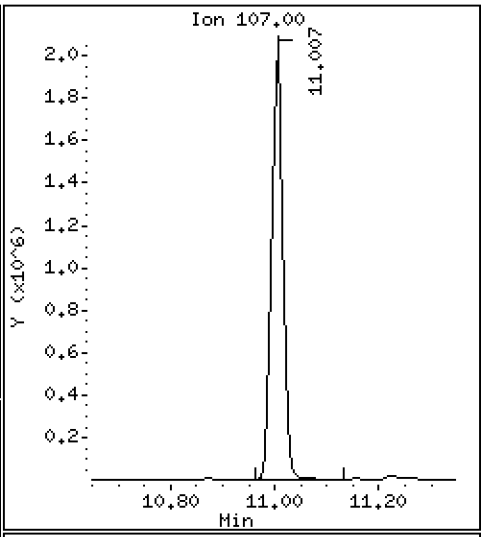
Column phase: ZB-5msi

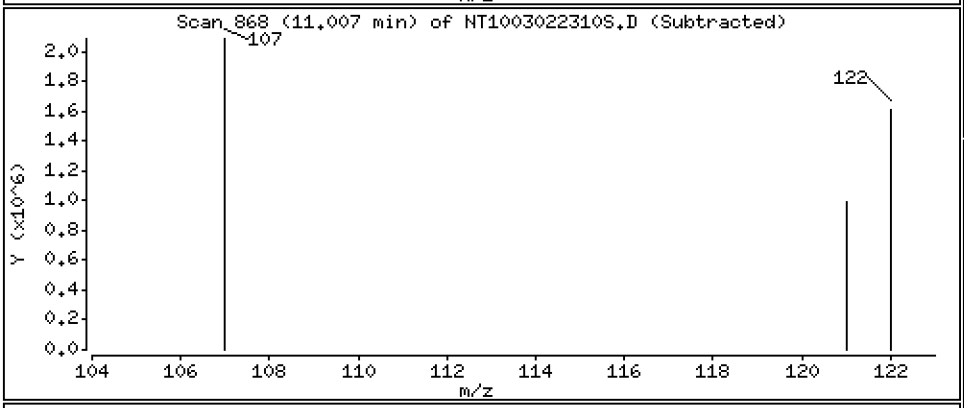
Column diameter: 0.25

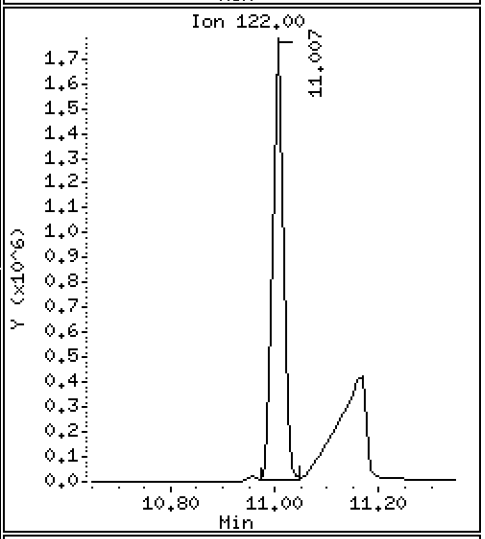
22 2,4-Dimethylphenol

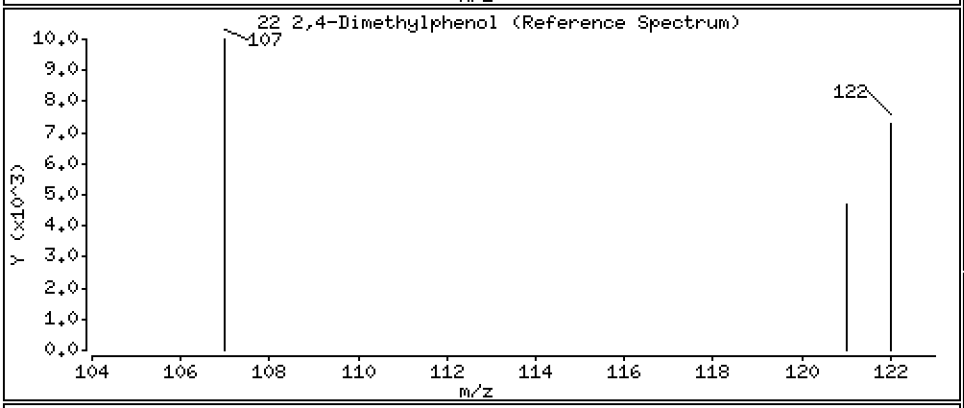
Concentration: 14.05 ug/L

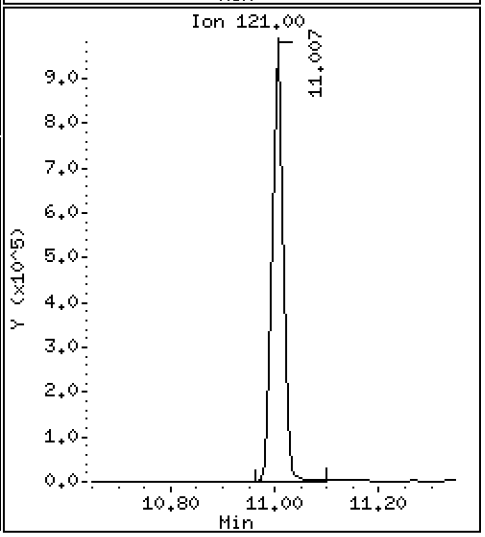


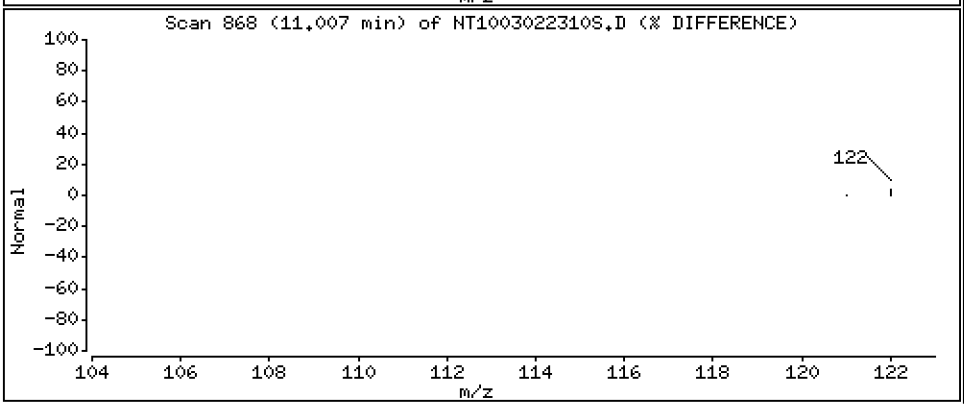












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Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

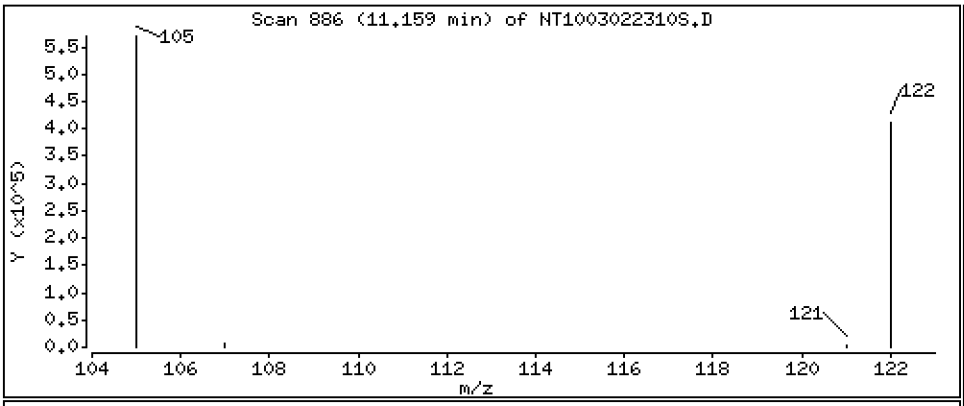
Operator: JGR

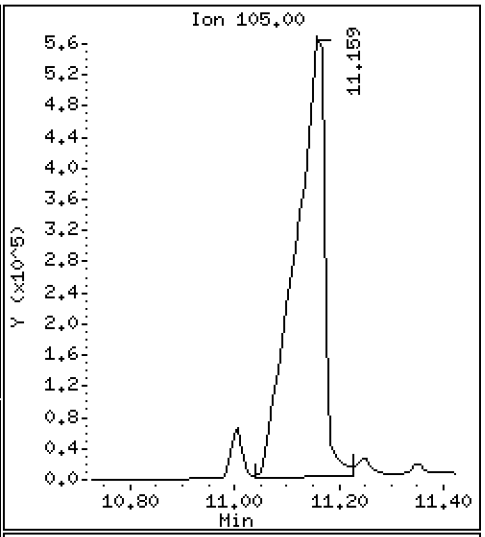
Column phase: ZB-5msi

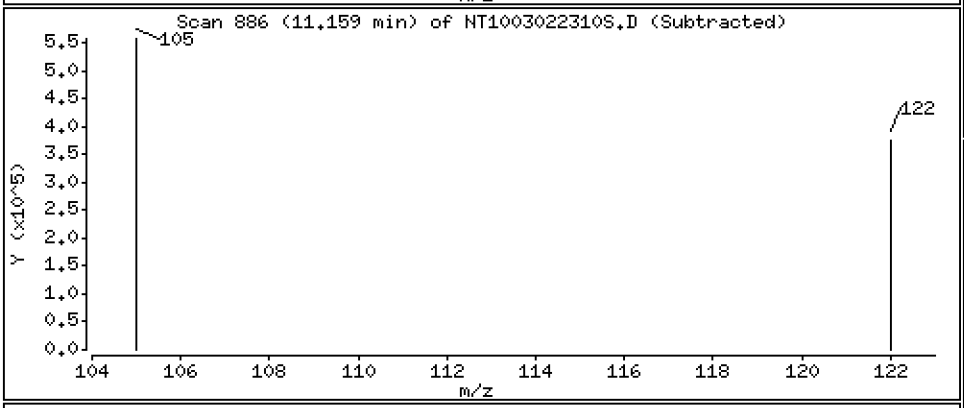
Column diameter: 0.25

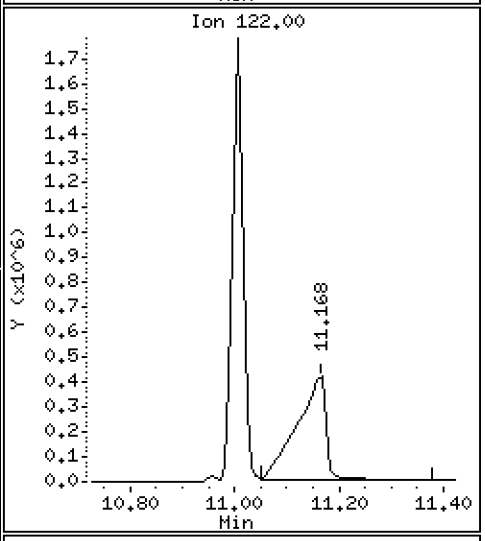
24 Benzoic acid

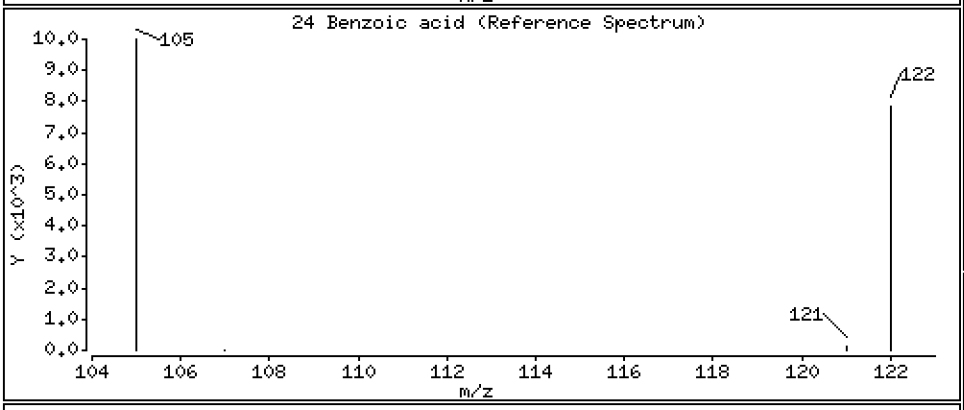
Concentration: 17.46 ug/L

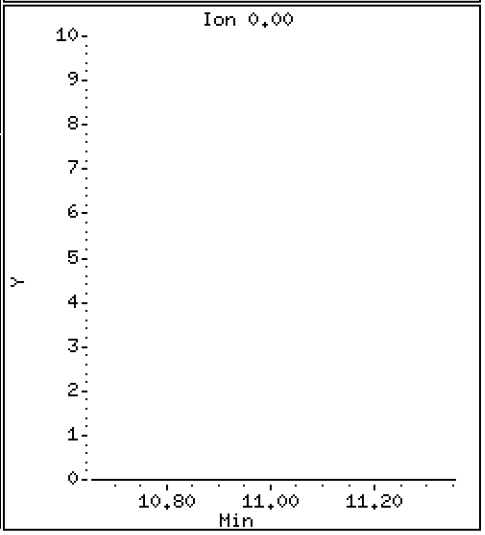


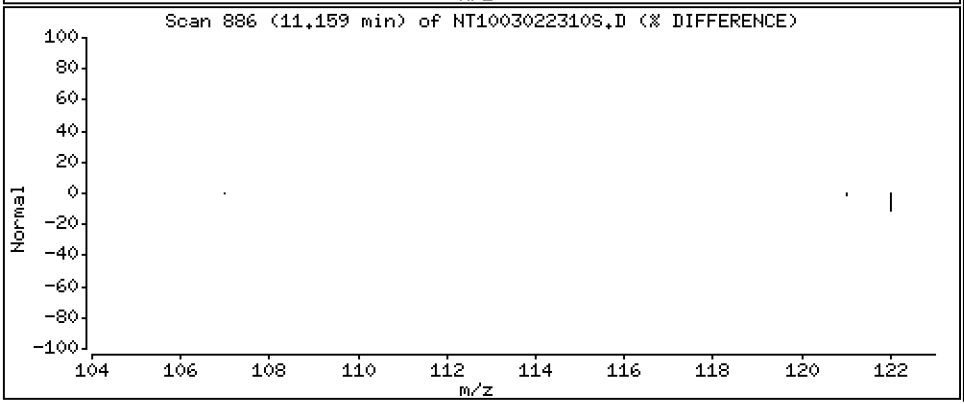












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Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

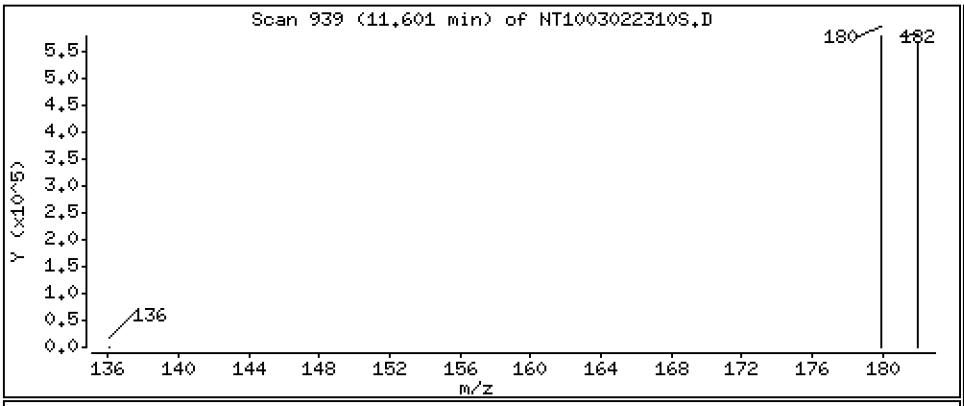
Operator: JGR

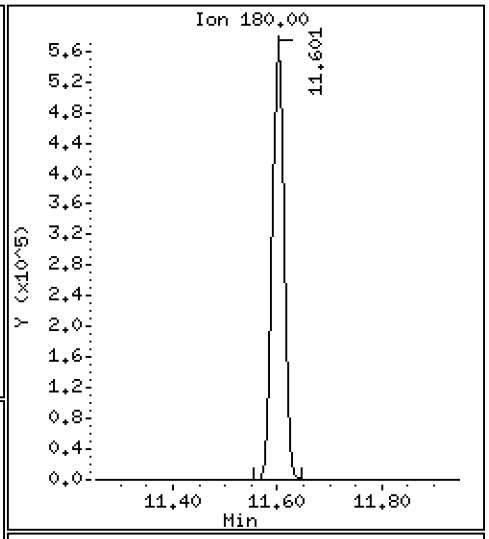
Column phase: ZB-5msi

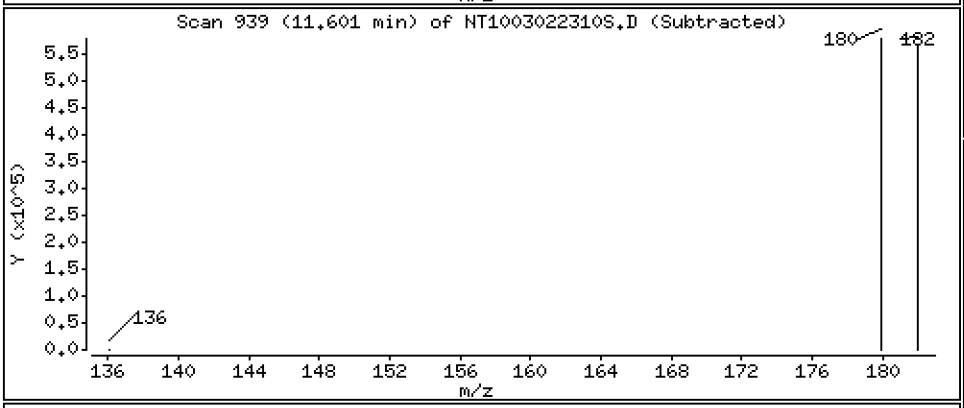
Column diameter: 0.25

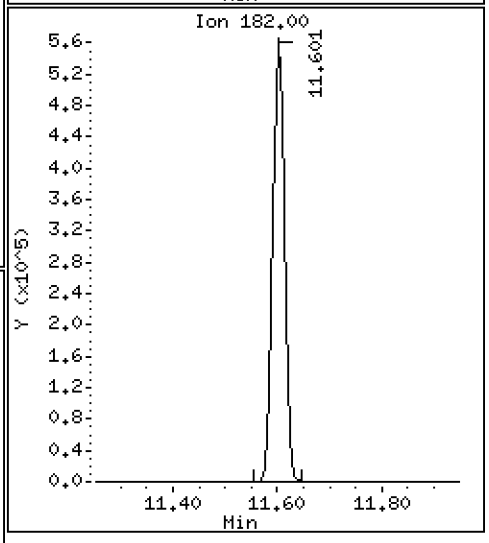
26 1,2,4-Trichlorobenzene

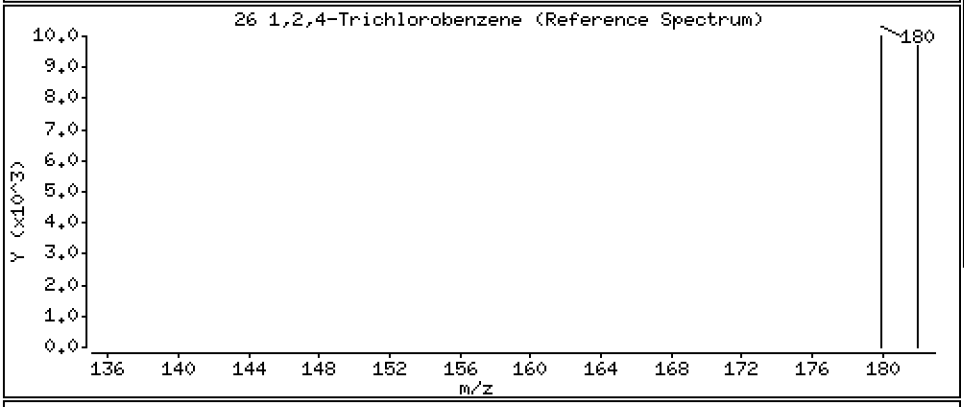
Concentration: 4.715 ug/L

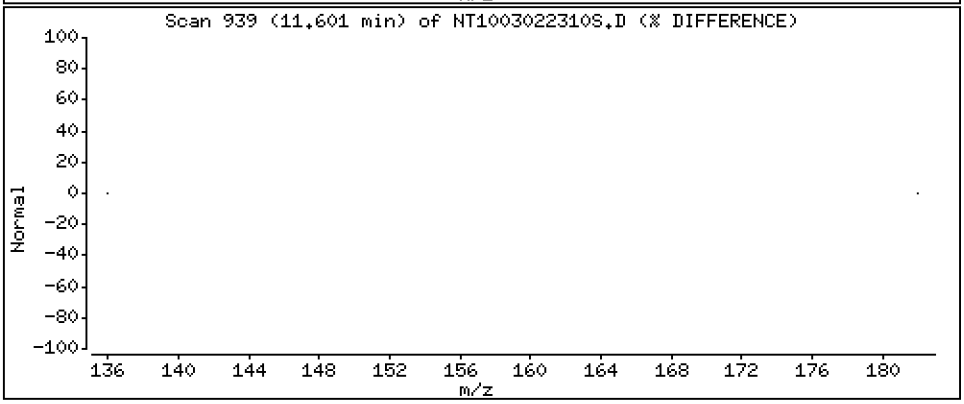












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022310S.D

Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

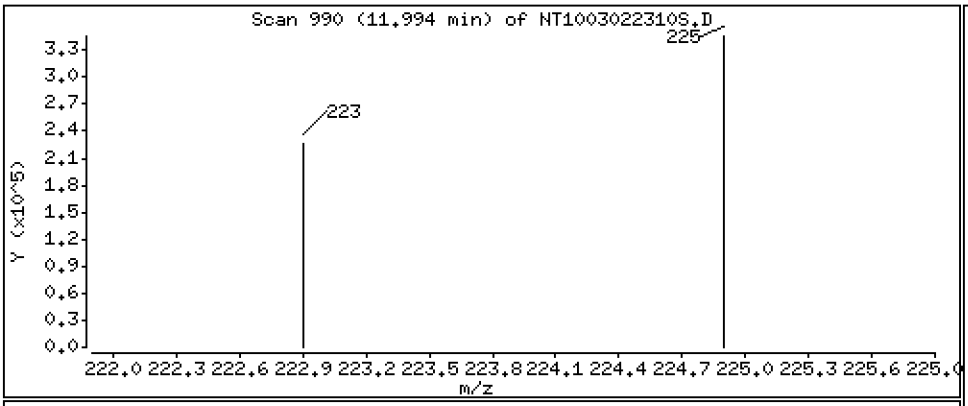
Operator: JGR

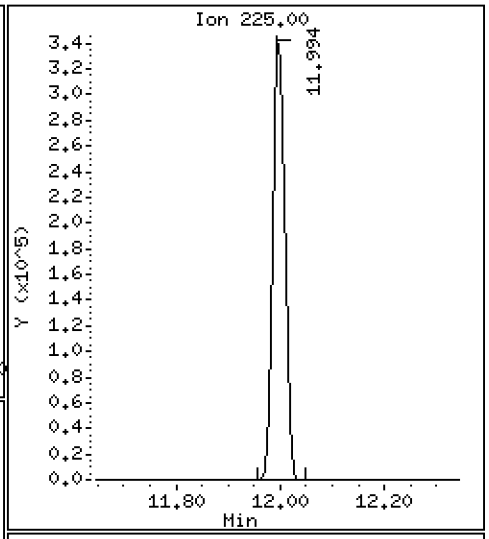
Column phase: ZB-5msi

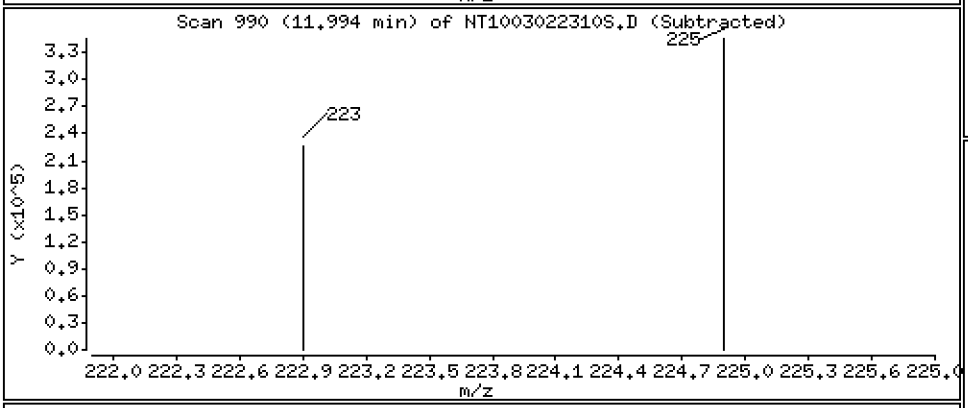
Column diameter: 0.25

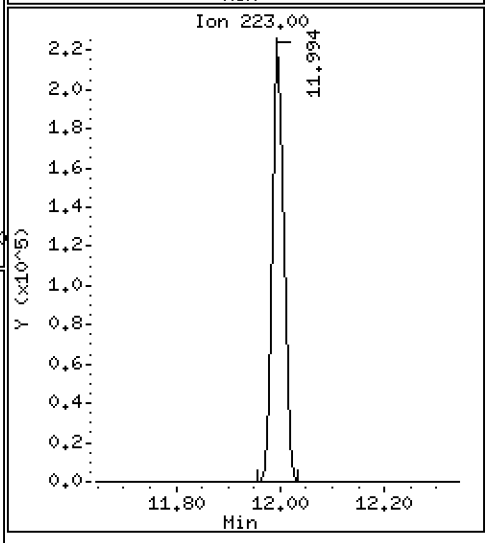
30 Hexachlorobutadiene

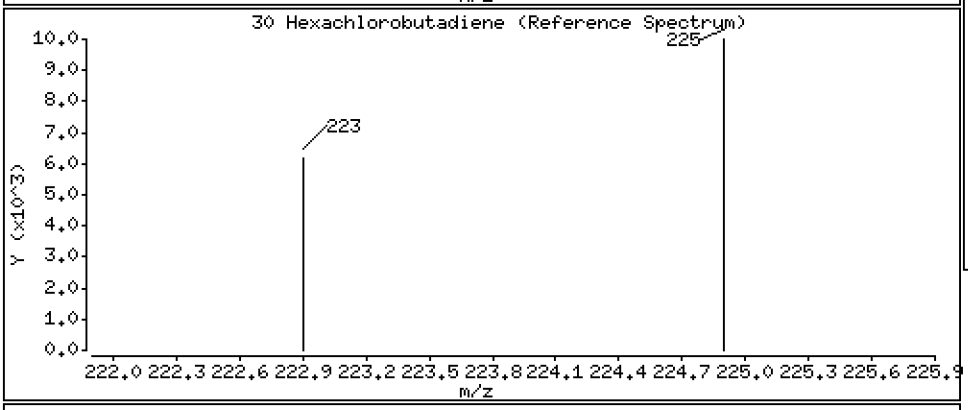
Concentration: 4.167 ug/L

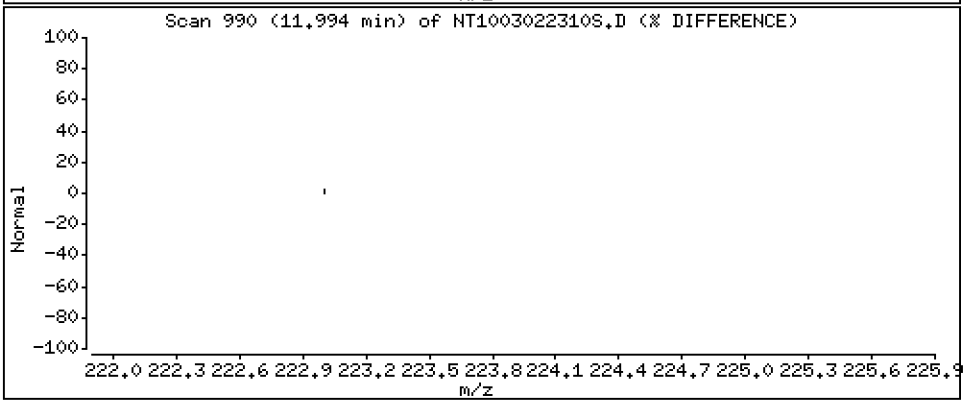












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Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

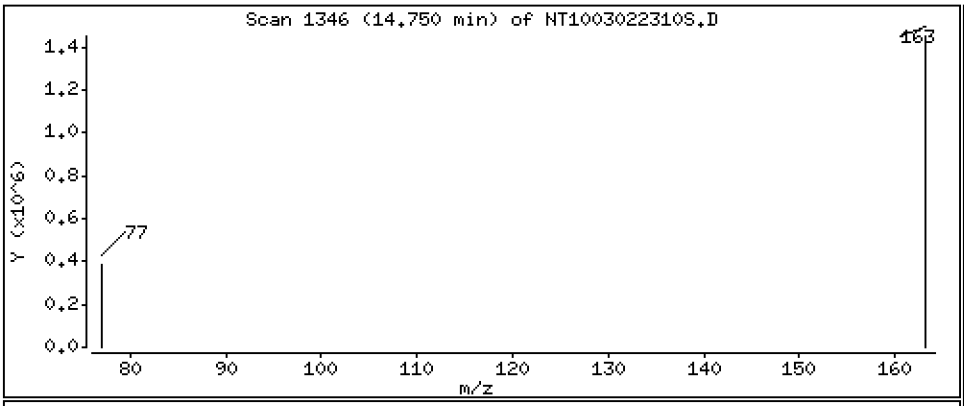
Operator: JGR

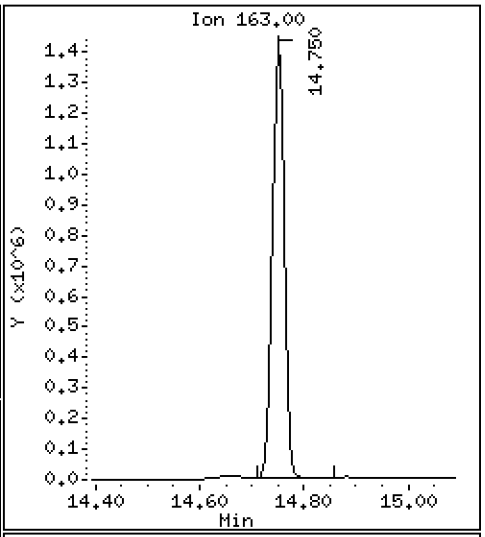
Column phase: ZB-5msi

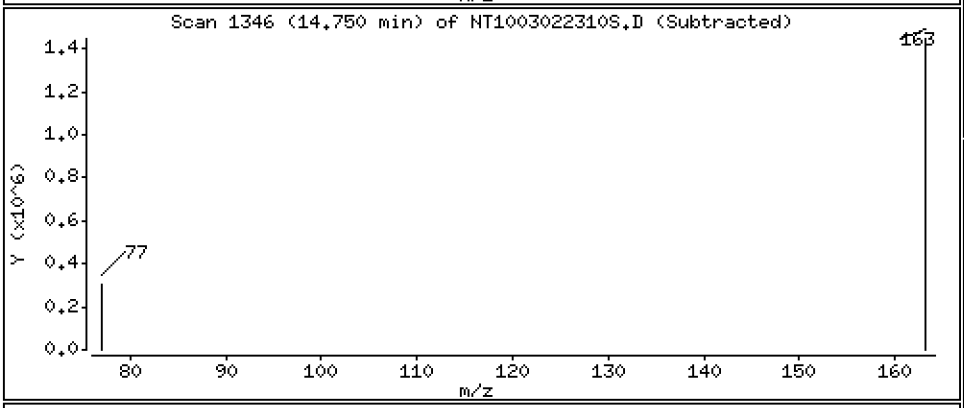
Column diameter: 0.25

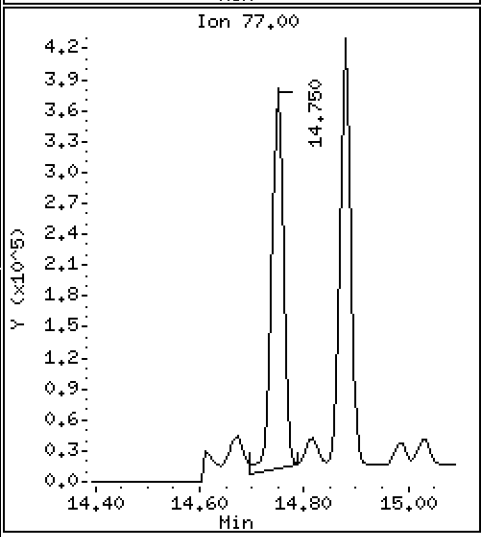
39 Dimethylphthalate

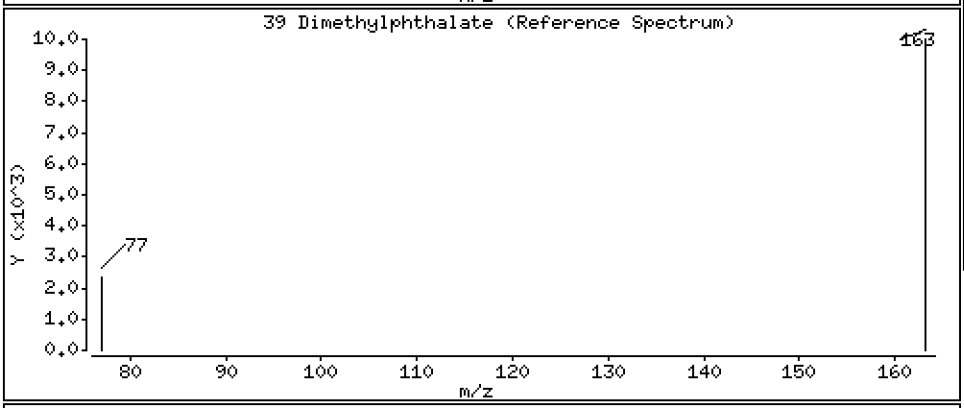
Concentration: 5.158 ug/L

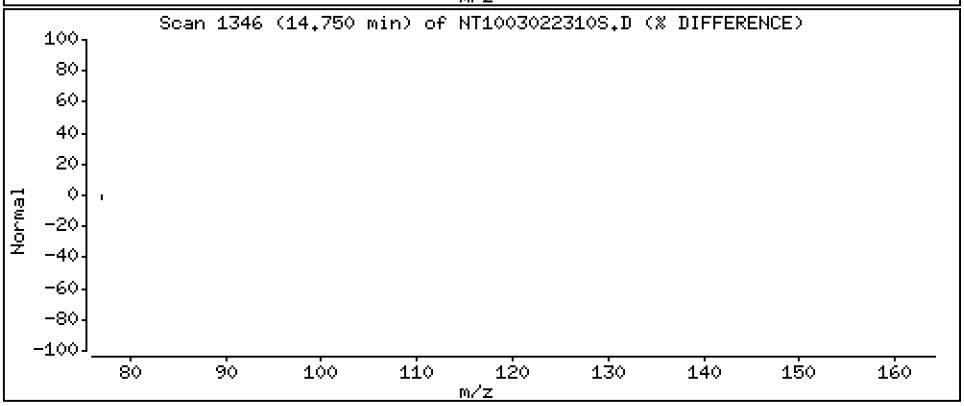












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Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

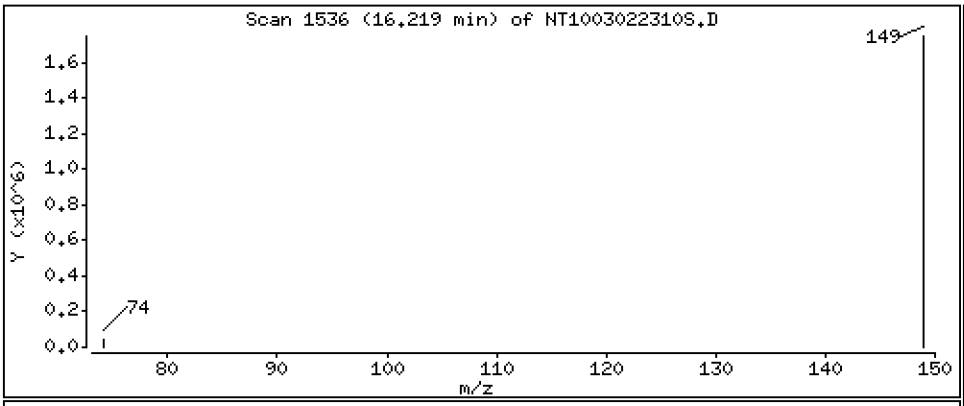
Operator: JGR

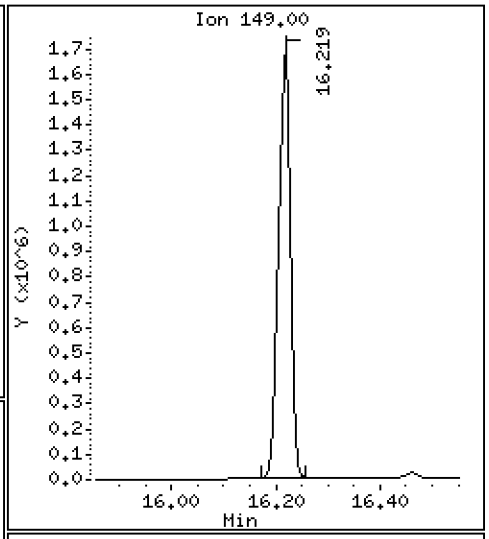
Column phase: ZB-5msi

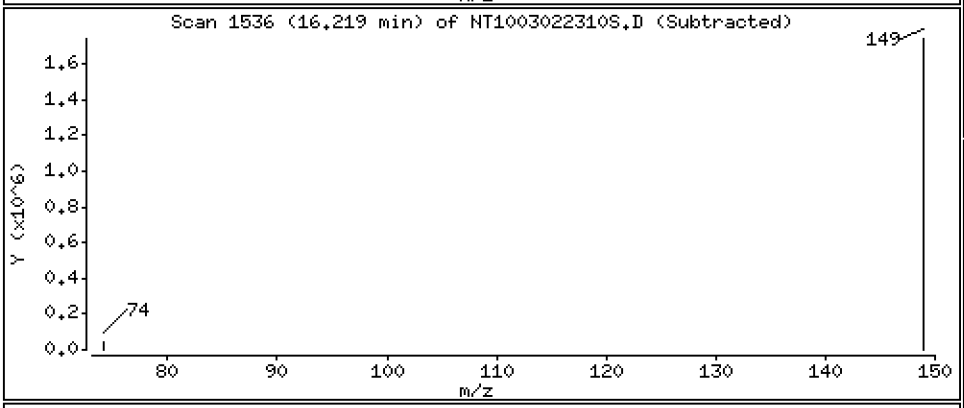
Column diameter: 0.25

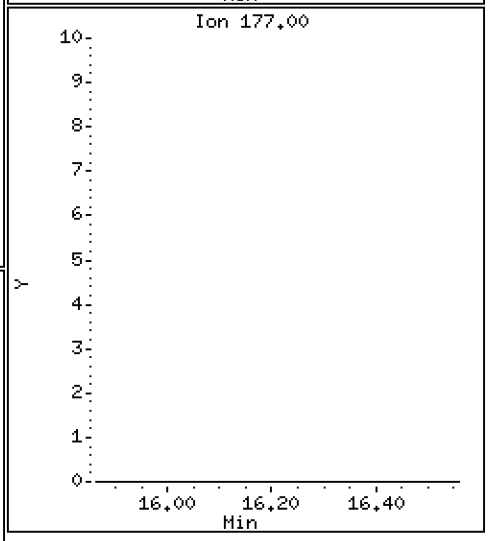
50 Diethylphthalate

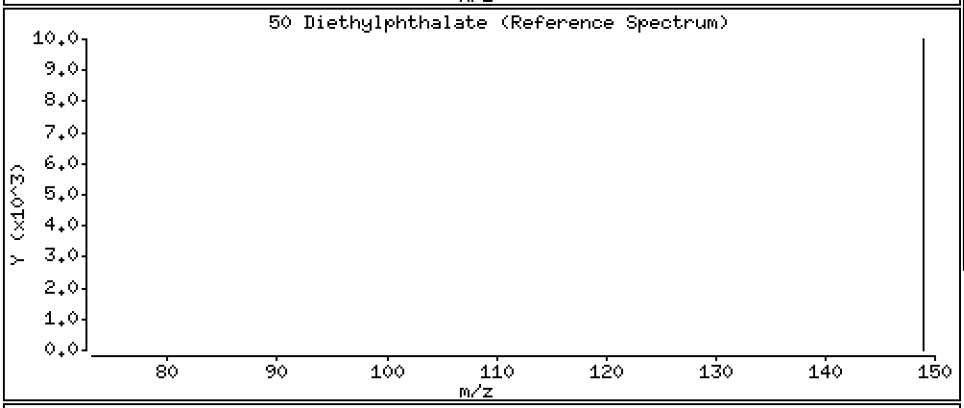
Concentration: 6.664 ug/L

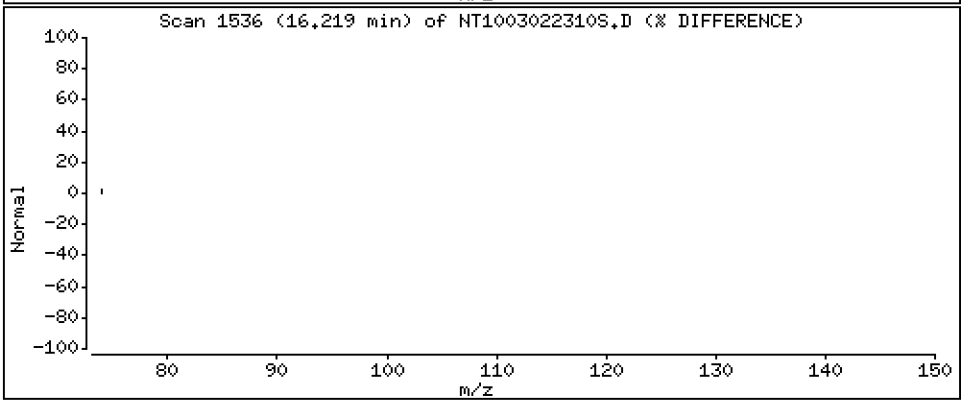












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Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

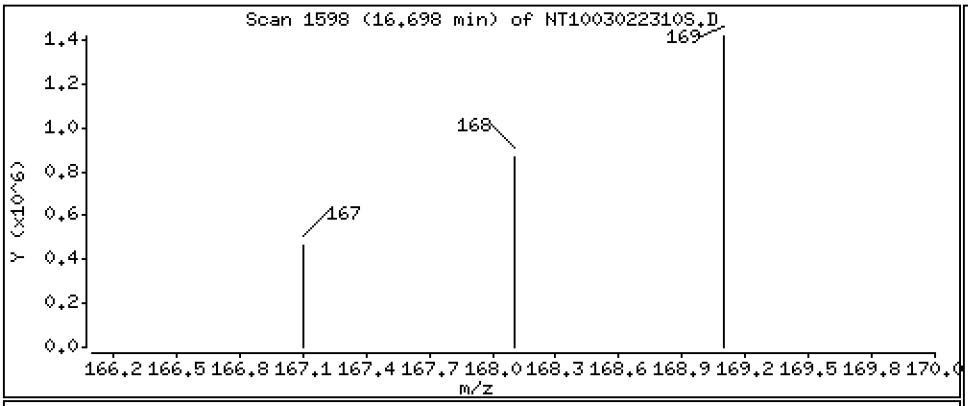
Operator: JGR

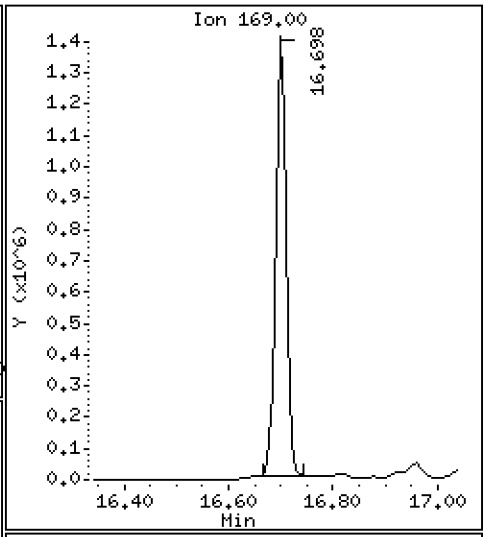
Column phase: ZB-5msi

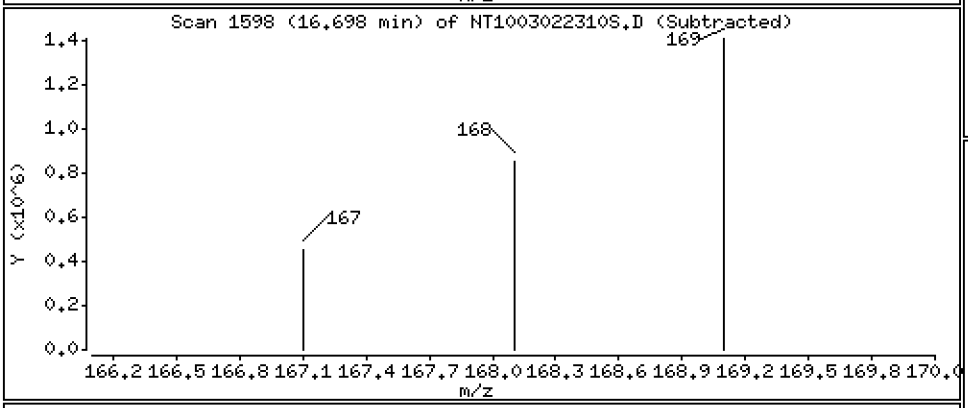
Column diameter: 0.25

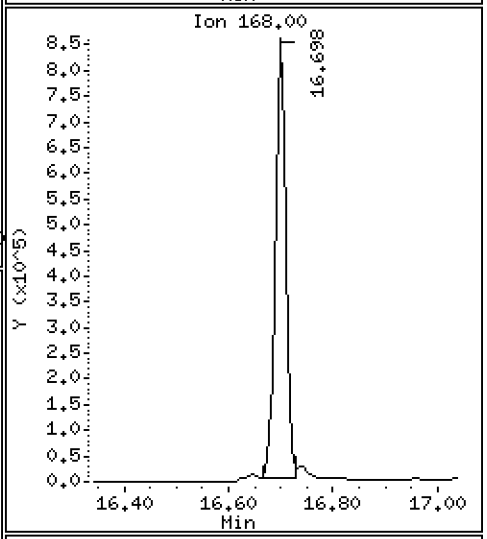
54 N-Nitrosodiphenylamine

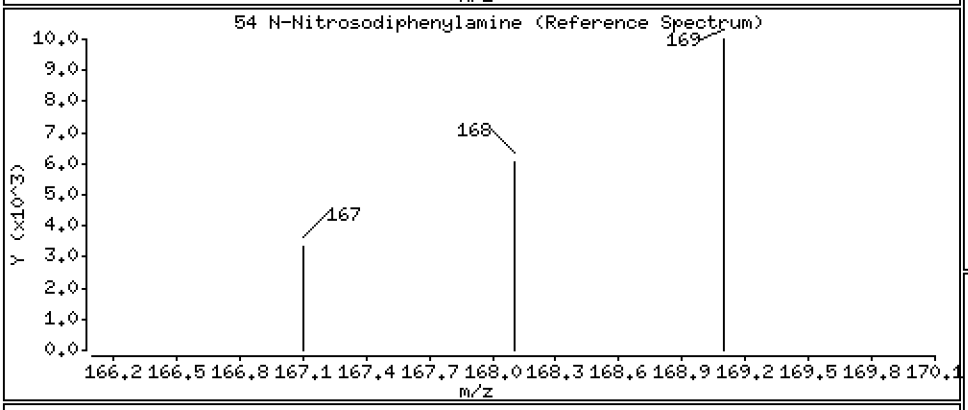
Concentration: 4.209 ug/L

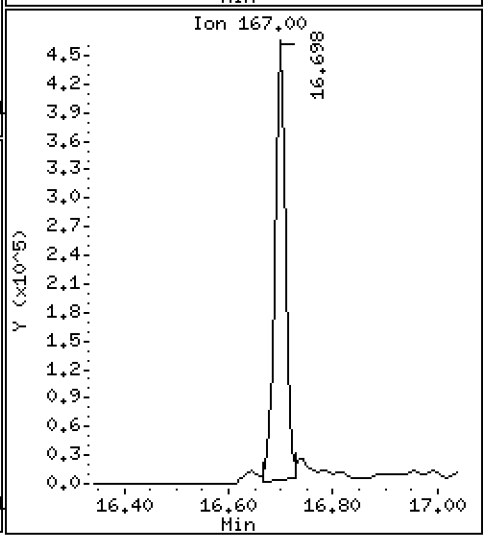


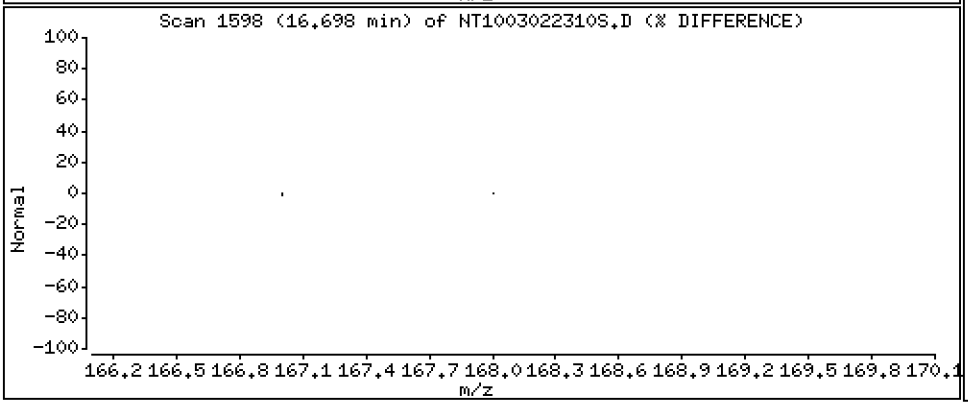












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022310S.D

Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

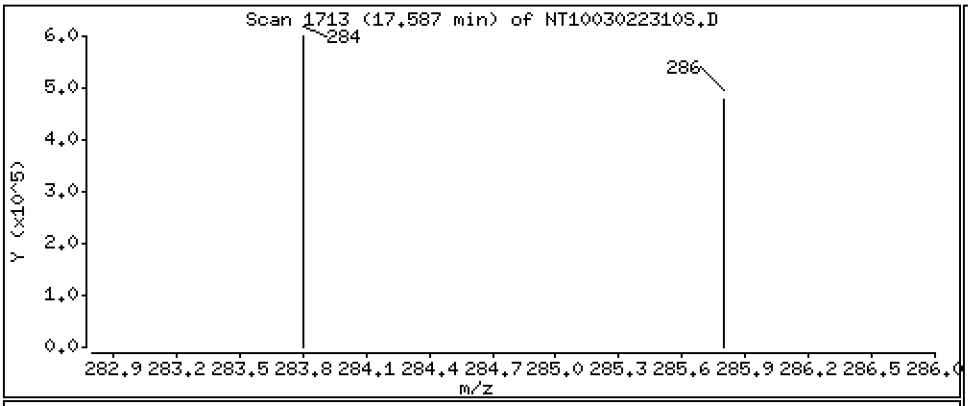
Operator: JGR

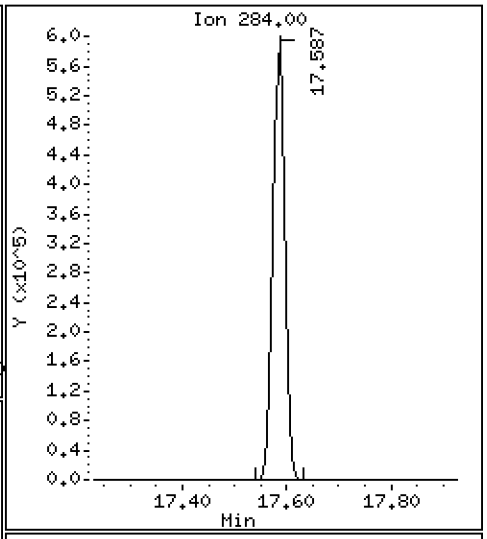
Column phase: ZB-5msi

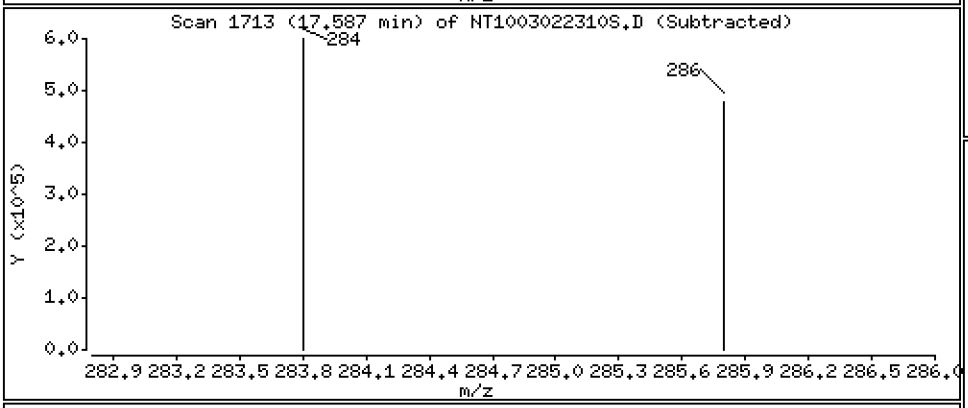
Column diameter: 0.25

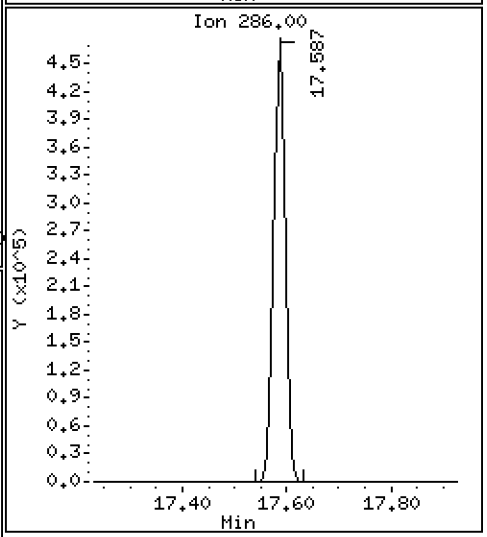
57 Hexachlorobenzene

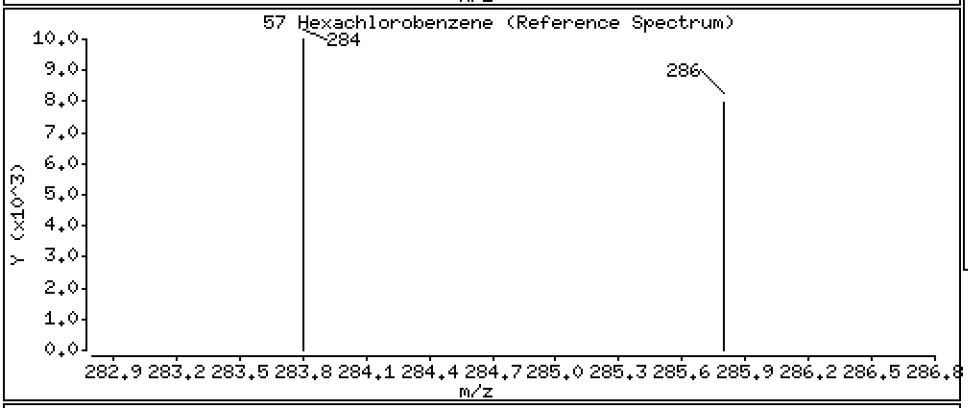
Concentration: 4.007 ug/L

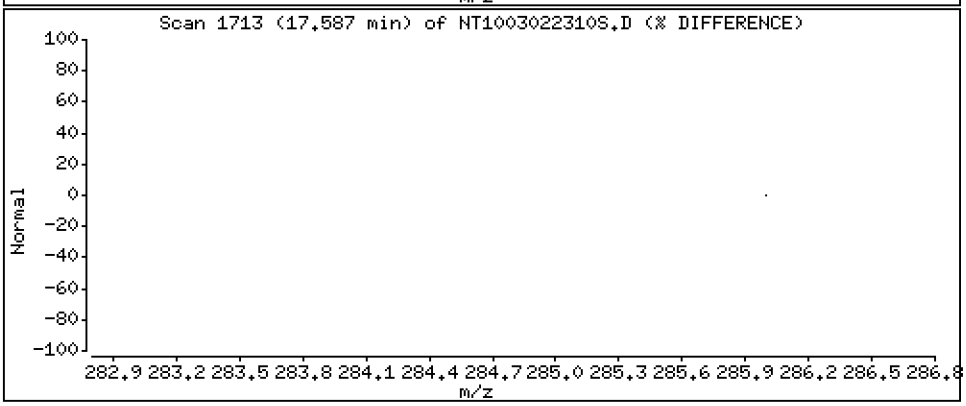












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022310S.D

Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

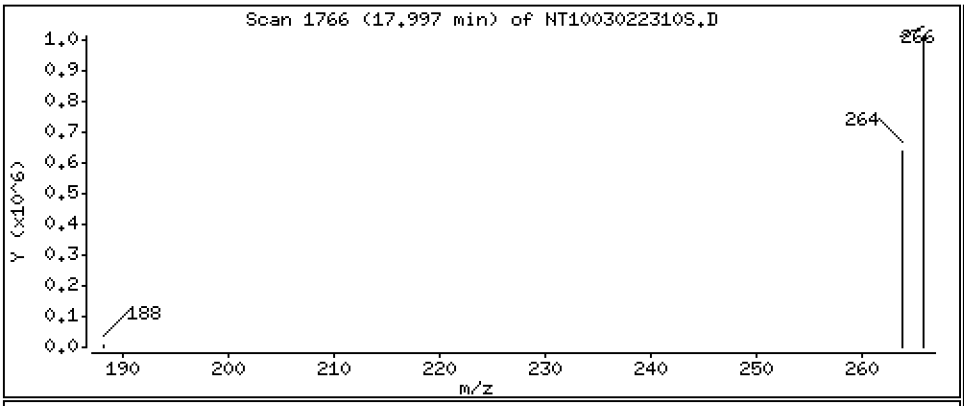
Operator: JGR

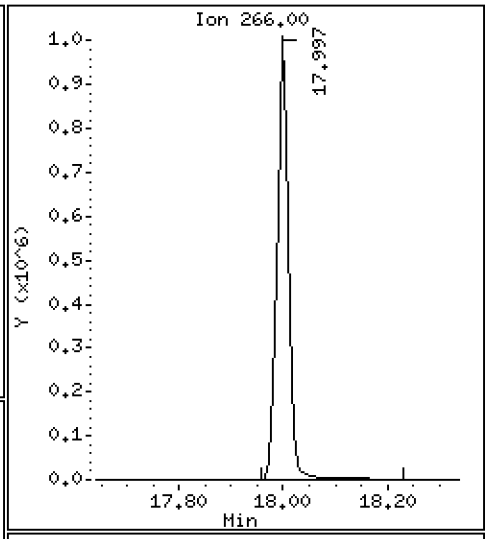
Column phase: ZB-5msi

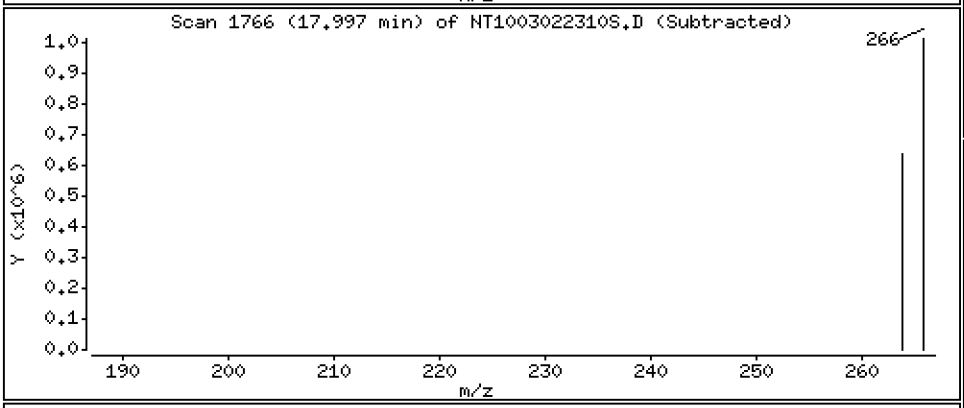
Column diameter: 0.25

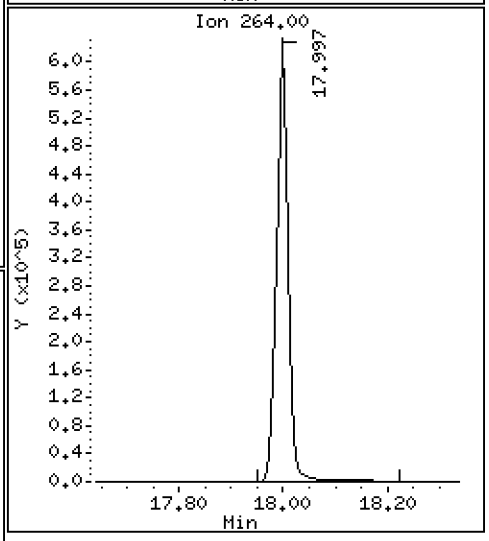
58 Pentachlorophenol

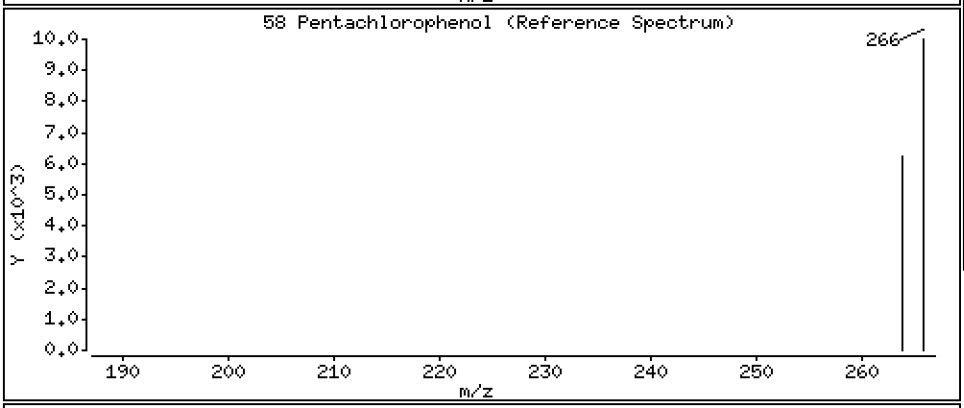
Concentration: 13.27 ug/L

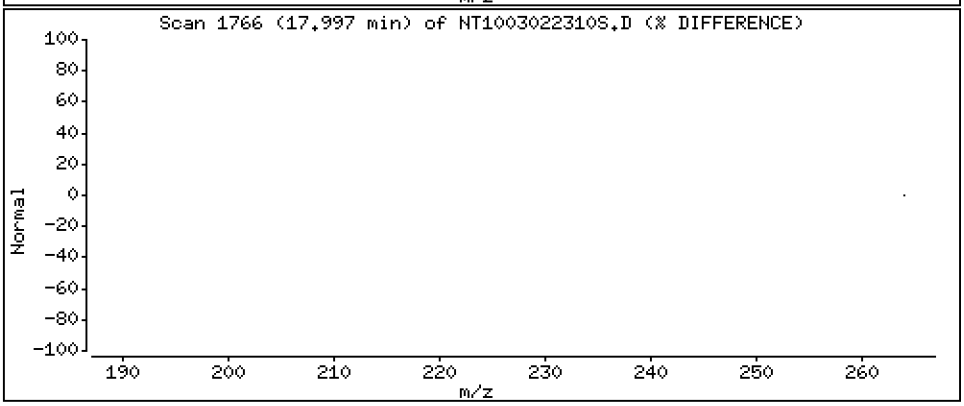












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022310S.D

Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

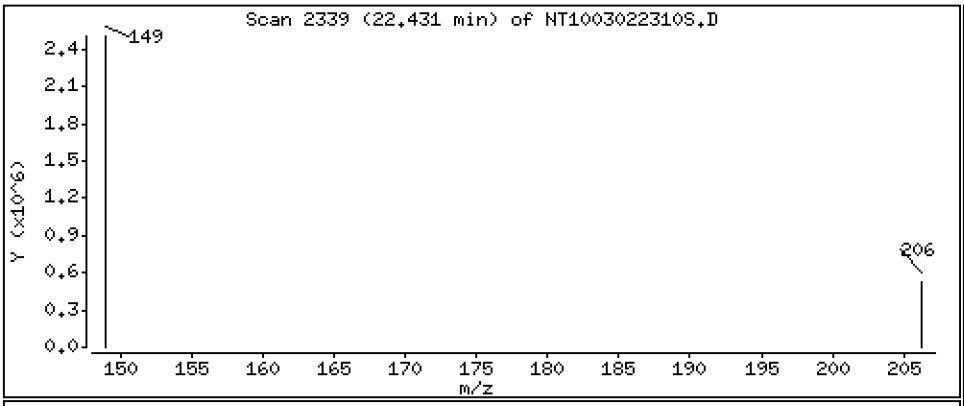
Operator: JGR

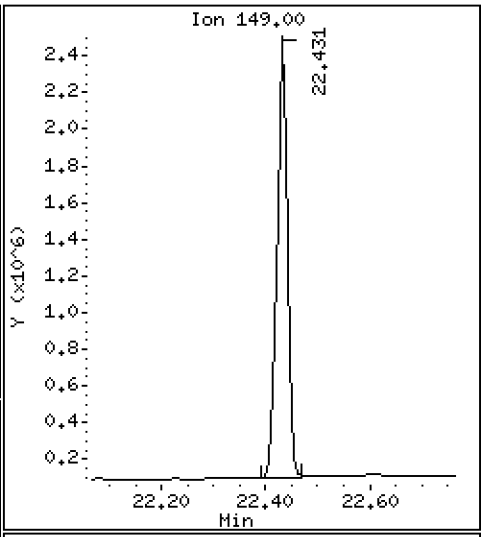
Column phase: ZB-5msi

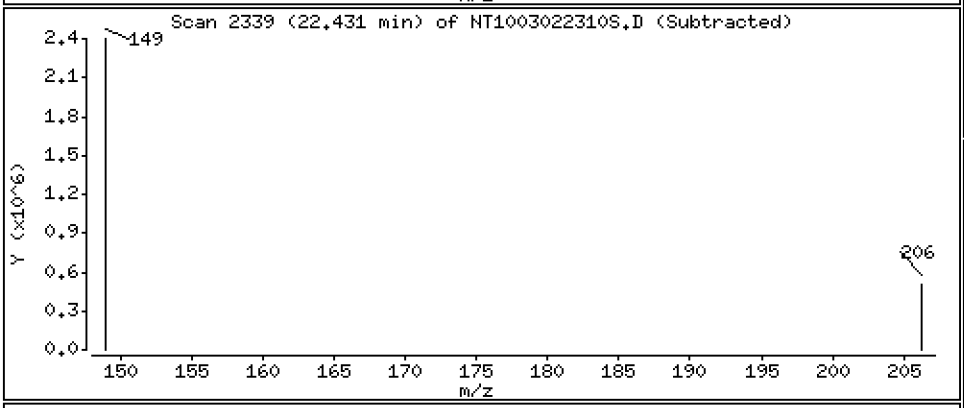
Column diameter: 0.25

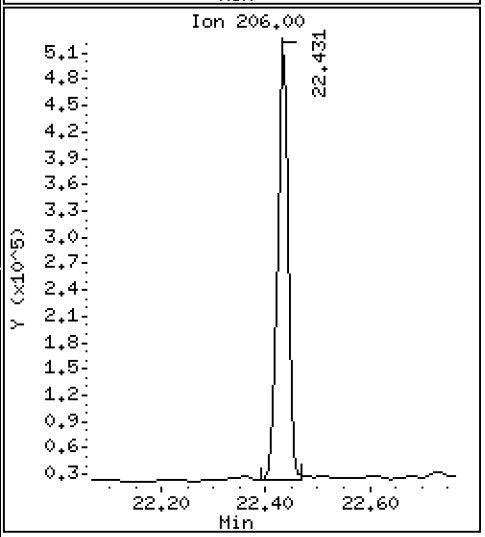
67 Butylbenzylphthalate

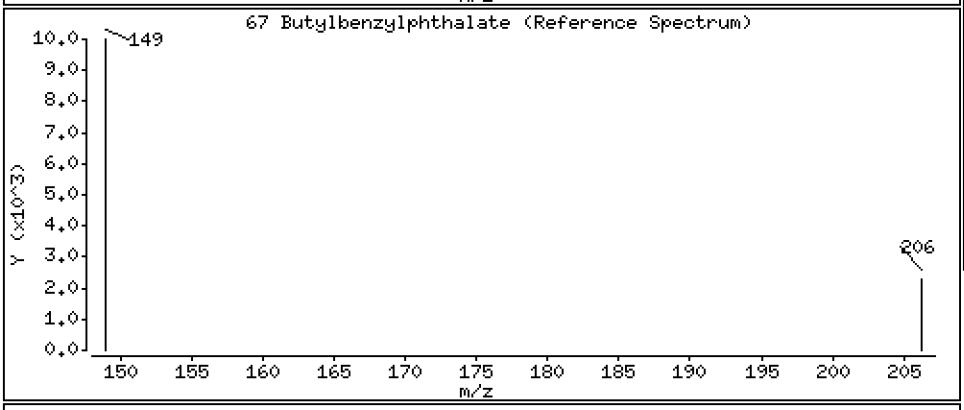
Concentration: 4.838 ug/L

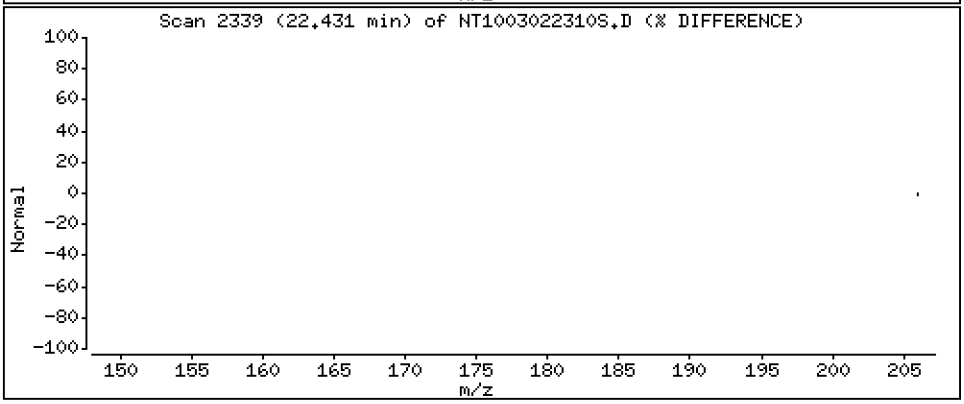












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022310S.D

Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

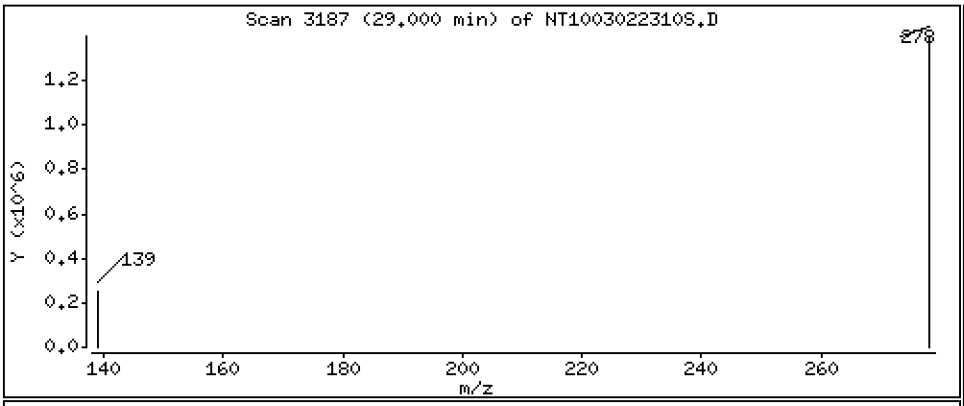
Operator: JGR

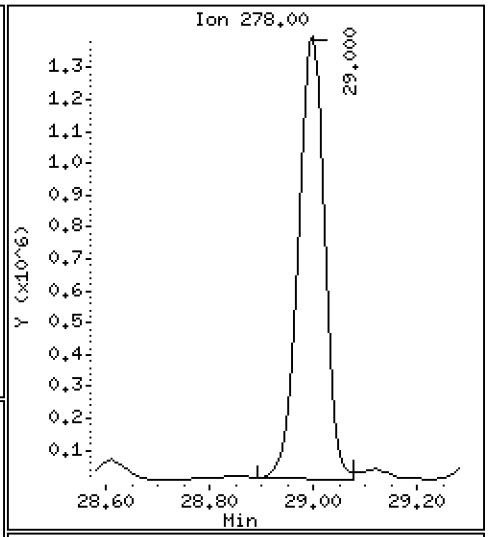
Column phase: ZB-5msi

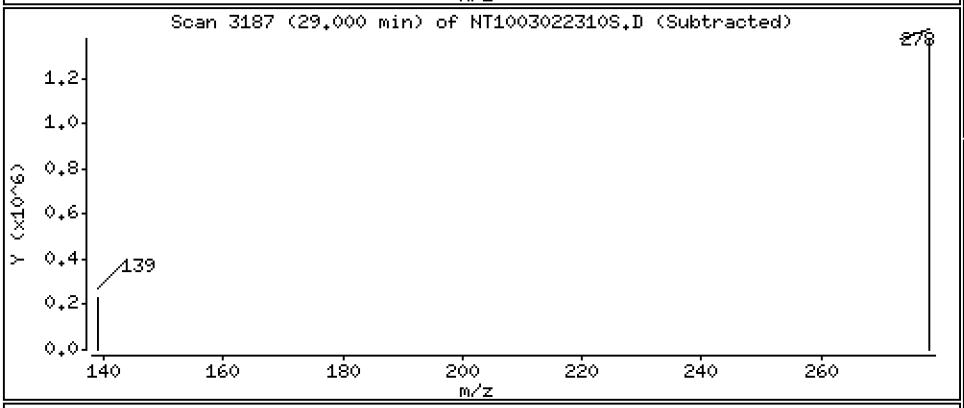
Column diameter: 0.25

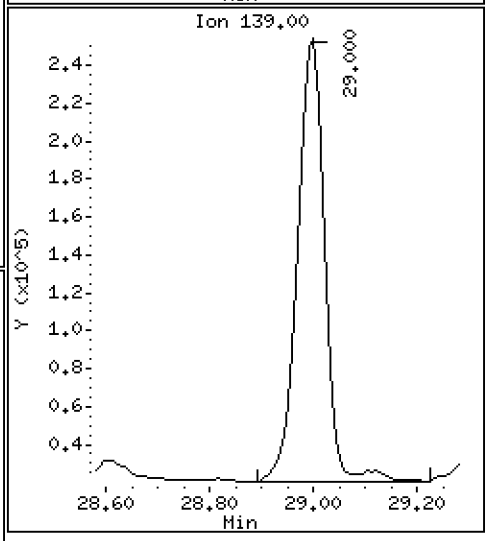
79 Dibenzo(a,h)anthracene

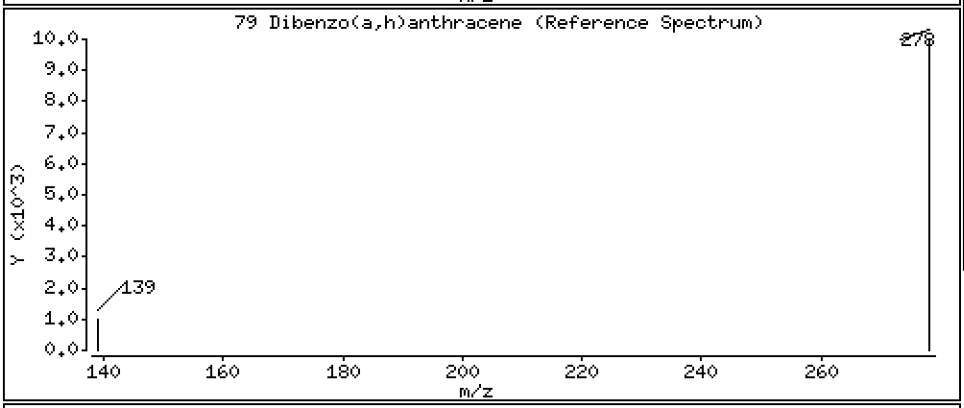
Concentration: 5.293 ug/L

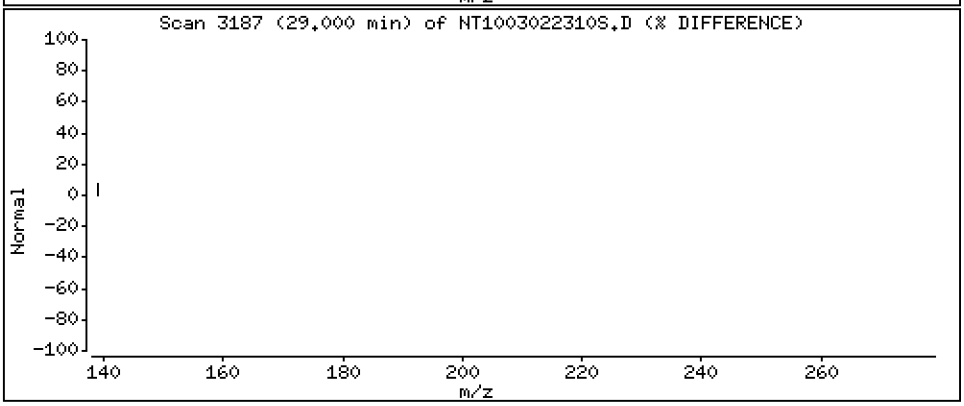












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223105.D

Date : 02-MAR-2023 20:06

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-MSD1

Volume Injected (uL): 1.0

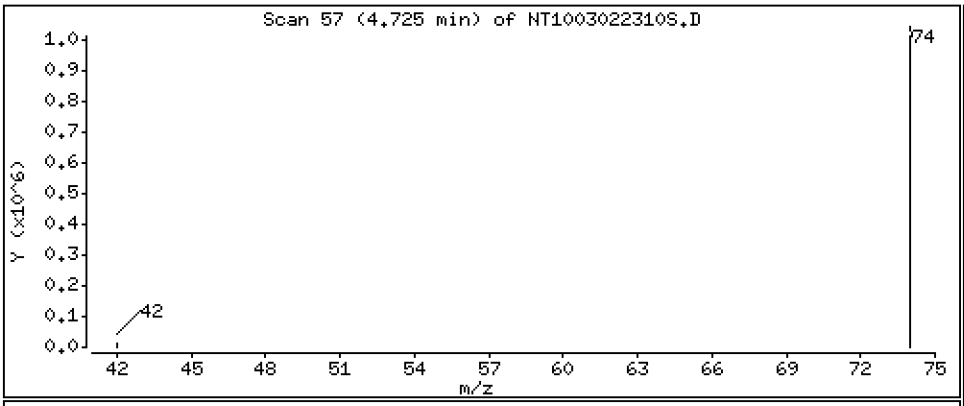
Operator: JGR

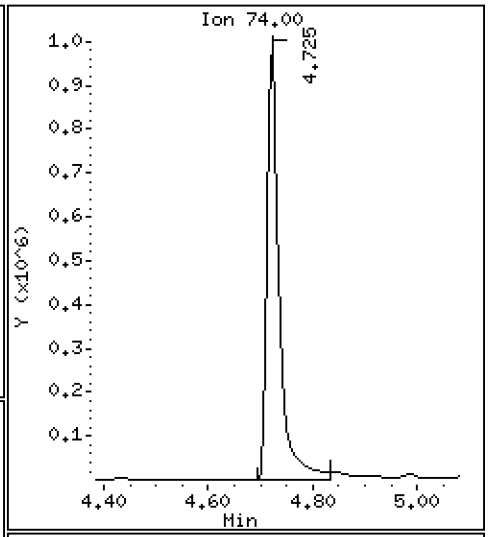
Column phase: ZB-5msi

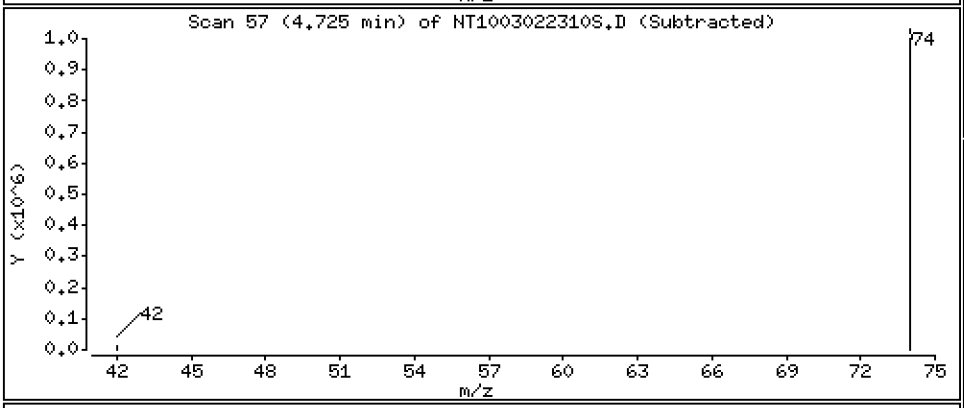
Column diameter: 0.25

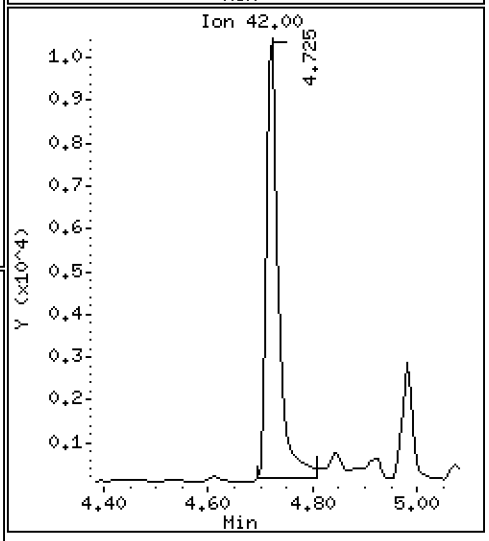
90 N-Nitrosodimethylamine

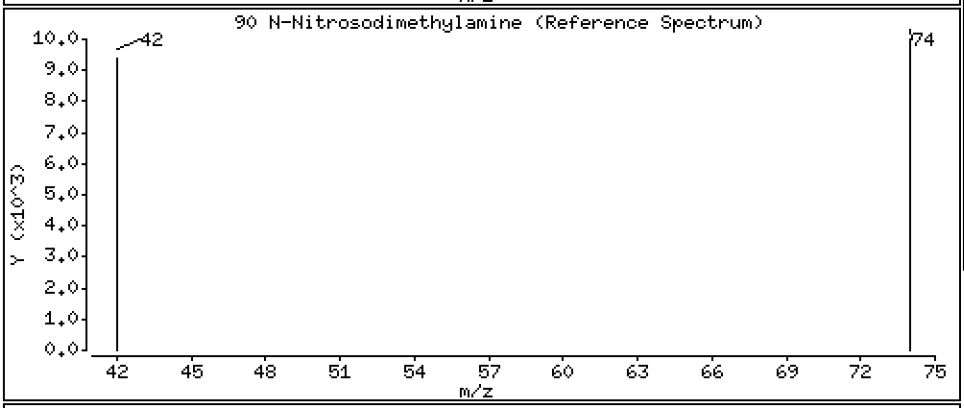
Concentration: 14.17 ug/L

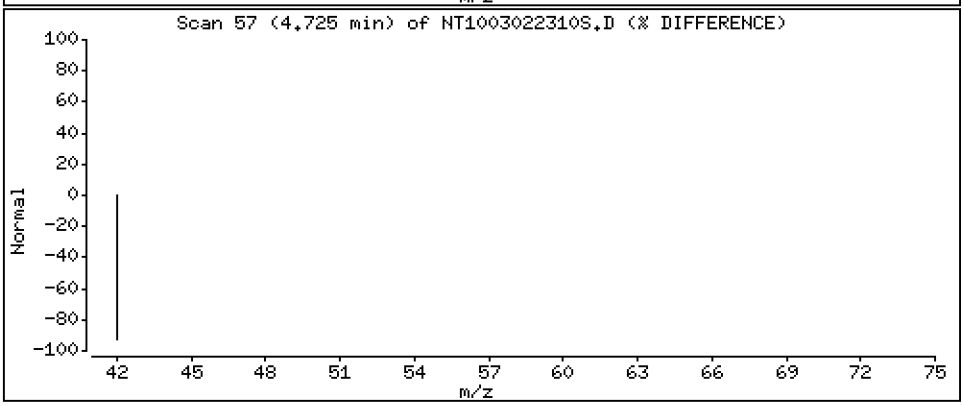












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022310S.D
Lab Smp Id: BLA0624-MSD1
Inj Date : 02-MAR-2023 20:06 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLA0624-MSD1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 14:53 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.902	6.902	(0.746)	1303007	6.78798	6.788(R)
3	Phenol	94	8.525	8.517	(0.921)	3620864	11.9635	11.96
7	1,3-Dichlorobenzene	146	9.143	9.143	(0.988)	999770	4.01213	4.012
* 8	1,4-Dichlorobenzene-d4	152	9.252	9.251	(1.000)	672370	4.00000	
9	1,4-Dichlorobenzene	146	9.283	9.282	(1.003)	1326016	5.47323	5.473
11	Benzyl alcohol	79	9.477	9.476	(1.024)	864065	5.12515	5.125
12	1,2-Dichlorobenzene	146	9.562	9.562	(1.034)	982974	4.22119	4.221
13	2-Methylphenol	108	9.655	9.655	(1.044)	823389	4.64786	4.648
15	4-Methylphenol	108	9.950	9.942	(1.076)	987540	5.24932	5.249
16	N-Nitroso-di-n-propylamine	70	9.982	9.981	(1.079)	706552	5.48803	5.488
22	2,4-Dimethylphenol	107	11.006	10.997	(0.939)	3078888	14.0520	14.05
24	Benzoic acid	105	11.159	11.074	(0.952)	2224613	17.4589	17.46
26	1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	840738	4.71541	4.715
* 27	Naphthalene-d8	136	11.724	11.723	(1.000)	2477168	4.00000	
30	Hexachlorobutadiene	225	11.994	11.994	(1.023)	527257	4.16719	4.167
39	Dimethylphthalate	163	14.749	14.741	(0.963)	2110389	5.15817	5.158
* 42	Acenaphthene-d10	162	15.322	15.314	(1.000)	1288517	4.00000	
50	Diethylphthalate	149	16.218	16.203	(1.059)	2571336	6.66444	6.664
54	N-Nitrosodiphenylamine	169	16.698	16.690	(0.907)	1987335	4.20939	4.209
57	Hexachlorobenzene	284	17.586	17.578	(0.955)	885306	4.00690	4.007

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	17.996	17.988	(0.977)	1516520	13.2670	13.27
*	59 Phenanthrene-d10	188	18.414	18.406	(1.000)	2917258	4.00000	
$	66 Terphenyl-d14	244	21.548	21.532	(0.919)	1626926	4.94335	4.943(R)
	67 Butylbenzylphthalate	149	22.430	22.414	(0.957)	3266796	4.83792	4.838
*	69 Chrysene-d12	240	23.445	23.421	(1.000)	4069829	4.00000	
*	77 Perylene-d12	264	26.147	26.115	(1.000)	3624176	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.000	28.929	(1.109)	4833039	5.29265	5.293
	90 N-Nitrosodimethylamine	74	4.725	4.732	(0.511)	1610808	14.1737	14.17

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003022310S.D
Lab Smp Id: BLA0624-MSD1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 02-MAR-2023
Calibration Time: 14:13
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
8 1,4-Dichlorobenze	493417	246709	986834	672370	36.27	
27 Naphthalene-d8	1779056	889528	3558112	2477168	39.24	
42 Acenaphthene-d10	954569	477285	1909138	1288517	34.98	
59 Phenanthrene-d10	1596290	798145	3192580	2917258	82.75	
69 Chrysene-d12	1649110	824555	3298220	4069829	146.79	<-
77 Perylene-d12	1901958	950979	3803916	3624176	90.55	

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.04
69 Chrysene-d12	23.42	22.92	23.92	23.45	0.10
77 Perylene-d12	26.12	25.62	26.62	26.15	0.12

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

REVIEW SUMMARY FOR FILE - NT1003022310S.D

Lab ID: BLA0624-MSD1
nt10.i, 20230302.b\SIM.b\SIMABN2.m,   02-MAR-2023 20:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.945	0.0072	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003022303S.D

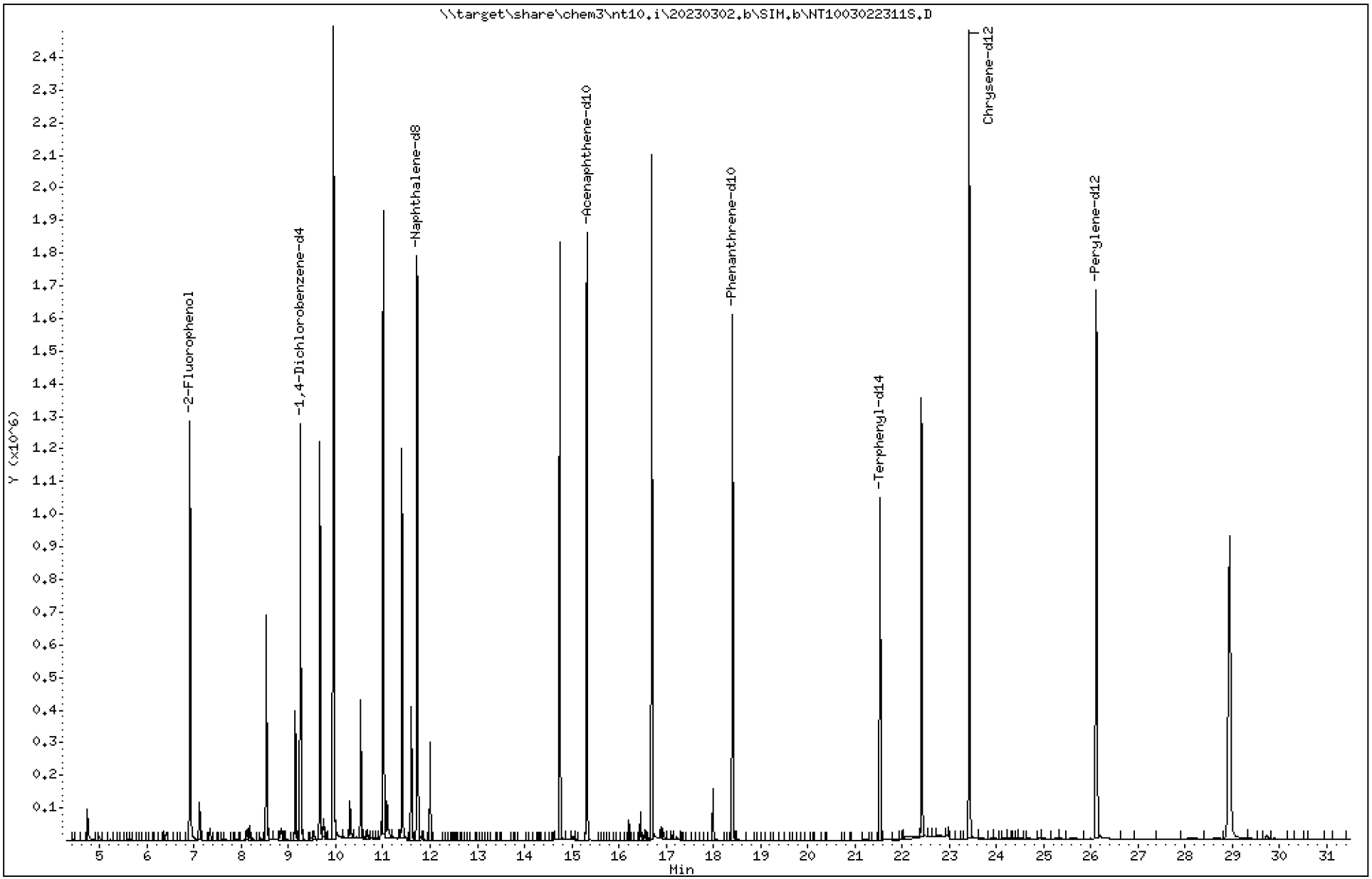
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D
Date : 02-MAR-2023 20:44
Client ID:
Sample Info: BLA0624-SRM1
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022311S.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

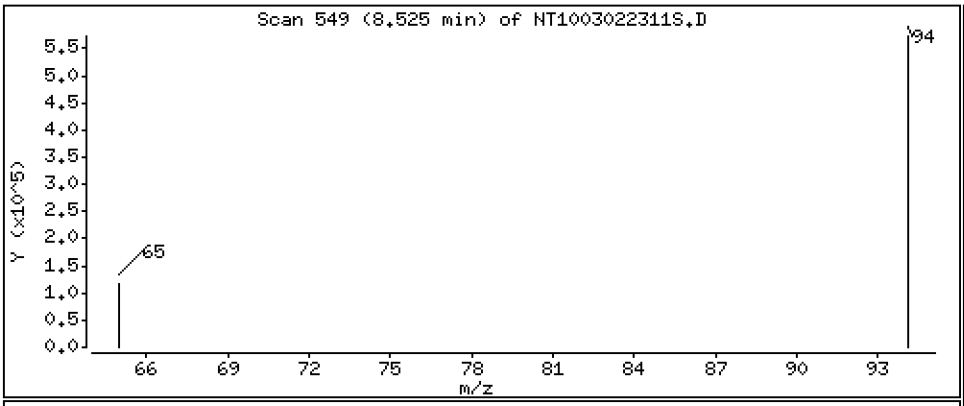
Operator: JGR

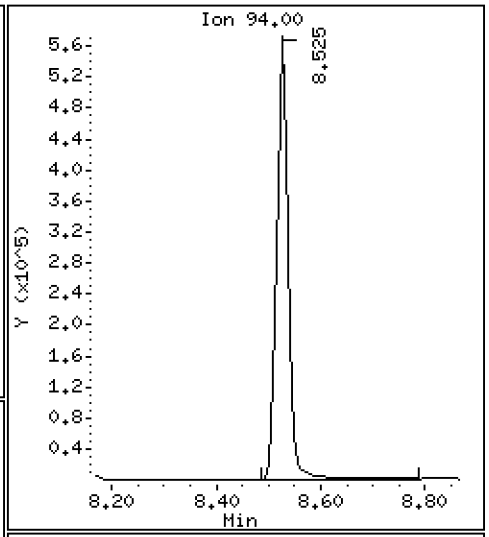
Column phase: ZB-5msi

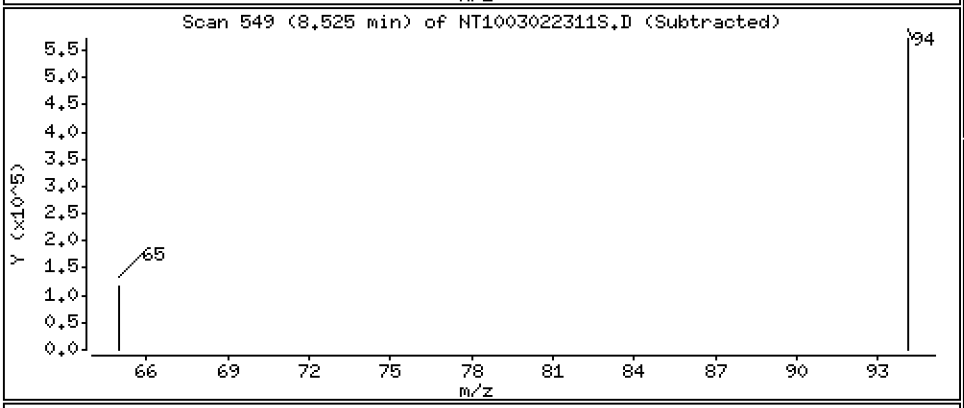
Column diameter: 0.25

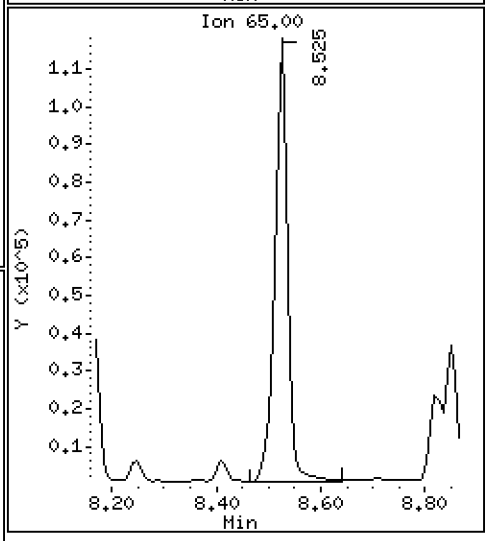
3 Phenol

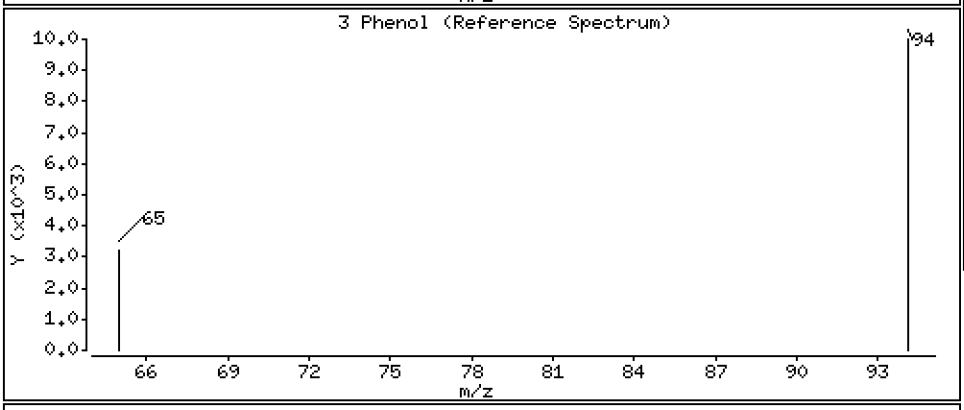
Concentration: 2.644 ug/L

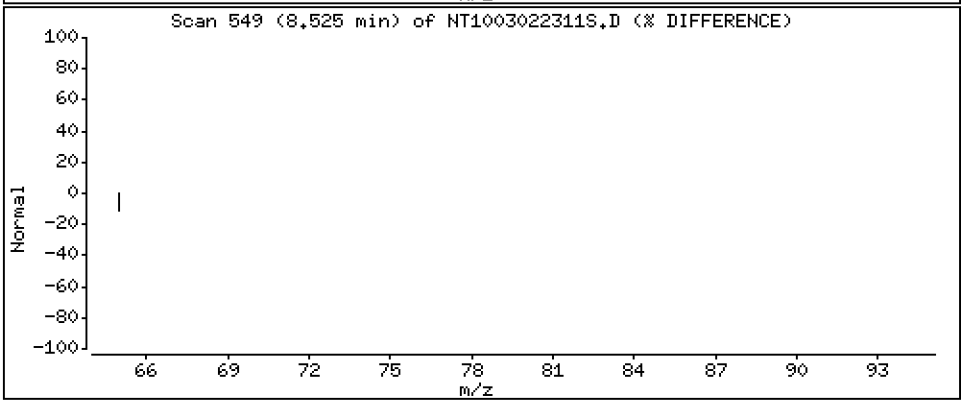












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

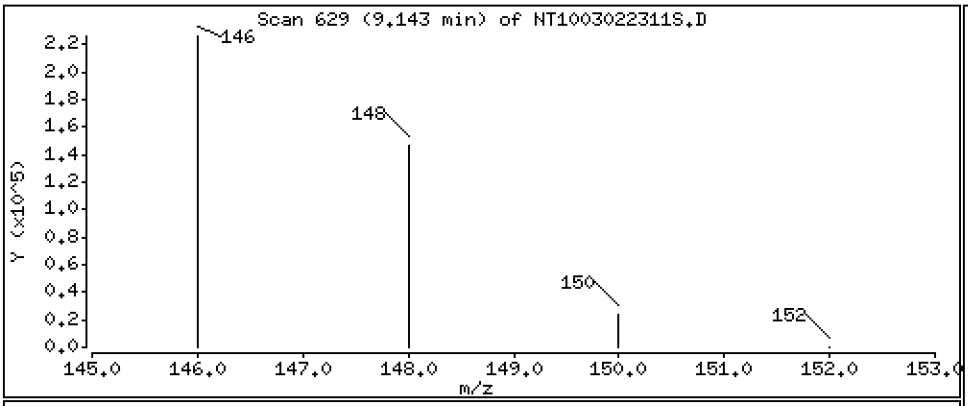
Operator: JGR

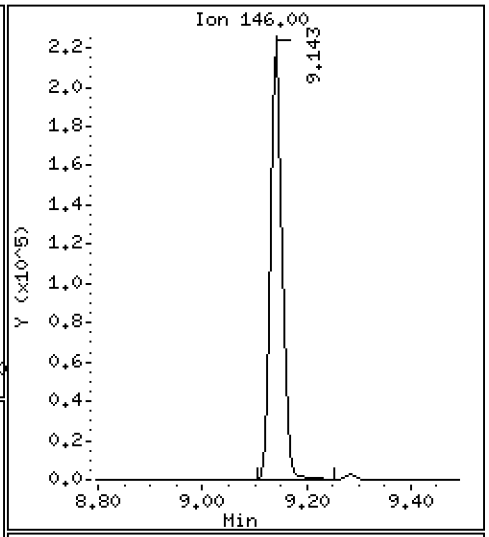
Column phase: ZB-5msi

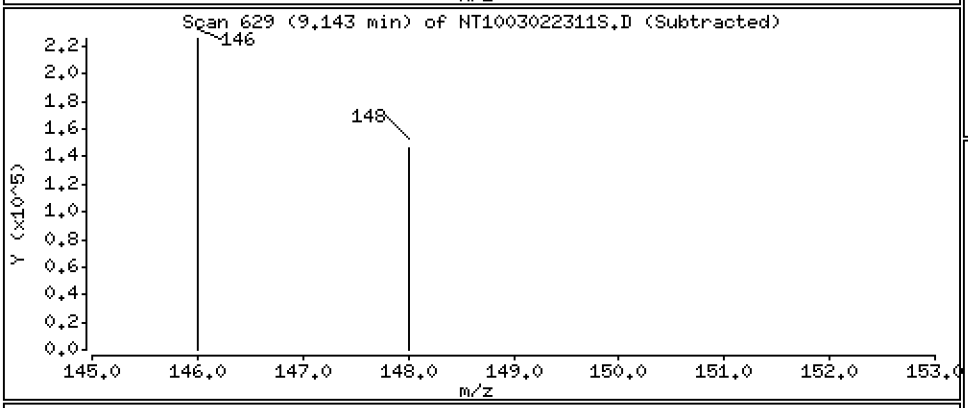
Column diameter: 0.25

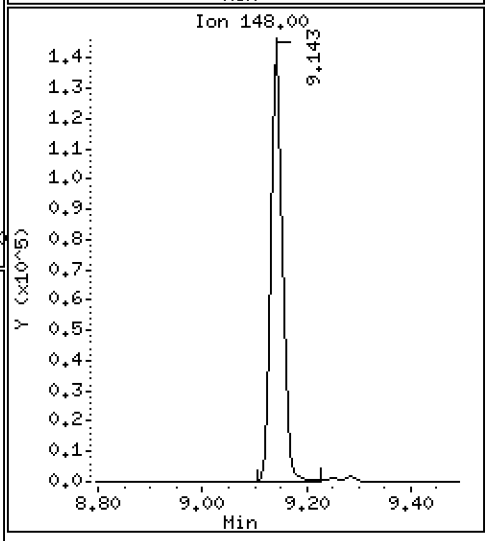
7 1,3-Dichlorobenzene

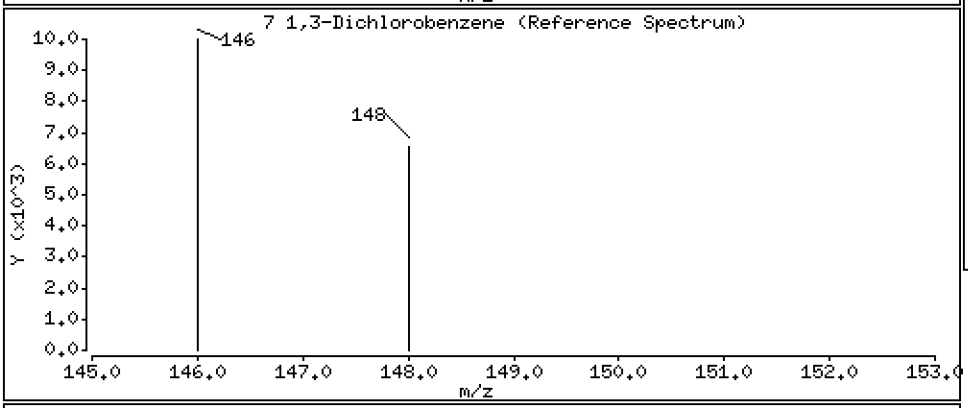
Concentration: 1.193 ug/L

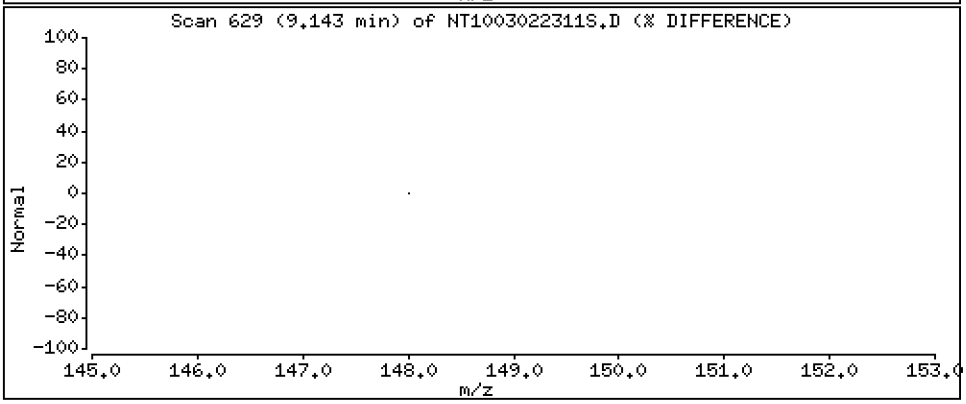












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

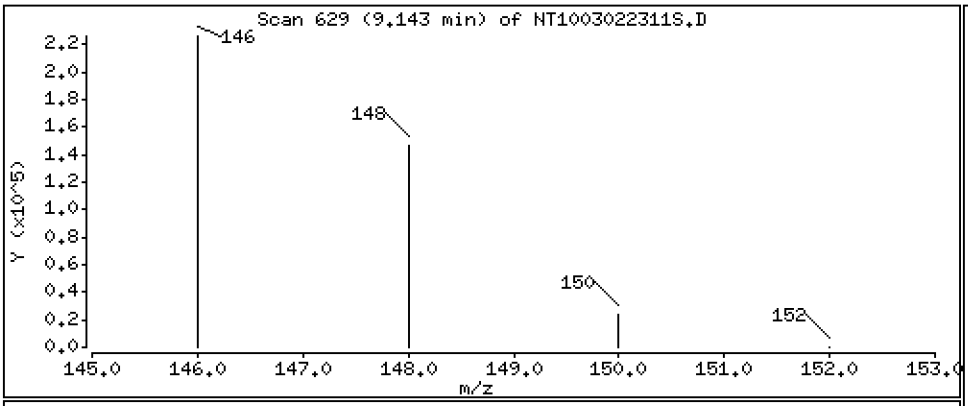
Operator: JGR

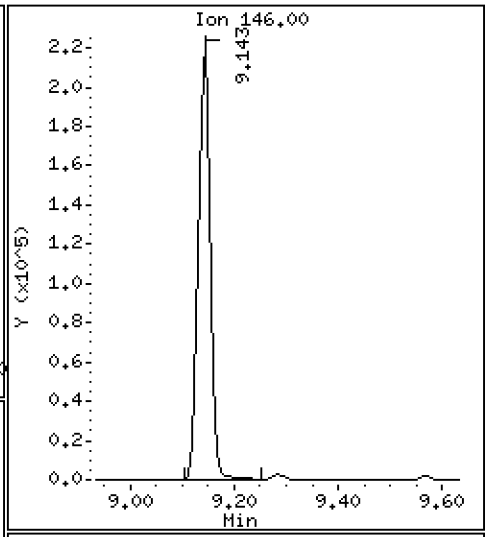
Column phase: ZB-5msi

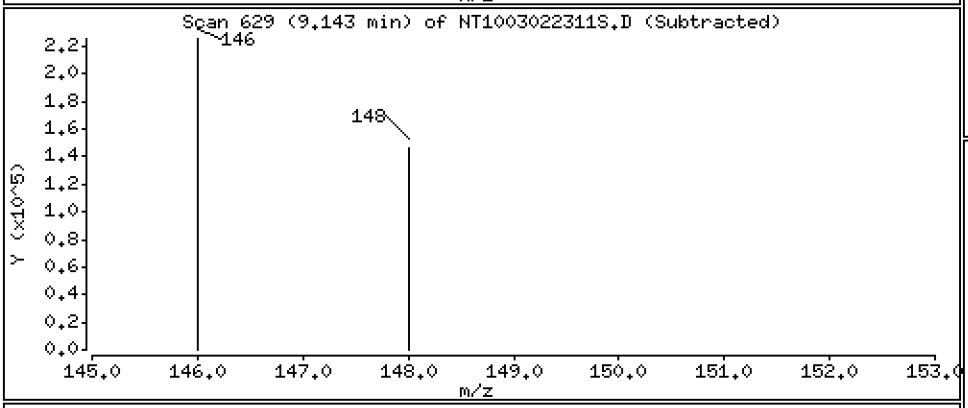
Column diameter: 0.25

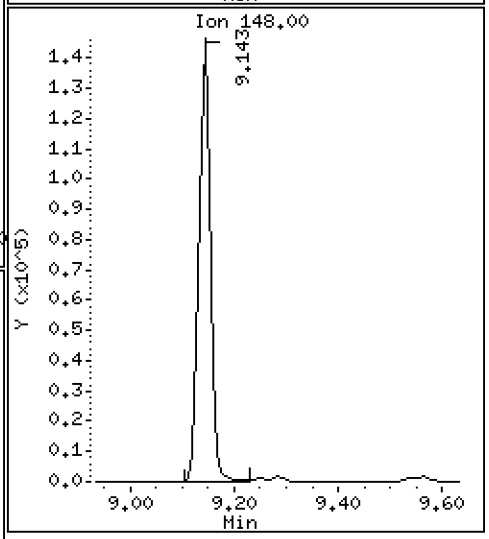
9 1,4-Dichlorobenzene

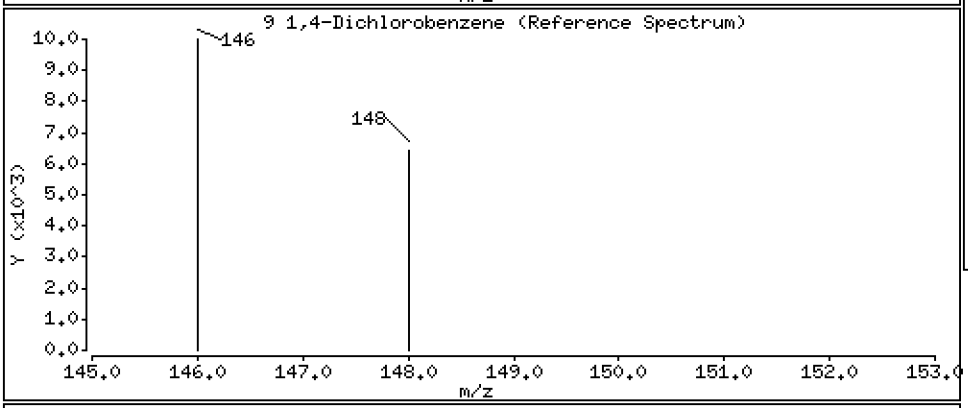
Concentration: 1.227 ug/L

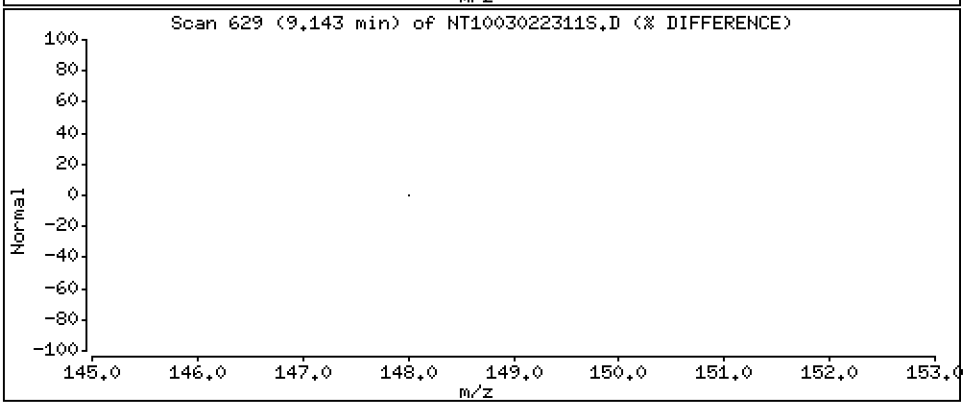












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

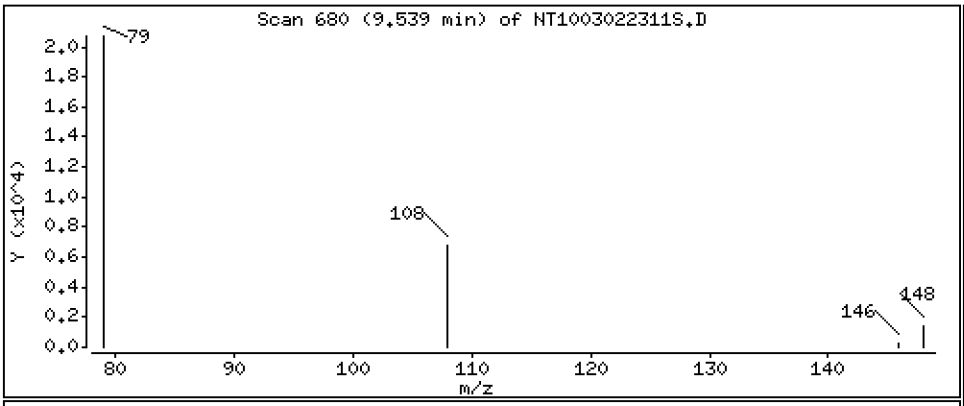
Operator: JGR

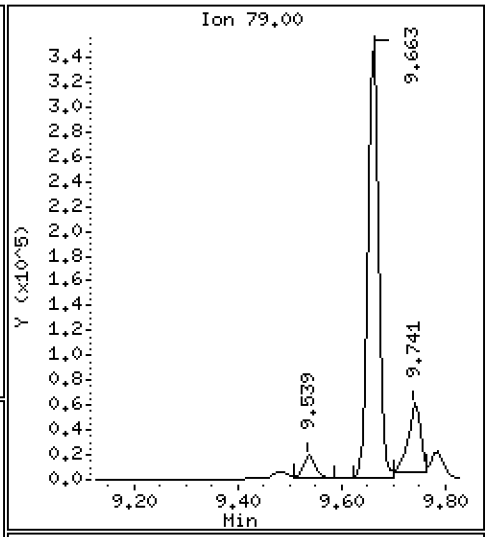
Column phase: ZB-5msi

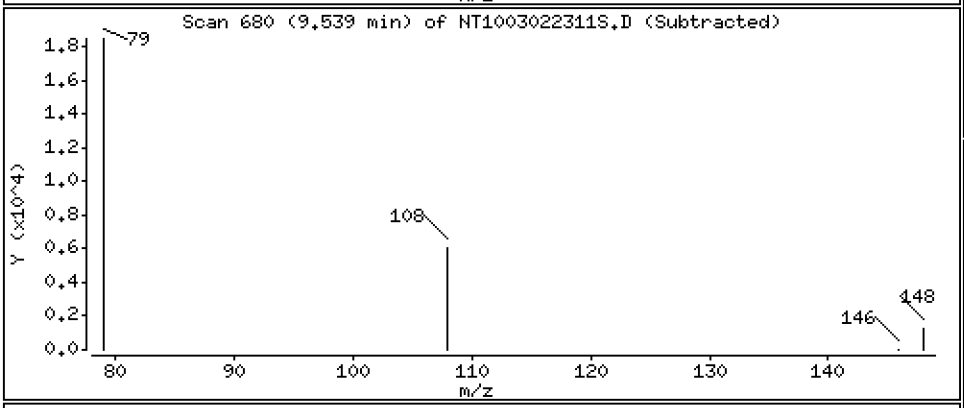
Column diameter: 0.25

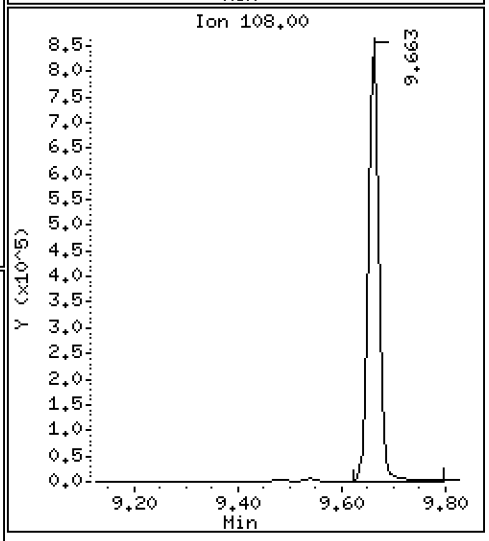
11 Benzyl alcohol

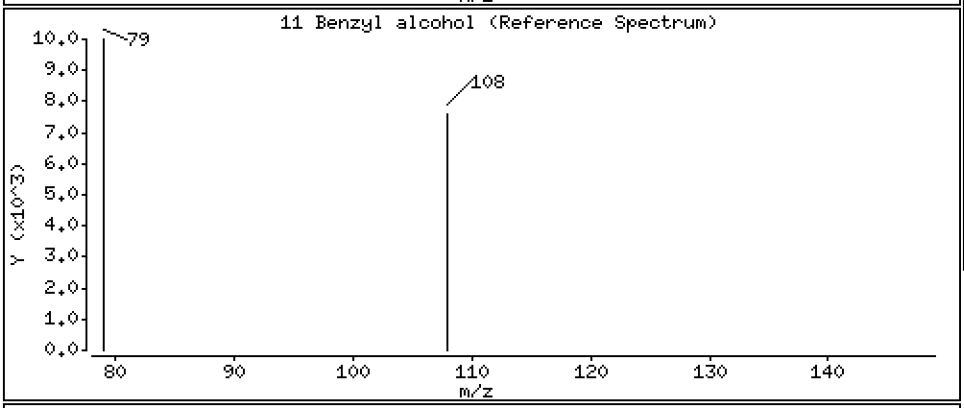
Concentration: 0.1750 ug/L

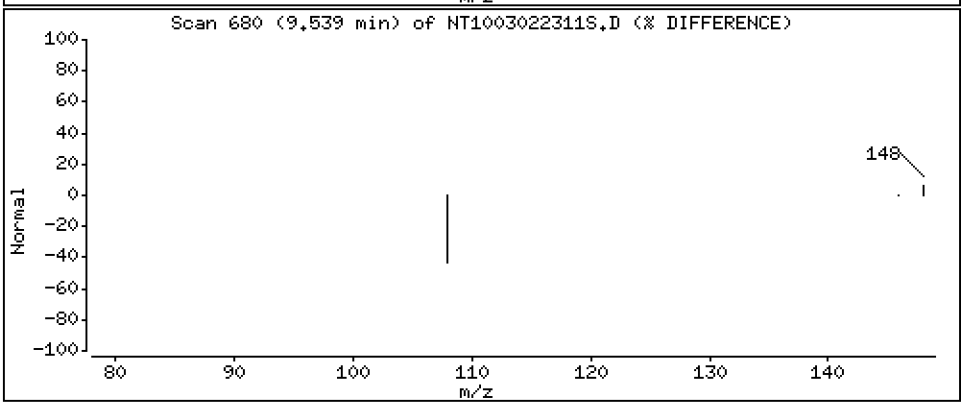












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

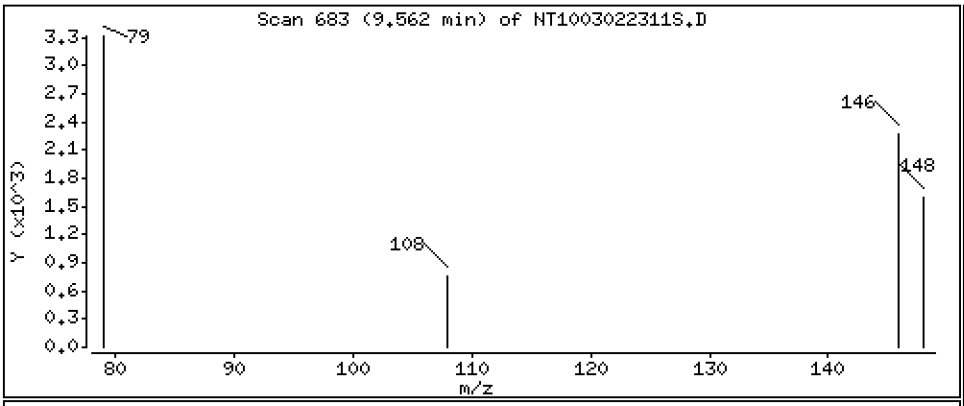
Operator: JGR

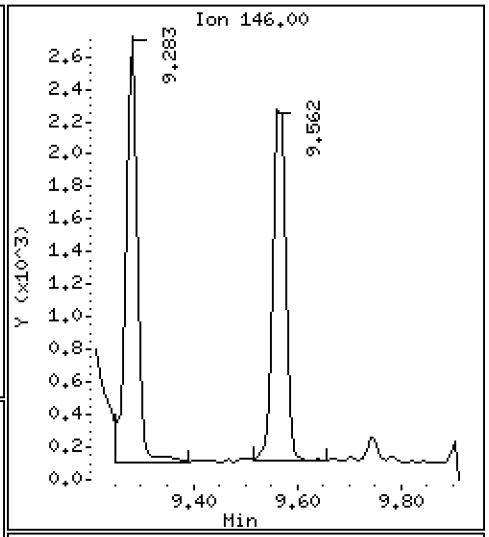
Column phase: ZB-5msi

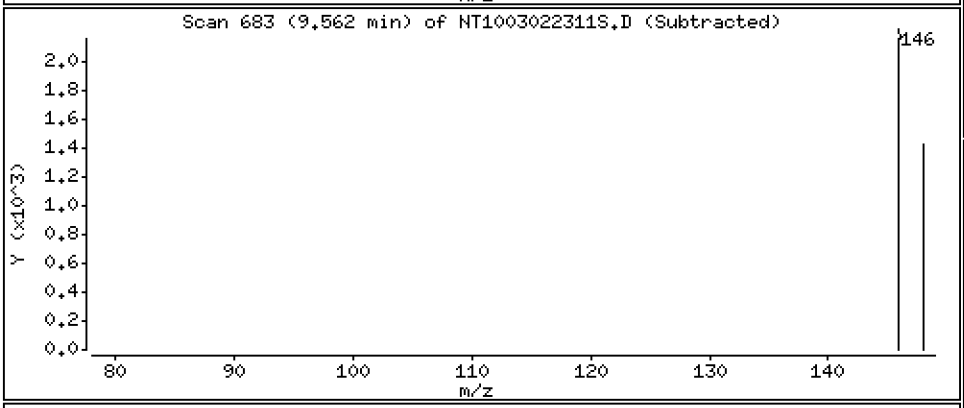
Column diameter: 0.25

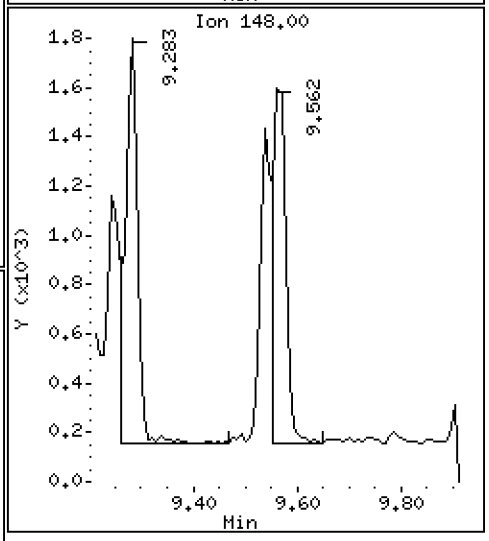
12 1,2-Dichlorobenzene

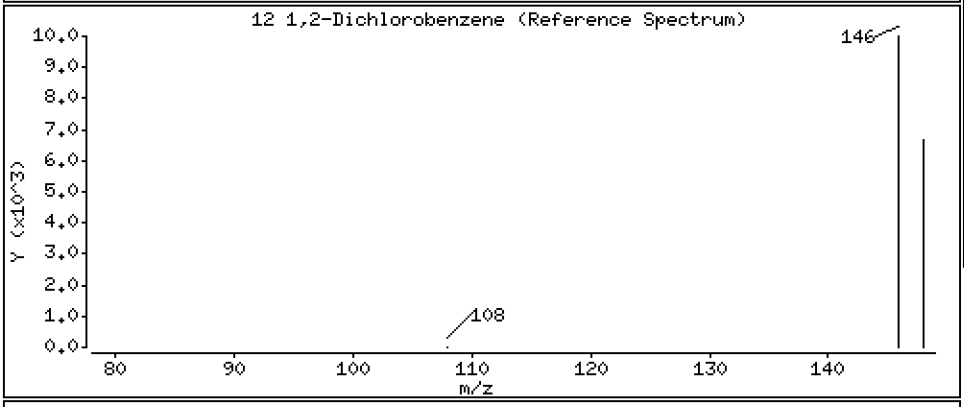
Concentration: 0.01329 ug/L

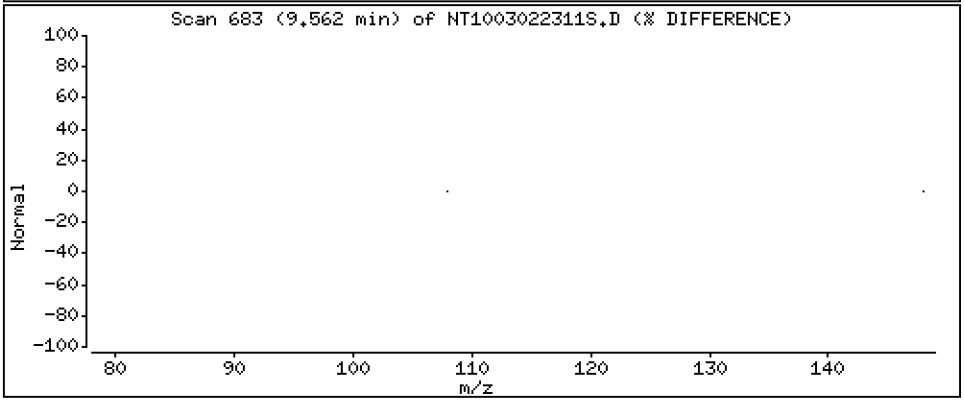












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

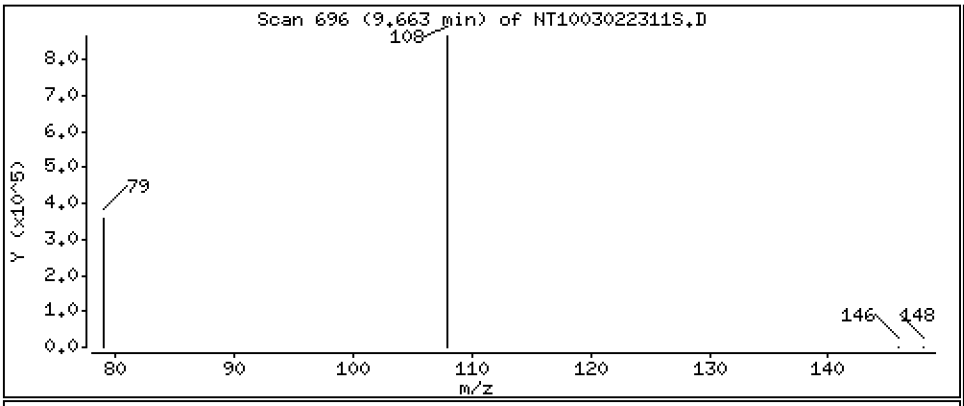
Operator: JGR

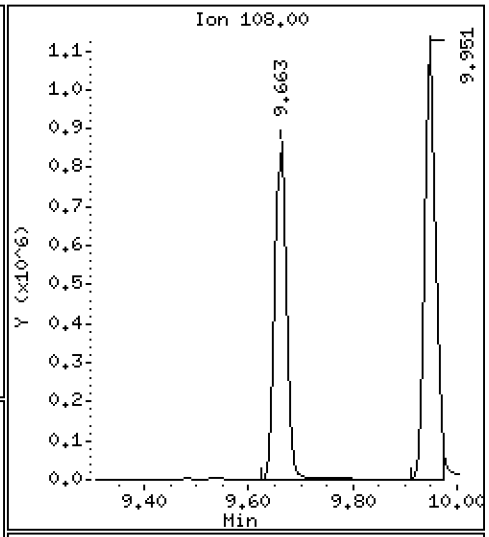
Column phase: ZB-5msi

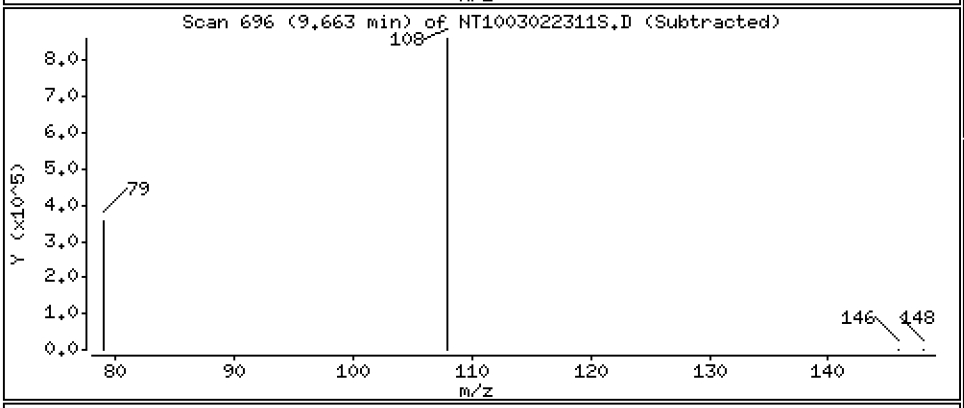
Column diameter: 0.25

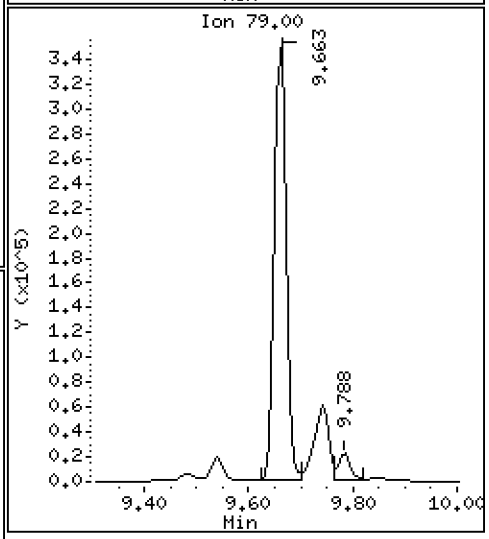
13 2-Methylphenol

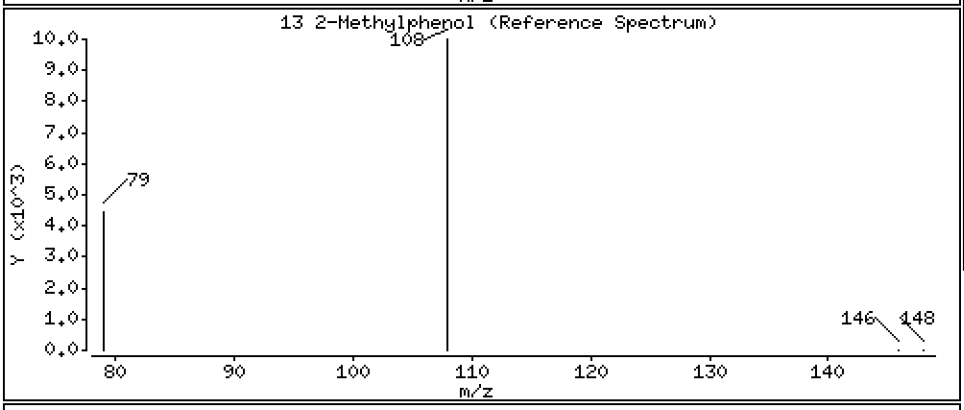
Concentration: 6.239 ug/L

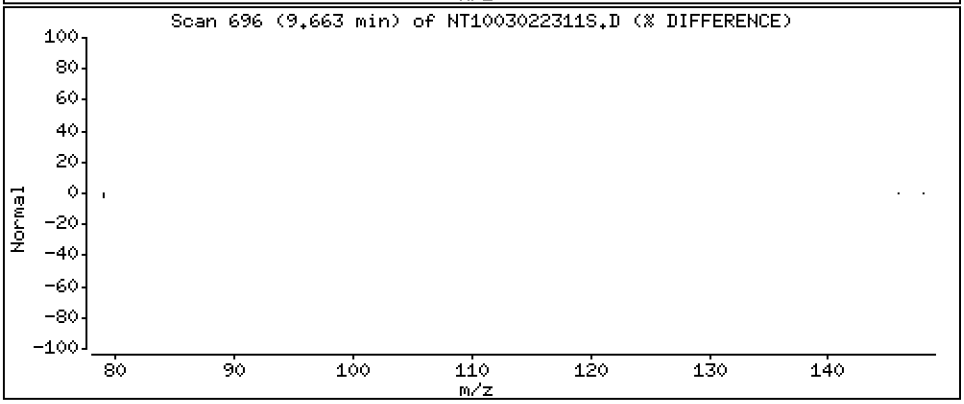












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

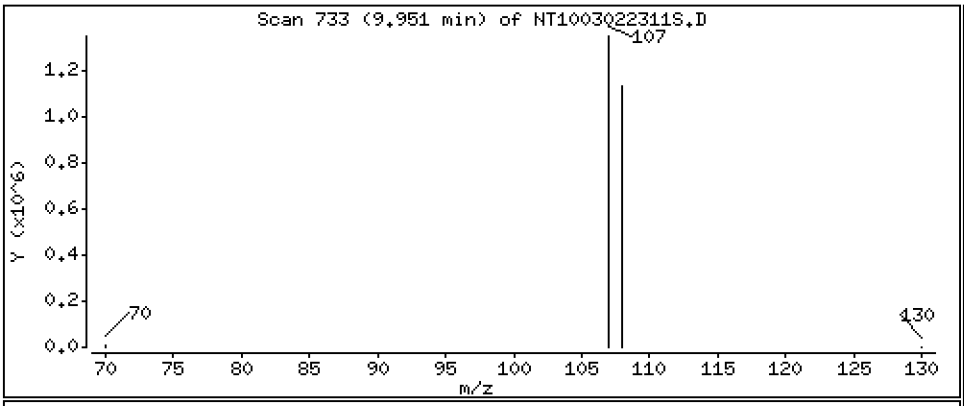
Operator: JGR

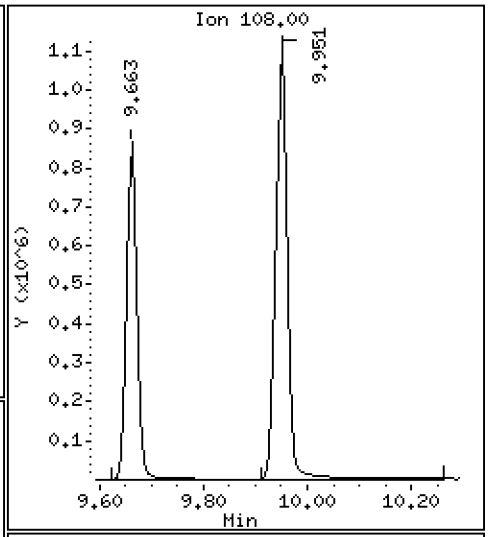
Column phase: ZB-5msi

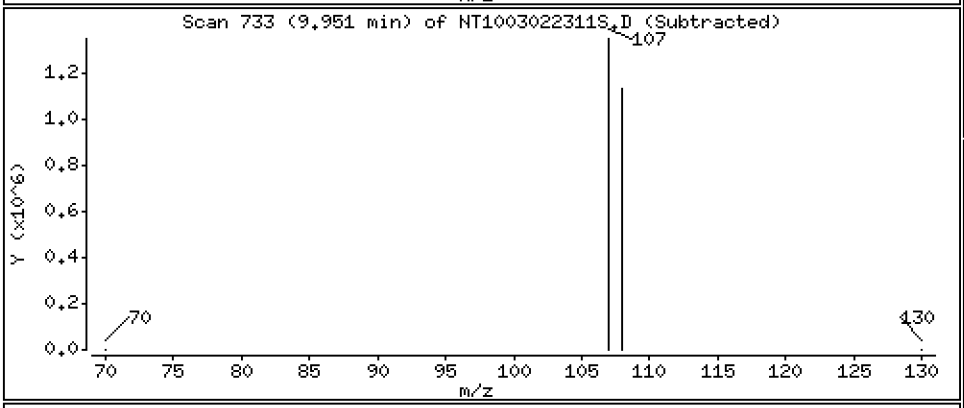
Column diameter: 0.25

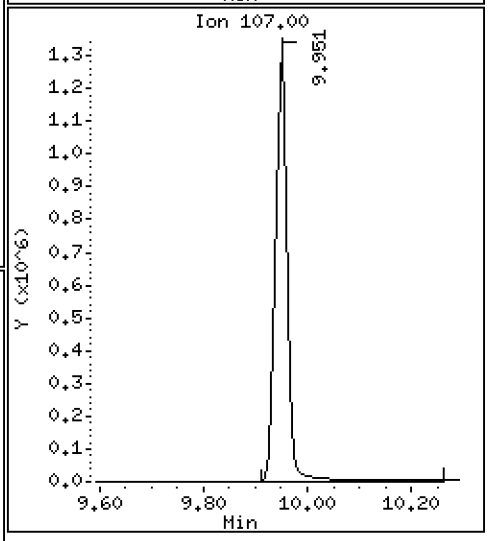
15 4-Methylphenol

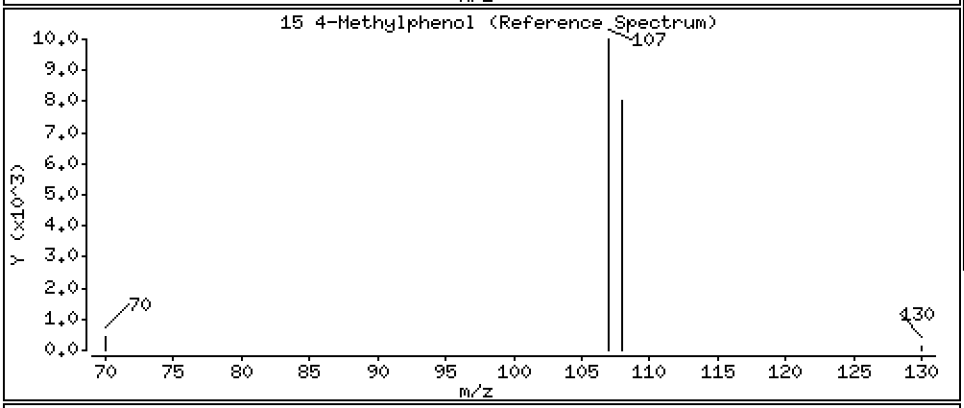
Concentration: 7.586 ug/L

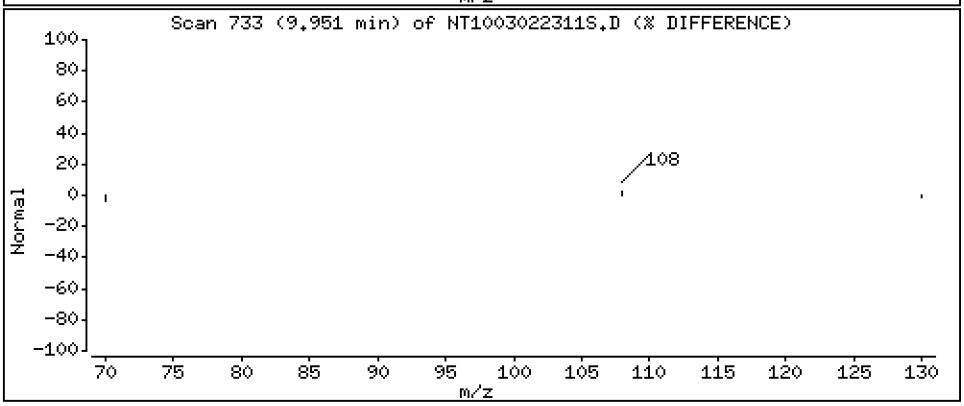












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

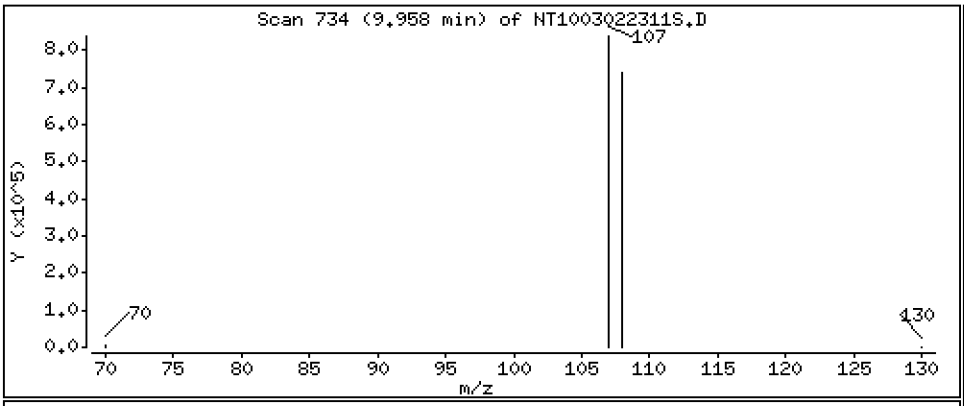
Operator: JGR

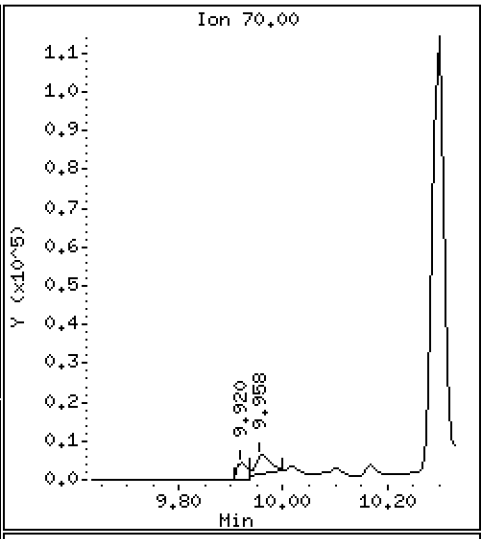
Column phase: ZB-5msi

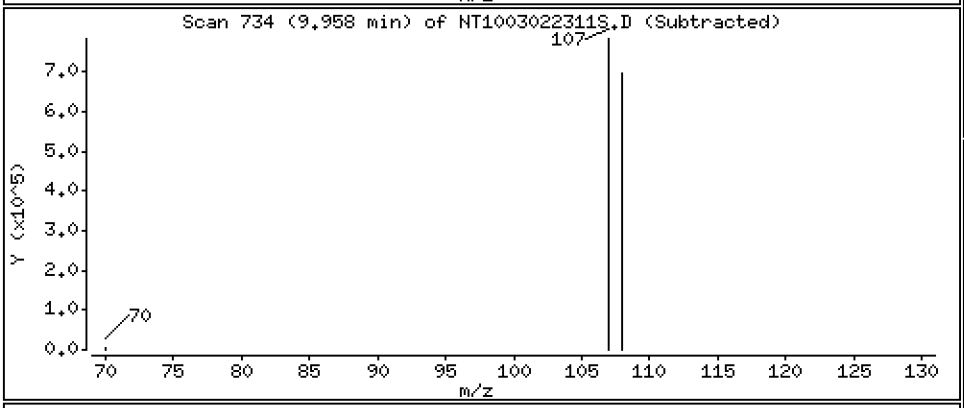
Column diameter: 0.25

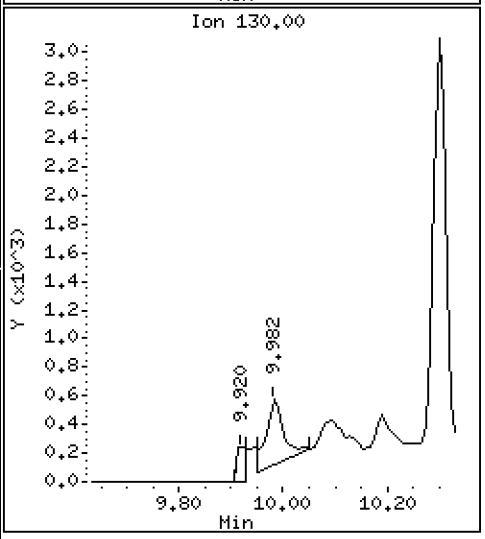
16 N-Nitroso-di-n-propylamine

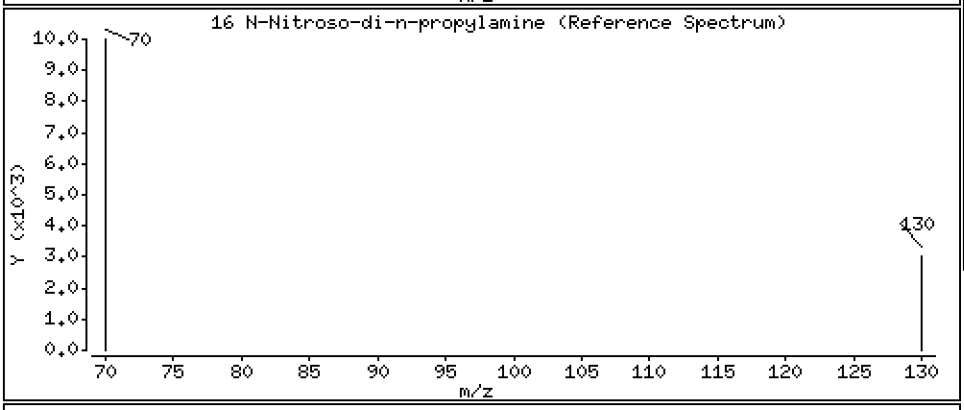
Concentration: 0.07196 ug/L

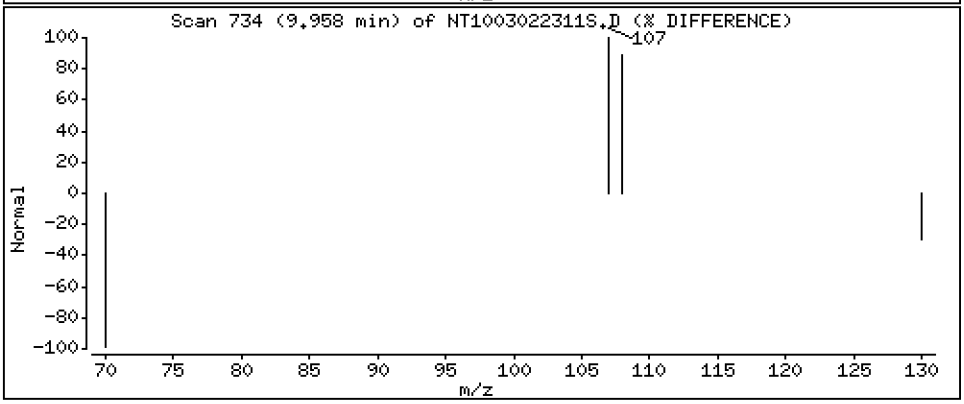












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

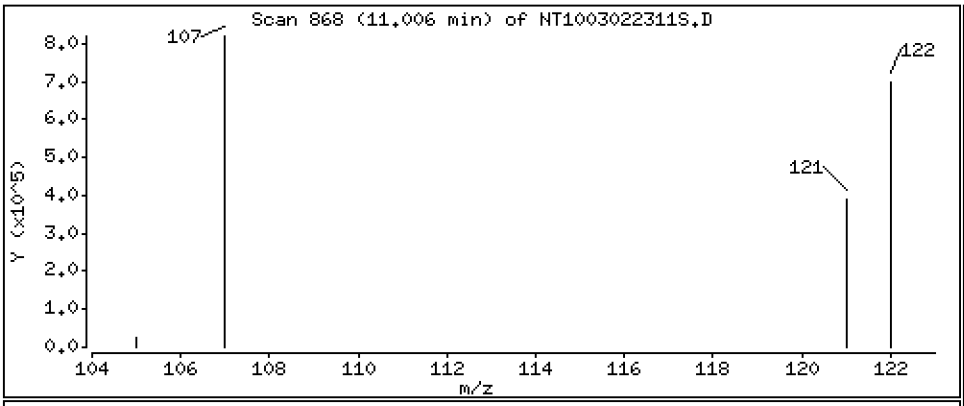
Operator: JGR

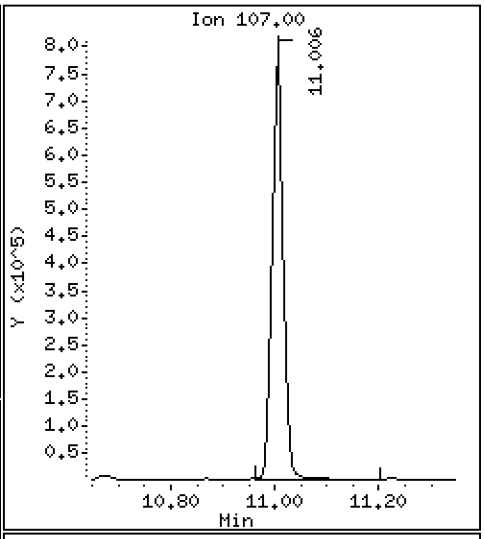
Column phase: ZB-5msi

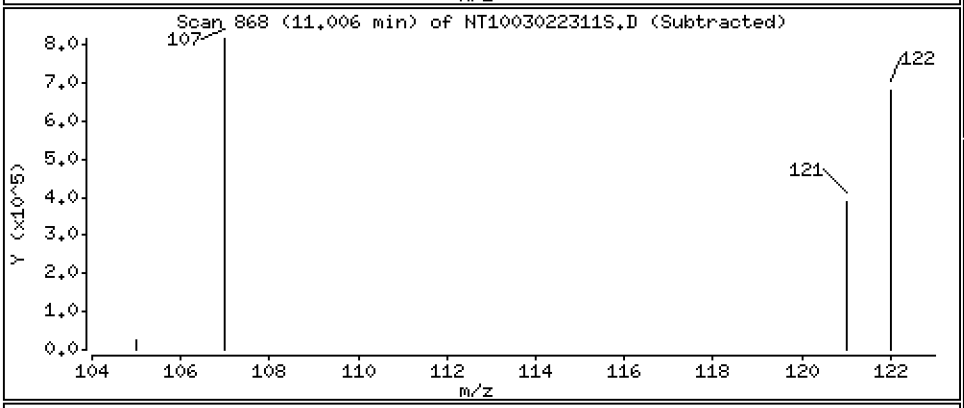
Column diameter: 0.25

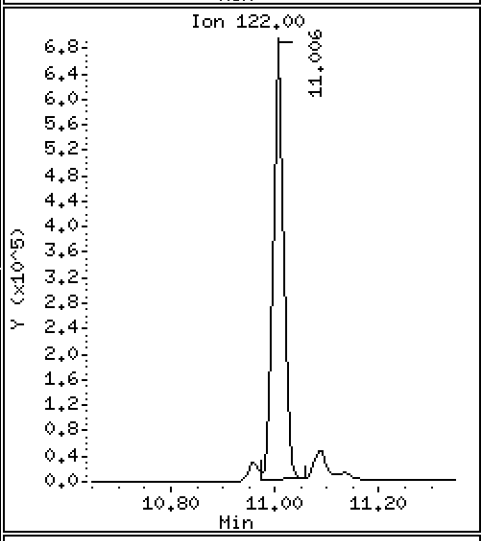
22 2,4-Dimethylphenol

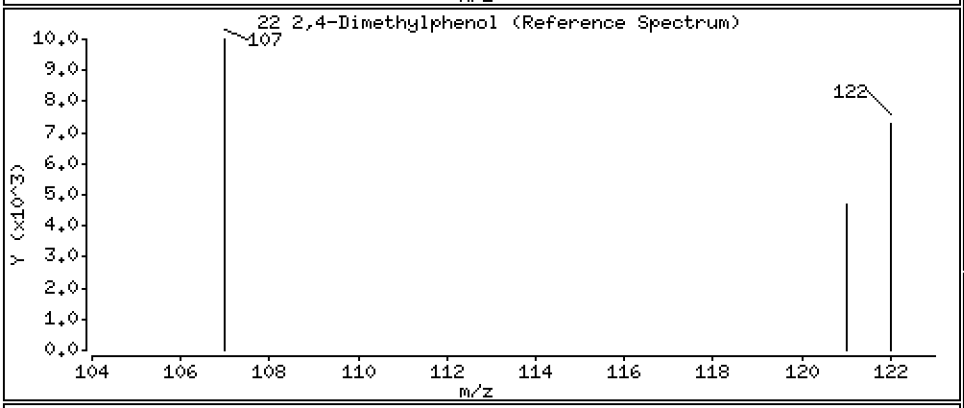
Concentration: 4.847 ug/L

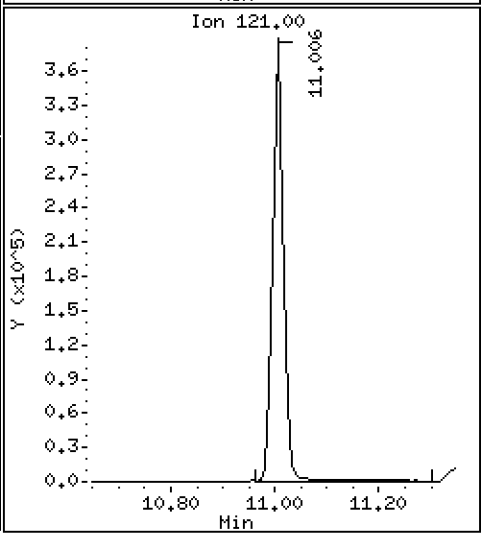


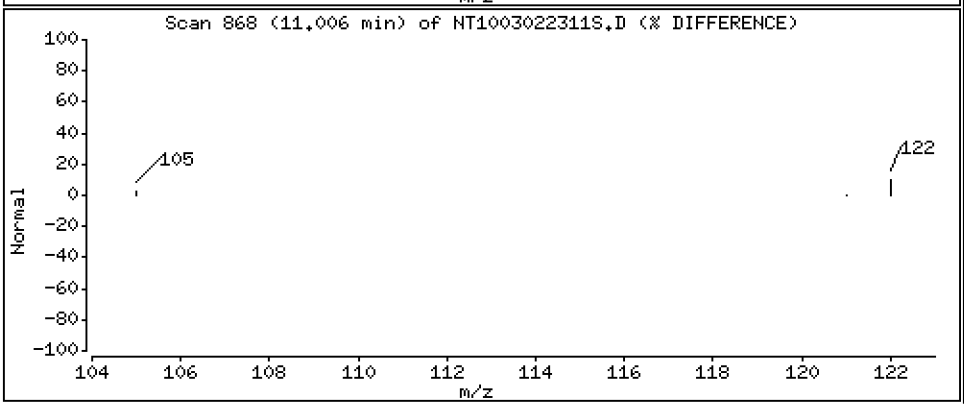












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

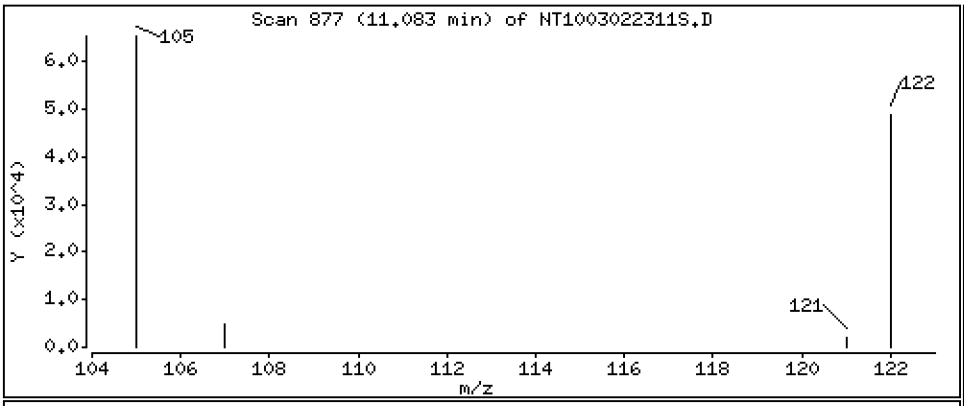
Operator: JGR

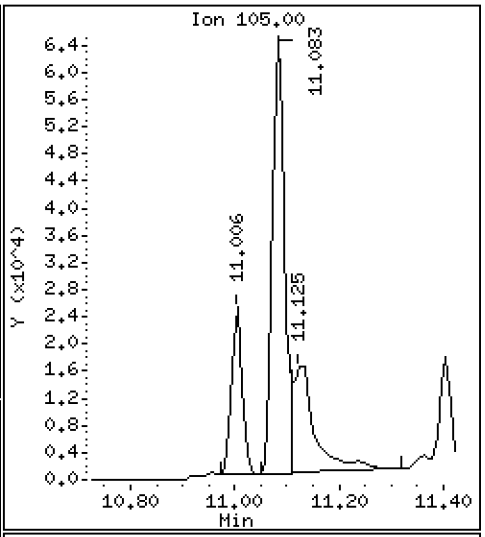
Column phase: ZB-5msi

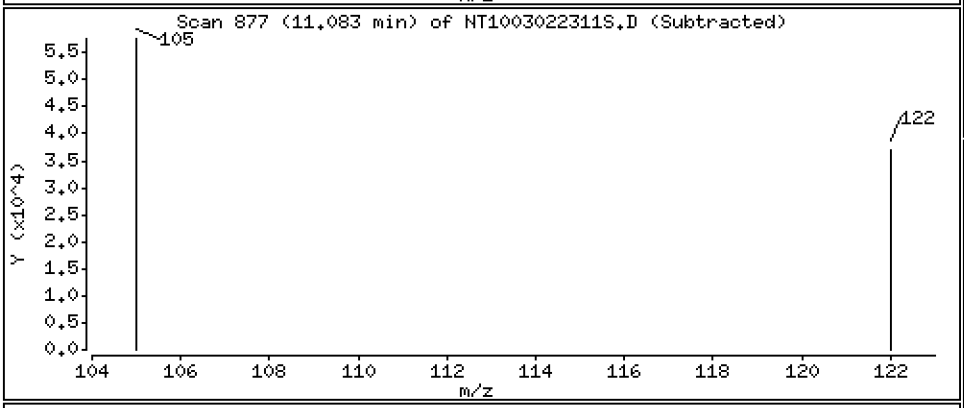
Column diameter: 0.25

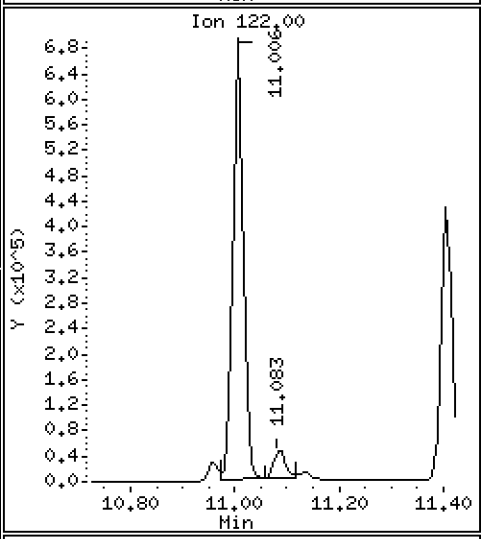
24 Benzoic acid

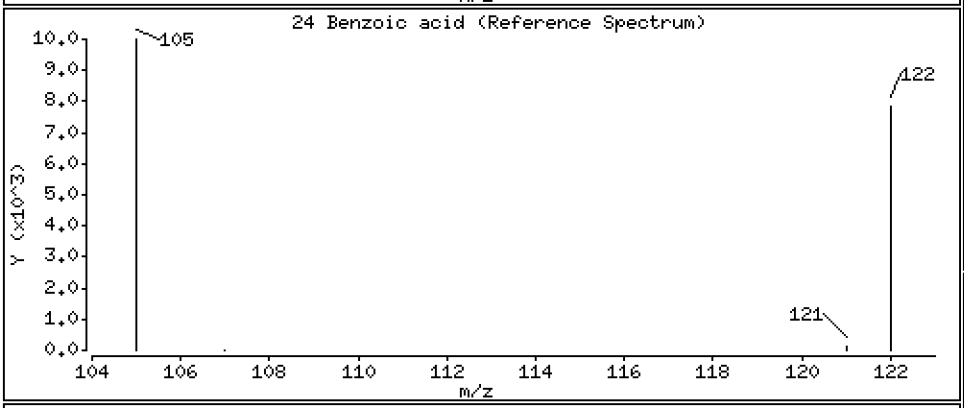
Concentration: 0.8166 ug/L

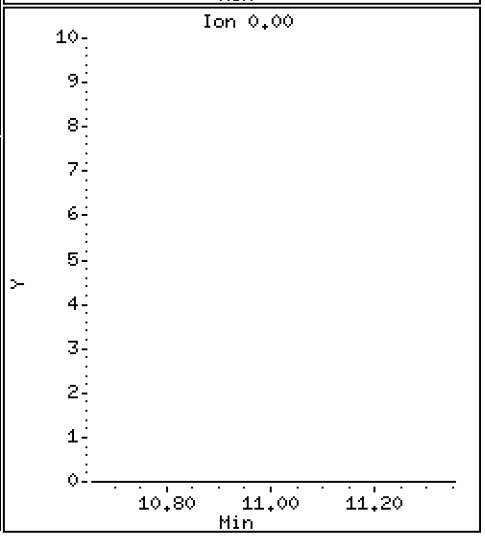


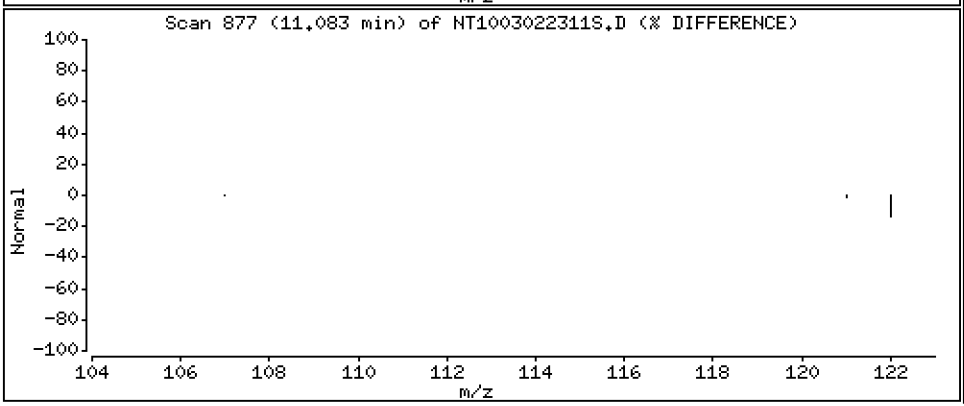












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Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

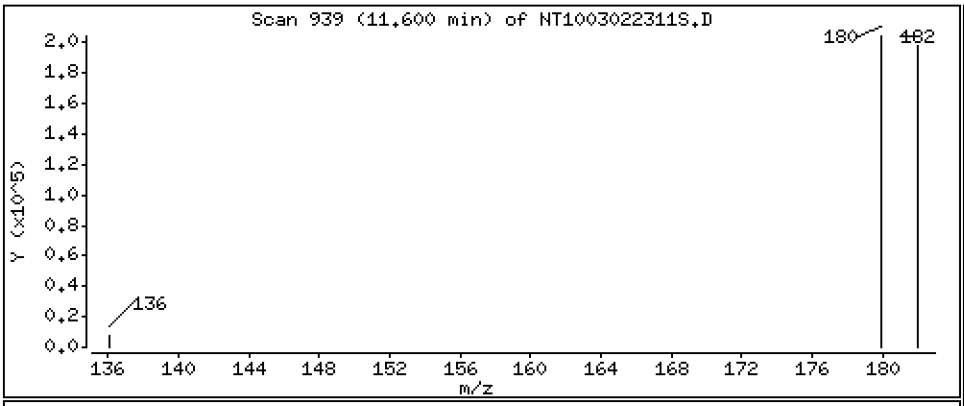
Operator: JGR

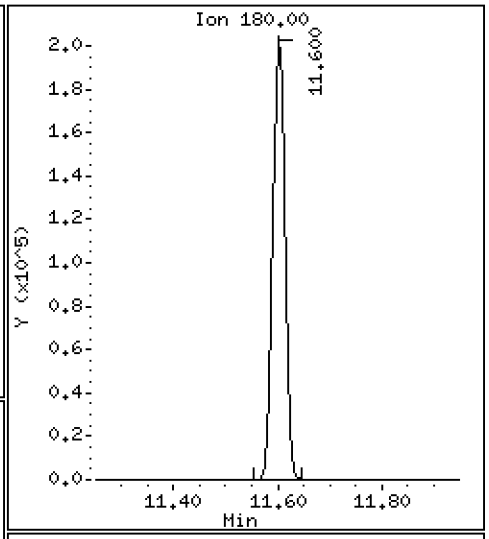
Column phase: ZB-5msi

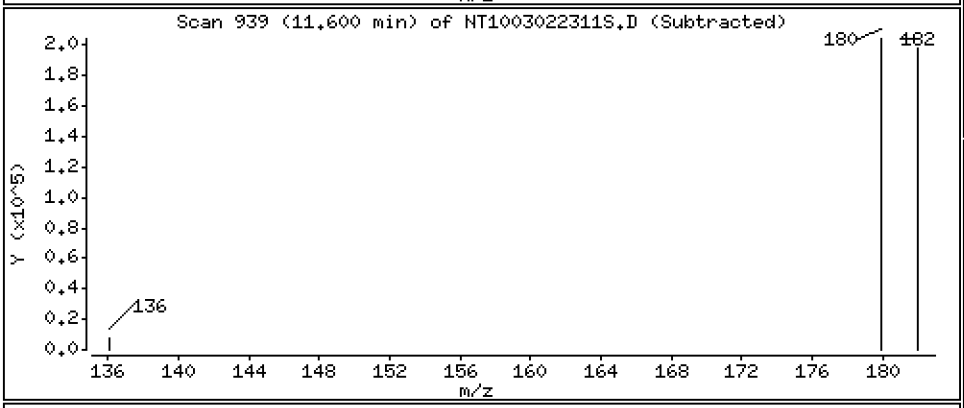
Column diameter: 0.25

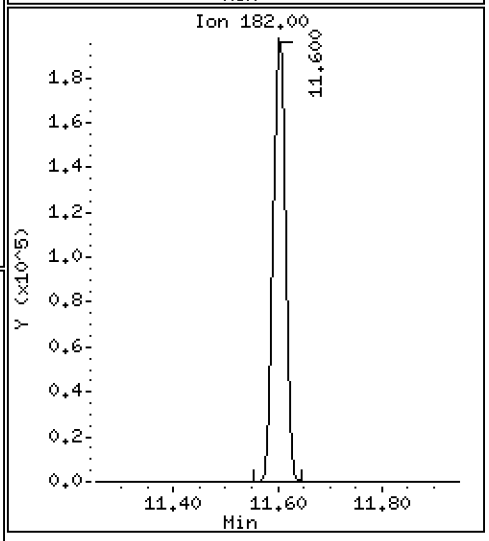
26 1,2,4-Trichlorobenzene

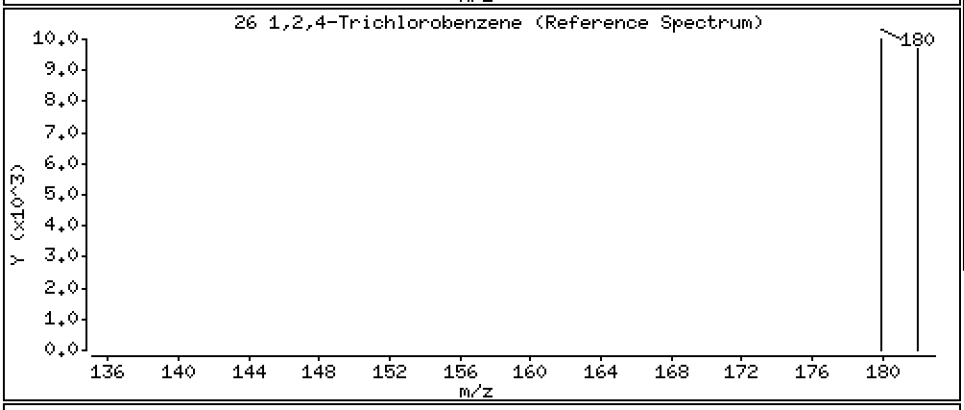
Concentration: 1.552 ug/L

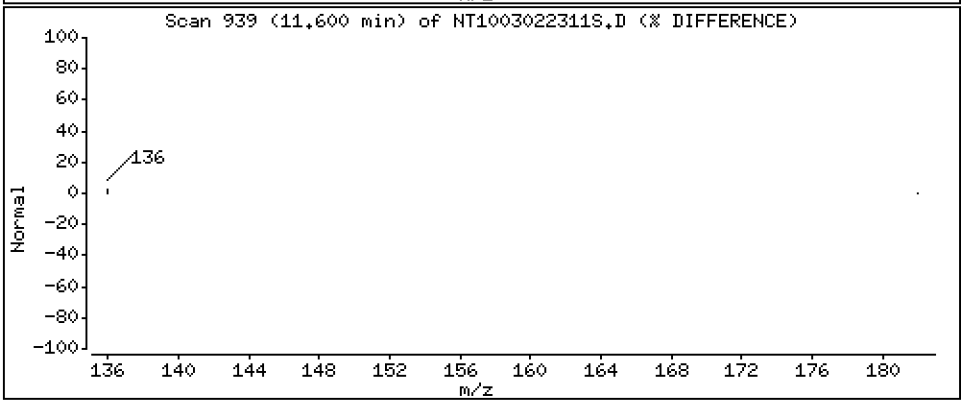












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

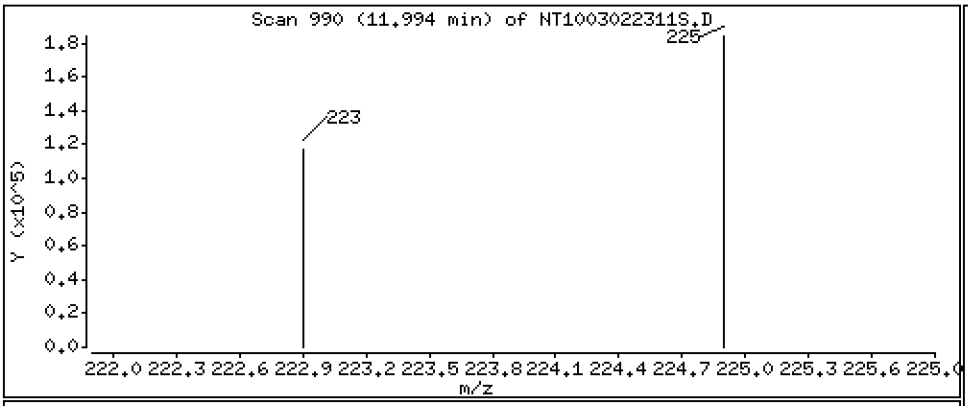
Operator: JGR

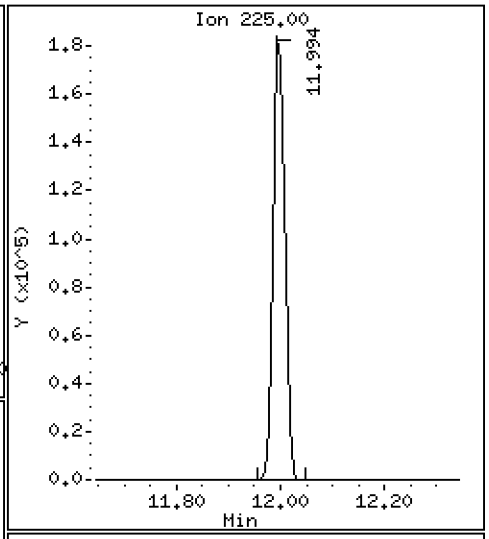
Column phase: ZB-5msi

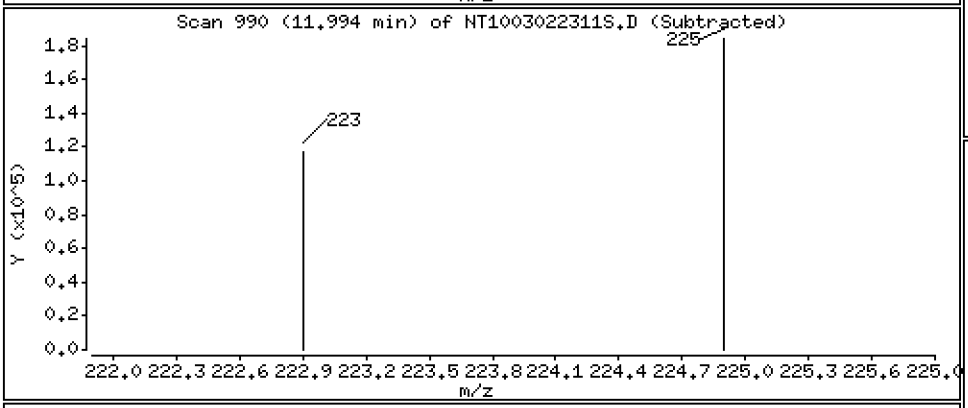
Column diameter: 0.25

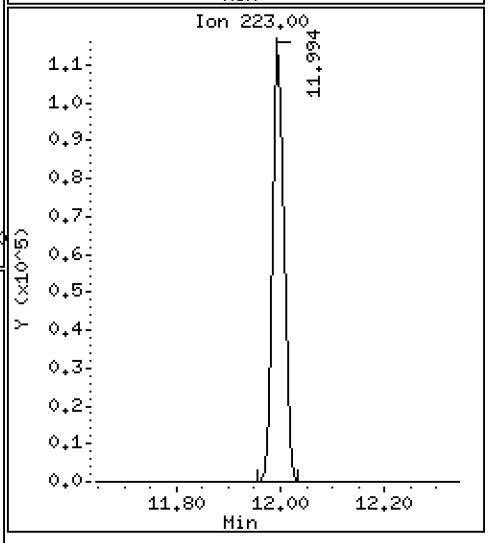
30 Hexachlorobutadiene

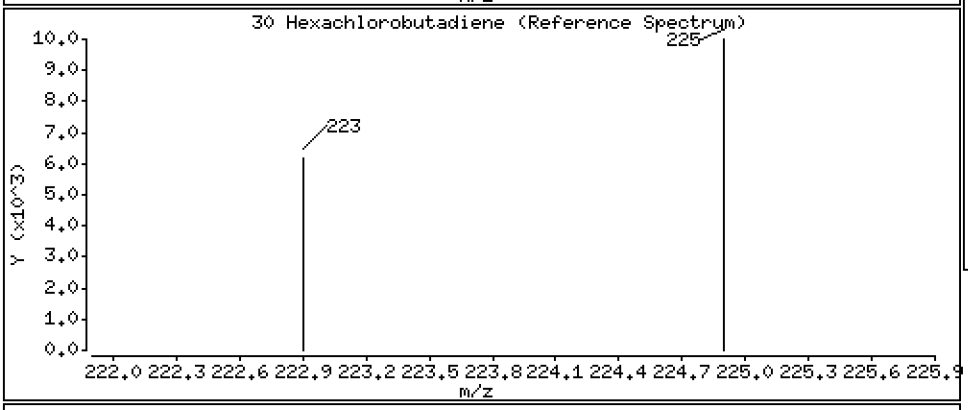
Concentration: 1.926 ug/L

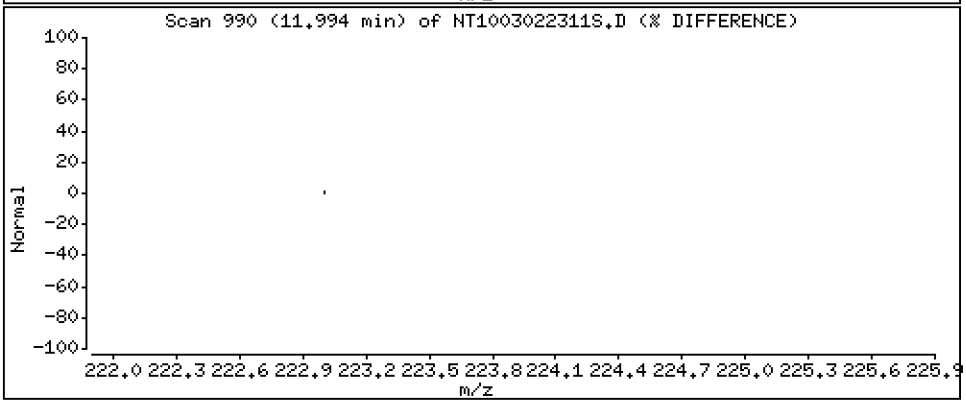












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

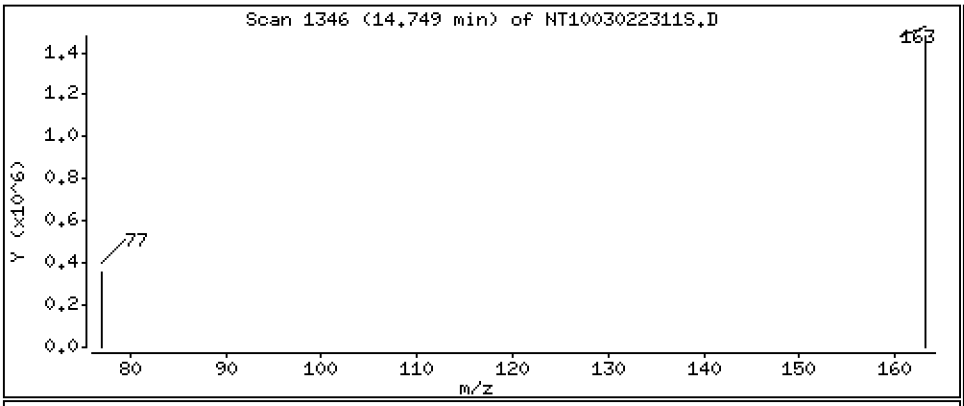
Operator: JGR

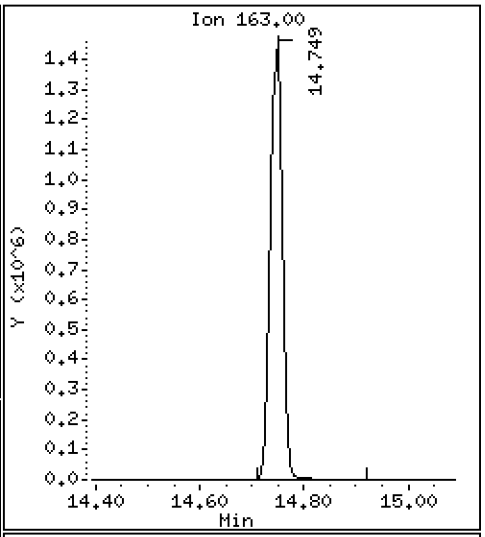
Column phase: ZB-5msi

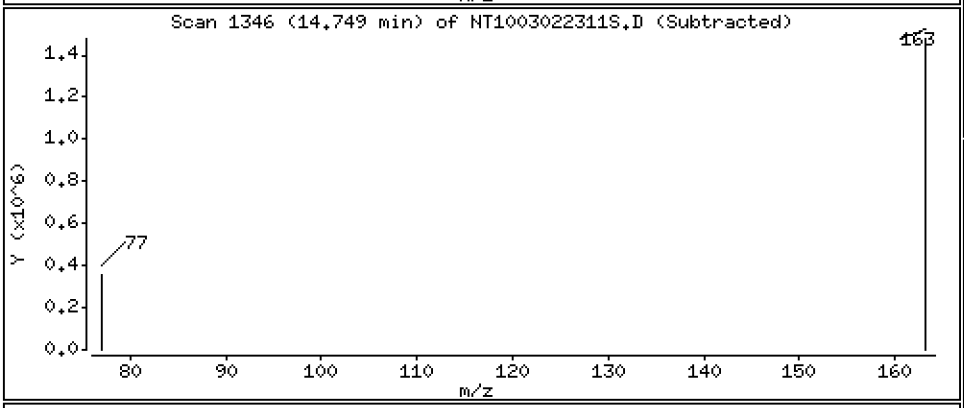
Column diameter: 0.25

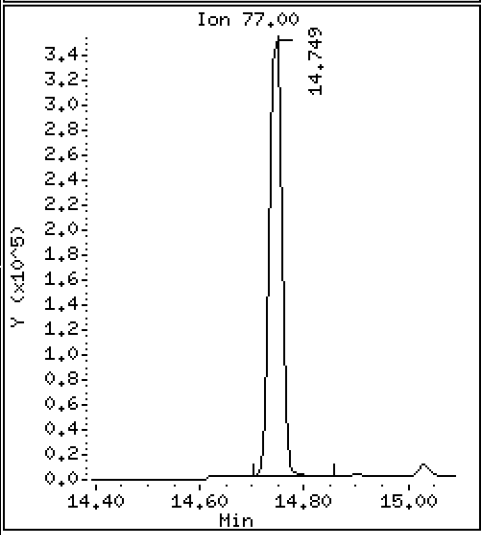
39 Dimethylphthalate

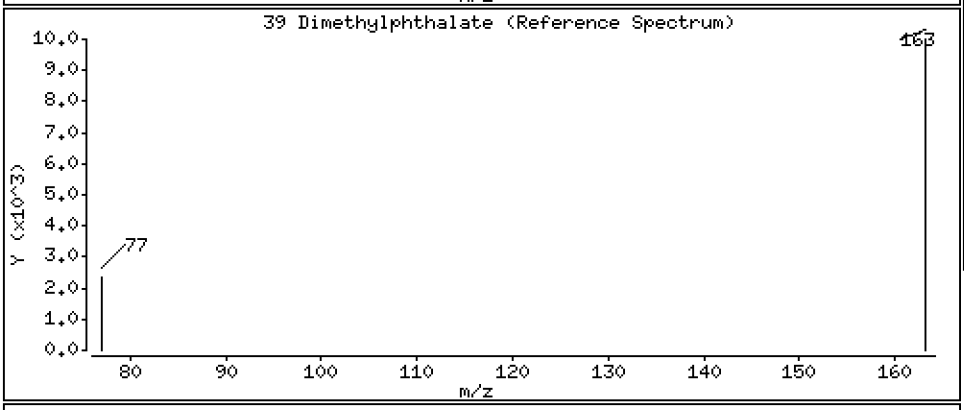
Concentration: 4.992 ug/L

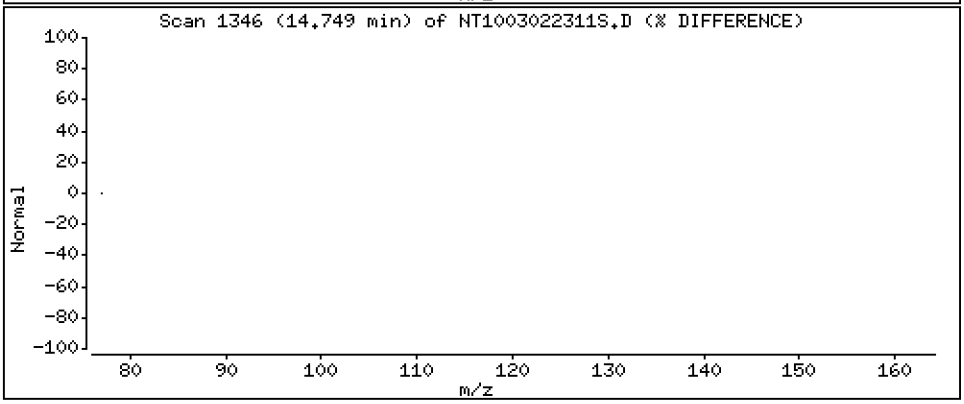












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Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

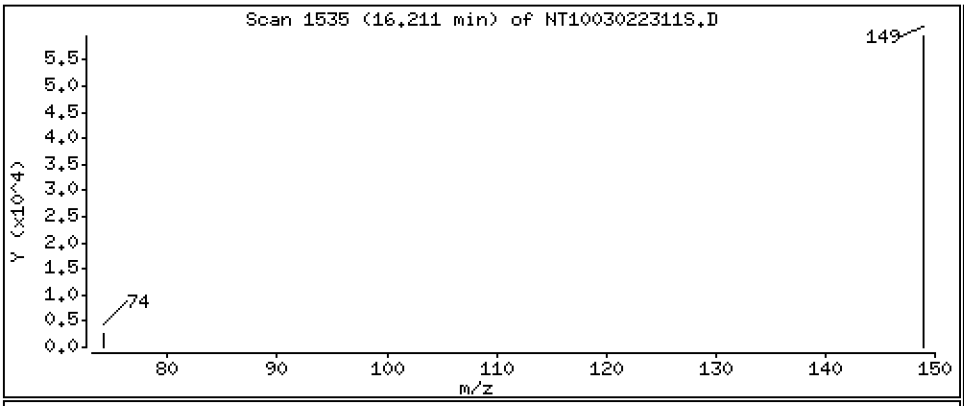
Operator: JGR

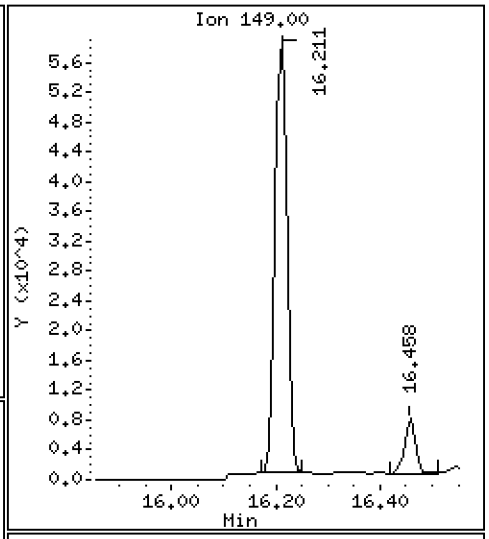
Column phase: ZB-5msi

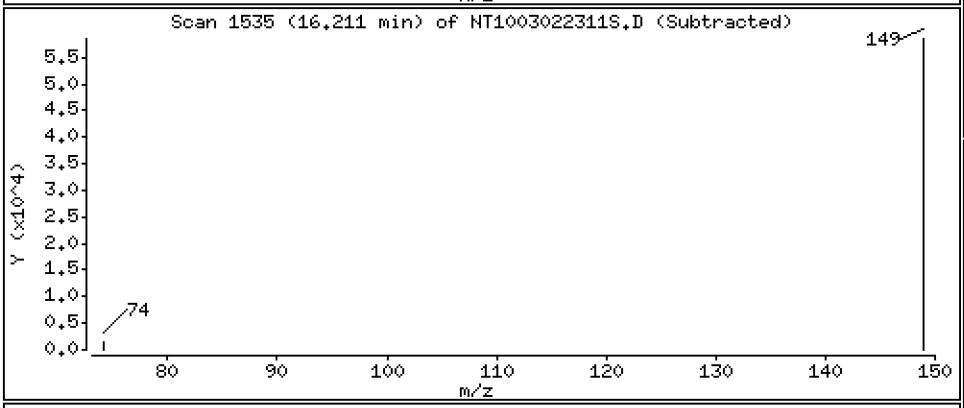
Column diameter: 0.25

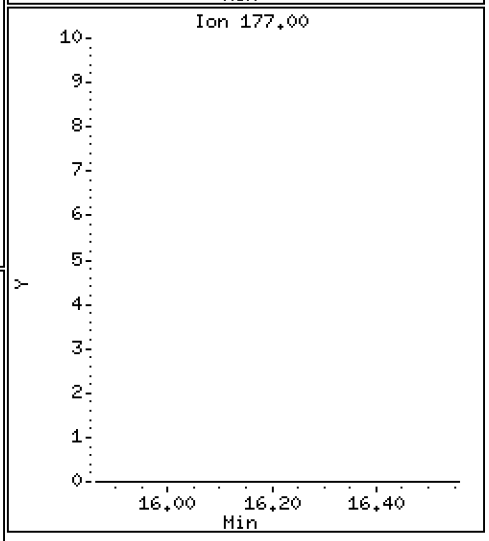
50 Diethylphthalate

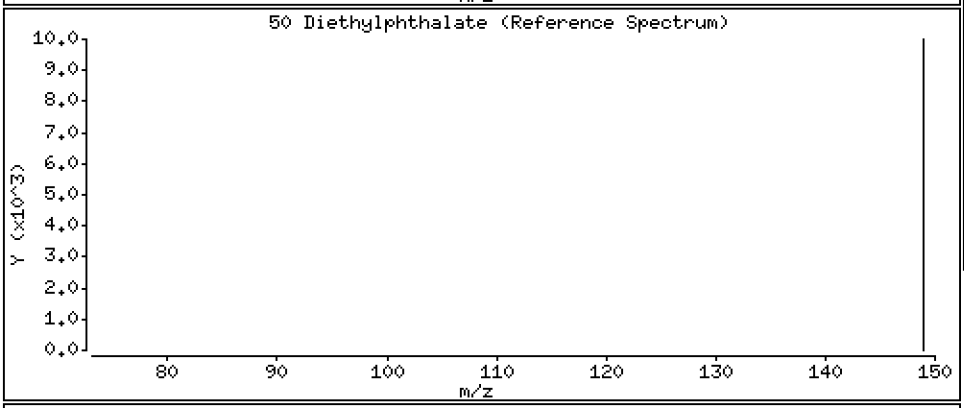
Concentration: 0.2121 ug/L

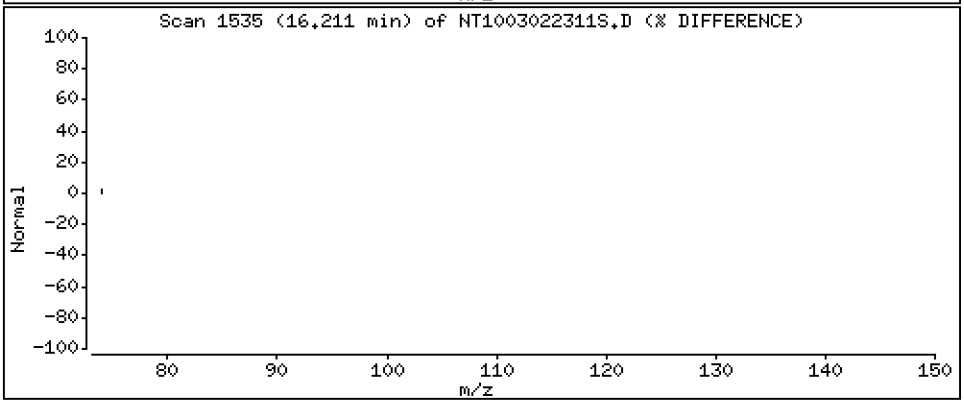












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Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

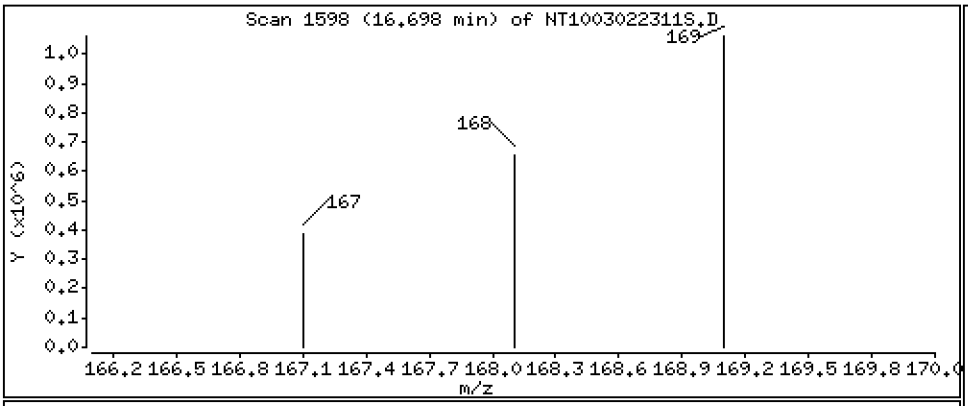
Operator: JGR

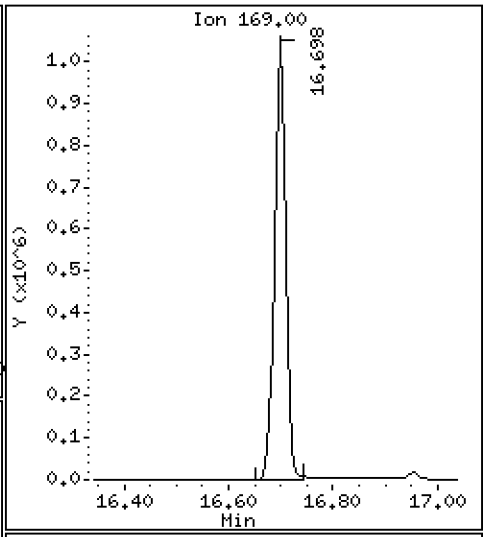
Column phase: ZB-5msi

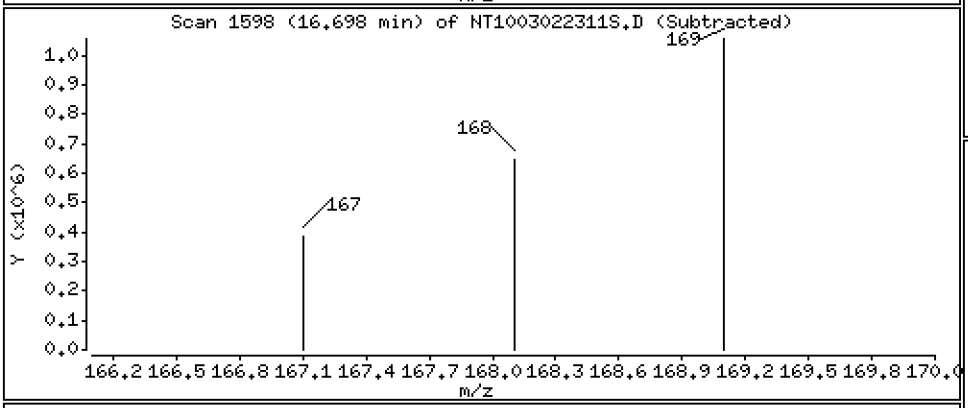
Column diameter: 0.25

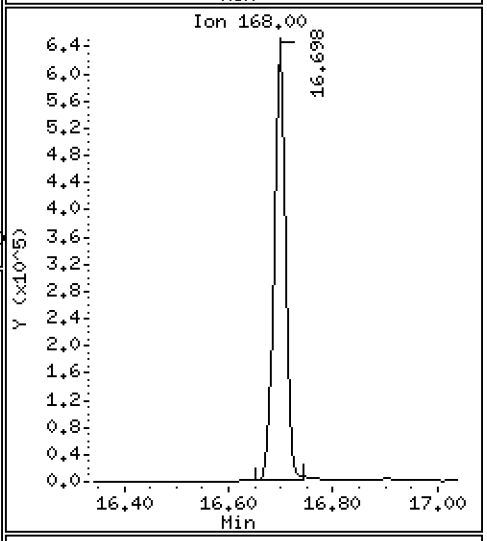
54 N-Nitrosodiphenylamine

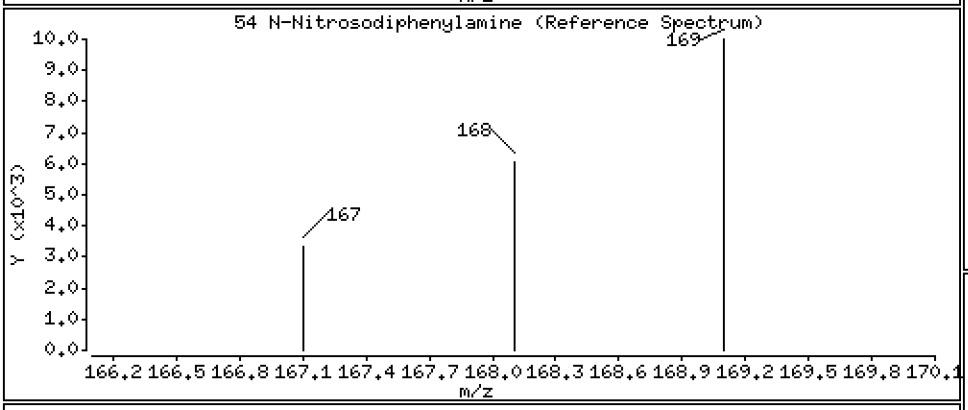
Concentration: 3.756 ug/L

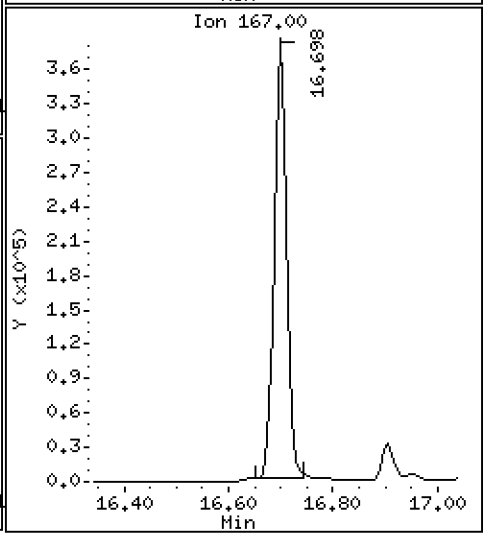


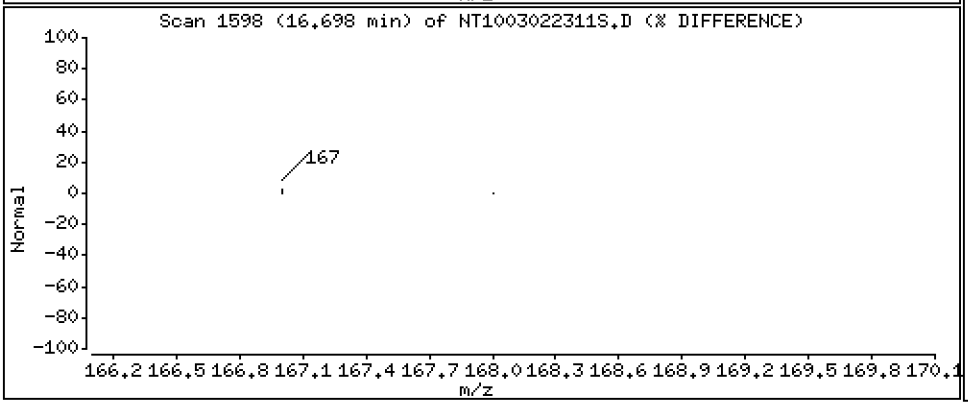












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Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

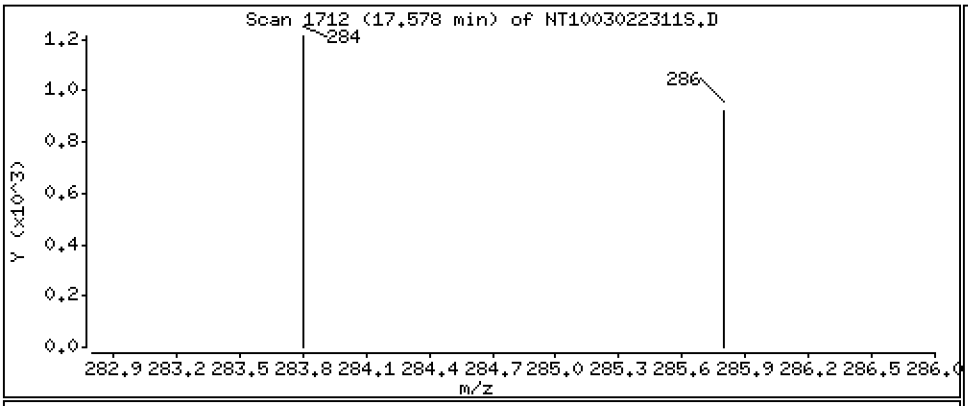
Operator: JGR

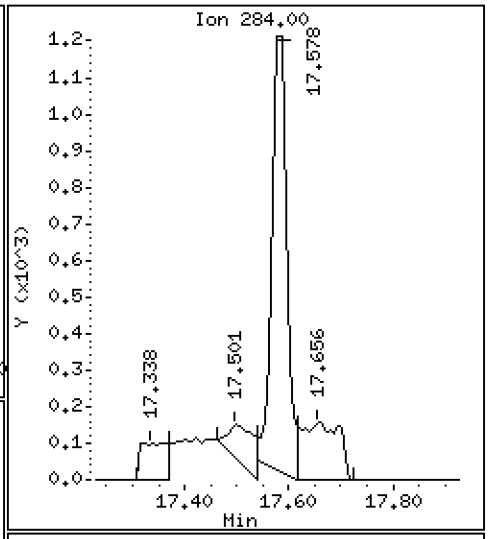
Column phase: ZB-5msi

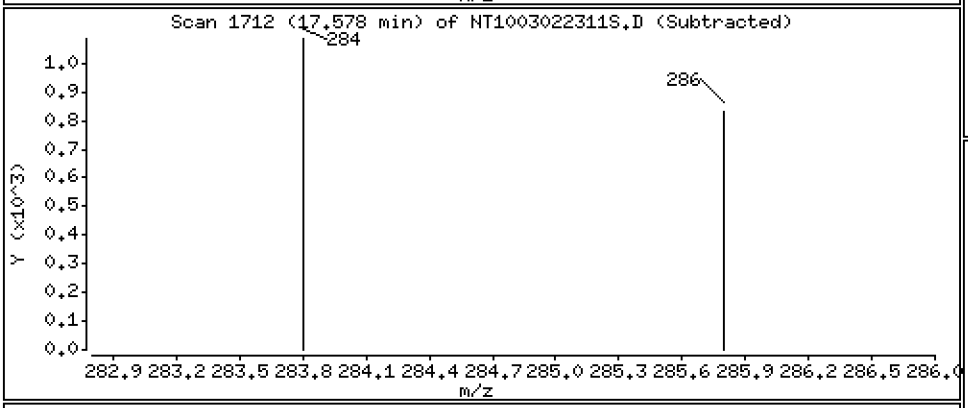
Column diameter: 0.25

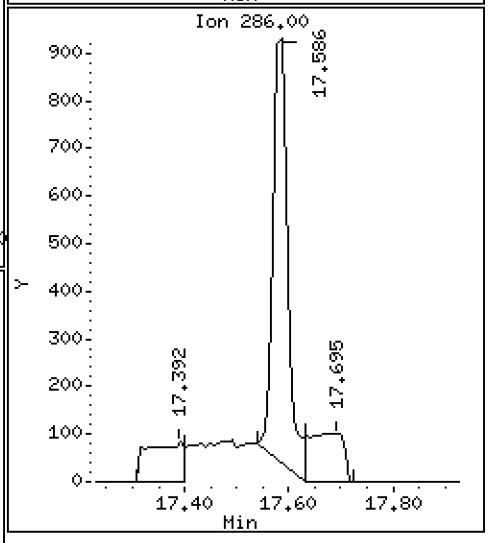
57 Hexachlorobenzene

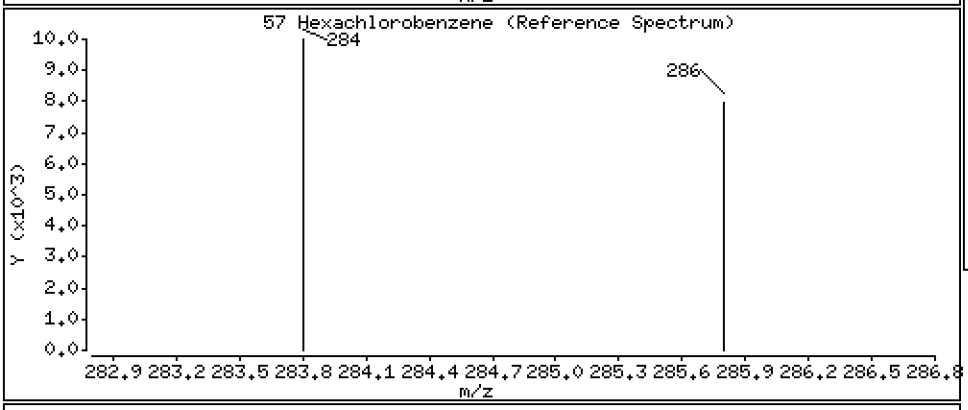
Concentration: 0.01174 ug/L

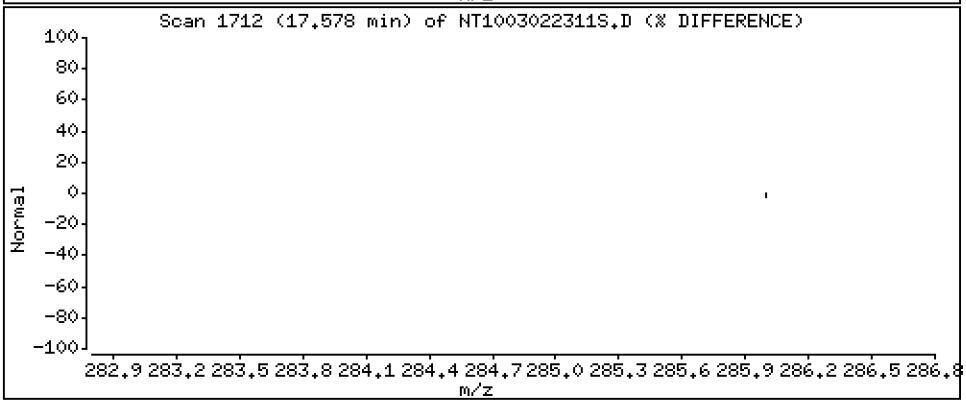












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

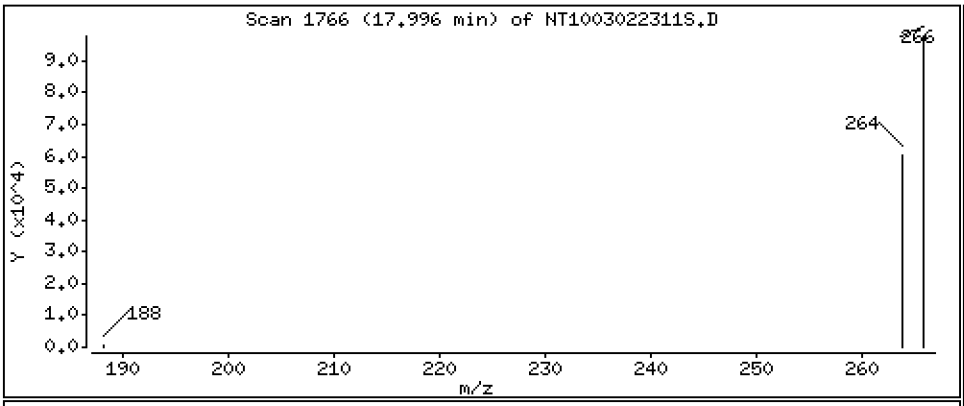
Operator: JGR

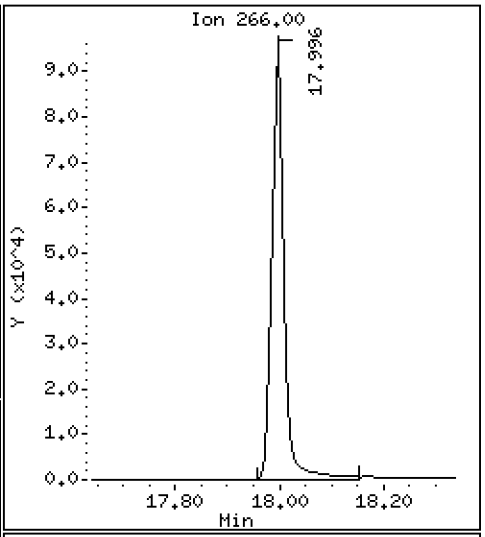
Column phase: ZB-5msi

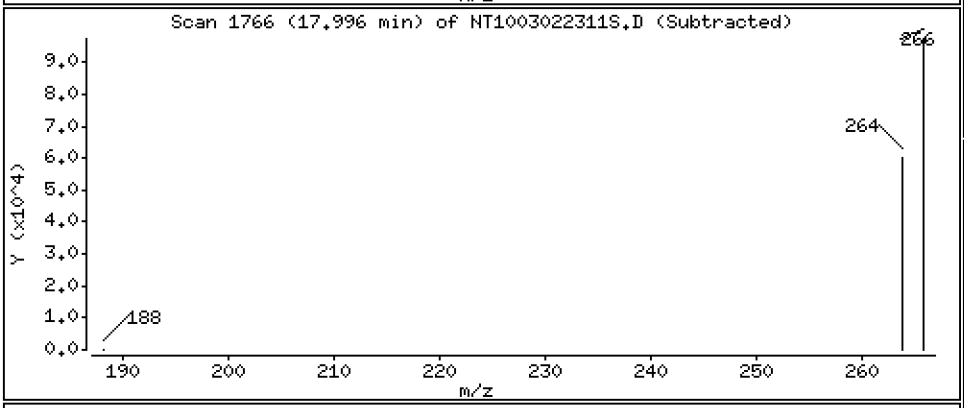
Column diameter: 0.25

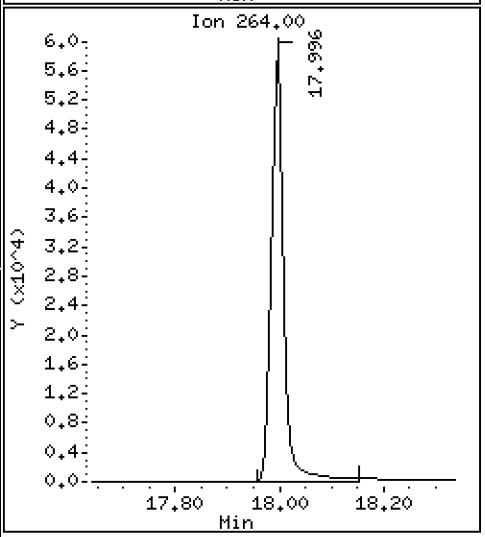
58 Pentachlorophenol

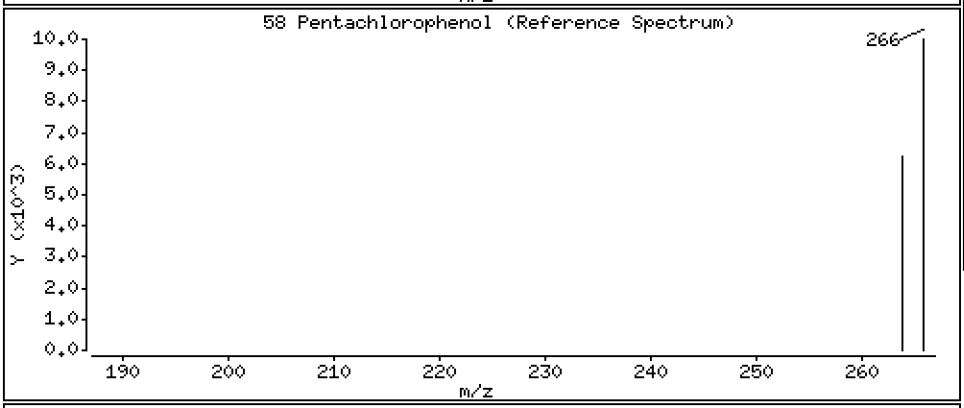
Concentration: 1.698 ug/L

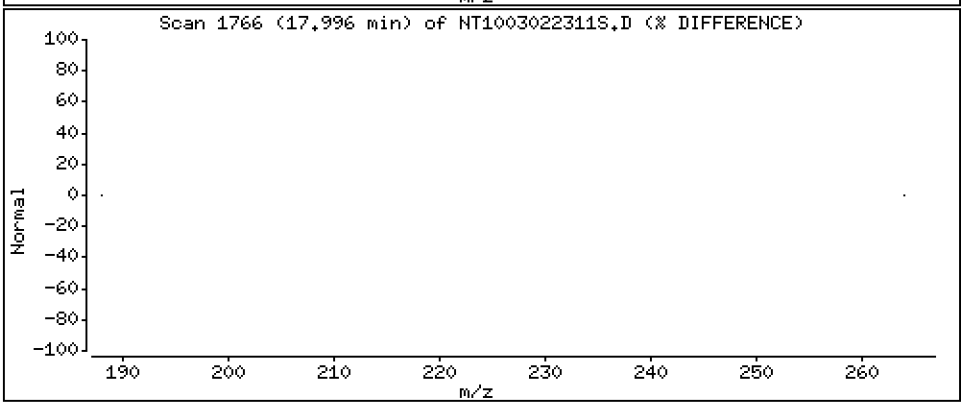












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

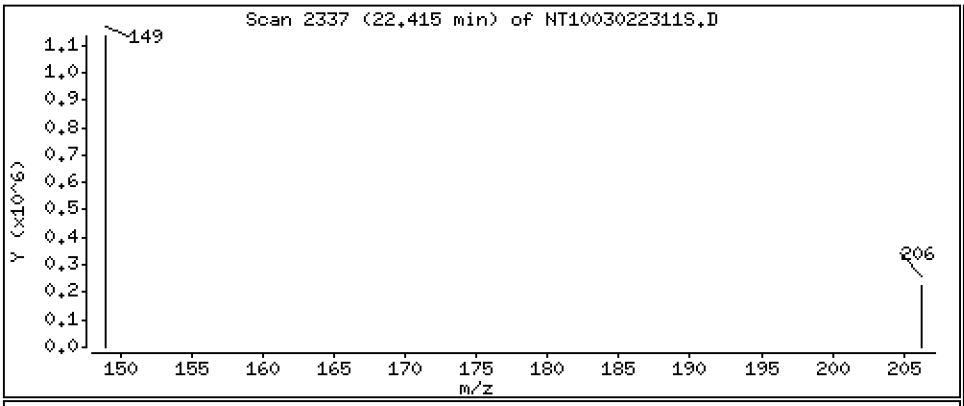
Operator: JGR

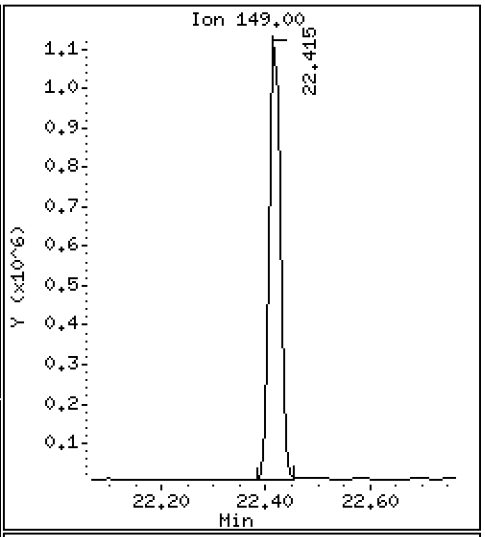
Column phase: ZB-5msi

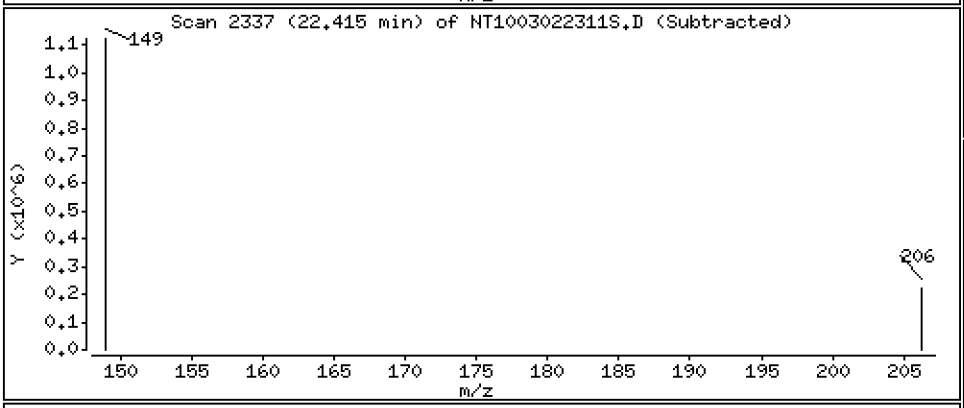
Column diameter: 0.25

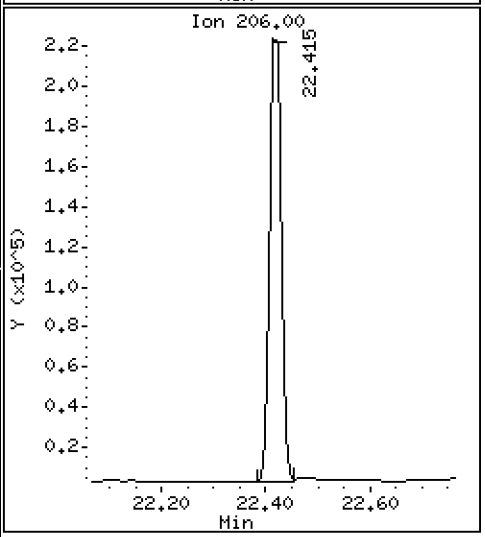
67 Butylbenzylphthalate

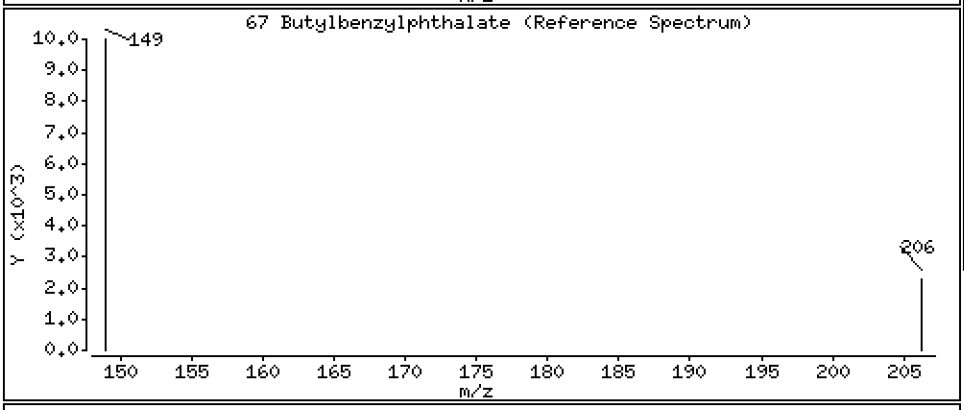
Concentration: 3.112 ug/L

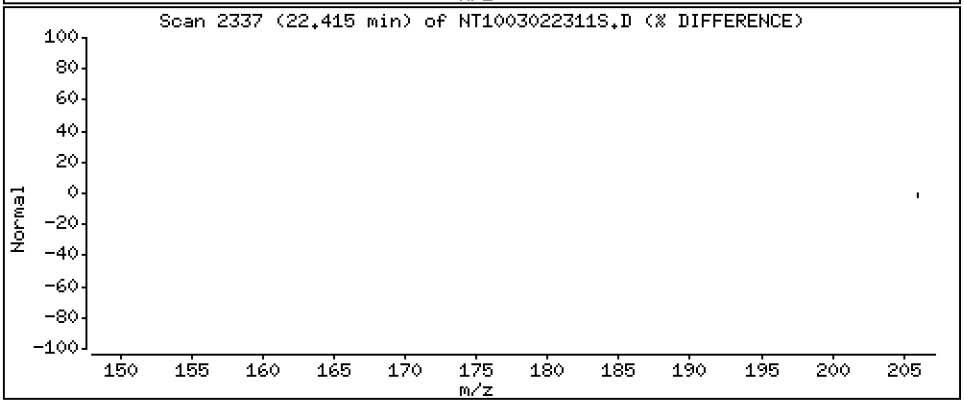












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022311S.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

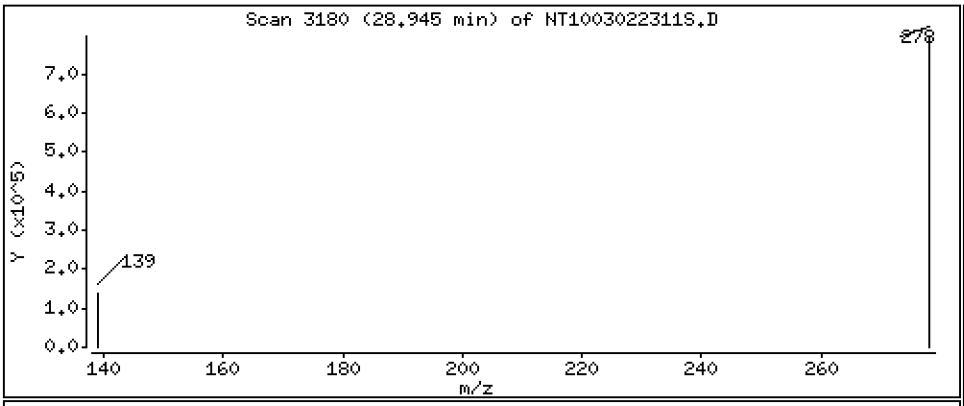
Operator: JGR

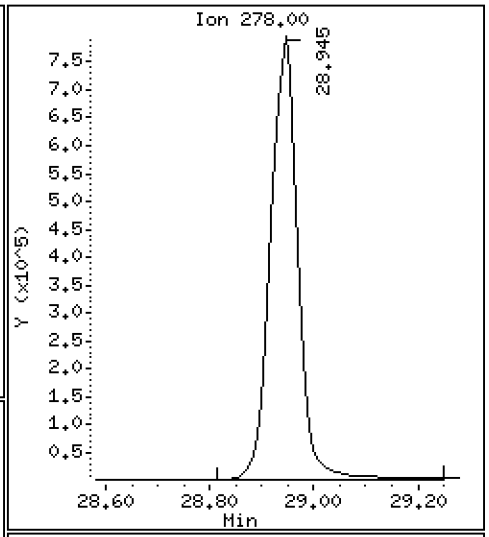
Column phase: ZB-5msi

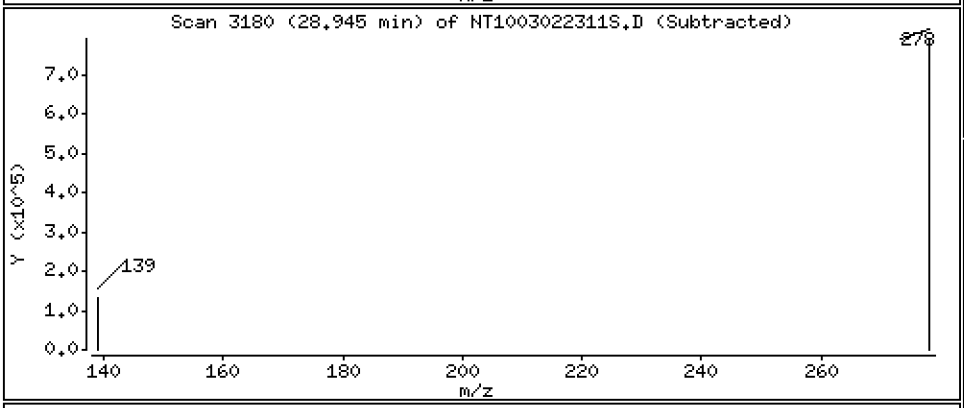
Column diameter: 0.25

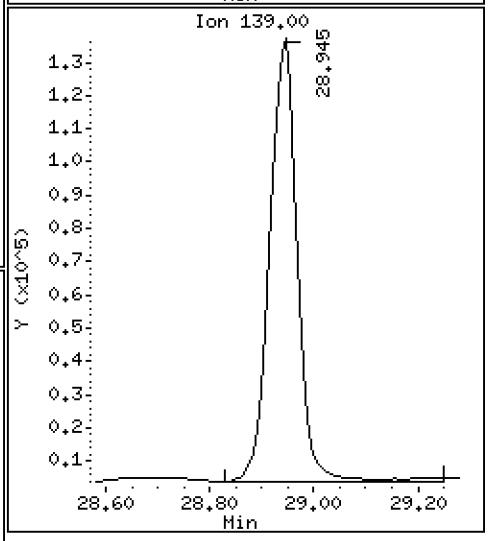
79 Dibenzo(a,h)anthracene

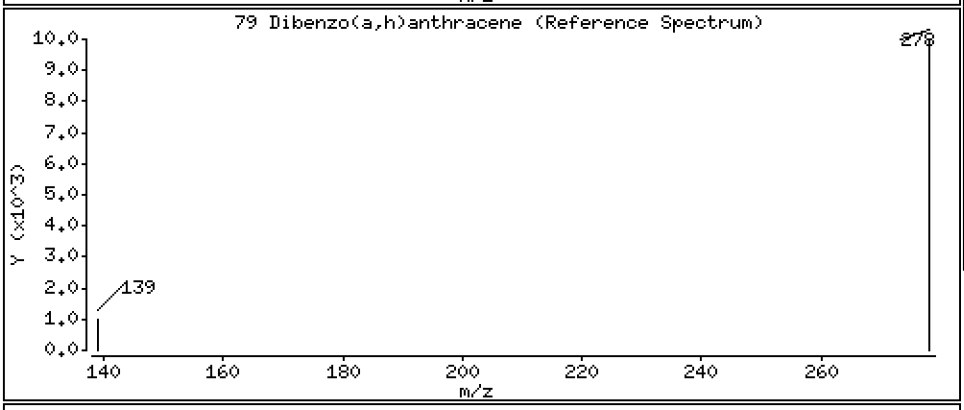
Concentration: 3.753 ug/L

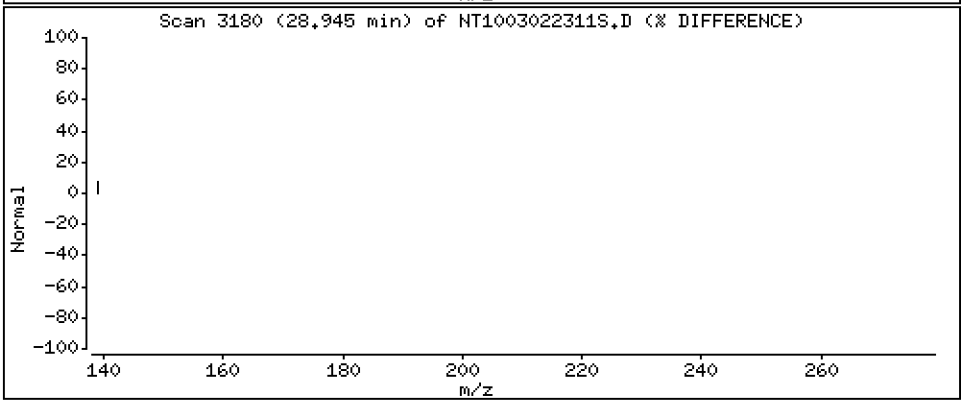












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223115.D

Date : 02-MAR-2023 20:44

Client ID:

Instrument: nt10.i

Sample Info: BLA0624-SRM1

Volume Injected (uL): 1.0

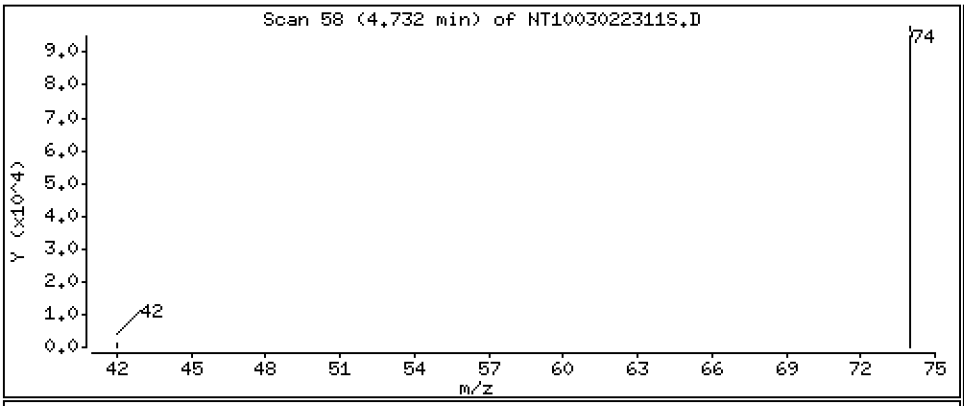
Operator: JGR

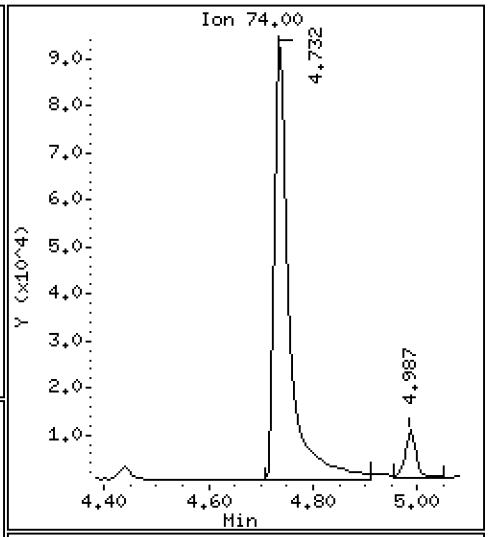
Column phase: ZB-5msi

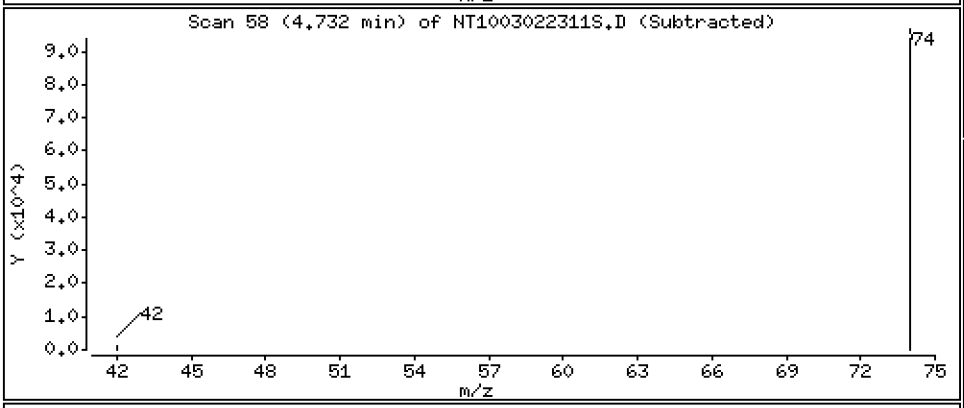
Column diameter: 0.25

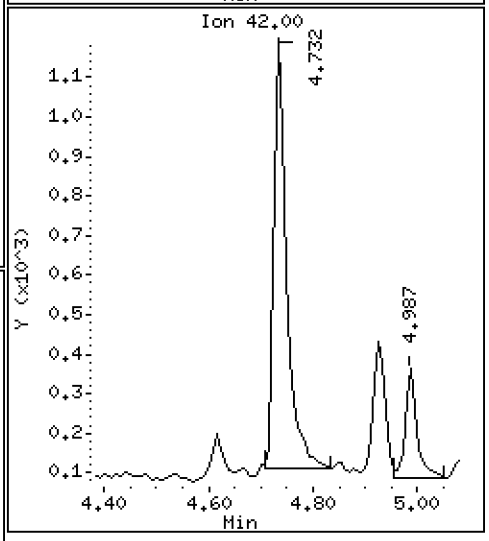
90 N-Nitrosodimethylamine

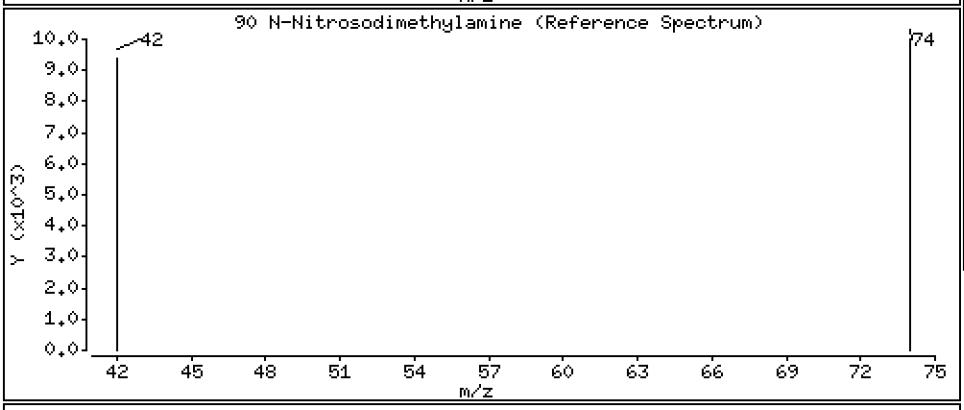
Concentration: 1.399 ug/L

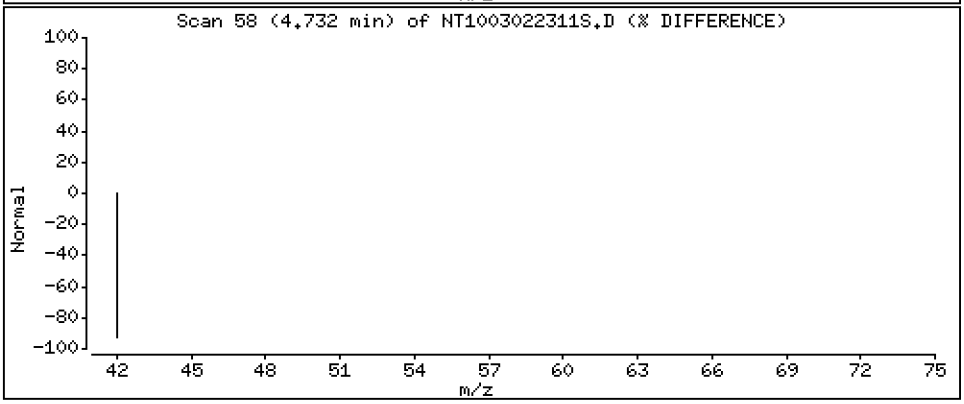












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022311S.D
Lab Smp Id: BLA0624-SRM1
Inj Date : 02-MAR-2023 20:44 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : BLA0624-SRM1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 14:53 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.910	6.902	(0.747)	1575203	7.19270	7.193(R)
3	Phenol	94	8.524	8.517	(0.921)	865603	2.64398	2.644
7	1,3-Dichlorobenzene	146	9.143	9.143	(0.988)	339074	1.19270	1.193
* 8	1,4-Dichlorobenzene-d4	152	9.251	9.251	(1.000)	767091	4.00000	
9	1,4-Dichlorobenzene	146	9.143	9.282	(0.988)	339074	1.22674	1.227
11	Benzyl alcohol	79	9.539	9.476	(1.031)	31398	0.17502	0.1750
12	1,2-Dichlorobenzene	146	9.562	9.562	(1.034)	3530	0.01329	0.01329
13	2-Methylphenol	108	9.663	9.655	(1.044)	1279955	6.23865	6.239
15	4-Methylphenol	108	9.950	9.942	(1.076)	1680277	7.58593	7.586
16	N-Nitroso-di-n-propylamine	70	9.958	9.981	(1.076)	10352	0.07196	0.07196
22	2,4-Dimethylphenol	107	11.006	10.997	(0.939)	1162291	4.84672	4.847
24	Benzoic acid	105	11.082	11.074	(0.945)	106321	0.81663	0.8166
26	1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	311359	1.55159	1.552
* 27	Naphthalene-d8	136	11.723	11.723	(1.000)	2788036	4.00000	
30	Hexachlorobutadiene	225	11.994	11.994	(1.023)	274250	1.92586	1.926
39	Dimethylphthalate	163	14.749	14.741	(0.963)	2190768	4.99232	4.992
* 42	Acenaphthene-d10	162	15.321	15.314	(1.000)	1382029	4.00000	
50	Diethylphthalate	149	16.210	16.203	(1.058)	87777	0.21211	0.2121
54	N-Nitrosodiphenylamine	169	16.698	16.690	(0.907)	1584342	3.75576	3.756
57	Hexachlorobenzene	284	17.578	17.578	(0.955)	2318	0.01174	0.01174

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	17.996	17.988	(0.978)	149186	1.69819	1.698
*	59 Phenanthrene-d10	188	18.406	18.406	(1.000)	2606597	4.00000	
$	66 Terphenyl-d14	244	21.532	21.532	(0.919)	1234616	5.14744	5.147(R)
	67 Butylbenzylphthalate	149	22.414	22.414	(0.957)	1540899	3.11192	3.112
*	69 Chrysene-d12	240	23.429	23.421	(1.000)	2965995	4.00000	
*	77 Perylene-d12	264	26.123	26.115	(1.000)	3162675	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.945	28.929	(1.108)	2910766	3.75254	3.753
	90 N-Nitrosodimethylamine	74	4.732	4.732	(0.511)	181438	1.39936	1.399

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003022311S.D
Lab Smp Id: BLA0624-SRM1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 02-MAR-2023
Calibration Time: 14:13
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	493417	246709	986834	767091	55.47
27 Naphthalene-d8	1779056	889528	3558112	2788036	56.71
42 Acenaphthene-d10	954569	477285	1909138	1382029	44.78
59 Phenanthrene-d10	1596290	798145	3192580	2606597	63.29
69 Chrysene-d12	1649110	824555	3298220	2965995	79.85
77 Perylene-d12	1901958	950979	3803916	3162675	66.29

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.00
69 Chrysene-d12	23.42	22.92	23.92	23.43	0.03
77 Perylene-d12	26.12	25.62	26.62	26.12	0.03

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

REVIEW SUMMARY FOR FILE - NT1003022311S.D

Lab ID: BLA0624-SRM1
nt10.i, 20230302.b\SIM.b\SIMABN2.m,   02-MAR-2023 20:44

RT	CO-ELUTION COMPOUNDS
9.143	1,4-Dichlorobenzene and 1,3-Dichlorobenzene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.988	1.003	-0.0151	1,4-Dichlorobenzene
1.031	1.024	0.0067	Benzyl alcohol

RRT check based on Ccal File: SIM.b/NT1003022303S.D

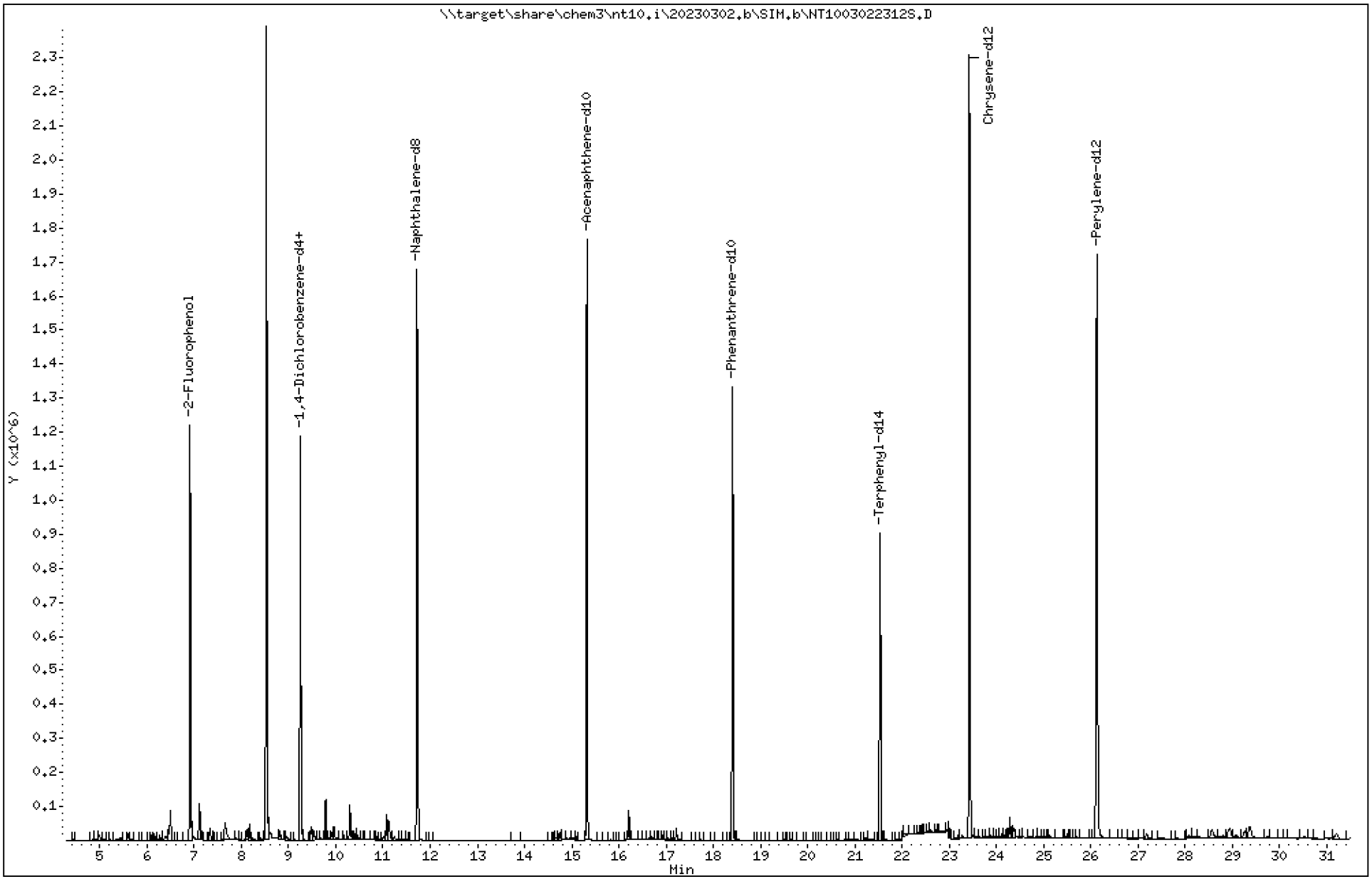
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223128.D
Date : 02-MAR-2023 21:22
Client ID:
Sample Info: 23A0206-01
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

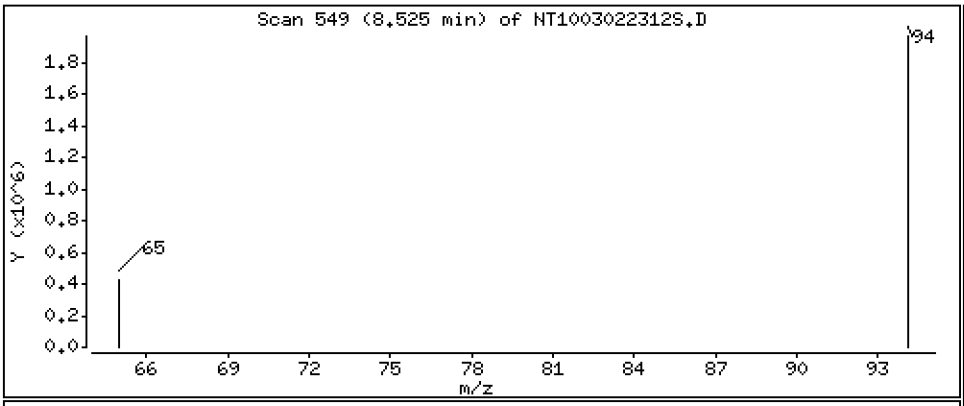
Operator: JGR

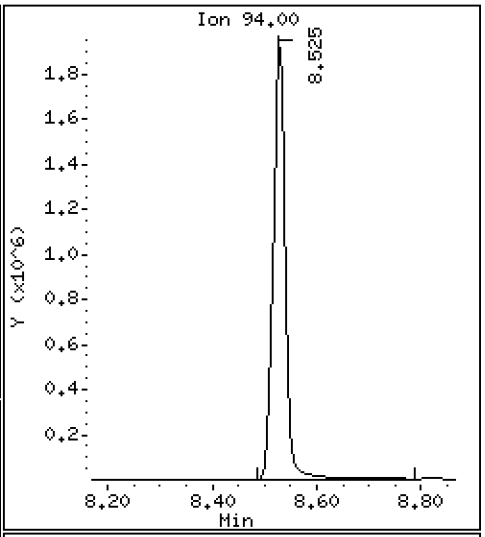
Column phase: ZB-5msi

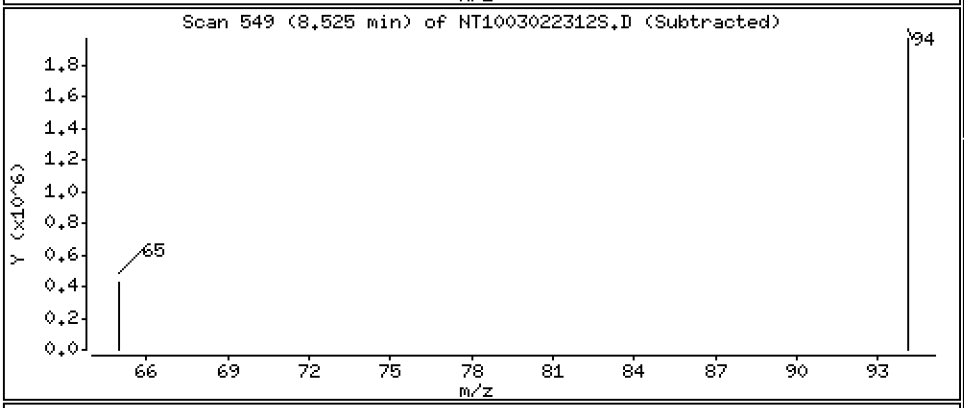
Column diameter: 0.25

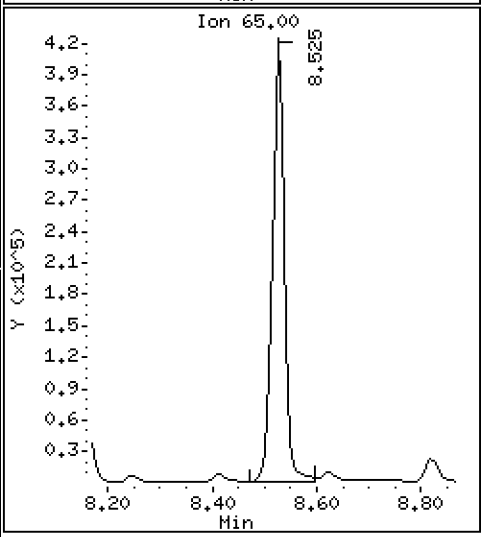
3 Phenol

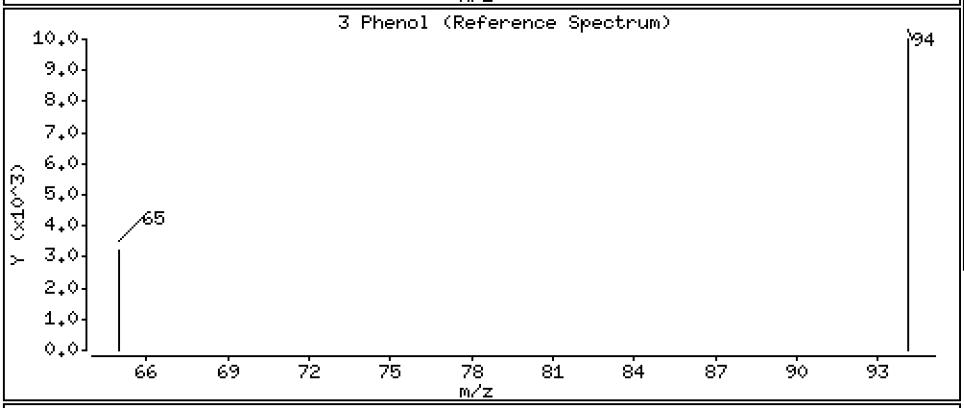
Concentration: 9.783 ug/L

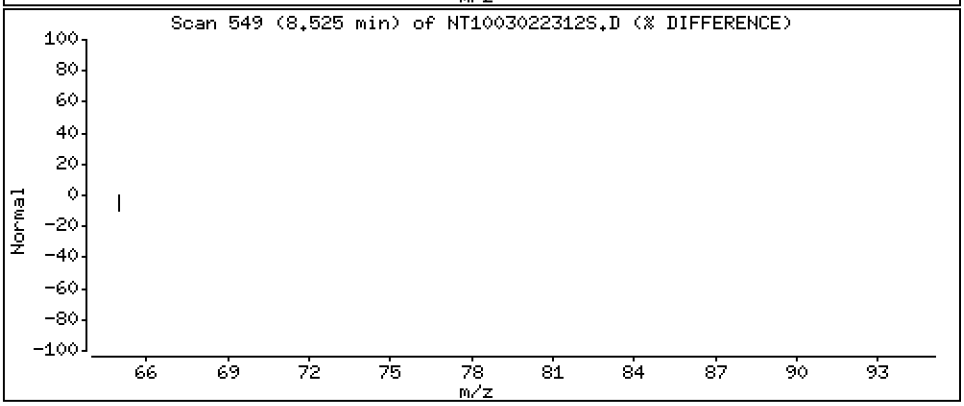












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

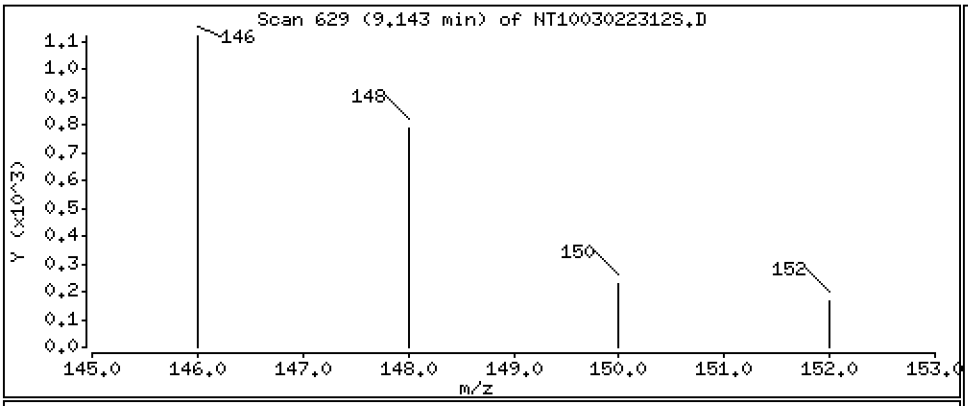
Operator: JGR

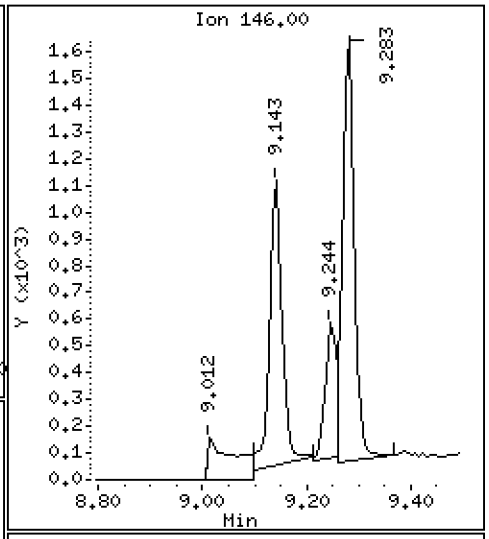
Column phase: ZB-5msi

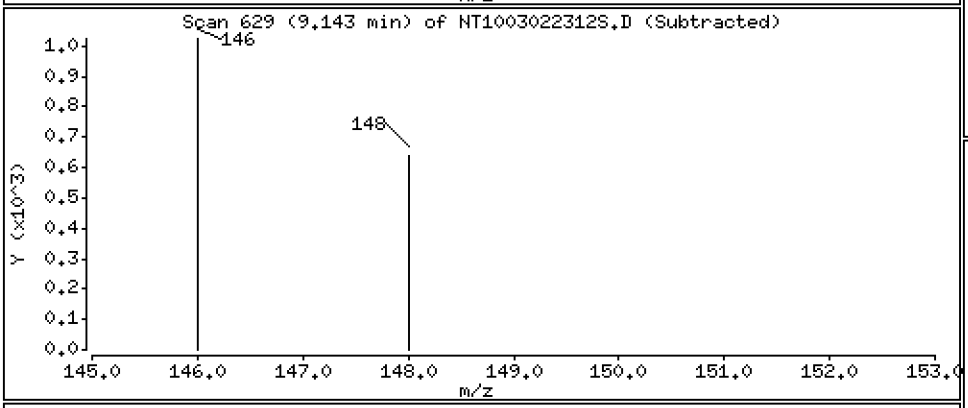
Column diameter: 0.25

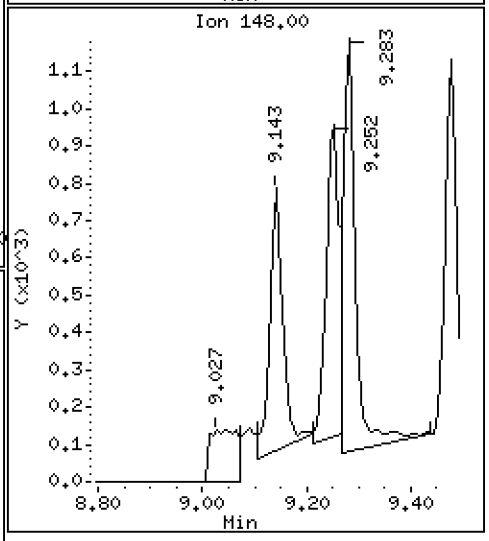
7 1,3-Dichlorobenzene

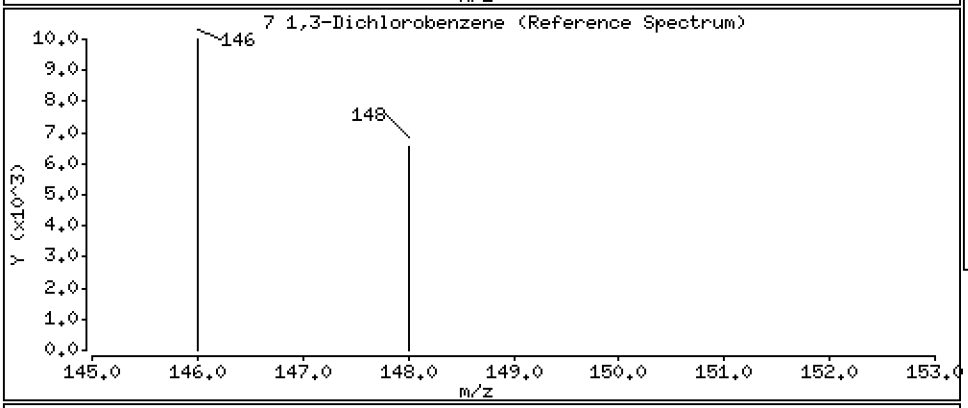
Concentration: 0.006583 ug/L

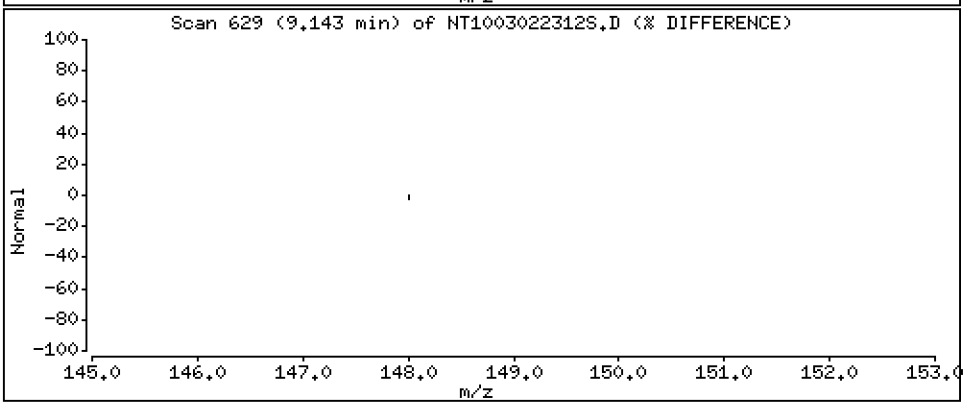












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

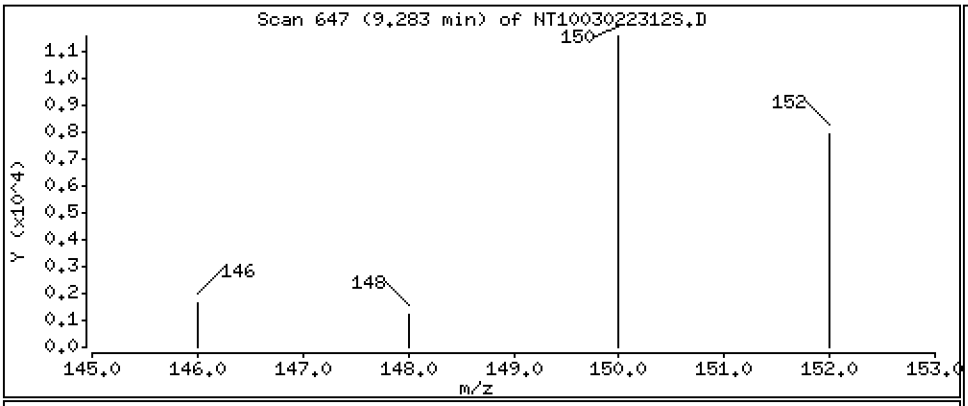
Operator: JGR

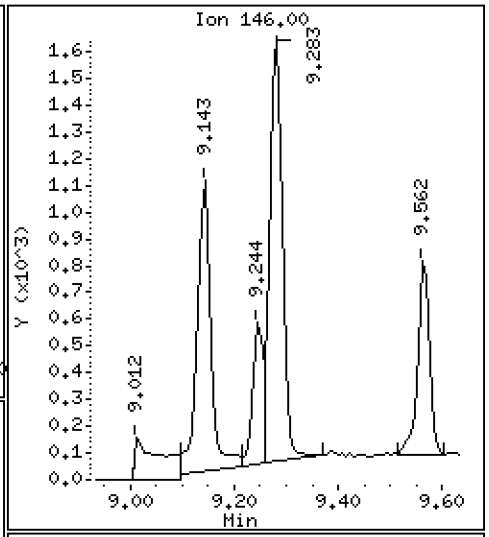
Column phase: ZB-5msi

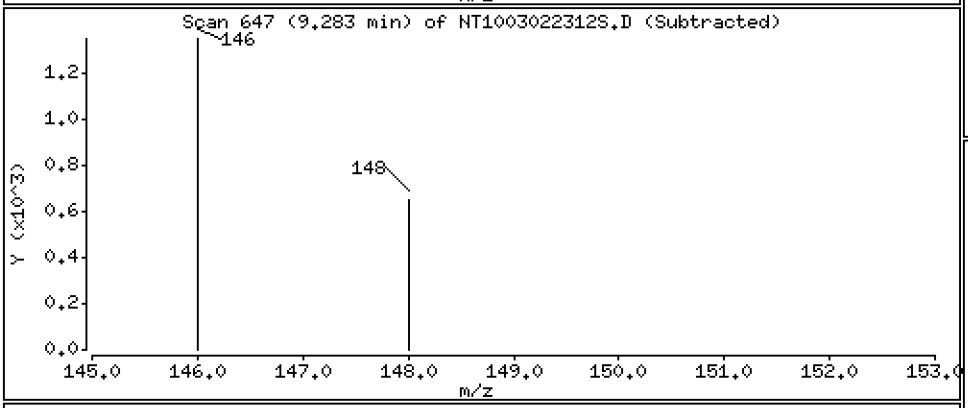
Column diameter: 0.25

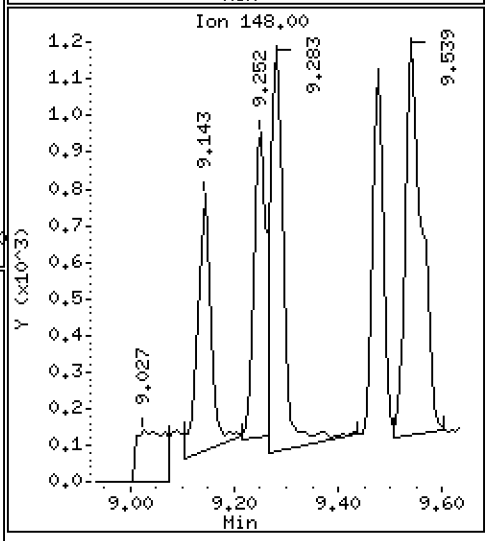
9 1,4-Dichlorobenzene

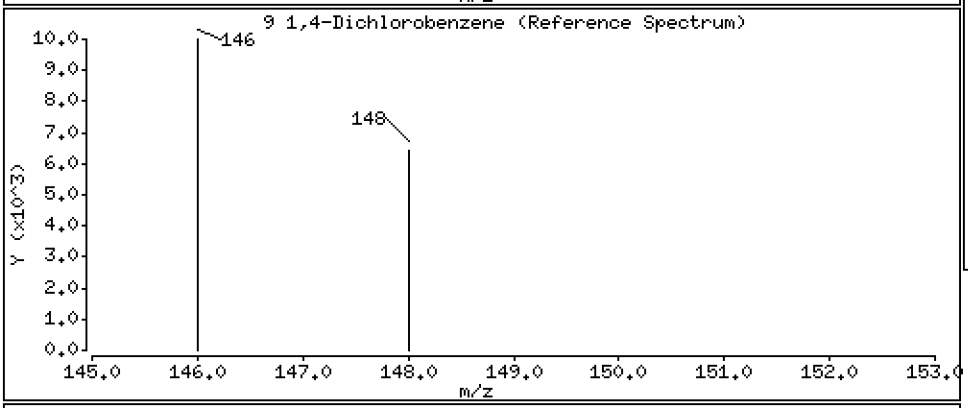
Concentration: 0.009987 ug/L

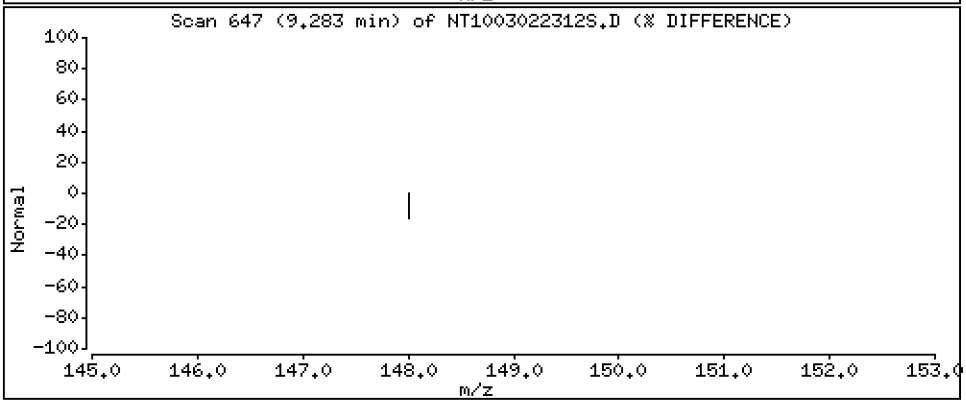












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

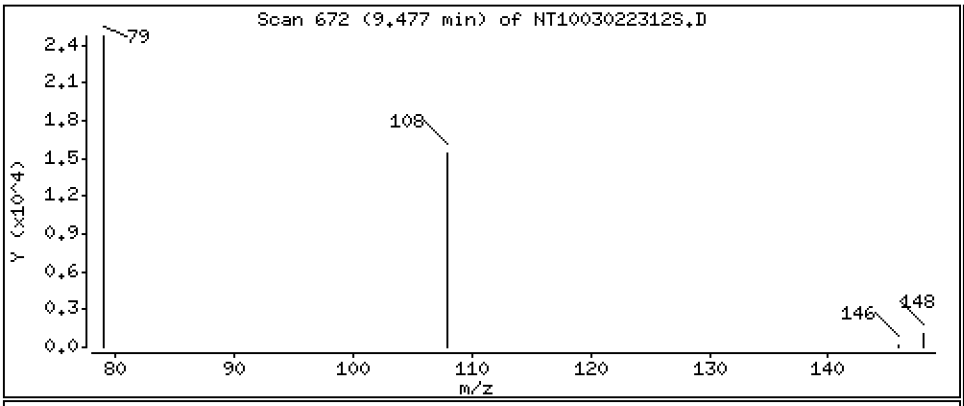
Operator: JGR

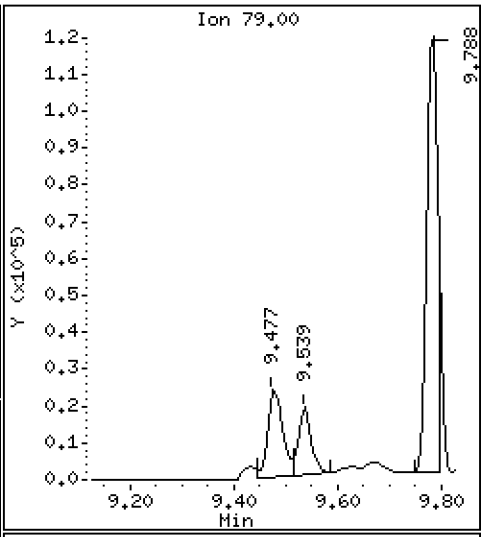
Column phase: ZB-5msi

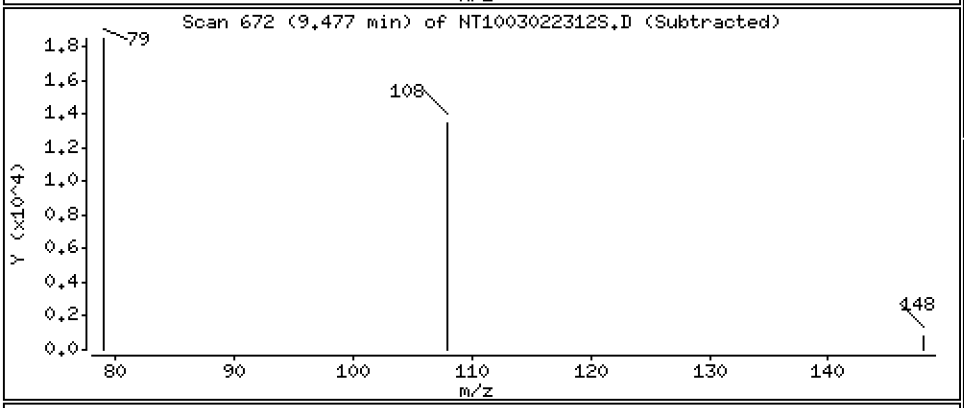
Column diameter: 0.25

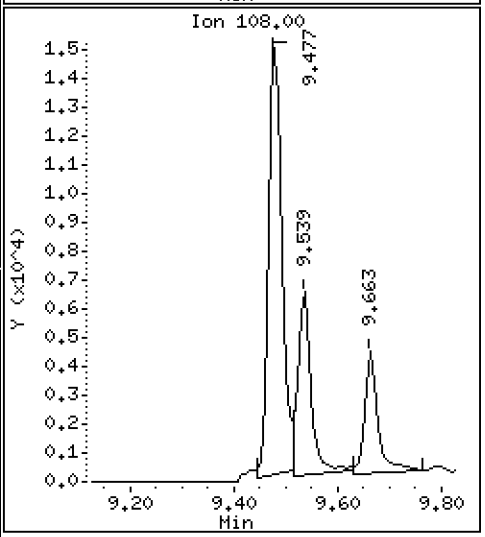
11 Benzyl alcohol

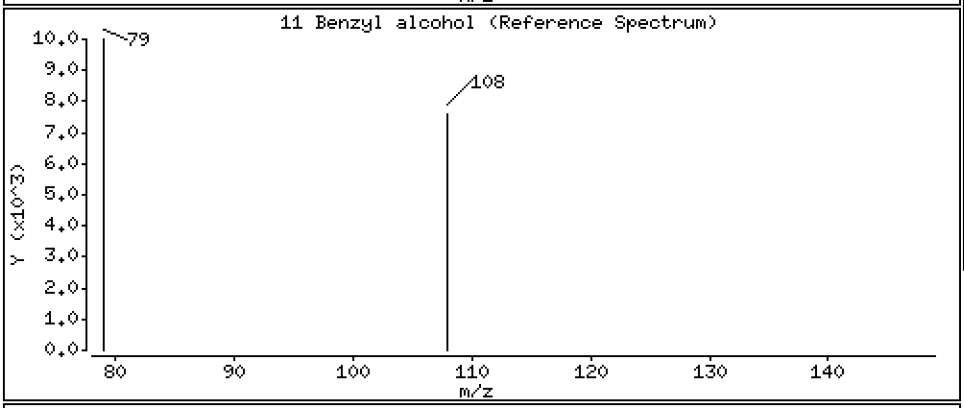
Concentration: 0.2733 ug/L

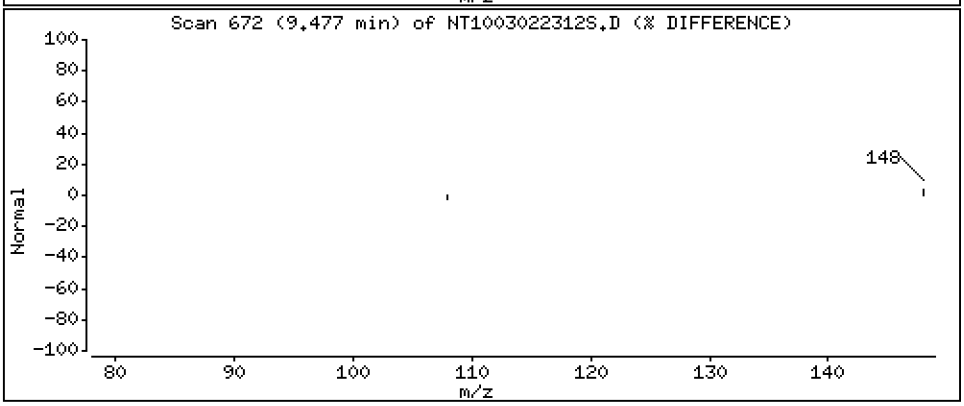












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

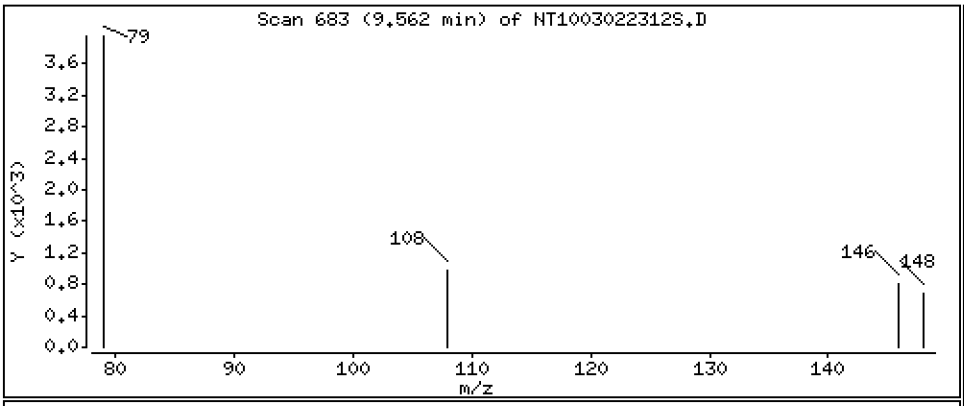
Operator: JGR

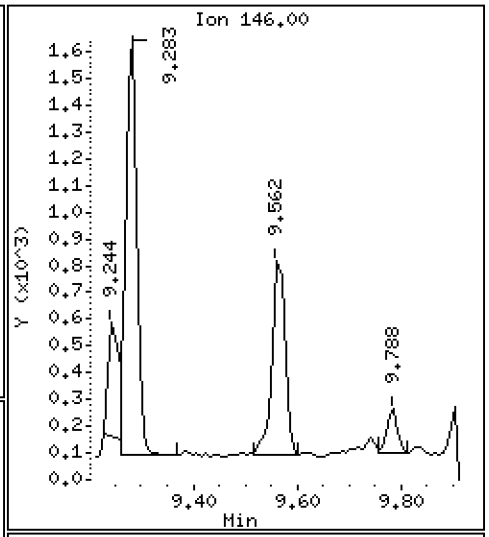
Column phase: ZB-5msi

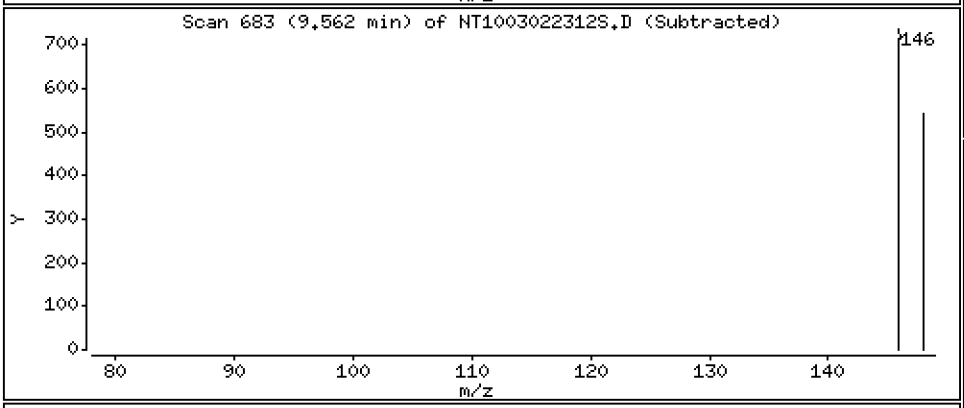
Column diameter: 0.25

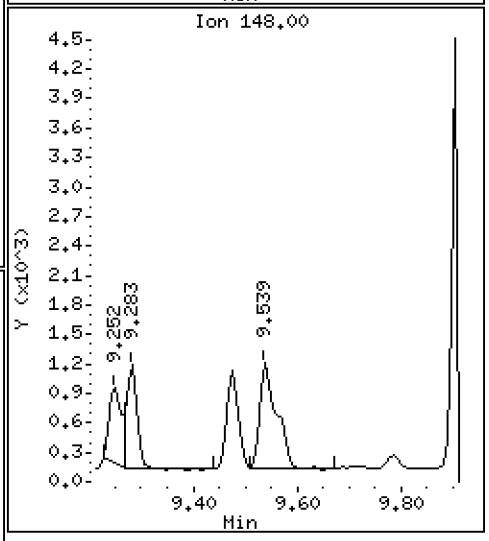
12 1,2-Dichlorobenzene

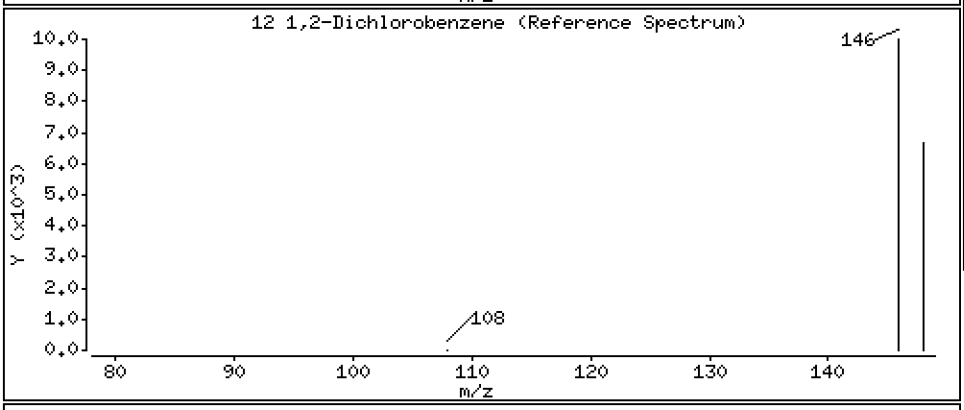
Concentration: 0.004811 ug/L

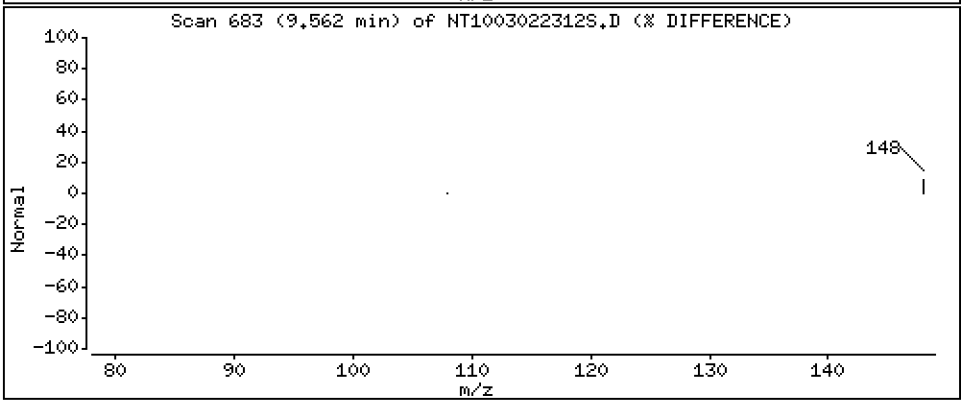












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

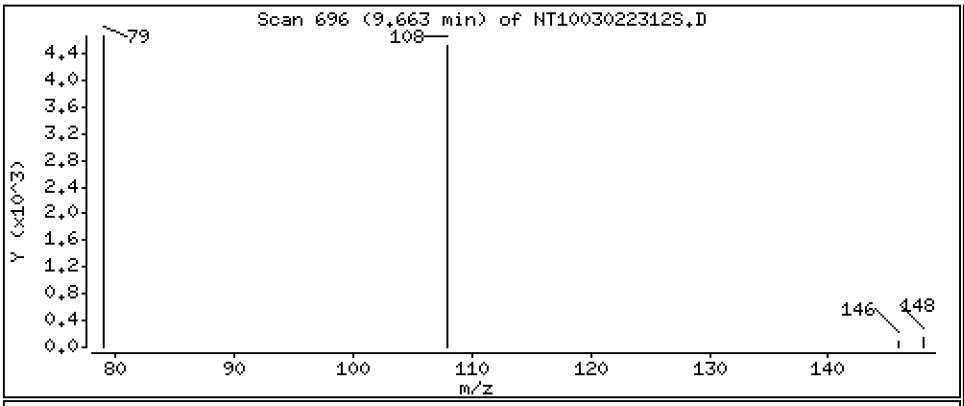
Operator: JGR

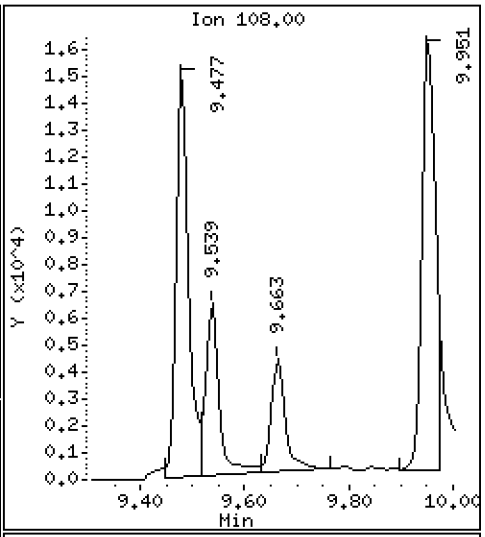
Column phase: ZB-5msi

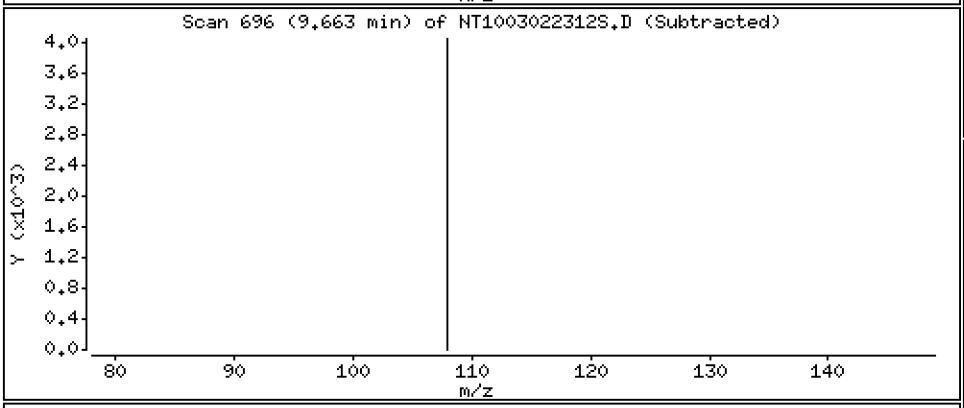
Column diameter: 0.25

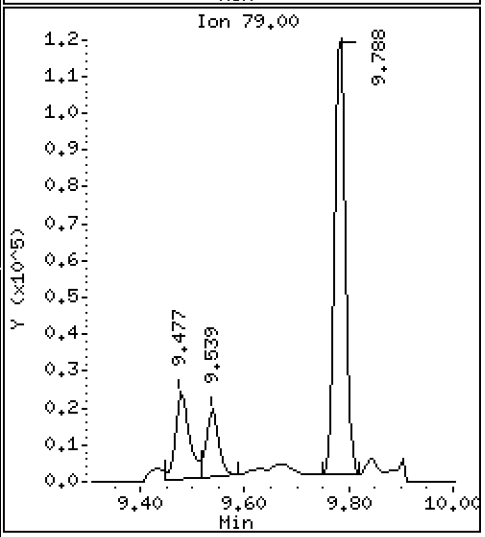
13 2-Methylphenol

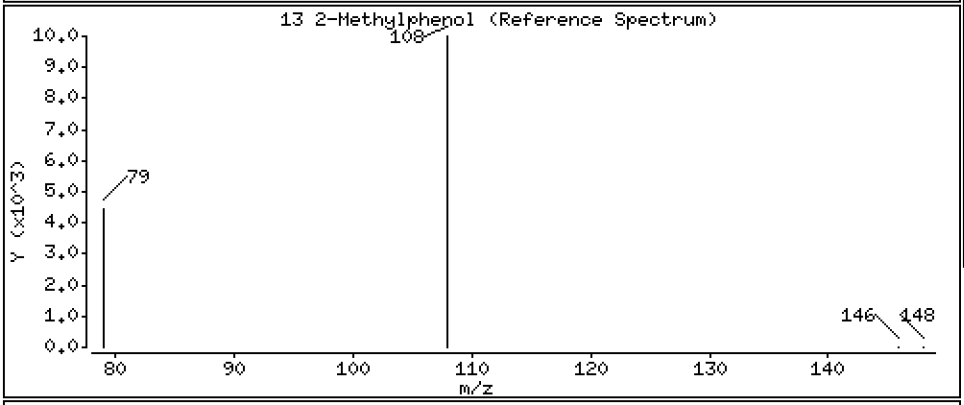
Concentration: 0.04254 ug/L

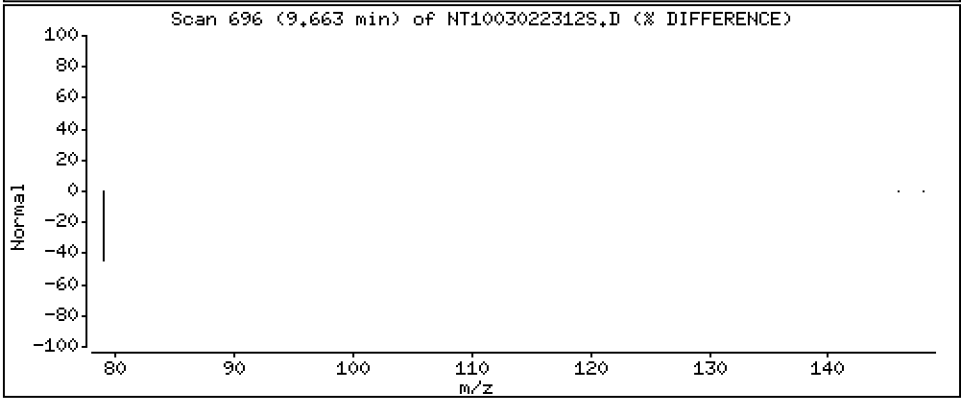












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

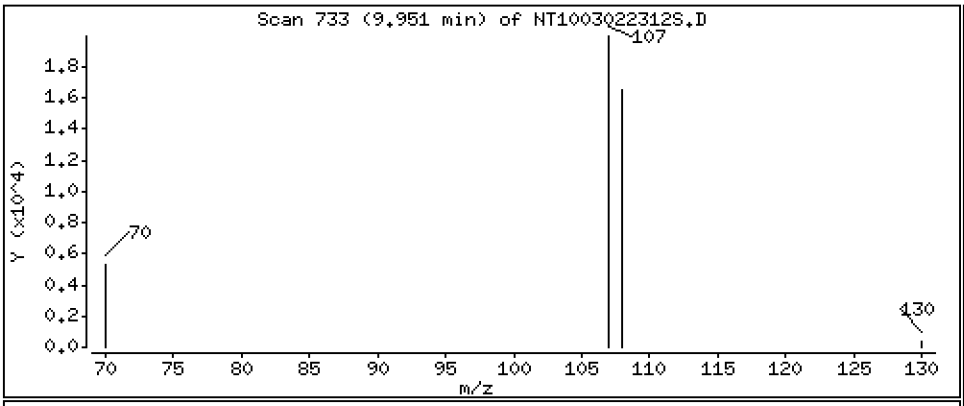
Operator: JGR

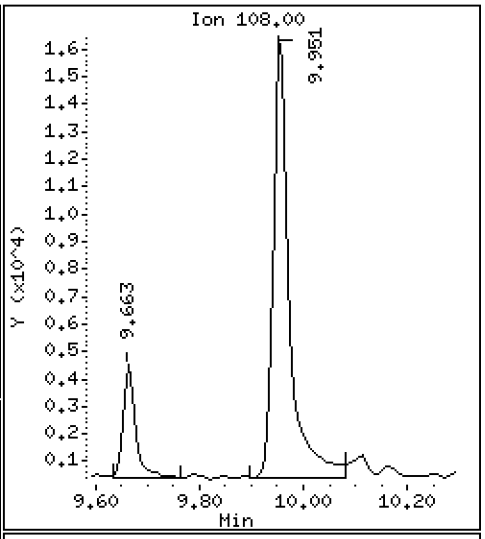
Column phase: ZB-5msi

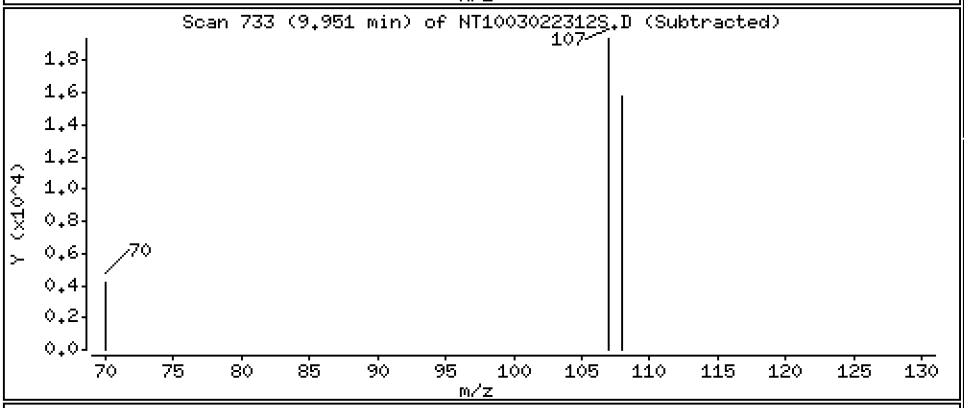
Column diameter: 0.25

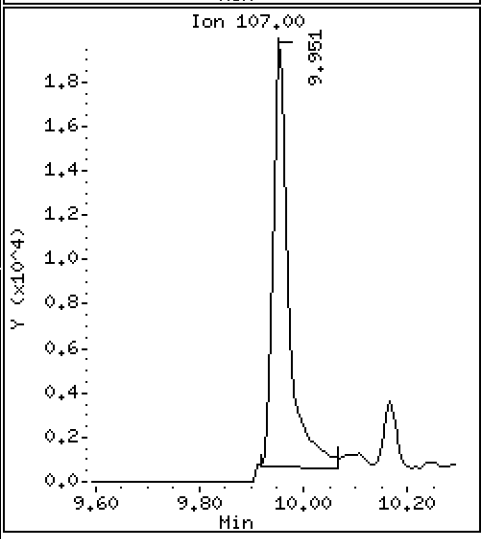
15 4-Methylphenol

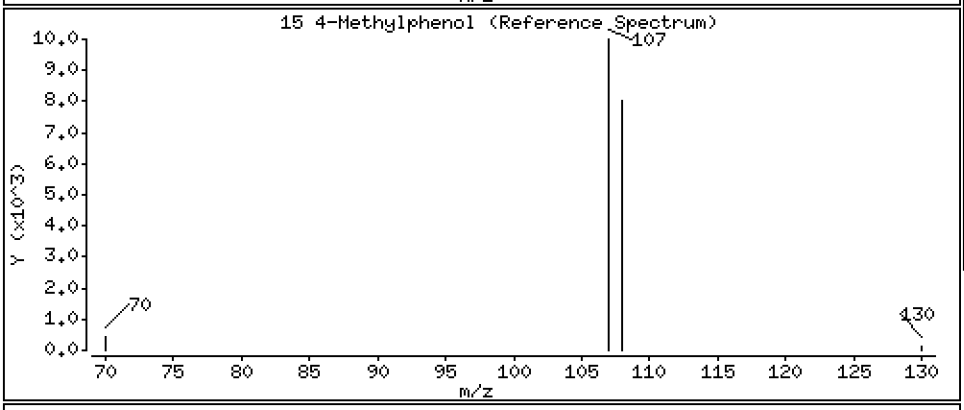
Concentration: 0.1843 ug/L

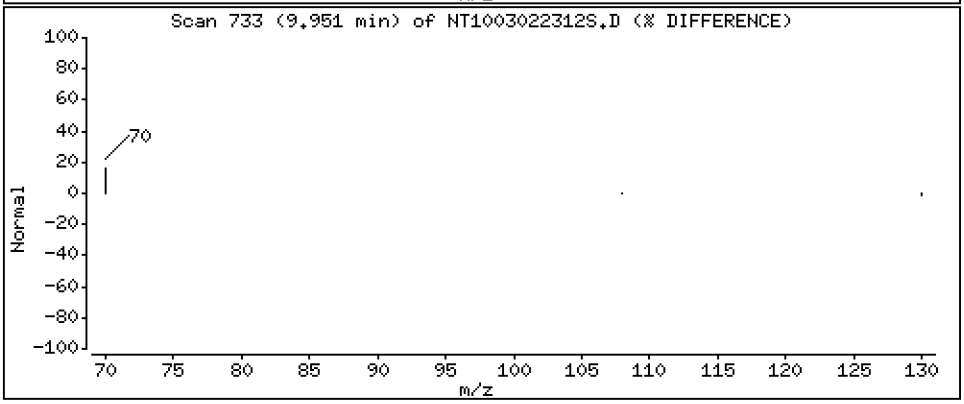












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

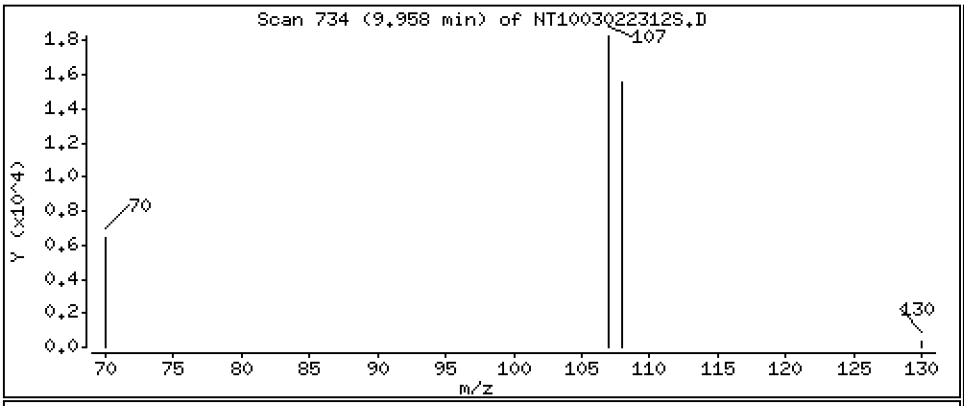
Operator: JGR

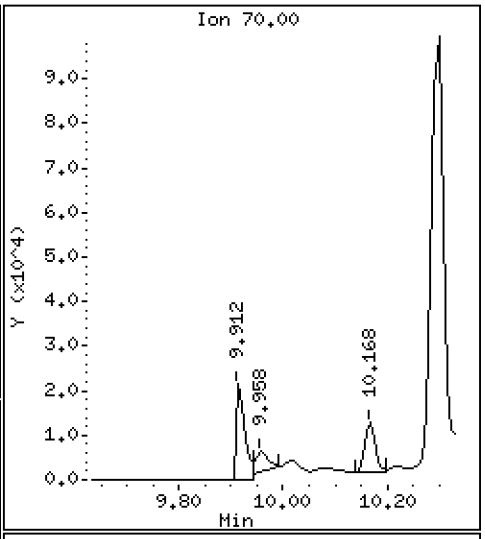
Column phase: ZB-5msi

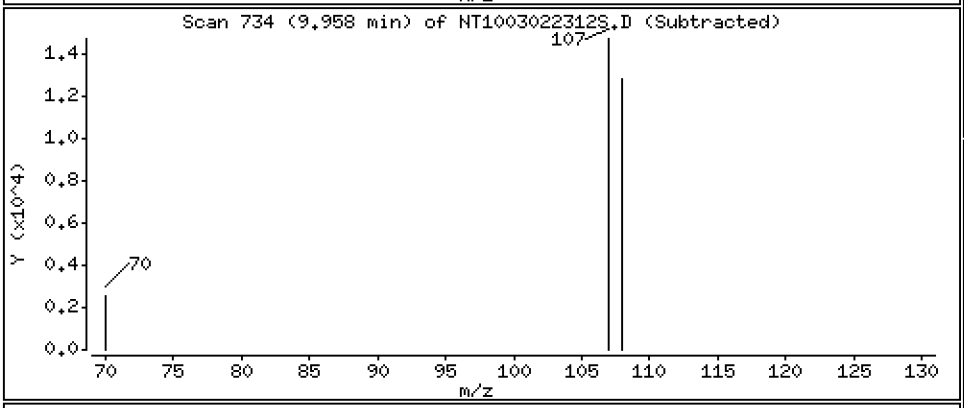
Column diameter: 0.25

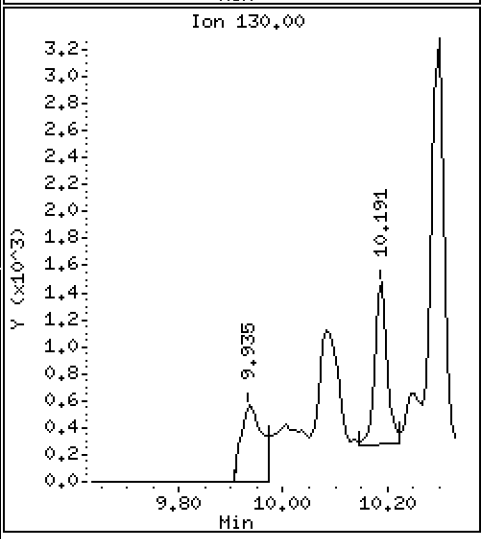
16 N-Nitroso-di-n-propylamine

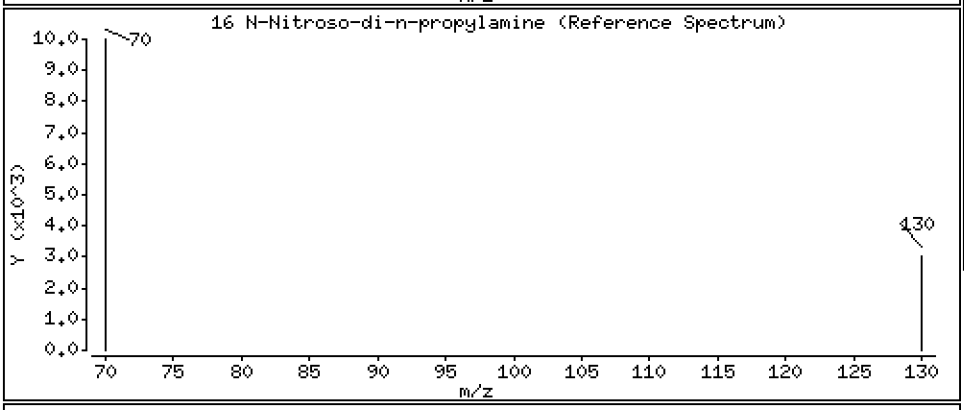
Concentration: 0.05906 ug/L

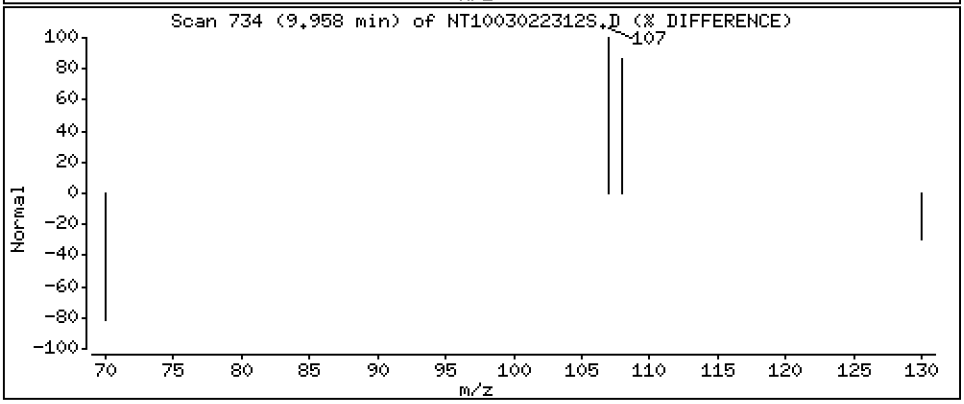












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

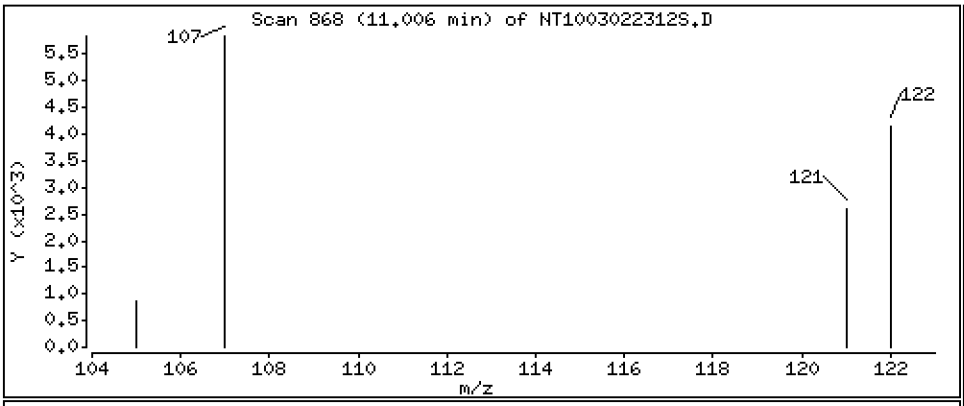
Operator: JGR

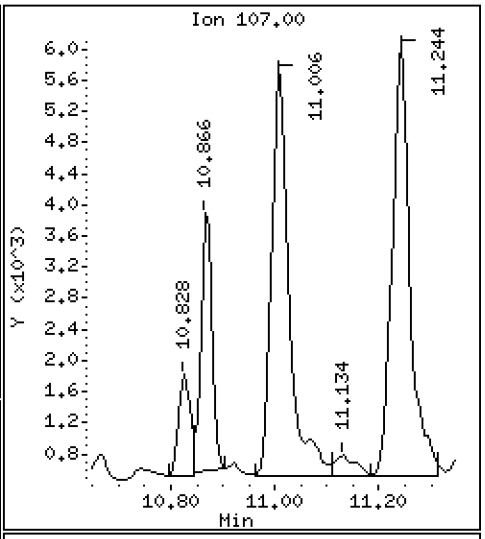
Column phase: ZB-5msi

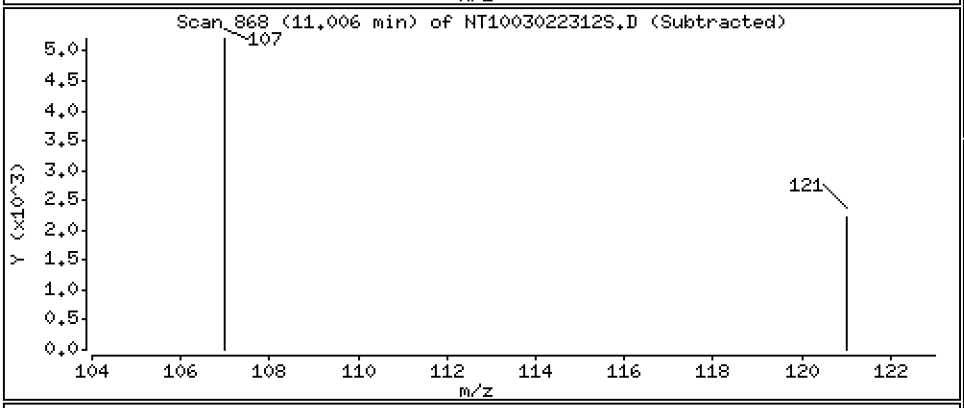
Column diameter: 0.25

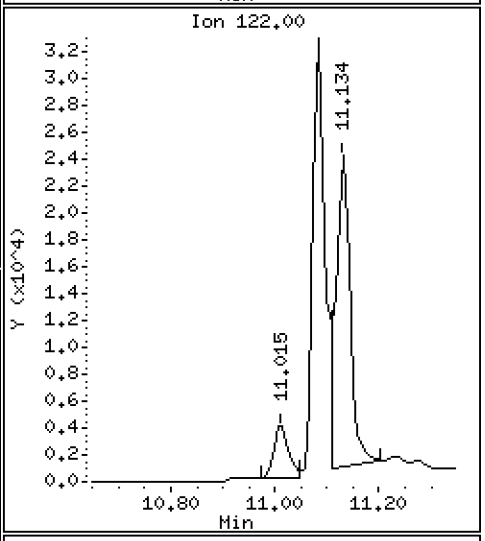
22 2,4-Dimethylphenol

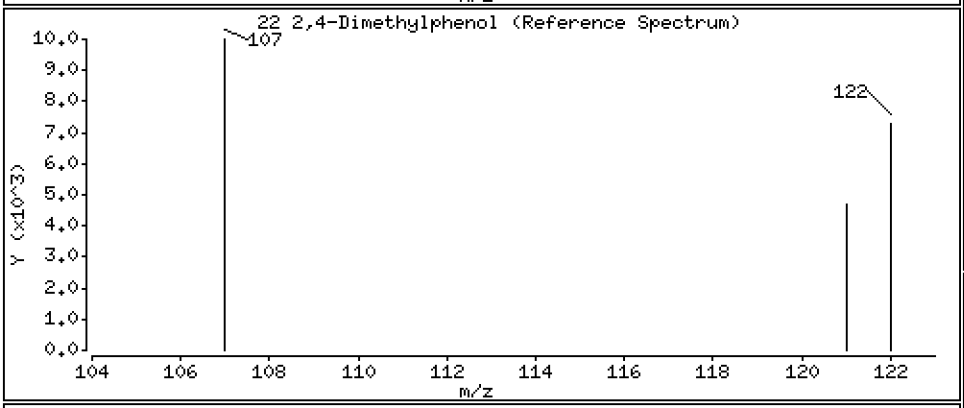
Concentration: 0.05672 ug/L

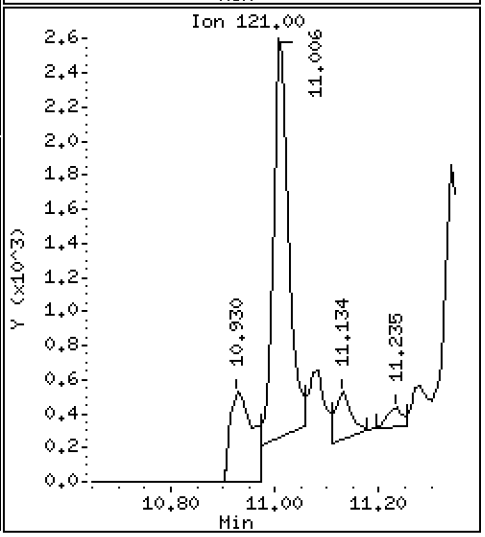


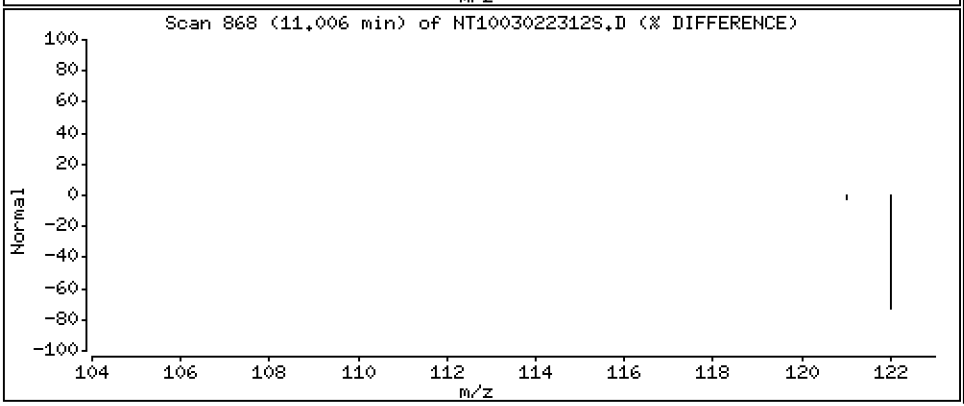












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

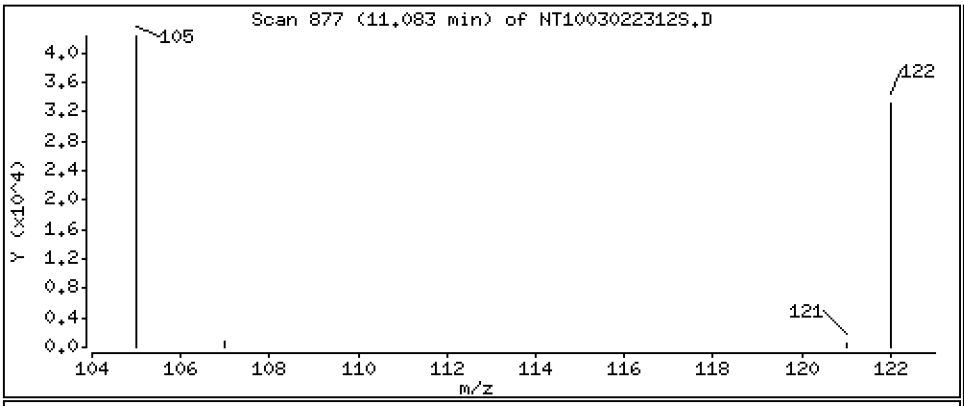
Operator: JGR

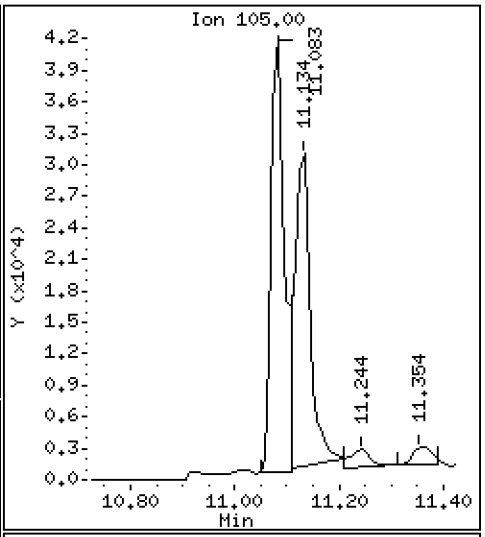
Column phase: ZB-5msi

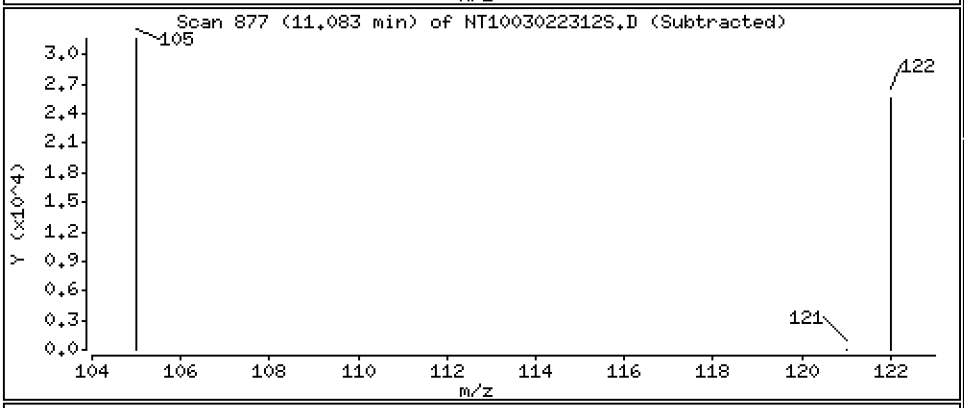
Column diameter: 0.25

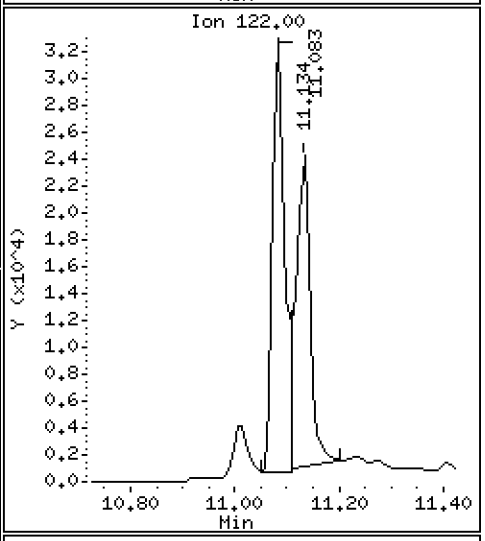
24 Benzoic acid

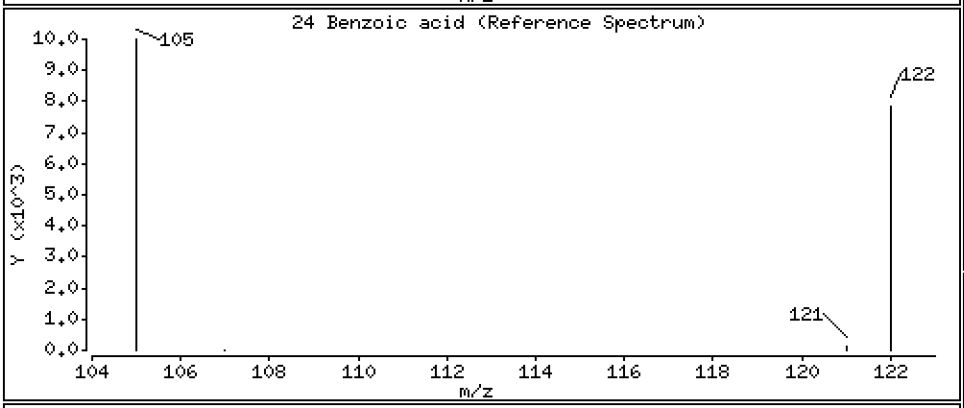
Concentration: 0.6311 ug/L

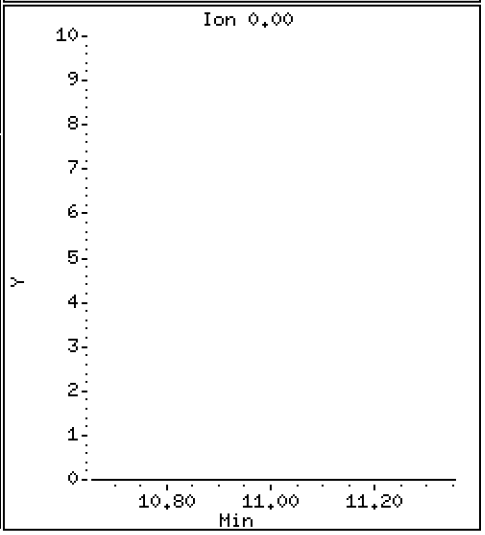


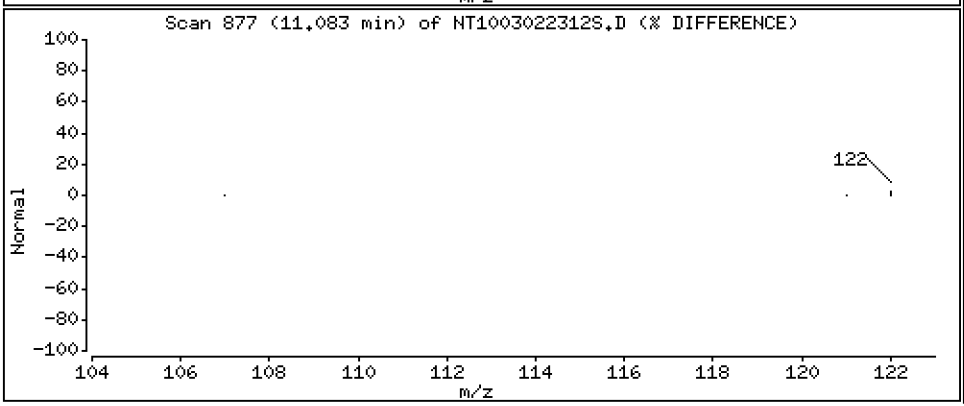












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

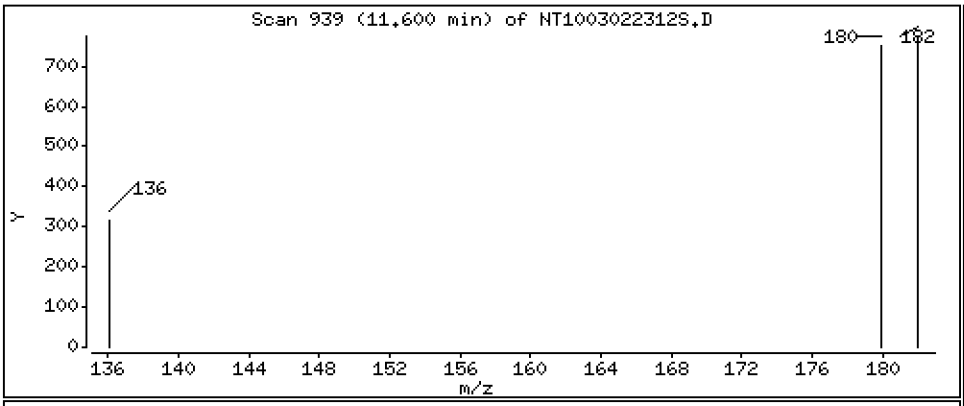
Operator: JGR

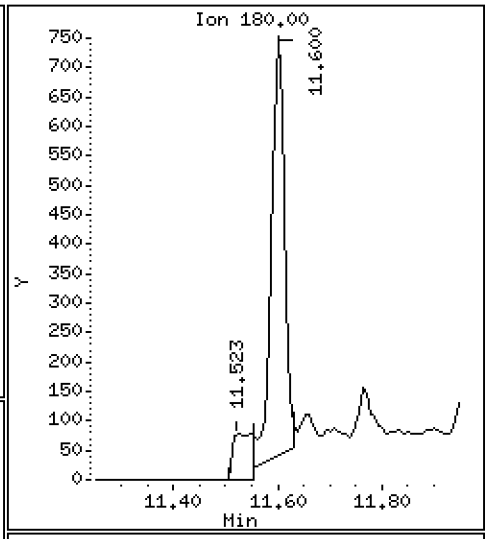
Column phase: ZB-5msi

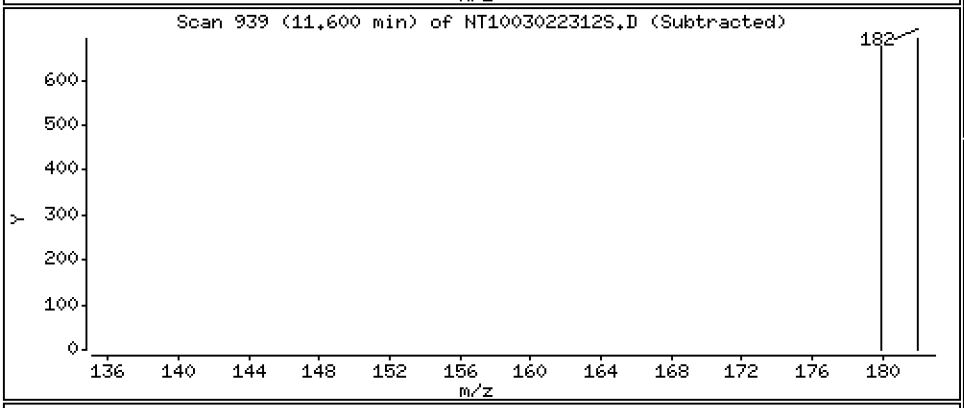
Column diameter: 0.25

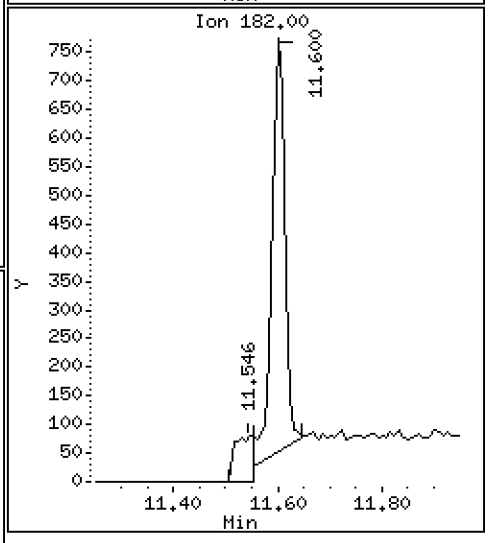
26 1,2,4-Trichlorobenzene

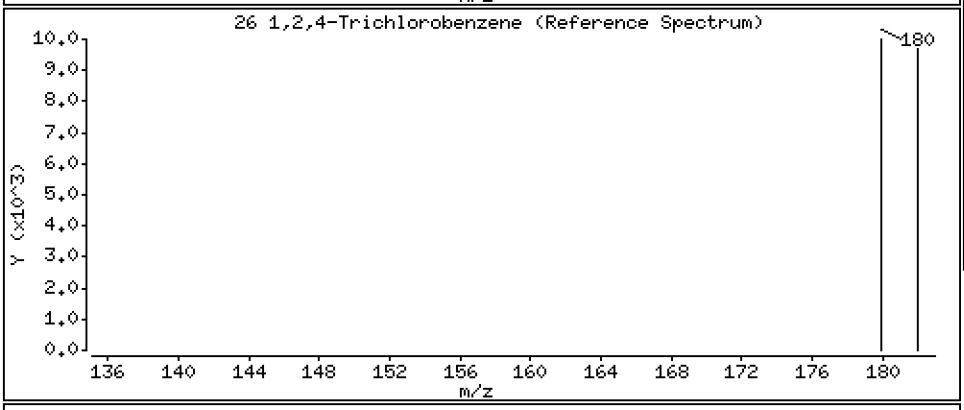
Concentration: 0.006590 ug/L

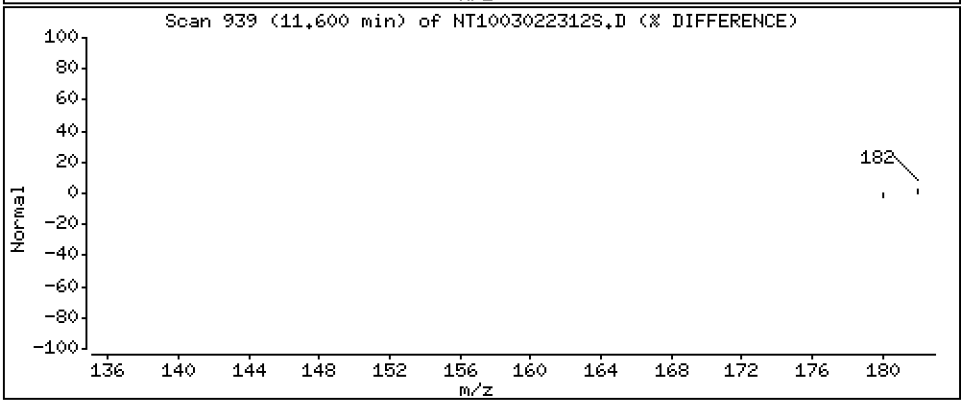












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

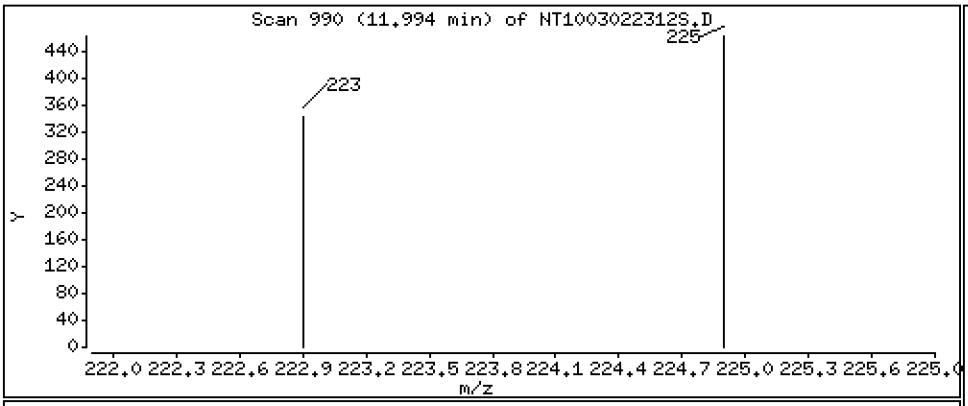
Operator: JGR

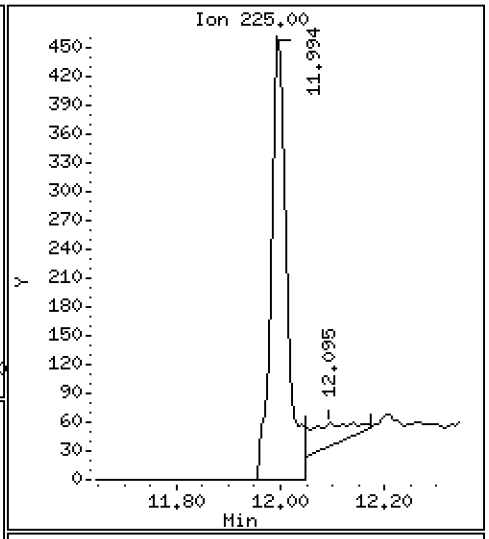
Column phase: ZB-5msi

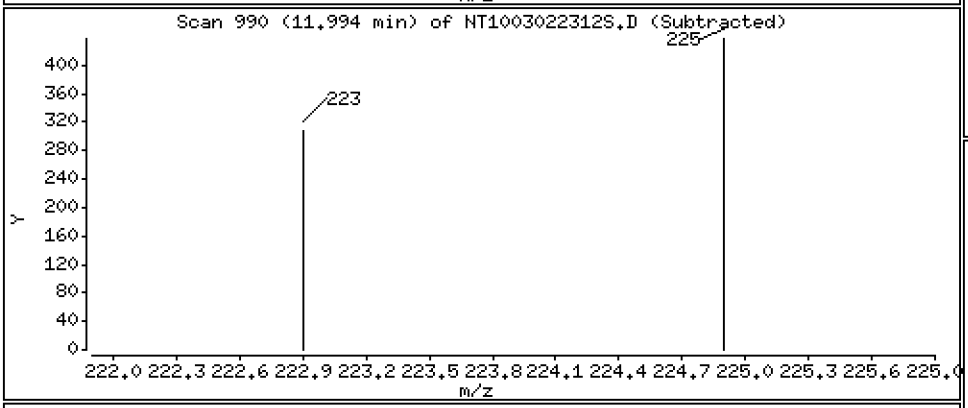
Column diameter: 0.25

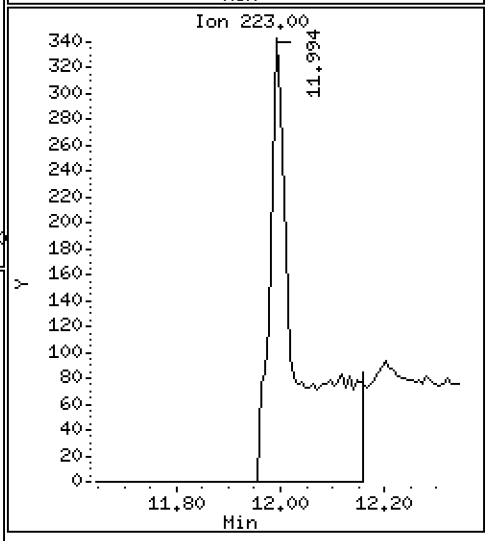
30 Hexachlorobutadiene

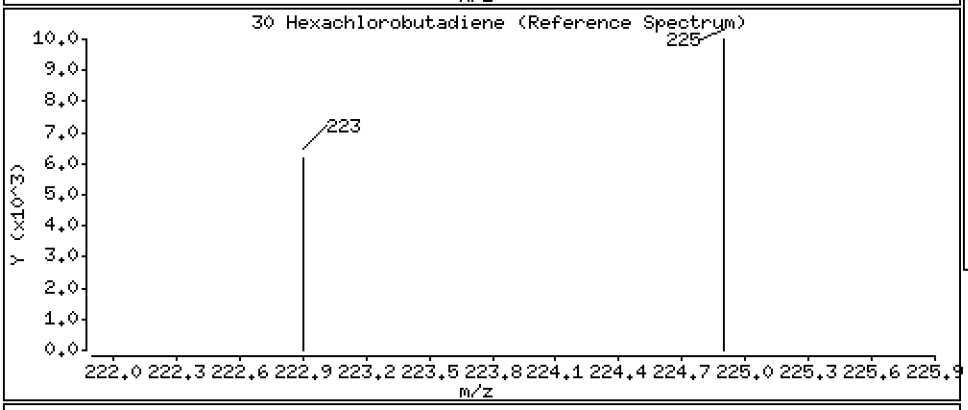
Concentration: 0.007303 ug/L

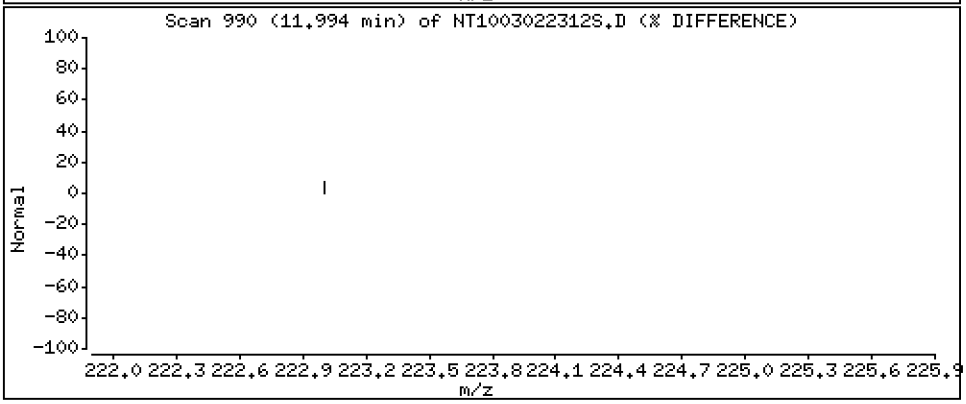












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

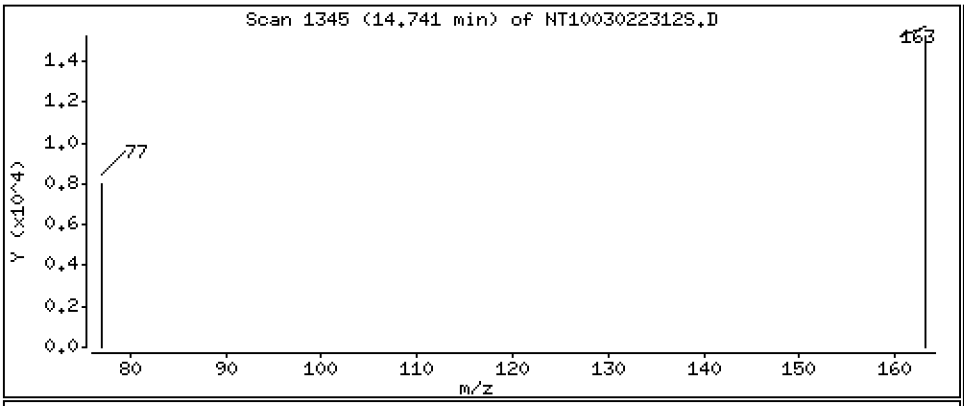
Operator: JGR

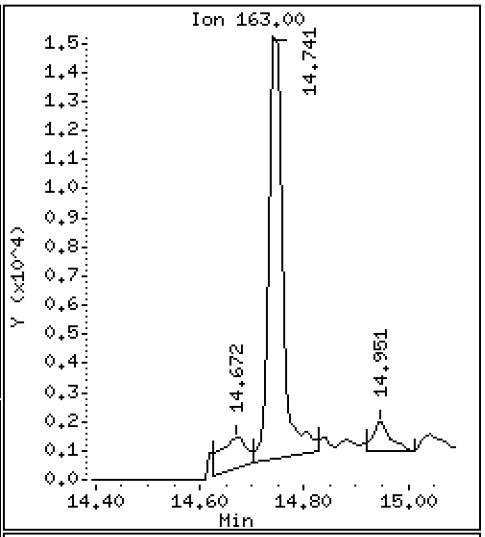
Column phase: ZB-5msi

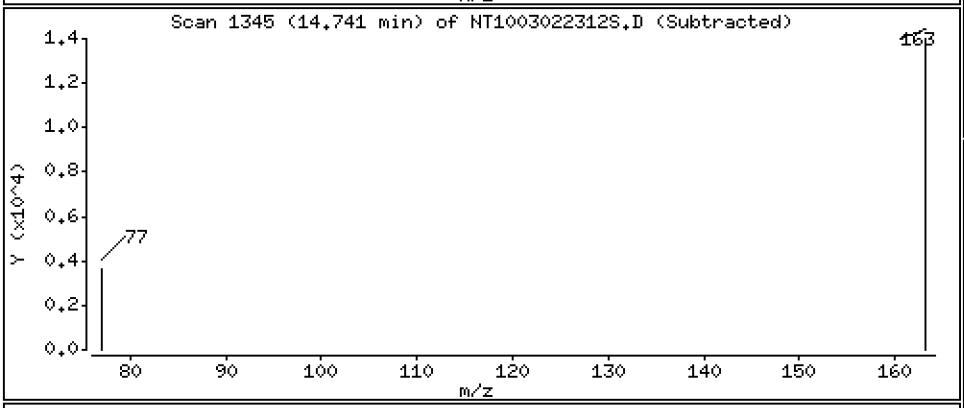
Column diameter: 0.25

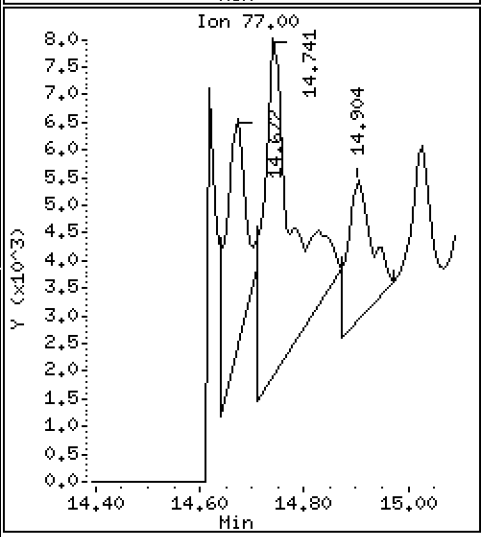
39 Dimethylphthalate

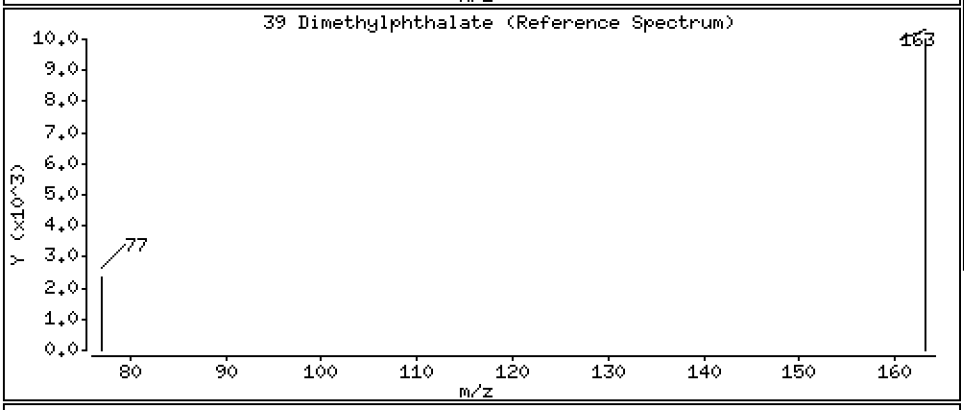
Concentration: 0.06597 ug/L

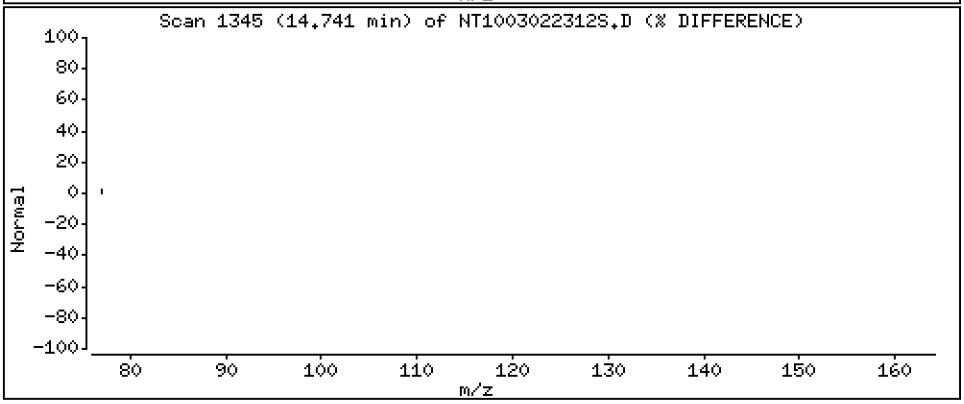












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Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

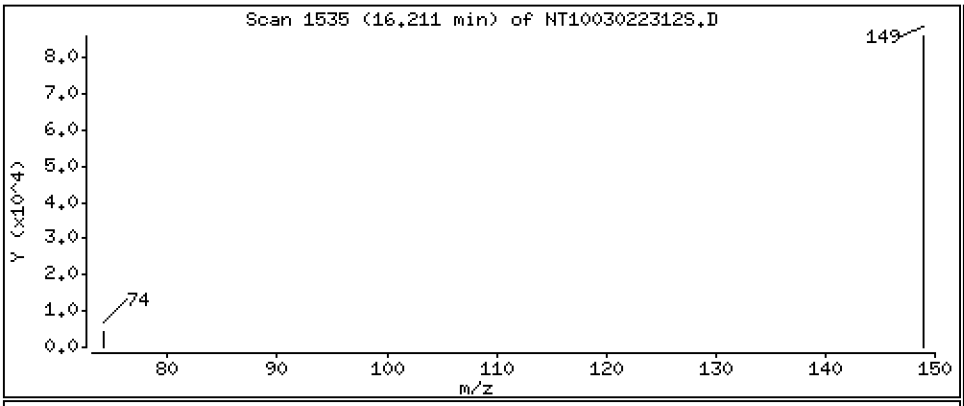
Operator: JGR

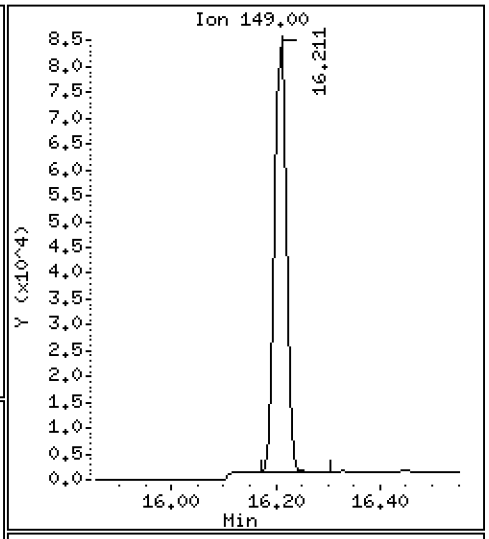
Column phase: ZB-5msi

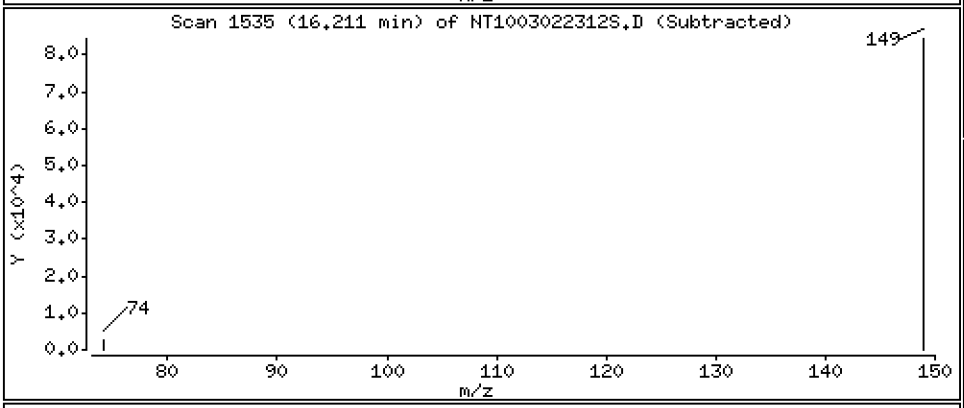
Column diameter: 0.25

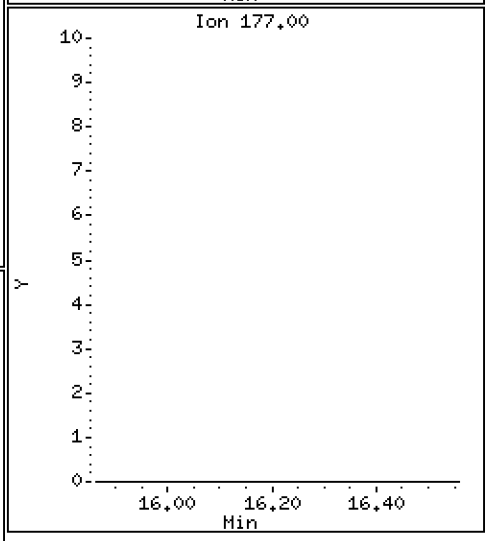
50 Diethylphthalate

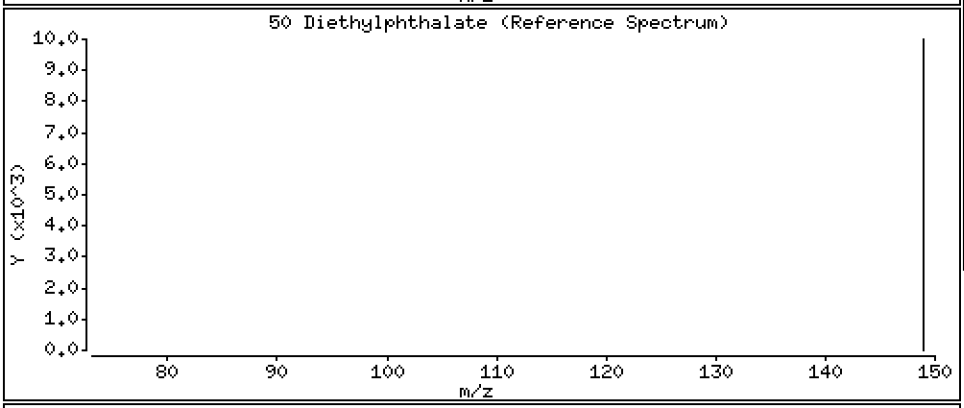
Concentration: 0.3326 ug/L

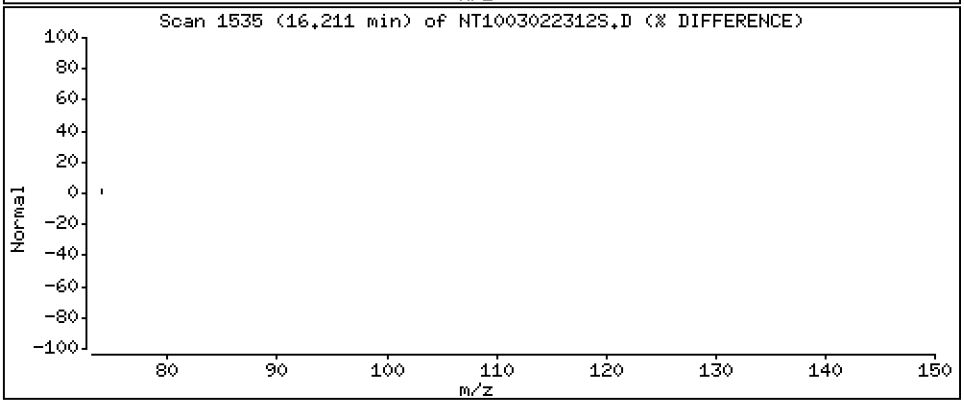












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Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

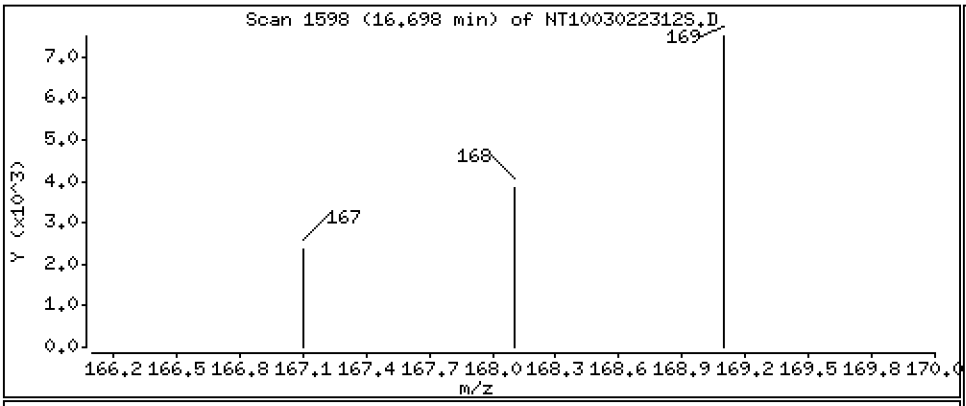
Operator: JGR

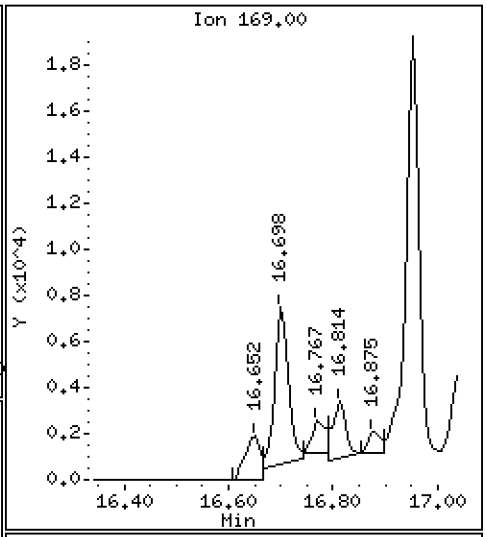
Column phase: ZB-5msi

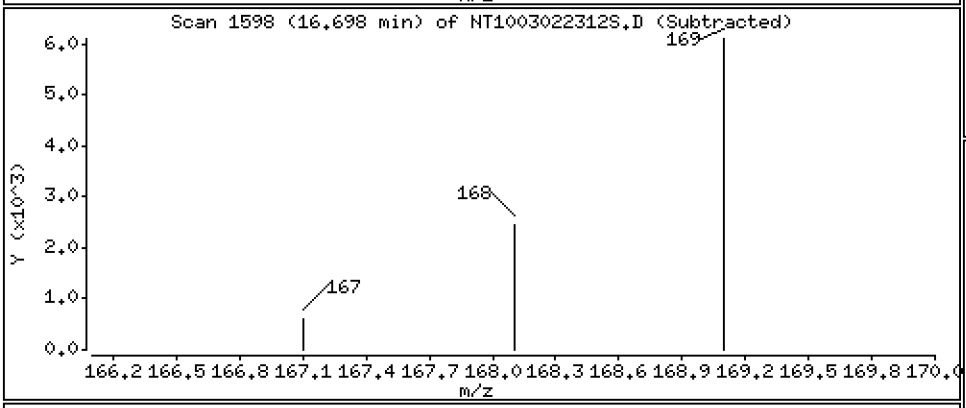
Column diameter: 0.25

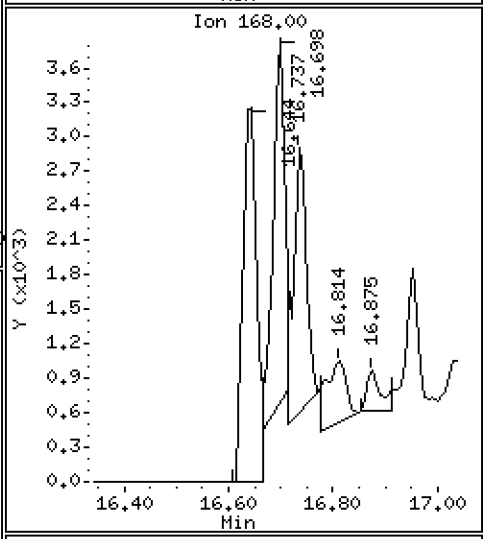
54 N-Nitrosodiphenylamine

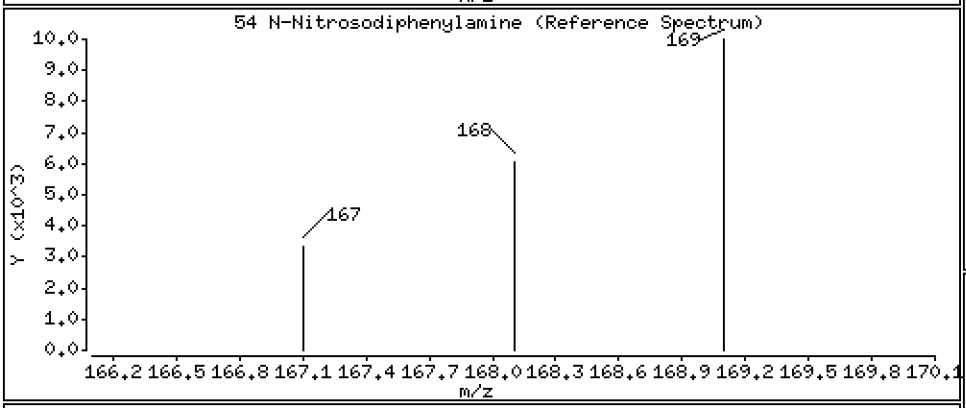
Concentration: 0.03481 ug/L

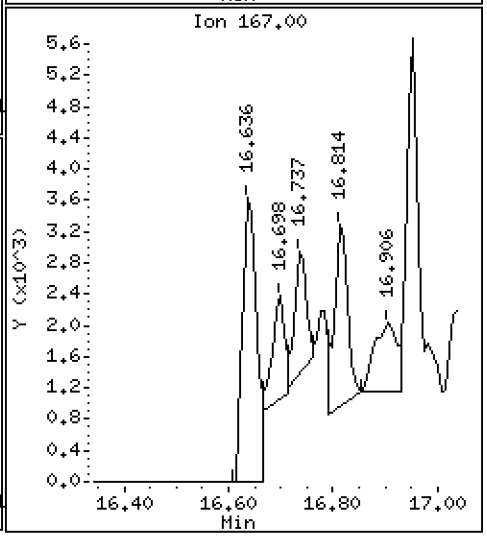


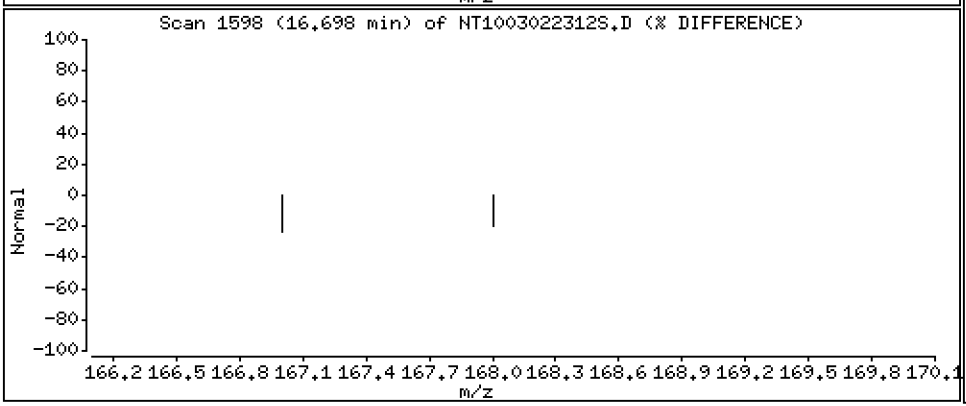












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Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

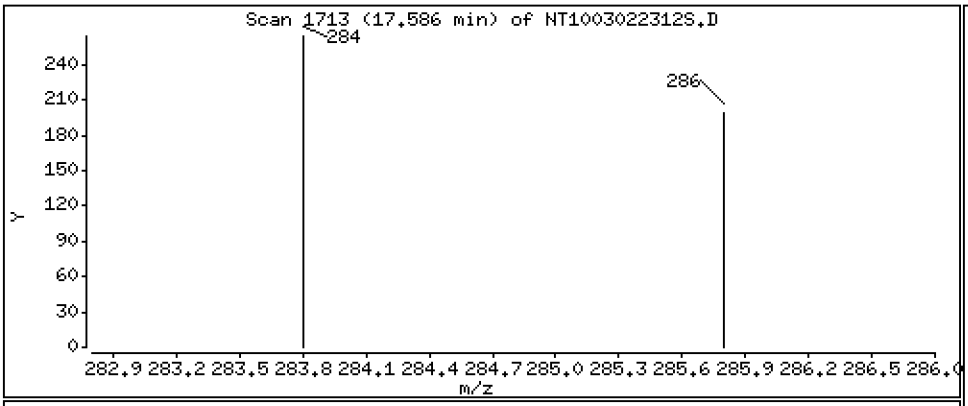
Operator: JGR

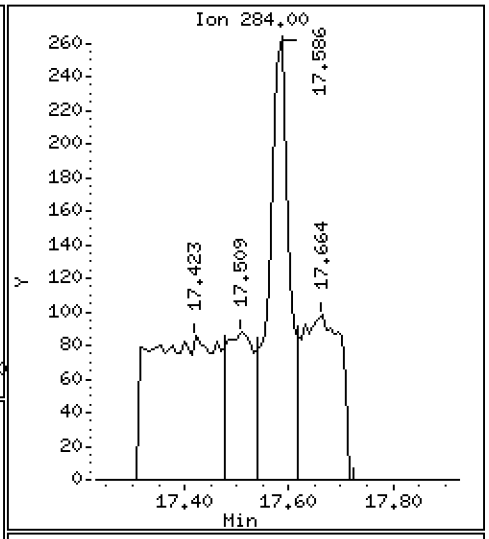
Column phase: ZB-5msi

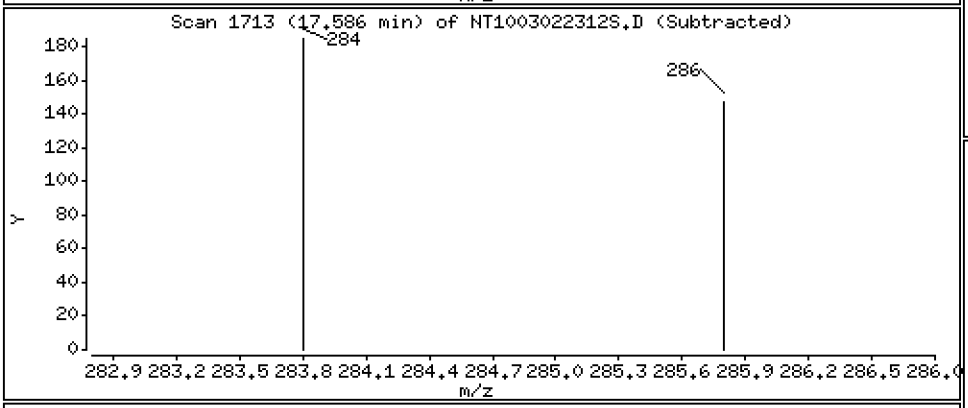
Column diameter: 0.25

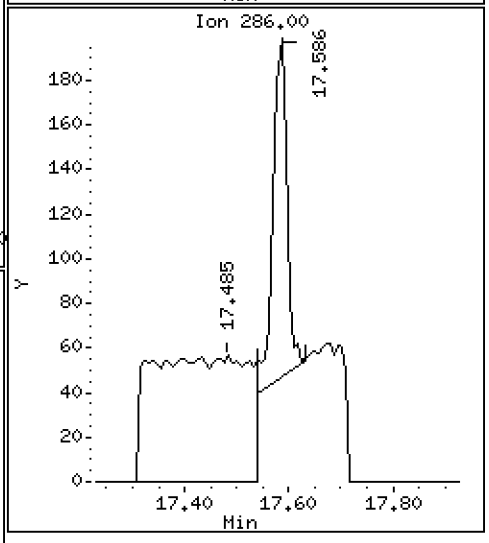
57 Hexachlorobenzene

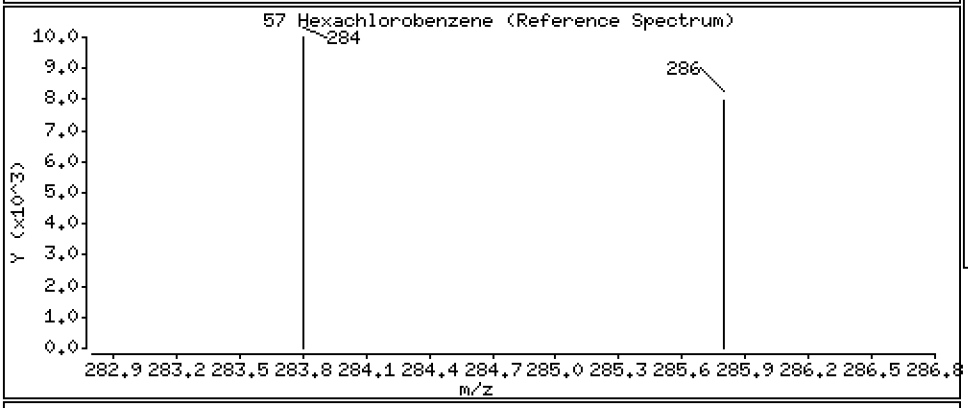
Concentration: 0.004138 ug/L

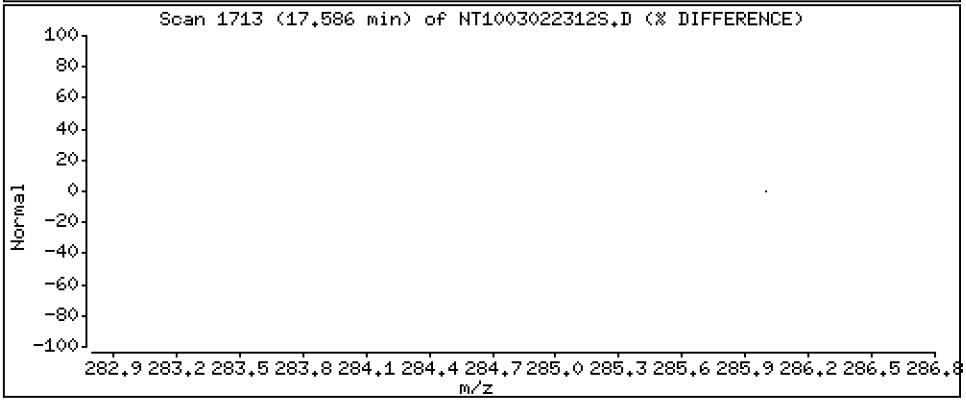












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

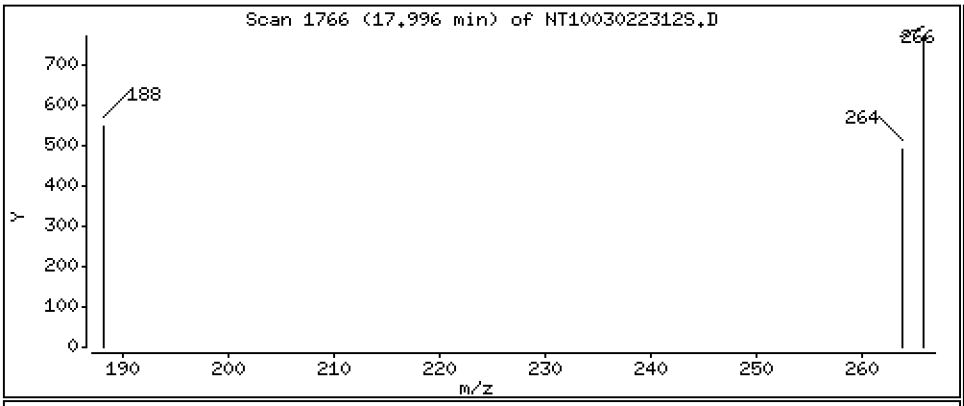
Operator: JGR

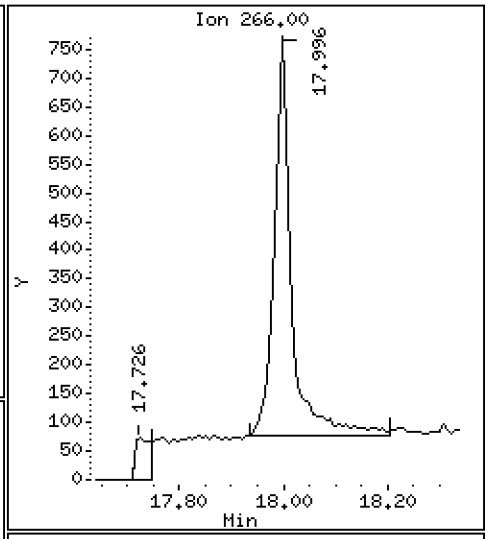
Column phase: ZB-5msi

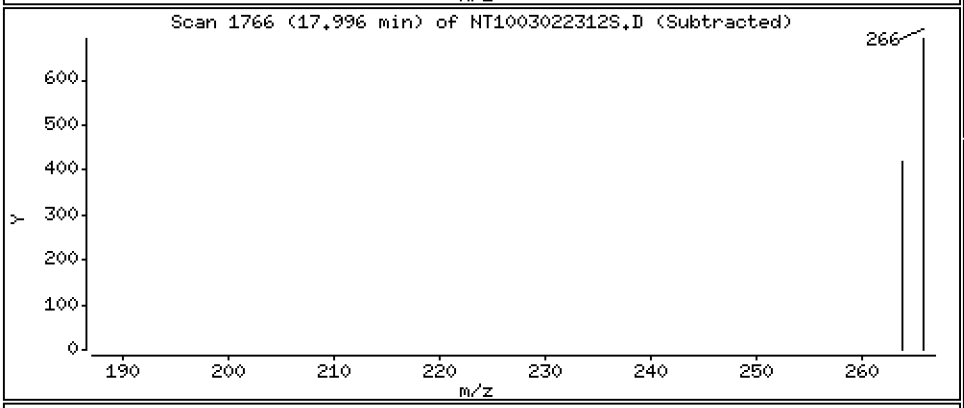
Column diameter: 0.25

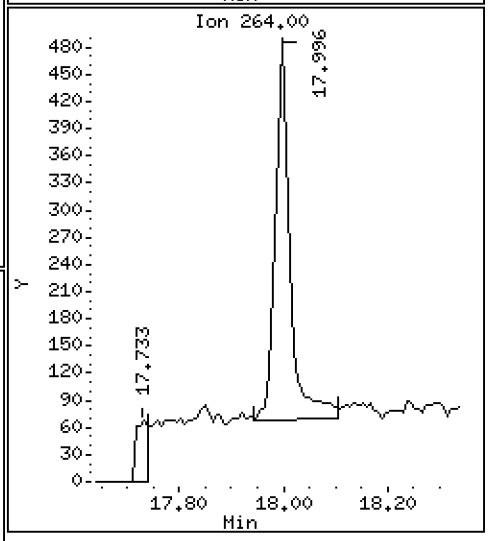
58 Pentachlorophenol

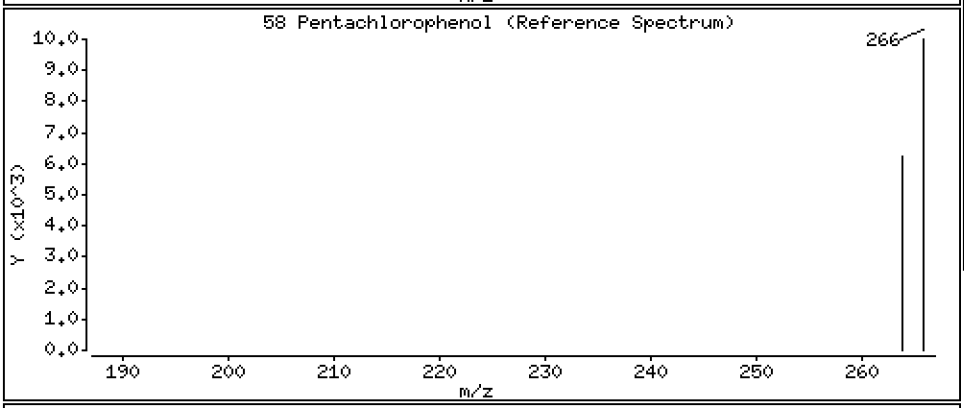
Concentration: 0.02110 ug/L

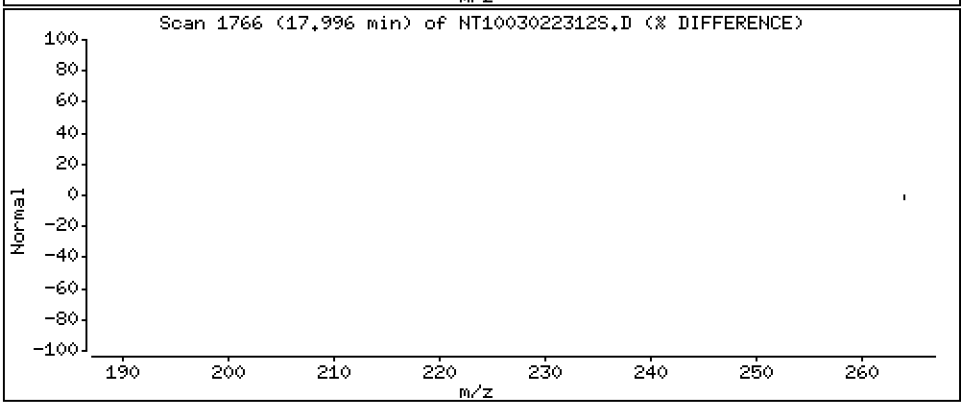












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

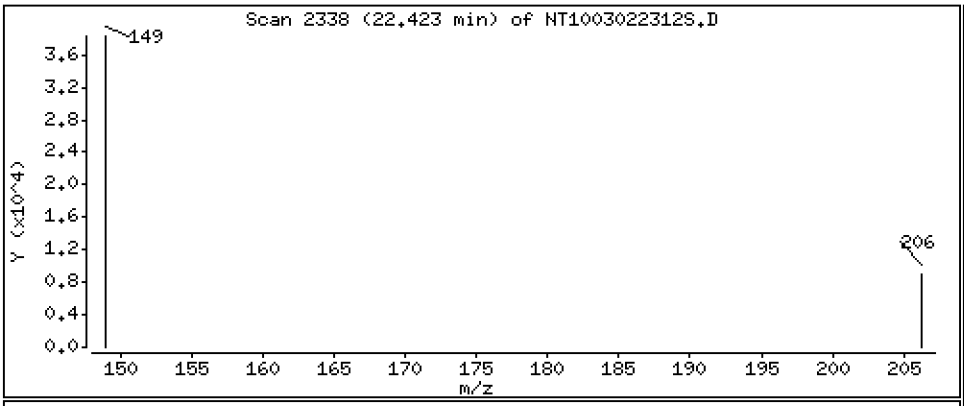
Operator: JGR

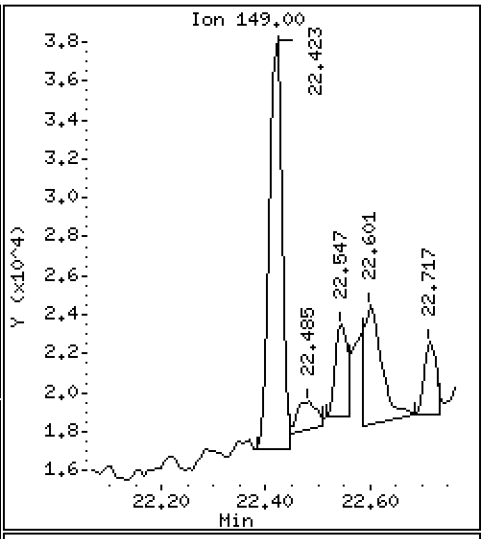
Column phase: ZB-5msi

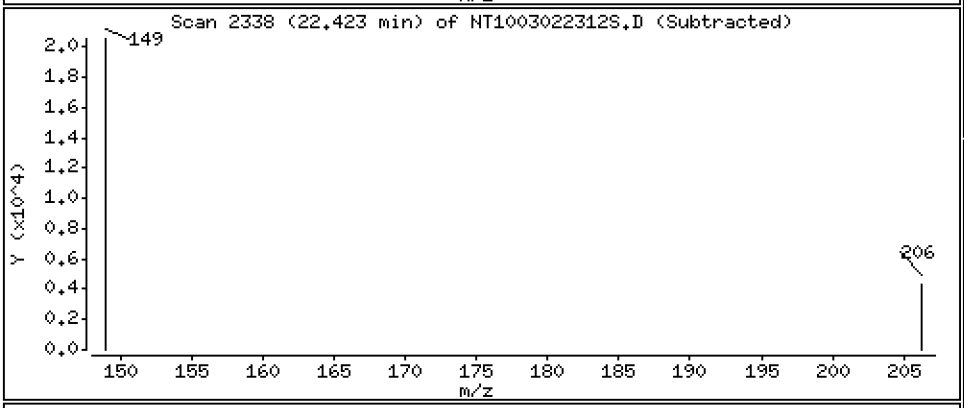
Column diameter: 0.25

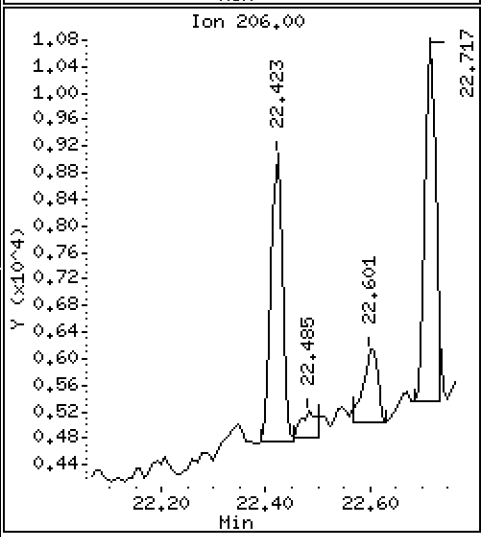
67 Butylbenzylphthalate

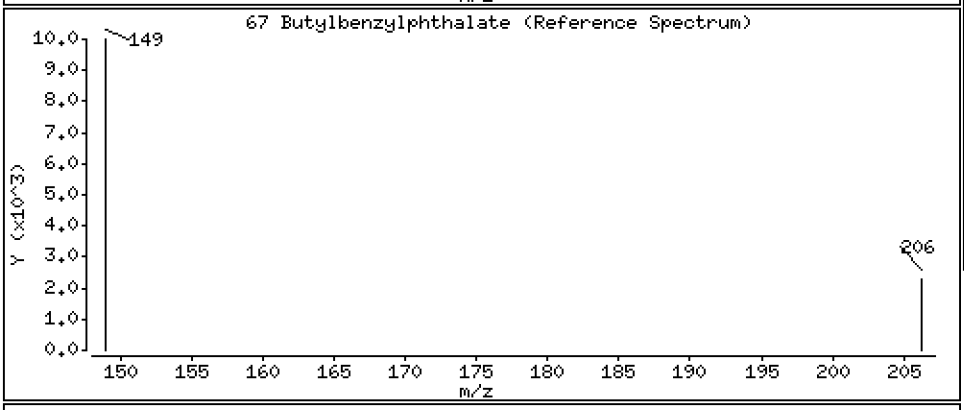
Concentration: 0.07165 ug/L

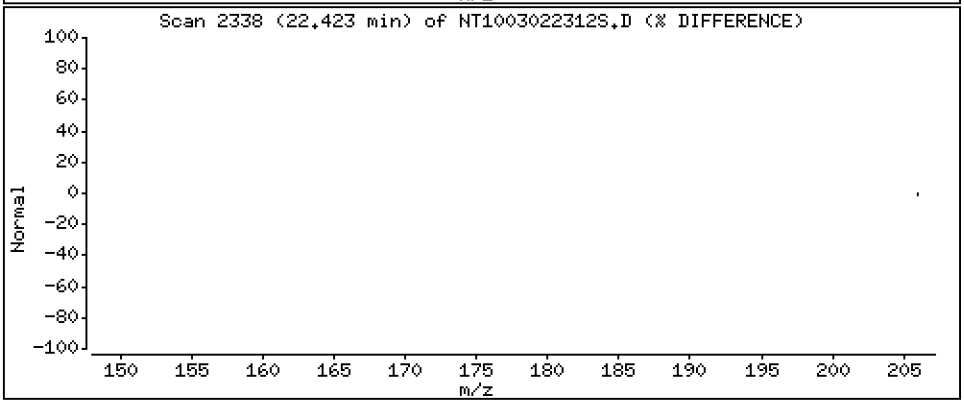












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

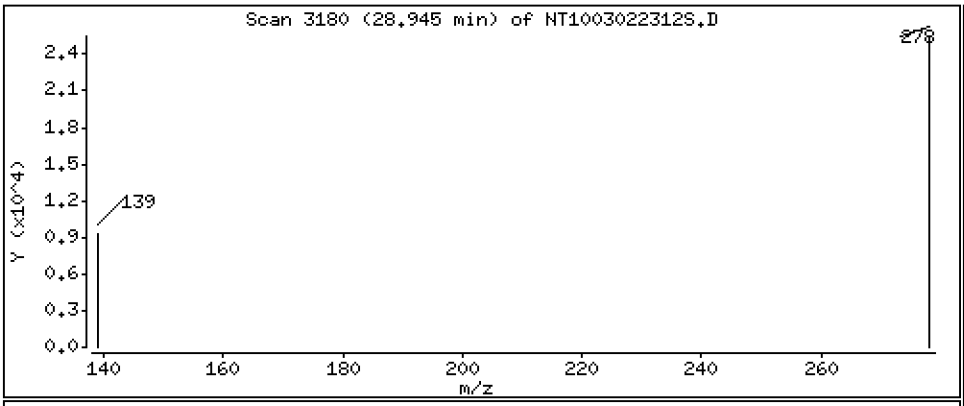
Operator: JGR

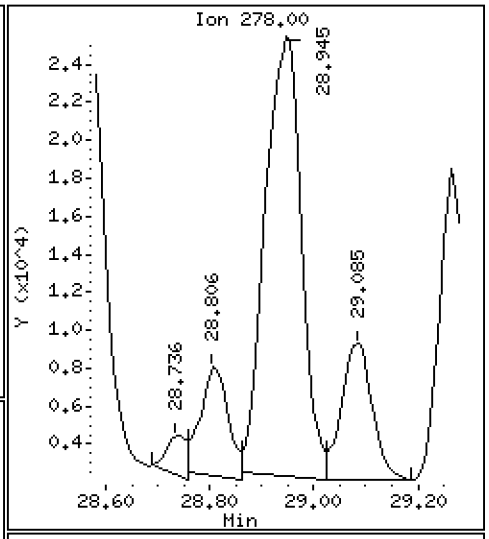
Column phase: ZB-5msi

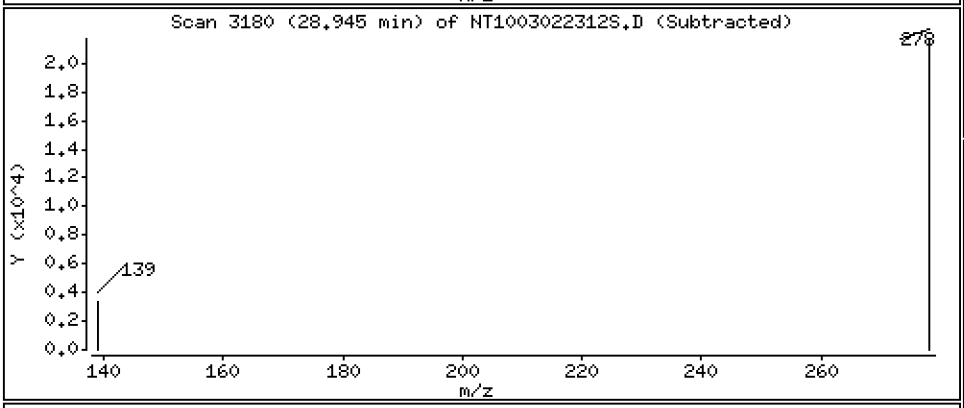
Column diameter: 0.25

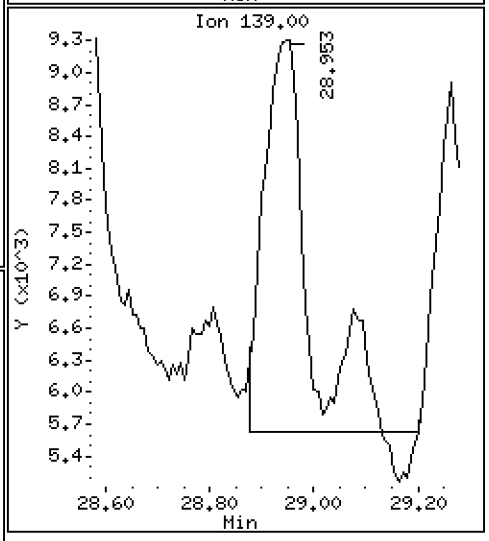
79 Dibenzo(a,h)anthracene

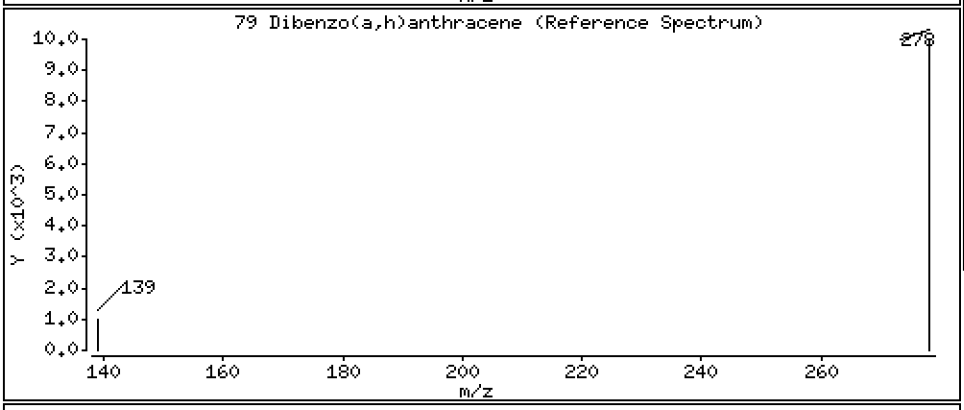
Concentration: 0.1597 ug/L

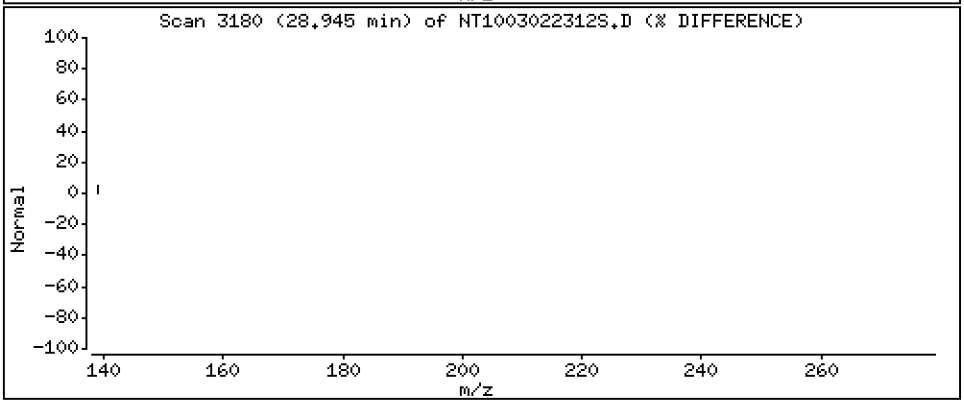












Data File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT10030223125.D

Date : 02-MAR-2023 21:22

Client ID:

Instrument: nt10.i

Sample Info: 23A0206-01

Volume Injected (uL): 1.0

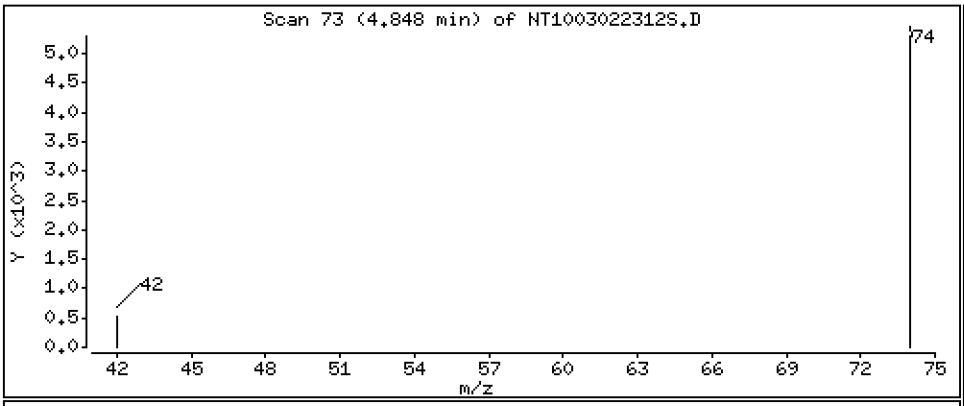
Operator: JGR

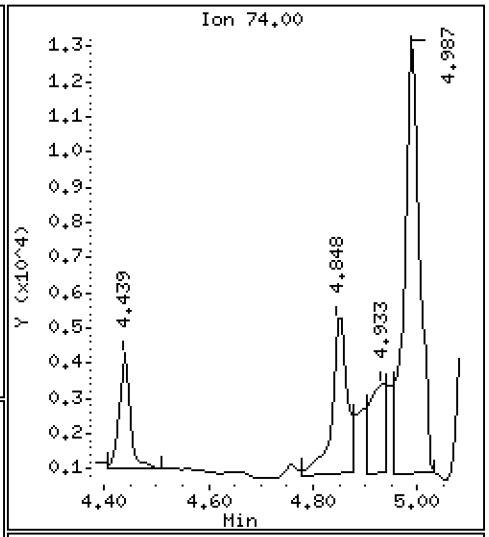
Column phase: ZB-5msi

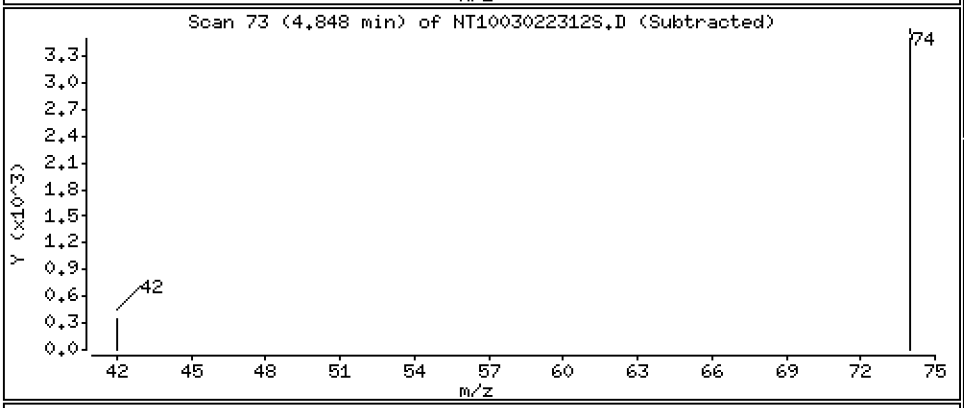
Column diameter: 0.25

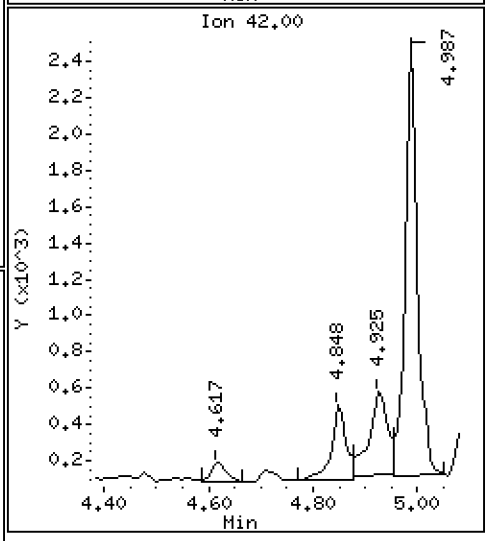
90 N-Nitrosodimethylamine

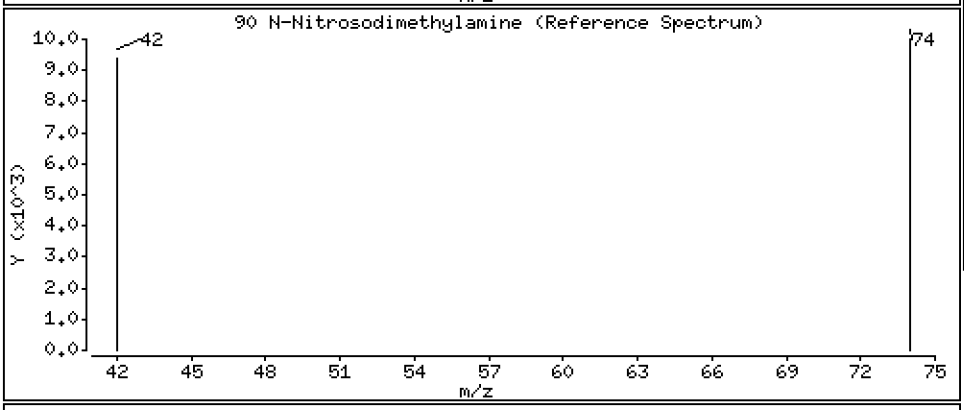
Concentration: 0.07999 ug/L

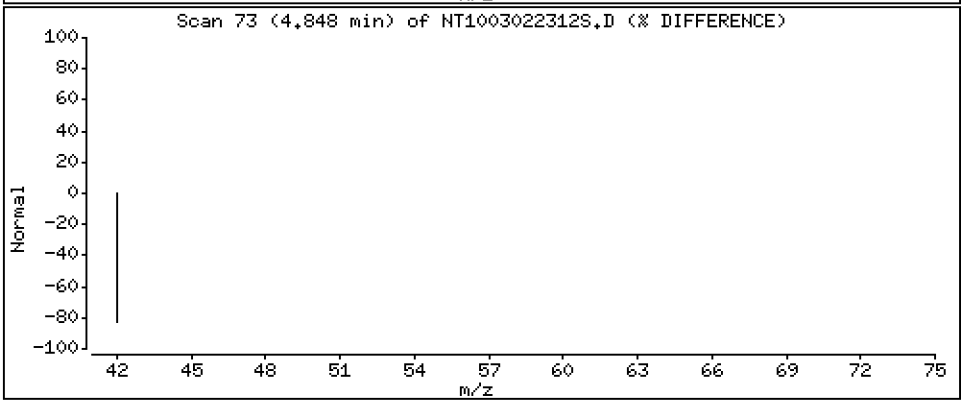












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230302.b\SIM.b\NT1003022312S.D
Lab Smp Id: 23A0206-01
Inj Date : 02-MAR-2023 21:22 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : 23A0206-01
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 14:53 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.910	6.902	(0.747)	1411998	6.85580	6.856(R)
3	Phenol	94	8.524	8.517	(0.921)	3134940	9.78296	9.783
7	1,3-Dichlorobenzene	146	9.143	9.143	(0.988)	1760	0.00658	0.006583
* 8	1,4-Dichlorobenzene-d4	152	9.251	9.251	(1.000)	721403	4.00000	
9	1,4-Dichlorobenzene	146	9.283	9.282	(1.003)	2596	0.00999	0.009987
11	Benzyl alcohol	79	9.476	9.476	(1.024)	46173	0.27334	0.2733
12	1,2-Dichlorobenzene	146	9.562	9.562	(1.034)	1202	0.00481	0.004811
13	2-Methylphenol	108	9.663	9.655	(1.044)	7769	0.04254	0.04254
15	4-Methylphenol	108	9.950	9.942	(1.076)	35061	0.18430	0.1843
16	N-Nitroso-di-n-propylamine	70	9.958	9.981	(1.076)	7989	0.05906	0.05906
22	2,4-Dimethylphenol	107	11.006	10.997	(0.939)	12257	0.05672	0.05672
24	Benzoic acid	105	11.082	11.074	(0.945)	74985	0.63106	0.6311
26	1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	1208	0.00659	0.006590
* 27	Naphthalene-d8	136	11.723	11.723	(1.000)	2546921	4.00000	
30	Hexachlorobutadiene	225	11.994	11.994	(1.023)	950	0.00730	0.007303
39	Dimethylphthalate	163	14.741	14.741	(0.962)	25956	0.06597	0.06597
* 42	Acenaphthene-d10	162	15.321	15.314	(1.000)	1239070	4.00000	
50	Diethylphthalate	149	16.210	16.203	(1.058)	123384	0.33255	0.3326
54	N-Nitrosodiphenylamine	169	16.698	16.690	(0.907)	12763	0.03481	0.03481
57	Hexachlorobenzene	284	17.586	17.578	(0.955)	710	0.00414	0.004138

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	17.996	17.988	(0.977)	1584	0.02110	0.02110
*	59 Phenanthrene-d10	188	18.414	18.406	(1.000)	2265720	4.00000	
$	66 Terphenyl-d14	244	21.532	21.532	(0.919)	1103320	4.89149	4.891(R)
	67 Butylbenzylphthalate	149	22.422	22.414	(0.957)	33739	0.07165	0.07165
*	69 Chrysene-d12	240	23.429	23.421	(1.000)	2789268	4.00000	
*	77 Perylene-d12	264	26.131	26.115	(1.000)	3057877	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.945	28.929	(1.108)	113304	0.15967	0.1597
	90 N-Nitrosodimethylamine	74	4.848	4.732	(0.524)	9754	0.07999	0.07999

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003022312S.D
Lab Smp Id: 23A0206-01
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230302.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 02-MAR-2023
Calibration Time: 14:13
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	493417	246709	986834	721403	46.21
27 Naphthalene-d8	1779056	889528	3558112	2546921	43.16
42 Acenaphthene-d10	954569	477285	1909138	1239070	29.80
59 Phenanthrene-d10	1596290	798145	3192580	2265720	41.94
69 Chrysene-d12	1649110	824555	3298220	2789268	69.14
77 Perylene-d12	1901958	950979	3803916	3057877	60.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.25	8.75	9.75	9.25	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.32	0.05
59 Phenanthrene-d10	18.41	17.91	18.91	18.41	0.04
69 Chrysene-d12	23.42	22.92	23.92	23.43	0.03
77 Perylene-d12	26.12	25.62	26.62	26.13	0.06

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

REVIEW SUMMARY FOR FILE - NT1003022312S.D

Lab ID: 23A0206-01
nt10.i, 20230302.b\SIM.b\SIMABN2.m,   02-MAR-2023 21:22

RT	CO-ELUTION COMPOUNDS
NO CO-ELUTIONS	

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.524	0.511	0.0125	N-Nitrosodimethylamine

RRT check based on Ccal File: SIM.b/NT1003022303S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLC0143

Instrument: NT10
Calibration ID: UNASSIGNED

Printed: 3/10/2023 10:34:45AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0143-CAL1	QC		1		K011453	K010831		
SLC0143-CAL2	QC		2		K011452	K010831		
SLC0143-CAL3	QC		3		K011105	K010831		
SLC0143-CAL4	QC		4		K011106	K010831		
SLC0143-CAL5	QC		5		K011107	K010831		
SLC0143-CAL6	QC		6		K011108	K010831		
SLC0143-CAL7	QC		7		K011109	K010831		
SLC0143-CAL8	QC		8		K011110	K010831		
SLC0143-ICB1	QC		9		K005156	K010831		
SLC0143-SCV1	QC		10		K010066	K010831		

Samples Loaded By Date

Data Processed By Date

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

	Time	Filename	LabID	ClientId	DF											
1	1642	NT1003012303S.D	SEQ-CAL8		1	9.25	358478	11.72	1302515	15.31	720687	18.40	1243145	23.42	1161833	26.11	1054384
2	1721	NT1003012304S.D	SEQ-CAL7		1	9.25	354441	11.72	1288295	15.31	739997	18.40	1248235	23.41	1079945	26.11	1086769
3	1759	NT1003012305S.D	SEQ-CAL6		1	9.24	334269	11.72	1202042	15.31	670352	18.40	1124281	23.41	948691	26.11	1004445
4	1837	NT1003012306S.D	SEQ-CAL5		1	9.24	320125	11.72	1136019	15.31	636993	18.40	1093620	23.41	1000300	26.10	1058448
5	1915	NT1003012307S.D	SEQ-CAL4		1	9.24	333617	11.72	1170292	15.31	639612	18.40	1094919	23.42	1048196	26.11	1117593
6	1953	NT1003012308S.D	SEQ-CAL3		1	9.25	314467	11.72	1088698	15.31	568154	18.40	979213	23.42	963807	26.11	1037909
7	2030	NT1003012309S.D	SEQ-CAL2		1	9.24	305434	11.72	1048978	15.31	536796	18.40	924275	23.42	947041	26.11	1060218
8	2109	NT1003012310S.D	SEQ-CAL1		1	9.25	370360	11.72	1262304	15.31	638059	18.40	1124768	23.42	1114478	26.11	1276260
9	2146	NT1003012311S.D	SEQ-SCV1		1	9.25	303734	11.72	1147551	15.31	645730	18.40	1151000	23.42	1297466	26.11	1394899
10	2224	NT1003012312S.D	SEQ-IBL1		1	9.25	515340	11.72	1787704	15.31	879316	18.40	1572306	23.42	1486349	26.11	1674195

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

ARI Job No.: SEQ- Method: SIM.b\SIMABN2.m Instrument: nt10.i Date: 01-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1642	NT1003012303S.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
1721	NT1003012304S.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
1759	NT1003012305S.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
1837	NT1003012306S.D	SEQ-CAL5		1	Pentachlorophenol,
1915	NT1003012307S.D	SEQ-CAL4		1	Pentachlorophenol,
1953	NT1003012308S.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2030	NT1003012309S.D	SEQ-CAL2		1	Benzyl alcohol, Benzoic acid,
2109	NT1003012310S.D	SEQ-CAL1		1	Benzyl alcohol, 2-Methylphenol, 4-Methylphenol, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Hexachlorobenzene,
2146	NT1003012311S.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
2224	NT1003012312S.D	SEQ-IBL1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 10-Mar-2023 11:02

NT1003012303S.D	Data Locked	yev, 10-
NT1003012304S.D	Data Locked	yev, 10-
NT1003012305S.D	Data Locked	yev, 10-
NT1003012306S.D	Data Locked	yev, 10-
NT1003012307S.D	Data Locked	yev, 10-
NT1003012308S.D	Data Locked	yev, 10-
NT1003012309S.D	Data Locked	yev, 10-
NT1003012310S.D	Data Locked	yev, 10-
NT1003012311S.D	Data Locked	yev, 10-
NT1003012312S.D	Data Locked	yev, 10-

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08
FILENAME:	NT1003012303S	NT1003012304S	NT1003012305S	NT1003012306S	NT1003012307S	NT1003012308S	NT1003012309S	NT1003012310S
INJ.DATE:	01-MAR-2023	01-MAR-2023	01-MAR-2023	01-MAR-2023	01-MAR-2023	01-MAR-2023	01-MAR-2023	01-MAR-2023
INJ.TIME:	16:42	17:21	17:59	18:37	19:15	19:53	20:30	21:09

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	6.902	6.902	6.895	6.895	6.895	6.902	6.903	6.902	6.902	6.402-7.402	6.900	0.004
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	33.580	33.080-34.080	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.873	30.373-31.373	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.300	30.800-31.800	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.300	30.800-31.800	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.496	14.996-15.996	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.428	19.928-20.928	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.471	19.971-20.971	+++++	+++++
137 NewCpnd_131	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.828	7.328-8.328	+++++	+++++
* 134 Di-n-octylphthalate-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.768	23.268-24.268	+++++	+++++
133 Butylatedhydroxytoluen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.190	13.690-14.690	+++++	+++++
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.262	30.762-31.762	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.954	29.454-30.454	+++++	+++++
146 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.752	23.252-24.252	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.717	27.217-28.217	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.566	20.066-21.066	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.796	19.296-20.296	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.349	22.849-23.849	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.474	21.974-22.974	+++++	+++++
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.191	10.691-11.691	+++++	+++++
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.779	17.279-18.279	+++++	+++++
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.310	15.810-16.810	+++++	+++++
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.707	17.207-18.207	+++++	+++++
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.921	8.421-9.421	+++++	+++++
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.736	3.236-4.236	+++++	+++++
$ 145 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.914	2.414-3.414	+++++	+++++
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.148	19.648-20.648	+++++	+++++
120 2,3,4,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.588	15.088-16.088	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.587	38.087-39.087	+++++	+++++
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.382	19.882-20.882	+++++	+++++
117 Butyl Diphenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.734	18.234-19.234	+++++	+++++
116 Dibutyl Phenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.987	16.487-17.487	+++++	+++++
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.204	14.704-15.704	+++++	+++++
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.586	21.086-22.086	+++++	+++++
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.692	17.192-18.192	+++++	+++++
111 Azobenzene (1,2-DP-Hyd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.268	15.768-16.768	+++++	+++++
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.055	17.555-18.555	+++++	+++++
109 3,4,5-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.228	16.728-17.728	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	108 4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.517	16.017-17.017	+++++	+++++
	107 4,5-Dichloro-2-Methoxy	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.803	14.303-15.303	+++++	+++++
	106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.843	11.343-12.343	+++++	+++++
	105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.927	12.427-13.427	+++++	+++++
$	2 Phenol-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.235	7.735-8.735	+++++	+++++
	3 Phenol	8.525	8.517	8.517	8.518	8.518	8.525	8.525	8.533	8.533	8.033-9.033	8.522	0.006
	4 Bis(2-Chloroethyl)ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.397	7.897-8.897	+++++	+++++
$	5 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.490	7.990-8.990	+++++	+++++
	6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.521	8.021-9.021	+++++	+++++
	7 1,3-Dichlorobenzene	9.143	9.143	9.136	9.136	9.136	9.143	9.144	9.136	9.136	8.636-9.636	9.140	0.004
*	8 1,4-Dichlorobenzene-d4	9.252	9.252	9.244	9.245	9.245	9.252	9.245	9.252	9.252	8.752-9.752	9.248	0.004
	9 1,4-Dichlorobenzene	9.283	9.283	9.275	9.276	9.276	9.275	9.276	9.275	9.275	8.775-9.775	9.277	0.003
$	10 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.230	8.730-9.730	+++++	+++++
	11 Benzyl alcohol	9.477	9.477	9.469	9.477	9.477	9.485	9.485	9.508	9.508	9.008-10.008	9.482	0.012
	12 1,2-Dichlorobenzene	9.562	9.562	9.562	9.563	9.563	9.562	9.563	9.563	9.563	9.063-10.063	9.562	0.000
	13 2-Methylphenol	9.656	9.655	9.656	9.656	9.656	9.663	9.664	9.671	9.671	9.171-10.171	9.660	0.006
	14 2,2'-oxybis(1-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.413	8.913-9.913	+++++	+++++
	15 4-Methylphenol	9.943	9.943	9.943	9.943	9.951	9.950	9.959	9.966	9.966	9.466-10.466	9.950	0.009
	16 N-Nitroso-di-n-propyla	9.982	9.982	9.974	9.974	9.974	9.974	9.974	9.982	9.982	9.482-10.482	9.977	0.004
	17 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.809	9.309-10.309	+++++	+++++
$	18 Nitrobenzene-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.917	9.417-10.417	+++++	+++++
	19 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.948	9.448-10.448	+++++	+++++
	20 Isophorone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.399	9.899-10.899	+++++	+++++
	21 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.575	10.075-11.075	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	22 2,4-Dimethylphenol	11.006	10.998	10.998	10.998	10.998	10.998	11.007	11.006	11.006	10.506-11.506	11.001	0.004
	23 Bis(2-Chloroethoxy)met	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.830	10.330-11.330	+++++	+++++
	24 Benzoic acid	11.218	11.159	11.108	11.074	11.058	11.074	11.007	+++++	11.007	10.507-11.507	11.100	0.070
	25 2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.033	10.533-11.533	+++++	+++++
	26 1,2,4-Trichlorobenzene	11.600	11.600	11.600	11.601	11.601	11.600	11.601	11.600	11.600	11.100-12.100	11.600	0.000
*	27 Naphthalene-d8	11.724	11.724	11.724	11.724	11.724	11.724	11.724	11.724	11.724	11.224-12.224	11.724	0.000
	28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.326	10.826-11.826	+++++	+++++
	29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.457	10.957-11.957	+++++	+++++
	30 Hexachlorobutadiene	11.994	11.994	11.994	11.994	11.994	11.994	11.994	11.994	11.994	11.494-12.494	11.994	0.000
	31 4-Chloro-3-methylpheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.432	11.932-12.932	+++++	+++++
	32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.710	12.210-13.210	+++++	+++++
	33 Hexachlorocyclopentadi	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.182	12.682-13.682	+++++	+++++
	34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.330	12.830-13.830	+++++	+++++
	35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.415	12.915-13.915	+++++	+++++
$	36 2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.484	12.984-13.984	+++++	+++++
	37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.686	13.186-14.186	+++++	+++++
	38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.941	13.441-14.441	+++++	+++++
	39 Dimethylphthalate	14.749	14.741	14.741	14.742	14.742	14.741	14.742	14.749	14.749	14.249-15.249	14.744	0.004
	40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.545	14.045-15.045	+++++	+++++
	41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.506	14.006-15.006	+++++	+++++
*	42 Acenaphthene-d10	15.314	15.314	15.314	15.314	15.314	15.314	15.314	15.314	15.314	14.814-15.814	15.314	0.000
	43 3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.785	14.285-15.285	+++++	+++++
	44 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.924	14.424-15.424	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.001	14.501-15.501	+++++	+++++
	46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.248	14.748-15.748	+++++	+++++
	47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.171	14.671-15.671	+++++	+++++
	48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.302	14.802-15.802	+++++	+++++
	49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.952	15.452-16.452	+++++	+++++
	50 Diethylphthalate	16.219	16.211	16.203	16.203	16.203	16.203	16.211	16.211	16.211	15.711-16.711	16.208	0.006
	51 4-Chlorophenyl-phenyle	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.952	15.452-16.452	+++++	+++++
	52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.037	15.537-16.537	+++++	+++++
	53 4,6-Dinitro-2-methylph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.145	15.645-16.645	+++++	+++++
	54 N-Nitrosodiphenylamine	16.698	16.690	16.690	16.691	16.691	16.698	16.698	16.706	16.706	16.206-17.206	16.695	0.006
$	55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.477	15.977-16.977	+++++	+++++
	56 4-Bromophenyl-phenylet	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.939	16.439-17.439	+++++	+++++
	57 Hexachlorobenzene	17.578	17.578	17.578	17.579	17.579	17.578	17.579	17.579	17.579	17.079-18.079	17.579	0.000
	58 Pentachlorophenol	17.989	17.981	17.989	17.989	17.989	17.996	18.004	18.012	18.012	17.512-18.512	17.994	0.010
*	59 Phenanthrene-d10	18.399	18.399	18.399	18.399	18.399	18.399	18.399	18.399	18.399	17.899-18.899	18.399	0.000
	60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.899	17.399-18.399	+++++	+++++
	61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.991	17.491-18.491	+++++	+++++
	62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.324	17.824-18.824	+++++	+++++
	63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.152	18.652-19.652	+++++	+++++
	64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.289	19.789-20.789	+++++	+++++
	65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.715	20.215-21.215	+++++	+++++
$	66 Terphenyl-d14	21.524	21.524	21.524	21.525	21.525	21.524	21.525	21.532	21.532	21.032-22.032	21.526	0.003
	67 Butylbenzylphthalate	22.407	22.407	22.407	22.407	22.415	22.415	22.407	22.415	22.415	21.915-22.915	22.410	0.004
	68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.875	22.375-23.375	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
*	69 Chrysene-d12	23.421	23.414	23.414	23.414	23.422	23.421	23.422	23.422	23.422	22.922-23.922	23.419	0.004
	70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.844	22.344-23.344	+++++	+++++
	71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.952	22.452-23.452	+++++	+++++
	72 bis(2-Ethylhexyl)phtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.007	22.507-23.507	+++++	+++++
	73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.990	23.490-24.490	+++++	+++++
	74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.687	24.187-25.187	+++++	+++++
	75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.725	24.225-25.225	+++++	+++++
	76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.283	24.783-25.783	+++++	+++++
*	77 Perylene-d12	26.108	26.108	26.108	26.101	26.108	26.108	26.108	26.108	26.108	25.608-26.608	26.107	0.003
	78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.794	27.294-28.294	+++++	+++++
	79 Dibenzo(a,h)anthracene	28.930	28.914	28.914	28.915	28.930	28.938	28.946	28.946	28.946	28.446-29.446	28.929	0.013
	80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	28.494	27.994-28.994	+++++	+++++
$	85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.238	16.738-17.738	+++++	+++++
$	86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.316	28.816-29.816	+++++	+++++
$	87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.007	25.507-26.507	+++++	+++++
$	88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	44.609	44.109-45.109	+++++	+++++
$	89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.085	15.585-16.585	+++++	+++++
	90 N-Nitrosodimethylamine	4.732	4.724	4.717	4.725	4.725	4.740	4.740	4.756	4.756	4.256-5.256	4.732	0.012
	91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.305	7.805-8.805	+++++	+++++
	92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.615	21.115-22.115	+++++	+++++
	93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.529	20.029-21.029	+++++	+++++
$	95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.686	17.186-18.186	+++++	+++++
	96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
	97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.957	26.457-27.457	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt10.i\20230301.b\SIM.b
Inst ID: nt10.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.609	19.109-20.109	+++++	+++++
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.438	24.938-25.938	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.384	25.884-26.884	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.881	43.381-44.381	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	45.573	45.073-46.073	+++++	+++++
103 Pyridine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.535	4.035-5.035	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
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Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

Calibration File Names:
Level 1: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012310S.D
Level 2: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012309S.D
Level 3: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012308S.D
Level 4: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012307S.D
Level 5: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012306S.D
Level 6: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012305S.D
Level 7: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012304S.D
Level 8: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012303S.D

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
142 1,2-Dibromo-3-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
135 2,3,5,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
136 2,3,4,5-tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
137 NewCpnd_131	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
133 Butylatedhydroxytoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
132 3,6-Dimethylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
146 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1 / 5.0000 Level 7	0.1000000 Level 2 / 10.0000 Level 8	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
144 alpha-Terpineol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
125 Safrole	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
124 3,4-Dimethylphenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
123 Acetophenone	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
122 Furfuraldehyde	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
143 1,4-Dioxane	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
121 Quinoline	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
120 2,3,4,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
117 Butyl Diphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
116 Dibutyl Phenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
111 Azobenzene (1,2-DP-Hydrazine)	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
109 3,4,5-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
108 4,5,6-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
107 4,5-Dichloro-2-Methoxyphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
3 Phenol	3599	8264	19568	61458	128497	360891					
	767247	1593896					QUAD	0.000e+000	0.59382	-0.00714	0.99994
4 Bis(2-Chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
7 1,3-Dichlorobenzene	1.56799	1.52570	1.49198	1.51309	1.44269	1.43612					
	1.43451	1.44742					AVRG		1.48244		3.36989
9 1,4-Dichlorobenzene	1.50923	1.47580	1.43373	1.46395	1.40754	1.40391					
	1.39839	1.43790					AVRG		1.44131		2.72097

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
11 Benzyl alcohol	1380	3114	10320	31347	65076	200086					
	449975	980075					QUAD	0.000e+000	1.07135	-0.05783	0.99978
12 1,2-Dichlorobenzene	1.43363	1.40456	1.36192	1.41000	1.36327	1.36665					
	1.36335	1.37939					AVRG		1.38535		1.96993
13 2-Methylphenol	1789	4548	11161	35755	75957	215648					
	472415	995533					QUAD	0.000e+000	0.98781	-0.03181	0.99992
14 2,2'-oxybis(1-Chloropropane)	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
15 4-Methylphenol	2062	3746	9608	34768	75243	225735					
	500092	1071975					QUAD	0.000e+000	0.94989	-0.03839	0.99982
16 N-Nitroso-di-n-propylamine	1965	4218	10242	27908	57866	160503					
	338518	699099					QUAD	0.000e+000	1.33351	-0.02653	0.99995
17 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
19 Nitrobenzene	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
20 Isophorone	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
21 2-Nitrophenol	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
22 2,4-Dimethylphenol	6159	11856	27660	89362	185925	522194					
	1127131	2348644					QUAD	0.000e+000	2.94692	-0.09695	0.99996
23 Bis(2-Chloroethoxy)methane	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000
24 Benzoic acid	#####	#####	7336	37634	126544	521508					
	1425868	3313595					QUAD	0.000e+000	5.37547	-0.57371	0.99759
25 2,4-Dichlorophenol	#####	#####	#####	#####	#####	#####					
	#####	#####					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
26 1,2,4-Trichlorobenzene	0.28887	0.28679	0.28252	0.29461	0.28337	0.28328					
	0.28854	0.29525					AVRG		0.28790		1.72341
28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
30 Hexachlorobutadiene	0.21833	0.20386	0.19805	0.20413	0.19707	0.19656					
	0.20447	0.21198					AVRG		0.20431		3.73354
31 4-Chloro-3-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
33 Hexachlorocyclopentadiene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
39 Dimethylphthalate	1.17306	1.13674	1.17700	1.32015	1.33033	1.34291					
	1.32177	1.35881					AVRG		1.27010		7.15698
40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
End Cal Date : 01-MAR-2023 21:09
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
43 3-Nitroaniline	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
44 Acenaphthene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
45 2,4-Dinitrophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
46 Dibenzofuran	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
47 4-Nitrophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
48 2,4-Dinitrotoluene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
49 Fluorene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
50 Diethylphthalate	1.10372	1.06260	1.10882	1.22577	1.23779	1.26204					
	1.26512	1.31611					AVRG		1.19775		7.73514
51 4-Chlorophenyl-phenylether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
53 4,6-Dinitro-2-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
54 N-Nitrosodiphenylamine	0.52420	0.58247	0.62289	0.68128	0.64518	0.68703					
	0.70947	0.72627					AVRG		0.64735		10.57293
56 4-Bromophenyl-phenylether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
57 Hexachlorobenzene	0.29659	0.29809	0.29705	0.31056	0.29828	0.29945					
	0.31009	0.31346					AVRG		0.30295		2.34116

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
58 Pentachlorophenol	+++++	1243	3505	15934	44811	176209					
	489921	1121362					QUAD	0.000e+000	7.54611	-2.24262	0.99782
60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
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Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
67 Butylbenzylphthalate	4671	8617	19744	65574	144786	387221					
	915766	1888709					QUAD	0.000e+000	1.48043	0.03284	0.99960
68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
72 bis(2-Ethylhexyl)phthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

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Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
79 Dibenzo(a,h)anthracene	10824	20472	39856	120142	236566	599679					
	1371633	2937326					QUAD	0.000e+000	1.07973	-0.06563	0.99996
80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
90 N-Nitrosodimethylamine	0.58127	0.59640	0.65358	0.68722	0.70407	0.73905					
	0.71236	0.73487					AVRG		0.67610		8.92506
91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
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Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
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Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
101 Cholesterol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
102 beta-Sitosterol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
103 Pyridine	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 1 2-Fluorophenol	1.02185	1.05555	1.08844	1.17836	1.17520	1.21583					
	1.18289	1.21771					AVRG		1.14198		6.62406
$ 145 d8-1,4-Dioxane	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 2 Phenol-d5	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 5 2-Chlorophenol-d4	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
End Cal Date : 01-MAR-2023 21:09
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1 / 5.0000 Level 7	0.1000000 Level 2 / 10.0000 Level 8	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
$ 10 1,2-Dichlorobenzene-d4	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 18 Nitrobenzene-d5	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 36 2-Fluorobiphenyl	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 55 2,4,6-Tribromophenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 66 Terphenyl-d14	0.26682 / 0.37637	0.28582 / 0.35956	0.28446	0.31786	0.33307	0.36379	AVRG		0.32347		12.80012
$ 85 p-Cresol-d4	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 86 Anthracene-d10	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
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Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

Compound	0.0500000 Level 1 / 5.0000 Level 7	0.1000000 Level 2 / 10.0000 Level 8	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
$ 87 Fluoranthene-d10	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 88 Dibenz(a,h)anthracene-d14	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 89 Diphenyl-d10	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 95 D10-1-methylnaphthalene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2023 16:42
End Cal Date : 01-MAR-2023 21:09
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Last Edit : 08-Mar-2023 14:14 yev

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

Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123035.D

Date : 01-MAR-2023 16:42

Client ID:

Instrument: nt10.i

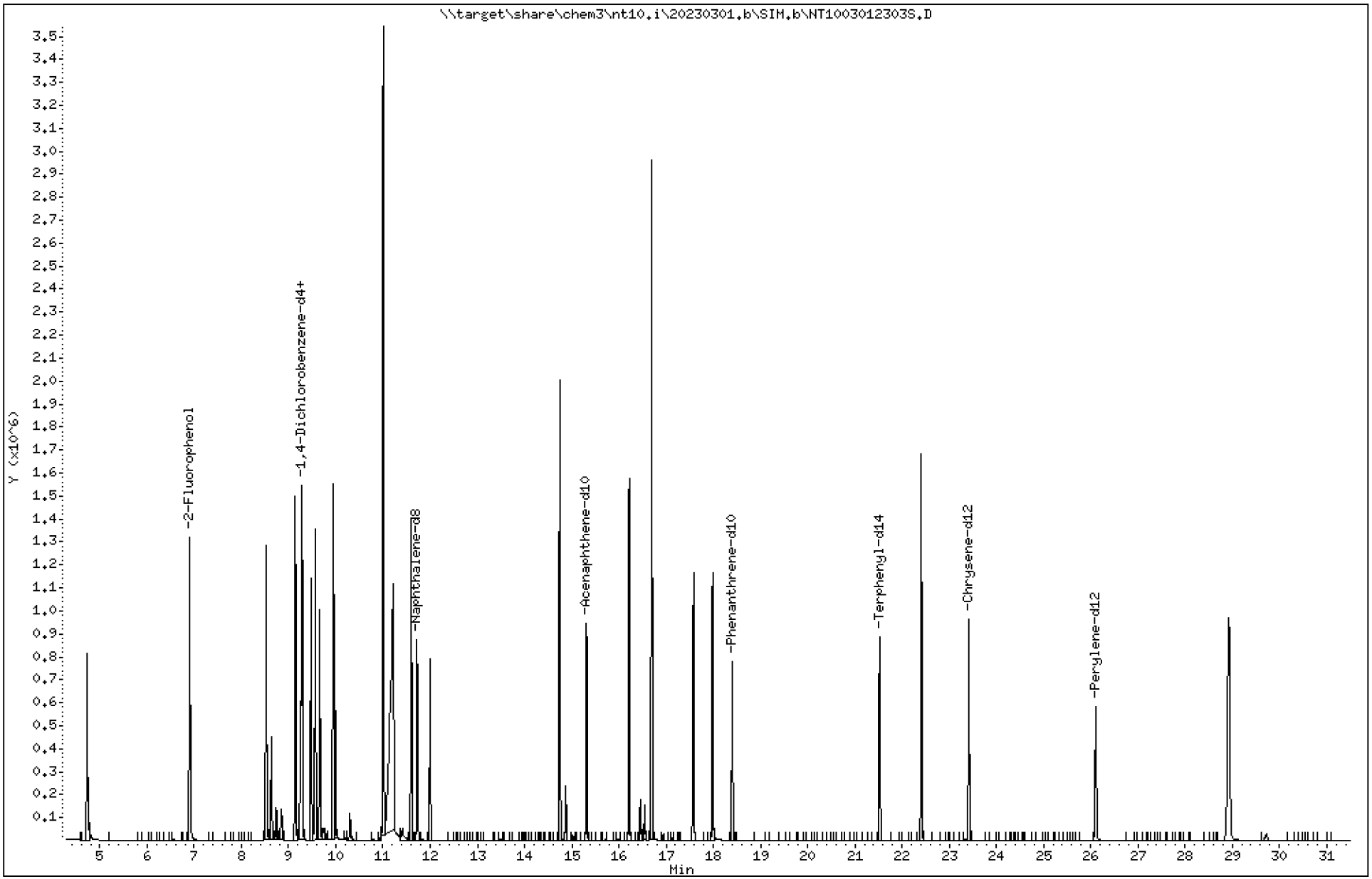
Sample Info: SEQ-CAL8

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012303S.D
Lab Smp Id: SLC0143-CAL8
Inj Date : 01-MAR-2023 16:42 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-CAL8
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	6.902	6.902	(0.746)	1636956	15.0000	15.99
3	Phenol	94	8.524	8.532	(0.921)	1593896	10.0000	9.997
7	1,3-Dichlorobenzene	146	9.143	9.136	(0.988)	1297168	10.0000	9.764
* 8	1,4-Dichlorobenzene-d4	152	9.251	9.252	(1.000)	358478	4.00000	
9	1,4-Dichlorobenzene	146	9.282	9.275	(1.003)	1288638	10.0000	9.976(H)
11	Benzyl alcohol	79	9.476	9.508	(1.024)	980075	10.0000	9.987
12	1,2-Dichlorobenzene	146	9.562	9.563	(1.034)	1236199	10.0000	9.957(H)
13	2-Methylphenol	108	9.655	9.671	(1.044)	995533	10.0000	9.992(H)
15	4-Methylphenol	108	9.942	9.966	(1.075)	1071975	10.0000	9.989
16	N-Nitroso-di-n-propylamine	70	9.981	9.982	(1.079)	699099	10.0000	9.999
22	2,4-Dimethylphenol	107	11.006	11.006	(0.939)	2348644	20.0000	19.99
24	Benzoic acid	105	11.218	11.007	(0.957)	3313595	40.0000	39.85
26	1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	961408	10.0000	10.26
* 27	Naphthalene-d8	136	11.723	11.723	(1.000)	1302515	4.00000	
30	Hexachlorobutadiene	225	11.994	11.994	(1.023)	690276	10.0000	10.38
39	Dimethylphthalate	163	14.749	14.749	(0.963)	2448191	10.0000	10.70
* 42	Acenaphthene-d10	162	15.314	15.314	(1.000)	720687	4.00000	
50	Diethylphthalate	149	16.218	16.211	(1.059)	2371265	10.0000	10.99
54	N-Nitrosodiphenylamine	169	16.698	16.705	(0.908)	2257135	10.0000	11.22
57	Hexachlorobenzene	284	17.578	17.579	(0.955)	974187	10.0000	10.35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	58 Pentachlorophenol	266	17.988	18.012	(0.978)	1121362	20.0000	19.93
*	59 Phenanthrene-d10	188	18.398	18.398	(1.000)	1243145	4.00000	
$	66 Terphenyl-d14	244	21.524	21.532	(0.919)	1044374	10.0000	11.12
	67 Butylbenzylphthalate	149	22.407	22.415	(0.957)	1888709	10.0000	9.974
*	69 Chrysene-d12	240	23.421	23.421	(1.000)	1161833	4.00000	
*	77 Perylene-d12	264	26.108	26.108	(1.000)	1054384	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.929	28.946	(1.108)	2937326	10.0000	9.994
	90 N-Nitrosodimethylamine	74	4.732	4.755	(0.511)	1317165	20.0000	21.74

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
Lab File ID: NT1003012303S.D Calibration Time: 18:37
Lab Smp Id: SLC0143-CAL8
Analysis Type: SV Level: LOW
Quant Type: ISTD Sample Type: AIR
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	320125	160063	640250	358478	11.98
27 Naphthalene-d8	1136019	568010	2272038	1302515	14.66
42 Acenaphthene-d10	636993	318497	1273986	720687	13.14
59 Phenanthrene-d10	1093620	546810	2187240	1243145	13.67
69 Chrysene-d12	1000300	500150	2000600	1161833	16.15
77 Perylene-d12	1058448	529224	2116896	1054384	-0.38

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	-0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	-0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	-0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012303S.D

Lab ID: SLC0143-CAL8
nt10.i, 20230301.b\SIM.b\SIMABN2.m,   01-MAR-2023 16:42

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.000	0.9569	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123045.D

Page 1

Date : 01-MAR-2023 17:21

Client ID:

Instrument: nt10.i

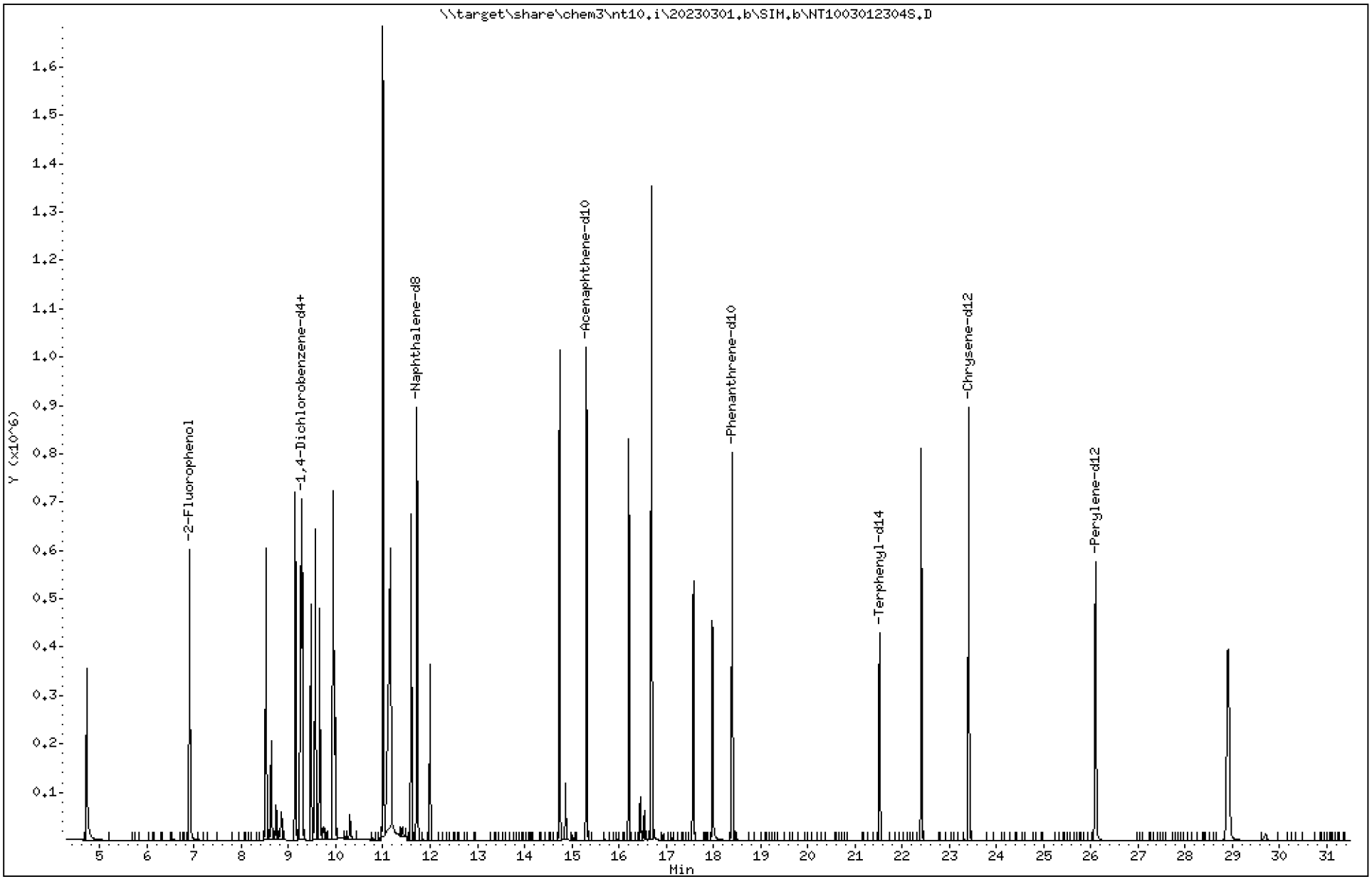
Sample Info: SEQ-CAL7

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012304S.D
Lab Smp Id: SLC0143-CAL7
Inj Date : 01-MAR-2023 17:21 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-CAL7
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	6.902	6.902	(0.746)	786120	7.50000	7.769
3	Phenol	94	8.517	8.532	(0.921)	767247	5.00000	5.008
7	1,3-Dichlorobenzene	146	9.143	9.136	(0.988)	635562	5.00000	4.838
* 8	1,4-Dichlorobenzene-d4	152	9.251	9.252	(1.000)	354441	4.00000	
9	1,4-Dichlorobenzene	146	9.282	9.275	(1.003)	619560	5.00000	4.851
11	Benzyl alcohol	79	9.476	9.508	(1.024)	449975	5.00000	5.068
12	1,2-Dichlorobenzene	146	9.562	9.563	(1.034)	604033	5.00000	4.921
13	2-Methylphenol	108	9.655	9.671	(1.044)	472415	5.00000	5.040
15	4-Methylphenol	108	9.942	9.966	(1.075)	500092	5.00000	5.055
16	N-Nitroso-di-n-propylamine	70	9.981	9.982	(1.079)	338518	5.00000	4.998
22	2,4-Dimethylphenol	107	10.997	11.006	(0.938)	1127131	10.0000	10.02
24	Benzoic acid	105	11.158	11.007	(0.952)	1425868	20.0000	20.99
26	1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	464653	5.00000	5.011
* 27	Naphthalene-d8	136	11.723	11.723	(1.000)	1288295	4.00000	
30	Hexachlorobutadiene	225	11.993	11.994	(1.023)	329266	5.00000	5.004
39	Dimethylphthalate	163	14.741	14.749	(0.963)	1222634	5.00000	5.203
* 42	Acenaphthene-d10	162	15.313	15.314	(1.000)	739997	4.00000	
50	Diethylphthalate	149	16.210	16.211	(1.059)	1170231	5.00000	5.281
54	N-Nitrosodiphenylamine	169	16.690	16.705	(0.907)	1106982	5.00000	5.480
57	Hexachlorobenzene	284	17.578	17.579	(0.955)	483835	5.00000	5.118

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	58 Pentachlorophenol	266	17.980	18.012	(0.977)	489921	10.0000	10.47
*	59 Phenanthrene-d10	188	18.398	18.398	(1.000)	1248235	4.00000	
$	66 Terphenyl-d14	244	21.524	21.532	(0.919)	508078	5.00000	5.818
	67 Butylbenzylphthalate	149	22.407	22.415	(0.957)	915766	5.00000	5.116
*	69 Chrysene-d12	240	23.413	23.421	(1.000)	1079945	4.00000	
*	77 Perylene-d12	264	26.107	26.108	(1.000)	1086769	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.914	28.946	(1.107)	1371633	5.00000	5.033
	90 N-Nitrosodimethylamine	74	4.724	4.755	(0.511)	631222	10.0000	10.54

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012304S.D
Lab Smp Id: SLC0143-CAL7
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 18:37
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	320125	160063	640250	354441	10.72
27 Naphthalene-d8	1136019	568010	2272038	1288295	13.40
42 Acenaphthene-d10	636993	318497	1273986	739997	16.17
59 Phenanthrene-d10	1093620	546810	2187240	1248235	14.14
69 Chrysene-d12	1000300	500150	2000600	1079945	7.96
77 Perylene-d12	1058448	529224	2116896	1086769	2.68

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	-0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	-0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	-0.00
69 Chrysene-d12	23.41	22.91	23.91	23.41	-0.00
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012304S.D

Lab ID: SLC0143-CAL7
nt10.i, 20230301.b\SIM.b\SIMABN2.m,   01-MAR-2023 17:21

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.000	0.9518	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123058.D

Date : 01-MAR-2023 17:59

Client ID:

Instrument: nt10.i

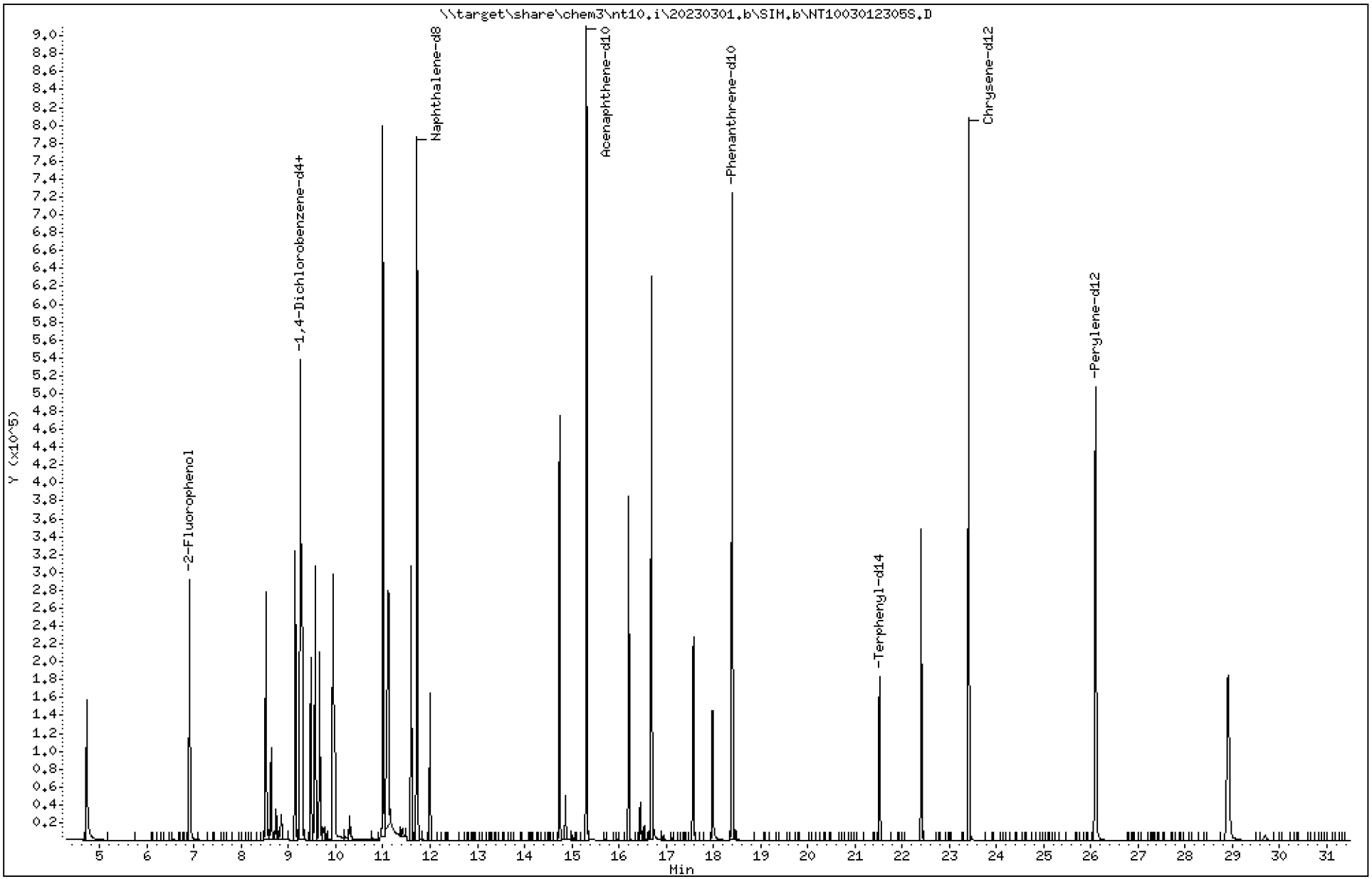
Sample Info: SEQ-CAL6

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012305S.D
Lab Smp Id: SLC0143-CAL6
Inj Date : 01-MAR-2023 17:59 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-CAL6
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.894	6.902	(0.746)	381012	3.75000	3.992
	3 Phenol	94	8.517	8.532	(0.921)	360891	2.50000	2.531
	7 1,3-Dichlorobenzene	146	9.135	9.136	(0.988)	300032	2.50000	2.422
*	8 1,4-Dichlorobenzene-d4	152	9.244	9.252	(1.000)	334269	4.00000	
	9 1,4-Dichlorobenzene	146	9.275	9.275	(1.003)	293303	2.50000	2.435
	11 Benzyl alcohol	79	9.469	9.508	(1.024)	200086	2.50000	2.482
	12 1,2-Dichlorobenzene	146	9.562	9.563	(1.034)	285519	2.50000	2.466
	13 2-Methylphenol	108	9.655	9.671	(1.044)	215648	2.50000	2.496
	15 4-Methylphenol	108	9.942	9.966	(1.076)	225735	2.50000	2.496
	16 N-Nitroso-di-n-propylamine	70	9.973	9.982	(1.079)	160503	2.50000	2.537
	22 2,4-Dimethylphenol	107	10.997	11.006	(0.938)	522194	5.00000	5.048
	24 Benzoic acid	105	11.108	11.007	(0.947)	521508	10.0000	8.897
	26 1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	212822	2.50000	2.460
*	27 Naphthalene-d8	136	11.723	11.723	(1.000)	1202042	4.00000	
	30 Hexachlorobutadiene	225	11.994	11.994	(1.023)	147673	2.50000	2.405
	39 Dimethylphthalate	163	14.741	14.749	(0.963)	562639	2.50000	2.643
*	42 Acenaphthene-d10	162	15.314	15.314	(1.000)	670352	4.00000	
	50 Diethylphthalate	149	16.203	16.211	(1.058)	528755	2.50000	2.634
	54 N-Nitrosodiphenylamine	169	16.690	16.705	(0.907)	482758	2.50000	2.653
	57 Hexachlorobenzene	284	17.578	17.579	(0.955)	210419	2.50000	2.471

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
58	Pentachlorophenol	266	17.988	18.012	(0.978)	176209	5.00000	4.510
* 59	Phenanthrene-d10	188	18.398	18.398	(1.000)	1124281	4.00000	
$ 66	Terphenyl-d14	244	21.524	21.532	(0.919)	215701	2.50000	2.812
67	Butylbenzylphthalate	149	22.407	22.415	(0.957)	387221	2.50000	2.439
* 69	Chrysene-d12	240	23.413	23.421	(1.000)	948691	4.00000	
* 77	Perylene-d12	264	26.108	26.108	(1.000)	1004445	4.00000	
79	Dibenzo(a,h)anthracene	278	28.914	28.946	(1.107)	599679	2.50000	2.485
90	N-Nitrosodimethylamine	74	4.716	4.755	(0.510)	308802	5.00000	5.466

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012305S.D
Lab Smp Id: SLC0143-CAL6
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 18:37
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	320125	160063	640250	334269	4.42
27 Naphthalene-d8	1136019	568010	2272038	1202042	5.81
42 Acenaphthene-d10	636993	318497	1273986	670352	5.24
59 Phenanthrene-d10	1093620	546810	2187240	1124281	2.80
69 Chrysene-d12	1000300	500150	2000600	948691	-5.16
77 Perylene-d12	1058448	529224	2116896	1004445	-5.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.24	-0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	-0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	-0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	-0.00
69 Chrysene-d12	23.41	22.91	23.91	23.41	-0.00
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012305S.D

Lab ID: SLC0143-CAL6
nt10.i, 20230301.b\SIM.b\SIMABN2.m,   01-MAR-2023 17:59

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.947	0.000	0.9475	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123065.D

Date : 01-MAR-2023 18:37

Client ID:

Instrument: nt10.i

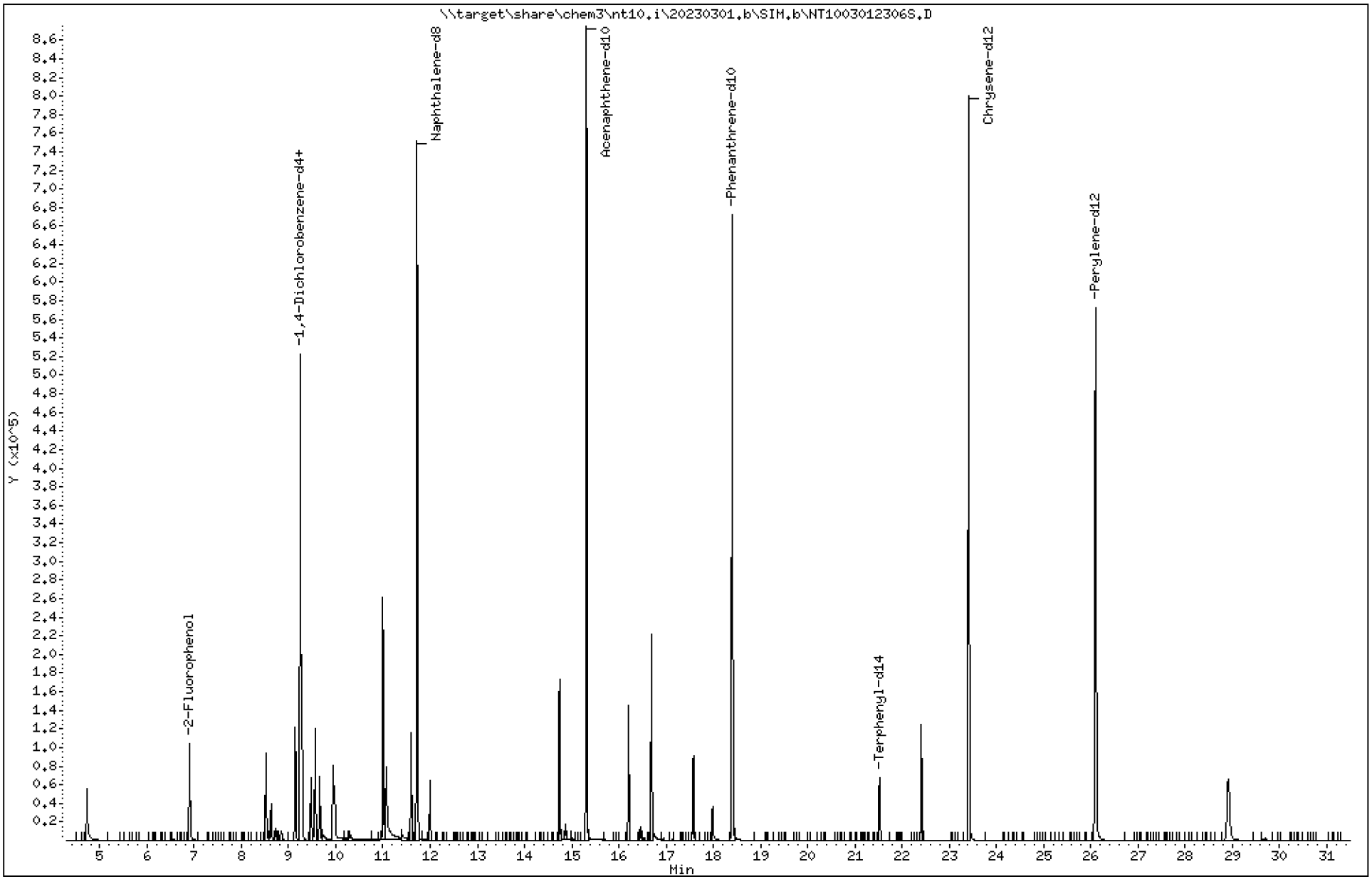
Sample Info: SEQ-CAL5

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012306S.D
Lab Smp Id: SLC0143-CAL5
Inj Date : 01-MAR-2023 18:37 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-CAL5
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.894	6.902	(0.746)	141079	1.50000	1.544
	3 Phenol	94	8.517	8.532	(0.921)	128497	1.00000	0.9488
	7 1,3-Dichlorobenzene	146	9.135	9.136	(0.988)	115460	1.00000	0.9732
*	8 1,4-Dichlorobenzene-d4	152	9.244	9.252	(1.000)	320125	4.00000	
	9 1,4-Dichlorobenzene	146	9.275	9.275	(1.003)	112647	1.00000	0.9766
	11 Benzyl alcohol	79	9.477	9.508	(1.025)	65076	1.00000	0.8616
	12 1,2-Dichlorobenzene	146	9.562	9.563	(1.034)	109104	1.00000	0.9841
	13 2-Methylphenol	108	9.655	9.671	(1.044)	75957	1.00000	0.9304
	15 4-Methylphenol	108	9.943	9.966	(1.076)	75243	1.00000	0.8846
	16 N-Nitroso-di-n-propylamine	70	9.974	9.982	(1.079)	57866	1.00000	0.9607
	22 2,4-Dimethylphenol	107	10.998	11.006	(0.938)	185925	2.00000	1.919
	24 Benzoic acid	105	11.074	11.007	(0.945)	126544	4.00000	2.367
	26 1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	80478	1.00000	0.9842
*	27 Naphthalene-d8	136	11.724	11.723	(1.000)	1136019	4.00000	
	30 Hexachlorobutadiene	225	11.994	11.994	(1.023)	55969	1.00000	0.9646
	39 Dimethylphthalate	163	14.741	14.749	(0.963)	211852	1.00000	1.047
*	42 Acenaphthene-d10	162	15.314	15.314	(1.000)	636993	4.00000	
	50 Diethylphthalate	149	16.203	16.211	(1.058)	197116	1.00000	1.033
	54 N-Nitrosodiphenylamine	169	16.690	16.705	(0.907)	176396	1.00000	0.9967
	57 Hexachlorobenzene	284	17.578	17.579	(0.955)	81552	1.00000	0.9846

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
58	Pentachlorophenol	266	17.988	18.012	(0.978)	44811	2.00000	1.222(M)
* 59	Phenanthrene-d10	188	18.399	18.398	(1.000)	1093620	4.00000	
$ 66	Terphenyl-d14	244	21.524	21.532	(0.919)	83293	1.00000	1.030
67	Butylbenzylphthalate	149	22.407	22.415	(0.957)	144786	1.00000	0.8599
* 69	Chrysene-d12	240	23.414	23.421	(1.000)	1000300	4.00000	
* 77	Perylene-d12	264	26.100	26.108	(1.000)	1058448	4.00000	
79	Dibenzo(a,h)anthracene	278	28.914	28.946	(1.108)	236566	1.00000	0.9522
90	N-Nitrosodimethylamine	74	4.724	4.755	(0.511)	112695	2.00000	2.083

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
Lab File ID: NT1003012306S.D Calibration Time: 18:37
Lab Smp Id: SLC0143-CAL5
Analysis Type: SV Level: LOW
Quant Type: ISTD Sample Type: AIR
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	320125	160063	640250	320125	0.00
27 Naphthalene-d8	1136019	568010	2272038	1136019	0.00
42 Acenaphthene-d10	636993	318497	1273986	636993	0.00
59 Phenanthrene-d10	1093620	546810	2187240	1093620	0.00
69 Chrysene-d12	1000300	500150	2000600	1000300	0.00
77 Perylene-d12	1058448	529224	2116896	1058448	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.24	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.41	22.91	23.91	23.41	0.00
77 Perylene-d12	26.10	25.60	26.60	26.10	0.00

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

REVIEW SUMMARY FOR FILE - NT1003012306S.D

Lab ID: SLC0143-CAL5
nt10.i, 20230301.b\SIM.b\SIMABN2.m,   01-MAR-2023 18:37

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.945	0.000	0.9446	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

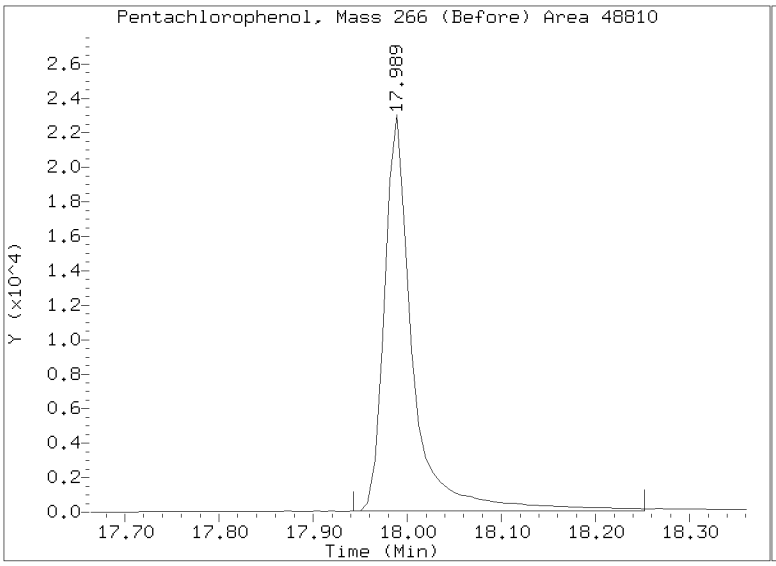
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

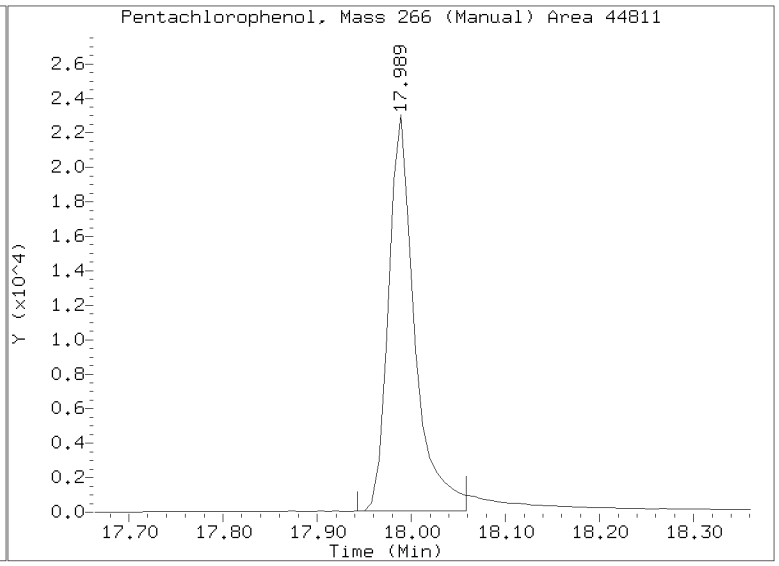
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/SIM.b/NT1003012306S.D
Injection Date: 01-MAR-2023 18:37
Lab ID:SLC0143-CAL5 Client ID:
Report Date: 03/10/2023 10:37





Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123075.D

Page 1

Date : 01-MAR-2023 19:15

Client ID:

Instrument: nt10.i

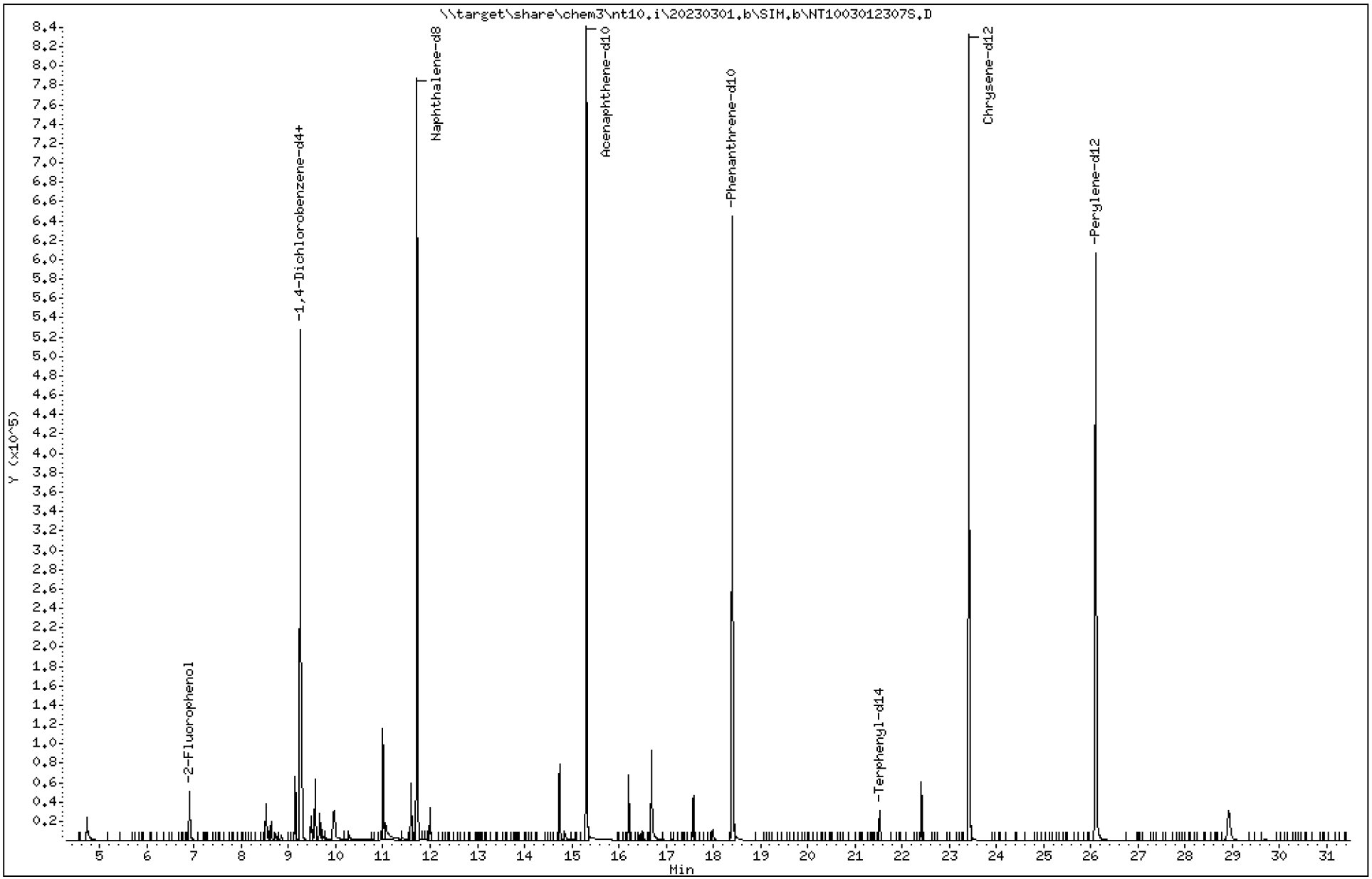
Sample Info: SEQ-CAL4

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012307S.D
Lab Smp Id: SLC0143-CAL4
Inj Date : 01-MAR-2023 19:15 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-CAL4
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.894	6.902	(0.746)	73710	0.75000	0.7739
	3 Phenol	94	8.517	8.532	(0.921)	61458	0.50000	0.4366
	7 1,3-Dichlorobenzene	146	9.136	9.136	(0.988)	63099	0.50000	0.5103
*	8 1,4-Dichlorobenzene-d4	152	9.244	9.252	(1.000)	333617	4.00000	
	9 1,4-Dichlorobenzene	146	9.275	9.275	(1.003)	61050	0.50000	0.5079
	11 Benzyl alcohol	79	9.477	9.508	(1.025)	31347	0.50000	0.4006
	12 1,2-Dichlorobenzene	146	9.562	9.563	(1.034)	58800	0.50000	0.5089
	13 2-Methylphenol	108	9.655	9.671	(1.044)	35755	0.50000	0.4220
	15 4-Methylphenol	108	9.950	9.966	(1.076)	34768	0.50000	0.3943
	16 N-Nitroso-di-n-propylamine	70	9.974	9.982	(1.079)	27908	0.50000	0.4455
	22 2,4-Dimethylphenol	107	10.998	11.006	(0.938)	89362	1.00000	0.8978
	24 Benzoic acid	105	11.057	11.007	(0.943)	37634	2.00000	0.6891
	26 1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	43097	0.50000	0.5116
*	27 Naphthalene-d8	136	11.724	11.723	(1.000)	1170292	4.00000	
	30 Hexachlorobutadiene	225	11.994	11.994	(1.023)	29862	0.50000	0.4996
	39 Dimethylphthalate	163	14.741	14.749	(0.963)	105548	0.50000	0.5197
*	42 Acenaphthene-d10	162	15.314	15.314	(1.000)	639612	4.00000	
	50 Diethylphthalate	149	16.203	16.211	(1.058)	98002	0.50000	0.5117
	54 N-Nitrosodiphenylamine	169	16.690	16.705	(0.907)	93243	0.50000	0.5262
	57 Hexachlorobenzene	284	17.578	17.579	(0.955)	42505	0.50000	0.5126

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
58	Pentachlorophenol	266	17.989	18.012	(0.978)	15934	1.00000	0.4374(M)
* 59	Phenanthrene-d10	188	18.399	18.398	(1.000)	1094919	4.00000	
$ 66	Terphenyl-d14	244	21.524	21.532	(0.919)	41647	0.50000	0.4913
67	Butylbenzylphthalate	149	22.415	22.415	(0.957)	65574	0.50000	0.3710
* 69	Chrysene-d12	240	23.421	23.421	(1.000)	1048196	4.00000	
* 77	Perylene-d12	264	26.108	26.108	(1.000)	1117593	4.00000	
79	Dibenzo(a,h)anthracene	278	28.930	28.946	(1.108)	120142	0.50000	0.4613
90	N-Nitrosodimethylamine	74	4.724	4.755	(0.511)	57317	1.00000	1.016

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012307S.D
Lab Smp Id: SLC0143-CAL4
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 18:37
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	320125	160063	640250	333617	4.21
27 Naphthalene-d8	1136019	568010	2272038	1170292	3.02
42 Acenaphthene-d10	636993	318497	1273986	639612	0.41
59 Phenanthrene-d10	1093620	546810	2187240	1094919	0.12
69 Chrysene-d12	1000300	500150	2000600	1048196	4.79
77 Perylene-d12	1058448	529224	2116896	1117593	5.59

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.24	0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012307S.D

Lab ID: SLC0143-CAL4
nt10.i, 20230301.b\SIM.b\SIMABN2.m,   01-MAR-2023 19:15

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.943	0.000	0.9431	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

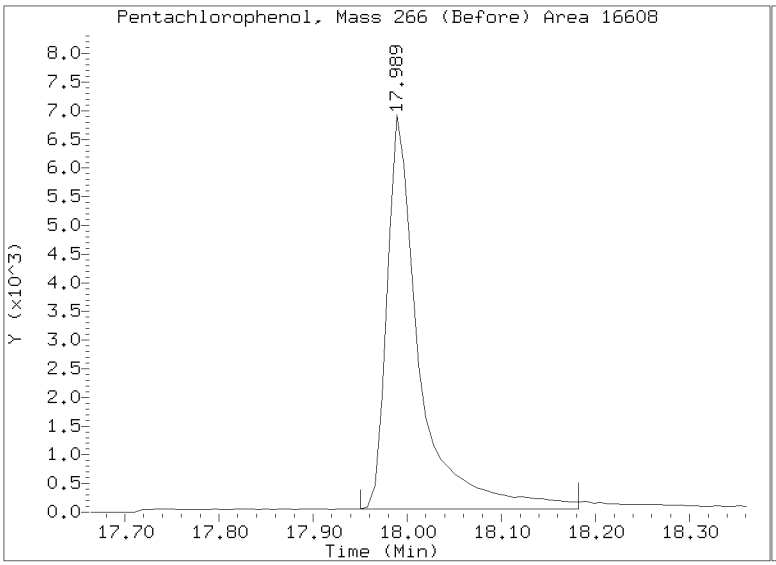
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

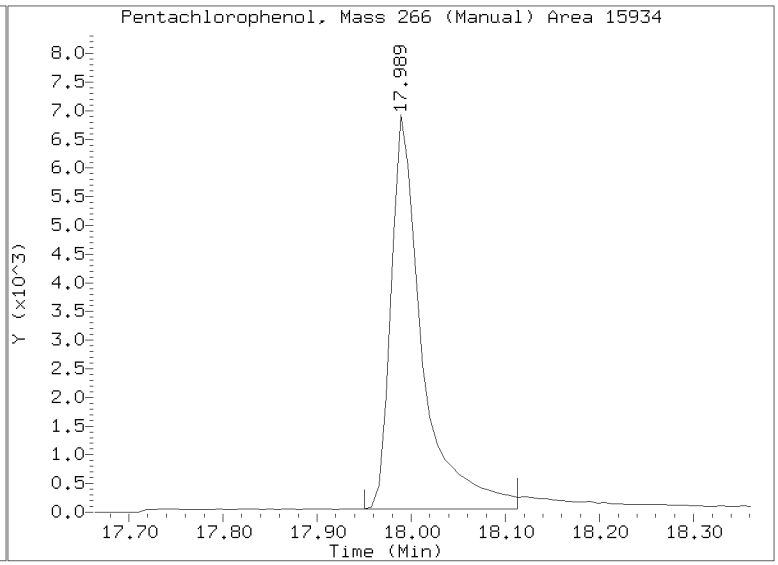
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/SIM.b/NT1003012307S.D
Injection Date: 01-MAR-2023 19:15
Lab ID:SLC0143-CAL4 Client ID:
Report Date: 03/10/2023 10:37





Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123085.D

Page 1

Date : 01-MAR-2023 19:53

Client ID:

Instrument: nt10.i

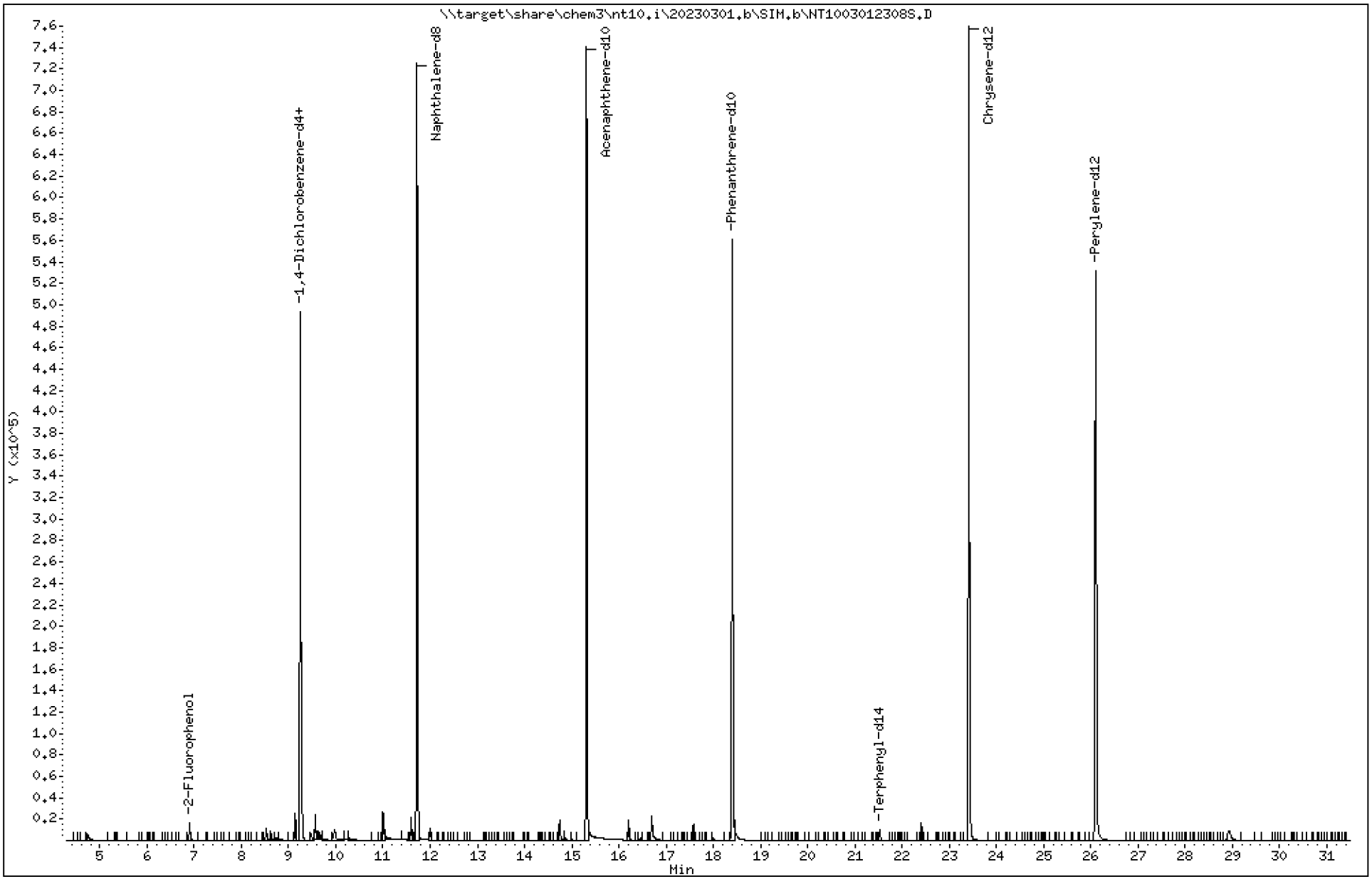
Sample Info: SEQ-CAL3

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012308S.D
Lab Smp Id: SLC0143-CAL3
Inj Date : 01-MAR-2023 19:53 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-CAL3
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.902	6.902	(0.746)	25671	0.30000	0.2859
	3 Phenol	94	8.524	8.532	(0.921)	19568	0.20000	0.1477
	7 1,3-Dichlorobenzene	146	9.143	9.136	(0.988)	23459	0.20000	0.2013
*	8 1,4-Dichlorobenzene-d4	152	9.251	9.252	(1.000)	314467	4.00000	
	9 1,4-Dichlorobenzene	146	9.275	9.275	(1.002)	22543	0.20000	0.1989
	11 Benzyl alcohol	79	9.484	9.508	(1.025)	10320	0.20000	0.1404
	12 1,2-Dichlorobenzene	146	9.562	9.563	(1.034)	21414	0.20000	0.1966
	13 2-Methylphenol	108	9.663	9.671	(1.044)	11161	0.20000	0.1401
	15 4-Methylphenol	108	9.950	9.966	(1.076)	9608	0.20000	0.1159
	16 N-Nitroso-di-n-propylamine	70	9.973	9.982	(1.078)	10242	0.20000	0.1736
	22 2,4-Dimethylphenol	107	10.997	11.006	(0.938)	27660	0.40000	0.2992
	24 Benzoic acid	105	11.074	11.007	(0.945)	7336	0.80000	0.1448
	26 1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	15379	0.20000	0.1963
*	27 Naphthalene-d8	136	11.723	11.723	(1.000)	1088698	4.00000	
	30 Hexachlorobutadiene	225	11.993	11.994	(1.023)	10781	0.20000	0.1939
	39 Dimethylphthalate	163	14.741	14.749	(0.963)	33436	0.20000	0.1853
*	42 Acenaphthene-d10	162	15.313	15.314	(1.000)	568154	4.00000	
	50 Diethylphthalate	149	16.203	16.211	(1.058)	31499	0.20000	0.1852
	54 N-Nitrosodiphenylamine	169	16.698	16.705	(0.908)	30497	0.20000	0.1924
	57 Hexachlorobenzene	284	17.578	17.579	(0.955)	14544	0.20000	0.1961

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
58	Pentachlorophenol	266	17.996	18.012	(0.978)	3505	0.40000	0.1079
* 59	Phenanthrene-d10	188	18.398	18.398	(1.000)	979213	4.00000	
$ 66	Terphenyl-d14	244	21.524	21.532	(0.919)	13708	0.20000	0.1759
67	Butylbenzylphthalate	149	22.414	22.415	(0.957)	19744	0.20000	0.1214
* 69	Chrysene-d12	240	23.421	23.421	(1.000)	963807	4.00000	
* 77	Perylene-d12	264	26.107	26.108	(1.000)	1037909	4.00000	
79	Dibenzo(a,h)anthracene	278	28.937	28.946	(1.108)	39856	0.20000	0.1655
90	N-Nitrosodimethylamine	74	4.739	4.755	(0.512)	20553	0.40000	0.3867

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012308S.D
Lab Smp Id: SLC0143-CAL3
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 18:37
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	320125	160063	640250	314467	-1.77
27 Naphthalene-d8	1136019	568010	2272038	1088698	-4.17
42 Acenaphthene-d10	636993	318497	1273986	568154	-10.81
59 Phenanthrene-d10	1093620	546810	2187240	979213	-10.46
69 Chrysene-d12	1000300	500150	2000600	963807	-3.65
77 Perylene-d12	1058448	529224	2116896	1037909	-1.94

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	-0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	-0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	-0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012308S.D

Lab ID: SLC0143-CAL3
nt10.i, 20230301.b\SIM.b\SIMABN2.m,   01-MAR-2023 19:53

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.945	0.000	0.9446	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123095.D

Date : 01-MAR-2023 20:30

Client ID:

Instrument: nt10.i

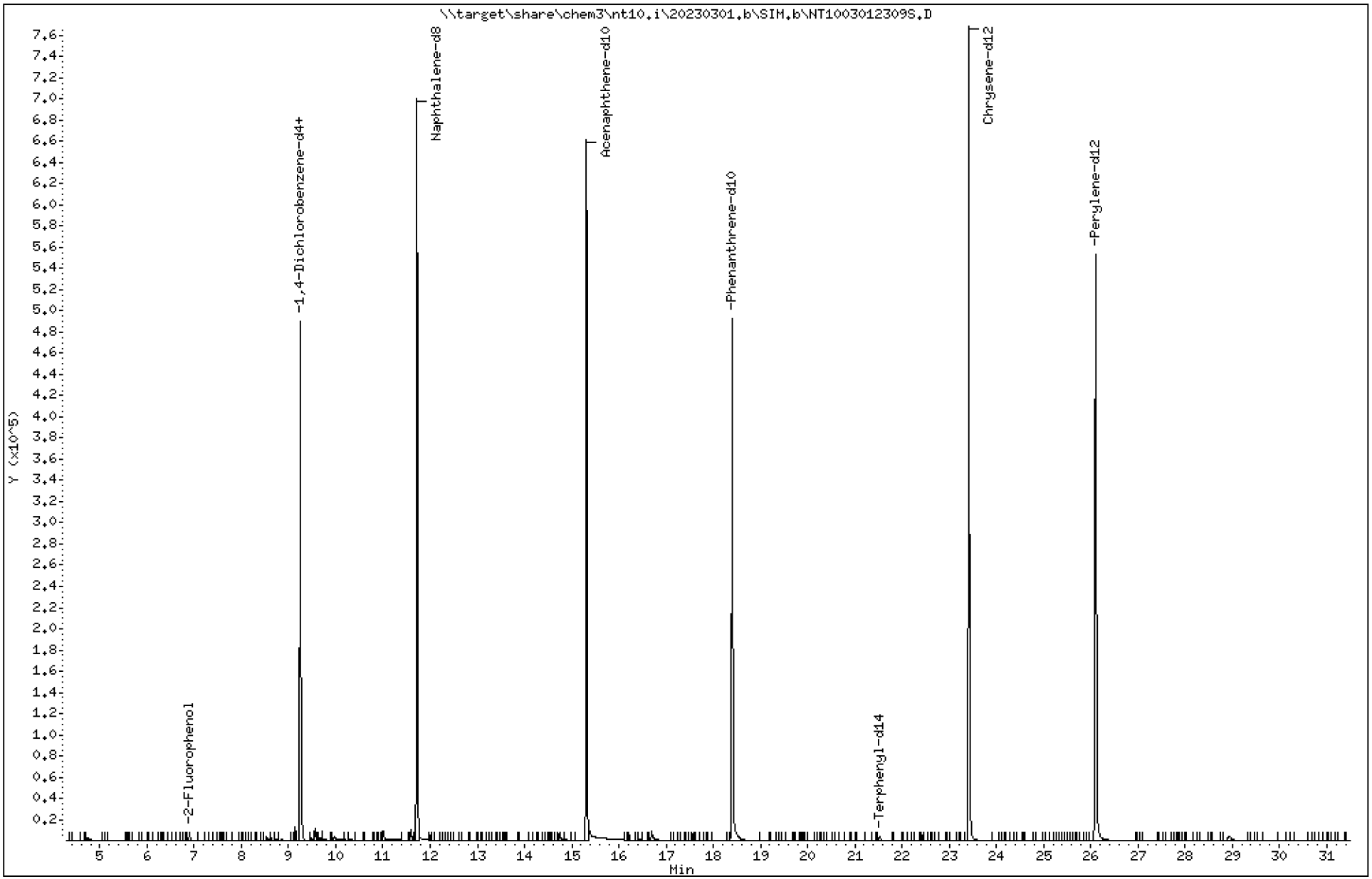
Sample Info: SEQ-CAL2

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012309S.D
Lab Smp Id: SLC0143-CAL2
Inj Date : 01-MAR-2023 20:30 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-CAL2
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.902	6.902	(0.747)	12090	0.15000	0.1386
	3 Phenol	94	8.525	8.532	(0.922)	8264	0.10000	0.06425
	7 1,3-Dichlorobenzene	146	9.143	9.136	(0.989)	11650	0.10000	0.1029
*	8 1,4-Dichlorobenzene-d4	152	9.244	9.252	(1.000)	305434	4.00000	
	9 1,4-Dichlorobenzene	146	9.275	9.275	(1.003)	11269	0.10000	0.1024
	11 Benzyl alcohol	79	9.485	9.508	(1.026)	3114	0.10000	0.04367(M)
	12 1,2-Dichlorobenzene	146	9.562	9.563	(1.034)	10725	0.10000	0.1014
	13 2-Methylphenol	108	9.663	9.671	(1.045)	4548	0.10000	0.05881
	15 4-Methylphenol	108	9.958	9.966	(1.077)	3746	0.10000	0.04658
	16 N-Nitroso-di-n-propylamine	70	9.974	9.982	(1.079)	4218	0.10000	0.07364
	22 2,4-Dimethylphenol	107	11.006	11.006	(0.939)	11856	0.20000	0.1332
	24 Benzoic acid	105	11.006	11.007	(0.939)	172	0.40000	0.003526(M)
	26 1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	7521	0.10000	0.09961
*	27 Naphthalene-d8	136	11.724	11.723	(1.000)	1048978	4.00000	
	30 Hexachlorobutadiene	225	11.994	11.994	(1.023)	5346	0.10000	0.09978
	39 Dimethylphthalate	163	14.741	14.749	(0.963)	15255	0.10000	0.08950
*	42 Acenaphthene-d10	162	15.314	15.314	(1.000)	536796	4.00000	
	50 Diethylphthalate	149	16.211	16.211	(1.059)	14260	0.10000	0.08872
	54 N-Nitrosodiphenylamine	169	16.698	16.705	(0.908)	13459	0.10000	0.08998
	57 Hexachlorobenzene	284	17.578	17.579	(0.955)	6888	0.10000	0.09840

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	58 Pentachlorophenol	266	18.004	18.012	(0.979)	1243	0.20000	0.04058
*	59 Phenanthrene-d10	188	18.399	18.398	(1.000)	924275	4.00000	
$	66 Terphenyl-d14	244	21.524	21.532	(0.919)	6767	0.10000	0.08836
	67 Butylbenzylphthalate	149	22.407	22.415	(0.957)	8617	0.10000	0.05389
*	69 Chrysene-d12	240	23.421	23.421	(1.000)	947041	4.00000	
*	77 Perylene-d12	264	26.108	26.108	(1.000)	1060218	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.945	28.946	(1.109)	20472	0.10000	0.08330
	90 N-Nitrosodimethylamine	74	4.740	4.755	(0.513)	9108	0.20000	0.1764

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012309S.D
Lab Smp Id: SLC0143-CAL2
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 18:37
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	320125	160063	640250	305434	-4.59
27 Naphthalene-d8	1136019	568010	2272038	1048978	-7.66
42 Acenaphthene-d10	636993	318497	1273986	536796	-15.73
59 Phenanthrene-d10	1093620	546810	2187240	924275	-15.48
69 Chrysene-d12	1000300	500150	2000600	947041	-5.32
77 Perylene-d12	1058448	529224	2116896	1060218	0.17

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.24	-0.00
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	-0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012309S.D

Lab ID: SLC0143-CAL2
nt10.i, 20230301.b\SIM.b\SIMABN2.m,   01-MAR-2023 20:30

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.939	0.000	0.9388	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

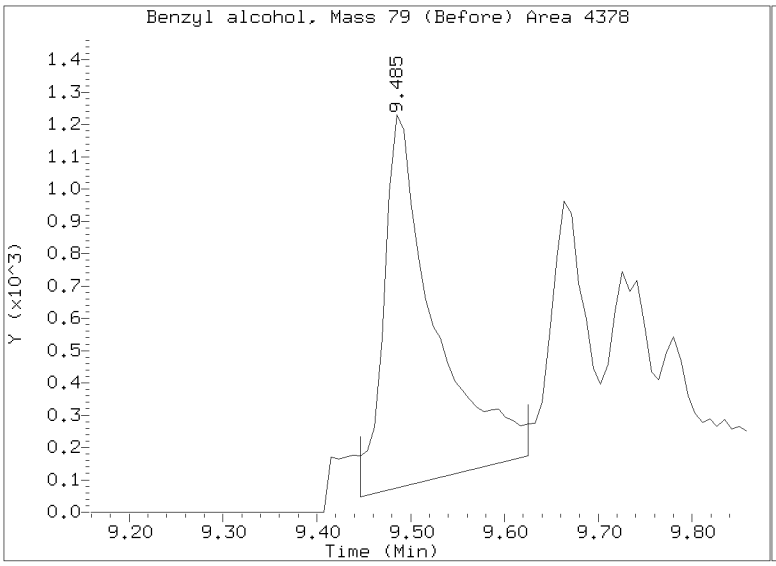
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

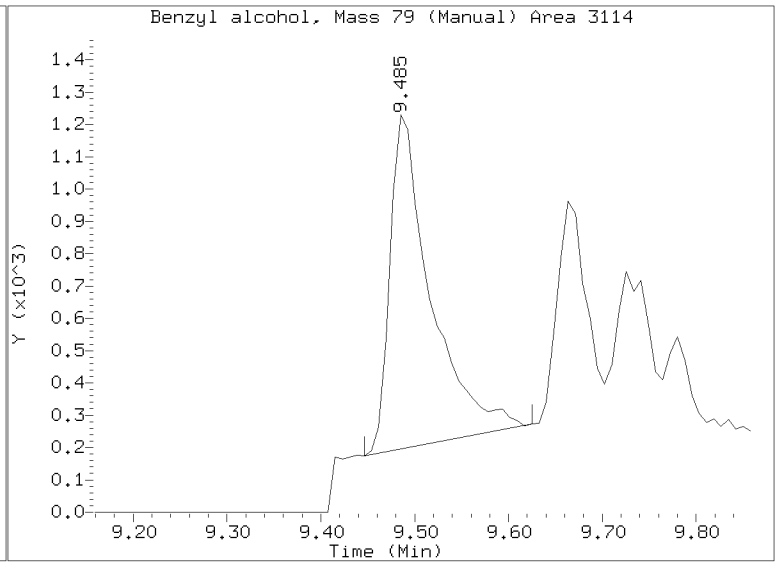
Exception: 1,2,4-Trichlorobenzene 0.0010

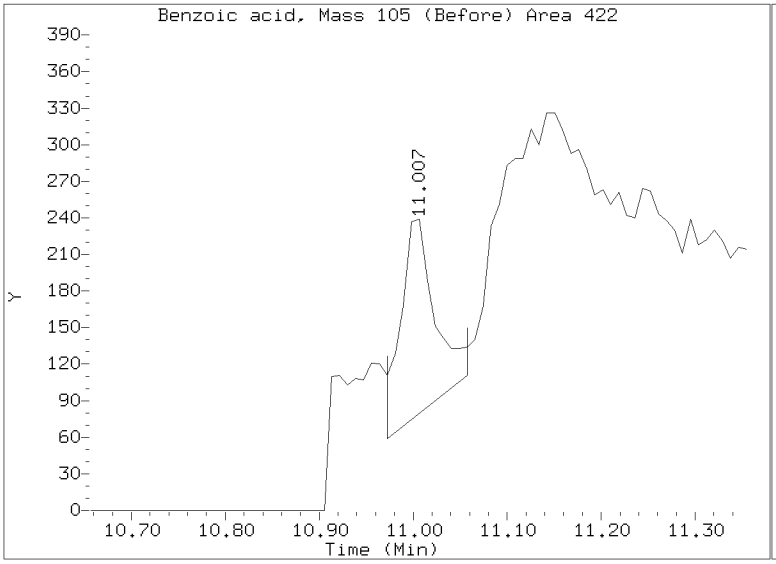
* Only compounds listed in the work order have been verified by the analyst *

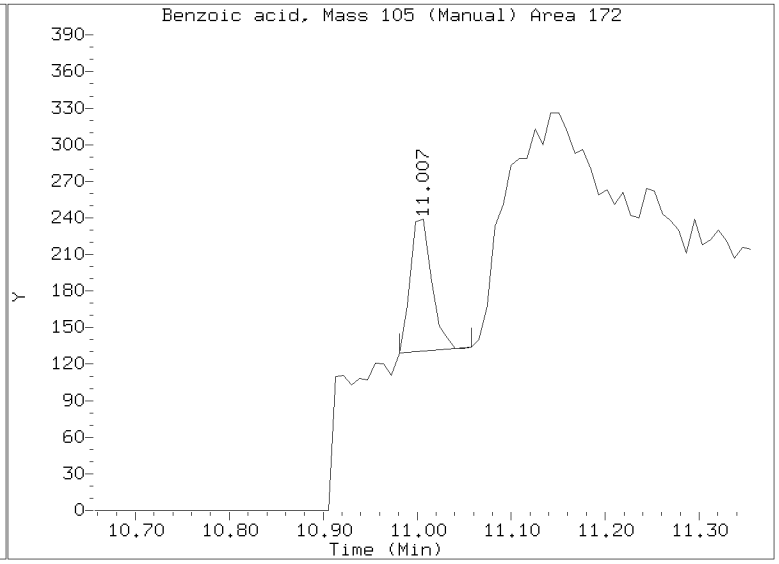
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230301.b/SIM.b/NT1003012309S.D
Injection Date: 01-MAR-2023 20:30
Lab ID:SLC0143-CAL2 Client ID:
Report Date: 03/10/2023 10:37









Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123105.D

Page 1

Date : 01-MAR-2023 21:09

Client ID:

Instrument: nt10.i

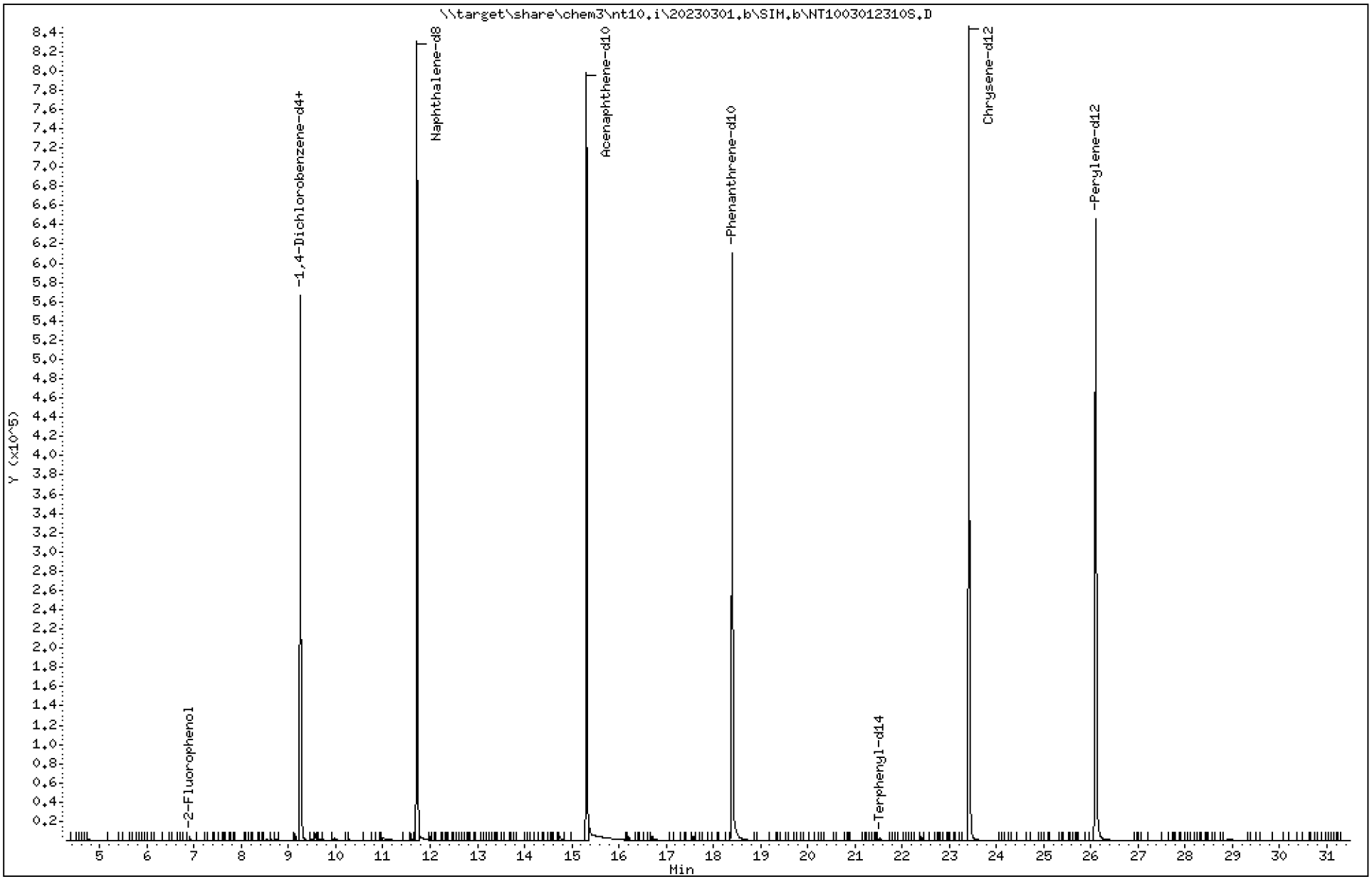
Sample Info: SEQ-CAL1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012310S.D
Lab Smp Id: SLC0143-CAL1
Inj Date : 01-MAR-2023 21:09 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-CAL1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.902	6.902	(0.746)	7096	0.07500	0.06711
	3 Phenol	94	8.532	8.532	(0.922)	3599	0.05000	0.02308
	7 1,3-Dichlorobenzene	146	9.135	9.136	(0.987)	7259	0.05000	0.05289
*	8 1,4-Dichlorobenzene-d4	152	9.252	9.252	(1.000)	370360	4.00000	
	9 1,4-Dichlorobenzene	146	9.275	9.275	(1.002)	6987	0.05000	0.05236
	11 Benzyl alcohol	79	9.508	9.508	(1.028)	1380	0.05000	0.01596(M)
	12 1,2-Dichlorobenzene	146	9.562	9.563	(1.034)	6637	0.05000	0.05174
	13 2-Methylphenol	108	9.671	9.671	(1.045)	1789	0.05000	0.01908(M)
	15 4-Methylphenol	108	9.966	9.966	(1.077)	2062	0.05000	0.02115(M)
	16 N-Nitroso-di-n-propylamine	70	9.981	9.982	(1.079)	1965	0.05000	0.02830(M)
	22 2,4-Dimethylphenol	107	11.006	11.006	(0.939)	6159	0.10000	0.05750
	24 Benzoic acid	105	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	4558	0.05000	0.05017
*	27 Naphthalene-d8	136	11.723	11.723	(1.000)	1262304	4.00000	
	30 Hexachlorobutadiene	225	11.994	11.994	(1.023)	3445	0.05000	0.05343
	39 Dimethylphthalate	163	14.749	14.749	(0.963)	9356	0.05000	0.04618
*	42 Acenaphthene-d10	162	15.314	15.314	(1.000)	638059	4.00000	
	50 Diethylphthalate	149	16.211	16.211	(1.059)	8803	0.05000	0.04607
	54 N-Nitrosodiphenylamine	169	16.705	16.705	(0.908)	7370	0.05000	0.04049(M)
	57 Hexachlorobenzene	284	17.578	17.579	(0.955)	4170	0.05000	0.04895(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	58 Pentachlorophenol	266	18.012	18.012	(0.979)	397	0.10000	0.01065
*	59 Phenanthrene-d10	188	18.398	18.398	(1.000)	1124768	4.00000	
$	66 Terphenyl-d14	244	21.532	21.532	(0.919)	3717	0.05000	0.04124
	67 Butylbenzylphthalate	149	22.415	22.415	(0.957)	4671	0.05000	0.02482
*	69 Chrysene-d12	240	23.421	23.421	(1.000)	1114478	4.00000	
*	77 Perylene-d12	264	26.108	26.108	(1.000)	1276260	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.945	28.946	(1.109)	10824	0.05000	0.03661
	90 N-Nitrosodimethylamine	74	4.755	4.755	(0.514)	5382	0.10000	0.08597

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012310S.D
Lab Smp Id: SLC0143-CAL1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 18:37
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	320125	160063	640250	370360	15.69
27 Naphthalene-d8	1136019	568010	2272038	1262304	11.12
42 Acenaphthene-d10	636993	318497	1273986	638059	0.17
59 Phenanthrene-d10	1093620	546810	2187240	1124768	2.85
69 Chrysene-d12	1000300	500150	2000600	1114478	11.41
77 Perylene-d12	1058448	529224	2116896	1276260	20.58

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	-0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	-0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	-0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012310S.D

Lab ID: SLC0143-CAL1
nt10.i, 20230301.b\SIM.b\SIMABN2.m,   01-MAR-2023 21:09

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1003012310S.D

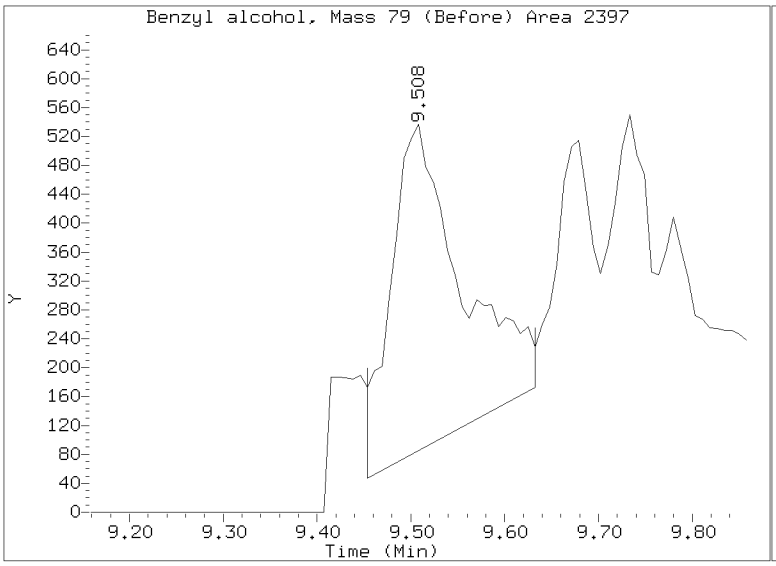
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

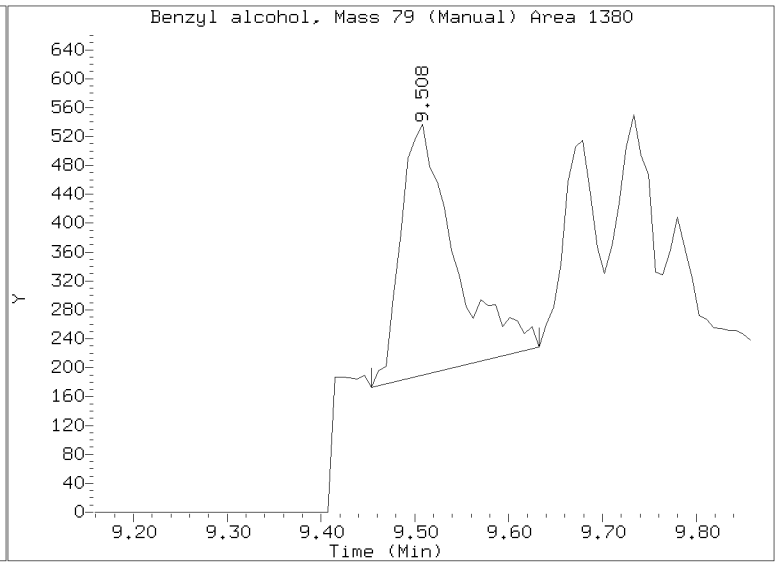
Exception: 1,2,4-Trichlorobenzene 0.0010

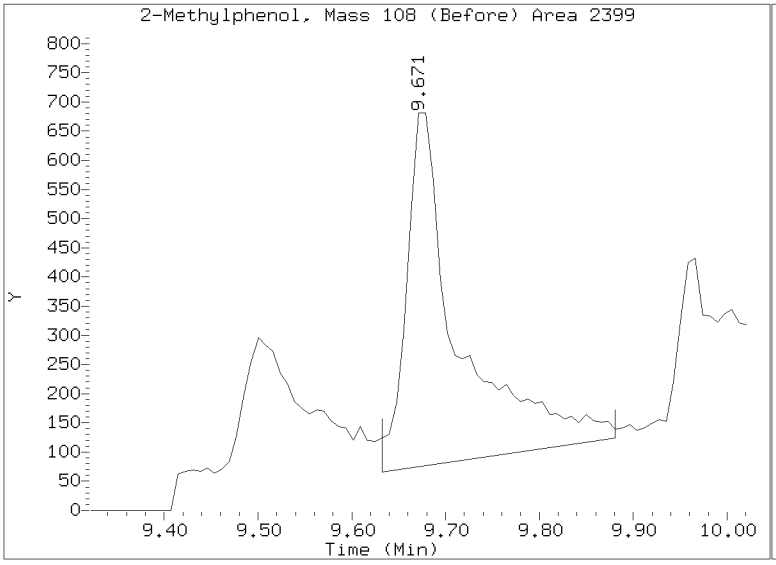
* Only compounds listed in the work order have been verified by the analyst *

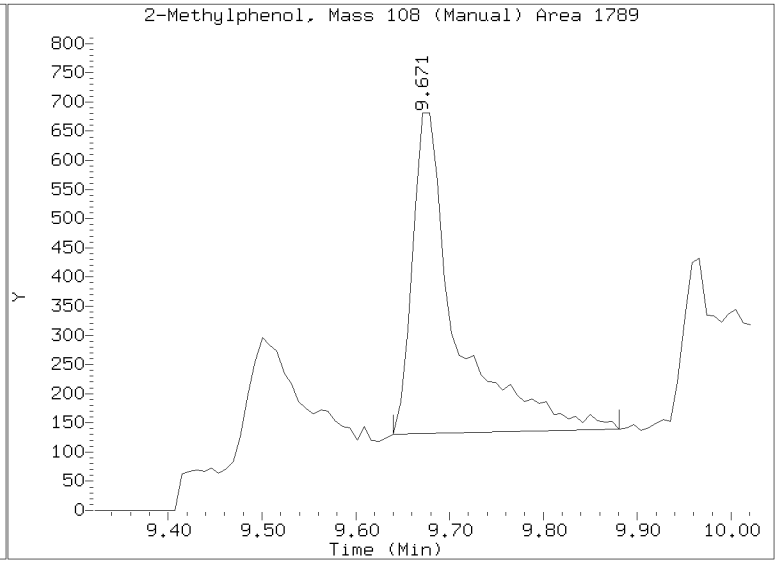
Quant Ion Manual Peak Adjustment Report

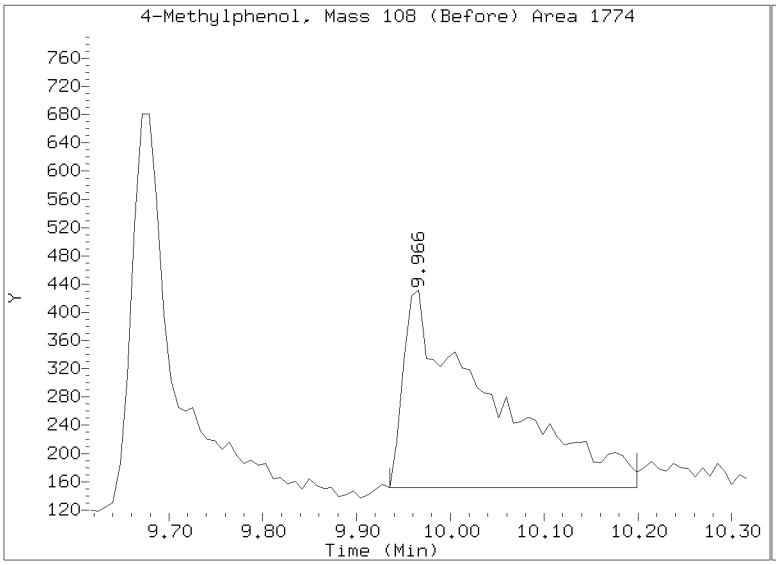
Datafile: //target/share/chem3/nt10.i/20230301.b/SIM.b/NT1003012310S.D
Injection Date: 01-MAR-2023 21:09
Lab ID:SLC0143-CAL1 Client ID:
Report Date: 03/10/2023 10:37

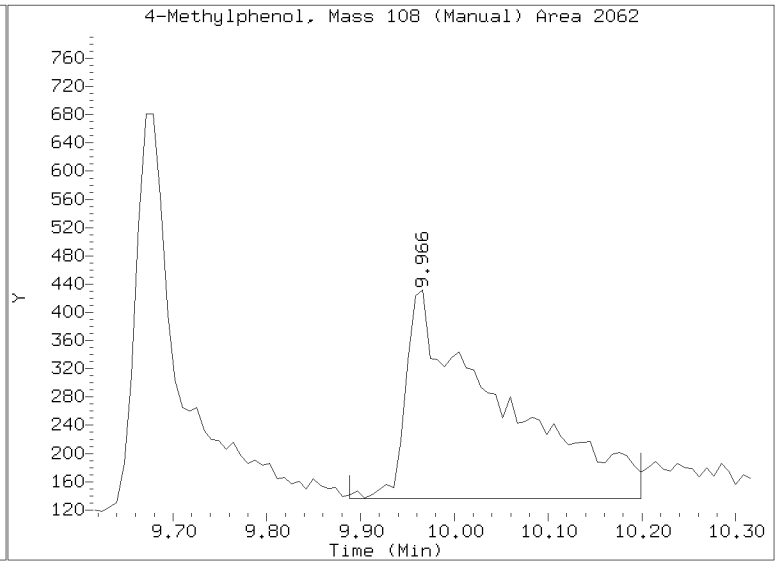






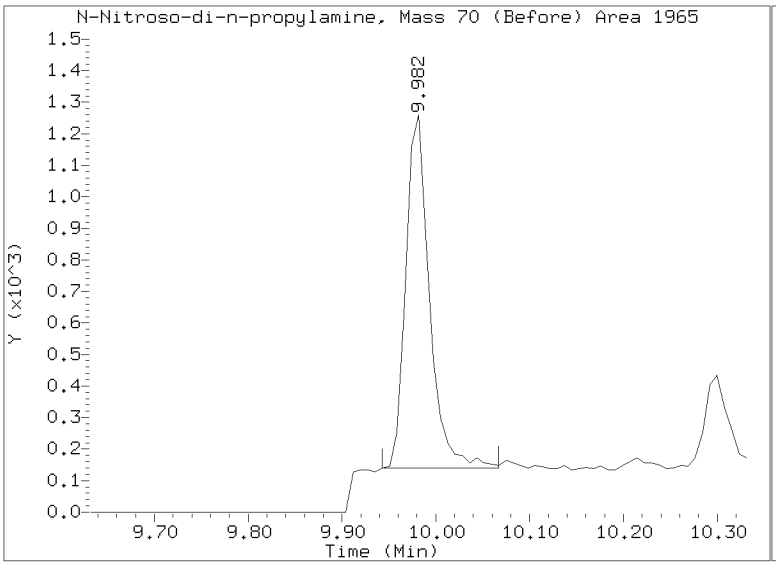


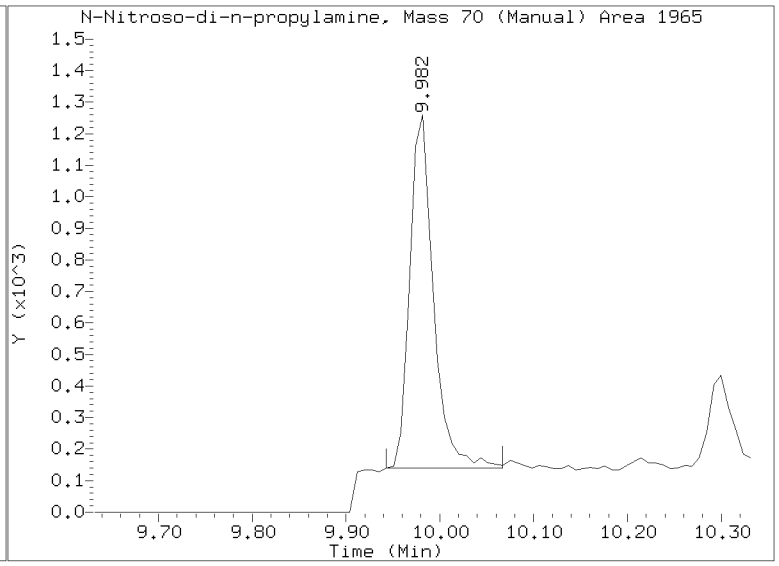


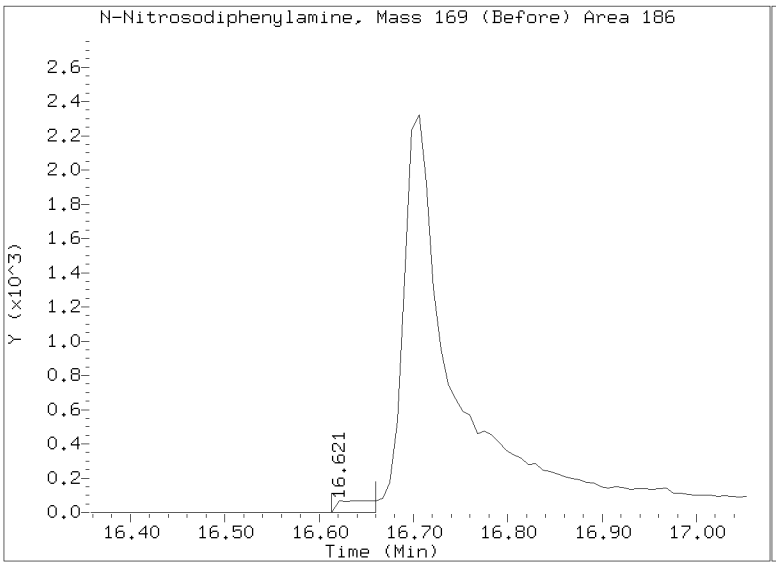


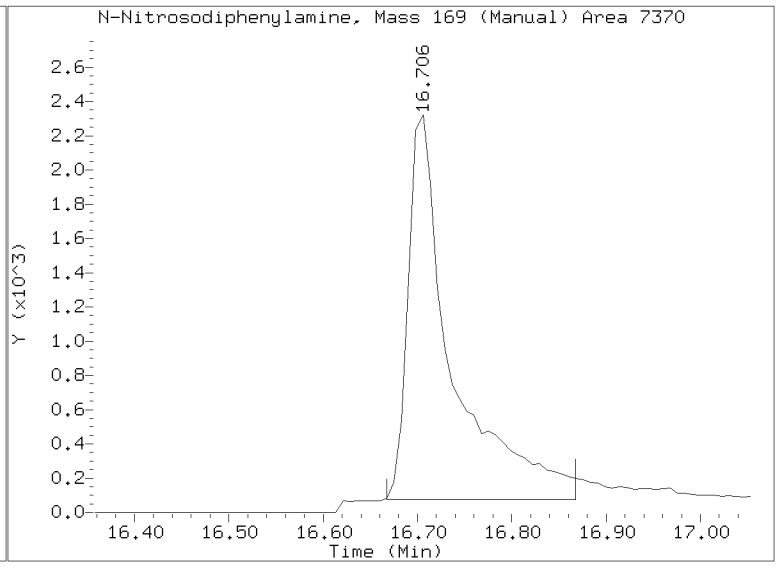
Quant Ion Manual Peak Adjustment Report

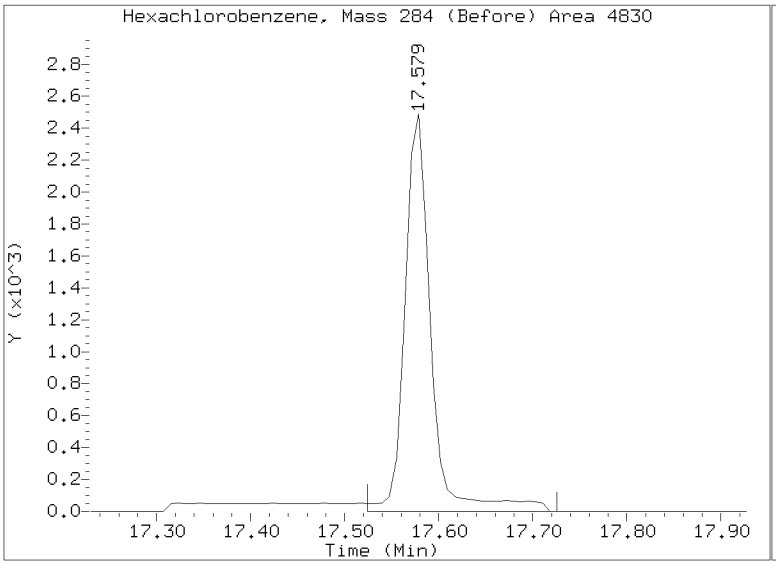
Datafile: //target/share/chem3/nt10.i/20230301.b/SIM.b/NT1003012310S.D
Injection Date: 01-MAR-2023 21:09
Lab ID:SLC0143-CAL1 Client ID:
Report Date: 03/10/2023 10:37

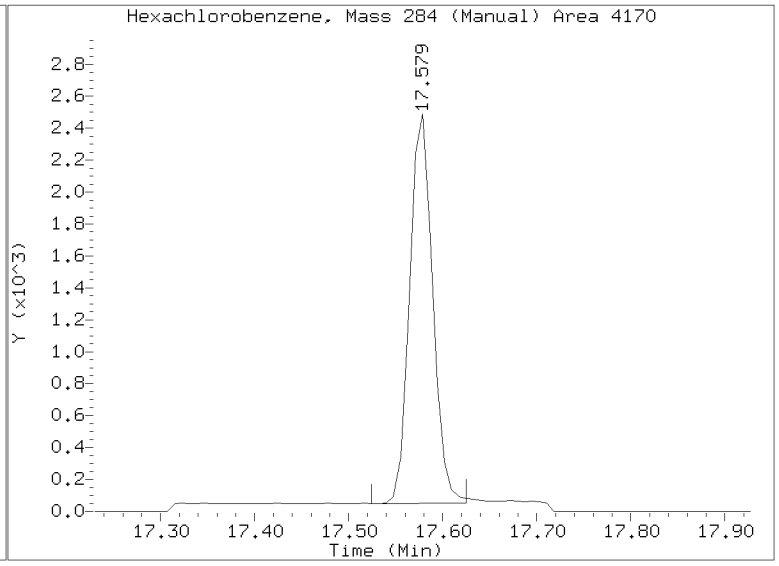












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

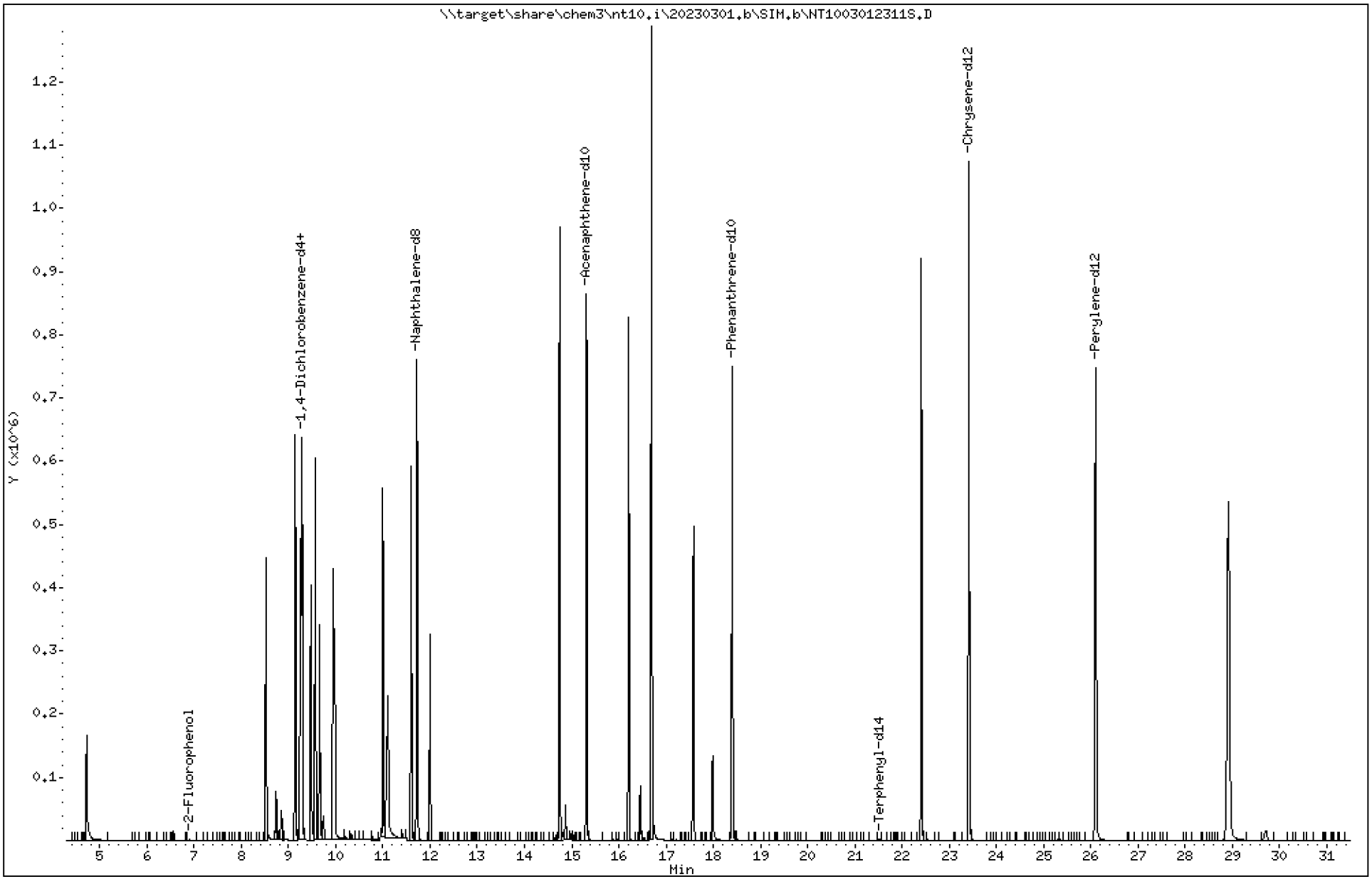
Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

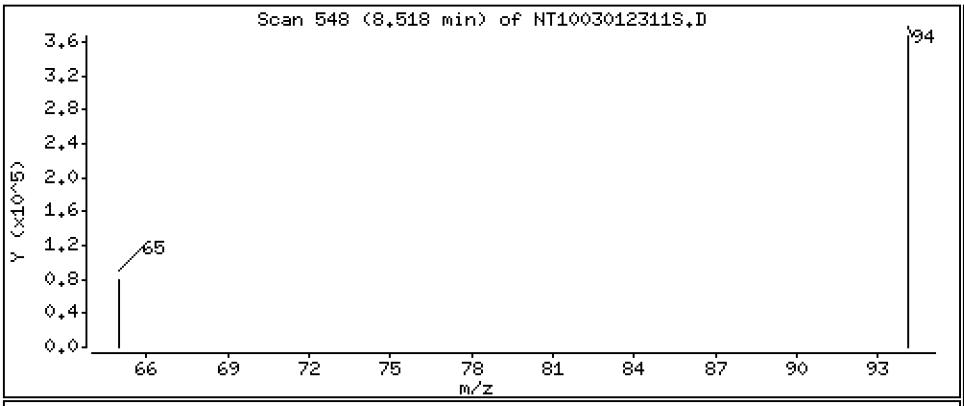
Operator: JGR

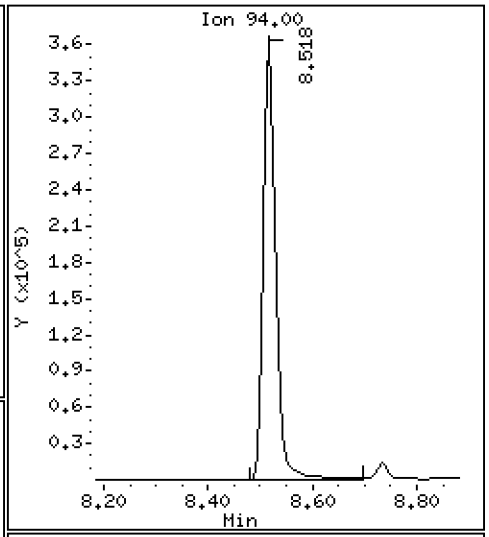
Column phase: ZB-5msi

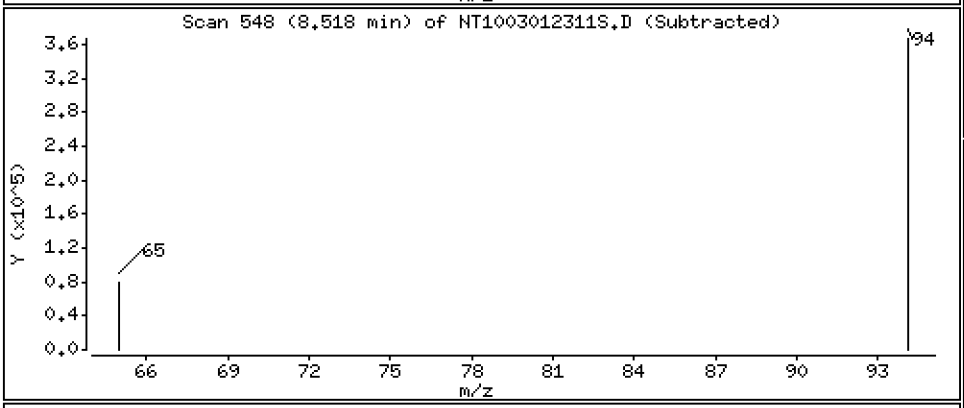
Column diameter: 0.25

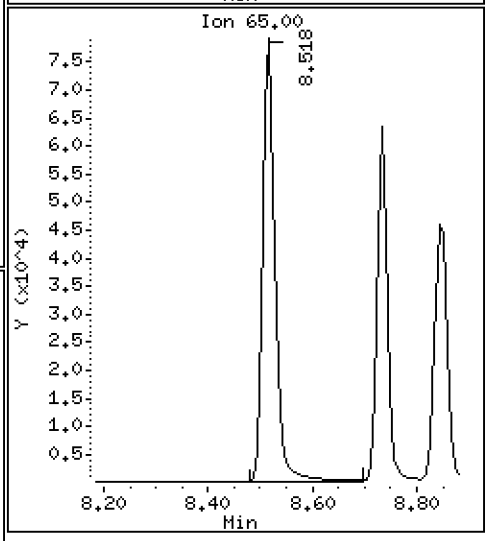
3 Phenol

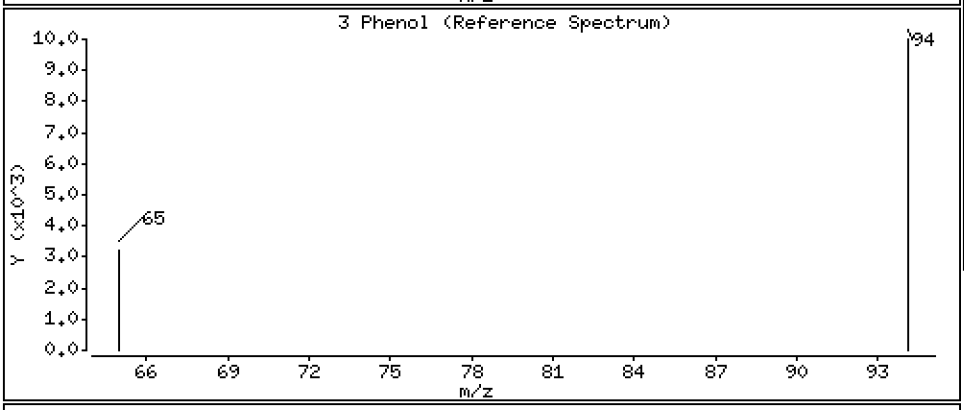
Concentration: 4.507 ug/L

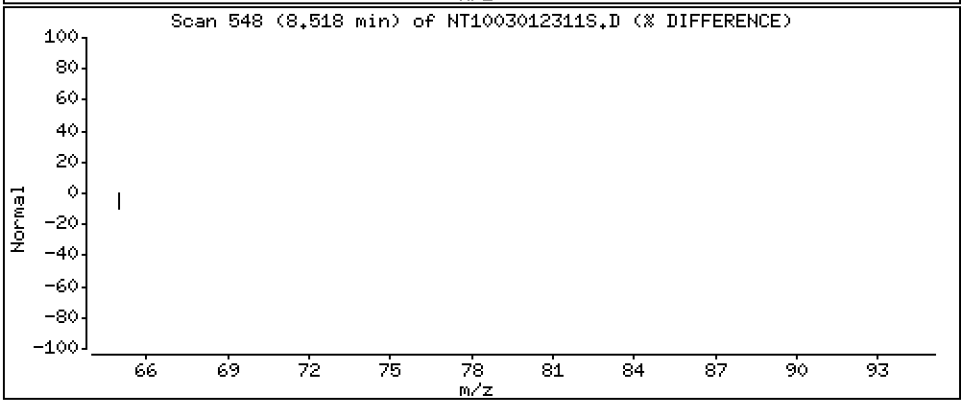












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

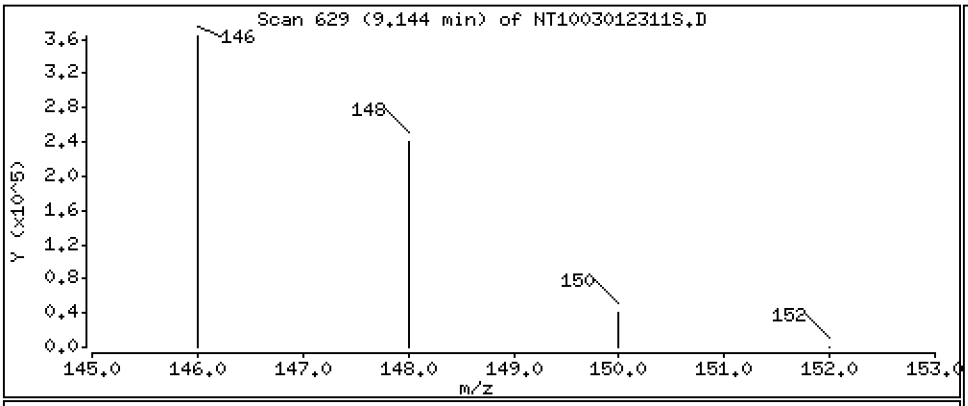
Operator: JGR

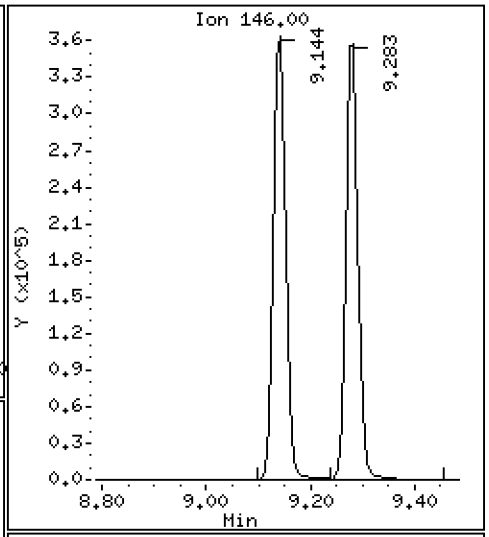
Column phase: ZB-5msi

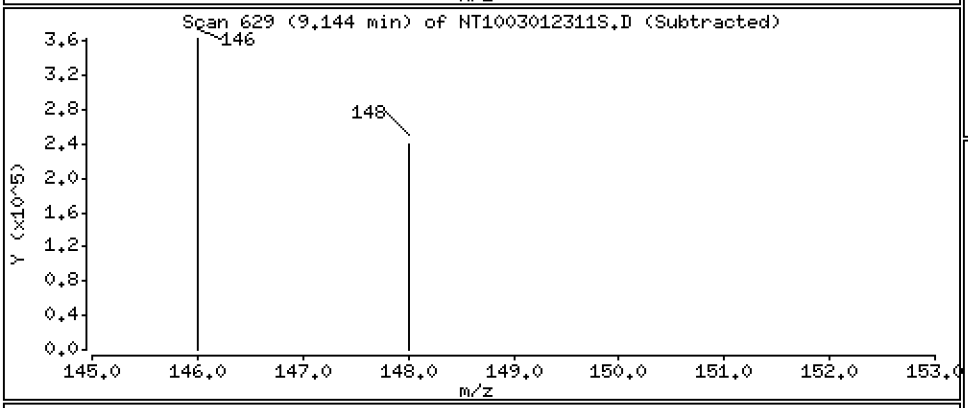
Column diameter: 0.25

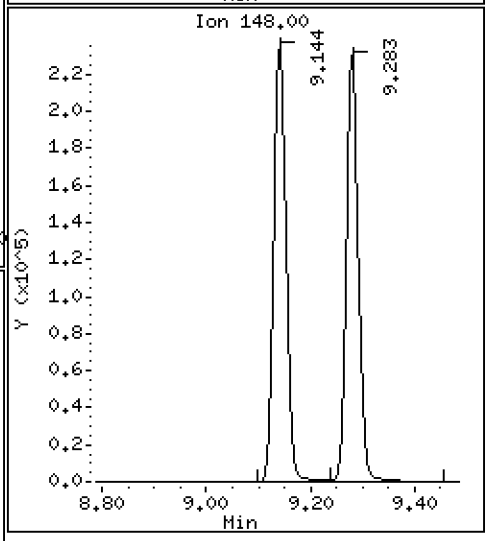
7 1,3-Dichlorobenzene

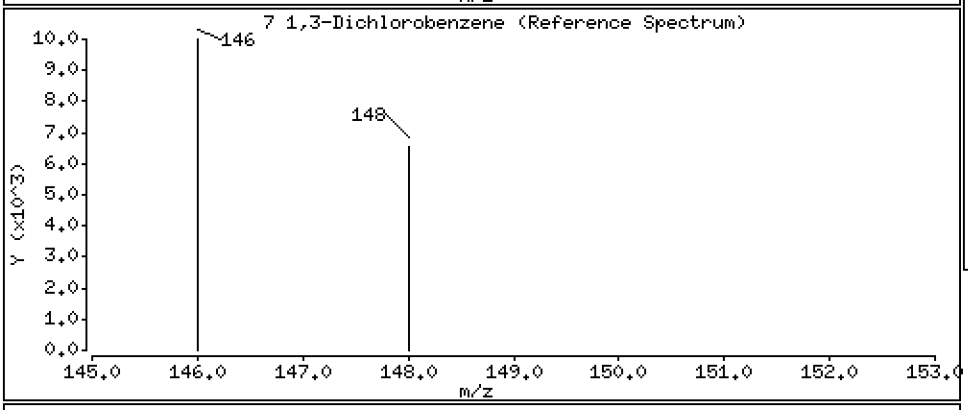
Concentration: 5.084 ug/L

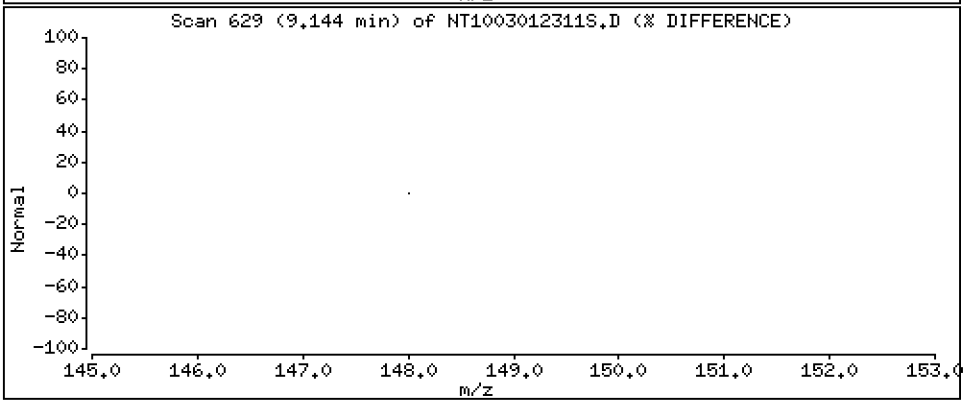












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

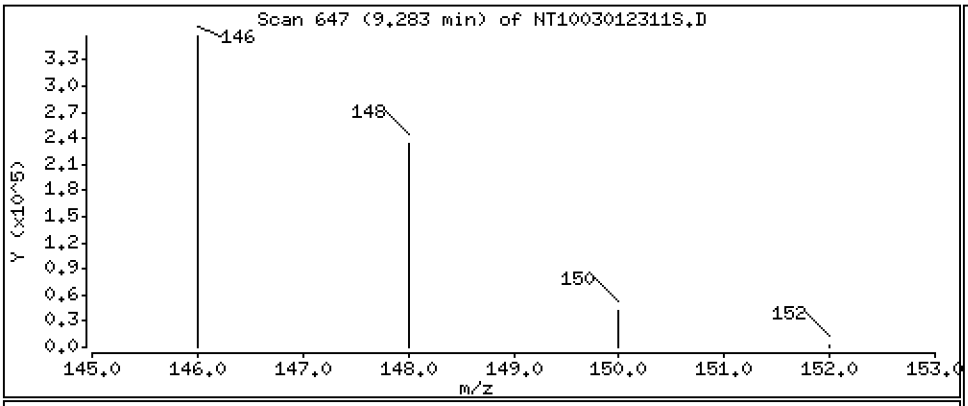
Operator: JGR

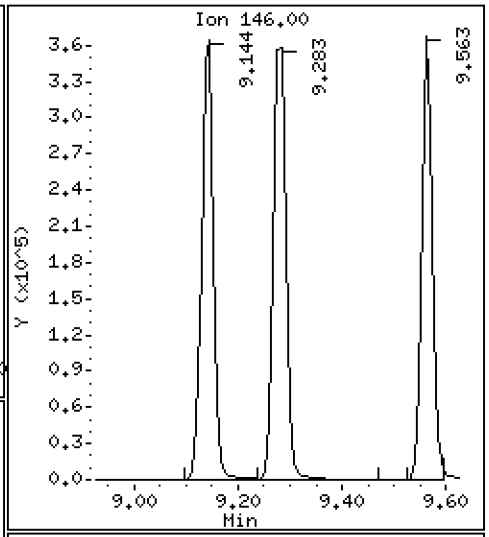
Column phase: ZB-5msi

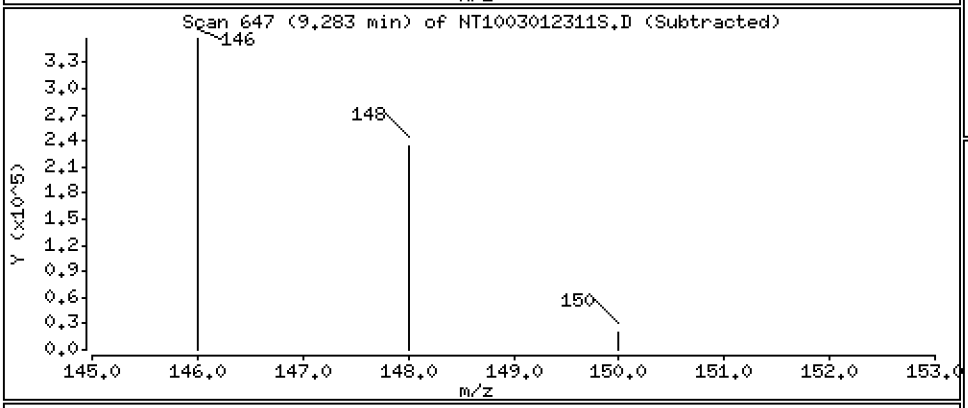
Column diameter: 0.25

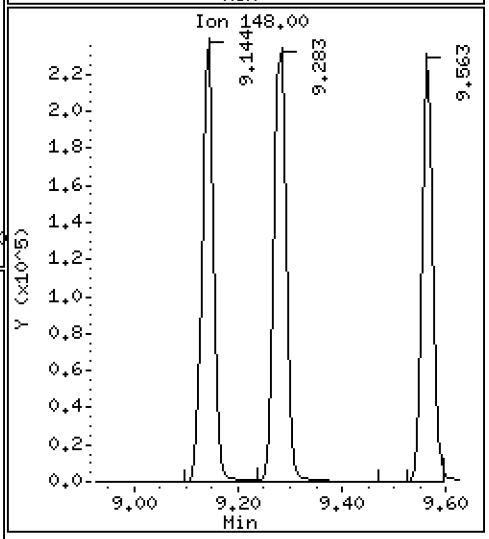
9 1,4-Dichlorobenzene

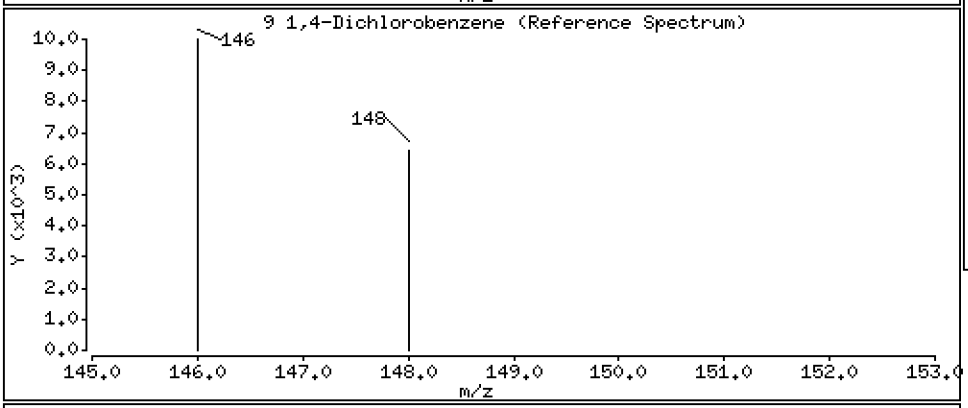
Concentration: 5.250 ug/L

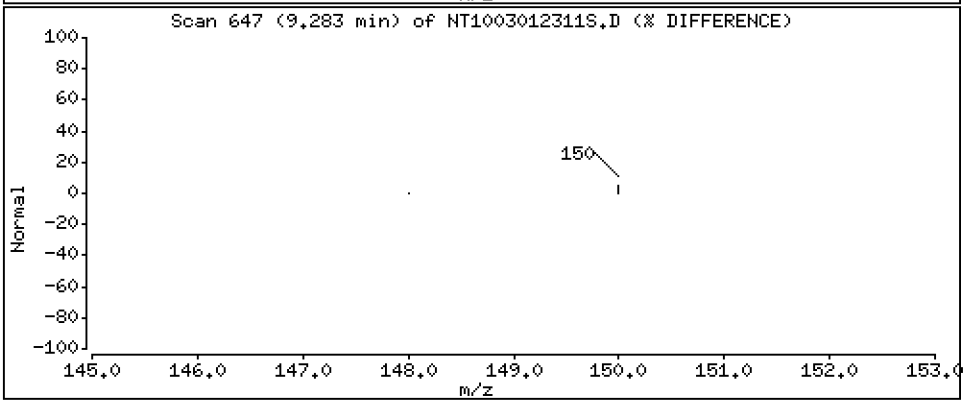












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

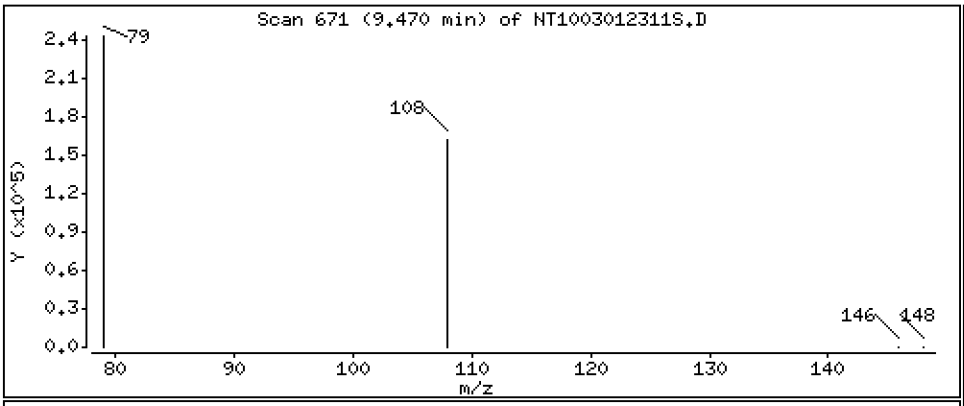
Operator: JGR

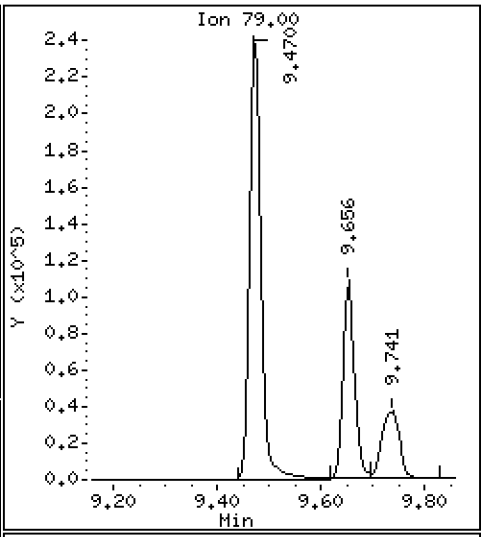
Column phase: ZB-5msi

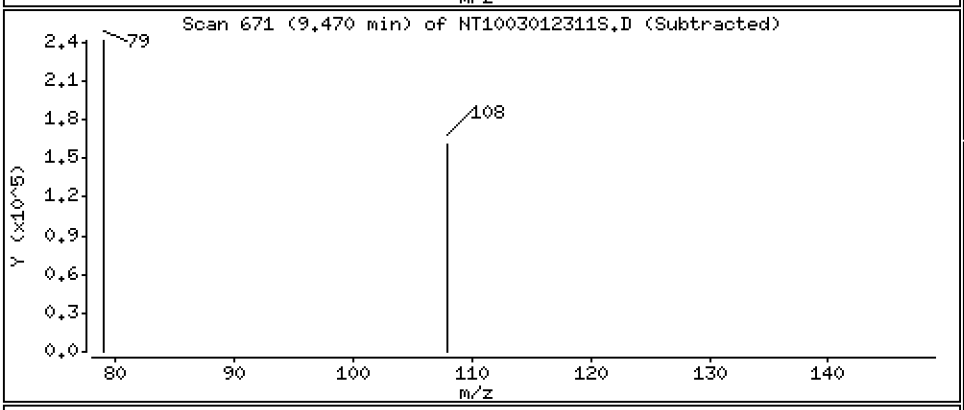
Column diameter: 0.25

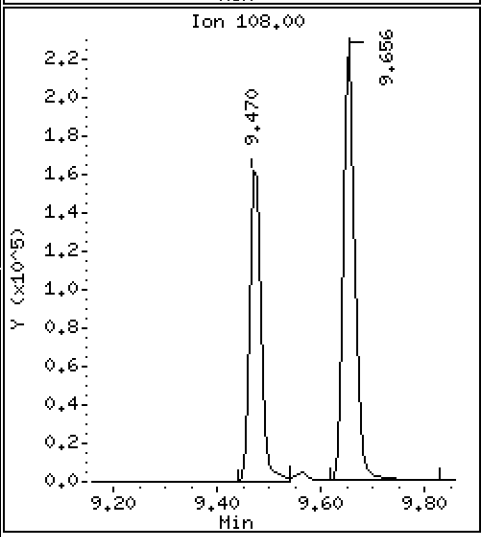
11 Benzyl alcohol

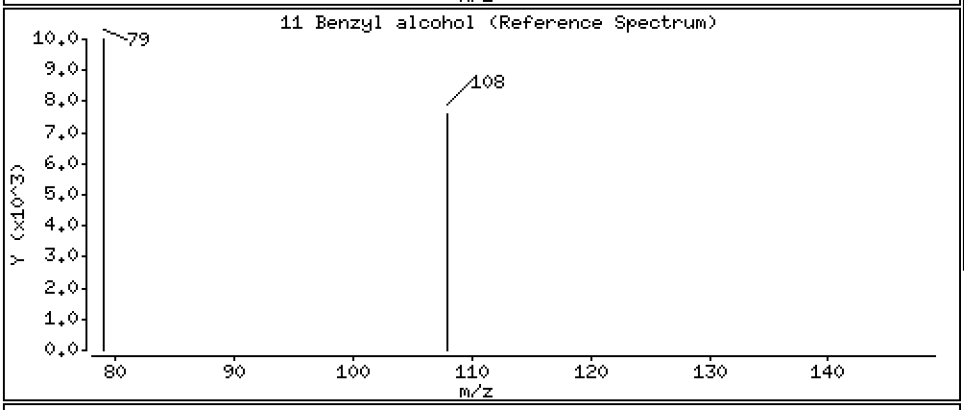
Concentration: 5.104 ug/L

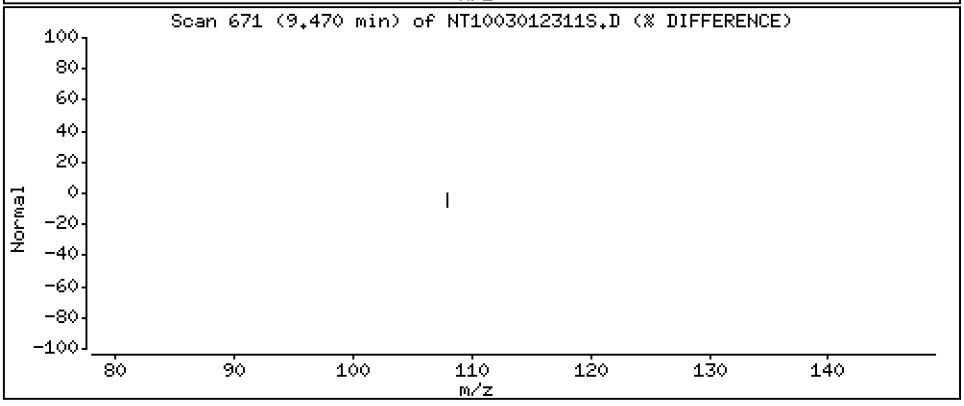












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

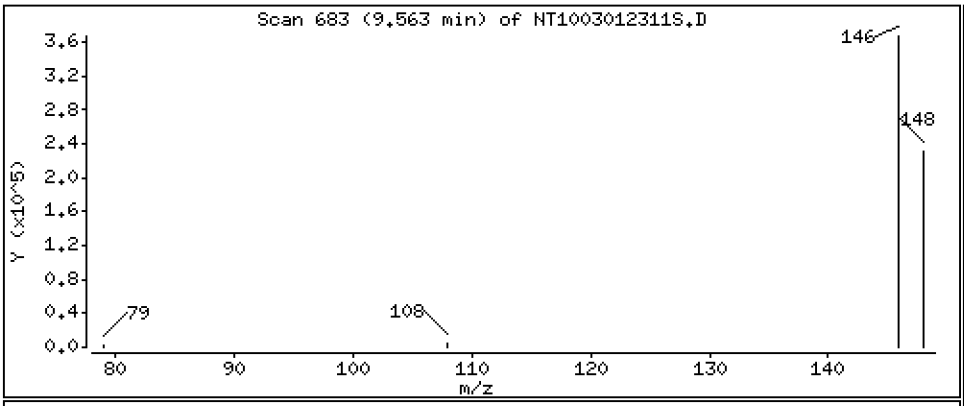
Operator: JGR

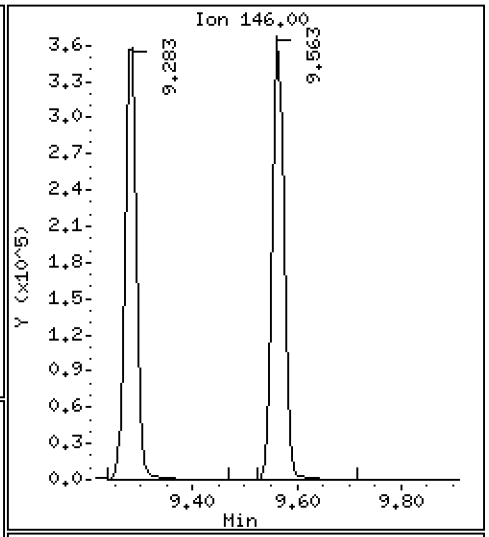
Column phase: ZB-5msi

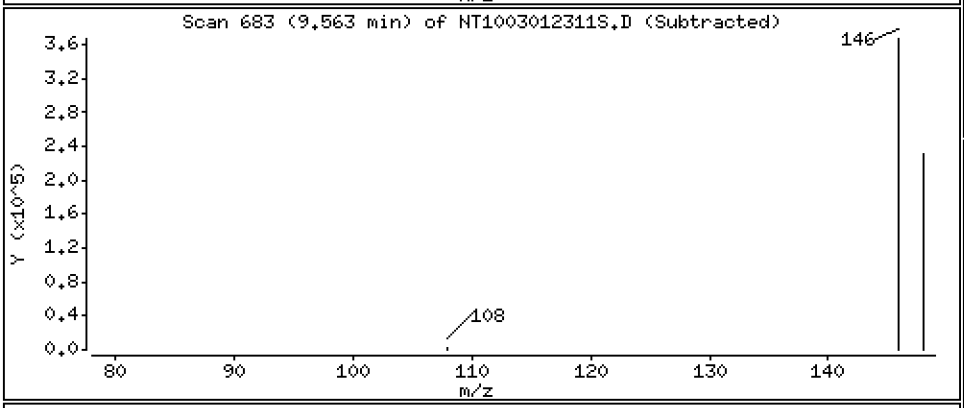
Column diameter: 0.25

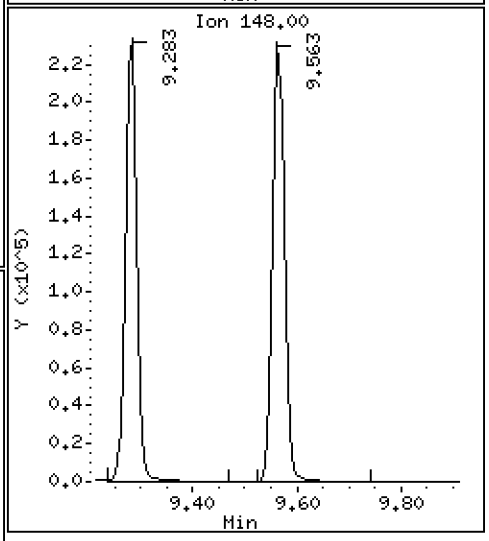
12 1,2-Dichlorobenzene

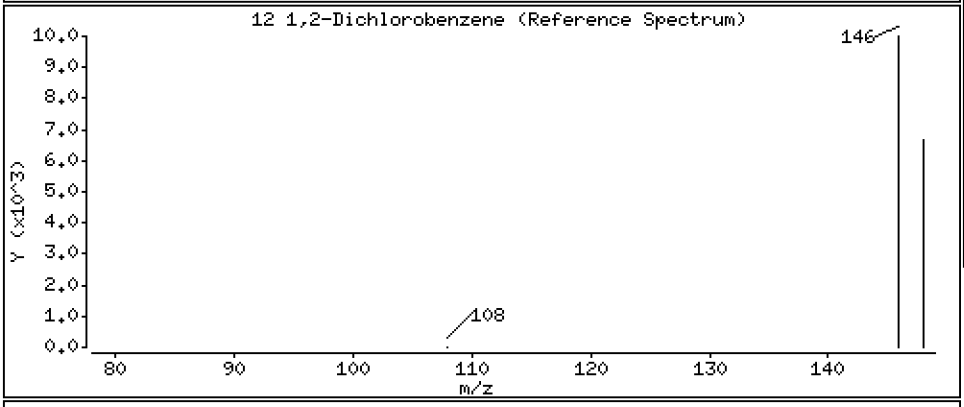
Concentration: 5.142 ug/L

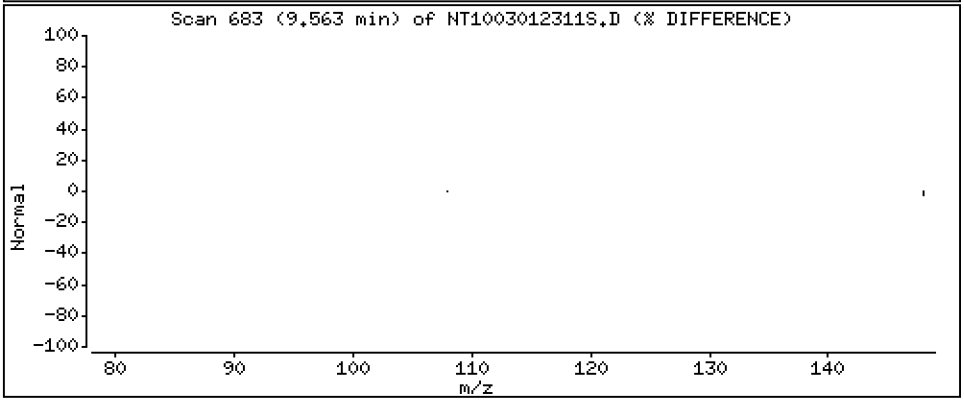












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

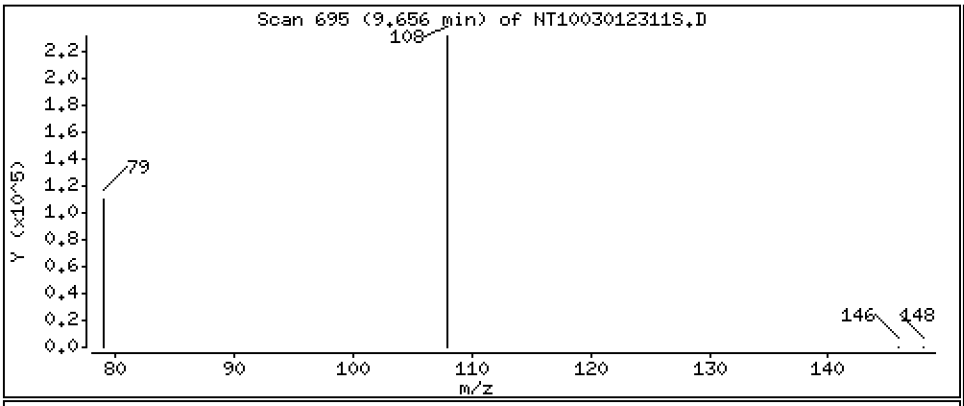
Operator: JGR

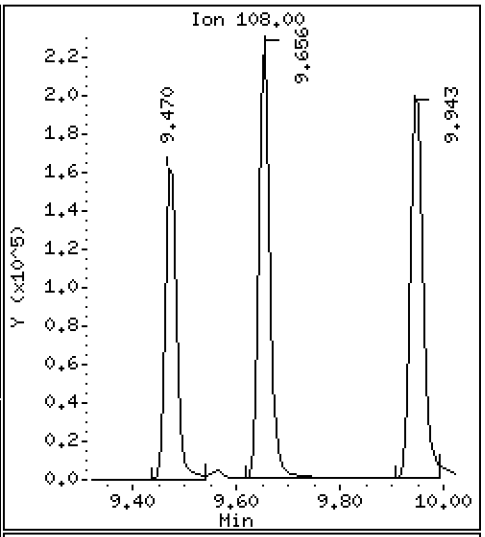
Column phase: ZB-5msi

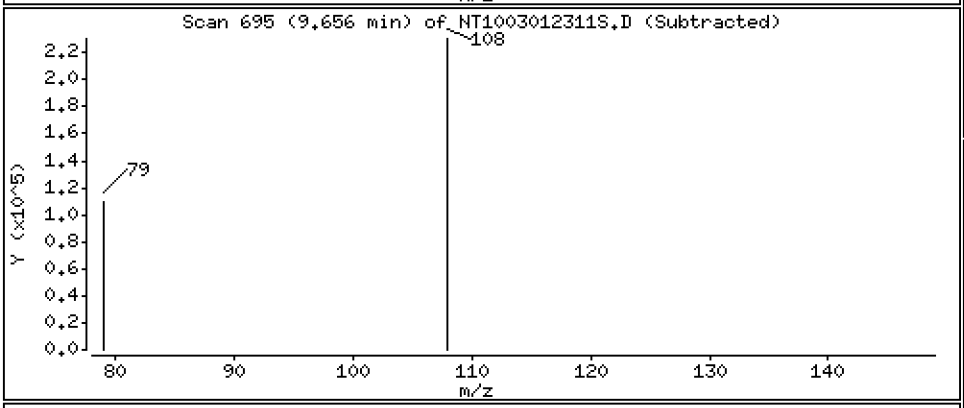
Column diameter: 0.25

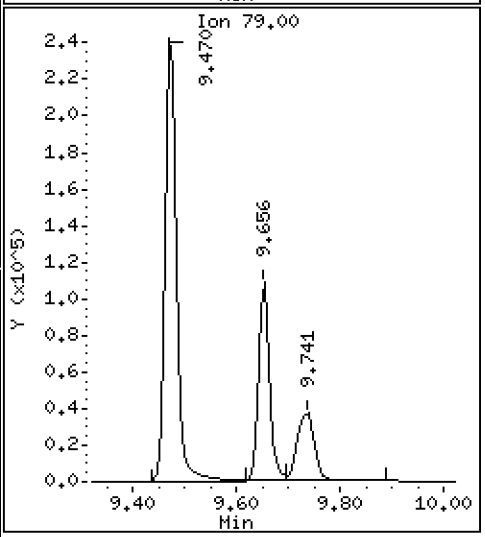
13 2-Methylphenol

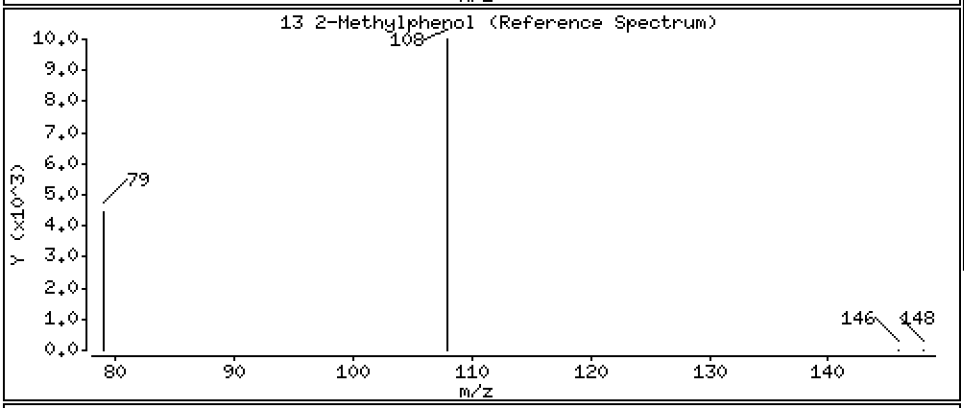
Concentration: 4.365 ug/L

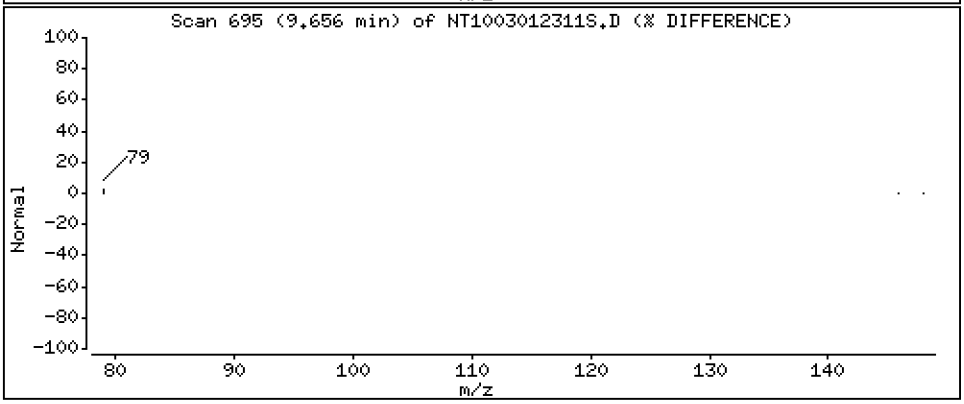












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

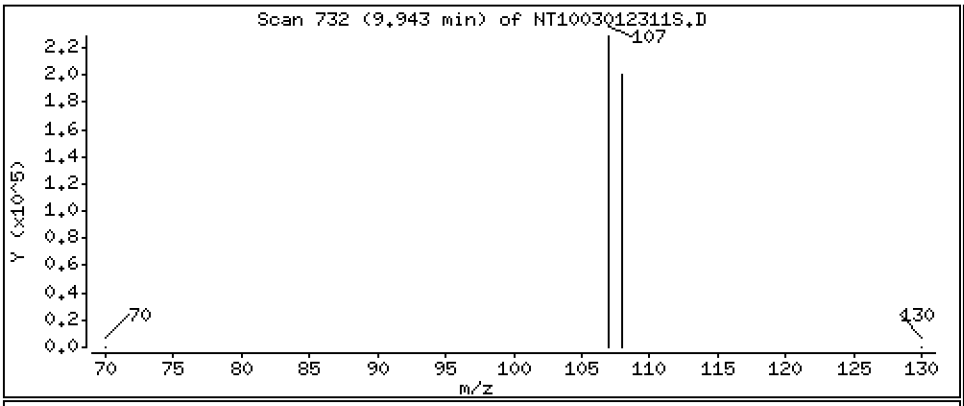
Operator: JGR

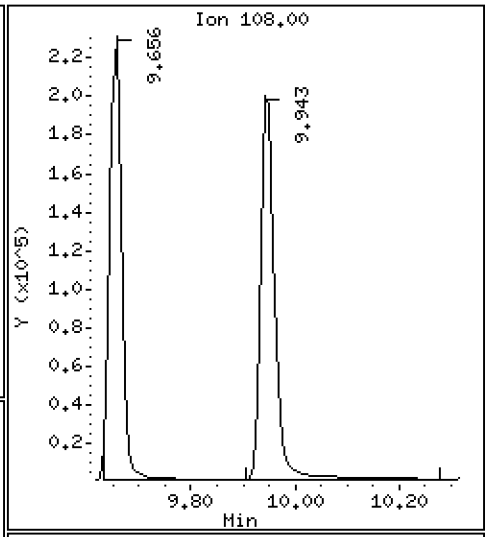
Column phase: ZB-5msi

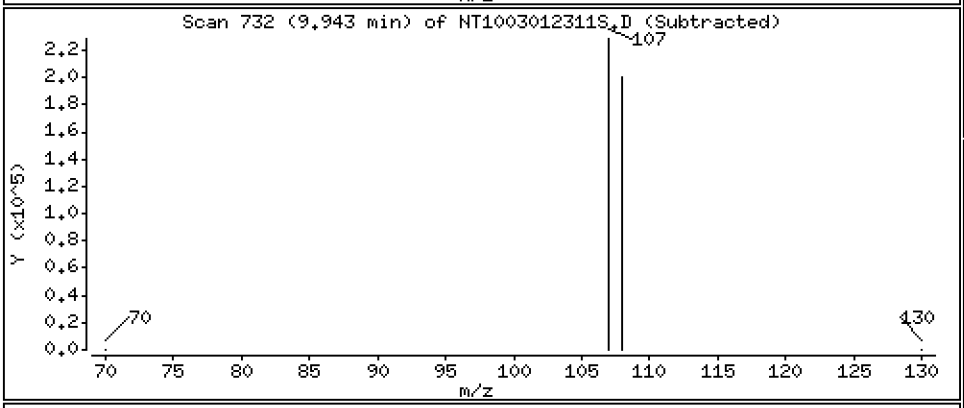
Column diameter: 0.25

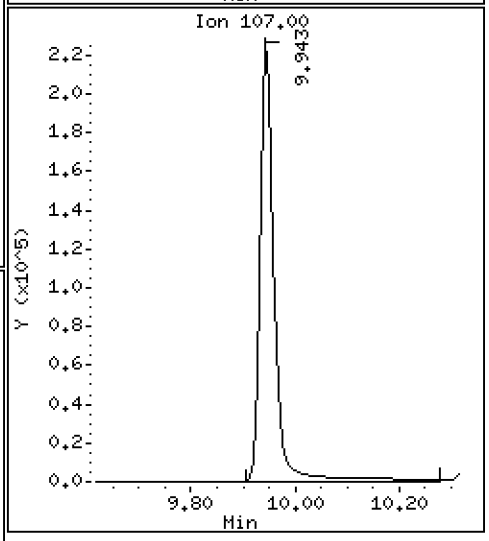
15 4-Methylphenol

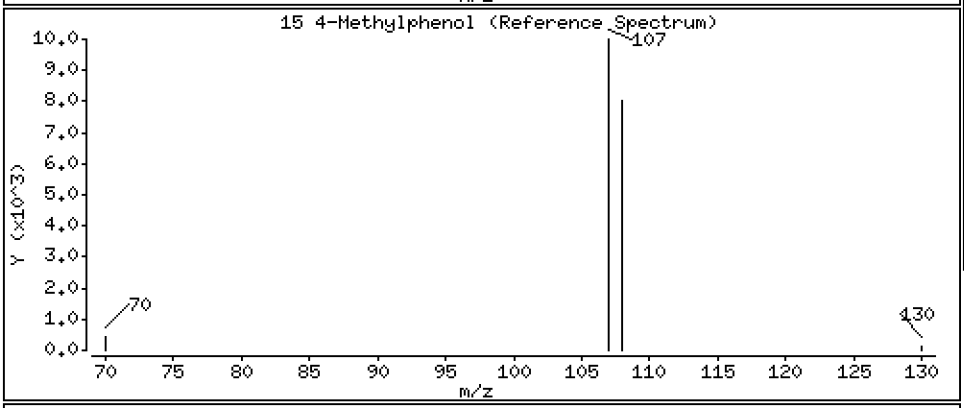
Concentration: 4.505 ug/L

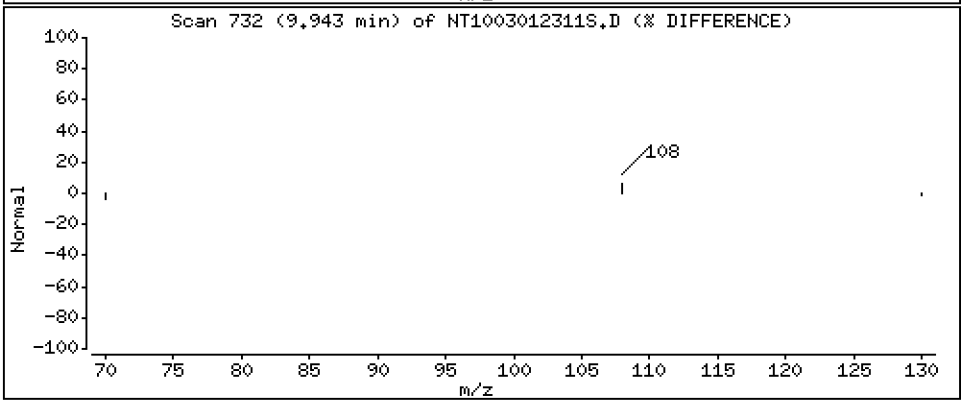












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

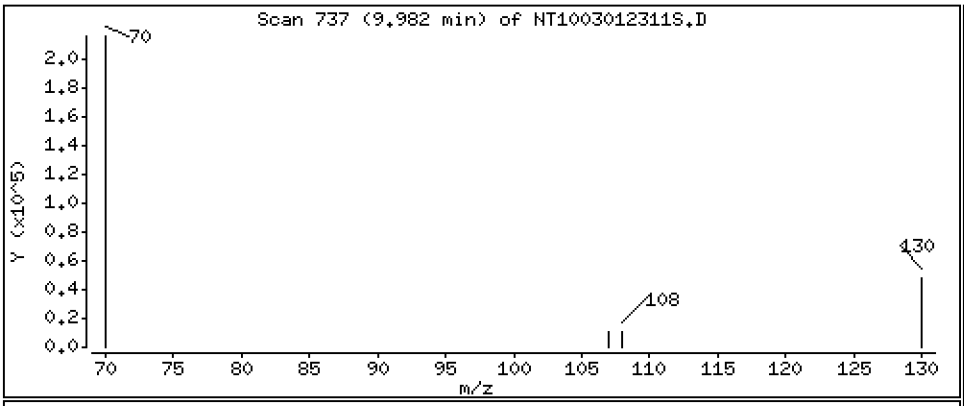
Operator: JGR

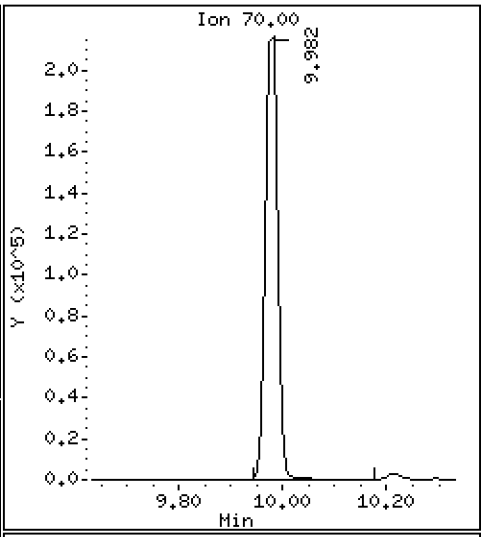
Column phase: ZB-5msi

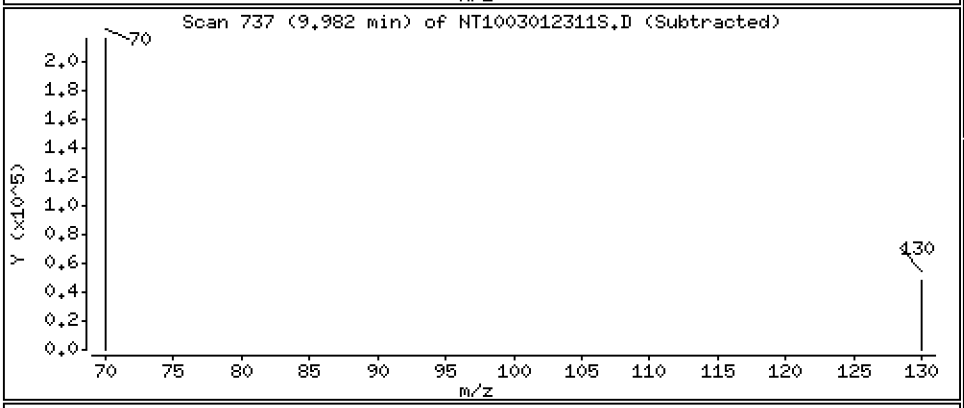
Column diameter: 0.25

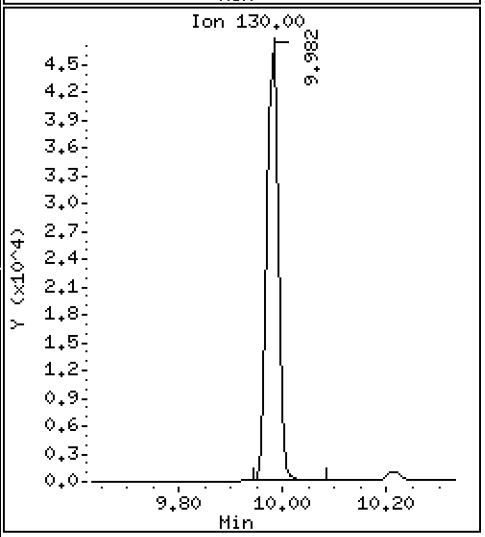
16 N-Nitroso-di-n-propylamine

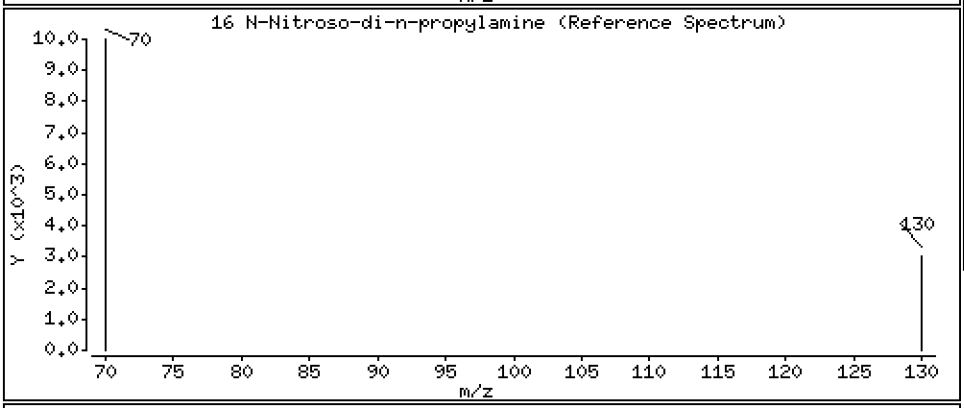
Concentration: 5.685 ug/L

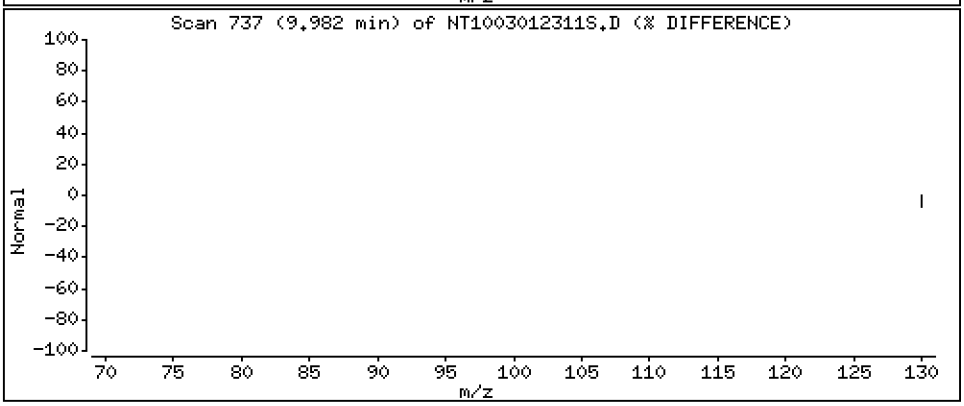












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

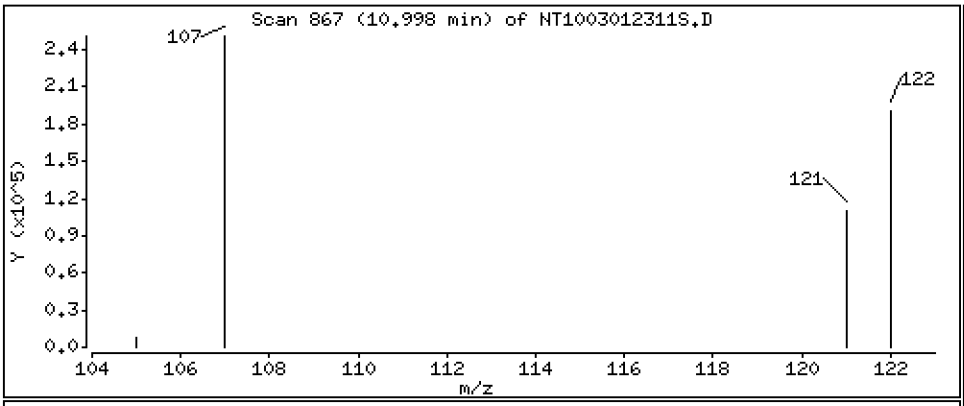
Operator: JGR

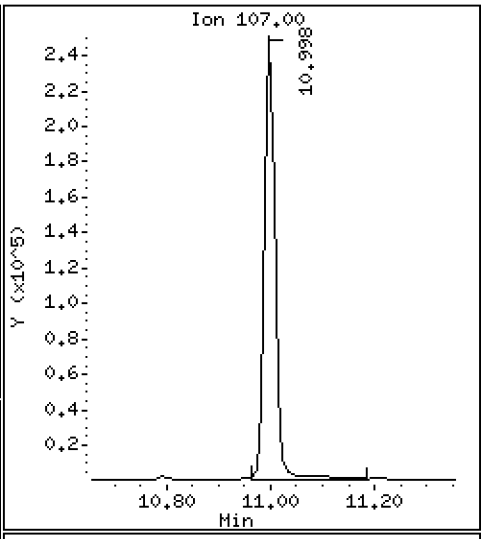
Column phase: ZB-5msi

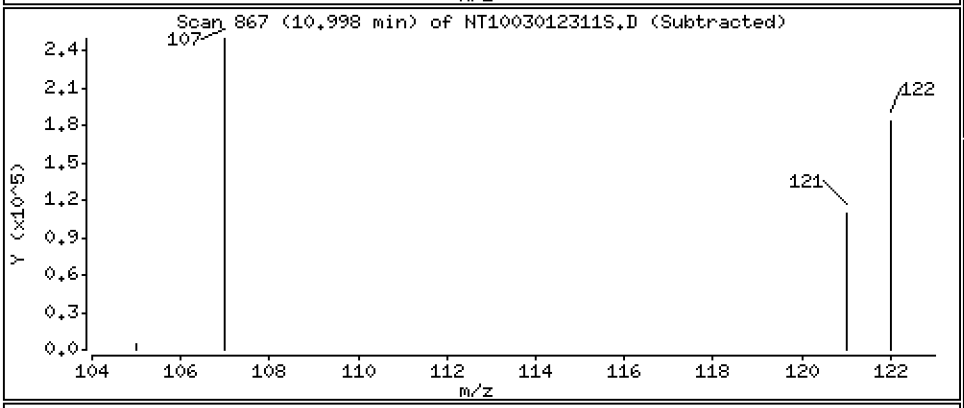
Column diameter: 0.25

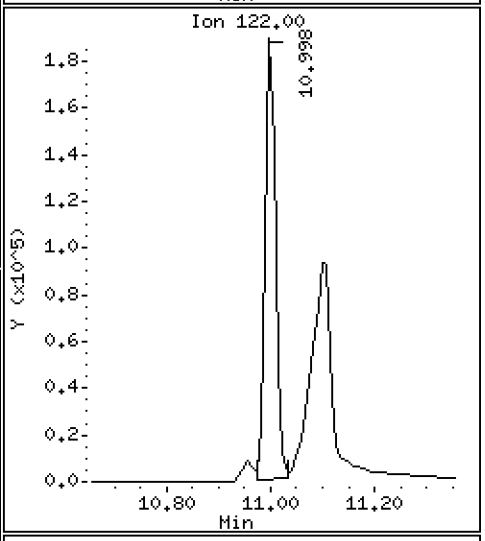
22 2,4-Dimethylphenol

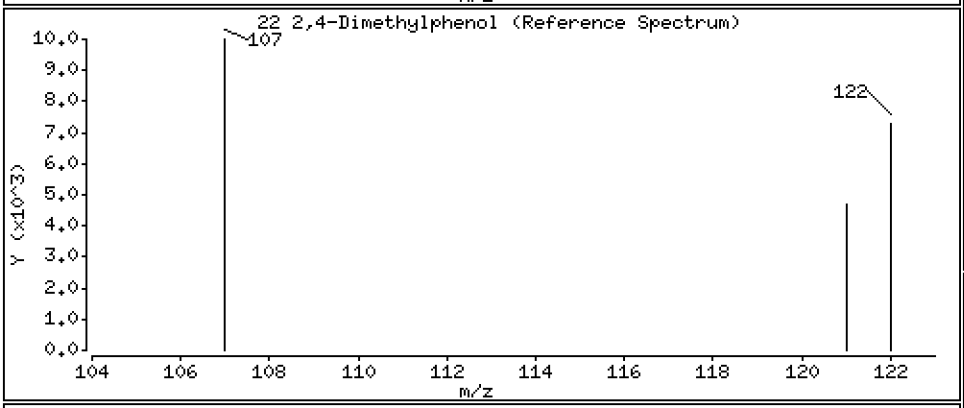
Concentration: 3.637 ug/L

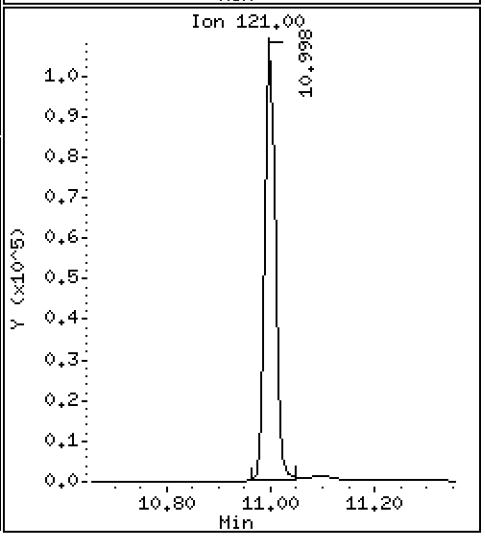


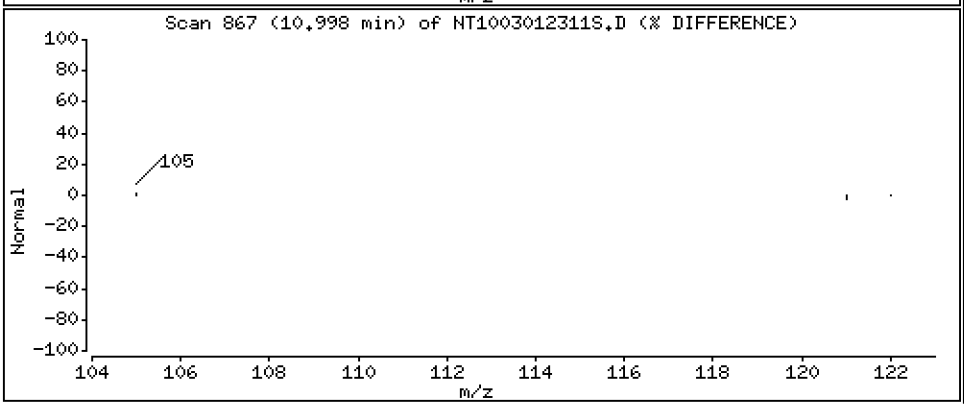












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

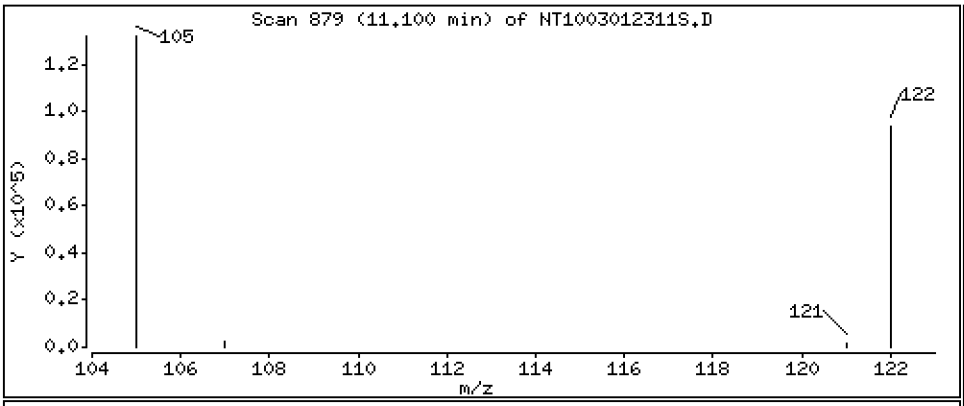
Operator: JGR

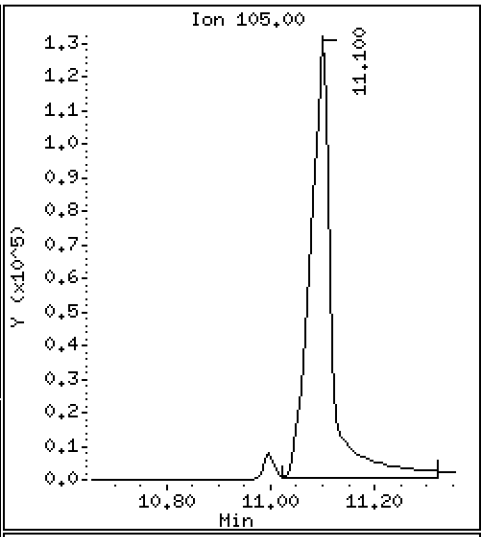
Column phase: ZB-5msi

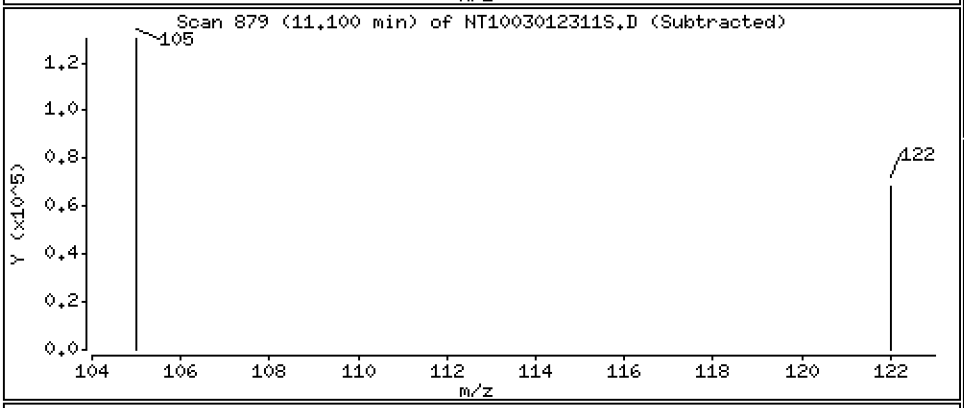
Column diameter: 0.25

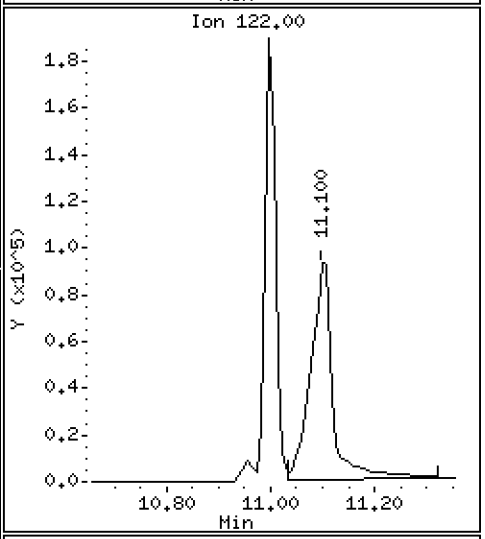
24 Benzoic acid

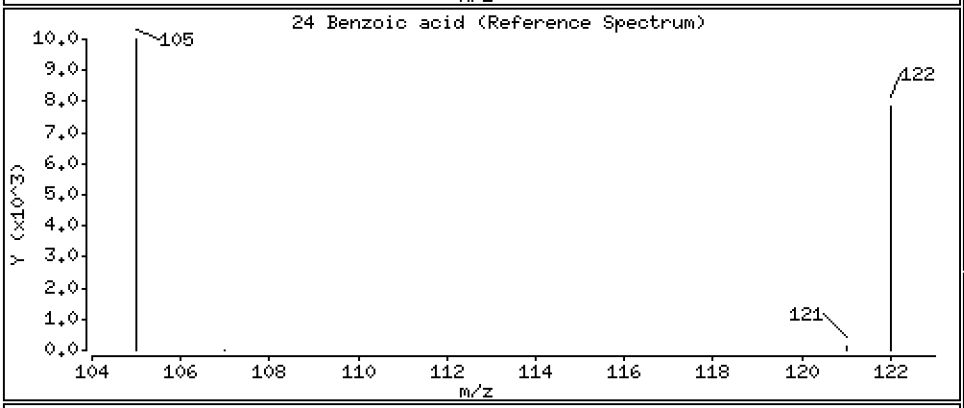
Concentration: 6.870 ug/L

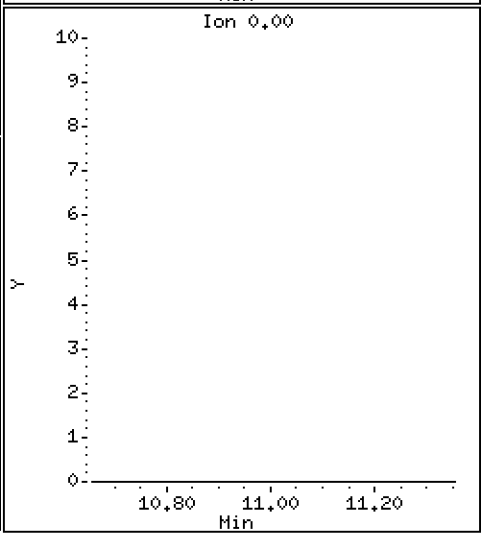


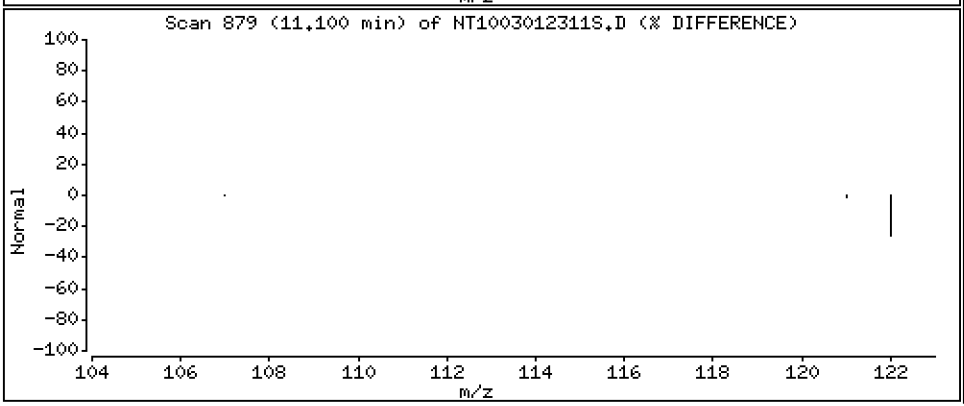












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

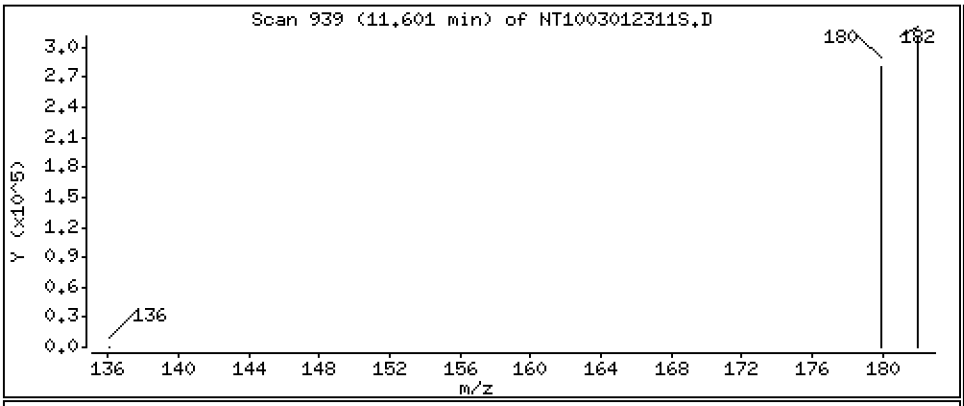
Operator: JGR

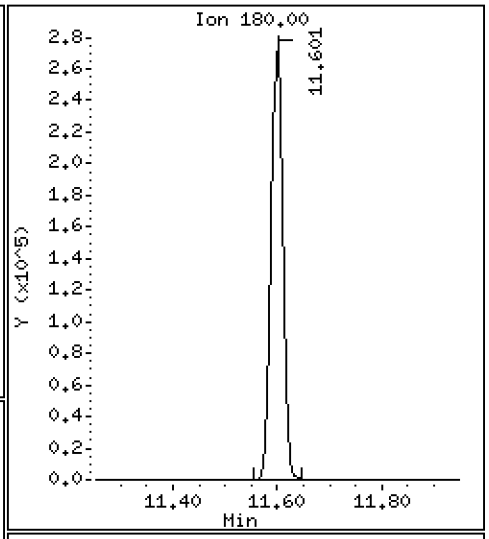
Column phase: ZB-5msi

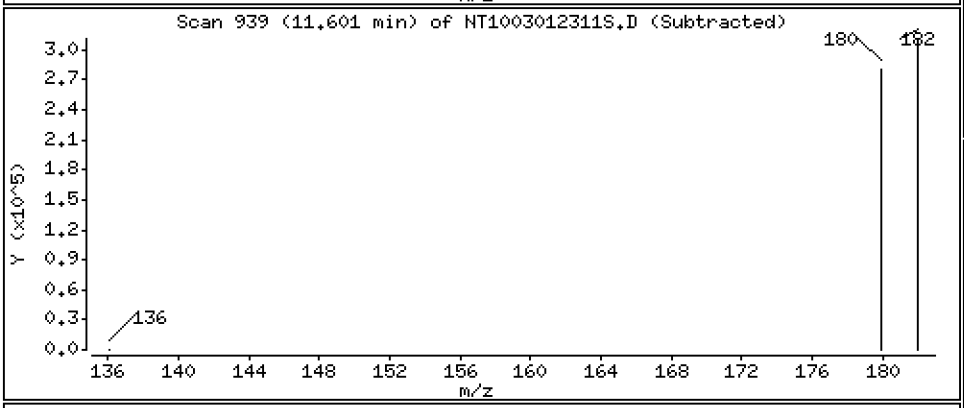
Column diameter: 0.25

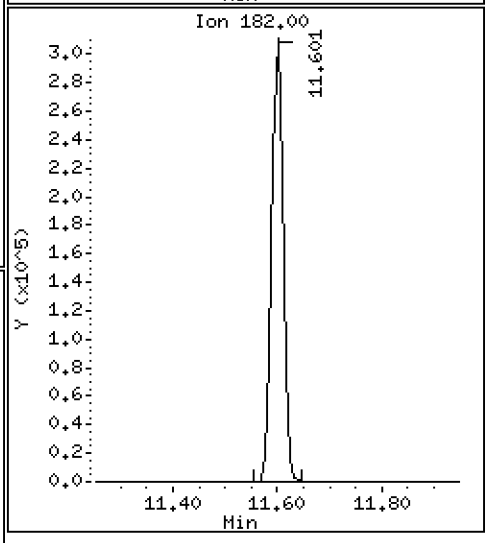
26 1,2,4-Trichlorobenzene

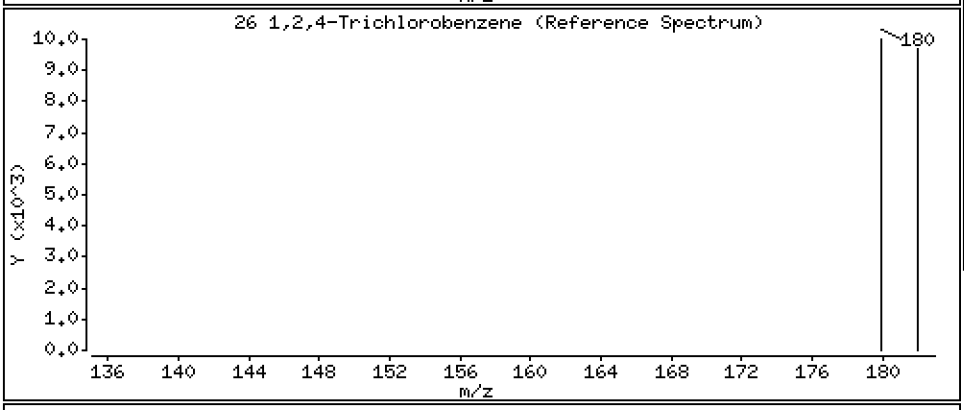
Concentration: 4.870 ug/L

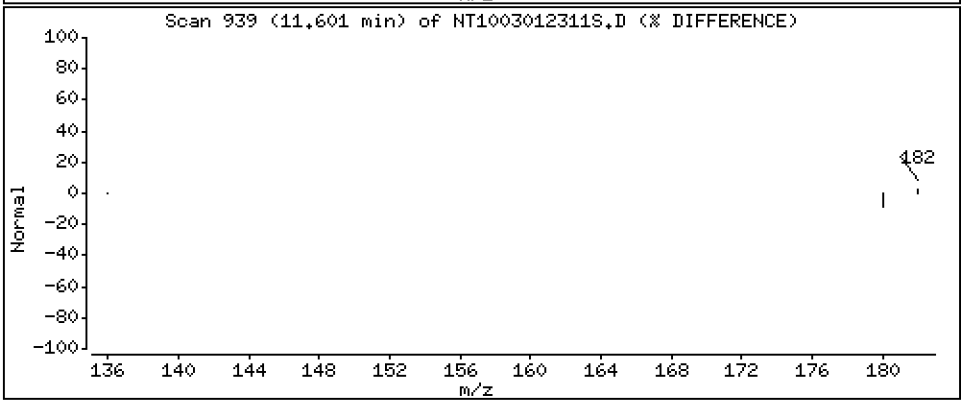












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

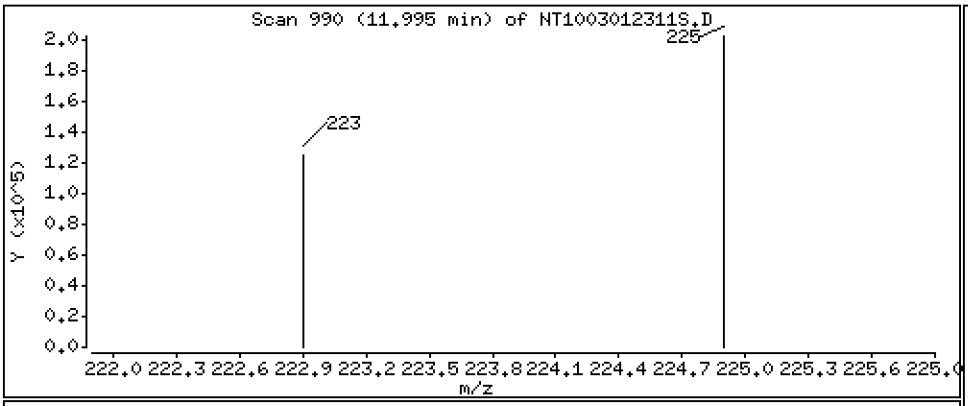
Operator: JGR

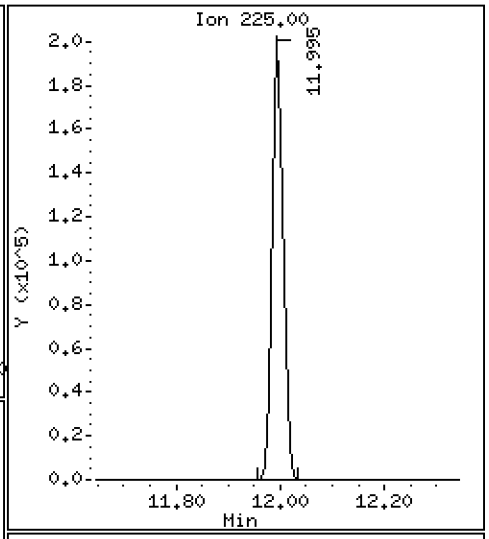
Column phase: ZB-5msi

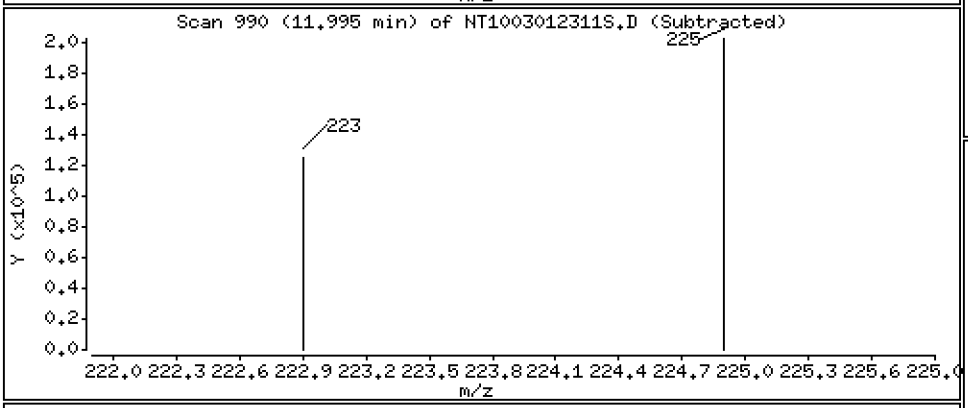
Column diameter: 0.25

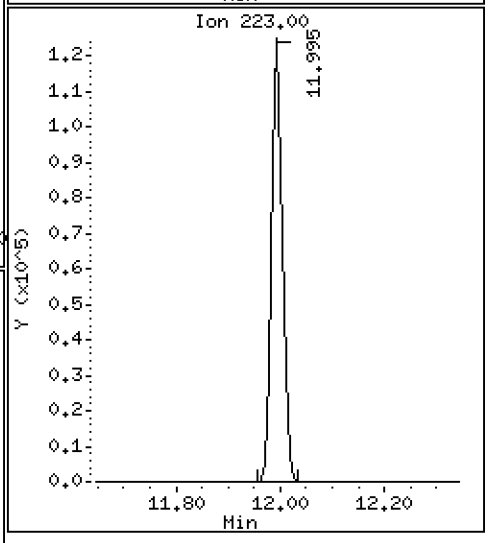
30 Hexachlorobutadiene

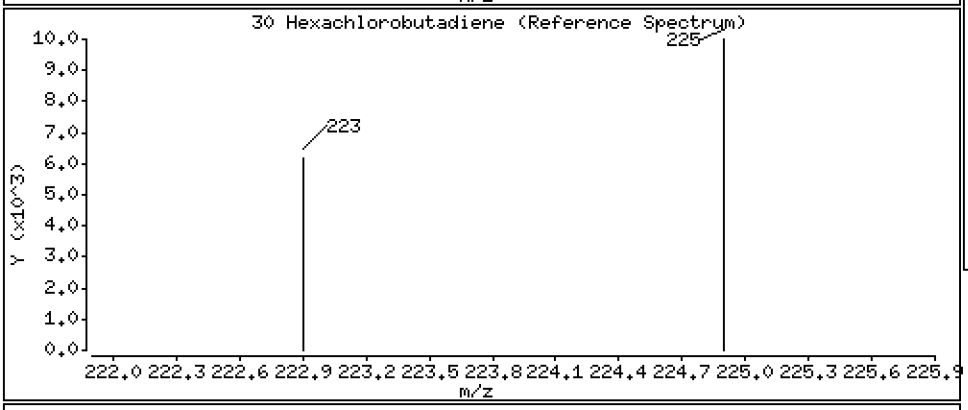
Concentration: 4.862 ug/L

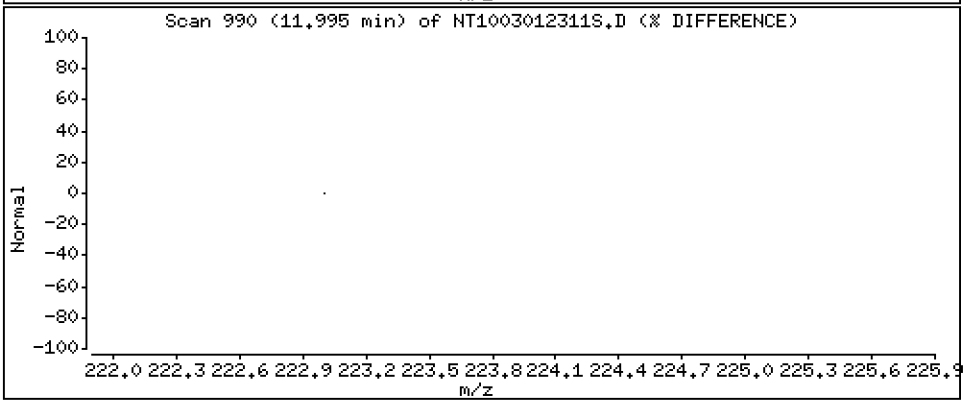












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

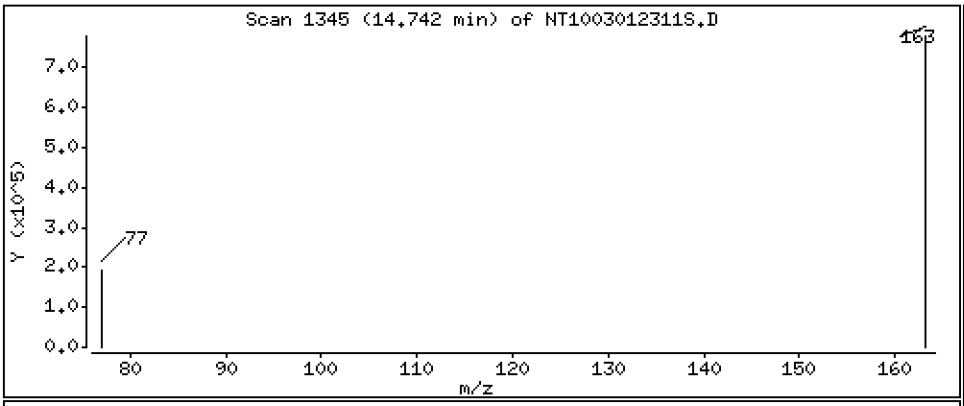
Operator: JGR

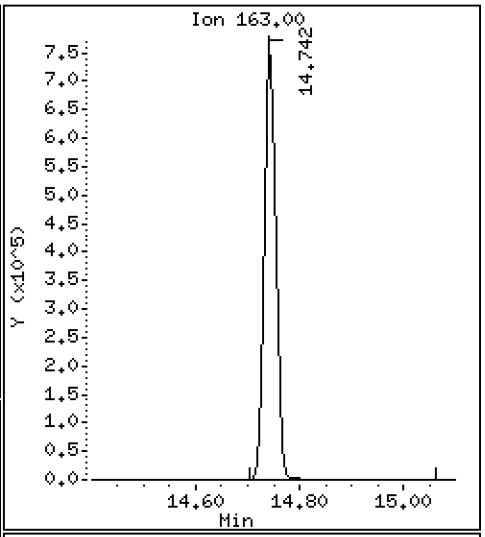
Column phase: ZB-5msi

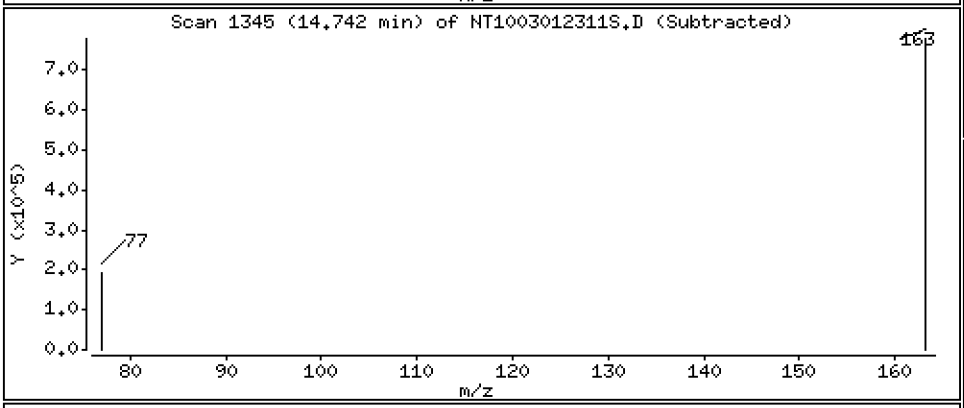
Column diameter: 0.25

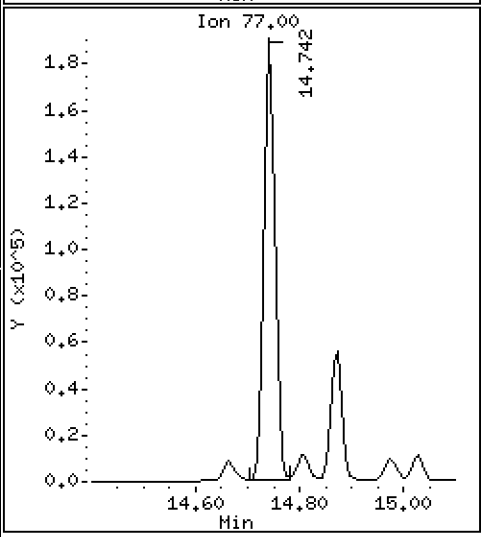
39 Dimethylphthalate

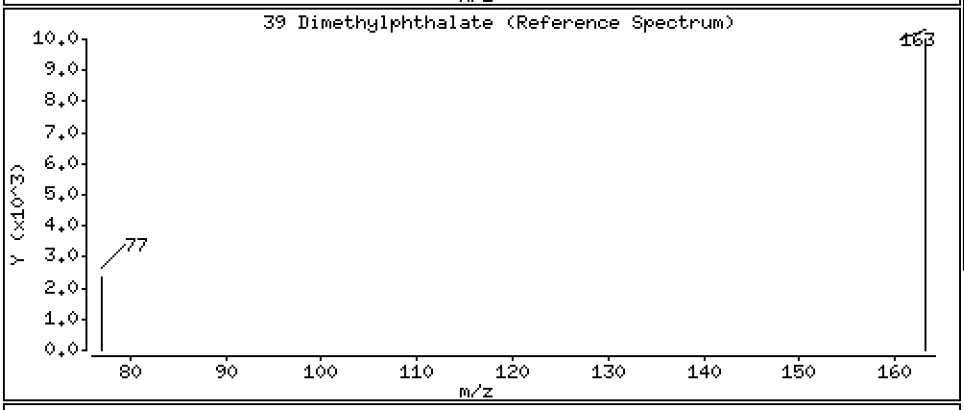
Concentration: 5.571 ug/L

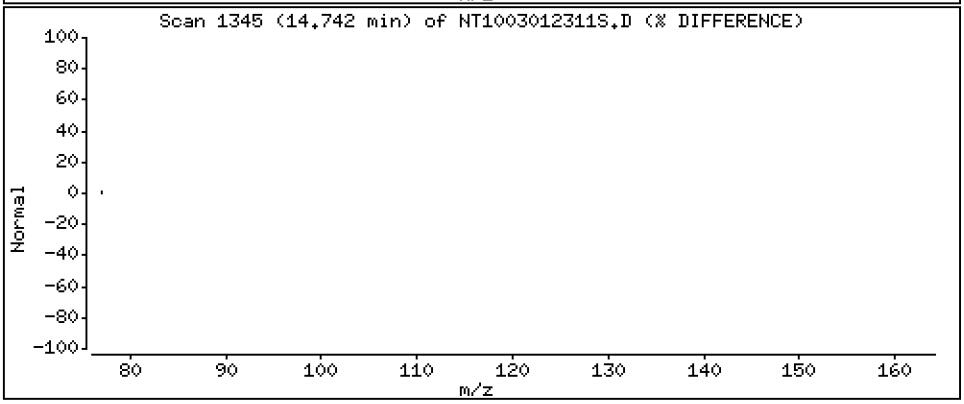












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

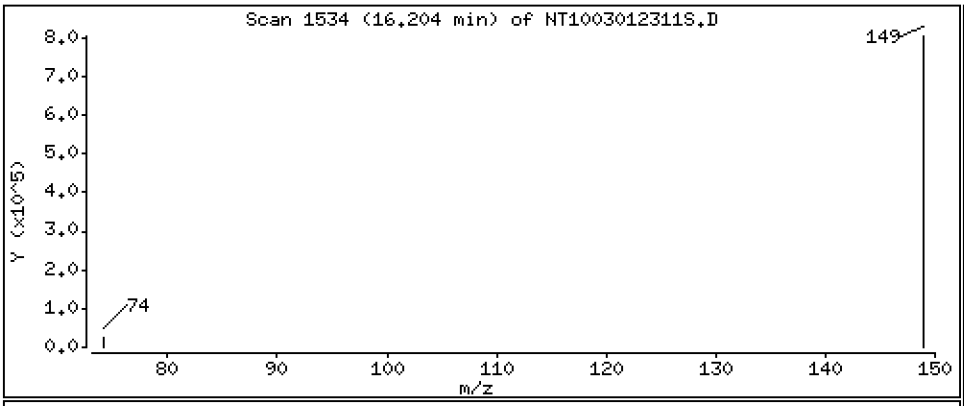
Operator: JGR

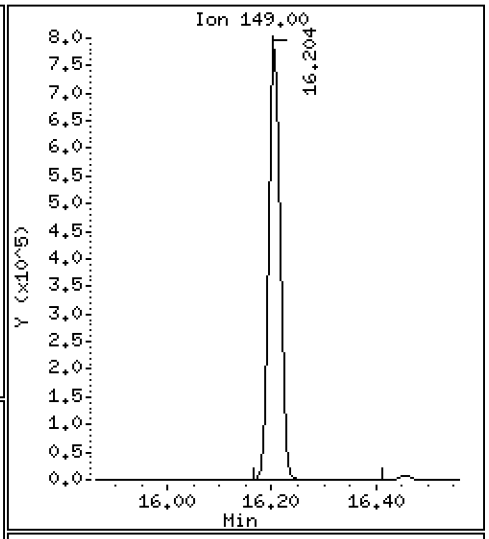
Column phase: ZB-5msi

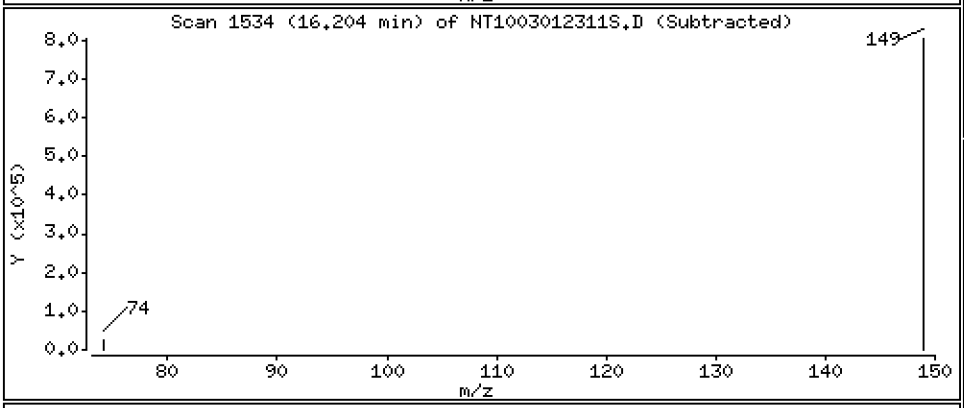
Column diameter: 0.25

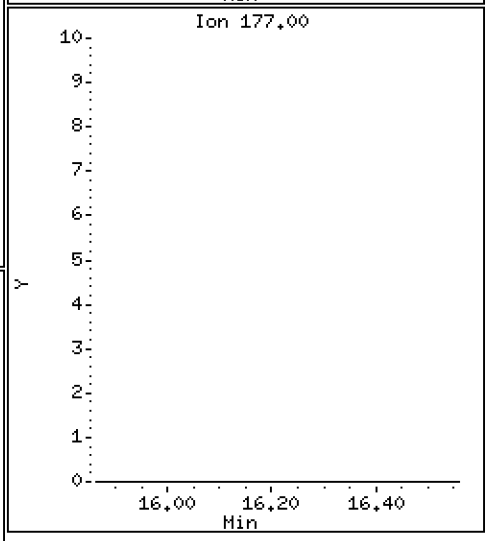
50 Diethylphthalate

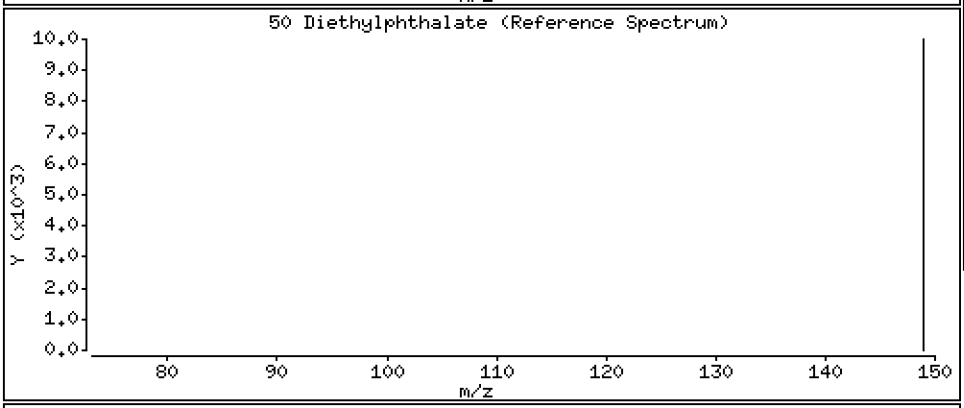
Concentration: 5.979 ug/L

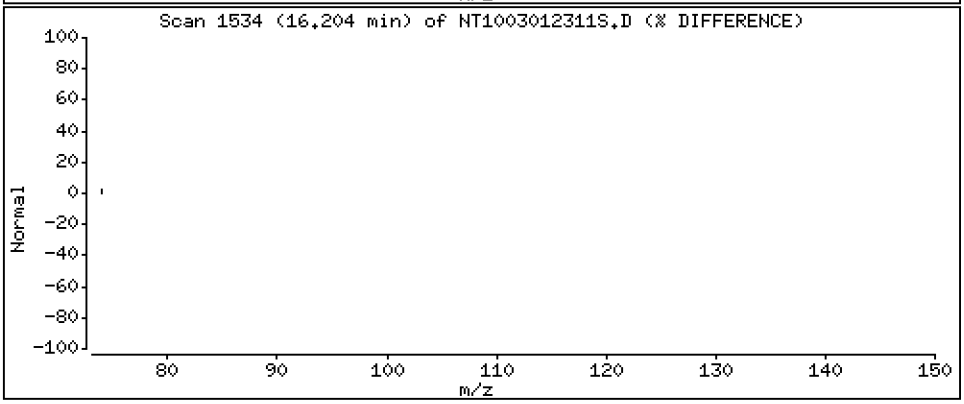












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

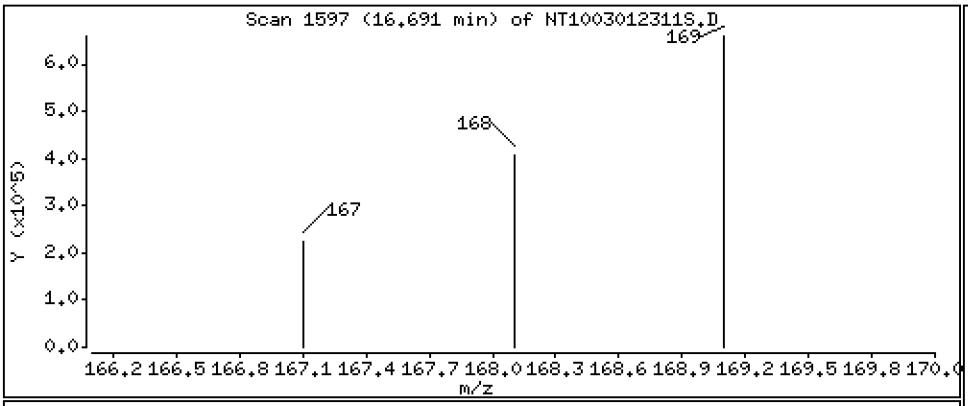
Operator: JGR

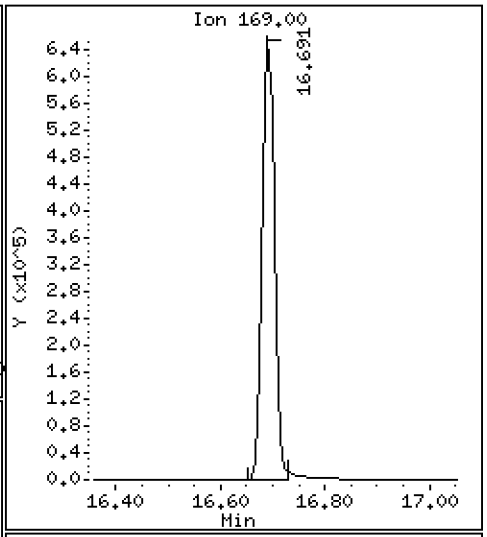
Column phase: ZB-5msi

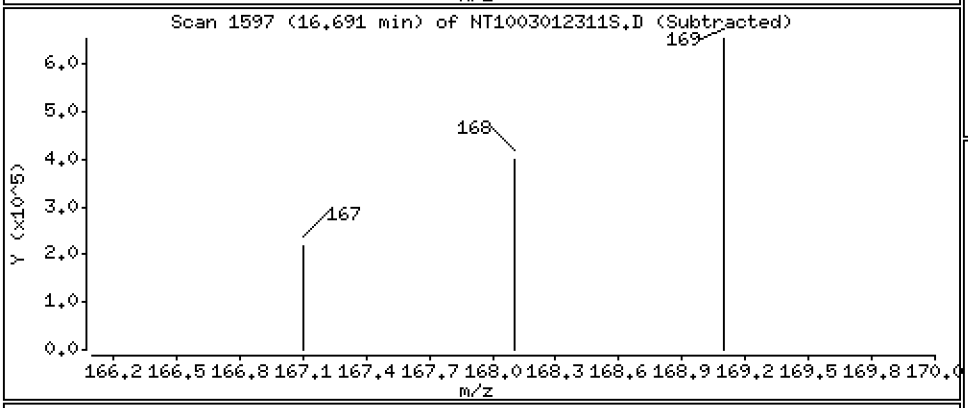
Column diameter: 0.25

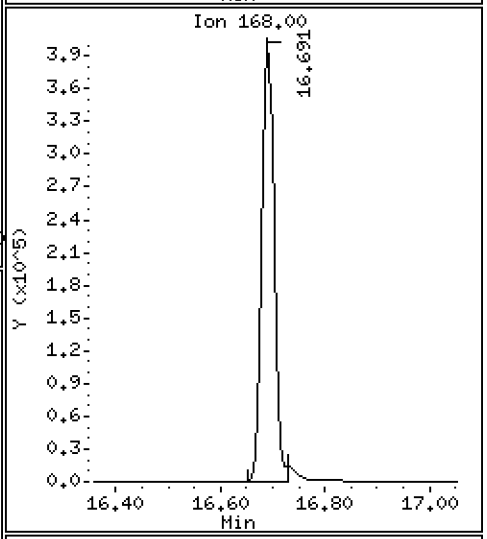
54 N-Nitrosodiphenylamine

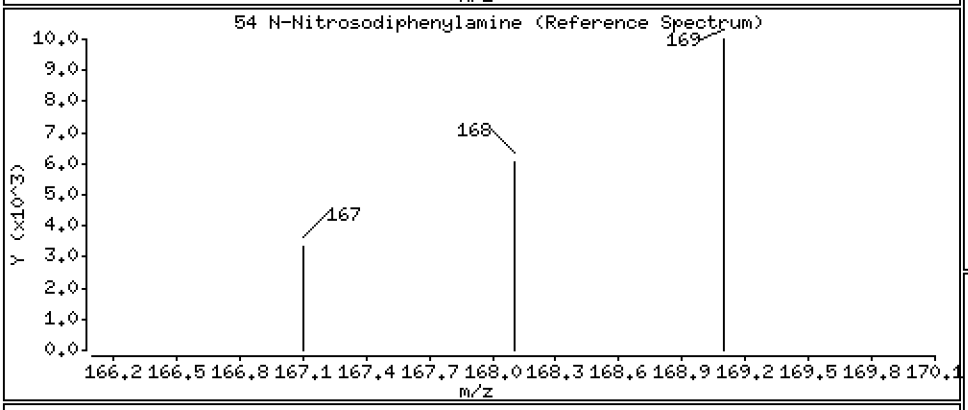
Concentration: 5.359 ug/L

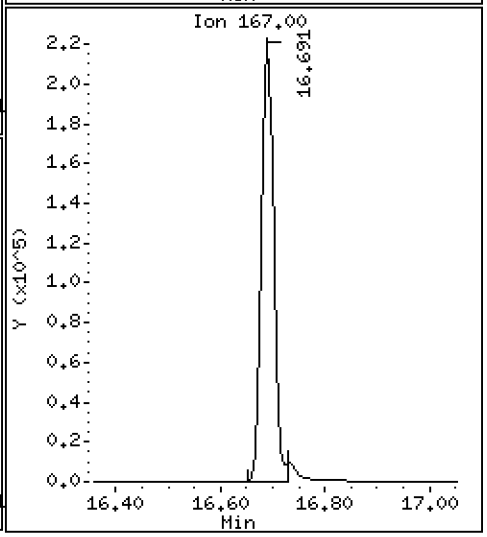


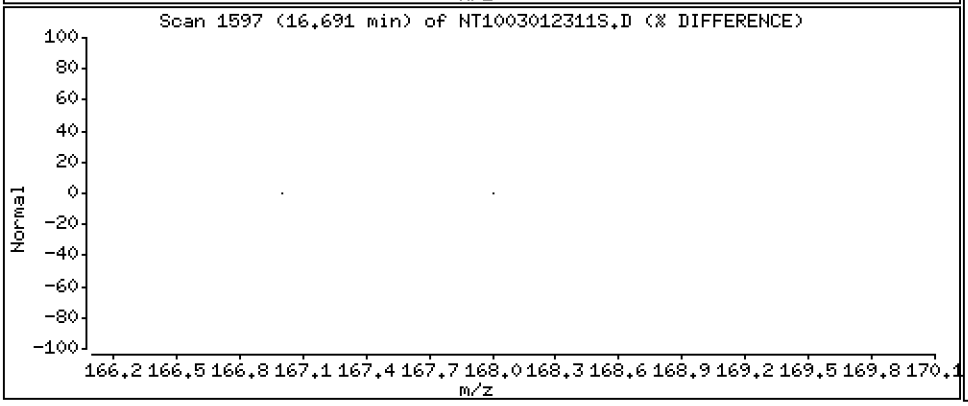












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

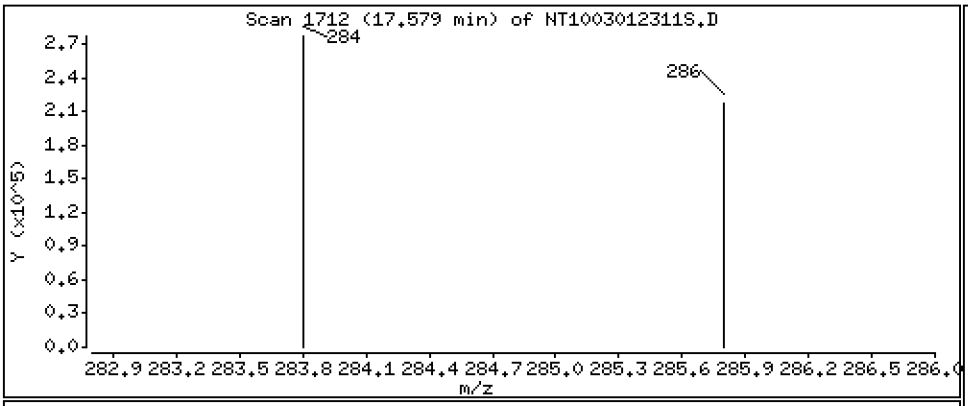
Operator: JGR

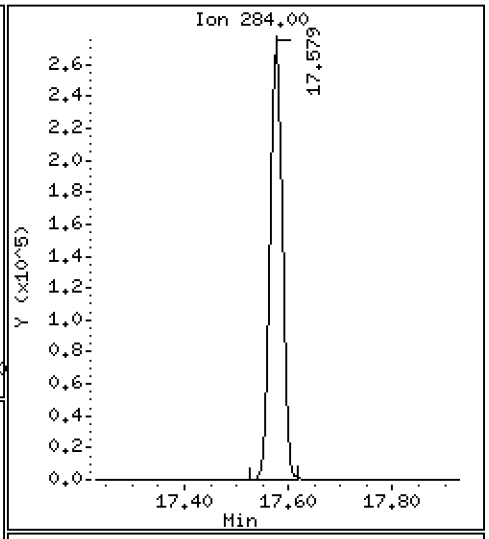
Column phase: ZB-5msi

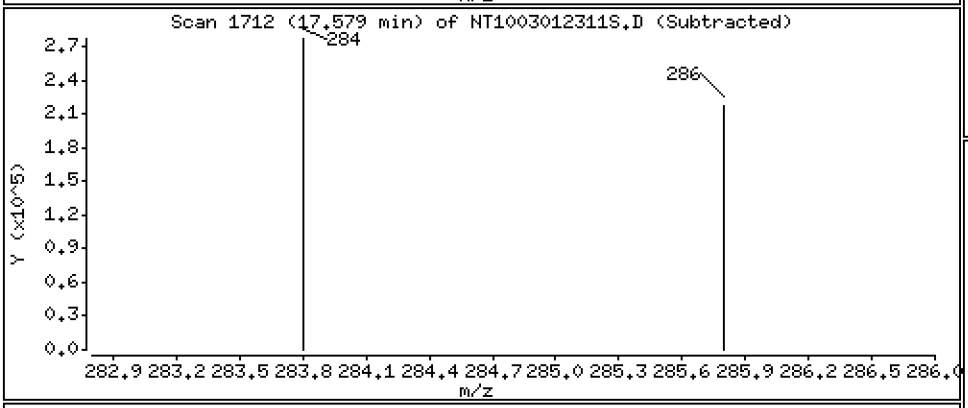
Column diameter: 0.25

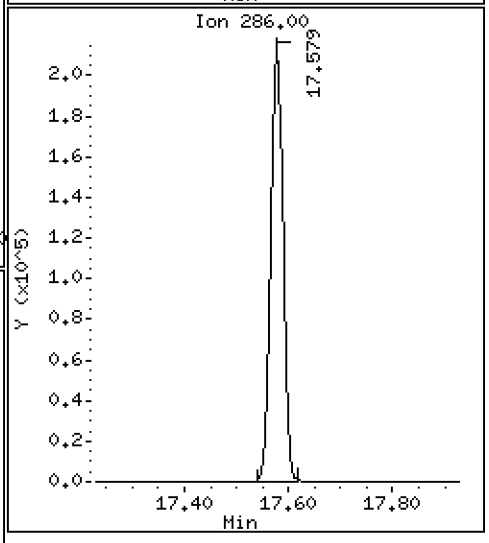
57 Hexachlorobenzene

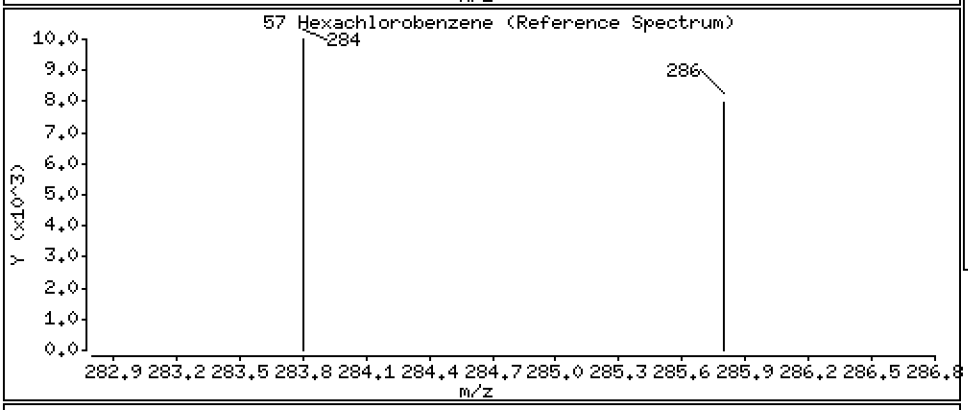
Concentration: 4.866 ug/L

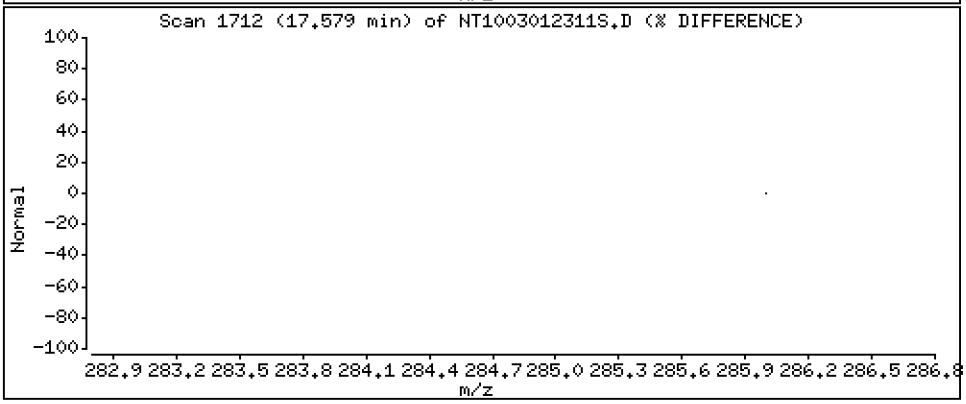












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

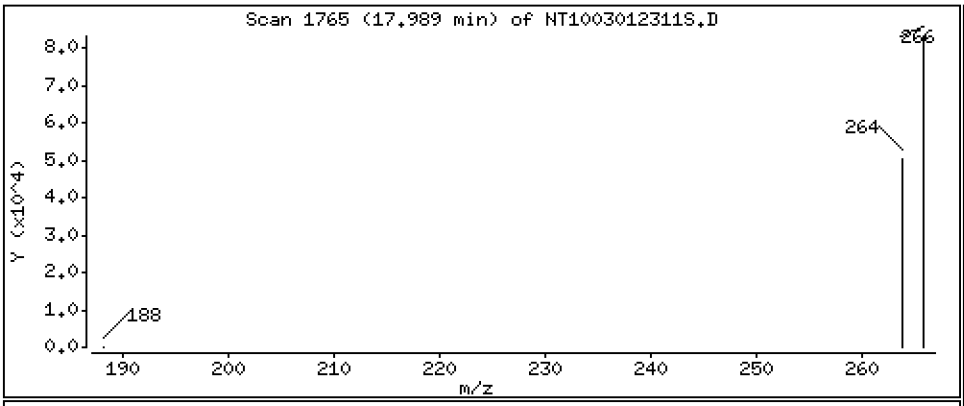
Operator: JGR

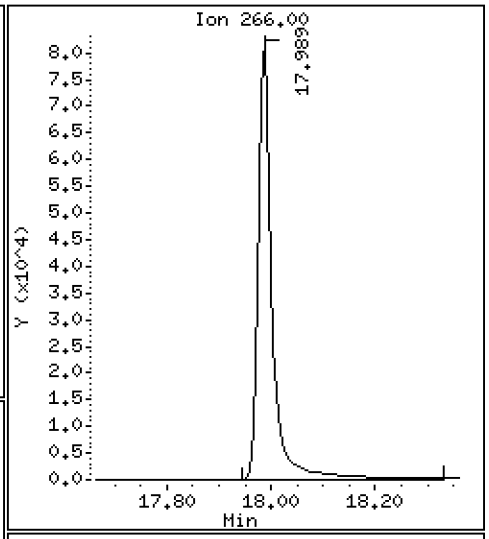
Column phase: ZB-5msi

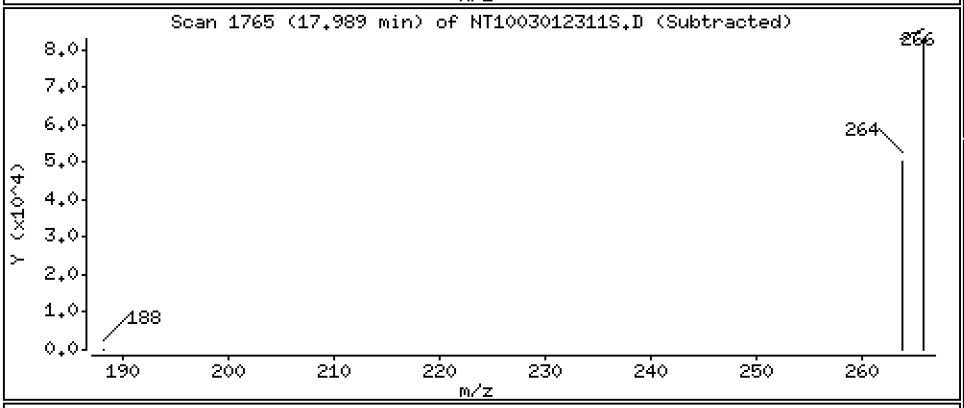
Column diameter: 0.25

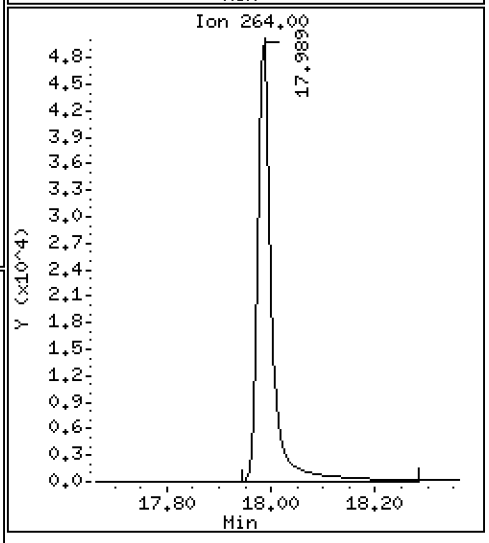
58 Pentachlorophenol

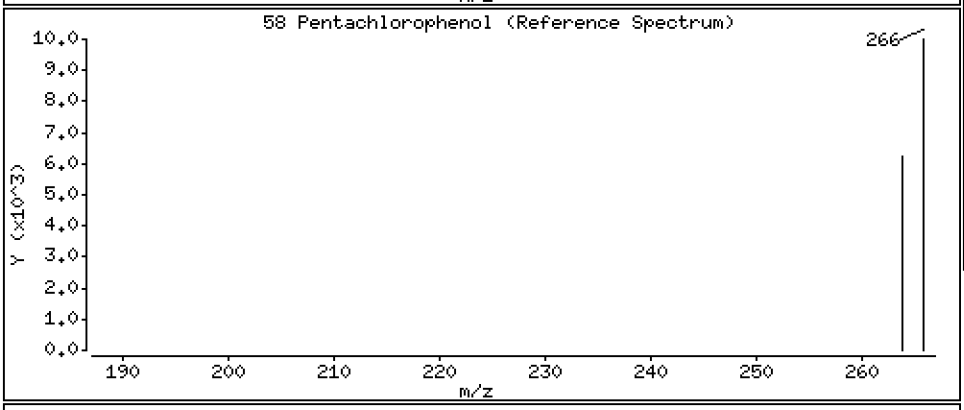
Concentration: 3.912 ug/L

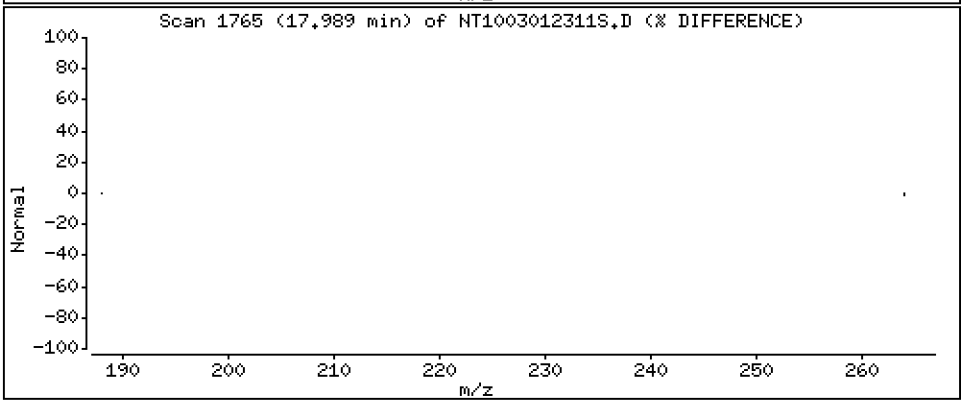












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

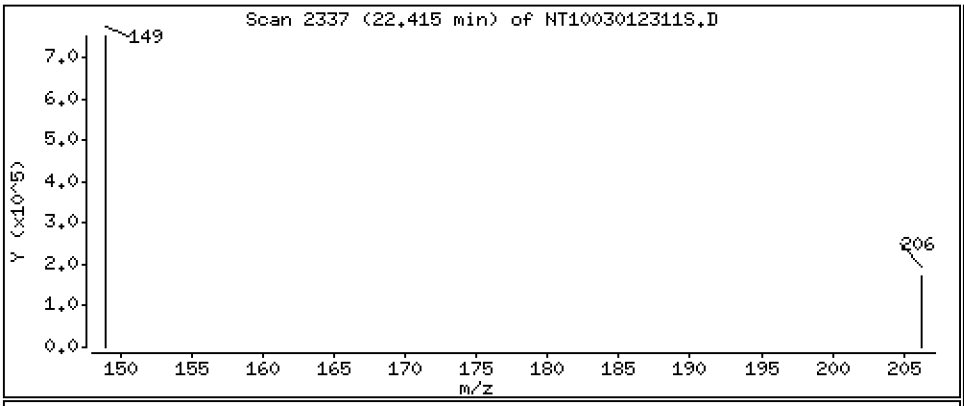
Operator: JGR

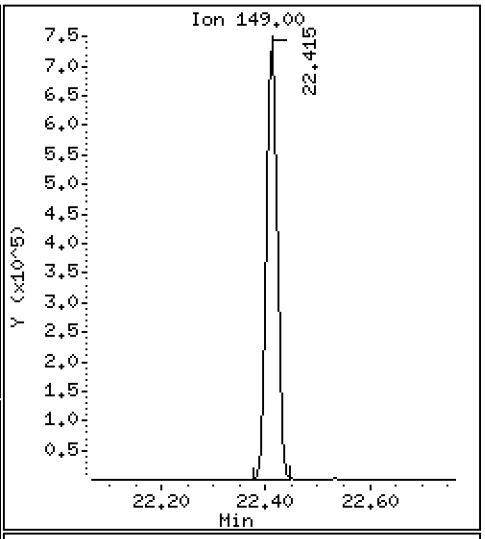
Column phase: ZB-5msi

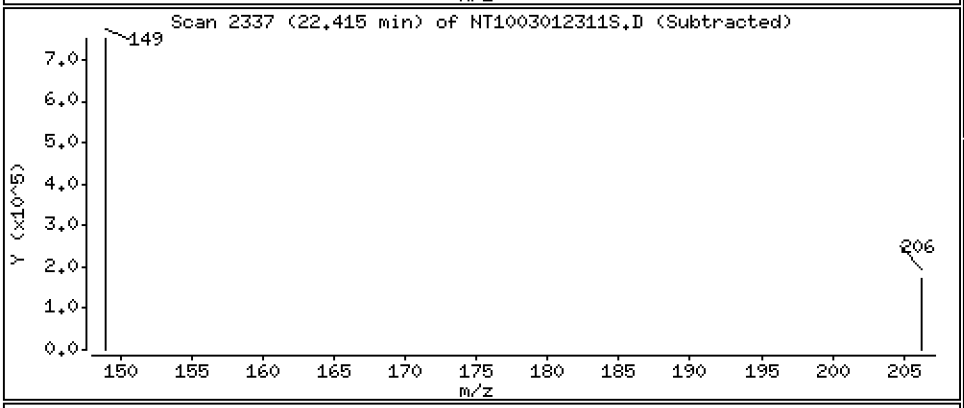
Column diameter: 0.25

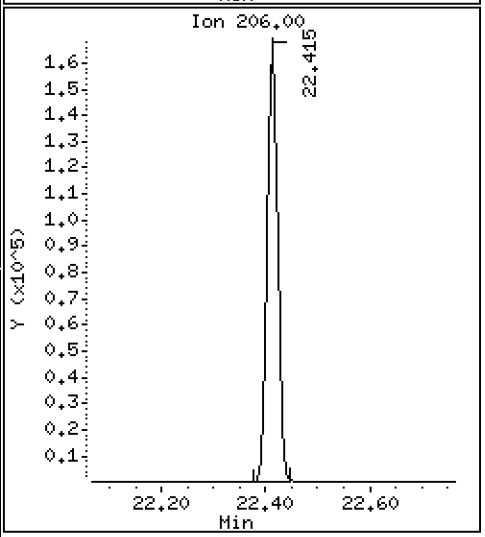
67 Butylbenzylphthalate

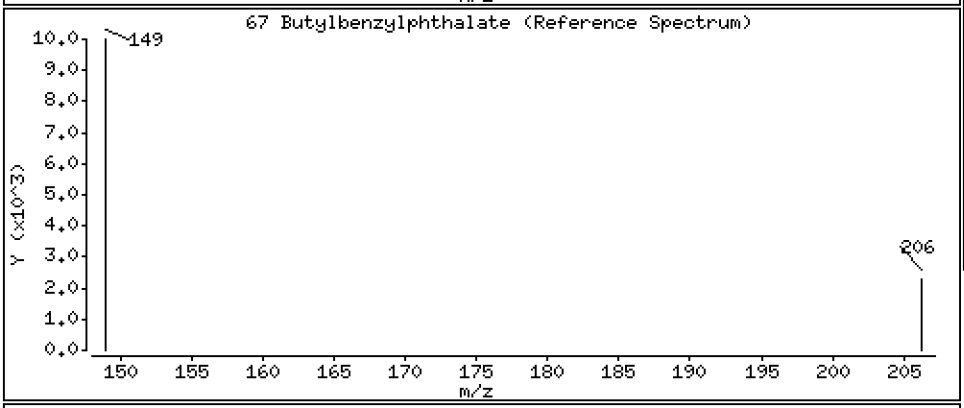
Concentration: 4.689 ug/L

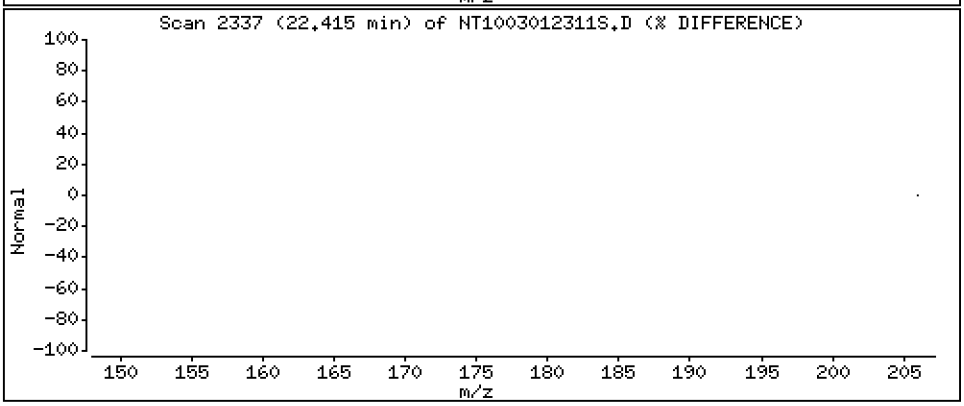












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

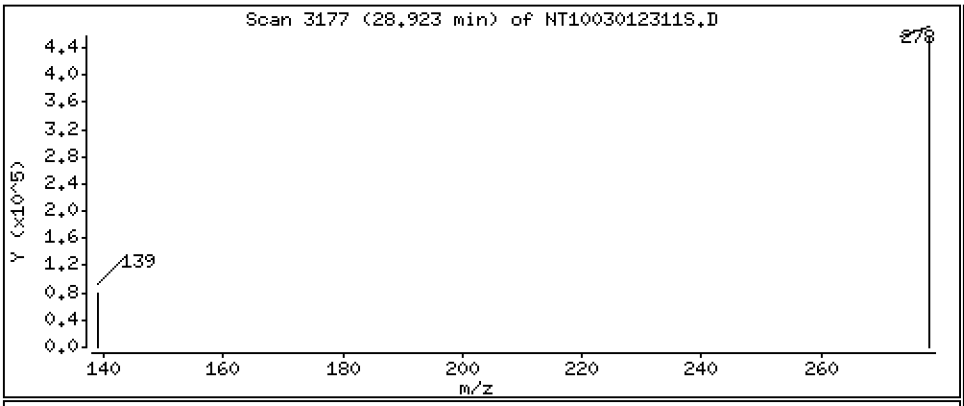
Operator: JGR

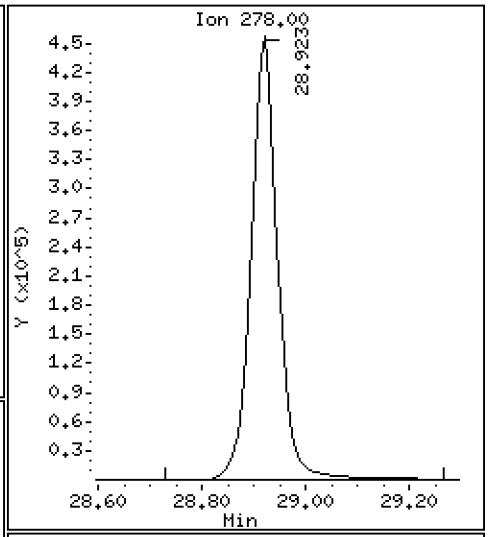
Column phase: ZB-5msi

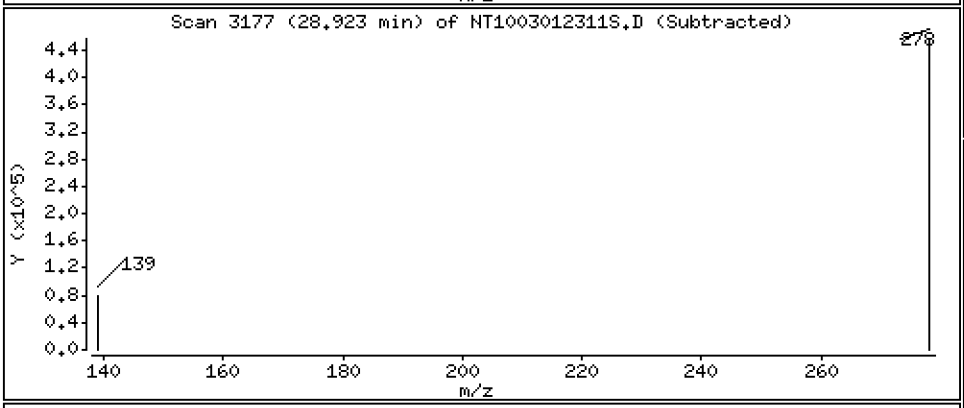
Column diameter: 0.25

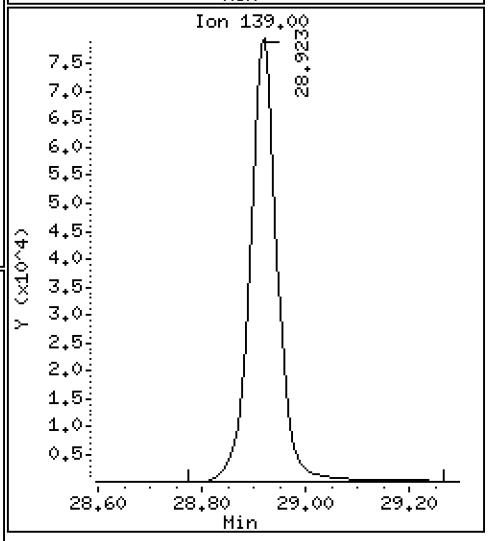
79 Dibenzo(a,h)anthracene

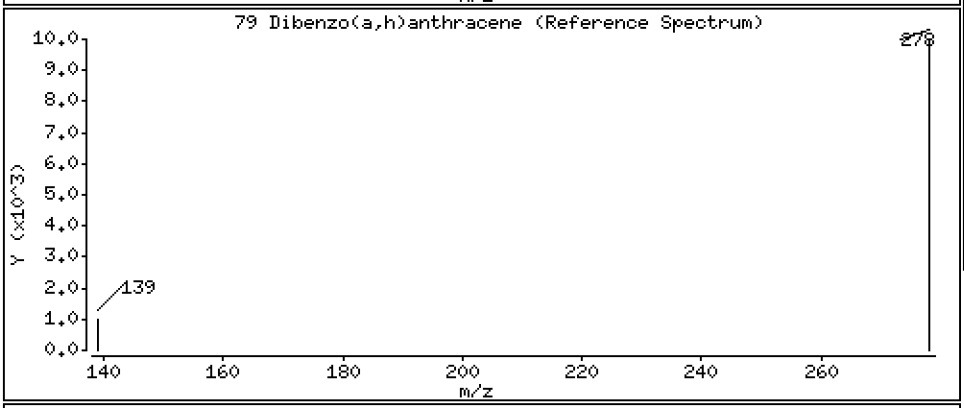
Concentration: 4.760 ug/L

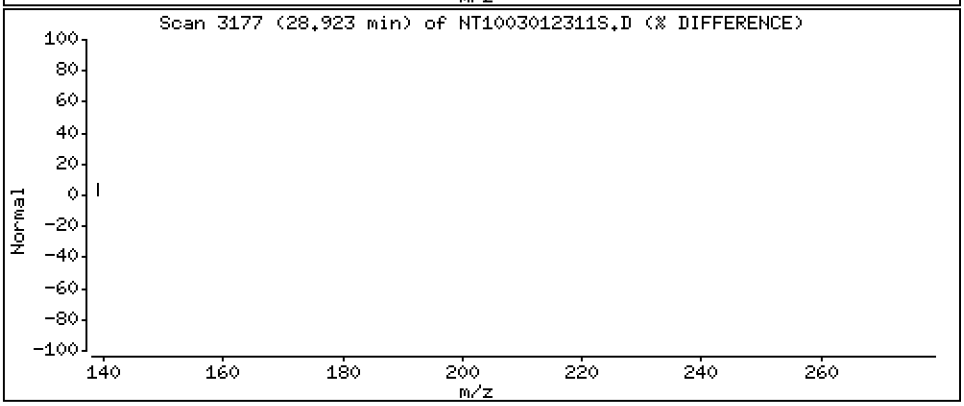












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

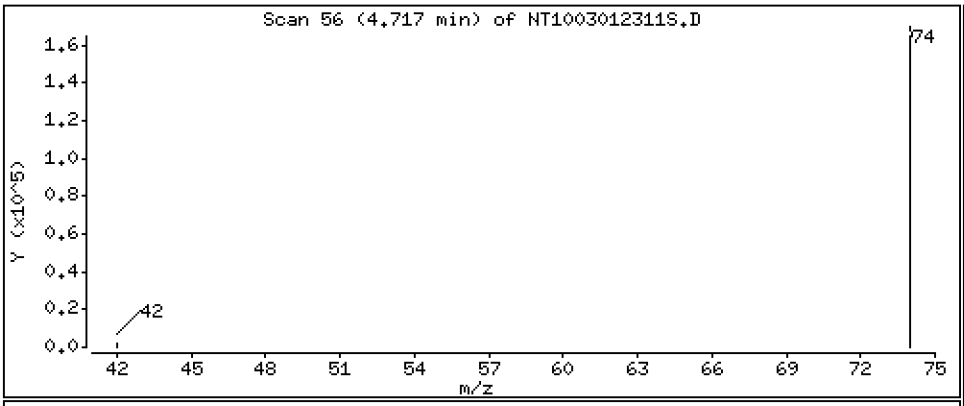
Operator: JGR

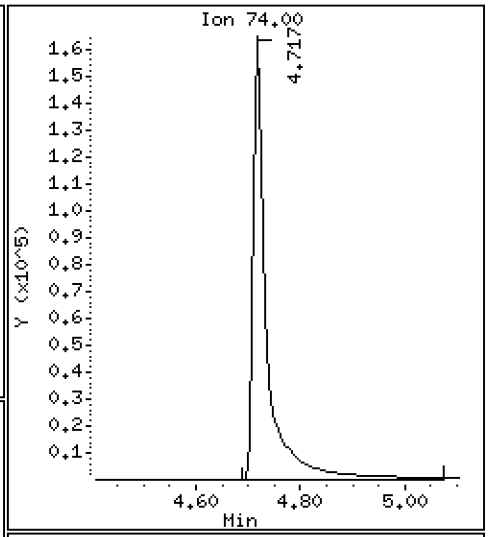
Column phase: ZB-5msi

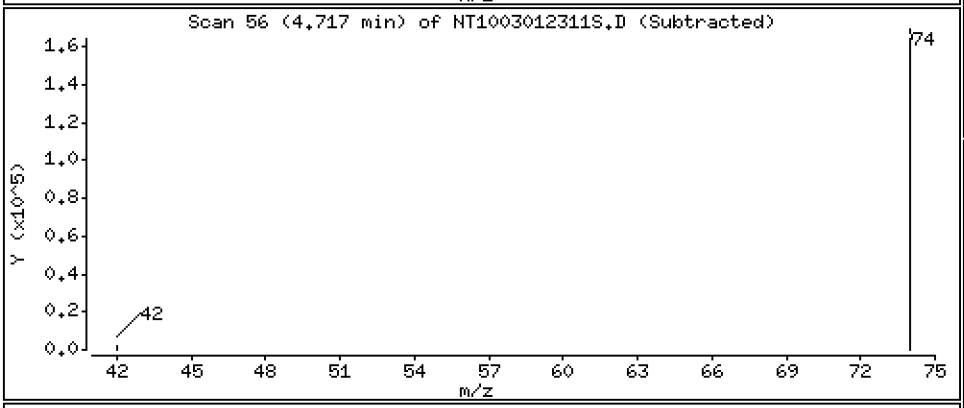
Column diameter: 0.25

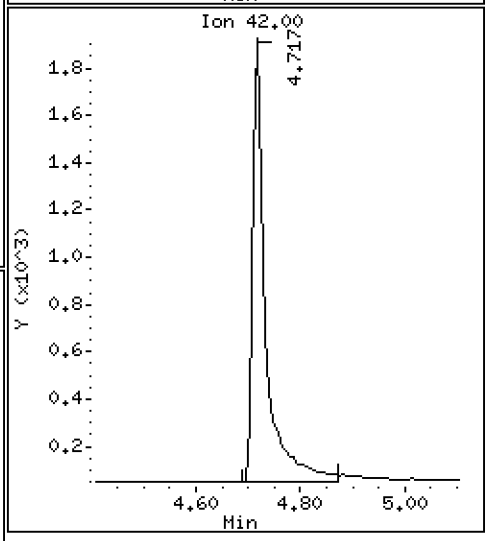
90 N-Nitrosodimethylamine

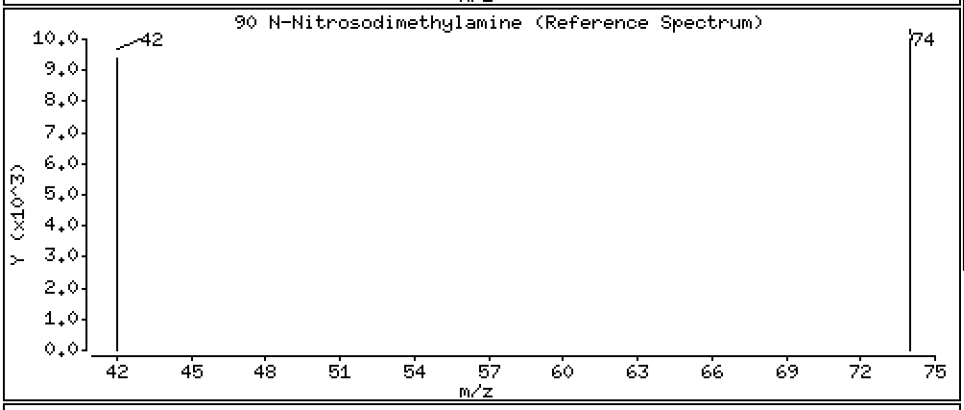
Concentration: 6.057 ug/L

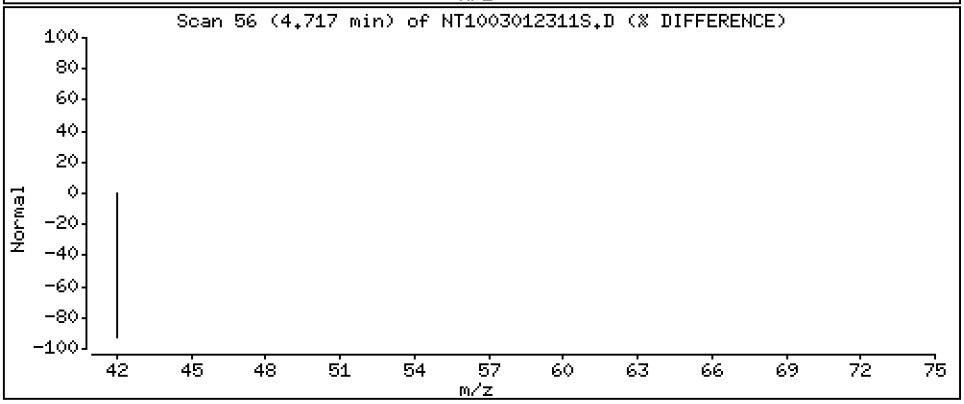












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012311S.D
Lab Smp Id: SLC0143-SCV1
Inj Date : 01-MAR-2023 21:46 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$	1 2-Fluorophenol	112	6.902	6.902	(0.746)	3267	0.03768	0.03768(R)
	3 Phenol	94	8.517	8.532	(0.921)	590047	4.50660	4.507
	7 1,3-Dichlorobenzene	146	9.143	9.136	(0.988)	572299	5.08409	5.084
*	8 1,4-Dichlorobenzene-d4	152	9.252	9.252	(1.000)	303734	4.00000	
	9 1,4-Dichlorobenzene	146	9.283	9.275	(1.003)	574537	5.24962	5.250
	11 Benzyl alcohol	79	9.469	9.508	(1.023)	388582	5.10390	5.104
	12 1,2-Dichlorobenzene	146	9.562	9.563	(1.034)	540938	5.14228	5.142
	13 2-Methylphenol	108	9.655	9.671	(1.044)	348452	4.36547	4.365
	15 4-Methylphenol	108	9.943	9.966	(1.075)	379262	4.50495	4.505
	16 N-Nitroso-di-n-propylamine	70	9.982	9.982	(1.079)	330861	5.68451	5.685
	22 2,4-Dimethylphenol	107	10.998	11.006	(0.938)	357707	3.63670	3.637
	24 Benzoic acid	105	11.099	11.007	(0.947)	380081	6.86990	6.870
	26 1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	402252	4.87012	4.870
*	27 Naphthalene-d8	136	11.724	11.723	(1.000)	1147551	4.00000	
	30 Hexachlorobutadiene	225	11.994	11.994	(1.023)	285002	4.86242	4.862
	39 Dimethylphthalate	163	14.741	14.749	(0.963)	1142178	5.57065	5.571
*	42 Acenaphthene-d10	162	15.314	15.314	(1.000)	645730	4.00000	
	50 Diethylphthalate	149	16.203	16.211	(1.058)	1156037	5.97883	5.979
	54 N-Nitrosodiphenylamine	169	16.690	16.705	(0.907)	998237	5.35897	5.359
	57 Hexachlorobenzene	284	17.578	17.579	(0.955)	424193	4.86607	4.866

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	17.989	18.012	(0.978)	155412	3.91206	3.912
*	59 Phenanthrene-d10	188	18.399	18.398	(1.000)	1151000	4.00000	
$	66 Terphenyl-d14	244	21.524	21.532	(0.919)	2846	0.02712	0.02712(R)
	67 Butylbenzylphthalate	149	22.415	22.415	(0.957)	1009961	4.68912	4.689
*	69 Chrysene-d12	240	23.421	23.421	(1.000)	1297466	4.00000	
*	77 Perylene-d12	264	26.108	26.108	(1.000)	1394899	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.922	28.946	(1.108)	1657122	4.76032	4.760
	90 N-Nitrosodimethylamine	74	4.717	4.755	(0.510)	310951	6.05685	6.057

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012311S.D
Lab Smp Id: SLC0143-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 18:37
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	320125	160063	640250	303734	-5.12
27 Naphthalene-d8	1136019	568010	2272038	1147551	1.02
42 Acenaphthene-d10	636993	318497	1273986	645730	1.37
59 Phenanthrene-d10	1093620	546810	2187240	1151000	5.25
69 Chrysene-d12	1000300	500150	2000600	1297466	29.71
77 Perylene-d12	1058448	529224	2116896	1394899	31.79

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012311S.D

Lab ID: SLC0143-SCV1
nt10.i, 20230301.b\SIM.b\SIMABN2.m,   01-MAR-2023 21:46

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.947	0.000	0.9467	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123128.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

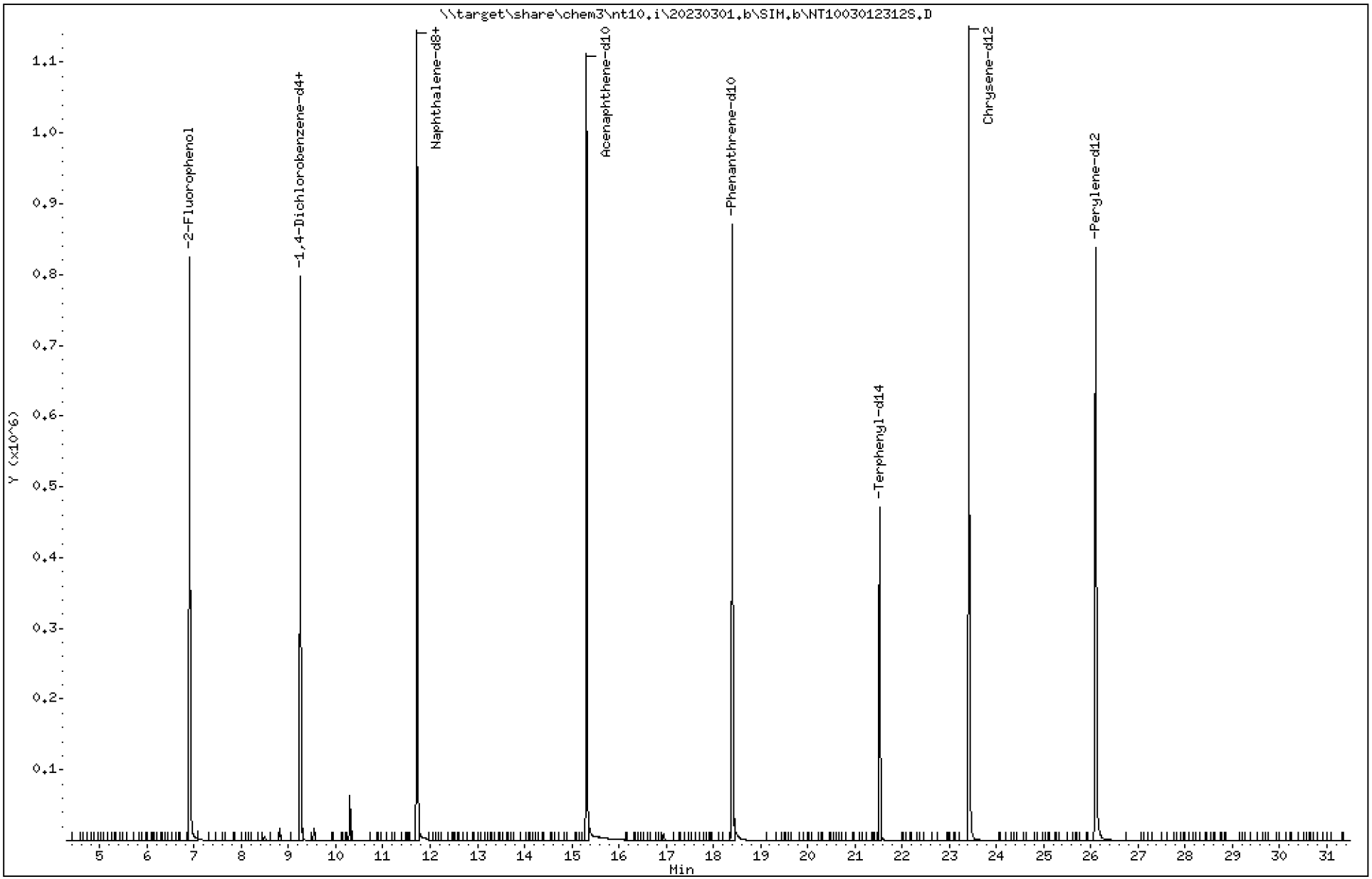
Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

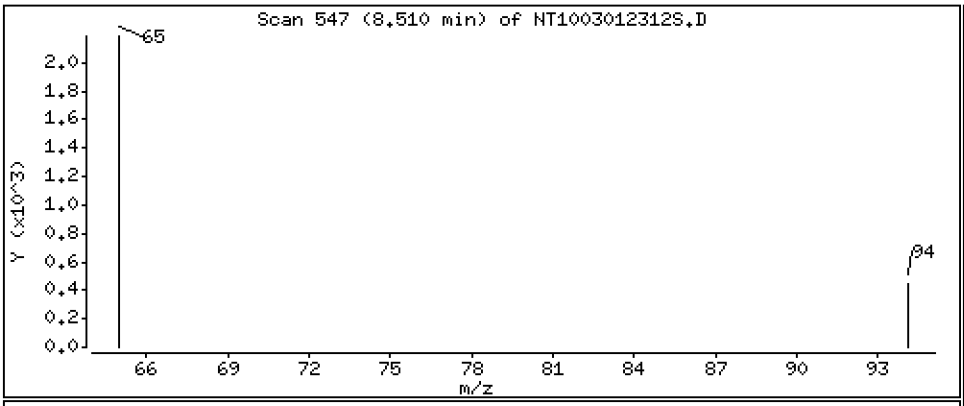
Operator: JGR

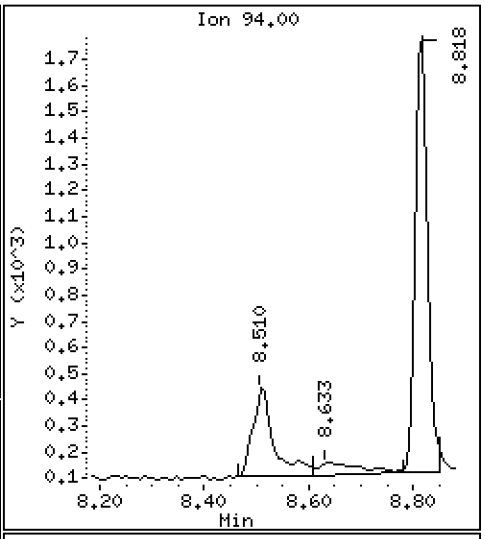
Column phase: ZB-5msi

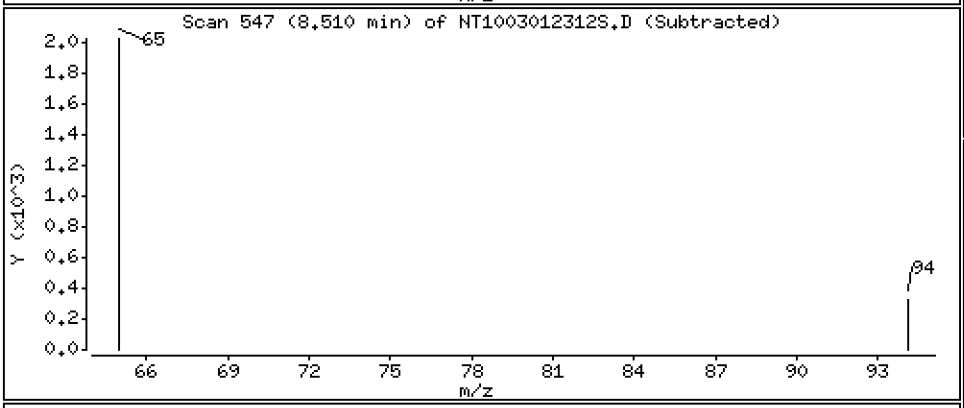
Column diameter: 0.25

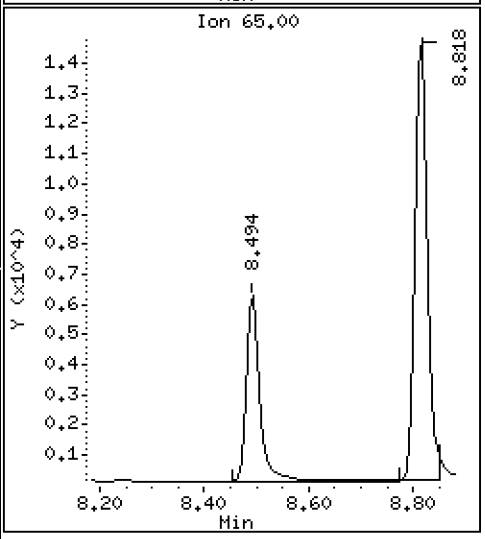
3 Phenol

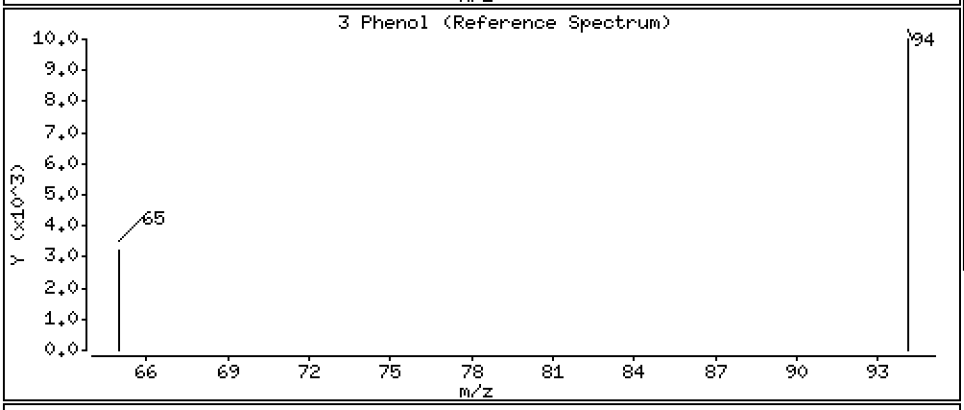
Concentration: 0.004664 ug/L

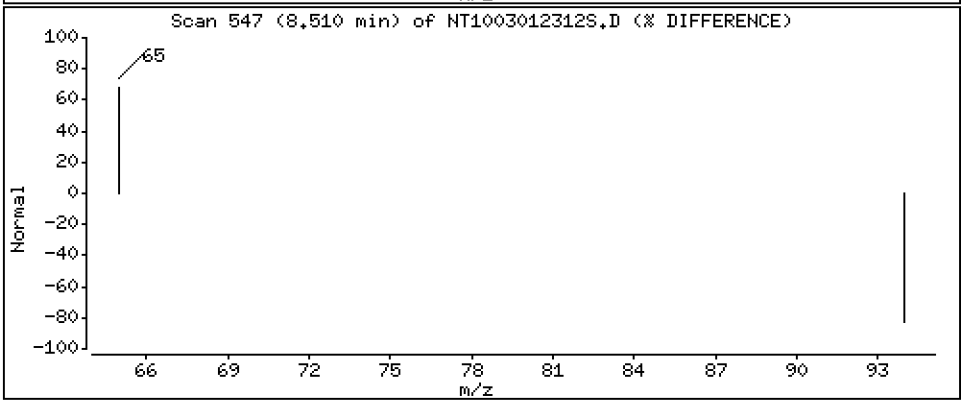












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

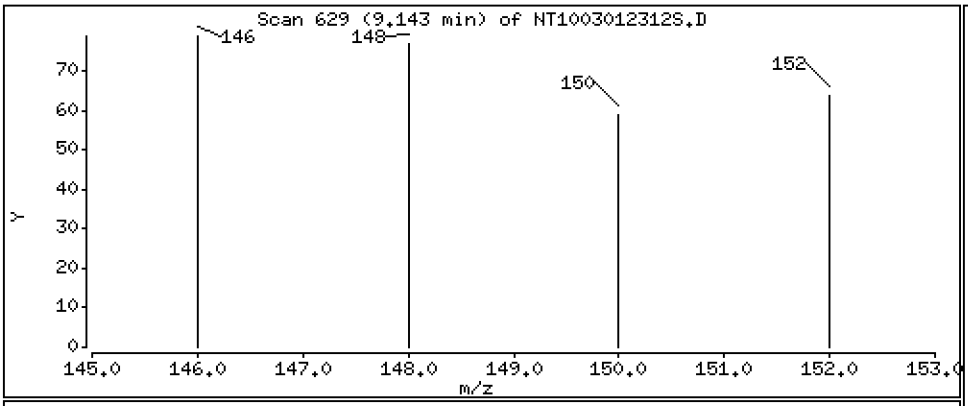
Operator: JGR

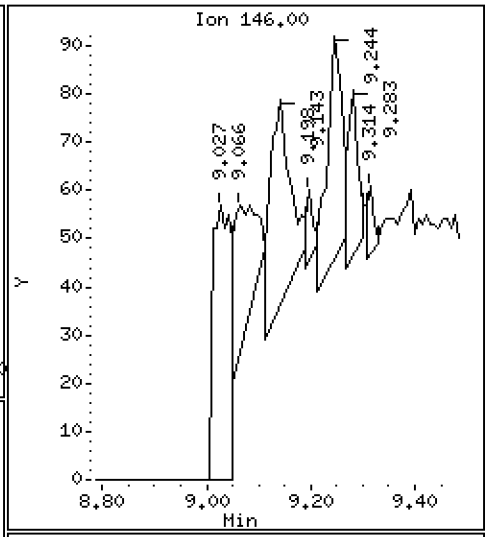
Column phase: ZB-5msi

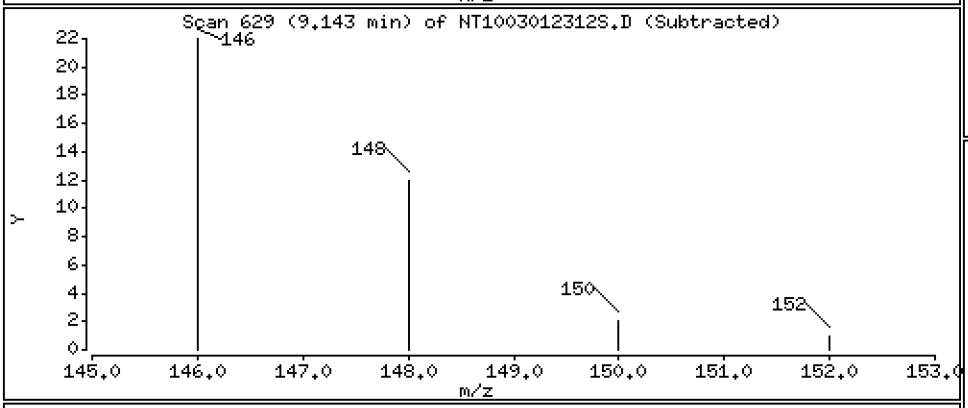
Column diameter: 0.25

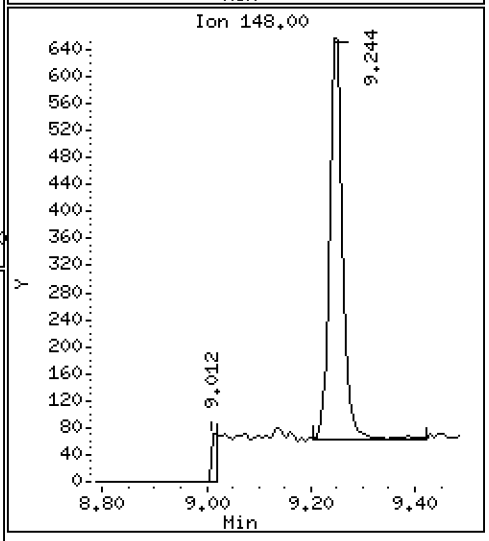
7 1,3-Dichlorobenzene

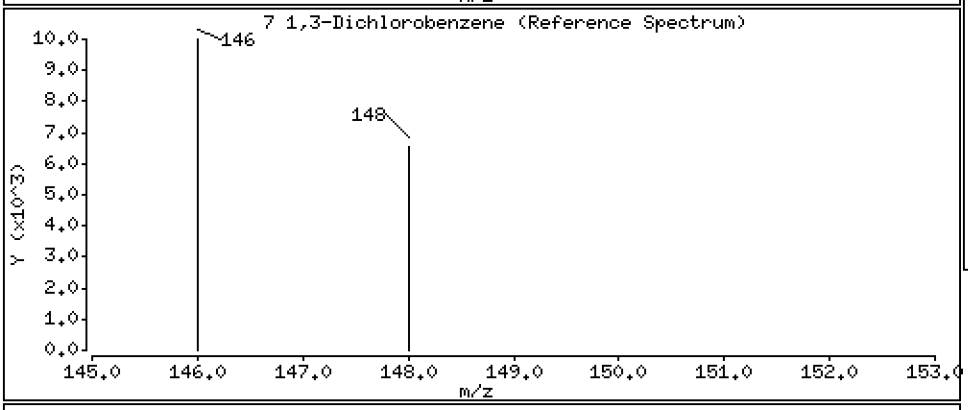
Concentration: 0.0006178 ug/L

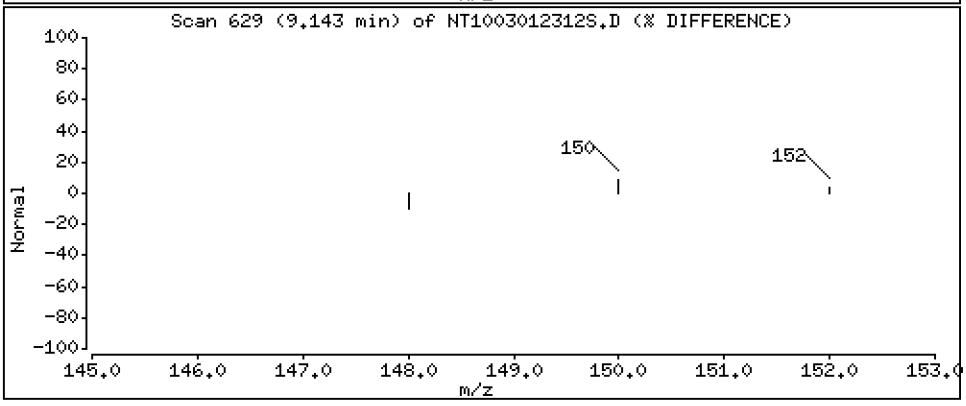












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

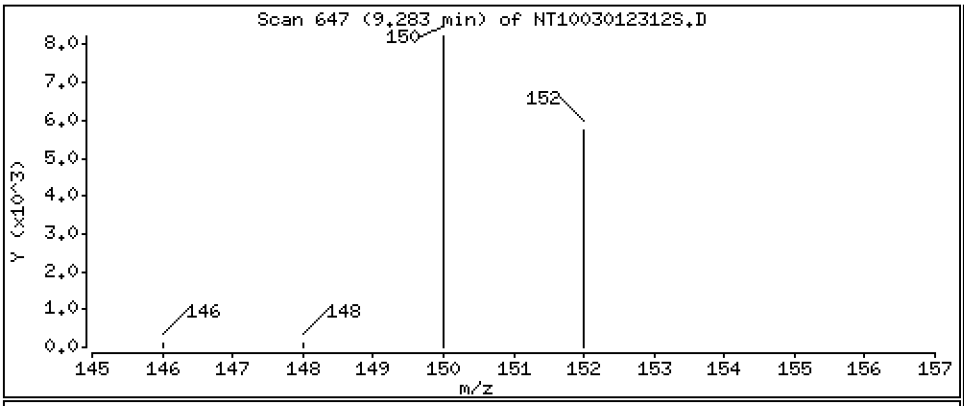
Operator: JGR

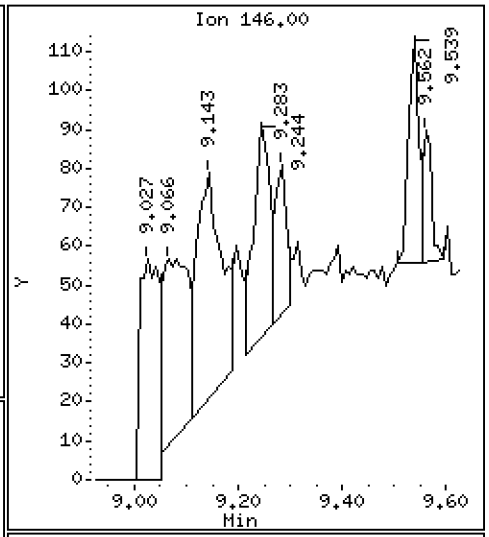
Column phase: ZB-5msi

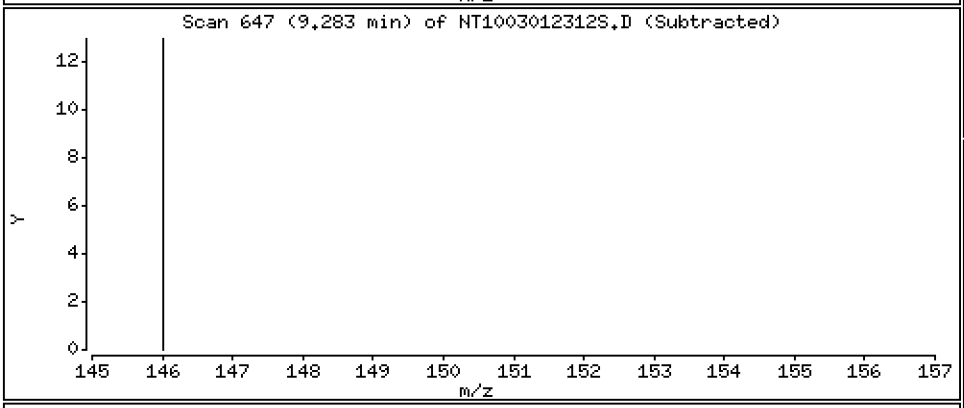
Column diameter: 0.25

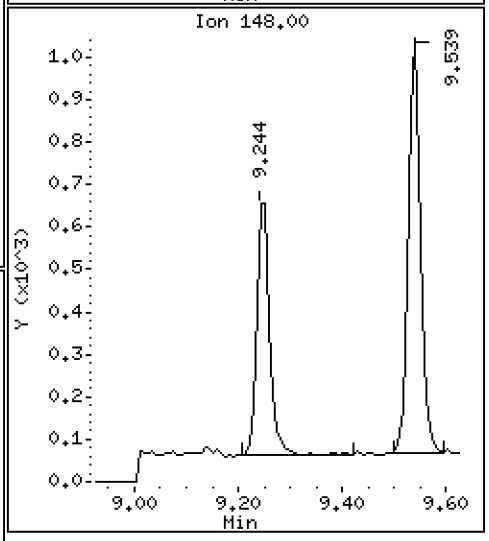
9 1,4-Dichlorobenzene

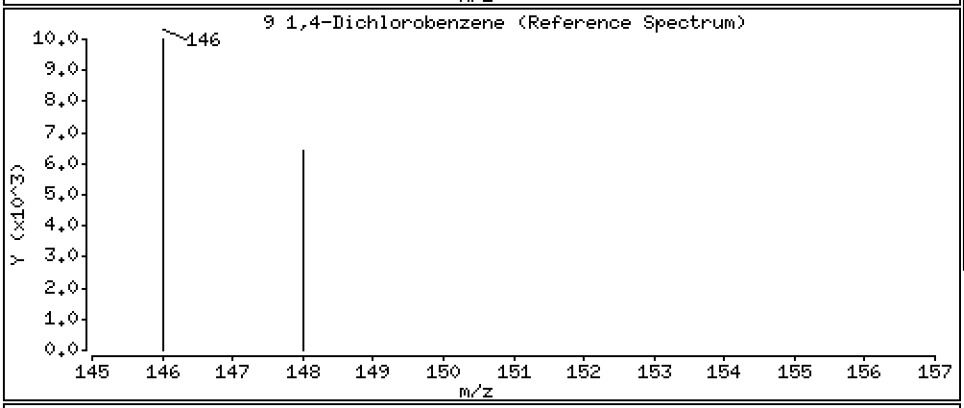
Concentration: 0.0003285 ug/L

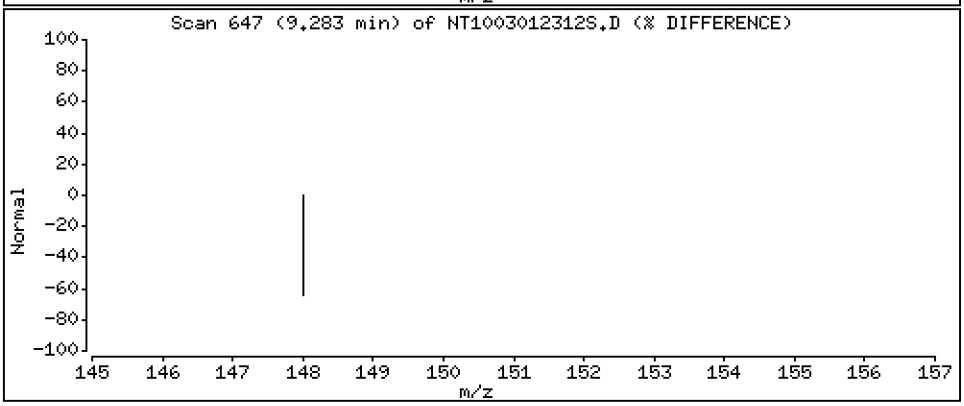












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

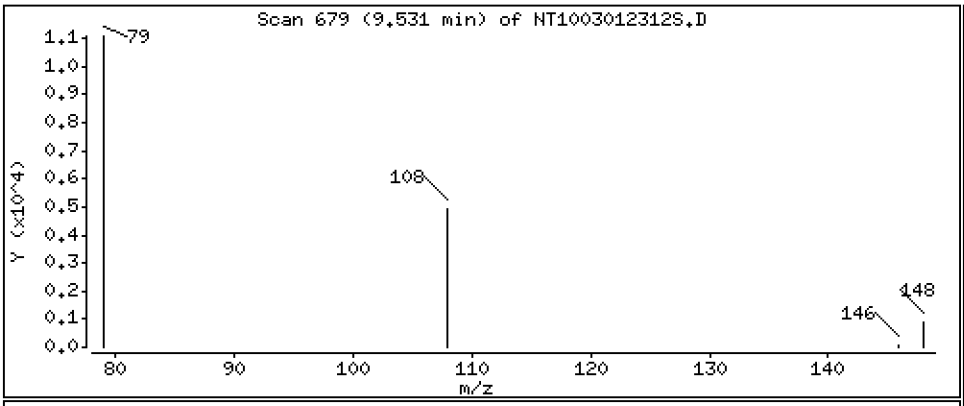
Operator: JGR

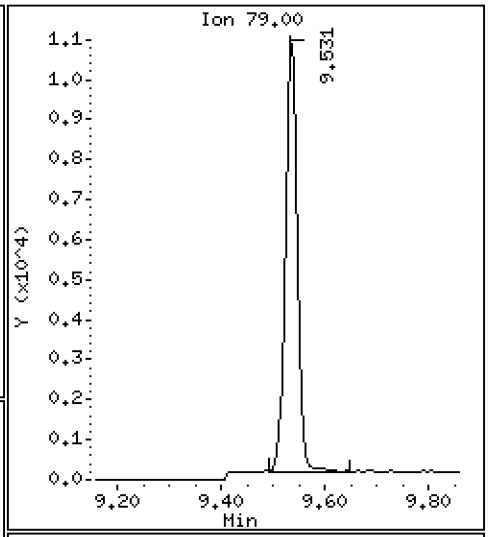
Column phase: ZB-5msi

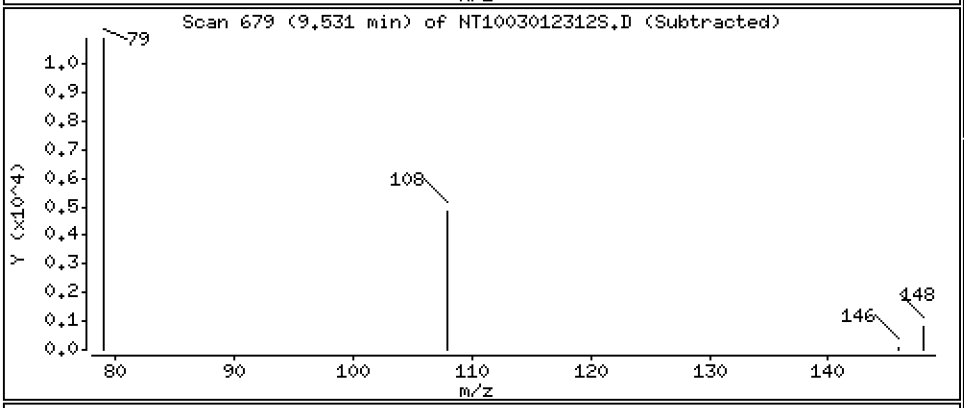
Column diameter: 0.25

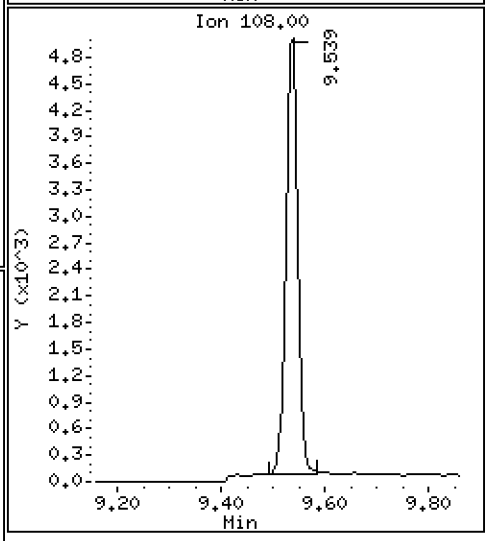
11 Benzyl alcohol

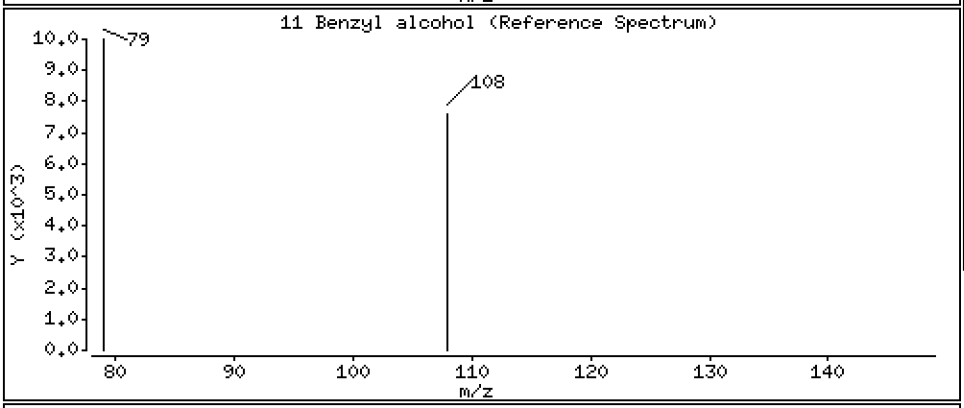
Concentration: 0.1469 ug/L

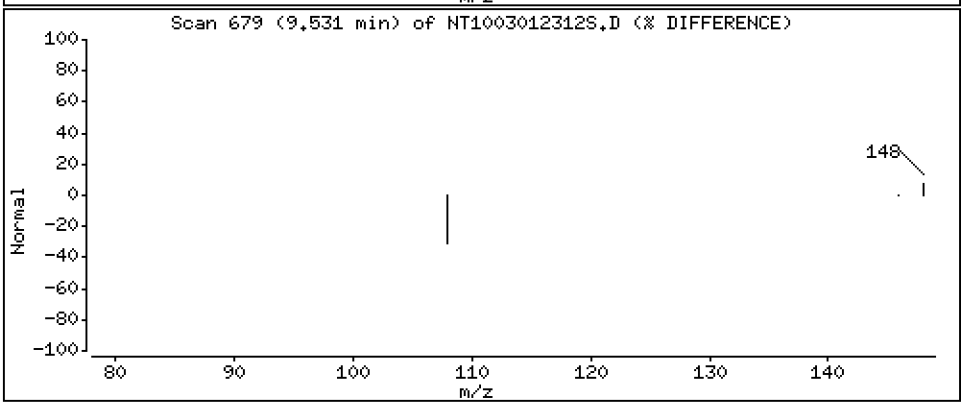












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

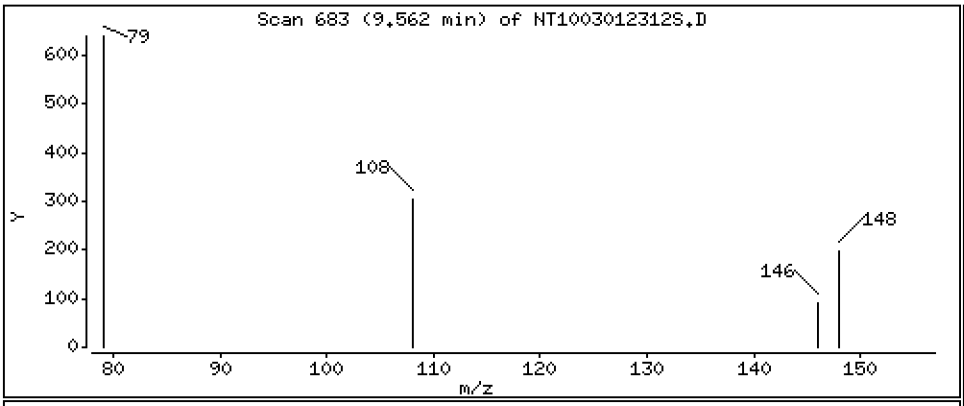
Operator: JGR

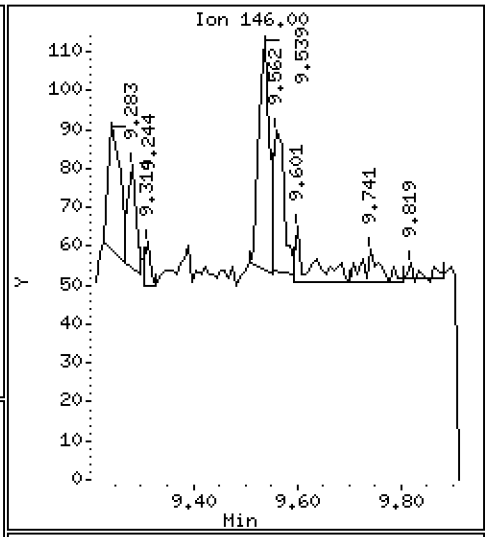
Column phase: ZB-5msi

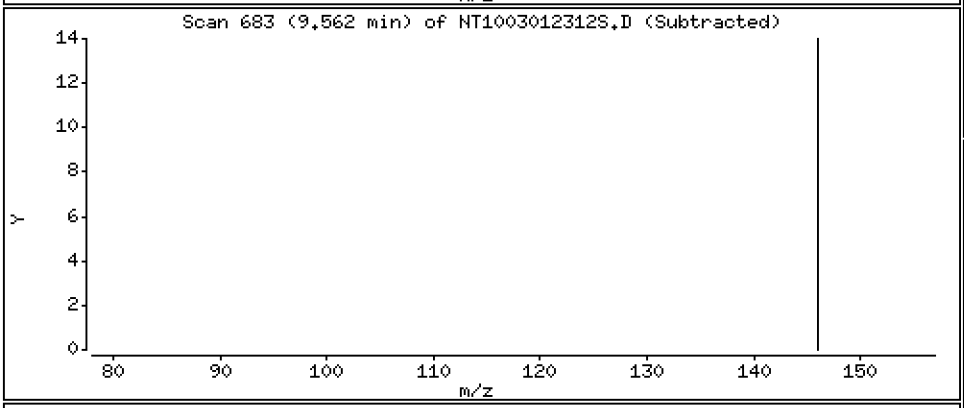
Column diameter: 0.25

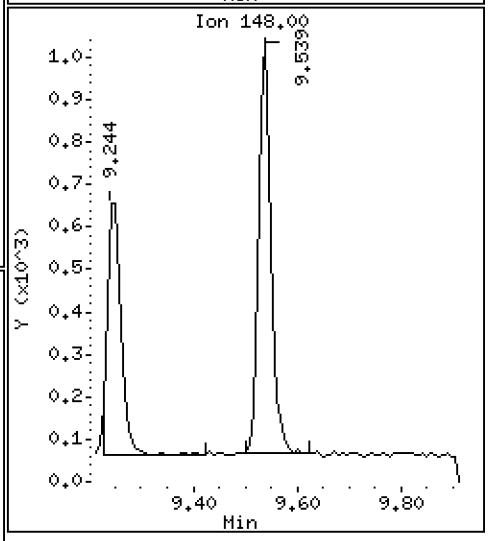
12 1,2-Dichlorobenzene

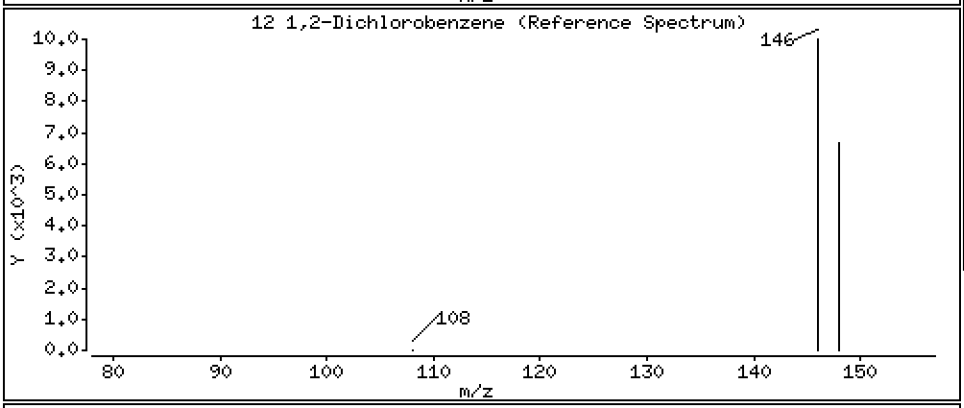
Concentration: 0.0002913 ug/L

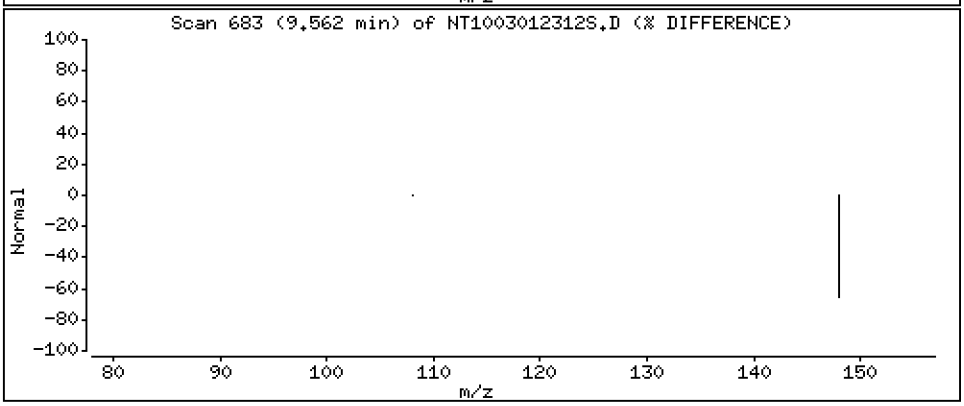












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

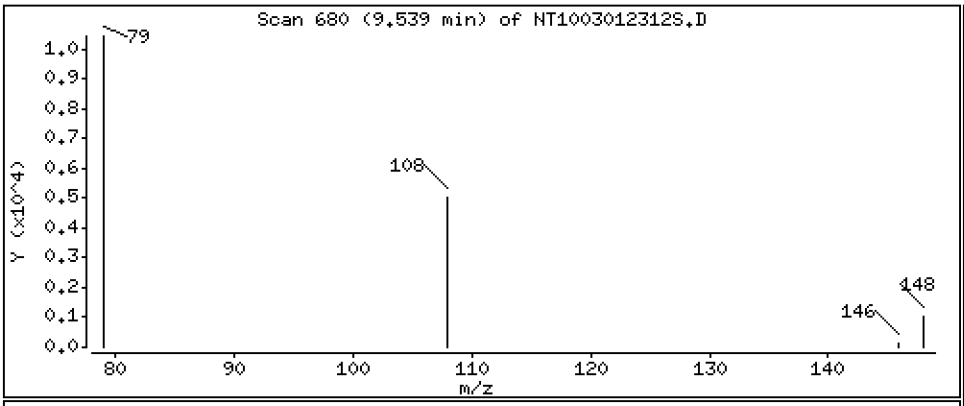
Operator: JGR

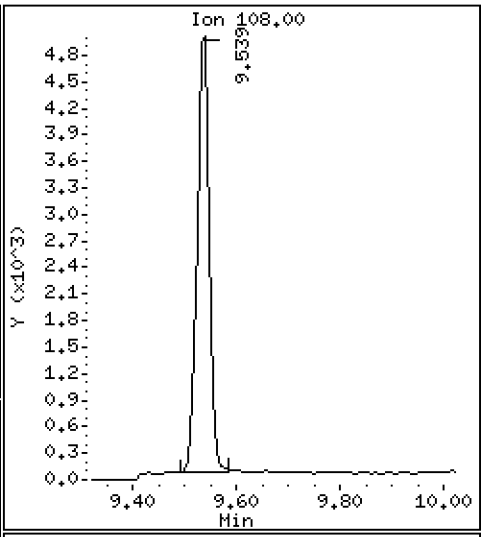
Column phase: ZB-5msi

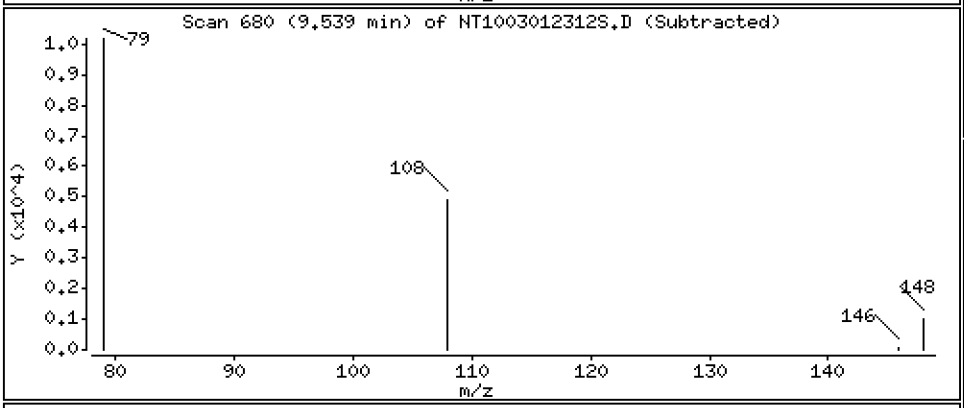
Column diameter: 0.25

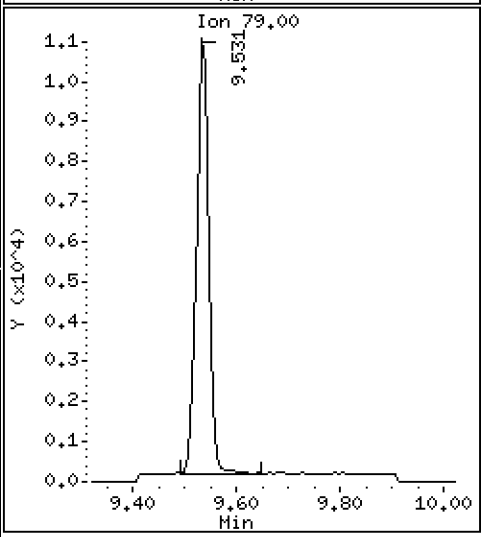
13 2-Methylphenol

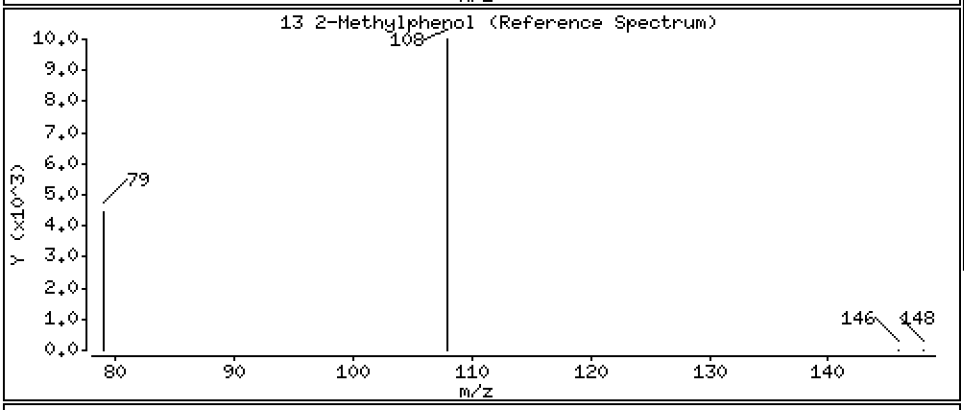
Concentration: 0.06143 ug/L

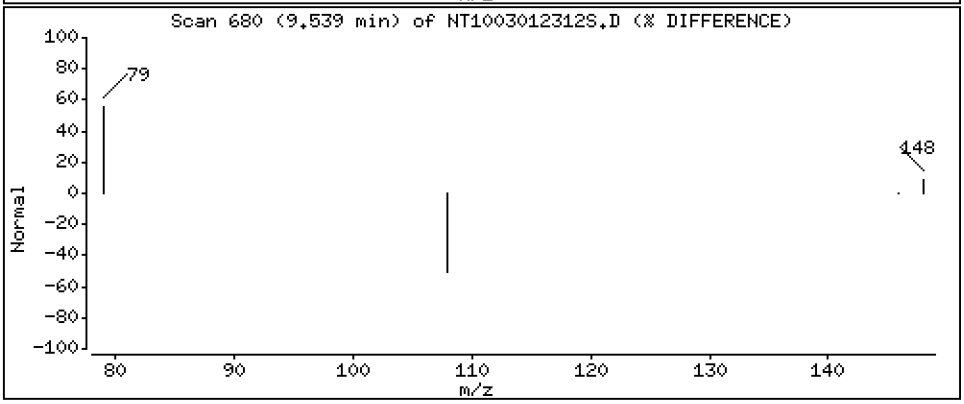












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

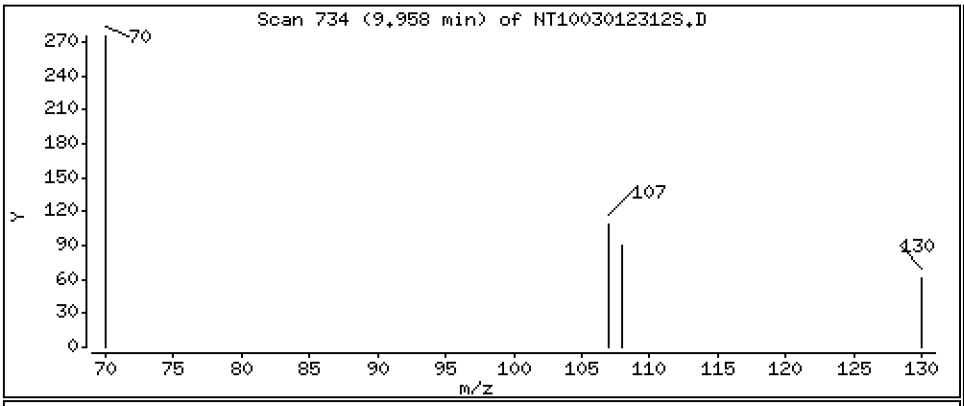
Operator: JGR

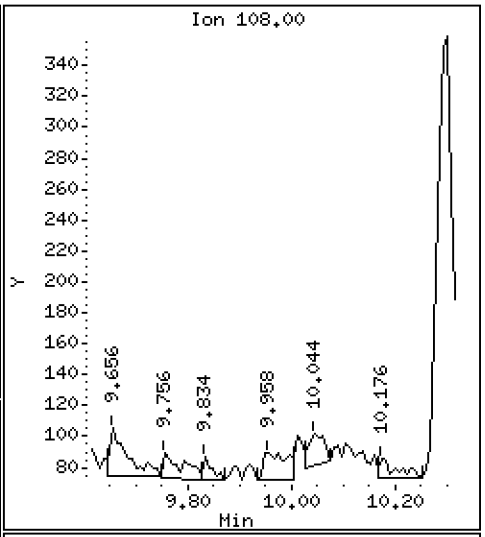
Column phase: ZB-5msi

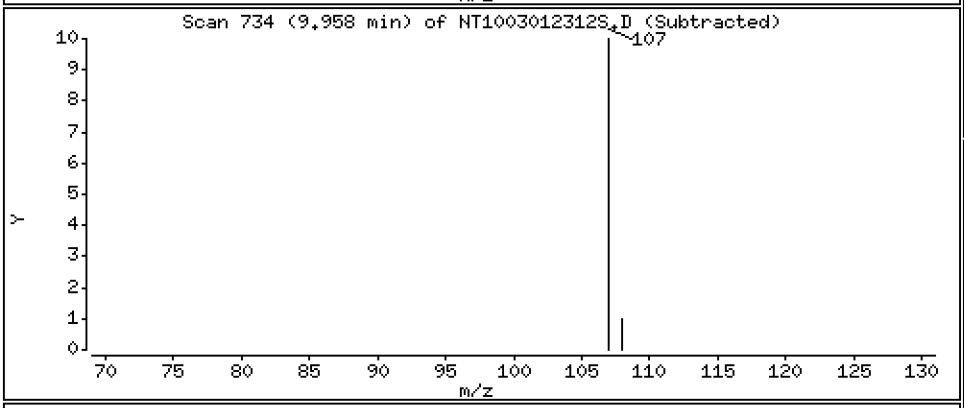
Column diameter: 0.25

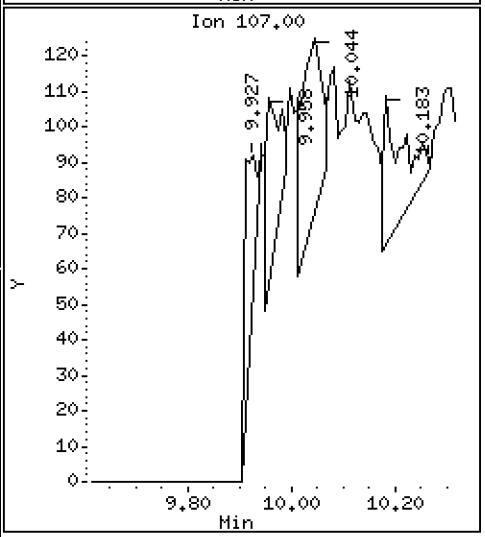
15 4-Methylphenol

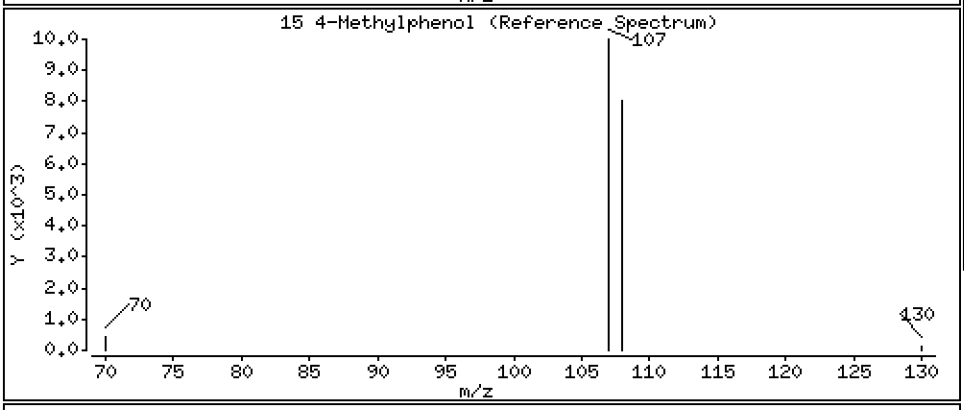
Concentration: 0.0004276 ug/L

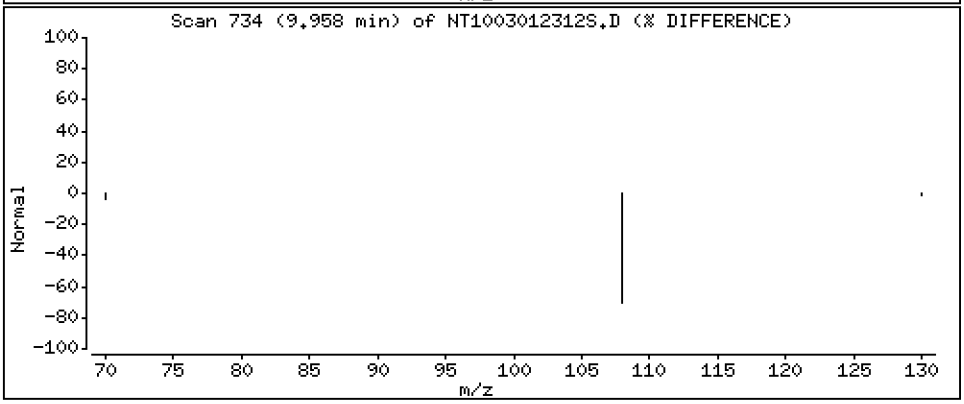












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

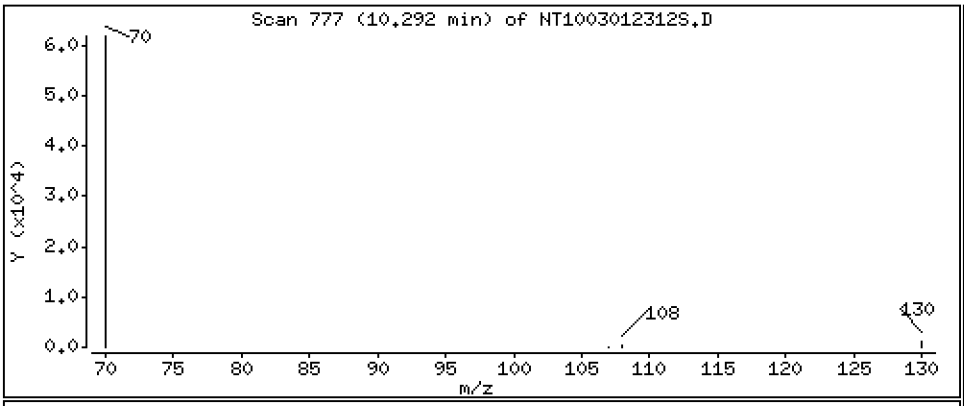
Operator: JGR

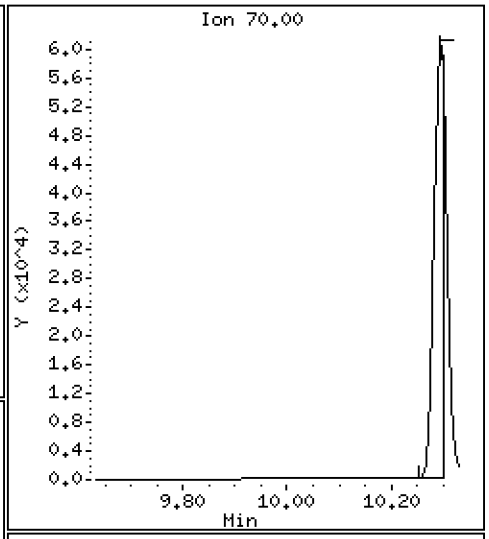
Column phase: ZB-5msi

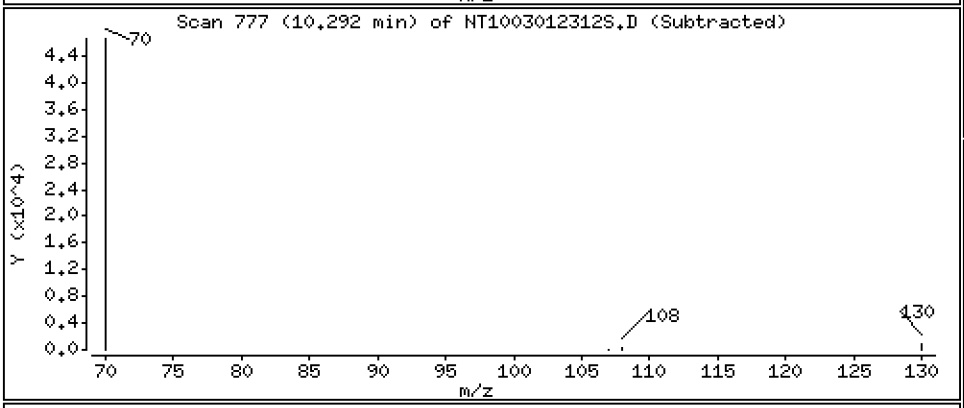
Column diameter: 0.25

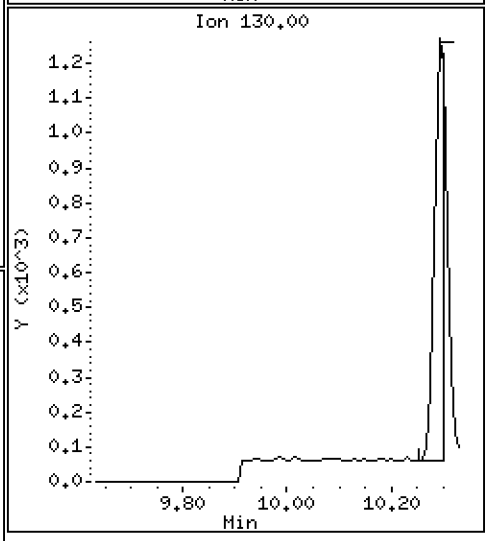
16 N-Nitroso-di-n-propylamine

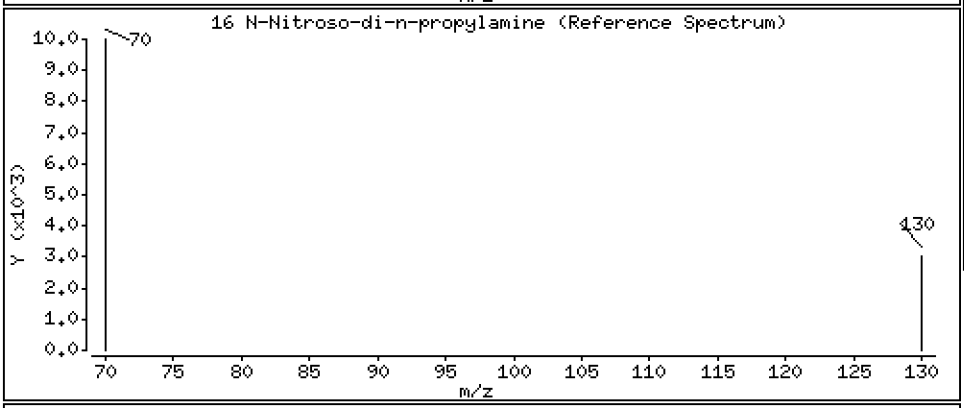
Concentration: 0.8128 ug/L

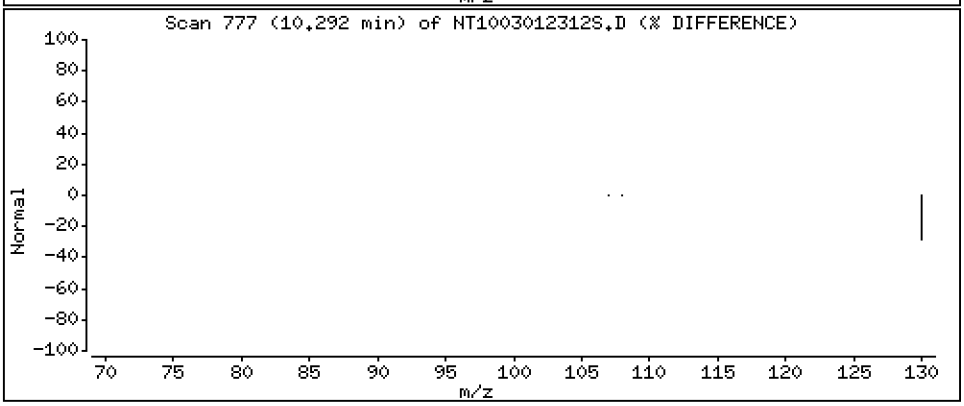












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

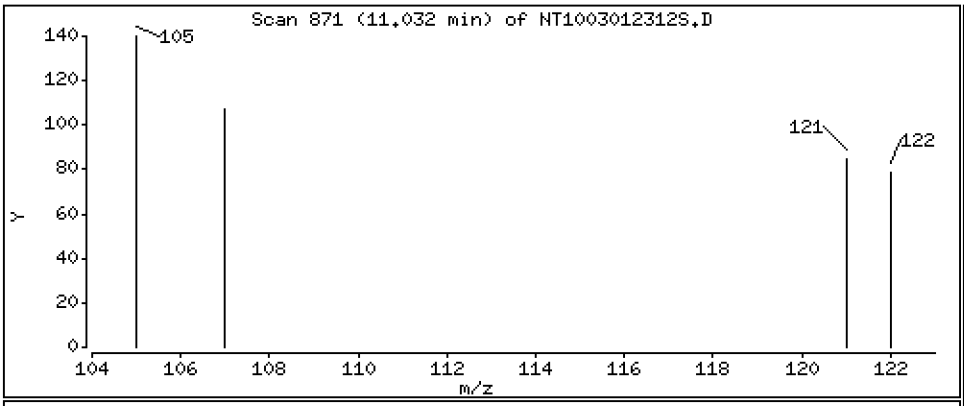
Operator: JGR

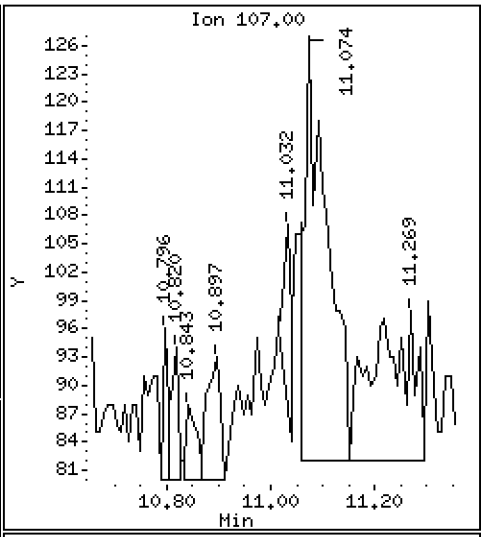
Column phase: ZB-5msi

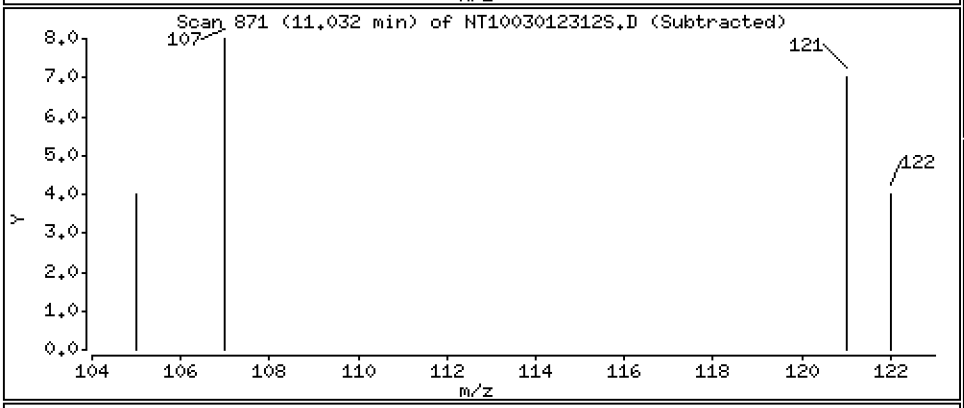
Column diameter: 0.25

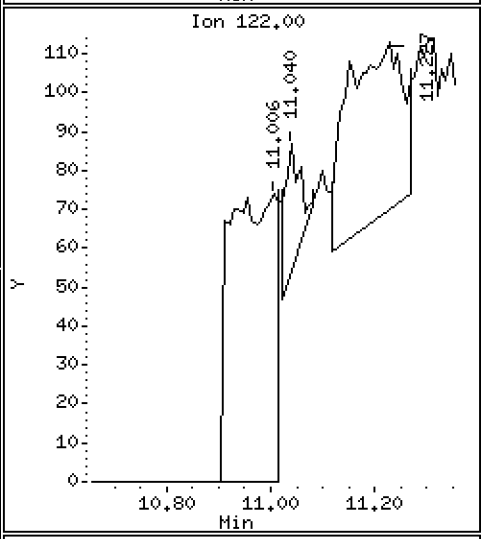
22 2,4-Dimethylphenol

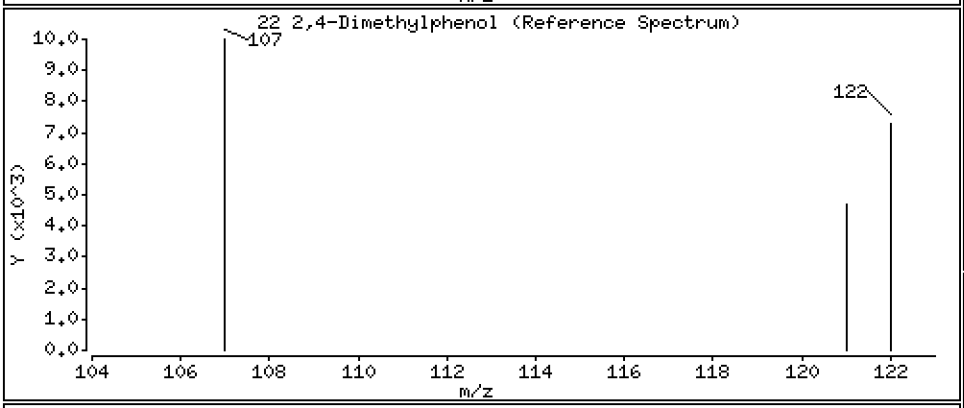
Concentration: 0.0001253 ug/L

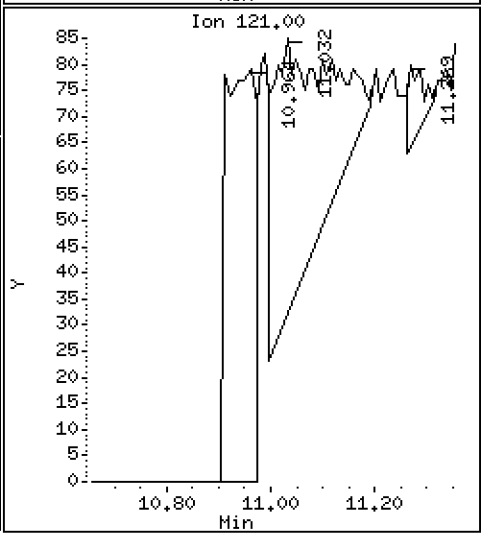


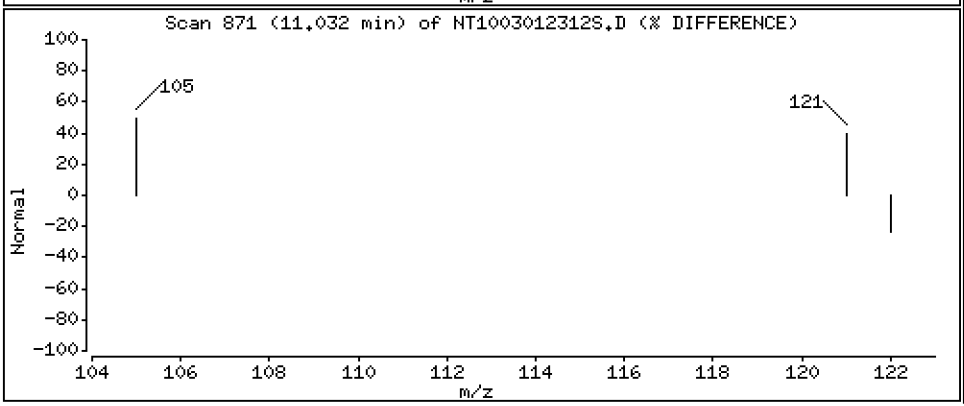












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

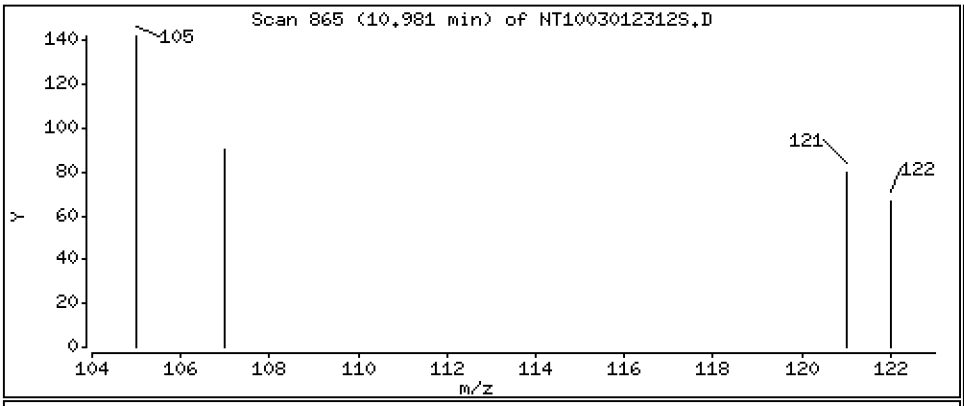
Operator: JGR

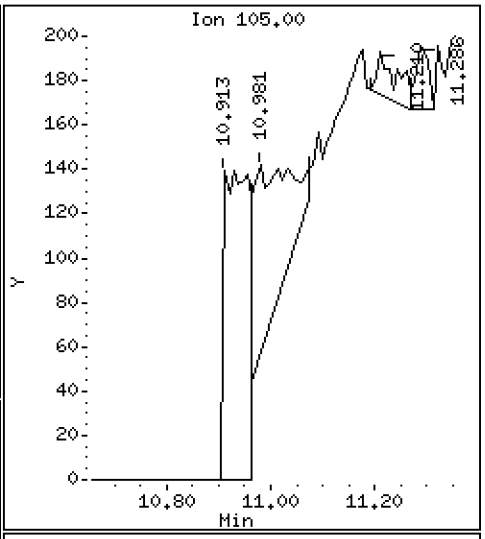
Column phase: ZB-5msi

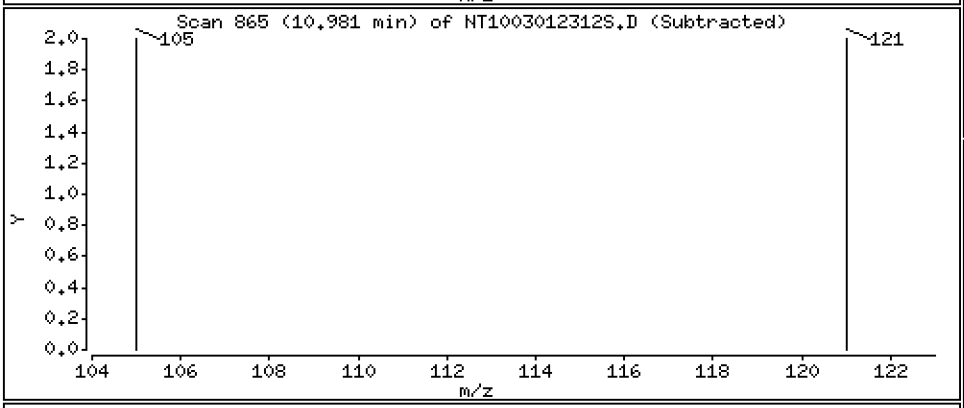
Column diameter: 0.25

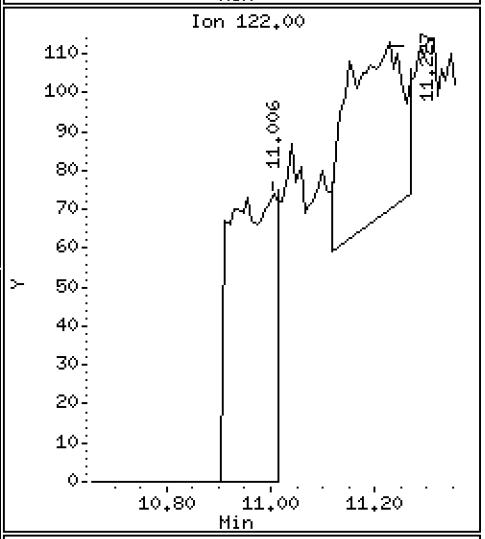
24 Benzoic acid

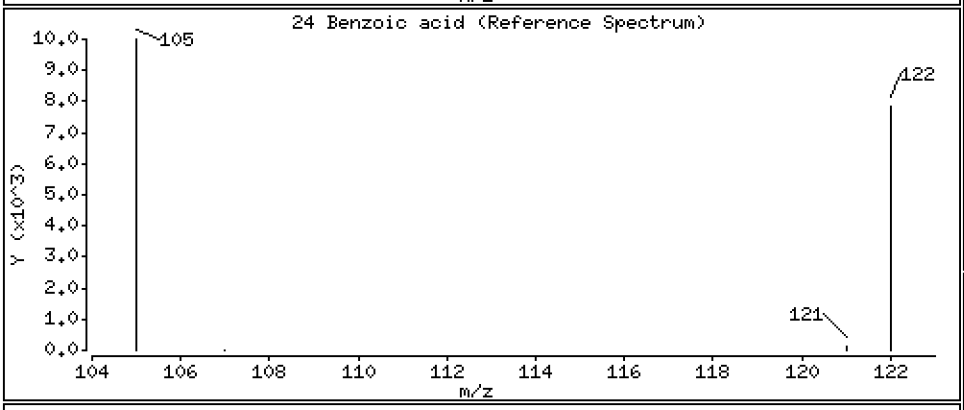
Concentration: 0.004402 ug/L

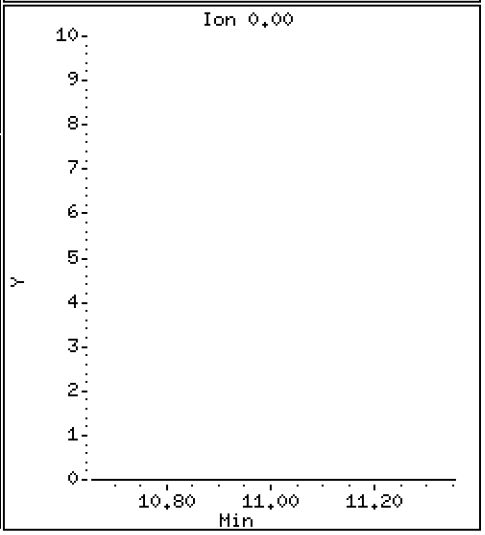


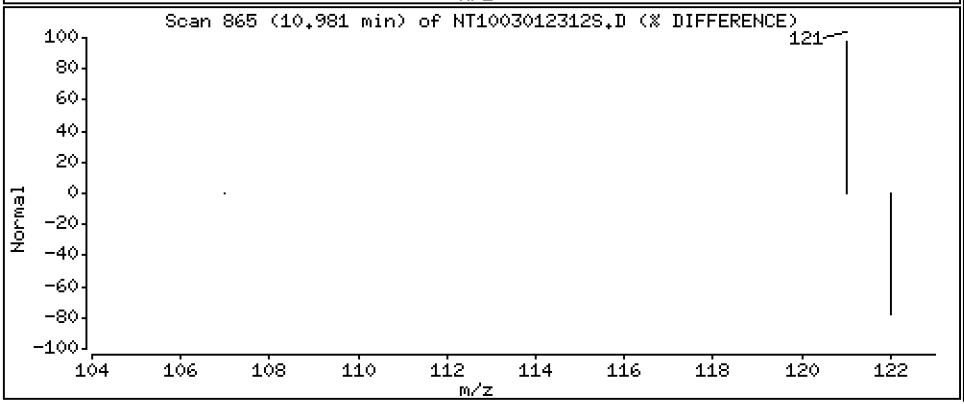












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

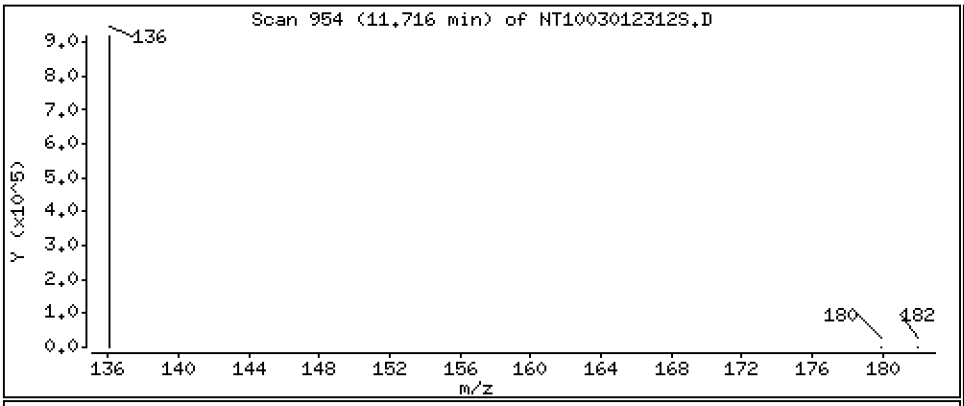
Operator: JGR

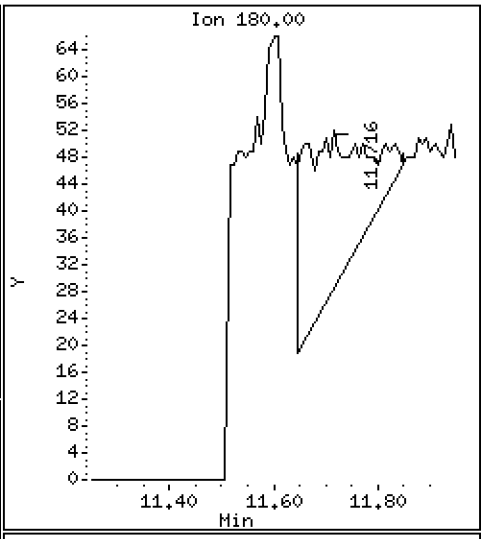
Column phase: ZB-5msi

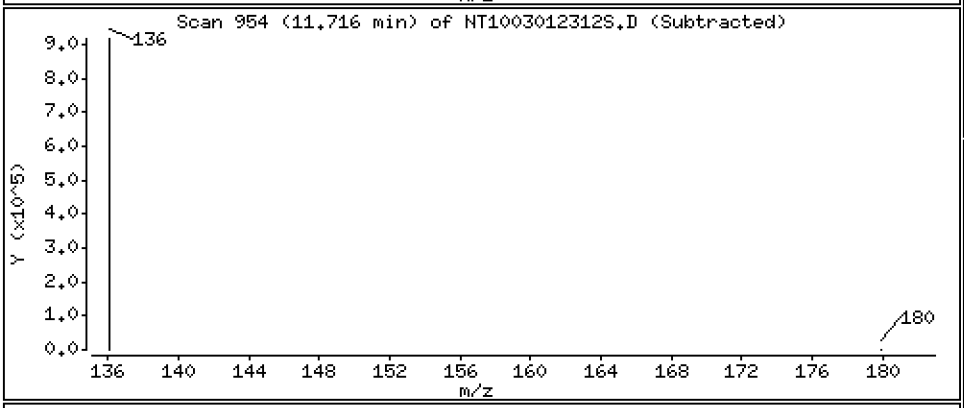
Column diameter: 0.25

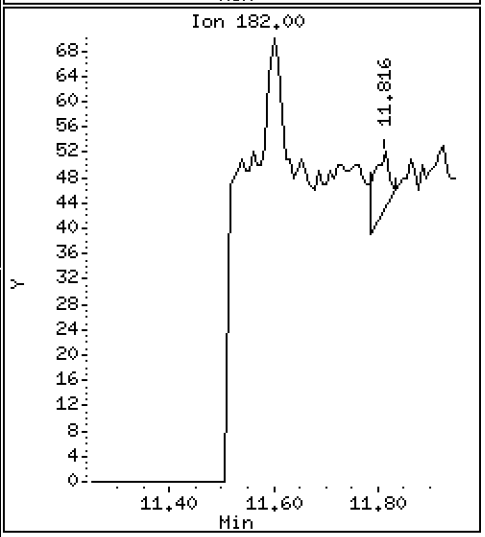
26 1,2,4-Trichlorobenzene

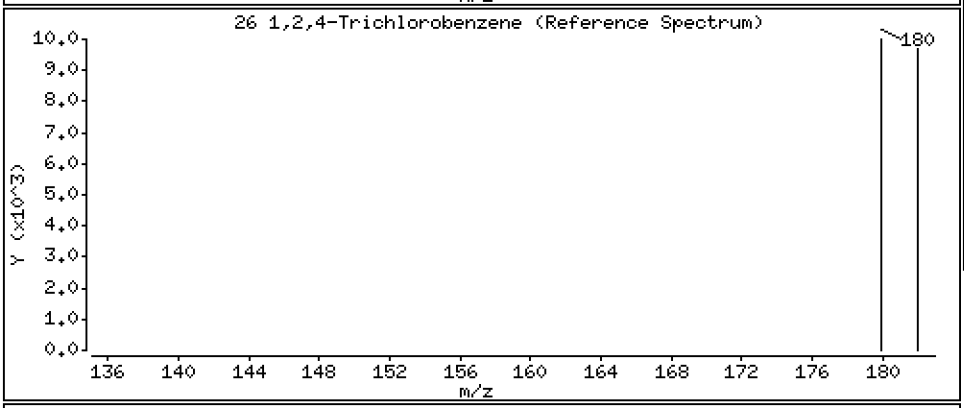
Concentration: 0.001531 ug/L

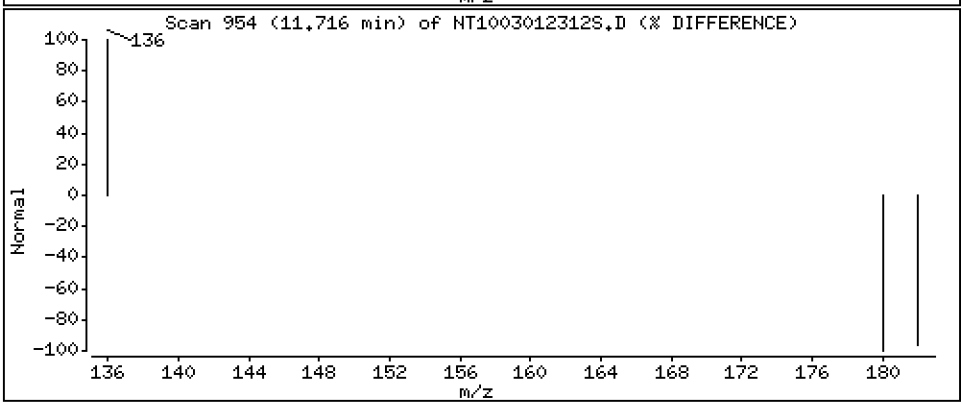












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

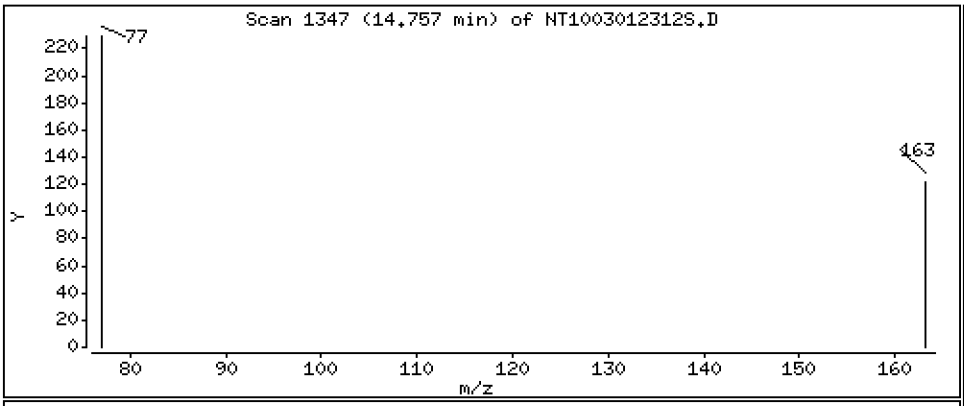
Operator: JGR

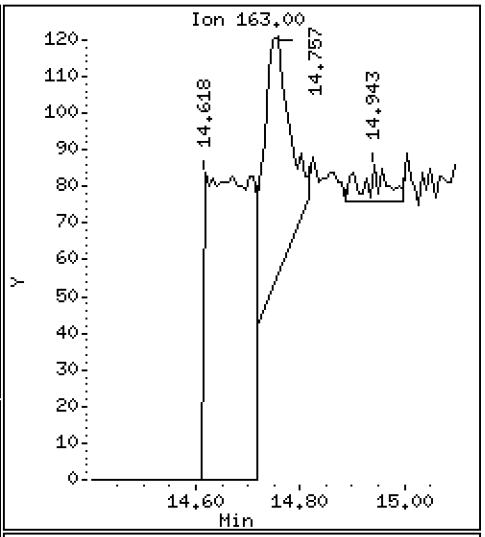
Column phase: ZB-5msi

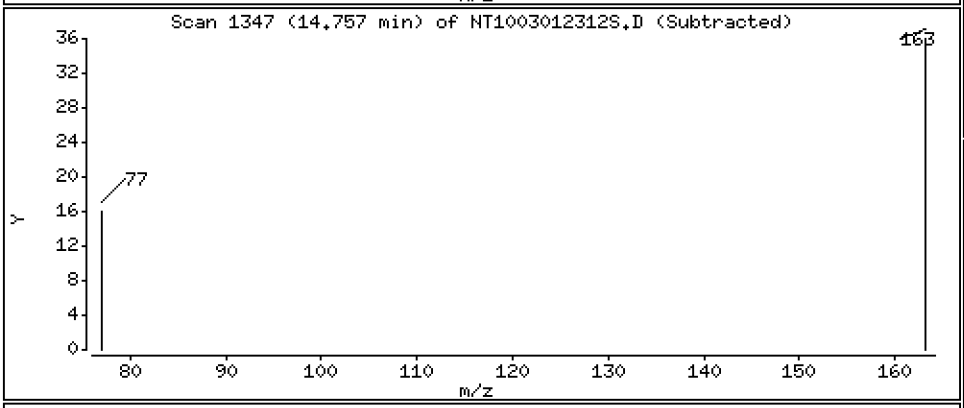
Column diameter: 0.25

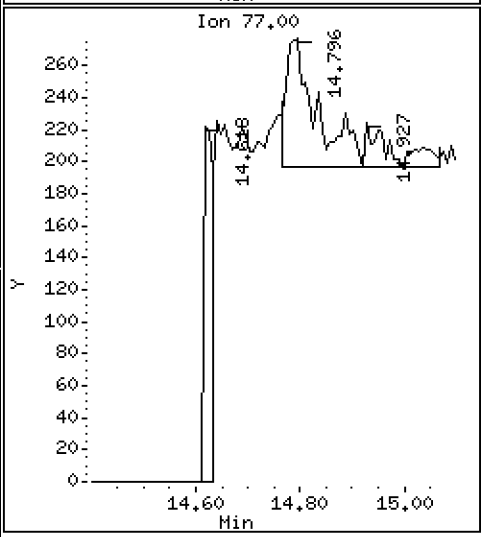
39 Dimethylphthalate

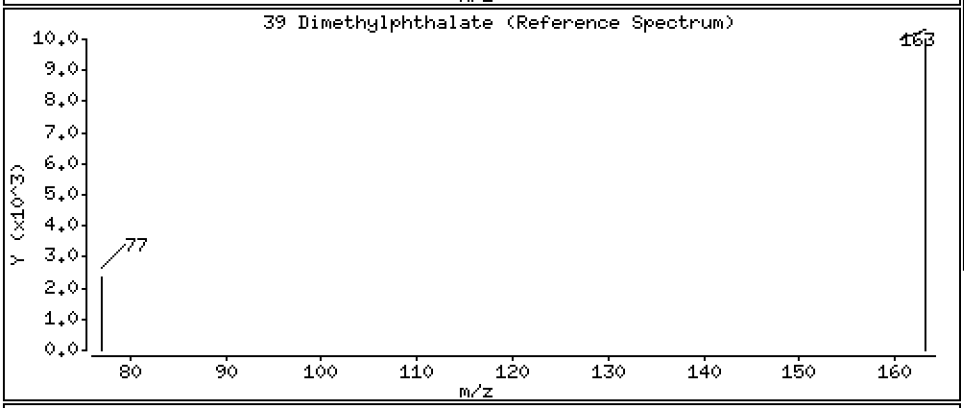
Concentration: 0.0008417 ug/L

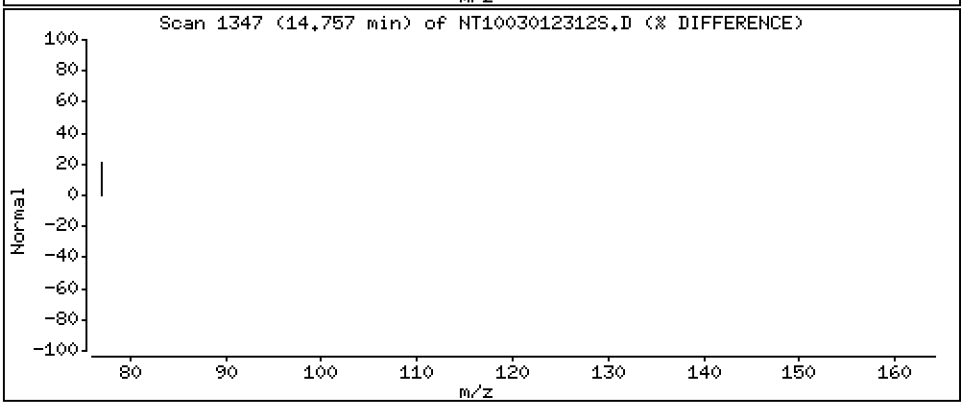












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

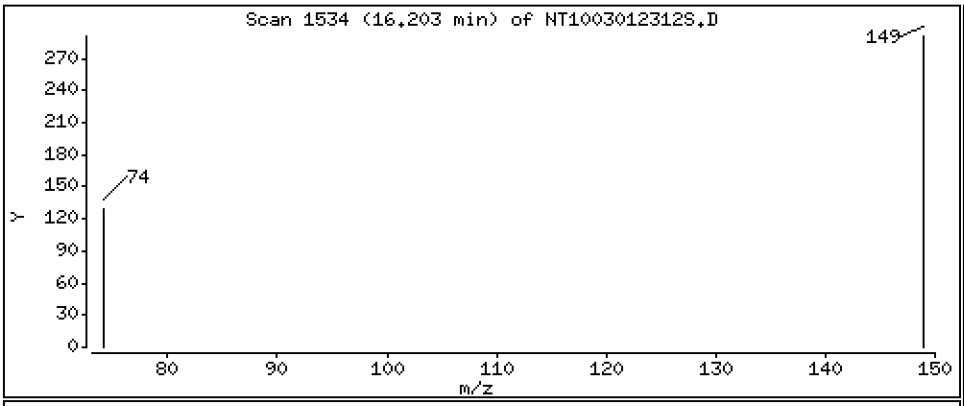
Operator: JGR

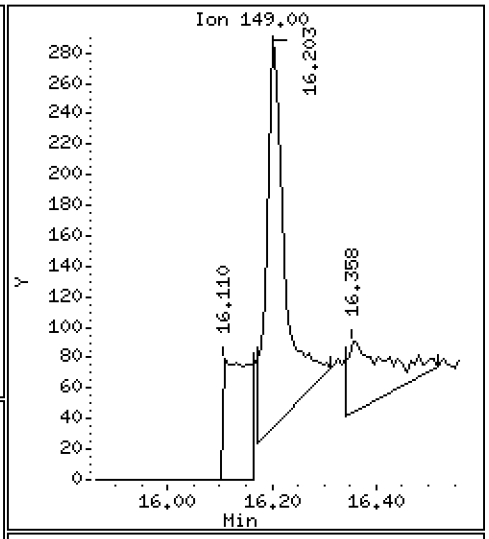
Column phase: ZB-5msi

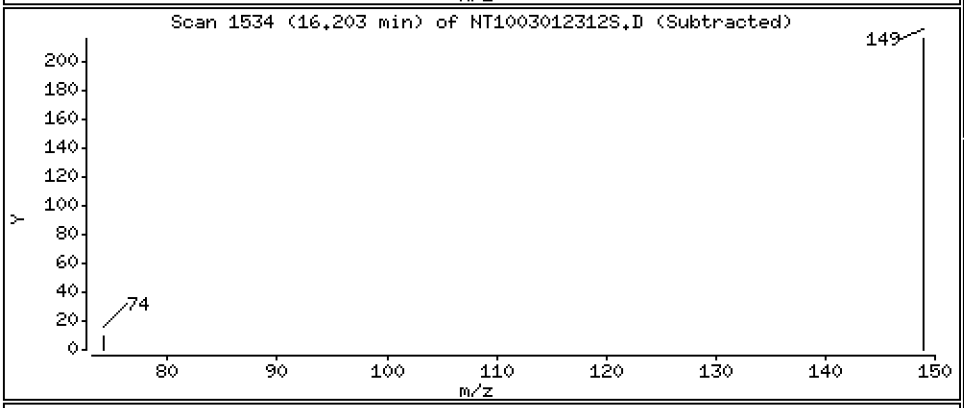
Column diameter: 0.25

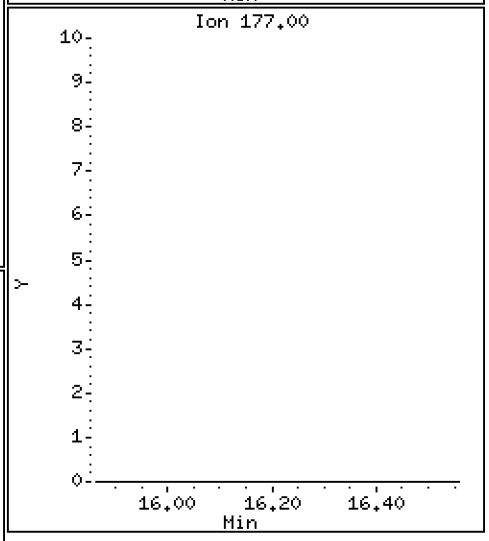
50 Diethylphthalate

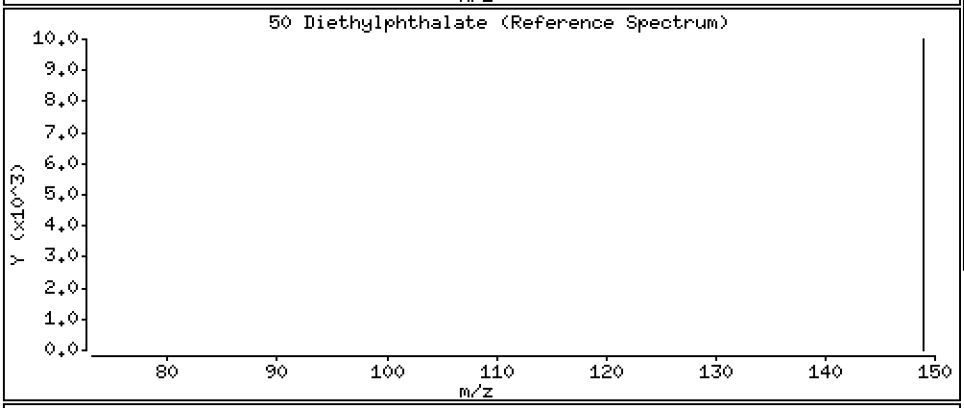
Concentration: 0.002321 ug/L

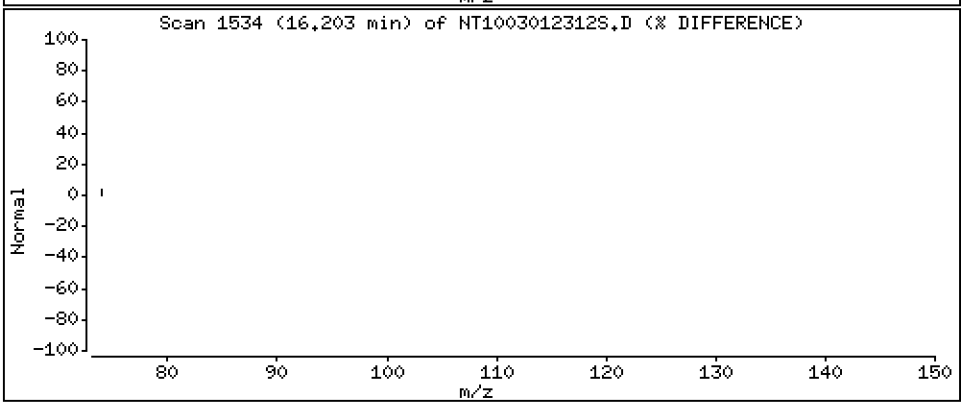












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

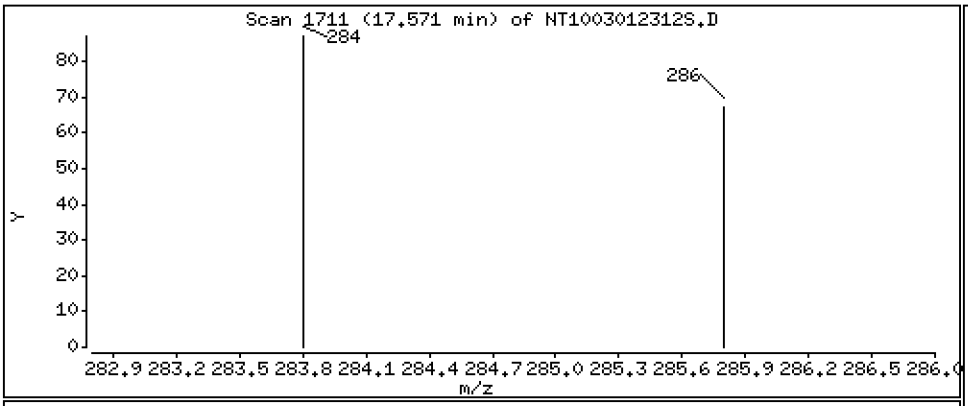
Operator: JGR

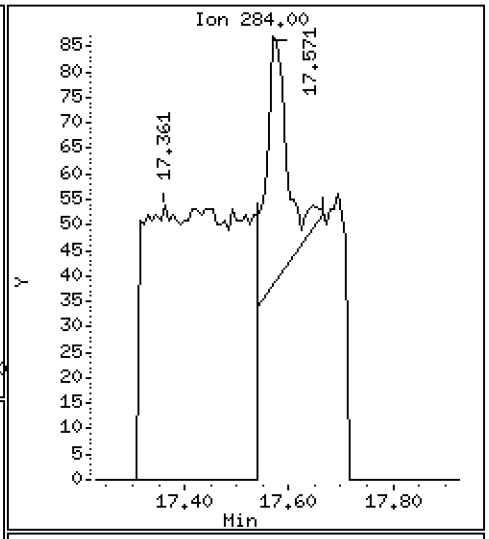
Column phase: ZB-5msi

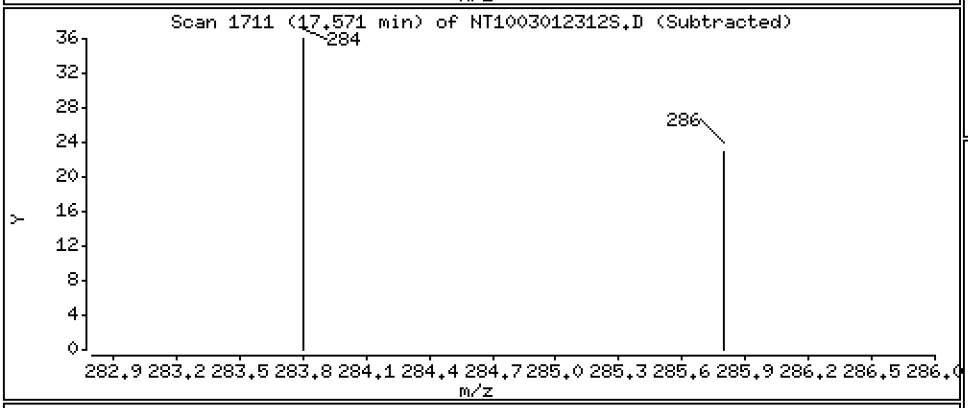
Column diameter: 0.25

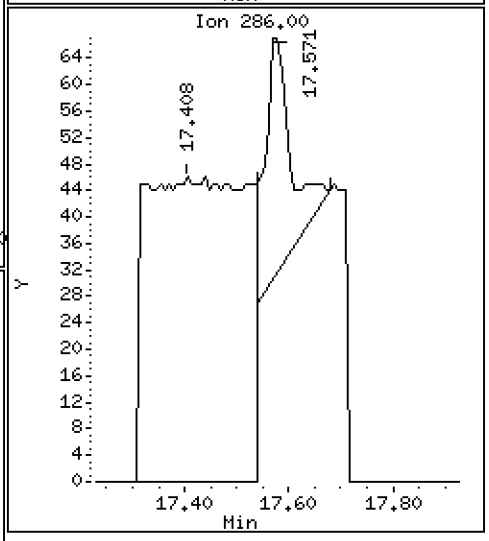
57 Hexachlorobenzene

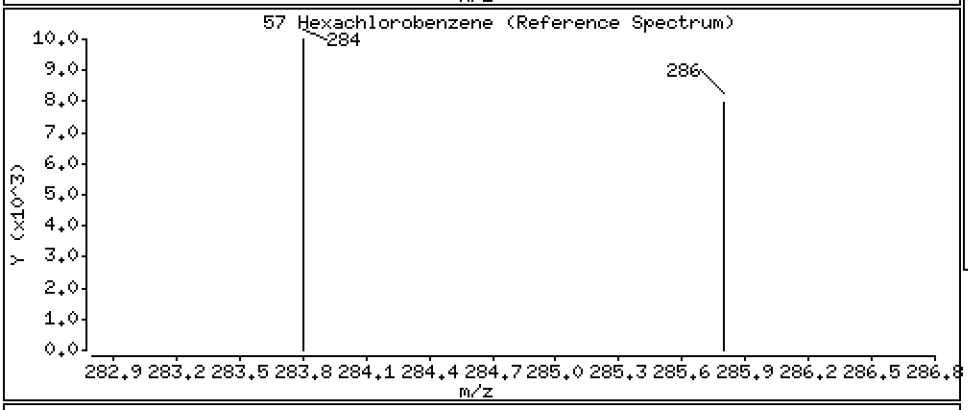
Concentration: 0.001117 ug/L

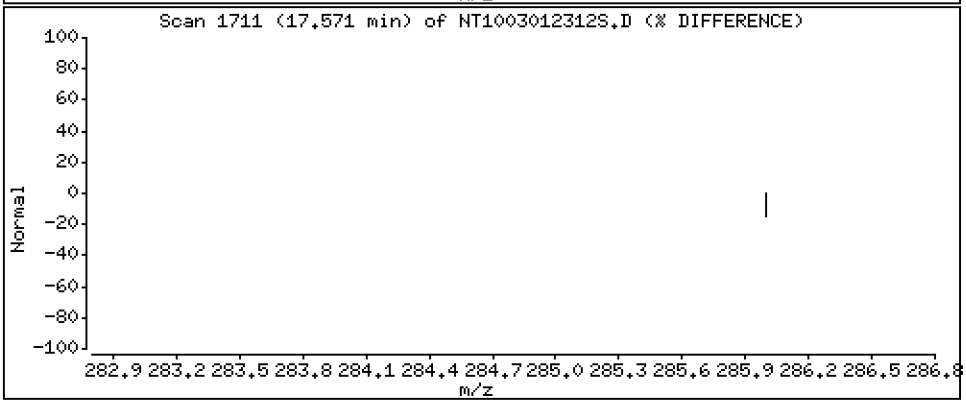












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Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

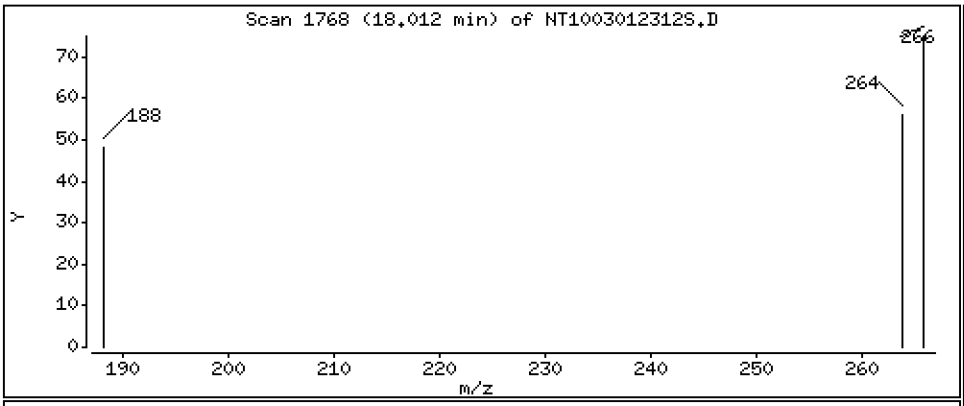
Operator: JGR

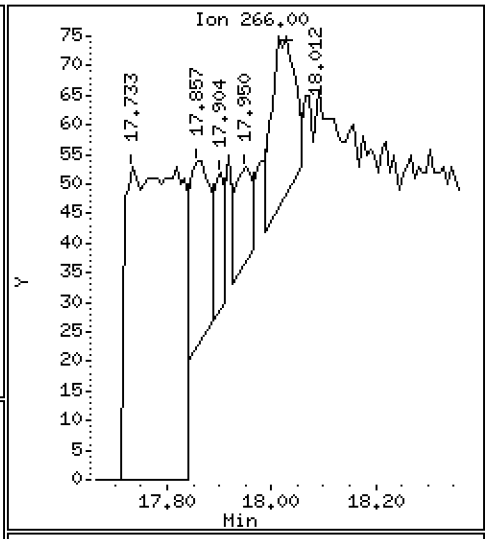
Column phase: ZB-5msi

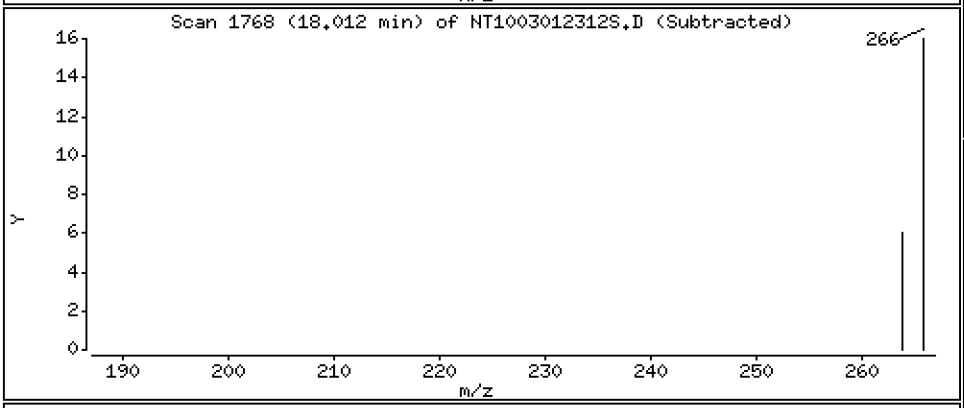
Column diameter: 0.25

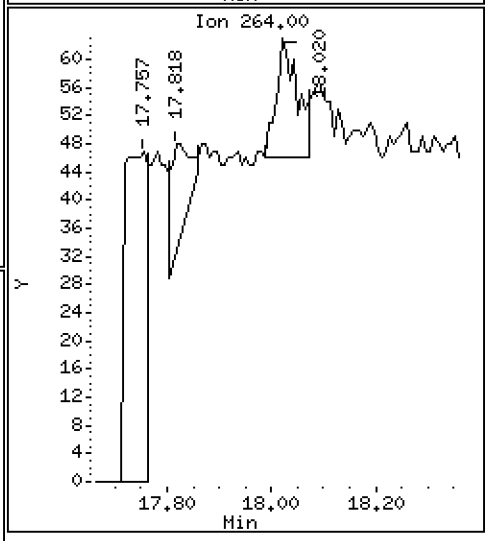
58 Pentachlorophenol

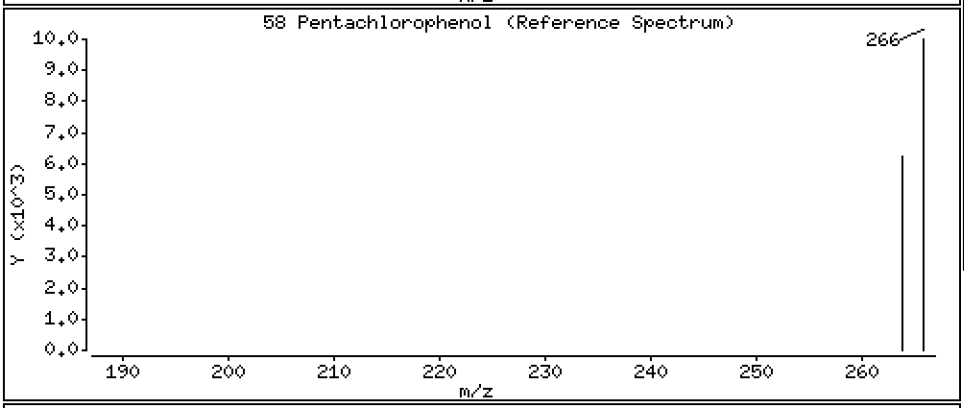
Concentration: 0.001689 ug/L

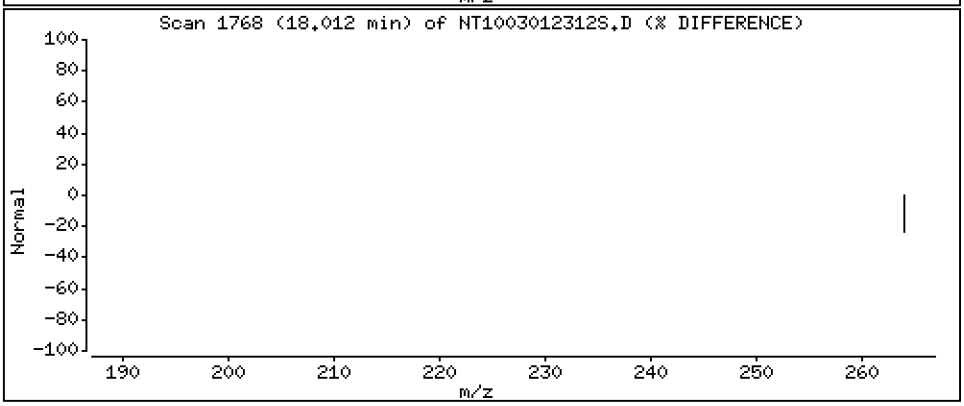












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Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

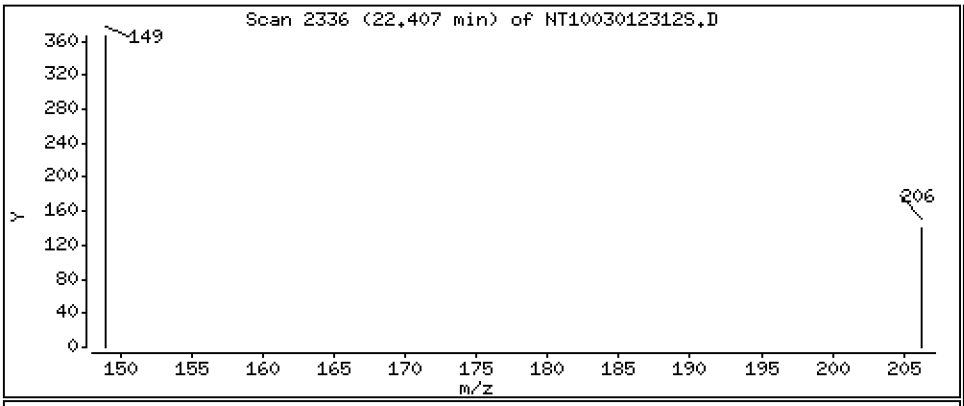
Operator: JGR

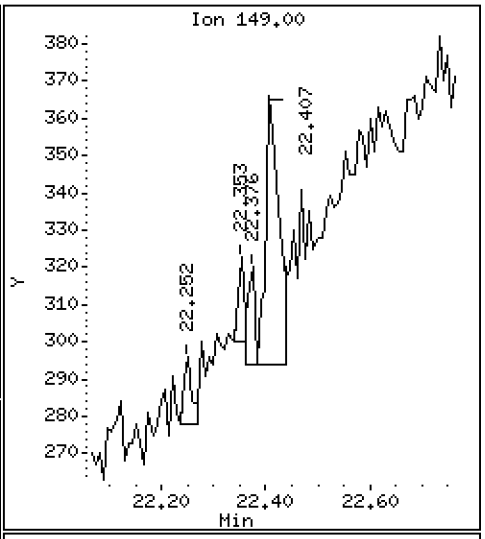
Column phase: ZB-5msi

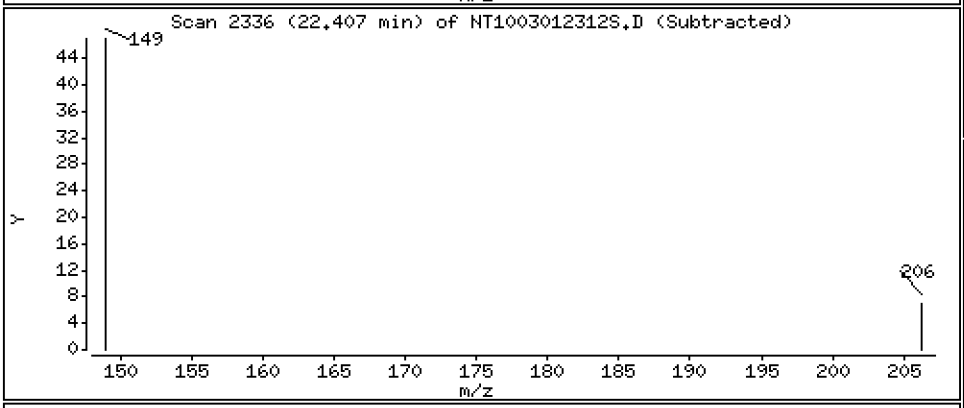
Column diameter: 0.25

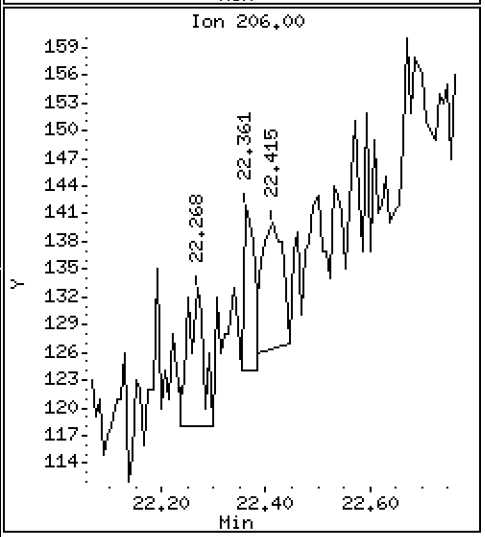
67 Butylbenzylphthalate

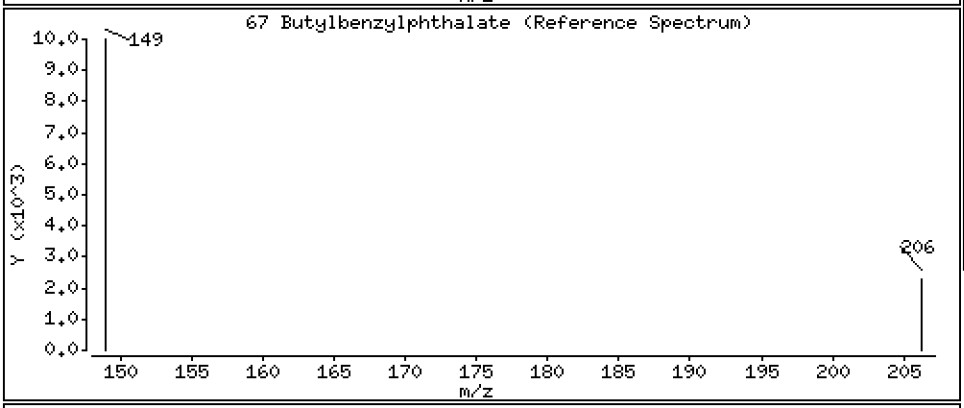
Concentration: 0.0004940 ug/L

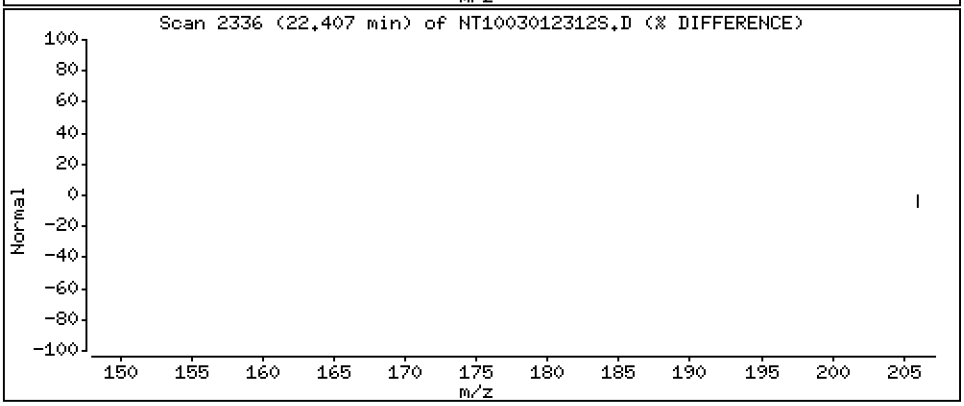












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123125.D

Date : 01-MAR-2023 22:24

Client ID:

Instrument: nt10.i

Sample Info: SEQ-IBL1

Volume Injected (uL): 1.0

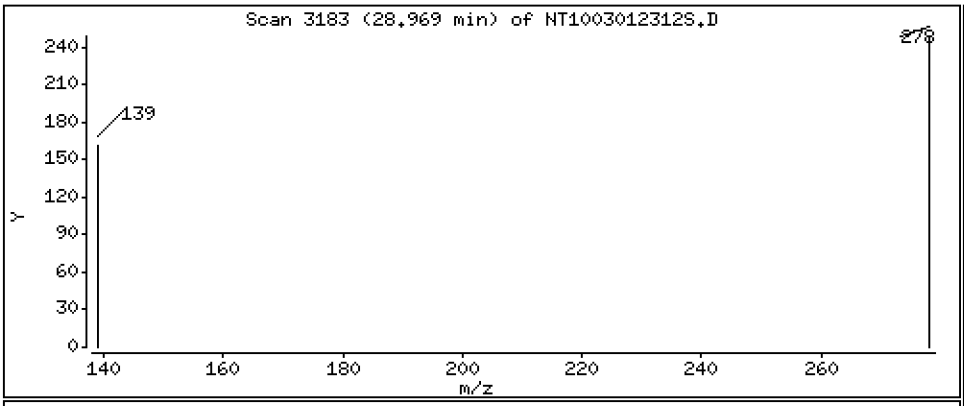
Operator: JGR

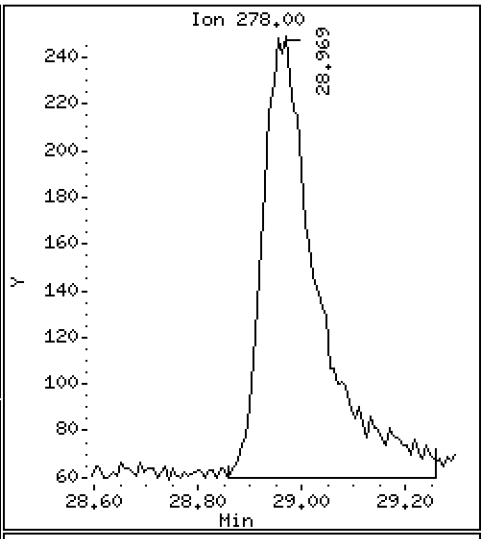
Column phase: ZB-5msi

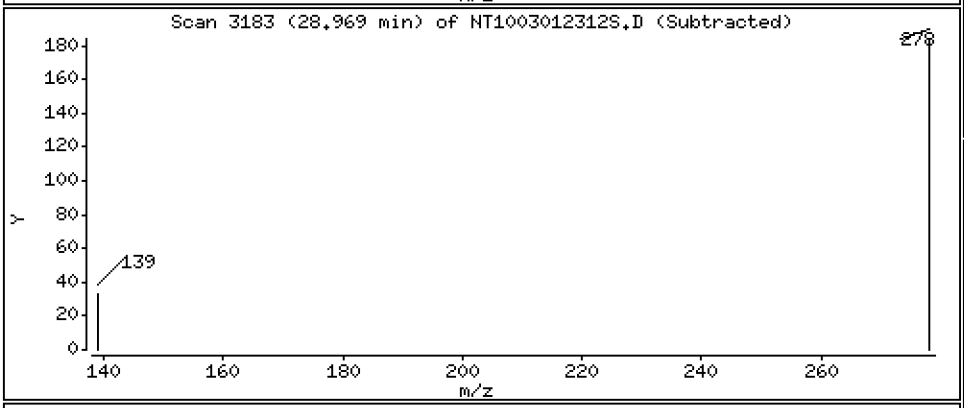
Column diameter: 0.25

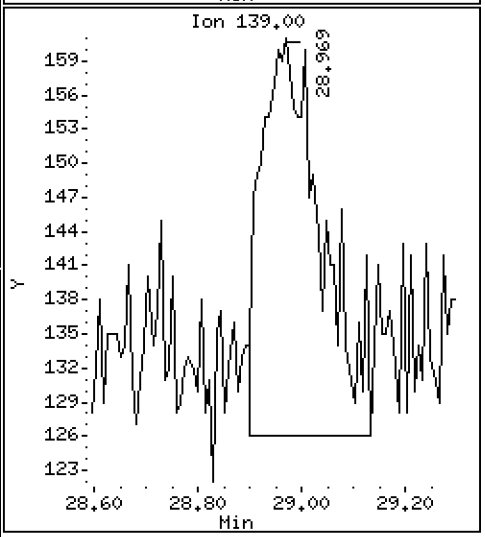
79 Dibenzo(a,h)anthracene

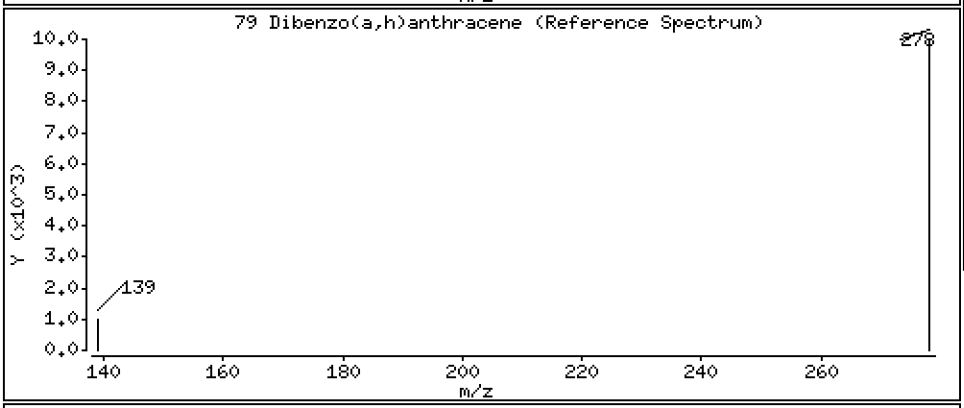
Concentration: 0.003648 ug/L

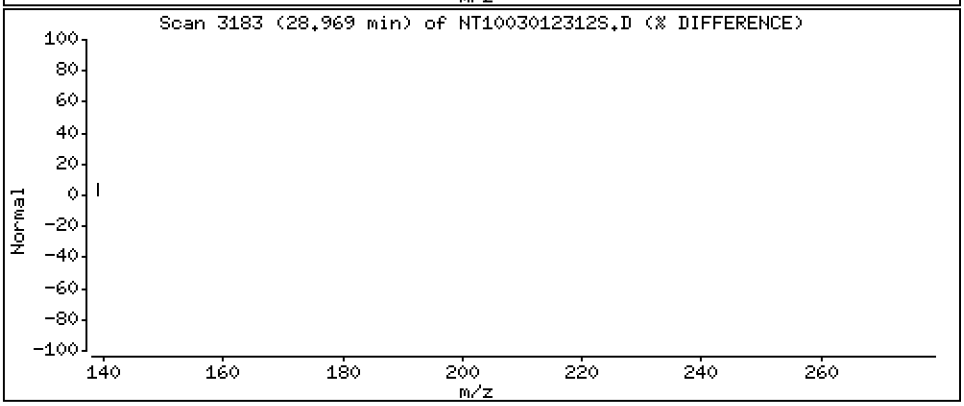












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012312S.D
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Inj Date : 01-MAR-2023 22:24 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-IBL1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.894	6.902	(0.745)	1154017	7.84369	7.844(R)
3	Phenol	94	8.509	8.532	(0.920)	1012	0.00466	0.004664
7	1,3-Dichlorobenzene	146	9.143	9.136	(0.988)	118	6e-004	0.0006178
* 8	1,4-Dichlorobenzene-d4	152	9.251	9.252	(1.000)	515340	4.00000	
9	1,4-Dichlorobenzene	146	9.282	9.275	(1.003)	61	3e-004	0.0003285
11	Benzyl alcohol	79	9.531	9.508	(1.030)	17695	0.14687	0.1469
12	1,2-Dichlorobenzene	146	9.562	9.563	(1.034)	52	3e-004	0.0002913
13	2-Methylphenol	108	9.539	9.671	(1.031)	8016	0.06143	0.06143
15	4-Methylphenol	108	9.958	9.966	(1.076)	58	4e-004	0.0004276
16	N-Nitroso-di-n-propylamine	70	10.292	9.982	(1.112)	78763	0.81276	0.8128
22	2,4-Dimethylphenol	107	11.031	11.006	(0.941)	19	1e-004	0.0001253
24	Benzoic acid	105	10.980	11.007	(0.937)	366	0.00440	0.004402
26	1,2,4-Trichlorobenzene	180	11.716	11.600	(0.999)	197	0.00153	0.001531
* 27	Naphthalene-d8	136	11.723	11.723	(1.000)	1787704	4.00000	
30	Hexachlorobutadiene	225	Compound Not Detected.					
39	Dimethylphthalate	163	14.756	14.749	(0.964)	235	8e-004	0.0008417
* 42	Acenaphthene-d10	162	15.314	15.314	(1.000)	879316	4.00000	
50	Diethylphthalate	149	16.203	16.211	(1.058)	611	0.00232	0.002321
54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
57	Hexachlorobenzene	284	17.570	17.579	(0.955)	133	0.00112	0.001117

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.011	18.012	(0.979)	88	0.00169	0.001689
*	59 Phenanthrene-d10	188	18.398	18.398	(1.000)	1572306	4.00000	
$	66 Terphenyl-d14	244	21.524	21.532	(0.919)	589014	4.90043	4.900(R)
	67 Butylbenzylphthalate	149	22.407	22.415	(0.957)	124	5e-004	0.0004940
*	69 Chrysene-d12	240	23.421	23.421	(1.000)	1486349	4.00000	
*	77 Perylene-d12	264	26.108	26.108	(1.000)	1674195	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.968	28.946	(1.110)	1414	0.00365	0.003648
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012312S.D
Lab Smp Id: SLC0143-ICB1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 18:37
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	320125	160063	640250	515340	60.98
27 Naphthalene-d8	1136019	568010	2272038	1787704	57.37
42 Acenaphthene-d10	636993	318497	1273986	879316	38.04
59 Phenanthrene-d10	1093620	546810	2187240	1572306	43.77
69 Chrysene-d12	1000300	500150	2000600	1486349	48.59
77 Perylene-d12	1058448	529224	2116896	1674195	58.17

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	-0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	-0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	-0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012312S.D

Lab ID: SLC0143-ICB1
nt10.i, 20230301.b\SIM.b\SIMABN2.m,   01-MAR-2023 22:24

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.031	1.045	-0.0143	2-Methylphenol
1.112	1.079	0.0335	N-Nitroso-di-n-propylamine
0.937	0.000	0.9366	Benzoic acid
0.999	0.989	0.0099	1,2,4-Trichlorobenzene

RRT check based on Ccal File: SIM.b/NT1003012310S.D

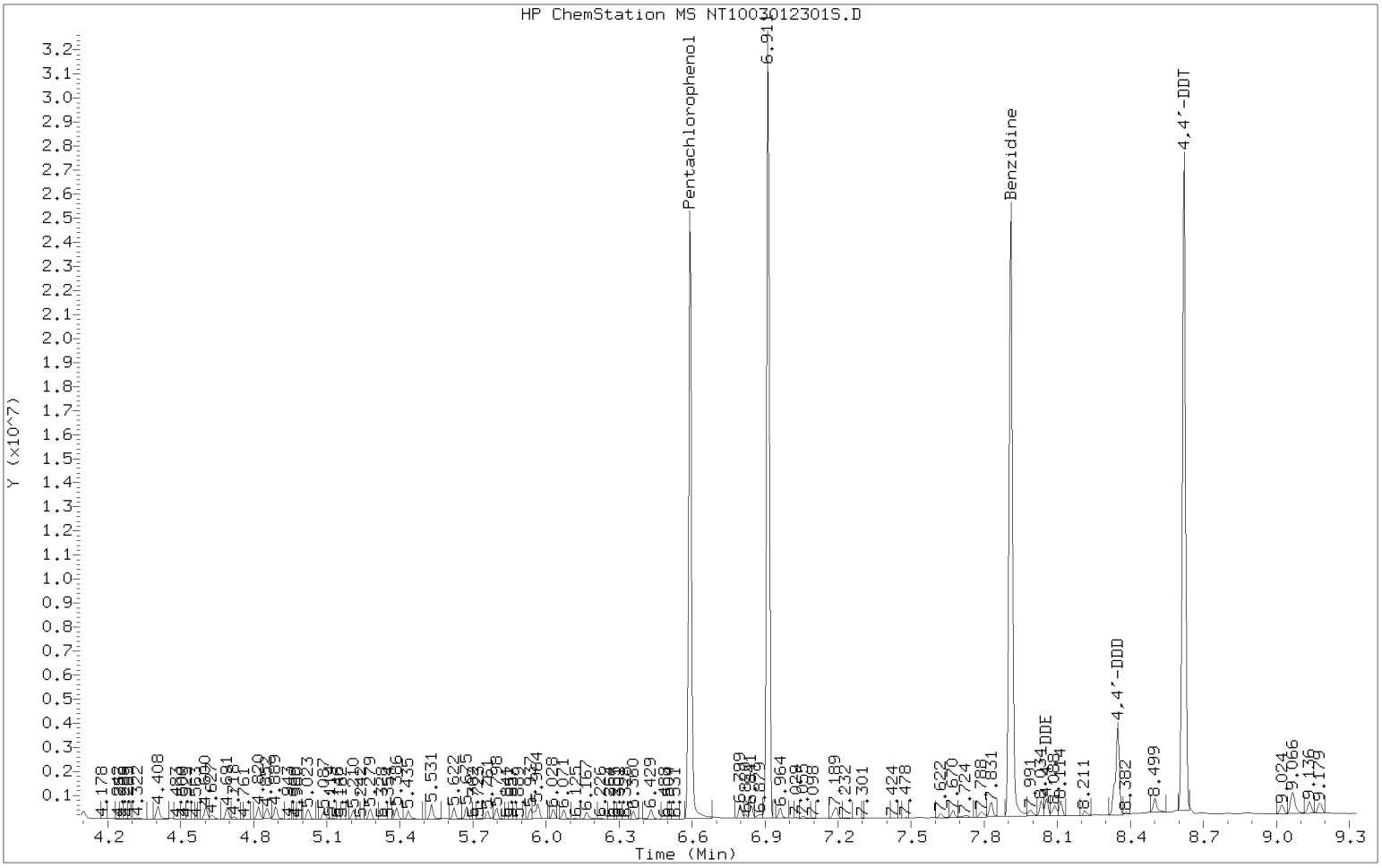
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

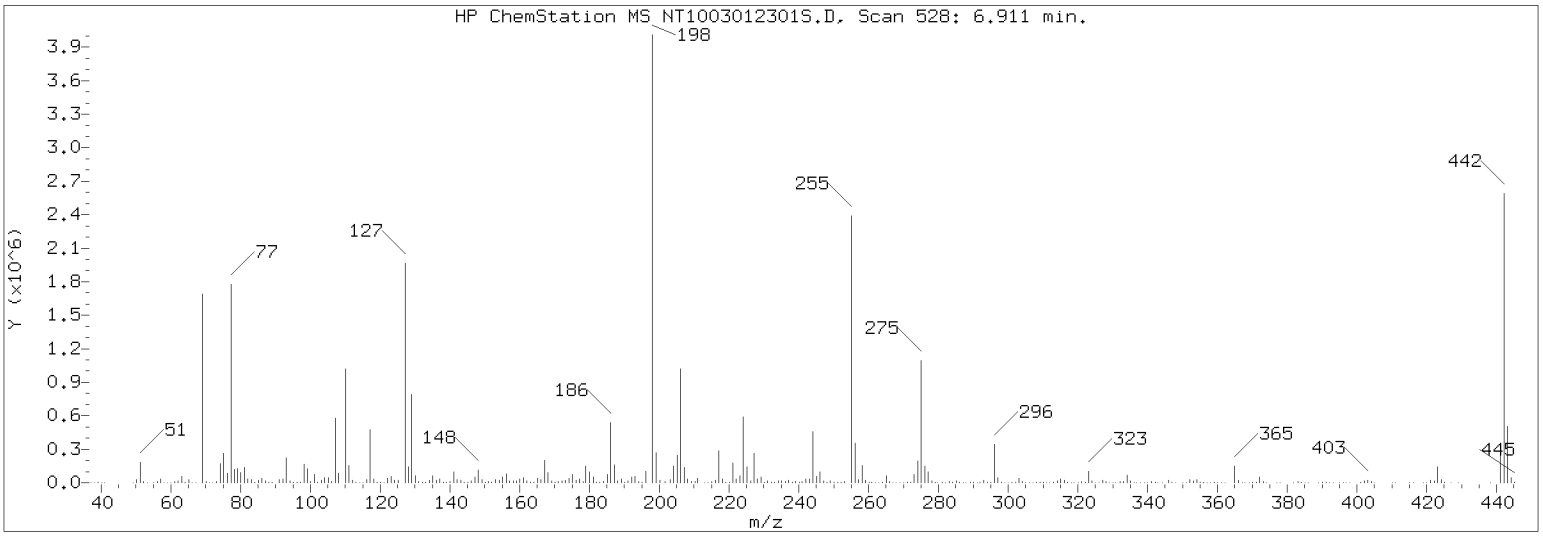
Exception: 1,2,4-Trichlorobenzene 0.0010

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

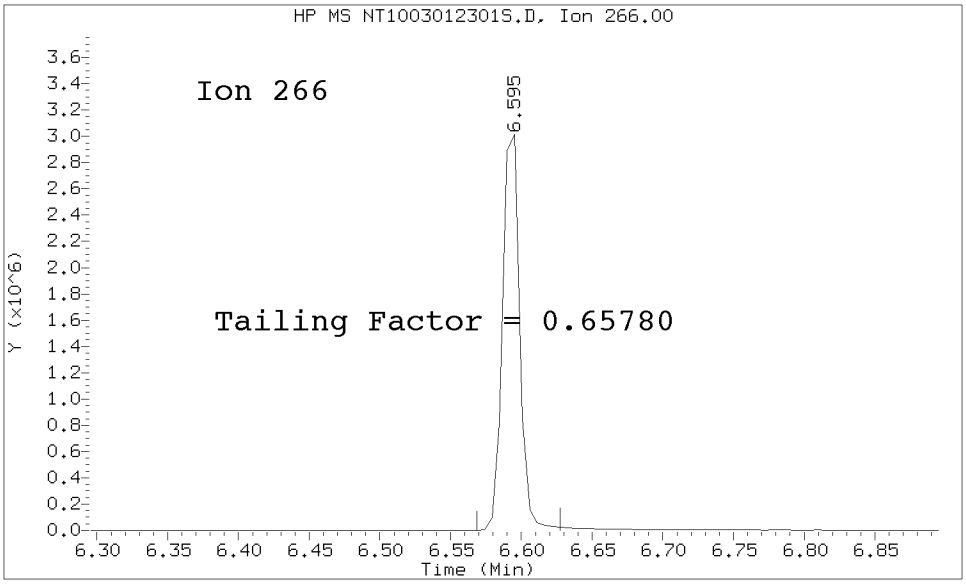
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230301.b/SIM.b/NT1003012301S.D/NT1003012301S.D
Method Used: \20230301.b\SIM.b\DFTPP8270E.m Inst: nt10
Injection Date: 01-MAR-2023 15:49 Operator: JGR
Sample Info: SLC0143-TUN1 SLC0143-TUN1
Report Date: 07/05/2023 09:35



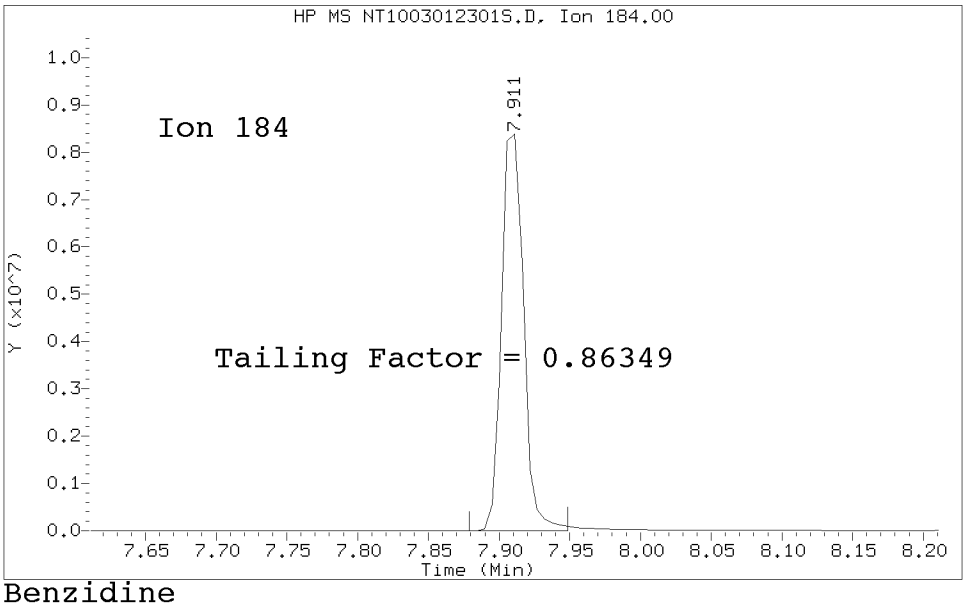


Datafile Analyzed: /20230301.b/SIM.b/NT1003012301S.D/NT1003012301S.D
Method Used: \20230301.b\DFTPP8270E.m\sw846ddt.m Inst: nt10
Injection Date: 01-MAR-2023 15:49 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 07/05/2023 09:35



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

Tail Factor = 0.658 Maximum Allowed = 2.0



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

Tail Factor = 0.863 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

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

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

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

Tuning Sample, nt10.i/20230301.b/SIM.b/NT1003012301S.D, *** PASSED ***

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

Data File: NT1003012301S.D
Spectrum: Avg. Scans 527-529 (6.91), Background Scan 522
Location of Maximum: 198.00
Number of points: 369

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

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

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

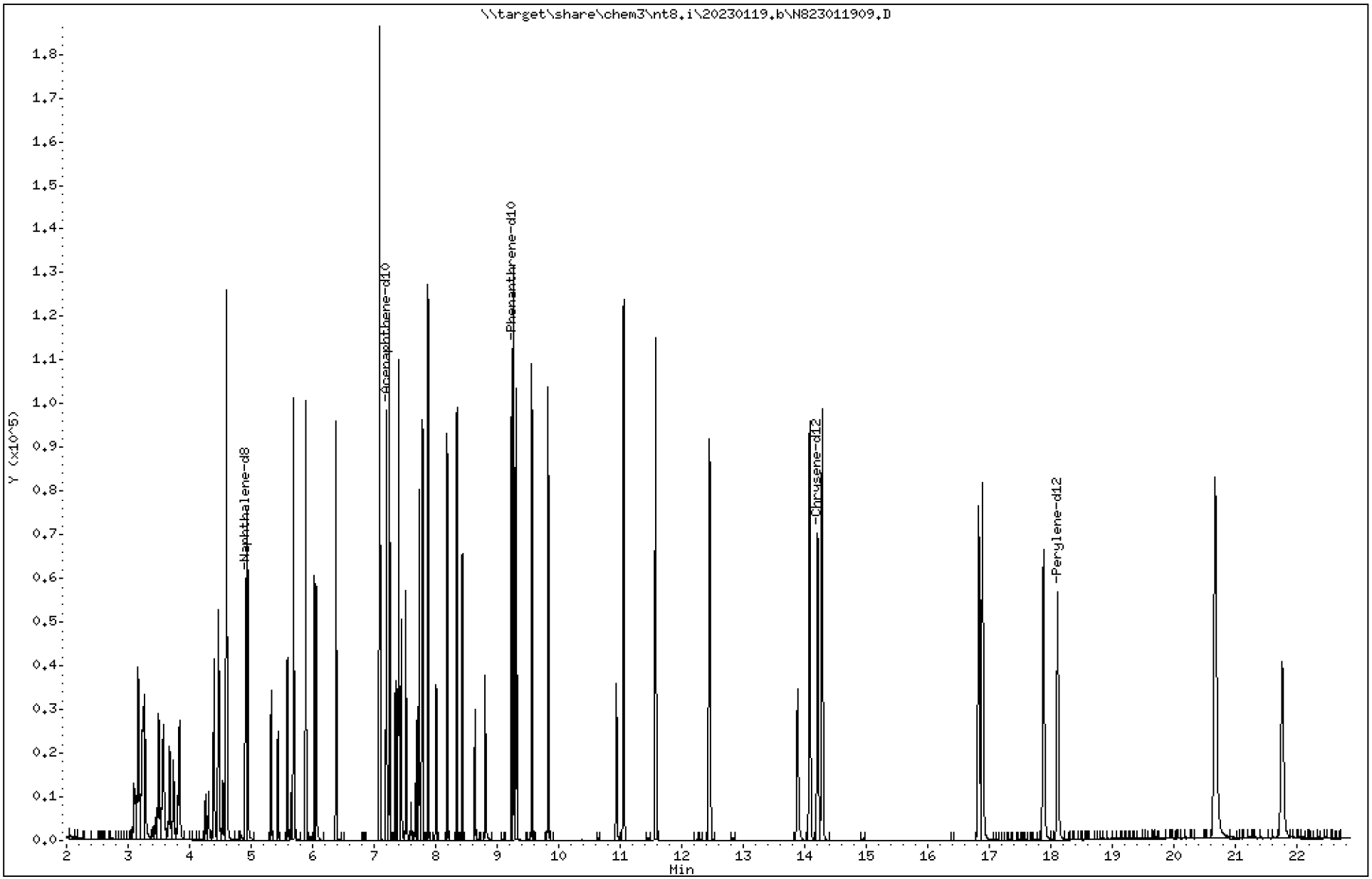
Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00050
Laboratory ID: SLA0213-SCV1
Sequence: SLA0213
Sequence Name: 8270 SIM PNA SCV
Standard ID: L000686

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Naphthalene	2.5000	2.63	5.0	
2-Methylnaphthalene	2.5000	2.67	6.8	
1-Methylnaphthalene	2.5000	2.65	6.0	
Acenaphthylene	2.5000	2.82	12.8	
Acenaphthene	2.5000	2.60	4.0	
Dibenzofuran	2.5000	2.86	14.4	
Fluorene	2.5000	2.63	5.2	
Phenanthrene	2.5000	2.45	-2.1	
Anthracene	2.5000	2.27	-9.2	
Fluoranthene	2.5000	2.65	6.1	
Pyrene	2.5000	2.46	-1.5	
Benzo(a)anthracene	2.5000	2.59	3.5	
Chrysene	2.5000	2.40	-4.0	
Benzo(b)fluoranthene	2.5000	2.51	0.3	
Benzo(k)fluoranthene	2.5000	2.66	6.2	
Benzofluoranthenes, Total	5.0000	5.48	9.6	
Benzo(a)pyrene	2.5000	2.57	2.9	
Indeno(1,2,3-cd)pyrene	2.5000	2.69	7.6	
Dibenzo(a,h)anthracene	2.5000	2.49	-0.3	
Benzo(g,h,i)perylene	2.5000	2.48	-0.7	

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Date : 19-JAN-2023 14:58
Client ID:
Sample Info: SCV230119
Volume Injected (uL): 1.0
Column phase: Rxi-17sil

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25



Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

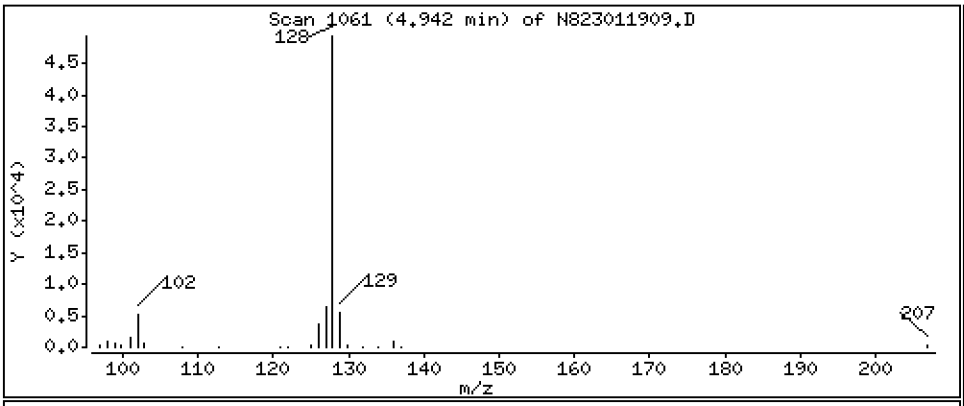
Operator: JZ

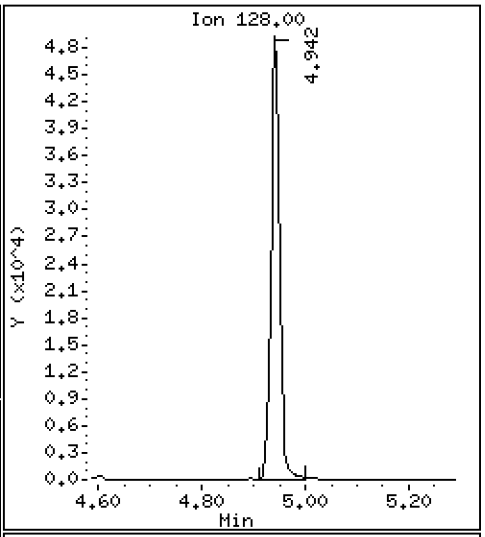
Column phase: Rxi-17sil

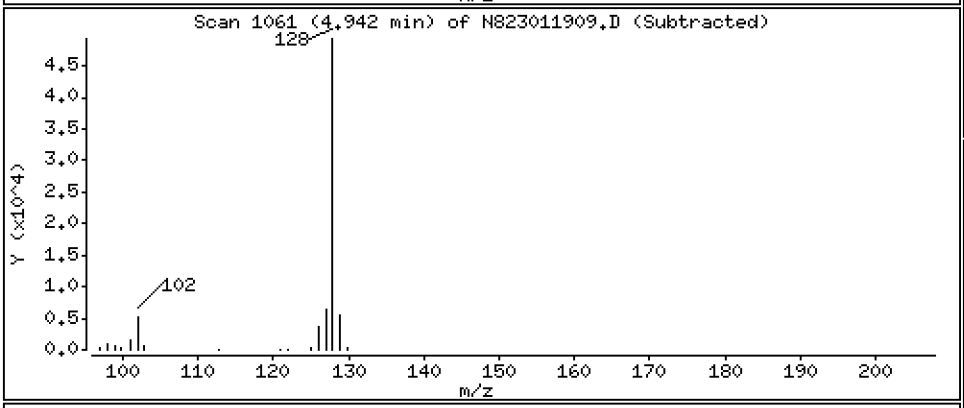
Column diameter: 0.25

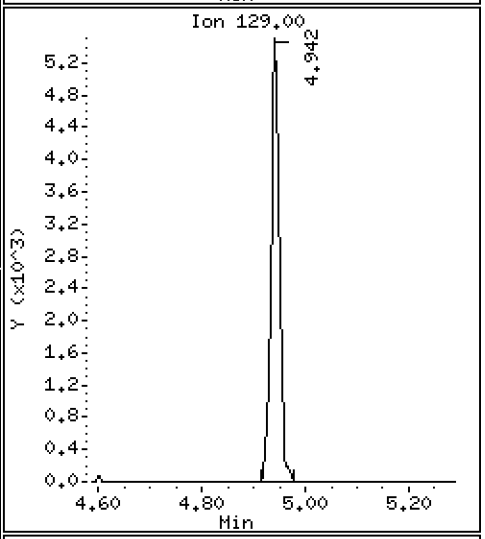
2 Naphthalene

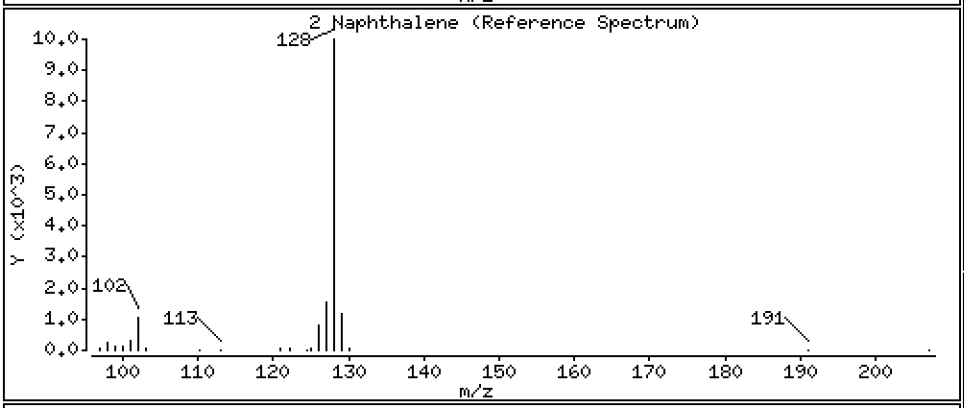
Concentration: 2.626 ug/L

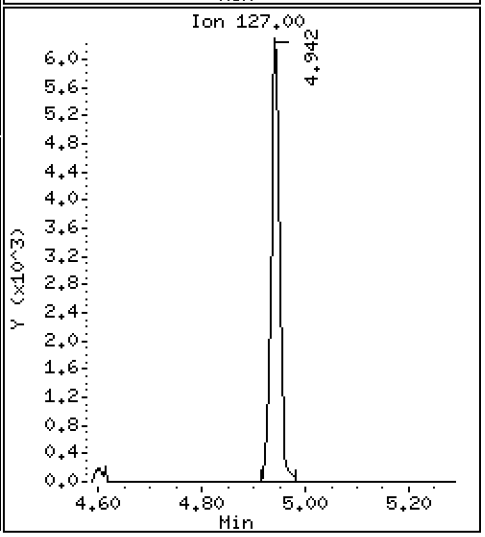


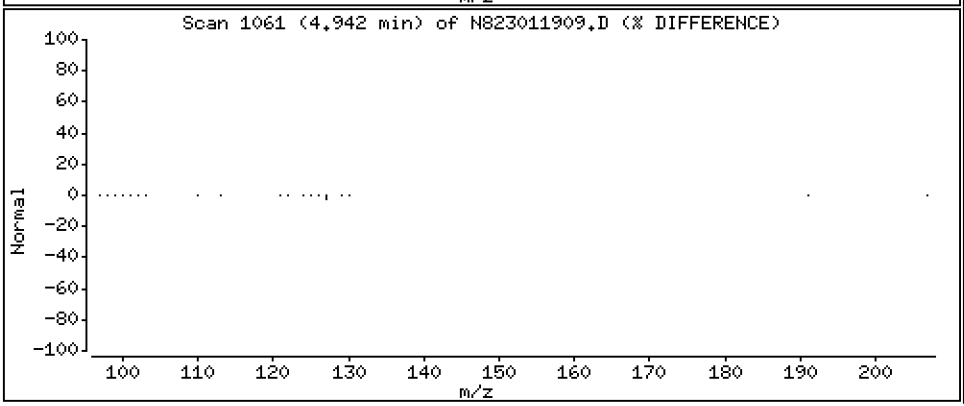












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

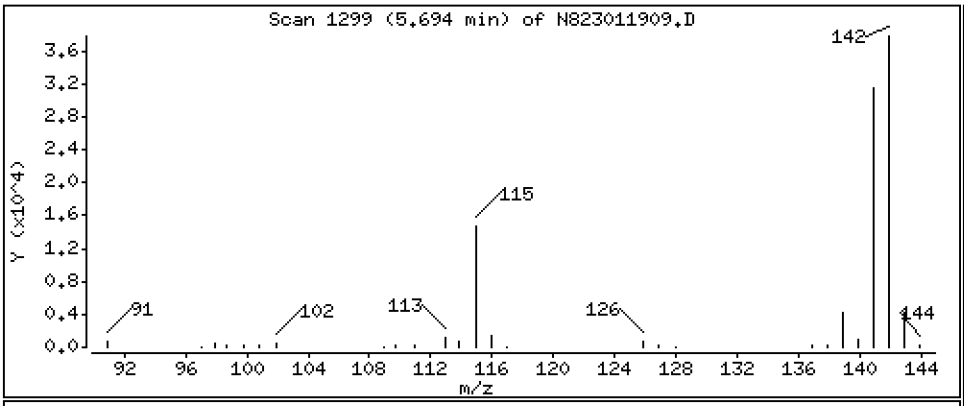
Operator: JZ

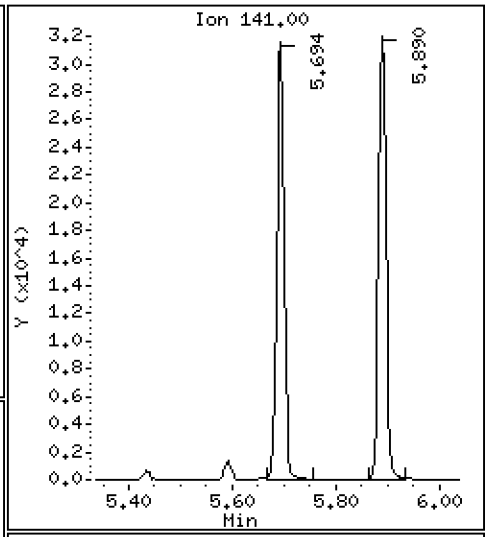
Column phase: Rxi-17sil

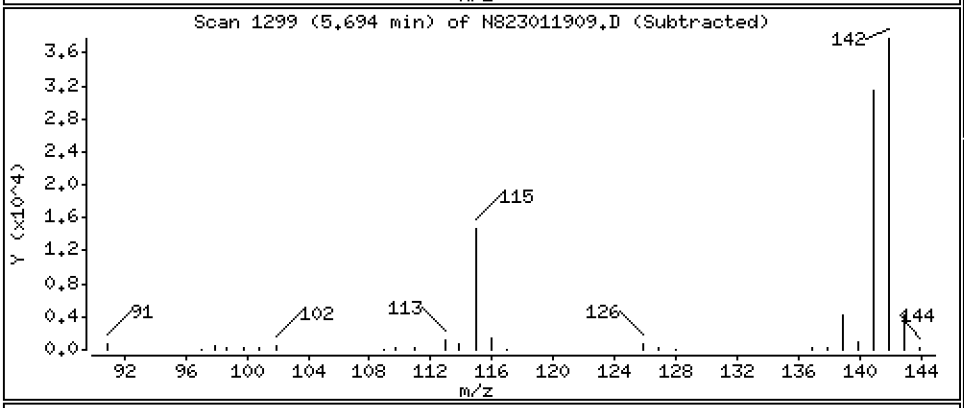
Column diameter: 0.25

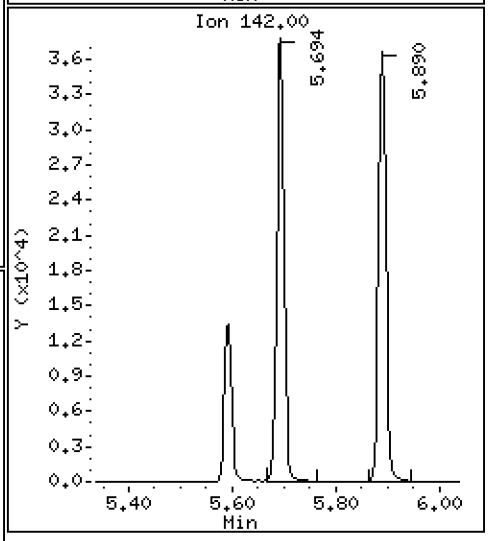
4 2-Methylnaphthalene

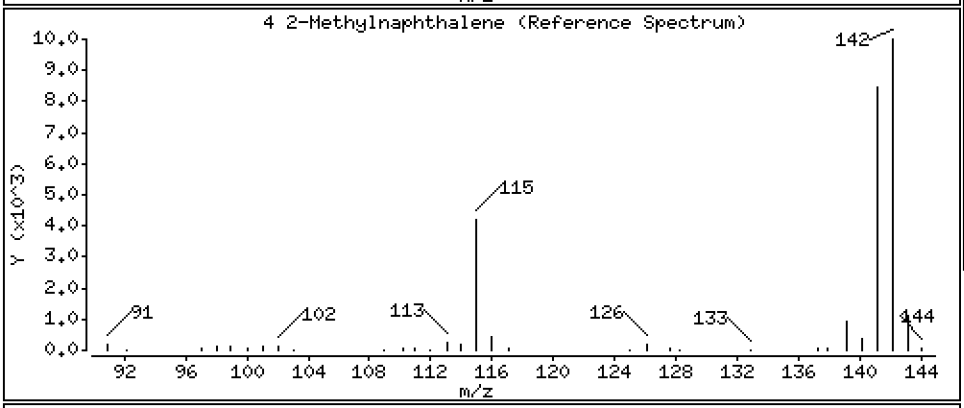
Concentration: 2.670 ug/L

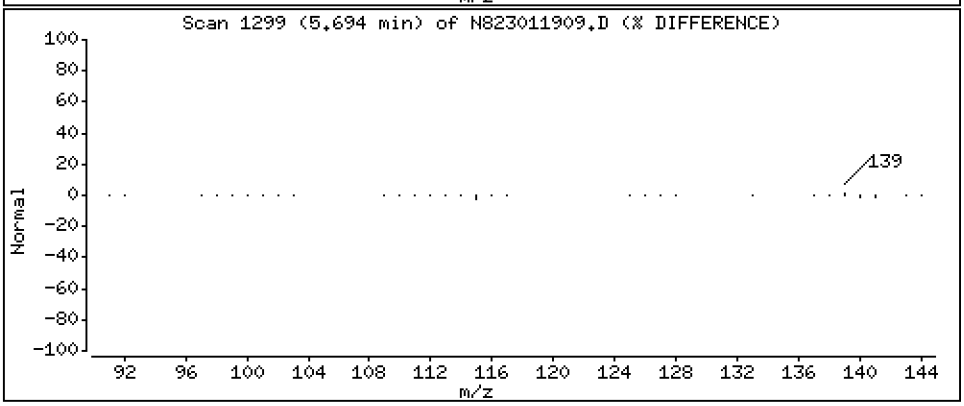












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

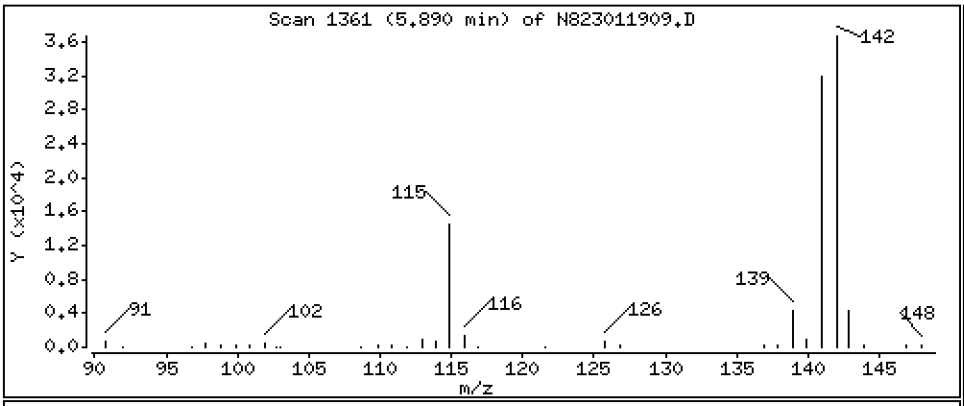
Operator: JZ

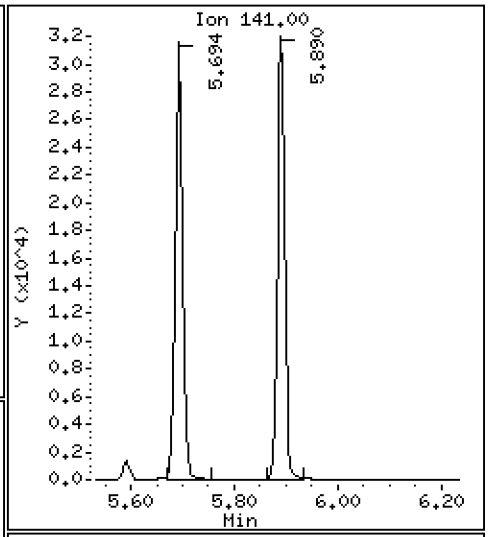
Column phase: Rxi-17sil

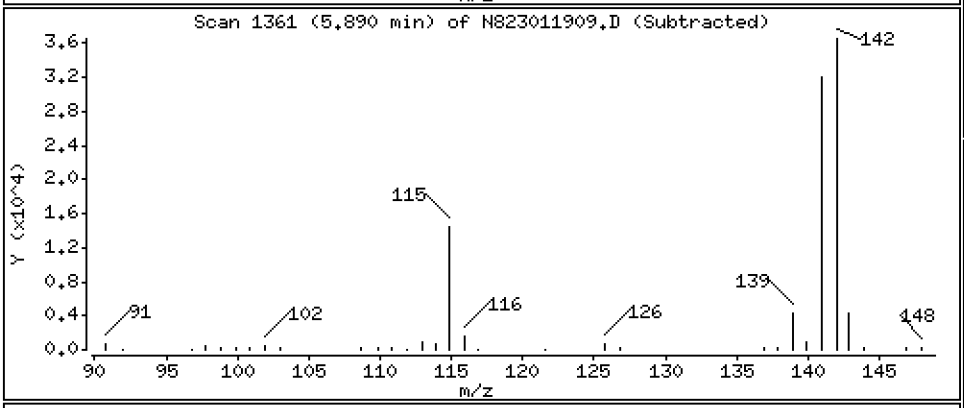
Column diameter: 0.25

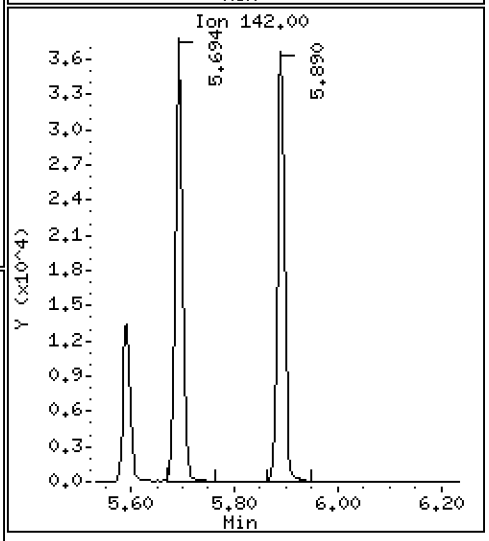
5 1-methylnaphthalene

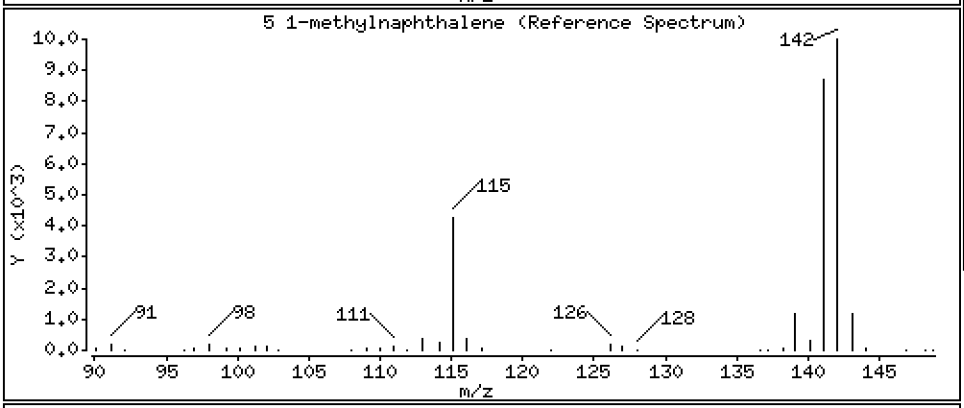
Concentration: 2.649 ug/L

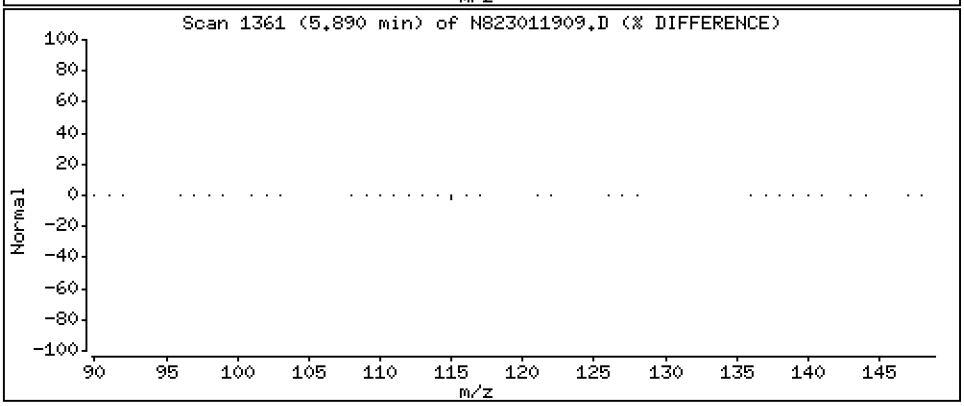












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

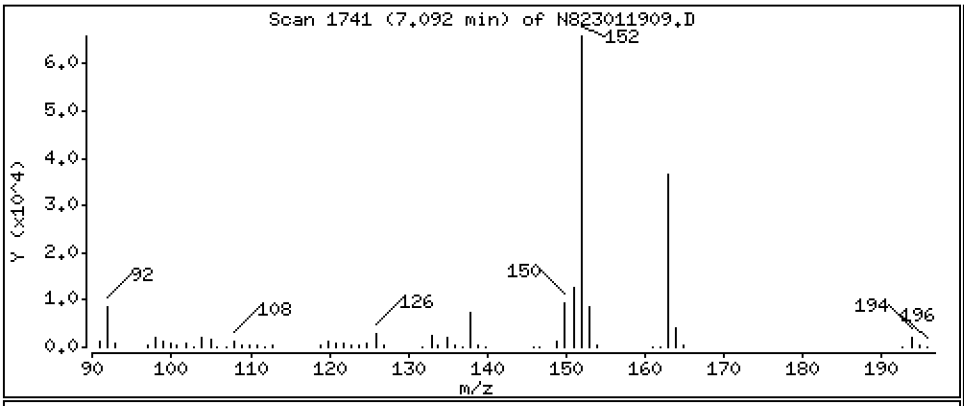
Operator: JZ

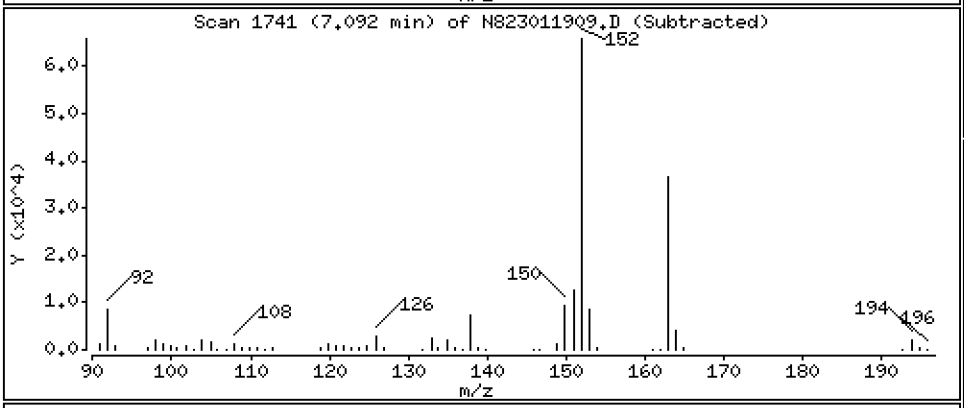
Column phase: Rxi-17sil

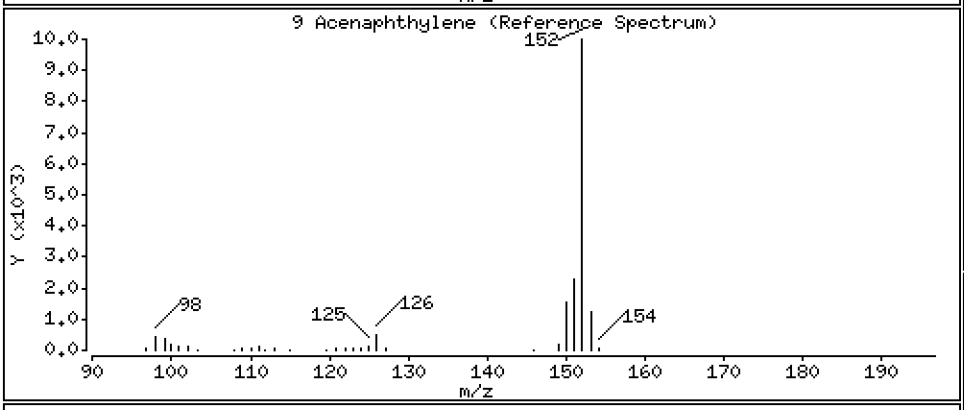
Column diameter: 0.25

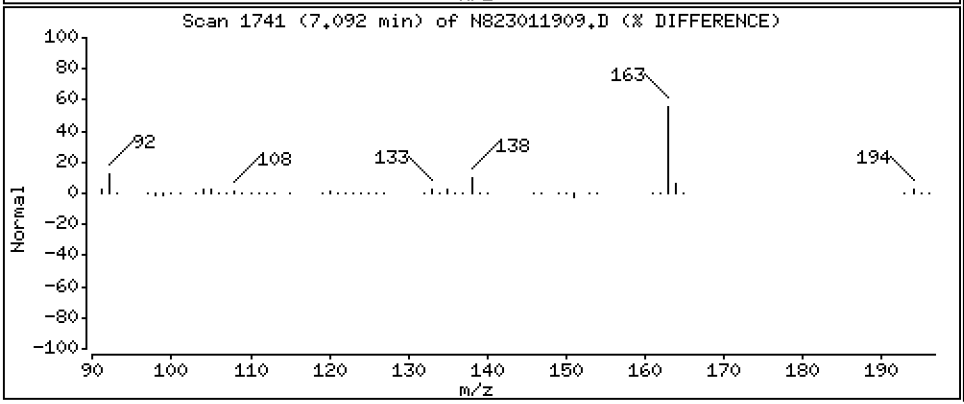
9 Acenaphthylene

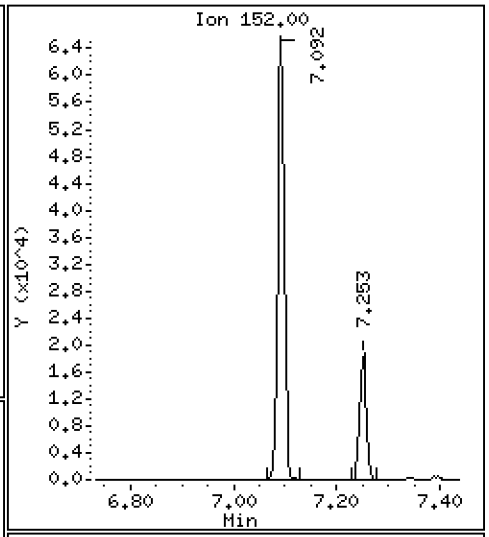
Concentration: 2.821 ug/L

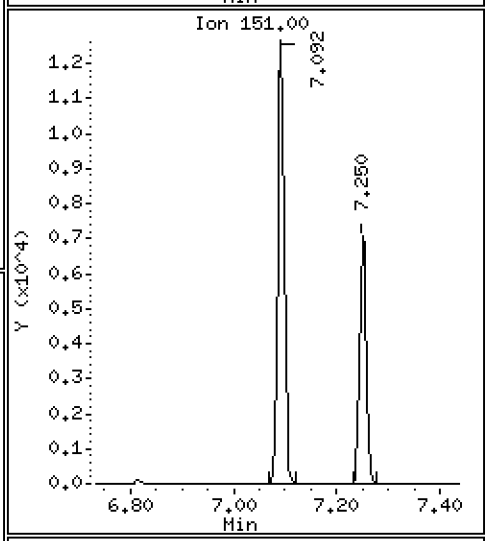


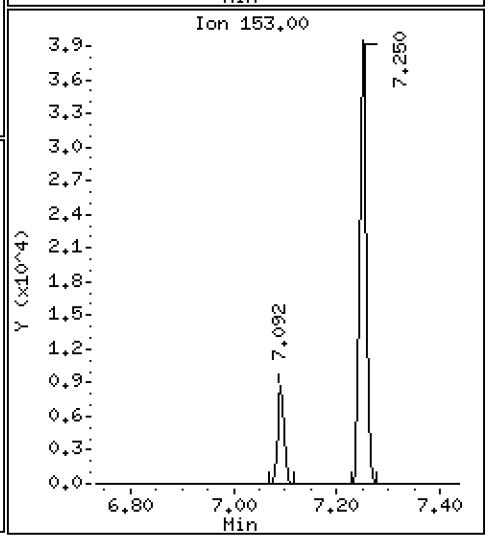












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

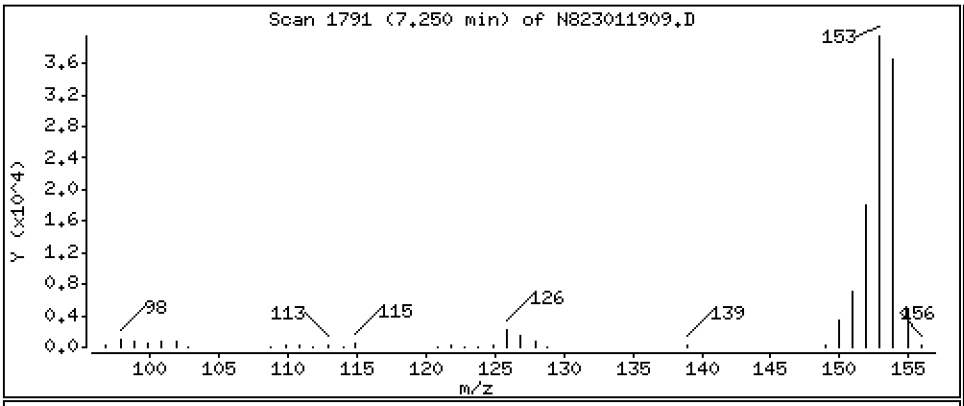
Operator: JZ

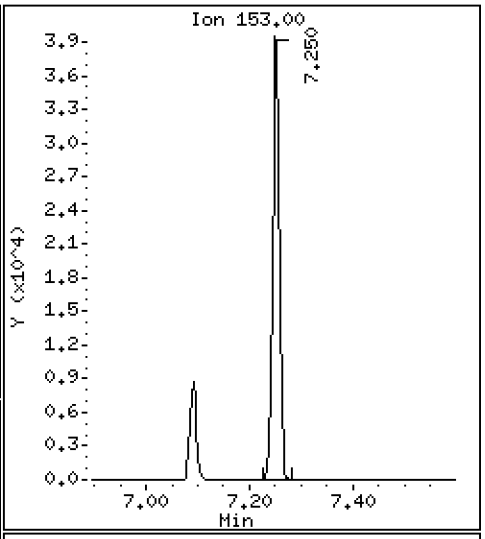
Column phase: Rxi-17sil

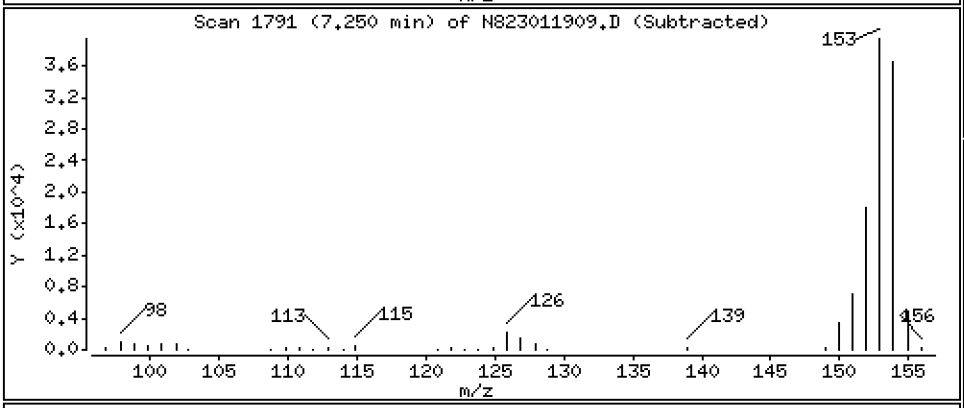
Column diameter: 0.25

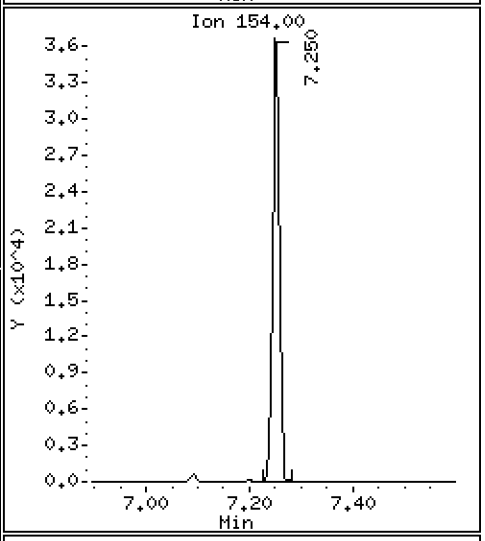
11 Acenaphthene

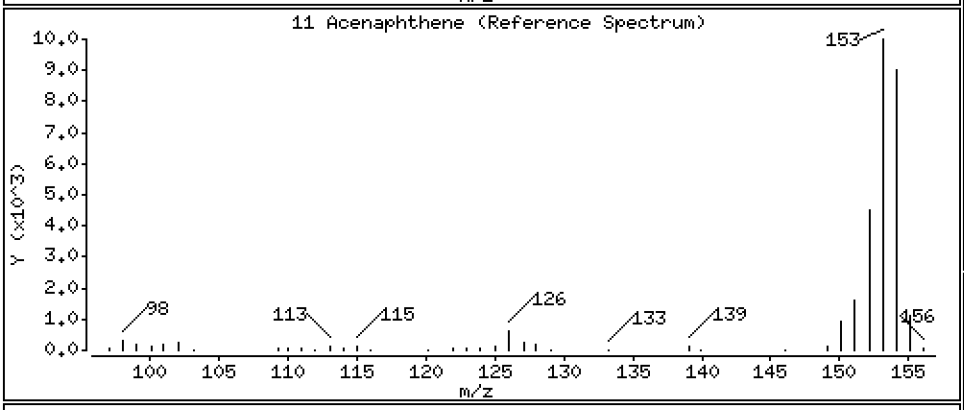
Concentration: 2.600 ug/L

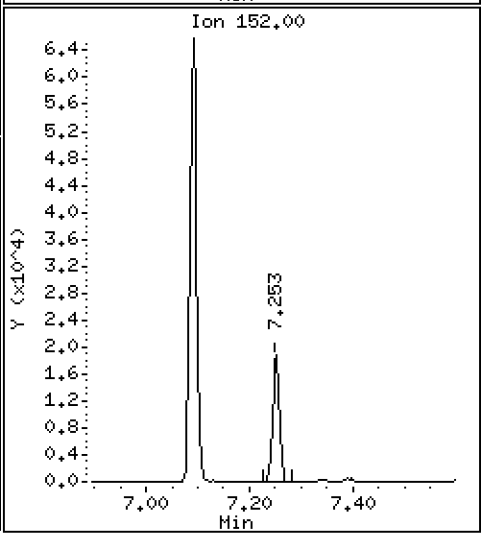


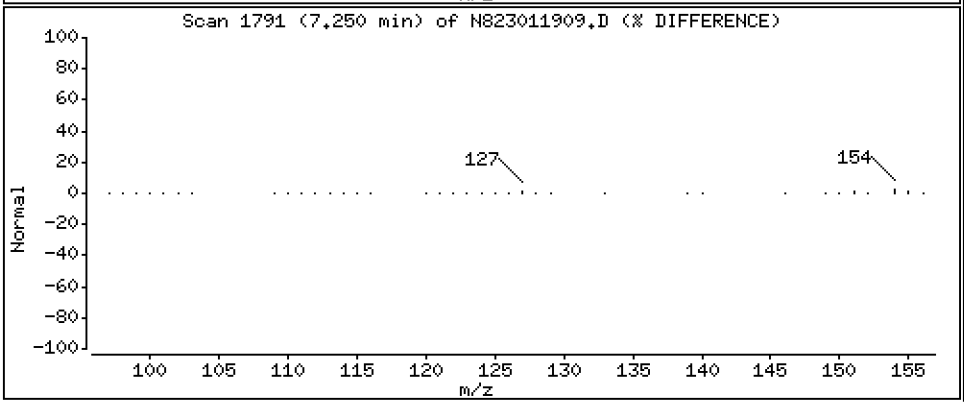












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

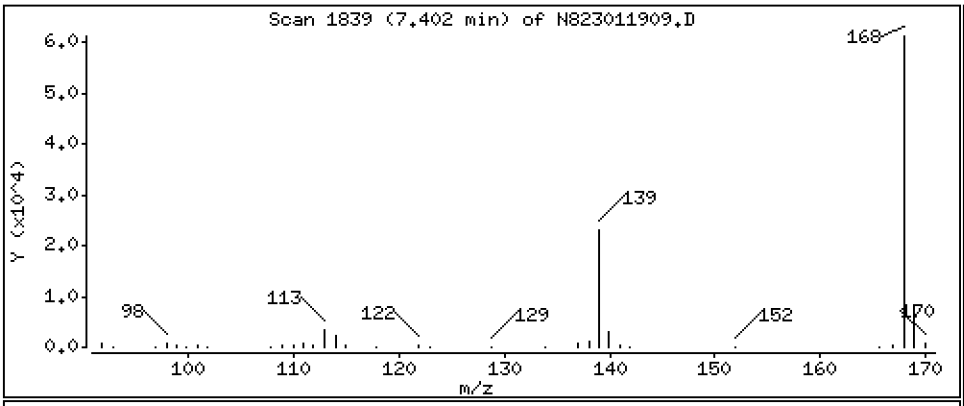
Operator: JZ

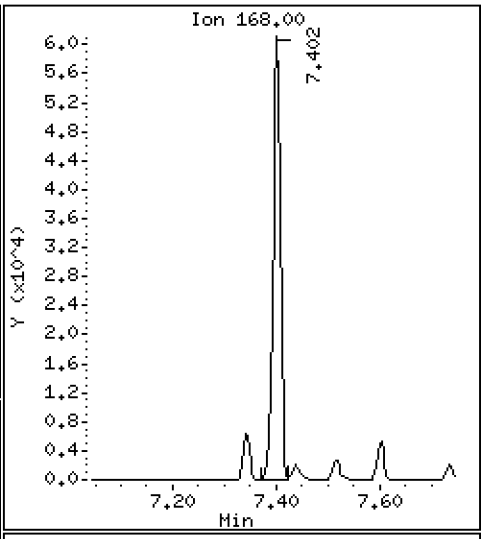
Column phase: Rxi-17sil

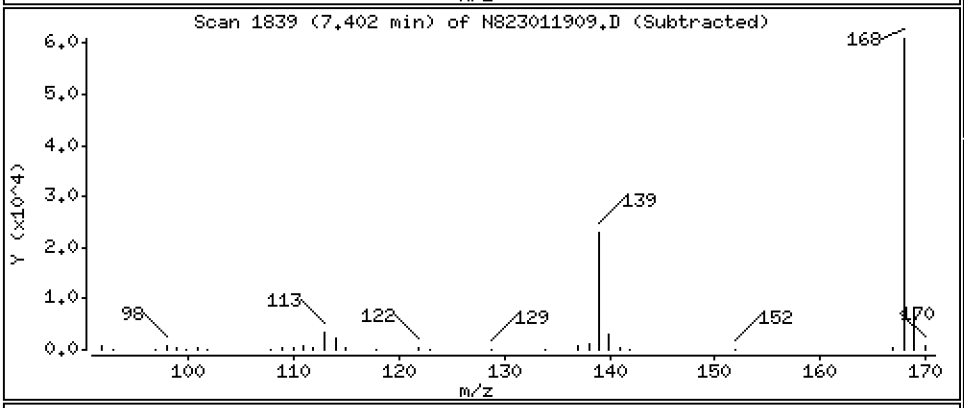
Column diameter: 0.25

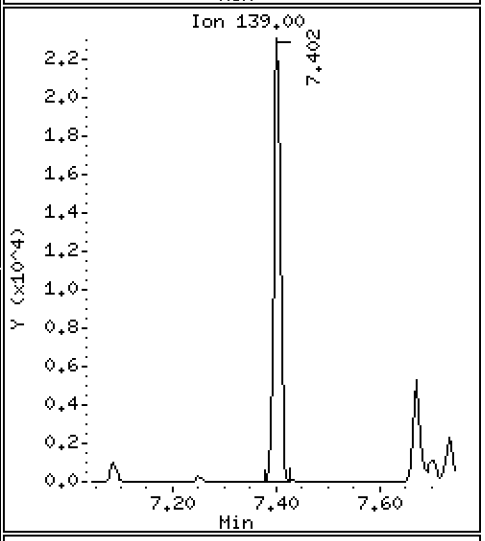
12 Dibenzofuran

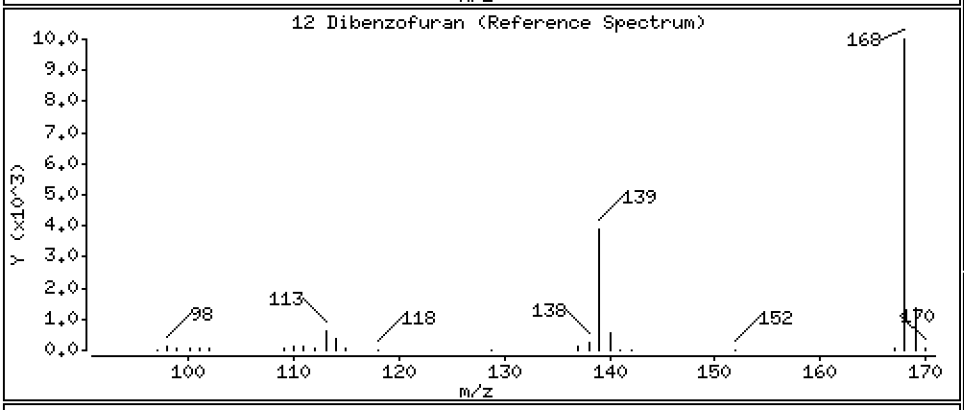
Concentration: 2.860 ug/L

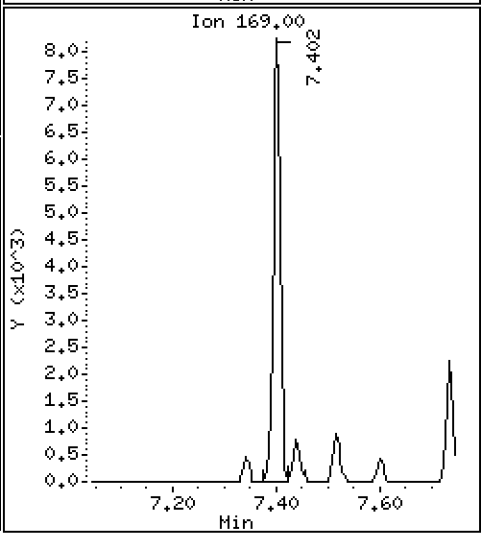


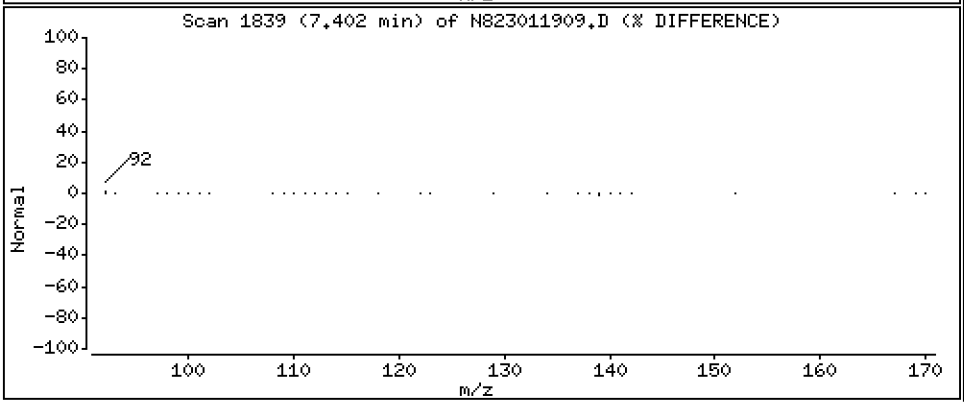












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

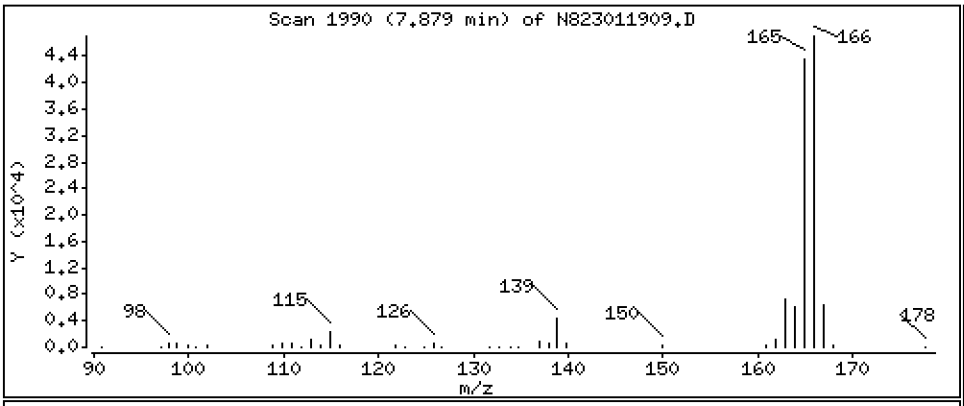
Operator: JZ

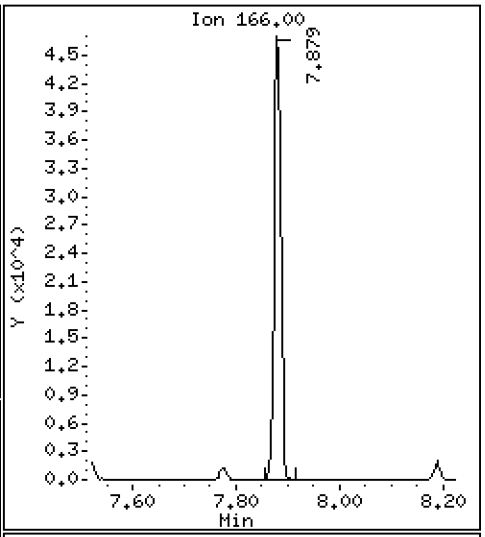
Column phase: Rxi-17sil

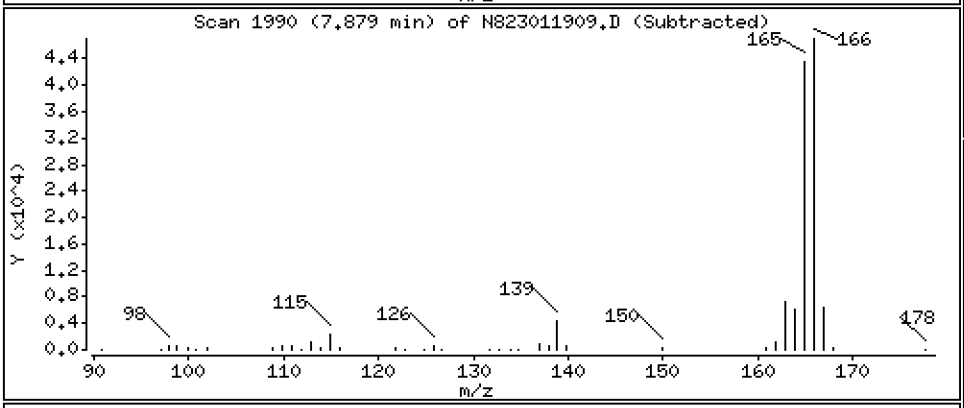
Column diameter: 0.25

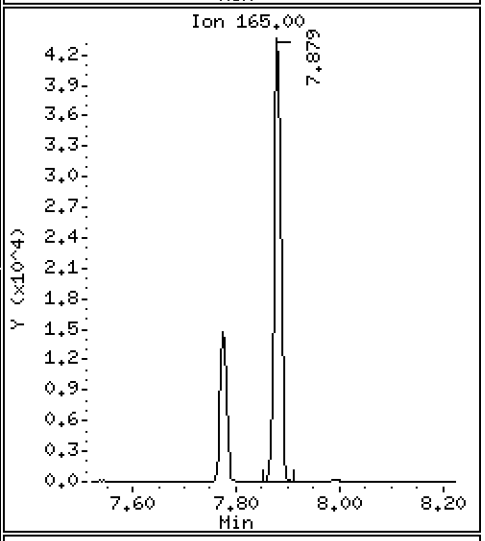
14 Fluorene

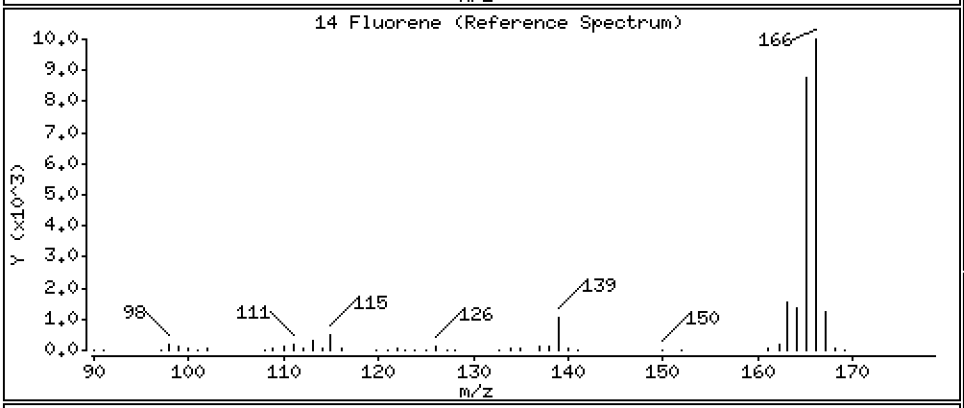
Concentration: 2.631 ug/L

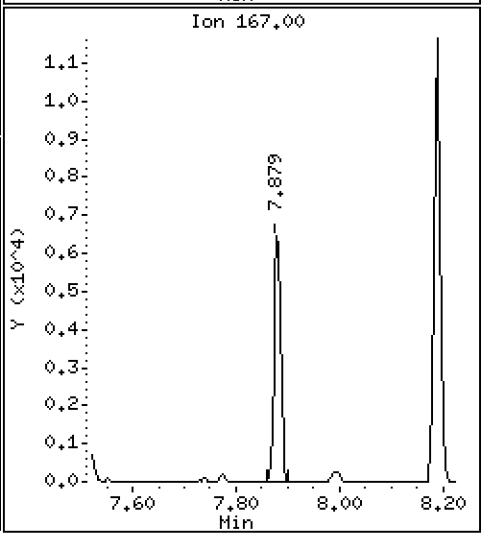


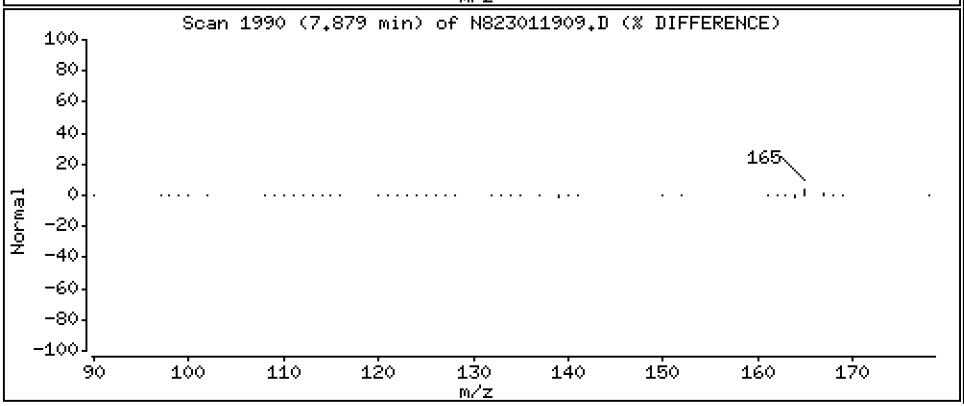












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

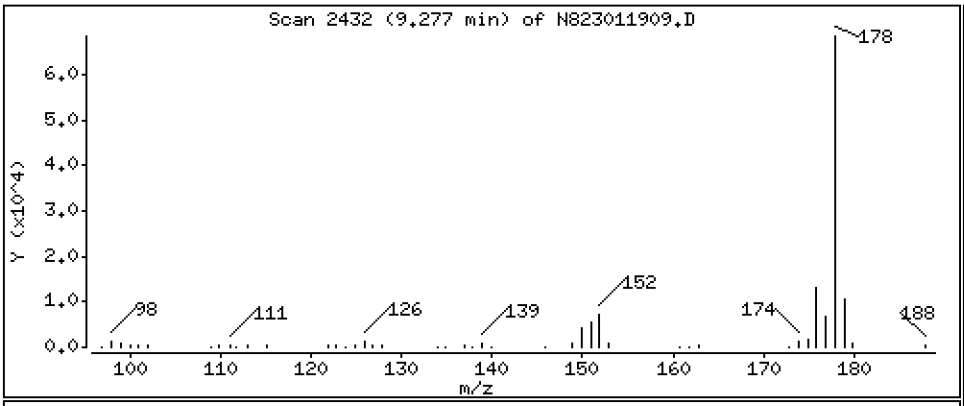
Operator: JZ

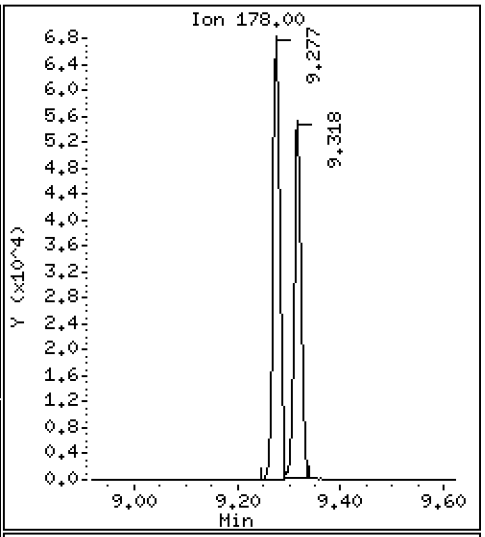
Column phase: Rxi-17sil

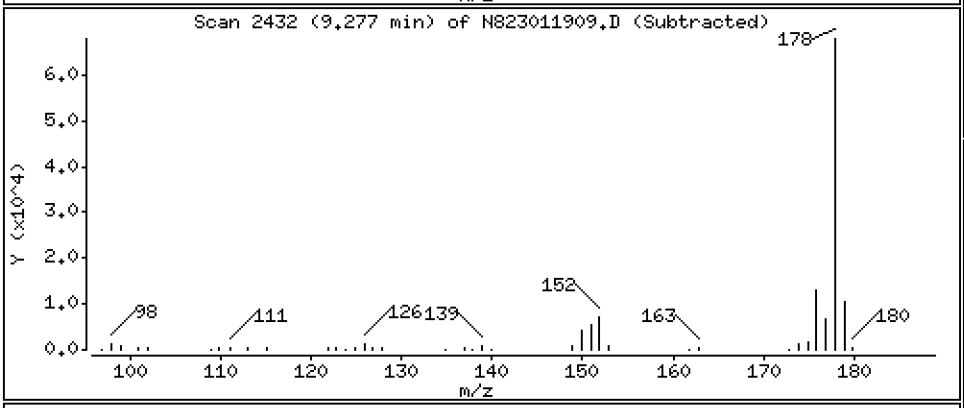
Column diameter: 0.25

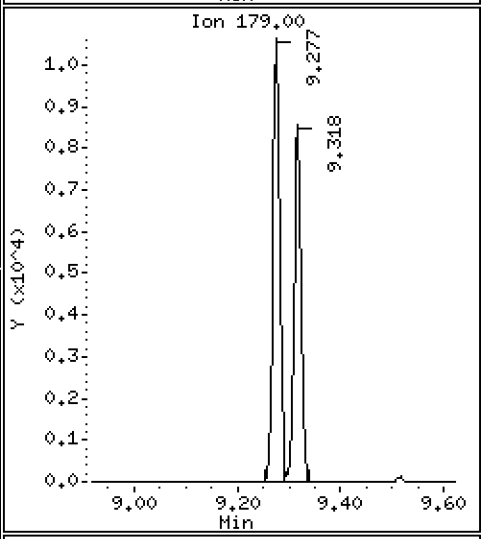
16 Phenanthrene

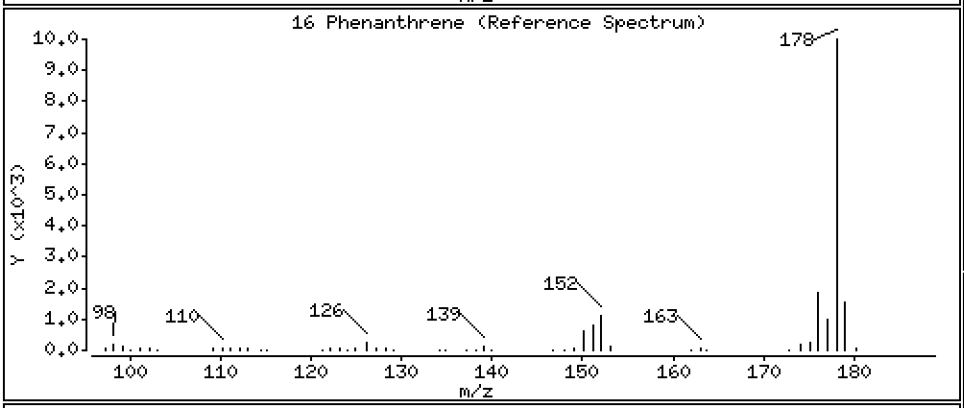
Concentration: 2.448 ug/L

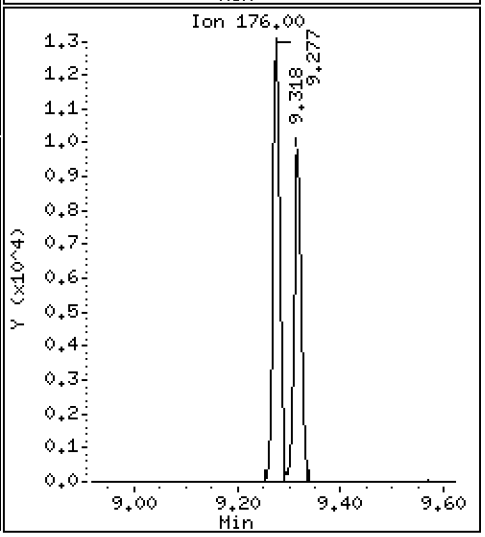


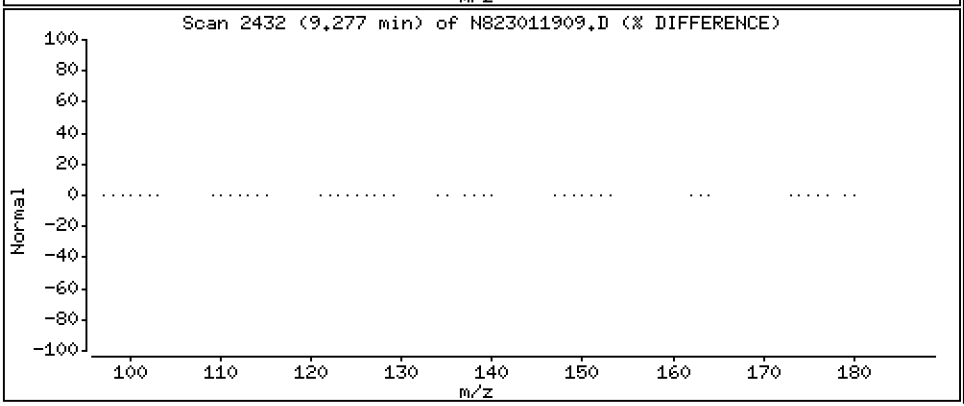












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

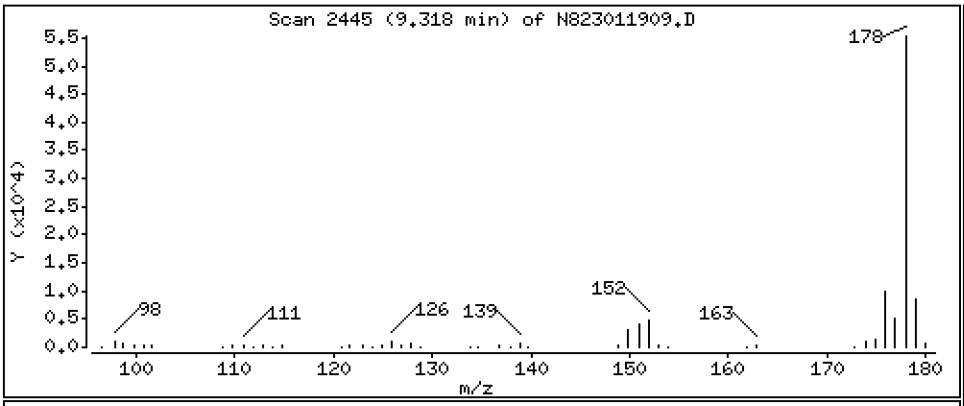
Operator: JZ

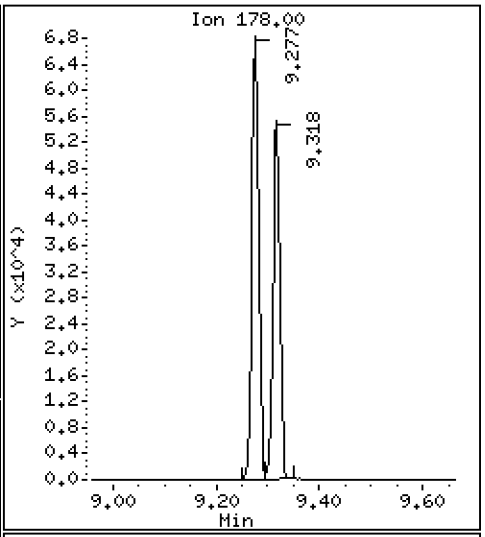
Column phase: Rxi-17sil

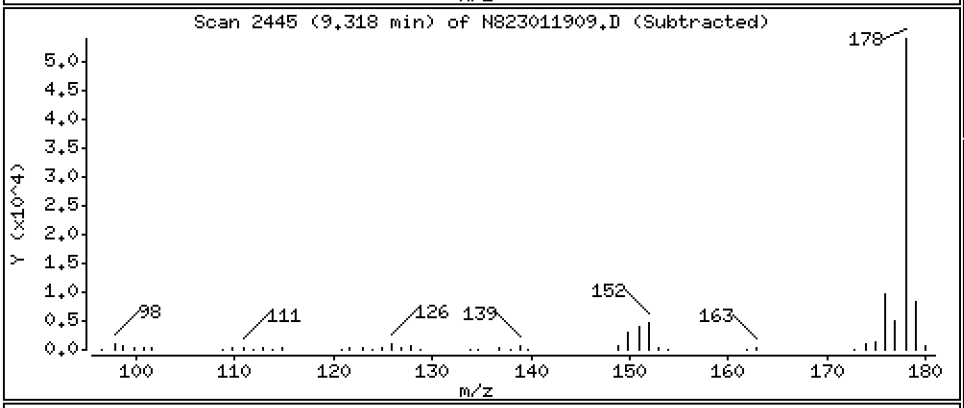
Column diameter: 0.25

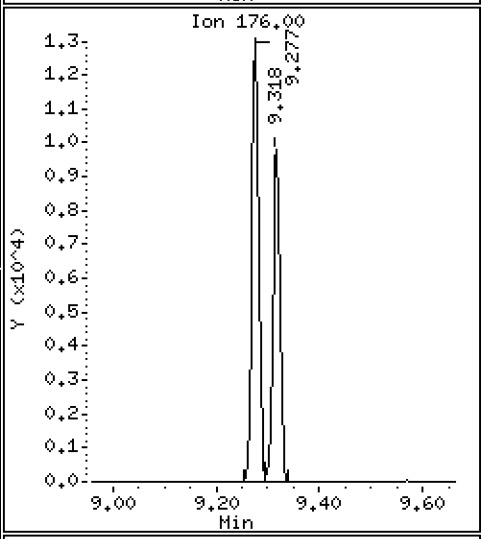
17 Anthracene

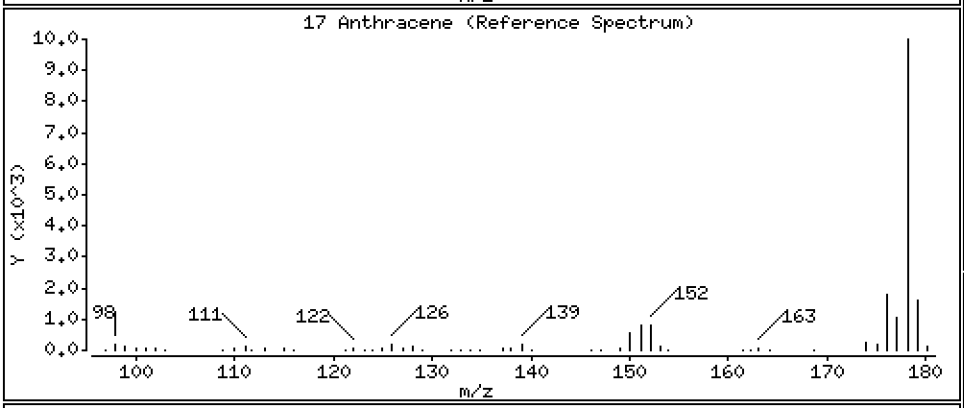
Concentration: 2.270 ug/L

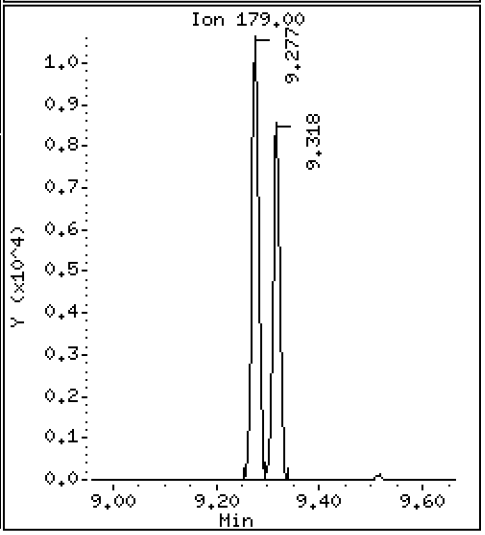


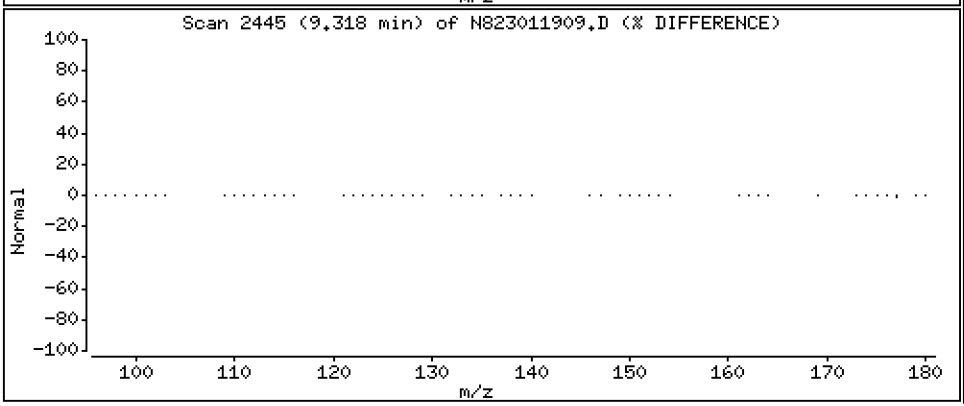












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

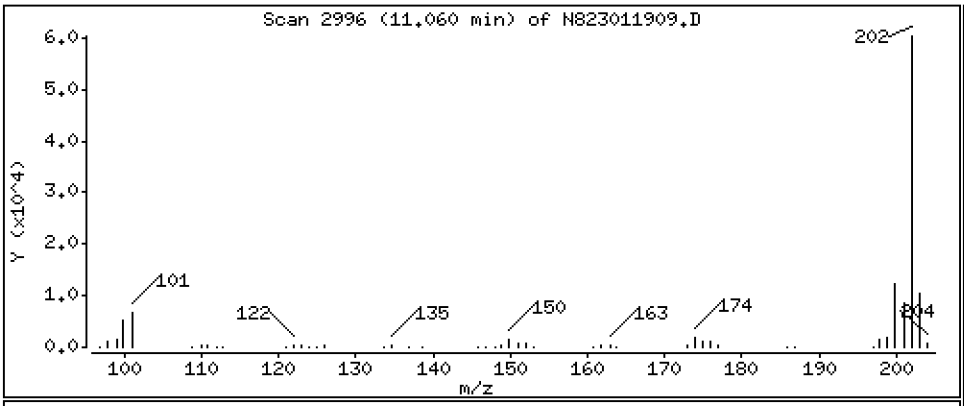
Operator: JZ

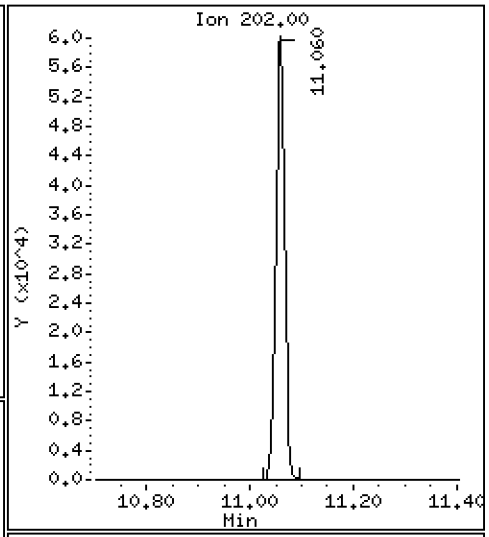
Column phase: Rxi-17sil

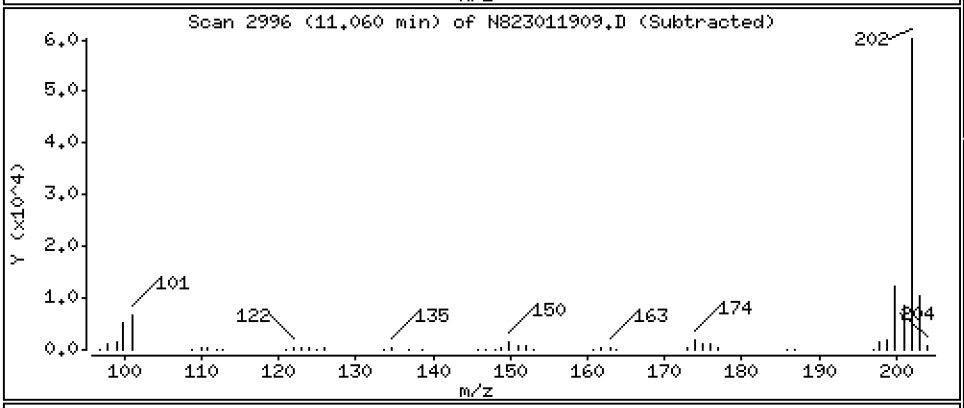
Column diameter: 0.25

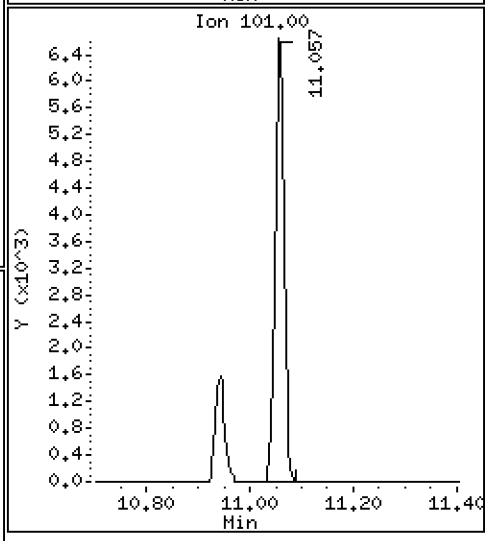
22 Fluoranthene

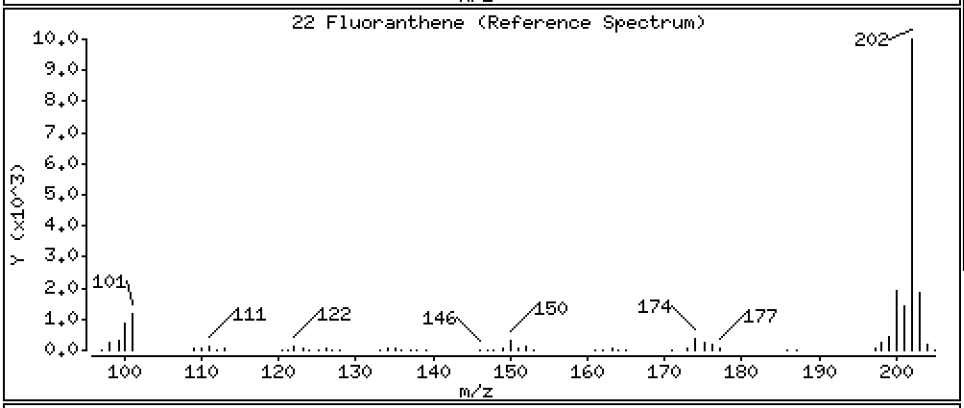
Concentration: 2.653 ug/L

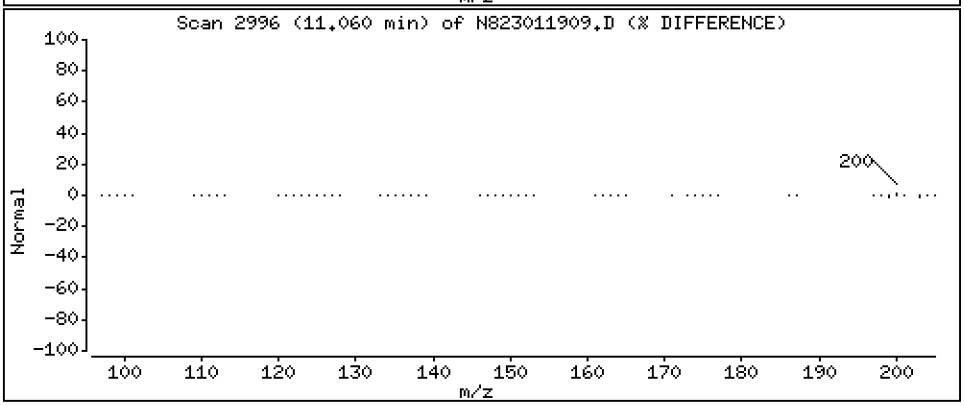












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

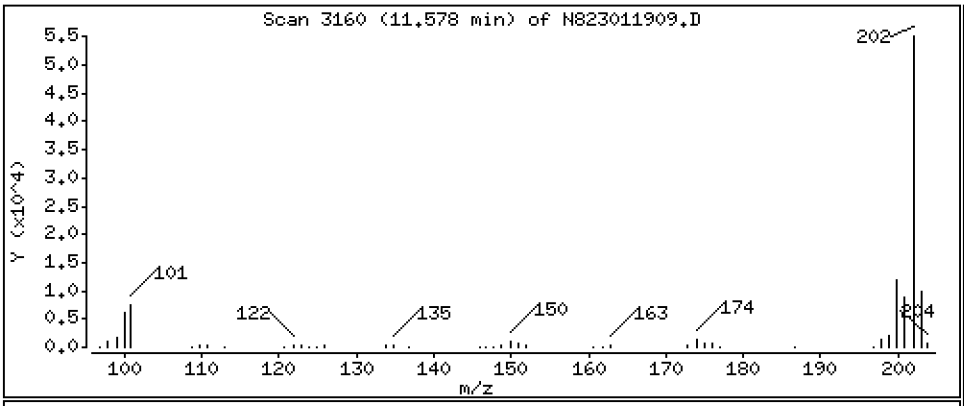
Operator: JZ

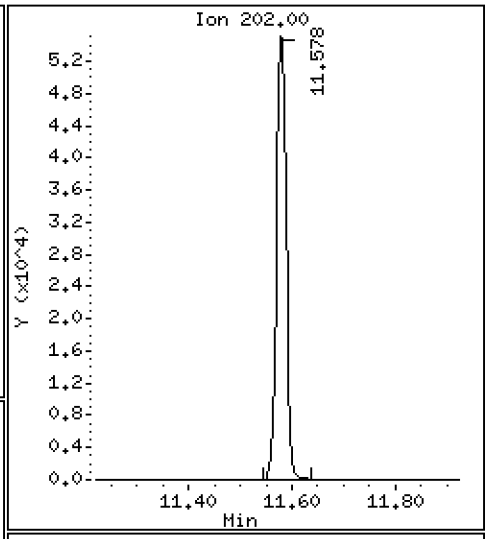
Column phase: Rxi-17sil

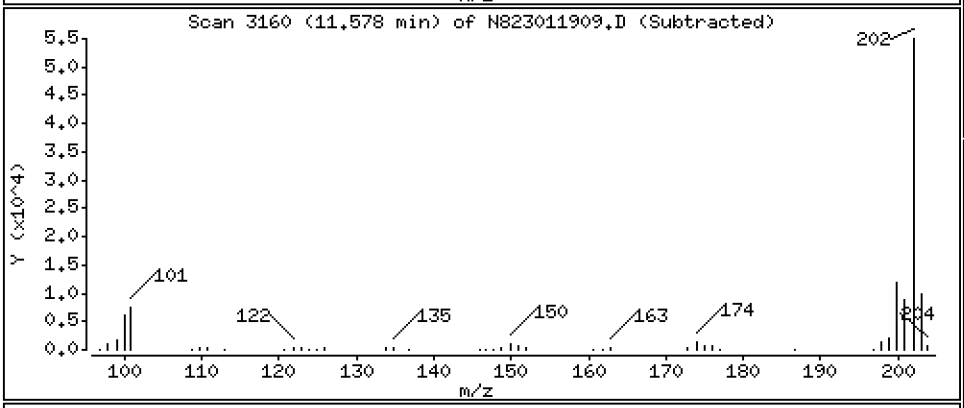
Column diameter: 0.25

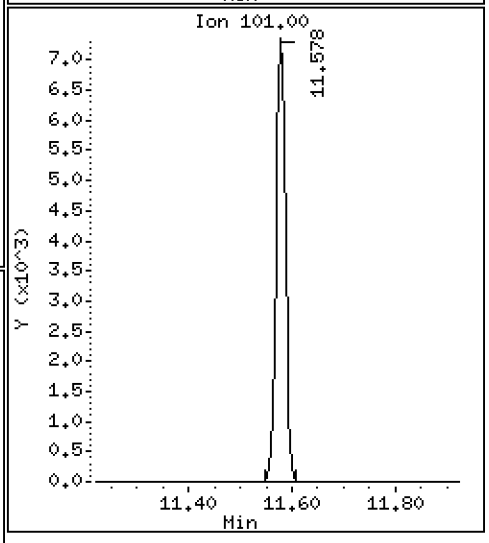
23 Pyrene

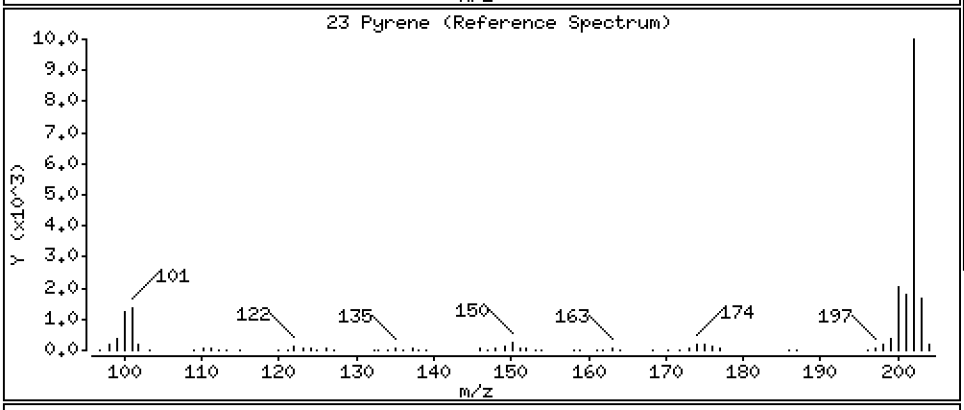
Concentration: 2.462 ug/L

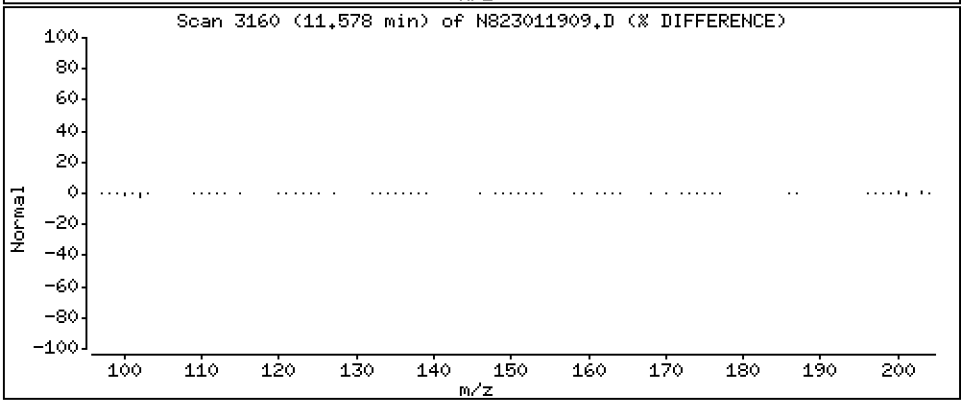












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

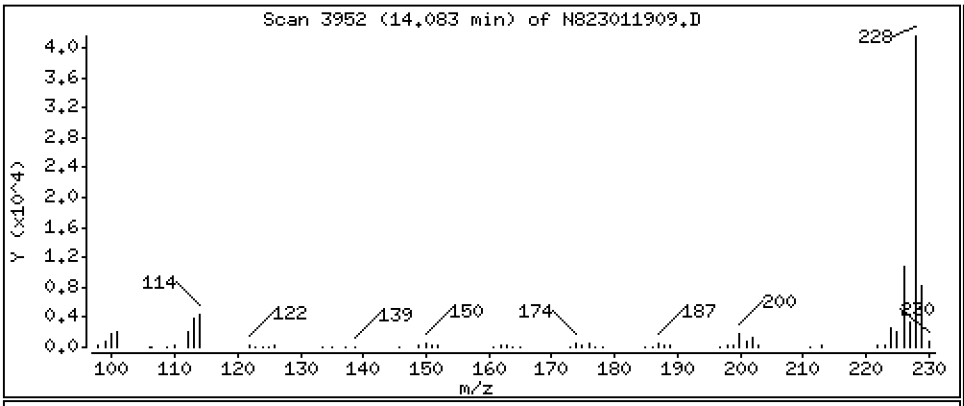
Operator: JZ

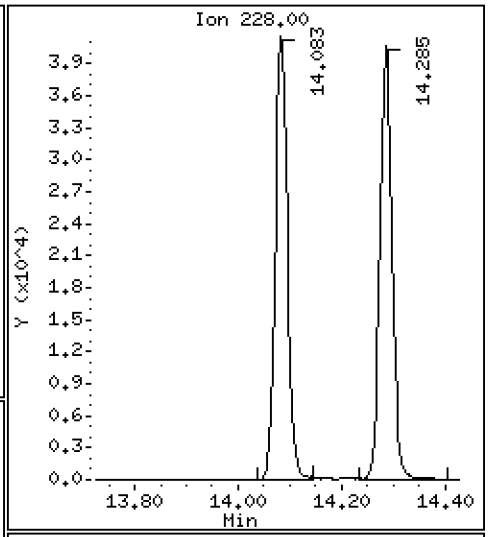
Column phase: Rxi-17sil

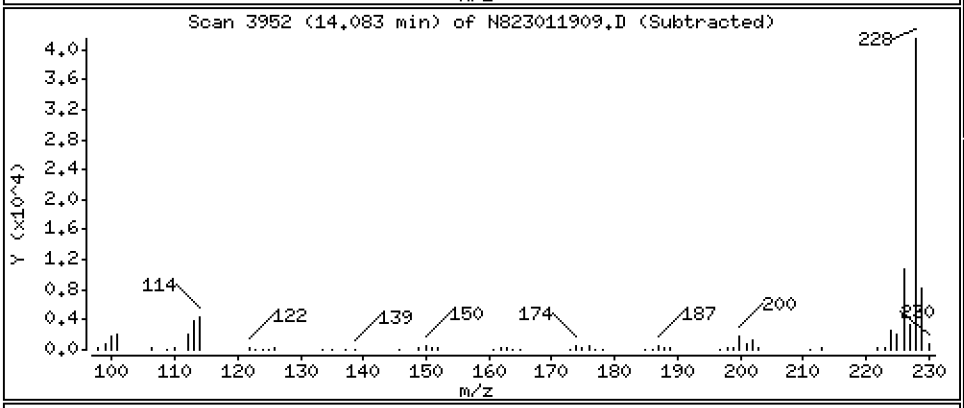
Column diameter: 0.25

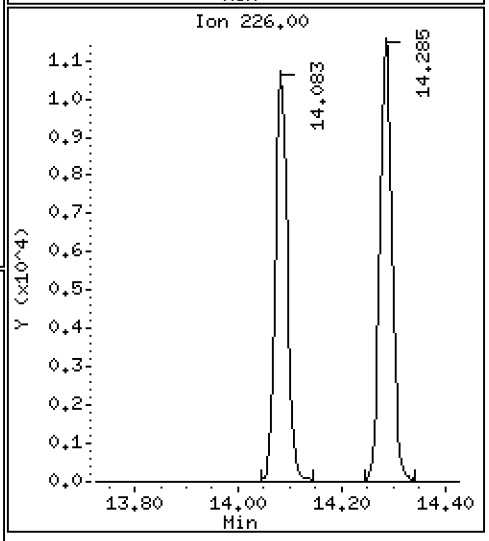
24 Benzo(a)anthracene

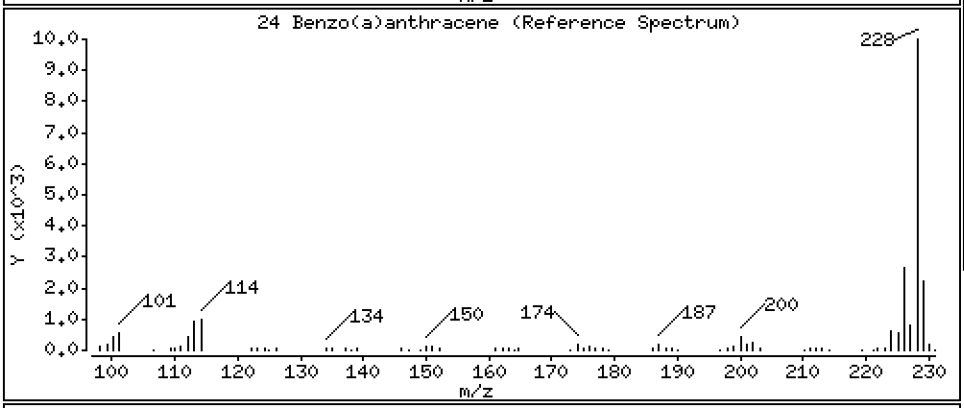
Concentration: 2.587 ug/L

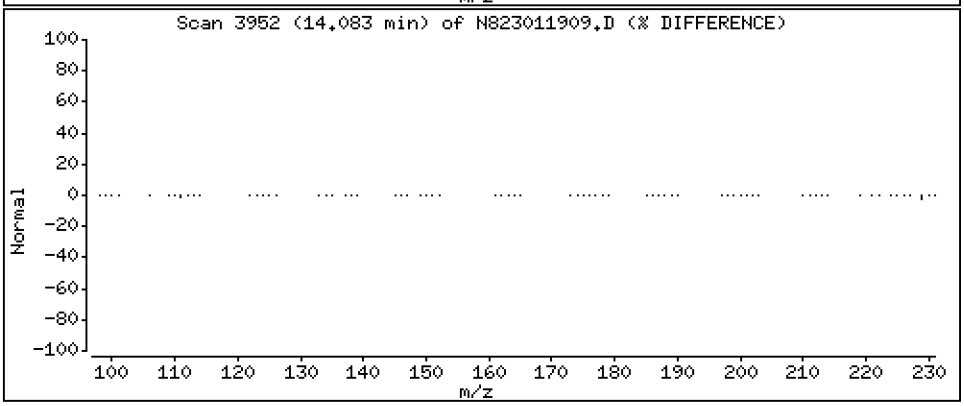












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

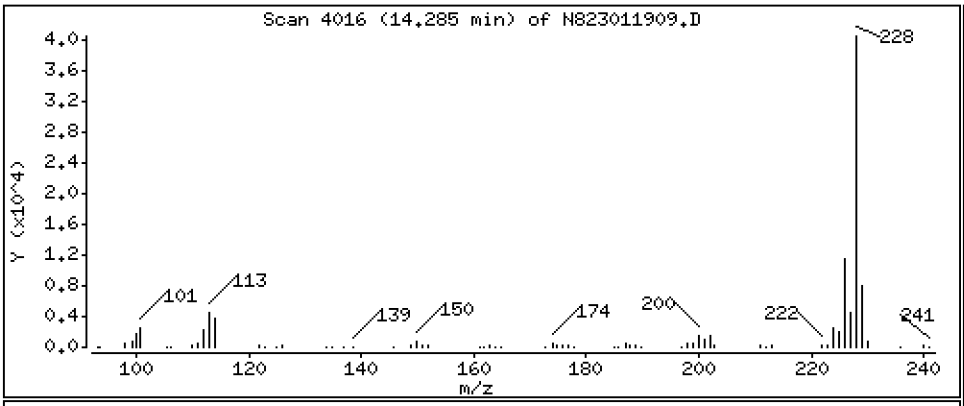
Operator: JZ

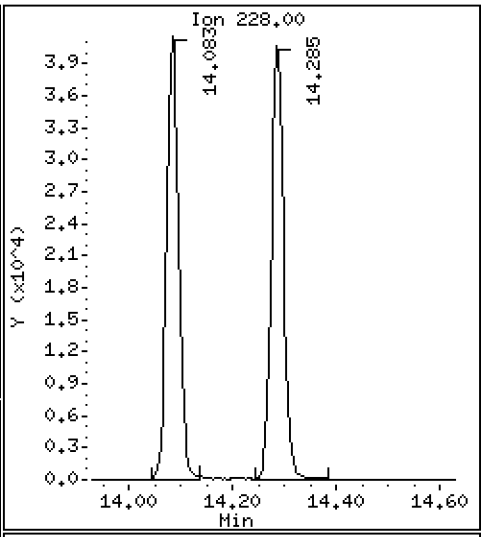
Column phase: Rxi-17sil

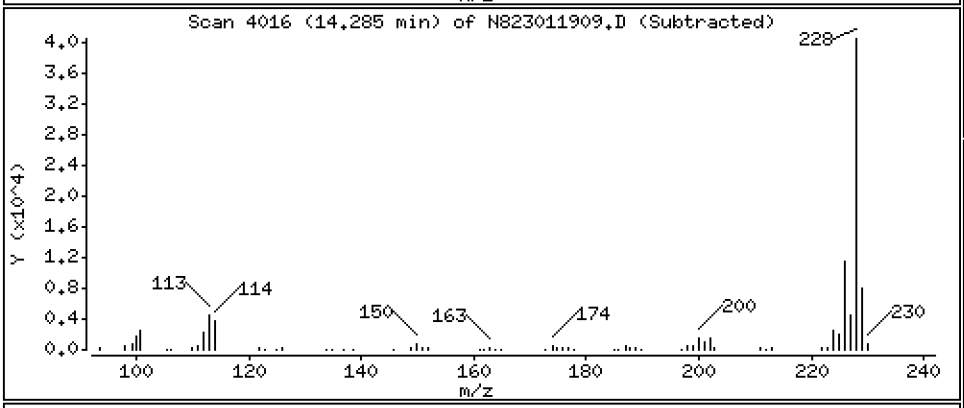
Column diameter: 0.25

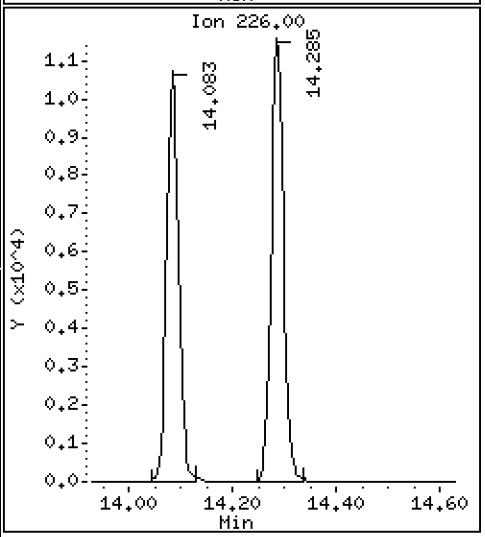
27 Chrysene

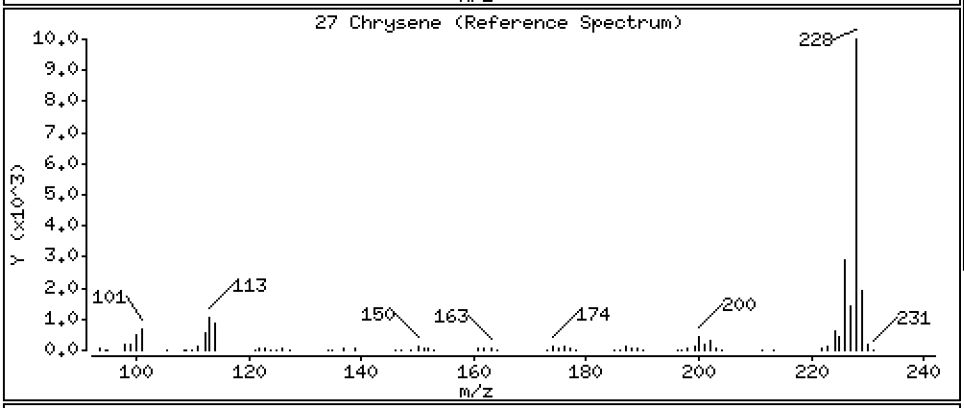
Concentration: 2.400 ug/L

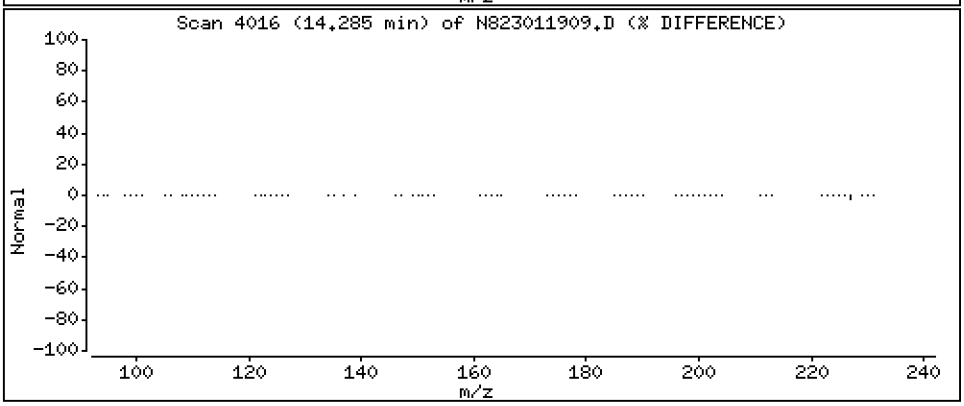












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

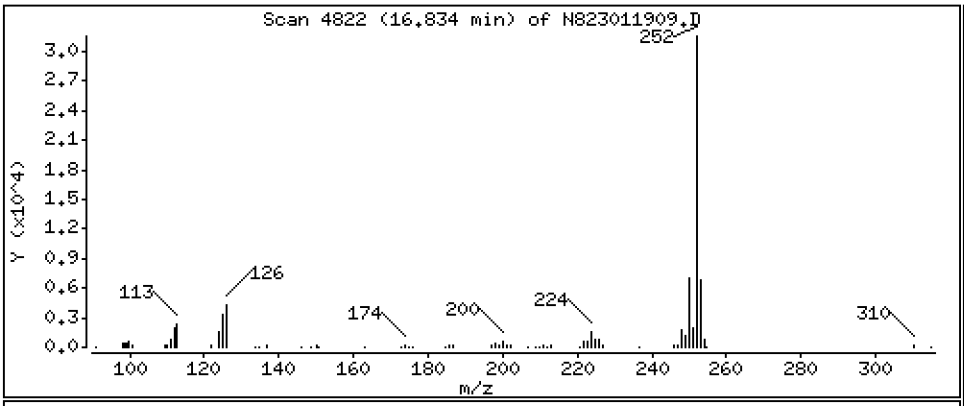
Operator: JZ

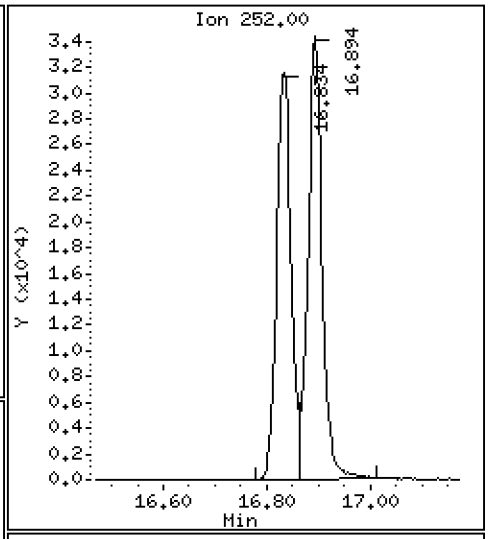
Column phase: Rxi-17sil

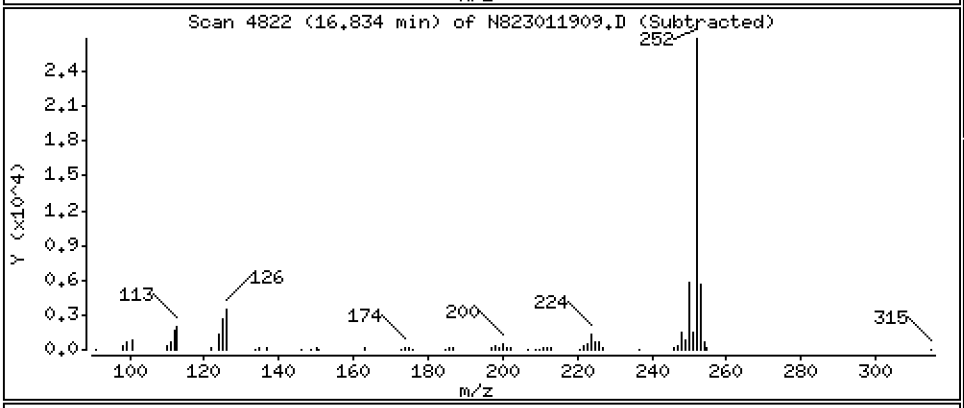
Column diameter: 0.25

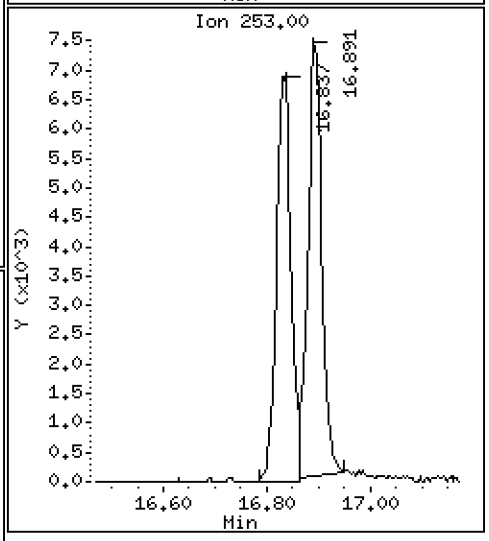
28 Benzo(b)fluoranthene

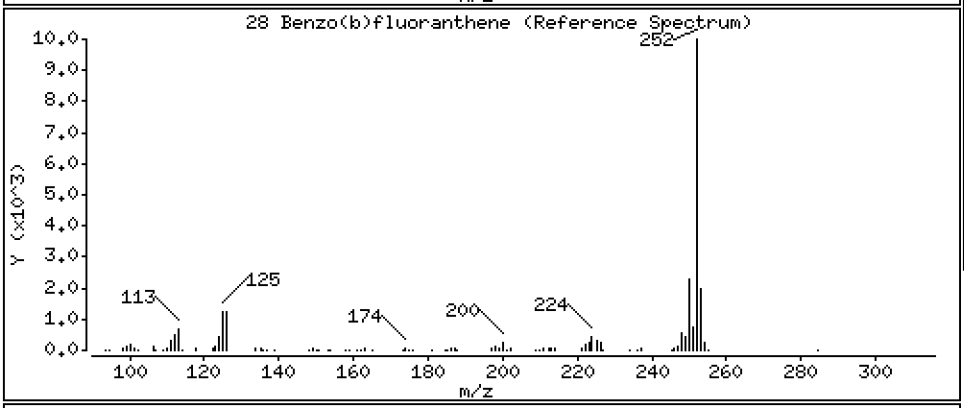
Concentration: 2.507 ug/L

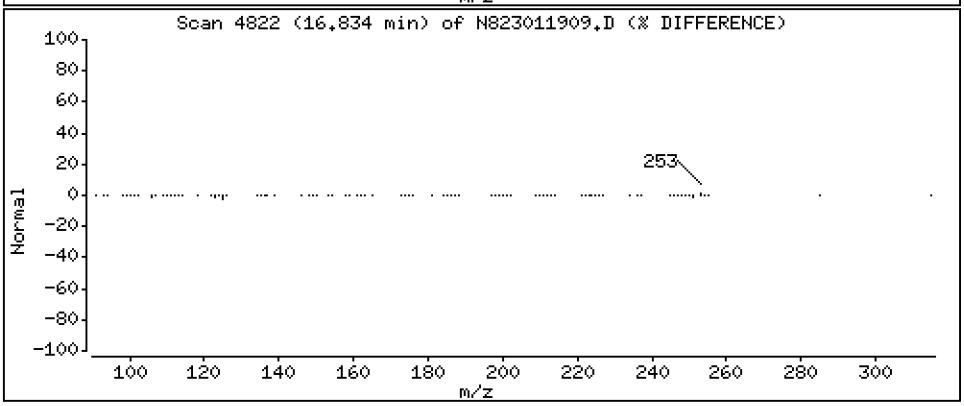












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

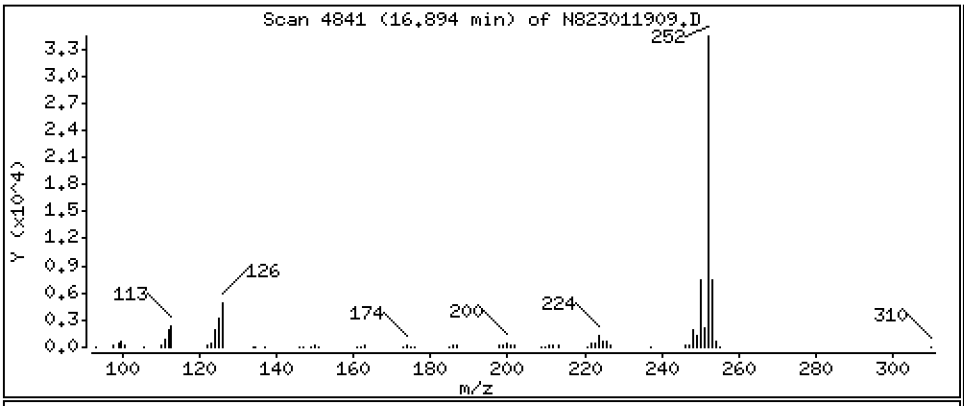
Operator: JZ

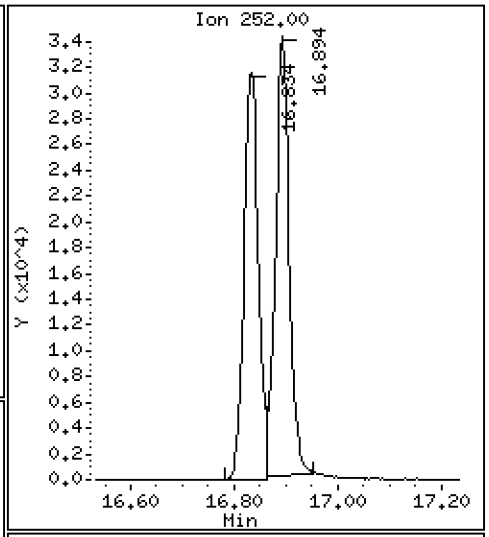
Column phase: Rxi-17sil

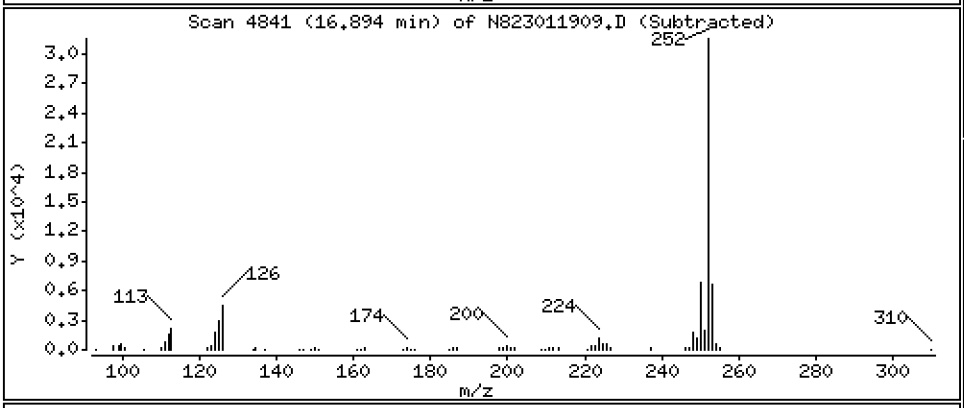
Column diameter: 0.25

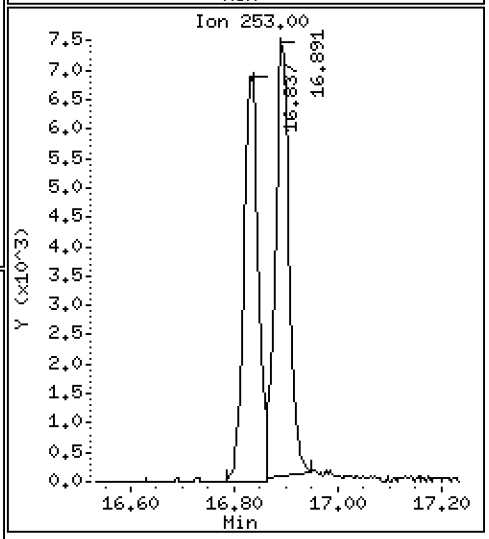
29 Benzo(k)fluoranthene

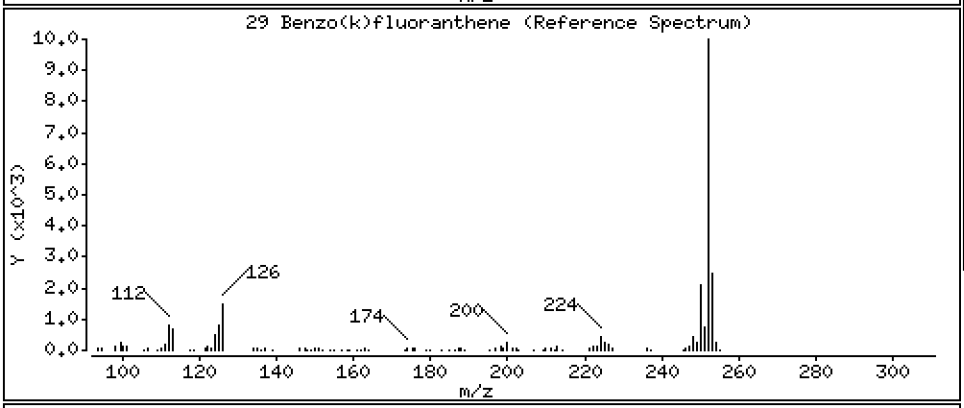
Concentration: 2.656 ug/L

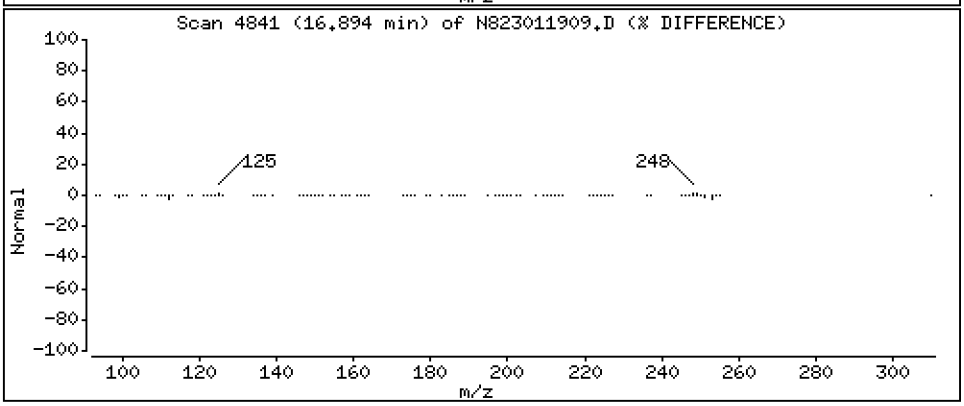












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

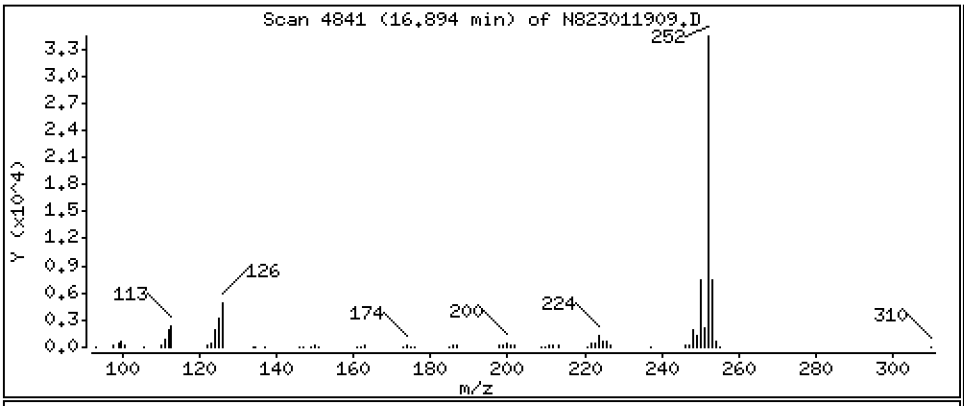
Operator: JZ

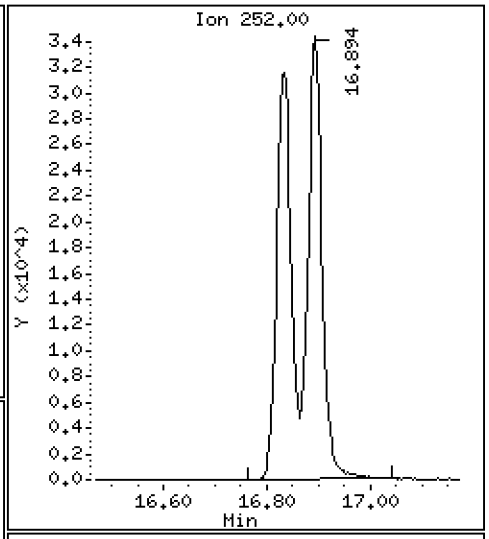
Column phase: Rxi-17sil

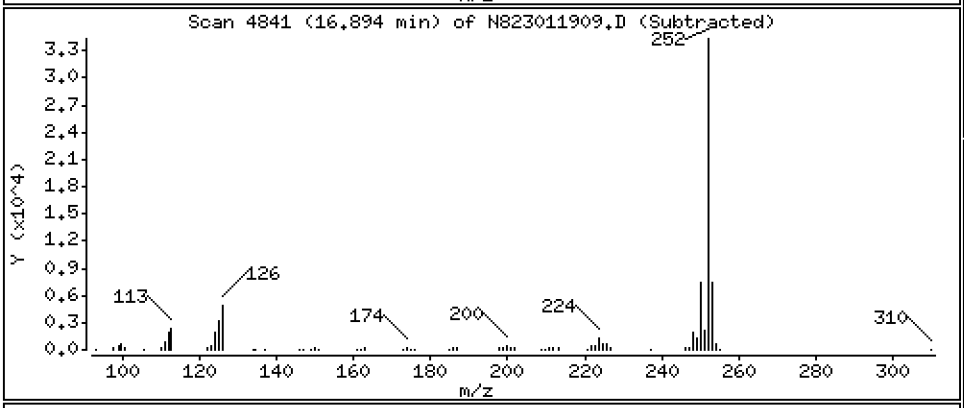
Column diameter: 0.25

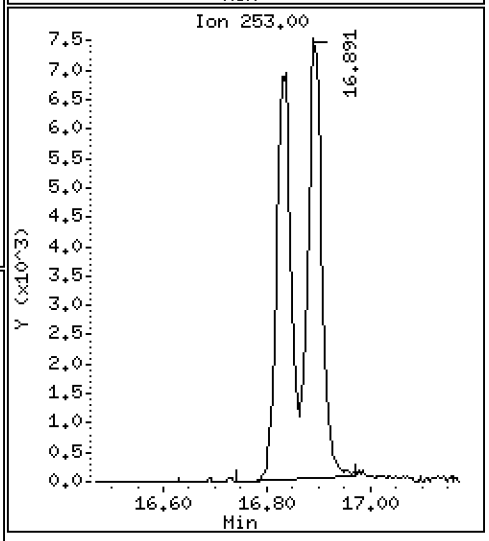
31 Total Benzofluoranthenes

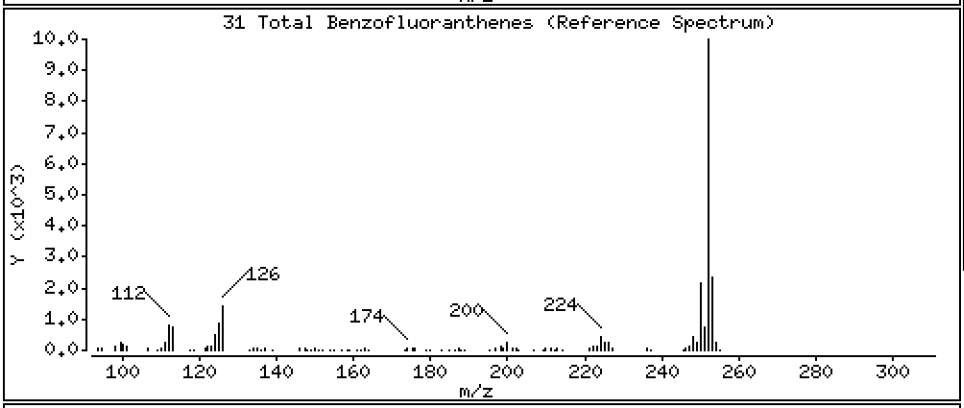
Concentration: 5.480 ug/L

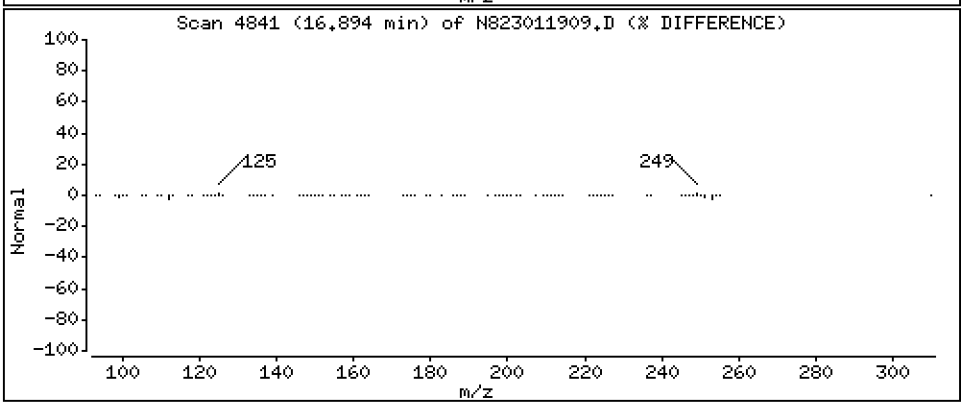












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

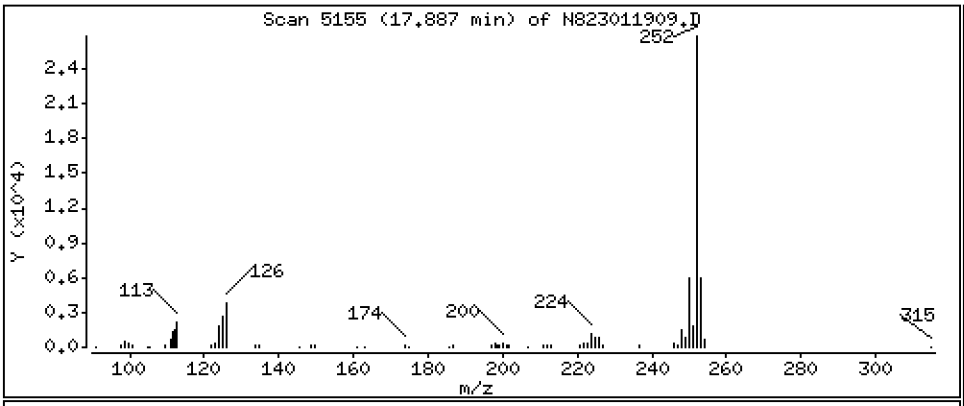
Operator: JZ

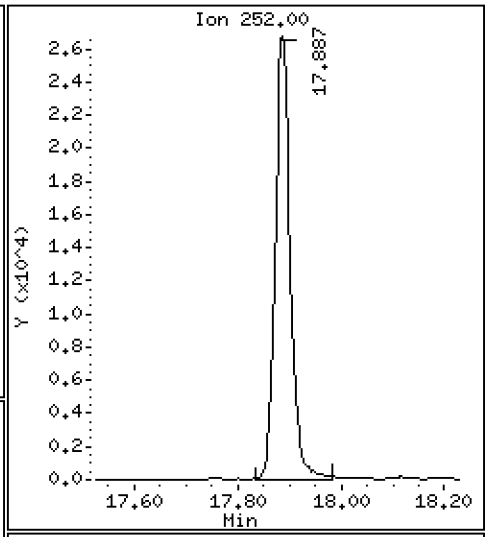
Column phase: Rxi-17sil

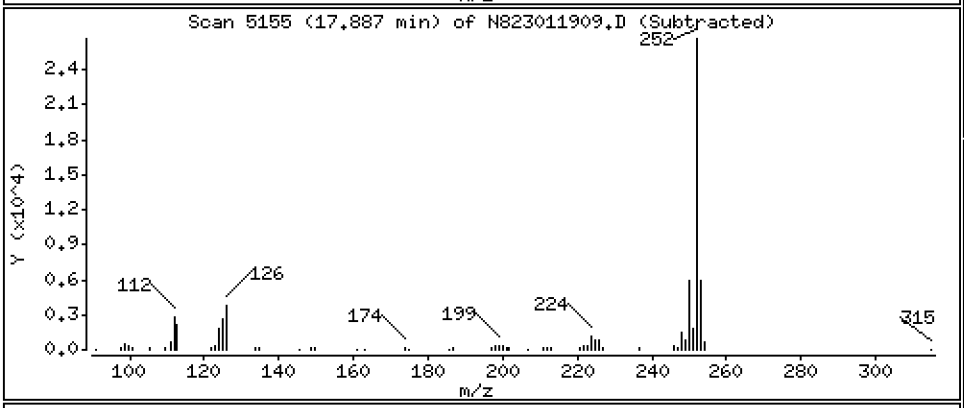
Column diameter: 0.25

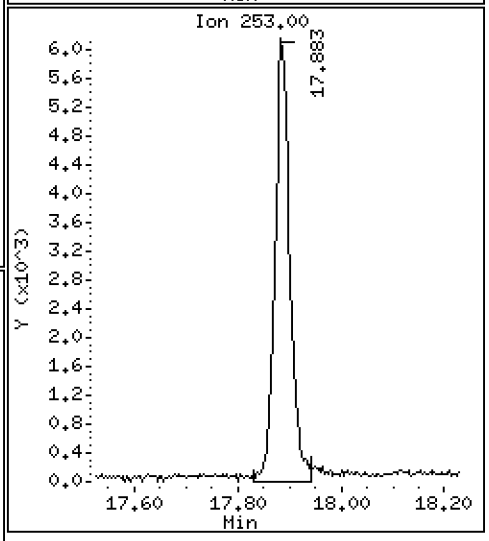
32 Benzo(a)pyrene

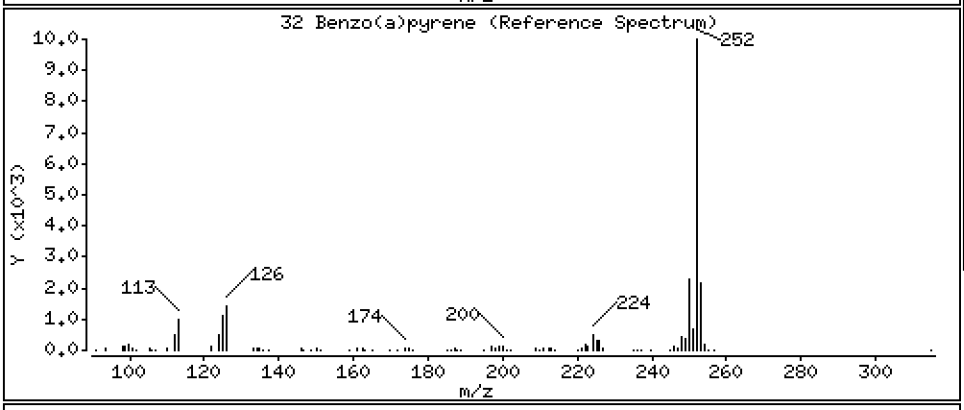
Concentration: 2.572 ug/L

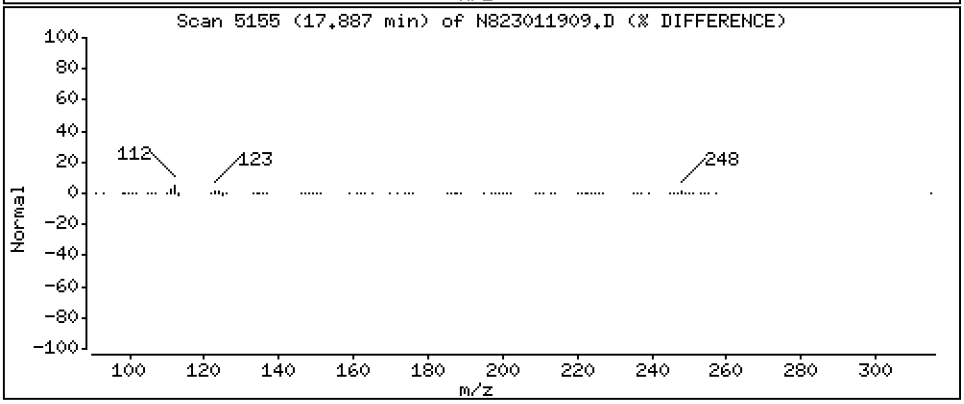












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

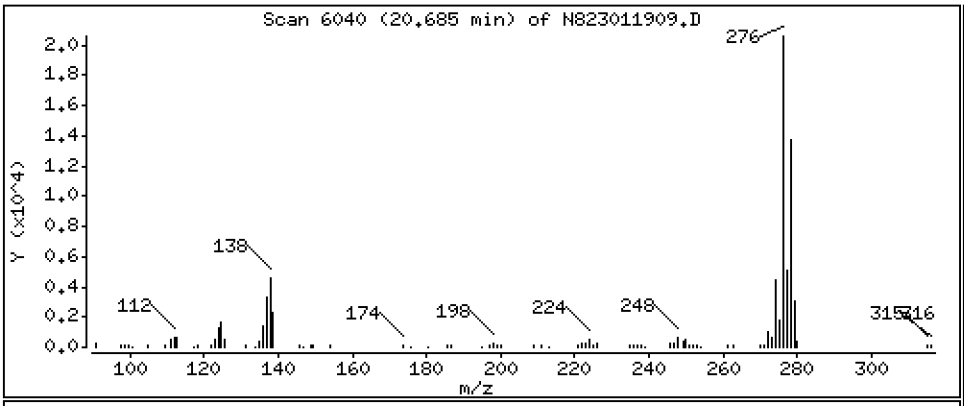
Operator: JZ

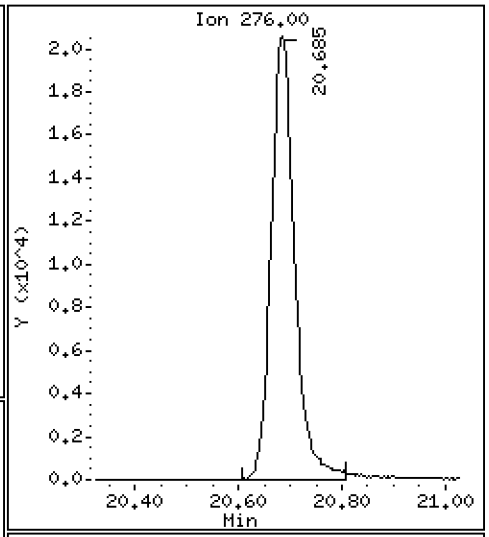
Column phase: Rxi-17sil

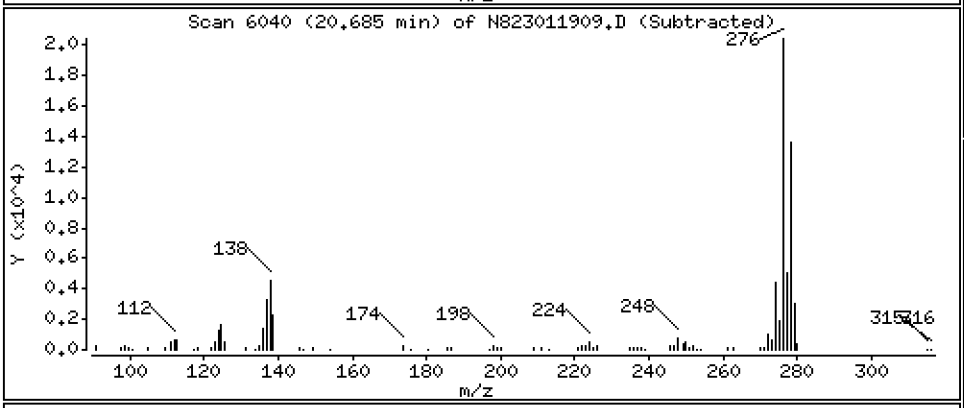
Column diameter: 0.25

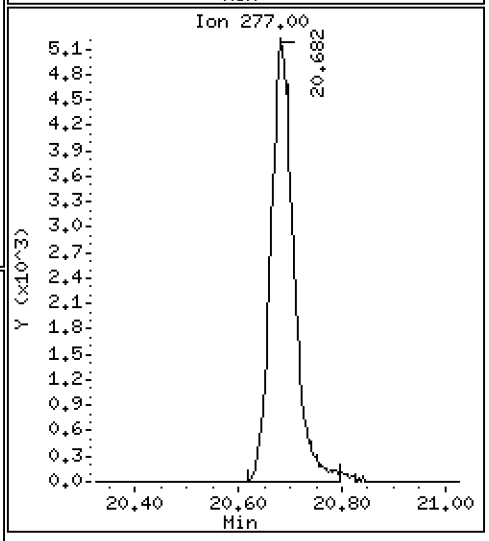
37 Indeno(1,2,3-cd)pyrene

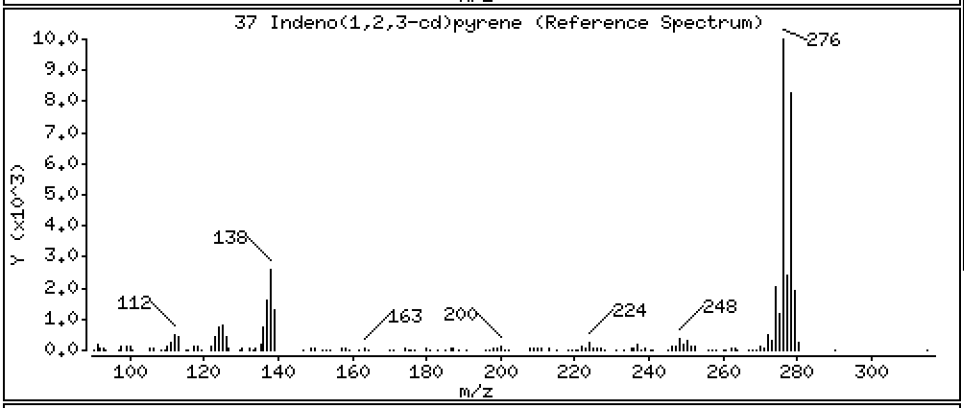
Concentration: 2.689 ug/L

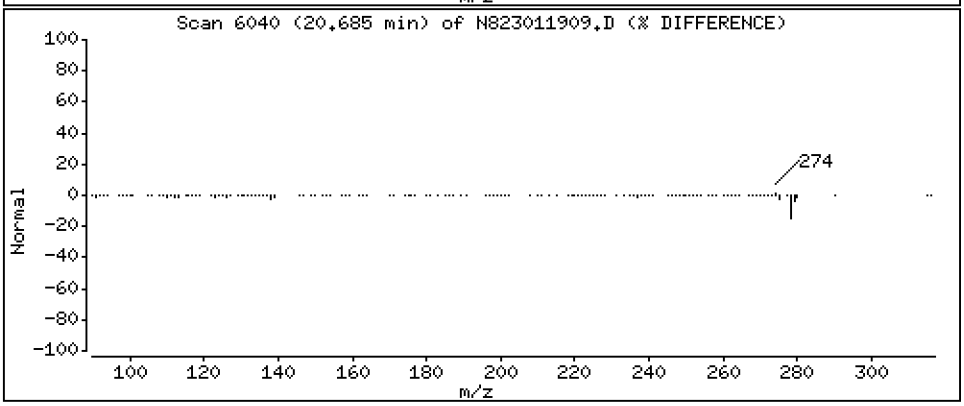












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

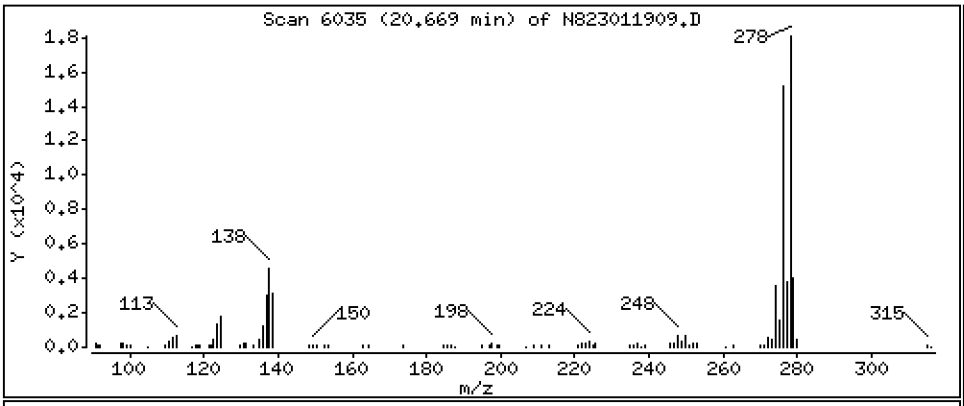
Operator: JZ

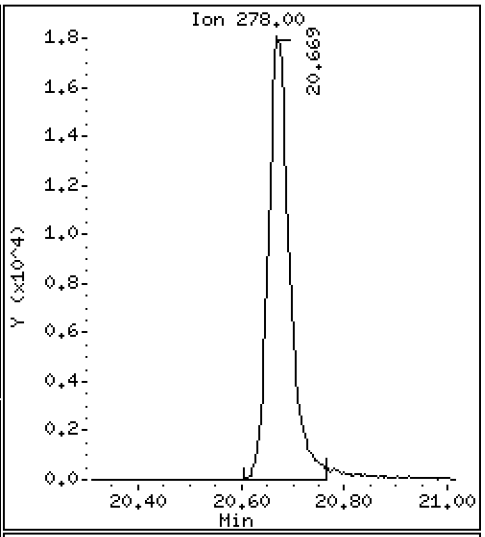
Column phase: Rxi-17sil

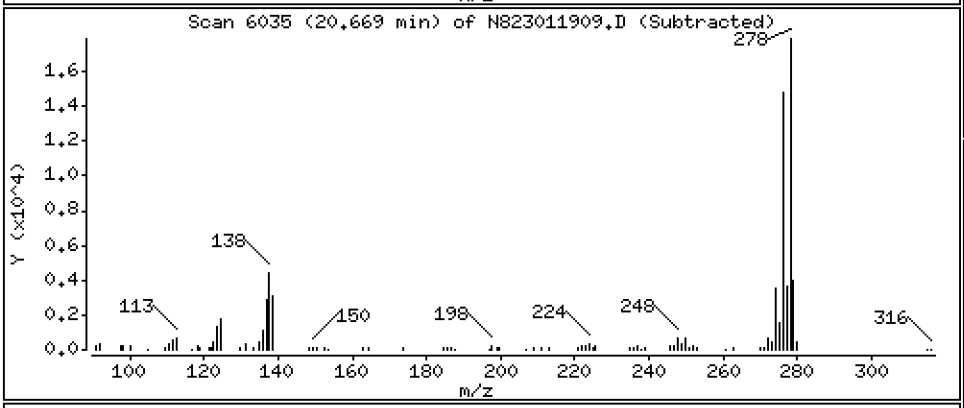
Column diameter: 0.25

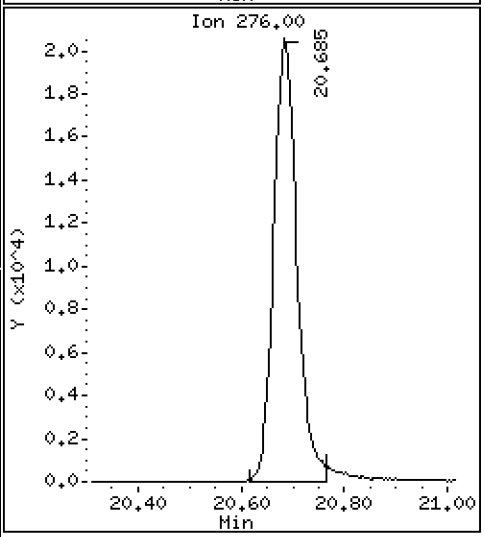
38 Dibenzo(a,h)anthracene

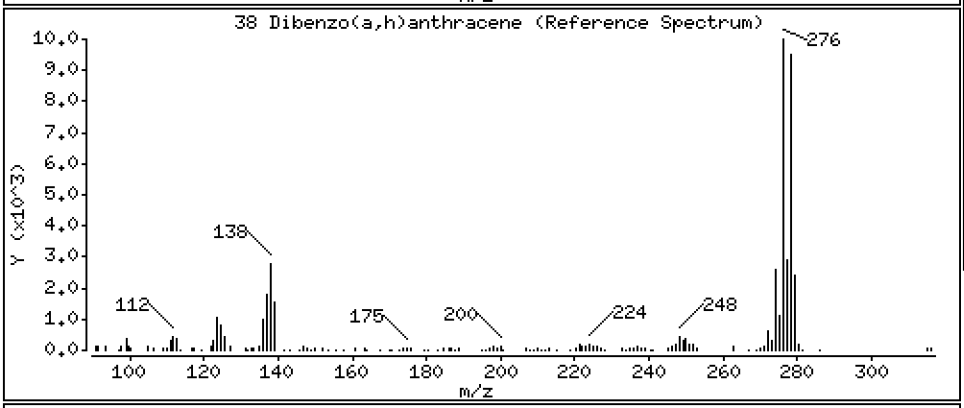
Concentration: 2.493 ug/L

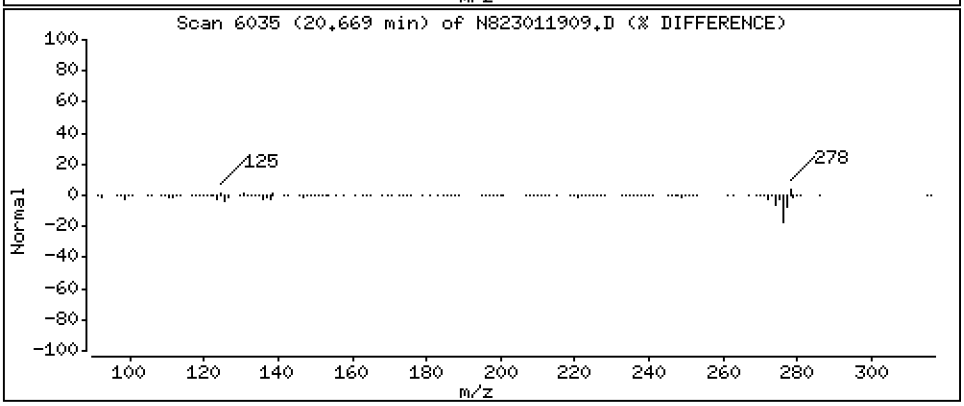












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

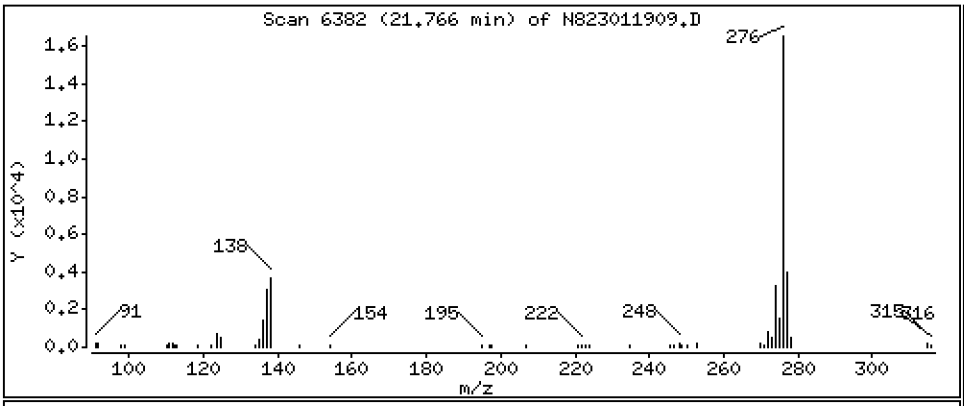
Operator: JZ

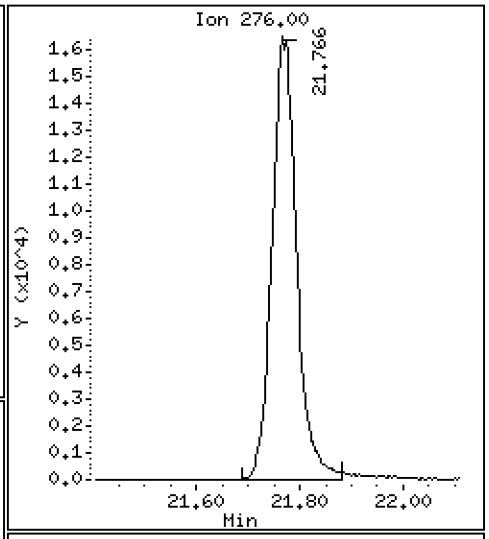
Column phase: Rxi-17sil

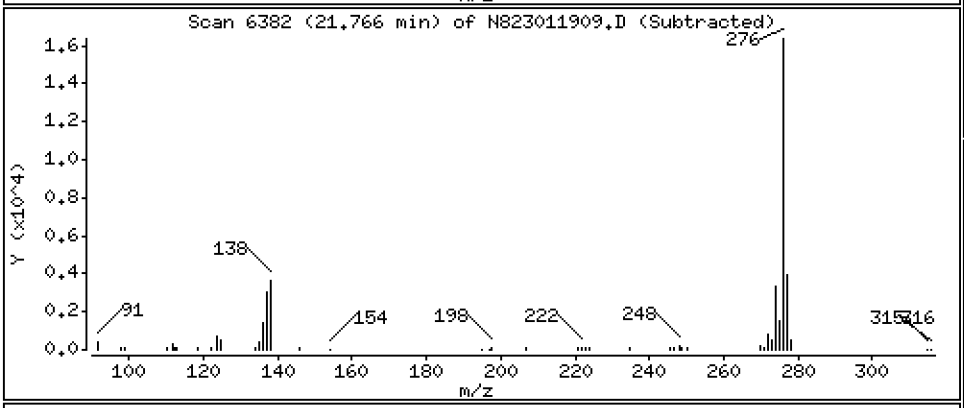
Column diameter: 0.25

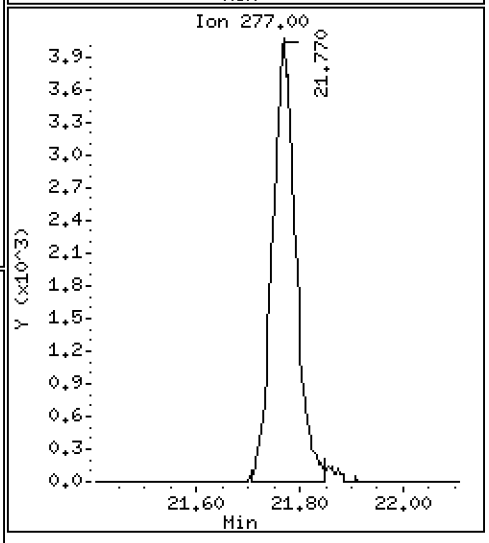
39 Benzo(g,h,i)perylene

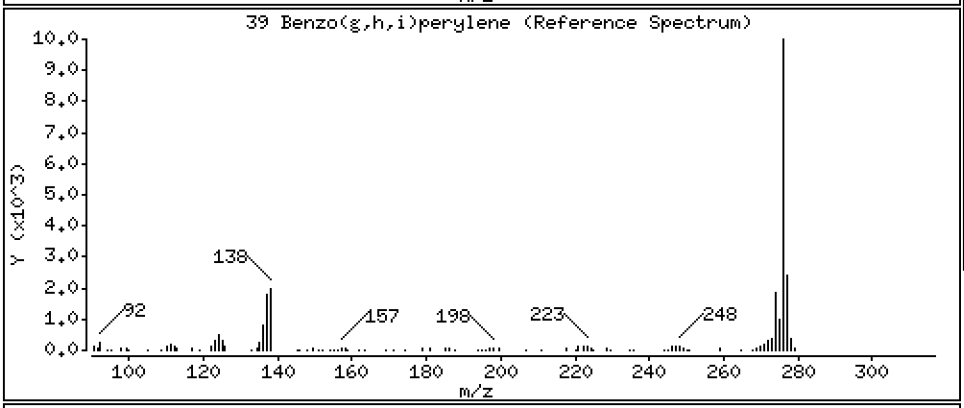
Concentration: 2.483 ug/L

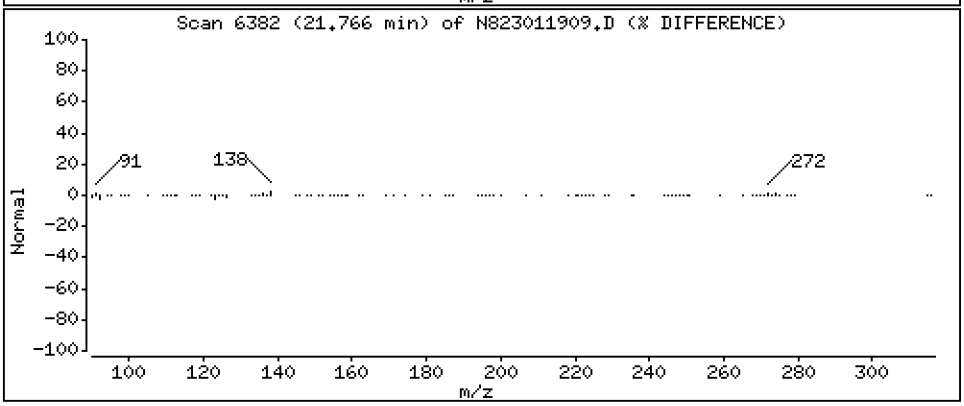












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Lab Smp Id: SLA0213-SCV1
Inj Date : 19-JAN-2023 14:58
Operator : JZ Inst ID: nt8.i
Smp Info : SCV230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 25-Jan-2023 21:57 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnascv.sub
Target Version: 4.14
Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 1 Naphthalene-d8	136	4.913	4.906	(1.000)	46346	2.00000	
2 Naphthalene	128	4.941	4.938	(1.006)	56587	2.62597	2.626
$ 3 2-Methylnaphthalene-d10	152	Compound Not Detected.					
4 2-Methylnaphthalene	141	5.694	5.687	(1.159)	31650	2.67019	2.670
5 1-methylnaphthalene	141	5.890	5.883	(1.199)	31873	2.64949	2.649
9 Acenaphthylene	152	7.091	7.085	(0.985)	59018	2.82060	2.821
* 10 Acenaphthene-d10	164	7.202	7.196	(1.000)	27709	2.00000	
11 Acenaphthene	153	7.249	7.246	(1.007)	36454	2.60022	2.600
12 Dibenzofuran	168	7.401	7.395	(1.028)	60898	2.85987	2.860
14 Fluorene	166	7.878	7.872	(1.094)	43507	2.63066	2.631
* 15 Phenanthrene-d10	188	9.238	9.235	(1.000)	51685	2.00000	
16 Phenanthrene	178	9.276	9.270	(1.004)	61815	2.44841	2.448
17 Anthracene	178	9.317	9.311	(1.009)	52064	2.27006	2.270
22 Fluoranthene	202	11.059	11.053	(1.197)	72902	2.65276	2.653
$ 21 Fluoranthene-d10	212	Compound Not Detected.					
23 Pyrene	202	11.578	11.572	(0.815)	71115	2.46242	2.462
24 Benzo(a)anthracene	228	14.082	14.076	(0.991)	67725	2.58725	2.587
* 25 Chrysene-d12	240	14.212	14.202	(1.000)	46582	2.00000	
27 Chrysene	228	14.285	14.278	(1.005)	66872	2.39976	2.400
28 Benzo(b)fluoranthene	252	16.833	16.821	(0.929)	60946	2.50689	2.507
29 Benzo(k)fluoranthene	252	16.893	16.884	(0.932)	63249	2.65606	2.656
31 Total Benzofluoranthenes	252	16.893	16.821	(0.932)	126178	5.48025	5.480(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572
*	33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000	
	37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689
$	36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493
	39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483
	35 Perylene	252	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011909.D
Lab Smp Id: SLA0213-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

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

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 14:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

No RRT check performed

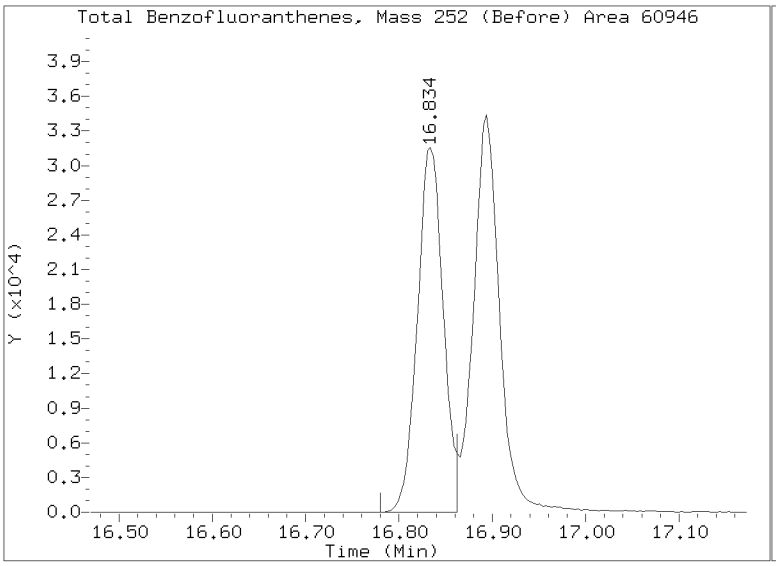
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

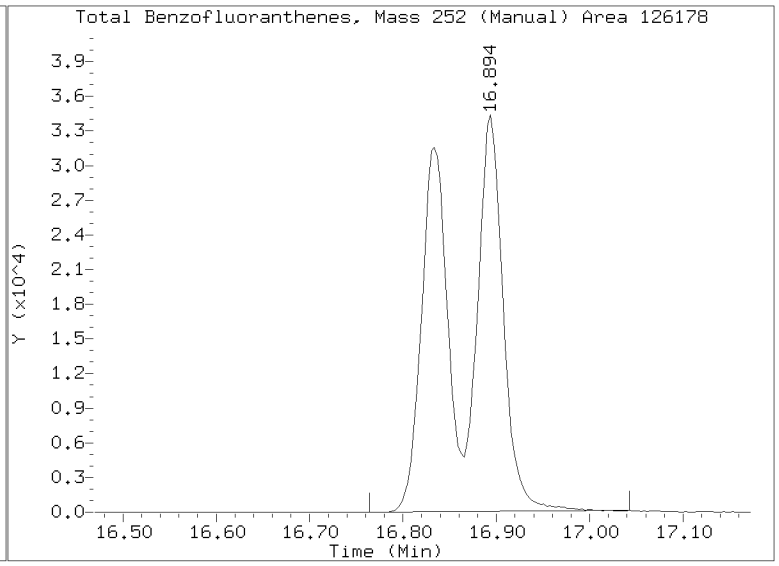
Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D
Injection Date: 19-JAN-2023 14:58
Lab ID:SLA0213-SCV1 Client ID:
Report Date: 01/25/2023 22:00





SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00032
Laboratory ID: SLC0143-SCV1
Sequence: SLC0143
Sequence Name: SCV 5.0
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
1,4-Dichlorobenzene	5.0000	5.2	5.0	20.00
1,2-Dichlorobenzene	5.0000	5.1	2.8	20.00
Benzyl Alcohol	5.0000	5.1	2.1	20.00
Benzoic acid	10.000	6.9	-31.3 *	20.00
2,4-Dimethylphenol	5.0000	3.6	-27.3 *	20.00
1,2,4-Trichlorobenzene	5.0000	4.9	-2.6	20.00
N-Nitrosodiphenylamine	5.0000	5.4	7.2	20.00
Pentachlorophenol	5.0000	3.9	-21.8 *	20.00
2-Fluorophenol	7.5000	0.0377	-99.5	
p-Terphenyl-d14	5.0000	0.0271	-99.5	

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

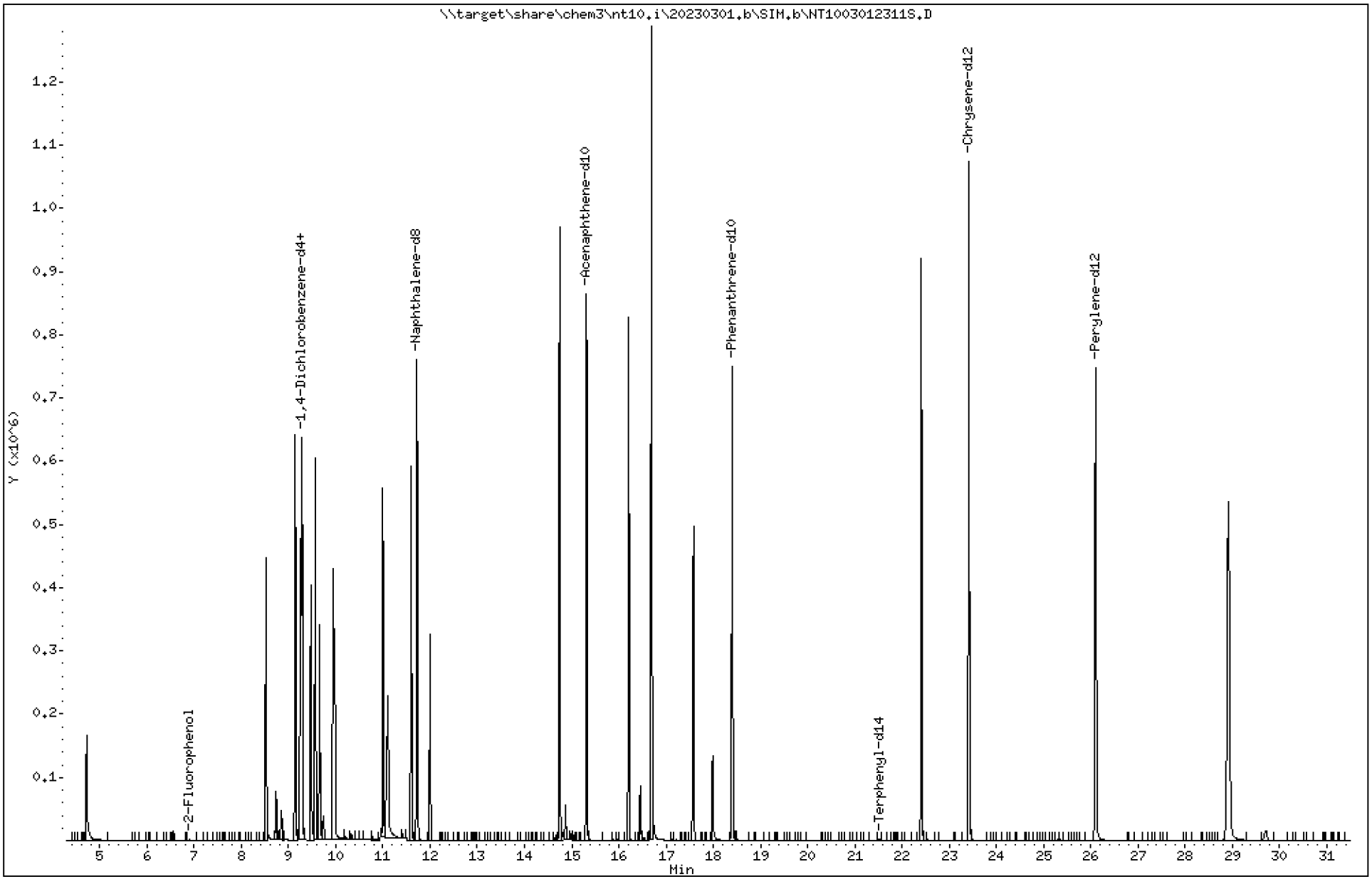
Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

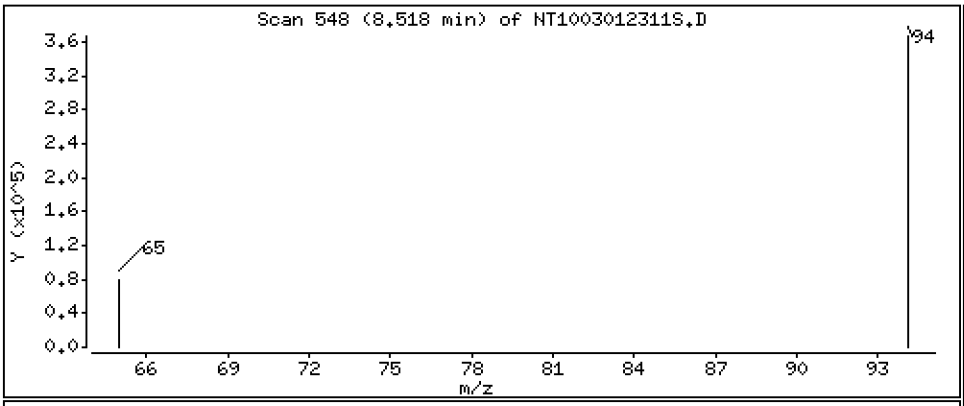
Operator: JGR

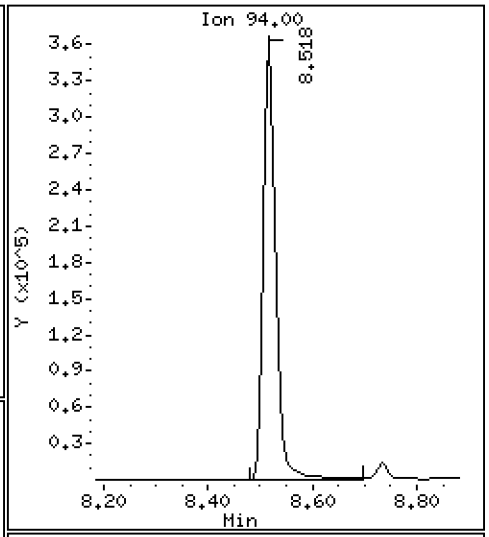
Column phase: ZB-5msi

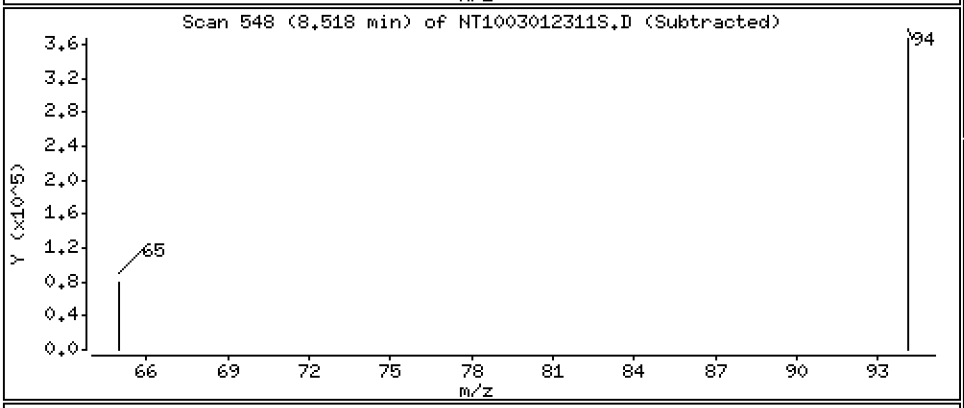
Column diameter: 0.25

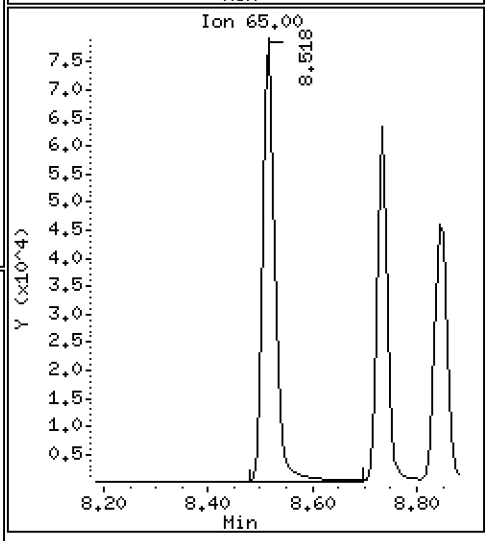
3 Phenol

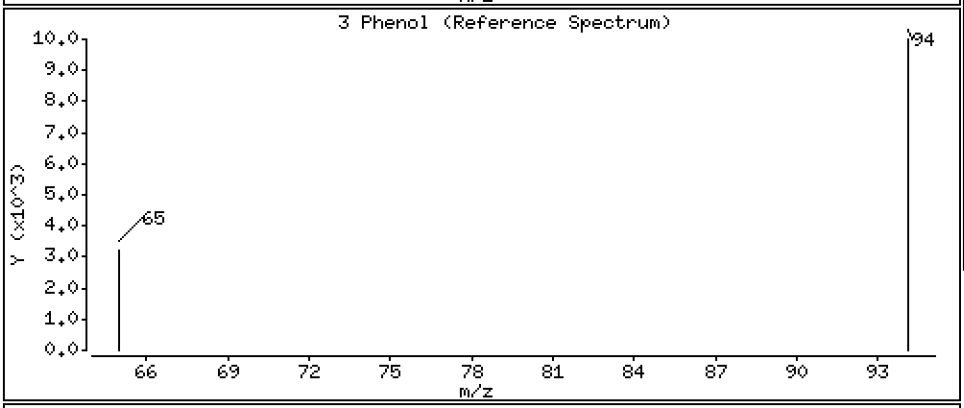
Concentration: 4.507 ug/L

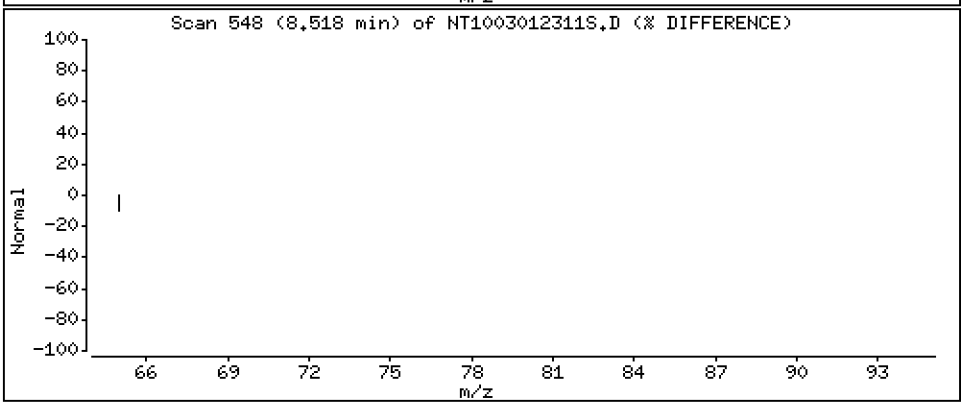












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

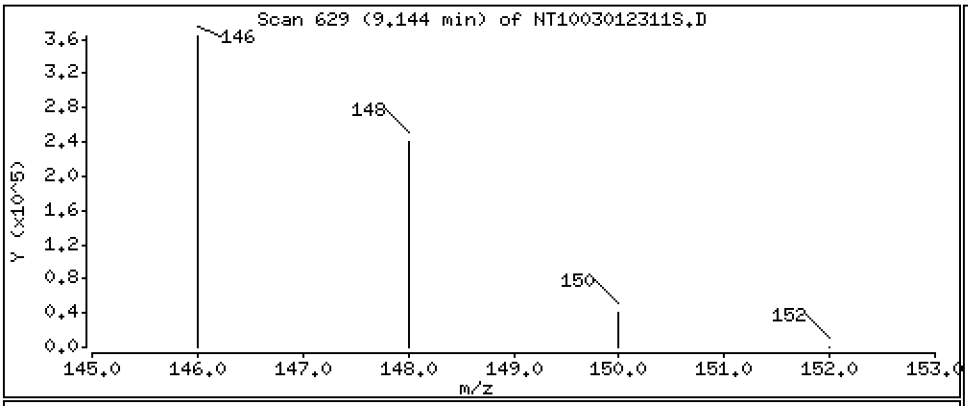
Operator: JGR

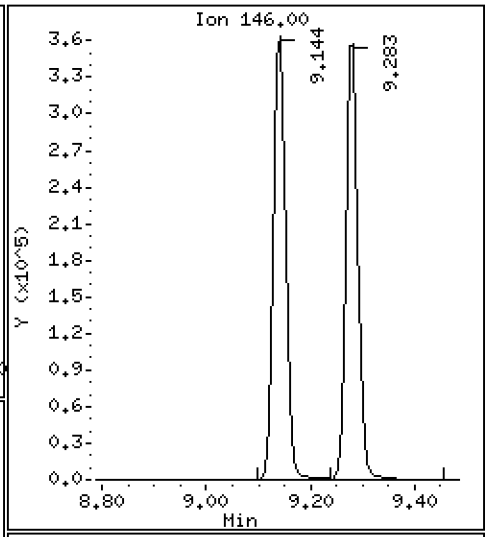
Column phase: ZB-5msi

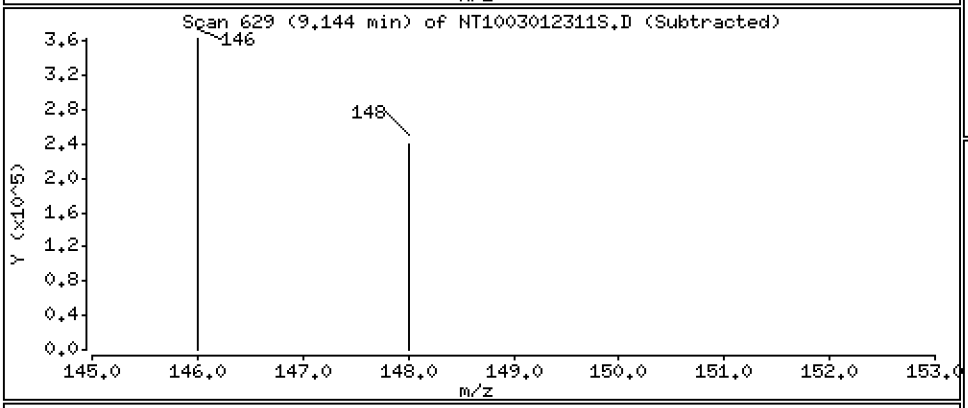
Column diameter: 0.25

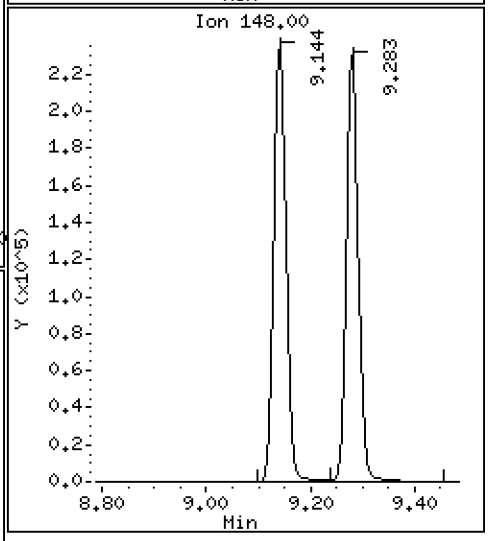
7 1,3-Dichlorobenzene

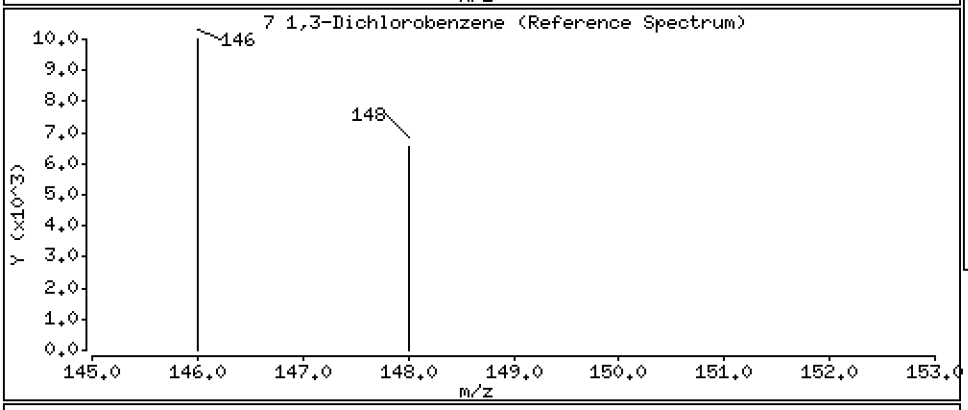
Concentration: 5.084 ug/L

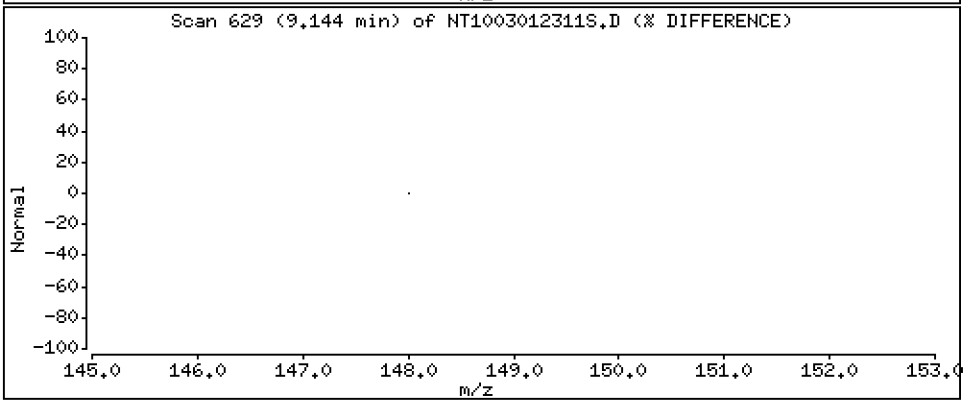












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

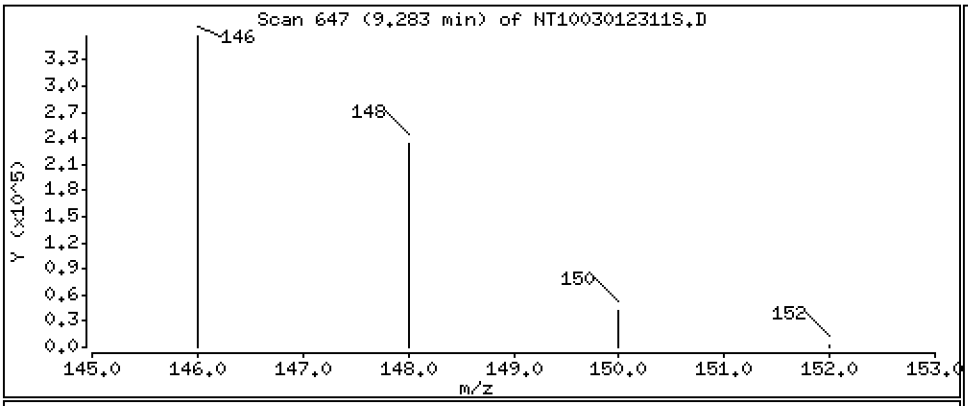
Operator: JGR

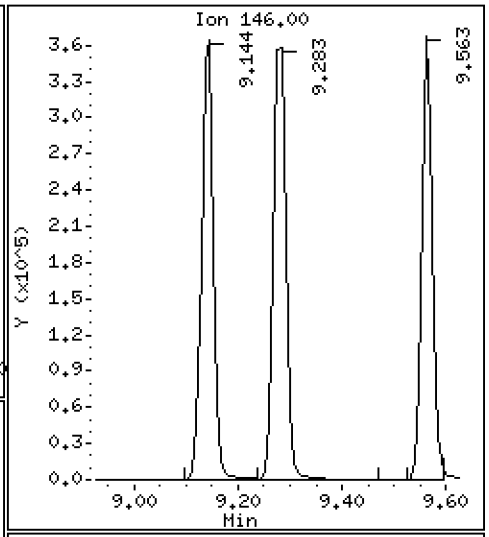
Column phase: ZB-5msi

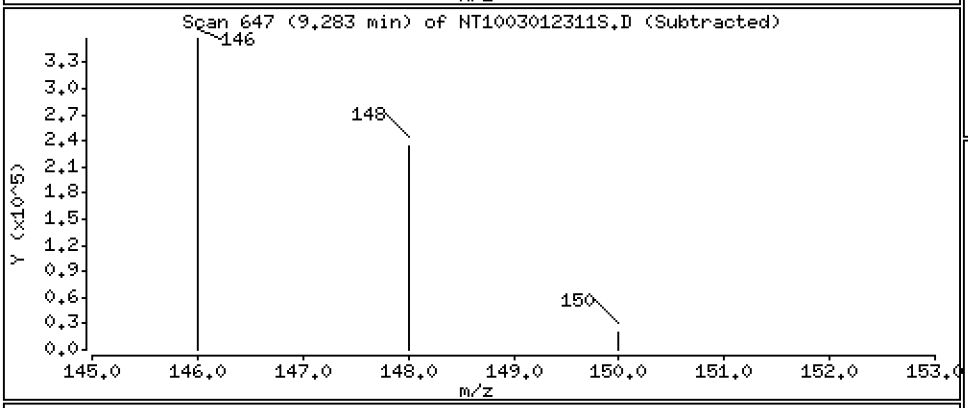
Column diameter: 0.25

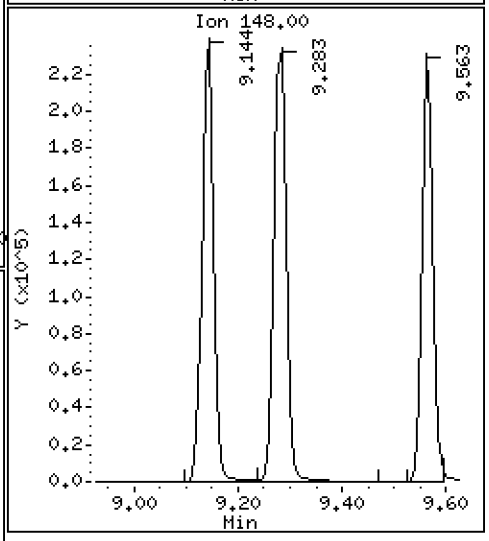
9 1,4-Dichlorobenzene

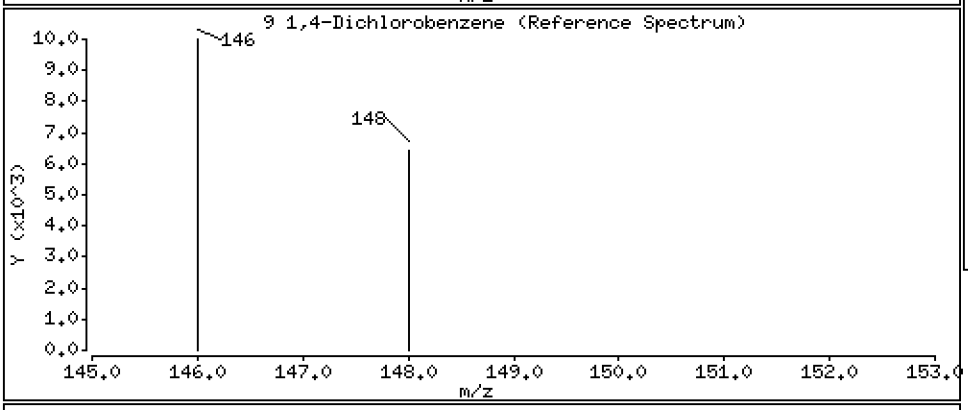
Concentration: 5.250 ug/L

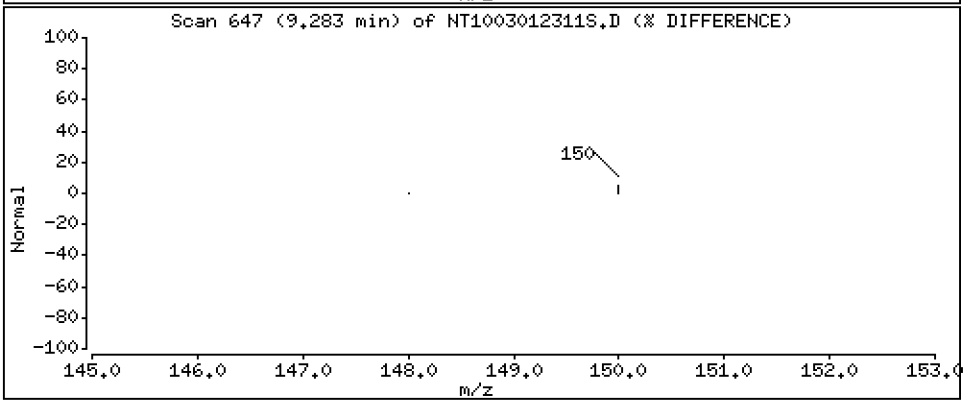












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

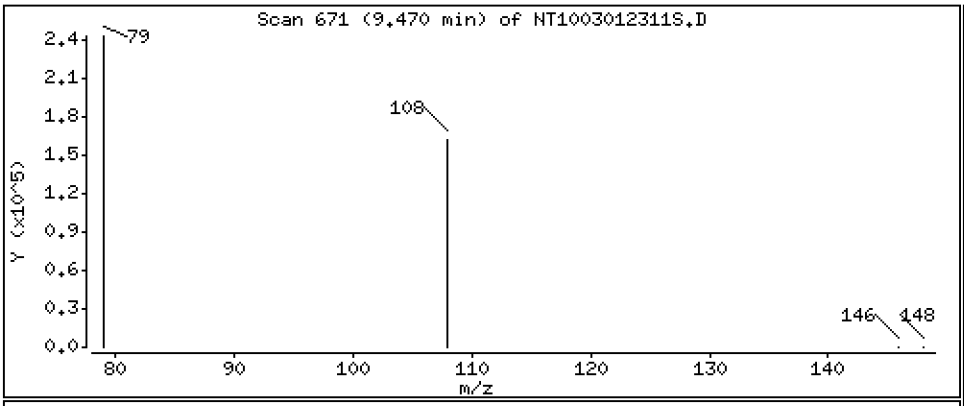
Operator: JGR

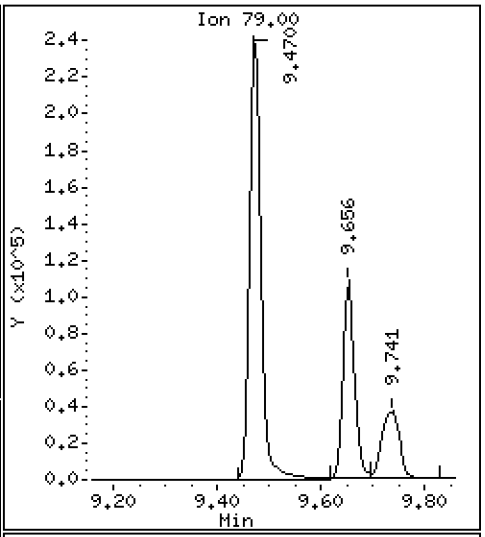
Column phase: ZB-5msi

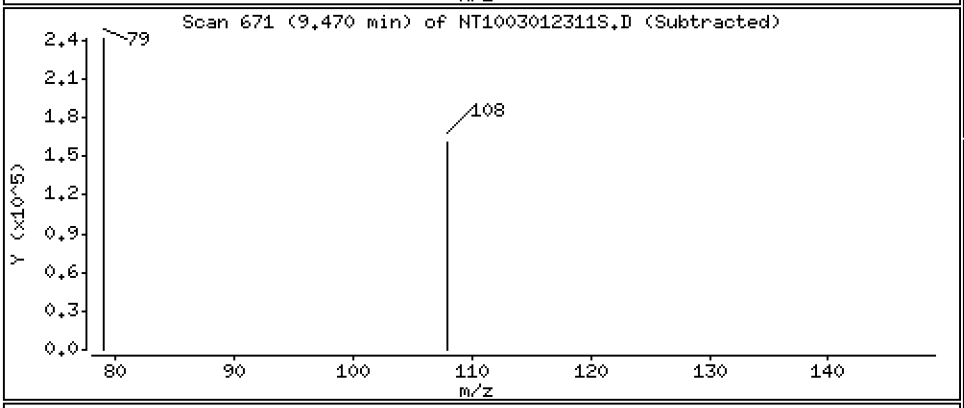
Column diameter: 0.25

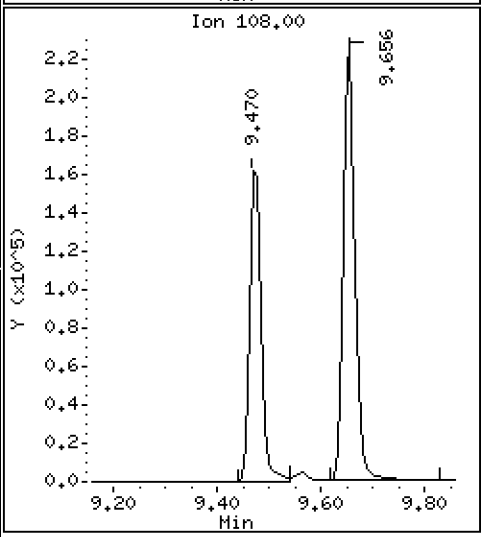
11 Benzyl alcohol

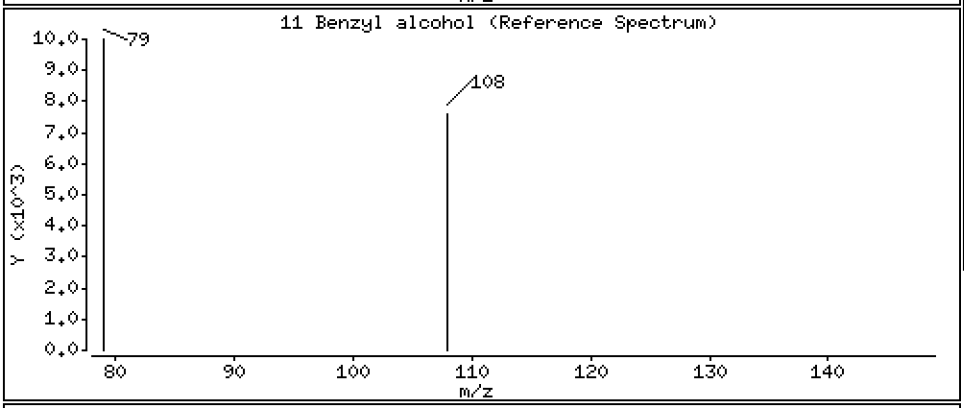
Concentration: 5.104 ug/L

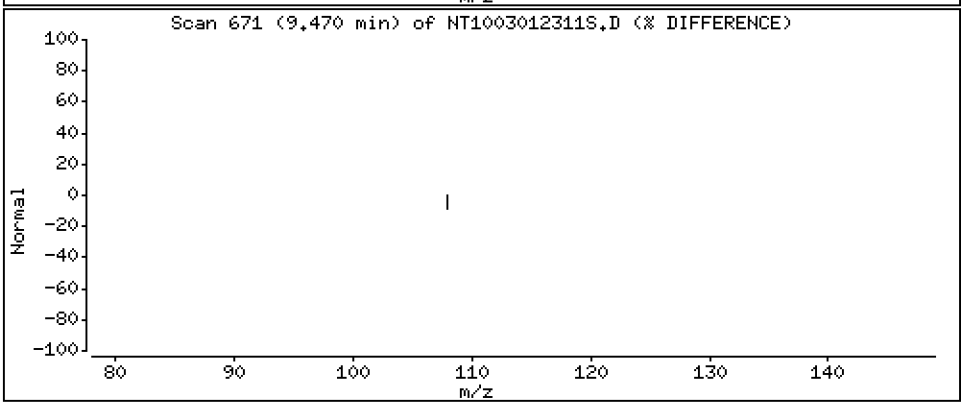












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

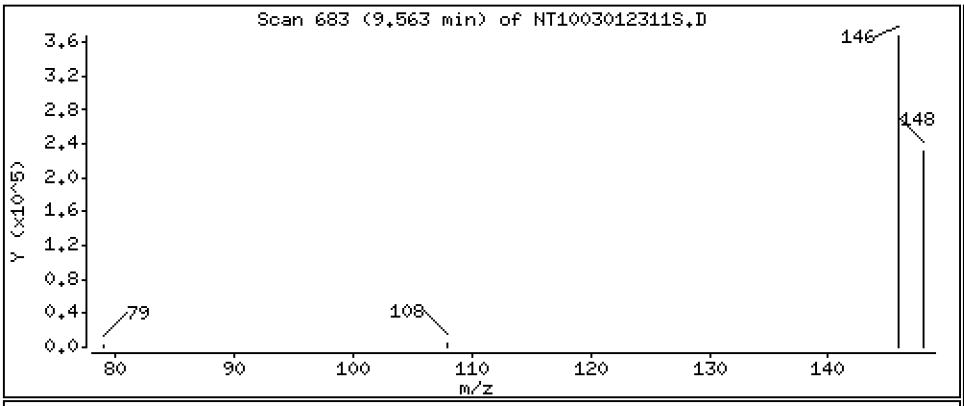
Operator: JGR

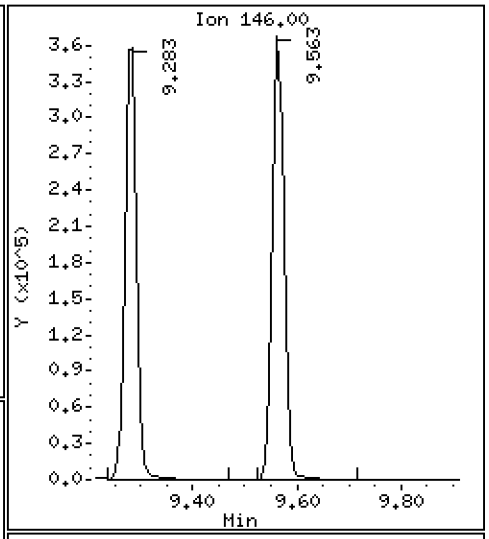
Column phase: ZB-5msi

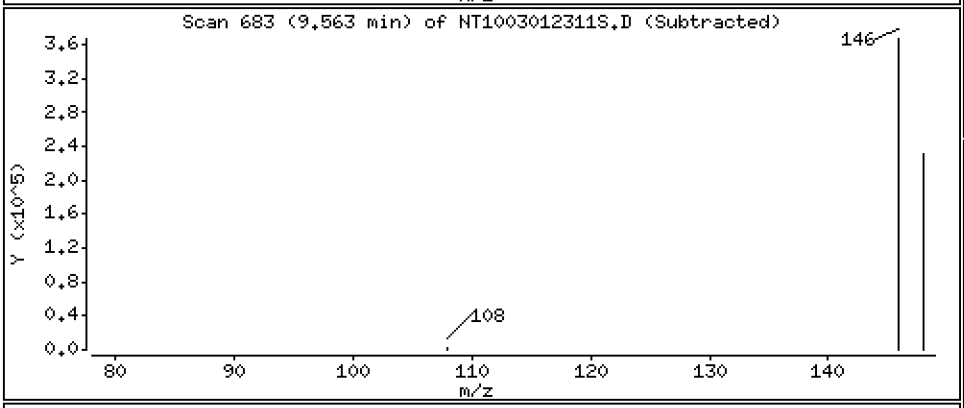
Column diameter: 0.25

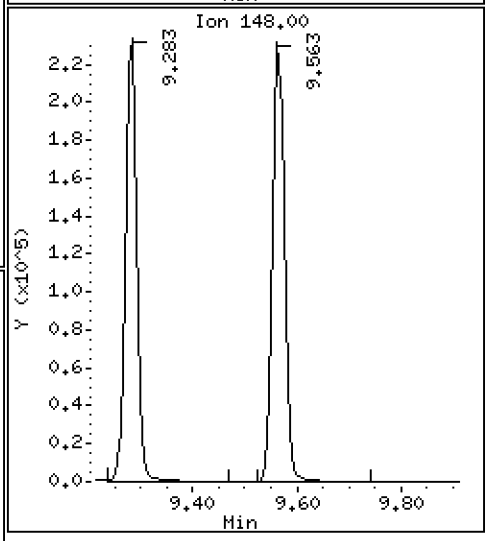
12 1,2-Dichlorobenzene

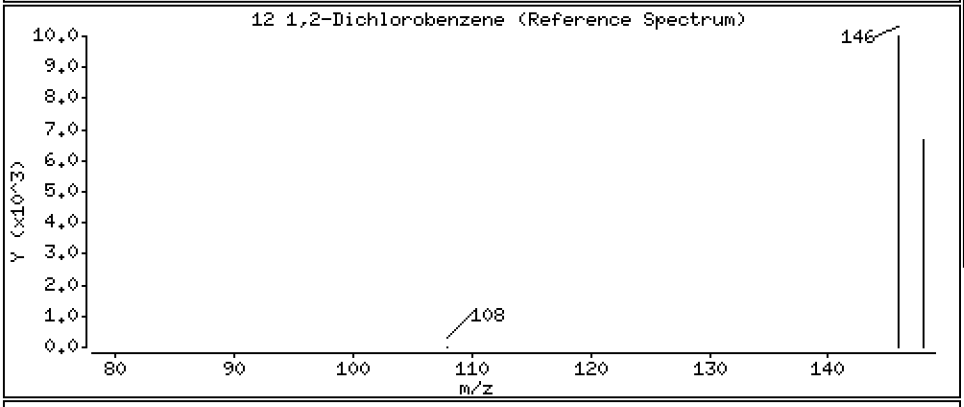
Concentration: 5.142 ug/L

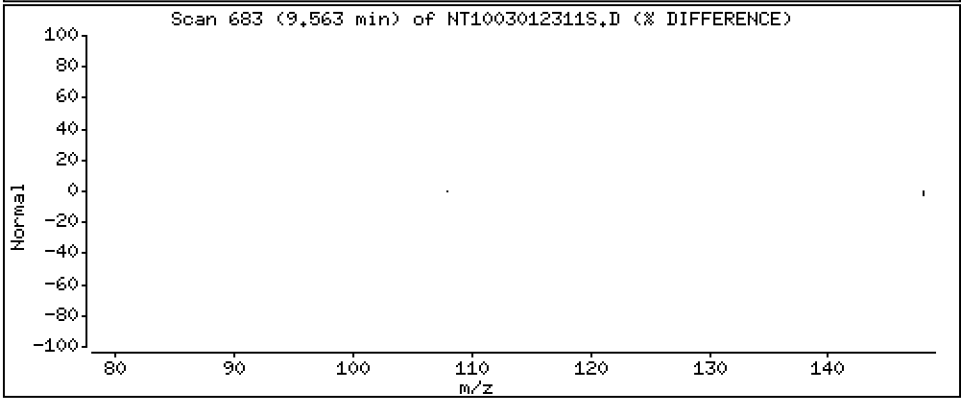












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

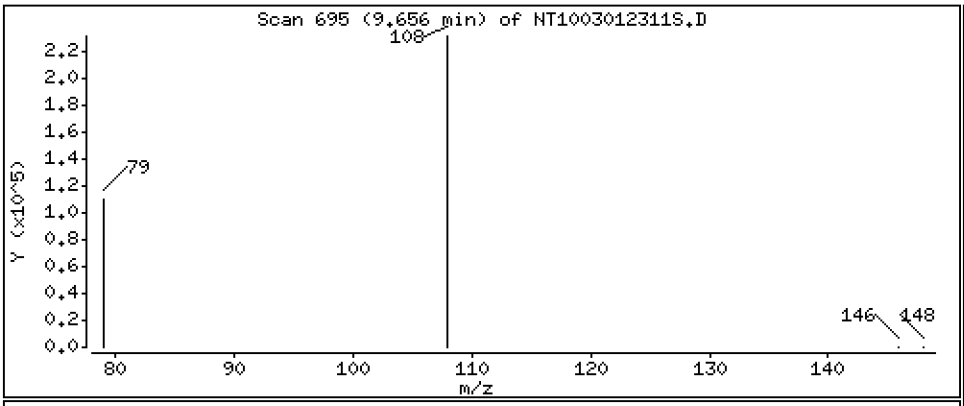
Operator: JGR

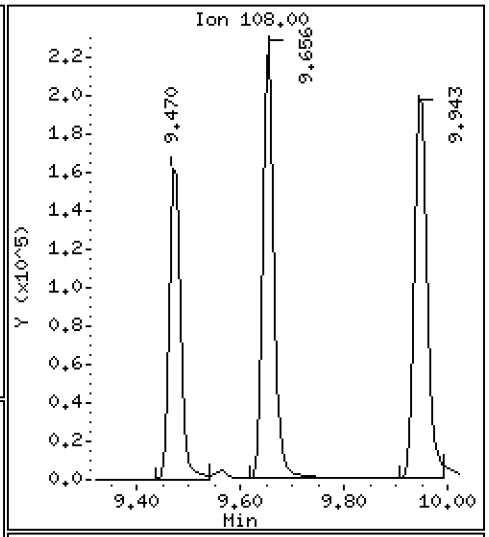
Column phase: ZB-5msi

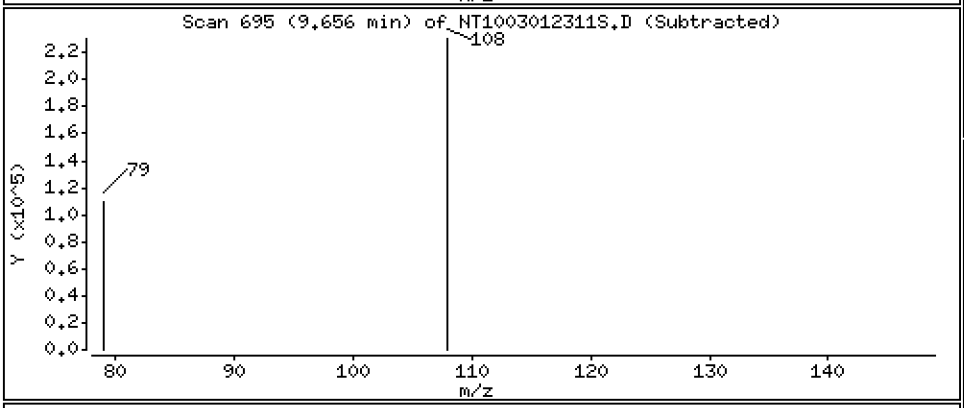
Column diameter: 0.25

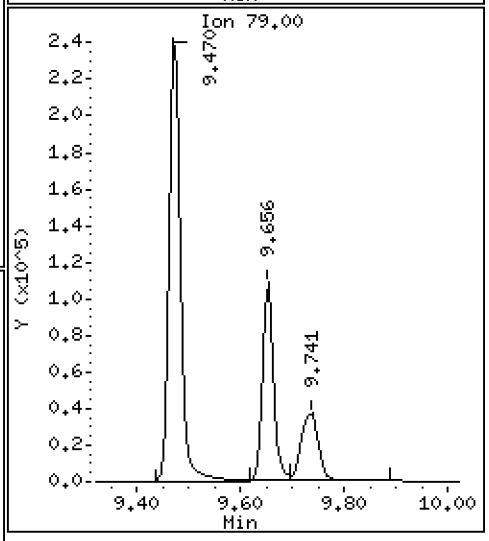
13 2-Methylphenol

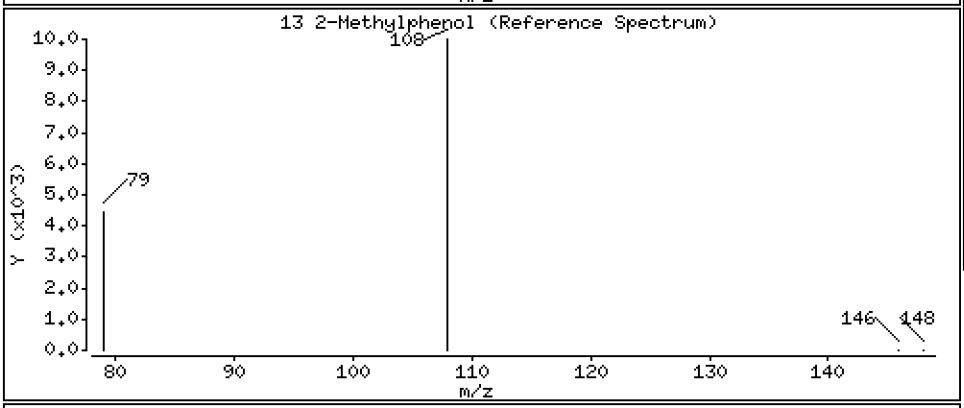
Concentration: 4.365 ug/L

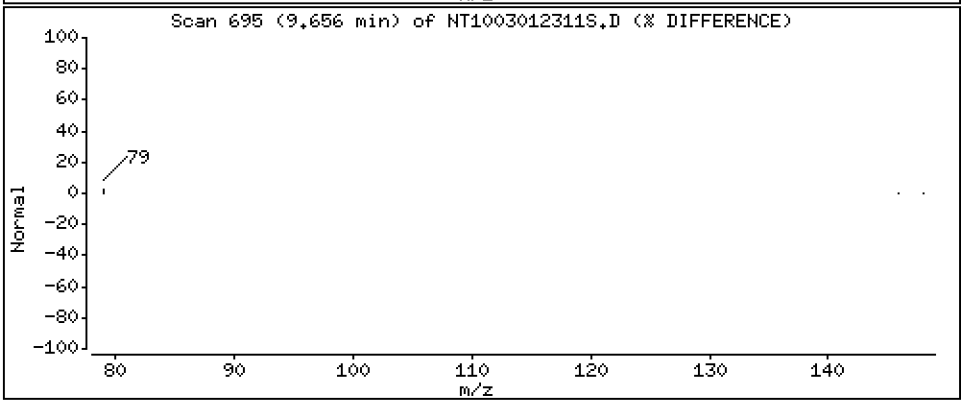












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

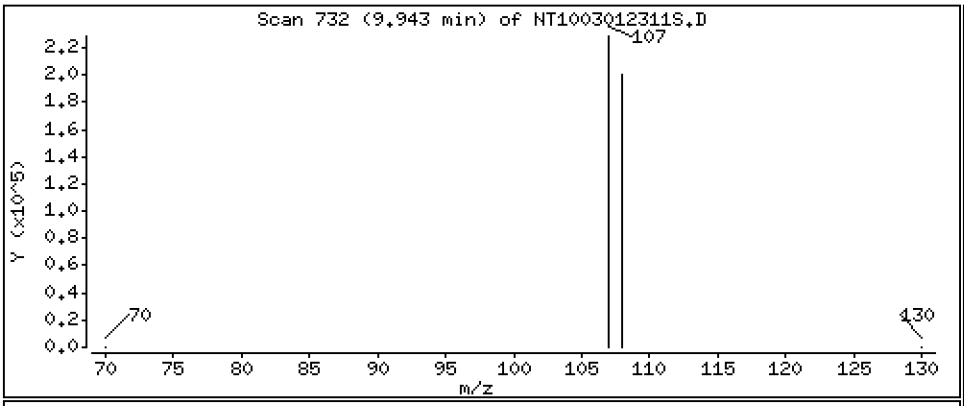
Operator: JGR

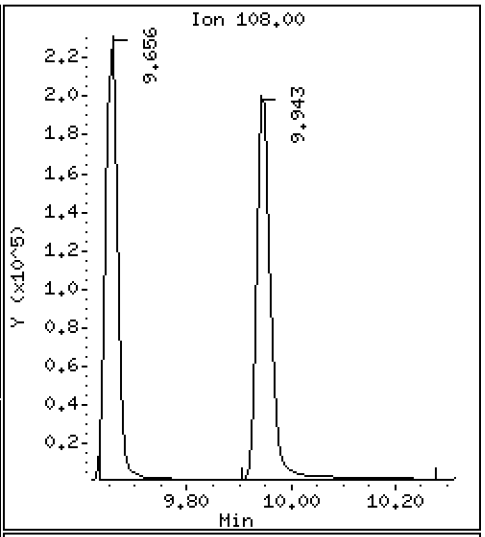
Column phase: ZB-5msi

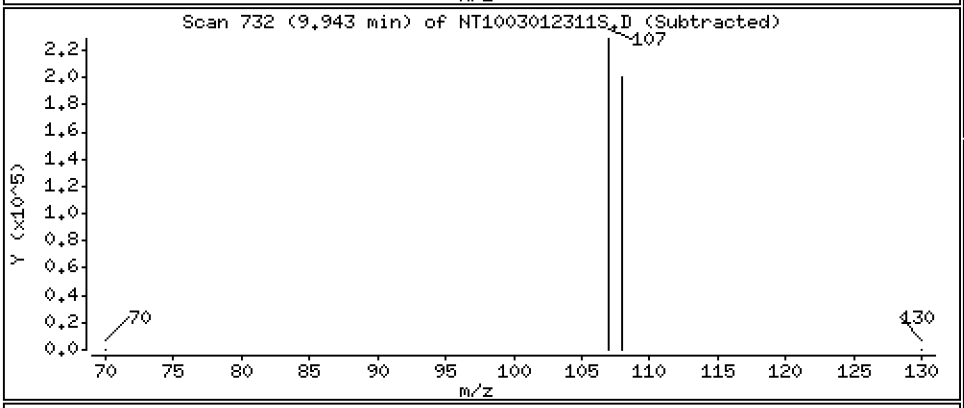
Column diameter: 0.25

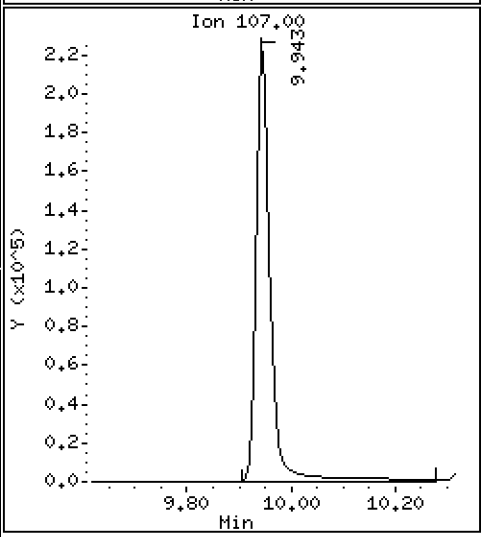
15 4-Methylphenol

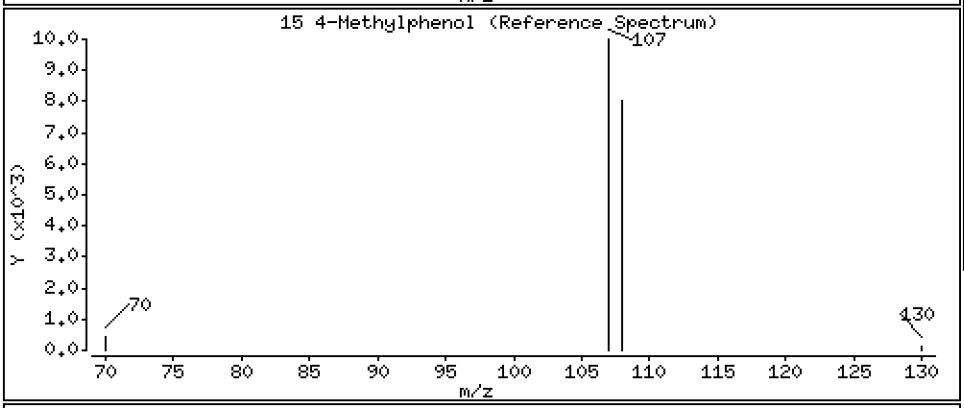
Concentration: 4.505 ug/L

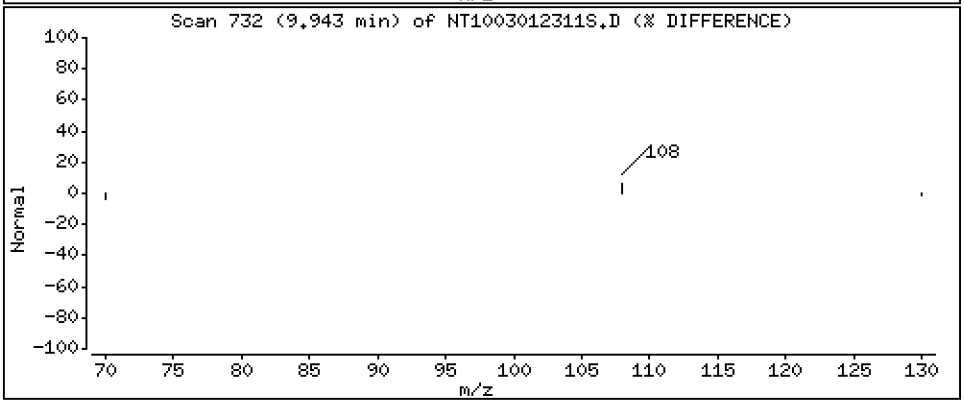












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

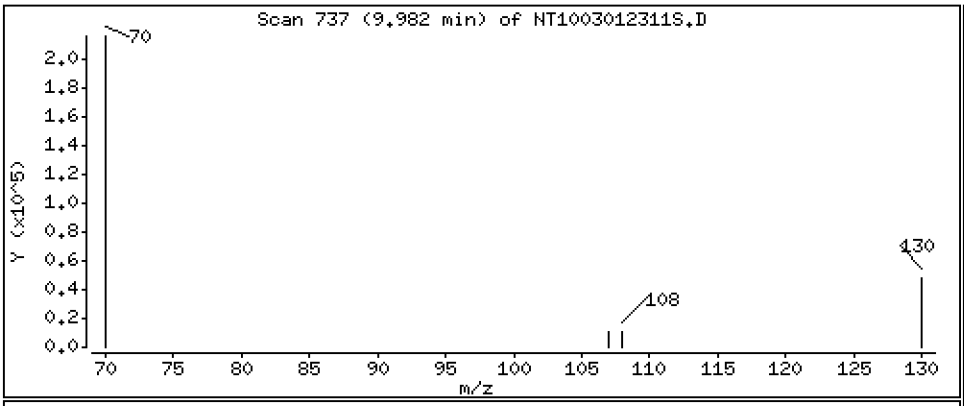
Operator: JGR

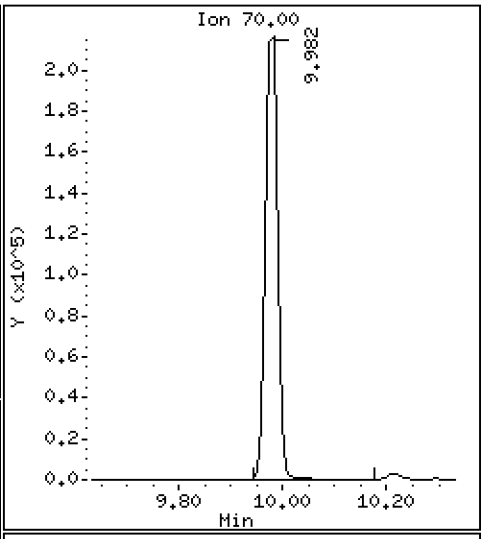
Column phase: ZB-5msi

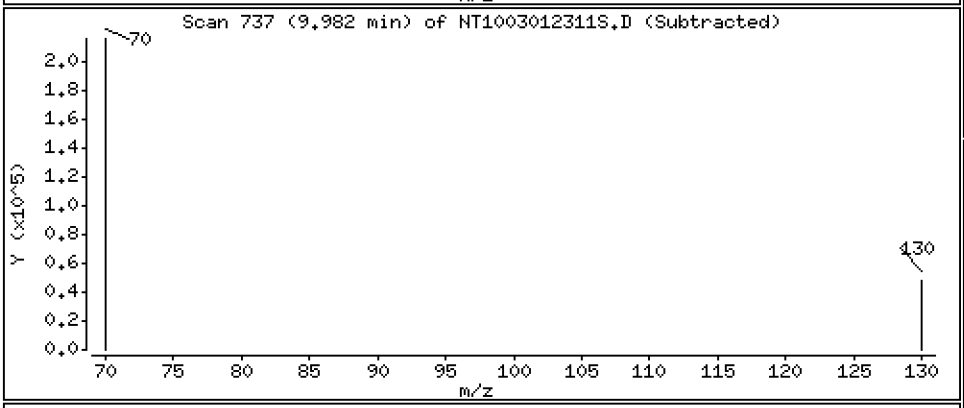
Column diameter: 0.25

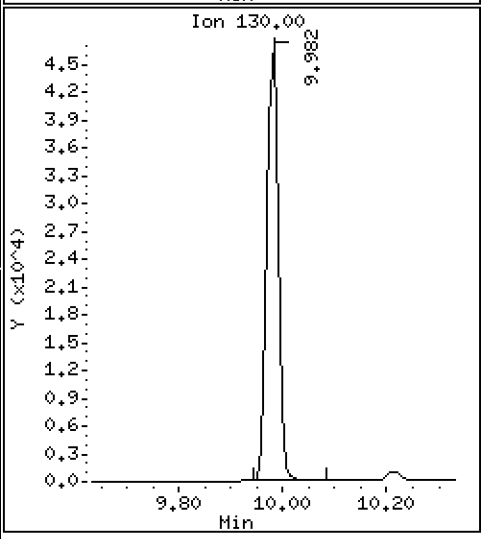
16 N-Nitroso-di-n-propylamine

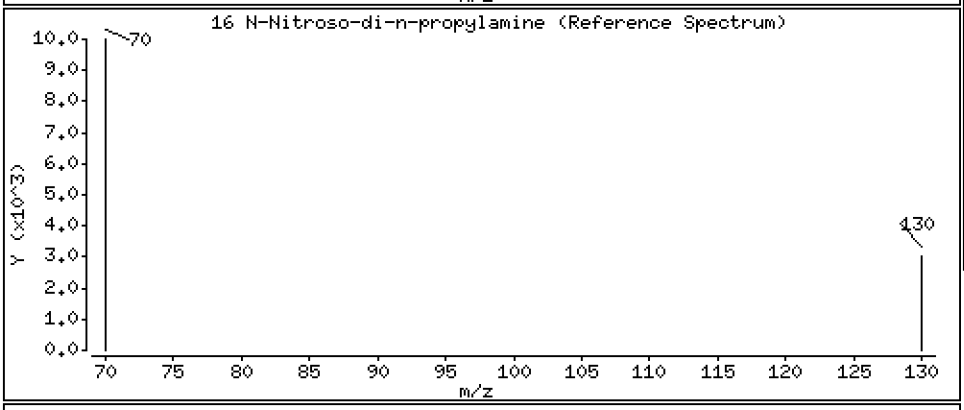
Concentration: 5.685 ug/L

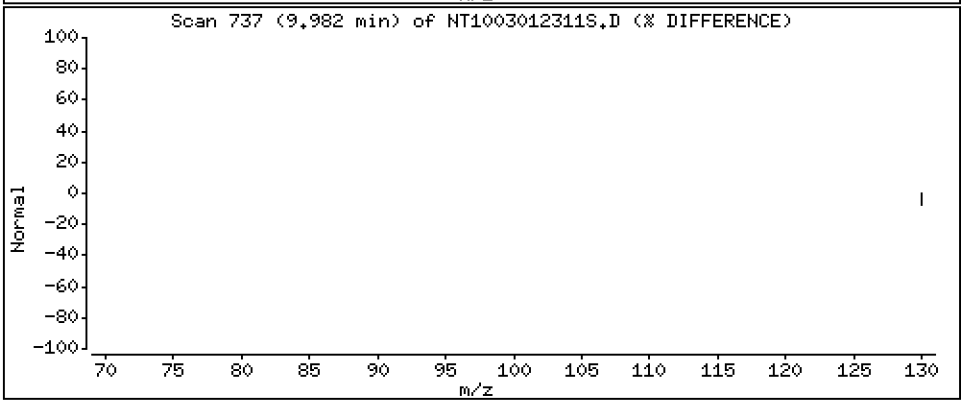












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

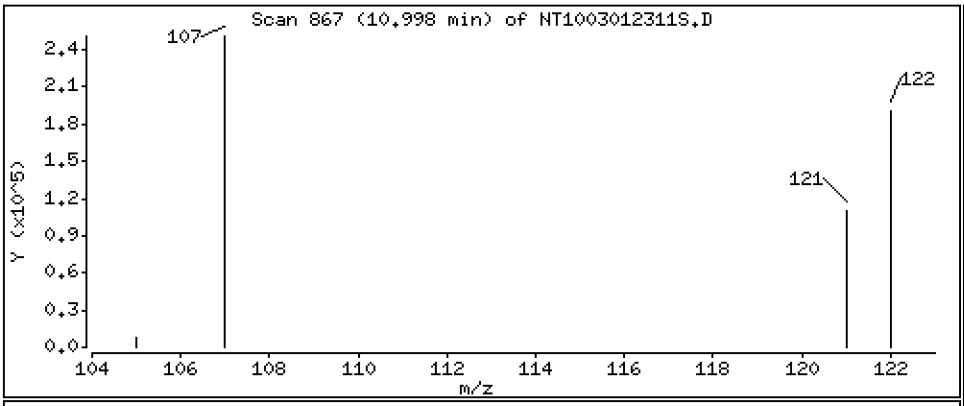
Operator: JGR

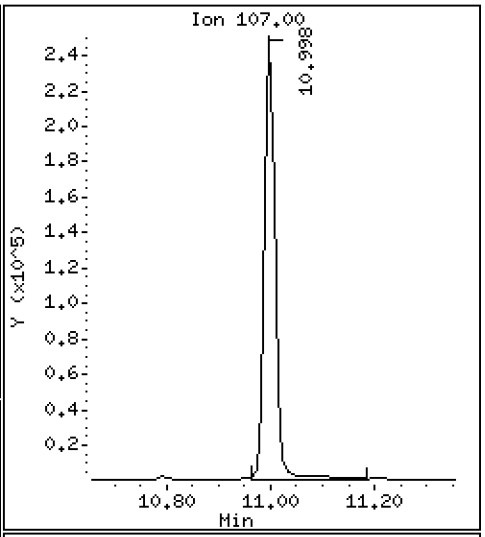
Column phase: ZB-5msi

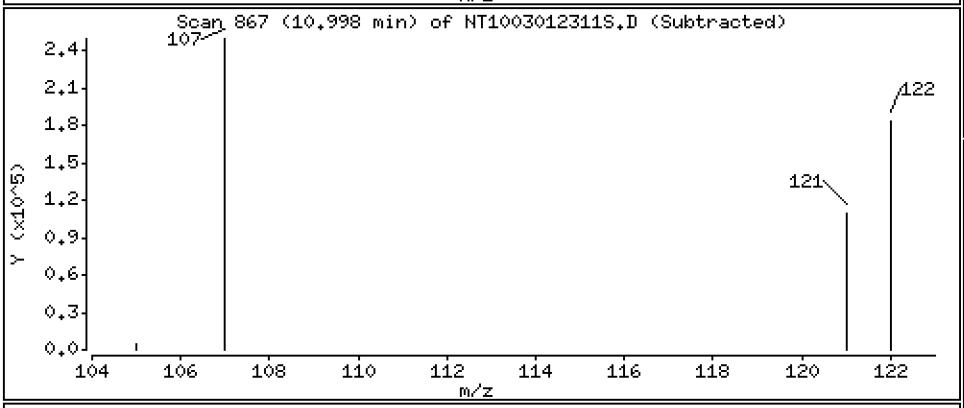
Column diameter: 0.25

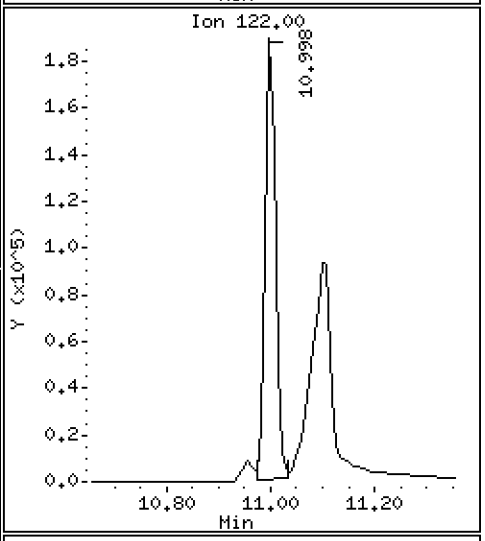
22 2,4-Dimethylphenol

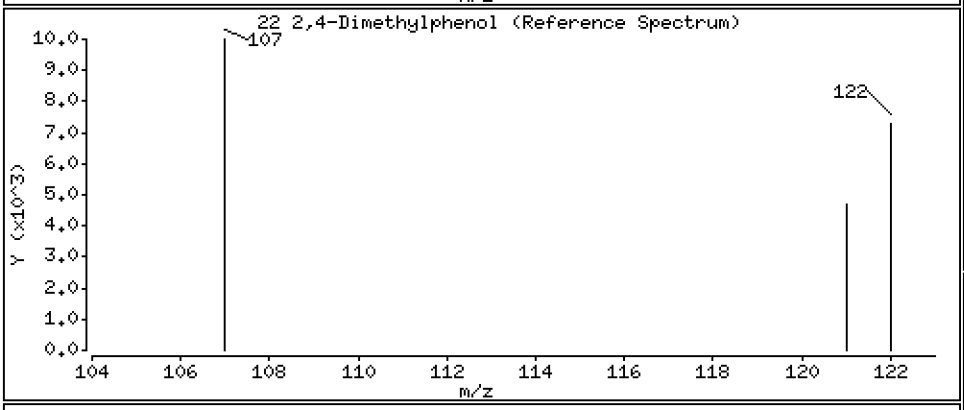
Concentration: 3.637 ug/L

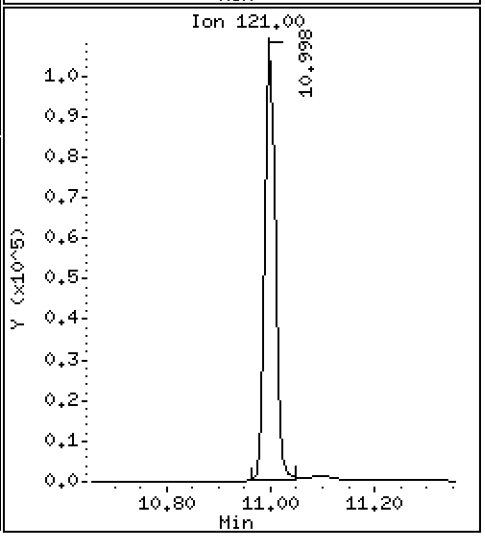


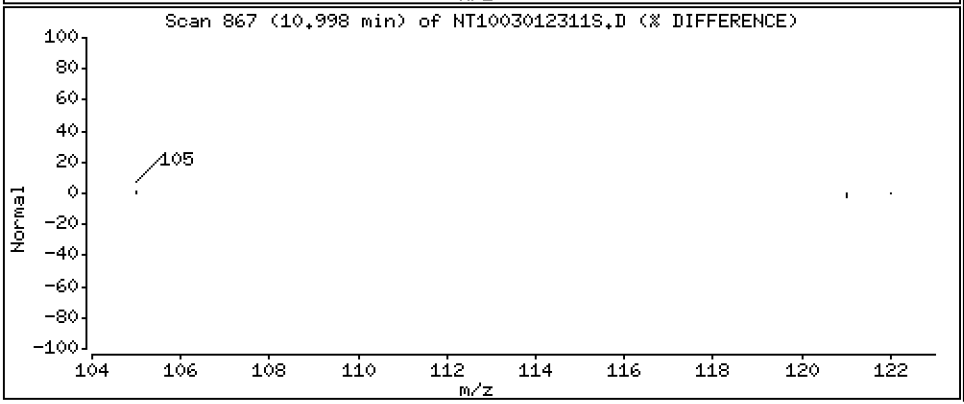












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

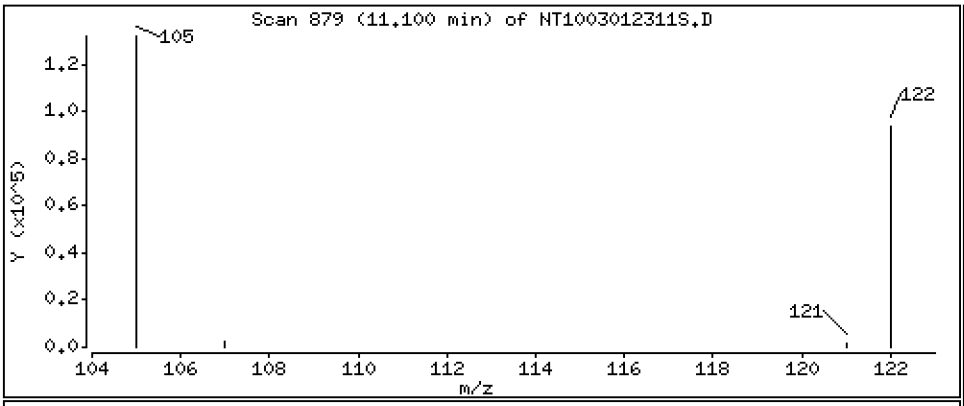
Operator: JGR

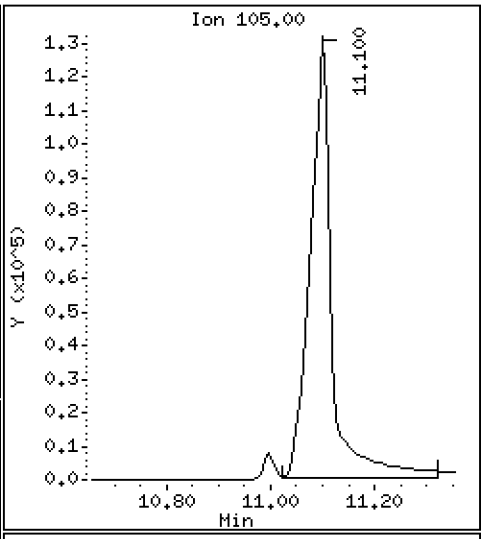
Column phase: ZB-5msi

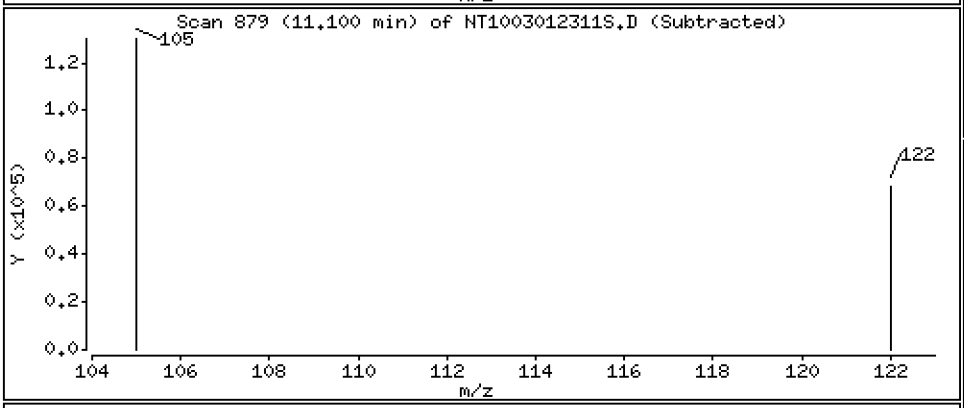
Column diameter: 0.25

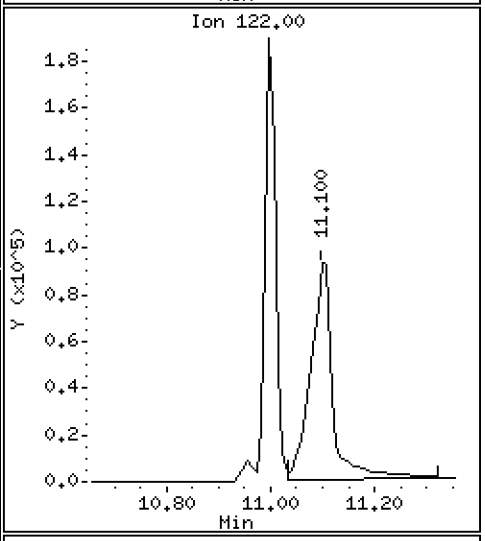
24 Benzoic acid

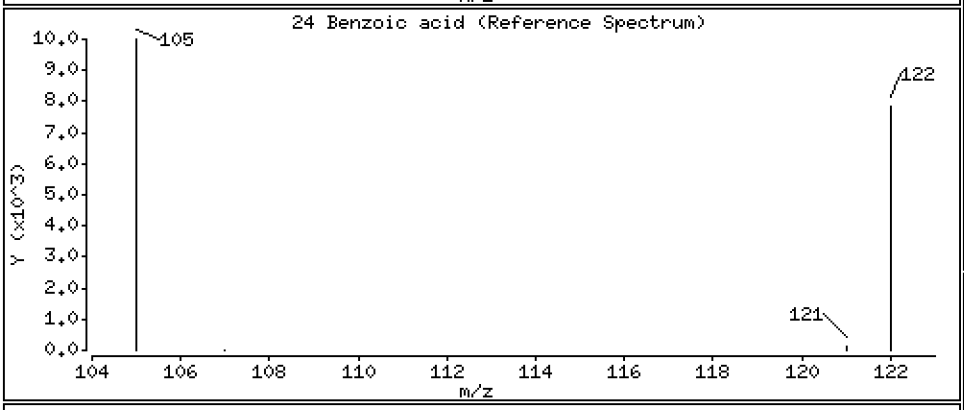
Concentration: 6.870 ug/L

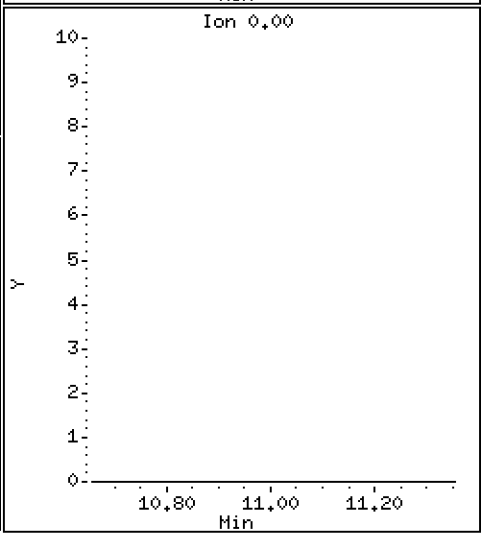


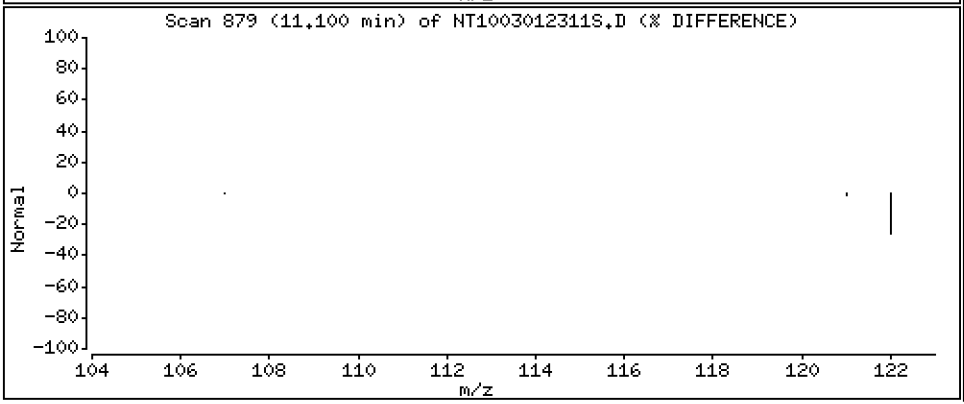












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

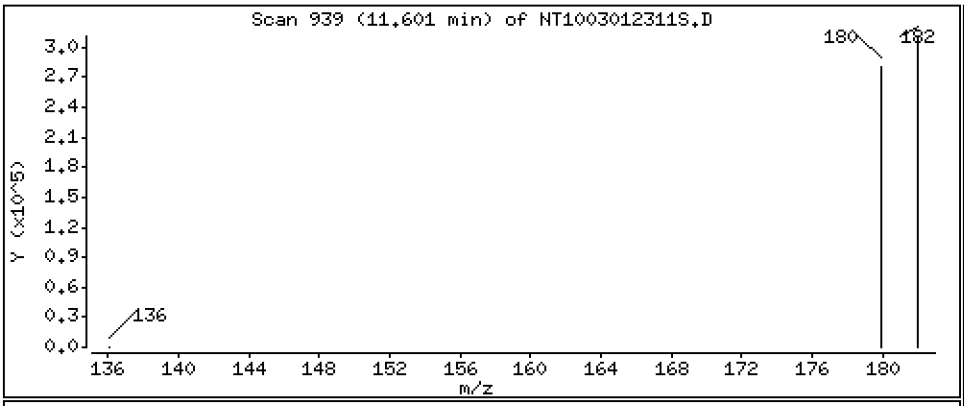
Operator: JGR

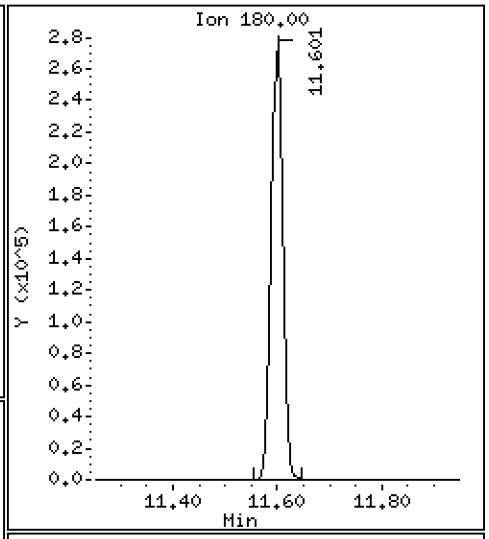
Column phase: ZB-5msi

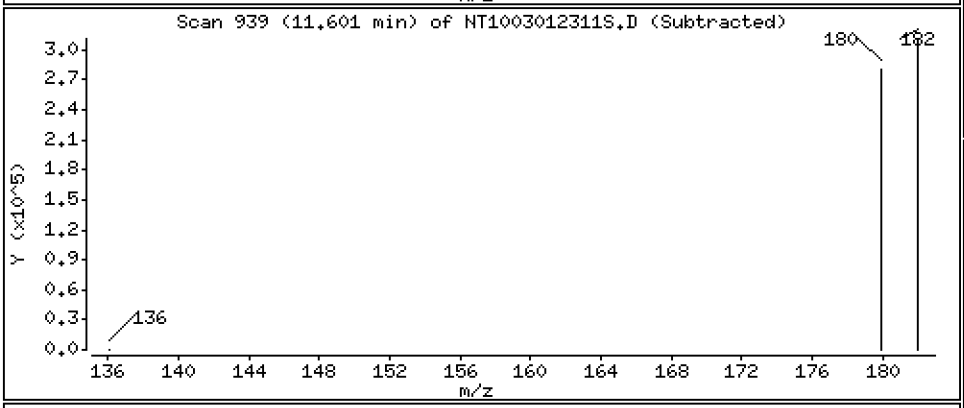
Column diameter: 0.25

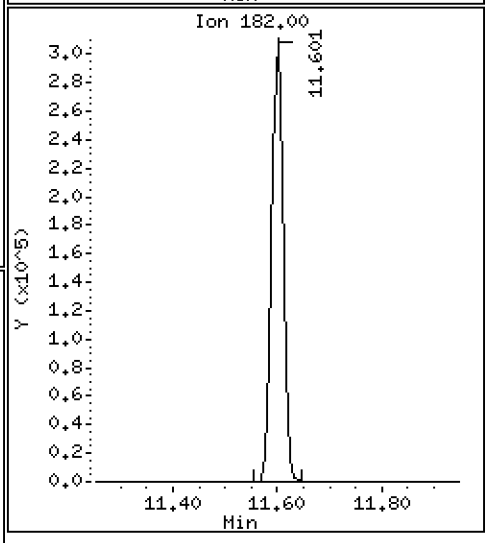
26 1,2,4-Trichlorobenzene

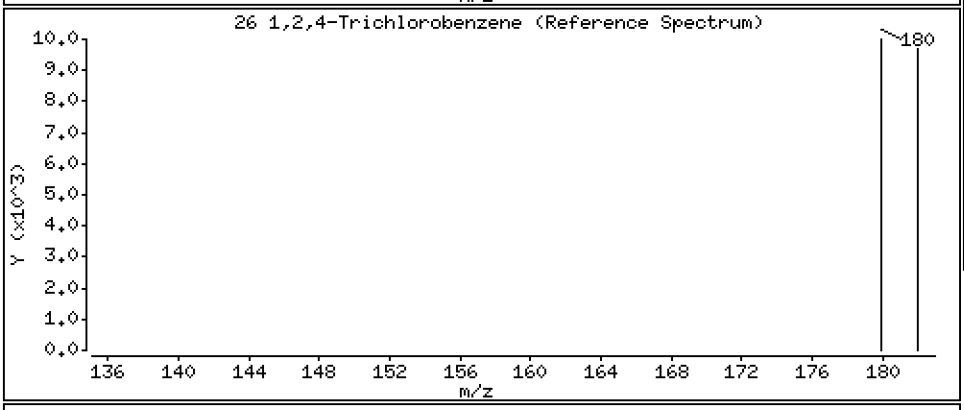
Concentration: 4.870 ug/L

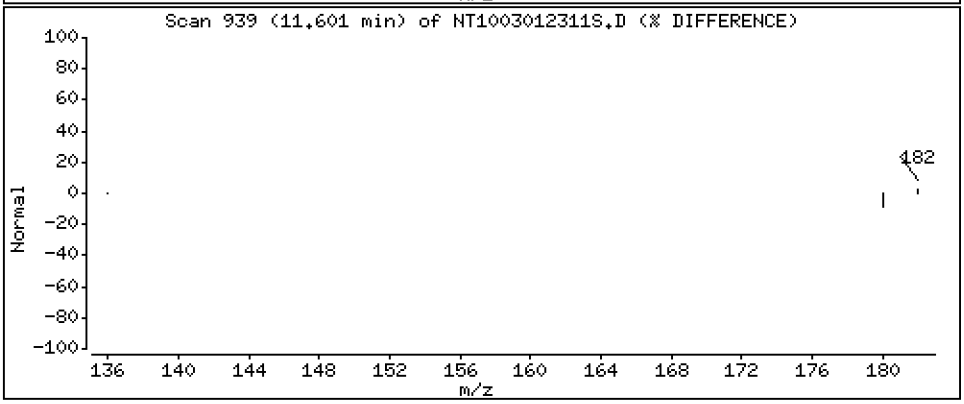












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

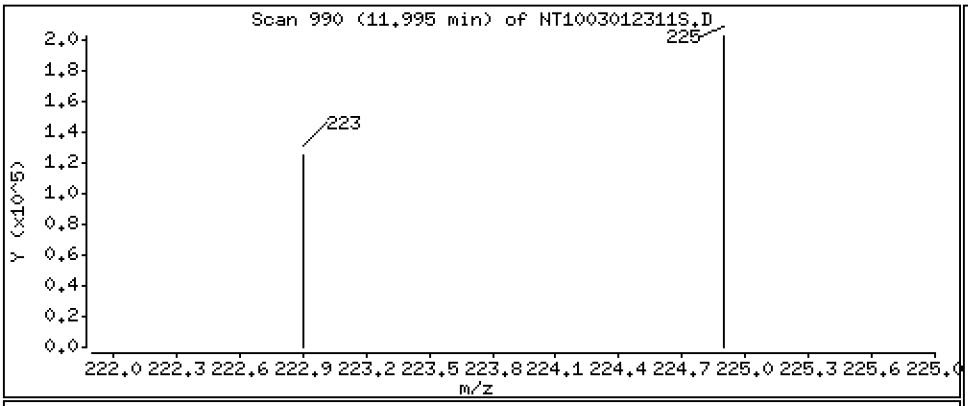
Operator: JGR

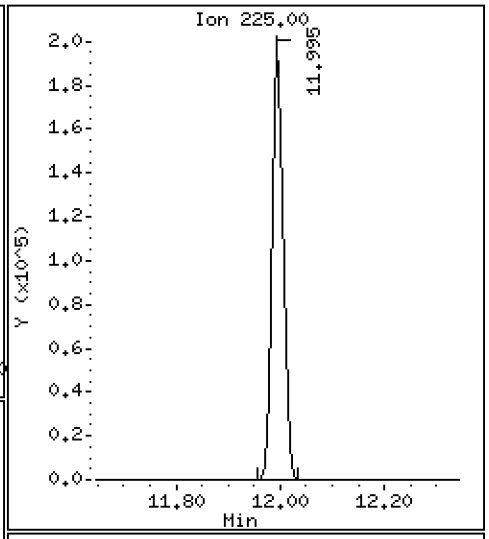
Column phase: ZB-5msi

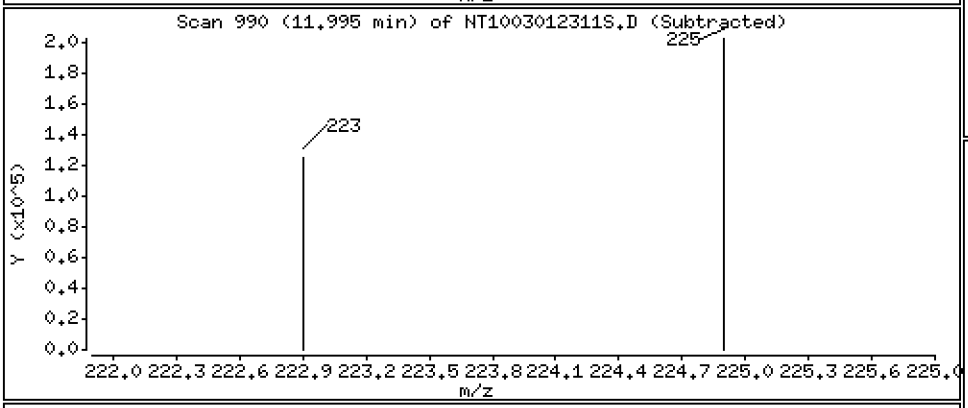
Column diameter: 0.25

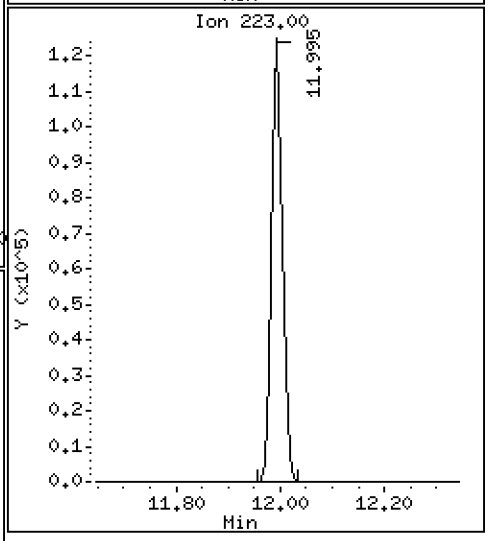
30 Hexachlorobutadiene

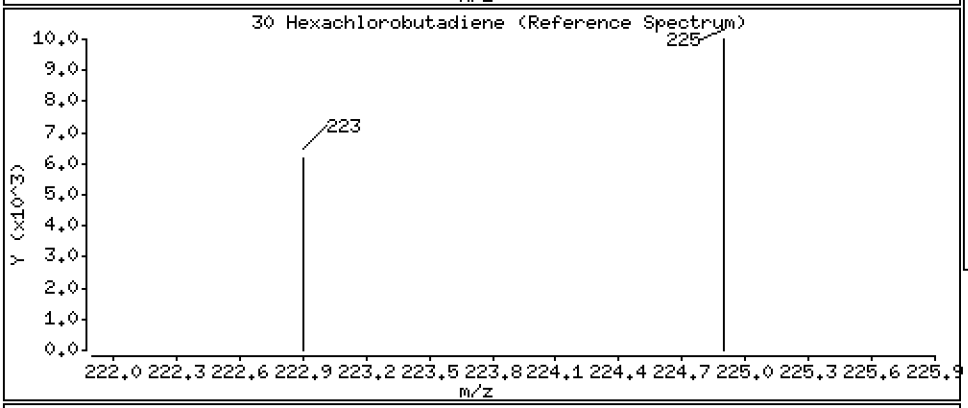
Concentration: 4.862 ug/L

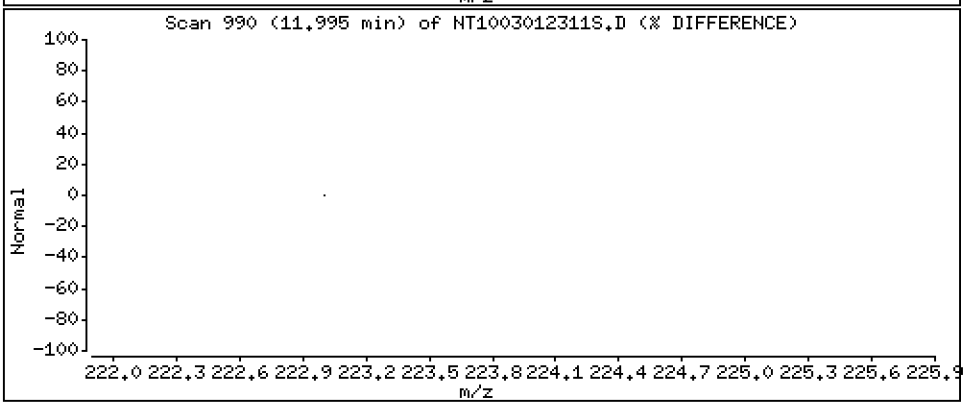












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

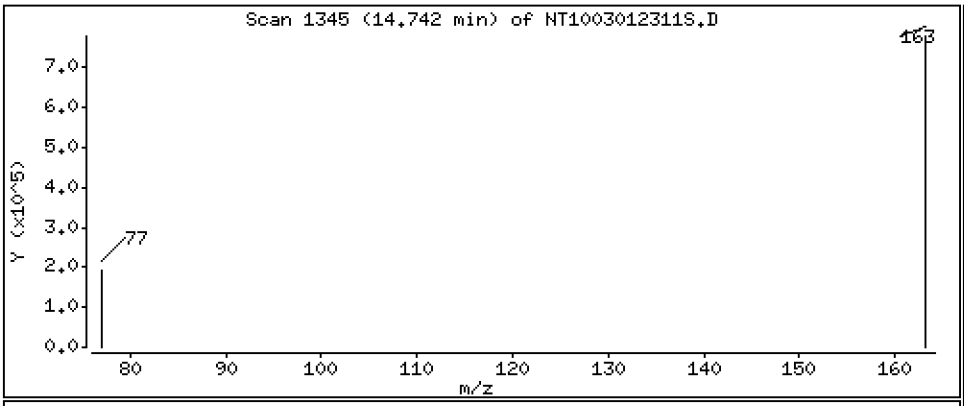
Operator: JGR

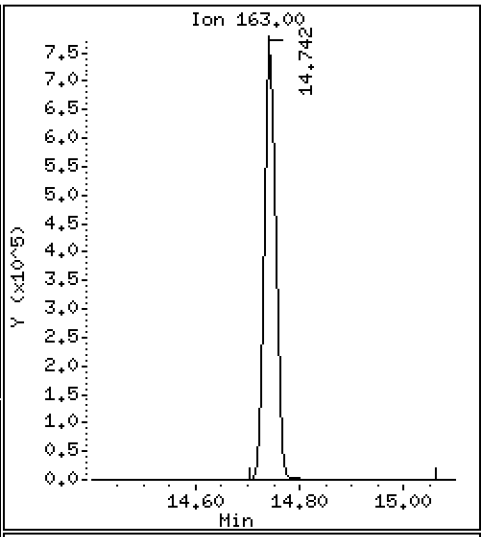
Column phase: ZB-5msi

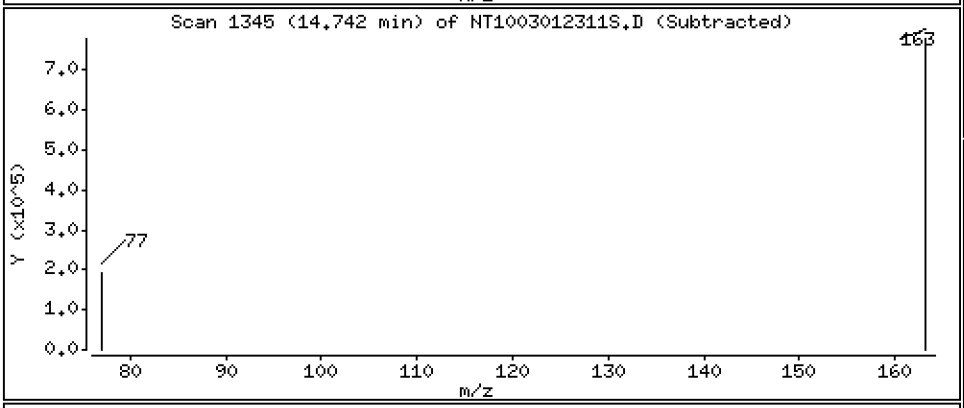
Column diameter: 0.25

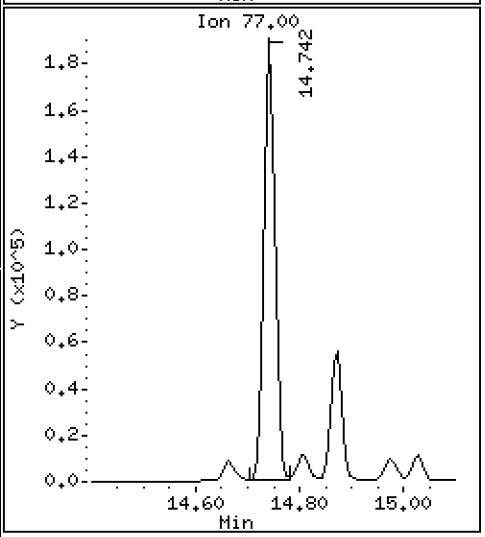
39 Dimethylphthalate

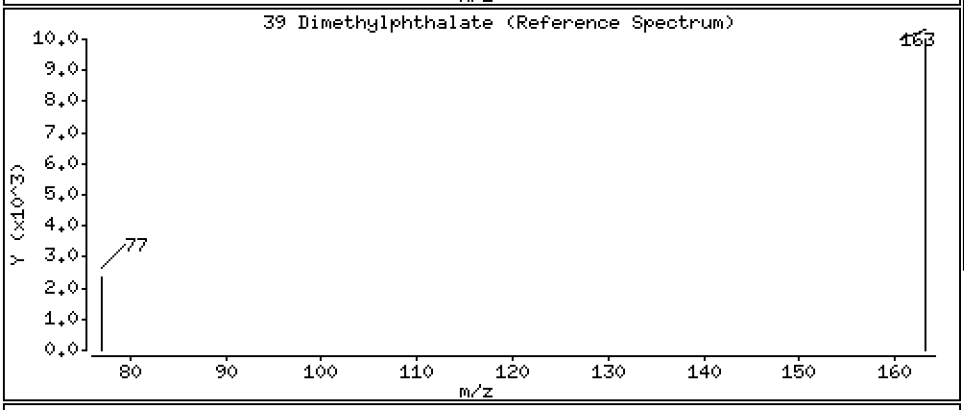
Concentration: 5.571 ug/L

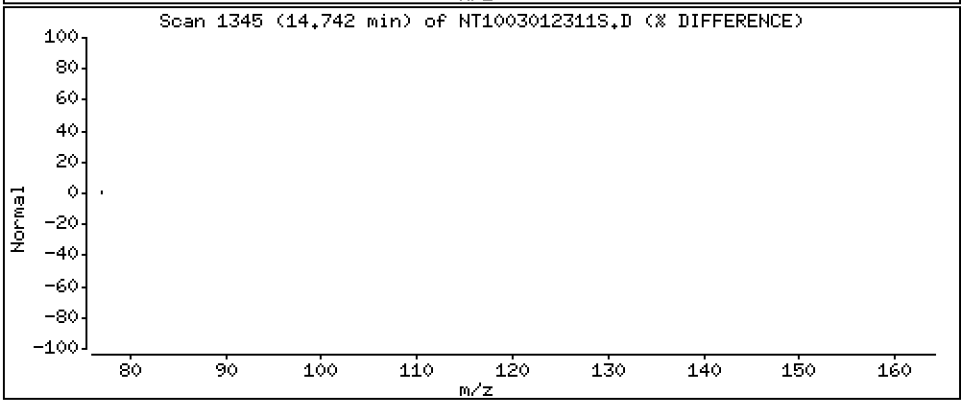












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

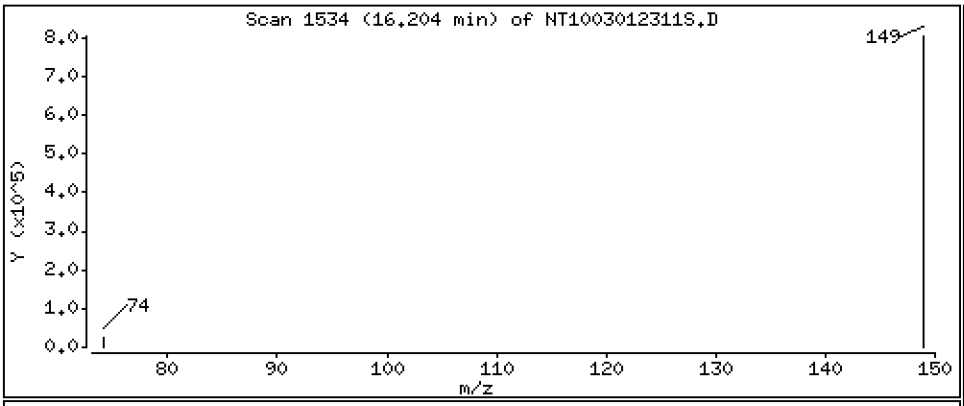
Operator: JGR

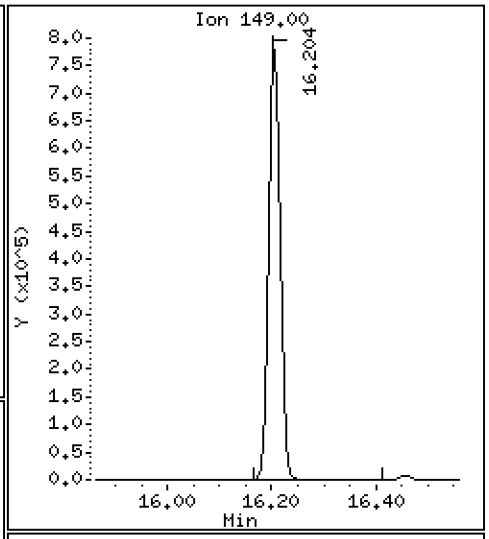
Column phase: ZB-5msi

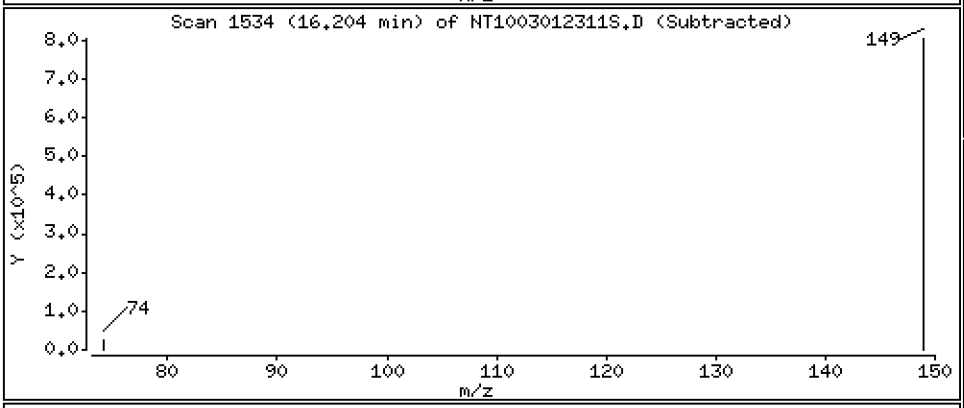
Column diameter: 0.25

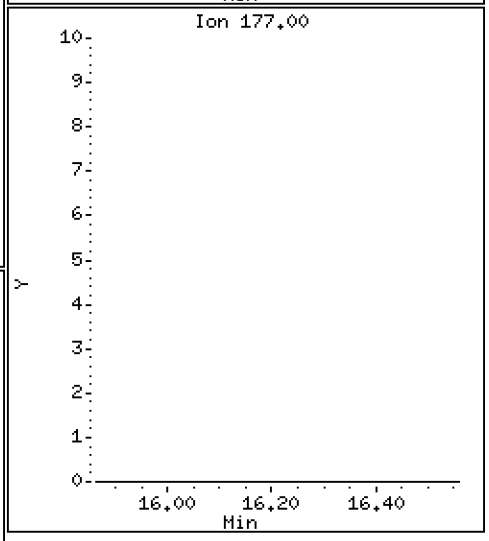
50 Diethylphthalate

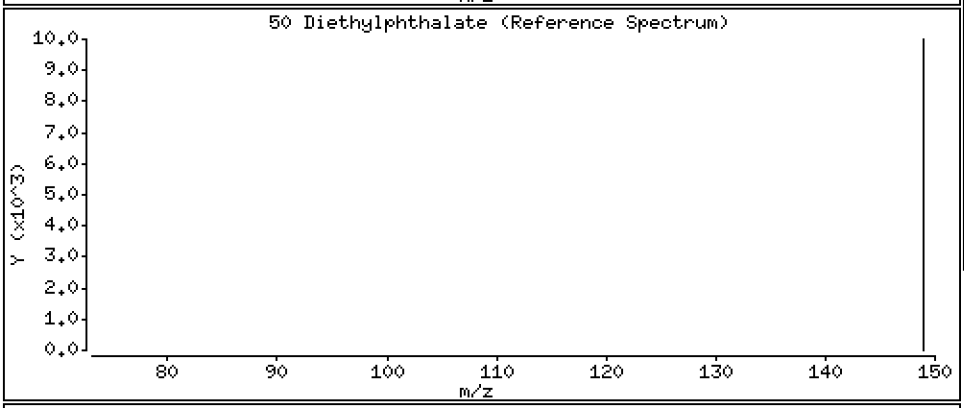
Concentration: 5.979 ug/L

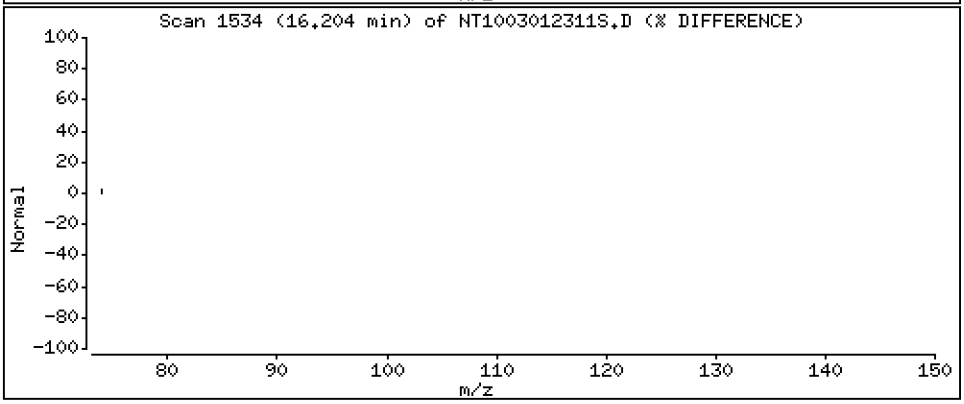












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

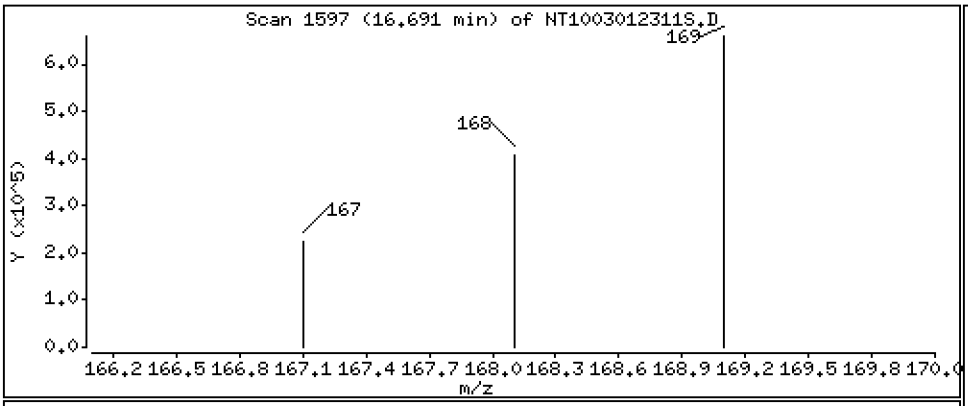
Operator: JGR

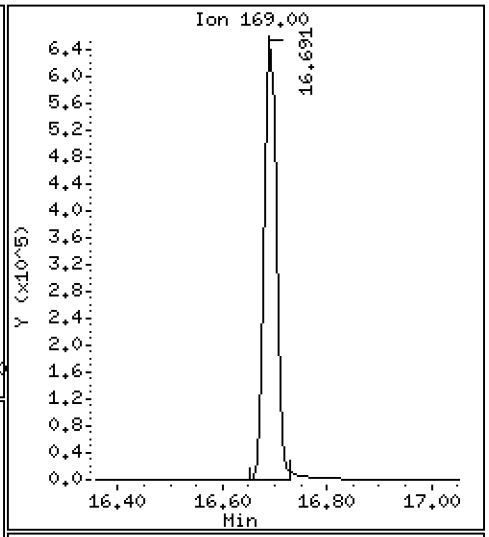
Column phase: ZB-5msi

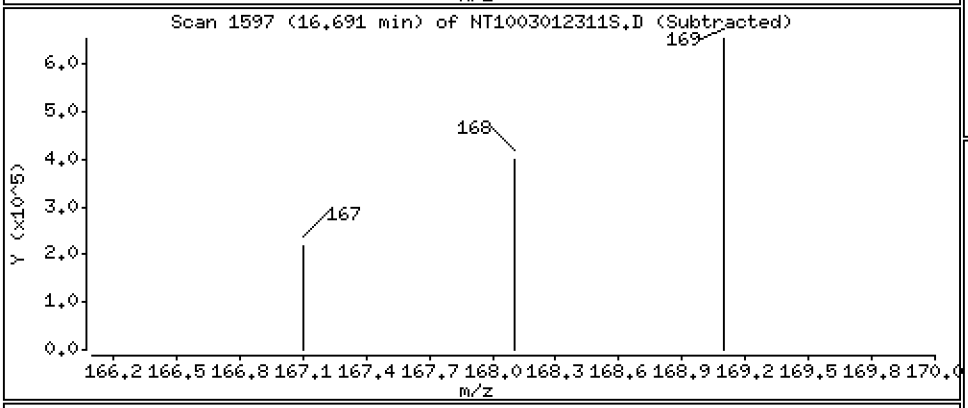
Column diameter: 0.25

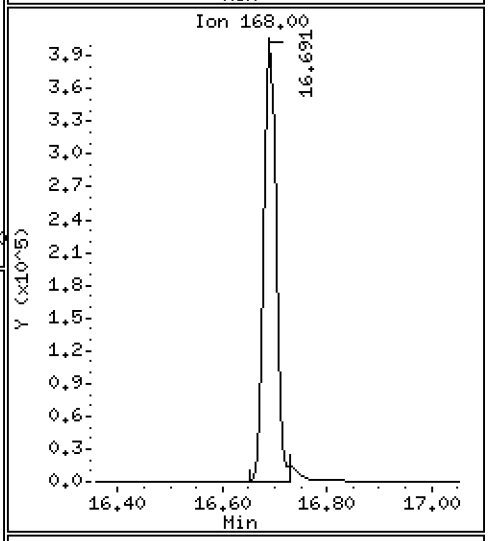
54 N-Nitrosodiphenylamine

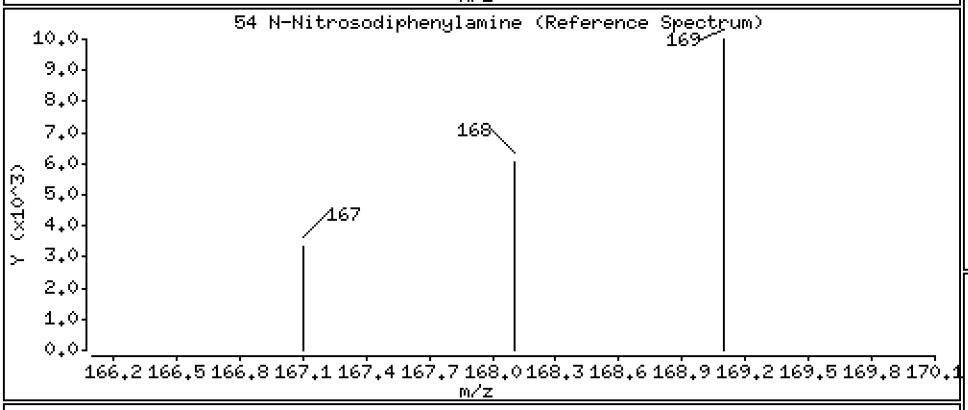
Concentration: 5.359 ug/L

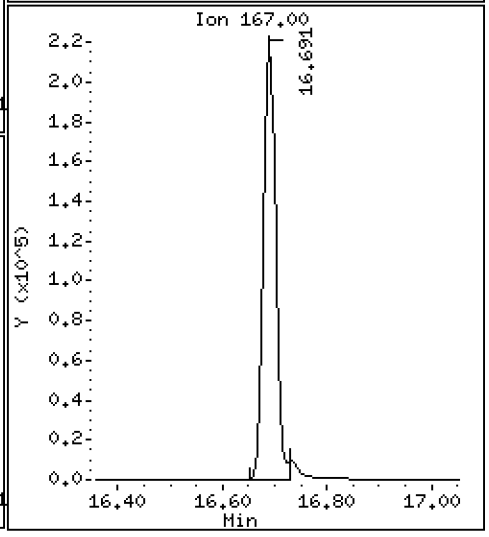


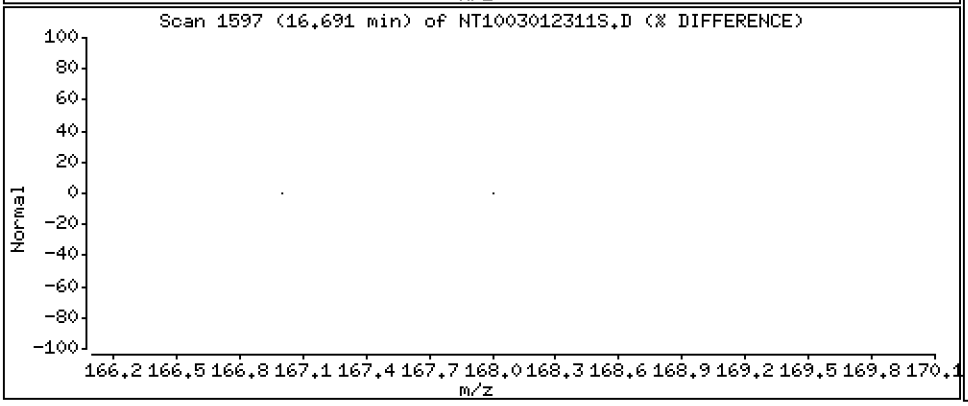












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

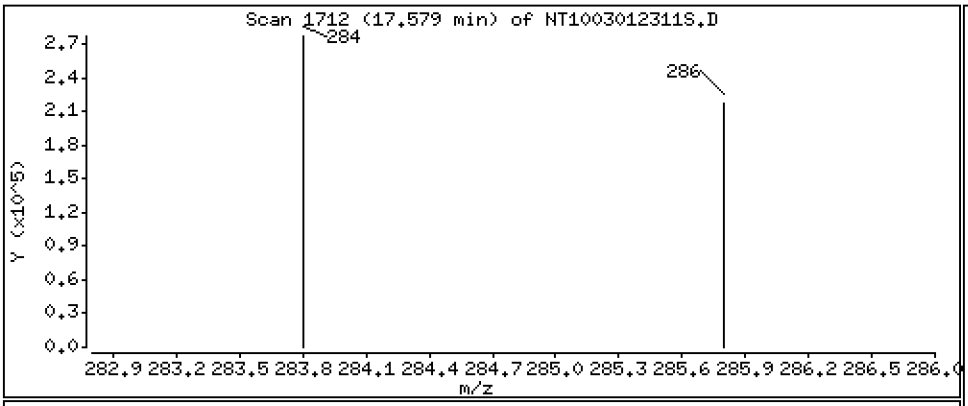
Operator: JGR

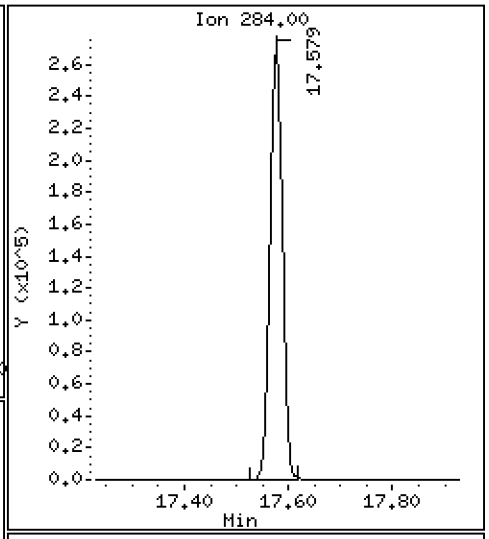
Column phase: ZB-5msi

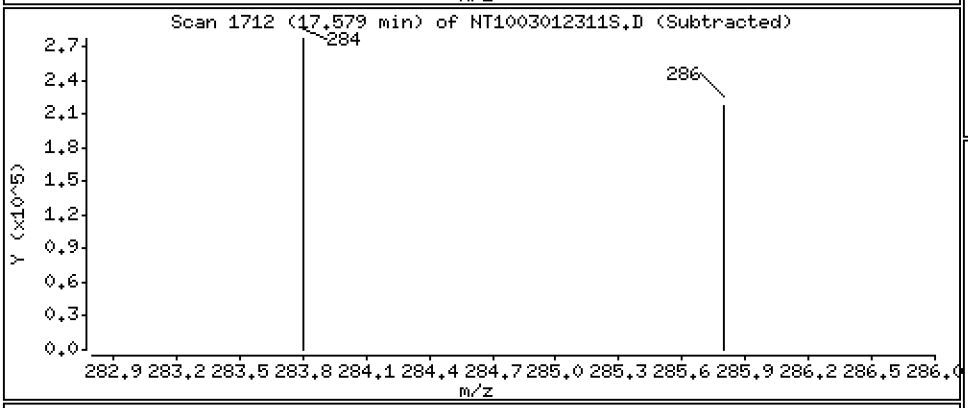
Column diameter: 0.25

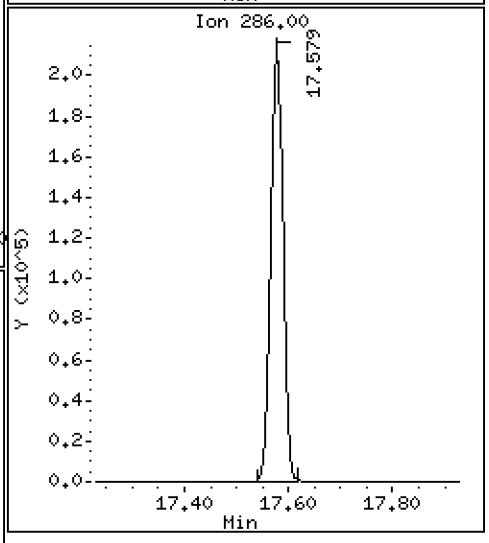
57 Hexachlorobenzene

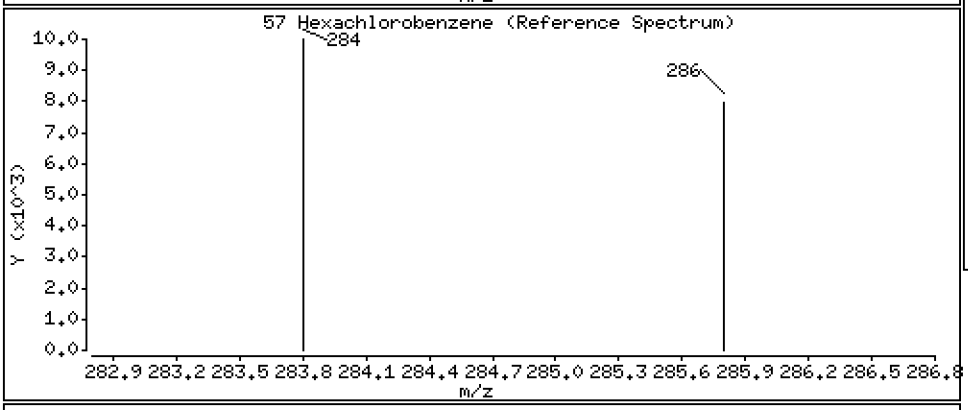
Concentration: 4.866 ug/L

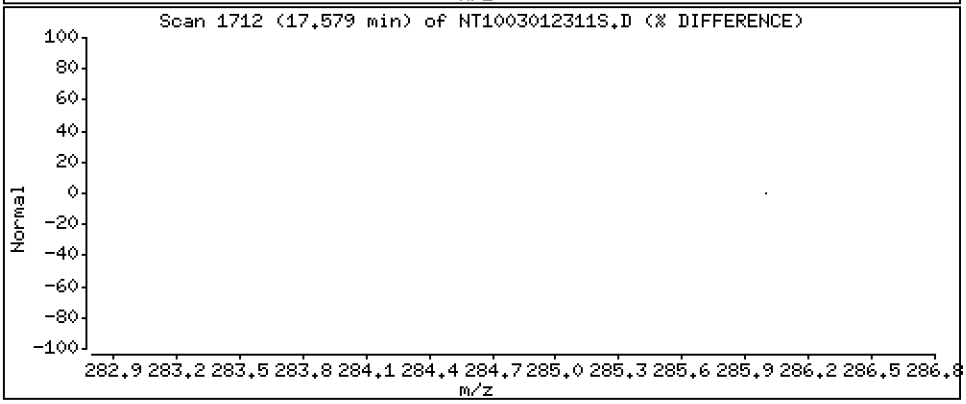












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

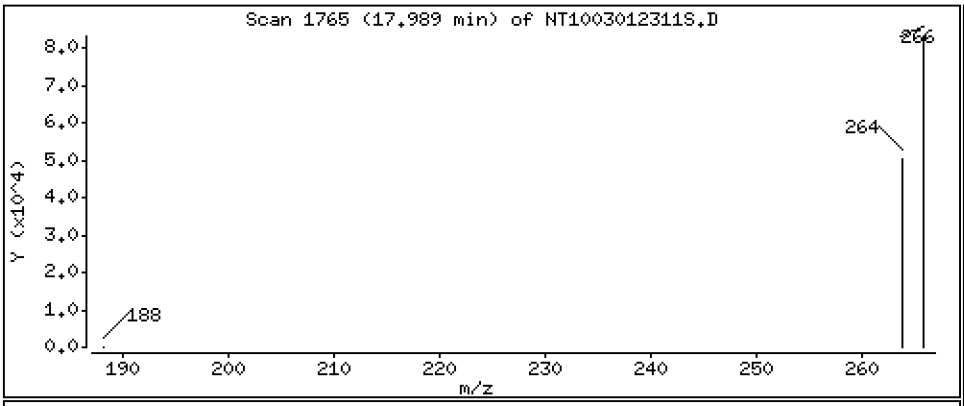
Operator: JGR

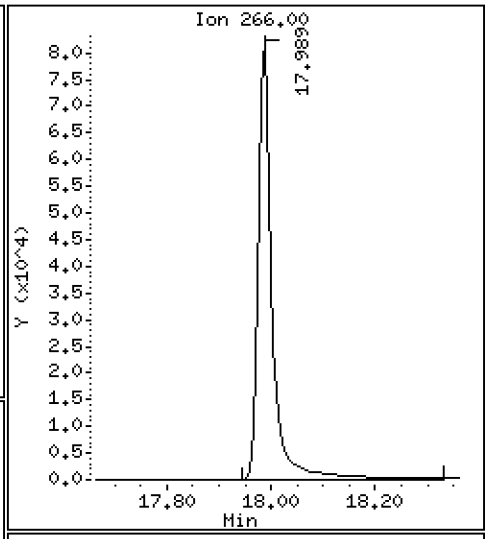
Column phase: ZB-5msi

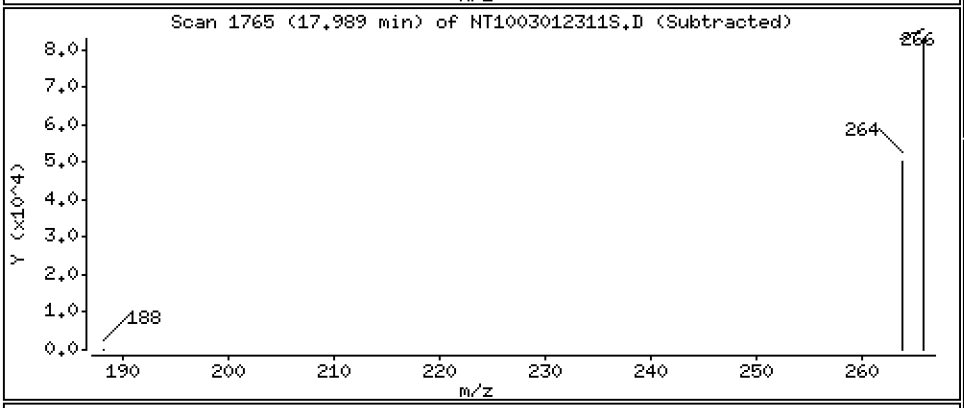
Column diameter: 0.25

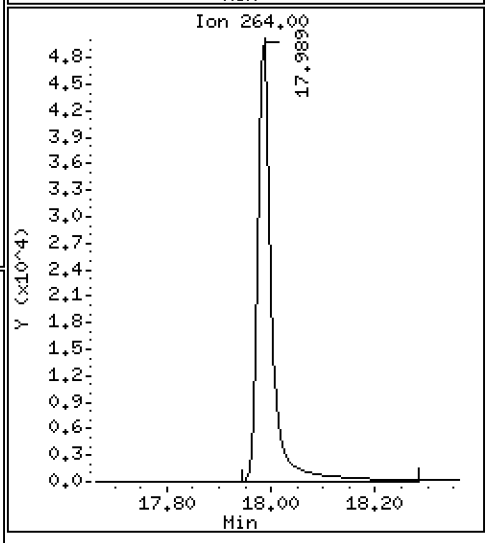
58 Pentachlorophenol

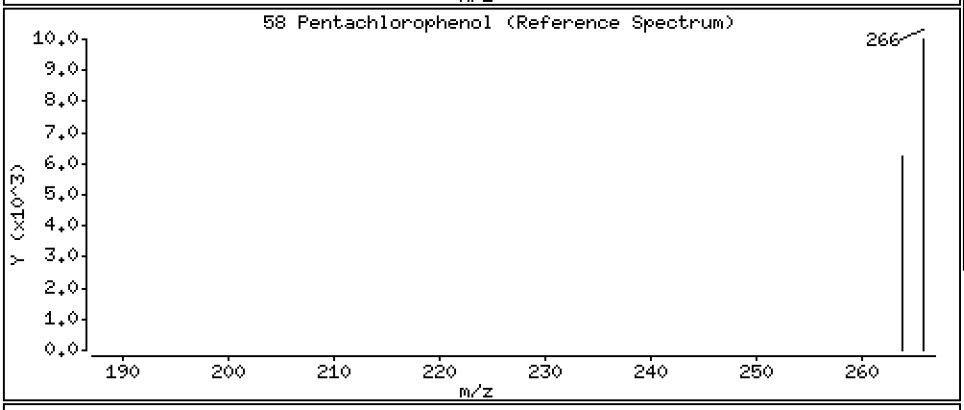
Concentration: 3.912 ug/L

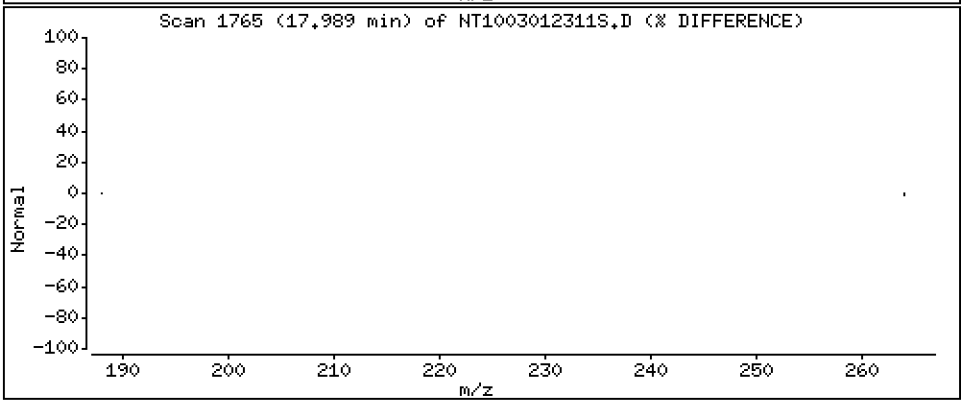












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

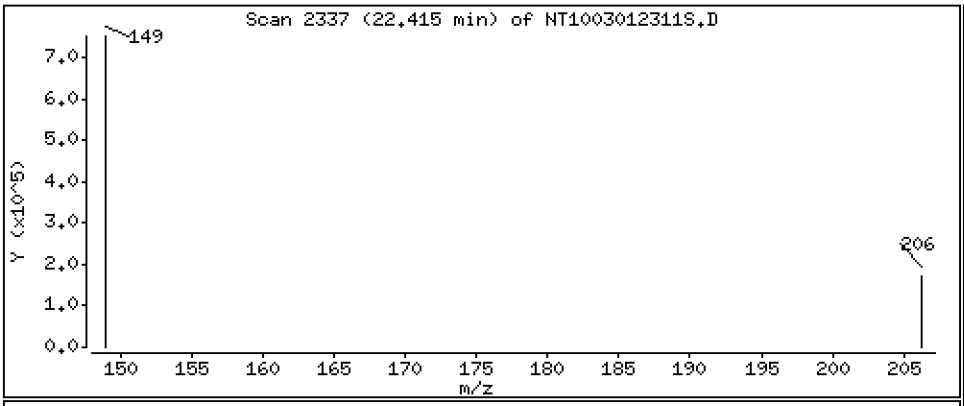
Operator: JGR

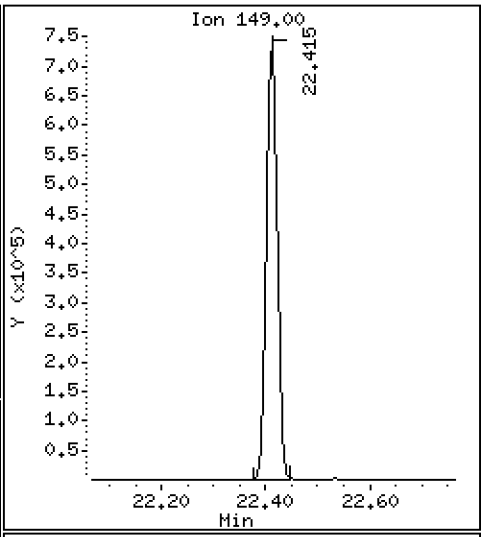
Column phase: ZB-5msi

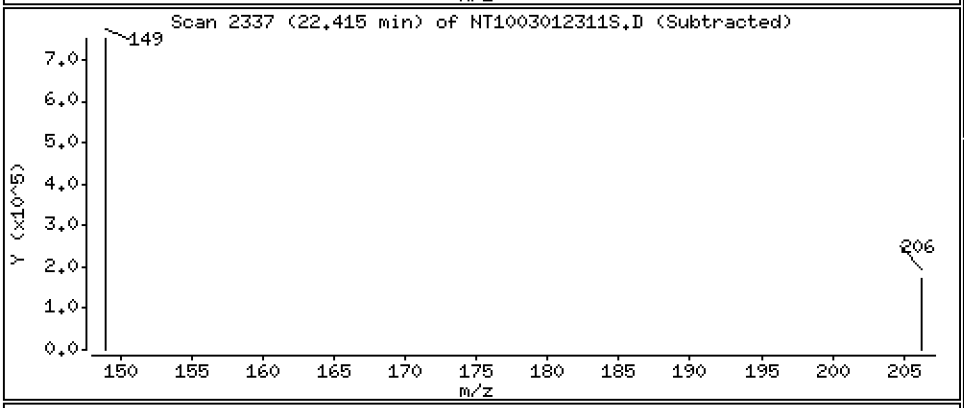
Column diameter: 0.25

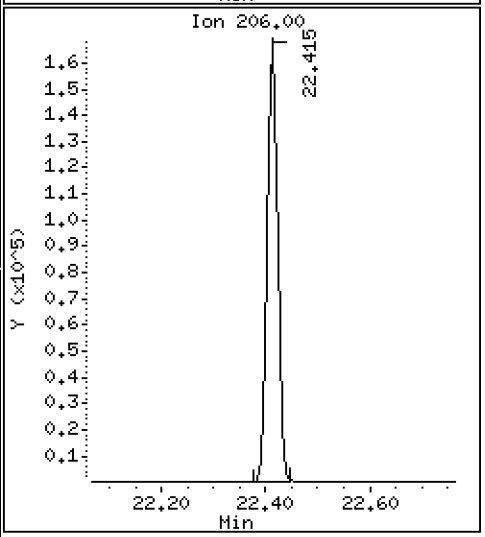
67 Butylbenzylphthalate

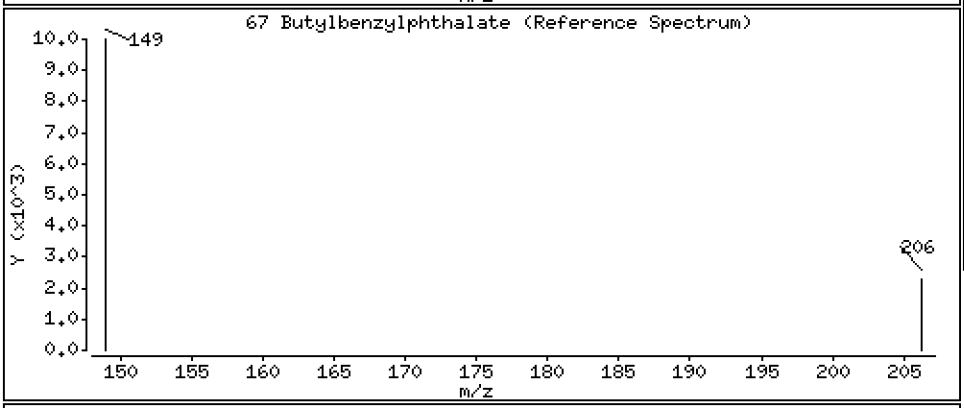
Concentration: 4.689 ug/L

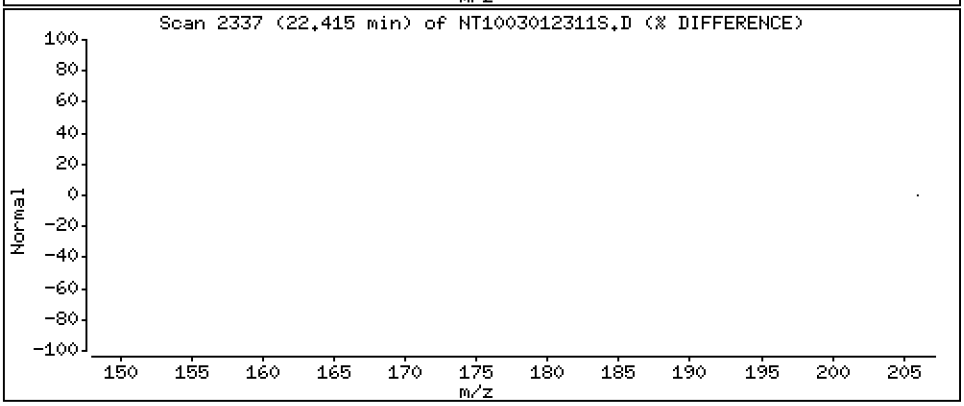












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

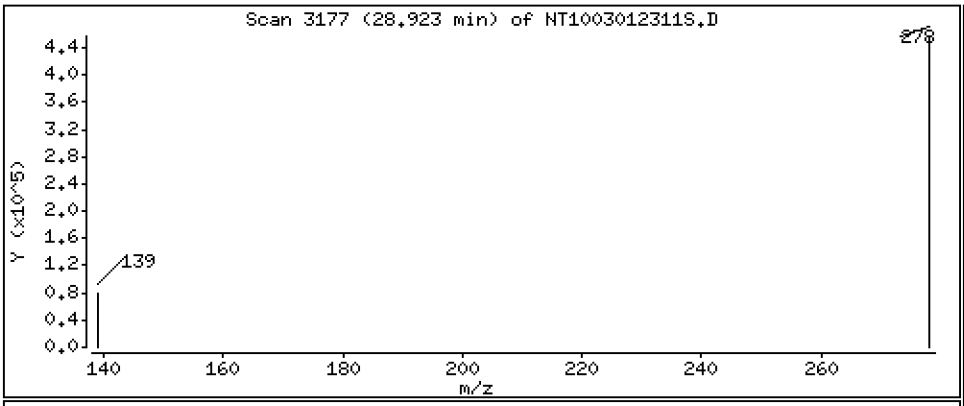
Operator: JGR

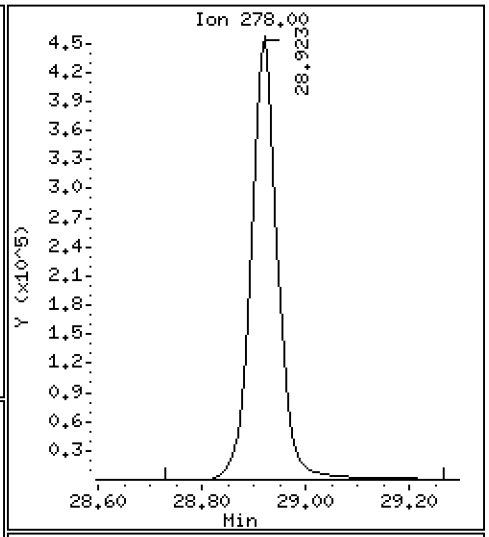
Column phase: ZB-5msi

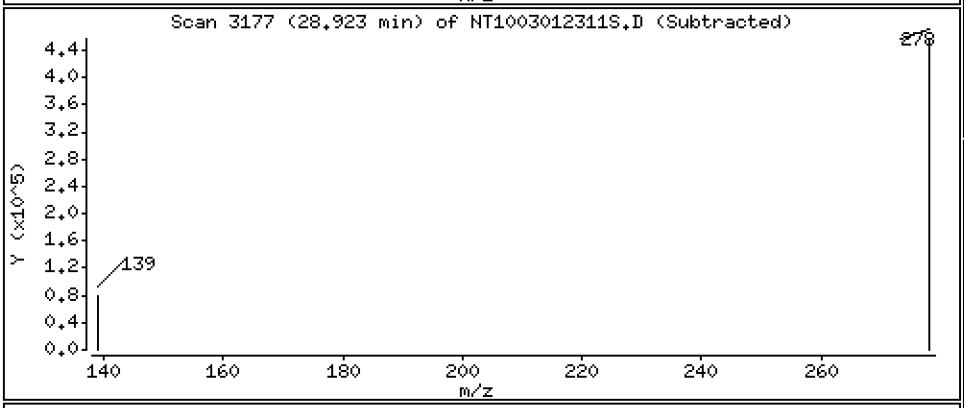
Column diameter: 0.25

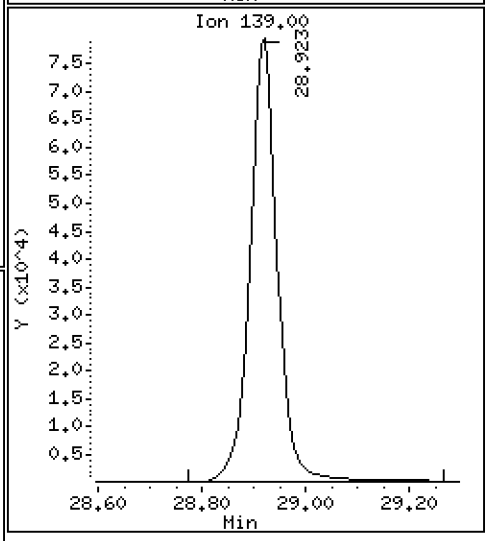
79 Dibenzo(a,h)anthracene

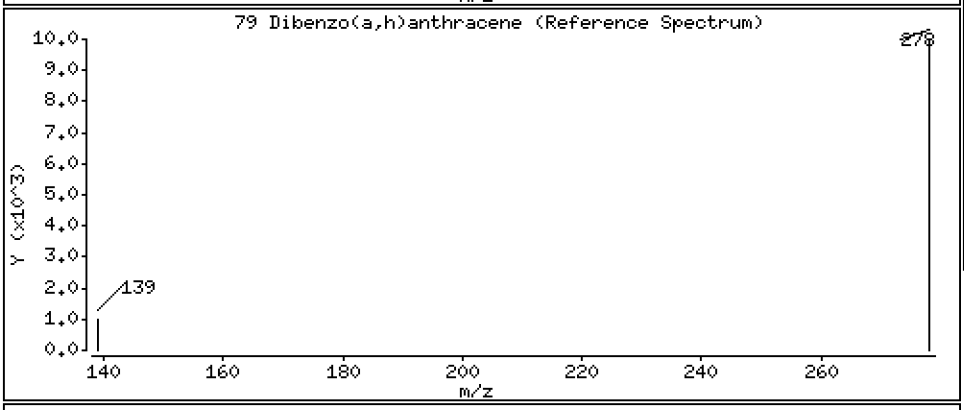
Concentration: 4.760 ug/L

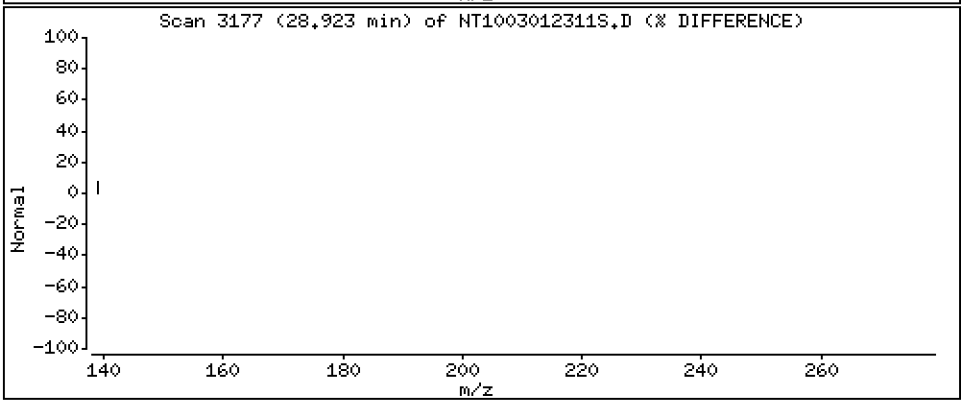












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

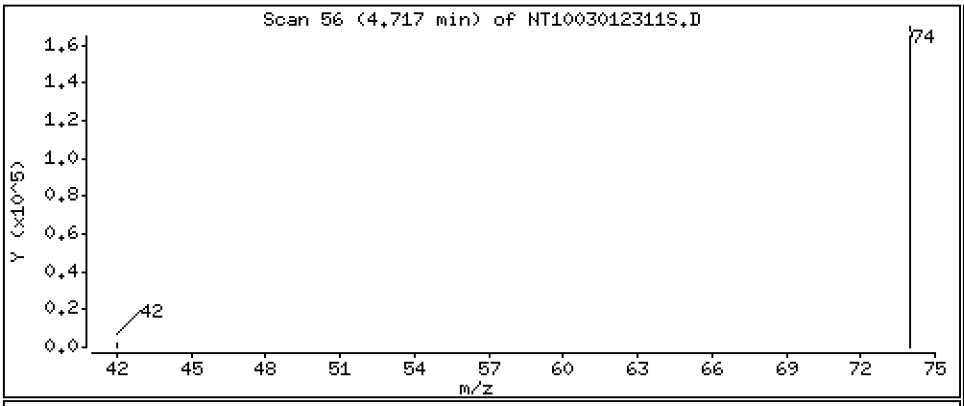
Operator: JGR

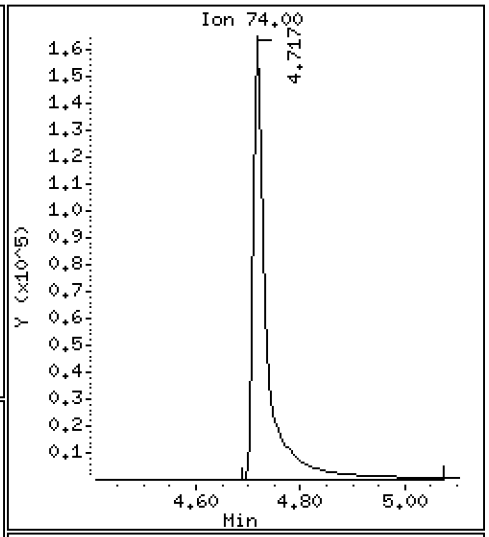
Column phase: ZB-5msi

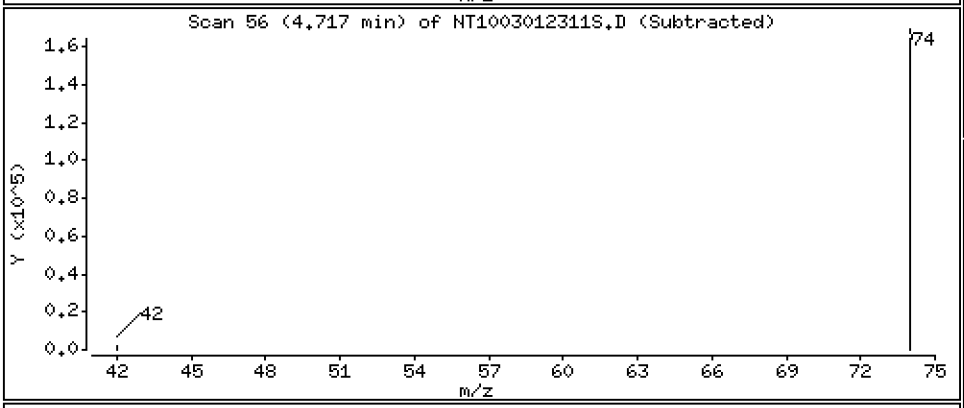
Column diameter: 0.25

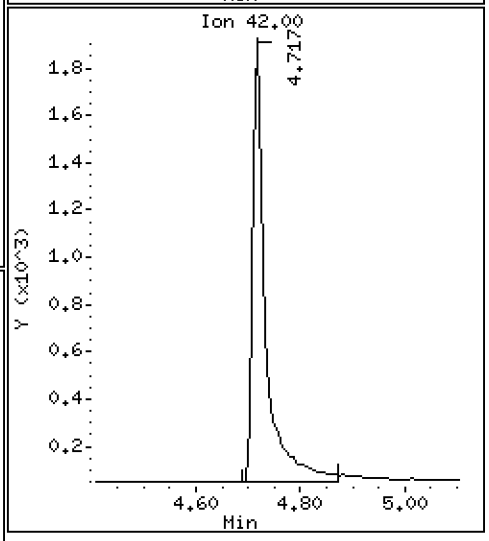
90 N-Nitrosodimethylamine

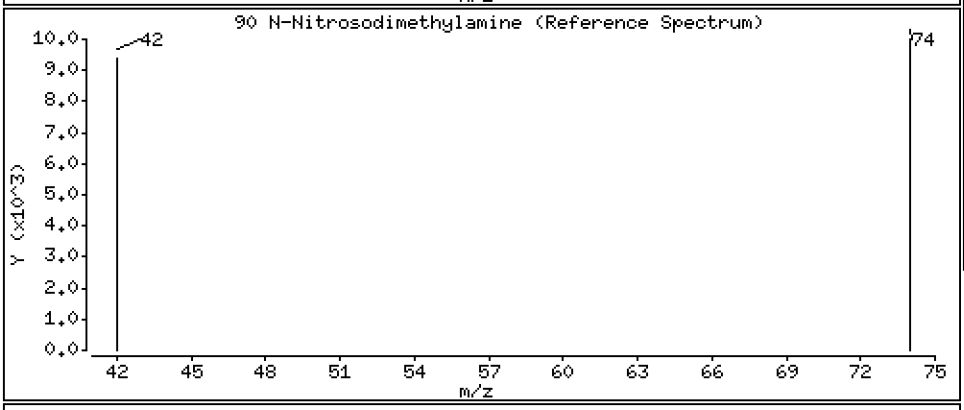
Concentration: 6.057 ug/L

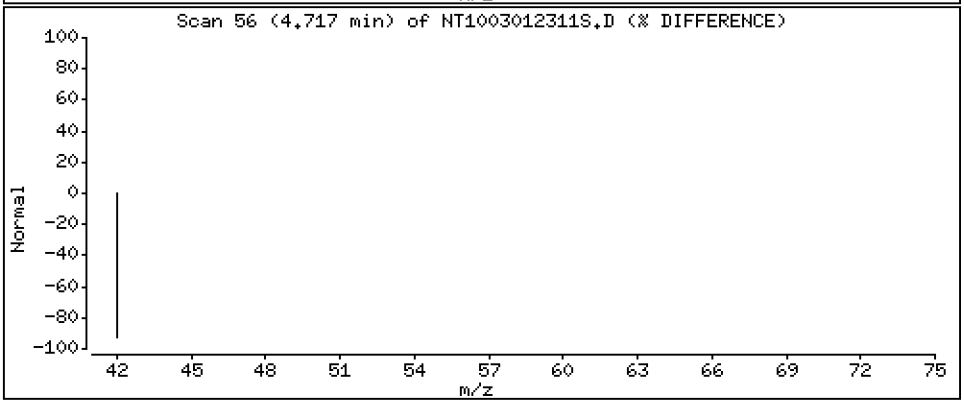












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012311S.D
Lab Smp Id: SLC0143-SCV1
Inj Date : 01-MAR-2023 21:46 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$	1 2-Fluorophenol	112	6.902	6.902	(0.746)	3267	0.03768	0.03768(R)
	3 Phenol	94	8.517	8.532	(0.921)	590047	4.50660	4.507
	7 1,3-Dichlorobenzene	146	9.143	9.136	(0.988)	572299	5.08409	5.084
*	8 1,4-Dichlorobenzene-d4	152	9.252	9.252	(1.000)	303734	4.00000	
	9 1,4-Dichlorobenzene	146	9.283	9.275	(1.003)	574537	5.24962	5.250
	11 Benzyl alcohol	79	9.469	9.508	(1.023)	388582	5.10390	5.104
	12 1,2-Dichlorobenzene	146	9.562	9.563	(1.034)	540938	5.14228	5.142
	13 2-Methylphenol	108	9.655	9.671	(1.044)	348452	4.36547	4.365
	15 4-Methylphenol	108	9.943	9.966	(1.075)	379262	4.50495	4.505
	16 N-Nitroso-di-n-propylamine	70	9.982	9.982	(1.079)	330861	5.68451	5.685
	22 2,4-Dimethylphenol	107	10.998	11.006	(0.938)	357707	3.63670	3.637
	24 Benzoic acid	105	11.099	11.007	(0.947)	380081	6.86990	6.870
	26 1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	402252	4.87012	4.870
*	27 Naphthalene-d8	136	11.724	11.723	(1.000)	1147551	4.00000	
	30 Hexachlorobutadiene	225	11.994	11.994	(1.023)	285002	4.86242	4.862
	39 Dimethylphthalate	163	14.741	14.749	(0.963)	1142178	5.57065	5.571
*	42 Acenaphthene-d10	162	15.314	15.314	(1.000)	645730	4.00000	
	50 Diethylphthalate	149	16.203	16.211	(1.058)	1156037	5.97883	5.979
	54 N-Nitrosodiphenylamine	169	16.690	16.705	(0.907)	998237	5.35897	5.359
	57 Hexachlorobenzene	284	17.578	17.579	(0.955)	424193	4.86607	4.866

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	17.989	18.012	(0.978)	155412	3.91206	3.912
*	59 Phenanthrene-d10	188	18.399	18.398	(1.000)	1151000	4.00000	
$	66 Terphenyl-d14	244	21.524	21.532	(0.919)	2846	0.02712	0.02712(R)
	67 Butylbenzylphthalate	149	22.415	22.415	(0.957)	1009961	4.68912	4.689
*	69 Chrysene-d12	240	23.421	23.421	(1.000)	1297466	4.00000	
*	77 Perylene-d12	264	26.108	26.108	(1.000)	1394899	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.922	28.946	(1.108)	1657122	4.76032	4.760
	90 N-Nitrosodimethylamine	74	4.717	4.755	(0.510)	310951	6.05685	6.057

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012311S.D
Lab Smp Id: SLC0143-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 18:37
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	320125	160063	640250	303734	-5.12
27 Naphthalene-d8	1136019	568010	2272038	1147551	1.02
42 Acenaphthene-d10	636993	318497	1273986	645730	1.37
59 Phenanthrene-d10	1093620	546810	2187240	1151000	5.25
69 Chrysene-d12	1000300	500150	2000600	1297466	29.71
77 Perylene-d12	1058448	529224	2116896	1394899	31.79

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012311S.D

Lab ID: SLC0143-SCV1
nt10.i, 20230301.b\SIM.b\SIMABN2.m,   01-MAR-2023 21:46

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.947	0.000	0.9467	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00050
Laboratory ID: SLA0213-SCV1
Sequence: SLA0213
Standard ID: L000686

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Naphthalene	2.5000	2.63	5.0	
2-Methylnaphthalene	2.5000	2.67	6.8	
1-Methylnaphthalene	2.5000	2.65	6.0	
Acenaphthylene	2.5000	2.82	12.8	
Acenaphthene	2.5000	2.60	4.0	
Dibenzofuran	2.5000	2.86	14.4	
Fluorene	2.5000	2.63	5.2	
Phenanthrene	2.5000	2.45	-2.1	
Anthracene	2.5000	2.27	-9.2	
Fluoranthene	2.5000	2.65	6.1	
Pyrene	2.5000	2.46	-1.5	
Benzo(a)anthracene	2.5000	2.59	3.5	
Chrysene	2.5000	2.40	-4.0	
Benzo(b)fluoranthene	2.5000	2.51	0.3	
Benzo(k)fluoranthene	2.5000	2.66	6.2	
Benzofluoranthenes, Total	5.0000	5.48	9.6	
Benzo(a)pyrene	2.5000	2.57	2.9	
Indeno(1,2,3-cd)pyrene	2.5000	2.69	7.6	
Dibenzo(a,h)anthracene	2.5000	2.49	-0.3	
Benzo(g,h,i)perylene	2.5000	2.48	-0.7	

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

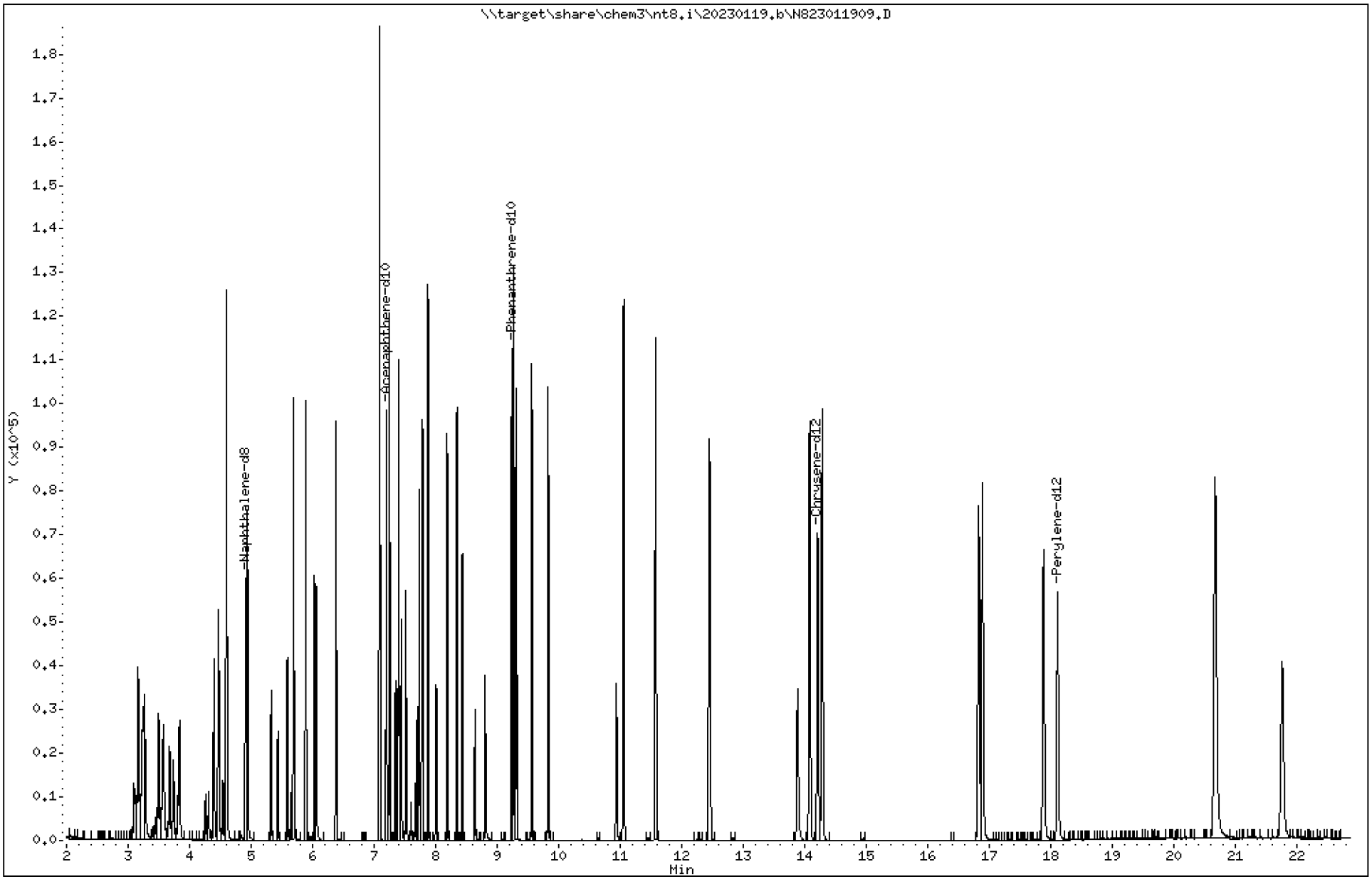
Sample Info: SCV230119

Volume Injected (uL): 1.0

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

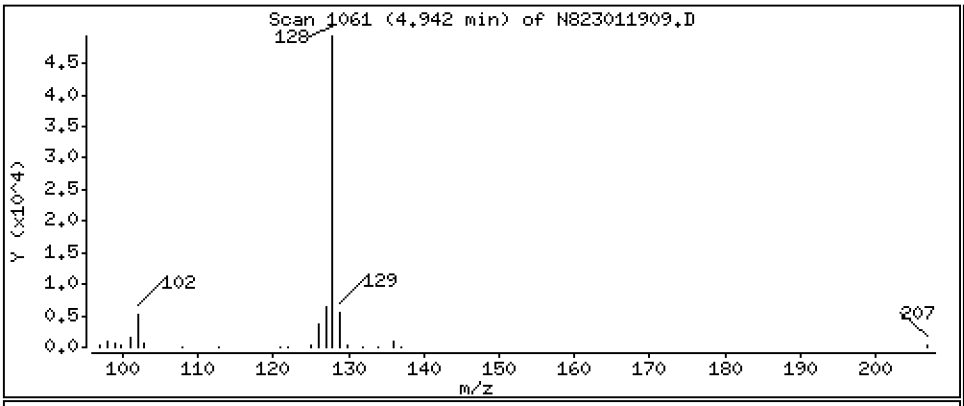
Operator: JZ

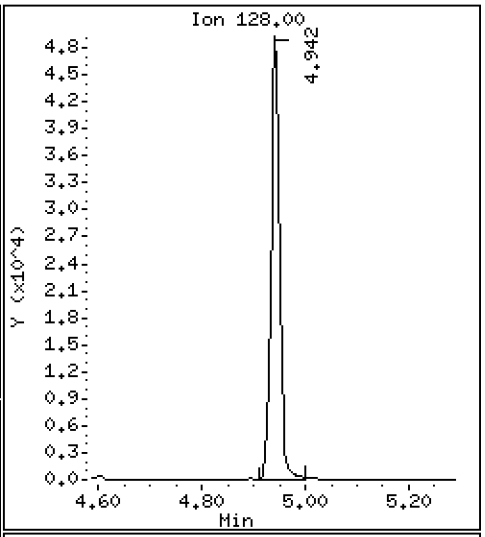
Column phase: Rxi-17sil

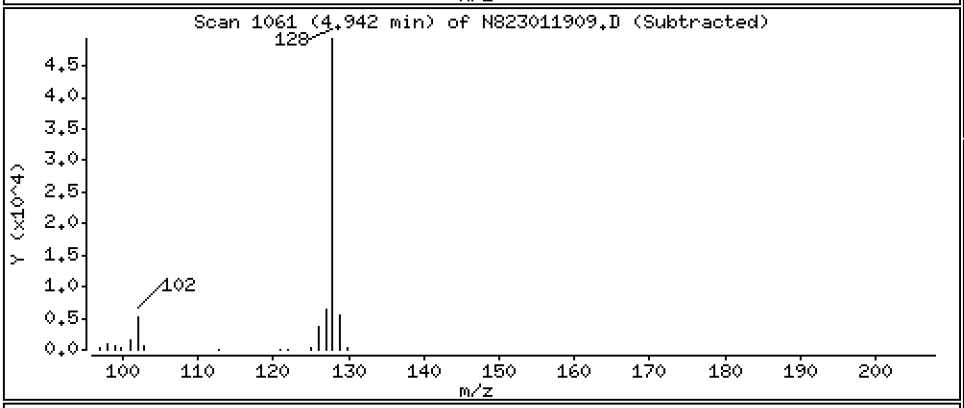
Column diameter: 0.25

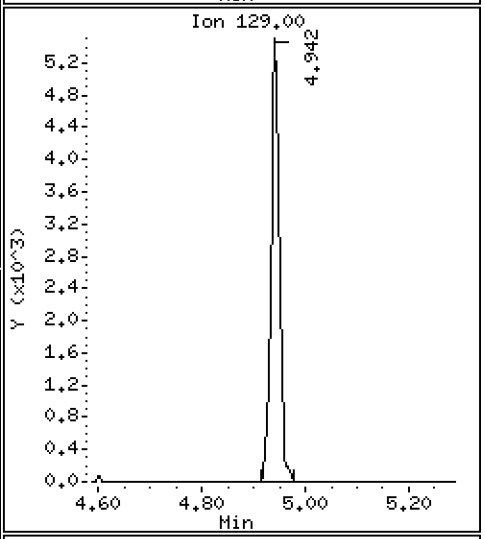
2 Naphthalene

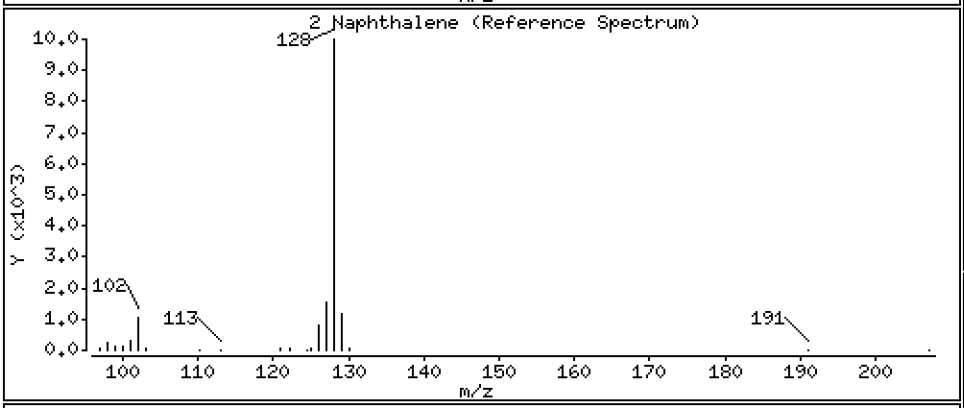
Concentration: 2.626 ug/L

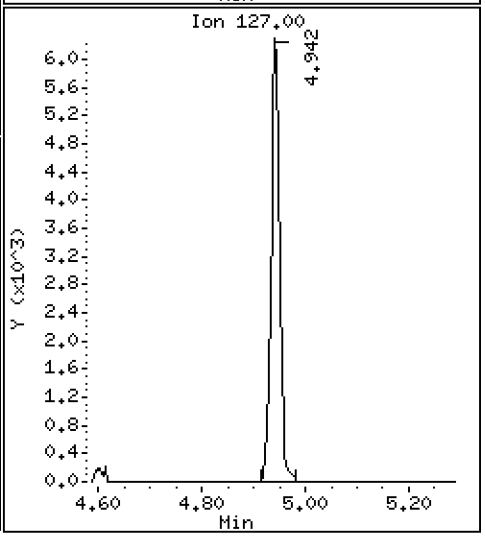


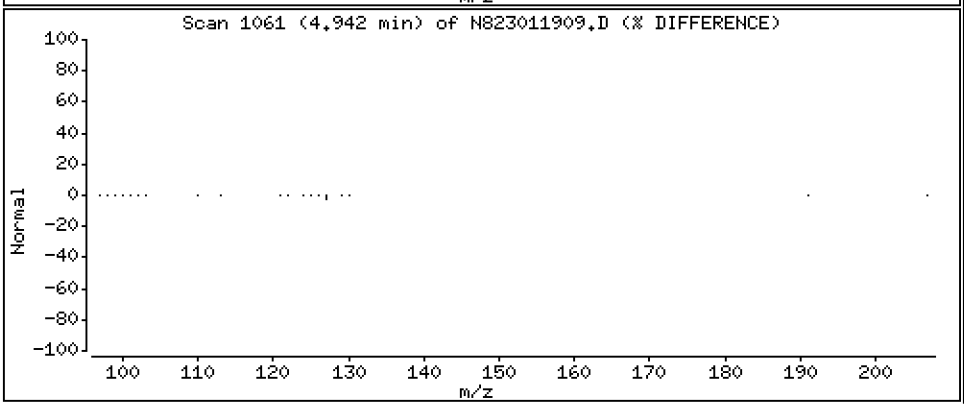












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

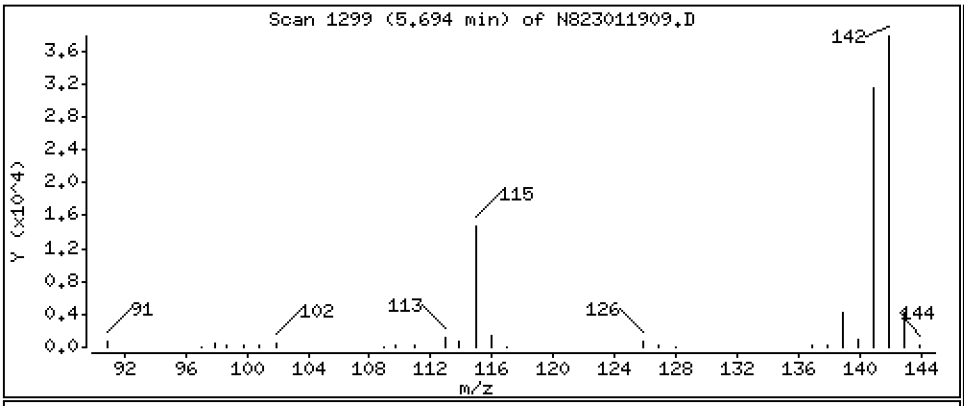
Operator: JZ

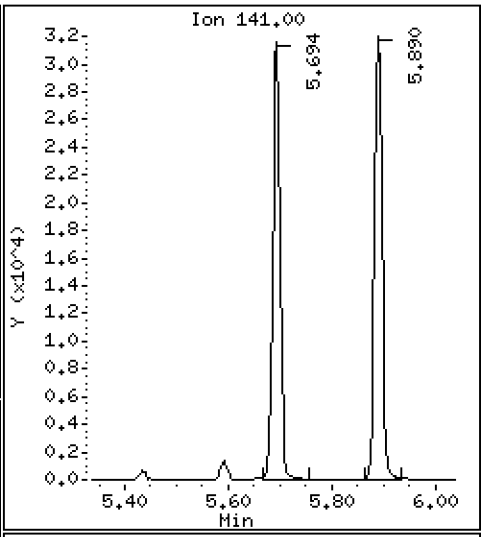
Column phase: Rxi-17sil

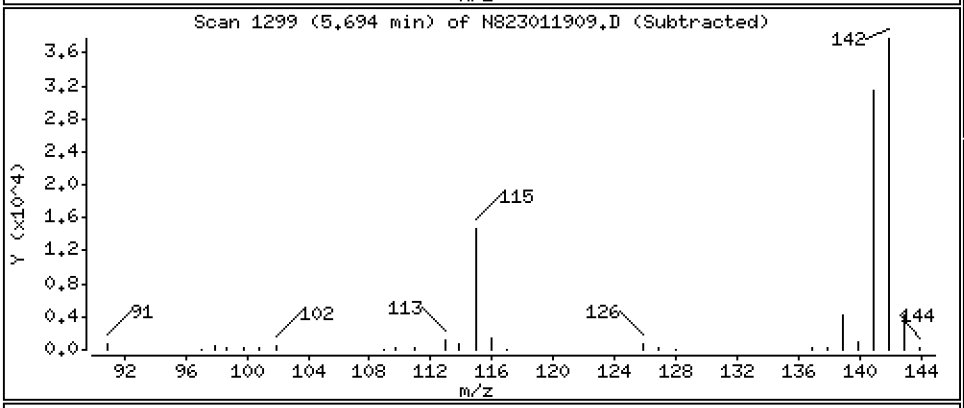
Column diameter: 0.25

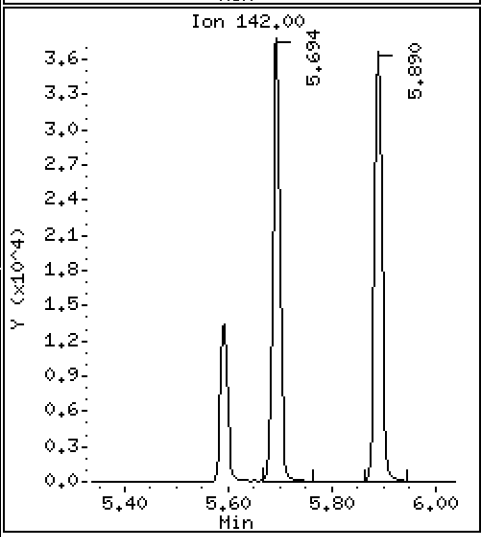
4 2-Methylnaphthalene

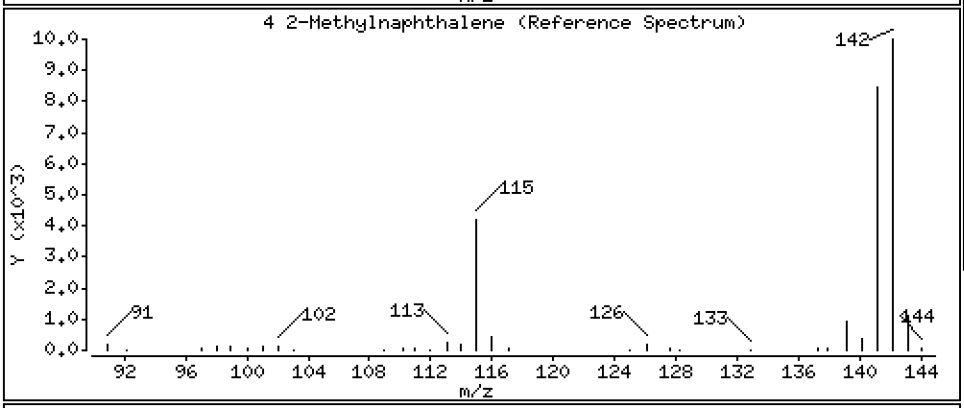
Concentration: 2.670 ug/L

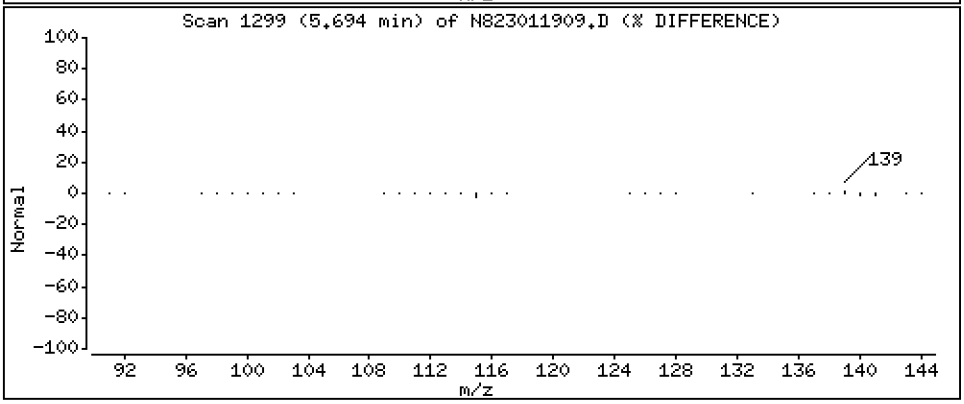












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

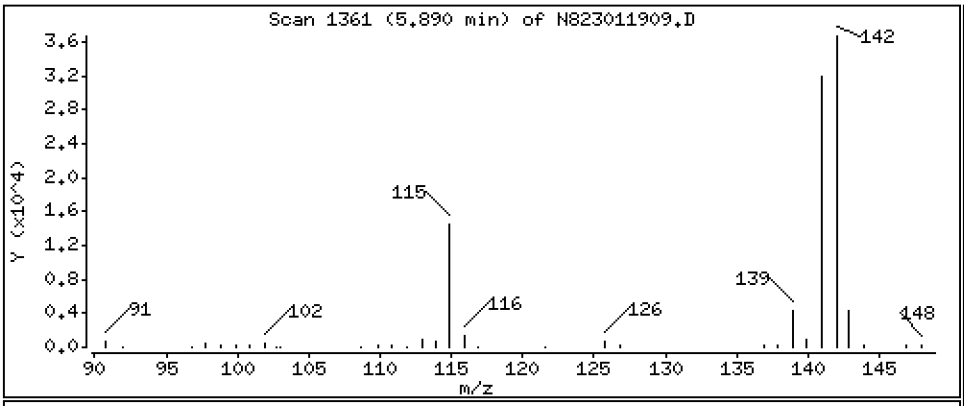
Operator: JZ

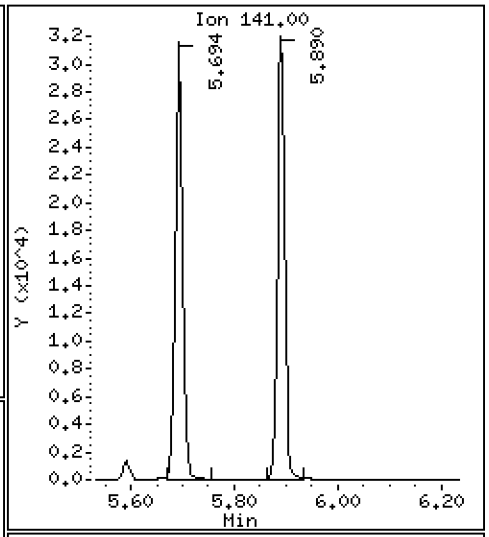
Column phase: Rxi-17sil

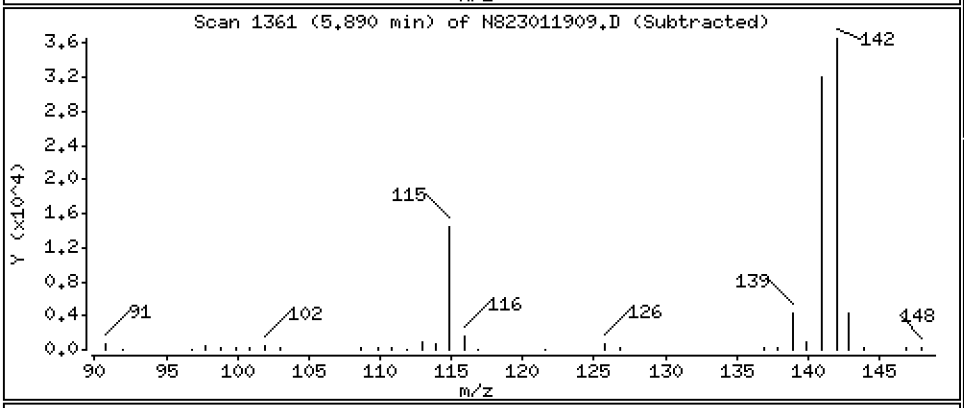
Column diameter: 0.25

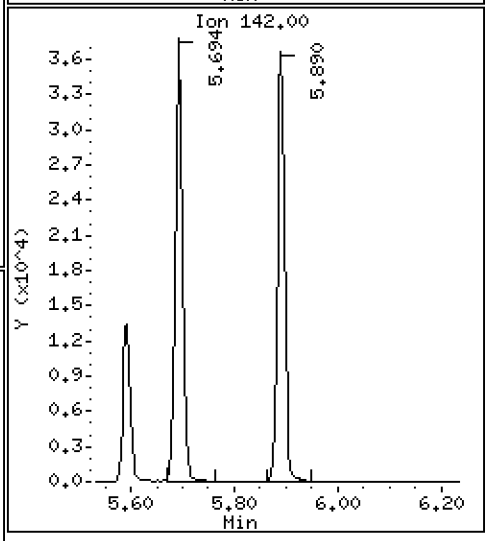
5 1-methylnaphthalene

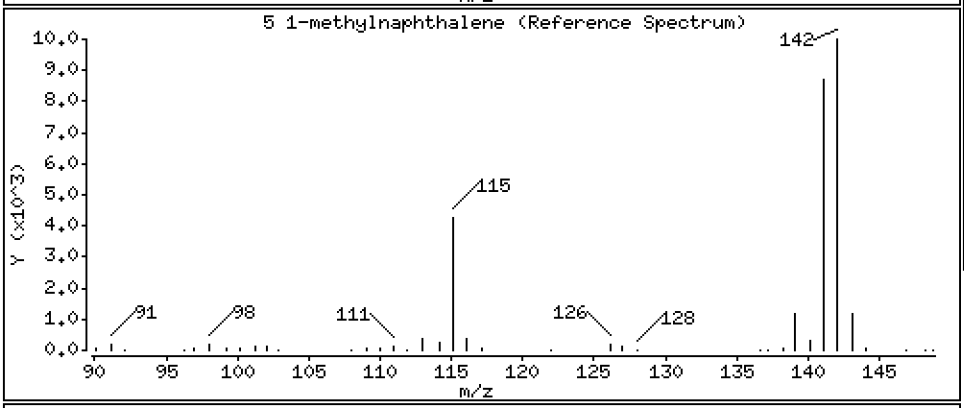
Concentration: 2.649 ug/L

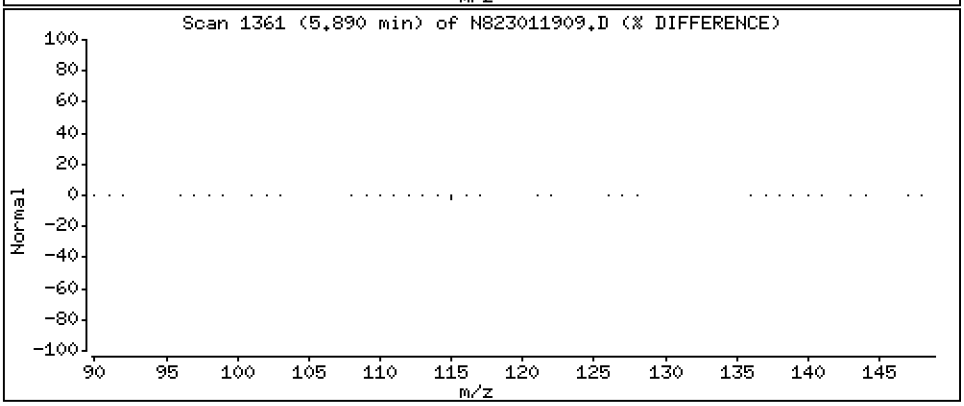












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

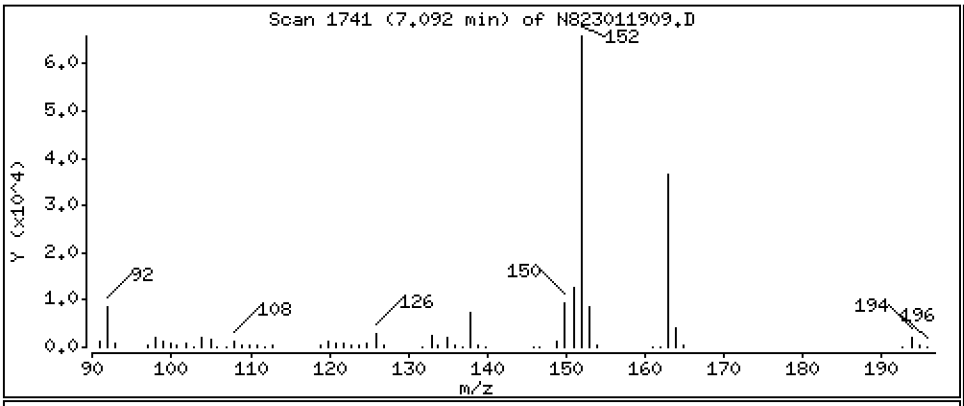
Operator: JZ

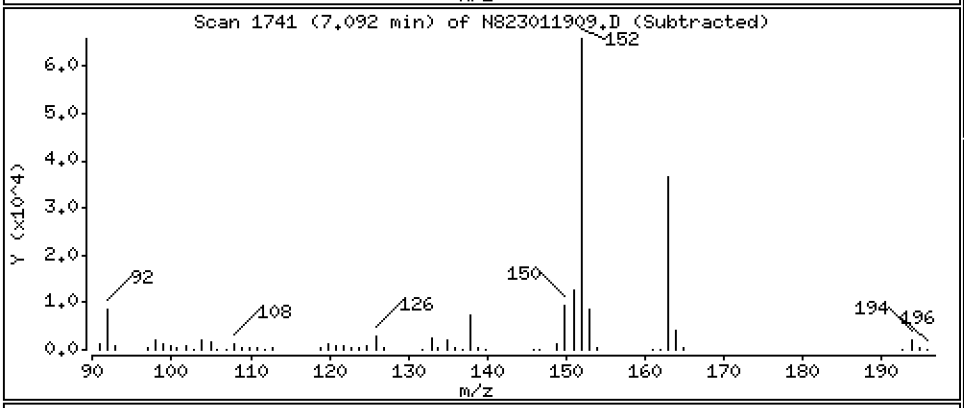
Column phase: Rxi-17sil

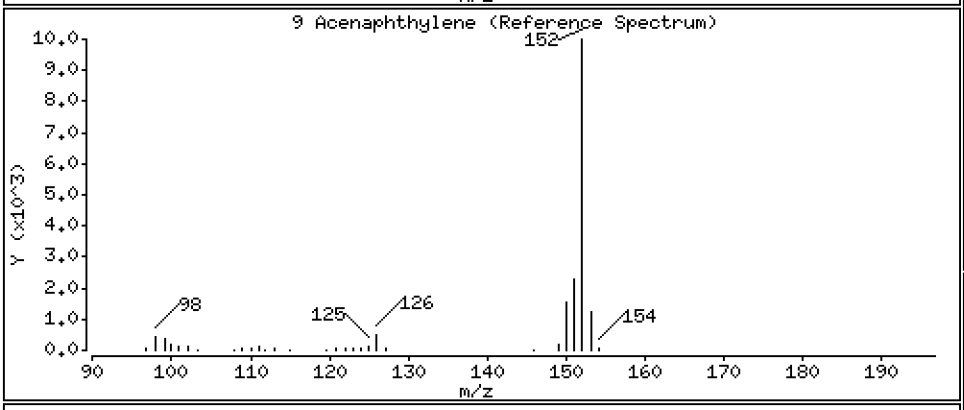
Column diameter: 0.25

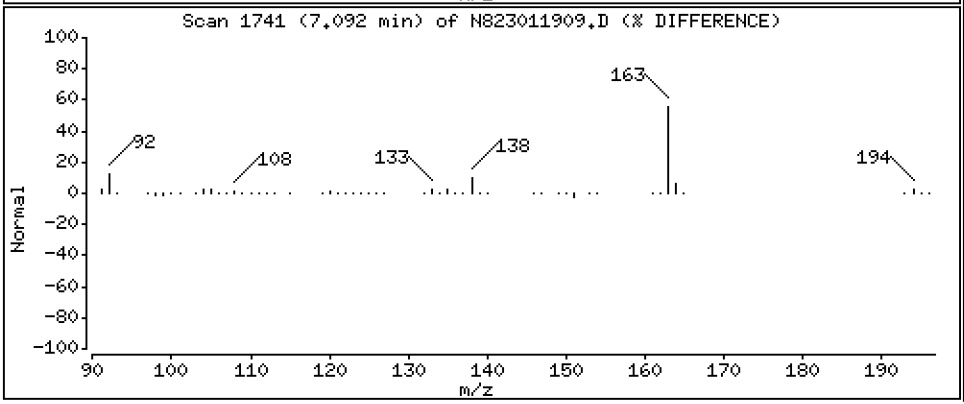
9 Acenaphthylene

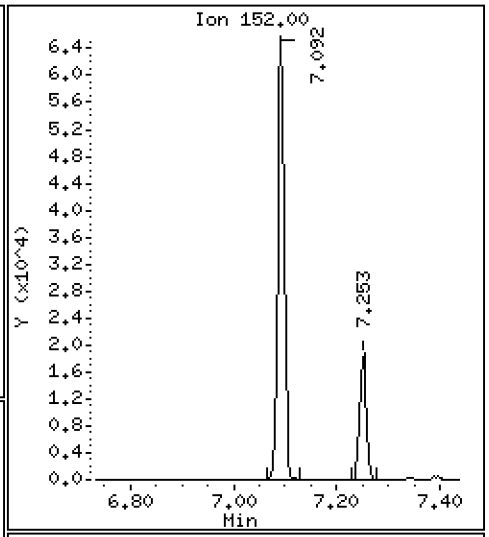
Concentration: 2.821 ug/L

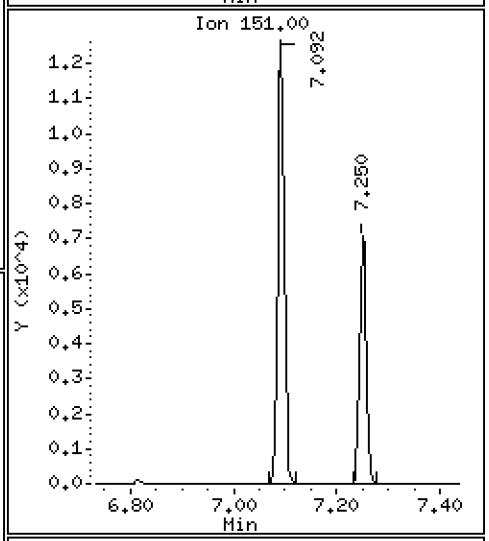


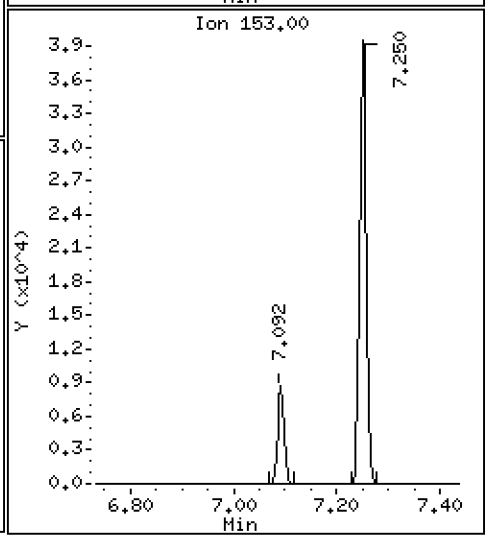












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

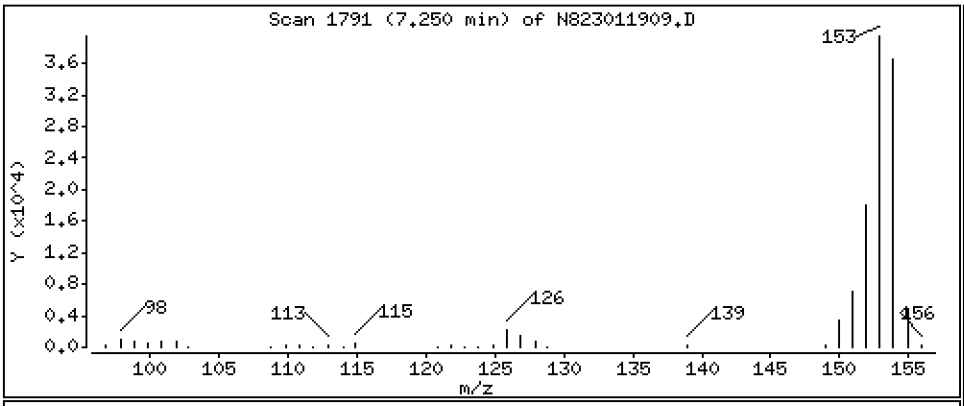
Operator: JZ

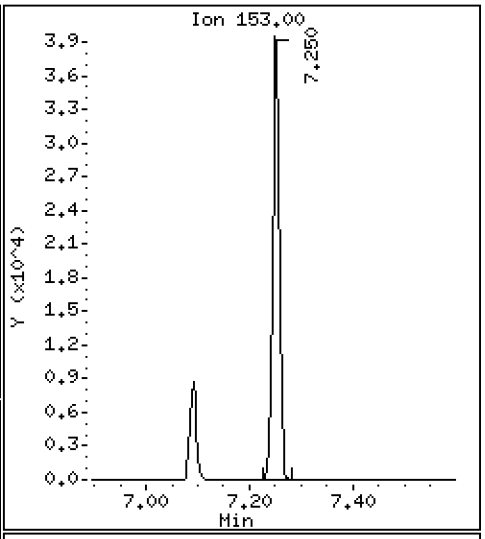
Column phase: Rxi-17sil

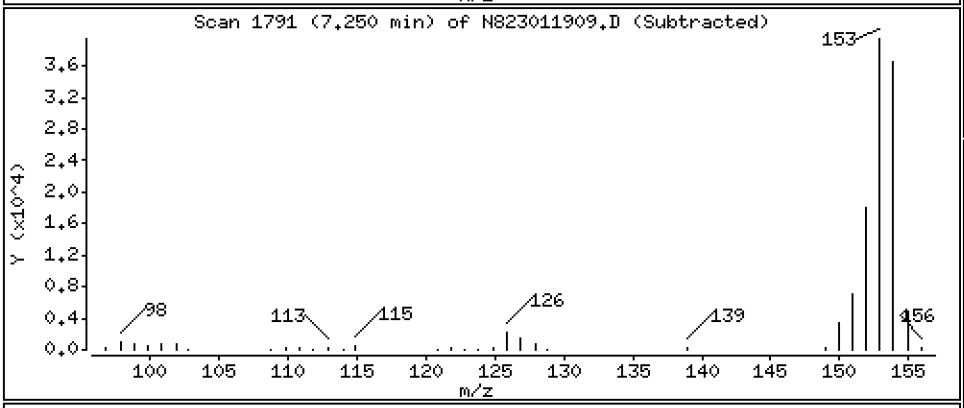
Column diameter: 0.25

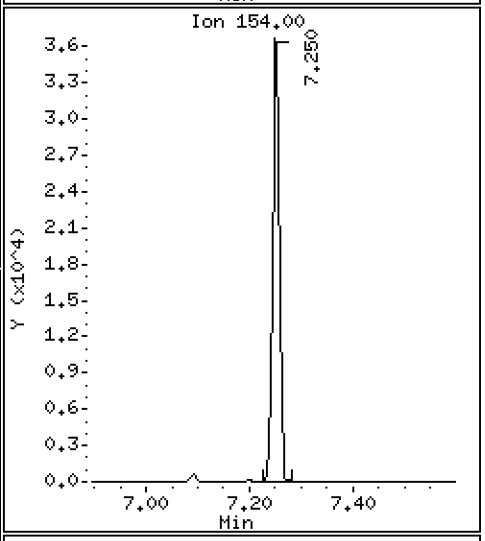
11 Acenaphthene

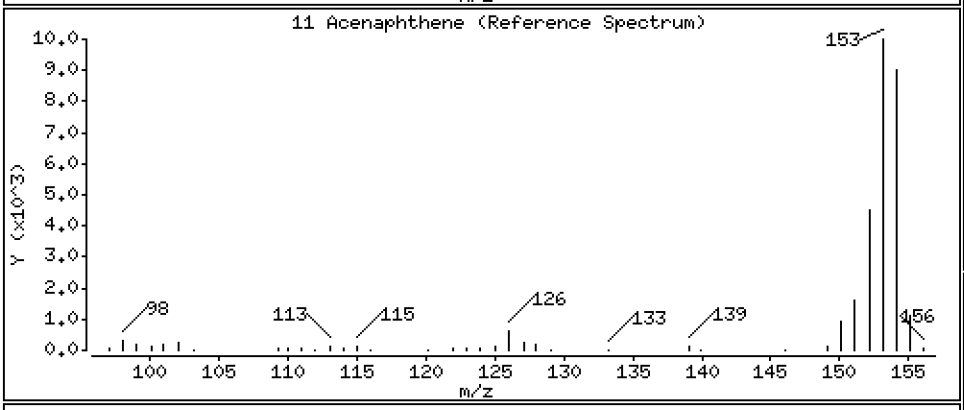
Concentration: 2.600 ug/L

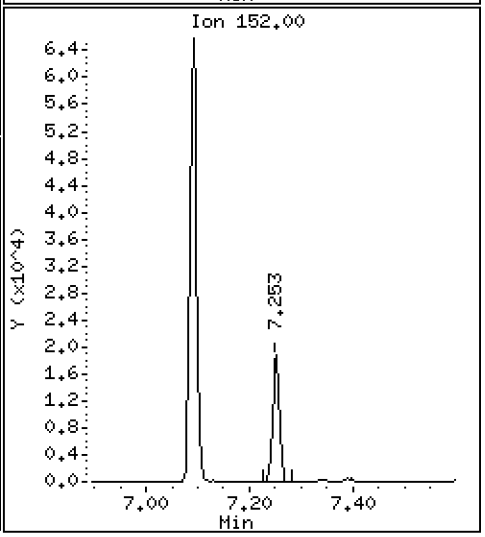


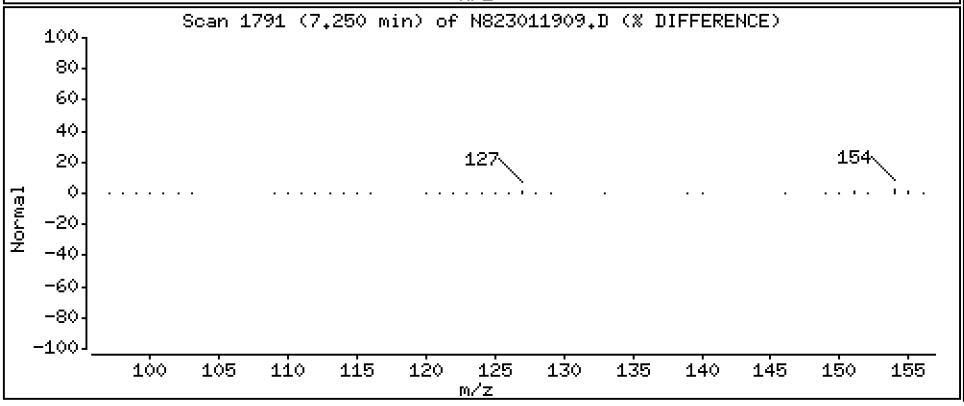












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

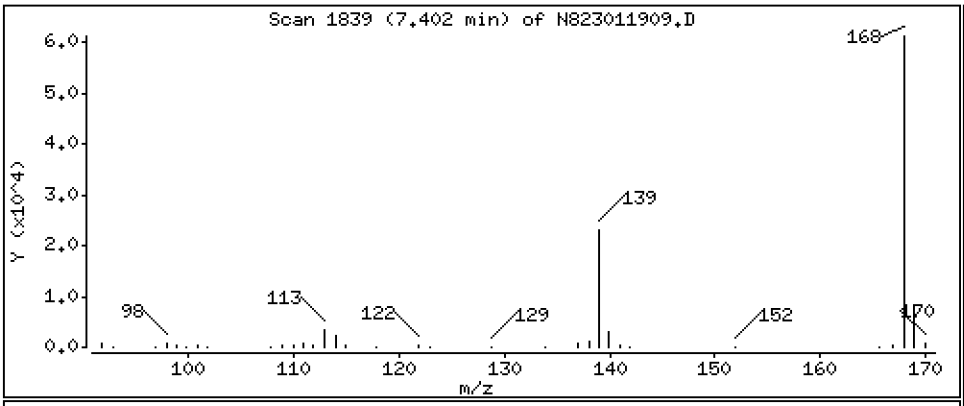
Operator: JZ

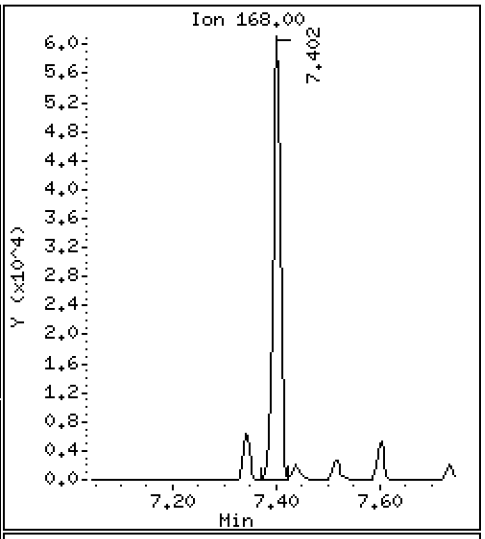
Column phase: Rxi-17sil

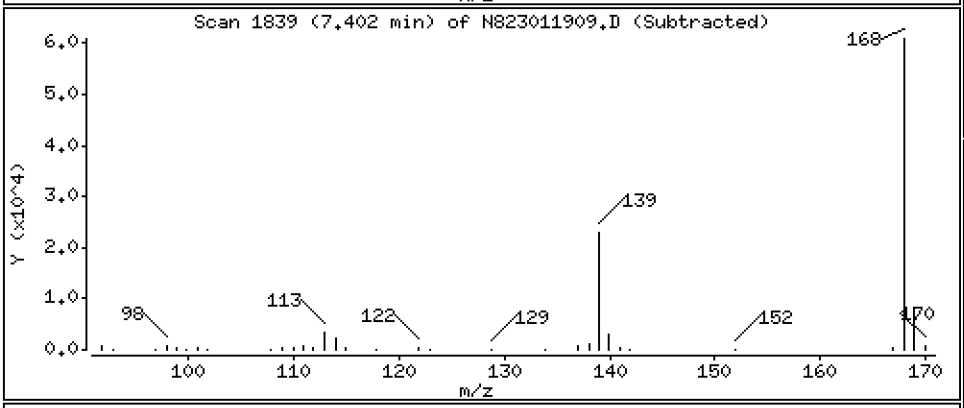
Column diameter: 0.25

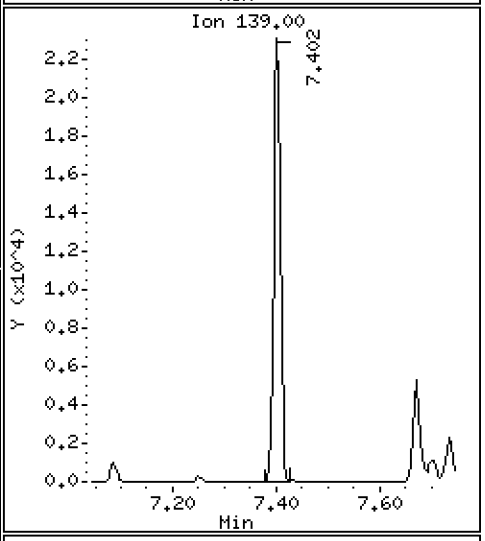
12 Dibenzofuran

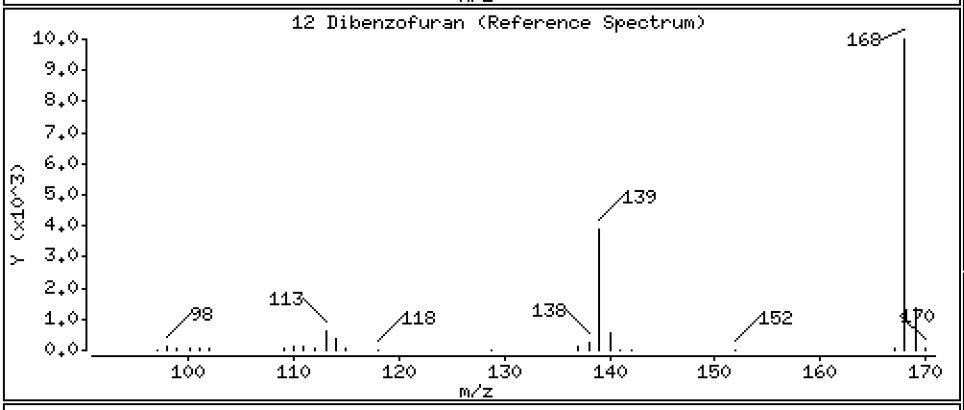
Concentration: 2.860 ug/L

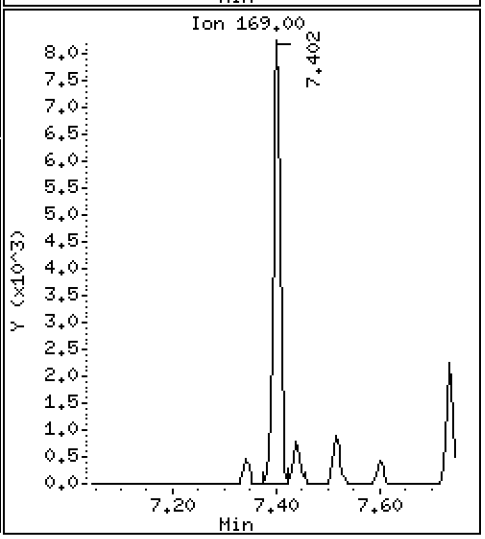


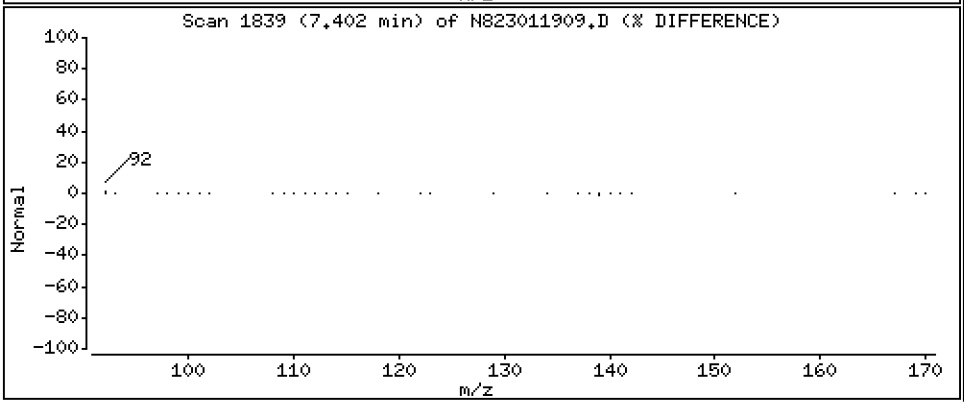












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

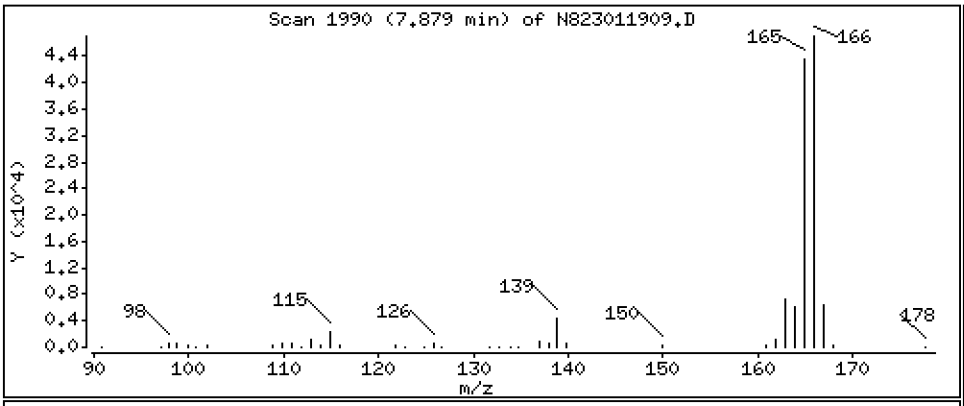
Operator: JZ

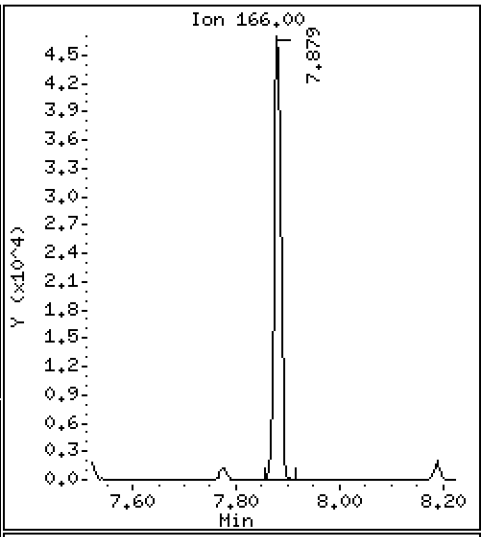
Column phase: Rxi-17sil

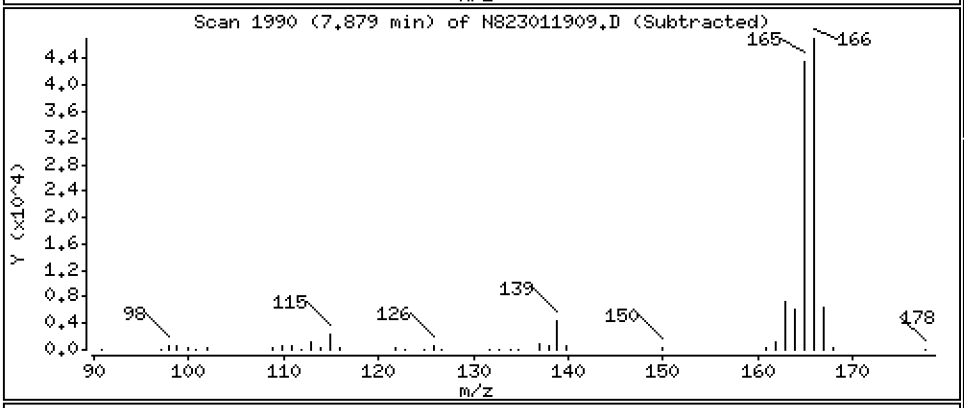
Column diameter: 0.25

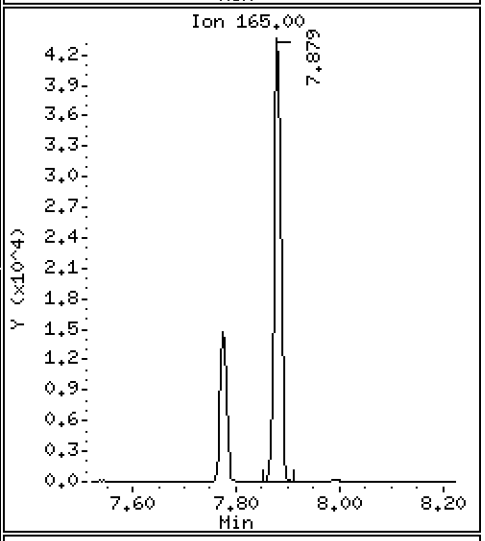
14 Fluorene

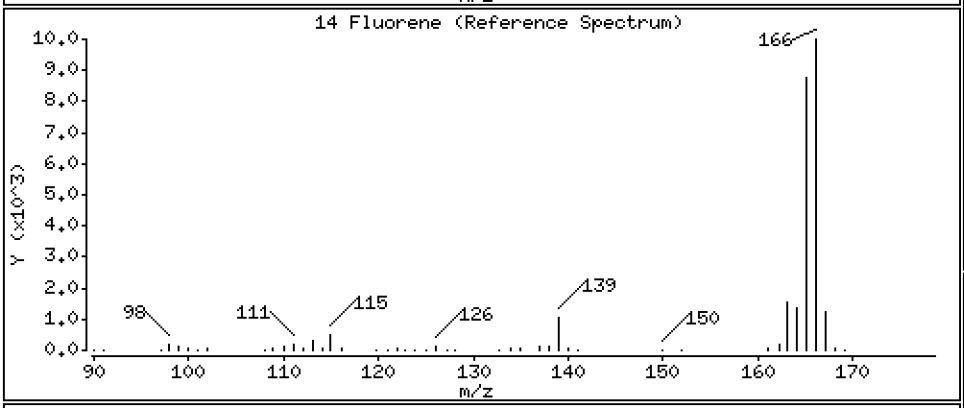
Concentration: 2.631 ug/L

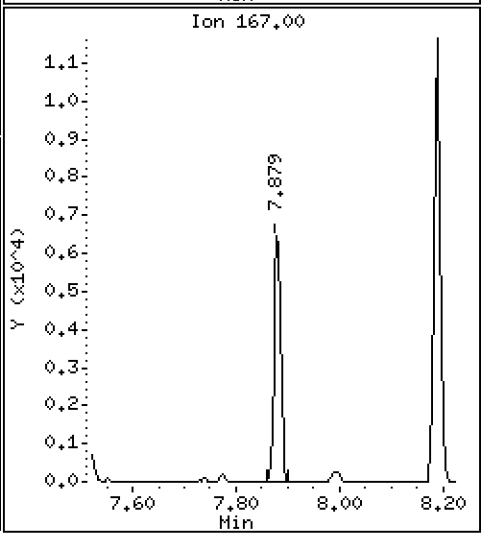


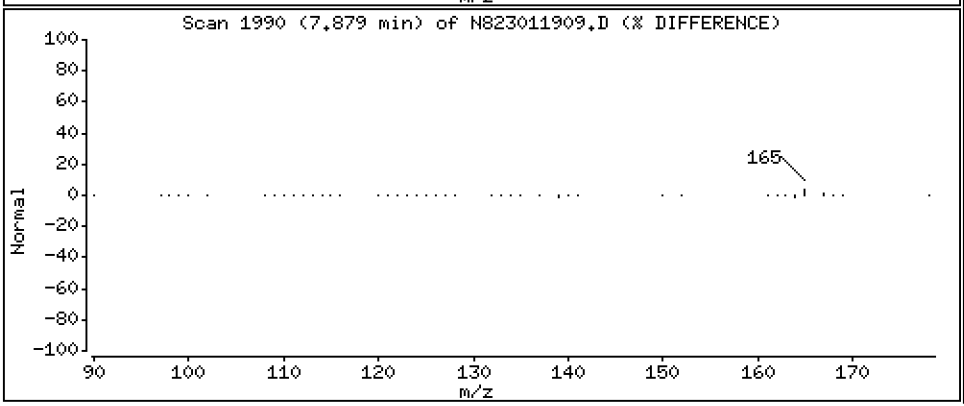












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

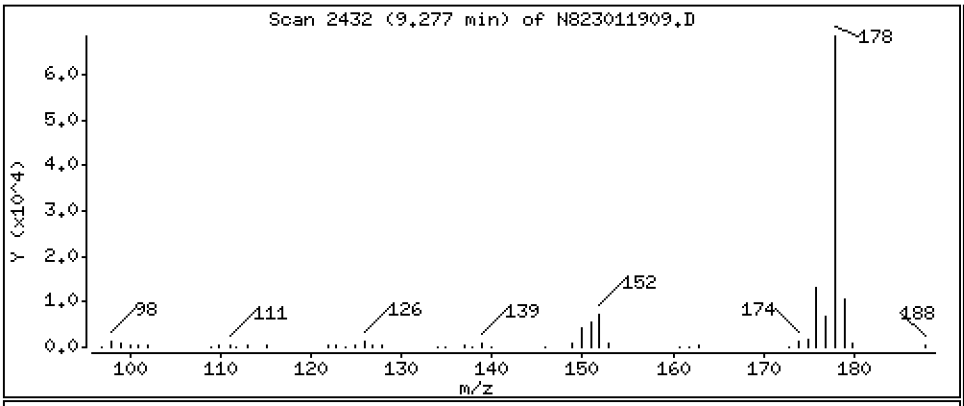
Operator: JZ

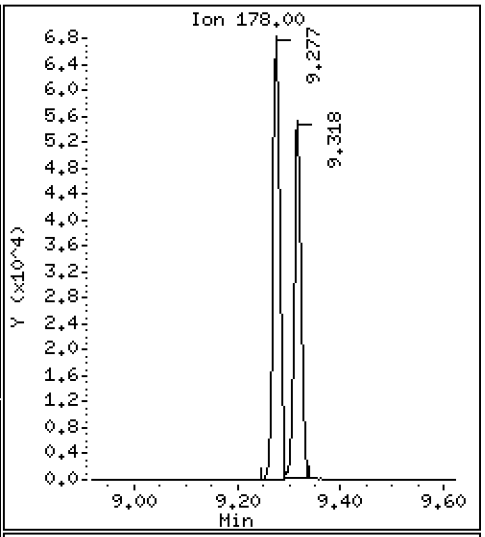
Column phase: Rxi-17sil

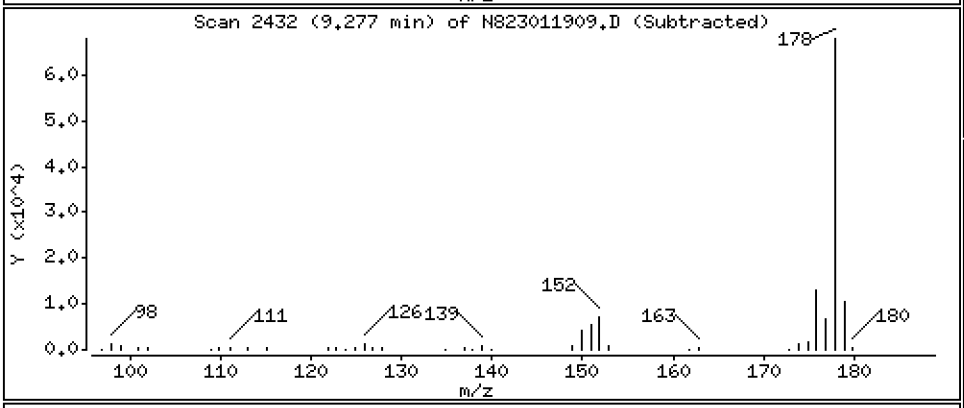
Column diameter: 0.25

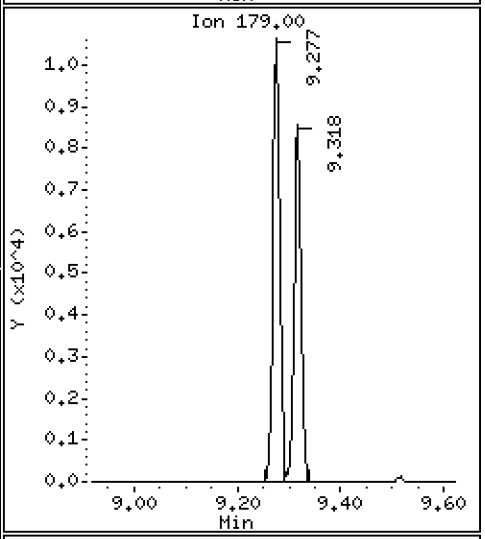
16 Phenanthrene

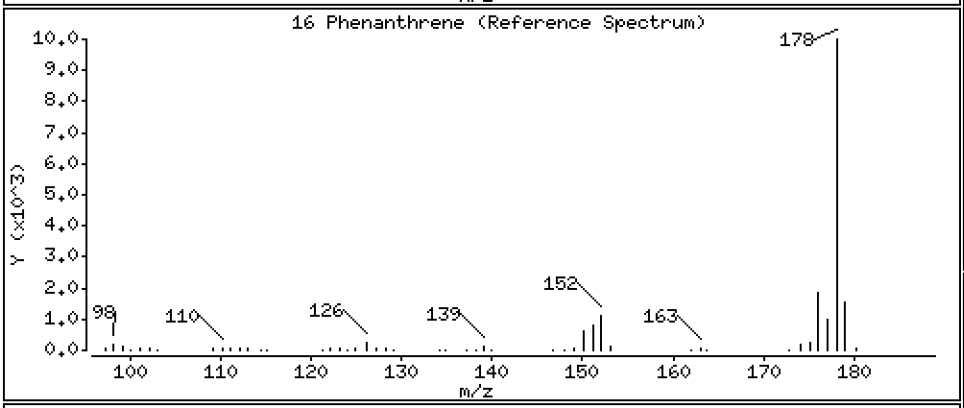
Concentration: 2.448 ug/L

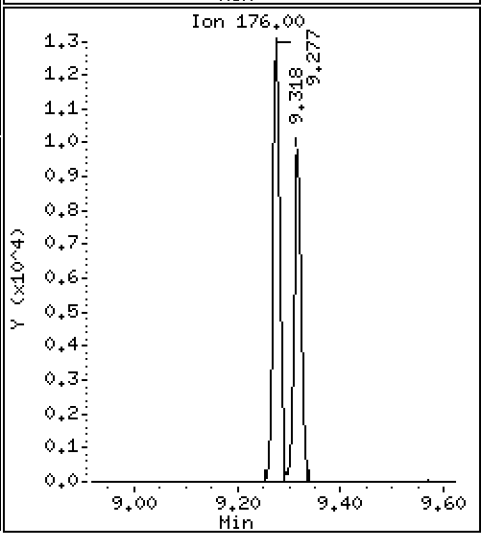


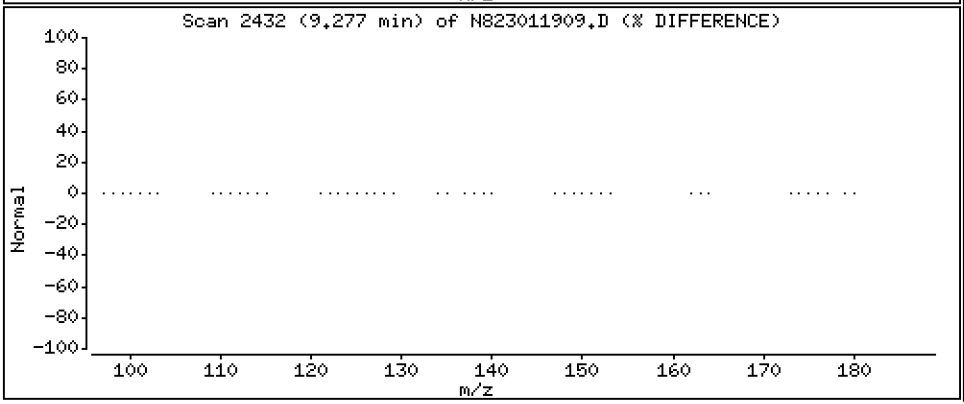












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

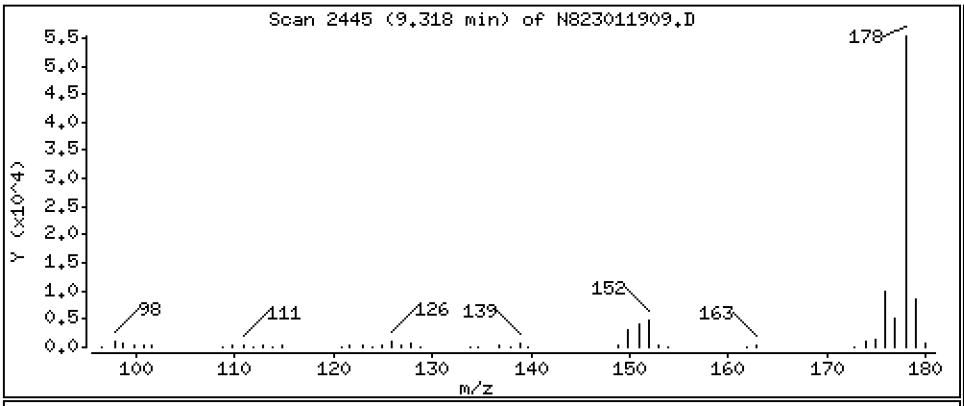
Operator: JZ

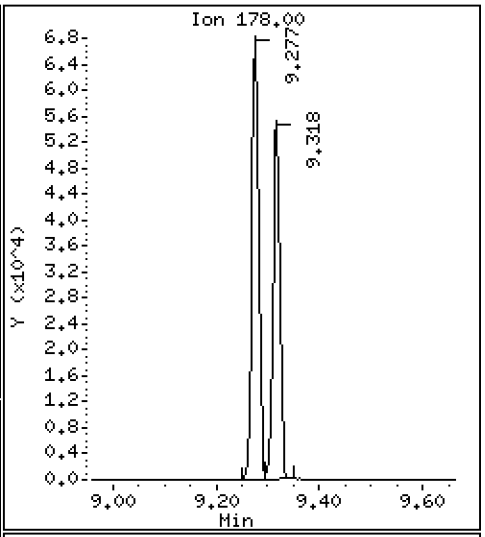
Column phase: Rxi-17sil

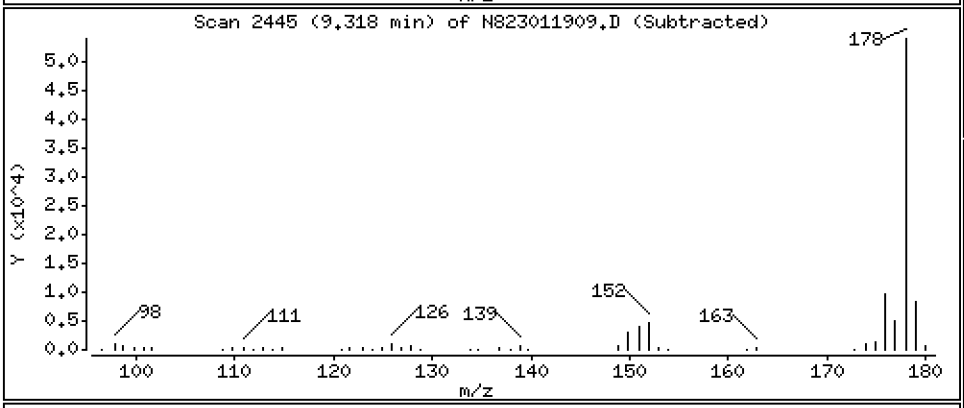
Column diameter: 0.25

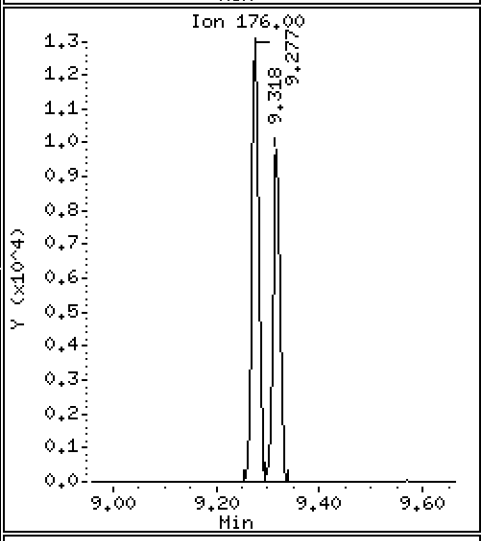
17 Anthracene

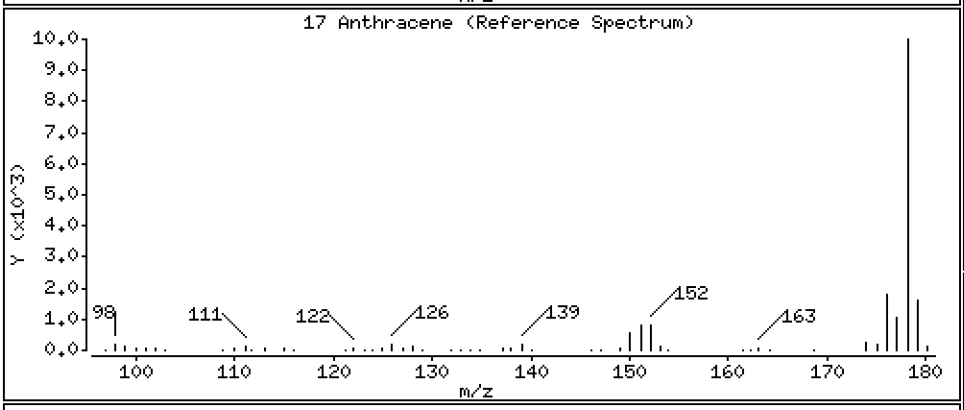
Concentration: 2.270 ug/L

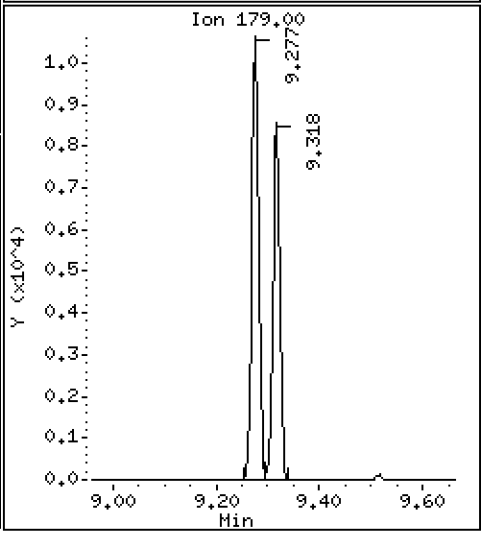


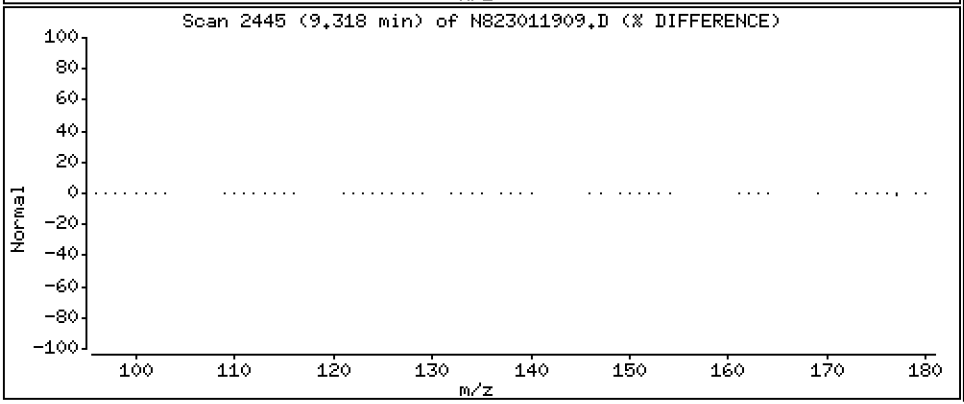












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

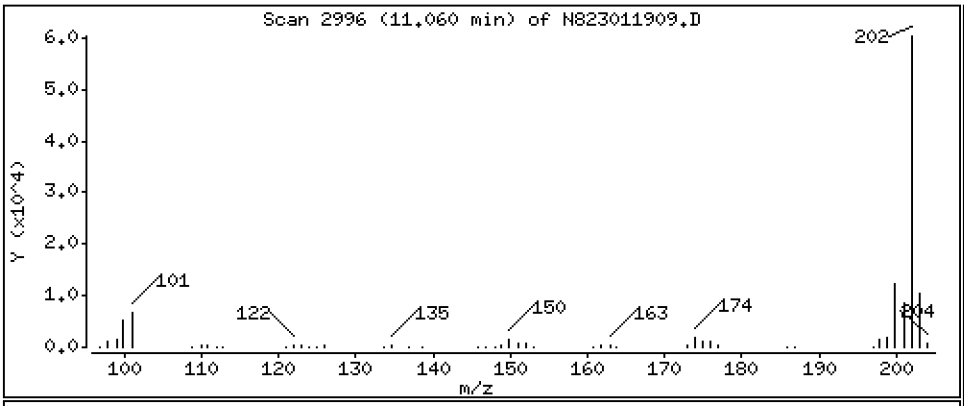
Operator: JZ

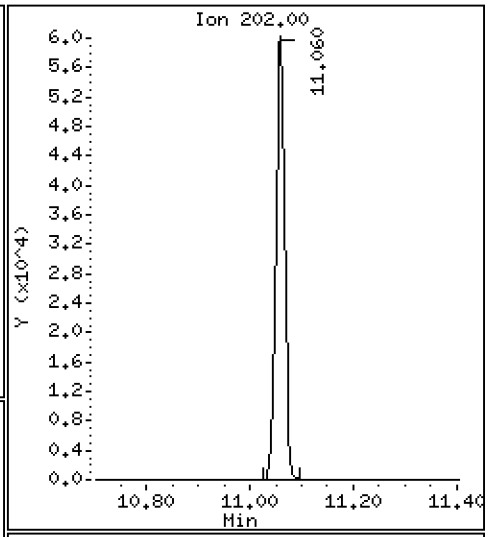
Column phase: Rxi-17sil

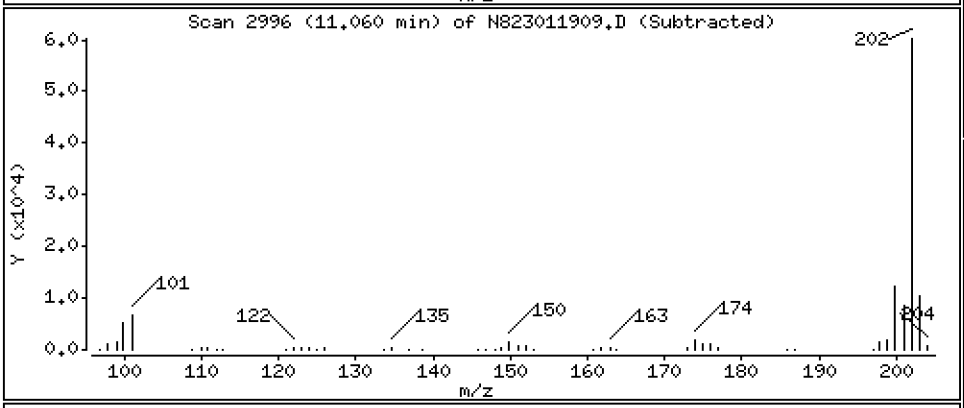
Column diameter: 0.25

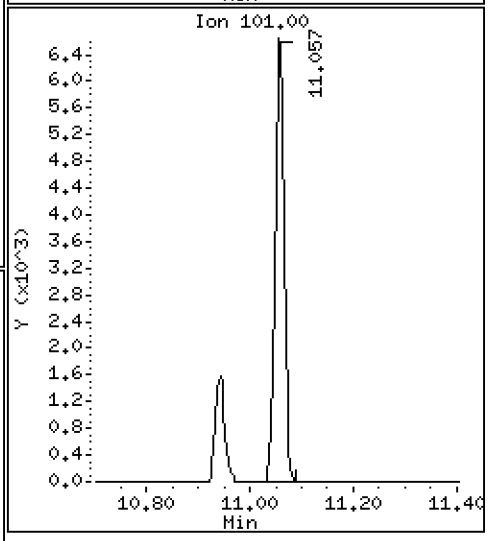
22 Fluoranthene

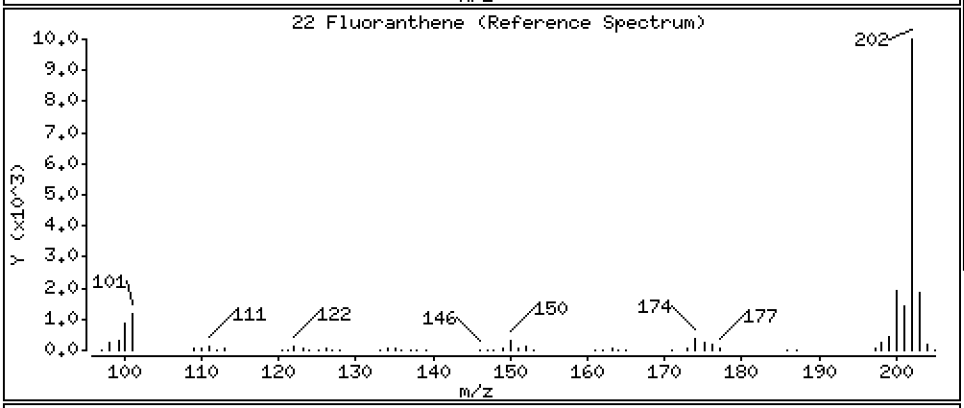
Concentration: 2.653 ug/L

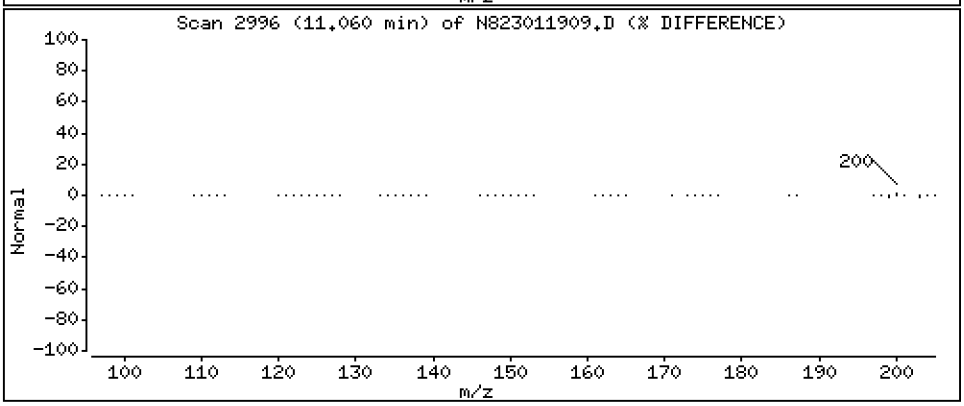












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

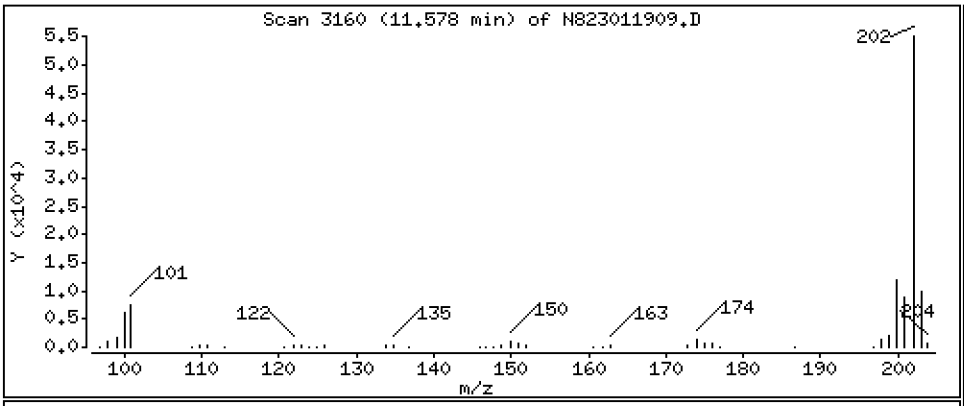
Operator: JZ

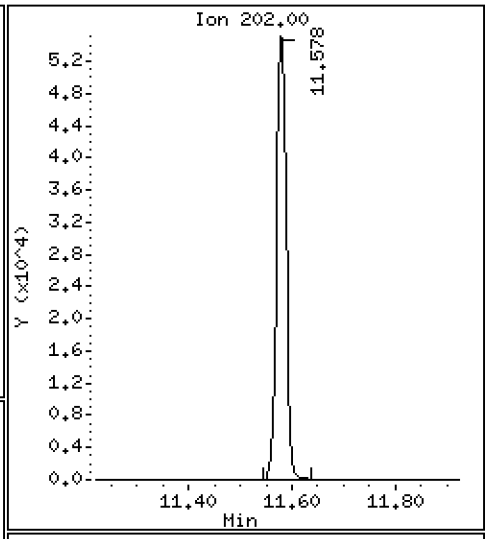
Column phase: Rxi-17sil

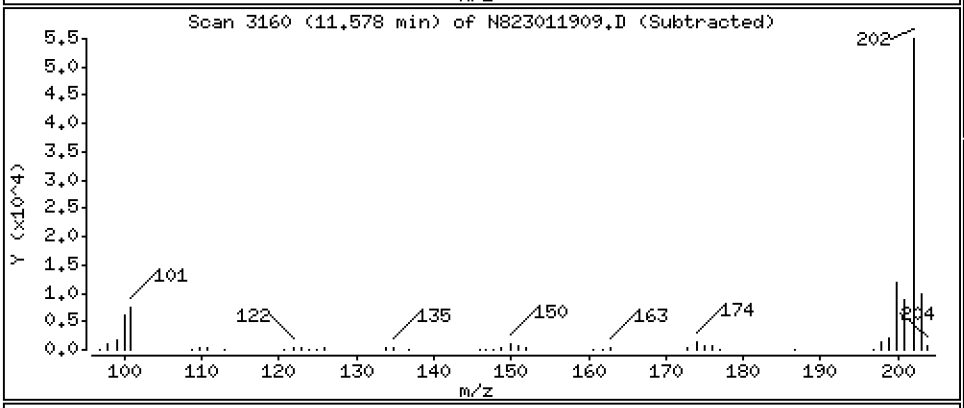
Column diameter: 0.25

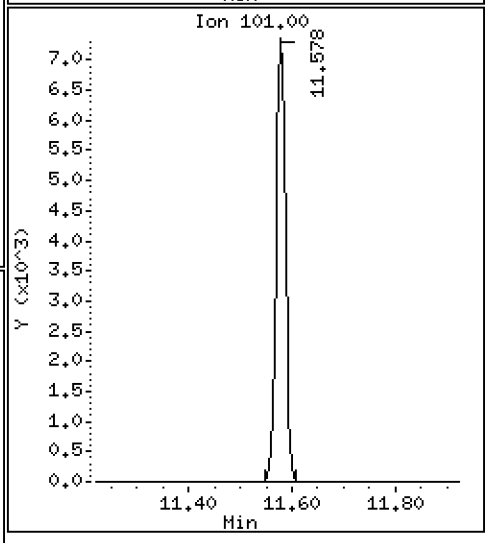
23 Pyrene

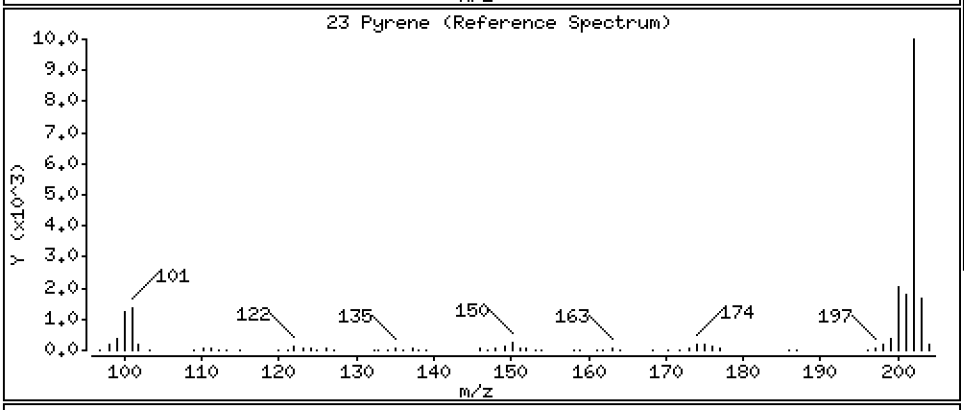
Concentration: 2.462 ug/L

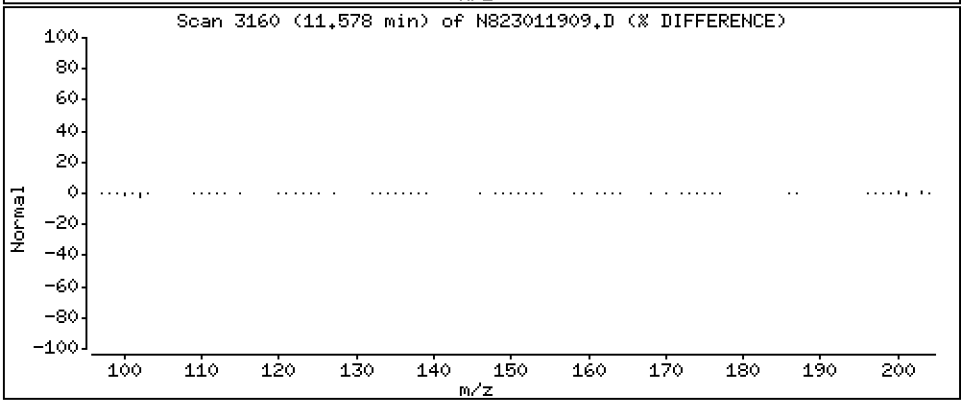












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

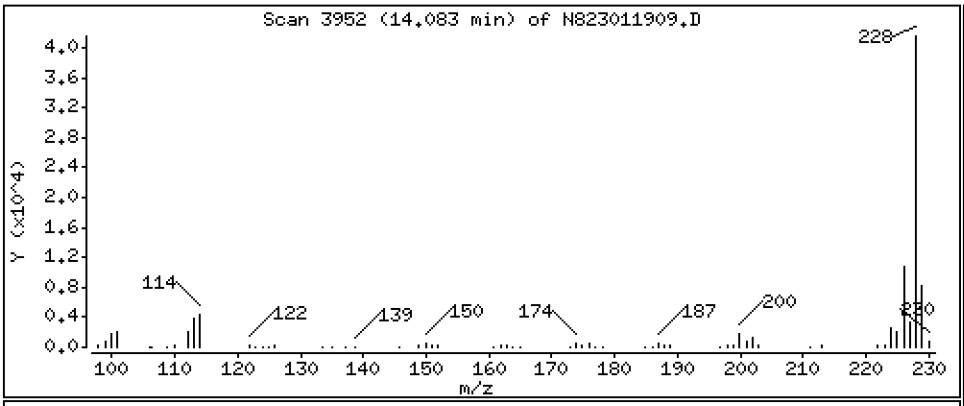
Operator: JZ

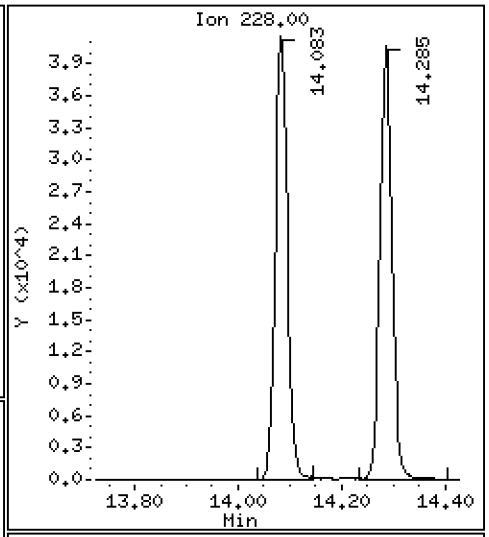
Column phase: Rxi-17sil

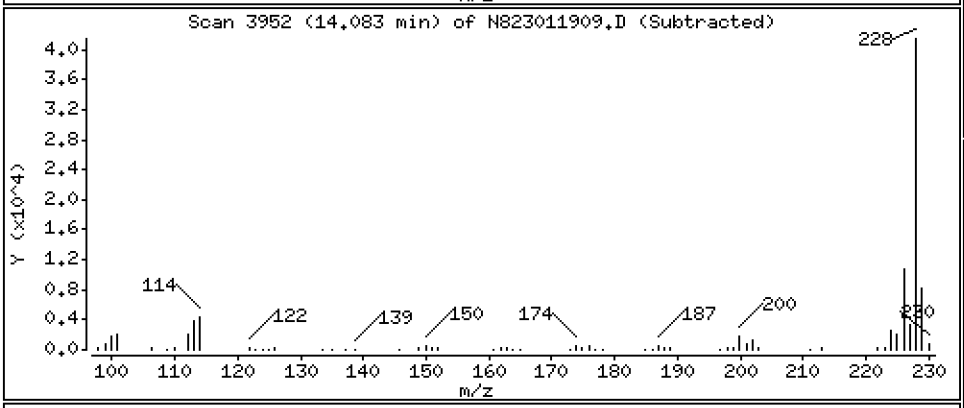
Column diameter: 0.25

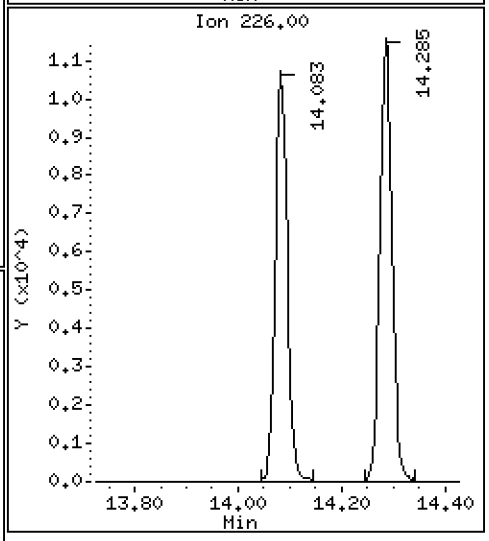
24 Benzo(a)anthracene

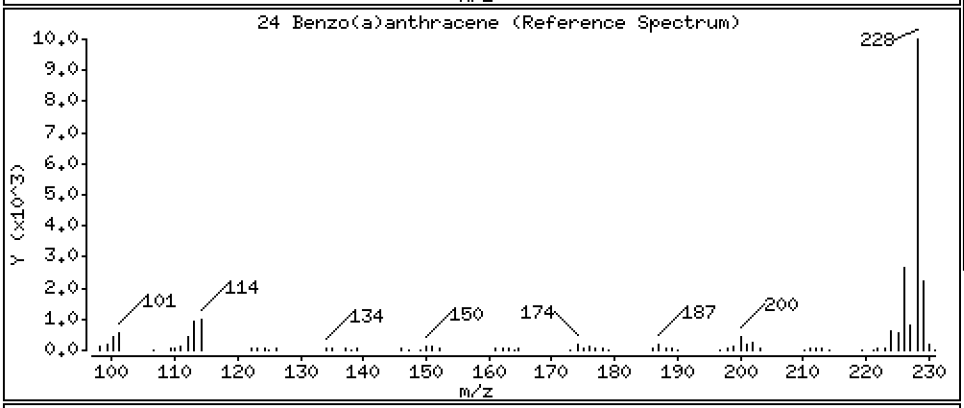
Concentration: 2.587 ug/L

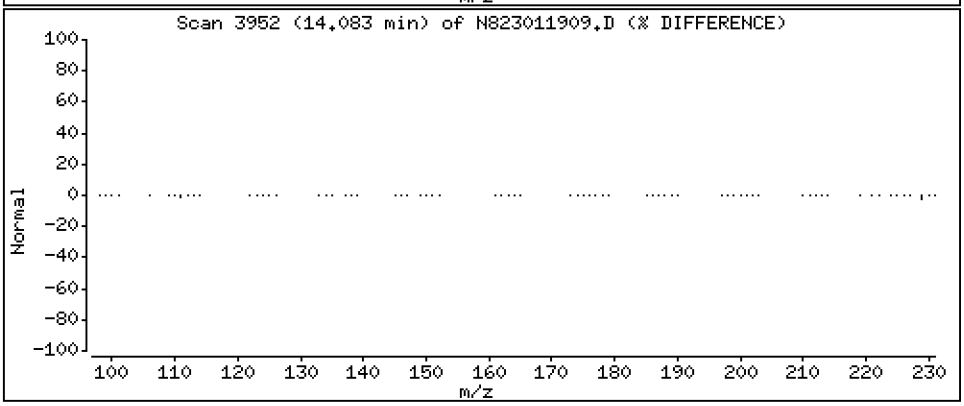












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

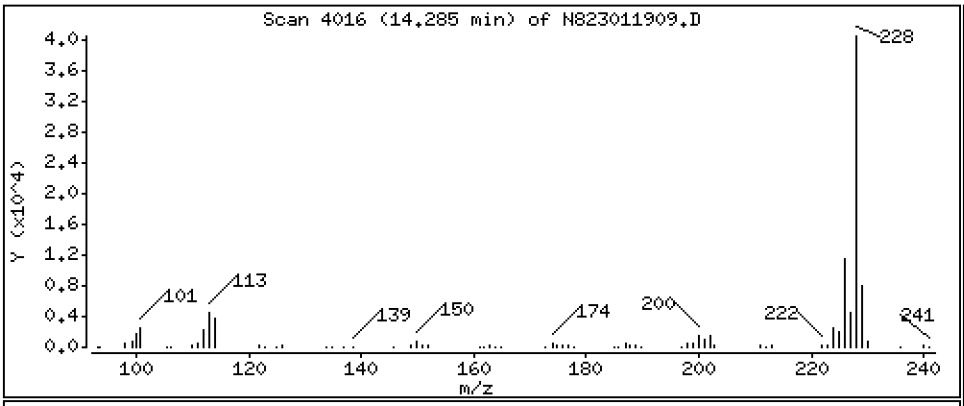
Operator: JZ

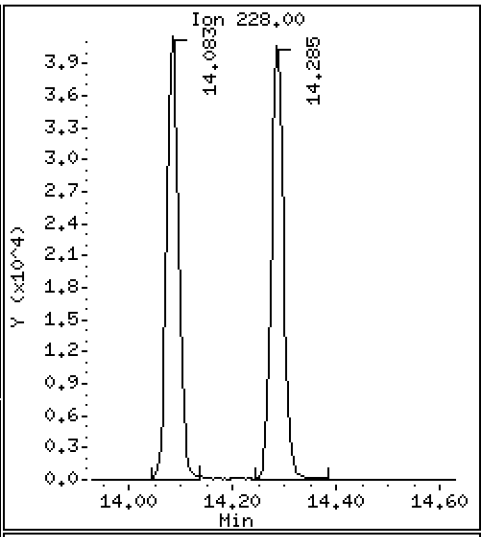
Column phase: Rxi-17sil

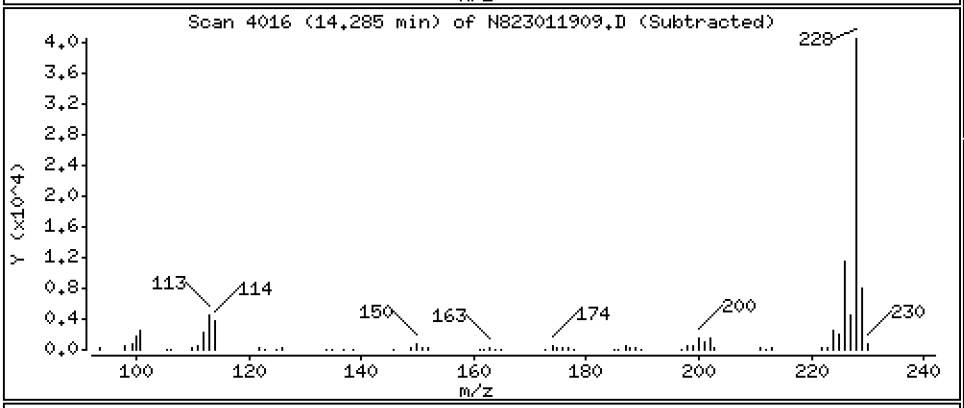
Column diameter: 0.25

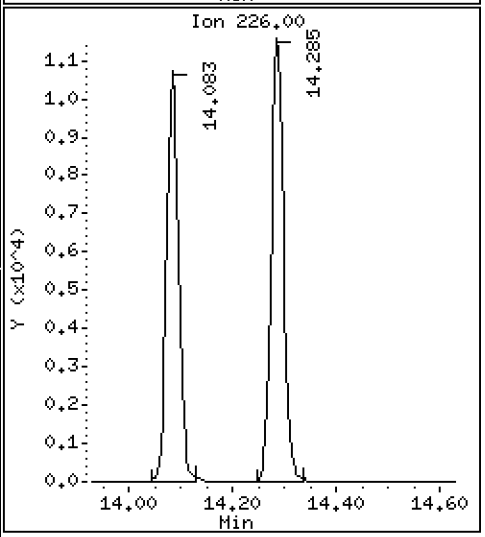
27 Chrysene

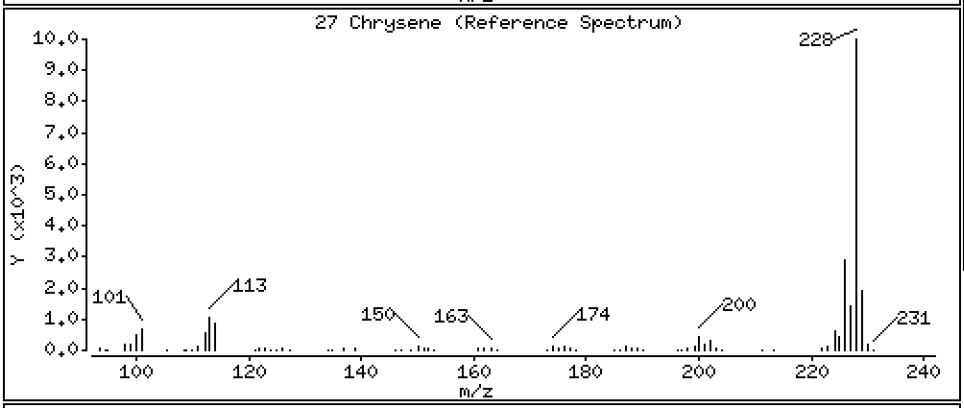
Concentration: 2.400 ug/L

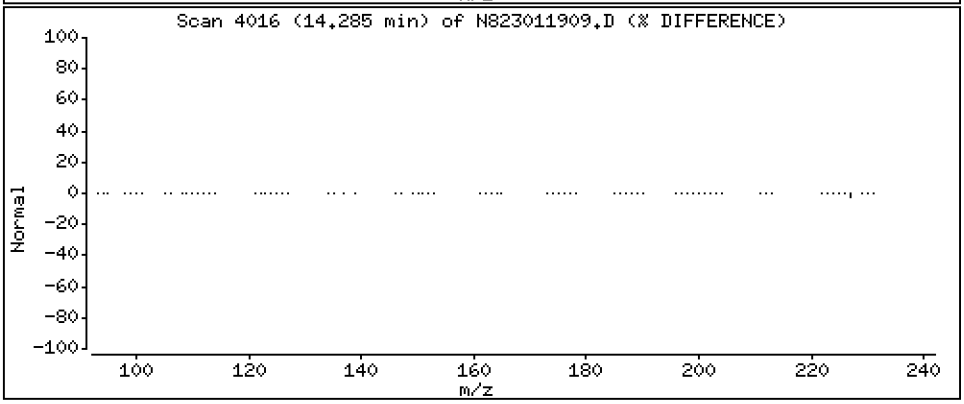












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

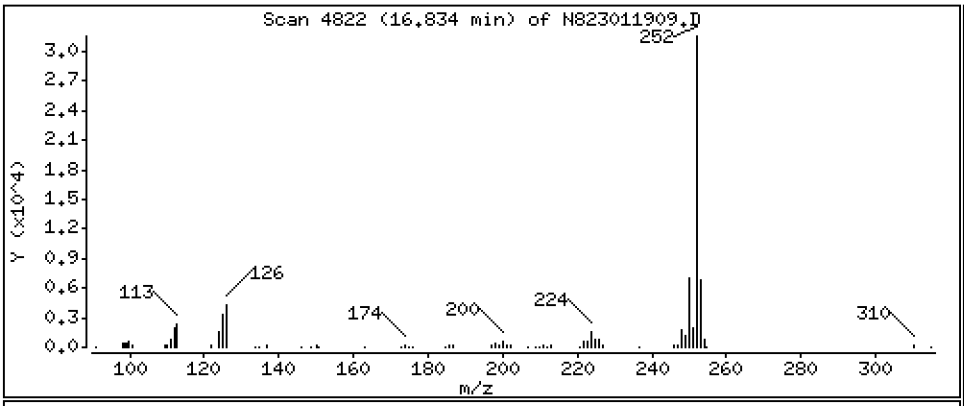
Operator: JZ

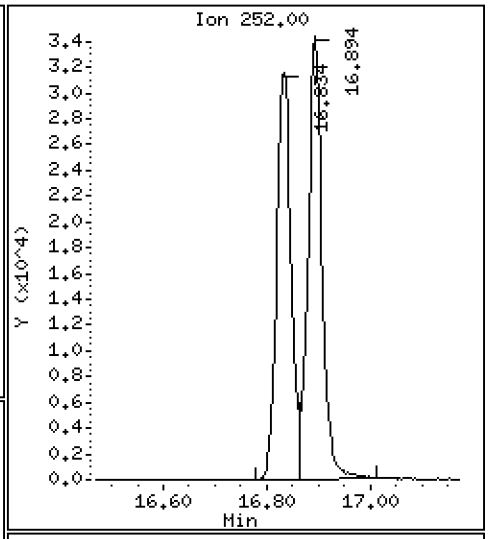
Column phase: Rxi-17sil

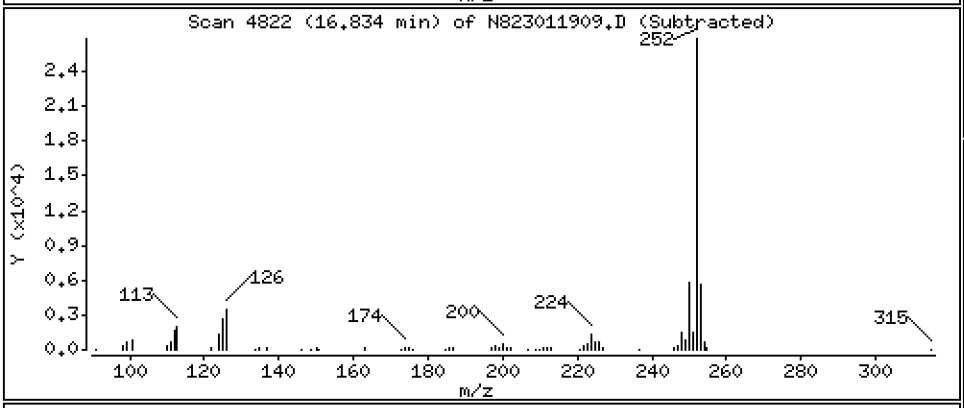
Column diameter: 0.25

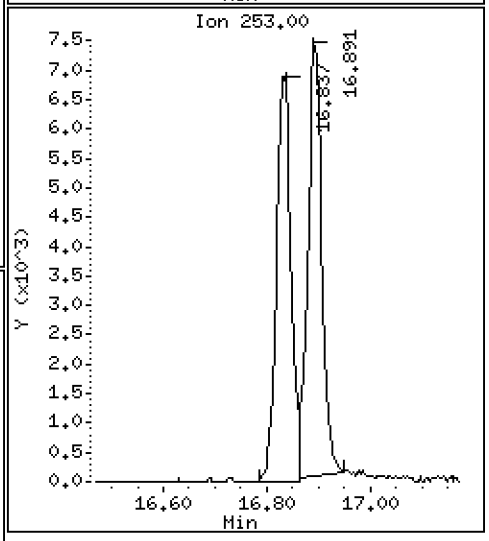
28 Benzo(b)fluoranthene

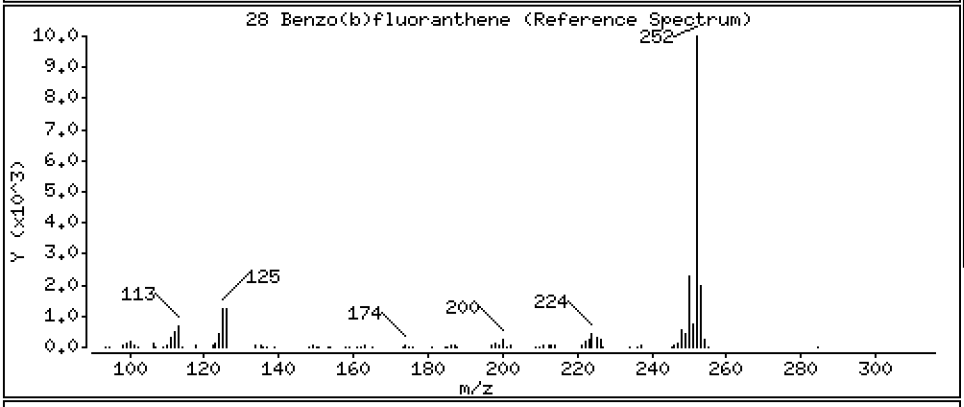
Concentration: 2.507 ug/L

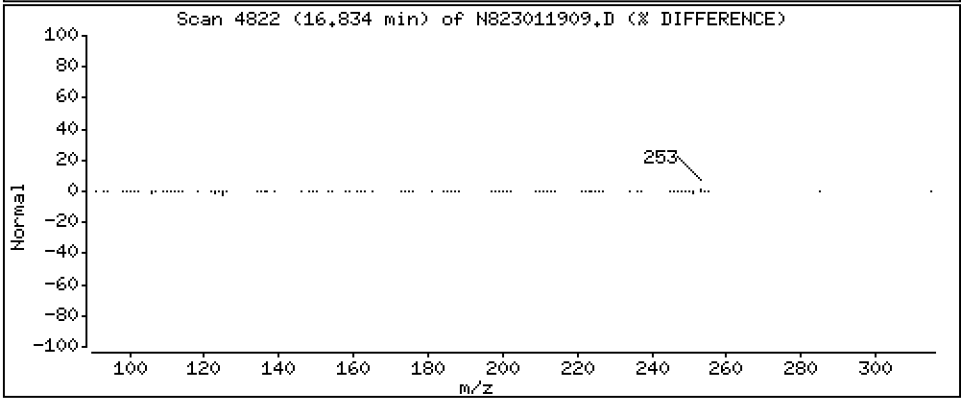












Date : 19-JAN-2023 14:58

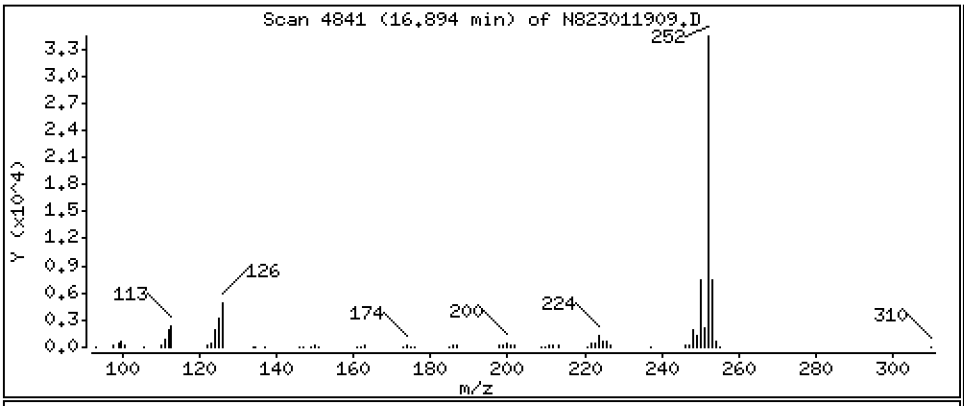
Client ID: Instrument: nt8.i

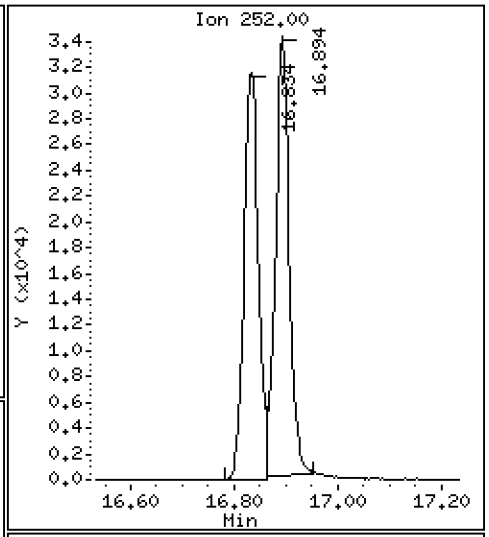
Sample Info: SCV230119

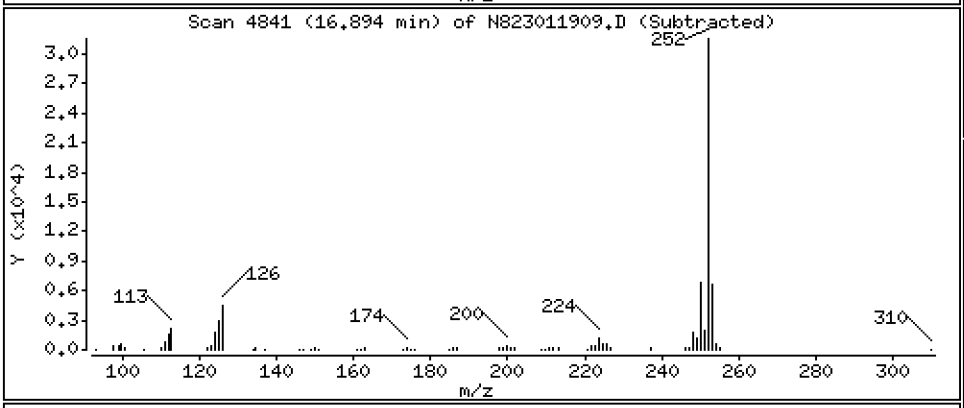
Volume Injected (uL): 1.0 Operator: JZ

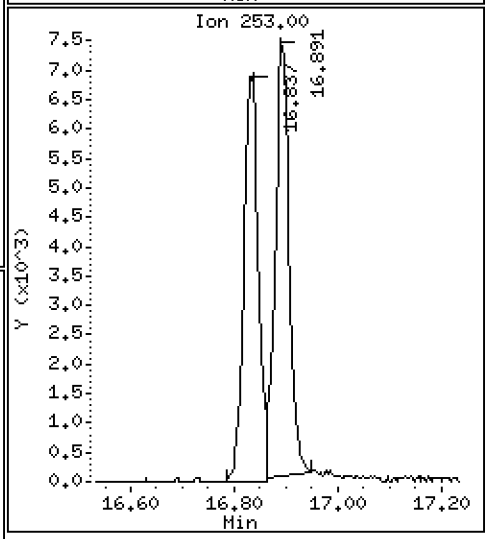
Column phase: Rxi-17sil Column diameter: 0.25

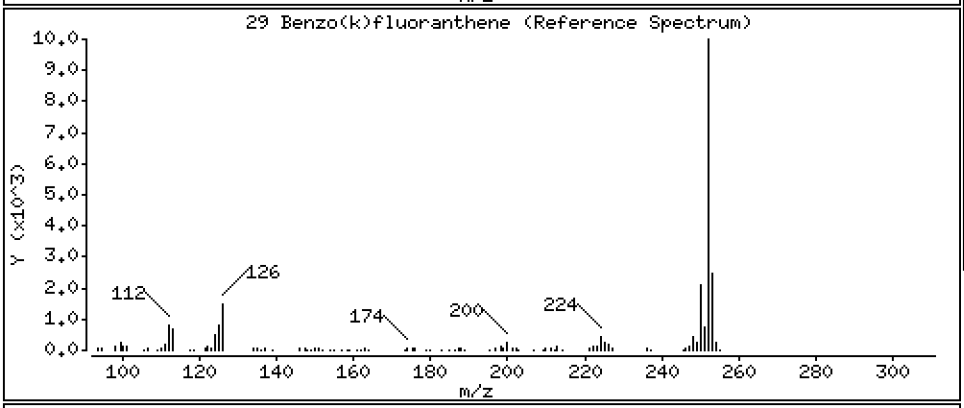
29 Benzo(k)fluoranthene Concentration: 2.656 ug/L

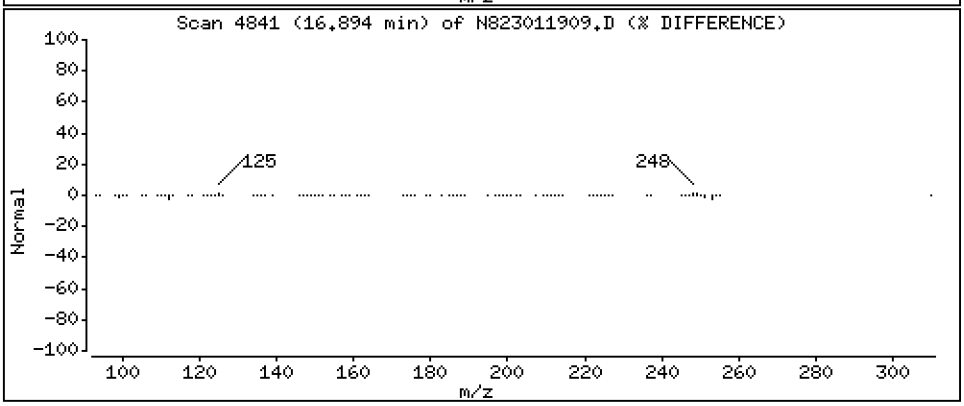












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

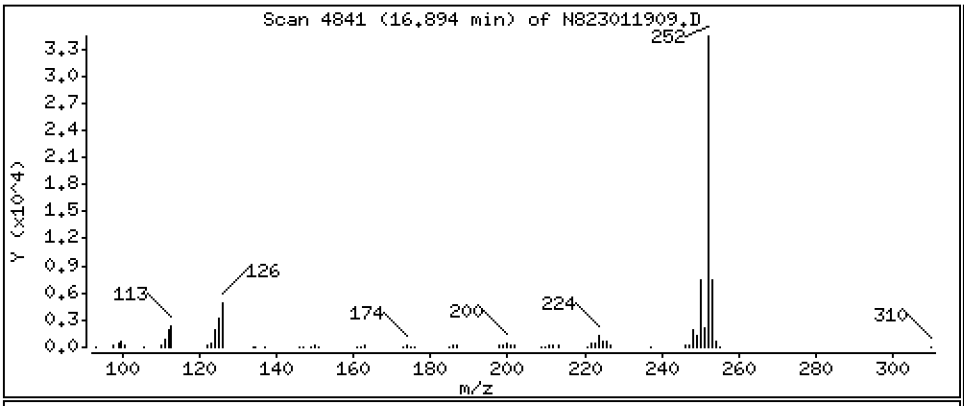
Operator: JZ

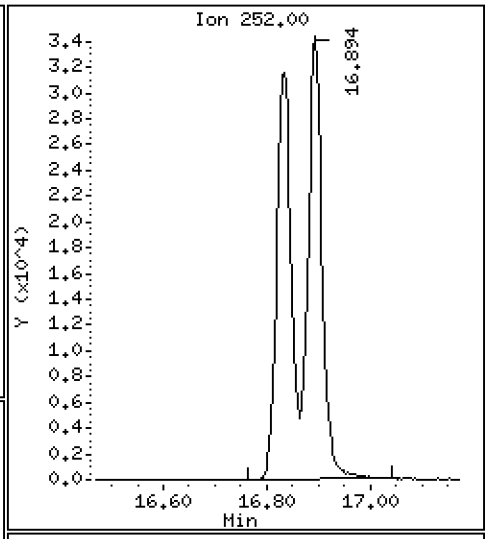
Column phase: Rxi-17sil

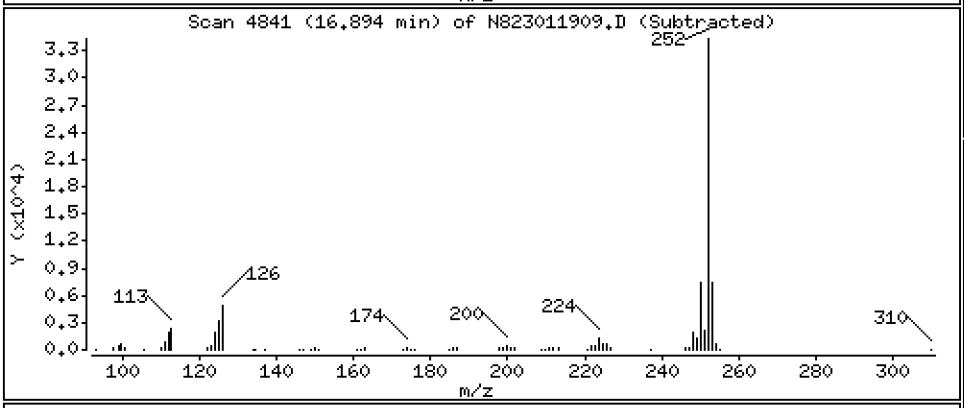
Column diameter: 0.25

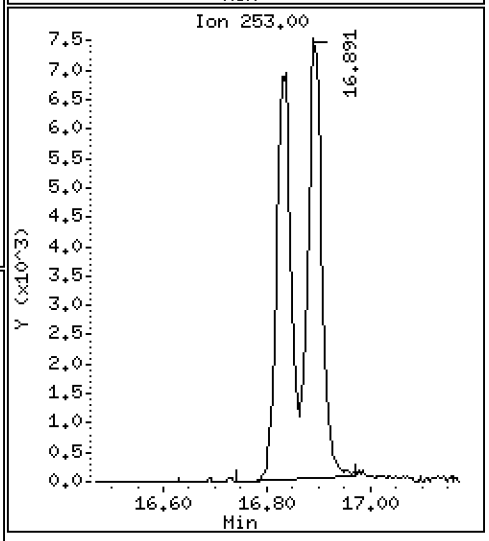
31 Total Benzofluoranthenes

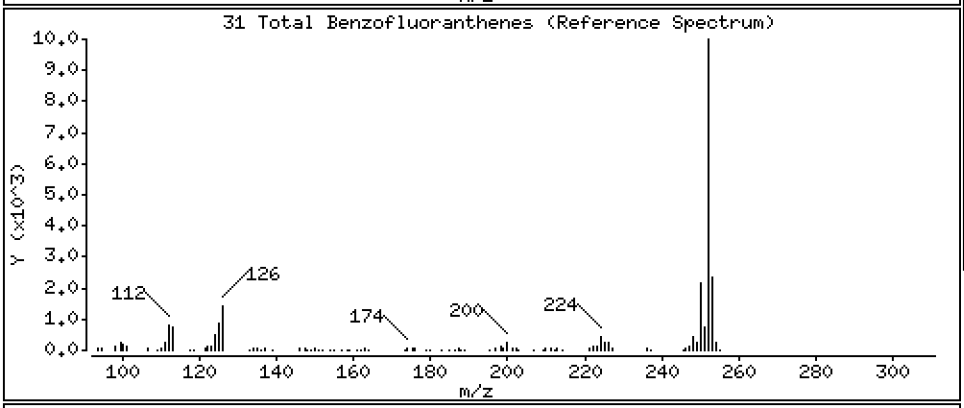
Concentration: 5.480 ug/L

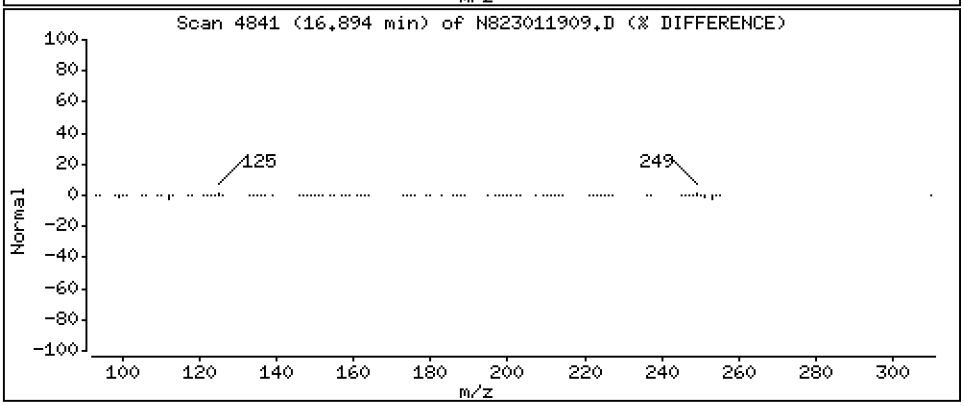












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

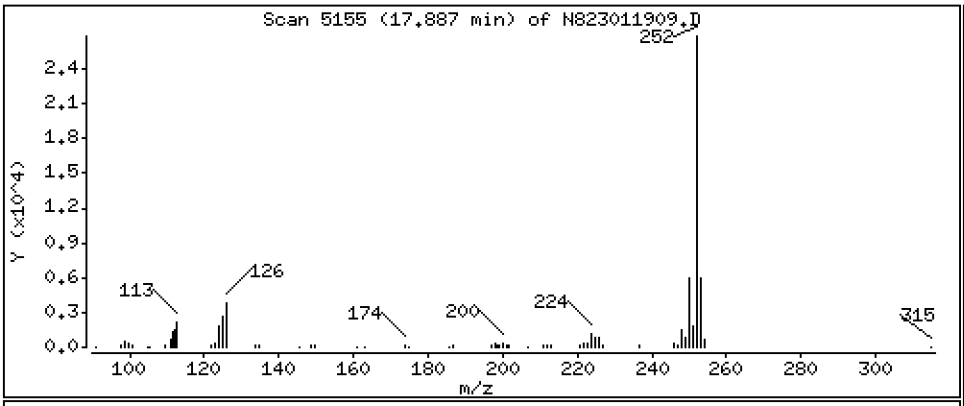
Operator: JZ

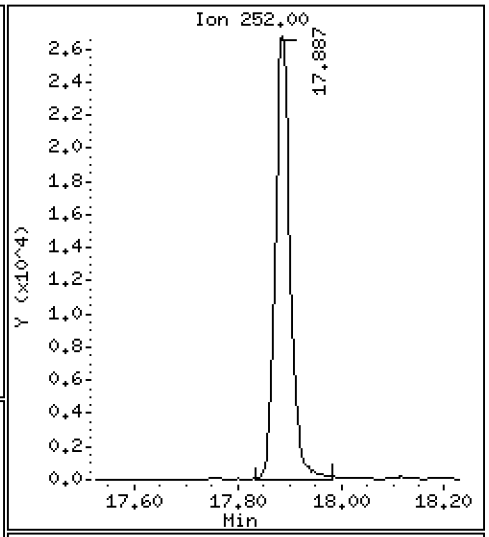
Column phase: Rxi-17sil

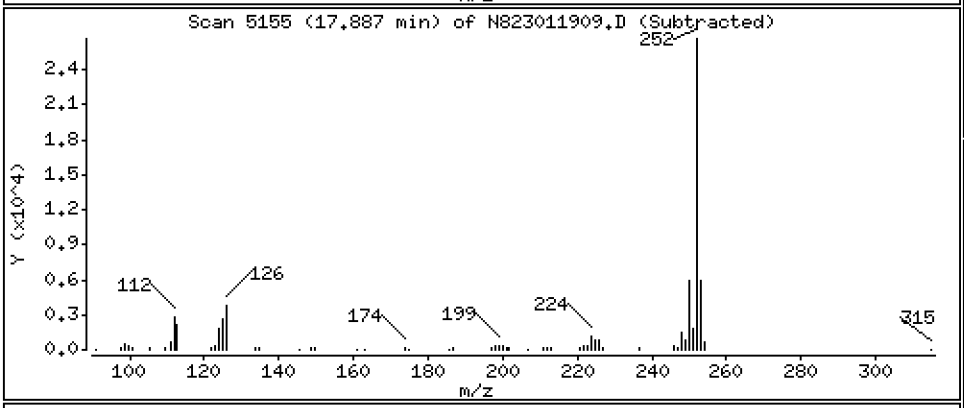
Column diameter: 0.25

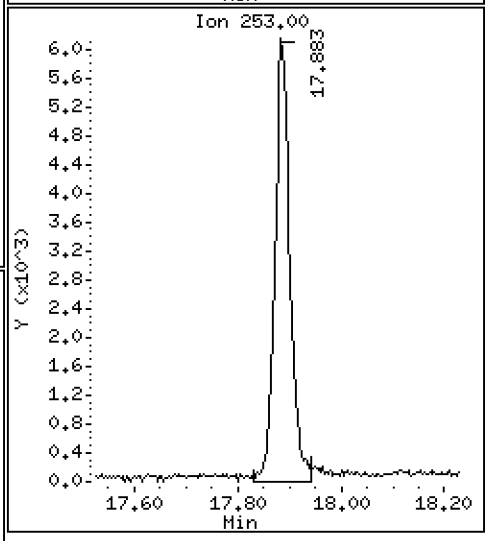
32 Benzo(a)pyrene

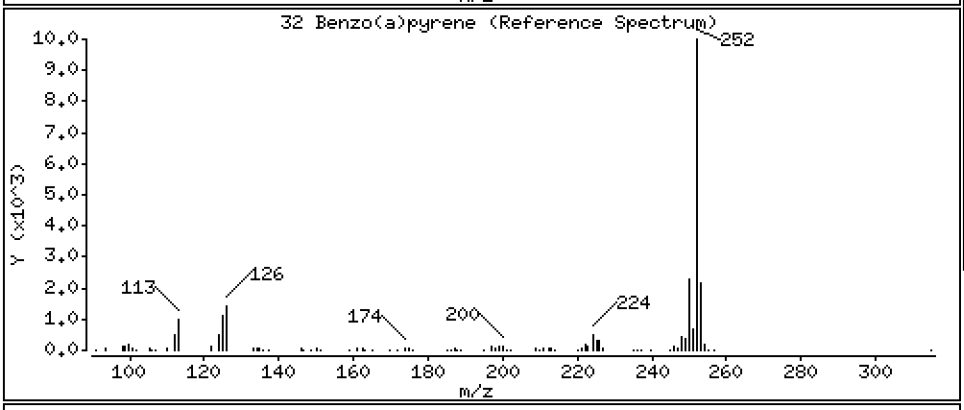
Concentration: 2.572 ug/L

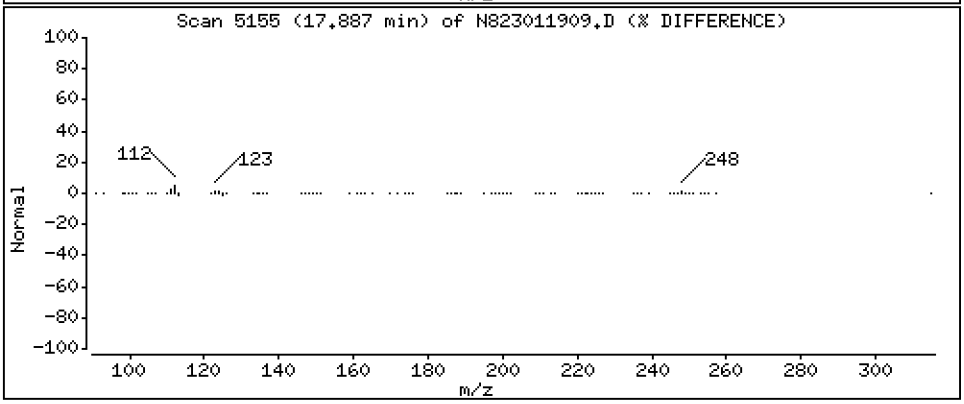












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

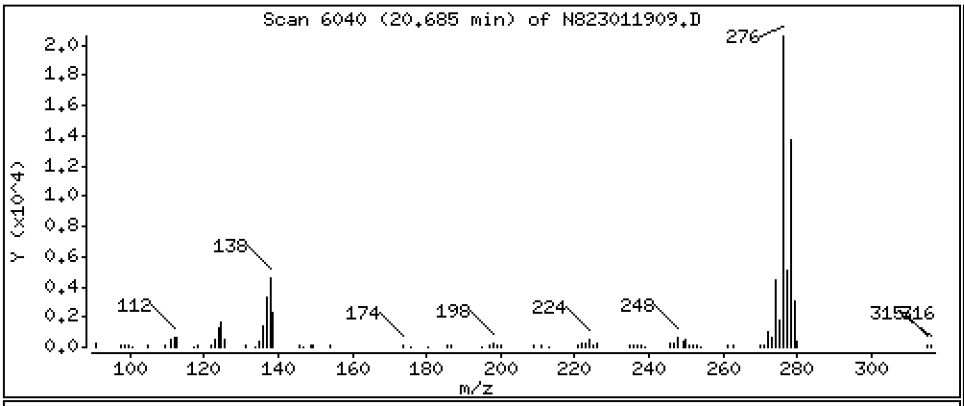
Operator: JZ

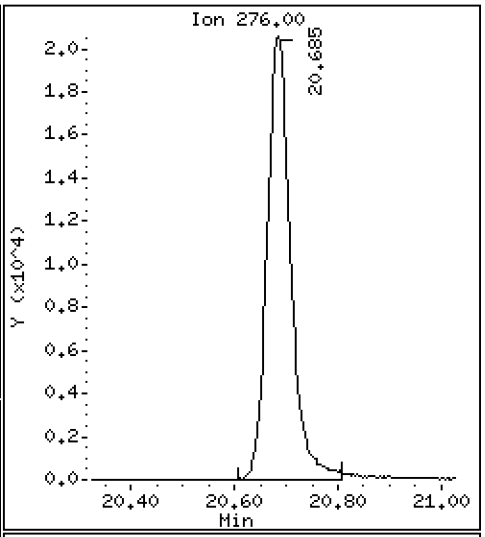
Column phase: Rxi-17sil

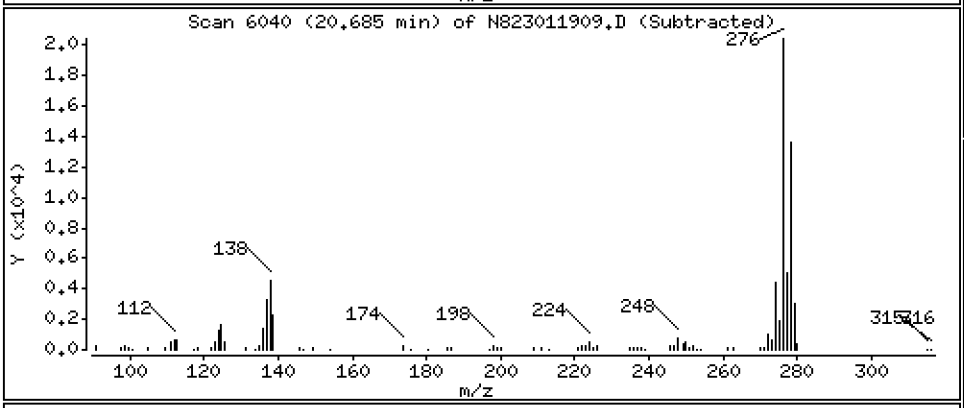
Column diameter: 0.25

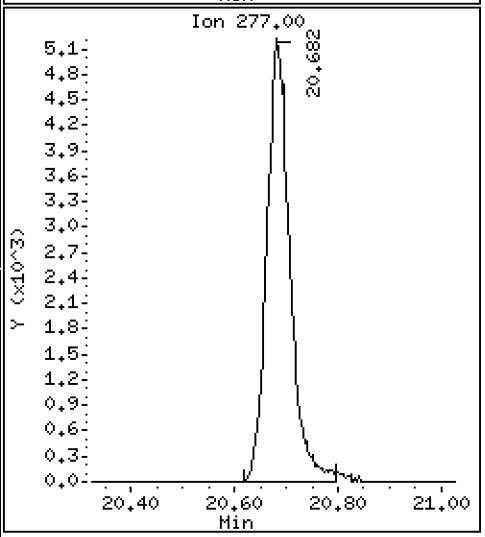
37 Indeno(1,2,3-cd)pyrene

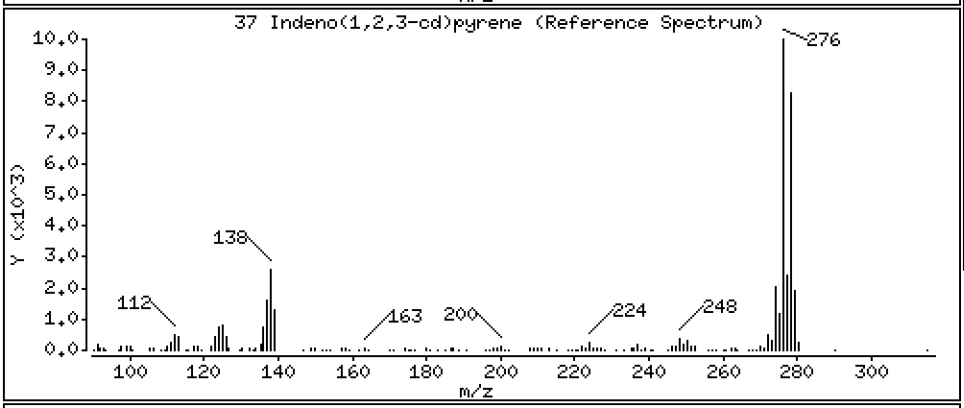
Concentration: 2.689 ug/L

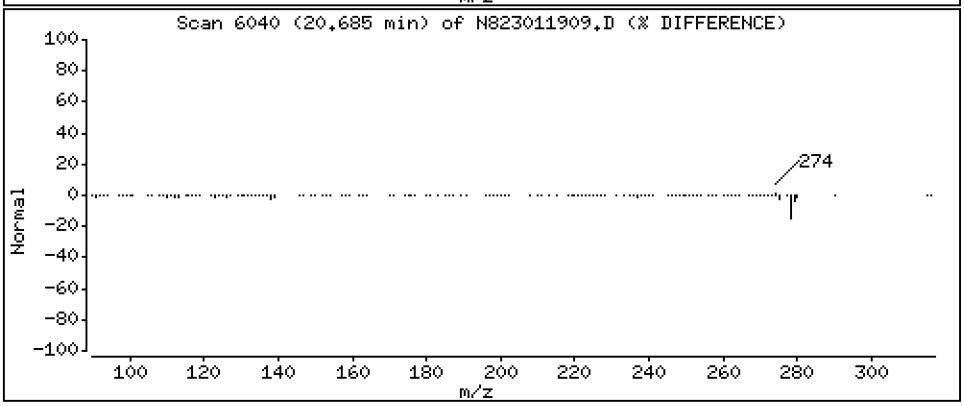












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

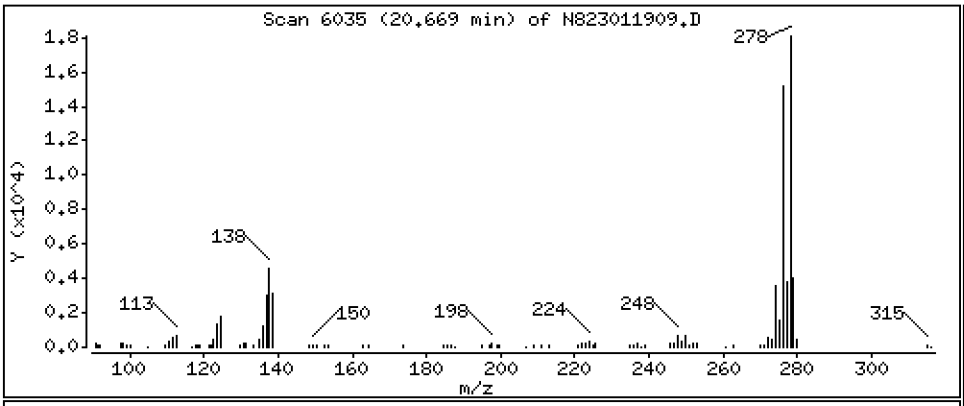
Operator: JZ

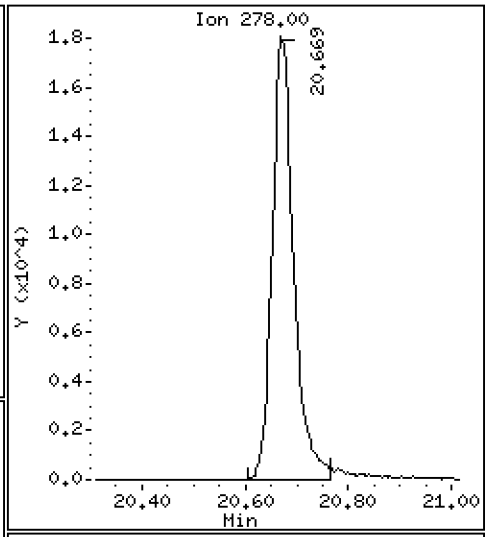
Column phase: Rxi-17sil

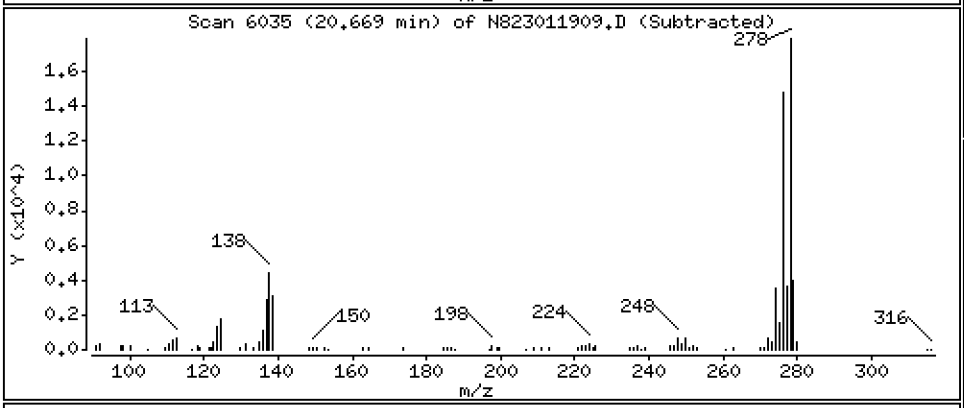
Column diameter: 0.25

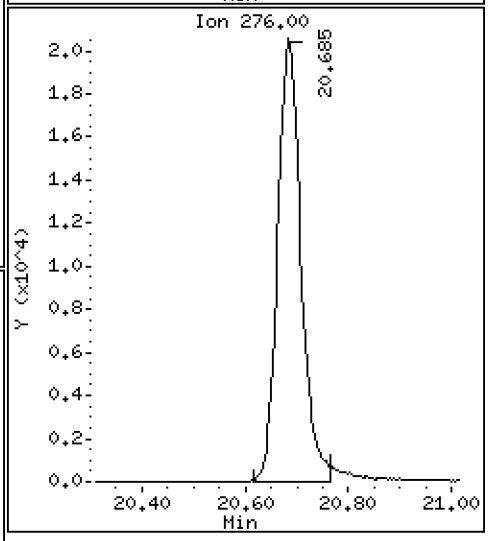
38 Dibenzo(a,h)anthracene

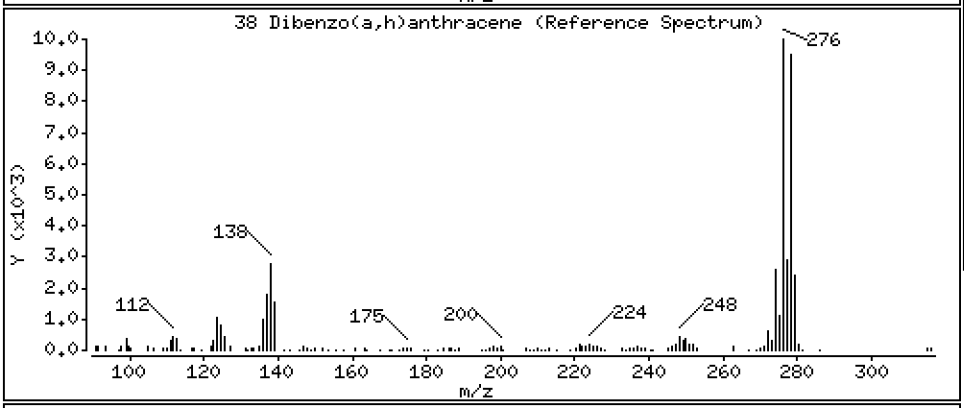
Concentration: 2.493 ug/L

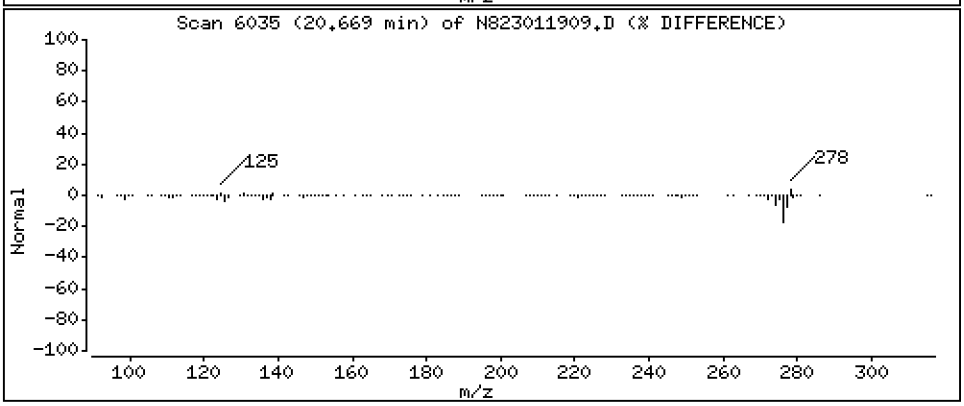












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

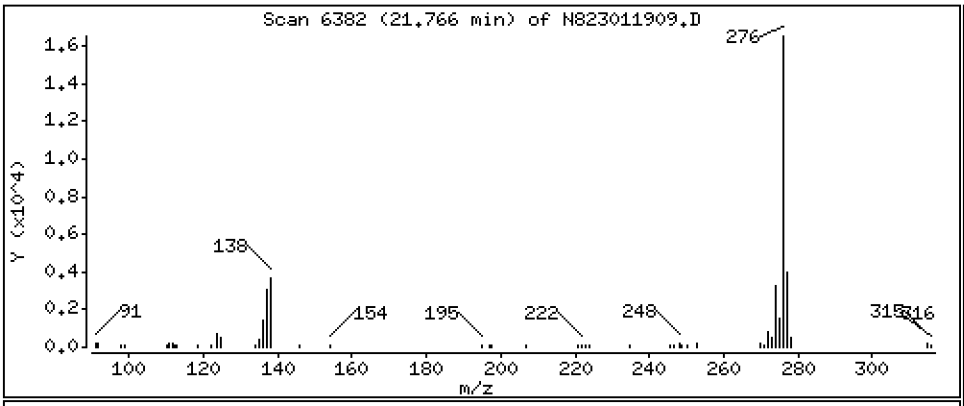
Operator: JZ

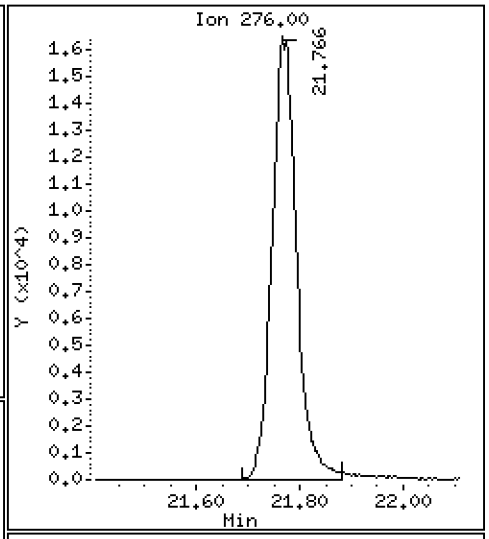
Column phase: Rxi-17sil

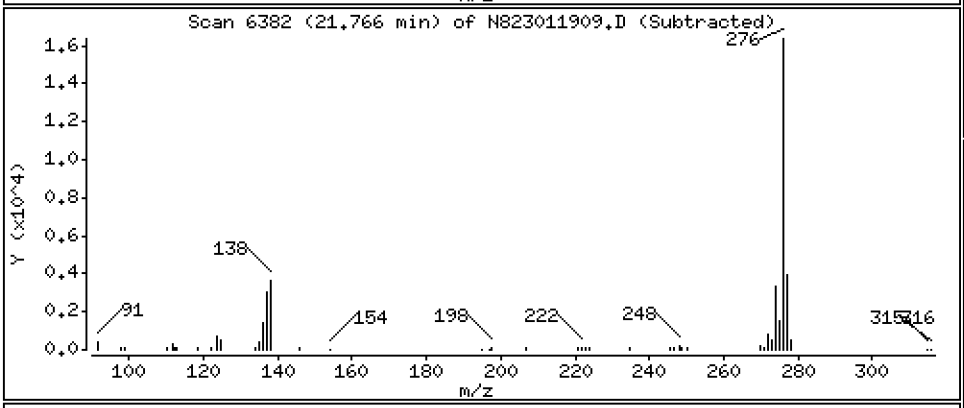
Column diameter: 0.25

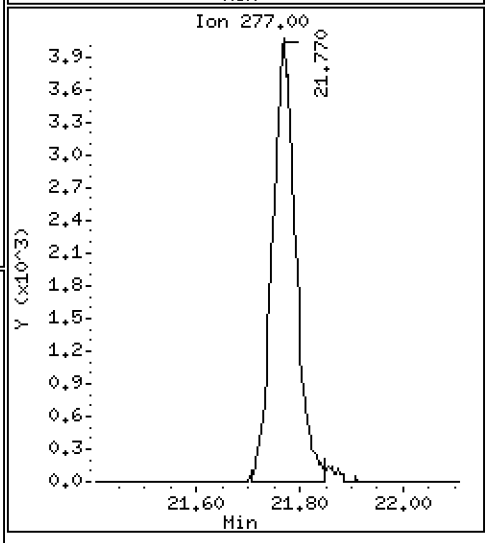
39 Benzo(g,h,i)perylene

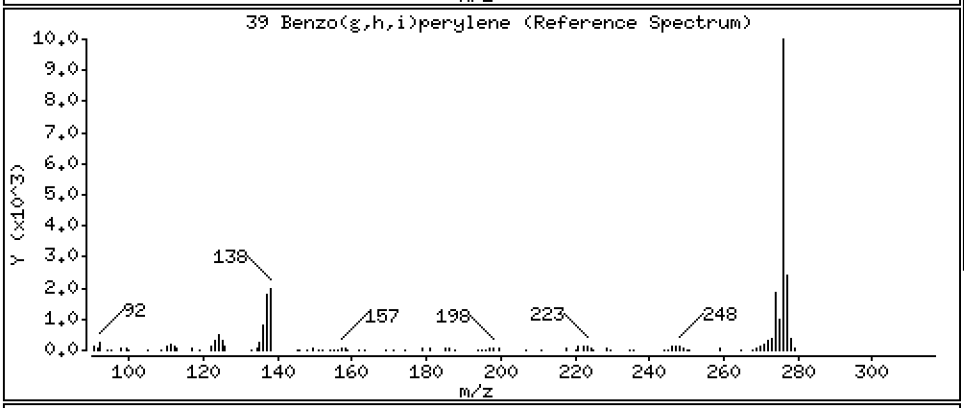
Concentration: 2.483 ug/L

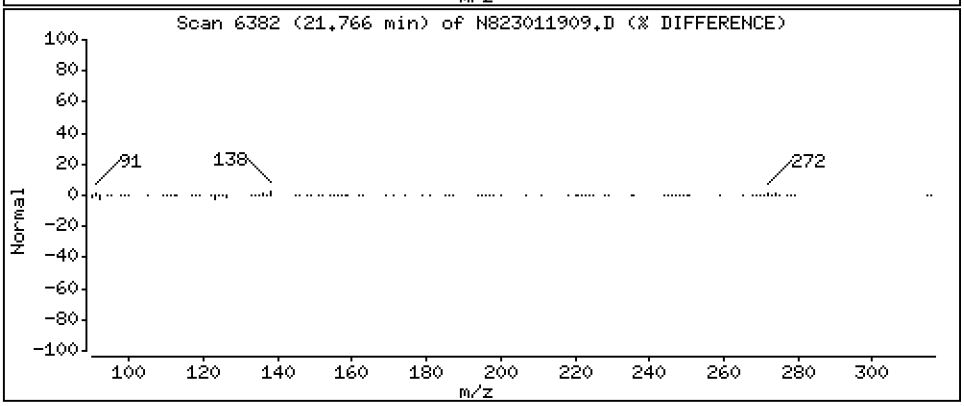












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Lab Smp Id: SLA0213-SCV1
Inj Date : 19-JAN-2023 14:58
Operator : JZ Inst ID: nt8.i
Smp Info : SCV230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 25-Jan-2023 21:57 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnascv.sub
Target Version: 4.14
Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 1 Naphthalene-d8	136	4.913	4.906	(1.000)	46346	2.00000	
2 Naphthalene	128	4.941	4.938	(1.006)	56587	2.62597	2.626
$ 3 2-Methylnaphthalene-d10	152	Compound Not Detected.					
4 2-Methylnaphthalene	141	5.694	5.687	(1.159)	31650	2.67019	2.670
5 1-methylnaphthalene	141	5.890	5.883	(1.199)	31873	2.64949	2.649
9 Acenaphthylene	152	7.091	7.085	(0.985)	59018	2.82060	2.821
* 10 Acenaphthene-d10	164	7.202	7.196	(1.000)	27709	2.00000	
11 Acenaphthene	153	7.249	7.246	(1.007)	36454	2.60022	2.600
12 Dibenzofuran	168	7.401	7.395	(1.028)	60898	2.85987	2.860
14 Fluorene	166	7.878	7.872	(1.094)	43507	2.63066	2.631
* 15 Phenanthrene-d10	188	9.238	9.235	(1.000)	51685	2.00000	
16 Phenanthrene	178	9.276	9.270	(1.004)	61815	2.44841	2.448
17 Anthracene	178	9.317	9.311	(1.009)	52064	2.27006	2.270
22 Fluoranthene	202	11.059	11.053	(1.197)	72902	2.65276	2.653
$ 21 Fluoranthene-d10	212	Compound Not Detected.					
23 Pyrene	202	11.578	11.572	(0.815)	71115	2.46242	2.462
24 Benzo(a)anthracene	228	14.082	14.076	(0.991)	67725	2.58725	2.587
* 25 Chrysene-d12	240	14.212	14.202	(1.000)	46582	2.00000	
27 Chrysene	228	14.285	14.278	(1.005)	66872	2.39976	2.400
28 Benzo(b)fluoranthene	252	16.833	16.821	(0.929)	60946	2.50689	2.507
29 Benzo(k)fluoranthene	252	16.893	16.884	(0.932)	63249	2.65606	2.656
31 Total Benzofluoranthenes	252	16.893	16.821	(0.932)	126178	5.48025	5.480(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572
*	33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000	
	37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689
$	36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493
	39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483
	35 Perylene	252	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011909.D
Lab Smp Id: SLA0213-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

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

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 14:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

No RRT check performed

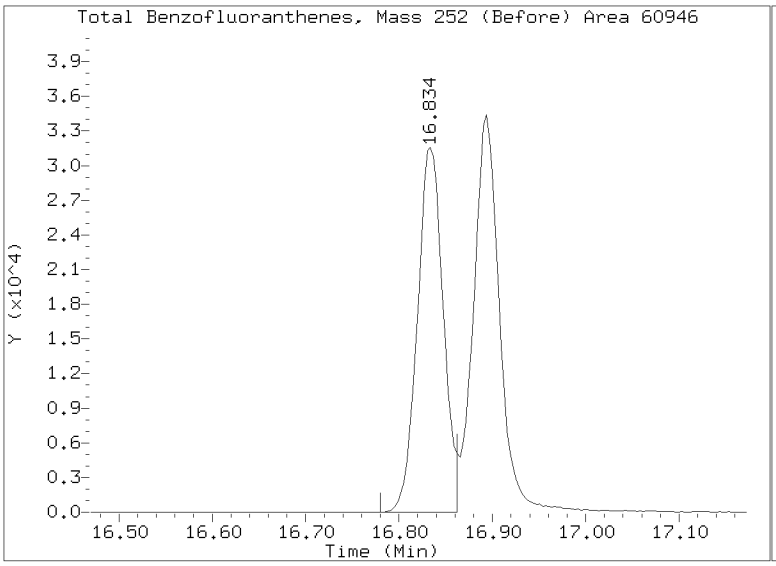
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

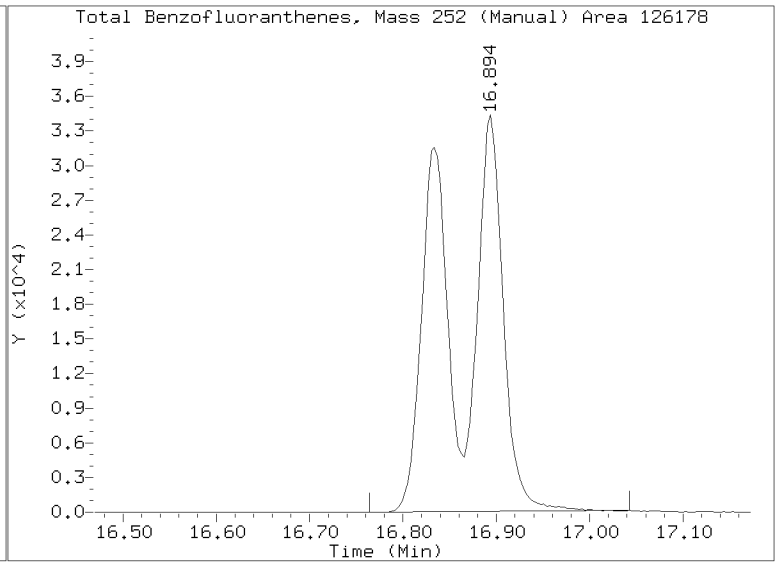
Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D
Injection Date: 19-JAN-2023 14:58
Lab ID:SLA0213-SCV1 Client ID:
Report Date: 01/25/2023 22:00





SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GC00032
Laboratory ID: SLC0143-SCV1
Sequence: SLC0143
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
1,4-Dichlorobenzene	5.0000	5.2	5.0	20.00
1,2-Dichlorobenzene	5.0000	5.1	2.8	20.00
Benzyl Alcohol	5.0000	5.1	2.1	20.00
Benzoic acid	10.000	6.9	-31.3 *	20.00
2,4-Dimethylphenol	5.0000	3.6	-27.3 *	20.00
1,2,4-Trichlorobenzene	5.0000	4.9	-2.6	20.00
N-Nitrosodiphenylamine	5.0000	5.4	7.2	20.00
Pentachlorophenol	5.0000	3.9	-21.8 *	20.00
2-Fluorophenol	7.5000	0.0377	-99.5	
p-Terphenyl-d14	5.0000	0.0271	-99.5	

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

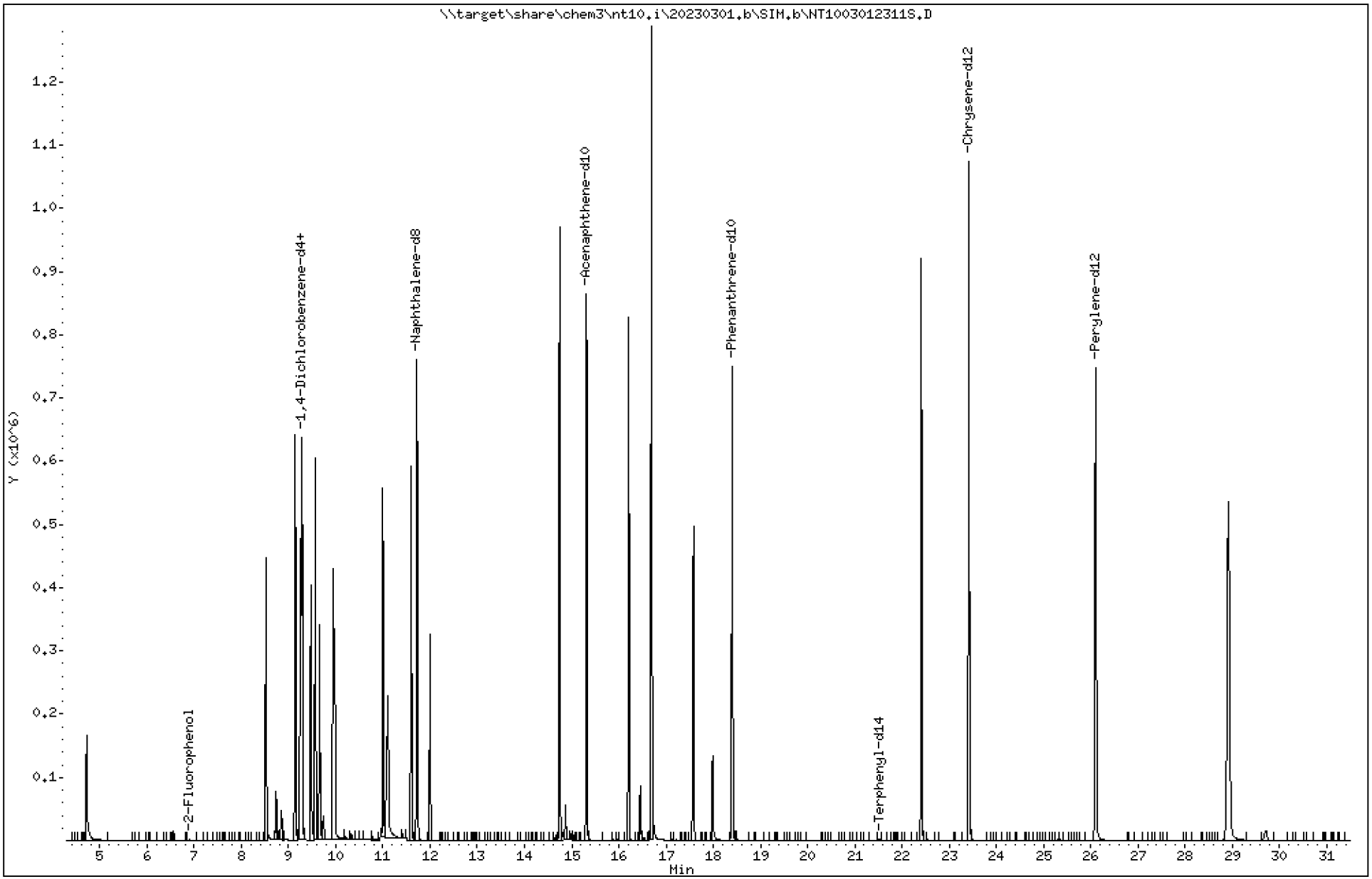
Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

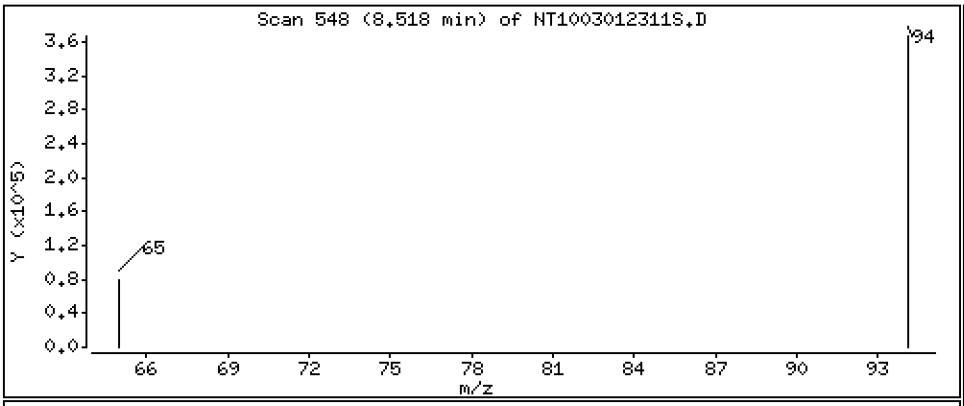
Operator: JGR

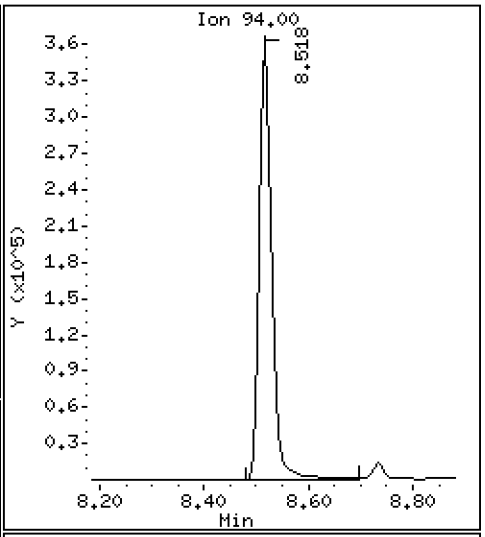
Column phase: ZB-5msi

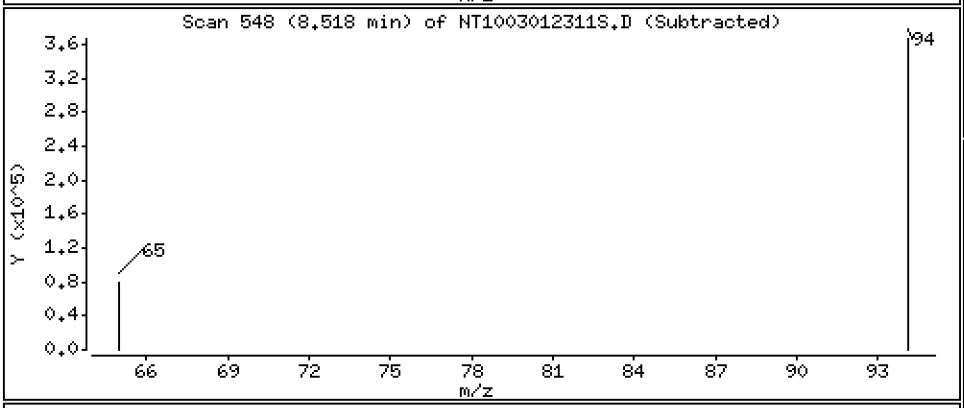
Column diameter: 0.25

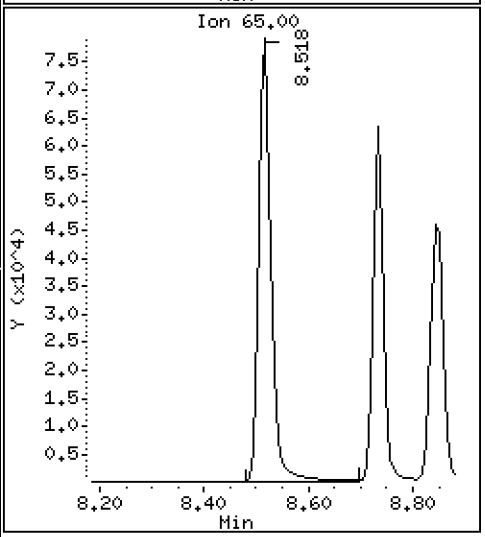
3 Phenol

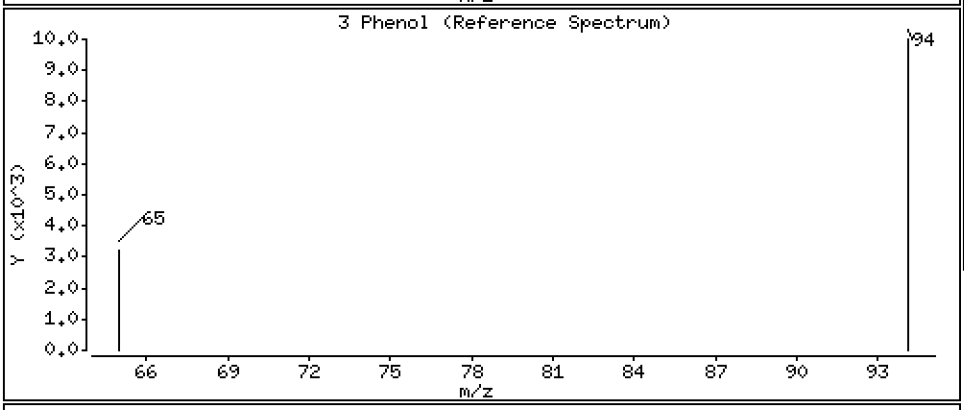
Concentration: 4.507 ug/L

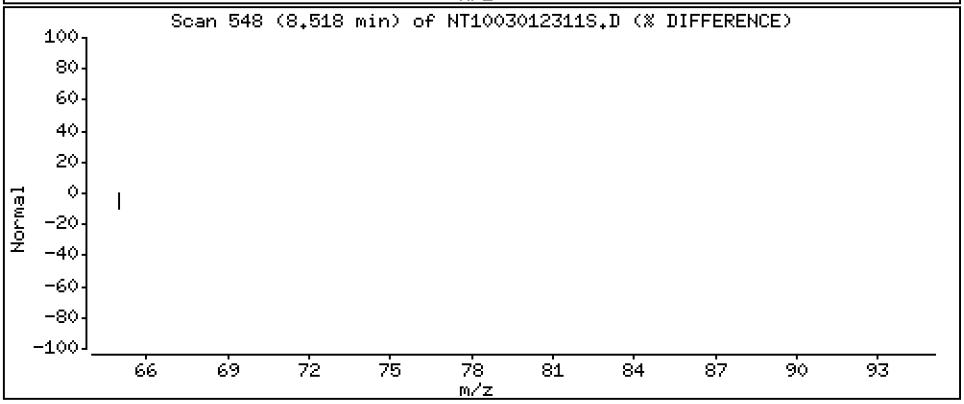












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

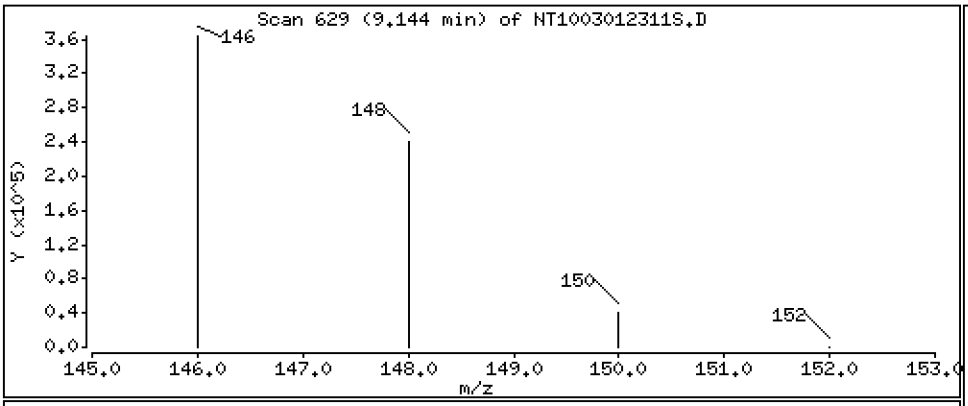
Operator: JGR

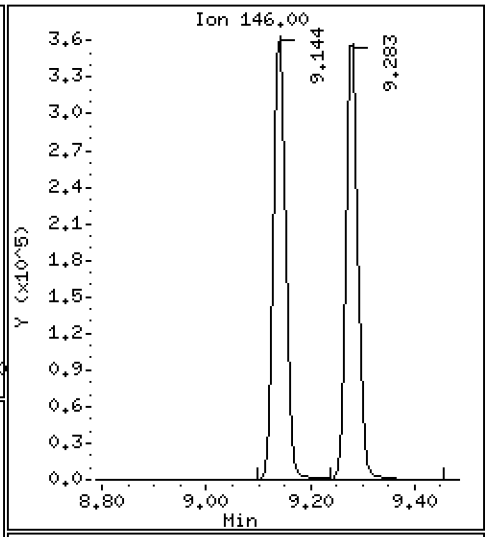
Column phase: ZB-5msi

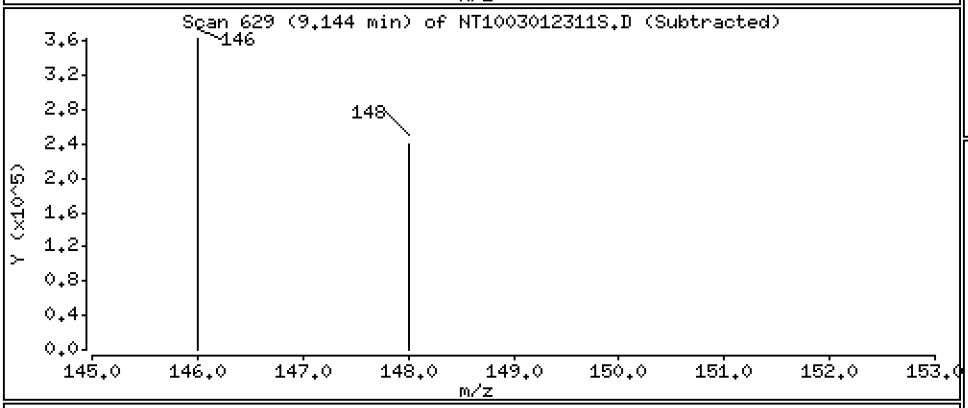
Column diameter: 0.25

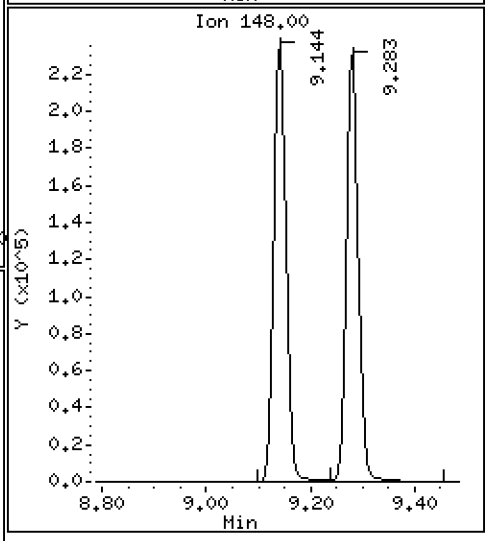
7 1,3-Dichlorobenzene

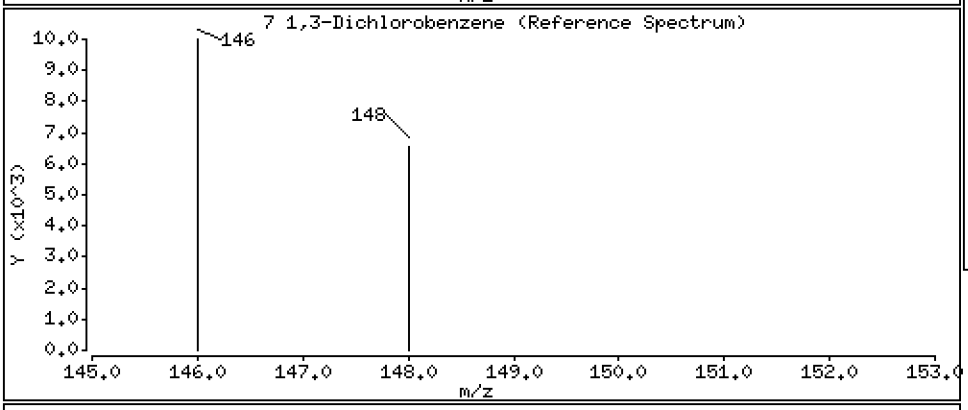
Concentration: 5.084 ug/L

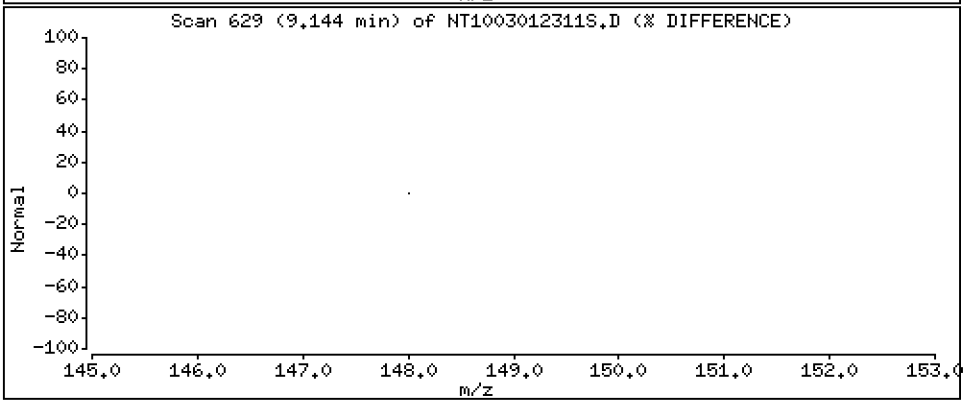












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

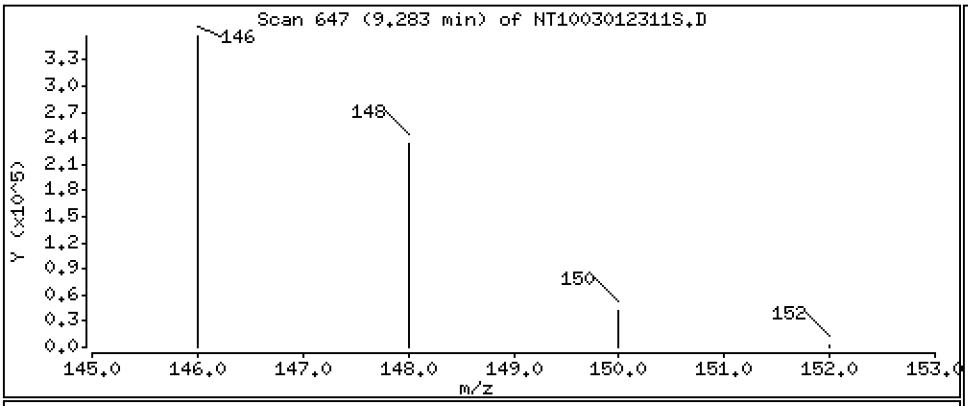
Operator: JGR

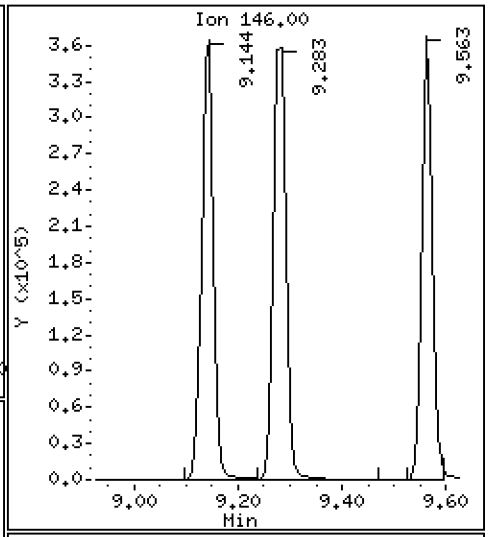
Column phase: ZB-5msi

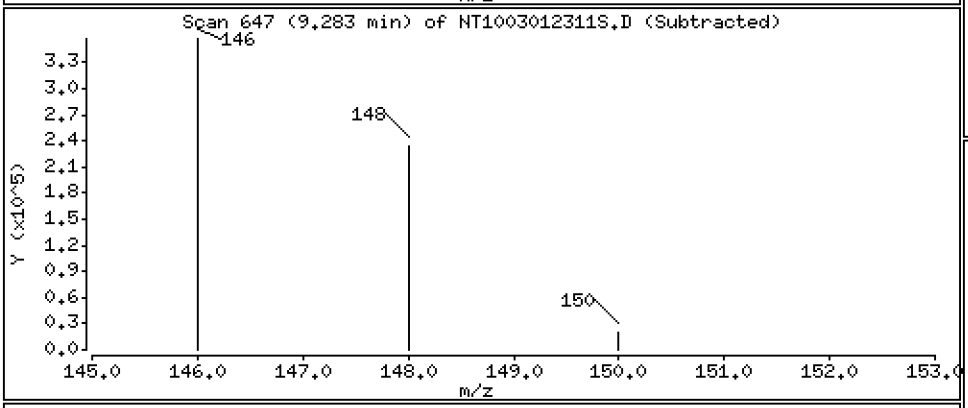
Column diameter: 0.25

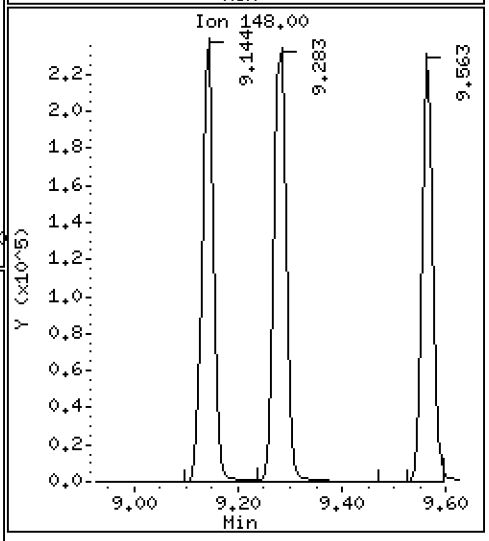
9 1,4-Dichlorobenzene

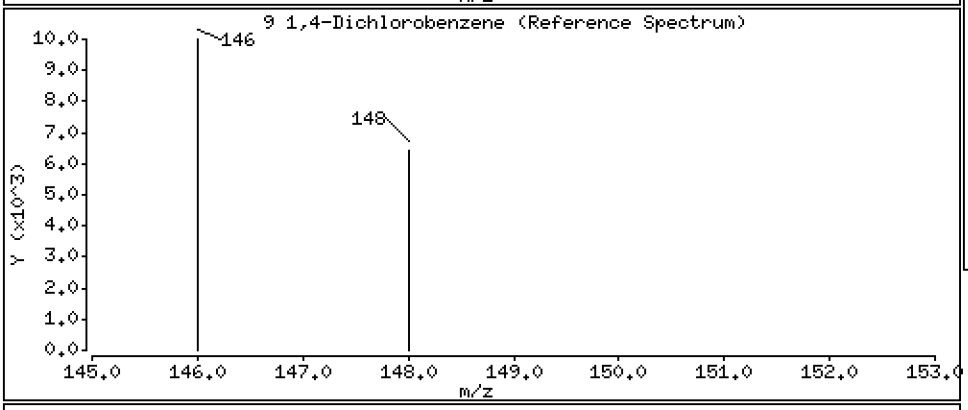
Concentration: 5.250 ug/L

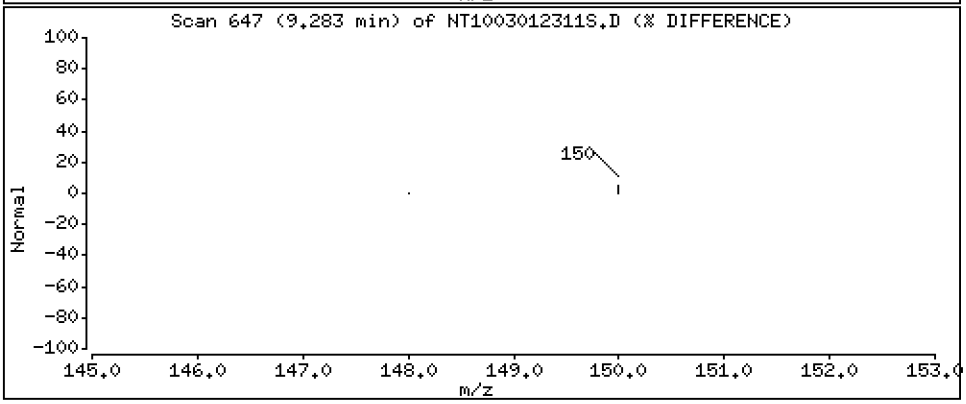












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

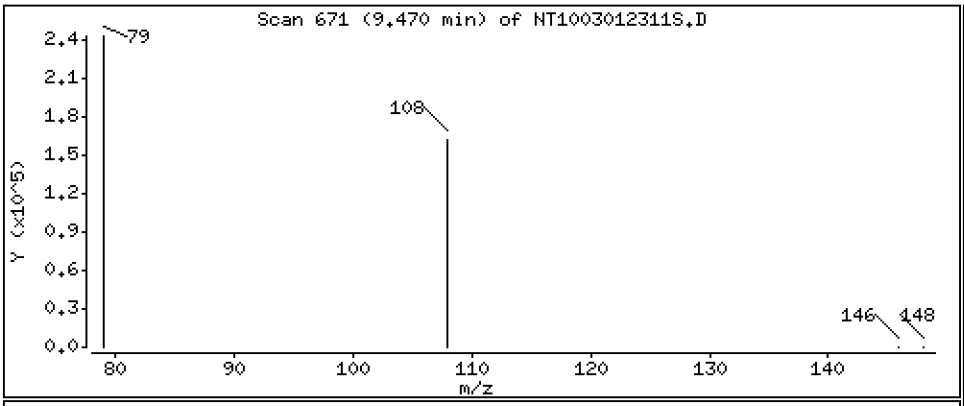
Operator: JGR

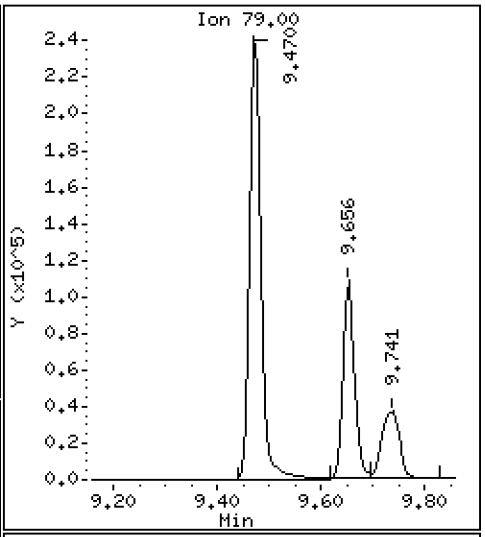
Column phase: ZB-5msi

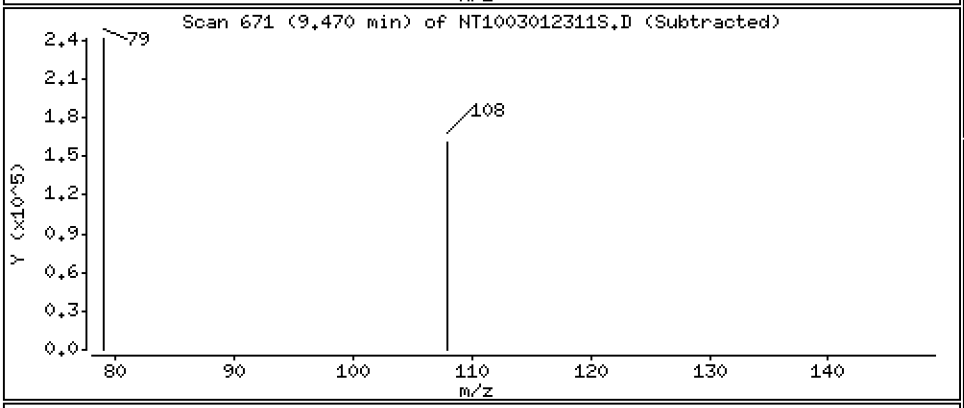
Column diameter: 0.25

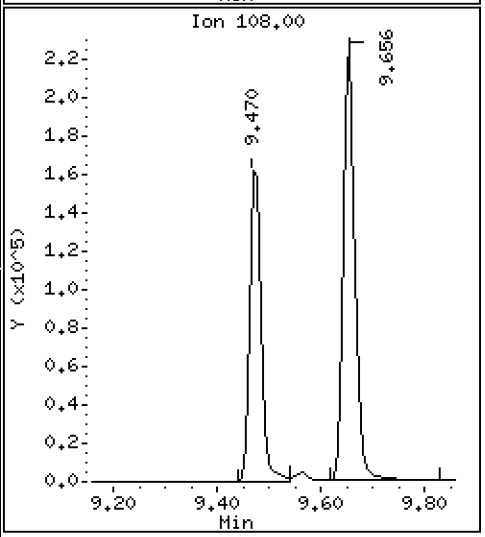
11 Benzyl alcohol

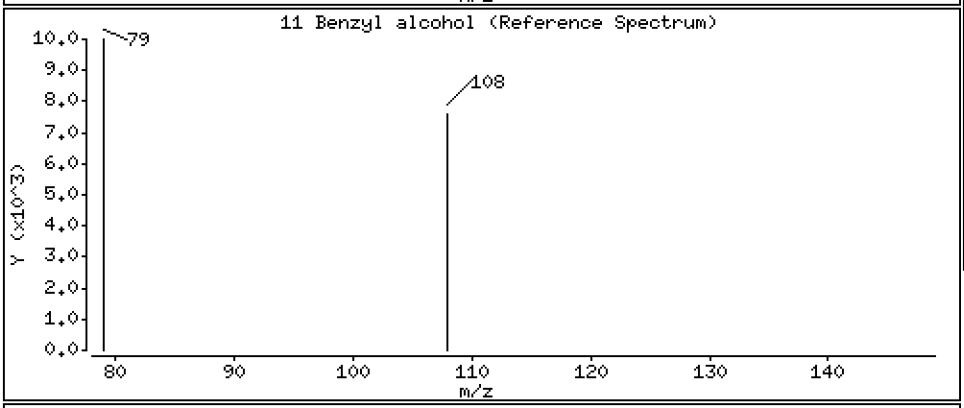
Concentration: 5.104 ug/L

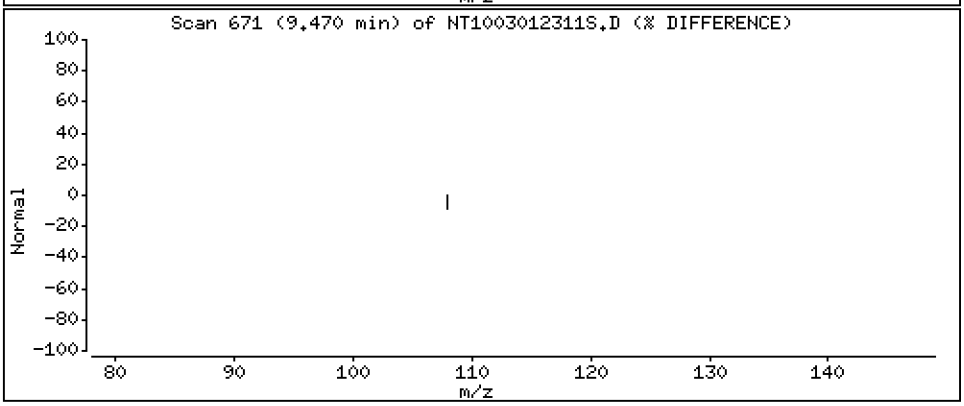












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

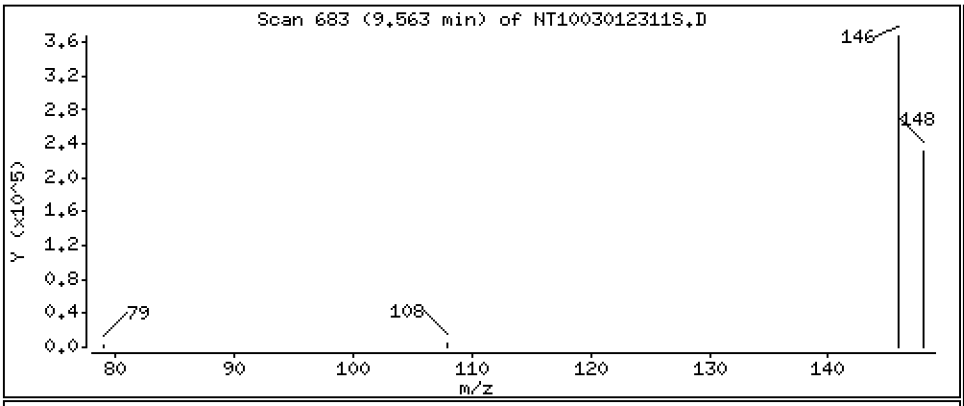
Operator: JGR

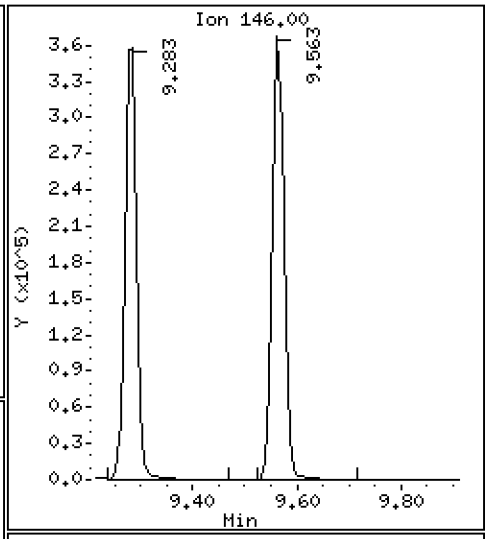
Column phase: ZB-5msi

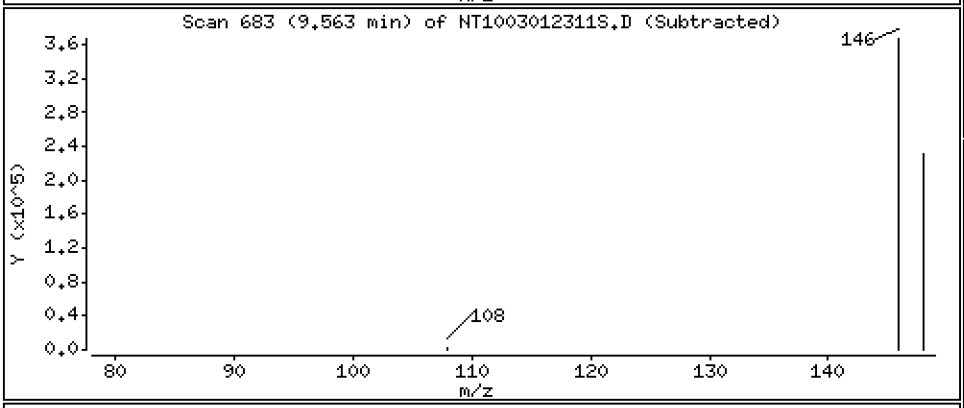
Column diameter: 0.25

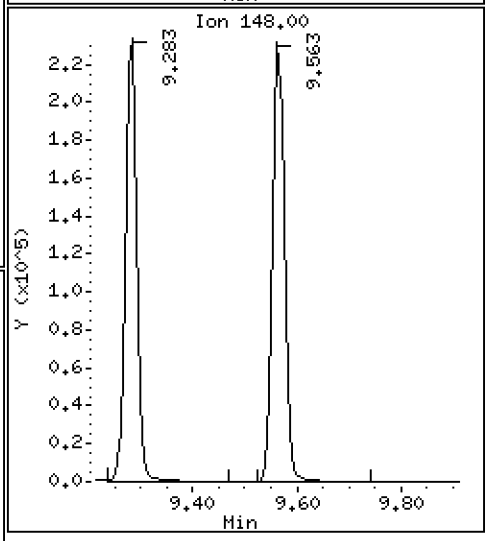
12 1,2-Dichlorobenzene

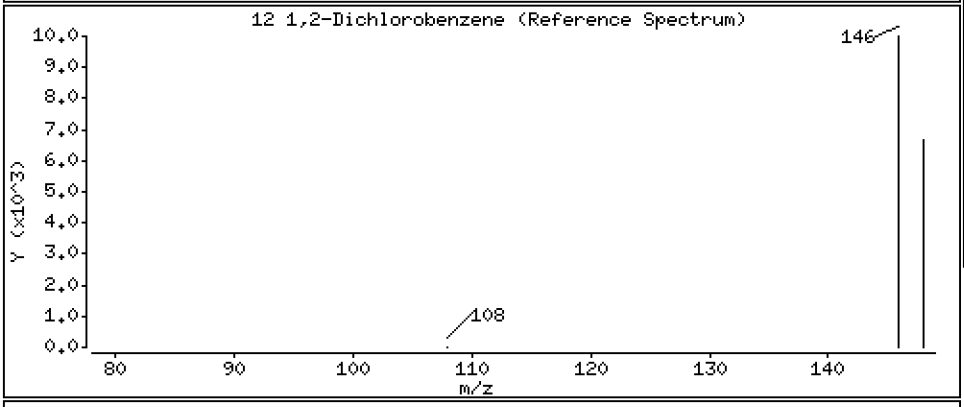
Concentration: 5.142 ug/L

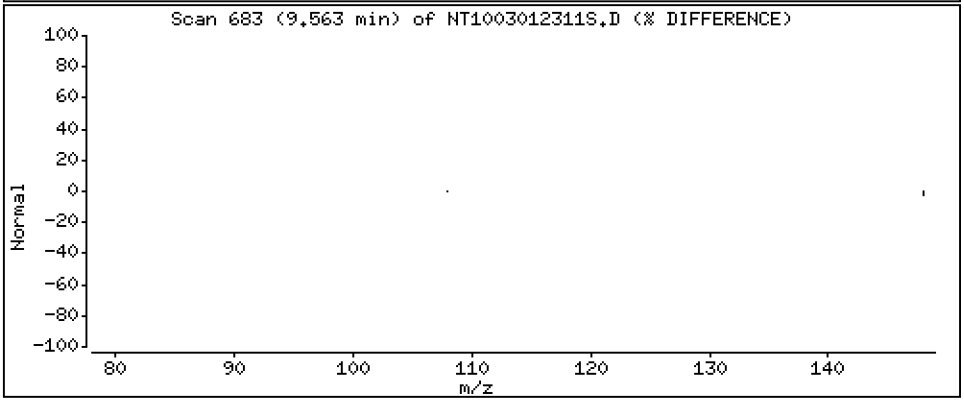












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

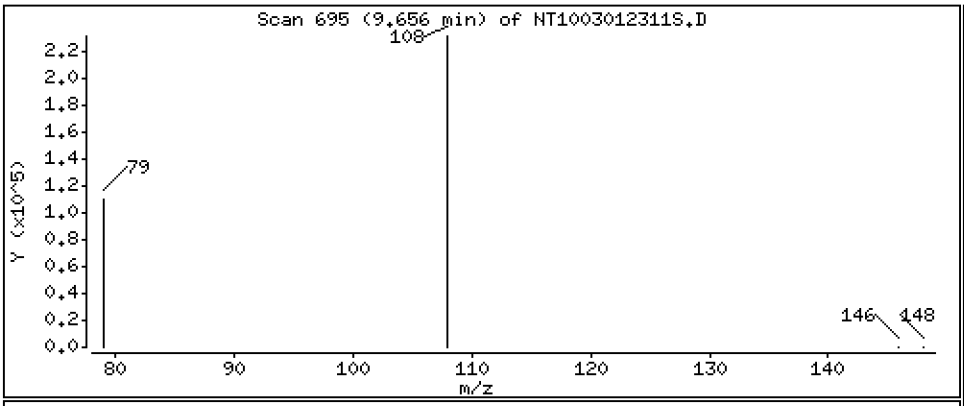
Operator: JGR

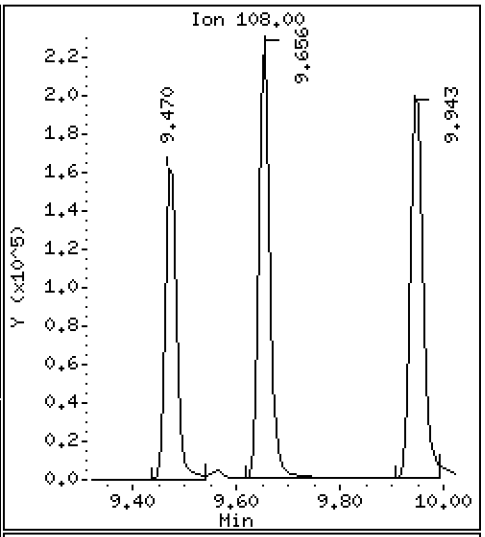
Column phase: ZB-5msi

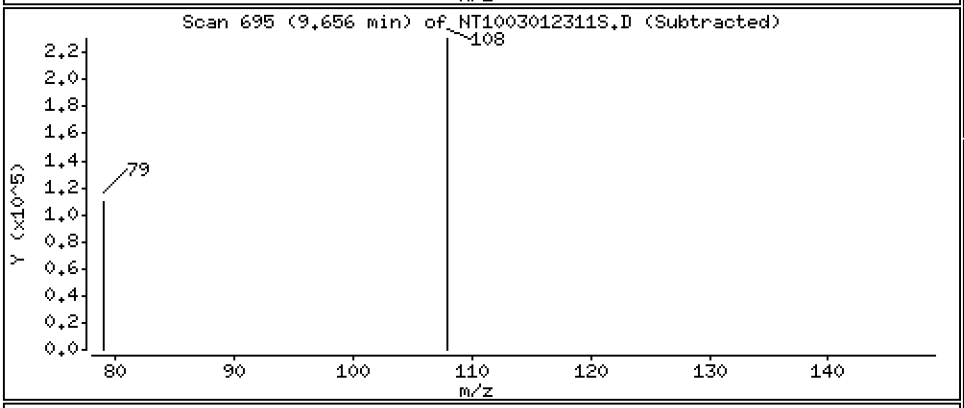
Column diameter: 0.25

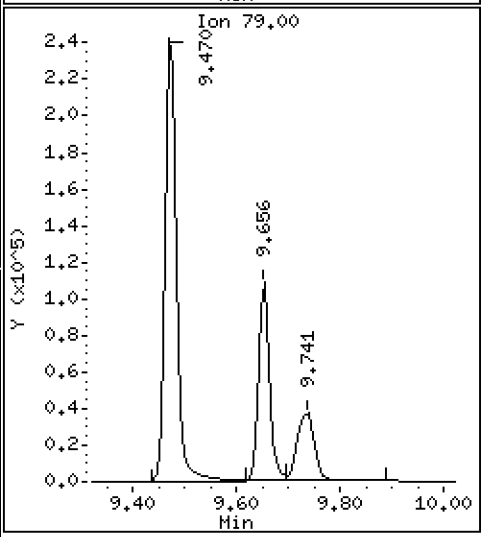
13 2-Methylphenol

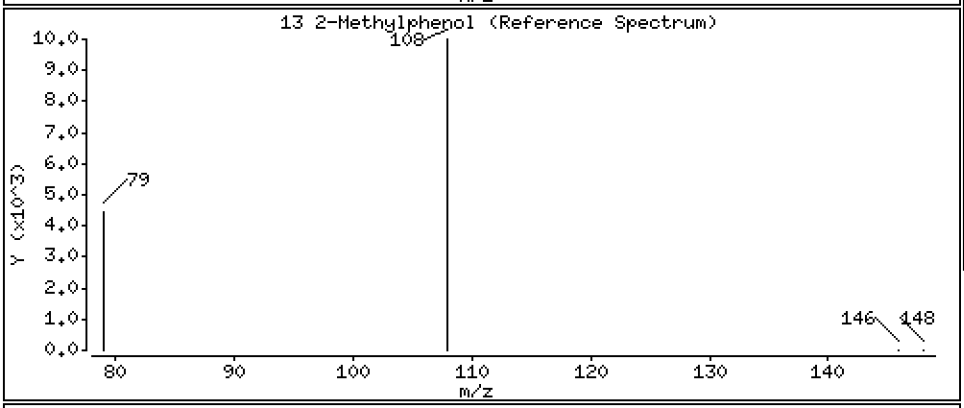
Concentration: 4.365 ug/L

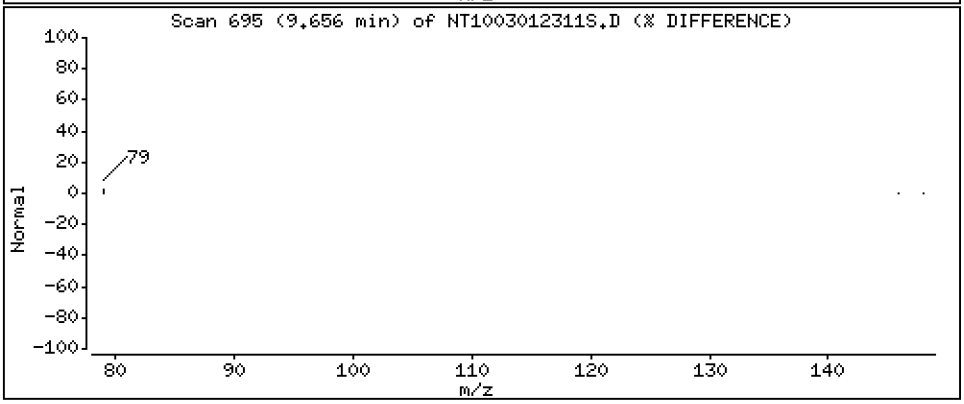












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

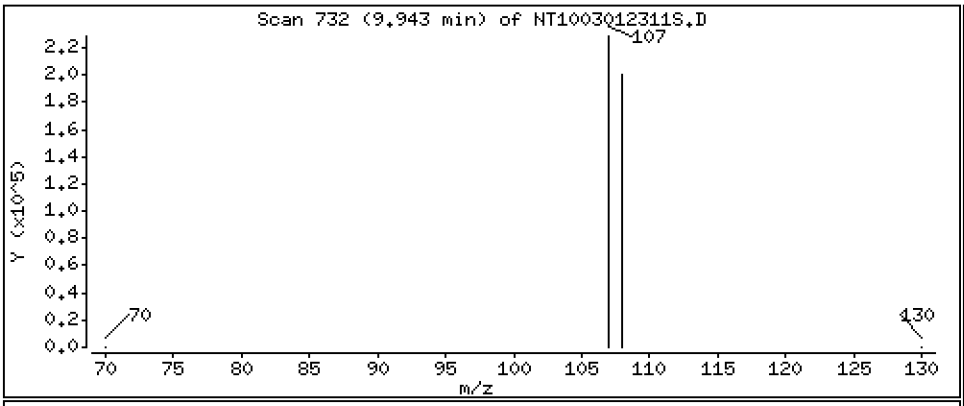
Operator: JGR

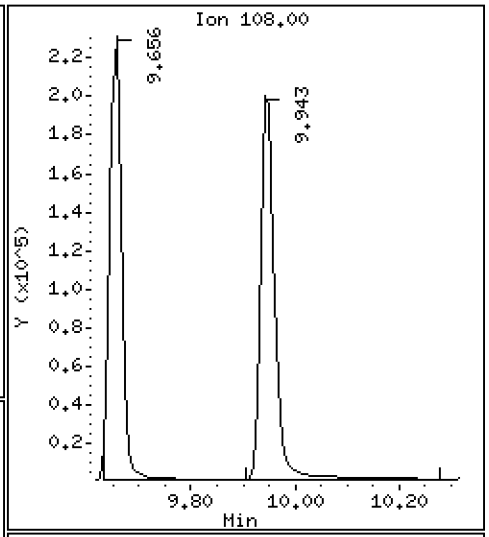
Column phase: ZB-5msi

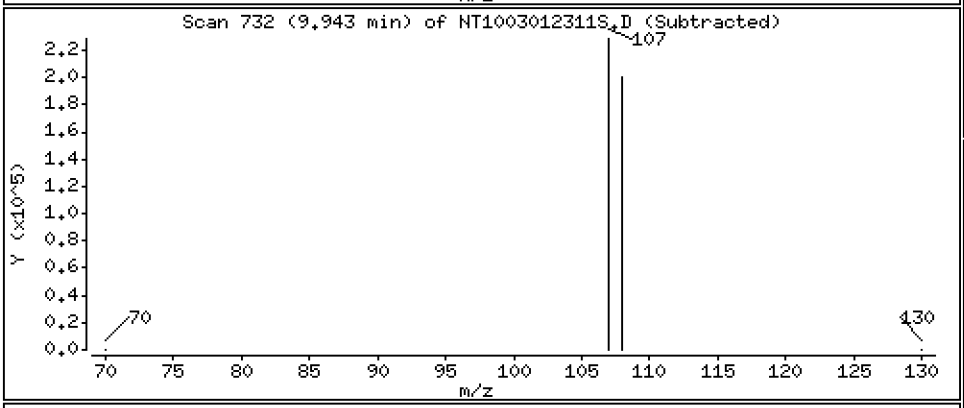
Column diameter: 0.25

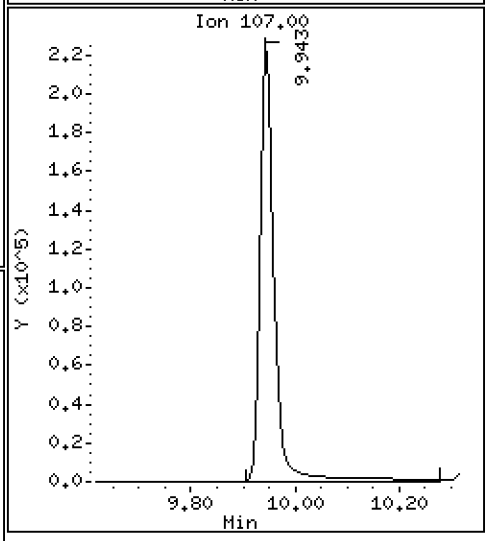
15 4-Methylphenol

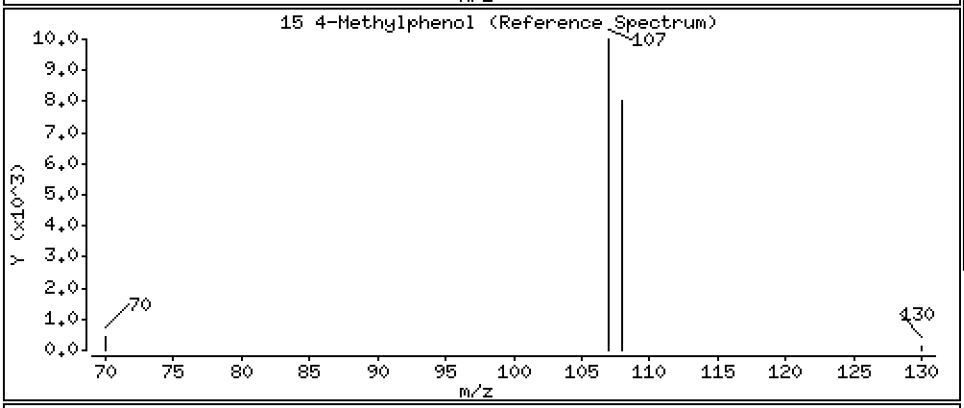
Concentration: 4.505 ug/L

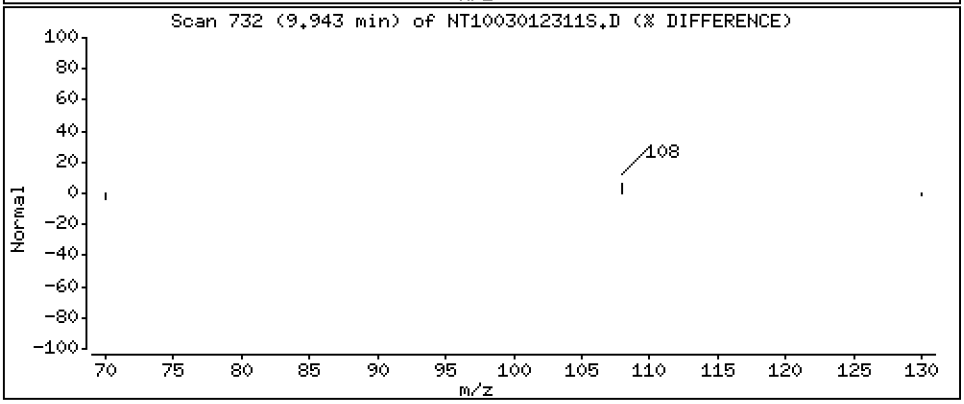












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

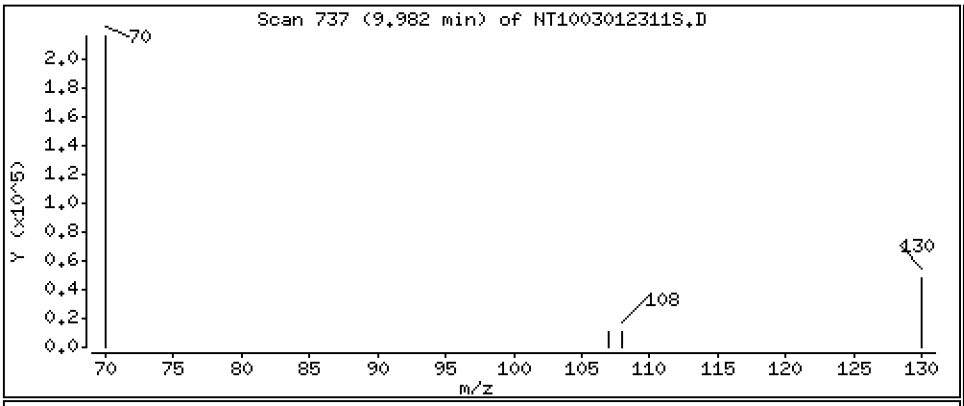
Operator: JGR

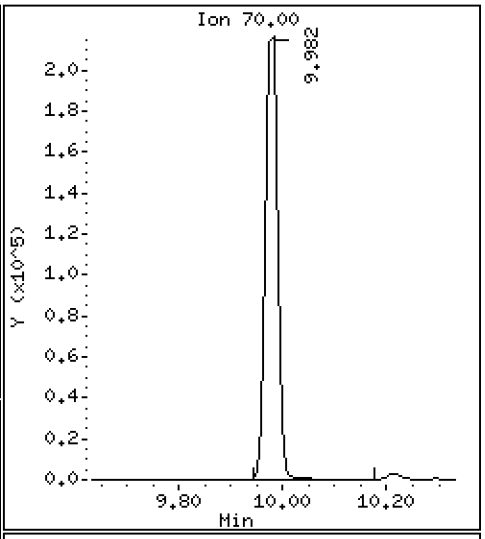
Column phase: ZB-5msi

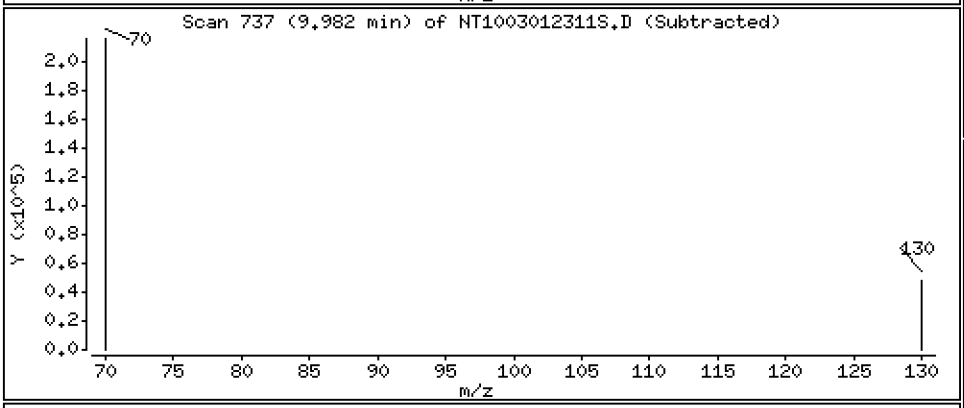
Column diameter: 0.25

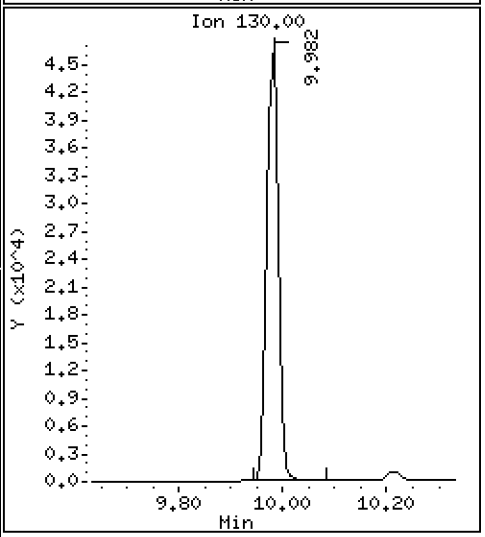
16 N-Nitroso-di-n-propylamine

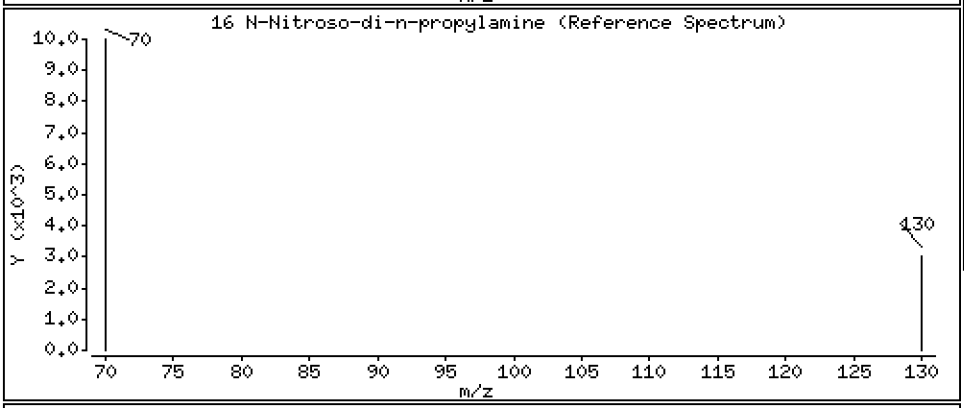
Concentration: 5.685 ug/L

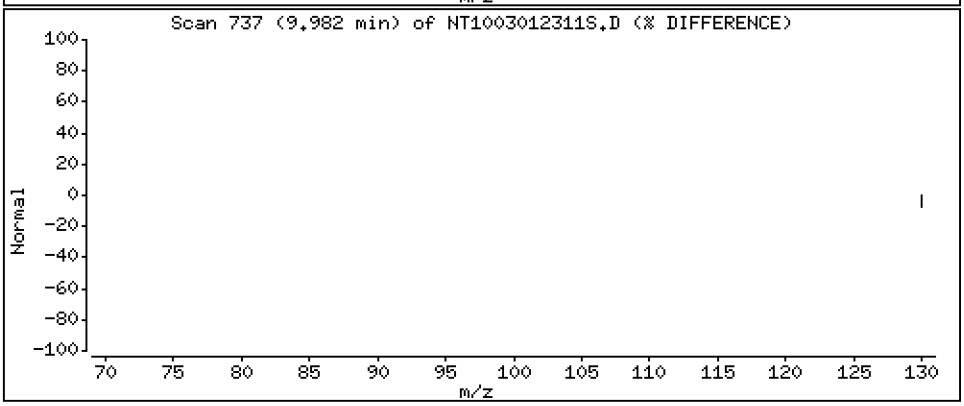












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

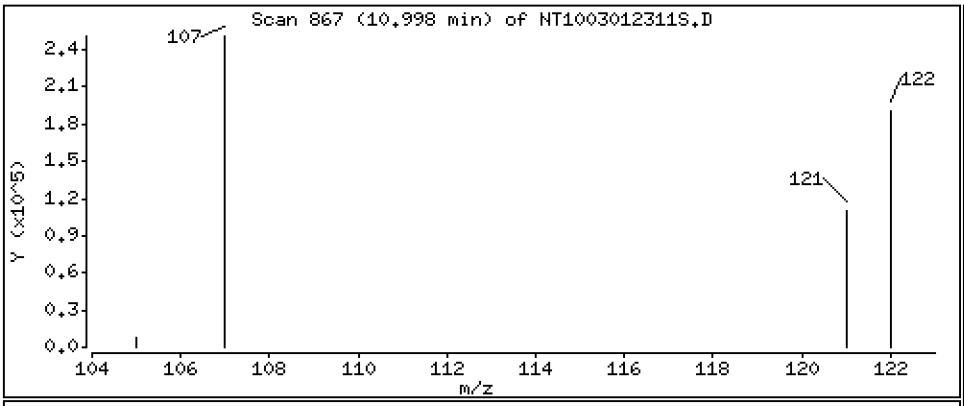
Operator: JGR

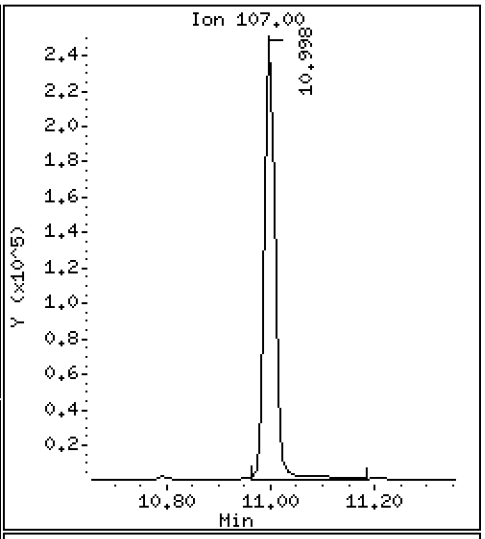
Column phase: ZB-5msi

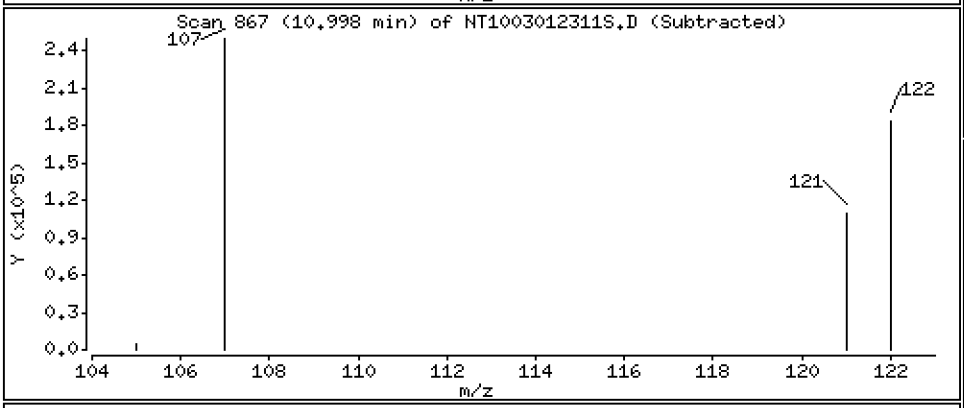
Column diameter: 0.25

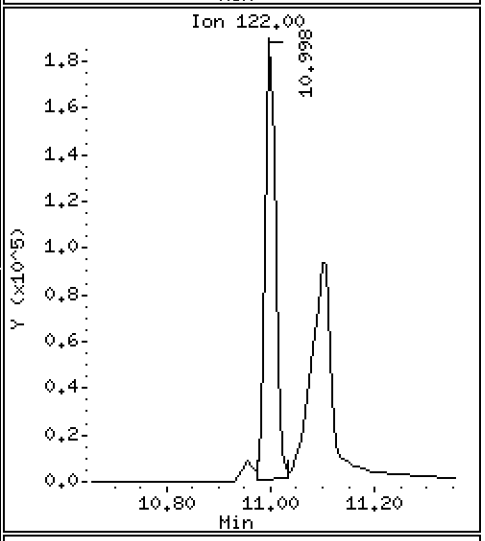
22 2,4-Dimethylphenol

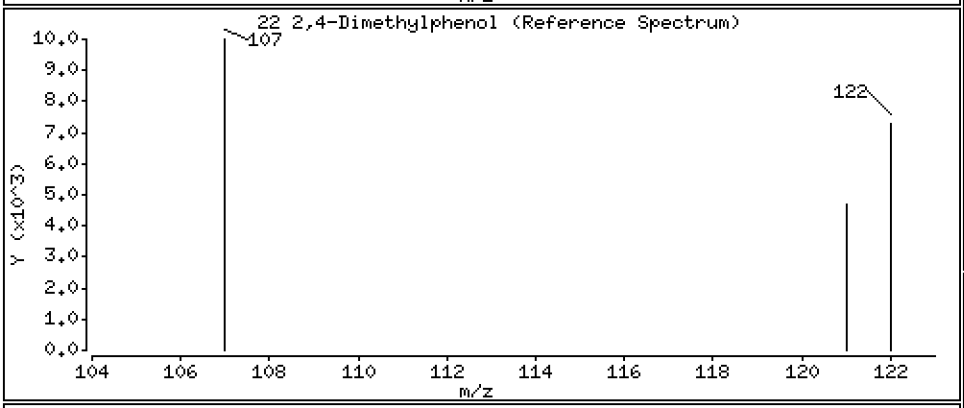
Concentration: 3.637 ug/L

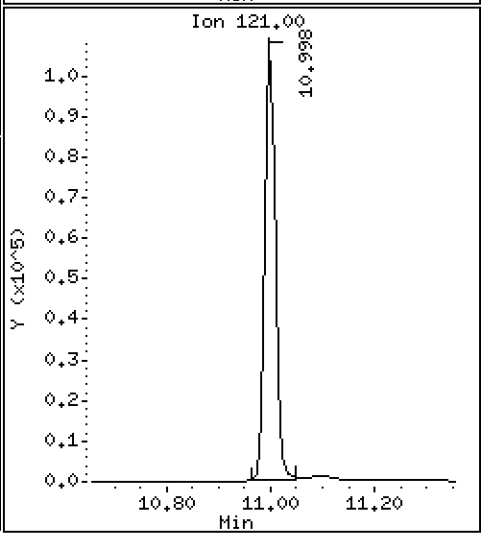


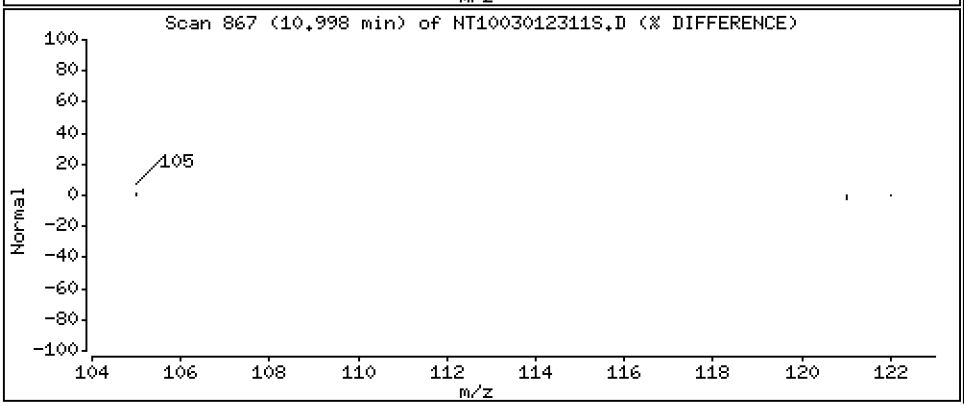












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

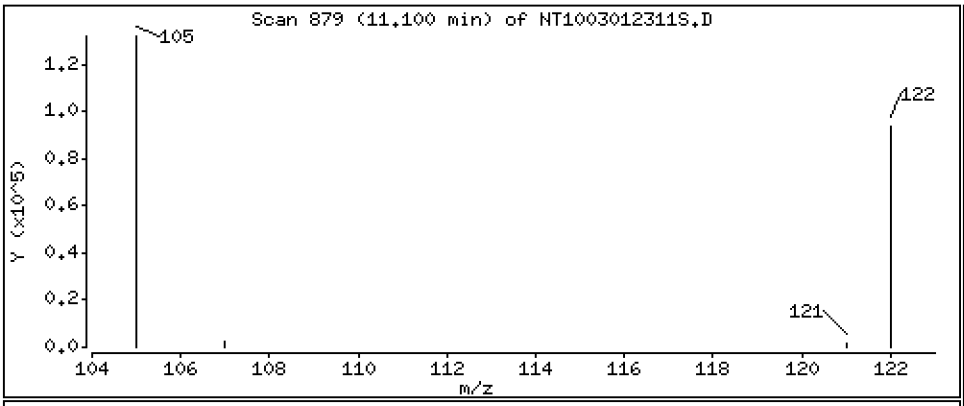
Operator: JGR

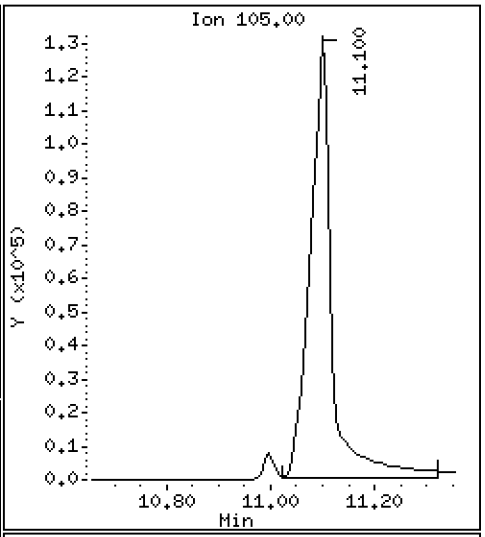
Column phase: ZB-5msi

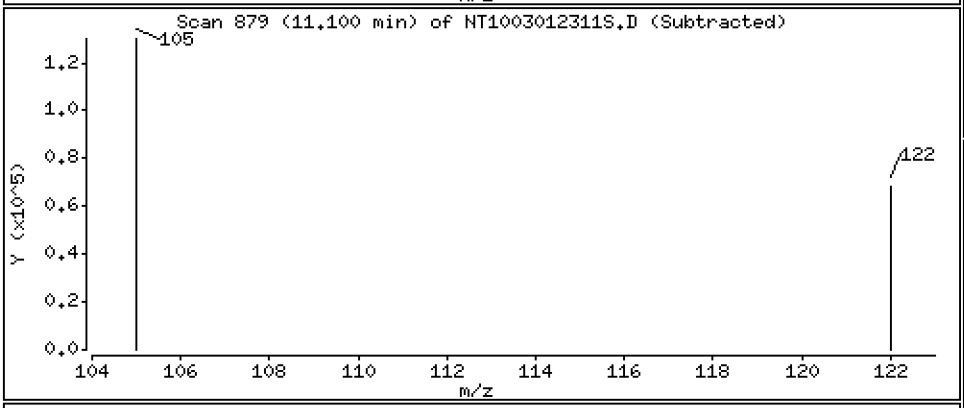
Column diameter: 0.25

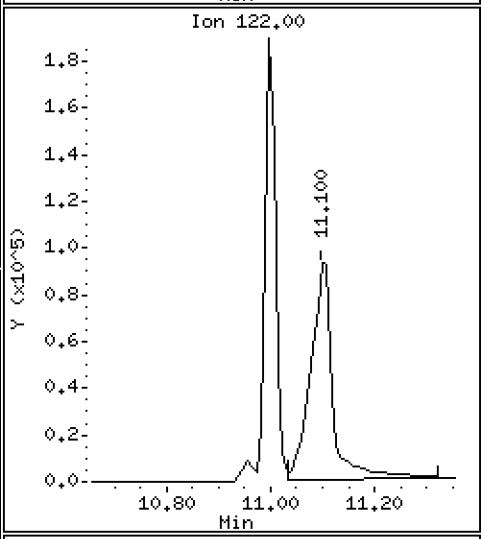
24 Benzoic acid

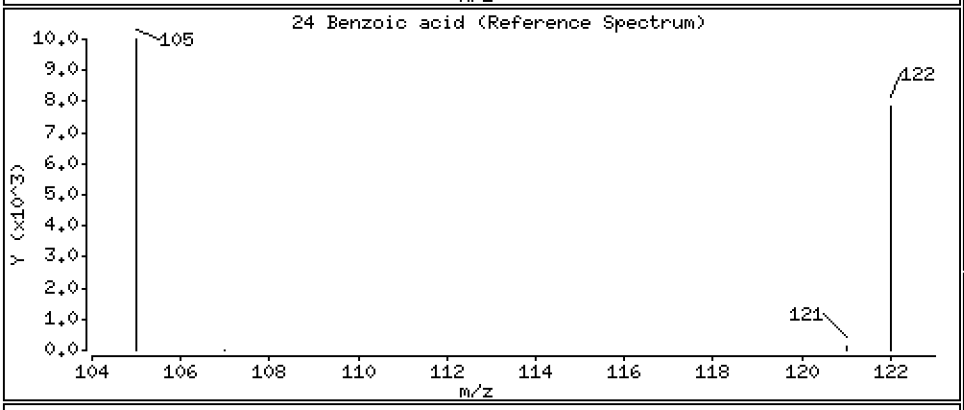
Concentration: 6.870 ug/L

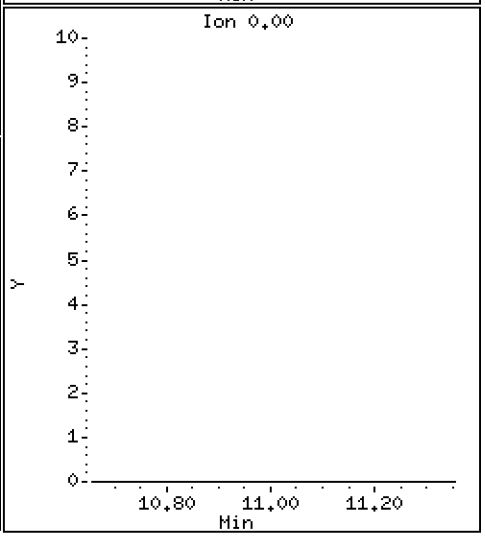


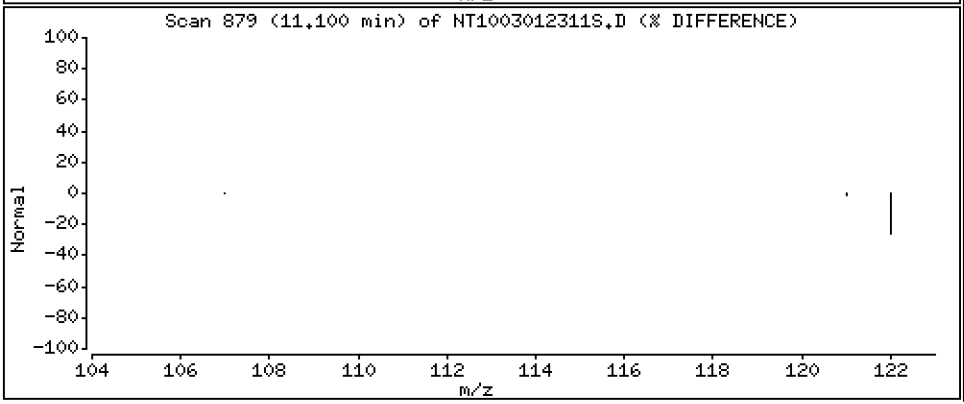












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

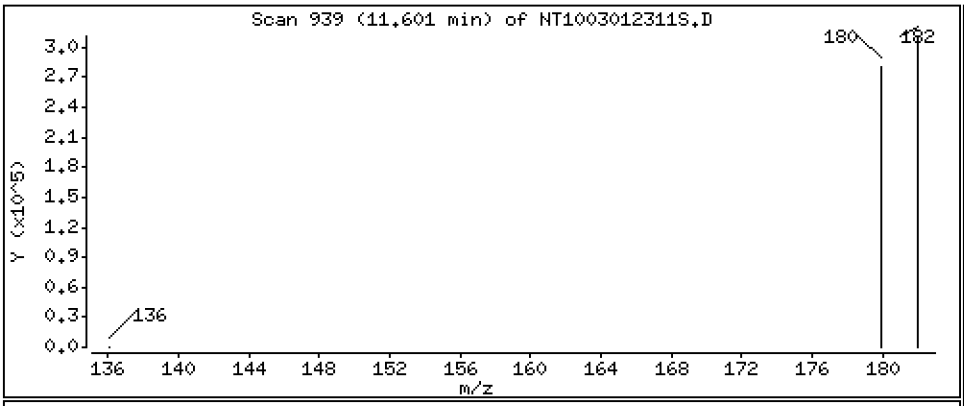
Operator: JGR

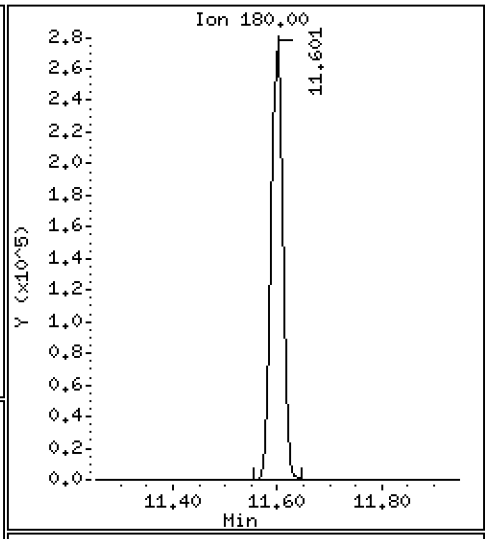
Column phase: ZB-5msi

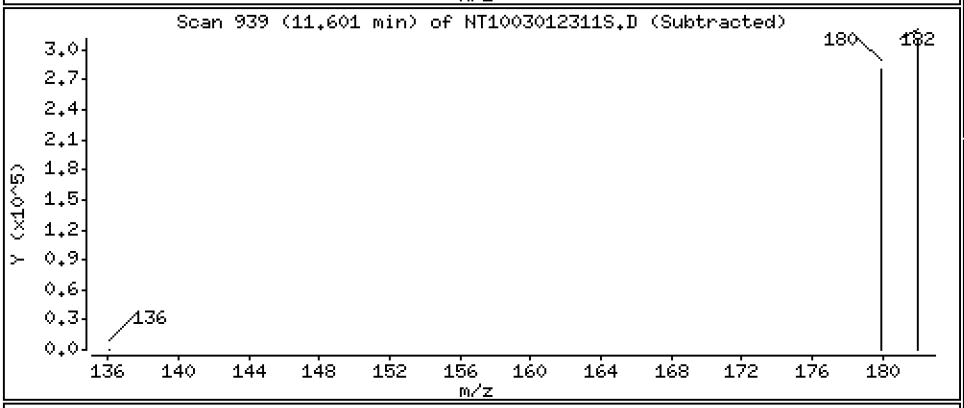
Column diameter: 0.25

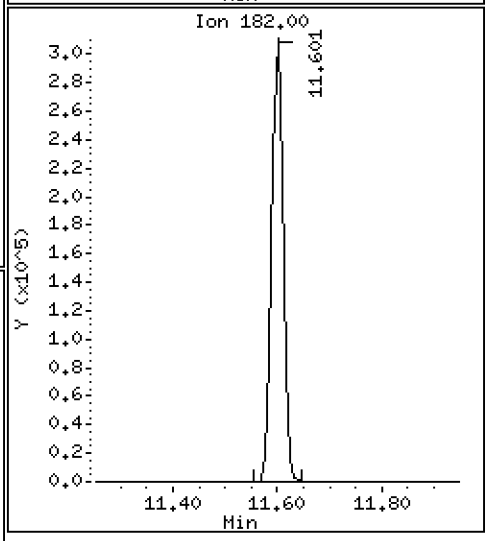
26 1,2,4-Trichlorobenzene

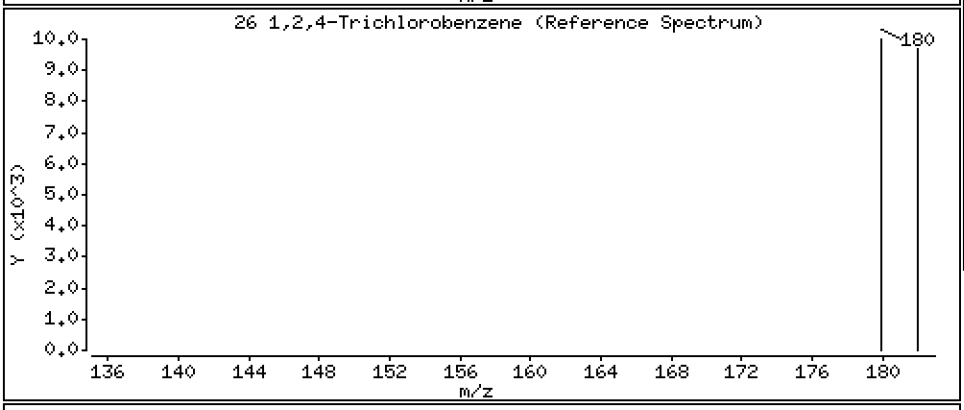
Concentration: 4.870 ug/L

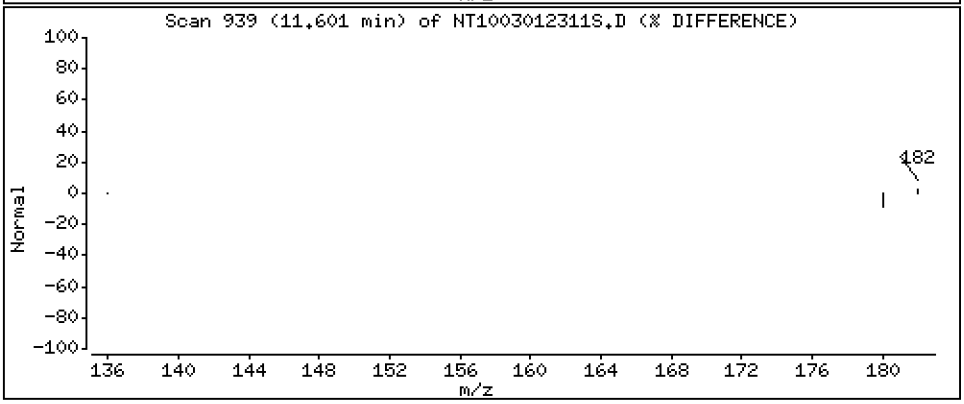












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

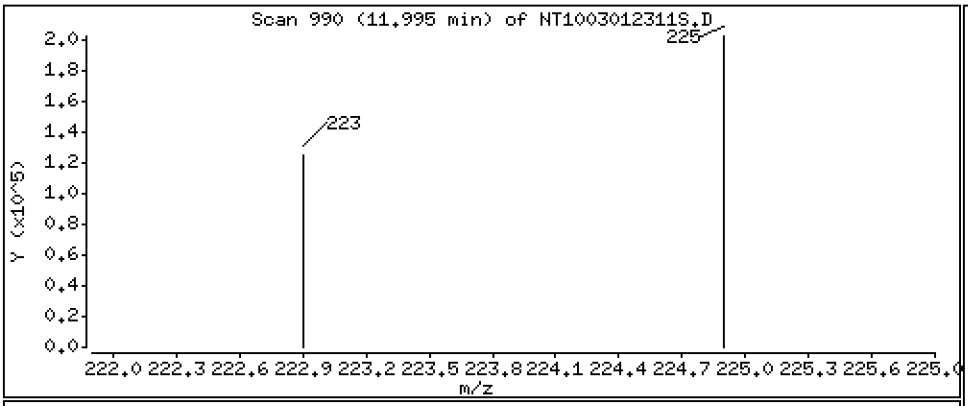
Operator: JGR

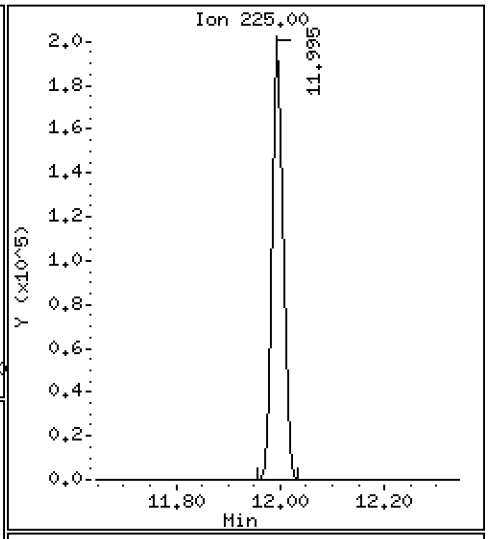
Column phase: ZB-5msi

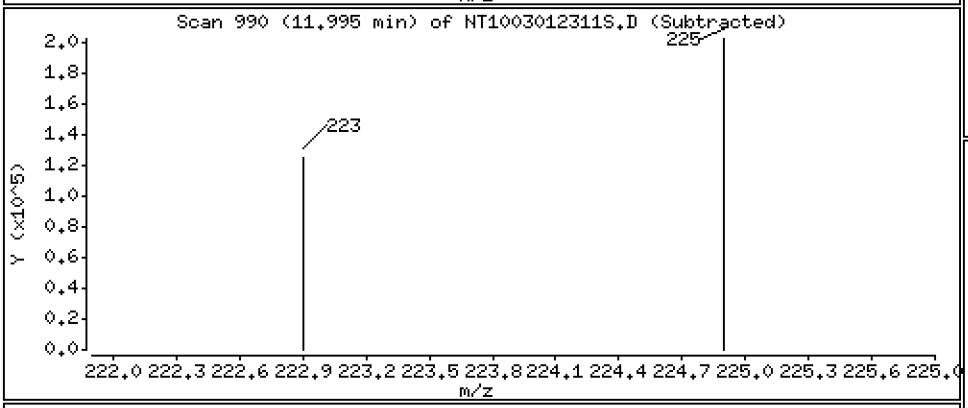
Column diameter: 0.25

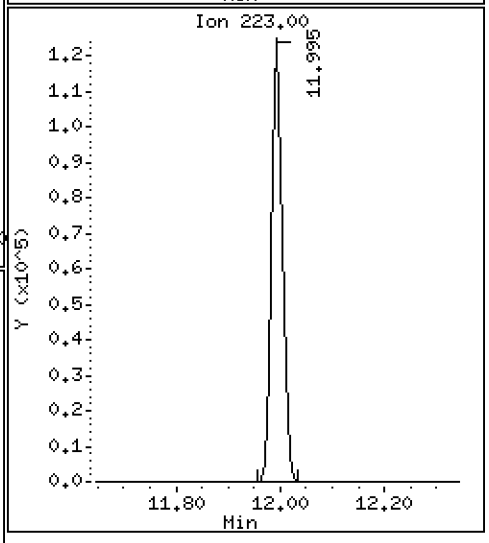
30 Hexachlorobutadiene

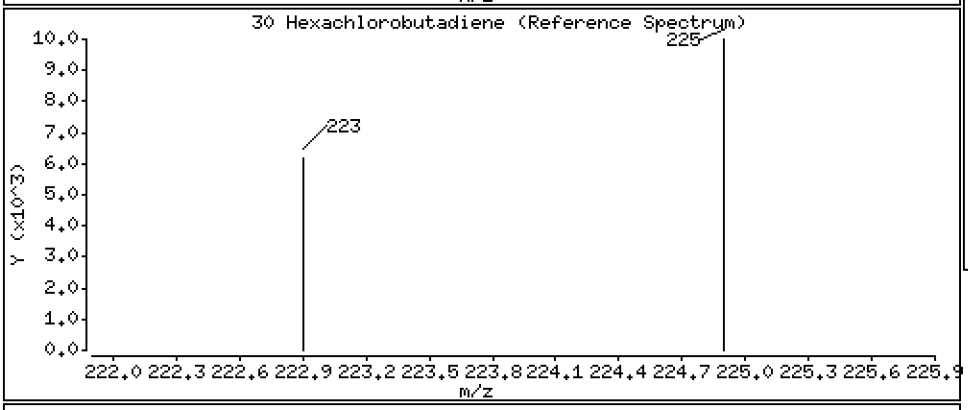
Concentration: 4.862 ug/L

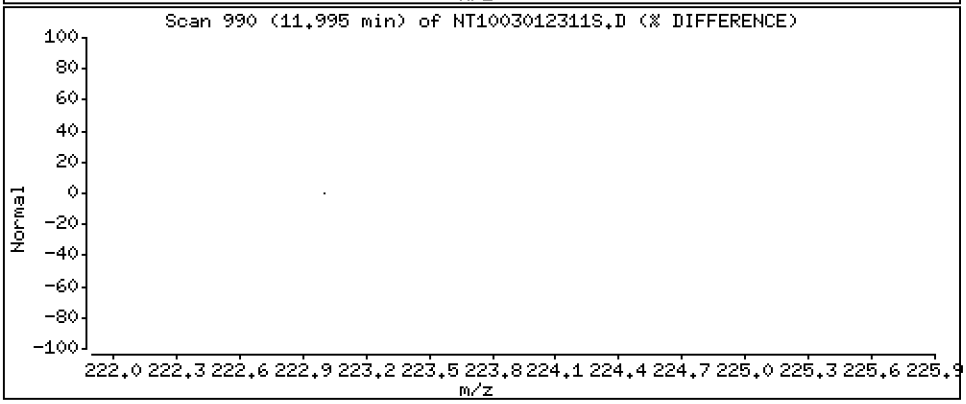












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

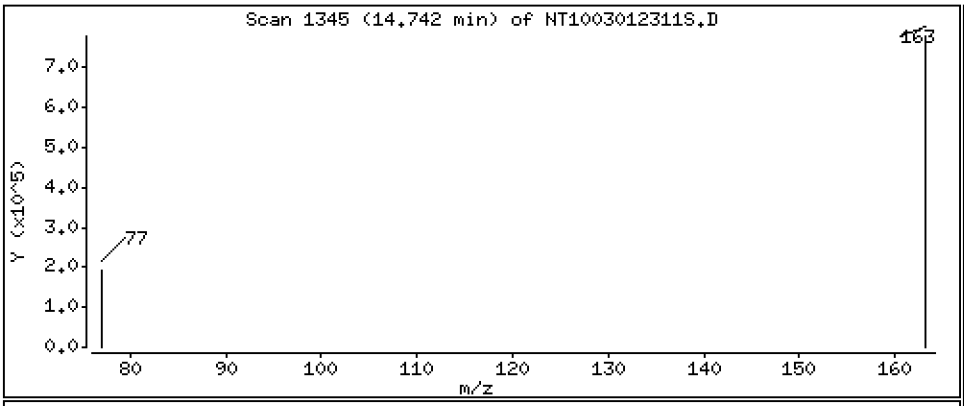
Operator: JGR

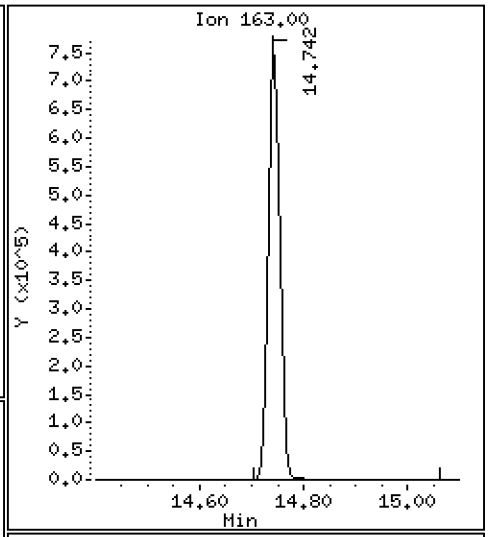
Column phase: ZB-5msi

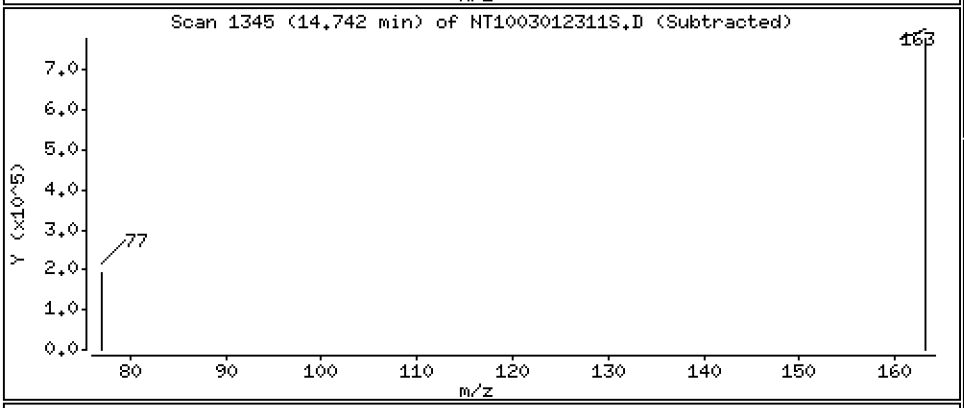
Column diameter: 0.25

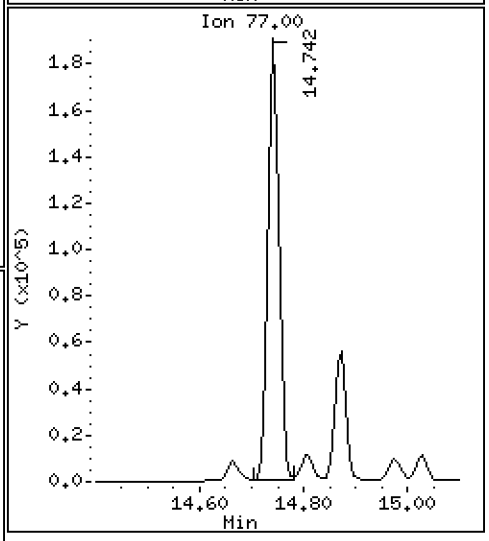
39 Dimethylphthalate

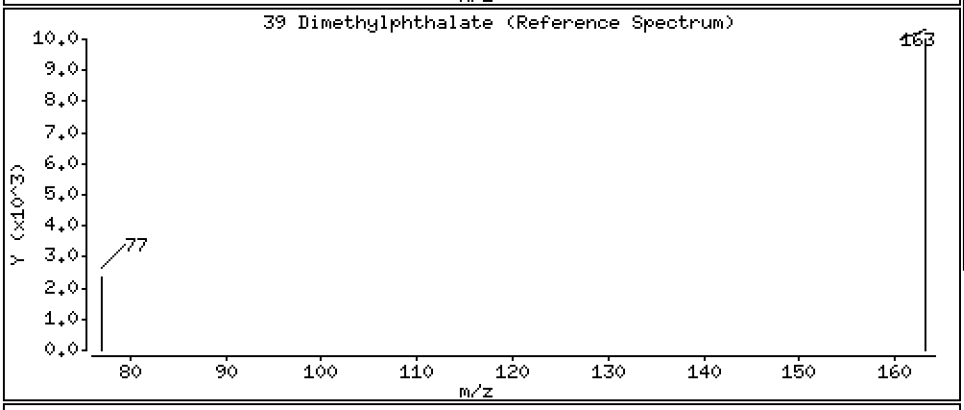
Concentration: 5.571 ug/L

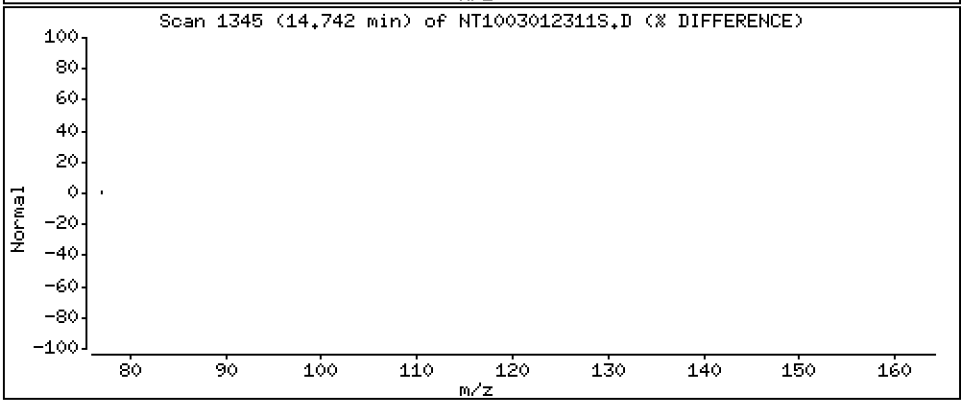












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

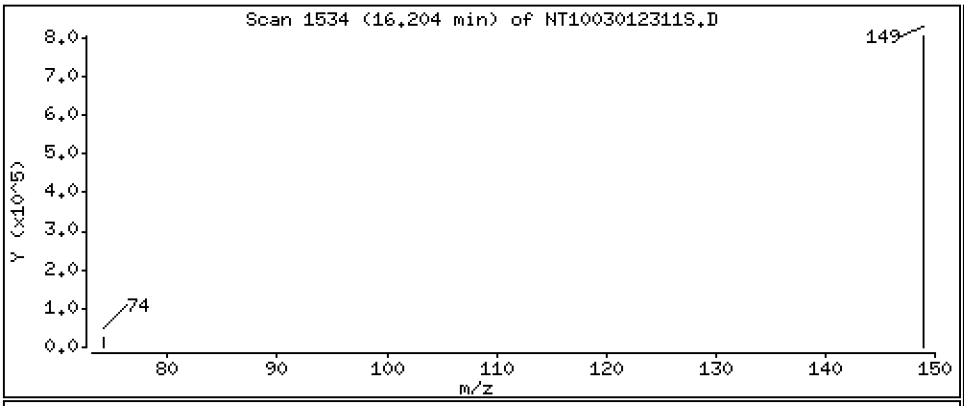
Operator: JGR

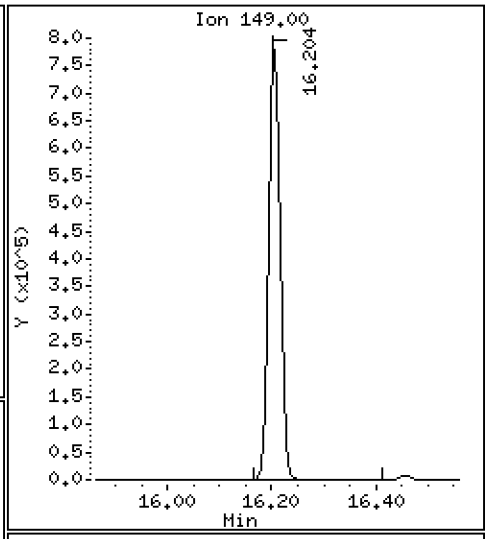
Column phase: ZB-5msi

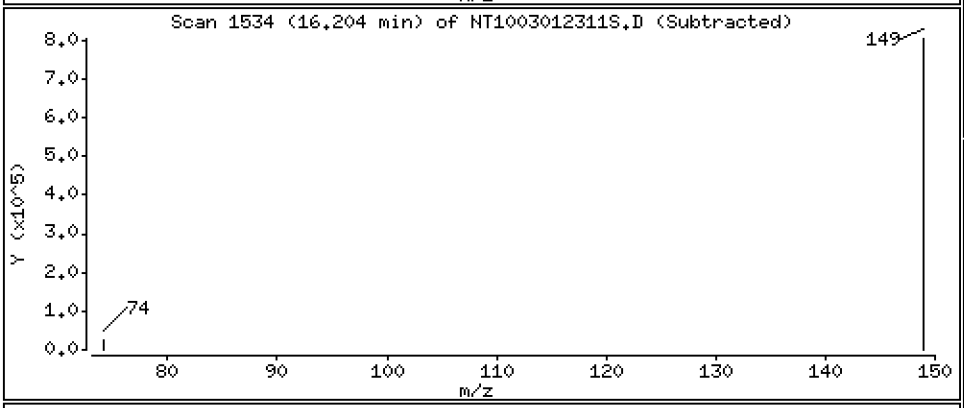
Column diameter: 0.25

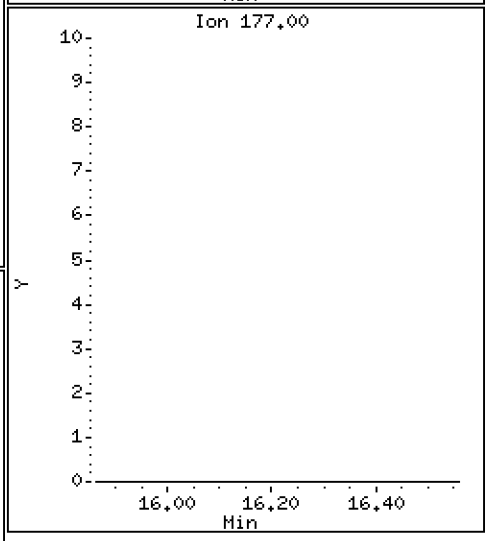
50 Diethylphthalate

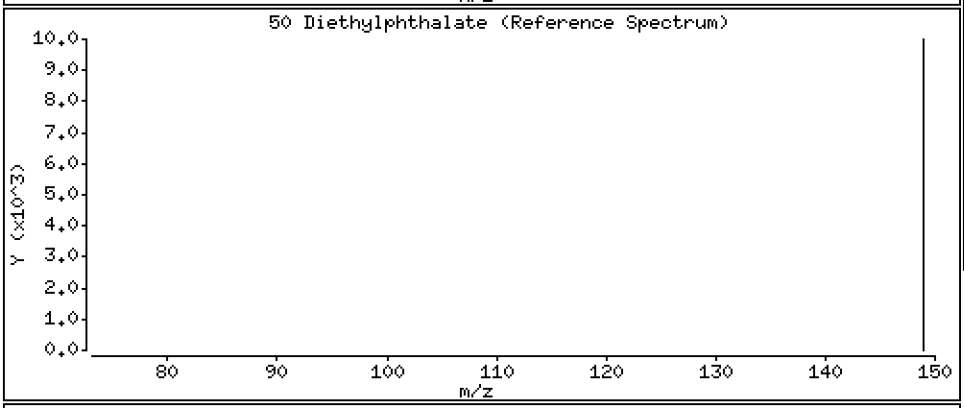
Concentration: 5.979 ug/L

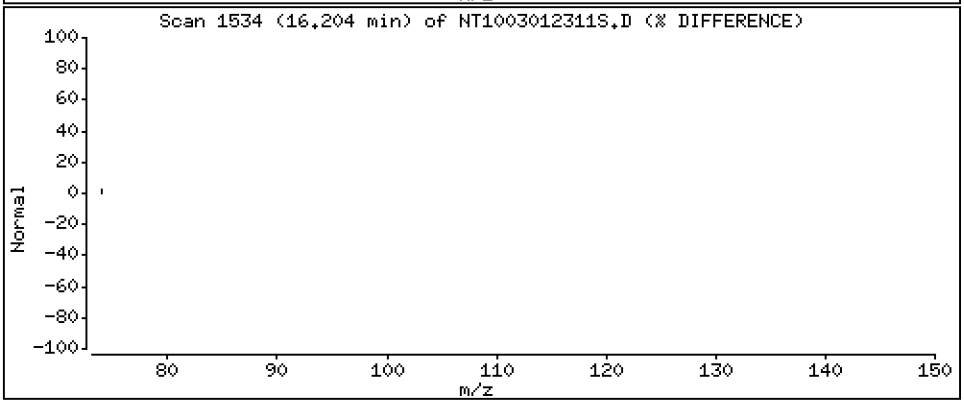












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

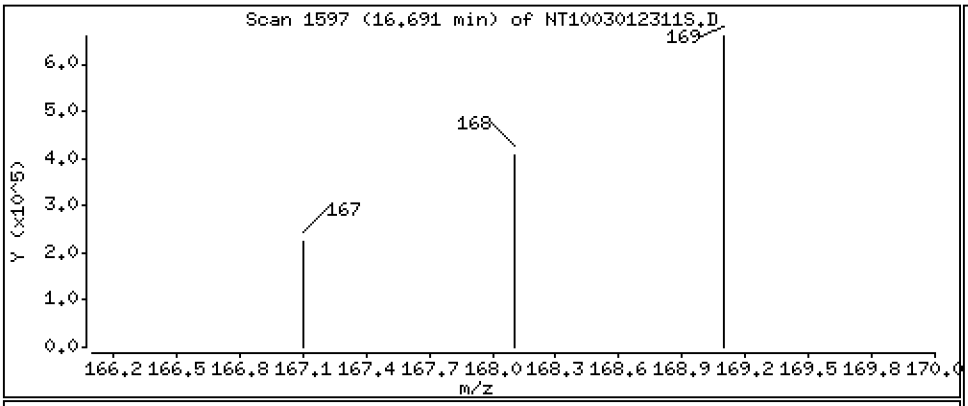
Operator: JGR

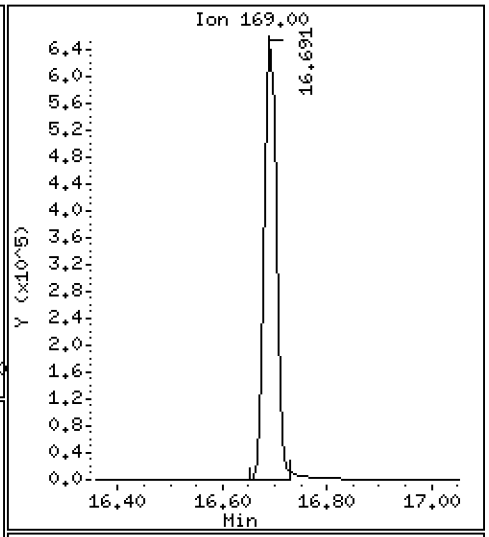
Column phase: ZB-5msi

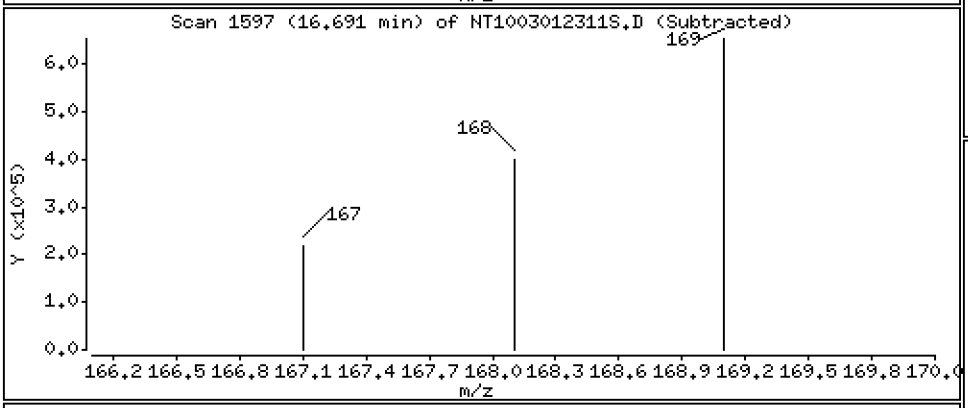
Column diameter: 0.25

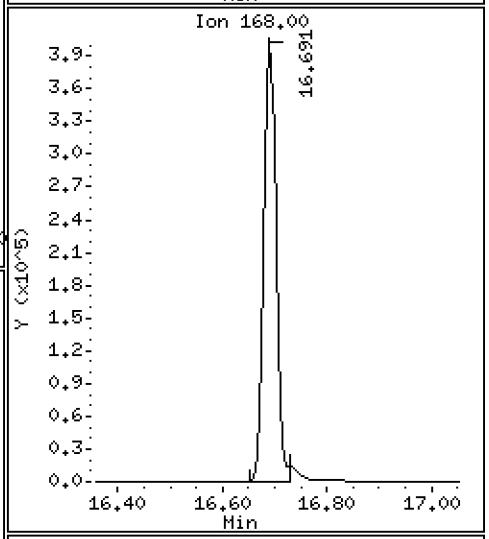
54 N-Nitrosodiphenylamine

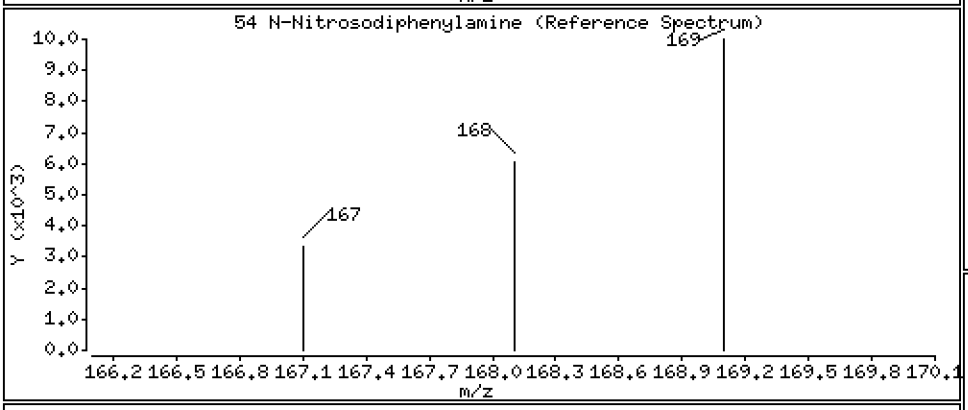
Concentration: 5.359 ug/L

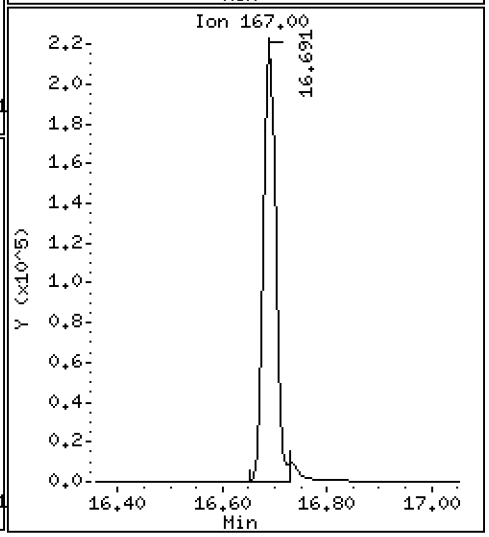


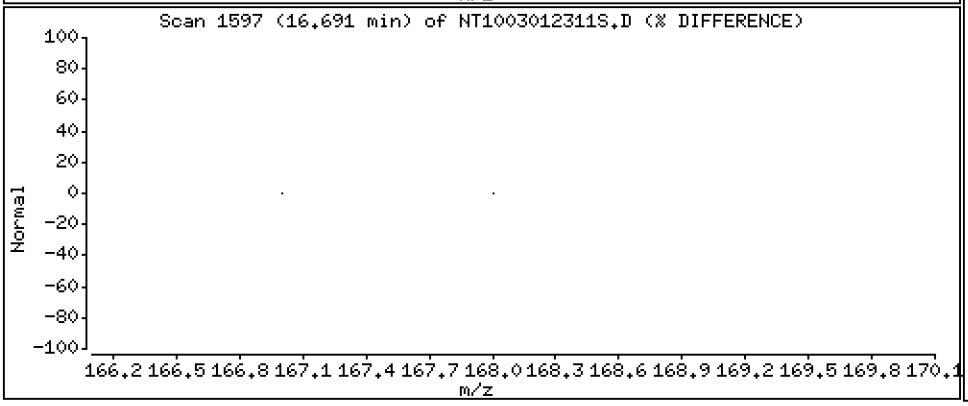












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

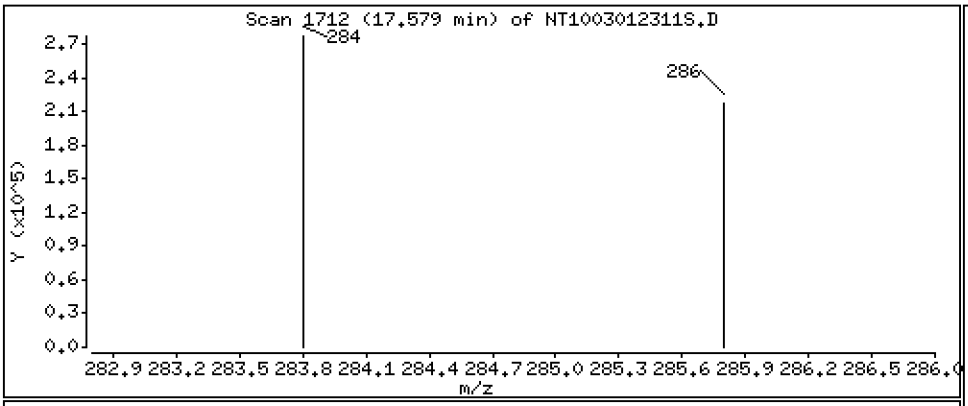
Operator: JGR

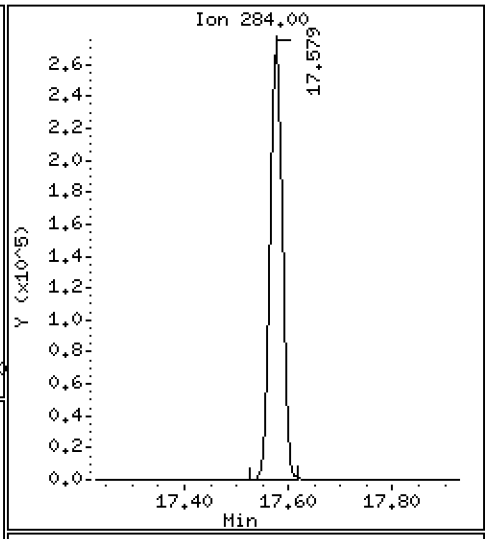
Column phase: ZB-5msi

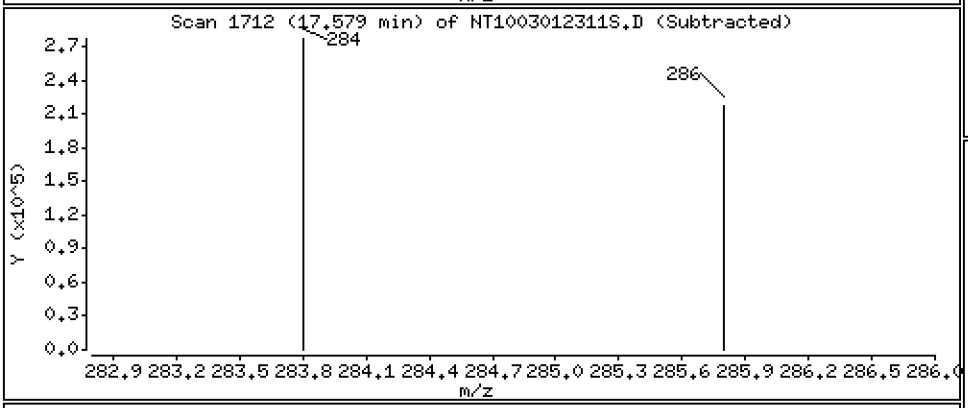
Column diameter: 0.25

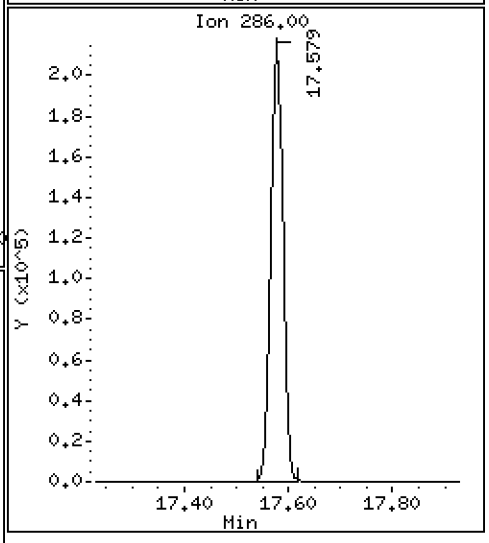
57 Hexachlorobenzene

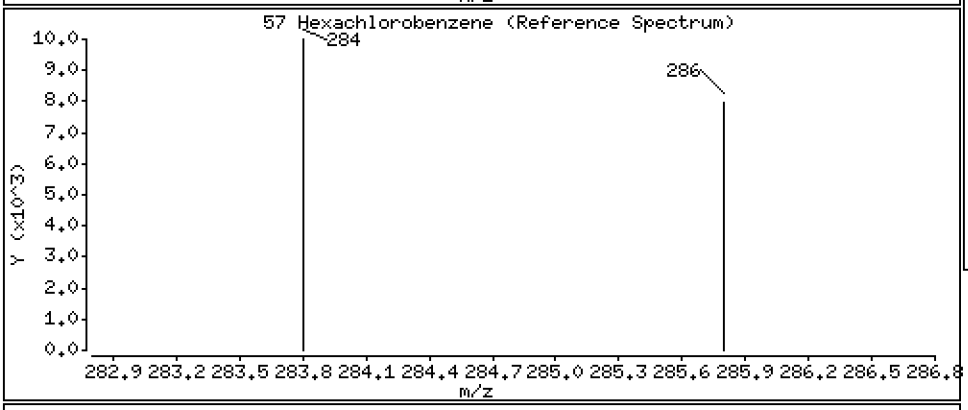
Concentration: 4.866 ug/L

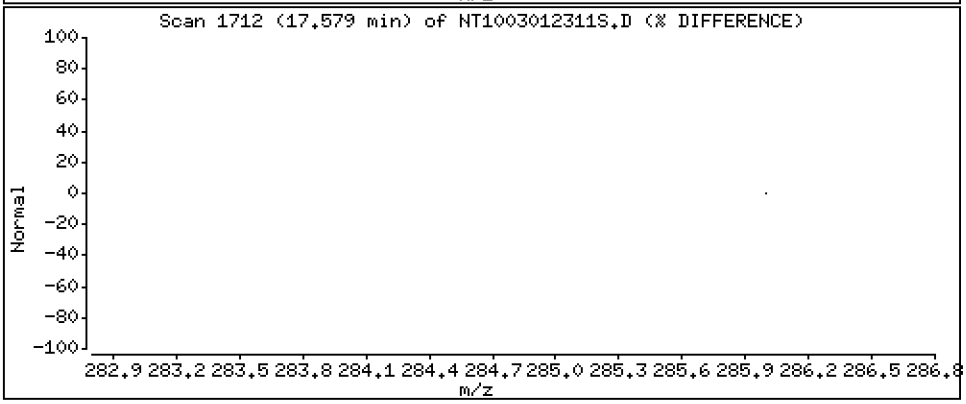












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

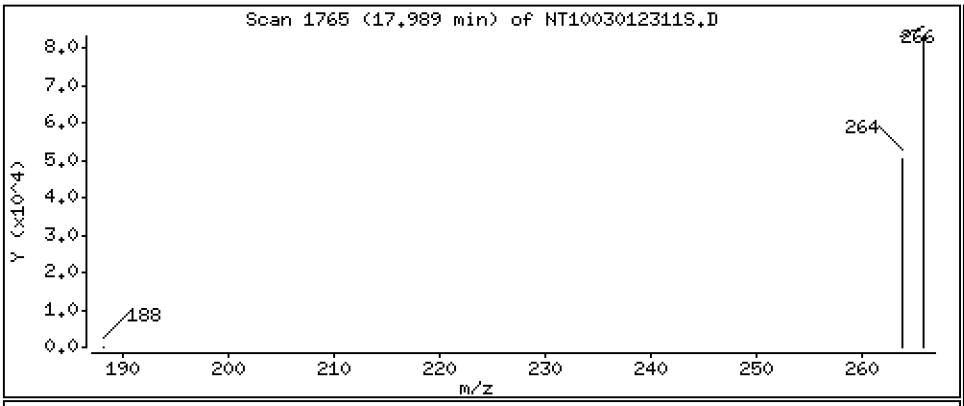
Operator: JGR

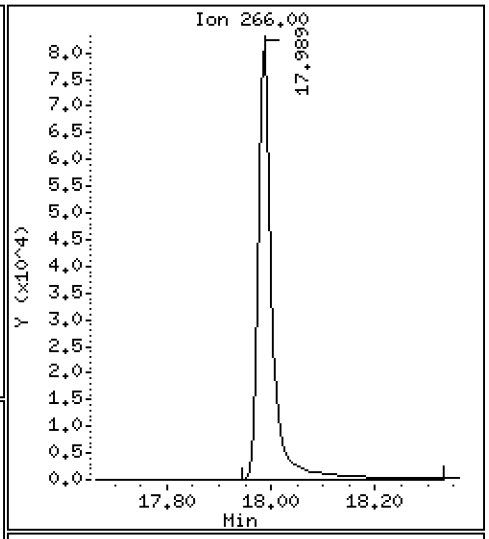
Column phase: ZB-5msi

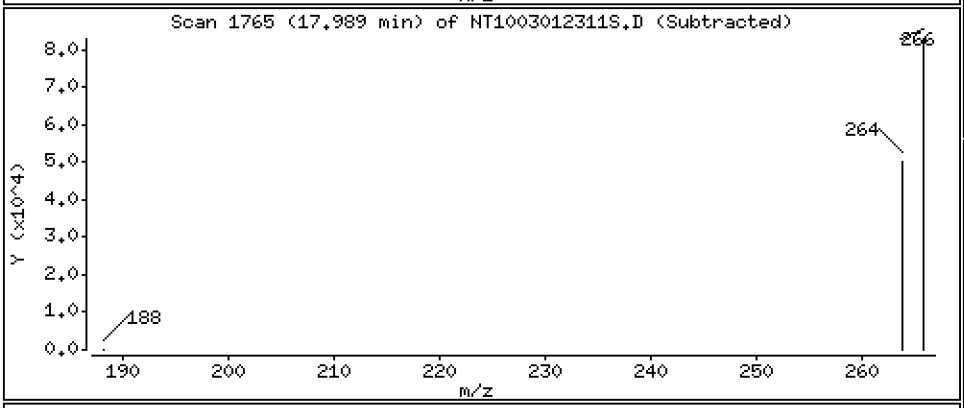
Column diameter: 0.25

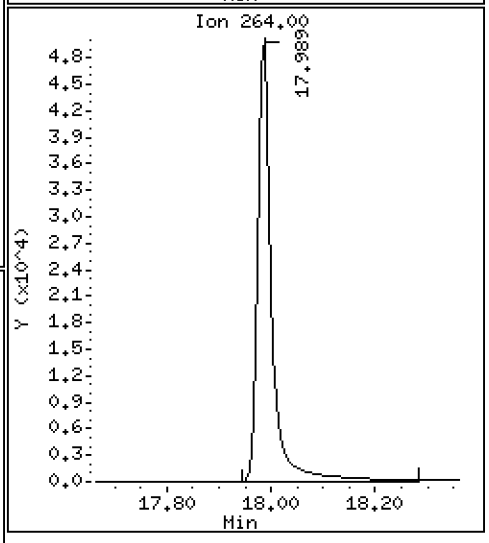
58 Pentachlorophenol

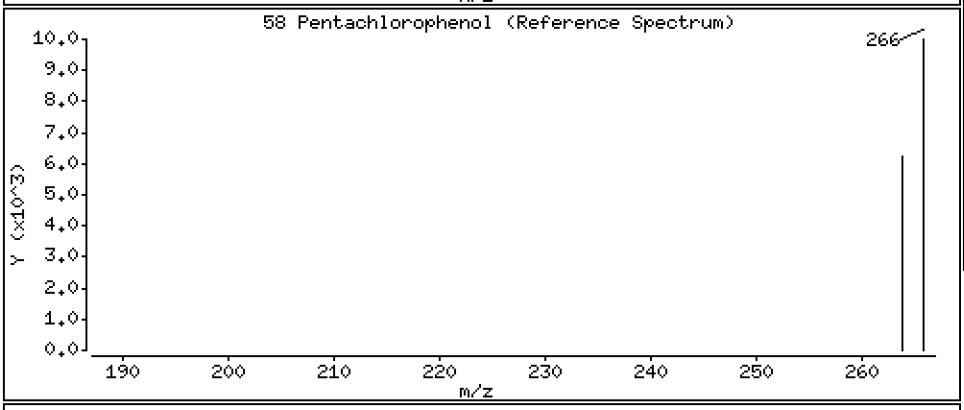
Concentration: 3.912 ug/L

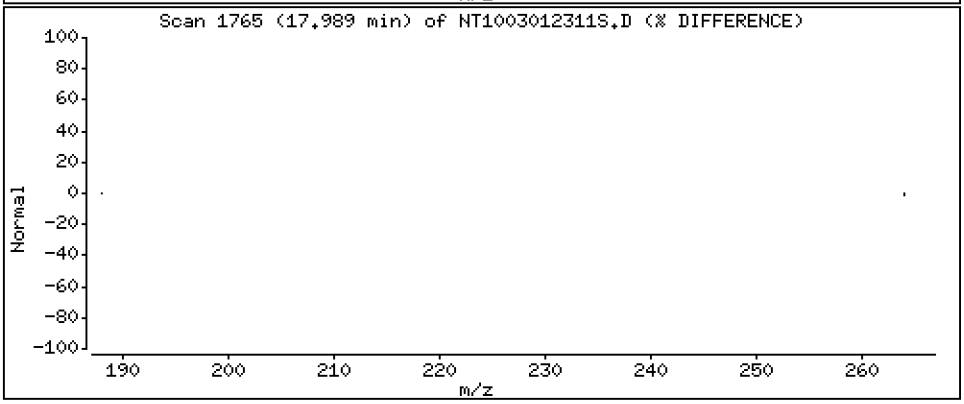












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

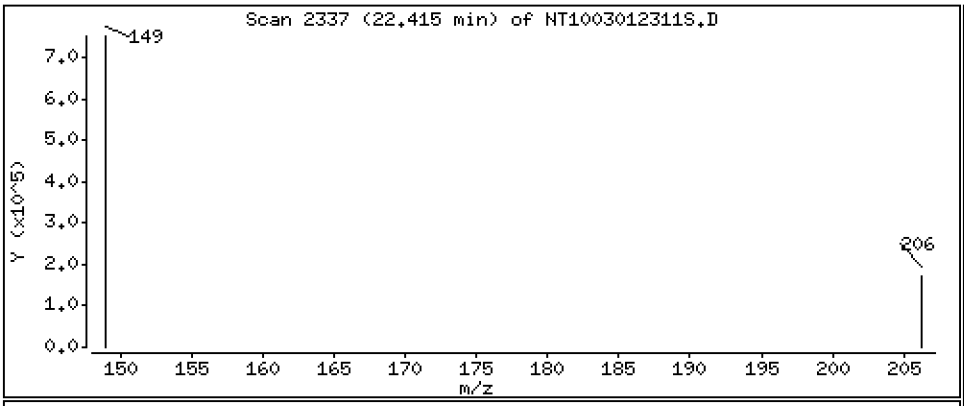
Operator: JGR

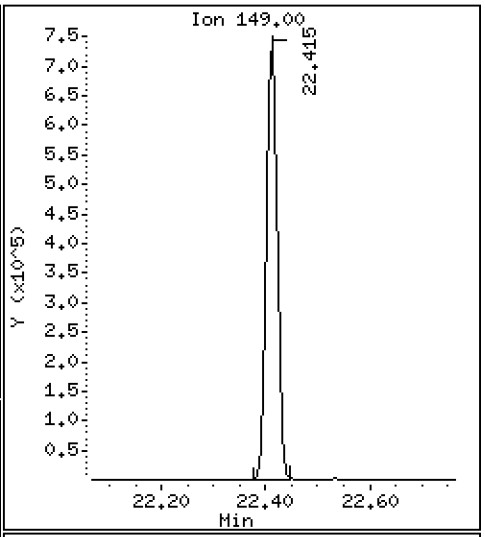
Column phase: ZB-5msi

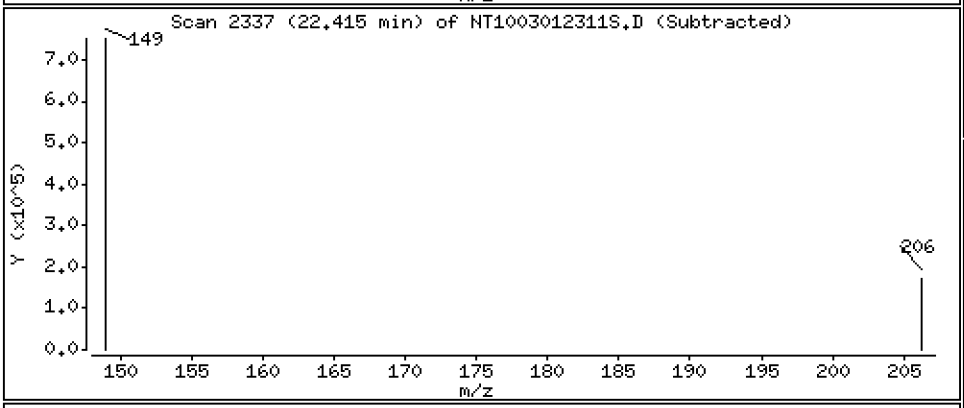
Column diameter: 0.25

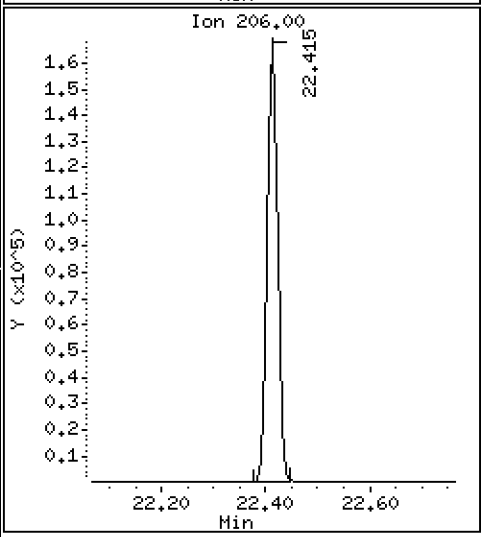
67 Butylbenzylphthalate

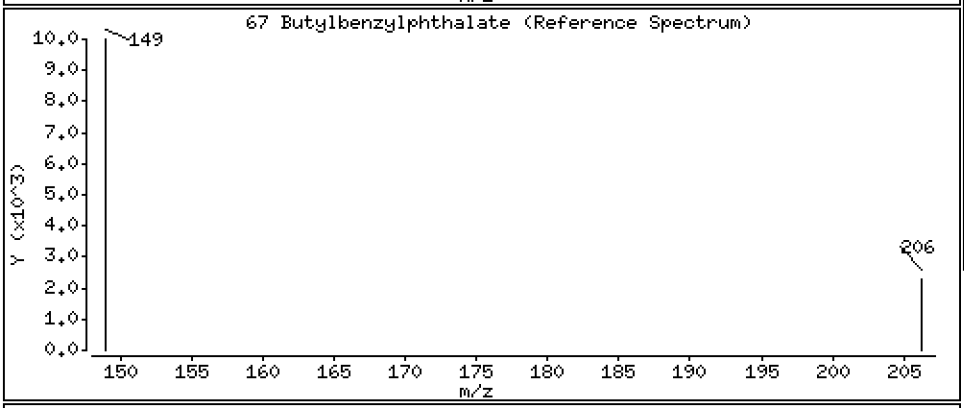
Concentration: 4.689 ug/L

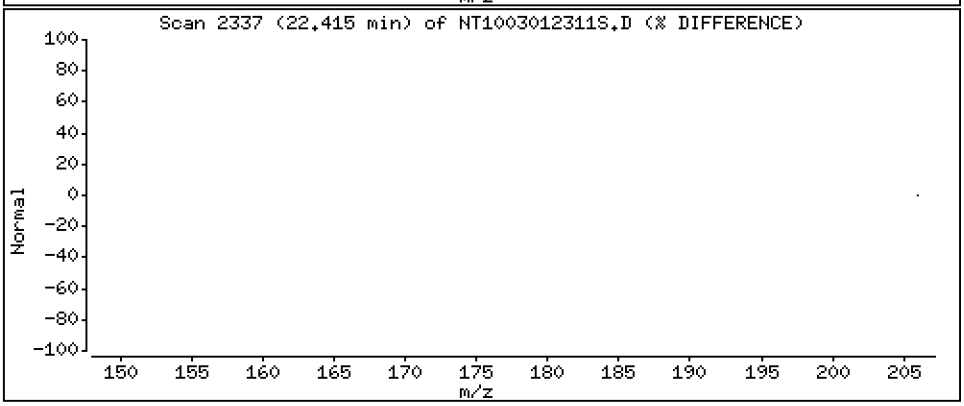












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

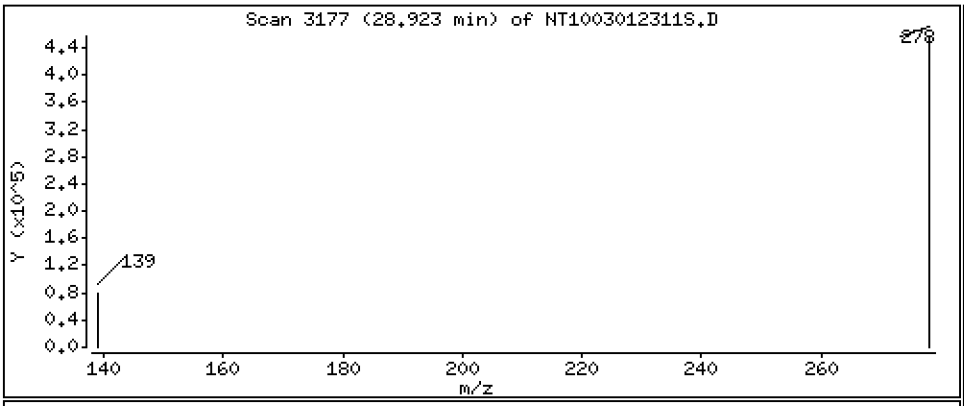
Operator: JGR

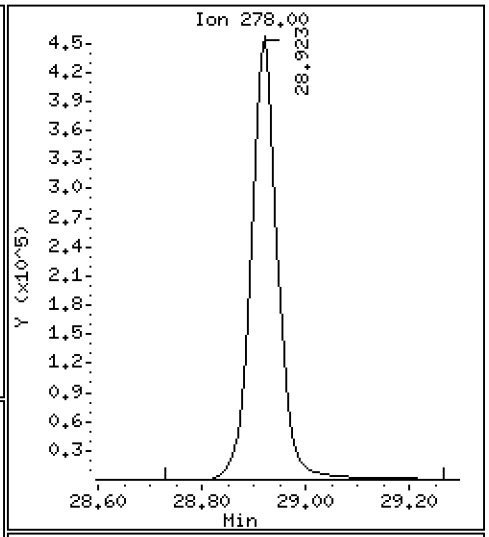
Column phase: ZB-5msi

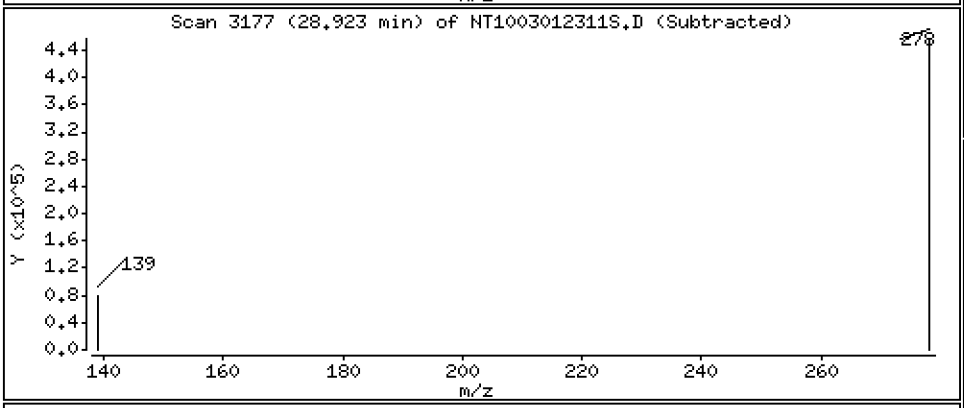
Column diameter: 0.25

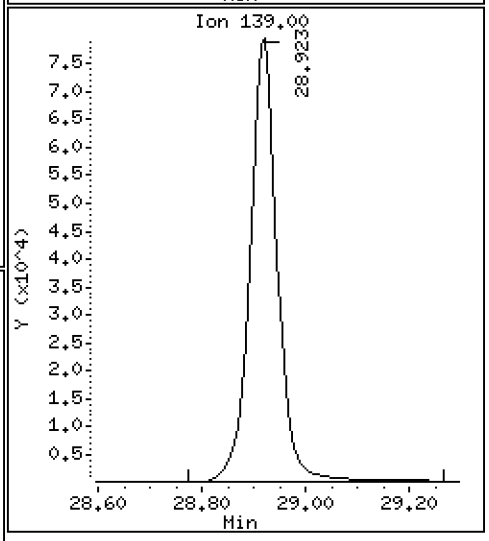
79 Dibenzo(a,h)anthracene

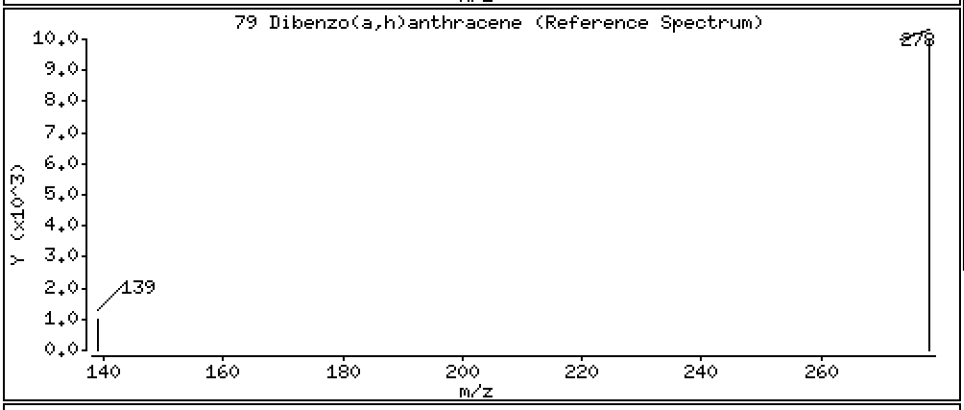
Concentration: 4.760 ug/L

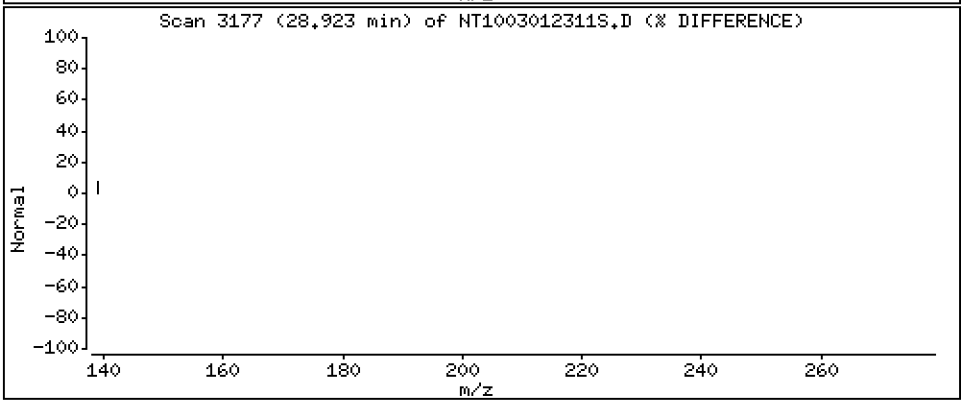












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

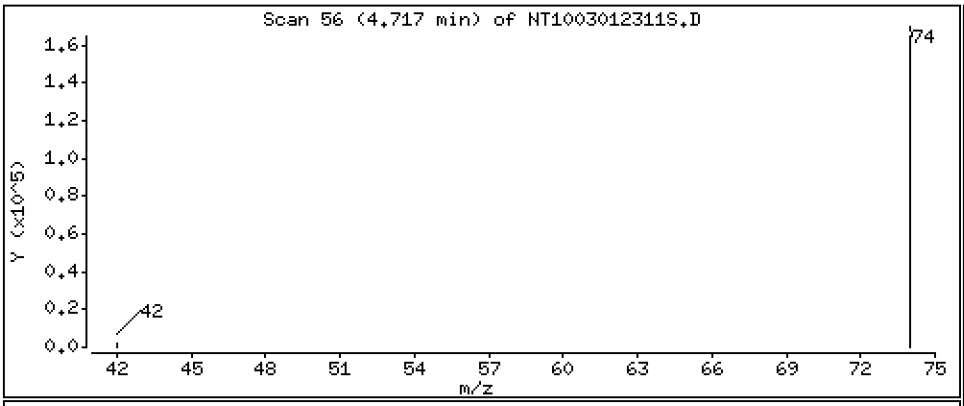
Operator: JGR

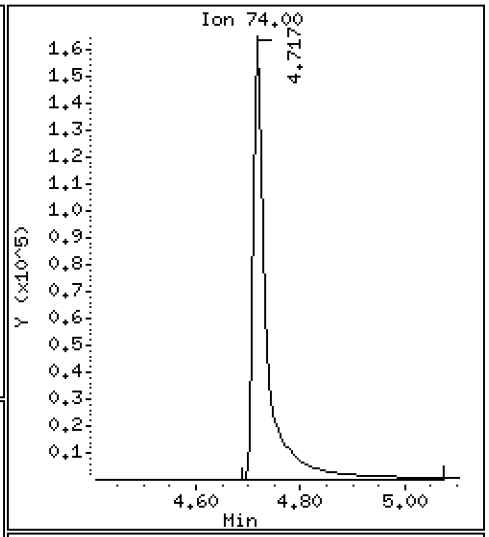
Column phase: ZB-5msi

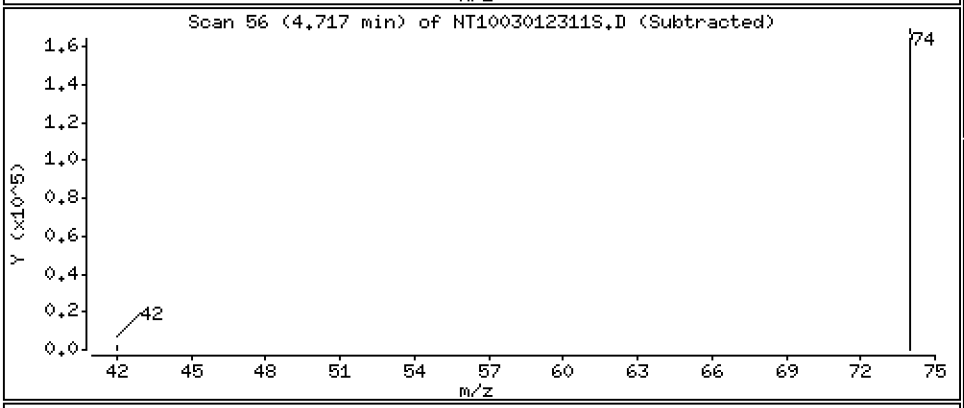
Column diameter: 0.25

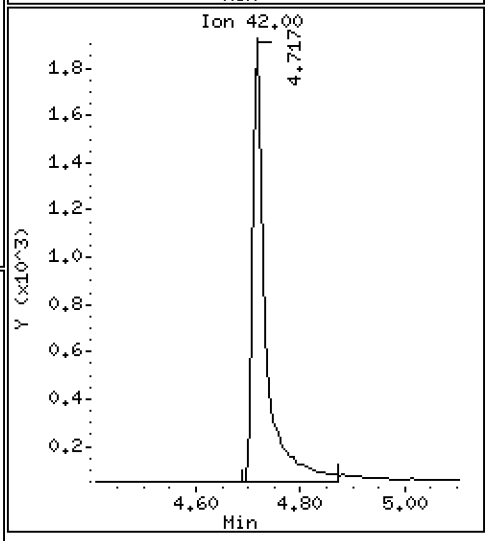
90 N-Nitrosodimethylamine

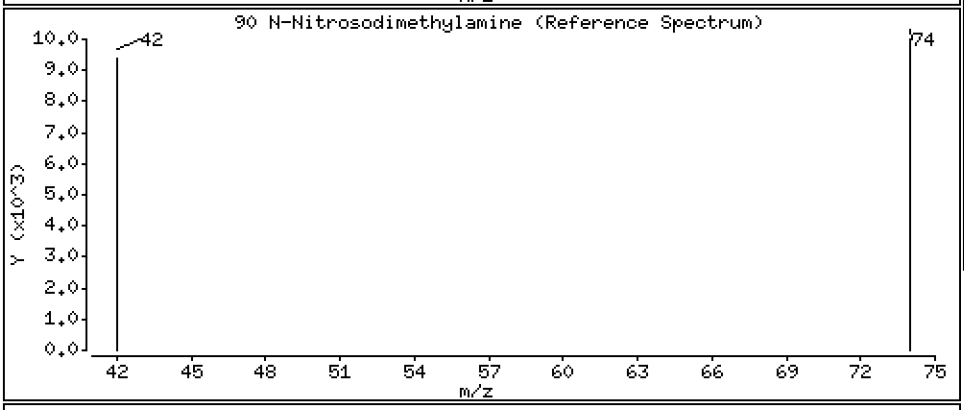
Concentration: 6.057 ug/L

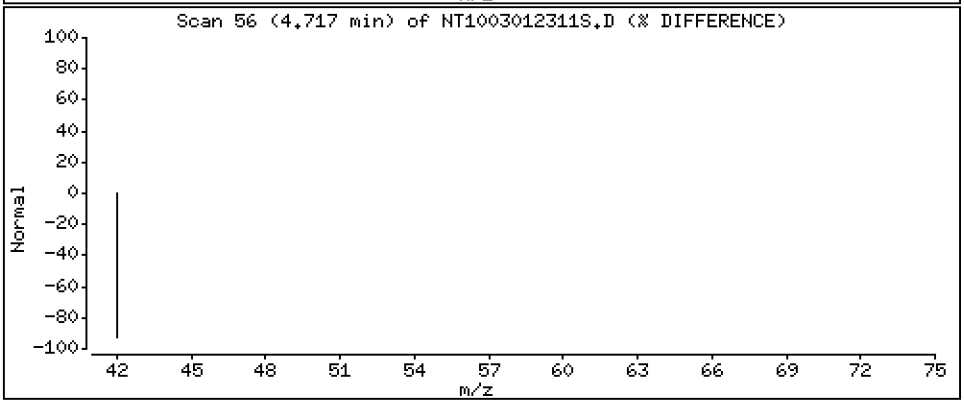












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012311S.D
Lab Smp Id: SLC0143-SCV1
Inj Date : 01-MAR-2023 21:46 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$	1 2-Fluorophenol	112	6.902	6.902	(0.746)	3267	0.03768	0.03768(R)
	3 Phenol	94	8.517	8.532	(0.921)	590047	4.50660	4.507
	7 1,3-Dichlorobenzene	146	9.143	9.136	(0.988)	572299	5.08409	5.084
*	8 1,4-Dichlorobenzene-d4	152	9.252	9.252	(1.000)	303734	4.00000	
	9 1,4-Dichlorobenzene	146	9.283	9.275	(1.003)	574537	5.24962	5.250
	11 Benzyl alcohol	79	9.469	9.508	(1.023)	388582	5.10390	5.104
	12 1,2-Dichlorobenzene	146	9.562	9.563	(1.034)	540938	5.14228	5.142
	13 2-Methylphenol	108	9.655	9.671	(1.044)	348452	4.36547	4.365
	15 4-Methylphenol	108	9.943	9.966	(1.075)	379262	4.50495	4.505
	16 N-Nitroso-di-n-propylamine	70	9.982	9.982	(1.079)	330861	5.68451	5.685
	22 2,4-Dimethylphenol	107	10.998	11.006	(0.938)	357707	3.63670	3.637
	24 Benzoic acid	105	11.099	11.007	(0.947)	380081	6.86990	6.870
	26 1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	402252	4.87012	4.870
*	27 Naphthalene-d8	136	11.724	11.723	(1.000)	1147551	4.00000	
	30 Hexachlorobutadiene	225	11.994	11.994	(1.023)	285002	4.86242	4.862
	39 Dimethylphthalate	163	14.741	14.749	(0.963)	1142178	5.57065	5.571
*	42 Acenaphthene-d10	162	15.314	15.314	(1.000)	645730	4.00000	
	50 Diethylphthalate	149	16.203	16.211	(1.058)	1156037	5.97883	5.979
	54 N-Nitrosodiphenylamine	169	16.690	16.705	(0.907)	998237	5.35897	5.359
	57 Hexachlorobenzene	284	17.578	17.579	(0.955)	424193	4.86607	4.866

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	17.989	18.012	(0.978)	155412	3.91206	3.912
*	59 Phenanthrene-d10	188	18.399	18.398	(1.000)	1151000	4.00000	
$	66 Terphenyl-d14	244	21.524	21.532	(0.919)	2846	0.02712	0.02712(R)
	67 Butylbenzylphthalate	149	22.415	22.415	(0.957)	1009961	4.68912	4.689
*	69 Chrysene-d12	240	23.421	23.421	(1.000)	1297466	4.00000	
*	77 Perylene-d12	264	26.108	26.108	(1.000)	1394899	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.922	28.946	(1.108)	1657122	4.76032	4.760
	90 N-Nitrosodimethylamine	74	4.717	4.755	(0.510)	310951	6.05685	6.057

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003012311S.D
Lab Smp Id: SLC0143-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 01-MAR-2023
Calibration Time: 18:37
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	320125	160063	640250	303734	-5.12
27 Naphthalene-d8	1136019	568010	2272038	1147551	1.02
42 Acenaphthene-d10	636993	318497	1273986	645730	1.37
59 Phenanthrene-d10	1093620	546810	2187240	1151000	5.25
69 Chrysene-d12	1000300	500150	2000600	1297466	29.71
77 Perylene-d12	1058448	529224	2116896	1394899	31.79

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012311S.D

Lab ID: SLC0143-SCV1
nt10.i, 20230301.b\SIM.b\SIMABN2.m,   01-MAR-2023 21:46

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.947	0.000	0.9467	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT8	Calibration:	GA00050
Lab File ID:	N823020607A.D	Calibration Date:	01/19/2023
Sequence:	SLB0075	Injection Date:	02/06/23
Lab Sample ID:	SLB0075-ICV1	Injection Time:	15:15
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Benzo(a)anthracene	A	2.5000	2.66	1.1238870	1.1977170		6.6	+/-20
Chrysene	A	2.5000	2.59	1.1964350	1.2401150		3.6	+/-20
Benzo(b)fluoranthene	A	2.5000	2.43	1.1648110	1.1308220		-2.9	+/-20
Benzo(k)fluoranthene	A	2.5000	2.50	1.1409370	1.1390980		-0.2	+/-20
Benzo(a)pyrene	A	2.5000	2.63	1.0250270	1.0773010		5.1	+/-20
Indeno(1,2,3-cd)pyrene	A	2.5000	2.75	1.1677520	1.2845510		10.0	+/-20
Dibenzo(a,h)anthracene	A	2.5000	2.75	1.0049440	1.1056670		10.0	+/-20
2-Methylnaphthalene-d10	A	2.5000	2.62	0.5454499	0.5707145		4.6	+/-20
Dibenzo[a,h]anthracene-d14	A	2.5000	2.42	0.6679424	0.7585108		-3.2	+/-20
Fluoranthene-d10	A	2.5000	2.58	0.8823923	0.9106613		3.2	+/-20
Naphthalene-d8	A	2.0000	2.00	22973.6700	1.0000		0.0	
Acenaphthene-d10	A	2.0000	2.00	13579.2500	1.0000		0.0	
Phenanthrene-d10	A	2.0000	2.00	25616.1700	1.0000		0.0	
Chrysene-d12	A	2.0000	2.00	22313.2500	1.0000		0.0	
Perylene-d12	A	2.0000	2.00	21012.9200	1.0000		0.0	

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020607A.D

Page 1

Date : 06-FEB-2023 15:15

Client ID:

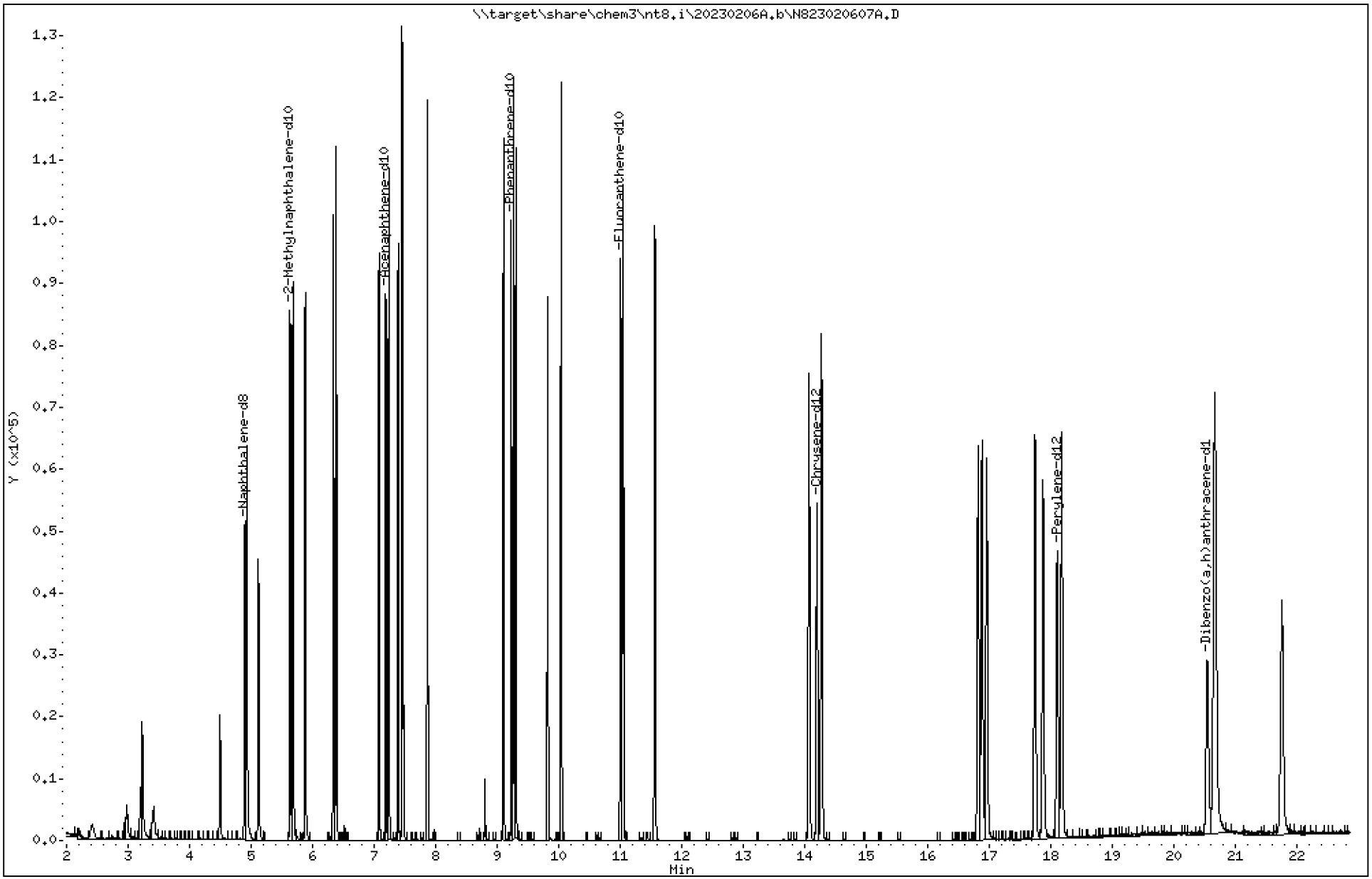
Instrument: nt8.i

Sample Info: ICV230206

Operator: JZ

Column phase: Rxi-17sil

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020607A.D
Lab Smp Id: SLB0075-ICV1
Inj Date : 06-FEB-2023 15:15
Operator : JZ   Inst ID: nt8.i
Smp Info : ICV230206
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
Meth Date : 07-Feb-2023 12:57 Jianqing   Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46   Cal File: N823011908.D
Als bottle: 7   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	1 Naphthalene-d8	136	4.900	4.900	(1.000)	44336	2.00000	
	2 Naphthalene	128	4.928	4.928	(1.006)	51993	2.50000	2.522
$	3 2-Methylnaphthalene-d10	152	5.634	5.634	(1.150)	31629	2.50000	2.616
	4 2-Methylnaphthalene	141	5.681	5.681	(1.159)	29535	2.50000	2.605
	5 1-methylnaphthalene	141	5.880	5.880	(1.200)	29856	2.50000	2.594
	7 Biphenyl	154	6.339	6.339	(0.882)	43705	2.50000	2.536
	8 2,6-Dimethylnaphthalene	156	6.386	6.386	(0.888)	31894	2.50000	2.614
	9 Acenaphthylene	152	7.082	7.082	(0.985)	53491	2.50000	2.711
*	10 Acenaphthene-d10	164	7.189	7.189	(1.000)	26127	2.00000	
	11 Acenaphthene	153	7.240	7.240	(1.007)	33973	2.50000	2.570
	12 Dibenzofuran	168	7.392	7.392	(1.028)	49788	2.50000	2.480
	13 1,6,7-Trimethylnaphthalene	170	7.455	7.455	(1.037)	33062	2.50000	2.611
	14 Fluorene	166	7.869	7.869	(1.095)	40694	2.50000	2.610
	18 Dibenzothiophene	184	9.105	9.105	(0.986)	53838	2.50000	2.569
*	15 Phenanthrene-d10	188	9.232	9.232	(1.000)	47424	2.00000	
	16 Phenanthrene	178	9.267	9.267	(1.004)	57495	2.50000	2.482
	17 Anthracene	178	9.308	9.308	(1.008)	54725	2.50000	2.600
	19 Carbazole	167	9.823	9.823	(1.064)	48982	2.50000	2.539
	20 1-Methylphenanthrene	192	10.044	10.044	(1.088)	42941	2.50000	2.572
	22 Fluoranthene	202	11.050	11.050	(1.197)	62701	2.50000	2.487
$	21 Fluoranthene-d10	212	11.009	11.009	(1.192)	53984	2.50000	2.580
	23 Pyrene	202	11.569	11.569	(0.815)	63466	2.50000	2.782
	24 Benzo(a)anthracene	228	14.070	14.070	(0.991)	55086	2.50000	2.664
*	25 Chrysene-d12	240	14.202	14.202	(1.000)	36794	2.00000	
	27 Chrysene	228	14.275	14.275	(1.005)	57036	2.50000	2.591
	28 Benzo(b)fluoranthene	252	16.824	16.824	(0.929)	51786	2.50000	2.427
	29 Benzo(k)fluoranthene	252	16.887	16.887	(0.933)	52165	2.50000	2.496
	30 Benzo(j)fluoranthene	252	16.963	16.963	(0.937)	47288	2.50000	2.513
	31 Total Benzofluoranthenes	252	16.824	16.824	(0.929)	152122	7.50000	7.528(M)
	34 Benzo(e)pyrene	252	17.750	17.750	(0.980)	51675	2.50000	2.429
	32 Benzo(a)pyrene	252	17.877	17.877	(0.987)	49335	2.50000	2.627
*	33 Perylene-d12	264	18.107	18.107	(1.000)	36636	2.00000	
	35 Perylene	252	18.183	18.183	(1.004)	51027	2.50000	2.532

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.549	20.549	(1.135)	34736	2.50000	2.420
37 Indeno(1,2,3-cd)pyrene	276	20.684	20.684	(1.142)	58826	2.50000	2.750
38 Dibenzo(a,h)anthracene	278	20.666	20.666	(1.141)	50634	2.50000	2.751
39 Benzo(g,h,i)perylene	276	21.763	21.763	(1.202)	50628	2.50000	2.612

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823020607A.D
Lab Smp Id: SLB0075-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 06-FEB-2023
Calibration Time: 11:54
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	44336	-0.82
10 Acenaphthene-d10	26411	13206	52822	26127	-1.08
15 Phenanthrene-d10	49210	24605	98420	47424	-3.63
25 Chrysene-d12	42994	21497	85988	36794	-14.42
33 Perylene-d12	40520	20260	81040	36636	-9.59

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.90	4.40	5.40	4.90	0.00
10 Acenaphthene-d10	7.19	6.69	7.69	7.19	0.00
15 Phenanthrene-d10	9.23	8.73	9.73	9.23	0.00
25 Chrysene-d12	14.20	13.70	14.70	14.20	0.00
33 Perylene-d12	18.11	17.61	18.61	18.11	0.00

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

REVIEW SUMMARY FOR FILE - N823020607A.D

Lab ID: SLB0075-ICV1
nt8.i, 20230206A.b\FSIMPNA230119.m,   06-FEB-2023 15:15

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

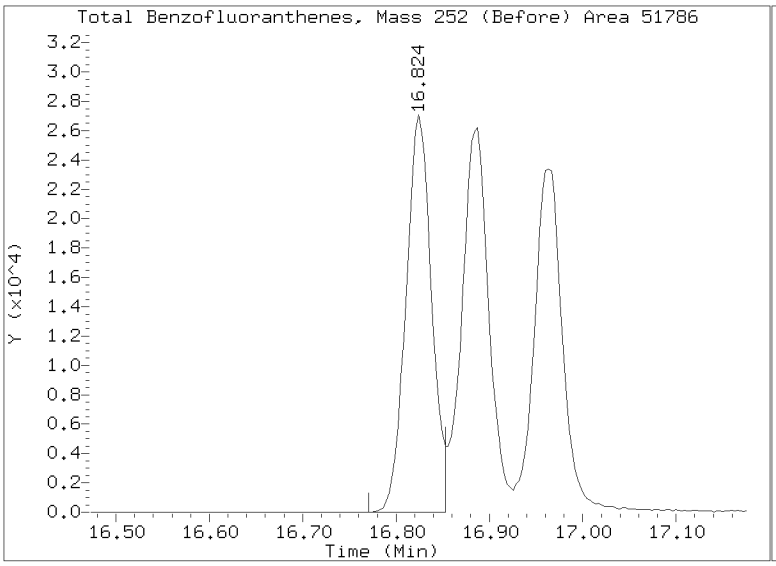
No RRT check performed

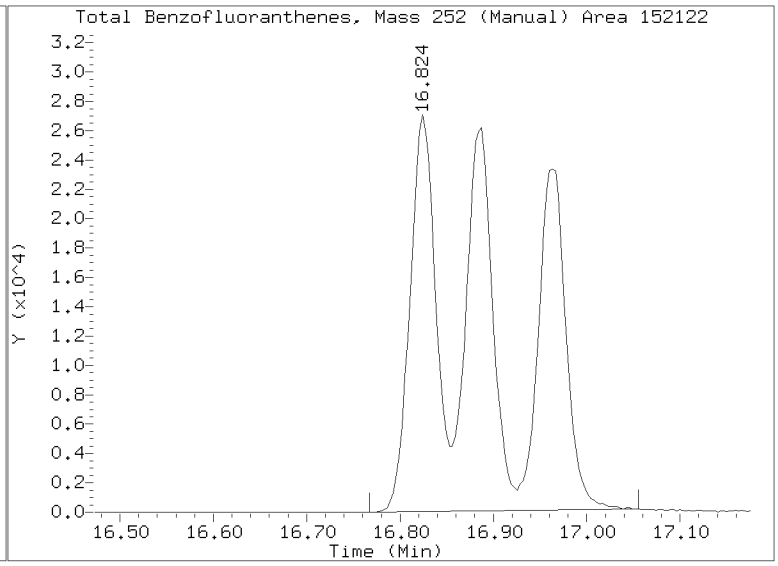
On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020607A.D
Injection Date: 06-FEB-2023 15:15
Lab ID:SLB0075-ICV1 Client ID:
Report Date: 02/07/2023 12:57





Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230206A.b

Instrument: nt8.i Date: 06-FEB-2023 Method: 20230206A.b\FSIMPNA230119.m

INITIAL CAL: 19-JAN-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: N823020607A.D 06-FEB-2023 15:15

Compound	%D
NO Q-FLAGS	

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00032
Lab File ID:	NT1003032303S.D	Calibration Date:	03/01/2023
Sequence:	SLC0250	Injection Date:	03/03/23
Lab Sample ID:	SLC0250-ICV1	Injection Time:	19:05
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
1,4-Dichlorobenzene	A	1.0000	0.9	1.4413080	1.3592820		-5.7	+/-20	
1,2-Dichlorobenzene	A	1.0000	1.0	1.3853460	1.3238190		-4.4	+/-20	
Benzyl Alcohol	A	1.0000	0.9	0.7492523	0.8159068		-13.6	+/-20	
Benzoic acid	A	4.0000	1.3	0.1431163	0.0587772		-68.6	+/-20	*
2,4-Dimethylphenol	A	2.0000	2.0	0.2957717	0.3349623		-1.9	+/-20	
1,2,4-Trichlorobenzene	A	1.0000	1.1	0.2879030	0.3096523		7.6	+/-20	
N-Nitrosodiphenylamine	A	1.0000	0.9	0.6473471	0.5812890		-10.2	+/-20	
Pentachlorophenol	A	2.0000	0.5	0.0950913	0.0307888		-76.9	+/-20	*
2-Fluorophenol	A	1.5000	1.75	1.1419780	1.3309540		16.5	+/-20	
p-Terphenyl-d14	A	1.0000	1.34	0.3234672	0.4325883		33.7	+/-20	*
1,4-Dichlorobenzene-d4	A	4.0000	4.0	84099.7200	1.0000		0.0		
Naphthalene-d8	A	4.0000	4.0	296848.2000	1.0000		0.0		
Acenaphthene-d10	A	4.0000	4.0	160957.8000	1.0000		0.0		
Phenanthrene-d10	A	4.0000	4.0	276014.3000	1.0000		0.0		
Chrysene-d12	A	4.0000	4.0	258259.1000	1.0000		0.0		
Perylene-d12	A	4.0000	4.0	271750.8000	1.0000		0.0		

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323033S.D

Date : 03-MAR-2023 19:05

Client ID:

Instrument: nt10.i

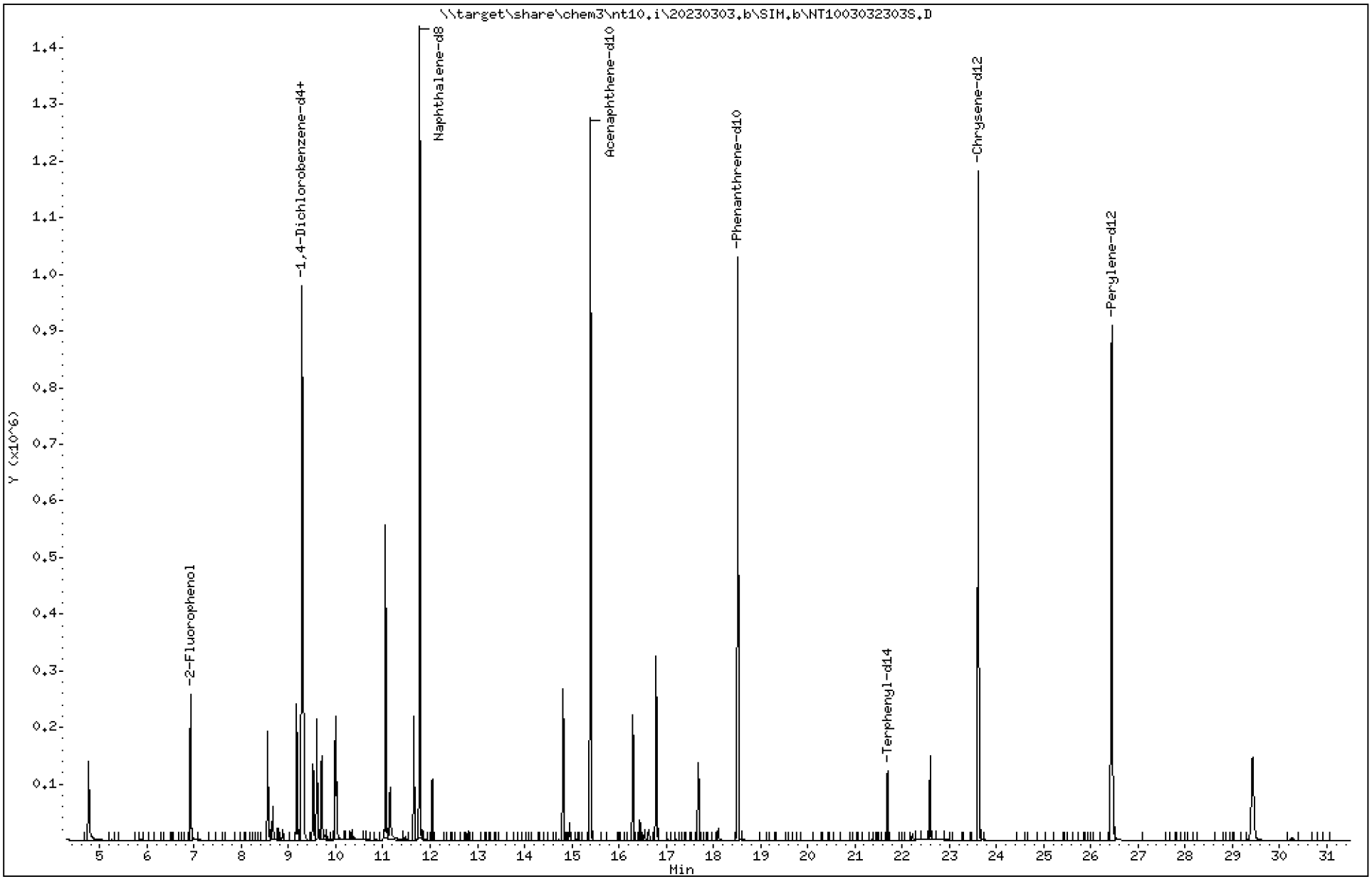
Sample Info: SEQ-ICVSIM

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032303S.D
Lab Smp Id: SLC0250-ICV1
Inj Date : 03-MAR-2023 19:05 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-ICVSIM
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 10:19 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	6.918	6.918	(0.745)	300617	1.50000	1.748
3	Phenol	94	8.556	8.556	(0.922)	246412	1.00000	0.9670
7	1,3-Dichlorobenzene	146	9.174	9.174	(0.988)	213749	1.00000	0.9576
* 8	1,4-Dichlorobenzene-d4	152	9.283	9.283	(1.000)	602309	4.00000	
9	1,4-Dichlorobenzene	146	9.314	9.314	(1.003)	204677	1.00000	0.9431
11	Benzyl alcohol	79	9.516	9.516	(1.025)	122857	1.00000	0.8645
12	1,2-Dichlorobenzene	146	9.601	9.601	(1.034)	199337	1.00000	0.9556
13	2-Methylphenol	108	9.702	9.702	(1.045)	157875	1.00000	1.027
15	4-Methylphenol	108	9.989	9.989	(1.076)	164556	1.00000	1.027
16	N-Nitroso-di-n-propylamine	70	10.020	10.020	(1.079)	115140	1.00000	1.016
22	2,4-Dimethylphenol	107	11.057	11.057	(0.939)	351995	2.00000	1.963
24	Benzoic acid	105	11.150	11.150	(0.947)	123532	4.00000	1.256(H)
26	1,2,4-Trichlorobenzene	180	11.654	11.654	(0.990)	162699	1.00000	1.076
* 27	Naphthalene-d8	136	11.778	11.778	(1.000)	2101699	4.00000	
30	Hexachlorobutadiene	225	12.048	12.048	(1.023)	100472	1.00000	0.9359
39	Dimethylphthalate	163	14.819	14.819	(0.963)	295942	1.00000	0.9293
* 42	Acenaphthene-d10	162	15.391	15.391	(1.000)	1002910	4.00000	
50	Diethylphthalate	149	16.296	16.296	(1.059)	304053	1.00000	1.012
54	N-Nitrosodiphenylamine	169	16.790	16.790	(0.906)	251707	1.00000	0.8980
57	Hexachlorobenzene	284	17.679	17.679	(0.954)	130680	1.00000	0.9962

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	
58	Pentachlorophenol	266	18.105	18.105	(0.977)	26664	2.00000	0.4625	
* 59	Phenanthrene-d10	188	18.522	18.522	(1.000)	1732061	4.00000		
$ 66	Terphenyl-d14	244	21.695	21.695	(0.919)	152497	1.00000	1.337	
67	Butylbenzylphthalate	149	22.593	22.593	(0.957)	159294	1.00000	0.6706	
* 69	Chrysene-d12	240	23.615	23.615	(1.000)	1410089	4.00000		
* 77	Perylene-d12	264	26.449	26.449	(1.000)	1732981	4.00000		(M)
79	Dibenzo(a,h)anthracene	278	29.435	29.435	(1.000)	478248	1.00000	1.172	(M)
90	N-Nitrosodimethylamine	74	4.755	4.755	(0.512)	254457	2.00000	2.499	

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032303S.D
Lab Smp Id: SLC0250-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 03-MAR-2023
Calibration Time: 06:14
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	602309	301155	1204618	602309	0.00
27 Naphthalene-d8	2101699	1050850	4203398	2101699	0.00
42 Acenaphthene-d10	1002910	501455	2005820	1002910	0.00
59 Phenanthrene-d10	1732061	866031	3464122	1732061	0.00
69 Chrysene-d12	1410089	705045	2820178	1410089	0.00
77 Perylene-d12	1732981	866491	3465962	1732981	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	0.00
59 Phenanthrene-d10	18.52	18.02	19.02	18.52	0.00
69 Chrysene-d12	23.62	23.12	24.12	23.62	0.00
77 Perylene-d12	26.45	25.95	26.95	26.45	0.00

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

REVIEW SUMMARY FOR FILE - NT1003032303S.D

Lab ID: SLC0250-ICV1
nt10.i, 20230303.b\SIM.b\SIMABN2.m,   03-MAR-2023 19:05

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

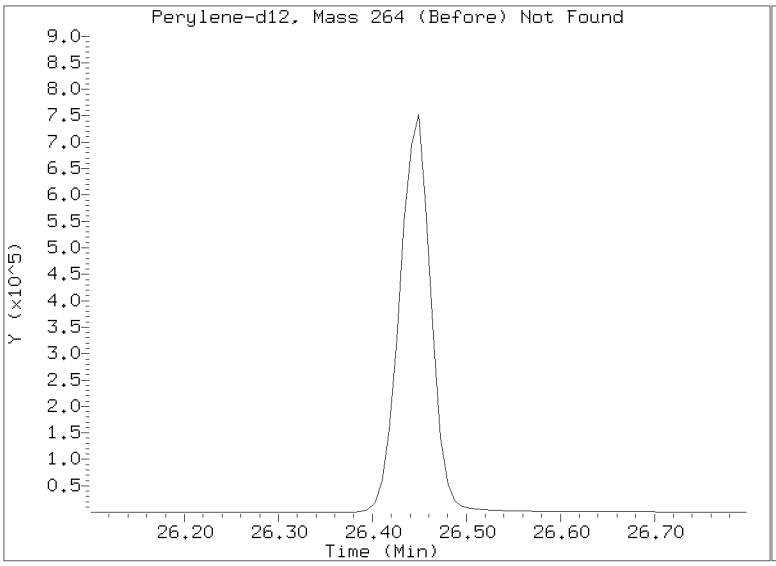
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

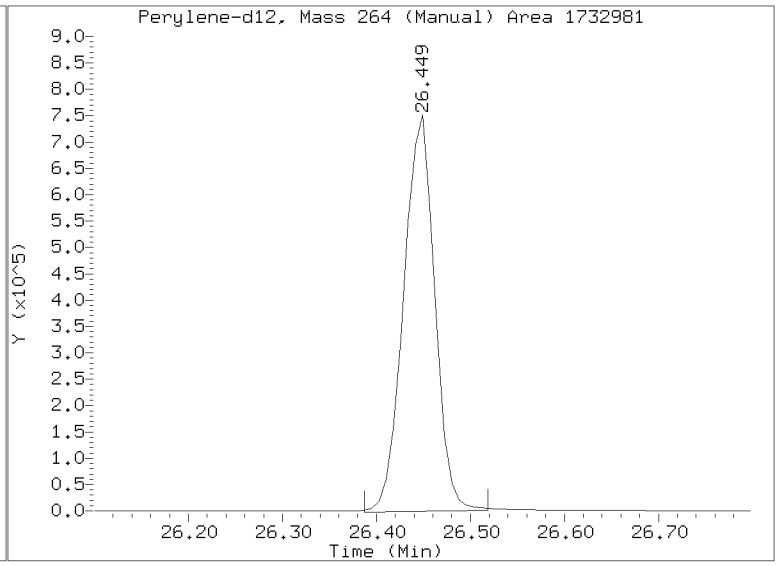
Exception: 1,2,4-Trichlorobenzene 0.0010

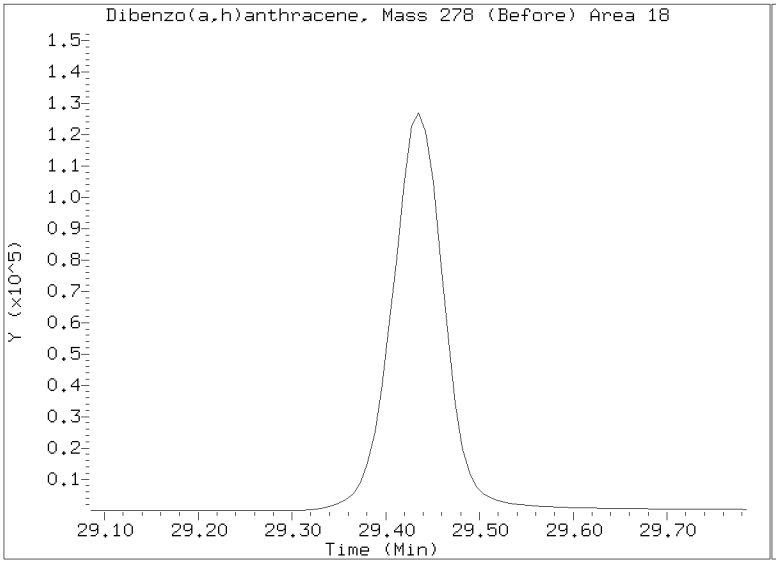
* Only compounds listed in the work order have been verified by the analyst *

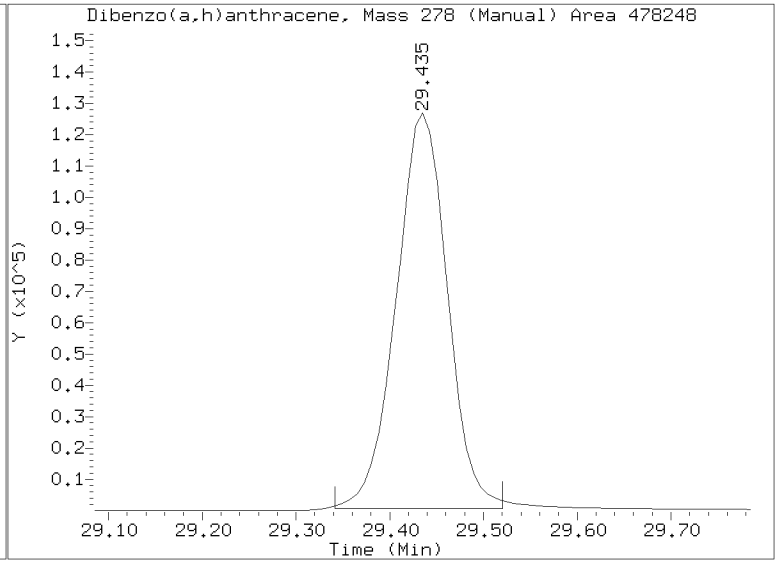
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230303.b/SIM.b/NT1003032303S.D
Injection Date: 03-MAR-2023 19:05
Lab ID:SLC0250-ICV1 Client ID:
Report Date: 03/17/2023 10:19









Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230303.b\SIM.b

Instrument: nt10.i Date: 03-MAR-2023 Method: SIM.b\SIMABN2.m

INITIAL CAL: 01-MAR-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1003032303S.D 03-MAR-2023 19:05

Compound	%D
Benzoic acid	-68.6
N-Nitrosodimethylamine	25.0
Pentachlorophenol	-76.9
Butylbenzylphthalate	-32.9
Terphenyl-d14	33.7

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00032
Lab File ID:	NT1003032315ICVS.D	Calibration Date:	03/01/2023
Sequence:	SLC0253	Injection Date:	03/04/23
Lab Sample ID:	SLC0253-ICV1	Injection Time:	02:40
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
1,4-Dichlorobenzene	A	1.0000	0.9	1.4413080	1.3402190		-7.0	+/-20	
1,2-Dichlorobenzene	A	1.0000	0.9	1.3853460	1.3121640		-5.3	+/-20	
Benzyl Alcohol	A	1.0000	1.0	0.7492523	0.9001021		-4.7	+/-20	
Benzoic acid	A	4.0000	0.5	0.1431163	0.0230636		-87.6	+/-20	*
2,4-Dimethylphenol	A	2.0000	2.0	0.2957717	0.3445517		1.0	+/-20	
1,2,4-Trichlorobenzene	A	1.0000	1.1	0.2879030	0.3151024		9.4	+/-20	
N-Nitrosodiphenylamine	A	1.0000	0.9	0.6473471	0.5803135		-10.4	+/-20	
Pentachlorophenol	A	2.0000	0.2	0.0950913	0.0155616		-88.3	+/-20	*
2-Fluorophenol	A	1.5000	1.72	1.1419780	1.3101150		14.7	+/-20	
p-Terphenyl-d14	A	1.0000	1.48	0.3234672	0.4774531		47.6	+/-20	*
1,4-Dichlorobenzene-d4	A	4.0000	4.0	84099.7200	1.0000		0.0		
Naphthalene-d8	A	4.0000	4.0	296848.2000	1.0000		0.0		
Acenaphthene-d10	A	4.0000	4.0	160957.8000	1.0000		0.0		
Phenanthrene-d10	A	4.0000	4.0	276014.3000	1.0000		0.0		
Chrysene-d12	A	4.0000	4.0	258259.1000	1.0000		0.0		
Perylene-d12	A	4.0000	4.0	271750.8000	1.0000		0.0		

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT1003032315ICVS.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

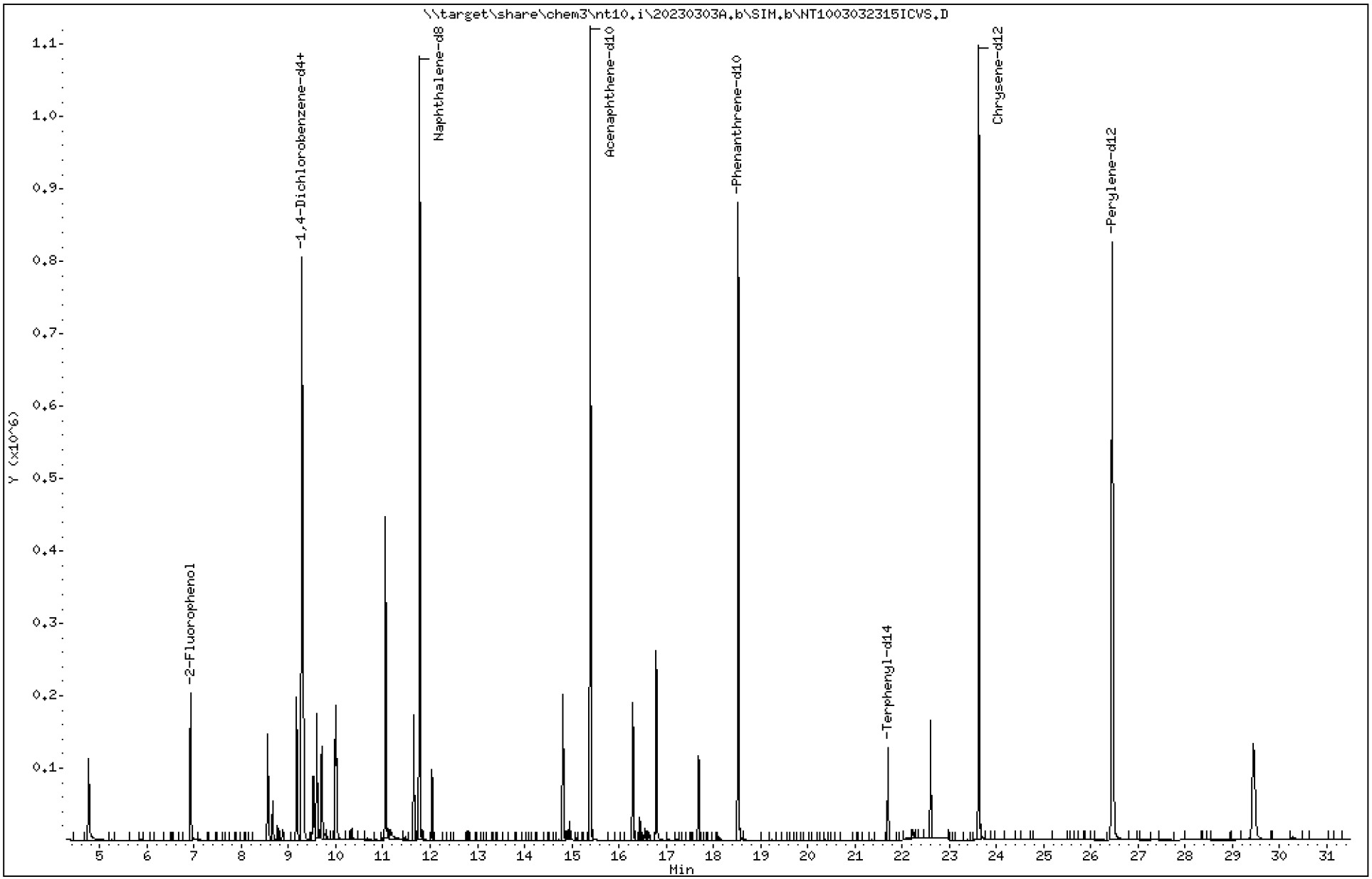
Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT1003032315ICVS.d
Lab Smp Id: SLC0253-ICV1
Inj Date : 04-MAR-2023 02:40 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-CCVSIM
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 11:26 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	6.917	6.917	(0.745)	246778	1.50000	1.721
3	Phenol	94	8.556	8.556	(0.922)	199686	1.00000	0.9398
7	1,3-Dichlorobenzene	146	9.174	9.174	(0.988)	176673	1.00000	0.9490
* 8	1,4-Dichlorobenzene-d4	152	9.283	9.283	(1.000)	502303	4.00000	
9	1,4-Dichlorobenzene	146	9.314	9.314	(1.003)	168299	1.00000	0.9299
11	Benzyl alcohol	79	9.515	9.515	(1.025)	113031	1.00000	0.9526
12	1,2-Dichlorobenzene	146	9.601	9.601	(1.034)	164776	1.00000	0.9472
13	2-Methylphenol	108	9.702	9.702	(1.045)	140762	1.00000	1.097
15	4-Methylphenol	108	9.997	9.997	(1.077)	145754	1.00000	1.090
16	N-Nitroso-di-n-propylamine	70	10.020	10.020	(1.079)	109841	1.00000	1.161
22	2,4-Dimethylphenol	107	11.057	11.057	(0.939)	301727	2.00000	2.019
24	Benzoic acid	105	11.159	11.159	(0.947)	40394	4.00000	0.4947(M)
26	1,2,4-Trichlorobenzene	180	11.646	11.646	(0.989)	137969	1.00000	1.094
* 27	Naphthalene-d8	136	11.777	11.777	(1.000)	1751418	4.00000	
30	Hexachlorobutadiene	225	12.040	12.040	(1.022)	84158	1.00000	0.9408
39	Dimethylphthalate	163	14.811	14.811	(0.962)	245372	1.00000	0.9487
* 42	Acenaphthene-d10	162	15.391	15.391	(1.000)	814551	4.00000	
50	Diethylphthalate	149	16.296	16.296	(1.059)	267464	1.00000	1.097
54	N-Nitrosodiphenylamine	169	16.790	16.790	(0.906)	210472	1.00000	0.8964
57	Hexachlorobenzene	284	17.687	17.687	(0.954)	107684	1.00000	0.9801

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	58 Pentachlorophenol	266	18.120	18.120	(0.978)	11288	2.00000	0.2343
*	59 Phenanthrene-d10	188	18.530	18.530	(1.000)	1450747	4.00000	
$	66 Terphenyl-d14	244	21.702	21.702	(0.918)	159352	1.00000	1.476
	67 Butylbenzylphthalate	149	22.608	22.608	(0.957)	196738	1.00000	0.8755
*	69 Chrysene-d12	240	23.630	23.630	(1.000)	1335017	4.00000	
*	77 Perylene-d12	264	26.456	26.456	(1.000)	1691506	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.450	29.450	(1.113)	496234	1.00000	1.244
	90 N-Nitrosodimethylamine	74	4.755	4.755	(0.512)	212510	2.00000	2.503

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032315ICVS.d
Lab Smp Id: SLC0253-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 03-MAR-2023
Calibration Time: 19:05
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	602309	301155	1204618	502303	-16.60
27 Naphthalene-d8	2101699	1050850	4203398	1751418	-16.67
42 Acenaphthene-d10	1002910	501455	2005820	814551	-18.78
59 Phenanthrene-d10	1732061	866031	3464122	1450747	-16.24
69 Chrysene-d12	1410089	705045	2820178	1335017	-5.32
77 Perylene-d12	1732981	866491	3465962	1691506	-2.39

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	-0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	-0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	-0.00
59 Phenanthrene-d10	18.52	18.02	19.02	18.53	0.04
69 Chrysene-d12	23.62	23.12	24.12	23.63	0.06
77 Perylene-d12	26.45	25.95	26.95	26.46	0.03

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

REVIEW SUMMARY FOR FILE - NT1003032315ICVS.d

Lab ID: SLC0253-ICV1
nt10.i, 20230303A.b\SIM.b\SIMABN2.m,   04-MAR-2023 02:40

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230303A.b\SIM.b

Instrument: nt10.i Date: 04-MAR-2023 Method: SIM.b\SIMABN2.m

INITIAL CAL: 01-MAR-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1003032315ICVS.d 04-MAR-2023 02:40

Compound	%D
Benzoic acid	-87.6
N-Nitrosodimethylamine	25.2
Pentachlorophenol	-88.3
Dibenzo(a,h)anthracene	24.4
Terphenyl-d14	47.6

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

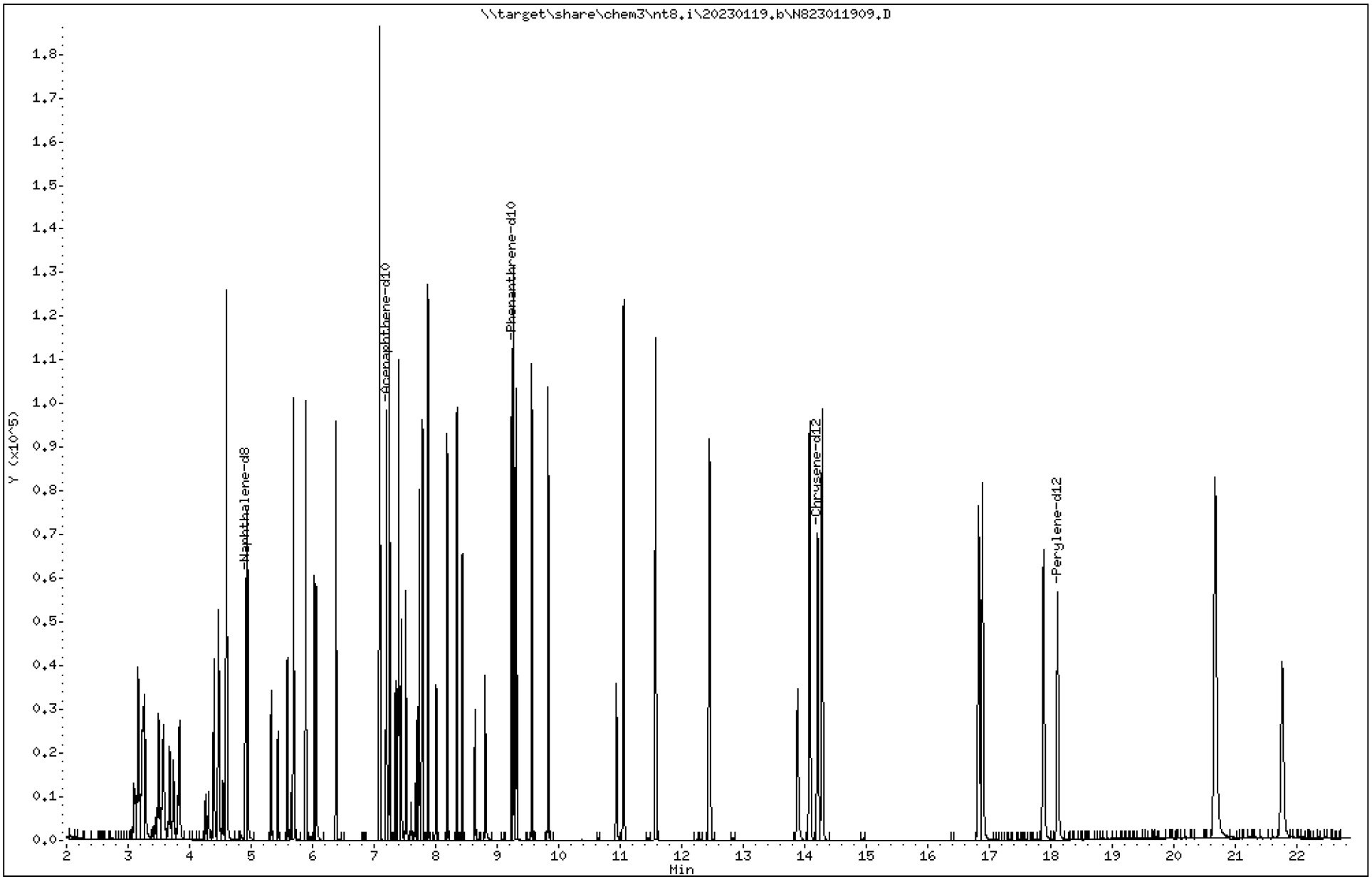
Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT8	Calibration:	GA00050
Lab File ID:	N823011909.D	Calibration Date:	01/19/2023
Sequence:	SLA0213	Injection Date:	01/19/23
Lab Sample ID:	SLA0213-SCV1	Injection Time:	14:58
Sequence Name:	8270 SIM PNA SCV		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Naphthalene	A	2.5000	2.63	0.9299181	0.9767747		5.0	
2-Methylnaphthalene	A	2.5000	2.67	0.5115033	0.5463255		6.8	
1-Methylnaphthalene	A	2.5000	2.65	0.5191318	0.5501748		6.0	
Acenaphthylene	A	2.5000	2.82	1.5102600	1.7039370		12.8	
Acenaphthene	A	2.5000	2.60	1.0119150	1.0524810		4.0	
Dibenzofuran	A	2.5000	2.86	1.5369690	1.7582160		14.4	
Fluorene	A	2.5000	2.63	1.1937240	1.2561120		5.2	
Phenanthrene	A	2.5000	2.45	0.9769567	0.9567960		-2.1	
Anthracene	A	2.5000	2.27	0.8874960	0.8058663		-9.2	
Fluoranthene	A	2.5000	2.65	1.0634260	1.1284050		6.1	
Pyrene	A	2.5000	2.46	1.2399700	1.2213300		-1.5	
Benzo(a)anthracene	A	2.5000	2.59	1.1238870	1.1631100		3.5	
Chrysene	A	2.5000	2.40	1.1964350	1.1484610		-4.0	
Benzo(b)fluoranthene	A	2.5000	2.51	1.1648110	1.1680230		0.3	
Benzo(k)fluoranthene	A	2.5000	2.66	1.1409370	1.2121600		6.2	
Benzofluoranthenes, Total	A	5.0000	5.48	1.1031370	1.2090940		9.6	
Benzo(a)pyrene	A	2.5000	2.57	1.0250270	1.0545670		2.9	
Indeno(1,2,3-cd)pyrene	A	2.5000	2.69	1.1677520	1.2561630		7.6	
Dibenzo(a,h)anthracene	A	2.5000	2.49	1.0049440	1.0021900		-0.3	
Benzo(g,h,i)perylene	A	2.5000	2.48	1.0580110	1.0506380		-0.7	

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Date : 19-JAN-2023 14:58
Client ID:
Sample Info: SCV230119
Volume Injected (uL): 1.0
Column phase: Rxi-17sil

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25



Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

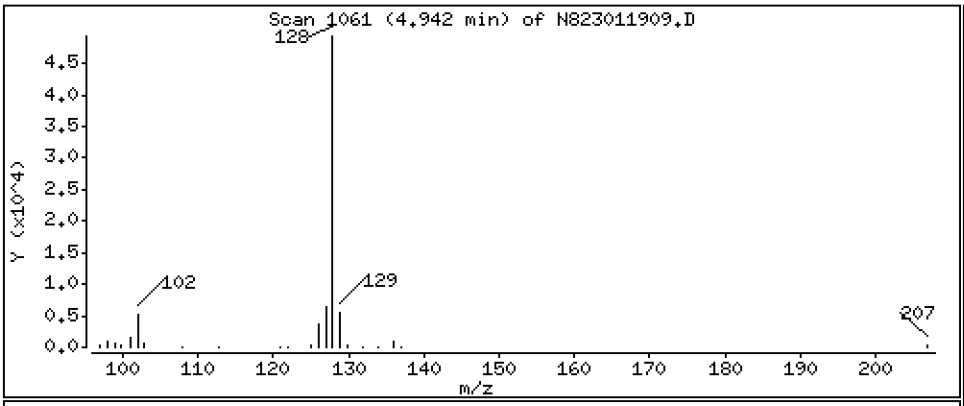
Operator: JZ

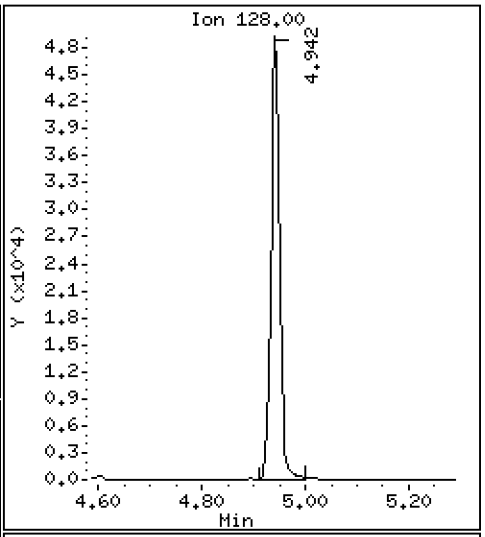
Column phase: Rxi-17sil

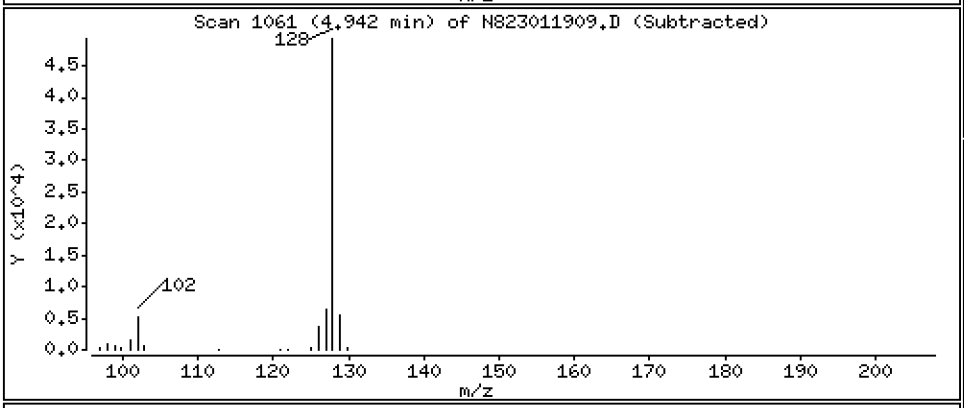
Column diameter: 0.25

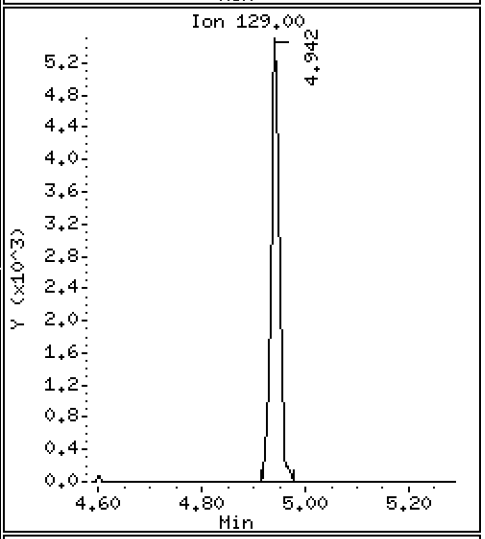
2 Naphthalene

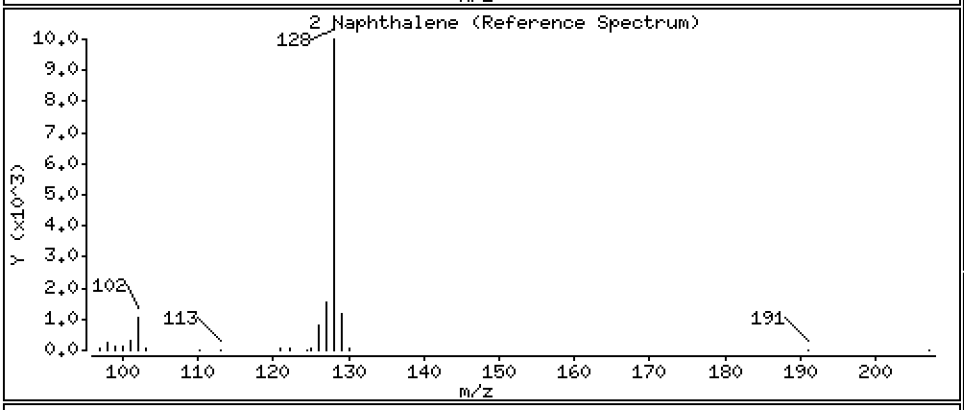
Concentration: 2.626 ug/L

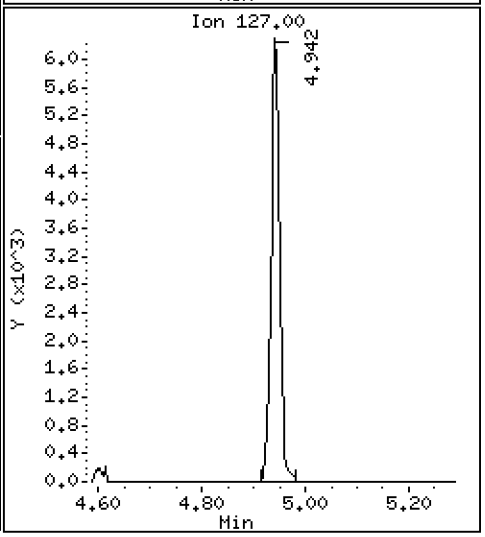


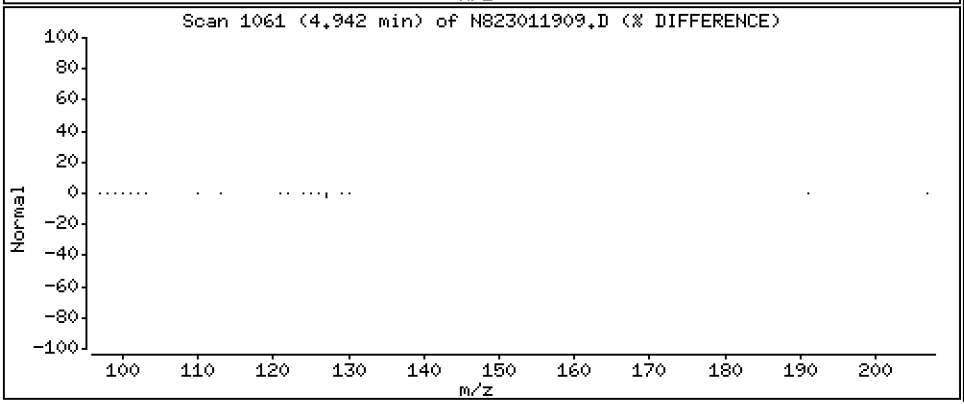












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

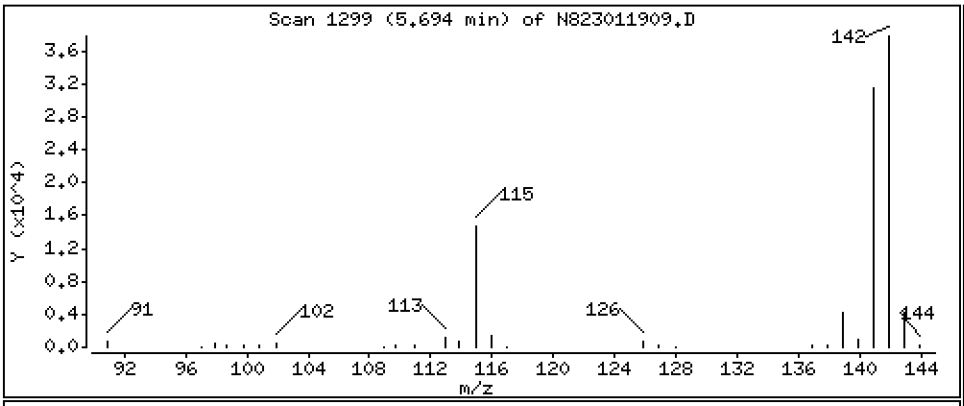
Operator: JZ

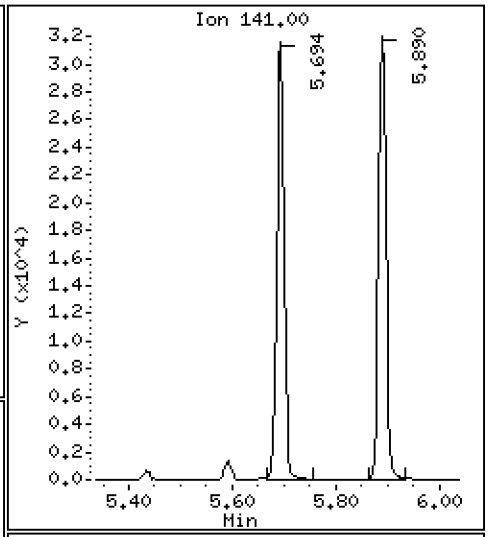
Column phase: Rxi-17sil

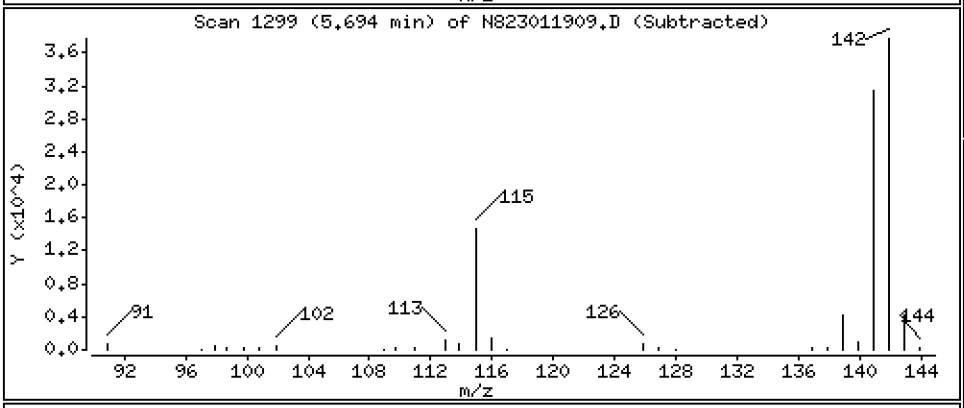
Column diameter: 0.25

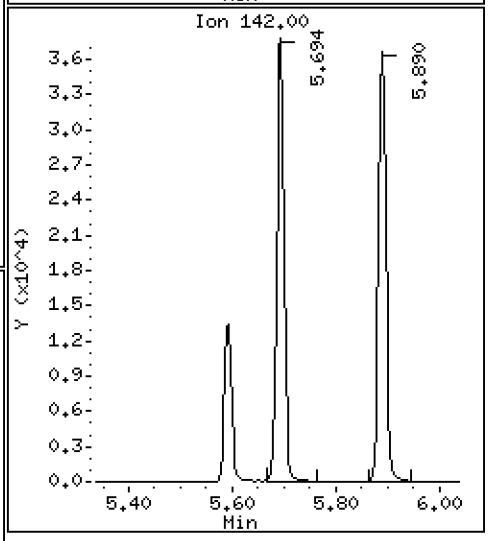
4 2-Methylnaphthalene

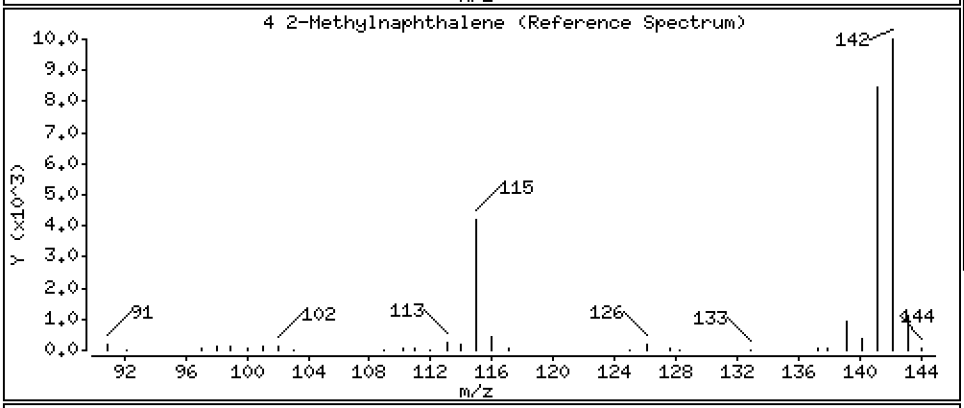
Concentration: 2.670 ug/L

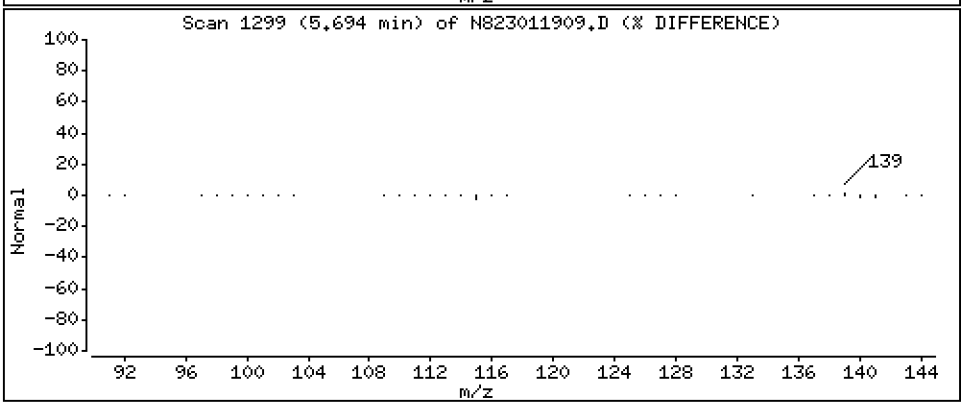












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

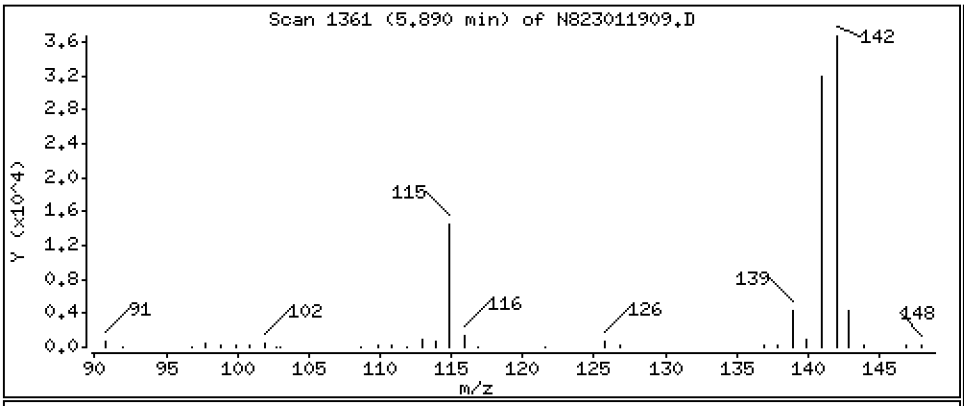
Operator: JZ

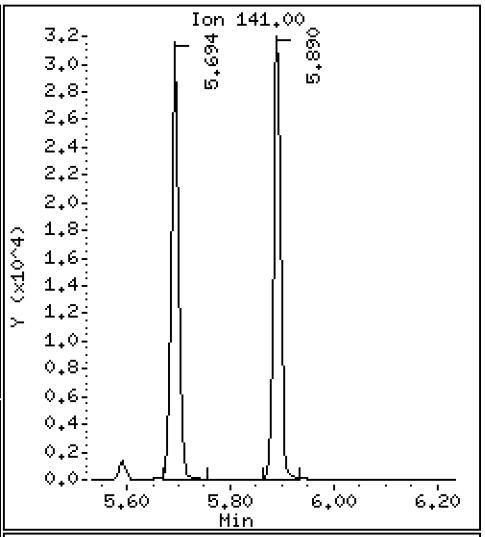
Column phase: Rxi-17sil

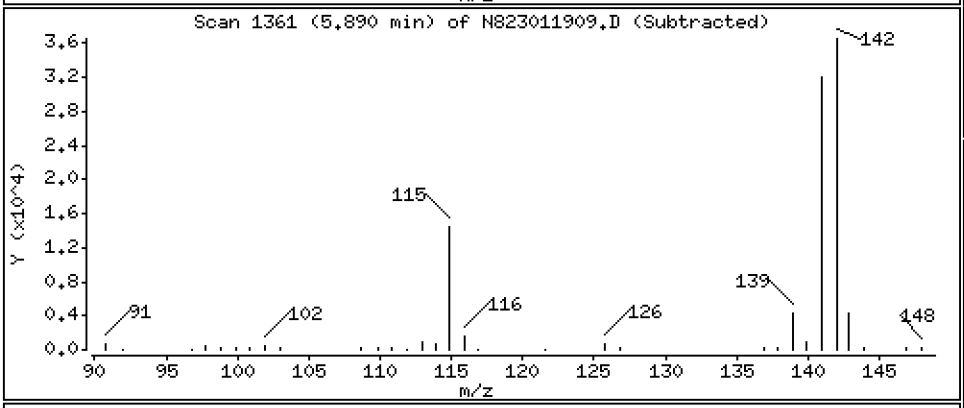
Column diameter: 0.25

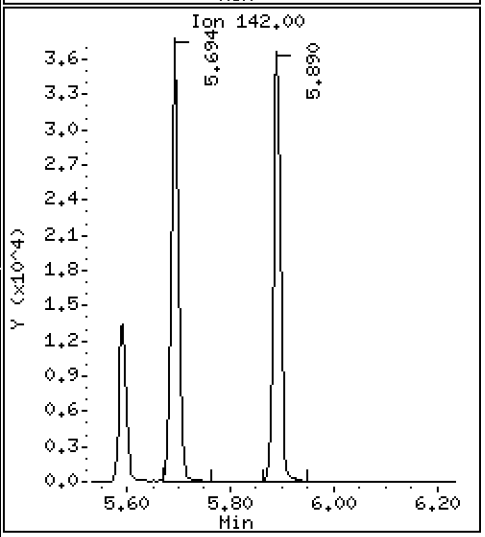
5 1-methylnaphthalene

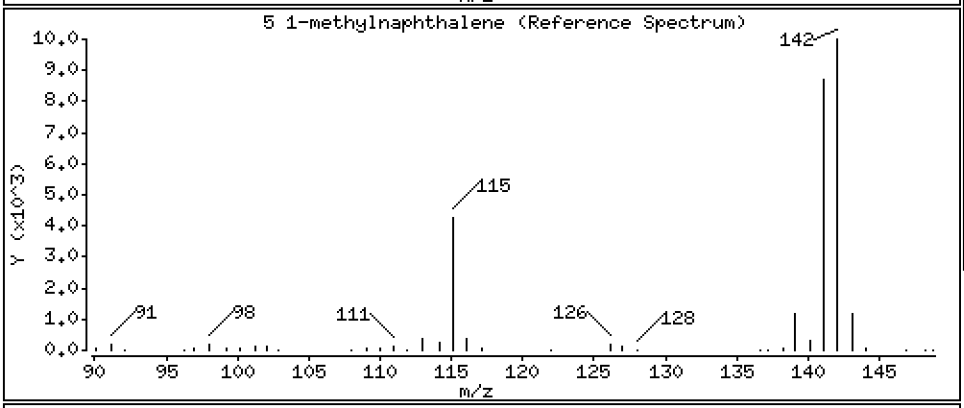
Concentration: 2.649 ug/L

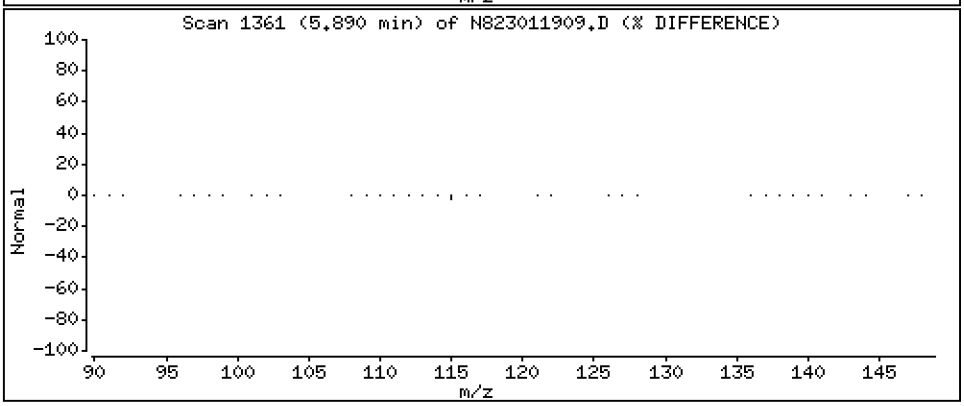












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

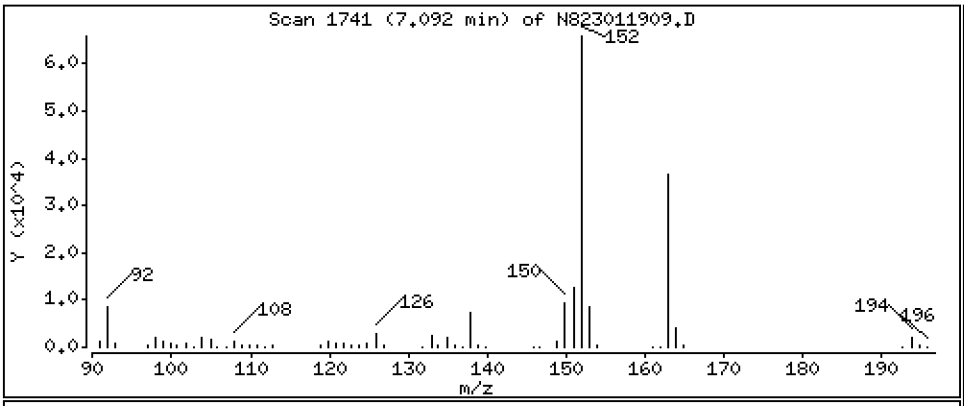
Operator: JZ

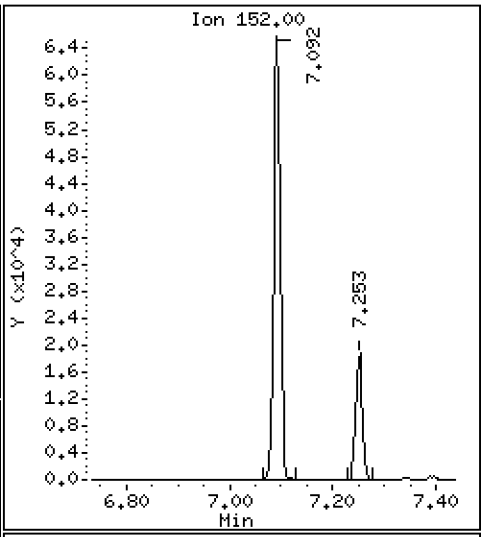
Column phase: Rxi-17sil

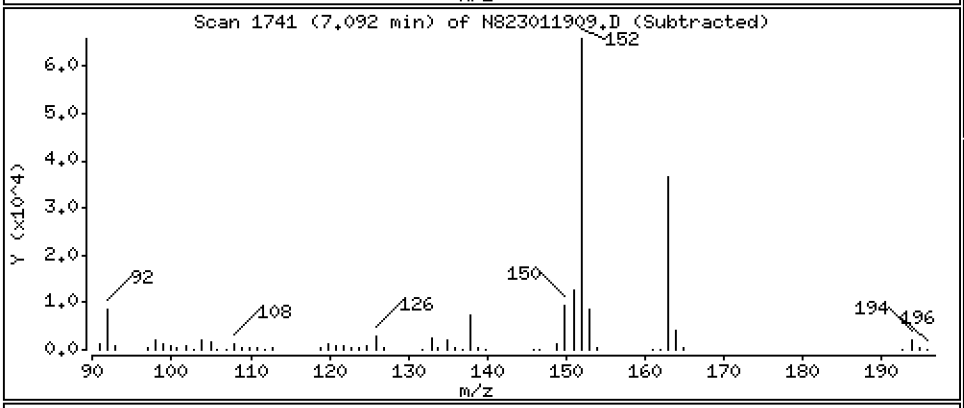
Column diameter: 0.25

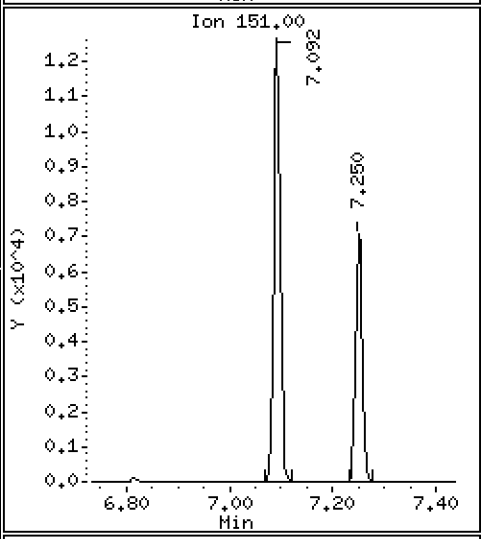
9 Acenaphthylene

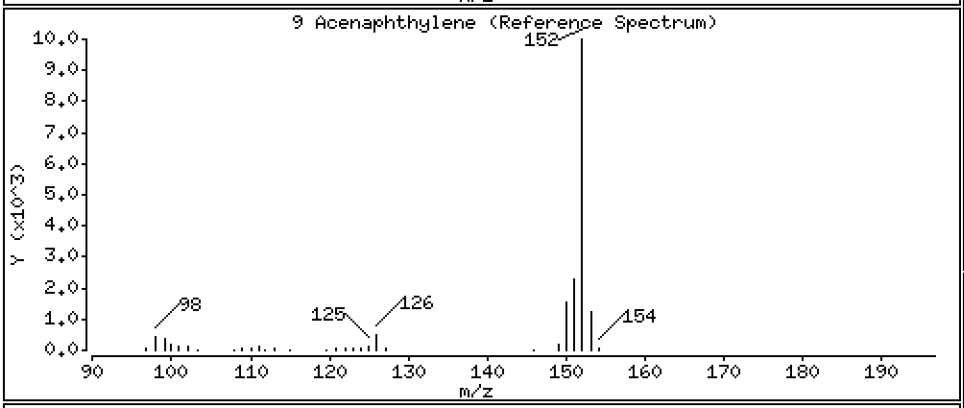
Concentration: 2.821 ug/L

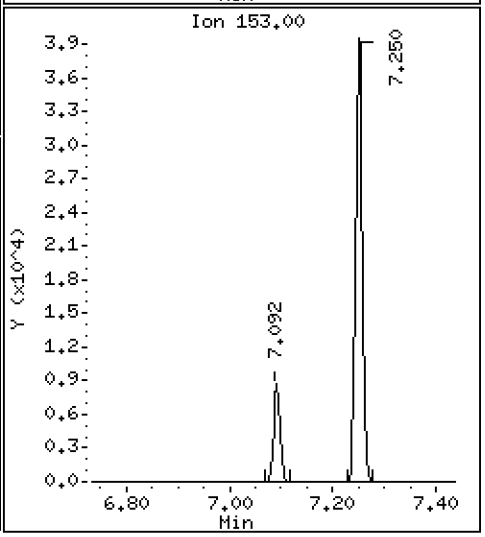


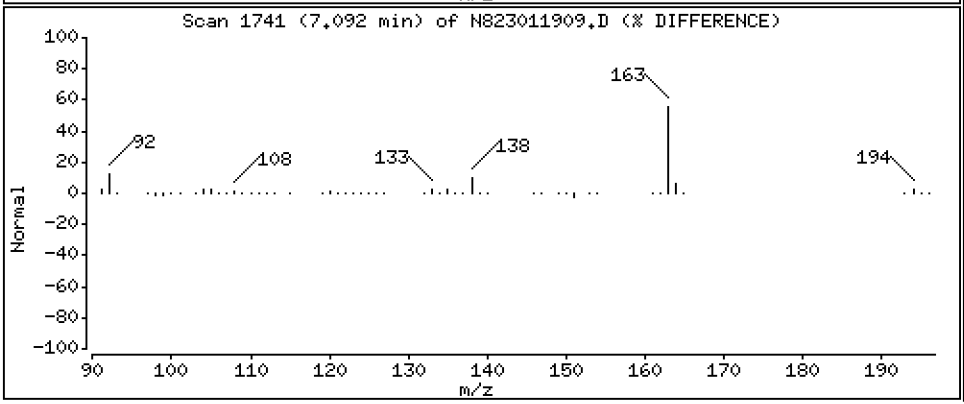












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

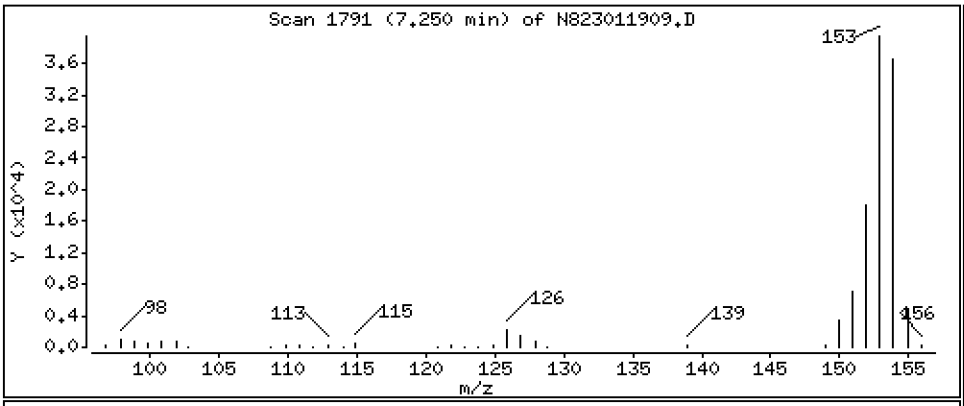
Operator: JZ

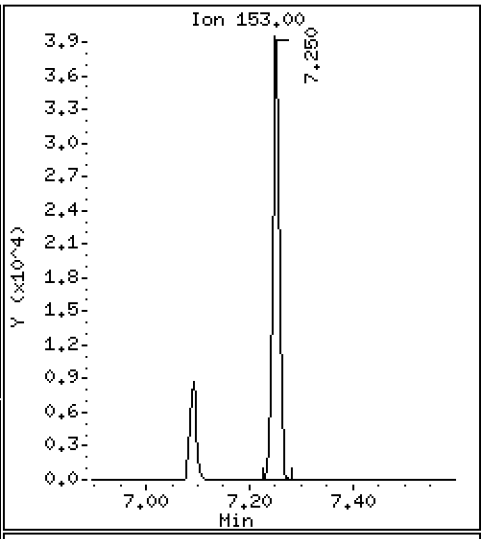
Column phase: Rxi-17sil

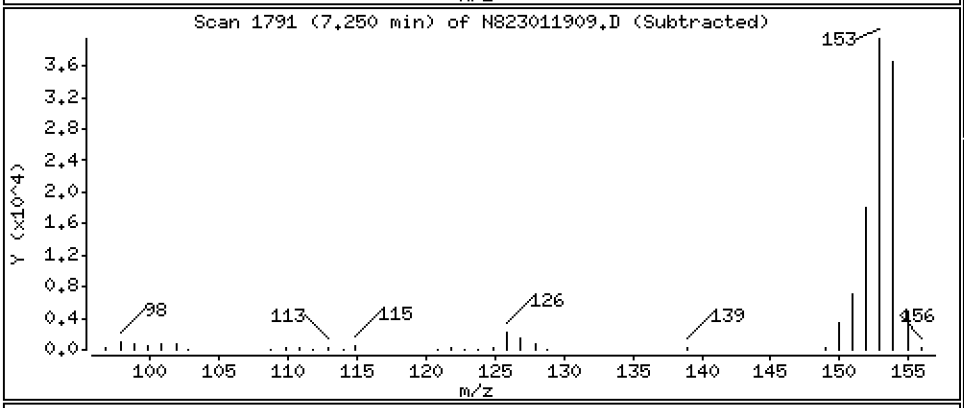
Column diameter: 0.25

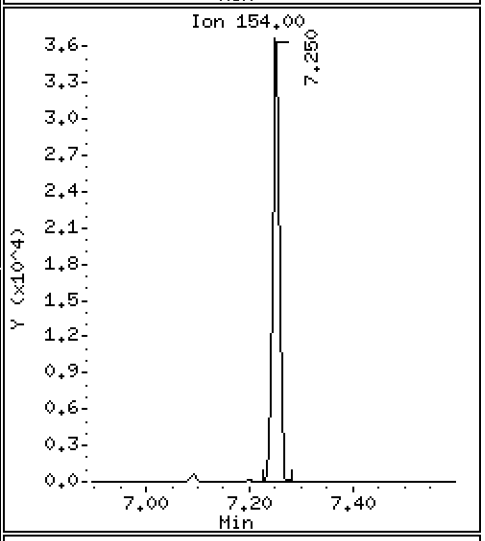
11 Acenaphthene

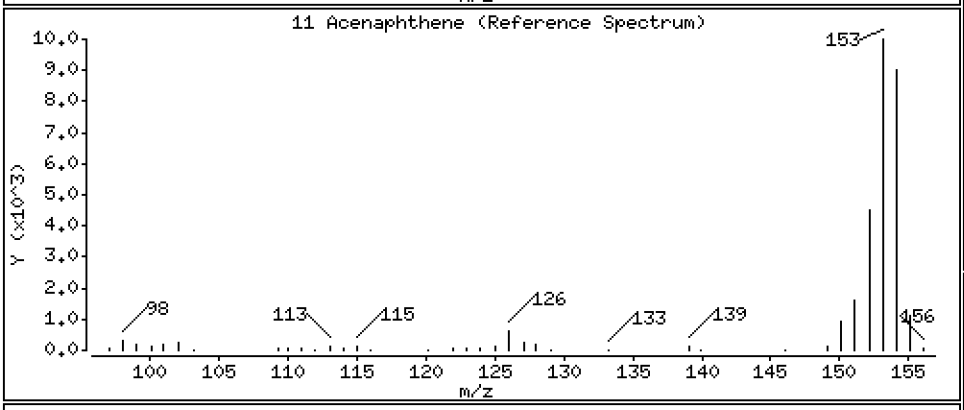
Concentration: 2.600 ug/L

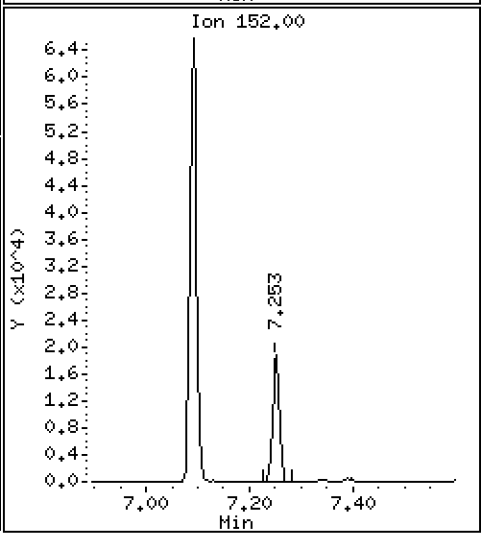


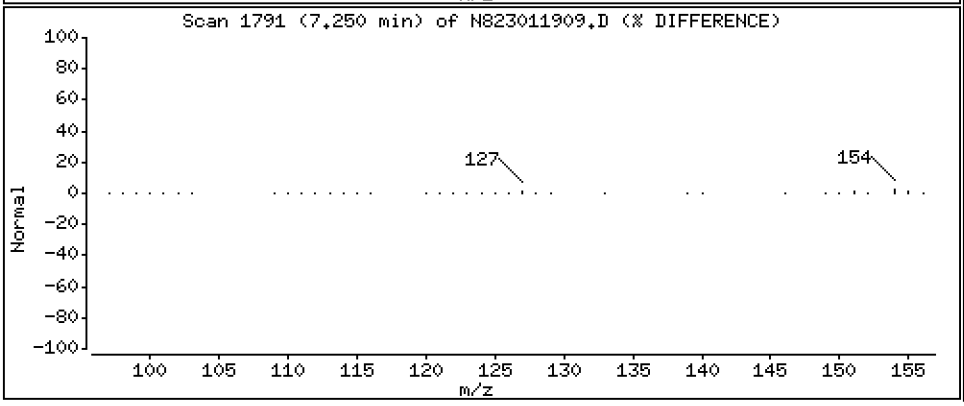












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

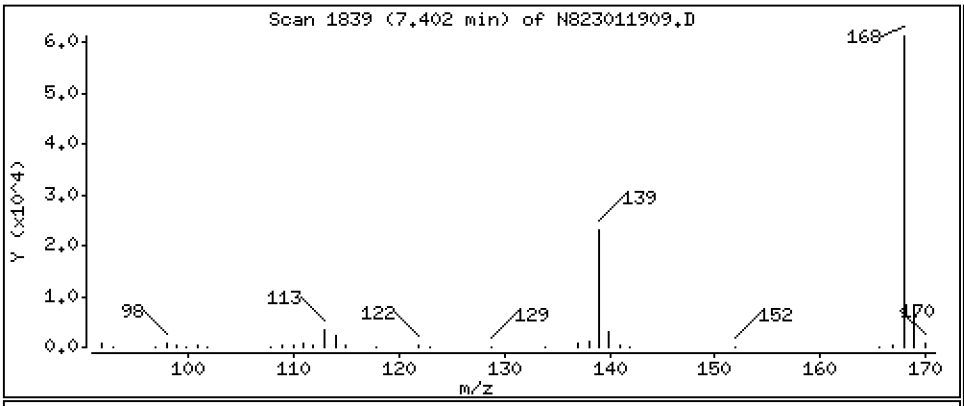
Operator: JZ

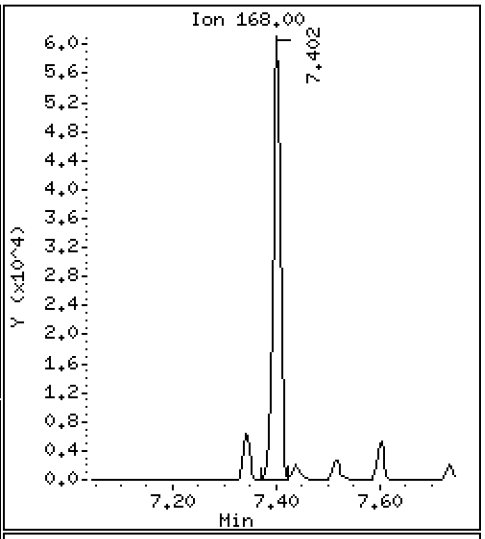
Column phase: Rxi-17sil

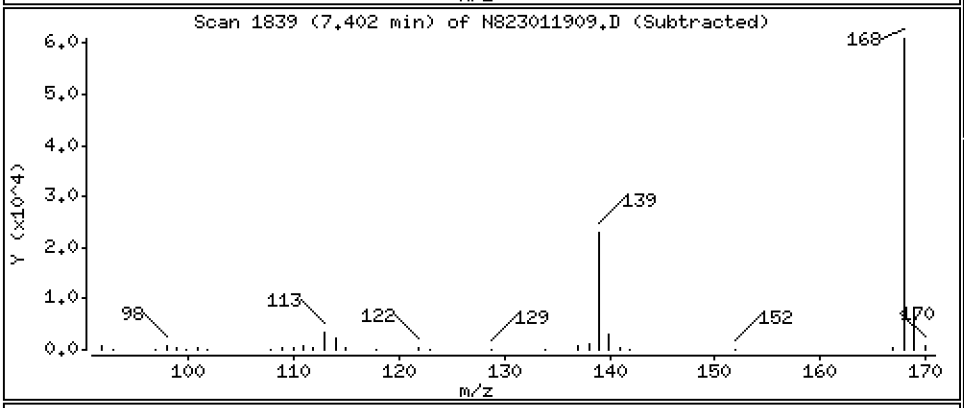
Column diameter: 0.25

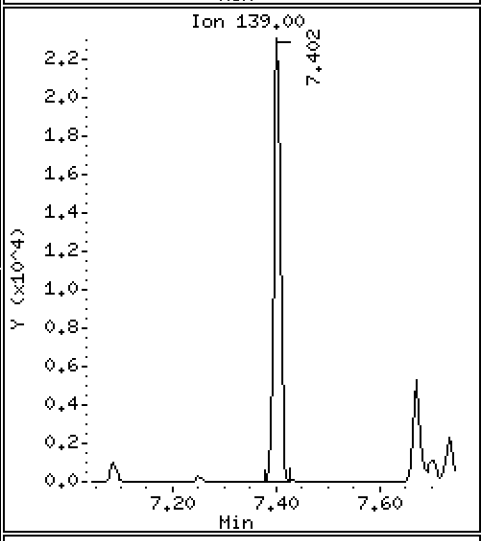
12 Dibenzofuran

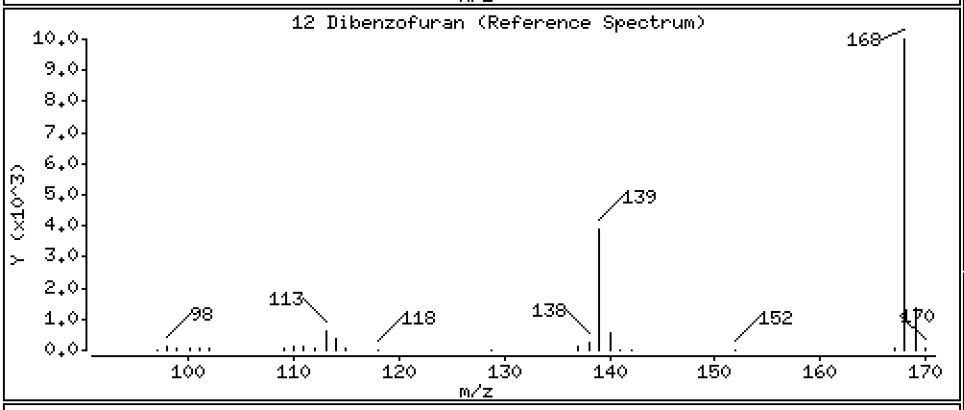
Concentration: 2.860 ug/L

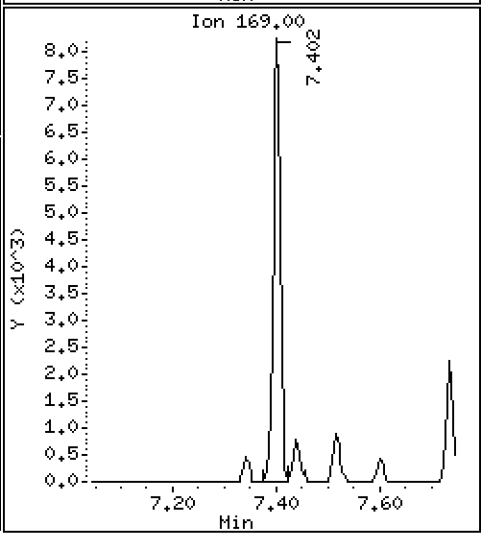


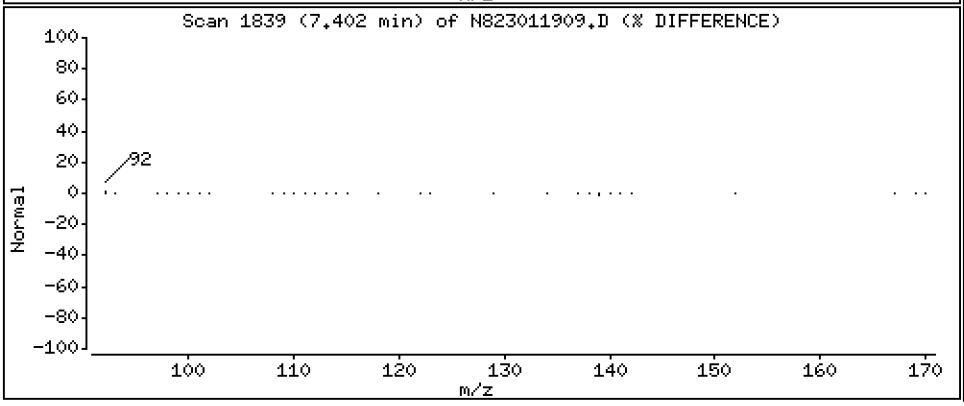












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

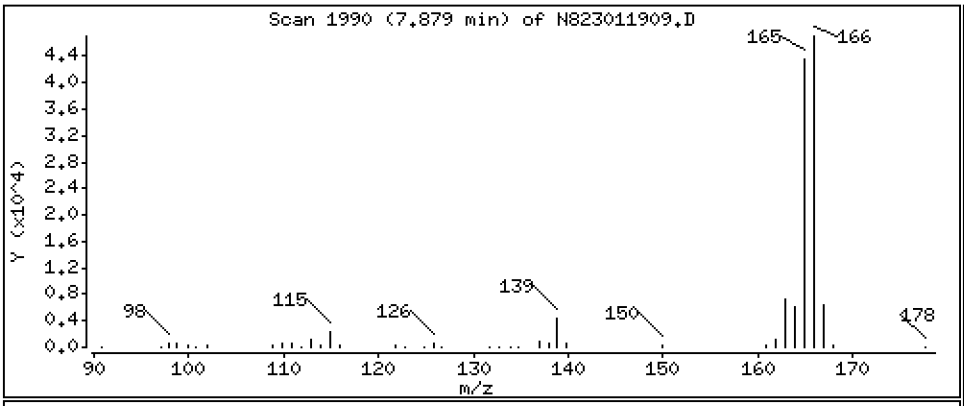
Operator: JZ

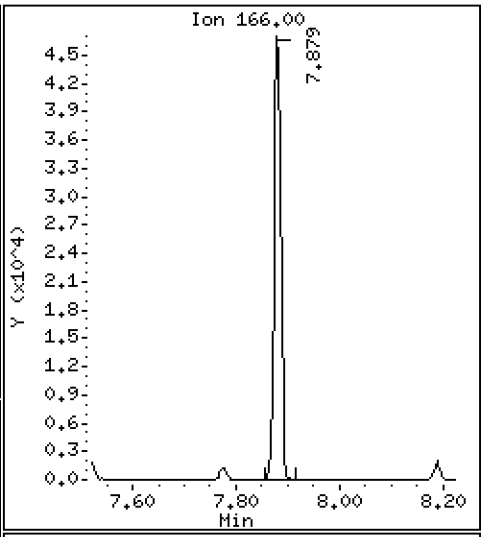
Column phase: Rxi-17sil

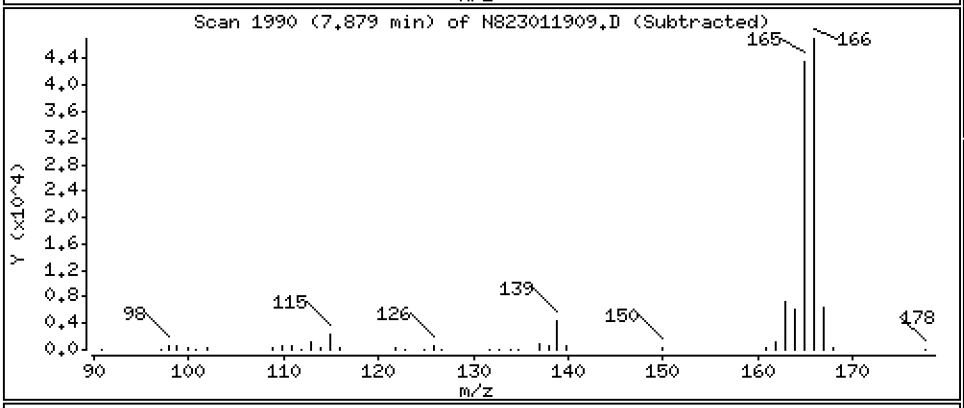
Column diameter: 0.25

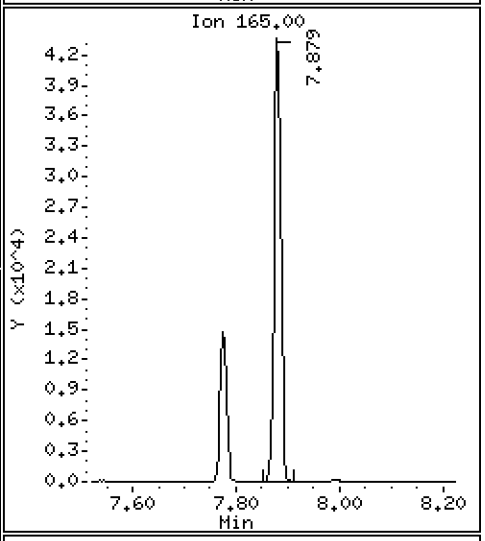
14 Fluorene

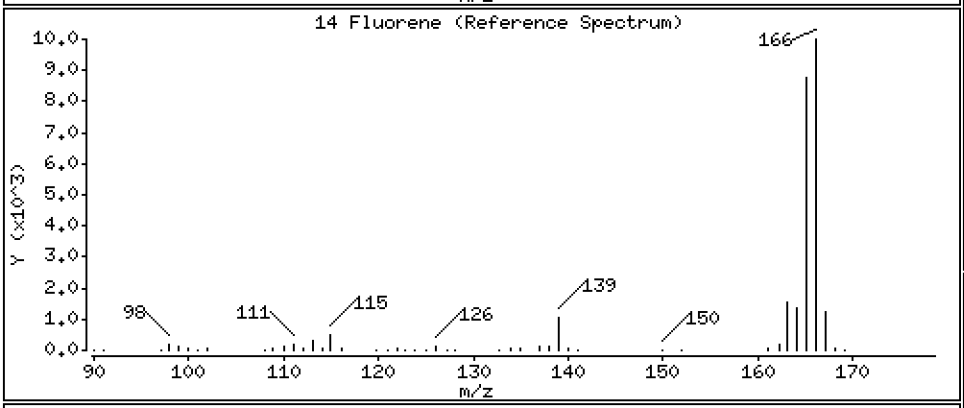
Concentration: 2.631 ug/L

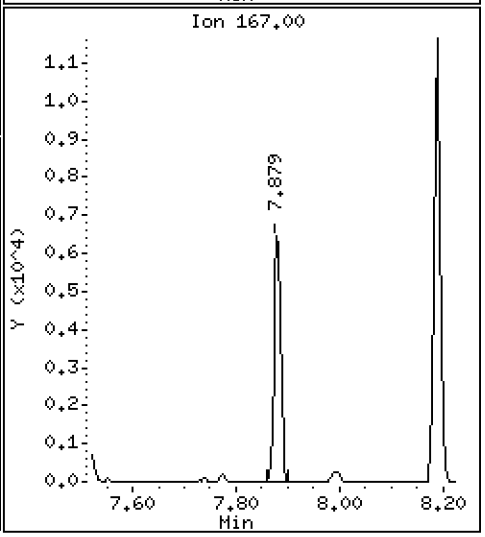


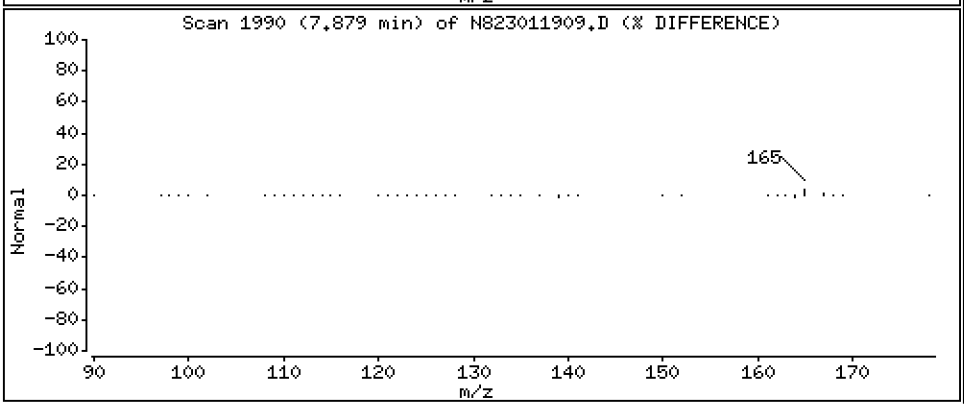












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

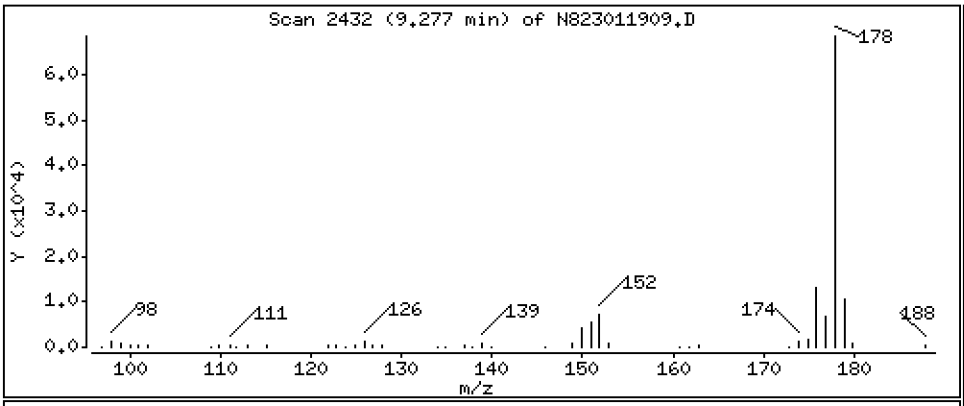
Operator: JZ

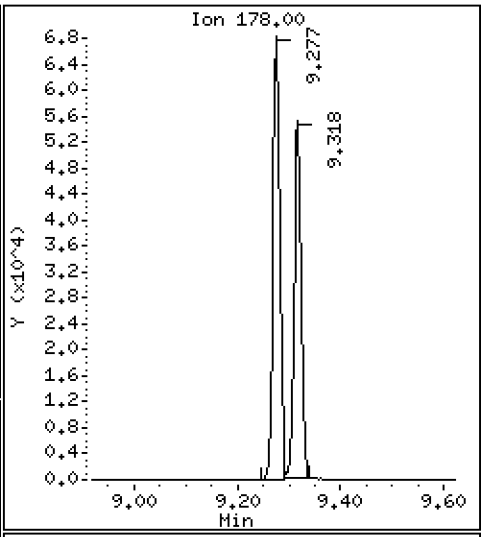
Column phase: Rxi-17sil

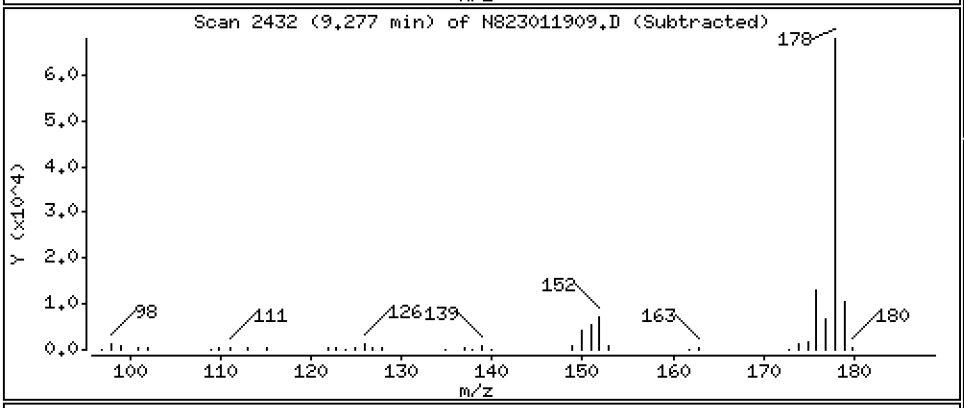
Column diameter: 0.25

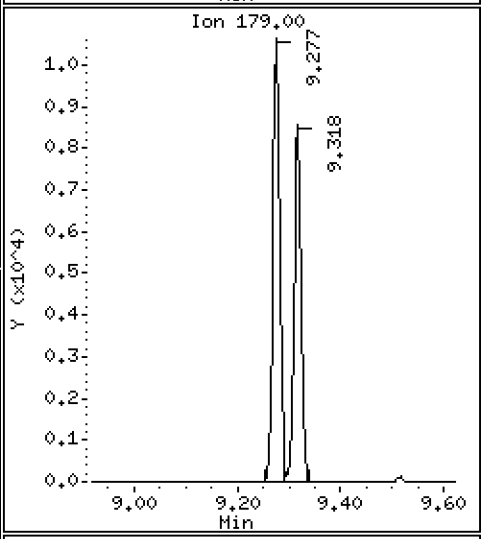
16 Phenanthrene

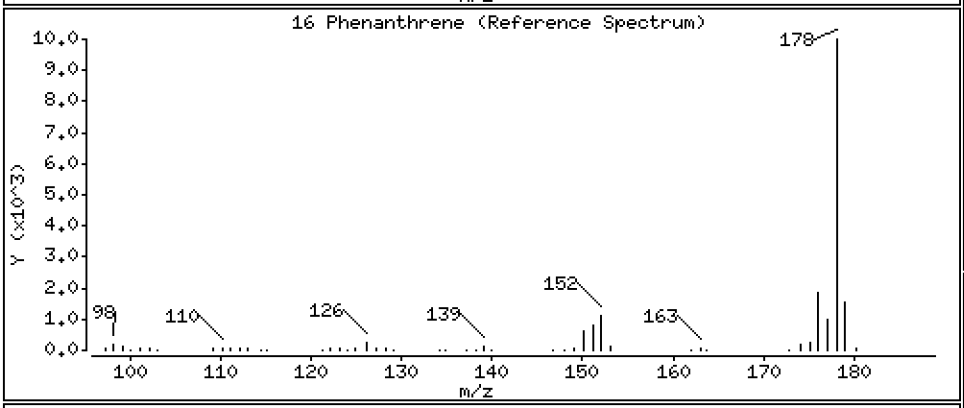
Concentration: 2.448 ug/L

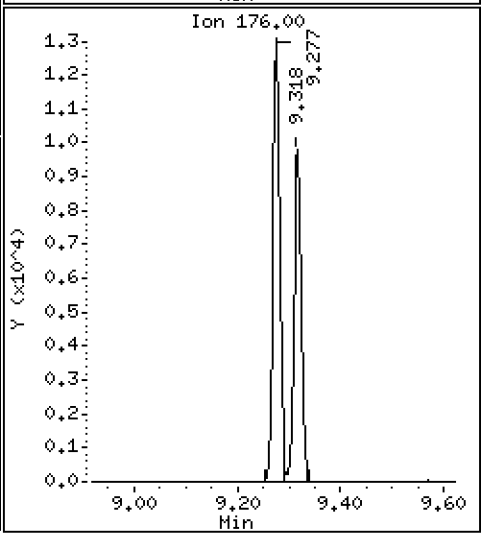


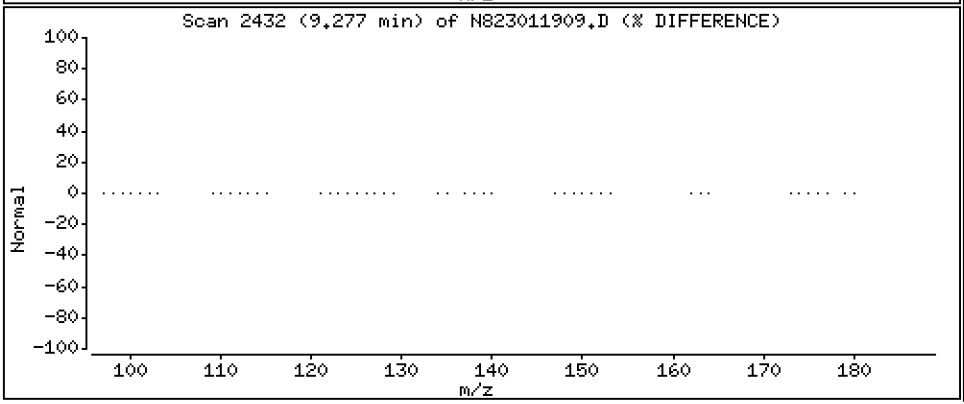












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

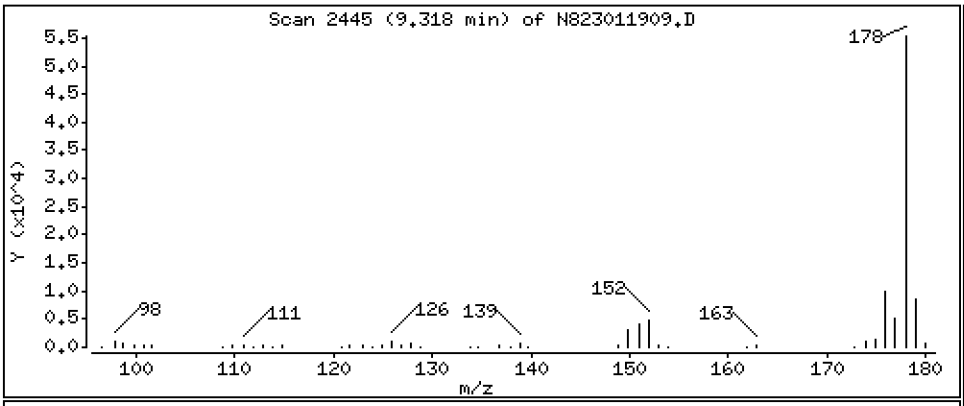
Operator: JZ

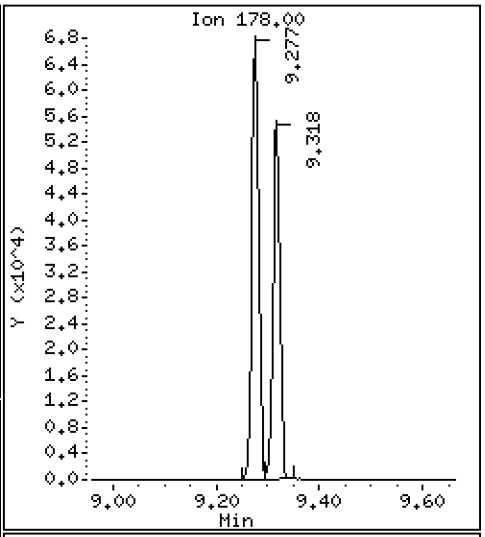
Column phase: Rxi-17sil

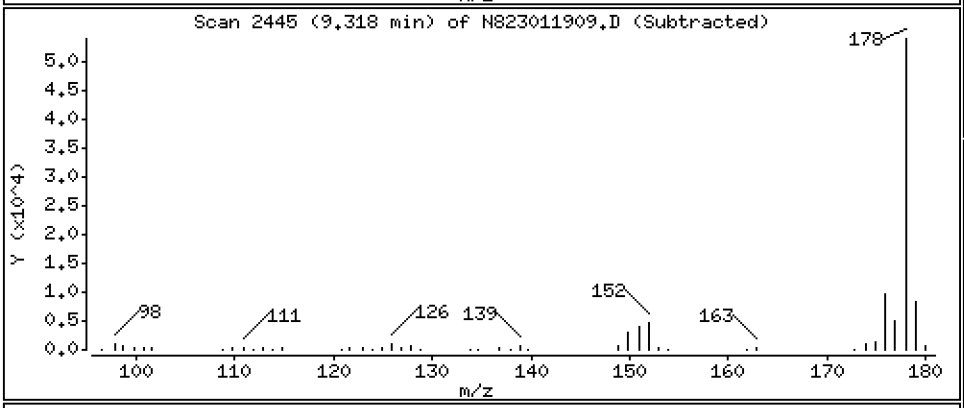
Column diameter: 0.25

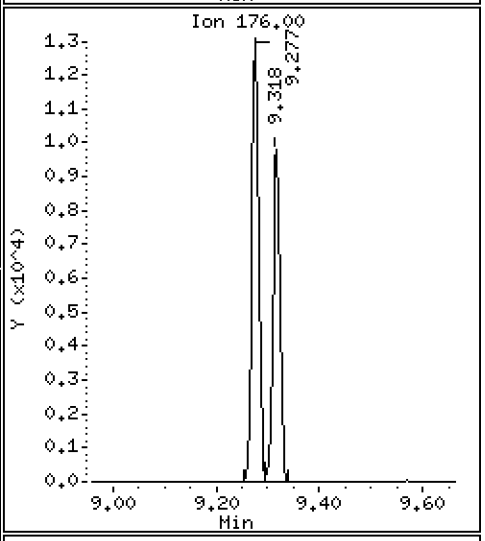
17 Anthracene

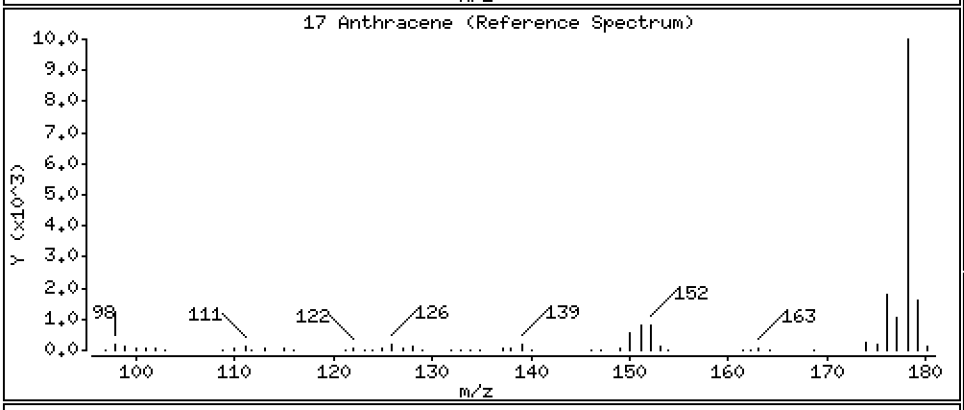
Concentration: 2.270 ug/L

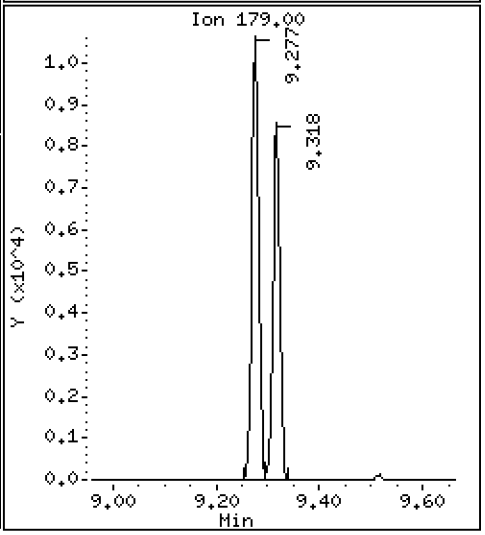


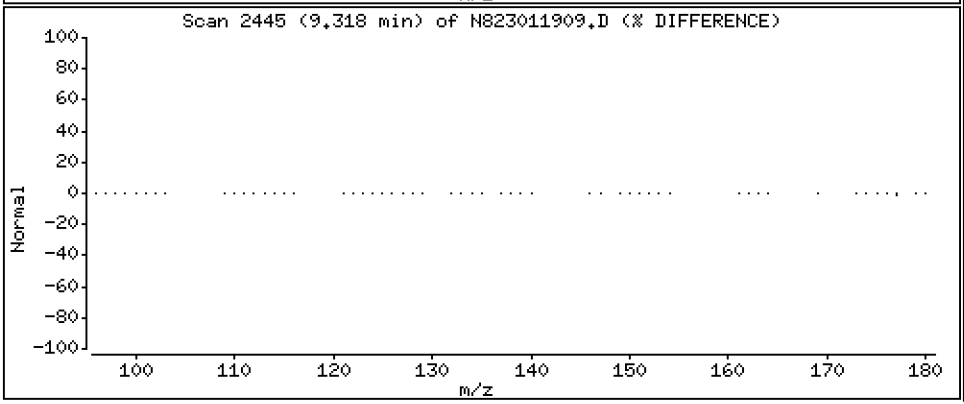












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

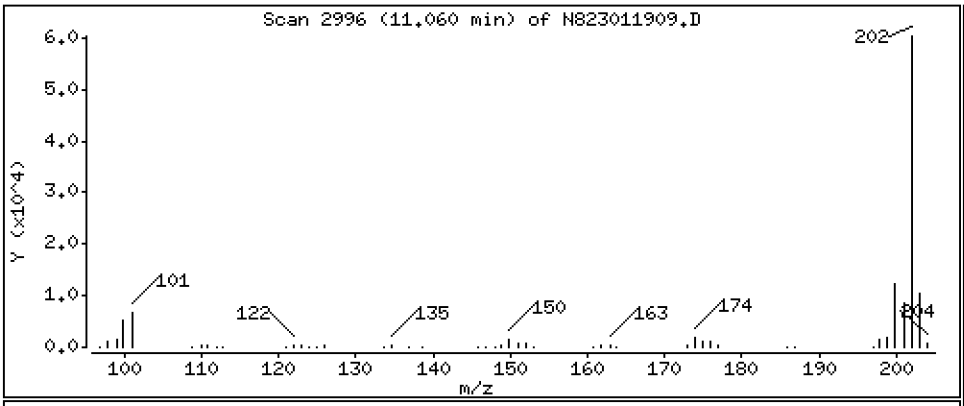
Operator: JZ

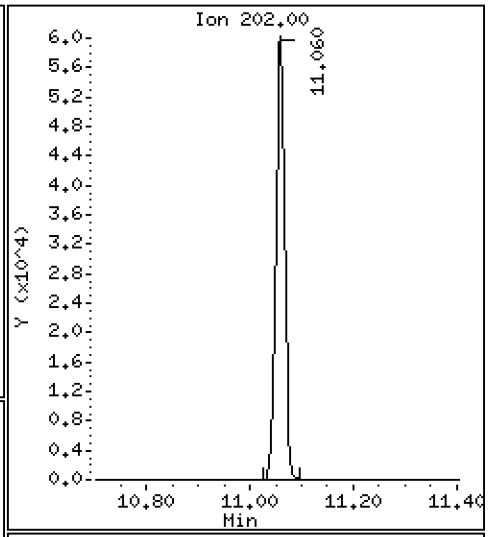
Column phase: Rxi-17sil

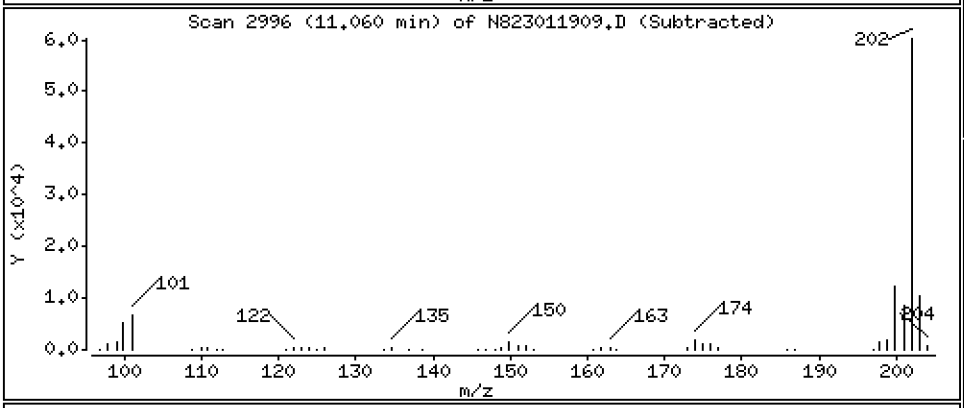
Column diameter: 0.25

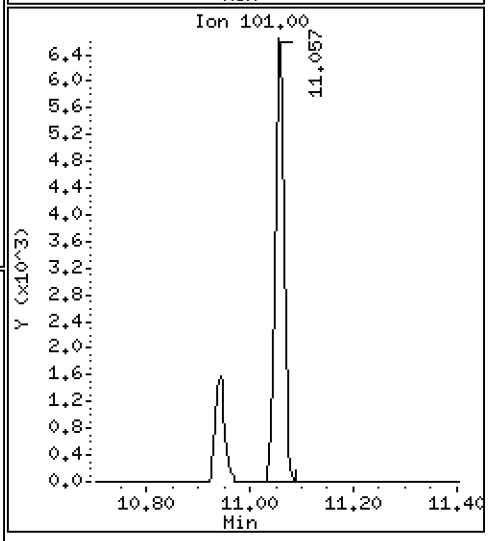
22 Fluoranthene

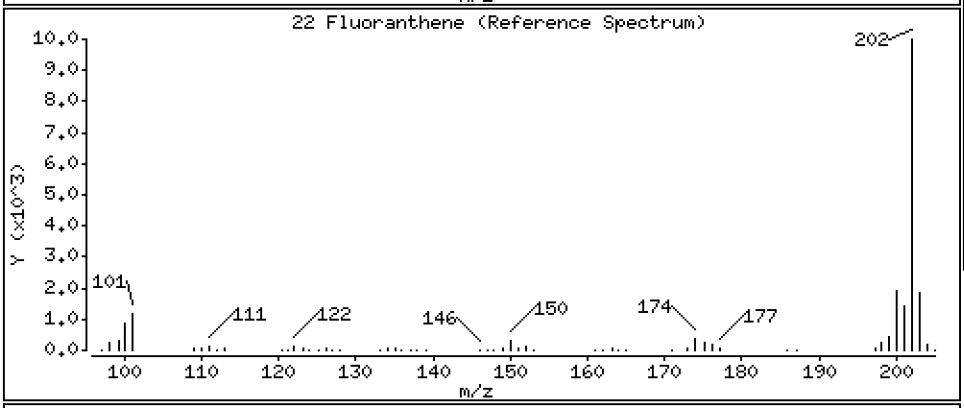
Concentration: 2.653 ug/L

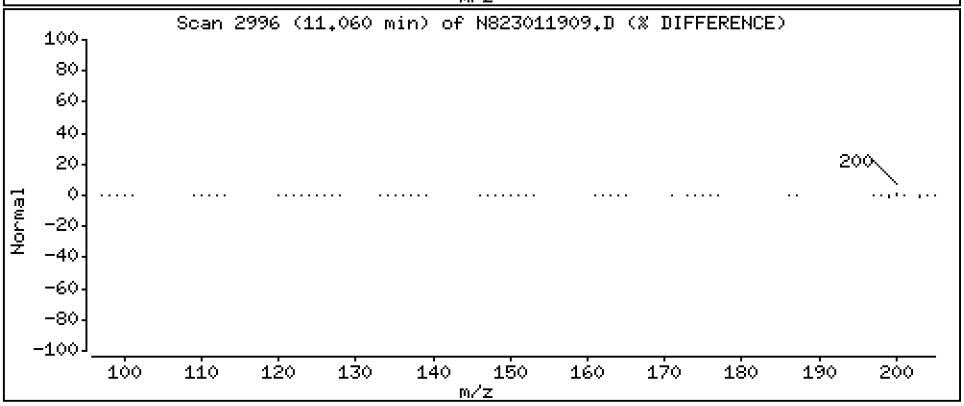












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Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

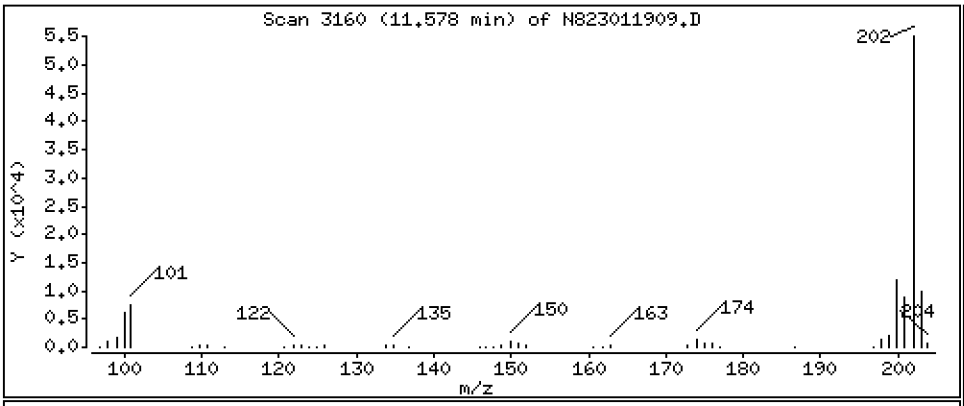
Operator: JZ

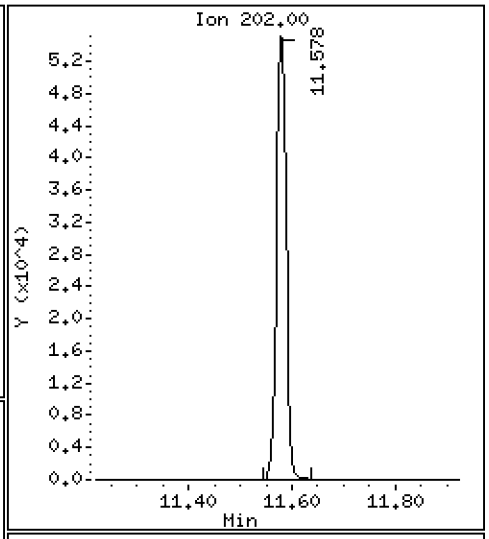
Column phase: Rxi-17sil

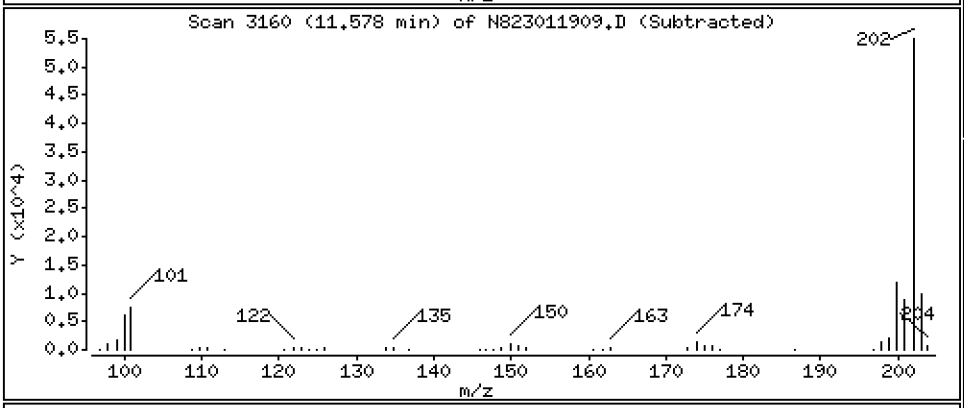
Column diameter: 0.25

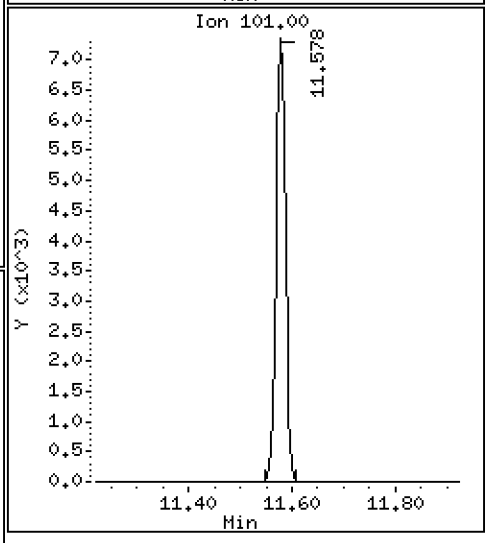
23 Pyrene

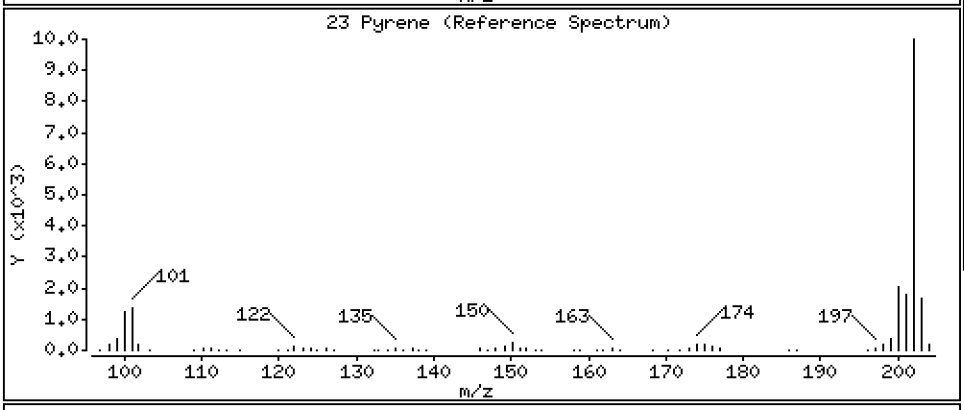
Concentration: 2.462 ug/L

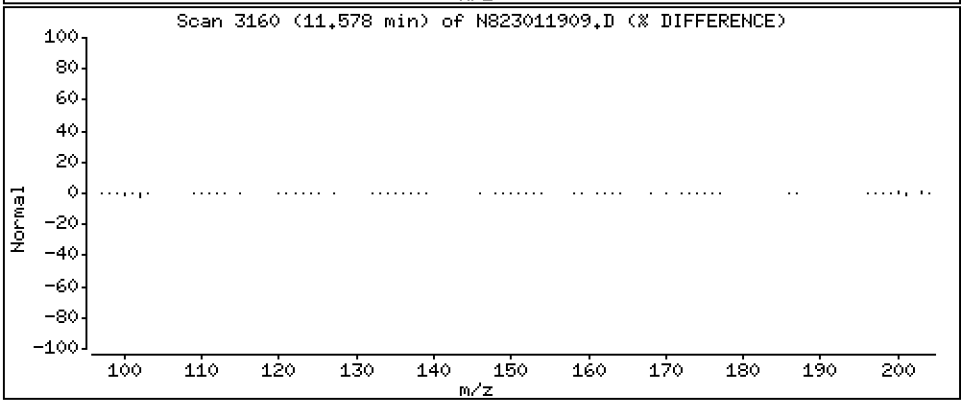












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

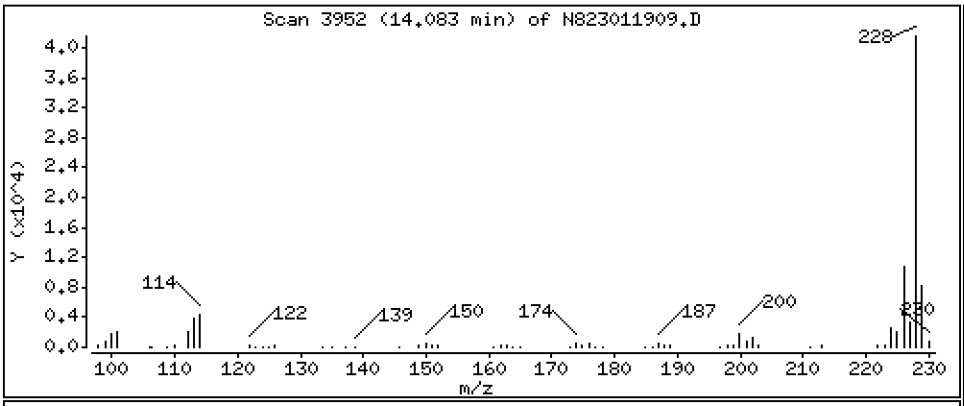
Operator: JZ

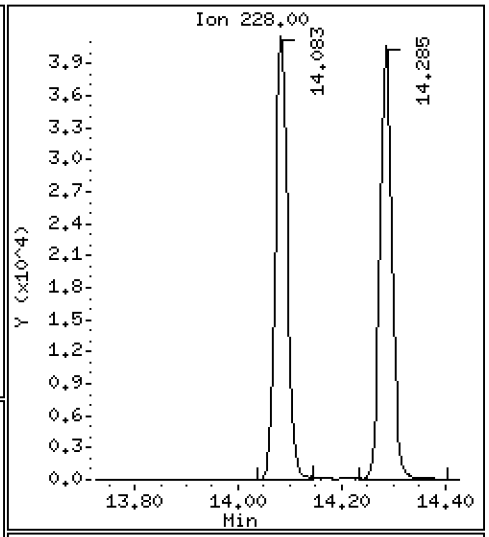
Column phase: Rxi-17sil

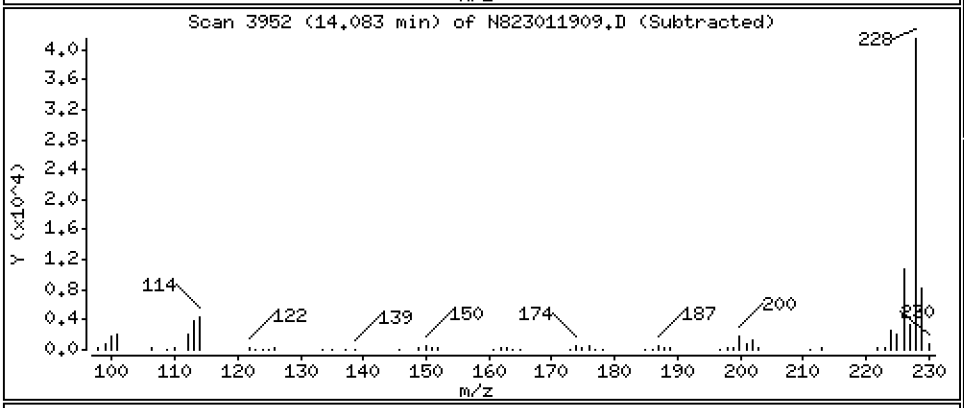
Column diameter: 0.25

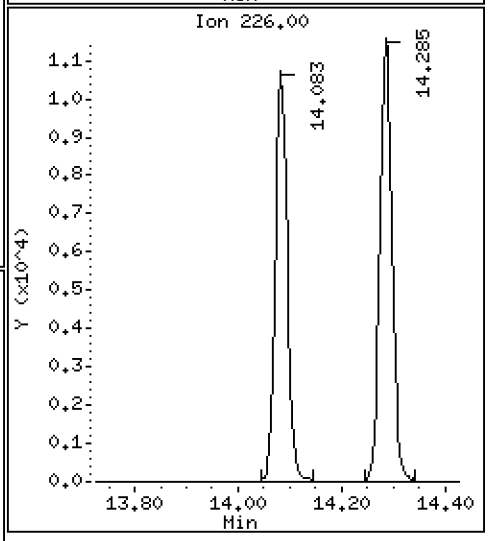
24 Benzo(a)anthracene

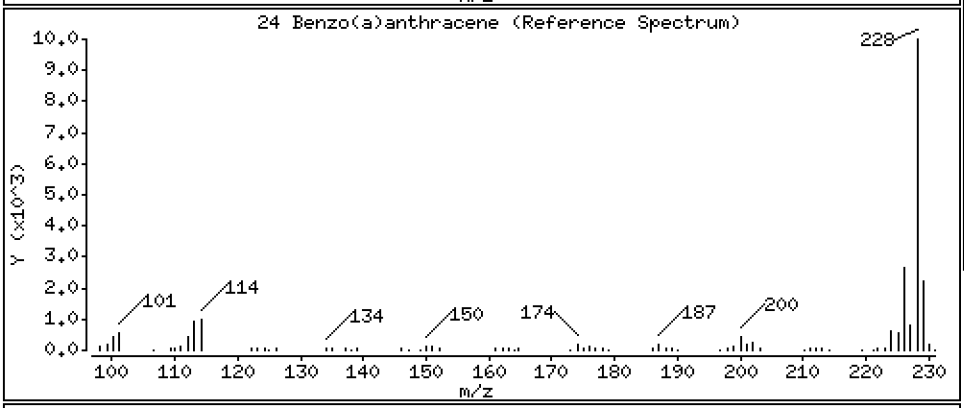
Concentration: 2.587 ug/L

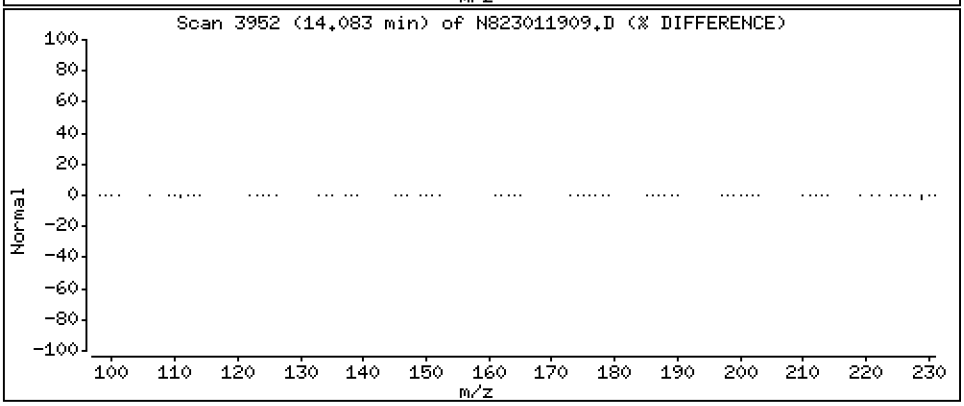












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

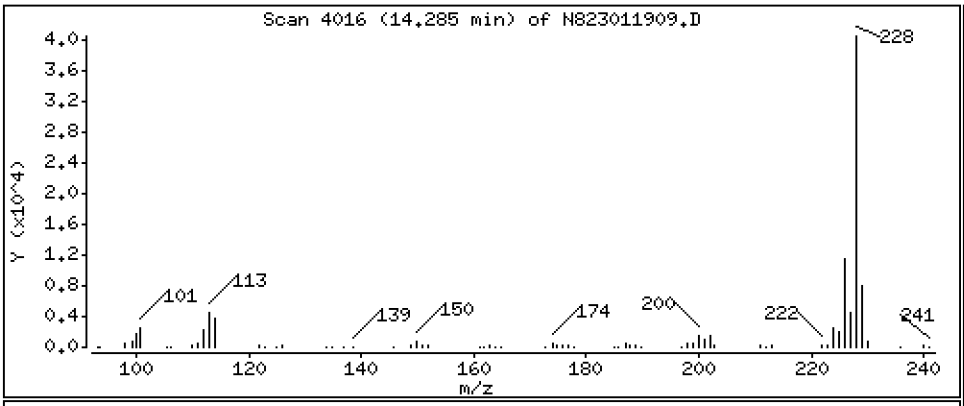
Operator: JZ

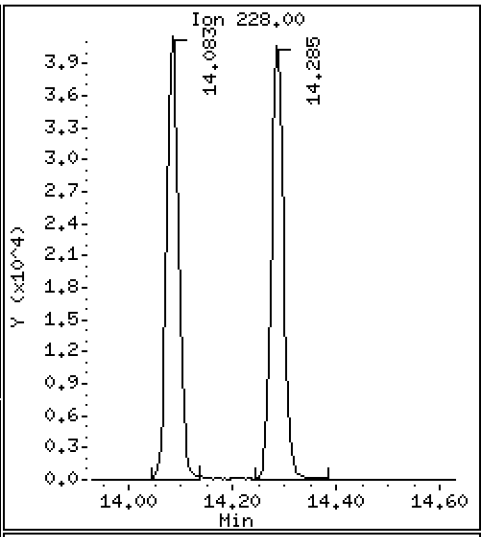
Column phase: Rxi-17sil

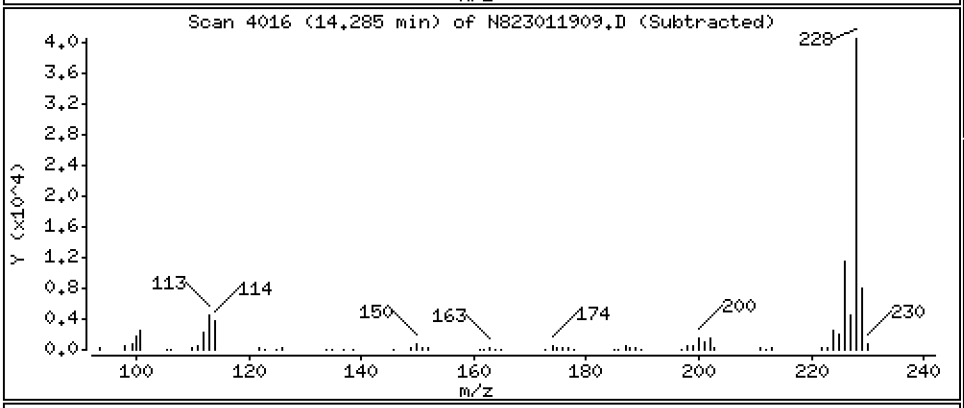
Column diameter: 0.25

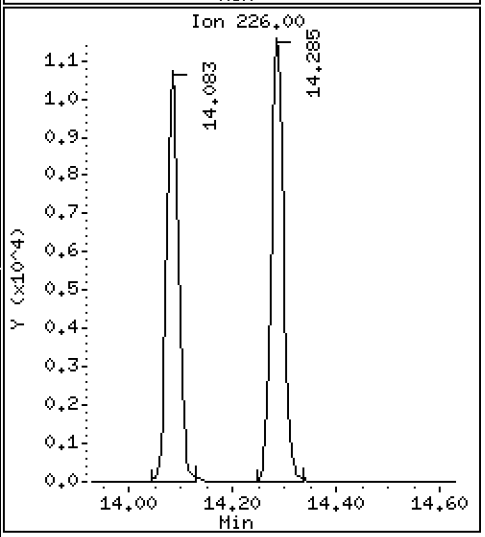
27 Chrysene

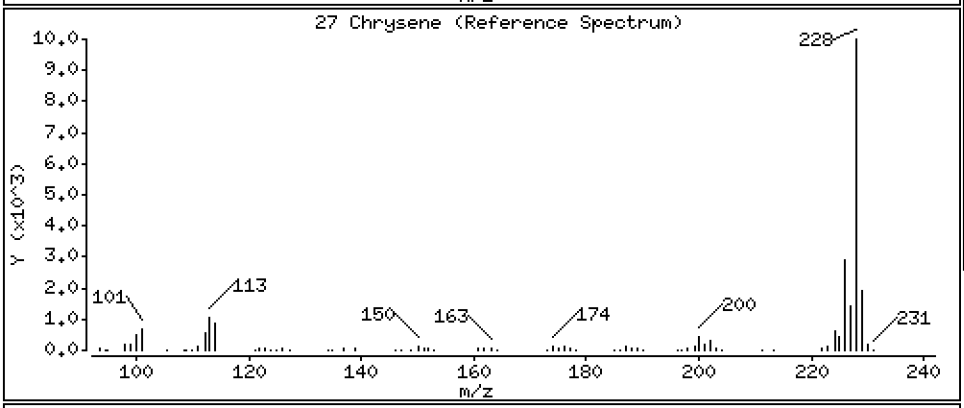
Concentration: 2.400 ug/L

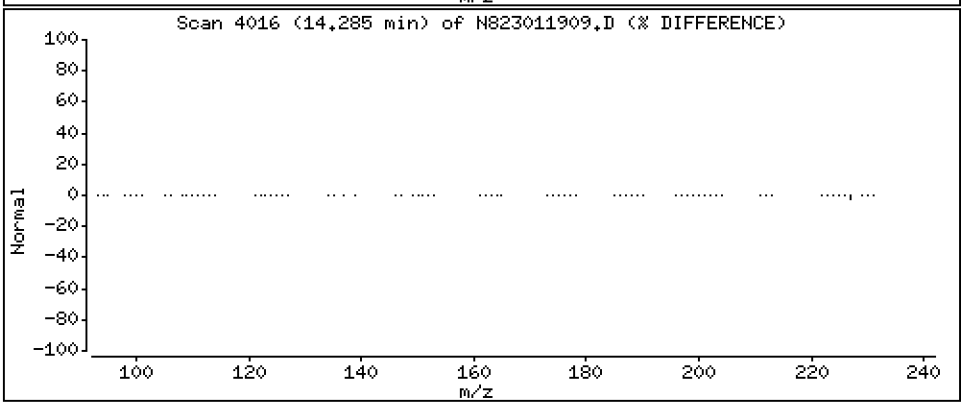












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

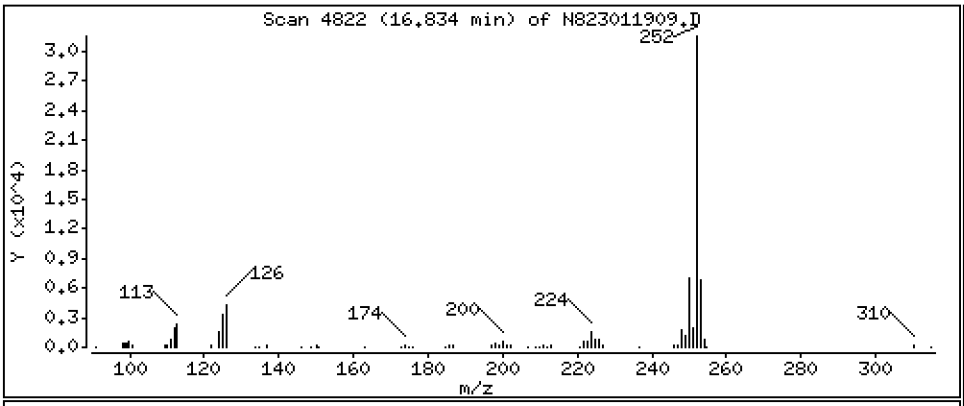
Operator: JZ

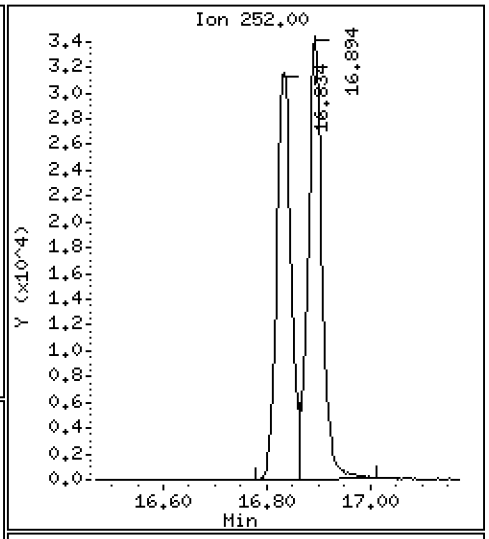
Column phase: Rxi-17sil

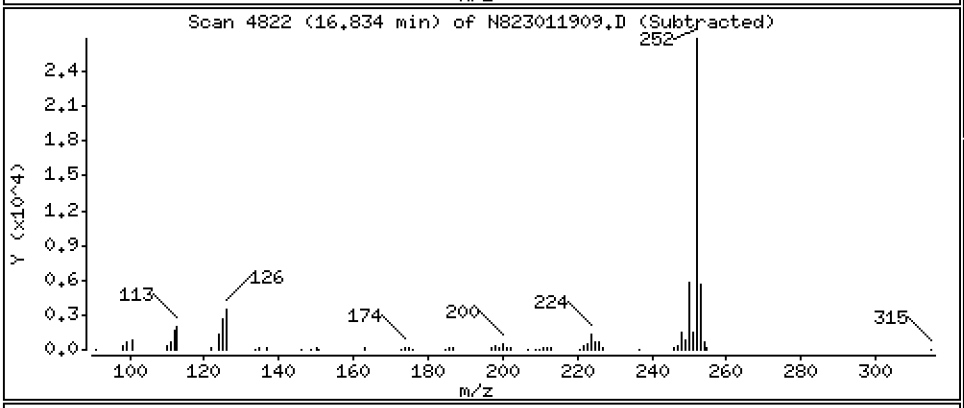
Column diameter: 0.25

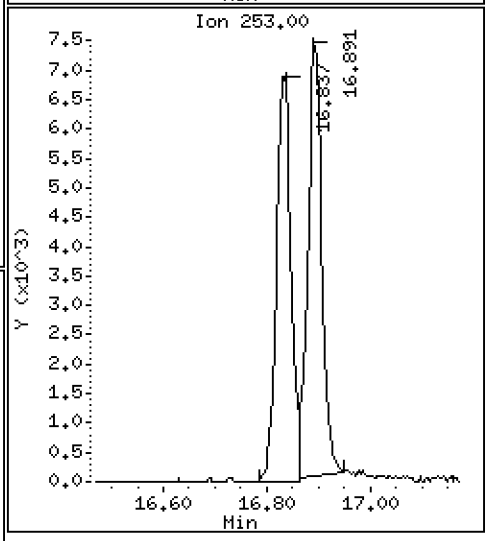
28 Benzo(b)fluoranthene

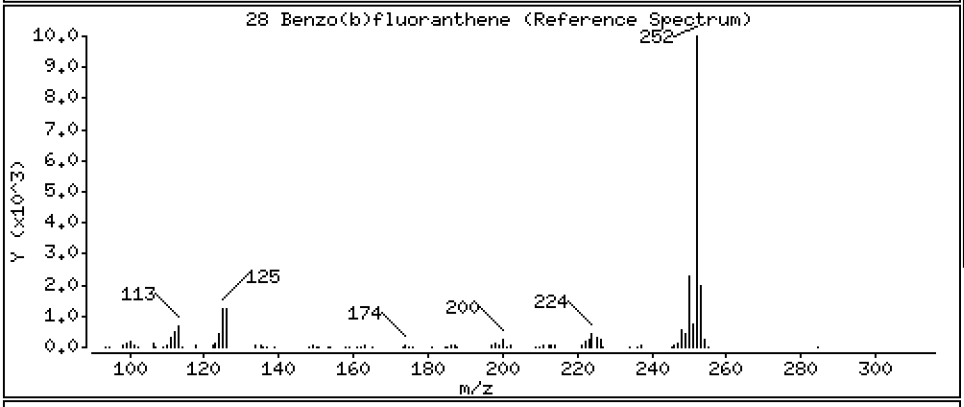
Concentration: 2.507 ug/L

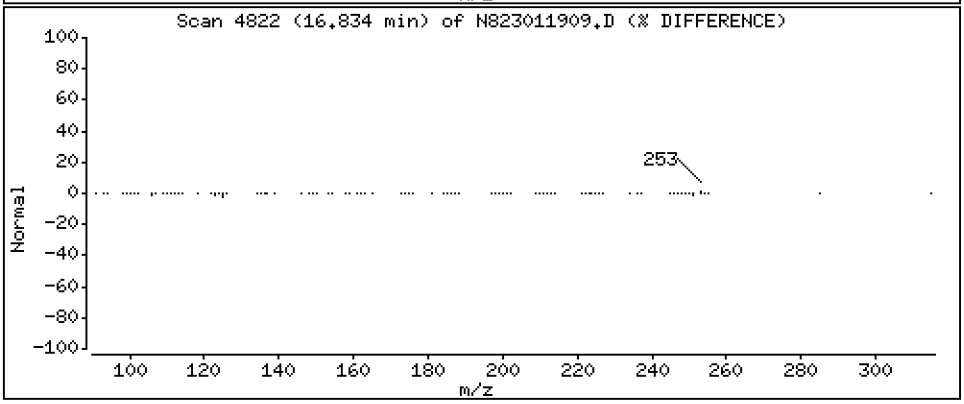












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

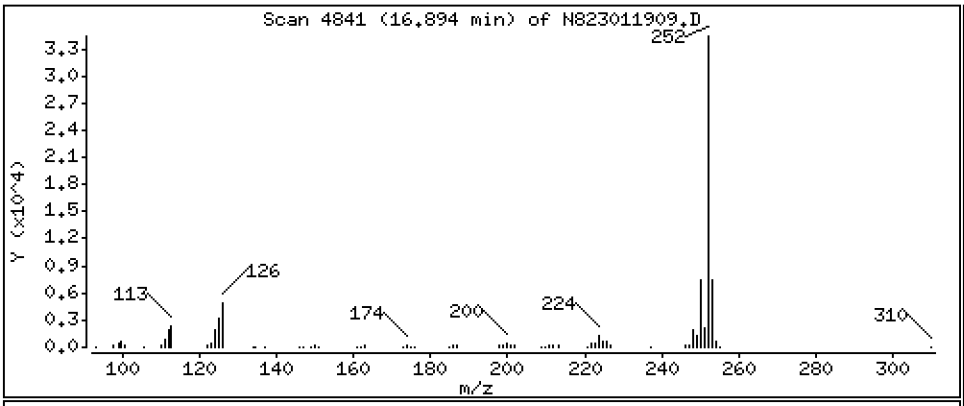
Operator: JZ

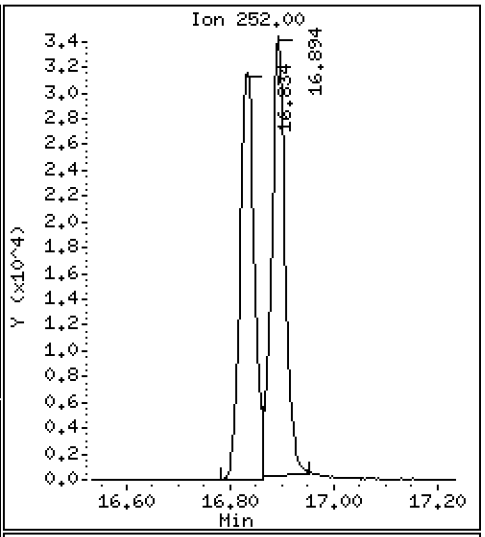
Column phase: Rxi-17sil

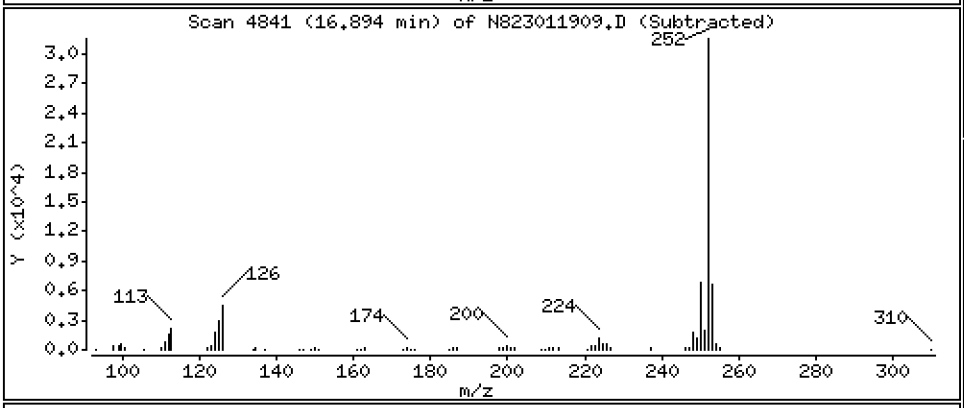
Column diameter: 0.25

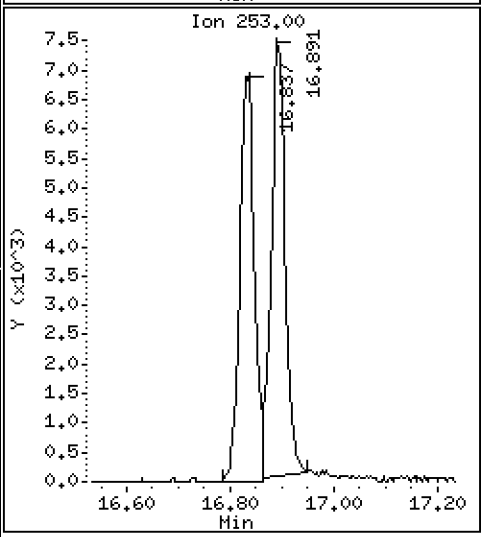
29 Benzo(k)fluoranthene

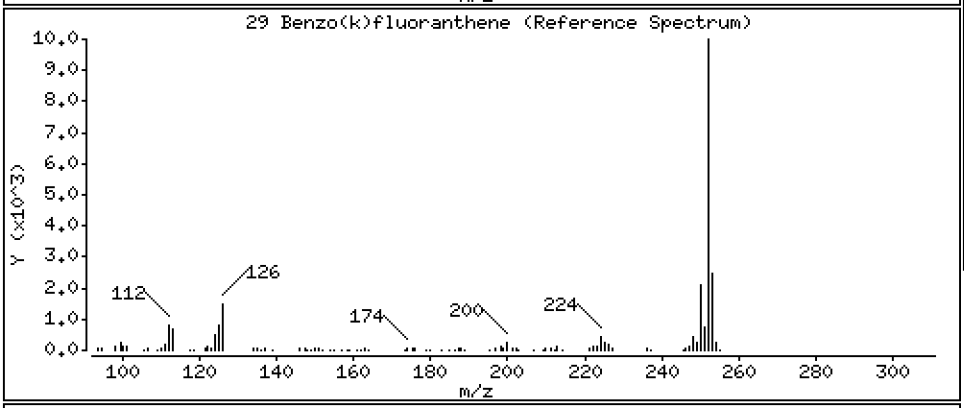
Concentration: 2.656 ug/L

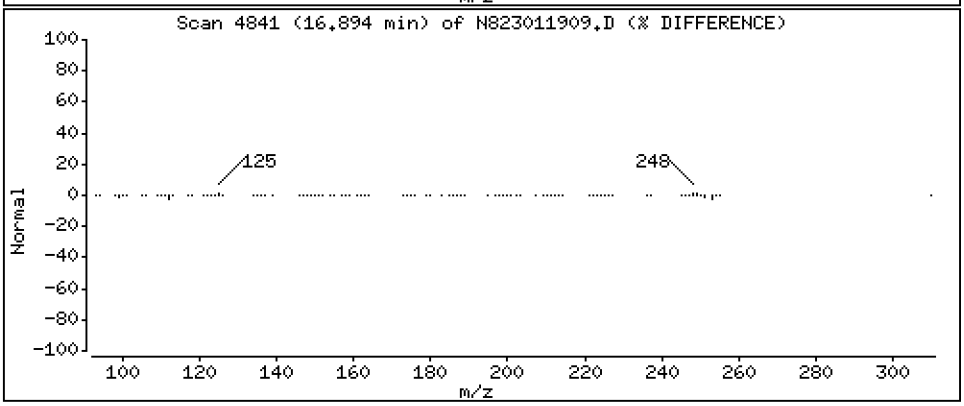












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

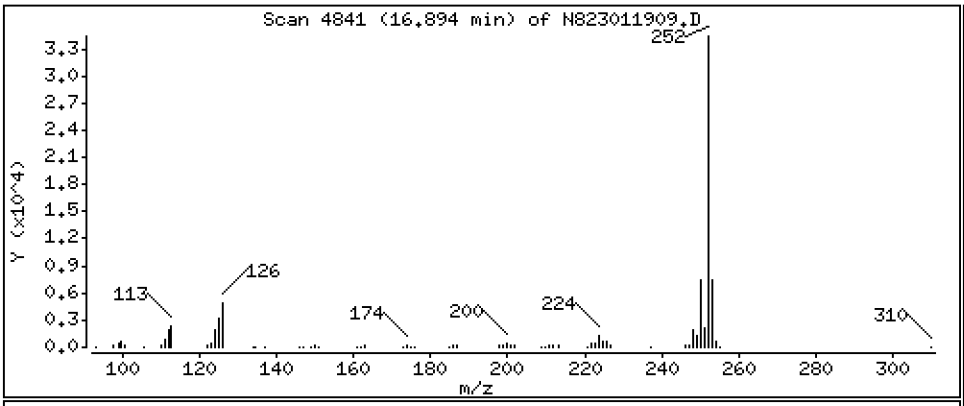
Operator: JZ

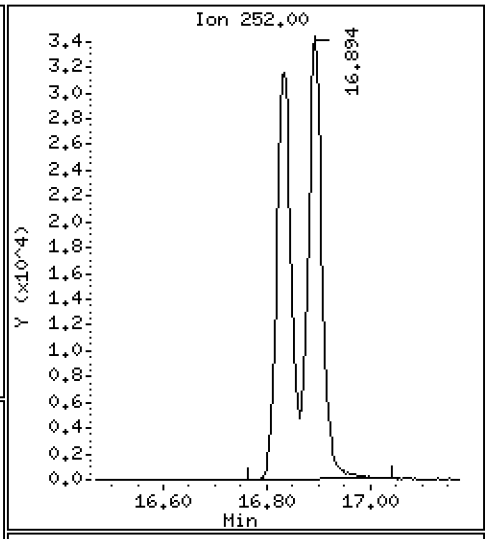
Column phase: Rxi-17sil

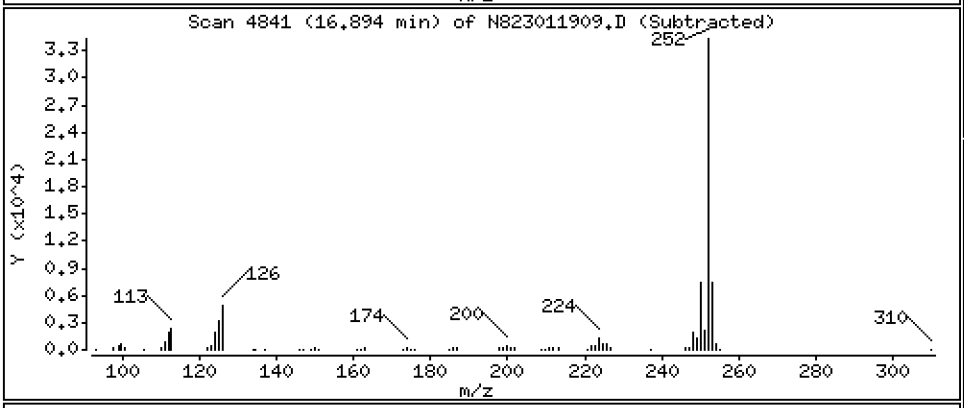
Column diameter: 0.25

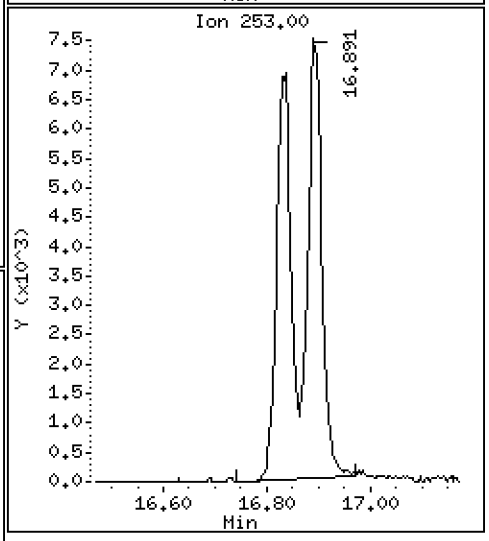
31 Total Benzofluoranthenes

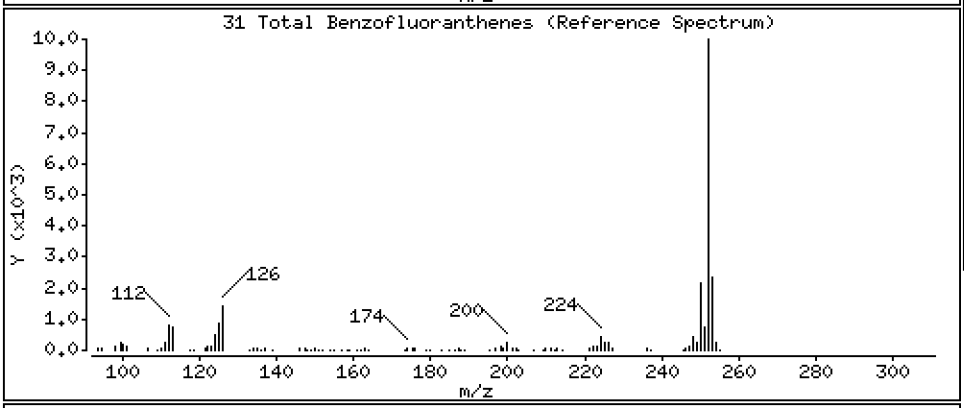
Concentration: 5.480 ug/L

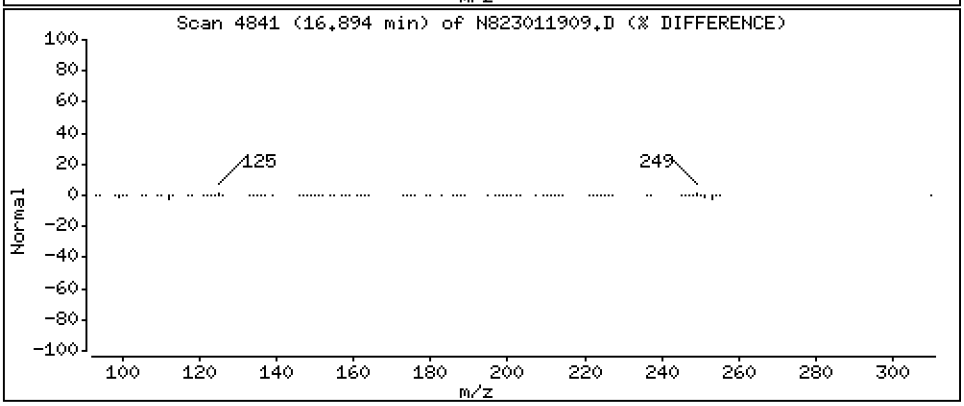












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

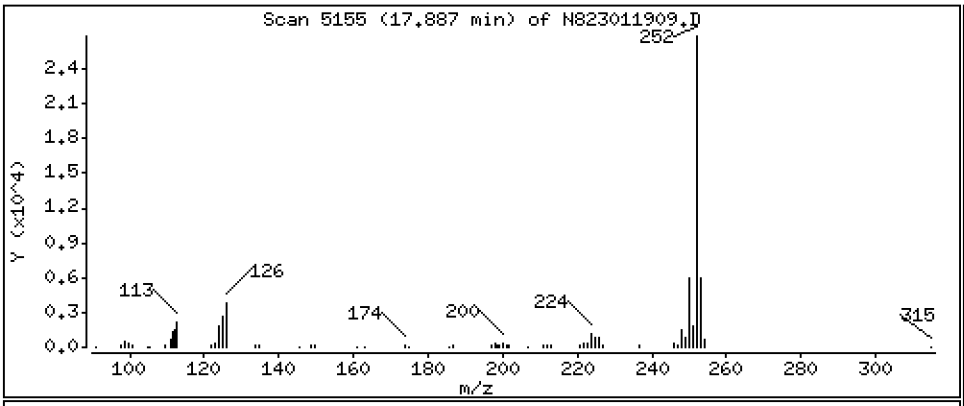
Operator: JZ

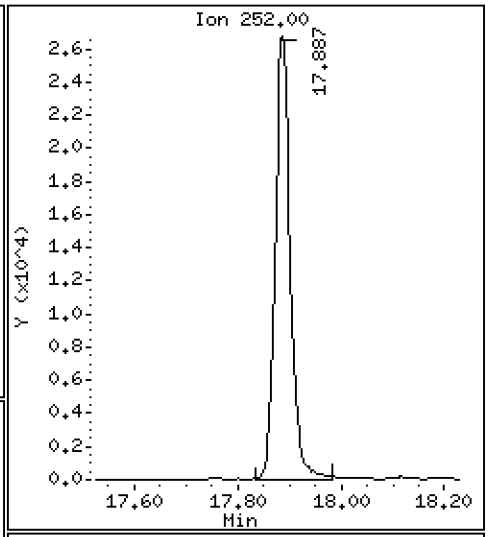
Column phase: Rxi-17sil

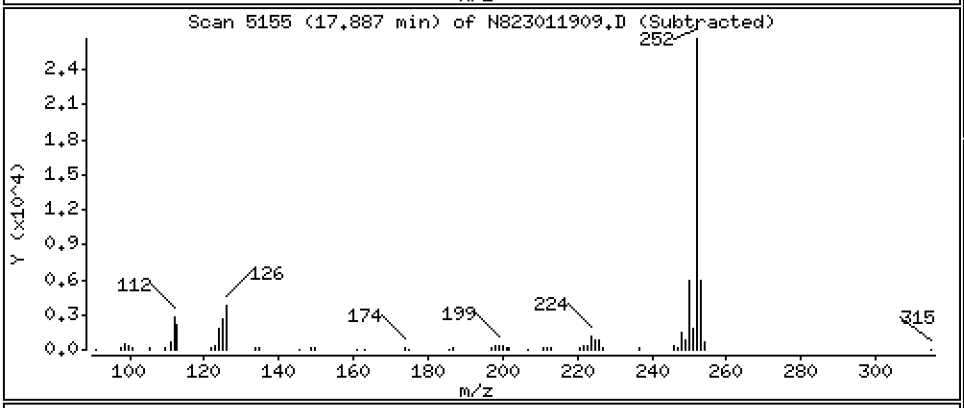
Column diameter: 0.25

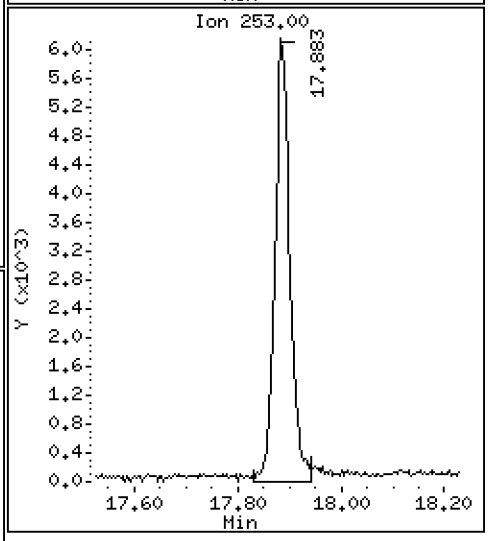
32 Benzo(a)pyrene

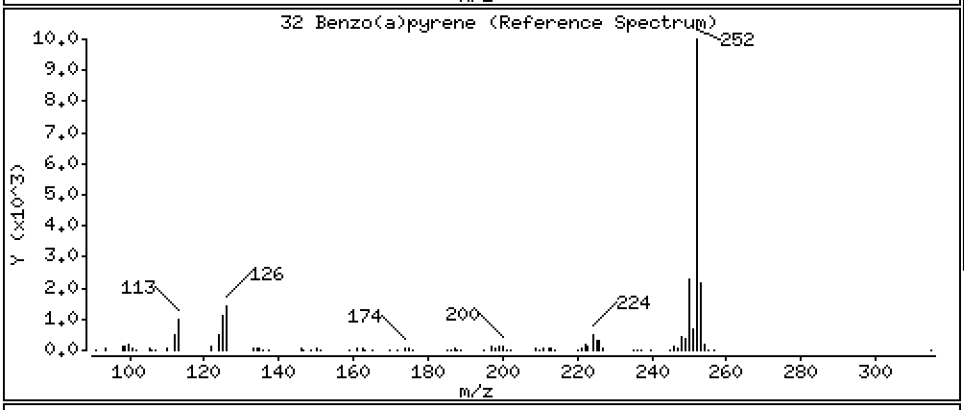
Concentration: 2.572 ug/L

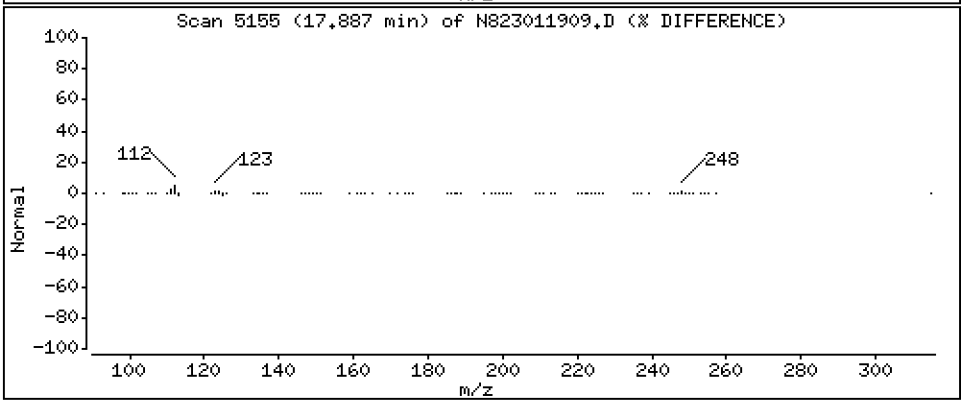












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

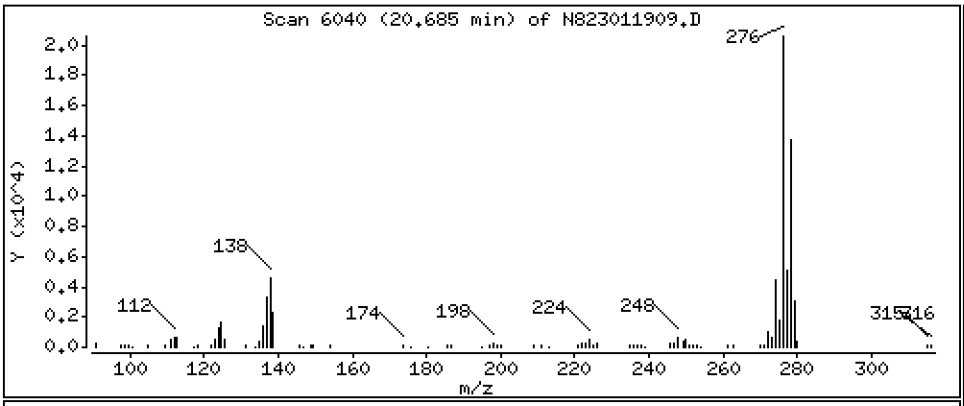
Operator: JZ

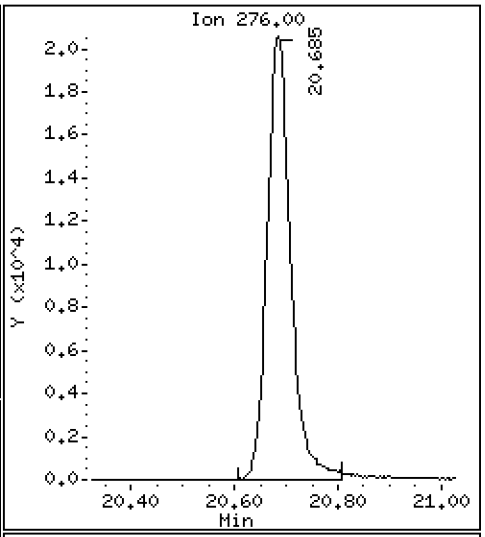
Column phase: Rxi-17sil

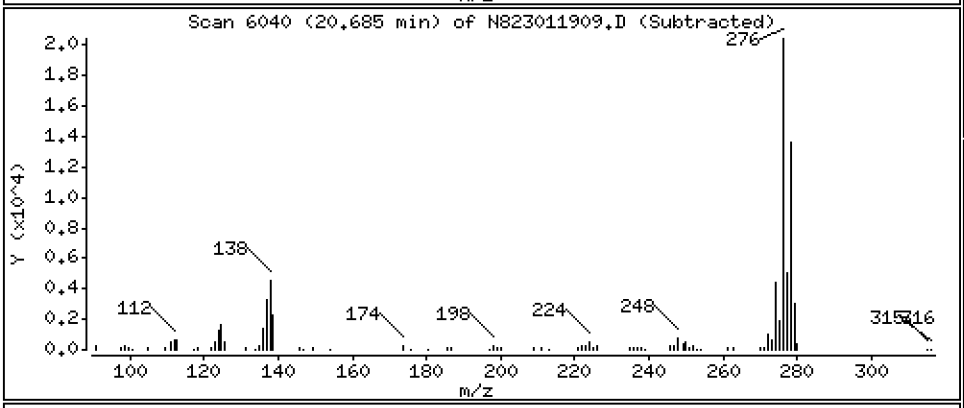
Column diameter: 0.25

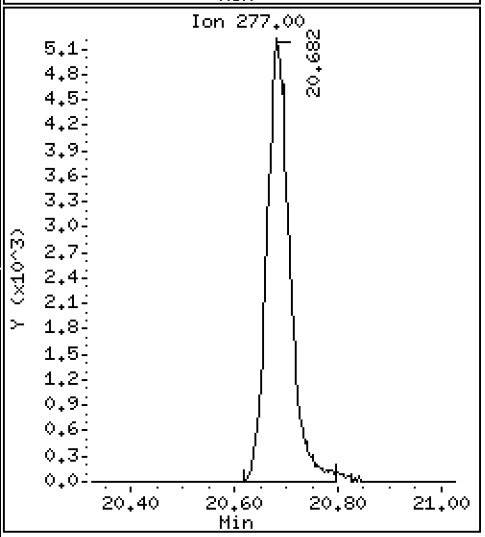
37 Indeno(1,2,3-cd)pyrene

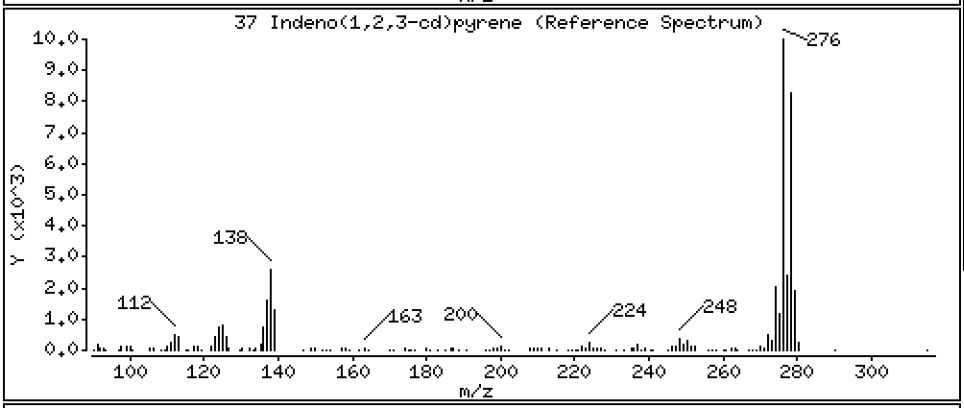
Concentration: 2.689 ug/L

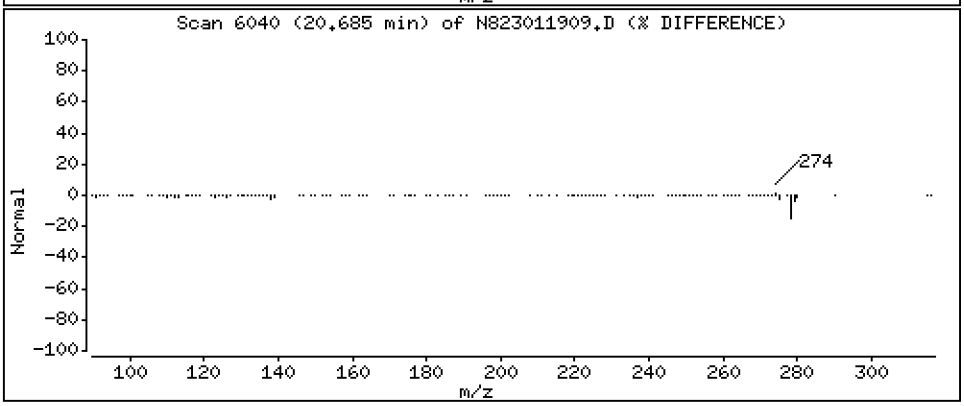












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

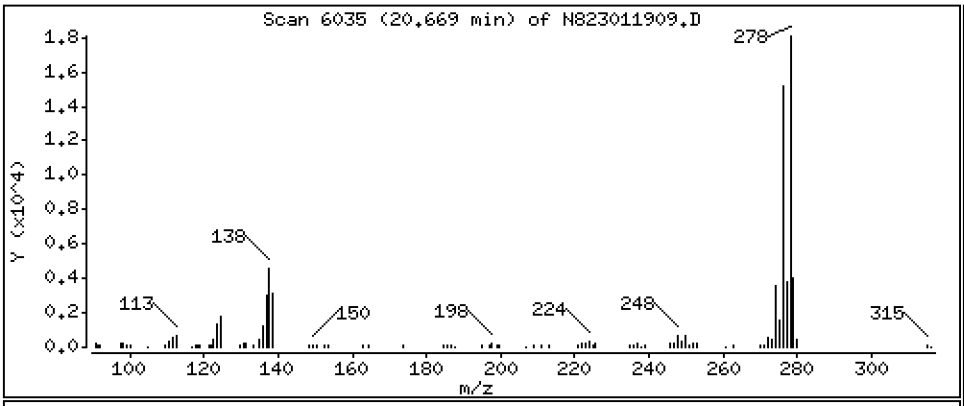
Operator: JZ

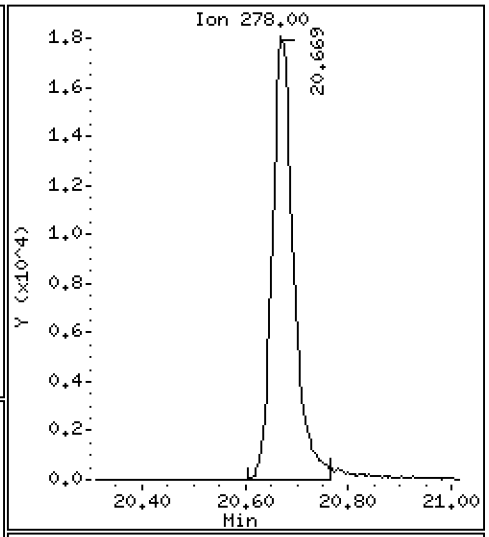
Column phase: Rxi-17sil

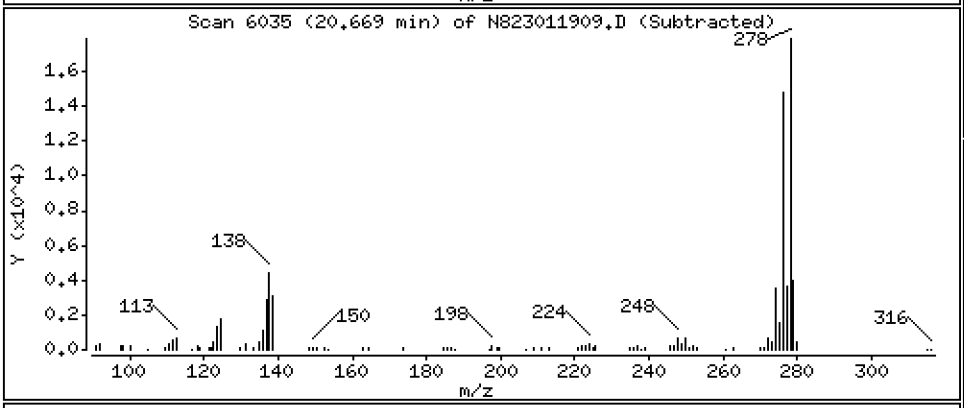
Column diameter: 0.25

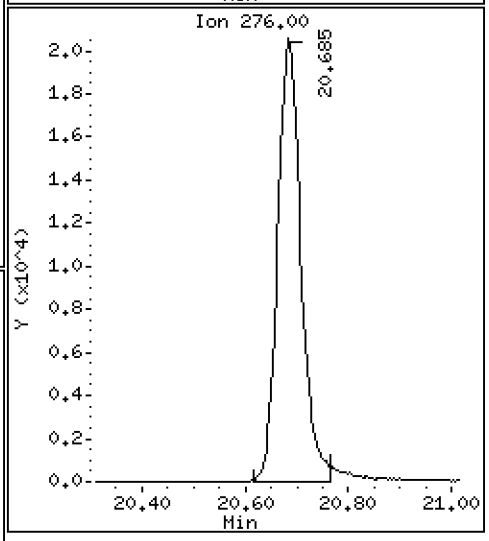
38 Dibenzo(a,h)anthracene

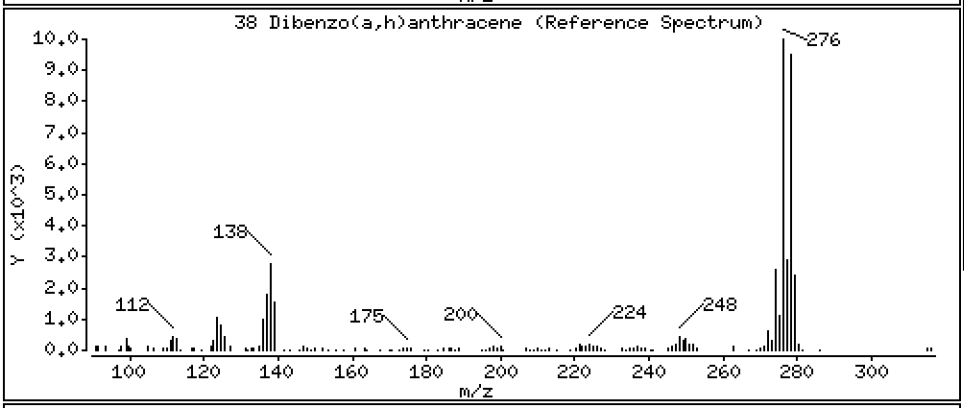
Concentration: 2.493 ug/L

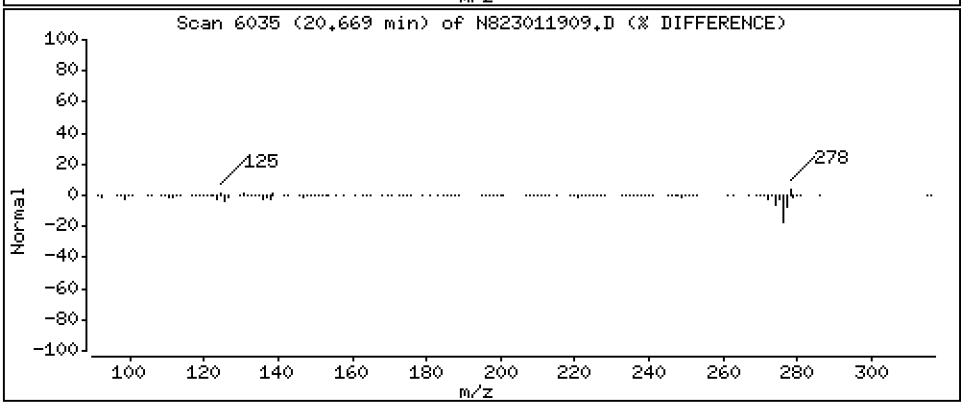












Data File: \\target\share\chem3\nt8.i\20230119.b\N823011909.D

Date : 19-JAN-2023 14:58

Client ID:

Instrument: nt8.i

Sample Info: SCV230119

Volume Injected (uL): 1.0

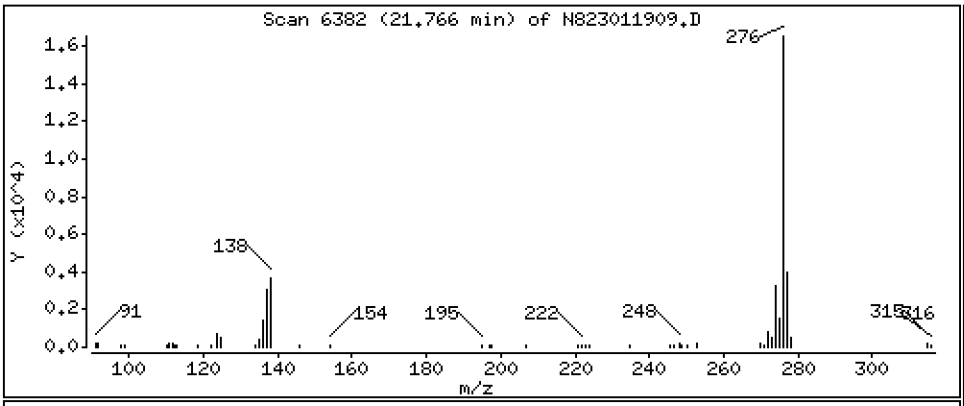
Operator: JZ

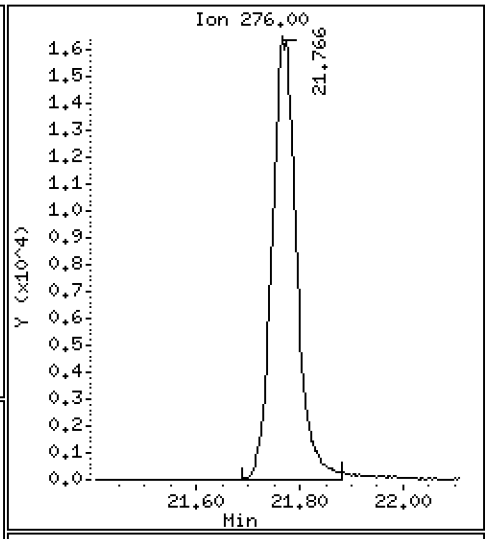
Column phase: Rxi-17sil

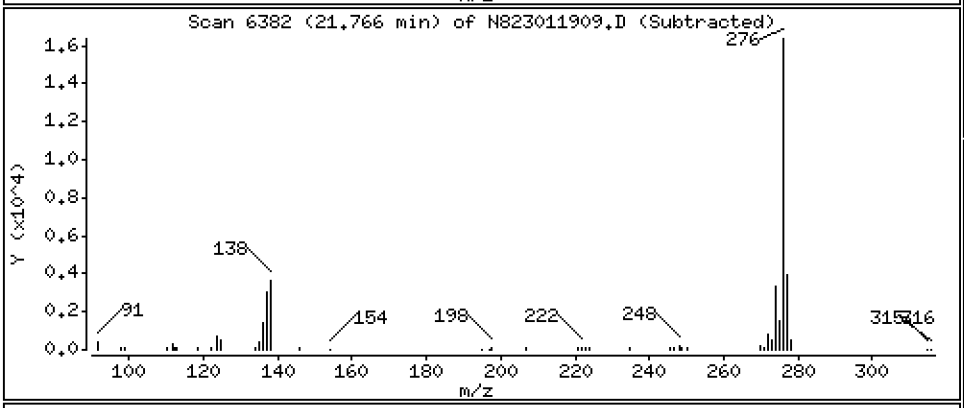
Column diameter: 0.25

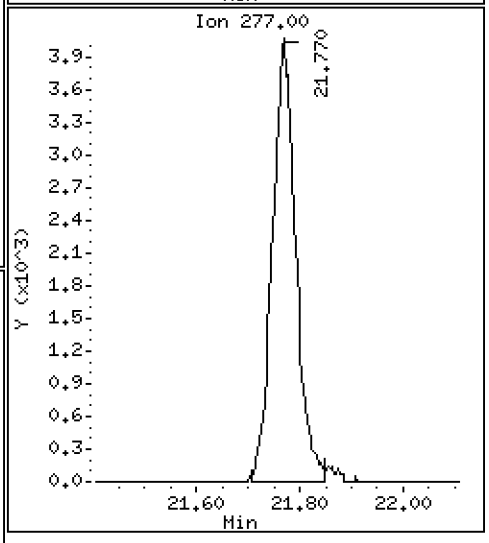
39 Benzo(g,h,i)perylene

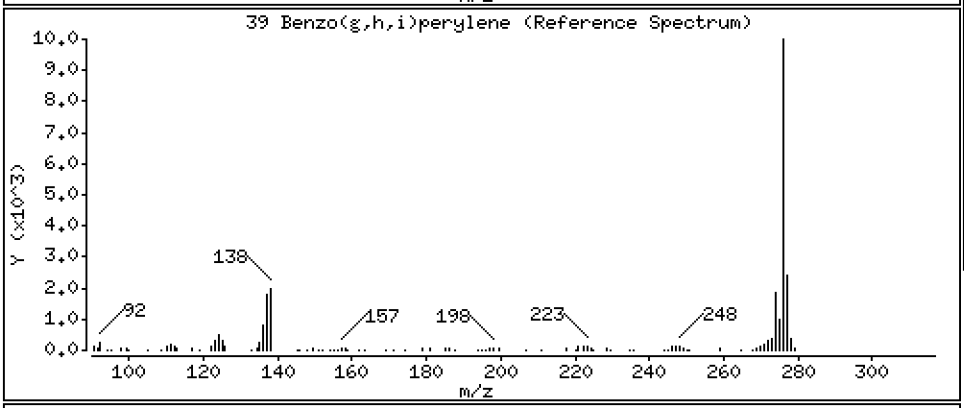
Concentration: 2.483 ug/L

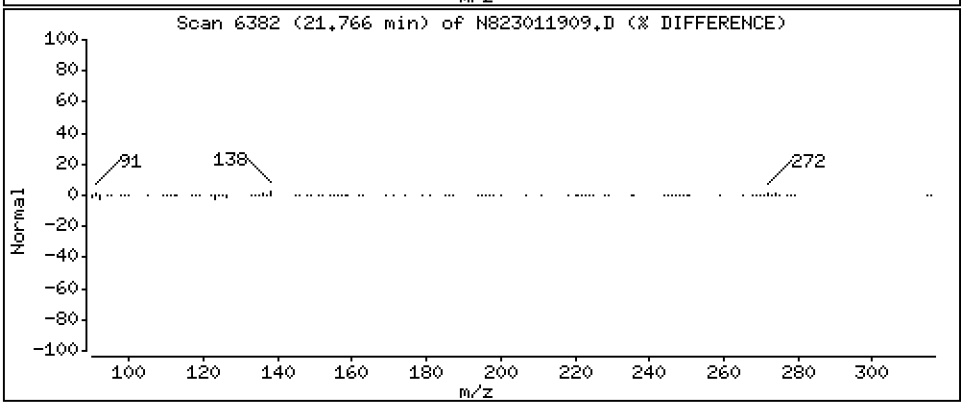












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230119.b\N823011909.D
Lab Smp Id: SLA0213-SCV1
Inj Date : 19-JAN-2023 14:58
Operator : JZ Inst ID: nt8.i
Smp Info : SCV230119
Misc Info : 23-
Comment   : 1ul Injection
Method   : \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Meth Date : 25-Jan-2023 21:57 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnascv.sub
Target Version: 4.14
Processing Host: JIANQING-202105

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	500.000	Volume of final extract (uL)
Vo	500.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
*	1 Naphthalene-d8	136	4.913	4.906	(1.000)	46346	2.00000	
	2 Naphthalene	128	4.941	4.938	(1.006)	56587	2.62597	2.626
$	3 2-Methylnaphthalene-d10	152	Compound Not Detected.					
	4 2-Methylnaphthalene	141	5.694	5.687	(1.159)	31650	2.67019	2.670
	5 1-methylnaphthalene	141	5.890	5.883	(1.199)	31873	2.64949	2.649
	9 Acenaphthylene	152	7.091	7.085	(0.985)	59018	2.82060	2.821
*	10 Acenaphthene-d10	164	7.202	7.196	(1.000)	27709	2.00000	
	11 Acenaphthene	153	7.249	7.246	(1.007)	36454	2.60022	2.600
	12 Dibenzofuran	168	7.401	7.395	(1.028)	60898	2.85987	2.860
	14 Fluorene	166	7.878	7.872	(1.094)	43507	2.63066	2.631
*	15 Phenanthrene-d10	188	9.238	9.235	(1.000)	51685	2.00000	
	16 Phenanthrene	178	9.276	9.270	(1.004)	61815	2.44841	2.448
	17 Anthracene	178	9.317	9.311	(1.009)	52064	2.27006	2.270
	22 Fluoranthene	202	11.059	11.053	(1.197)	72902	2.65276	2.653
$	21 Fluoranthene-d10	212	Compound Not Detected.					
	23 Pyrene	202	11.578	11.572	(0.815)	71115	2.46242	2.462
	24 Benzo(a)anthracene	228	14.082	14.076	(0.991)	67725	2.58725	2.587
*	25 Chrysene-d12	240	14.212	14.202	(1.000)	46582	2.00000	
	27 Chrysene	228	14.285	14.278	(1.005)	66872	2.39976	2.400
	28 Benzo(b)fluoranthene	252	16.833	16.821	(0.929)	60946	2.50689	2.507
	29 Benzo(k)fluoranthene	252	16.893	16.884	(0.932)	63249	2.65606	2.656
	31 Total Benzofluoranthenes	252	16.893	16.821	(0.932)	126178	5.48025	5.480(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	32 Benzo(a)pyrene	252	17.886	17.877	(0.987)	55026	2.57205	2.572
*	33 Perylene-d12	264	18.117	18.111	(1.000)	41743	2.00000	
	37 Indeno(1,2,3-cd)pyrene	276	20.684	20.675	(1.142)	65545	2.68928	2.689
$	36 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	38 Dibenzo(a,h)anthracene	278	20.669	20.662	(1.141)	52293	2.49315	2.493
	39 Benzo(g,h,i)perylene	276	21.766	21.756	(1.201)	54821	2.48258	2.483
	35 Perylene	252	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823011909.D
Lab Smp Id: SLA0213-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230119.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 19-JAN-2023
Calibration Time: 12:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44704	22352	89408	46346	3.67
10 Acenaphthene-d10	26411	13206	52822	27709	4.91
15 Phenanthrene-d10	49210	24605	98420	51685	5.03
25 Chrysene-d12	42994	21497	85988	46582	8.35
33 Perylene-d12	40520	20260	81040	41743	3.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.91	4.41	5.41	4.91	0.13
10 Acenaphthene-d10	7.20	6.70	7.70	7.20	0.09
15 Phenanthrene-d10	9.24	8.74	9.74	9.24	0.03
25 Chrysene-d12	14.20	13.70	14.70	14.21	0.07
33 Perylene-d12	18.11	17.61	18.61	18.12	0.03

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

REVIEW SUMMARY FOR FILE - N823011909.D

Lab ID: SLA0213-SCV1
nt8.i, 20230119.b\FSIMPNA230119.m,   19-JAN-2023 14:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

No RRT check performed

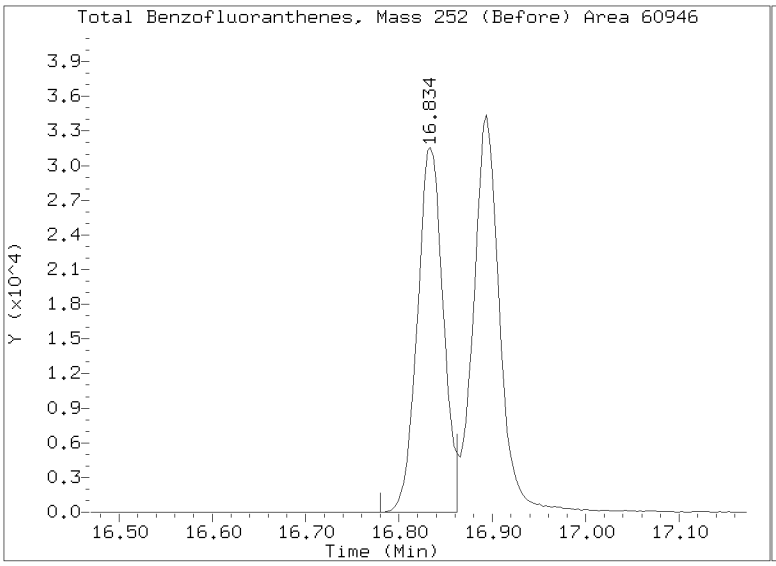
On Column LOD for nt8.i, 20230119.b\FSIMPNA230119.m, pnascv.sub = 0.0500

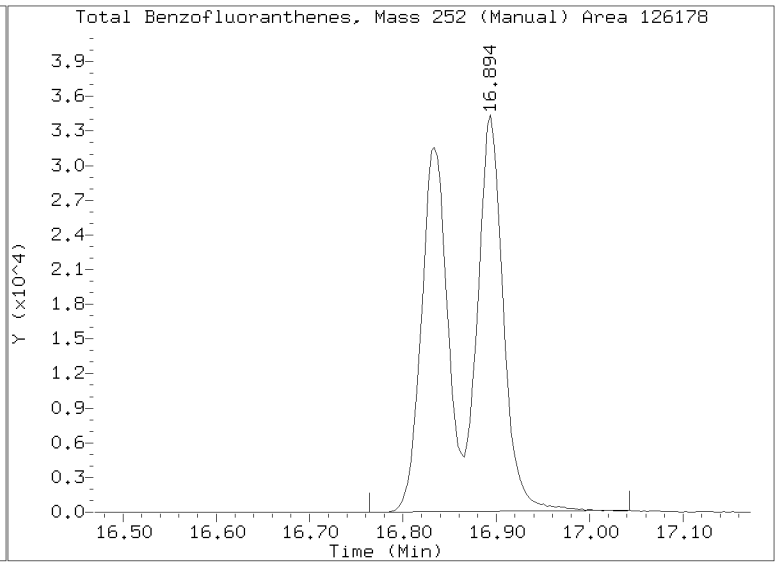
Exception: Benzo(b)fluoranthene 0.0300
Exception: Benzo(k)fluoranthene 0.0300
Exception: Total Benzofluoranthenes 0.0300
Exception: Fluoranthene-d10 (Surr) 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230119.b/N823011909.D
Injection Date: 19-JAN-2023 14:58
Lab ID:SLA0213-SCV1 Client ID:
Report Date: 01/25/2023 22:00





Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT8	Calibration:	GA00050
Lab File ID:	N823020633.D	Calibration Date:	01/19/2023
Sequence:	SLB0075	Injection Date:	02/07/23
Lab Sample ID:	SLB0075-CCV1	Injection Time:	03:09
Sequence Name:	Calibration Check		

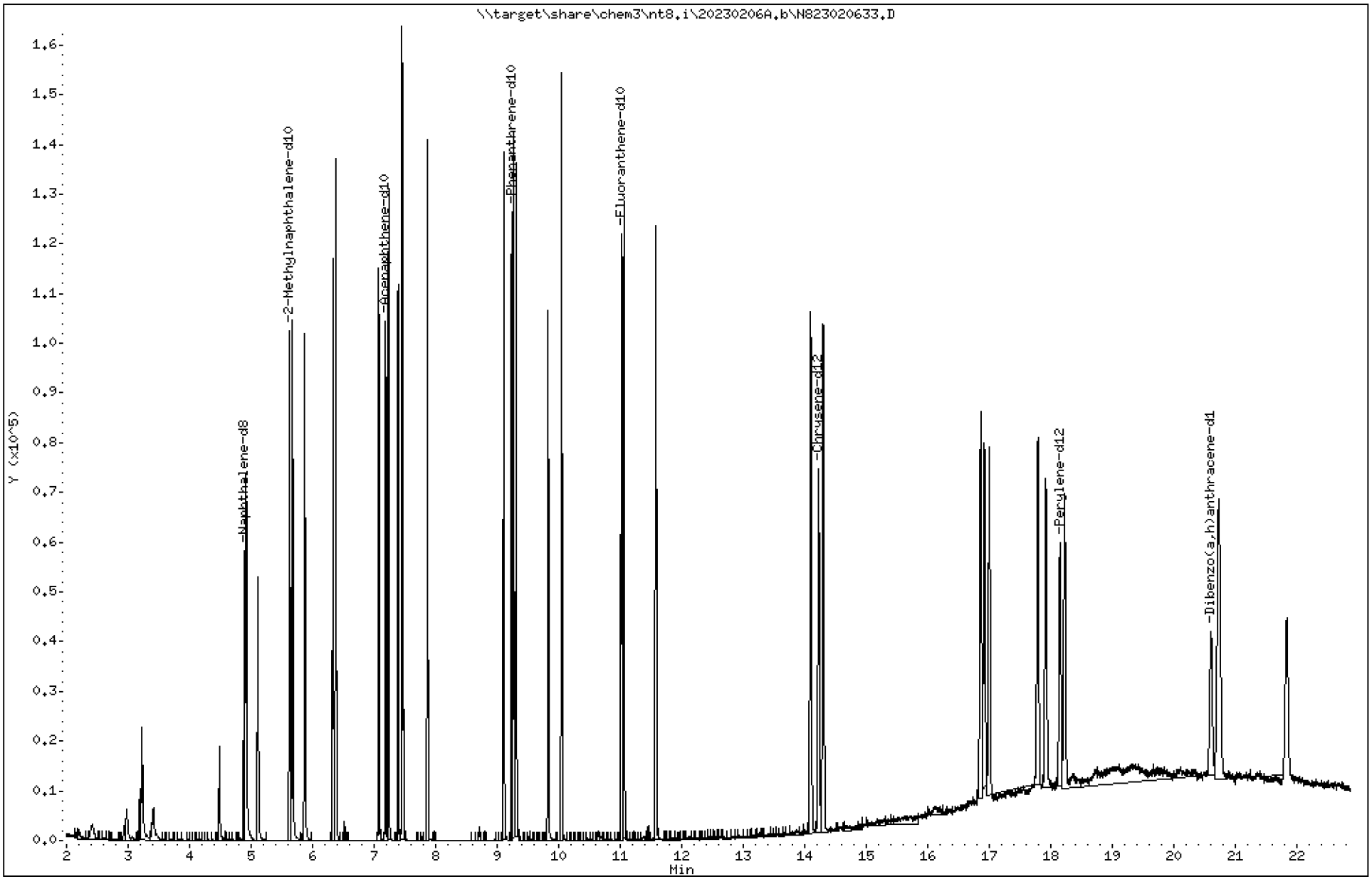
		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Benzo(a)anthracene	A	2.5000	2.85	1.1238870	1.2807120		14.0	+/-50
Chrysene	A	2.5000	2.46	1.1964350	1.1765240		-1.7	+/-50
Benzo(b)fluoranthene	A	2.5000	2.93	1.1648110	1.3636180		17.1	+/-50
Benzo(k)fluoranthene	A	2.5000	2.72	1.1409370	1.2422350		8.9	+/-50
Benzo(a)pyrene	A	2.5000	2.65	1.0250270	1.0880440		6.1	+/-50
Indeno(1,2,3-cd)pyrene	A	2.5000	2.26	1.1677520	1.0535810		-9.8	+/-50
Dibenzo(a,h)anthracene	A	2.5000	2.35	1.0049440	0.9451614		-5.9	+/-50
2-Methylnaphthalene-d10	A	2.5000	2.69	0.5454499	0.5877536		7.8	+/-50
Dibenzo[a,h]anthracene-d14	A	2.5000	2.20	0.6679424	0.6893016		-12.0	+/-50
Fluoranthene-d10	A	2.5000	2.73	0.8823923	0.9648554		9.3	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D
Date : 07-FEB-2023 03:09
Client ID:
Sample Info: CCV230206A

Instrument: nt8.i
Operator: JZ
Column diameter: 0.25

Column phase: Rxi-17sil



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Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

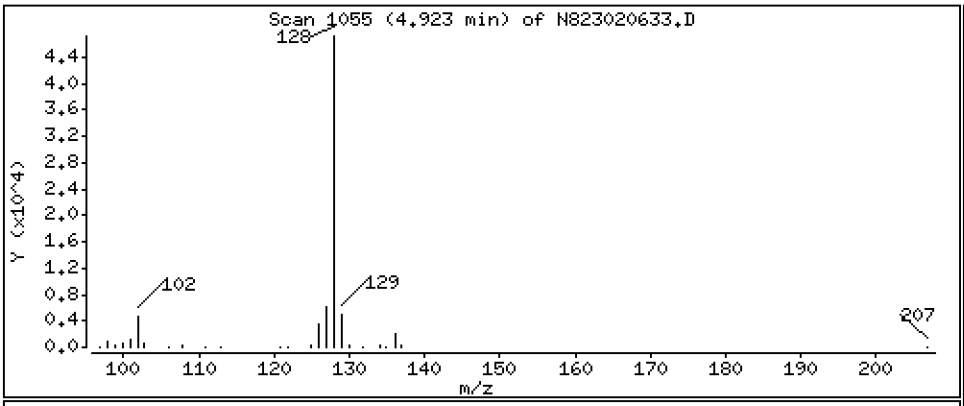
Operator: JZ

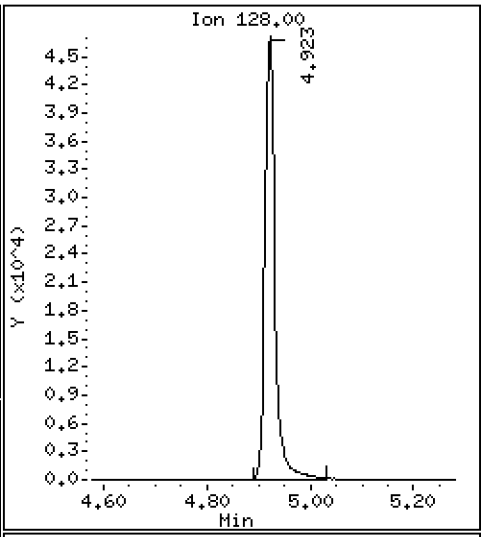
Column phase: Rxi-17sil

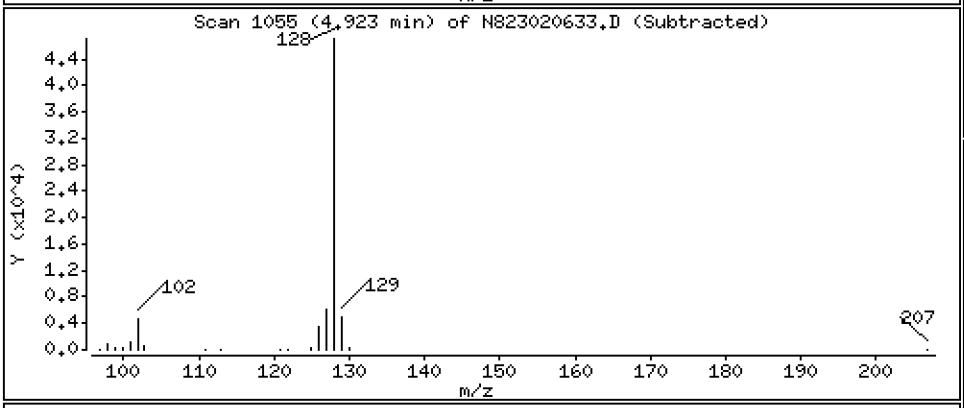
Column diameter: 0.25

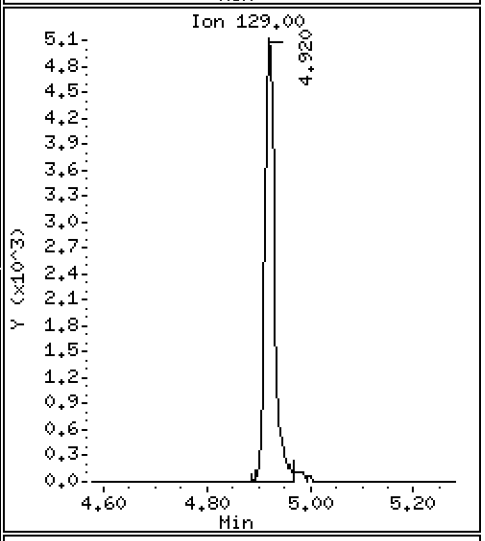
2 Naphthalene

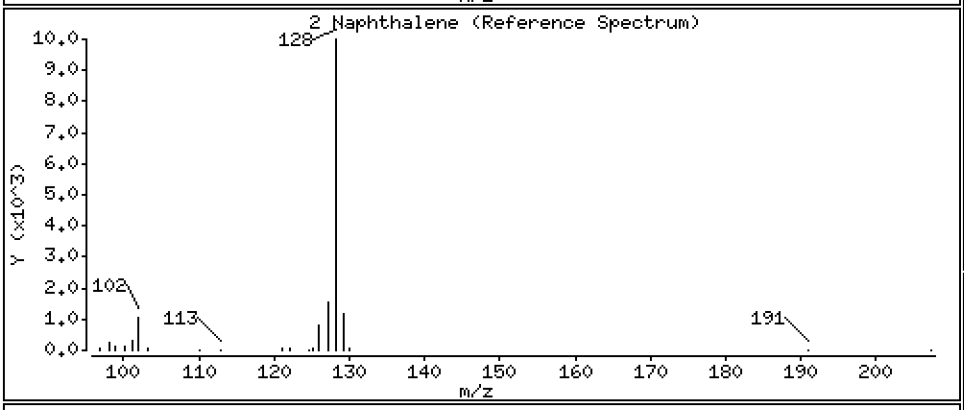
Concentration: 2.576 ug/mL

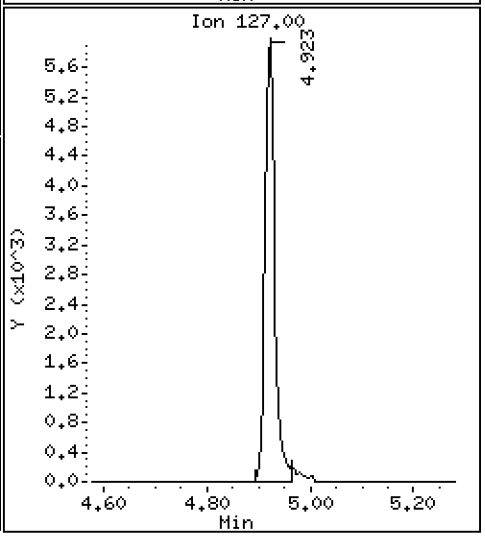


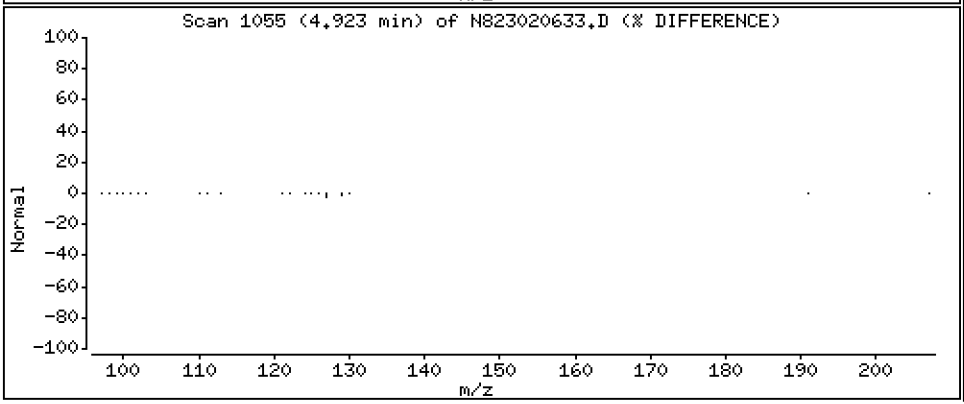












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Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

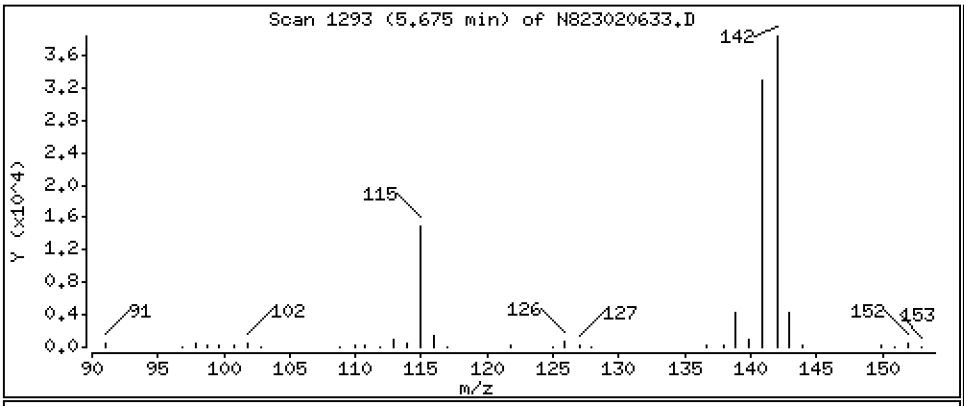
Operator: JZ

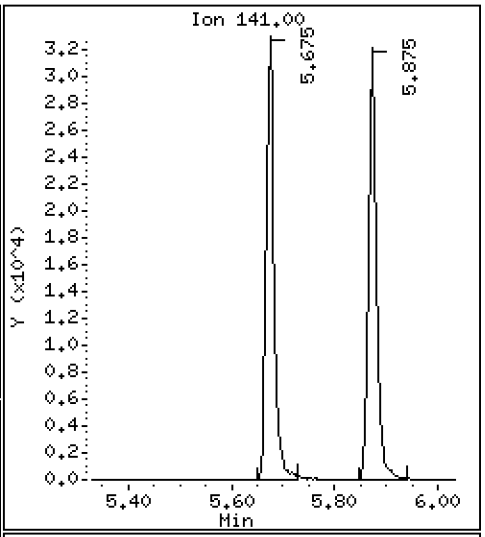
Column phase: Rxi-17sil

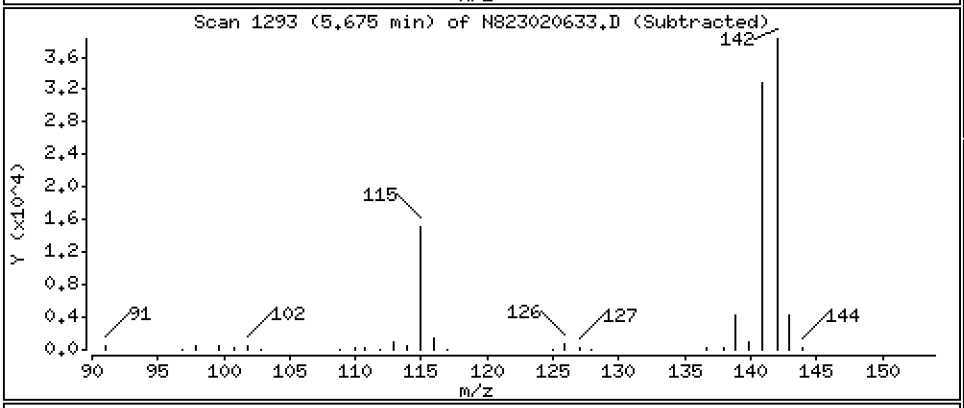
Column diameter: 0.25

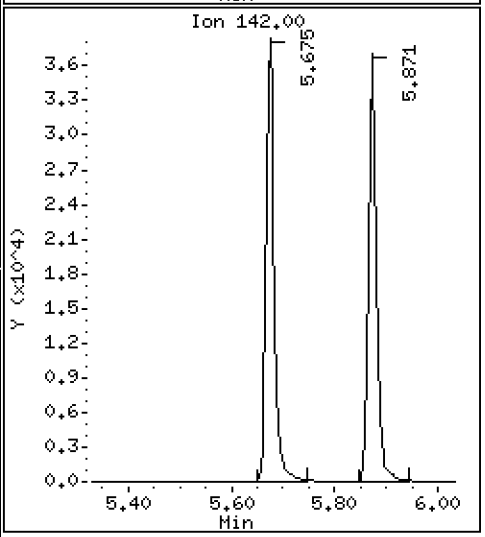
4 2-Methylnaphthalene

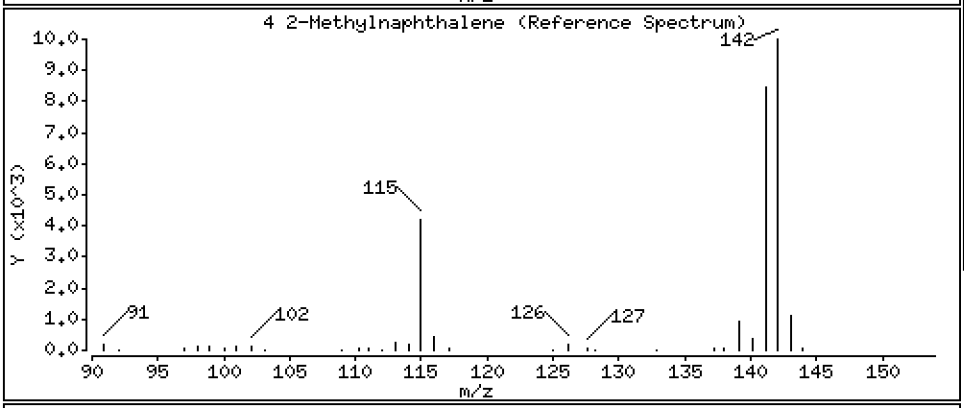
Concentration: 2.611 ug/mL

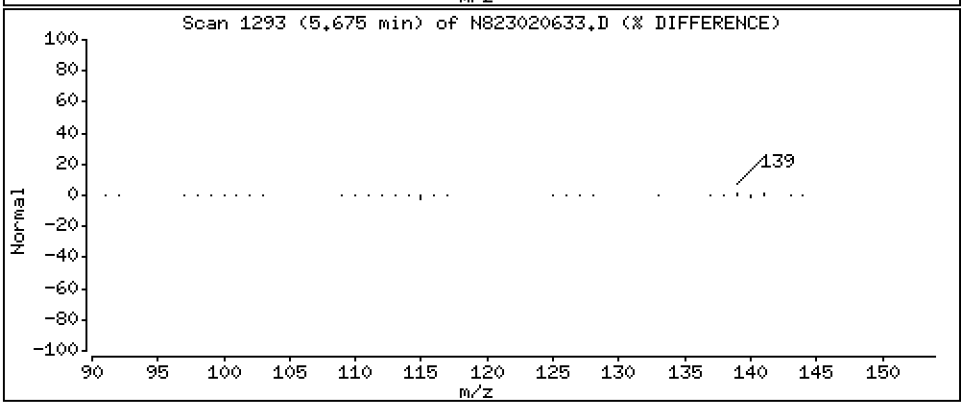












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Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

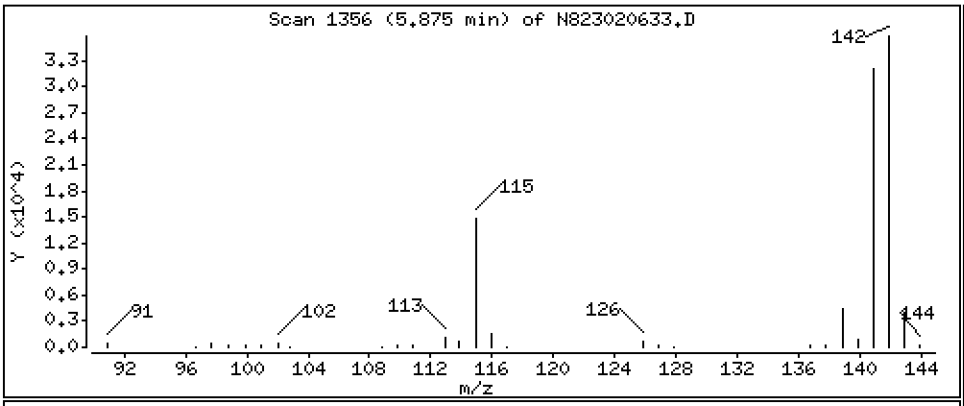
Operator: JZ

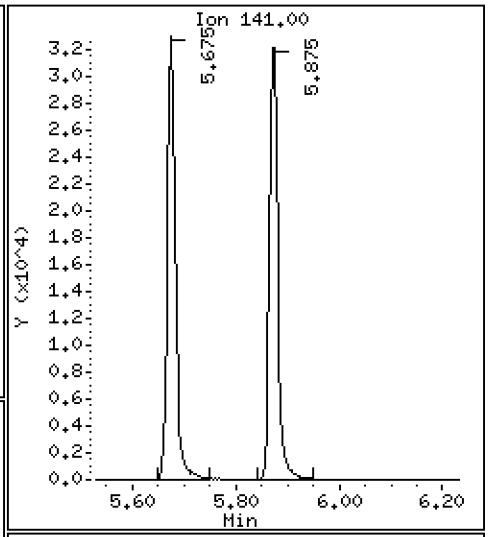
Column phase: Rxi-17sil

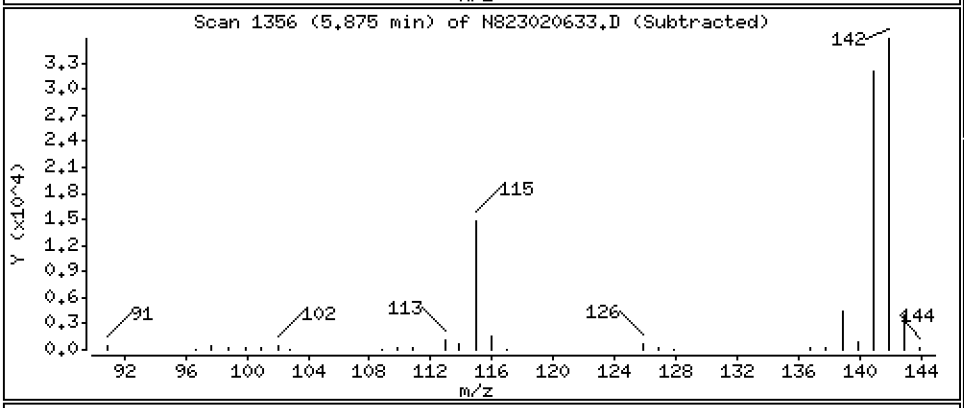
Column diameter: 0.25

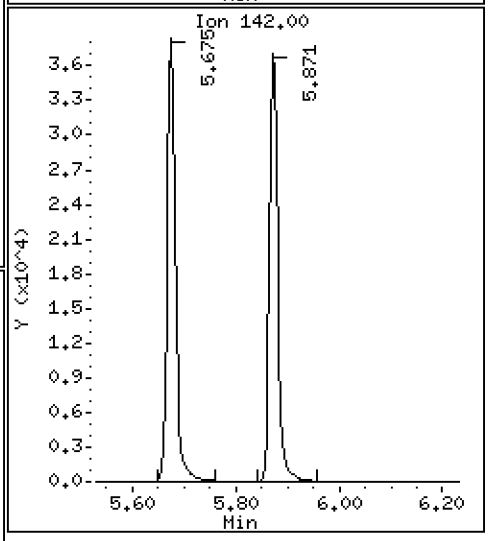
5 1-methylnaphthalene

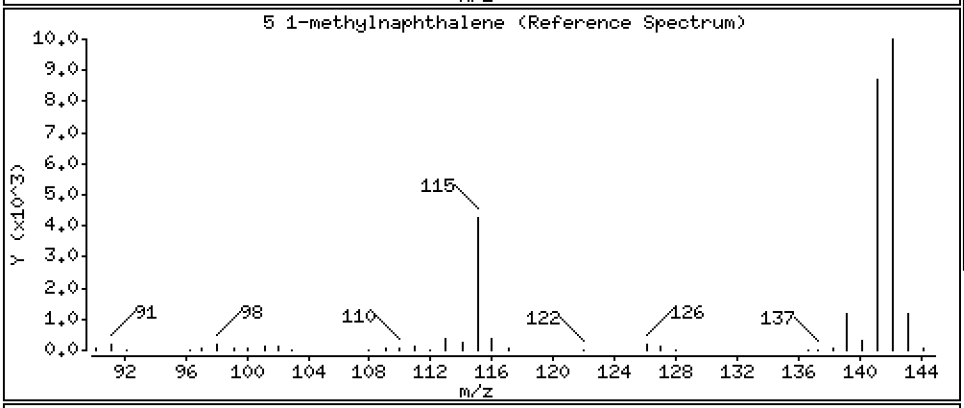
Concentration: 2.603 ug/mL

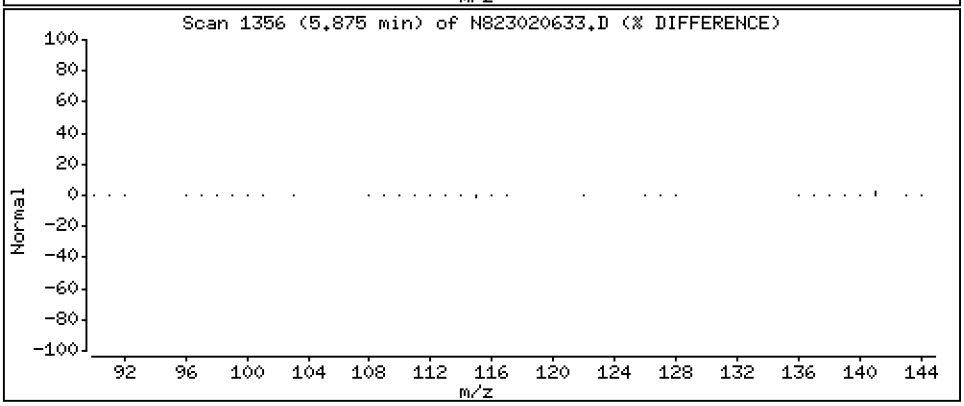












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D

Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

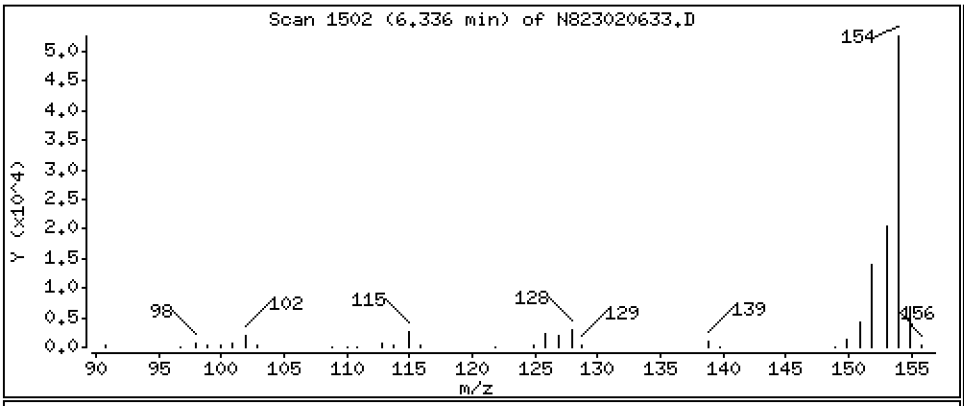
Operator: JZ

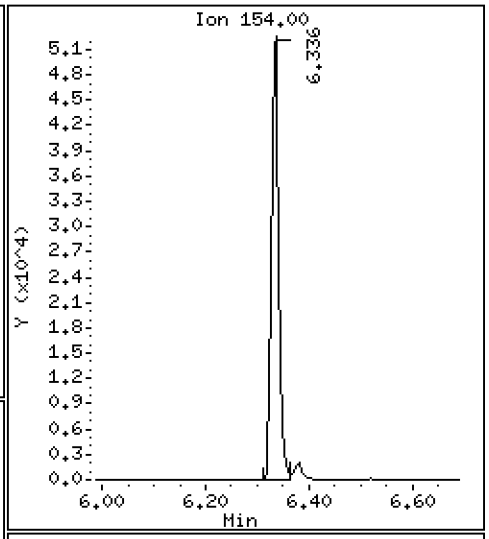
Column phase: Rxi-17sil

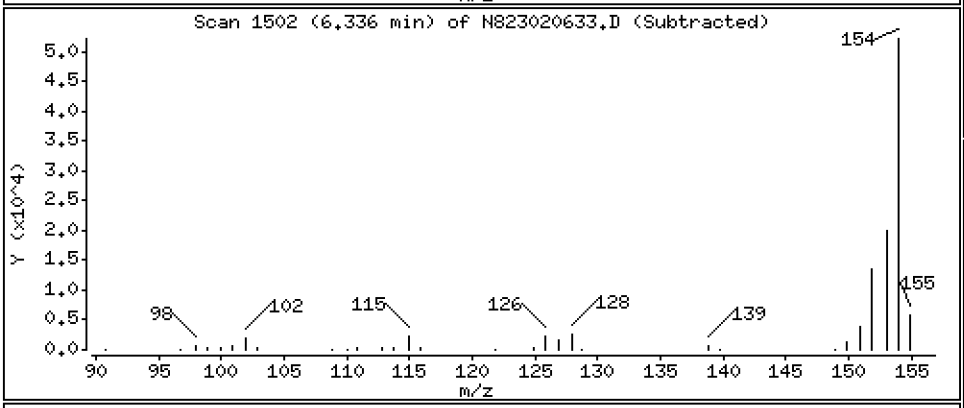
Column diameter: 0.25

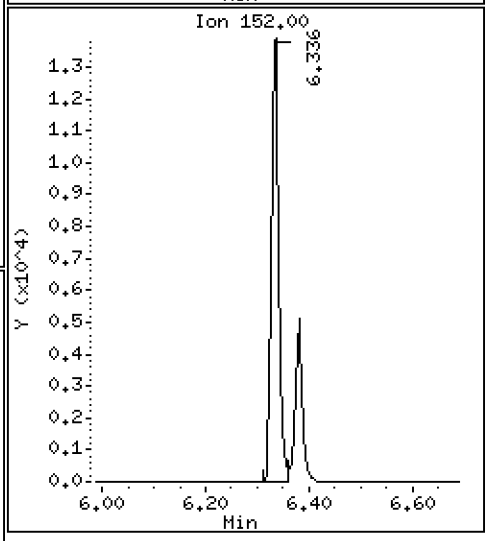
7 Biphenyl

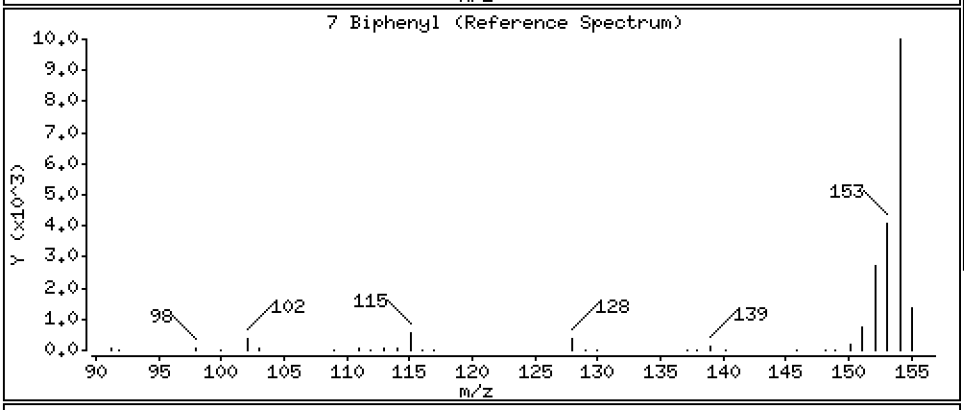
Concentration: 2.532 ug/mL

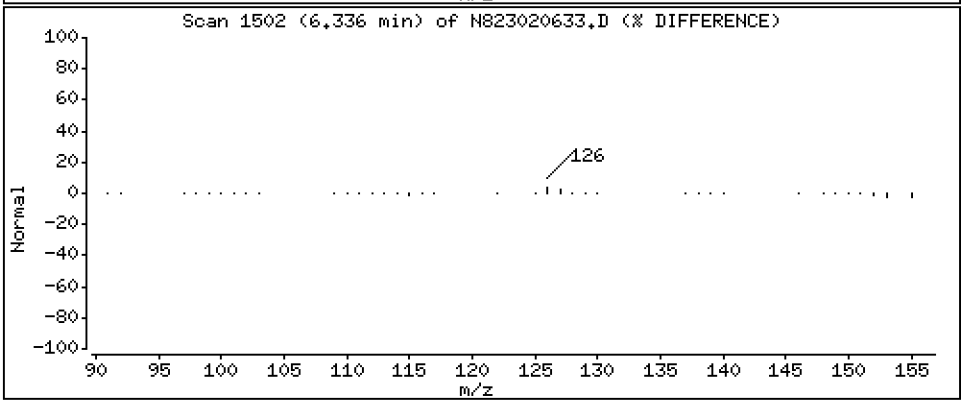












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Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

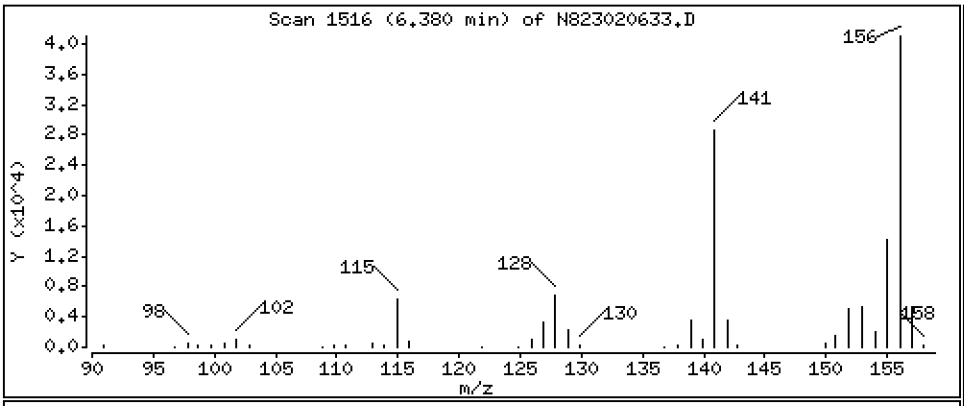
Operator: JZ

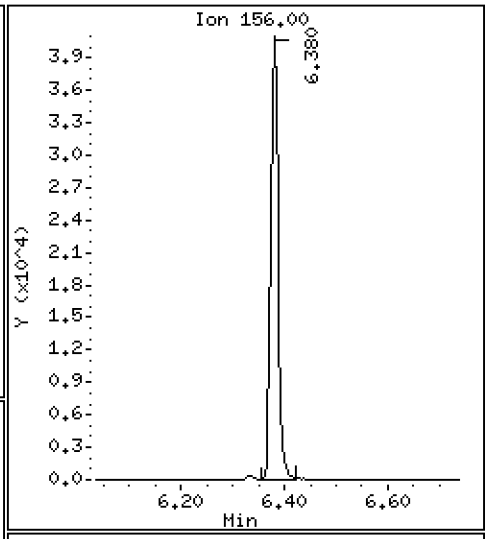
Column phase: Rxi-17sil

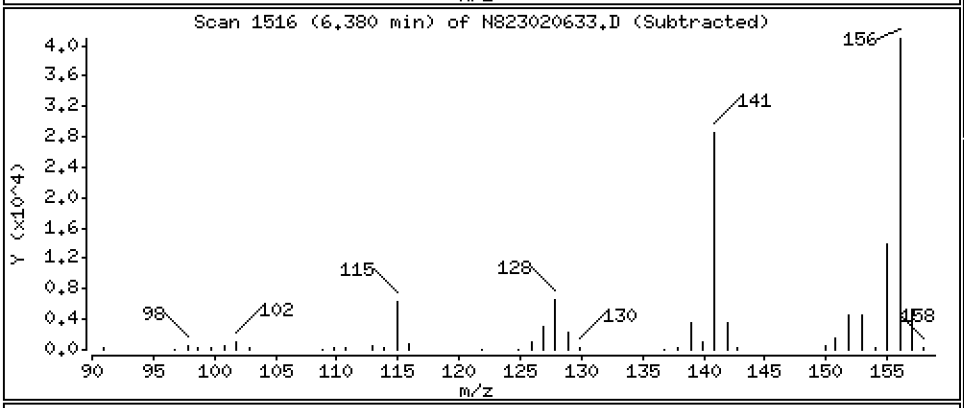
Column diameter: 0.25

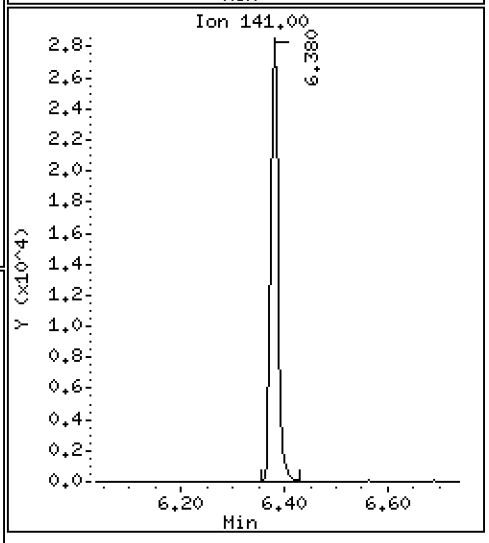
8 2,6-Dimethylnaphthalene

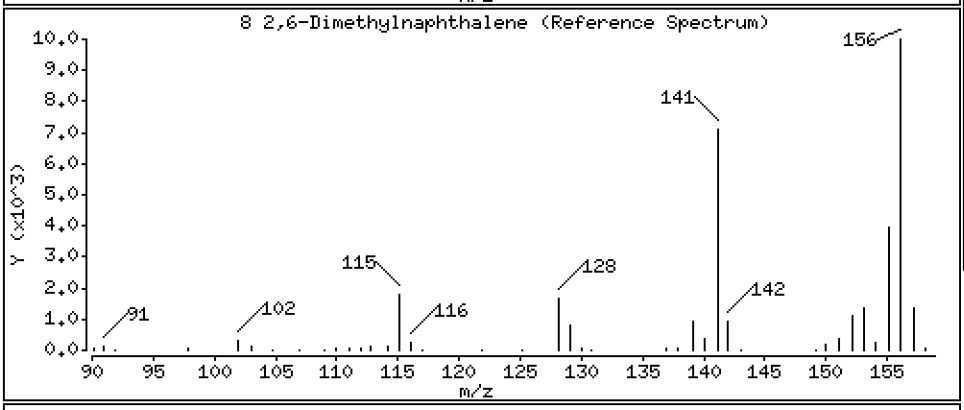
Concentration: 2.669 ug/mL

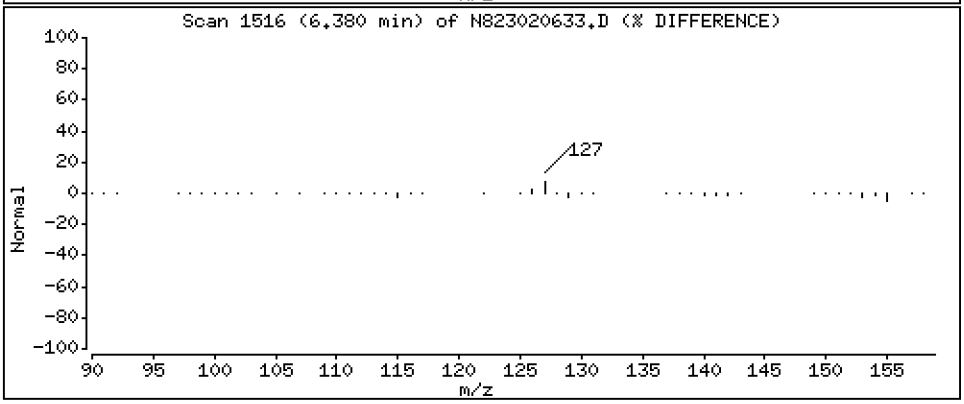












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Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

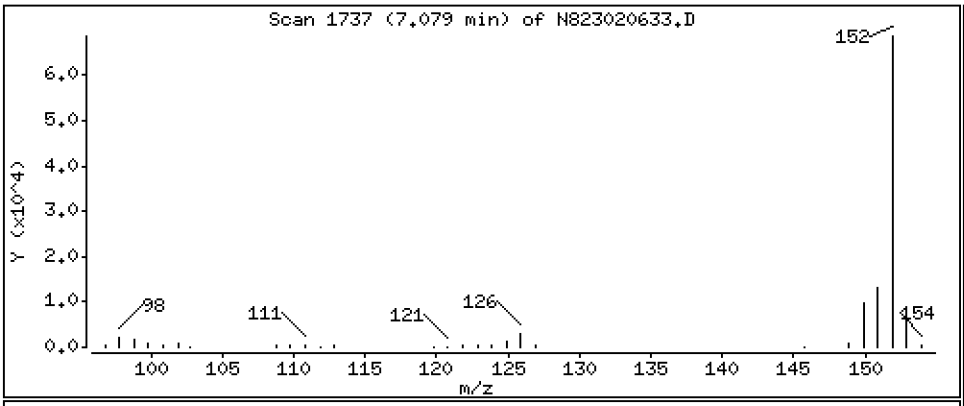
Operator: JZ

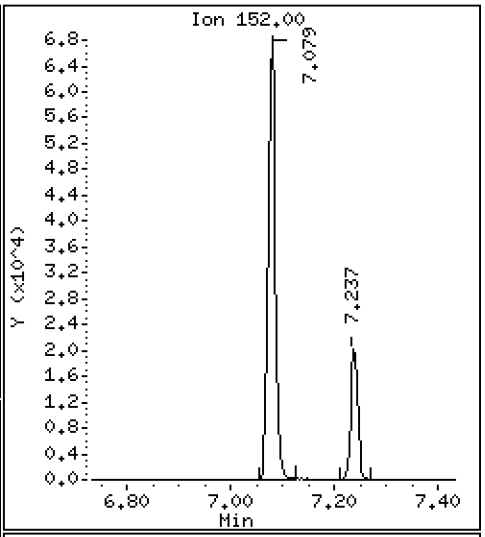
Column phase: Rxi-17sil

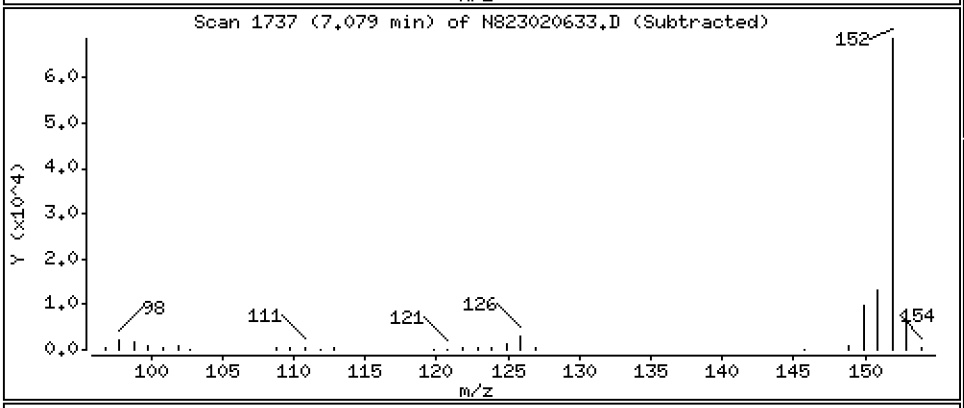
Column diameter: 0.25

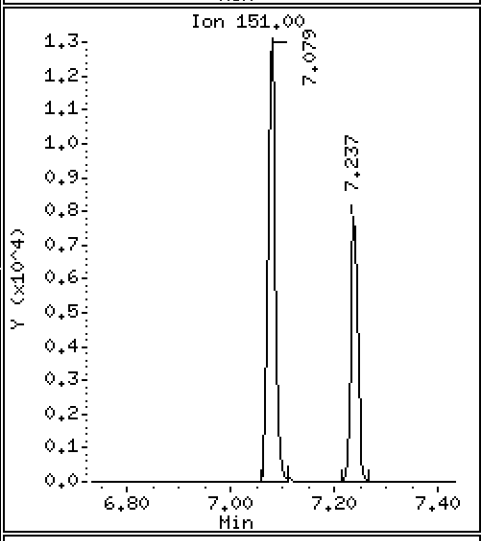
9 Acenaphthylene

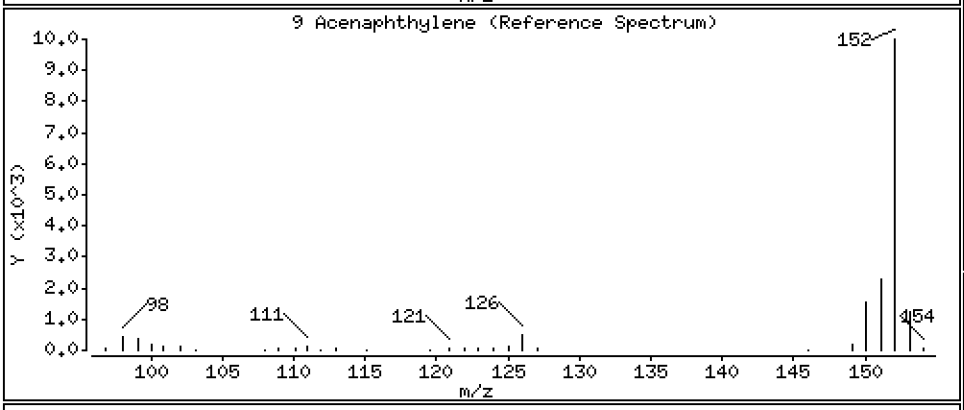
Concentration: 2.741 ug/mL

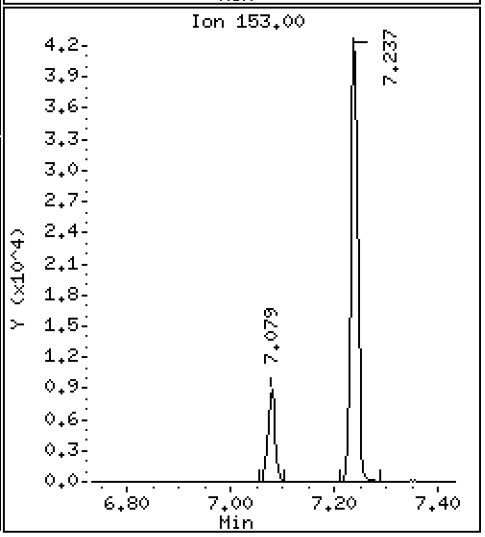


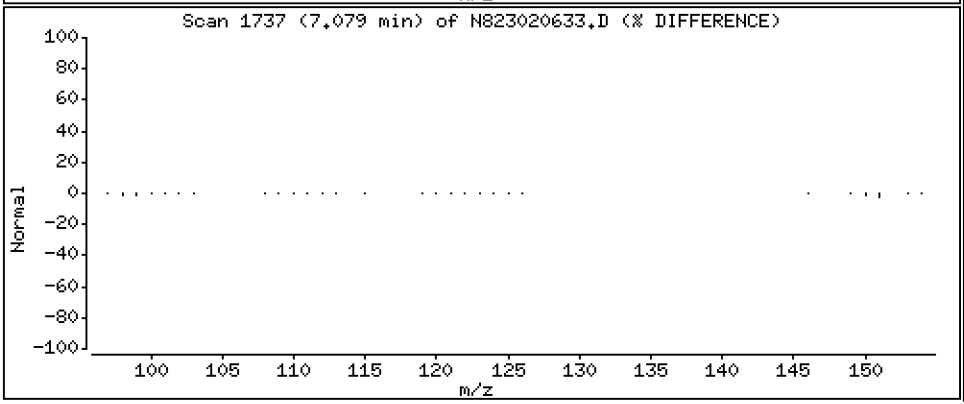












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Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

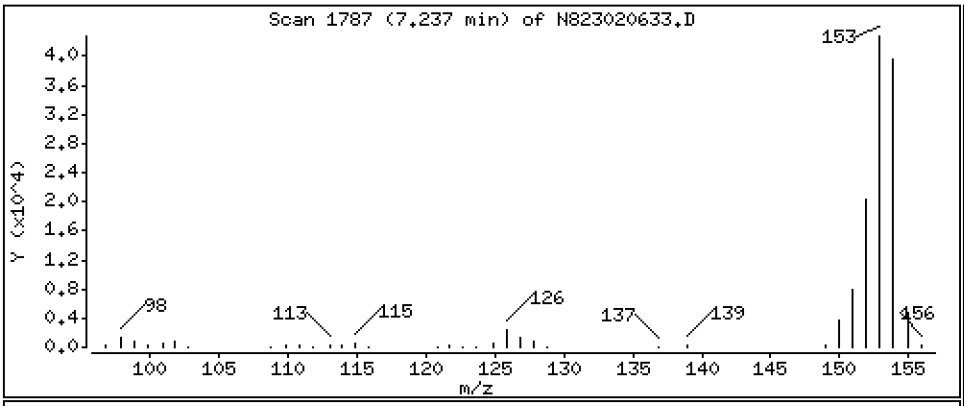
Operator: JZ

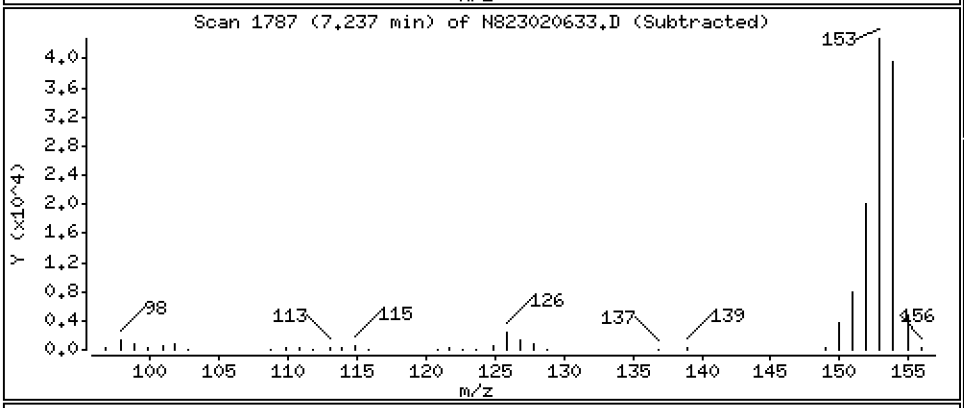
Column phase: Rxi-17sil

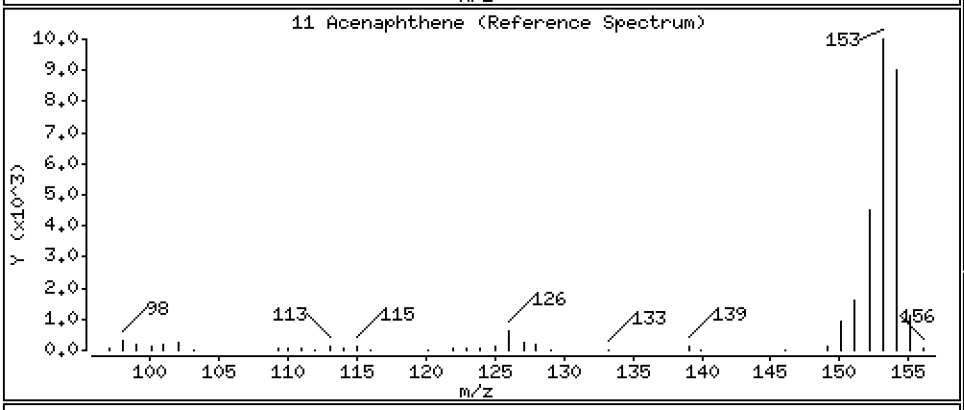
Column diameter: 0.25

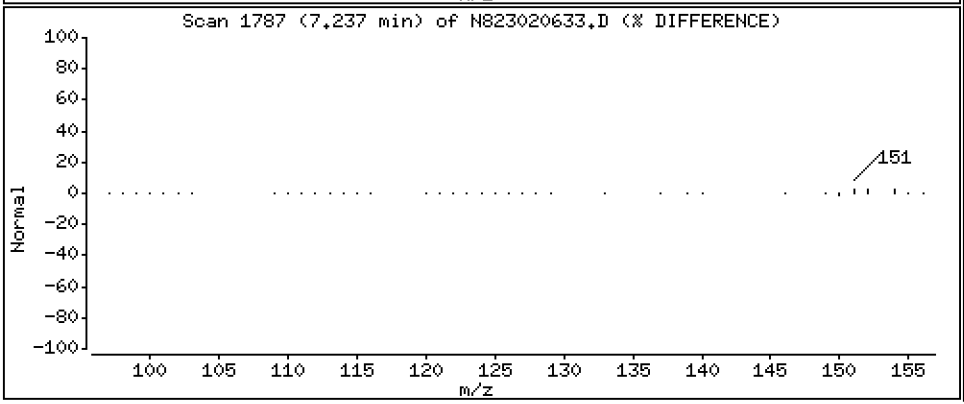
11 Acenaphthene

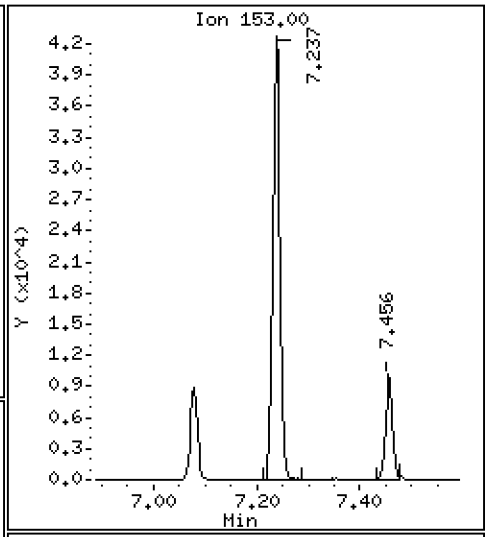
Concentration: 2.545 ug/mL

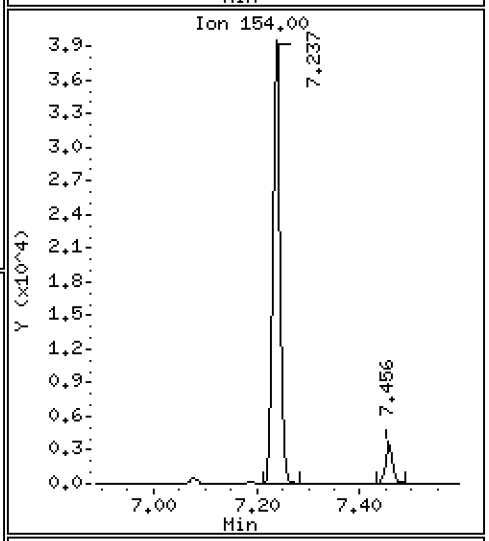


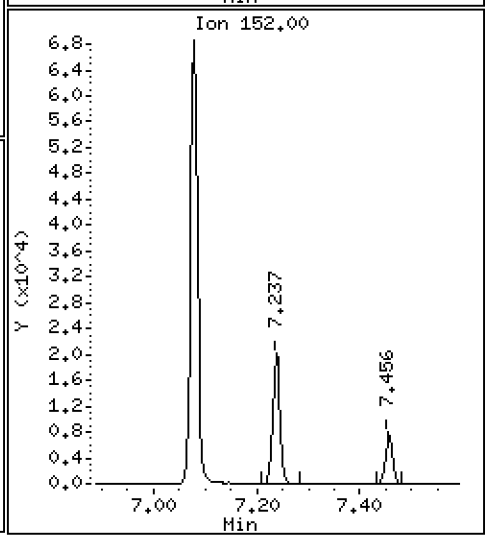












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Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

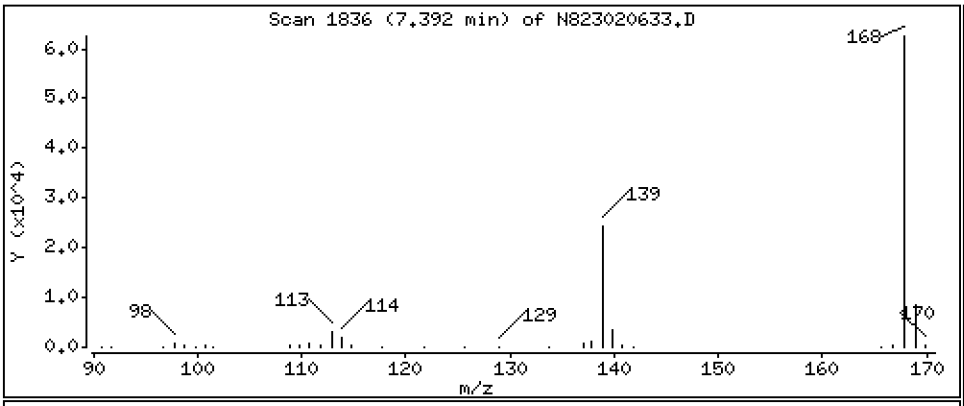
Operator: JZ

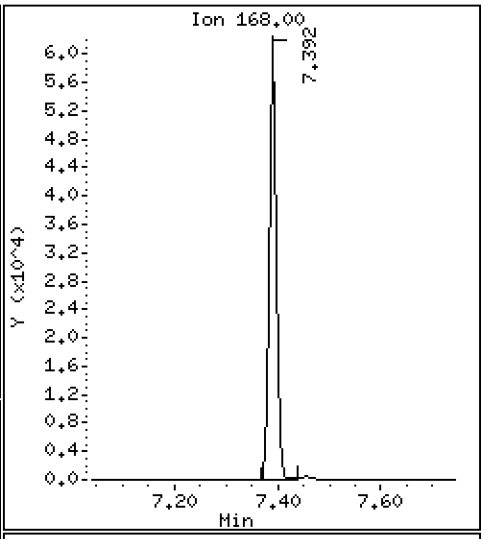
Column phase: Rxi-17sil

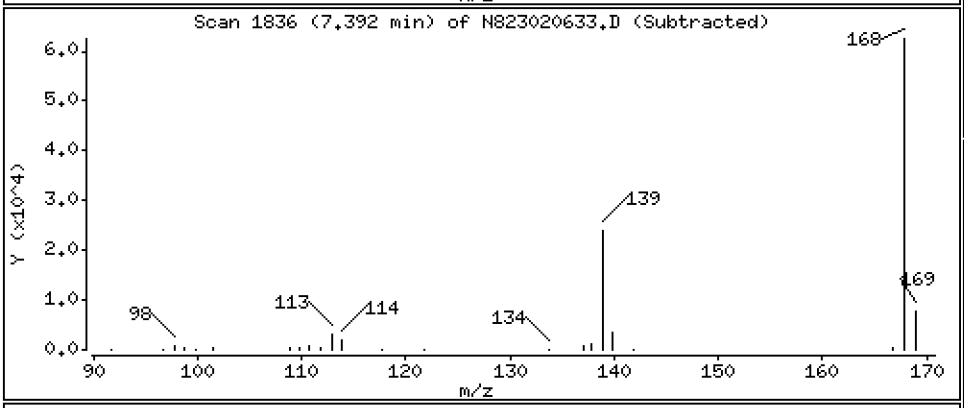
Column diameter: 0.25

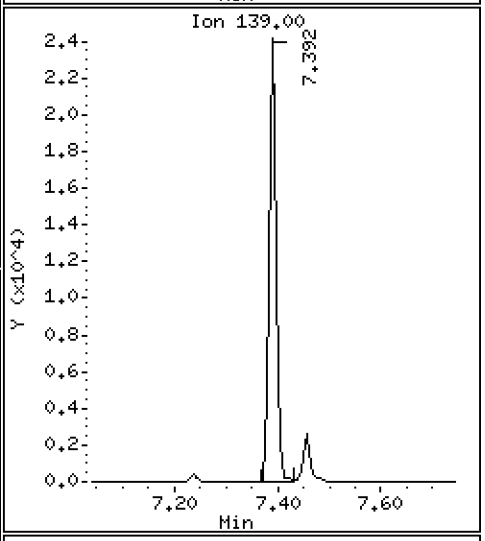
12 Dibenzofuran

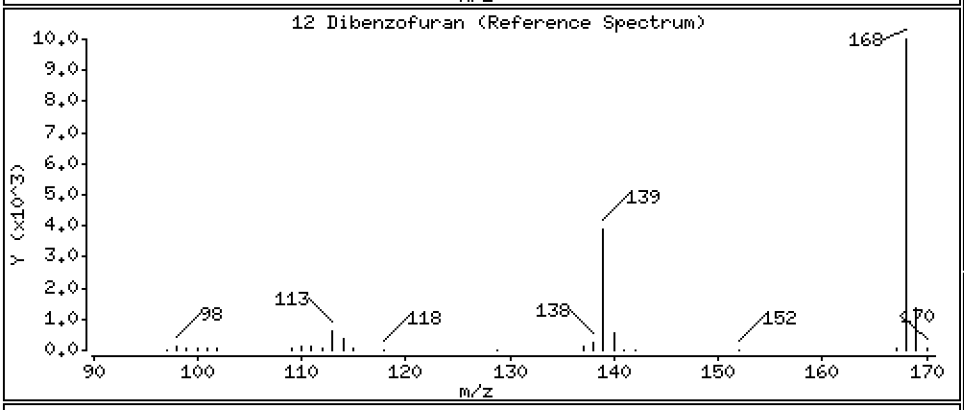
Concentration: 2.493 ug/mL

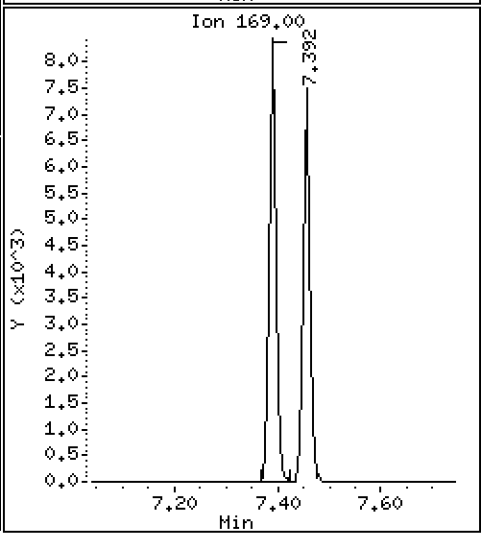


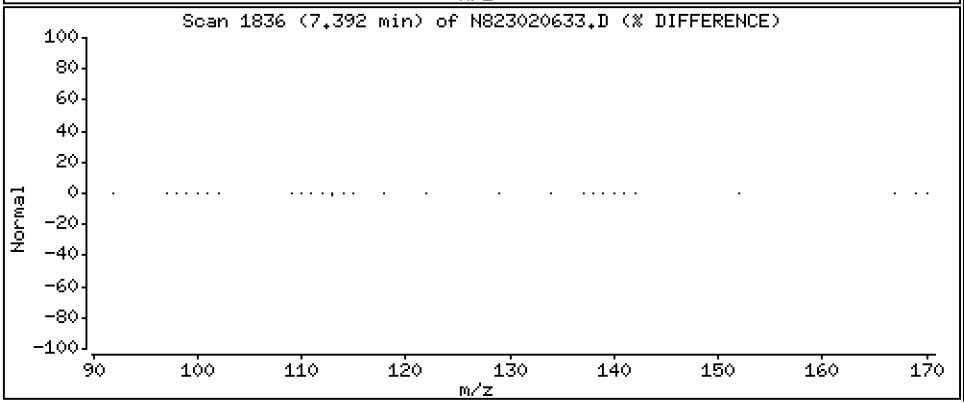












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Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

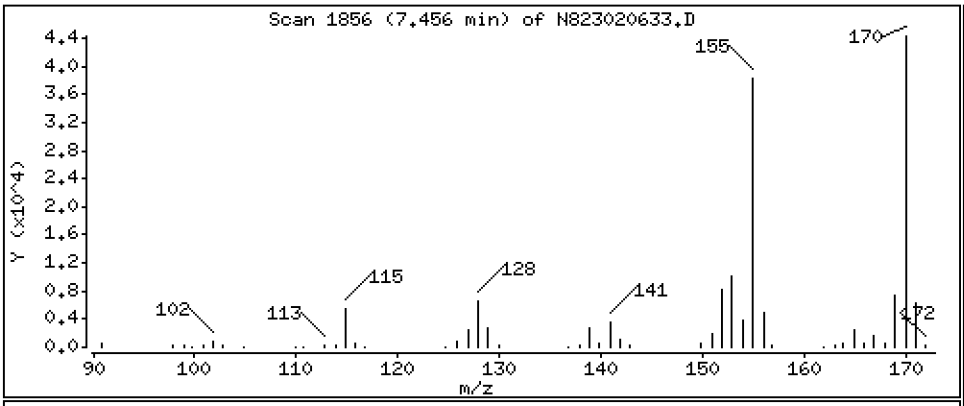
Operator: JZ

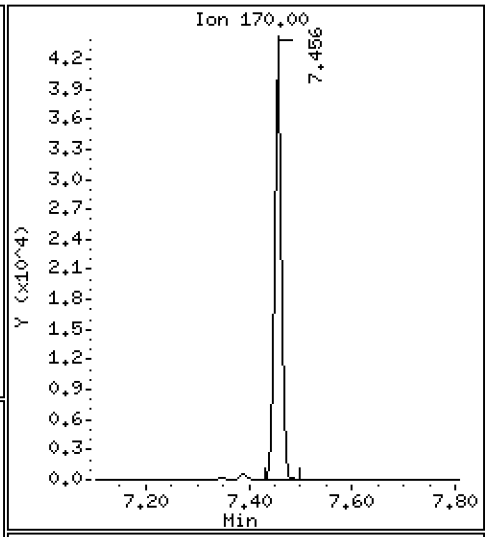
Column phase: Rxi-17sil

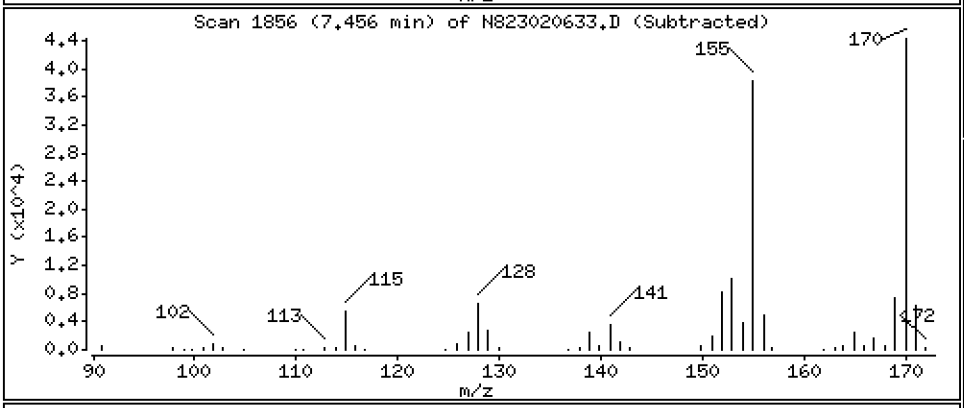
Column diameter: 0.25

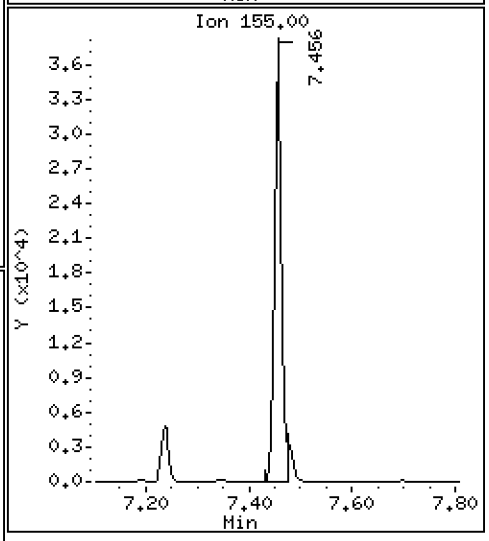
13 1,6,7-Trimethylnaphthalene

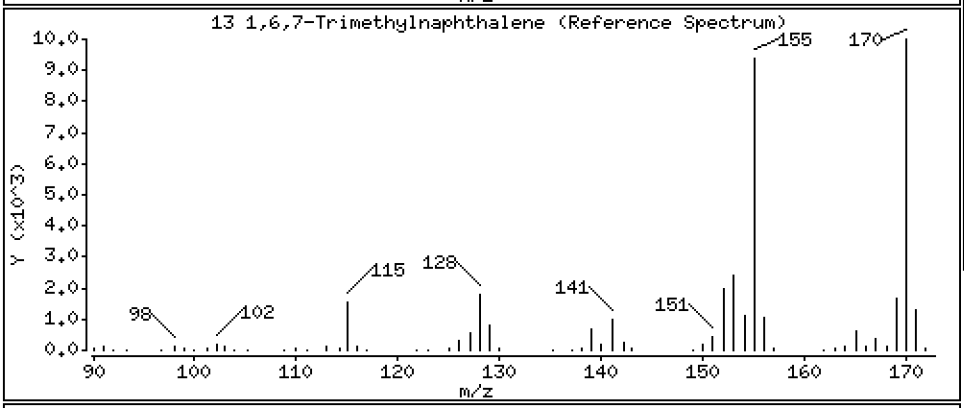
Concentration: 2.660 ug/mL

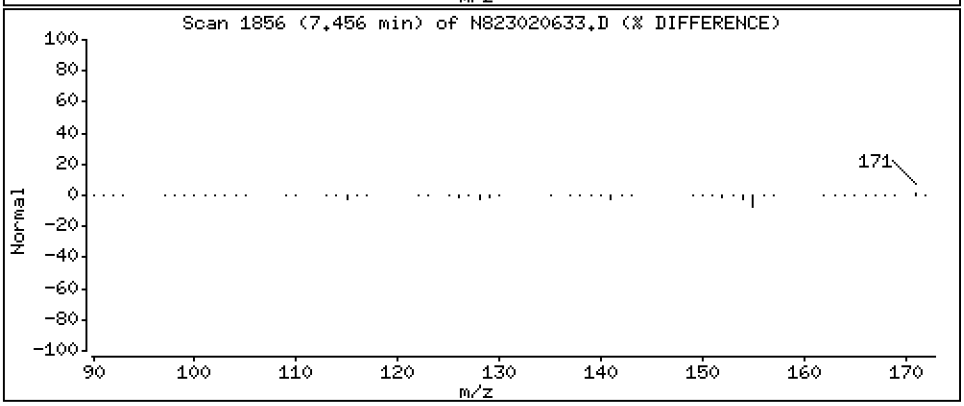












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D

Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

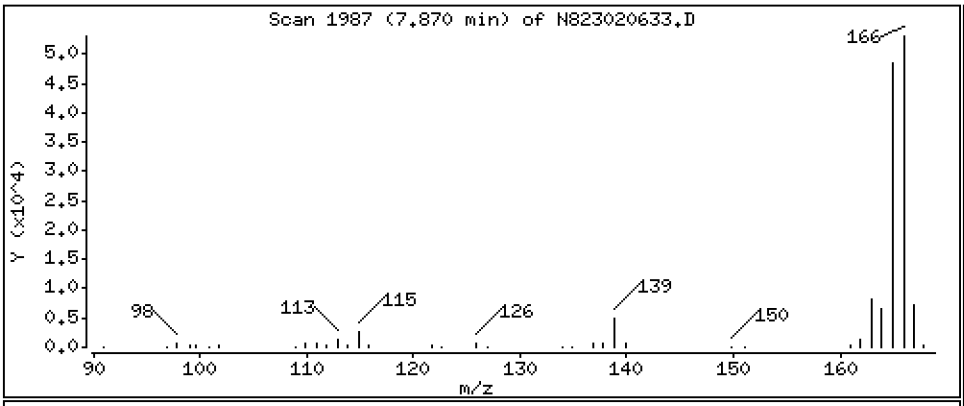
Operator: JZ

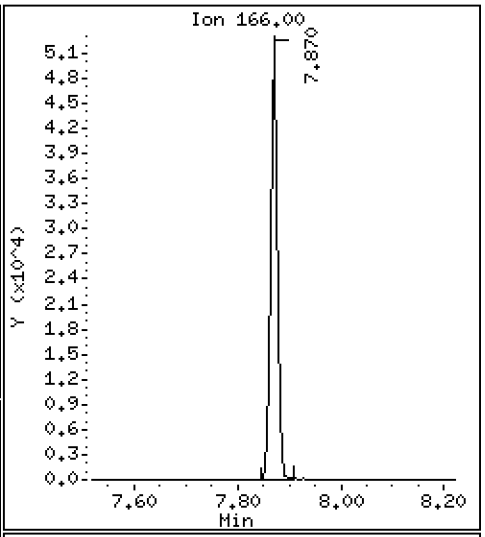
Column phase: Rxi-17sil

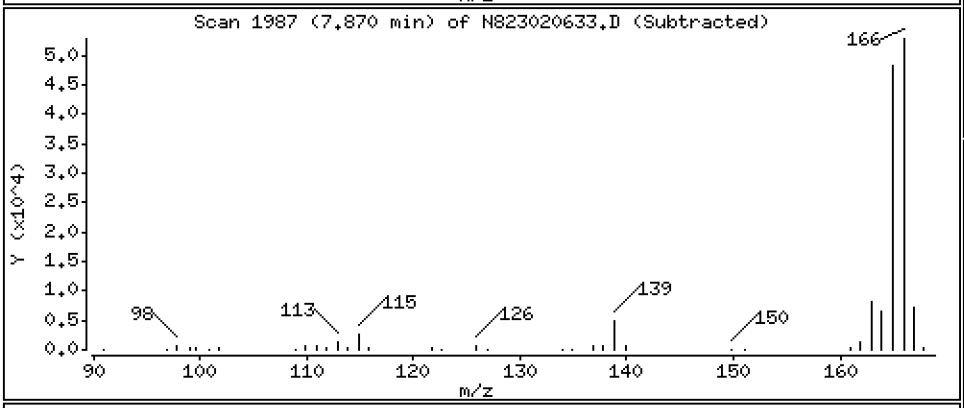
Column diameter: 0.25

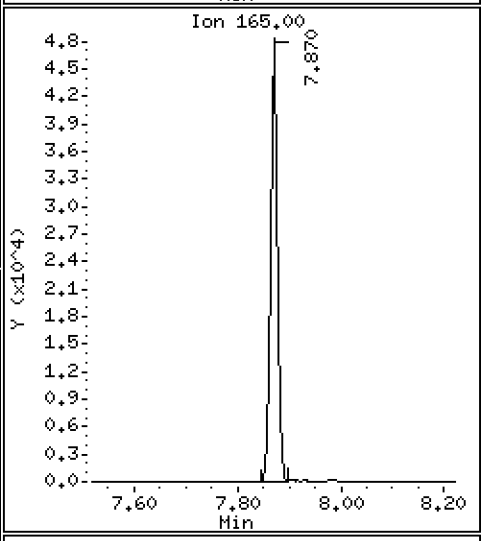
14 Fluorene

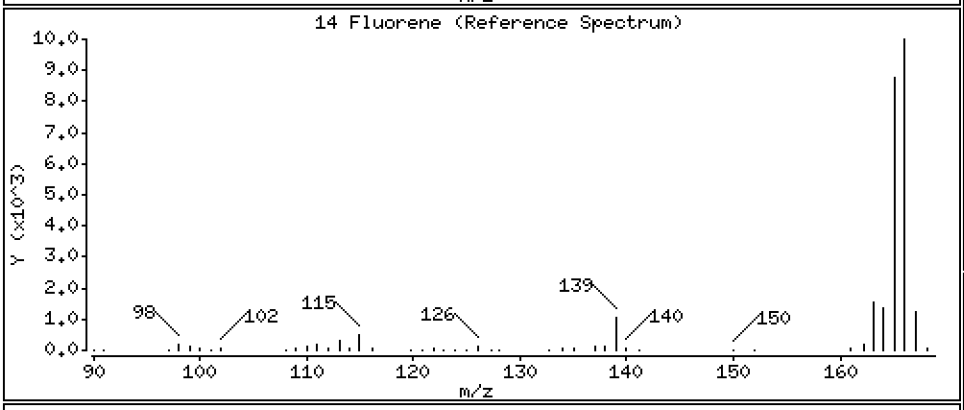
Concentration: 2.623 ug/mL

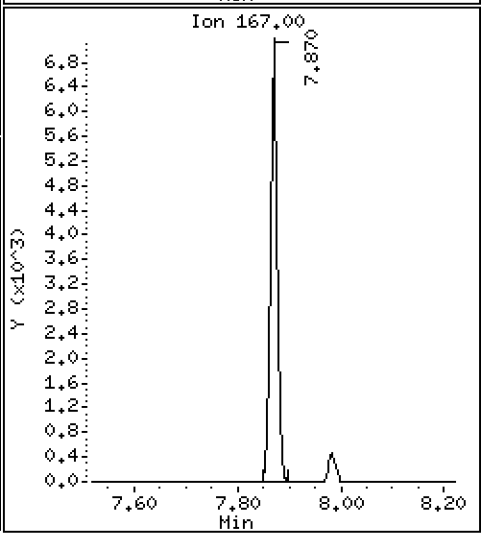


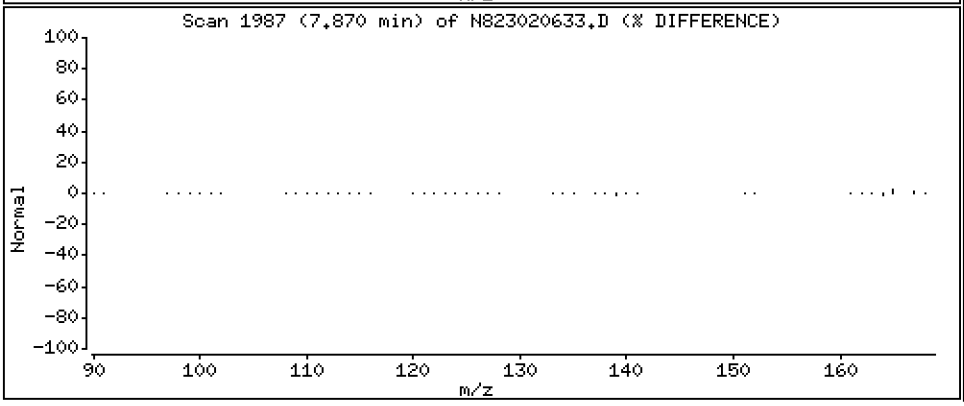












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D

Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

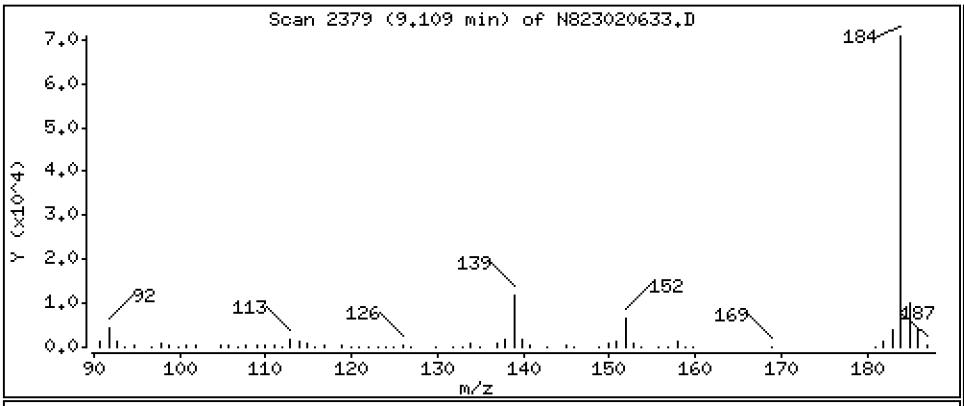
Operator: JZ

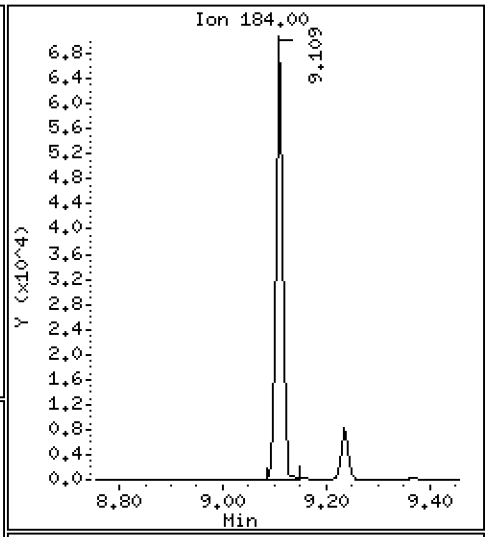
Column phase: Rxi-17sil

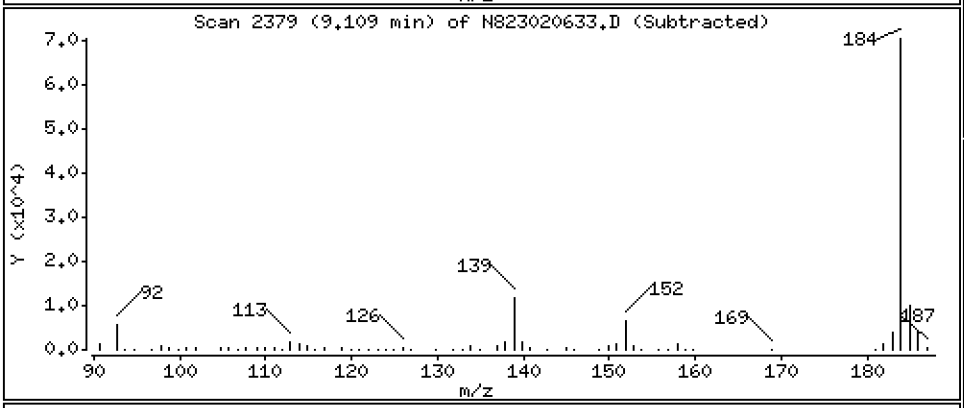
Column diameter: 0.25

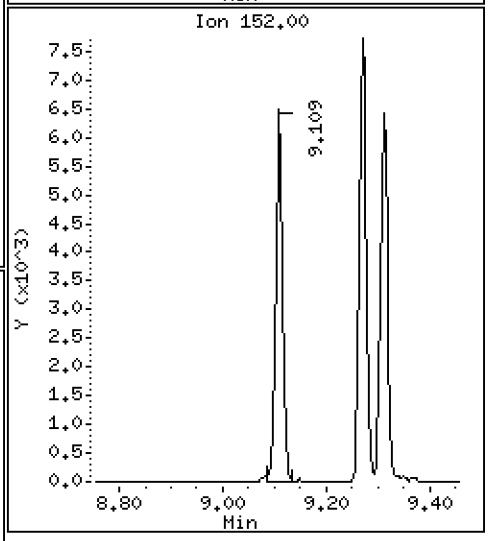
18 Dibenzothiophene

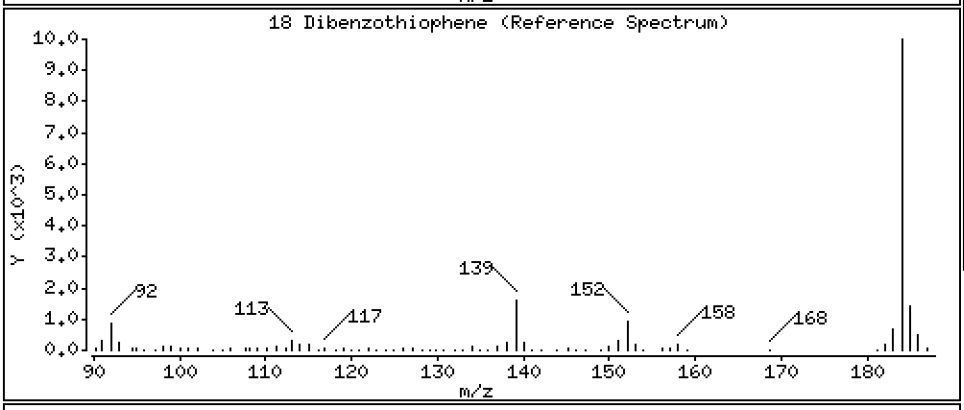
Concentration: 2.606 ug/mL

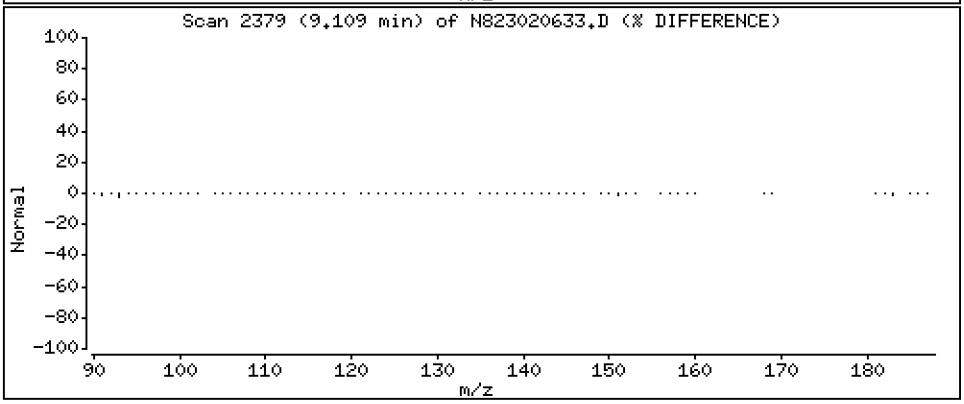












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Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

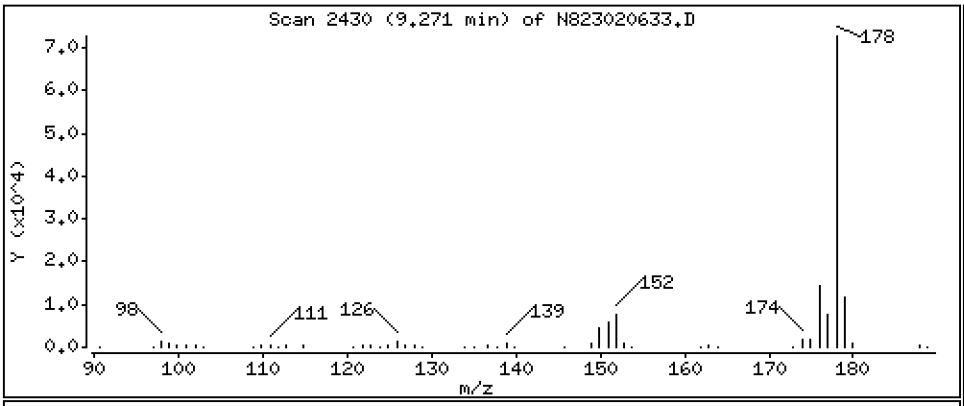
Operator: JZ

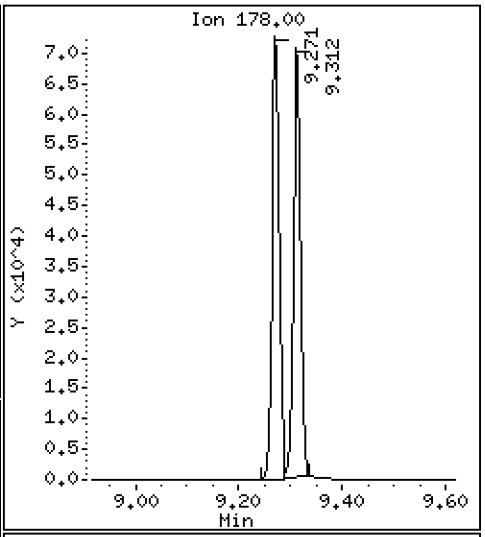
Column phase: Rxi-17sil

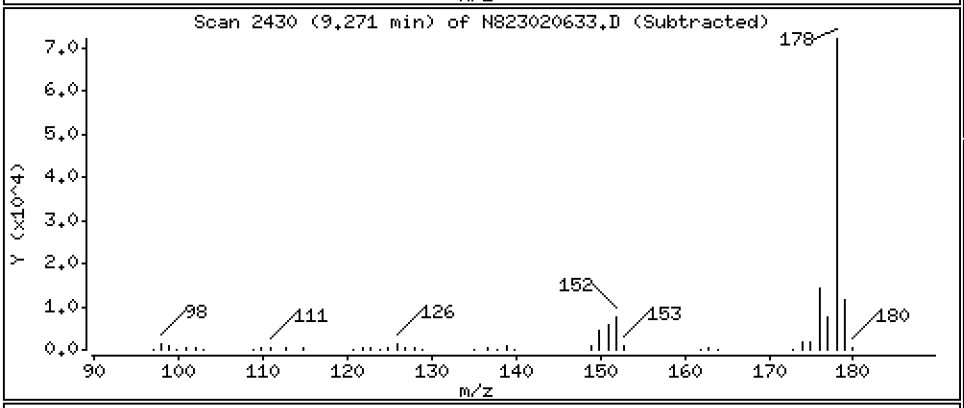
Column diameter: 0.25

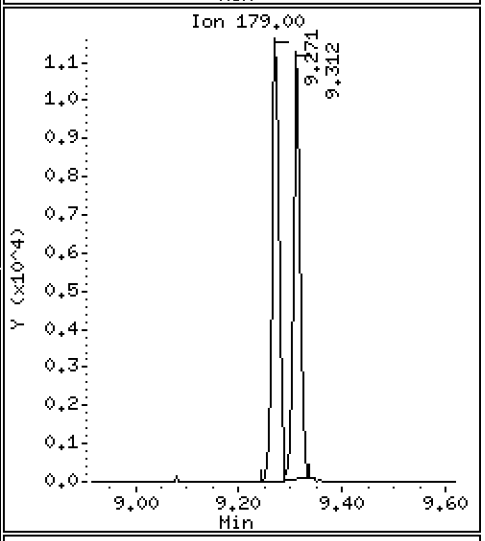
16 Phenanthrene

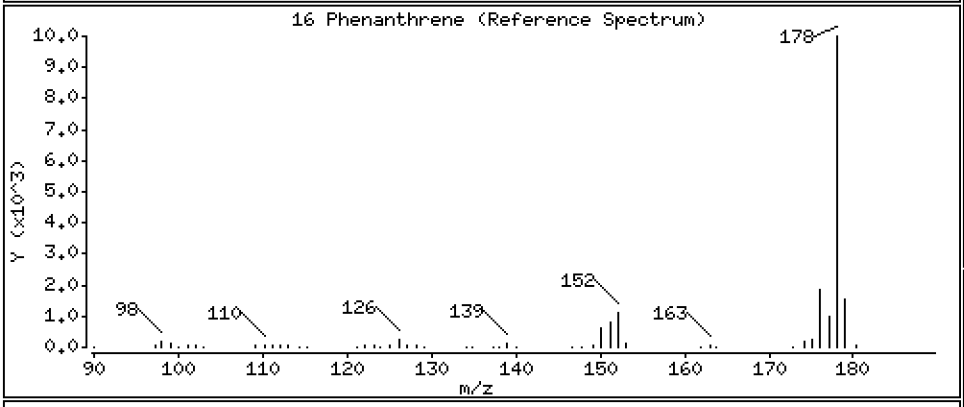
Concentration: 2.454 ug/mL

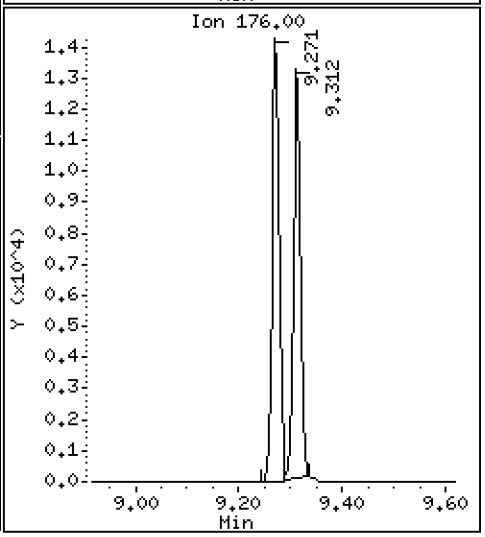


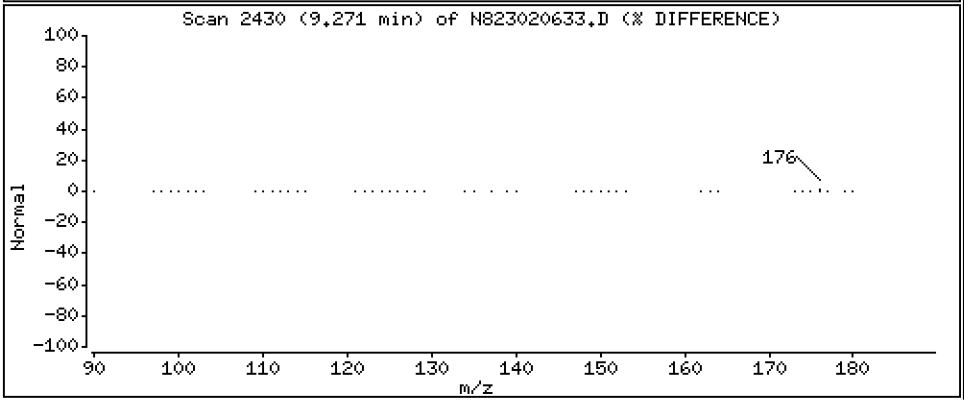












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D

Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

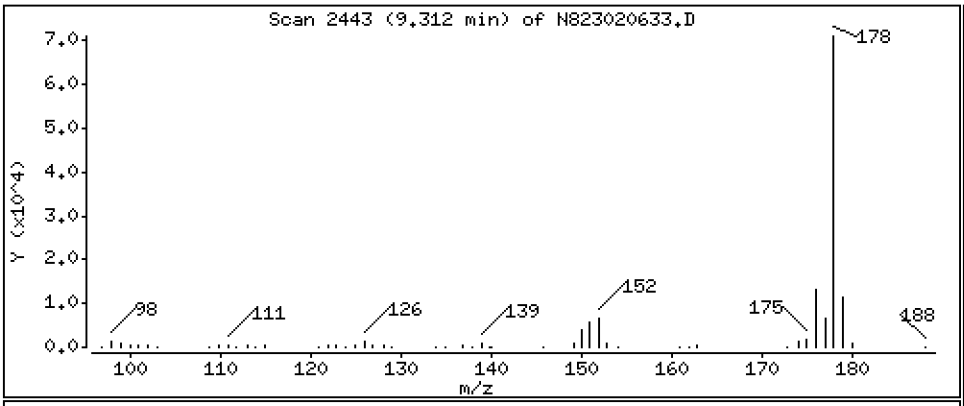
Operator: JZ

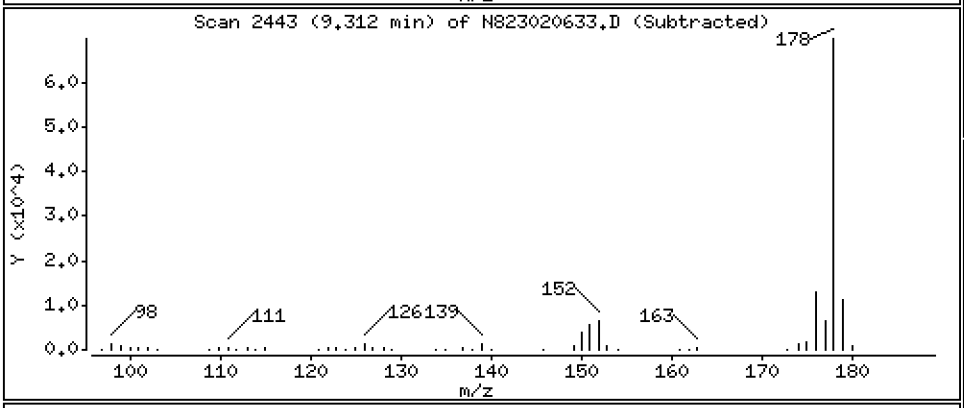
Column phase: Rxi-17sil

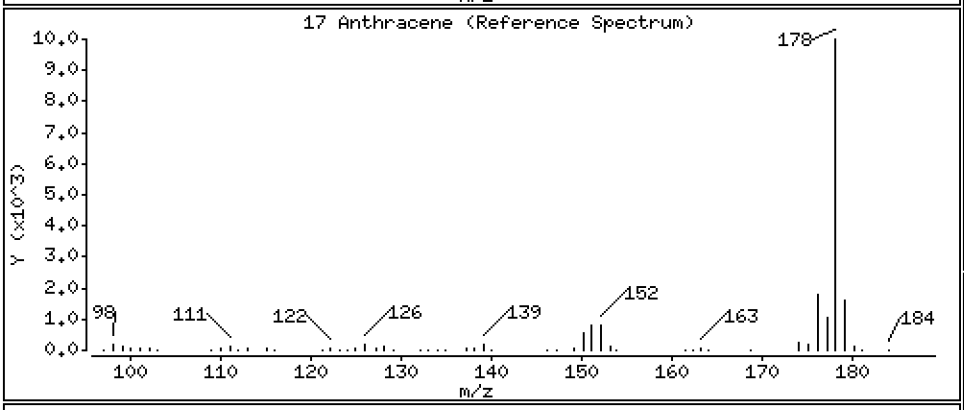
Column diameter: 0.25

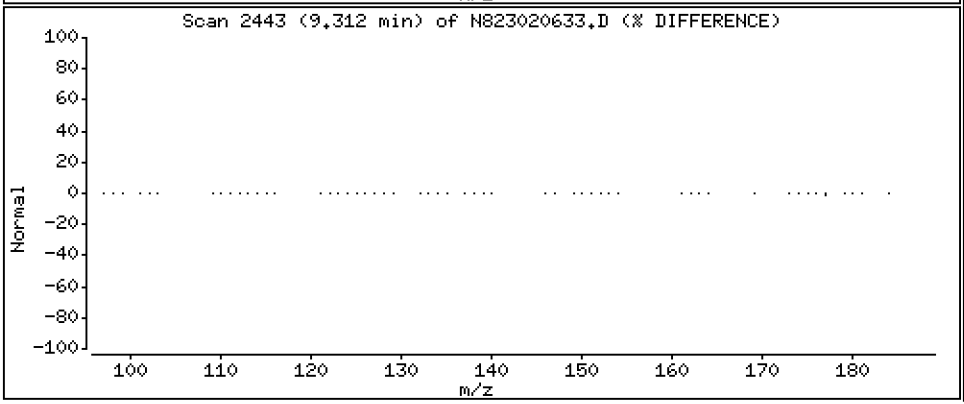
17 Anthracene

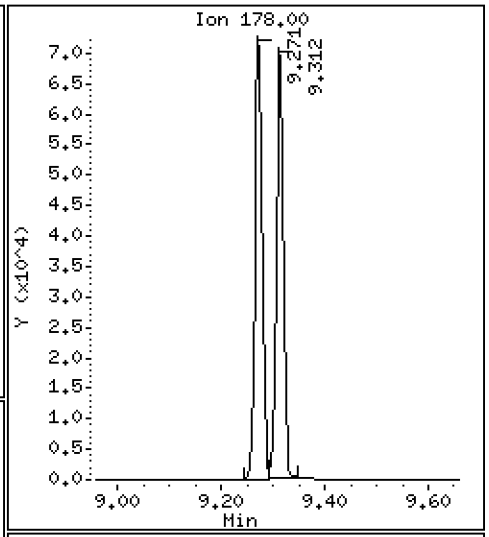
Concentration: 2.634 ug/mL

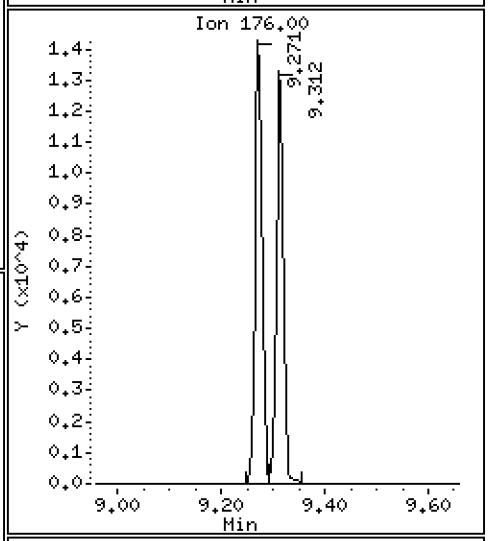


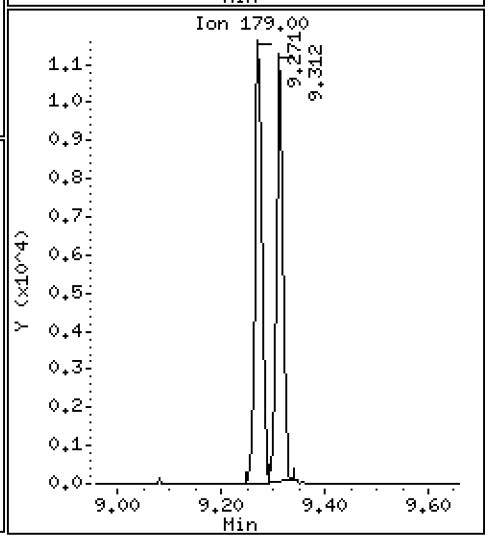












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Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

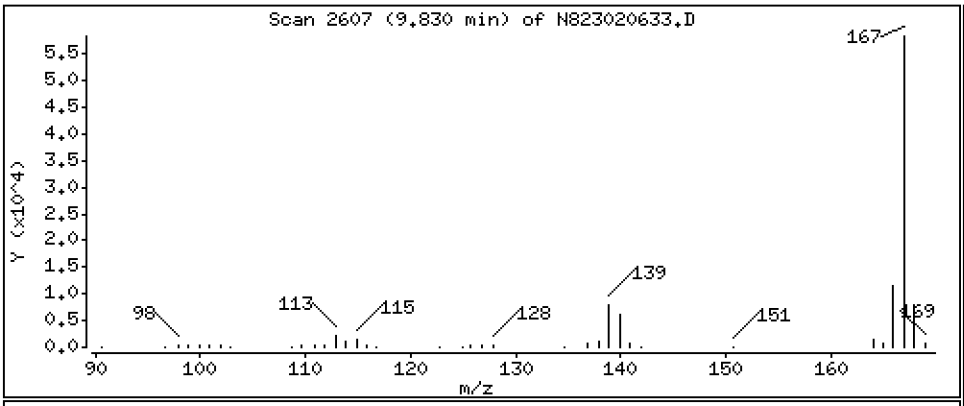
Operator: JZ

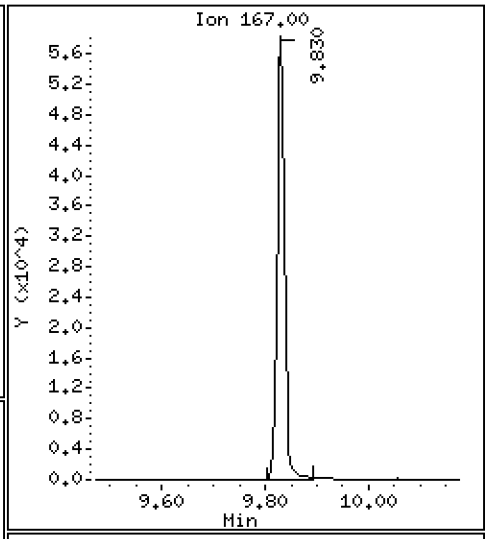
Column phase: Rxi-17sil

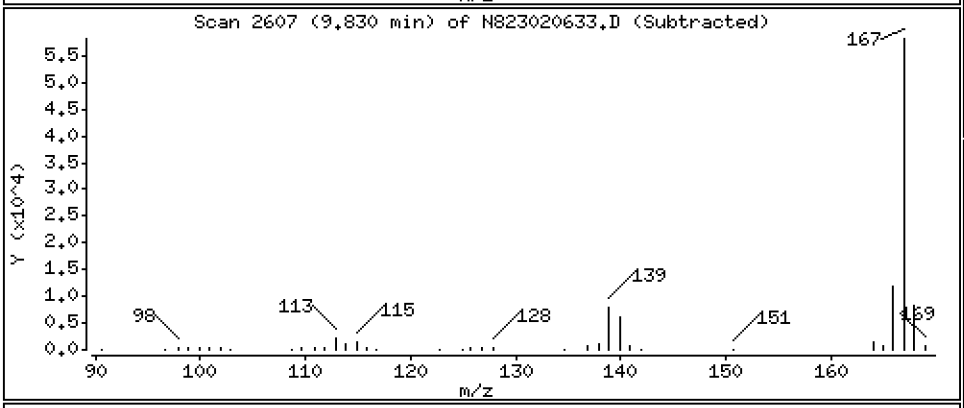
Column diameter: 0.25

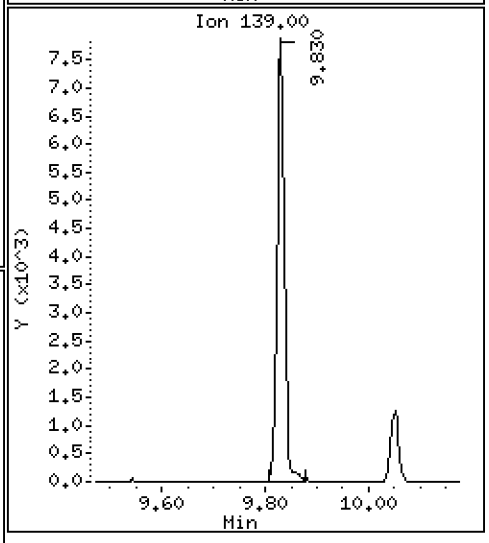
19 Carbazole

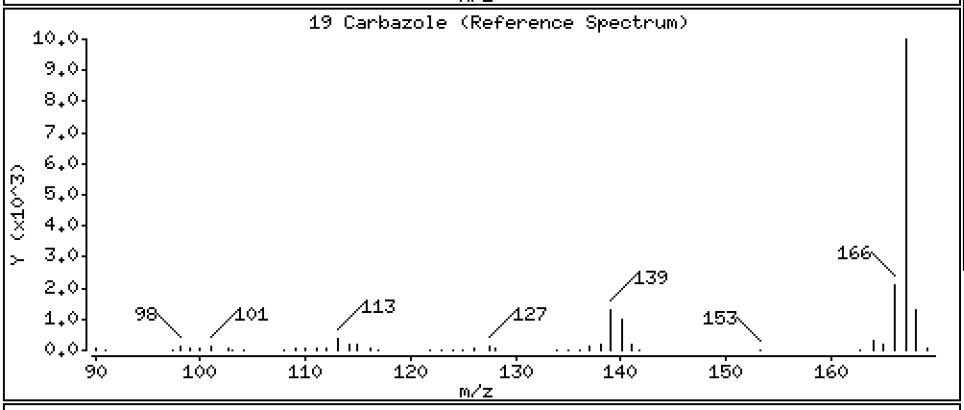
Concentration: 2.534 ug/mL

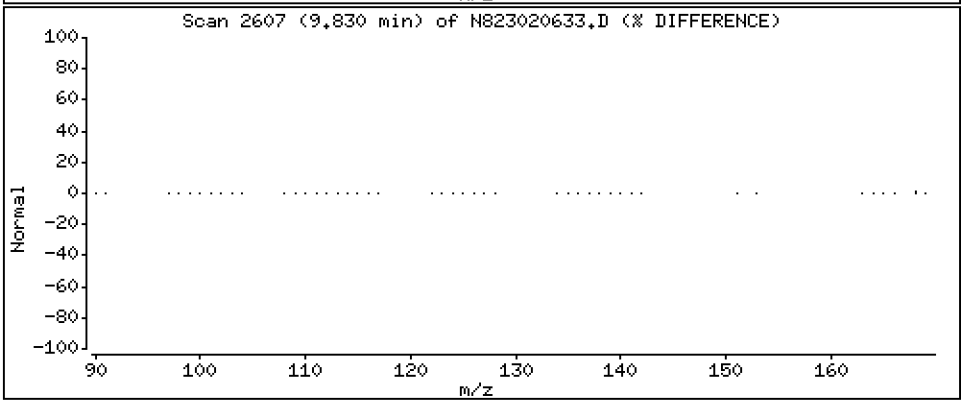












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D

Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

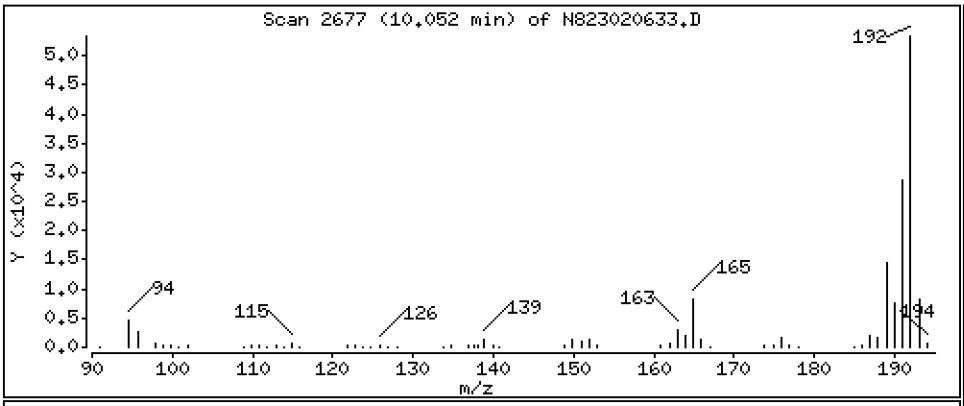
Operator: JZ

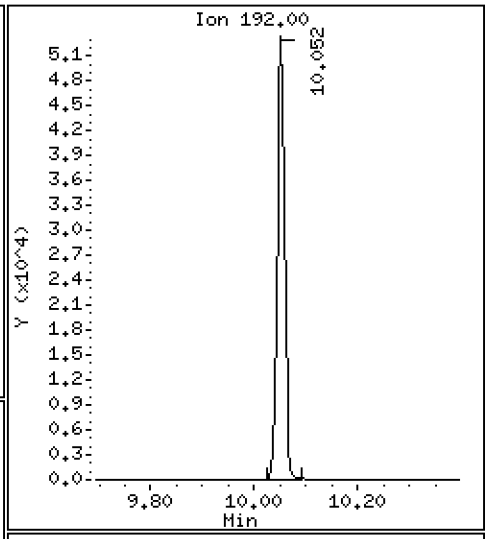
Column phase: Rxi-17sil

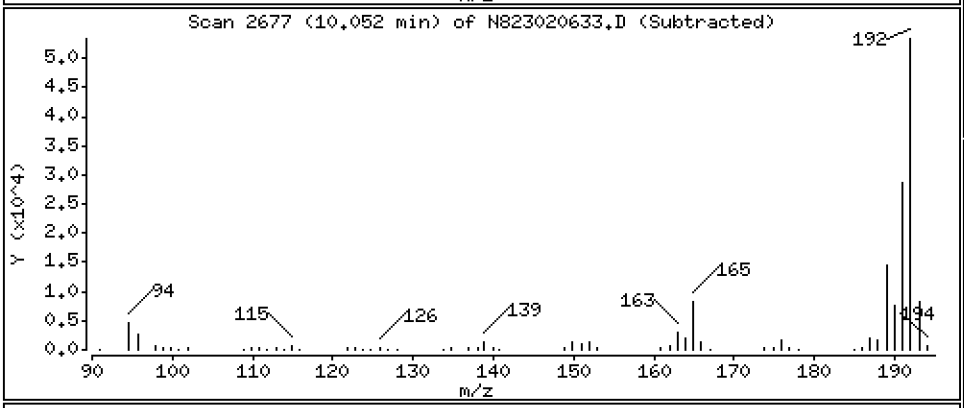
Column diameter: 0.25

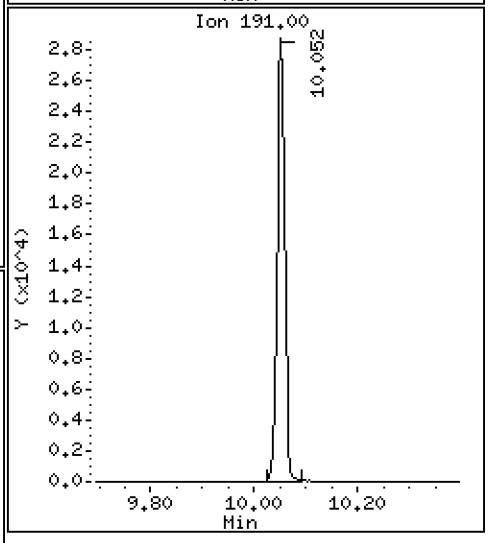
20 1-Methylphenanthrene

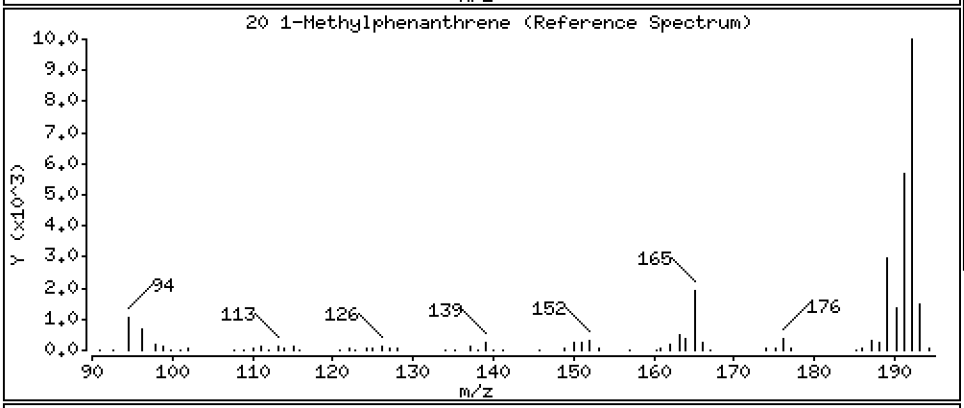
Concentration: 2.660 ug/mL

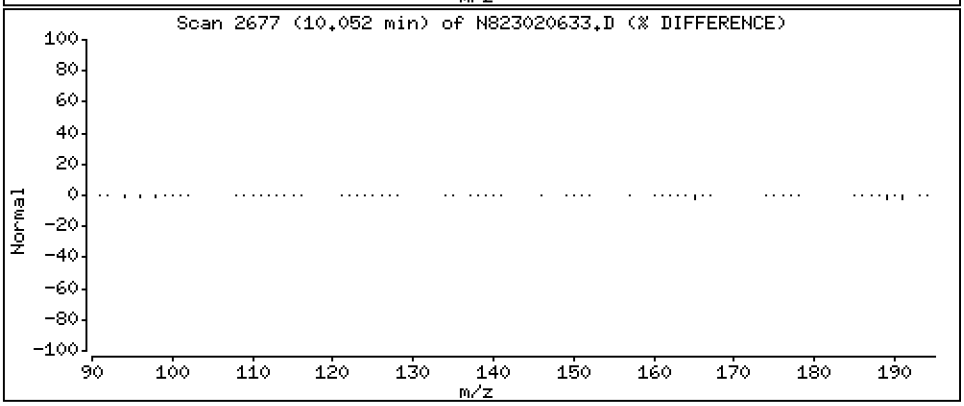












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Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

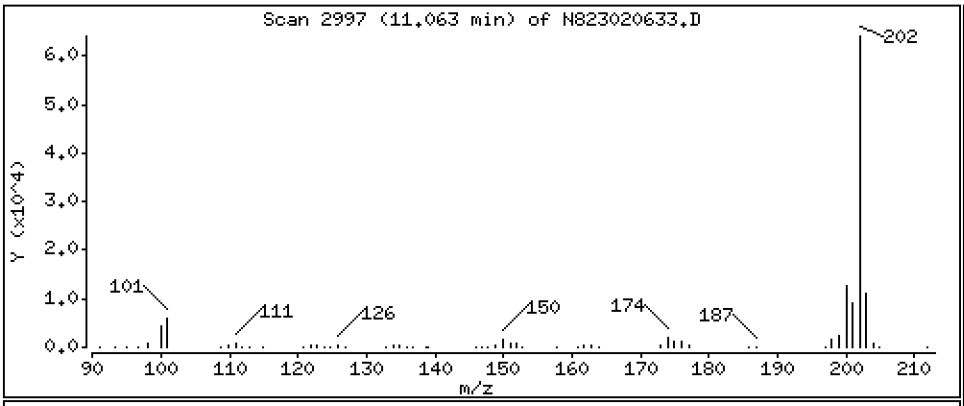
Operator: JZ

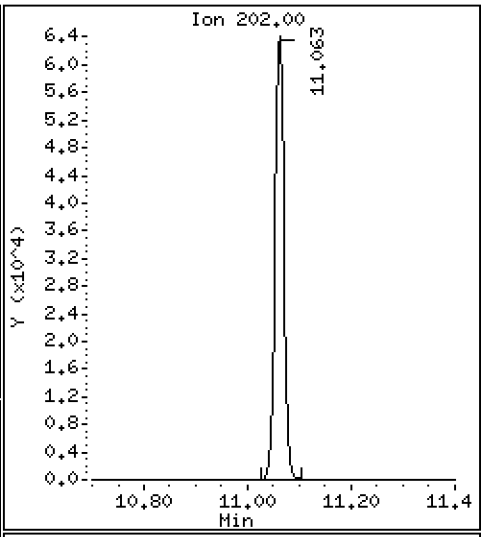
Column phase: Rxi-17sil

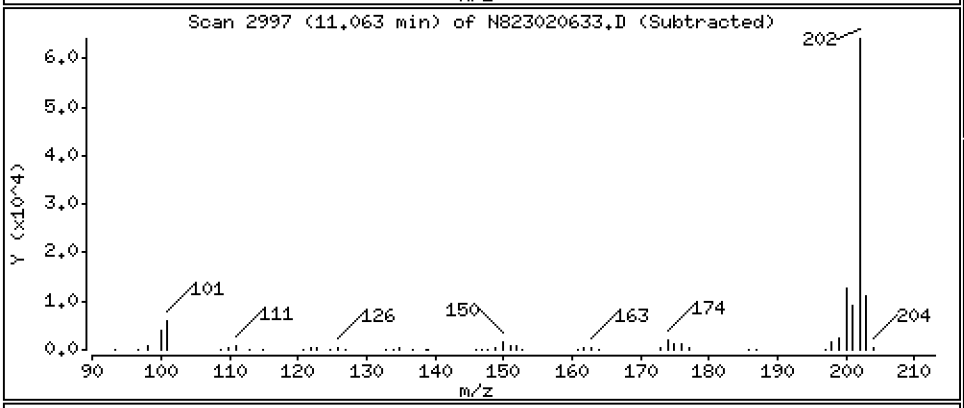
Column diameter: 0.25

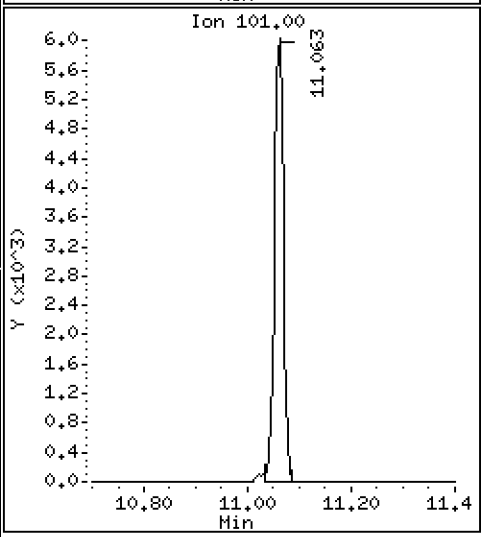
22 Fluoranthene

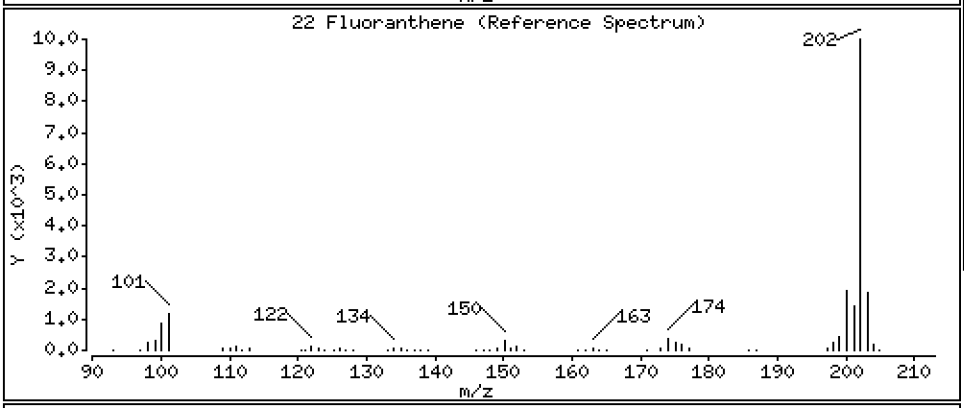
Concentration: 2.561 ug/mL

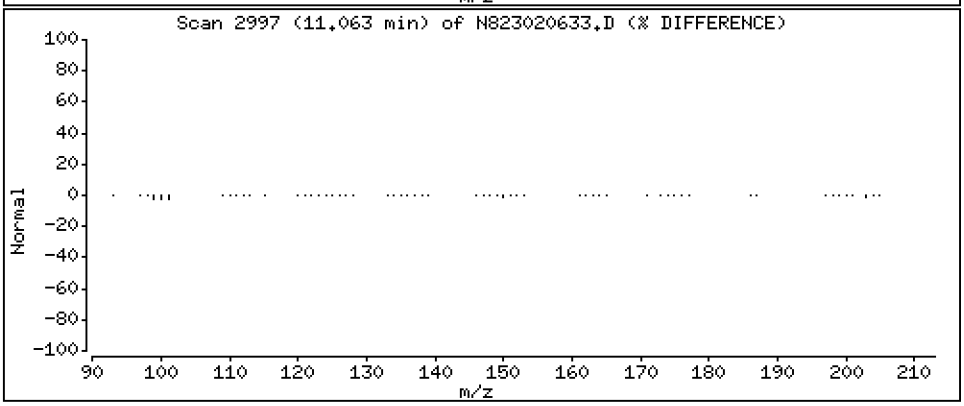












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Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

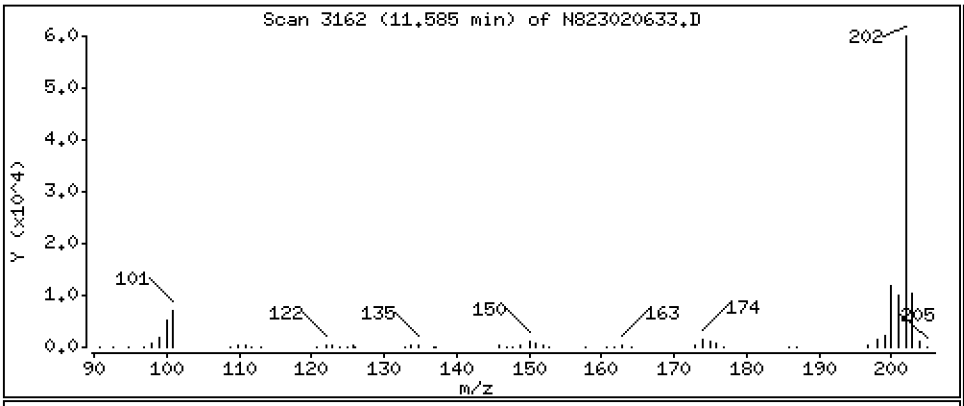
Operator: JZ

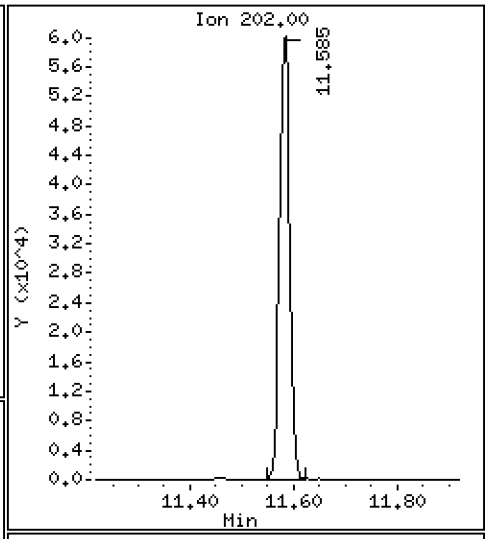
Column phase: Rxi-17sil

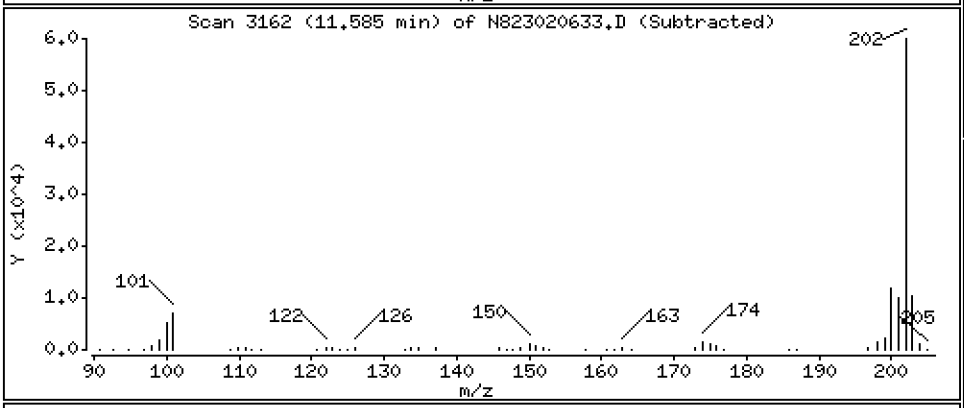
Column diameter: 0.25

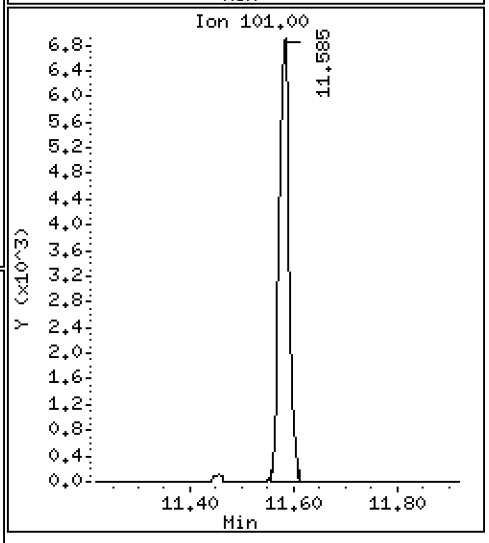
23 Pyrene

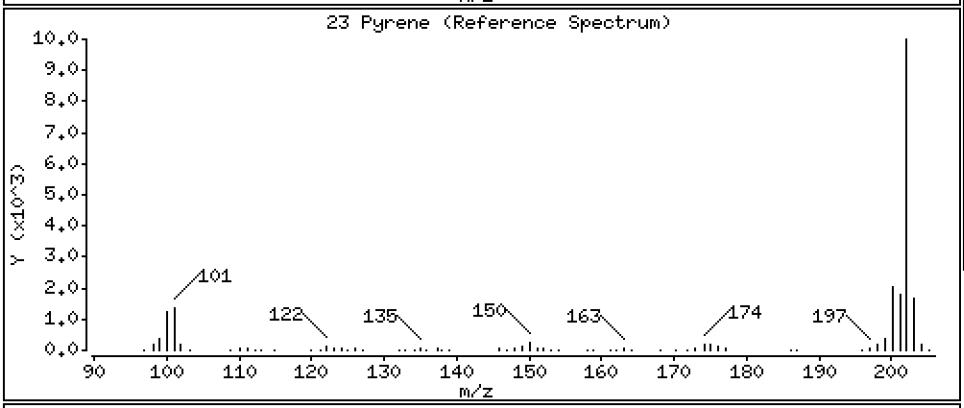
Concentration: 2.763 ug/mL

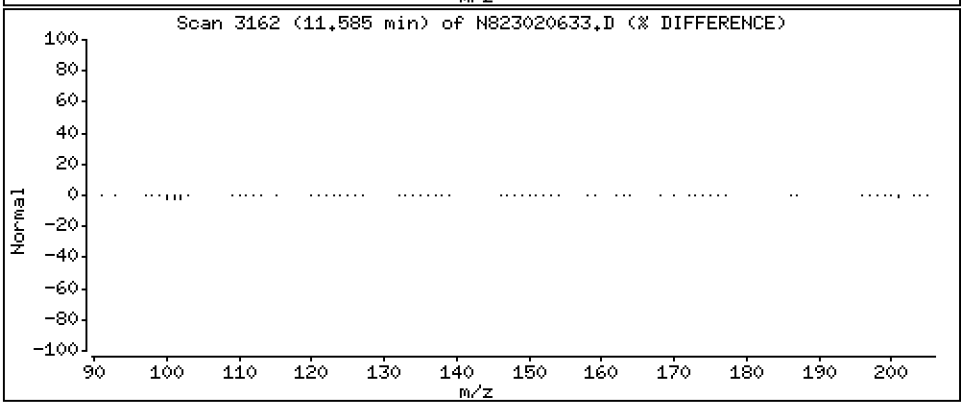












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D

Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

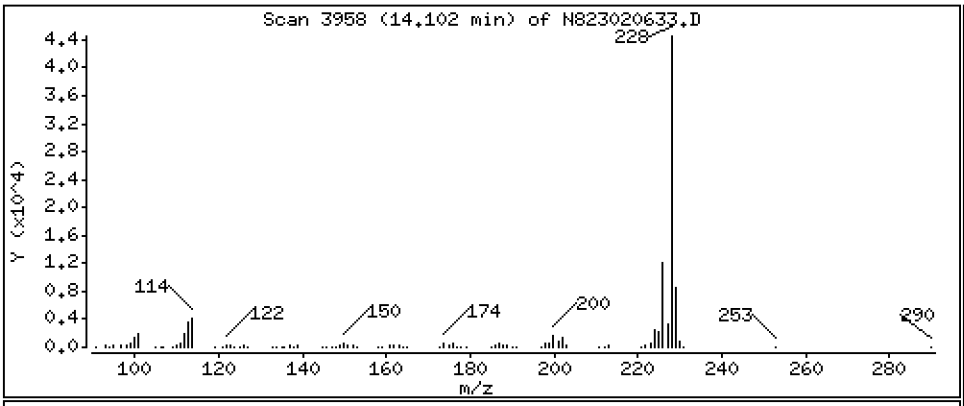
Operator: JZ

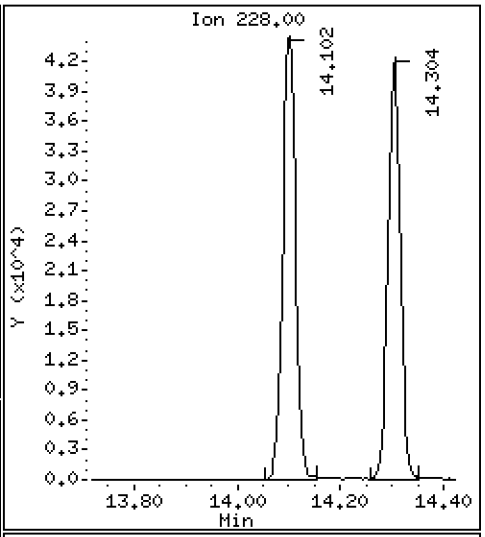
Column phase: Rxi-17sil

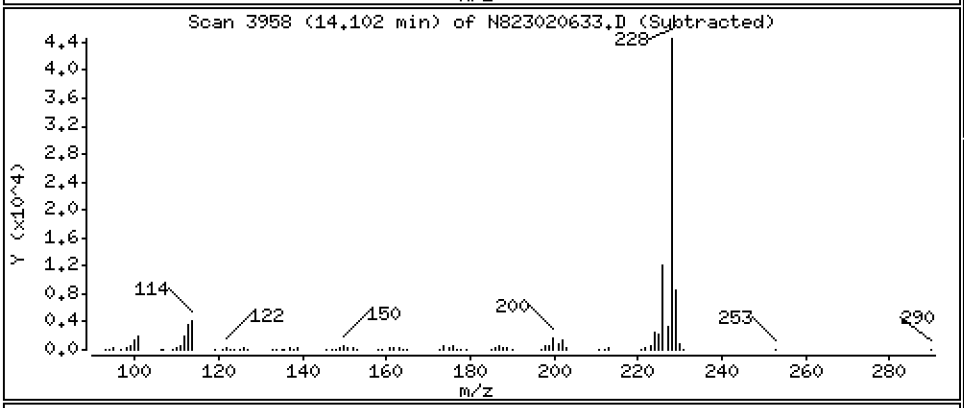
Column diameter: 0.25

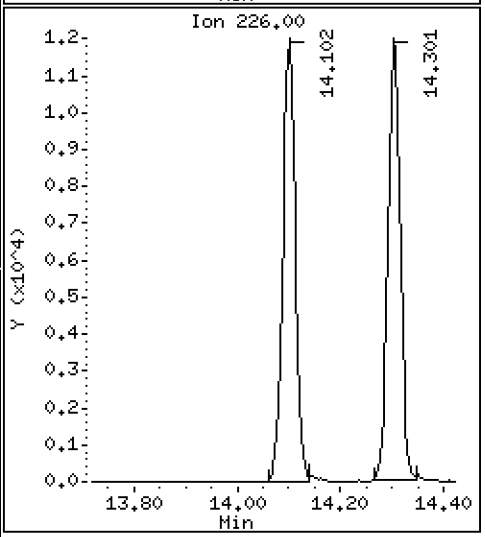
24 Benzo(a)anthracene

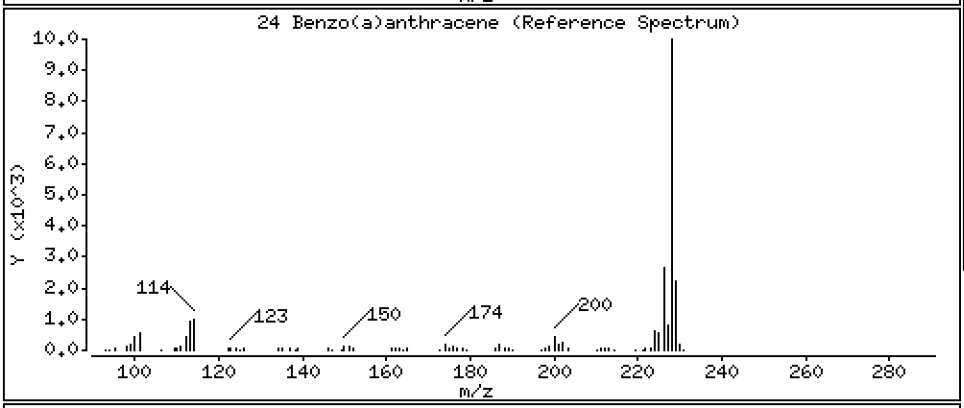
Concentration: 2.849 ug/mL

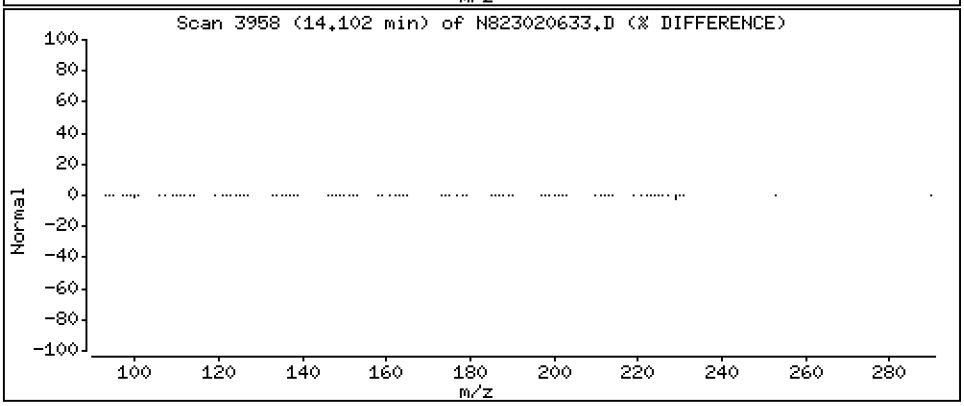












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D

Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

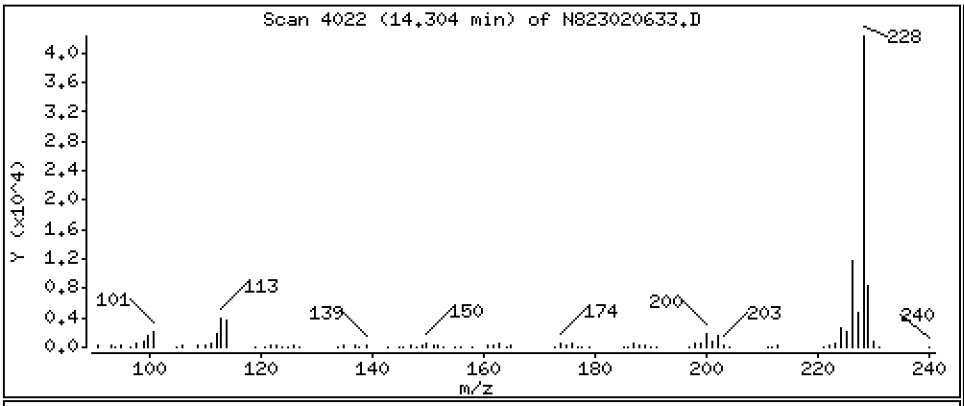
Operator: JZ

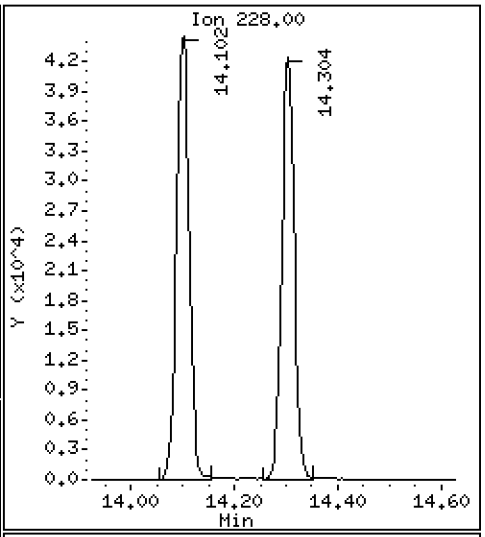
Column phase: Rxi-17sil

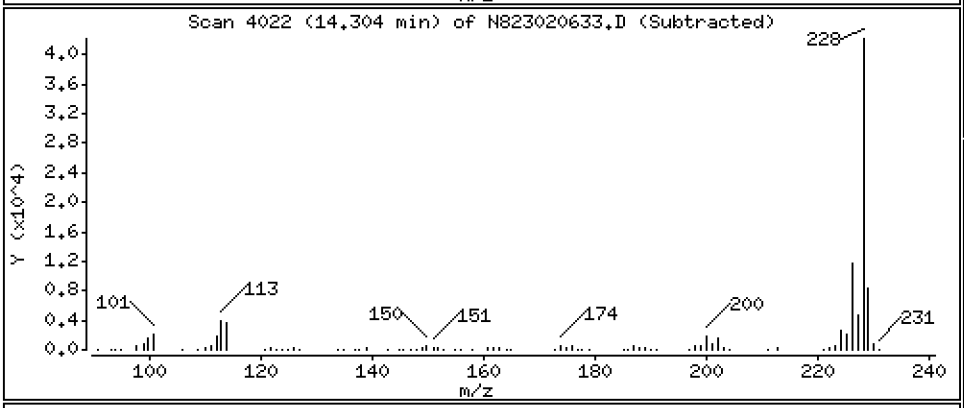
Column diameter: 0.25

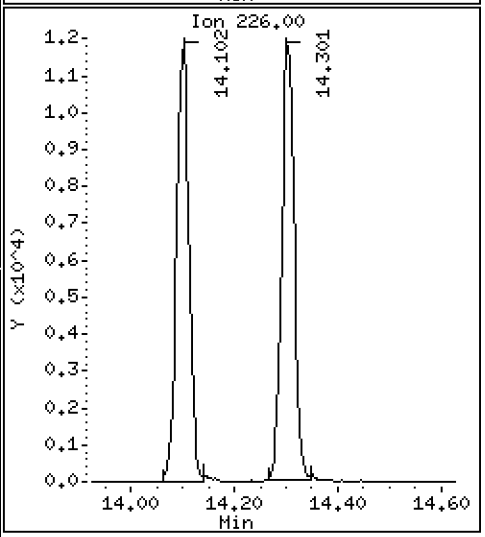
27 Chrysene

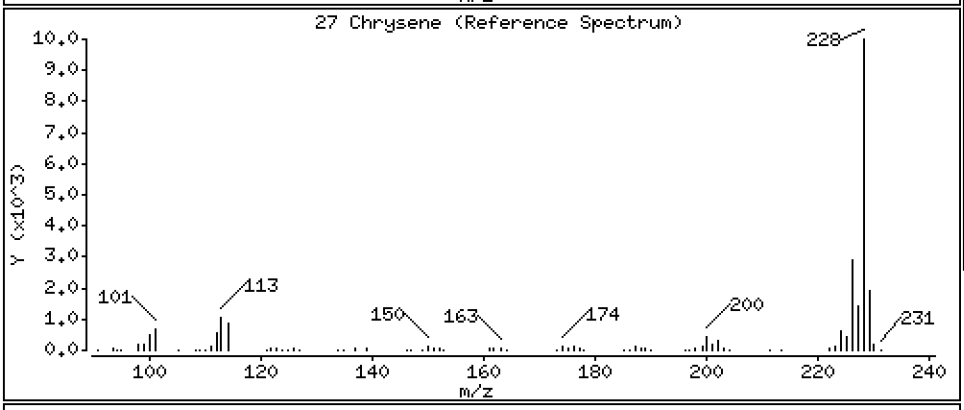
Concentration: 2.458 ug/mL

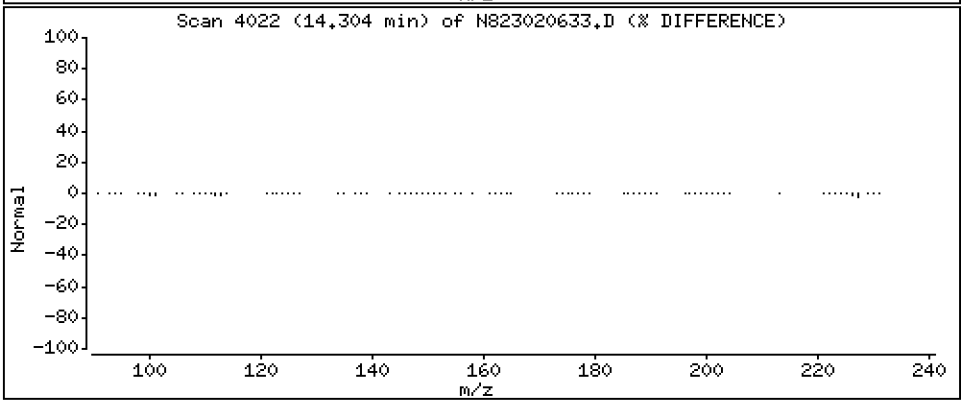












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D

Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

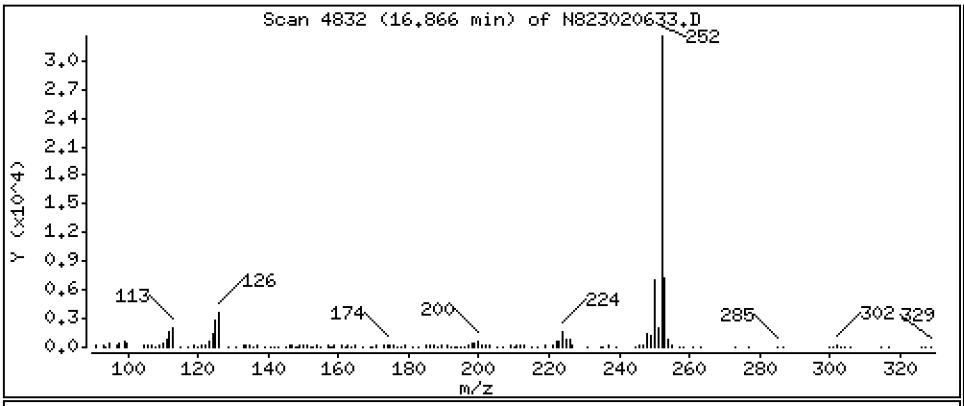
Operator: JZ

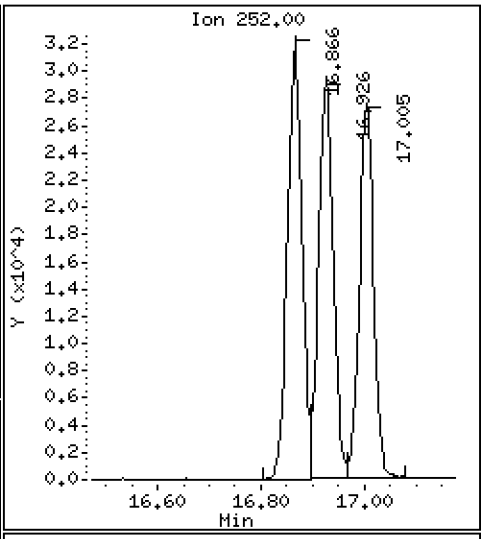
Column phase: Rxi-17sil

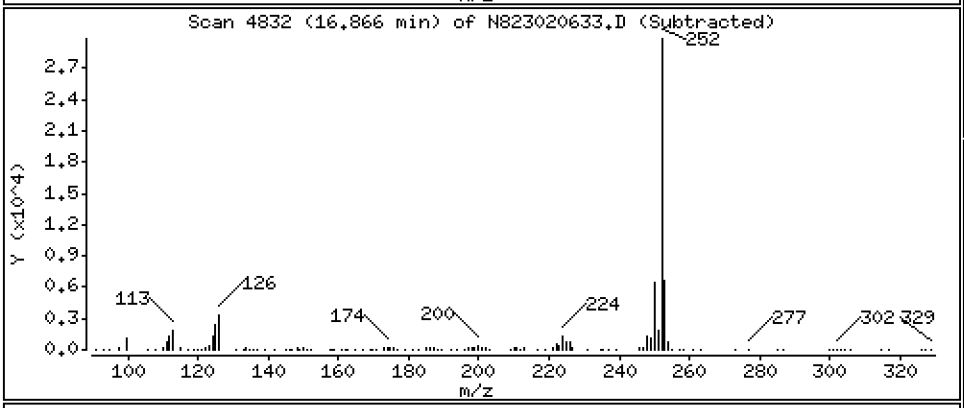
Column diameter: 0.25

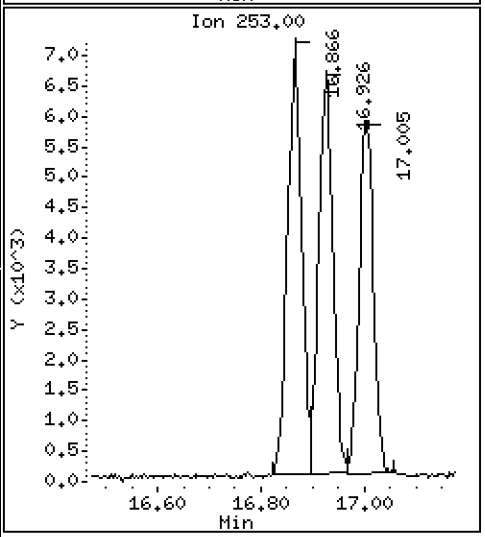
28 Benzo(b)fluoranthene

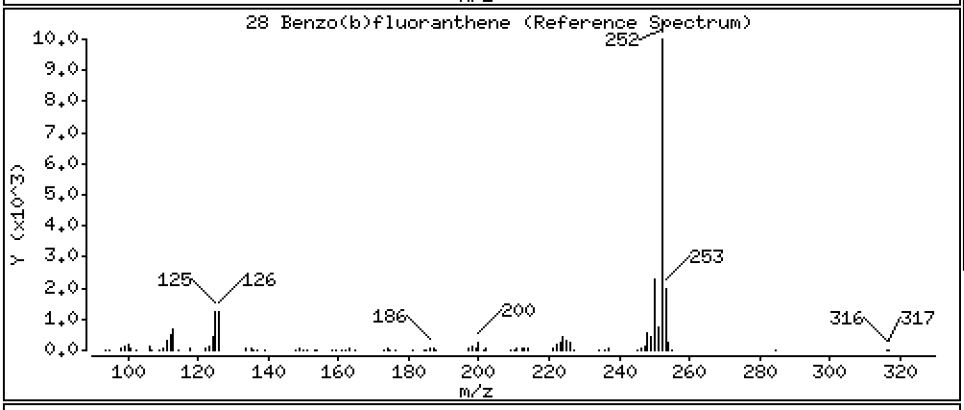
Concentration: 2.927 ug/mL

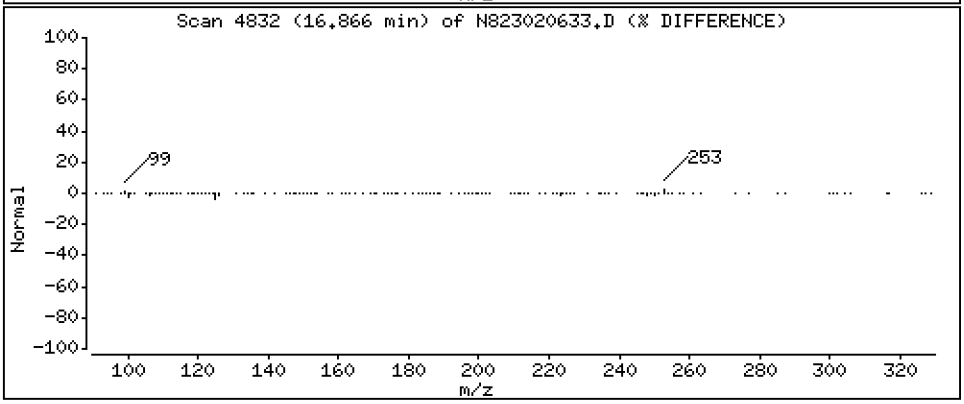












Date : 07-FEB-2023 03:09

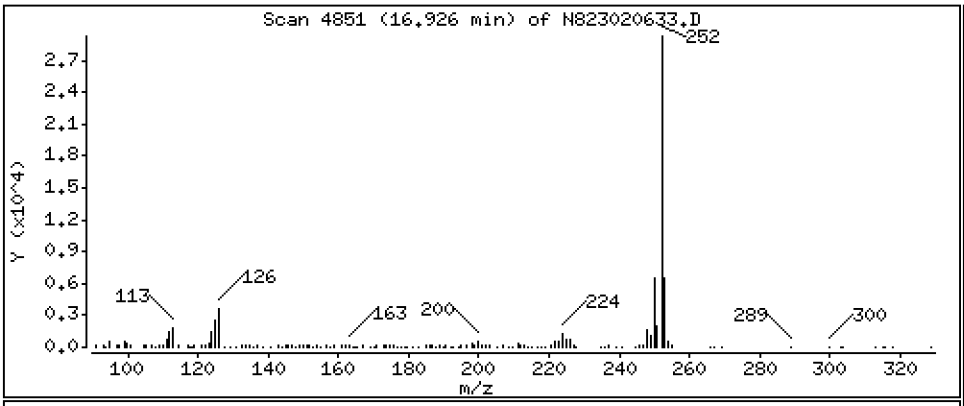
Client ID: Instrument: nt8.i

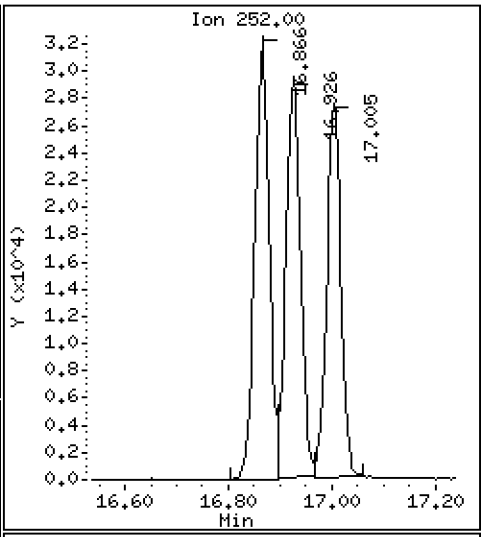
Sample Info: CCV230206A

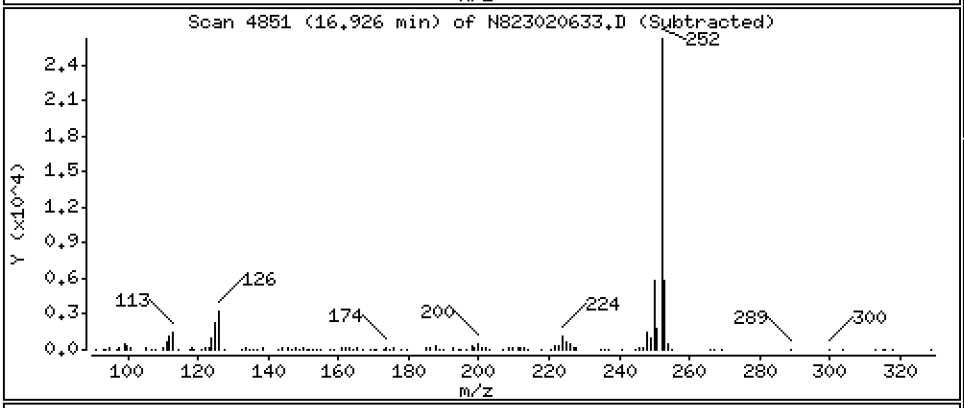
Operator: JZ

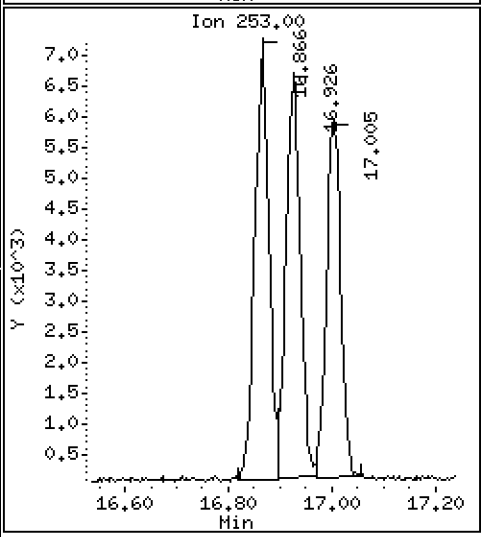
Column phase: Rxi-17sil Column diameter: 0.25

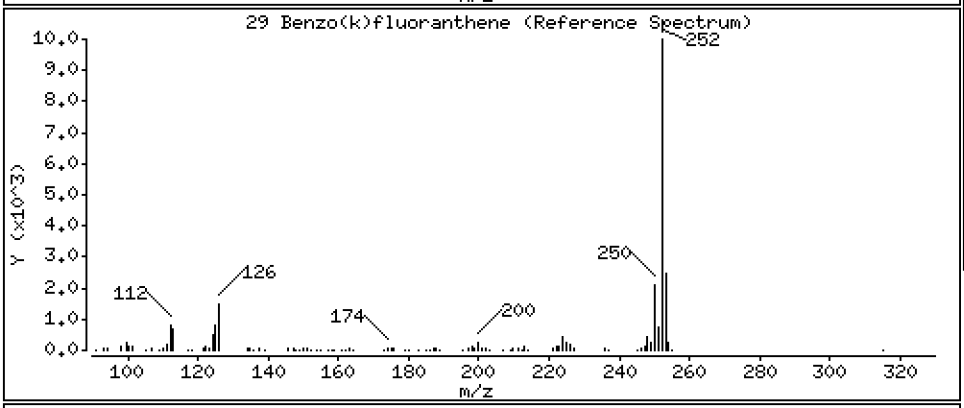
29 Benzo(k)fluoranthene Concentration: 2.722 ug/mL

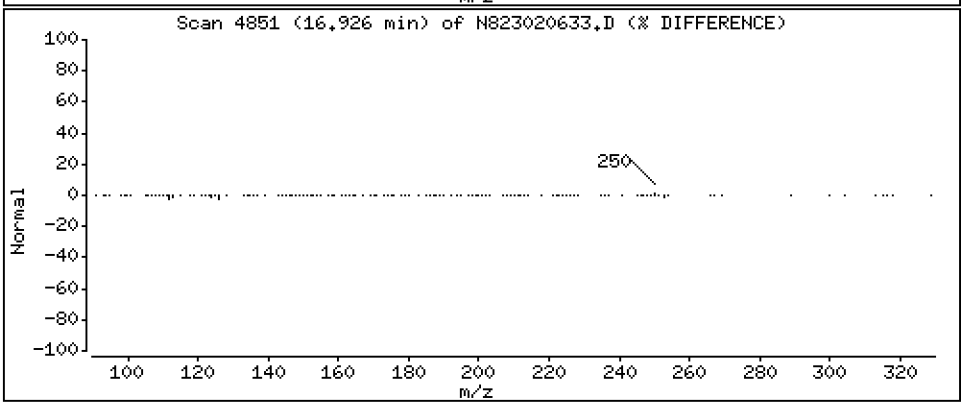












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D

Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

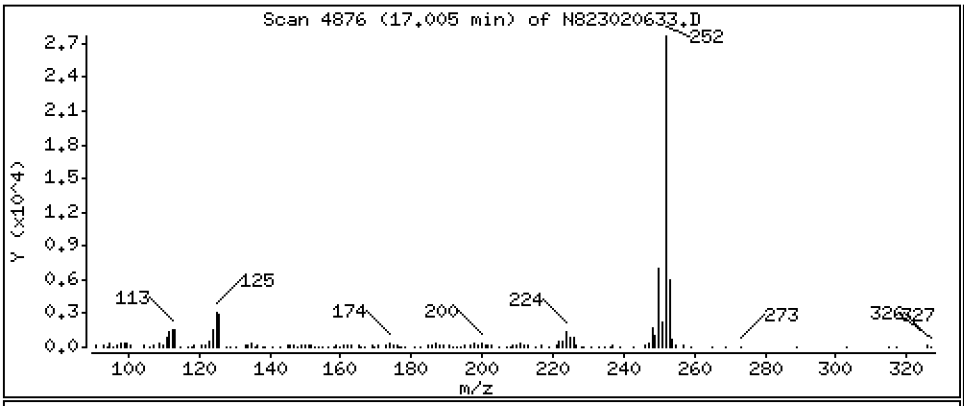
Operator: JZ

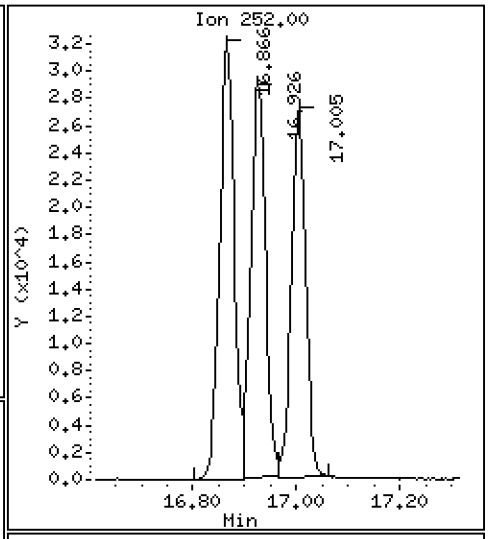
Column phase: Rxi-17sil

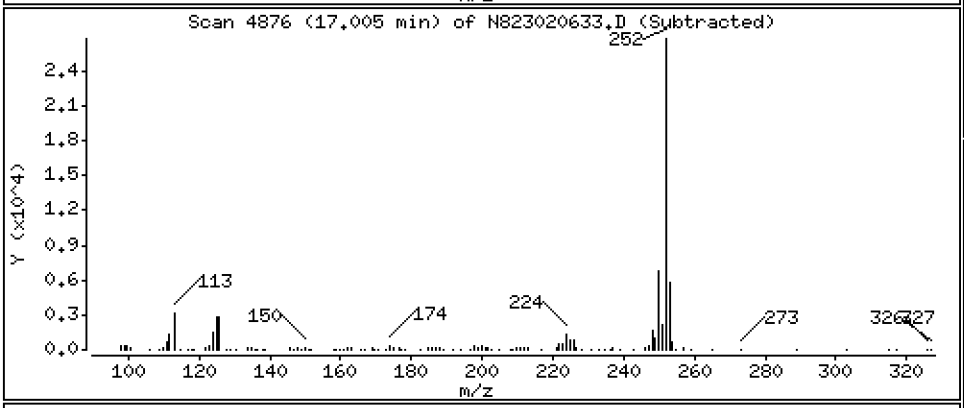
Column diameter: 0.25

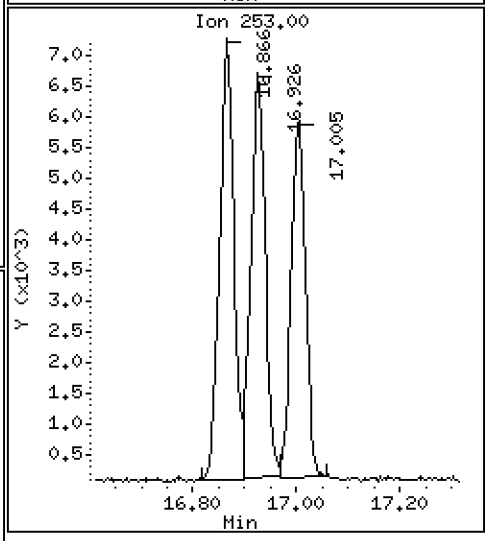
30 Benzo(j)fluoranthene

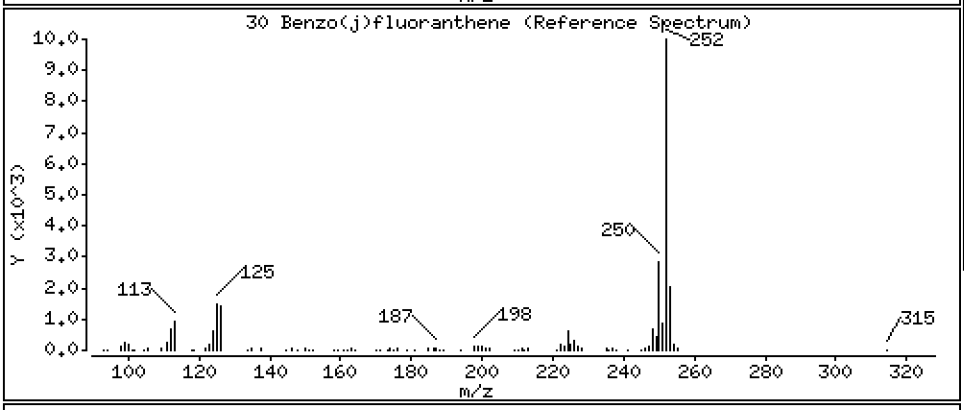
Concentration: 2.719 ug/mL

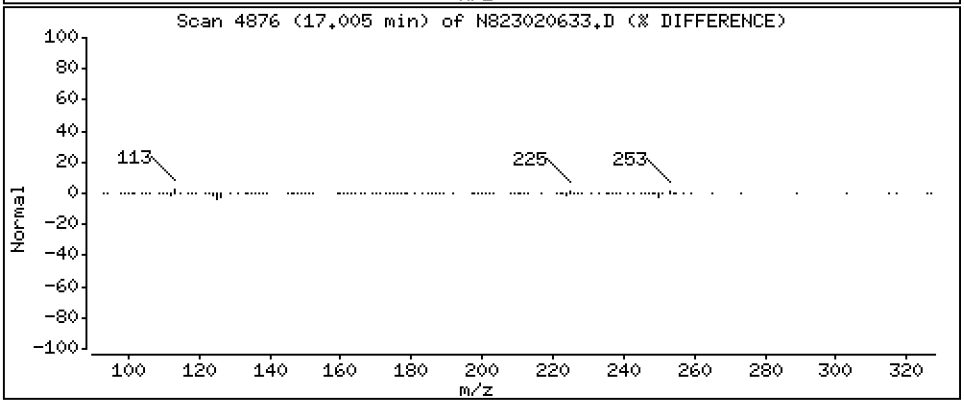












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D

Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

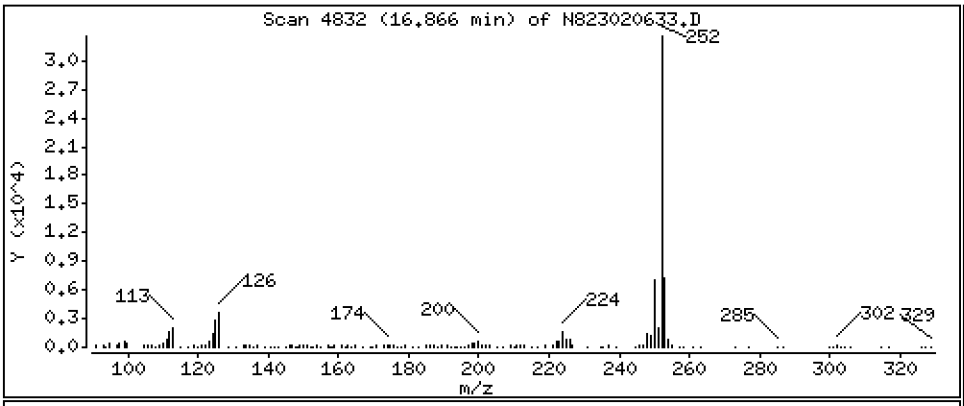
Operator: JZ

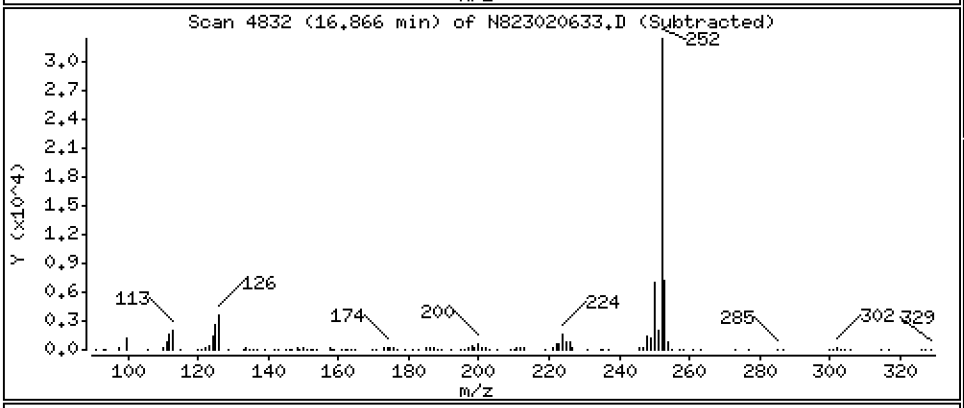
Column phase: Rxi-17sil

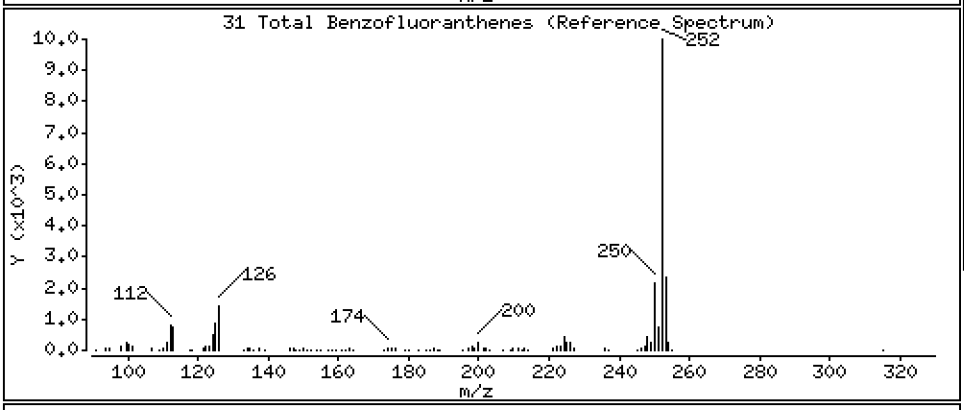
Column diameter: 0.25

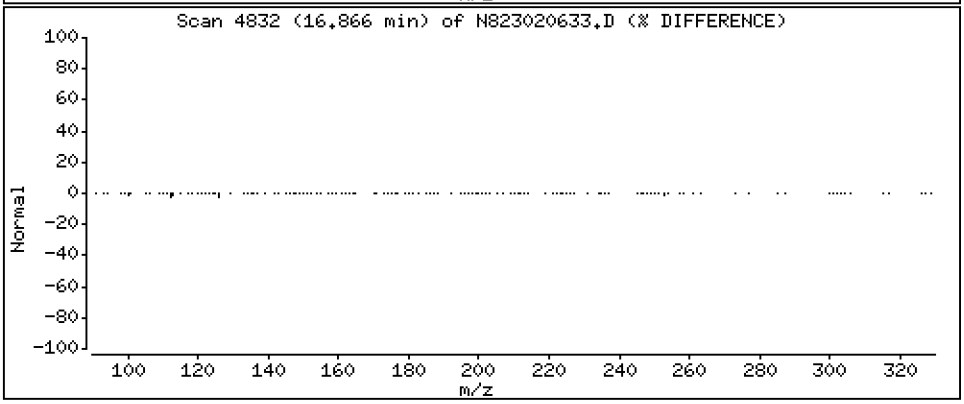
31 Total Benzofluoranthenes

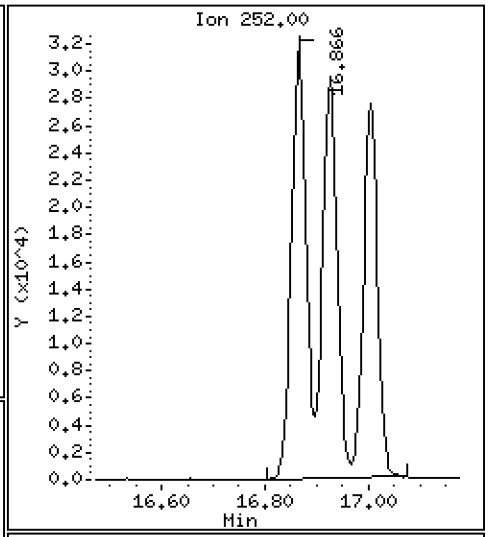
Concentration: 8.381 ug/mL

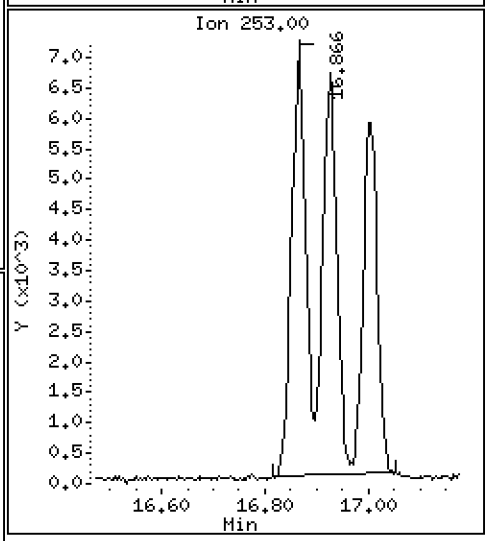












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D

Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

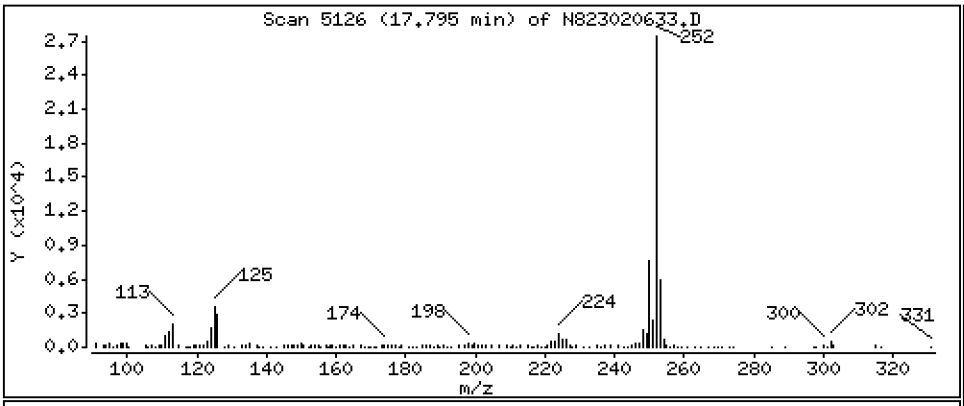
Operator: JZ

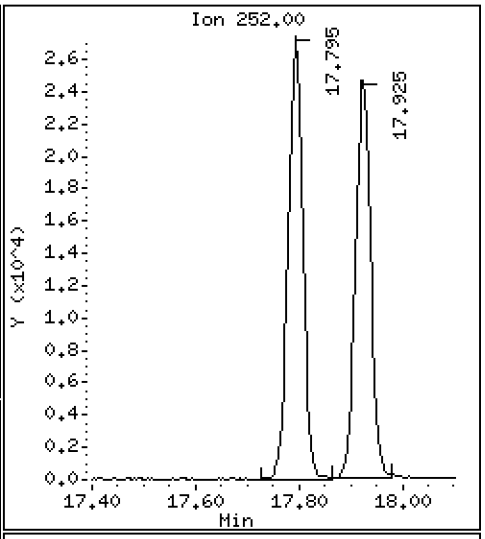
Column phase: Rxi-17sil

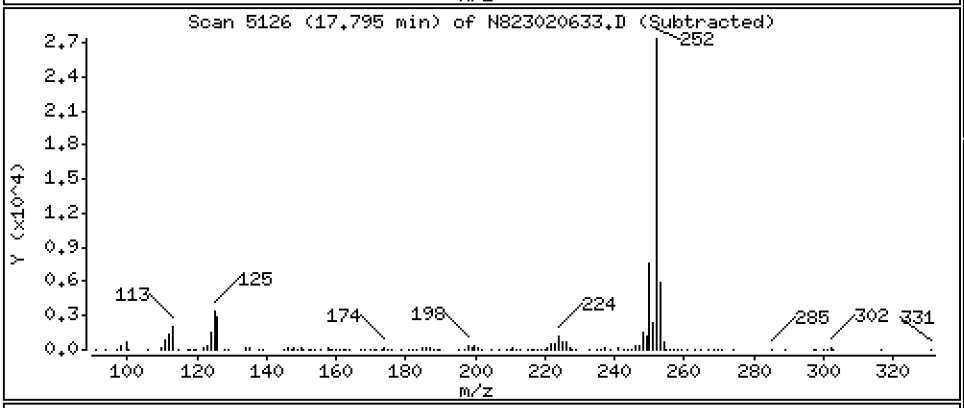
Column diameter: 0.25

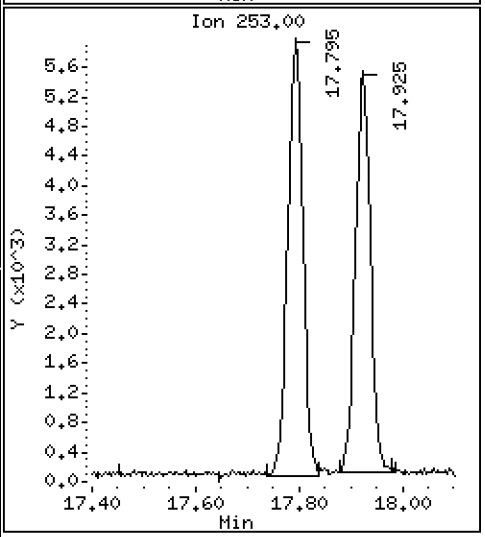
34 Benzo(e)pyrene

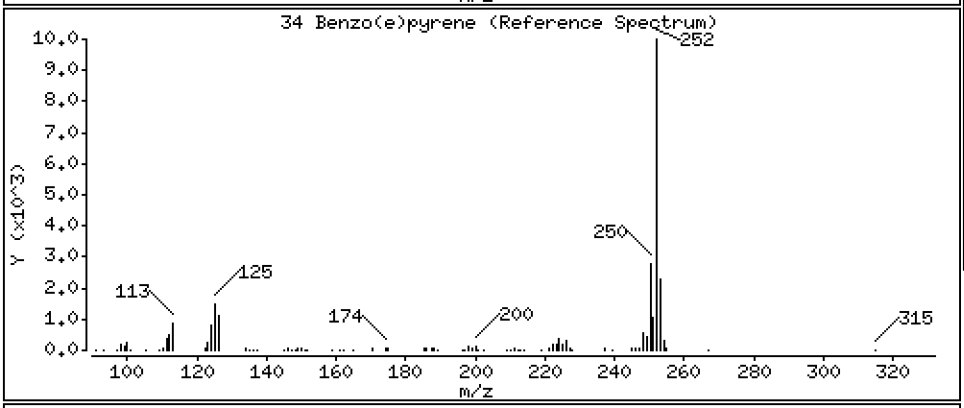
Concentration: 2.516 ug/mL

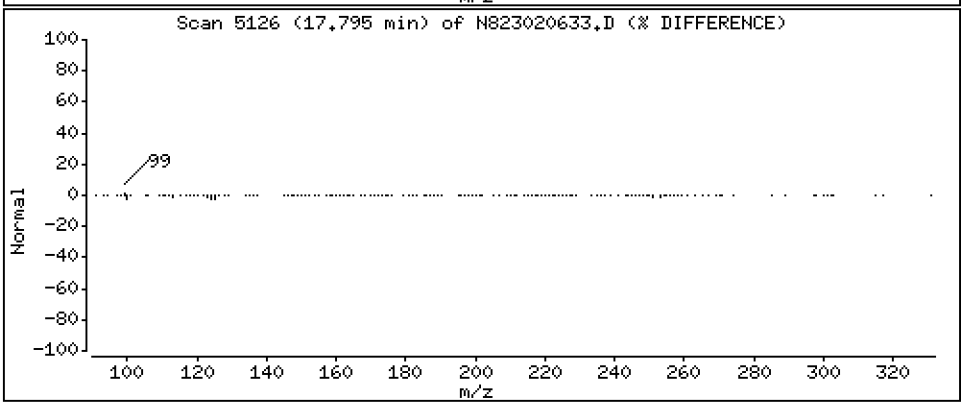












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D

Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

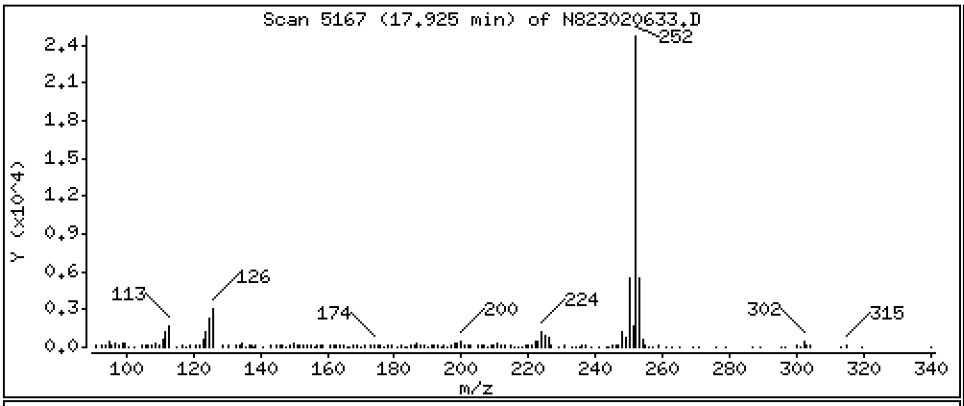
Operator: JZ

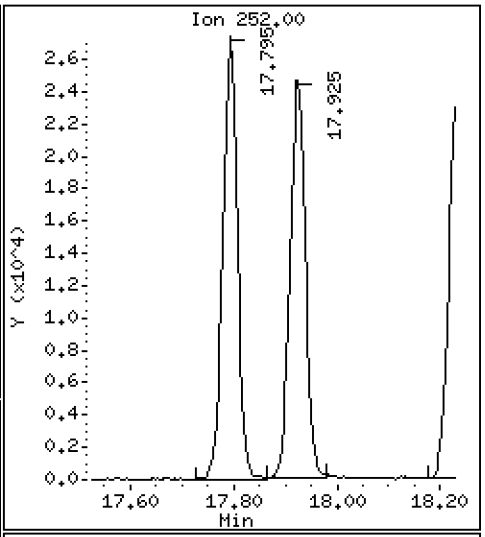
Column phase: Rxi-17sil

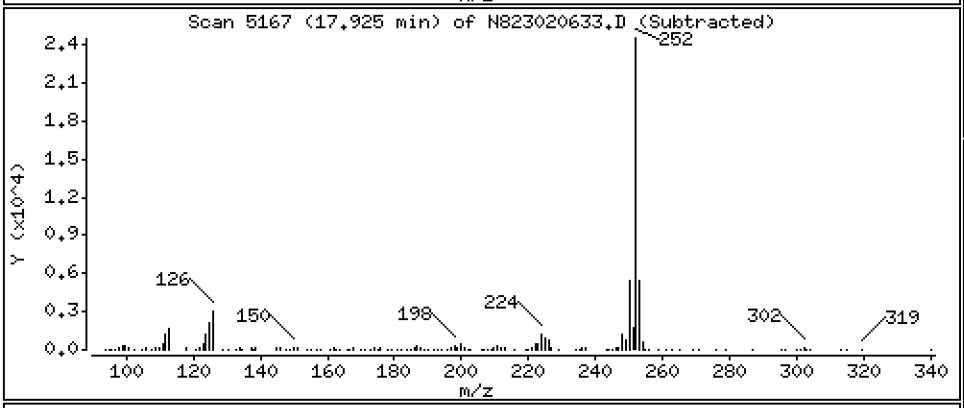
Column diameter: 0.25

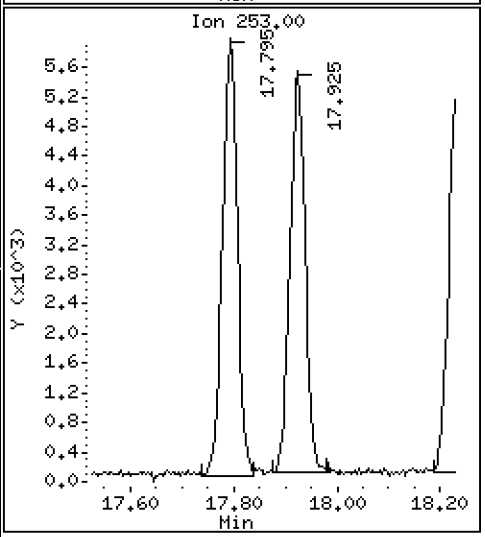
32 Benzo(a)pyrene

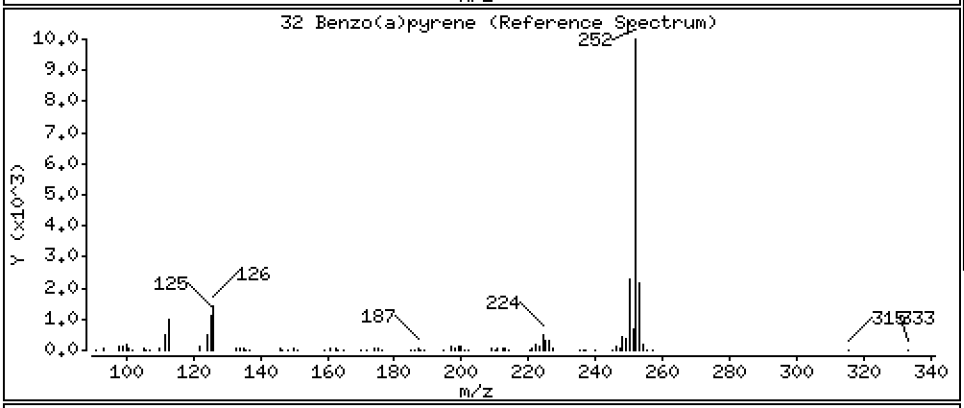
Concentration: 2.654 ug/mL

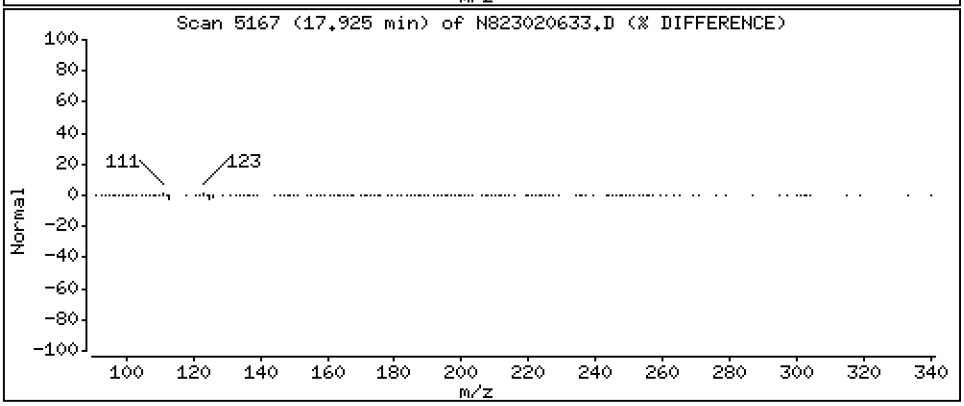












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D

Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

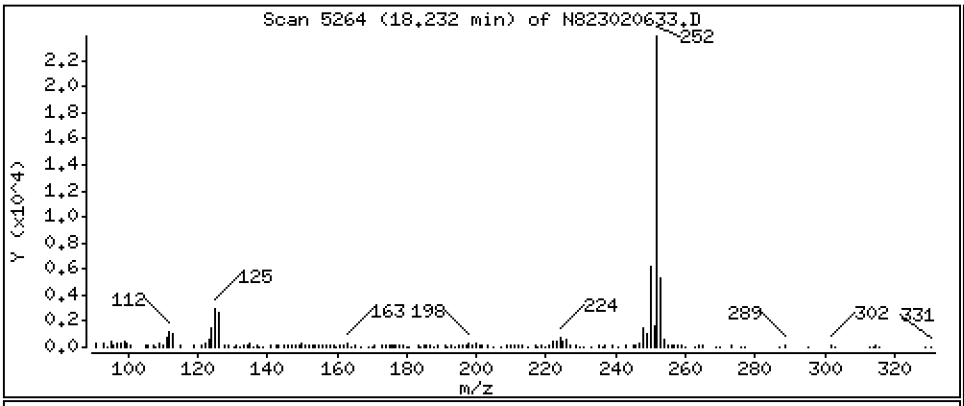
Operator: JZ

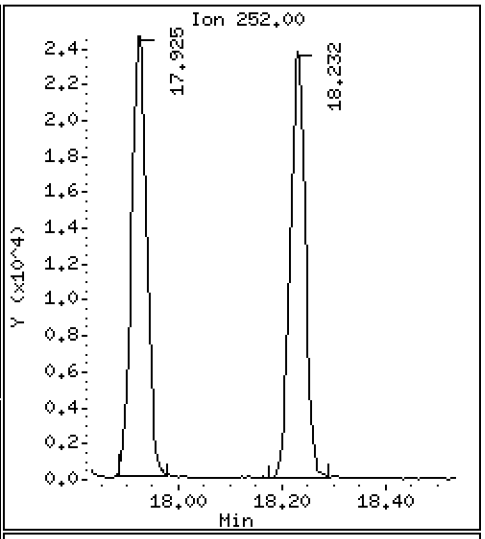
Column phase: Rxi-17sil

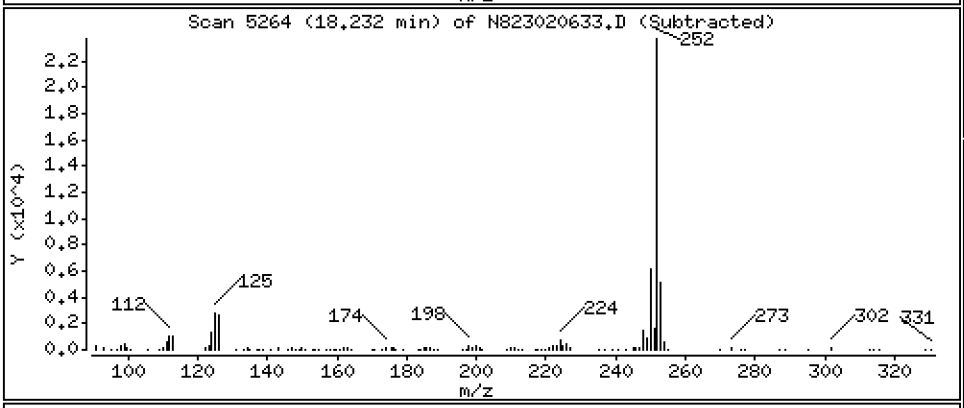
Column diameter: 0.25

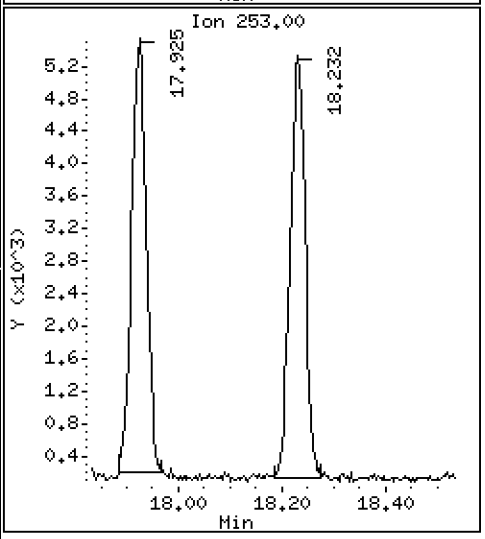
35 Perylene

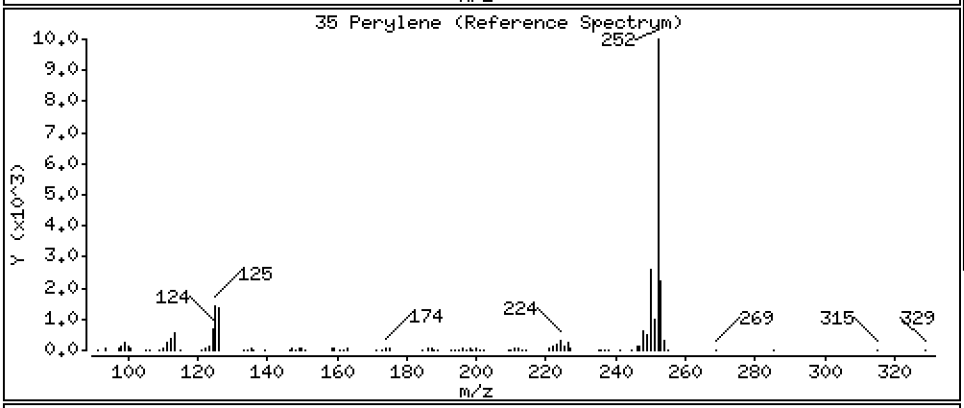
Concentration: 2.357 ug/mL

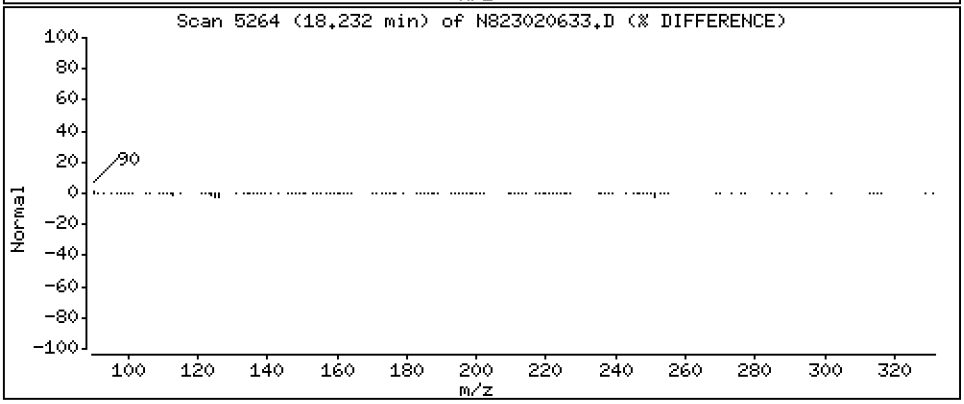












Date : 07-FEB-2023 03:09

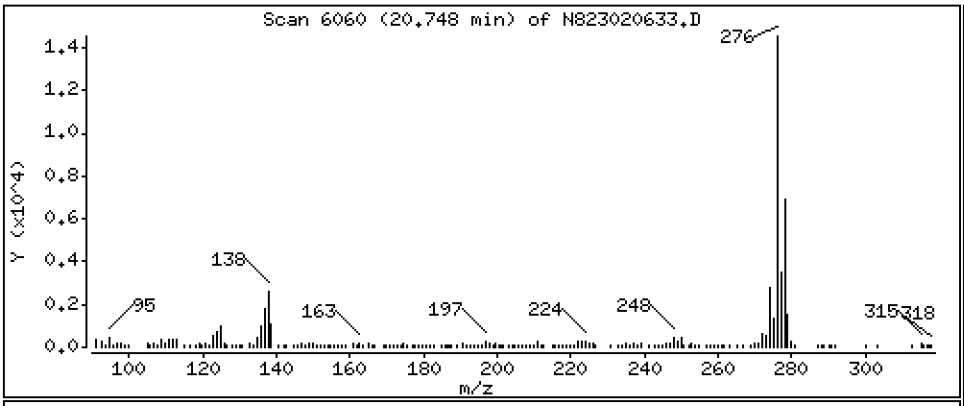
Client ID: Instrument: nt8.i

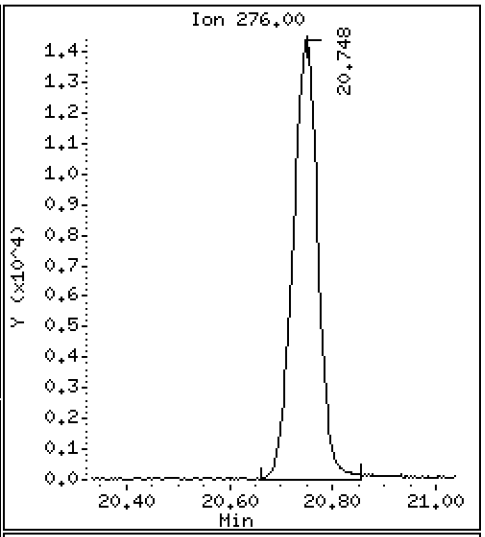
Sample Info: CCV230206A

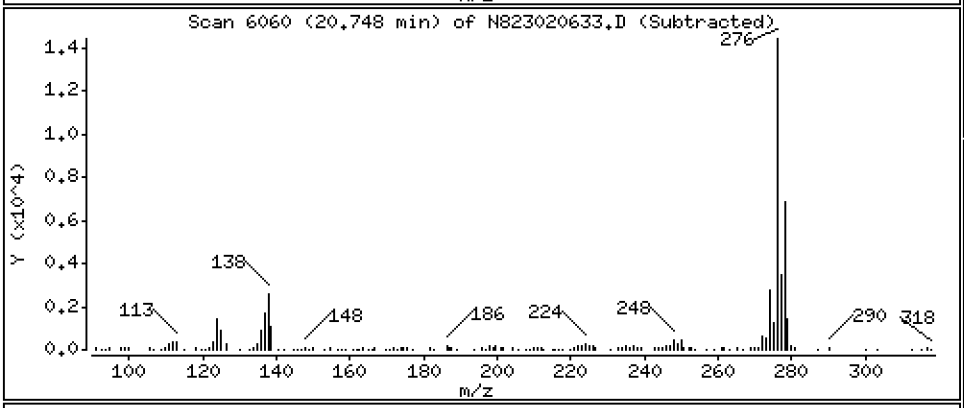
Operator: JZ

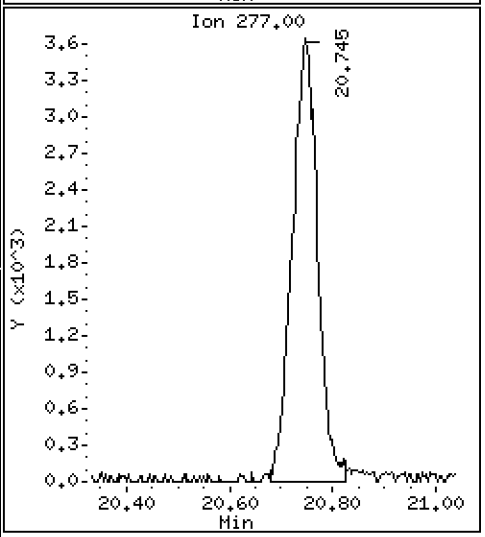
Column phase: Rxi-17sil Column diameter: 0.25

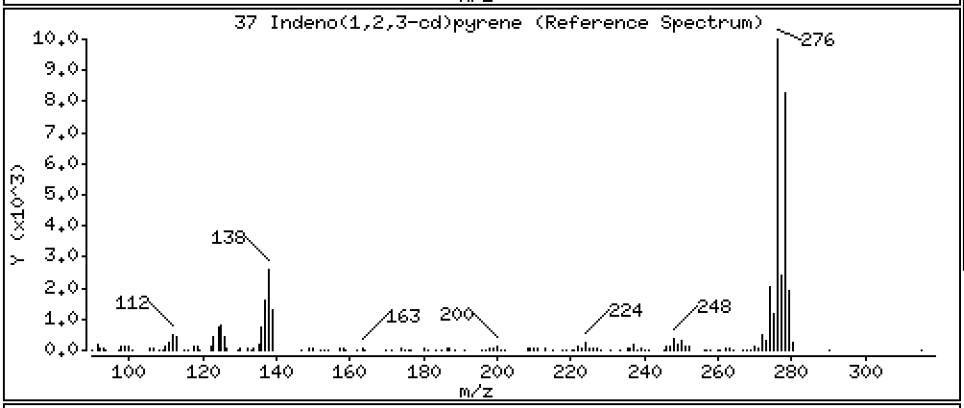
37 Indeno(1,2,3-cd)pyrene Concentration: 2.256 ug/mL

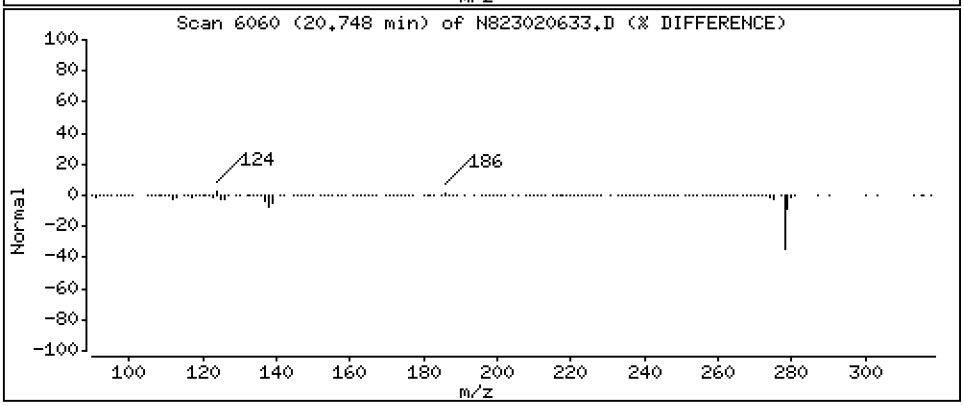












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Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

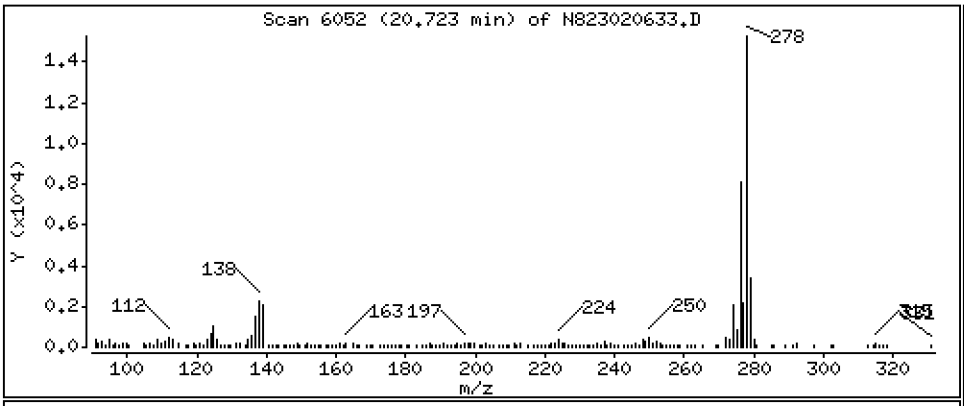
Operator: JZ

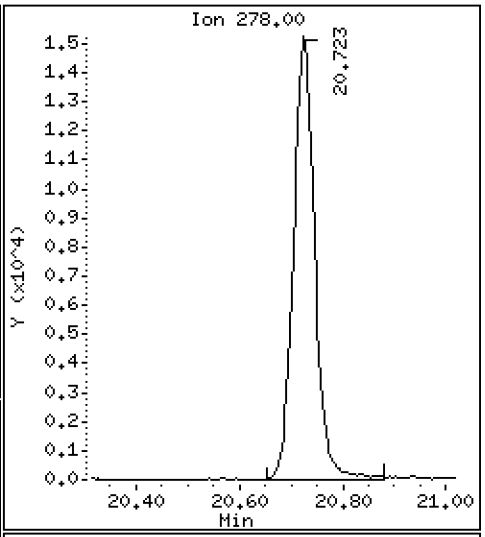
Column phase: Rxi-17sil

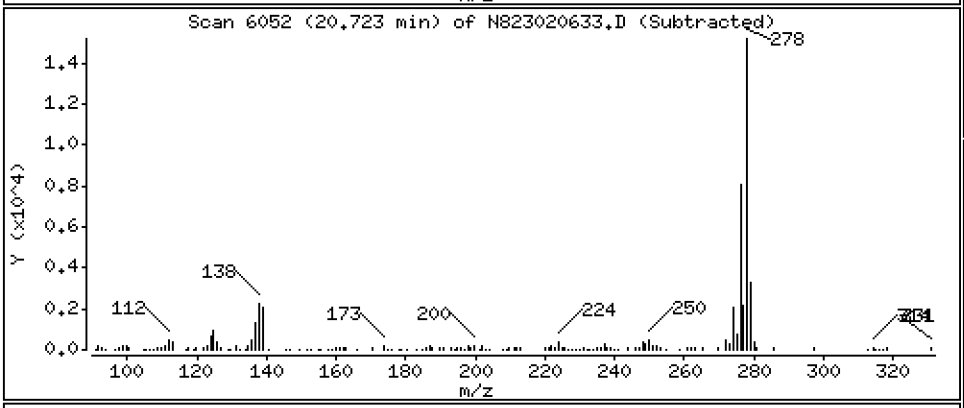
Column diameter: 0.25

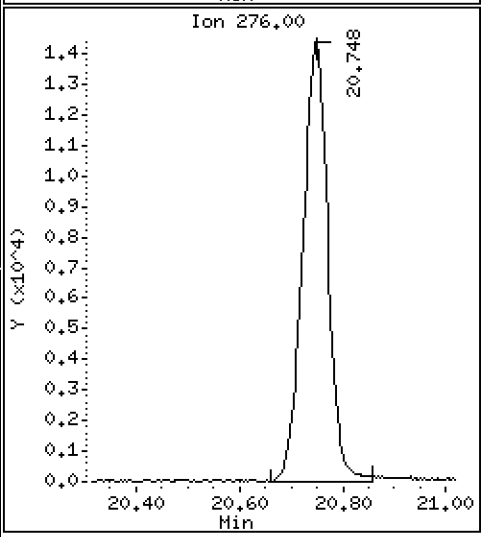
38 Dibenzo(a,h)anthracene

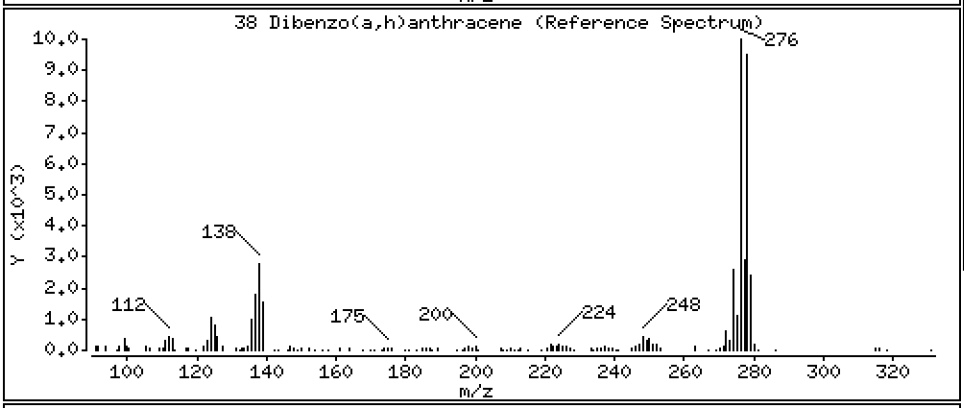
Concentration: 2.351 ug/mL

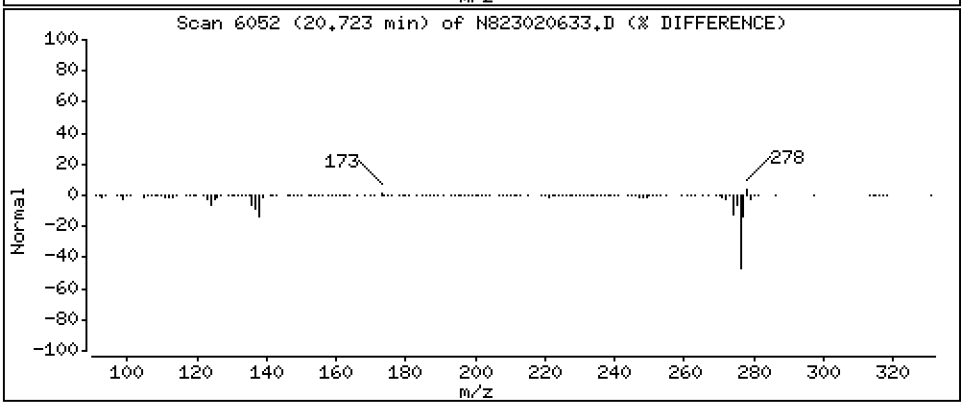












Data File: \\target\share\chem3\nt8.i\20230206A.b\N823020633.D

Date : 07-FEB-2023 03:09

Client ID:

Instrument: nt8.i

Sample Info: CCV230206A

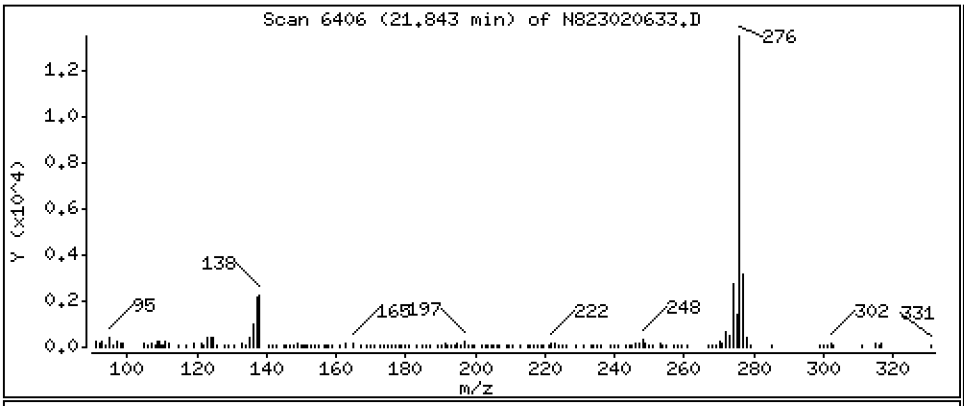
Operator: JZ

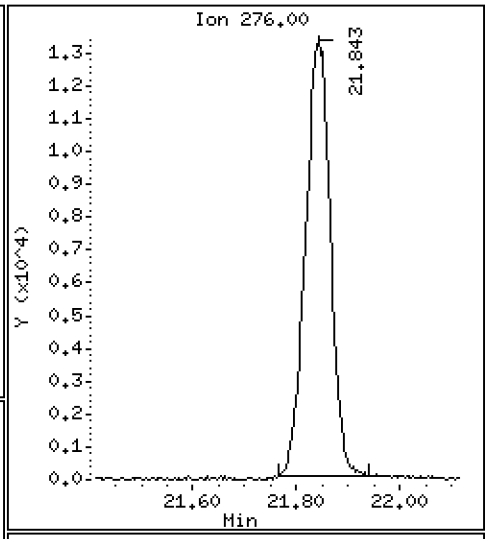
Column phase: Rxi-17sil

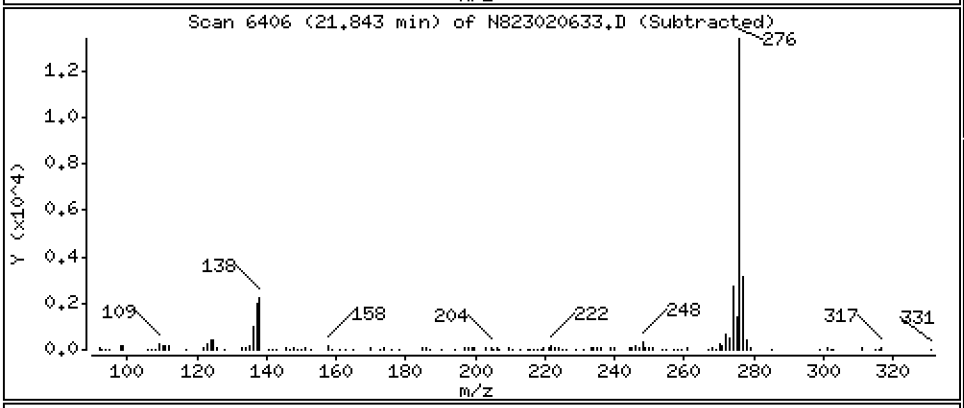
Column diameter: 0.25

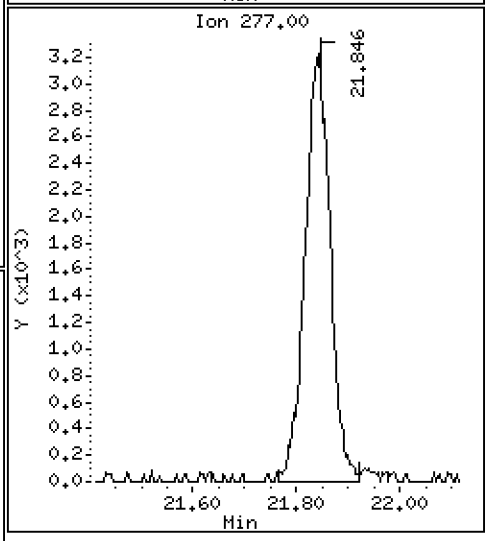
39 Benzo(g,h,i)perylene

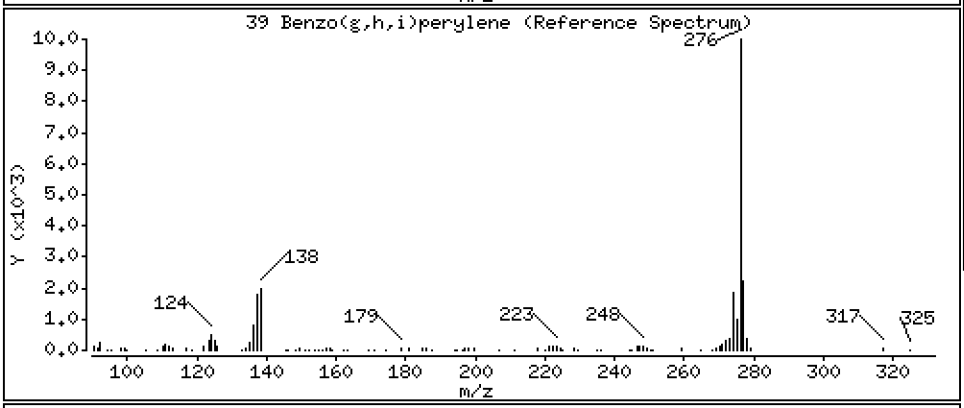
Concentration: 2.282 ug/mL

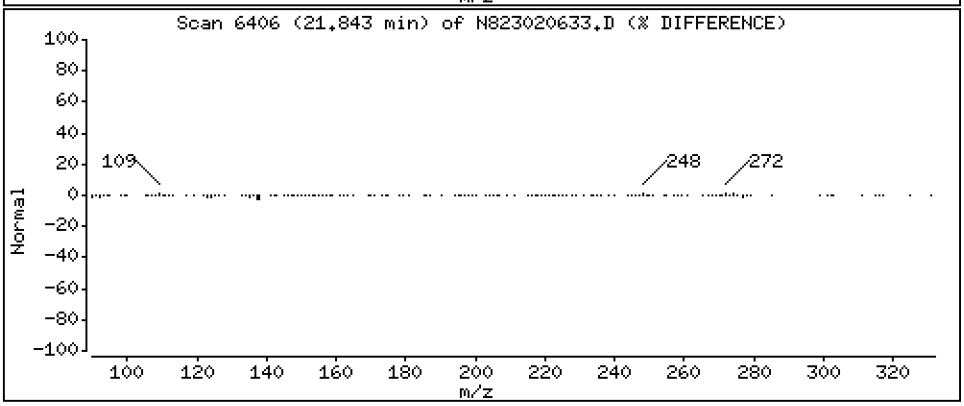












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt8.i\20230206A.b\N823020633.D
Lab Smp Id: SLB0075-CCV1
Inj Date : 07-FEB-2023 03:09
Operator : JZ Inst ID: nt8.i
Smp Info : CCV230206A
Misc Info : 23-
Comment : 1ul Injection
Method : \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
Meth Date : 07-Feb-2023 13:04 jianqing Quant Type: ISTD
Cal Date : 19-JAN-2023 13:46 Cal File: N823011908.D
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: FSIMPNAICLA.sub
Target Version: 4.14
Processing Host: JIANQING-202105

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
*	1 Naphthalene-d8	136	4.891	4.900	(1.000)	52897	2.00000	
	2 Naphthalene	128	4.922	4.928	(1.006)	63361	2.57618	2.576
$	3 2-Methylnaphthalene-d10	152	5.627	5.634	(1.151)	38863	2.69389	2.694
	4 2-Methylnaphthalene	141	5.675	5.681	(1.160)	35322	2.61093	2.611
	5 1-methylnaphthalene	141	5.874	5.880	(1.201)	35734	2.60257	2.603
	7 Biphenyl	154	6.336	6.339	(0.882)	52884	2.53205	2.532
	8 2,6-Dimethylnaphthalene	156	6.380	6.386	(0.888)	39449	2.66873	2.669
	9 Acenaphthylene	152	7.079	7.082	(0.985)	65531	2.74112	2.741
*	10 Acenaphthene-d10	164	7.186	7.189	(1.000)	31659	2.00000	
	11 Acenaphthene	153	7.237	7.240	(1.007)	40761	2.54468	2.545
	12 Dibenzofuran	168	7.392	7.392	(1.029)	60656	2.49311	2.493
	13 1,6,7-Trimethylnaphthalene	170	7.455	7.455	(1.037)	40805	2.65970	2.660
	14 Fluorene	166	7.869	7.869	(1.095)	49570	2.62330	2.623
	18 Dibenzothiophene	184	9.109	9.105	(0.986)	66534	2.60645	2.606
*	15 Phenanthrene-d10	188	9.235	9.232	(1.000)	57767	2.00000	
	16 Phenanthrene	178	9.270	9.267	(1.004)	69258	2.45440	2.454
	17 Anthracene	178	9.311	9.308	(1.008)	67531	2.63443	2.634
	19 Carbazole	167	9.830	9.823	(1.064)	59552	2.53414	2.534
	20 1-Methylphenanthrene	192	10.051	10.044	(1.088)	54096	2.66030	2.660
	22 Fluoranthene	202	11.063	11.050	(1.198)	78660	2.56093	2.561
$	21 Fluoranthene-d10	212	11.025	11.009	(1.194)	69671	2.73363	2.734
	23 Pyrene	202	11.585	11.569	(0.814)	82339	2.76298	2.763
	24 Benzo(a)anthracene	228	14.102	14.070	(0.991)	76950	2.84885	2.849
*	25 Chrysene-d12	240	14.228	14.202	(1.000)	48067	2.00000	
	27 Chrysene	228	14.304	14.275	(1.005)	70690	2.45840	2.458
	28 Benzo(b)fluoranthene	252	16.865	16.824	(0.929)	63427	2.92669	2.927
	29 Benzo(k)fluoranthene	252	16.925	16.887	(0.932)	57781	2.72196	2.722
	30 Benzo(j)fluoranthene	252	17.004	16.963	(0.937)	51952	2.71859	2.719
	31 Total Benzofluoranthenes	252	16.865	16.824	(0.929)	172015	8.38100	8.381(M)
	34 Benzo(e)pyrene	252	17.795	17.750	(0.980)	54383	2.51644	2.516
	32 Benzo(a)pyrene	252	17.924	17.877	(0.987)	50609	2.65370	2.654
*	33 Perylene-d12	264	18.155	18.107	(1.000)	37211	2.00000	
	35 Perylene	252	18.231	18.183	(1.004)	48227	2.35653	2.357

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$ 36 Dibenzo(a,h)anthracene-d14	292	20.609	20.549	(1.135)	32062	2.19903	2.199
37 Indeno(1,2,3-cd)pyrene	276	20.748	20.684	(1.143)	49006	2.25558	2.256
38 Dibenzo(a,h)anthracene	278	20.723	20.666	(1.141)	43963	2.35128	2.351
39 Benzo(g,h,i)perylene	276	21.842	21.763	(1.203)	44913	2.28160	2.282

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt8.i
Lab File ID: N823020633.D
Lab Smp Id: SLB0075-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: \\target\share\chem3\nt8.i\20230206A.b\FSIMPNA230119.m
Misc Info: 23-

Calibration Date: 06-FEB-2023
Calibration Time: 15:15
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	44336	22168	88672	52897	19.31
10 Acenaphthene-d10	26127	13064	52254	31659	21.17
15 Phenanthrene-d10	47424	23712	94848	57767	21.81
25 Chrysene-d12	36794	18397	73588	48067	30.64
33 Perylene-d12	36636	18318	73272	37211	1.57

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 Naphthalene-d8	4.90	4.40	5.40	4.89	-0.19
10 Acenaphthene-d10	7.19	6.69	7.69	7.19	-0.04
15 Phenanthrene-d10	9.23	8.73	9.73	9.24	0.04
25 Chrysene-d12	14.20	13.70	14.70	14.23	0.18
33 Perylene-d12	18.11	17.61	18.61	18.16	0.26

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

REVIEW SUMMARY FOR FILE - N823020633.D

Lab ID: SLB0075-CCV1
nt8.i, 20230206A.b\FSIMPNA230119.m,   07-FEB-2023 03:09

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

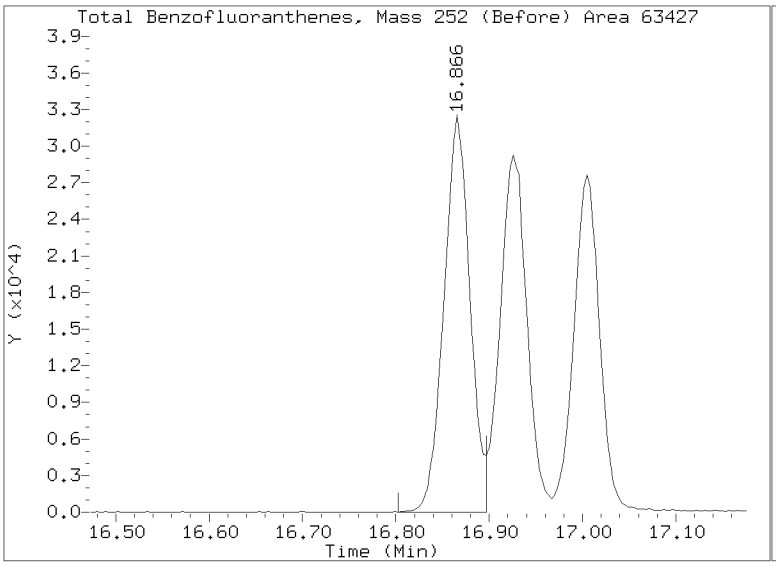
No RRT check performed

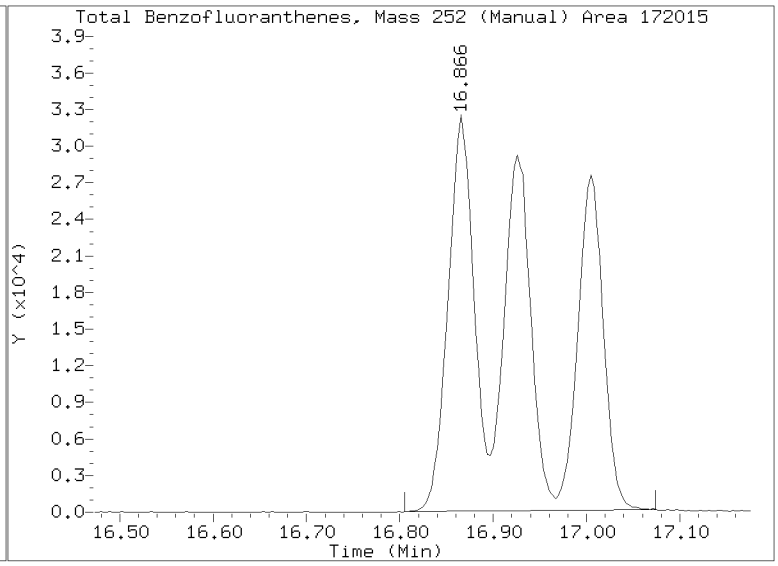
On Column LOD for nt8.i, 20230206A.b\FSIMPNA230119.m, FSIMPNAICLA.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt8.i/20230206A.b/N823020633.D
Injection Date: 07-FEB-2023 03:09
Lab ID:SLB0075-CCV1 Client ID:
Report Date: 02/07/2023 19:38





Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00032
Lab File ID:	NT1003012311S.D	Calibration Date:	03/01/2023
Sequence:	SLC0143	Injection Date:	03/01/23
Lab Sample ID:	SLC0143-SCV1	Injection Time:	21:46
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
1,4-Dichlorobenzene	A	5.0000	5.2	1.4413080	1.5132640		5.0	+/-20	
1,2-Dichlorobenzene	A	5.0000	5.1	1.3853460	1.4247680		2.8	+/-20	
Benzyl Alcohol	A	5.0000	5.1	0.7492523	1.0234800		2.1	+/-20	
Benzoic acid	A	10.000	6.9	0.1431163	0.1324842		-31.3	+/-20	*
2,4-Dimethylphenol	A	5.0000	3.6	0.2957717	0.2493707		-27.3	+/-20	*
1,2,4-Trichlorobenzene	A	5.0000	4.9	0.2879030	0.2804247		-2.6	+/-20	
N-Nitrosodiphenylamine	A	5.0000	5.4	0.6473471	0.6938224		7.2	+/-20	
Pentachlorophenol	A	5.0000	3.9	0.0950913	0.1080188		-21.8	+/-20	*
2-Fluorophenol	A	7.5000	0.0377	1.1419780	0.0057366		-99.5		
p-Terphenyl-d14	A	5.0000	0.0271	0.3234672	0.0017548		-99.5		

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

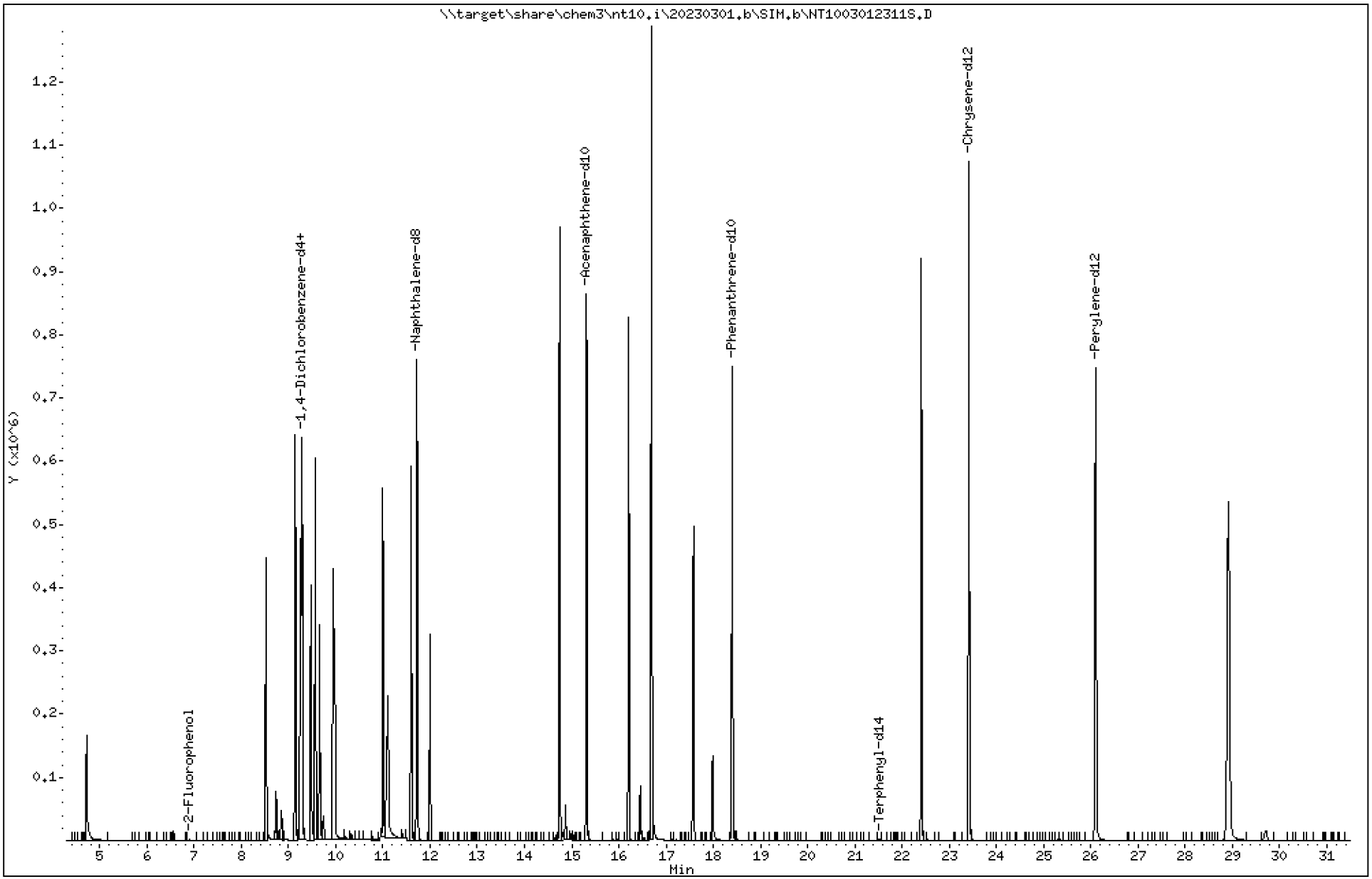
Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

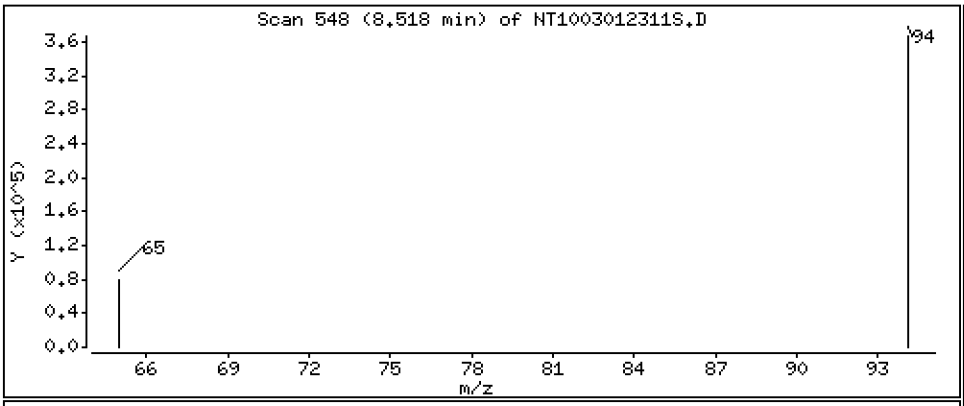
Operator: JGR

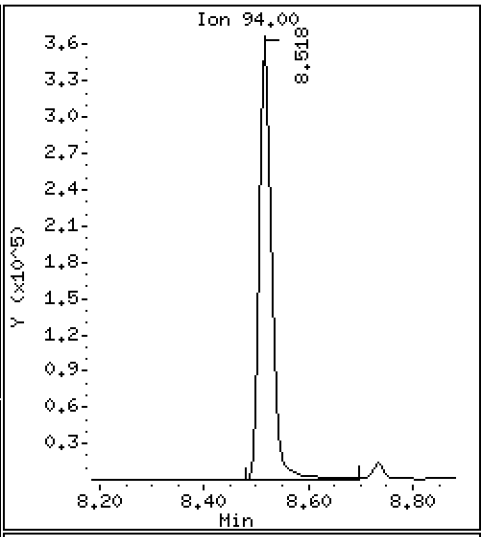
Column phase: ZB-5msi

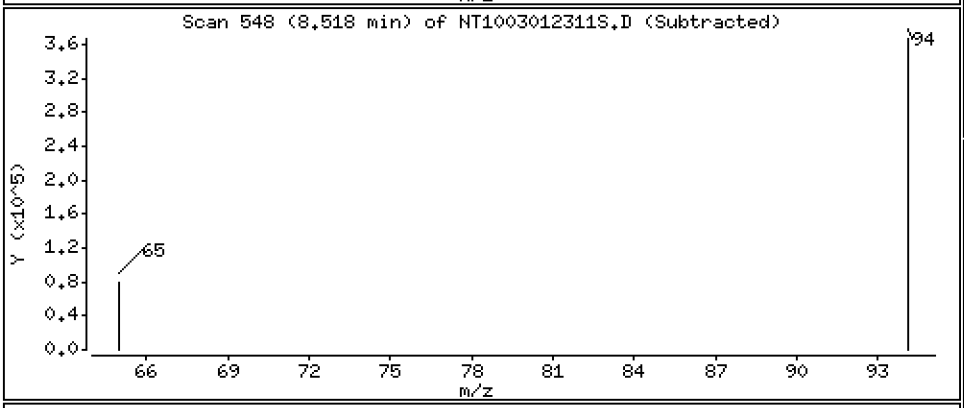
Column diameter: 0.25

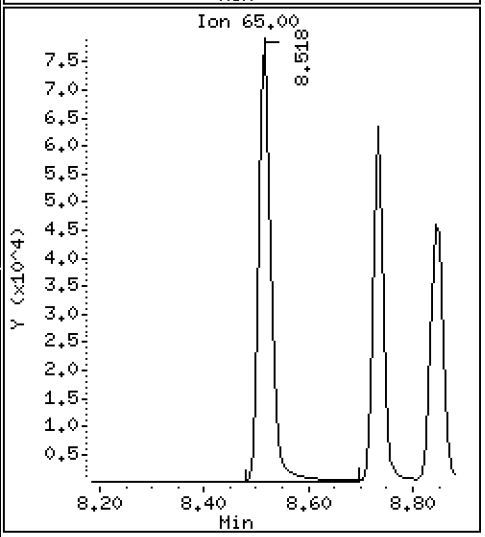
3 Phenol

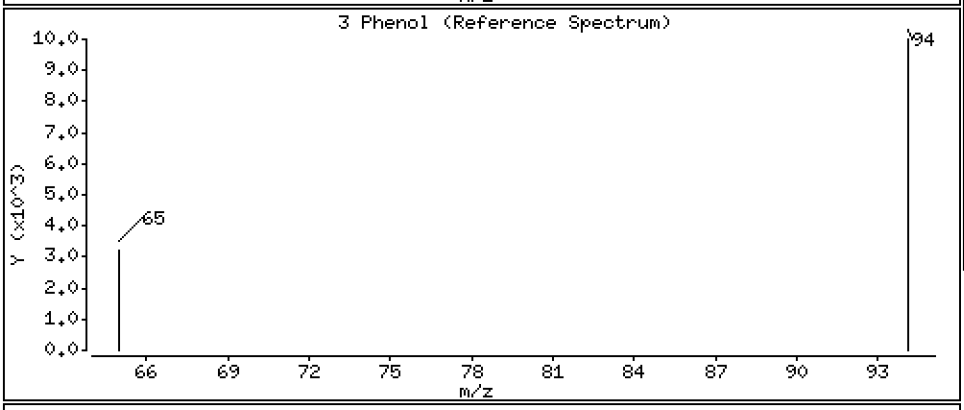
Concentration: 4.507 ug/L

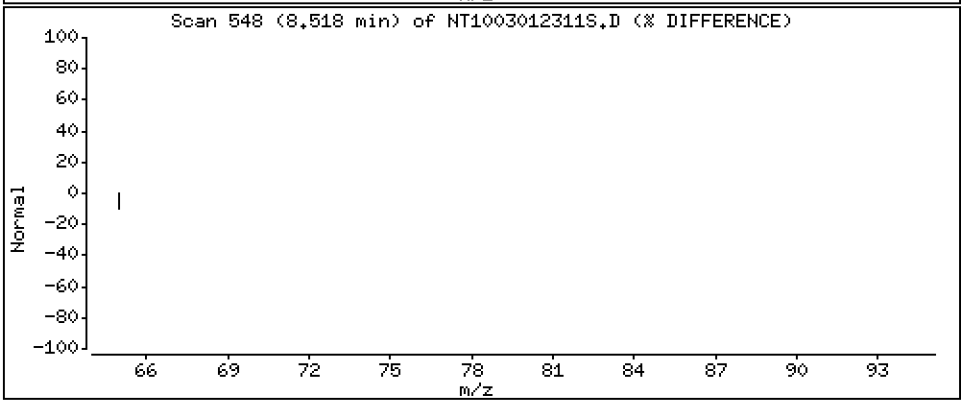












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

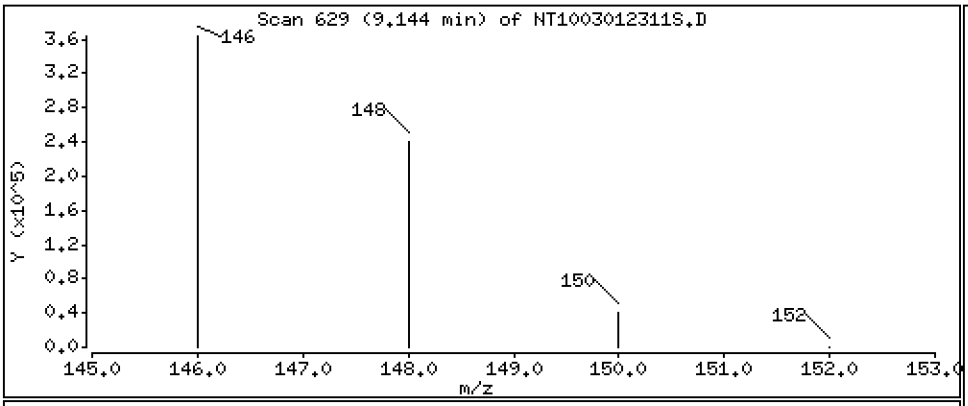
Operator: JGR

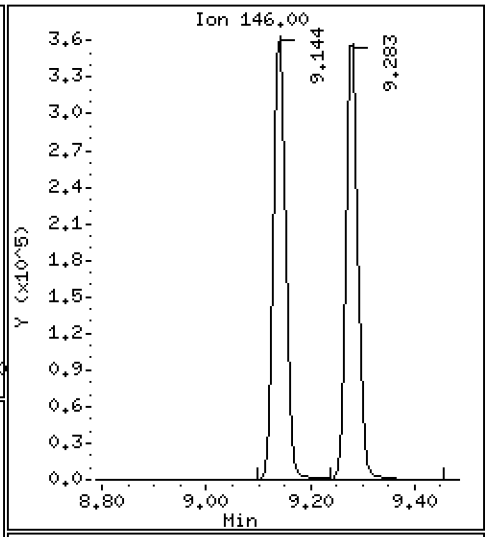
Column phase: ZB-5msi

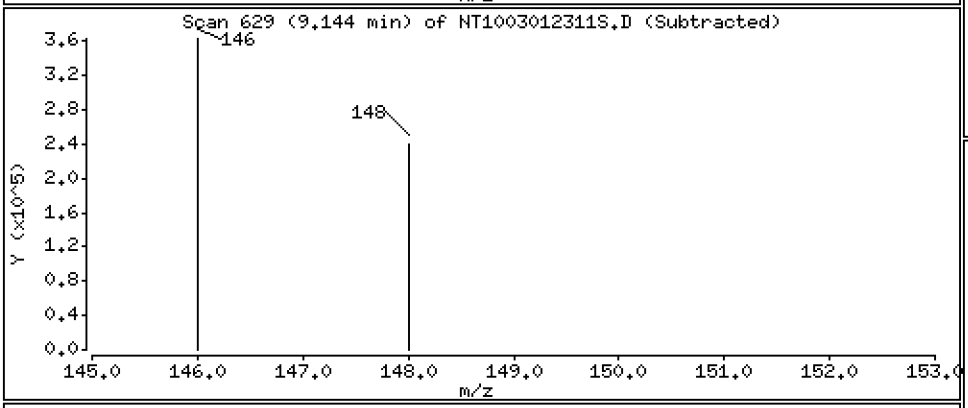
Column diameter: 0.25

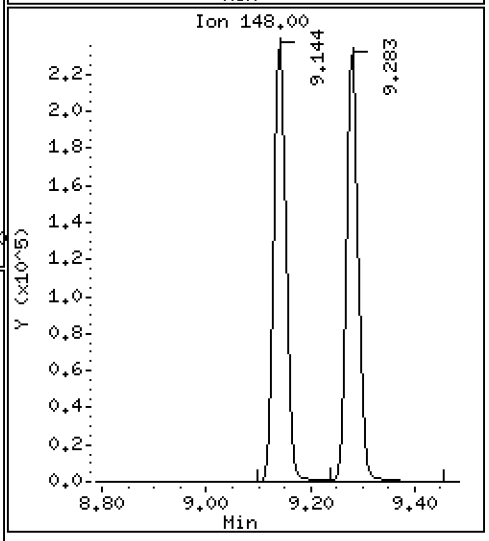
7 1,3-Dichlorobenzene

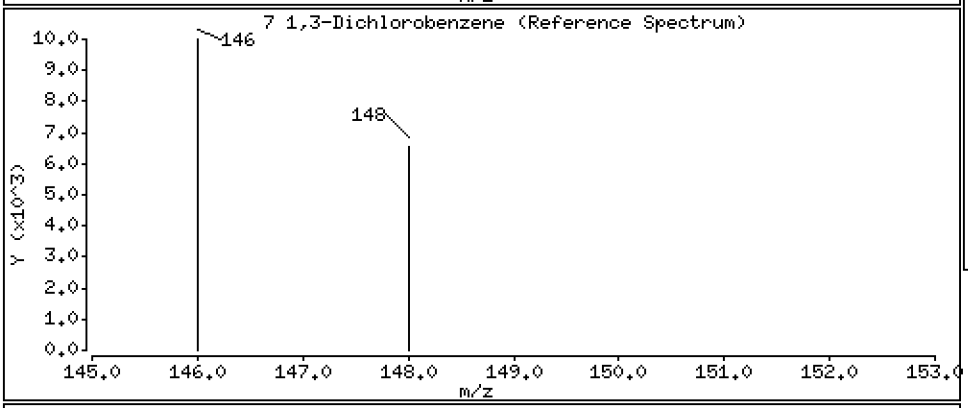
Concentration: 5.084 ug/L

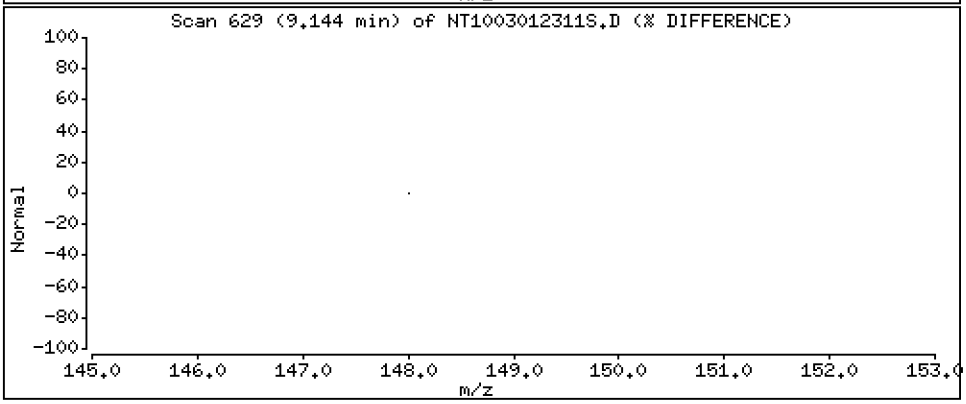












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

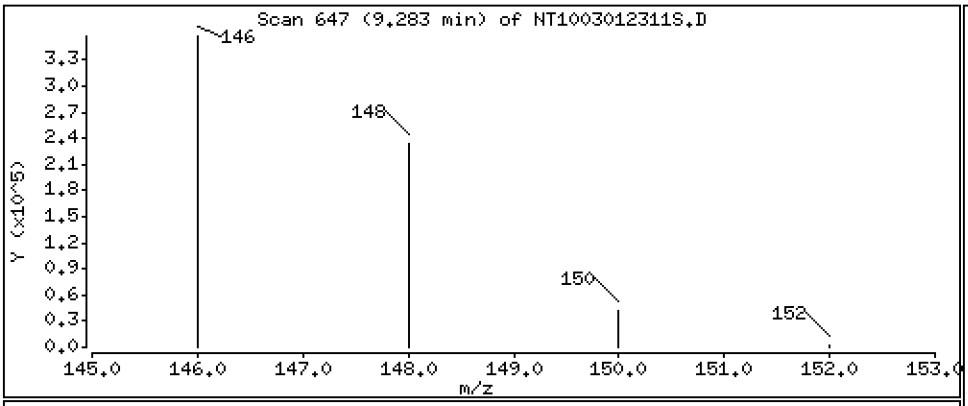
Operator: JGR

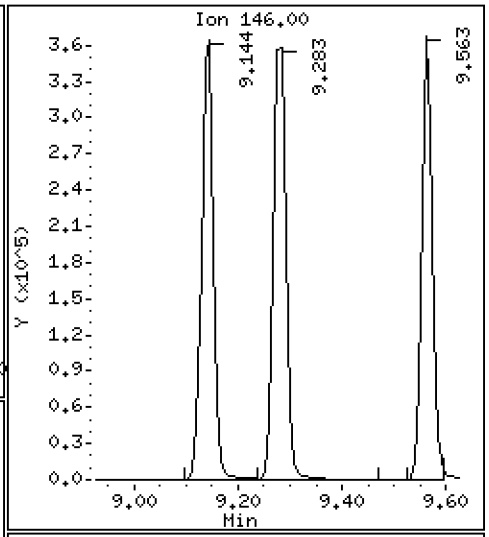
Column phase: ZB-5msi

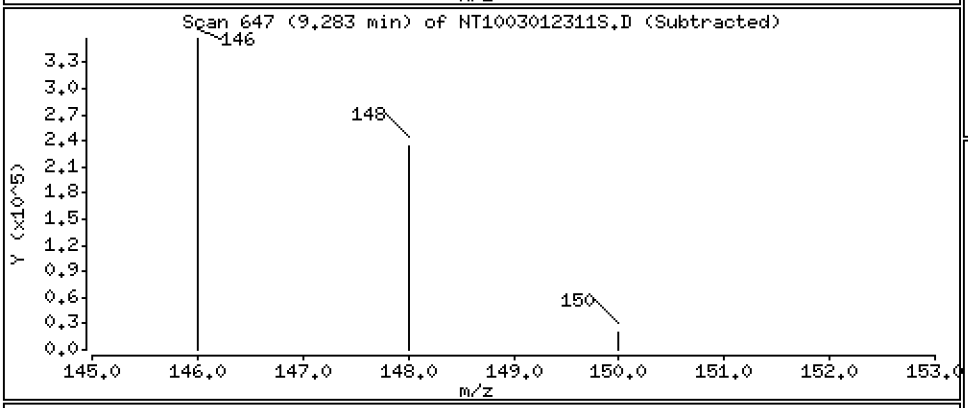
Column diameter: 0.25

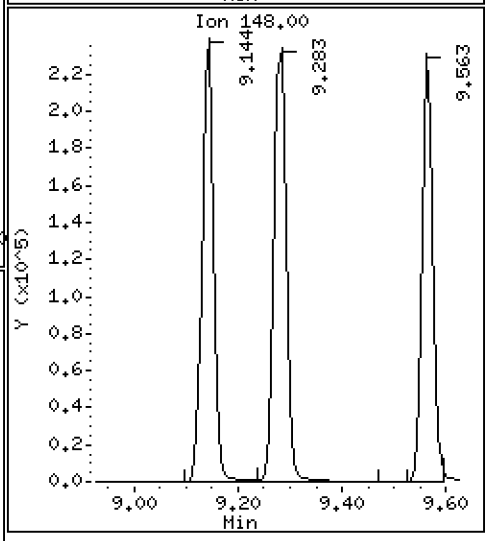
9 1,4-Dichlorobenzene

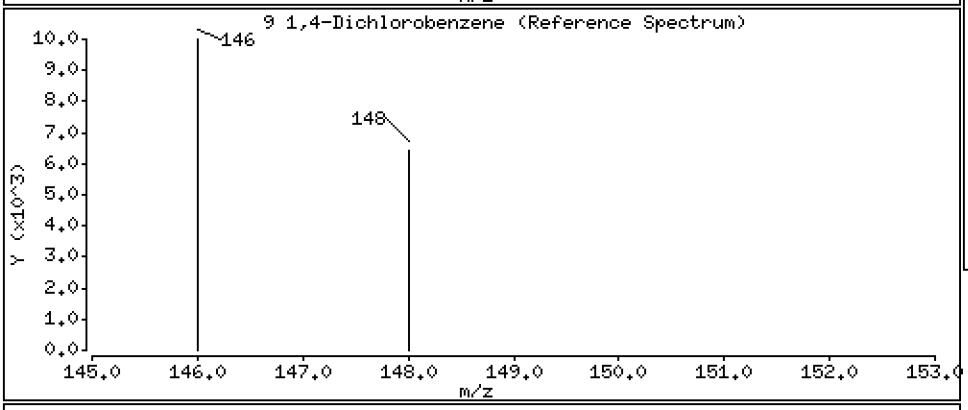
Concentration: 5.250 ug/L

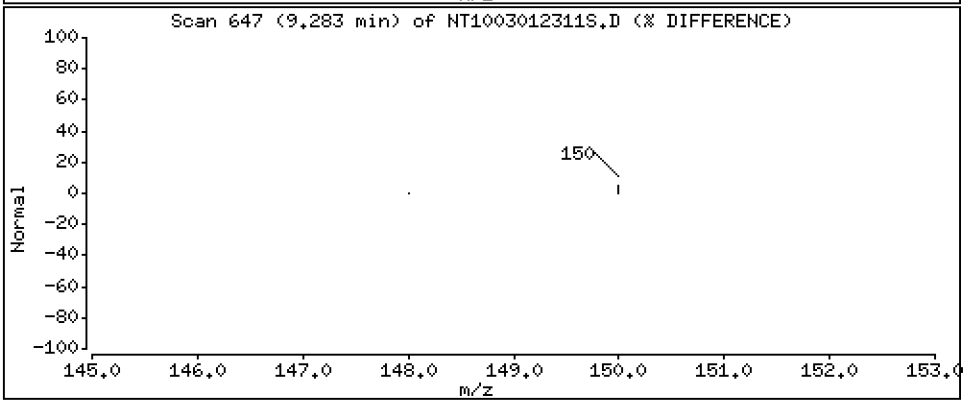












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

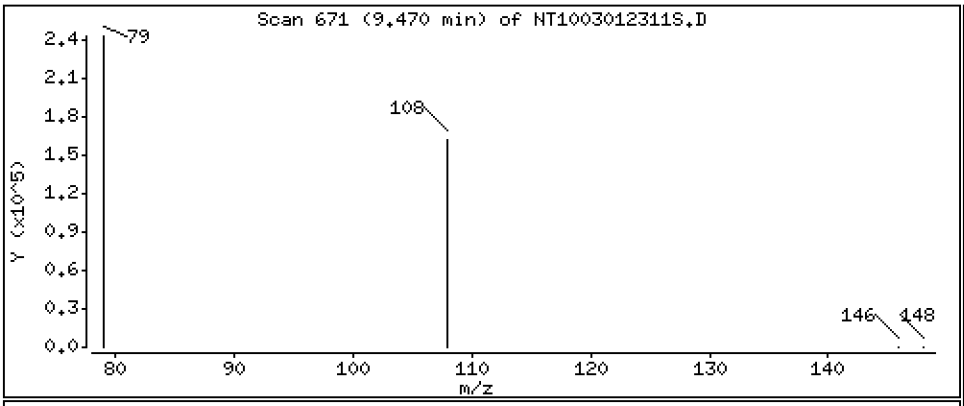
Operator: JGR

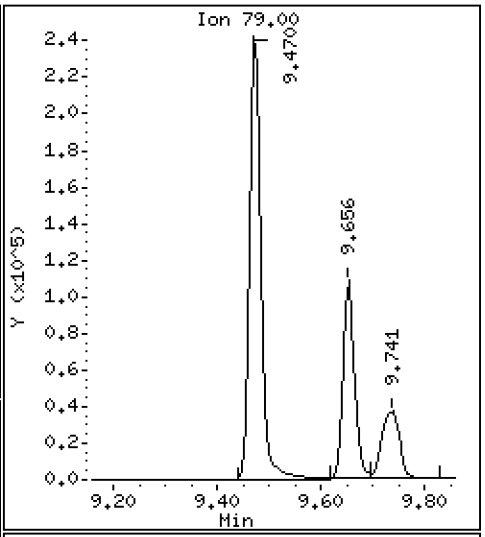
Column phase: ZB-5msi

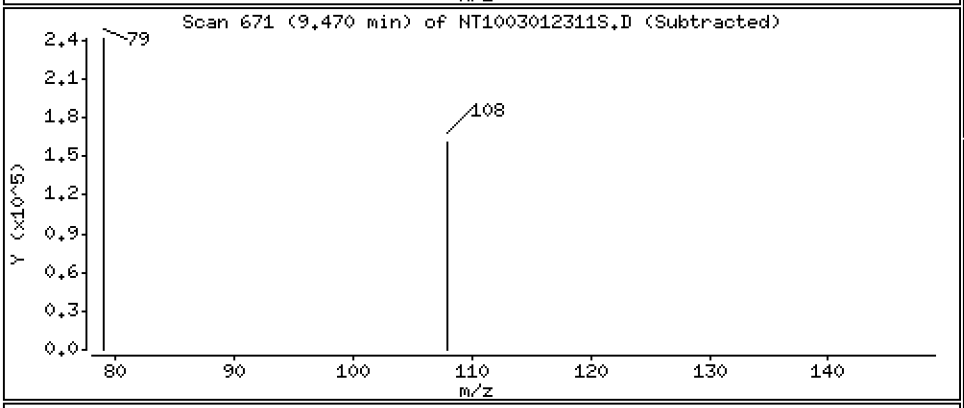
Column diameter: 0.25

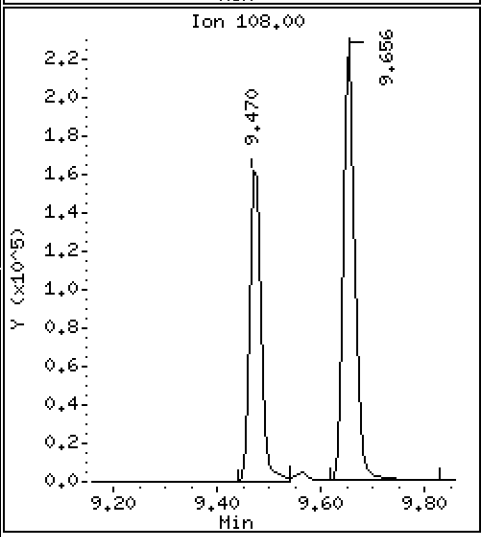
11 Benzyl alcohol

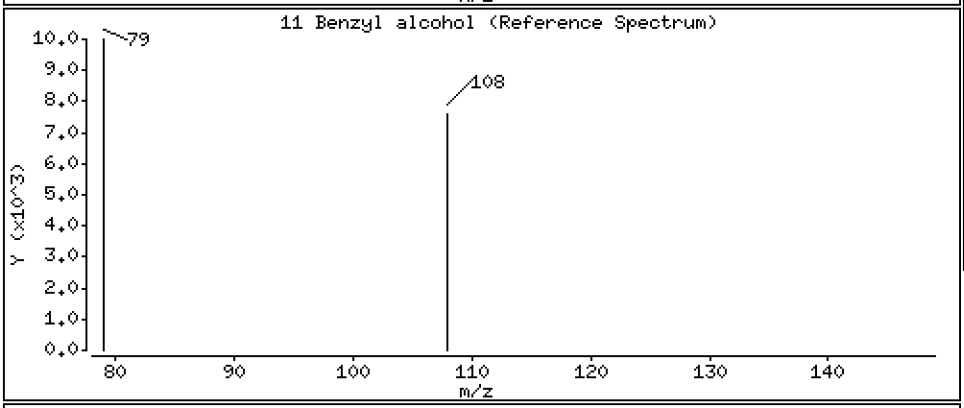
Concentration: 5.104 ug/L

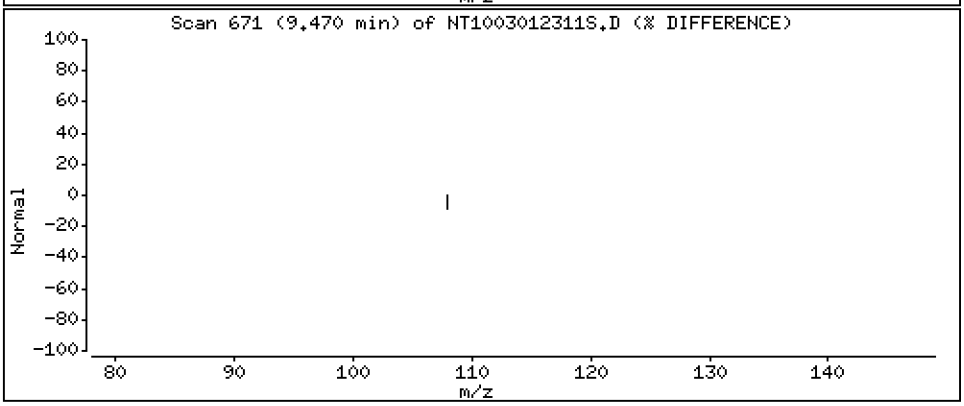












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

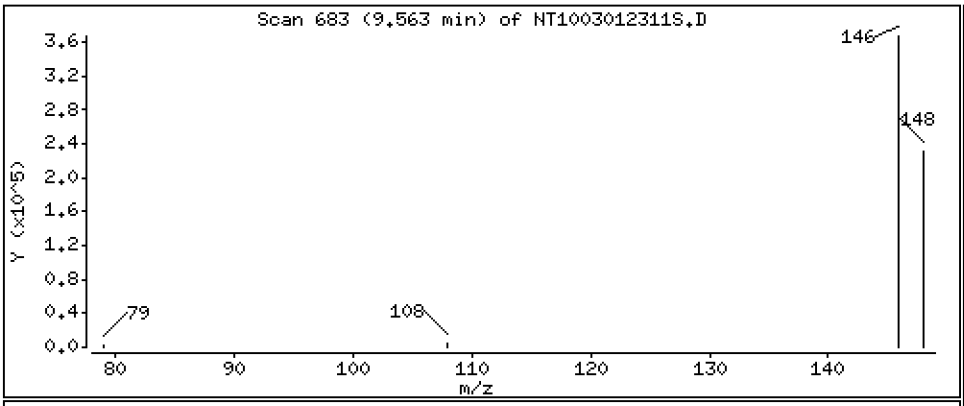
Operator: JGR

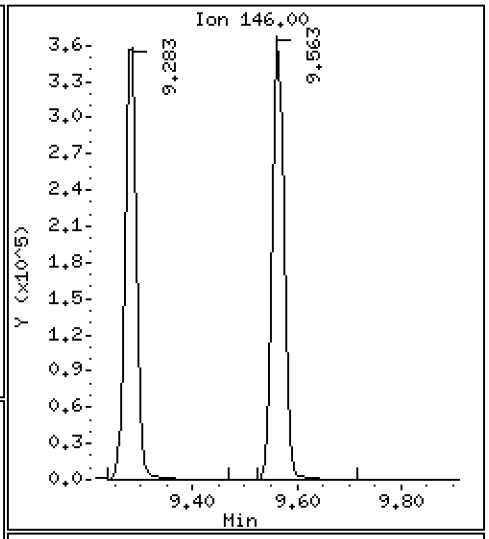
Column phase: ZB-5msi

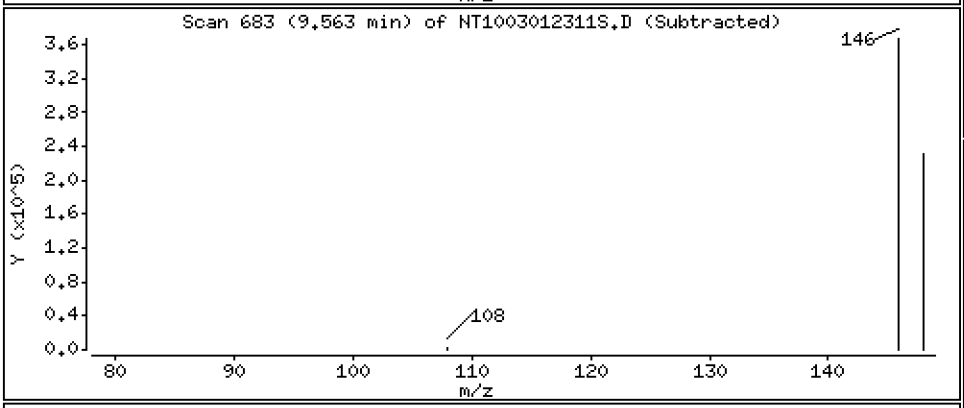
Column diameter: 0.25

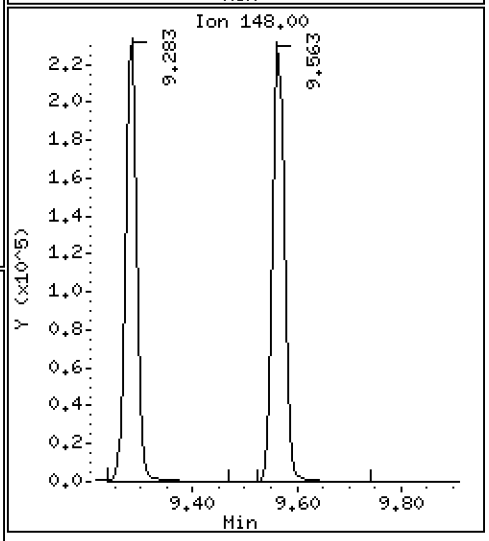
12 1,2-Dichlorobenzene

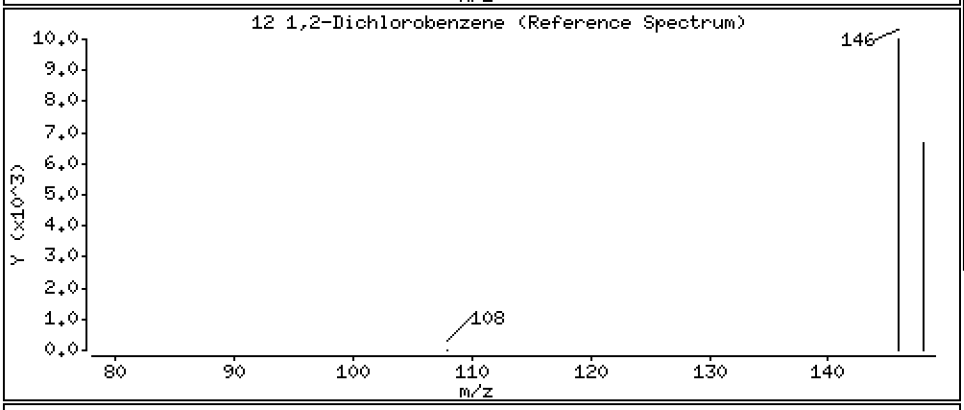
Concentration: 5.142 ug/L

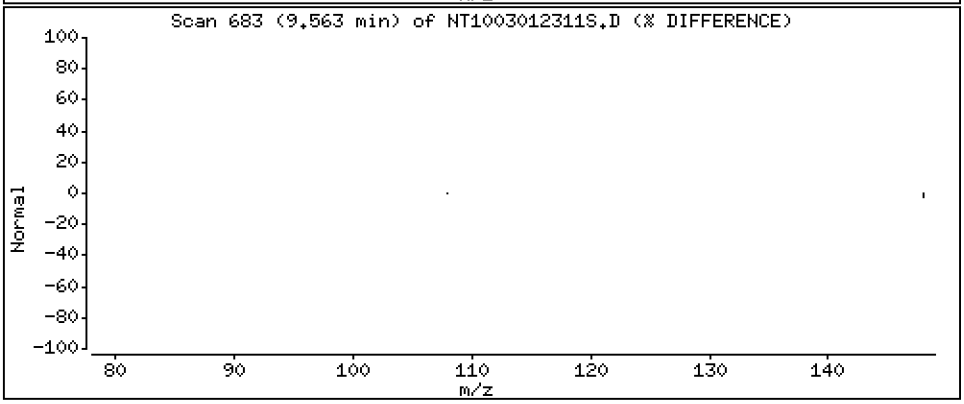












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

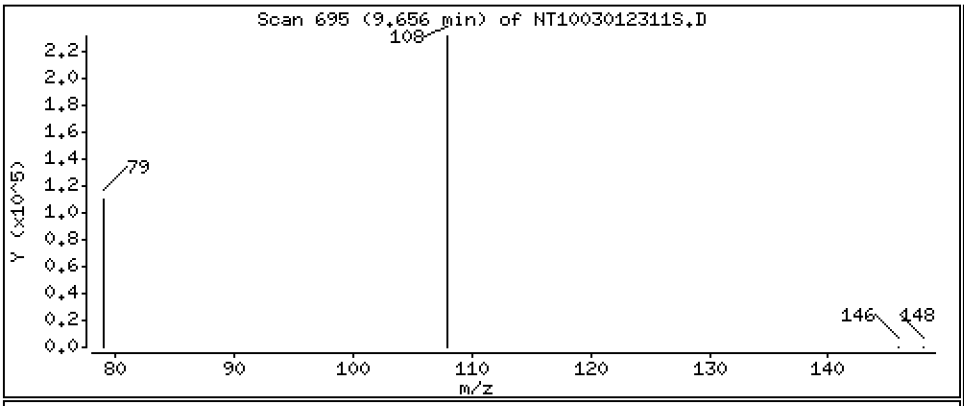
Operator: JGR

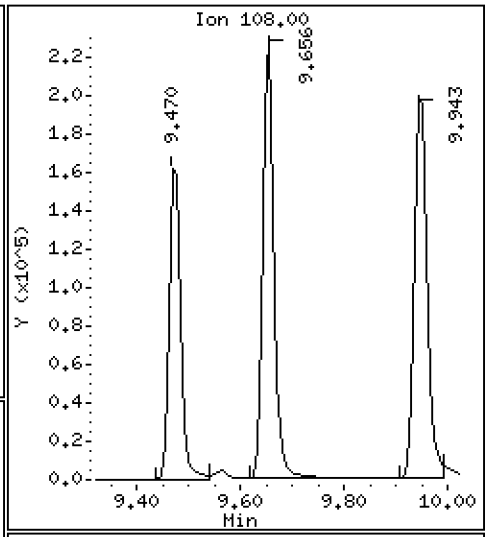
Column phase: ZB-5msi

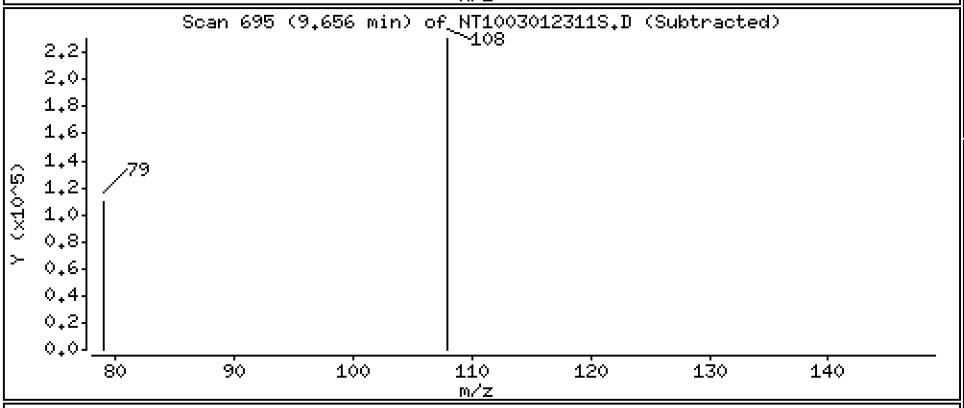
Column diameter: 0.25

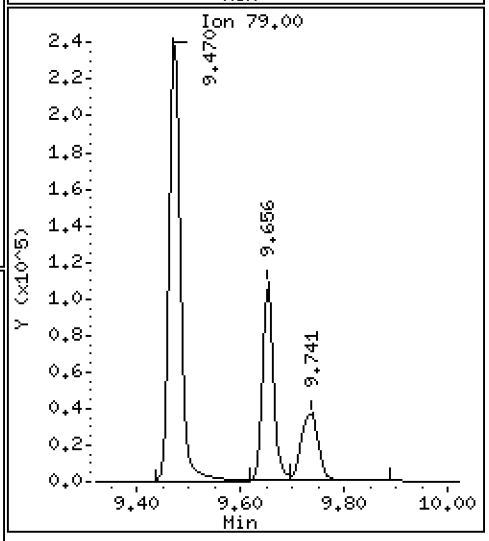
13 2-Methylphenol

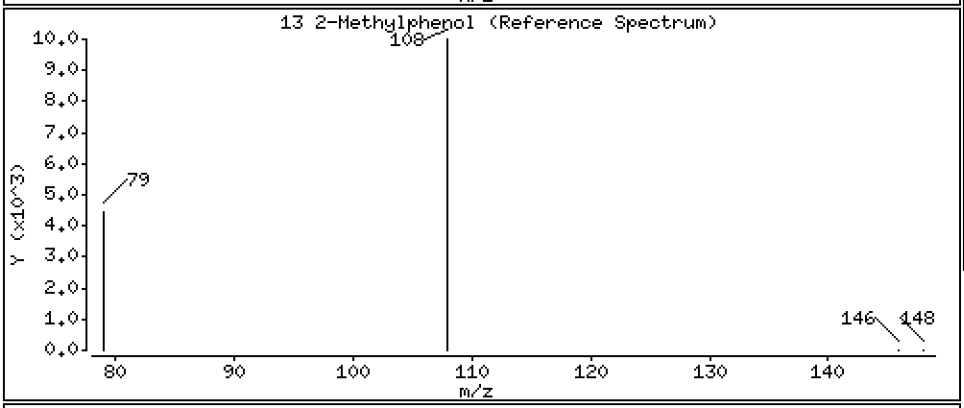
Concentration: 4.365 ug/L

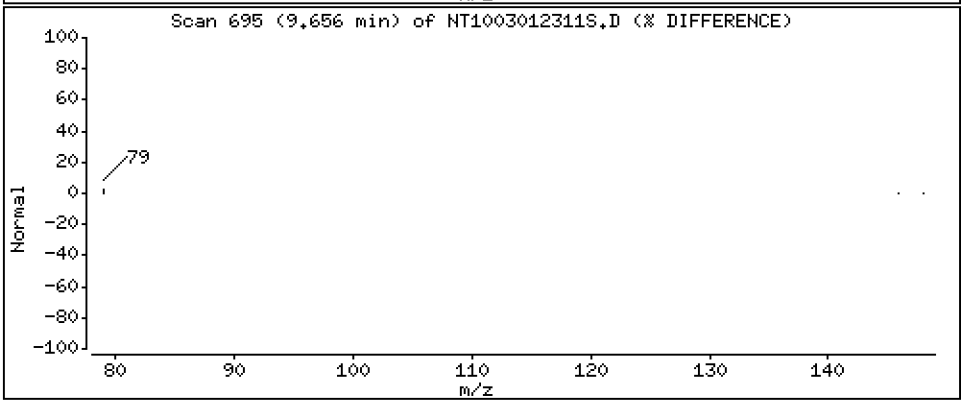












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

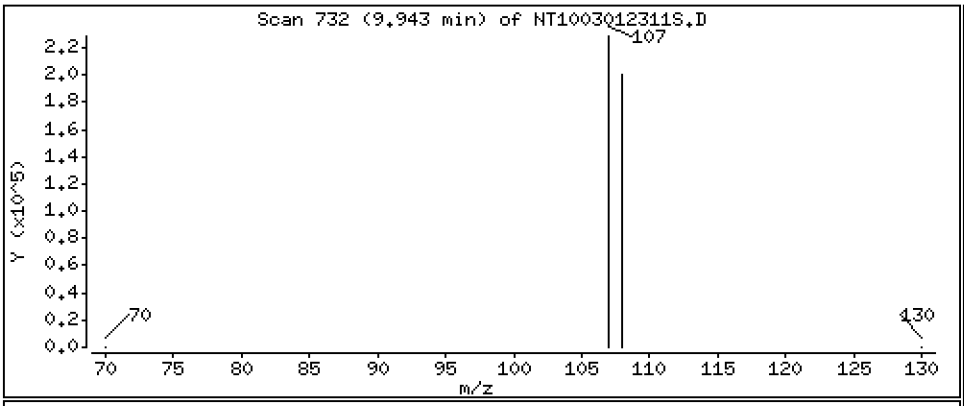
Operator: JGR

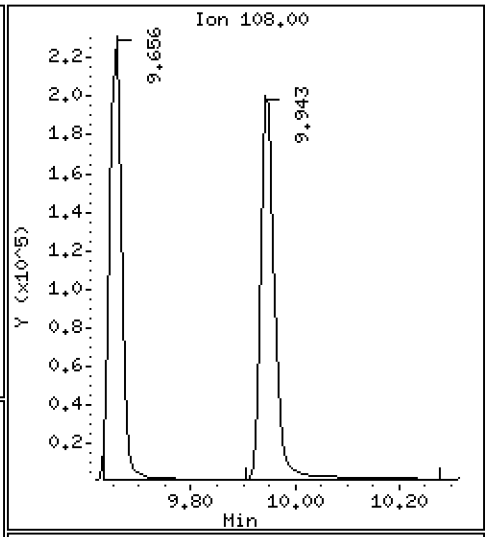
Column phase: ZB-5msi

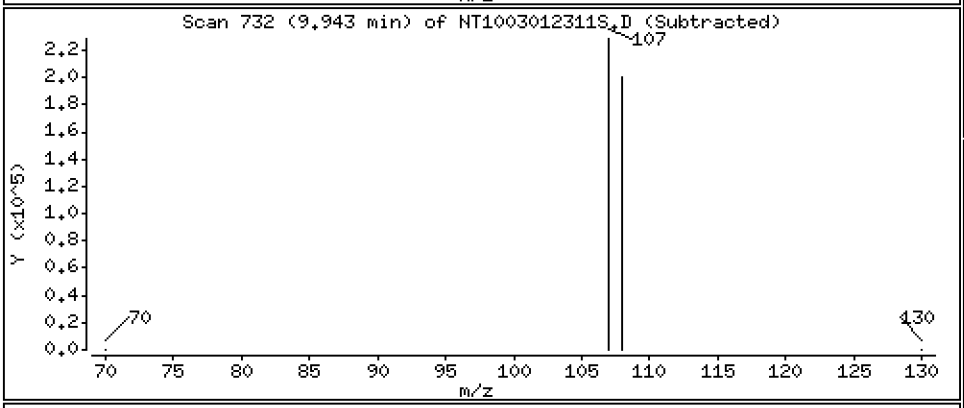
Column diameter: 0.25

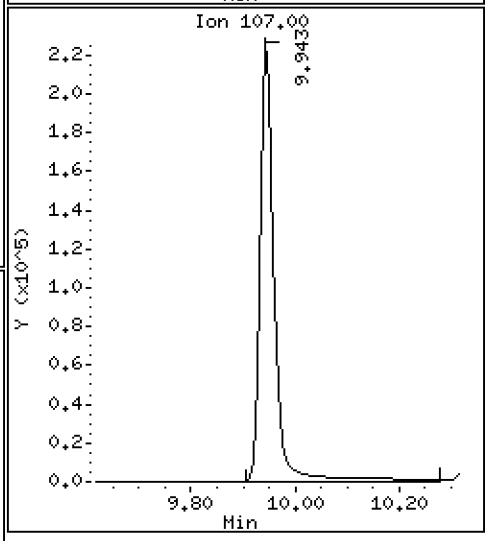
15 4-Methylphenol

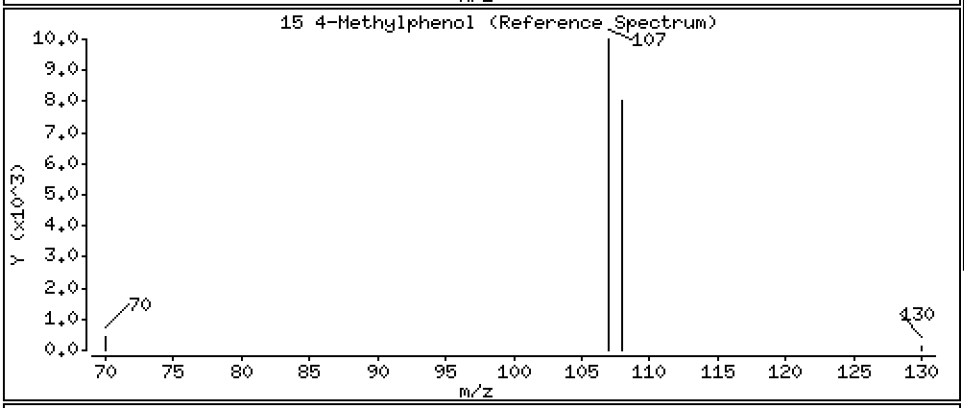
Concentration: 4.505 ug/L

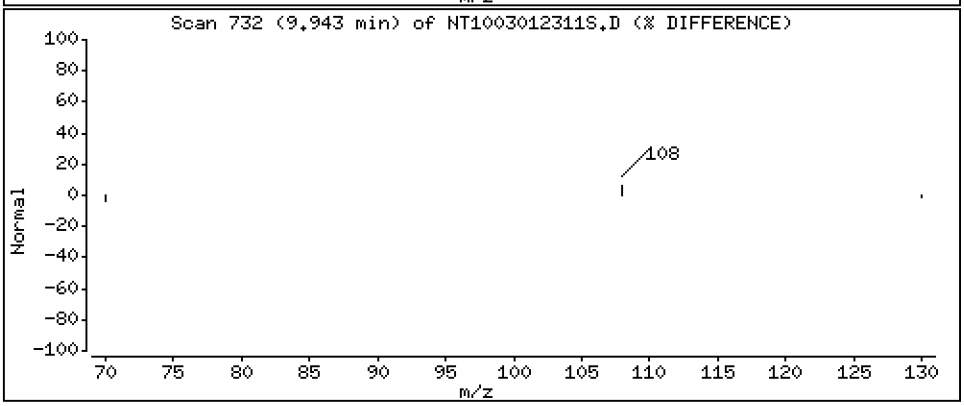












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

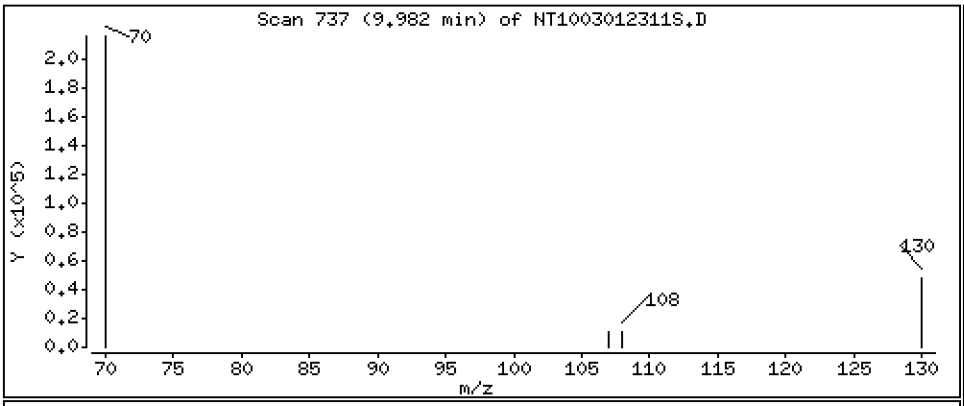
Operator: JGR

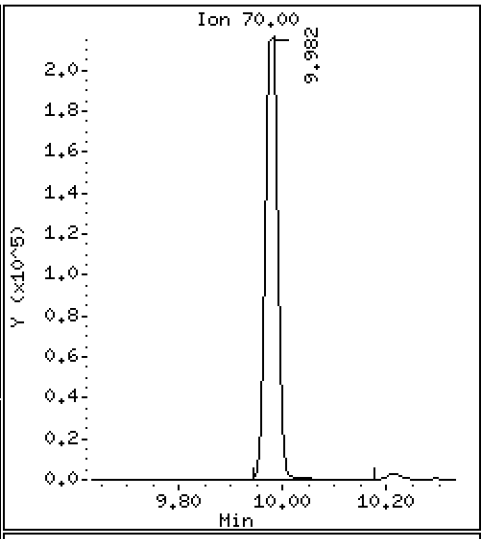
Column phase: ZB-5msi

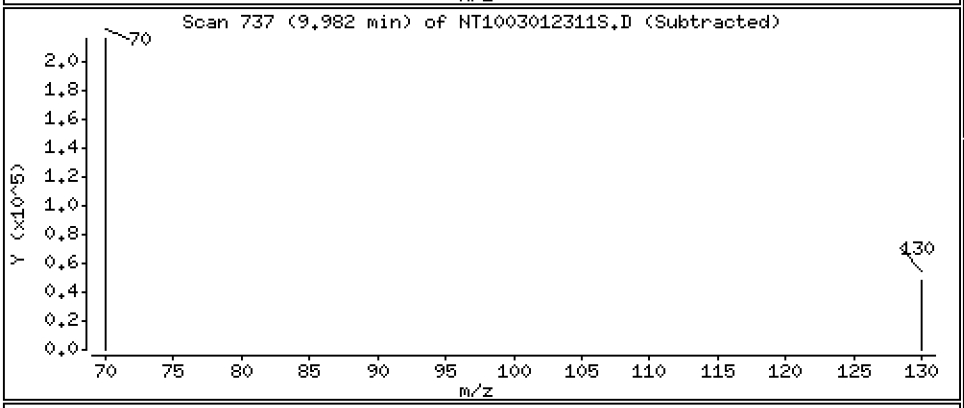
Column diameter: 0.25

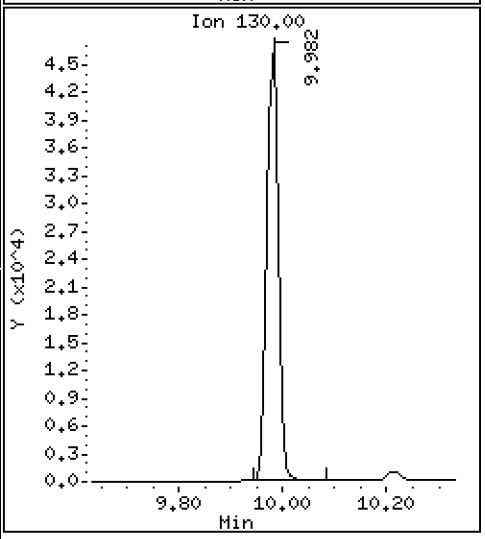
16 N-Nitroso-di-n-propylamine

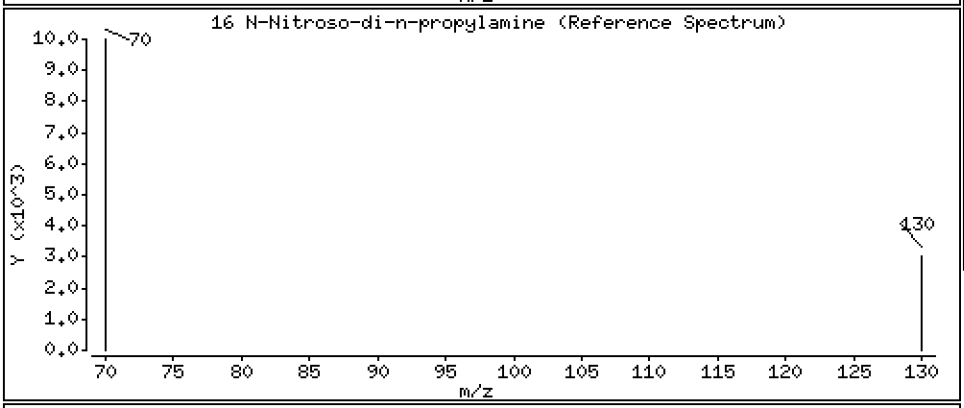
Concentration: 5.685 ug/L

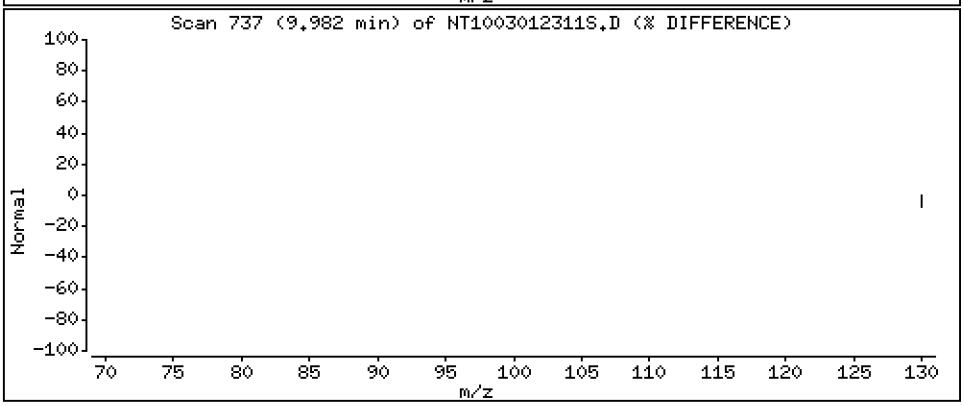












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

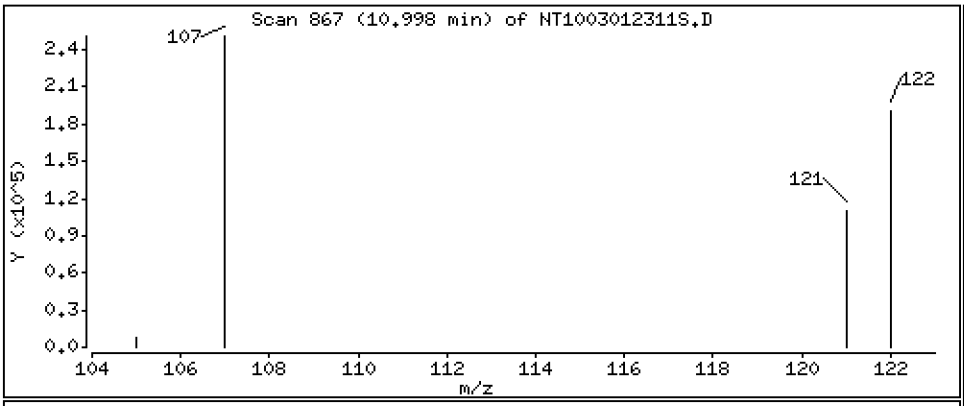
Operator: JGR

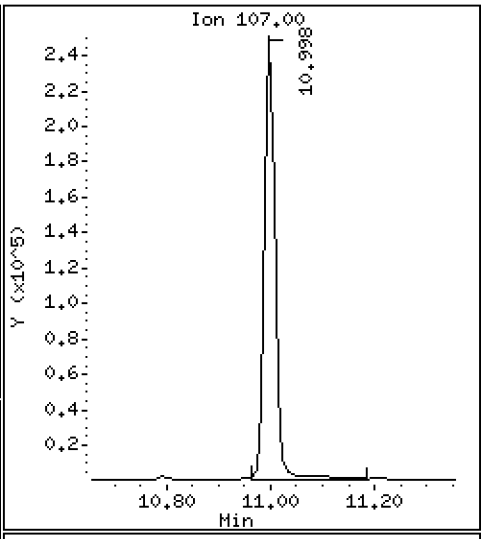
Column phase: ZB-5msi

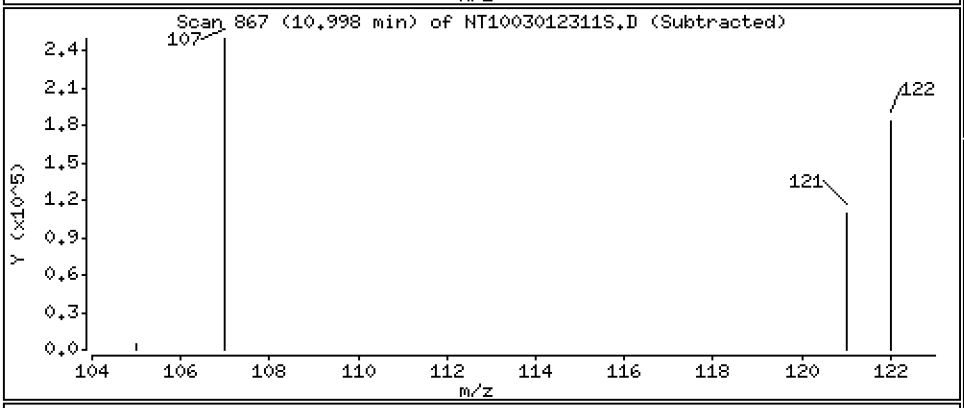
Column diameter: 0.25

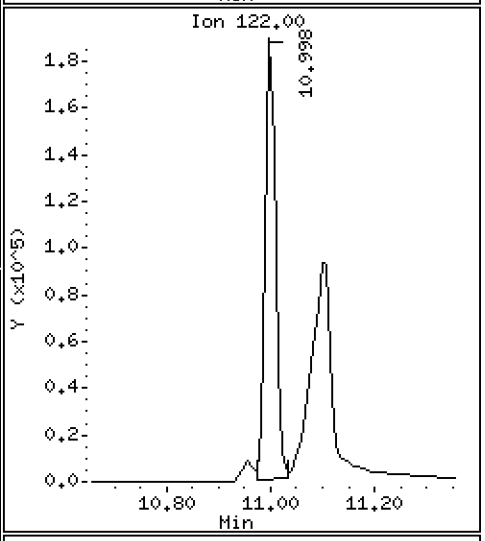
22 2,4-Dimethylphenol

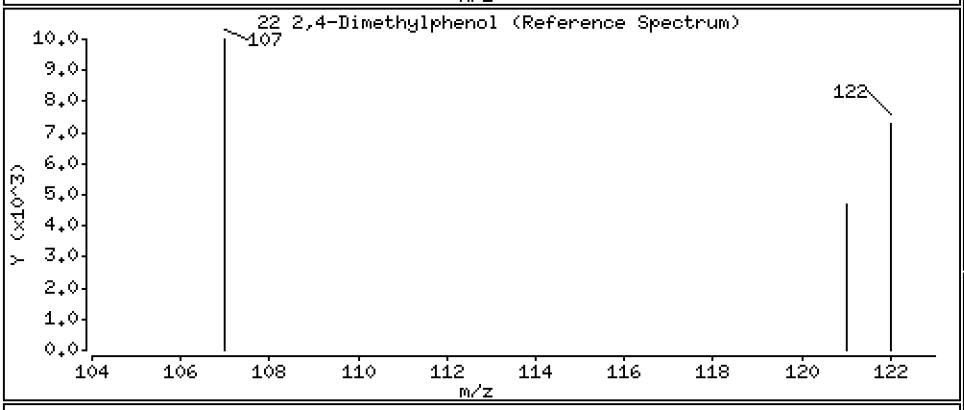
Concentration: 3.637 ug/L

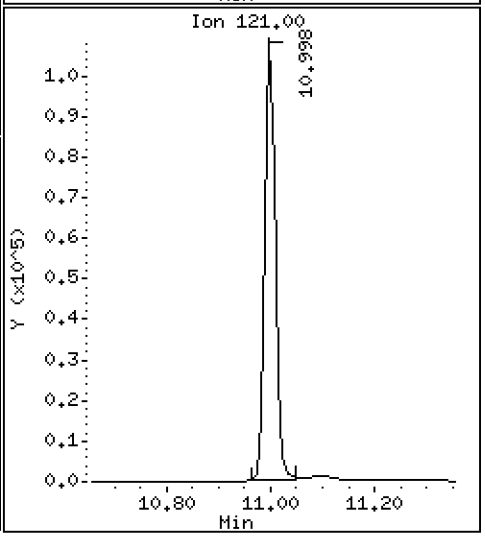


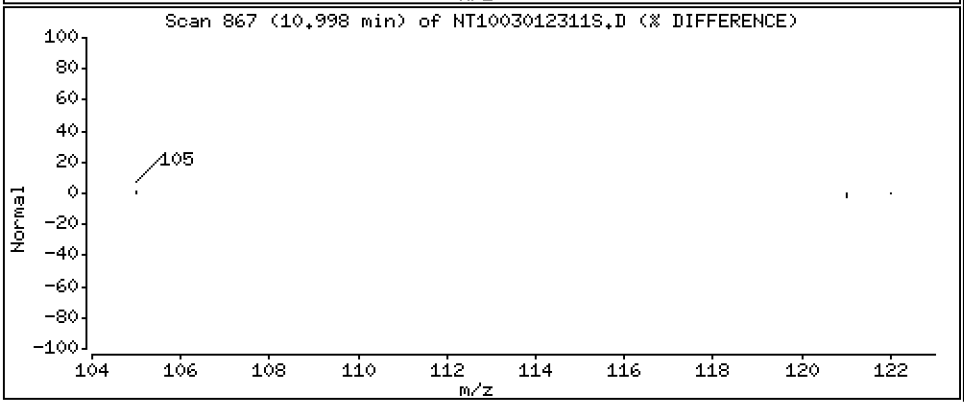












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

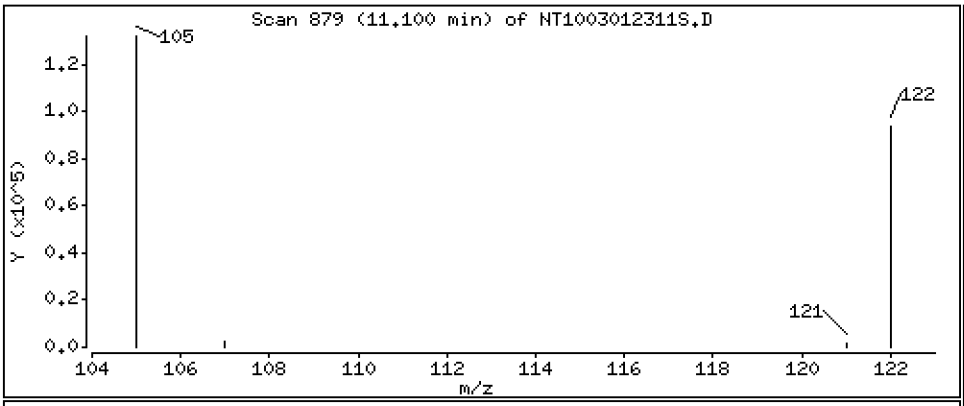
Operator: JGR

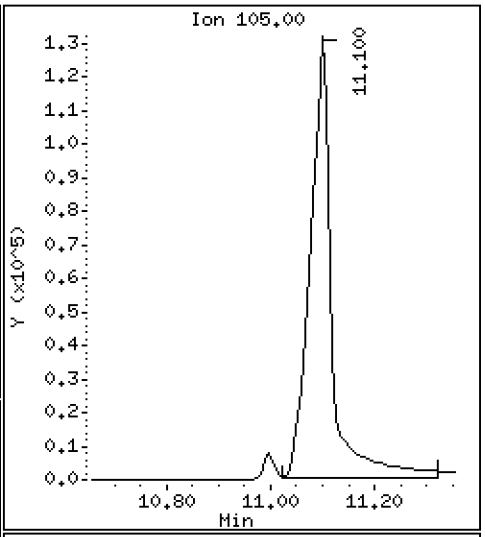
Column phase: ZB-5msi

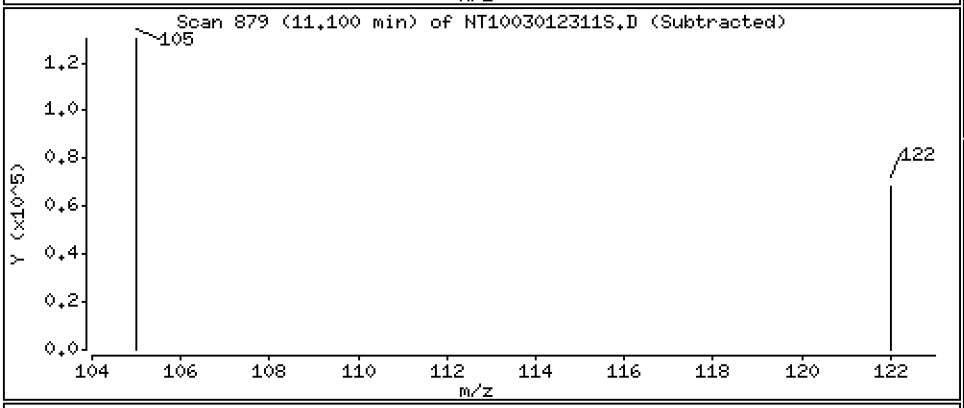
Column diameter: 0.25

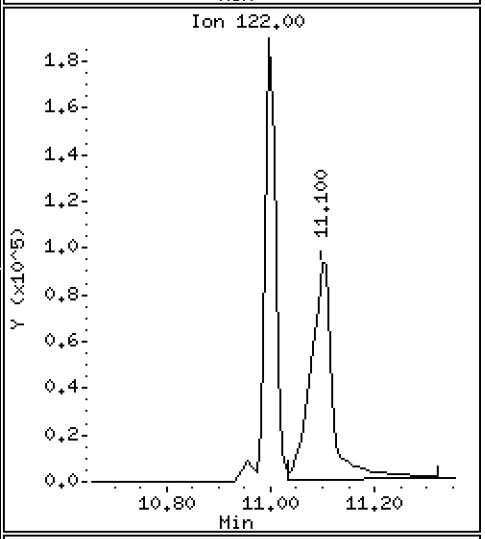
24 Benzoic acid

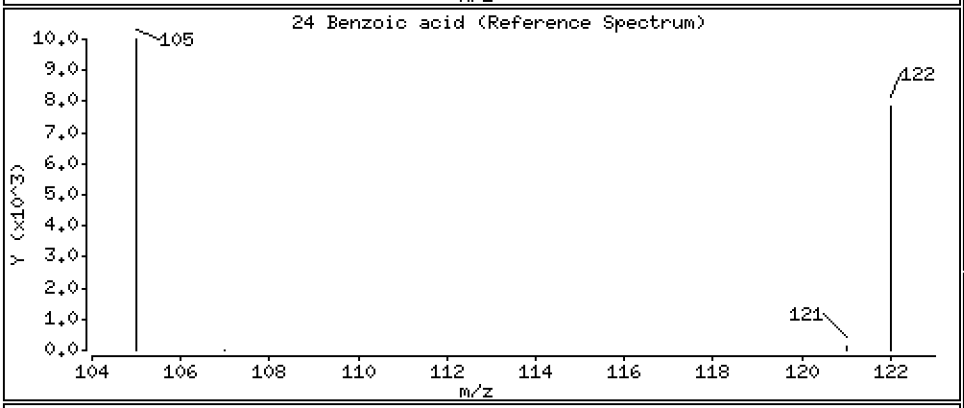
Concentration: 6.870 ug/L

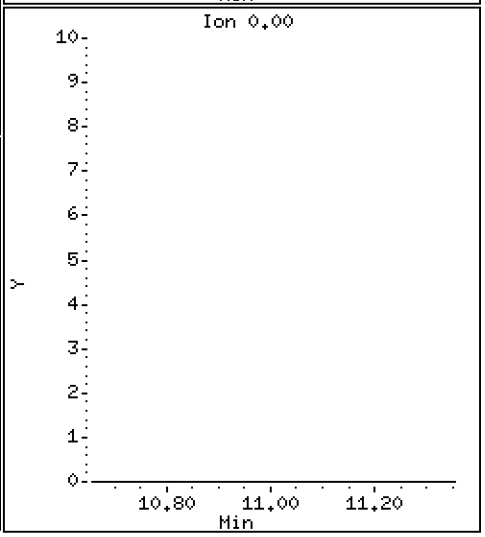


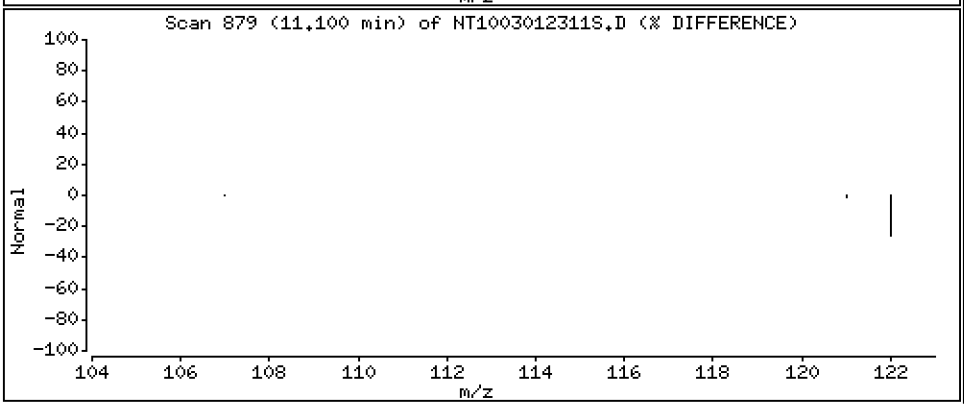












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

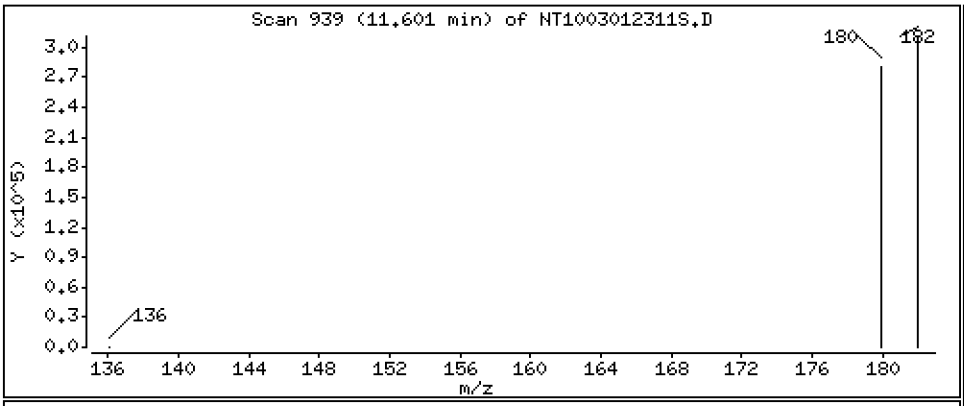
Operator: JGR

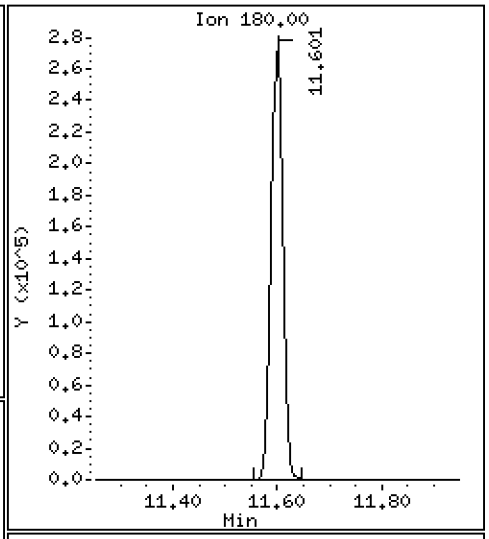
Column phase: ZB-5msi

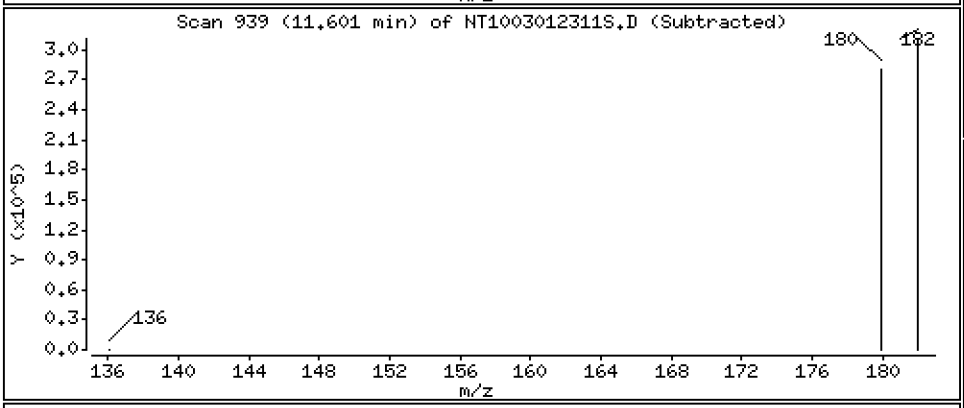
Column diameter: 0.25

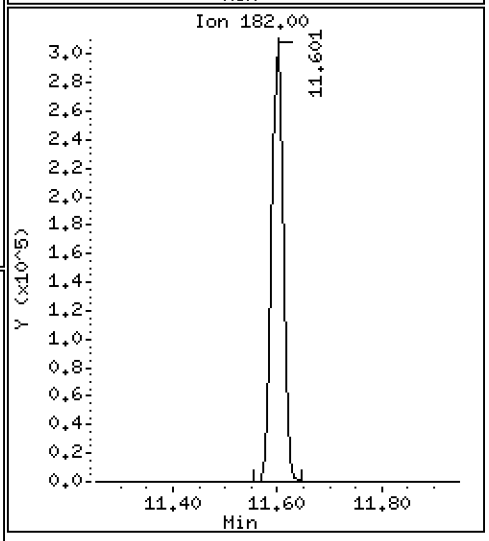
26 1,2,4-Trichlorobenzene

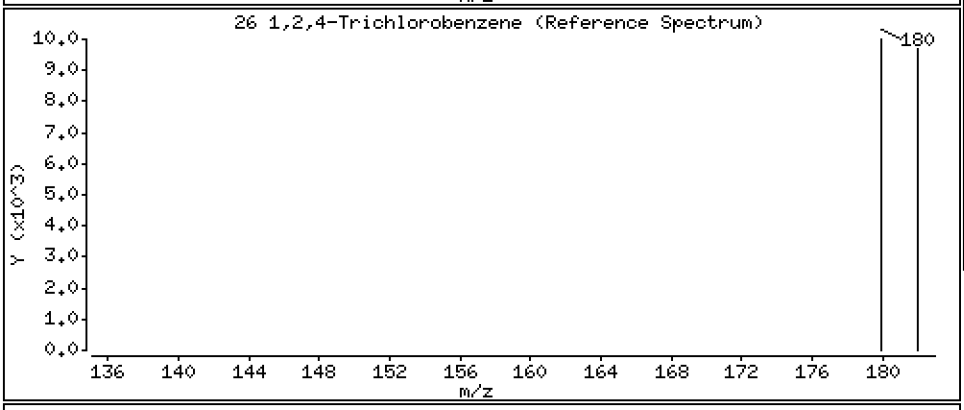
Concentration: 4.870 ug/L

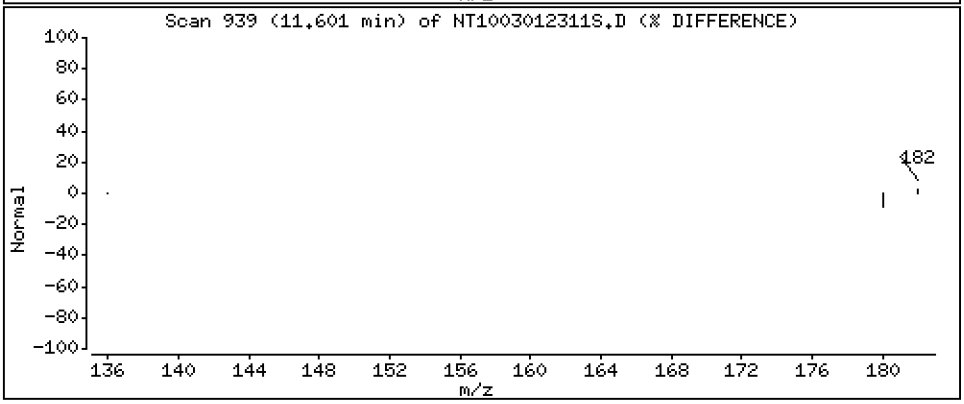












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

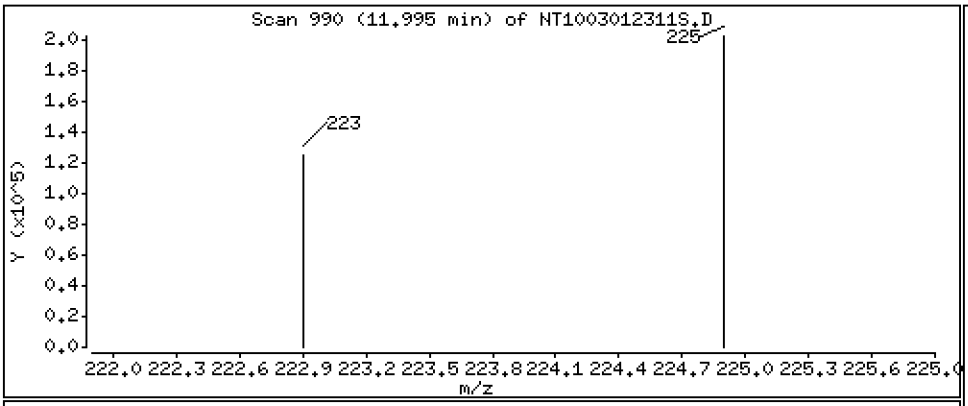
Operator: JGR

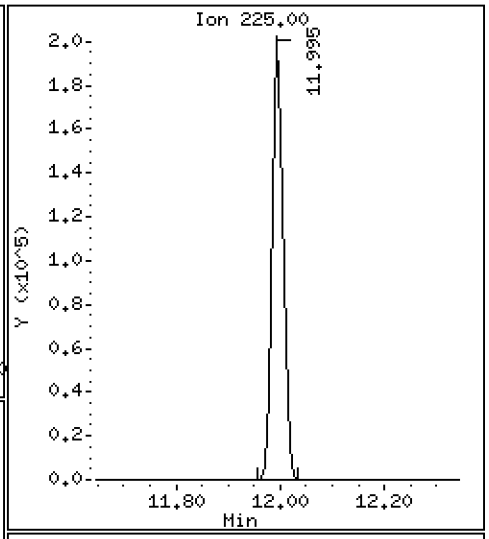
Column phase: ZB-5msi

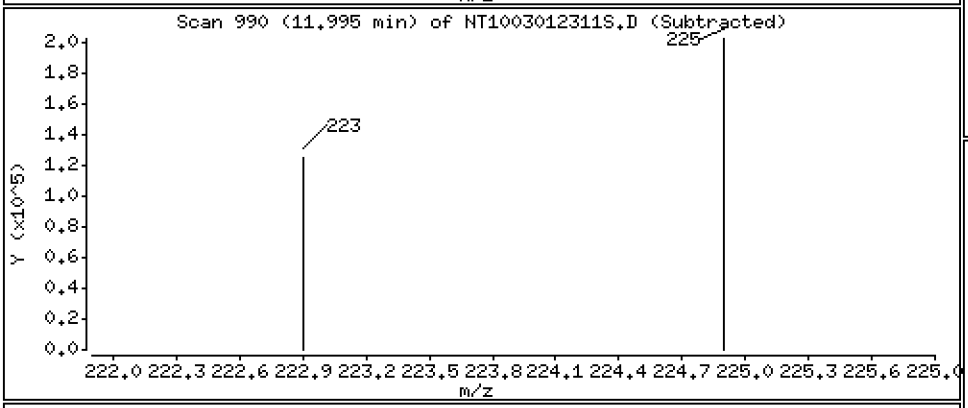
Column diameter: 0.25

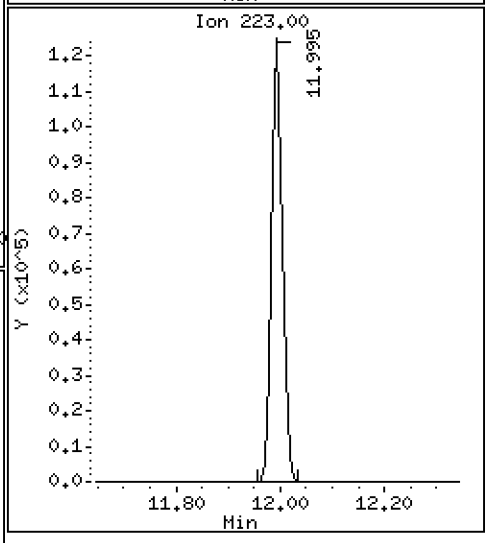
30 Hexachlorobutadiene

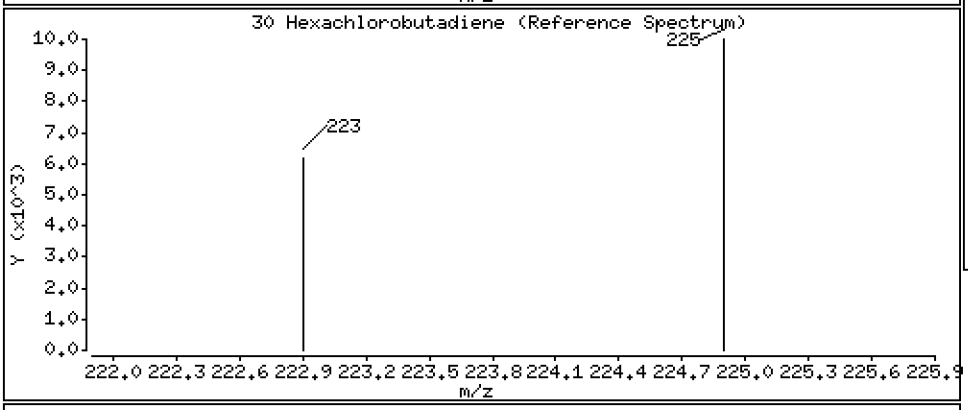
Concentration: 4.862 ug/L

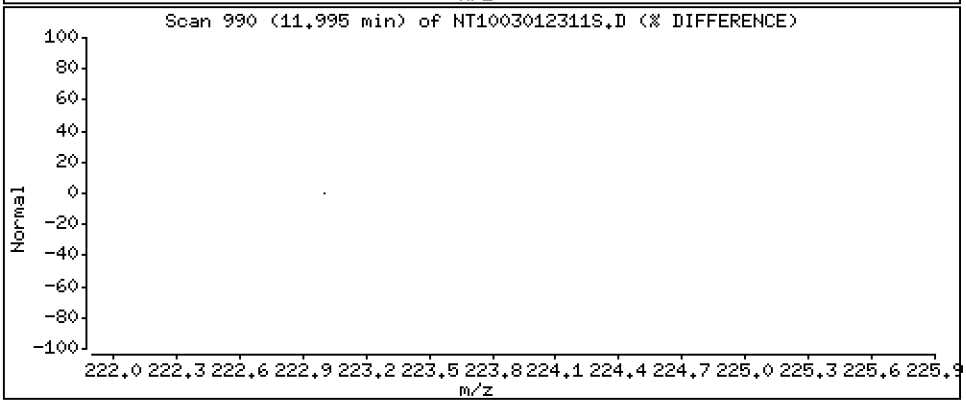












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

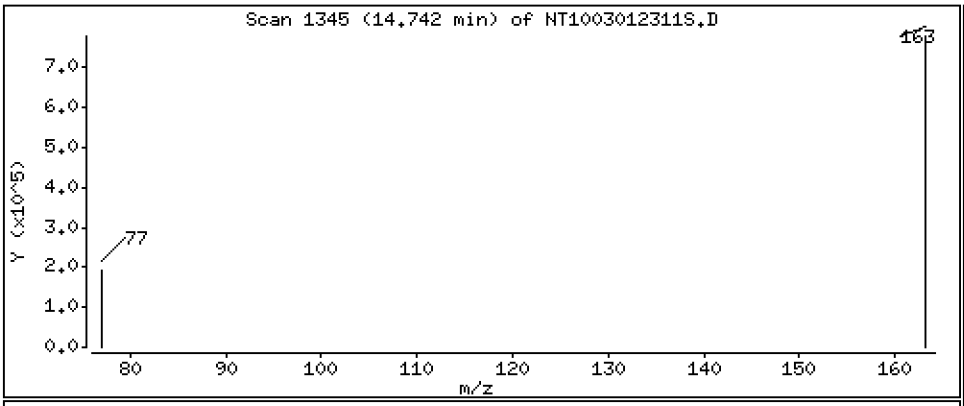
Operator: JGR

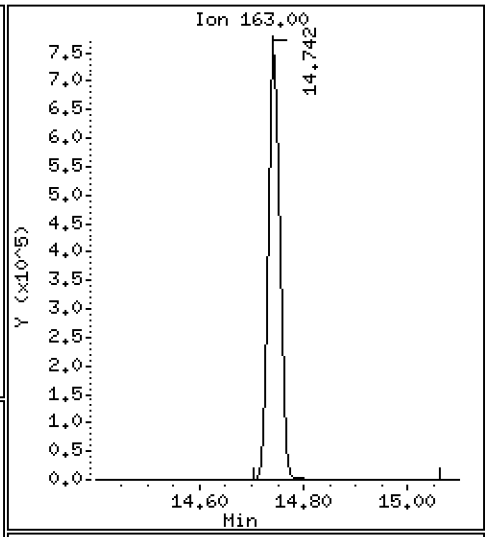
Column phase: ZB-5msi

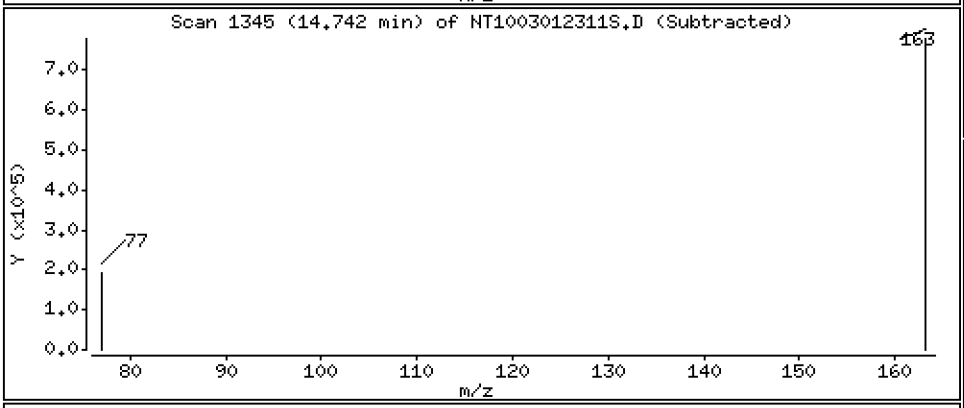
Column diameter: 0.25

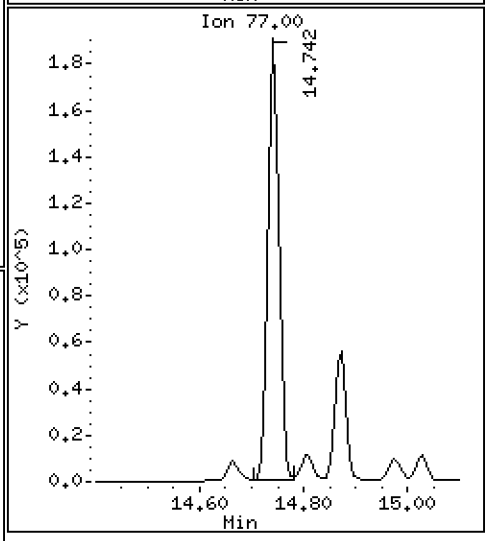
39 Dimethylphthalate

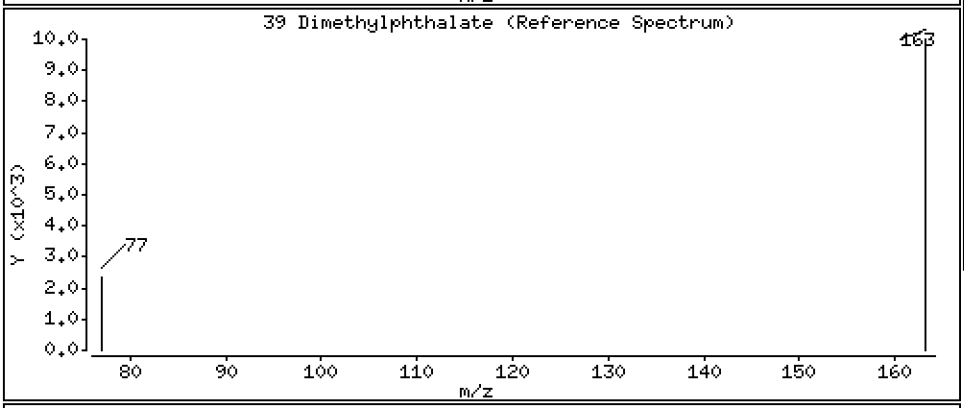
Concentration: 5.571 ug/L

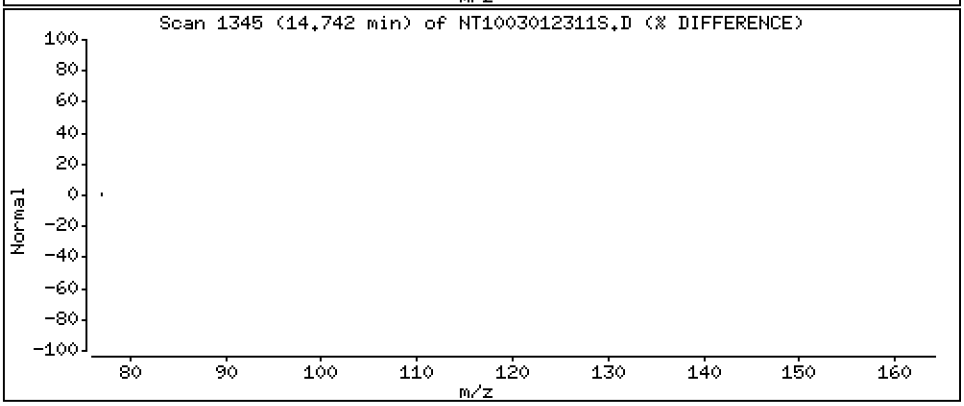












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

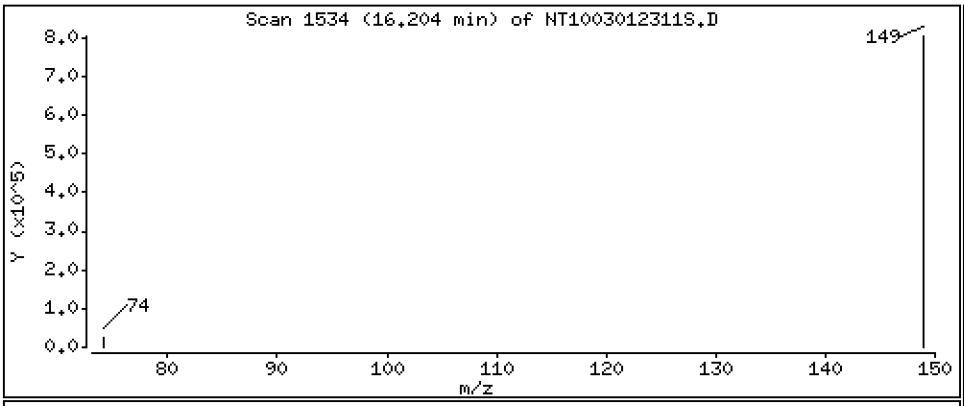
Operator: JGR

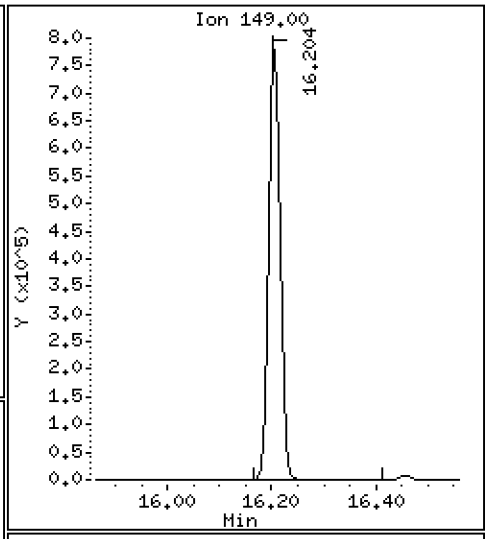
Column phase: ZB-5msi

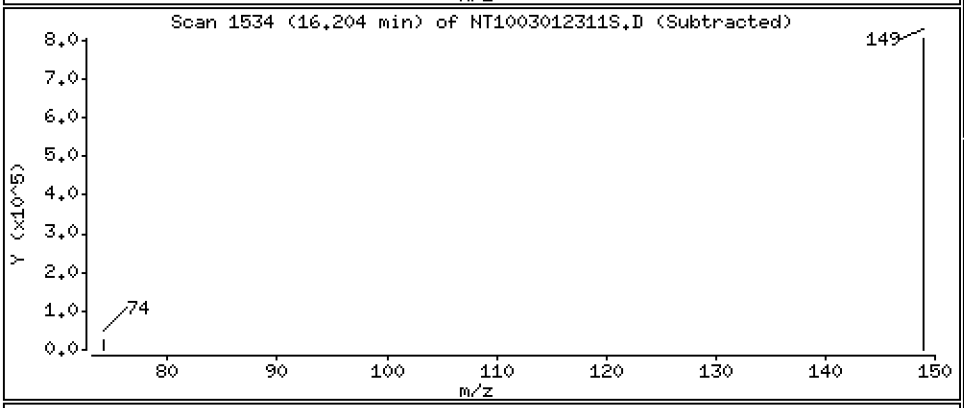
Column diameter: 0.25

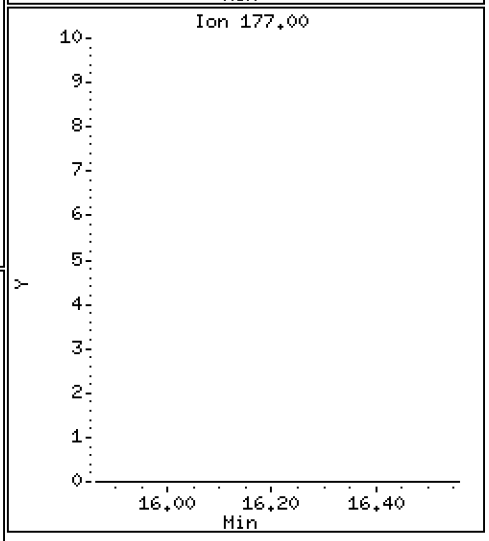
50 Diethylphthalate

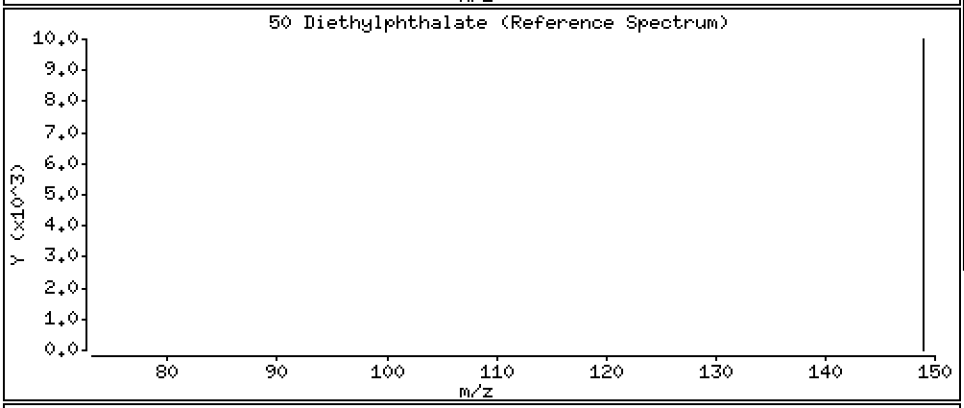
Concentration: 5.979 ug/L

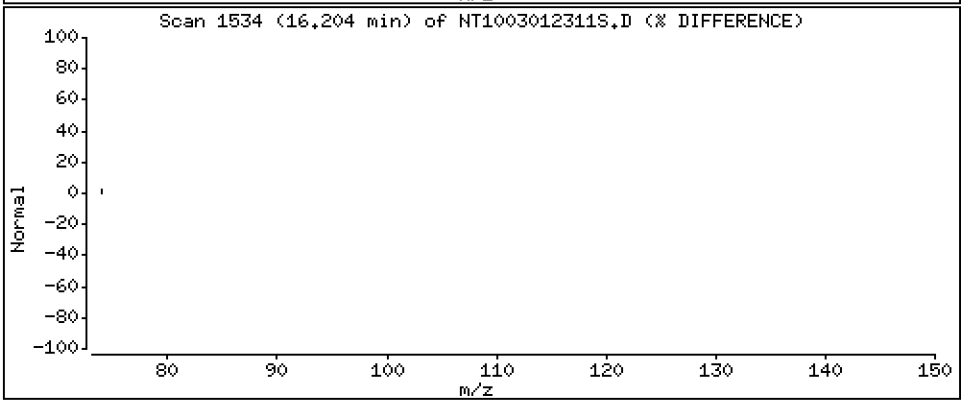












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

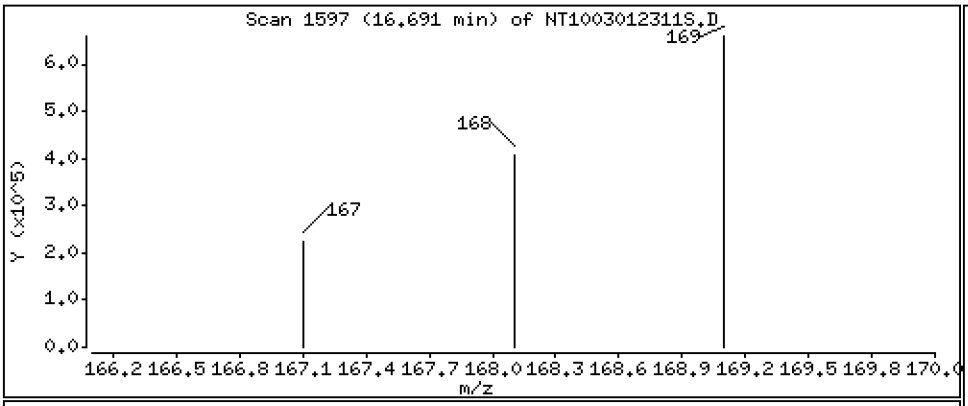
Operator: JGR

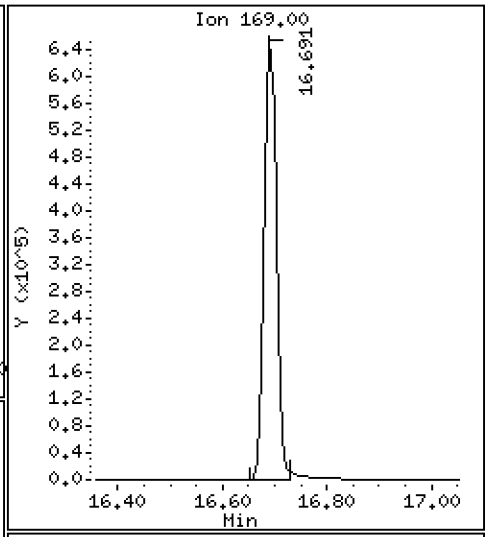
Column phase: ZB-5msi

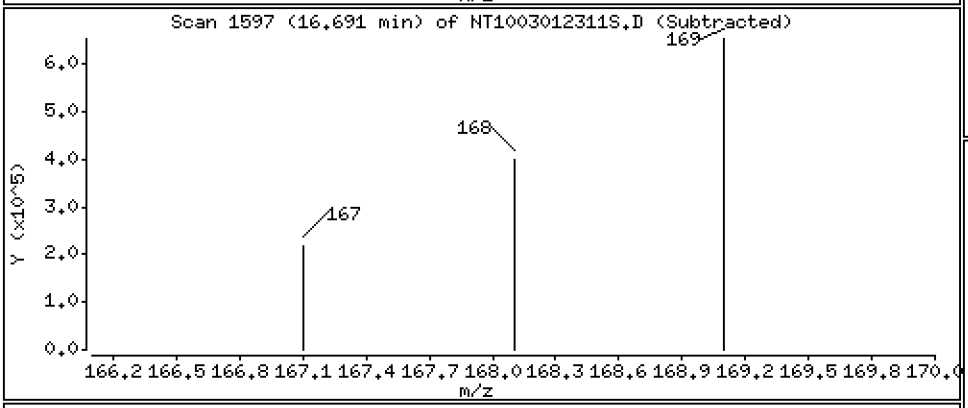
Column diameter: 0.25

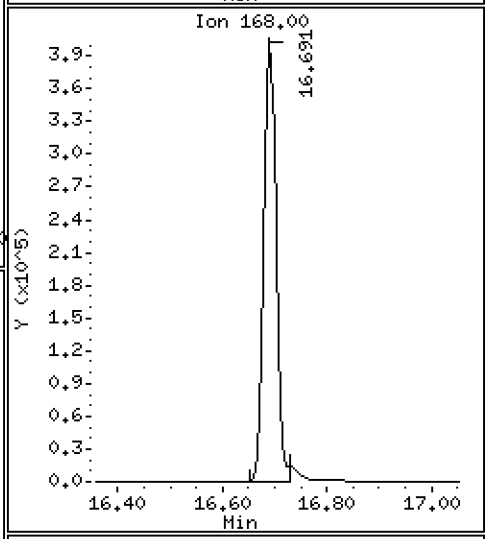
54 N-Nitrosodiphenylamine

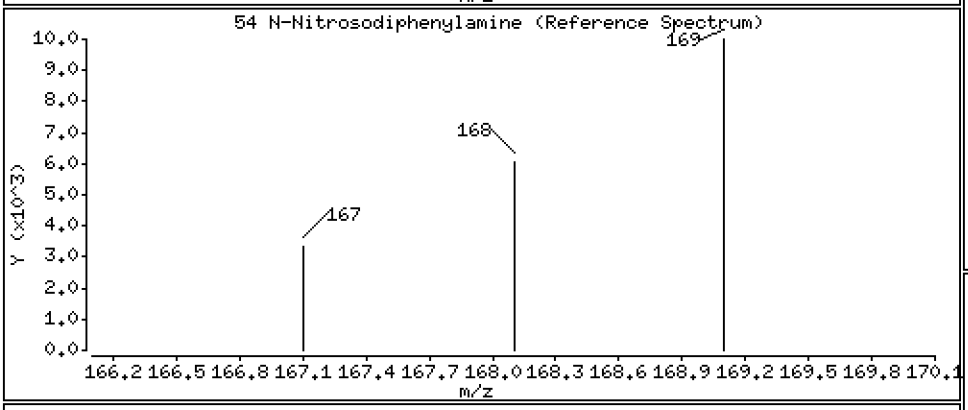
Concentration: 5.359 ug/L

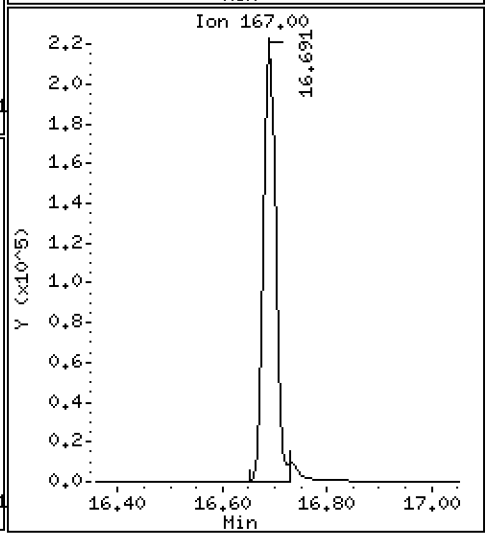


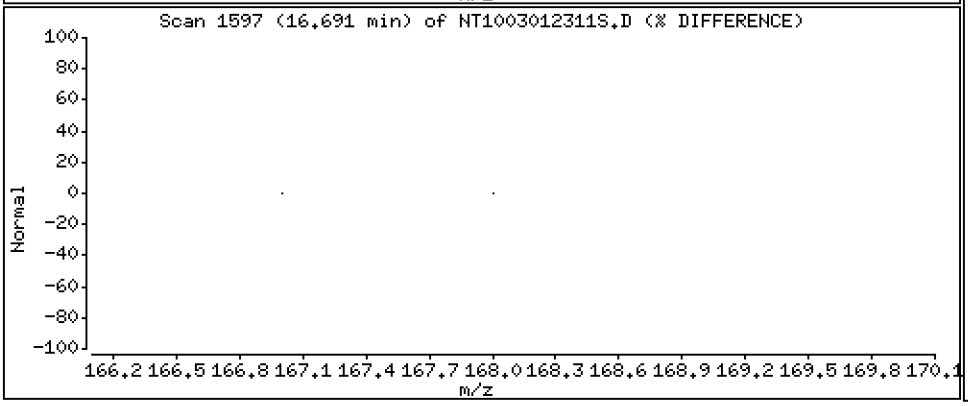












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Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

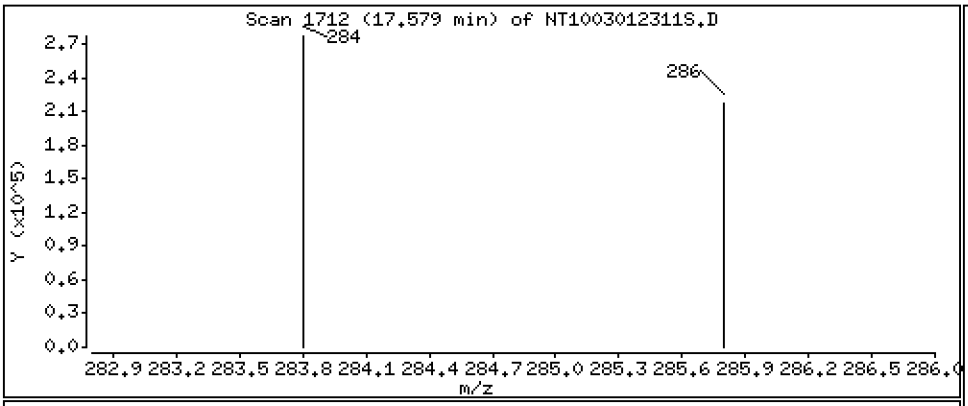
Operator: JGR

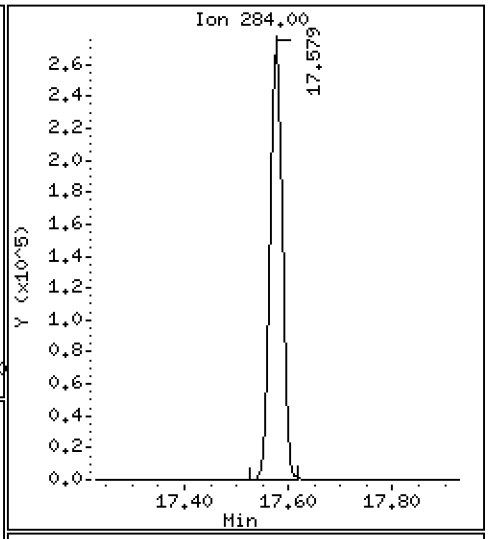
Column phase: ZB-5msi

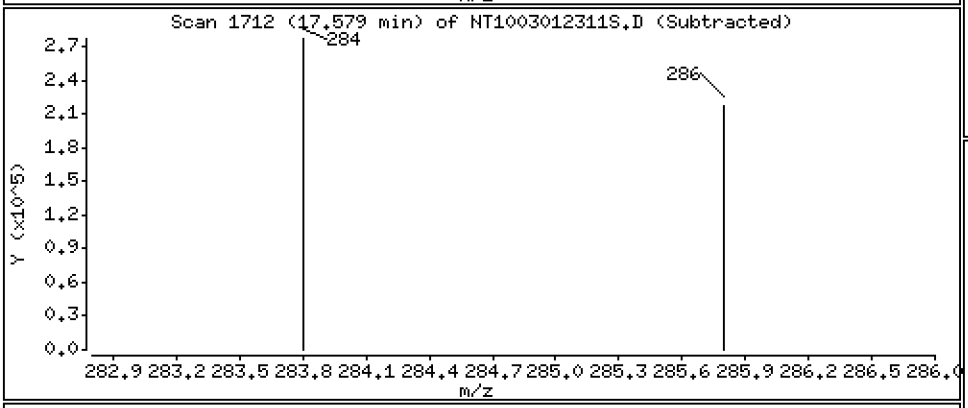
Column diameter: 0.25

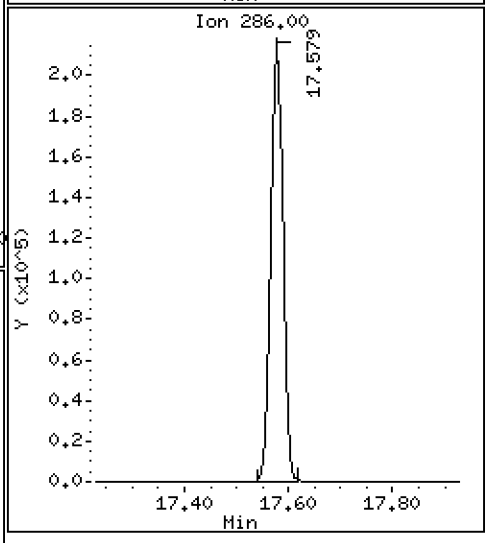
57 Hexachlorobenzene

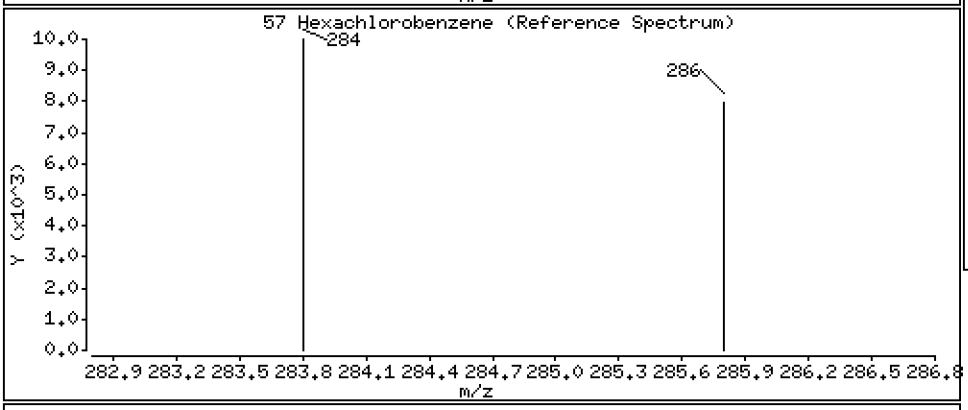
Concentration: 4.866 ug/L

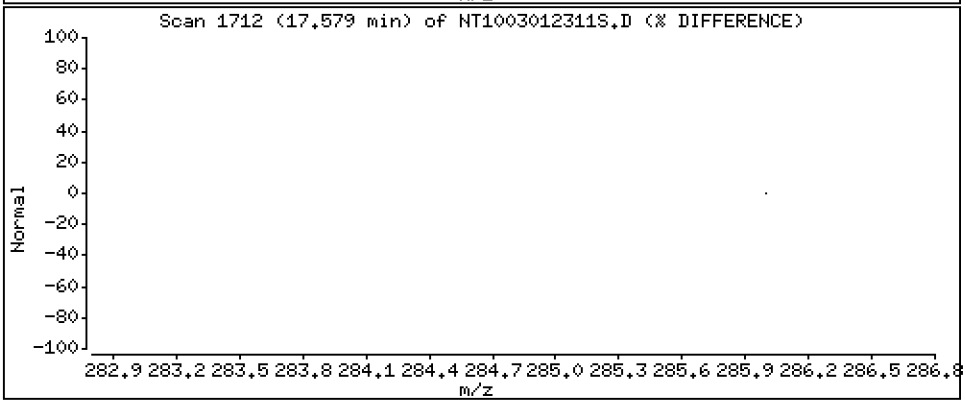












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

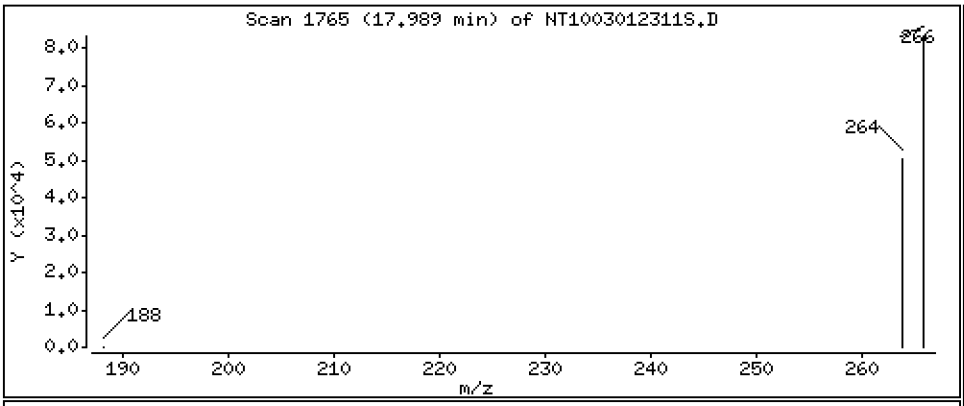
Operator: JGR

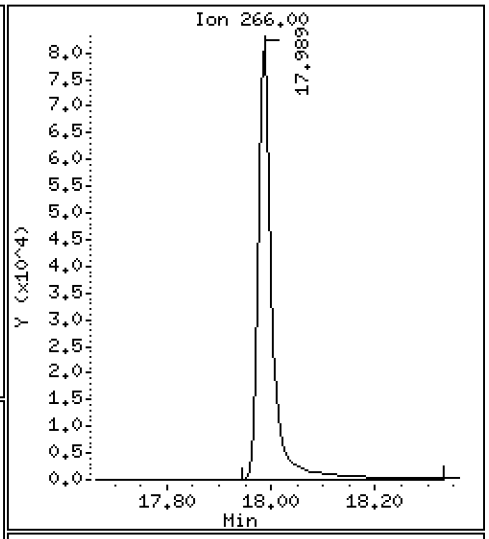
Column phase: ZB-5msi

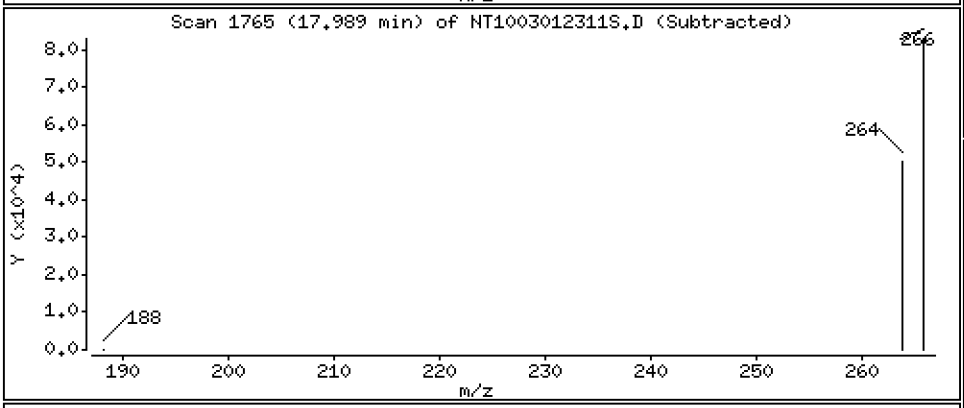
Column diameter: 0.25

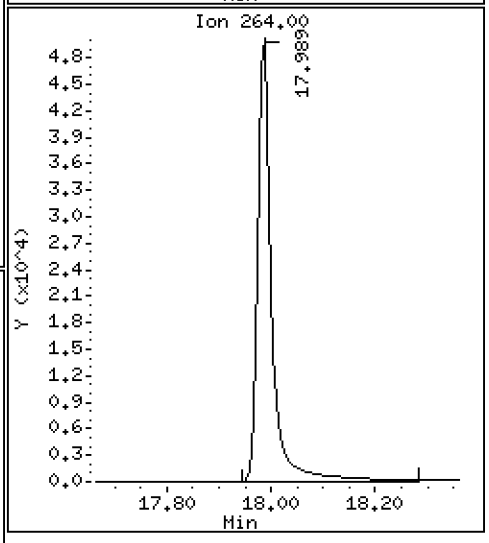
58 Pentachlorophenol

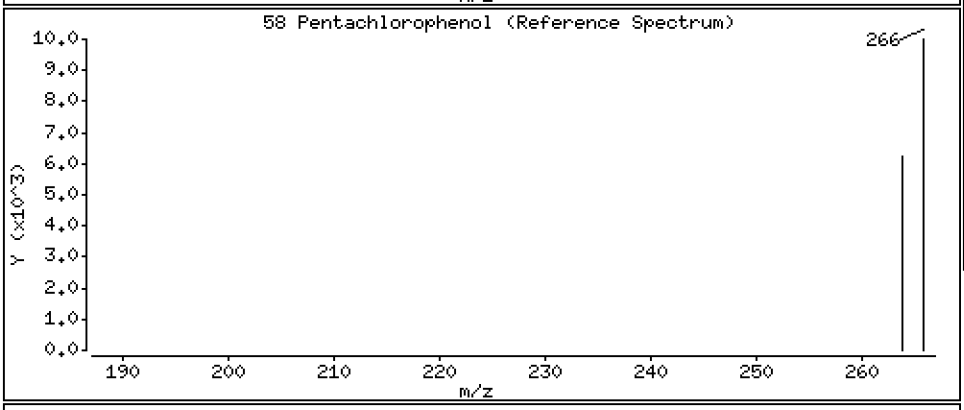
Concentration: 3.912 ug/L

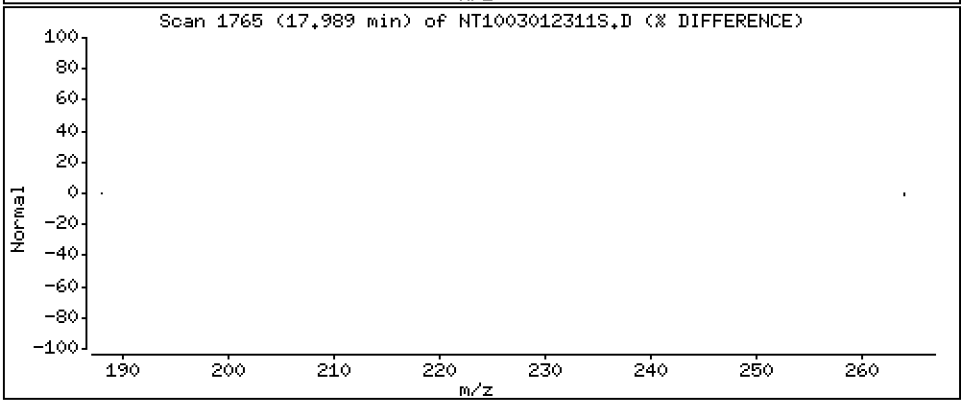












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

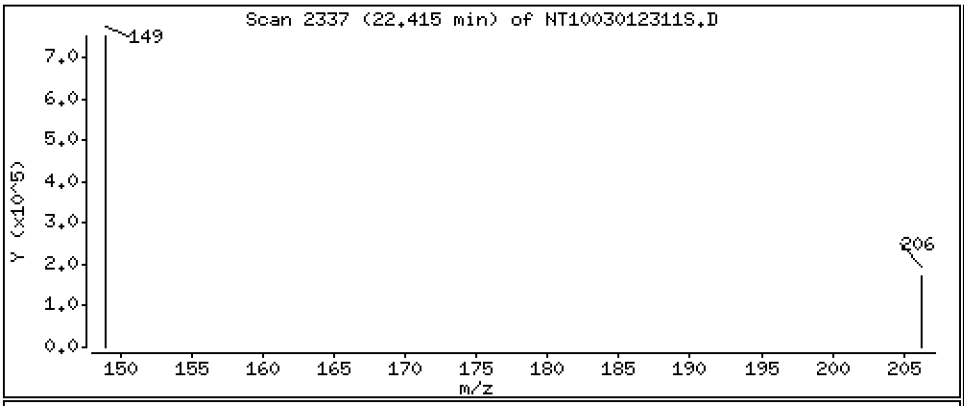
Operator: JGR

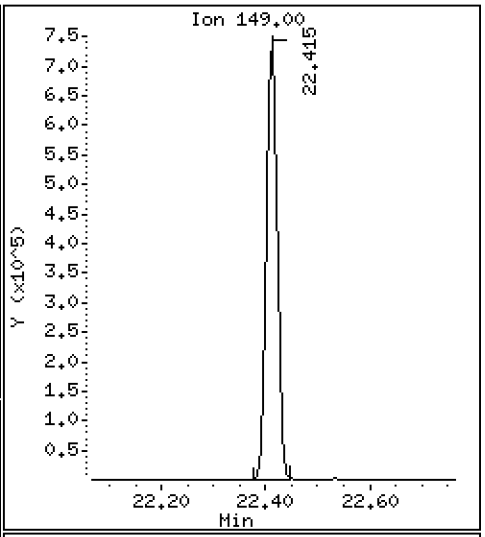
Column phase: ZB-5msi

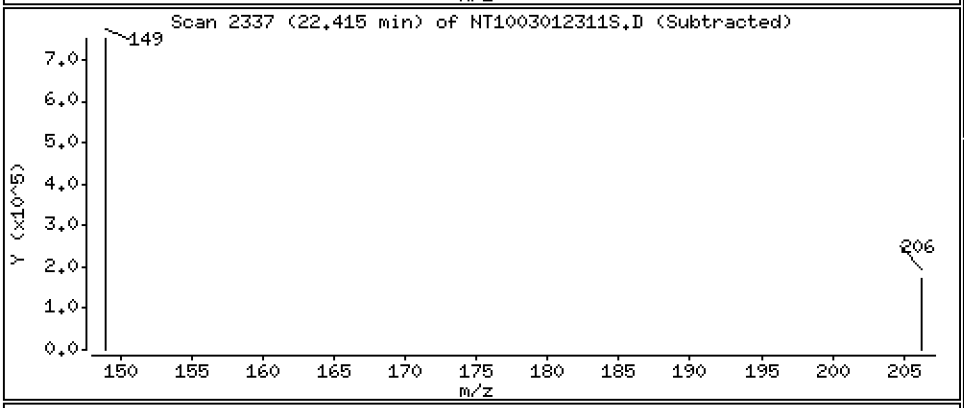
Column diameter: 0.25

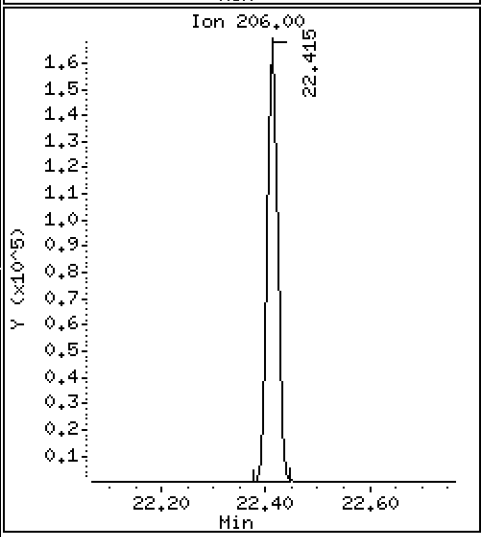
67 Butylbenzylphthalate

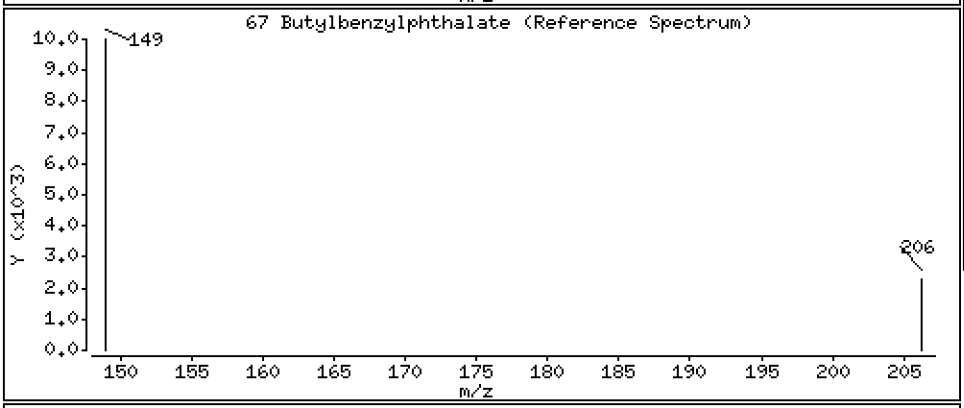
Concentration: 4.689 ug/L

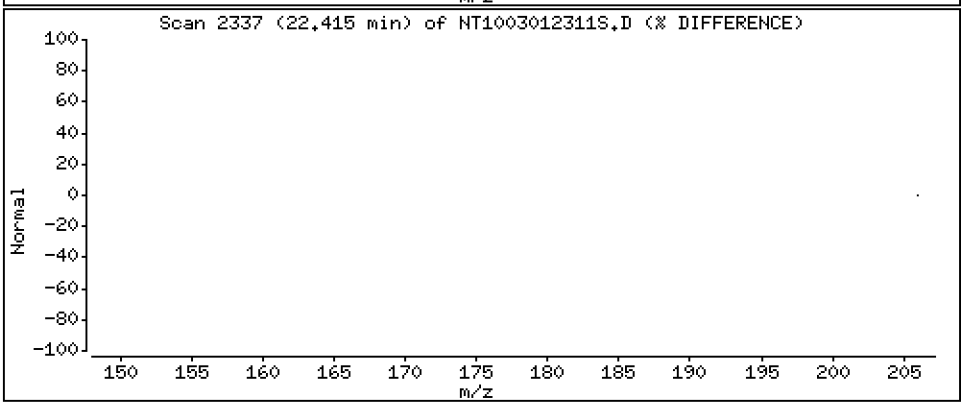












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

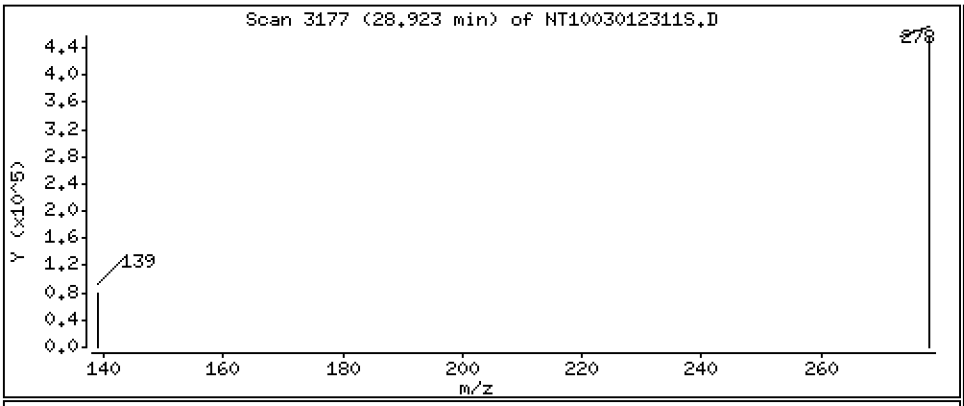
Operator: JGR

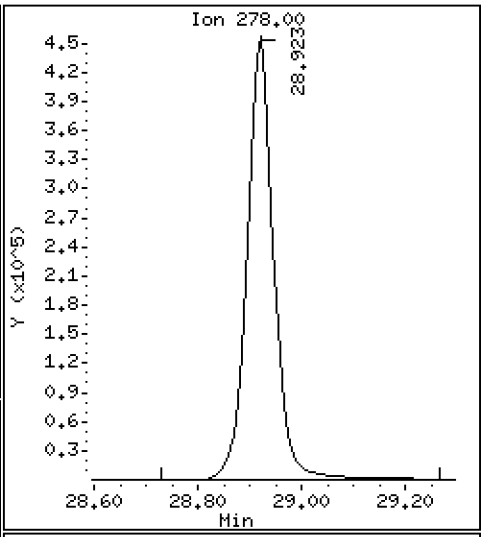
Column phase: ZB-5msi

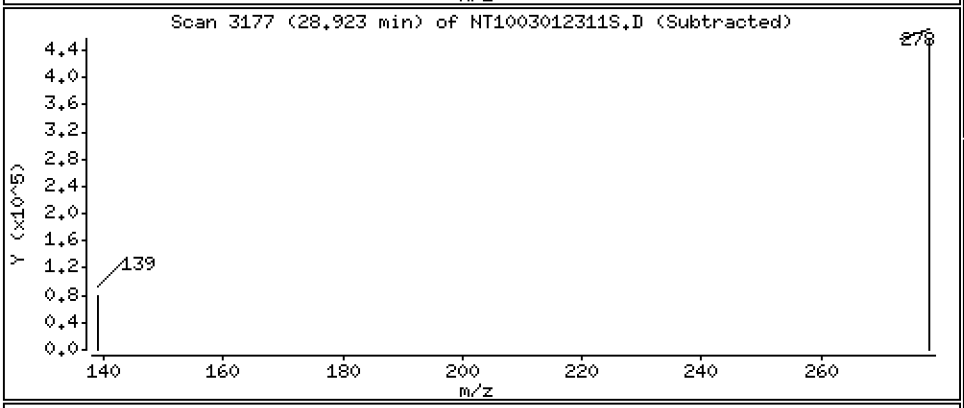
Column diameter: 0.25

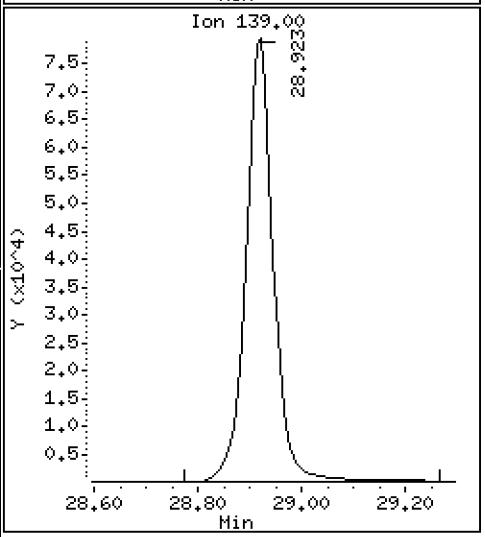
79 Dibenzo(a,h)anthracene

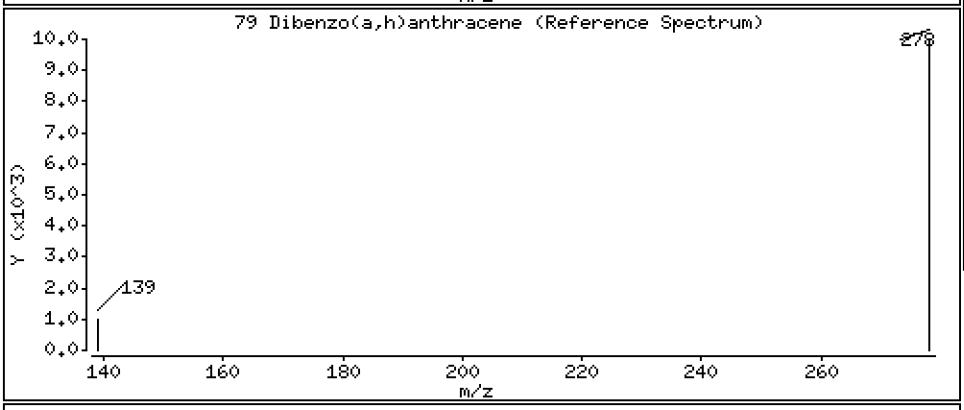
Concentration: 4.760 ug/L

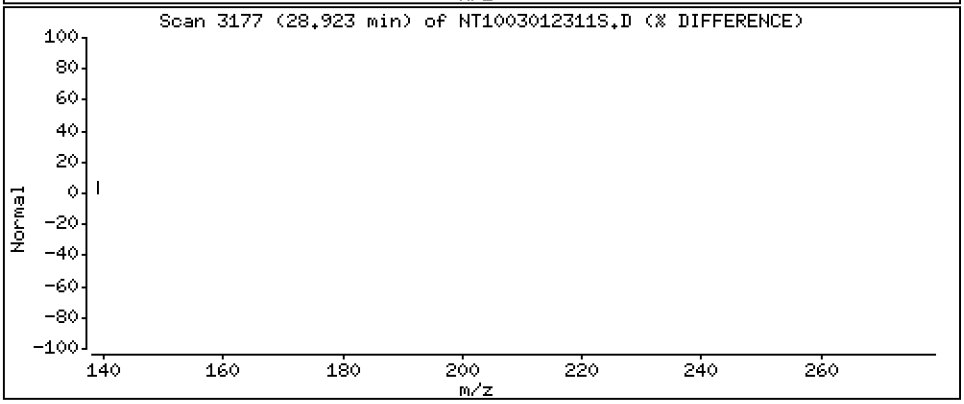












Data File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT10030123115.D

Date : 01-MAR-2023 21:46

Client ID:

Instrument: nt10.i

Sample Info: SEQ-SCV1

Volume Injected (uL): 1.0

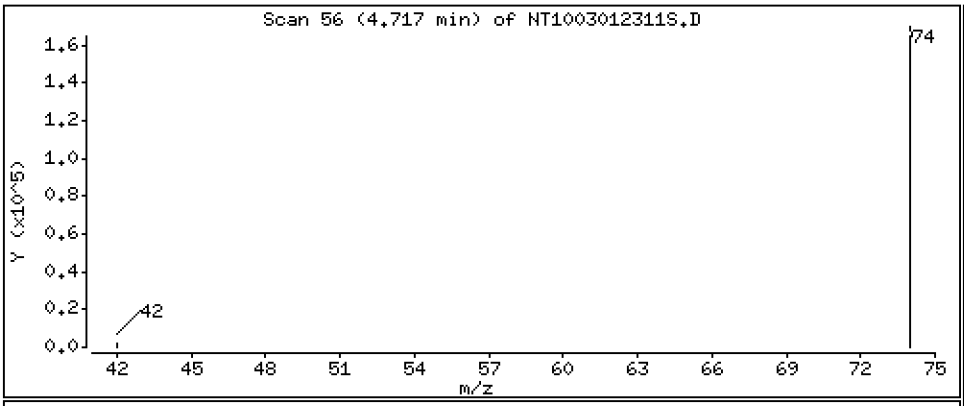
Operator: JGR

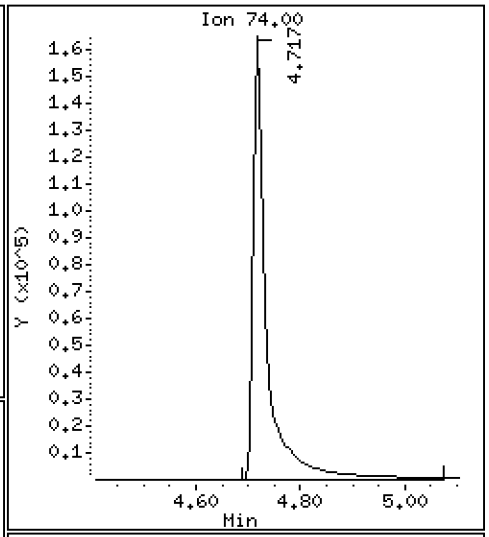
Column phase: ZB-5msi

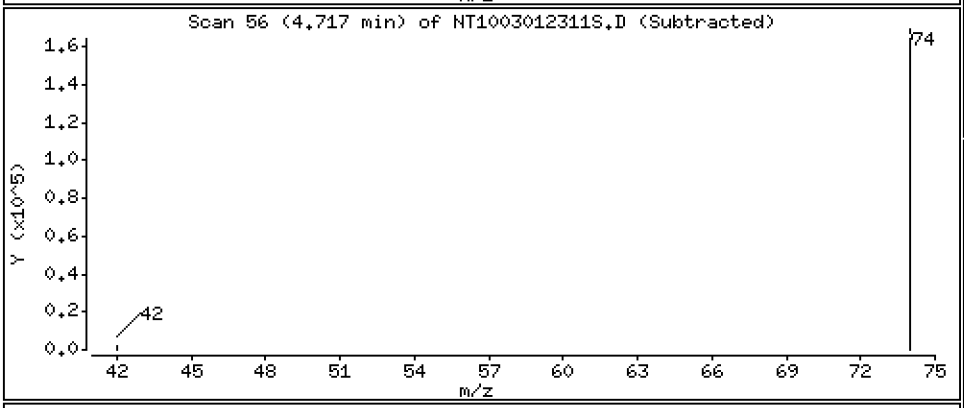
Column diameter: 0.25

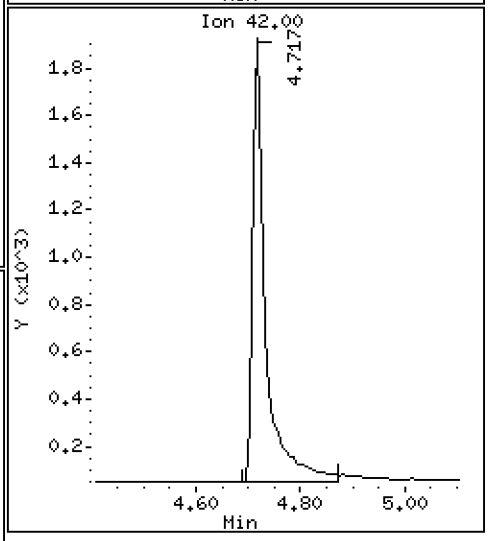
90 N-Nitrosodimethylamine

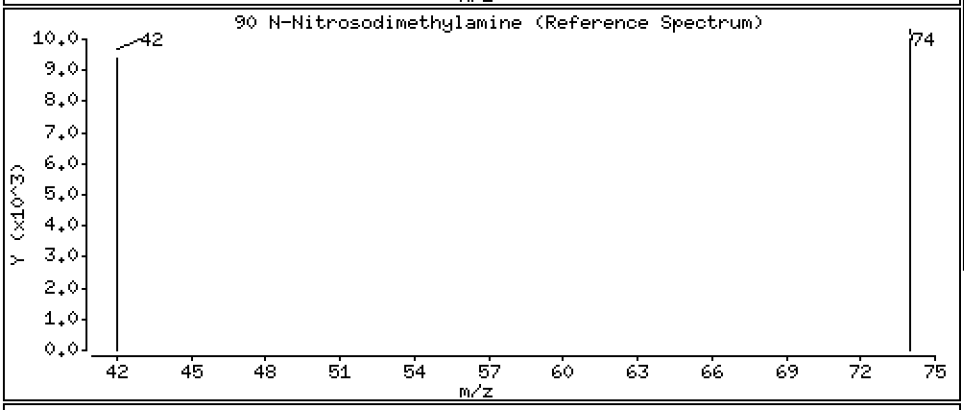
Concentration: 6.057 ug/L

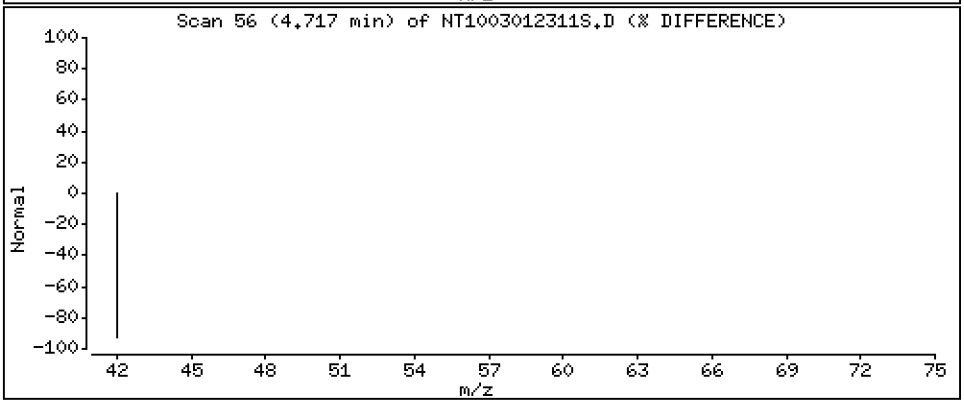












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230301.b\SIM.b\NT1003012311S.D
Lab Smp Id: SLC0143-SCV1
Inj Date : 01-MAR-2023 21:46 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Meth Date : 08-Mar-2023 15:10 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$	1 2-Fluorophenol	112	6.902	6.902	(0.746)	3267	0.03768	0.03768(R)
	3 Phenol	94	8.517	8.532	(0.921)	590047	4.50660	4.507
	7 1,3-Dichlorobenzene	146	9.143	9.136	(0.988)	572299	5.08409	5.084
*	8 1,4-Dichlorobenzene-d4	152	9.252	9.252	(1.000)	303734	4.00000	
	9 1,4-Dichlorobenzene	146	9.283	9.275	(1.003)	574537	5.24962	5.250
	11 Benzyl alcohol	79	9.469	9.508	(1.023)	388582	5.10390	5.104
	12 1,2-Dichlorobenzene	146	9.562	9.563	(1.034)	540938	5.14228	5.142
	13 2-Methylphenol	108	9.655	9.671	(1.044)	348452	4.36547	4.365
	15 4-Methylphenol	108	9.943	9.966	(1.075)	379262	4.50495	4.505
	16 N-Nitroso-di-n-propylamine	70	9.982	9.982	(1.079)	330861	5.68451	5.685
	22 2,4-Dimethylphenol	107	10.998	11.006	(0.938)	357707	3.63670	3.637
	24 Benzoic acid	105	11.099	11.007	(0.947)	380081	6.86990	6.870
	26 1,2,4-Trichlorobenzene	180	11.600	11.600	(0.989)	402252	4.87012	4.870
*	27 Naphthalene-d8	136	11.724	11.723	(1.000)	1147551	4.00000	
	30 Hexachlorobutadiene	225	11.994	11.994	(1.023)	285002	4.86242	4.862
	39 Dimethylphthalate	163	14.741	14.749	(0.963)	1142178	5.57065	5.571
*	42 Acenaphthene-d10	162	15.314	15.314	(1.000)	645730	4.00000	
	50 Diethylphthalate	149	16.203	16.211	(1.058)	1156037	5.97883	5.979
	54 N-Nitrosodiphenylamine	169	16.690	16.705	(0.907)	998237	5.35897	5.359
	57 Hexachlorobenzene	284	17.578	17.579	(0.955)	424193	4.86607	4.866

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	17.989	18.012	(0.978)	155412	3.91206	3.912
*	59 Phenanthrene-d10	188	18.399	18.398	(1.000)	1151000	4.00000	
$	66 Terphenyl-d14	244	21.524	21.532	(0.919)	2846	0.02712	0.02712(R)
	67 Butylbenzylphthalate	149	22.415	22.415	(0.957)	1009961	4.68912	4.689
*	69 Chrysene-d12	240	23.421	23.421	(1.000)	1297466	4.00000	
*	77 Perylene-d12	264	26.108	26.108	(1.000)	1394899	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.922	28.946	(1.108)	1657122	4.76032	4.760
	90 N-Nitrosodimethylamine	74	4.717	4.755	(0.510)	310951	6.05685	6.057

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i Calibration Date: 01-MAR-2023
Lab File ID: NT1003012311S.D Calibration Time: 18:37
Lab Smp Id: SLC0143-SCV1
Analysis Type: SV Level: LOW
Quant Type: ISTD Sample Type: AIR
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230301.b\SIM.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	320125	160063	640250	303734	-5.12
27 Naphthalene-d8	1136019	568010	2272038	1147551	1.02
42 Acenaphthene-d10	636993	318497	1273986	645730	1.37
59 Phenanthrene-d10	1093620	546810	2187240	1151000	5.25
69 Chrysene-d12	1000300	500150	2000600	1297466	29.71
77 Perylene-d12	1058448	529224	2116896	1394899	31.79

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.24	8.74	9.74	9.25	0.08
27 Naphthalene-d8	11.72	11.22	12.22	11.72	0.00
42 Acenaphthene-d10	15.31	14.81	15.81	15.31	0.00
59 Phenanthrene-d10	18.40	17.90	18.90	18.40	0.00
69 Chrysene-d12	23.41	22.91	23.91	23.42	0.03
77 Perylene-d12	26.10	25.60	26.60	26.11	0.03

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

REVIEW SUMMARY FOR FILE - NT1003012311S.D

Lab ID: SLC0143-SCV1
nt10.i, 20230301.b\SIM.b\SIMABN2.m,   01-MAR-2023 21:46

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.947	0.000	0.9467	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003012310S.D

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00032
Lab File ID:	NT1003032315S.D	Calibration Date:	03/01/2023
Sequence:	SLC0250	Injection Date:	03/04/23
Lab Sample ID:	SLC0250-CCV1	Injection Time:	02:40
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
1,4-Dichlorobenzene	A	1.0000	0.9	1.4413080	1.3402190		-7.0	+/-50	
1,2-Dichlorobenzene	A	1.0000	0.9	1.3853460	1.3121640		-5.3	+/-50	
Benzyl Alcohol	A	1.0000	1.0	0.7492523	0.9001021		-4.7	+/-50	
Benzoic acid	A	4.0000	0.5	0.1431163	0.0230636		-87.6	+/-50	*
2,4-Dimethylphenol	A	2.0000	2.0	0.2957717	0.3445517		1.0	+/-50	
1,2,4-Trichlorobenzene	A	1.0000	1.1	0.2879030	0.3151024		9.4	+/-50	
N-Nitrosodiphenylamine	A	1.0000	0.9	0.6473471	0.5803135		-10.4	+/-50	
Pentachlorophenol	A	2.0000	0.2	0.0950913	0.0155616		-88.3	+/-50	*
2-Fluorophenol	A	1.5000	1.72	1.1419780	1.3101150		14.7	+/-50	
p-Terphenyl-d14	A	1.0000	1.48	0.3234672	0.4774531		47.6	+/-50	

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323155.D

Page 1

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

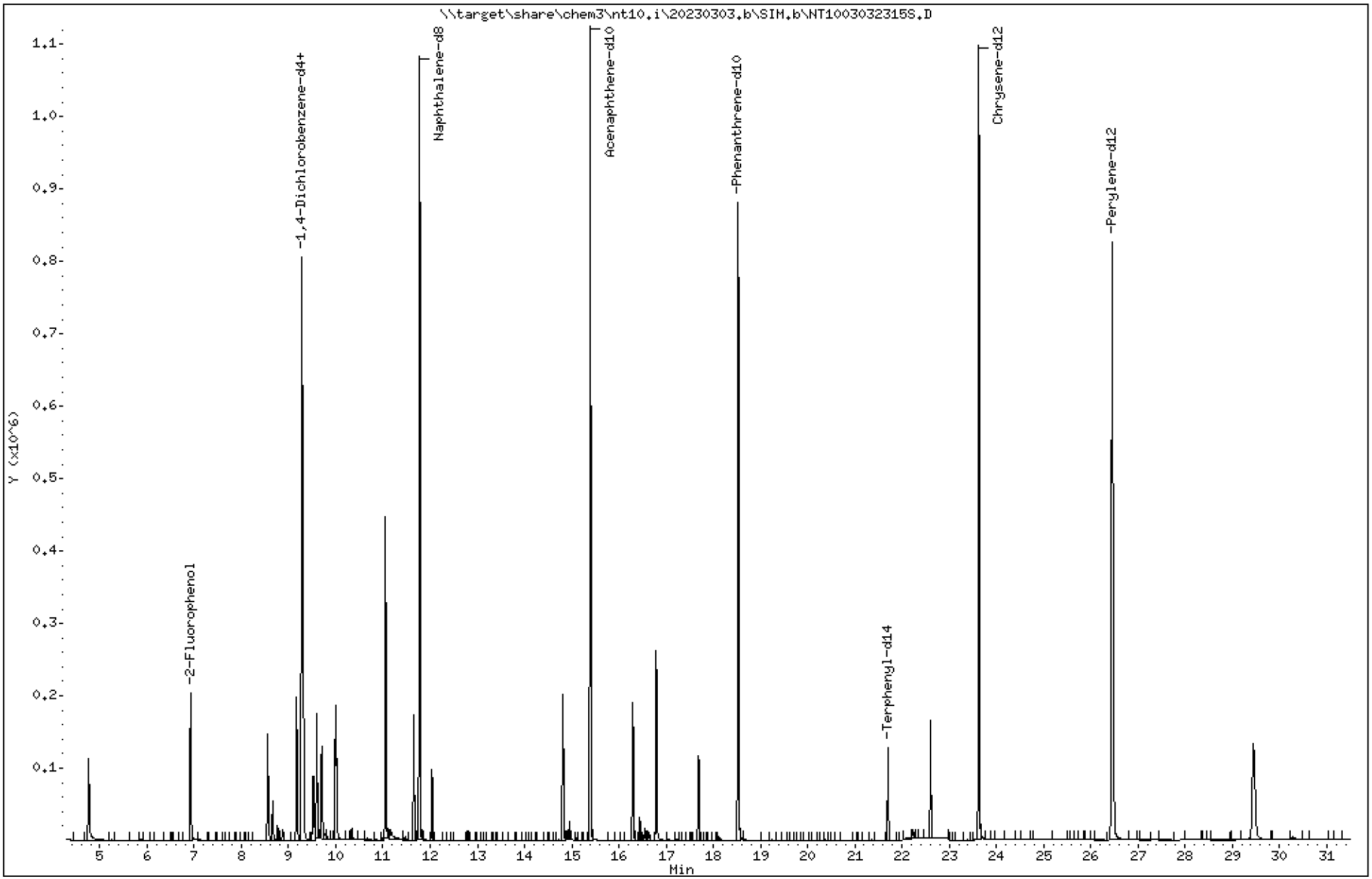
Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323155.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

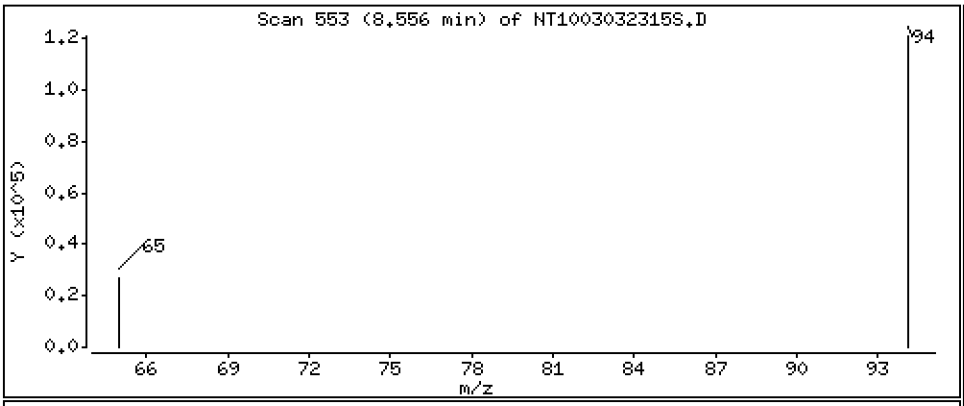
Operator: JGR

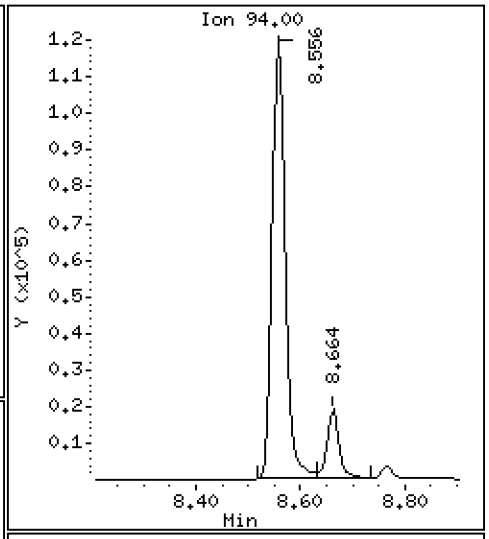
Column phase: ZB-5msi

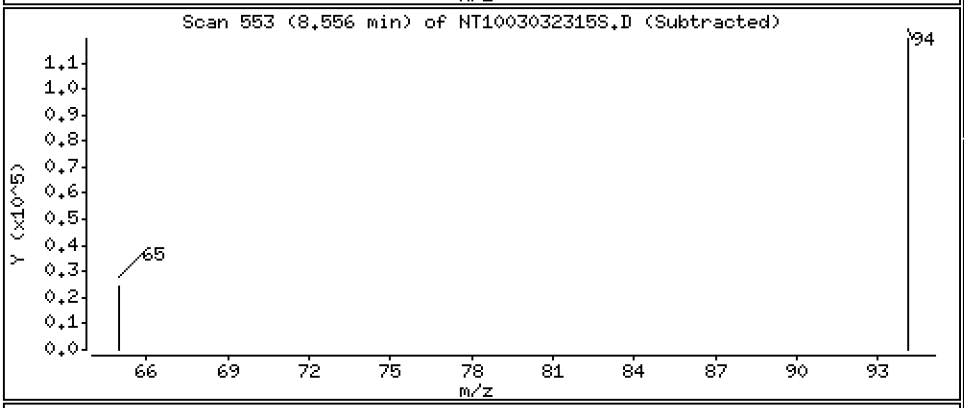
Column diameter: 0.25

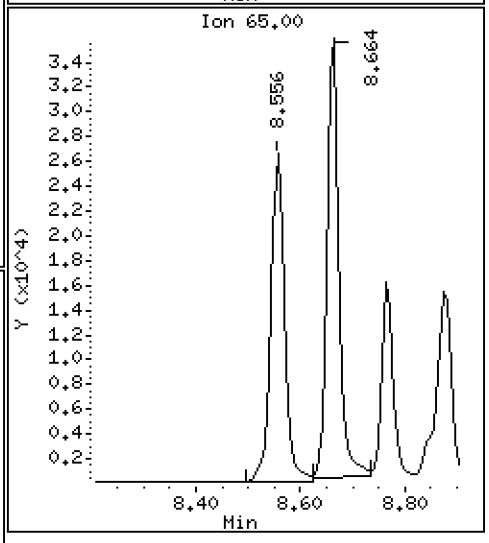
3 Phenol

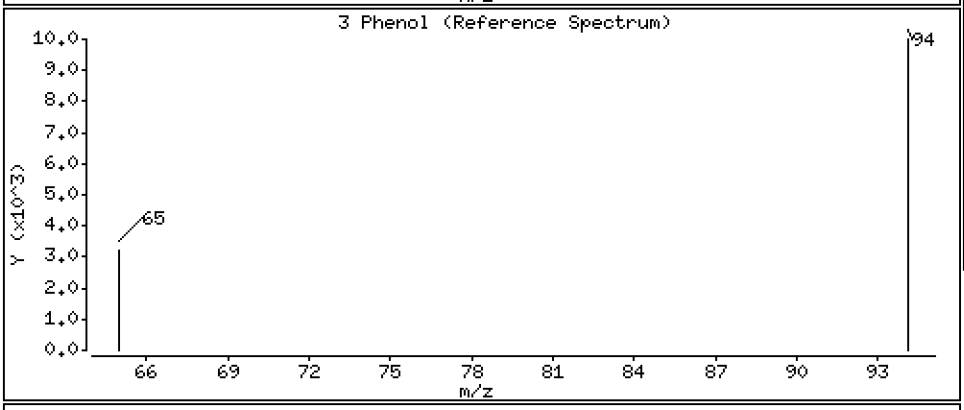
Concentration: 0.9398 ug/L

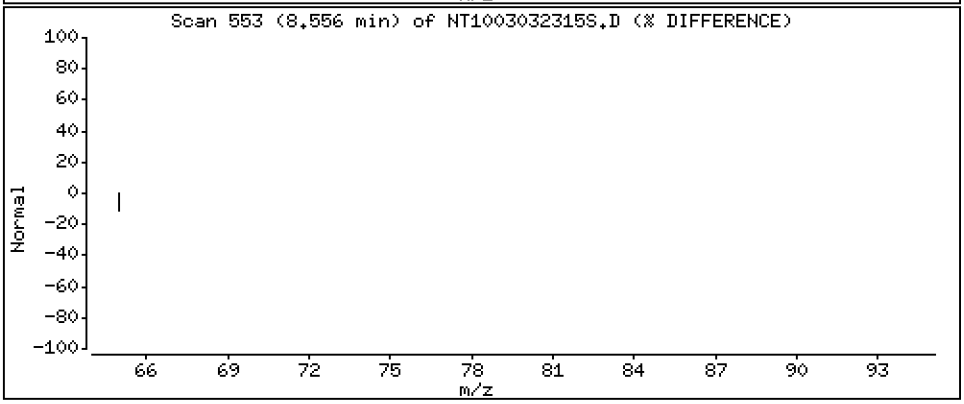












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323155.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

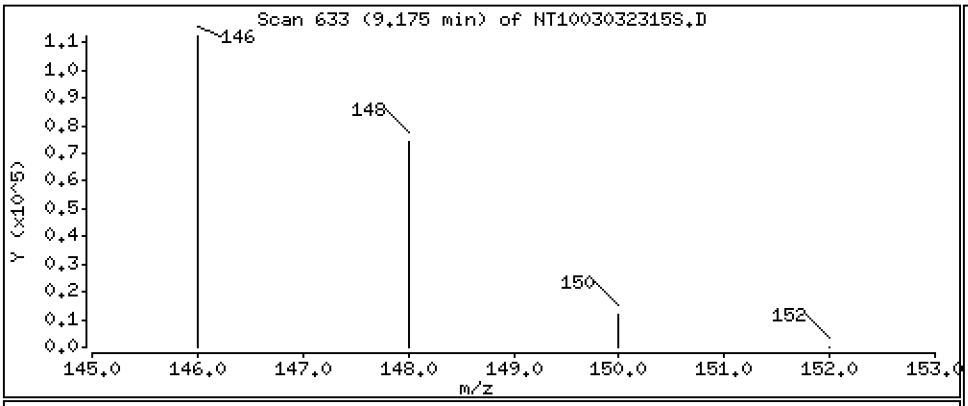
Operator: JGR

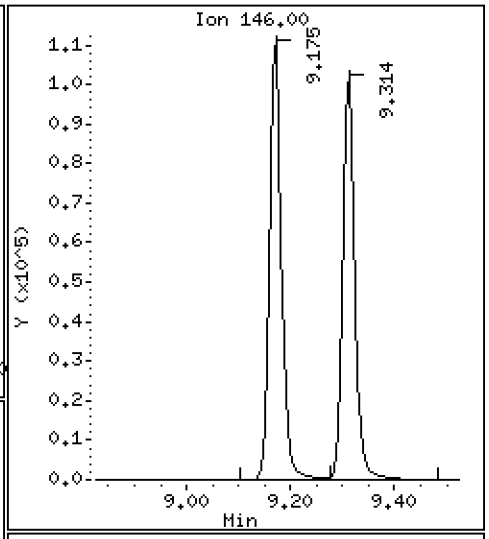
Column phase: ZB-5msi

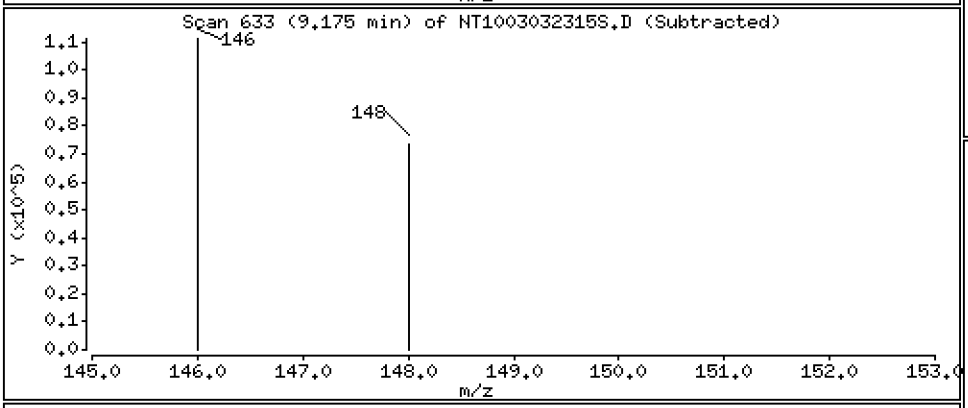
Column diameter: 0.25

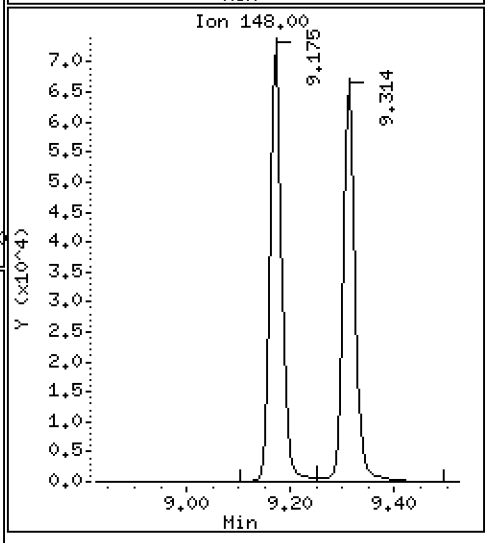
7 1,3-Dichlorobenzene

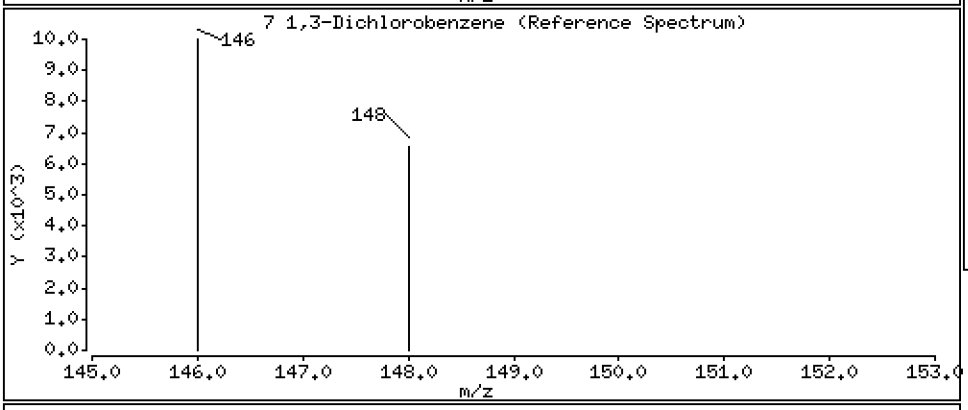
Concentration: 0.9490 ug/L

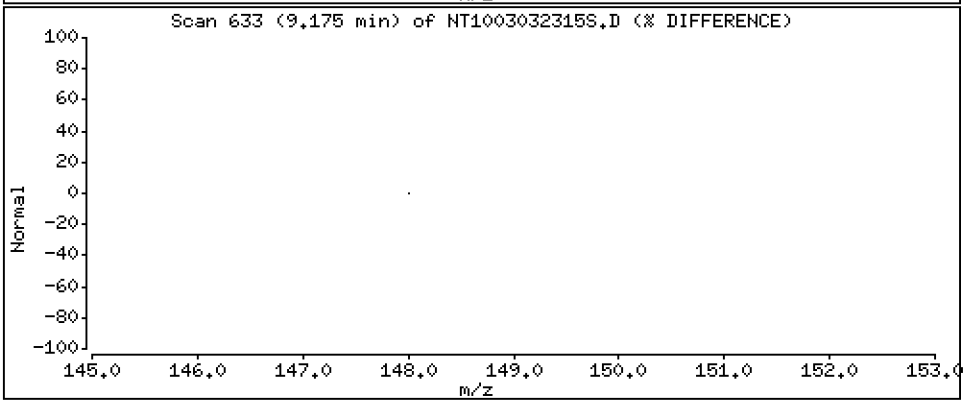












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323155.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

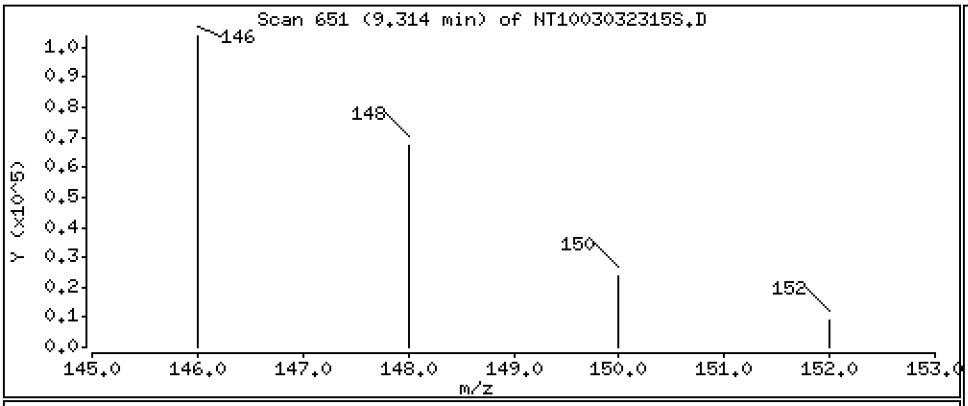
Operator: JGR

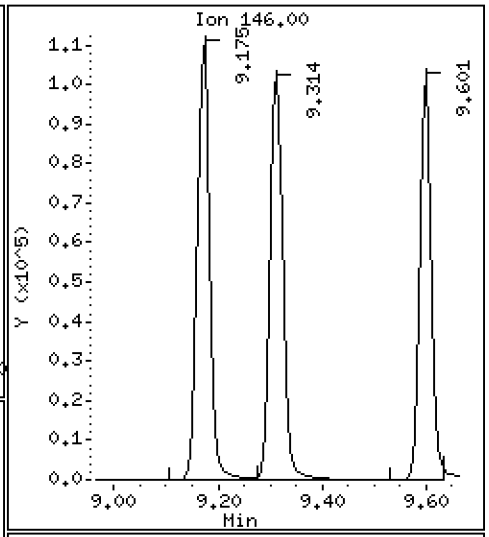
Column phase: ZB-5msi

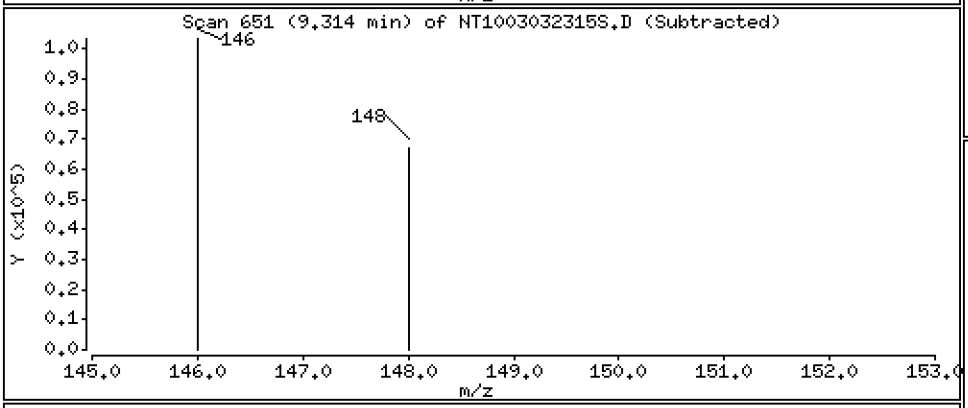
Column diameter: 0.25

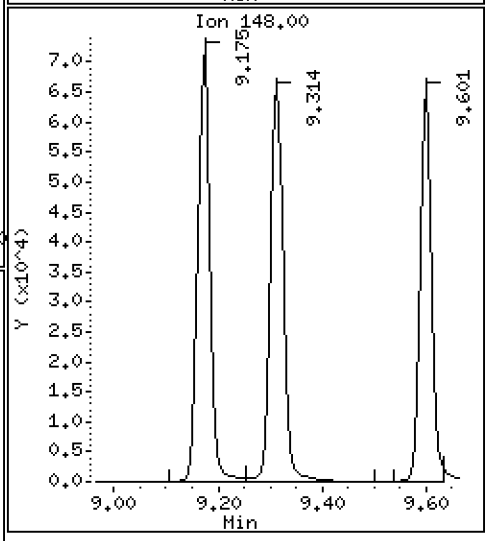
9 1,4-Dichlorobenzene

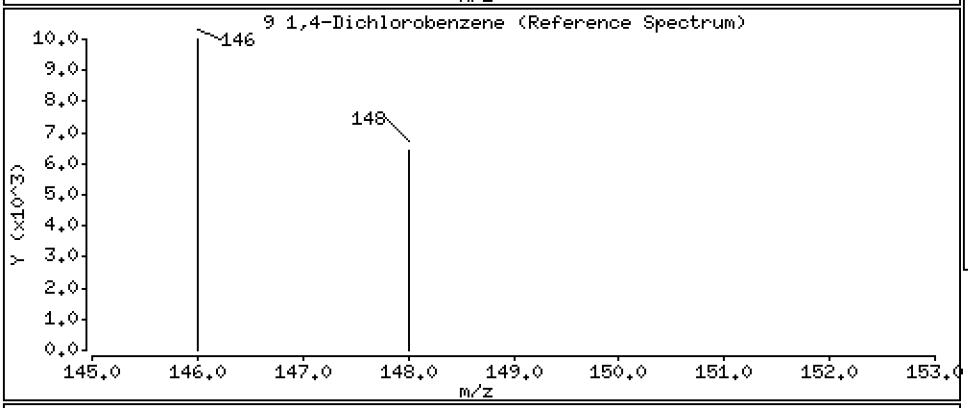
Concentration: 0.9299 ug/L

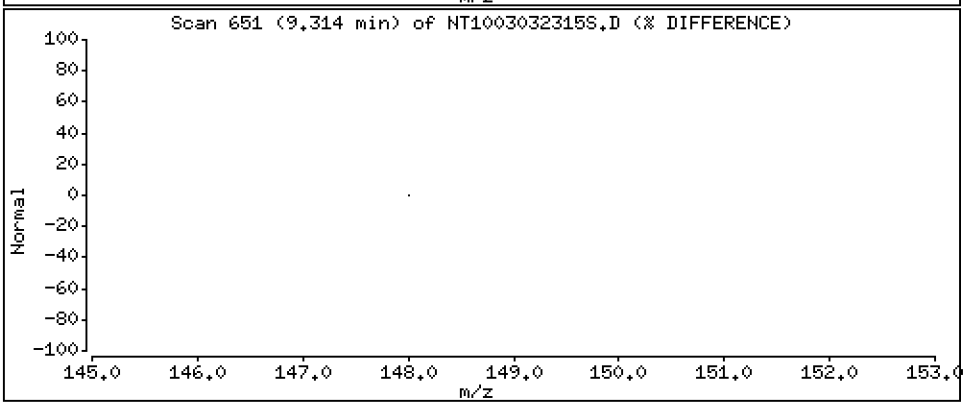












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323155.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

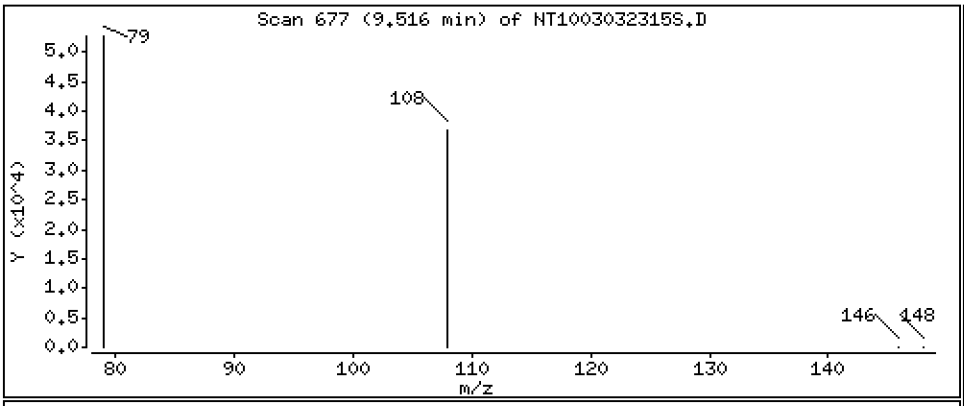
Operator: JGR

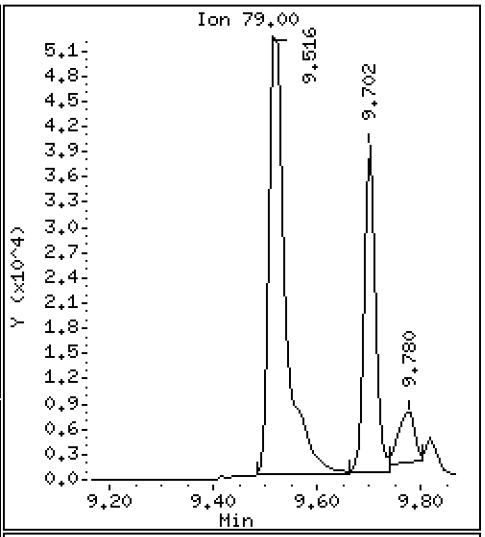
Column phase: ZB-5msi

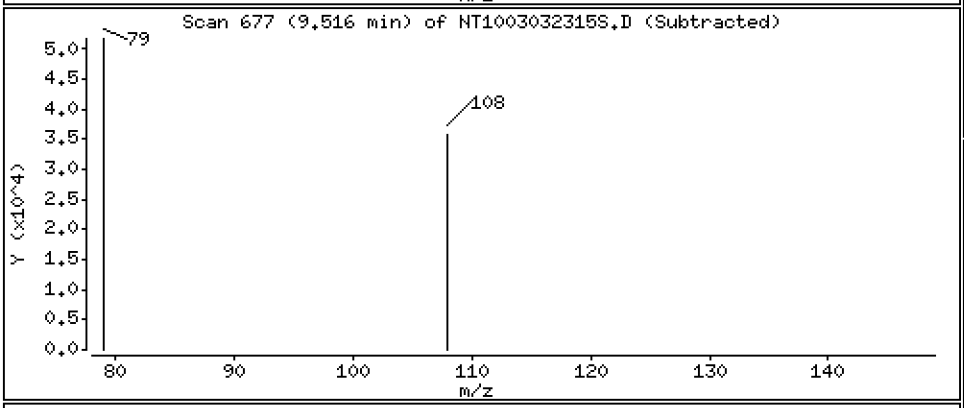
Column diameter: 0.25

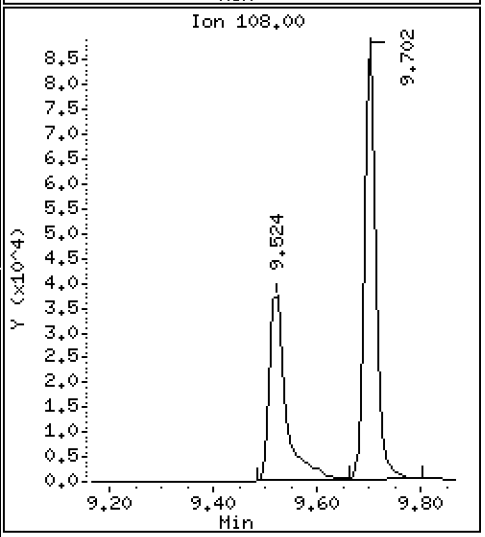
11 Benzyl alcohol

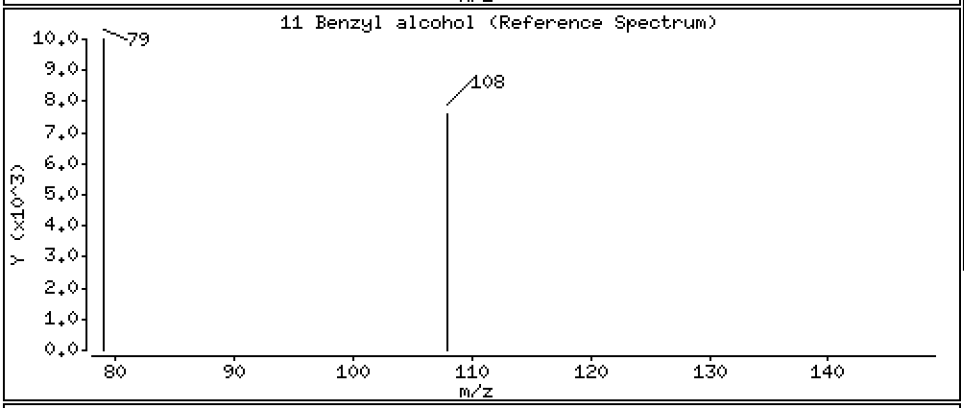
Concentration: 0.9526 ug/L

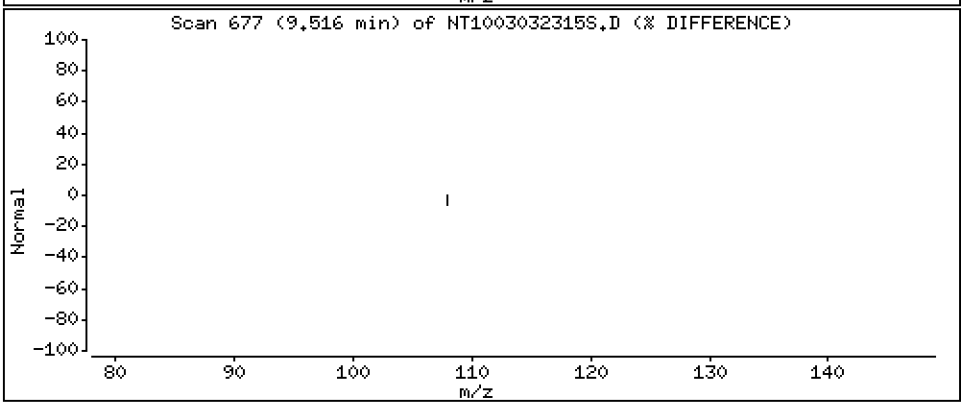












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323155.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

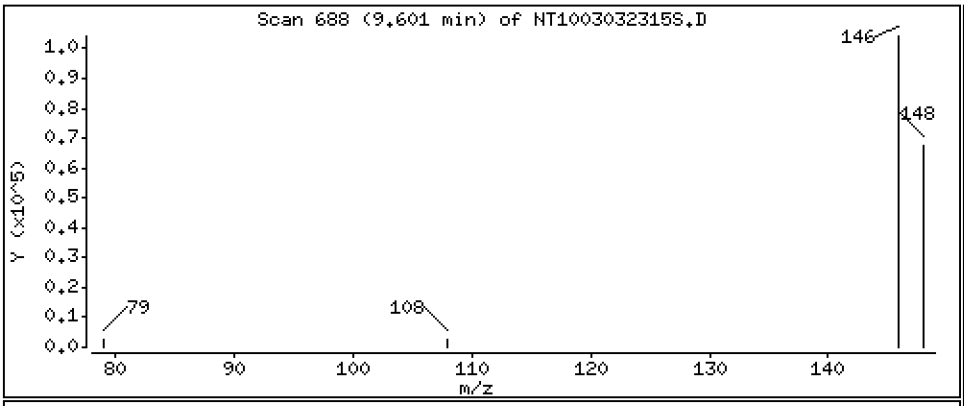
Operator: JGR

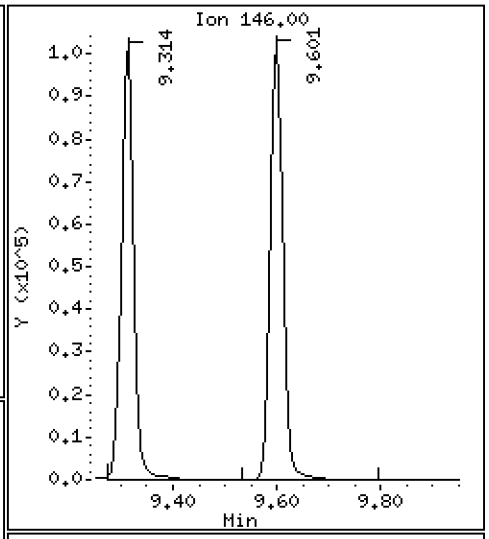
Column phase: ZB-5msi

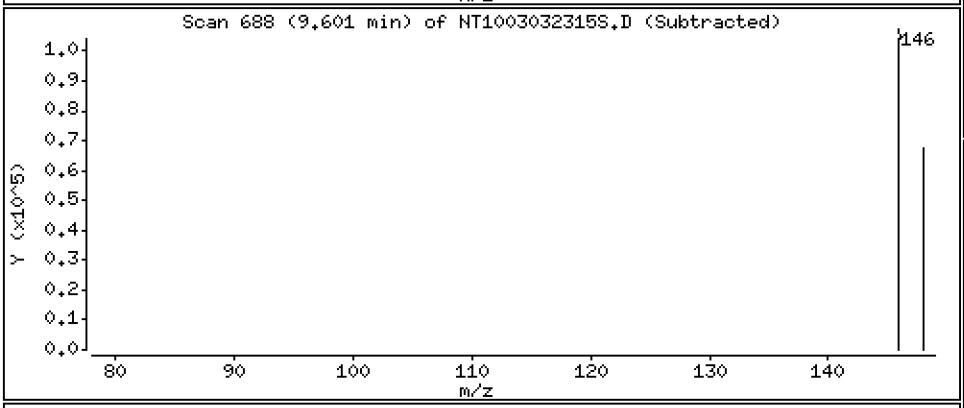
Column diameter: 0.25

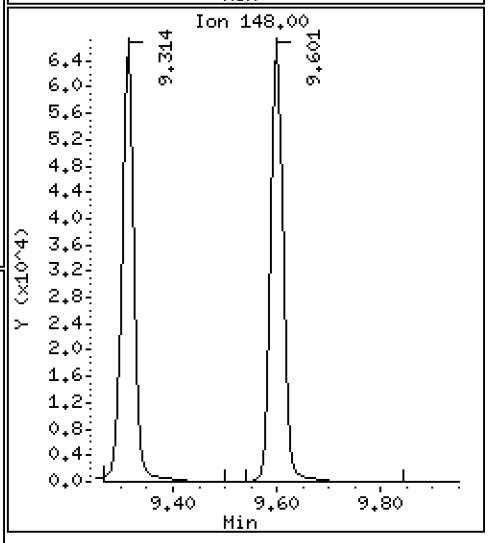
12 1,2-Dichlorobenzene

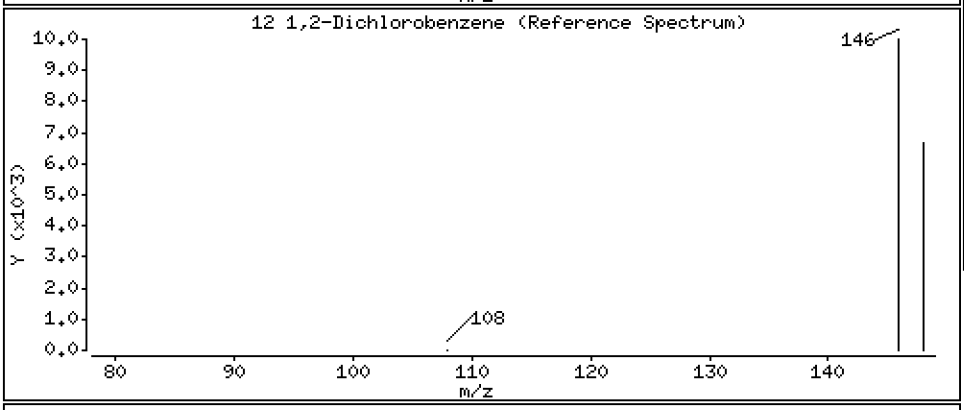
Concentration: 0.9472 ug/L

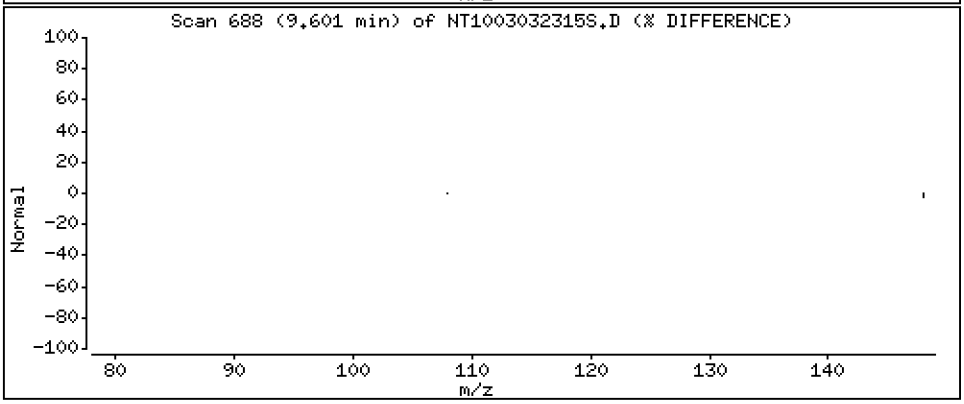












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323155.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

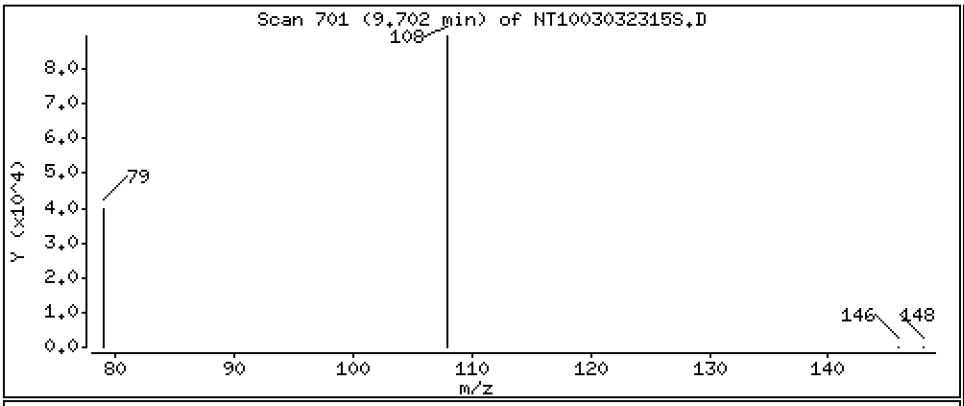
Operator: JGR

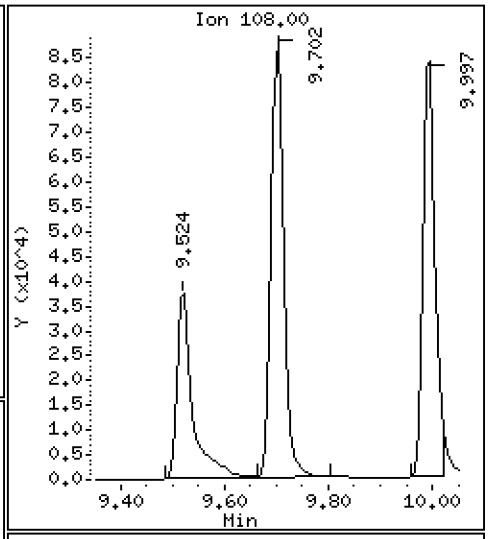
Column phase: ZB-5msi

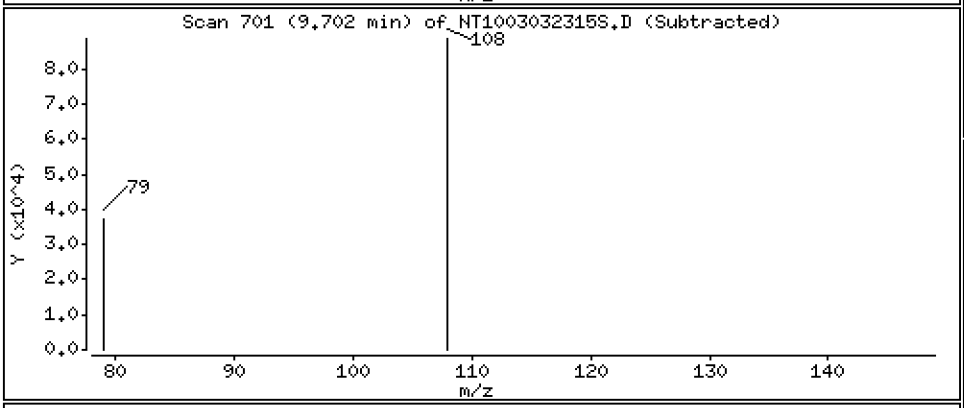
Column diameter: 0.25

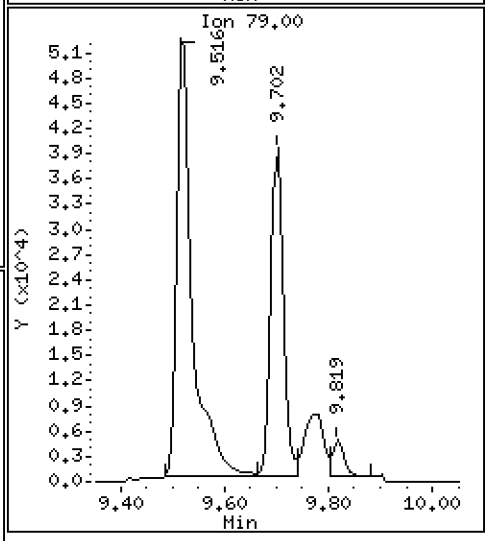
13 2-Methylphenol

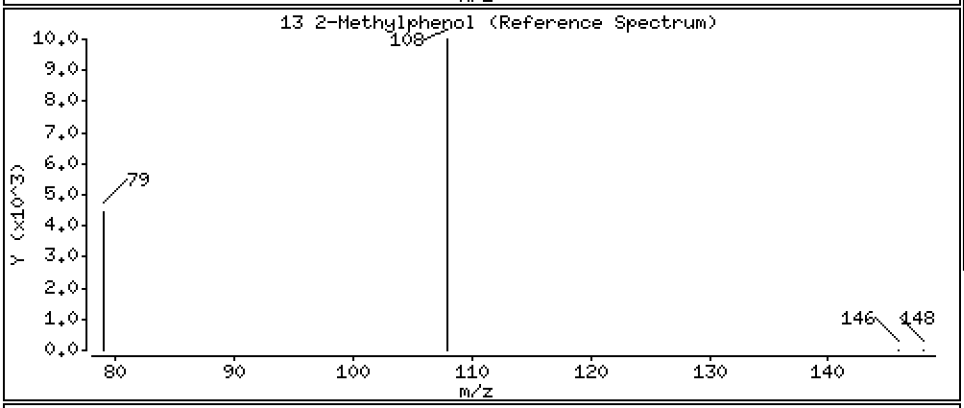
Concentration: 1.097 ug/L

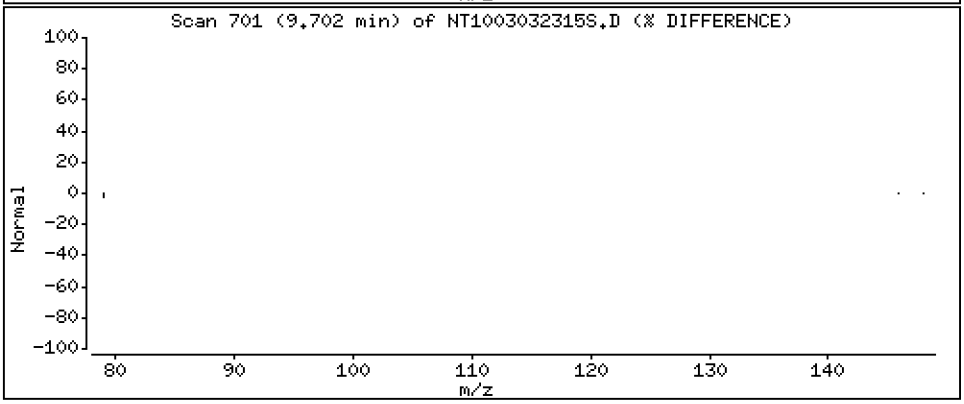












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323155.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

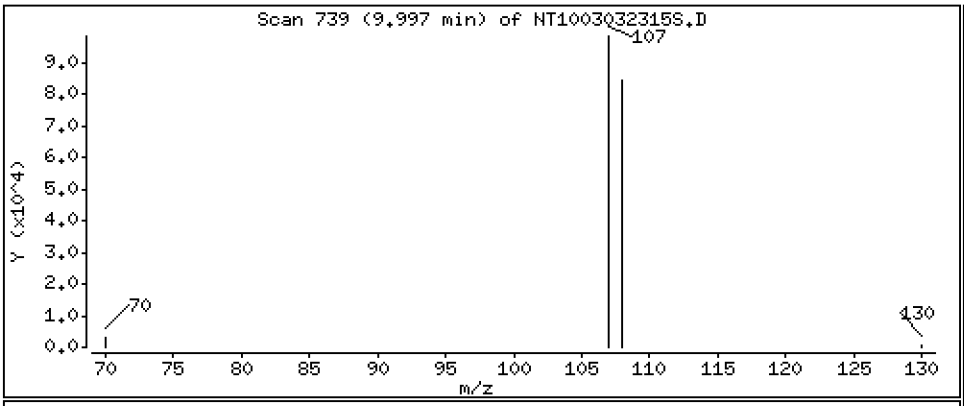
Operator: JGR

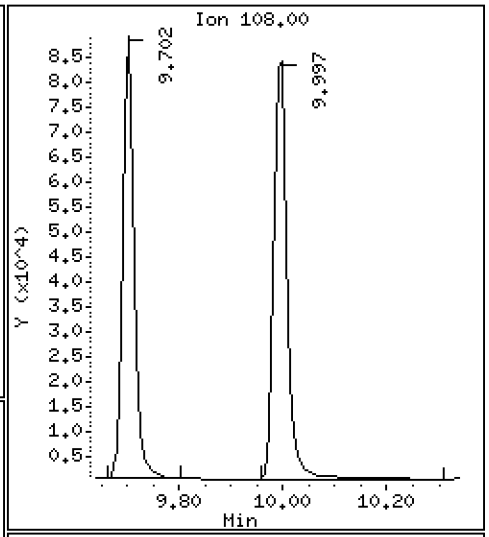
Column phase: ZB-5msi

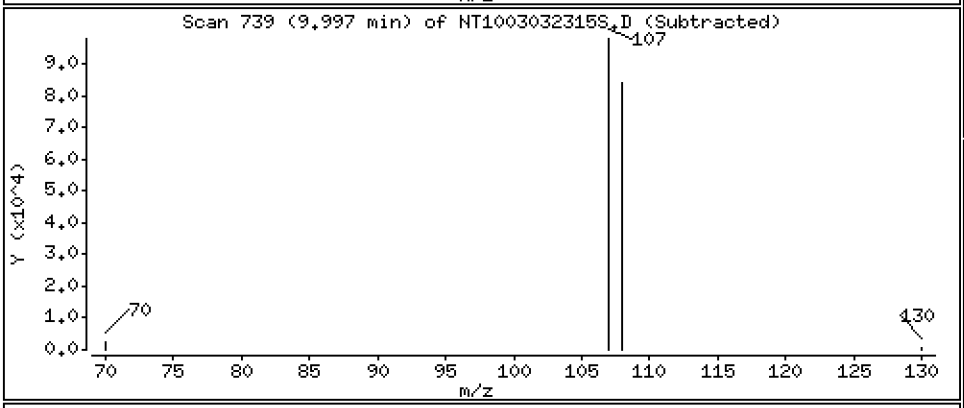
Column diameter: 0.25

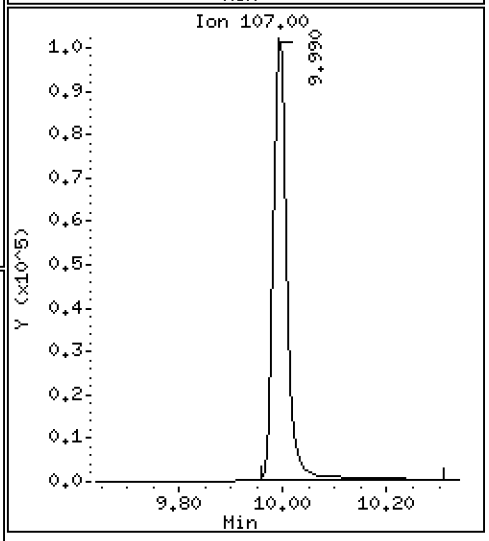
15 4-Methylphenol

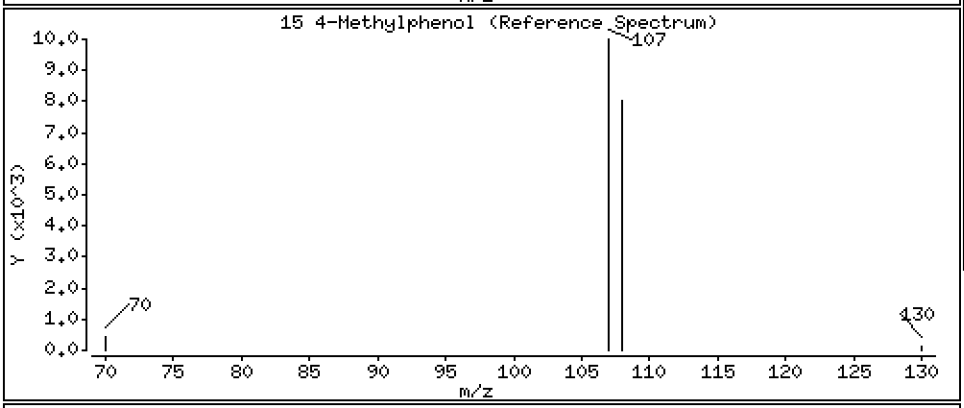
Concentration: 1.090 ug/L

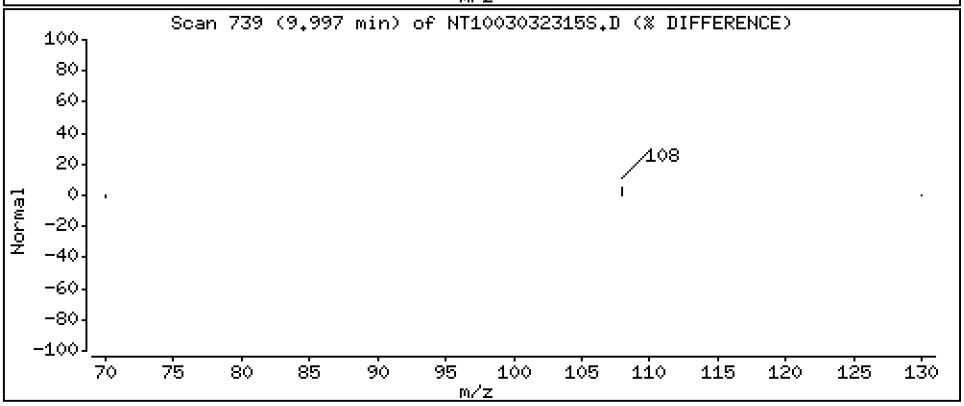












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323155.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

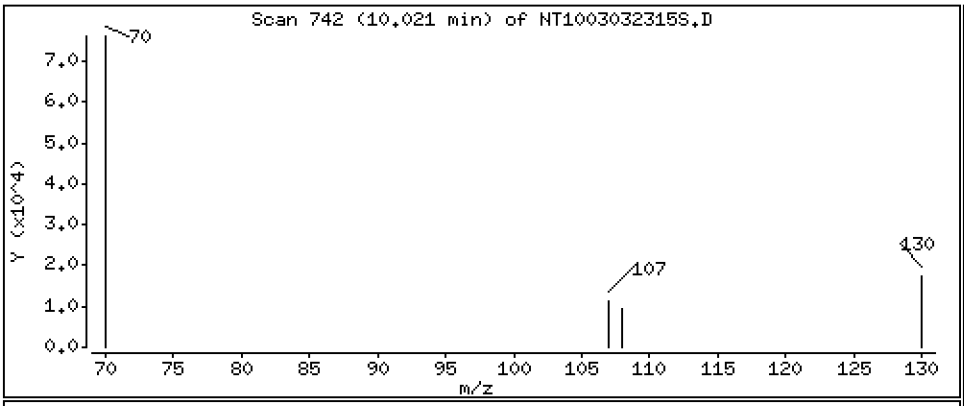
Operator: JGR

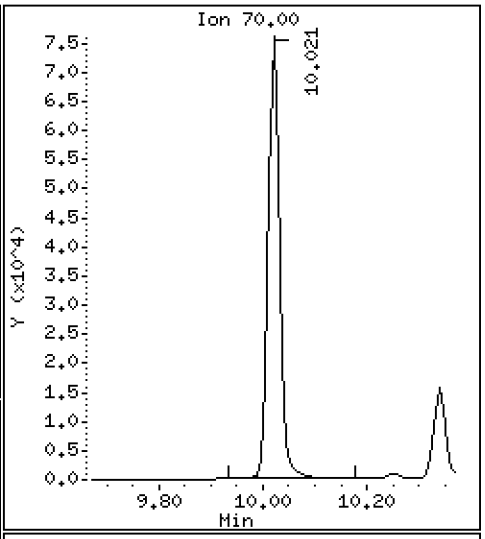
Column phase: ZB-5msi

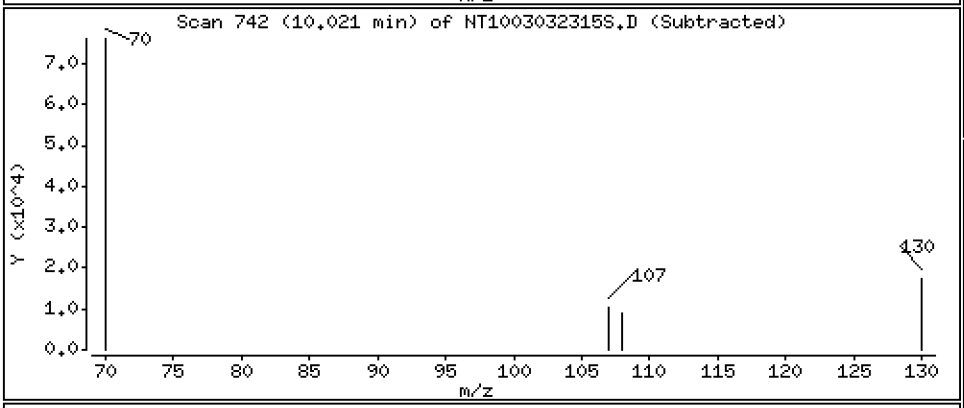
Column diameter: 0.25

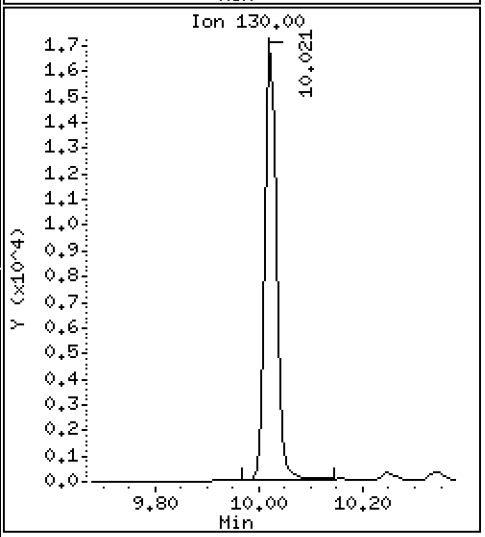
16 N-Nitroso-di-n-propylamine

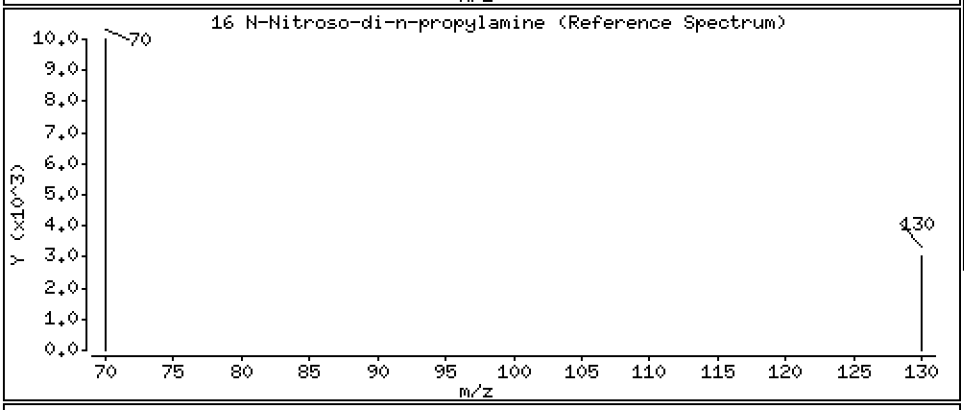
Concentration: 1.161 ug/L

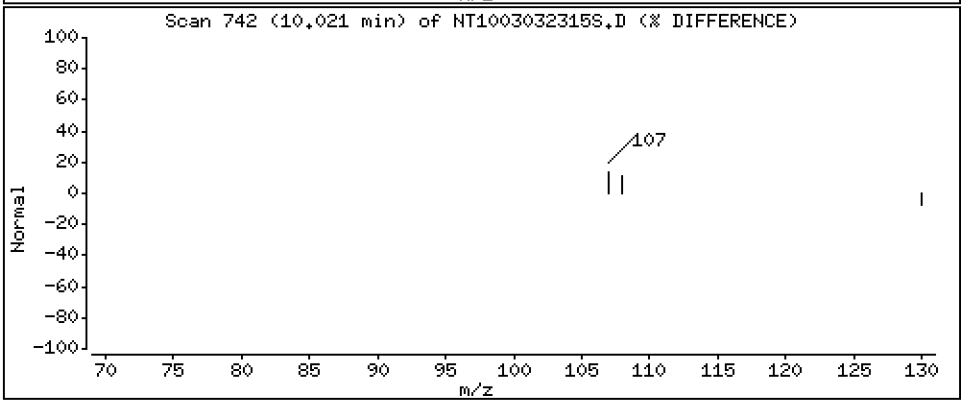












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323155.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

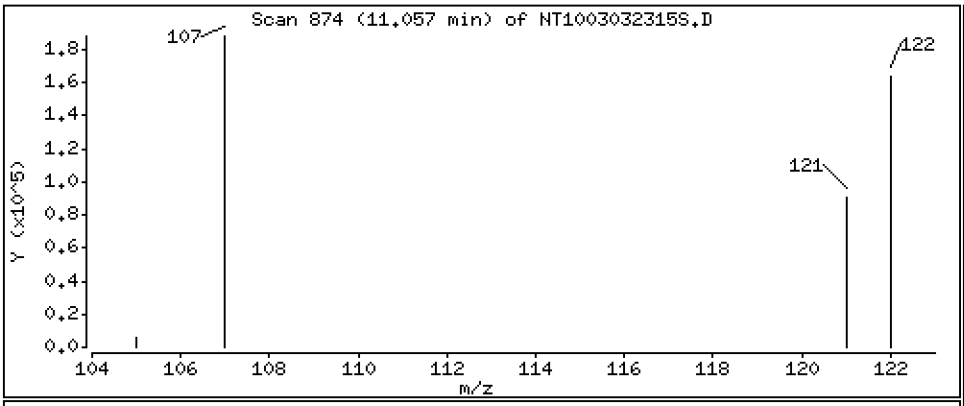
Operator: JGR

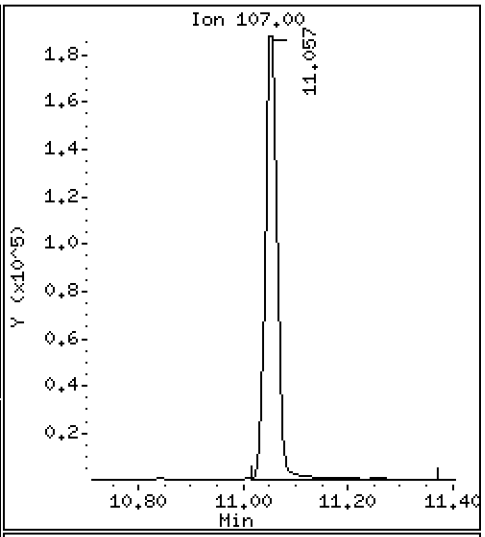
Column phase: ZB-5msi

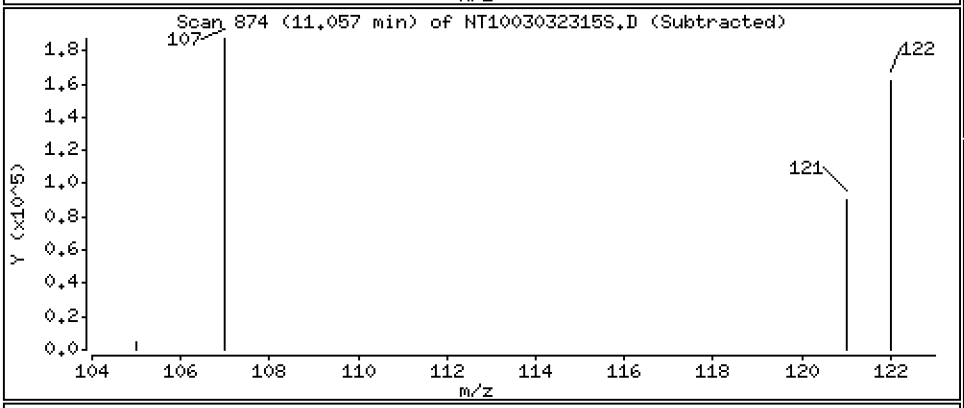
Column diameter: 0.25

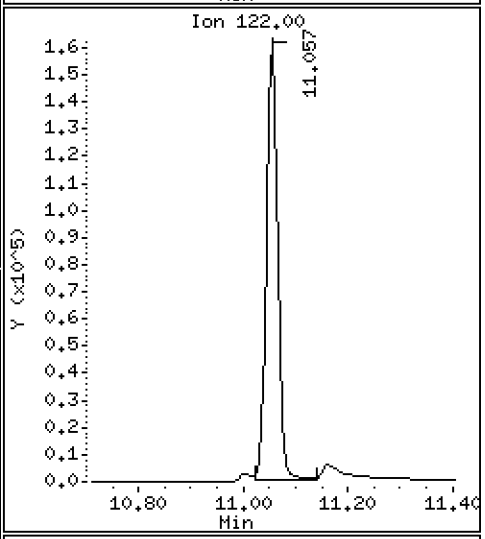
22 2,4-Dimethylphenol

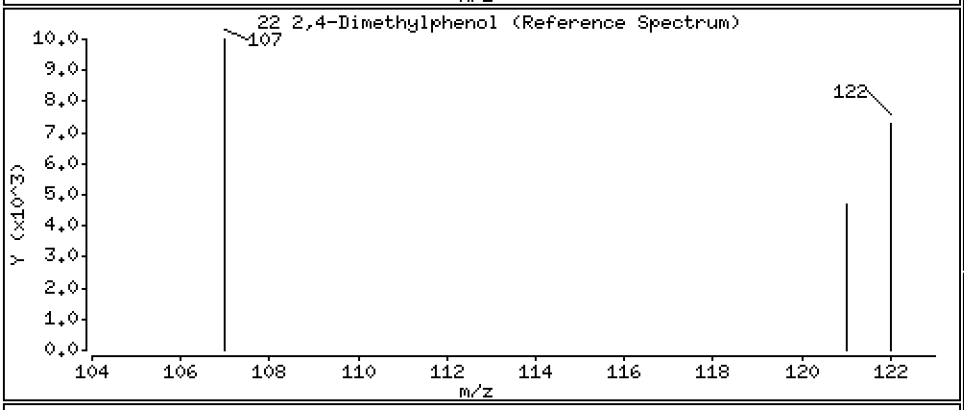
Concentration: 2.019 ug/L

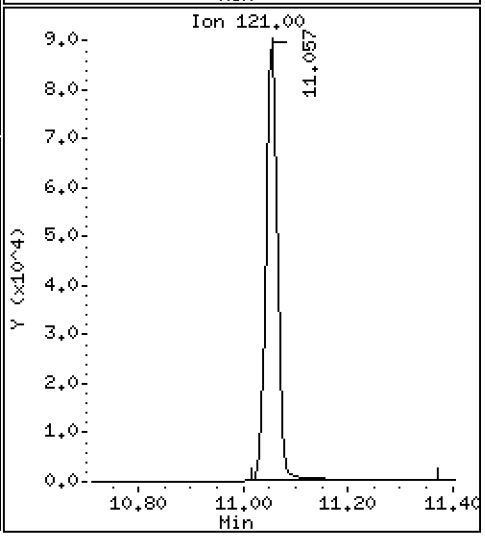


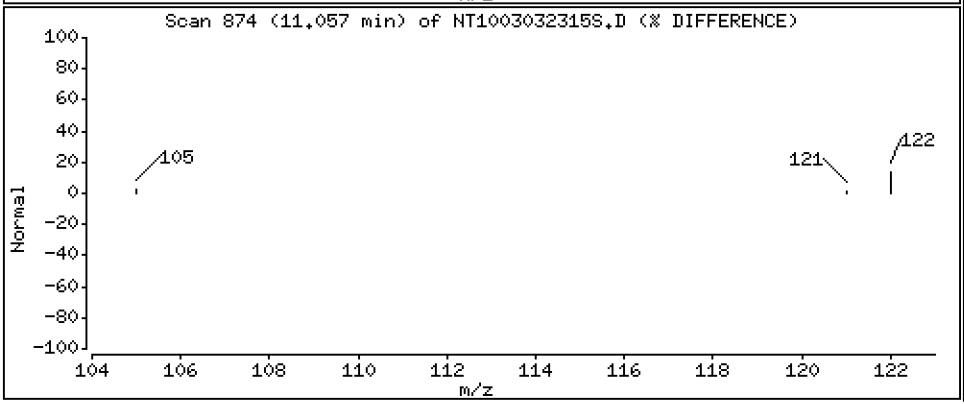












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323155.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

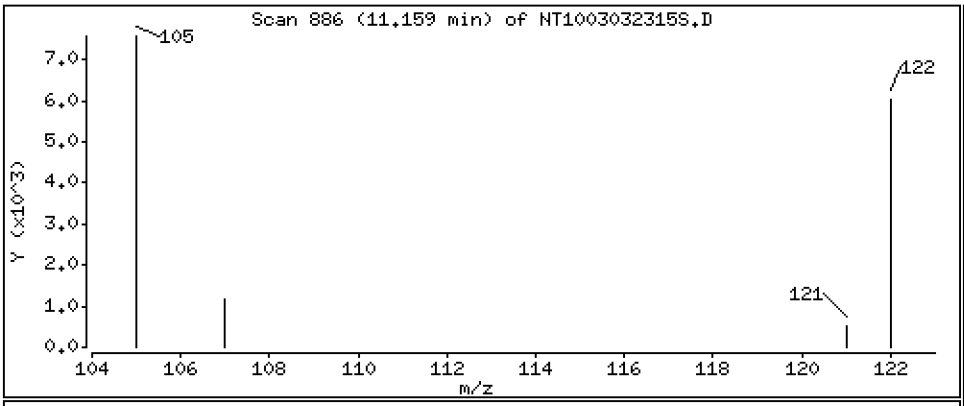
Operator: JGR

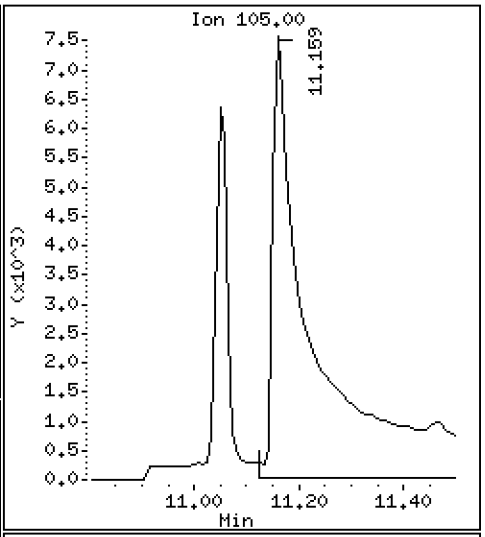
Column phase: ZB-5msi

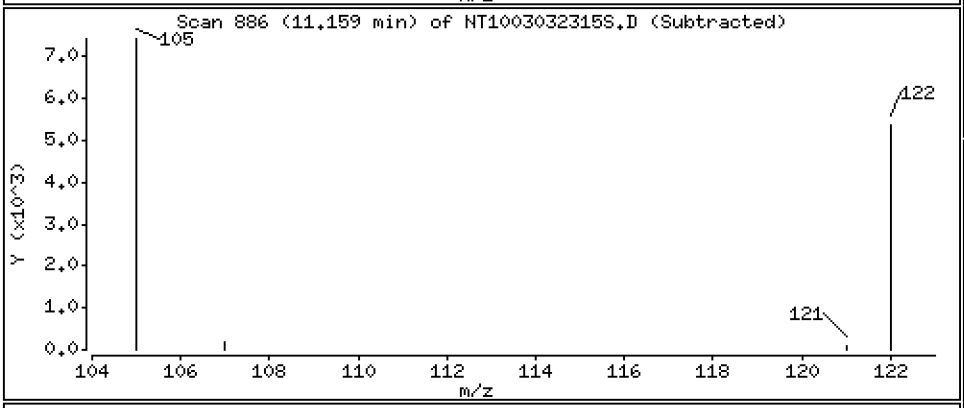
Column diameter: 0.25

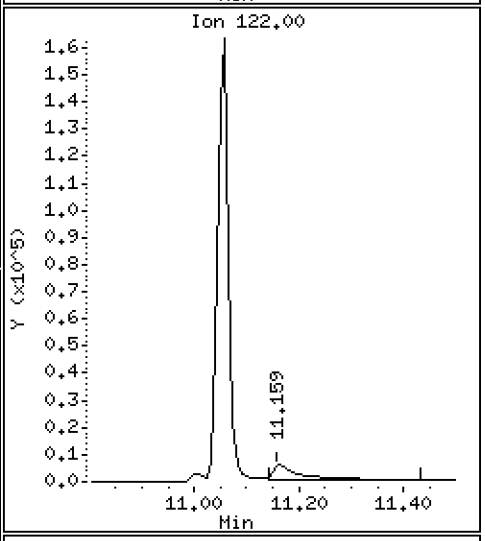
24 Benzoic acid

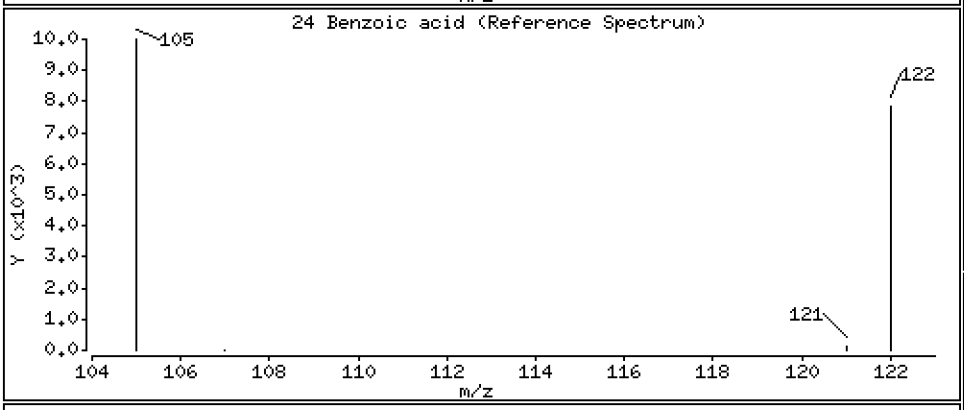
Concentration: 0.4947 ug/L

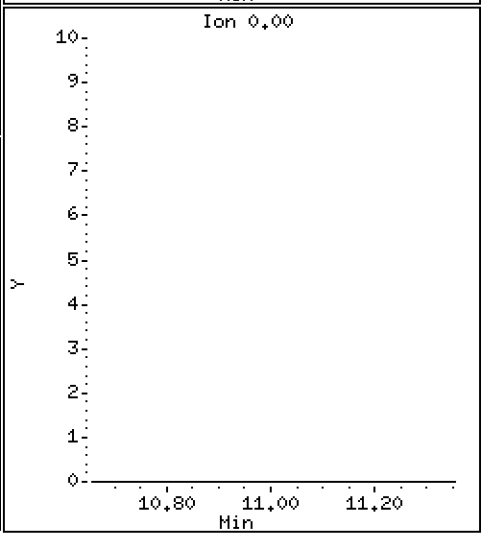


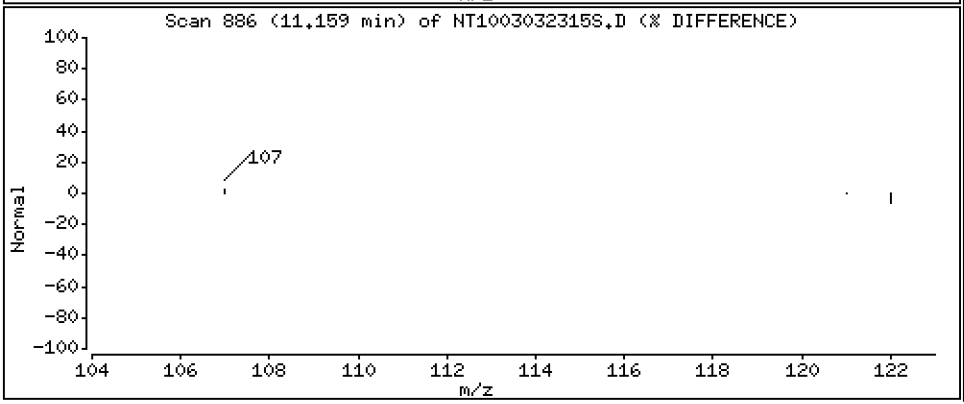












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Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

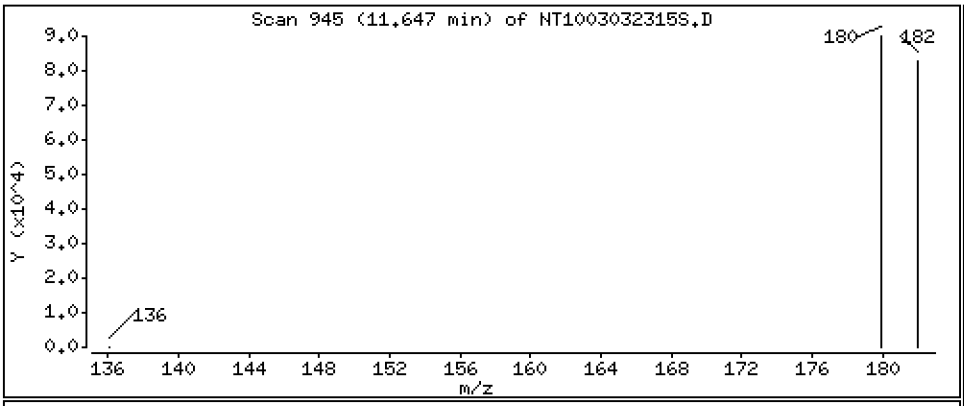
Operator: JGR

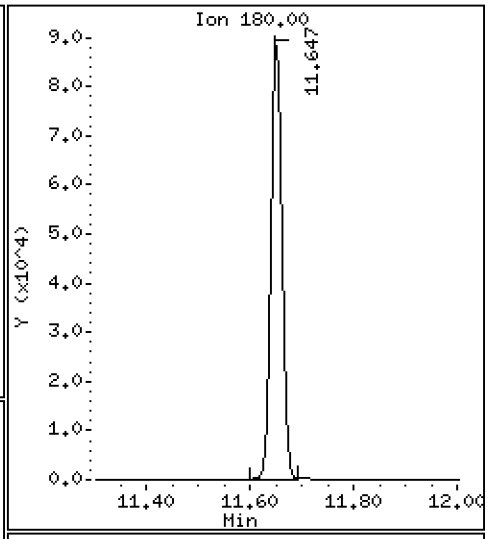
Column phase: ZB-5msi

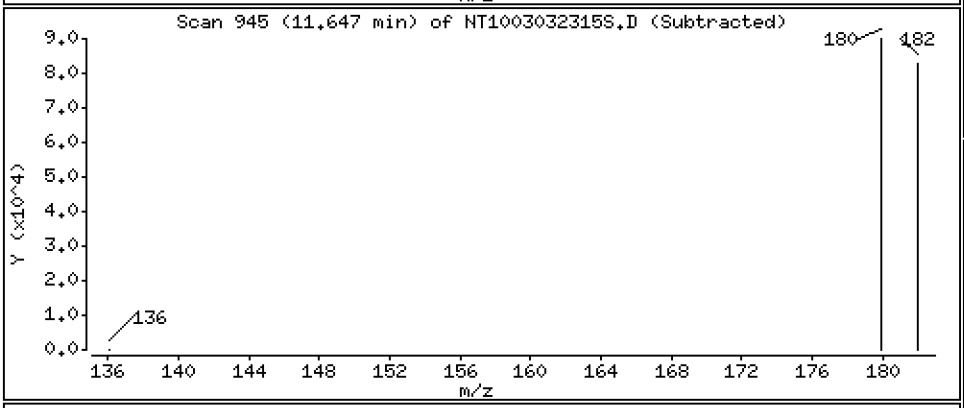
Column diameter: 0.25

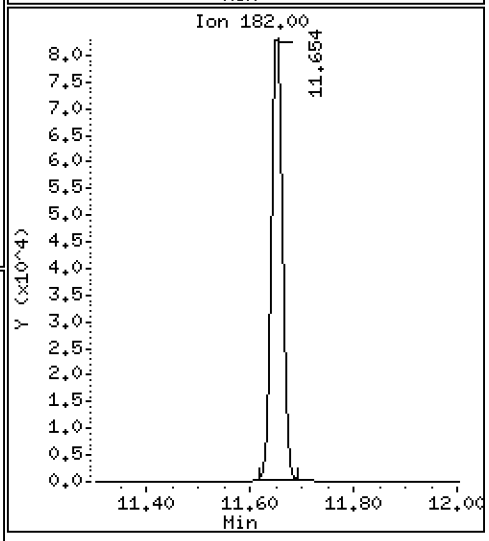
26 1,2,4-Trichlorobenzene

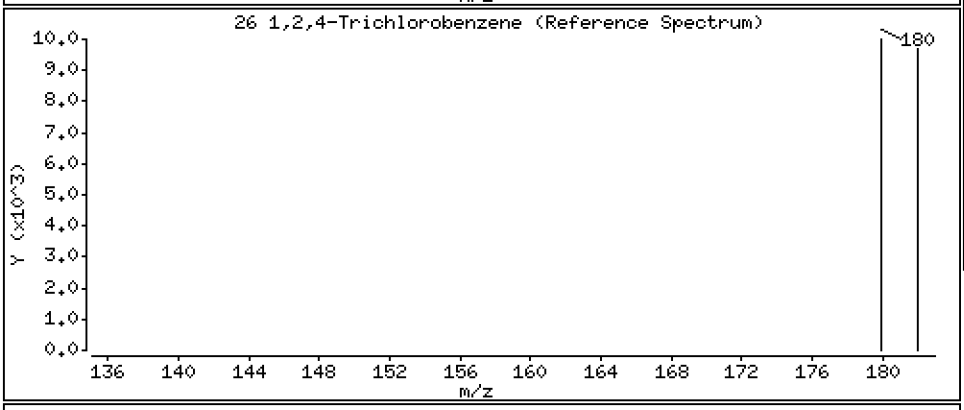
Concentration: 1.094 ug/L

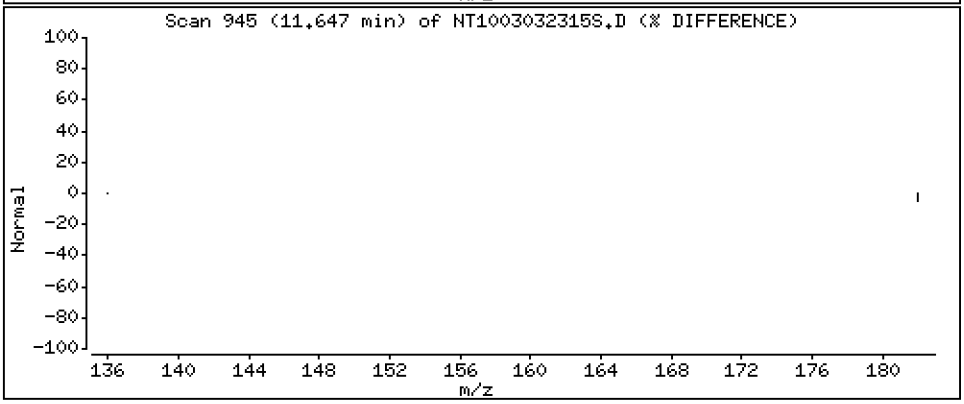












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323155.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

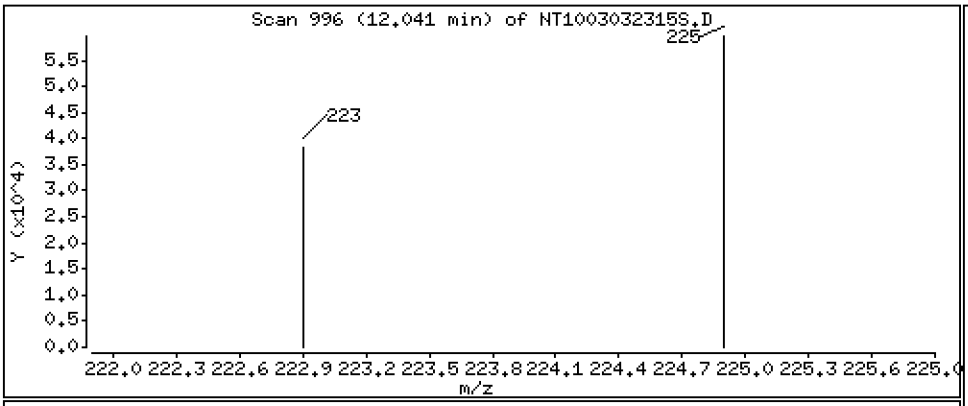
Operator: JGR

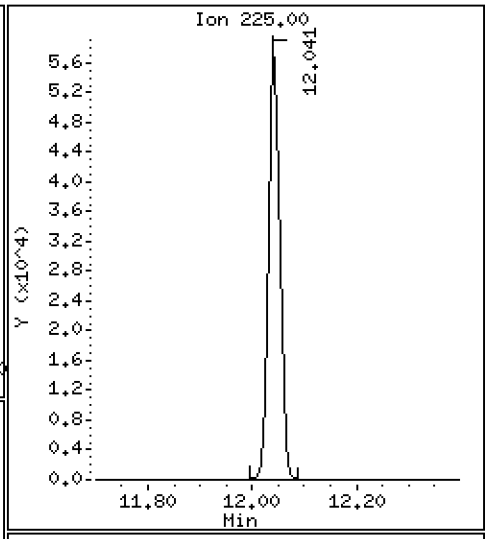
Column phase: ZB-5msi

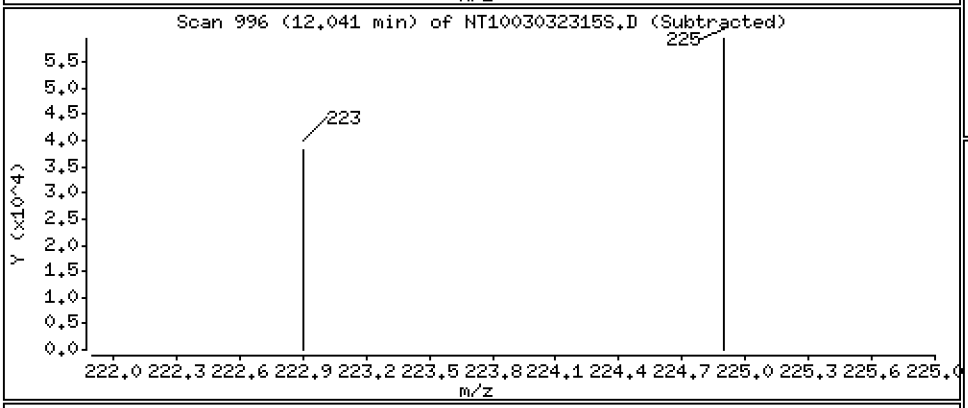
Column diameter: 0.25

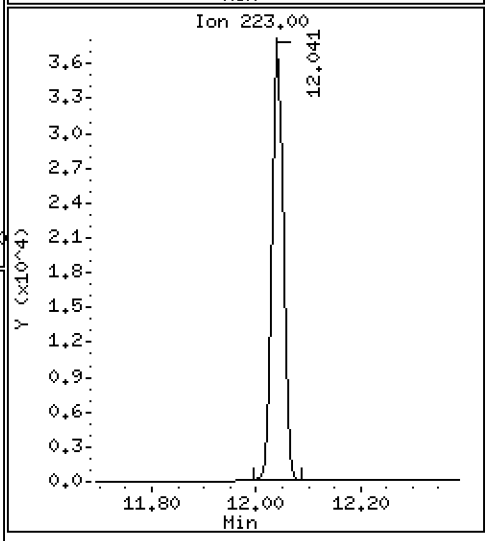
30 Hexachlorobutadiene

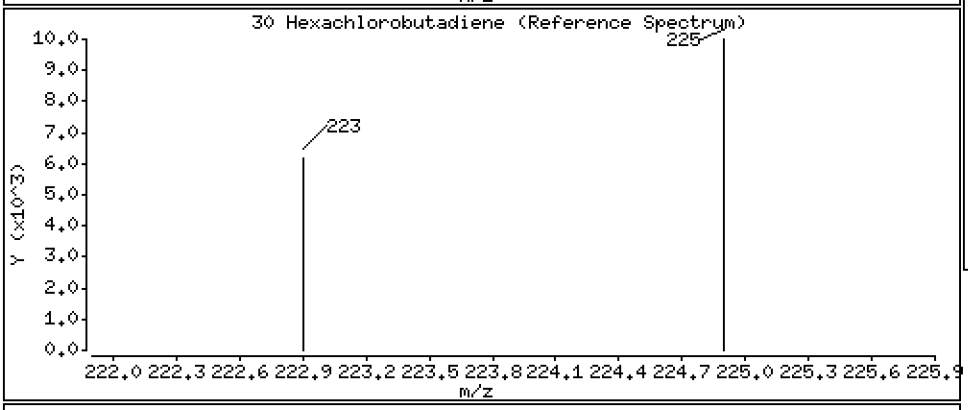
Concentration: 0.9408 ug/L

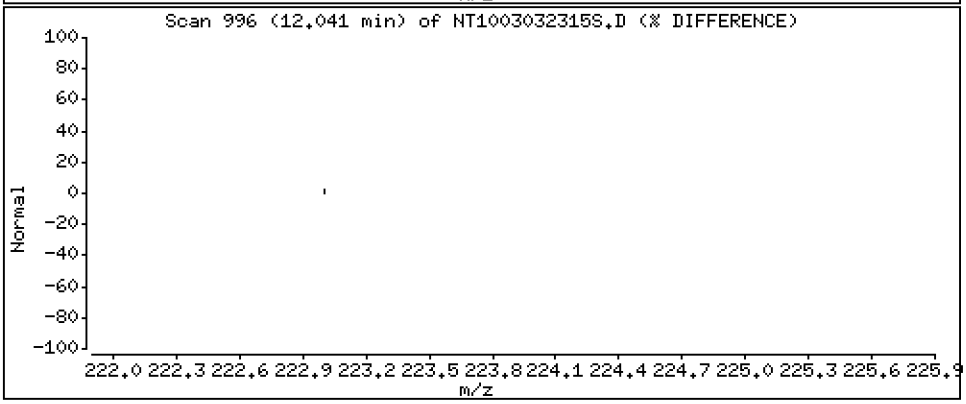












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Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

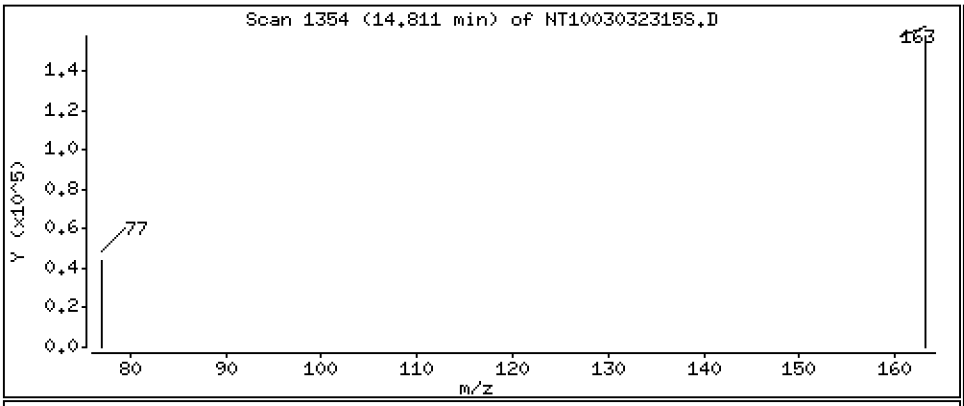
Operator: JGR

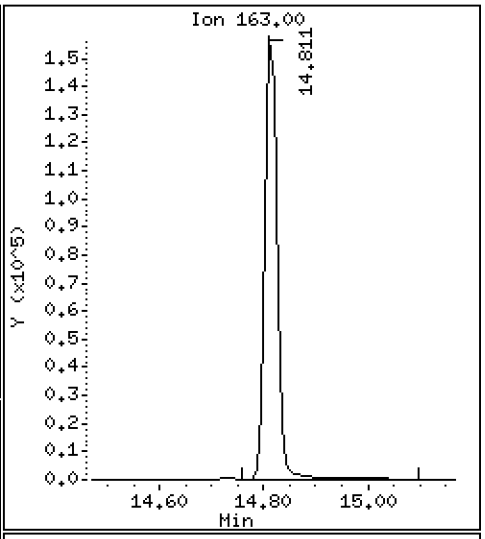
Column phase: ZB-5msi

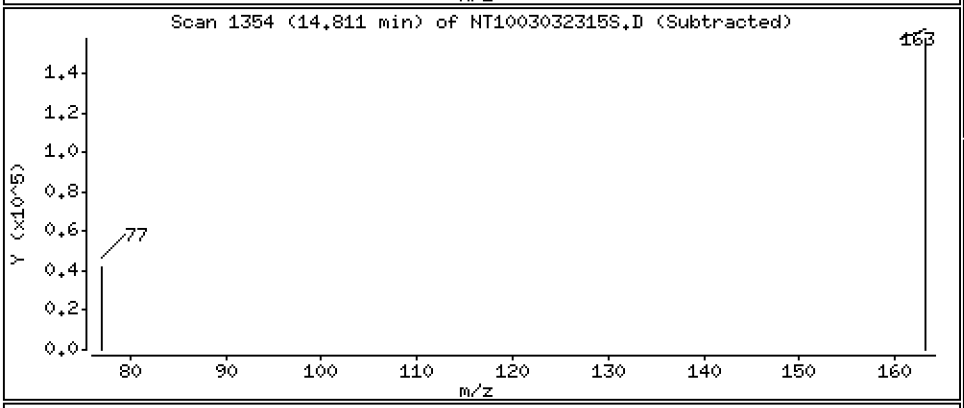
Column diameter: 0.25

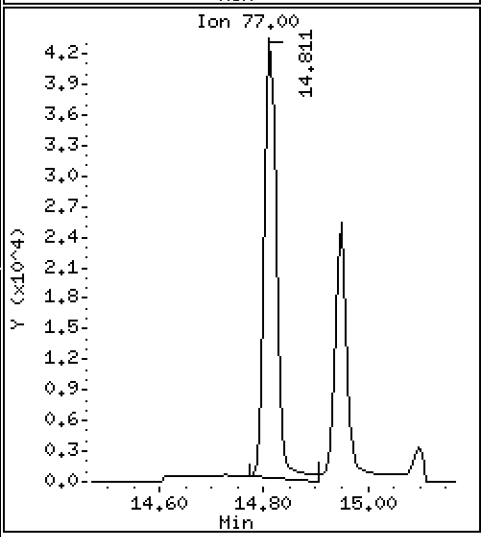
39 Dimethylphthalate

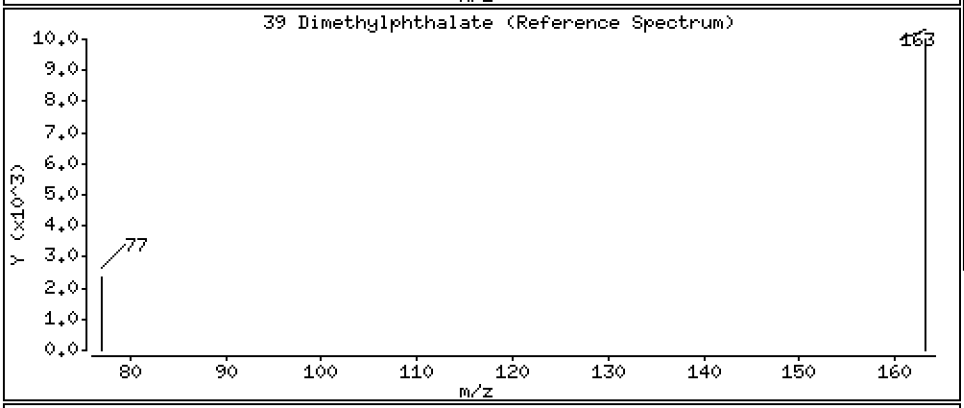
Concentration: 0.9487 ug/L

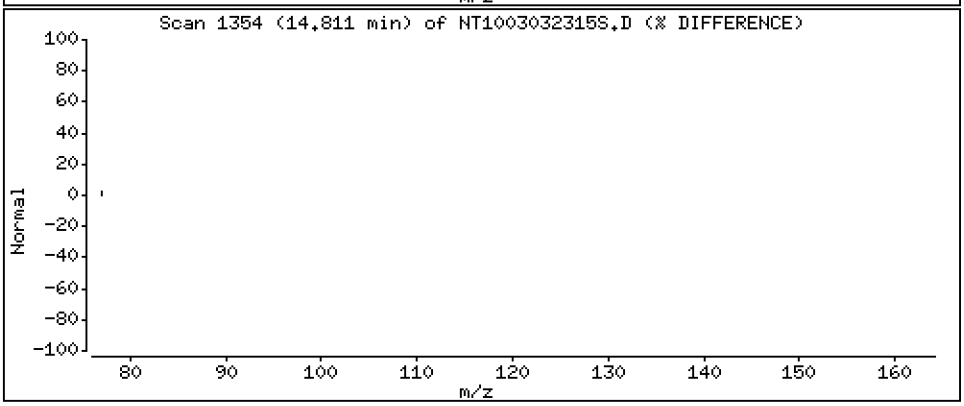












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Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

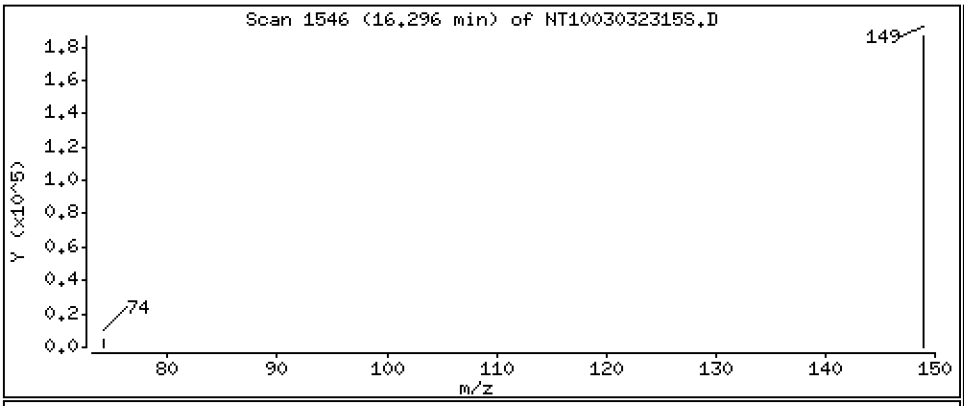
Operator: JGR

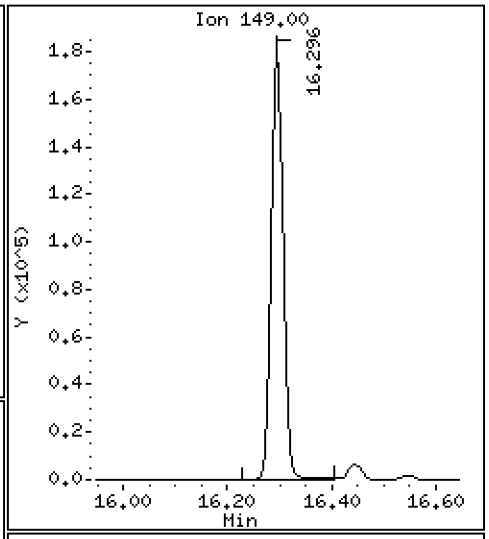
Column phase: ZB-5msi

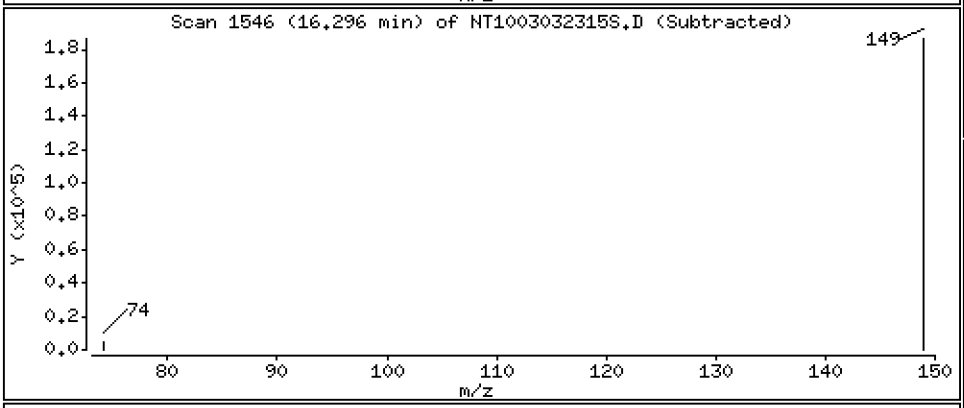
Column diameter: 0.25

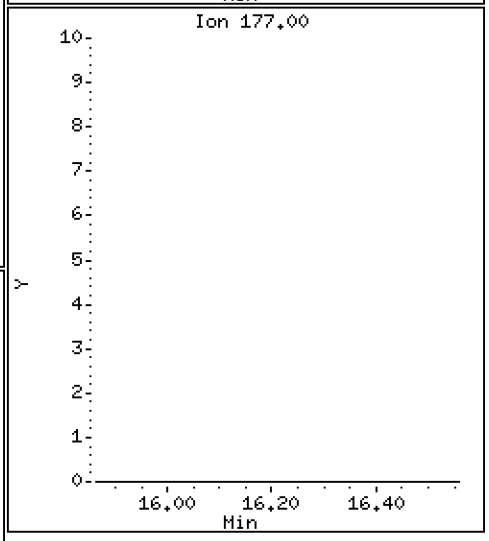
50 Diethylphthalate

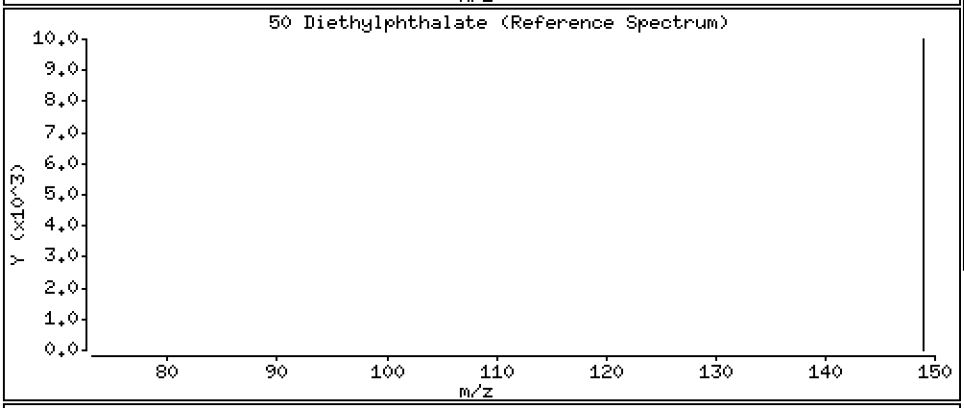
Concentration: 1.097 ug/L

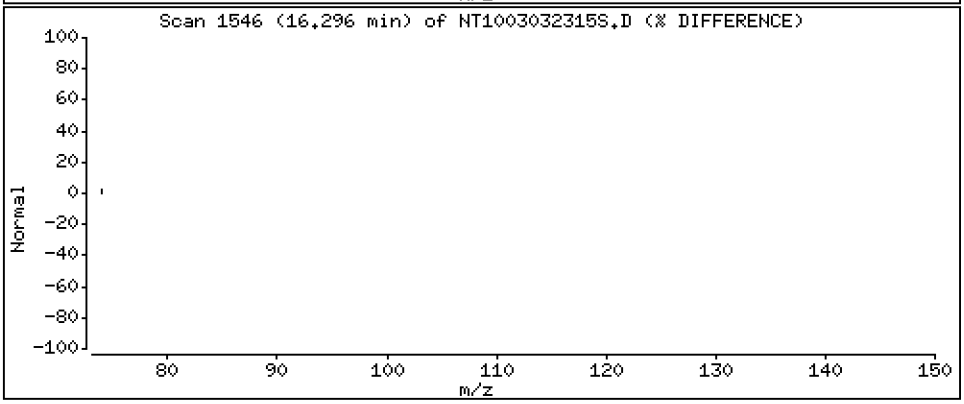












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Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

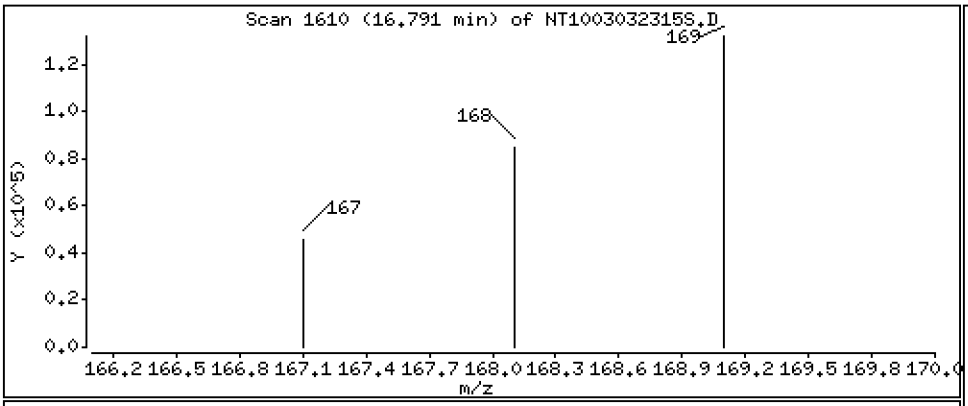
Operator: JGR

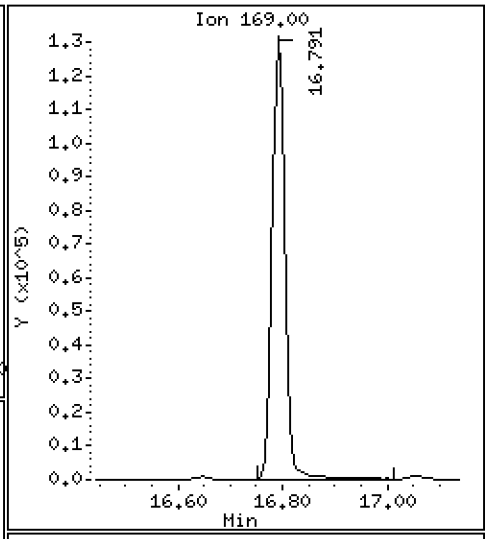
Column phase: ZB-5msi

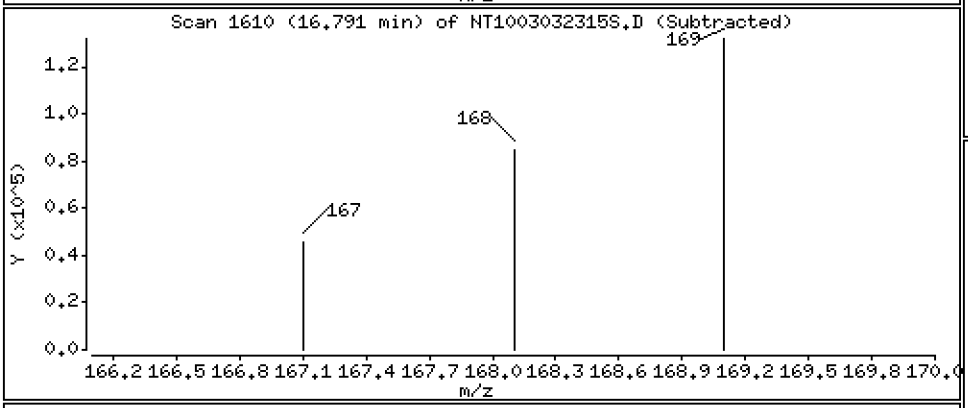
Column diameter: 0.25

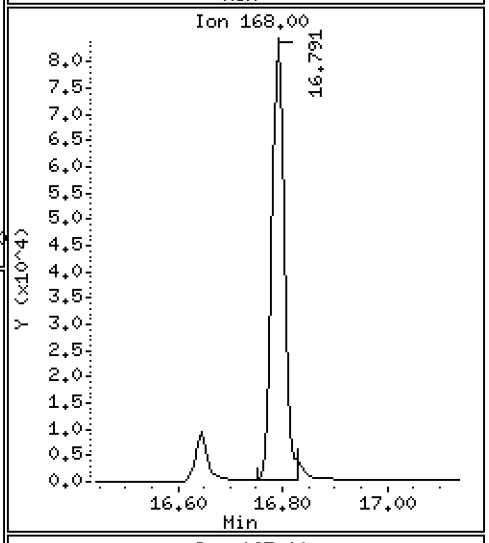
54 N-Nitrosodiphenylamine

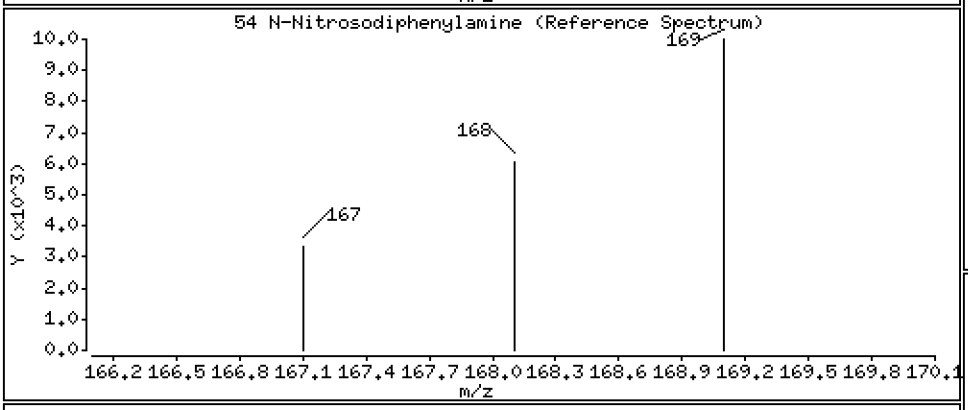
Concentration: 0.8964 ug/L

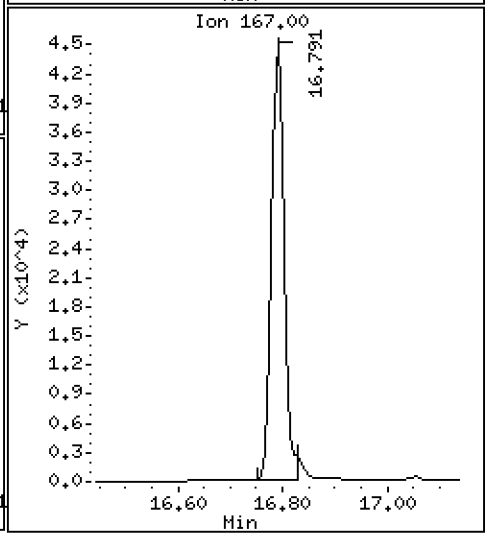


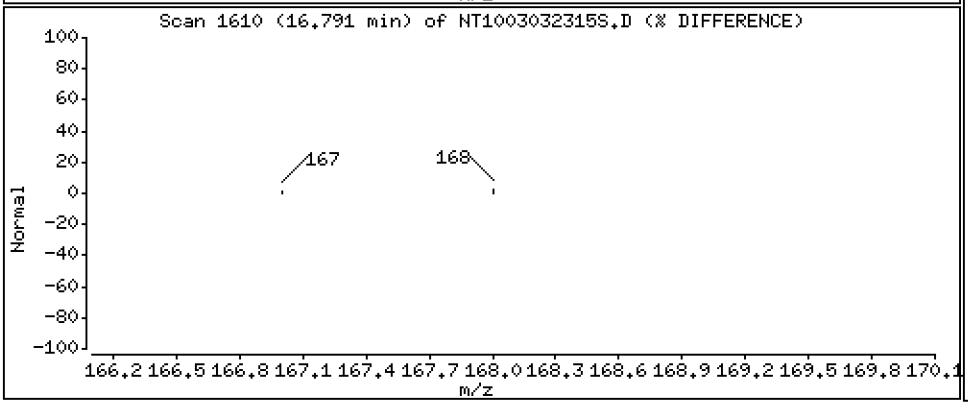












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Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

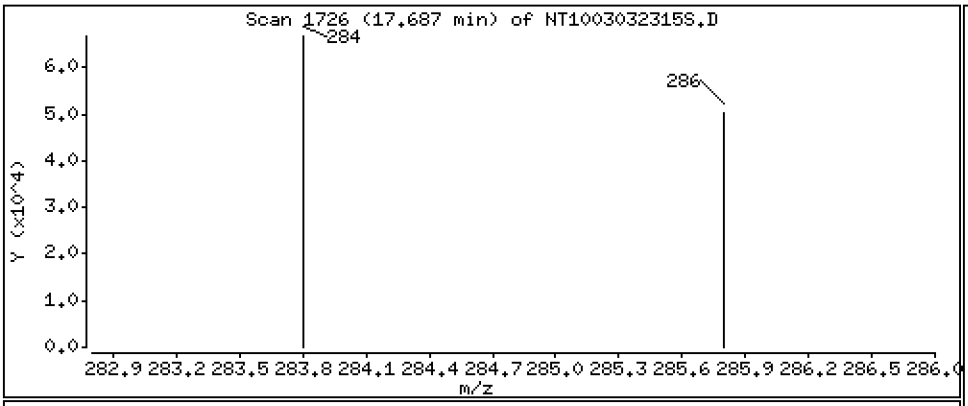
Operator: JGR

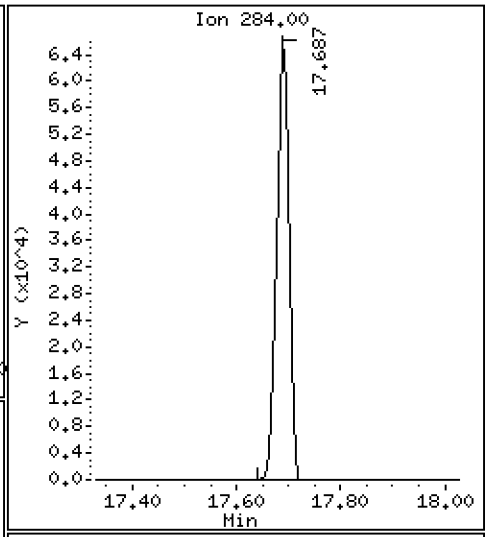
Column phase: ZB-5msi

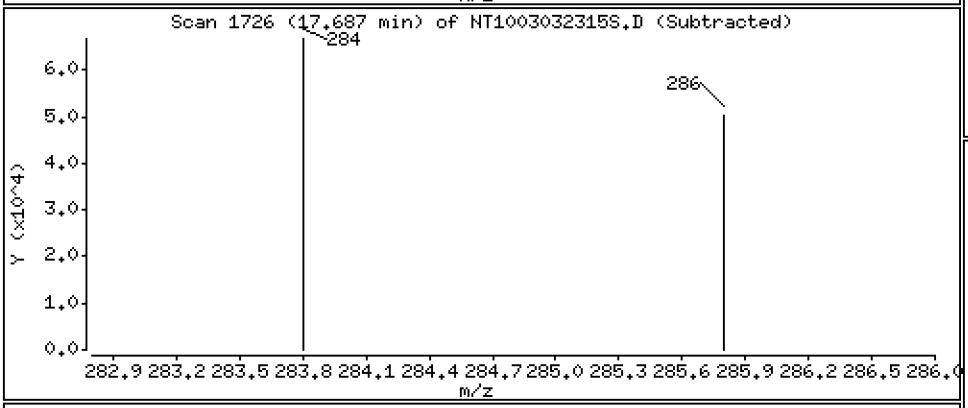
Column diameter: 0.25

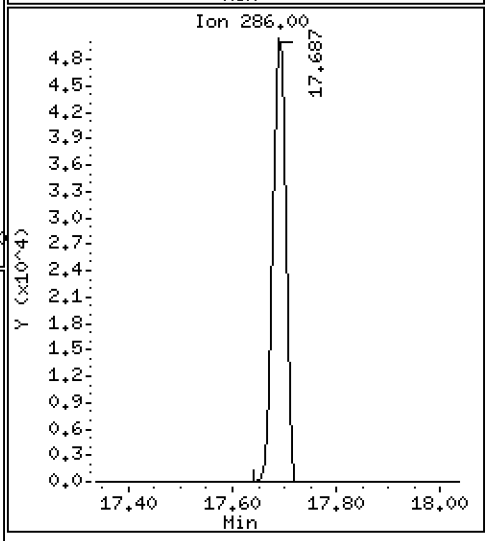
57 Hexachlorobenzene

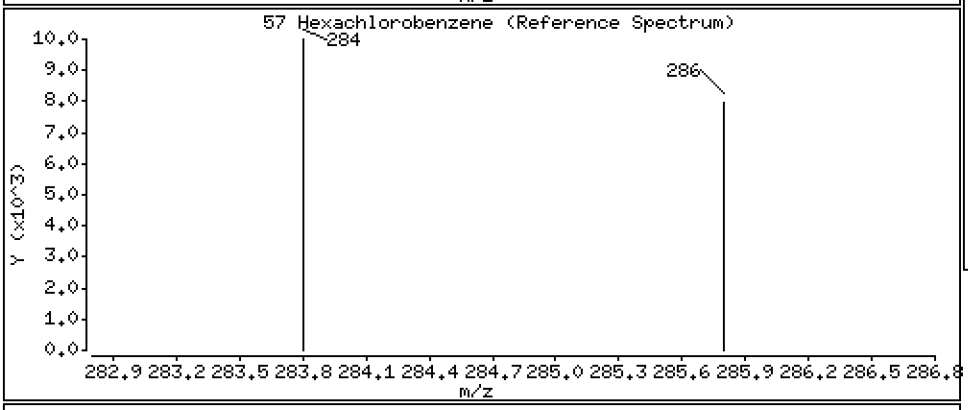
Concentration: 0.9801 ug/L

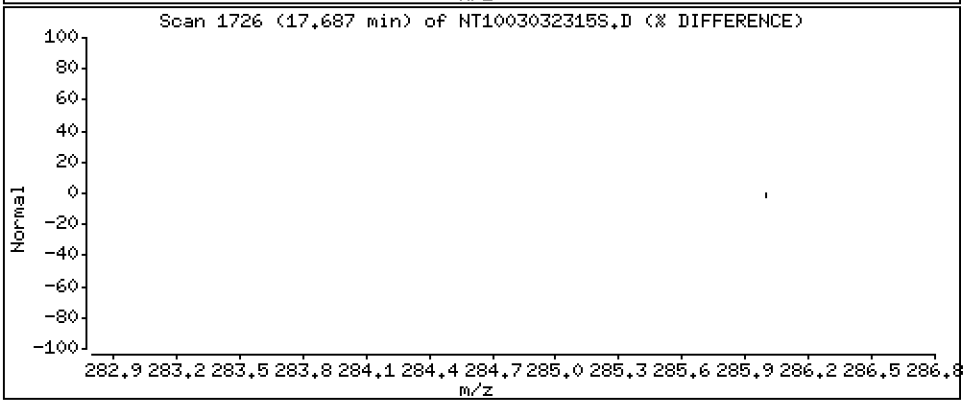












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032315S.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

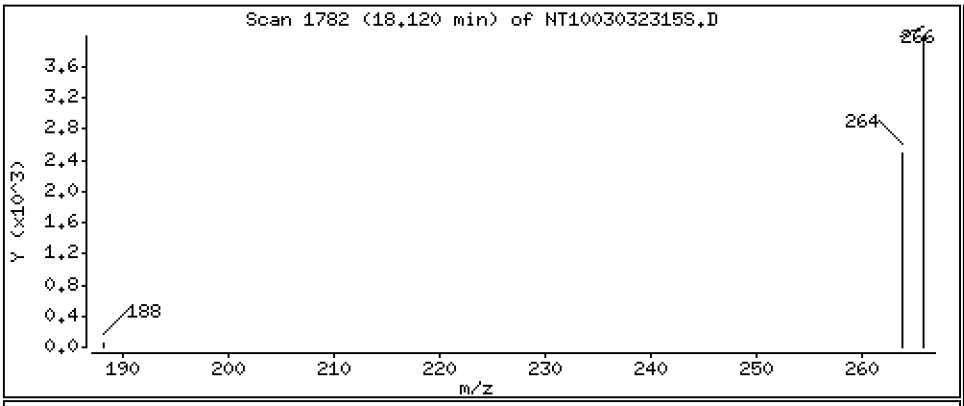
Operator: JGR

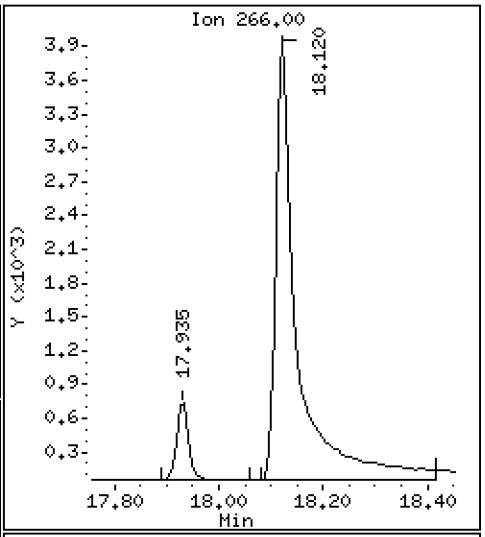
Column phase: ZB-5msi

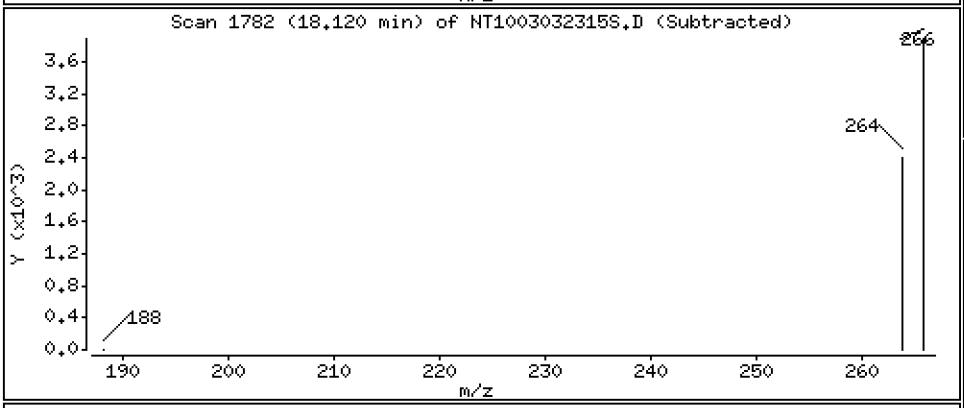
Column diameter: 0.25

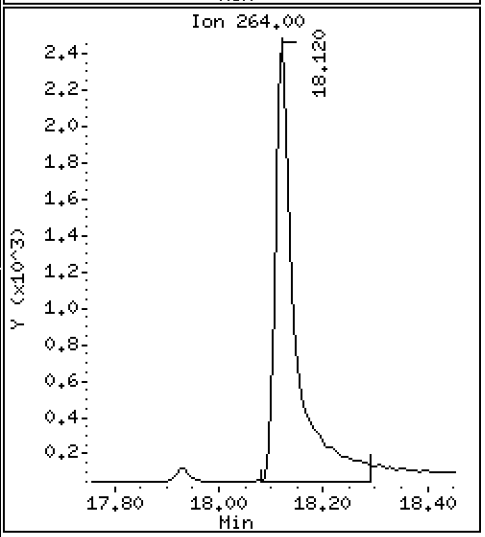
58 Pentachlorophenol

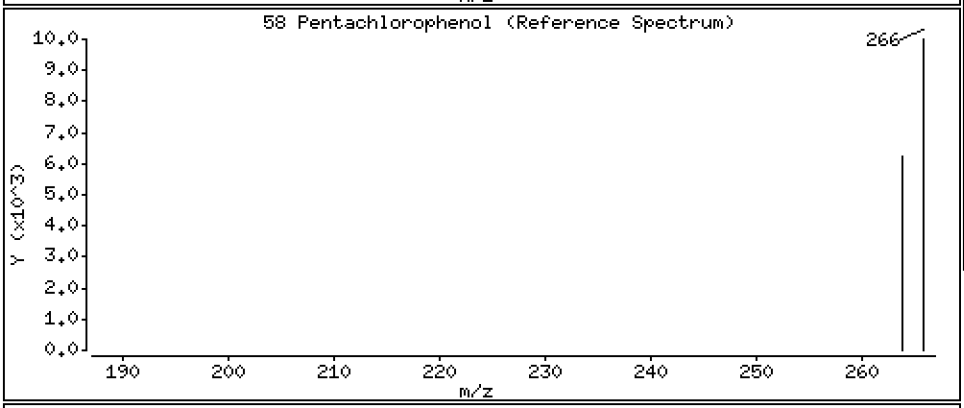
Concentration: 0.2343 ug/L

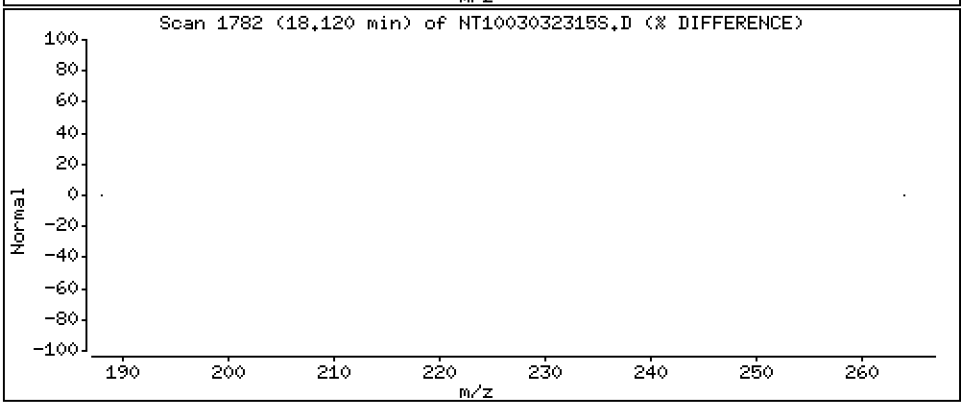












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323155.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

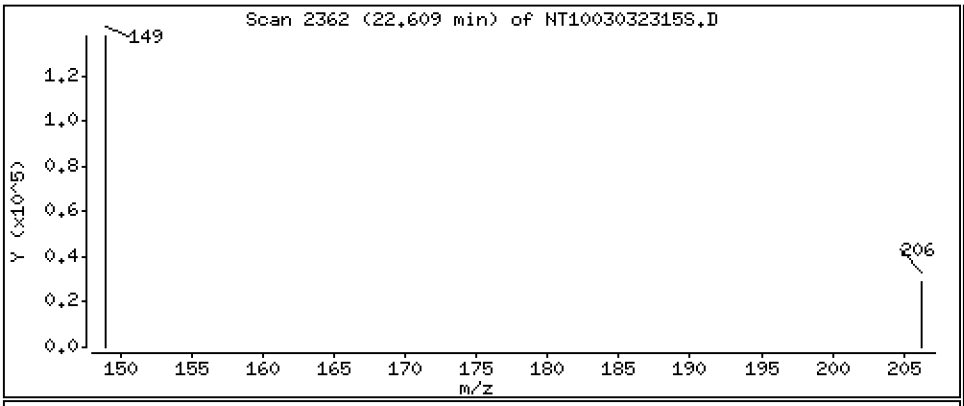
Operator: JGR

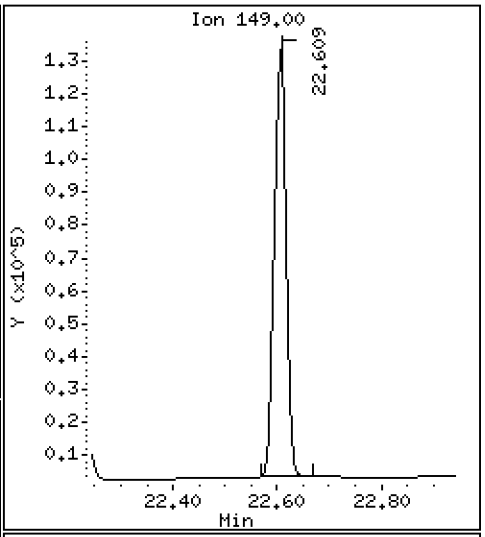
Column phase: ZB-5msi

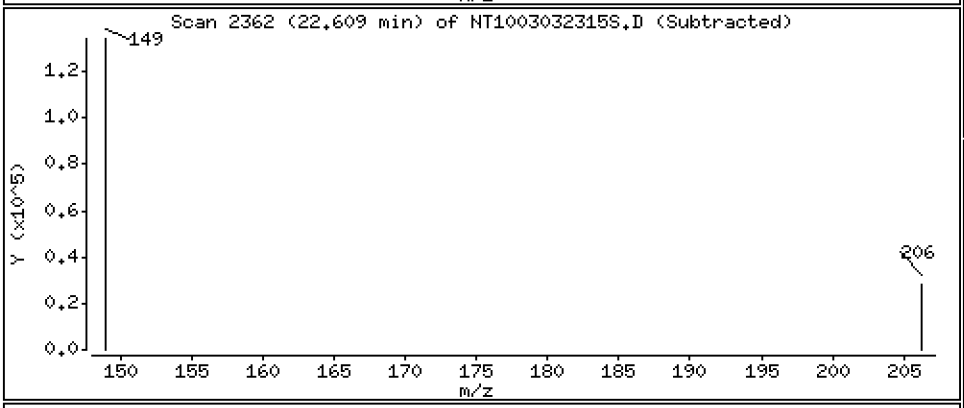
Column diameter: 0.25

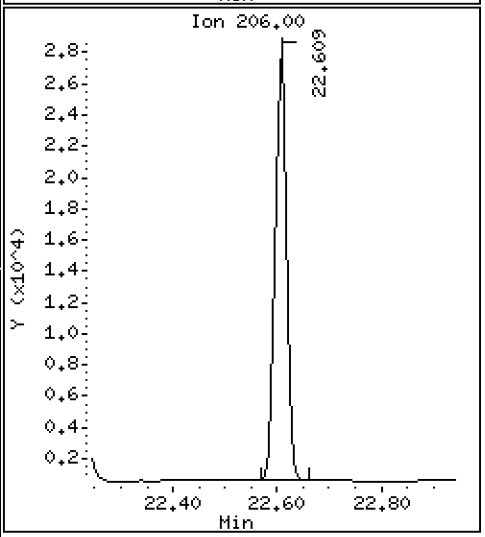
67 Butylbenzylphthalate

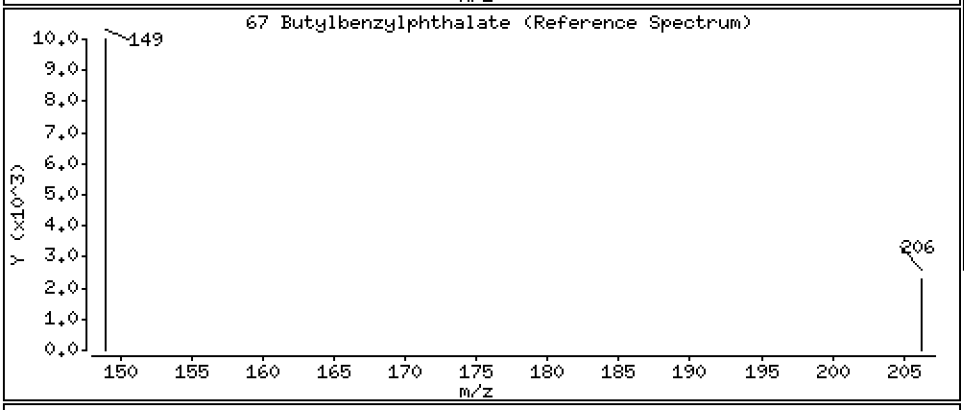
Concentration: 0.8755 ug/L

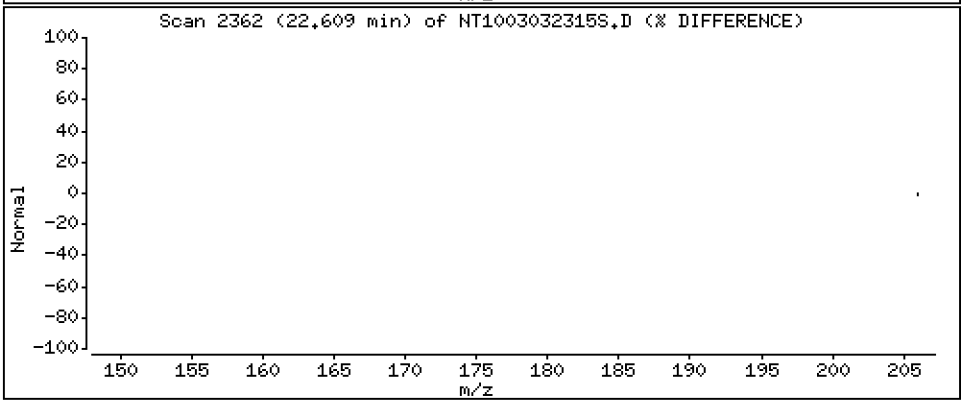












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032315S.D

Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

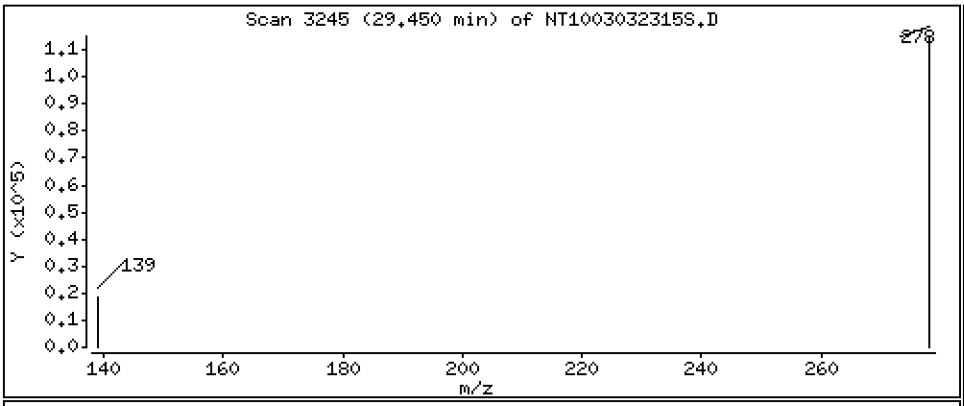
Operator: JGR

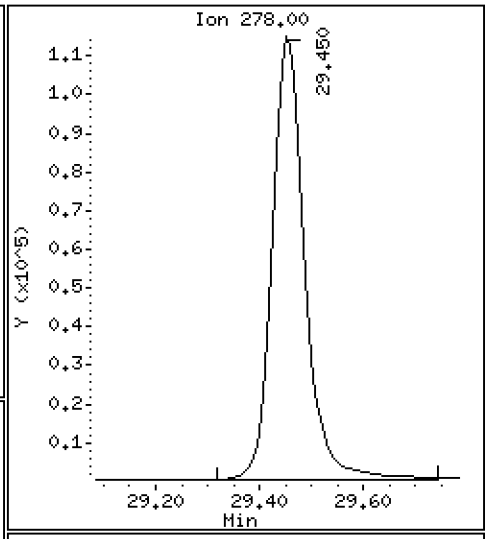
Column phase: ZB-5msi

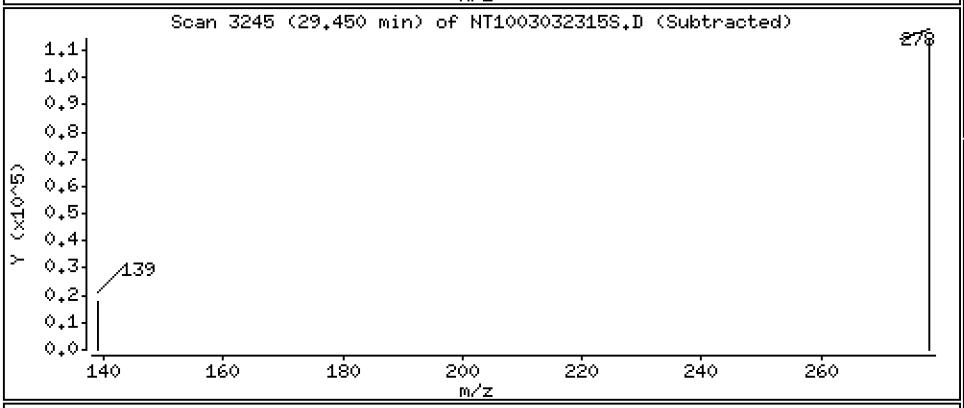
Column diameter: 0.25

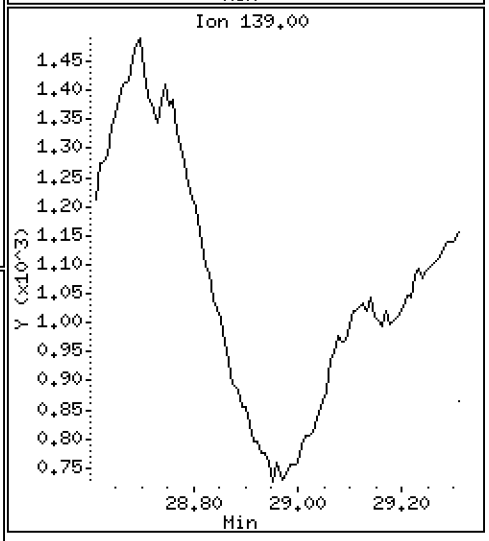
79 Dibenzo(a,h)anthracene

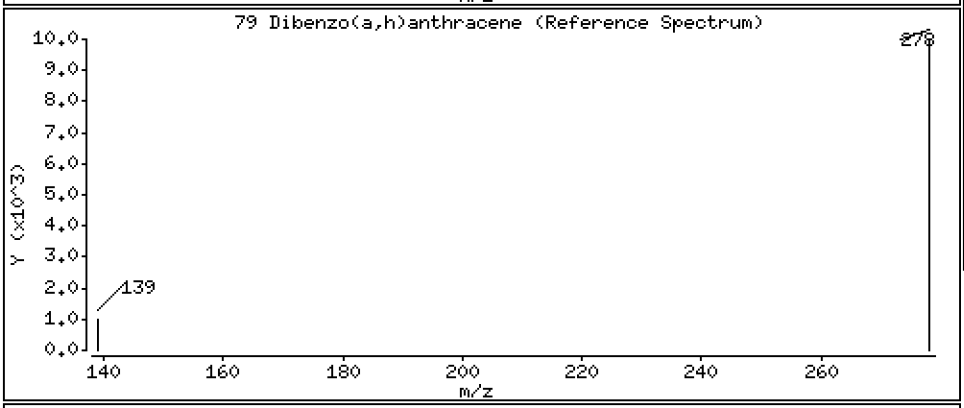
Concentration: 1.244 ug/L

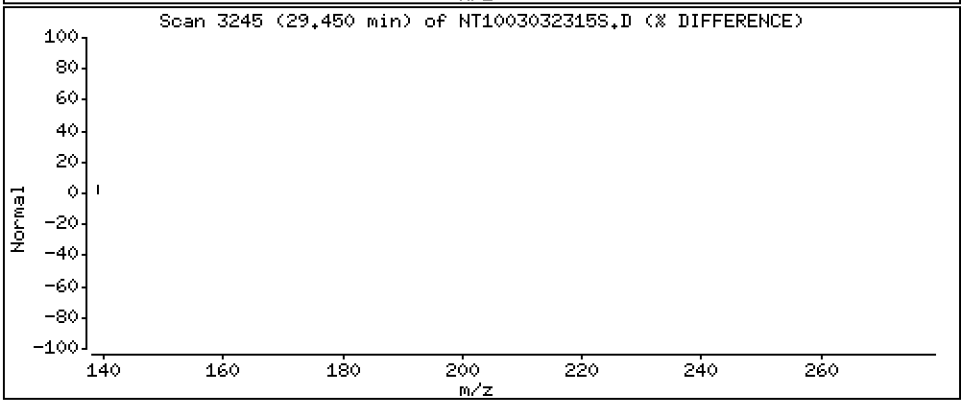












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Date : 04-MAR-2023 02:40

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

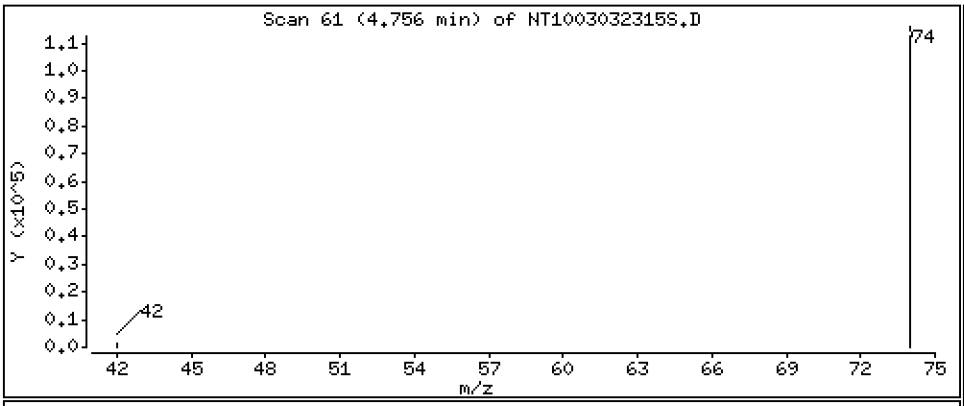
Operator: JGR

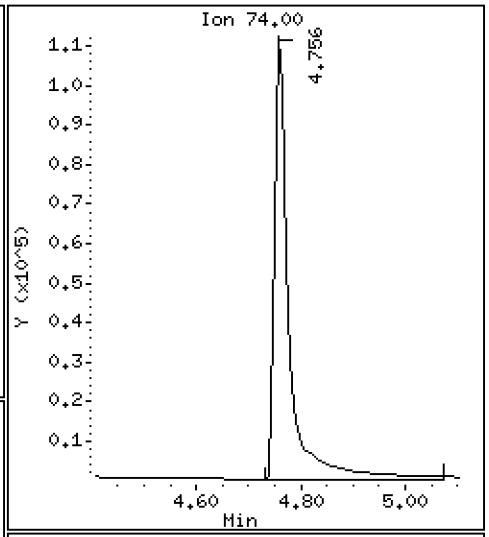
Column phase: ZB-5msi

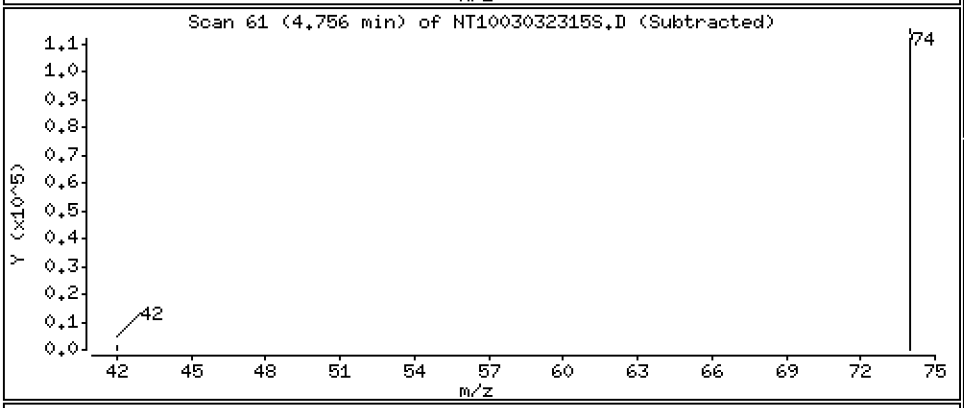
Column diameter: 0.25

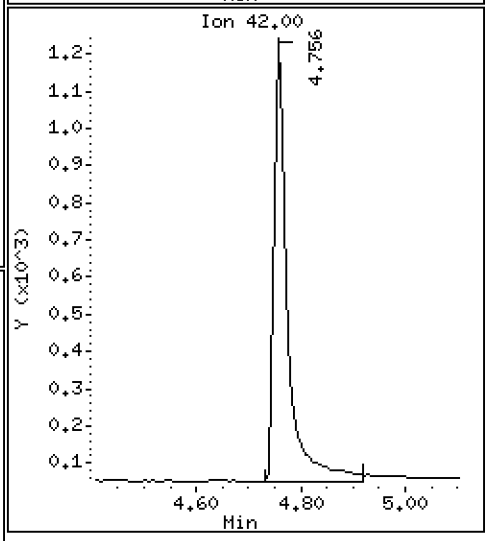
90 N-Nitrosodimethylamine

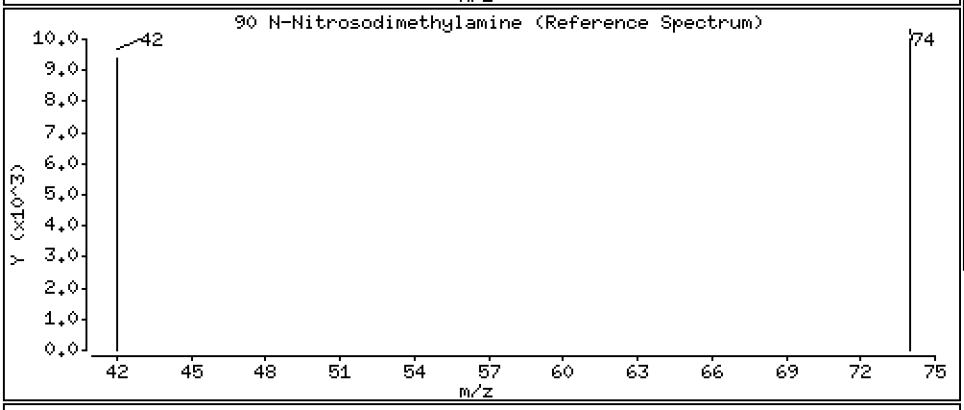
Concentration: 2.503 ug/L

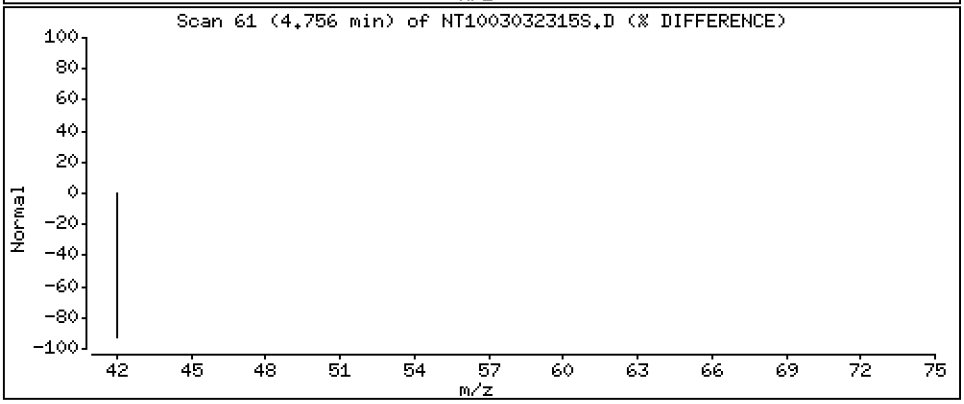












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032315S.D
Lab Smp Id: SLC0250-CCV1
Inj Date : 04-MAR-2023 02:40 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-CCVSIM
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 10:19 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.917	6.918	(0.745)	246778	1.72085	1.721(R)
3	Phenol	94	8.556	8.556	(0.922)	199686	0.93976	0.9398
7	1,3-Dichlorobenzene	146	9.174	9.174	(0.988)	176673	0.94905	0.9490
* 8	1,4-Dichlorobenzene-d4	152	9.283	9.283	(1.000)	502303	4.00000	
9	1,4-Dichlorobenzene	146	9.314	9.314	(1.003)	168299	0.92986	0.9299
11	Benzyl alcohol	79	9.515	9.516	(1.025)	113031	0.95261	0.9526
12	1,2-Dichlorobenzene	146	9.601	9.601	(1.034)	164776	0.94717	0.9472
13	2-Methylphenol	108	9.702	9.702	(1.045)	140762	1.09727	1.097
15	4-Methylphenol	108	9.997	9.989	(1.077)	145754	1.08960	1.090
16	N-Nitroso-di-n-propylamine	70	10.020	10.020	(1.079)	109841	1.16134	1.161
22	2,4-Dimethylphenol	107	11.057	11.057	(0.939)	301727	2.01923	2.019
24	Benzoic acid	105	11.159	11.150	(0.947)	40394	0.49469	0.4947(M)
26	1,2,4-Trichlorobenzene	180	11.646	11.654	(0.989)	137969	1.09447	1.094
* 27	Naphthalene-d8	136	11.777	11.778	(1.000)	1751418	4.00000	
30	Hexachlorobutadiene	225	12.040	12.048	(1.022)	84158	0.94077	0.9408
39	Dimethylphthalate	163	14.811	14.819	(0.962)	245372	0.94870	0.9487
* 42	Acenaphthene-d10	162	15.391	15.391	(1.000)	814551	4.00000	
50	Diethylphthalate	149	16.296	16.296	(1.059)	267464	1.09658	1.097
54	N-Nitrosodiphenylamine	169	16.790	16.790	(0.906)	210472	0.89645	0.8964
57	Hexachlorobenzene	284	17.687	17.679	(0.954)	107684	0.98005	0.9801

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.120	18.105	(0.978)	11288	0.23432	0.2343
*	59 Phenanthrene-d10	188	18.530	18.522	(1.000)	1450747	4.00000	
$	66 Terphenyl-d14	244	21.702	21.695	(0.918)	159352	1.47605	1.476(R)
	67 Butylbenzylphthalate	149	22.608	22.593	(0.957)	196738	0.87552	0.8755
*	69 Chrysene-d12	240	23.630	23.615	(1.000)	1335017	4.00000	
*	77 Perylene-d12	264	26.456	26.449	(1.000)	1691506	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.450	29.435	(1.113)	496234	1.24444	1.244
	90 N-Nitrosodimethylamine	74	4.755	4.755	(0.512)	212510	2.50300	2.503

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032315S.D
Lab Smp Id: SLC0250-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 03-MAR-2023
Calibration Time: 19:05
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	602309	301155	1204618	502303	-16.60
27 Naphthalene-d8	2101699	1050850	4203398	1751418	-16.67
42 Acenaphthene-d10	1002910	501455	2005820	814551	-18.78
59 Phenanthrene-d10	1732061	866031	3464122	1450747	-16.24
69 Chrysene-d12	1410089	705045	2820178	1335017	-5.32
77 Perylene-d12	1732981	866491	3465962	1691506	-2.39

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	-0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	-0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	-0.00
59 Phenanthrene-d10	18.52	18.02	19.02	18.53	0.04
69 Chrysene-d12	23.62	23.12	24.12	23.63	0.06
77 Perylene-d12	26.45	25.95	26.95	26.46	0.03

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

REVIEW SUMMARY FOR FILE - NT1003032315S.D

Lab ID: SLC0250-CCV1
nt10.i, 20230303.b\SIM.b\SIMABN2.m,   04-MAR-2023 02:40

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.113	1.000	0.1132	Dibenzo(a,h)anthracene

RRT check based on Ccal File: SIM.b/NT1003032303S.D

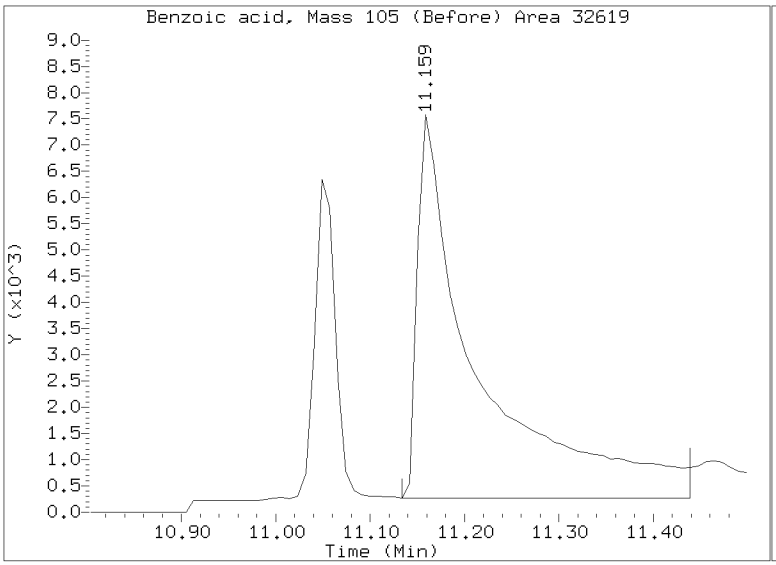
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

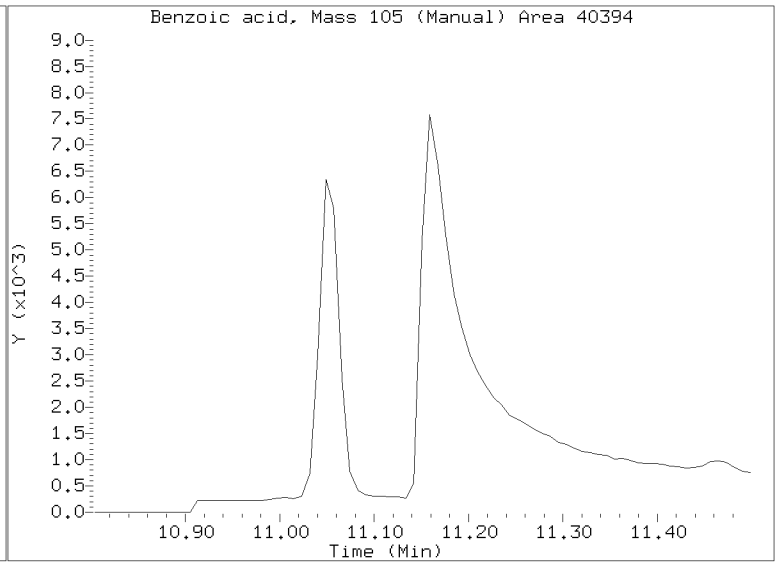
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230303.b/SIM.b/NT1003032315S.D
Injection Date: 04-MAR-2023 02:40
Lab ID:SLC0250-CCV1 Client ID:
Report Date: 03/17/2023 10:20





Analytical Resources, LLC
Analytical Chemists and Consultants

LOW-CONCENTRATION CONTINUING CALIBRATION CHECK

EPA 8270E-SIM

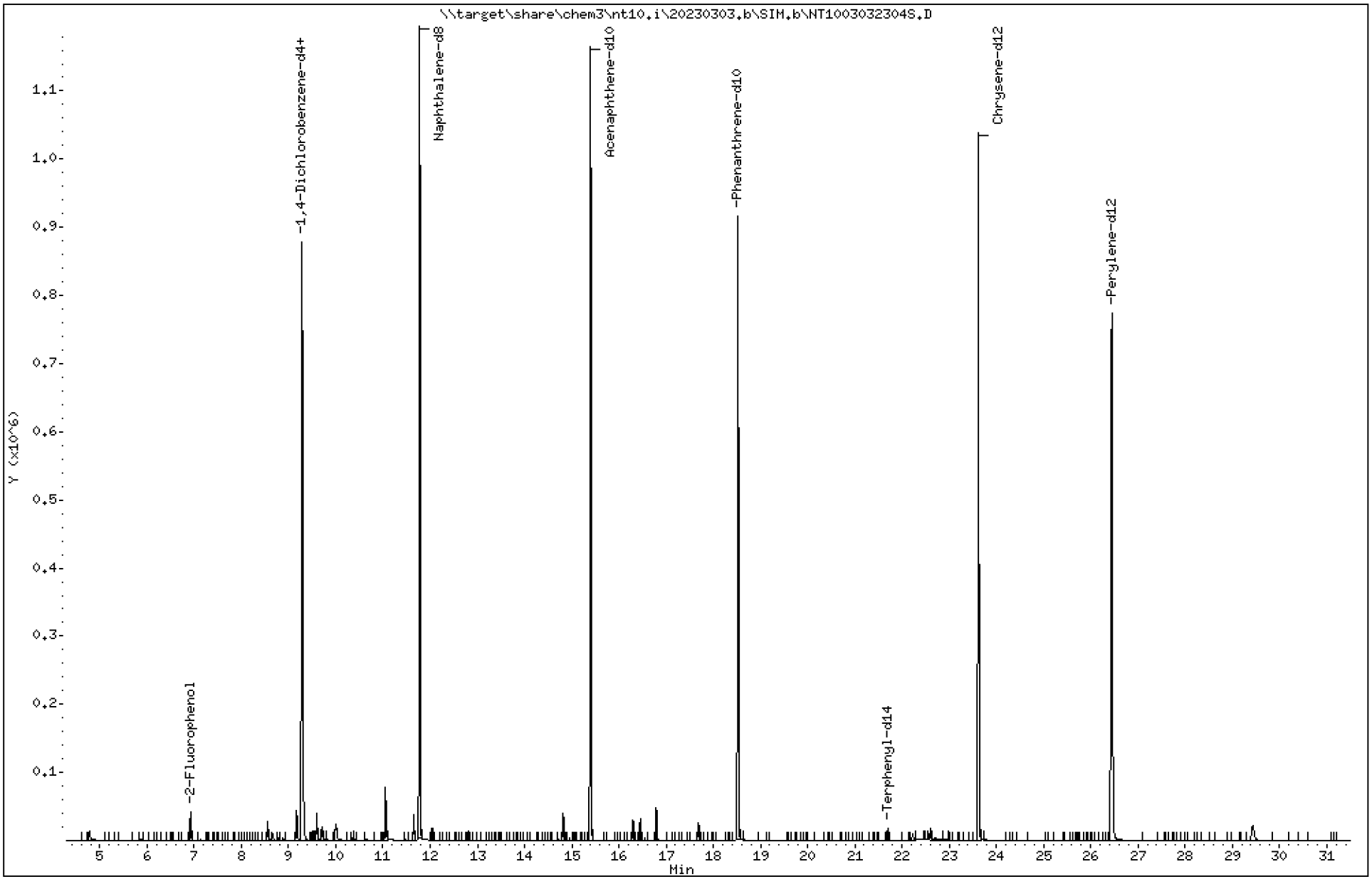
Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00032
Lab File ID:	NT1003032304S.D	Calibration Date:	03/01/2023
Sequence:	SLC0250	Injection Date:	03/03/23
Lab Sample ID:	SLC0250-LCV1	Injection Time:	19:43
Sequence Name:	Low Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.20000	0.2	1.4413080	1.3586310		-5.7	
1,2-Dichlorobenzene	A	0.20000	0.2	1.3853460	1.3265880		-4.2	
Benzyl Alcohol	A	0.20000	0.1	0.7492523	0.6899714		-26.2	
Benzoic acid	A	0.80000	0.02	0.1431163	0.0037473		-98.0	
2,4-Dimethylphenol	A	0.40000	0.3	0.2957717	0.2910927		-14.3	
1,2,4-Trichlorobenzene	A	0.20000	0.2	0.2879030	0.3072802		6.7	
N-Nitrosodiphenylamine	A	0.20000	0.2	0.6473471	0.5216235		-19.4	
Pentachlorophenol	A	0.40000	0.02	0.0950913	0.0065693		-95.0	
2-Fluorophenol	A	0.30000	0.325	1.1419780	1.2380850		8.4	
p-Terphenyl-d14	A	0.20000	0.240	0.3234672	0.3880984		20.0	

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT10030323045.D
Date : 03-MAR-2023 19:43
Client ID:
Sample Info: SEQ-LCV200
Volume Injected (uL): 1.0
Column phase: ZB-5msi

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



Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

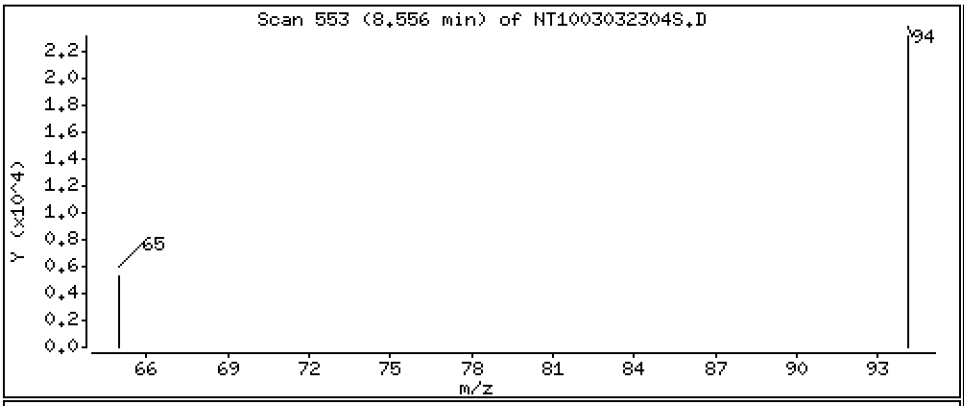
Operator: JGR

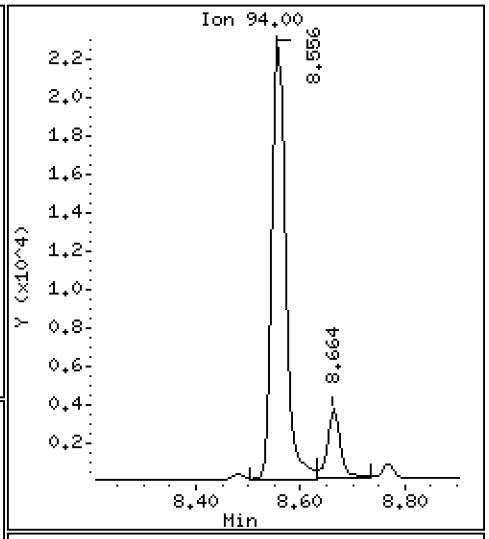
Column phase: ZB-5msi

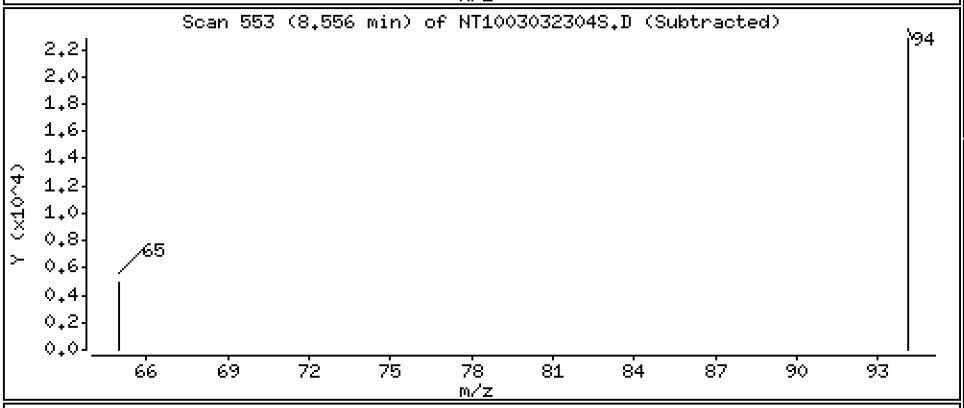
Column diameter: 0.25

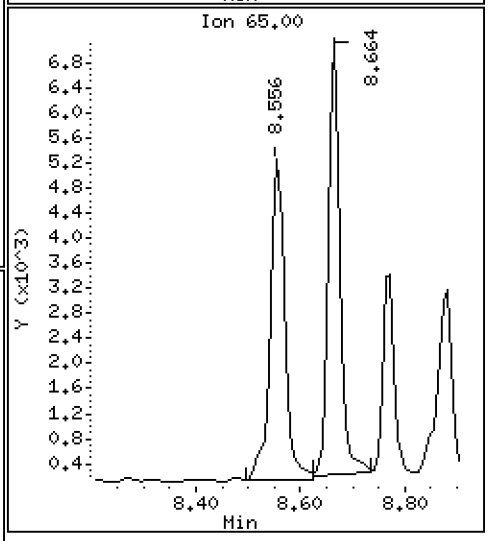
3 Phenol

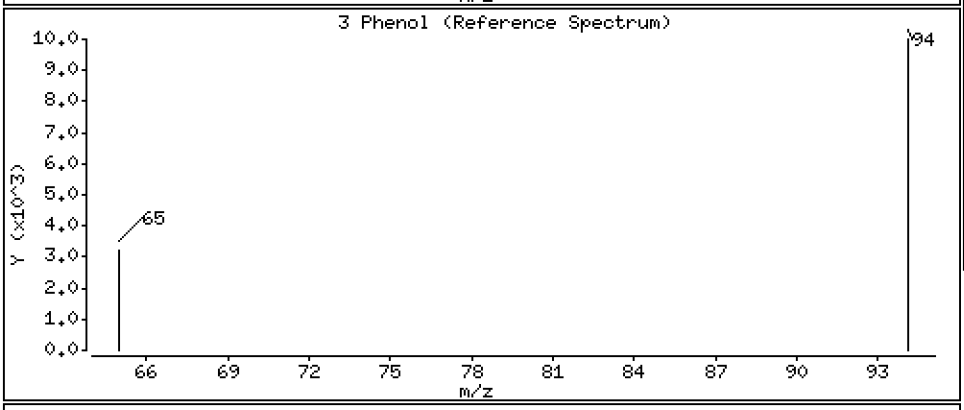
Concentration: 0.1767 ug/L

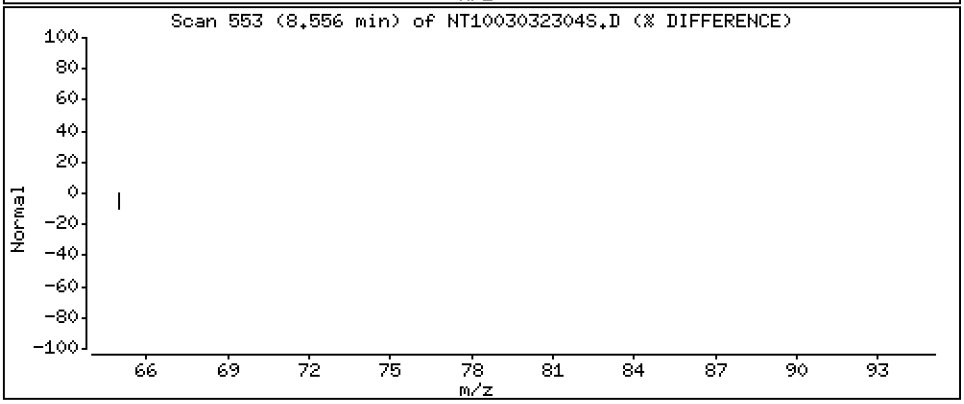












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

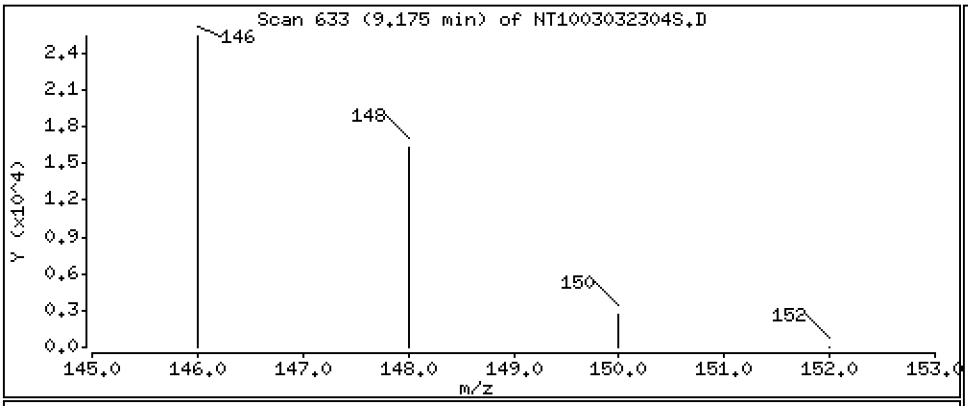
Operator: JGR

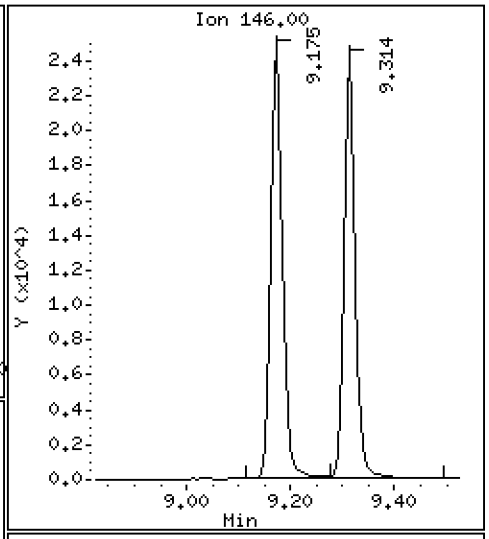
Column phase: ZB-5msi

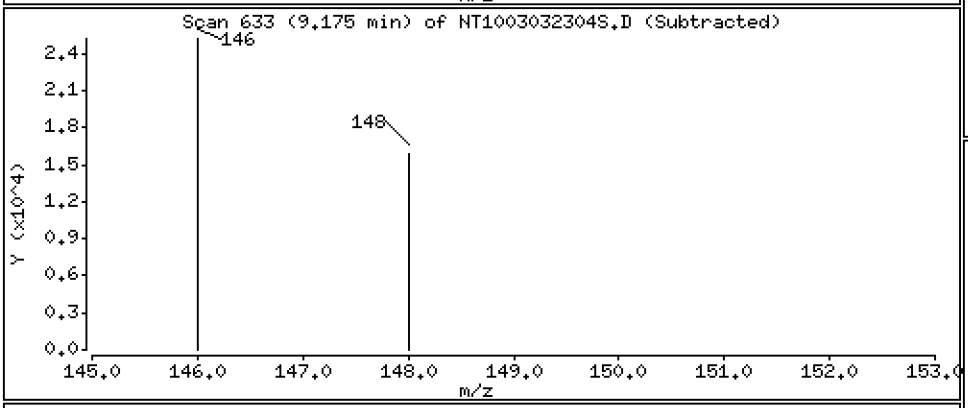
Column diameter: 0.25

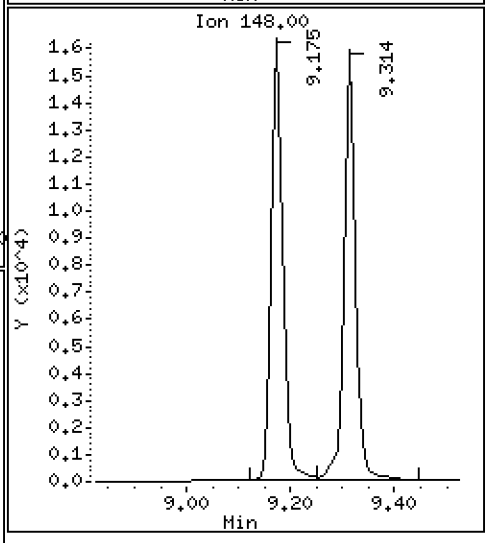
7 1,3-Dichlorobenzene

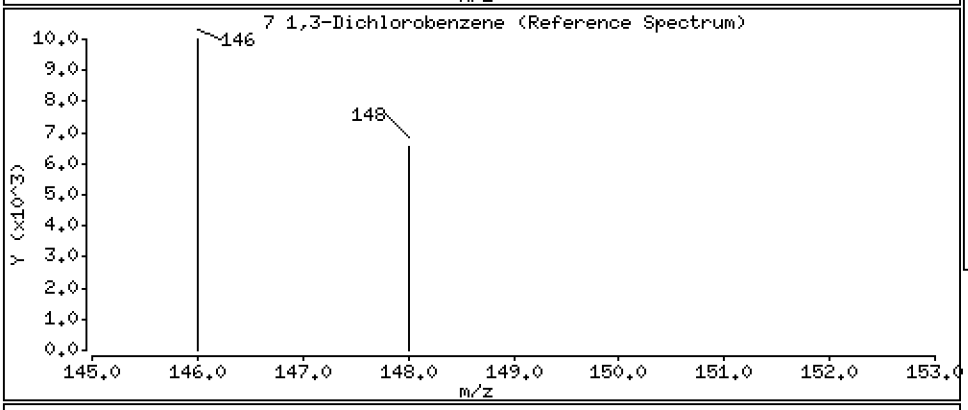
Concentration: 0.1927 ug/L

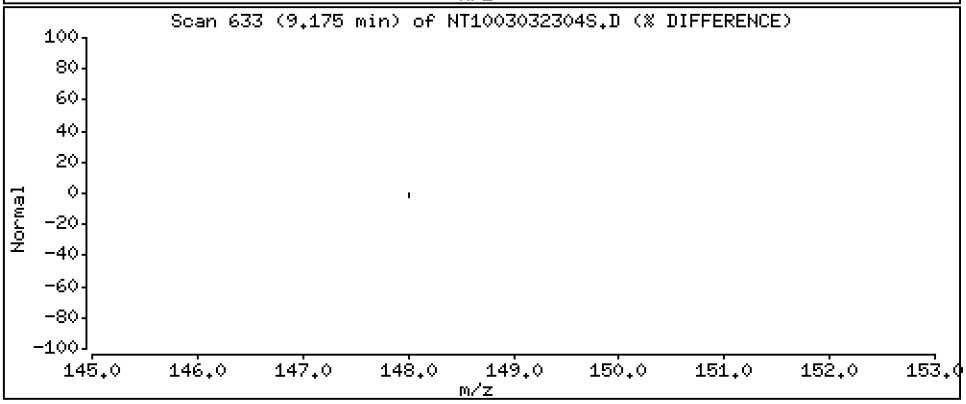












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

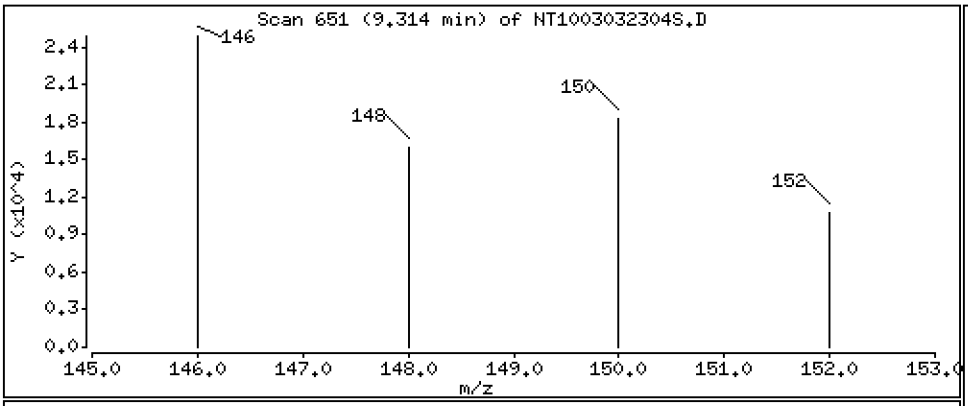
Operator: JGR

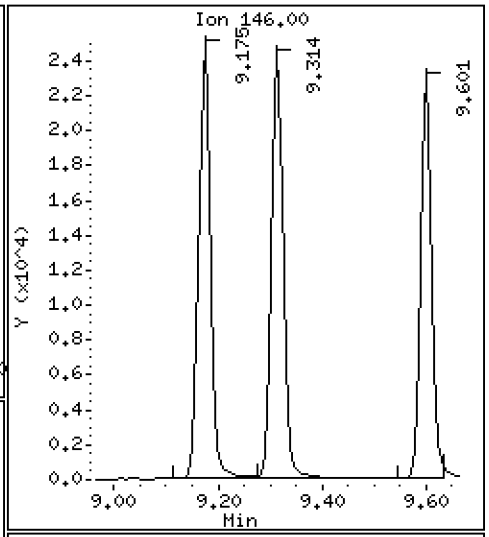
Column phase: ZB-5msi

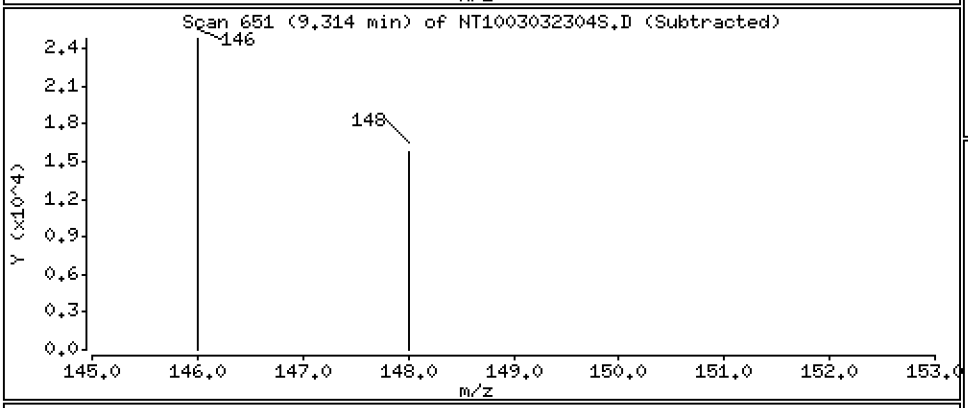
Column diameter: 0.25

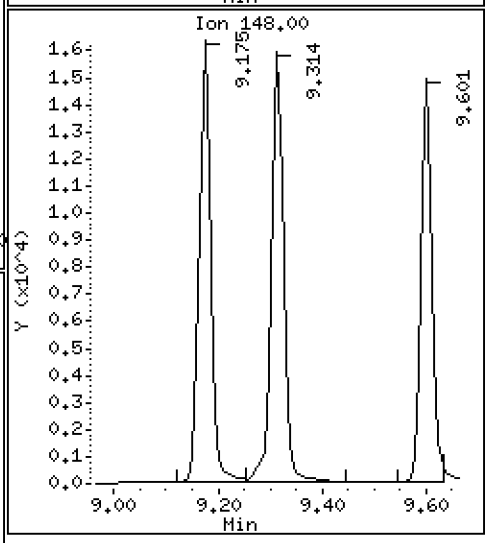
9 1,4-Dichlorobenzene

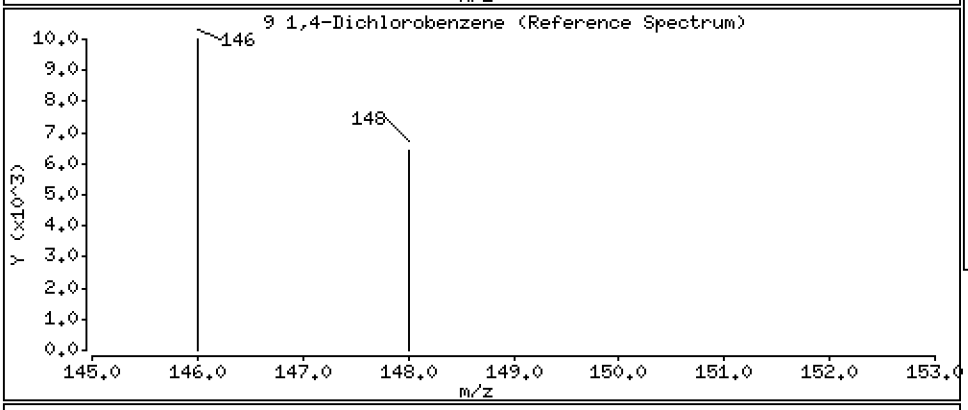
Concentration: 0.1885 ug/L

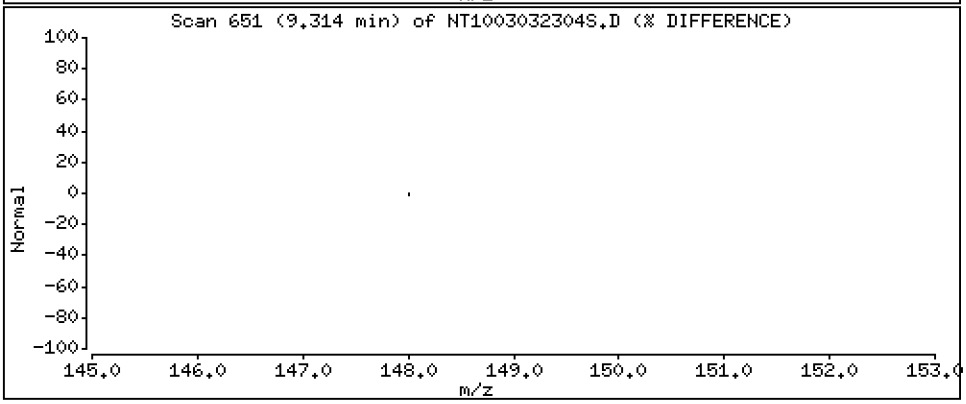












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

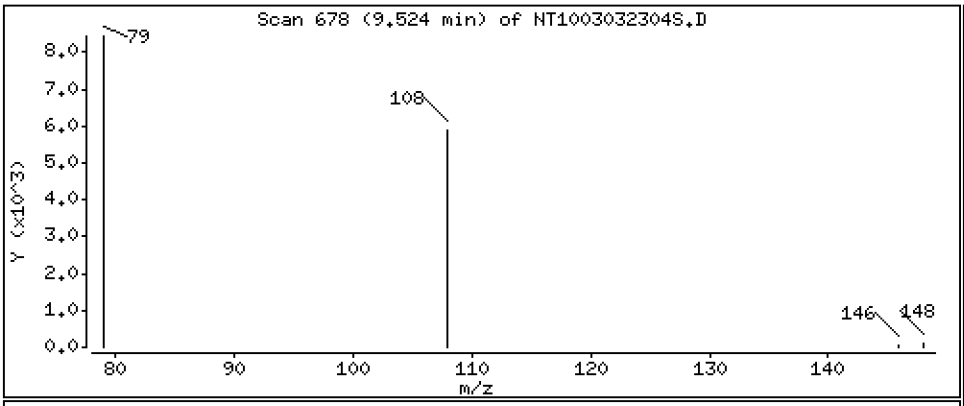
Operator: JGR

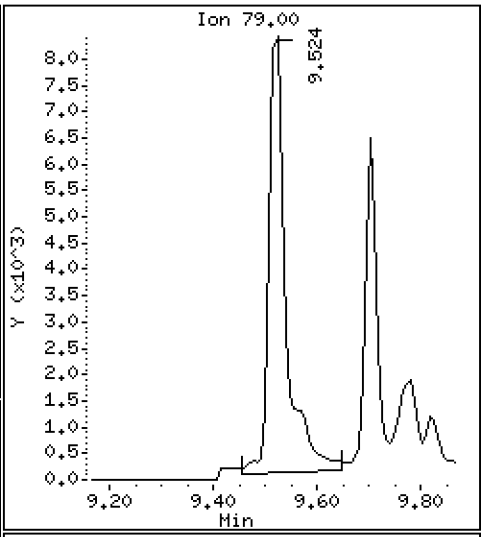
Column phase: ZB-5msi

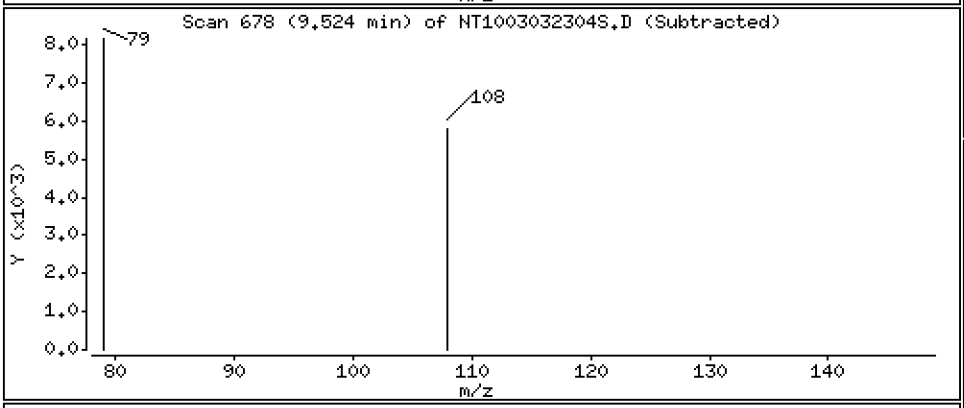
Column diameter: 0.25

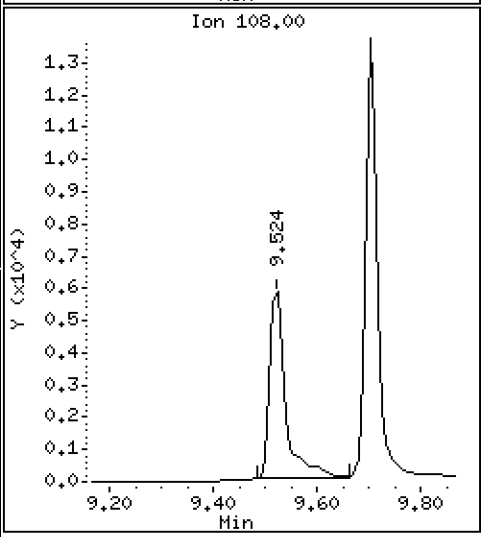
11 Benzyl alcohol

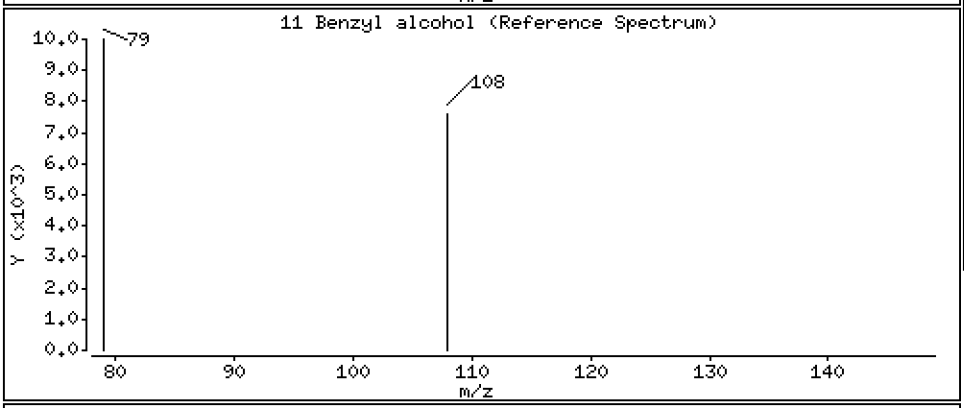
Concentration: 0.1476 ug/L

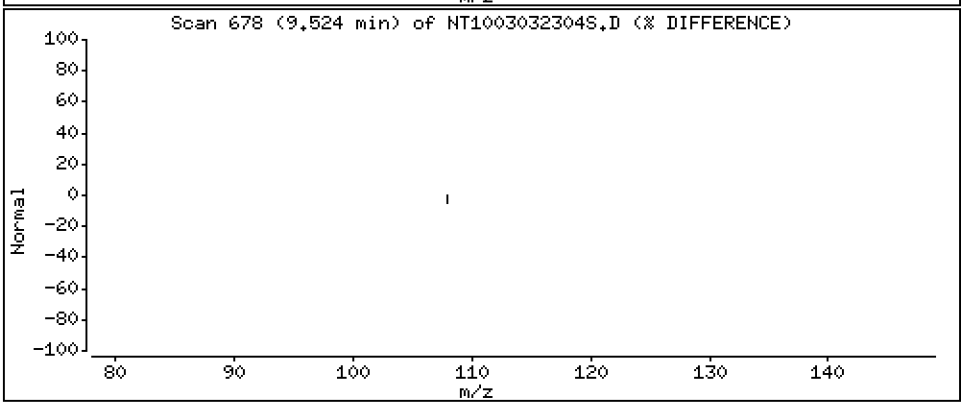












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

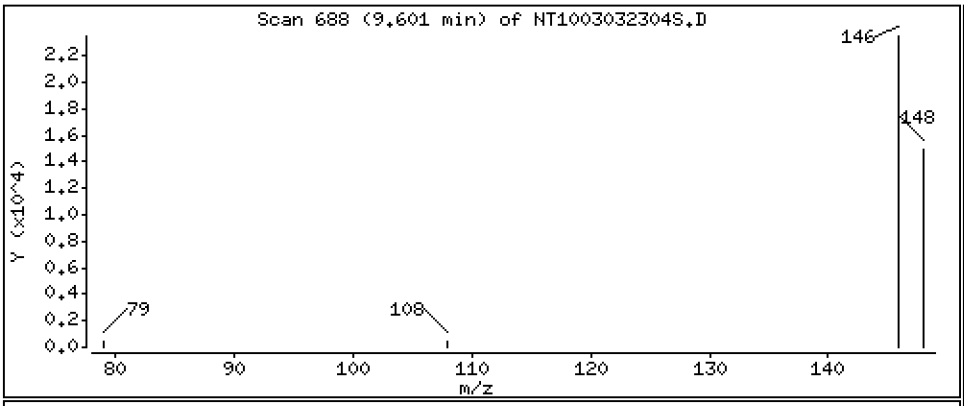
Operator: JGR

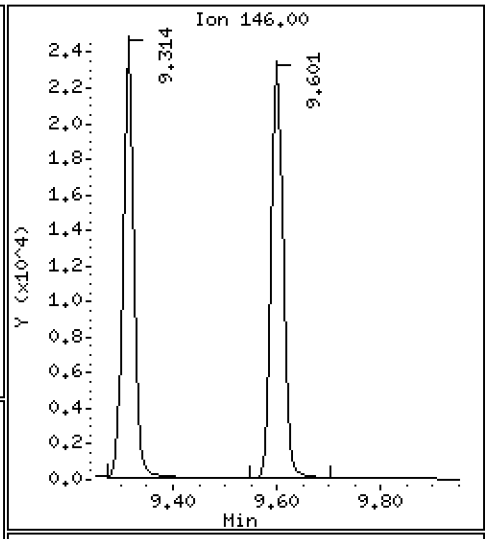
Column phase: ZB-5msi

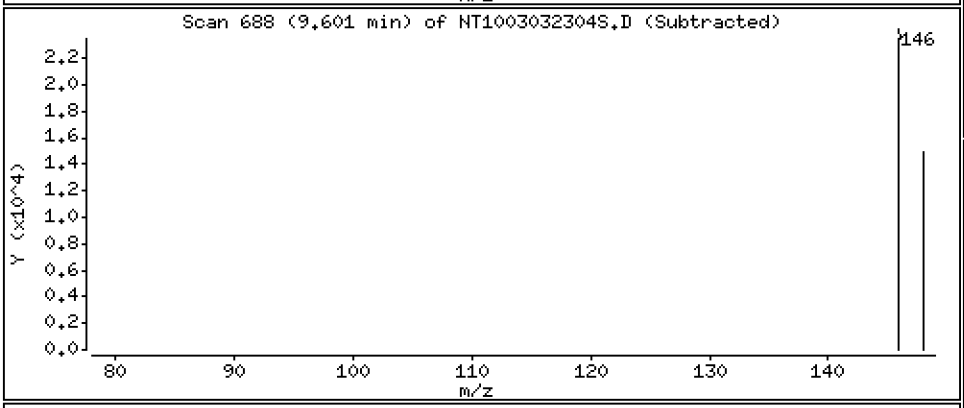
Column diameter: 0.25

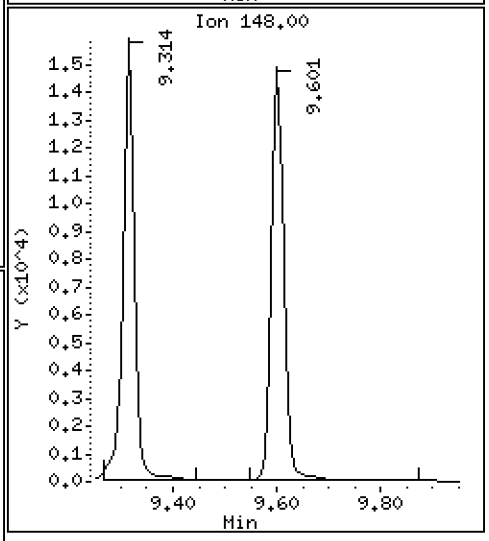
12 1,2-Dichlorobenzene

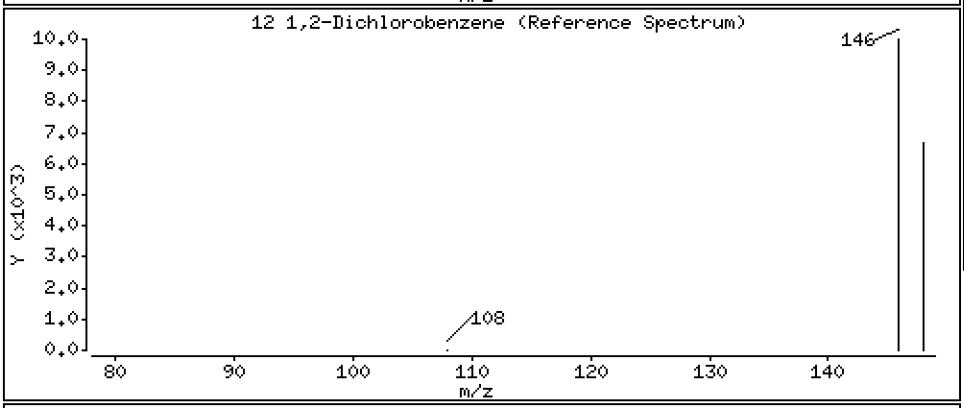
Concentration: 0.1915 ug/L

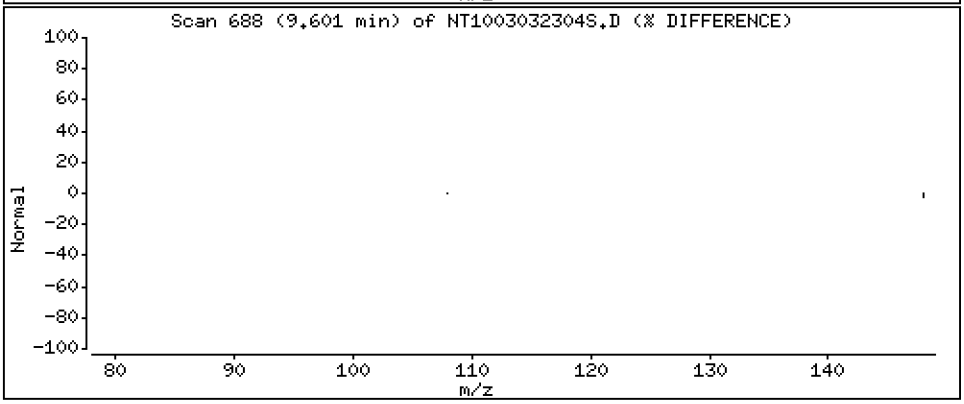












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

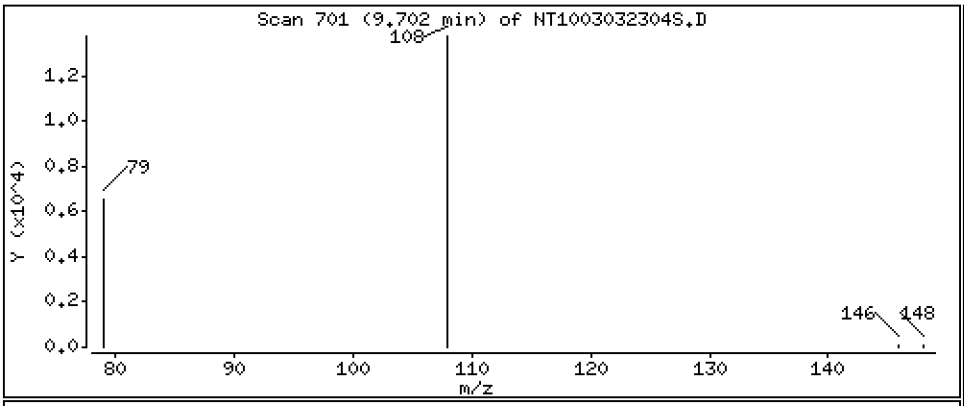
Operator: JGR

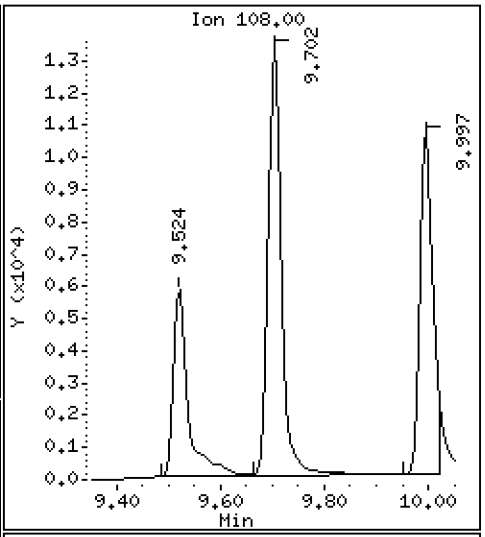
Column phase: ZB-5msi

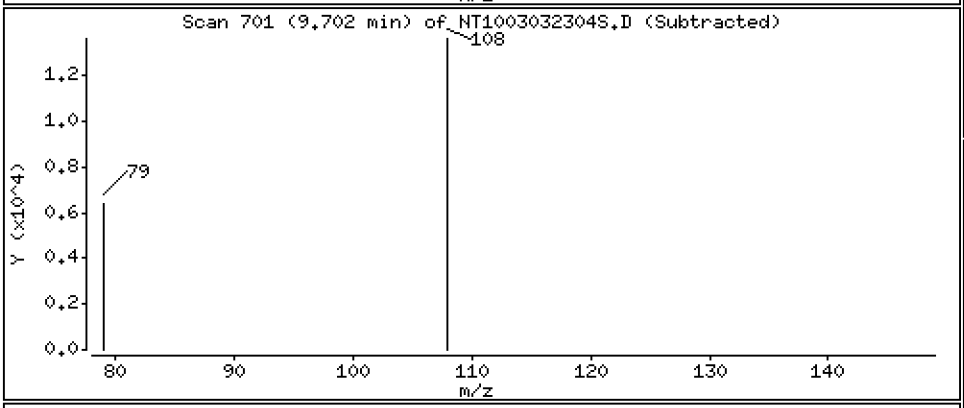
Column diameter: 0.25

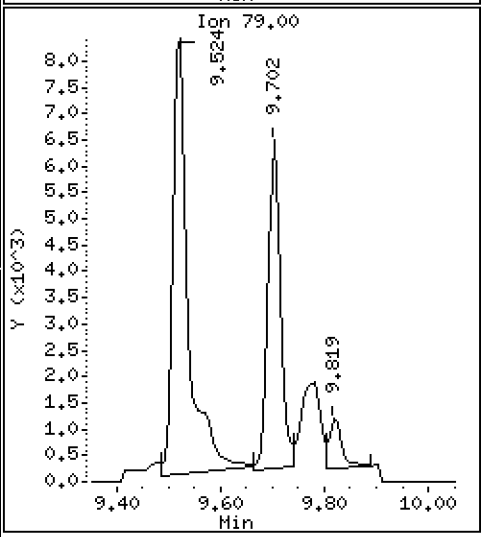
13 2-Methylphenol

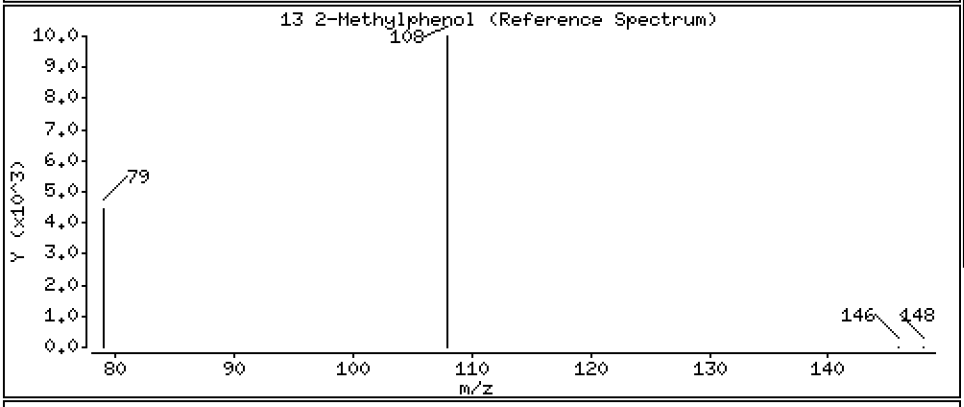
Concentration: 0.1669 ug/L

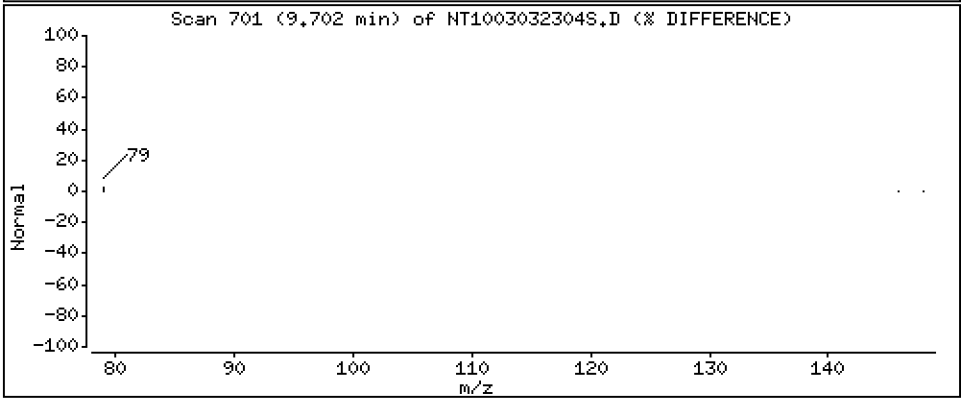












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

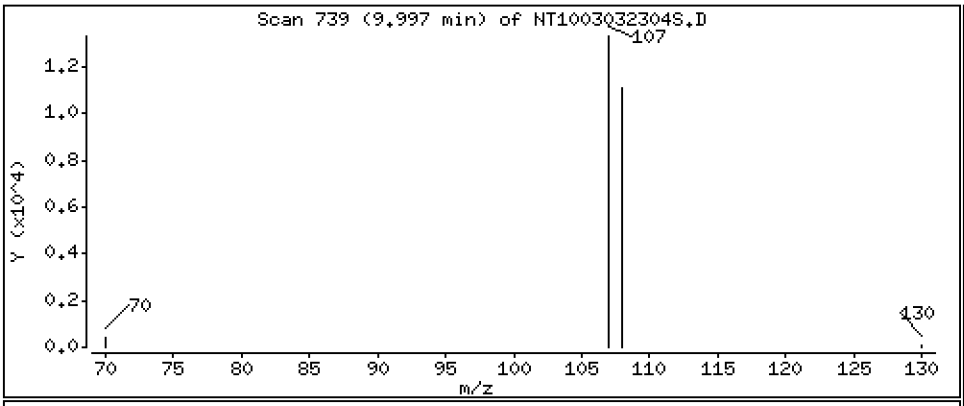
Operator: JGR

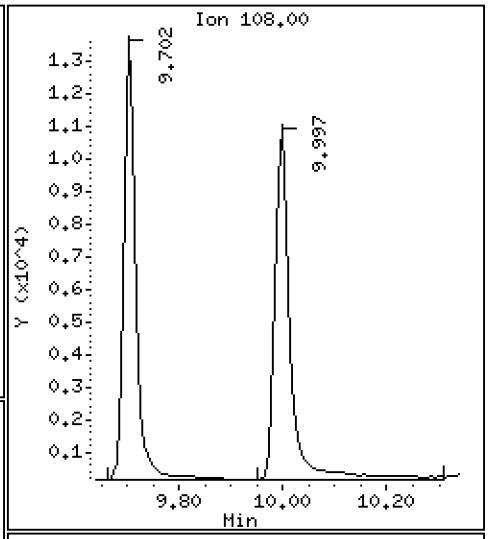
Column phase: ZB-5msi

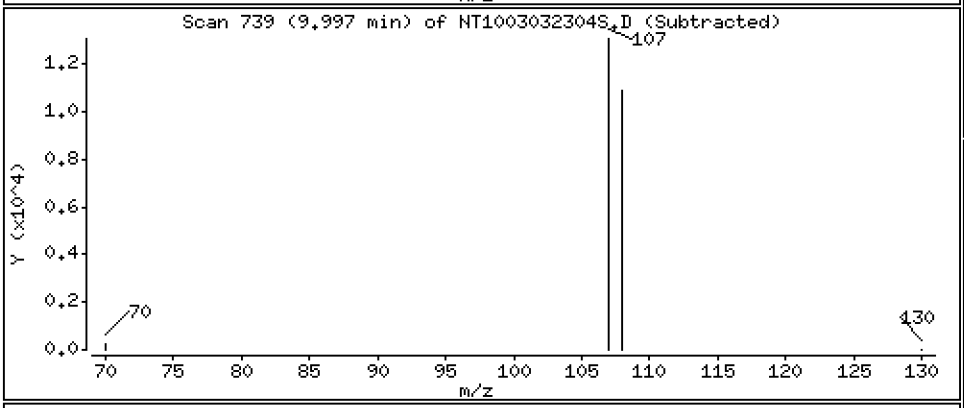
Column diameter: 0.25

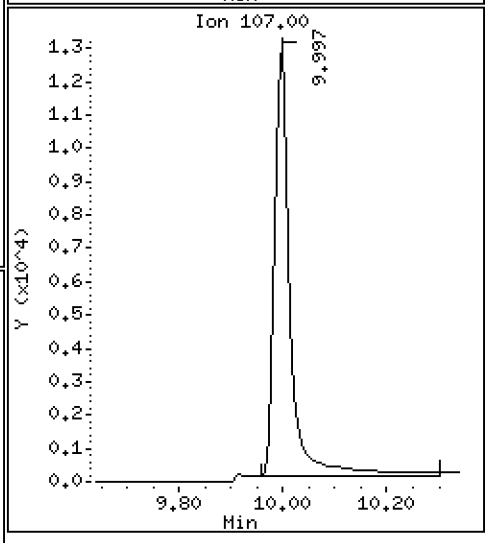
15 4-Methylphenol

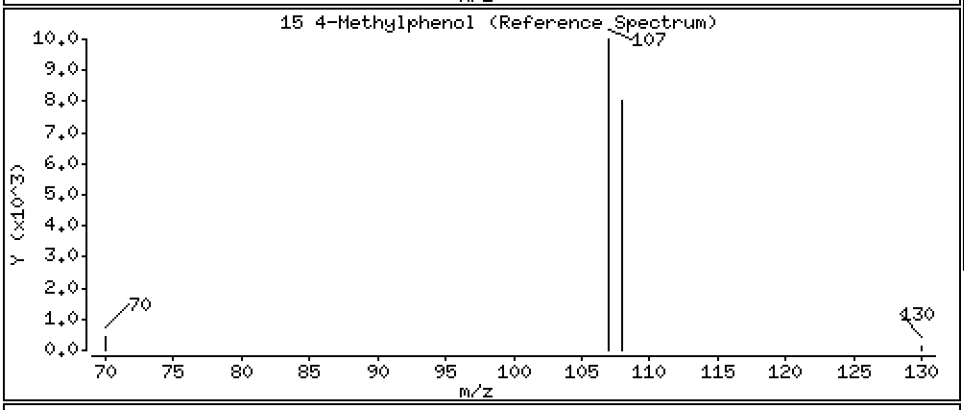
Concentration: 0.1541 ug/L

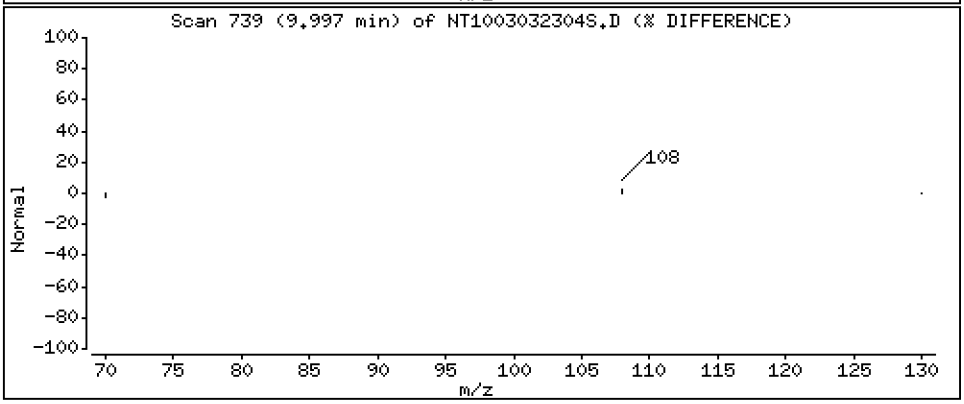












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

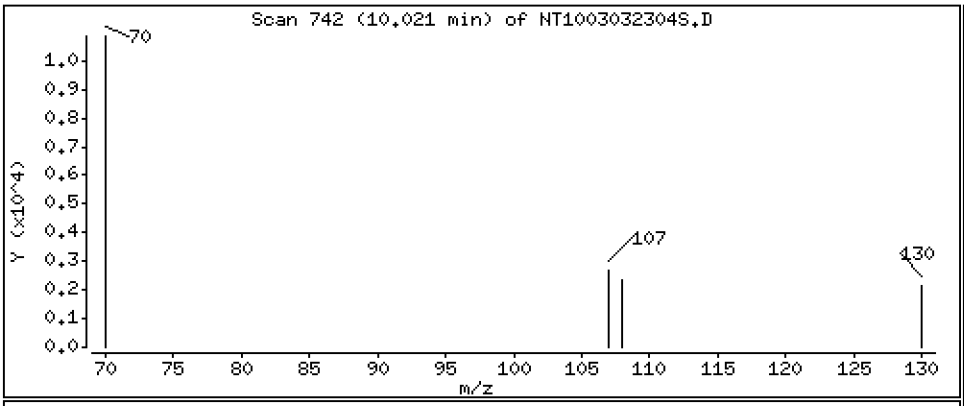
Operator: JGR

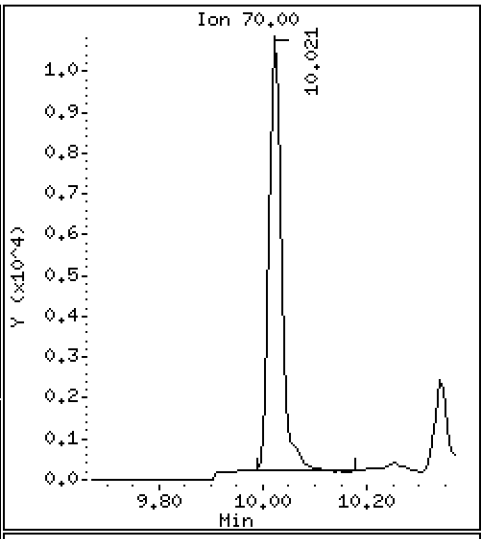
Column phase: ZB-5msi

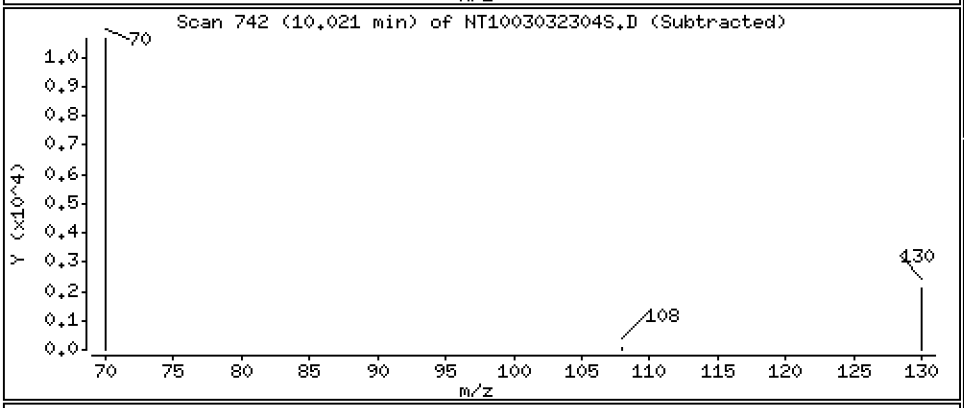
Column diameter: 0.25

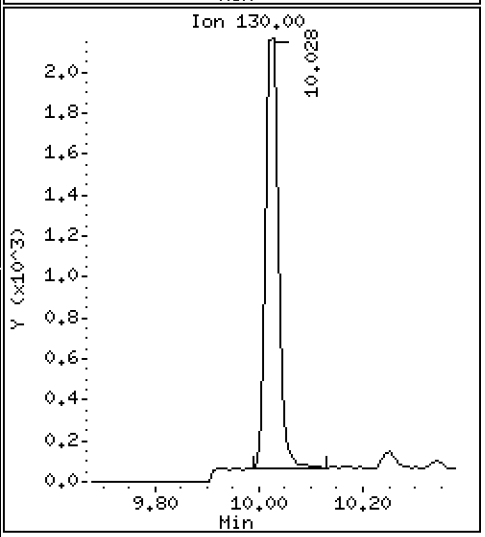
16 N-Nitroso-di-n-propylamine

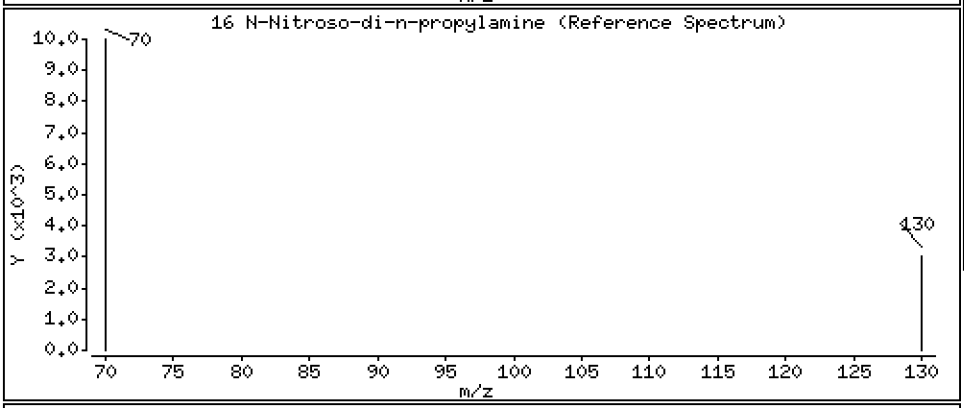
Concentration: 0.1684 ug/L

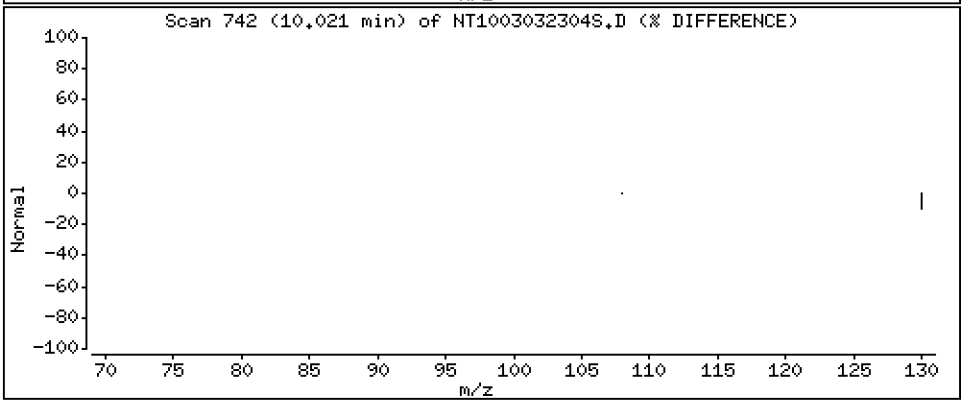












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Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

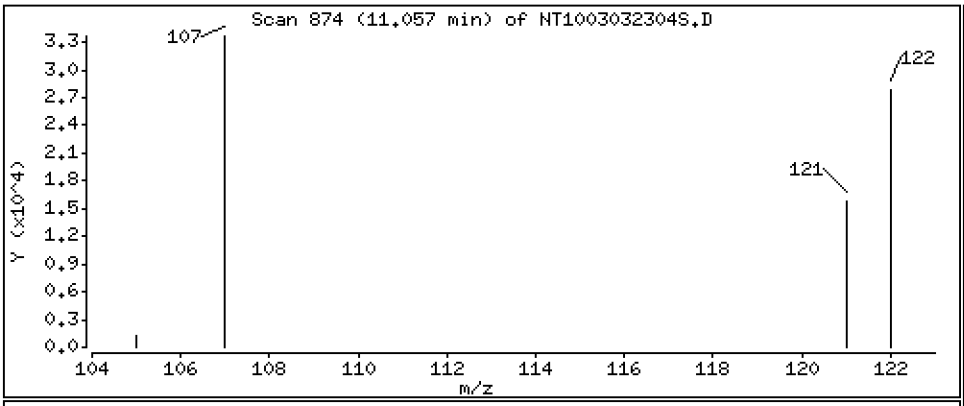
Operator: JGR

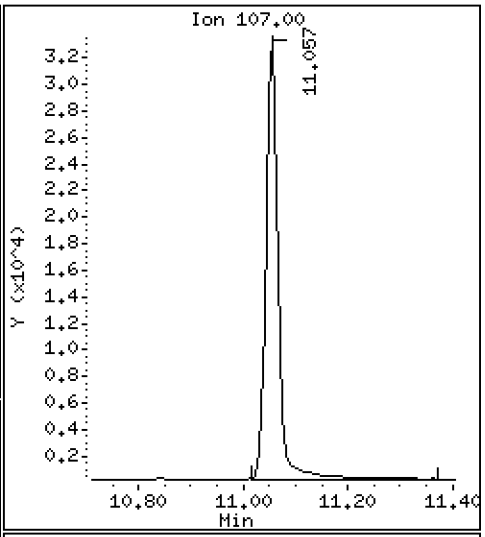
Column phase: ZB-5msi

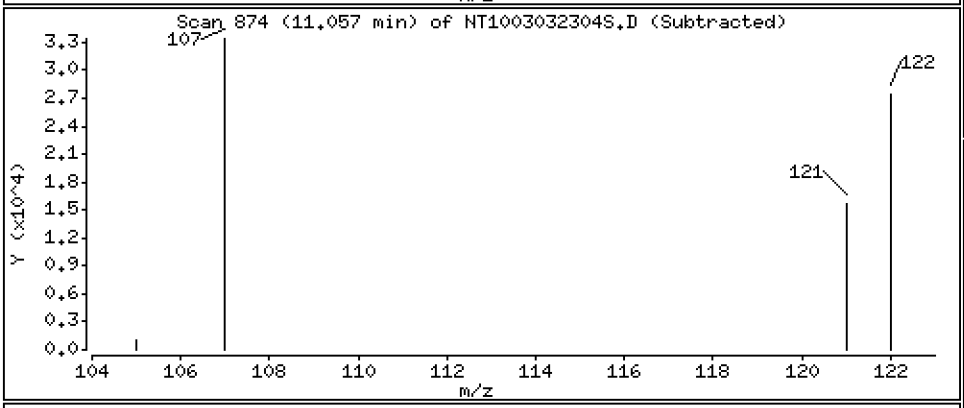
Column diameter: 0.25

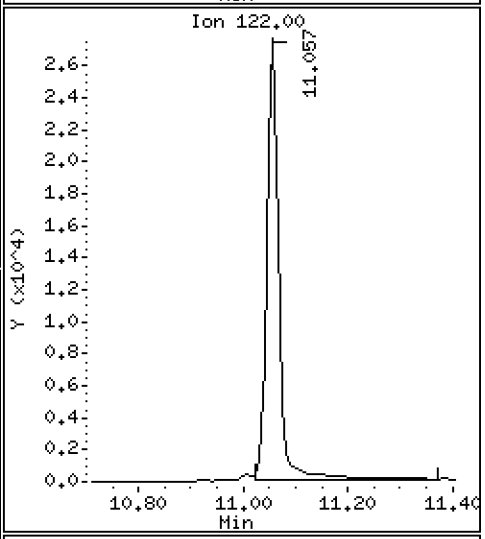
22 2,4-Dimethylphenol

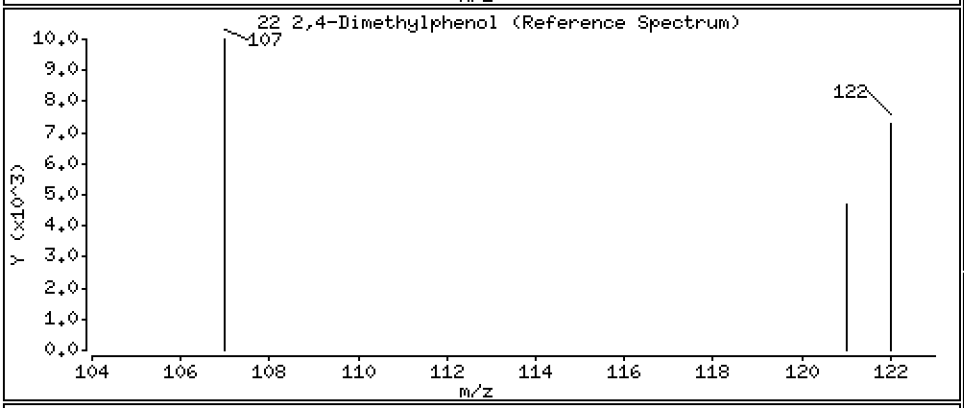
Concentration: 0.3428 ug/L

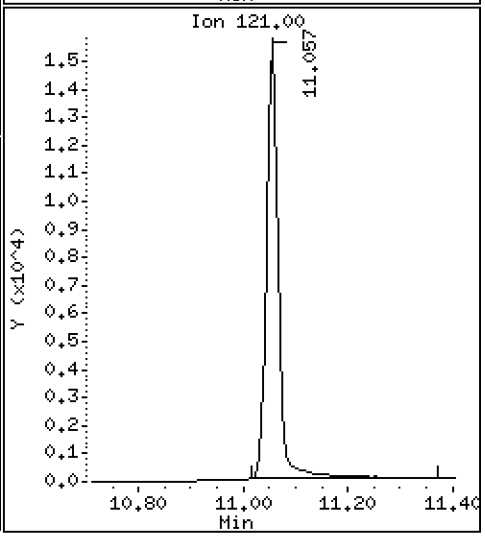


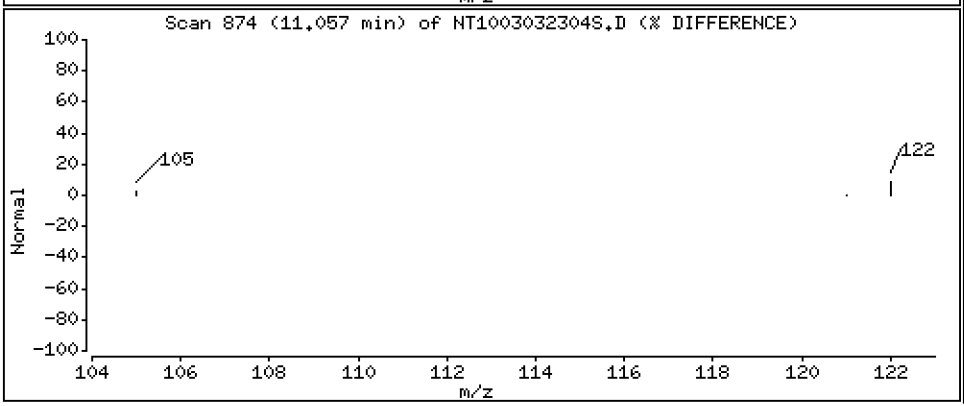












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Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

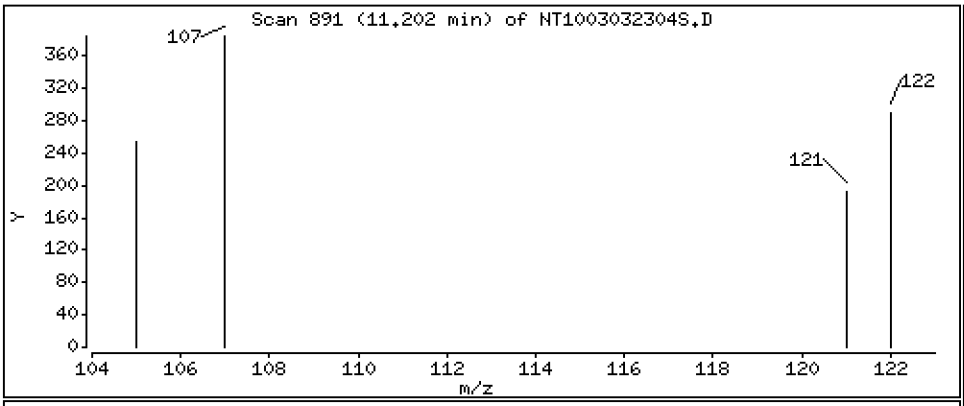
Operator: JGR

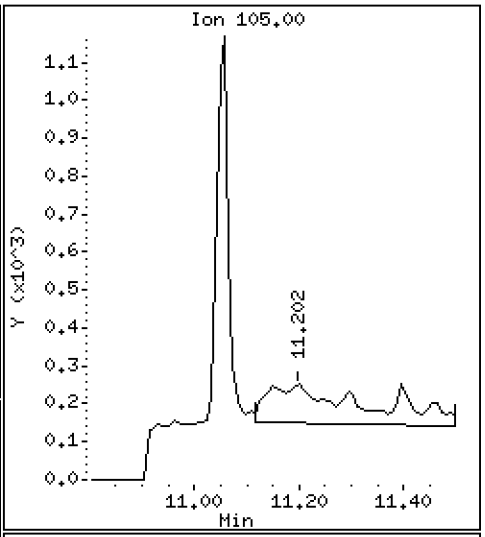
Column phase: ZB-5msi

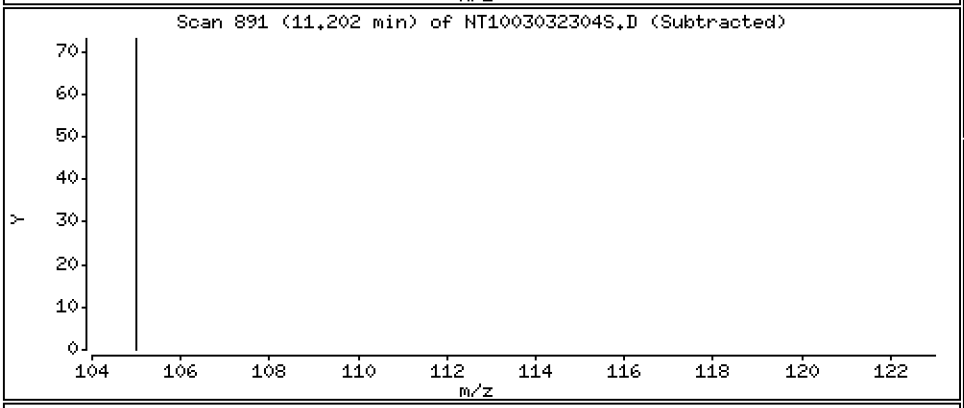
Column diameter: 0.25

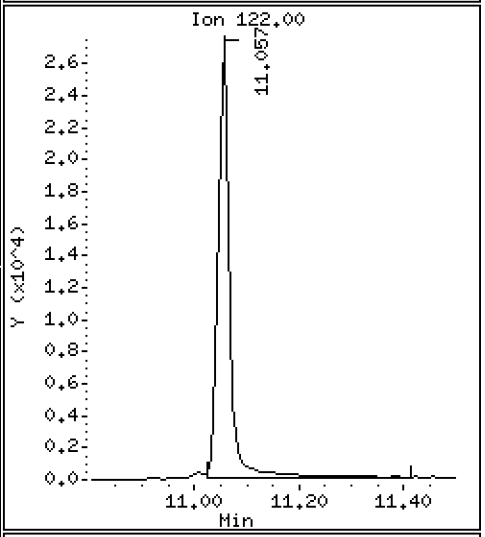
24 Benzoic acid

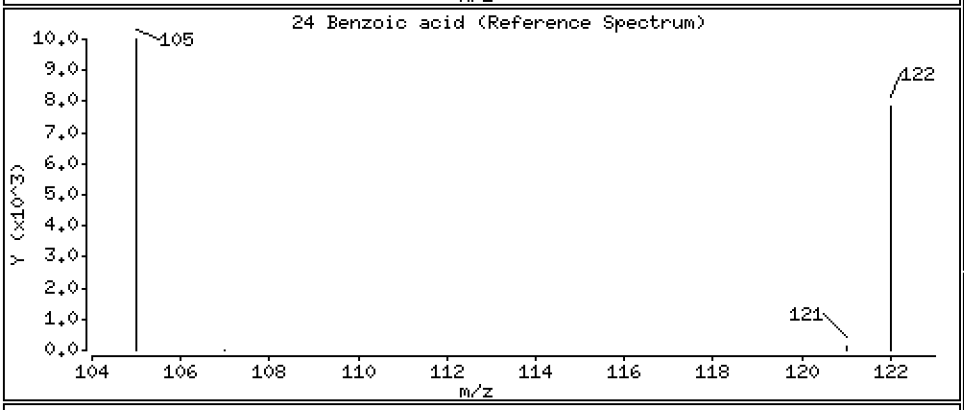
Concentration: 0.01611 ug/L

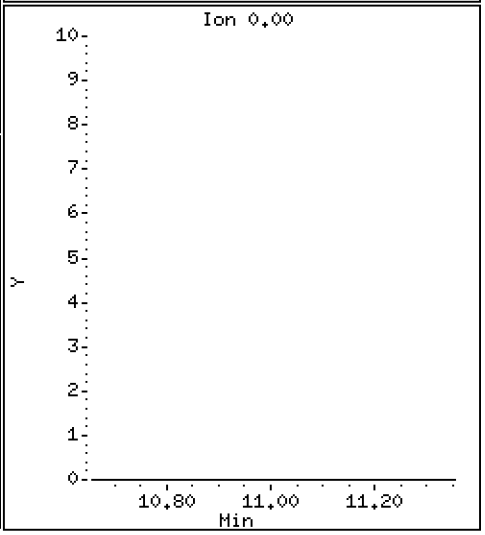


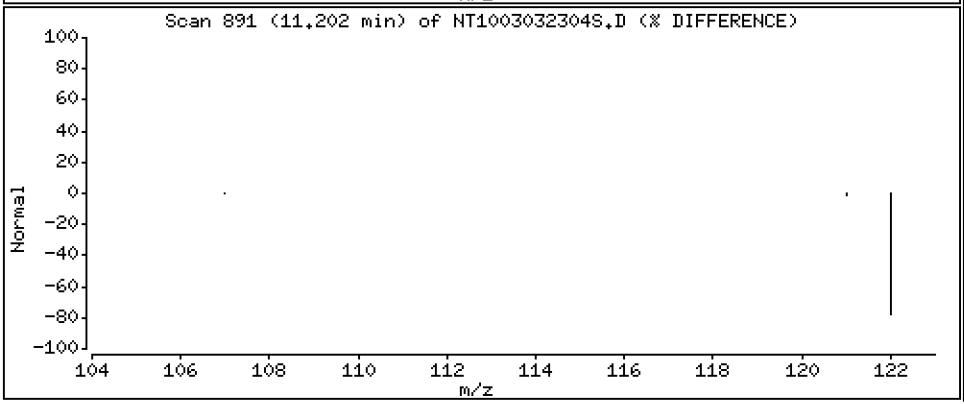












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Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

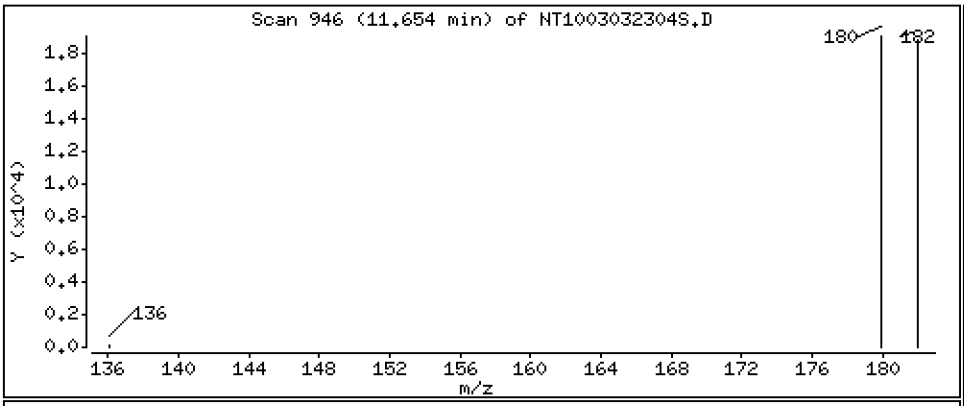
Operator: JGR

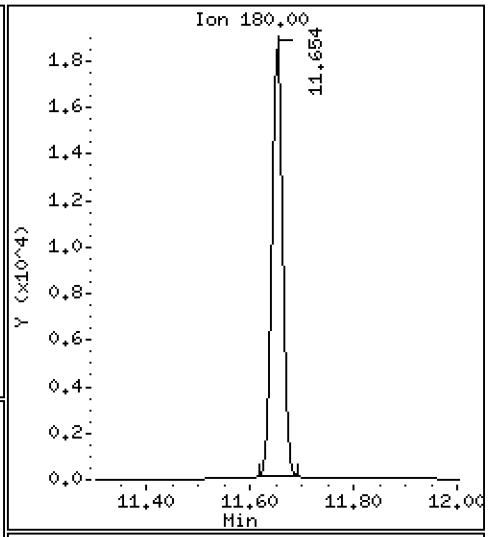
Column phase: ZB-5msi

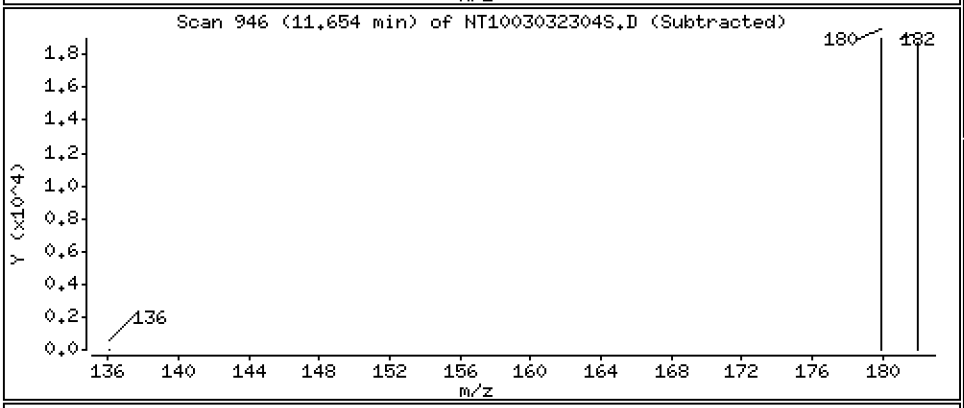
Column diameter: 0.25

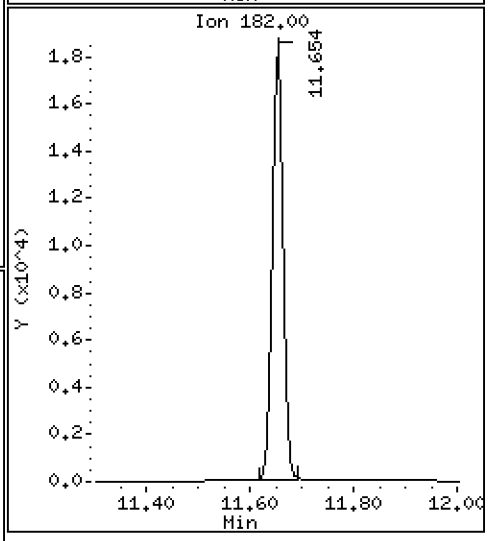
26 1,2,4-Trichlorobenzene

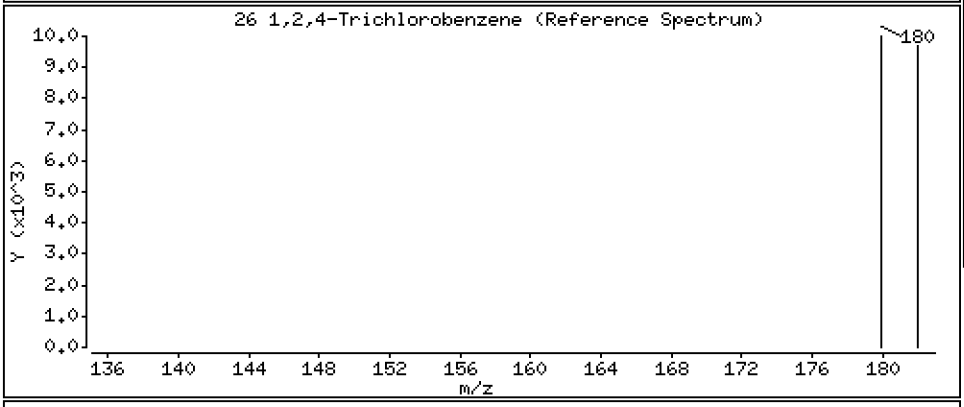
Concentration: 0.2135 ug/L

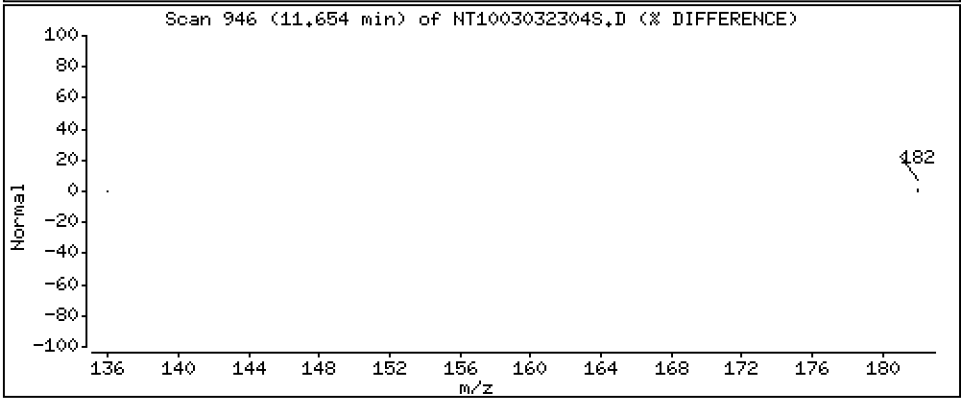












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

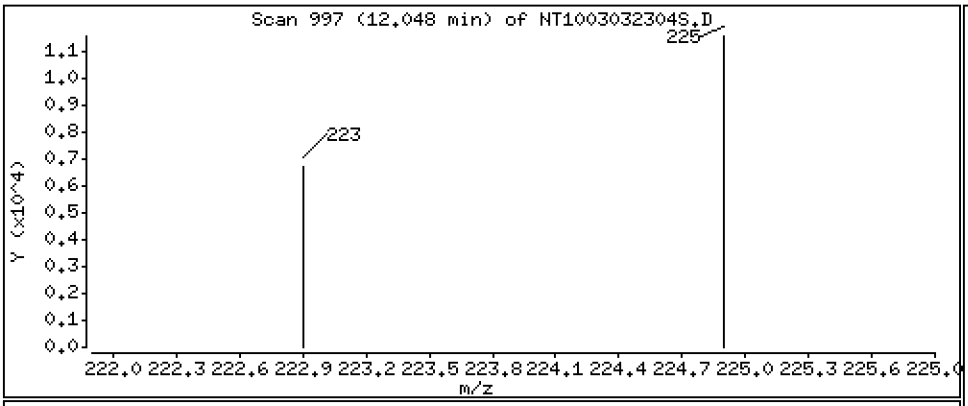
Operator: JGR

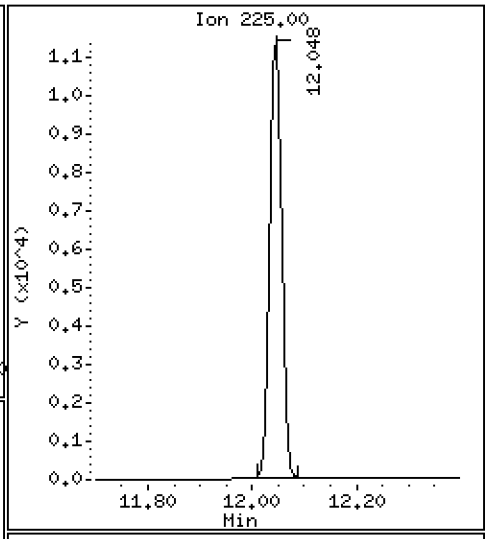
Column phase: ZB-5msi

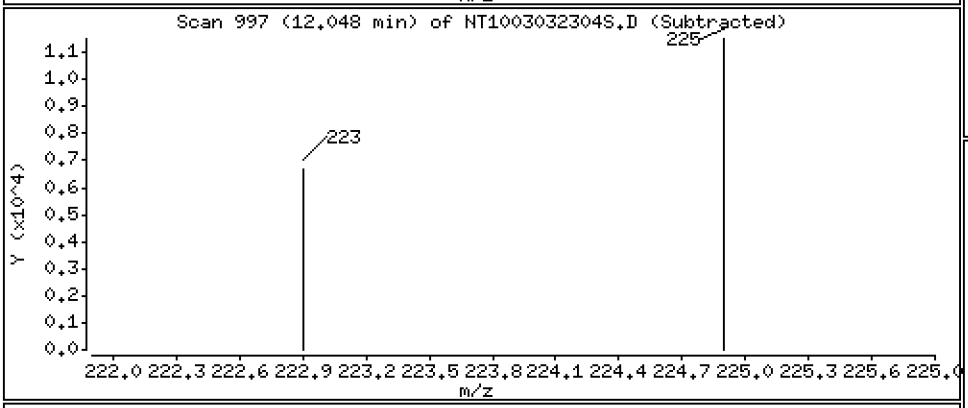
Column diameter: 0.25

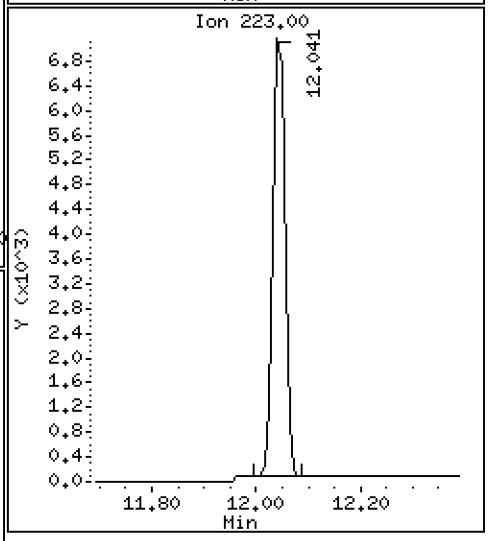
30 Hexachlorobutadiene

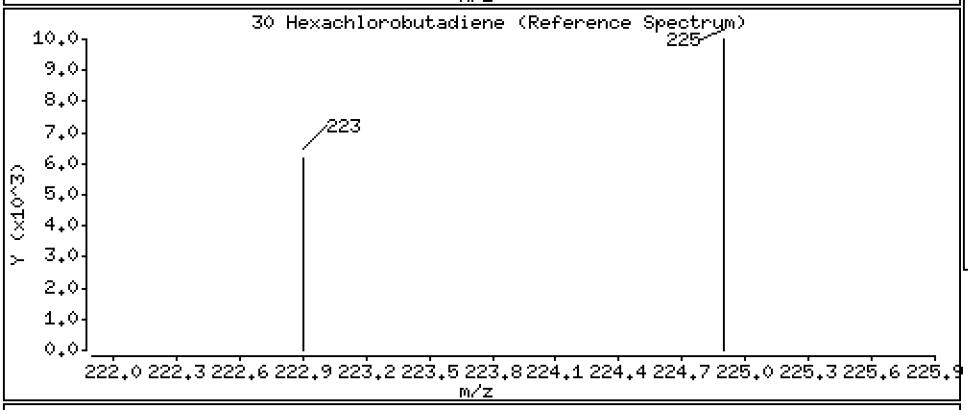
Concentration: 0.1844 ug/L

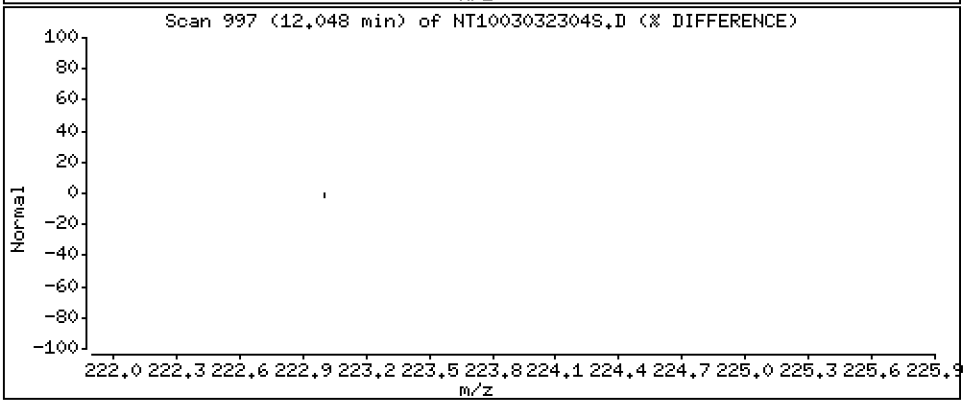












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Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

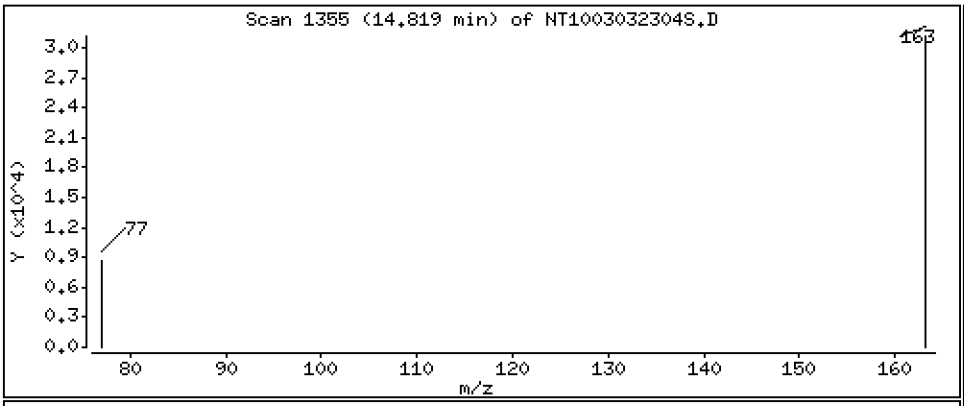
Operator: JGR

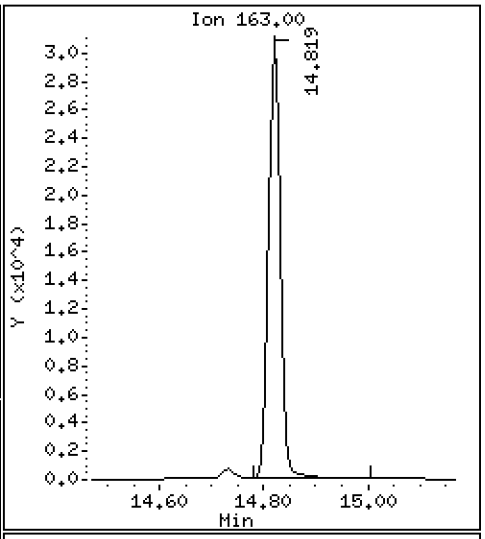
Column phase: ZB-5msi

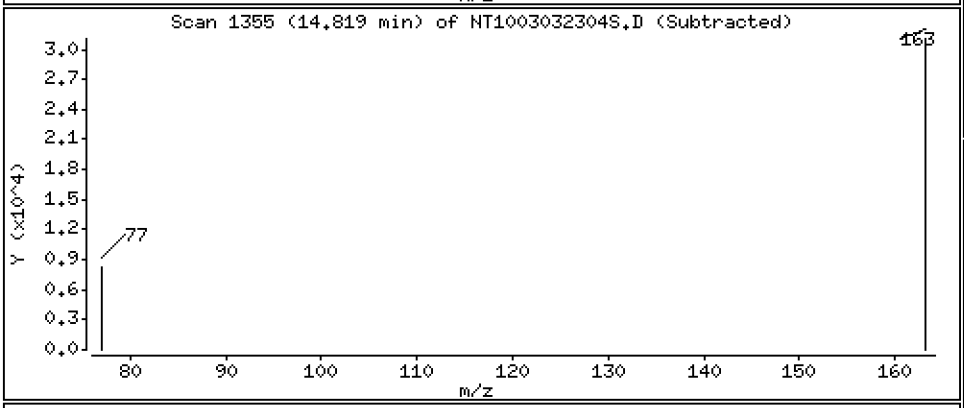
Column diameter: 0.25

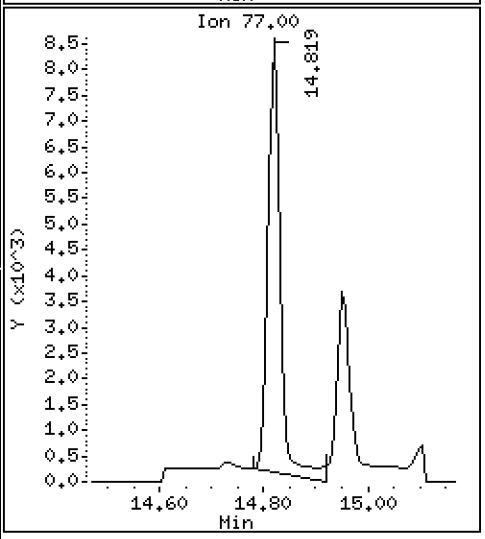
39 Dimethylphthalate

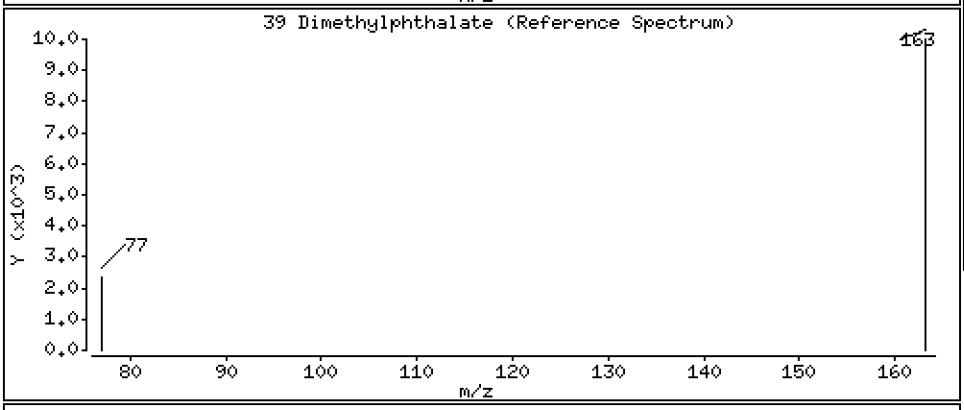
Concentration: 0.1654 ug/L

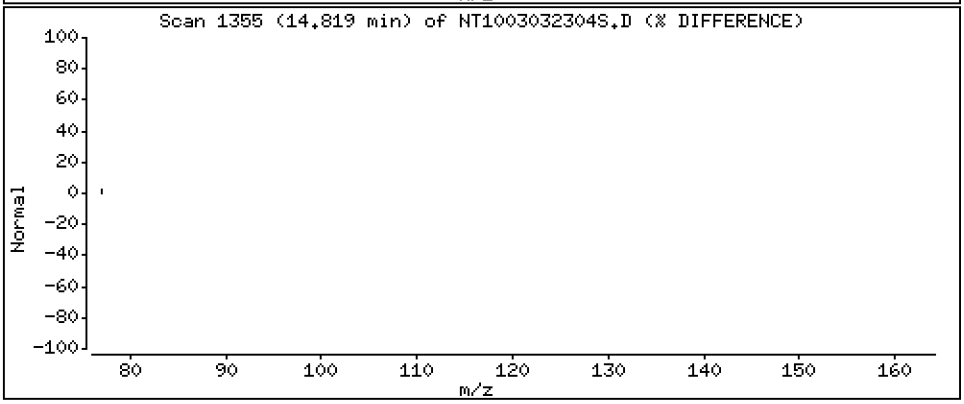












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

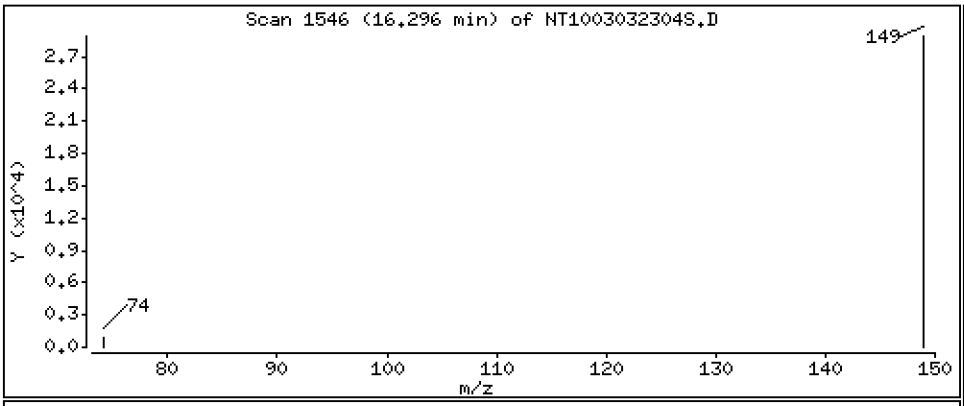
Operator: JGR

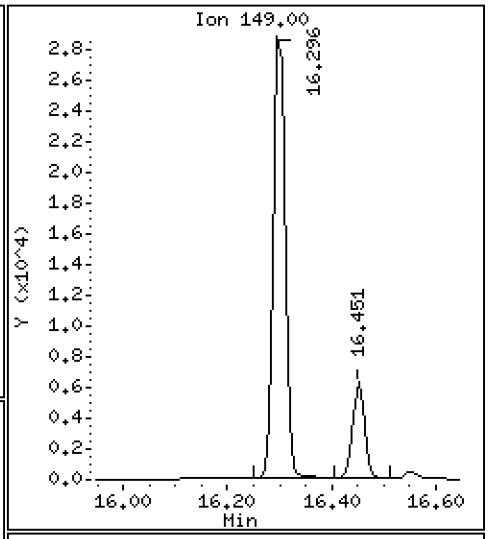
Column phase: ZB-5msi

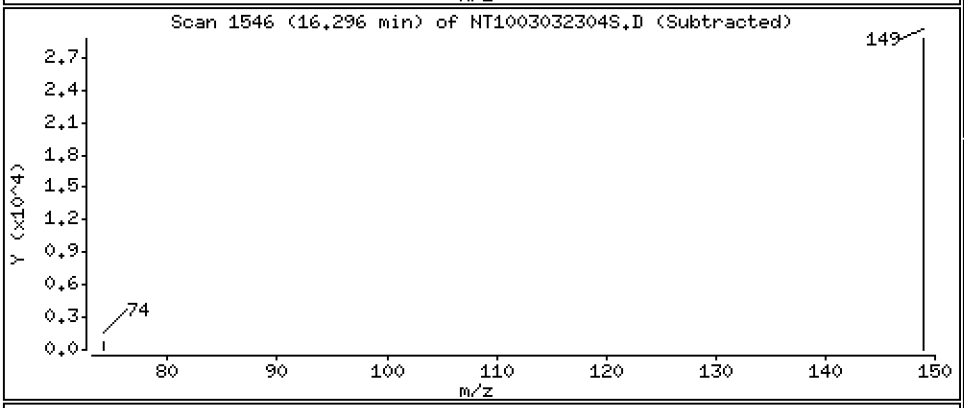
Column diameter: 0.25

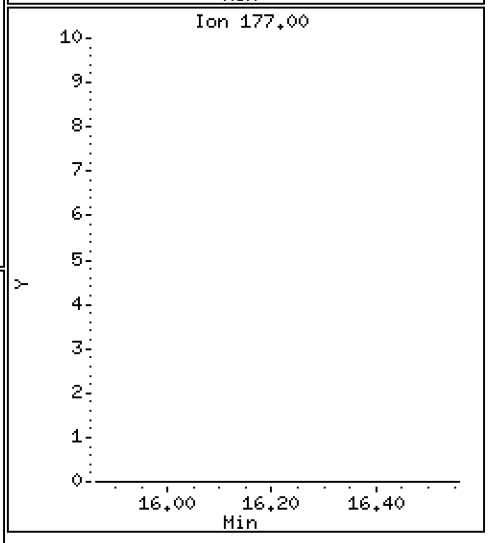
50 Diethylphthalate

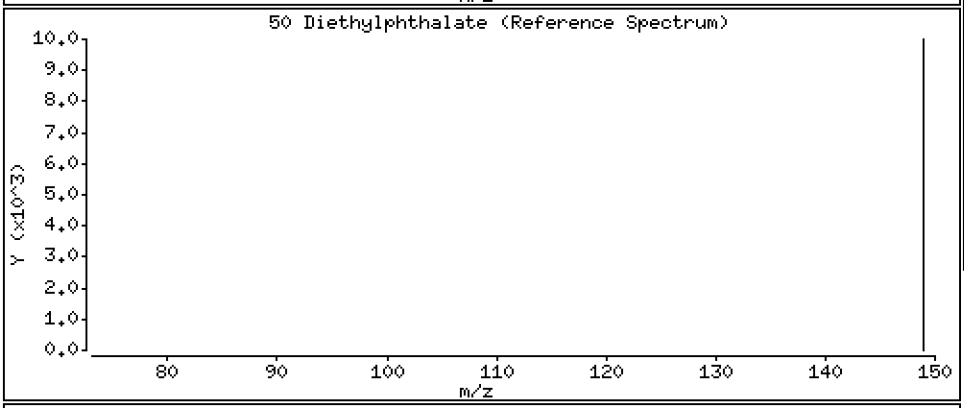
Concentration: 0.1637 ug/L

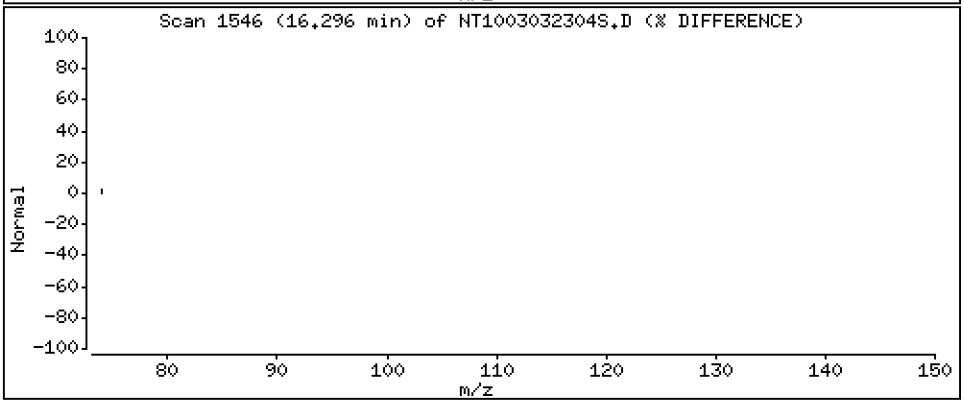












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Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

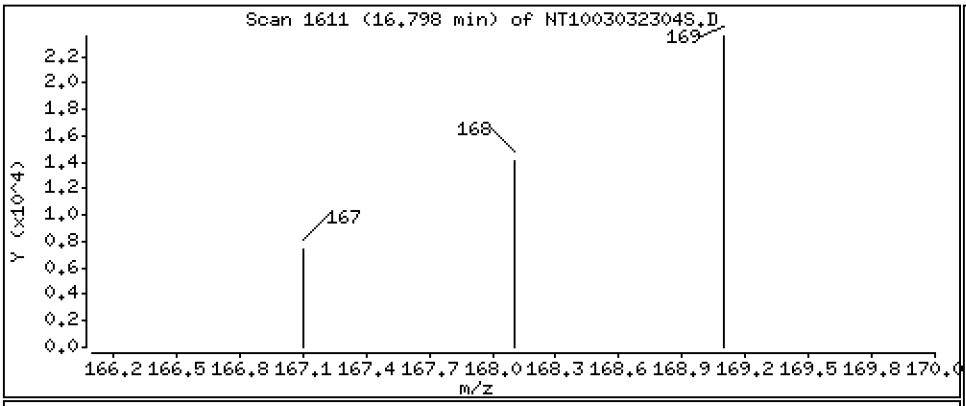
Operator: JGR

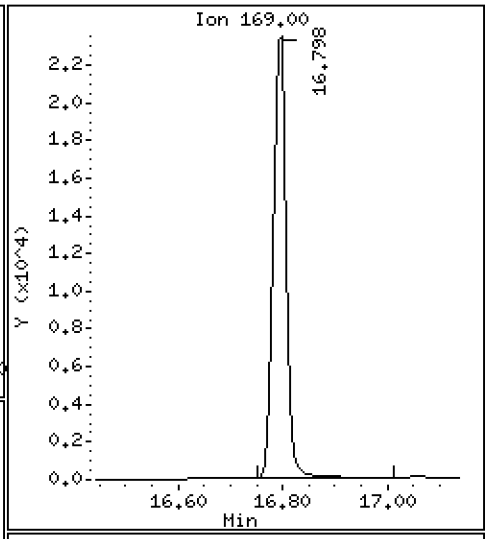
Column phase: ZB-5msi

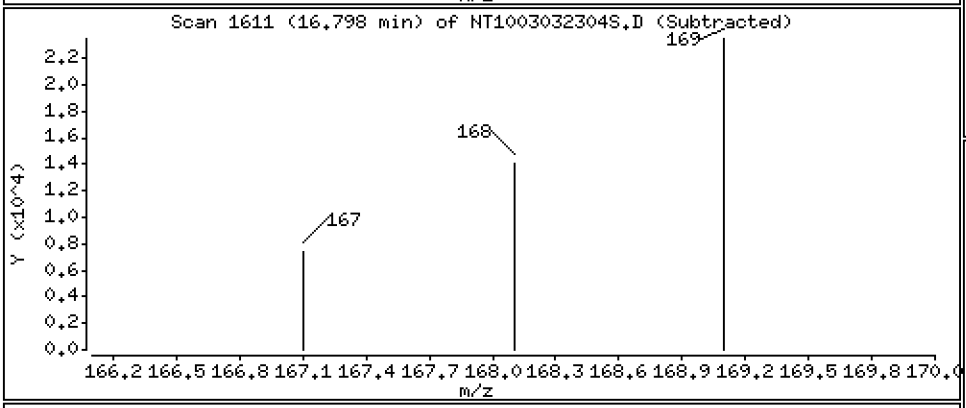
Column diameter: 0.25

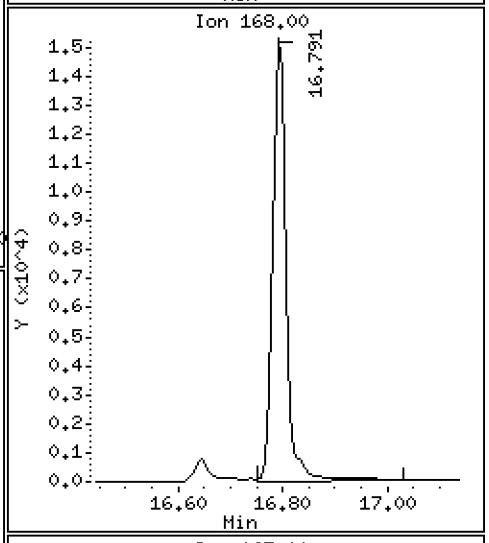
54 N-Nitrosodiphenylamine

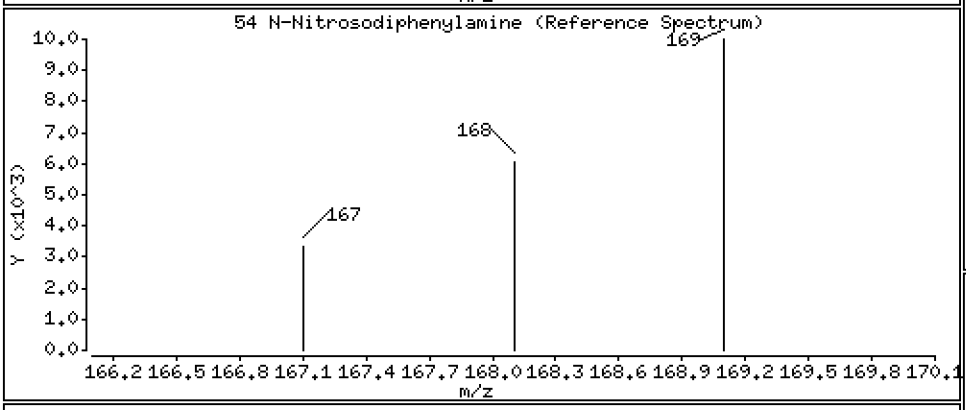
Concentration: 0.1612 ug/L

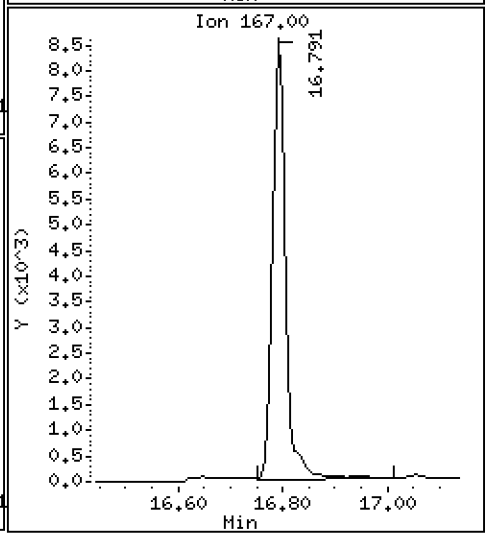


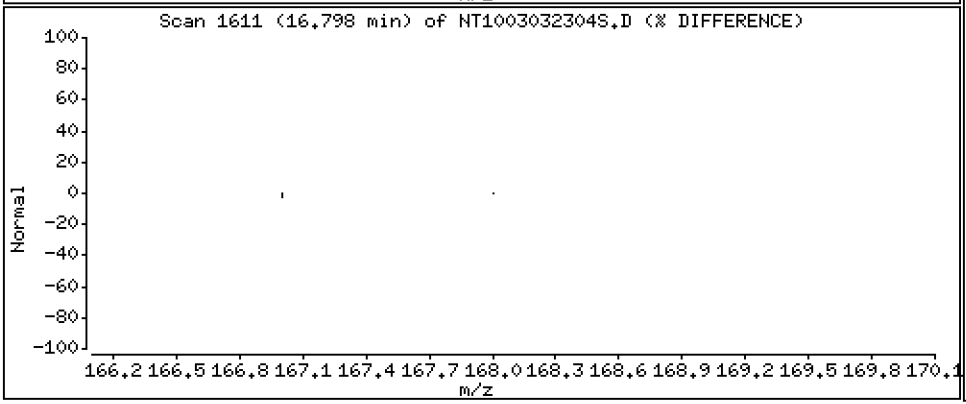












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

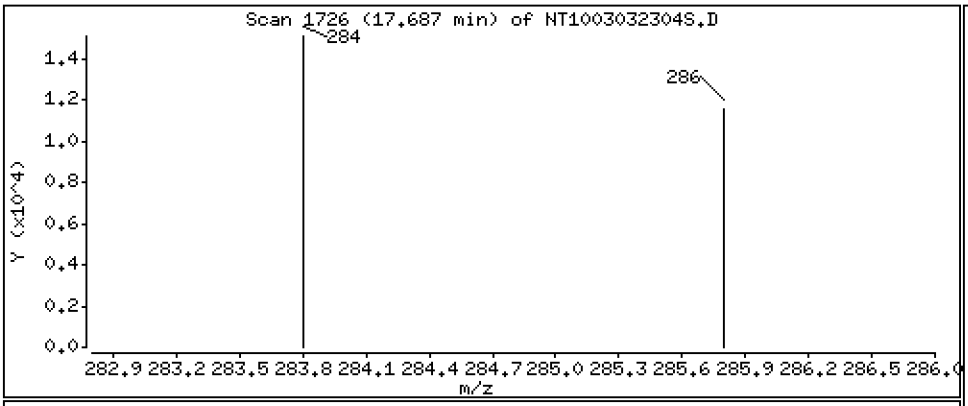
Operator: JGR

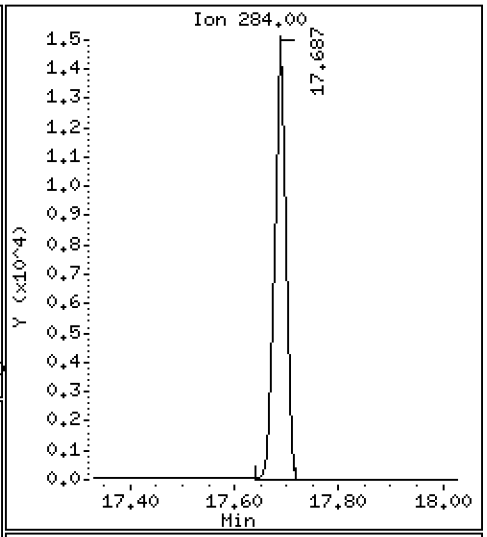
Column phase: ZB-5msi

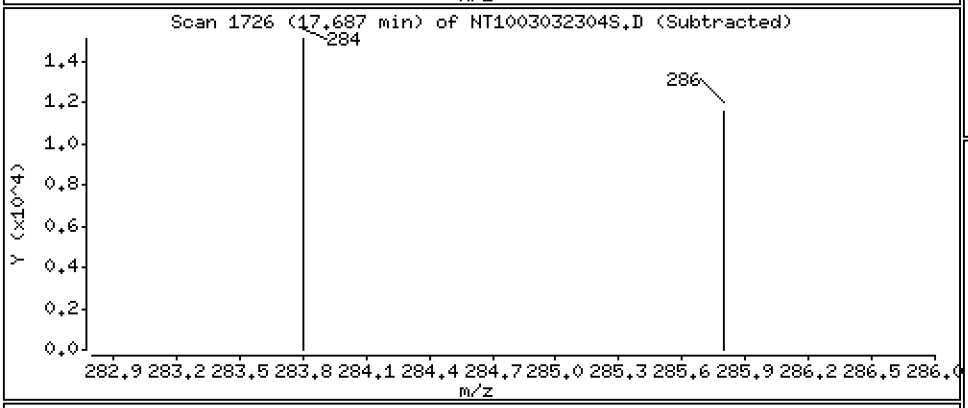
Column diameter: 0.25

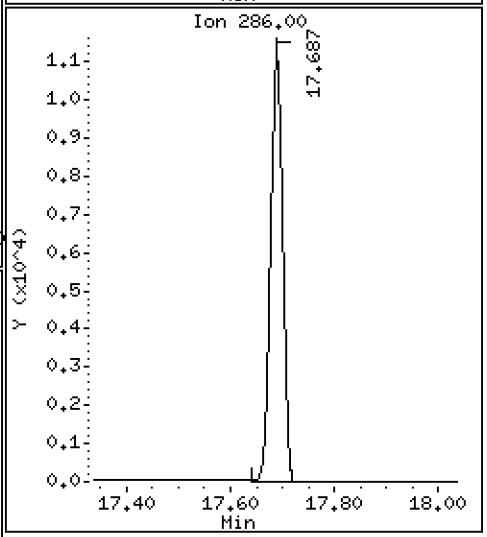
57 Hexachlorobenzene

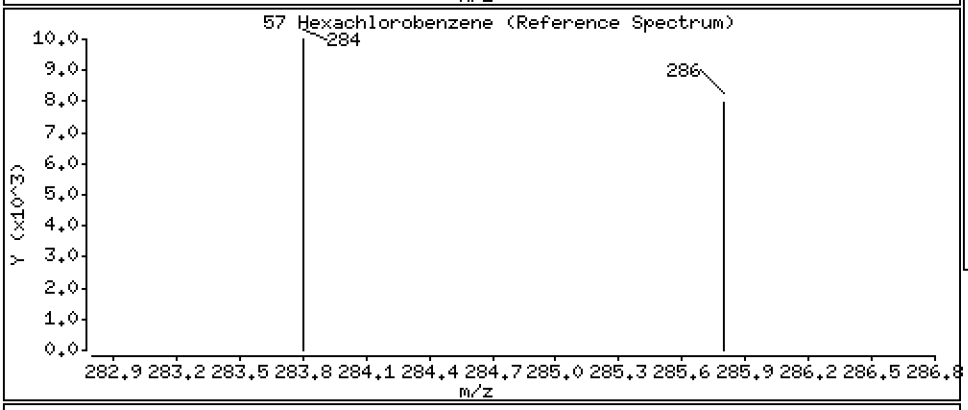
Concentration: 0.1956 ug/L

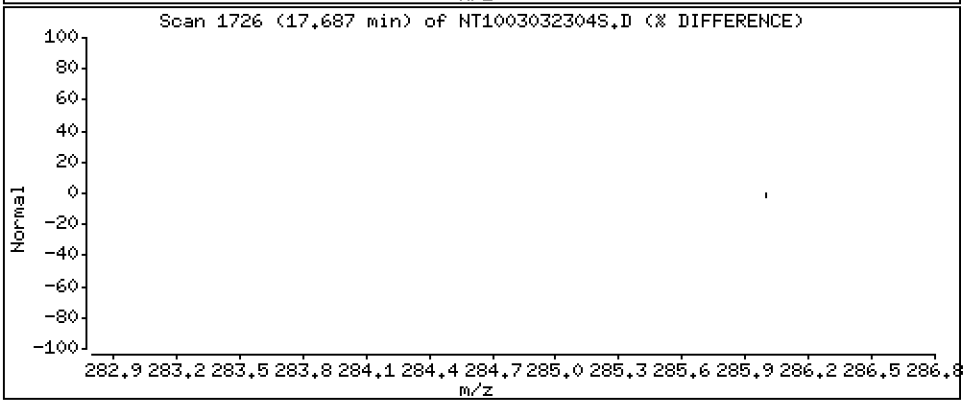












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

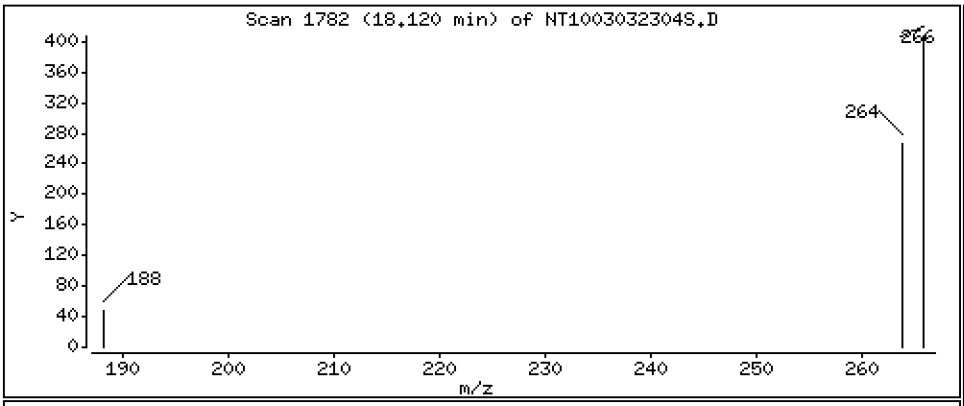
Operator: JGR

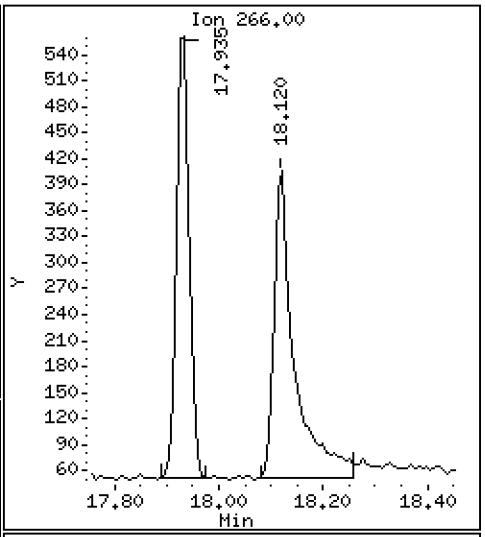
Column phase: ZB-5msi

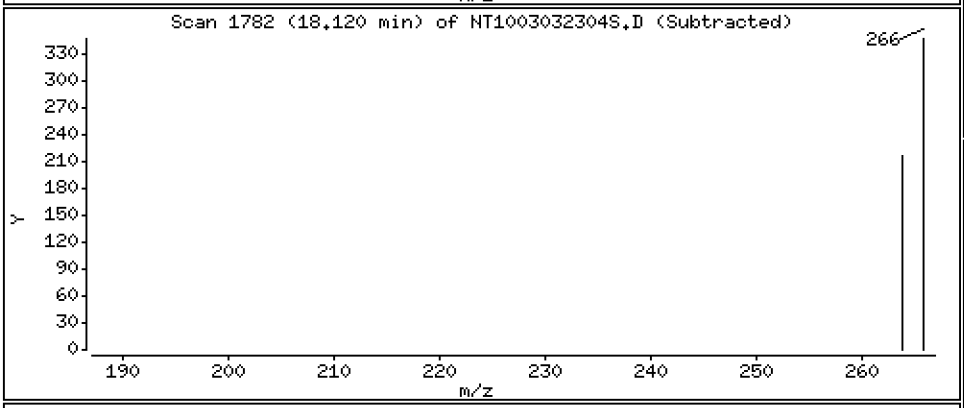
Column diameter: 0.25

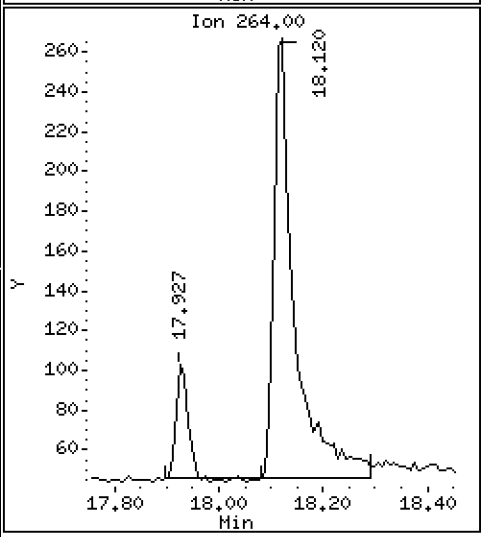
58 Pentachlorophenol

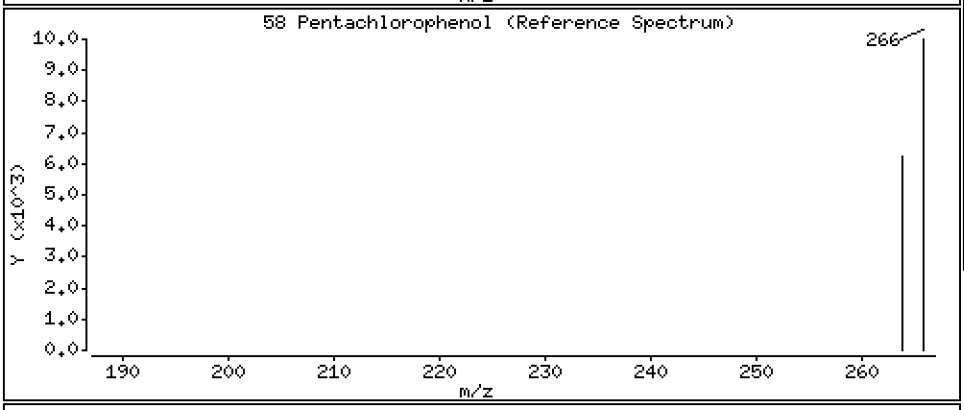
Concentration: 0.01983 ug/L

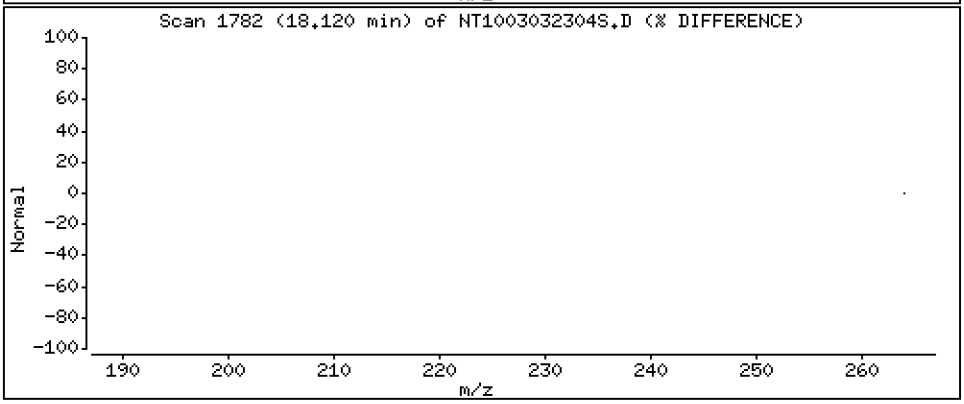












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

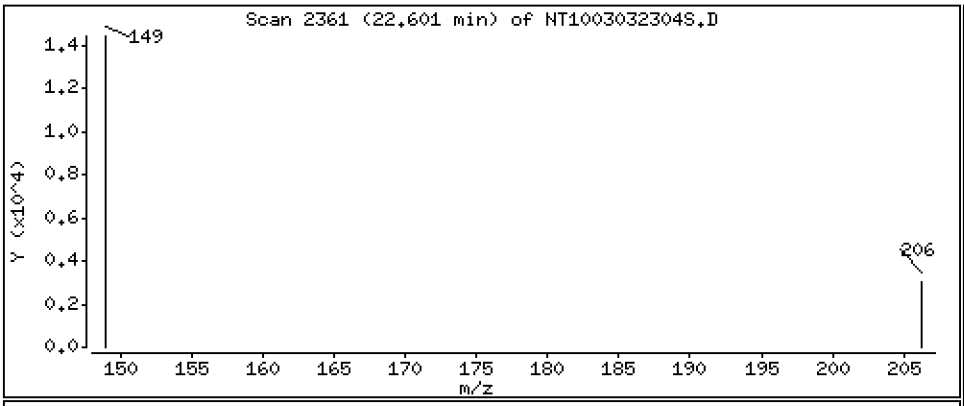
Operator: JGR

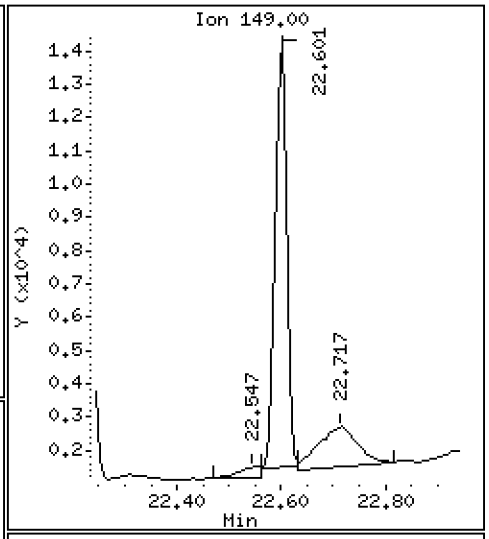
Column phase: ZB-5msi

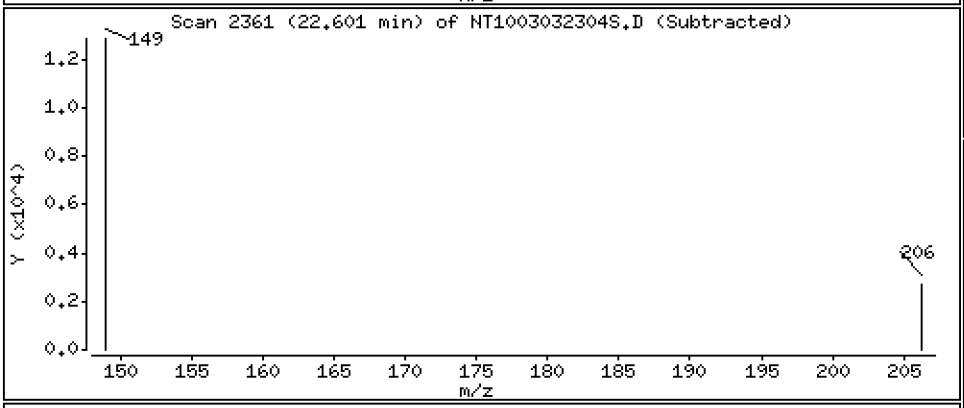
Column diameter: 0.25

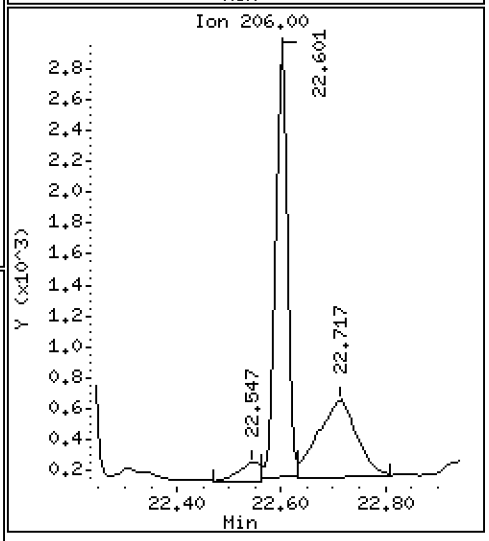
67 Butylbenzylphthalate

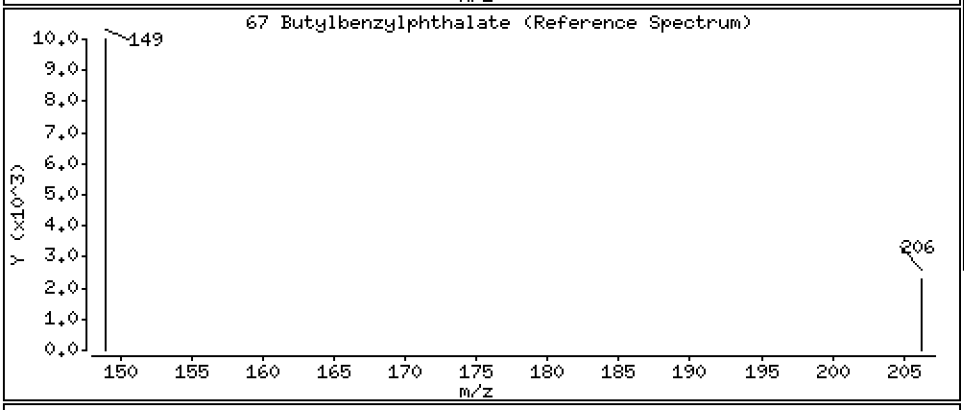
Concentration: 0.09159 ug/L

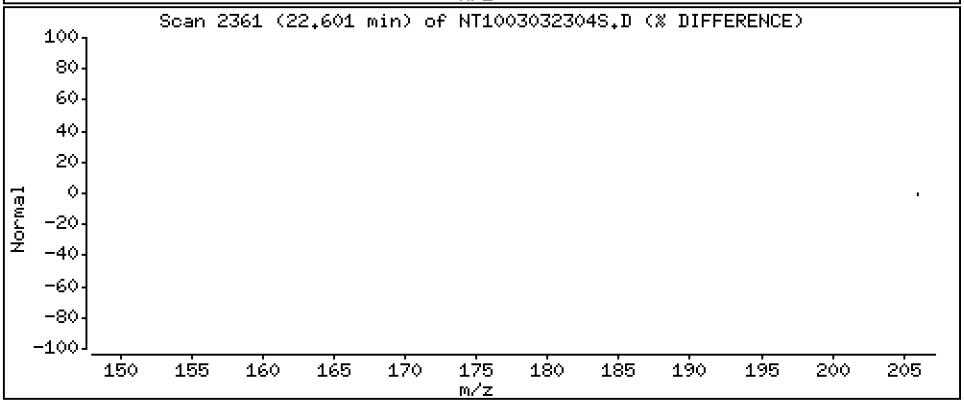












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

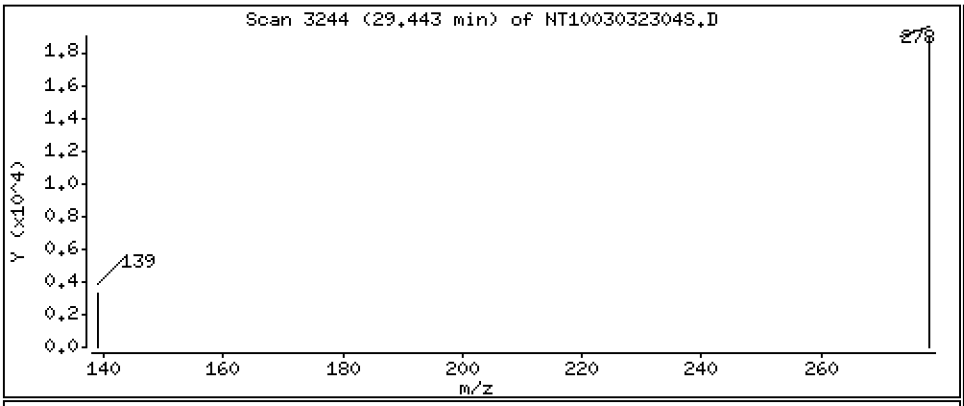
Operator: JGR

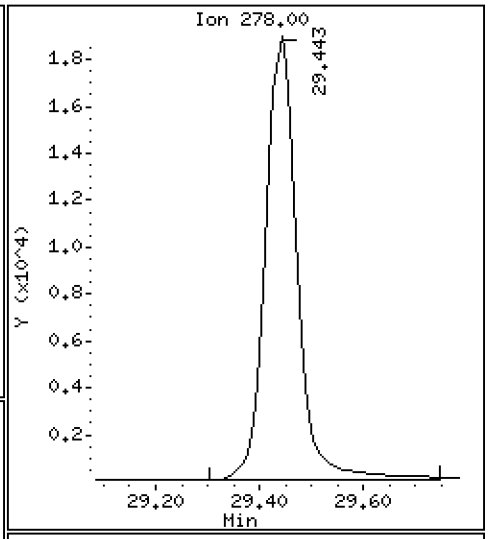
Column phase: ZB-5msi

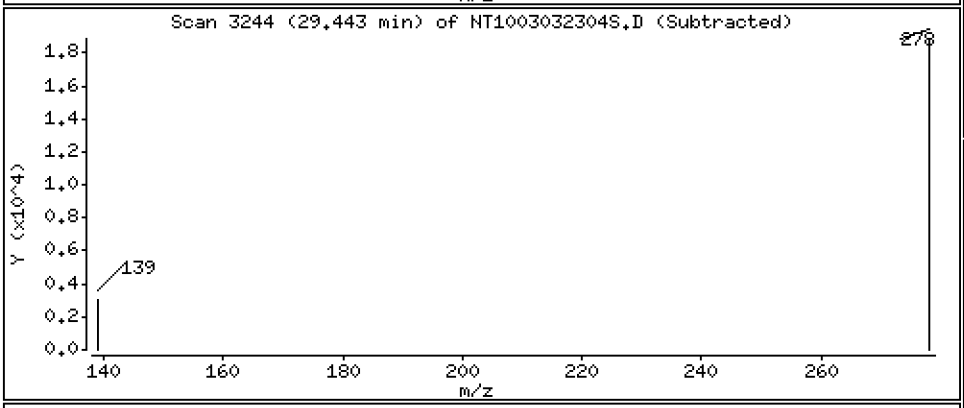
Column diameter: 0.25

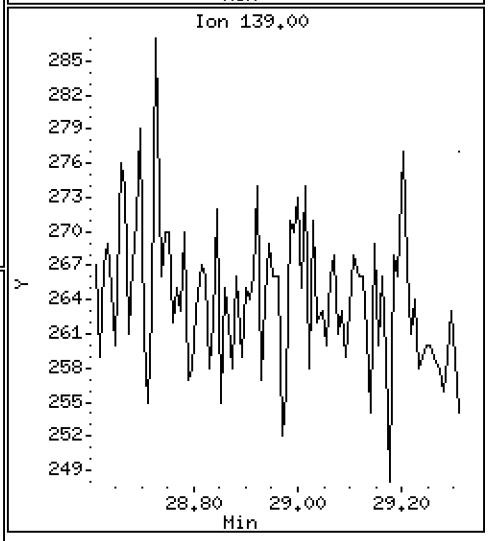
79 Dibenzo(a,h)anthracene

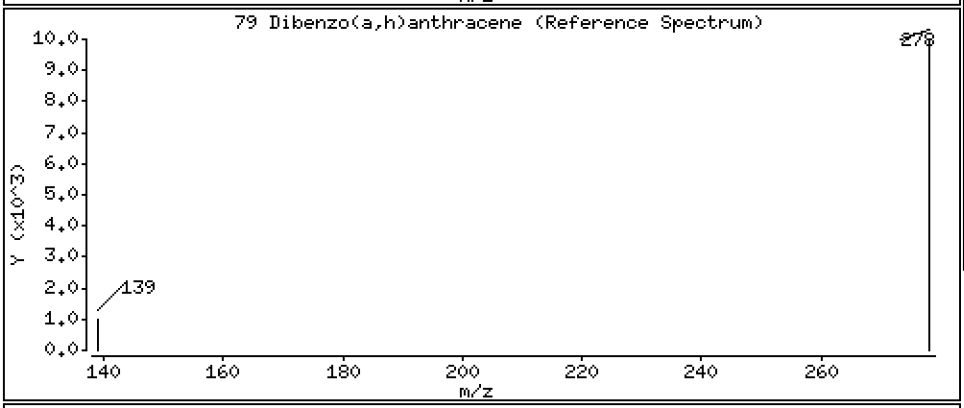
Concentration: 0.2287 ug/L

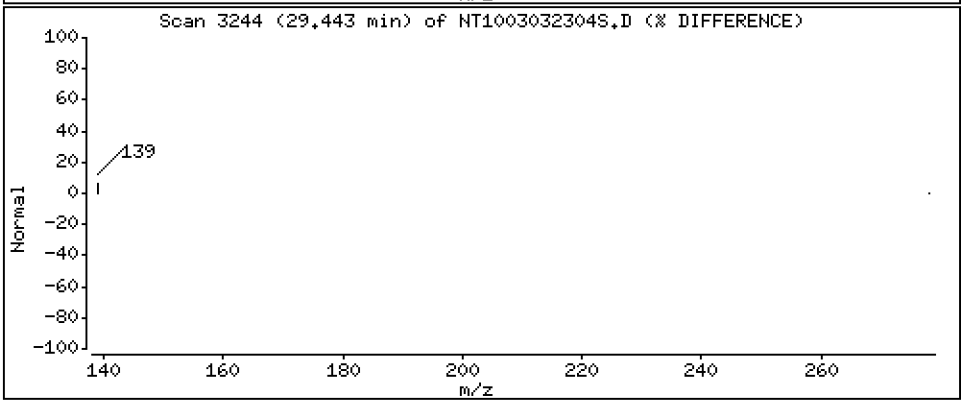












Data File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D

Date : 03-MAR-2023 19:43

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

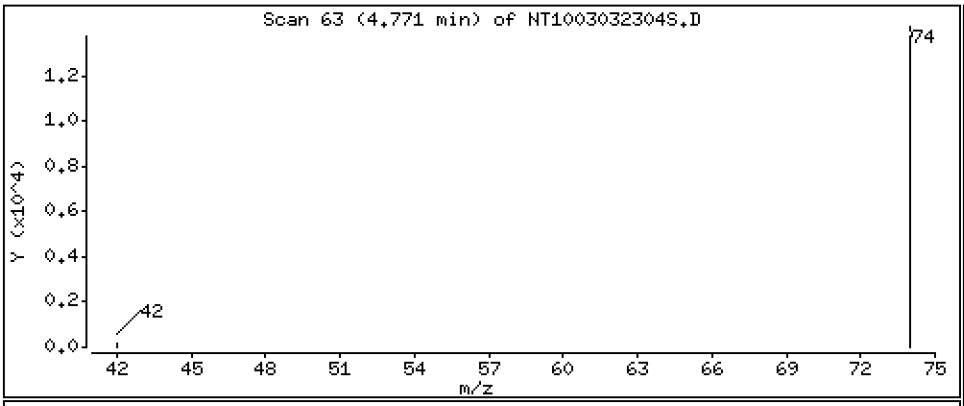
Operator: JGR

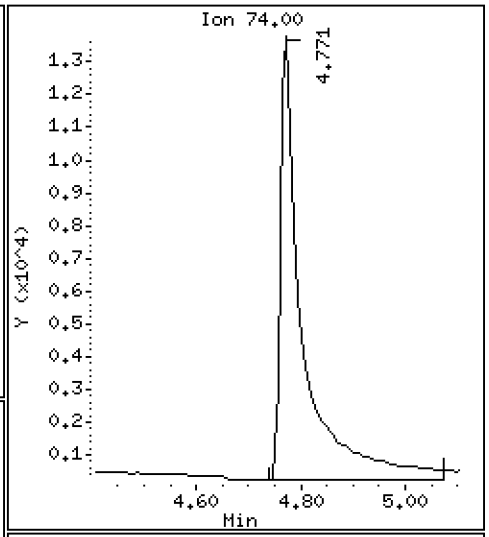
Column phase: ZB-5msi

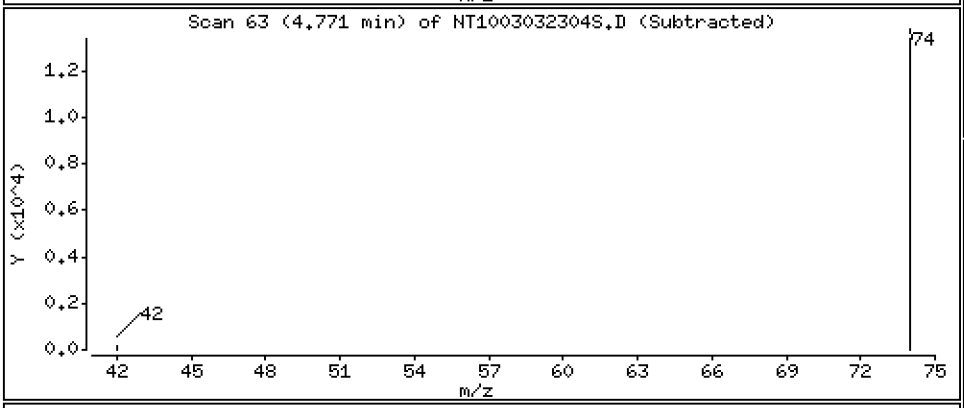
Column diameter: 0.25

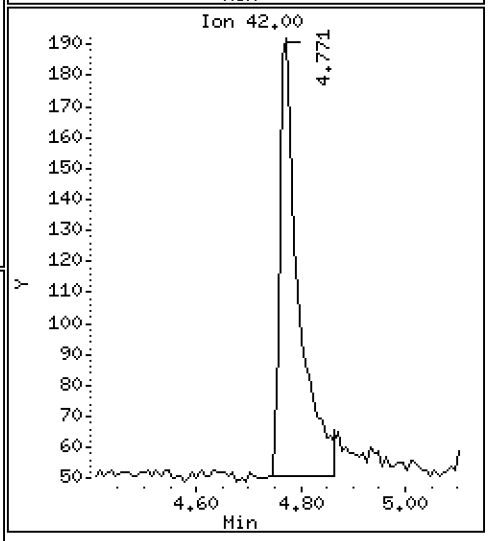
90 N-Nitrosodimethylamine

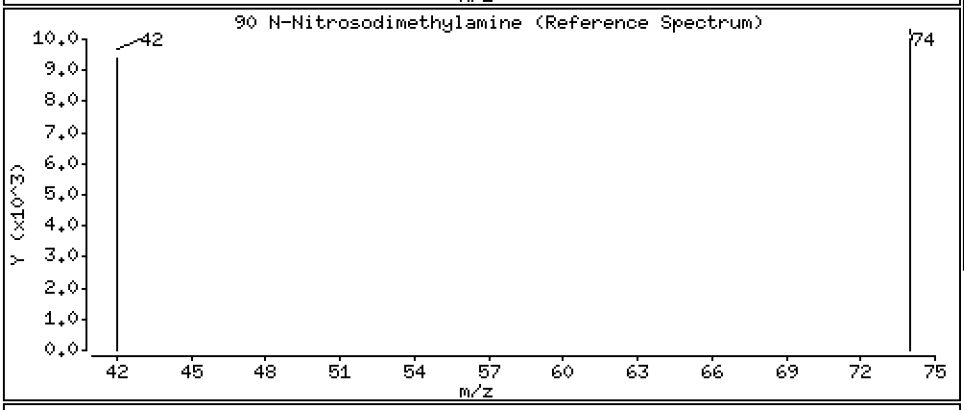
Concentration: 0.4520 ug/L

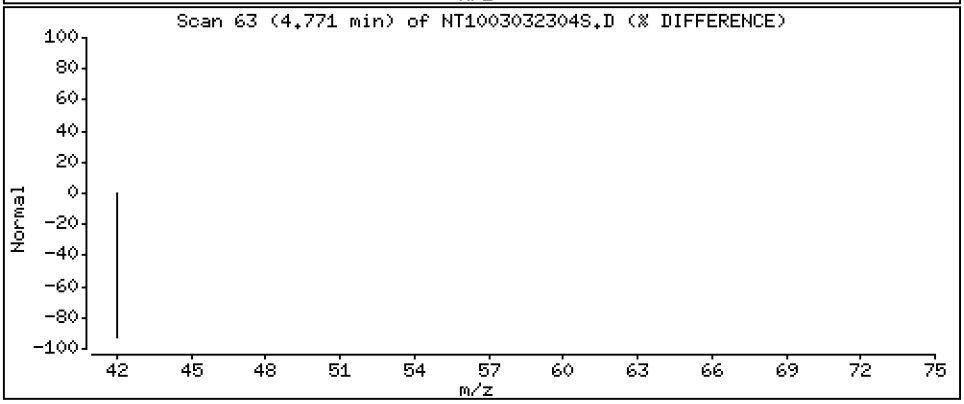












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303.b\SIM.b\NT1003032304S.D
Lab Smp Id: SLC0250-LCV1
Inj Date : 03-MAR-2023 19:43 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-LCV200
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 10:19 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.917	6.918	(0.745)	50018	0.32525	0.3252(R)
3	Phenol	94	8.555	8.556	(0.922)	40100	0.17667	0.1767
7	1,3-Dichlorobenzene	146	9.174	9.174	(0.988)	38463	0.19267	0.1927
* 8	1,4-Dichlorobenzene-d4	152	9.283	9.283	(1.000)	538660	4.00000	
9	1,4-Dichlorobenzene	146	9.314	9.314	(1.003)	36592	0.18853	0.1885
11	Benzyl alcohol	79	9.523	9.516	(1.026)	18583	0.14756	0.1476(M)
12	1,2-Dichlorobenzene	146	9.601	9.601	(1.034)	35729	0.19152	0.1915
13	2-Methylphenol	108	9.702	9.702	(1.045)	22782	0.16688	0.1669
15	4-Methylphenol	108	9.997	9.989	(1.077)	21888	0.15414	0.1541
16	N-Nitroso-di-n-propylamine	70	10.020	10.020	(1.079)	17015	0.16838	0.1684
22	2,4-Dimethylphenol	107	11.057	11.057	(0.939)	53444	0.34280	0.3428
24	Benzoic acid	105	11.201	11.150	(0.951)	1376	0.01611	0.01611(M)
26	1,2,4-Trichlorobenzene	180	11.654	11.654	(0.990)	28208	0.21346	0.2135
* 27	Naphthalene-d8	136	11.777	11.778	(1.000)	1835979	4.00000	
30	Hexachlorobutadiene	225	12.048	12.048	(1.023)	17296	0.18444	0.1844
39	Dimethylphthalate	163	14.819	14.819	(0.962)	45691	0.16538	0.1654
* 42	Acenaphthene-d10	162	15.399	15.391	(1.000)	870106	4.00000	
50	Diethylphthalate	149	16.296	16.296	(1.058)	42649	0.16369	0.1637
54	N-Nitrosodiphenylamine	169	16.798	16.790	(0.907)	38709	0.16116	0.1612
57	Hexachlorobenzene	284	17.686	17.679	(0.955)	21986	0.19559	0.1956

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.120	18.105	(0.978)	975	0.01983	0.01983
*	59 Phenanthrene-d10	188	18.522	18.522	(1.000)	1484174	4.00000	
$	66 Terphenyl-d14	244	21.694	21.695	(0.918)	24083	0.23996	0.2400(R)
	67 Butylbenzylphthalate	149	22.600	22.593	(0.957)	19189	0.09159	0.09159
*	69 Chrysene-d12	240	23.622	23.615	(1.000)	1241077	4.00000	
*	77 Perylene-d12	264	26.448	26.449	(1.000)	1512758	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.442	29.435	(1.113)	80369	0.22871	0.2287
	90 N-Nitrosodimethylamine	74	4.771	4.755	(0.514)	41157	0.45204	0.4520

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032304S.D
Lab Smp Id: SLC0250-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 03-MAR-2023
Calibration Time: 19:05
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	602309	301155	1204618	538660	-10.57
27 Naphthalene-d8	2101699	1050850	4203398	1835979	-12.64
42 Acenaphthene-d10	1002910	501455	2005820	870106	-13.24
59 Phenanthrene-d10	1732061	866031	3464122	1484174	-14.31
69 Chrysene-d12	1410089	705045	2820178	1241077	-11.99
77 Perylene-d12	1732981	866491	3465962	1512758	-12.71

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	-0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.78	-0.00
42 Acenaphthene-d10	15.39	14.89	15.89	15.40	0.05
59 Phenanthrene-d10	18.52	18.02	19.02	18.52	-0.00
69 Chrysene-d12	23.62	23.12	24.12	23.62	0.03
77 Perylene-d12	26.45	25.95	26.95	26.45	-0.00

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

REVIEW SUMMARY FOR FILE - NT1003032304S.D

Lab ID: SLC0250-LCV1
nt10.i, 20230303.b\SIM.b\SIMABN2.m,   03-MAR-2023 19:43

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.113	1.000	0.1132	Dibenzo(a,h)anthracene

RRT check based on Ccal File: SIM.b/NT1003032303S.D

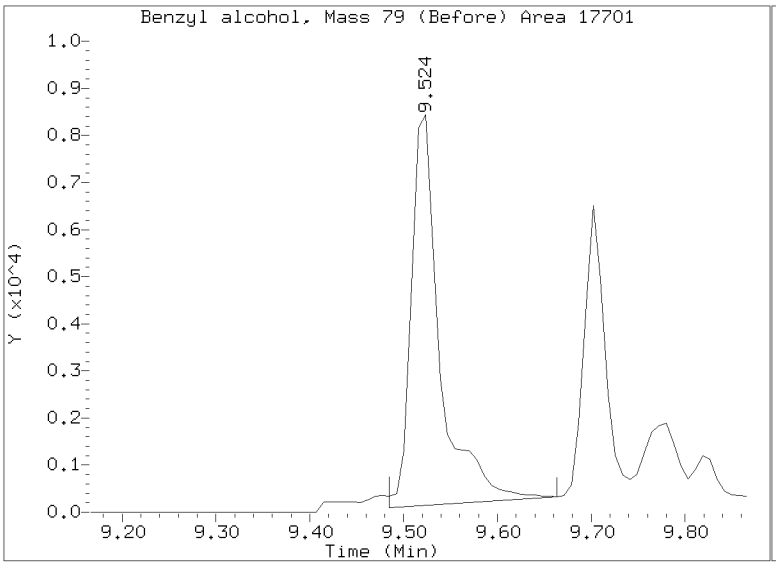
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

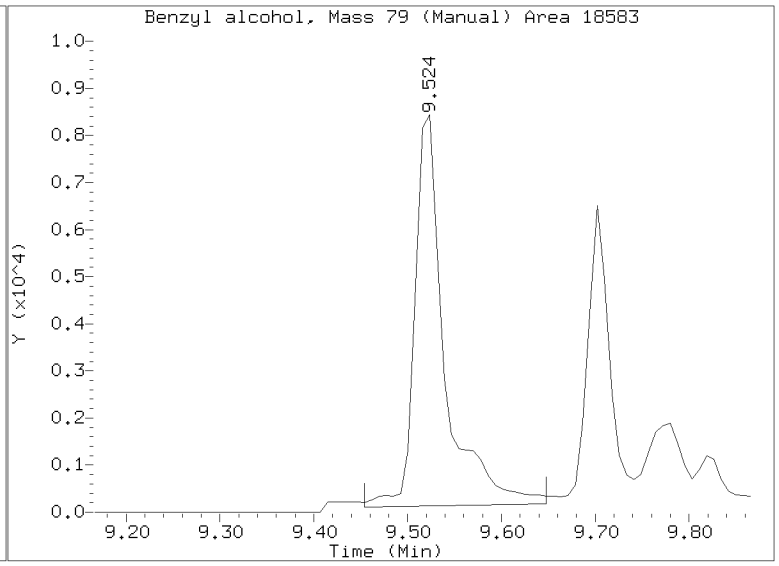
Exception: 1,2,4-Trichlorobenzene 0.0010

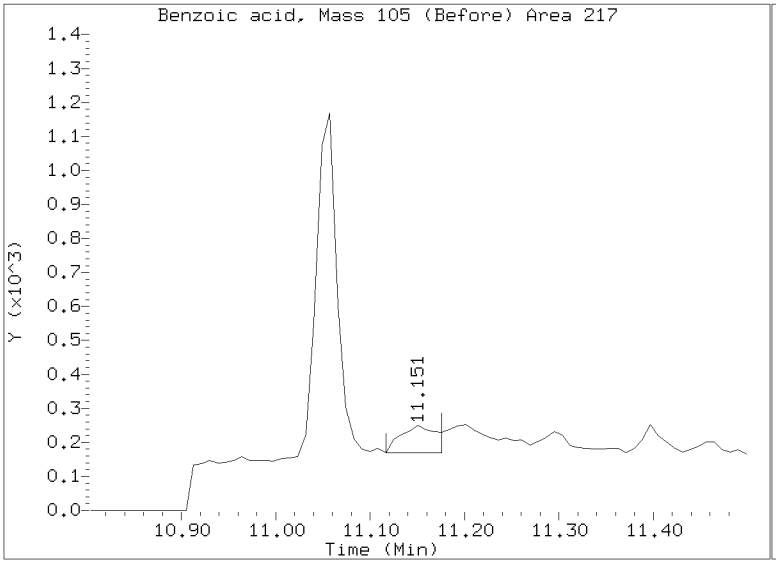
* Only compounds listed in the work order have been verified by the analyst *

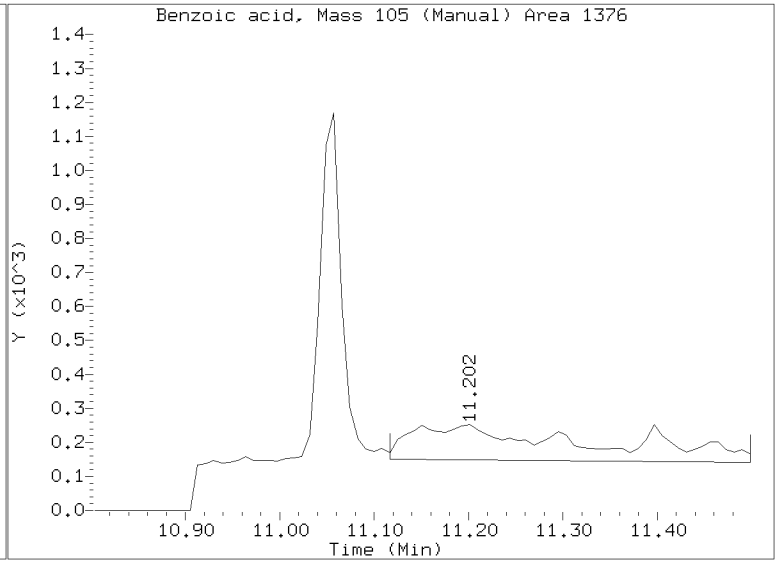
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230303.b/SIM.b/NT1003032304S.D
Injection Date: 03-MAR-2023 19:43
Lab ID:SLC0250-LCV1 Client ID:
Report Date: 03/17/2023 10:19









Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00032
Lab File ID:	NT1003032327S.D	Calibration Date:	03/01/2023
Sequence:	SLC0253	Injection Date:	03/04/23
Lab Sample ID:	SLC0253-CCV1	Injection Time:	10:17
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
1,4-Dichlorobenzene	A	1.0000	0.9	1.4413080	1.3340940		-7.4	+/-50	
1,2-Dichlorobenzene	A	1.0000	0.9	1.3853460	1.3159410		-5.0	+/-50	
Benzyl Alcohol	A	1.0000	0.9	0.7492523	0.8248183		-12.6	+/-50	
Benzoic acid	A	4.0000	0.3	0.1431163	0.0141942		-92.4	+/-50	*
2,4-Dimethylphenol	A	2.0000	2.0	0.2957717	0.3465882		1.6	+/-50	
1,2,4-Trichlorobenzene	A	1.0000	1.2	0.2879030	0.3312584		15.1	+/-50	
N-Nitrosodiphenylamine	A	1.0000	0.9	0.6473471	0.5573334		-13.9	+/-50	
Pentachlorophenol	A	2.0000	0.2	0.0950913	0.0113583		-91.4	+/-50	*
2-Fluorophenol	A	1.5000	1.74	1.1419780	1.3253320		16.1	+/-50	
p-Terphenyl-d14	A	1.0000	1.52	0.3234672	0.4913750		51.9	+/-50	*

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323275.D

Page 1

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

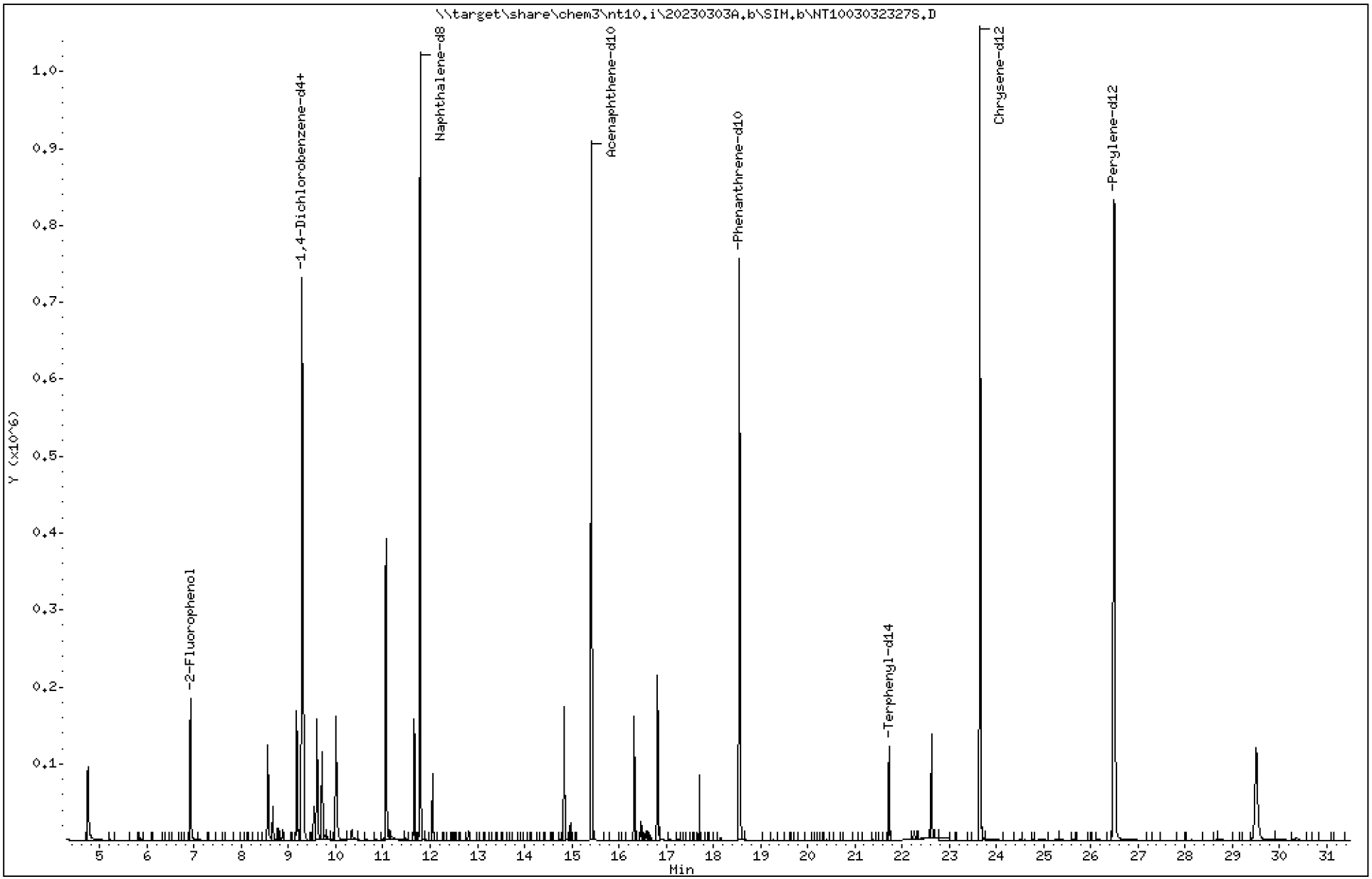
Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

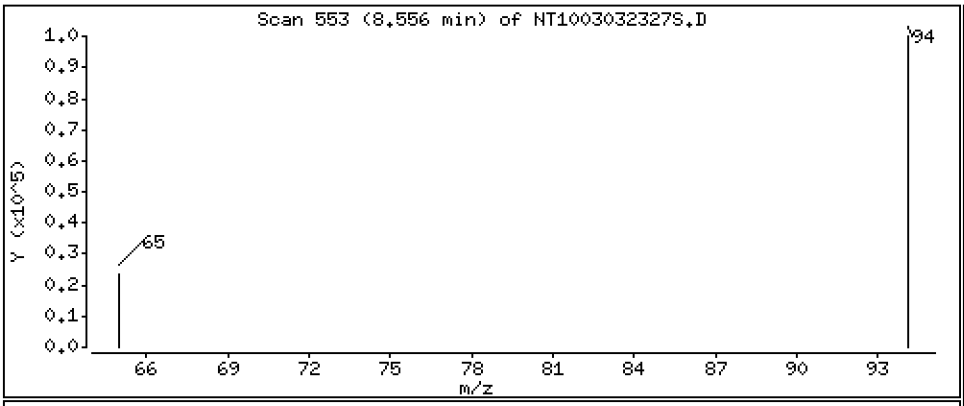
Operator: JGR

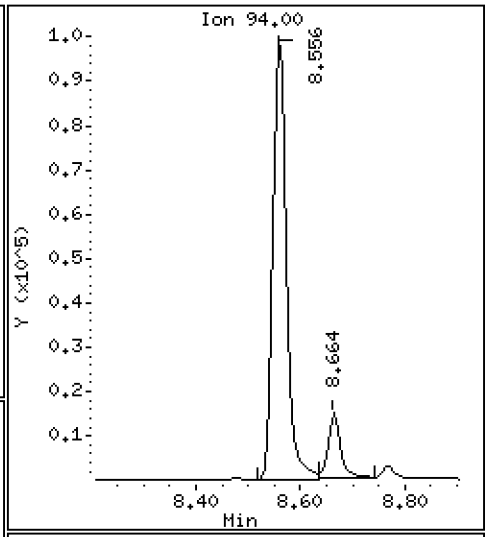
Column phase: ZB-5msi

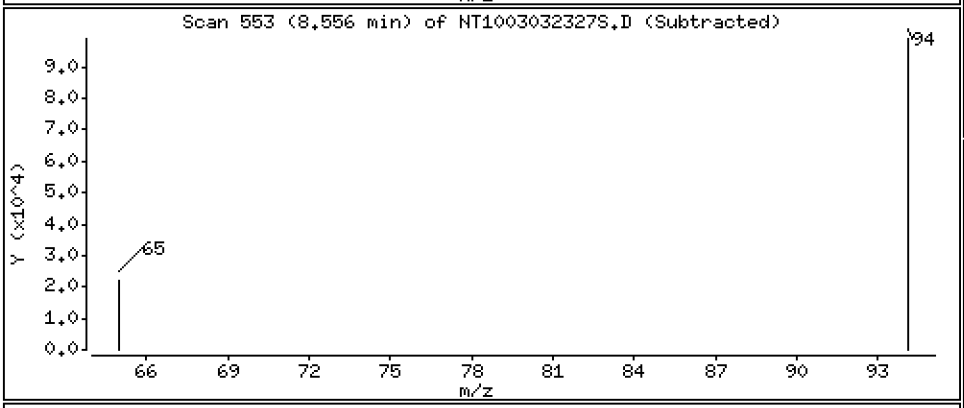
Column diameter: 0.25

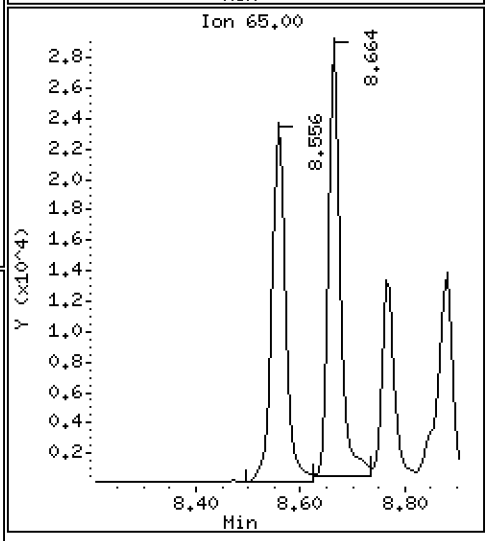
3 Phenol

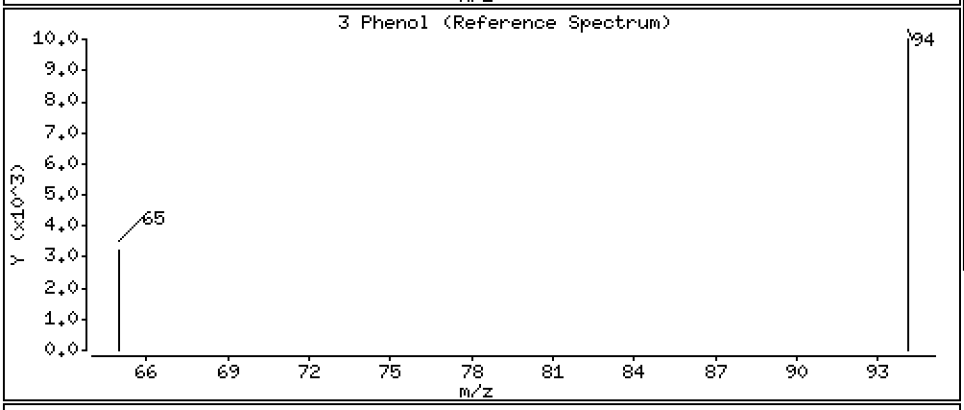
Concentration: 0.9275 ug/L

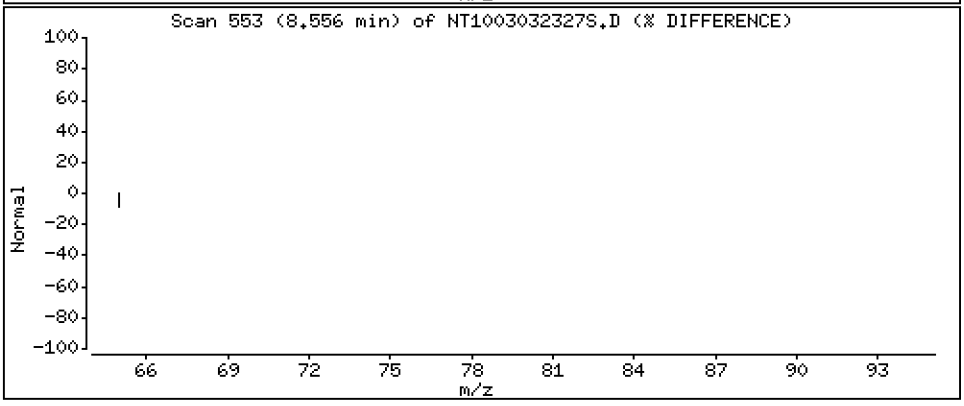












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Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

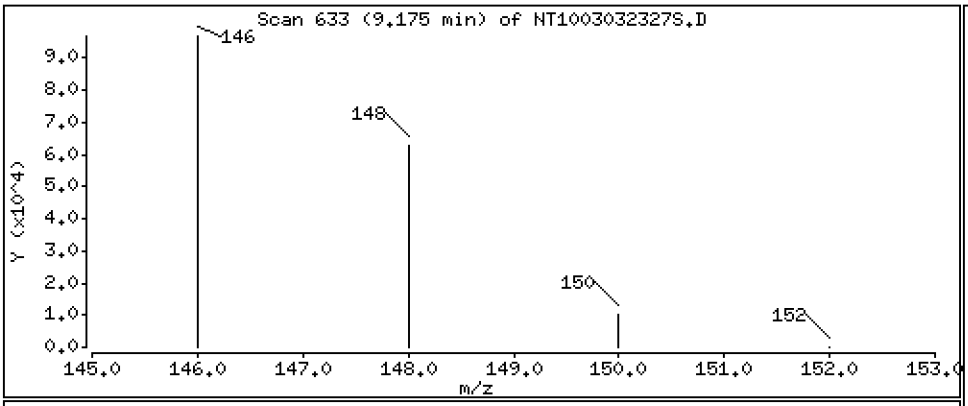
Operator: JGR

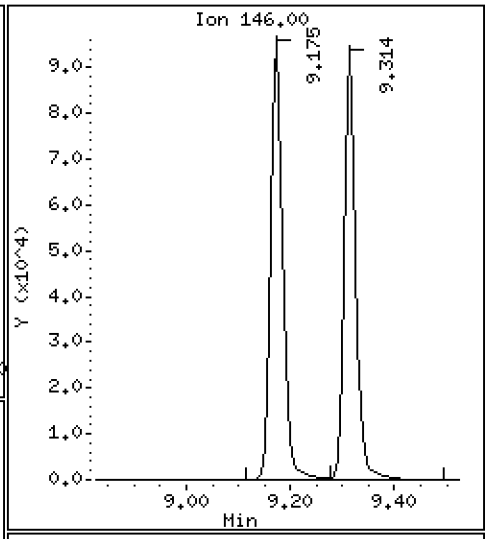
Column phase: ZB-5msi

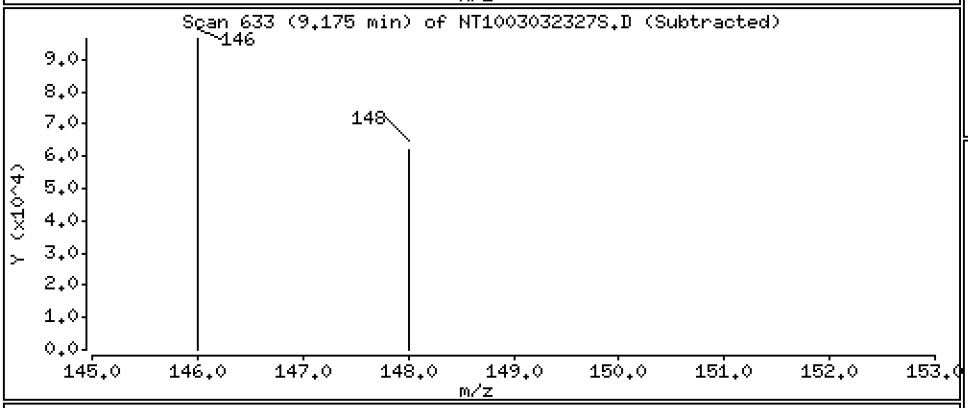
Column diameter: 0.25

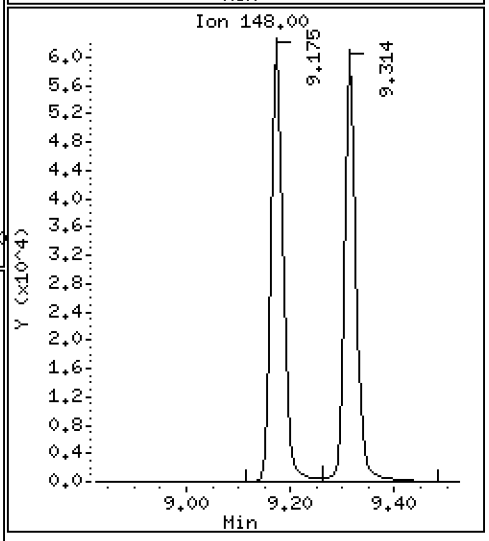
7 1,3-Dichlorobenzene

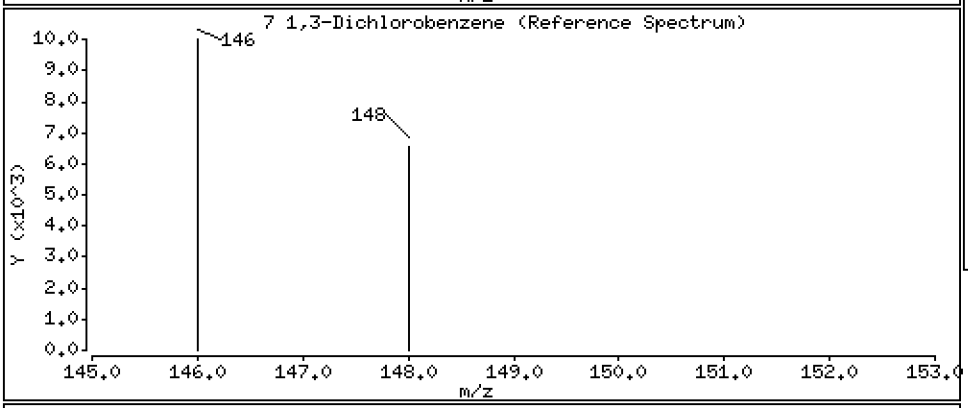
Concentration: 0.9464 ug/L

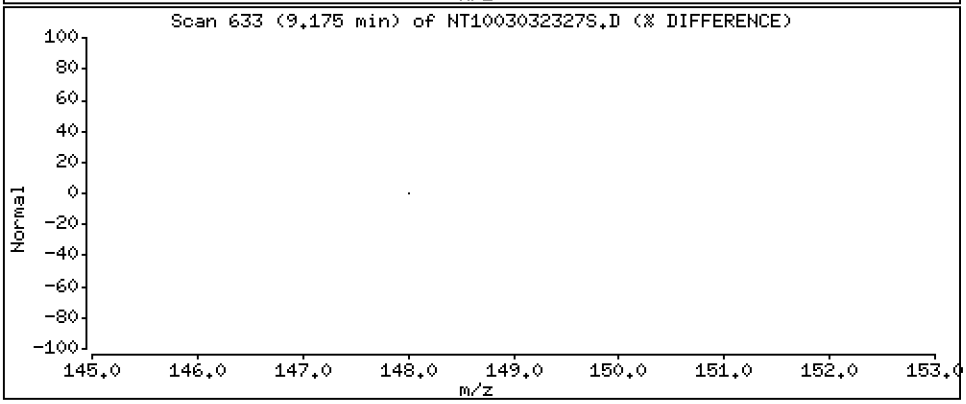












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323275.D

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

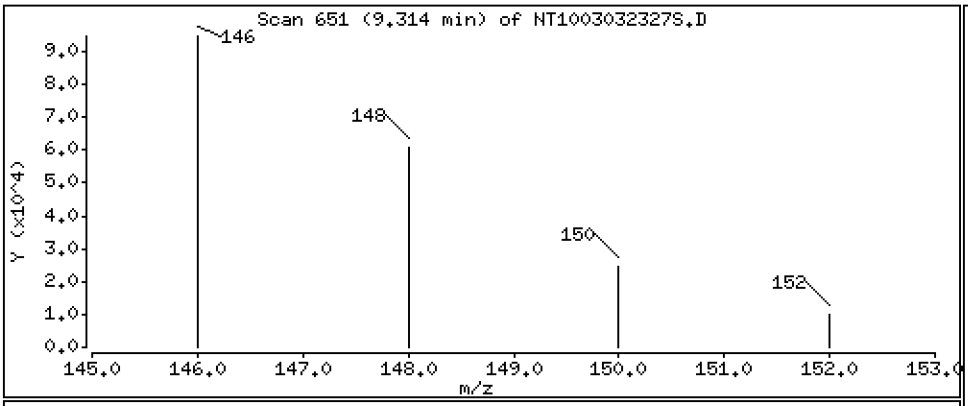
Operator: JGR

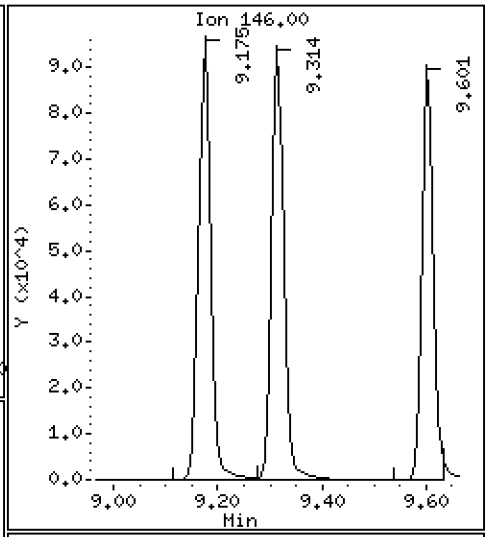
Column phase: ZB-5msi

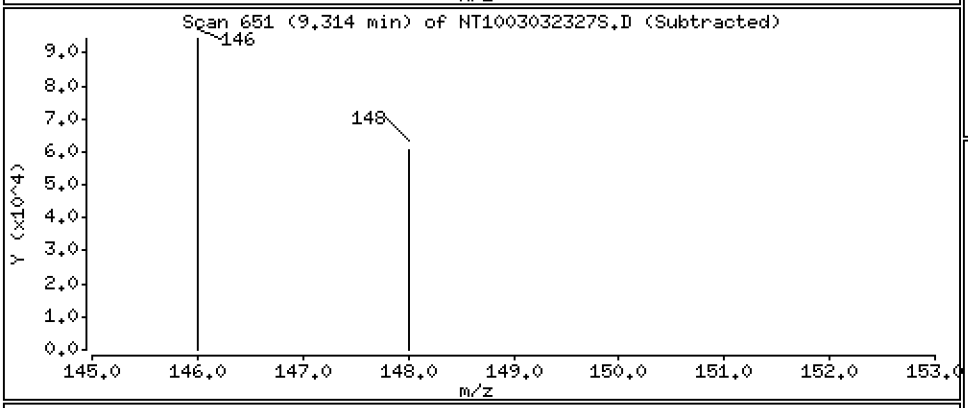
Column diameter: 0.25

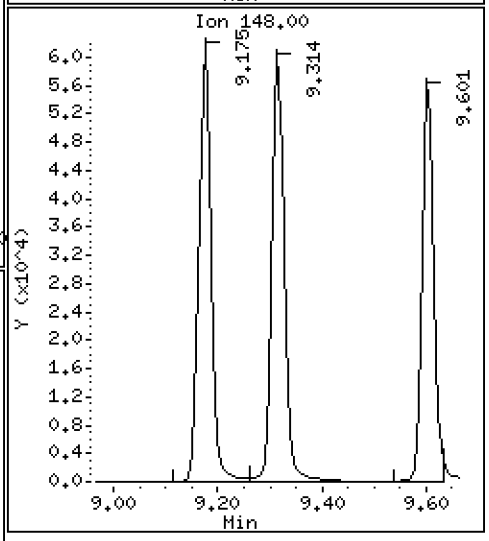
9 1,4-Dichlorobenzene

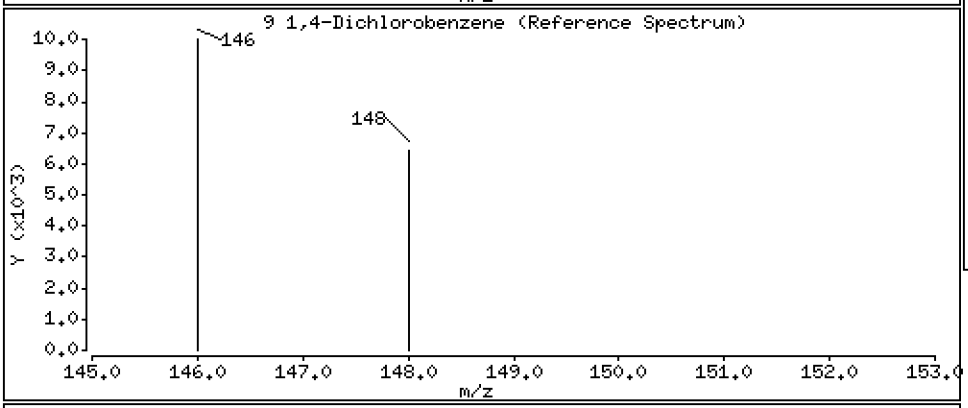
Concentration: 0.9256 ug/L

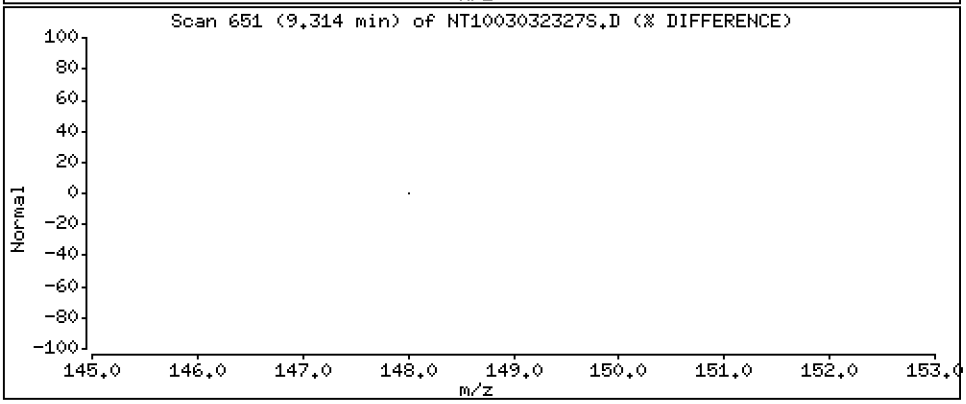












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323275.D

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

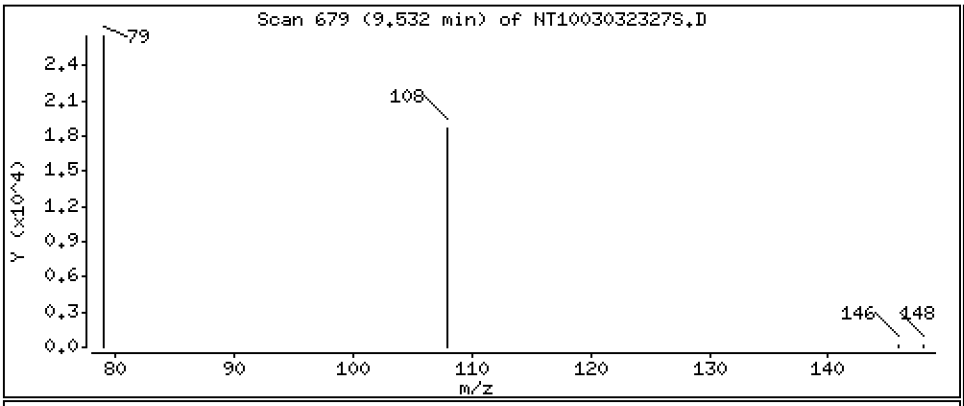
Operator: JGR

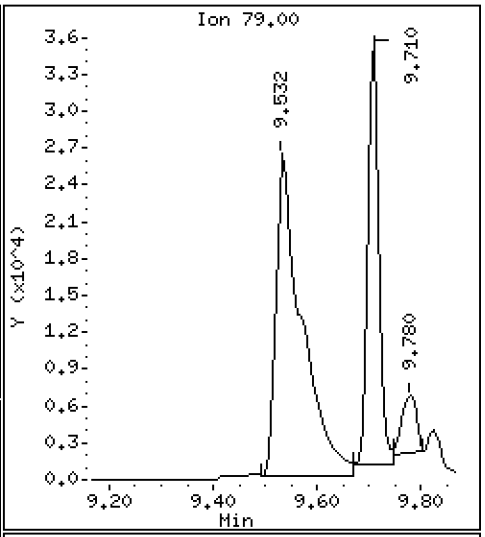
Column phase: ZB-5msi

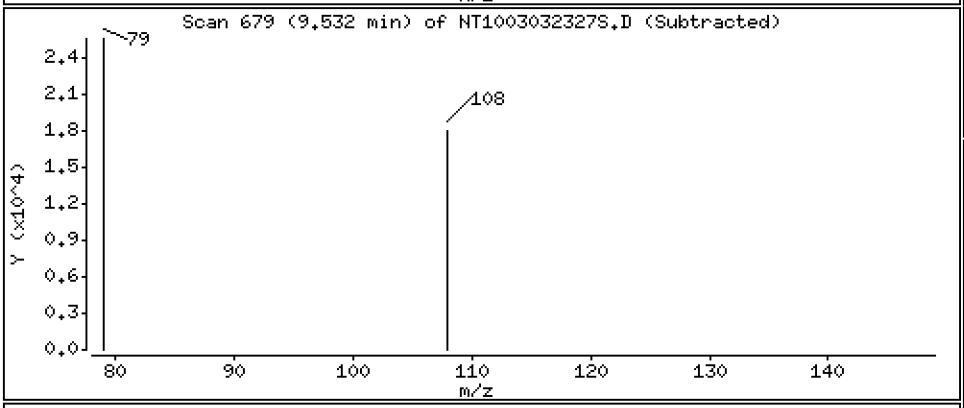
Column diameter: 0.25

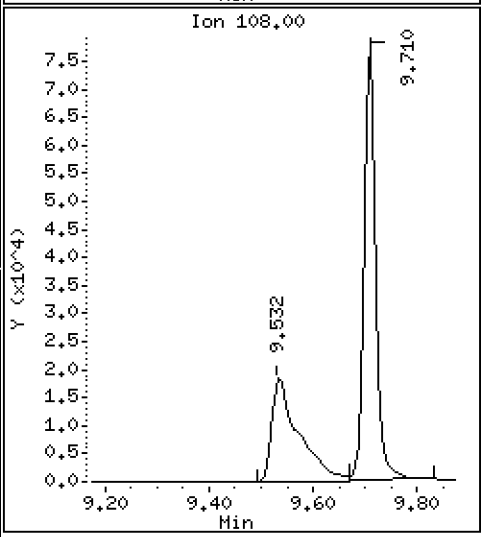
11 Benzyl alcohol

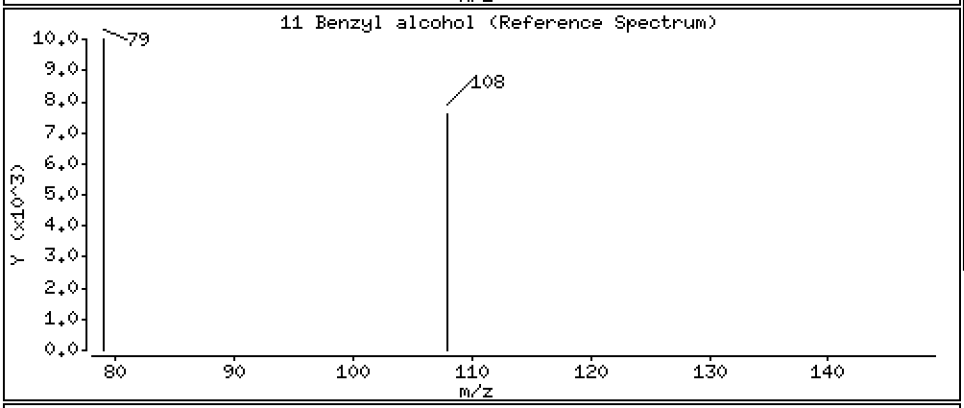
Concentration: 0.8738 ug/L

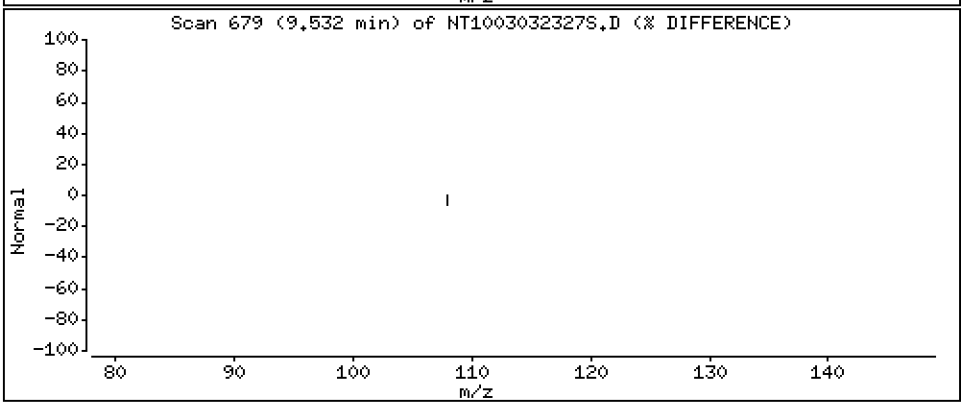












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Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

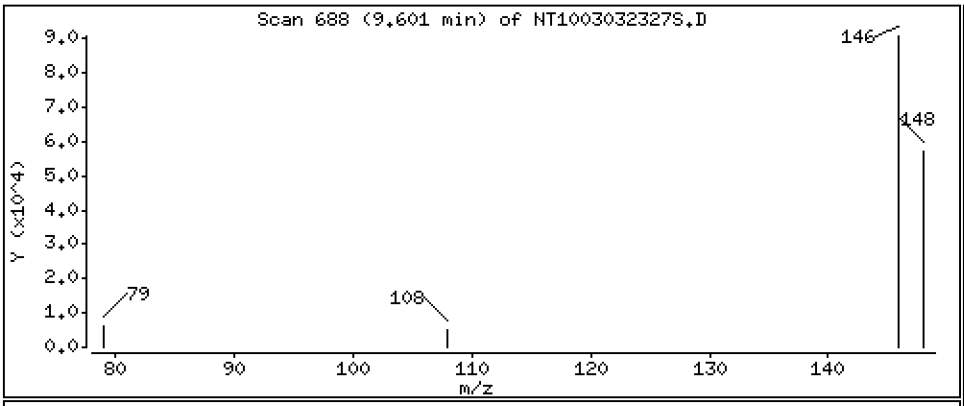
Operator: JGR

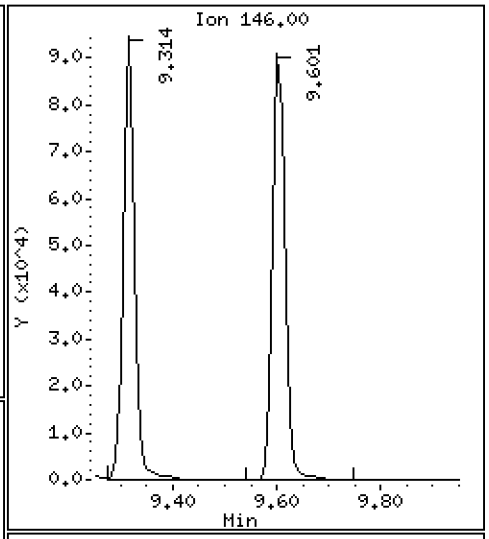
Column phase: ZB-5msi

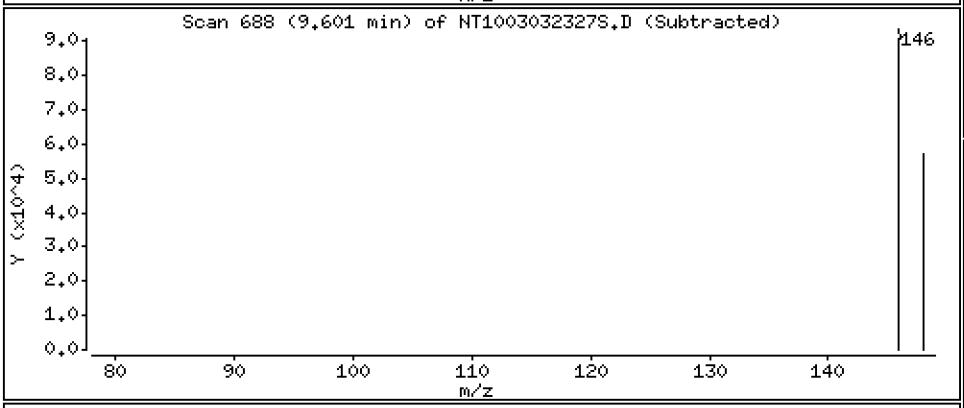
Column diameter: 0.25

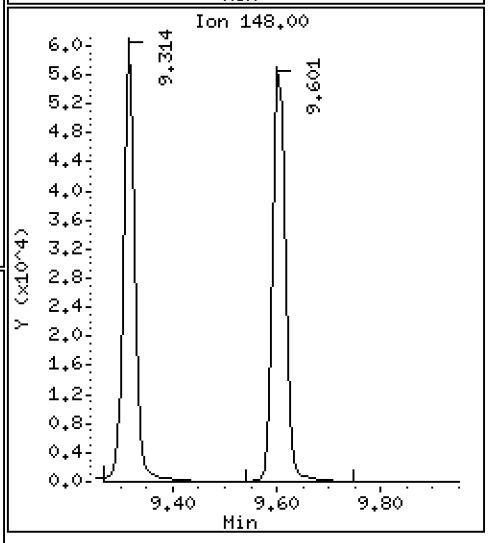
12 1,2-Dichlorobenzene

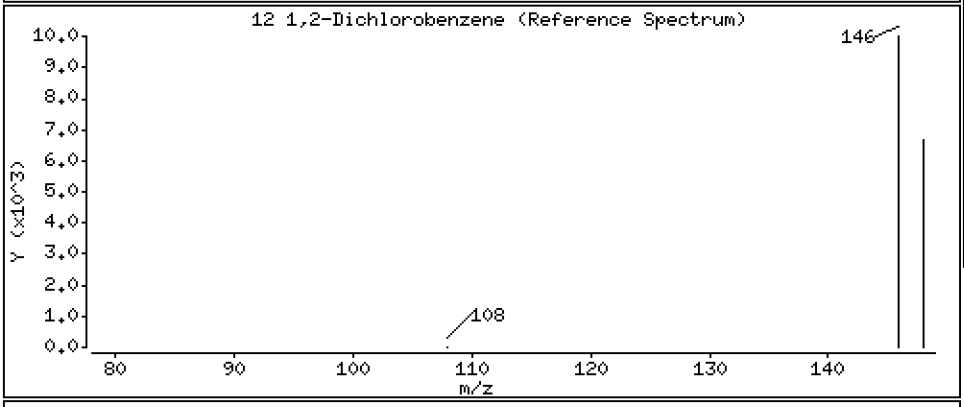
Concentration: 0.9499 ug/L

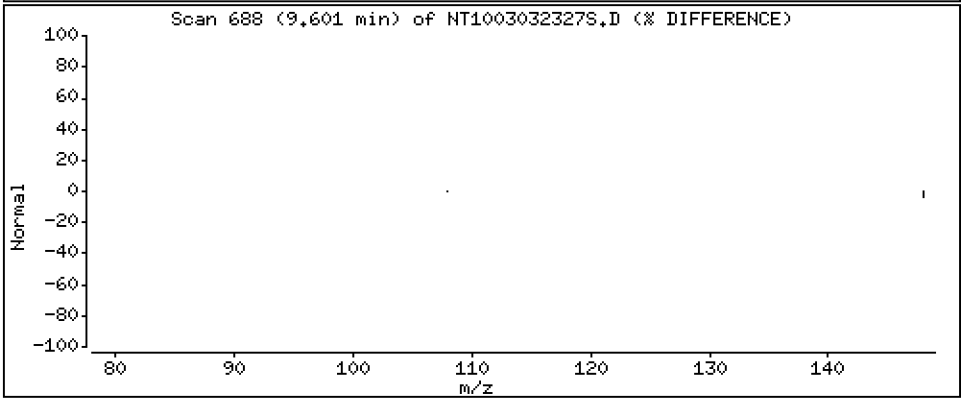












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Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

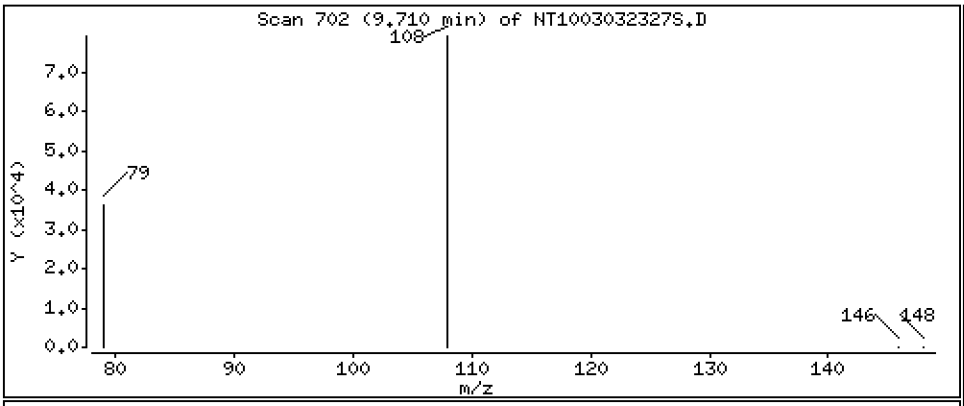
Operator: JGR

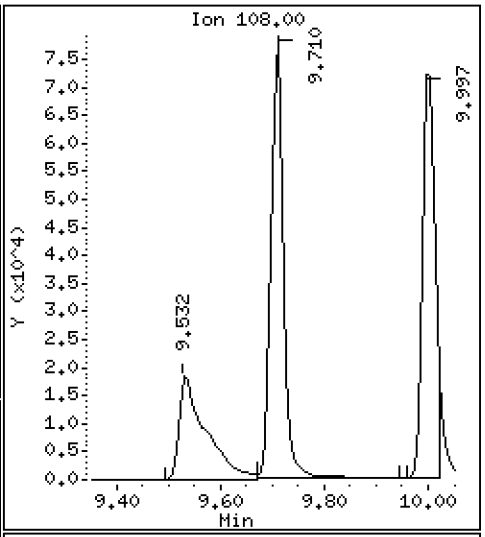
Column phase: ZB-5msi

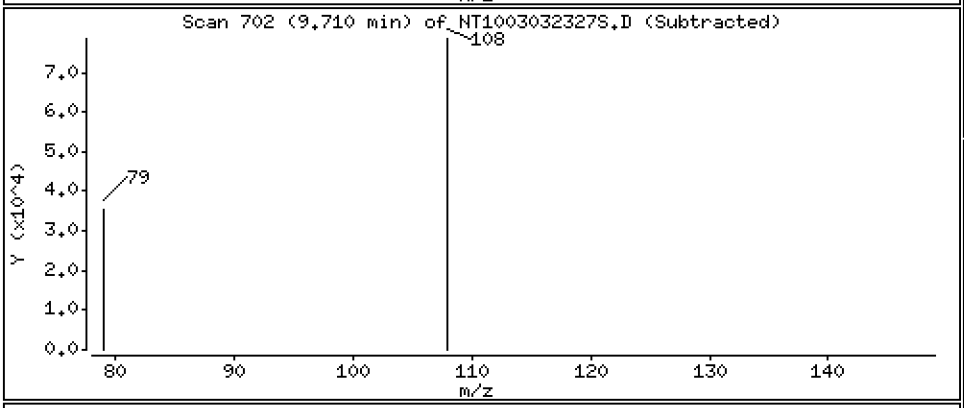
Column diameter: 0.25

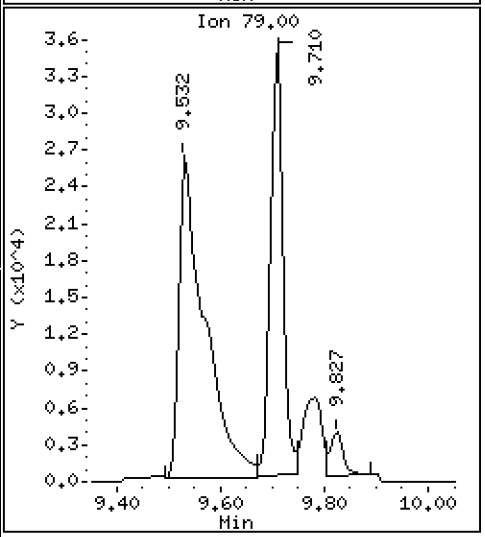
13 2-Methylphenol

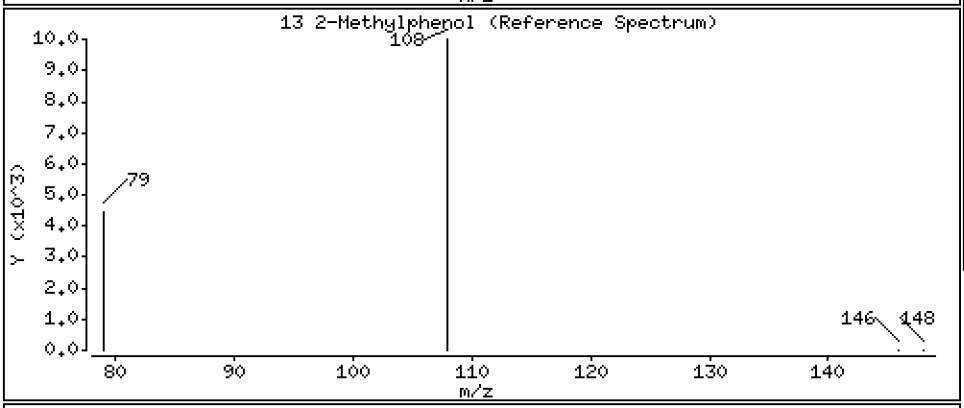
Concentration: 1.146 ug/L

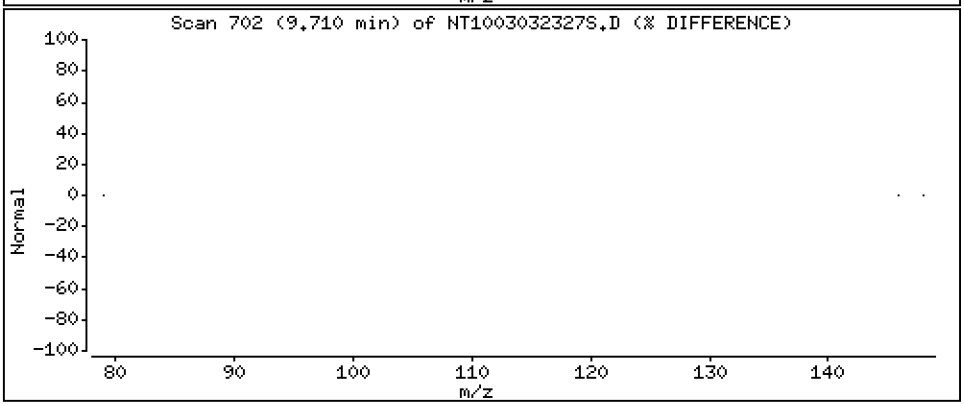












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323275.D

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

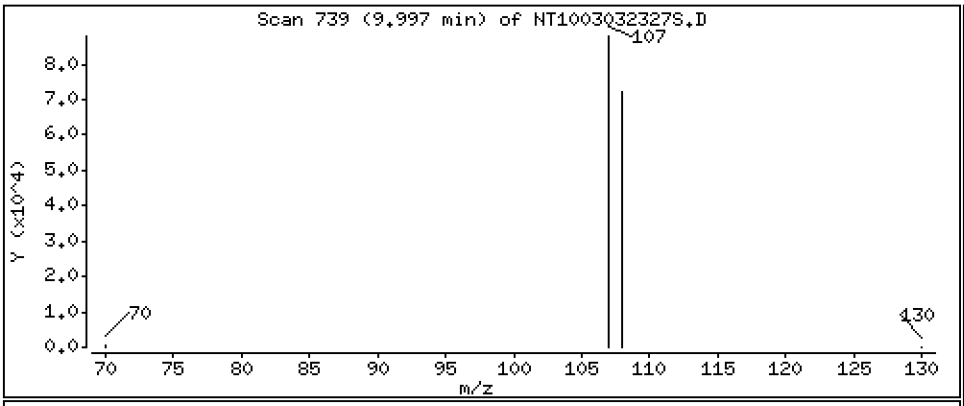
Operator: JGR

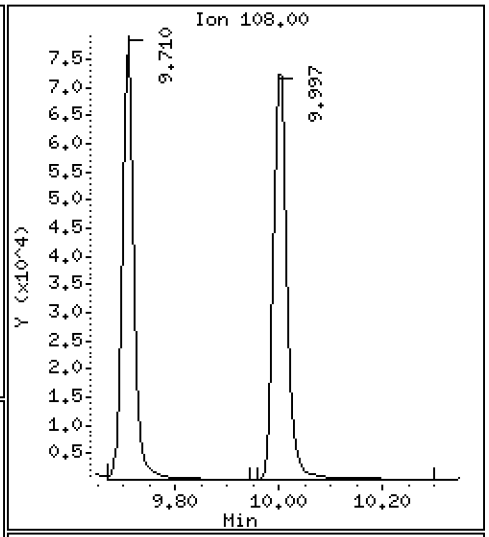
Column phase: ZB-5msi

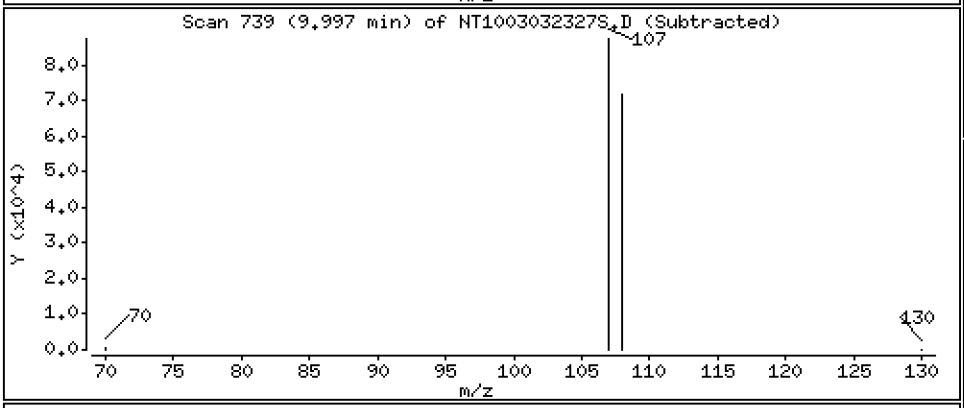
Column diameter: 0.25

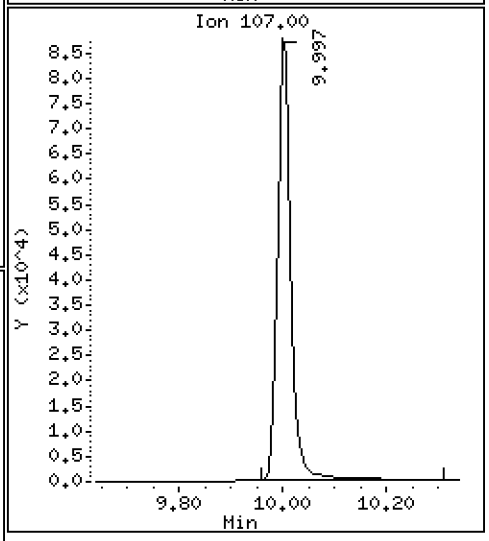
15 4-Methylphenol

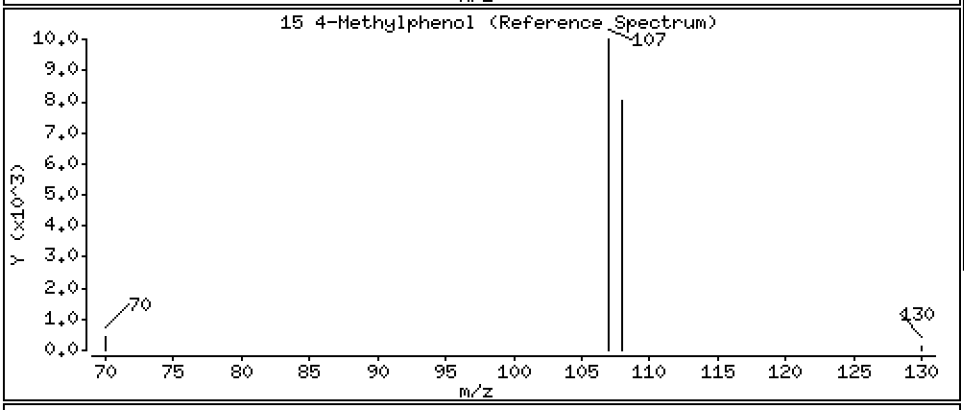
Concentration: 1.108 ug/L

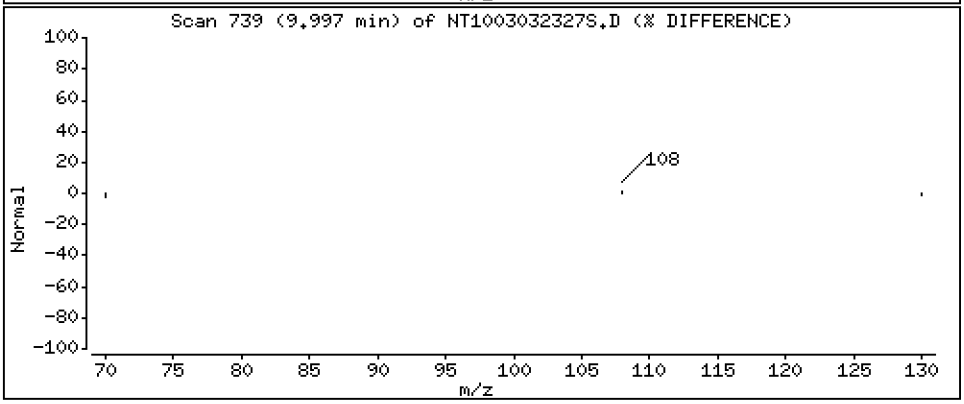












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323275.D

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

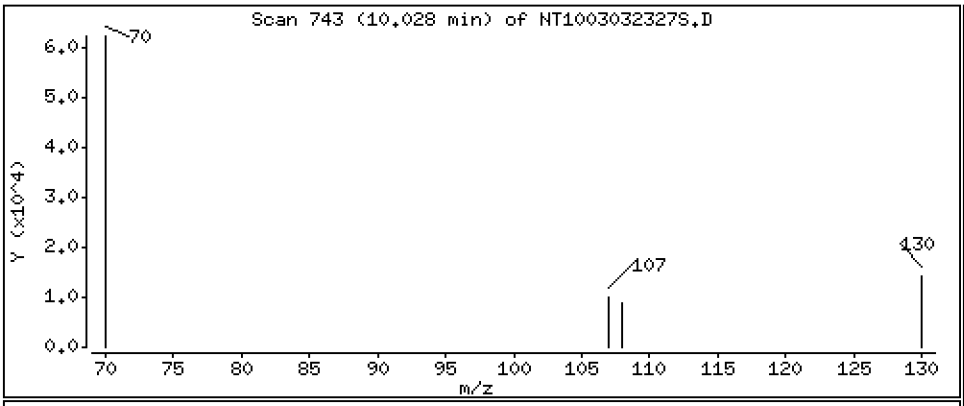
Operator: JGR

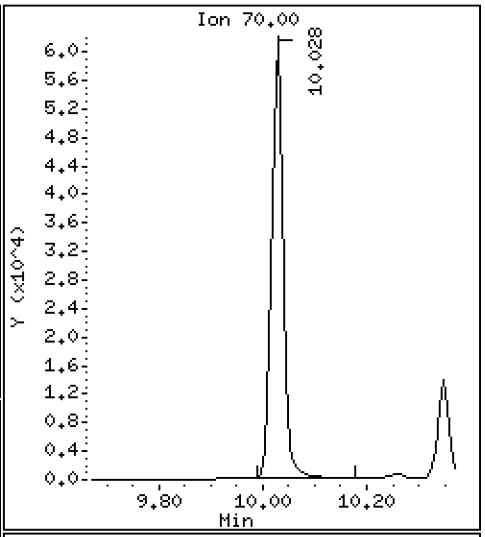
Column phase: ZB-5msi

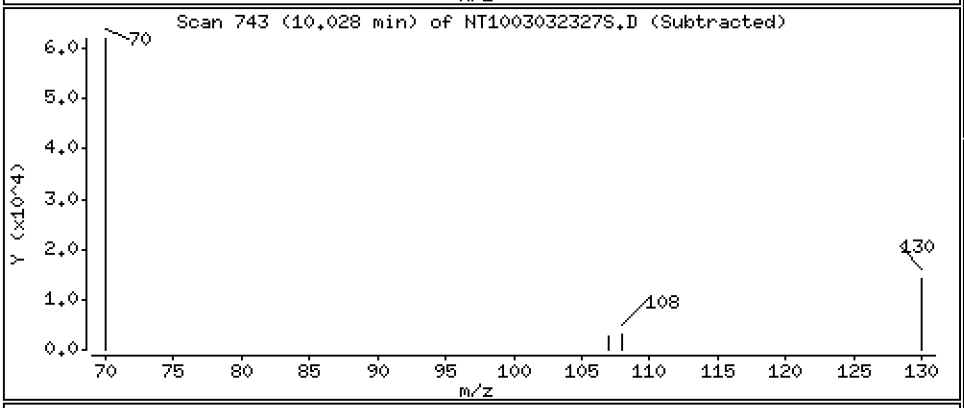
Column diameter: 0.25

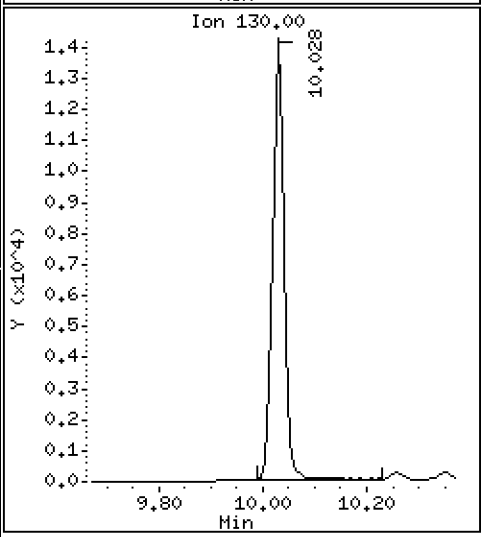
16 N-Nitroso-di-n-propylamine

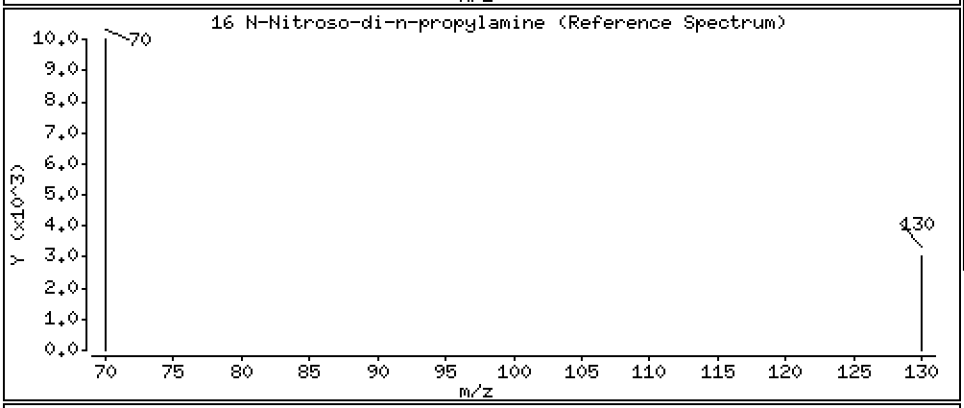
Concentration: 1.123 ug/L

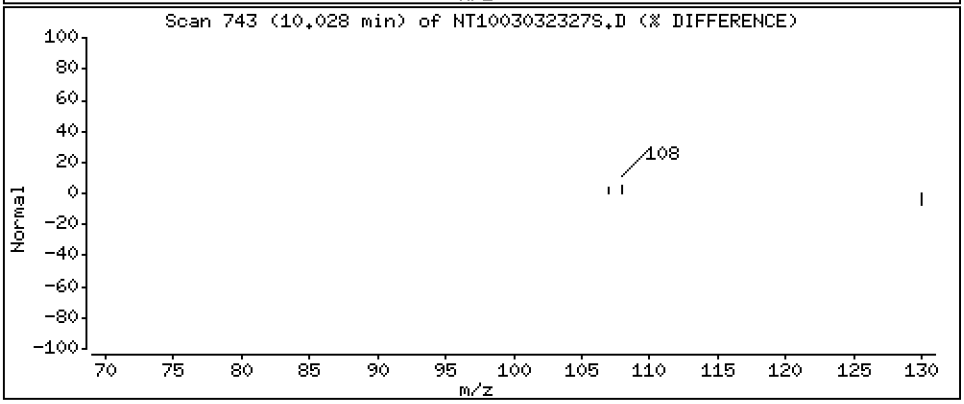












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323275.D

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

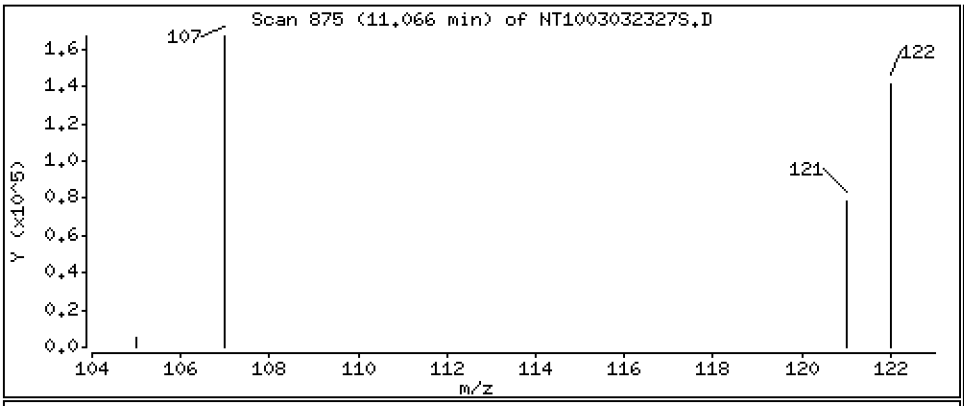
Operator: JGR

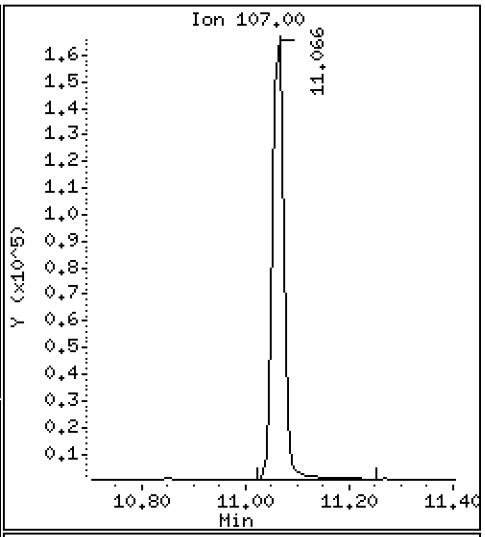
Column phase: ZB-5msi

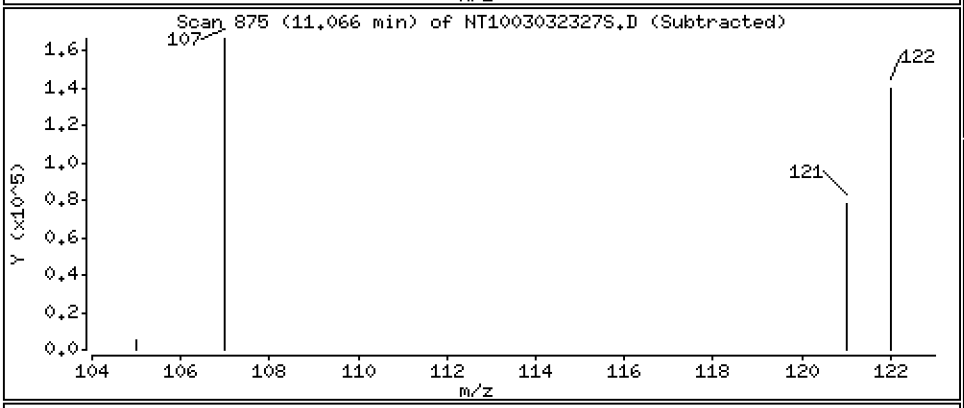
Column diameter: 0.25

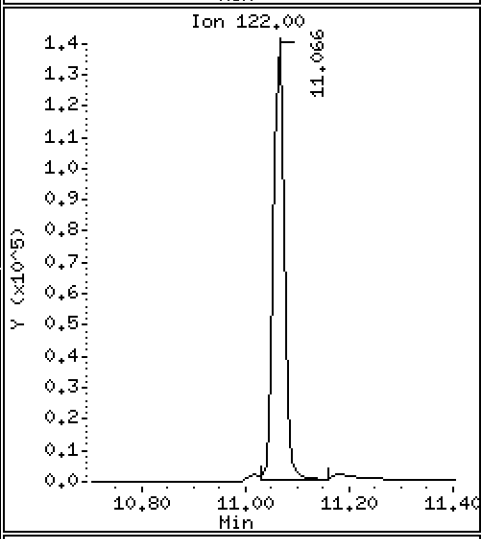
22 2,4-Dimethylphenol

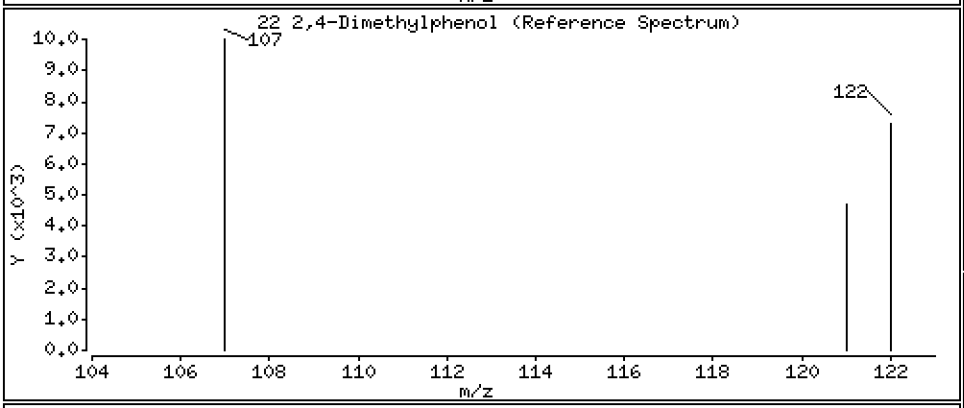
Concentration: 2.031 ug/L

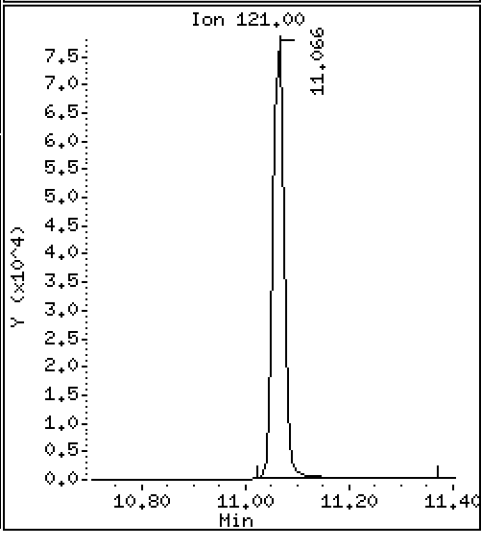


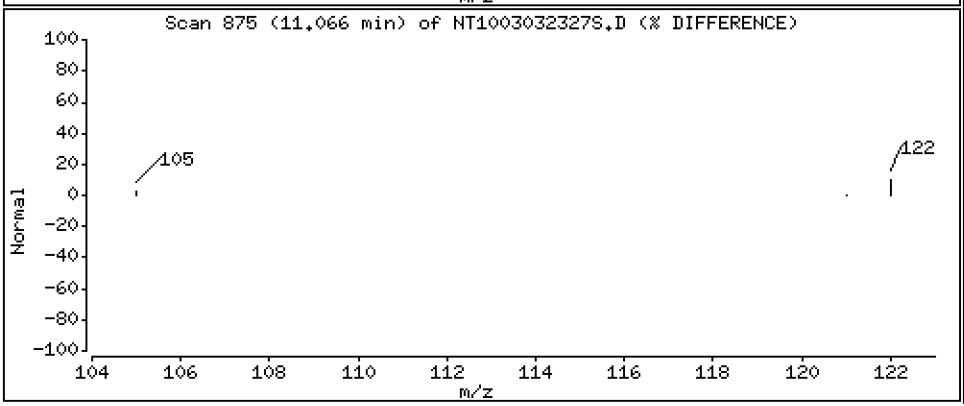












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Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

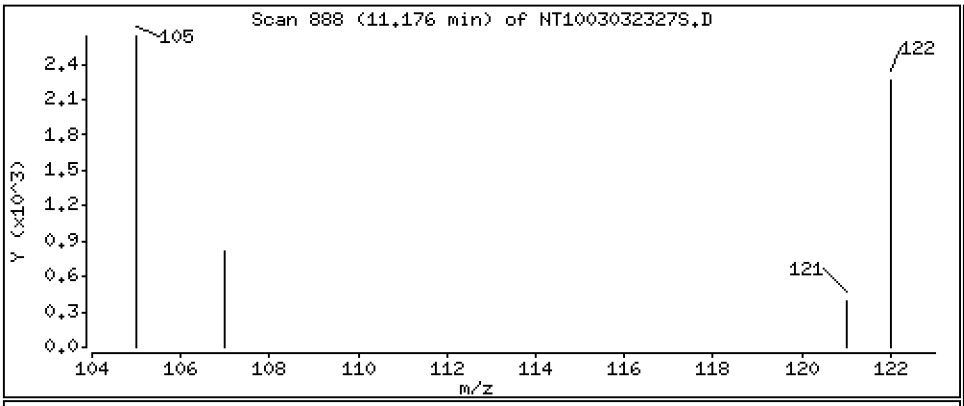
Operator: JGR

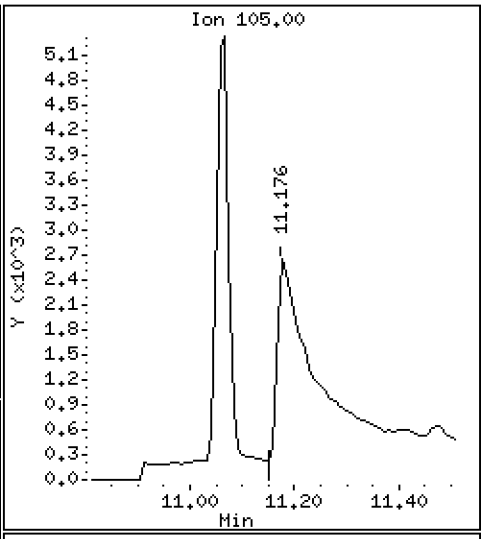
Column phase: ZB-5msi

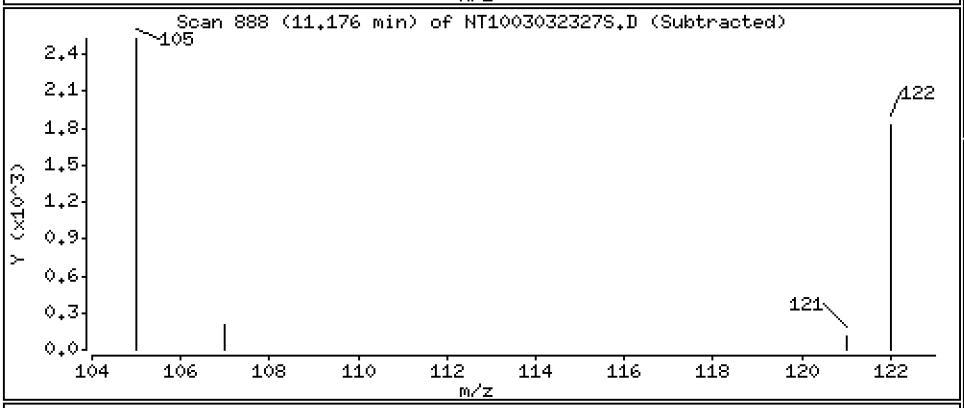
Column diameter: 0.25

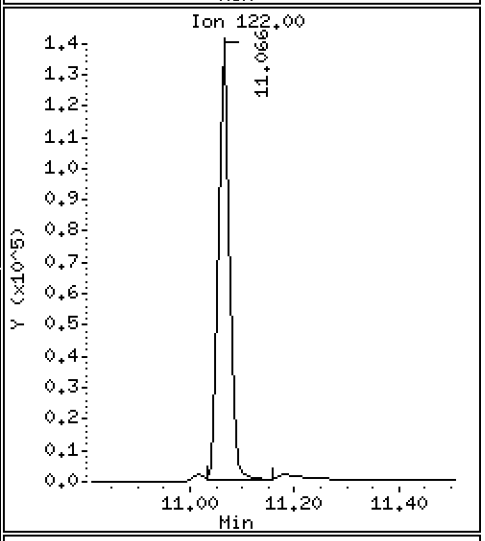
24 Benzoic acid

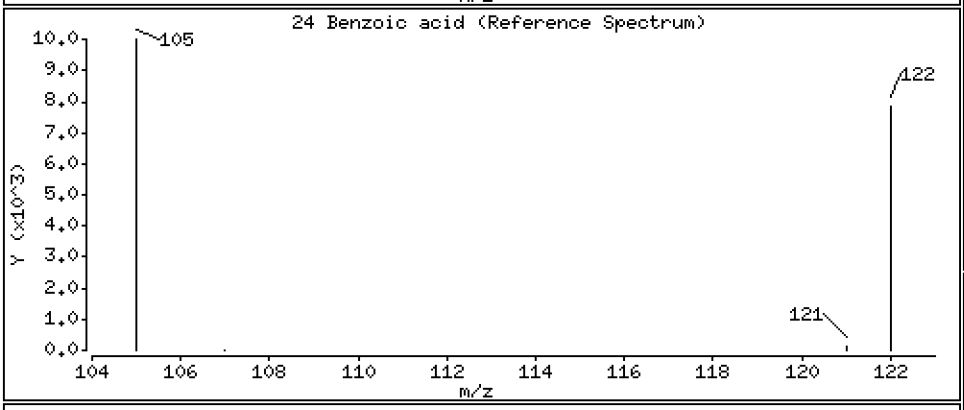
Concentration: 0.3047 ug/L

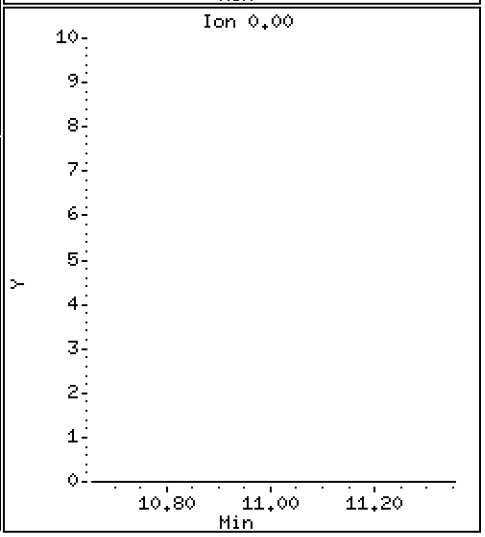


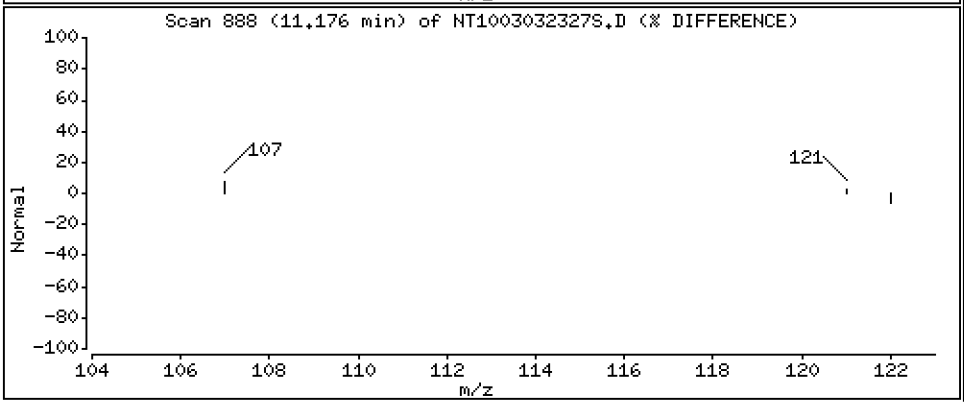












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323275.D

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

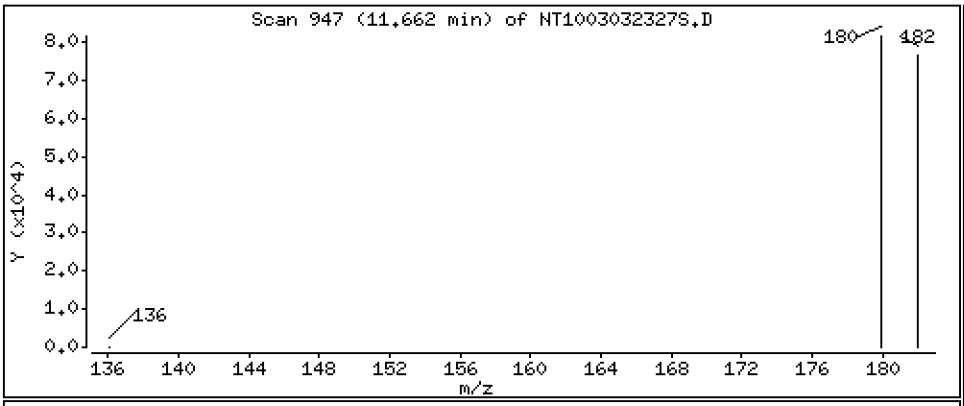
Operator: JGR

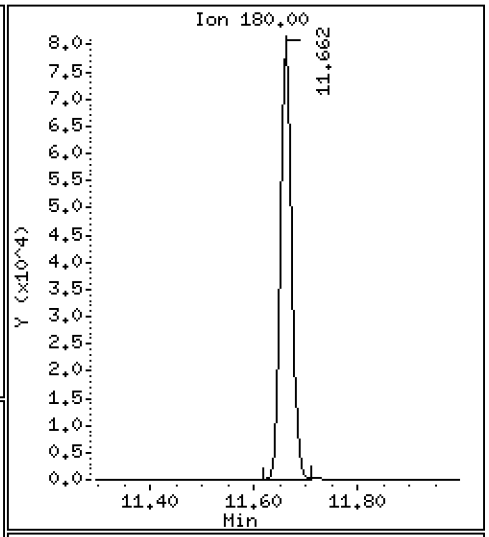
Column phase: ZB-5msi

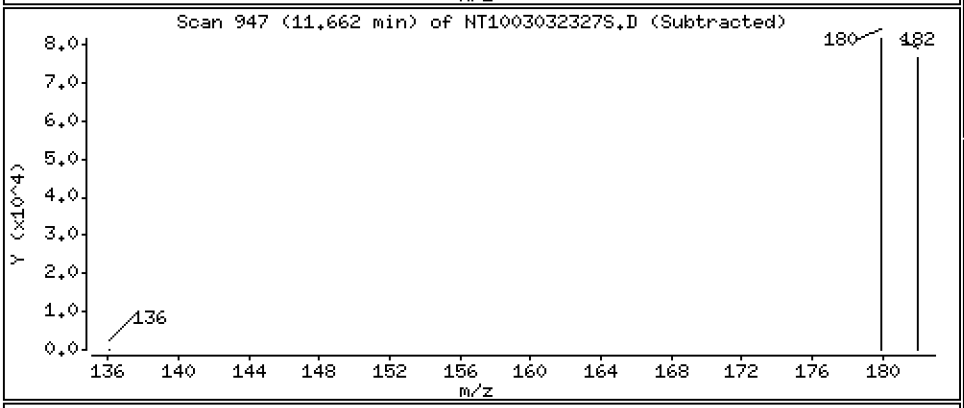
Column diameter: 0.25

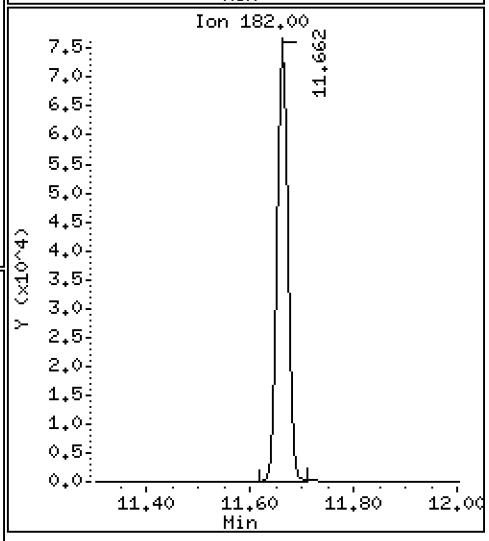
26 1,2,4-Trichlorobenzene

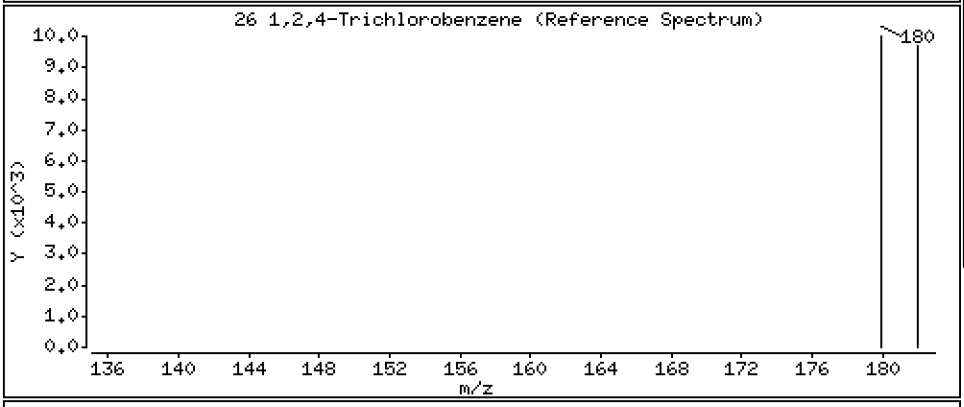
Concentration: 1.151 ug/L

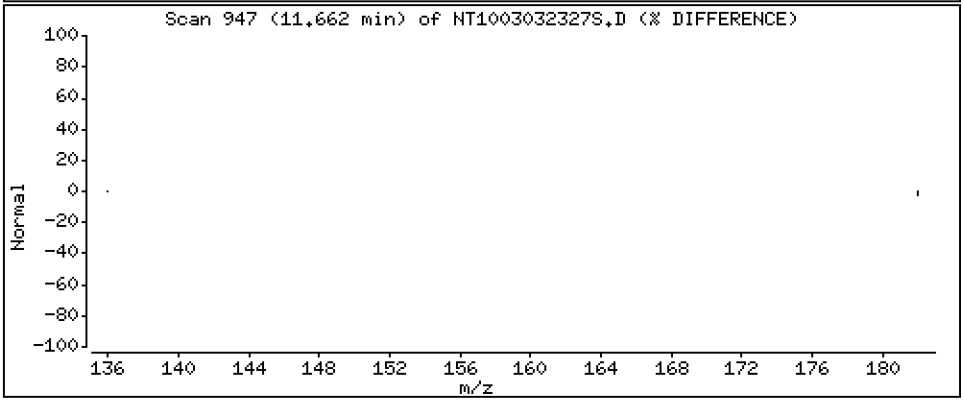












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323275.D

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

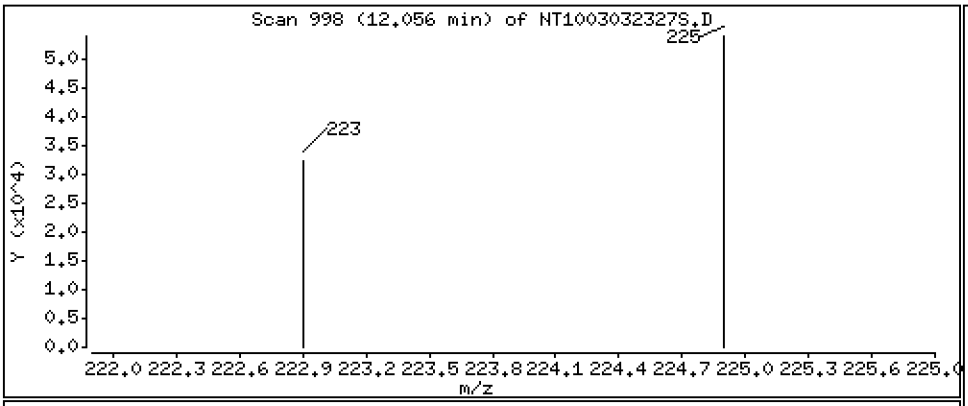
Operator: JGR

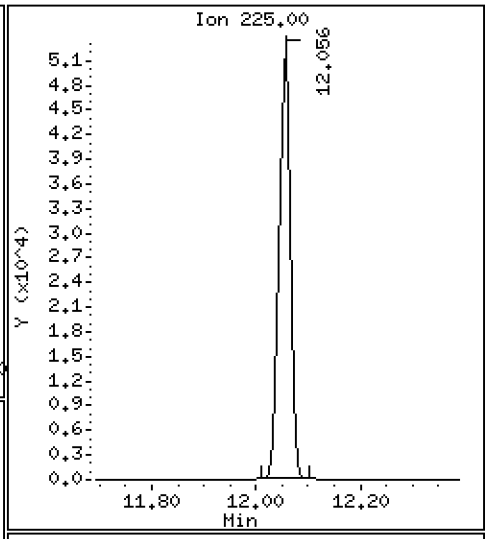
Column phase: ZB-5msi

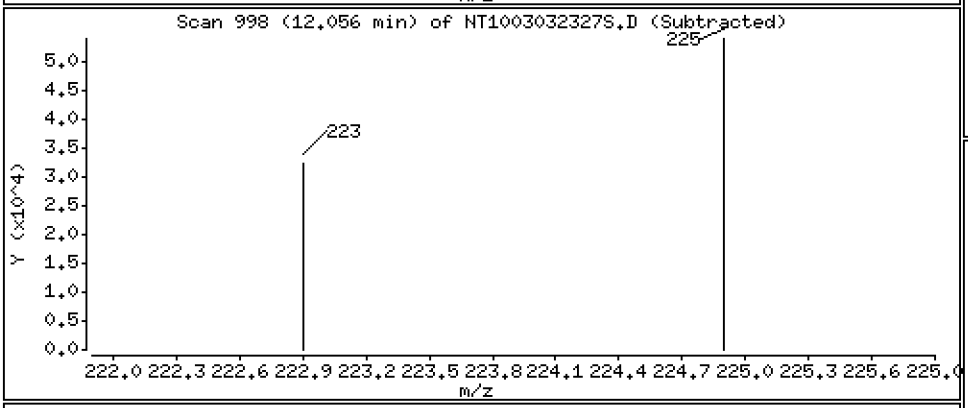
Column diameter: 0.25

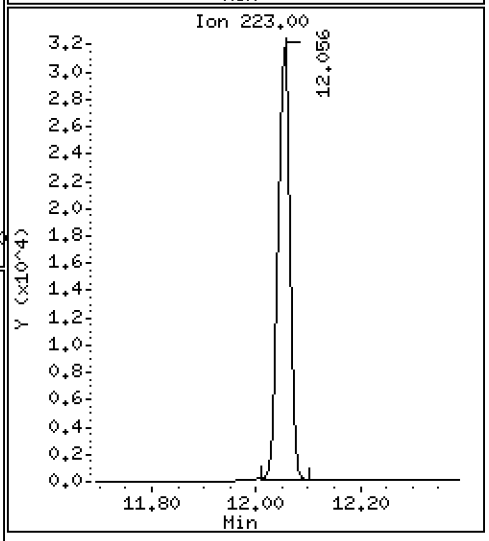
30 Hexachlorobutadiene

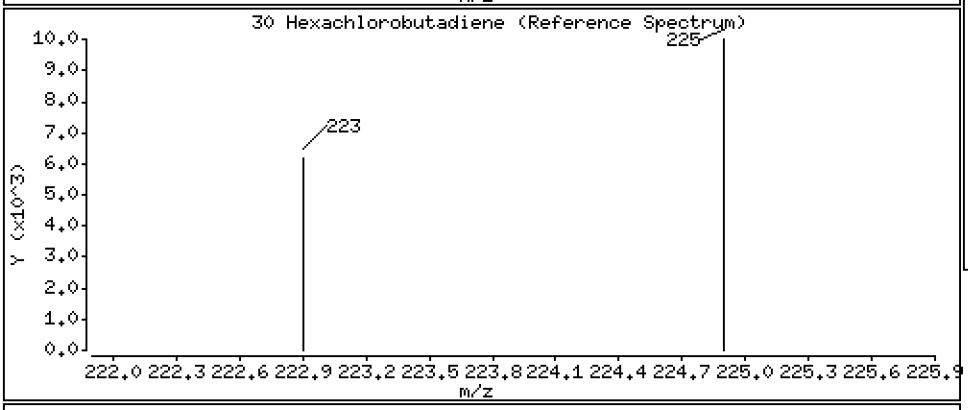
Concentration: 1.011 ug/L

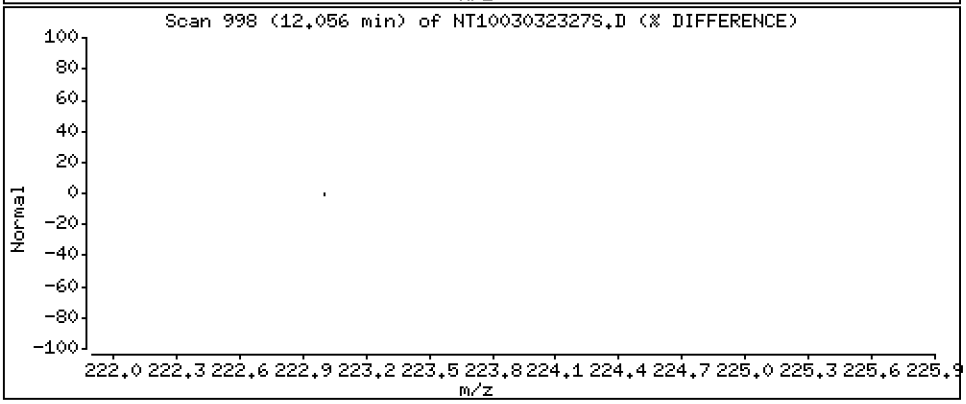












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323275.D

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

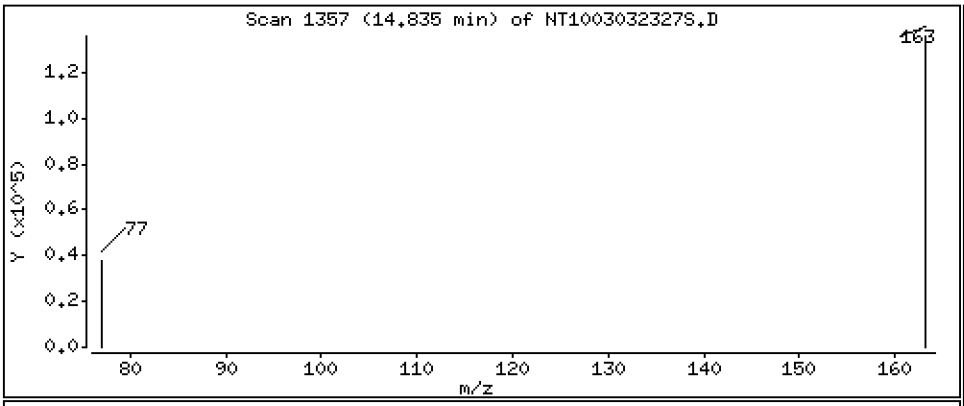
Operator: JGR

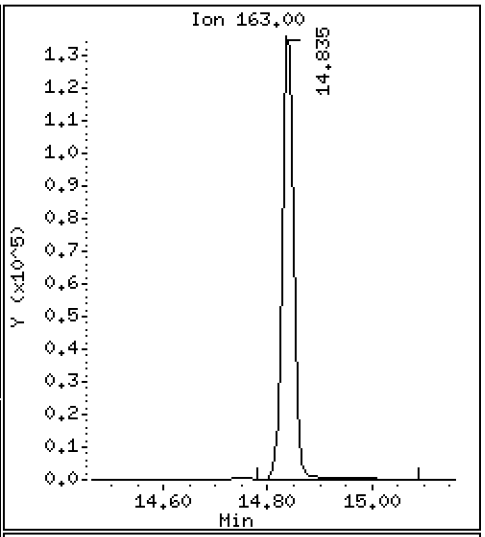
Column phase: ZB-5msi

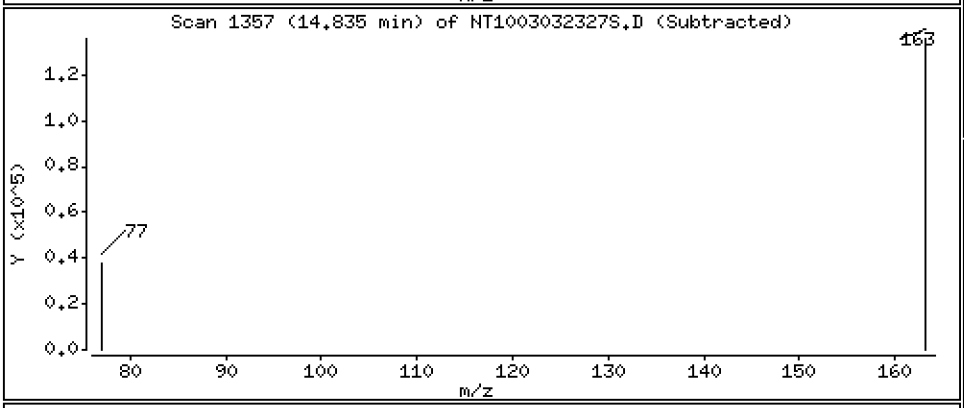
Column diameter: 0.25

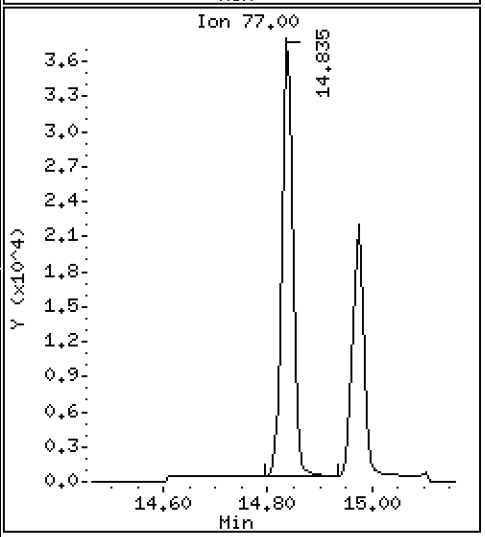
39 Dimethylphthalate

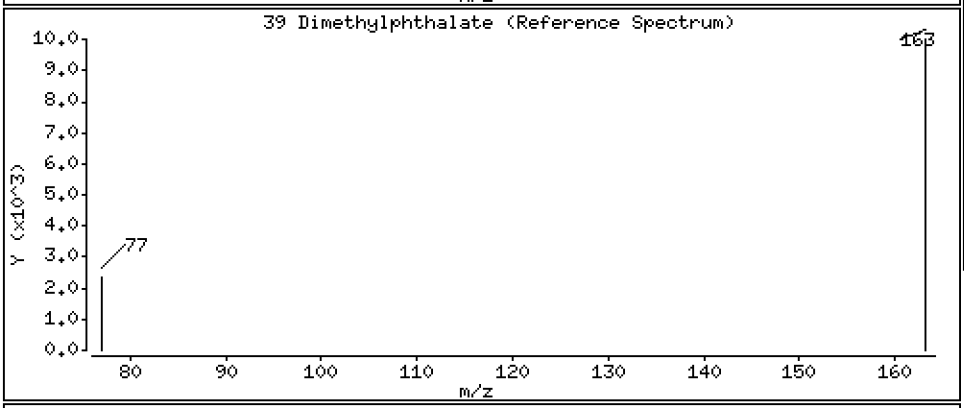
Concentration: 0.9756 ug/L

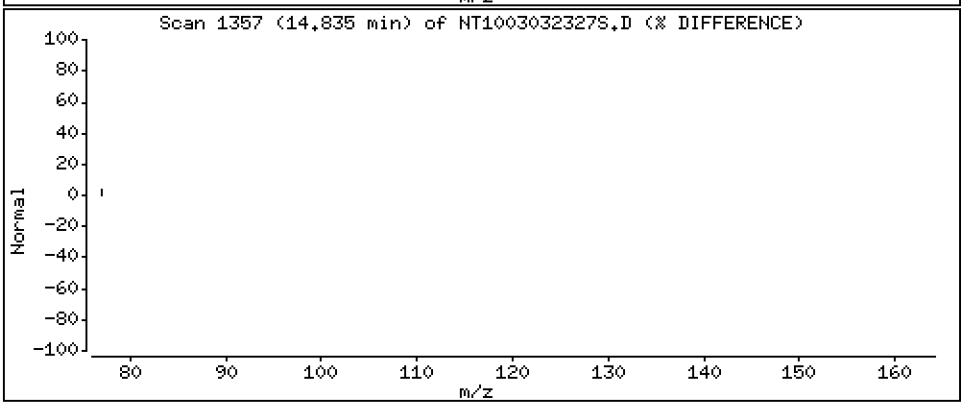












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Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

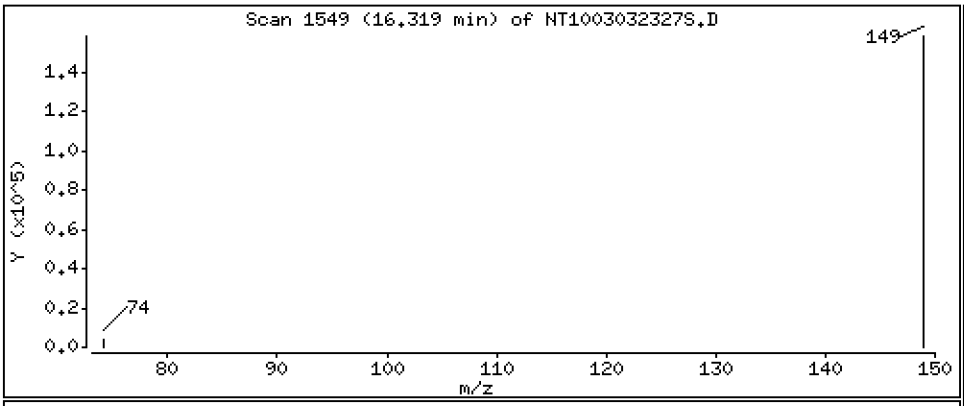
Operator: JGR

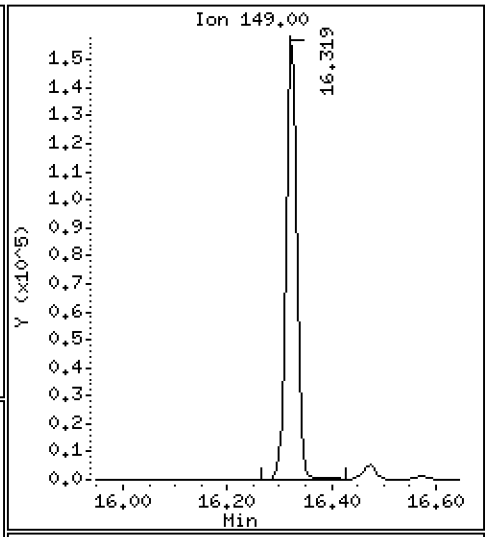
Column phase: ZB-5msi

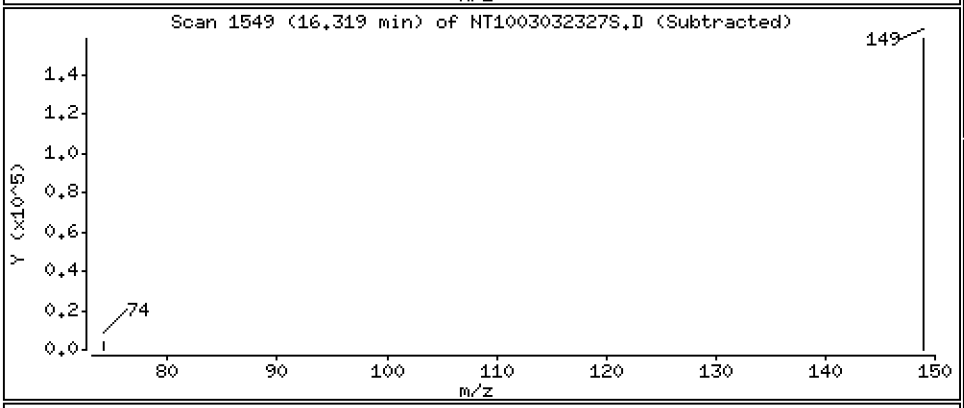
Column diameter: 0.25

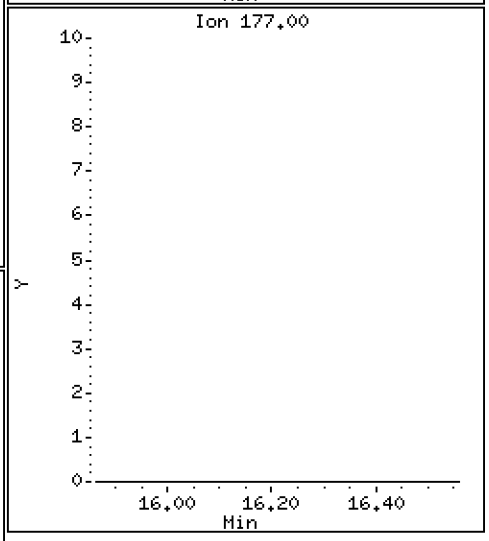
50 Diethylphthalate

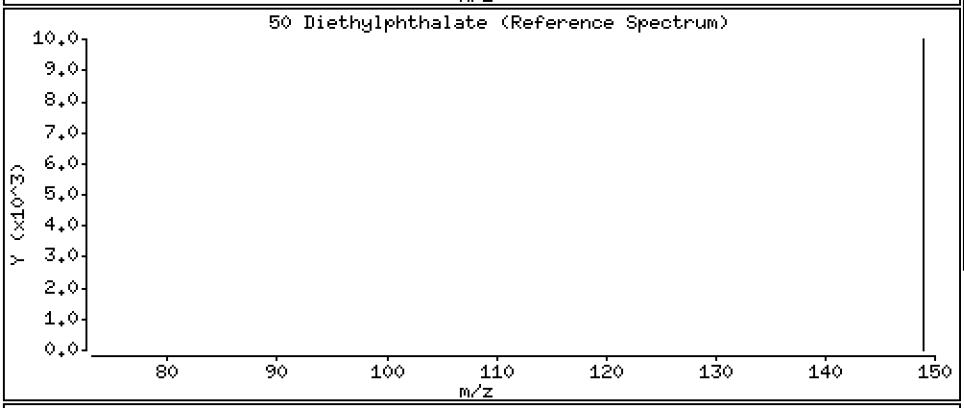
Concentration: 1.114 ug/L

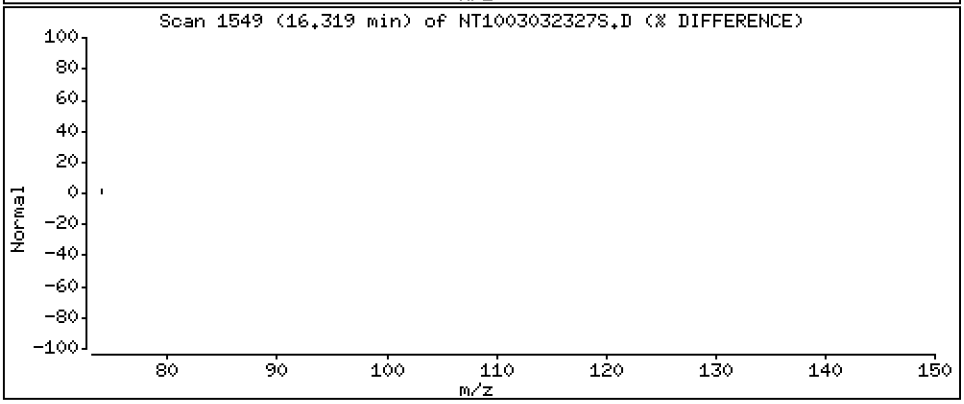












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323275.D

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

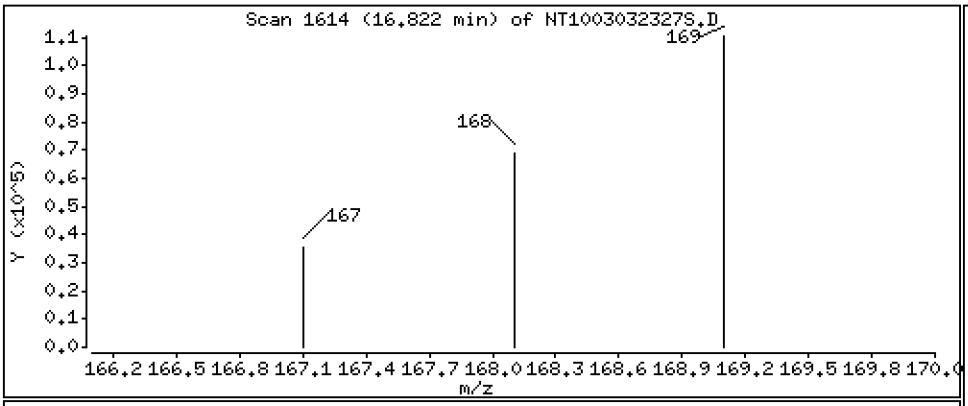
Operator: JGR

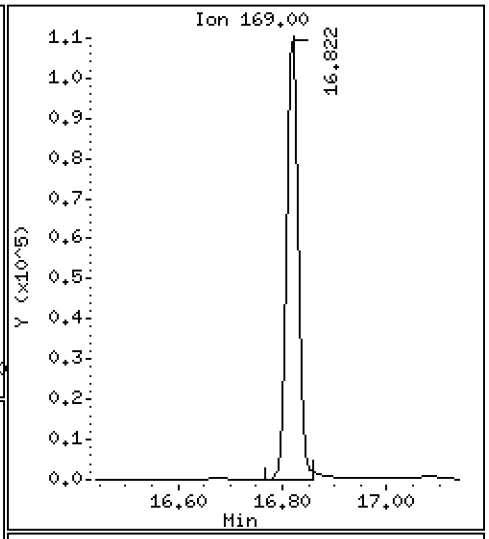
Column phase: ZB-5msi

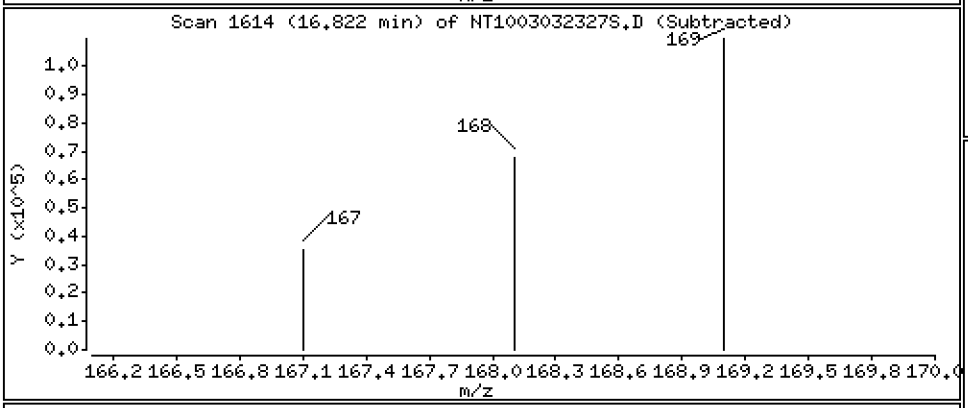
Column diameter: 0.25

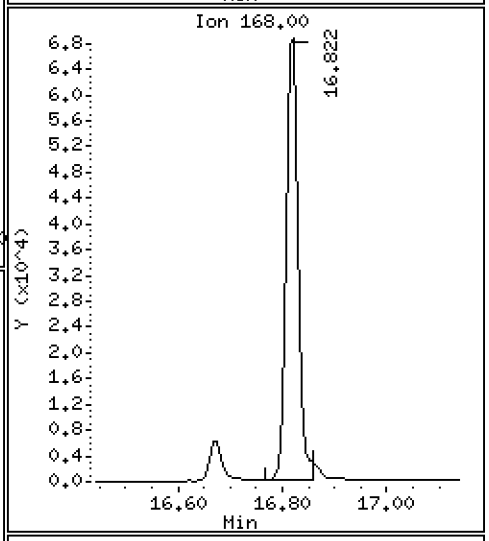
54 N-Nitrosodiphenylamine

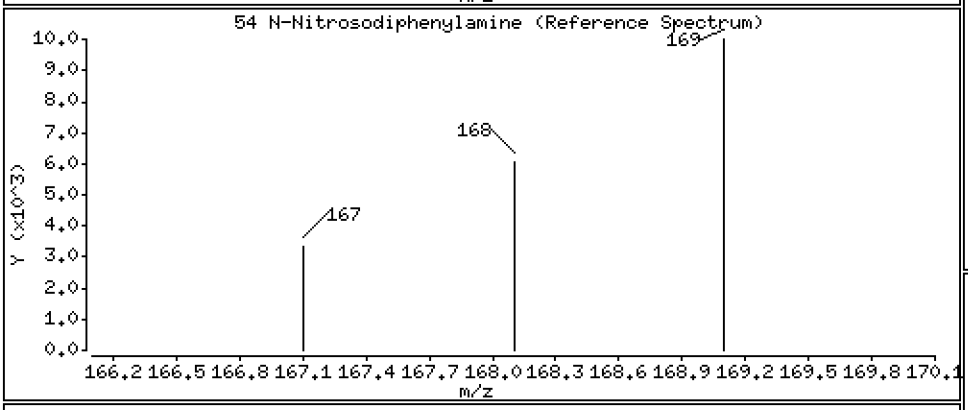
Concentration: 0.8609 ug/L

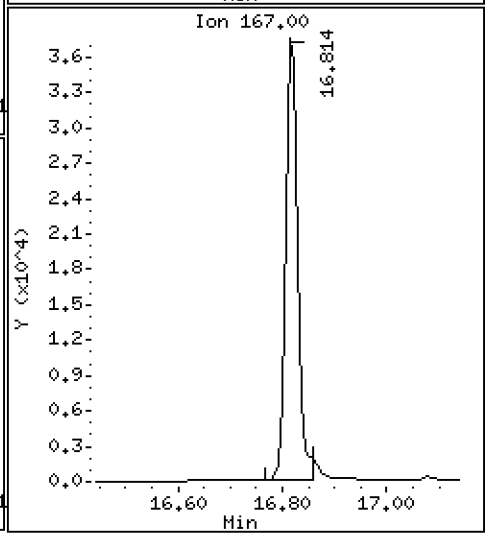


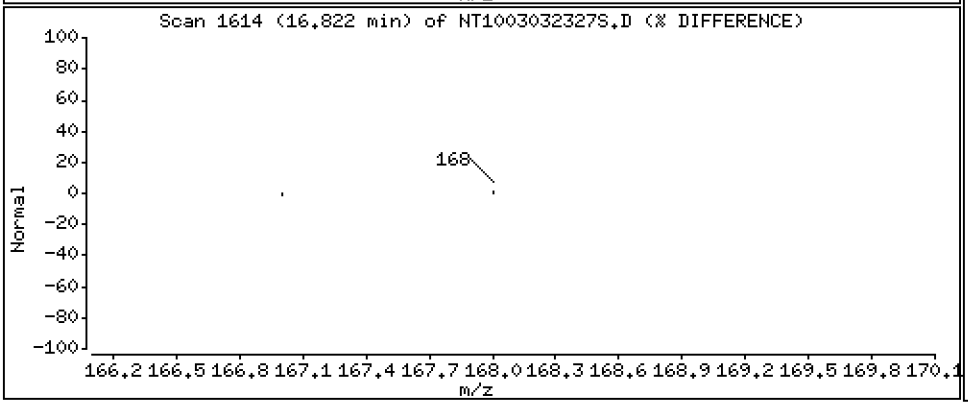












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323275.D

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

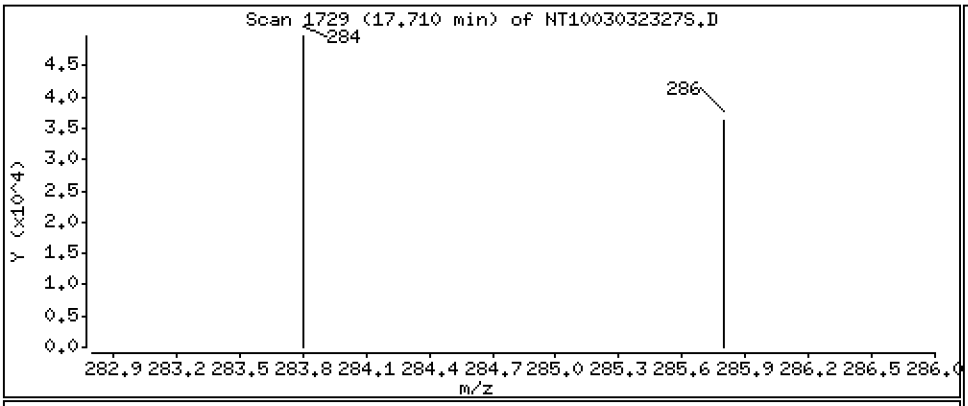
Operator: JGR

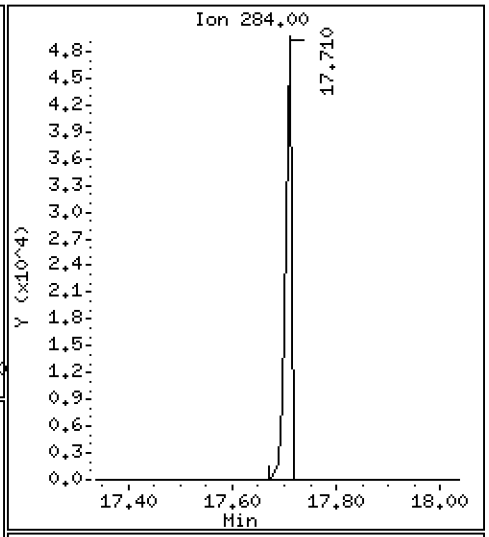
Column phase: ZB-5msi

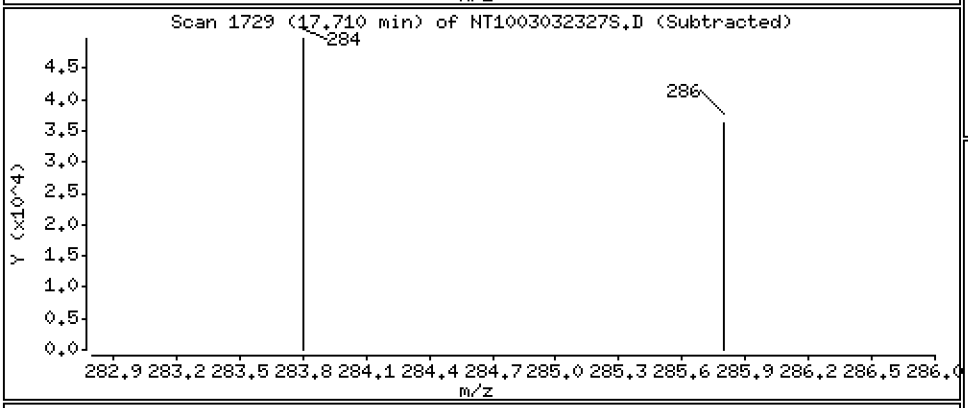
Column diameter: 0.25

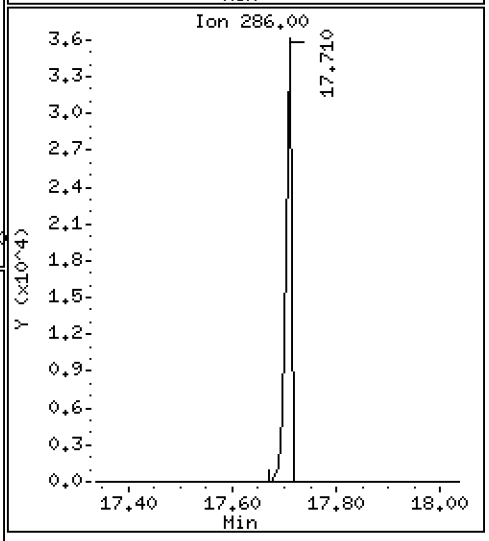
57 Hexachlorobenzene

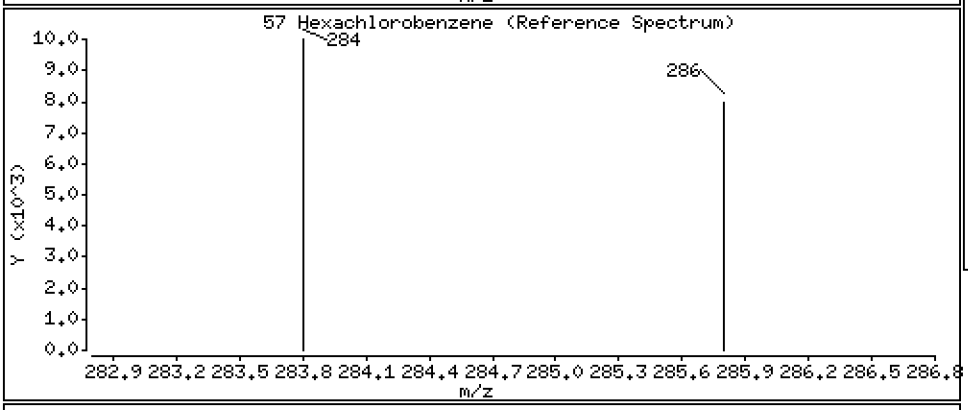
Concentration: 0.4226 ug/L

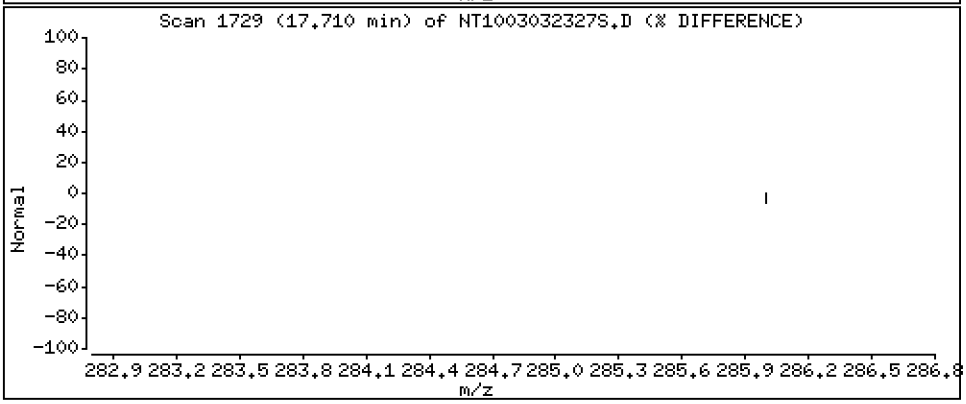












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323275.D

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

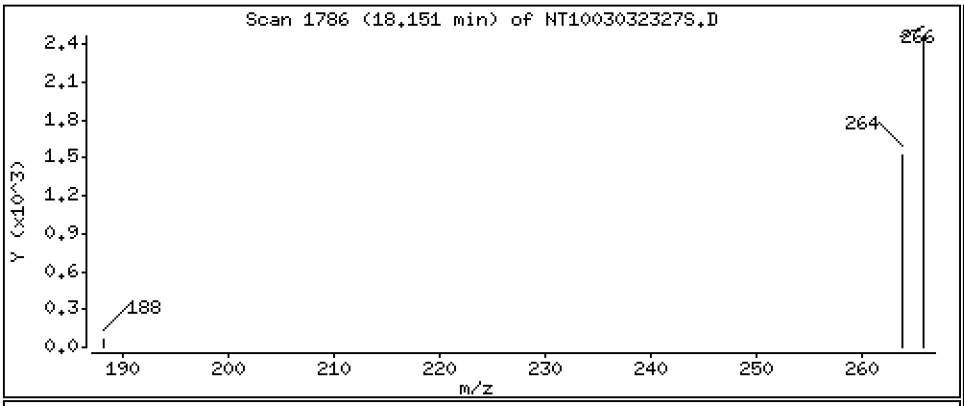
Operator: JGR

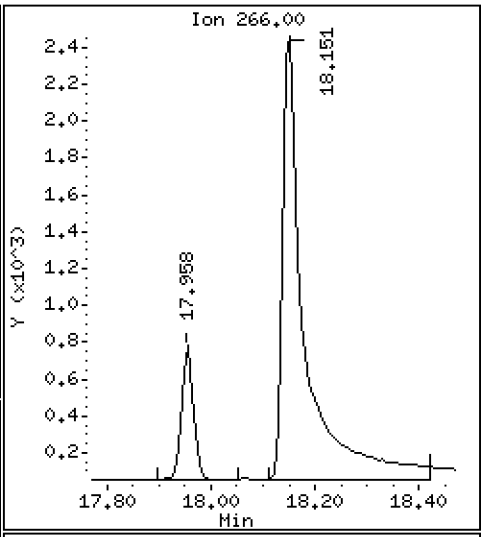
Column phase: ZB-5msi

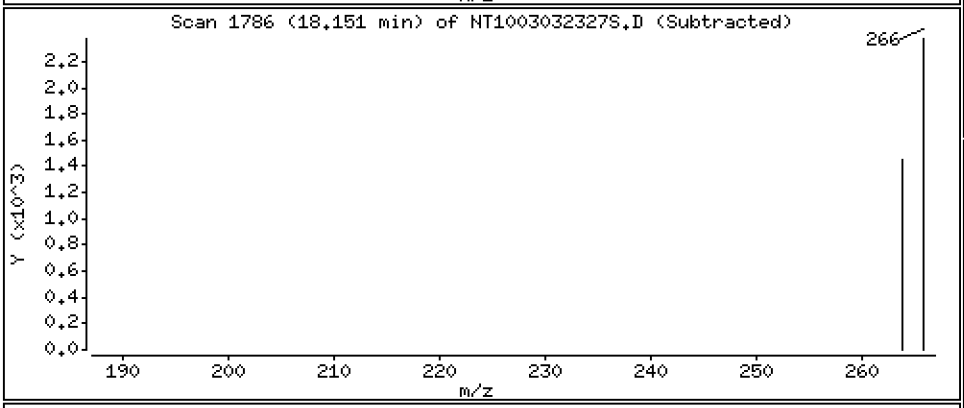
Column diameter: 0.25

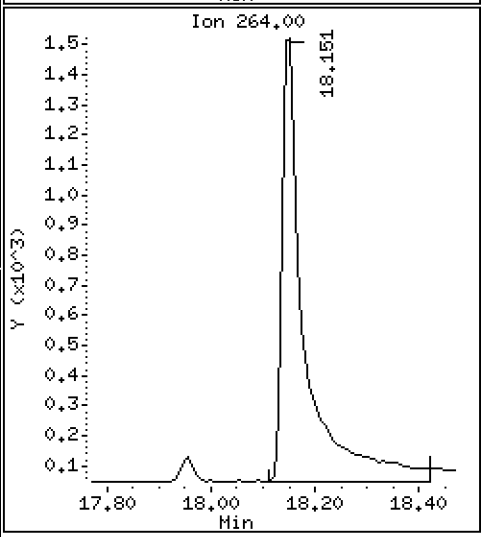
58 Pentachlorophenol

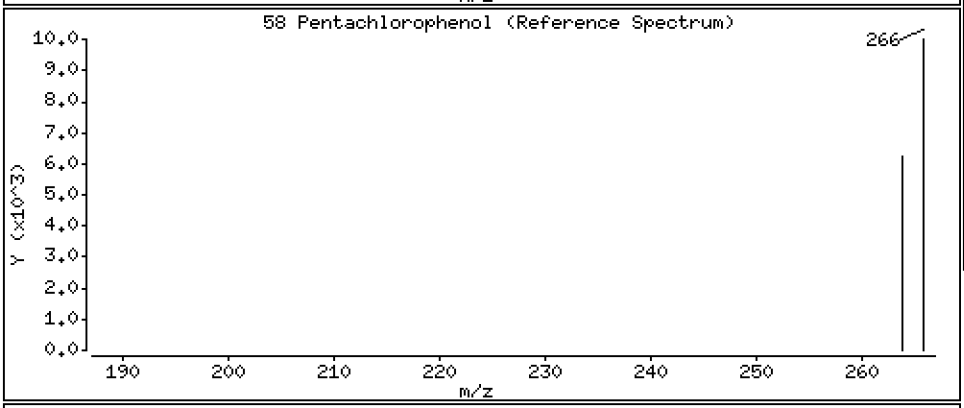
Concentration: 0.1711 ug/L

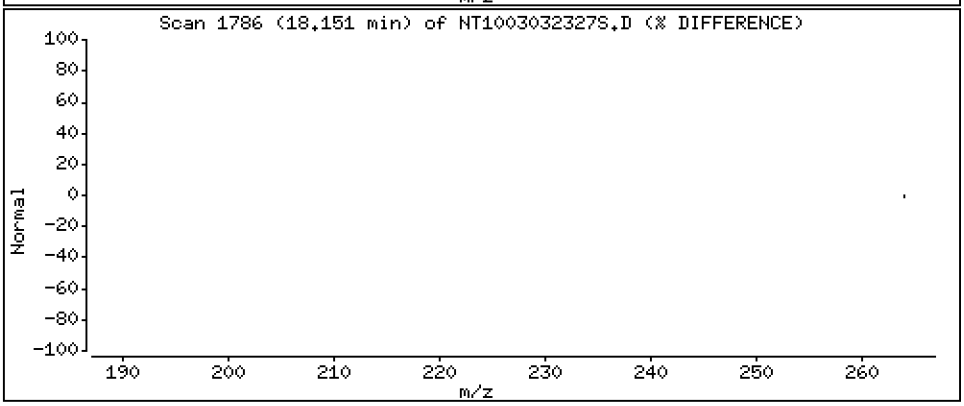












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323275.D

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

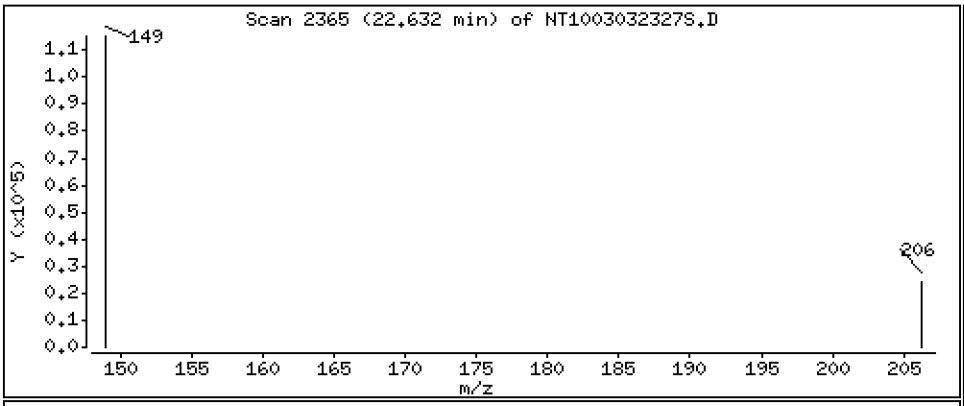
Operator: JGR

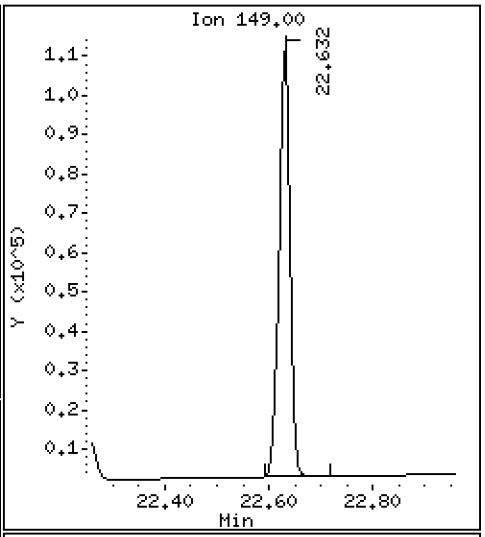
Column phase: ZB-5msi

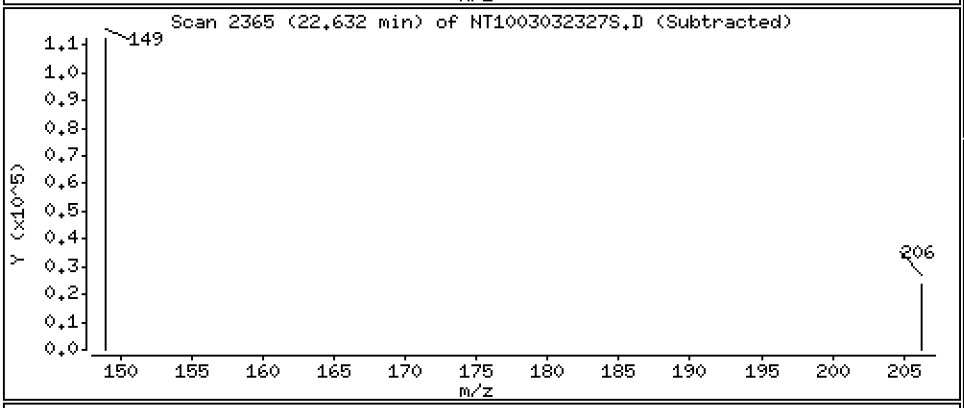
Column diameter: 0.25

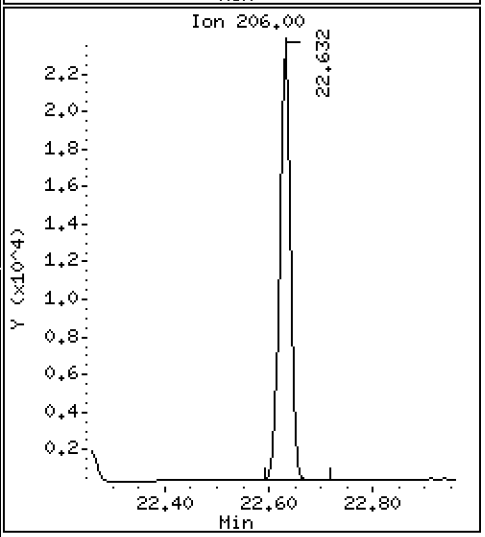
67 Butylbenzylphthalate

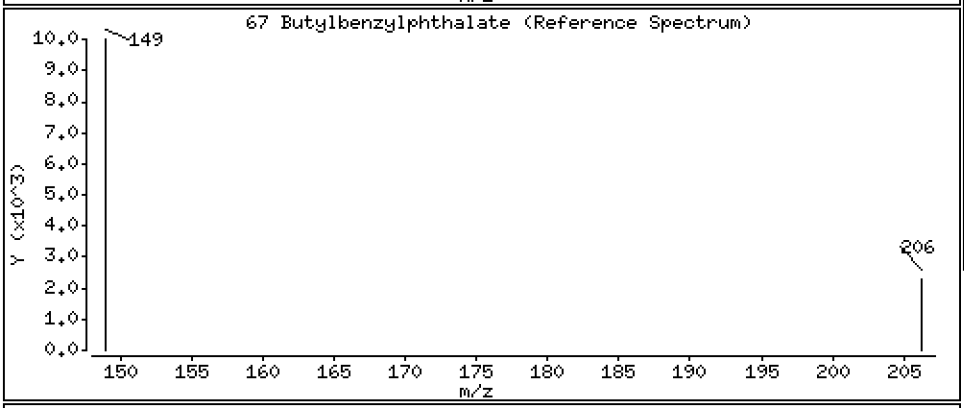
Concentration: 0.7547 ug/L

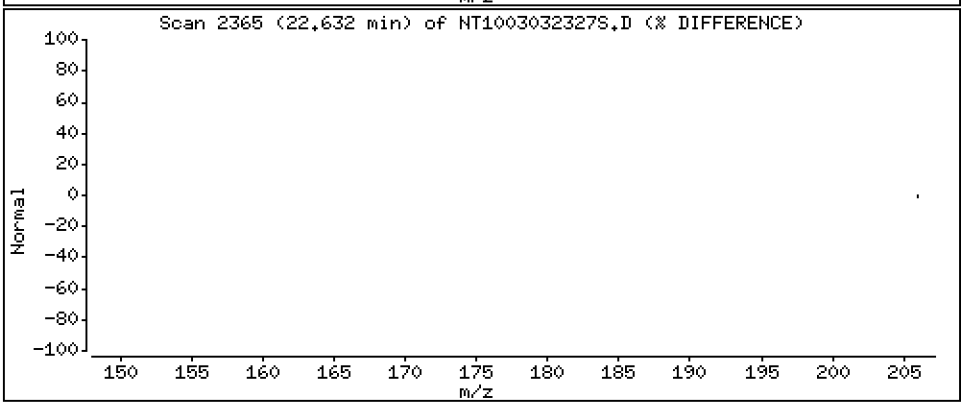












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT1003032327S.D

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

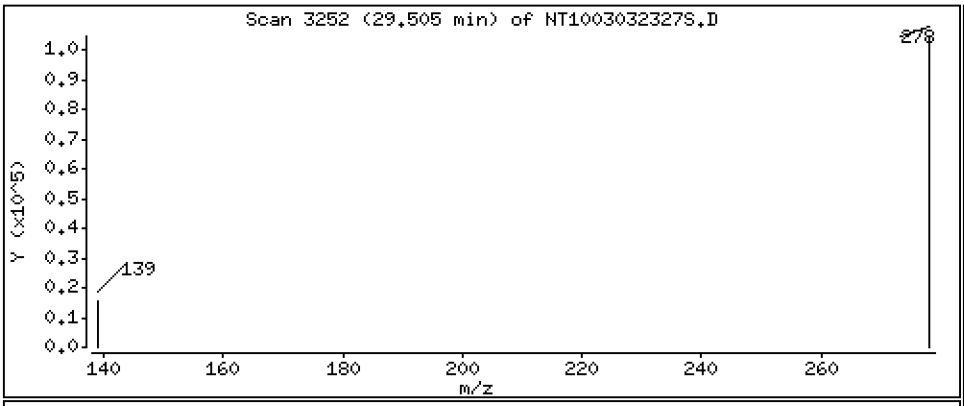
Operator: JGR

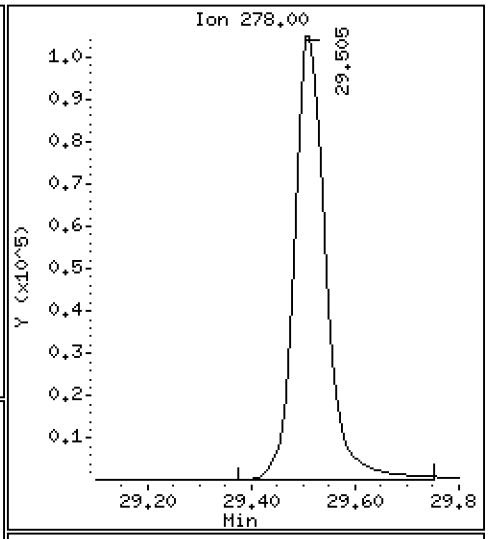
Column phase: ZB-5msi

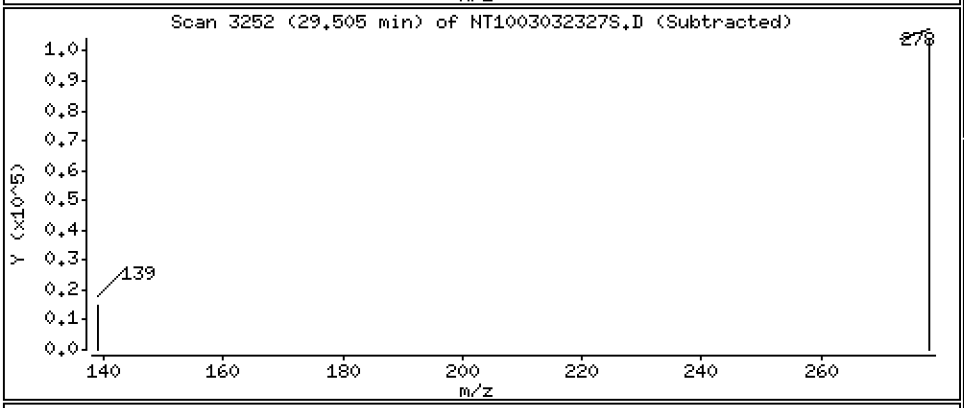
Column diameter: 0.25

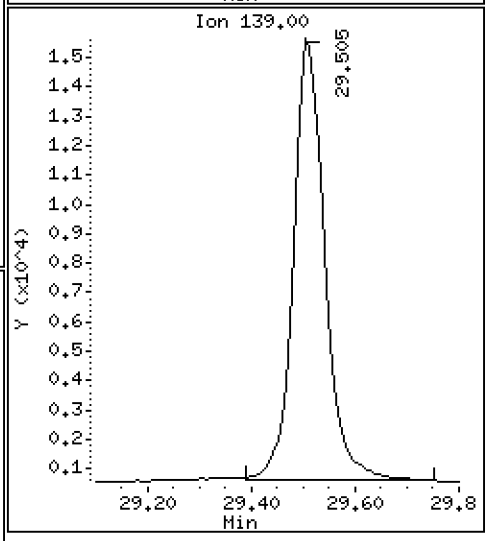
79 Dibenzo(a,h)anthracene

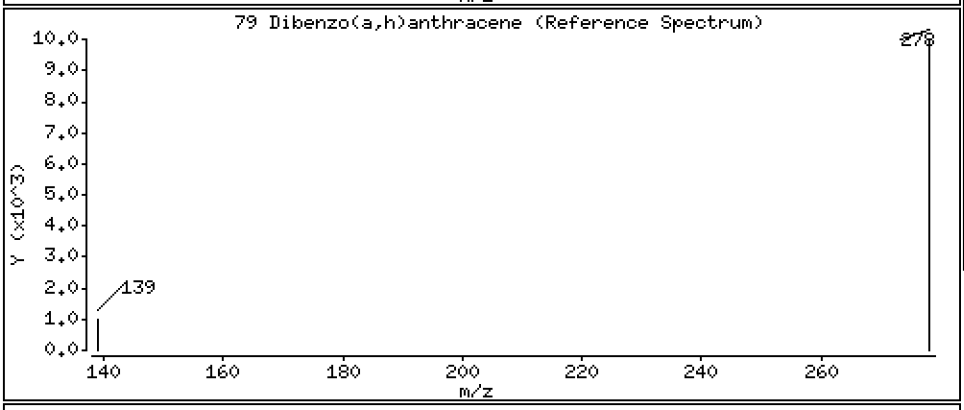
Concentration: 1.156 ug/L

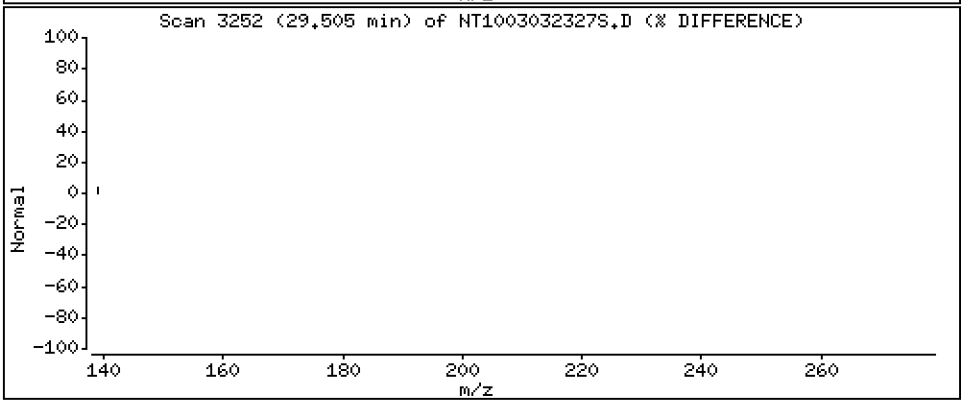












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323275.D

Date : 04-MAR-2023 10:17

Client ID:

Instrument: nt10.i

Sample Info: SEQ-CCVSIM

Volume Injected (uL): 1.0

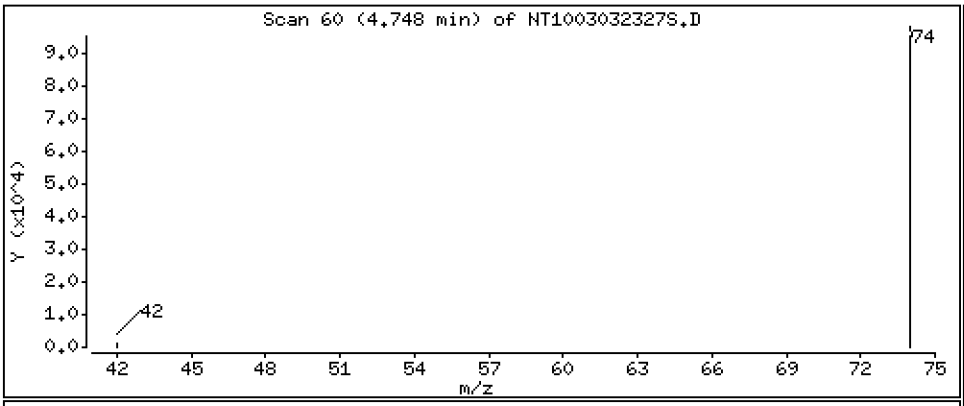
Operator: JGR

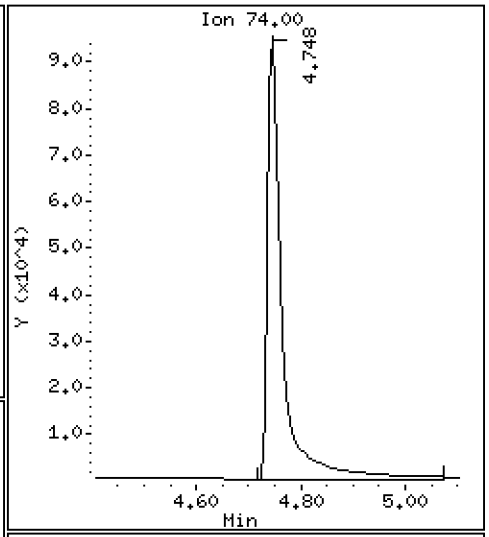
Column phase: ZB-5msi

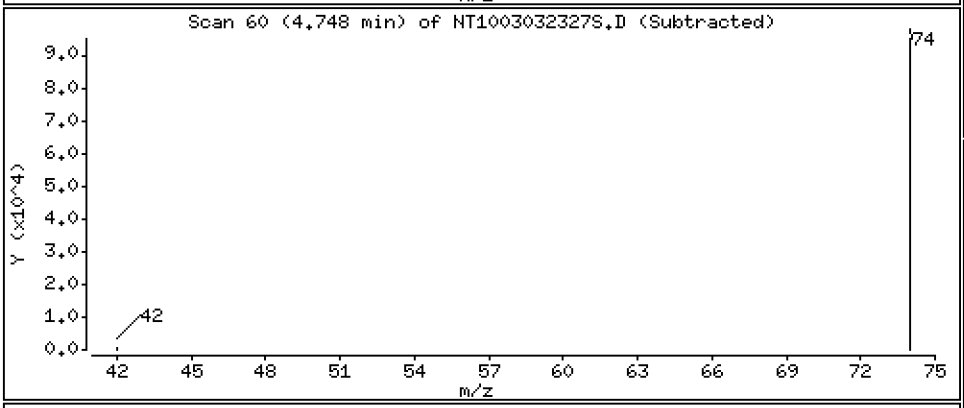
Column diameter: 0.25

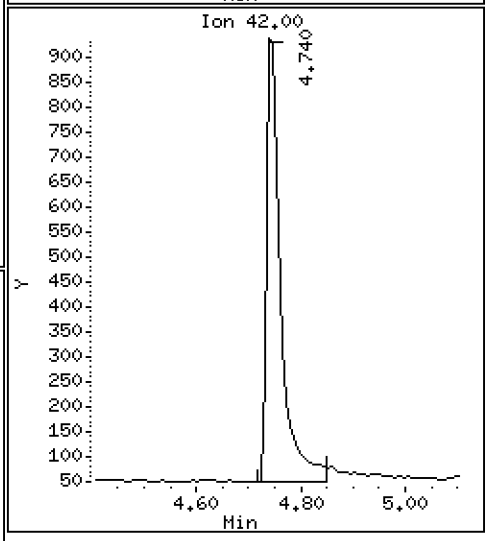
90 N-Nitrosodimethylamine

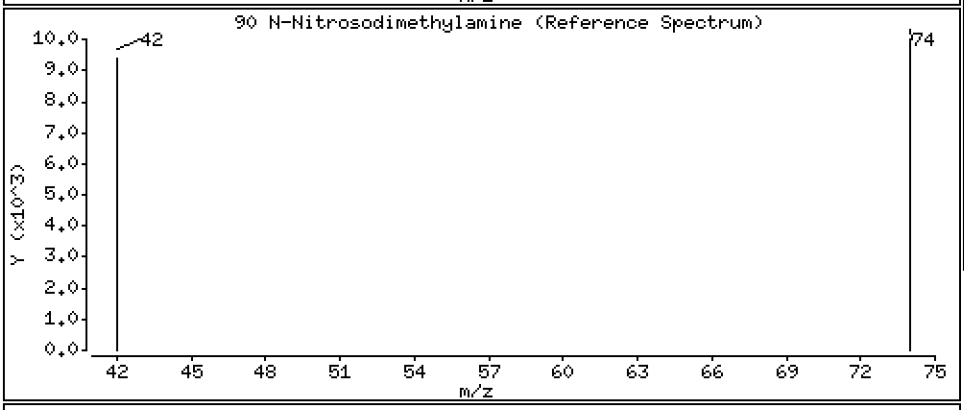
Concentration: 2.488 ug/L

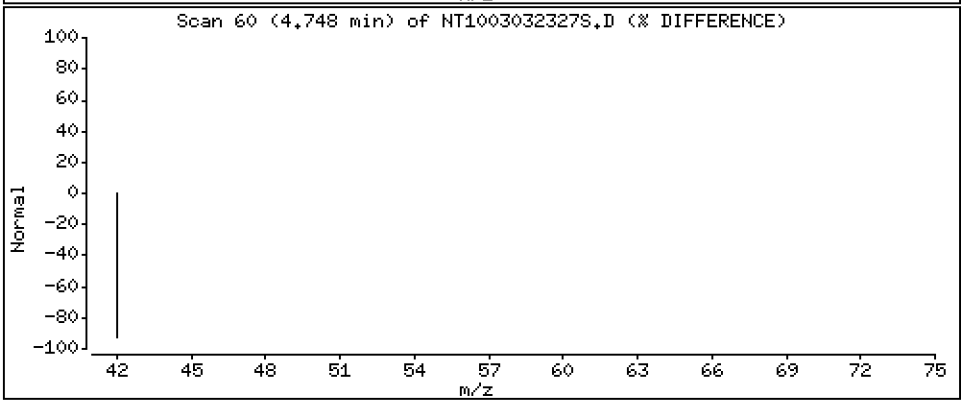












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT1003032327S.D
Lab Smp Id: SCV0253-CCV1
Inj Date : 04-MAR-2023 10:17 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-CCVSIM
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 11:26 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.918	6.917	(0.745)	216067	1.74084	1.741(R)
3	Phenol	94	8.556	8.556	(0.922)	170568	0.92753	0.9275
7	1,3-Dichlorobenzene	146	9.174	9.174	(0.988)	152484	0.94640	0.9464
* 8	1,4-Dichlorobenzene-d4	152	9.283	9.283	(1.000)	434743	4.00000	
9	1,4-Dichlorobenzene	146	9.314	9.314	(1.003)	144997	0.92561	0.9256
11	Benzyl alcohol	79	9.531	9.515	(1.027)	89646	0.87383	0.8738
12	1,2-Dichlorobenzene	146	9.601	9.601	(1.034)	143024	0.94990	0.9499
13	2-Methylphenol	108	9.710	9.702	(1.046)	127266	1.14577	1.146
15	4-Methylphenol	108	9.997	9.997	(1.077)	128346	1.10834	1.108
16	N-Nitroso-di-n-propylamine	70	10.028	10.020	(1.080)	91912	1.12296	1.123
22	2,4-Dimethylphenol	107	11.065	11.057	(0.939)	257288	2.03109	2.031
24	Benzoic acid	105	11.176	11.159	(0.948)	21074	0.30474	0.3047(M)
26	1,2,4-Trichlorobenzene	180	11.662	11.646	(0.990)	122954	1.15059	1.151
* 27	Naphthalene-d8	136	11.785	11.777	(1.000)	1484690	4.00000	
30	Hexachlorobutadiene	225	12.056	12.040	(1.023)	76676	1.01111	1.011
39	Dimethylphthalate	163	14.834	14.811	(0.962)	217358	0.97562	0.9756
* 42	Acenaphthene-d10	162	15.414	15.391	(1.000)	701644	4.00000	
50	Diethylphthalate	149	16.319	16.296	(1.059)	234000	1.11377	1.114
54	N-Nitrosodiphenylamine	169	16.821	16.790	(0.907)	180007	0.86095	0.8609
57	Hexachlorobenzene	284	17.710	17.687	(0.955)	41354	0.42264	0.4226

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.151	18.120	(0.978)	7337	0.17113	0.1711
*	59 Phenanthrene-d10	188	18.553	18.530	(1.000)	1291916	4.00000	
$	66 Terphenyl-d14	244	21.726	21.702	(0.918)	156236	1.51909	1.519(R)
	67 Butylbenzylphthalate	149	22.632	22.608	(0.957)	161642	0.75474	0.7547
*	69 Chrysene-d12	240	23.654	23.630	(1.000)	1271827	4.00000	
*	77 Perylene-d12	264	26.495	26.456	(1.000)	1618955	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.505	29.450	(1.114)	440727	1.15628	1.156
	90 N-Nitrosodimethylamine	74	4.748	4.755	(0.511)	182798	2.48764	2.488

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032327S.D
Lab Smp Id: SCV0253-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	502303	251152	1004606	434743	-13.45
27 Naphthalene-d8	1751418	875709	3502836	1484690	-15.23
42 Acenaphthene-d10	814551	407276	1629102	701644	-13.86
59 Phenanthrene-d10	1450747	725374	2901494	1291916	-10.95
69 Chrysene-d12	1335017	667509	2670034	1271827	-4.73
77 Perylene-d12	1691506	845753	3383012	1618955	-4.29

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.79	0.07
42 Acenaphthene-d10	15.39	14.89	15.89	15.41	0.15
59 Phenanthrene-d10	18.53	18.03	19.03	18.55	0.13
69 Chrysene-d12	23.63	23.13	24.13	23.65	0.10
77 Perylene-d12	26.46	25.96	26.96	26.50	0.15

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

REVIEW SUMMARY FOR FILE - NT1003032327S.D

Lab ID: SCV0253-CCV1
nt10.i, 20230303A.b\SIM.b\SIMABN2.m,   04-MAR-2023 10:17

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1003032315ICVS.d

On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

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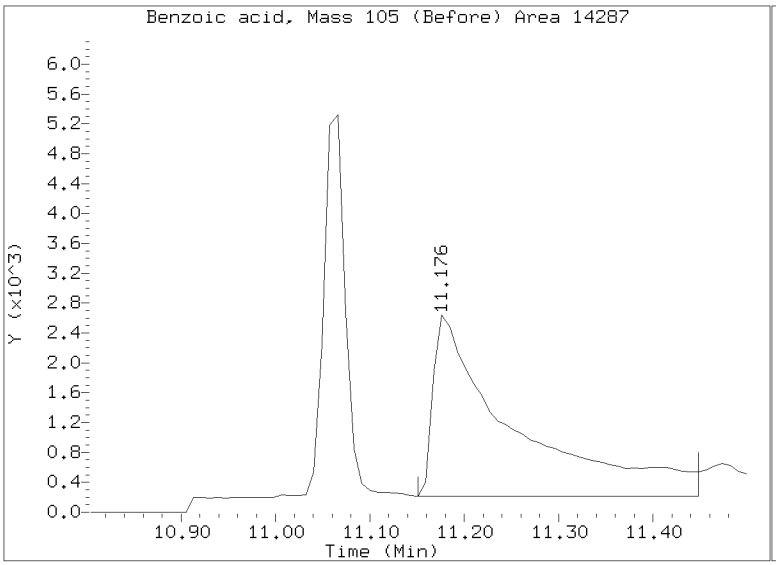
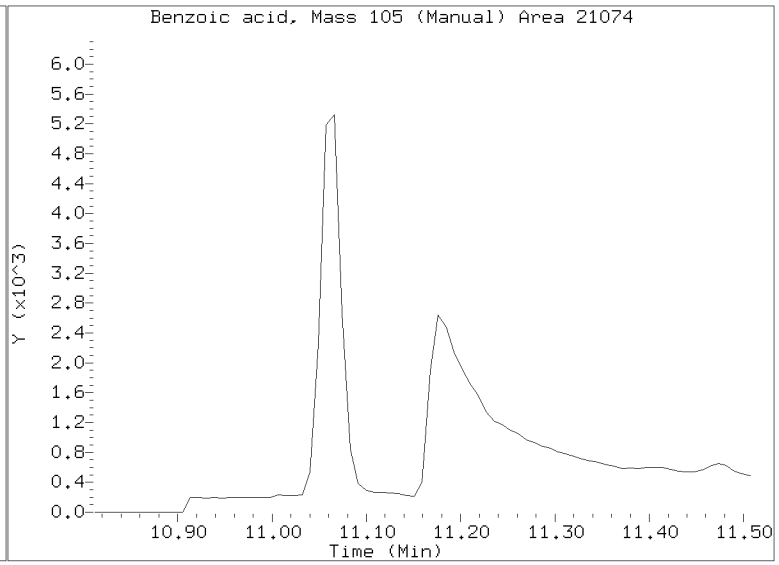
Injection Date: 04-MAR-2023 10:17
Lab ID:SCV0253-CCV1 Client ID:
Report Date: 03/17/2023 11:27





Analytical Resources, LLC
Analytical Chemists and Consultants

LOW-CONCENTRATION CONTINUING CALIBRATION CHECK

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT10	Calibration:	GC00032
Lab File ID:	NT1003032316S.D	Calibration Date:	03/01/2023
Sequence:	SLC0253	Injection Date:	03/04/23
Lab Sample ID:	SLC0253-LCV1	Injection Time:	03:18
Sequence Name:	Low Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	0.20000	0.2	1.4413080	1.3668370		-5.2	
1,2-Dichlorobenzene	A	0.20000	0.2	1.3853460	1.3538780		-2.3	
Benzyl Alcohol	A	0.20000	0.1	0.7492523	0.4459087		-52.3	
Benzoic acid	A	0.80000	0.006	0.1431163	0.0013640		-99.3	
2,4-Dimethylphenol	A	0.40000	0.4	0.2957717	0.3113282		-8.3	
1,2,4-Trichlorobenzene	A	0.20000	0.2	0.2879030	0.3214099		11.6	
N-Nitrosodiphenylamine	A	0.20000	0.2	0.6473471	0.5344196		-17.4	
Pentachlorophenol	A	0.40000	0.006	0.0950913	0.0019739		-98.5	
2-Fluorophenol	A	0.30000	0.342	1.1419780	1.3012000		13.9	
p-Terphenyl-d14	A	0.20000	0.280	0.3234672	0.4527539		40.0	

* Values outside of QC limits

Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323165.D

Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

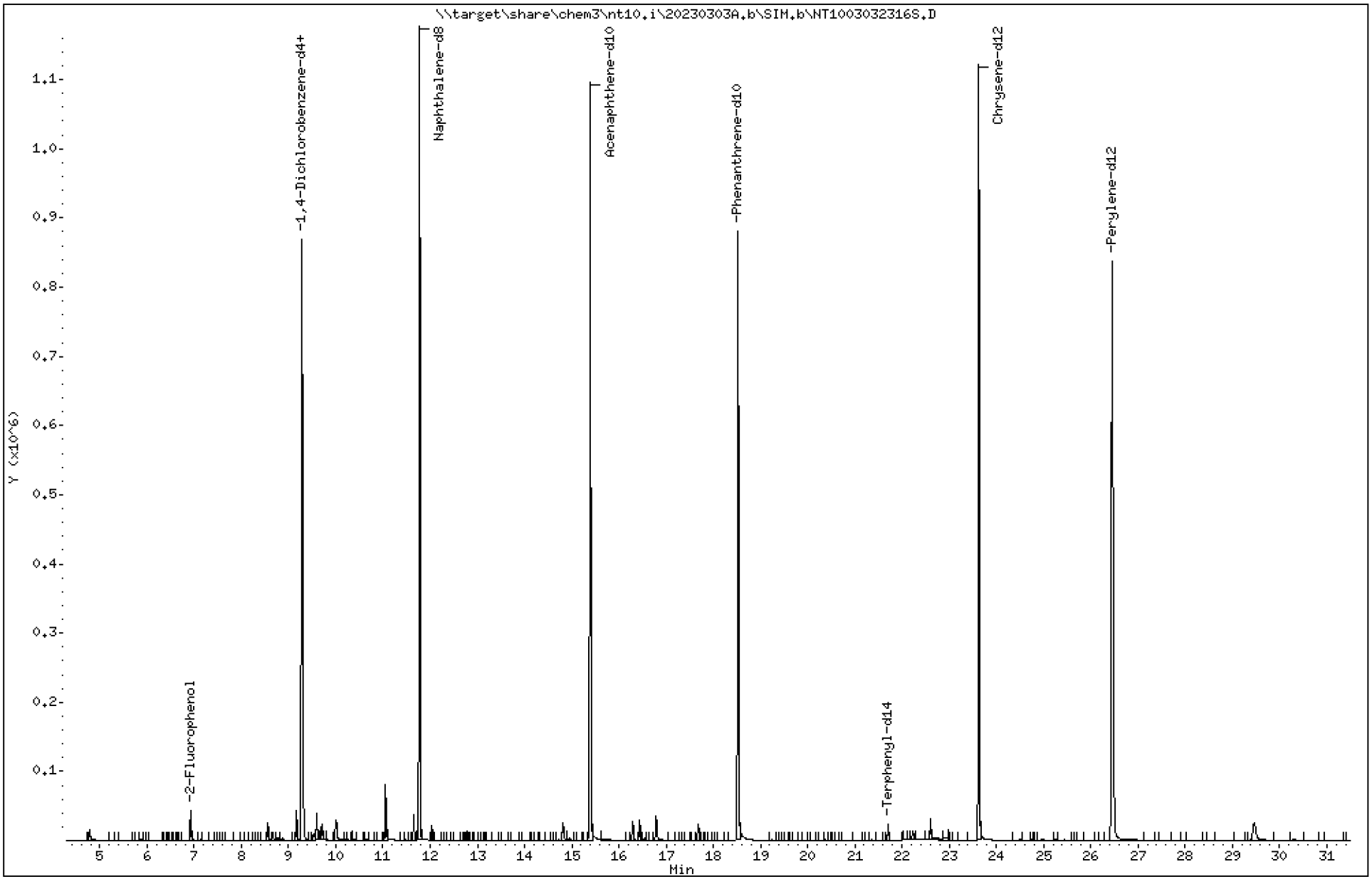
Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

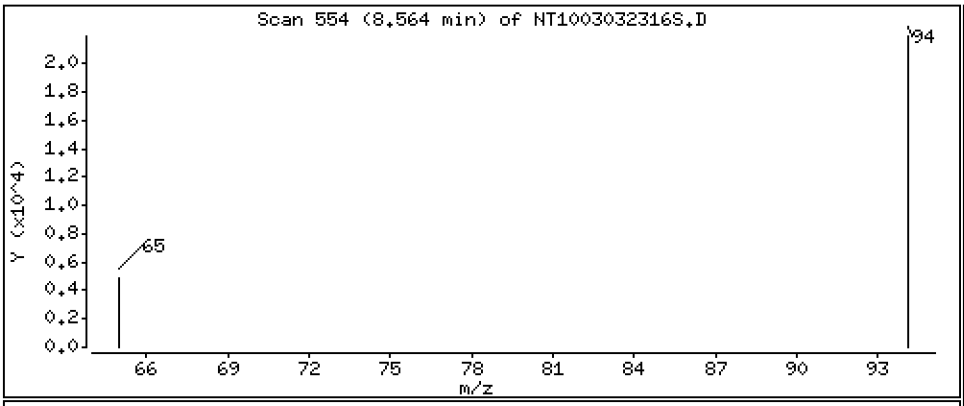
Operator: JGR

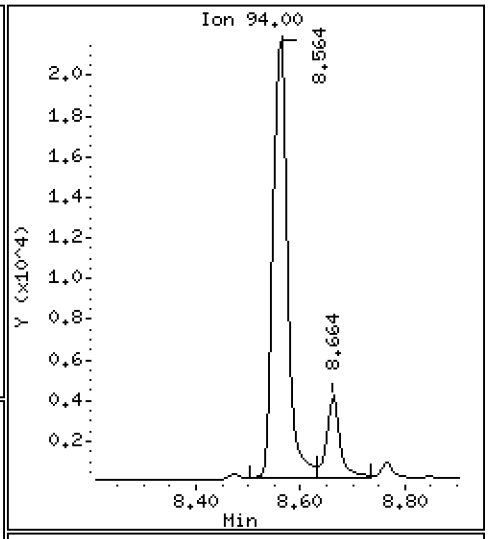
Column phase: ZB-5msi

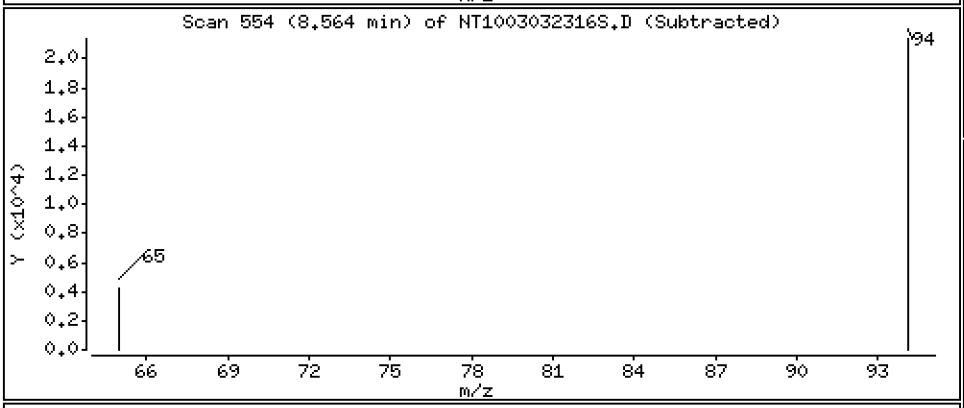
Column diameter: 0.25

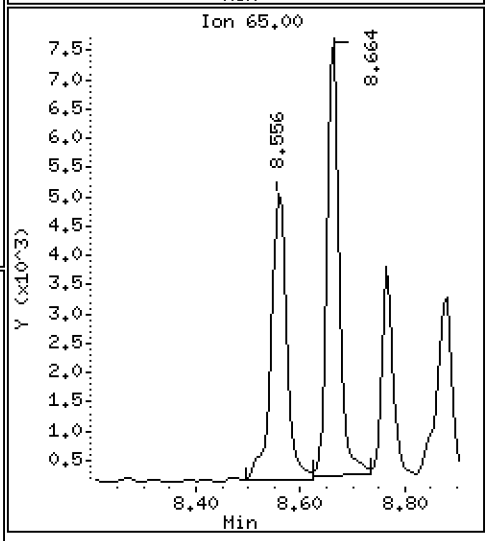
3 Phenol

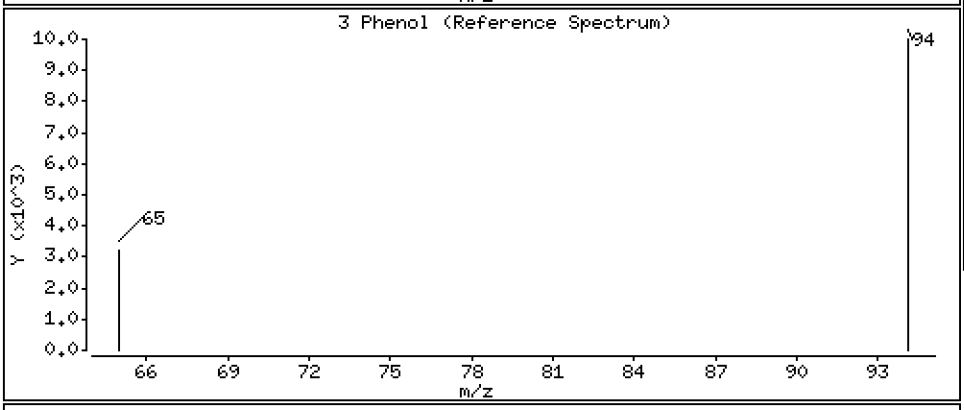
Concentration: 0.1778 ug/L

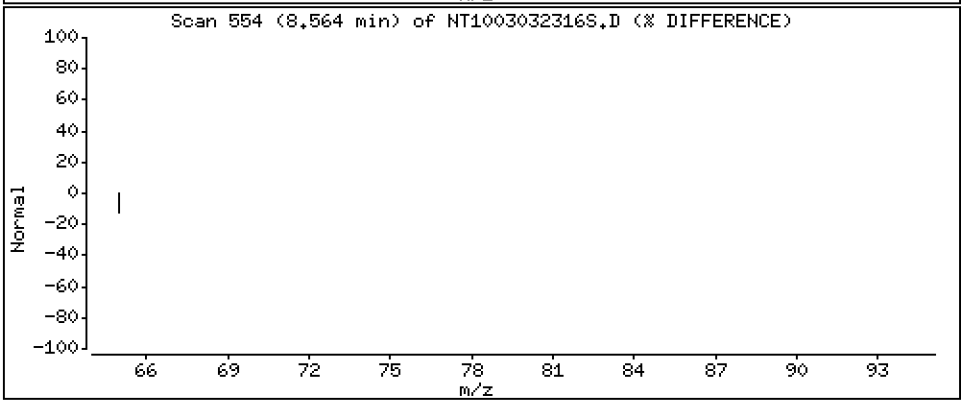












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Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

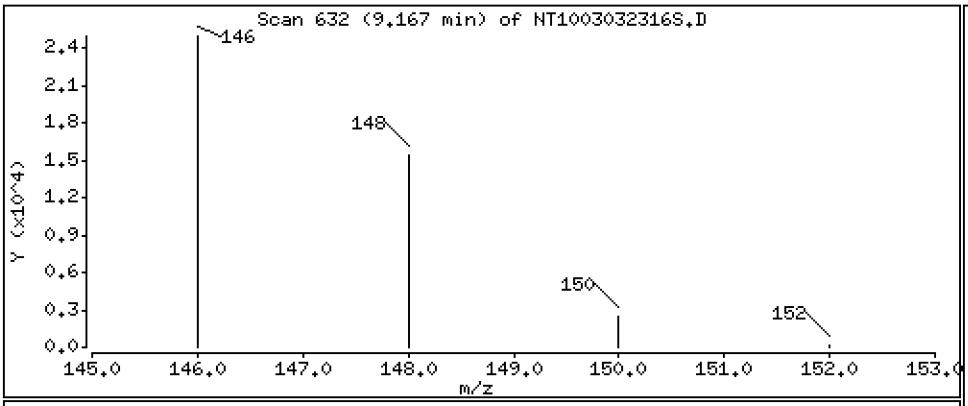
Operator: JGR

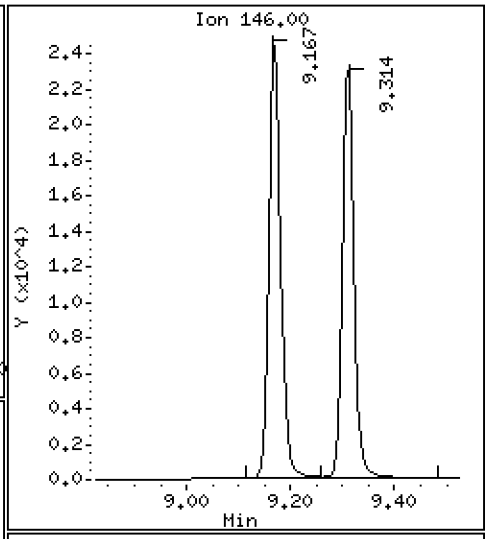
Column phase: ZB-5msi

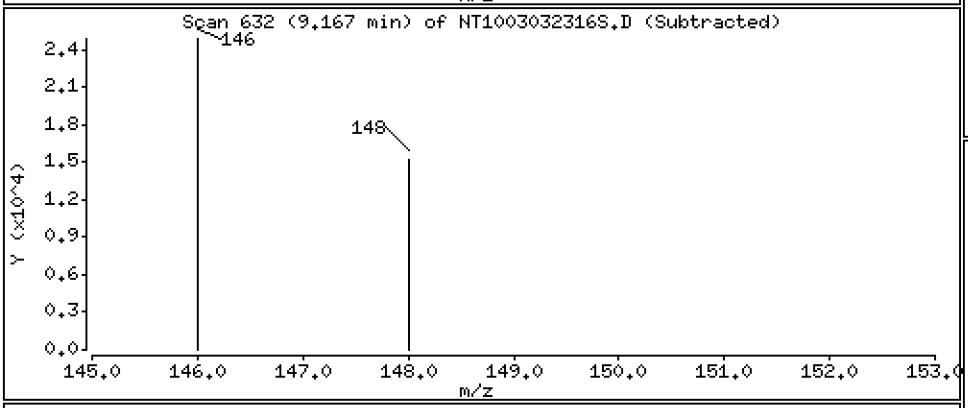
Column diameter: 0.25

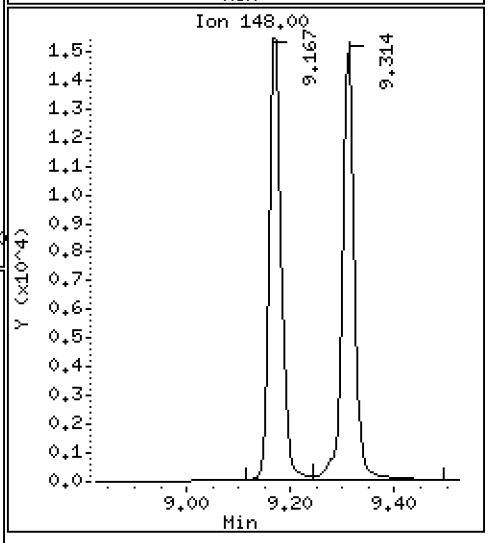
7 1,3-Dichlorobenzene

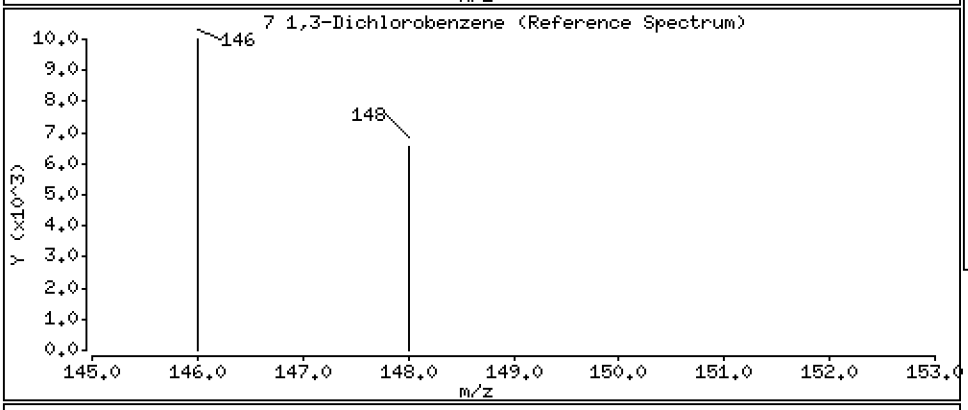
Concentration: 0.1938 ug/L

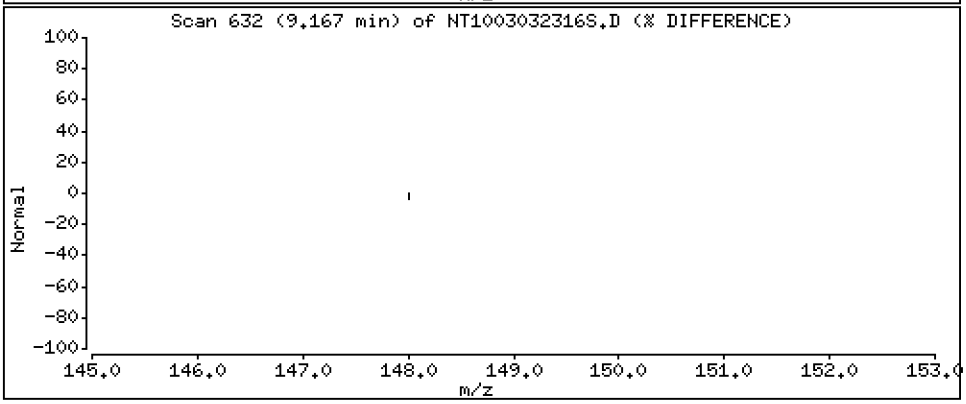












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Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

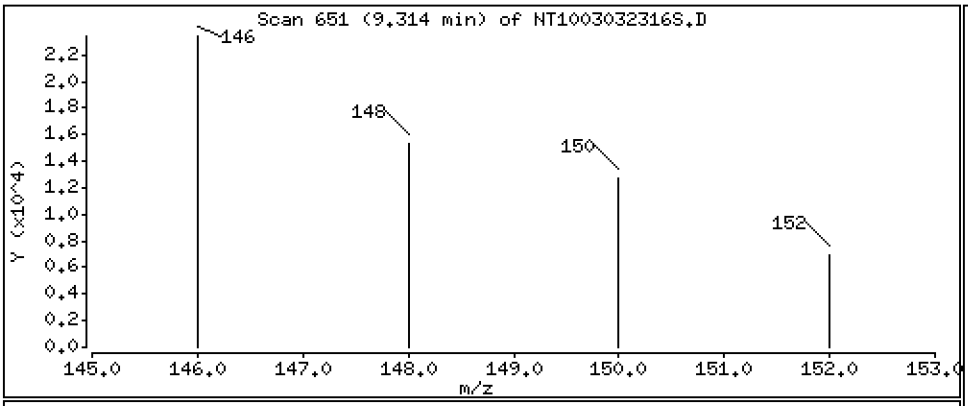
Operator: JGR

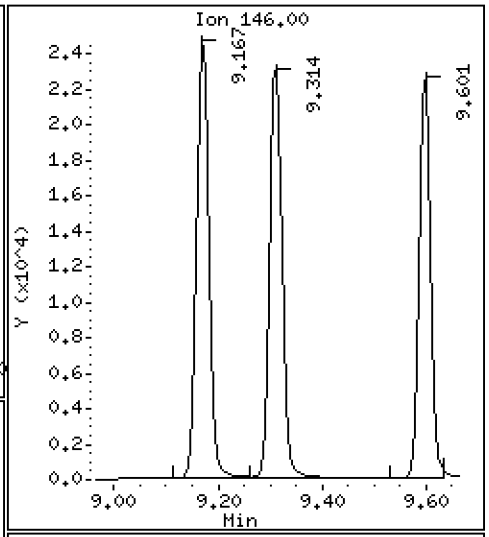
Column phase: ZB-5msi

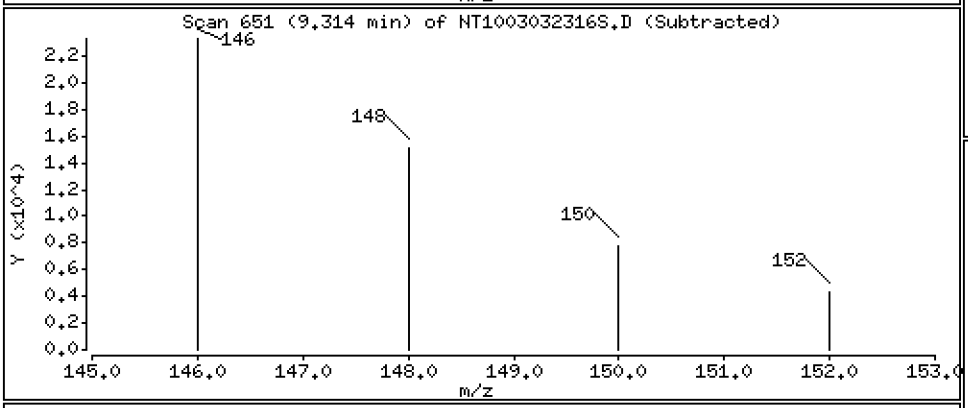
Column diameter: 0.25

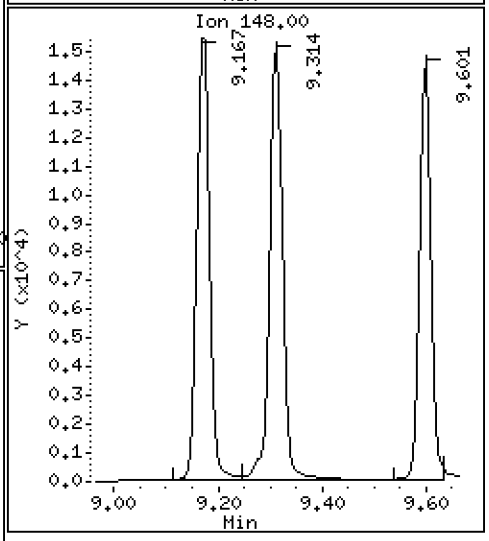
9 1,4-Dichlorobenzene

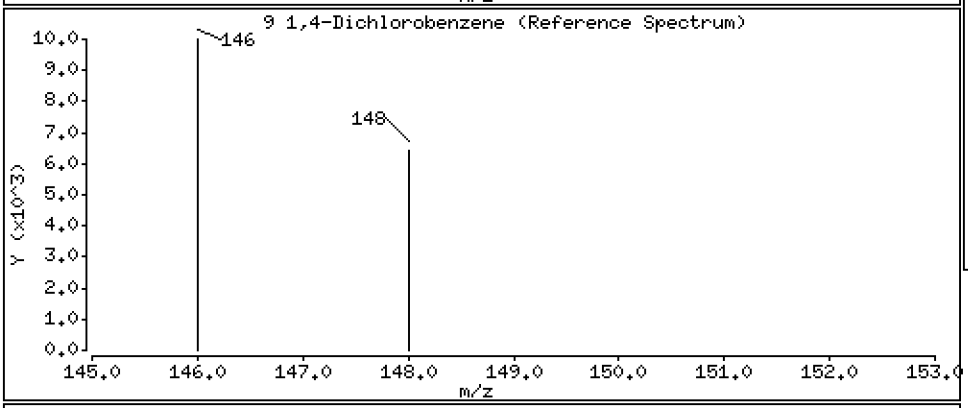
Concentration: 0.1897 ug/L

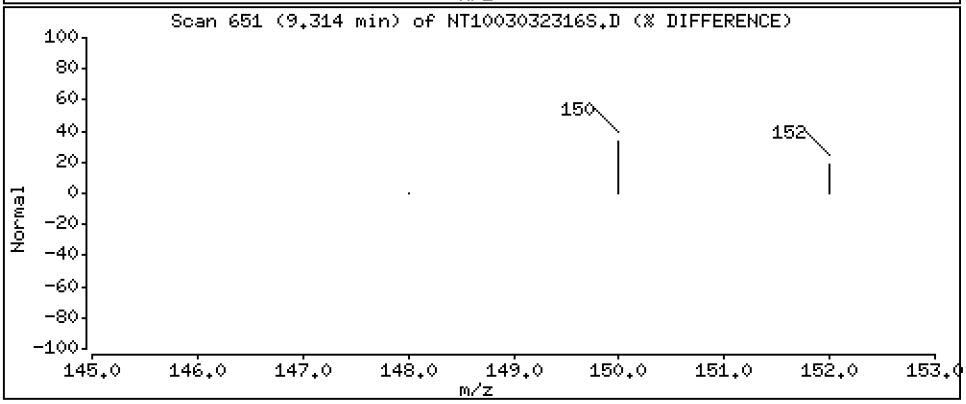












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Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

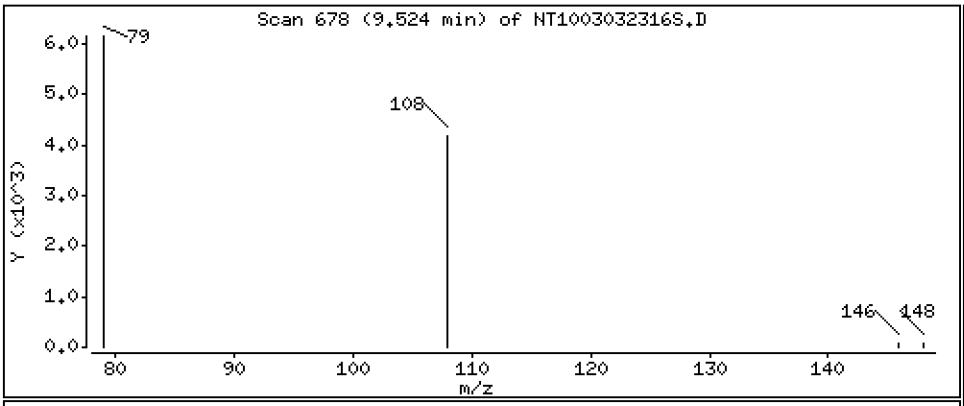
Operator: JGR

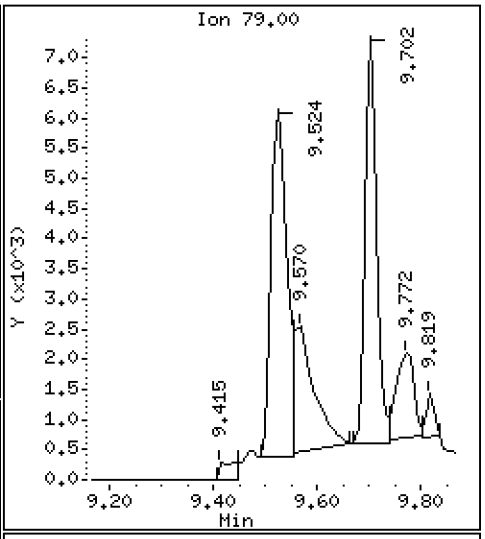
Column phase: ZB-5msi

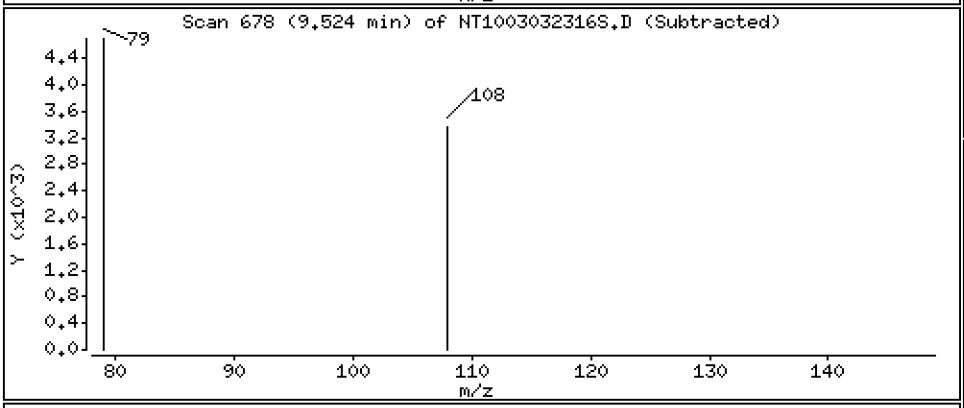
Column diameter: 0.25

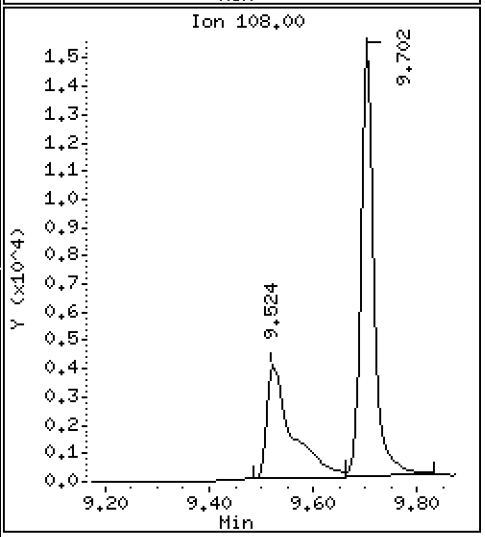
11 Benzyl alcohol

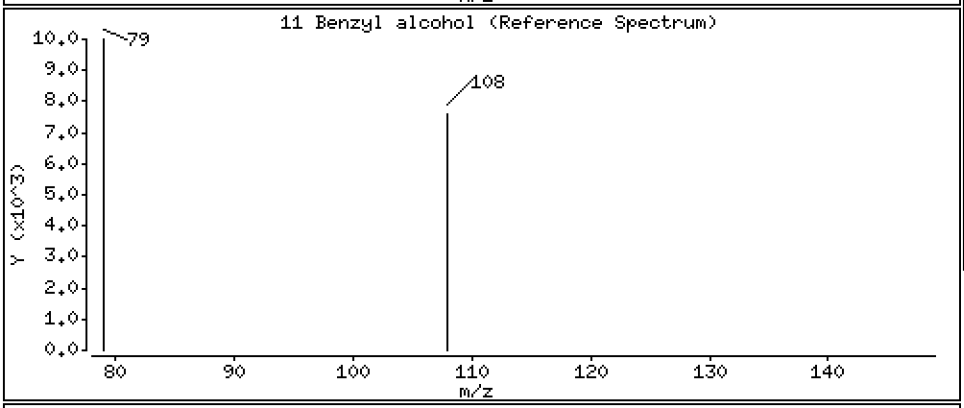
Concentration: 0.09543 ug/L

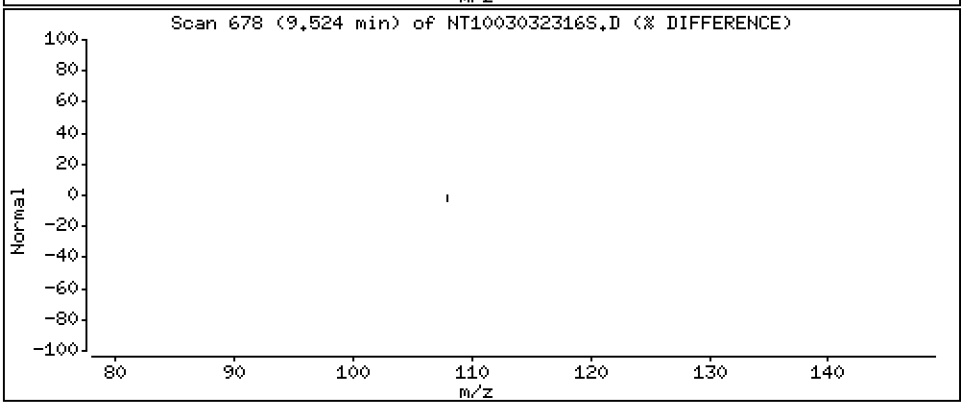












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Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

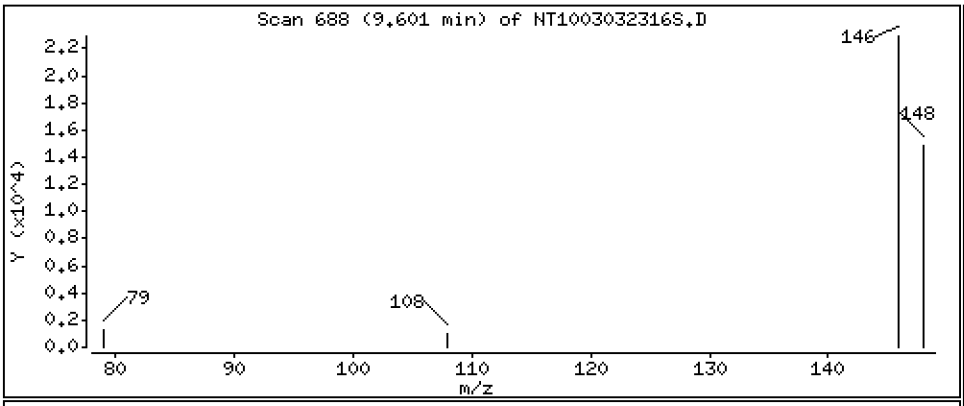
Operator: JGR

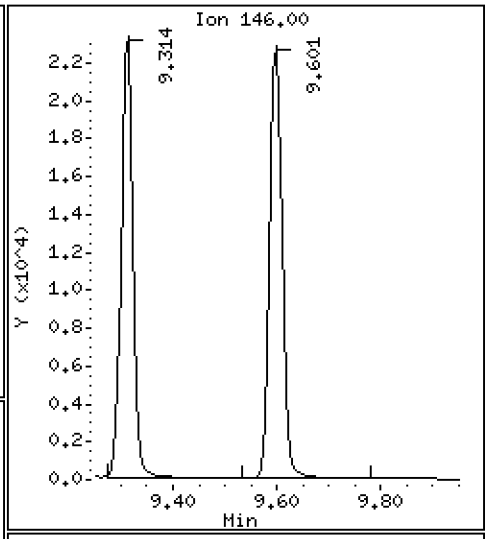
Column phase: ZB-5msi

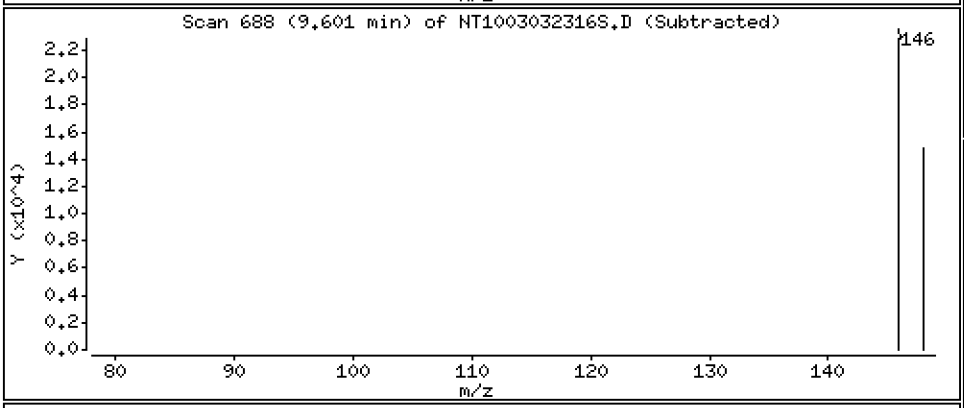
Column diameter: 0.25

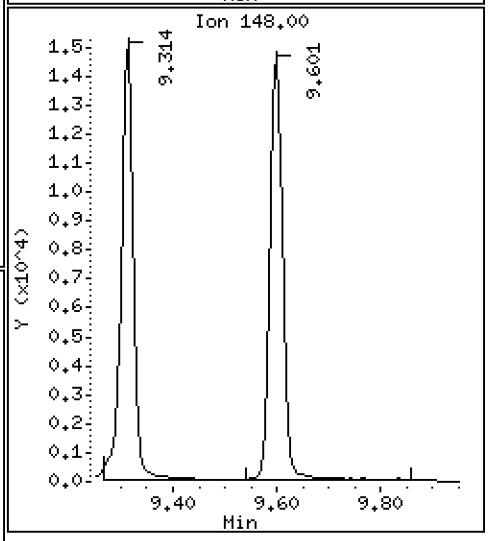
12 1,2-Dichlorobenzene

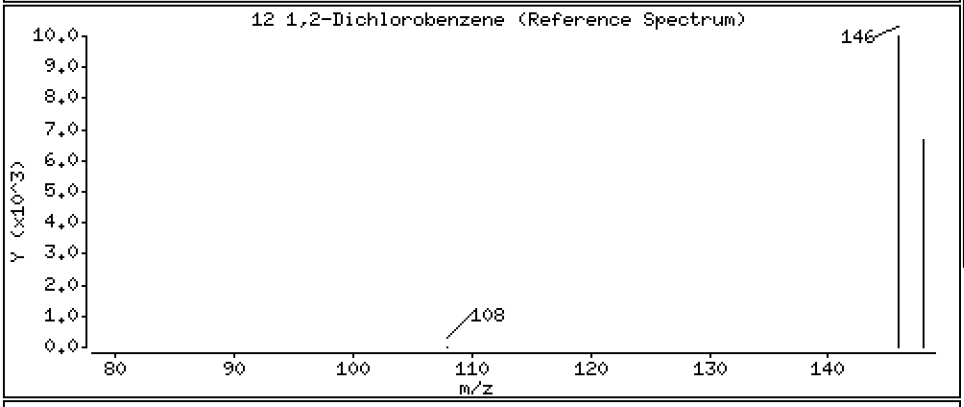
Concentration: 0.1955 ug/L

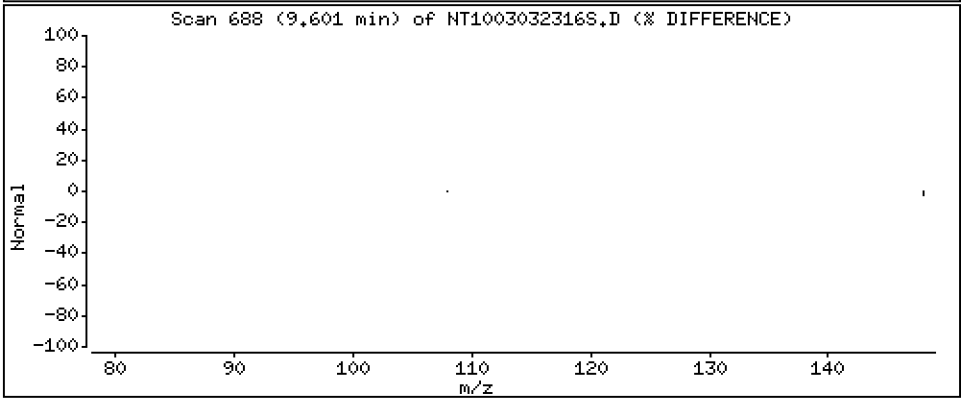












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Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

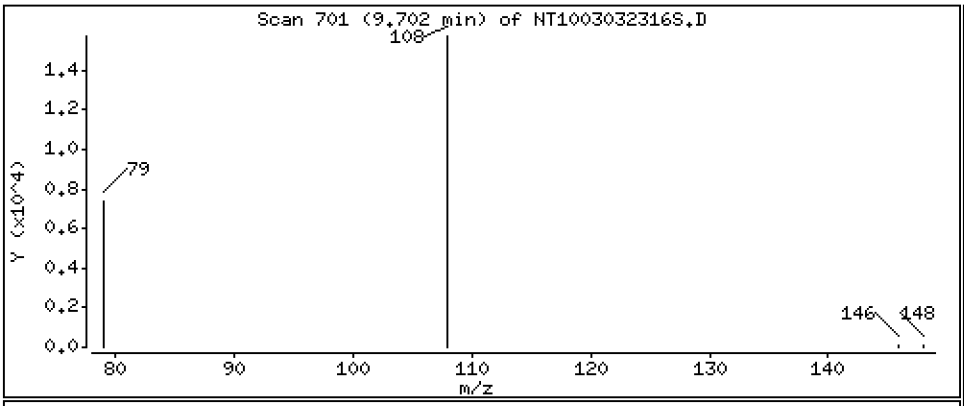
Operator: JGR

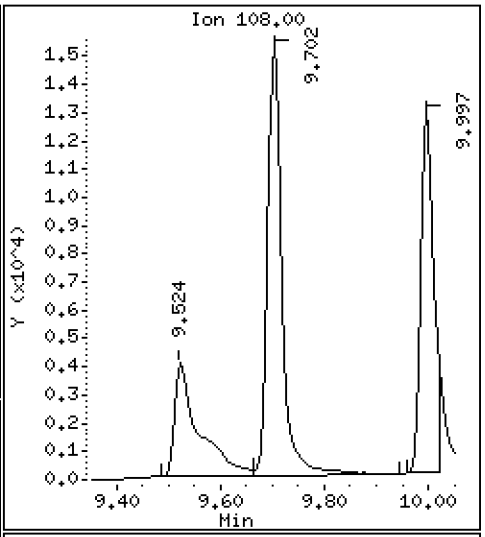
Column phase: ZB-5msi

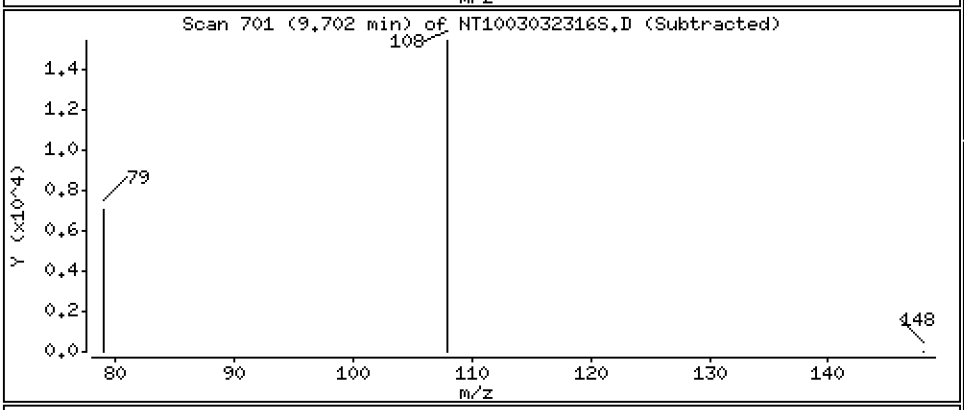
Column diameter: 0.25

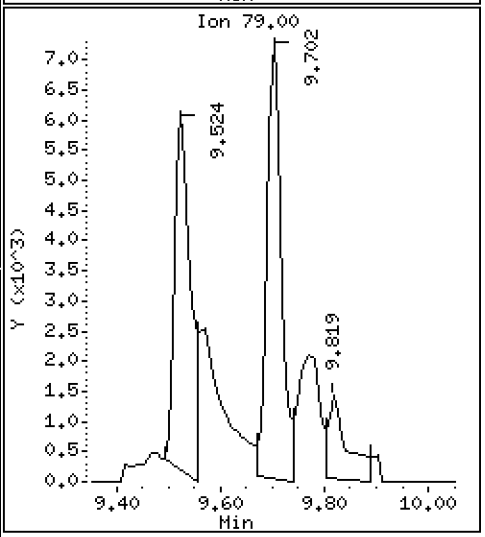
13 2-Methylphenol

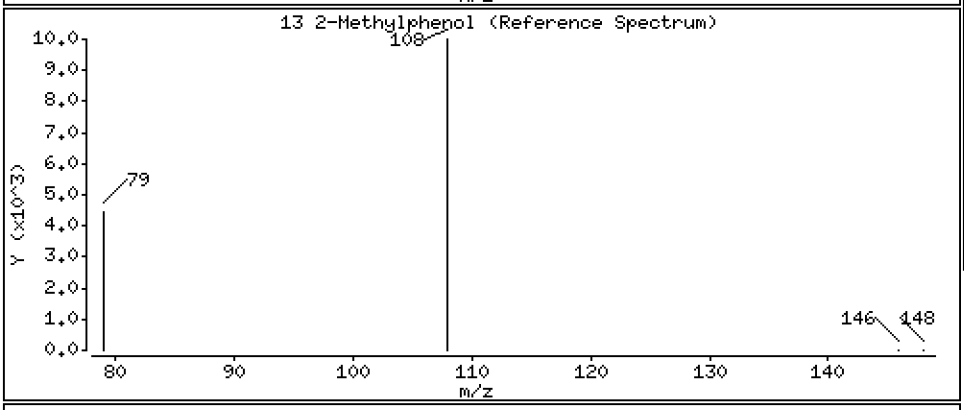
Concentration: 0.2028 ug/L

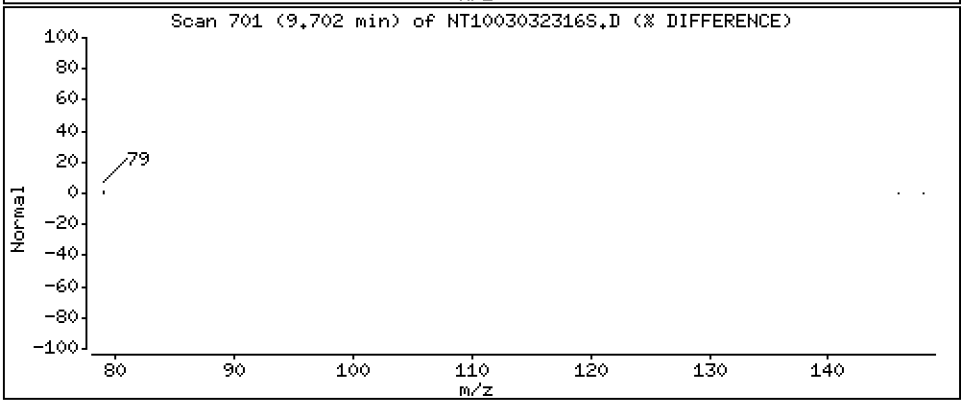












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323165.D

Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

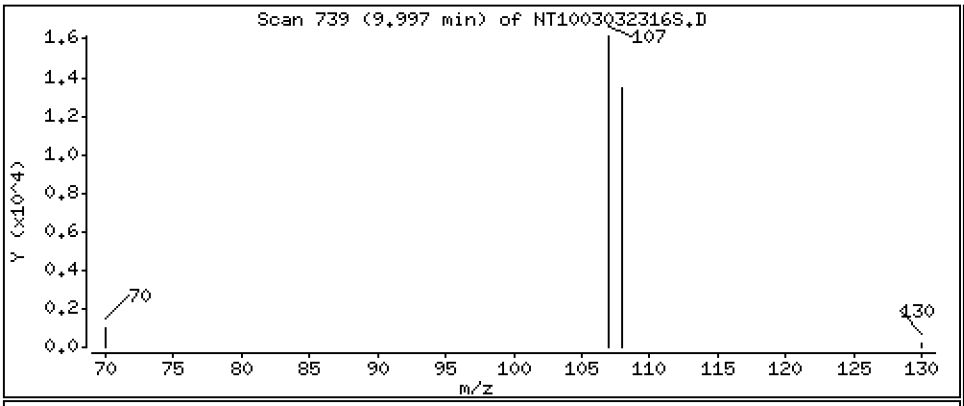
Operator: JGR

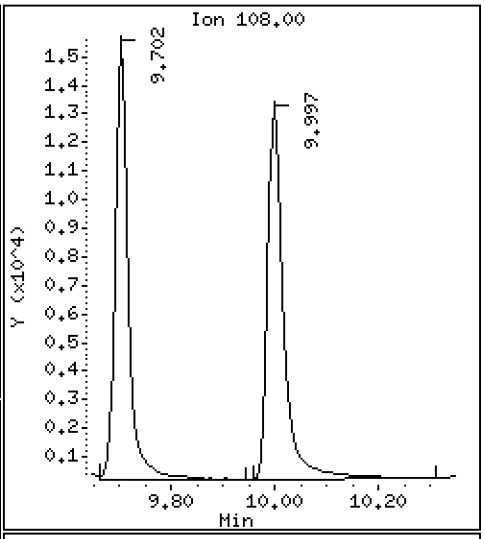
Column phase: ZB-5msi

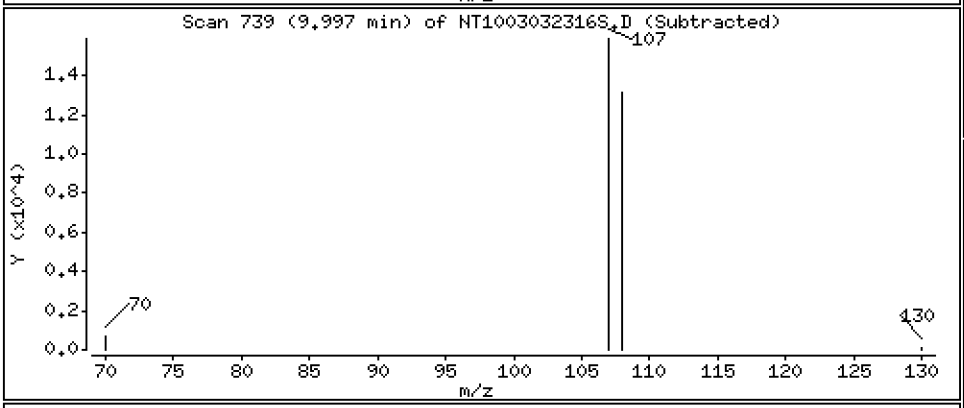
Column diameter: 0.25

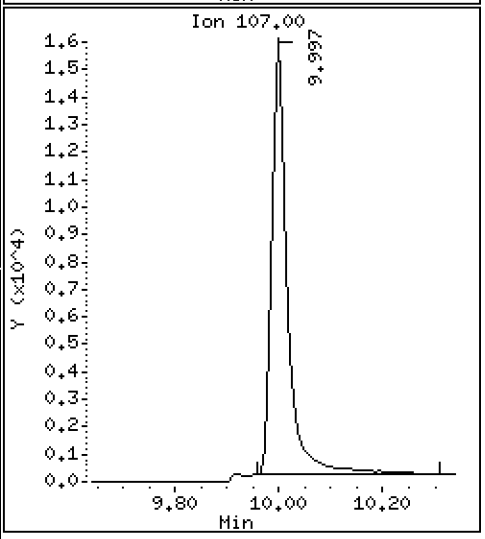
15 4-Methylphenol

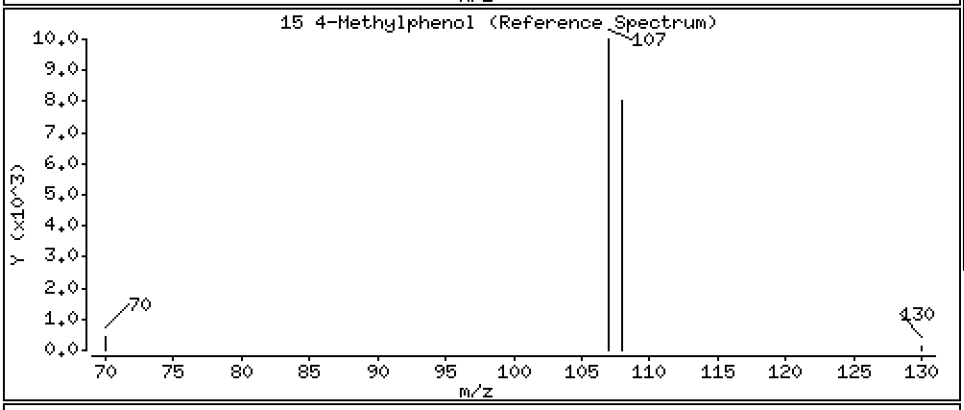
Concentration: 0.1892 ug/L

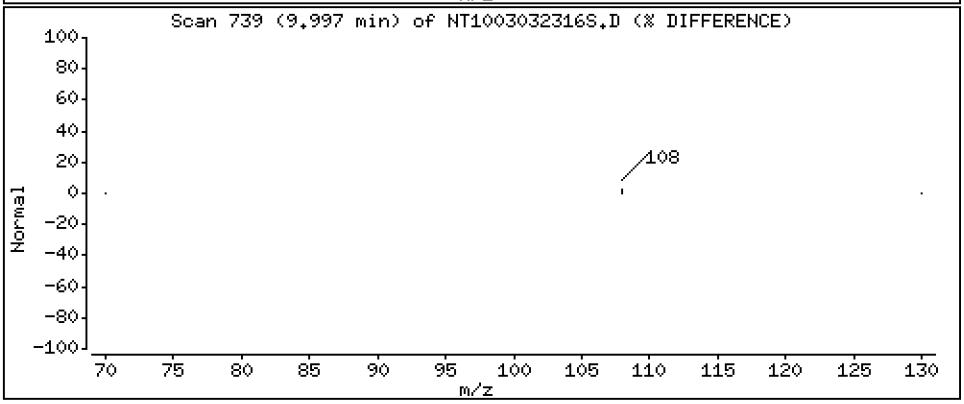












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323165.D

Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

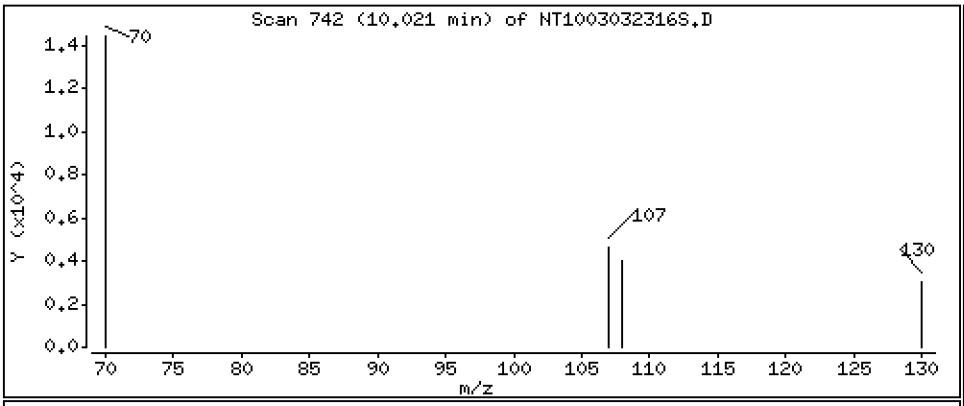
Operator: JGR

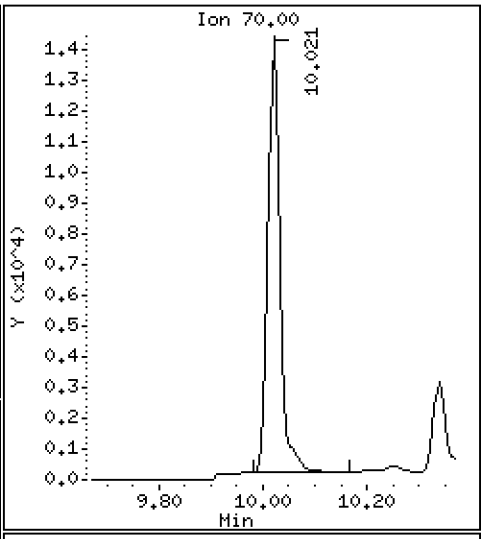
Column phase: ZB-5msi

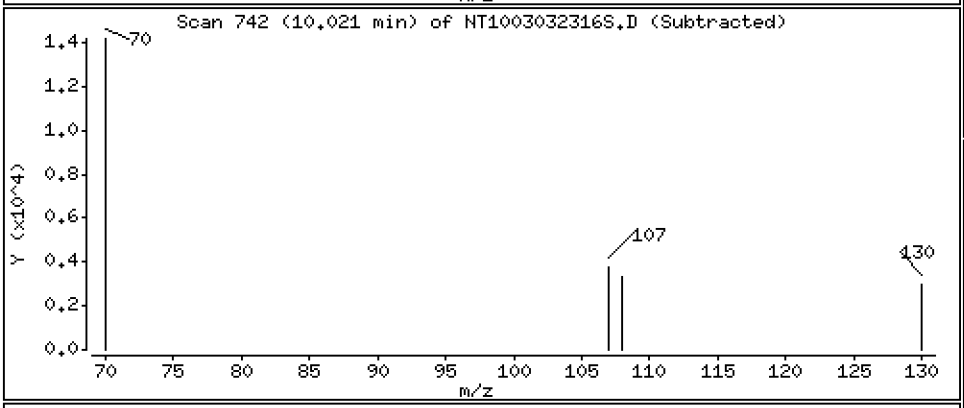
Column diameter: 0.25

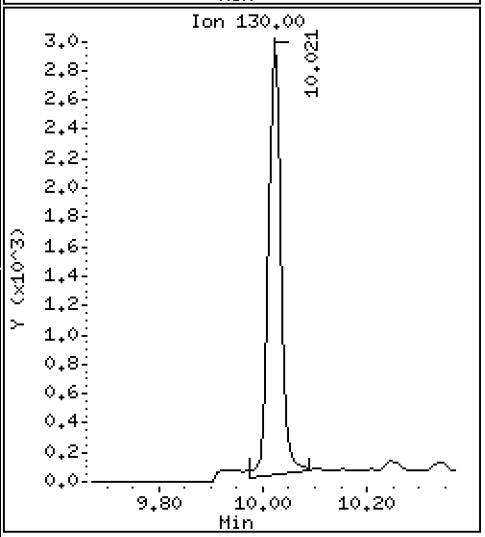
16 N-Nitroso-di-n-propylamine

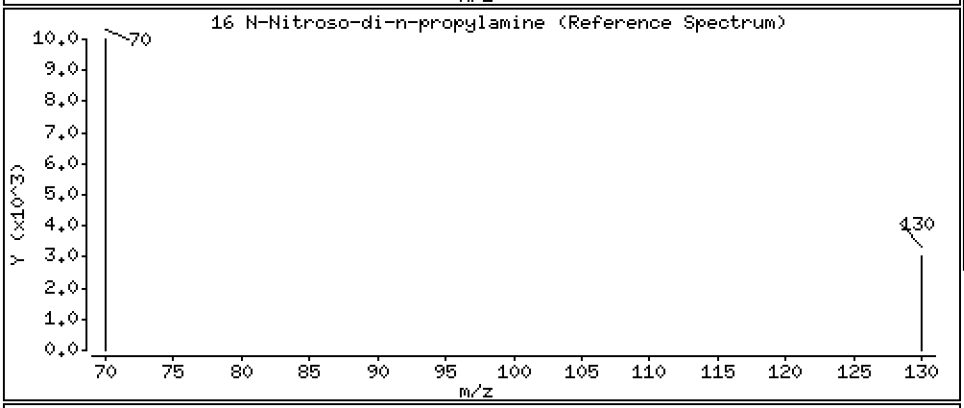
Concentration: 0.2112 ug/L

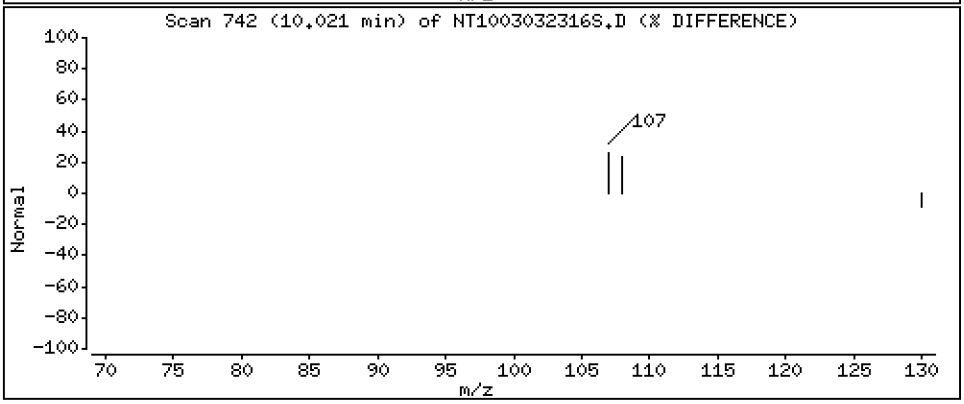












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Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

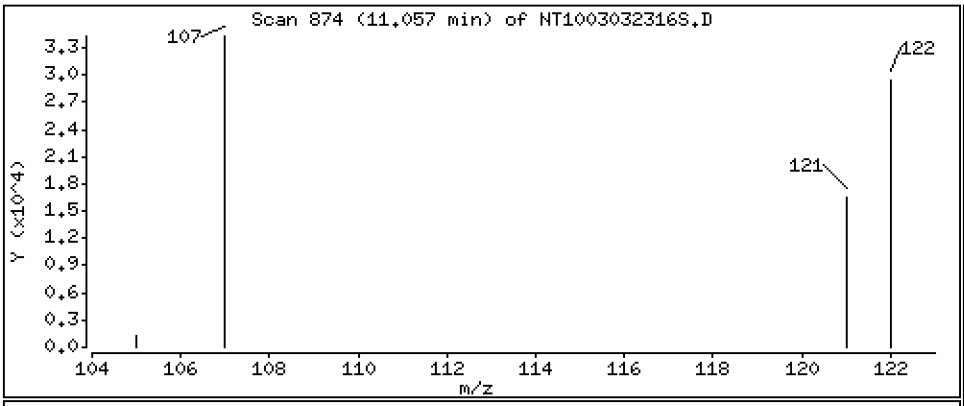
Operator: JGR

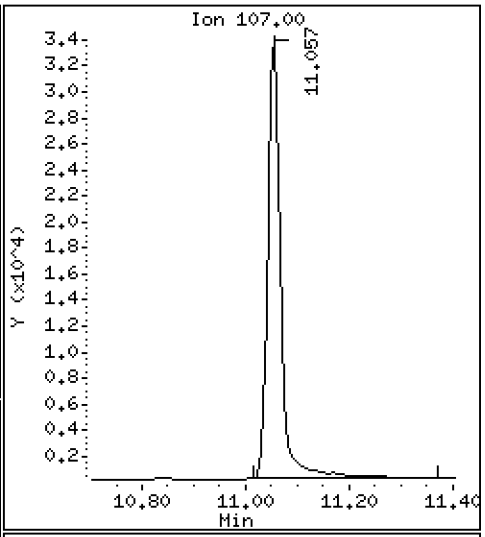
Column phase: ZB-5msi

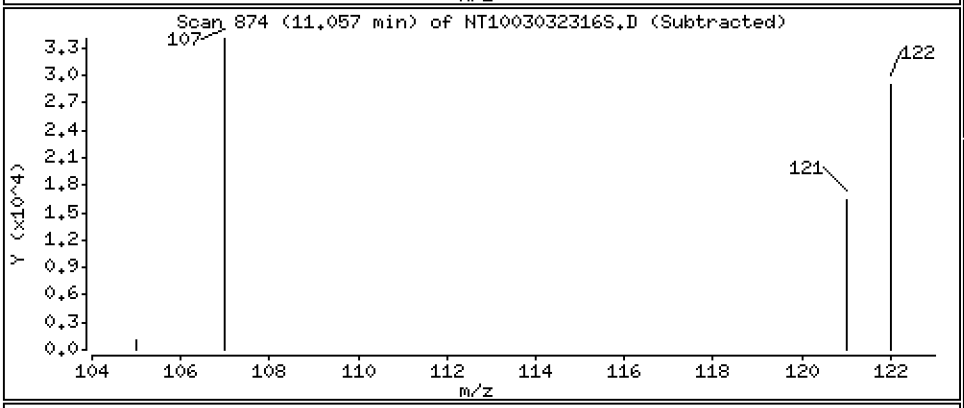
Column diameter: 0.25

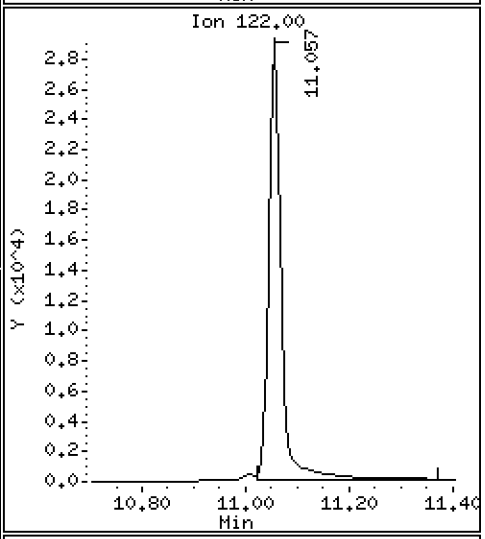
22 2,4-Dimethylphenol

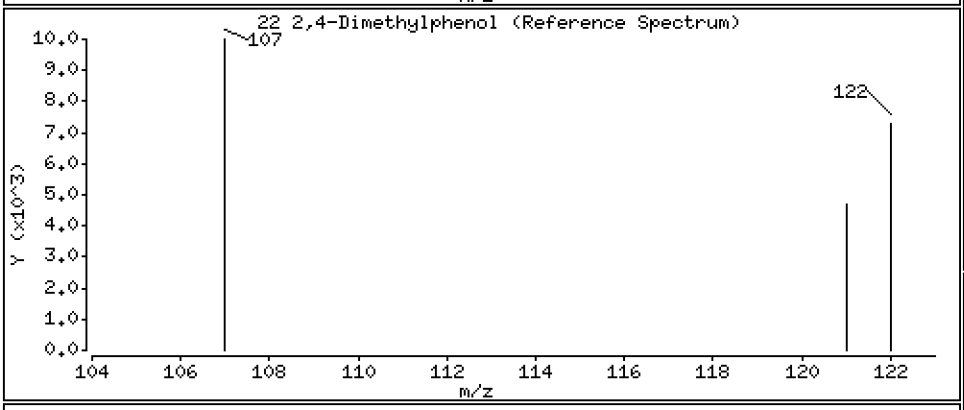
Concentration: 0.3666 ug/L

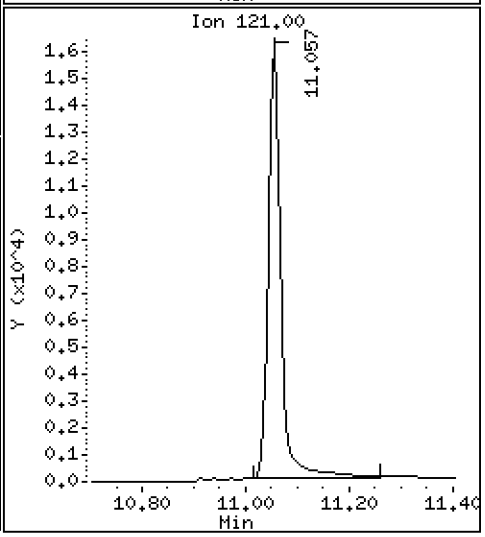


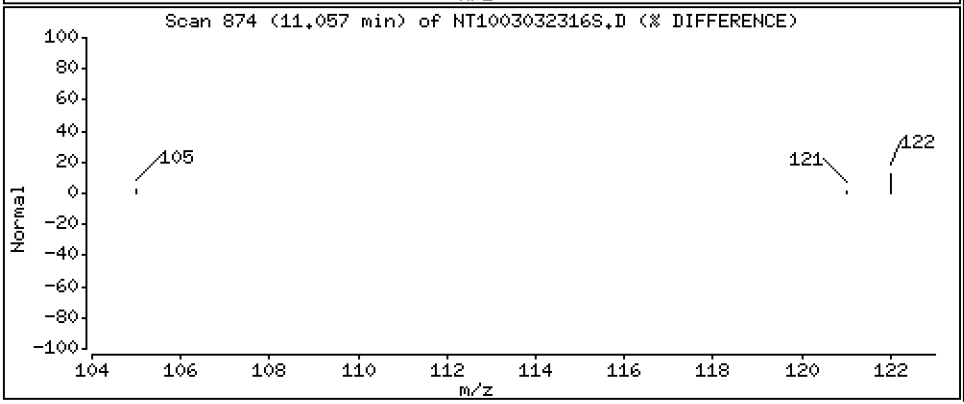












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323165.D

Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

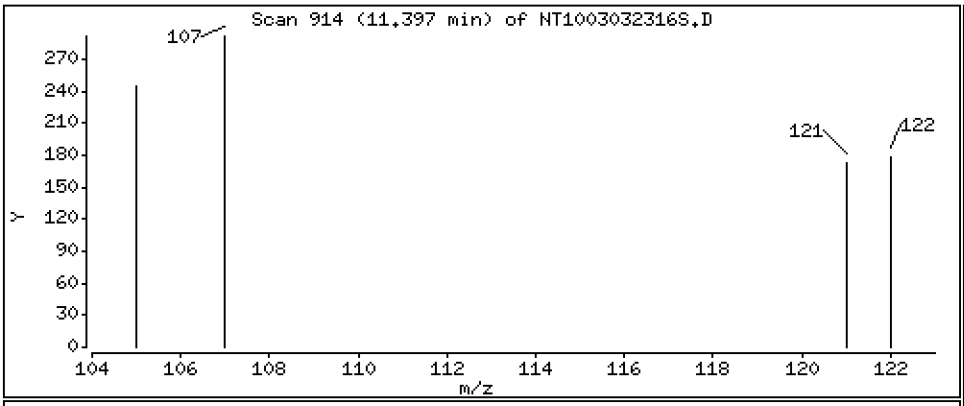
Operator: JGR

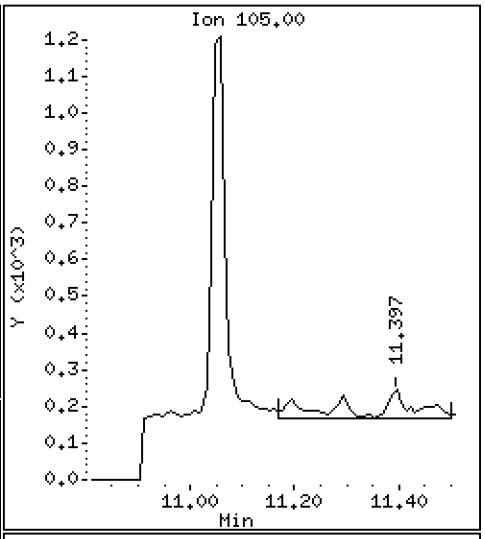
Column phase: ZB-5msi

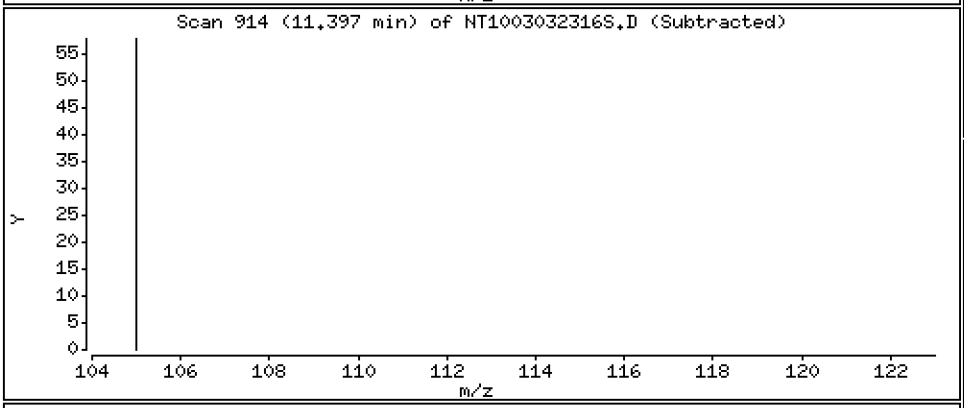
Column diameter: 0.25

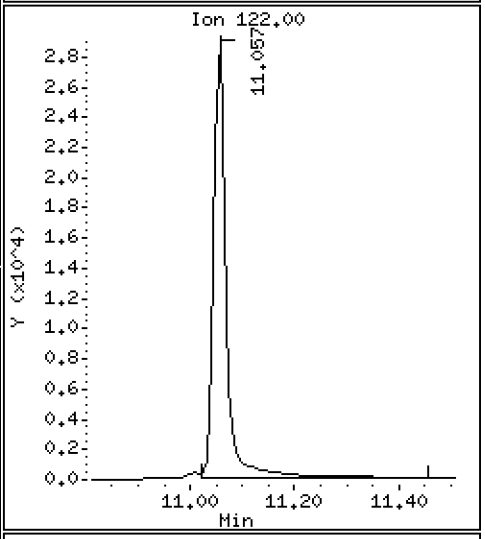
24 Benzoic acid

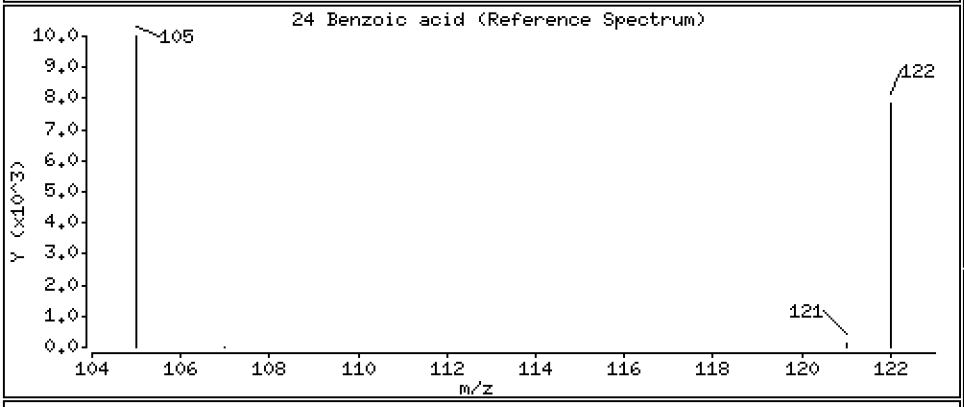
Concentration: 0.005865 ug/L

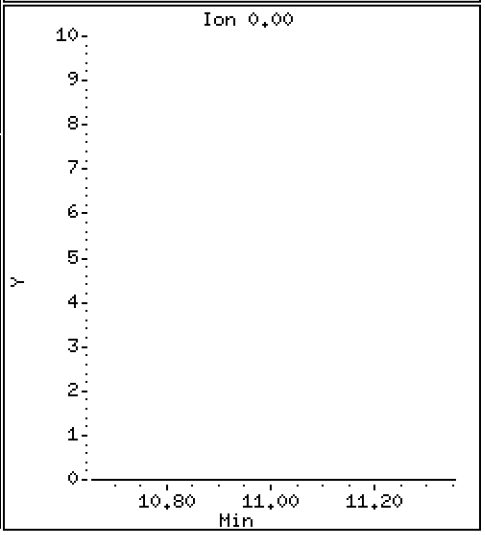


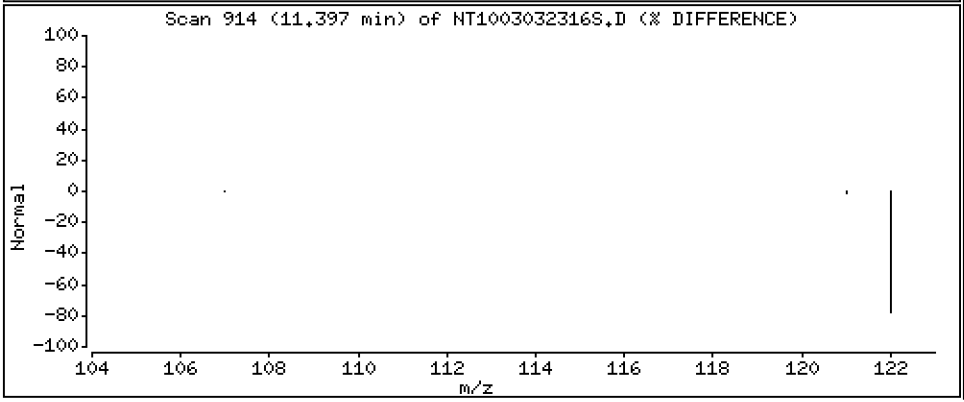












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323165.D

Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

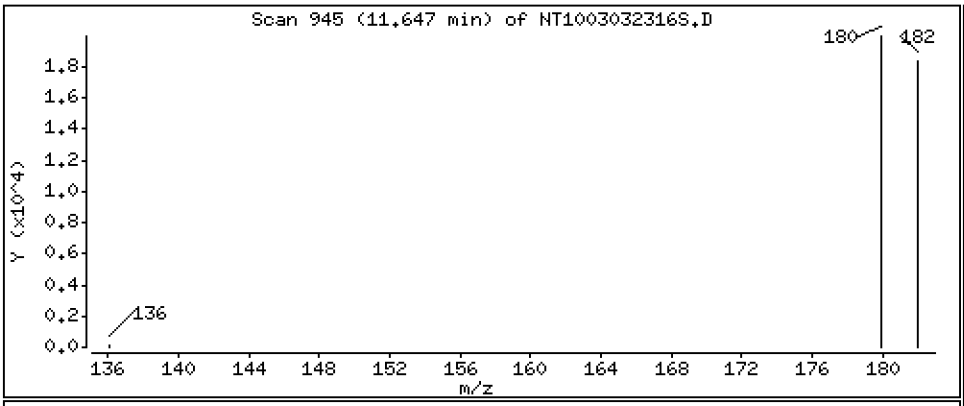
Operator: JGR

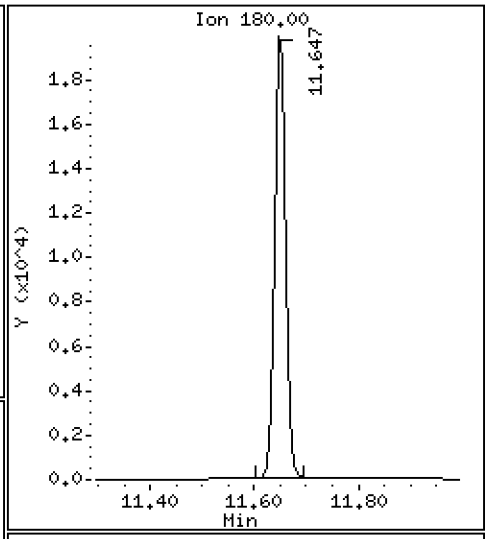
Column phase: ZB-5msi

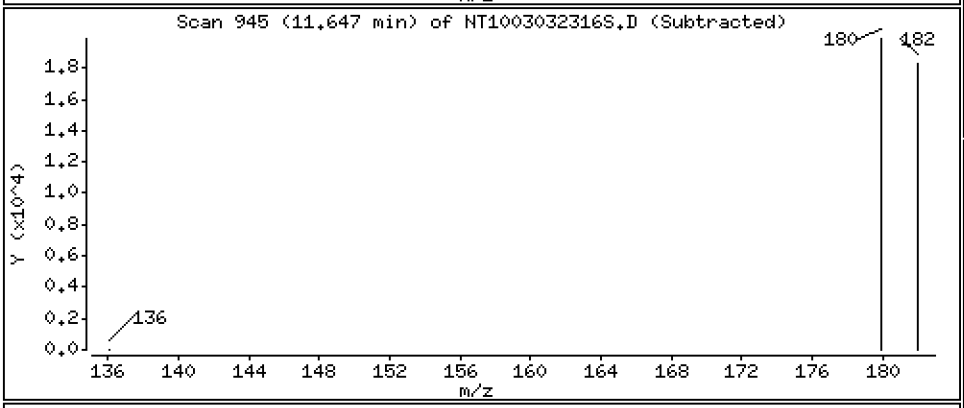
Column diameter: 0.25

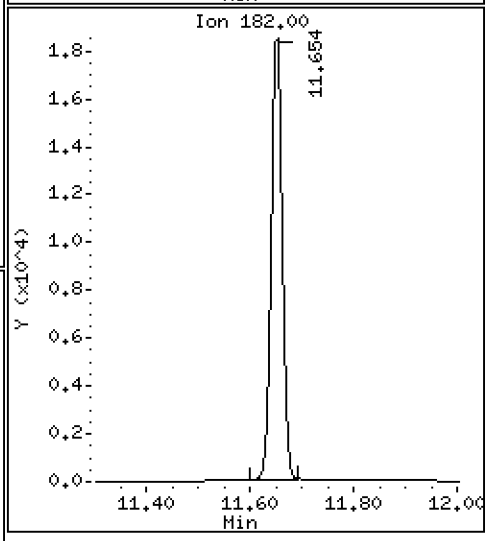
26 1,2,4-Trichlorobenzene

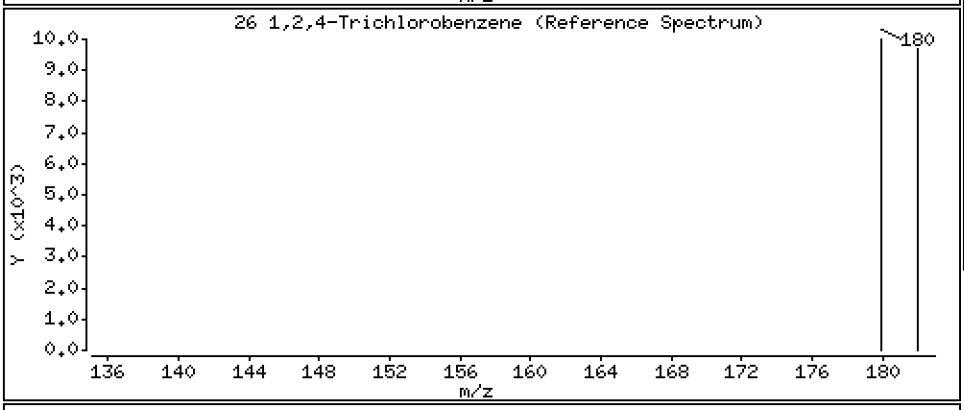
Concentration: 0.2233 ug/L

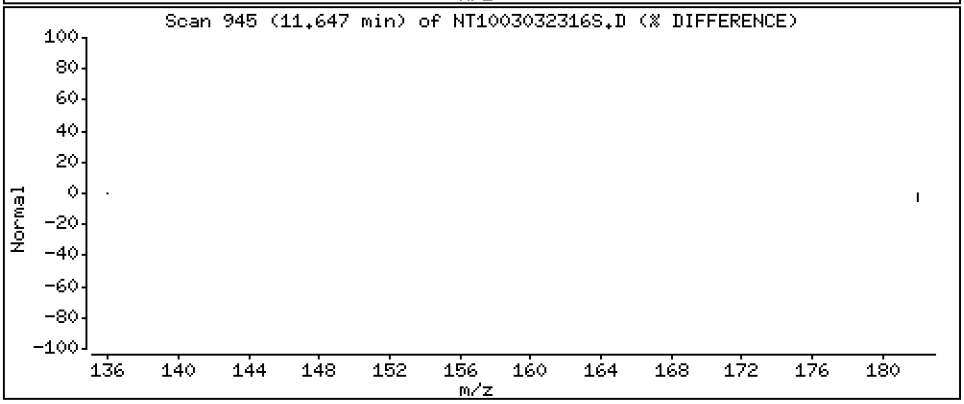












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323165.D

Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

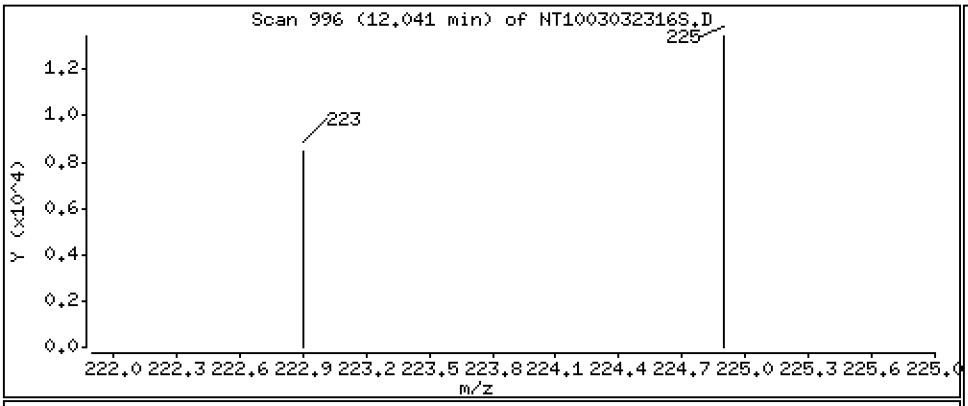
Operator: JGR

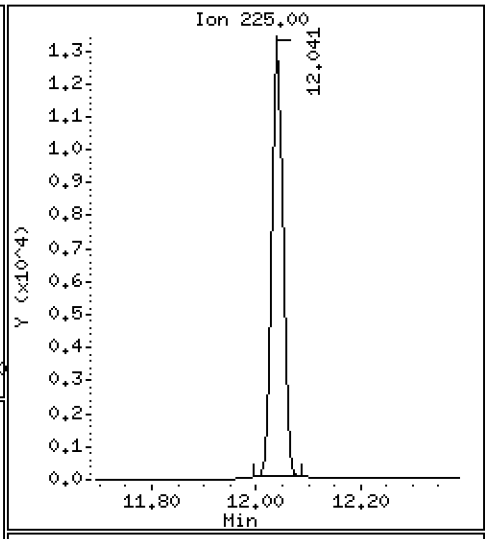
Column phase: ZB-5msi

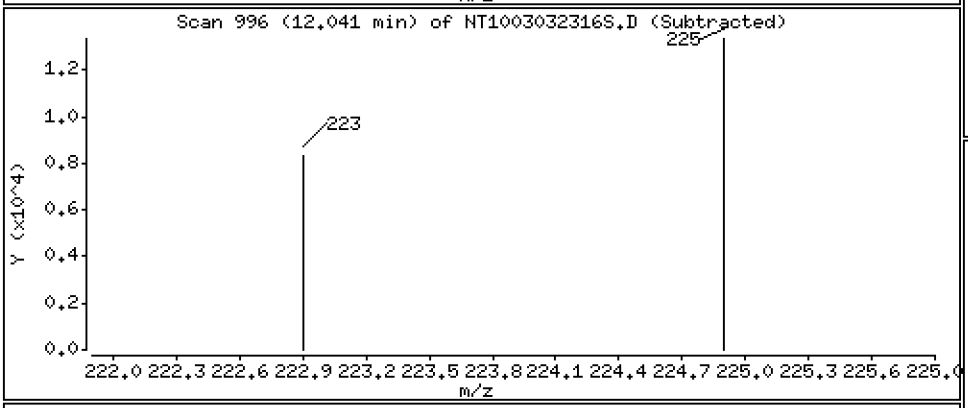
Column diameter: 0.25

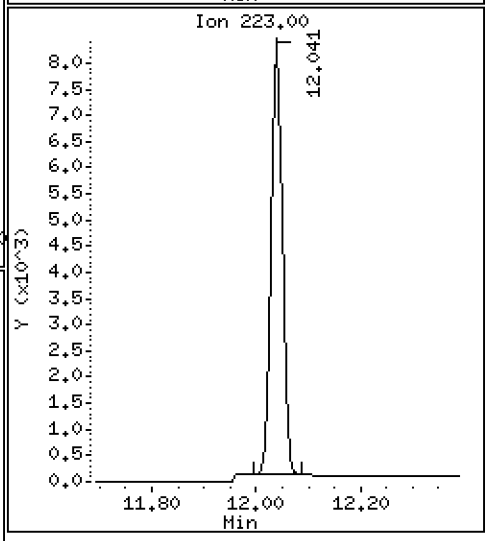
30 Hexachlorobutadiene

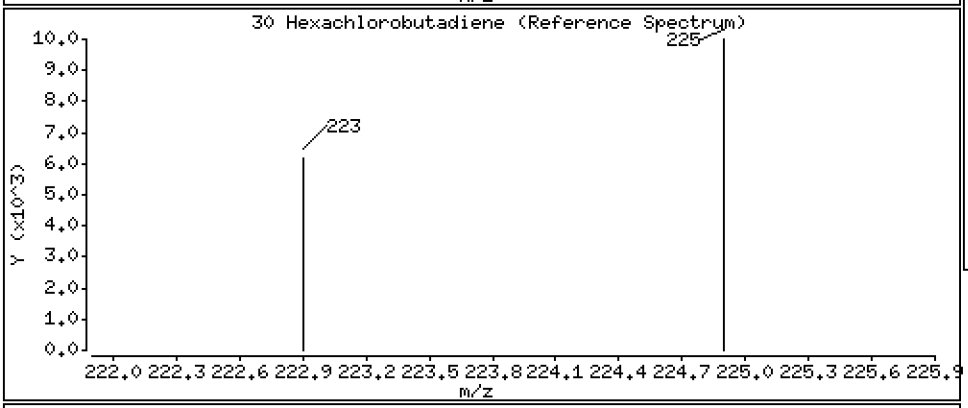
Concentration: 0.1886 ug/L

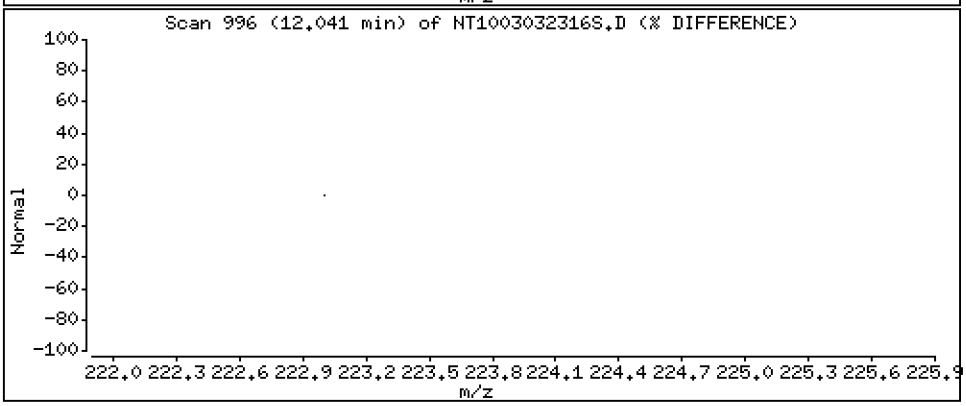












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323165.D

Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

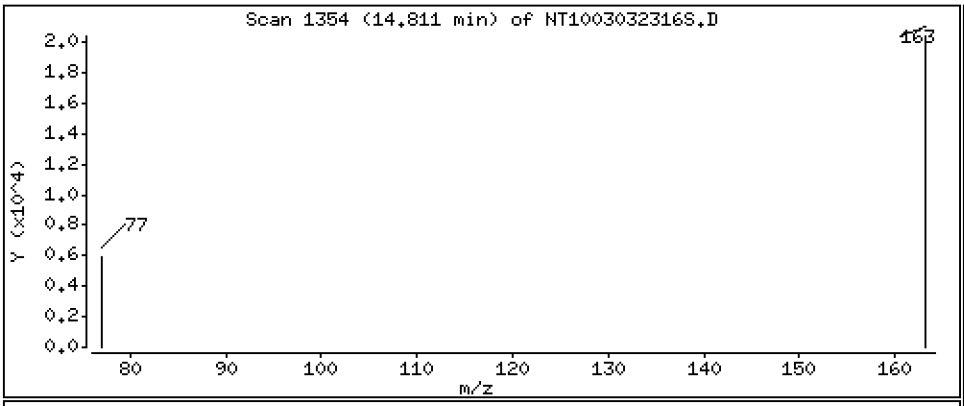
Operator: JGR

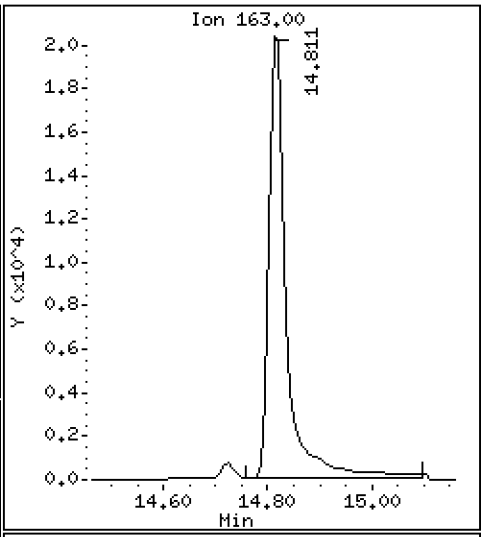
Column phase: ZB-5msi

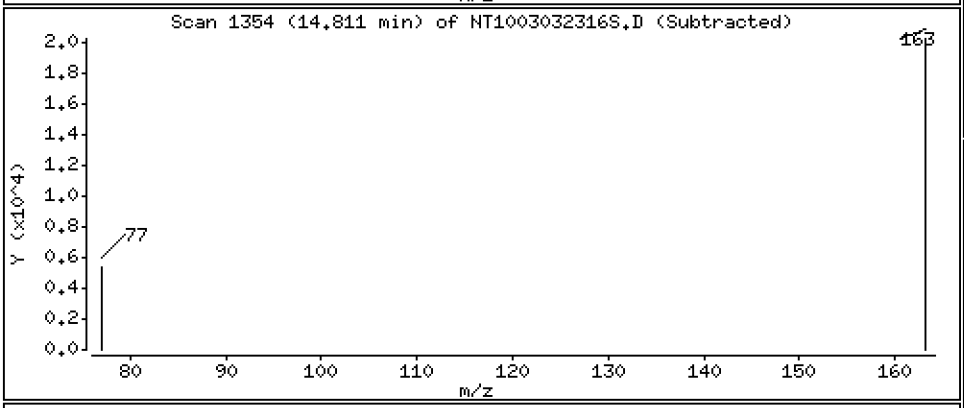
Column diameter: 0.25

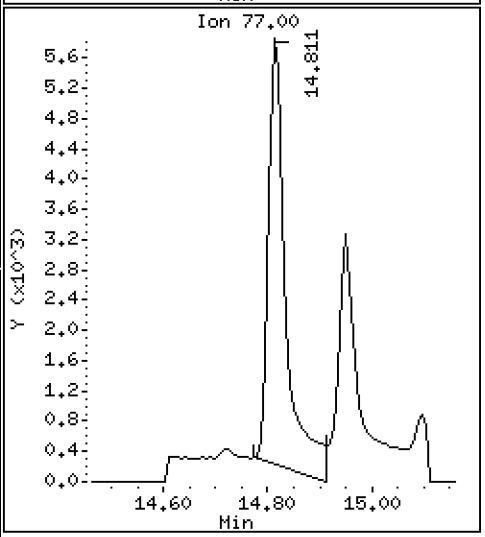
39 Dimethylphthalate

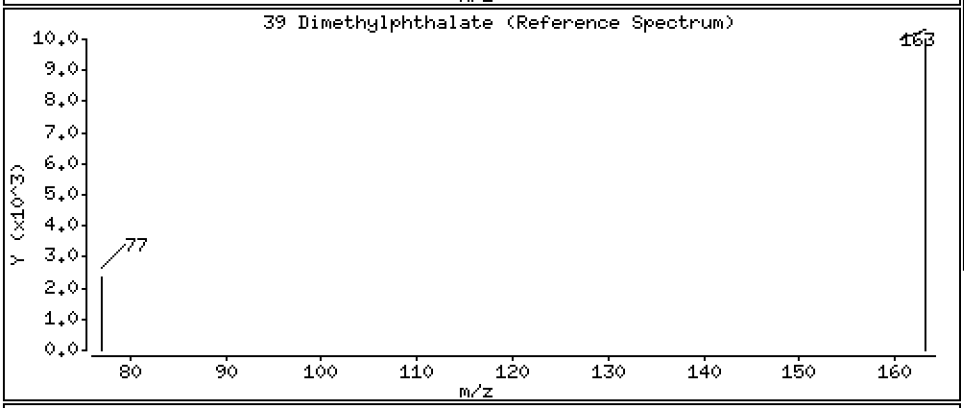
Concentration: 0.1700 ug/L

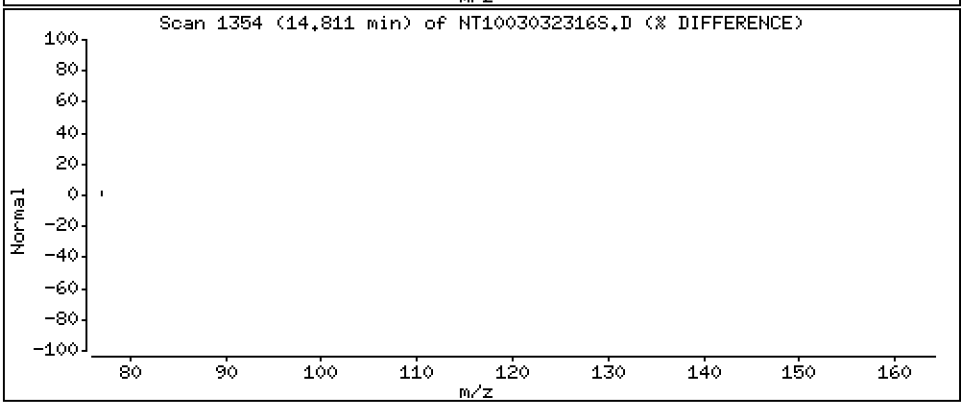












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323165.D

Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

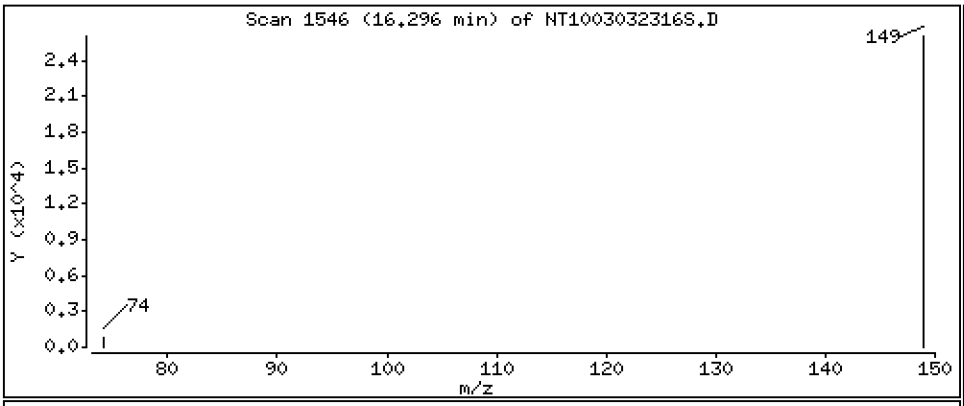
Operator: JGR

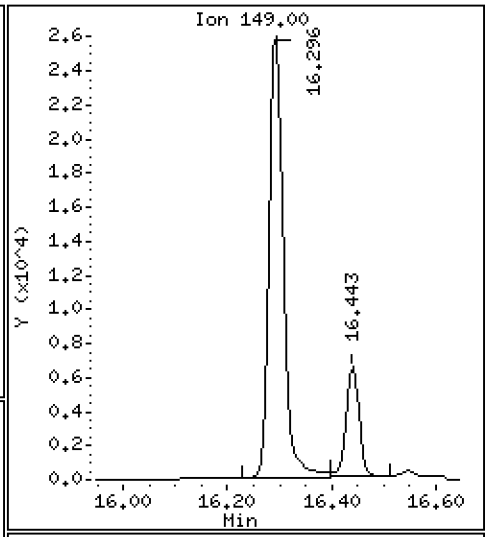
Column phase: ZB-5msi

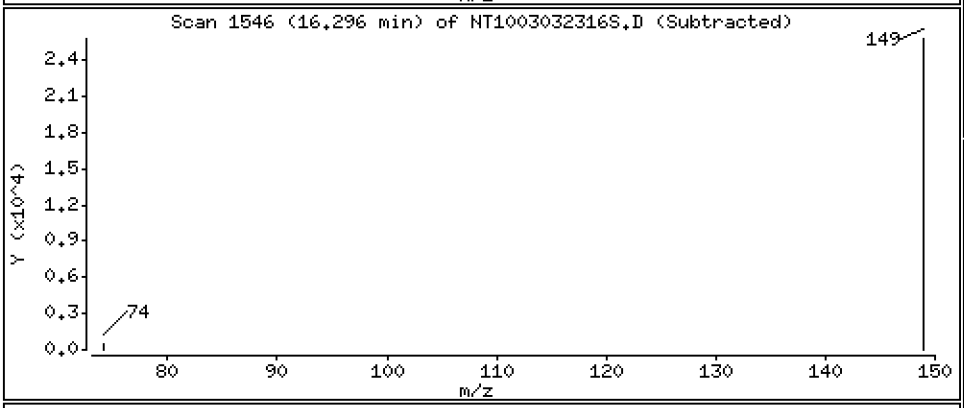
Column diameter: 0.25

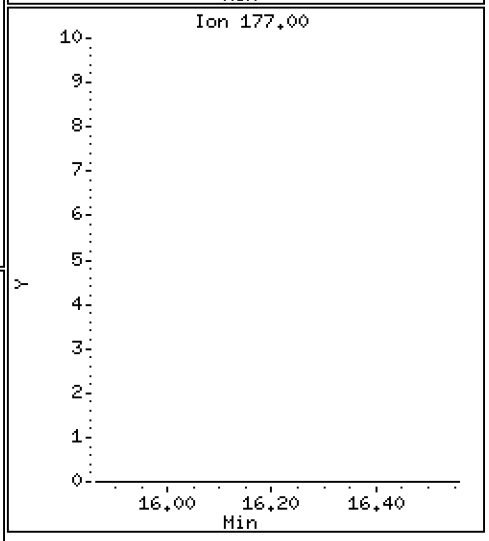
50 Diethylphthalate

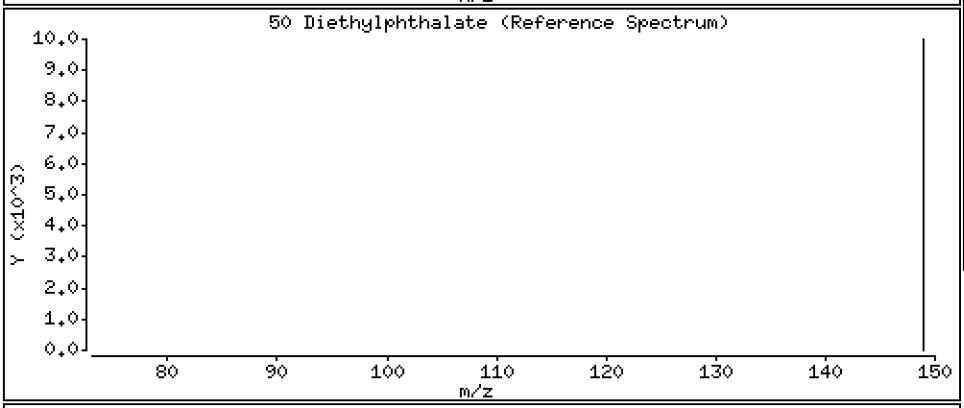
Concentration: 0.1873 ug/L

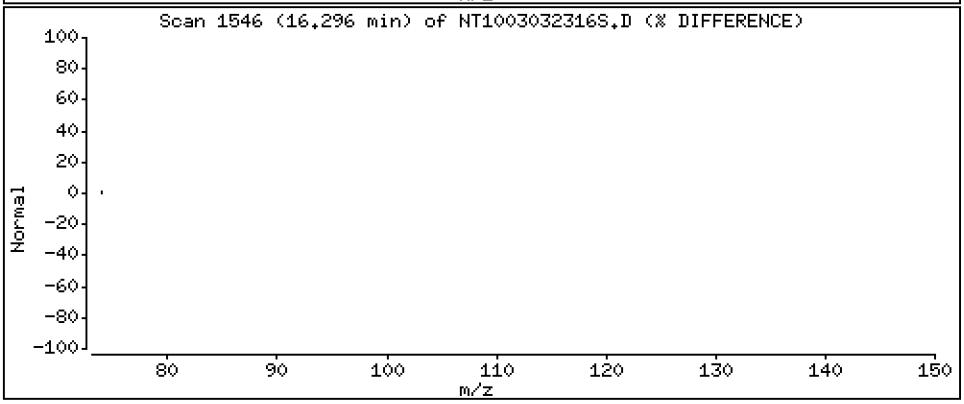












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323165.D

Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

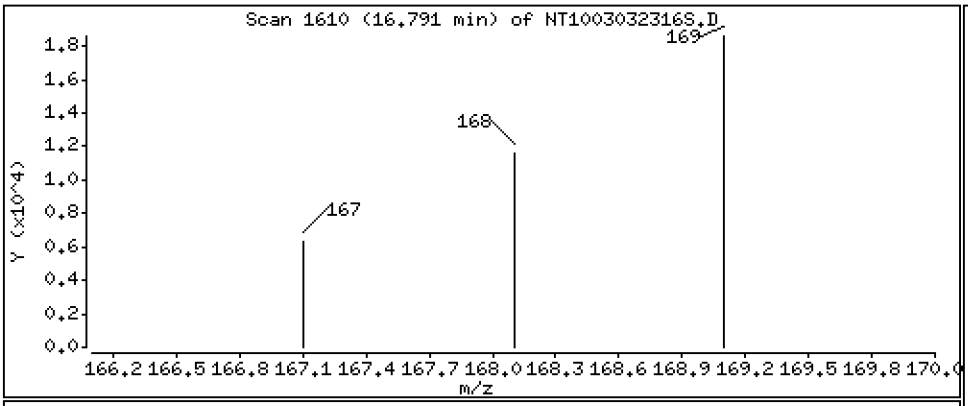
Operator: JGR

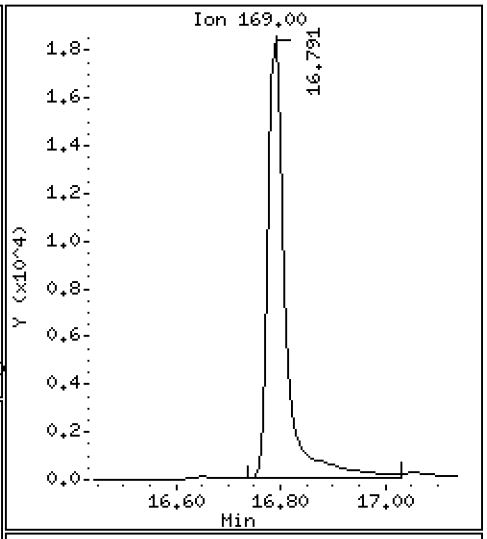
Column phase: ZB-5msi

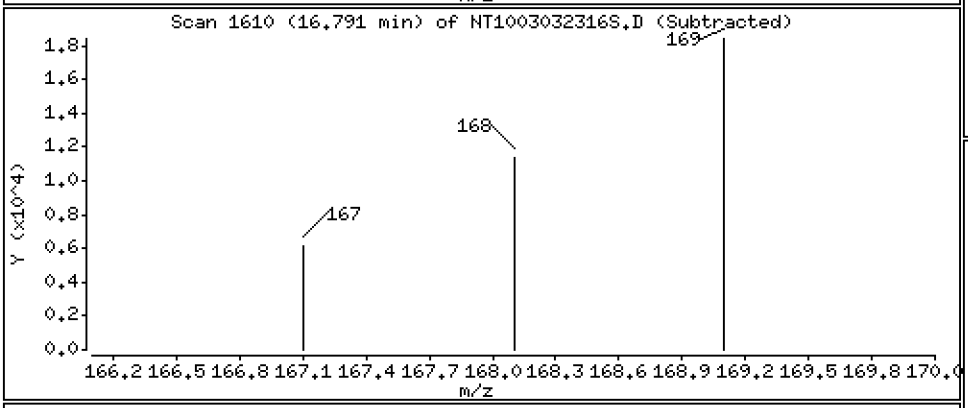
Column diameter: 0.25

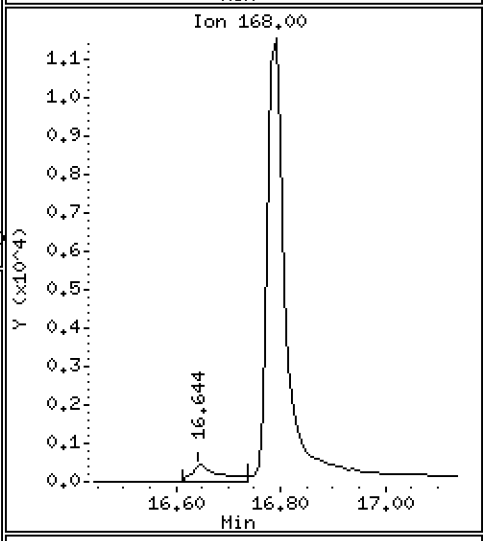
54 N-Nitrosodiphenylamine

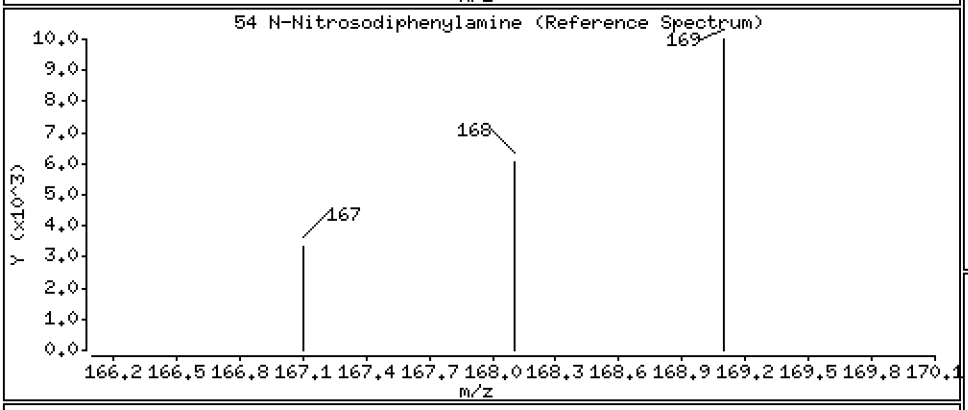
Concentration: 0.1651 ug/L

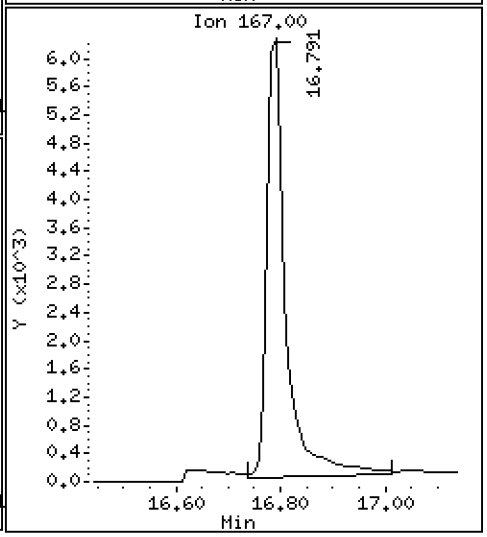


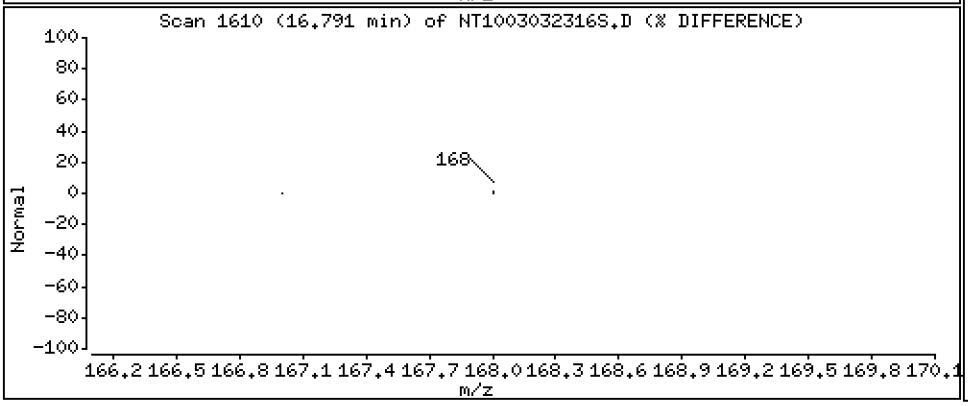












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323165.D

Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

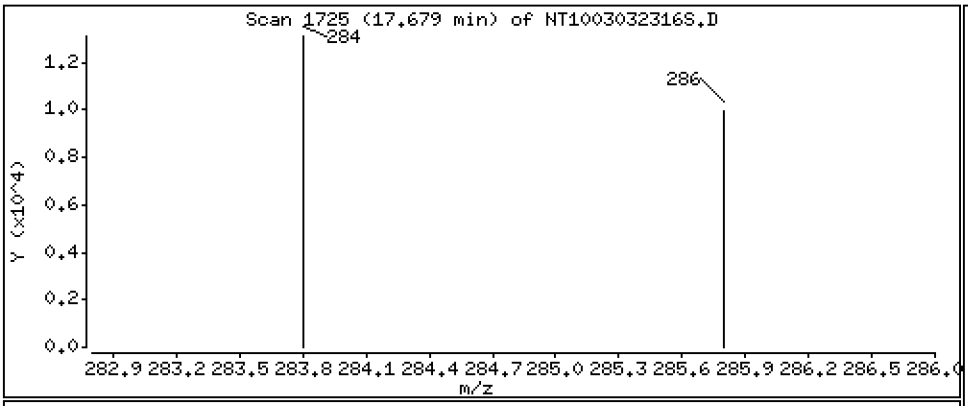
Operator: JGR

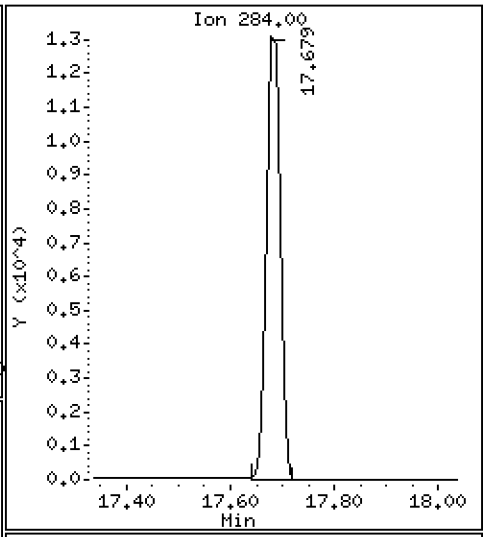
Column phase: ZB-5msi

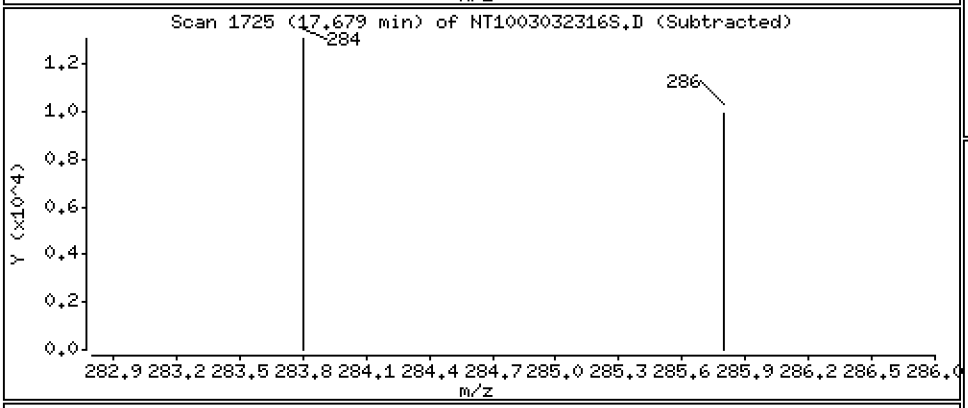
Column diameter: 0.25

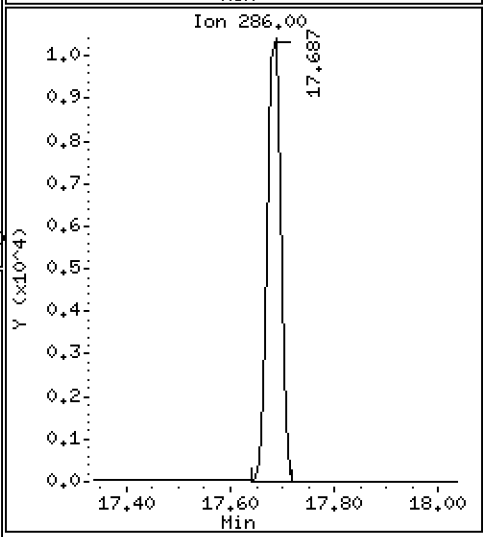
57 Hexachlorobenzene

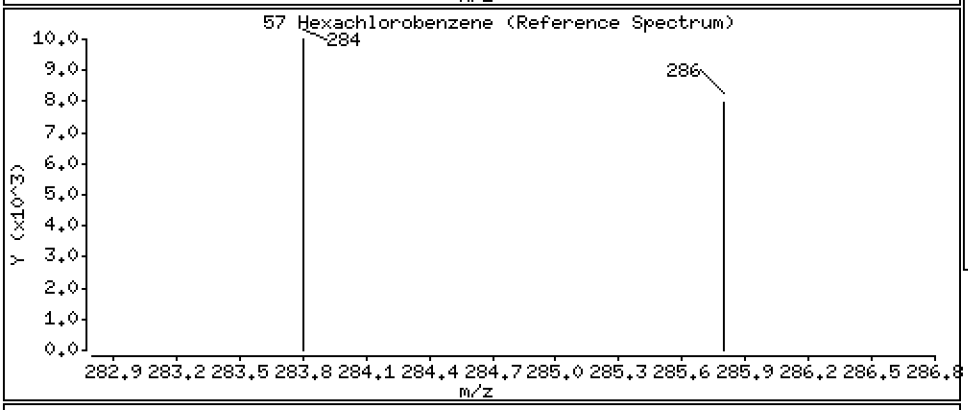
Concentration: 0.1957 ug/L

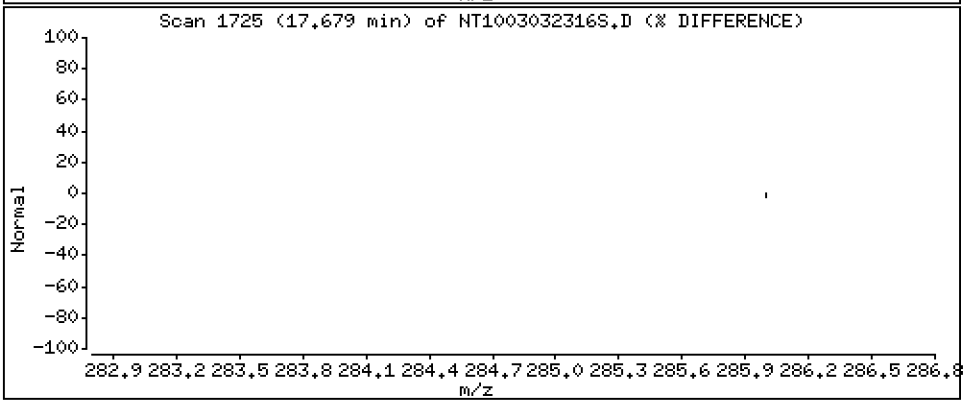












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Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

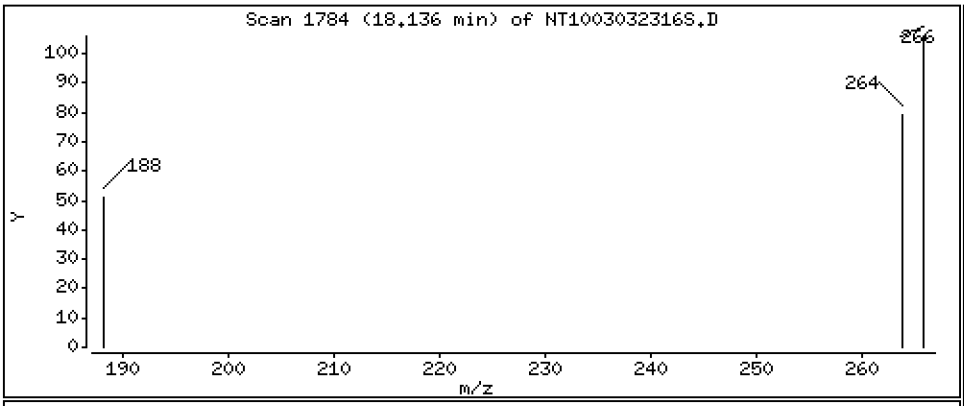
Operator: JGR

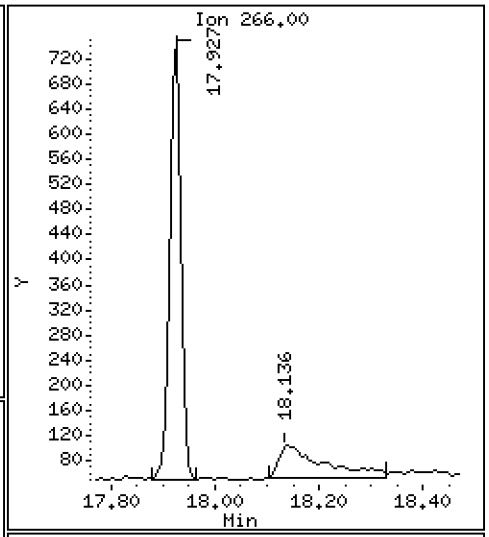
Column phase: ZB-5msi

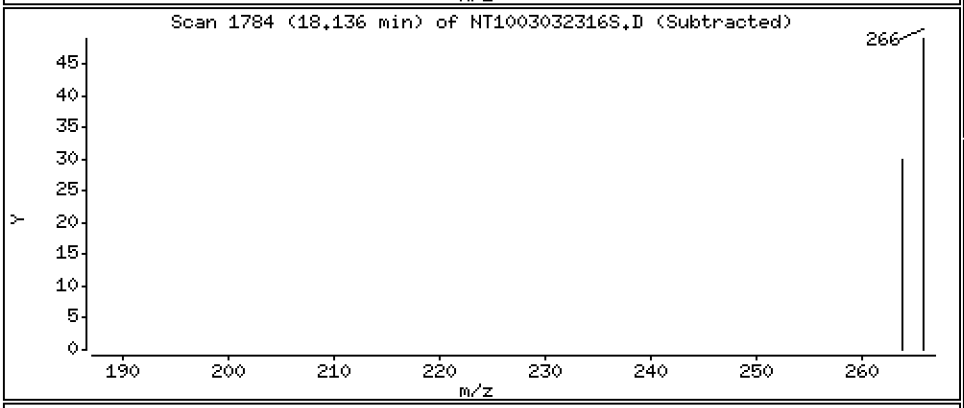
Column diameter: 0.25

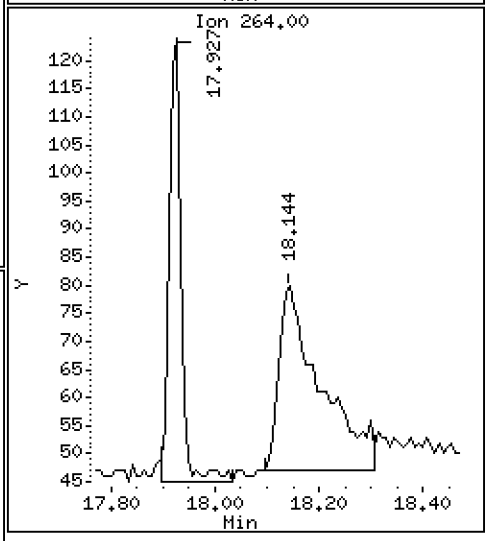
58 Pentachlorophenol

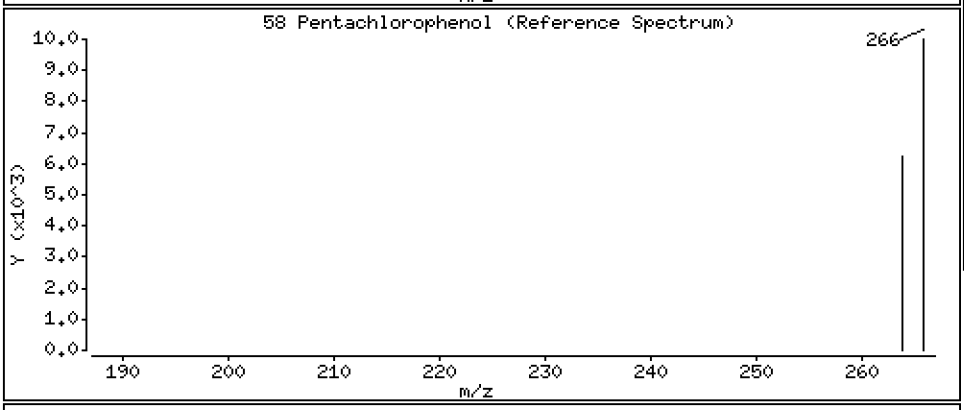
Concentration: 0.005958 ug/L

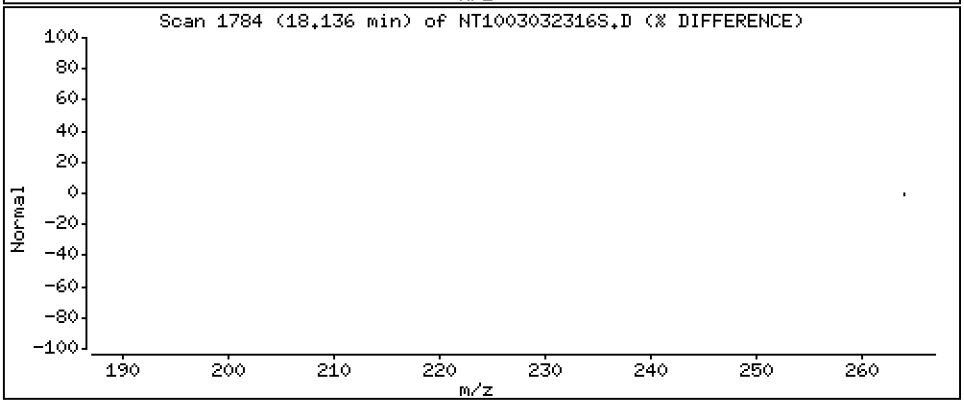












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Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

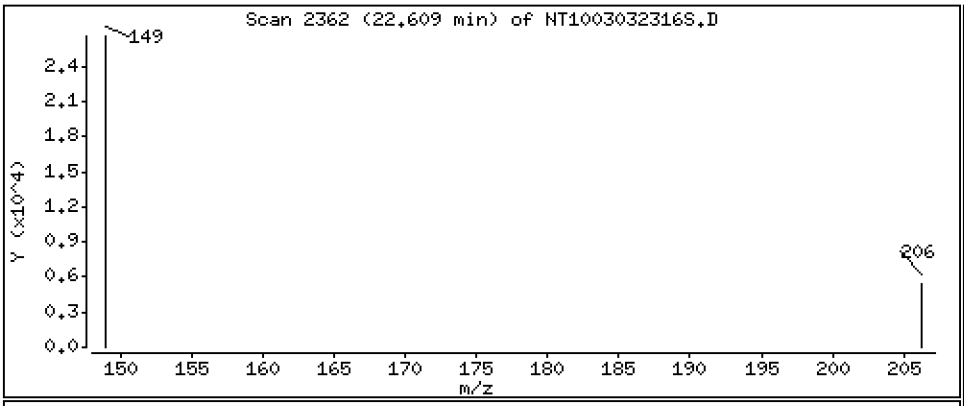
Operator: JGR

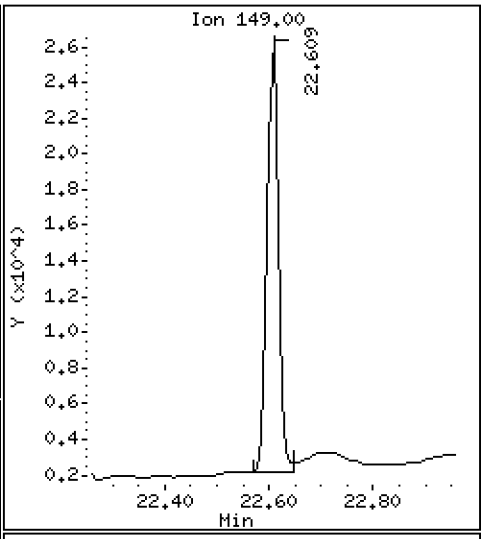
Column phase: ZB-5msi

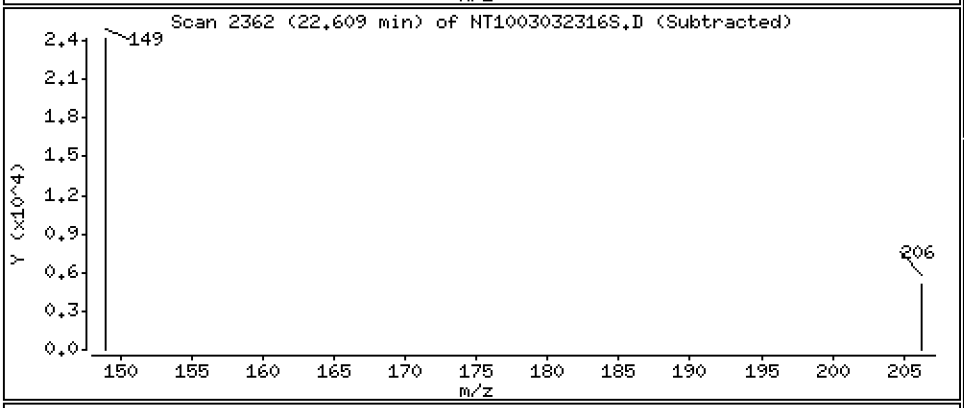
Column diameter: 0.25

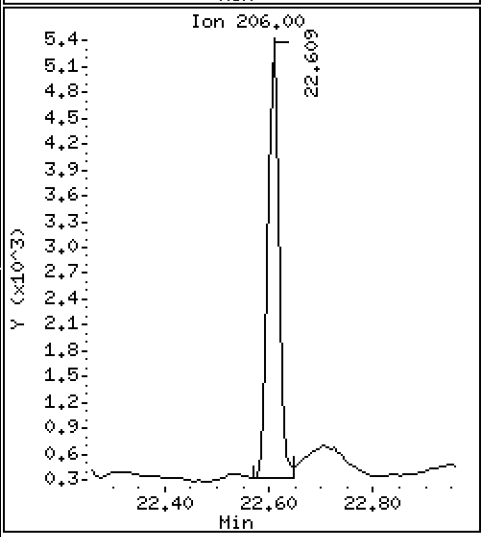
67 Butylbenzylphthalate

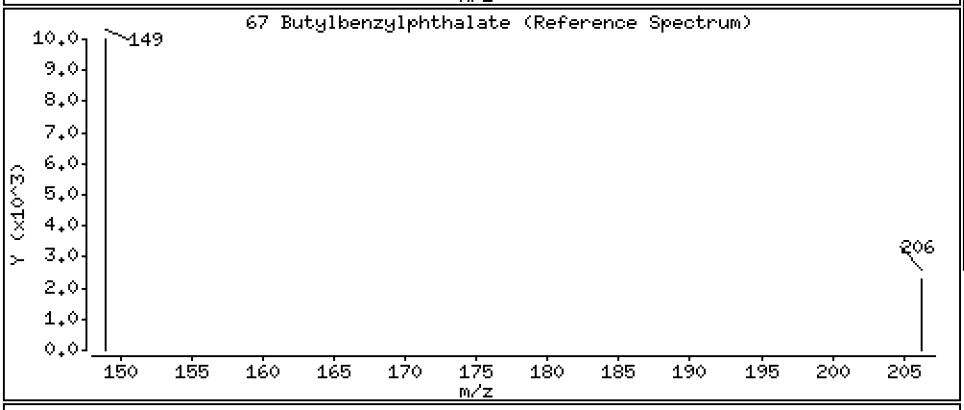
Concentration: 0.1468 ug/L

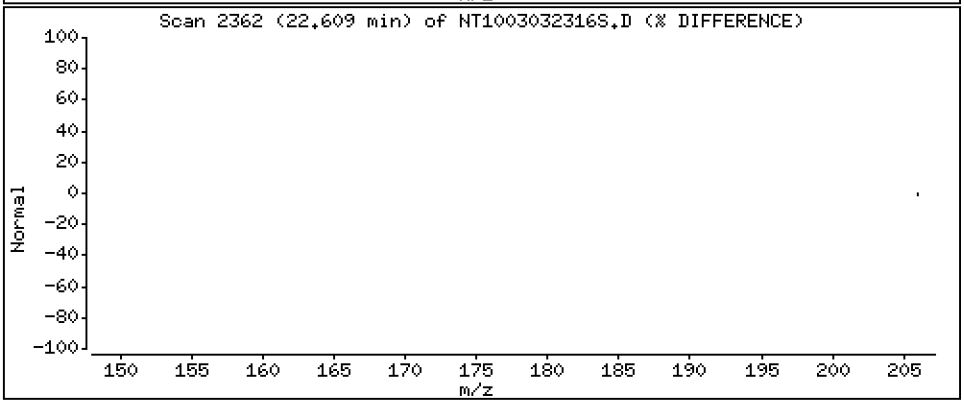












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323165.D

Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

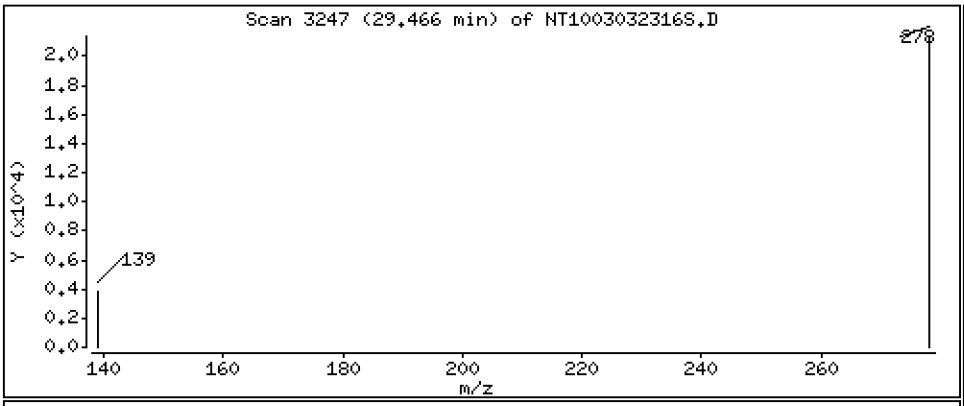
Operator: JGR

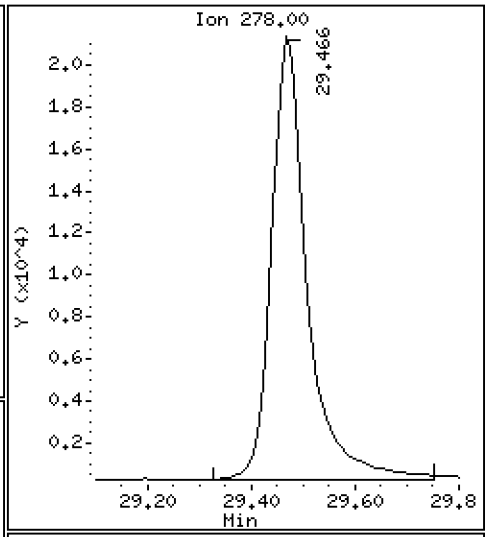
Column phase: ZB-5msi

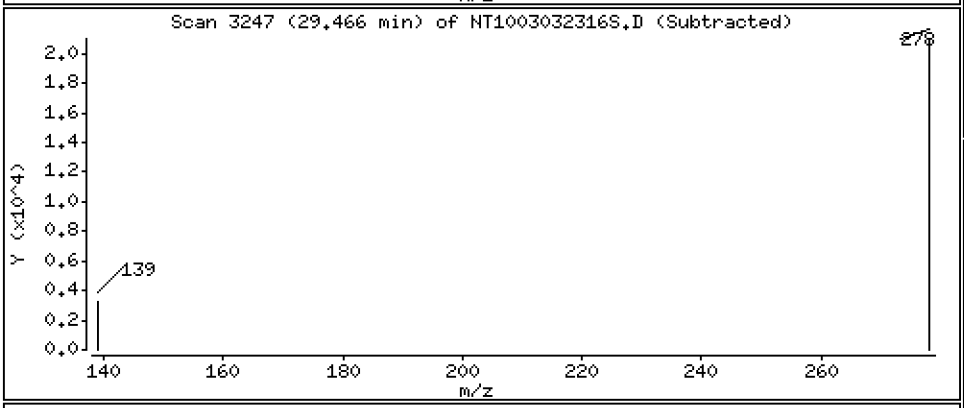
Column diameter: 0.25

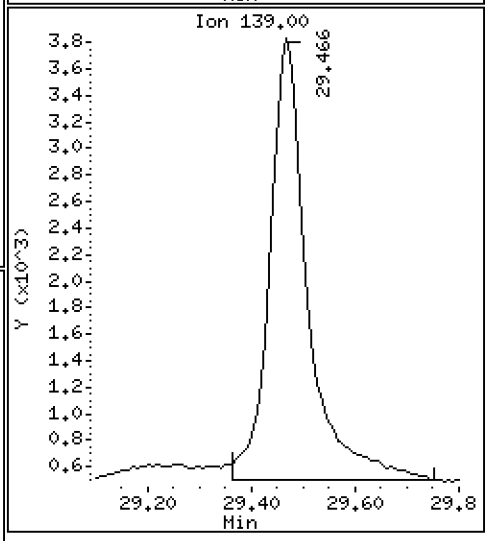
79 Dibenzo(a,h)anthracene

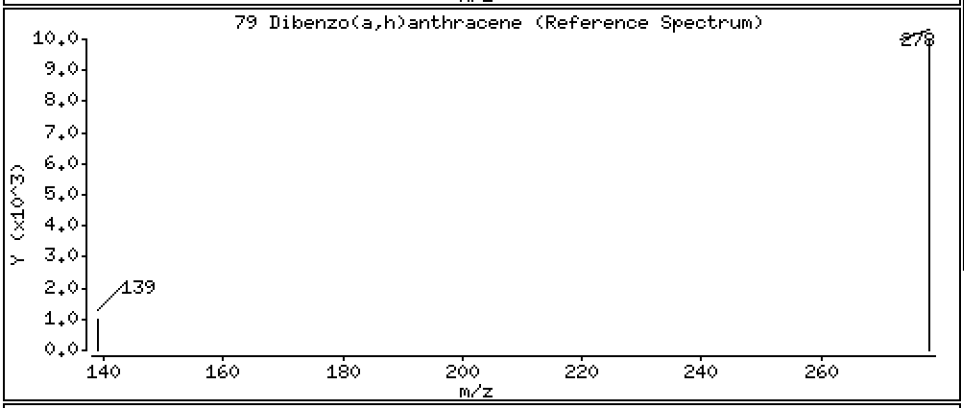
Concentration: 0.2442 ug/L

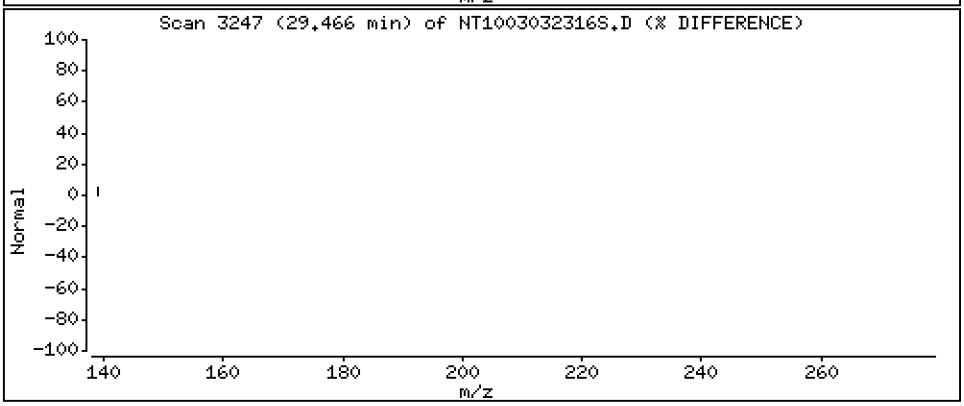












Data File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT10030323165.D

Date : 04-MAR-2023 03:18

Client ID:

Instrument: nt10.i

Sample Info: SEQ-LCV200

Volume Injected (uL): 1.0

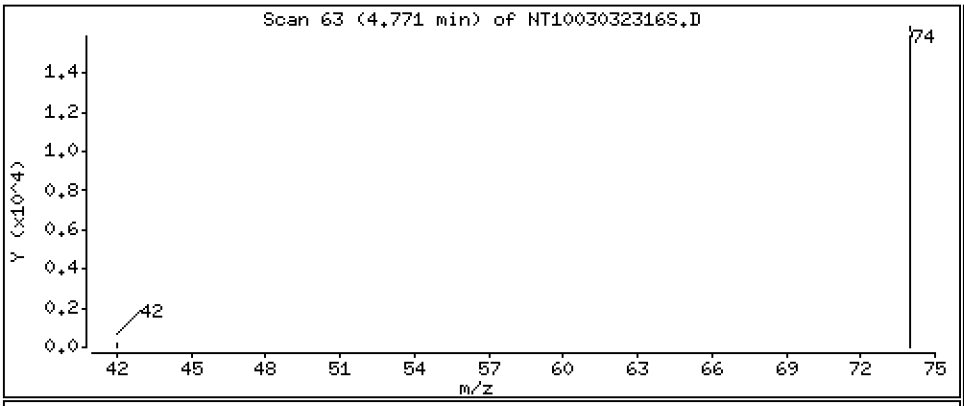
Operator: JGR

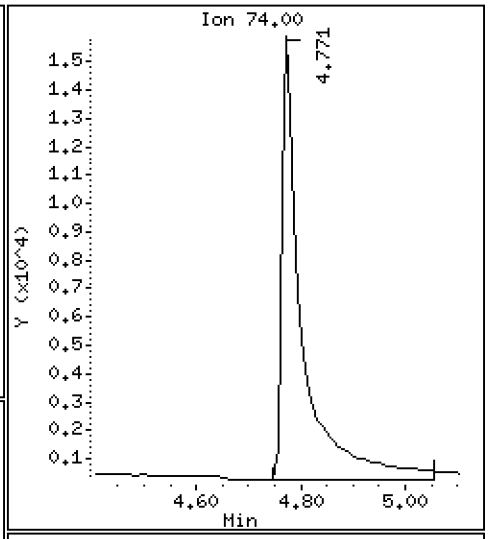
Column phase: ZB-5msi

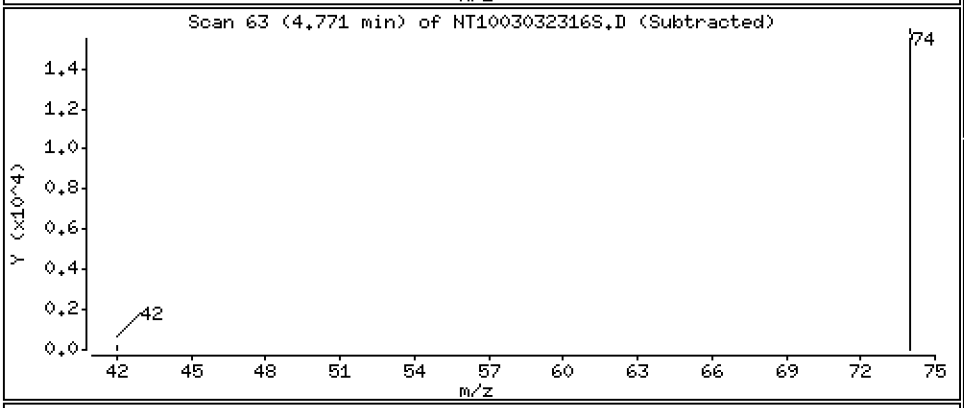
Column diameter: 0.25

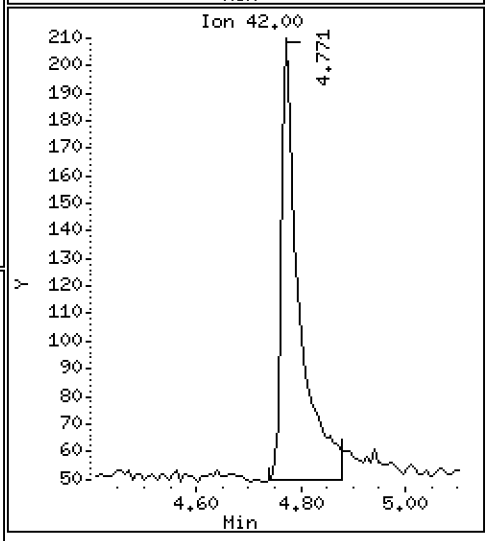
90 N-Nitrosodimethylamine

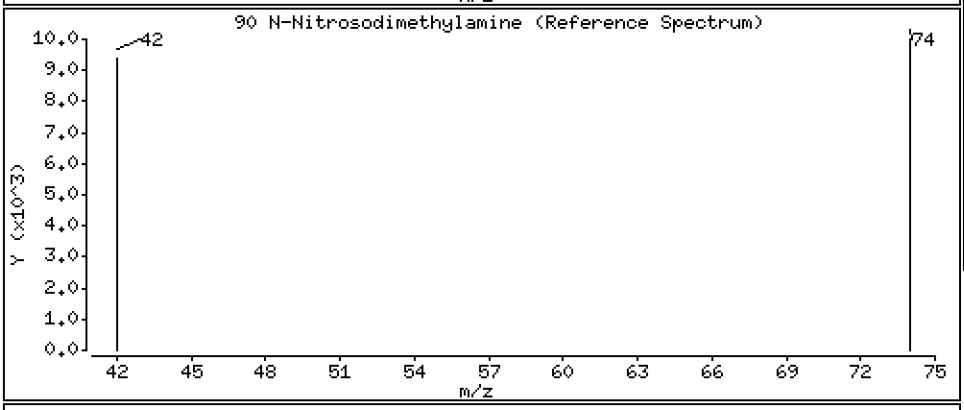
Concentration: 0.4695 ug/L

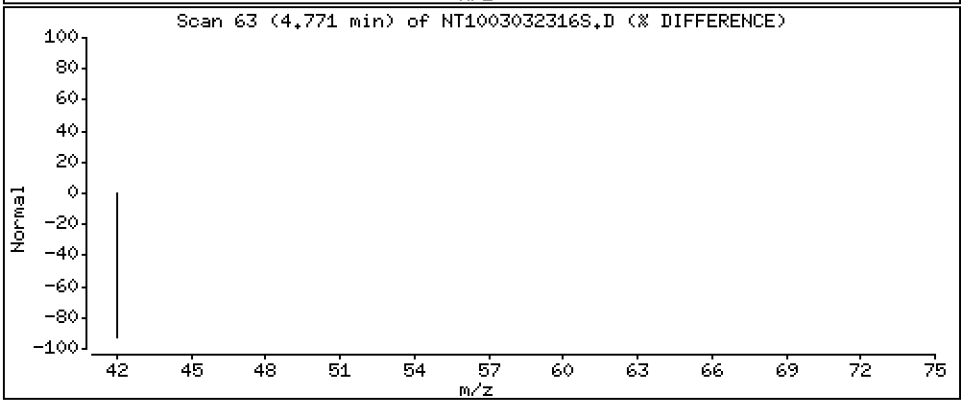












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\NT1003032316S.D
Lab Smp Id: SCV0253-LCV1
Inj Date : 04-MAR-2023 03:18 MS Autotune Date: 16-JAN-2023 16:42
Operator : JGR Inst ID: nt10.i
Smp Info : SEQ-LCV200
Misc Info :
Comment :
Method : \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Meth Date : 17-Mar-2023 11:26 yev Quant Type: ISTD
Cal Date : 01-MAR-2023 21:09 Cal File: NT1003012310S.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: ORGDATA102

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	1000.000	Volume of sample extracted (mL)
Vt	1000.000	Volume of final extract (uL)
Vi	1.000	Volume injected (uL)
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	6.925	6.917	(0.746)	53169	0.34183	0.3418(R)
3	Phenol	94	8.563	8.556	(0.923)	40819	0.17780	0.1778
7	1,3-Dichlorobenzene	146	9.166	9.174	(0.987)	39131	0.19380	0.1938
* 8	1,4-Dichlorobenzene-d4	152	9.283	9.283	(1.000)	544820	4.00000	
9	1,4-Dichlorobenzene	146	9.314	9.314	(1.003)	37234	0.18967	0.1897
11	Benzyl alcohol	79	9.523	9.515	(1.026)	12147	0.09543	0.09543
12	1,2-Dichlorobenzene	146	9.601	9.601	(1.034)	36881	0.19546	0.1955
13	2-Methylphenol	108	9.702	9.702	(1.045)	28014	0.20283	0.2028
15	4-Methylphenol	108	9.997	9.997	(1.077)	27184	0.18920	0.1892
16	N-Nitroso-di-n-propylamine	70	10.020	10.020	(1.079)	21584	0.21115	0.2112
22	2,4-Dimethylphenol	107	11.057	11.057	(0.939)	58889	0.36661	0.3666
24	Benzoic acid	105	11.396	11.159	(0.968)	516	0.00587	0.005865(M)
26	1,2,4-Trichlorobenzene	180	11.646	11.646	(0.990)	30398	0.22328	0.2233
* 27	Naphthalene-d8	136	11.770	11.777	(1.000)	1891541	4.00000	
30	Hexachlorobutadiene	225	12.040	12.040	(1.023)	18217	0.18855	0.1886
39	Dimethylphthalate	163	14.811	14.811	(0.962)	45839	0.16997	0.1700
* 42	Acenaphthene-d10	162	15.391	15.391	(1.000)	849365	4.00000	
50	Diethylphthalate	149	16.296	16.296	(1.059)	47636	0.18730	0.1873
54	N-Nitrosodiphenylamine	169	16.790	16.790	(0.906)	41423	0.16511	0.1651
57	Hexachlorobenzene	284	17.679	17.687	(0.954)	22977	0.19570	0.1957

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	58 Pentachlorophenol	266	18.135	18.120	(0.979)	306	0.00596	0.005958
*	59 Phenanthrene-d10	188	18.522	18.530	(1.000)	1550205	4.00000	
$	66 Terphenyl-d14	244	21.702	21.702	(0.918)	31308	0.27994	0.2799(R)
	67 Butylbenzylphthalate	149	22.608	22.608	(0.957)	34266	0.14680	0.1468
*	69 Chrysene-d12	240	23.630	23.630	(1.000)	1383003	4.00000	
*	77 Perylene-d12	264	26.456	26.456	(1.000)	1779203	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.466	29.450	(1.114)	100954	0.24422	0.2442
	90 N-Nitrosodimethylamine	74	4.771	4.755	(0.514)	43236	0.46951	0.4695

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt10.i
Lab File ID: NT1003032316S.D
Lab Smp Id: SCV0253-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt10.i\20230303A.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 04-MAR-2023
Calibration Time: 02:40
Level: LOW
Sample Type: AIR

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	502303	251152	1004606	544820	8.46
27 Naphthalene-d8	1751418	875709	3502836	1891541	8.00
42 Acenaphthene-d10	814551	407276	1629102	849365	4.27
59 Phenanthrene-d10	1450747	725374	2901494	1550205	6.86
69 Chrysene-d12	1335017	667509	2670034	1383003	3.59
77 Perylene-d12	1691506	845753	3383012	1779203	5.18

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.28	8.78	9.78	9.28	0.00
27 Naphthalene-d8	11.78	11.28	12.28	11.77	-0.07
42 Acenaphthene-d10	15.39	14.89	15.89	15.39	0.00
59 Phenanthrene-d10	18.53	18.03	19.03	18.52	-0.04
69 Chrysene-d12	23.63	23.13	24.13	23.63	0.00
77 Perylene-d12	26.46	25.96	26.96	26.46	0.00

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

REVIEW SUMMARY FOR FILE - NT1003032316S.D

Lab ID: SCV0253-LCV1
nt10.i, 20230303A.b\SIM.b\SIMABN2.m,   04-MAR-2023 03:18

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.968	0.947	0.0208	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1003032315ICVS.d

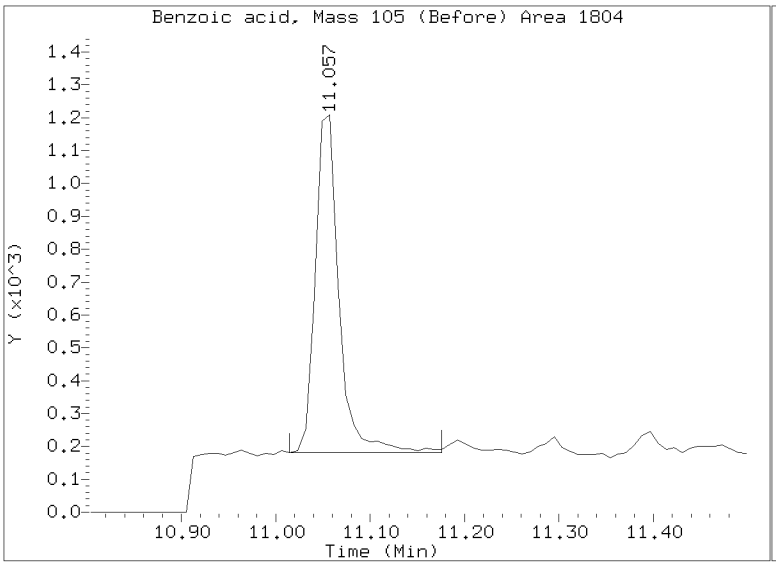
On Column LOD for nt10.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

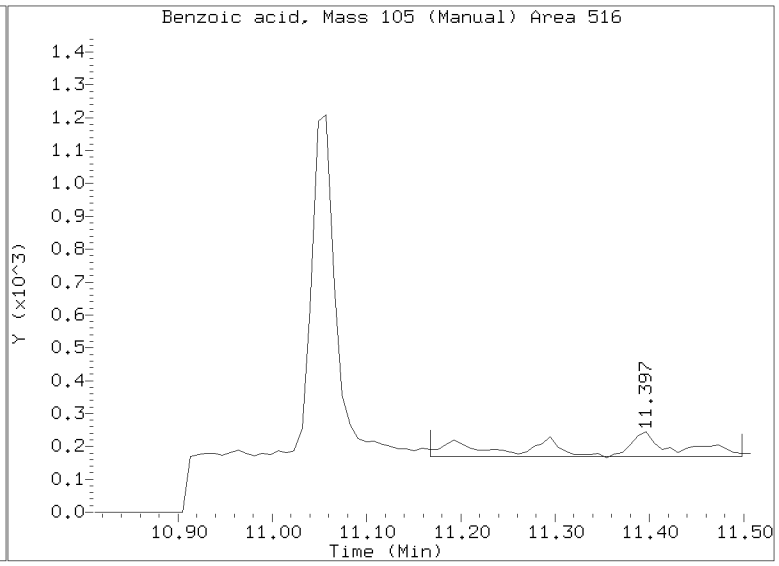
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt10.i/20230303A.b/SIM.b/NT1003032316S.D
Injection Date: 04-MAR-2023 03:18
Lab ID:SCV0253-LCV1 Client ID:
Report Date: 03/17/2023 11:26





Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0213	Instrument:	NT8
		Calibration:	GA00050

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLA0213-TUN1	N823011901.D	NA	01/19/23 10:28
Initial Cal Blank	SLA0213-ICB1	N823011902.D	NA	01/19/23 10:59
8270 SIM PNA 0.1	SLA0213-CAL1	N823011903.D	NA	01/19/23 11:26
8270 SIM PNA 0.5	SLA0213-CAL2	N823011904.D	NA	01/19/23 11:58
8270 SIM PNA 1.0	SLA0213-CAL3	N823011905.D	NA	01/19/23 12:25
8270 SIM PNA 2.5	SLA0213-CAL4	N823011906.D	NA	01/19/23 12:52
8270 SIM PNA 5	SLA0213-CAL5	N823011907.D	NA	01/19/23 13:19
8270 SIM PNA 10	SLA0213-CAL6	N823011908.D	NA	01/19/23 13:46
8270 SIM PNA SCV	SLA0213-SCV1	N823011909.D	NA	01/19/23 14:58

Printed: 1/19/2023 8:45:16PM

ANALYSIS SEQUENCE

SLA0213

Instrument: NT8 Element Column ID: J006458
Calibration ID: GA00050

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SLA0213-TUN1	MS Tune	QC		1	K004775			
SLA0213-ICB1	Initial Cal Blank	QC		2		K008540		
SLA0213-CAL1	8270 SIM PNA 0.1	QC		3	L000603	K008540		
SLA0213-CAL2	8270 SIM PNA 0.5	QC		4	L000604	K008540		
SLA0213-CAL3	8270 SIM PNA 1.0	QC		5	L000605	K008540		
SLA0213-CAL4	8270 SIM PNA 2.5	QC		6	L000606	K008540		
SLA0213-CAL5	8270 SIM PNA 5	QC		7	L000607	K008540		
SLA0213-CAL6	8270 SIM PNA 10	QC		8	L000608	K008540		
SLA0213-SCV1	8270 SIM PNA SCV	QC		9	L000686	K008540		

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

	Time	Filename	LabID	ClientId	DF									
1	1028	N823011901.D	SLA0213-TUN1		1	NO ISTDS FOUND								
2	1059	N823011902.D	SLA0213-ICB1		1	4.92	52082	7.20	30936	9.24	59030	14.22	50944	18.12	47418
3	1126	N823011903.D	SLA0213-CAL1		1	4.91	46132	7.20	27261	9.24	52158	14.20	44953	18.11	41635
4	1158	N823011904.D	SLA0213-CAL2		1	4.91	45056	7.20	26746	9.24	50759	14.21	44658	18.11	42567
5	1225	N823011905.D	SLA0213-CAL3		1	4.91	47180	7.20	28206	9.24	53233	14.20	46493	18.11	44587
6	1252	N823011906.D	SLA0213-CAL4		1	4.91	44704	7.20	26411	9.24	49210	14.20	42994	18.11	40520
7	1319	N823011907.D	SLA0213-CAL5		1	4.91	46542	7.20	27638	9.23	51351	14.20	44781	18.11	42187
8	1346	N823011908.D	SLA0213-CAL6		1	4.91	46070	7.20	26689	9.24	50683	14.21	43880	18.11	40659
9	1458	N823011909.D	SLA0213-SCV1		1	4.91	46346	7.20	27709	9.24	51685	14.21	46582	18.12	41743

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230119.b

ARI Job No.: SLA0 Method: FSIMPNA230119.m Instrument: nt8.i Date: 19-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1059	N823011902.D	SLA0213-ICB1		1	NO MANUAL INTEGRATION
1126	N823011903.D	SLA0213-CAL1		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene-d14,
1158	N823011904.D	SLA0213-CAL2		1	Total Benzofluoranthenes, Dibenzo(a,h)anthracene, Dibenzo(a,h)anthracene-d14,
1225	N823011905.D	SLA0213-CAL3		1	Total Benzofluoranthenes,
1252	N823011906.D	SLA0213-CAL4		1	Total Benzofluoranthenes,
1319	N823011907.D	SLA0213-CAL5		1	Total Benzofluoranthenes,
1346	N823011908.D	SLA0213-CAL6		1	Total Benzofluoranthenes,
1458	N823011909.D	SLA0213-SCV1		1	Total Benzofluoranthenes,

Security Status Report

Date: 19-Jan-2023 20:43

N823011901.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011902.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011903.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011904.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011905.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011906.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011907.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011908.D	Data Locked	jianqing, 19-Jan-2023 20:43
N823011909.D	Data Locked	jianqing, 19-Jan-2023 20:43

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0075	Instrument:	NT8
		Calibration:	GA00050

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLB0075-TUN1	N823020606.D	NA	02/06/23 14:46
Initial Cal Check	SLB0075-ICV1	N823020607A.D	NA	02/06/23 15:15
Blank	BLA0683-BLK1	N823020608.D	Solid	02/06/23 15:57
LCS	BLA0683-BS1	N823020609.D	Solid	02/06/23 16:24
LCS Dup	BLA0683-BSD1	N823020610.D	Solid	02/06/23 16:51
Reference	BLA0683-SRM1	N823020611.D	Solid	02/06/23 17:18
ZZZZZ	23A0207-01	N823020612.D	Solid	02/06/23 17:45
ZZZZZ	23A0207-02	N823020613.D	Solid	02/06/23 18:12
ZZZZZ	23A0207-03	N823020614.D	Solid	02/06/23 18:39
ZZZZZ	23A0207-05	N823020618.D	Solid	02/06/23 20:26
ZZZZZ	23A0207-06	N823020619.D	Solid	02/06/23 20:53
ZZZZZ	23A0207-07	N823020620.D	Solid	02/06/23 21:20
ZZZZZ	23A0207-08	N823020621.D	Solid	02/06/23 21:47
ZZZZZ	23A0207-09	N823020622.D	Solid	02/06/23 22:14
ZZZZZ	23A0207-15	N823020623.D	Solid	02/06/23 22:41
ZZZZZ	23A0207-17	N823020625.D	Solid	02/06/23 23:34
LDW23-IT1034	23A0249-07	N823020626.D	Solid	02/07/23 00:01
ZZZZZ	23A0295-08	N823020627.D	Solid	02/07/23 00:28
ZZZZZ	23A0313-03	N823020628.D	Solid	02/07/23 00:55
ZZZZZ	23A0313-04	N823020629.D	Solid	02/07/23 01:22
ZZZZZ	23A0313-12	N823020630.D	Solid	02/07/23 01:49
ZZZZZ	23A0326-08	N823020631.D	Solid	02/07/23 02:16
ZZZZZ	23A0326-09	N823020632.D	Solid	02/07/23 02:42
Calibration Check	SLB0075-CCV1	N823020633.D	NA	02/07/23 03:09

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLB0075

Instrument: NT8
Calibration ID: GA00050

Printed: 2/8/2023 4:31:14PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLB0075-TUN1	QC		1		K004775			
SLB0075-ICV1	QC		2		L000606	K008540		
BLA0683-BLK1	QC		3			K008540		
BLA0683-BS1	QC		4			K008540		
BLA0683-BSD1	QC		5			K008540		
BLA0683-SRM1	QC		6			K008540		
23A0207-01	0E-SIM PAH (0.1ug/L or 5ug	A 02	7			K008540	Anchor QEA, LLC	
23A0207-02	0E-SIM PAH (0.1ug/L or 5ug	A 02	8			K008540	Anchor QEA, LLC	
23A0207-03	0E-SIM PAH (0.1ug/L or 5ug	A 02	9			K008540	Anchor QEA, LLC	
BLA0683-MS1	QC		10			K008540		
BLA0683-MSD1	QC		11			K008540		
23A0207-05	0E-SIM PAH (0.1ug/L or 5ug	A 02	12			K008540	Anchor QEA, LLC	
23A0207-06	0E-SIM PAH (0.1ug/L or 5ug	A 02	13			K008540	Anchor QEA, LLC	
23A0207-07	0E-SIM PAH (0.1ug/L or 5ug	A 02	14			K008540	Anchor QEA, LLC	
23A0207-08	0E-SIM PAH (0.1ug/L or 5ug	A 02	15			K008540	Anchor QEA, LLC	
23A0207-09	0E-SIM PAH (0.1ug/L or 5ug	A 02	16			K008540	Anchor QEA, LLC	
23A0207-15	0E-SIM PAH (0.1ug/L or 5ug	A 02	17			K008540	Anchor QEA, LLC	
23A0207-17	0E-SIM PAH (0.1ug/L or 5ug	A 02	18			K008540	Anchor QEA, LLC	
23A0249-07	0E-SIM PAH (0.1ug/L or 5ug	A 01	19			K008540	Anchor QEA, LLC	
23A0295-08	0E-SIM PAH (0.1ug/L or 5ug	A 01	20			K008540	Anchor QEA, LLC	
23A0313-03	0E-SIM PAH (0.1ug/L or 5ug	A 01	21			K008540	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SLB0075

Instrument: NT8
Calibration ID: GA00050

Printed: 2/8/2023 4:31:14PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
23A0313-04	0E-SIM PAH (0.1ug/L or 5ug	A 01	22			K008540	Anchor QEA, LLC	
23A0313-12	0E-SIM PAH (0.1ug/L or 5ug	A 01	23			K008540	Anchor QEA, LLC	
23A0326-08	0E-SIM PAH (0.1ug/L or 5ug	A 01	24			K008540	Anchor QEA, LLC	
23A0326-09	0E-SIM PAH (0.1ug/L or 5ug	A 01	25			K008540	Anchor QEA, LLC	
SLB0075-CCV1	QC		26		L000606	K008540		

Samples Loaded By Date

Data Processed By Date

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230206A.b

	Time	Filename	LabID	ClientId	DF										
1	1446	N823020606.D	SLB0075-TUN1		1	NO ISTDS FOUND									
2	1515	N823020607A.D	SLB0075-ICV1		1	4.90	44336	7.19	26127	9.23	47424	14.20	36794	18.11	36636
3	1557	N823020608.D	BLA0683-BLK1		1	4.89	48985	7.19	28561	9.23	52393	14.20	40654	18.10	24723
4	1624	N823020609.D	BLA0683-BS1		1	4.88	50596	7.18	29850	9.22	54061	14.19	41046	18.10	27103
5	1651	N823020610.D	BLA0683-BSD1		1	4.89	52018	7.18	29996	9.22	54697	14.19	41650	18.10	27575
6	1718	N823020611.D	BLA0683-SRM1		1	4.88	47898	7.18	26592	9.22	44776	14.19	36552	18.09	22526
7	1745	N823020612.D	23A0207-01		1	4.88	49668	7.18	29744	9.22	50330	14.19	35079	18.09	30080
8	1812	N823020613.D	23A0207-02		1	4.89	52443	7.18	30994	9.22	49132	14.19	23550	18.10	21895
9	1839	N823020614.D	23A0207-03		1	4.88	52165	7.18	30594	9.23	46304	14.19	23098	18.10	21017
10	1906	N823020615.D	BLA0683-MS1		1	4.88	54388	7.18	30727	9.23	46335	14.19	24118	18.11	21563
11	1933	N823020616.D	BLA0683-MSD1		1	4.88	52636	7.18	30563	9.23	45924	14.19	23485	18.10	21615
12	1959	N823020617.D	23A0207-04	IS out, NR	1	4.88	51275	7.18	28123	9.23	43249	14.20	19710	18.11	17658
13	2026	N823020618.D	23A0207-05		1	4.89	50448	7.18	28375	9.23	45673	14.20	20022	18.11	18460
14	2053	N823020619.D	23A0207-06		3	4.89	50637	7.18	30605	9.23	52103	14.20	24084	18.10	20229
15	2120	N823020620.D	23A0207-07		1	4.89	51867	7.18	31021	9.23	53247	14.20	26745	18.11	24765
16	2147	N823020621.D	23A0207-08		1	4.88	54142	7.18	32326	9.23	57668	14.19	37315	18.11	31960
17	2214	N823020622.D	23A0207-09		1	4.88	51253	7.18	30524	9.23	47253	14.19	26321	18.11	26206
18	2241	N823020623.D	23A0207-15		3	4.89	54069	7.19	27937	9.23	43496	14.20	23177	18.12	20718
19	2308	N823020624.D	23A0207-16	IS out, NR	3	4.89	52940	7.19	28892	9.23	42684	14.22	19654	18.13	17901
20	2334	N823020625.D	23A0207-17		3	4.89	53176	7.19	28398	9.23	43410	14.22	20694	18.14	18612

JZ 2/10/23

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230206A.b

	Time	Filename	LabID	ClientId	DF											
21	0001	N823020626.D	23A0249-07		1	4.88	57390	7.19	33309	9.24	50089	14.24	22976	18.17	20857
22	0028	N823020627.D	23A0295-08		1	4.88	53834	7.19	32628	9.24	54268	14.23	24018	18.16	19340
23	0055	N823020628.D	23A0313-03		3	4.89	56887	7.19	30456	9.24	48664	14.25	22993	18.17	19769
24	0122	N823020629.D	23A0313-04		1	4.89	53062	7.19	28241	9.24	46666	14.28	29789	18.19	22259
25	0149	N823020630.D	23A0313-12		1	4.88	58298	7.19	35361	9.24	61613	14.23	23944	18.16	19888
26	0216	N823020631.D	23A0326-08		1	4.88	56917	7.19	31966	9.24	50110	14.25	22679	18.17	20298
27	0242	N823020632.D	23A0326-09		1	4.88	55762	7.19	33500	9.24	54143	14.23	22621	18.16	20226
28	0309	N823020633.D	SLB0075-CCV1		1	4.89	52897	7.19	31659	9.24	57767	14.23	48067	18.16	37211

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230206A.b

ARI Job No.: SLB0 Method: tune.b\DFTPP.m Instrument: nt8.i Date: 06-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1446	N823020606.D	SLB0075-TUN1		1	NO MANUAL INTEGRATION
1557	N823020608.D	BLA0683-BLK1		1	Acenaphthene, Phenanthrene,
1624	N823020609.D	BLA0683-BS1		1	Total Benzofluoranthenes,
1651	N823020610.D	BLA0683-BSD1		1	Total Benzofluoranthenes,
1718	N823020611.D	BLA0683-SRM1		1	2-Methylnaphthalene, Dibenzofuran, Perylene, Total Benzofluoranthenes,
1745	N823020612.D	23A0207-01		1	Total Benzofluoranthenes,
1812	N823020613.D	23A0207-02		1	2-Methylnaphthalene, Anthracene, Total Benzofluoranthenes,
1839	N823020614.D	23A0207-03		1	Naphthalene, Dibenzo(a,h)anthracene, 2-Methylnaphthalene, 1-methylnaphthalene, Acenaphthylene, Total Benzofluoranthenes, Chrysene,
1906	N823020615.D	BLA0683-MS1		1	Total Benzofluoranthenes,
1933	N823020616.D	BLA0683-MSD1		1	Total Benzofluoranthenes,
2026	N823020618.D	23A0207-05		1	Benzo(g,h,i)perylene, Naphthalene, Dibenzo(a,h)anthracene, 1-methylnaphthalene, Indeno(1,2,3-cd)pyrene, Acenaphthene, Perylene, Total Benzofluoranthenes, Chrysene, Carbazole,
2053	N823020619.D	23A0207-06		3	Benzo(g,h,i)perylene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Perylene, Benzo(a)pyrene, Total Benzofluoranthenes, Benzo(j)fluoranthene,
2120	N823020620.D	23A0207-07		1	Benzo(g,h,i)perylene, Naphthalene, Dibenzo(a,h)anthracene, 2-Methylnaphthalene, Indeno(1,2,3-cd)pyrene, Acenaphthene, Fluorene, Perylene, Benzo(a)pyrene, Total Benzofluoranthenes, Benzo(j)fluoranthene,
2147	N823020621.D	23A0207-08		1	Benzo(g,h,i)perylene, 2-Methylnaphthalene, Phenanthrene, Benzo(k)fluoranthene, Total Benzofluoranthenes, Carbazole,
2214	N823020622.D	23A0207-09		1	Benzo(g,h,i)perylene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Acenaphthene, Anthracene, Benzo(a)anthracene, Total Benzofluoranthenes, Chrysene,
2241	N823020623.D	23A0207-15		3	Benzo(g,h,i)perylene, Naphthalene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Dibenzofuran, Fluorene, Benzo(a)pyrene, Total Benzofluoranthenes,

2334	N823020625.D	23A0207-17	3	1-methylnaphthalene, Total Benzofluoranthenes, Carbazole,	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt8.i\20230206A.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0001	N823020626.D	23A0249-07		1	Dibenzo(a,h)anthracene, Fluorene, Benzo(a)pyrene, Benzo(a)anthracene, Total Benzofluoranthenes, Chrysene,
0028	N823020627.D	23A0295-08		1	Dibenzo(a,h)anthracene, 2-Methylnaphthalene, Acenaphthylene, Indeno(1,2,3-cd)pyrene, Perylene, Total Benzofluoranthenes, Chrysene, Carbazole,
0055	N823020628.D	23A0313-03		3	Benzo(g,h,i)perylene, Dibenzo(a,h)anthracene, Acenaphthylene, Acenaphthene, Anthracene, Total Benzofluoranthenes, Carbazole,
0122	N823020629.D	23A0313-04		1	Dibenzo(a,h)anthracene, Total Benzofluoranthenes, Dibenzo(a,h)anthracene-d14,
0149	N823020630.D	23A0313-12		1	Benzo(g,h,i)perylene, Naphthalene, Dibenzo(a,h)anthracene, 2-Methylnaphthalene, Acenaphthylene, Indeno(1,2,3-cd)pyrene, Fluorene, Perylene, Total Benzofluoranthenes, Chrysene, Benzo(j)fluoranthene, Dibenzo(a,h)anthracene-d14,
0216	N823020631.D	23A0326-08		1	Benzo(g,h,i)perylene, Naphthalene, Dibenzo(a,h)anthracene, 2-Methylnaphthalene, 1-methylnaphthalene, Indeno(1,2,3-cd)pyrene, Acenaphthene, Fluorene, Perylene, Total Benzofluoranthenes, Benzo(j)fluoranthene, Perylene-d12, Carbazole, Fluoranthene-d10, Dibenzo(a,h)anthracene-d14,
0242	N823020632.D	23A0326-09		1	Naphthalene, Dibenzo(a,h)anthracene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Total Benzofluoranthenes, Carbazole,
0309	N823020633.D	SLB0075-CCV1		1	Total Benzofluoranthenes,

Security Status Report

Date: 10-Feb-2023 13:10

N823020606.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020607A.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020608.D	Data Locked	jianqing, 10-Feb-2023 13:10
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N823020610.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020611.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020612.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020613.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020614.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020615.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020616.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020618.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020619.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020620.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020621.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020622.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020623.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020625.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020626.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020627.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020628.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020629.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020630.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020631.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020632.D	Data Locked	jianqing, 10-Feb-2023 13:10
N823020633.D	Data Locked	jianqing, 10-Feb-2023 13:10

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Extract Dilution Bench Sheet

Sequence: SLB0078
Analyst: JZ Date: 2/6/23

Sample ID	Primary Dilution				Secondary Dilution			
	Extract Volume (uL)	Diluent ID	Diluent Volume (uL)	Dilution Factor	Extract Volume (uL)	Diluent ID	Diluent Volume (uL)	Dilution Factor
23A0207-06	100	K005942	200	3				
23A0207-15	100		200	3				
23A0207-17	100		200	3				
23A0313-03	100		200	3				

Form 12010F Version 002 03/01/2018

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0143	Instrument:	NT10
		Calibration:	GC00032

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLC0143-TUN1	NT1003012301S.D	NA	03/01/23 15:49
CAL 10.0	SLC0143-CAL8	NT1003012303S.D	NA	03/01/23 16:42
CAL 5.0	SLC0143-CAL7	NT1003012304S.D	NA	03/01/23 17:21
CAL 2.5	SLC0143-CAL6	NT1003012305S.D	NA	03/01/23 17:59
CAL 1.0	SLC0143-CAL5	NT1003012306S.D	NA	03/01/23 18:37
CAL 0.50	SLC0143-CAL4	NT1003012307S.D	NA	03/01/23 19:15
CAL 0.20	SLC0143-CAL3	NT1003012308S.D	NA	03/01/23 19:53
CAL 0.10	SLC0143-CAL2	NT1003012309S.D	NA	03/01/23 20:30
CAL 0.05	SLC0143-CAL1	NT1003012310S.D	NA	03/01/23 21:09
SCV 5.0	SLC0143-SCV1	NT1003012311S.D	NA	03/01/23 21:46
Initial Cal Blank	SLC0143-ICB1	NT1003012312S.D	NA	03/01/23 22:24

ANALYSIS SEQUENCE

SLC0143

Instrument: NT10
Calibration ID: UNASSIGNED

Printed: 3/10/2023 10:34:45AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0143-CAL1	QC		1		K011453	K010831		
SLC0143-CAL2	QC		2		K011452	K010831		
SLC0143-CAL3	QC		3		K011105	K010831		
SLC0143-CAL4	QC		4		K011106	K010831		
SLC0143-CAL5	QC		5		K011107	K010831		
SLC0143-CAL6	QC		6		K011108	K010831		
SLC0143-CAL7	QC		7		K011109	K010831		
SLC0143-CAL8	QC		8		K011110	K010831		
SLC0143-ICB1	QC		9		K005156	K010831		
SLC0143-SCV1	QC		10		K010066	K010831		

Samples Loaded By Date

Data Processed By Date

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

	Time	Filename	LabID	ClientId	DF											
1	1642	NT1003012303S.D	SEQ-CAL8		1	9.25	358478	11.72	1302515	15.31	720687	18.40	1243145	23.42	1161833	26.11	1054384
2	1721	NT1003012304S.D	SEQ-CAL7		1	9.25	354441	11.72	1288295	15.31	739997	18.40	1248235	23.41	1079945	26.11	1086769
3	1759	NT1003012305S.D	SEQ-CAL6		1	9.24	334269	11.72	1202042	15.31	670352	18.40	1124281	23.41	948691	26.11	1004445
4	1837	NT1003012306S.D	SEQ-CAL5		1	9.24	320125	11.72	1136019	15.31	636993	18.40	1093620	23.41	1000300	26.10	1058448
5	1915	NT1003012307S.D	SEQ-CAL4		1	9.24	333617	11.72	1170292	15.31	639612	18.40	1094919	23.42	1048196	26.11	1117593
6	1953	NT1003012308S.D	SEQ-CAL3		1	9.25	314467	11.72	1088698	15.31	568154	18.40	979213	23.42	963807	26.11	1037909
7	2030	NT1003012309S.D	SEQ-CAL2		1	9.24	305434	11.72	1048978	15.31	536796	18.40	924275	23.42	947041	26.11	1060218
8	2109	NT1003012310S.D	SEQ-CAL1		1	9.25	370360	11.72	1262304	15.31	638059	18.40	1124768	23.42	1114478	26.11	1276260
9	2146	NT1003012311S.D	SEQ-SCV1		1	9.25	303734	11.72	1147551	15.31	645730	18.40	1151000	23.42	1297466	26.11	1394899
10	2224	NT1003012312S.D	SEQ-IBL1		1	9.25	515340	11.72	1787704	15.31	879316	18.40	1572306	23.42	1486349	26.11	1674195

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

ARI Job No.: SEQ- Method: SIM.b\SIMABN2.m Instrument: nt10.i Date: 01-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1642	NT1003012303S.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
1721	NT1003012304S.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
1759	NT1003012305S.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
1837	NT1003012306S.D	SEQ-CAL5		1	Pentachlorophenol,
1915	NT1003012307S.D	SEQ-CAL4		1	Pentachlorophenol,
1953	NT1003012308S.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2030	NT1003012309S.D	SEQ-CAL2		1	Benzyl alcohol, Benzoic acid,
2109	NT1003012310S.D	SEQ-CAL1		1	Benzyl alcohol, 2-Methylphenol, 4-Methylphenol, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Hexachlorobenzene,
2146	NT1003012311S.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
2224	NT1003012312S.D	SEQ-IBL1		1	NO MANUAL INTEGRATION

Security Status Report

Date: 10-Mar-2023 11:02

NT1003012303S.D	Data Locked	yev, 10-
NT1003012304S.D	Data Locked	yev, 10-
NT1003012305S.D	Data Locked	yev, 10-
NT1003012306S.D	Data Locked	yev, 10-
NT1003012307S.D	Data Locked	yev, 10-
NT1003012308S.D	Data Locked	yev, 10-
NT1003012309S.D	Data Locked	yev, 10-
NT1003012310S.D	Data Locked	yev, 10-
NT1003012311S.D	Data Locked	yev, 10-
NT1003012312S.D	Data Locked	yev, 10-

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0250	Instrument:	NT10
		Calibration:	GC00032

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLC0250-ICV1	NT1003032303S.D	NA	03/03/23 19:05
Low Cal Check	SLC0250-LCV1	NT1003032304S.D	NA	03/03/23 19:43
Blank	BLA0673-BLK2	NT1003032306S.D	Solid	03/03/23 20:59
LCS	BLA0673-BS2	NT1003032307S.D	Solid	03/03/23 21:37
LCS Dup	BLA0673-BSD2	NT1003032308S.D	Solid	03/03/23 22:15
Reference	BLA0673-SRM2	NT1003032311S.D	Solid	03/04/23 00:08
Calibration Check	SLC0250-CCV1	NT1003032315S.D	NA	03/04/23 02:40

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLC0250

Instrument: NT10
Calibration ID: GC00032

Printed: 3/17/2023 9:38:33AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0250-ICV1	QC		1		K011107	K010831		
SLC0250-LCV1	QC		2		K011105	K010831		
BLA0673-BLK2	QC		3			K010831		
BLA0673-BS2	QC		4			K010831		
BLA0673-BSD2	QC		5			K010831		
BLA0673-SRM2	QC		6			K010831		
BLA0673-MS2	QC		7			K010831		
BLA0673-MSD2	QC		8			K010831		
SLC0250-CCV1	QC		9		K011107	K010831		

Samples Loaded By Date

Data Processed By Date

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230303.b\SIM.b

	Time	Filename	LabID	ClientId	DF												
1	1905	NT1003032303S.D	SLC0250-ICV1		1	9.28	602309	11.78	2101699	15.39	1002910	18.52	1732061	23.62	1410089	26.45	1732981
2	1943	NT1003032304S.D	SLC0250-LCV1		1	9.28	538660	11.78	1835979	15.40	870106	18.52	1484174	23.62	1241077	26.45	1512758
3	2021	NT1003032305S.D	SEQ-LCV100		1	9.28	524968	11.77	1830738	15.39	896303	18.51	1575127	23.60	1232056	26.43	1463843
4	2059	NT1003032306S.D	BLA0673-BLK2		1	9.28	534040	11.77	1862417	15.38	882262	18.51	1597014	23.59	1402727	26.39	1445696
5	2137	NT1003032307S.D	BLA0673-BS2		1	9.28	577308	11.78	2083646	15.40	997712	18.53	1825372	23.63	1620278	26.46	1583846
6	2215	NT1003032308S.D	BLA0673-BSD2		1	9.28	594217	11.78	2127836	15.40	1000846	18.53	1821443	23.62	1506073	26.44	1668749
7	2252	NT1003032309S.D	BLA0673-MS2		1	9.28	611504	11.78	2175566	15.39	1031732	18.52	1837178	23.62	1549854	26.45	1712643
8	2330	NT1003032310S.D	BLA0673-MSD2		1	9.28	566337	11.77	2004282	15.39	945340	18.52	1679588	23.62	1430145	26.44	1605425
9	0008	NT1003032311S.D	BLA0673-SRM2		1	9.28	521634	11.79	1845415	15.41	881928	18.54	1566096	23.63	1315710	26.46	1362792
10	0046	NT1003032312S.D	BLA0624-MS1		1	9.28	468783	11.78	1684021	15.39	827095	18.52	1655892	23.64	1688276	26.47	1854598
11	0124	NT1003032313S.D	BLA0624-MSD1		1	9.28	464426	11.78	1636530	15.39	782087	18.53	1593956	23.64	1617889	26.48	1774242
12	0202	NT1003032314S.D	SEQ-CCVFULL		1	9.28	582141	11.78	2023861	15.41	934245	18.54	1814480	23.63	1735889	26.46	1979671
13	0240	NT1003032315S.D	SLC0250-CCV1		1	9.28	502303	11.78	1751418	15.39	814551	18.53	1450747	23.63	1335017	26.46	1691506

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230303.b\SIM.b

ARI Job No.: SLC0 Method: SIM.b\SIMABN2.m Instrument: nt10.i Date: 03-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1905	NT1003032303S.D	SLC0250-ICV1		1	Dibenzo(a,h)anthracene, Perylene-d12,
1943	NT1003032304S.D	SLC0250-LCV1		1	Benzyl alcohol, Benzoic acid,
2021	NT1003032305S.D	SEQ-LCV100		1	N-Nitroso-di-n-propylamine,
2059	NT1003032306S.D	BLA0673-BLK2		1	1,3-Dichlorobenzene, 1,4-Dichlorobenzene,
2137	NT1003032307S.D	BLA0673-BS2		1	NO MANUAL INTEGRATION
2215	NT1003032308S.D	BLA0673-BSD2		1	NO MANUAL INTEGRATION
2252	NT1003032309S.D	BLA0673-MS2		1	NO MANUAL INTEGRATION
2330	NT1003032310S.D	BLA0673-MSD2		1	NO MANUAL INTEGRATION
0008	NT1003032311S.D	BLA0673-SRM2		1	Benzoic acid,
0046	NT1003032312S.D	BLA0624-MS1		1	NO MANUAL INTEGRATION
0124	NT1003032313S.D	BLA0624-MSD1		1	NO MANUAL INTEGRATION
0202	NT1003032314S.D	SEQ-CCVFULL		1	NO MANUAL INTEGRATION
0240	NT1003032315S.D	SLC0250-CCV1		1	Benzoic acid,

Security Status Report

Date: 17-Mar-2023 10:28

NT1003032303S.D	Data Locked	yev, 17-
NT1003032304S.D	Data Locked	yev, 17-
NT1003032305S.D	Data Locked	yev, 17-
NT1003032306S.D	Data Locked	yev, 17-
NT1003032307S.D	Data Locked	yev, 17-
NT1003032308S.D	Data Locked	yev, 17-
NT1003032309S.D	Data Locked	yev, 17-
NT1003032310S.D	Data Locked	yev, 17-
NT1003032311S.D	Data Locked	yev, 17-
NT1003032312S.D	Data Locked	yev, 17-
NT1003032313S.D	Data Locked	yev, 17-
NT1003032314S.D	Data Locked	yev, 17-
NT1003032315S.D	Data Locked	yev, 17-

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0253	Instrument:	NT10
		Calibration:	GC00032

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLC0253-ICV1	NT1003032315ICVS.D	NA	03/04/23 02:40
Low Cal Check	SLC0253-LCV1	NT1003032316S.D	NA	03/04/23 03:18
LDW23-SC1083	23A0249-02	NT1003032318S.D	Solid	03/04/23 04:34
LDW23-SC1018	23A0249-03	NT1003032319S.D	Solid	03/04/23 05:12
LDW23-SC1084	23A0249-04	NT1003032320S.D	Solid	03/04/23 05:50
LDW23-SC1025	23A0249-05	NT1003032321S.D	Solid	03/04/23 06:28
LDW23-SC1024	23A0249-08	NT1003032322S.D	Solid	03/04/23 07:06
LDW23-SC1020	23A0249-11	NT1003032323S.D	Solid	03/04/23 07:45
ZZZZZ	23A0295-01	NT1003032324S.D	Solid	03/04/23 08:23
ZZZZZ	23A0295-02	NT1003032325S.D	Solid	03/04/23 09:01
Calibration Check	SLC0253-CCV1	NT1003032327S.D	NA	03/04/23 10:17

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLC0253

Instrument: NT10
Calibration ID: GC00032

Printed: 3/17/2023 10:35:17AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0253-ICV1	QC		1		K011107	K010831		
SLC0253-LCV1	QC		2		K011105	K010831		
23A0249-02	8270E-SIM Dual Scan SVOC	A 02	3			K010831	Anchor QEA, LLC	
23A0249-03	8270E-SIM Dual Scan SVOC	A 02	4			K010831	Anchor QEA, LLC	
23A0249-04	8270E-SIM Dual Scan SVOC	A 02	5			K010831	Anchor QEA, LLC	
23A0249-05	8270E-SIM Dual Scan SVOC	A 02	6			K010831	Anchor QEA, LLC	
23A0249-08	8270E-SIM Dual Scan SVOC	A 02	7			K010831	Anchor QEA, LLC	
23A0249-11	8270E-SIM Dual Scan SVOC	A 02	8			K010831	Anchor QEA, LLC	
23A0295-01	8270E-SIM Dual Scan SVOC	A 02	9			K010831	Anchor QEA, LLC	
23A0295-02	8270E-SIM Dual Scan SVOC	A 02	10			K010831	Anchor QEA, LLC	
SLC0253-CCV1	QC		11		K011107	K010831		

Samples Loaded By Date

Data Processed By Date

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230303A.b\SIM.b

	Time	Filename	LabID	ClientId	DF						
1	0240	NT1003032315ICVS.d	SLC0253-ICV1		1	9.28 502303	11.78 1751418	15.39 814551	18.53 1450747	23.63 1335017	26.46 1691506
2	0318	NT1003032316S.D	SCV0253-LCV1		1	9.28 544820	11.77 1891541	15.39 849365	18.52 1550205	23.63 1383003	26.46 1779203
3	0356	NT1003032317S.D	SEQ-LCV100		1	9.30 520122	11.80 1790040	15.42 822715	18.55 1494290	23.65 1263707	26.50 1535020
4	0434	NT1003032318S.D	23A0249-02		1	9.30 434346	11.80 1533596	15.44 734499	18.58 1356563	23.67 1241453	26.53 1560866
5	0512	NT1003032319S.D	23A0249-03		1	9.29 504889	11.80 1779189	15.43 824129	18.57 1523281	23.66 1489566	26.51 1693189
6	0550	NT1003032320S.D	23A0249-04		1	9.29 524856	11.79 1824588	15.42 848291	18.56 1534427	23.66 1281744	26.50 1698962
7	0628	NT1003032321S.D	23A0249-05		1	9.28 495062	11.79 1752747	15.42 801852	18.56 1532752	23.67 1337569	26.52 1733835
8	0706	NT1003032322S.D	23A0249-08		1	9.28 448634	11.79 1567414	15.41 746171	18.56 1440377	23.67 1198216	26.51 1559290
9	0745	NT1003032323S.D	23A0249-11		1	9.28 420230	11.79 1468708	15.42 688482	18.56 1268968	23.66 1125418	26.50 1441355
10	0823	NT1003032324S.D	23A0295-01		1	9.28 426823	11.79 1471247	15.42 717967	18.56 1382266	23.68 1256390	26.53 1567356
11	0901	NT1003032325S.D	23A0295-02		1	9.28 406661	11.79 1417733	15.42 718031	18.57 1401400	23.68 1179424	26.53 1475192
12	0939	NT1003032326S.D	SEQ-CCVFULL		1	9.28 417652	11.79 1456780	15.42 682671	18.56 1320682	23.66 1372733	26.50 1579475
13	1017	NT1003032327S.D	SCV0253-CCV1		1	9.28 434743	11.79 1484690	15.41 701644	18.55 1291916	23.65 1271827	26.50 1618955

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt10.i\20230303A.b\SIM.b

ARI Job No.: SLC0 Method: SIM.b\SIMABN2.m Instrument: nt10.i Date: 04-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0240	NT1003032315ICVS.d	SLC0253-ICV1		1	Benzoic acid,
0318	NT1003032316S.D	SCV0253-LCV1		1	Benzoic acid,
0356	NT1003032317S.D	SEQ-LCV100		1	NO MANUAL INTEGRATION
0434	NT1003032318S.D	23A0249-02		1	Hexachlorobutadiene, Dimethylphthalate,
0512	NT1003032319S.D	23A0249-03		1	Benzyl alcohol, Dimethylphthalate, Diethylphthalate,
0550	NT1003032320S.D	23A0249-04		1	2-Methylphenol, 2,4-Dimethylphenol, 1,2,4-Trichlorobenzene,
0628	NT1003032321S.D	23A0249-05		1	1,2,4-Trichlorobenzene,
0706	NT1003032322S.D	23A0249-08		1	1,2,4-Trichlorobenzene,
0745	NT1003032323S.D	23A0249-11		1	NO MANUAL INTEGRATION
0823	NT1003032324S.D	23A0295-01		1	NO MANUAL INTEGRATION
0901	NT1003032325S.D	23A0295-02		1	NO MANUAL INTEGRATION
0939	NT1003032326S.D	SEQ-CCVFULL		1	NO MANUAL INTEGRATION
1017	NT1003032327S.D	SCV0253-CCV1		1	Benzoic acid,

Security Status Report

Date: 17-Mar-2023 11:32

NT1003032315ICVS.d	Data Locked	yev, 17-
NT1003032316S.D	Data Locked	yev, 17-
NT1003032317S.D	Data Locked	yev, 17-
NT1003032318S.D	Data Locked	yev, 17-
NT1003032319S.D	Data Locked	yev, 17-
NT1003032320S.D	Data Locked	yev, 17-
NT1003032321S.D	Data Locked	yev, 17-
NT1003032322S.D	Data Locked	yev, 17-
NT1003032323S.D	Data Locked	yev, 17-
NT1003032324S.D	Data Locked	yev, 17-
NT1003032325S.D	Data Locked	yev, 17-
NT1003032326S.D	Data Locked	yev, 17-
NT1003032327S.D	Data Locked	yev, 17-

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0213	Instrument:	NT8
Calibration:	GA00050	Calibration Date:	01/19/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLA0213-ICB1 (Water)			Lab File ID: N823011902.D				Analyzed: 01/19/23 10:59	
2-Methylnaphthalene-d10			31 - 120		5.6415	-5.6415	N/A	
Dibenzo[a,h]anthracene-d14			10 - 125		20.5525	-20.5525	N/A	
Fluoranthene-d10			46 - 121		11.016	-11.0160	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0075	Instrument:	NT8
Calibration:	GA00050	Calibration Date:	01/19/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0075-ICV1 (Solid)				Lab File ID: N823020607A.D			Analyzed: 02/06/23 15:15	
2-Methylnaphthalene-d10	2.5000	105	80 - 120	5.634	5.6415	-0.0075	N/A	
Dibenzo[a,h]anthracene-d14	2.5000	96.8	80 - 120	20.549	20.5525	-0.0035	N/A	
Fluoranthene-d10	2.5000	103	80 - 120	11.009	11.016	-0.0070	N/A	
BLA0683-BLK1 (Solid)				Lab File ID: N823020608.D			Analyzed: 02/06/23 15:57	
2-Methylnaphthalene-d10	150.00	83.2	32 - 120	5.627	5.6415	-0.0145	N/A	
Dibenzo[a,h]anthracene-d14	150.00	154	21 - 133	20.545	20.5525	-0.0075	N/A	*
Fluoranthene-d10	150.00	99.4	36 - 134	11.009	11.016	-0.0070	N/A	
BLA0683-BS1 (Solid)				Lab File ID: N823020609.D			Analyzed: 02/06/23 16:24	
2-Methylnaphthalene-d10	150.00	63.3	32 - 120	5.624	5.6415	-0.0175	N/A	
Dibenzo[a,h]anthracene-d14	150.00	114	21 - 133	20.536	20.5525	-0.0165	N/A	
Fluoranthene-d10	150.00	73.4	36 - 134	11	11.016	-0.0160	N/A	
BLA0683-BSD1 (Solid)				Lab File ID: N823020610.D			Analyzed: 02/06/23 16:51	
2-Methylnaphthalene-d10	150.00	71.8	32 - 120	5.624	5.6415	-0.0175	N/A	
Dibenzo[a,h]anthracene-d14	150.00	119	21 - 133	20.533	20.5525	-0.0195	N/A	
Fluoranthene-d10	150.00	80.0	36 - 134	11.003	11.016	-0.0130	N/A	
BLA0683-SRM1 (Solid)				Lab File ID: N823020611.D			Analyzed: 02/06/23 17:18	
2-Methylnaphthalene-d10	300.00	95.8	32 - 120	5.624	5.6415	-0.0175	N/A	
Dibenzo[a,h]anthracene-d14	300.00	173	21 - 133	20.53	20.5525	-0.0225	N/A	*
Fluoranthene-d10	300.00	110	36 - 134	11.003	11.016	-0.0130	N/A	
23A0249-07 (Solid)				Lab File ID: N823020626.D			Analyzed: 02/07/23 00:01	
2-Methylnaphthalene-d10	149.79	82.3	32 - 120	5.621	5.6415	-0.0205	N/A	
Dibenzo[a,h]anthracene-d14	149.79	99.0	21 - 133	20.631	20.5525	0.0785	N/A	
Fluoranthene-d10	149.79	87.5	36 - 134	11.025	11.016	0.0090	N/A	
SLB0075-CCV1 (Solid)				Lab File ID: N823020633.D			Analyzed: 02/07/23 03:09	
2-Methylnaphthalene-d10	2.5000	108	50 - 150	5.627	5.6415	-0.0145	N/A	
Dibenzo[a,h]anthracene-d14	2.5000	88.0	50 - 150	20.609	20.5525	0.0565	N/A	
Fluoranthene-d10	2.5000	109	50 - 150	11.025	11.016	0.0090	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0143	Instrument:	NT10
Calibration:	GC00032	Calibration Date:	03/01/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0143-SCV1 (Solid)			Lab File ID: NT1003012311S.D				Analyzed: 03/01/23 21:46	
2-Fluorophenol	7.5000	0.502	0 - 200	6.902	6.899	0.0030	N/A	
p-Terphenyl-d14	5.0000	0.542	0 - 200	21.524	21.525	-0.0010	N/A	
SLC0143-ICB1 (Solid)			Lab File ID: NT1003012312S.D				Analyzed: 03/01/23 22:24	
2-Fluorophenol	7.5000	105	27 - 120	6.894	6.899	-0.0050	N/A	
p-Terphenyl-d14	5.0000	98.0	37 - 120	21.524	21.525	-0.0010	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0250	Instrument:	NT10
Calibration:	GC00032	Calibration Date:	03/01/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0250-ICV1 (Solid)			Lab File ID: NT1003032303S.D			Analyzed: 03/03/23 19:05		
2-Fluorophenol	1.5000	117	80 - 120	6.918	6.899	0.0190	N/A	
p-Terphenyl-d14	1.0000	134	80 - 120	21.695	21.525	0.1700	N/A	*
SLC0250-LCV1 (Solid)			Lab File ID: NT1003032304S.D			Analyzed: 03/03/23 19:43		
2-Fluorophenol	0.30000	108	0 - 200	6.917	6.899	0.0180	N/A	
p-Terphenyl-d14	0.20000	120	0 - 200	21.694	21.525	0.1690	N/A	
BLA0673-BLK2 (Solid)			Lab File ID: NT1003032306S.D			Analyzed: 03/03/23 20:59		
2-Fluorophenol	750.00	71.6	27 - 120	6.917	6.899	0.0180	N/A	
p-Terphenyl-d14	500.00	141	37 - 120	21.671	21.525	0.1460	N/A	*
BLA0673-BS2 (Solid)			Lab File ID: NT1003032307S.D			Analyzed: 03/03/23 21:37		
2-Fluorophenol	750.00	82.2	27 - 120	6.925	6.899	0.0260	N/A	
p-Terphenyl-d14	500.00	121	37 - 120	21.702	21.525	0.1770	N/A	*
BLA0673-BSD2 (Solid)			Lab File ID: NT1003032308S.D			Analyzed: 03/03/23 22:15		
2-Fluorophenol	750.00	81.4	27 - 120	6.925	6.899	0.0260	N/A	
p-Terphenyl-d14	500.00	133	37 - 120	21.695	21.525	0.1700	N/A	*
BLA0673-SRM2 (Solid)			Lab File ID: NT1003032311S.D			Analyzed: 03/04/23 00:08		
2-Fluorophenol	7500.0	86.5	27 - 120	6.925	6.899	0.0260	N/A	
p-Terphenyl-d14	5000.0	124	37 - 120	21.702	21.525	0.1770	N/A	*
SLC0250-CCV1 (Solid)			Lab File ID: NT1003032315S.D			Analyzed: 03/04/23 02:40		
2-Fluorophenol	1.5000	115	50 - 150	6.917	6.899	0.0180	N/A	
p-Terphenyl-d14	1.0000	148	50 - 150	21.702	21.525	0.1770	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0253	Instrument:	NT10
Calibration:	GC00032	Calibration Date:	03/01/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0253-ICV1 (Solid)			Lab File ID: NT1003032315ICVS.D			Analyzed: 03/04/23 02:40		
2-Fluorophenol	1.5000	115	80 - 120	6.917	6.899	0.0180	N/A	
p-Terphenyl-d14	1.0000	148	80 - 120	21.702	21.525	0.1770	N/A	*
SLC0253-LCV1 (Solid)			Lab File ID: NT1003032316S.D			Analyzed: 03/04/23 03:18		
2-Fluorophenol	0.30000	114	0 - 200	6.925	6.899	0.0260	N/A	
p-Terphenyl-d14	0.20000	140	0 - 200	21.702	21.525	0.1770	N/A	
23A0249-02 (Solid)			Lab File ID: NT1003032318S.D			Analyzed: 03/04/23 04:34		
2-Fluorophenol	719.07	81.2	27 - 120	6.933	6.899	0.0340	N/A	
p-Terphenyl-d14	479.38	172	37 - 120	21.748	21.525	0.2230	N/A	*
23A0249-03 (Solid)			Lab File ID: NT1003032319S.D			Analyzed: 03/04/23 05:12		
2-Fluorophenol	728.41	88.5	27 - 120	6.925	6.899	0.0260	N/A	
p-Terphenyl-d14	485.61	132	37 - 120	21.733	21.525	0.2080	N/A	*
23A0249-04 (Solid)			Lab File ID: NT1003032320S.D			Analyzed: 03/04/23 05:50		
2-Fluorophenol	744.77	66.9	27 - 120	6.917	6.899	0.0180	N/A	
p-Terphenyl-d14	496.52	123	37 - 120	21.733	21.525	0.2080	N/A	*
23A0249-05 (Solid)			Lab File ID: NT1003032321S.D			Analyzed: 03/04/23 06:28		
2-Fluorophenol	721.99	83.1	27 - 120	6.925	6.899	0.0260	N/A	
p-Terphenyl-d14	481.32	169	37 - 120	21.741	21.525	0.2160	N/A	*
23A0249-08 (Solid)			Lab File ID: NT1003032322S.D			Analyzed: 03/04/23 07:06		
2-Fluorophenol	723.65	80.5	27 - 120	6.925	6.899	0.0260	N/A	
p-Terphenyl-d14	482.43	166	37 - 120	21.741	21.525	0.2160	N/A	*
23A0249-11 (Solid)			Lab File ID: NT1003032323S.D			Analyzed: 03/04/23 07:45		
2-Fluorophenol	735.26	63.1	27 - 120	6.925	6.899	0.0260	N/A	
p-Terphenyl-d14	490.17	111	37 - 120	21.733	21.525	0.2080	N/A	
SLC0253-CCV1 (Solid)			Lab File ID: NT1003032327S.D			Analyzed: 03/04/23 10:17		
2-Fluorophenol	1.5000	116	50 - 150	6.918	6.899	0.0190	N/A	
p-Terphenyl-d14	1.0000	152	50 - 150	21.726	21.525	0.2010	N/A	*

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0213	Instrument:	NT8
		Calibration:	GA00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Blank (SLA0213-ICB1)		(Water)		Lab File ID: N823011902.D				Analyzed: 01/19/23 10:59	
Naphthalene-d8	52082	4.916	44704	4.906	117	50 - 200	0.010	+/-0.50	
Acenaphthene-d10	30936	7.202	26411	7.196	117	50 - 200	0.006	+/-0.50	
Phenanthrene-d10	59030	9.241	49210	9.235	120	50 - 200	0.006	+/-0.50	
Chrysene-d12	50944	14.215	42994	14.202	118	50 - 200	0.013	+/-0.50	
Perylene-d12	47418	18.12	40520	18.111	117	50 - 200	0.009	+/-0.50	
Secondary Cal Check (SLA0213-SCV1)		(Water)		Lab File ID: N823011909.D				Analyzed: 01/19/23 14:58	
Naphthalene-d8	46346	4.913	44704	4.906	104	50 - 200	0.007	+/-0.50	
Acenaphthene-d10	27709	7.202	26411	7.196	105	50 - 200	0.006	+/-0.50	
Phenanthrene-d10	51685	9.238	49210	9.235	105	50 - 200	0.003	+/-0.50	
Chrysene-d12	46582	14.212	42994	14.202	108	50 - 200	0.010	+/-0.50	
Perylene-d12	41743	18.117	40520	18.111	103	50 - 200	0.006	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0075	Instrument:	NT8
		Calibration:	GA00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLB0075-ICV1)		(Solid)		Lab File ID: N823020607A.D				Analyzed: 02/06/23 15:15	
Naphthalene-d8	44336	4.9	44336	4.9	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	26127	7.189	26127	7.189	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	47424	9.232	47424	9.232	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	36794	14.202	36794	14.202	100	50 - 200	0.000	+/-0.50	
Perylene-d12	36636	18.107	36636	18.107	100	50 - 200	0.000	+/-0.50	
Blank (BLA0683-BLK1)		(Solid)		Lab File ID: N823020608.D				Analyzed: 02/06/23 15:57	
Naphthalene-d8	48985	4.89	44336	4.9	110	50 - 200	-0.010	+/-0.50	
Acenaphthene-d10	28561	7.189	26127	7.189	109	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	52393	9.229	47424	9.232	110	50 - 200	-0.003	+/-0.50	
Chrysene-d12	40654	14.196	36794	14.202	110	50 - 200	-0.006	+/-0.50	
Perylene-d12	24723	18.104	36636	18.107	67	50 - 200	-0.003	+/-0.50	
LCS (BLA0683-BS1)		(Solid)		Lab File ID: N823020609.D				Analyzed: 02/06/23 16:24	
Naphthalene-d8	50596	4.884	44336	4.9	114	50 - 200	-0.016	+/-0.50	
Acenaphthene-d10	29850	7.183	26127	7.189	114	50 - 200	-0.006	+/-0.50	
Phenanthrene-d10	54061	9.222	47424	9.232	114	50 - 200	-0.010	+/-0.50	
Chrysene-d12	41046	14.19	36794	14.202	112	50 - 200	-0.012	+/-0.50	
Perylene-d12	27103	18.098	36636	18.107	74	50 - 200	-0.009	+/-0.50	
LCS Dup (BLA0683-BSD1)		(Solid)		Lab File ID: N823020610.D				Analyzed: 02/06/23 16:51	
Naphthalene-d8	52018	4.887	44336	4.9	117	50 - 200	-0.013	+/-0.50	
Acenaphthene-d10	29996	7.183	26127	7.189	115	50 - 200	-0.006	+/-0.50	
Phenanthrene-d10	54697	9.223	47424	9.232	115	50 - 200	-0.009	+/-0.50	
Chrysene-d12	41650	14.187	36794	14.202	113	50 - 200	-0.015	+/-0.50	
Perylene-d12	27575	18.098	36636	18.107	75	50 - 200	-0.009	+/-0.50	
Reference (BLA0683-SRM1)		(Solid)		Lab File ID: N823020611.D				Analyzed: 02/06/23 17:18	
Naphthalene-d8	47898	4.884	44336	4.9	108	50 - 200	-0.016	+/-0.50	
Acenaphthene-d10	26592	7.183	26127	7.189	102	50 - 200	-0.006	+/-0.50	
Phenanthrene-d10	44776	9.223	47424	9.232	94	50 - 200	-0.009	+/-0.50	
Chrysene-d12	36552	14.19	36794	14.202	99	50 - 200	-0.012	+/-0.50	
Perylene-d12	22526	18.092	36636	18.107	61	50 - 200	-0.015	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0075	Instrument:	NT8
		Calibration:	GA00050

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-IT1034 (23A0249-07)		(Solid)		Lab File ID: N823020626.D				Analyzed: 02/07/23 00:01	
Naphthalene-d8	57390	4.881	44336	4.9	129	50 - 200	-0.019	+/-0.50	
Acenaphthene-d10	33309	7.186	26127	7.189	127	50 - 200	-0.003	+/-0.50	
Phenanthrene-d10	50089	9.235	47424	9.232	106	50 - 200	0.003	+/-0.50	
Chrysene-d12	22976	14.237	36794	14.202	62	50 - 200	0.035	+/-0.50	
Perylene-d12	20857	18.171	36636	18.107	57	50 - 200	0.064	+/-0.50	
Calibration Check (SLB0075-CCV1)		(Water)		Lab File ID: N823020633.D				Analyzed: 02/07/23 03:09	
Naphthalene-d8	52897	4.891	44336	4.9	119	50 - 200	-0.009	+/-0.50	
Acenaphthene-d10	31659	7.186	26127	7.189	121	50 - 200	-0.003	+/-0.50	
Phenanthrene-d10	57767	9.235	47424	9.232	122	50 - 200	0.003	+/-0.50	
Chrysene-d12	48067	14.228	36794	14.202	131	50 - 200	0.026	+/-0.50	
Perylene-d12	37211	18.155	36636	18.107	102	50 - 200	0.048	+/-0.50	

Analytical Resources, LLC
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INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0143	Instrument:	NT10
		Calibration:	GC00032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLC0143-SCV1)		(Solid)		Lab File ID: NT1003012311S.D				Analyzed: 03/01/23 21:46	
1,4-Dichlorobenzene-d4	303734	9.252	320125	9.244	95	50 - 200	0.008	+/-0.50	
Naphthalene-d8	1147551	11.724	1136019	11.724	101	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	645730	15.314	636993	15.314	101	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1151000	18.399	1093620	18.399	105	50 - 200	0.000	+/-0.50	
Chrysene-d12	1297466	23.421	1000300	23.414	130	50 - 200	0.007	+/-0.50	
Perylene-d12	1394899	26.108	1058448	26.1	132	50 - 200	0.008	+/-0.50	
Initial Cal Blank (SLC0143-ICB1)		(Solid)		Lab File ID: NT1003012312S.D				Analyzed: 03/01/23 22:24	
1,4-Dichlorobenzene-d4	515340	9.251	320125	9.244	161	50 - 200	0.007	+/-0.50	
Naphthalene-d8	1787704	11.723	1136019	11.724	157	50 - 200	-0.001	+/-0.50	
Acenaphthene-d10	879316	15.314	636993	15.314	138	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1572306	18.398	1093620	18.399	144	50 - 200	-0.001	+/-0.50	
Chrysene-d12	1486349	23.421	1000300	23.414	149	50 - 200	0.007	+/-0.50	
Perylene-d12	1674195	26.108	1058448	26.1	158	50 - 200	0.008	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0250	Instrument:	NT10
		Calibration:	GC00032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0250-ICV1)		(Solid)	Lab File ID: NT1003032303S.D				Analyzed: 03/03/23 19:05		
1,4-Dichlorobenzene-d4	602309	9.283	602309	9.283	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	2101699	11.778	2101699	11.778	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	1002910	15.391	1002910	15.391	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1732061	18.522	1732061	18.522	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	1410089	23.615	1410089	23.615	100	50 - 200	0.000	+/-0.50	
Perylene-d12	1732981	26.449	1732981	26.449	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0250-LCV1)		(Solid)	Lab File ID: NT1003032304S.D				Analyzed: 03/03/23 19:43		
1,4-Dichlorobenzene-d4	538660	9.283	602309	9.283	89	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1835979	11.777	2101699	11.778	87	50 - 200	-0.001	+/-0.50	
Acenaphthene-d10	870106	15.399	1002910	15.391	87	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1484174	18.522	1732061	18.522	86	50 - 200	0.000	+/-0.50	
Chrysene-d12	1241077	23.622	1410089	23.615	88	50 - 200	0.007	+/-0.50	
Perylene-d12	1512758	26.448	1732981	26.449	87	50 - 200	-0.001	+/-0.50	
Blank (BLA0673-BLK2)		(Solid)	Lab File ID: NT1003032306S.D				Analyzed: 03/03/23 20:59		
1,4-Dichlorobenzene-d4	534040	9.275	602309	9.283	89	50 - 200	-0.008	+/-0.50	
Naphthalene-d8	1862417	11.77	2101699	11.778	89	50 - 200	-0.008	+/-0.50	
Acenaphthene-d10	882262	15.383	1002910	15.391	88	50 - 200	-0.008	+/-0.50	
Phenanthrene-d10	1597014	18.507	1732061	18.522	92	50 - 200	-0.015	+/-0.50	
Chrysene-d12	1402727	23.591	1410089	23.615	99	50 - 200	-0.024	+/-0.50	
Perylene-d12	1445696	26.394	1732981	26.449	83	50 - 200	-0.055	+/-0.50	
LCS (BLA0673-BS2)		(Solid)	Lab File ID: NT1003032307S.D				Analyzed: 03/03/23 21:37		
1,4-Dichlorobenzene-d4	577308	9.283	602309	9.283	96	50 - 200	0.000	+/-0.50	
Naphthalene-d8	2083646	11.777	2101699	11.778	99	50 - 200	-0.001	+/-0.50	
Acenaphthene-d10	997712	15.399	1002910	15.391	99	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1825372	18.53	1732061	18.522	105	50 - 200	0.008	+/-0.50	
Chrysene-d12	1620278	23.63	1410089	23.615	115	50 - 200	0.015	+/-0.50	
Perylene-d12	1583846	26.456	1732981	26.449	91	50 - 200	0.007	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0250	Instrument:	NT10
		Calibration:	GC00032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (BLA0673-BSD2)		(Solid)	Lab File ID: NT1003032308S.D				Analyzed: 03/03/23 22:15		
1,4-Dichlorobenzene-d4	594217	9.283	602309	9.283	99	50 - 200	0.000	+/-0.50	
Naphthalene-d8	2127836	11.778	2101699	11.778	101	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	1000846	15.399	1002910	15.391	100	50 - 200	0.008	+/-0.50	
Phenanthrene-d10	1821443	18.53	1732061	18.522	105	50 - 200	0.008	+/-0.50	
Chrysene-d12	1506073	23.623	1410089	23.615	107	50 - 200	0.008	+/-0.50	
Perylene-d12	1668749	26.441	1732981	26.449	96	50 - 200	-0.008	+/-0.50	
Reference (BLA0673-SRM2)		(Solid)	Lab File ID: NT1003032311S.D				Analyzed: 03/04/23 00:08		
1,4-Dichlorobenzene-d4	521634	9.283	602309	9.283	87	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1845415	11.786	2101699	11.778	88	50 - 200	0.008	+/-0.50	
Acenaphthene-d10	881928	15.407	1002910	15.391	88	50 - 200	0.016	+/-0.50	
Phenanthrene-d10	1566096	18.538	1732061	18.522	90	50 - 200	0.016	+/-0.50	
Chrysene-d12	1315710	23.63	1410089	23.615	93	50 - 200	0.015	+/-0.50	
Perylene-d12	1362792	26.457	1732981	26.449	79	50 - 200	0.008	+/-0.50	
Calibration Check (SLC0250-CCV1)		(Solid)	Lab File ID: NT1003032315S.D				Analyzed: 03/04/23 02:40		
1,4-Dichlorobenzene-d4	502303	9.283	602309	9.283	83	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1751418	11.777	2101699	11.778	83	50 - 200	-0.001	+/-0.50	
Acenaphthene-d10	814551	15.391	1002910	15.391	81	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1450747	18.53	1732061	18.522	84	50 - 200	0.008	+/-0.50	
Chrysene-d12	1335017	23.63	1410089	23.615	95	50 - 200	0.015	+/-0.50	
Perylene-d12	1691506	26.456	1732981	26.449	98	50 - 200	0.007	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0253	Instrument:	NT10
		Calibration:	GC00032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0253-ICV1)		(Solid)	Lab File ID: NT1003032315ICVS.D				Analyzed: 03/04/23 02:40		
1,4-Dichlorobenzene-d4	502303	9.283	502303	9.283	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1751418	11.777	1751418	11.777	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	814551	15.391	814551	15.391	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1450747	18.53	1450747	18.53	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	1335017	23.63	1335017	23.63	100	50 - 200	0.000	+/-0.50	
Perylene-d12	1691506	26.456	1691506	26.456	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLC0253-LCV1)		(Solid)	Lab File ID: NT1003032316S.D				Analyzed: 03/04/23 03:18		
1,4-Dichlorobenzene-d4	544820	9.283	502303	9.283	108	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1891541	11.77	1751418	11.777	108	50 - 200	-0.007	+/-0.50	
Acenaphthene-d10	849365	15.391	814551	15.391	104	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1550205	18.522	1450747	18.53	107	50 - 200	-0.008	+/-0.50	
Chrysene-d12	1383003	23.63	1335017	23.63	104	50 - 200	0.000	+/-0.50	
Perylene-d12	1779203	26.456	1691506	26.456	105	50 - 200	0.000	+/-0.50	
LDW23-SC1083 (23A0249-02)		(Solid)	Lab File ID: NT1003032318S.D				Analyzed: 03/04/23 04:34		
1,4-Dichlorobenzene-d4	434346	9.298	502303	9.283	86	50 - 200	0.015	+/-0.50	
Naphthalene-d8	1533596	11.801	1751418	11.777	88	50 - 200	0.024	+/-0.50	
Acenaphthene-d10	734499	15.437	814551	15.391	90	50 - 200	0.046	+/-0.50	
Phenanthrene-d10	1356563	18.576	1450747	18.53	94	50 - 200	0.046	+/-0.50	
Chrysene-d12	1241453	23.669	1335017	23.63	93	50 - 200	0.039	+/-0.50	
Perylene-d12	1560866	26.526	1691506	26.456	92	50 - 200	0.070	+/-0.50	
LDW23-SC1018 (23A0249-03)		(Solid)	Lab File ID: NT1003032319S.D				Analyzed: 03/04/23 05:12		
1,4-Dichlorobenzene-d4	504889	9.29	502303	9.283	101	50 - 200	0.007	+/-0.50	
Naphthalene-d8	1779189	11.801	1751418	11.777	102	50 - 200	0.024	+/-0.50	
Acenaphthene-d10	824129	15.43	814551	15.391	101	50 - 200	0.039	+/-0.50	
Phenanthrene-d10	1523281	18.569	1450747	18.53	105	50 - 200	0.039	+/-0.50	
Chrysene-d12	1489566	23.661	1335017	23.63	112	50 - 200	0.031	+/-0.50	
Perylene-d12	1693189	26.511	1691506	26.456	100	50 - 200	0.055	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0253	Instrument:	NT10
		Calibration:	GC00032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1084 (23A0249-04)		(Solid)	Lab File ID: NT1003032320S.D				Analyzed: 03/04/23 05:50		
1,4-Dichlorobenzene-d4	524856	9.29	502303	9.283	104	50 - 200	0.007	+/-0.50	
Naphthalene-d8	1824588	11.793	1751418	11.777	104	50 - 200	0.016	+/-0.50	
Acenaphthene-d10	848291	15.422	814551	15.391	104	50 - 200	0.031	+/-0.50	
Phenanthrene-d10	1534427	18.561	1450747	18.53	106	50 - 200	0.031	+/-0.50	
Chrysene-d12	1281744	23.661	1335017	23.63	96	50 - 200	0.031	+/-0.50	
Perylene-d12	1698962	26.502	1691506	26.456	100	50 - 200	0.046	+/-0.50	
LDW23-SC1025 (23A0249-05)		(Solid)	Lab File ID: NT1003032321S.D				Analyzed: 03/04/23 06:28		
1,4-Dichlorobenzene-d4	495062	9.283	502303	9.283	99	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1752747	11.785	1751418	11.777	100	50 - 200	0.008	+/-0.50	
Acenaphthene-d10	801852	15.422	814551	15.391	98	50 - 200	0.031	+/-0.50	
Phenanthrene-d10	1532752	18.561	1450747	18.53	106	50 - 200	0.031	+/-0.50	
Chrysene-d12	1337569	23.669	1335017	23.63	100	50 - 200	0.039	+/-0.50	
Perylene-d12	1733835	26.518	1691506	26.456	103	50 - 200	0.062	+/-0.50	
LDW23-SC1024 (23A0249-08)		(Solid)	Lab File ID: NT1003032322S.D				Analyzed: 03/04/23 07:06		
1,4-Dichlorobenzene-d4	448634	9.282	502303	9.283	89	50 - 200	-0.001	+/-0.50	
Naphthalene-d8	1567414	11.785	1751418	11.777	89	50 - 200	0.008	+/-0.50	
Acenaphthene-d10	746171	15.414	814551	15.391	92	50 - 200	0.023	+/-0.50	
Phenanthrene-d10	1440377	18.561	1450747	18.53	99	50 - 200	0.031	+/-0.50	
Chrysene-d12	1198216	23.669	1335017	23.63	90	50 - 200	0.039	+/-0.50	
Perylene-d12	1559290	26.51	1691506	26.456	92	50 - 200	0.054	+/-0.50	
LDW23-SC1020 (23A0249-11)		(Solid)	Lab File ID: NT1003032323S.D				Analyzed: 03/04/23 07:45		
1,4-Dichlorobenzene-d4	420230	9.283	502303	9.283	84	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1468708	11.785	1751418	11.777	84	50 - 200	0.008	+/-0.50	
Acenaphthene-d10	688482	15.422	814551	15.391	85	50 - 200	0.031	+/-0.50	
Phenanthrene-d10	1268968	18.561	1450747	18.53	87	50 - 200	0.031	+/-0.50	
Chrysene-d12	1125418	23.661	1335017	23.63	84	50 - 200	0.031	+/-0.50	
Perylene-d12	1441355	26.503	1691506	26.456	85	50 - 200	0.047	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0253	Instrument:	NT10
		Calibration:	GC00032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (SLC0253-CCV1)		(Solid)		Lab File ID: NT1003032327S.D				Analyzed: 03/04/23 10:17	
1,4-Dichlorobenzene-d4	434743	9.283	502303	9.283	87	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1484690	11.785	1751418	11.777	85	50 - 200	0.008	+/-0.50	
Acenaphthene-d10	701644	15.414	814551	15.391	86	50 - 200	0.023	+/-0.50	
Phenanthrene-d10	1291916	18.553	1450747	18.53	89	50 - 200	0.023	+/-0.50	
Chrysene-d12	1271827	23.654	1335017	23.63	95	50 - 200	0.024	+/-0.50	
Perylene-d12	1618955	26.495	1691506	26.456	96	50 - 200	0.039	+/-0.50	

HOLDING TIME SUMMARY

Analysis: EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1083 23A0249-02	01/12/23 08:38	01/12/23 16:38	01/30/23 14:02	18	365	03/04/23 04:34	33	40	
LDW23-SC1018 23A0249-03	01/12/23 10:21	01/12/23 16:38	01/30/23 14:02	18	365	03/04/23 05:12	33	40	
LDW23-SC1084 23A0249-04	01/12/23 09:47	01/12/23 16:38	01/30/23 14:02	18	365	03/04/23 05:50	33	40	
LDW23-SC1025 23A0249-05	01/12/23 11:28	01/12/23 16:38	01/30/23 14:02	18	365	03/04/23 06:28	33	40	
LDW23-IT1034 23A0249-07	01/12/23 12:32	01/12/23 16:38	02/01/23 11:29	19	365	02/07/23 00:01	6	40	
LDW23-SC1024 23A0249-08	01/12/23 13:35	01/12/23 16:38	01/30/23 14:02	18	365	03/04/23 07:06	33	40	
LDW23-SC1020 23A0249-11	01/12/23 15:23	01/12/23 16:38	01/30/23 14:02	17	365	03/04/23 07:45	33	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: NT10

Analyte	MDL	RL	Units
1,4-Dichlorobenzene	0.6	5.0	ug/kg
1,2-Dichlorobenzene	0.7	5.0	ug/kg
Benzyl Alcohol	2.5	20.0	ug/kg
Benzoic acid	13.4	100	ug/kg
2,4-Dimethylphenol	2.2	20.0	ug/kg
1,2,4-Trichlorobenzene	2.7	5.0	ug/kg
N-Nitrosodiphenylamine	1.3	5.0	ug/kg
Pentachlorophenol	2.1	20.0	ug/kg

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: NT8

Analyte	MDL	RL	Units
Benzo(a)anthracene	0.82	5.00	ug/kg
Chrysene	1.05	5.00	ug/kg
Benzo(b)fluoranthene	1.37	5.00	ug/kg
Benzo(k)fluoranthene	0.76	5.00	ug/kg
Benzo(a)pyrene	0.61	5.00	ug/kg
Indeno(1,2,3-cd)pyrene	1.05	5.00	ug/kg
Dibenzo(a,h)anthracene	0.89	5.00	ug/kg

I-8227

Certificate of Analysis

SIGMA-ALDRICH

Product Name	Pentachlorophenol, 97%
Product Number	P2604
Product Brand	ALDRICH
CAS Number	87-86-5
Molecular Formula	C_6Cl_5OH
Molecular Weight	266.34

TEST	SPECIFICATION	LOT 07119HO RESULTS
APPEARANCE	WHITE TO OFF-WHITE OR LIGHT BLUE POWDER	OFF-WHITE POWDER
INFRARED SPECTRUM	CONFORMS TO STRUCTURE.	CONFORMS TO STRUCTURE AND STANDARD
TITRATION	97.5% - 102.5% (WITH AGNO3 AFTER OXYGEN	100.5 % (WITH AGNO3 AFTER OXYGEN COMBUSTION)
GAS LIQUID CHROMATOGRAPHY	97.5% (MINIMUM)	99.9 %
SOLUBILITY		100 MG/ML, 95% ETOH: VERY HAZY, FAINT YELLOW SOLUTION
QUALITY CONTROL ACCEPTANCE DATE		JUNE 2001

Barbara Rajzer

Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001941

Printed: 9/25/2013 1:45:31PM

Description:	SVOC 2,4-Dinitrophenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 13:45 by JZ
Vendor:	SIGMA	Lot #:	65H5021
Vendor Catalog #:			

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941
SVOA 2,4-Dinitrophenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: ____________________

Chemical: 2.4-Dinitrophenol

Manufacturer: Sigma

Product #: ____________________

Lot #: 65H5021

Purity: 90~95%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001945

Printed: 9/25/2013 3:23:22PM

Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945
SVOC Benzoic Acid
Expires 12/31/2029
Prepared By Jianqing Zhou 12/31/2012

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0214339

Purity: 98%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001948

Printed: 9/25/2013 3:37:51PM

Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948
SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: KB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002054

Printed: 10/4/2013 6:32:21PM

Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL

B002054
SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 67-53

Purity: 99%

Analyst: AZ

Cambridge Isotope Laboratories, Inc.

50 Frontage Road, Andover, MA 01810-5413 USA
800.322.1174 (N.AMERICA) 978.749.8000 (INTERNATIONAL)
www.isotope.com

CERTIFICATE OF ANALYSIS

Product Name: DIBENZ[A,H]ANTHRACENE
(Isotopic Label & Enrichment Specification) (D14, 97%)

Lot Number: PR-14764/09163DA2

Catalog Number: DLM-677-0

I295

Product Information

Chemical Purity Specification:	≥ 98%
Labeled CAS Number:	NA
Unlabeled CAS Number:	53-70-3
Molecular Weight:	292.5
Chemical Formula:	C22D14
Storage:	Store at room temperature away from light and moisture.
Stability:	Stable if stored under recommended conditions.

Certification

Cambridge Isotope Laboratories, Inc. guarantees that this material meets or exceeds the specifications stated. Absolute identity as well as chemical and isotopic purities are assured by the use of unambiguous synthetic routes and multiple chemical analyses whenever possible.

Approved by: Deborah E. Costa

Deborah E. Costa, Quality Assurance

Quality Control Tests and Results

GC/MS for Chemical Purity	99.3%
GC/MS for Isotopic Enrichment	97.4%
Melting Point Range Determination	263-265°C
1H NMR for Chemical Purity	Pass

E006466

SVOA-d14-Dibenz(a,h)anthracene-NEAT
Solvent / Lot: NA
Prep: 11/9/2016 by VS
Exp: 5/8/2030
Location:

H000691

Data File: \\target\share\chem2\fid4a.i\20230317.b\423C1703.D

Page 1

Date : 17-MAR-2023 10:46

Client ID:

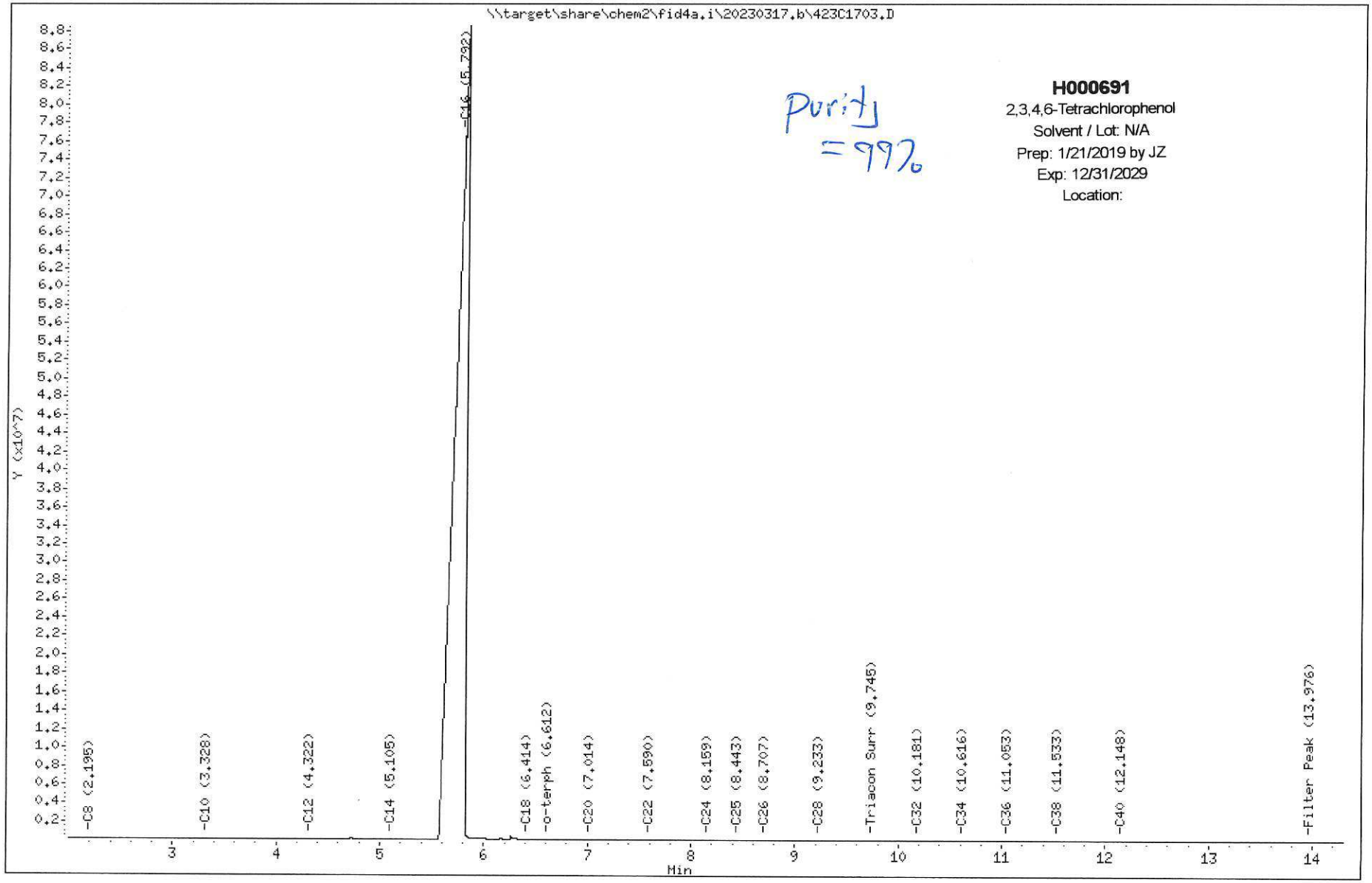
Instrument: fid4a.i

Sample Info: K007226

Operator: AA

Column phase: RTX-1

Column diameter: 0.25



Purity = 99%

H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:

ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
Lab Smp Id: K007226
Inj Date : 17-MAR-2023 10:46
Operator : AA Inst ID: fid4a.i
Smp Info : K007226
Misc Info :
Comment   :
Method   : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
Meth Date : 17-Mar-2023 16:58 alfonso Quant Type: AREA%
Cal Date : 18-AUG-2022 11:51 Cal File: 422H1803.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: tph.sub
Target Version: 4.14
Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA		COMPOUNDS
5.228	2027	2354	1.162	0.000		
5.276	4673	2682	0.574	0.000		
5.322	195	844	4.328	0.000		
5.331	977	1203	1.231	0.000		
5.356	490	993	2.027	0.000		
5.361	814	1044	1.283	0.000		
5.382	115	387	3.351	0.000		
5.399	619	960	1.551	0.000		
5.406	402	1035	2.576	0.000		
5.410	378	1122	2.968	0.000		
5.423	1663	1555	0.935	0.000		
5.452	5951	5020	0.844	0.000		
5.501	290	797	2.753	0.000		
5.523	2317	2472	1.067	0.000		
5.538	5946	6823	1.147	0.000		
5.792	501855376	76456669	0.152	74.449		6 C16
5.807	79757019	82319946	1.032	11.775		
5.823	77929961	88539160	1.136	11.505		
5.962	75333	84828	1.126	0.011		
5.986	474748	124326	0.262	0.070		
6.070	17103	57180	3.343	0.002		
6.074	120761	57565	0.477	0.017		
6.113	90233	47140	0.522	0.013		
6.165	407438	218439	0.536	0.060		
6.263	944101	374166	0.396	0.139		
6.414	114839	39498	0.344	0.016		7 C18
6.464	53190	31177	0.586	0.007		
6.523	31509	25870	0.821	0.004		
6.551	4785	23963	5.008	0.000		
6.559	51194	25409	0.496	0.007		
6.590	21354	21666	1.015	0.003		
6.612	35061	21127	0.603	0.005	$	8 o-terph
6.638	17712	19934	1.125	0.002		
6.672	22159	19651	0.887	0.003		
6.683	26846	19268	0.718	0.003		
6.708	5413	18142	3.351	0.000		
6.713	24941	18247	0.732	0.003		
6.747	50657	18478	0.365	0.007		
6.795	23973	17444	0.728	0.003		
6.814	28457	17895	0.629	0.004		
6.837	10746	15445	1.437	0.001		
6.871	29974	21406	0.714	0.004		
6.874	4287	21471	5.009	0.000		
6.882	20520	21675	1.056	0.003		
6.944	32864	17445	0.531	0.004		
6.978	9138	15347	1.679	0.001		
7.014	4130	13830	3.348	0.000		9 C20
7.025	12567	14083	1.121	0.001		
7.038	4952	14274	2.882	0.000		
7.044	6508	14578	2.240	0.000		
7.050	25344	14736	0.581	0.003		
7.099	5531	12365	2.236	0.000		
7.108	16440	12371	0.752	0.002		
7.129	9415	11275	1.198	0.001		
7.175	3589	10327	2.878	0.000		
7.182	7285	10474	1.438	0.001		
7.212	11252	10002	0.889	0.001		

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
	677340272	268782821		100.000	

Total unknown % area = 25.478

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

2-Chloronaphthalene

CATALOG NUMBER	N-10323-100MG
LOT NUMBER	10816400
DATE CERTIFIED	05/22/18
EXPIRATION DATE	05/31/24
CAS NUMBER	91-58-7
MOLECULAR FORMULA	C10H7Cl
MOLECULAR WEIGHT	162.62
STORAGE	Store at room temperature (20 - 25 °C).
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

I010152
2-Chloronaphthalene NEAT
Expires 12/31/2079
Prepared By Joshua Rains 10/29/2020

Analytical Test	Value
% PURITY (GC/FID)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell
CSM/TC

Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015

PJLA Reference Material Producer
PJLA Testing

COA Form
Revision 3 (3/2015)

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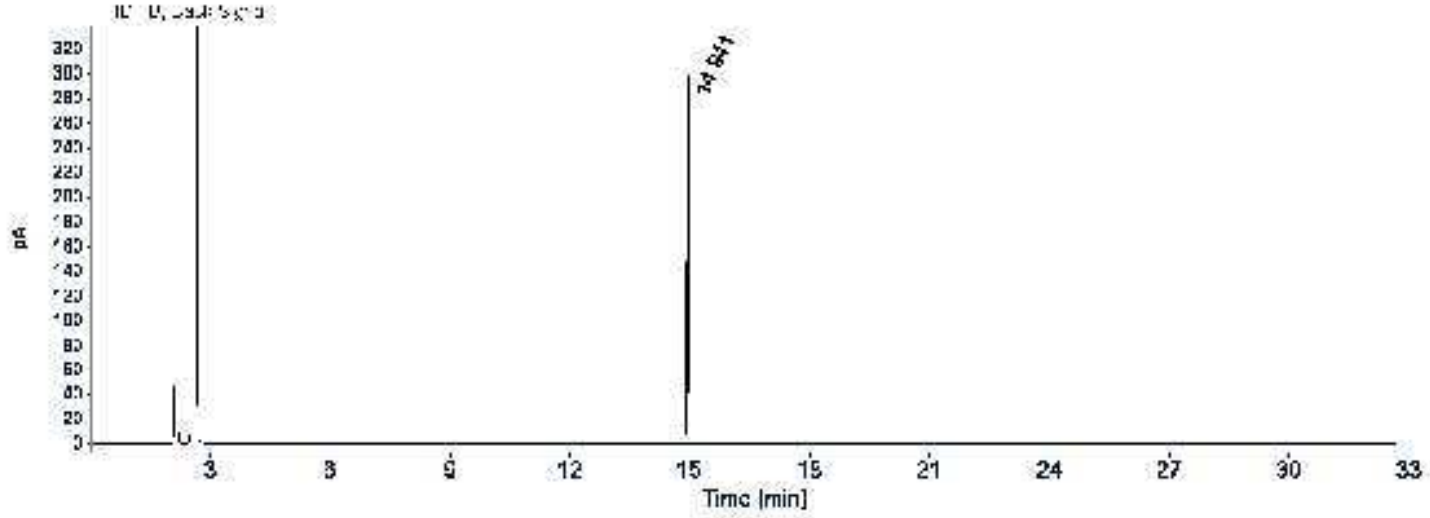
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\Chem32\1\Data\2018 Data\0518\2-Chloronaphtthalene.D
Sample name: 2-Chloronaphthalene

Instrument: GC3
Injection date: 5/22/2018 1:12:52 PM
Acq. method: REAR_SCREEN.M
Location: 209
Injection volume: 1.0uL
Col Type: pn# 7HG-G006-17-C **Diameter** 250.000 **Length** 30.000



Signal: FID1 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
14.941	BB	0.0410	808.8124	308.5675	100.0000
		Sum	808.8124		

Supelco®

www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAC9813
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9813.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005199
SVOA-ABN BASE STOCK-200-800ug/ml
Expires 5/31/2023
Prepared By Jianqing Zhou 5/18/2021

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE CAS# 91-94-1	802	µg/mL	99.9	LC27068
2,4-DINITROTOLUENE CAS# 121-14-2	802	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	801	µg/mL	99.9	LB79891
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	802	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	801	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	201	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	803	µg/mL	100.0	10126MG
4-CHLOROANILINE CAS# 106-47-8	803	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	802	µg/mL	99.9	LC05068
3-NITROANILINE CAS# 99-09-2	802	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	802	µg/mL	99.9	LC11400
PYRIDINE (LOW WATER) CAS# 110-86-1	802	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 12-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9813.01	12-May-2021	Original Release Date

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www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

ACID STOC"

Product no.: 22523046
Lot no.: LRAC9812
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9812.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005200
SVOA-ABN ACID STOCK-200-800ug/ml
Solvent / Lot: DCM
Prep: 5/18/2021 by JZ
Exp: 5/31/2023
Location:

JZ 5/18/21

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2,4-DIMETHYLPHENOL CAS# 105-67-9	802	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	802	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	802	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1806	µg/mL	75.9	MKBP5833V
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	803	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	801	µg/mL	99.9	JS00013
4-NITROPHENOL CAS# 100-02-7	801	µg/mL	99.9	LC10889
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1804	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	803	µg/mL	98.7	MKCK8156
BENZOIC ACID CAS# 65-85-0	1805	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

CERTIFIED WEIGHT REPORT

Part Number: **70476**
Lot Number: 092220
Description: Benzo(j)fluoranthene

Expiration Date: 092225
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 23060

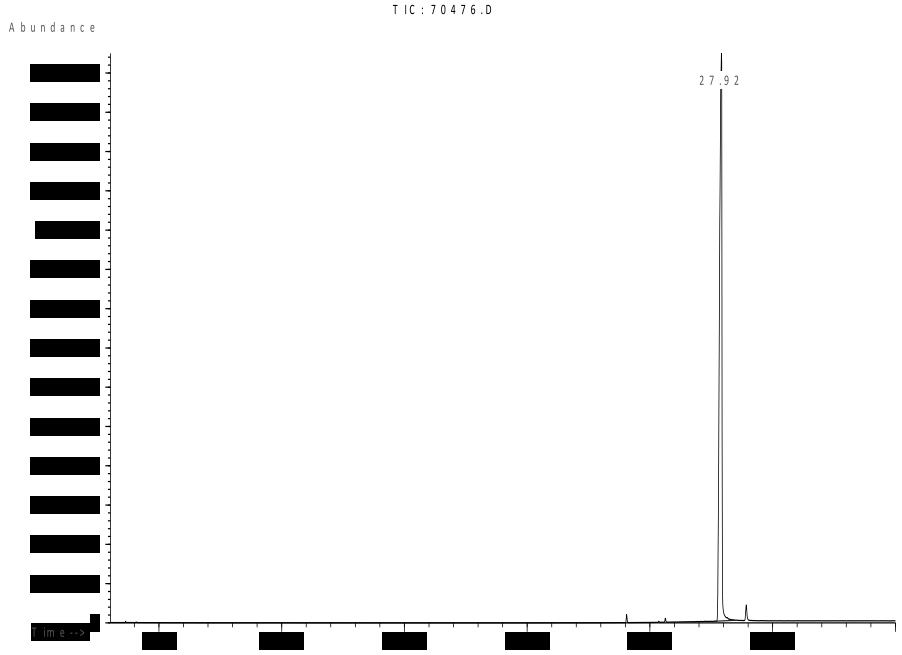
Solvent(s): **Lot#**
Methylene chloride 104929

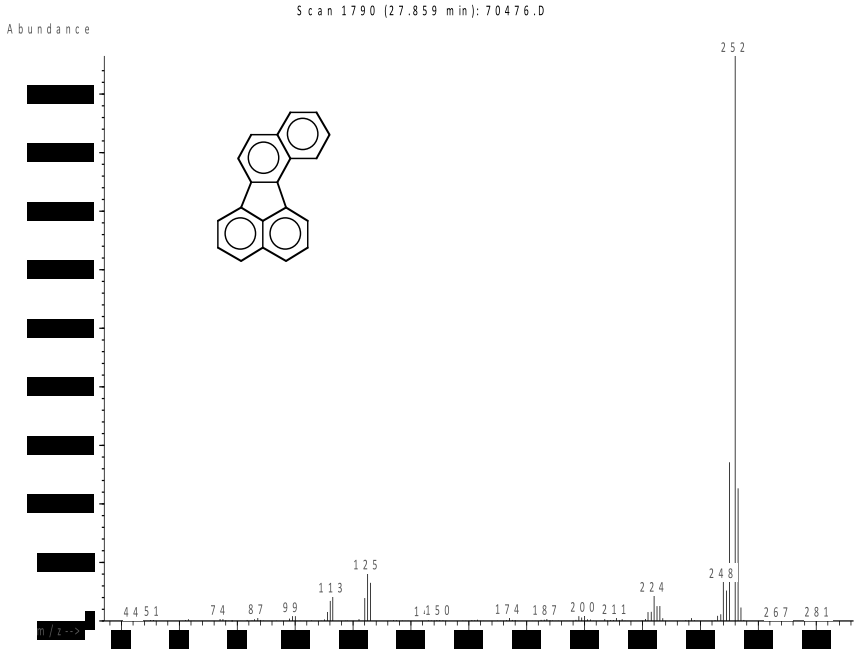
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty

092220	
Formulated By: Benson Chan	DATE
092220	
Reviewed By: Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Benzo(j)fluoranthene	476	3-CSZ-153-20	1000	98.1	0.2	0.02547	0.02552	1001.8	5.7	205-82-3	0.2mg/m3	N/A

Method GC8MSD1M: Column:SBB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 290°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren.





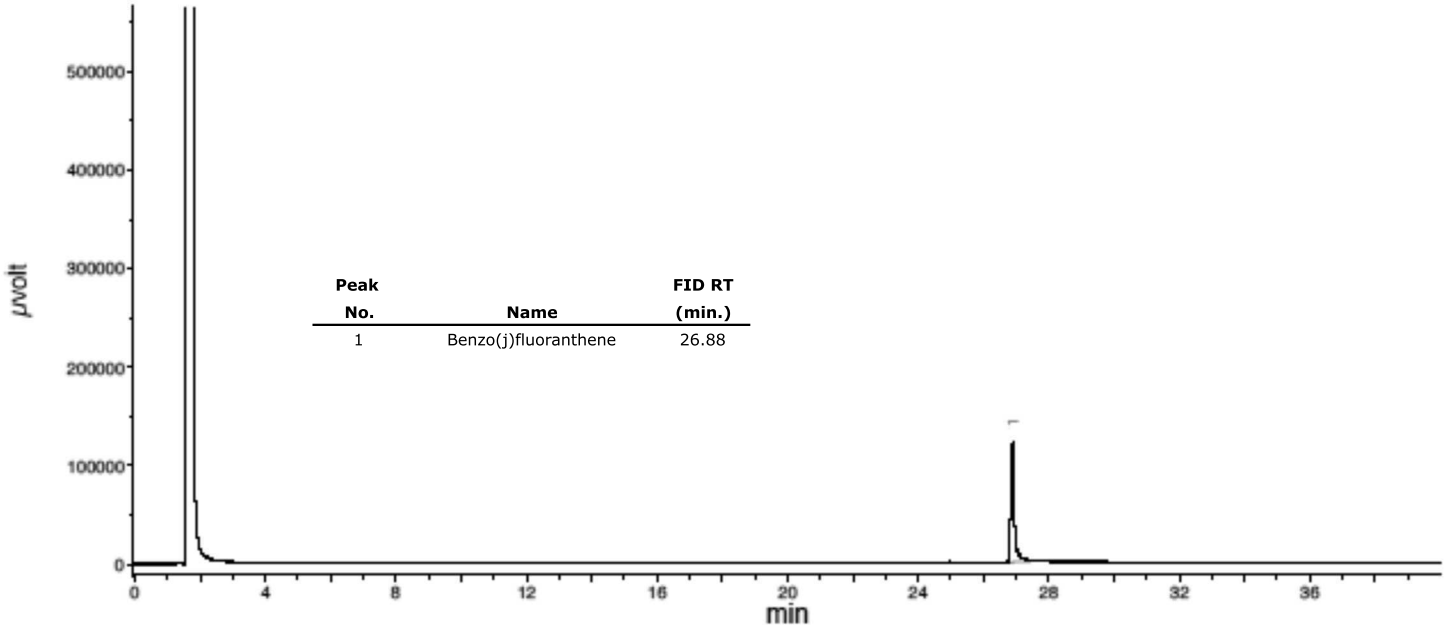
- **The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.**
- **Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).**
- **Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.**
- **All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.**
- **Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).**

Run 31, "P70476 L092220 [1000µg/mL in MeCl2]"

Run Length: 40.00 min, 23999 points at 10 points/second.
Created: Thu, Sep 24, 2020 at 2:33:43 AM.
Sampled: Sequence "092120-GC9M2", Method "GC9-M2".
Analyzed using Method "GC9-M2".

Comments

GC9-M2 Analysis by Melissa Stonier
Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.
Flow rates; Total Flow = 300 ml/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL.
Hydrogen (detector) = 30 mL, Air (detector) =360 mLOven Temp 1 = 50°C (1 min).
Rate = 10°C/min, Oven Temp 2 = 300°C (14 min), Total Run Time = 40 Minutes. Injector Temp = 250°C.
FID Temp = 300°C, FID Signal = eDaq Channel 1.
Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 uL, Range = 3



Peak No.	Name	FID RT (min.)
1	Benzo(j)fluoranthene	26.88

Certificate of Analysis

J008074
SVOA PAH STD 2000ug/ml
Expires 6/30/2023
Prepared By Joshua Rains 8/5/2021

Product Name: PAH Standard

Product Number: US-106N-1

Lot Number: 0006540449

Lot Issue Date: 11-Jun-2020

Expiration Date: 30-Jun-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
acenaphthene	000083-32-9	RM10879	2008 ± 10 µg/mL
acenaphthylene	000208-96-8	RM10891	2003 ± 10 µg/mL
anthracene	000120-12-7	RM14212	2006 ± 10 µg/mL
benz[a]anthracene	000056-55-3	RM16072	2006 ± 10 µg/mL
benzo[b]fluoranthene	000205-99-2	RM14571	2005 ± 10 µg/mL
benzo[k]fluoranthene	000207-08-9	RM14321	2009 ± 10 µg/mL
benzo[ghi]perylene	000191-24-2	RM15761	2008 ± 10 µg/mL
benzo[a]pyrene	000050-32-8	RM12669	2009 ± 10 µg/mL
chrysene	000218-01-9	RM12260	2009 ± 10 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM06786	2009 ± 10 µg/mL
fluoranthene	000206-44-0	RM12277	2004 ± 10 µg/mL
fluorene	000086-73-7	RM09441	2009 ± 10 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM14192	2009 ± 10 µg/mL
naphthalene	000091-20-3	NT00970	2008 ± 10 µg/mL
phenanthrene	000085-01-8	RM10495	2009 ± 10 µg/mL
pyrene	000129-00-0	RM03479	2008 ± 10 µg/mL

Matrix: methylene chloride/benzene (1:1)

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/

ISO 17025 Cert No. AT-1937

Certificate of Analysis

Product Number: US-106N-1 **Lot Number:** 0006540449

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026
Page: 2 of 2

www.agilent.com/quality/

ISO 17025 Cert
No. AT-1937

Certificate of Analysis

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Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16062
Certification Date: November 19, 2020
Expiration Date: November 30, 2030

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 2.740%
3,3'-Dichlorobenzidine	91-94-1	2000	± 3.229%

J008310
Benzidines std @2000ug/ml
Expires 11/30/2030
Prepared By Van Spohn 8/12/2021

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018_us

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

Sigma-Aldrich

Product Name:	2,4,6-Tribromophenol
Product Description:	99%
Product Brand:	Sigma-Aldrich
Product Number:	137715
Molecular Weight:	330.80
Molecular Formula:	$Br_3C_6H_2OH$
CAS Number:	118-79-6

TEST	SPECIFICATION	LOT 05110PD RESULTS
APPEARANCE:	WHITE TO OFF-WHITE TO PINK FLAKES, CHUNKS,	PINK BEADS
INFRARED SPECTRUM:		CONFORMS TO STRUCTURE.
GAS LIQUID:	98.5% (MINIMUM)	99.9%
QUALITY CONTROL:		NOVEMBER 2005

Barbara Rajzer

Barbara Rajzer, Supervisor
Quality Control
Milwaukee, Wisconsin USA

J010541
SVOA-Tribromophenol-NEAT
Solvent / Lot: 05110PD
Prep: 10/1/2021 by VS
Exp: 3/30/2040
Location: voa freezer

Certificate of Analysis

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Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246
Description: Benzoic Acid
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16693
Certification Date: May 6, 2021
Expiration Date: April 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 4.383%

K3238

A2LA ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

A2LA ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018_us

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 25 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101443
Description: Aniline
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17696
Certification Date: December 14, 2021
Expiration Date: December 31, 2029

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 0.760%

K 3239

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

phenova Certified Reference Materials | A Phenomenex Company

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018_us

Certificate of Analysis

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Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	*Units*	*Certified Value* [1,4]
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	*Units*	*Suggested Acceptance Windows*	*Standard Deviation*
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4ºC.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4ºC. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4ºC.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID	CRM143-50G
Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.

Description

Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

***k*:** Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date	January 05, 2021
Version	0-152021

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 93462
Lot Number: 081021
Description: PAH Standard
30 components
Expiration Date: 081026
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

Solvent(s): Methylene chloride **Lot#** 105345

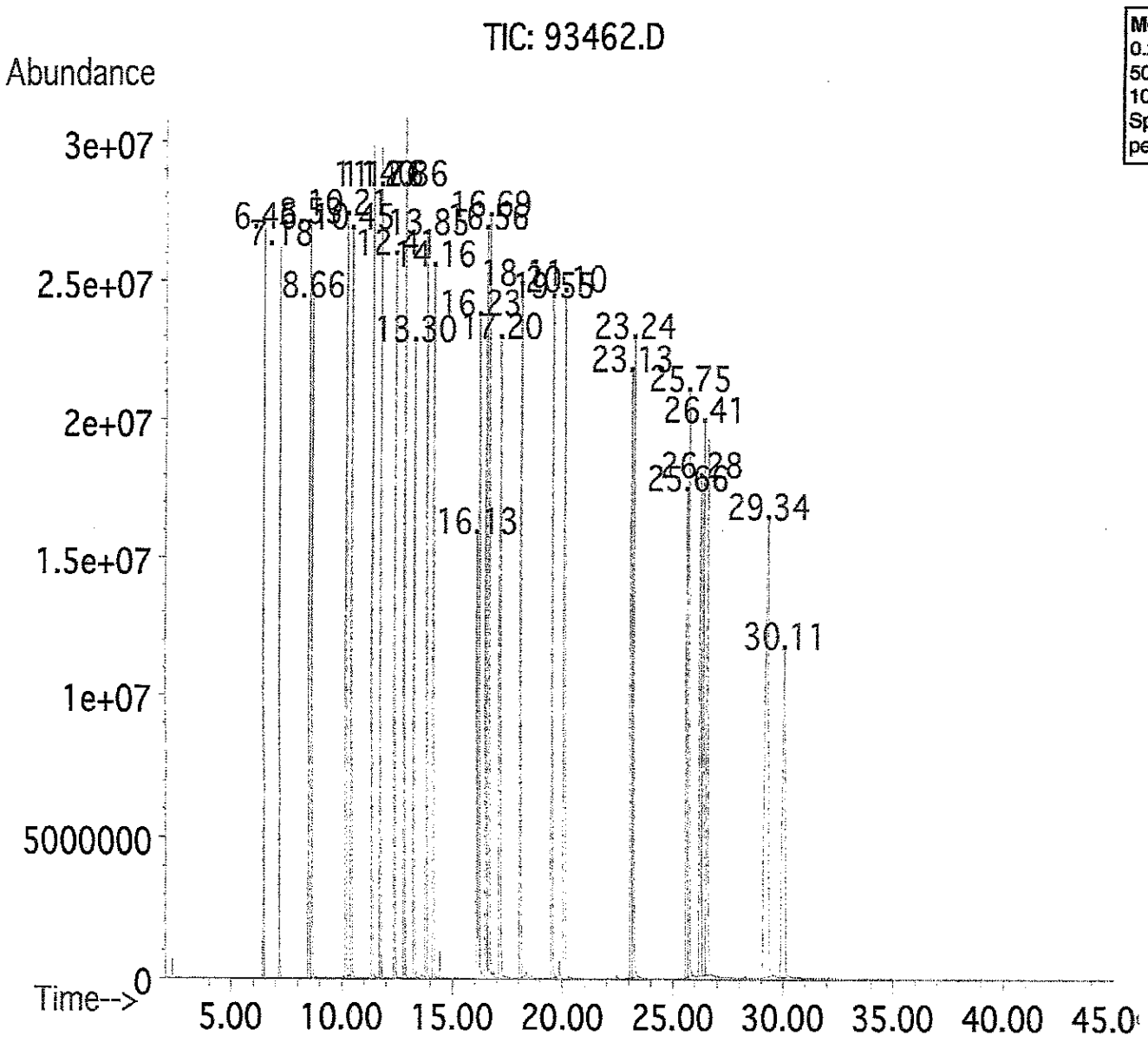
K3587

5E-05 Balance Uncertainty
Volume(s) shown below were combined and diluted to (mL): 20.0 0.001 Flask Uncertainty

Formulated By:	Prashant Chauhan	081021 DATE
Reviewed By:	Pedro L. Rentas	081021 DATE

Compound	Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Initial Conc.(ug/mL)	Final Conc.(ug/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Acenaphthene	10007	042420	0.50	10.00	0.042	2001.2	1000.4	9.4	83-32-9	N/A	ipr-rat 600mg/kg
2. Acenaphthylene	10007	042420	0.50	10.00	0.042	2000.2	999.9	9.4	208-96-8	N/A	N/A
3. Anthracene	10007	042420	0.50	10.00	0.042	2000.3	999.9	9.3	120-12-7	0.2mg/m3 (8H)	ipr-mus 430mg/kg
4. Benzo(a)anthracene	10007	042420	0.50	10.00	0.042	2001.3	1000.4	9.4	56-55-3	N/A	N/A
5. Benzo(a)pyrene	10007	042420	0.50	10.00	0.042	2000.0	999.8	9.3	50-32-8	0.2mg/m3 (8H)	scu-rat 50mg/kg
6. Benzo(b)fluoranthene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.3	205-99-2	N/A	N/A
7. Benzo(k)fluoranthene	10007	042420	0.50	10.00	0.042	2001.2	1000.4	9.4	207-08-9	N/A	N/A
8. Benzo(g,h,i)perylene	10007	042420	0.50	10.00	0.042	2000.0	999.8	9.3	191-24-2	N/A	N/A
9. Carbazole	10007	042420	0.50	10.00	0.042	2000.3	999.9	9.4	86-74-8	N/A	ipr-mus 200mg/kg
10. Chrysene	10007	042420	0.50	10.00	0.042	2000.8	1000.2	9.4	218-01-9	0.2mg/m3	N/A
11. Dibenzo(a,h)anthracene	10007	042420	0.50	10.00	0.042	2000.8	1000.2	9.4	53-70-3	0.2mg/m3	N/A
12. Fluoranthene	10007	042420	0.50	10.00	0.042	2000.3	999.9	9.4	206-44-0	N/A	orl-rat 2000mg/kg
13. Fluorene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.4	86-73-7	N/A	ipr-mus 2 g/kg
14. Indeno(1,2,3-cd)pyrene	10007	042420	0.50	10.00	0.042	2000.1	999.8	9.3	193-39-5	N/A	N/A
15. Naphthalene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.3	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
16. Phenanthrene	10007	042420	0.50	10.00	0.042	2000.9	1000.2	9.4	85-01-8	0.2mg/m3/8H	orl-mus 700mg/kg
17. Pyrene	10007	042420	0.50	10.00	0.042	2001.0	1000.3	9.4	129-00-0	0.2mg/m3/8H	orl-rat 2700mg/kg
18. Benzo(e)pyrene	94851	081021	0.50	10.00	0.042	2002.1	1000.8	9.4	192-97-2	N/A	N/A
19. Biphenyl	94851	081021	0.50	10.00	0.042	2001.5	1000.5	9.4	92-52-4	0.2 ppm(1mg/m3/8H)	orl-rat 2400mg/kg
20. Decalin (49% cis, 51% trans)	94851	081021	0.50	10.00	0.042	2002.5	1001.0	9.4	91-17-8	N/A	N/A
21. Dibenzofuran	94851	081021	0.50	10.00	0.042	2002.3	1000.9	9.4	132-64-9	N/A	N/A
22. Dibenzothiophene	94851	081021	0.50	10.00	0.042	2002.5	1001.0	9.4	132-65-0	N/A	orl-mus 470 mg/kg
23. 2,6-Dimethylnaphthalene	94851	081021	0.50	10.00	0.042	2001.9	1000.7	9.4	581-42-0	N/A	N/A
24. 1-Methylnaphthalene	94851	081021	0.50	10.00	0.042	2002.2	1000.9	9.4	90-12-0	N/A	orl-rat 1840mg/kg
25. 2-Methylnaphthalene	94851	081021	0.50	10.00	0.042	2000.6	1000.1	9.4	91-57-6	N/A	orl-rat 1630mg/kg
26. 1-Methylphenanthrene	94851	081021	0.50	10.00	0.042	2002.3	1000.9	13.2	832-69-9	N/A	N/A
27. Pentachlorophenol	94851	081021	0.50	10.00	0.042	3961.5	1980.3	18.6	87-86-5	0.5mg/m3/8H (skin)	orl-rat 27mg/kg
28. Perylene	94851	081021	0.50	10.00	0.042	2001.9	1000.7	9.4	198-55-0	N/A	N/A
29. Thianaphthene	94851	081021	0.50	10.00	0.042	2003.1	1001.3	9.4	95-15-8	N/A	N/A
30. 2,3,5-Trimethylnaphthalene	94851	081021	0.50	10.00	0.042	2003.1	1001.3	9.5	2245-38-7	N/A	N/A

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



Method GC8MSD-2Long: Column:SPB-5 (30m X 0.25mm ID X 0.25μm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (14min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Gina McLane.

Retention Time (min.)	
Decahydronaphthalene (Decalin) (isomer)	6.46
Decahydronaphthalene (Decalin) (isomer)	7.18
Naphthalene	8.53
Thianaphthene	8.66
2-Methylnaphthalene	10.21
1-Methylnaphthalene	10.45
Biphenyl	11.4
2,6-Dimethylnaphthalene	11.76
Acenaphthylene	12.41
Acenaphthene	12.86
Dibenzofuran	13.3
2,3,5-Trimethylnaphthalene	13.85
Fluorene	14.16
Pentachlorophenol	16.13
Dibenzothiophene	16.23
Phenanthrene	16.56
Anthracene	16.69
Carbazole	17.2
1-Methylphenanthrene	18.11
Fluoranthene	19.55
Pyrene	20.1
Benzo(a)anthracene	23.13
Chrysene	23.24
Benzo(b)fluoranthene	25.66
Benzo(k)fluoranthene	25.75
Perylene	26.28
Benzo(a)pyrene	26.41
Benzo(e)pyrene	26.61
Indeno(1,2,3-cd)pyrene	29.34
Dibenzo(a,h)anthracene	29.34
Benzo(g,h,i)perylene	30.11

Certificate of Analysis

Phenova Certified Reference Materials are sold by Phenomenex.
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Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101291	**Lot Number:**	CL11000
Description:	GC/MS Tuning Mix	**Certification Date:**	May 9, 2014
Storage:	4 °C	**Expiration Date:**	December 31, 2023
Provided As:	1 mL in 2 mL Ampoule in Methylene chloride	**Revision Date:**	August 5, 2015

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

K003891
GC/MS Tune solution-1000ug/ml
Solvent / Lot: CL11000
Prep: 4/22/2022 by VS
Exp: 12/31/2023
Location:

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Certificate No. 2427.03

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Reference Materials Producer
Cert #2495.01

Certificate of Analysis

Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics**® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Mora

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory , please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i, where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Accredited to 17025 & Guide 34 ISO Certified to 9001

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Reference Materials Producer
Cert #2495.01

ECS

Certificate of Analysis

ilac-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

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Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
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2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
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Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
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K004542

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

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Date of Certification: 1-26-2021 Certifying Officer: Shannon Nave

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

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- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i where $u_c = \sqrt{\sum u_i^2}$

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Accredited to 17025 & Guide 34 ISO Certified to 9001

Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-104N-1 **Lot Issue Date:** 02-Jul-2021

Lot Number: 0006620643 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
aniline	000062-53-3	RM12853	2005 ± 10 µg/mL
benzyl alcohol	000100-51-6	RM10547	2004 ± 10 µg/mL
4-chloroaniline	000106-47-8	RM01886	2002 ± 10 µg/mL
dibenzofuran	000132-64-9	RM02077	2002 ± 10 µg/mL
2-methylnaphthalene	000091-57-6	RM01258	2006 ± 10 µg/mL
2-nitroaniline	000088-74-4	RM02402	2003 ± 10 µg/mL
3-nitroaniline	000099-09-2	RM02424	2003 ± 10 µg/mL
4-nitroaniline	000100-01-6	RM02425	2003 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

K004544
toxic sub mix#2
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

05/11/22

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0181243

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

05/11/22

K004545
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO175316
Prep: 5/11/2022 by JZ
Exp: 10/20/2025
Location:

Elution Order	Compound	Gr (weig					
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ2508) **Purity** 99%	1,50		+/- 53.3632	µg/mL	Stressed	
2	Phenol-d6 **CAS #** 13127-88-3 (Lot PR-31262) **Purity** 99%	1,506.0	µg/mL	+/- 8.9452 +/- 43.9882 +/- 53.3632	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,510.0	µg/mL	+/- 8.9689 +/- 44.1050 +/- 53.5049	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32542/022621DB1 **Purity** 99%	1,004.0	µg/mL	+/- 5.9635 +/- 29.3255 +/- 35.5754	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,008.0	µg/mL	+/- 5.9872 +/- 29.4423 +/- 35.7172	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 19169) **Purity** 99%	1,006.0	µg/mL	+/- 5.9753 +/- 29.3839 +/- 35.6463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,506.0	µg/mL	+/- 8.9452 +/- 43.9882 +/- 53.3632	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101246
Description: Benzoic Acid
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17953
Certification Date: January 31, 2022
Expiration Date: January 31, 2032

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603
Benzoic Acid @2000ug/ml
Solvent / Lot: N/A
Prep: 5/13/2022 by JZ
Exp: 1/31/2032
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

phenova Certified Reference Materials | A Phenomenex Company

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018 us

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17662
Certification Date: December 2, 2021
Expiration Date: November 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604
Benzidines std @2000ug/ml
Solvent / Lot: MeCl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
Certicate No. 2427.03

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 33913 **Lot No.:** A0183500

Description : SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 29, 2028 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Methylnaphthalene-d10	2,003.5 µg/mL	+/- 11.7578 µg/mL	Gravimetric
	CAS # 7297-45-2 (Lot EF-135)		+/- 90.2539 µg/mL	Unstressed
	Purity 96%		+/- 100.1449 µg/mL	Stressed
2	Fluoranthene-d10	2,006.0 µg/mL	+/- 11.7723 µg/mL	Gravimetric
	CAS # 93951-69-0 (Lot PR-20668)		+/- 90.3656 µg/mL	Unstressed
	Purity 99%		+/- 100.2689 µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

K004605
SOMO 1.0 SIM DMC
Solvent / Lot: A0183500
Prep: 5/14/2022 by VS
Exp: 2/29/2028
Location:

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

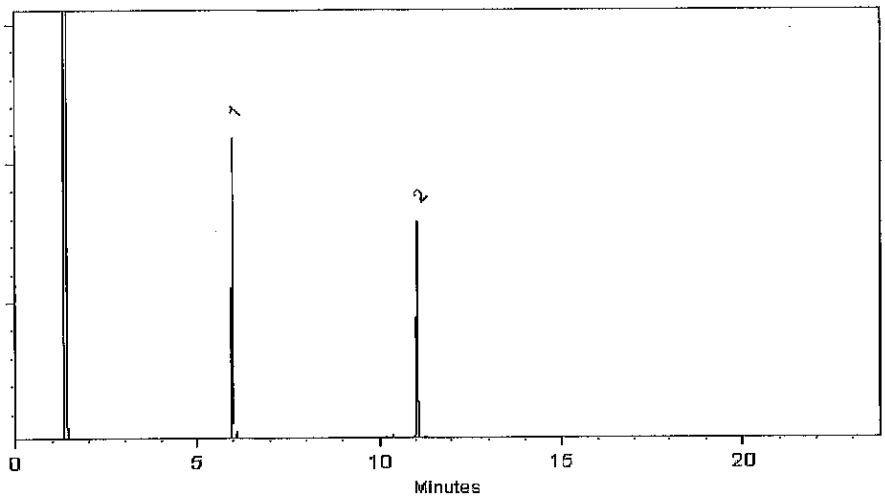
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cathleen Soltis - Mix Technician

Date Mixed: 29-Mar-2022 **Balance:** B345965662

Ciara Windle - Operations Technician I

Date Passed: 01-Apr-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

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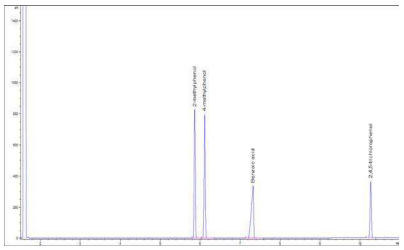
Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

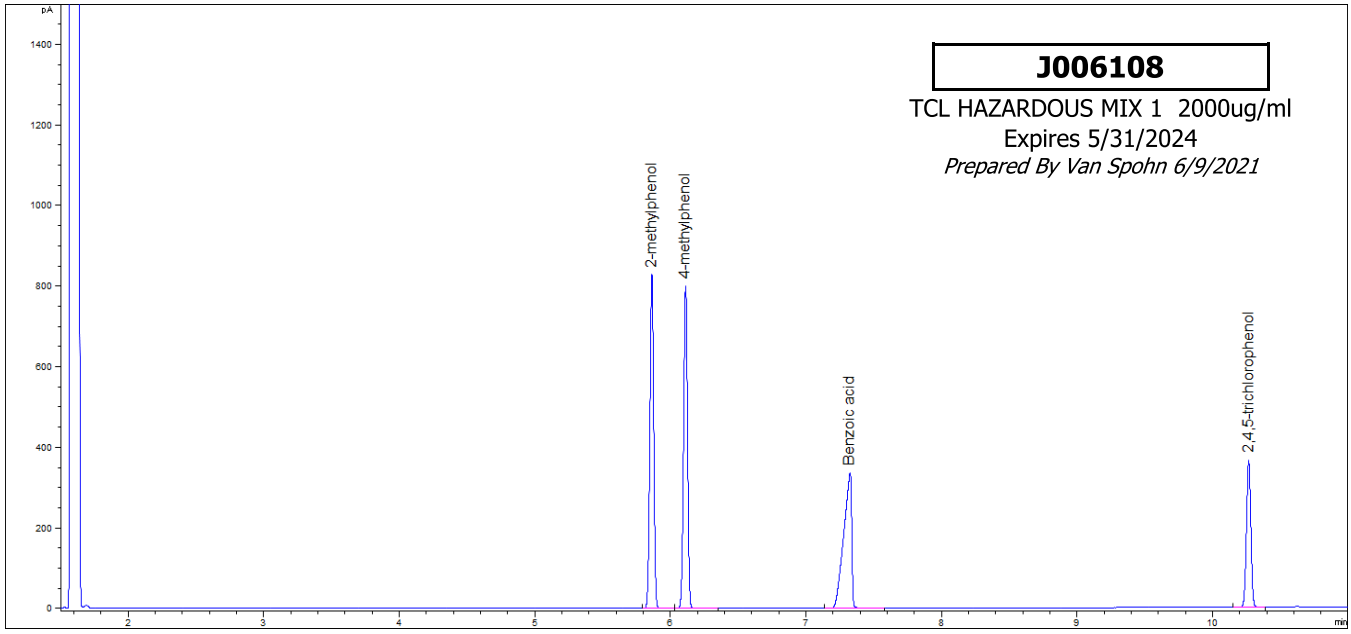
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Elution order*	*Raw Material Lot*
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:
Analytical Method Parameters:
Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
Carrier Gas: H2, Flow: 4.5 mL/min
Inlet Temperature: 170 °C, Injection Volume: 1 µL
Injection Mode: Split, Split Ratio: 20:1

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom}\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

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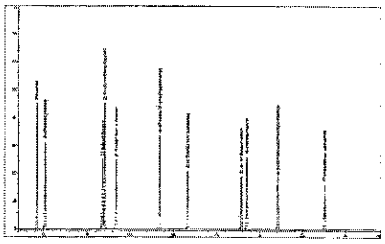
Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



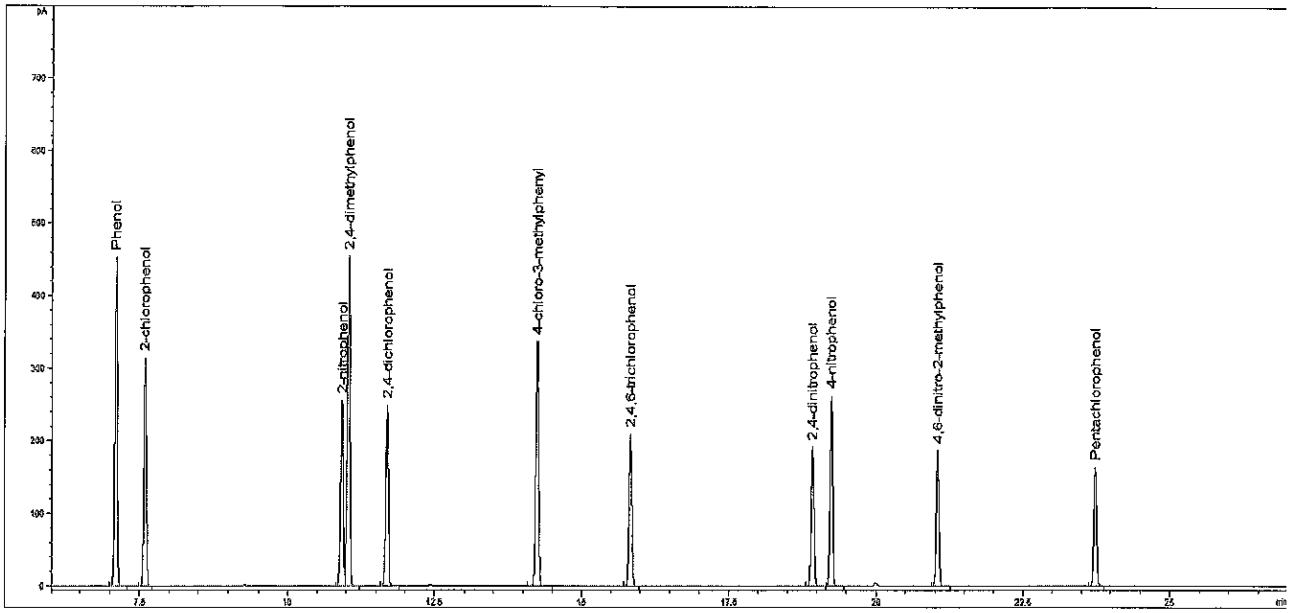
Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597
TCL Phenols Mix 2000ug/ml
Solvent / Lot: LRAD0139
Prep: 12/30/2021 by VS
Exp: 7/31/2024
Location:

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.



METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.5 mL/min
Inlet Temperature: 200 °C Injection Volume: 1.0 µL
Injection Mode: 25:1
Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)
Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorphenol
6	14.242	4-chloro-3-m3thylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{hom\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18355
Certification Date: July 25, 2022
Expiration Date: August 31, 2023

K007995
SVOA-8270 LCS MIX 1000ug/ml
Solvent / Lot: N/A
Prep: 8/29/2022 by JZ
Exp: 8/31/2023
Location: FREEZER 44

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

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Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

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Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

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Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroiospropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Supelco®

www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

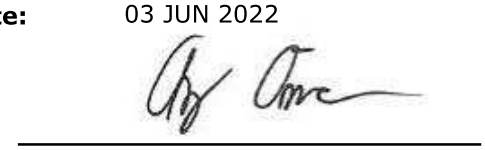
Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 03 JUN 2022



Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

Supelco®

www.sigmaaldrich.com

Certificate of Analysis - Analytical Standard

PAHs in Soil

Product no.: SQC017-40G
Lot no.: LRAD3953
Expiry Date: October 2025
Manufacturing Date: October 2022
Storage: REFRIGERATE
Solvent/Matrix: SOIL
Certificate version: LRAD3953.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Analyte	*Units*	*Certified Value*
Naphthalene	µg/Kg	418 ± 39
Acenaphthene	µg/Kg	478 ± 51
Acenaphthylene	µg/Kg	557 ± 63
Anthracene	µg/Kg	393 ± 23
Benzo(a)anthracene	µg/Kg	110 ± 11
Benzo(a)pyrene	µg/Kg	159 ± 23
Benzo(b)fluoranthene	µg/Kg	318 ± 49
Benzo(g,h,i)perylene	µg/Kg	103 ± 18
Benzo(k)fluoranthene	µg/Kg	95.1 ± 16.0
Chrysene	µg/Kg	231 ± 24
Dibenz(a,h) anthracene	µg/Kg	220 ± 16
Fluoranthene	µg/Kg	303 ± 24
Fluorene	µg/Kg	340 ± 27
Indeno(1,2,3-cd) pyrene	µg/Kg	119 ± 14
Phenanthrene	µg/Kg	510 ± 30
Pyrene	µg/Kg	350 ± 25

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Informational Values:

Analyte	*Units*	*Suggested Acceptance Windows*	*Standard Deviation*
Acenaphthene	µg/Kg	192 to 1041	141
Acenaphthylene	µg/Kg	13.1 to 1101	181
Anthracene	µg/Kg	166 to 619	75.4
Benzo(a)anthracene	µg/Kg	28.4 to 191	27.2
Benzo(a)pyrene	µg/Kg	0.00 to 327	56.2
Benzo(b)fluoranthene	µg/Kg	0.00 to 672	118
Benzo(g,h,i)perylene	µg/Kg	35.9 to 170	36.0
Benzo(k)fluoranthene	µg/Kg	0.00 to 215	39.9
Chrysene	µg/Kg	100.00 to 361	43.5
Dibenz(a,h) anthracene	µg/Kg	98.0 to 341	40.5
Fluoranthene	µg/Kg	176 to 518	57.0
Fluorene	µg/Kg	128 to 644	85.9
Indeno(1,2,3-cd) pyrene	µg/Kg	52.6 to 185	22.0
Naphthalene	µg/Kg	31.3 to 910	146
Phenanthrene	µg/Kg	255 to 953	116
Pyrene	µg/Kg	184 to 654	78.2

Additional Information: DESCRIPTION

This product consist of a 4 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested show homogeneity.

Four samples have been provided for your convenience (multiple methods, multiple analysts, etc.)

The soil has been chemically stabilized with 1 mL of acetone to minimize degradation of the sample.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Note: Sample extracts and calibration solutions should be in the same solvent.

All values are based on a wet weight basis, do not correct for moisture.

Assume a 10g sample size for all calculations.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: Package of 4 units of 10 g in amber jar

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 24 OCT 2022

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD3953.01	24 OCT 2022	Original release date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1083

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-02 A	File ID:	23030116.D
Sampled:	01/12/23 08:38	Prepared:	01/31/23 13:36	Analyzed:	03/01/23 18:32
% Solids:	61.90	Preparation:	EPA 3546 (Microwave)	Initial/Final:	20.37 g Wet / 2.5 mL
Batch:	BLA0672	Sequence:	SLC0031	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9308*	*7.02*	*88.6*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.9308*	*7.50*	*94.6*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9308*	*4.79*	*60.4*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.9308*	*5.19*	*65.5*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230301.b/23030116.D
Data file 2: /20230301.b/B20230301.b/23030116.D
Method: \20230301.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23A0249-02
Client ID:
Injection Date: 01-MAR-2023 18:32
Report Date: 03/02/2023 13:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2			
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD		Compound/Flag
----			4.833	0.000	12034	0.00	0.83	---		alpha-BHC
----			5.335	0.029	32509	0.00	5.90	---		beta-BHC
----			----			0.00	0.00	---		delta-BHC
----			5.227	-0.000	10858	0.00	0.88	---		gamma-BHC (Lindane)
----			5.765	0.011	77703	0.00	6.98	---		Heptachlor
----			6.154	-0.002	30124	0.00	2.37	---		Aldrin
----			6.790	-0.021	457443	0.00	43.50	---		Heptachlor epoxide b
----			7.240	-0.014	33548	0.00	3.62	---		Endosulfan I
----			7.528	-0.019	147182	0.00	14.37	---		Dieldrin
----			7.334	-0.001	122341	0.00	13.03	---		4,4'-DDE
----			7.897	0.027	322856	0.00	55.38	---		Endrin
----			8.088	0.007	158254	0.00	26.48	---		Endosulfan II
----			7.939	-0.000	330581	0.00	58.29	---		4,4'-DDD
----			----			0.00	0.00	---		Endosulfan sulfate
----			8.266	0.010	549320	0.00	100.36	---		4,4'-DDT
----			----			0.00	0.00	---		Methoxychlor
----			9.215	0.016	164399	0.00	29.01	---		Endrin ketone
----			8.403	-0.007	64515	0.00	15.30	---		Endrin aldehyde
----			----			0.00	0.00	---		trans-Chlordane
----			7.180	-0.001	15629	0.00	1.52	---		cis-Chlordane
2.332	-0.016	29888	2.468	-0.027	72206	2.91	5.25	57.4*		Hexachlorobutadiene
----			----			0.00	0.00	---		Hexachlorobenzene
3.874	0.001	167502	4.197	-0.001	266604	24.17	26.20	8.1		Tetrachloro-m-xylene MN
9.440	0.000	123972	10.408	0.002	171478	35.42	37.84	6.6		Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

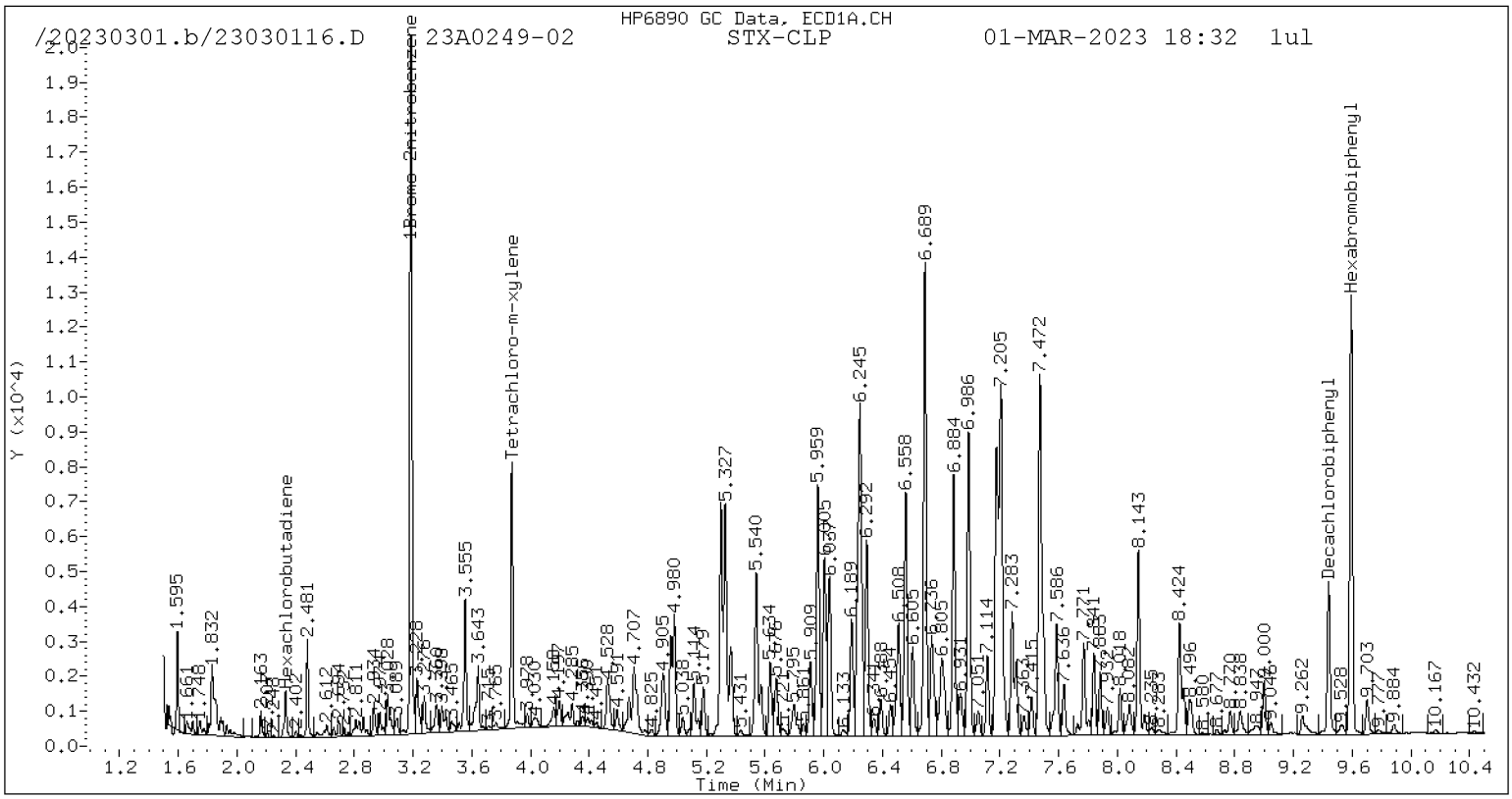
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	509594	-24.2
Hexabromobiphenyl	609723	345406	-43.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	722915	-28.2
Hexabromobiphenyl	769764	410034	-46.7

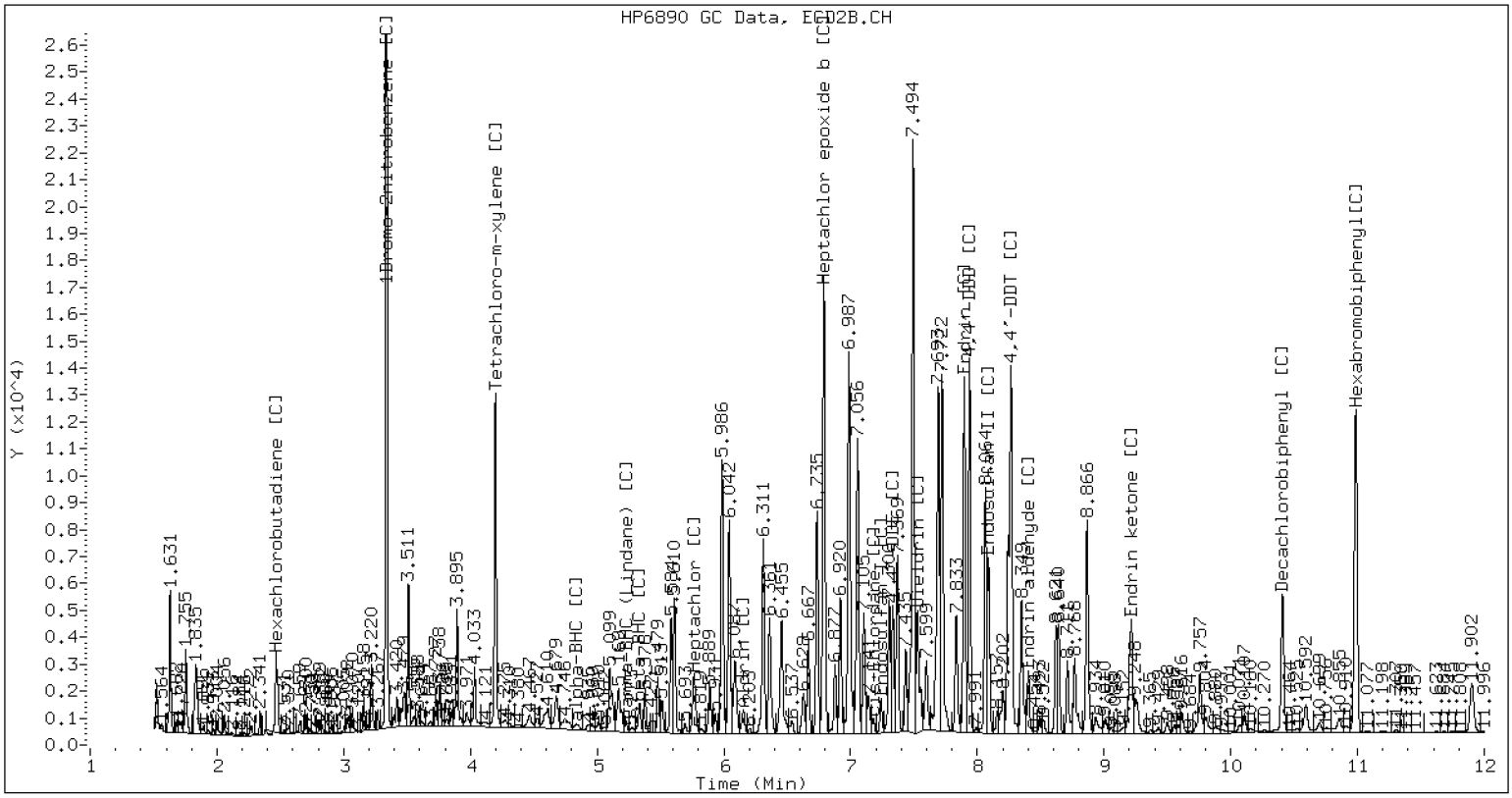
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

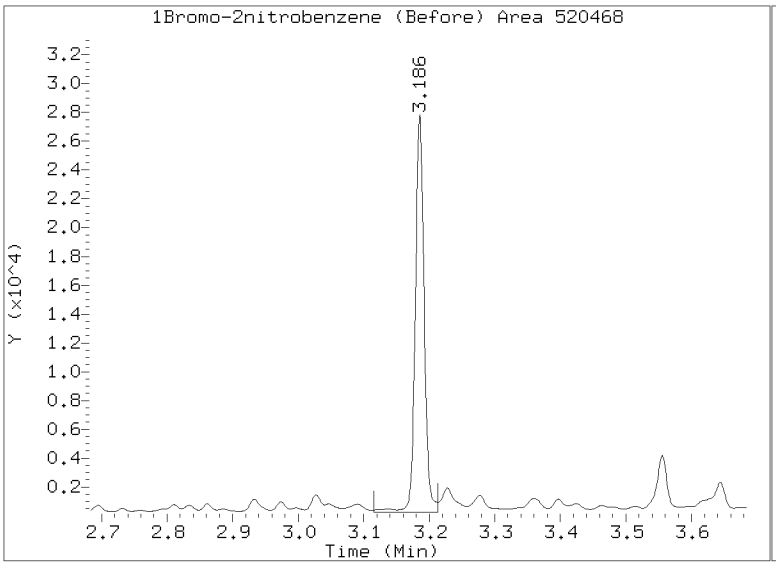
/20230301.b/B20230301.b/23030116.D 23A0249-02 CLP2

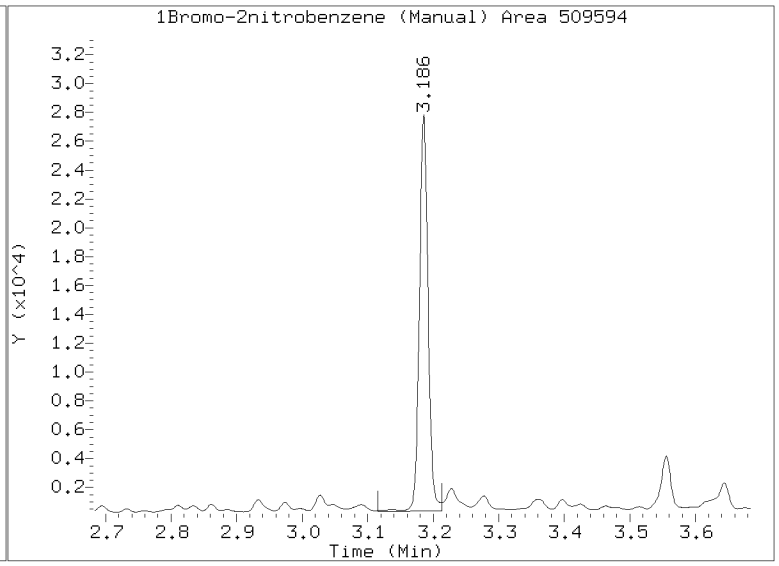


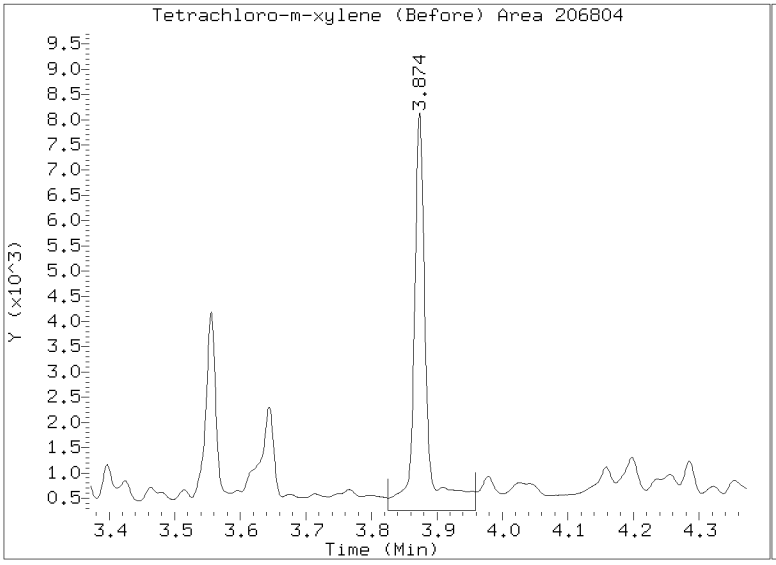
CLP-2 Manual Integration: YES

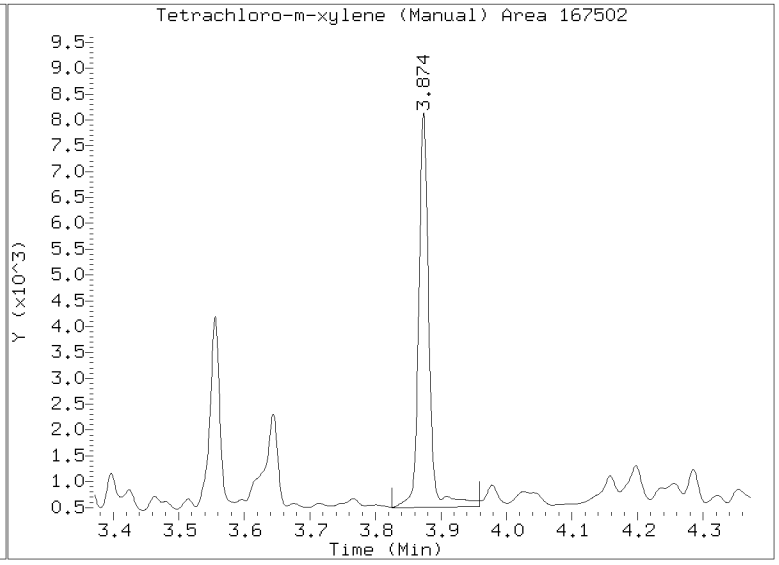
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230301.b/23030116.D
Injection Date: 01-MAR-2023 18:32
Lab ID:23A0249-02 Client ID:
Report Date: 03/02/2023 13:14









Manual Peak Adjustment Report, CLP-2

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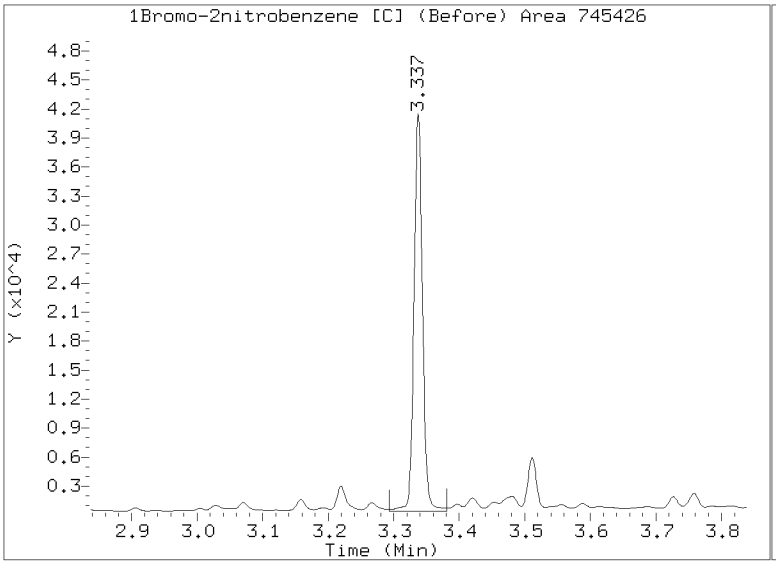

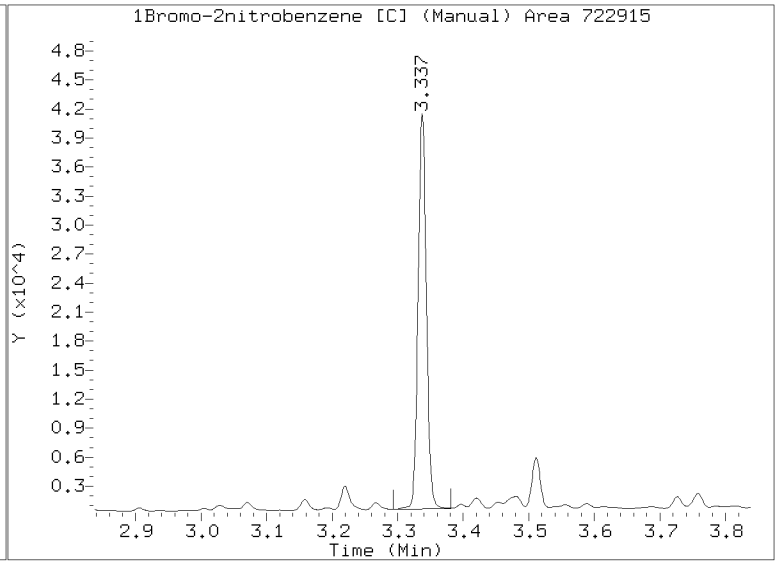

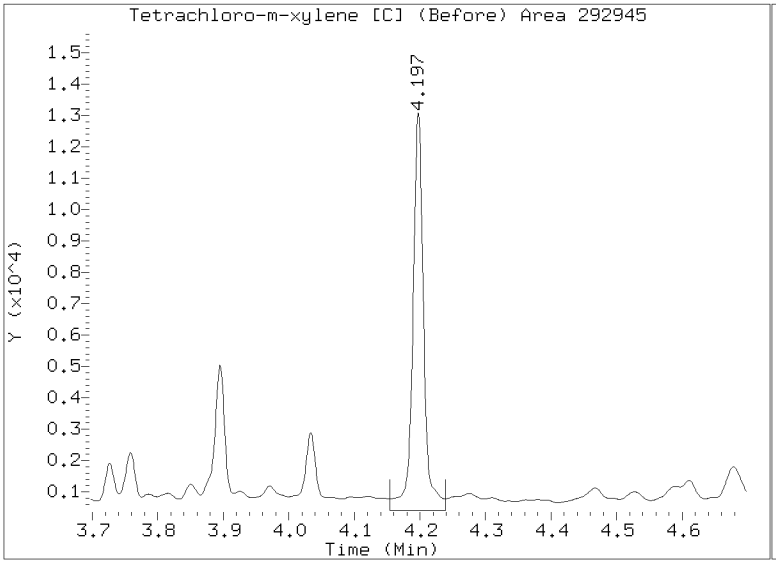

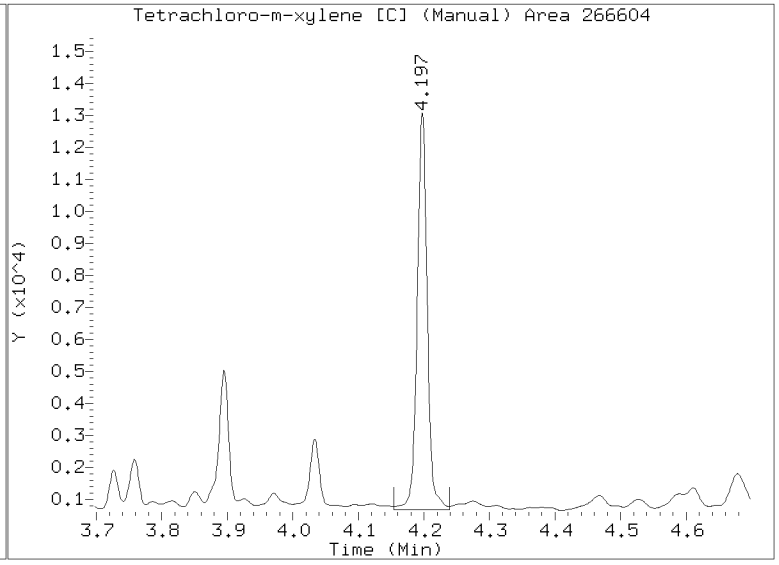

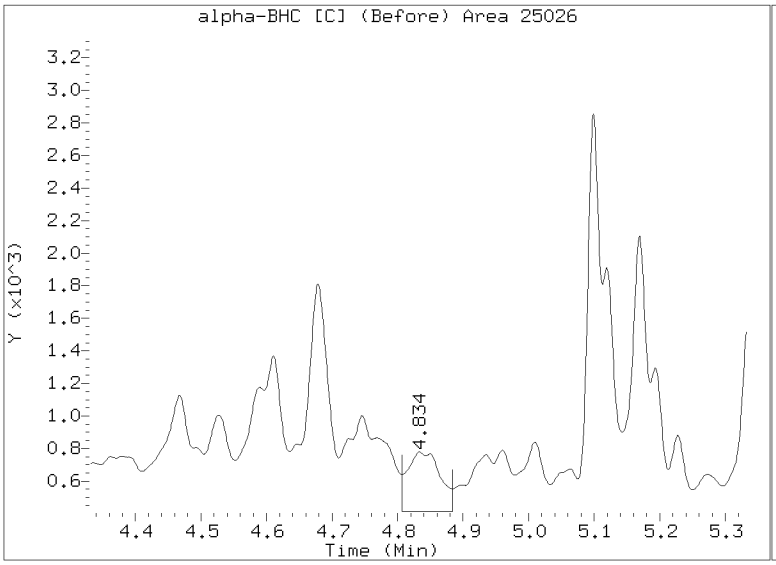

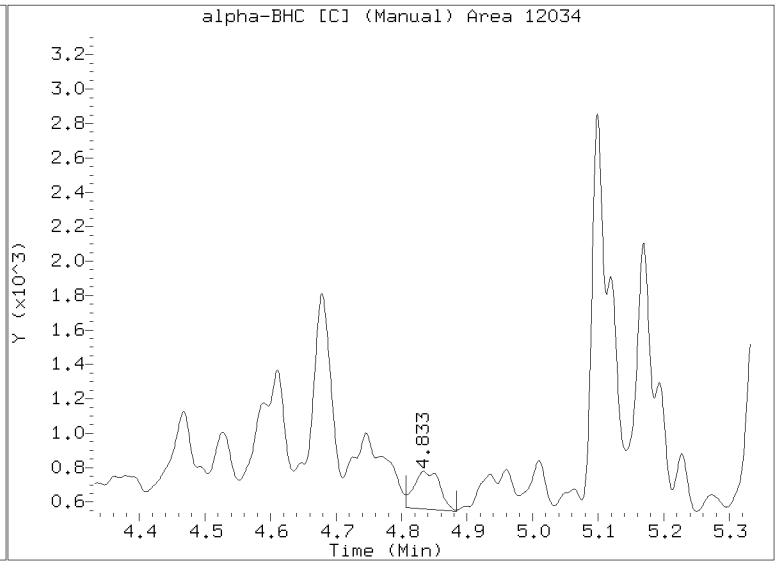

Manual Peak Adjustment Report, CLP-2

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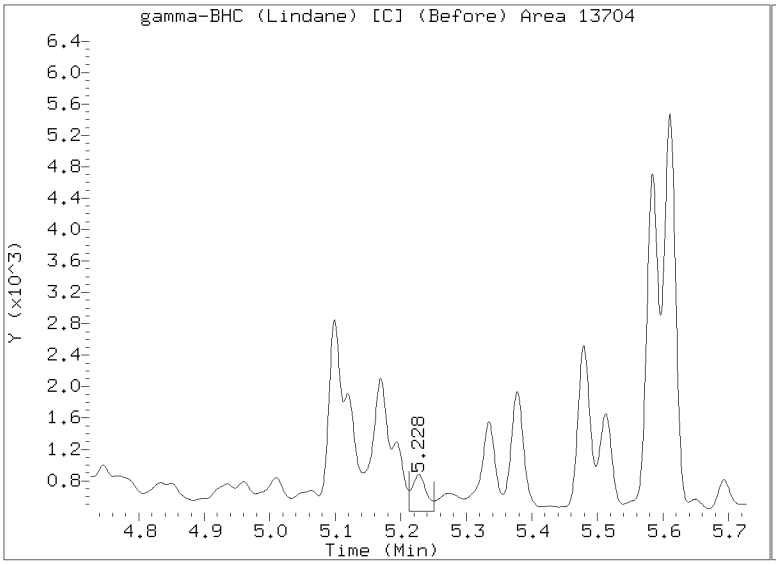

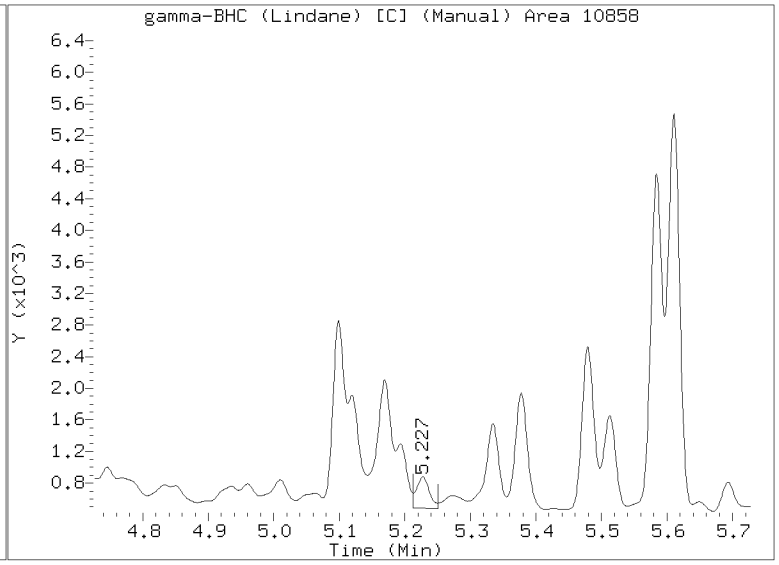

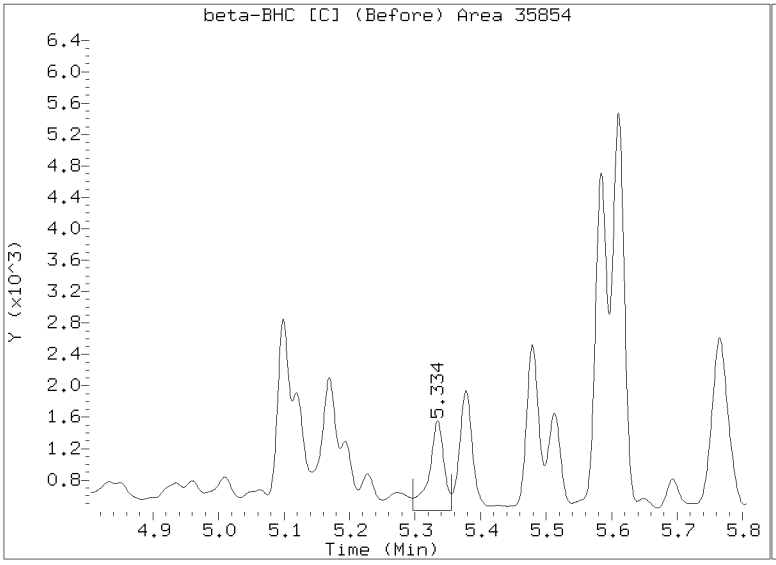

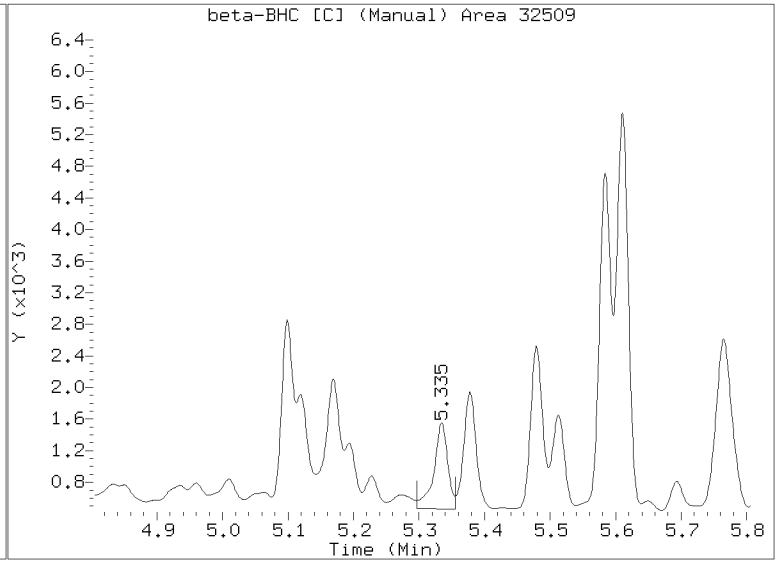

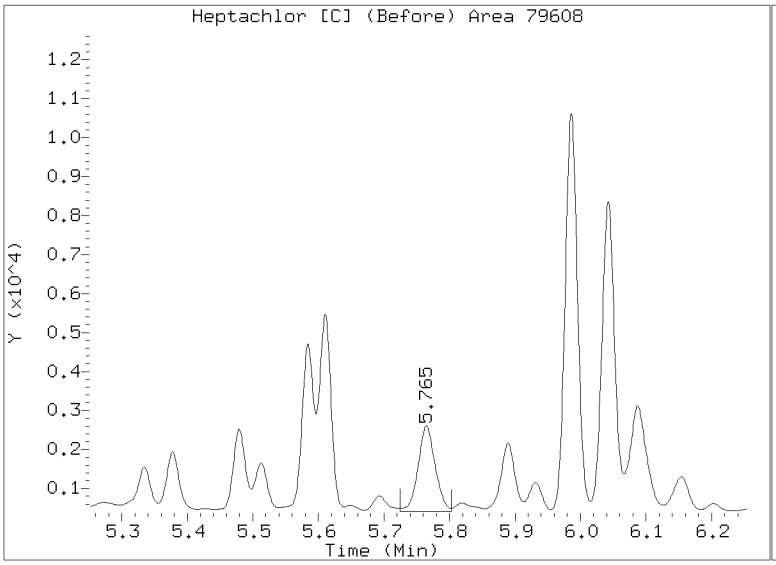

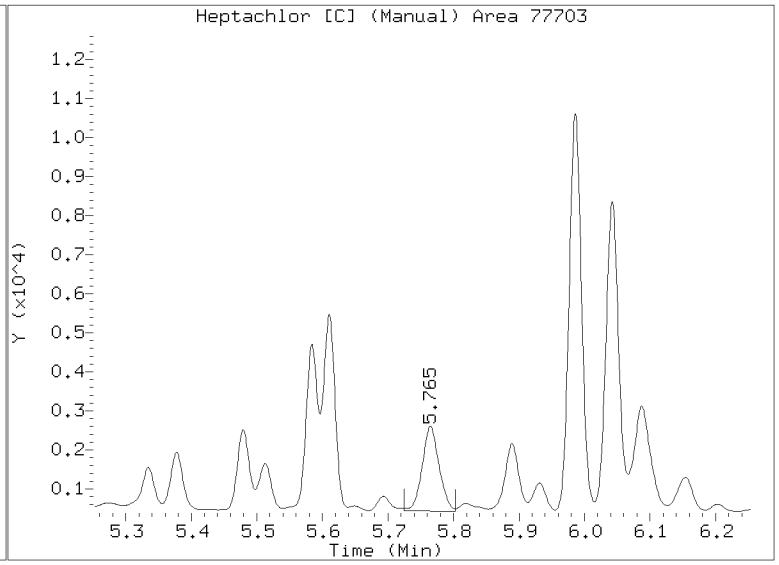

Manual Peak Adjustment Report, CLP-2

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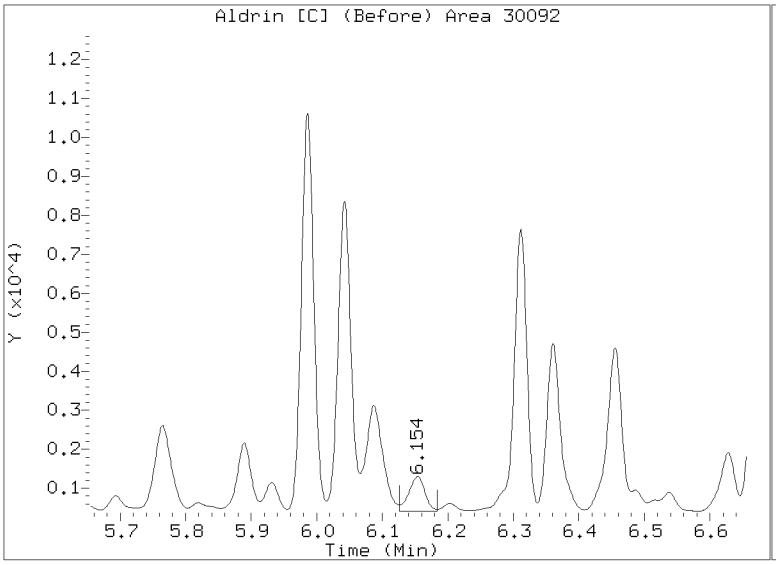
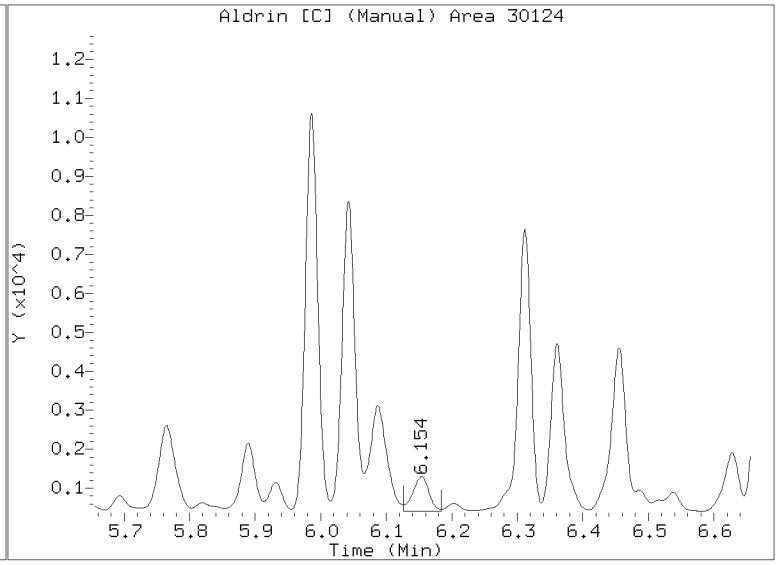
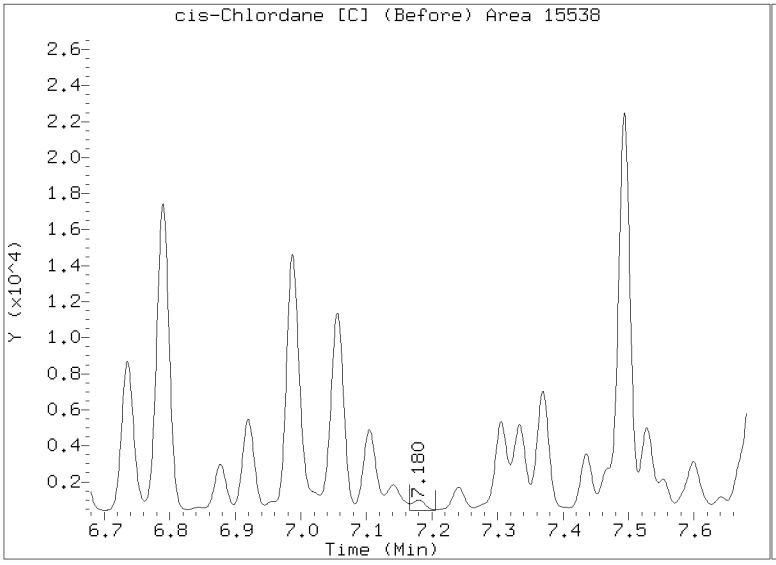
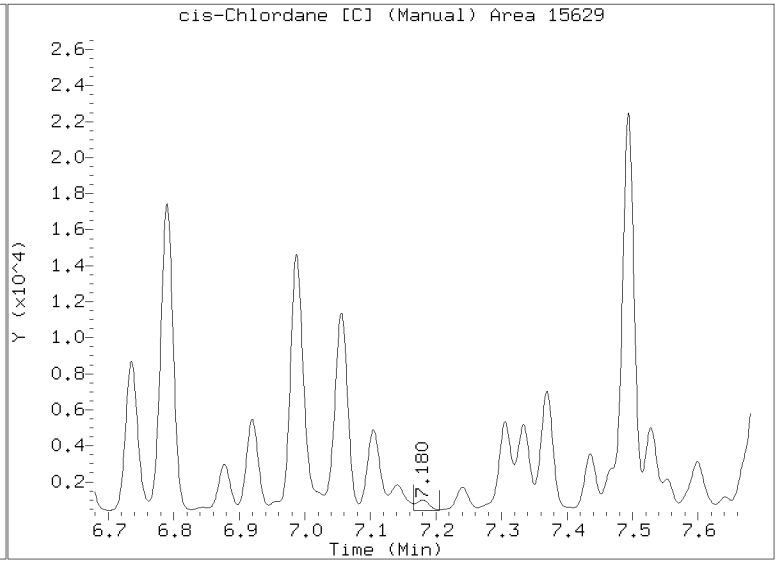
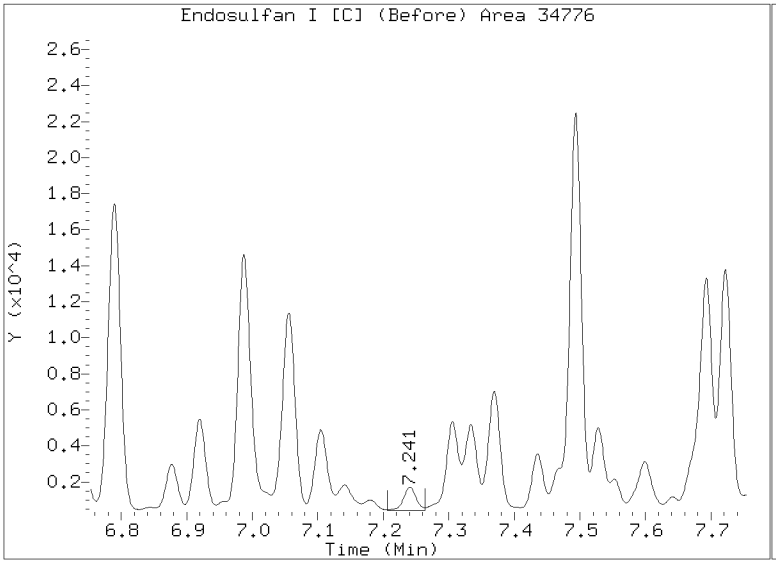
Lab ID:23A0249-02 Client ID:

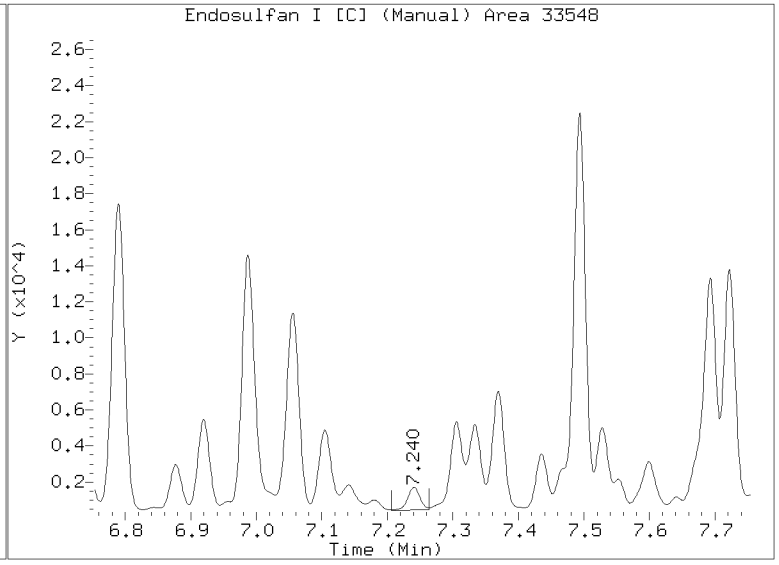












Manual Peak Adjustment Report, CLP-2

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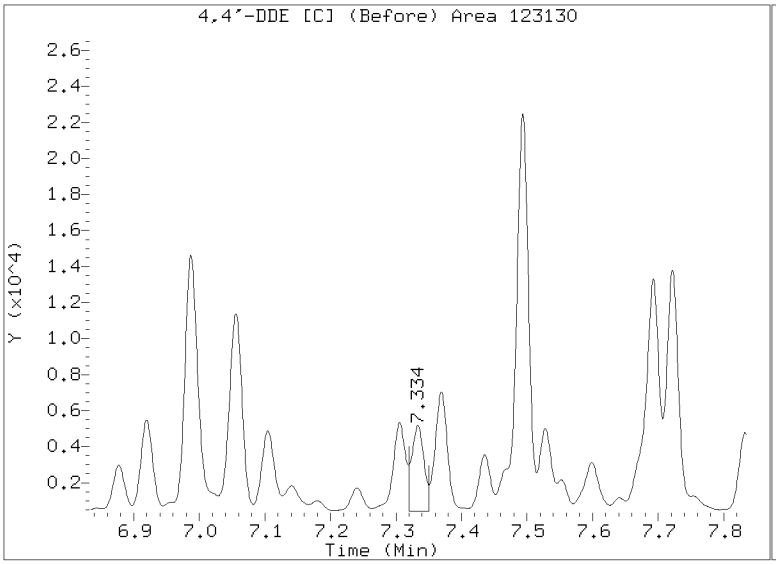
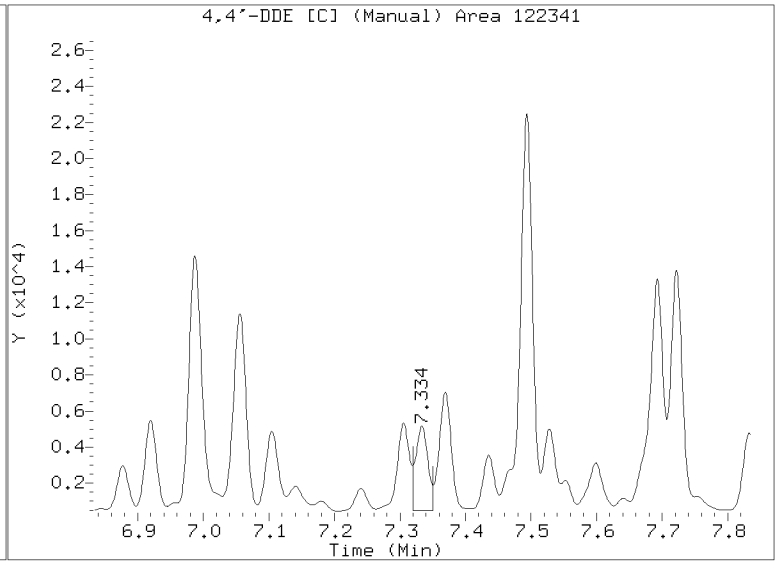
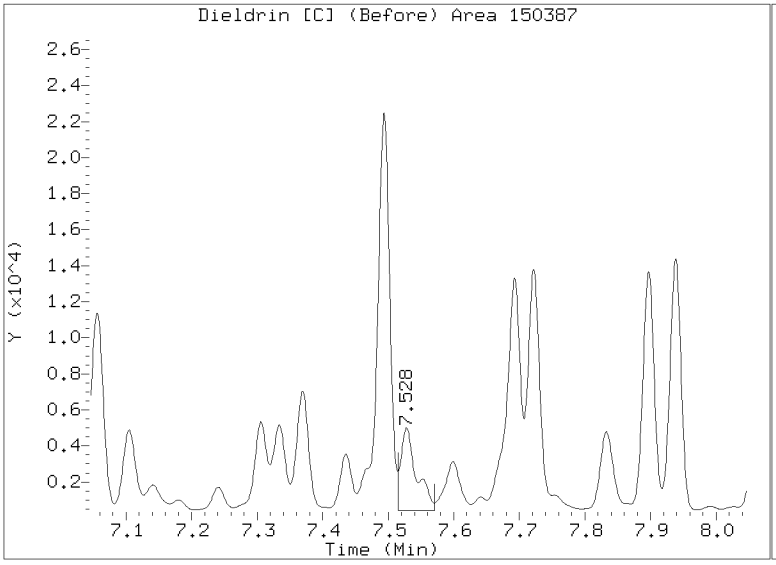
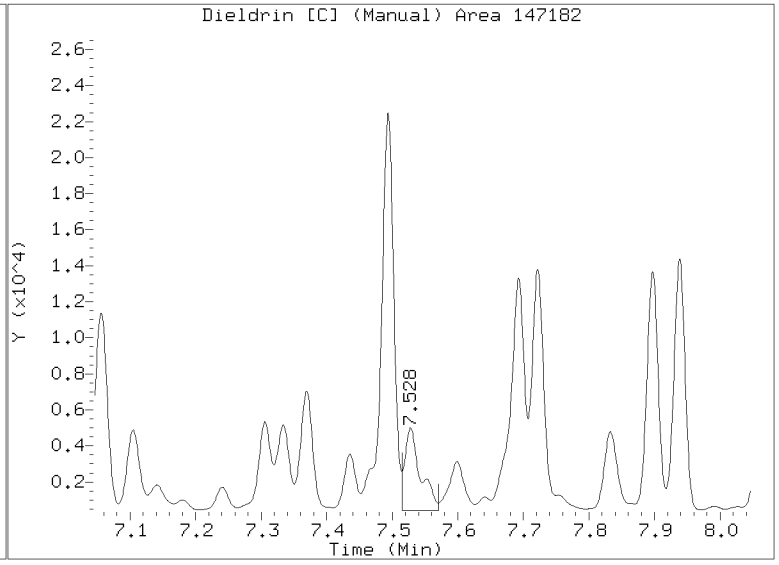
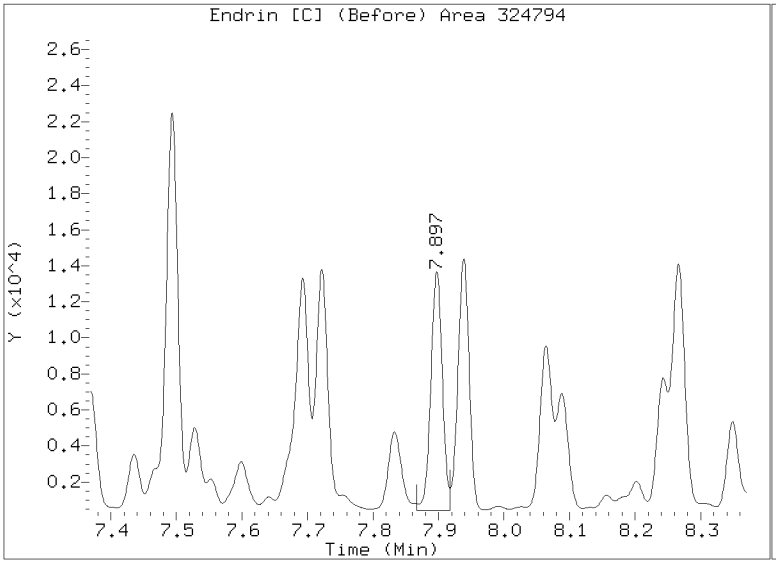
Injection Date: 01-MAR-2023 18:32
Lab ID:23A0249-02 Client ID:

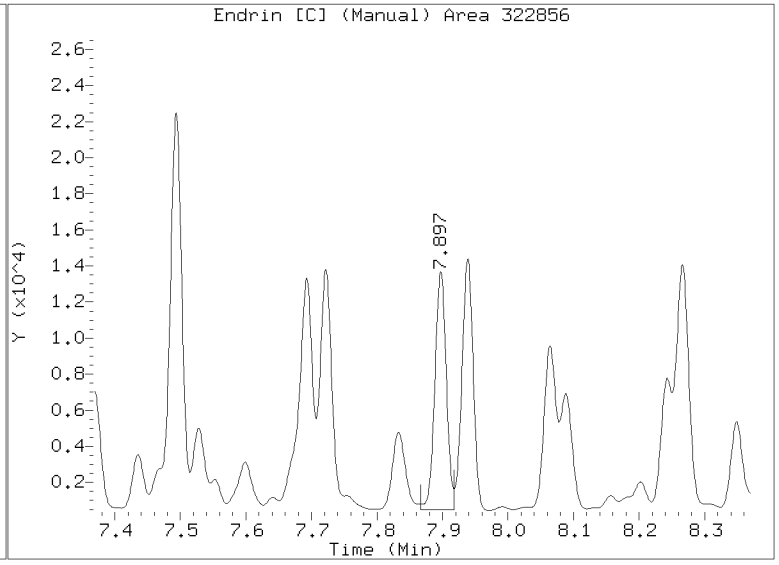












Manual Peak Adjustment Report, CLP-2

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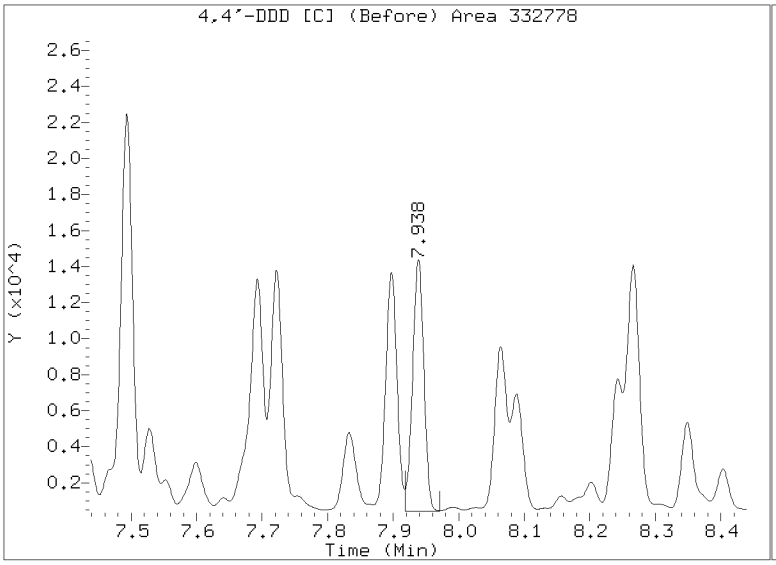
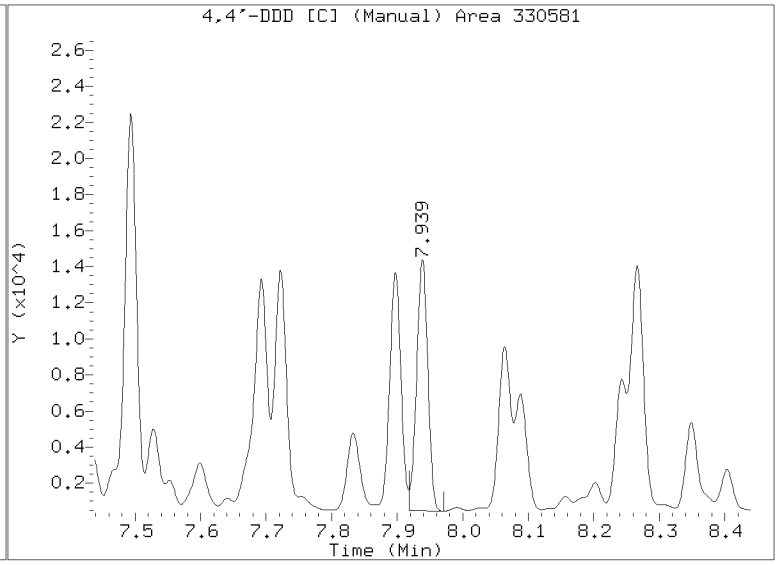
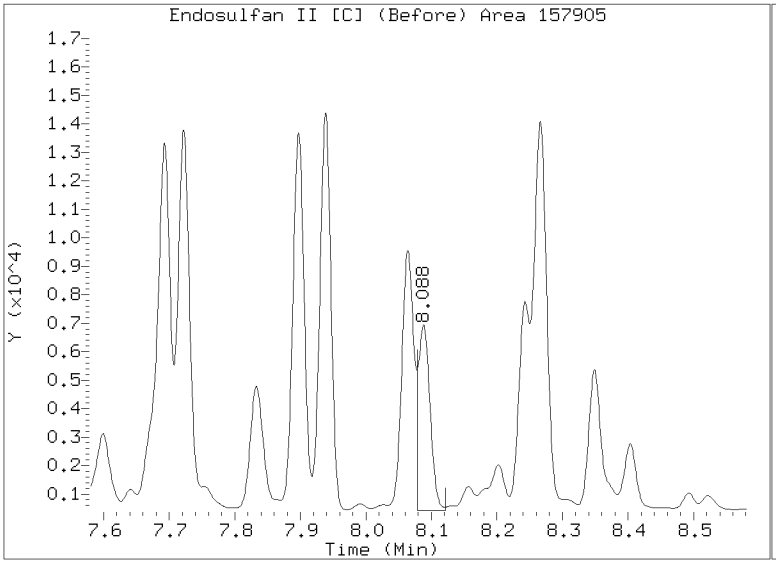
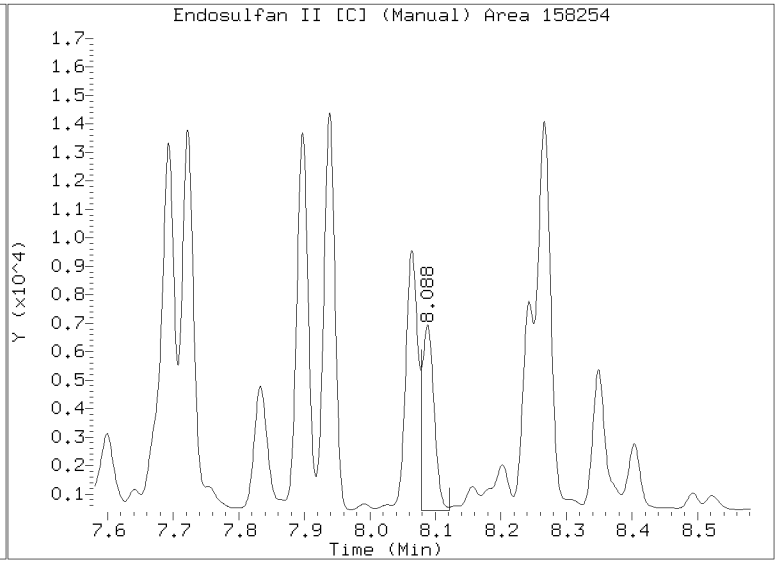
Injection Date: 01-MAR-2023 18:32
Lab ID:23A0249-02 Client ID:









Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1018

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-03 A	File ID:	23030117.D
Sampled:	01/12/23 10:21	Prepared:	01/31/23 13:36	Analyzed:	03/01/23 18:50
% Solids:	49.91	Preparation:	EPA 3546 (Microwave)	Initial/Final:	25.95 g Wet / 2.5 mL
Batch:	BLA0672	Sequence:	SLC0031	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.48	0.14	0.48	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.7210*	*6.80*	*88.1*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.7210*	*8.18*	*106*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.7210*	*2.68*	*34.7*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.7210*	*5.20*	*67.3*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230301.b/23030117.D
Data file 2: /20230301.b/B20230301.b/23030117.D
Method: \20230301.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23A0249-03
Client ID:
Injection Date: 01-MAR-2023 18:50
Report Date: 03/02/2023 13:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.390	-0.004	42314	4.831	-0.002	17640	2.43	1.22	66.1*	alpha-BHC MN
----			5.315	0.009	30453	0.00	5.55	---	beta-BHC
4.981	0.013	102040	----			7.16	0.00	---	delta-BHC
4.722	0.021	153339	5.229	0.002	14854	10.14	1.21	157.3*	gamma-BHC (Lindane) MN
5.178	-0.017	44847	5.764	0.010	57430	3.33	5.17	43.3*	Heptachlor MN
5.540	0.017	78815	----			5.23	0.00	---	Aldrin
6.190	-0.012	29005	6.790	-0.020	189739	2.22	18.11	156.3*	Heptachlor epoxide b N
----			7.242	-0.012	9947	0.00	1.08	---	Endosulfan I
6.885	-0.019	88774	----			6.89	0.00	---	Dieldrin
6.558	-0.005	99172	----			8.29	0.00	---	4,4'-DDE
7.177	0.023	201755	7.897	0.028	215838	48.88	36.76	28.3	Endrin N
7.417	0.027	19845	8.064	-0.017	212372	5.34	35.29	147.4*	Endosulfan II N
----			----			0.00	0.00	---	4,4'-DDD
8.235	-0.017	8572	----			2.43	0.00	---	Endosulfan sulfate
7.473	-0.029	216843	8.267	0.010	339089	57.70	61.52	6.4	4,4'-DDT N
----			8.866	-0.028	179748	0.00	73.69	---	Methoxychlor
----			9.213	0.014	217772	0.00	38.15	---	Endrin ketone
7.842	0.024	48940	8.402	-0.008	59242	16.51	13.96	16.8	Endrin aldehyde N
6.342	-0.001	29877	----			2.25	0.00	---	trans-Chlordane
6.508	0.018	71285	7.180	-0.000	14849	5.35	1.45	114.6*	cis-Chlordane N
2.348	-0.000	23469	2.493	-0.002	15869	1.28	1.16	10.4	Hexachlorobutadiene
4.244	0.011	13550	----			0.84	0.00	---	Hexachlorobenzene
3.873	0.000	170998	4.197	-0.001	272975	13.89	26.92	63.9*	Tetrachloro-m-xylene MN
9.440	0.000	112469	10.408	0.002	193433	35.25	42.39	18.4	Decachlorobiphenyl M

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	905555	34.7
Hexabromobiphenyl	609723	314860	-48.4

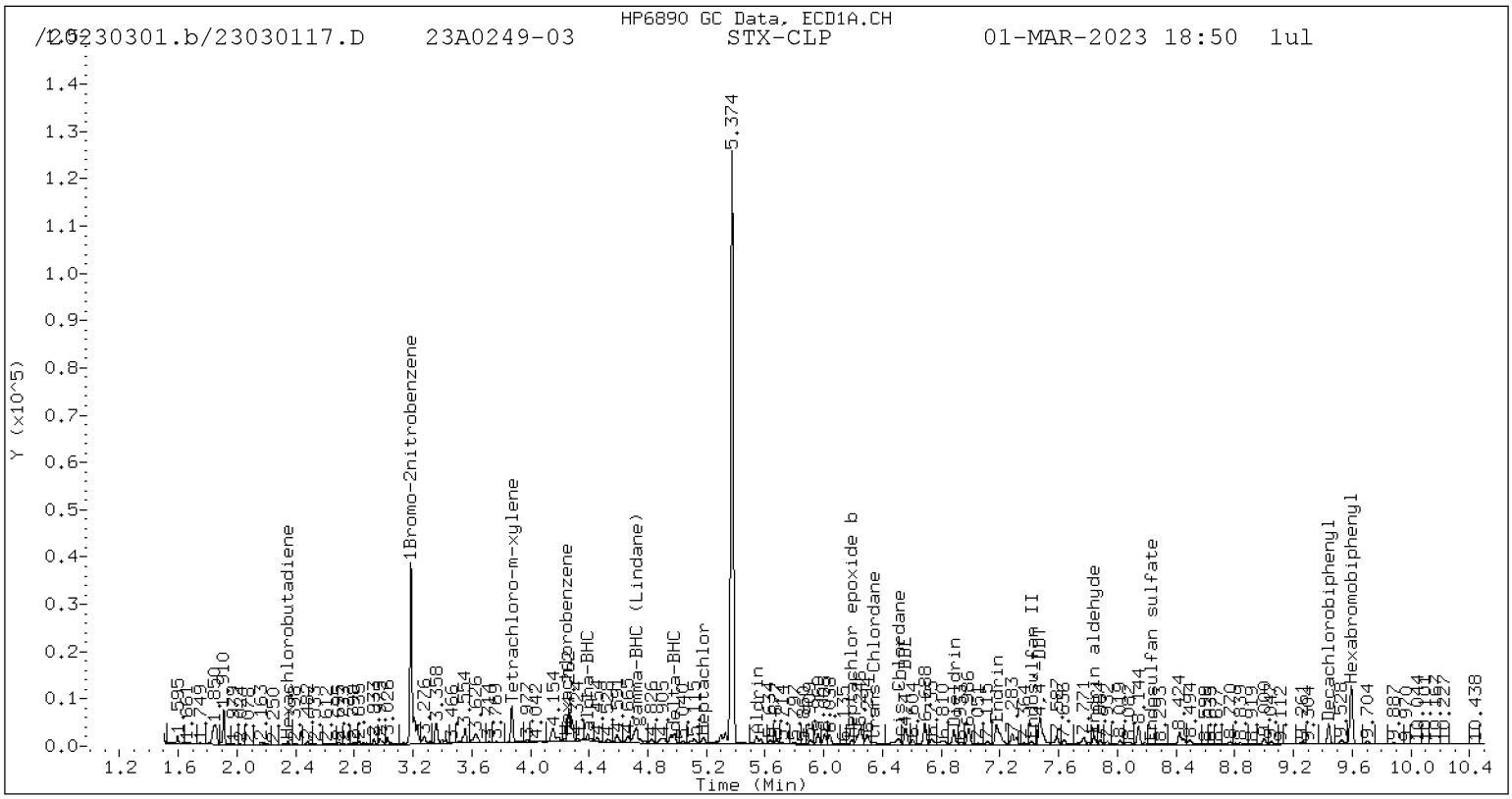
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	720342	-28.4
Hexabromobiphenyl	769764	412914	-46.4

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

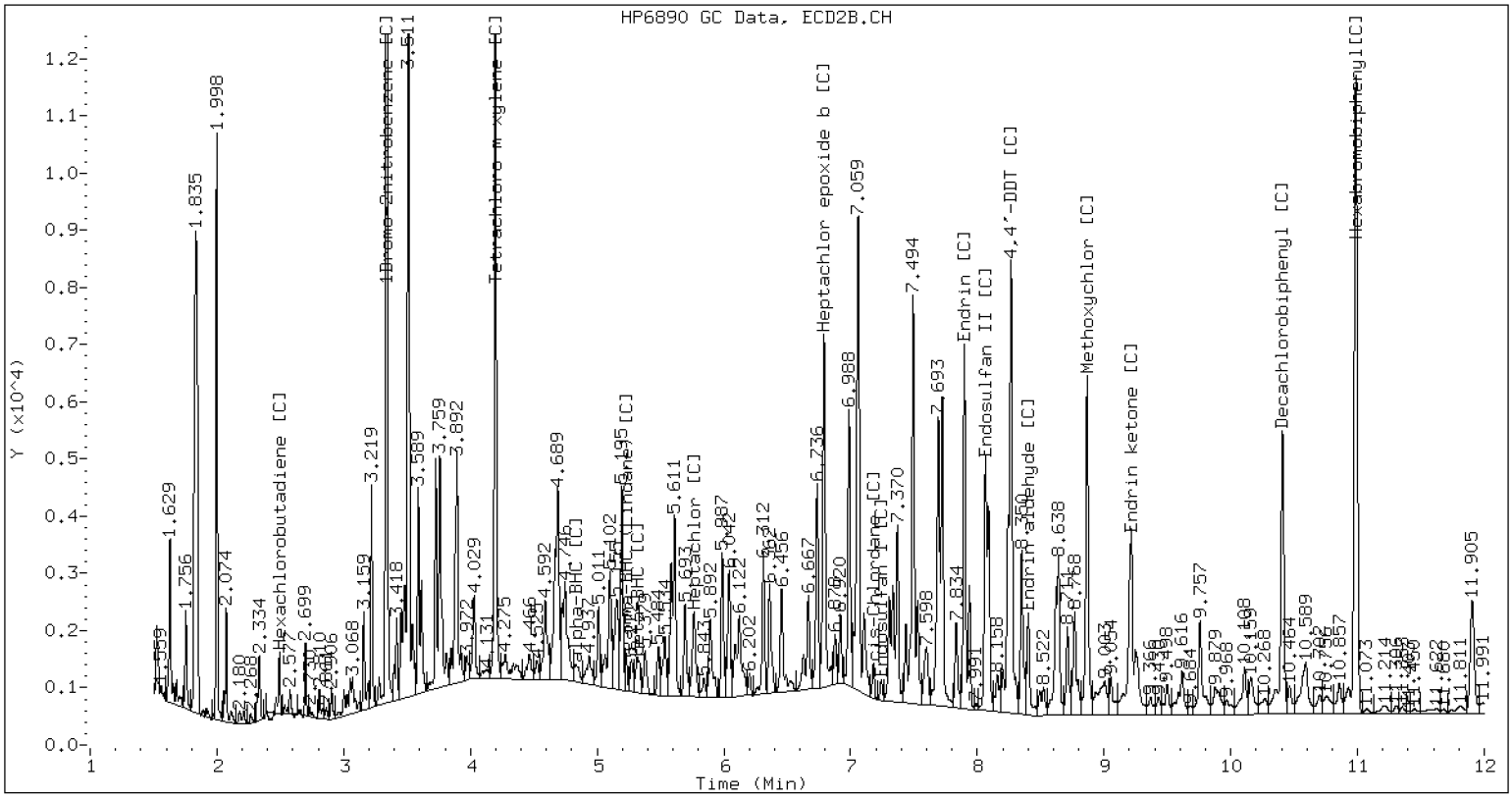
Pesticide Dual Column Chromatograms

/20230301.b/23030117.D 23A0249-03 STX-CLP 01-MAR-2023 18:50 1ul



STX-CLP Manual Integration: YES

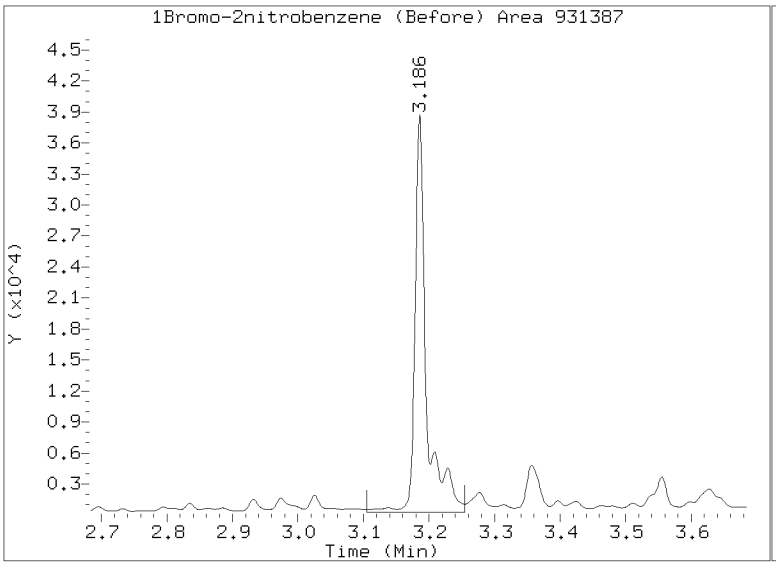
/20230301.b/B20230301.b/23030117.D 23A0249-03 CLP2

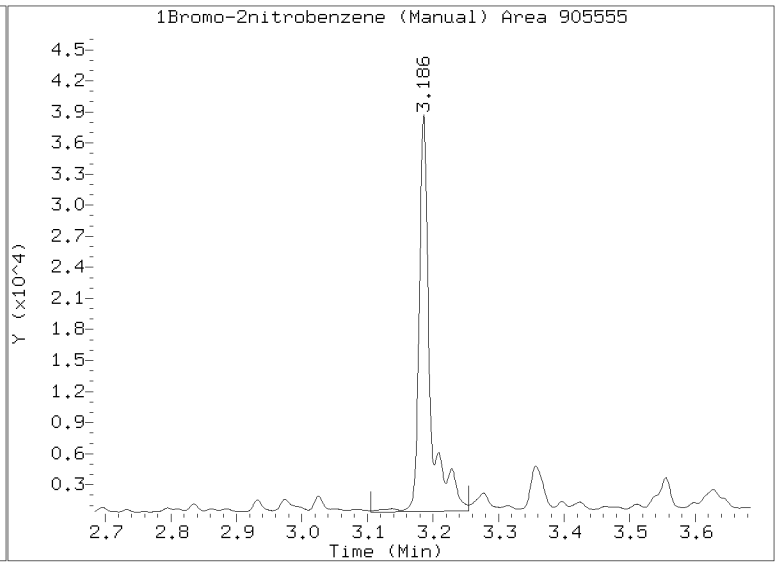


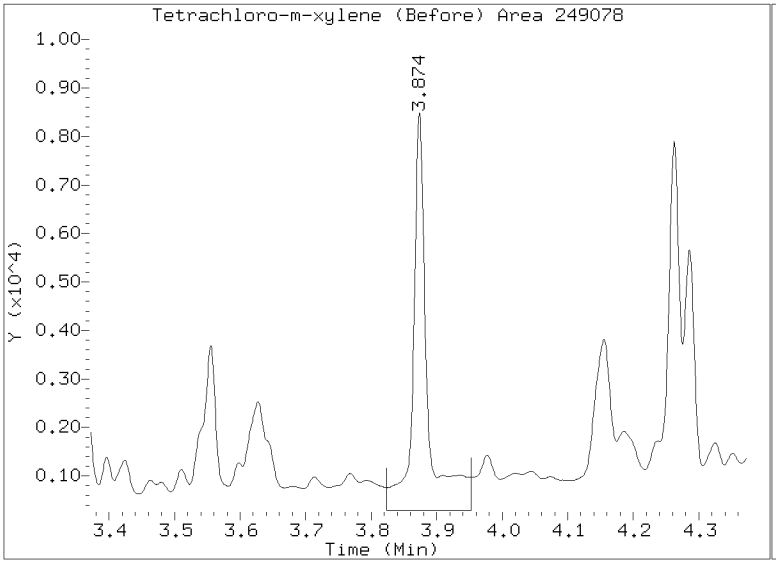
CLP-2 Manual Integration: YES

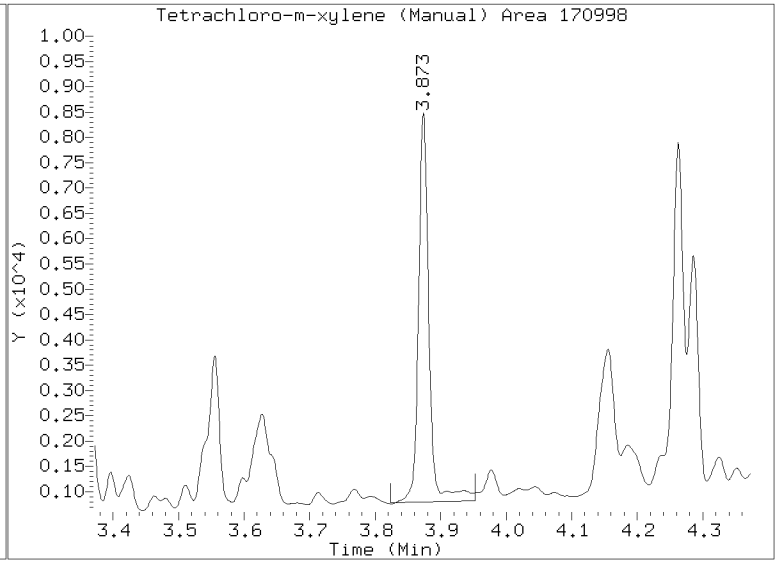
Manual Peak Adjustment Report, STX-CLP

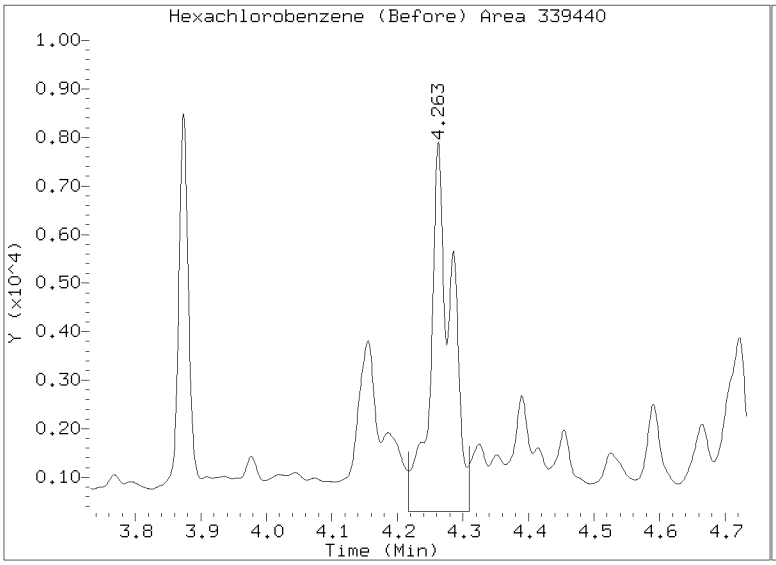
Datafile: /20230301.b/23030117.D
Injection Date: 01-MAR-2023 18:50
Lab ID:23A0249-03 Client ID:
Report Date: 03/02/2023 13:14

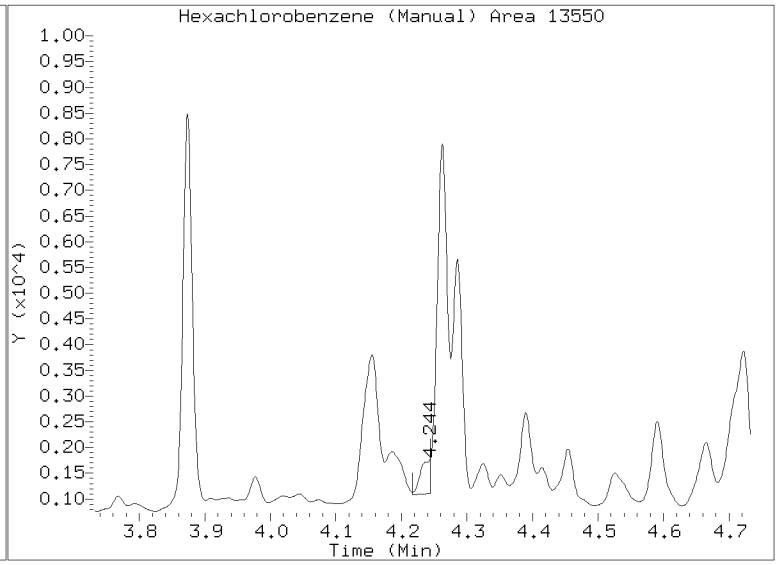






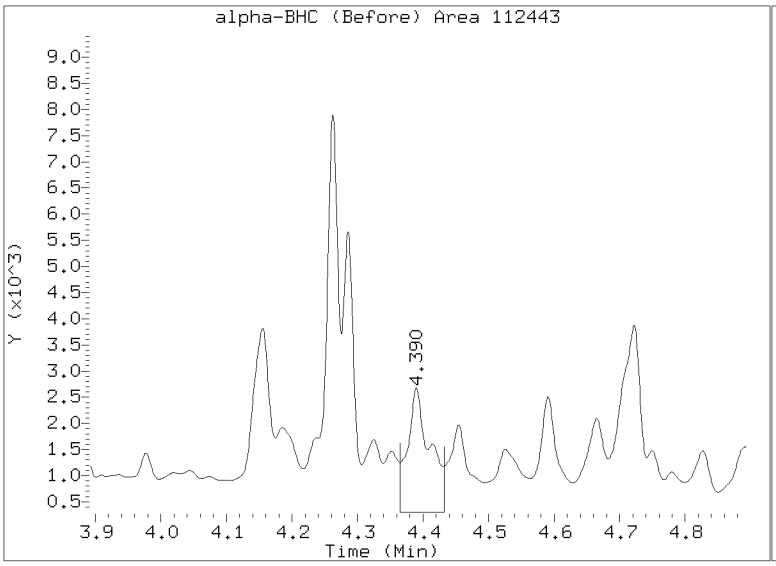


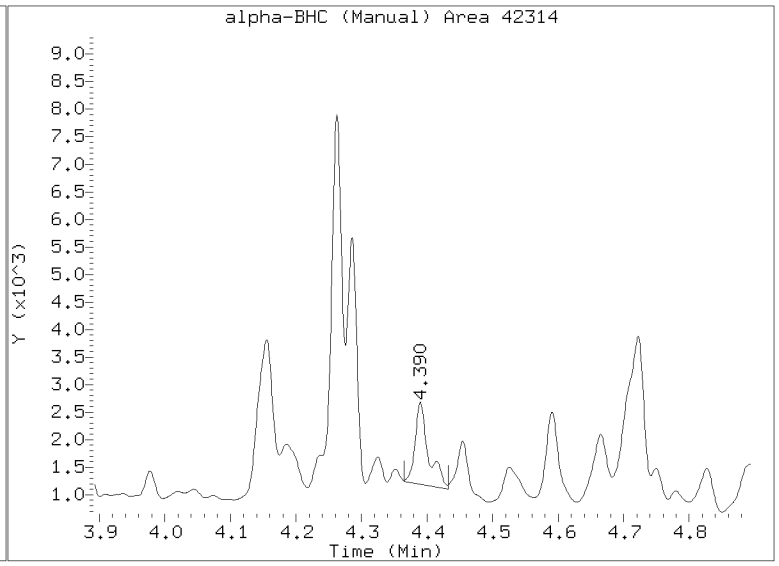


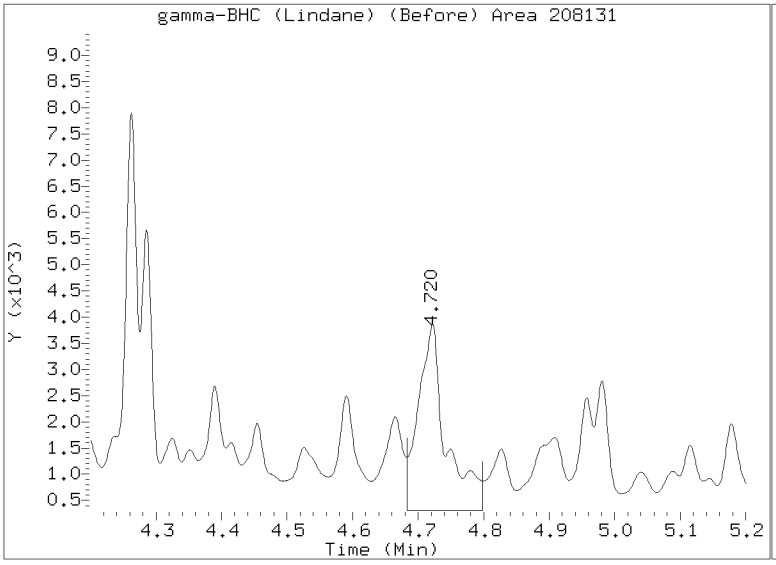


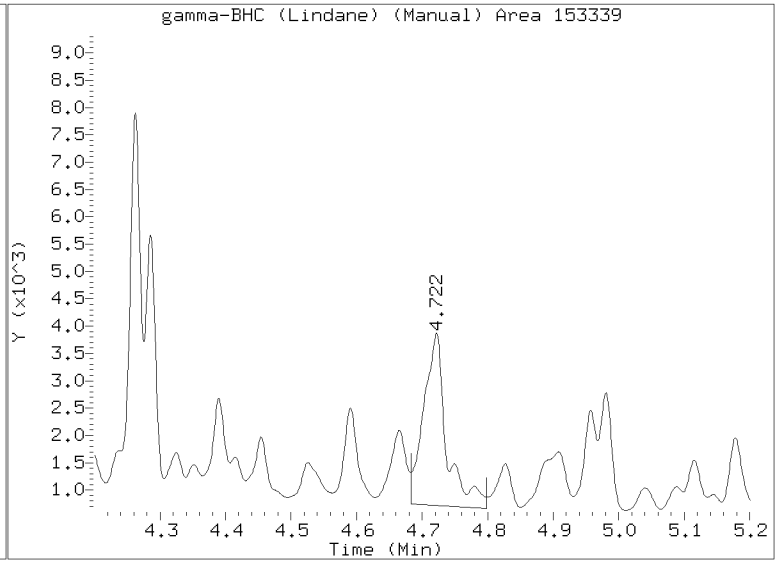
Manual Peak Adjustment Report, STX-CLP

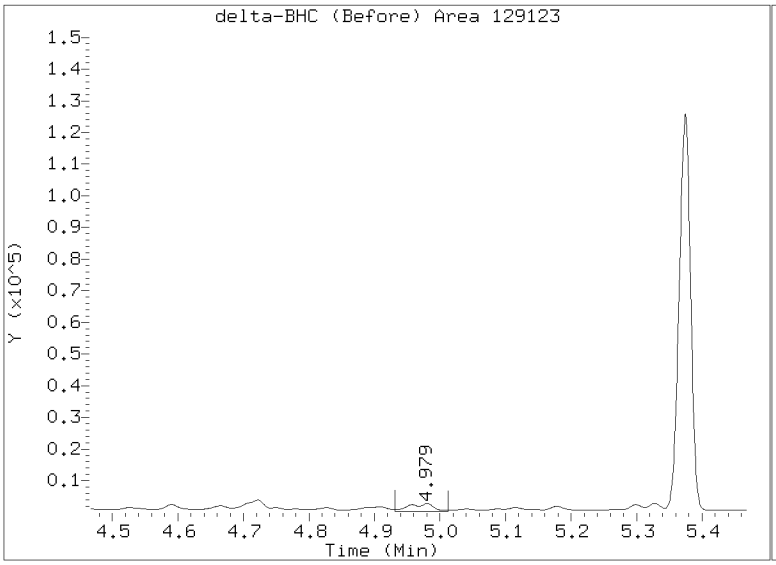
Datafile: /20230301.b/23030117.D
Injection Date: 01-MAR-2023 18:50
Lab ID:23A0249-03 Client ID:
Report Date: 03/02/2023 13:14

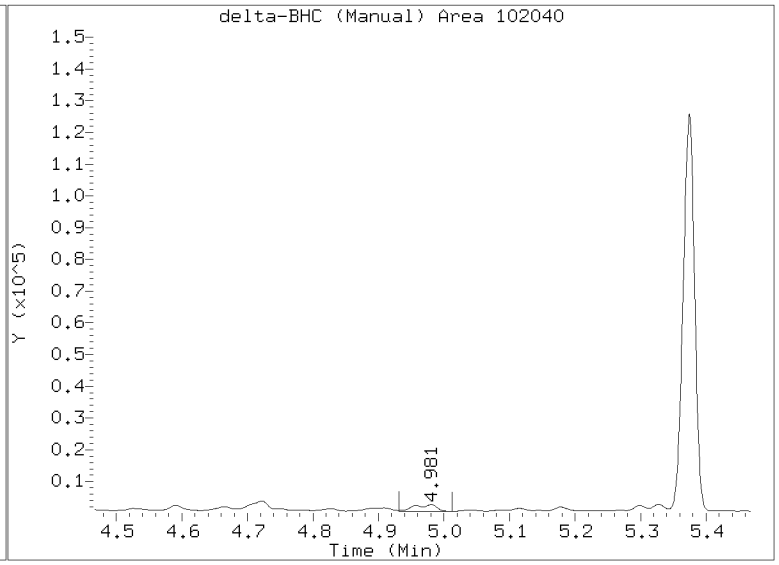












Manual Peak Adjustment Report, STX-CLP

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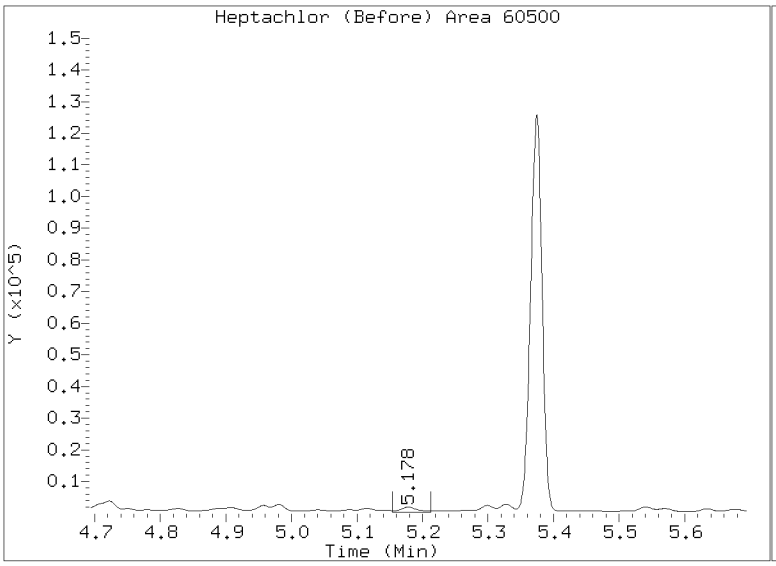
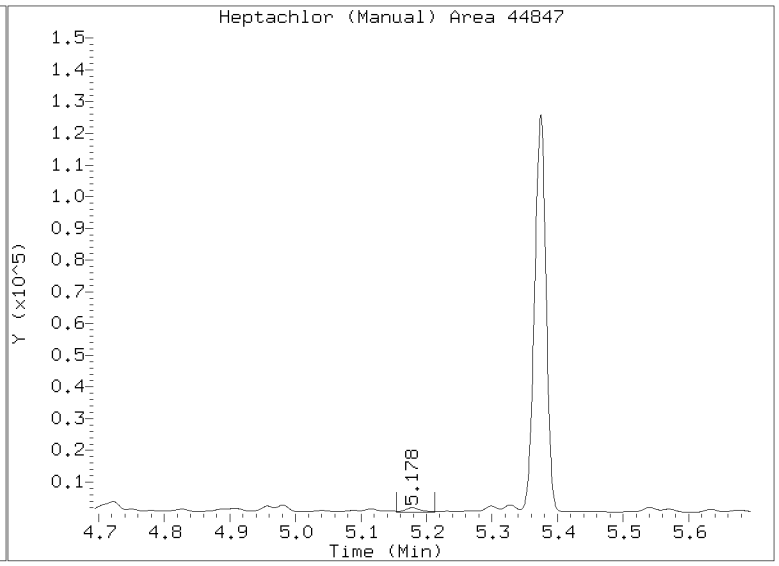
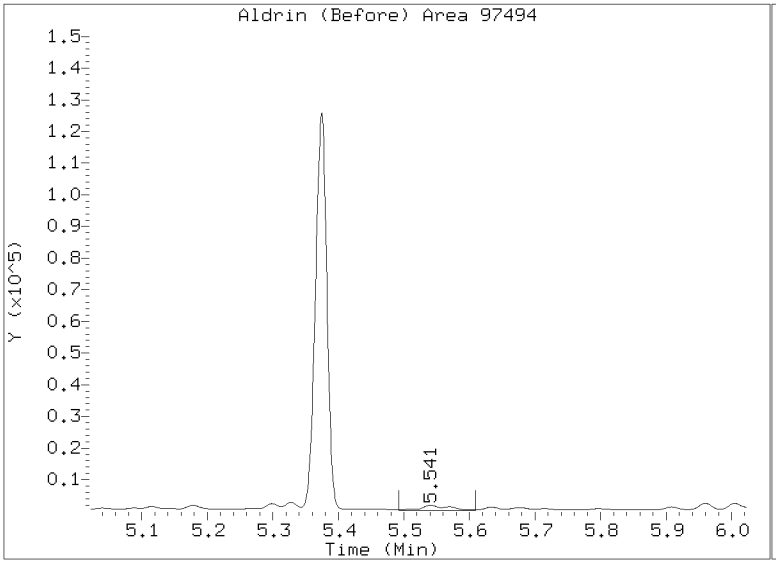
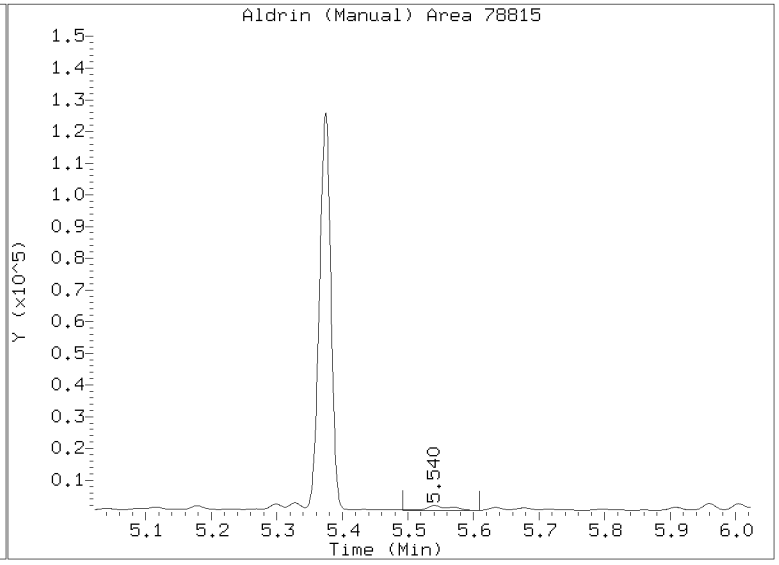
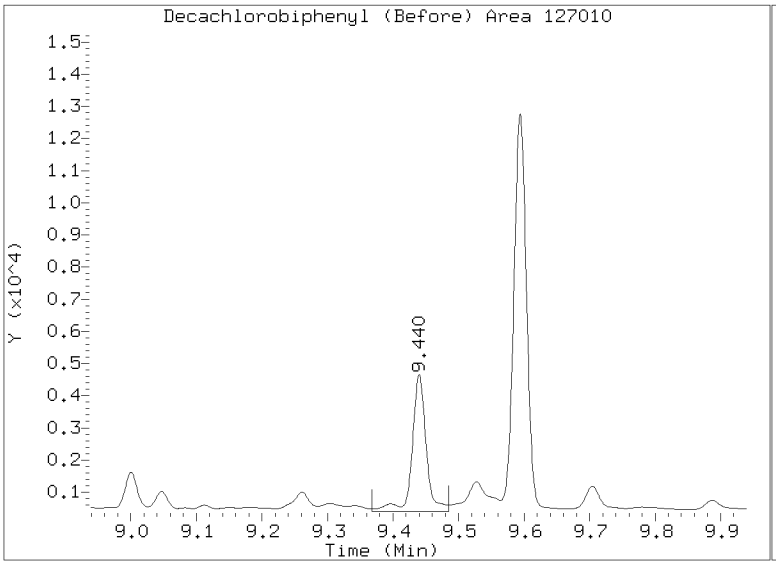
Injection Date: 01-MAR-2023 18:50
Lab ID:23A0249-03 Client ID:
Report Date: 03/02/2023 13:14

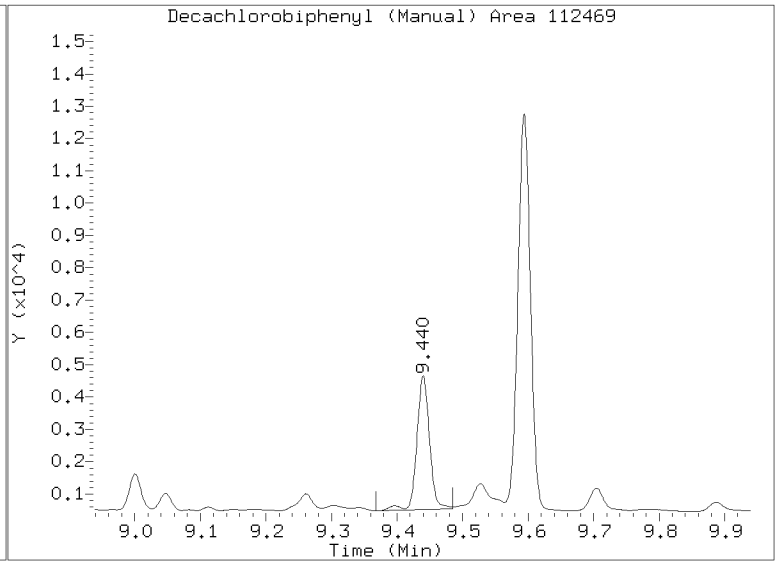












Manual Peak Adjustment Report, STX-CLP

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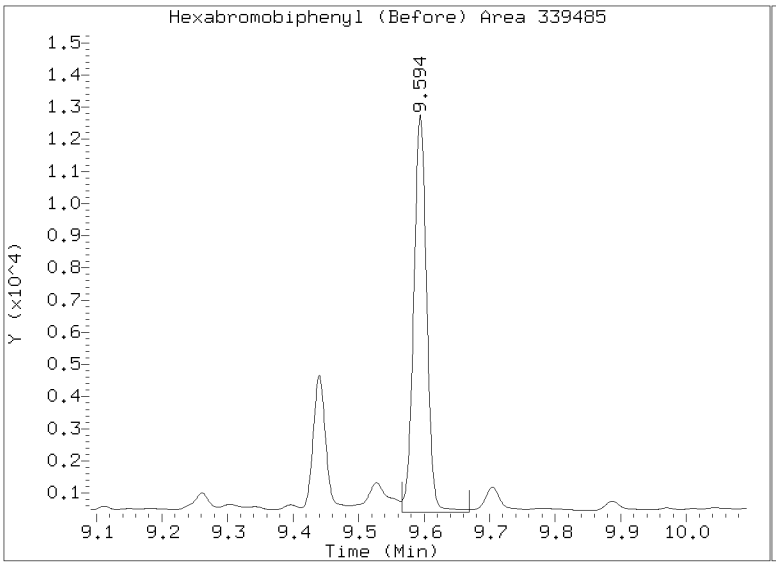
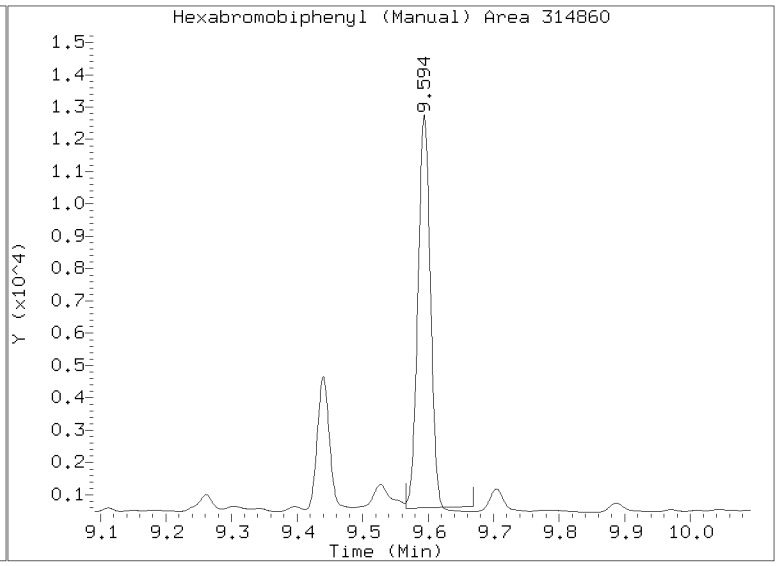
Report Date: 03/02/2023 13:14





Manual Peak Adjustment Report, CLP-2

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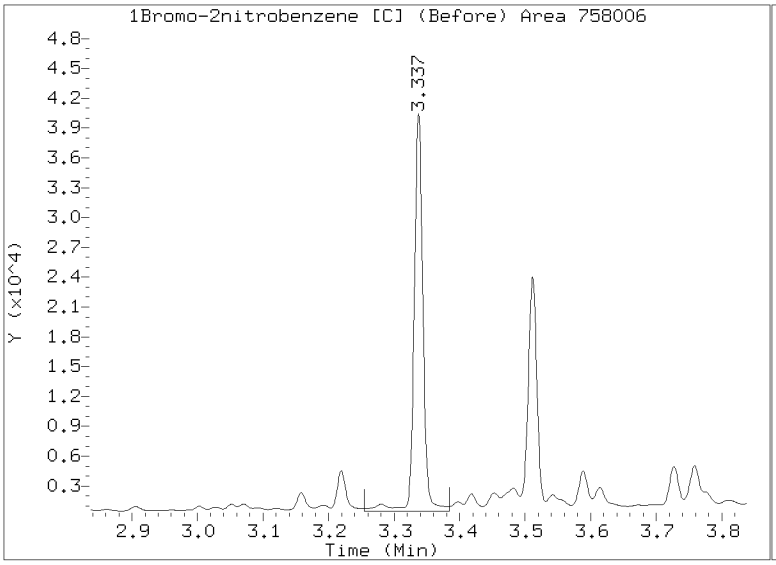

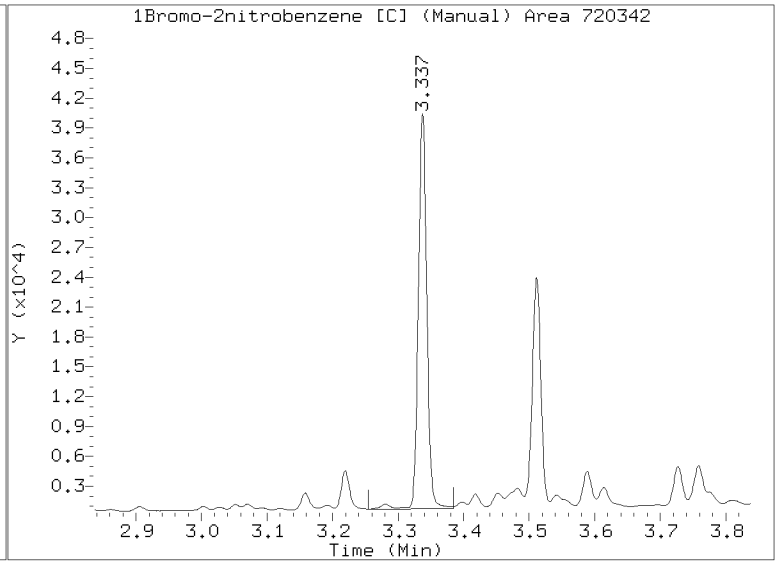

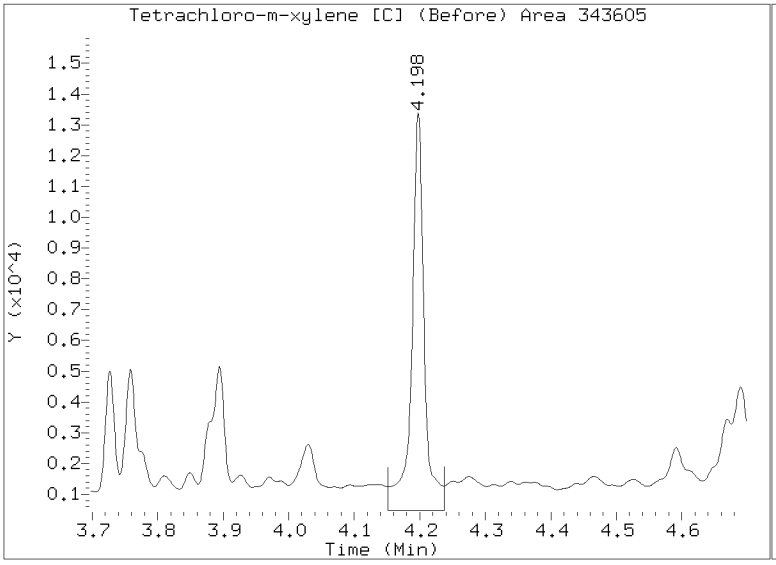

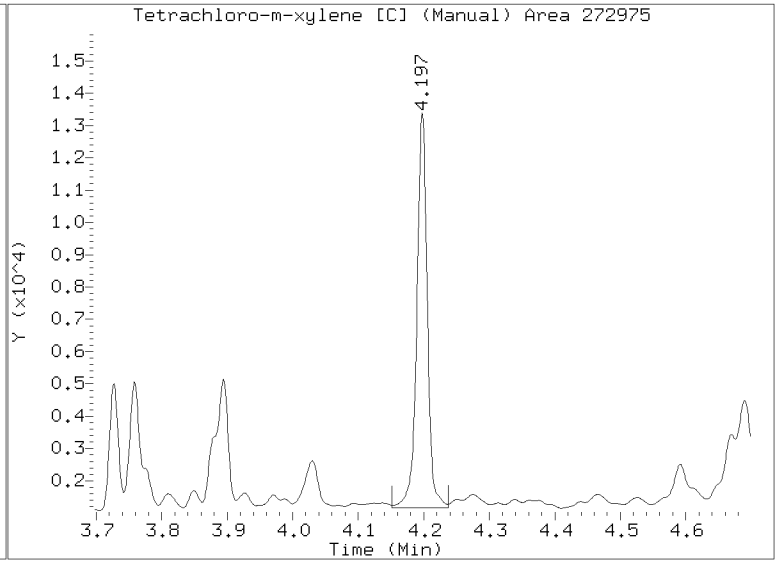

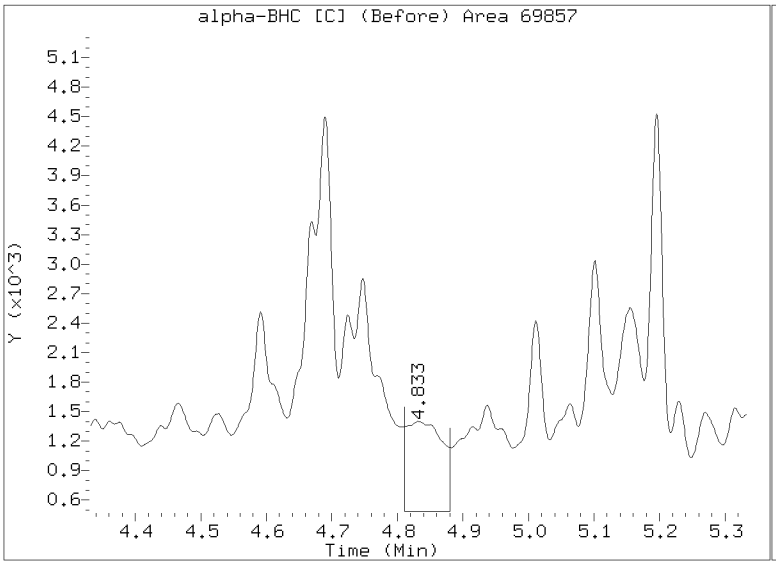

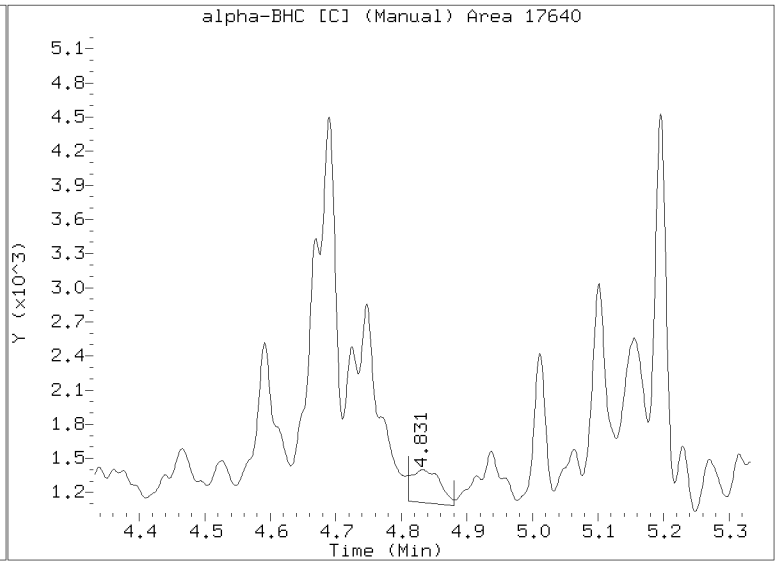

Manual Peak Adjustment Report, CLP-2

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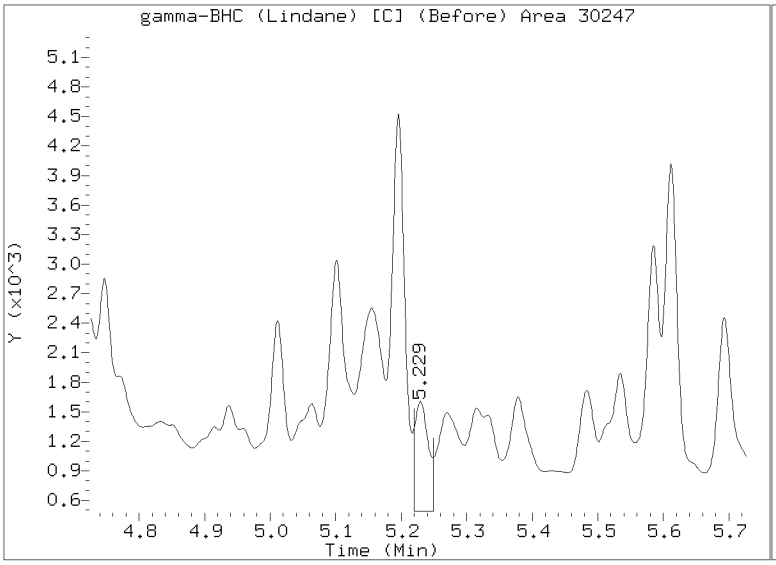
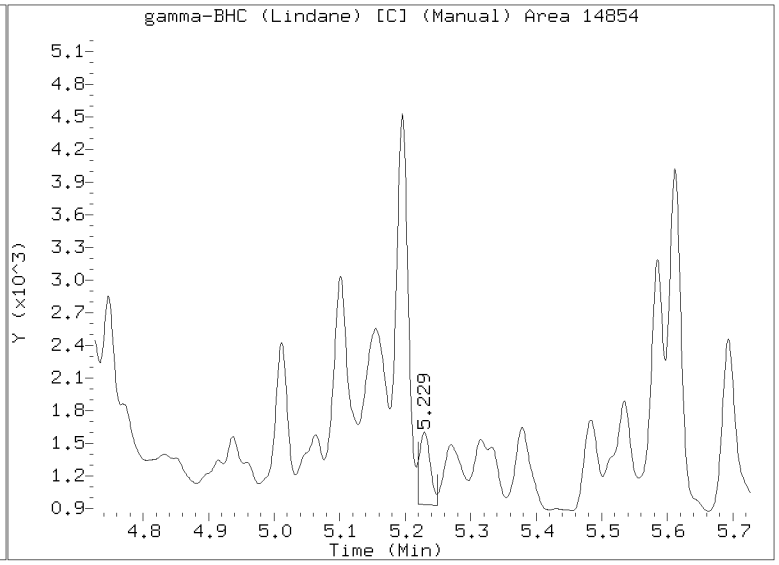
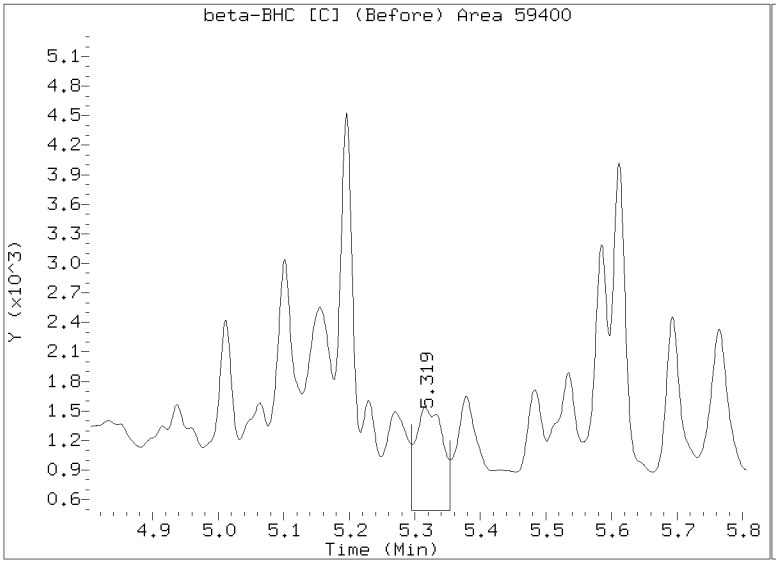
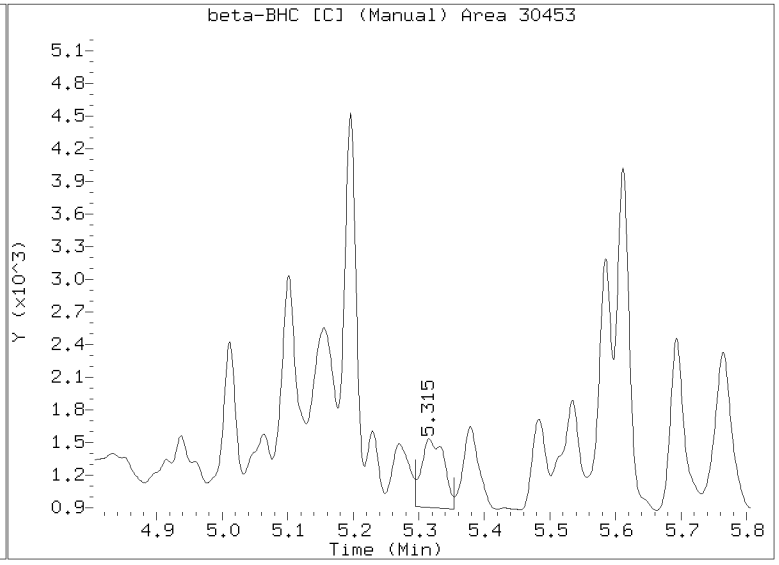
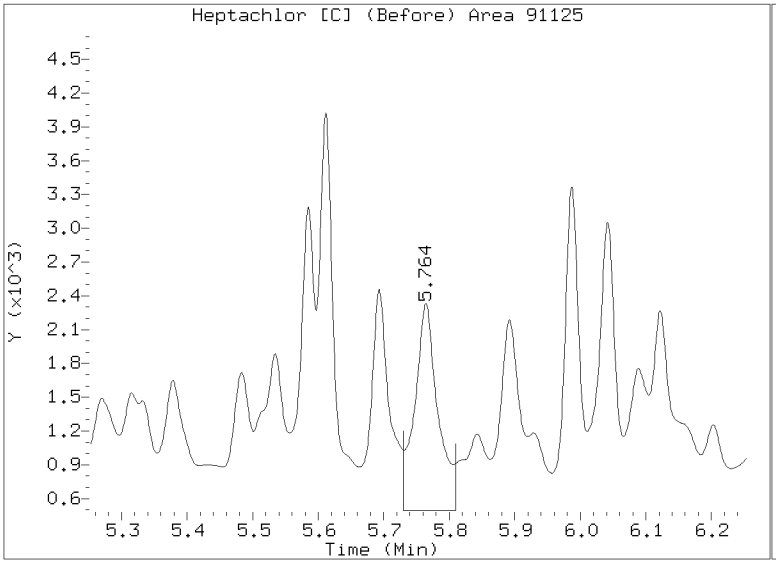
Lab ID:23A0249-03 Client ID:

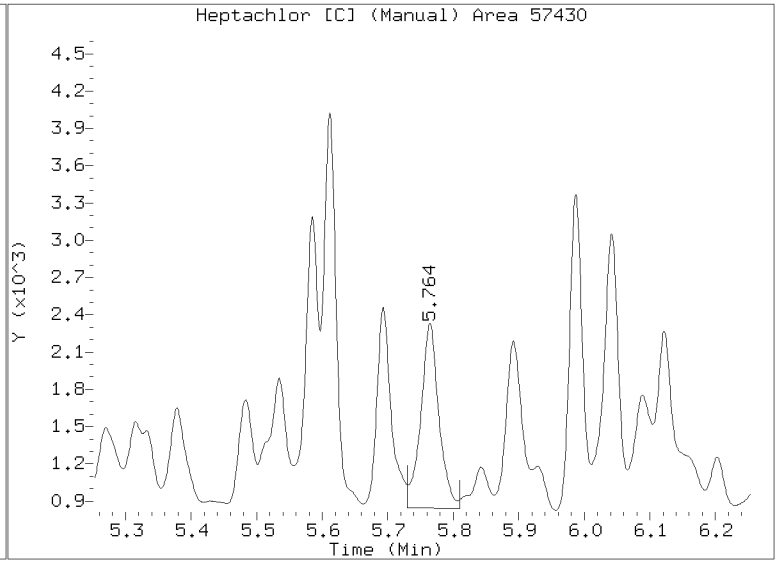












Manual Peak Adjustment Report, CLP-2

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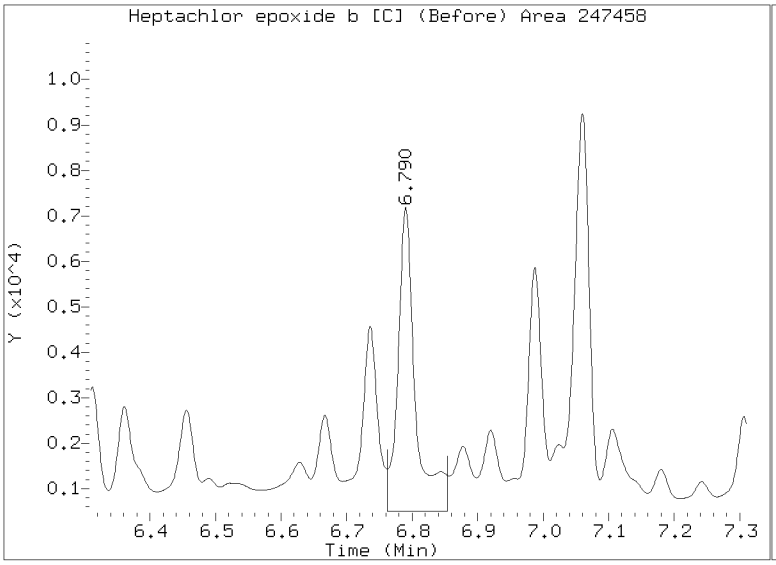
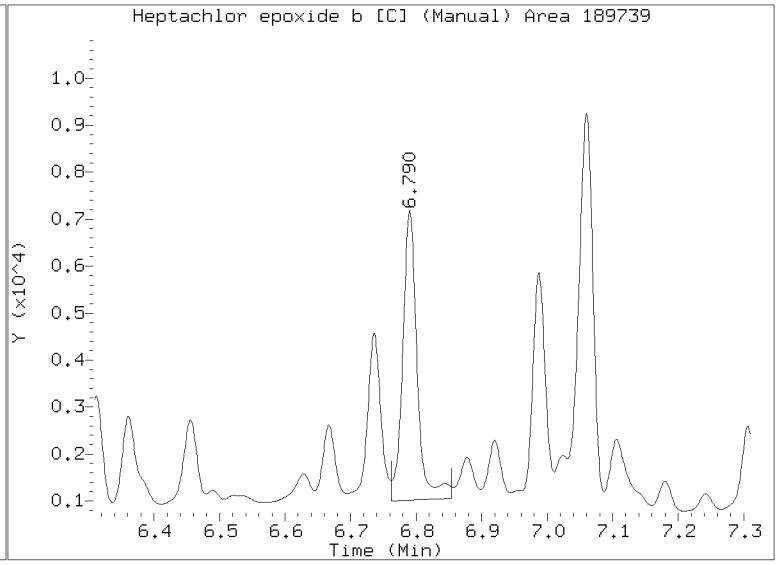
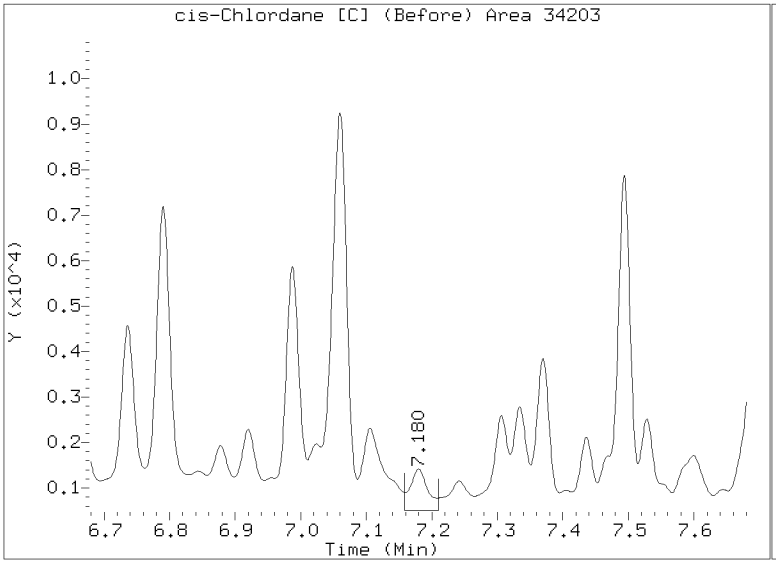
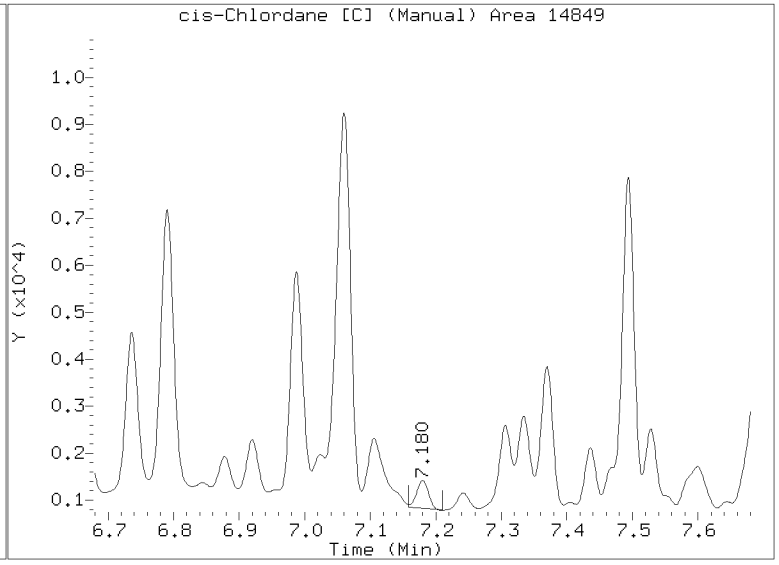
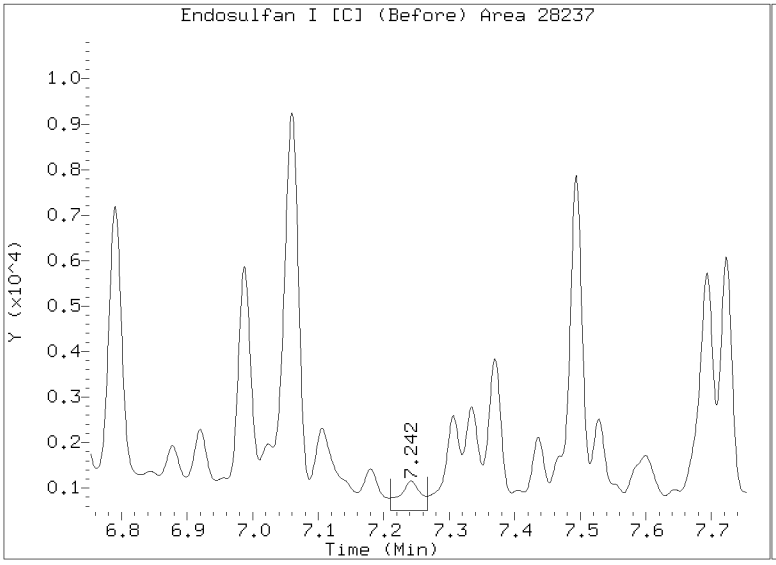
Lab ID:23A0249-03 Client ID:

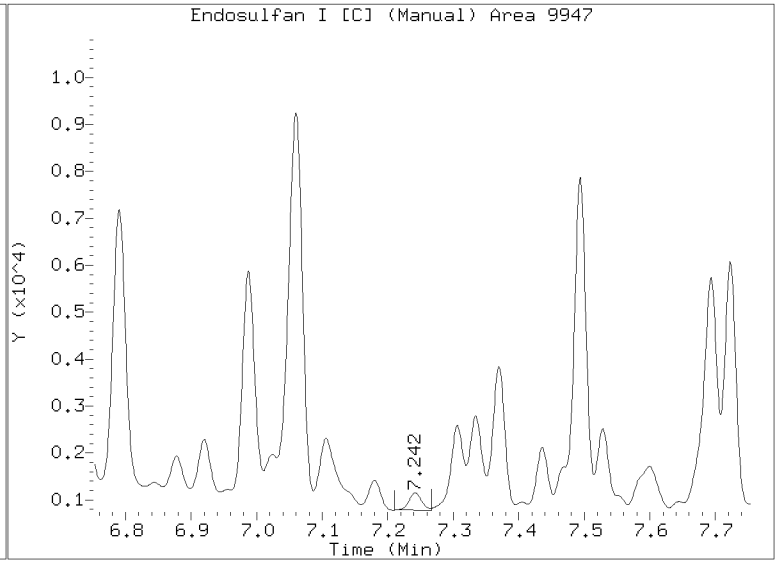












Manual Peak Adjustment Report, CLP-2

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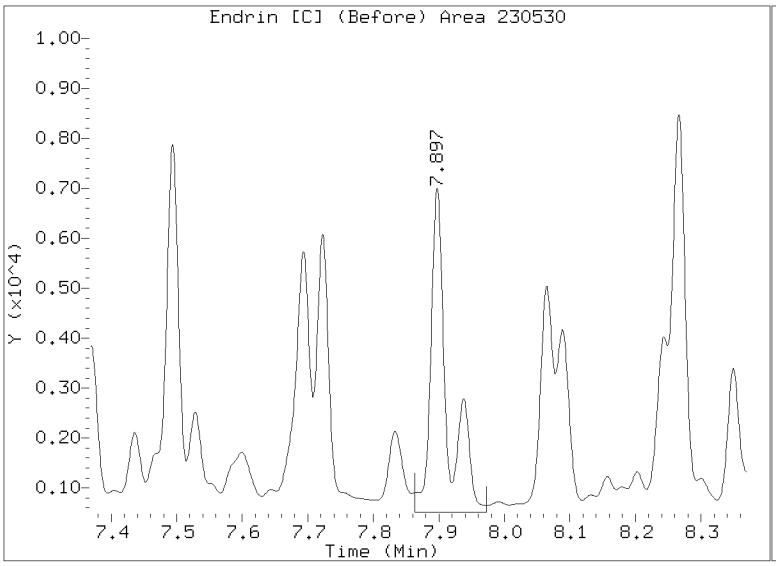
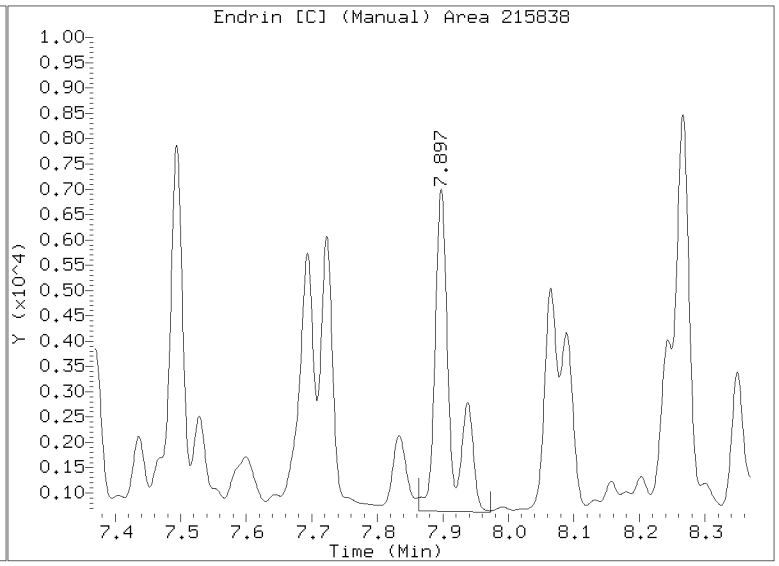
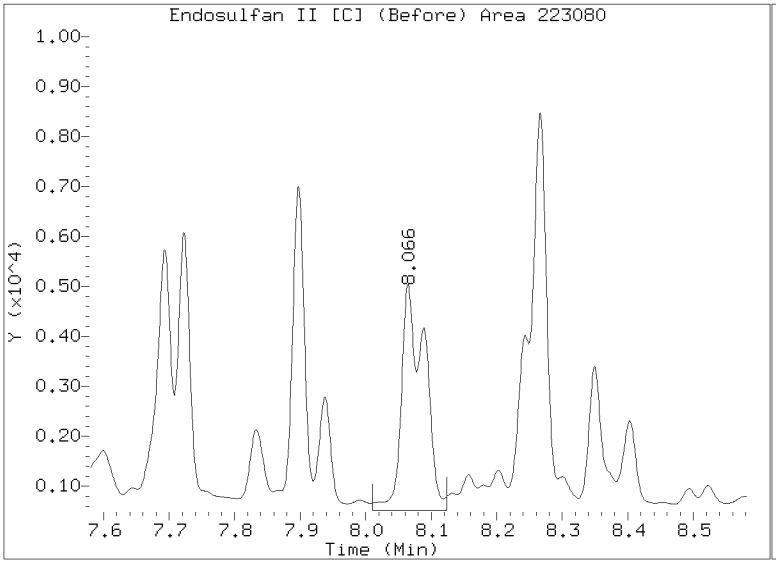
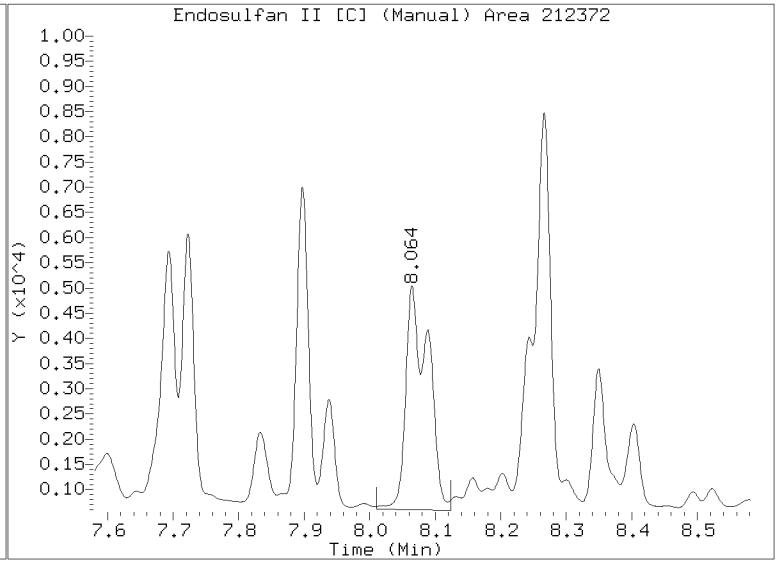
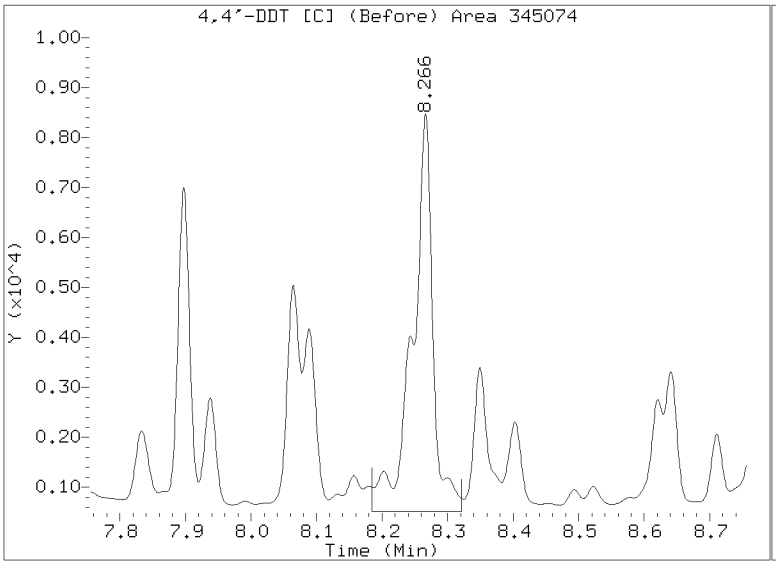
Injection Date: 01-MAR-2023 18:50
Lab ID:23A0249-03 Client ID:

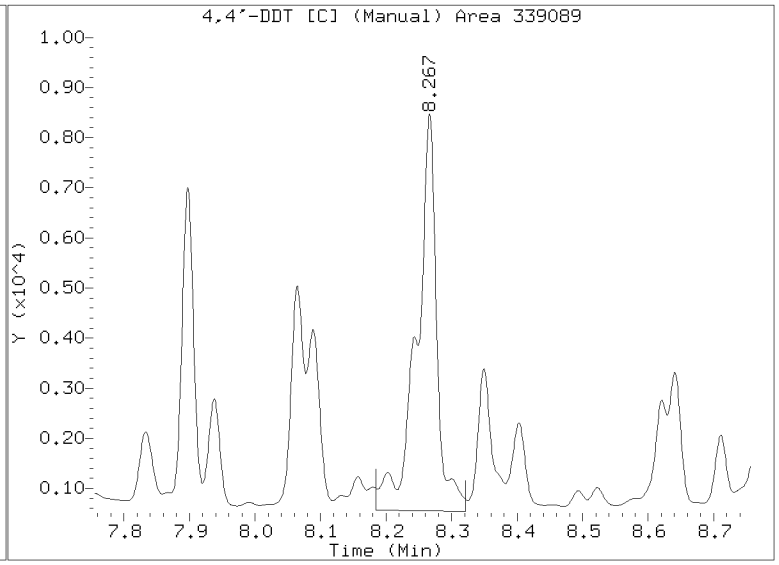












Manual Peak Adjustment Report, CLP-2

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Injection Date: 01-MAR-2023 18:50
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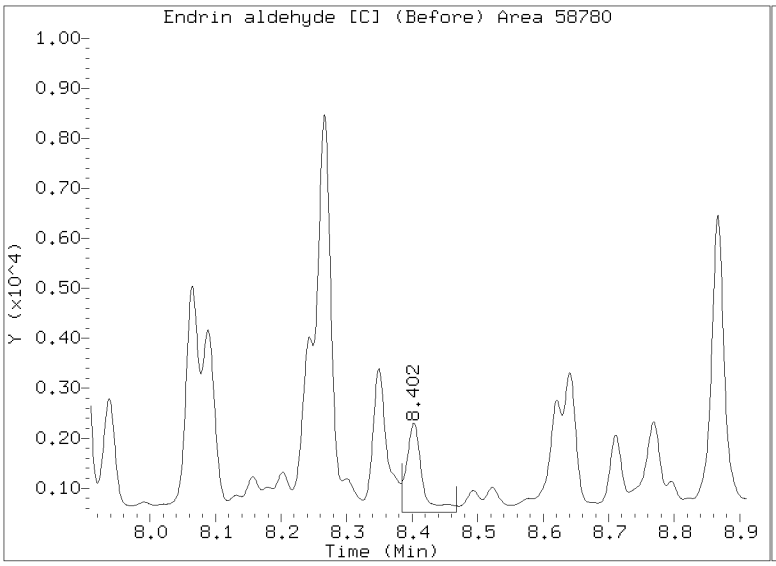
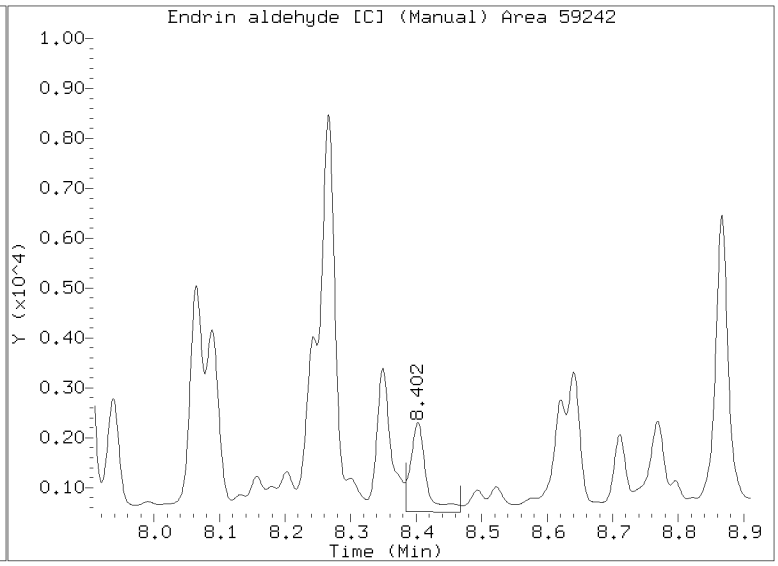




Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1084

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-04 A	File ID:	23030118.D
Sampled:	01/12/23 09:47	Prepared:	01/31/23 13:36	Analyzed:	03/01/23 19:08
% Solids:	53.88	Preparation:	EPA 3546 (Microwave)	Initial/Final:	23.85 g Wet / 2.5 mL
Batch:	BLA0672	Sequence:	SLC0031	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.49	0.14	0.49	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.7819*	*7.05*	*90.6*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.7819*	*7.17*	*92.1*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.7819*	*3.45*	*44.3*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.7819*	*5.13*	*66.0*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230301.b/23030118.D
Data file 2: /20230301.b/B20230301.b/23030118.D
Method: \20230301.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23A0249-04
Client ID:
Injection Date: 01-MAR-2023 19:08
Report Date: 03/02/2023 13:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.389	-0.004	48428	4.832	-0.001	8099	3.81	0.57	148.2*	alpha-BHC MN
----			5.334	0.028	33817	0.00	6.22	---	beta-BHC
4.980	0.012	128423	----			12.36	0.00	---	delta-BHC
4.705	0.004	95724	5.228	0.000	17148	8.68	1.41	144.0*	gamma-BHC (Lindane) MN
5.179	-0.016	33292	5.764	0.010	71548	3.39	6.51	63.0*	Heptachlor MN
5.539	0.017	119911	6.147	-0.009	18082	10.91	1.44	153.3*	Aldrin M
6.189	-0.013	59727	6.789	-0.021	344170	6.27	33.18	136.5*	Heptachlor epoxide b M
----			7.241	-0.013	27704	0.00	3.03	---	Endosulfan I
6.884	-0.019	152663	7.528	-0.019	105418	16.25	10.44	43.5*	Dieldrin M
6.558	-0.005	164087	7.334	-0.001	102300	18.81	11.05	52.0*	4,4'-DDE M
7.176	0.022	391544	7.897	0.027	269944	88.33	47.30	60.5*	Endrin M
7.416	0.027	25541	8.088	0.007	131365	6.40	22.46	111.3*	Endosulfan II M
----			7.938	-0.001	164426	0.00	29.62	---	4,4'-DDD
8.237	-0.014	7867	----			2.08	0.00	---	Endosulfan sulfate
7.473	-0.029	325300	8.266	0.009	492482	80.61	91.92	13.1	4,4'-DDT M
----			8.866	-0.028	226828	0.00	95.67	---	Methoxychlor
----			9.215	0.016	192930	0.00	34.78	---	Endrin ketone
7.841	0.024	61954	8.404	-0.006	64978	19.47	15.75	21.1	Endrin aldehyde M
----			----			0.00	0.00	---	trans-Chlordane
6.508	0.018	78335	7.179	-0.001	15477	8.07	1.53	136.3*	cis-Chlordane M
2.330	-0.018	15343	2.466	-0.029	48617	1.15	3.58	102.7*	Hexachlorobutadiene
----			----			0.00	0.00	---	Hexachlorobenzene
3.874	0.001	159062	4.197	-0.002	264804	17.71	26.38	39.3	Tetrachloro-m-xylene MN
9.440	0.001	124135	10.409	0.003	163424	36.24	36.84	1.7	Decachlorobiphenyl M

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

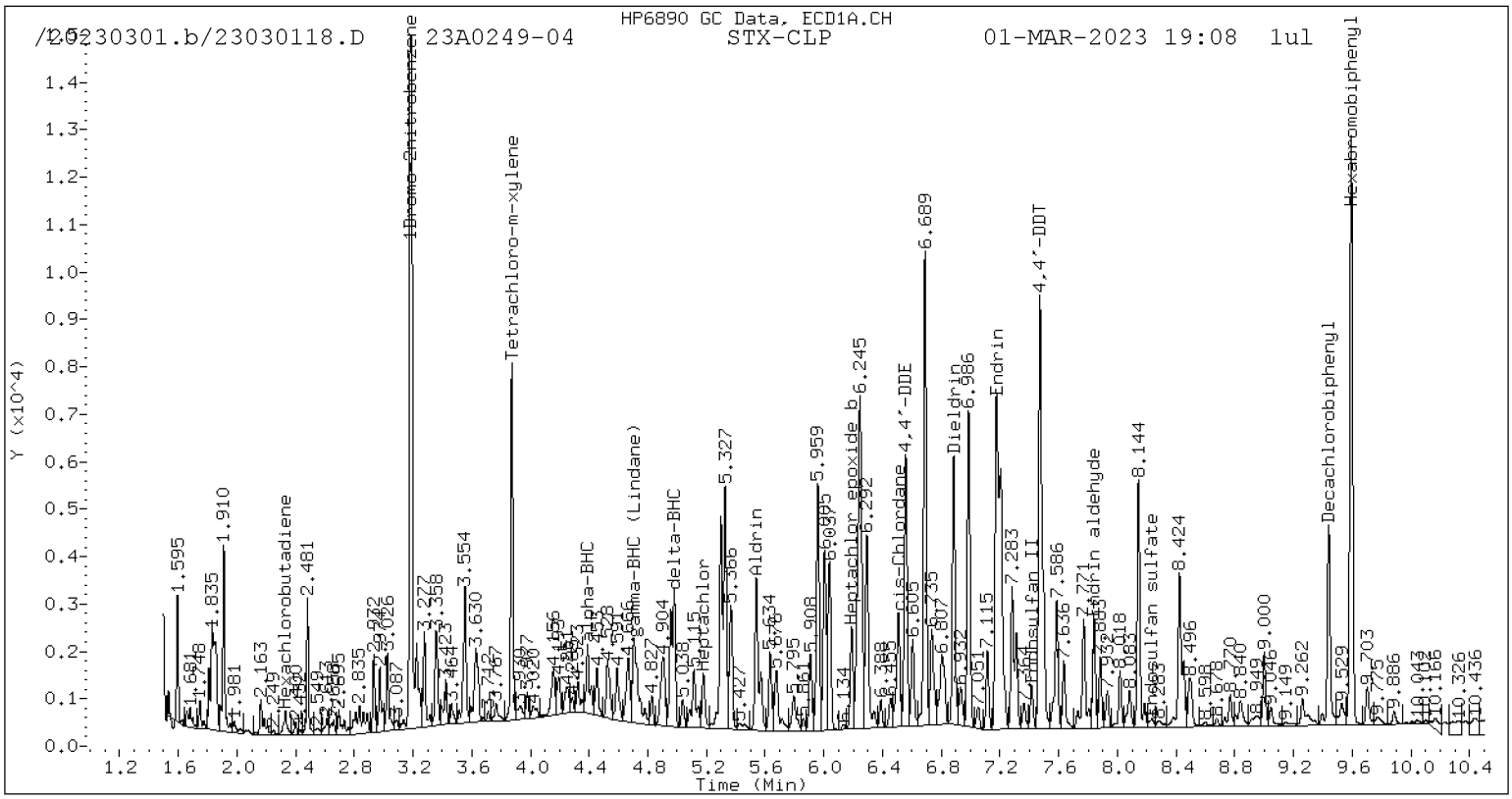
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	660442	-1.8
Hexabromobiphenyl	609723	338099	-44.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	713028	-29.2
Hexabromobiphenyl	769764	401349	-47.9

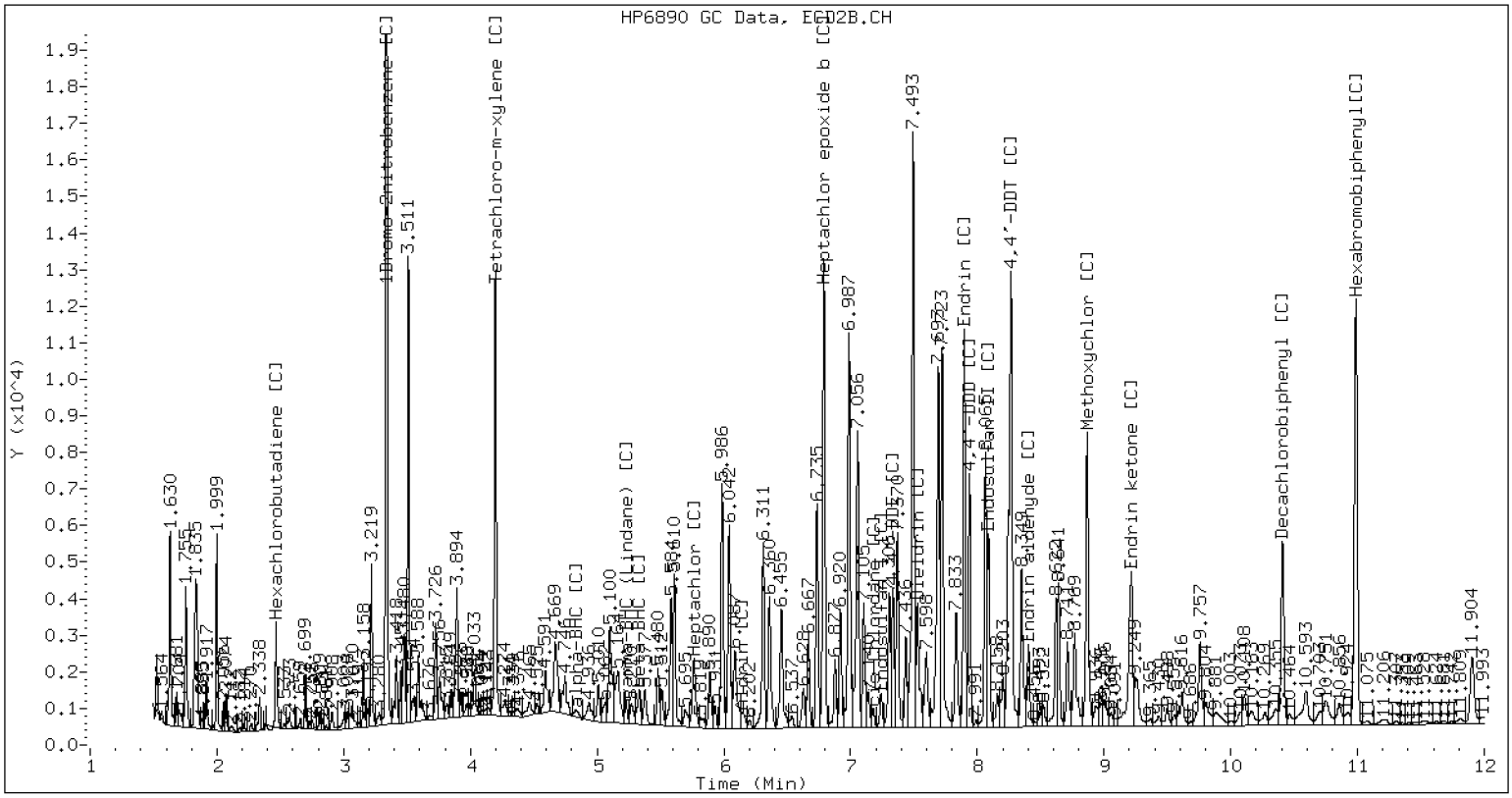
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

/20230301.b/B20230301.b/23030118.D 23A0249-04 CLP2



CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, STX-CLP

Datafile: /20230301.b/23030118.D
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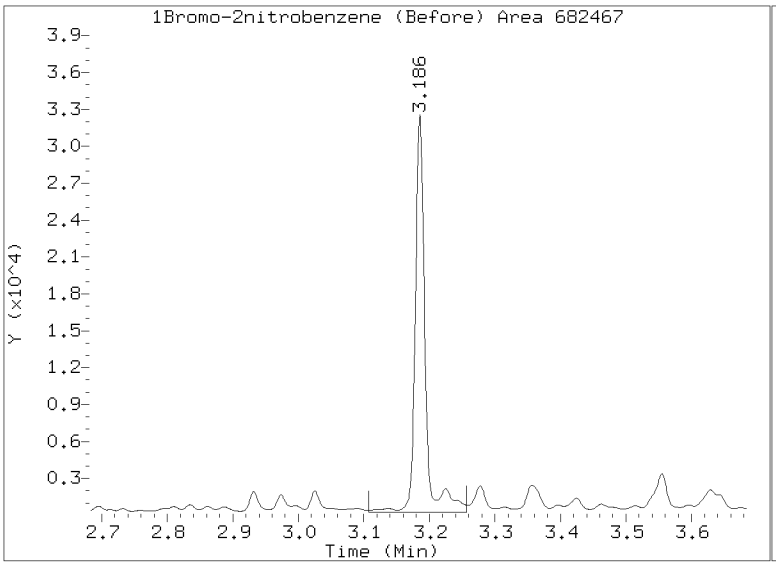
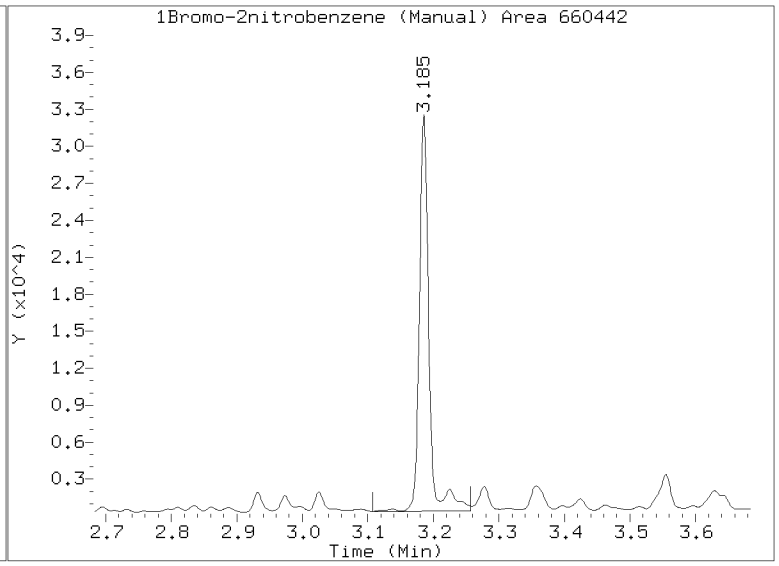
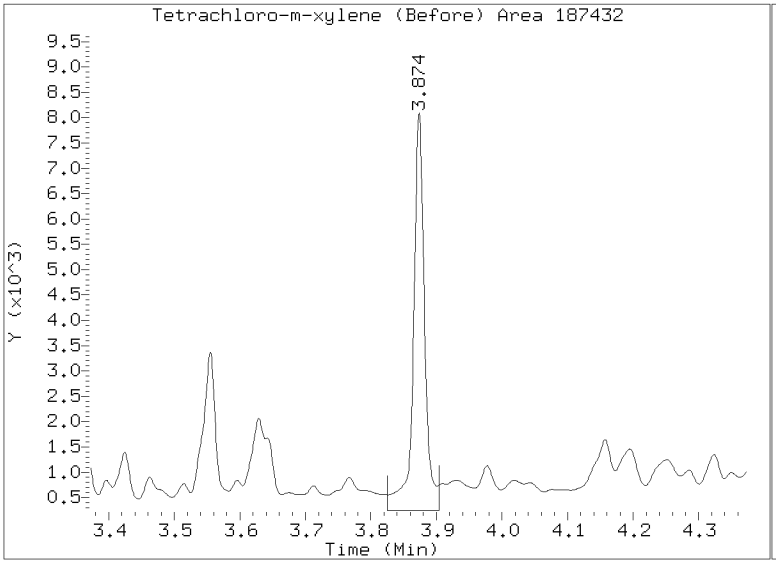
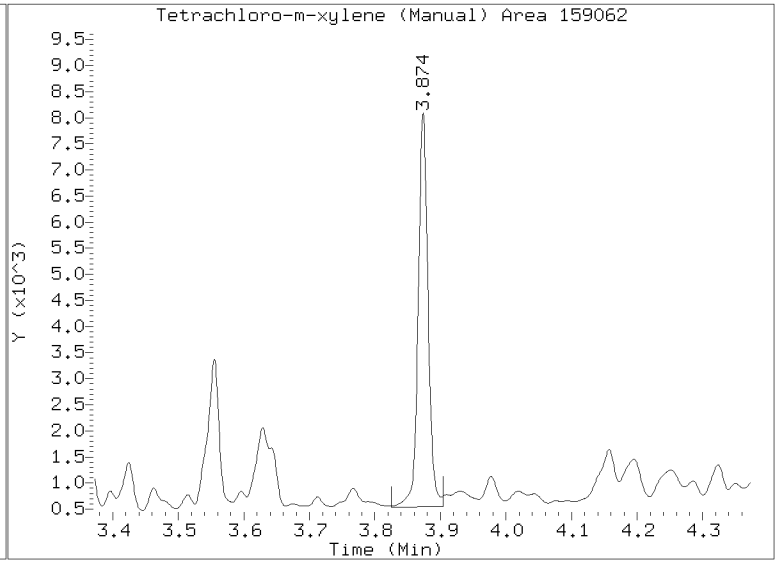
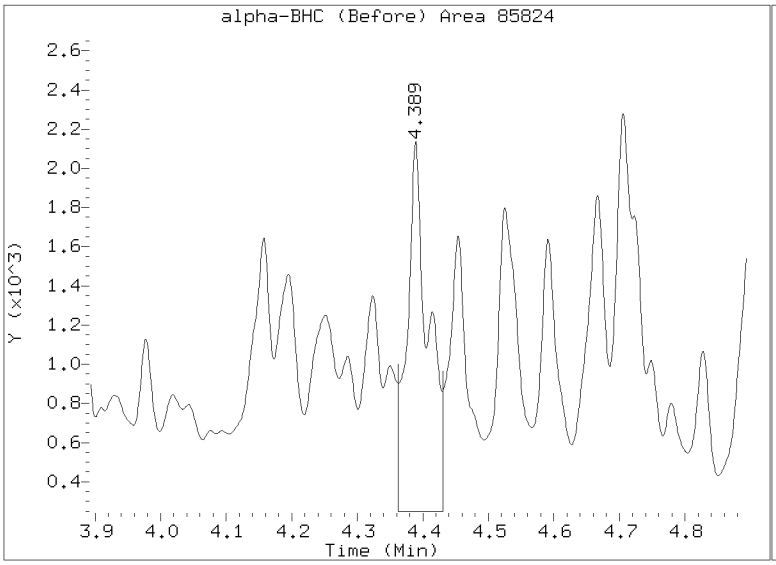
Lab ID:23A0249-04 Client ID:
Report Date: 03/02/2023 13:14

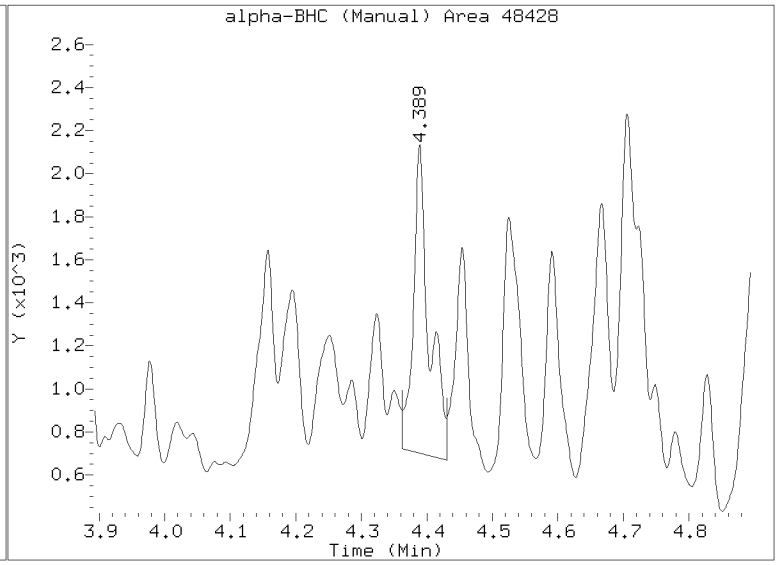












Manual Peak Adjustment Report, STX-CLP

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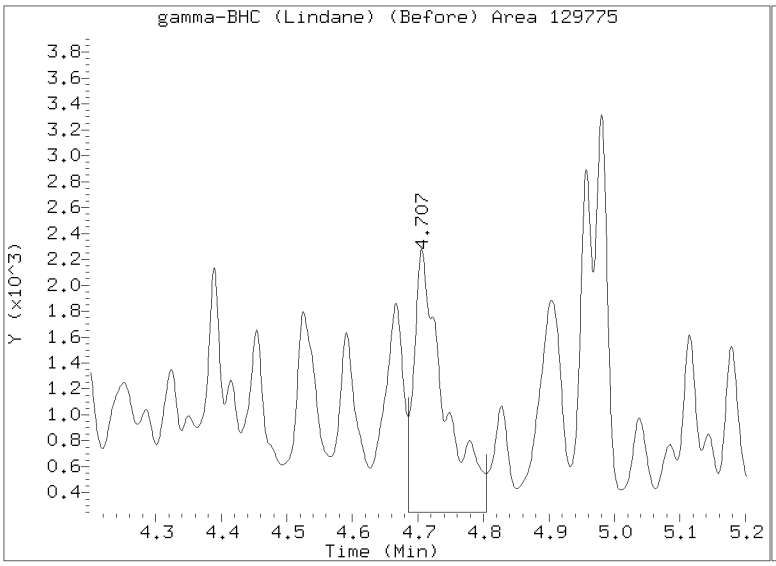

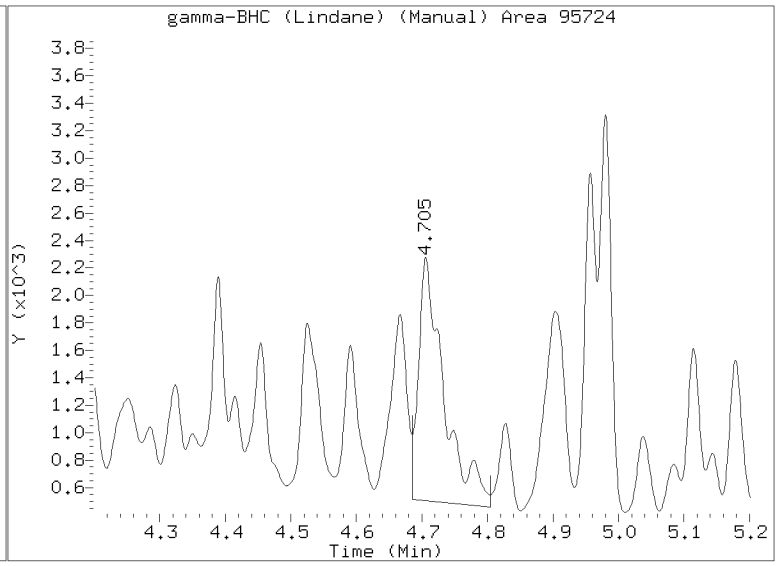

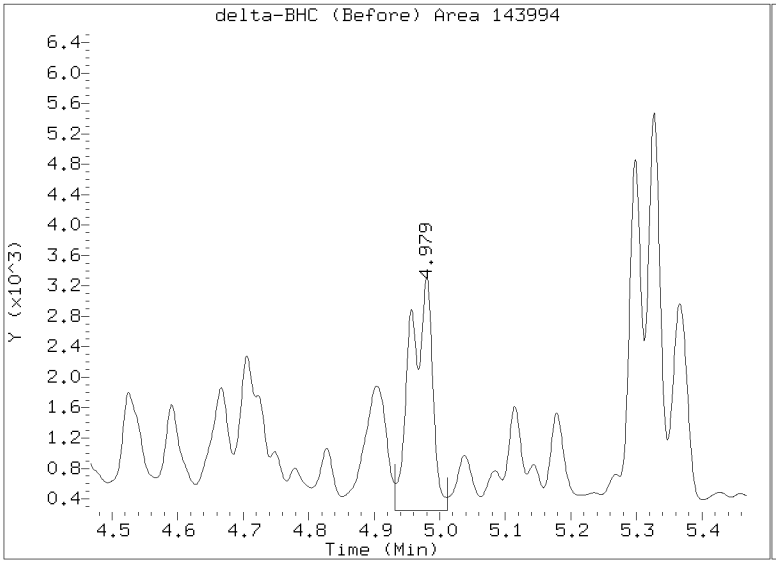

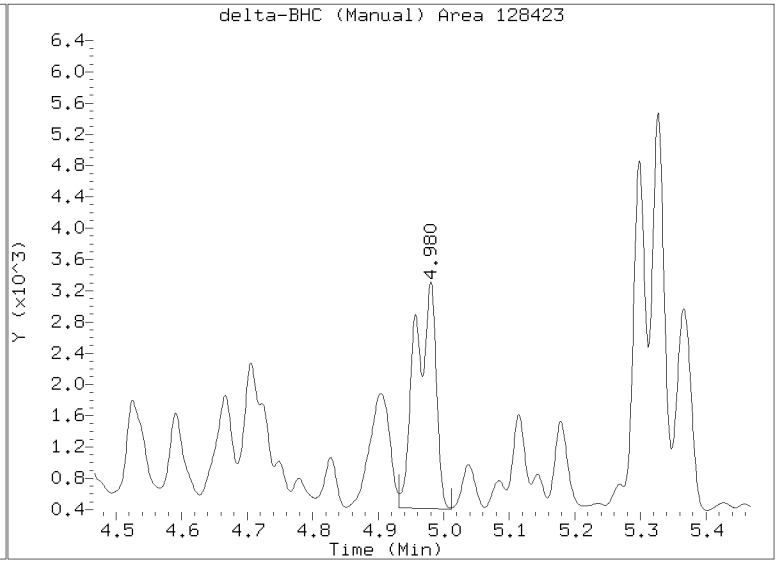

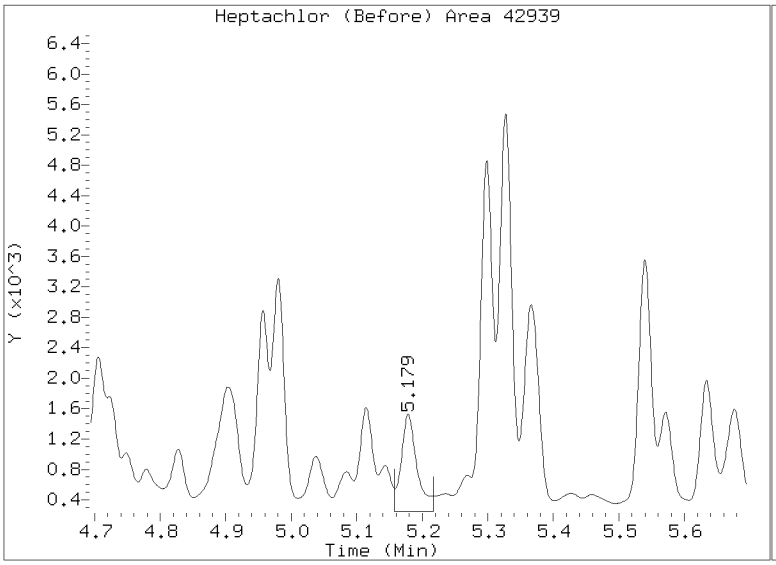

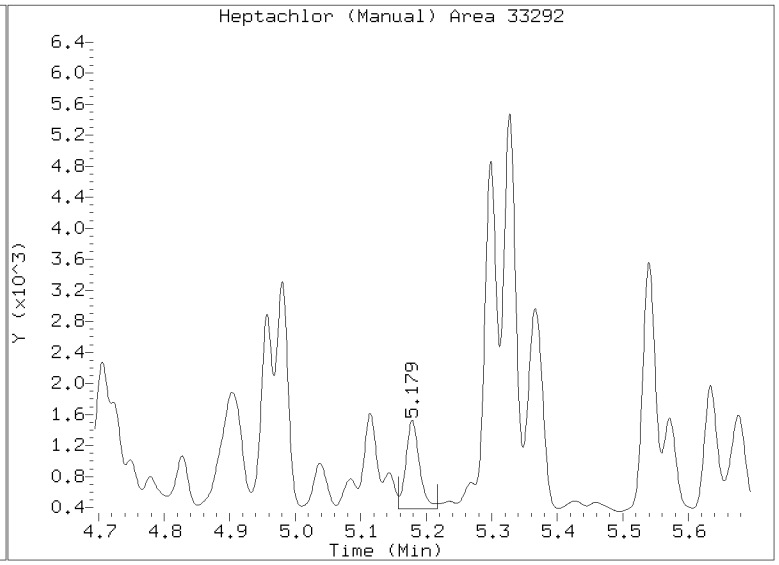

Manual Peak Adjustment Report, STX-CLP

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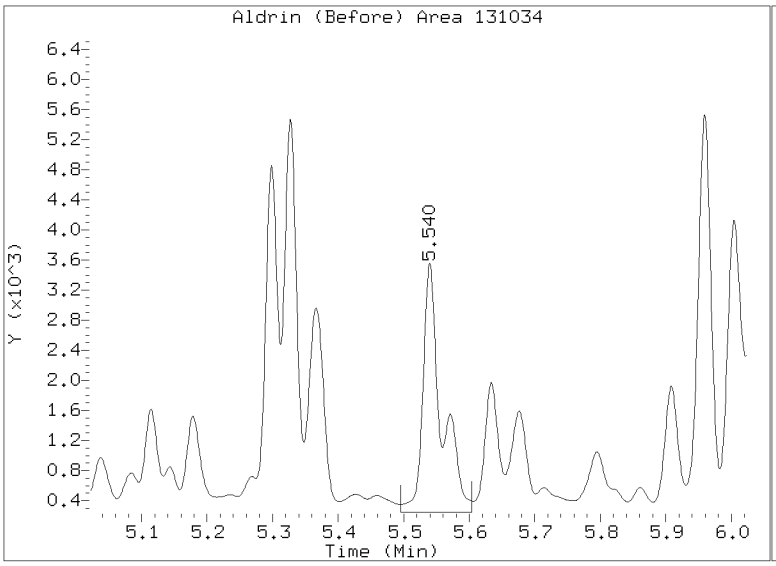

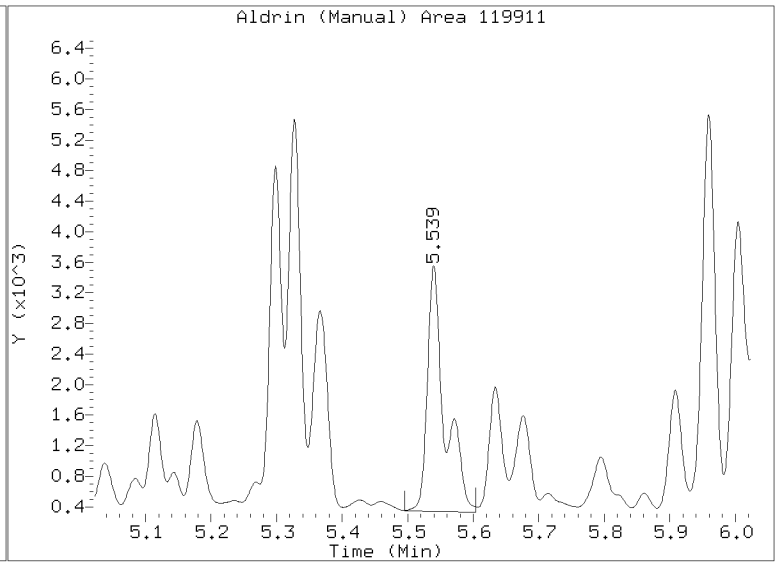

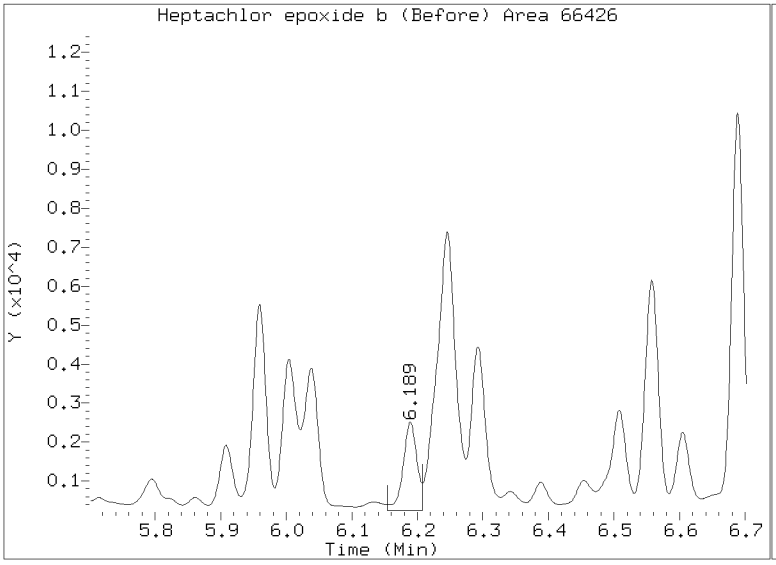

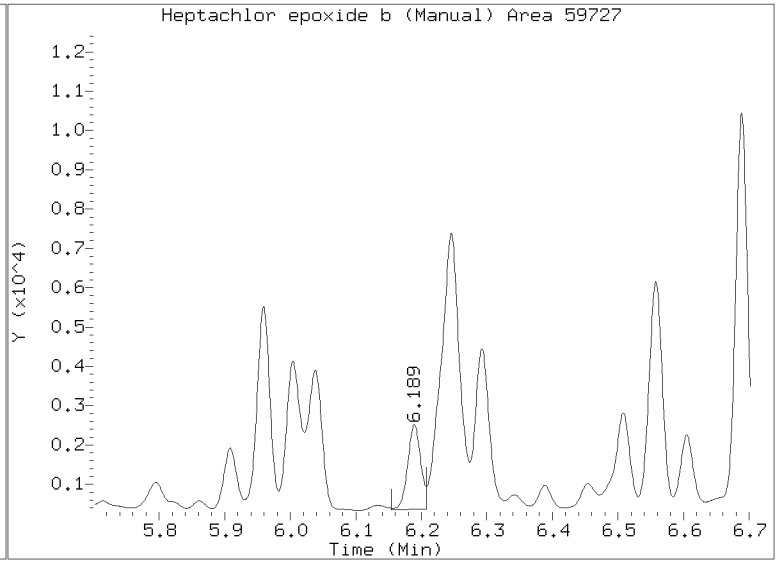

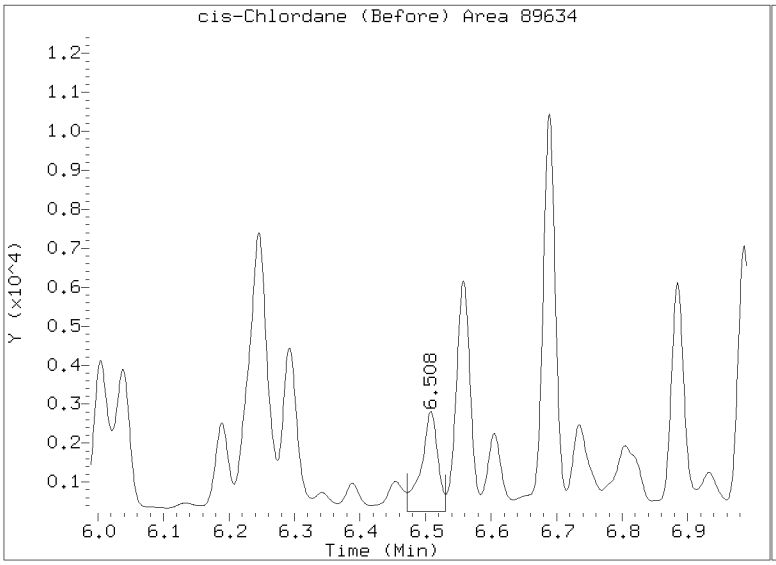

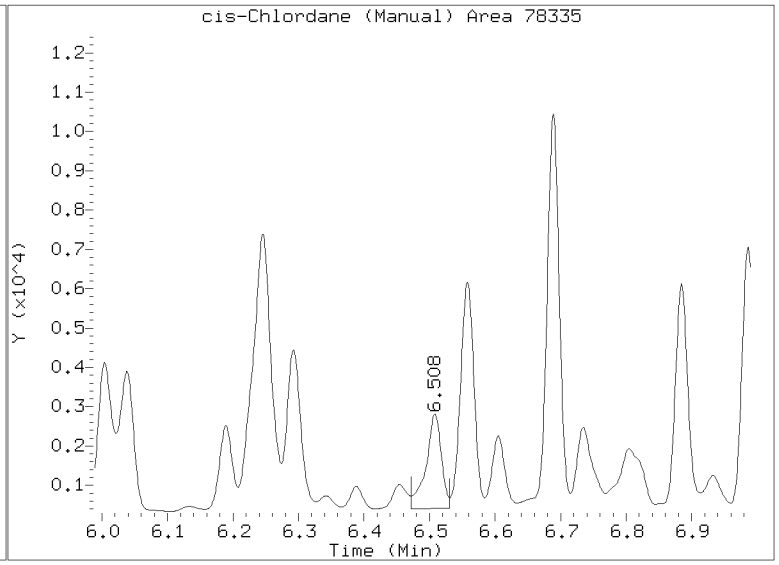

Manual Peak Adjustment Report, STX-CLP

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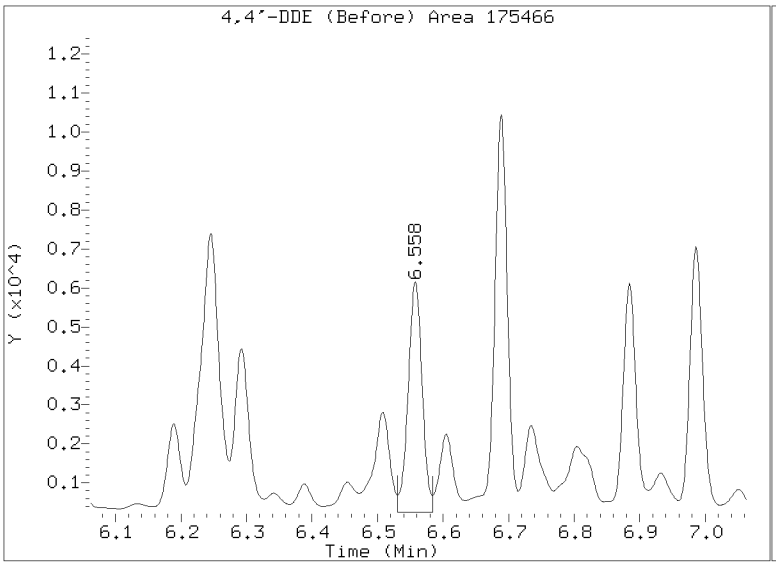

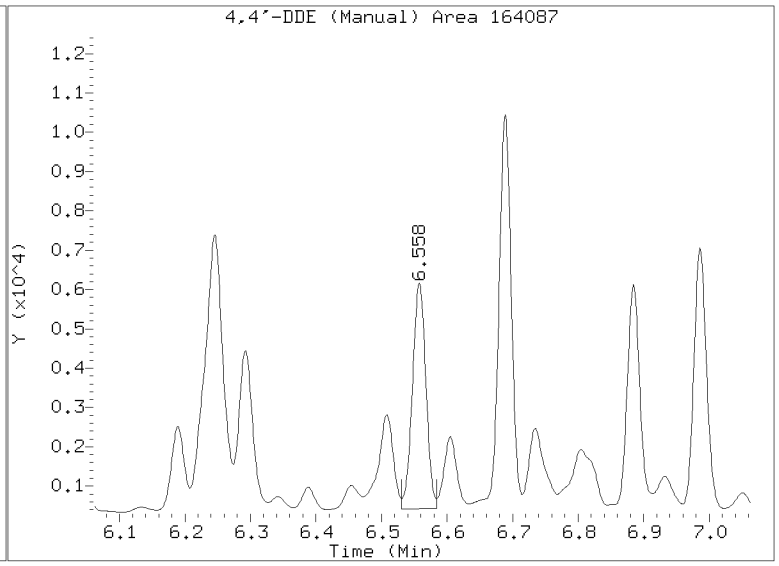

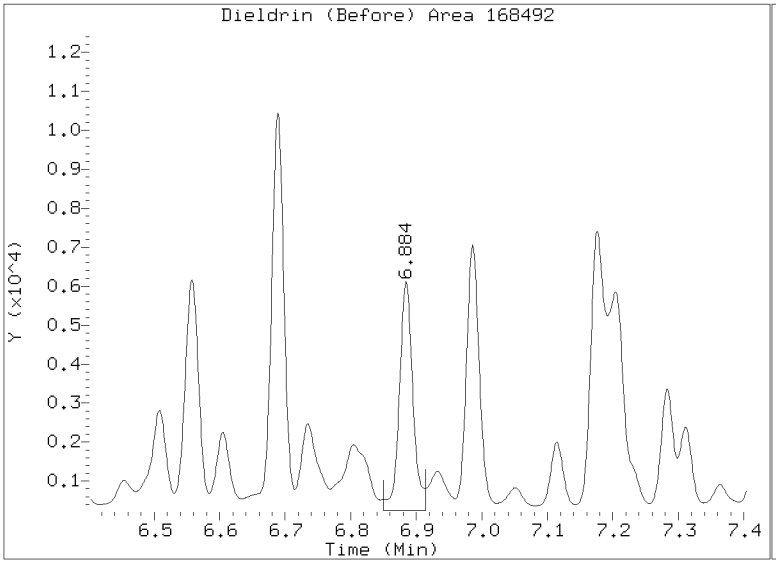

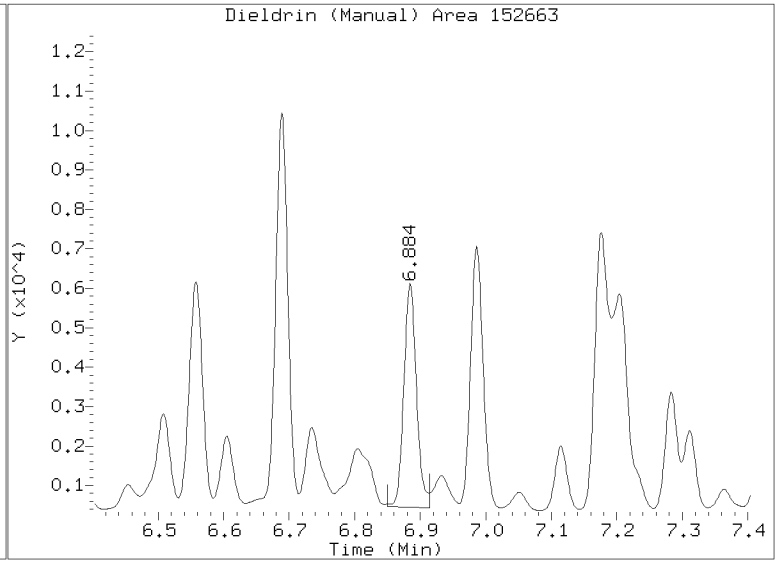

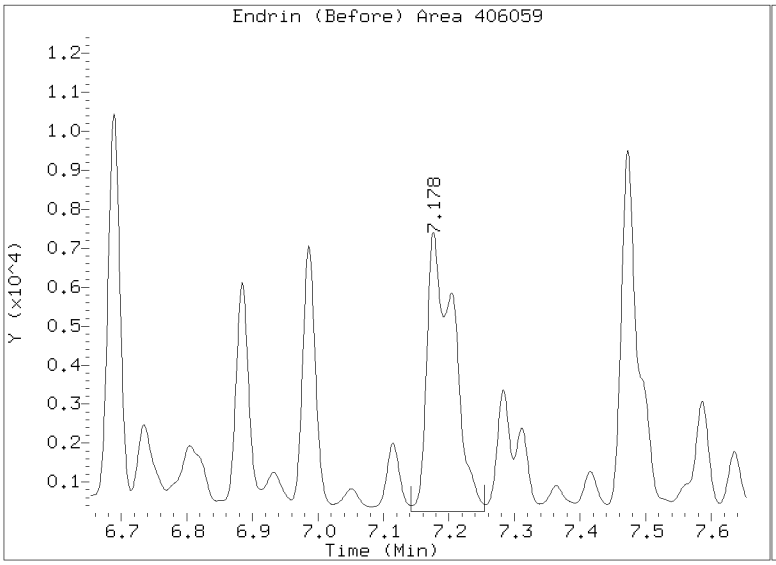

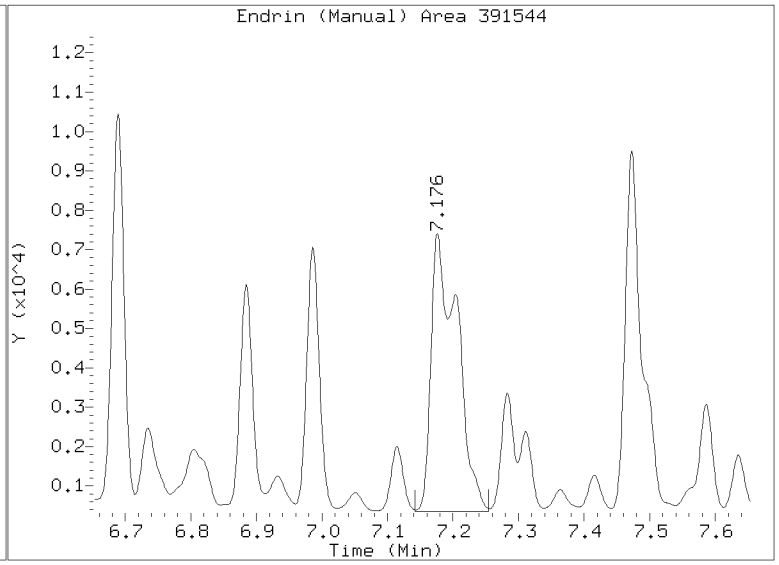

Manual Peak Adjustment Report, STX-CLP

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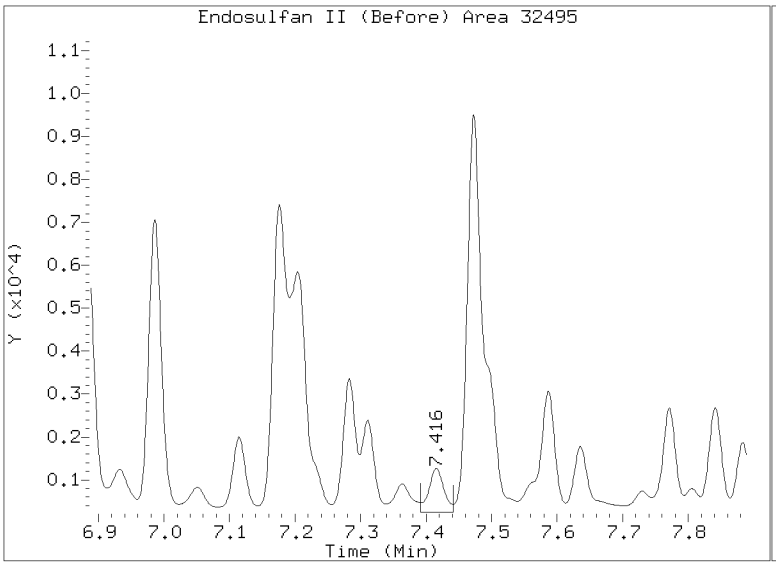
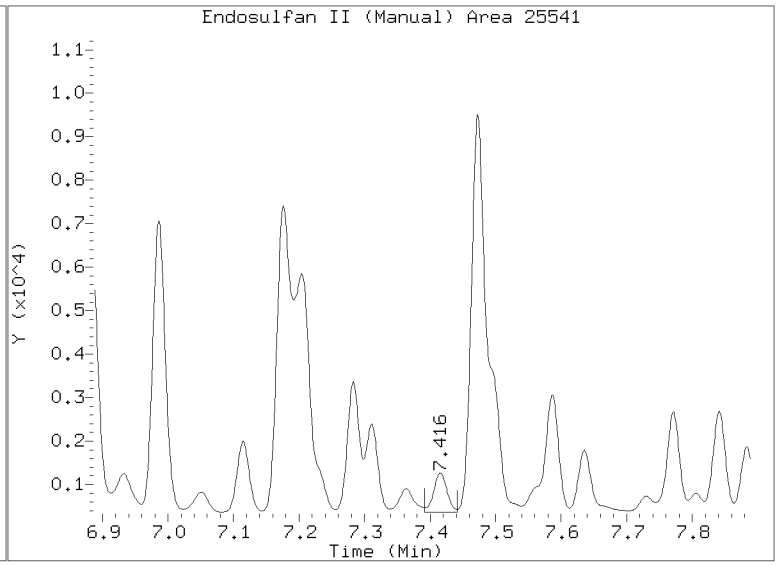
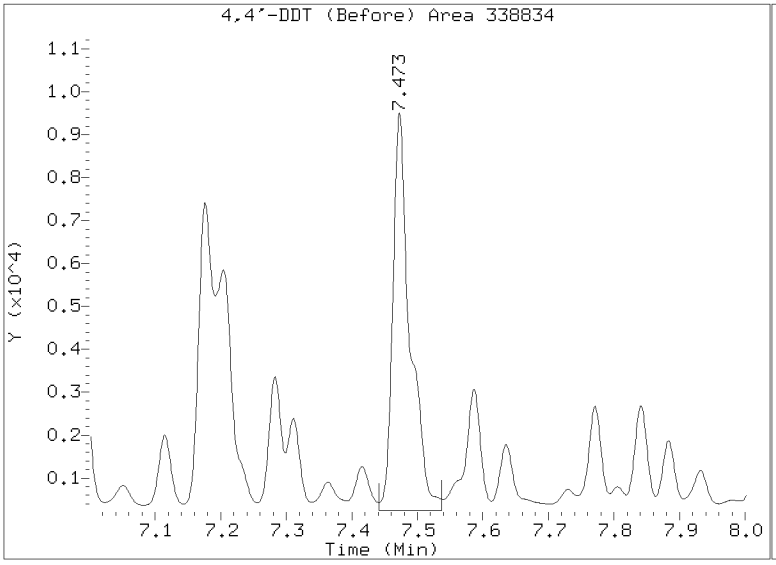
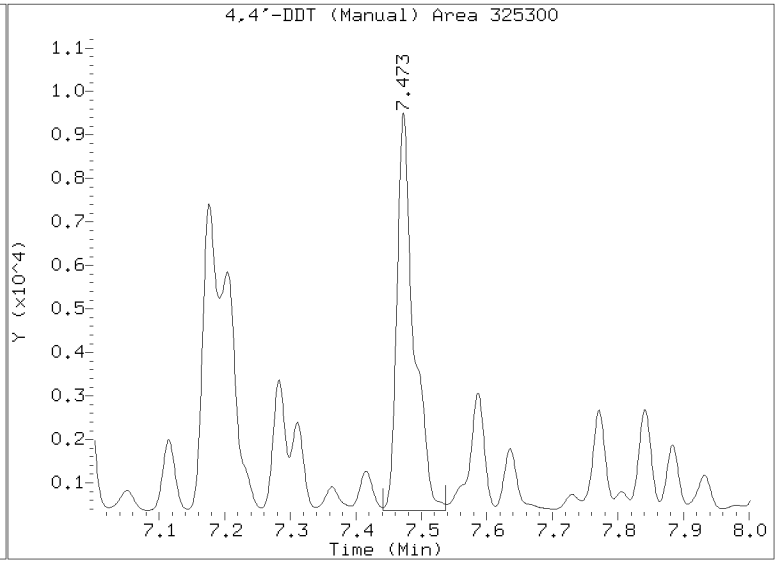
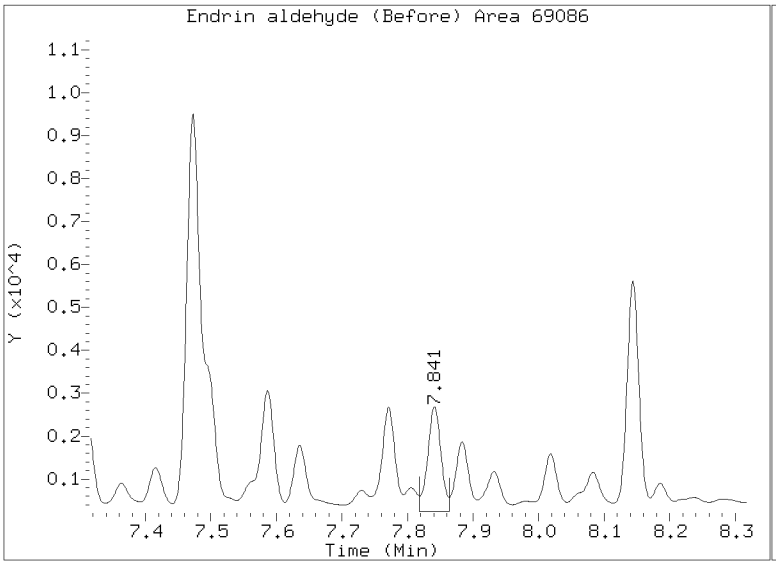
Report Date: 03/02/2023 13:14

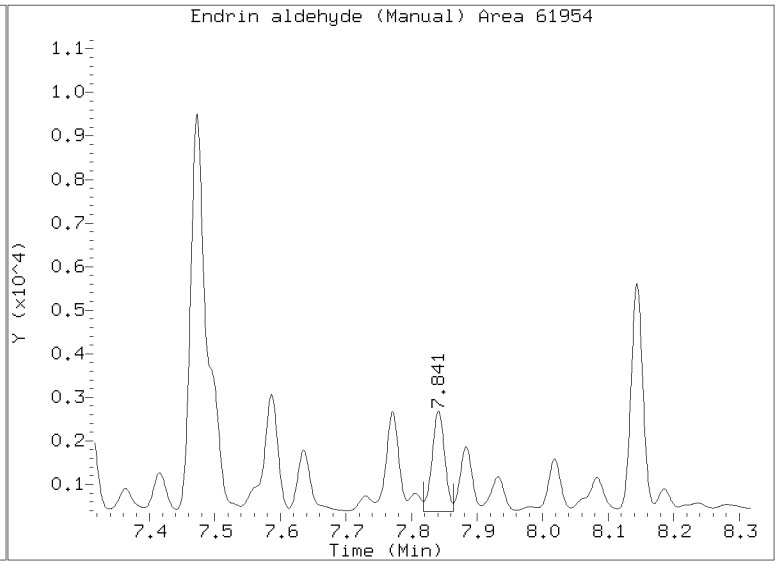












Manual Peak Adjustment Report, STX-CLP

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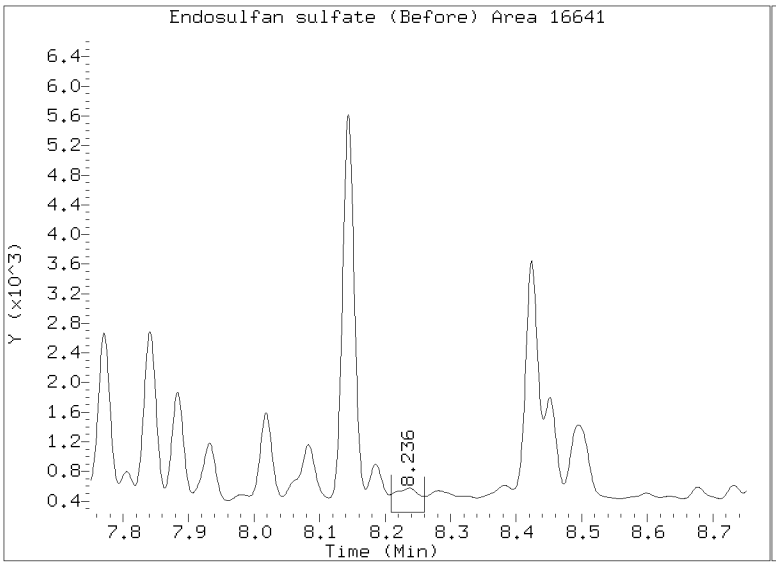

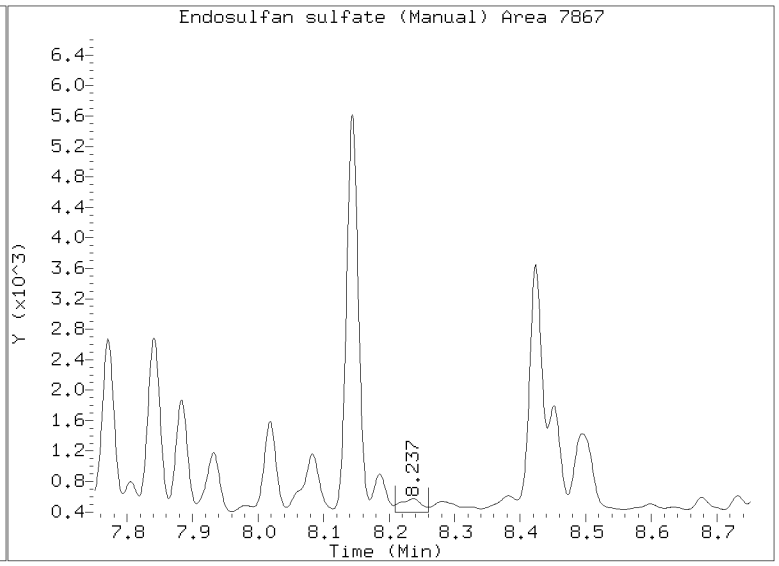

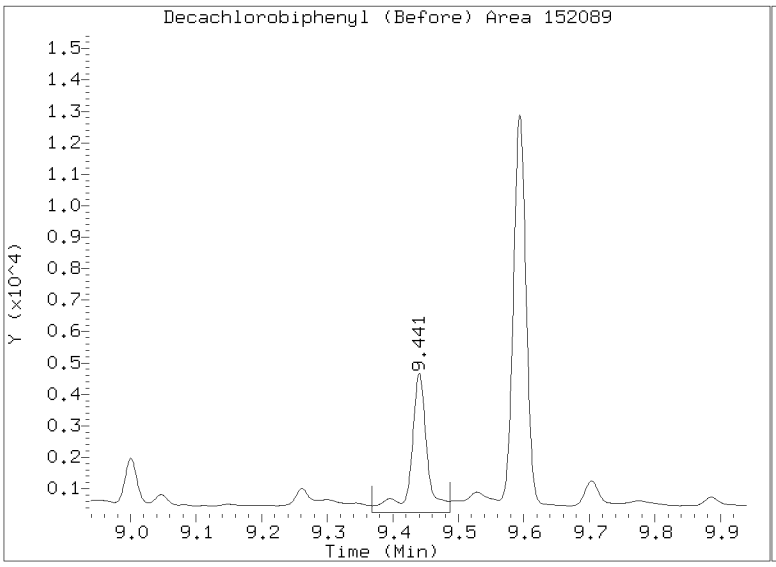

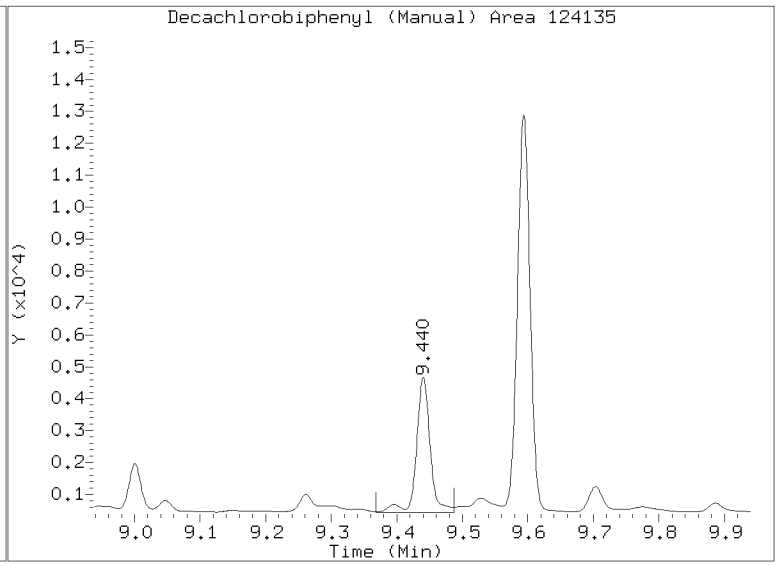

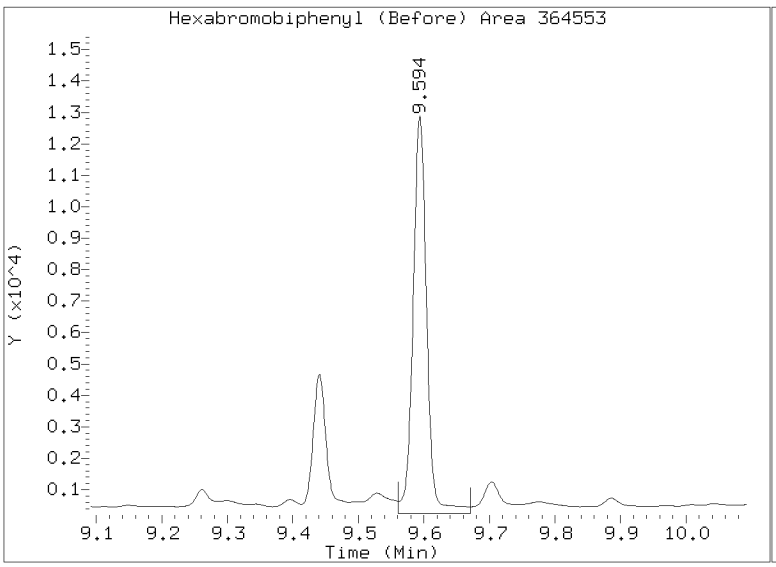

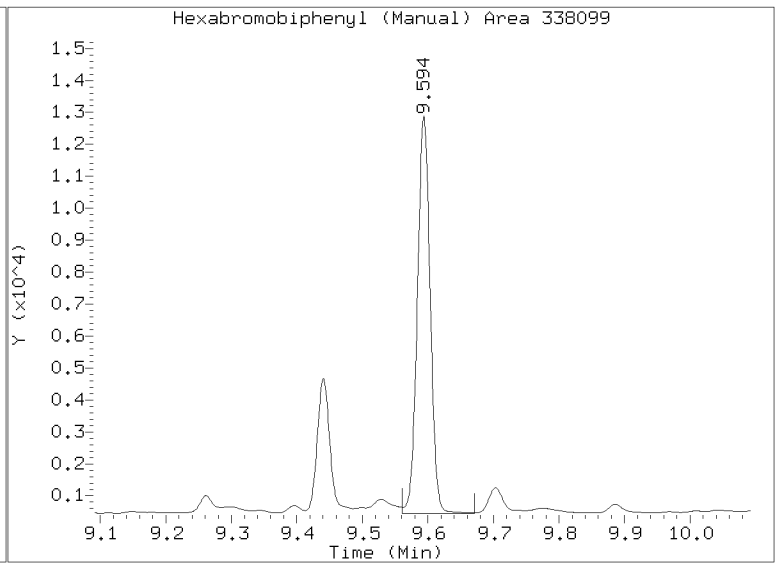

Manual Peak Adjustment Report, CLP-2

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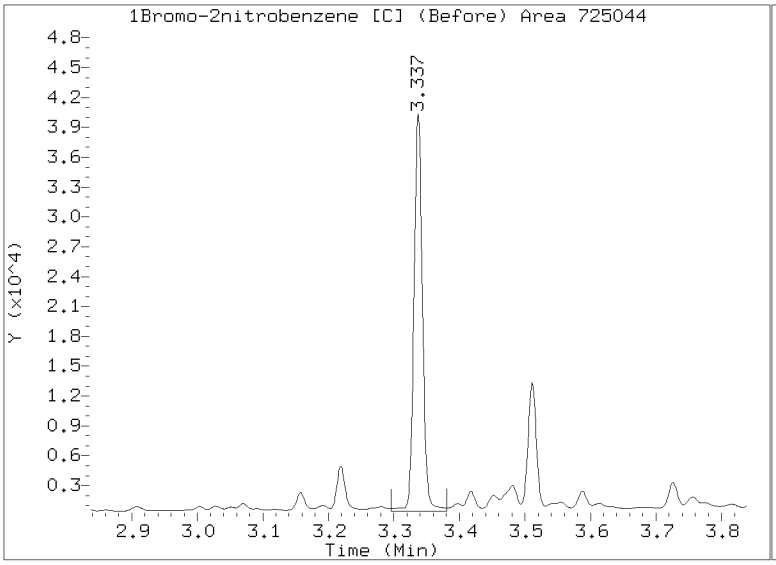

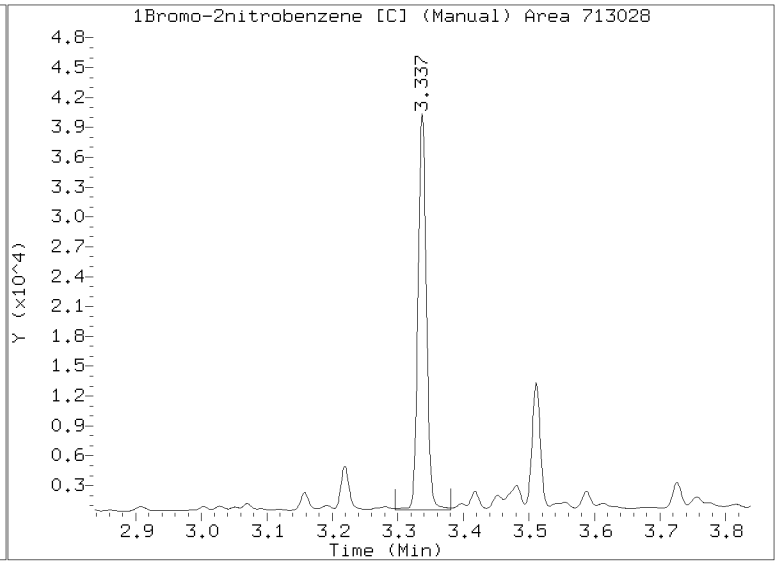

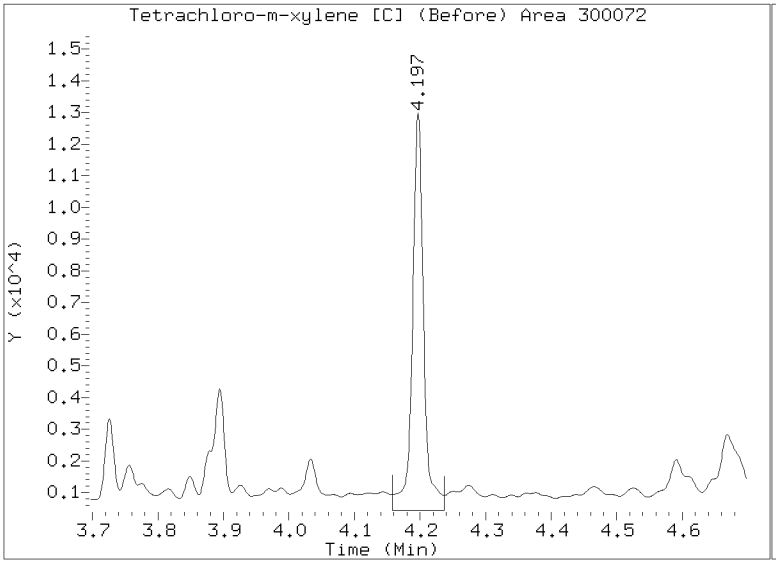

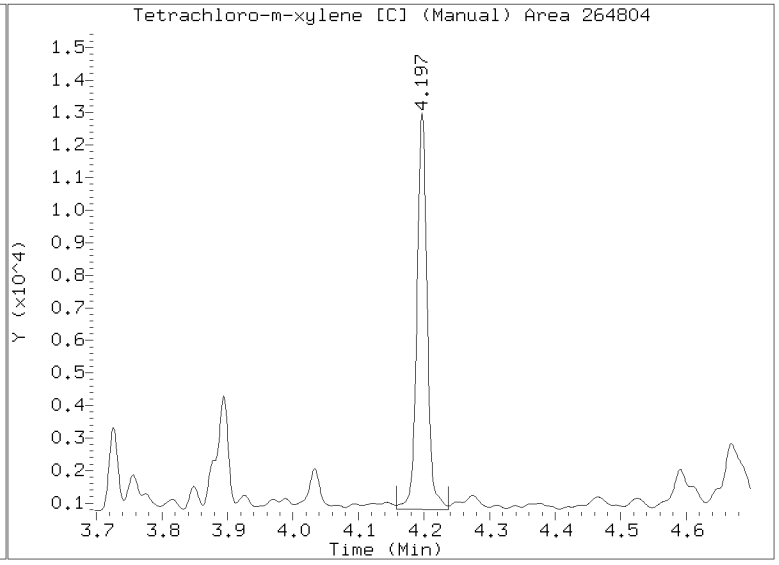

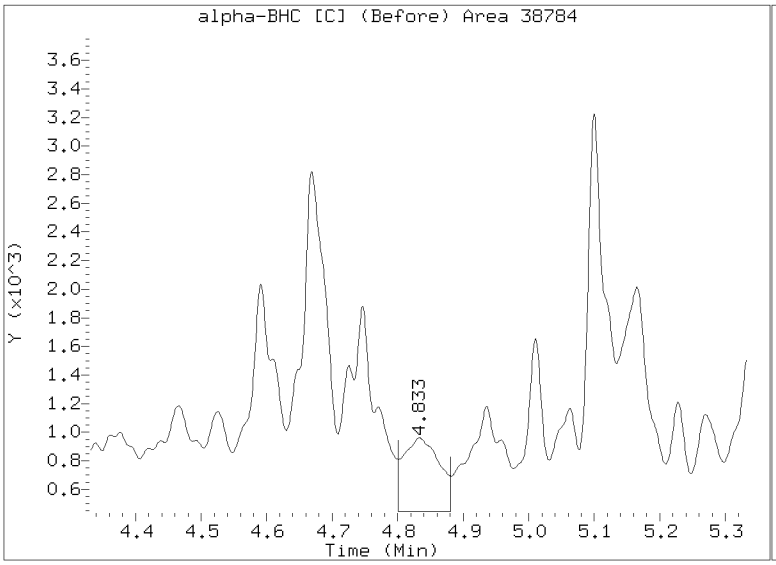

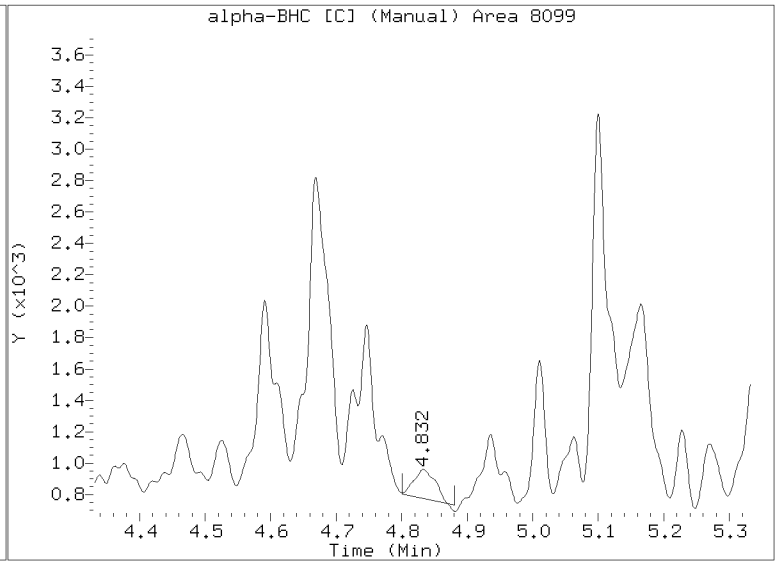

Manual Peak Adjustment Report, CLP-2

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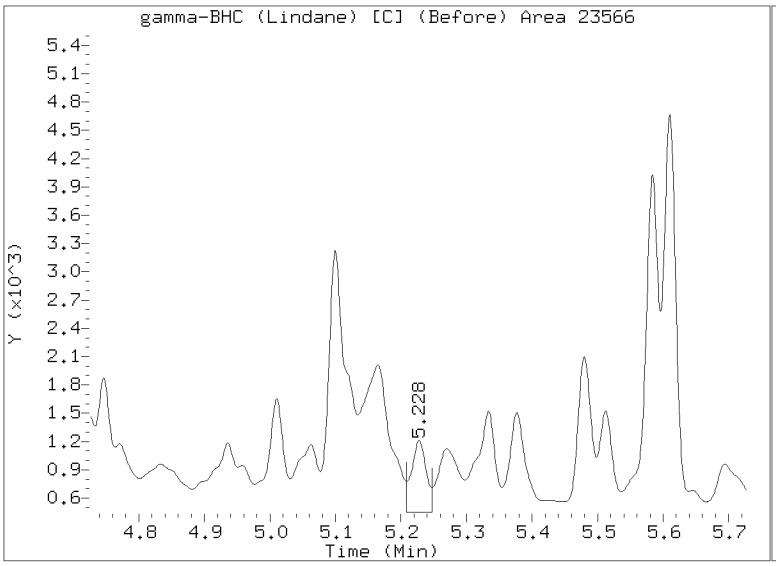
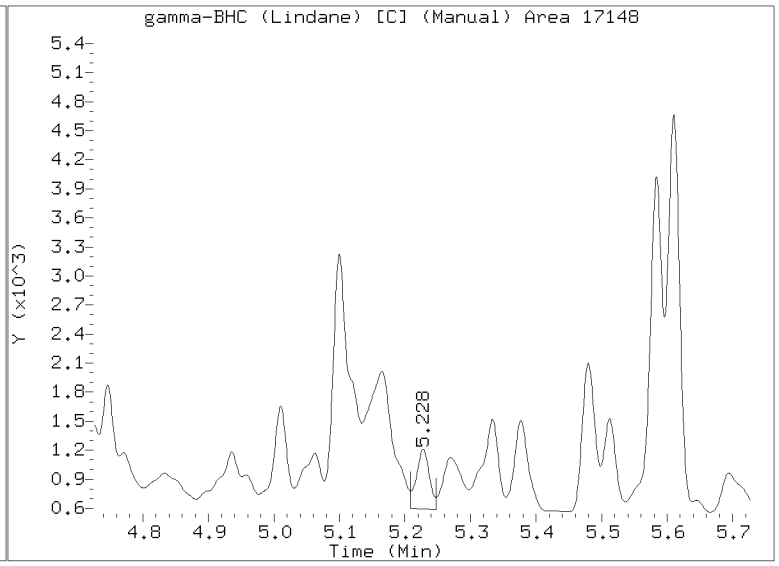
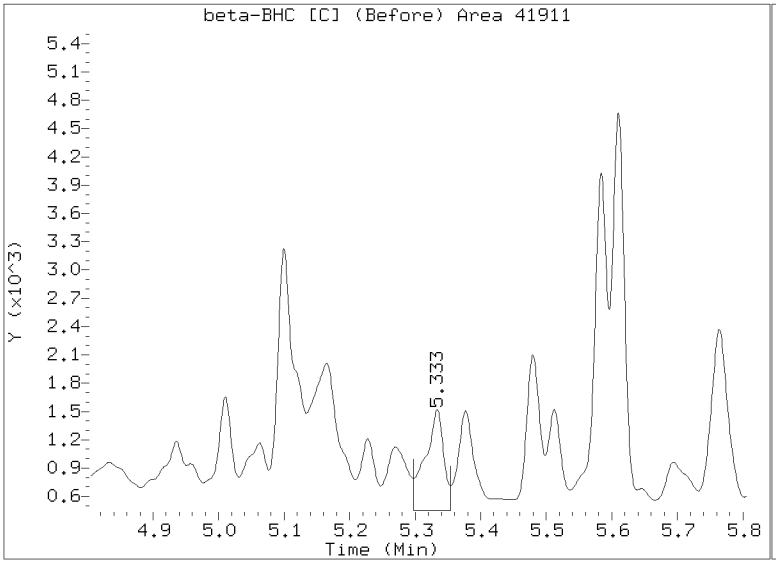
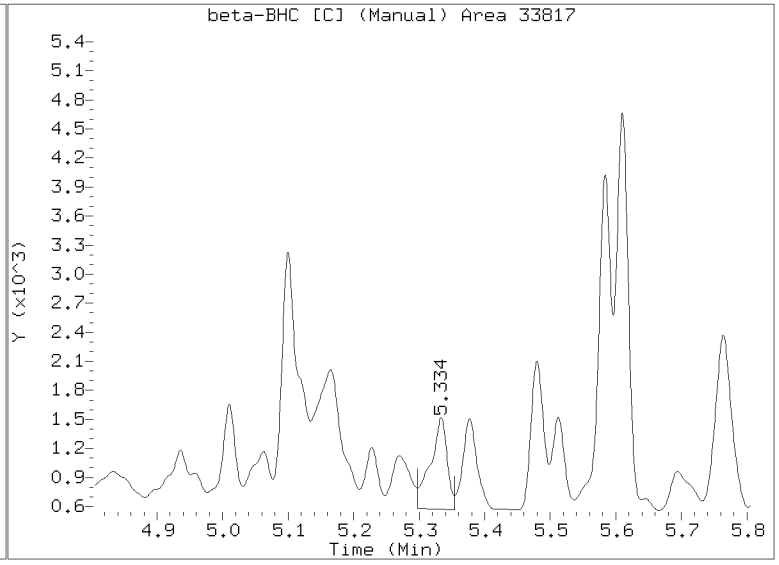
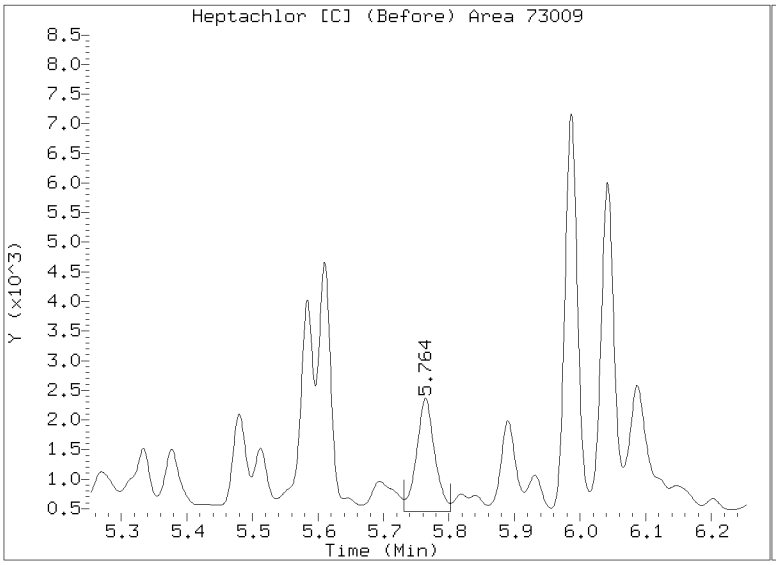
Injection Date: 01-MAR-2023 19:08
Lab ID:23A0249-04 Client ID:

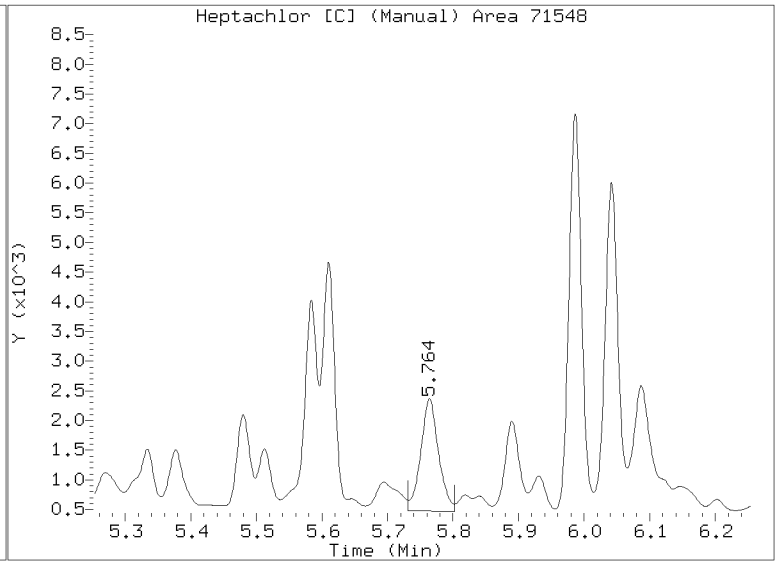












Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1025

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-05 A	File ID:	23C03074.D
Sampled:	01/12/23 11:28	Prepared:	01/31/23 13:36	Analyzed:	03/07/23 09:53
% Solids:	59.36	Preparation:	EPA 3546 (Microwave)	Initial/Final:	21.84 g Wet / 2.5 mL
Batch:	BLA0672	Sequence:	SLC0106	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.48	0.14	0.48	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.7135*	*6.72*	*87.2*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.7135*	*6.15*	*79.8*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.7135*	*2.60*	*33.8*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.7135*	*4.41*	*57.2*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230307.b/23C03074.D
Data file 2: /20230307.b/B20230307.b/23C03074.D
Method: \20230307.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23A0249-05
Client ID:
Injection Date: 07-MAR-2023 09:53
Report Date: 03/09/2023 13:37
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.374	-0.004	157999	4.809	-0.007	8872	5.41	0.30	178.8*	alpha-BHC
4.764	-0.002	39179	5.316	0.026	97778	3.49	8.80	86.5*	beta-BHC
4.964	0.011	393400	----			16.49	0.00	---	delta-BHC
4.689	0.004	196326	5.212	0.003	50338	7.76	2.03	117.1*	gamma-BHC (Lindane)
5.163	-0.013	105092	5.747	0.011	213854	4.67	9.52	68.4*	Heptachlor
5.523	0.019	278857	6.129	-0.008	30287	11.05	1.18	161.4*	Aldrin
6.174	-0.010	80158	6.830	0.037	19618	3.66	0.92	119.4*	Heptachlor epoxide b
----			7.226	-0.010	40437	0.00	2.16	---	Endosulfan I
----			----			0.00	0.00	---	Dieldrin
6.542	-0.004	299246	7.319	-0.001	142928	14.94	7.54	65.8*	4,4'-DDE
7.163	0.028	694135	7.883	0.030	557271	84.13	48.13	54.4*	Endrin
7.403	0.031	51046	8.073	0.009	285426	6.87	24.05	111.1*	Endosulfan II
----			7.923	-0.000	174814	0.00	15.52	---	4,4'-DDD
----			8.696	0.037	127626	0.00	12.25	---	Endosulfan sulfate
----			8.252	0.010	982821	0.00	90.42	---	4,4'-DDT
8.006	0.034	81986	8.920	0.040	27454	24.63	5.71	124.7*	Methoxychlor
----			9.200	0.019	401793	0.00	35.70	---	Endrin ketone
7.827	0.027	157982	8.389	-0.005	157332	26.67	18.79	34.6	Endrin aldehyde
----			7.038	0.034	477361	0.00	22.56	---	trans-Chlordane
6.492	0.021	149220	7.163	-0.000	31473	6.70	1.52	126.0*	cis-Chlordane
2.316	-0.019	22783	2.466	-0.016	14341	0.75	0.52	36.2	Hexachlorobutadiene
----			----			0.00	0.00	---	Hexachlorobenzene
3.857	-0.002	278428	4.182	-0.001	469372	13.51	22.86	51.4*	Tetrachloro-m-xylene MN
9.432	0.011	222323	10.393	0.008	287144	34.86	31.91	8.9	Decachlorobiphenyl MN

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

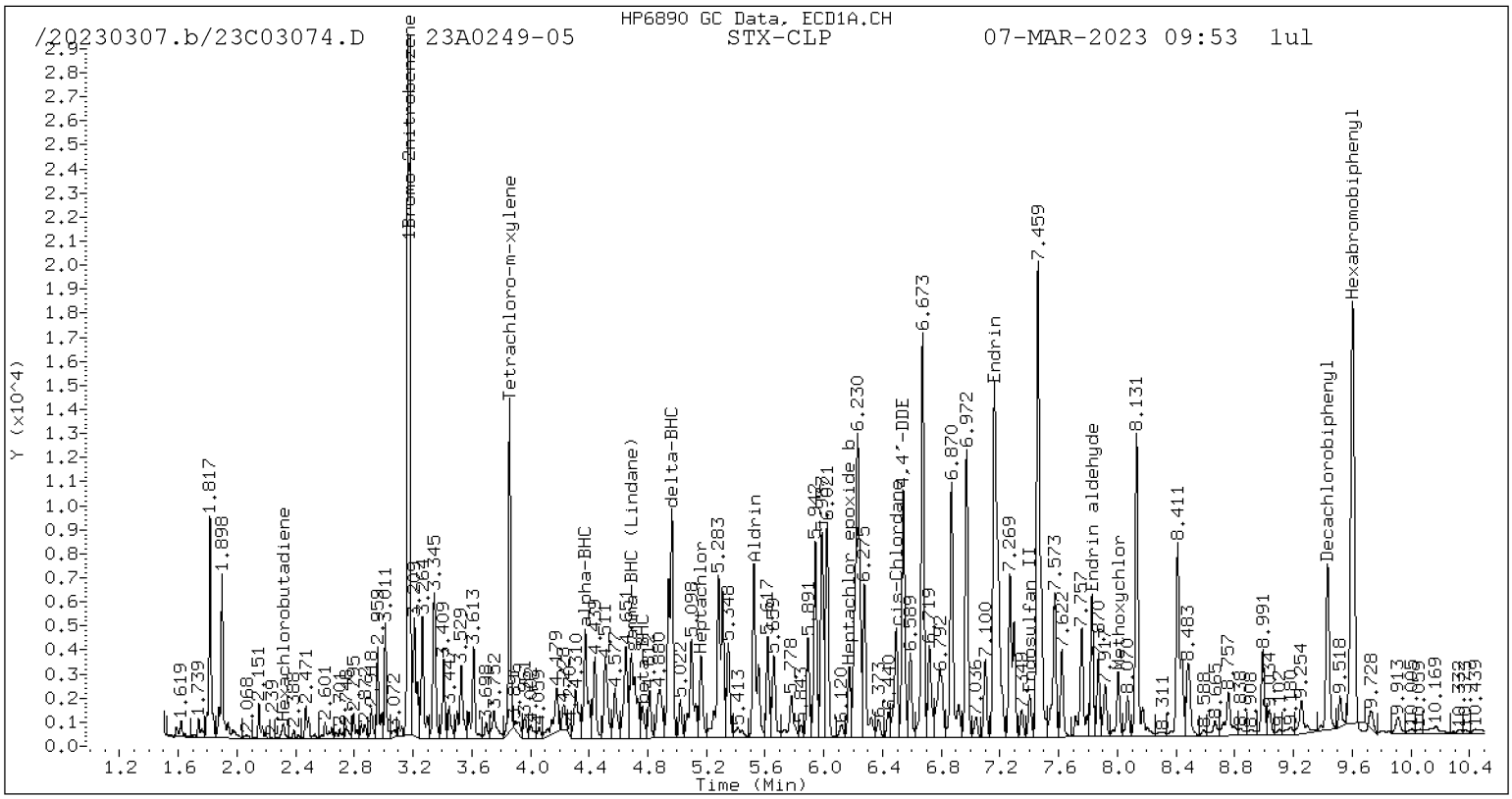
Standard Cpnd	Standard Area*	Sample Area	%D	
Bromo-Nitrobenzene	672426	1515925	125.4	<-
Hexabromobiphenyl	609723	629352	3.2	

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1458599	44.9
Hexabromobiphenyl	769764	814300	5.8

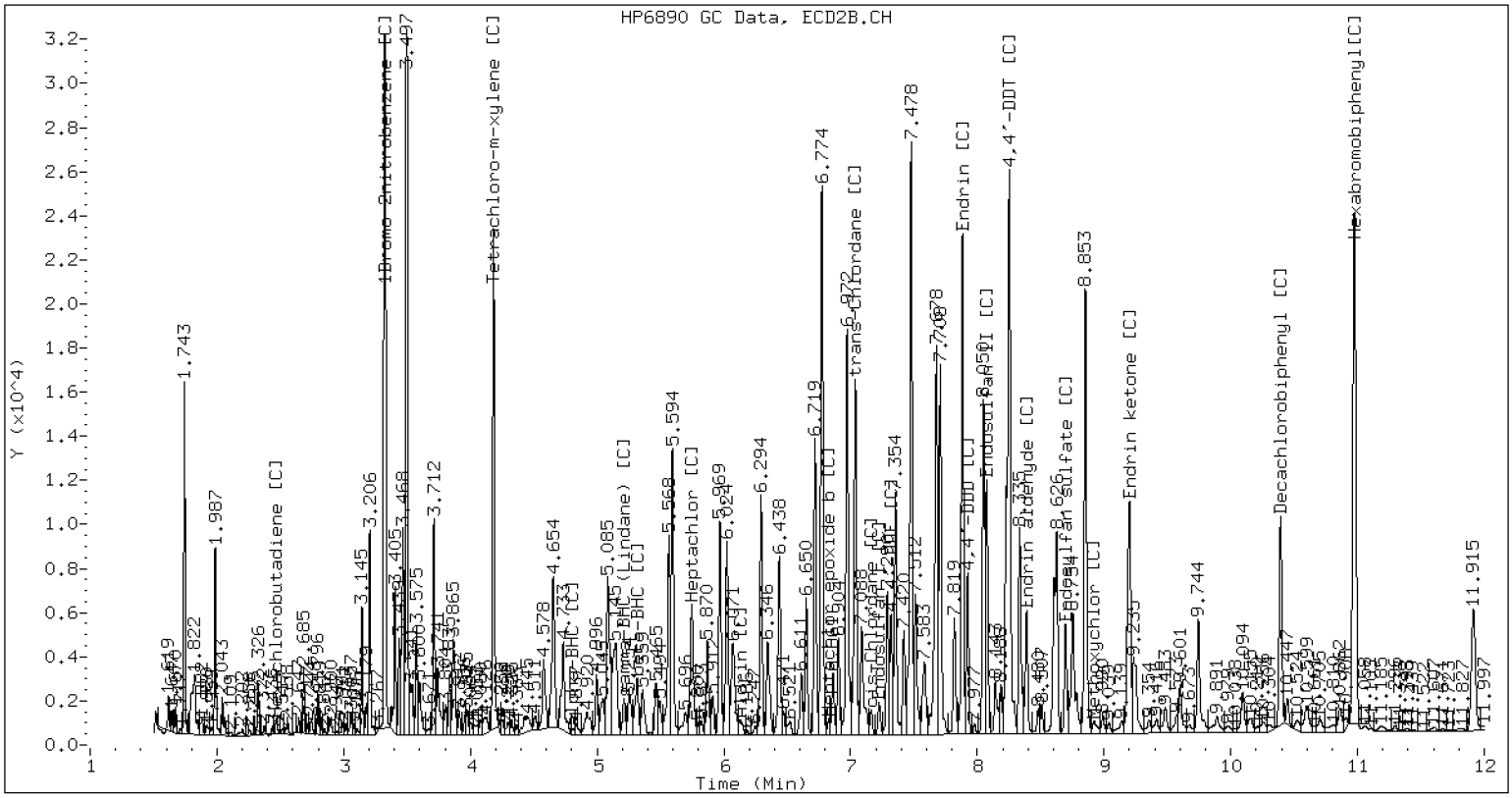
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

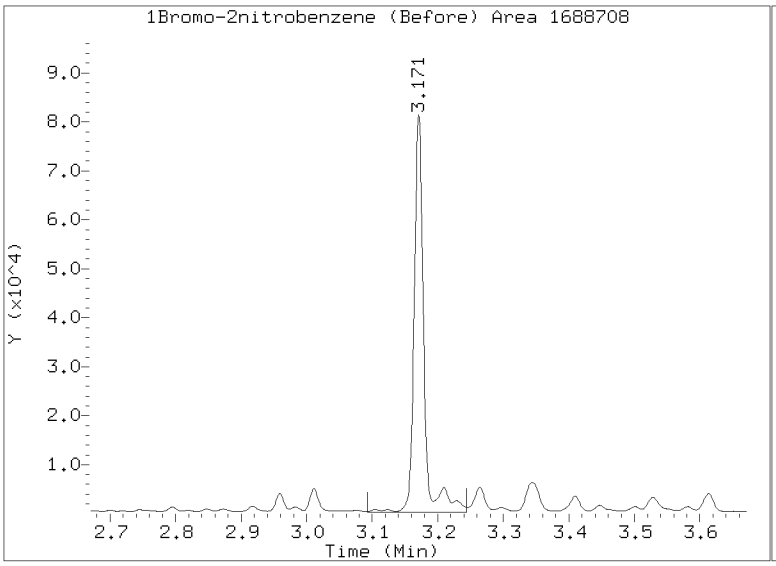
/20230307.b/B20230307.b/23C03074.D 23A0249-05 CLP2

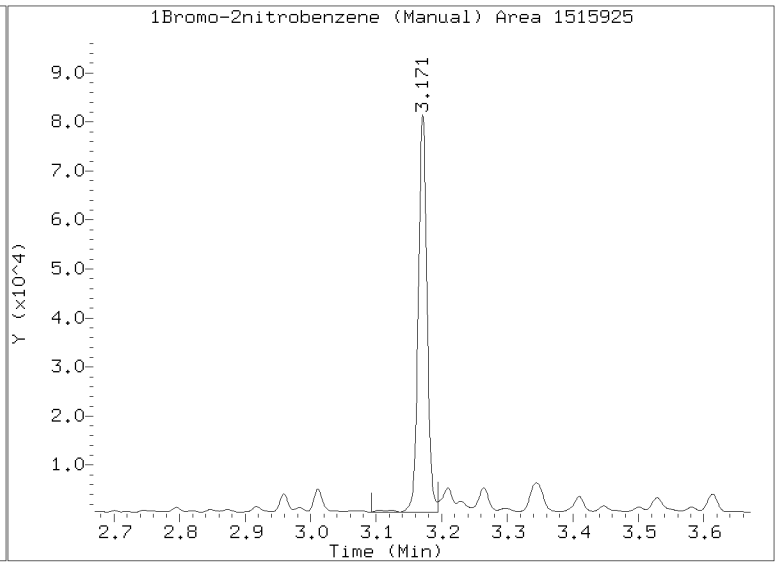


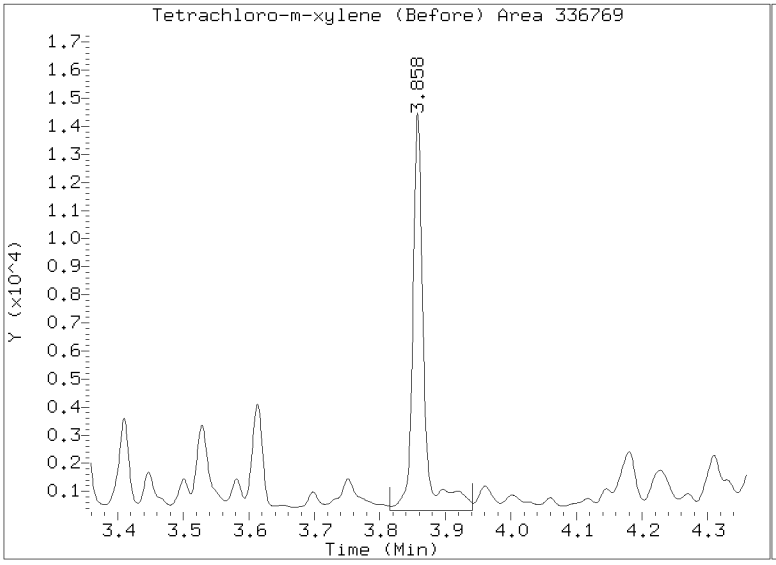
CLP-2 Manual Integration: YES

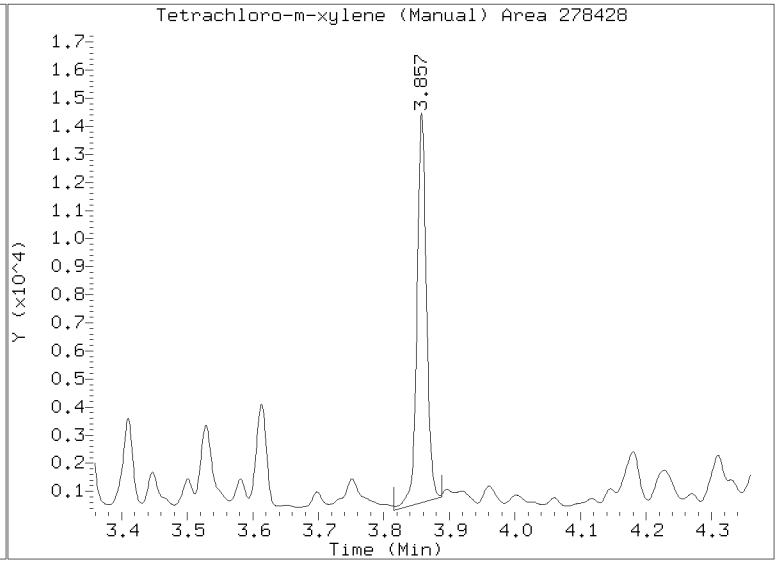
Manual Peak Adjustment Report, STX-CLP

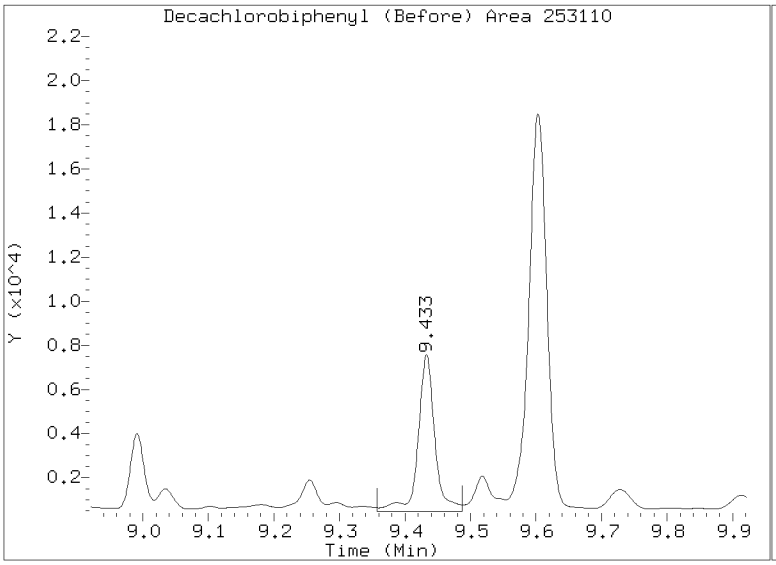
Datafile: /20230307.b/23C03074.D
Injection Date: 07-MAR-2023 09:53
Lab ID:23A0249-05 Client ID:
Report Date: 03/09/2023 13:38

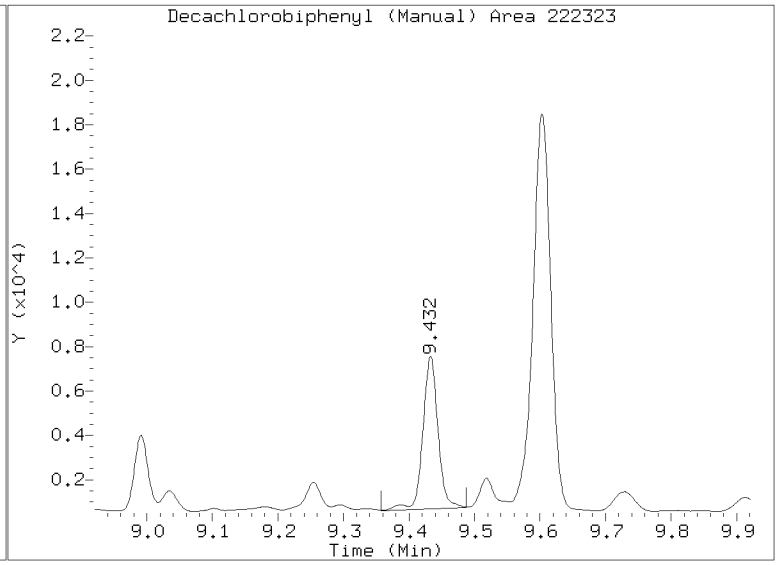












Manual Peak Adjustment Report, STX-CLP

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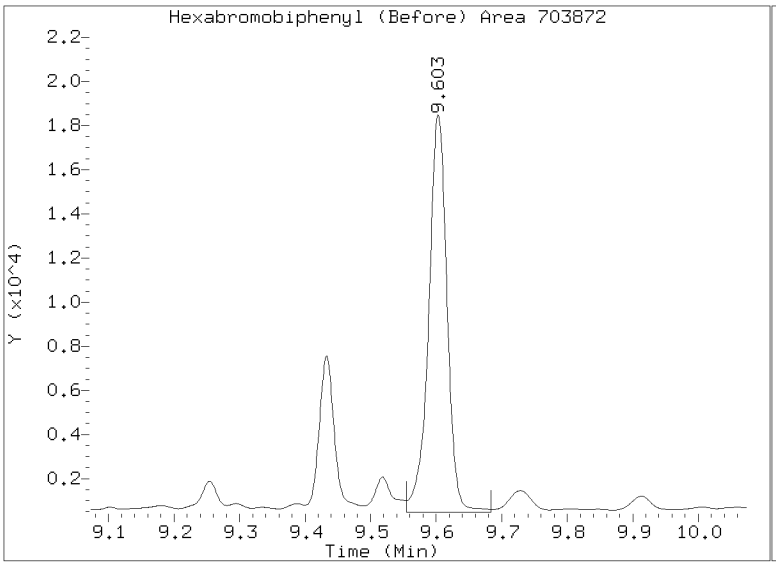
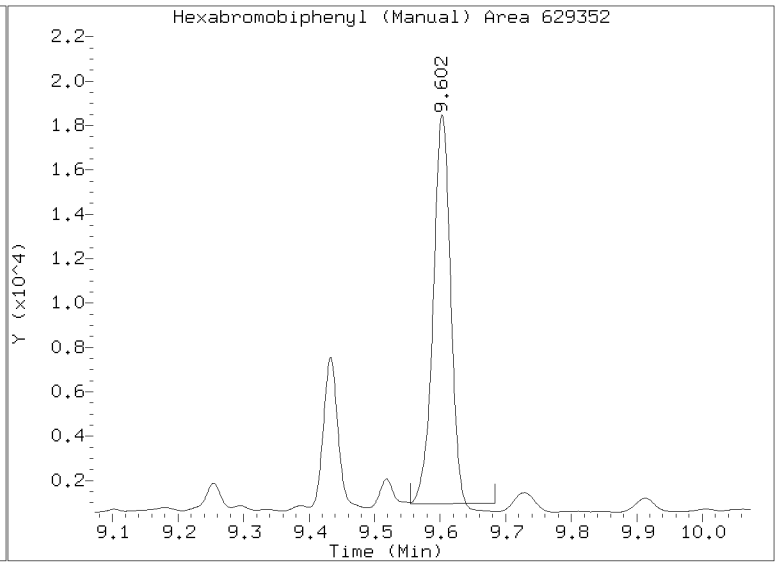
Injection Date: 07-MAR-2023 09:53
Lab ID:23A0249-05 Client ID:
Report Date: 03/09/2023 13:38





Manual Peak Adjustment Report, CLP-2

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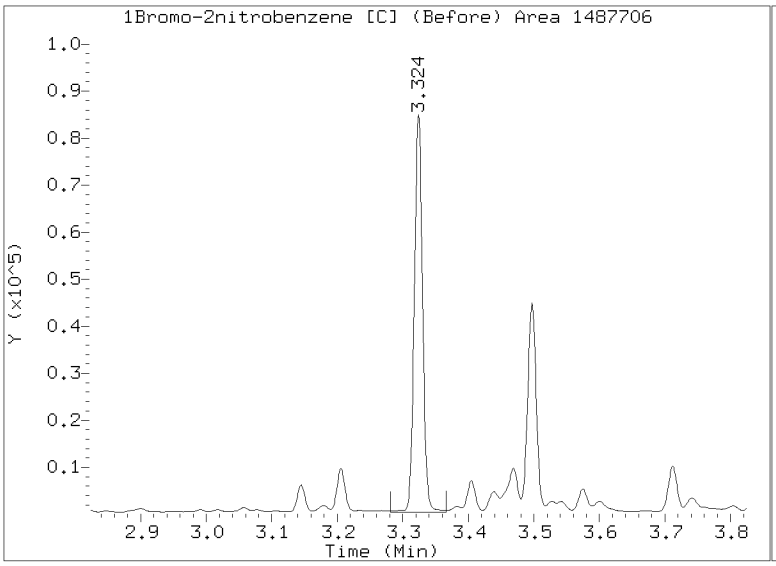
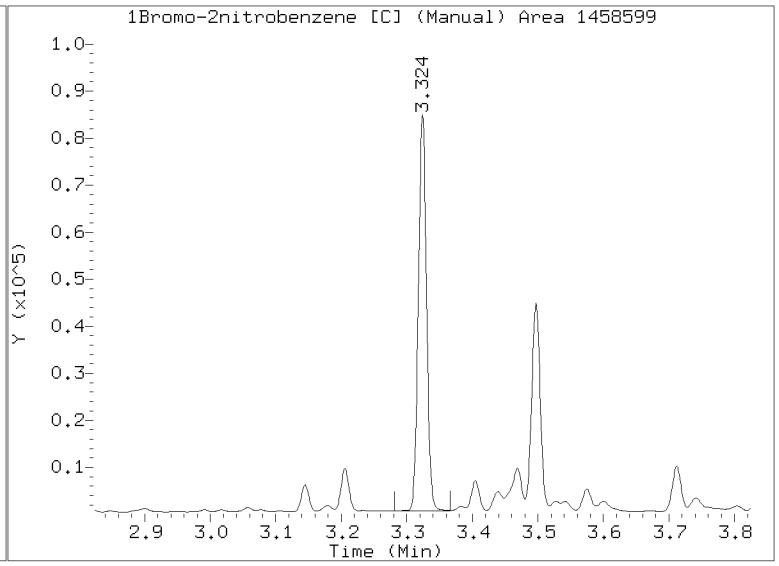
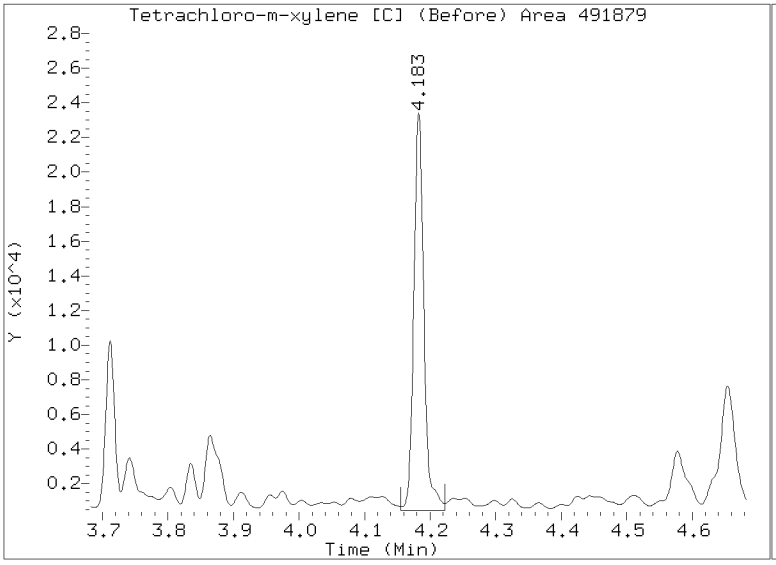
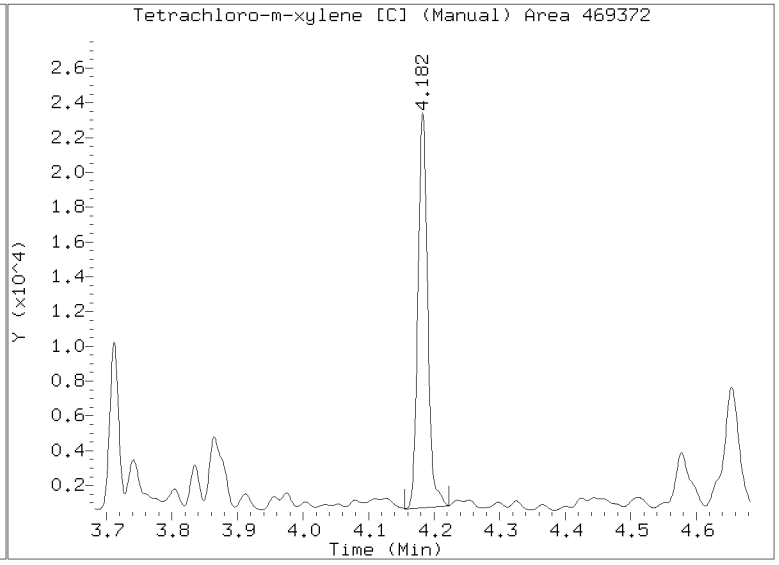
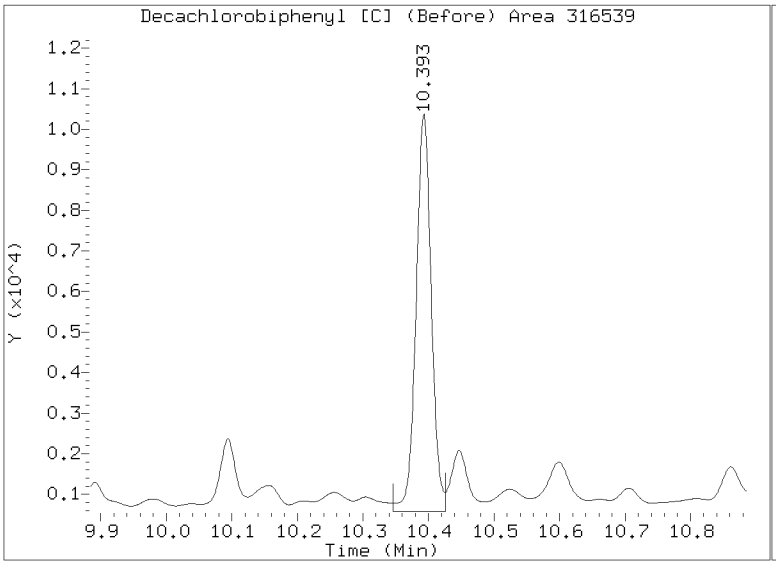
Lab ID:23A0249-05 Client ID:

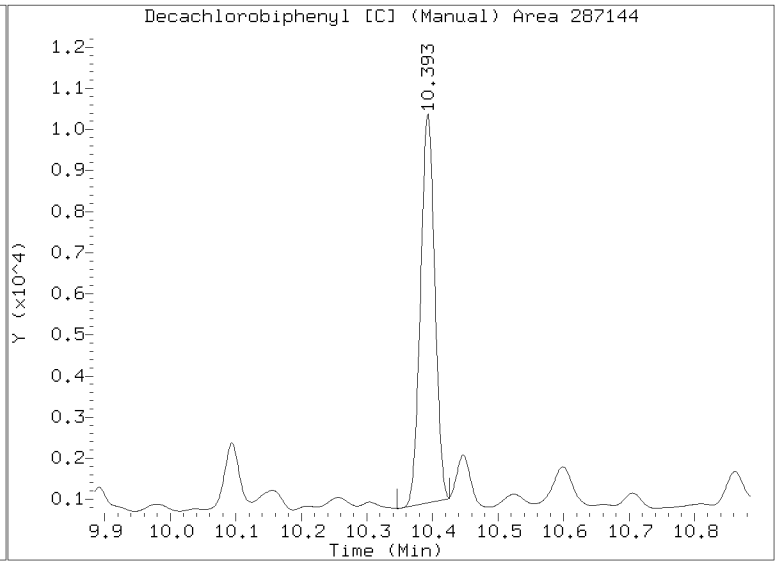












Manual Peak Adjustment Report, CLP-2

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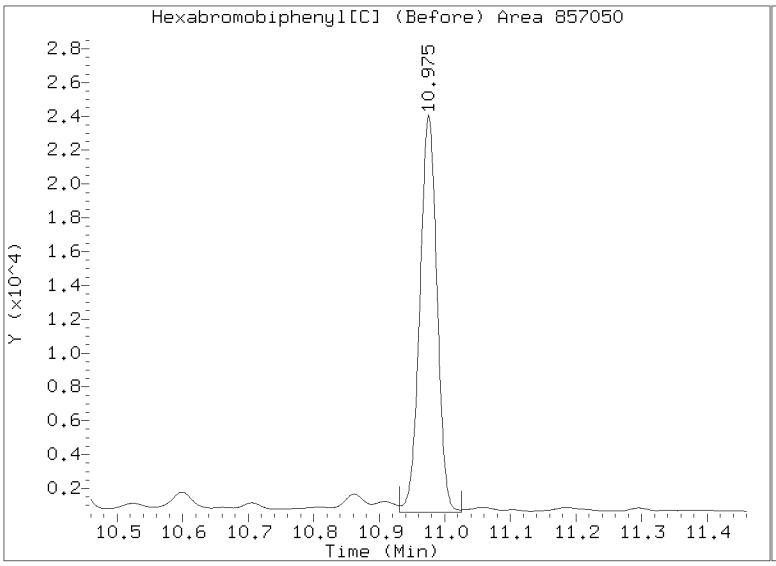
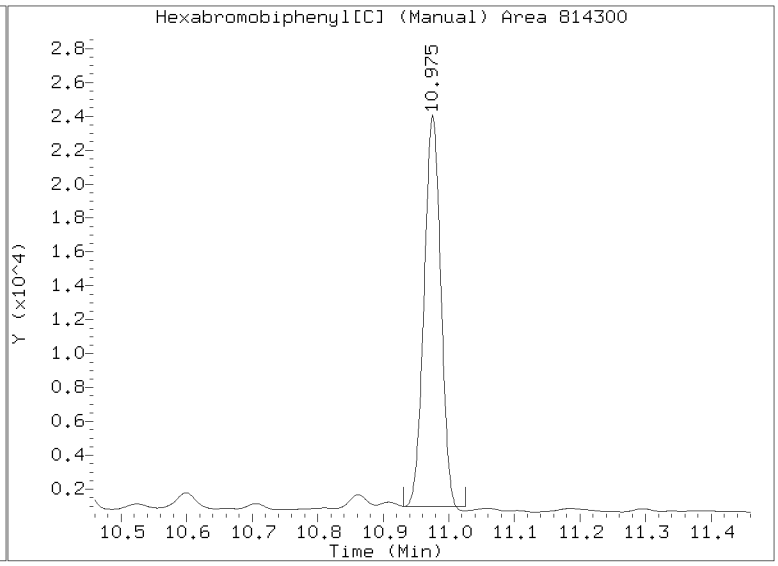
Injection Date: 07-MAR-2023 09:53
Lab ID:23A0249-05 Client ID:





Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1024

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-08 A	File ID:	23030120.D
Sampled:	01/12/23 13:35	Prepared:	01/31/23 13:36	Analyzed:	03/01/23 19:43
% Solids:	48.98	Preparation:	EPA 3546 (Microwave)	Initial/Final:	25.97 g Wet / 2.5 mL
Batch:	BLA0672	Sequence:	SLC0031	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.49	0.14	0.49	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.8616*	*6.11*	*77.7*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.8616*	*6.42*	*81.7*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.8616*	*3.92*	*49.9*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.8616*	*5.02*	*63.9*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230301.b/23030120.D
Data file 2: /20230301.b/B20230301.b/23030120.D
Method: \20230301.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23A0249-08
Client ID:
Injection Date: 01-MAR-2023 19:43
Report Date: 03/02/2023 13:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.390	-0.004	31599	4.836	0.003	8007	2.89	0.61	130.6*	alpha-BHC MN
----			5.334	0.028	8609	0.00	1.72	---	beta-BHC
4.980	0.012	60689	----			6.80	0.00	---	delta-BHC
4.722	0.020	68623	5.228	0.001	3574	7.24	0.32	183.1*	gamma-BHC (Lindane) MN
5.178	-0.017	27018	5.765	0.011	31301	3.21	3.09	3.8	Heptachlor
5.540	0.017	43745	6.155	-0.001	11454	4.63	0.99	129.6*	Aldrin
6.189	-0.013	23673	6.790	-0.021	118944	2.89	12.43	124.5*	Heptachlor epoxide b N
----			7.241	-0.013	6685	0.00	0.79	---	Endosulfan I
6.884	-0.020	70345	7.527	-0.020	33584	8.71	3.60	83.0*	Dieldrin MN
6.557	-0.005	66200	7.334	-0.001	39136	8.83	4.58	63.4*	4,4'-DDE MN
7.175	0.021	163174	7.897	0.027	117665	37.62	22.08	52.1*	Endrin MN
7.417	0.027	12169	8.089	0.008	61022	3.12	11.17	112.8*	Endosulfan II MN
----			7.938	-0.001	33489	0.00	6.46	---	4,4'-DDD
8.238	-0.013	4093	----			1.10	0.00	---	Endosulfan sulfate
7.472	-0.030	160343	8.266	0.009	201312	40.61	40.24	0.9	4,4'-DDT MN
----			8.866	-0.029	130121	0.00	58.78	---	Methoxychlor
----			9.215	0.016	102017	0.00	19.69	---	Endrin ketone
7.842	0.024	41856	8.400	-0.010	71786	13.44	18.63	32.4	Endrin aldehyde MN
----			----			0.00	0.00	---	trans-Chlordane
6.508	0.018	40798	7.179	-0.001	7939	4.89	0.85	140.8*	cis-Chlordane MN
2.326	-0.022	8866	2.466	-0.028	54646	0.77	4.36	139.7*	Hexachlorobutadiene
----			4.695	0.003	40064	0.00	3.34	---	Hexachlorobenzene
3.873	0.000	153938	4.197	-0.001	236714	19.95	25.55	24.6	Tetrachloro-m-xylene MN
9.440	0.000	104239	10.407	0.001	135347	31.10	32.68	5.0	Decachlorobiphenyl MN

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

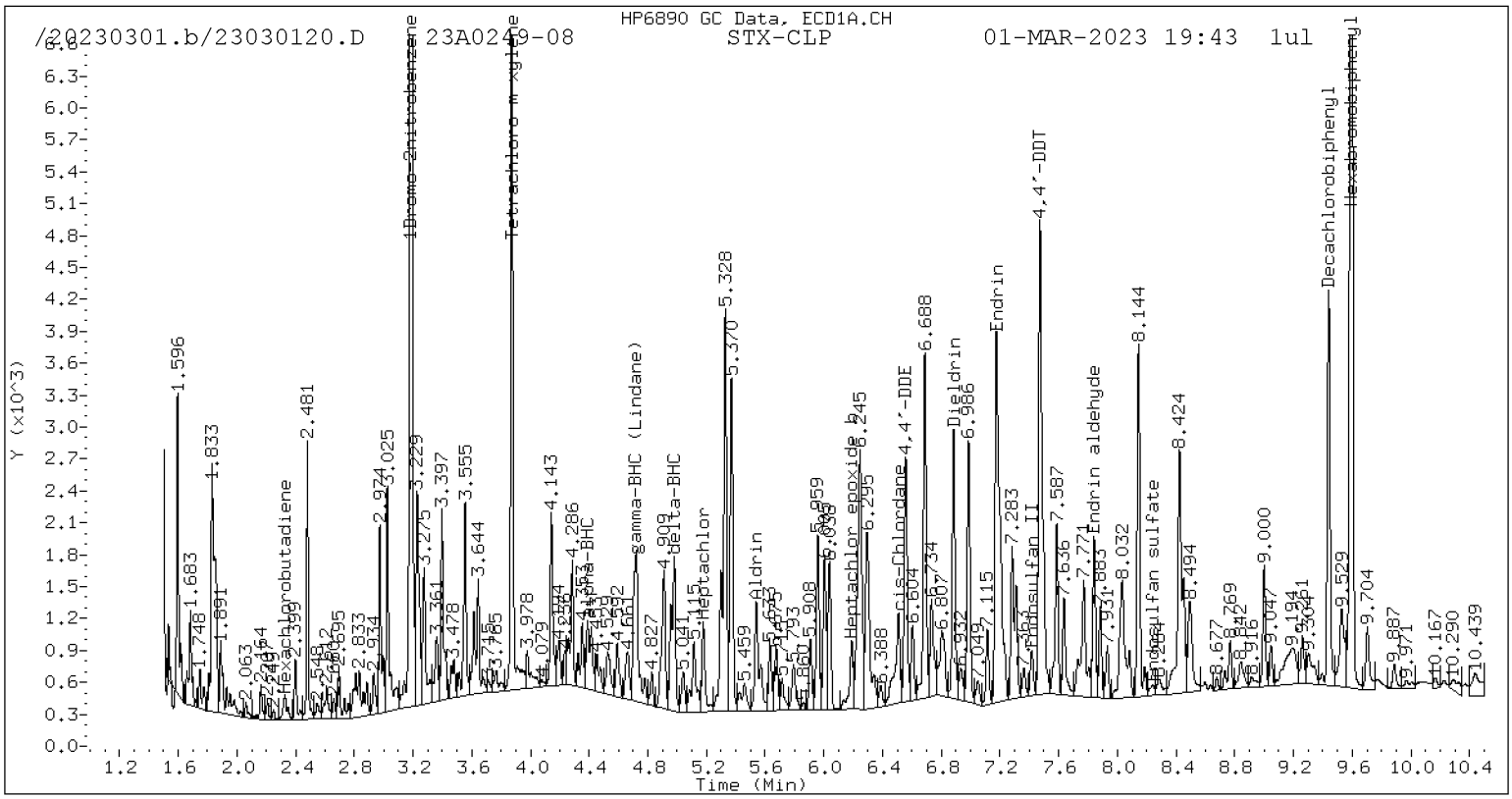
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	567459	-15.6
Hexabromobiphenyl	609723	330829	-45.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	658086	-34.6
Hexabromobiphenyl	769764	374770	-51.3 <-

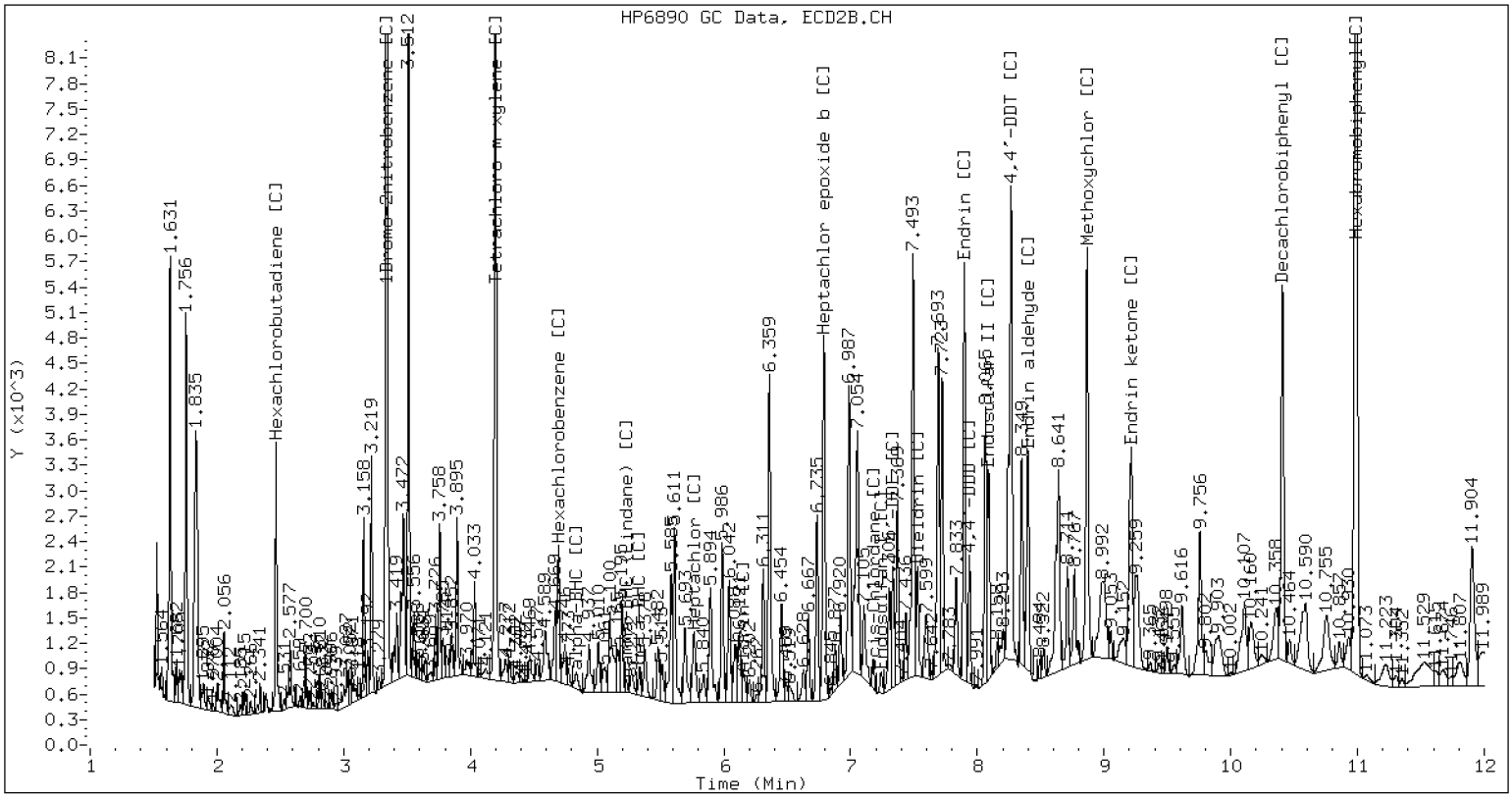
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

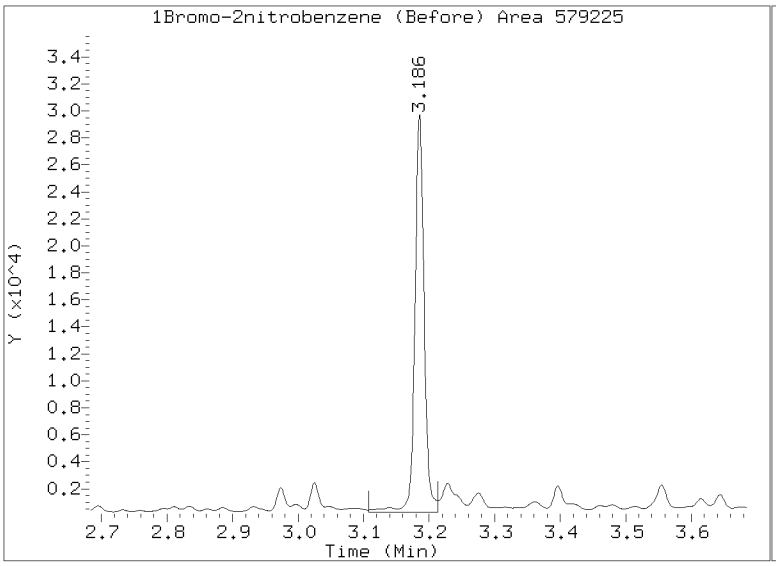
/20230301.b/B20230301.b/23030120.D 23A0249-08 CLP2

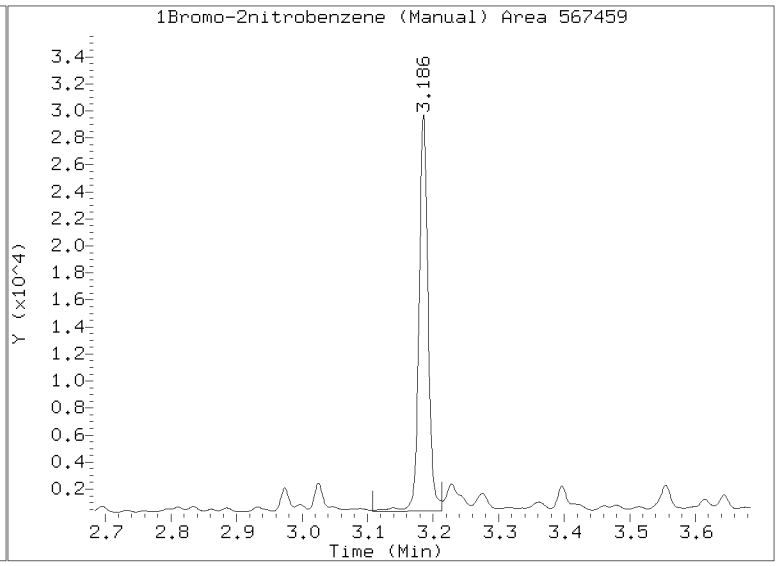


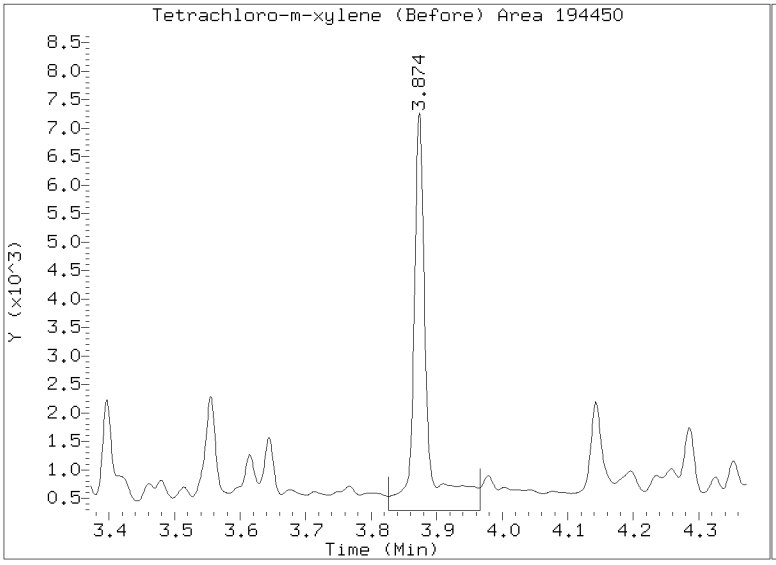
CLP-2 Manual Integration: YES

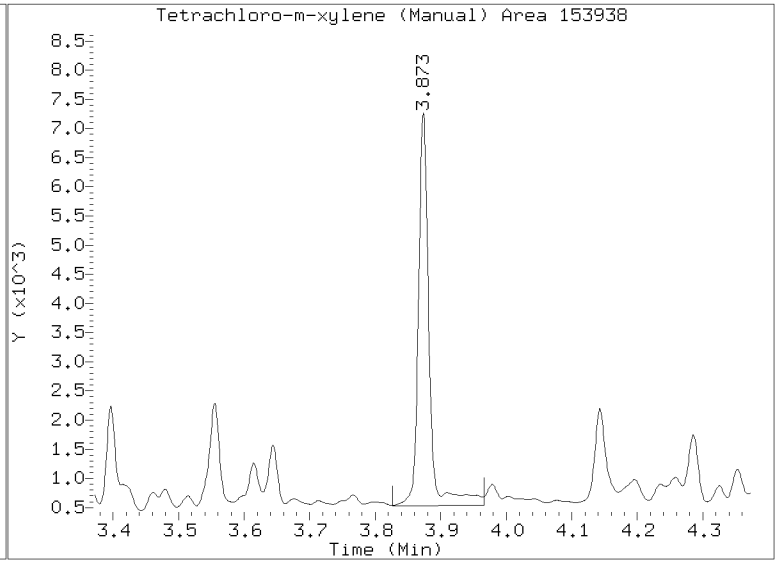
Manual Peak Adjustment Report, STX-CLP

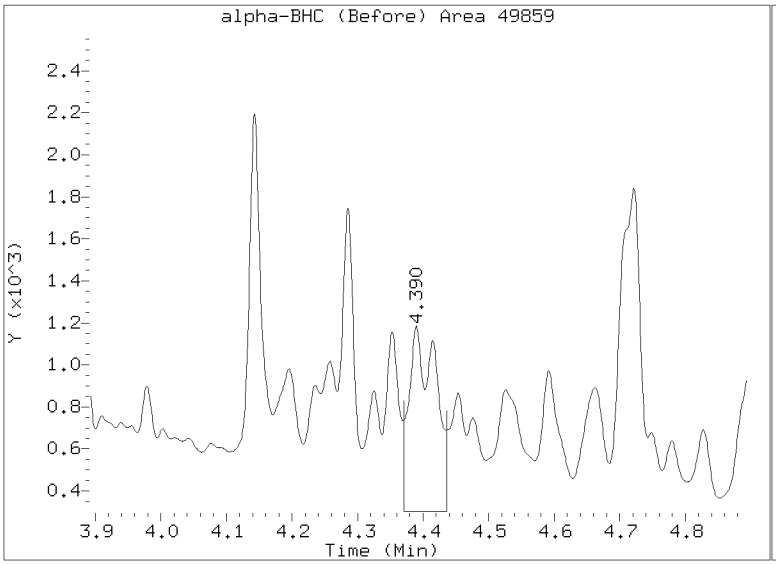
Datafile: /20230301.b/23030120.D
Injection Date: 01-MAR-2023 19:43
Lab ID:23A0249-08 Client ID:
Report Date: 03/02/2023 13:14

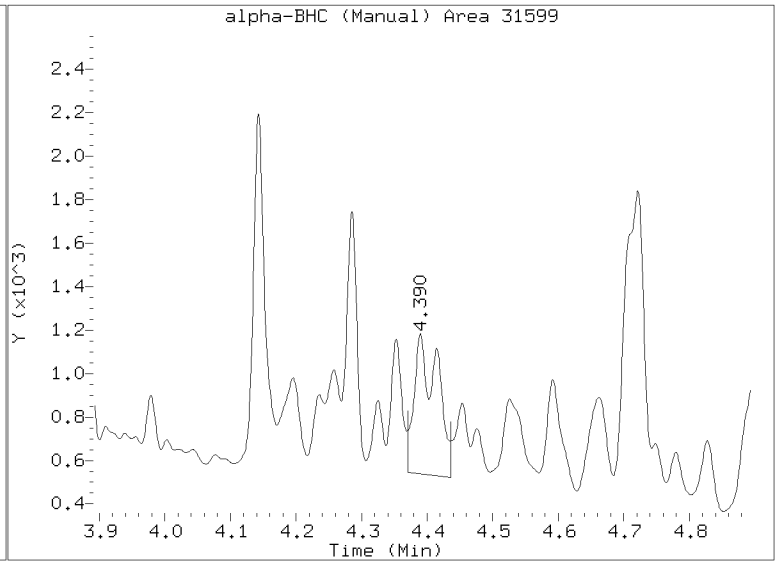












Manual Peak Adjustment Report, STX-CLP

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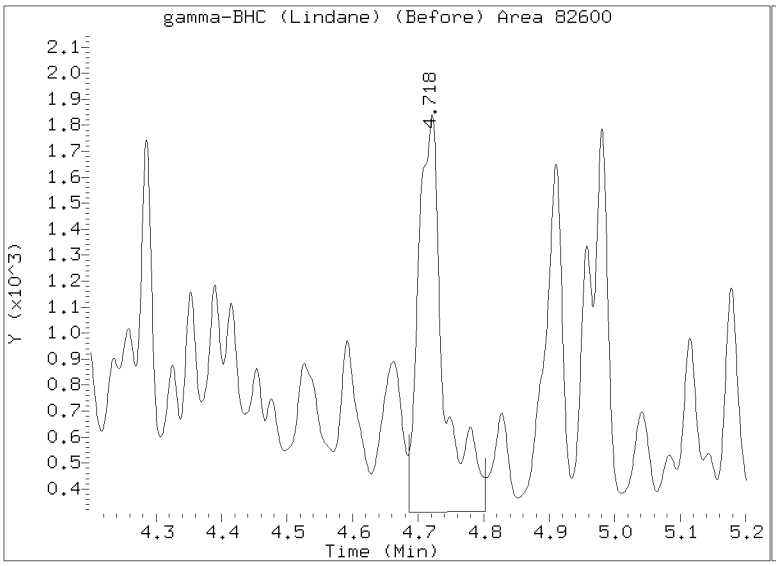

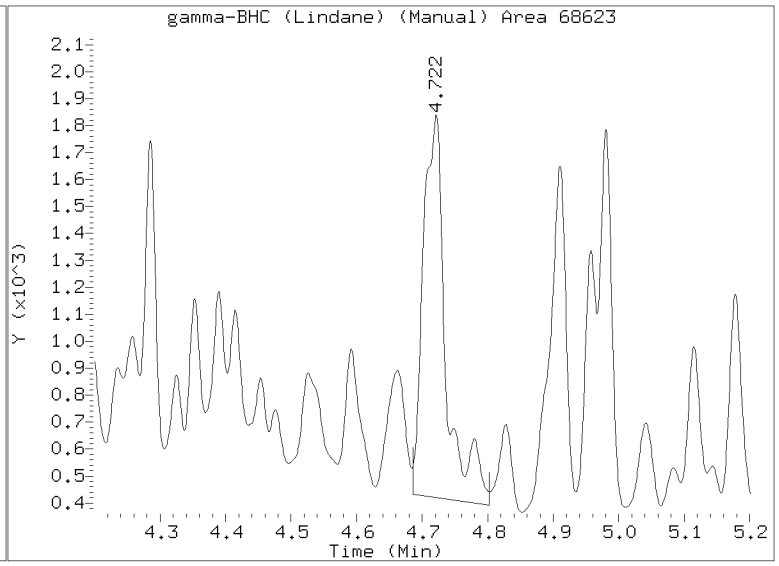

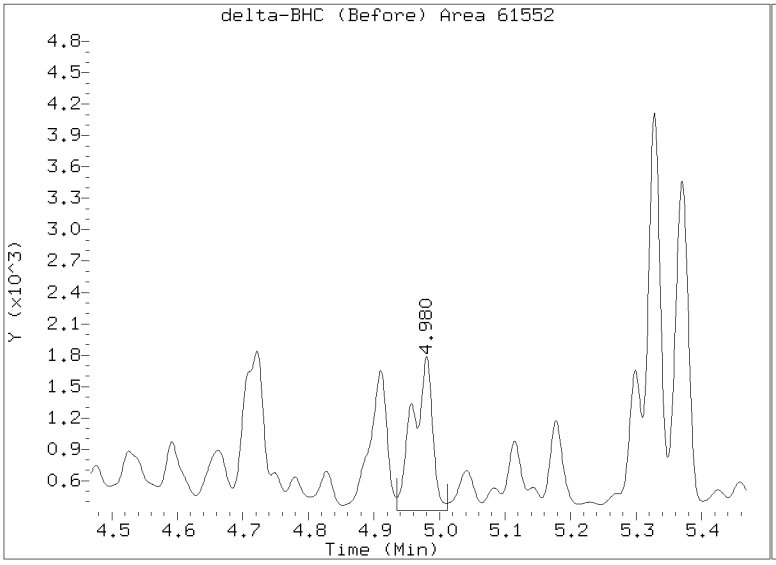

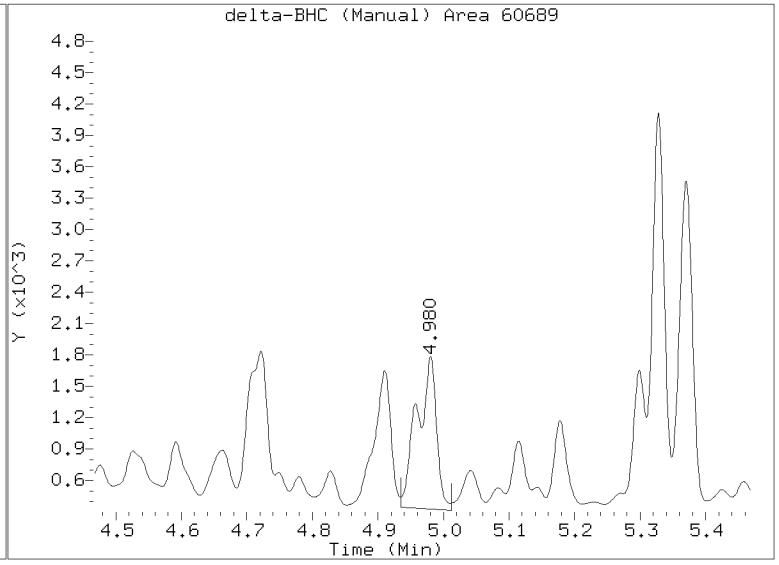

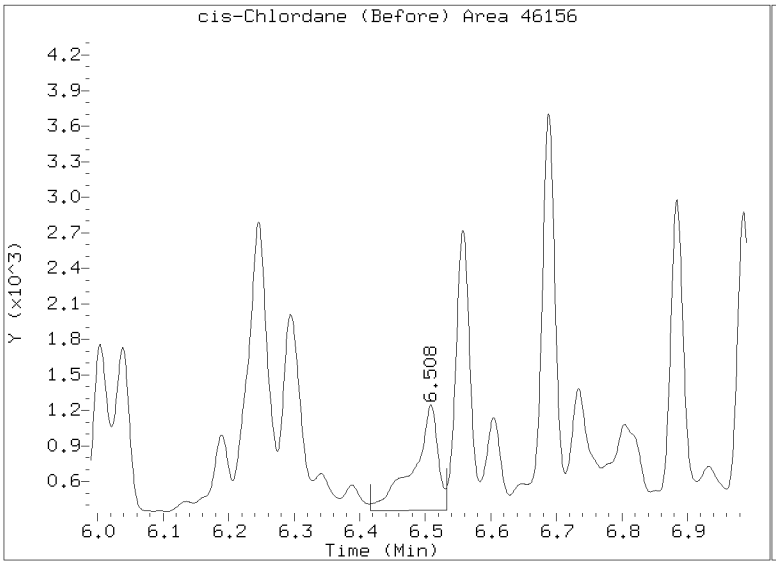

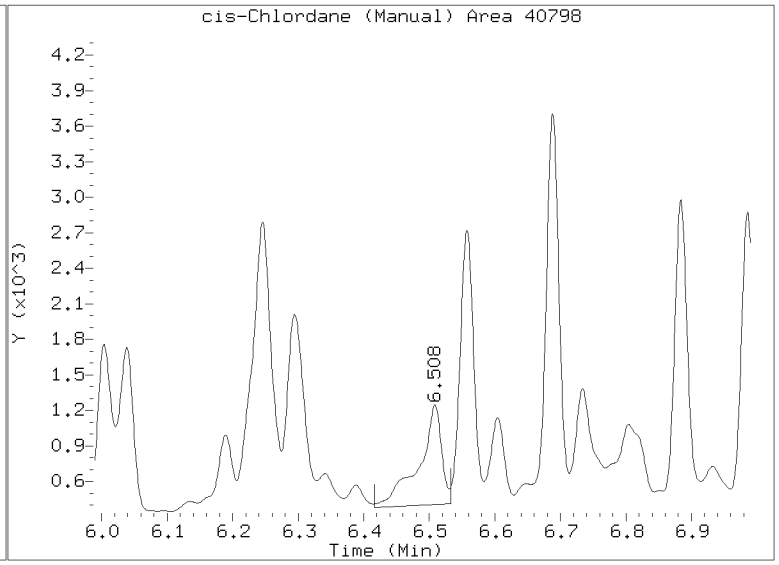

Manual Peak Adjustment Report, STX-CLP

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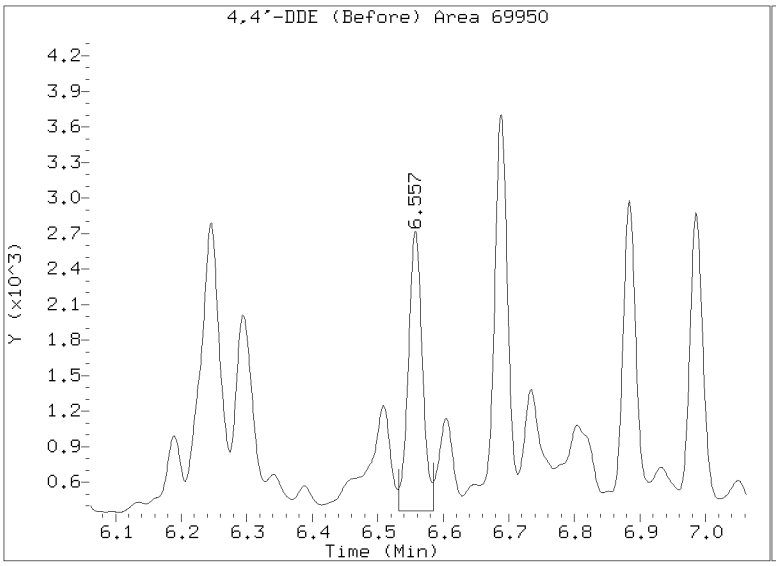

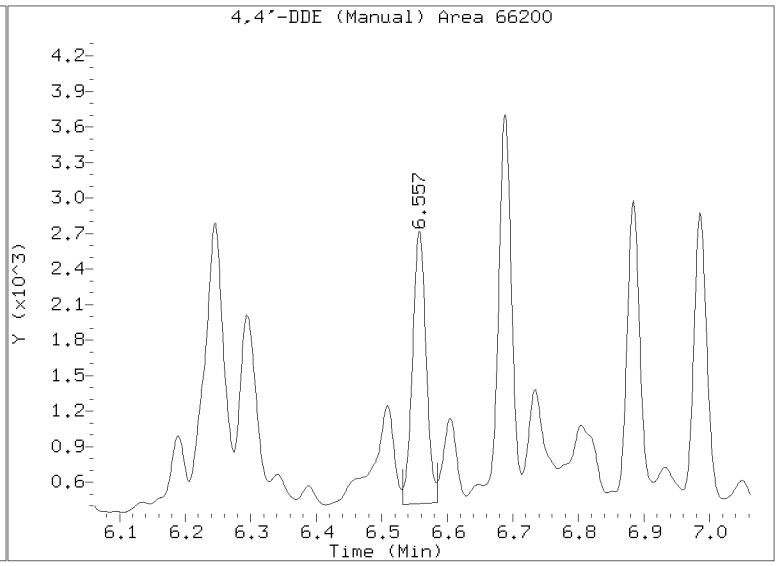

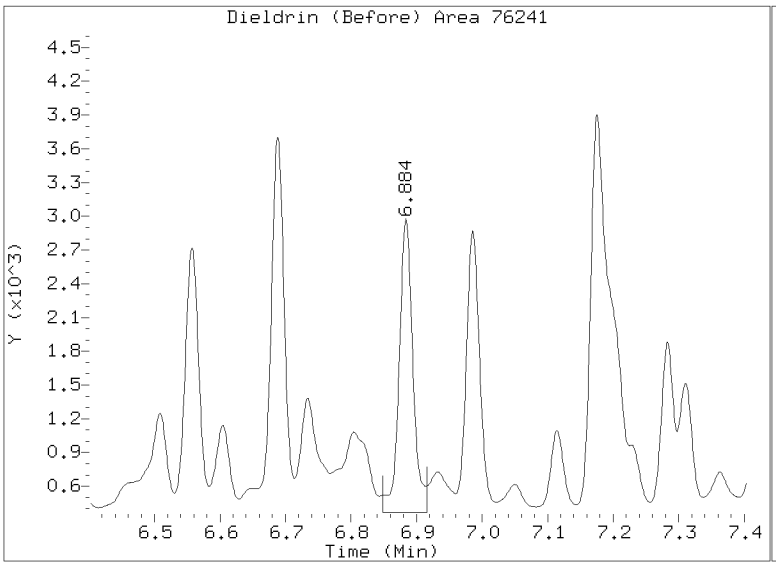

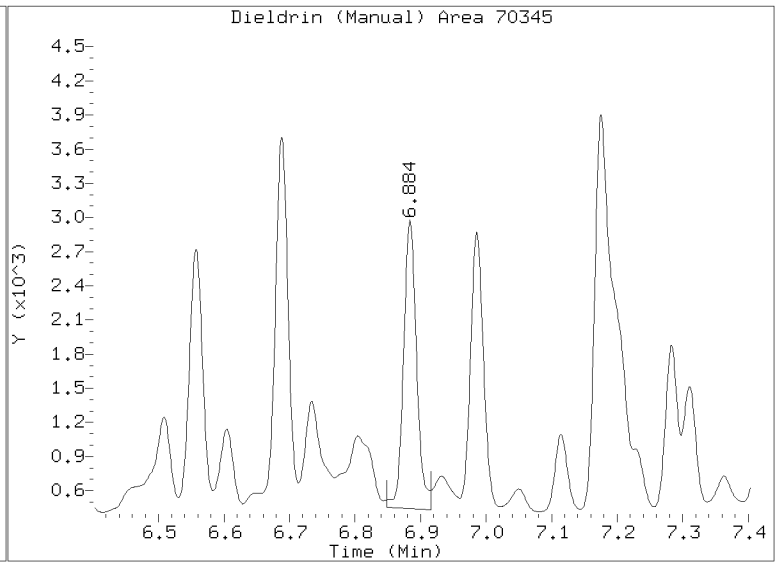

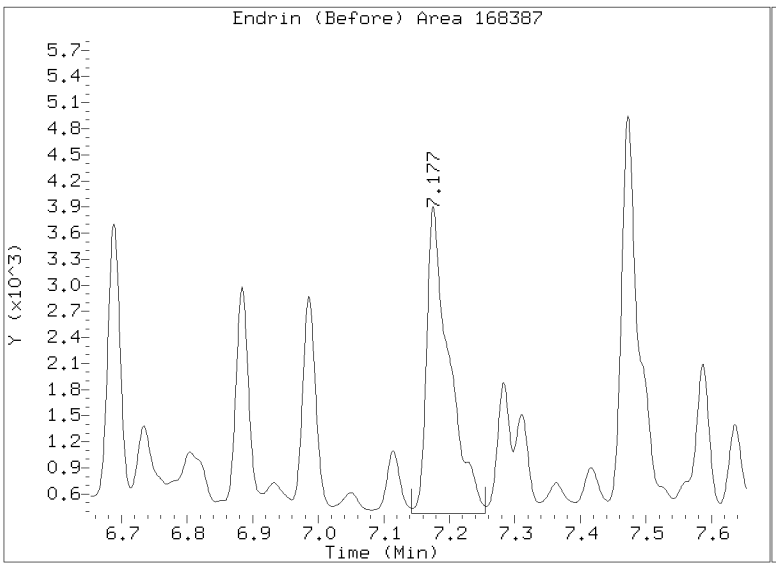

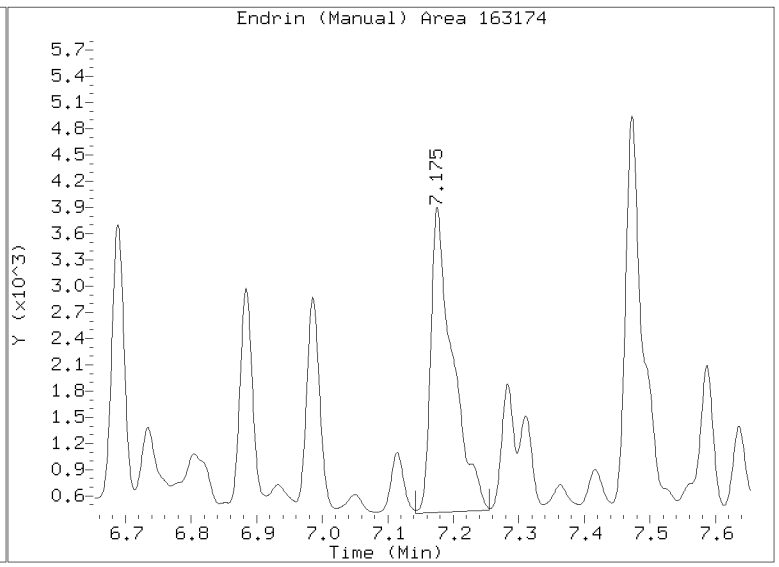

Manual Peak Adjustment Report, STX-CLP

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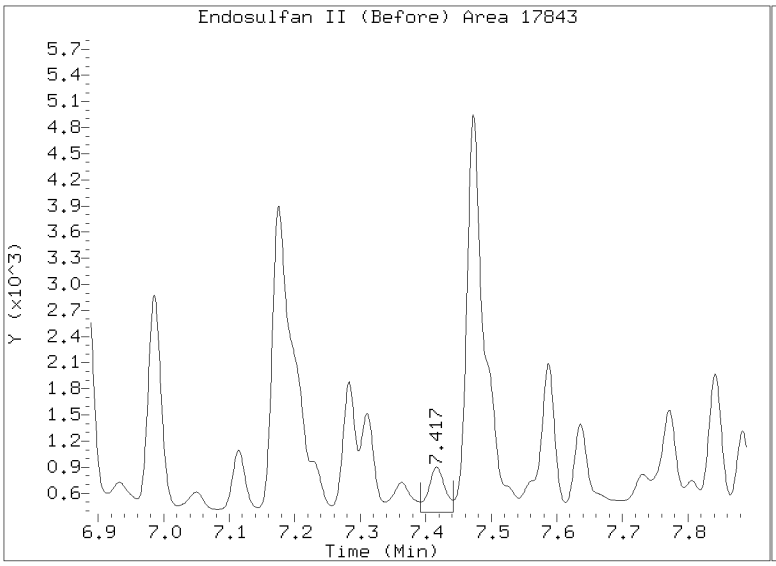

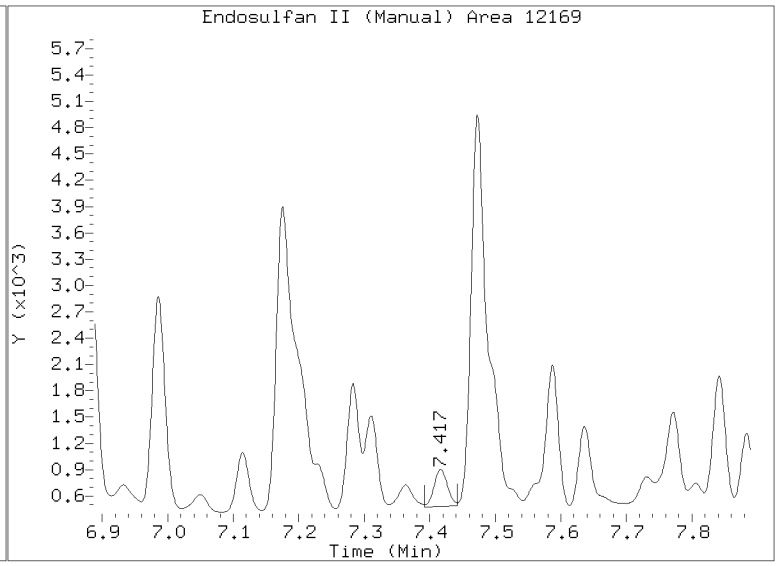

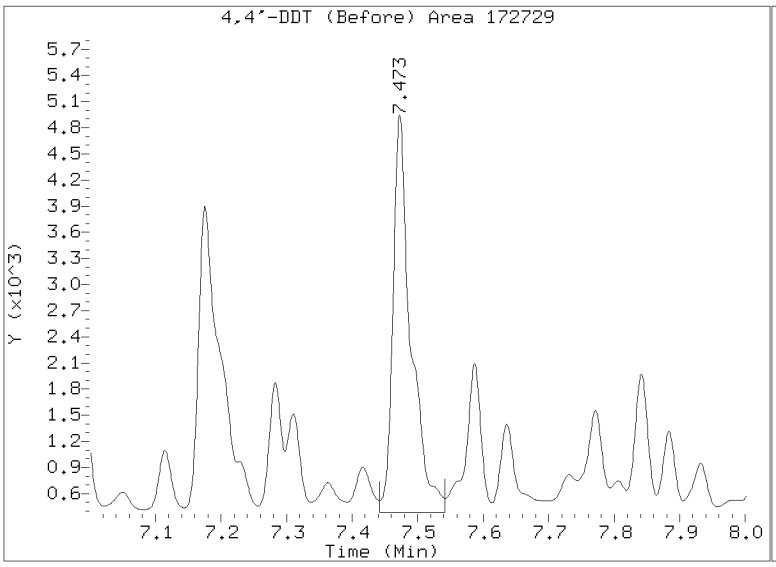

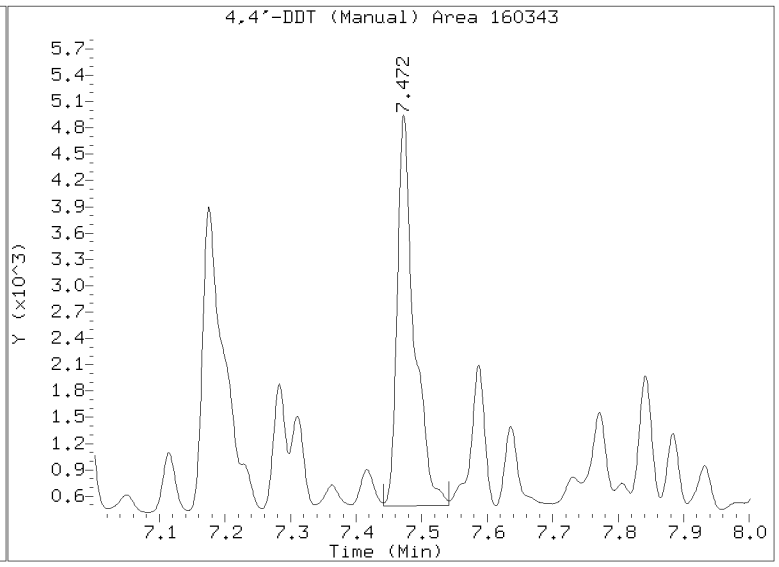

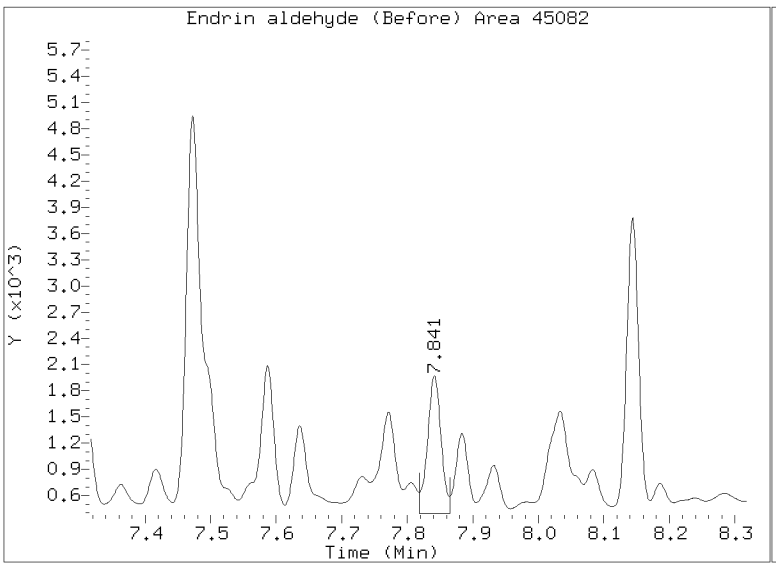

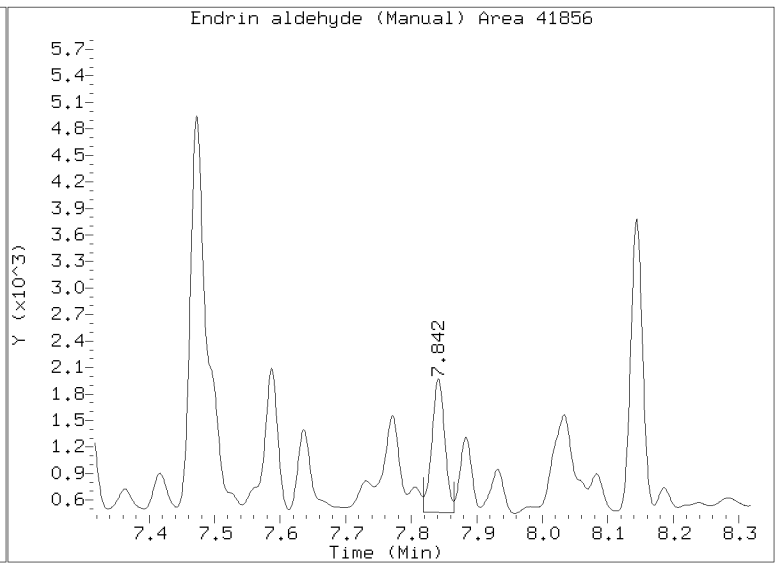

Manual Peak Adjustment Report, STX-CLP

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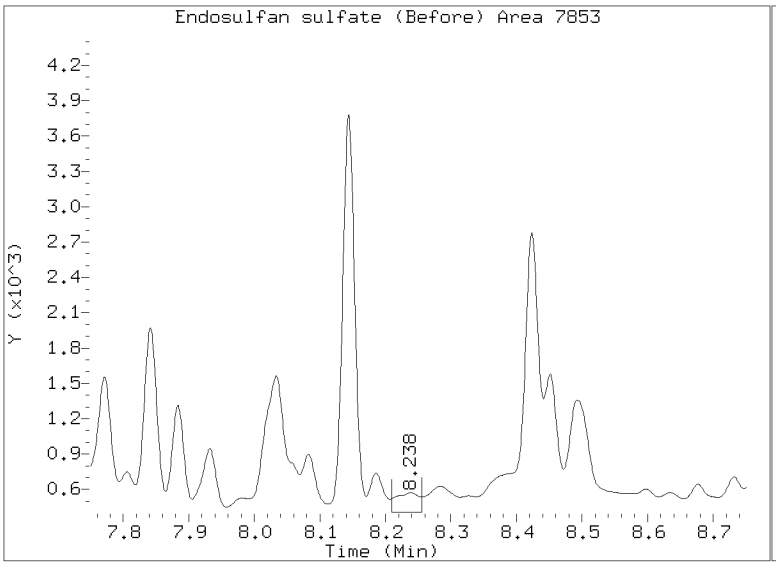

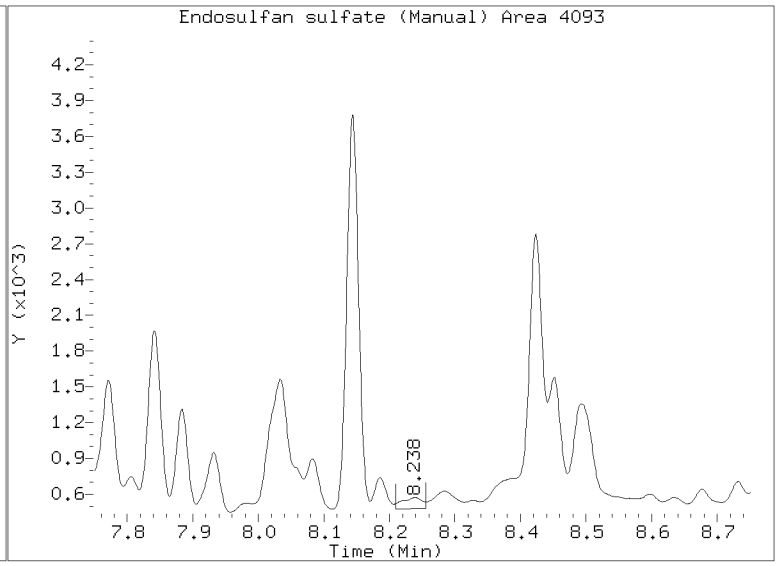

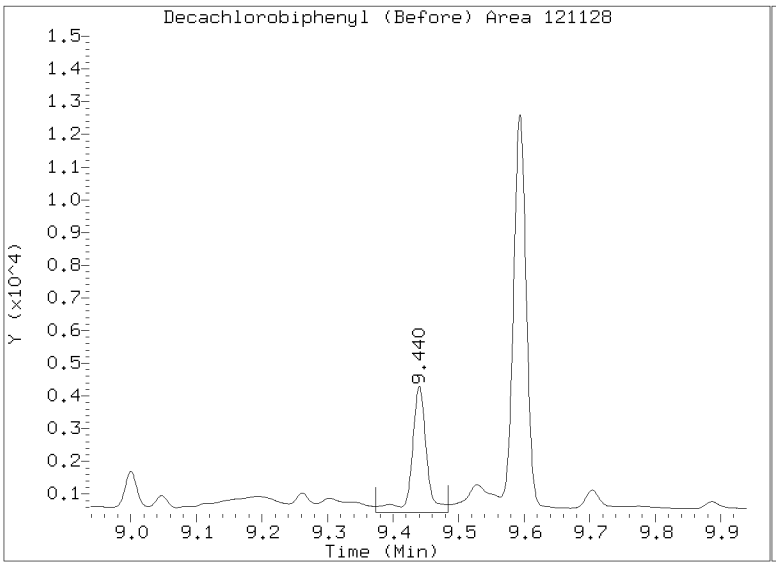

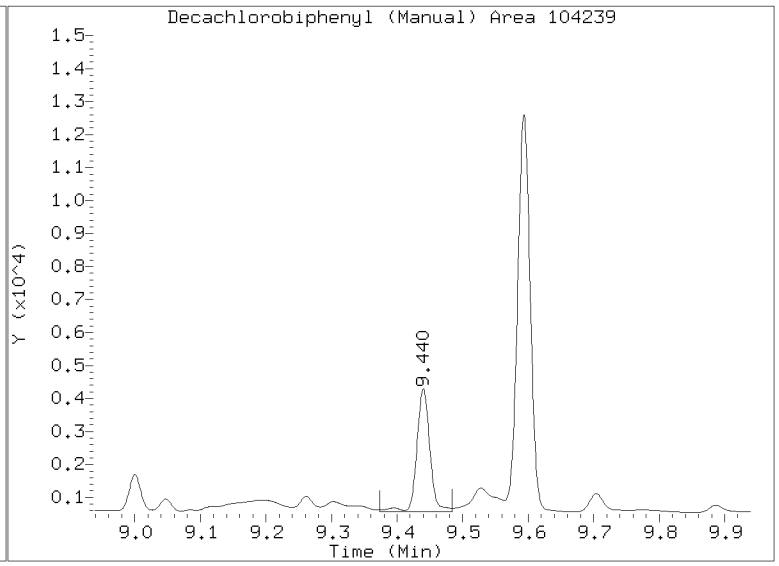

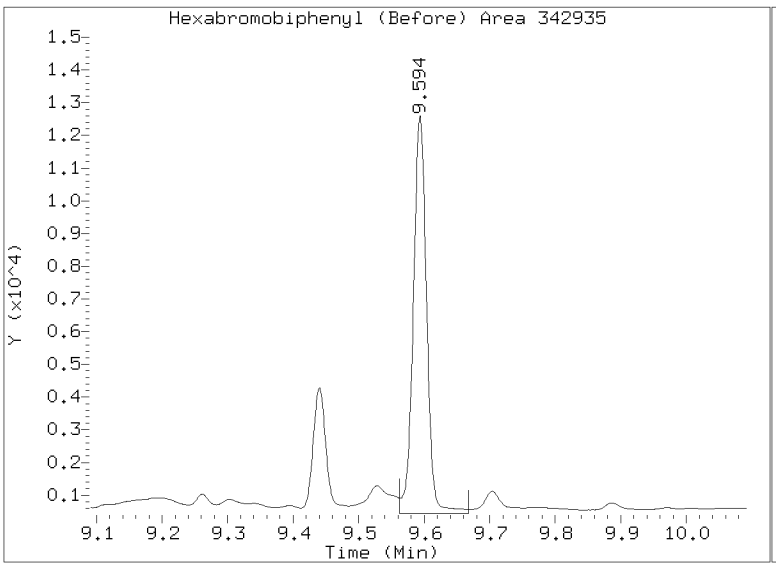

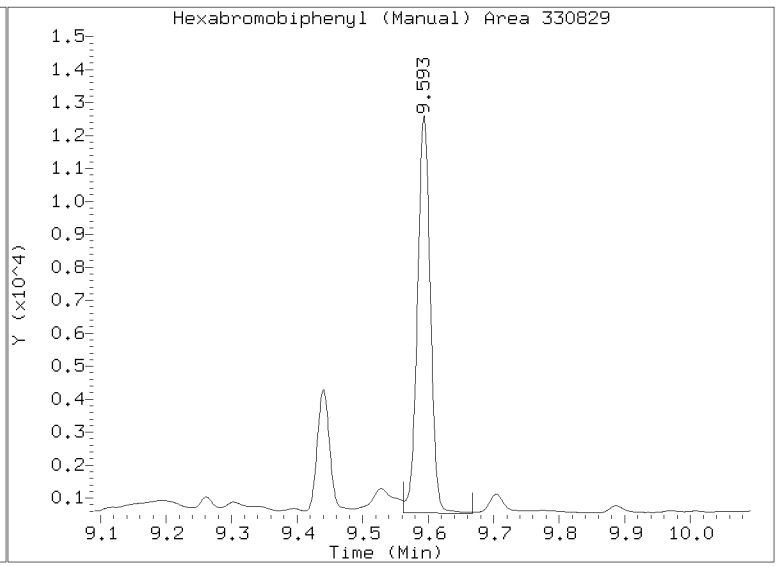

Manual Peak Adjustment Report, CLP-2

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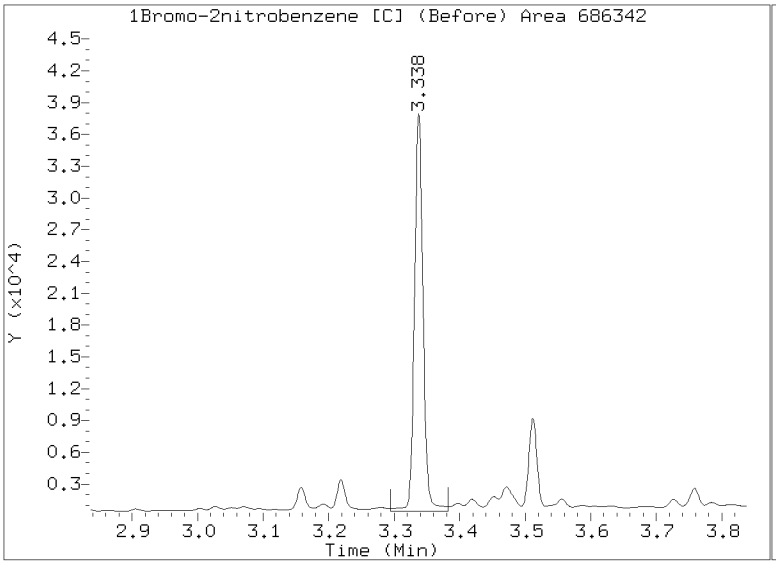

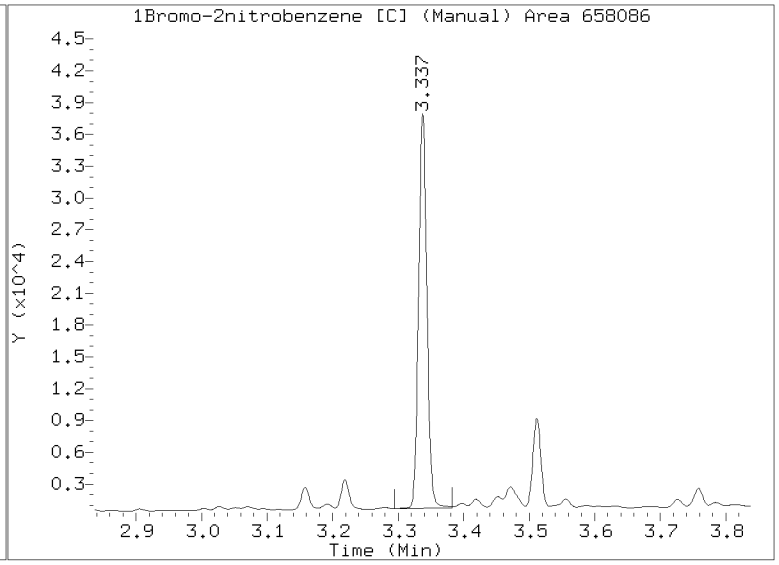

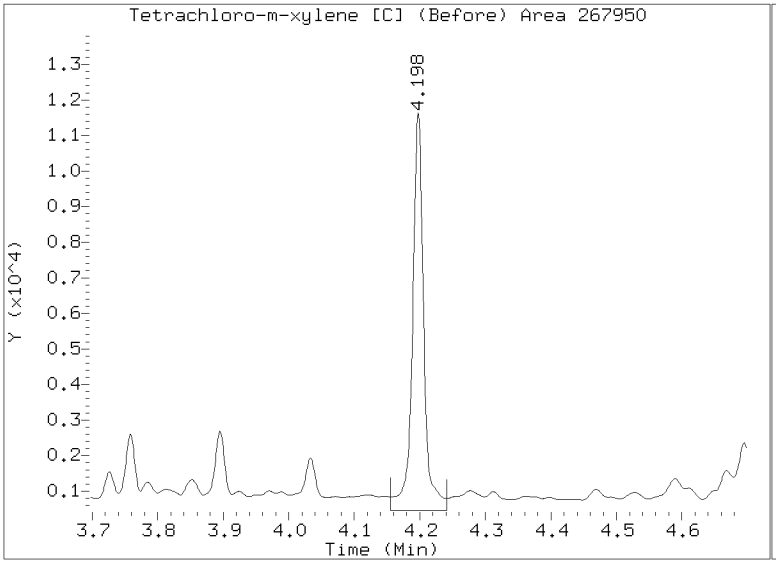

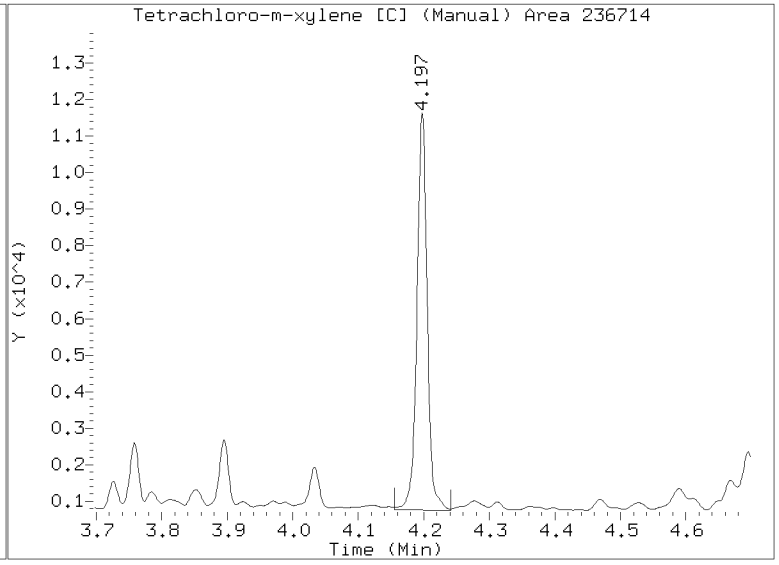

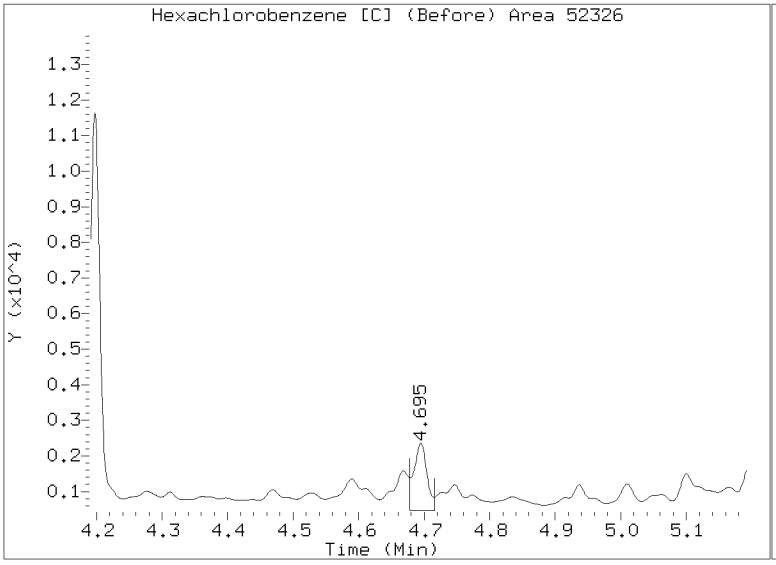

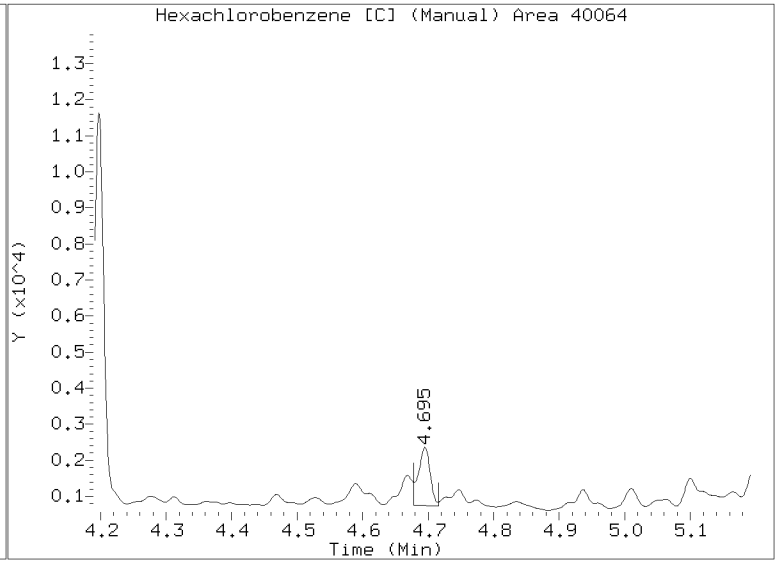

Manual Peak Adjustment Report, CLP-2

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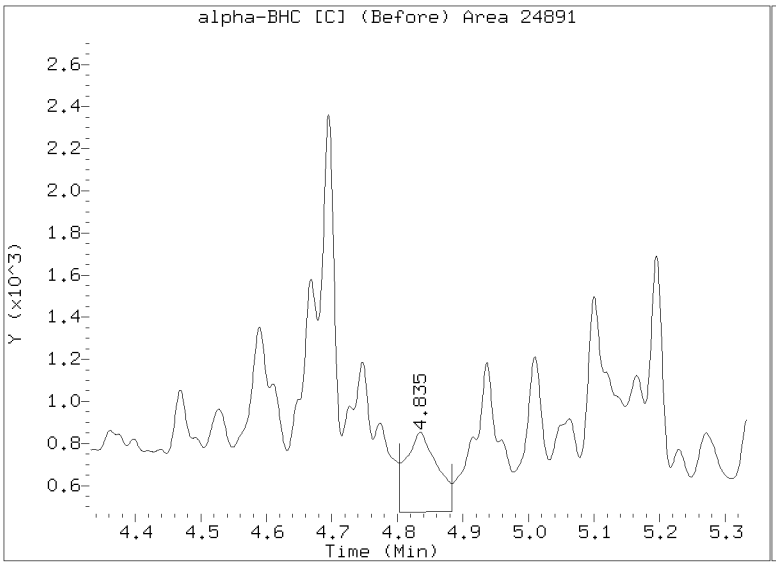

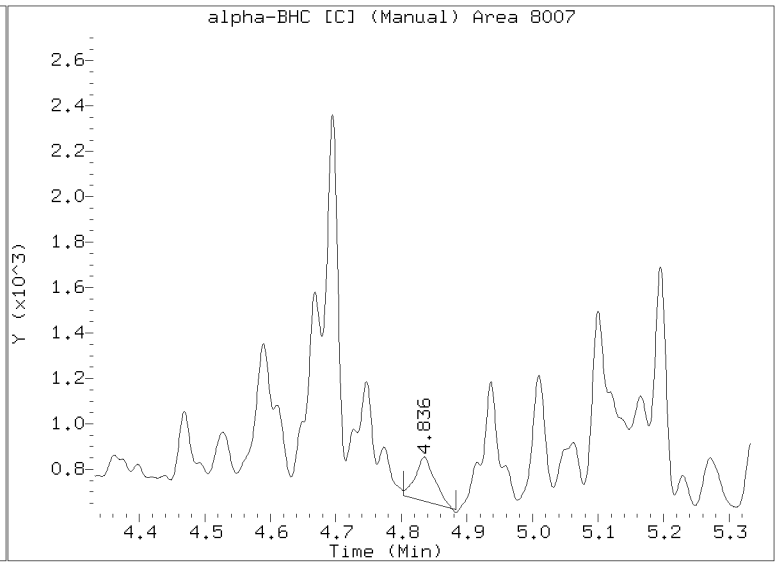

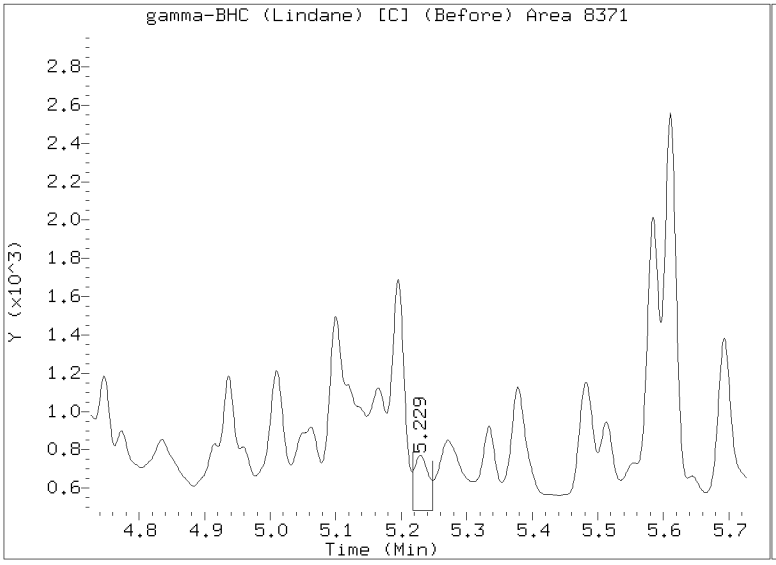

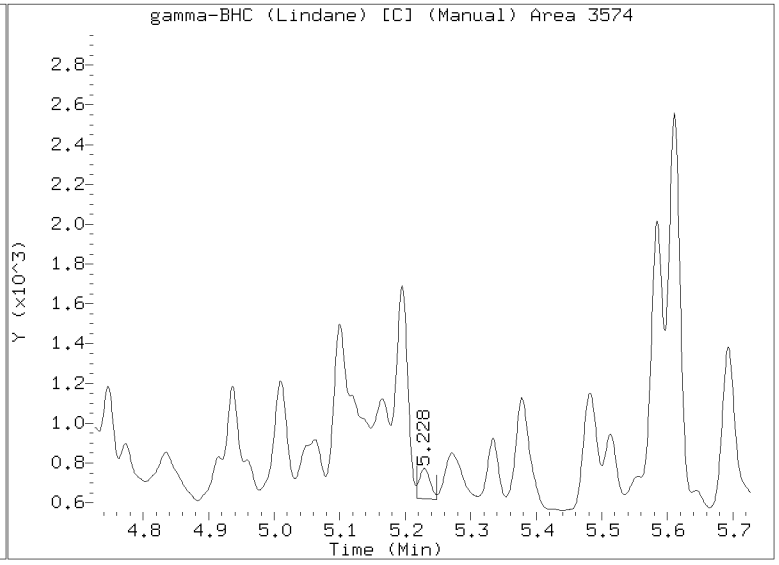

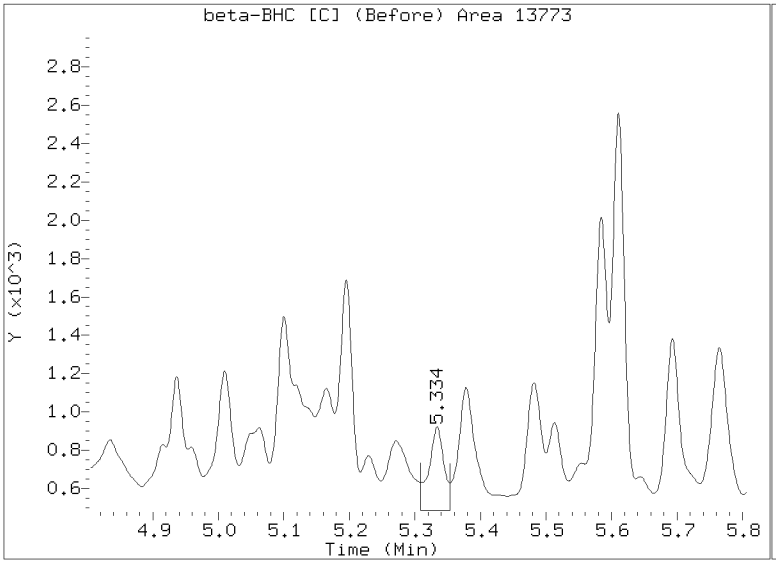

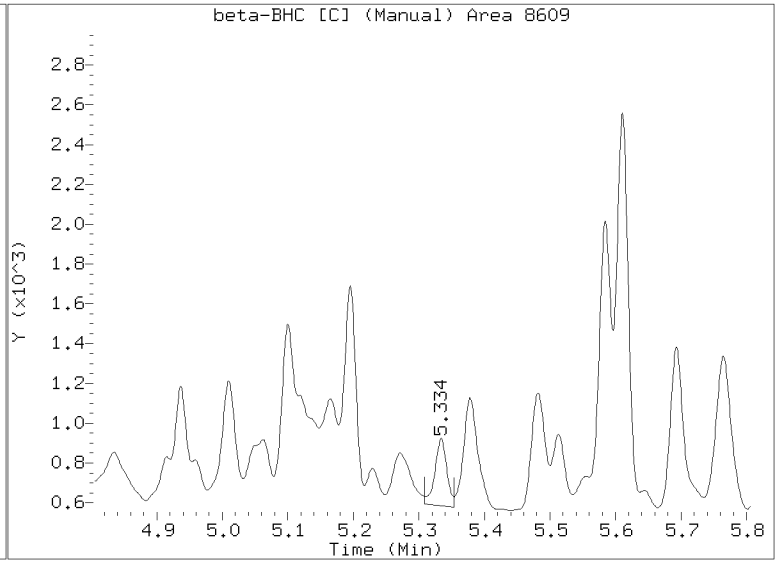

Manual Peak Adjustment Report, CLP-2

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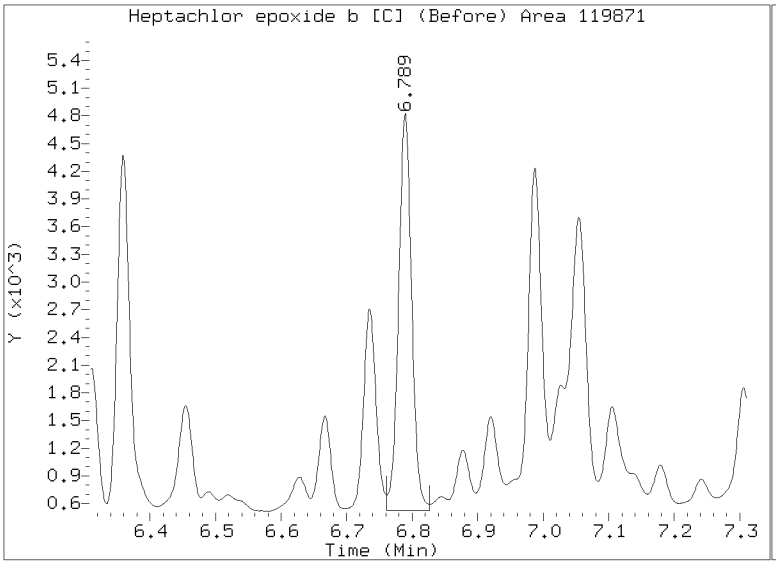

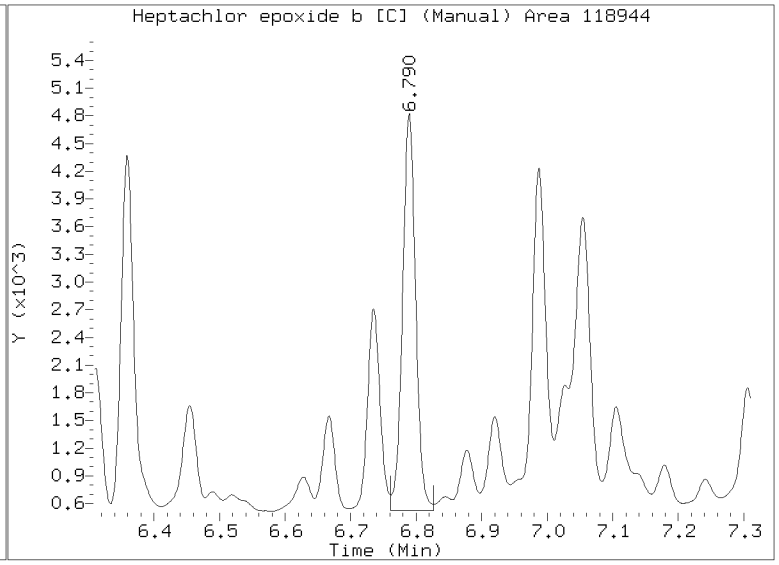

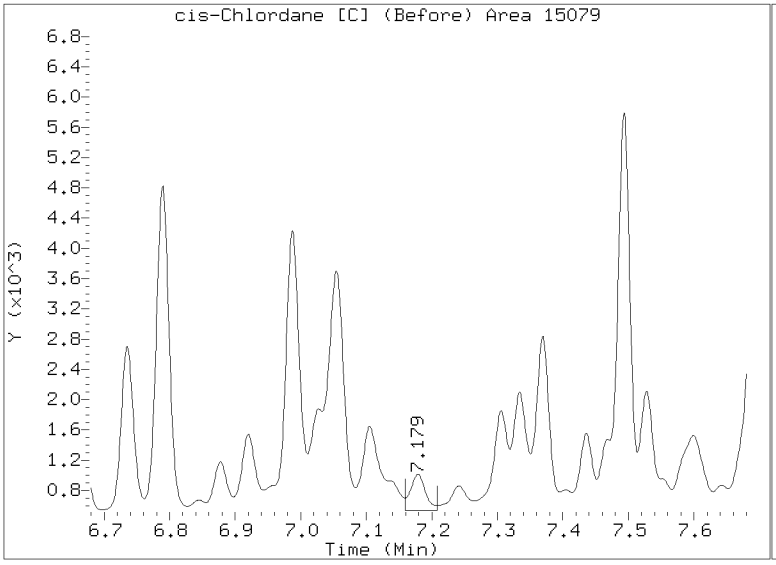

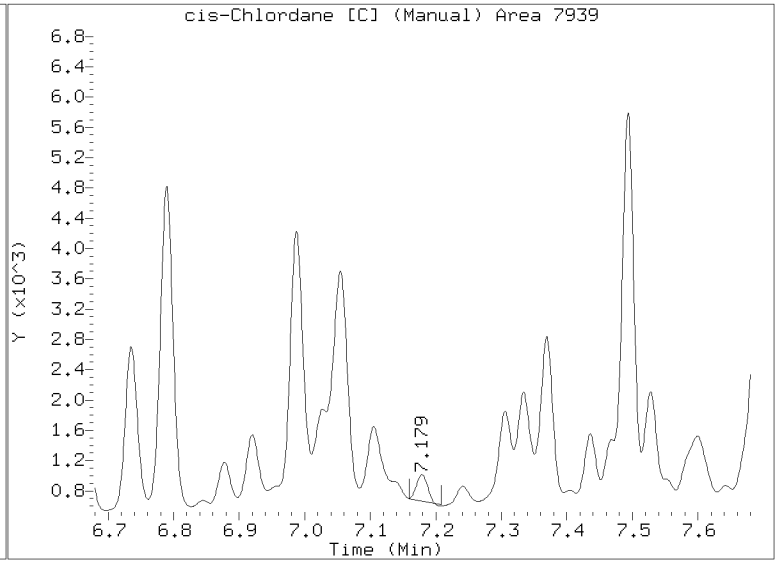

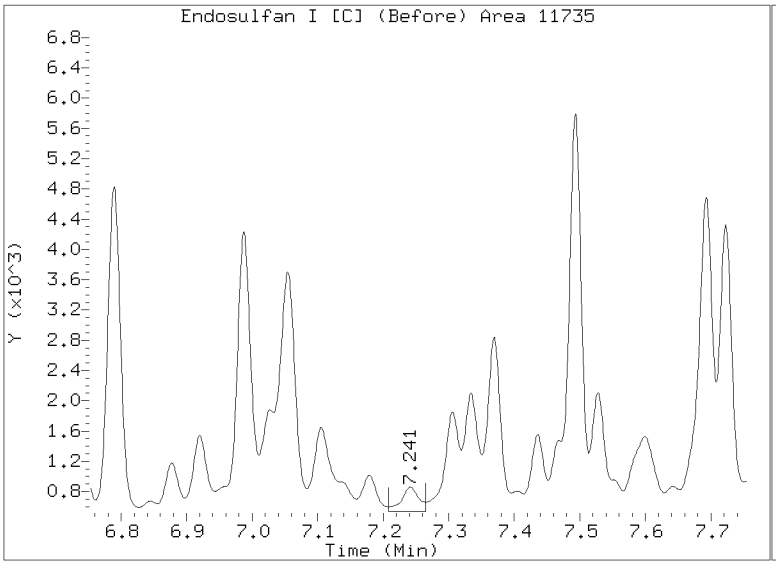

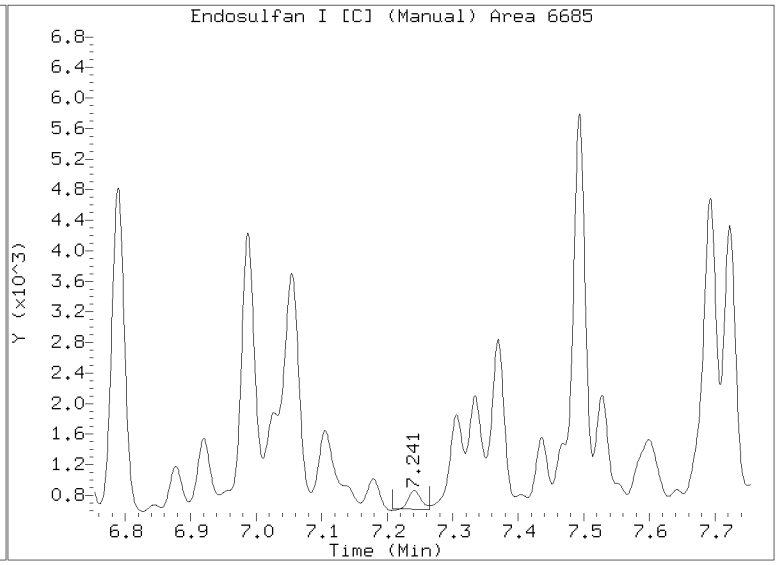

Manual Peak Adjustment Report, CLP-2

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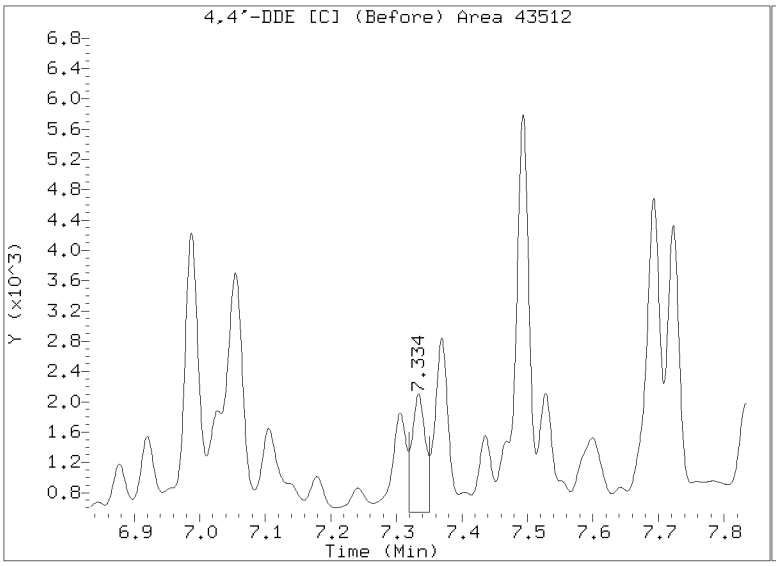

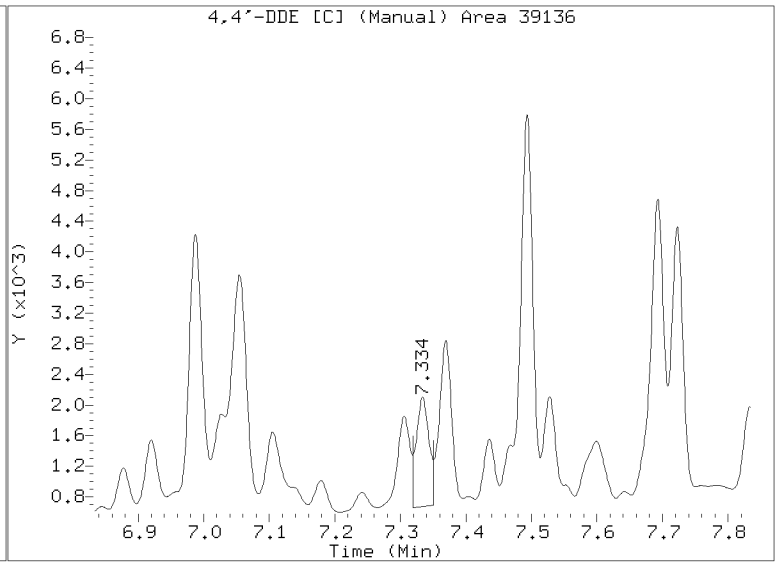

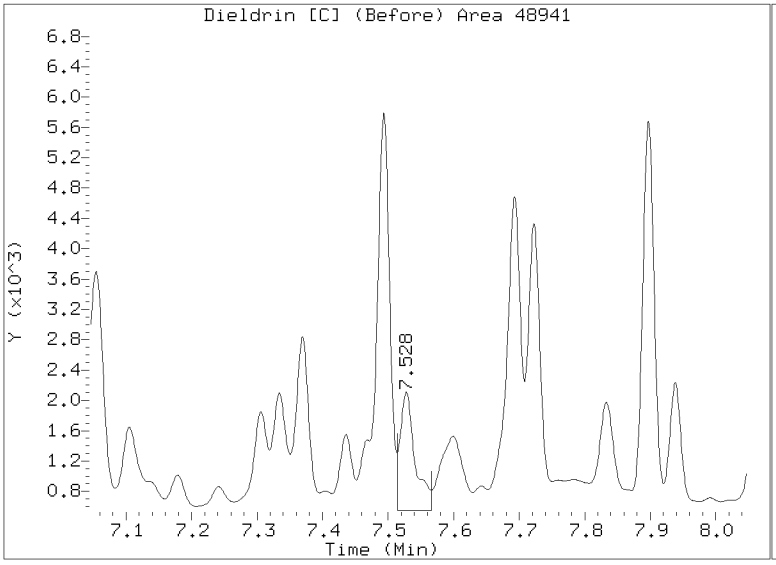

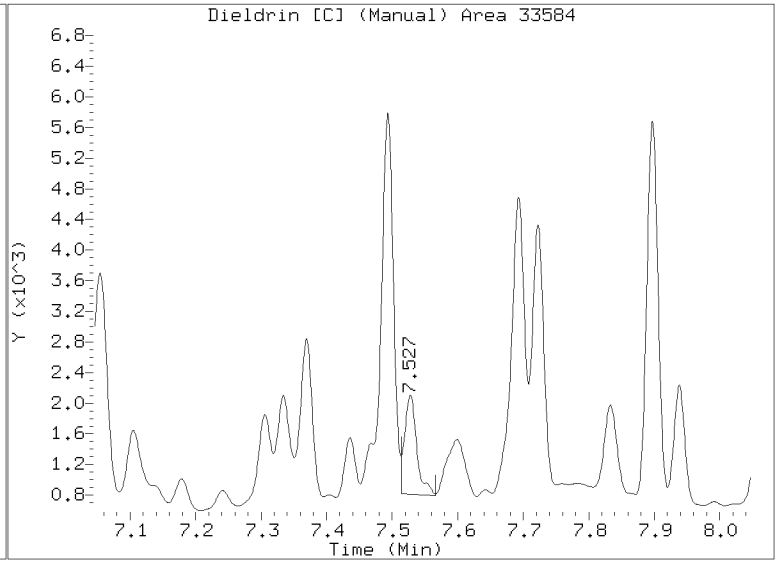

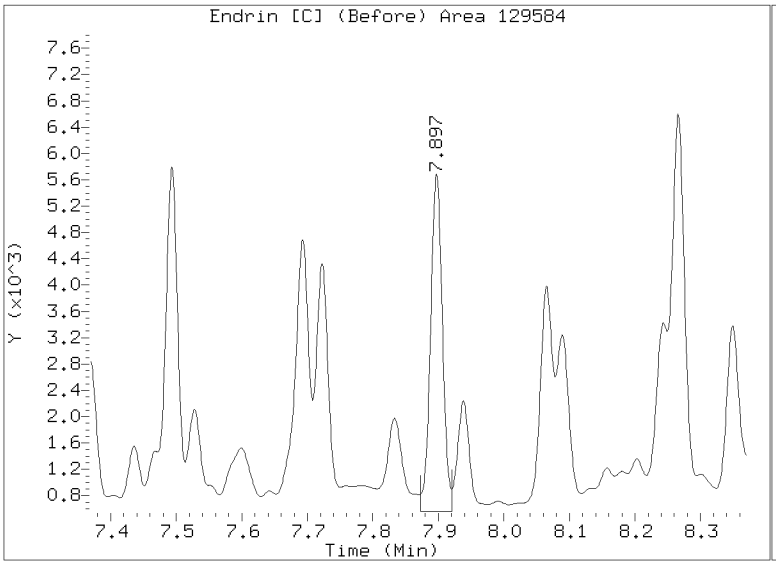

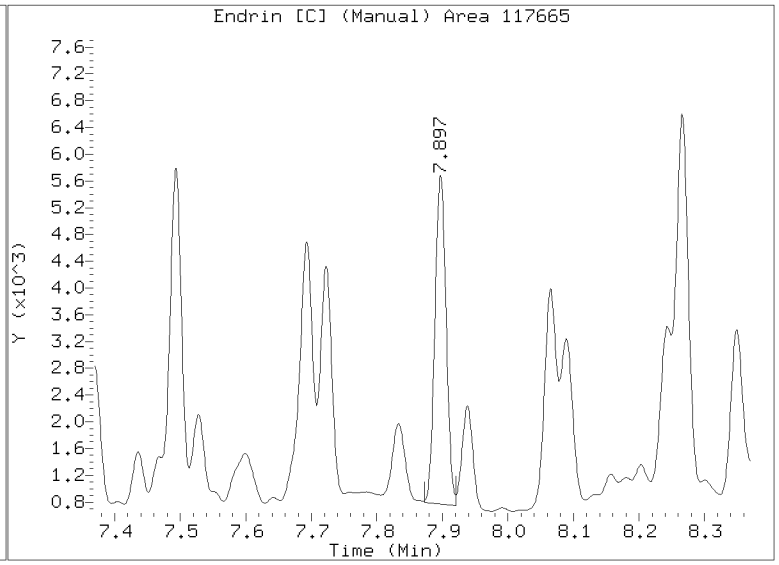

Manual Peak Adjustment Report, CLP-2

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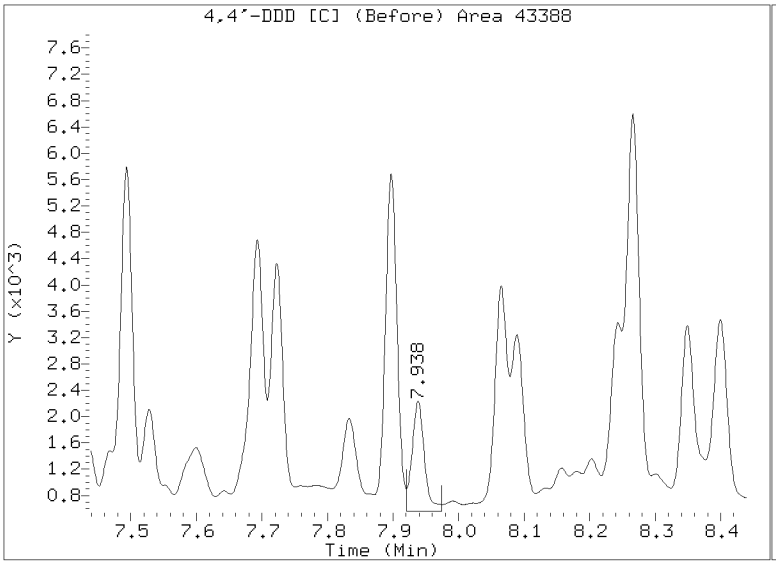
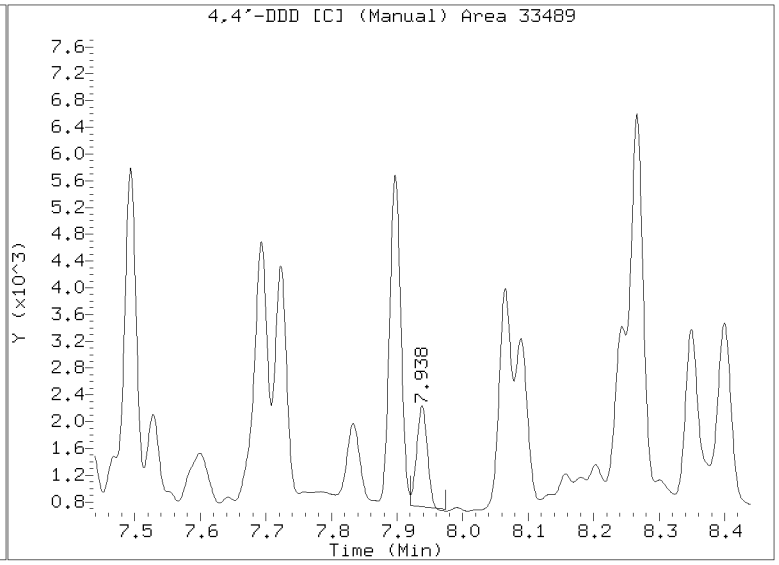
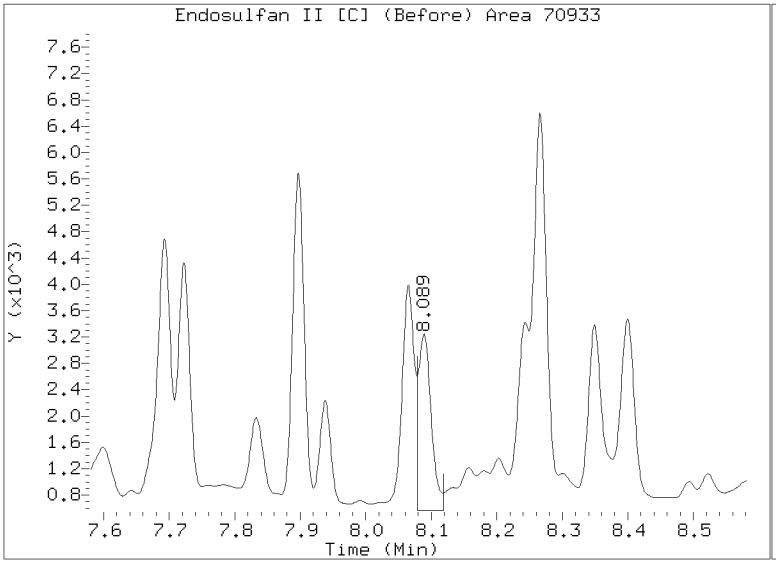
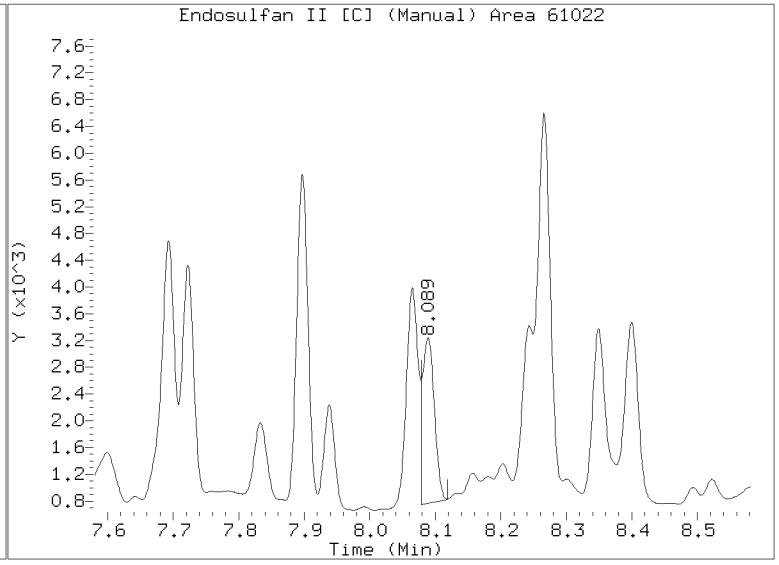
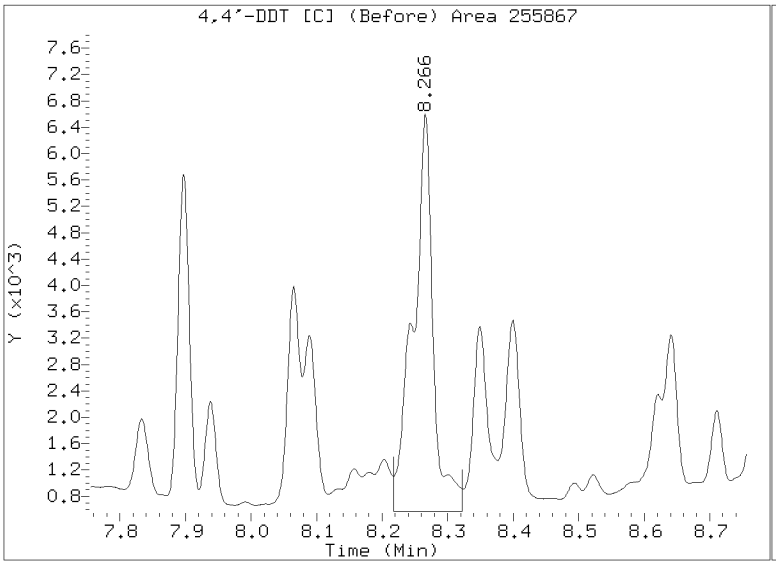
Injection Date: 01-MAR-2023 19:43
Lab ID:23A0249-08 Client ID:

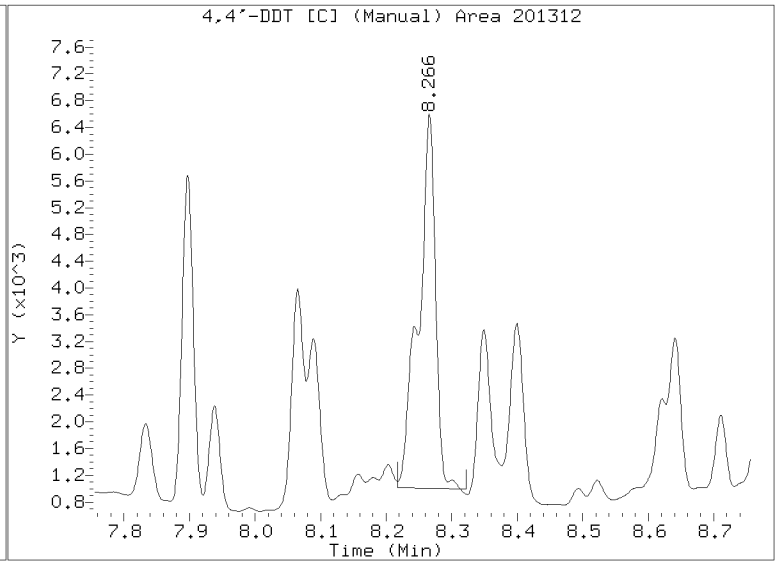












Manual Peak Adjustment Report, CLP-2

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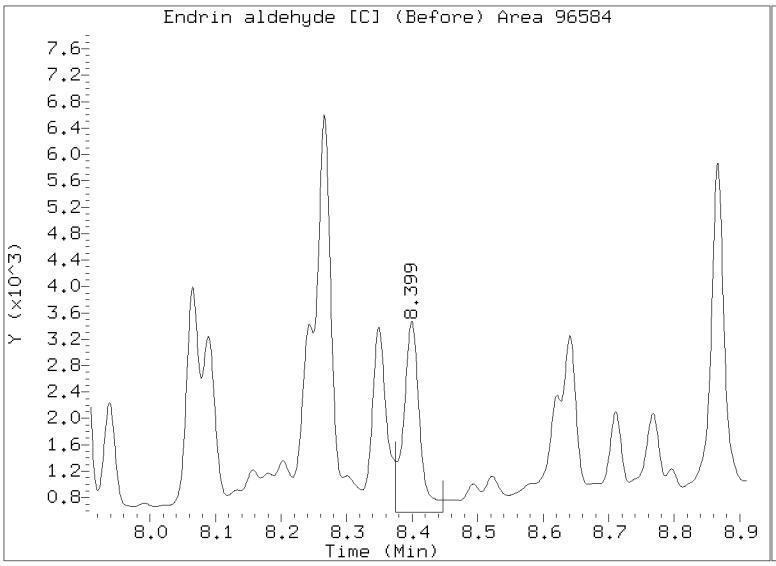
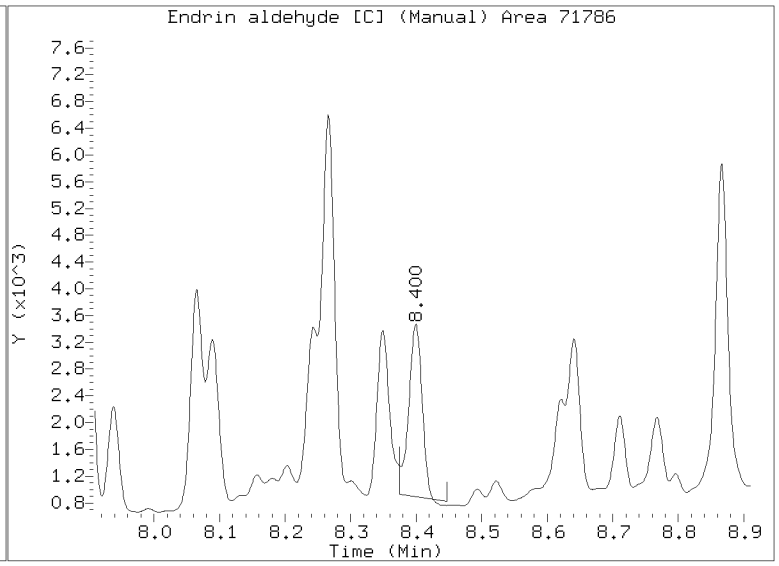
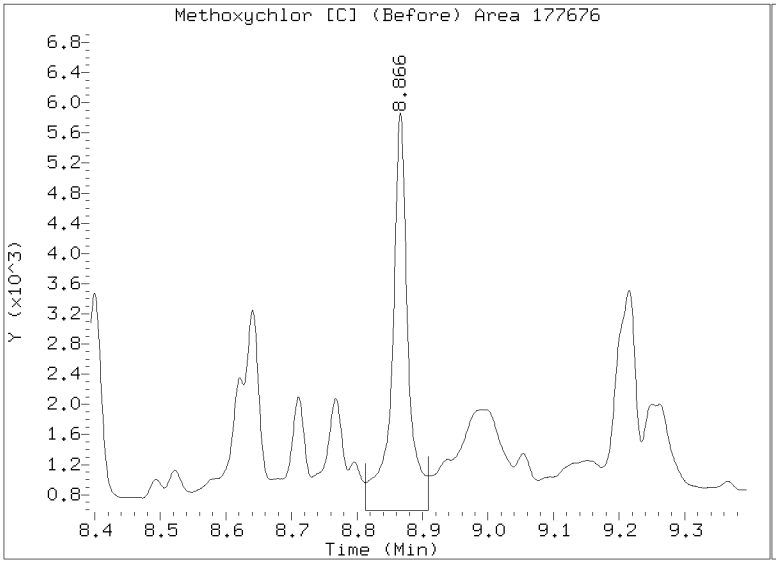
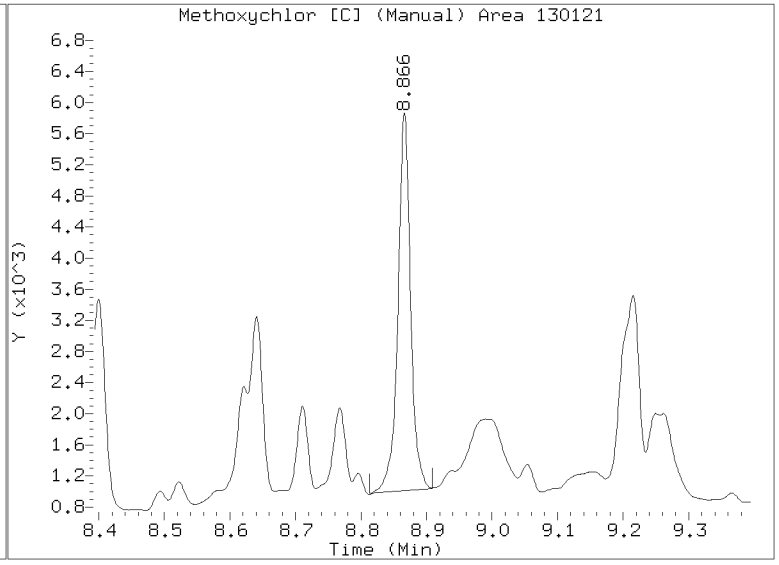
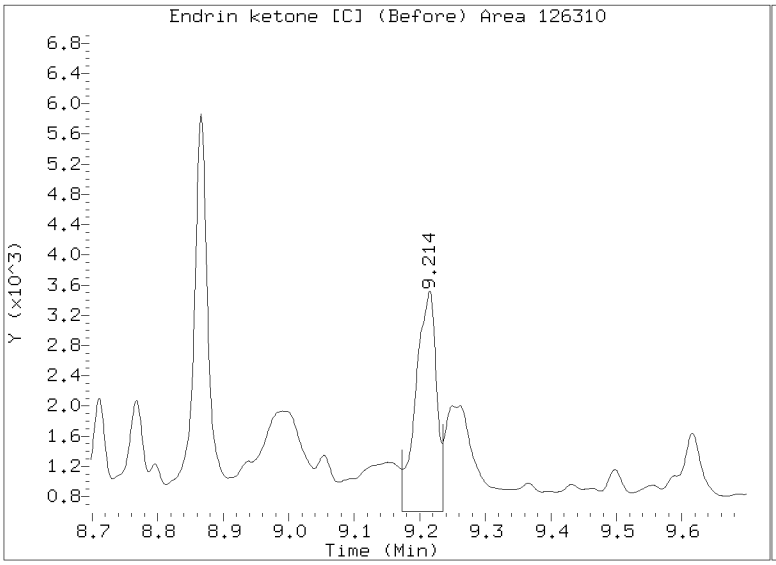
Lab ID:23A0249-08 Client ID:

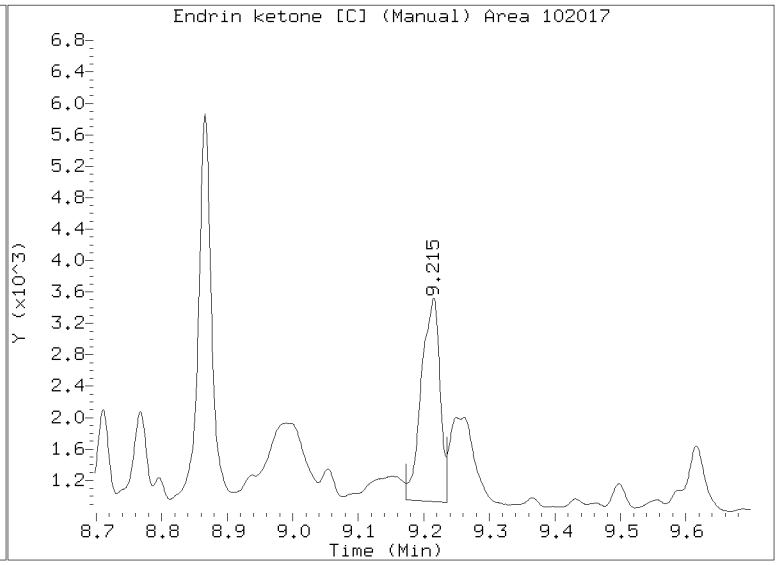






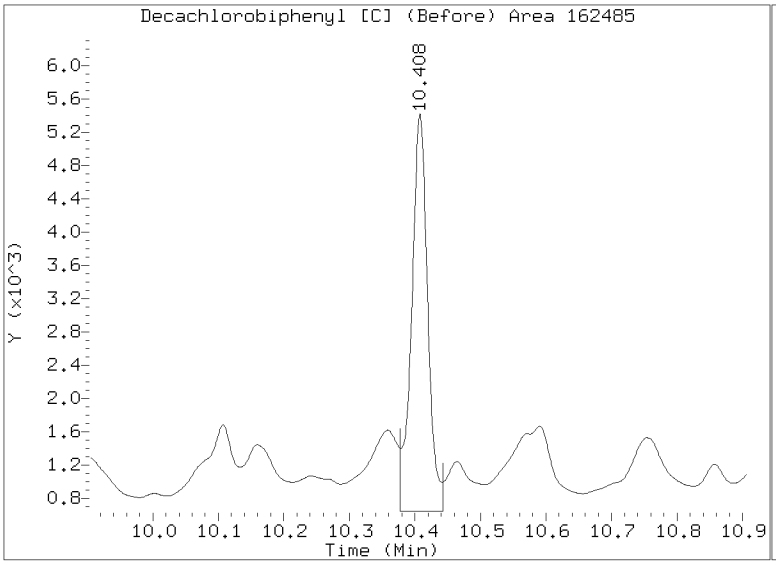


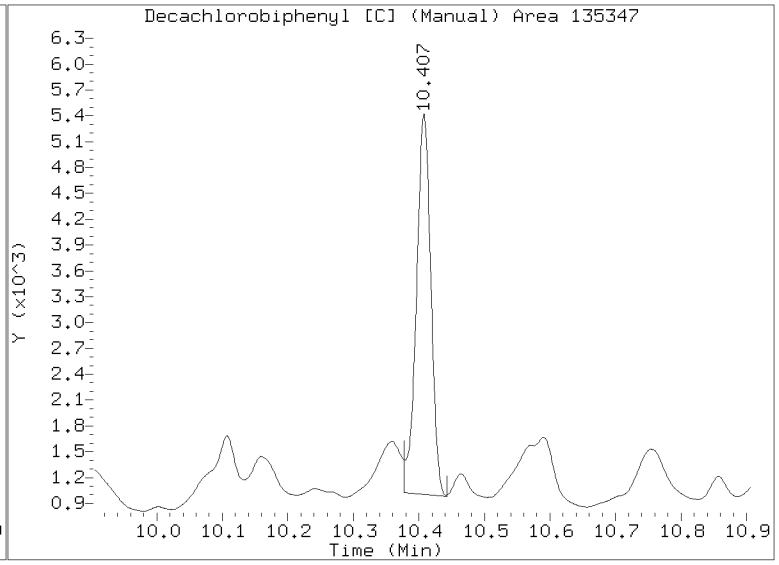


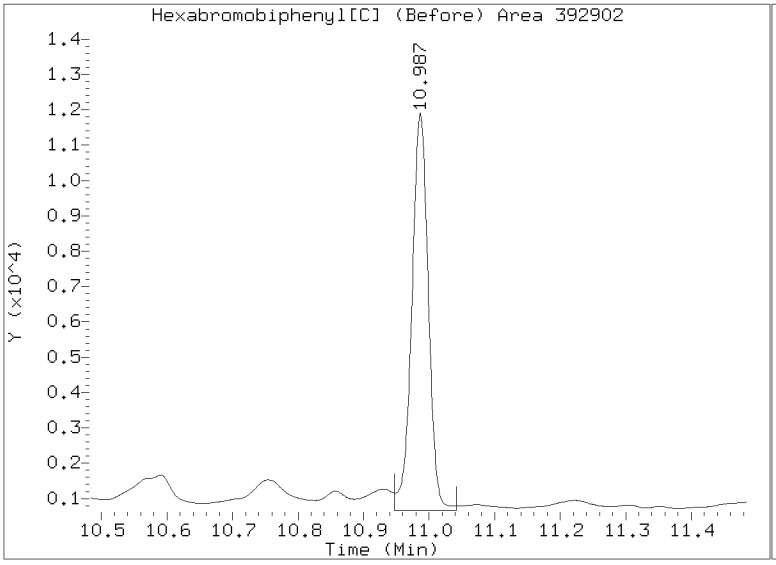


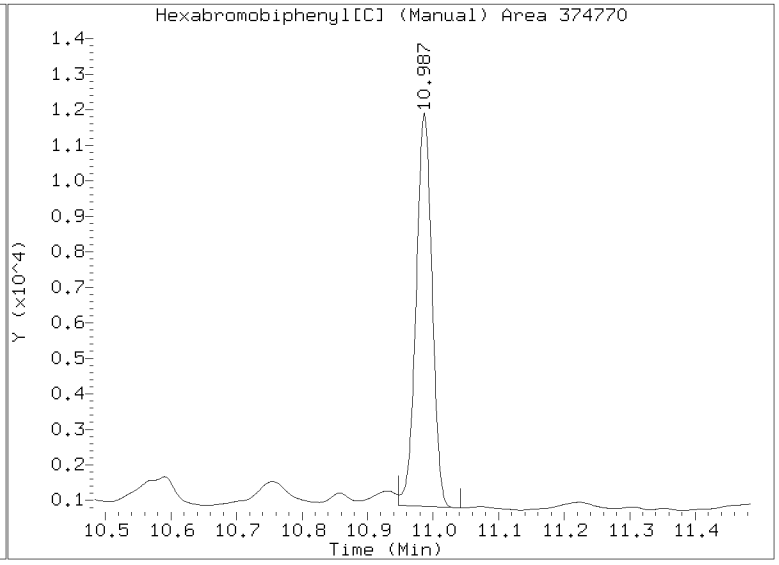
Manual Peak Adjustment Report, CLP-2

Datafile: /20230301.b/B20230301.b/23030120.D
Injection Date: 01-MAR-2023 19:43
Lab ID:23A0249-08 Client ID:









Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1020

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-11 A	File ID:	23030121.D
Sampled:	01/12/23 15:23	Prepared:	01/31/23 13:36	Analyzed:	03/01/23 20:01
% Solids:	70.01	Preparation:	EPA 3546 (Microwave)	Initial/Final:	18.03 g Wet / 2.5 mL
Batch:	BLA0672	Sequence:	SLC0031	Calibration:	FL00041
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9222*	*6.82*	*86.1*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9222*	*5.19*	*65.5*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230301.b/23030121.D
Data file 2: /20230301.b/B20230301.b/23030121.D
Method: \20230301.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: 23A0249-11
Client ID:
Injection Date: 01-MAR-2023 20:01
Report Date: 03/02/2023 13:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2			
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag	
----			4.839	0.006	1757	0.00	0.13	---	alpha-BHC	
----			5.314	0.008	1010	0.00	0.20	---	beta-BHC	
----			----			0.00	0.00	---	delta-BHC	
4.709	0.008	13411	----			1.71	0.00	---	gamma-BHC (Lindane)	
5.176	-0.019	3178	5.762	0.009	1950	0.46	0.19	83.1*	Heptachlor	
----			6.161	0.004	6668	0.00	0.56	---	Aldrin	
----			6.788	-0.022	2664	0.00	0.27	---	Heptachlor epoxide b	
----			----			0.00	0.00	---	Endosulfan I	
----			7.527	-0.020	838	0.00	0.09	---	Dieldrin	
6.556	-0.007	6551	7.333	-0.002	9320	1.06	1.07	1.0	4,4'-DDE N	
7.177	0.023	4471	7.895	0.025	1735	1.04	0.31	107.6*	Endrin N	
----			8.090	0.009	2626	0.00	0.46	---	Endosulfan II	
----			7.937	-0.003	1121	0.00	0.21	---	4,4'-DDD	
----			----			0.00	0.00	---	Endosulfan sulfate	
7.474	-0.028	4098	8.265	0.009	2503	1.05	0.48	74.3*	4,4'-DDT N	
----			----			0.00	0.00	---	Methoxychlor	
----			9.179	-0.020	23380	0.00	4.34	---	Endrin ketone	
----			8.396	-0.014	2856	0.00	0.71	---	Endrin aldehyde	
----			----			0.00	0.00	---	trans-Chlordane	
----			----			0.00	0.00	---	cis-Chlordane	
----			2.466	-0.029	14436	0.00	1.13	---	Hexachlorobutadiene	
----			----			0.00	0.00	---	Hexachlorobenzene	
3.873	0.000	167415	4.198	-0.000	256525	26.20	27.07	3.3	Tetrachloro-m-xylene	MN
9.438	-0.002	114197	10.407	0.001	156399	34.45	36.29	5.2	Decachlorobiphenyl	

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

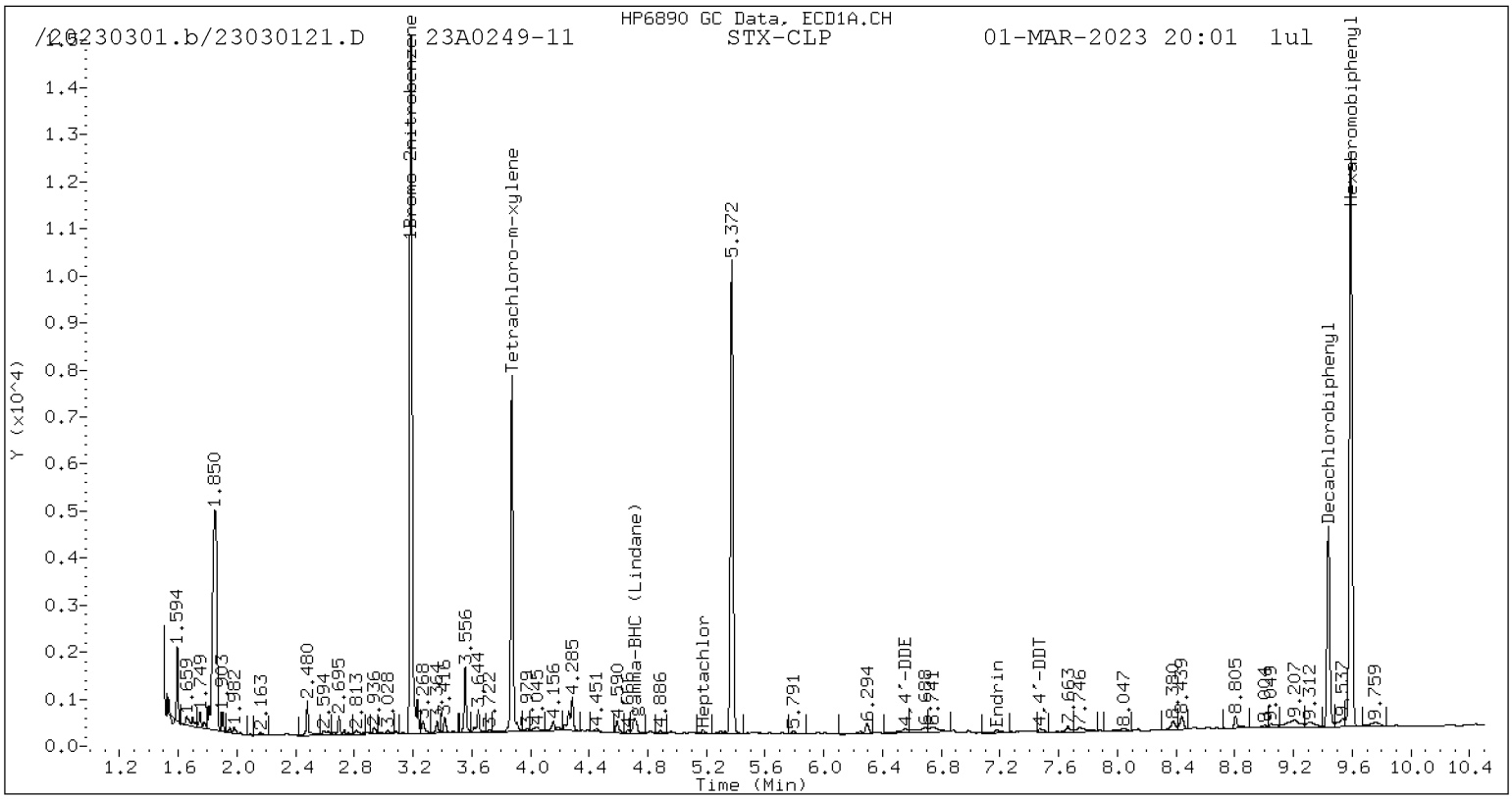
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	469896	-30.1
Hexabromobiphenyl	609723	327135	-46.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	673209	-33.1
Hexabromobiphenyl	769764	389927	-49.3

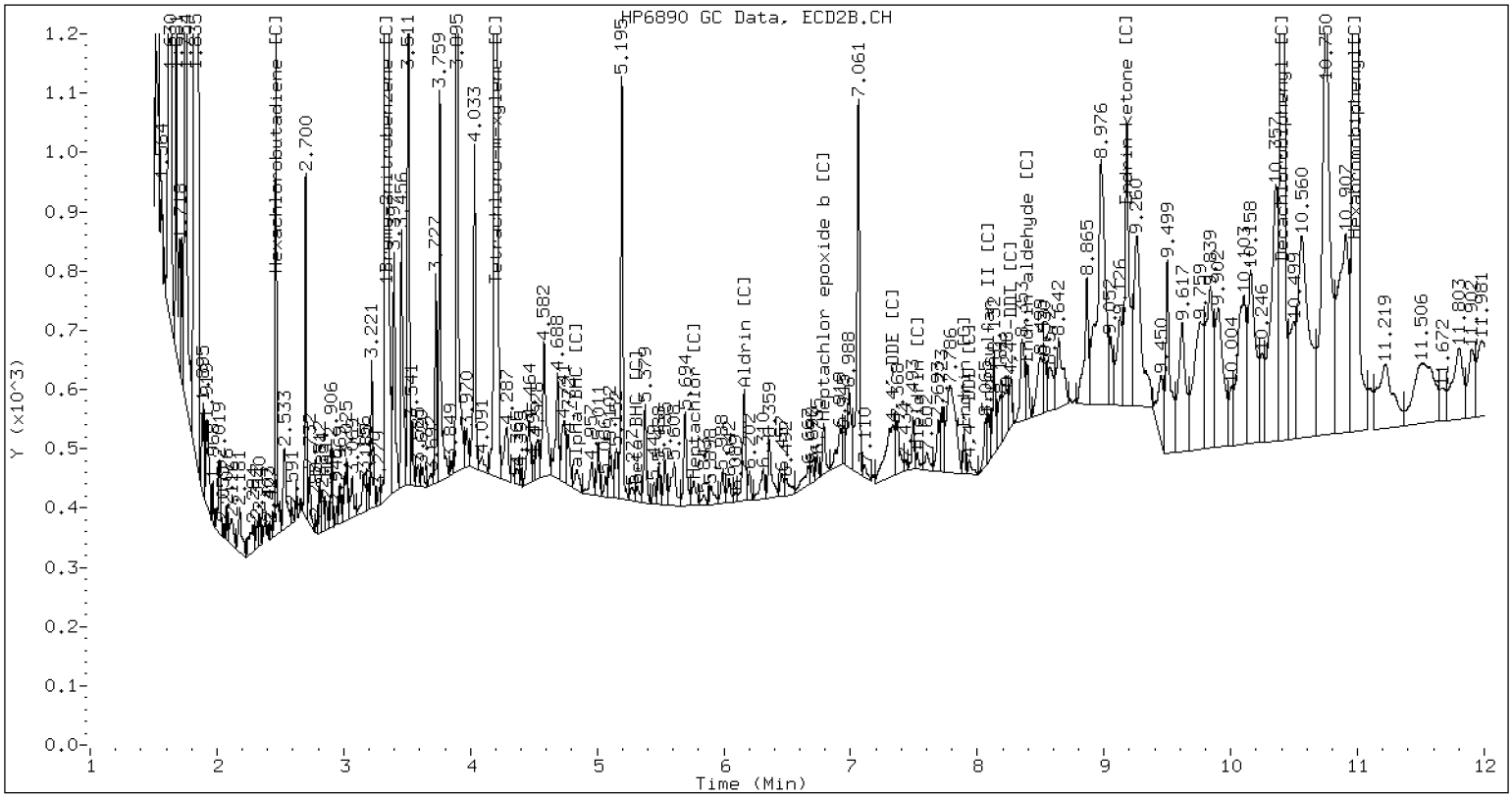
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

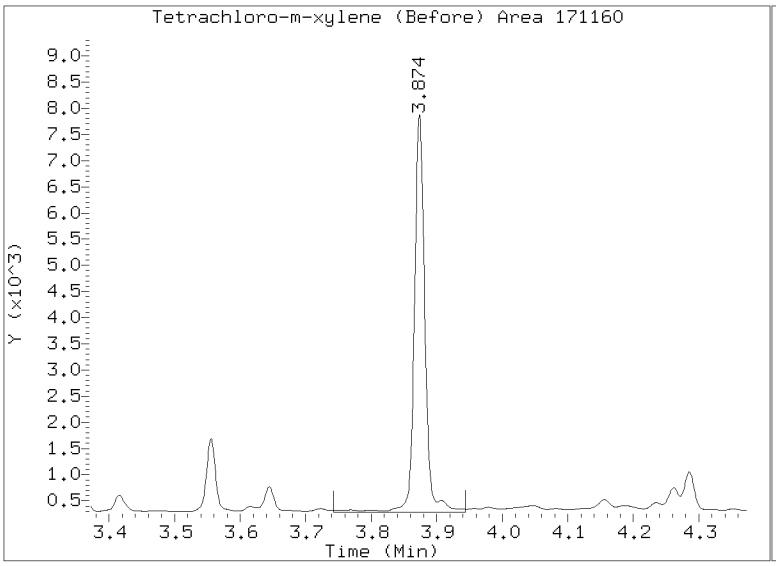
/20230301.b/B20230301.b/23030121.D 23A0249-11 CLP2

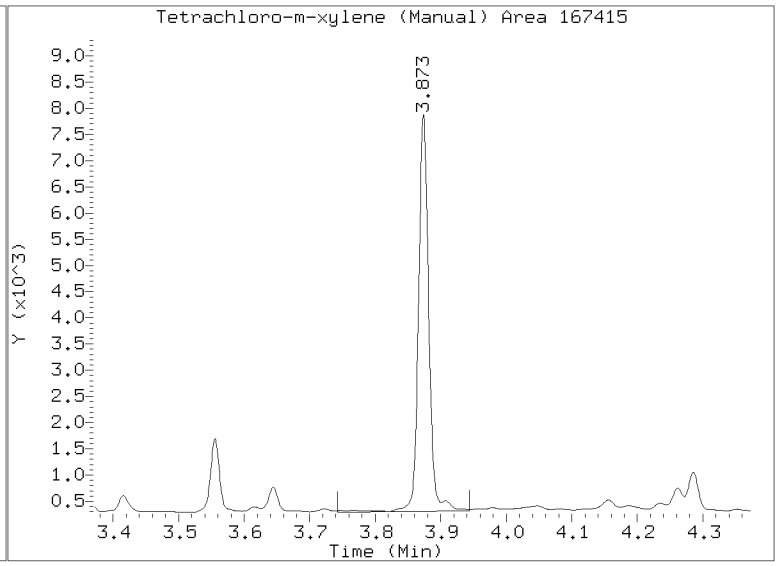


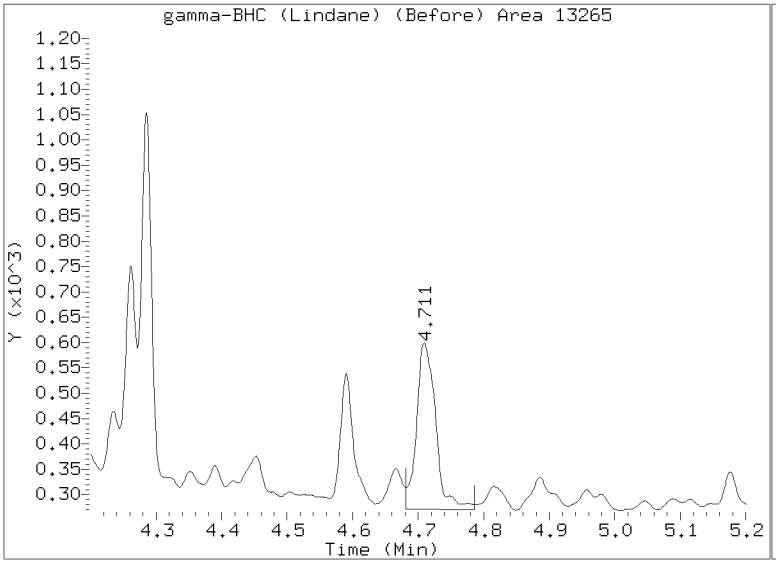
CLP-2 Manual Integration: YES

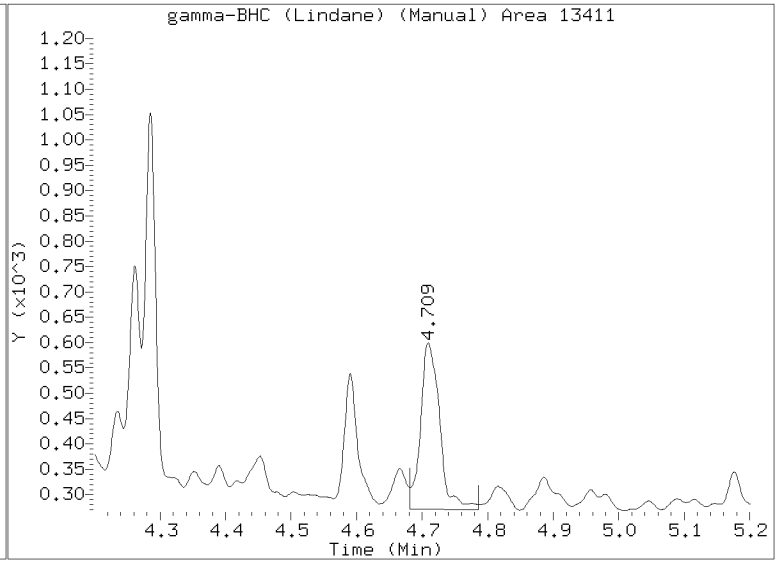
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230301.b/23030121.D
Injection Date: 01-MAR-2023 20:01
Lab ID:23A0249-11 Client ID:
Report Date: 03/02/2023 13:14









Manual Peak Adjustment Report, CLP-2

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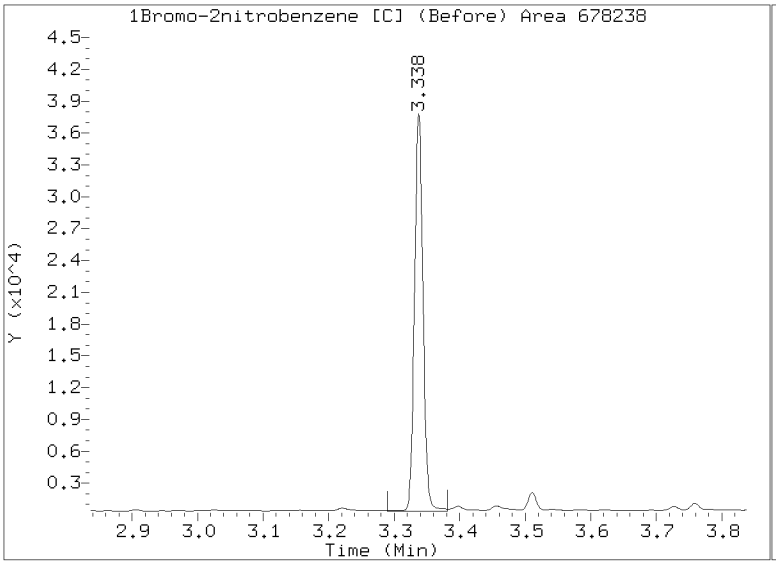
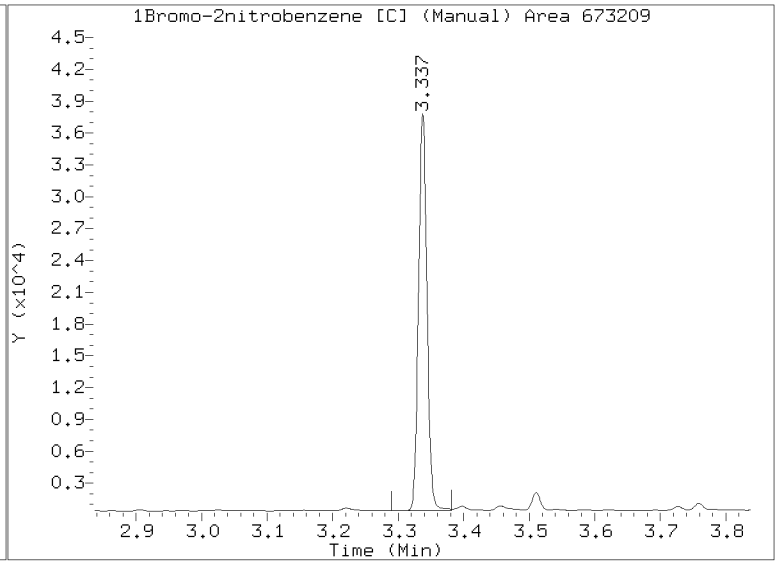
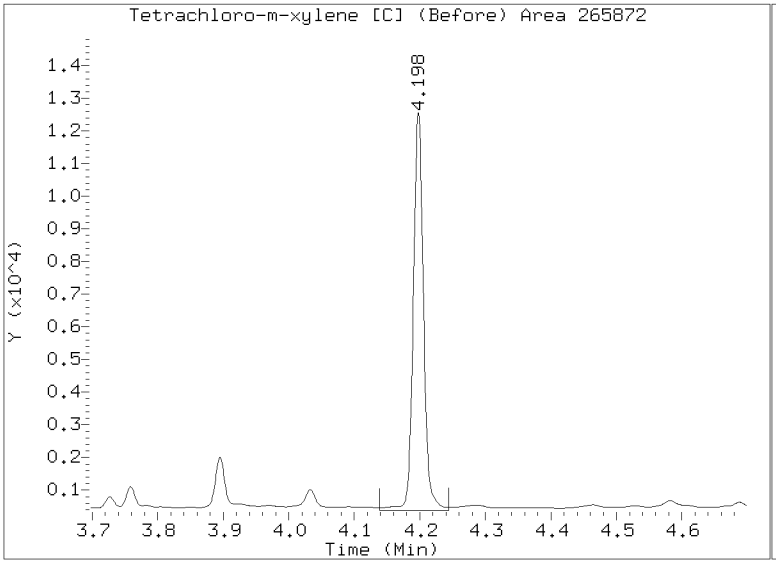
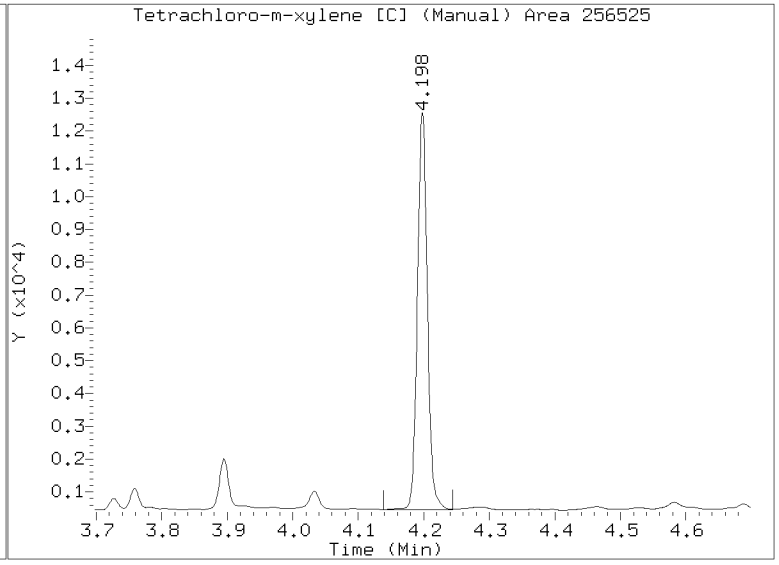
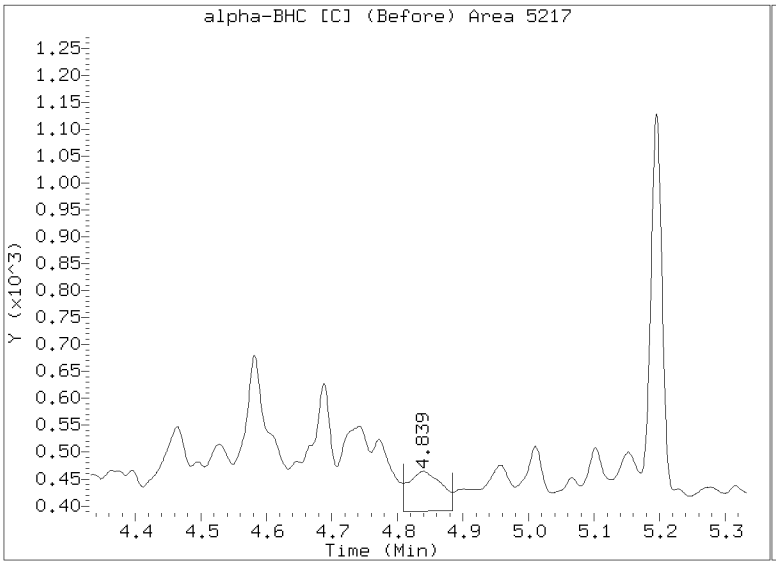
Injection Date: 01-MAR-2023 20:01
Lab ID:23A0249-11 Client ID:

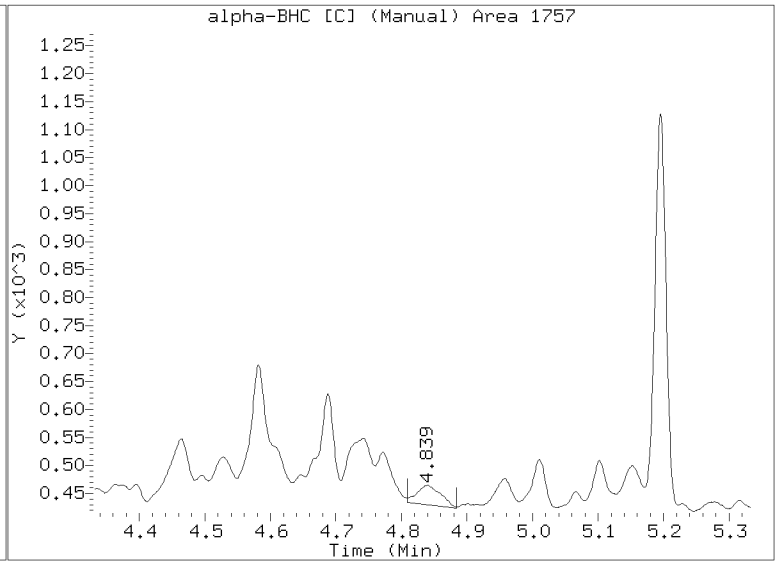












Manual Peak Adjustment Report, CLP-2

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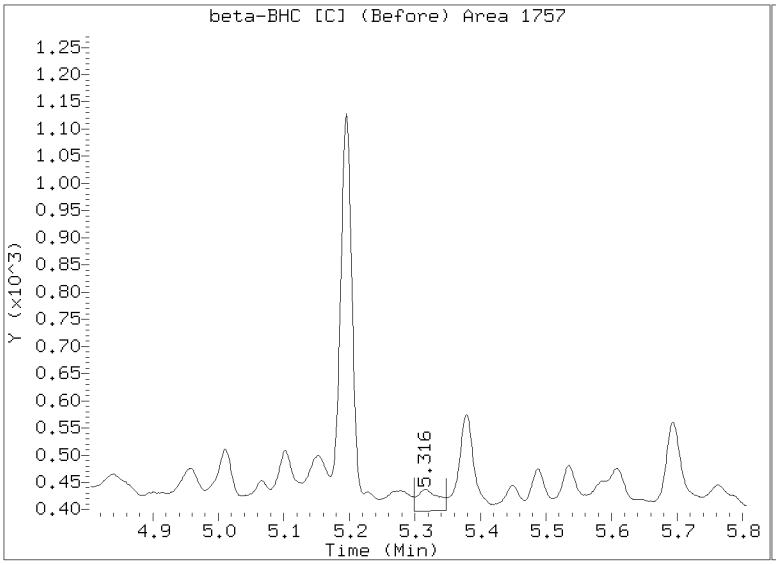

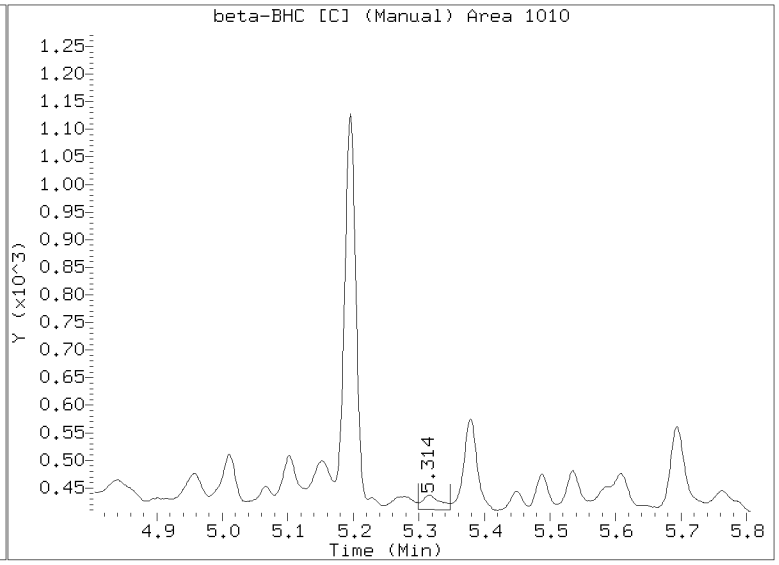

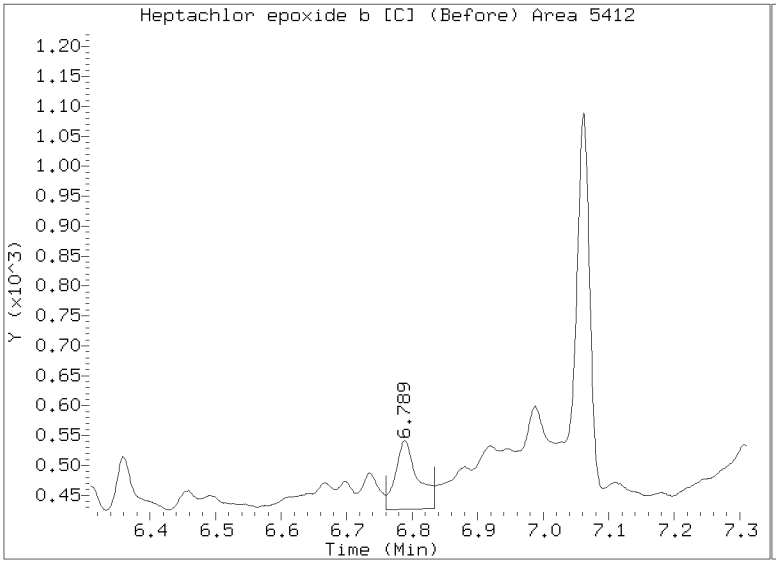

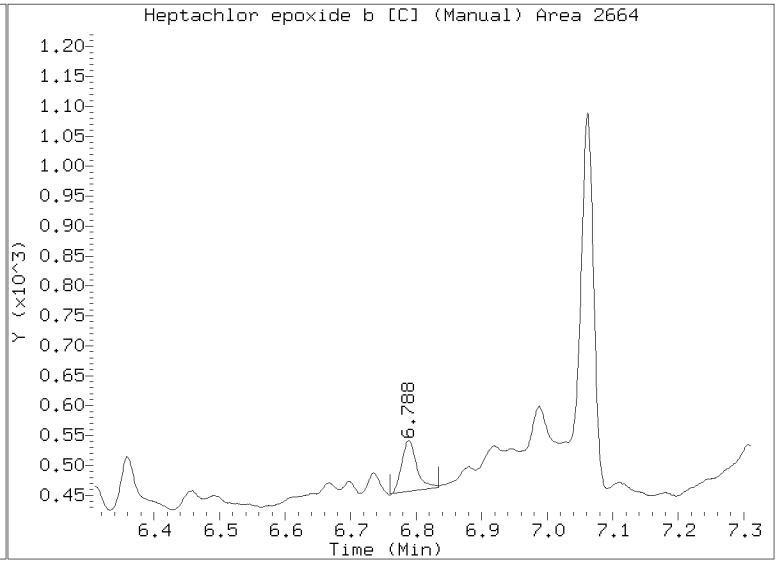

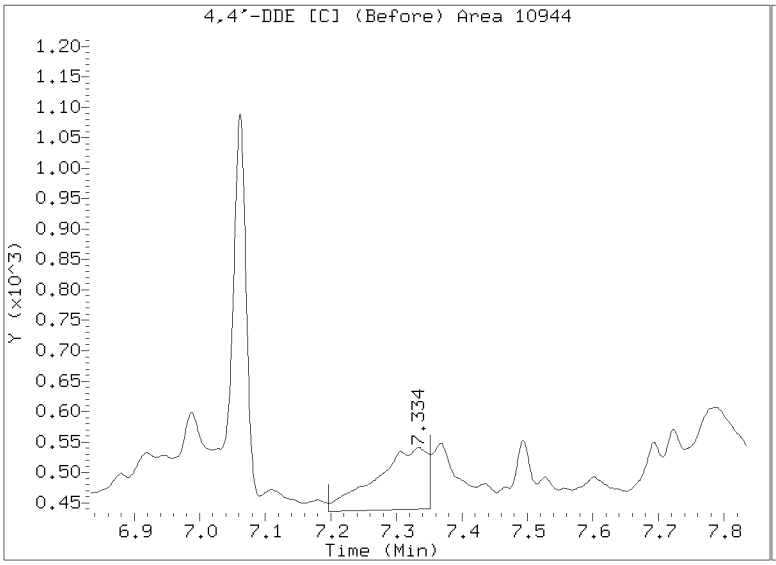

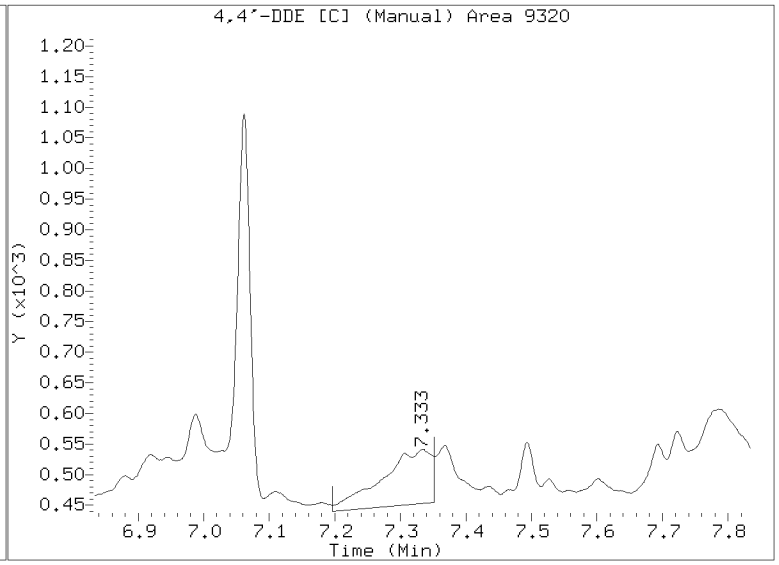

Manual Peak Adjustment Report, CLP-2

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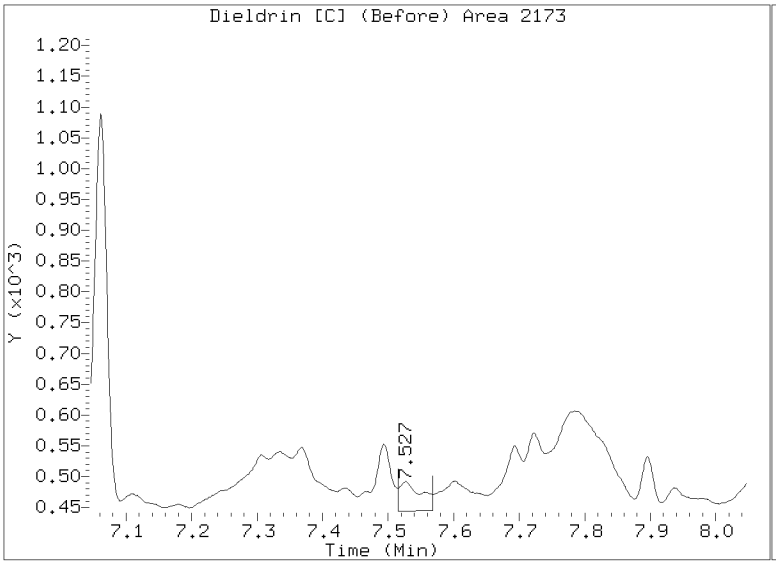
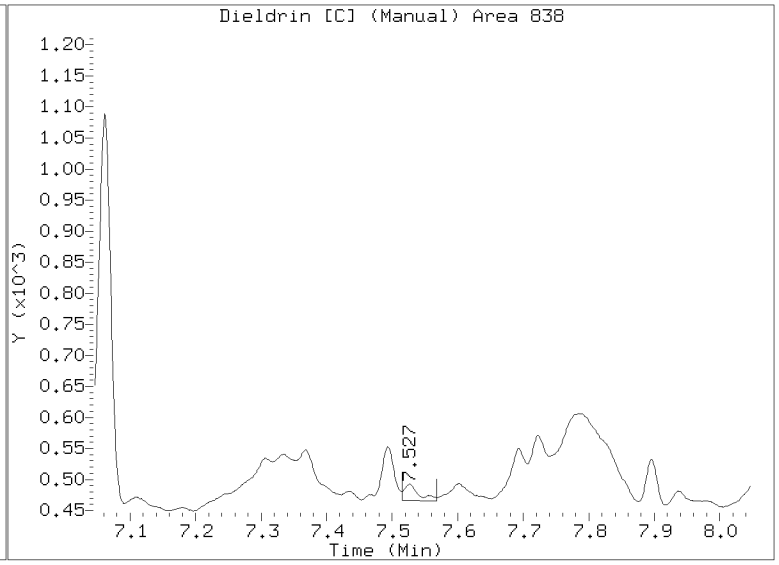
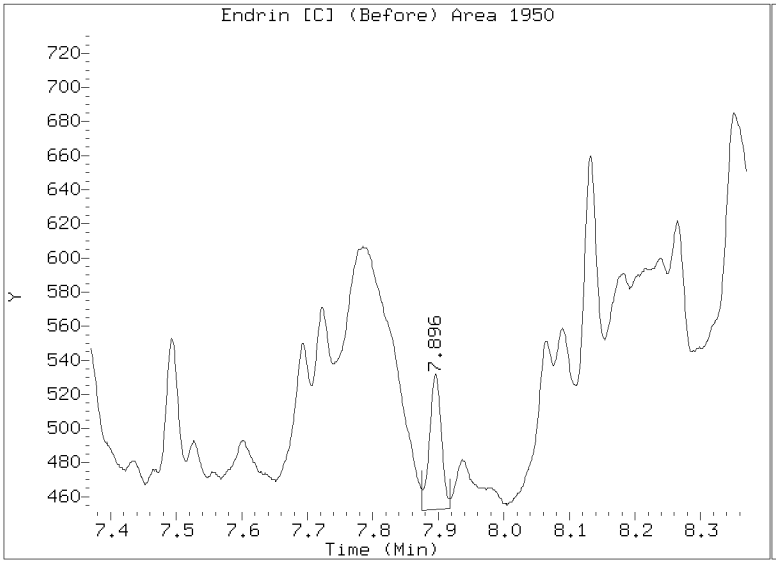
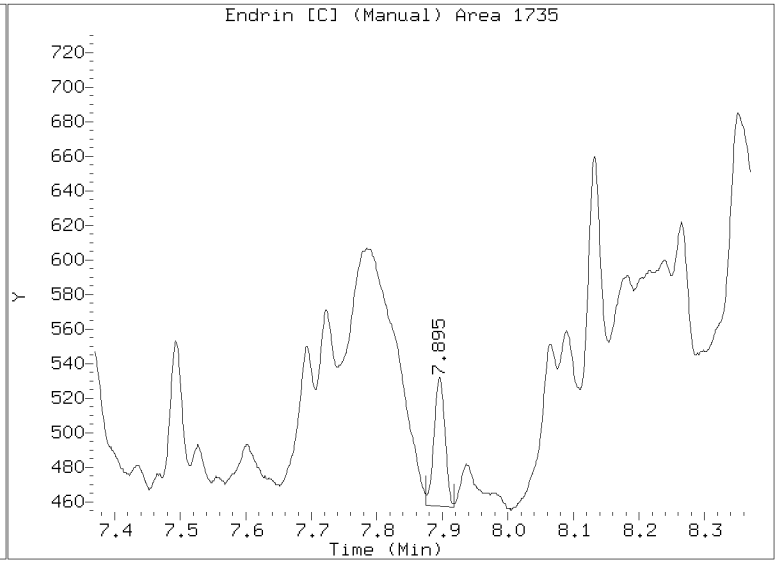
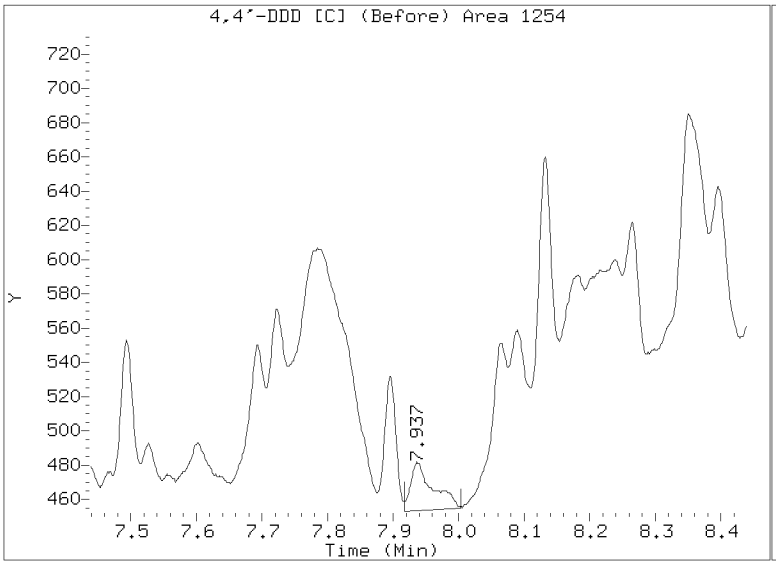
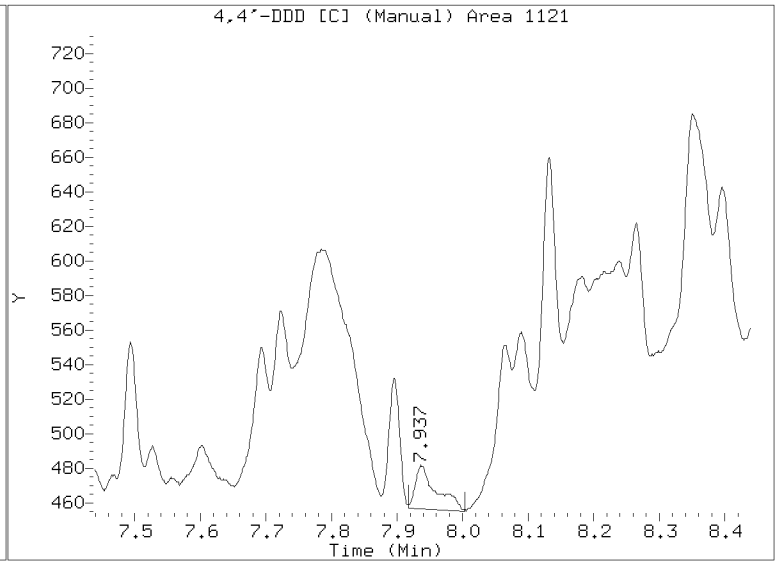






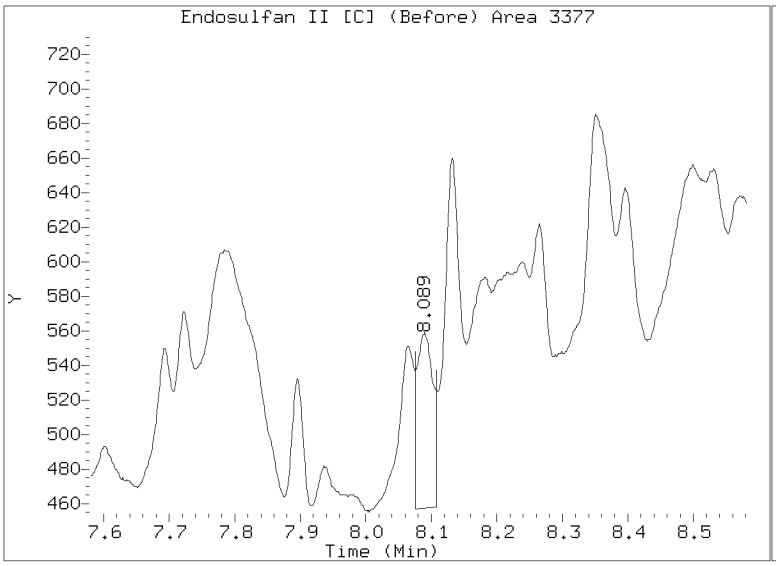


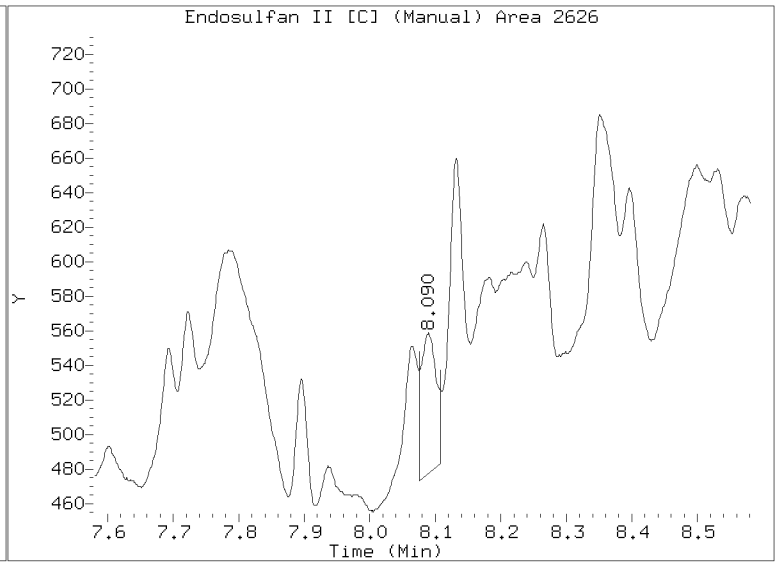


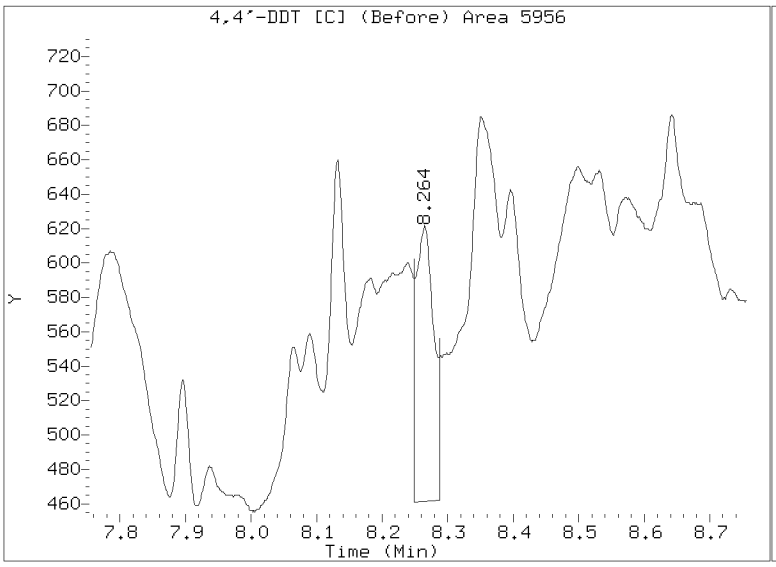


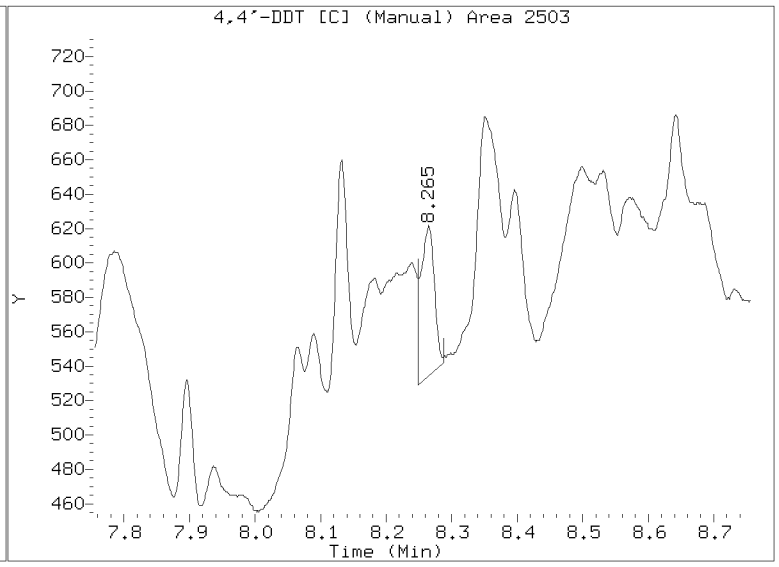
Manual Peak Adjustment Report, CLP-2

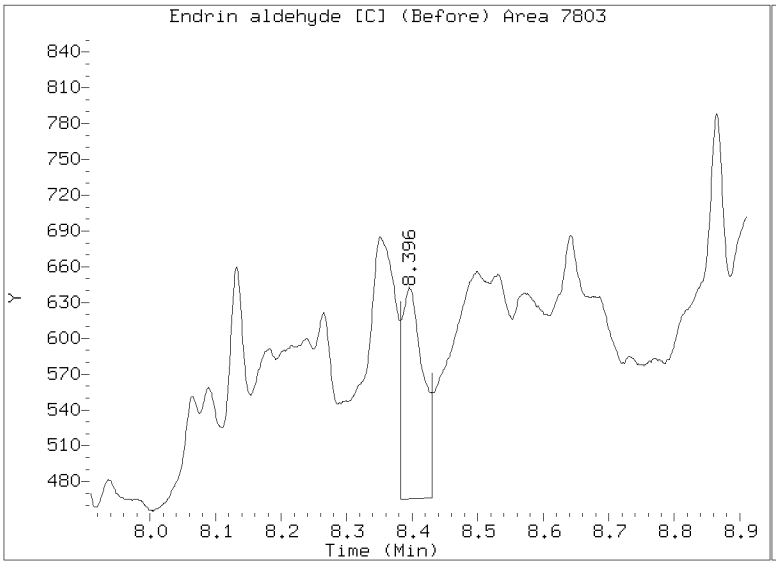
Datafile: /20230301.b/B20230301.b/23030121.D
Injection Date: 01-MAR-2023 20:01
Lab ID:23A0249-11 Client ID:

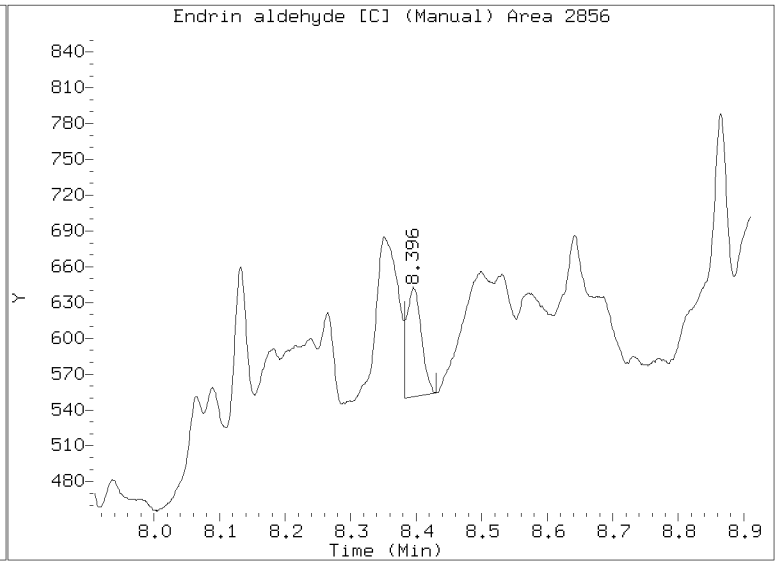






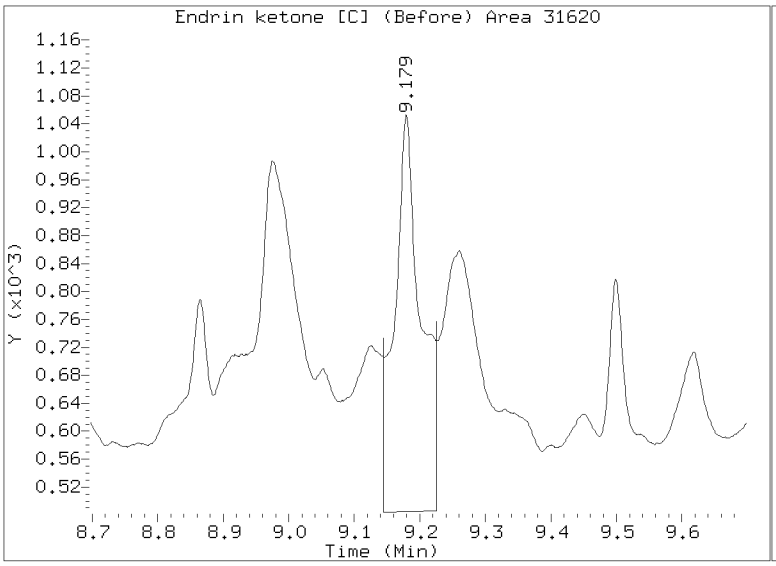


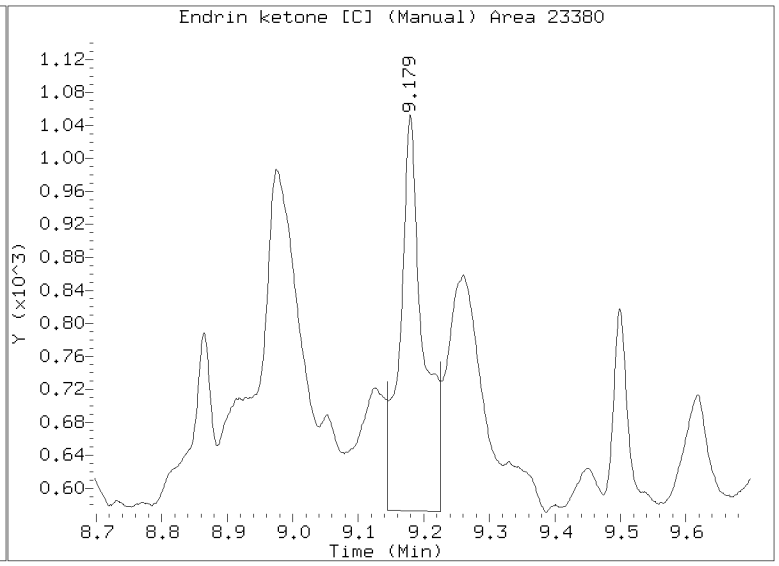




Manual Peak Adjustment Report, CLP-2

Datafile: /20230301.b/B20230301.b/23030121.D
Injection Date: 01-MAR-2023 20:01
Lab ID:23A0249-11 Client ID:





PREPARATION BATCH SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC SDG: 23A0249

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

Batch: BLA0672 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1083	23A0249-02	23030116.D	01/31/23 13:36	
LDW23-SC1018	23A0249-03	23030117.D	01/31/23 13:36	
LDW23-SC1084	23A0249-04	23030118.D	01/31/23 13:36	
LDW23-SC1025	23A0249-05	23C03074.D	01/31/23 13:36	
LDW23-SC1024	23A0249-08	23030120.D	01/31/23 13:36	
LDW23-SC1020	23A0249-11	23030121.D	01/31/23 13:36	
Blank	BLA0672-BLK1	23030113.D	01/31/23 13:36	
LCS	BLA0672-BS1	23030114.D	01/31/23 13:36	
LCS Dup	BLA0672-BSD1	23030115.D	01/31/23 13:36	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0672

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

Matrix: Solid **Date Prepared:** 1/31/23 **Balance ID:** B13929 3002 **Set Up By:** GD 1/27/23

WO Comments

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
62	Toxaphene
44	WND
QLS 10	QLS Spike

Analysis: 8081B Pest (PSDDA)

Lab Number & Container	% Solids	Initial (g) Target Dry: 12.5 (Wet)	Actual	(REQ) GPC (1:1) 1 (2) 3	(Yes) / No) Acid Clean 5mL	(REQ) Sulfur C/U 4.5mL+0.5 mL ~~Ethyl Acetate~~	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0249-02 A	61.9	(20.19)	20.37	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0249-03 A	49.9	(25.05)	25.15	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0249-04 A	53.9	(23.20)	23.85	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0249-05 A	59.4	(21.06)	21.24	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0249-08 A	49.0	(25.52)	25.97	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0249-11 A	70.0	(17.86)	18.23	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0295-01 A	54.5	(22.95)	22.96	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0295-02 A	54.1	(23.13)	23.66	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0295-03 A	58.3	(21.43)	21.91	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0295-04 A	52.9	(23.62)	23.76	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0295-05 A	60.1	(20.79)	20.98	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0295-06 A	54.4	(23.00)	23.58	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0295-07 A	77.6	(16.11)	16.33	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0295-09 A	66.5	(18.79)	19.18	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23A0295-10 A	78.1	(16.01)	16.01	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 12.5 (Wet)	Actual	(REQ) GPC (1:1) 1 (2) 3	(Yes) / No) Acid Clean 5mL	(REQ) Sulfur C/U 4.5mL+0.5 mL ~~Ethyl Acetate~~	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0672-BLK1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLA0672-BS1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLA0672-BSD1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLA0672-MS1	78.1	(16.01)	16.01	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	Use 23A0295-10
BLA0672-MSD1	78.1	(16.01)	16.01	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	Use 23A0295-10

CR 1/31/23 LJ 2/2 3/23 01/31/23 CT 13:36

Client ID verified By | Date | Preparation Reviewed By | Date | Extraction Date and Time

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0672

Prepared using: EPA 3546 (Microwave)
8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments
23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps

Microwave
1 2 3
CR 1/31
Analyst/Date

Pre GPC KD
100°C
(No Exchange)
~~3~~ 4 5 6
LJ/AV 2-9-23
Analyst/Date

TurboVap
Pre GPC
1 2 3 4 5
LJ 2/14/23
Analyst/Date

Post GPC KD
80 - 85°C
Hexane Exchange
(2 X 20 mL)
100°C
1 2 3 4 5 6
AV 8/20
Analyst/Date

TurboVap
Pre-Cleanups
1 2 3 4 5
2/23/23
LJ for NFB
Analyst/Date

TurboVap
Post-Cleanups
1 2 3 4 5
LJ 2/23/23
Analyst/Date

Vialing
LJ 2/23/23

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: CR Date: 1/31/23	
Hexane	K008310
80:20 Hexane/Acetone	L000257
1:1 Hexane/Acetone	L000879
Neutral Glass Wool	L000350
Anhydrous Sodium Sulfate	L000759
Pre GPC KD Analyst: LJ/AV Date: 2-9-23	
Hexane	M011377
Anhydrous Sodium Sulfate	
Neutral Glass Wool	
GPC Filter Prep Analyst: LJ Date: 2/14/23	
Methylene Chloride	L000608
GPC Analyst: TWC Date: 2/16/23	
Methylene Chloride	L000808
GPC Calibration File	CLB0132-GPC2
Post GPC KD Analyst: AV Date: 07/20/2023	
Methylene Chloride	K005941
Hexane	~~K000889~~ L000489 LJ 2/23/23
Vialing Analyst: LJ Date: 2/23/23	
Hexane	L000889
Sulfuric Acid	L000103
Ethyl Acetate	N/A
Tetrabutylammonium hydrogensulfate (TBAS)	L001601
Sodium Sulfite	K010363
Silica Gel (SPE) Darts	L001004

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 2µg/mL	N L000773 Exp Date: 7/21/23	50µL	CR	CT
Spike (Freezer) 0.5/1/5µg/mL	3 K011471 Exp Date: 6/10/23	100µL	CR	CT

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0672

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
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23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessels. 3. Add 1:1 Hex/ACE to the vessels (until solvent is 3" above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot then let cool 15 min in cold water. Re-homogenize while cool. 7. Decant 1:1 Hex/ACE into Erlenmeyer flask using a funnel containing neutral glasswool. 8. Rinse with Hexane. 9. Microwave a 2nd time using 8:2 Hex/Ace (until solvent is 3" above soil layer after homogenization). 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with Hexane. 11. KD to 5mL at 100°C. (NO HEXANE EXCHANGE). 12. TurboVap 13. GPC 14. After GPC: KD at 80 - 85°C 15. Exchange to Hexane at 100°C 2 x 20 mL). 16. TurboVap. 17. Cleanups, If Acid cleaning do not add Ethyl Acetate for Sulfur Clean. Do Not Acid Clean if Acid liable compounds are requested. 18. Vial in Hexane. A. Need Total Solids Y (N) B. Archive/Freeze (Y) N	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: PEST   Extraction Batch BLA0672

Total Solids Batch: BLA0590   Work Order(s): 23A0249

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 02-11	CR 1/26/23
☒ Standing Water Decanted (Not shared)= 03-06, 08, 10	CR 1/26/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 02-11	CR 1/26/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☒ Other Notes/Comments= (Note problems, concerns, corrective actions).	
BS1 leaked out columns during KD	AV ~~2/08~~ 2/09/23
☒ Share Samples Y / (N)	CR 1/26/23
☒ Multiple Jars Y / (N)	CR 1/26/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

3056F

Revision 15
07/01/19

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory
Analyst Notes

Extraction Parameter: PEST Extraction Batch BLA0672

Total Solids Batch: BLA0598 Work Order(s): 23A0295

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-10	CR 1/26/23
☒ Standing Water Decanted (Not shared)= 01, 02, 04, 06, 07	CR 1/26/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 01-10	CR 1/26/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	CR 1/26/23
☒ Multiple Jars Y / (N)	CR 1/26/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0672

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
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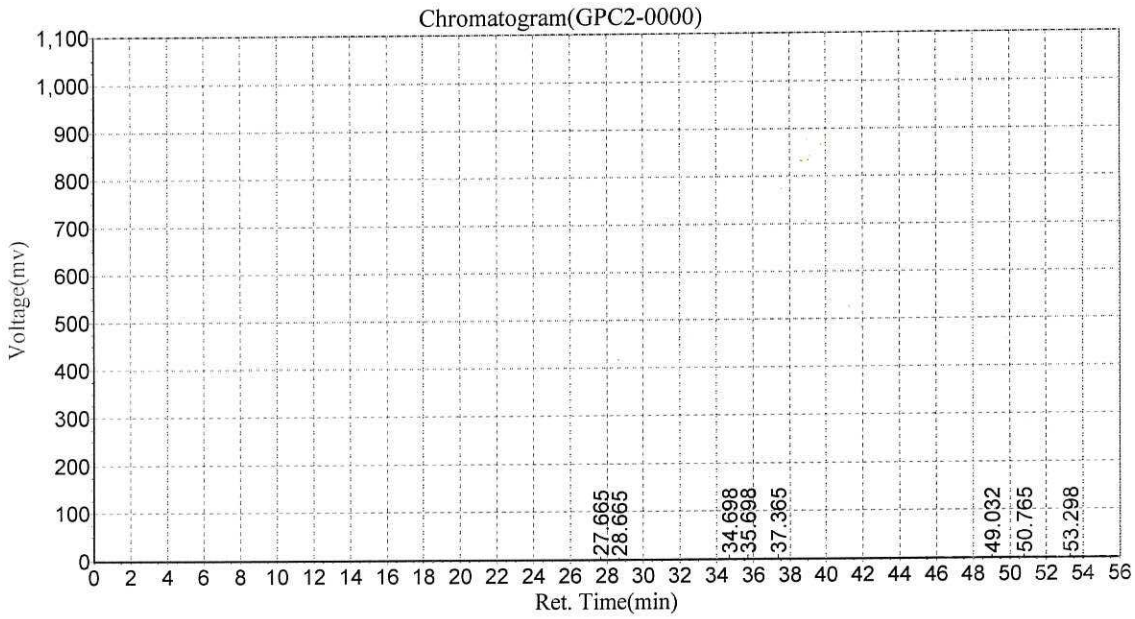
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Analyst/Date

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

Date:2023-02-16,6:43:10 PM
Data File:c:\n2000\data\gpc2\021623\GPC2-0000
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-02-16,6:43:11 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		27.665	2828.944	128993.445	6.2080
2		28.665	2718.611	148636.125	7.1534
3		34.698	6444.000	654101.500	31.4798
4		35.698	4971.237	289269.781	13.9216
5		37.365	4162.631	383558.563	18.4594
6		49.032	1826.333	192556.266	9.2671
7		50.765	2083.889	146912.875	7.0704
8		53.298	1587.778	133817.406	6.4402
Total			26623.424	2077845.961	100.000

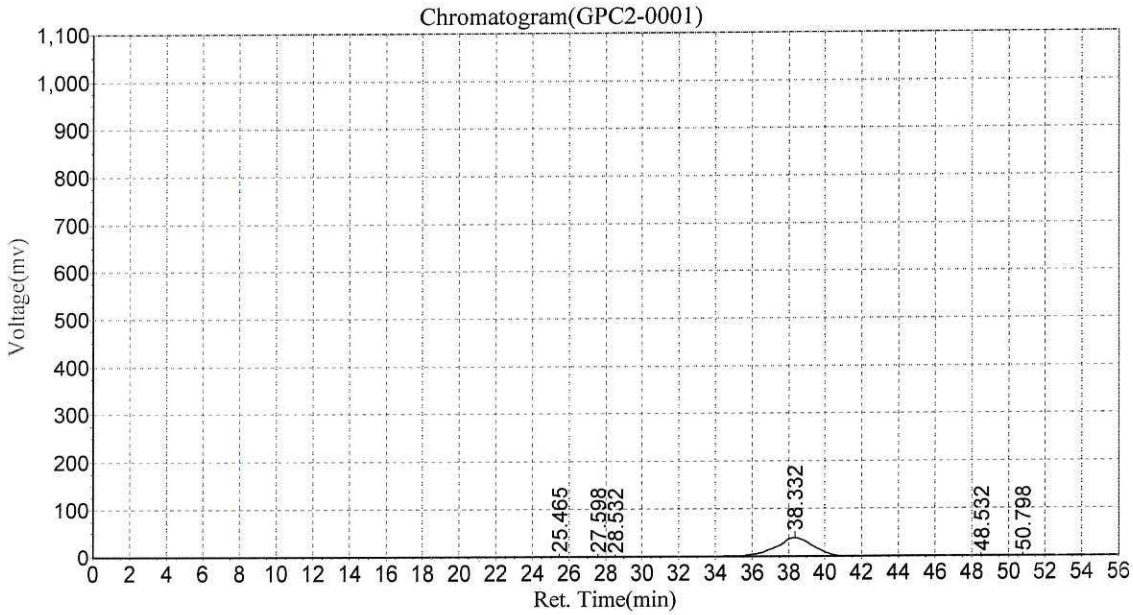
Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

Date:2023-02-16,7:40:53 PM
Data File:c:\n2000\data\gpc2\021623\GPC2-0001
Method File:E:\GPC2_InHouse.mtd

Analyst£°TWC
Date/Time2023-02-16,7:40:54 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		25.465	2511.175	106966.070	1.1134
2		27.598	2533.778	122995.016	1.2802
3		28.532	2590.667	142682.797	1.4851
4		38.332	45761.637	8875024.000	92.3757
5		48.532	1975.313	206180.203	2.1460
6		50.798	1918.828	153679.141	1.5996
Total			57291.396	9607527.227	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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Method File:E:\GPC2_InHouse.mtd

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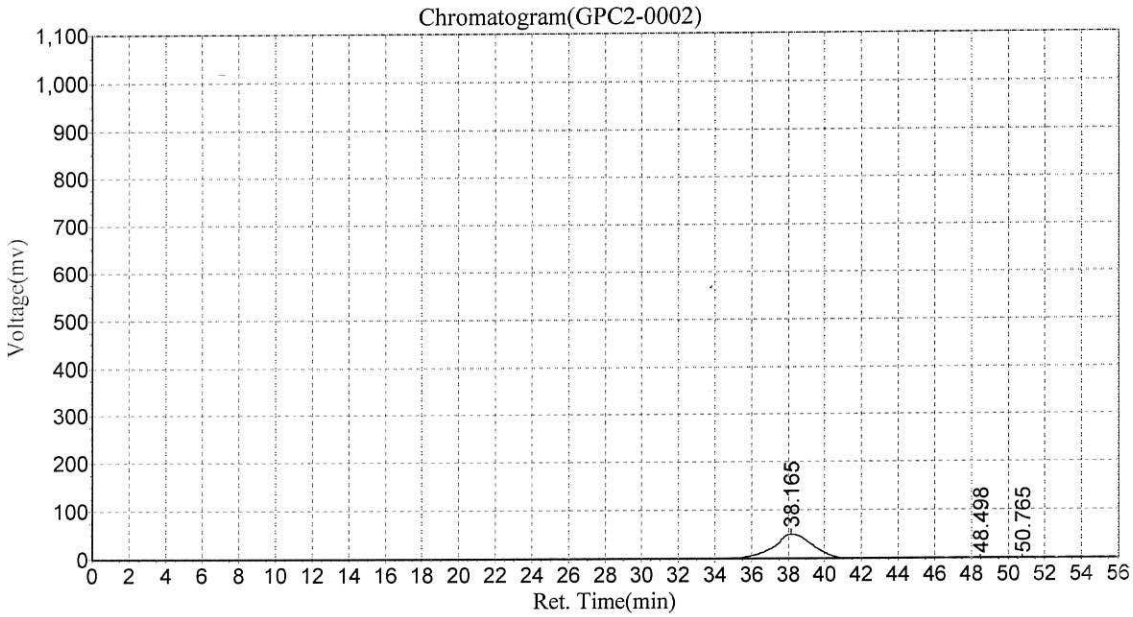

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		38.165	55859.332	10298911.000	96.9482
2		48.498	1695.563	176316.891	1.6597
3		50.765	1804.641	147883.109	1.3921
Total			59359.535	10623111.000	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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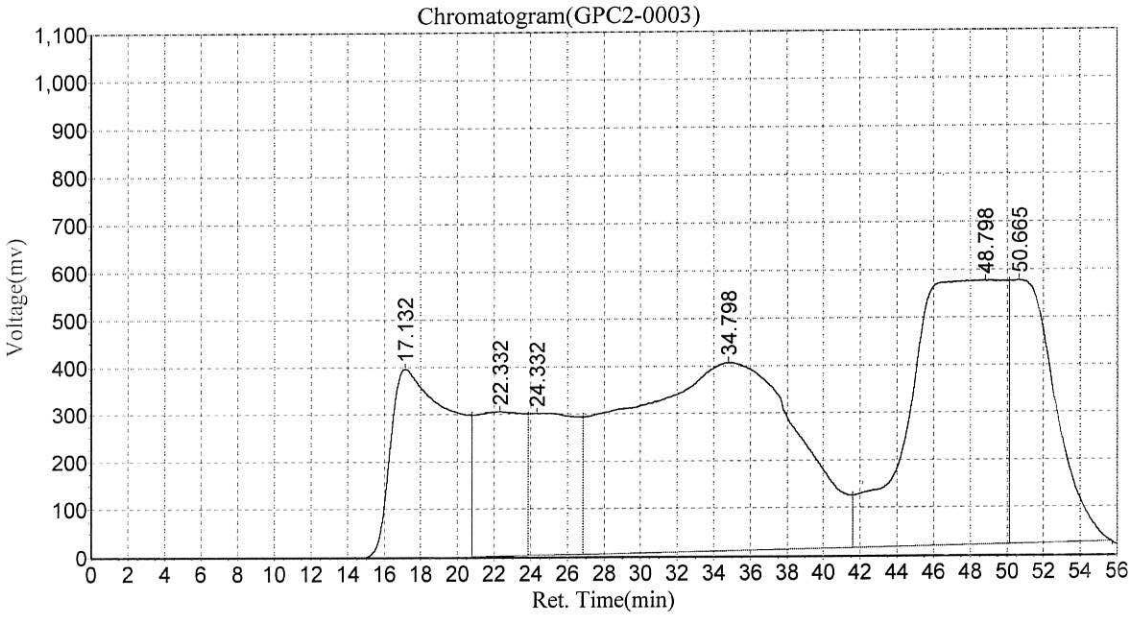

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.132	397483.125	94930448.000	12.5841
2		22.332	302808.344	55183608.000	7.3152
3		24.332	297400.500	52832528.000	7.0036
4		34.798	393549.656	262831328.000	34.8414
5		48.798	552821.750	196961616.000	26.1096
6		50.665	551324.313	91626536.000	12.1462
Total			2495387.688	754366064.000	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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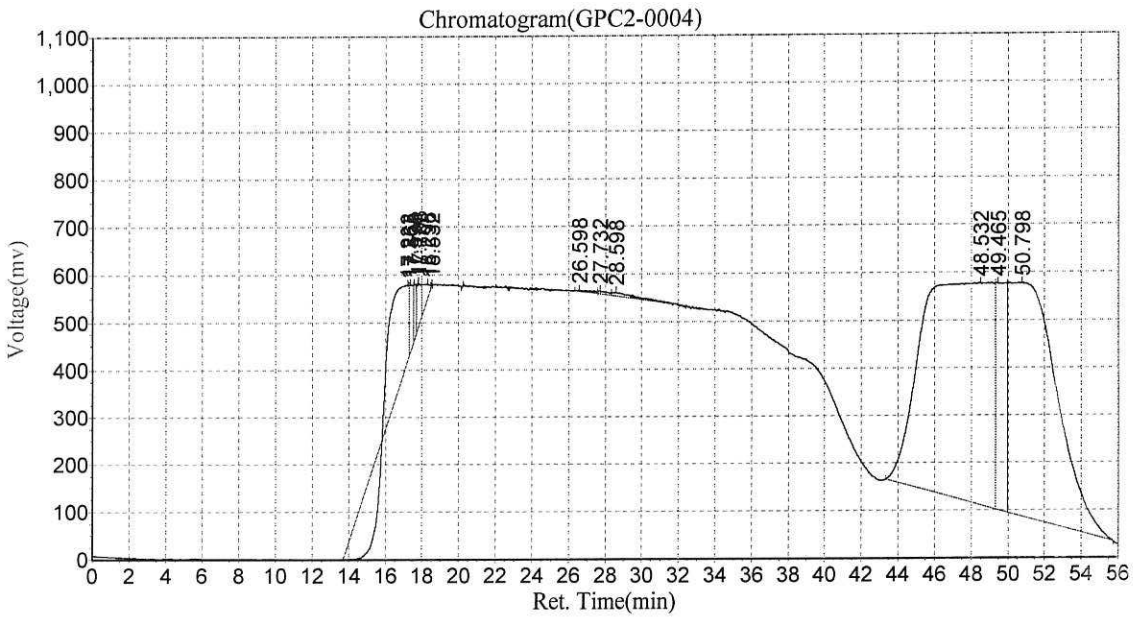

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.232	170576.828	5963771.000	2.4476
2		17.365	155995.484	2093873.375	0.8594
3		17.598	129562.867	1253263.125	0.5144
4		17.798	109474.344	1804907.875	0.7408
5		18.298	48299.035	1550435.750	0.6363
6		18.532	21495.422	133168.219	0.0547
7		26.598	2958.736	231876.094	0.0952
8		27.732	6899.615	261492.906	0.1073
9		28.598	8681.758	937474.000	0.3848
10		48.532	466963.938	122586856.000	50.3113
11		49.465	476067.813	19104844.000	7.8409
12		50.798	489810.875	87734544.000	36.0075
Total			2086786.715	243656506.344	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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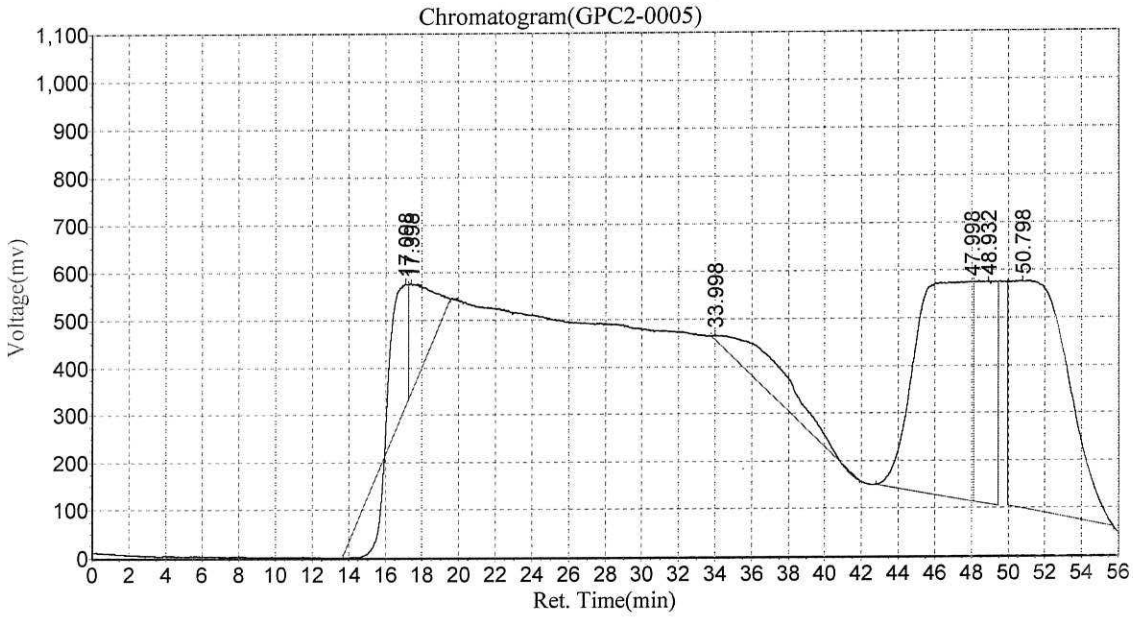

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.098	258693.234	7037318.000	2.5141
2		17.398	231267.297	17077884.000	6.1012
3		33.998	8905.793	18942224.000	6.7673
4	Dump BAN	47.998	458759.719	95358688.000	34.0677
5		48.932	465975.594	37146580.000	13.2709
6		50.798	478829.406	104346976.000	37.2788
Total			1902431.043	279909670.000	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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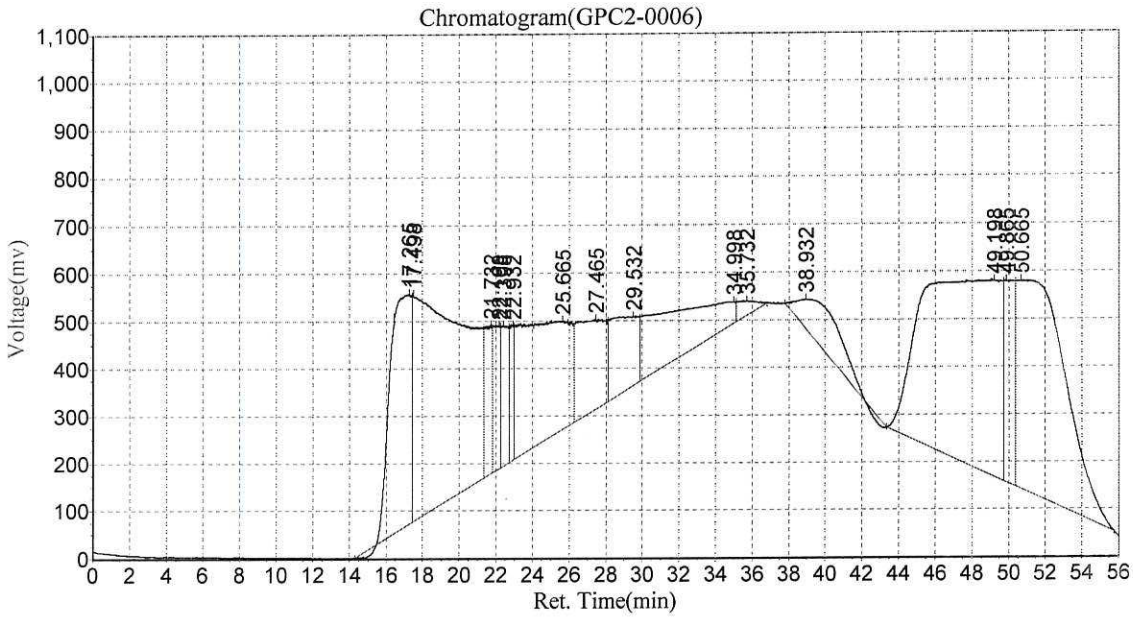

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.265	483816.219	39291968.000	7.7667
2		17.498	477087.969	90746200.000	17.9375
3		21.732	310729.125	8759010.000	1.7314
4		22.198	299741.563	8482989.000	1.6768
5		22.398	294859.188	8169848.500	1.6149
6		22.932	283614.844	4541144.000	0.8976
7		25.665	227130.359	48370188.000	9.5612
8		27.465	187215.969	21371640.000	4.2245
9		29.532	144931.391	16169984.000	3.1963
10		34.998	45093.398	28394444.000	5.6126
11		35.732	29003.678	2193511.750	0.4336
12		38.932	68796.352	15482339.000	3.0603
13		49.198	409813.031	115279464.000	22.7869
14		49.865	420035.969	16927562.000	3.3460
15		50.665	434028.531	81722768.000	16.1538
Total			4115897.584	505903060.250	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000

2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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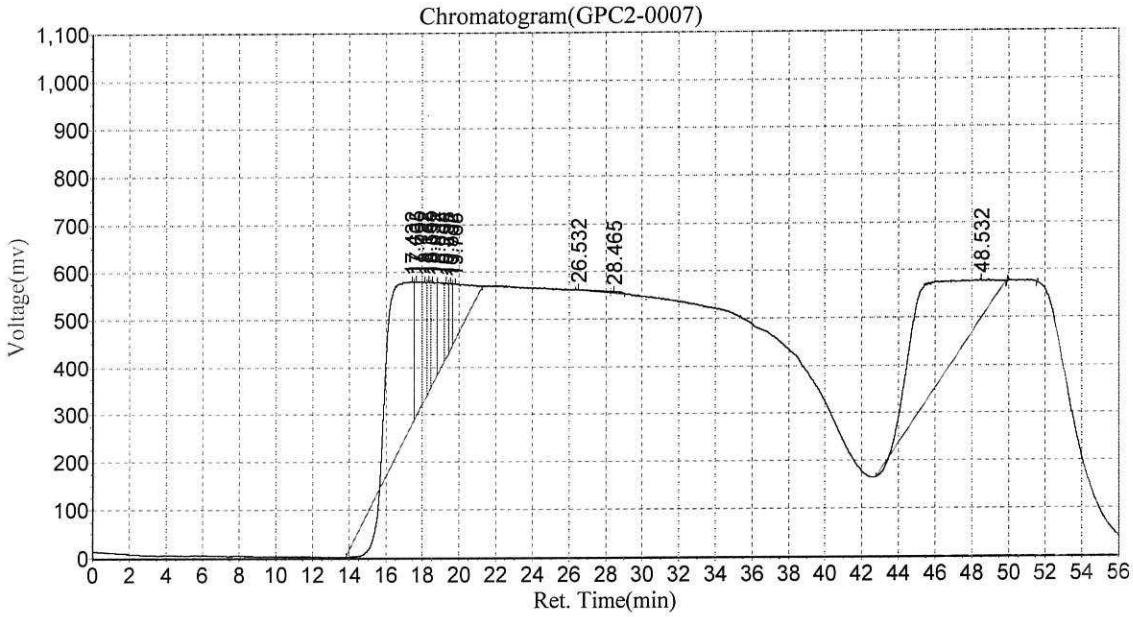

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.432	302169.438	27908318.000	24.7253
2		17.665	284684.563	7155152.000	6.3391
3		18.132	249088.844	3492252.500	3.0940
4		18.365	231489.984	3244446.500	2.8744
5		18.532	217506.234	4180312.250	3.7035
6		18.832	194127.266	4328130.500	3.8345
7		19.298	157769.547	1880164.000	1.6657
8		19.532	138777.688	1952132.125	1.7295
9		19.765	120234.820	6366704.000	5.6406
10		26.532	1726.431	213112.203	0.1888
11		28.465	3940.931	183626.203	0.1627
12		48.532	87200.984	51968952.000	46.0418
Total			1988716.729	112873302.281	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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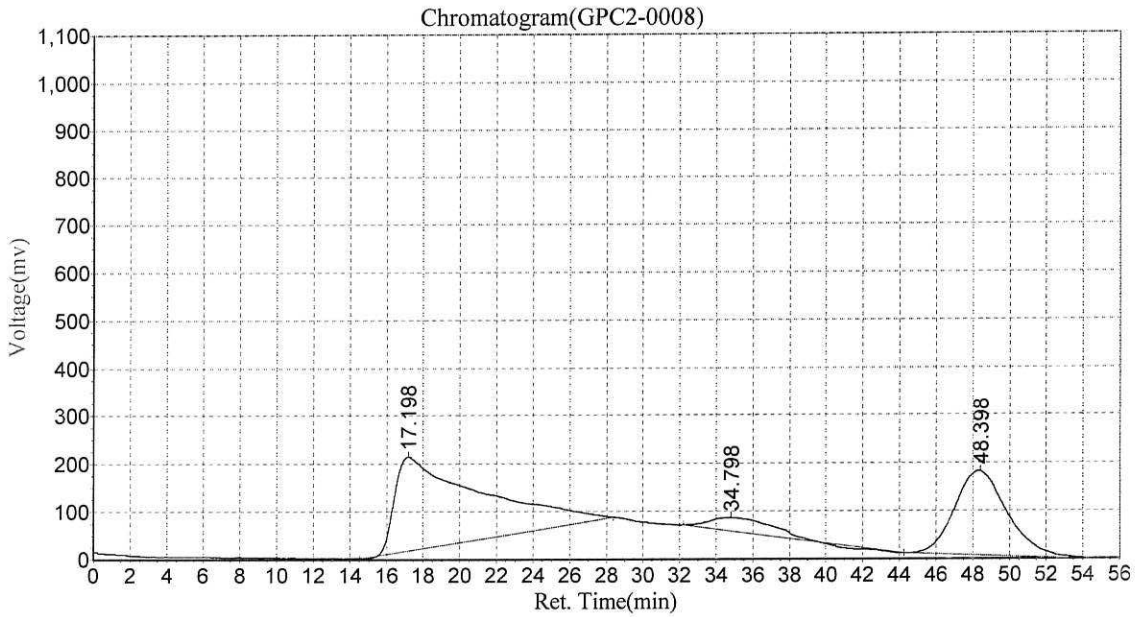

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.198	196255.500	63276976.000	60.2199
2		34.798	27579.613	6534224.000	6.2185
3		48.398	176260.625	35265332.000	33.5616
Total			400095.738	105076532.000	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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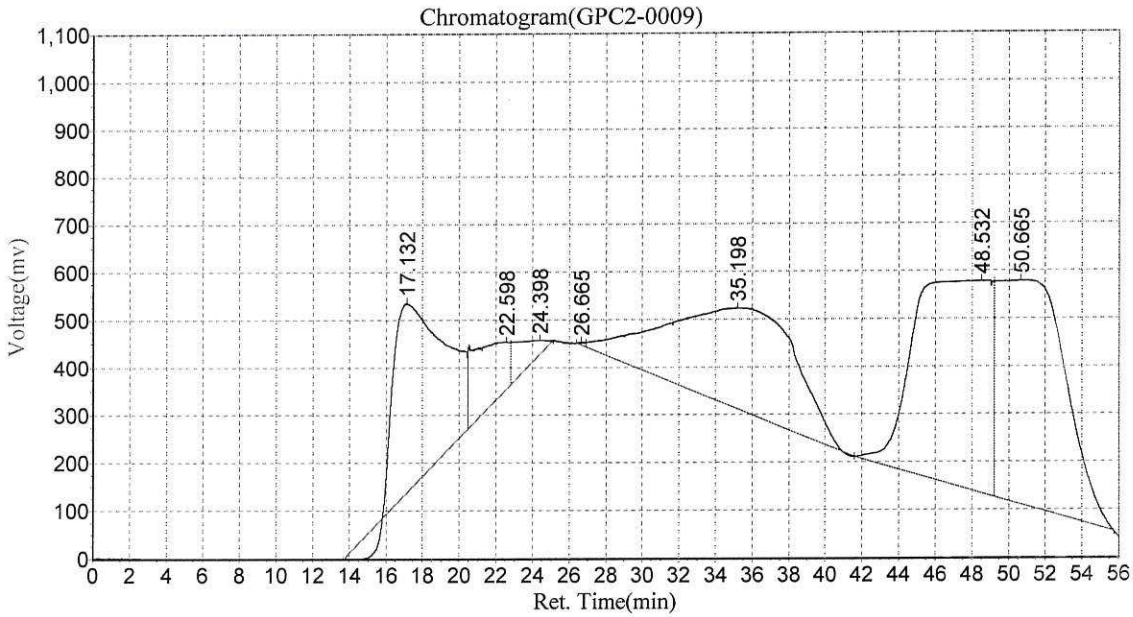

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.132	397373.125	70800520.000	15.9293
2		22.598	98375.469	18168812.000	4.0878
3		24.398	30443.574	6409121.500	1.4420
4		26.665	4881.877	149706.406	0.0337
5		35.198	210808.953	104874920.000	23.5957
6		48.532	441381.500	123795832.000	27.8526
7		50.665	464893.656	120268128.000	27.0590
Total			1648158.154	444467039.906	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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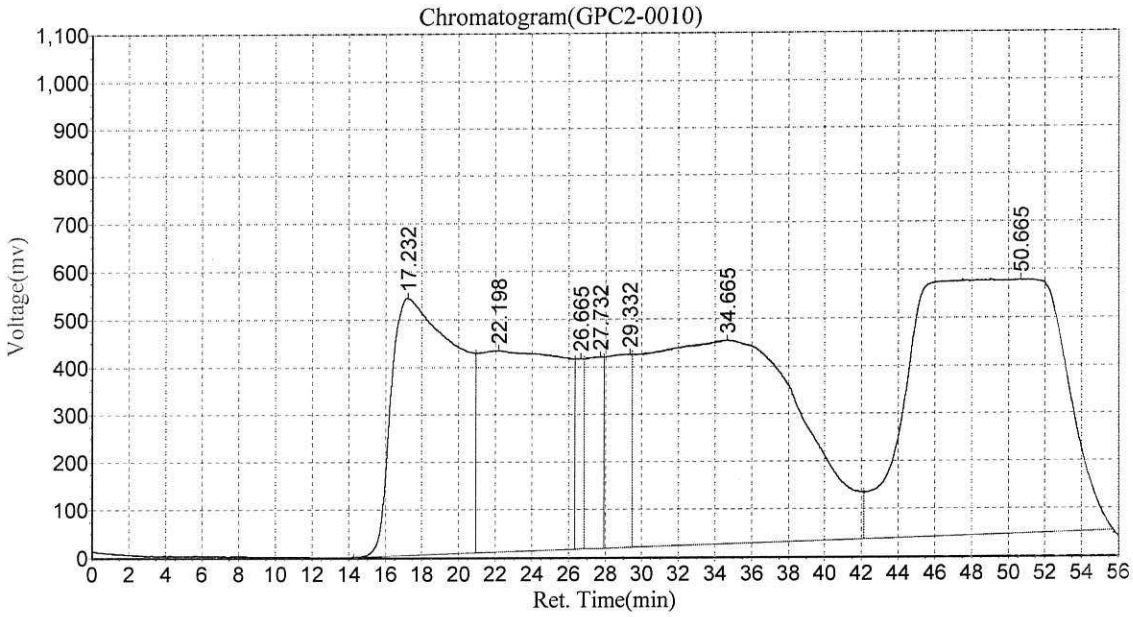

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.232	538395.063	137640816.000	15.2282
2		22.198	421616.844	133708968.000	14.7931
3		26.665	399013.375	12762430.000	1.4120
4		27.732	400429.250	25572690.000	2.8293
5		29.332	403335.031	37015184.000	4.0952
6		34.665	424553.313	252404048.000	27.9252
7		50.665	527030.188	304753280.000	33.7170
Total			3114373.063	903857416.000	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

Date:2023-02-17,5:18:09 AM
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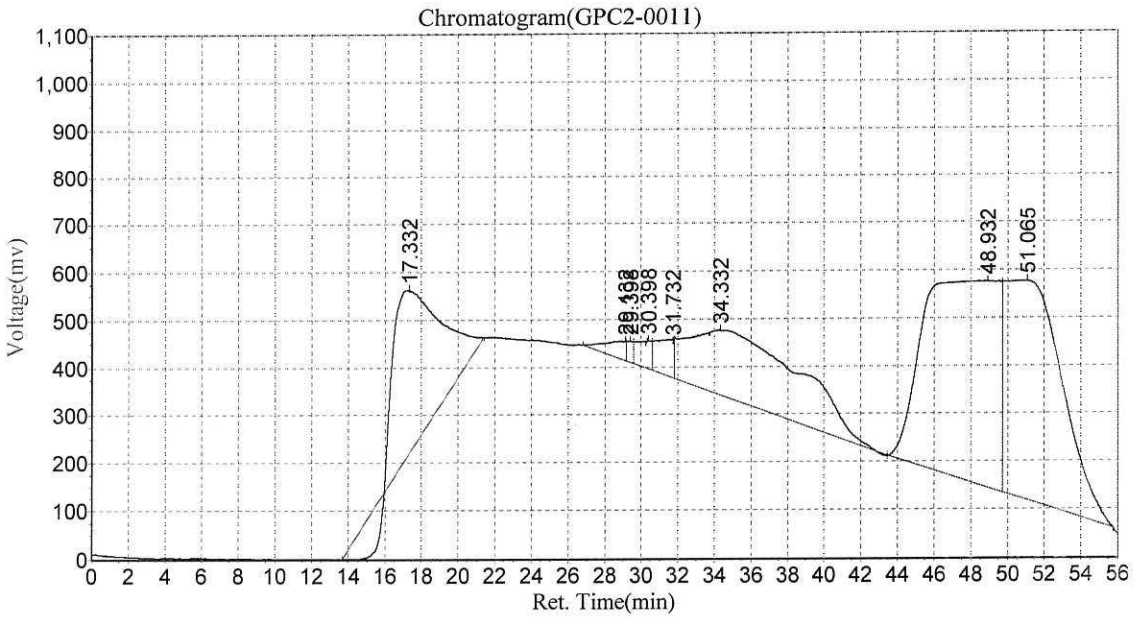

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.332	343417.281	53699764.000	15.4614
2		29.132	44500.359	3693248.500	1.0634
3		29.398	48352.297	1148307.875	0.3306
4		30.398	64496.063	3437537.250	0.9897
5		31.732	83783.750	5394430.500	1.5532
6		34.332	139540.141	64138028.000	18.4668
7		48.932	429544.219	118386512.000	34.0862
8		51.065	455565.094	97417280.000	28.0487
Total			1609199.203	347315108.125	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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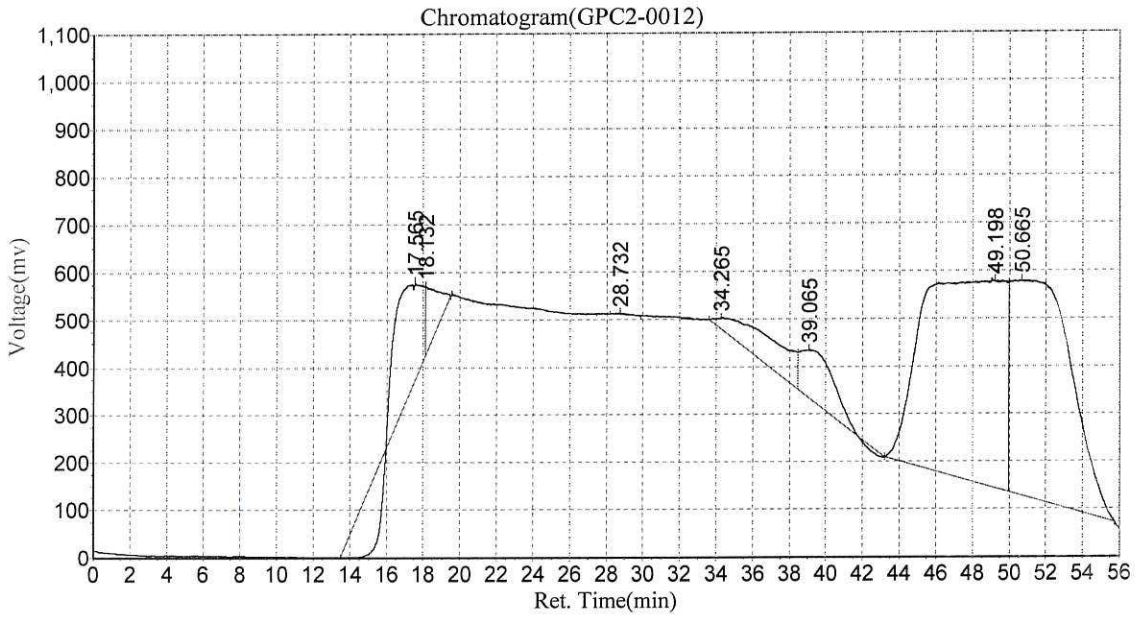

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.565	206301.766	12399350.000	4.4033
2		18.132	147058.281	6339703.500	2.2514
3		28.732	4508.432	282533.188	0.1003
4		34.265	22796.375	14002357.000	4.9725
5		39.065	99736.883	13341716.000	4.7379
6		49.198	433521.969	132293824.000	46.9802
7		50.665	447941.875	102935560.000	36.5545
Total			1361865.581	281595043.688	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

Date:2023-02-17,7:13:34 AM
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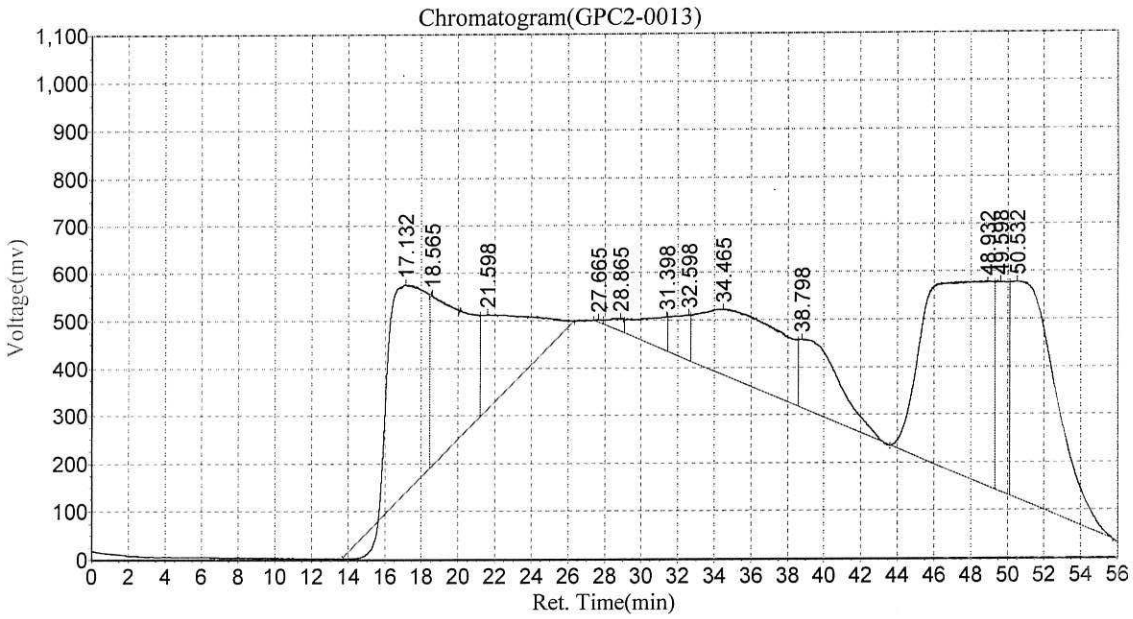

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.132	436982.781	58228716.000	13.6974
2		18.565	363185.906	46591756.000	10.9600
3		21.598	199327.453	33531266.000	7.8877
4		27.665	5649.753	160291.203	0.0377
5		28.865	27273.643	1363263.000	0.3207
6		31.398	71235.297	7157405.500	1.6837
7		32.598	94484.188	6436594.000	1.5141
8		34.465	136704.453	47370116.000	11.1431
9		38.798	144029.453	22947376.000	5.3980
10		48.932	426123.313	103754744.000	24.4068
11		49.598	436642.219	21019786.000	4.9446
12		50.532	451376.281	76545256.000	18.0061
Total			2793014.739	425106569.703	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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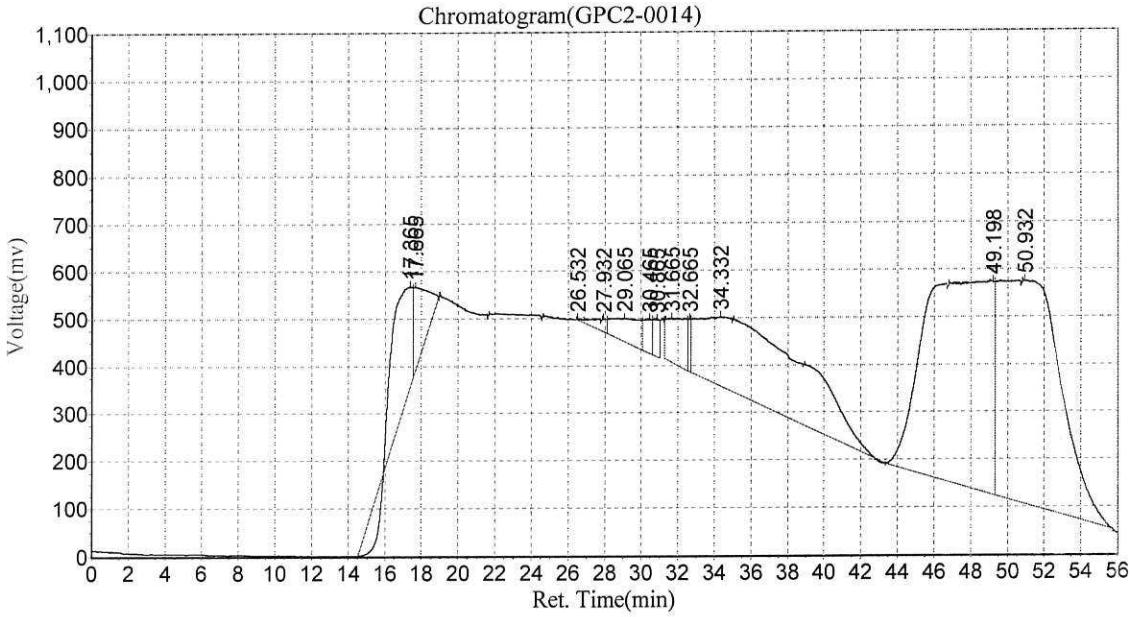

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	217217.063	16584141.000	4.9248
2		17.665	179862.188	8127885.500	2.4137
3		26.532	9238.433	257043.344	0.0763
4		27.932	35583.730	1920040.000	0.5702
5		29.065	54771.066	6253123.000	1.8569
6		30.465	77080.367	2376581.500	0.7058
7		30.865	84411.305	1983450.750	0.5890
8		31.665	100292.188	7858003.000	2.3335
9		32.665	116716.547	1389722.375	0.4127
10		34.332	150345.797	69276840.000	20.5725
11		49.198	447210.344	111565544.000	33.1306
12		50.932	467567.000	109152728.000	32.4140
Total			1940296.026	336745102.469	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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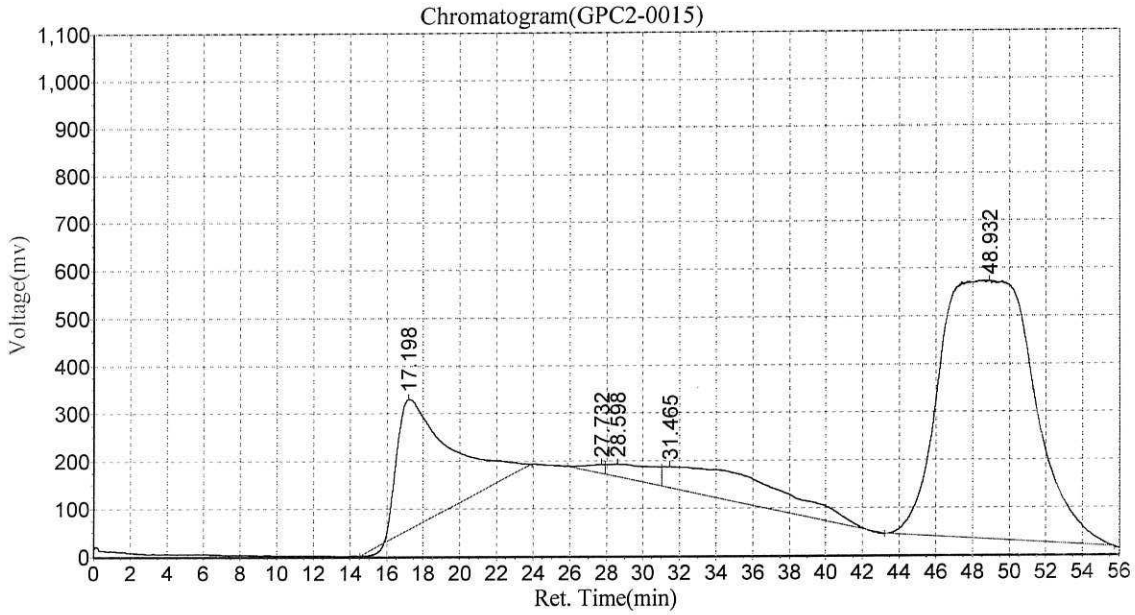

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.198	274579.563	53704148.000	19.0296
2		27.732	19227.477	1246245.375	0.4416
3		28.598	26877.377	5682789.500	2.0136
4		31.465	44379.430	28123044.000	9.9652
5		48.932	538692.375	193457184.000	68.5500
Total			903756.221	282213410.875	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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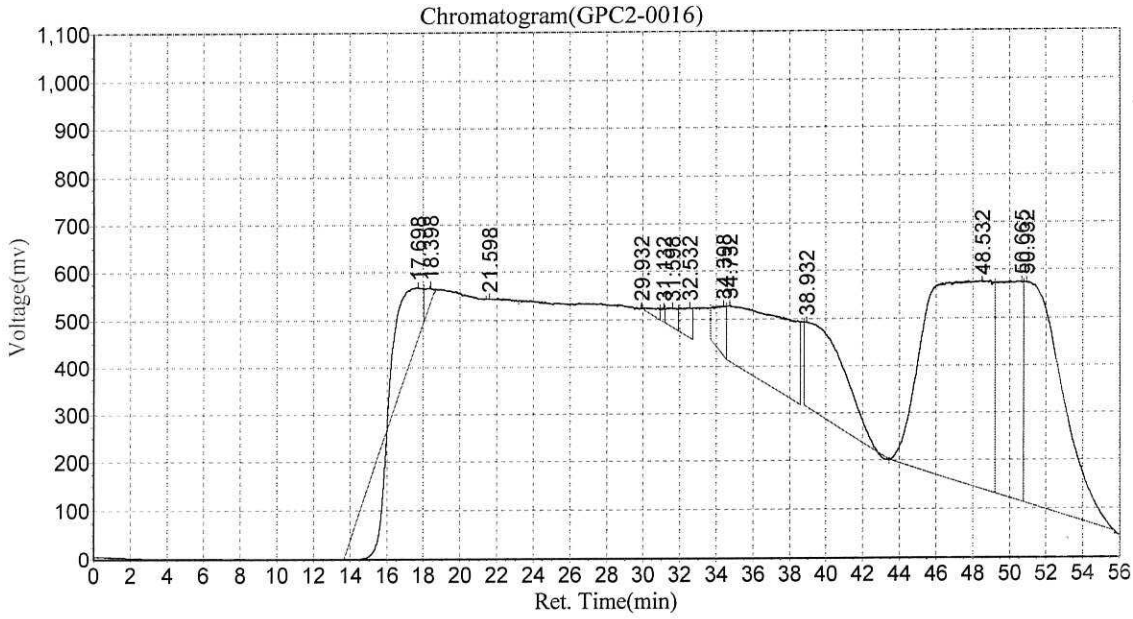

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.698	110379.859	2504492.000	0.8446
2		18.398	30702.703	1291811.250	0.4356
3		21.598	1270.125	152939.953	0.0516
4		29.932	2341.147	786228.625	0.2651
5		31.132	29093.795	437839.063	0.1477
6		31.598	41091.824	1743279.375	0.5879
7		32.532	63813.887	2775881.750	0.9361
8		34.398	110525.008	5307051.500	1.7897
9		34.732	118954.742	35722584.000	12.0467
10		38.932	184294.016	29226146.000	9.8559
11		48.532	433959.688	107887944.000	36.3830
12		50.665	458337.344	43143460.000	14.5492
13		50.932	461253.781	65554504.000	22.1069
Total			2046017.919	296534161.516	100.000

Ingredient Table

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

Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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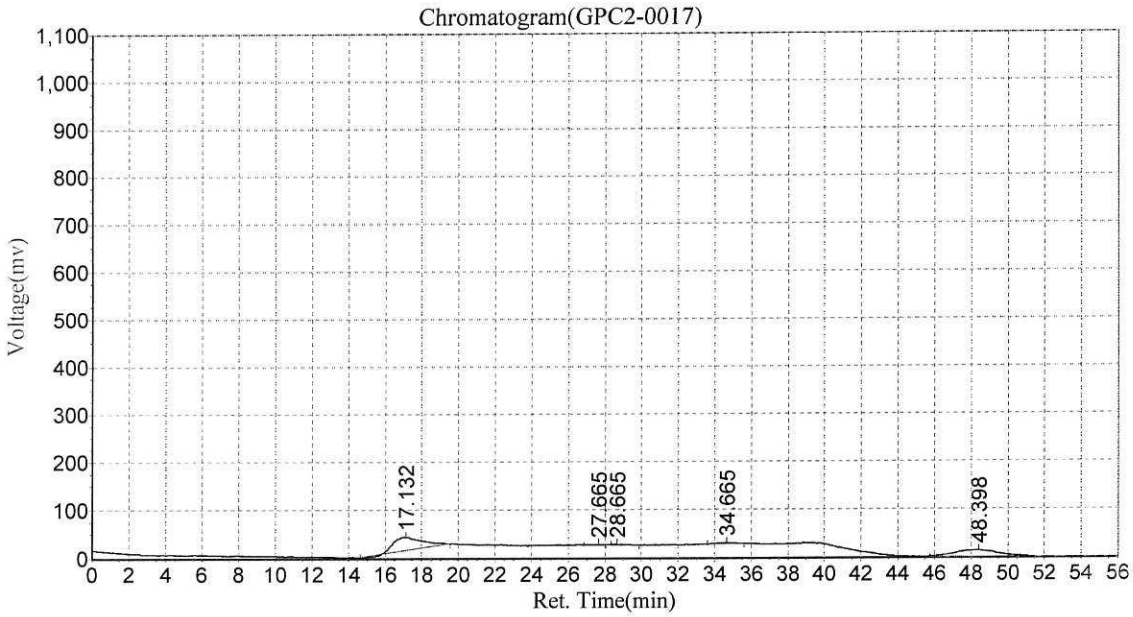

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.132	27335.742	2977658.000	50.5797
2		27.665	1916.567	108976.789	1.8511
3		28.665	2354.400	134608.734	2.2865
4		34.665	2702.533	187616.000	3.1869
5		48.398	13629.111	2478199.500	42.0957
Total			47938.353	5887059.023	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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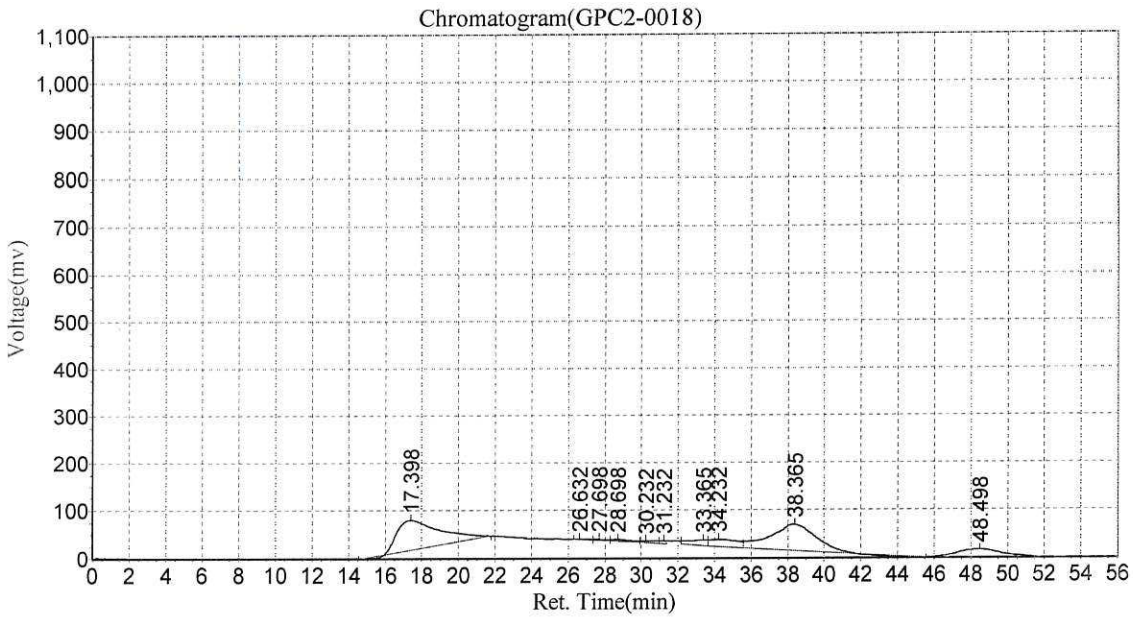

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.398	61887.055	9953400.000	37.1425
2		26.632	2298.734	141443.344	0.5278
3		27.698	3829.961	195282.344	0.7287
4		28.698	5429.485	462098.250	1.7244
5		30.232	5525.623	359156.750	1.3402
6		31.232	7283.147	165446.391	0.6174
7		33.365	13232.600	994588.563	3.7114
8		34.232	15796.721	1740332.500	6.4943
9		38.365	54806.223	9422068.000	35.1598
10		48.498	17956.467	3364044.250	12.5534
Total			188046.015	26797860.391	100.000

Ingredient Table

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

BLA0672/BLB0246 23A0249/23B0016 PEST/SVOC

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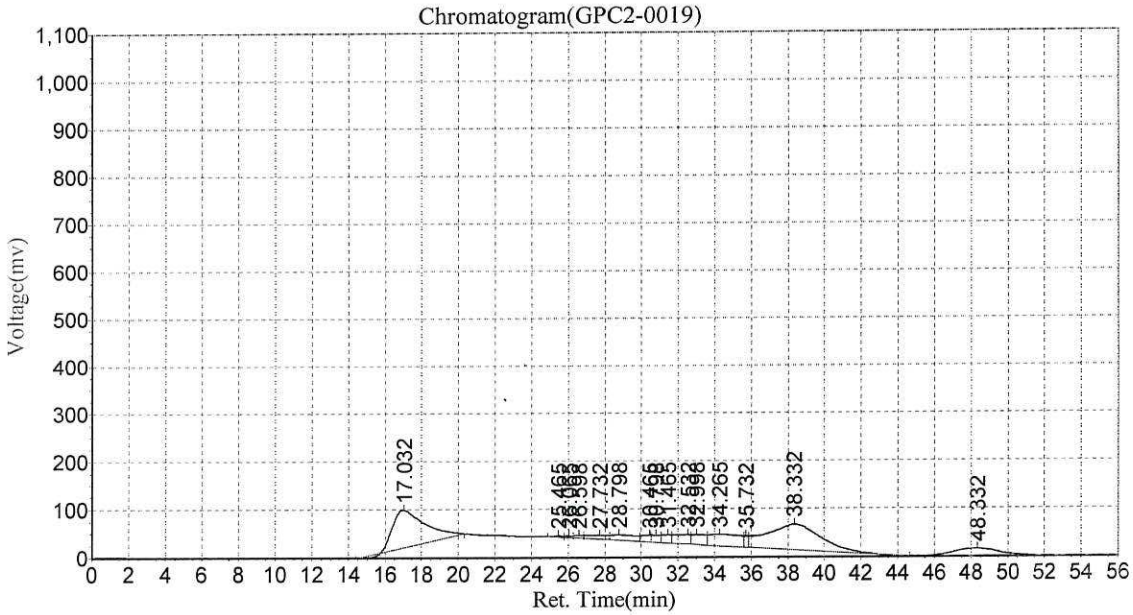


Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.032	77475.922	9406189.000	27.9621
2		25.465	4385.801	201356.563	0.5986
3		26.065	5533.244	144747.281	0.4303
4		26.598	7078.305	243022.781	0.7224
5		27.732	10185.811	776013.313	2.3069
6		28.798	13101.933	1262936.625	3.7544
7		30.465	15446.498	519078.844	1.5431
8		30.798	16263.411	514216.344	1.5286
9		31.465	18319.238	641042.875	1.9056
10		32.532	20883.359	1263851.000	3.7571
11		32.998	21519.039	1123661.000	3.3403
12		34.265	24593.309	2878936.250	8.5583
13		35.732	24313.727	384972.625	1.1444
14		38.332	53624.648	11052711.000	32.8567
15		48.332	16558.994	3226363.000	9.5911
Total			329283.239	33639098.500	100.000

Ingredient Table

No	Peak ID	Ret Time	Peak Width	Factor1	Factor2	ISTD Wt.
1	Collect Pest	29.000	0.010	0.00E+000	0.00E+000	0.0000

2	Dump Pest	46.000	0.010	0.00E+000	0.00E+000	0.0000
3	Dump BAN	48.000	0.010	0.00E+000	0.00E+000	0.0000
4	Collect BAN	24.000	0.010	0.00E+000	0.00E+000	0.0000

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0215	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1024	23A0249-08	23030120.D	02/23/2023	
LDW23-SC1018	23A0249-03	23030117.D	02/23/2023	
LCS Dup	BLA0672-BSD1	23030115.D	02/23/2023	
LCS	BLA0672-BS1	23030114.D	02/23/2023	
LDW23-SC1084	23A0249-04	23030118.D	02/23/2023	
LDW23-SC1025	23A0249-05	23C03074.D	02/23/2023	
Blank	BLA0672-BLK1	23030113.D	02/23/2023	
LDW23-SC1020	23A0249-11	23030121.D	02/23/2023	
LDW23-SC1083	23A0249-02	23030116.D	02/23/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0215

Matrix: Solid **Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL** **Printed: 2/23/2023 5:35:42PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0249-02	A	LDW23-SC1083	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-03	A	LDW23-SC1018	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-04	A	LDW23-SC1084	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-05	A	LDW23-SC1025	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-08	A	LDW23-SC1024	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-11	A	LDW23-SC1020	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-01	A	LDW23-SC1074	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-02	A	LDW23-SC1075	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-03	A	LDW23-SC1038B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-04	A	LDW23-SC1023B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-05	A	LDW23-SC1022A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-06	A	LDW23-SC1017B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-07	A	LDW23-SC1019	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-09	A	LDW23-SC1026	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-10	A	LDW23-IT1041	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
BLA0672-BLK1	-	Blank	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-BS1	-	LCS	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-BSD1	-	LCS Dup	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-MS1	-	Matrix Spike	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/23/2023	LMJ	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0216	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1084	23A0249-04	23030118.D	02/23/2023	
LDW23-SC1083	23A0249-02	23030116.D	02/23/2023	
LDW23-SC1018	23A0249-03	23030117.D	02/23/2023	
LDW23-SC1020	23A0249-11	23030121.D	02/23/2023	
LDW23-SC1025	23A0249-05	23C03074.D	02/23/2023	
LCS Dup	BLA0672-BSD1	23030115.D	02/23/2023	
LCS	BLA0672-BS1	23030114.D	02/23/2023	
Blank	BLA0672-BLK1	23030113.D	02/23/2023	
LDW23-SC1024	23A0249-08	23030120.D	02/23/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0216

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLB0132-GPC2** **Printed: 2/23/2023 5:36:23PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0249-02	A	LDW23-SC1083	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-03	A	LDW23-SC1018	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-04	A	LDW23-SC1084	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-05	A	LDW23-SC1025	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-08	A	LDW23-SC1024	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-11	A	LDW23-SC1020	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-01	A	LDW23-SC1074	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-02	A	LDW23-SC1075	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-03	A	LDW23-SC1038B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-04	A	LDW23-SC1023B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-05	A	LDW23-SC1022A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-06	A	LDW23-SC1017B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-07	A	LDW23-SC1019	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-09	A	LDW23-SC1026	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-10	A	LDW23-IT1041	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
BLA0672-BLK1	-	Blank	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-BS1	-	LCS	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-BSD1	-	LCS Dup	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-MS1	-	Matrix Spike	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/23/2023	LMJ	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0217	Cleanup Type:	Sulfur
Cleanup Method:	EPA 3660B Sulfur Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	BLA0672-BLK1	23030113.D	02/23/2023	
LDW23-SC1018	23A0249-03	23030117.D	02/23/2023	
LCS	BLA0672-BS1	23030114.D	02/23/2023	
LDW23-SC1020	23A0249-11	23030121.D	02/23/2023	
LCS Dup	BLA0672-BSD1	23030115.D	02/23/2023	
LDW23-SC1084	23A0249-04	23030118.D	02/23/2023	
LDW23-SC1083	23A0249-02	23030116.D	02/23/2023	
LDW23-SC1025	23A0249-05	23C03074.D	02/23/2023	
LDW23-SC1024	23A0249-08	23030120.D	02/23/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0217

Matrix: Solid **Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL** **Printed: 2/23/2023 5:37:14PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0249-02	A	LDW23-SC1083	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-03	A	LDW23-SC1018	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-04	A	LDW23-SC1084	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-05	A	LDW23-SC1025	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-08	A	LDW23-SC1024	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-11	A	LDW23-SC1020	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-01	A	LDW23-SC1074	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-02	A	LDW23-SC1075	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-03	A	LDW23-SC1038B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-04	A	LDW23-SC1023B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-05	A	LDW23-SC1022A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-06	A	LDW23-SC1017B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-07	A	LDW23-SC1019	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-09	A	LDW23-SC1026	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-10	A	LDW23-IT1041	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
BLA0672-BLK1	-	Blank	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-BS1	-	LCS	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-BSD1	-	LCS Dup	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-MS1	-	Matrix Spike	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/23/2023	LMJ	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0218	Cleanup Type:	Sulfuric Acid
Cleanup Method:	EPA 3665 Sulfuric Acid Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1083	23A0249-02	23030116.D	02/23/2023	
LCS Dup	BLA0672-BSD1	23030115.D	02/23/2023	
LDW23-SC1018	23A0249-03	23030117.D	02/23/2023	
LDW23-SC1020	23A0249-11	23030121.D	02/23/2023	
LDW23-SC1025	23A0249-05	23C03074.D	02/23/2023	
LDW23-SC1084	23A0249-04	23030118.D	02/23/2023	
Blank	BLA0672-BLK1	23030113.D	02/23/2023	
LCS	BLA0672-BS1	23030114.D	02/23/2023	
LDW23-SC1024	23A0249-08	23030120.D	02/23/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0218

Matrix: Solid **Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 2/23/2023 5:37:42PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0249-02	A	LDW23-SC1083	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-03	A	LDW23-SC1018	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-04	A	LDW23-SC1084	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-05	A	LDW23-SC1025	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-08	A	LDW23-SC1024	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0249-11	A	LDW23-SC1020	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-01	A	LDW23-SC1074	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-02	A	LDW23-SC1075	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-03	A	LDW23-SC1038B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-04	A	LDW23-SC1023B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-05	A	LDW23-SC1022A	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-06	A	LDW23-SC1017B	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-07	A	LDW23-SC1019	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-09	A	LDW23-SC1026	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
23A0295-10	A	LDW23-IT1041	A 01	2.5	2.5	8081B Pest (PSDDA)	2/23/2023	LMJ	
BLA0672-BLK1	-	Blank	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-BS1	-	LCS	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-BSD1	-	LCS Dup	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-MS1	-	Matrix Spike	-	2.5	2.5	-	2/23/2023	LMJ	
BLA0672-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/23/2023	LMJ	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8081B

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0672-BLK1	File ID:	23030113.D
Sampled:	N/A	Prepared:	01/31/23 13:36	Analyzed:	03/01/23 17:38
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	12.5 g / 2.5 mL
Batch:	BLA0672	Sequence:	SLC0031	Calibration:	FL00041
Instrument:	ECD6	Column:	STX-CLP	Cleanups:	GPC, Silica Gel, Sulfur, Sulfuric Acid

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
118-74-1	Hexachlorobenzene	1	0.50	U	0.15	0.50

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl	8.0000	6.08	76.0	30 - 160	
Decachlorobiphenyl [2C]	8.0000	6.58	82.3	30 - 160	
Tetrachlorometaxylene	8.0000	4.94	61.7	30 - 160	
Tetrachlorometaxylene [2C]	8.0000	4.86	60.8	30 - 160	

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230301.b/23030113.D
Data file 2: /20230301.b/B20230301.b/23030113.D
Method: \20230301.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: BLA0672-BLK1
Client ID:
Injection Date: 01-MAR-2023 17:38
Report Date: 03/02/2023 13:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			4.837	0.004	1222	0.00	0.08	---	alpha-BHC
----			5.285	-0.021	538	0.00	0.09	---	beta-BHC
----			5.659	0.001	350	0.00	0.03	---	delta-BHC
----			5.227	-0.001	405	0.00	0.03	---	gamma-BHC (Lindane)
----			5.753	-0.000	781	0.00	0.07	---	Heptachlor
----			6.161	0.005	6944	0.00	0.53	---	Aldrin
----			6.807	-0.003	961	0.00	0.09	---	Heptachlor epoxide b
----			----			0.00	0.00	---	Endosulfan I
----			----			0.00	0.00	---	Dieldrin
----			7.335	0.000	328	0.00	0.03	---	4,4'-DDE
----			7.848	-0.022	559	0.00	0.09	---	Endrin
----			----			0.00	0.00	---	Endosulfan II
----			7.932	-0.007	600	0.00	0.10	---	4,4'-DDD
----			8.678	0.002	691	0.00	0.12	---	Endosulfan sulfate
----			8.261	0.004	1852	0.00	0.31	---	4,4'-DDT
----			----			0.00	0.00	---	Methoxychlor
8.522	-0.004	1548	9.210	0.011	6960	0.30	1.14	116.6*	Endrin ketone
----			8.398	-0.012	19672	0.00	4.33	---	Endrin aldehyde
----			----			0.00	0.00	---	trans-Chlordane
----			7.180	-0.000	449	0.00	0.04	---	cis-Chlordane
2.352	0.004	2520	2.494	-0.001	1340	0.25	0.09	91.7*	Hexachlorobutadiene
4.236	0.003	3746	4.690	-0.002	1369	0.43	0.10	123.6*	Hexachlorobenzene
3.875	0.002	165132	4.199	0.000	255327	24.69	24.30	1.6	Tetrachloro-m-xylene
9.440	0.000	123755	10.408	0.002	160636	30.42	32.92	7.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

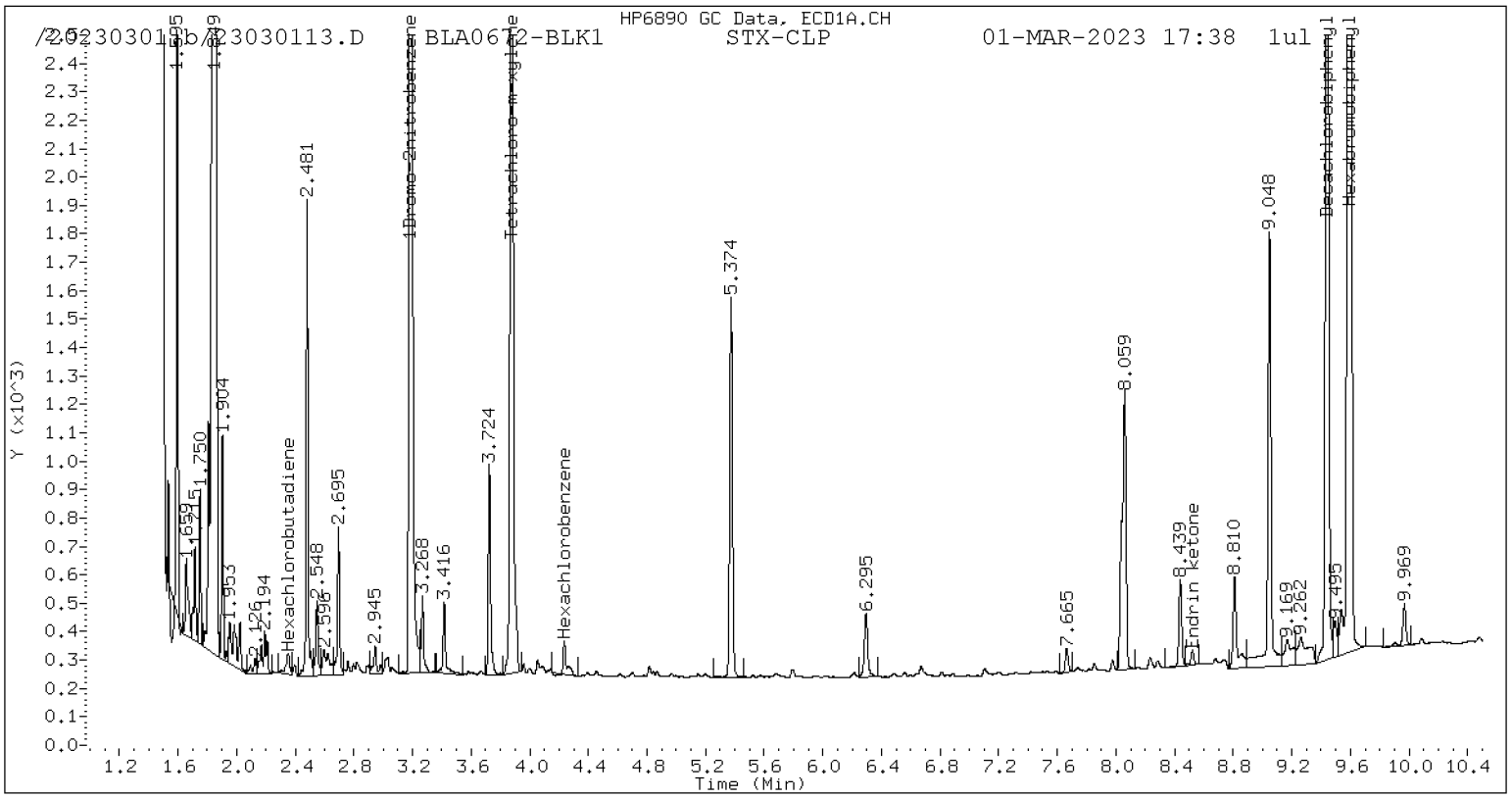
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	491830	-26.9
Hexabromobiphenyl	609723	401521	-34.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	746375	-25.8
Hexabromobiphenyl	769764	441550	-42.6

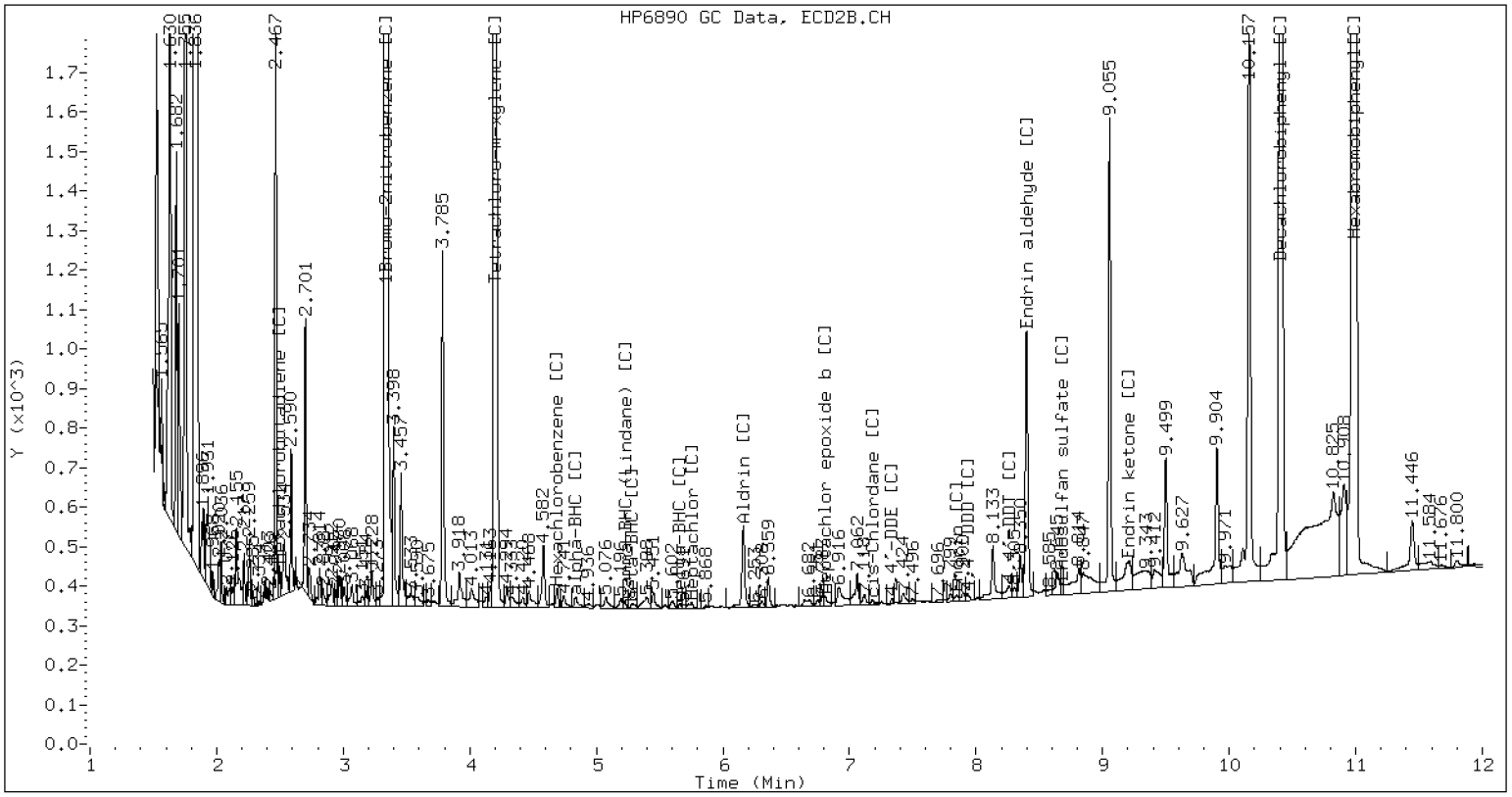
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230301.b/B20230301.b/23030113.D BLA0672-BLK1 CLP2



CLP-2 Manual Integration: NO

LCS / LCS DUPLICATE RECOVERY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	03/01/23 17:56
Batch:	BLA0672	Laboratory ID:	BLA0672-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	12.5 g / 2.5 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Hexachlorobenzene	4.00	2.65		66.3	26 - 128

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Hexachlorobenzene	4.00	2.90		72.5	8.87	30	26 - 128

* Indicates values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230301.b/23030114.D
Data file 2: /20230301.b/B20230301.b/23030114.D
Method: \20230301.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: BLA0672-BS1
Client ID:
Injection Date: 01-MAR-2023 17:56
Report Date: 03/02/2023 13:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.394	0.001	128138	4.833	-0.000	193312	14.01	13.15	6.3	alpha-BHC
4.783	0.001	55828	5.306	-0.000	80957	15.85	14.49	9.0	beta-BHC
4.968	0.000	126719	5.658	0.001	184991	16.95	15.28	10.4	delta-BHC
4.702	0.000	121225	5.228	0.000	179964	15.29	14.43	5.8	gamma-BHC (Lindane)
5.195	-0.000	109556	5.755	0.001	155390	15.53	13.75	12.1	Heptachlor
5.522	-0.001	113119	6.157	0.001	154277	14.30	11.96	17.9	Aldrin
6.202	0.000	107556	6.811	0.001	143245	15.69	13.43	15.5	Heptachlor epoxide b
6.643	-0.000	159252	7.255	0.000	205407	25.31	21.85	14.7	Endosulfan I
----			7.554	0.007	348	0.00	0.03	---	Dieldrin
6.562	-0.000	204735	7.335	0.001	262167	32.62	27.52	17.0	4,4'-DDE
----			7.876	0.006	1473	0.00	0.24	---	Endrin
7.389	-0.000	67116	8.080	-0.000	85693	14.43	13.46	7.0	Endosulfan II
7.208	-0.001	173484	7.940	0.000	219221	37.28	36.29	2.7	4,4'-DDD
8.251	-0.000	138714	8.677	0.001	179649	31.42	32.14	2.3	Endosulfan sulfate
7.502	-0.000	171140	8.257	0.001	211197	36.40	36.22	0.5	4,4'-DDT
7.987	-0.001	21669	8.896	0.001	30117	10.40	11.67	11.5	Methoxychlor
8.526	-0.000	181318	9.200	0.001	217939	35.85	36.10	0.7	Endrin ketone
7.817	-0.001	15394	8.410	0.000	25871	4.15	5.76	32.5	Endrin aldehyde
6.343	-0.000	114567	7.022	0.001	144412	16.45	13.57	19.2	trans-Chlordane
6.489	-0.001	108813	7.181	0.001	138203	15.58	13.28	15.9	cis-Chlordane
2.349	0.001	111147	2.494	-0.001	148004	11.60	10.60	9.0	Hexachlorobutadiene
4.234	0.001	112679	4.692	-0.001	165571	13.27	12.38	6.9	Hexachlorobenzene
3.874	0.002	166462	4.198	-0.000	263065	25.76	25.48	1.1	Tetrachloro-m-xylene
9.439	-0.001	132644	10.407	0.002	166204	33.23	34.43	3.6	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

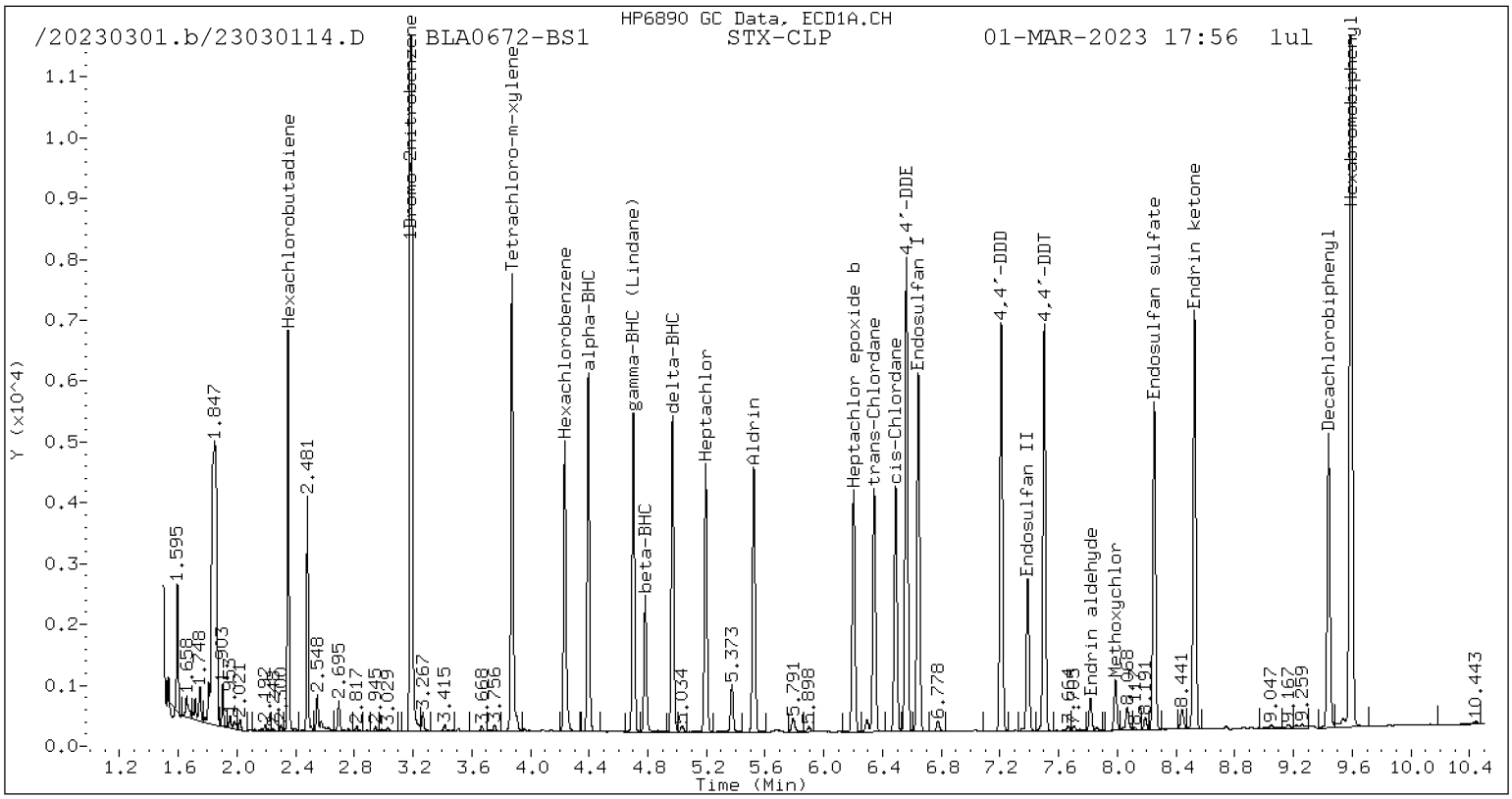
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	475133	-29.3
Hexabromobiphenyl	609723	393975	-35.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	733400	-27.1
Hexabromobiphenyl	769764	436774	-43.3

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

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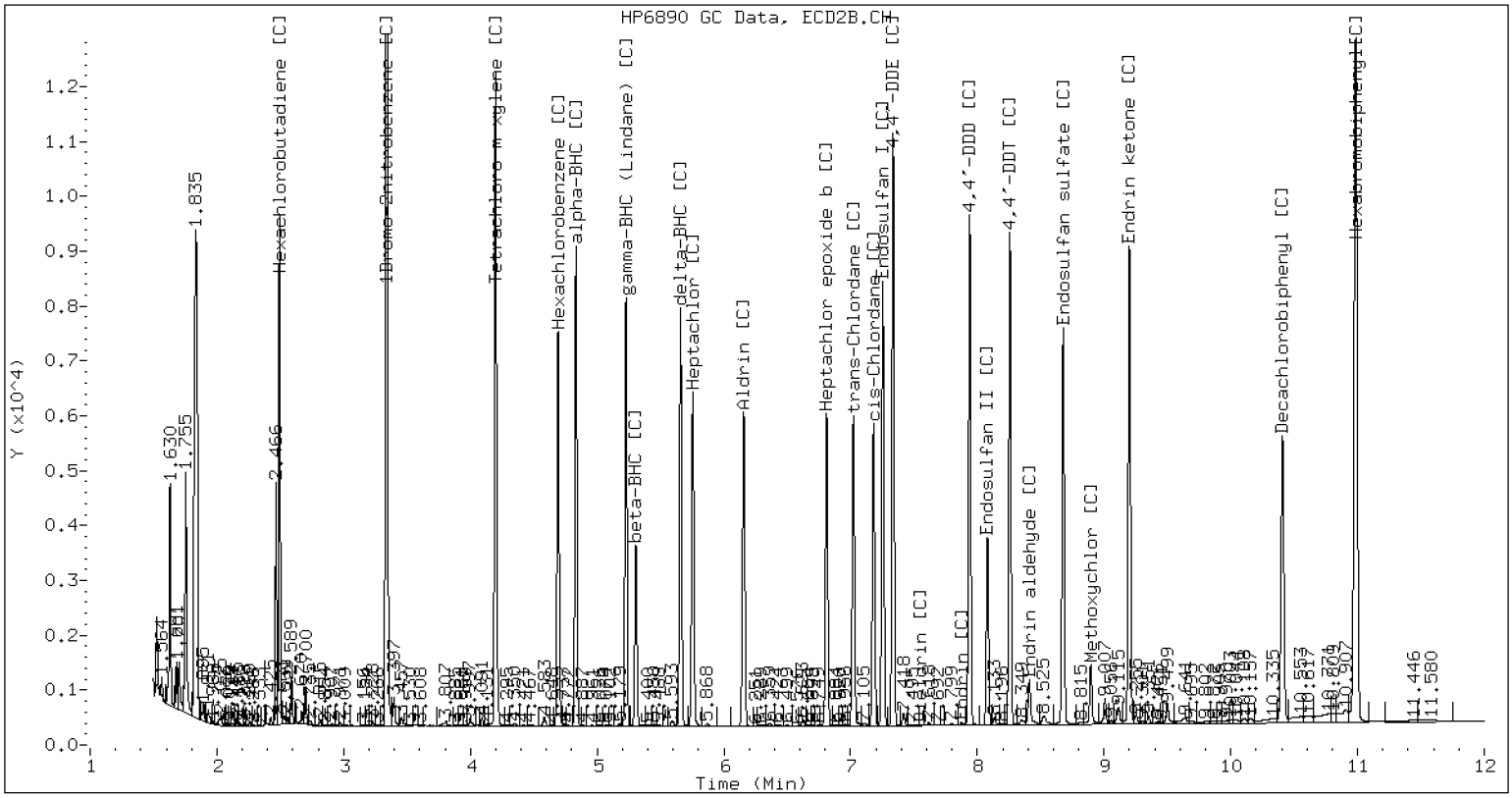


CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230301.b/23030115.D
Data file 2: /20230301.b/B20230301.b/23030115.D
Method: \20230301.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: BLA0672-BSD1
Client ID:
Injection Date: 01-MAR-2023 18:14
Report Date: 03/02/2023 13:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.394	0.000	139007	4.832	-0.001	211711	15.37	14.37	6.7	alpha-BHC
4.782	-0.000	56914	5.305	-0.001	86684	16.34	15.48	5.4	beta-BHC
4.968	-0.000	130403	5.657	-0.000	195291	17.64	16.10	9.2	delta-BHC
4.701	0.000	127530	5.227	-0.000	192430	16.26	15.39	5.5	gamma-BHC (Lindane)
5.194	-0.000	116621	5.754	0.000	169025	16.71	14.93	11.3	Heptachlor
5.522	-0.001	119694	6.157	0.000	165774	15.31	12.82	17.7	Aldrin
6.202	-0.000	108764	6.810	-0.000	147282	16.04	13.78	15.2	Heptachlor epoxide b
6.643	-0.001	162040	7.254	-0.000	212733	26.04	22.58	14.3	Endosulfan I
----			7.554	0.007	321	0.00	0.03	---	Dieldrin
6.562	-0.001	207673	7.334	-0.000	270448	33.46	28.33	16.6	4,4'-DDE
----			7.876	0.006	1394	0.00	0.22	---	Endrin
7.388	-0.001	57264	8.080	-0.001	75207	12.49	11.75	6.1	Endosulfan II
7.208	-0.001	173520	7.939	-0.000	222683	37.82	36.67	3.1	4,4'-DDD
8.251	-0.001	136303	8.676	0.000	177121	31.31	31.51	0.6	Endosulfan sulfate
7.501	-0.001	170910	8.256	0.000	214104	36.87	36.52	0.9	4,4'-DDT
7.987	-0.001	13444	8.895	0.001	22469	6.54	8.66	27.8	Methoxychlor
8.526	-0.000	168272	9.199	0.000	202121	33.75	33.30	1.3	Endrin ketone
7.817	-0.001	21805	8.410	-0.000	31116	5.96	6.89	14.4	Endrin aldehyde
6.342	-0.001	116135	7.021	-0.000	149569	16.86	14.03	18.4	trans-Chlordane
6.489	-0.001	110709	7.181	0.001	142886	16.03	13.70	15.7	cis-Chlordane
2.348	0.000	124501	2.494	-0.001	168790	13.14	12.07	8.5	Hexachlorobutadiene
4.233	0.000	121757	4.691	-0.001	184833	14.50	13.79	5.0	Hexachlorobenzene
3.874	0.001	181585	4.197	-0.001	290455	28.42	28.07	1.2	Tetrachloro-m-xylene
9.439	-0.001	128834	10.407	0.001	167512	32.74	34.51	5.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

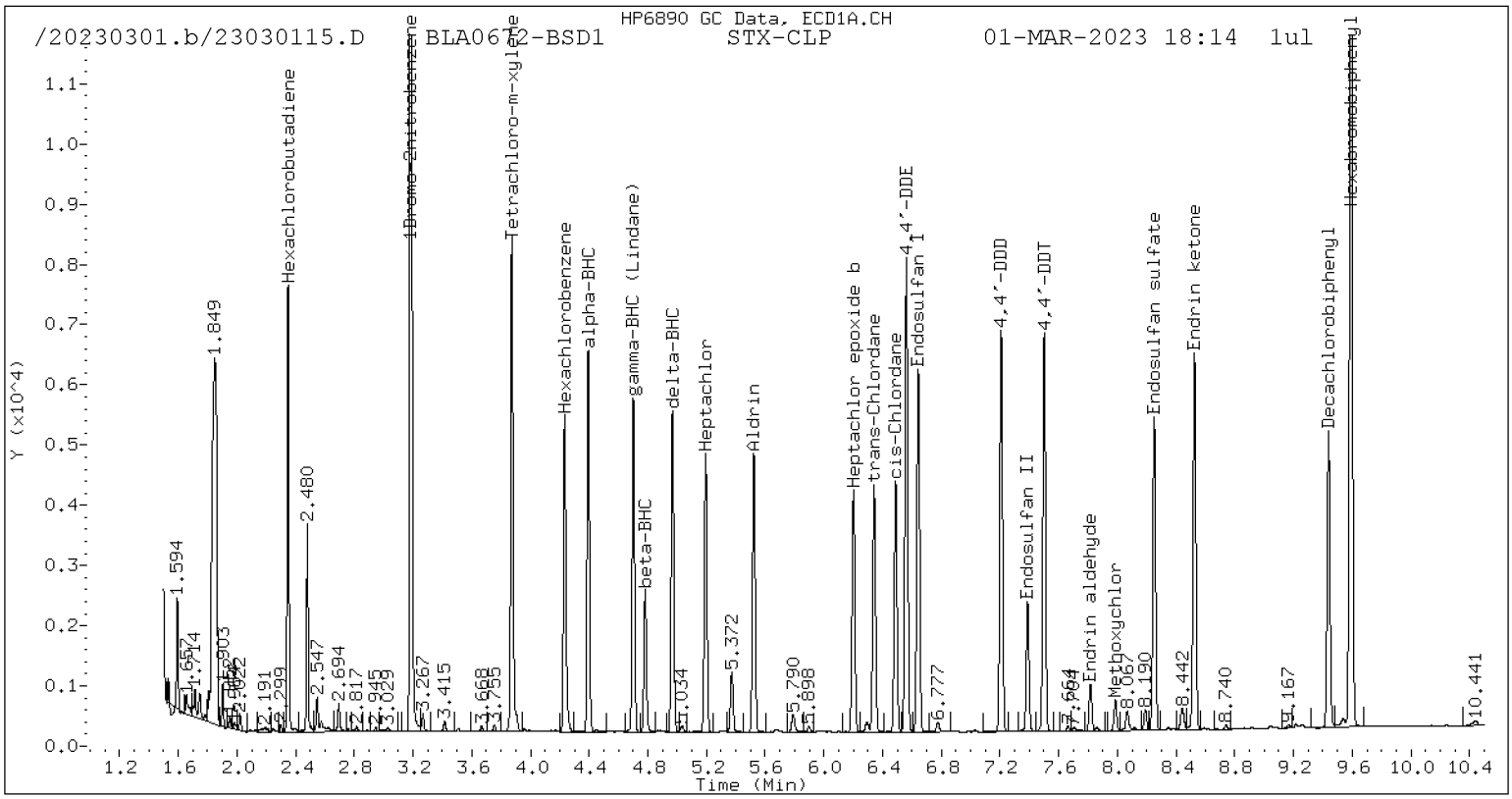
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	469818	-30.1
Hexabromobiphenyl	609723	388412	-36.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	735020	-27.0
Hexabromobiphenyl	769764	439143	-43.0

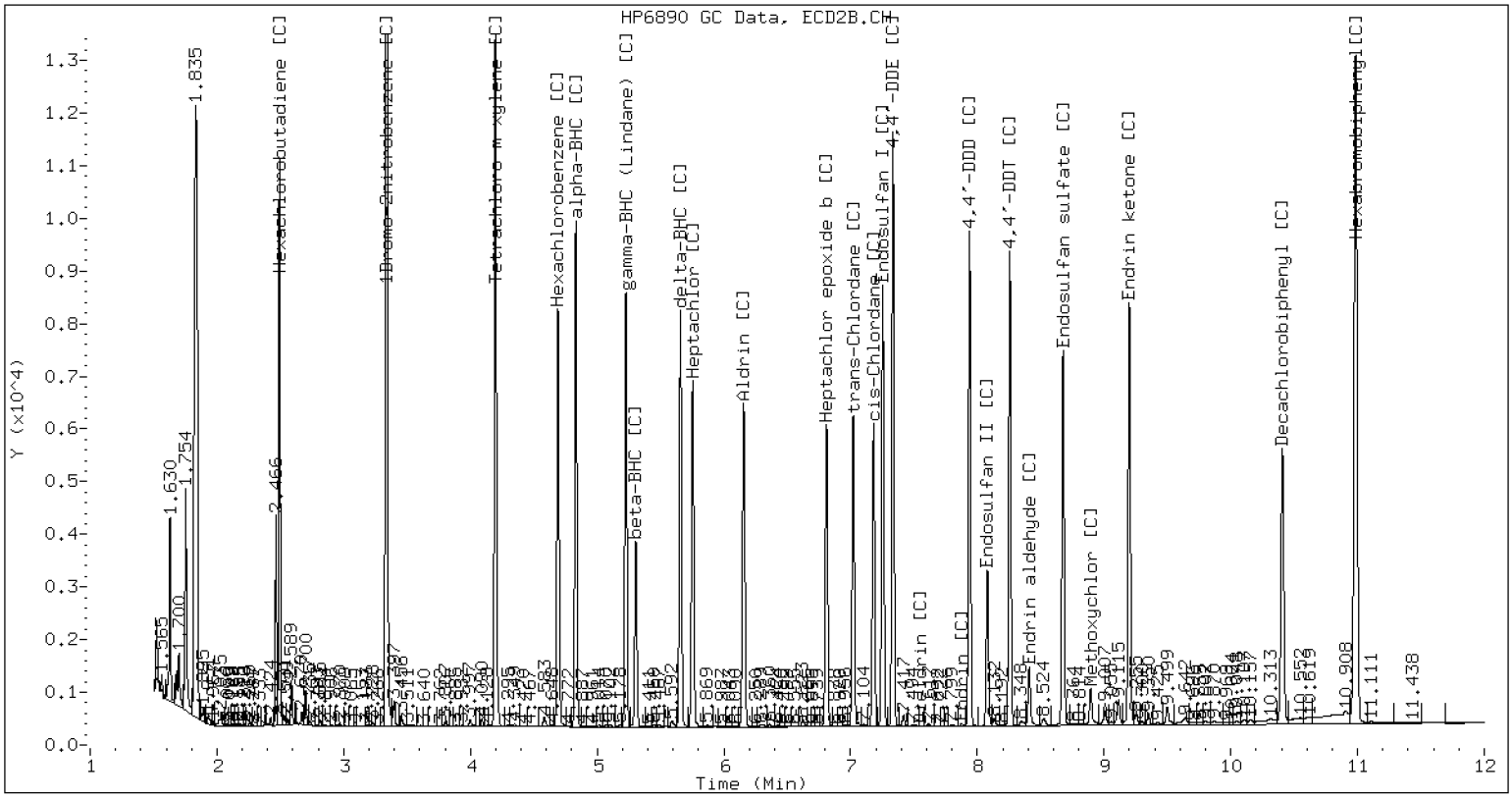
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230301.b/B20230301.b/23030115.D BLA0672-BSD1 CLP2



CLP-2 Manual Integration: NO

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
alpha-BHC			2.5	1.564682	5	1.558115	10	1.57359	20	1.566596	40	1.528219
beta-BHC			2.5	0.6501672	5	0.6116678	10	0.6049898	20	0.5910241	40	0.567415
gamma-BHC (Lindane)			2.5	1.364013	5	1.359107	10	1.367627	20	1.357913	40	1.317203
delta-BHC			2.5	1.267737	5	1.264366	10	1.278672	20	1.286232	40	1.255792
Heptachlor			2.5	1.26903	5	1.222902	10	1.218715	20	1.207966	40	1.145438
Aldrin			2.5	1.349967	5	1.349283	10	1.40535	20	1.372547	40	1.307197
Heptachlor Epoxide			2.5	1.231126	5	1.189593	10	1.20792	20	1.178021	40	1.104377
trans-Chlordane (beta-Chlordane)			2.5	1.262297	5	1.202181	10	1.202336	20	1.19062	40	1.128117
cis-Chlordane (alpha-chlordane)			2.5	1.308183	5	1.222582	10	1.200602	20	1.177182	40	1.111332
Endosulfan I			2.5	1.143813	5	1.097776	10	1.093658	20	1.076133	40	1.011287
4,4'-DDE			5	1.141182	10	1.108491	20	1.098369	40	1.077225	80	0.9961189
Dieldrin			5	1.225418	10	1.190449	20	1.185191	40	1.155764	80	1.077517
Endrin			5	1.158191	10	1.117563	20	1.079508	40	1.061387	80	0.9725989
Endosulfan II			5	0.9400399	10	0.9913797	20	1.005265	40	0.925043	80	0.9337917
4,4'-DDD			5	1.004568	10	0.9927897	20	0.9803235	40	0.9586353	80	0.8937077
Endrin Aldehyde			5	0.8167784	10	0.7834798	20	0.7706241	40	0.7573308	80	0.7147756
4,4'-DDT			5	1.007054	10	0.9936998	20	0.9768522	40	0.9722874	80	0.9123228
Endosulfan Sulfate			5	0.9534179	10	0.9413755	20	0.9158457	40	0.9056998	80	0.8542021
Endrin Ketone			5	1.134866	10	1.083274	20	1.043162	40	1.021136	80	0.9645492
Methoxychlor			25	0.4887243	50	0.4567517	100	0.4291758	200	0.4123964	400	0.380531
Hexachlorobutadiene			2.5	1.967135	5	1.727858	10	1.608612	20	1.550898	40	1.457962
Hexachlorobenzene			2.5	1.583946	5	1.509865	10	1.463674	20	1.414258	40	1.348389
Decachlorobiphenyl			5	0.9567749	10	0.8690419	20	0.8114883	40	0.7853665	80	0.7399881
Tetrachlorometaxylene			5	1.223478	10	1.154628	20	1.122612	40	1.064313	80	1.018952

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC	80	1.449687										
beta-BHC	80	0.5324503										
gamma-BHC (Lindane)	80	1.246178										
delta-BHC	80	1.199667										
Heptachlor	80	1.064858										
Aldrin	80	1.204866										
Heptachlor Epoxide	80	1.016142										
trans-Chlordane (beta-Chlordane)	80	1.050129										
cis-Chlordane (alpha-chlordane)	80	1.036345										
Endosulfan I	80	0.9344351										
4,4'-DDE	160	0.9196699										
Dieldrin	160	0.9953457										
Endrin	160	0.903669										
Endosulfan II	160	0.8694106										
4,4'-DDD	160	0.8394108										
Endrin Aldehyde	160	0.6754471										
4,4'-DDT	160	0.8666848										
Endosulfan Sulfate	160	0.808554										
Endrin Ketone	160	0.9150773										
Methoxychlor	800	0.3710888										
Hexachlorobutadiene	80	1.368623										
Hexachlorobenzene	80	1.259233										
2,4'-DDE					5	0.8703192	10	0.8471901	20	0.8231684	40	0.7887622
2,4'-DDD					5	0.761682	10	0.7418629	20	0.7301989	40	0.7053717
2,4'-DDT					5	0.8194572	10	0.8004965	20	0.7842725	40	0.7616258
Oxychlordane					5	1.016746	10	1.011016	20	0.9890796	40	0.9530961
cis-Nonachlor					5	1.323191	10	1.277938	20	1.243982	40	1.217703

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
trans-Nonachlor					5	1.347777	10	1.328677	20	1.28535	40	1.249062
Mirex					5	0.8317764	10	0.8043457	20	0.7641487	40	0.7481553
Decachlorobiphenyl	160	0.7008722										
Tetrachlorometaxylene	160	0.9437243										

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4'-DDE	80	0.7262802	160	0.6559468								
2,4'-DDD	80	0.6522807	160	0.6001736								
2,4'-DDT	80	0.7135595	160	0.6495601								
Oxychlordane	80	0.9018234	160	0.8351028								
cis-Nonachlor	80	1.140435	160	1.065099								
trans-Nonachlor	80	1.167639	160	1.085646								
Mirex	80	0.706171	160	0.6667706								

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

Compound	Level 25		Level 26		Level 27		Level 28		Level 29		Level 30	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (1):	STX-CLP

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
alpha-BHC	1.540148	3.1			RSD (20)	
beta-BHC	0.5929524	6.8			RSD (20)	
gamma-BHC (Lindane)	1.33534	3.5			RSD (20)	
delta-BHC	1.258744	2.5			RSD (20)	
Heptachlor	1.188151	6.1			RSD (20)	
Aldrin	1.331535	5.2			RSD (20)	
Heptachlor Epoxide	1.15453	6.9			RSD (20)	
trans-Chlordane (beta-Chlordane)	1.172613	6.3			RSD (20)	
cis-Chlordane (alpha-chlordane)	1.176038	8.0			RSD (20)	
Endosulfan I	1.059517	7.1			RSD (20)	
4,4'-DDE	1.056843	7.9			RSD (20)	
Dieldrin	1.138281	7.6			RSD (20)	
Endrin	1.048819	9.0			RSD (20)	
Endosulfan II	0.944155	5.2			RSD (20)	
4,4'-DDD	0.9449058	6.9			RSD (20)	
Endrin Aldehyde	0.7530726	6.7			RSD (20)	
4,4'-DDT	0.9548168	5.7			RSD (20)	
Endosulfan Sulfate	0.8965158	6.2			RSD (20)	
Endrin Ketone	1.027011	7.7			RSD (20)	
Methoxychlor	0.4231113	10.6			RSD (20)	
Hexachlorobutadiene	1.613515	13.2			RSD (20)	
Hexachlorobenzene	1.429894	8.1			RSD (20)	
2,4'-DDE	0.7852778	10.3			RSD (20)	
2,4'-DDD	0.698595	8.8			RSD (20)	
2,4'-DDT	0.7548286	8.4			RSD (20)	
Oxychlordane	0.951144	7.5			RSD (20)	
cis-Nonachlor	1.211391	7.8			RSD (20)	
trans-Nonachlor	1.244025	8.1			RSD (20)	
Mirex	0.7535613	8.1			RSD (20)	
Decachlorobiphenyl	0.8105886	11.4			RSD (20)	
Tetrachlorometaxylene	1.087951	9.2			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
alpha-BHC [2C]			2.5	1.582358	5	1.586238	10	1.633164	20	1.640486	40	1.615441
beta-BHC [2C]			2.5	0.652782	5	0.6172948	10	0.6184608	20	0.6125812	40	0.5918008
gamma-BHC (Lindane) [2C]			2.5	1.355071	5	1.348783	10	1.381456	20	1.392772	40	1.366606
delta-BHC [2C]			2.5	1.323764	5	1.307234	10	1.339425	20	1.328433	40	1.331977
Heptachlor [2C]			2.5	1.270249	5	1.234236	10	1.258409	20	1.272245	40	1.215755
Aldrin [2C]			2.5	1.511397	5	1.416724	10	1.432636	20	1.430376	40	1.370917
Heptachlor Epoxide [2C]			2.5	1.2977	5	1.174596	10	1.174288	20	1.174706	40	1.114434
trans-Chlordane (beta-Chlordane) [2C]			2.5	1.25449	5	1.176102	10	1.164843	20	1.168848	40	1.125534
cis-Chlordane (alpha-chlordane) [2C]			2.5	1.258498	5	1.153199	10	1.135052	20	1.136251	40	1.089792
Endosulfan I [2C]			2.5	1.118263	5	1.044155	10	1.035412	20	1.034697	40	0.9885012
4,4'-DDE [2C]			5	1.120237	10	1.069625	20	1.064387	40	1.055415	80	0.9897135
Dieldrin [2C]			5	1.270008	10	1.162844	20	1.139359	40	1.136098	80	1.071389
Endrin [2C]			5	1.256912	10	1.17909	20	1.159477	40	1.149599	80	1.066056
Endosulfan II [2C]			5	1.296819	10	1.202961	20	1.188491	40	1.160501	80	1.099056
4,4'-DDD [2C]			5	1.234482	10	1.121556	20	1.117792	40	1.112003	80	1.04628
Endrin Aldehyde [2C]			5	0.9430111	10	0.8430348	20	0.8249196	40	0.8129946	80	0.7727701
4,4'-DDT [2C]			5	1.175911	10	1.077825	20	1.067612	40	1.073272	80	1.019364
Endosulfan Sulfate [2C]			5	1.137768	10	1.042553	20	1.030373	40	1.023023	80	0.9721732
Endrin Ketone [2C]			5	1.235631	10	1.119988	20	1.114405	40	1.100852	80	1.047659
Methoxychlor [2C]			25	0.5184064	50	0.4866753	100	0.4751666	200	0.4681736	400	0.4433957
Hexachlorobutadiene [2C]			2.5	1.975612	5	1.648845	10	1.492482	20	1.376096	40	1.341211
Hexachlorobenzene [2C]			2.5	1.602215	5	1.520618	10	1.491402	20	1.450251	40	1.385947
Decachlorobiphenyl [2C]			5	1.087142	10	0.9391597	20	0.8562421	40	0.8499592	80	0.8013928
Tetrachlorometaxylene [2C]			5	1.220863	10	1.179368	20	1.164832	40	1.127982	80	1.06878

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
alpha-BHC [2C]	80	1.561903										
beta-BHC [2C]	80	0.5642956										
gamma-BHC (Lindane) [2C]	80	1.31891										
delta-BHC [2C]	80	1.29291										
Heptachlor [2C]	80	1.144118										
Aldrin [2C]	80	1.281263										
Heptachlor Epoxide [2C]	80	1.046144										
trans-Chlordane (beta-Chlordane) [2C]	80	1.072685										
cis-Chlordane (alpha-chlordane) [2C]	80	1.03859										
Endosulfan I [2C]	80	0.9325836										
4,4'-DDE [2C]	160	0.9356313										
Dieldrin [2C]	160	1.019365										
Endrin [2C]	160	1.013782										
Endosulfan II [2C]	160	1.047801										
4,4'-DDD [2C]	160	1.006382										
Endrin Aldehyde [2C]	160	0.7380269										
4,4'-DDT [2C]	160	0.9933936										
Endosulfan Sulfate [2C]	160	0.9372514										
Endrin Ketone [2C]	160	1.016567										
Methoxychlor [2C]	800	0.4436418										
Hexachlorobutadiene [2C]	80	1.300813										
Hexachlorobenzene [2C]	80	1.304223										
2,4'-DDE [2C]					5	0.8343307	10	0.8052418	20	0.7431295	40	0.7258871
2,4'-DDD [2C]					5	0.9097548	10	0.8797099	20	0.8273813	40	0.8164191
2,4'-DDT [2C]					5	0.9400077	10	0.8804604	20	0.8502582	40	0.8485216
Oxychlordane [2C]					5	0.9644685	10	0.9467754	20	0.9033255	40	0.8966281
cis-Nonachlor [2C]					5	1.449238	10	1.407074	20	1.376474	40	1.372123

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
trans-Nonachlor [2C]					5	1.488853	10	1.51762	20	1.451789	40	1.447663
Mirex [2C]					5	0.9331395	10	0.8115521	20	0.7946205	40	0.762682
Decachlorobiphenyl [2C]	160	0.7711875										
Tetrachlorometaxylene [2C]	160	0.9948184										

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2,4'-DDE [2C]	80	0.6667087	160	0.6020159								
2,4'-DDD [2C]	80	0.76623	160	0.7136982								
2,4'-DDT [2C]	80	0.7977257	160	0.7424898								
Oxychlordane [2C]	80	0.8433342	160	0.7909247								
cis-Nonachlor [2C]	80	1.313286	160	1.248174								
trans-Nonachlor [2C]	80	1.376815	160	1.306683								
Mirex [2C]	80	0.7399752	160	0.7075065								

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

Compound	Level 25		Level 26		Level 27		Level 28		Level 29		Level 30	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FL00041	Instrument:	ECD6
Calibration Date:	12/14/2022	Column (2):	STX-CLPII

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
alpha-BHC [2C]	1.603265	1.9			RSD (20)	
beta-BHC [2C]	0.6095359	4.9			RSD (20)	
gamma-BHC (Lindane) [2C]	1.3606	1.9			RSD (20)	
delta-BHC [2C]	1.320624	1.3			RSD (20)	
Heptachlor [2C]	1.232502	3.9			RSD (20)	
Aldrin [2C]	1.407219	5.4			RSD (20)	
Heptachlor Epoxide [2C]	1.163645	7.1			RSD (20)	
trans-Chlordane (beta-Chlordane) [2C]	1.160417	5.2			RSD (20)	
cis-Chlordane (alpha-chlordane) [2C]	1.13523	6.5			RSD (20)	
Endosulfan I [2C]	1.025602	6.0			RSD (20)	
4,4'-DDE [2C]	1.039168	6.3			RSD (20)	
Dieldrin [2C]	1.133177	7.5			RSD (20)	
Endrin [2C]	1.137486	7.6			RSD (20)	
Endosulfan II [2C]	1.165938	7.4			RSD (20)	
4,4'-DDD [2C]	1.106416	7.0			RSD (20)	
Endrin Aldehyde [2C]	0.8224595	8.5			RSD (20)	
4,4'-DDT [2C]	1.067896	5.9			RSD (20)	
Endosulfan Sulfate [2C]	1.023857	6.7			RSD (20)	
Endrin Ketone [2C]	1.10585	6.8			RSD (20)	
Methoxychlor [2C]	0.4725766	6.0			RSD (20)	
Hexachlorobutadiene [2C]	1.52251	16.8			RSD (20)	
Hexachlorobenzene [2C]	1.459109	7.2			RSD (20)	
2,4'-DDE [2C]	0.7295523	11.8			RSD (20)	
2,4'-DDD [2C]	0.8188656	8.8			RSD (20)	
2,4'-DDT [2C]	0.8432439	8.1			RSD (20)	
Oxychlordane [2C]	0.8909094	7.3			RSD (20)	
cis-Nonachlor [2C]	1.361061	5.2			RSD (20)	
trans-Nonachlor [2C]	1.43157	5.4			RSD (20)	
Mirex [2C]	0.7915793	9.9			RSD (20)	
Decachlorobiphenyl [2C]	0.8841805	13.0			RSD (20)	
Tetrachlorometaxylene [2C]	1.126107	7.3			RSD (20)	

Printed: 12/17/2022 10:57:45AM

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-PEM1	DS1	QC		1	K007286	K006953		
SKL0233-CAL1	INDAA	QC		2	K011594	K006953		
SKL0233-CAL2	INDAB	QC		3	K011593	K006953		
SKL0233-CAL3	INDAC	QC		4	K011592	K006953		
SKL0233-CAL4	INDAD	QC		5	K011591	K006953		
SKL0233-CAL5	INDAE	QC		6	K011590	K006953		
SKL0233-CAL6	INDAF	QC		7	K011589	K006953		
SKL0233-CAL7	INDAG	QC		8	K011463	K006953		
SKL0233-CAL8	WNDA	QC		9	K011595	K006953		
SKL0233-CAL9	WNDB	QC		10	K007148	K006953		
SKL0233-CALA	WNDC	QC		11	K007147	K006953		
SKL0233-CALB	WNDD	QC		12	K007146	K006953		
SKL0233-CALC	WNDE	QC		13	K007145	K006953		
SKL0233-CALD	WNDF	QC		14	K007144	K006953		
SKL0233-CALE	WNDG	QC		15	K007093	K006953		
SKL0233-CALM	NOS1	QC		16	K007375	K006953		
SKL0233-CALN	NOS2	QC		17	K007374	K006953		
SKL0233-CALO	NOS3	QC		18	K007373	K006953		
SKL0233-CALP	NOS4	QC		19	K007372	K006953		
SKL0233-CALQ	NOS5	QC		20	K007371	K006953		
SKL0233-CALR	NOS6	QC		21	K007370	K006953		
SKL0233-CALS	NOS7	QC		22	K007287	K006953		

Printed: 12/17/2022 10:57:45AM

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-CALF	TOXAPH1	QC		23	K011601	K006953		
SKL0233-CALG	TOXAPH2	QC		24	K011600	K006953		
SKL0233-CALH	TOXAPH3	QC		25	K011599	K006953		
SKL0233-CALI	TOXAPH4	QC		26	K011598	K006953		
SKL0233-CALJ	TOXAPH5	QC		27	K011597	K006953		
SKL0233-CALK	TOXAPH6	QC		28	K011596	K006953		
SKL0233-CALL	TOXAPH7	QC		29	K008546	K006953		

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	14-DEC-2022 19:27	22121401.D	1	RINSE	
2	14-DEC-2022 19:44	22121402.D	1	RINSE	
3	14-DEC-2022 20:02	22121403.D	1	SEQ-IBL1	
4	14-DEC-2022 20:20	22121404.D	1	SEQ-PEM1	
5	14-DEC-2022 20:38	22121405.D	1	SEQ-CAL1	
6	14-DEC-2022 20:56	22121406.D	1	SEQ-CAL2	
7	14-DEC-2022 21:14	22121407.D	1	SEQ-CAL3	
8	14-DEC-2022 21:31	22121408.D	1	SEQ-CAL4	
9	14-DEC-2022 21:49	22121409.D	1	SEQ-CAL5	
10	14-DEC-2022 22:07	22121410.D	1	SEQ-CAL6	
11	14-DEC-2022 22:25	22121411.D	1	SEQ-CAL7	
12	14-DEC-2022 22:43	22121412.D	1	SEQ-CAL8	
13	14-DEC-2022 23:01	22121413.D	1	SEQ-CAL9	
14	14-DEC-2022 23:19	22121414.D	1	SEQ-CALA	
15	14-DEC-2022 23:36	22121415.D	1	SEQ-CALB	
16	14-DEC-2022 23:54	22121416.D	1	SEQ-CALC	
17	15-DEC-2022 00:12	22121417.D	1	SEQ-CALD	
18	15-DEC-2022 00:30	22121418.D	1	SEQ-CALE	
19	15-DEC-2022 00:48	22121419.D	1	SEQ-SCV1	
20	15-DEC-2022 01:06	22121420.D	1	SEQ-SCV2	
21	15-DEC-2022 01:24	22121421.D	1	SEQ-CAL1A	
22	15-DEC-2022 01:42	22121422.D	1	SEQ-CAL2A	
23	15-DEC-2022 01:59	22121423.D	1	SEQ-CAL3A	
24	15-DEC-2022 02:17	22121424.D	1	SEQ-CAL4A	
25	15-DEC-2022 02:35	22121425.D	1	SEQ-CAL5A	
26	15-DEC-2022 02:53	22121426.D	1	SEQ-CAL6A	
27	15-DEC-2022 03:11	22121427.D	1	SEQ-CAL7A	
28	15-DEC-2022 03:29	22121428.D	1	SEQ-CAL8A	
29	15-DEC-2022 03:46	22121429.D	1	SEQ-CAL9A	
30	15-DEC-2022 04:04	22121430.D	1	SEQ-CALAA	
31	15-DEC-2022 04:22	22121431.D	1	SEQ-CALAB	
32	15-DEC-2022 04:40	22121432.D	1	SEQ-CALAC	
33	15-DEC-2022 04:58	22121433.D	1	SEQ-CALAD	
34	15-DEC-2022 05:16	22121434.D	1	SEQ-CALAE	
35	15-DEC-2022 05:33	22121435.D	1	SEQ-PEM2	
36	15-DEC-2022 05:51	22121436.D	1	SEQ-ICV1	
37	15-DEC-2022 06:09	22121437.D	1	SEQ-ICV2	
38	15-DEC-2022 06:27	22121438.D	1	SEQ-ICV3	
39	15-DEC-2022 06:45	22121439.D	1	SEQ-ICV4	
40	15-DEC-2022 07:03	22121440.D	1	BKK0688-BLK1	
41	15-DEC-2022 07:21	22121441.D	1	BKK0688-BS1	
42	15-DEC-2022 07:39	22121442.D	1	BKK0688-BS2	
43	15-DEC-2022 07:57	22121443.D	1	BKK0688-BS3	
44	15-DEC-2022 08:15	22121444.D	1	BKK0688-BSD1	
45	15-DEC-2022 08:32	22121445.D	1	BKK0142-BLK1	
46	15-DEC-2022 08:50	22121446.D	1	BKK0142-BS1	
47	15-DEC-2022 09:08	22121447.D	1	BKK0142-BS2	
48	15-DEC-2022 09:26	22121448.D	1	BKK0142-BSD1	
49	15-DEC-2022 09:44	22121449.D	1	BKK0142-MS1	
50	15-DEC-2022 10:02	22121450.D	1	BKK0142-MSD1	

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b p

	Inject Date/Time	Filename	DF	LabID	ClientID
51	15-DEC-2022 10:20	22121451.D	1	22J0513-01	
52	15-DEC-2022 10:38	22121452.D	1	22J0513-04	
53	15-DEC-2022 10:55	22121453.D	1	22J0535-01	
54	15-DEC-2022 11:13	22121454.D	1	22K0429-01	
55	15-DEC-2022 11:31	22121455.D	1	22K0429-02	
56	15-DEC-2022 11:49	22121456.D	1	22K0429-03	
57	15-DEC-2022 12:07	22121457.D	1	SEQ-PEM3	
58	15-DEC-2022 12:25	22121458.D	1	SEQ-CCV1	
59	15-DEC-2022 12:43	22121459.D	1	SEQ-CCV2	
60	15-DEC-2022 13:01	22121460.D	1	SEQ-CCV3	
61	15-DEC-2022 13:19	22121461.D	1	SEQ-CCV4	
62	15-DEC-2022 13:36	22121462.D	1	BKK0380-BLK1	
63	15-DEC-2022 13:54	22121463.D	1	BKK0380-BS1	
64	15-DEC-2022 14:12	22121464.D	1	BKK0380-BSD1	
65	15-DEC-2022 14:30	22121465.D	1	22K0157-01	
66	15-DEC-2022 14:48	22121466.D	1	22K0230-01	
67	15-DEC-2022 15:06	22121467.D	1	22K0231-01	
68	15-DEC-2022 15:24	22121468.D	1	BKK0382-BLK1	
69	15-DEC-2022 15:42	22121469.D	1	BKK0382-BS1	
70	15-DEC-2022 16:00	22121470.D	1	BKK0382-BS2	
71	15-DEC-2022 16:18	22121471.D	1	BKK0382-BSD1	
72	15-DEC-2022 16:35	22121472.D	1	22K0075-01	
73	15-DEC-2022 16:53	22121473.D	1	SEQ-PEM4	
74	15-DEC-2022 17:11	22121474.D	1	SEQ-CCV5	
75	15-DEC-2022 17:29	22121475.D	1	SEQ-CCV6	
76	15-DEC-2022 17:47	22121476.D	1	SEQ-CCV7	
77	15-DEC-2022 18:05	22121477.D	1	SEQ-CCV8	
78	15-DEC-2022 18:23	22121478.D	1	BKK0537-BLK1	
79	15-DEC-2022 18:40	22121479.D	1	BKK0537-BS1	
80	15-DEC-2022 18:58	22121480.D	1	BKK0537-BS2	
81	15-DEC-2022 19:16	22121481.D	1	22K0194-01	
82	15-DEC-2022 19:34	22121482.D	1	22K0194-01RE1	10
83	15-DEC-2022 19:52	22121483.D	1	SEQ-PEM5	
84	15-DEC-2022 20:09	22121484.D	1	SEQ-CCV9	
85	15-DEC-2022 20:27	22121485.D	1	SEQ-CCVA	
86	15-DEC-2022 20:45	22121486.D	1	SEQ-CCVB	
87	15-DEC-2022 21:03	22121487.D	1	SEQ-CCVC	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 14-DEC-2022

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1113	22121454.D	22K0429-01		1	Heptachlor epoxide b,
1131	22121455.D	22K0429-02		1	Heptachlor epoxide b,
1149	22121456.D	22K0429-03		1	Hexachlorobenzene,
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2009	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane [C],
1113	22121454.D	22K0429-01		1	NO MANUAL INTEGRATION
1131	22121455.D	22K0429-02		1	Aldrin [C], Heptachlor epoxide b [C], trans-Chlordane [C],
1149	22121456.D	22K0429-03		1	Aldrin [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2010	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION

Security Status Report

Date: 17-Dec-2022 10:57

22121401.D	Data Locked	jrains, 17-Dec-2022 10:57
22121402.D	Data Locked	jrains, 17-Dec-2022 10:57
22121403.D	Data Locked	jrains, 17-Dec-2022 10:57
22121404.D	Data Locked	jrains, 17-Dec-2022 10:57
22121405.D	Data Locked	jrains, 17-Dec-2022 10:57
22121406.D	Data Locked	jrains, 17-Dec-2022 10:57
22121407.D	Data Locked	jrains, 17-Dec-2022 10:57
22121408.D	Data Locked	jrains, 17-Dec-2022 10:57
22121409.D	Data Locked	jrains, 17-Dec-2022 10:57
22121410.D	Data Locked	jrains, 17-Dec-2022 10:57
22121411.D	Data Locked	jrains, 17-Dec-2022 10:57
22121412.D	Data Locked	jrains, 17-Dec-2022 10:57
22121413.D	Data Locked	jrains, 17-Dec-2022 10:57
22121414.D	Data Locked	jrains, 17-Dec-2022 10:57
22121415.D	Data Locked	jrains, 17-Dec-2022 10:57
22121416.D	Data Locked	jrains, 17-Dec-2022 10:57
22121417.D	Data Locked	jrains, 17-Dec-2022 10:57
22121418.D	Data Locked	jrains, 17-Dec-2022 10:57
22121419.D	Data Locked	jrains, 17-Dec-2022 10:57
22121420.D	Data Locked	jrains, 17-Dec-2022 10:57
22121421.D	Data Locked	jrains, 17-Dec-2022 10:57
22121422.D	Data Locked	jrains, 17-Dec-2022 10:57
22121423.D	Data Locked	jrains, 17-Dec-2022 10:57
22121424.D	Data Locked	jrains, 17-Dec-2022 10:57
22121425.D	Data Locked	jrains, 17-Dec-2022 10:57
22121426.D	Data Locked	jrains, 17-Dec-2022 10:57
22121427.D	Data Locked	jrains, 17-Dec-2022 10:57
22121428.D	Data Locked	jrains, 17-Dec-2022 10:57
22121429.D	Data Locked	jrains, 17-Dec-2022 10:57
22121430.D	Data Locked	jrains, 17-Dec-2022 10:57
22121431.D	Data Locked	jrains, 17-Dec-2022 10:57
22121432.D	Data Locked	jrains, 17-Dec-2022 10:57
22121433.D	Data Locked	jrains, 17-Dec-2022 10:57
22121434.D	Data Locked	jrains, 17-Dec-2022 10:57

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121428.D
Level 2: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121429.D
Level 3: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121430.D
Level 4: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121431.D
Level 5: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121432.D
Level 6: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121433.D
Level 7: \\target\share\chem4\ecd6.i\20221214.b\20221214.b\22121434.D

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
1 Hexachlorobutadiene [C]	+++++	1.97561	1.64885	1.49248	1.37610	1.34121	1.30081	1.52251	16.761
5 Hexachlorobenzene [C]	+++++	1.60221	1.52062	1.49140	1.45025	1.38595	1.30422	1.45911	7.170
6 alpha-BHC [C]	+++++	1.58236	1.58624	1.63316	1.64049	1.61544	1.56190	1.60327	1.946
7 gamma-BHC (Lindane) [C]	+++++	1.35507	1.34878	1.38146	1.39277	1.36661	1.31891	1.36060	1.921
8 beta-BHC [C]	+++++	0.65278	0.61729	0.61846	0.61258	0.59180	0.56430	0.60954	4.856
9 delta-BHC [C]	+++++	1.32376	1.30723	1.33943	1.32843	1.33198	1.29291	1.32062	1.312
10 Heptachlor [C]	+++++	1.27025	1.23424	1.25841	1.27225	1.21576	1.14412	1.23250	3.937
11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

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Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
12 Aldrin [C]	+++++	1.51140	1.41672	1.43264	1.43038	1.37092	1.28126	1.40722	5.441
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Heptachlor epoxide b [C]	+++++	1.29770	1.17460	1.17429	1.17471	1.11443	1.04614	1.16364	7.144
15 cis-Chlordane [C]	+++++	1.25850	1.15320	1.13505	1.13625	1.08979	1.03859	1.13523	6.464
16 trans-Chlordane [C]	+++++	1.25449	1.17610	1.16484	1.16885	1.12553	1.07269	1.16042	5.185
17 Endosulfan I [C]	+++++	1.11826	1.04415	1.03541	1.03470	0.98850	0.93258	1.02560	6.032
18 4,4'-DDE [C]	+++++	1.12024	1.06963	1.06439	1.05541	0.98971	0.93563	1.03917	6.320
19 Dieldrin [C]	+++++	1.27001	1.16284	1.13936	1.13610	1.07139	1.01937	1.13318	7.532
20 Endrin [C]	+++++	1.25691	1.17909	1.15948	1.14960	1.06606	1.01378	1.13749	7.566
21 4,4'-DDD [C]	+++++	1.23448	1.12156	1.11779	1.11200	1.04628	1.00638	1.10642	7.049
22 Endosulfan II [C]	+++++	1.29682	1.20296	1.18849	1.16050	1.09906	1.04780	1.16594	7.425

ARI Labs, Inc.

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Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
23 4,4'-DDT [C]	+++++	1.17591	1.07782	1.06761	1.07327	1.01936	0.99339	1.06790	5.878
24 Endrin aldehyde [C]	+++++	0.94301	0.84303	0.82492	0.81299	0.77277	0.73803	0.82246	8.537
25 Endosulfan sulfate [C]	+++++	1.13777	1.04255	1.03037	1.02302	0.97217	0.93725	1.02386	6.702
26 Methoxychlor [C]	+++++	0.51841	0.48668	0.47517	0.46817	0.44340	0.44364	0.47258	5.996
27 Endrin ketone [C]	+++++	1.23563	1.11999	1.11440	1.10085	1.04766	1.01657	1.10585	6.827
29 Aroclor-1016(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

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Origin : Disabled
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Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
31 Aroclor-1232(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
32 Aroclor-1242(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
33 Aroclor-1248(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
34 Aroclor-1254(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
35 Aroclor-1260(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
36 Aroclor-1262(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
37 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
38 Toxaphene [C](1)	0.01492	0.01529	0.01573	0.01558	0.01527	0.01455	0.01387	0.01503	4.285
(2)	0.03524	0.03538	0.03581	0.03480	0.03351	0.03170	0.03010	0.03379	6.368
(3)	0.02615	0.02659	0.02671	0.02640	0.02571	0.02464	0.02387	0.02572	4.197
(4)	0.08868	0.08690	0.08740	0.08502	0.08225	0.07926	0.07782	0.08390	5.022
(5)	0.04138	0.04124	0.04193	0.04145	0.04102	0.04046	0.04062	0.04116	1.227
39 2,4-DDE [C]	+++++	0.83433	0.80524	0.74313	0.72589	0.66671	0.60202	0.72955	11.810

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2022 20:38
End Cal Date : 15-DEC-2022 05:16
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
40 2,4-DDD [C]	+++++	0.90975	0.87971	0.82738	0.81642	0.76623		
	0.71370						0.81887	8.785
41 2,4-DDT [C]	+++++	0.94001	0.88046	0.85026	0.84852	0.79773		
	0.74249						0.84324	8.052
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
43 Oxychlordane [C]	+++++	0.96447	0.94678	0.90333	0.89663	0.84333		
	0.79092						0.89091	7.271
44 trans-Nonachlor [C]	+++++	1.48885	1.51762	1.45179	1.44766	1.37681		
	1.30668						1.43157	5.406
45 cis-Nonachlor [C]	+++++	1.44924	1.40707	1.37647	1.37212	1.31329		
	1.24817						1.36106	5.224
46 Mirex [C]	+++++	0.93314	0.81155	0.79462	0.76268	0.73998		
	0.70751						0.79158	9.949
47 bis-(2-ethylhexyl) Phthalate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
48 Chlordane (NOS) [C](1)	0.03877	0.03690	0.03764	0.03840	0.03761	0.03805		
	0.03764						0.03786	1.615
(2)	0.04647	0.04439	0.04416	0.04357	0.04103	0.03978		
	0.03825						0.04252	6.844
(3)	0.14135	0.14252	0.14927	0.15059	0.14418	0.14081		
	0.13812						0.14383	3.173

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Last Edit : 15-Dec-2022 08:33 jrains
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 4 Tetrachloro-m-xylene [C]	+++++	1.22086	1.17937	1.16483	1.12798	1.06878	0.99482	1.12611	7.306
$ 28 Decachlorobiphenyl [C]	+++++	1.08714	0.93916	0.85624	0.84996	0.80139	0.77119	0.88418	12.973

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd6.i\20220809.b\22080909.D
Level 2: \\target\share\chem4\ecd6.i\20220809.b\22080910.D
Level 3: \\target\share\chem4\ecd6.i\20220809.b\22080911.D
Level 4: \\target\share\chem4\ecd6.i\20220809.b\22080912.D
Level 5: \\target\share\chem4\ecd6.i\20220809.b\22080913.D
Level 6: \\target\share\chem4\ecd6.i\20220809.b\22080914.D
Level 7: \\target\share\chem4\ecd6.i\20220809.b\22080915.D

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
1 Hexachlorobutadiene	+++++	1.64215	1.55667	1.51049	1.47308	1.40536		
	1.30292						1.48178	7.988
5 Hexachlorobenzene	+++++	1.48647	1.40778	1.36481	1.31957	1.25458		
	1.15582						1.33150	8.750
6 alpha-BHC	+++++	1.41183	1.40802	1.42270	1.42790	1.37811		
	1.29587						1.39074	3.567
7 gamma-BHC (Lindane)	+++++	1.20108	1.18733	1.20704	1.21598	1.18532		
	1.11861						1.18589	2.948
8 beta-BHC	+++++	0.65244	0.60612	0.58927	0.57533	0.54649		
	0.50588						0.57925	8.684
9 delta-BHC	+++++	1.15252	1.13315	1.18185	1.21952	1.21492		
	1.16159						1.17726	2.950
10 Heptachlor	+++++	1.18674	1.12881	1.11527	1.09009	1.03076		
	0.94214						1.08230	7.897
11 Aldrin	+++++	1.14505	1.10493	1.10576	1.09698	1.04621		
	0.96536						1.07738	5.877

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Heptachlor epoxide b	+++++	1.05278	0.99602	0.98316	0.95413	0.89408	0.81733	0.94959	8.751
15 cis-Chlordane	+++++	1.00217	0.95563	0.94931	0.93343	0.89233	0.82943	0.92705	6.424
16 trans-Chlordane	+++++	1.02223	0.96054	0.95840	0.94631	0.90606	0.84267	0.93937	6.420
17 Endosulfan I	+++++	1.10444	1.01004	0.97510	0.92642	0.86761	0.77363	0.94287	12.207
18 4,4'-DDE	+++++	0.85783	0.84618	0.86175	0.85068	0.80349	0.73346	0.82557	6.027
19 Dieldrin	+++++	1.02112	0.97469	0.96064	0.93395	0.87876	0.79720	0.92773	8.553
20 Endrin	+++++	1.03359	0.99258	1.01493	1.03951	0.95184	0.92125	0.99228	4.755
21 4,4'-DDD	+++++	1.26749	1.21690	1.21140	1.19455	1.09258	1.02286	1.16763	7.815
22 Endosulfan II	+++++	1.32213	1.30831	1.28817	1.25191	1.14300	1.05695	1.22841	8.614

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
23 4,4'-DDT	+++++	1.20278	1.19912	1.21231	1.21971	1.13284	1.06544	1.17203	5.186
24 Endrin aldehyde	+++++	1.05042	1.01673	1.00197	0.99460	0.91340	0.84575	0.97048	7.836
25 Methoxychlor	+++++	0.56408	0.54010	0.51985	0.50693	0.45626	0.43428	0.50358	9.854
26 Endosulfan sulfate	+++++	1.14290	1.11216	1.09802	1.09968	1.00734	0.94888	1.06816	6.922
27 Endrin ketone	+++++	1.47959	1.40243	1.34455	1.31335	1.19489	1.12695	1.31029	9.966
29 Aroclor-1016(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
31 Aroclor-1232(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 Aroclor-1242(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(6)	*****	*****	*****	*****	*****	*****	*****	*****	*****
33 Aroclor-1248(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
34 Aroclor-1254(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
35 Aroclor-1260(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
36 Aroclor-1262(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
37 Aroclor-1268(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
38 Toxaphene(1)	0.02824	0.03896	0.03693	0.03480	0.03418	0.02891	0.02792	0.03285	13.645
(2)	0.08343	0.10636	0.10204	0.09499	0.09608	0.08394	0.08263	0.09278	10.362
(3)	0.04776	0.06283	0.06069	0.06020	0.06090	0.05141	0.05119	0.05643	10.755
(4)	0.05098	0.07225	0.07089	0.06844	0.06847	0.06296	0.06388	0.06541	11.021
(5)	0.04955	0.06896	0.06748	0.06372	0.06603	0.05846	0.05934	0.06194	10.880

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
39 2,4-DDE	+++++	1.14103	1.08072	1.09005	1.06169	0.88466	0.89319	1.02522	10.614
40 2,4-DDD	+++++	1.08881	1.01841	0.99599	0.98400	0.85150	0.85318	0.96531	9.816
41 2,4-DDT	+++++	0.97799	0.97179	0.97332	0.98841	0.88743	0.88215	0.94685	5.117
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Oxychlordane	+++++	1.32927	1.24890	1.22496	1.20236	1.04785	1.05015	1.18392	9.540
44 trans-Nonachlor	+++++	1.68629	1.57989	1.58456	1.55669	1.34437	1.36253	1.51906	8.949
45 cis-Nonachlor	+++++	1.62941	1.55213	1.53413	1.52347	1.34758	1.35527	1.49033	7.639
46 Mirex	+++++	1.20478	1.11168	1.05006	1.00932	0.85381	0.85786	1.01459	13.749
47 bis-(2-ethylhexyl) Phthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Chlordane (NOS)(1)	0.06029	0.05735	0.05369	0.05005	0.04581	0.04808	0.04531	0.05151	11.230
(2)	0.15038	0.14213	0.13501	0.13074	0.12020	0.12674	0.12030	0.13221	8.482

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(3)	0.17221	0.15459	0.13623	0.13893	0.12753	0.13518	0.13160	0.14232	11.024
49 Trifluralin	*****	*****	*****	*****	*****	*****	*****	*****	*****
50 Dacthal	*****	*****	*****	*****	*****	*****	*****	*****	*****
51 Oxadiazon	*****	*****	*****	*****	*****	*****	*****	*****	*****
52 Kelthane	*****	*****	*****	*****	*****	*****	*****	*****	*****
53 Chlorpyrifos	*****	*****	*****	*****	*****	*****	*****	*****	*****
54 Methyl Parathion	*****	*****	*****	*****	*****	*****	*****	*****	*****
55 Ethyl Parathion	*****	*****	*****	*****	*****	*****	*****	*****	*****
56 Kepone	*****	*****	*****	*****	*****	*****	*****	*****	*****
57 1-Chloropyrene	*****	*****	*****	*****	*****	*****	*****	*****	*****
$ 4 Tetrachloro-m-xylene	*****	1.10401	1.05839	1.02629	0.99588	0.93352	0.85040	0.99475	9.166

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2022 11:03
End Cal Date : 13-DEC-2022 22:43
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Last Edit : 14-Dec-2022 10:32
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
$ 28 Decachlorobiphenyl	+++++	0.99444	0.96249	0.90111	0.87014	0.79161	0.75653	0.87939	10.607

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121405	22121406	22121407	22121408	22121409	22121410	22121411
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022
INJ.TIME:	20:38	20:56	21:14	21:31	21:49	22:07	22:25

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene	2.323	2.323	2.324	2.323	2.324	2.324	2.324	2.324	2.294-2.354	2.323	0.000
* 2 1Bromo-2nitrobenzene	3.151	3.151	3.152	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
* 3 Hexabromobiphenyl	9.504	9.503	9.504	9.505	9.505	9.504	9.504	9.505	9.475-9.535	9.504	0.001
$ 4 Tetrachloro-m-xylene	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.798-3.858	3.828	0.000
5 Hexachlorobenzene	4.182	4.182	4.183	4.183	4.182	4.183	4.182	4.182	4.152-4.212	4.183	0.000
6 alpha-BHC	4.342	4.342	4.343	4.343	4.342	4.342	4.342	4.342	4.312-4.372	4.342	0.000
7 gamma-BHC (Lindane)	4.645	4.645	4.646	4.646	4.645	4.646	4.645	4.645	4.615-4.675	4.645	0.000
8 beta-BHC	4.726	4.726	4.727	4.726	4.726	4.726	4.726	4.726	4.696-4.756	4.726	0.000
9 delta-BHC	4.909	4.909	4.910	4.910	4.909	4.910	4.910	4.909	4.879-4.939	4.910	0.000
10 Heptachlor	5.130	5.129	5.130	5.130	5.130	5.130	5.130	5.130	5.100-5.160	5.130	0.000
11 Aldrin	5.453	5.453	5.455	5.454	5.454	5.454	5.454	5.454	5.424-5.484	5.454	0.000
12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
14 Heptachlor epoxide b	6.130	6.130	6.132	6.131	6.130	6.130	6.130	6.130	6.100-6.160	6.131	0.001
15 cis-Chlordane	6.417	6.417	6.417	6.418	6.417	6.417	6.417	6.417	6.387-6.447	6.417	0.000
16 trans-Chlordane	6.270	6.271	6.271	6.271	6.271	6.271	6.271	6.271	6.241-6.301	6.271	0.000
17 Endosulfan I	6.572	6.572	6.573	6.573	6.572	6.572	6.573	6.572	6.542-6.602	6.573	0.000

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	6.489	6.489	6.490	6.490	6.489	6.489	6.490	6.489	6.459-6.519	6.489	0.000
	19 Dieldrin	6.831	6.832	6.832	6.832	6.831	6.832	6.832	6.831	6.801-6.861	6.832	0.000
	20 Endrin	7.081	7.081	7.082	7.082	7.081	7.082	7.082	7.081	7.051-7.111	7.082	0.000
	21 4,4'-DDD	7.135	7.136	7.136	7.136	7.135	7.136	7.135	7.135	7.105-7.165	7.136	0.000
	22 Endosulfan II	7.318	7.317	7.318	7.318	7.317	7.317	7.317	7.317	7.287-7.347	7.317	0.000
	23 4,4'-DDT	7.427	7.427	7.428	7.428	7.427	7.427	7.428	7.427	7.397-7.457	7.428	0.000
	24 Endrin aldehyde	7.746	7.746	7.746	7.746	7.746	7.746	7.746	7.746	7.716-7.776	7.746	0.000
	25 Methoxychlor	7.912	7.912	7.913	7.912	7.912	7.912	7.912	7.912	7.882-7.942	7.912	0.000
	26 Endosulfan sulfate	8.180	8.179	8.180	8.180	8.180	8.179	8.180	8.180	8.150-8.210	8.180	0.000
	27 Endrin ketone	8.453	8.452	8.454	8.453	8.453	8.453	8.454	8.453	8.423-8.483	8.453	0.001
$	28 Decachlorobiphenyl	9.355	9.354	9.355	9.355	9.355	9.355	9.356	9.355	9.325-9.385	9.355	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
	39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121405	22121406	22121407	22121408	22121409	22121410	22121411
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022
INJ.TIME:	20:38	20:56	21:14	21:31	21:49	22:07	22:25

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene [C	2.500	2.500	2.500	2.500	2.500	2.500	2.501	2.501	2.471-2.531	2.500	0.000
* 2 1Bromo-2nitrobenzene [	3.350	3.350	3.351	3.351	3.350	3.351	3.351	3.351	3.321-3.381	3.351	0.000
* 3 Hexabromobiphenyl[C]	11.054	11.053	11.054	11.054	11.053	11.053	11.054	11.054	11.024-11.084	11.054	0.000
$ 4 Tetrachloro-m-xylene [	4.220	4.220	4.220	4.220	4.220	4.221	4.220	4.220	4.190-4.250	4.220	0.000
5 Hexachlorobenzene [C]	4.718	4.718	4.718	4.718	4.718	4.718	4.718	4.718	4.688-4.748	4.718	0.000
6 alpha-BHC [C]	4.860	4.859	4.860	4.860	4.860	4.860	4.861	4.861	4.831-4.891	4.860	0.000
7 gamma-BHC (Lindane) [C	5.257	5.257	5.258	5.258	5.258	5.258	5.258	5.258	5.228-5.288	5.258	0.000
8 beta-BHC [C]	5.337	5.337	5.338	5.337	5.337	5.337	5.337	5.337	5.307-5.367	5.337	0.000
9 delta-BHC [C]	5.690	5.691	5.691	5.691	5.690	5.691	5.691	5.691	5.661-5.721	5.691	0.000
10 Heptachlor [C]	5.786	5.787	5.787	5.787	5.787	5.787	5.787	5.787	5.757-5.817	5.787	0.000
11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
12 Aldrin [C]	6.190	6.190	6.191	6.191	6.191	6.190	6.191	6.191	6.161-6.221	6.191	0.000
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
14 Heptachlor epoxide b [	6.845	6.845	6.845	6.846	6.845	6.846	6.845	6.845	6.815-6.875	6.845	0.000
15 cis-Chlordane [C]	7.215	7.215	7.216	7.216	7.216	7.215	7.216	7.216	7.186-7.246	7.215	0.000
16 trans-Chlordane [C]	7.056	7.055	7.056	7.056	7.056	7.056	7.056	7.056	7.026-7.086	7.056	0.000
17 Endosulfan I [C]	7.288	7.288	7.289	7.289	7.289	7.288	7.289	7.289	7.259-7.319	7.288	0.000

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	7.370	7.370	7.371	7.371	7.370	7.371	7.371	7.371	7.341-7.401	7.371	0.000
	19 Dieldrin [C]	7.582	7.582	7.583	7.583	7.582	7.582	7.583	7.583	7.553-7.613	7.582	0.000
	20 Endrin [C]	7.906	7.906	7.906	7.907	7.907	7.907	7.907	7.907	7.877-7.937	7.907	0.000
	21 4,4'-DDD [C]	7.976	7.976	7.976	7.977	7.976	7.976	7.976	7.976	7.946-8.006	7.976	0.000
	22 Endosulfan II [C]	8.117	8.116	8.117	8.117	8.117	8.117	8.117	8.117	8.087-8.147	8.117	0.000
	23 4,4'-DDT [C]	8.294	8.294	8.294	8.295	8.295	8.295	8.295	8.295	8.265-8.325	8.295	0.000
	24 Endrin aldehyde [C]	8.448	8.447	8.448	8.448	8.448	8.448	8.448	8.448	8.418-8.478	8.448	0.000
	25 Endosulfan sulfate [C]	8.715	8.714	8.715	8.715	8.715	8.715	8.715	8.715	8.685-8.745	8.715	0.000
	26 Methoxychlor [C]	8.935	8.934	8.935	8.936	8.935	8.935	8.936	8.936	8.906-8.966	8.935	0.001
	27 Endrin ketone [C]	9.239	9.239	9.239	9.240	9.239	9.239	9.240	9.240	9.210-9.270	9.239	0.000
$	28 Decachlorobiphenyl [C]	10.466	10.465	10.466	10.466	10.466	10.466	10.467	10.467	10.437-10.497	10.466	0.001
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
	39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121412	22121413	22121414	22121415	22121416	22121417	22121418
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	22:43	23:01	23:19	23:36	23:54	00:12	00:30

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.324	2.294-2.354	+++++	+++++
*	2 1Bromo-2nitrobenzene	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
*	3 Hexabromobiphenyl	9.504	9.504	9.504	9.504	9.504	9.504	9.504	9.505	9.475-9.535	9.504	0.000
$	4 Tetrachloro-m-xylene	+++++	+++++	+++++	+++++	3.800	3.800	3.800	3.828	3.798-3.858	3.800	0.000
	5 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.182	4.152-4.212	+++++	+++++
	6 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.342	4.312-4.372	+++++	+++++
	7 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.645	4.615-4.675	+++++	+++++
	8 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.726	4.696-4.756	+++++	+++++
	9 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.909	4.879-4.939	+++++	+++++
	10 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.130	5.100-5.160	+++++	+++++
	11 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.454	5.424-5.484	+++++	+++++
	12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
	14 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.130	6.100-6.160	+++++	+++++
	15 cis-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.417	6.387-6.447	+++++	+++++
	16 trans-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.271	6.241-6.301	+++++	+++++
	17 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.572	6.542-6.602	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
	19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
	20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
	21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
	22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
	23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
	24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
	25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
	26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
	27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
$	28 Decachlorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.355	9.325-9.385	+++++	+++++
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
	39 2,4-DDE	6.106	6.106	6.106	6.106	6.106	6.106	6.106	6.106	6.076-6.136	6.106	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	6.681	6.681	6.681	6.681	6.681	6.681	6.680	6.681	6.651-6.711	6.681	0.000
41 2,4-DDT	6.956	6.957	6.956	6.956	6.957	6.956	6.956	6.957	6.927-6.987	6.956	0.000
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	6.014	6.015	6.014	6.015	6.014	6.014	6.014	6.014	5.984-6.044	6.015	0.000
44 trans-Nonachlor	6.397	6.398	6.398	6.398	6.397	6.397	6.397	6.397	6.367-6.427	6.398	0.000
45 cis-Nonachlor	7.112	7.112	7.111	7.112	7.112	7.112	7.112	7.112	7.082-7.142	7.112	0.000
46 Mirex	8.082	8.082	8.082	8.082	8.082	8.082	8.082	8.082	8.052-8.112	8.082	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121412	22121413	22121414	22121415	22121416	22121417	22121418
INJ.DATE:	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	14-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	22:43	23:01	23:19	23:36	23:54	00:12	00:30

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.501	2.471-2.531	+++++	+++++
*	2 1Bromo-2nitrobenzene [	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.321-3.381	3.351	0.000
*	3 Hexabromobiphenyl[C]	11.054	11.054	11.054	11.054	11.054	11.054	11.054	11.054	11.024-11.084	11.054	0.000
$	4 Tetrachloro-m-xylene [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.220	4.190-4.250	+++++	+++++
	5 Hexachlorobenzene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.718	4.688-4.748	+++++	+++++
	6 alpha-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.861	4.831-4.891	+++++	+++++
	7 gamma-BHC (Lindane) [C	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.258	5.228-5.288	+++++	+++++
	8 beta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.337	5.307-5.367	+++++	+++++
	9 delta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.691	5.661-5.721	+++++	+++++
	10 Heptachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.787	5.757-5.817	+++++	+++++
	11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
	12 Aldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.191	6.161-6.221	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
	14 Heptachlor epoxide b [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.845	6.815-6.875	+++++	+++++
	15 cis-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.216	7.186-7.246	+++++	+++++
	16 trans-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.056	7.026-7.086	+++++	+++++
	17 Endosulfan I [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.289	7.259-7.319	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
	19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
	20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
	21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
	22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
	23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
	24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
	25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
	26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
	27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
$	28 Decachlorobiphenyl [C]	+++++	+++++	+++++	+++++	+++++	+++++	10.471	10.467	10.437-10.497	10.471	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
	39 2,4-DDE [C]	7.036	7.036	7.035	7.036	7.036	7.036	7.036	7.036	7.006-7.066	7.036	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	7.591	7.590	7.590	7.591	7.590	7.591	7.591	7.591	7.561-7.621	7.591	0.000
41 2,4-DDT [C]	7.913	7.914	7.913	7.913	7.913	7.914	7.913	7.913	7.883-7.943	7.913	0.000
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	6.741	6.741	6.741	6.741	6.741	6.741	6.741	6.741	6.711-6.771	6.741	0.000
44 trans-Nonachlor [C]	7.154	7.154	7.154	7.155	7.154	7.155	7.155	7.155	7.125-7.185	7.154	0.000
45 cis-Nonachlor [C]	7.975	7.975	7.975	7.975	7.975	7.975	7.975	7.975	7.945-8.005	7.975	0.000
46 Mirex [C]	9.223	9.223	9.222	9.223	9.222	9.223	9.223	9.223	9.193-9.253	9.223	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121421	22121422	22121423	22121424	22121425	22121426	22121427
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	01:24	01:42	01:59	02:17	02:35	02:53	03:11

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.324	2.294-2.354	+++++	+++++
*	2 1Bromo-2nitrobenzene	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
*	3 Hexabromobiphenyl	9.504	9.504	9.505	9.504	9.504	9.504	9.505	9.505	9.475-9.535	9.504	0.000
$	4 Tetrachloro-m-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.828	3.798-3.858	+++++	+++++
	5 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.182	4.152-4.212	+++++	+++++
	6 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.342	4.312-4.372	+++++	+++++
	7 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.645	4.615-4.675	+++++	+++++
	8 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.726	4.696-4.756	+++++	+++++
	9 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.909	4.879-4.939	+++++	+++++
	10 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.130	5.100-5.160	+++++	+++++
	11 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.454	5.424-5.484	+++++	+++++
	12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
	14 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.130	6.100-6.160	+++++	+++++
	15 cis-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.417	6.387-6.447	+++++	+++++
	16 trans-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.271	6.241-6.301	+++++	+++++
	17 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.572	6.542-6.602	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
	19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
	20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
	21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
	22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
	23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
	24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
	25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
	26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
	27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
$	28 Decachlorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	9.380	9.355	9.325-9.385	9.380	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.931	6.901-6.961	+++++	+++++
	39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	5.593	5.593	5.593	5.593	5.593	5.592	5.593	5.593	5.563-5.623	5.593	0.000
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121421	22121422	22121423	22121424	22121425	22121426	22121427
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	01:24	01:42	01:59	02:17	02:35	02:53	03:11

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.501	2.471-2.531	+++++	+++++
*	2 1Bromo-2nitrobenzene [	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.321-3.381	3.351	0.000
*	3 Hexabromobiphenyl[C]	11.054	11.055	11.054	11.054	11.054	11.054	11.054	11.054	11.024-11.084	11.054	0.000
$	4 Tetrachloro-m-xylene [	4.215	+++++	+++++	+++++	+++++	+++++	+++++	4.220	4.190-4.250	4.215	0.000
	5 Hexachlorobenzene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.718	4.688-4.748	+++++	+++++
	6 alpha-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.861	4.831-4.891	+++++	+++++
	7 gamma-BHC (Lindane) [C	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.258	5.228-5.288	+++++	+++++
	8 beta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.337	5.307-5.367	+++++	+++++
	9 delta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.691	5.661-5.721	+++++	+++++
	10 Heptachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.787	5.757-5.817	+++++	+++++
	11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
	12 Aldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.191	6.161-6.221	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
	14 Heptachlor epoxide b [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.845	6.815-6.875	+++++	+++++
	15 cis-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.216	7.186-7.246	+++++	+++++
	16 trans-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.056	7.026-7.086	+++++	+++++
	17 Endosulfan I [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.289	7.259-7.319	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
$ 28 Decachlorobiphenyl [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.467	10.437-10.497	+++++	+++++
29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.126	7.096-7.156	+++++	+++++
39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	5.612	5.612	5.612	5.611	5.612	5.612	5.612	5.612	5.582-5.642	5.612	0.000
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121428	22121429	22121430	22121431	22121432	22121433	22121434
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	03:29	03:46	04:04	04:22	04:40	04:58	05:16

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.324	2.294-2.354	+++++	+++++
*	2 1Bromo-2nitrobenzene	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.151	3.121-3.181	3.151	0.000
*	3 Hexabromobiphenyl	9.505	9.504	9.504	9.504	9.505	9.504	9.504	9.505	9.475-9.535	9.504	0.000
$	4 Tetrachloro-m-xylene	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.828	3.798-3.858	3.828	0.000
	5 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.182	4.152-4.212	+++++	+++++
	6 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.342	4.312-4.372	+++++	+++++
	7 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.645	4.615-4.675	+++++	+++++
	8 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.726	4.696-4.756	+++++	+++++
	9 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.909	4.879-4.939	+++++	+++++
	10 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.130	5.100-5.160	+++++	+++++
	11 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.454	5.424-5.484	+++++	+++++
	12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
	14 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.130	6.100-6.160	+++++	+++++
	15 cis-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.417	6.387-6.447	+++++	+++++
	16 trans-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.271	6.241-6.301	+++++	+++++
	17 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.572	6.542-6.602	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
	19 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.831	6.801-6.861	+++++	+++++
	20 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.081	7.051-7.111	+++++	+++++
	21 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.135	7.105-7.165	+++++	+++++
	22 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.317	7.287-7.347	+++++	+++++
	23 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.427	7.397-7.457	+++++	+++++
	24 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.746	7.716-7.776	+++++	+++++
	25 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.912	7.882-7.942	+++++	+++++
	26 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.180	8.150-8.210	+++++	+++++
	27 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.453	8.423-8.483	+++++	+++++
$	28 Decachlorobiphenyl	9.355	9.355	9.355	9.355	9.356	9.356	9.355	9.355	9.325-9.385	9.356	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	6.931	6.931	6.931	6.931	6.931	6.931	6.931	6.931	6.901-6.961	6.931	0.000
	39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.681	6.651-6.711	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.957	6.927-6.987	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.014	5.984-6.044	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.397	6.367-6.427	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.082	8.052-8.112	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	22121428	22121429	22121430	22121431	22121432	22121433	22121434
INJ.DATE:	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022	15-DEC-2022
INJ.TIME:	03:29	03:46	04:04	04:22	04:40	04:58	05:16

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.501	2.471-2.531	+++++	+++++
*	2 1Bromo-2nitrobenzene [	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.351	3.321-3.381	3.351	0.000
*	3 Hexabromobiphenyl[C]	11.055	11.054	11.054	11.055	11.054	11.054	11.054	11.054	11.024-11.084	11.054	0.000
$	4 Tetrachloro-m-xylene [	4.221	4.220	4.220	4.221	4.221	4.221	4.221	4.220	4.190-4.250	4.221	0.000
	5 Hexachlorobenzene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.718	4.688-4.748	+++++	+++++
	6 alpha-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.861	4.831-4.891	+++++	+++++
	7 gamma-BHC (Lindane) [C	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.258	5.228-5.288	+++++	+++++
	8 beta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.337	5.307-5.367	+++++	+++++
	9 delta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.691	5.661-5.721	+++++	+++++
	10 Heptachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.787	5.757-5.817	+++++	+++++
	11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
	12 Aldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.191	6.161-6.221	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
	14 Heptachlor epoxide b [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.845	6.815-6.875	+++++	+++++
	15 cis-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.216	7.186-7.246	+++++	+++++
	16 trans-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.056	7.026-7.086	+++++	+++++
	17 Endosulfan I [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.289	7.259-7.319	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.371	7.341-7.401	+++++	+++++
	19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.583	7.553-7.613	+++++	+++++
	20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.907	7.877-7.937	+++++	+++++
	21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.976	7.946-8.006	+++++	+++++
	22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.117	8.087-8.147	+++++	+++++
	23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.295	8.265-8.325	+++++	+++++
	24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.448	8.418-8.478	+++++	+++++
	25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.715	8.685-8.745	+++++	+++++
	26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.936	8.906-8.966	+++++	+++++
	27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.240	9.210-9.270	+++++	+++++
$	28 Decachlorobiphenyl [C]	10.467	10.467	10.467	10.466	10.466	10.466	10.467	10.467	10.437-10.497	10.466	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	7.125	7.125	7.125	7.125	7.126	7.126	7.126	7.126	7.096-7.156	7.125	0.000
	39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.036	7.006-7.066	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20221214.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20221214.b\B20221214.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.591	7.561-7.621	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.913	7.883-7.943	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.741	6.711-6.771	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.155	7.125-7.185	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.975	7.945-8.005	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.223	9.193-9.253	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121403.D
Data file 2: /20221214.b/B20221214.b/22121403.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-IBL1
Client ID:
Injection Date: 14-DEC-2022 20:02
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	alpha-BHC
----			----			0.00	0.00	---	beta-BHC
----			----			0.00	0.00	---	delta-BHC
----			----			0.00	0.00	---	gamma-BHC (Lindane)
----			----			0.00	0.00	---	Heptachlor
----			----			0.00	0.00	---	Aldrin
----			6.824	-0.021	2291	0.00	0.14	---	Heptachlor epoxide b
----			----			0.00	0.00	---	Endosulfan I
----			7.597	0.015	1696	0.00	0.11	---	Dieldrin
----			----			0.00	0.00	---	4,4'-DDE
----			----			0.00	0.00	---	Endrin
----			8.135	0.018	285	0.00	0.02	---	Endosulfan II
----			7.975	-0.002	1369	0.00	0.12	---	4,4'-DDD
----			8.720	0.005	243	0.00	0.02	---	Endosulfan sulfate
----			----			0.00	0.00	---	4,4'-DDT
----			8.924	-0.013	546	0.00	0.11	---	Methoxychlor
8.444	-0.009	1962	9.226	-0.013	2888	0.23	0.25	10.1	Endrin ketone
----			----			0.00	0.00	---	Endrin aldehyde
----			7.070	0.014	4708	0.00	0.30	---	trans-Chlordane
----			7.219	0.003	810	0.00	0.05	---	cis-Chlordane
2.351	0.028	6378	2.512	0.012	33421	0.42	1.60	116.6*	Hexachlorobutadiene
4.183	0.001	4869	4.721	0.003	421	0.36	0.02	178.1*	Hexachlorobenzene
3.828	0.000	375293	4.220	-0.000	579767	36.70	37.46	2.1	Tetrachloro-m-xylene
9.356	0.001	243291	10.467	0.000	323668	35.86	35.40	1.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

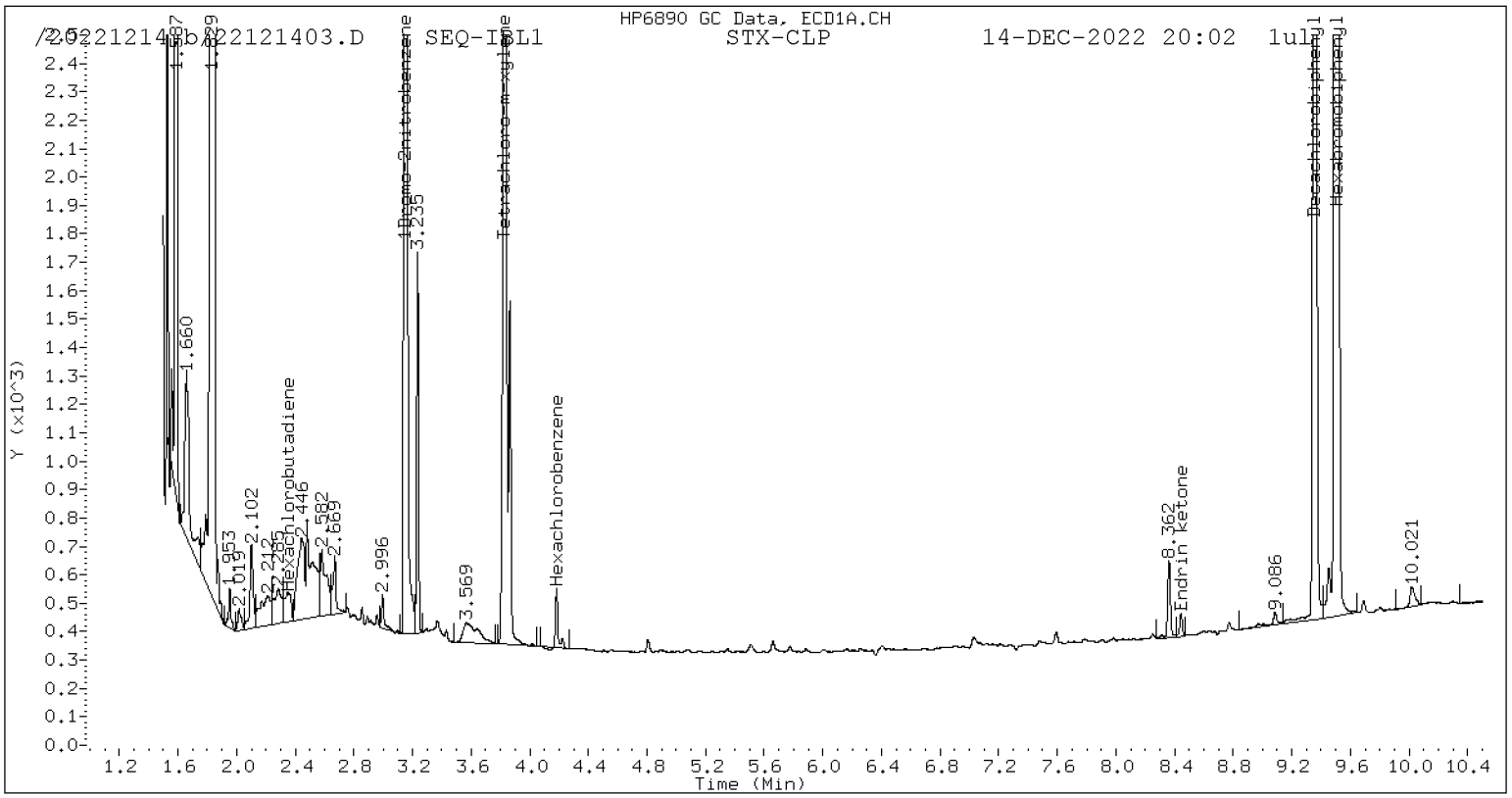
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	751998	5.8
Hexabromobiphenyl	641833	669495	4.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1099555	3.8
Hexabromobiphenyl	797125	827325	3.8

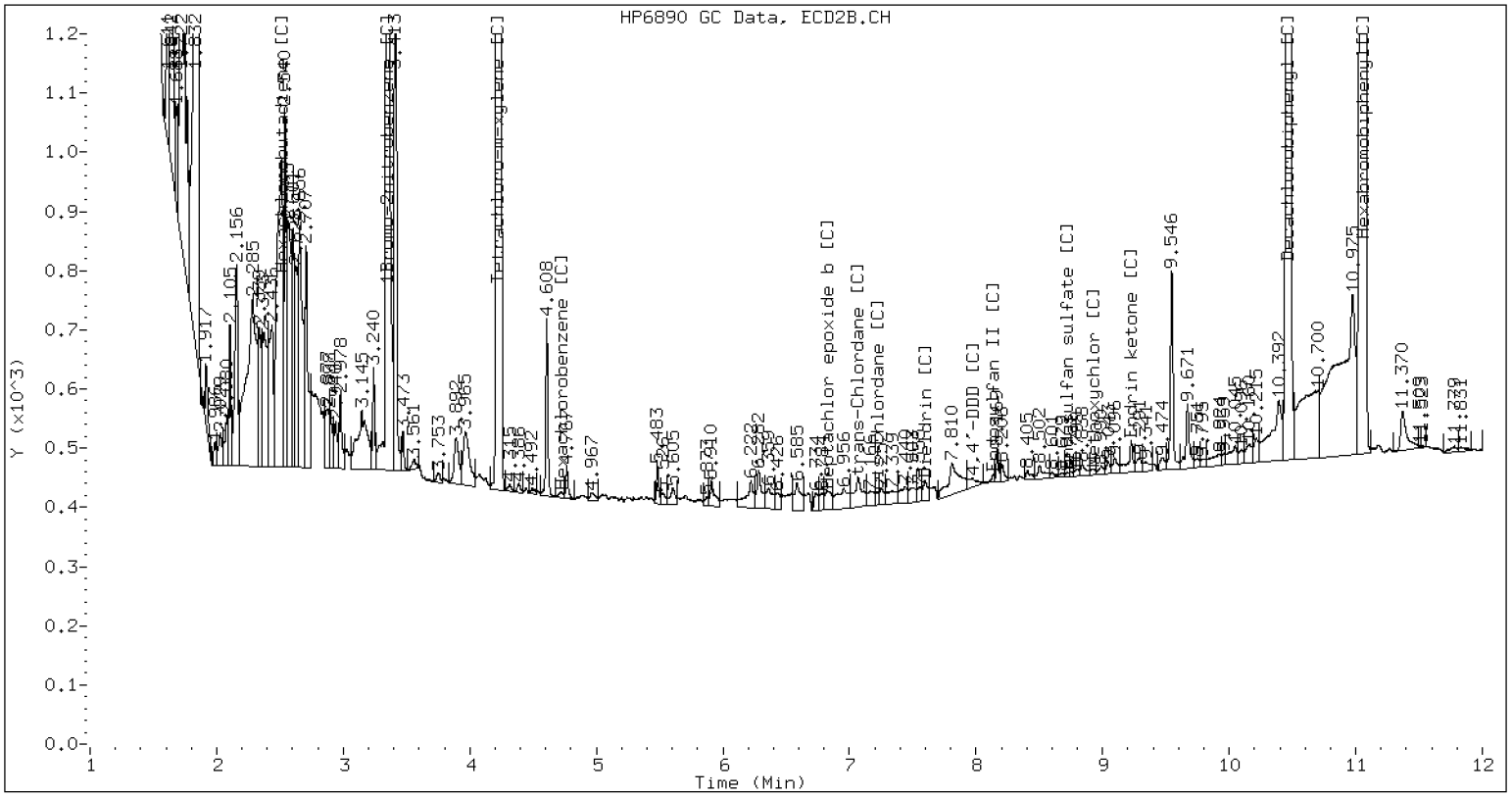
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121403.D SEQ-IBL1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121403.D
Data file 2: /20221214.b/B20221214.b/22121403.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-IBL1
Client ID:
Injection Date: 14-DEC-2022 20:02
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

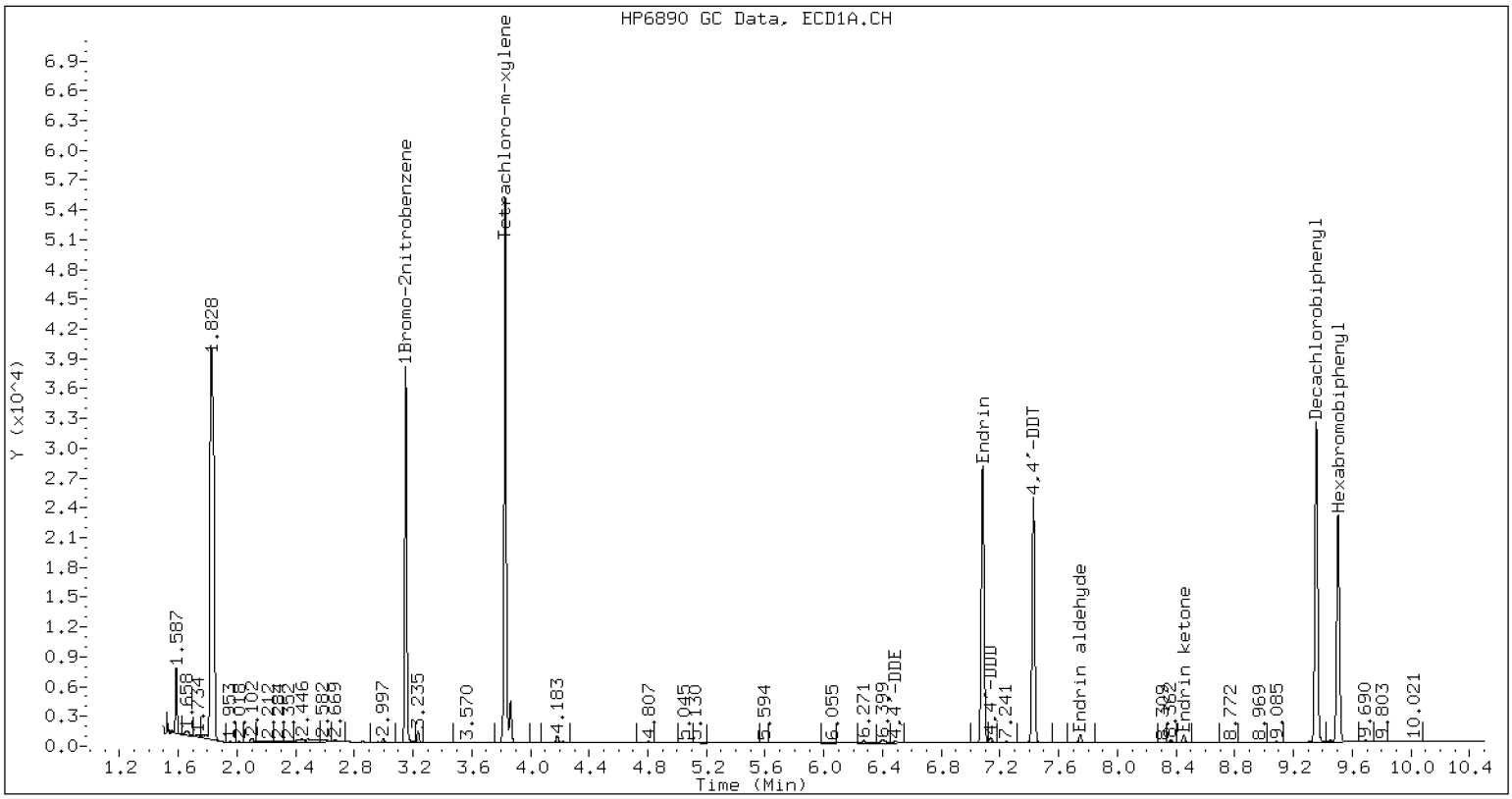
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene [C]	3.350	1005375
4,4'-DDE [C]	7.370	11906
Endrin [C]	7.907	1029194
4,4'-DDD [C]	7.977	32697
4,4'-DDT [C]	8.295	890195
Endrin ketone [C]	9.239	28268
Endrin aldehyde [C]	8.448	31426
Hexabromobiphenyl[C]	11.054	772586
Tetrachloro-m-xylene [C]	4.220	1890294
Decachlorobiphenyl [C]	10.467	1140978

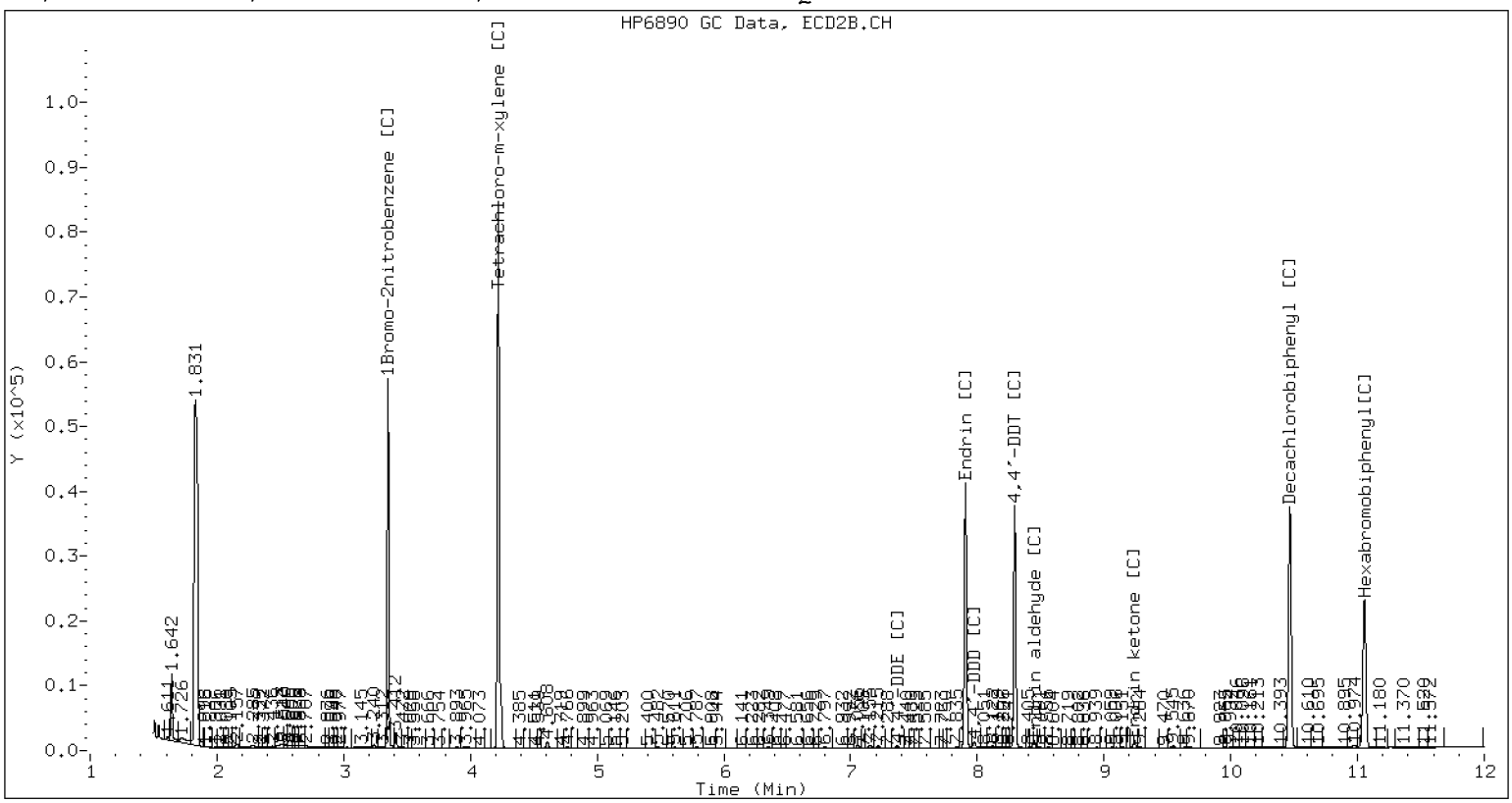
DDT Percent Breakdown = 4.8 %
((11906+32697) * 100)/(11906+32697+890195)

Endrin Percent Breakdown = 5.5 %
((31426+28268) * 100)/(31426+28268+1029194)

/20221214.b/22121404.D SEQ-PEM1 STX-CLP 14-DEC-2022 20:20 1ul



/20221214.b/B20221214.b/22121404.D SEQ-PEM1 CLP2 14-DEC-2022



7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121405.D
Data file 2: /20221214.b/B20221214.b/22121405.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1
Client ID:
Injection Date: 14-DEC-2022 20:38
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	-0.000	17720	4.860	-0.001	25579	1.30	1.22	6.4	alpha-BHC
4.726	-0.000	7513	5.337	-0.000	10927	1.43	1.37	4.4	beta-BHC
4.909	-0.000	14050	5.690	-0.000	21188	1.26	1.23	2.8	delta-BHC
4.645	-0.000	15329	5.257	-0.001	21981	1.30	1.24	4.9	gamma-BHC (Lindane)
5.130	-0.000	14540	5.786	-0.000	20395	1.38	1.27	8.9	Heptachlor
5.453	-0.001	15026	6.190	-0.001	24413	1.28	1.33	3.9	Aldrin
6.130	0.000	13937	6.845	-0.000	21959	1.37	1.44	5.6	Heptachlor epoxide b
6.572	-0.000	13220	7.288	-0.000	19257	1.41	1.44	1.8	Endosulfan I
6.831	0.000	27285	7.582	-0.001	43580	2.71	2.94	8.2	Dieldrin
6.489	0.000	25951	7.370	-0.001	37722	2.78	2.78	0.0	4,4'-DDE
7.081	0.000	24429	7.906	-0.001	31381	2.94	2.78	5.3	Endrin
7.318	0.001	19827	8.117	-0.000	30675	2.65	2.66	0.3	Endosulfan II
7.135	0.000	20434	7.976	-0.000	28995	2.73	2.65	3.0	4,4'-DDD
8.180	-0.000	19661	8.715	-0.000	26689	2.76	2.63	4.9	Endosulfan sulfate
7.427	0.000	20071	8.294	-0.001	26950	2.65	2.55	3.9	4,4'-DDT
7.912	-0.000	52385	8.935	-0.001	65896	15.60	14.07	10.3	Methoxychlor
8.453	-0.001	24276	9.239	-0.000	30129	2.98	2.75	8.0	Endrin ketone
7.746	-0.000	17209	8.448	-0.000	21218	2.88	2.60	10.1	Endrin aldehyde
6.270	-0.001	14829	7.056	-0.000	22517	1.43	1.48	3.7	trans-Chlordane
6.417	0.000	15767	7.215	-0.000	22150	1.52	1.49	1.6	cis-Chlordane
2.323	-0.001	27320	2.500	-0.001	42655	1.92	2.14	11.3	Hexachlorobutadiene
4.182	0.000	18555	4.718	-0.000	27377	1.47	1.44	2.2	Hexachlorobenzene
3.828	-0.000	28792	4.220	-0.001	41270	2.99	2.80	6.5	Tetrachloro-m-xylene
9.355	-0.000	21954	10.466	-0.000	30646	3.41	3.50	2.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

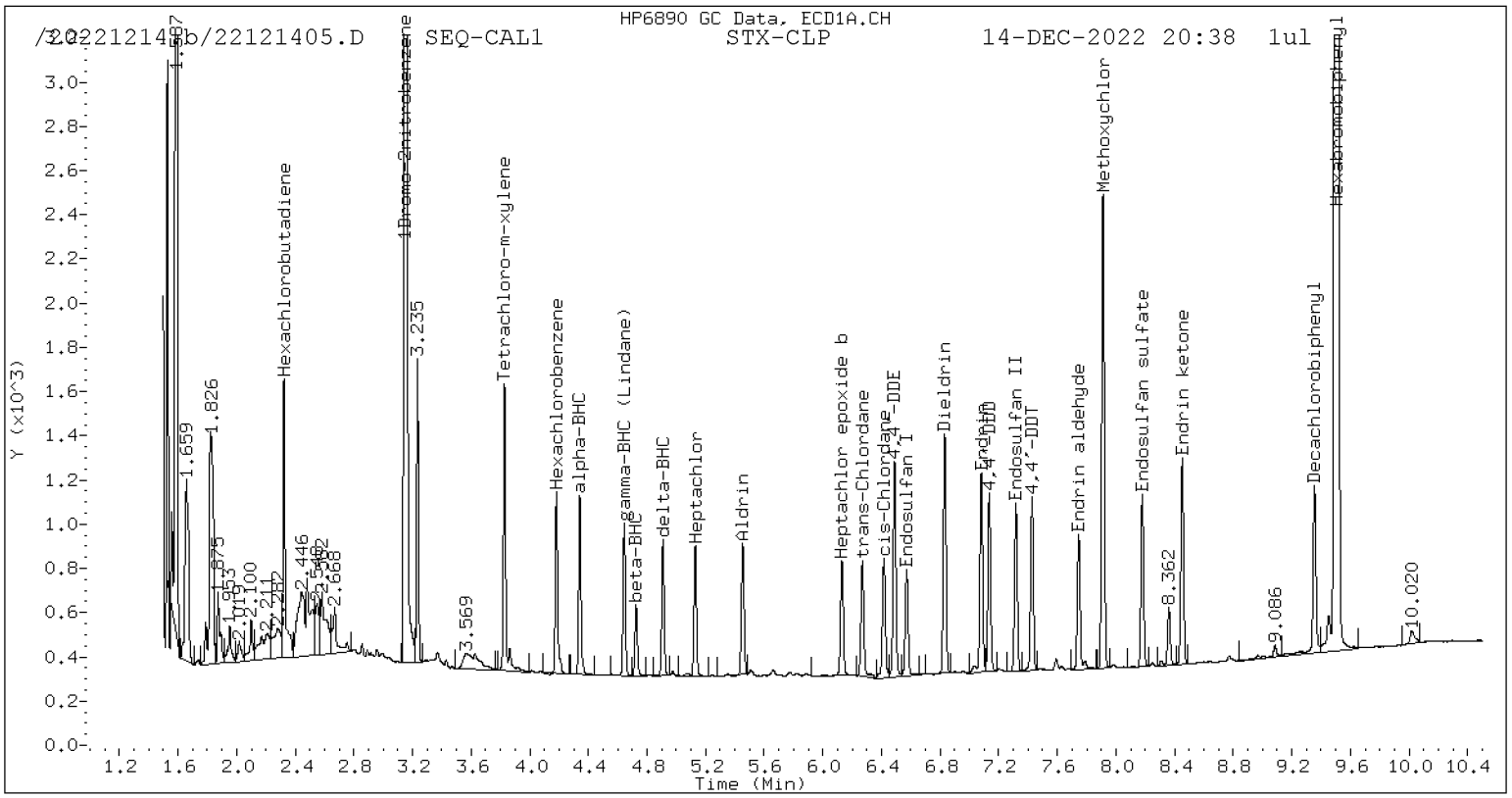
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	707324	-0.5
Hexabromobiphenyl	641833	634819	-1.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1045524	-1.3
Hexabromobiphenyl	797125	792558	-0.6

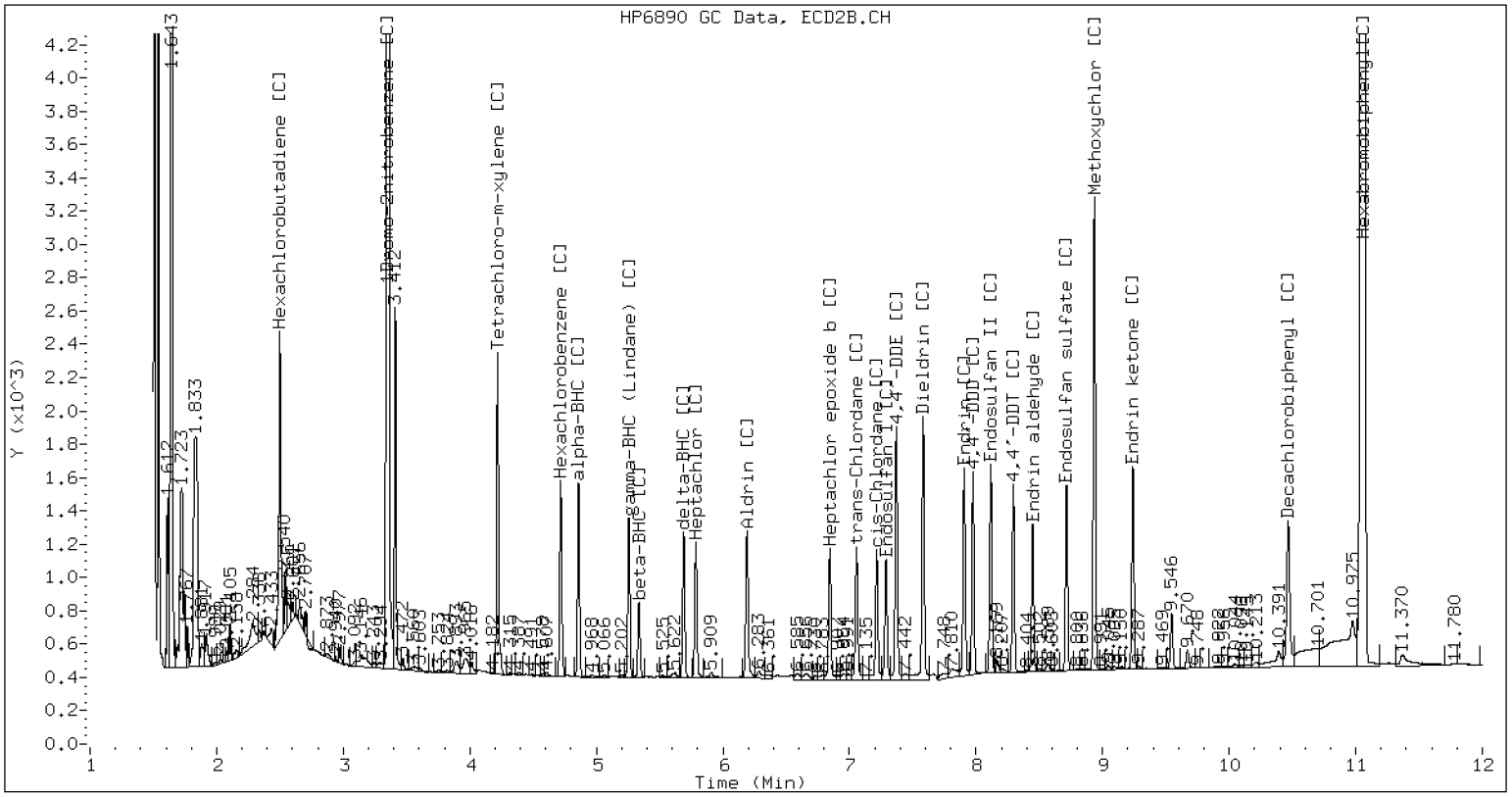
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121405.D SEQ-CAL1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121405.D
Data file 2: /20221214.b/B20221214.b/22121405.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1
Client ID:
Injection Date: 14-DEC-2022 20:38
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121406.D
Data file 2: /20221214.b/B20221214.b/22121406.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2
Client ID:
Injection Date: 14-DEC-2022 20:56
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	-0.000	35088	4.859	-0.001	52514	2.54	2.47	2.9	alpha-BHC
4.726	-0.000	14580	5.337	-0.000	21664	2.74	2.68	2.4	beta-BHC
4.909	-0.000	28429	5.691	-0.000	43932	2.52	2.51	0.5	delta-BHC
4.645	0.000	30588	5.257	-0.001	44971	2.55	2.49	2.5	gamma-BHC (Lindane)
5.129	-0.001	28458	5.787	-0.000	42156	2.67	2.58	3.6	Heptachlor
5.453	-0.001	30273	6.190	-0.001	50159	2.53	2.69	5.8	Aldrin
6.130	-0.001	27608	6.845	-0.001	43067	2.67	2.79	4.5	Heptachlor epoxide b
6.572	-0.000	25650	7.288	-0.001	37112	2.70	2.73	1.0	Endosulfan I
6.832	0.000	54960	7.582	-0.001	84296	5.38	5.60	4.0	Dieldrin
6.489	-0.000	51182	7.370	-0.001	74355	5.40	5.39	0.2	4,4'-DDE
7.081	0.000	46577	7.906	-0.001	63434	5.52	5.52	0.1	Endrin
7.317	0.001	37804	8.116	-0.001	65448	4.98	5.56	11.1	Endosulfan II
7.136	0.001	40399	7.976	-0.001	62302	5.32	5.58	4.8	4,4'-DDD
8.179	-0.001	38342	8.714	-0.001	57421	5.32	5.56	4.4	Endosulfan sulfate
7.427	-0.000	40499	8.294	-0.001	59346	5.27	5.51	4.3	4,4'-DDT
7.912	-0.000	98271	8.934	-0.002	130815	28.88	27.42	5.2	Methoxychlor
8.452	-0.001	45639	9.239	-0.001	62360	5.53	5.59	1.1	Endrin ketone
7.746	0.000	32847	8.447	-0.001	47592	5.42	5.73	5.6	Endrin aldehyde
6.271	0.000	28307	7.055	-0.001	41633	2.69	2.70	0.4	trans-Chlordane
6.417	0.000	29336	7.215	-0.000	41766	2.78	2.77	0.3	cis-Chlordane
2.323	-0.001	44113	2.500	-0.001	65565	3.05	3.24	6.2	Hexachlorobutadiene
4.182	-0.000	35520	4.718	-0.000	53173	2.77	2.75	0.9	Hexachlorobenzene
3.828	-0.000	54873	4.220	-0.001	81034	5.62	5.42	3.7	Tetrachloro-m-xylene
9.354	-0.001	38477	10.465	-0.001	54866	5.90	6.15	4.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

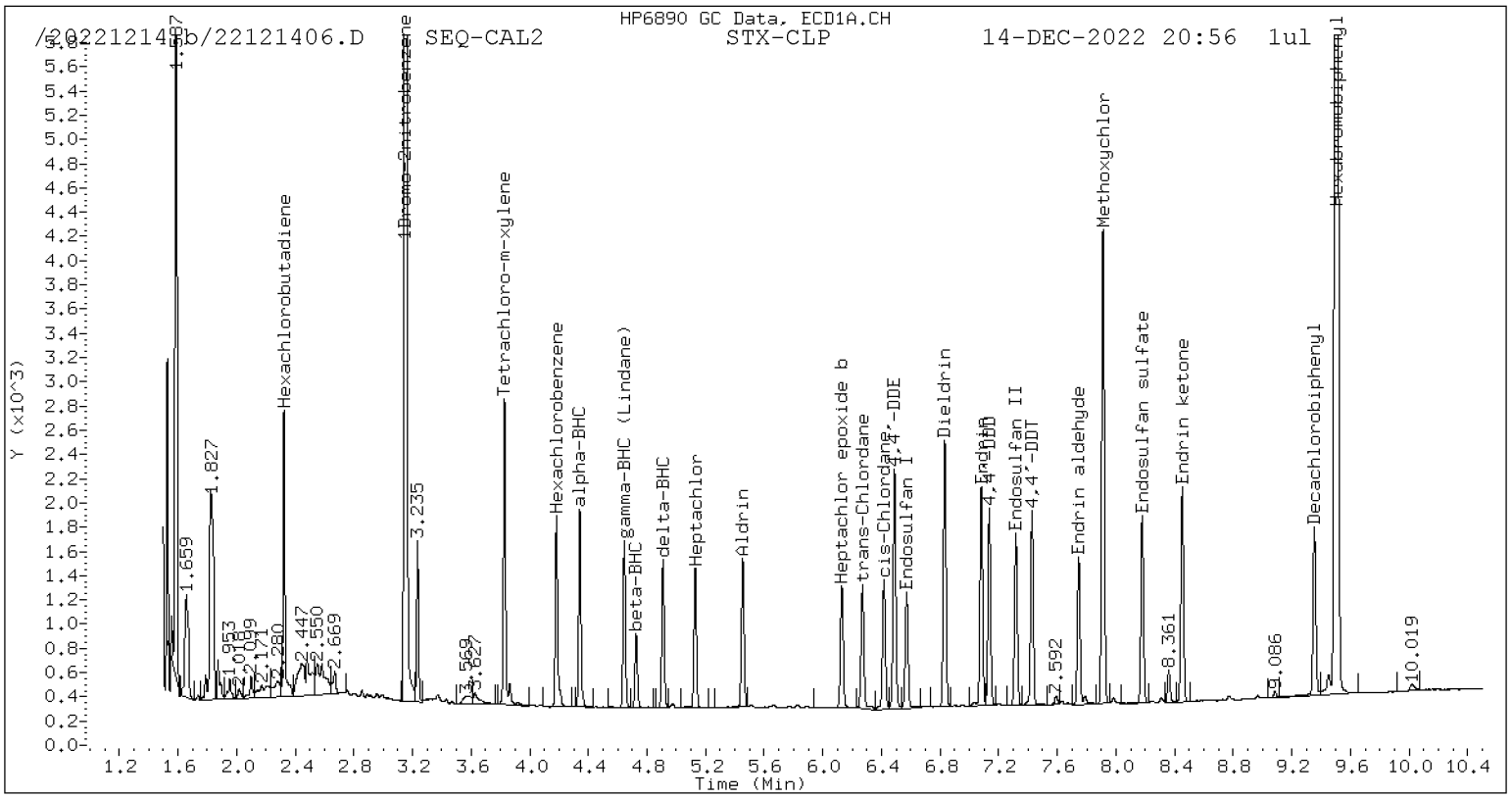
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	717600	1.0
Hexabromobiphenyl	641833	643445	0.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1061990	0.3
Hexabromobiphenyl	797125	807490	1.3

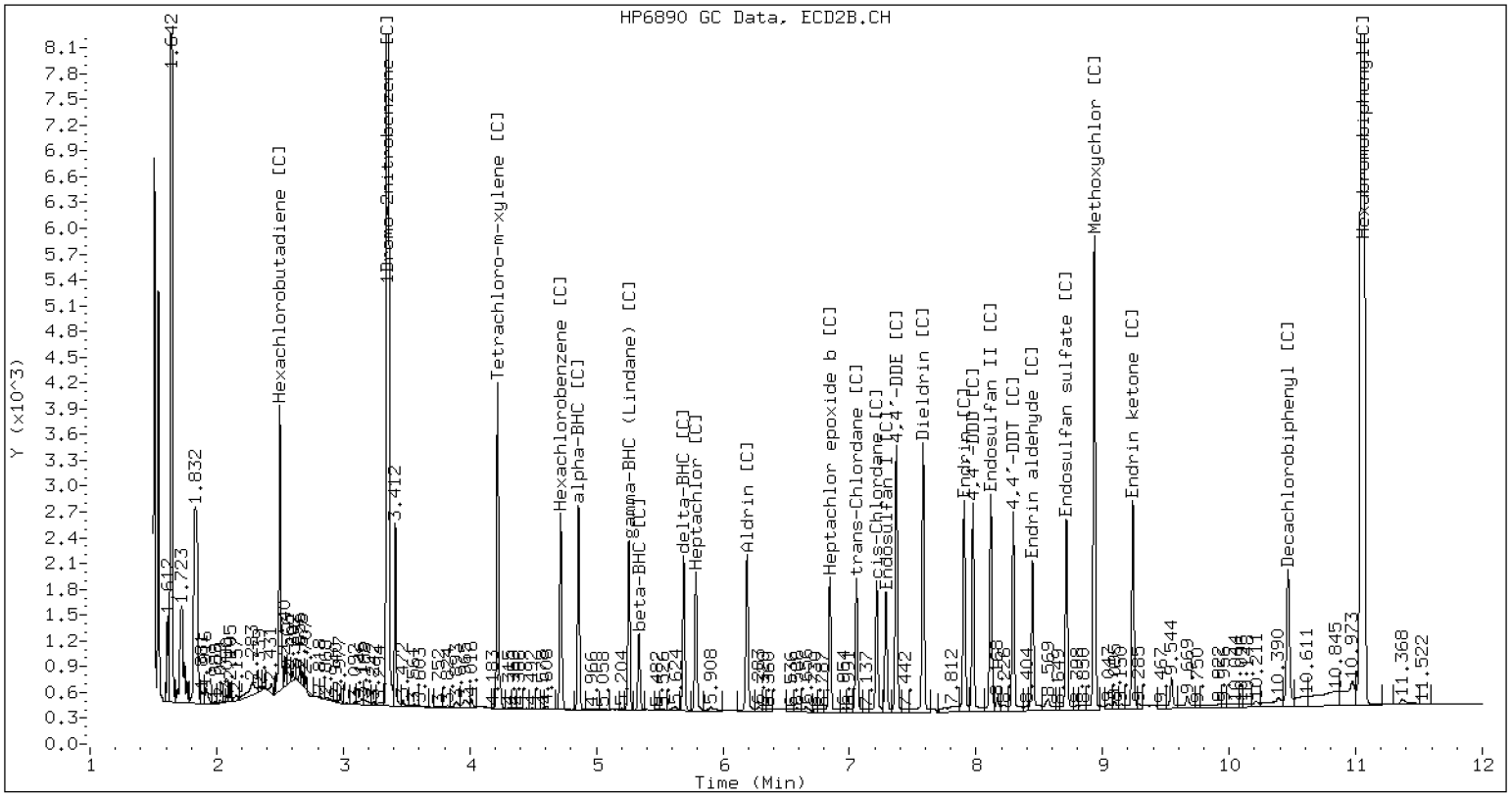
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121406.D SEQ-CAL2 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121406.D
Data file 2: /20221214.b/B20221214.b/22121406.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2
Client ID:
Injection Date: 14-DEC-2022 20:56
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121407.D
Data file 2: /20221214.b/B20221214.b/22121407.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3
Client ID:
Injection Date: 14-DEC-2022 21:14
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.343	0.001	68202	4.860	-0.000	103195	5.06	4.95	2.2	alpha-BHC
4.727	0.000	26774	5.338	0.000	40159	5.16	5.06	1.8	beta-BHC
4.910	0.001	55344	5.691	0.000	85044	5.02	4.95	1.5	delta-BHC
4.646	0.001	59491	5.258	0.000	87747	5.09	4.96	2.6	gamma-BHC (Lindane)
5.130	0.000	53529	5.787	0.000	80295	5.15	5.01	2.7	Heptachlor
5.455	0.001	59061	6.191	0.000	92167	5.07	5.03	0.7	Aldrin
6.132	0.001	52071	6.845	-0.000	76415	5.15	5.05	2.1	Heptachlor epoxide b
6.573	0.001	48052	7.289	-0.000	67929	5.18	5.09	1.8	Endosulfan I
6.832	0.001	104217	7.583	-0.000	151301	10.46	10.26	1.9	Dieldrin
6.490	0.001	97042	7.371	0.000	139172	10.49	10.29	1.9	4,4'-DDE
7.082	0.001	87185	7.906	-0.001	115830	10.66	10.37	2.8	Endrin
7.318	0.001	77341	8.117	0.000	118175	10.50	10.32	1.8	Endosulfan II
7.136	0.001	77451	7.976	0.000	110178	10.51	10.14	3.6	4,4'-DDD
8.180	0.001	73440	8.715	0.000	102417	10.50	10.18	3.1	Endosulfan sulfate
7.428	0.001	77522	8.294	-0.001	105882	10.41	10.09	3.1	4,4'-DDT
7.913	0.001	178164	8.935	-0.001	239047	53.98	51.49	4.7	Methoxychlor
8.454	0.000	84510	9.239	-0.000	110024	10.55	10.13	4.1	Endrin ketone
7.746	0.001	61122	8.448	-0.000	82817	10.40	10.25	1.5	Endrin aldehyde
6.271	0.001	52622	7.056	-0.000	76513	5.13	5.07	1.1	trans-Chlordane
6.417	0.001	53515	7.216	0.000	75023	5.20	5.08	2.3	cis-Chlordane
2.324	-0.000	75632	2.500	-0.000	107268	5.35	5.41	1.1	Hexachlorobutadiene
4.183	0.001	66090	4.718	-0.000	98926	5.28	5.21	1.3	Hexachlorobenzene
3.828	0.000	101081	4.220	-0.000	153451	10.61	10.47	1.3	Tetrachloro-m-xylene
9.355	-0.000	67797	10.466	-0.000	92260	10.72	10.62	0.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

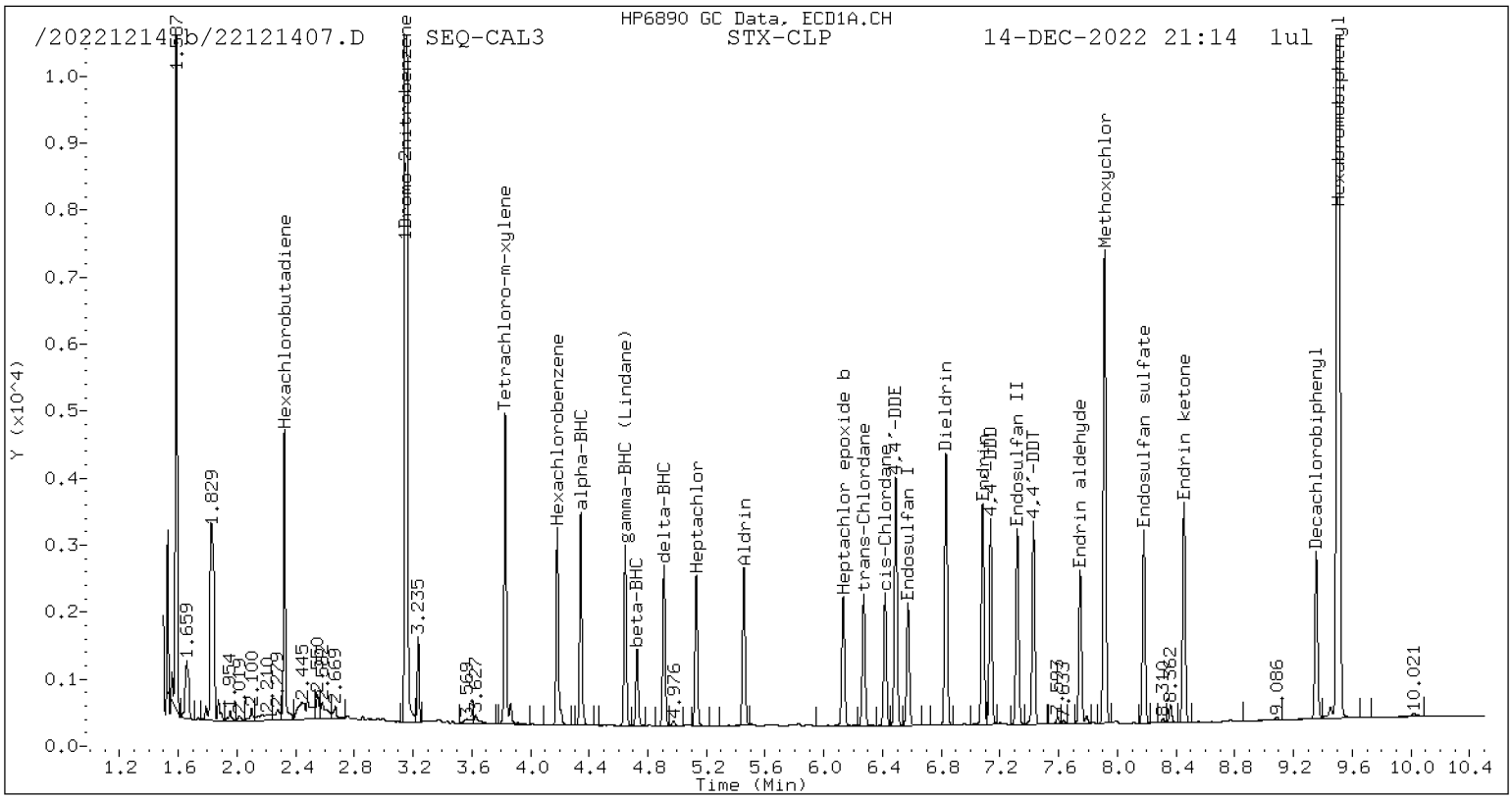
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	700354	-1.4
Hexabromobiphenyl	641833	624108	-2.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1040903	-1.7
Hexabromobiphenyl	797125	785894	-1.4

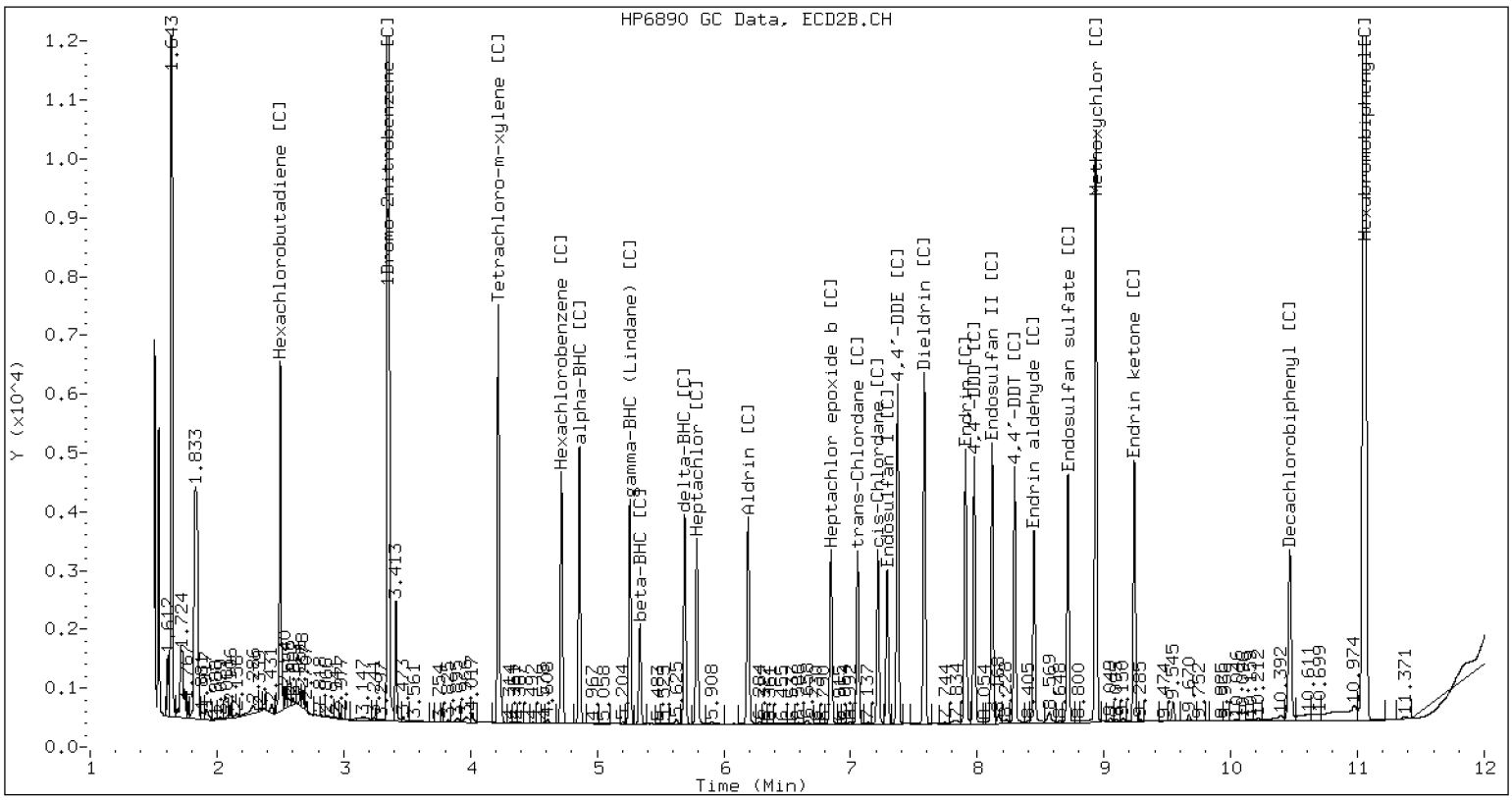
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121407.D SEQ-CAL3 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121407.D
Data file 2: /20221214.b/B20221214.b/22121407.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3
Client ID:
Injection Date: 14-DEC-2022 21:14
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121408.D
Data file 2: /20221214.b/B20221214.b/22121408.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4
Client ID:
Injection Date: 14-DEC-2022 21:31
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.343	0.000	139784	4.860	-0.000	216159	10.22	10.19	0.3	alpha-BHC
4.726	0.000	53742	5.337	0.000	81857	10.20	10.15	0.6	beta-BHC
4.910	0.001	113586	5.691	0.000	177281	10.16	10.14	0.2	delta-BHC
4.646	0.000	121488	5.258	0.000	182844	10.24	10.15	0.9	gamma-BHC (Lindane)
5.130	0.000	108260	5.787	-0.000	166558	10.26	10.21	0.5	Heptachlor
5.454	0.000	124839	6.191	0.000	189618	10.55	10.18	3.6	Aldrin
6.131	0.001	107301	6.846	0.001	155424	10.46	10.09	3.6	Heptachlor epoxide b
6.573	0.000	97151	7.289	0.000	137043	10.32	10.10	2.2	Endosulfan I
6.832	0.001	210564	7.583	0.000	301602	20.82	20.11	3.5	Dieldrin
6.490	0.001	195139	7.371	0.000	281756	20.79	20.49	1.5	4,4'-DDE
7.082	0.001	173216	7.907	-0.000	231062	20.59	20.39	1.0	Endrin
7.318	0.001	161303	8.117	0.001	236844	21.29	20.39	4.4	Endosulfan II
7.136	0.001	157301	7.977	0.001	222755	20.75	20.21	2.7	4,4'-DDD
8.180	0.000	146955	8.715	0.000	205334	20.43	20.13	1.5	Endosulfan sulfate
7.428	0.001	156744	8.295	-0.000	212755	20.46	19.99	2.3	4,4'-DDT
7.912	0.001	344324	8.936	-0.001	473459	101.43	100.55	0.9	Methoxychlor
8.453	-0.000	167384	9.240	0.000	222080	20.31	20.15	0.8	Endrin ketone
7.746	0.000	123653	8.448	0.000	164391	20.47	20.06	2.0	Endrin aldehyde
6.271	0.001	106805	7.056	0.000	154174	10.25	10.04	2.1	trans-Chlordane
6.418	0.001	106651	7.216	0.001	150231	10.21	10.00	2.1	cis-Chlordane
2.323	-0.000	142895	2.500	-0.001	197539	9.97	9.80	1.7	Hexachlorobutadiene
4.183	0.000	130020	4.718	0.000	197396	10.24	10.22	0.1	Hexachlorobenzene
3.828	0.000	199446	4.220	-0.000	308345	20.64	20.69	0.2	Tetrachloro-m-xylene
9.355	0.000	130210	10.466	-0.000	170633	20.02	19.37	3.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

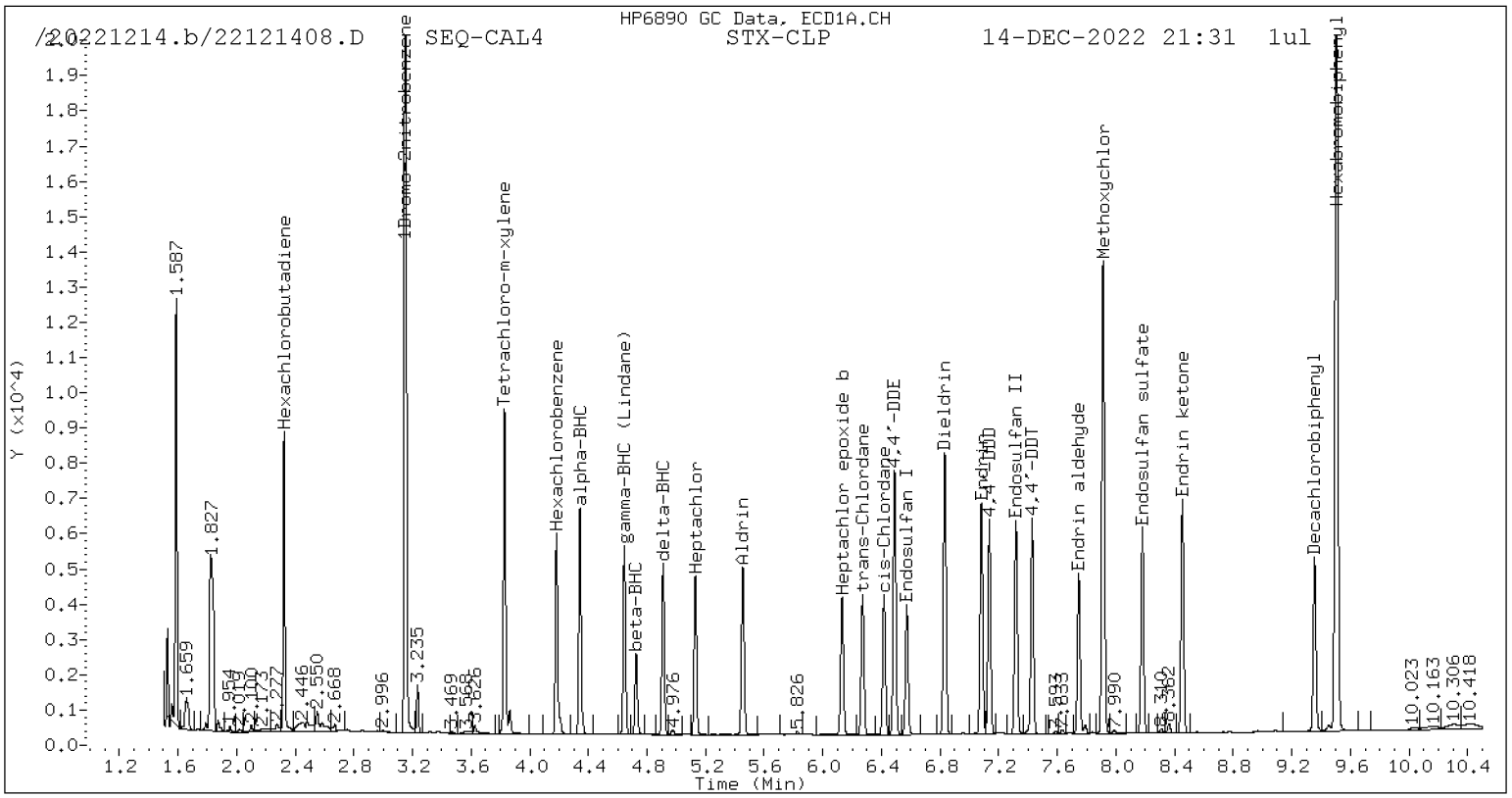
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	710650	0.0
Hexabromobiphenyl	641833	641833	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1058848	0.0
Hexabromobiphenyl	797125	797125	0.0

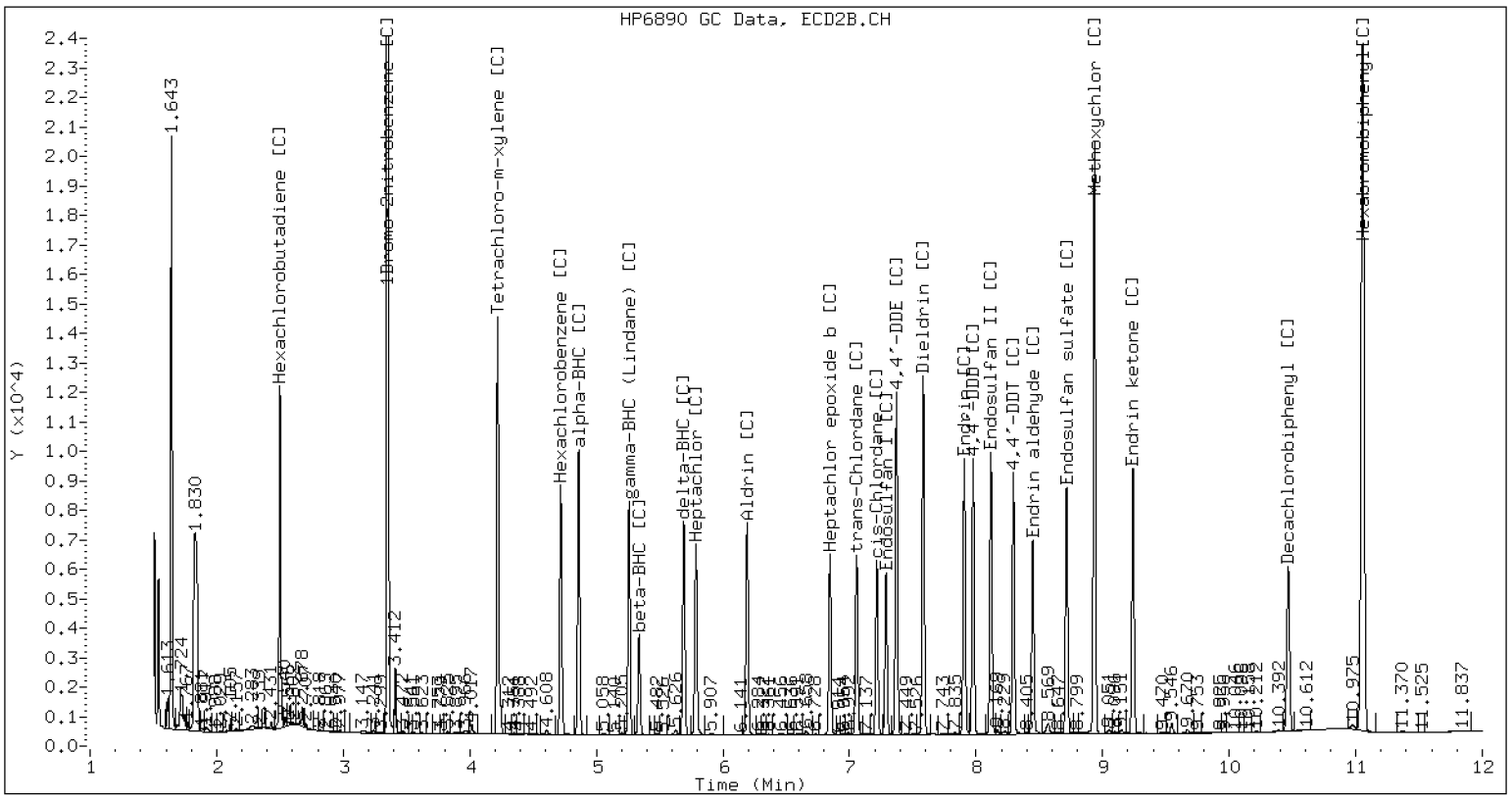
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121408.D SEQ-CAL4 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121408.D
Data file 2: /20221214.b/B20221214.b/22121408.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4
Client ID:
Injection Date: 14-DEC-2022 21:31
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121409.D
Data file 2: /20221214.b/B20221214.b/22121409.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5
Client ID:
Injection Date: 14-DEC-2022 21:49
Report Date: 12/16/2022 15:30
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	263355	4.860	-0.001	412780	20.34	20.46	0.6	alpha-BHC
4.726	0.000	99355	5.337	-0.000	154138	19.93	20.10	0.8	beta-BHC
4.909	0.000	216224	5.690	-0.000	334261	20.44	20.12	1.6	delta-BHC
4.645	0.000	228274	5.258	-0.000	350450	20.34	20.47	0.7	gamma-BHC (Lindane)
5.130	0.000	203067	5.787	-0.000	320123	20.33	20.64	1.5	Heptachlor
5.454	0.000	230734	6.191	-0.000	359912	20.62	20.33	1.4	Aldrin
6.130	0.000	198033	6.845	-0.000	295580	20.41	20.19	1.1	Heptachlor epoxide b
6.572	0.000	180905	7.289	-0.000	260351	20.31	20.18	0.7	Endosulfan I
6.831	0.000	388583	7.582	-0.000	571731	40.61	40.10	1.3	Dieldrin
6.489	0.000	362177	7.370	-0.000	531128	40.77	40.63	0.4	4,4'-DDE
7.081	0.000	323576	7.907	-0.000	442460	40.48	40.43	0.1	Endrin
7.317	0.000	282010	8.117	-0.000	446656	39.19	39.81	1.6	Endosulfan II
7.135	0.000	292251	7.976	-0.000	427990	40.58	40.20	0.9	4,4'-DDD
8.180	0.000	276113	8.715	0.000	393743	40.41	39.97	1.1	Endosulfan sulfate
7.427	0.000	296413	8.295	-0.000	413083	40.73	40.20	1.3	4,4'-DDT
7.912	0.000	628619	8.935	-0.001	900958	194.94	198.14	1.6	Methoxychlor
8.453	0.000	311305	9.239	-0.000	423698	39.77	39.82	0.1	Endrin ketone
7.746	0.000	230881	8.448	0.000	312907	40.23	39.54	1.7	Endrin aldehyde
6.271	0.000	200151	7.056	-0.000	294106	20.31	20.15	0.8	trans-Chlordane
6.417	0.000	197892	7.216	-0.000	285904	20.02	20.02	0.0	cis-Chlordane
2.324	0.000	260716	2.500	-0.000	346254	19.22	18.08	6.2	Hexachlorobutadiene
4.182	0.000	237746	4.718	-0.000	364913	19.78	19.88	0.5	Hexachlorobenzene
3.828	0.000	357836	4.220	-0.000	567647	39.13	40.07	2.4	Tetrachloro-m-xylene
9.355	0.000	239428	10.466	-0.001	327134	38.76	38.45	0.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

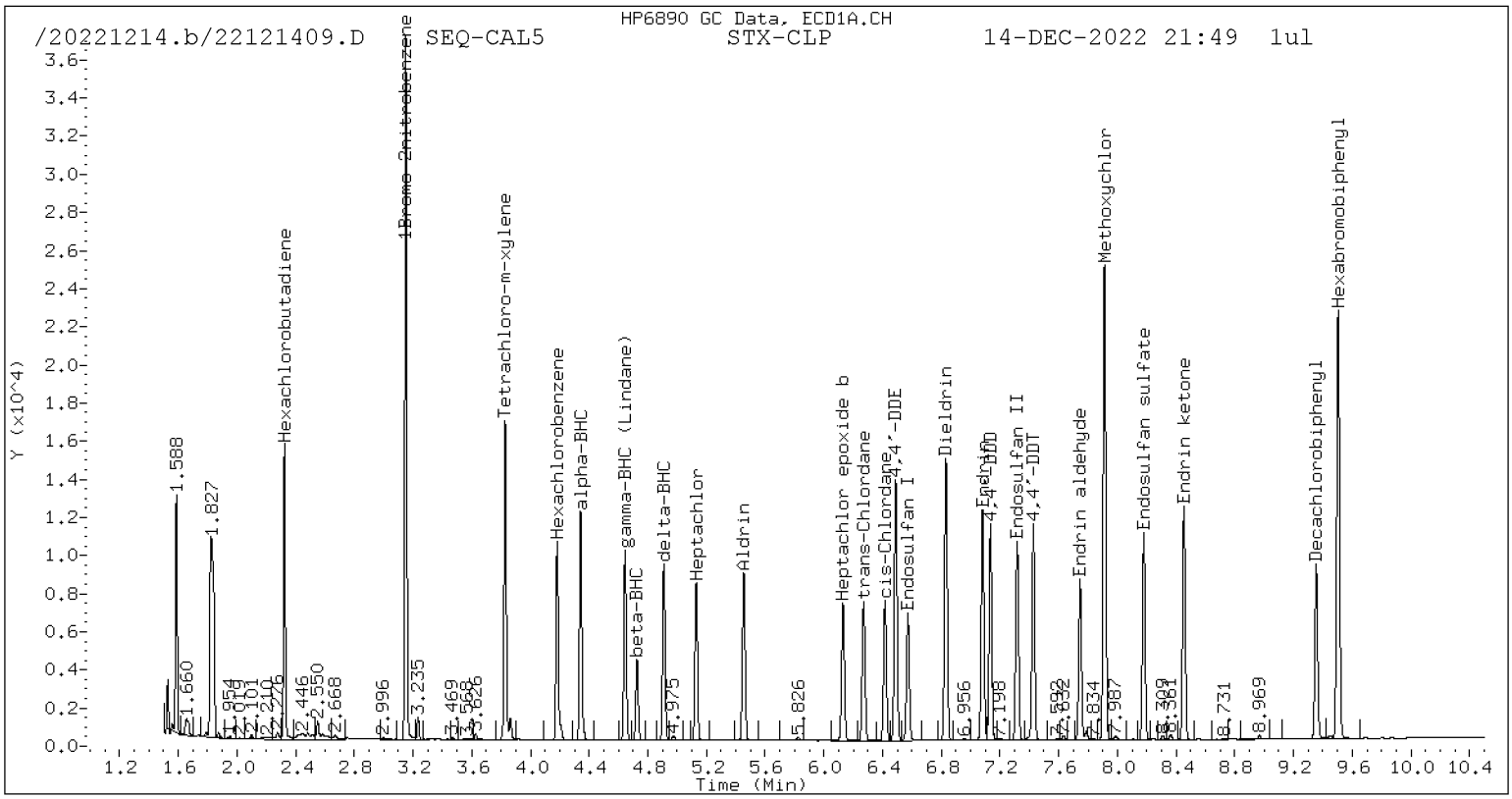
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	672426	0.0
Hexabromobiphenyl	609723	609723	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1006482	0.0
Hexabromobiphenyl	769764	769764	0.0

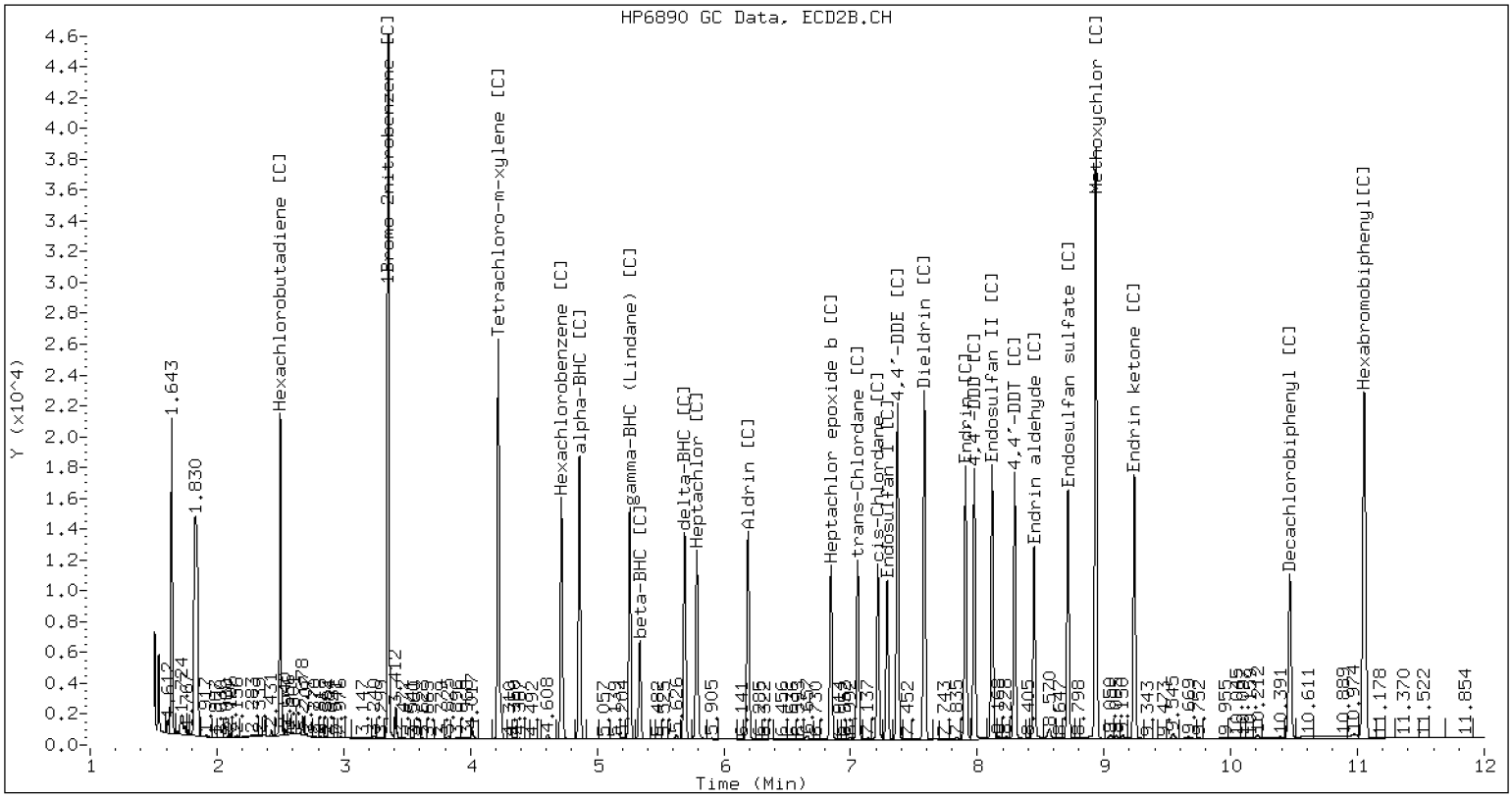
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121409.D SEQ-CAL5 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121409.D
Data file 2: /20221214.b/B20221214.b/22121409.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5
Client ID:
Injection Date: 14-DEC-2022 21:49
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121410.D
Data file 2: /20221214.b/B20221214.b/22121410.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6
Client ID:
Injection Date: 14-DEC-2022 22:07
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	535902	4.860	-0.000	849533	39.69	40.30	1.5	alpha-BHC
4.726	0.000	198976	5.337	-0.000	311218	38.28	38.84	1.4	beta-BHC
4.910	0.000	440370	5.691	0.000	700464	39.91	40.34	1.1	delta-BHC
4.646	0.000	461905	5.258	0.000	718675	39.46	40.18	1.8	gamma-BHC (Lindane)
5.130	0.000	401672	5.787	0.000	639345	38.56	39.46	2.3	Heptachlor
5.454	0.000	458396	6.190	-0.000	720942	39.27	38.97	0.8	Aldrin
6.130	0.000	387273	6.846	0.000	586062	38.26	38.31	0.1	Heptachlor epoxide b
6.572	-0.000	354629	7.288	-0.001	519836	38.18	38.55	1.0	Endosulfan I
6.832	0.000	755708	7.582	-0.000	1126850	75.73	75.64	0.1	Dieldrin
6.489	0.000	698620	7.371	-0.000	1040947	75.40	76.19	1.0	4,4'-DDE
7.082	0.000	615481	7.907	-0.000	858461	74.19	74.98	1.1	Endrin
7.317	0.000	590923	8.117	-0.000	885035	79.12	75.41	4.8	Endosulfan II
7.136	0.000	565557	7.976	-0.000	842536	75.67	75.65	0.0	4,4'-DDD
8.179	-0.001	540557	8.715	0.000	782860	76.22	75.96	0.3	Endosulfan sulfate
7.427	0.000	577337	8.295	-0.000	820861	76.44	76.36	0.1	4,4'-DDT
7.912	-0.000	1204040	8.935	-0.001	1785262	359.75	375.30	4.2	Methoxychlor
8.453	-0.001	610387	9.239	-0.000	843646	75.13	75.79	0.9	Endrin ketone
7.746	-0.000	452325	8.448	0.000	622287	75.93	75.17	1.0	Endrin aldehyde
6.271	0.000	395598	7.056	-0.000	591899	38.48	38.80	0.8	trans-Chlordane
6.417	0.001	389712	7.215	-0.000	573103	37.80	38.40	1.6	cis-Chlordane
2.324	0.000	511265	2.500	-0.000	705320	36.14	35.24	2.5	Hexachlorobutadiene
4.183	0.001	472841	4.718	0.000	728846	37.72	37.99	0.7	Hexachlorobenzene
3.828	-0.000	714634	4.221	0.000	1124106	74.93	75.93	1.3	Tetrachloro-m-xylene
9.355	-0.000	468280	10.466	-0.001	645336	73.03	72.51	0.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

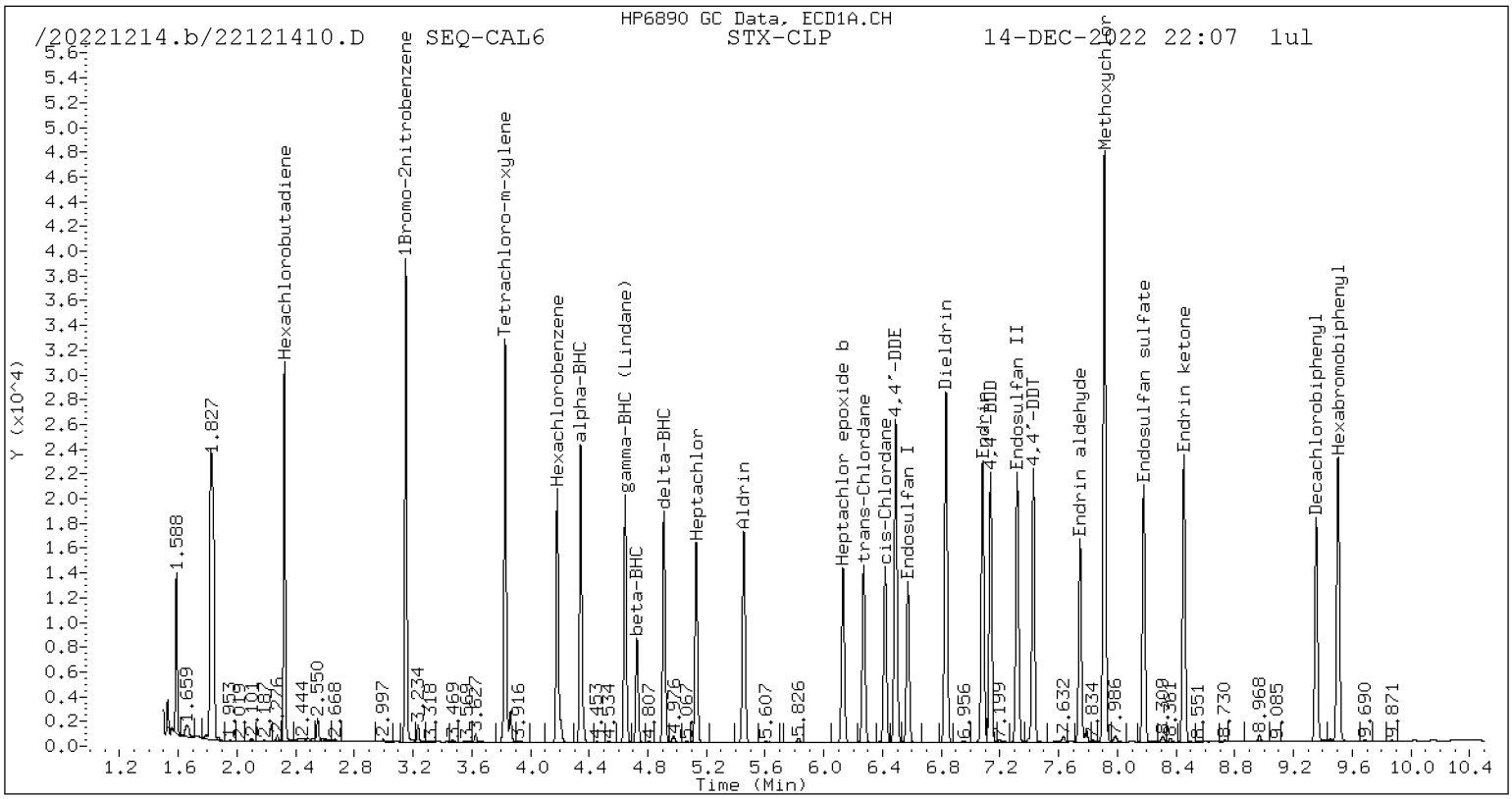
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	701342	-1.3
Hexabromobiphenyl	641833	632821	-1.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1051766	-0.7
Hexabromobiphenyl	797125	805268	1.0

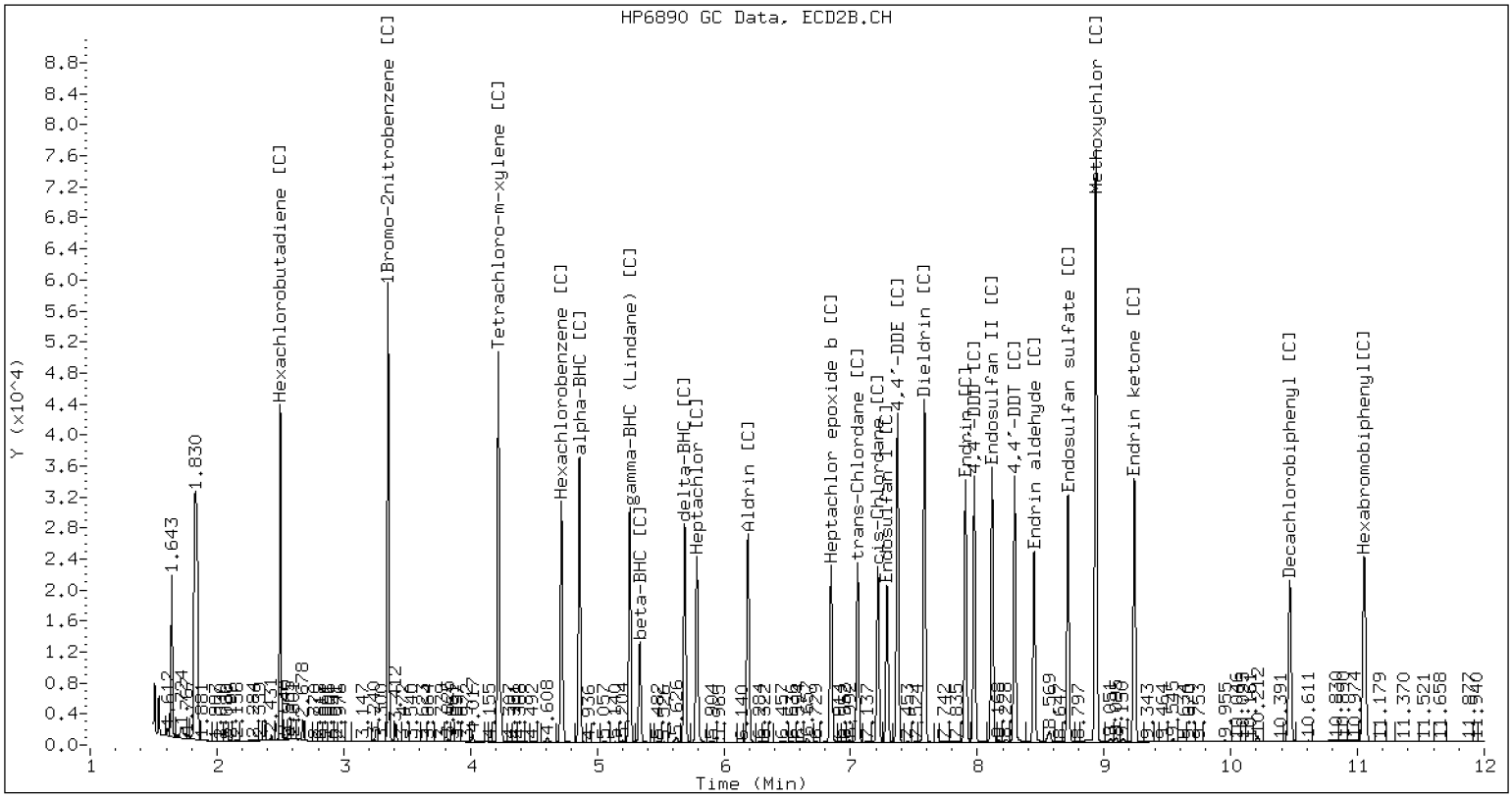
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121410.D SEQ-CAL6 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121410.D
Data file 2: /20221214.b/B20221214.b/22121410.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6
Client ID:
Injection Date: 14-DEC-2022 22:07
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121411.D
Data file 2: /20221214.b/B20221214.b/22121411.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7
Client ID:
Injection Date: 14-DEC-2022 22:25
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	1012605	4.861	0.000	1623058	75.30	77.94	3.4	alpha-BHC
4.726	0.000	371916	5.337	0.000	586390	71.84	74.06	3.1	beta-BHC
4.910	0.000	837966	5.691	0.000	1343533	76.25	78.32	2.7	delta-BHC
4.645	-0.000	870454	5.258	0.000	1370551	74.66	77.55	3.8	gamma-BHC (Lindane)
5.130	0.000	743802	5.787	0.000	1188915	71.70	74.26	3.5	Heptachlor
5.454	0.000	841598	6.191	0.000	1331430	72.39	72.84	0.6	Aldrin
6.130	-0.000	709774	6.845	0.000	1087105	70.41	71.92	2.1	Heptachlor epoxide b
6.573	0.000	652702	7.289	0.000	969098	70.56	72.74	3.1	Endosulfan I
6.832	0.000	1390496	7.583	0.000	2118555	139.91	143.93	2.8	Dieldrin
6.490	0.001	1284777	7.371	0.000	1944530	139.23	144.06	3.4	4,4'-DDE
7.082	0.001	1132487	7.907	0.000	1618631	137.86	142.60	3.4	Endrin
7.317	0.000	1089554	8.117	0.000	1672946	147.33	143.79	2.4	Endosulfan II
7.135	0.000	1051958	7.976	0.000	1606815	142.14	145.53	2.4	4,4'-DDD
8.180	0.000	1013288	8.715	0.000	1496440	144.30	146.47	1.5	Endosulfan sulfate
7.428	0.001	1086138	8.295	0.000	1586078	145.23	148.84	2.5	4,4'-DDT
7.912	0.001	2325261	8.936	0.000	3541650	701.64	751.02	6.8	Methoxychlor
8.454	0.000	1146784	9.240	0.000	1623077	142.56	147.08	3.1	Endrin ketone
7.746	-0.000	846477	8.448	0.000	1178353	143.51	143.57	0.0	Endrin aldehyde
6.271	0.000	733514	7.056	0.000	1114685	71.64	73.95	3.2	trans-Chlordane
6.417	0.001	723886	7.216	0.000	1079255	70.50	73.19	3.7	cis-Chlordane
2.324	0.000	955982	2.501	0.000	1351745	67.86	68.35	0.7	Hexachlorobutadiene
4.182	0.000	879573	4.718	0.000	1355289	70.45	71.51	1.5	Hexachlorobenzene
3.828	0.000	1318381	4.220	0.000	2067539	138.79	141.35	1.8	Tetrachloro-m-xylene
9.356	0.000	878340	10.467	0.000	1231298	138.34	139.55	0.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

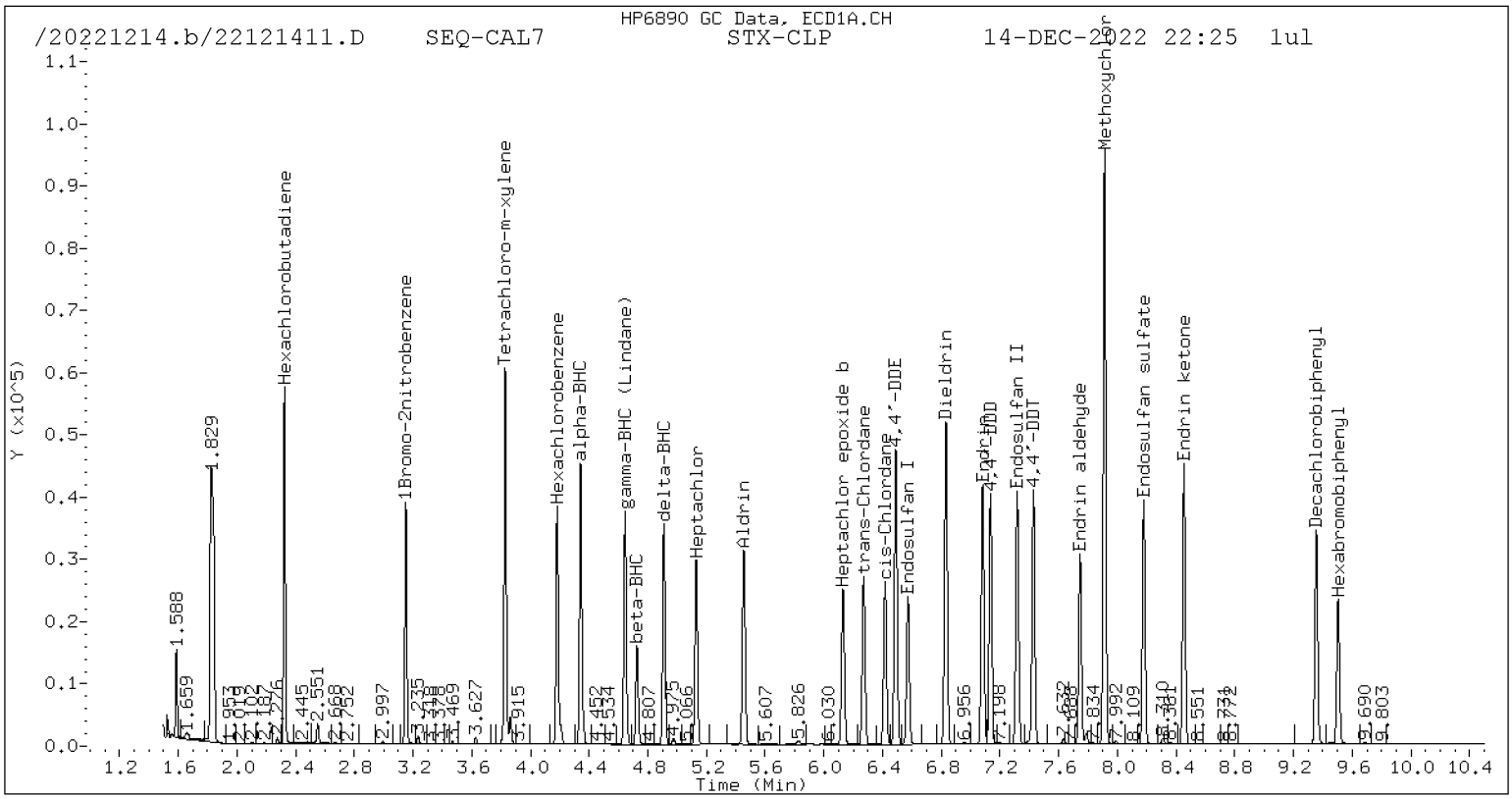
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	698499	-1.7
Hexabromobiphenyl	641833	626605	-2.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1039154	-1.9
Hexabromobiphenyl	797125	798313	0.1

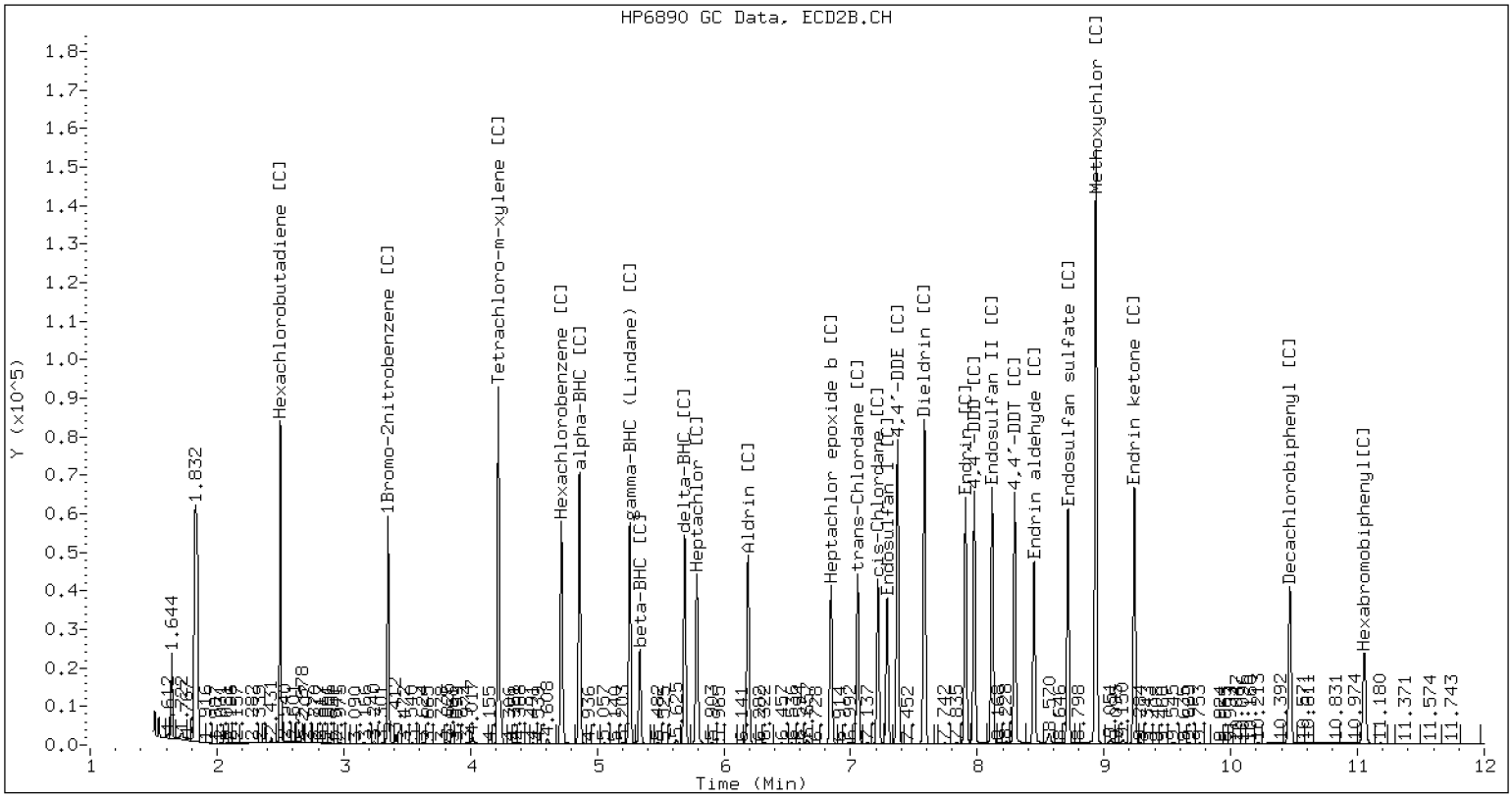
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121411.D SEQ-CAL7 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121411.D
Data file 2: /20221214.b/B20221214.b/22121411.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7
Client ID:
Injection Date: 14-DEC-2022 22:25
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121412.D
Data file 2: /20221214.b/B20221214.b/22121412.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8
Client ID:
Injection Date: 14-DEC-2022 22:43
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	22184	6.741	-0.000	34211	2.89	2.85	1.2	Oxychlordane
6.106	-0.000	18661	7.036	-0.000	30817	2.94	3.14	6.5	2,4-DDE
6.397	-0.000	30616	7.154	-0.001	41466	3.05	2.82	7.5	trans-Nonachlor
6.681	0.000	16263	7.591	0.000	26177	2.88	3.12	7.9	2,4-DDD
6.956	-0.001	17569	7.913	-0.000	24398	2.88	2.82	2.1	2,4-DDT
7.112	-0.000	29417	7.975	-0.000	37972	3.01	2.72	9.9	cis-Nonachlor
8.082	-0.000	18819	9.223	-0.000	24312	3.09	3.00	3.1	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

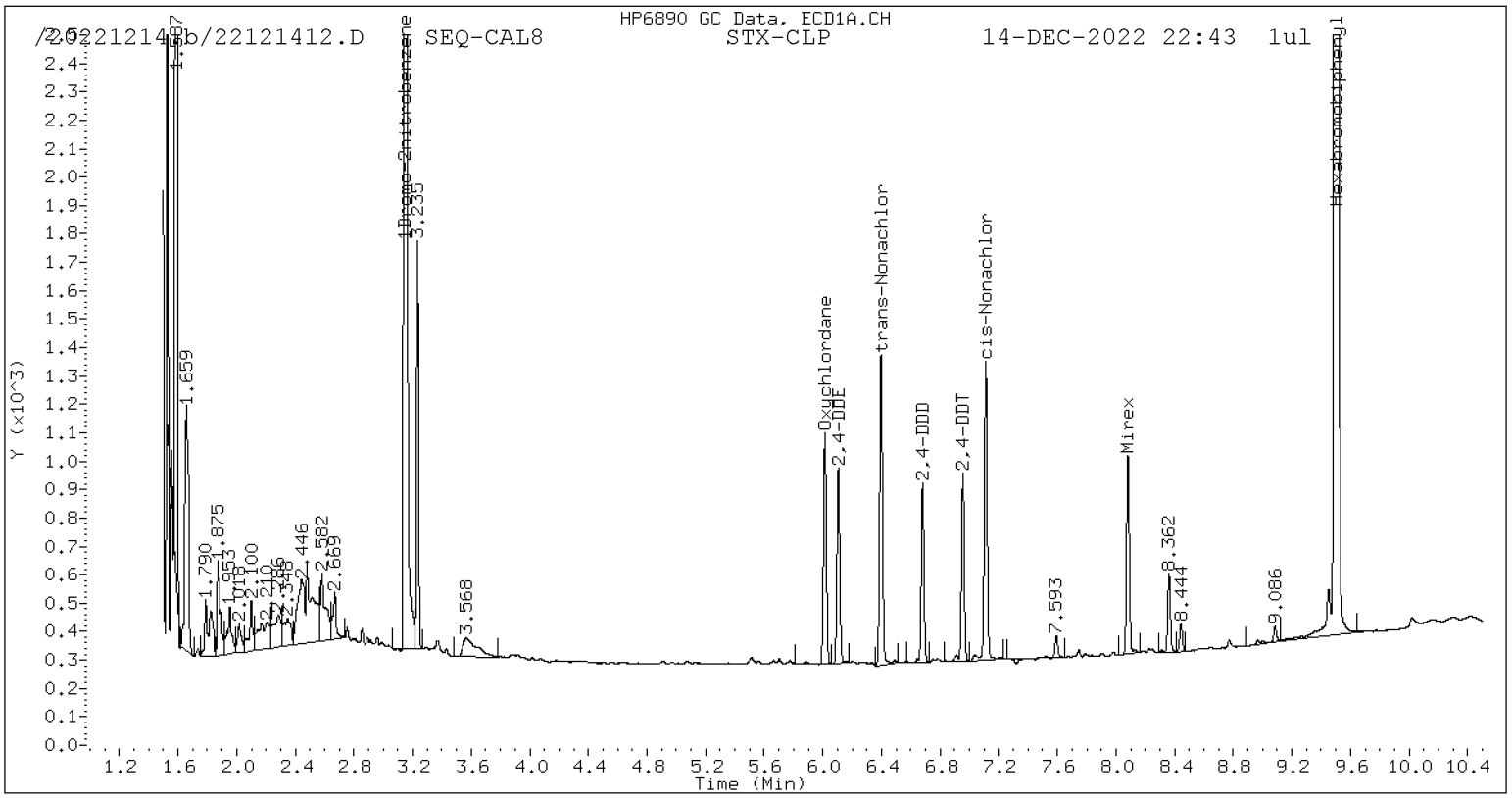
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	713898	0.5
Hexabromobiphenyl	641833	646441	0.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1076864	1.7
Hexabromobiphenyl	797125	820275	2.9

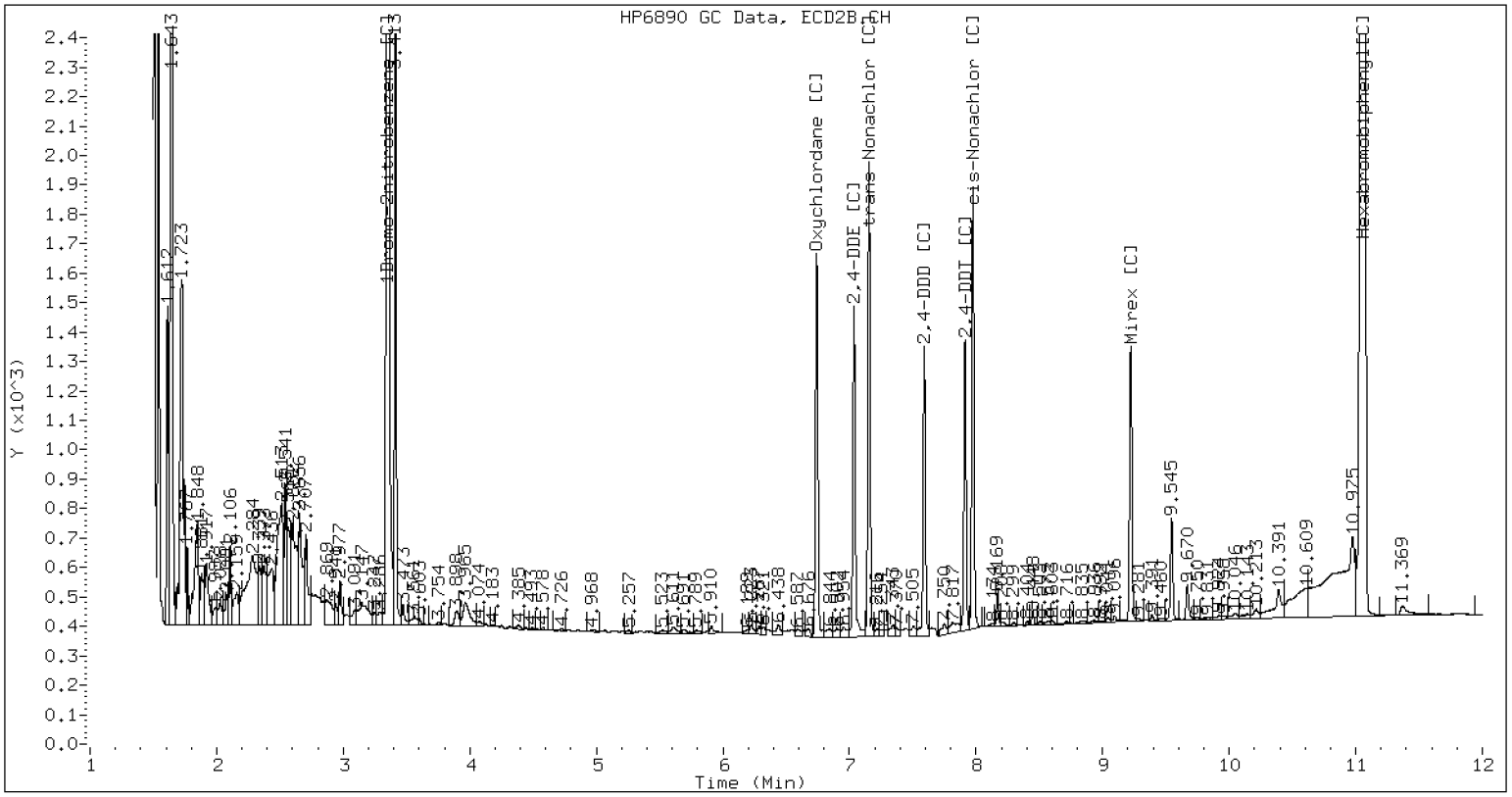
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121412.D SEQ-CAL8 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121412.D
Data file 2: /20221214.b/B20221214.b/22121412.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8
Client ID:
Injection Date: 14-DEC-2022 22:43
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121413.D
Data file 2: /20221214.b/B20221214.b/22121413.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9
Client ID:
Injection Date: 14-DEC-2022 23:01
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.015	0.000	39121	6.741	-0.000	61505	5.34	5.41	1.3	Oxychlordane
6.106	0.000	33487	7.036	-0.000	53206	5.54	5.72	3.1	2,4-DDE
6.398	0.000	51858	7.154	-0.001	72836	5.42	5.20	4.1	trans-Nonachlor
6.681	0.000	29307	7.590	-0.000	44506	5.45	5.55	1.9	2,4-DDD
6.957	-0.000	31530	7.914	0.000	45986	5.43	5.57	2.6	2,4-DDT
7.112	-0.000	50912	7.975	0.000	70898	5.46	5.32	2.6	cis-Nonachlor
8.082	-0.000	32004	9.223	-0.000	45650	5.52	5.89	6.6	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

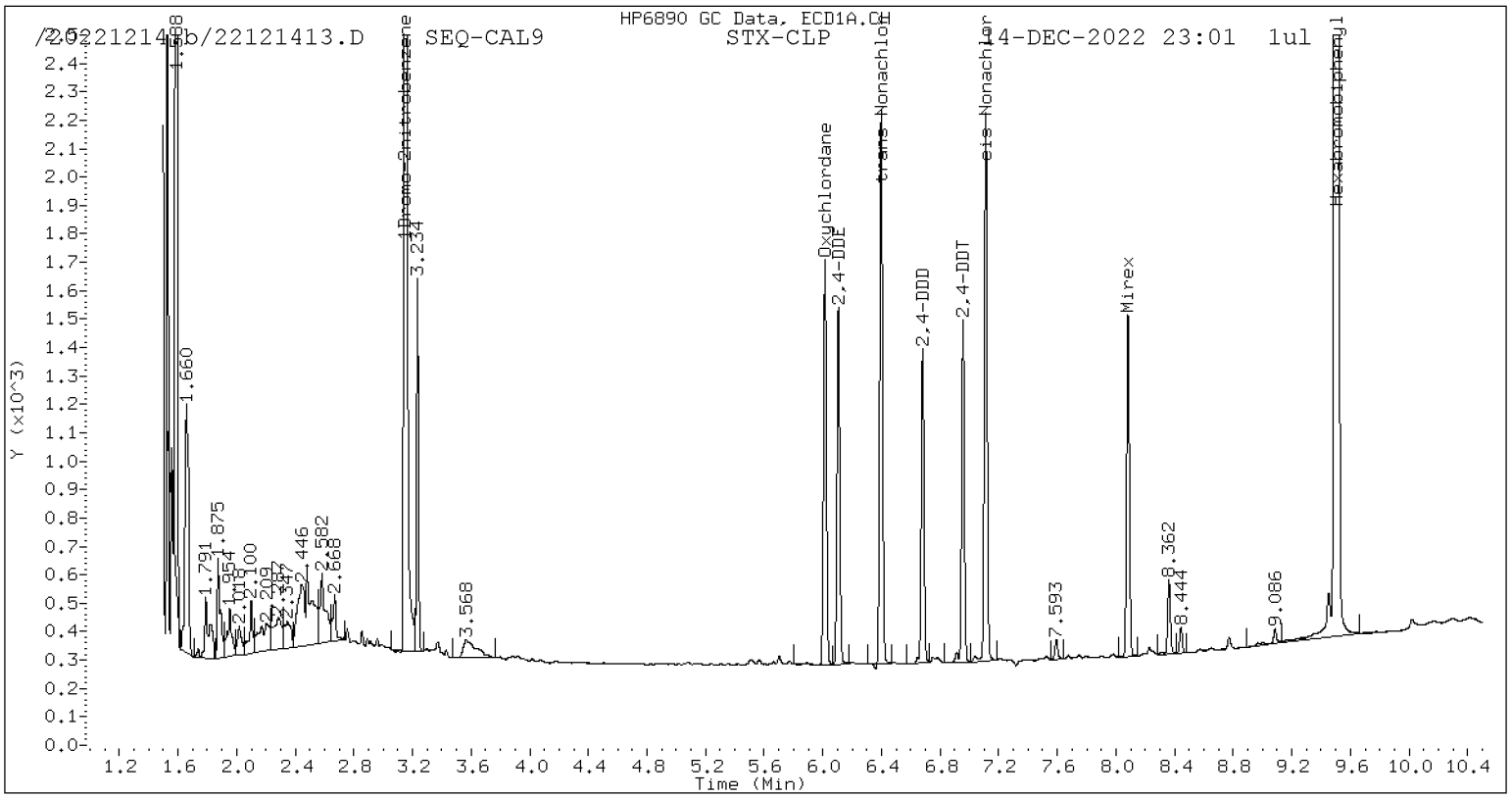
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	672507	-5.4
Hexabromobiphenyl	641833	615627	-4.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1020334	-3.6
Hexabromobiphenyl	797125	782734	-1.8

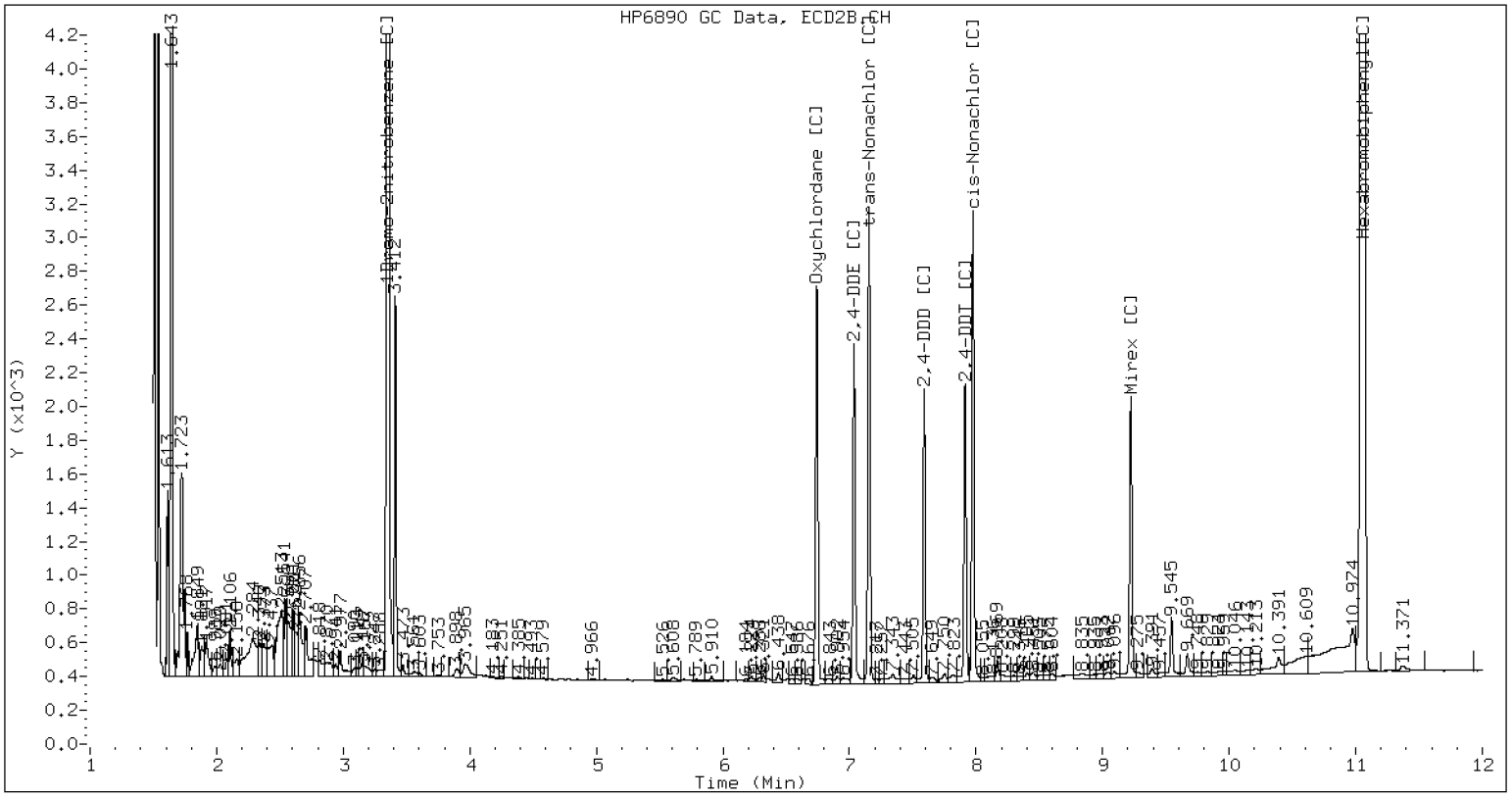
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121413.D SEQ-CAL9 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121413.D
Data file 2: /20221214.b/B20221214.b/22121413.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9
Client ID:
Injection Date: 14-DEC-2022 23:01
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121414.D
Data file 2: /20221214.b/B20221214.b/22121414.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALA
Client ID:
Injection Date: 14-DEC-2022 23:19
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	82473	6.741	-0.001	127500	10.63	10.63	0.0	Oxychlordane
6.106	-0.000	69109	7.035	-0.001	108440	10.79	11.04	2.3	2,4-DDE
6.398	0.000	108386	7.154	-0.001	157712	10.68	10.60	0.7	trans-Nonachlor
6.681	0.000	60517	7.590	-0.000	91420	10.62	10.74	1.2	2,4-DDD
6.956	-0.001	65300	7.913	0.000	91498	10.61	10.44	1.6	2,4-DDT
7.111	-0.001	104247	7.975	-0.000	146224	10.55	10.34	2.0	cis-Nonachlor
8.082	-0.000	65614	9.222	-0.000	84337	10.67	10.25	4.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

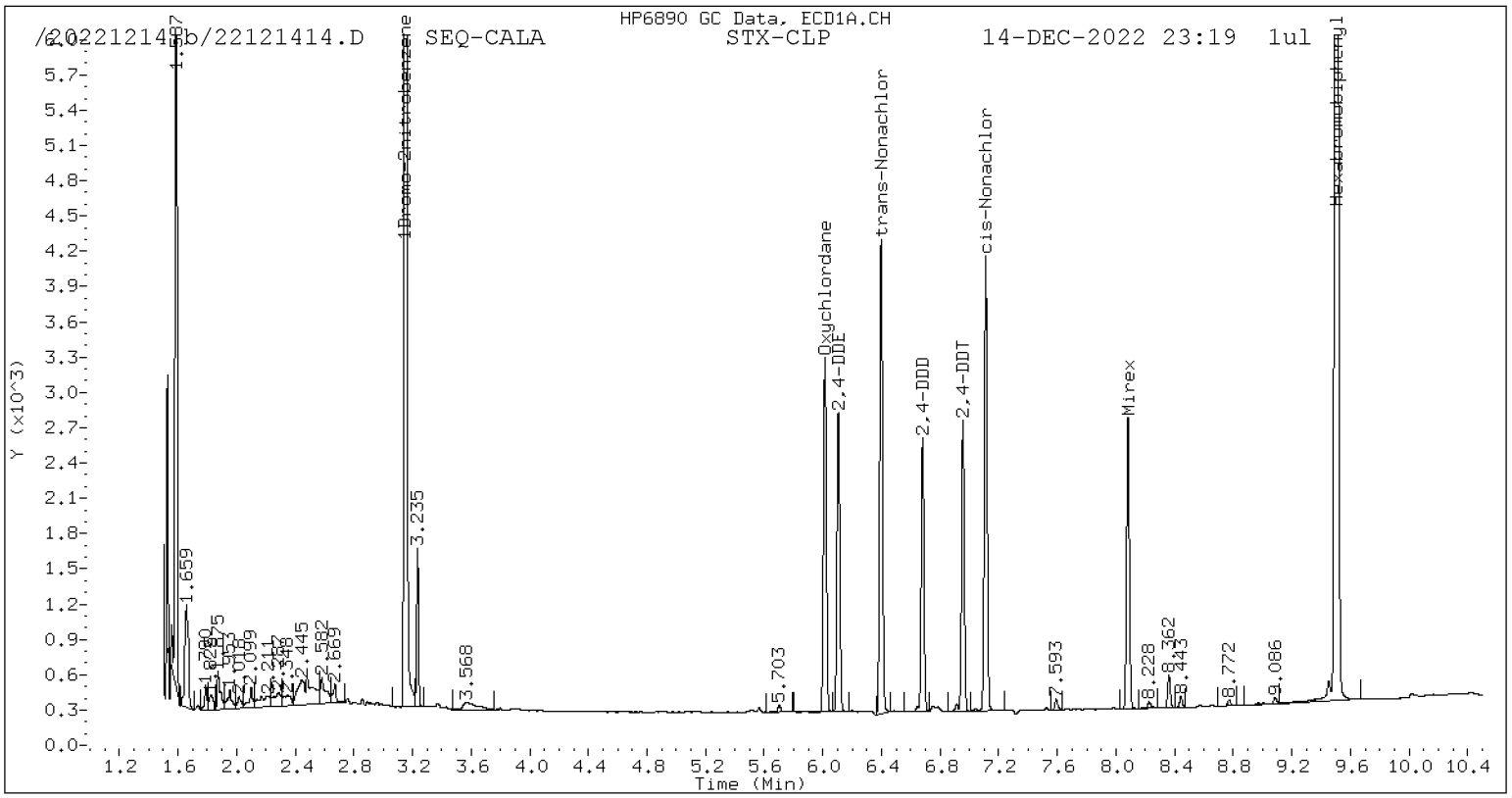
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	712122	0.2
Hexabromobiphenyl	641833	652595	1.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1077341	1.7
Hexabromobiphenyl	797125	831365	4.3

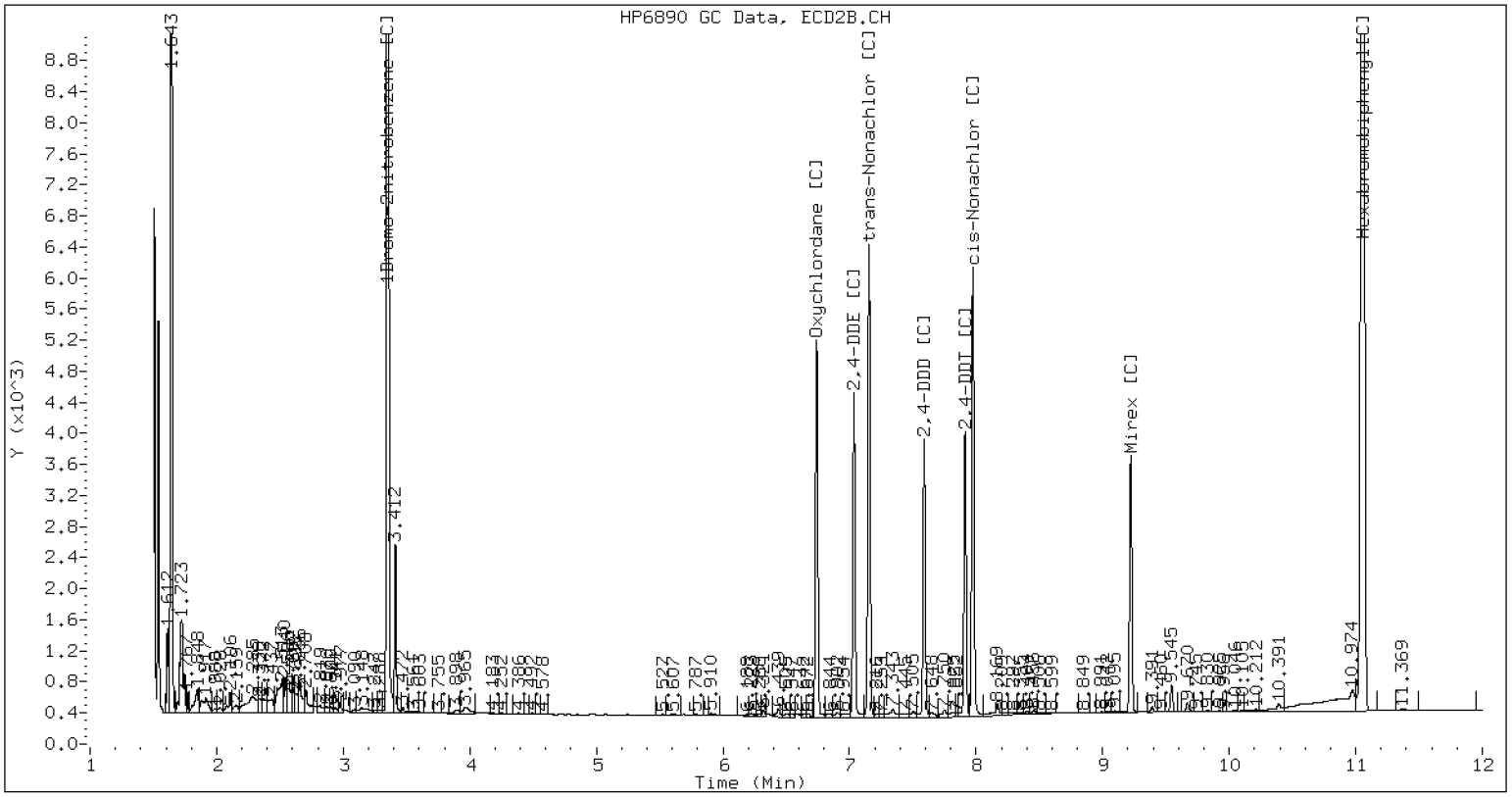
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121414.D SEQ-CALA CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121414.D
Data file 2: /20221214.b/B20221214.b/22121414.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALA
Client ID:
Injection Date: 14-DEC-2022 23:19
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121415.D
Data file 2: /20221214.b/B20221214.b/22121415.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALB
Client ID:
Injection Date: 14-DEC-2022 23:36
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.015	0.001	154379	6.741	-0.000	238017	20.80	20.28	2.5	Oxychlordane
6.106	-0.000	128483	7.036	-0.000	195807	20.97	20.37	2.9	2,4-DDE
6.398	0.000	200622	7.155	-0.000	289952	20.66	20.28	1.9	trans-Nonachlor
6.681	0.000	113972	7.591	0.000	165245	20.90	20.21	3.4	2,4-DDD
6.956	-0.001	122412	7.913	0.000	169814	20.78	20.17	3.0	2,4-DDT
7.112	-0.000	194165	7.975	-0.000	274910	20.54	20.23	1.5	cis-Nonachlor
8.082	-0.000	119271	9.223	0.000	158702	20.28	20.08	1.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

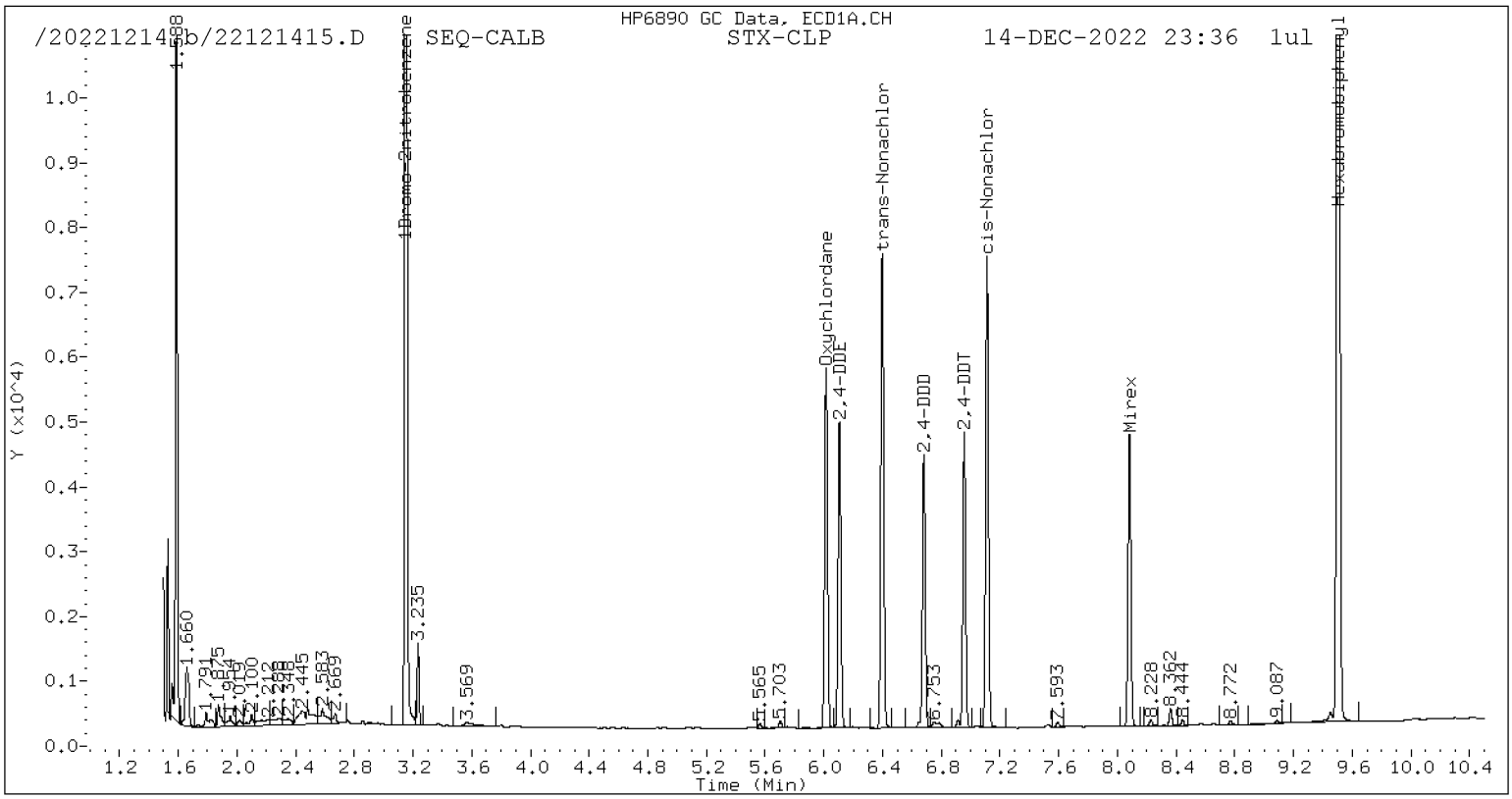
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	693450	-2.4
Hexabromobiphenyl	641833	624334	-2.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1053959	-0.5
Hexabromobiphenyl	797125	798882	0.2

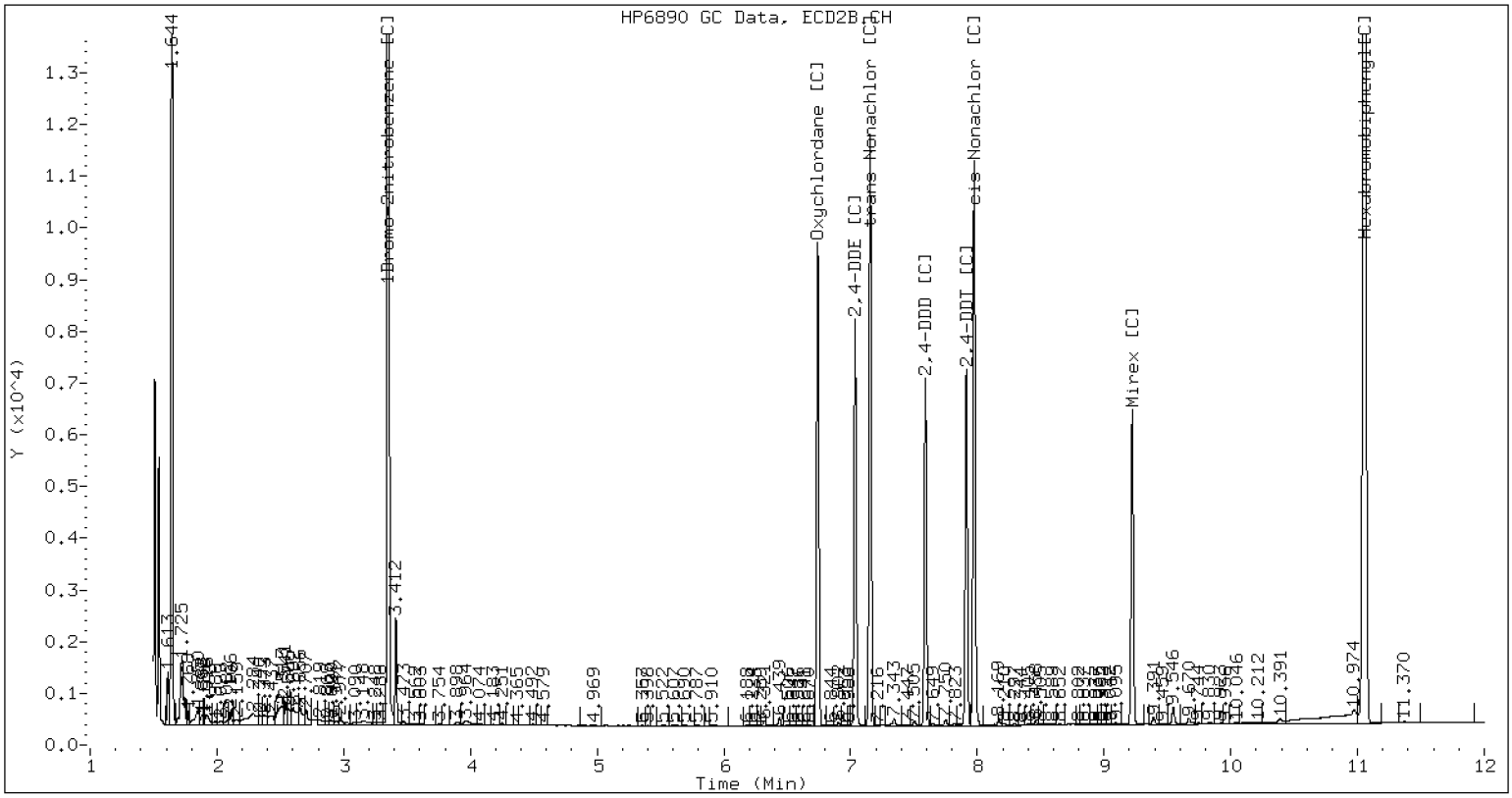
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121415.D SEQ-CALB CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121415.D
Data file 2: /20221214.b/B20221214.b/22121415.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALB
Client ID:
Injection Date: 14-DEC-2022 23:36
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121416.D
Data file 2: /20221214.b/B20221214.b/22121416.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALC
Client ID:
Injection Date: 14-DEC-2022 23:54
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	0.000	292499	6.741	-0.000	460731	40.08	40.26	0.4	Oxychlordane
6.106	0.000	242066	7.036	-0.000	372996	40.18	39.80	0.9	2,4-DDE
6.397	0.000	383329	7.154	-0.001	567971	40.16	40.45	0.7	trans-Nonachlor
6.681	0.000	216474	7.590	-0.000	320311	40.39	39.88	1.3	2,4-DDD
6.957	0.000	233738	7.913	-0.000	332906	40.36	40.25	0.3	2,4-DDT
7.112	0.000	373705	7.975	-0.000	538334	40.21	40.33	0.3	cis-Nonachlor
8.082	0.000	229604	9.222	-0.000	299228	39.71	38.54	3.0	Mirex
3.800	-0.028	1151	----			0.13	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

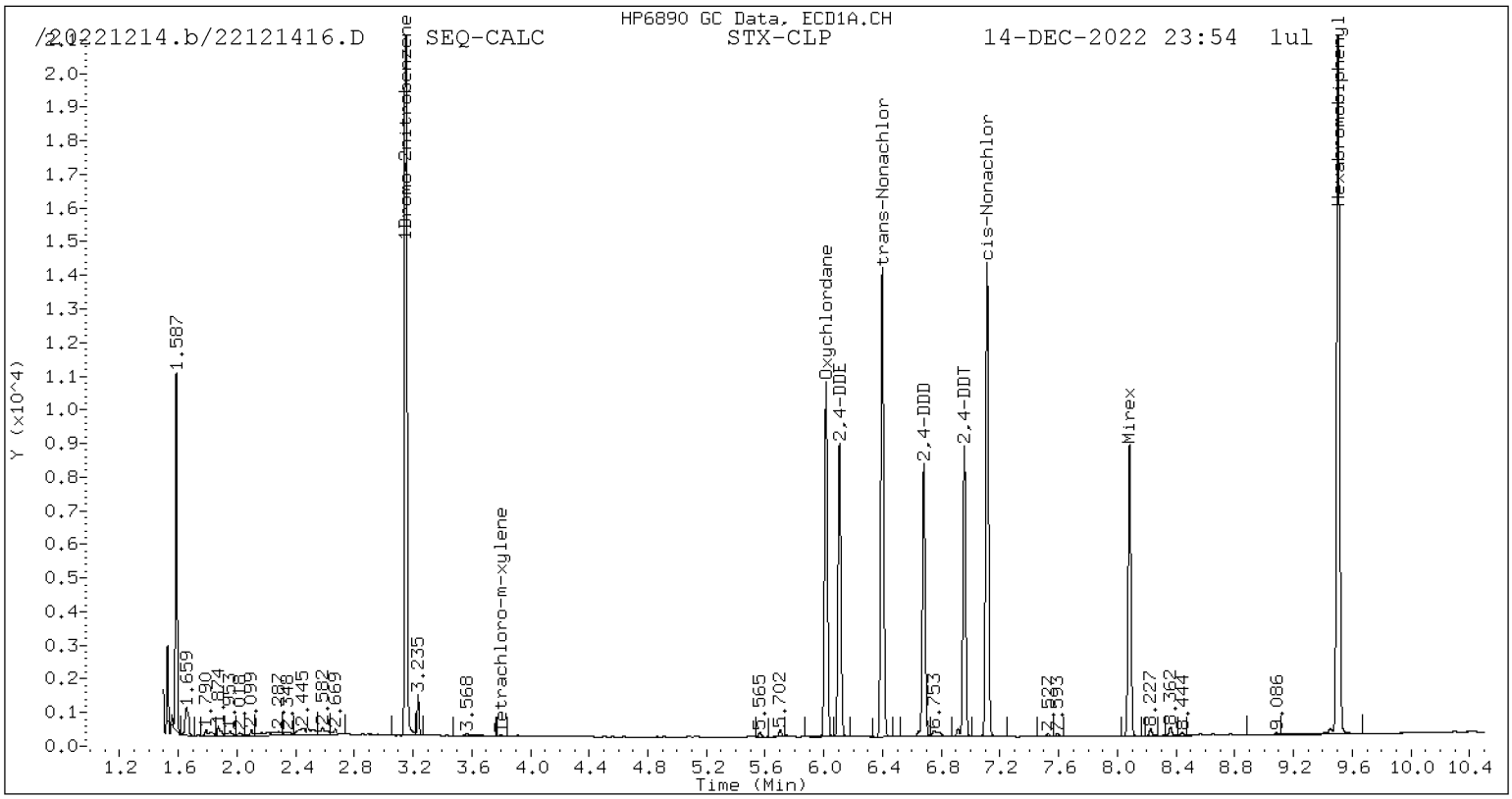
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	674573	-5.1
Hexabromobiphenyl	641833	613787	-4.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1027697	-2.9
Hexabromobiphenyl	797125	784673	-1.6

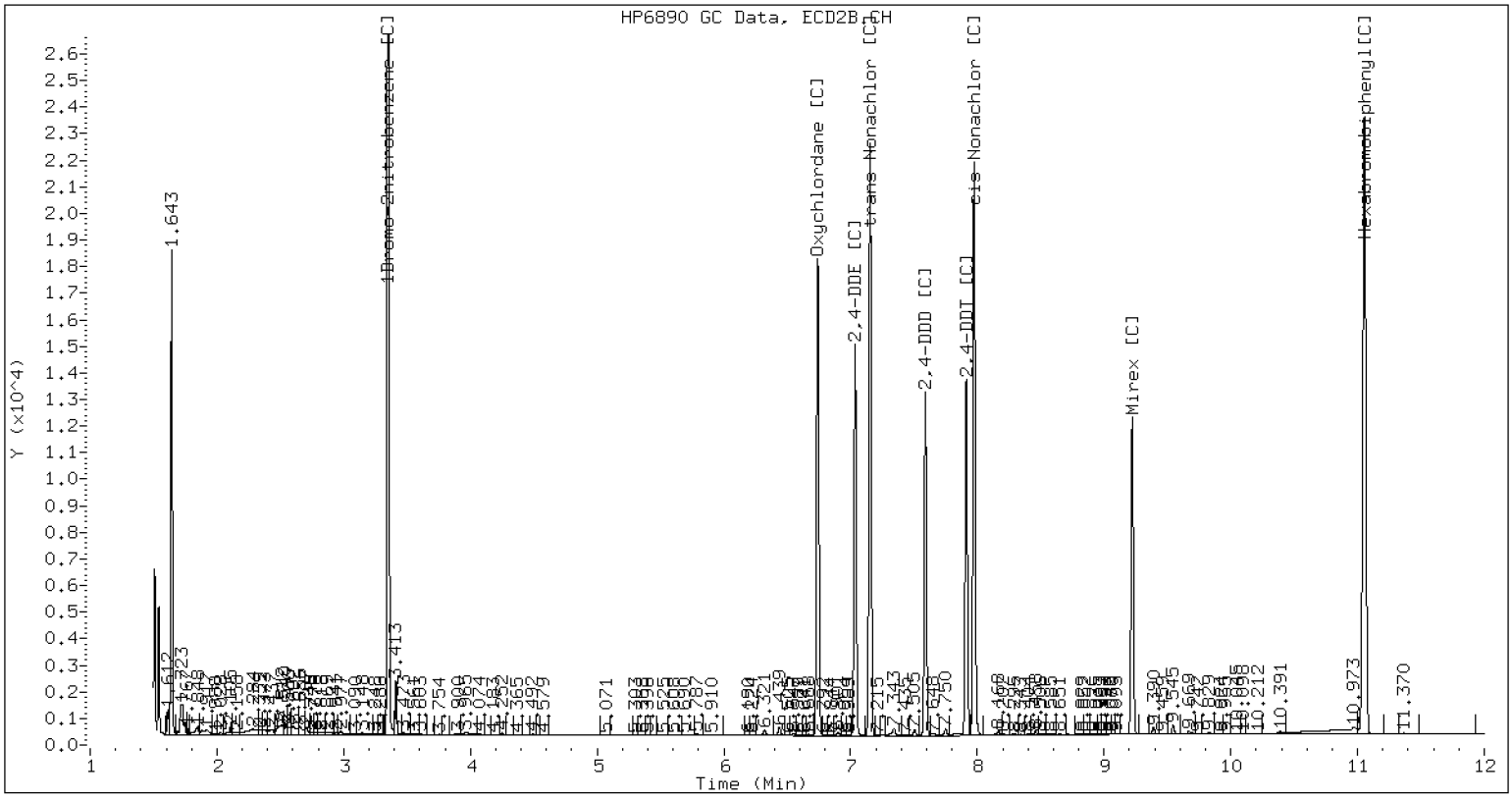
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121416.D SEQ-CALC CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121416.D
Data file 2: /20221214.b/B20221214.b/22121416.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALC
Client ID:
Injection Date: 14-DEC-2022 23:54
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121417.D
Data file 2: /20221214.b/B20221214.b/22121417.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALD
Client ID:
Injection Date: 15-DEC-2022 00:12
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	544254	6.741	-0.000	856443	75.85	75.73	0.2	Oxychlordane
6.106	-0.000	438313	7.036	-0.000	677072	73.99	73.11	1.2	2,4-DDE
6.397	-0.000	704675	7.155	0.000	1067899	75.09	76.94	2.4	trans-Nonachlor
6.681	0.000	393654	7.591	0.000	594311	74.70	74.86	0.2	2,4-DDD
6.956	-0.001	430636	7.914	0.000	618740	75.63	75.68	0.1	2,4-DDT
7.112	-0.000	688257	7.975	0.000	1018624	75.31	77.19	2.5	cis-Nonachlor
8.082	-0.001	426177	9.223	0.000	573947	74.97	74.78	0.2	Mirex
3.800	-0.028	2109	----			0.23	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

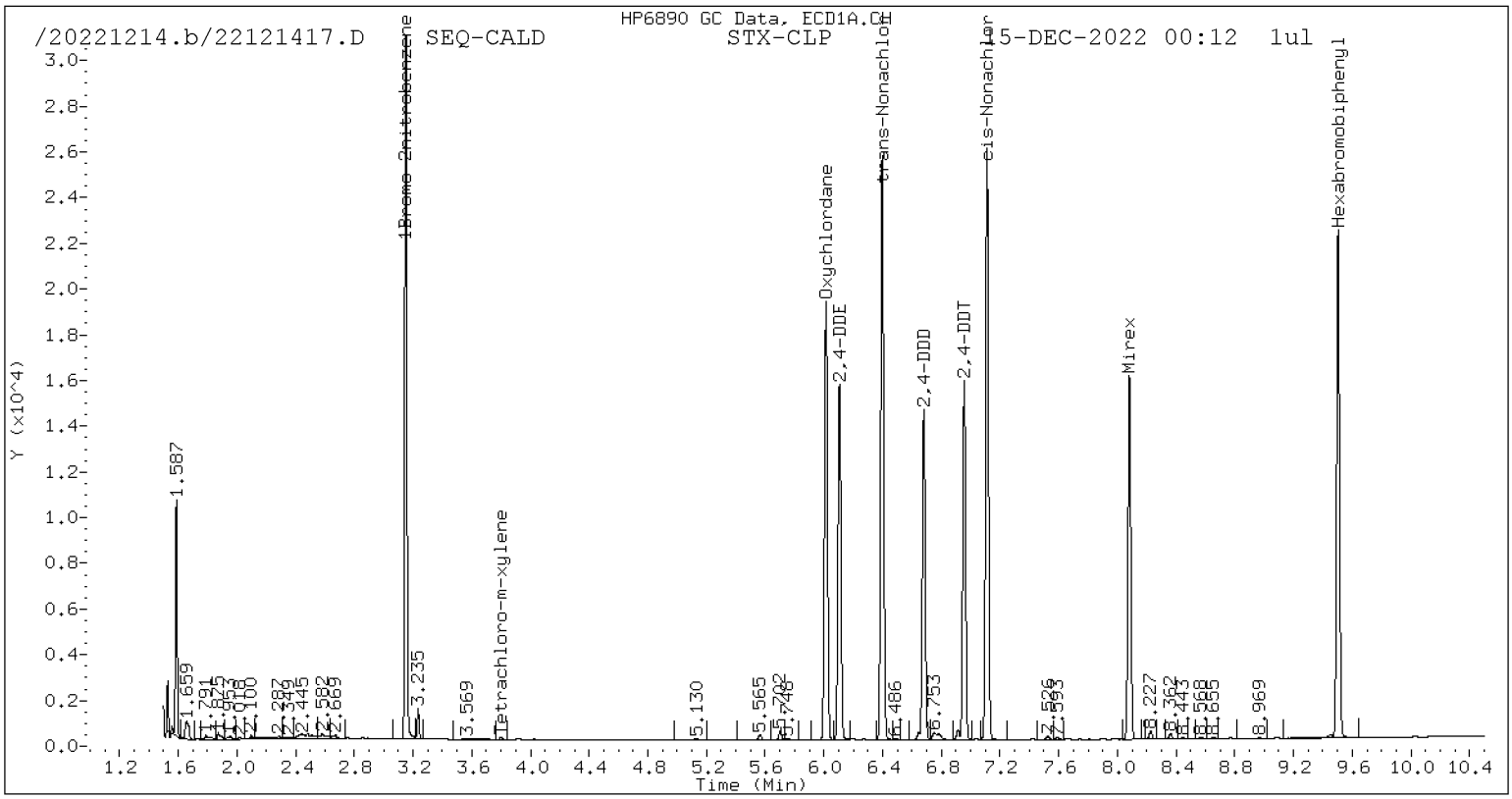
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	664375	-6.5
Hexabromobiphenyl	641833	603504	-6.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1015544	-4.1
Hexabromobiphenyl	797125	775630	-2.7

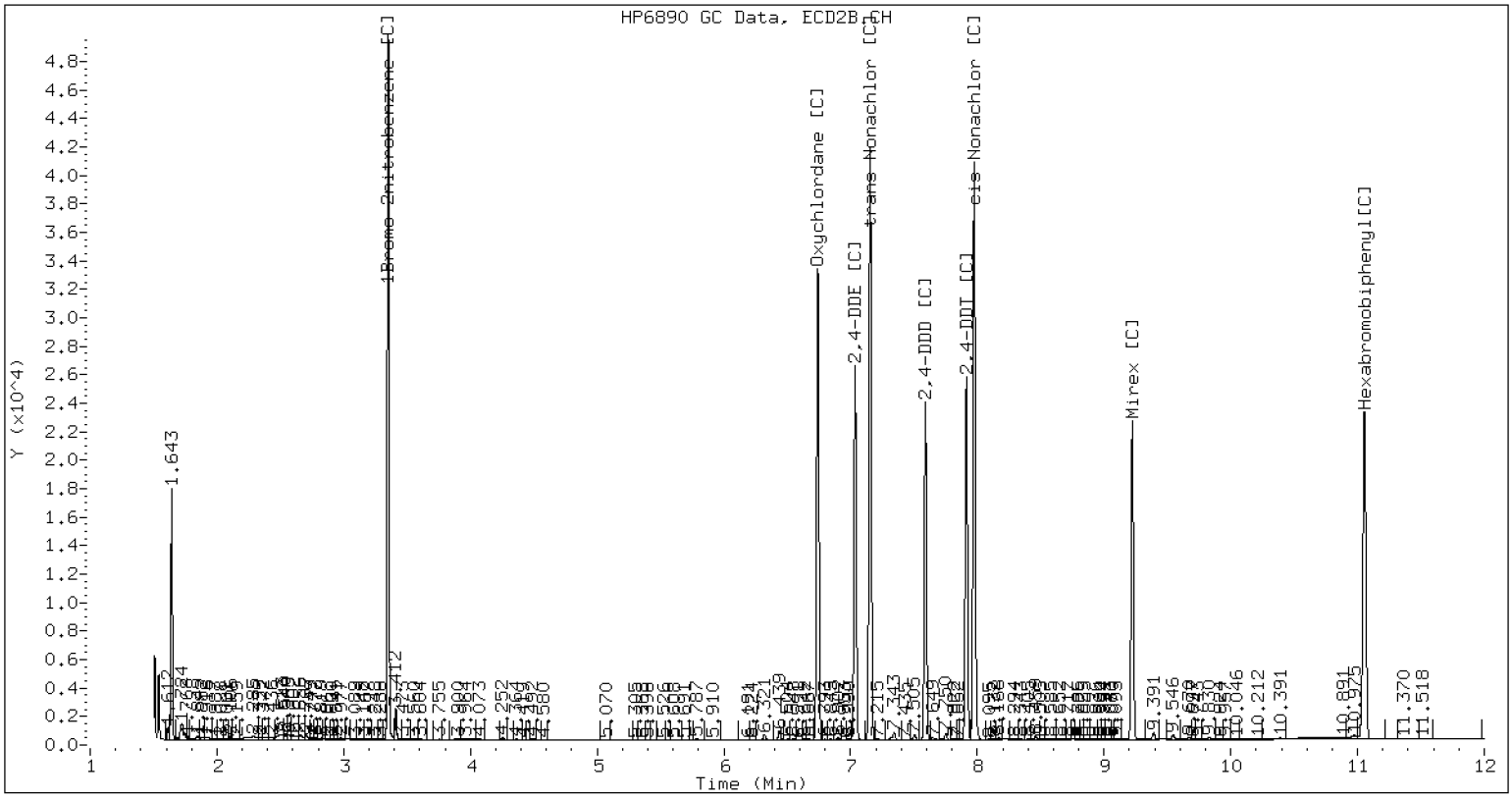
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121417.D SEQ-CALD CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121417.D
Data file 2: /20221214.b/B20221214.b/22121417.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALD
Client ID:
Injection Date: 15-DEC-2022 00:12
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121418.D
Data file 2: /20221214.b/B20221214.b/22121418.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALE
Client ID:
Injection Date: 15-DEC-2022 00:30
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	0.000	1020828	6.741	0.000	1630330	140.48	142.04	1.1	Oxychlordane
6.106	-0.000	801828	7.036	0.000	1240933	133.65	132.03	1.2	2,4-DDE
6.397	0.000	1327091	7.155	0.000	2047915	139.63	146.04	4.5	trans-Nonachlor
6.680	-0.000	733651	7.591	0.000	1118552	137.46	139.45	1.4	2,4-DDD
6.956	-0.001	794021	7.913	0.000	1163676	137.69	140.88	2.3	2,4-DDT
7.112	-0.000	1301975	7.975	0.000	1956215	140.68	146.73	4.2	cis-Nonachlor
8.082	-0.001	815059	9.223	0.000	1108848	141.57	143.01	1.0	Mirex
3.800	-0.028	3997	----			0.43	0.00	---	Tetrachloro-m-xylene
----			10.471	0.004	3393	0.00	0.39	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

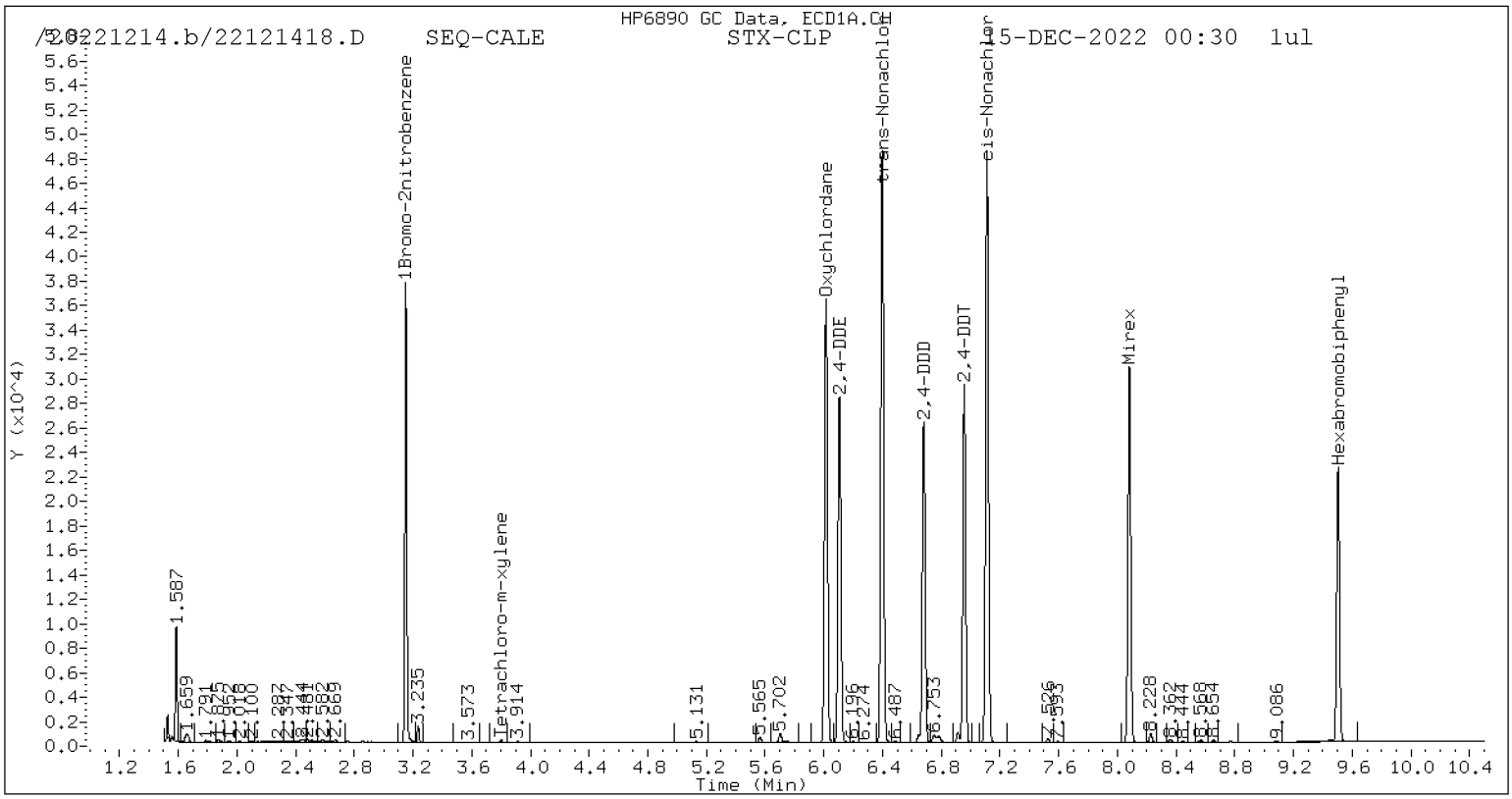
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	675789	-4.9
Hexabromobiphenyl	641833	611199	-4.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1030648	-2.7
Hexabromobiphenyl	797125	783631	-1.7

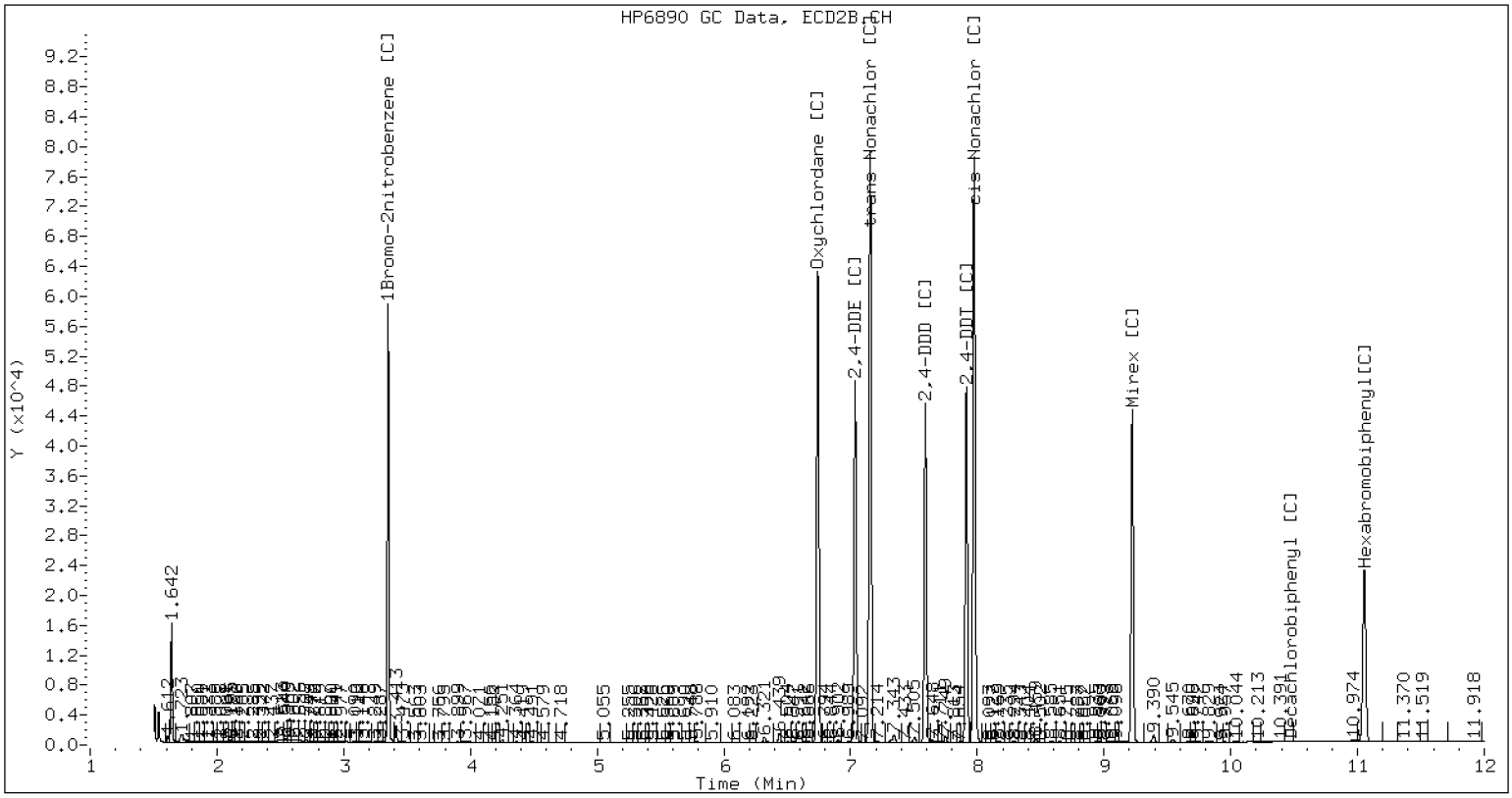
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121418.D SEQ-CALE CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121418.D
Data file 2: /20221214.b/B20221214.b/22121418.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALE
Client ID:
Injection Date: 15-DEC-2022 00:30
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121419.D
Data file 2: /20221214.b/B20221214.b/22121419.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV1
Client ID:
Injection Date: 15-DEC-2022 00:48
Report Date: 12/16/2022 15:19
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.342	0.000	643235	4.860	-0.000	1047709	49.66	51.22	3.1	alpha-BHC
4.726	-0.000	242617	5.337	0.000	386388	48.66	49.69	2.1	beta-BHC
4.909	0.000	554797	5.692	0.001	897343	52.41	53.26	1.6	delta-BHC
4.646	0.001	573983	5.258	0.000	915596	51.11	52.75	3.1	gamma-BHC (Lindane)
5.130	0.000	495138	5.788	0.001	804002	49.55	51.13	3.1	Heptachlor
5.454	0.000	526615	6.191	0.000	842909	47.03	46.95	0.2	Aldrin
6.130	0.000	469481	6.846	0.000	724932	48.36	48.83	1.0	Heptachlor epoxide b
6.573	0.000	423102	7.289	-0.000	632890	47.49	48.37	1.8	Endosulfan I
6.832	0.000	478299	7.583	0.000	724854	49.97	50.14	0.3	Dieldrin
6.489	0.000	448741	7.371	0.000	670346	50.49	50.56	0.1	4,4'-DDE
7.082	0.001	396143	7.907	0.000	551004	50.36	50.73	0.7	Endrin
7.318	0.001	350431	8.118	0.001	537104	49.49	48.24	2.6	Endosulfan II
7.136	0.001	355688	7.977	0.001	525927	50.19	49.78	0.8	4,4'-DDD
8.180	0.000	347949	8.716	0.001	502438	51.75	51.39	0.7	Endosulfan sulfate
7.428	0.001	368644	8.295	-0.000	524685	51.48	51.45	0.1	4,4'-DDT
7.913	0.001	174306	8.935	-0.001	238791	54.93	52.91	3.7	Methoxychlor
8.454	0.000	394474	9.240	-0.000	540431	51.21	51.18	0.1	Endrin ketone
7.746	0.001	316262	8.448	0.000	449269	56.00	57.20	2.1	Endrin aldehyde
6.271	0.000	490842	7.056	0.000	748350	49.78	50.55	1.5	trans-Chlordane
6.417	0.001	469513	7.216	0.000	700871	47.47	48.39	1.9	cis-Chlordane
----			2.512	0.011	11364	0.00	0.59	---	Hexachlorobutadiene
----			4.719	0.001	634	0.00	0.03	---	Hexachlorobenzene
----			4.220	-0.000	1724	0.00	0.12	---	Tetrachloro-m-xylene
----			10.468	0.001	643	0.00	0.08	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

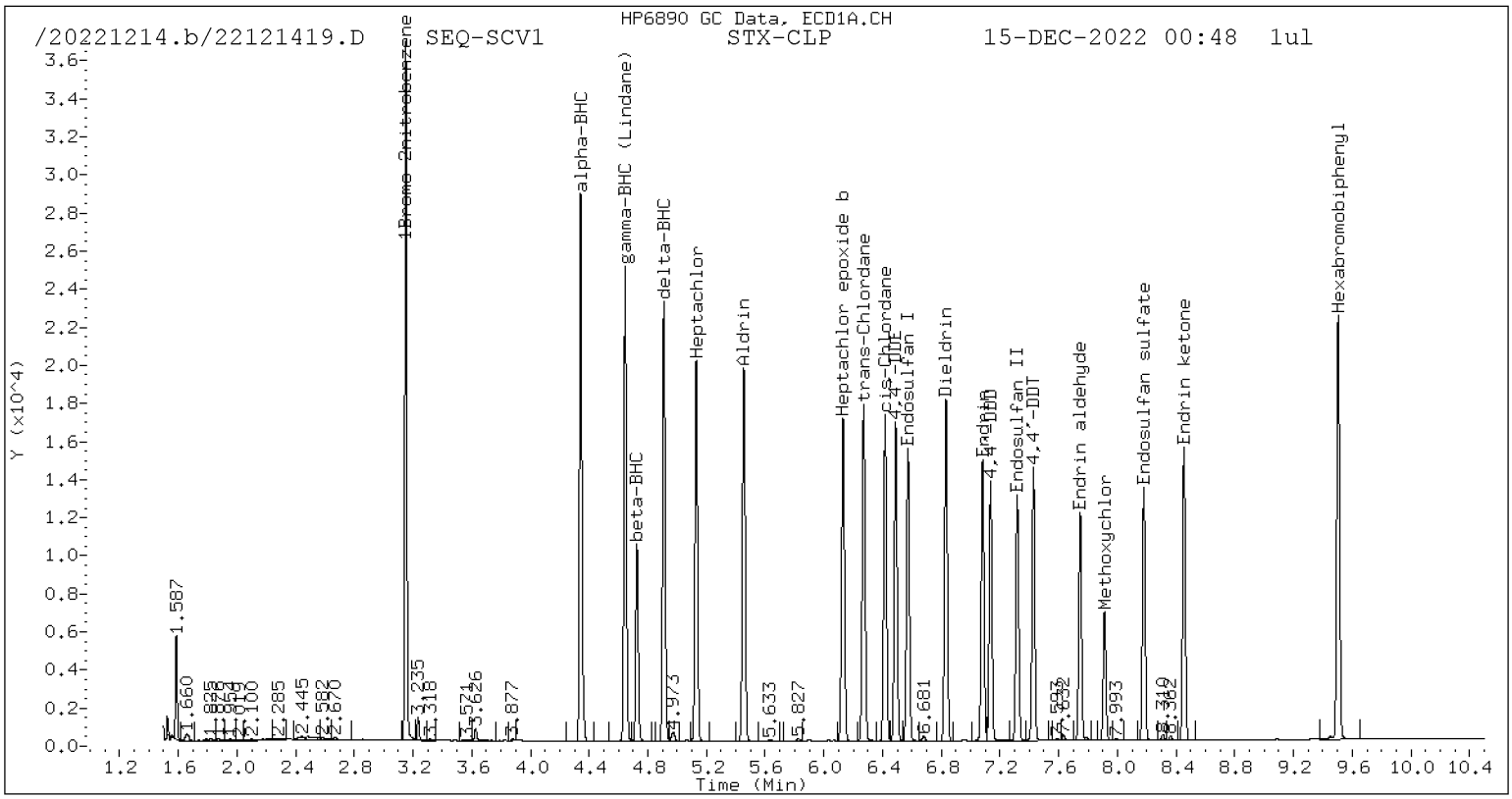
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	672755	-5.3
Hexabromobiphenyl	641833	599983	-6.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1020655	-3.6
Hexabromobiphenyl	797125	763949	-4.2

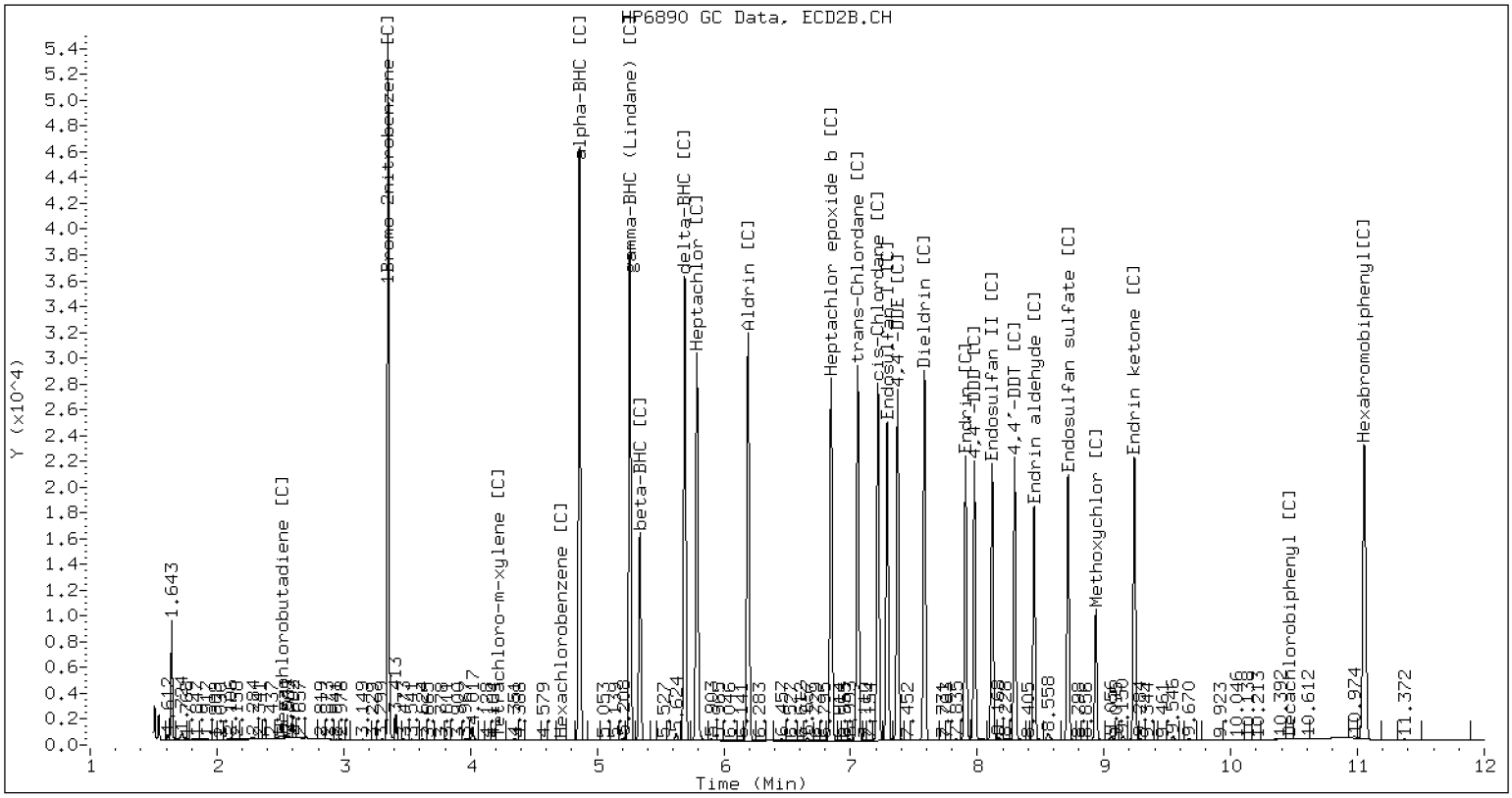
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121419.D SEQ-SCV1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121419.D
Data file 2: /20221214.b/B20221214.b/22121419.D
Method: \20221214.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV1
Client ID:
Injection Date: 15-DEC-2022 00:48
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121420.D
Data file 2: /20221214.b/B20221214.b/22121420.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV2
Client ID:
Injection Date: 15-DEC-2022 01:06
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.014	-0.000	374516	6.741	0.000	591348	51.08	50.07	2.0	Oxychlordane
6.106	-0.000	261097	7.036	-0.000	403824	43.13	41.76	3.2	2,4-DDE
6.397	-0.000	444133	7.155	-0.000	657777	46.31	45.91	0.9	trans-Nonachlor
6.681	0.000	222534	7.591	0.000	334706	41.32	40.84	1.2	2,4-DDD
6.956	-0.001	262722	7.914	0.000	382016	45.15	45.26	0.2	2,4-DDT
7.111	-0.001	455894	7.975	0.000	655718	48.82	48.13	1.4	cis-Nonachlor
8.081	-0.001	256593	9.223	0.000	343173	44.17	43.31	2.0	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

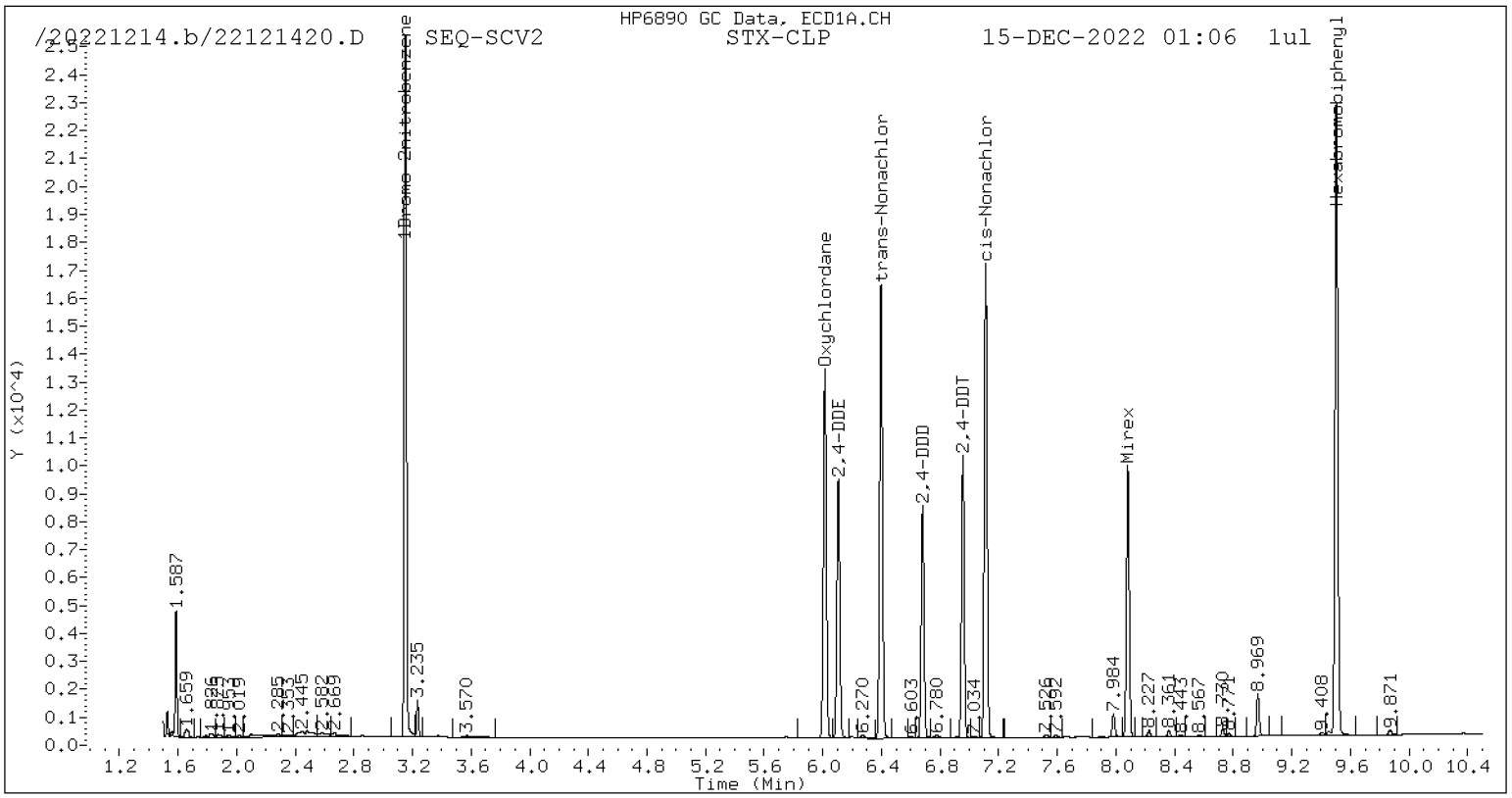
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	687052	-3.3
Hexabromobiphenyl	641833	616730	-3.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1060438	0.2
Hexabromobiphenyl	797125	800740	0.5

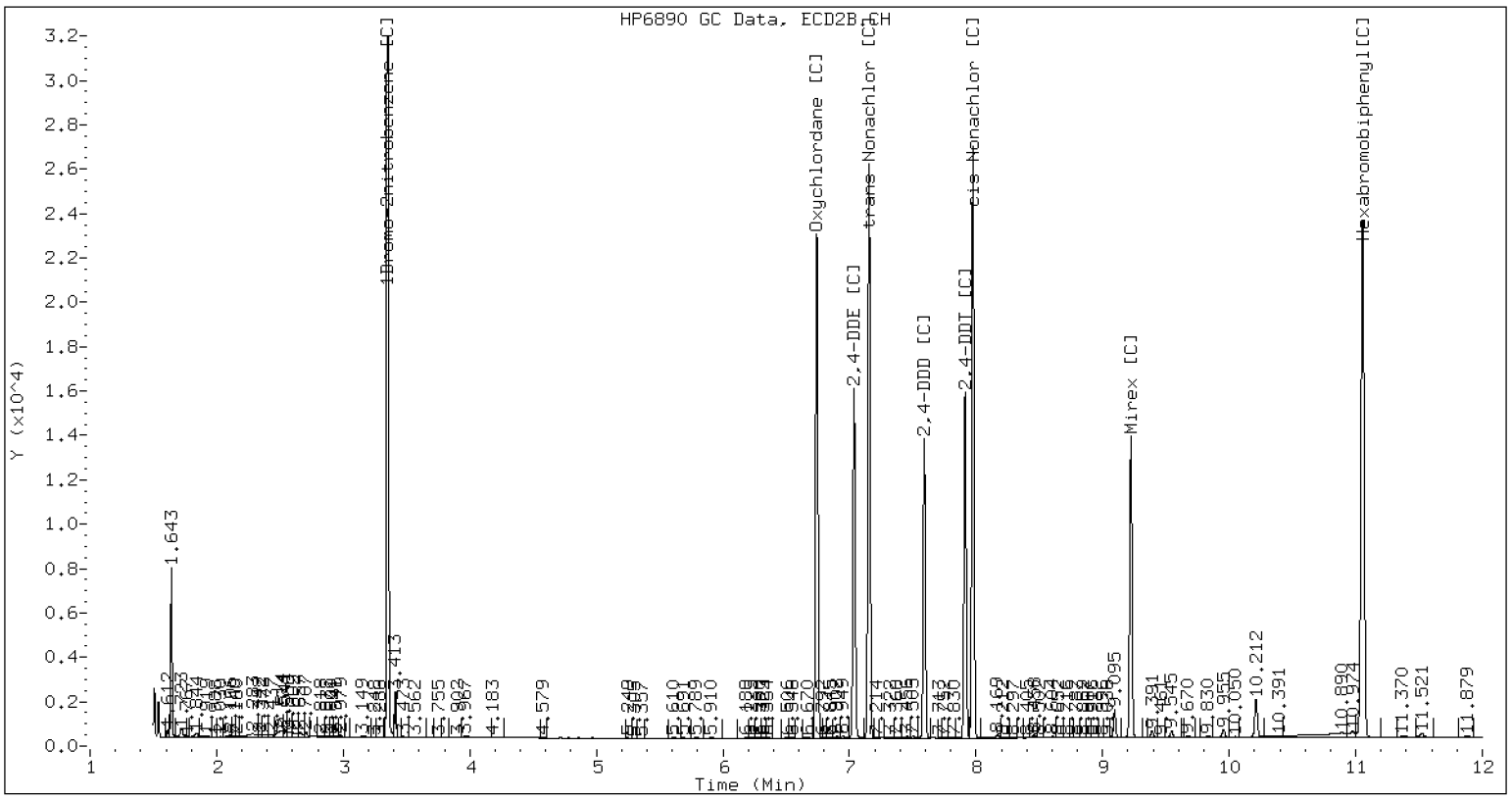
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121420.D SEQ-SCV2 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121420.D
Data file 2: /20221214.b/B20221214.b/22121420.D
Method: \20221214.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-SCV2
Client ID:
Injection Date: 15-DEC-2022 01:06
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121421.D
Data file 2: /20221214.b/B20221214.b/22121421.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1A
Client ID:
Injection Date: 15-DEC-2022 01:24
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			4.215	-0.006	361	0.00	0.02	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	601512	-15.4
Hexabromobiphenyl	641833	690103	7.5

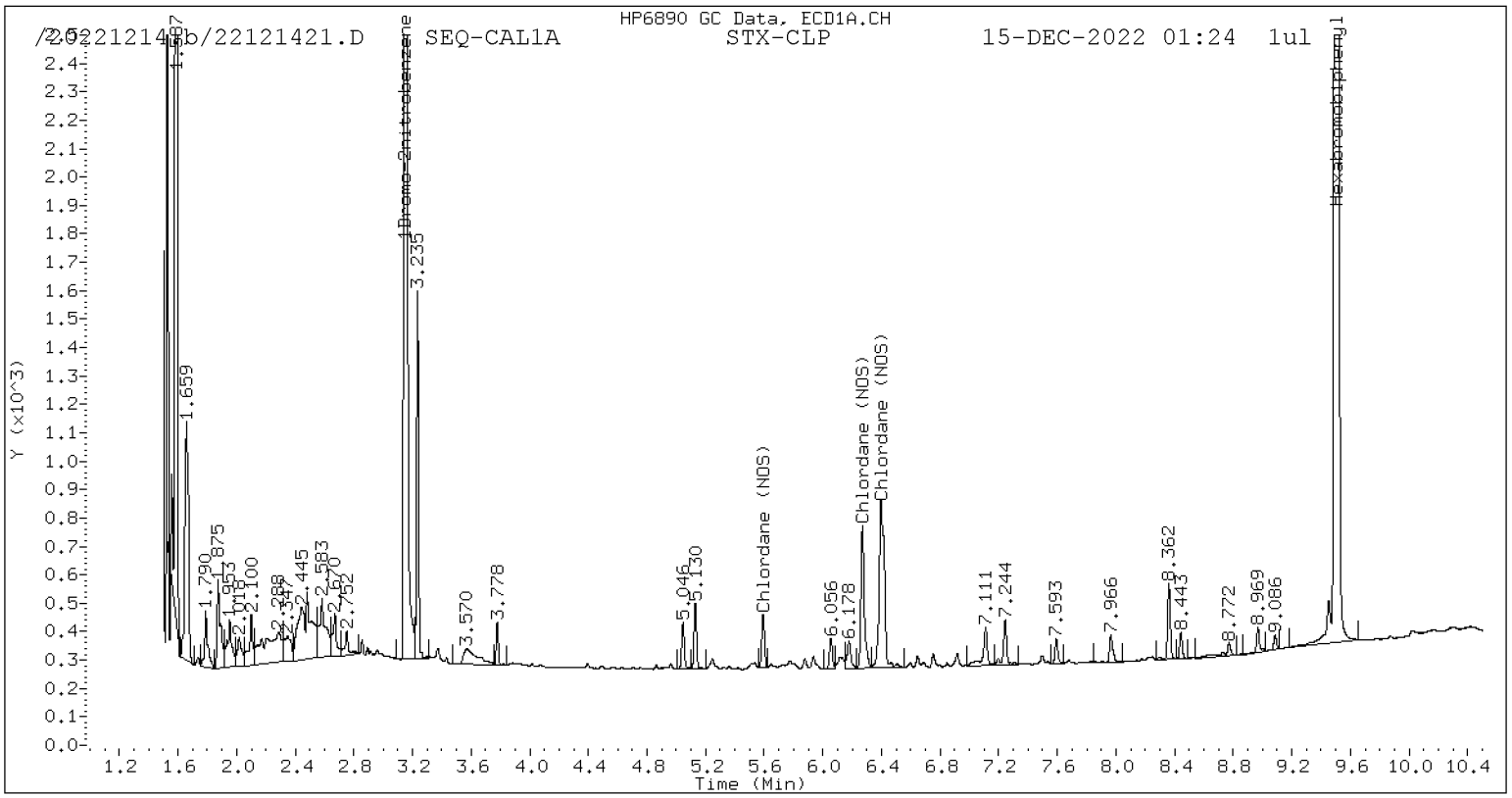
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	776759	-26.6
Hexabromobiphenyl	797125	1058847	32.8

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

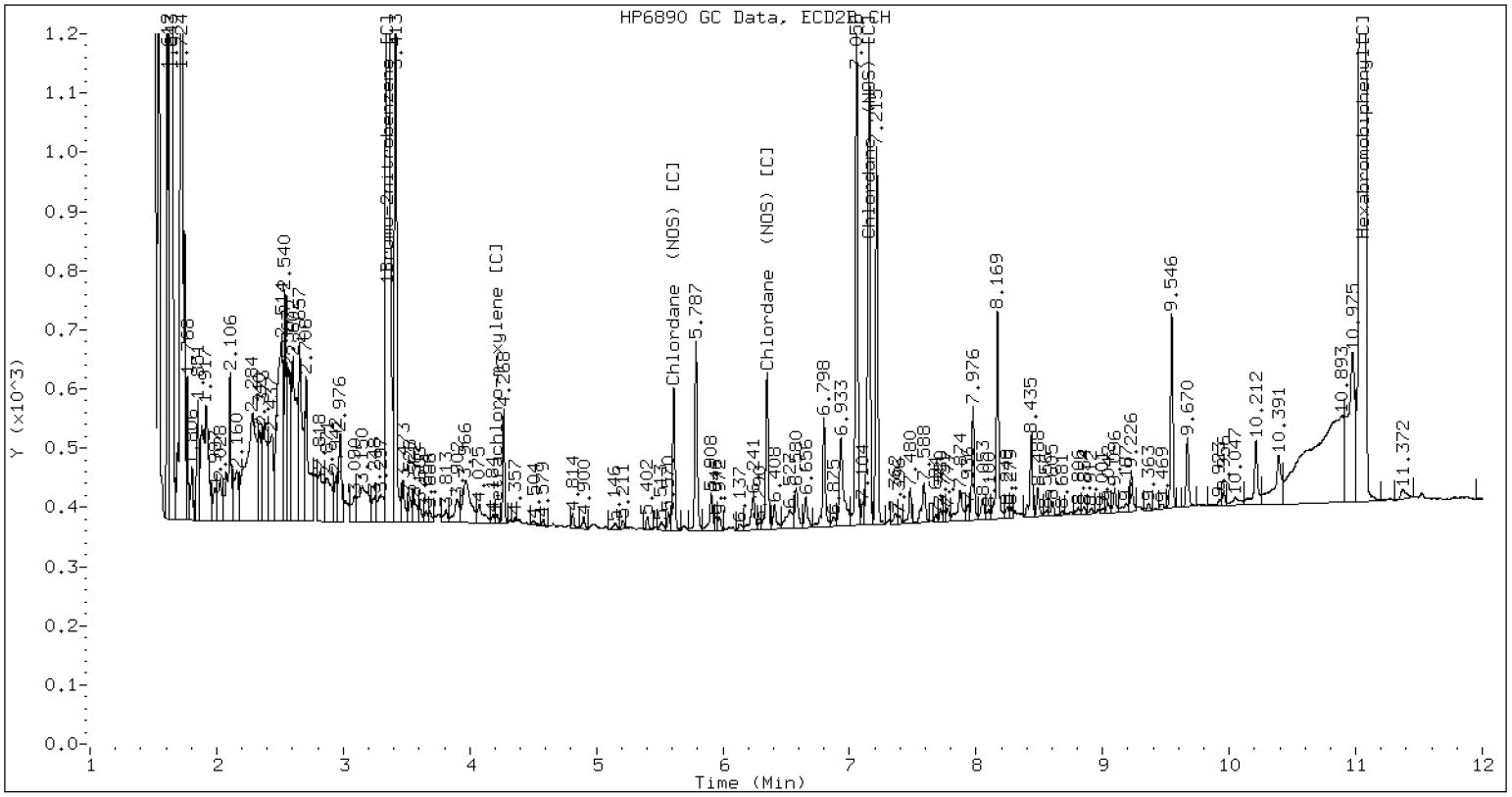
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.000	5054	13.1	1	5.612	-0.000	6415	12.8	
Chlordane (NOS)	2	6.271	-0.000	15913	12.4	2	6.349	-0.000	7689	13.7	
Chlordane (NOS)	3	6.399	0.000	29332	13.1	3	7.155	-0.001	23386	12.3	
Total STX-CLPAve (3 peaks): 12.882						Total CLP2Ave (3 peaks): 12.916				RPD = 0	
Corrected Ave (3 peaks): 12.882						Corrected Ave (3 peaks): 12.916				RPD = 0	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121421.D SEQ-CAL1A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121421.D
Data file 2: /20221214.b/B20221214.b/22121421.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1A
Client ID:
Injection Date: 15-DEC-2022 01:24
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121422.D
Data file 2: /20221214.b/B20221214.b/22121422.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2A
Client ID:
Injection Date: 15-DEC-2022 01:42
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	611280	-14.0
Hexabromobiphenyl	641833	704720	9.8

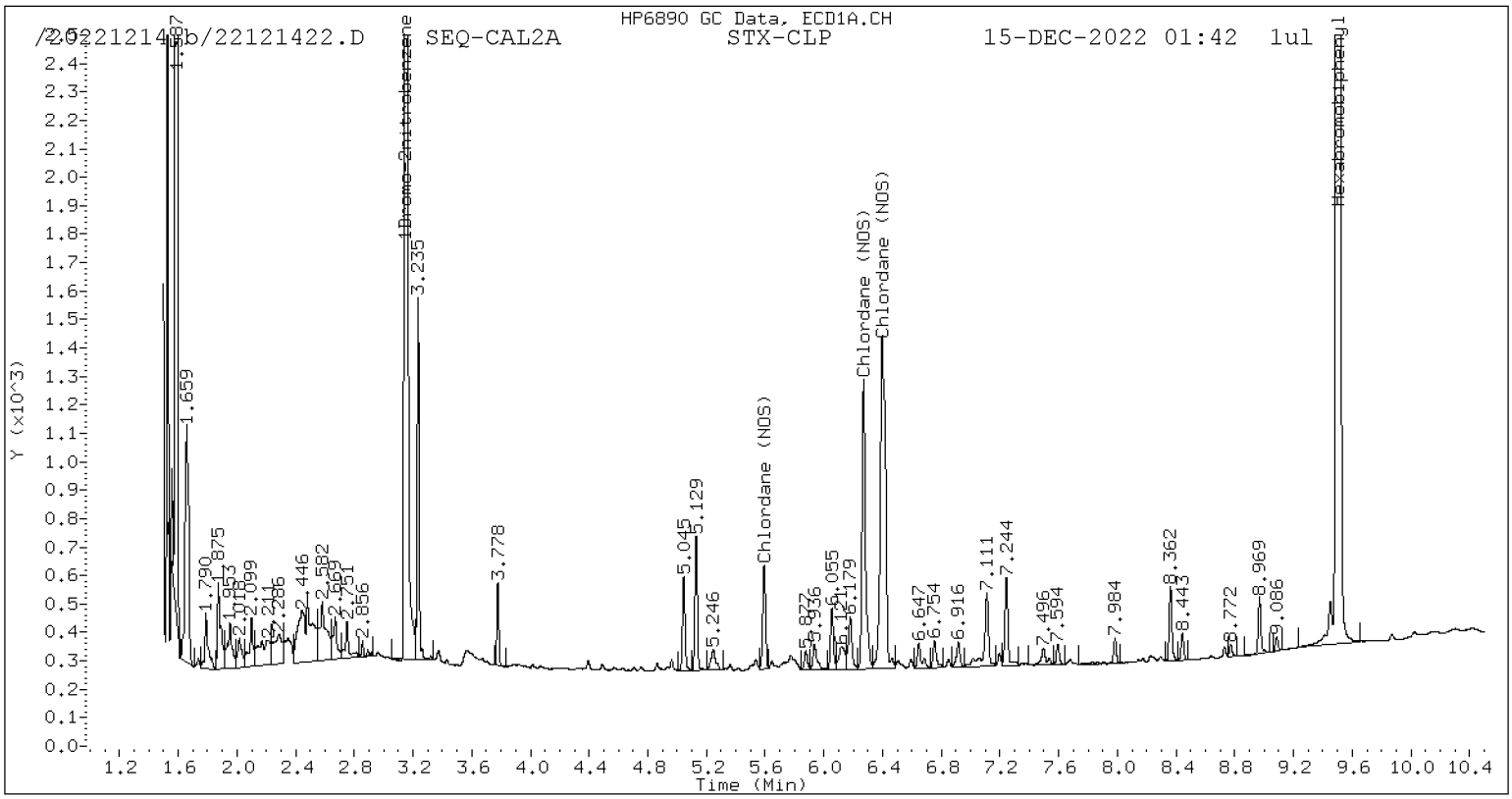
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	793365	-25.1
Hexabromobiphenyl	797125	1083049	35.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

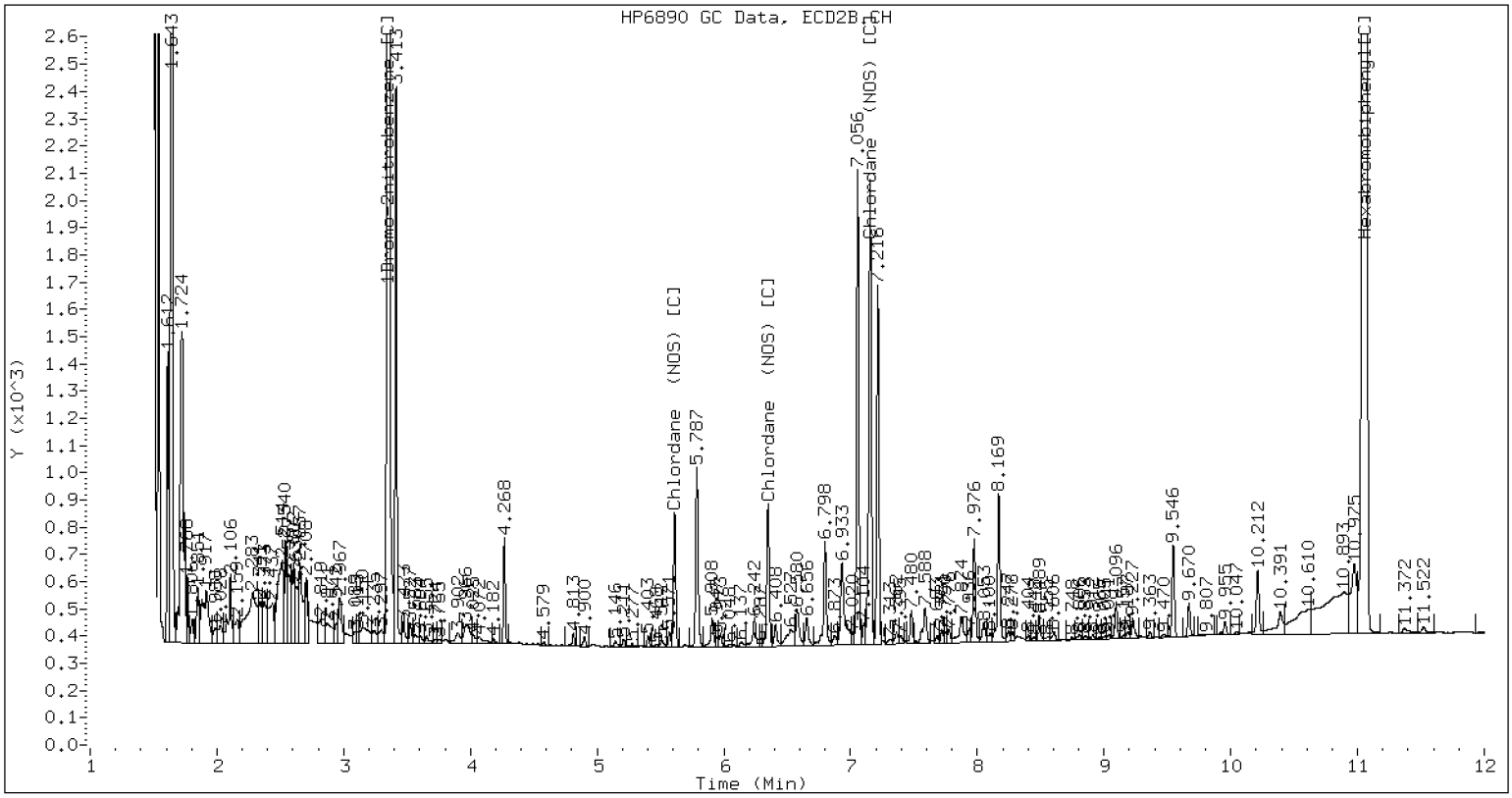
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.000	10046	25.5	1	5.612	-0.000	12488	24.4	
Chlordane (NOS)	2	6.271	-0.000	32715	25.0	2	6.348	-0.001	15023	26.1	
Chlordane (NOS)	3	6.399	0.000	58016	25.4	3	7.155	-0.000	48236	24.8	
Total STX-CLPAve (3 peaks): 25.309						Total CLP2Ave (3 peaks): 25.077				RPD = 1	
Corrected Ave (3 peaks): 25.309						Corrected Ave (3 peaks): 25.077				RPD = 1	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121422.D SEQ-CAL2A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121422.D
Data file 2: /20221214.b/B20221214.b/22121422.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2A
Client ID:
Injection Date: 15-DEC-2022 01:42
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121423.D
Data file 2: /20221214.b/B20221214.b/22121423.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3A
Client ID:
Injection Date: 15-DEC-2022 01:59
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	592438	-16.6
Hexabromobiphenyl	641833	685225	6.8

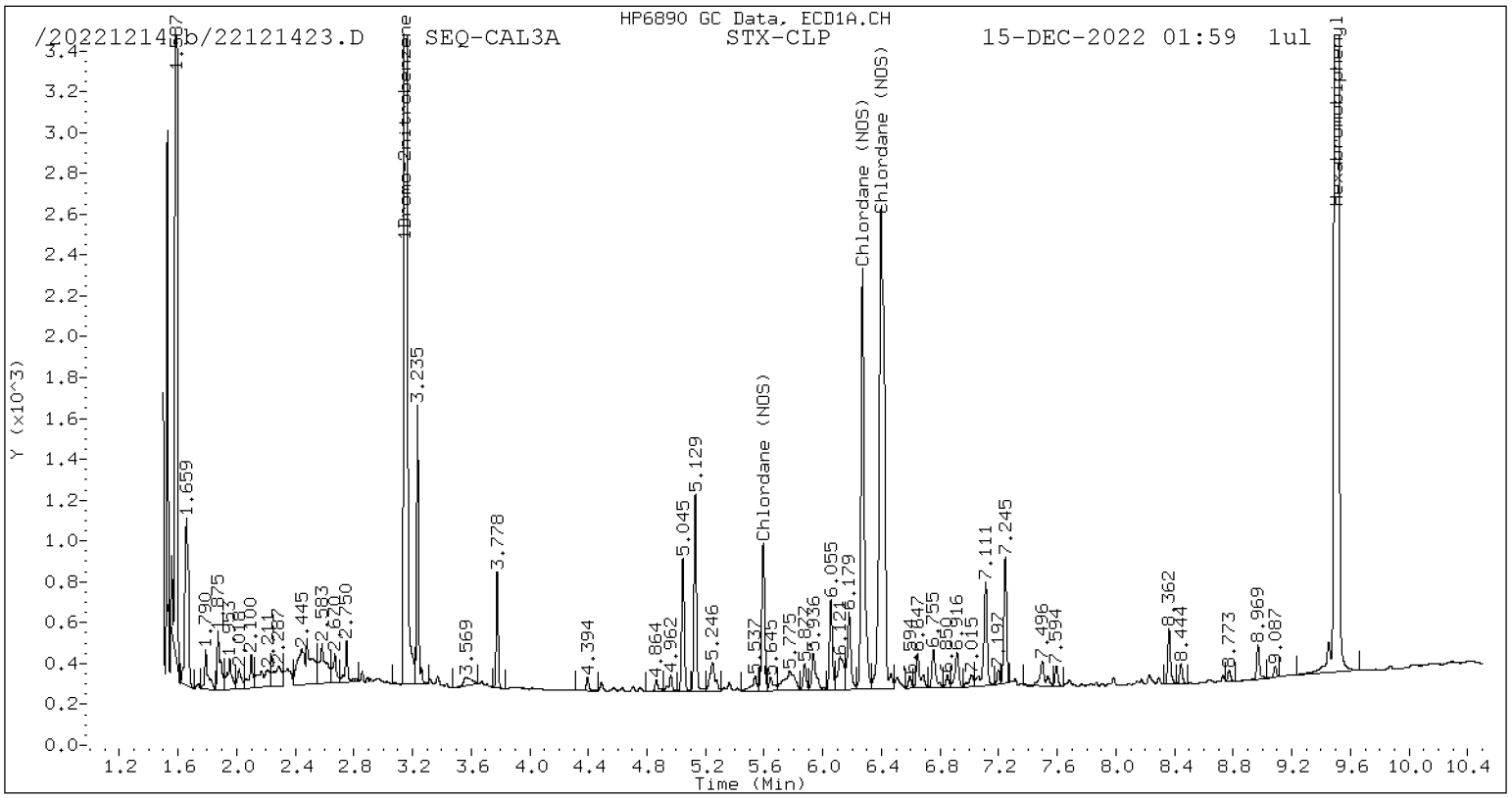
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	769029	-27.4
Hexabromobiphenyl	797125	1054742	32.3

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

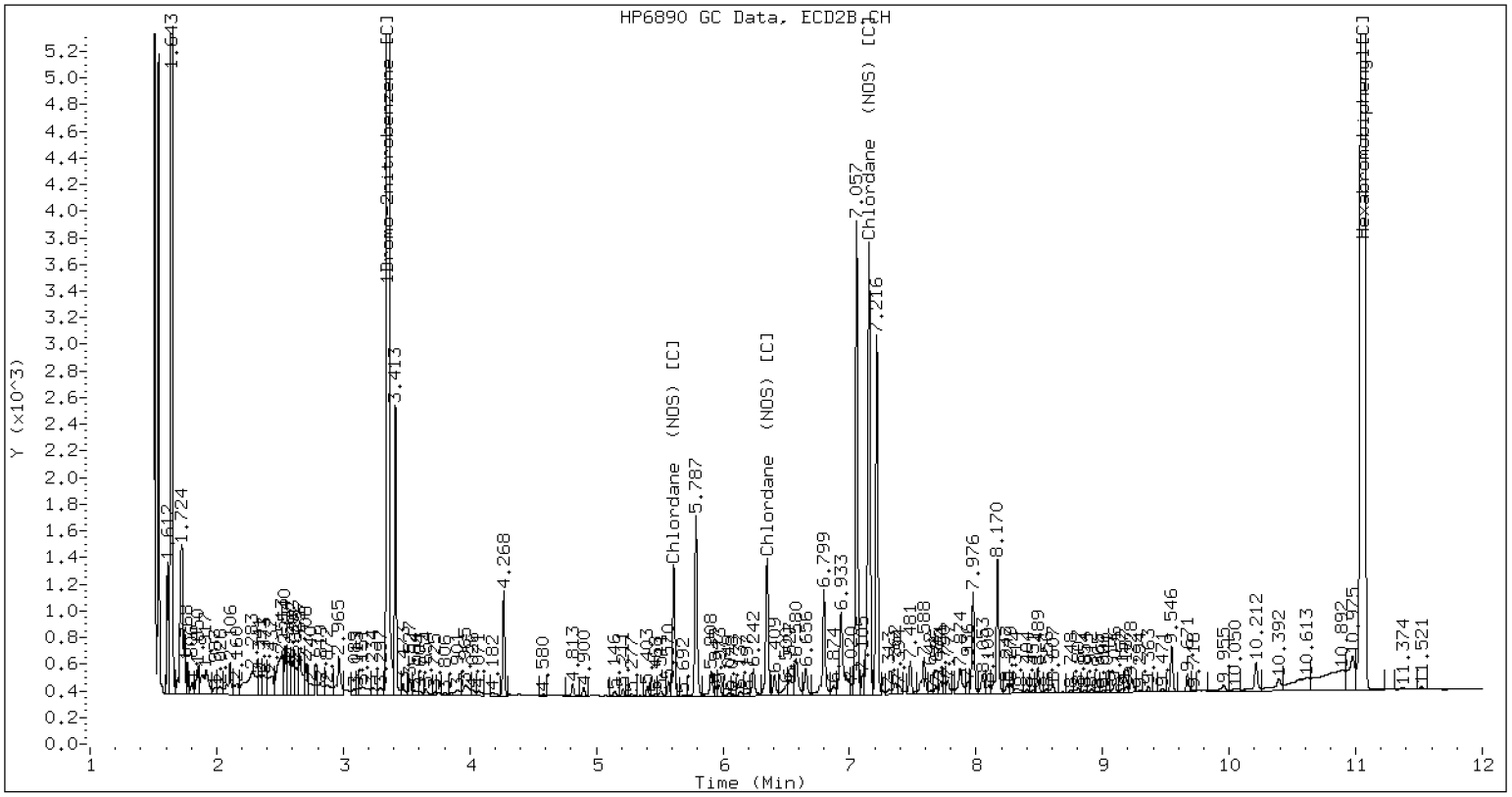
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.001	20502	53.5	1	5.612	-0.000	24816	49.7	
Chlordane (NOS)	2	6.271	-0.000	66320	52.2	2	6.349	0.000	29114	51.9	
Chlordane (NOS)	3	6.399	0.000	116820	52.6	3	7.155	-0.000	98401	51.9	
Total STX-CLPAve (3 peaks): 52.767						Total CLP2Ave (3 peaks): 51.179				RPD = 3	
Corrected Ave (3 peaks): 52.767						Corrected Ave (3 peaks): 51.179				RPD = 3	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121423.D SEQ-CAL3A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121423.D
Data file 2: /20221214.b/B20221214.b/22121423.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3A
Client ID:
Injection Date: 15-DEC-2022 01:59
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121424.D
Data file 2: /20221214.b/B20221214.b/22121424.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4A
Client ID:
Injection Date: 15-DEC-2022 02:17
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	584808	-17.7
Hexabromobiphenyl	641833	675665	5.3

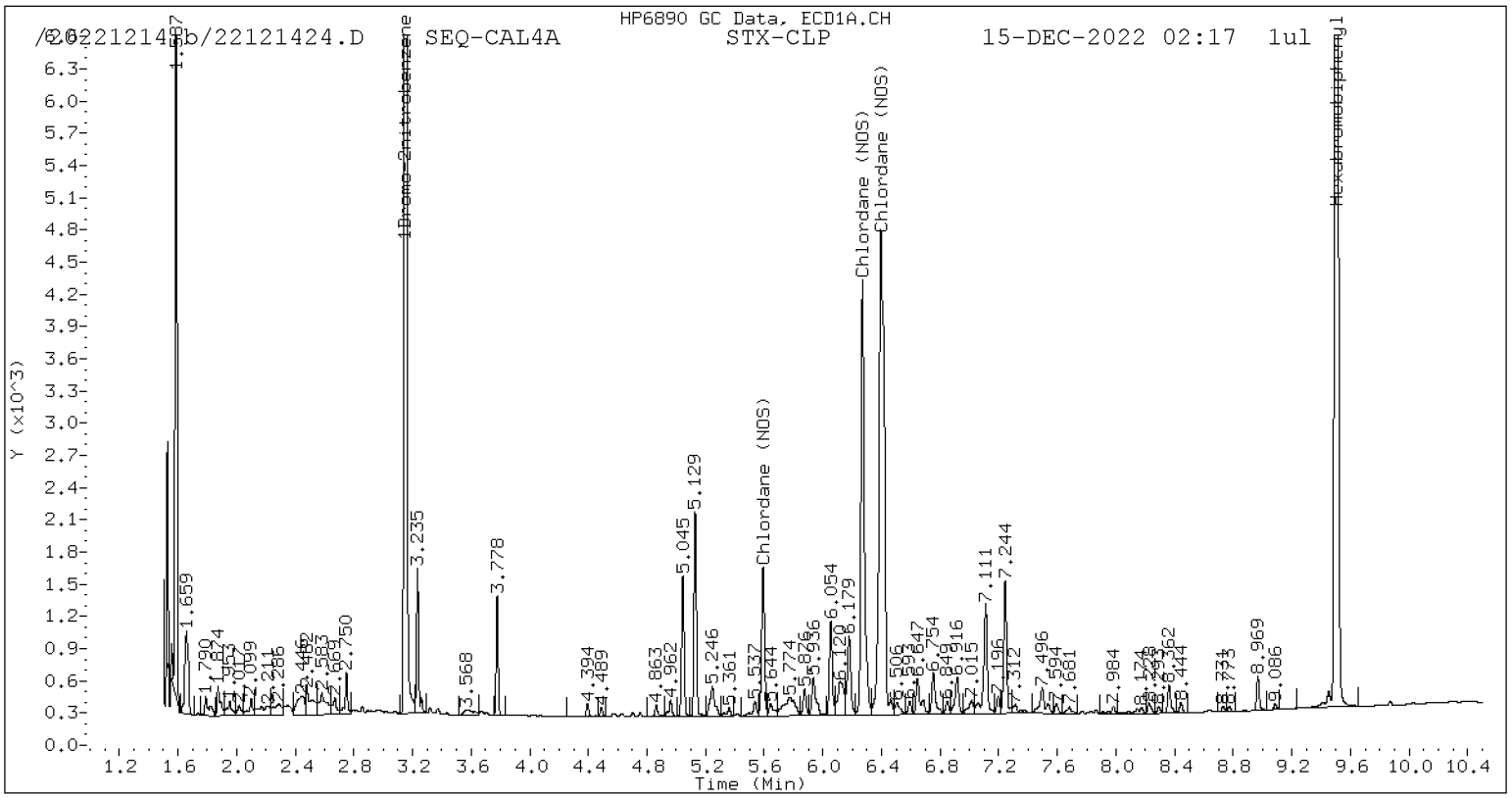
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	758204	-28.4
Hexabromobiphenyl	797125	1039488	30.4

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

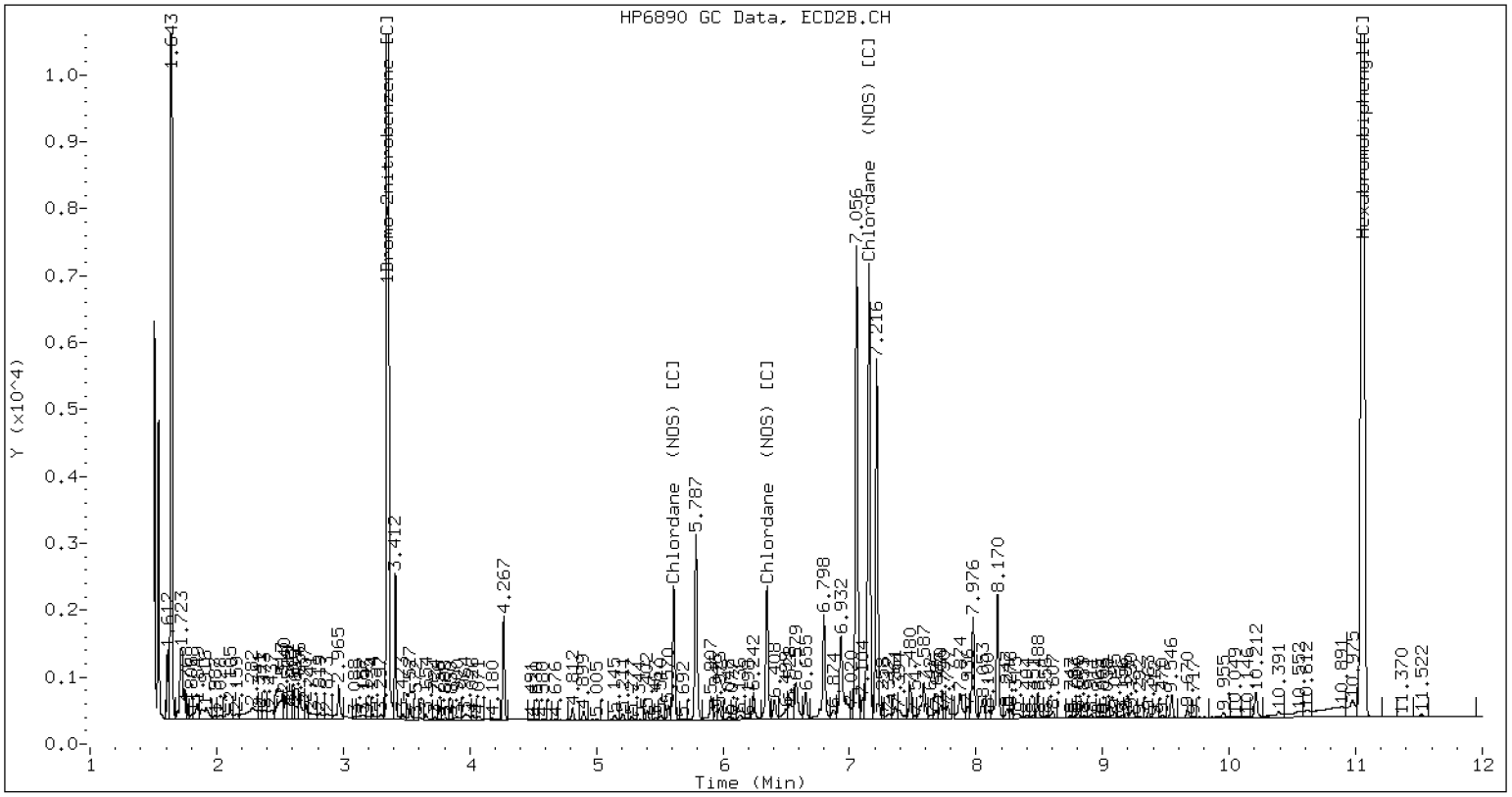
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	-0.000	39696	105.0	1	5.611	-0.001	49889	101.4	
Chlordane (NOS)	2	6.271	-0.000	131726	105.2	2	6.348	-0.001	56608	102.5	
Chlordane (NOS)	3	6.398	-0.001	229050	104.6	3	7.155	-0.000	195665	104.7	
Total STX-CLPAve (3 peaks): 104.931						Total CLP2Ave (3 peaks): 102.854				RPD = 2	
Corrected Ave (3 peaks): 104.931						Corrected Ave (3 peaks): 102.854				RPD = 2	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121424.D SEQ-CAL4A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121424.D
Data file 2: /20221214.b/B20221214.b/22121424.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4A
Client ID:
Injection Date: 15-DEC-2022 02:17
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121425.D
Data file 2: /20221214.b/B20221214.b/22121425.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5A
Client ID:
Injection Date: 15-DEC-2022 02:35
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	612592	-13.8
Hexabromobiphenyl	641833	705251	9.9

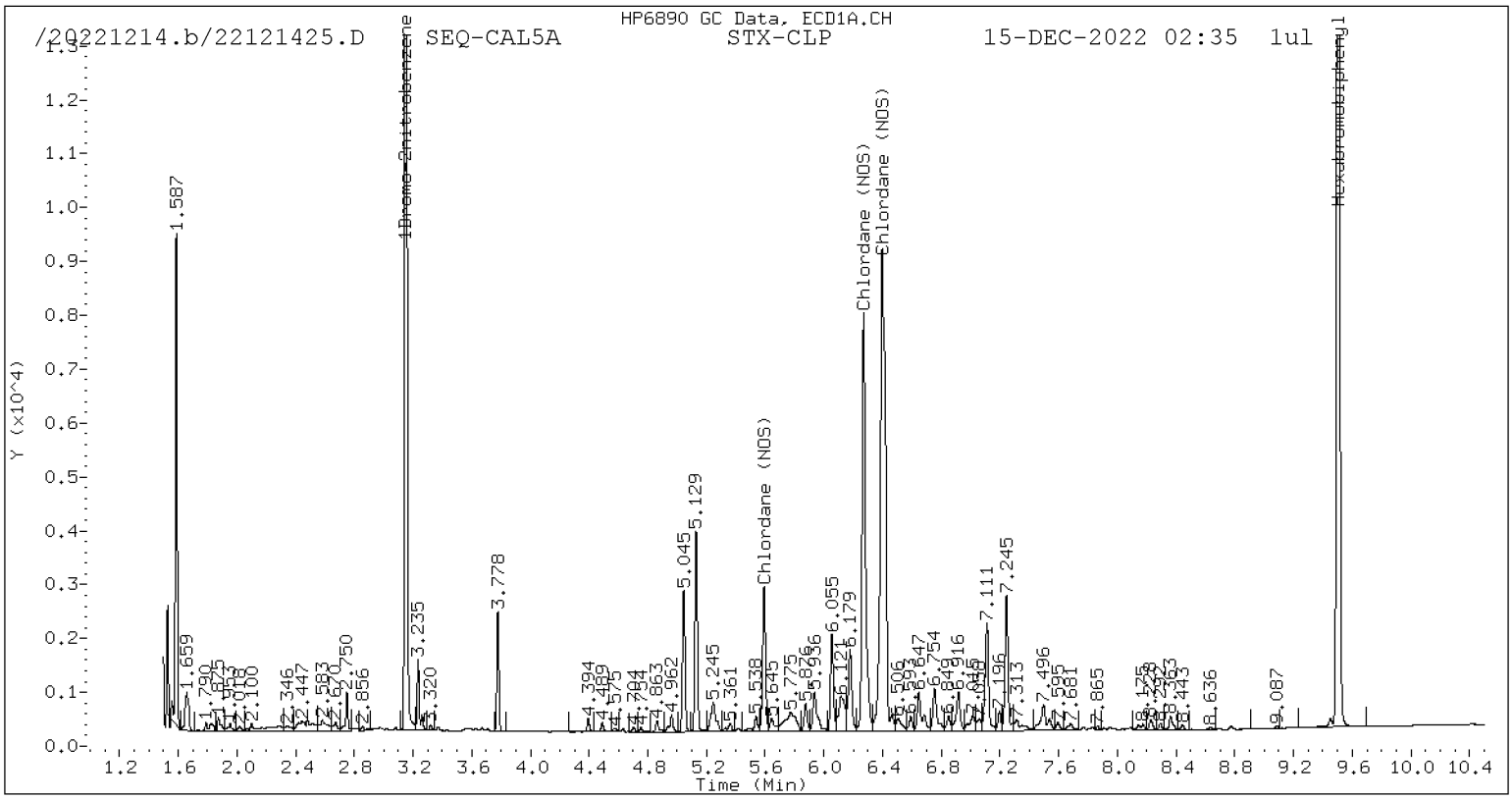
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	792856	-25.1
Hexabromobiphenyl	797125	1079718	35.5

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

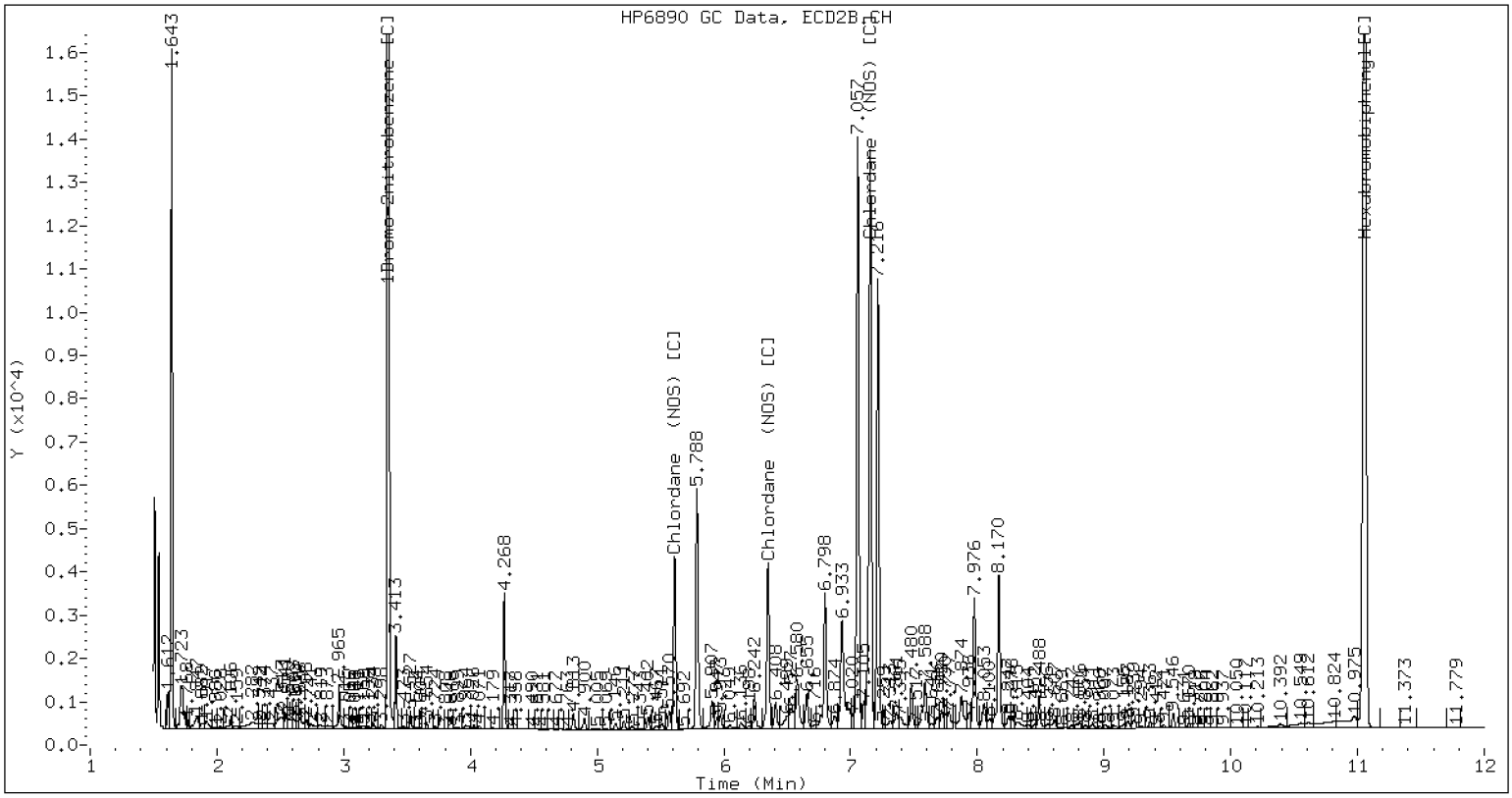
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.000	77307	196.0	1	5.612	-0.000	101527	198.7	
Chlordane (NOS)	2	6.271	0.000	261078	199.7	2	6.349	-0.001	110757	193.0	
Chlordane (NOS)	3	6.399	0.000	449301	196.5	3	7.155	-0.000	389197	200.5	
Total STX-CLPAve (3 peaks): 197.408						Total CLP2Ave (3 peaks): 197.390				RPD = 0	
Corrected Ave (3 peaks): 197.408						Corrected Ave (3 peaks): 197.390				RPD = 0	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121425.D SEQ-CAL5A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121425.D
Data file 2: /20221214.b/B20221214.b/22121425.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5A
Client ID:
Injection Date: 15-DEC-2022 02:35
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121426.D
Data file 2: /20221214.b/B20221214.b/22121426.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6A
Client ID:
Injection Date: 15-DEC-2022 02:53
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	603526	-15.1
Hexabromobiphenyl	641833	699031	8.9

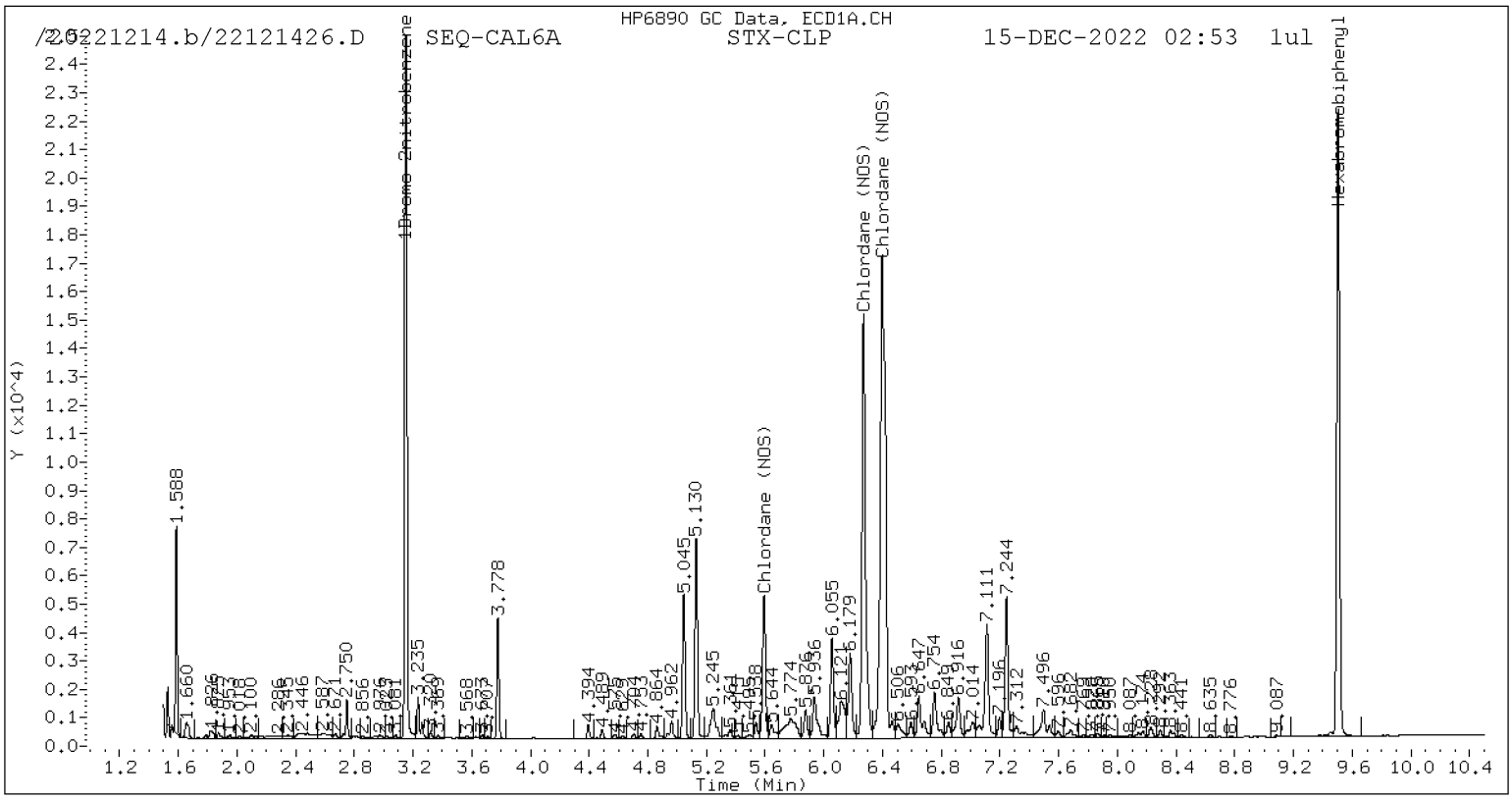
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	779405	-26.4
Hexabromobiphenyl	797125	1068976	34.1

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

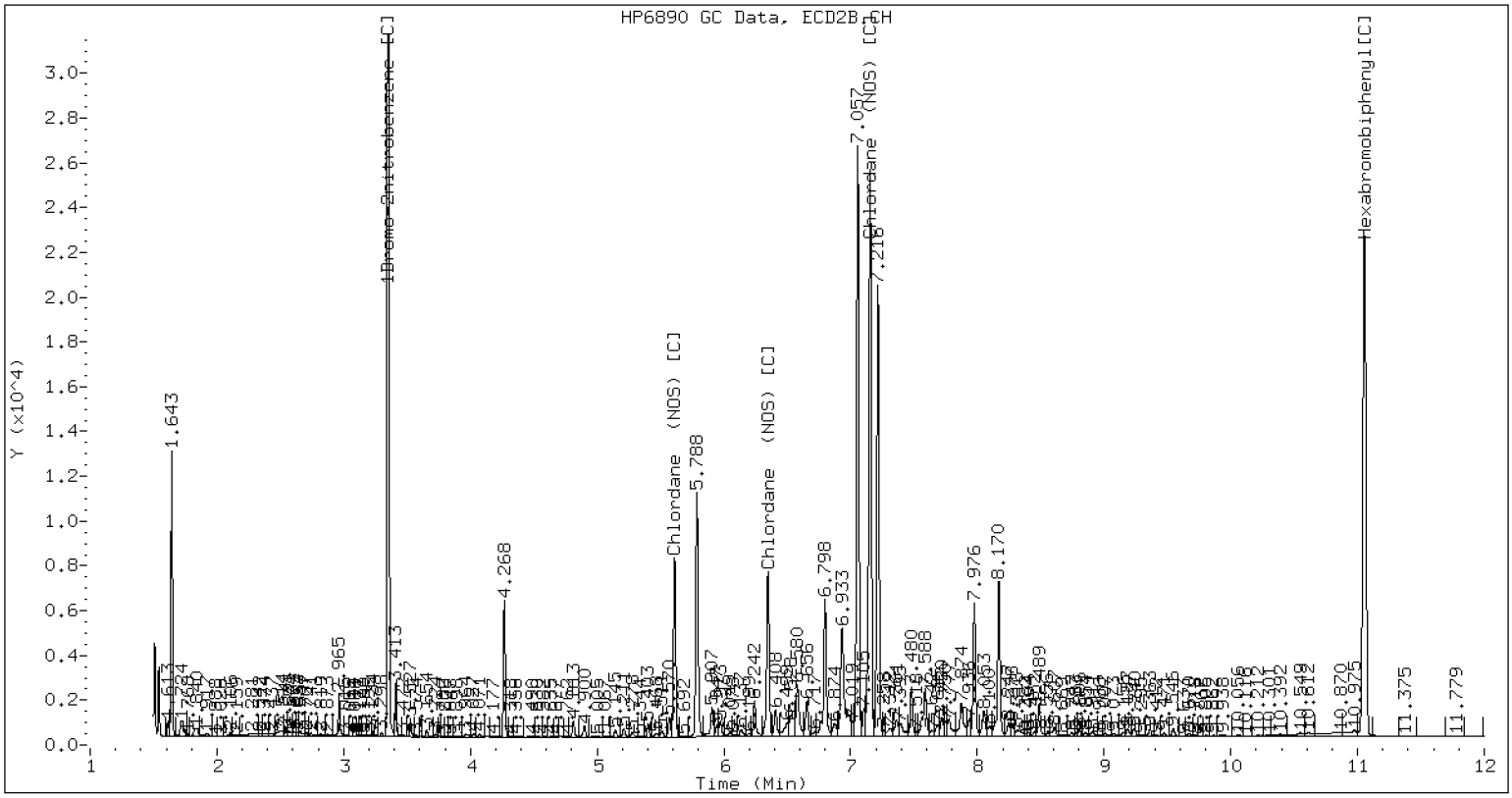
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.592	-0.000	146950	375.8	1	5.612	-0.000	203386	402.0	
Chlordane (NOS)	2	6.271	-0.000	503310	388.5	2	6.349	-0.000	212637	374.2	
Chlordane (NOS)	3	6.399	0.000	857451	378.4	3	7.155	-0.000	752631	391.6	
Total STX-CLPAve (3 peaks): 380.894						Total CLP2Ave (3 peaks): 389.290				RPD = 2	
Corrected Ave (3 peaks): 380.894						Corrected Ave (3 peaks): 389.290				RPD = 2	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121426.D SEQ-CAL6A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121426.D
Data file 2: /20221214.b/B20221214.b/22121426.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6A
Client ID:
Injection Date: 15-DEC-2022 02:53
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121427.D
Data file 2: /20221214.b/B20221214.b/22121427.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7A
Client ID:
Injection Date: 15-DEC-2022 03:11
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			----			0.00	0.00	---	Tetrachloro-m-xylene
9.380	0.025	1930	----			0.31	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	610159	-14.1
Hexabromobiphenyl	641833	692215	7.8

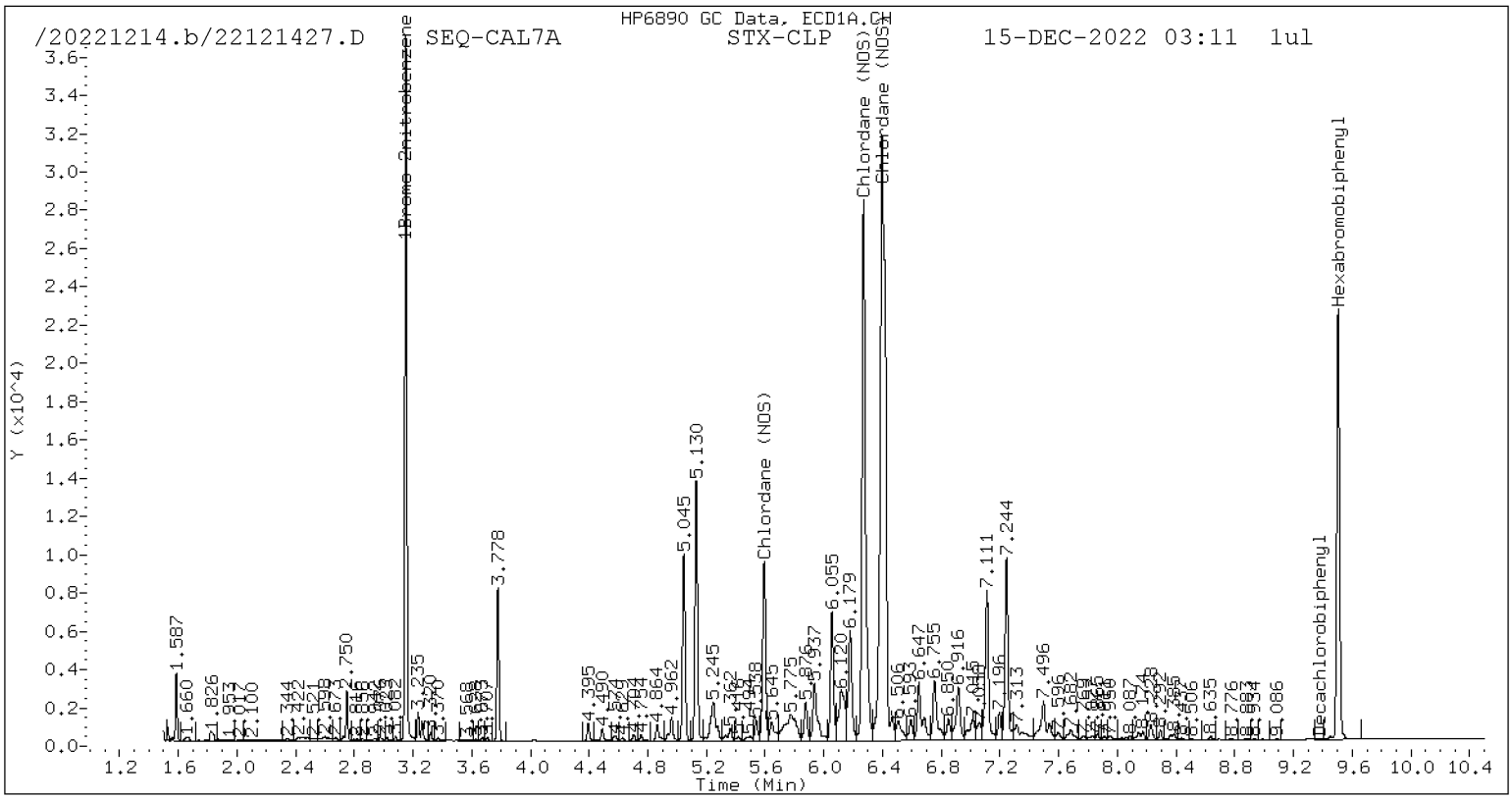
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	790388	-25.4
Hexabromobiphenyl	797125	1059143	32.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

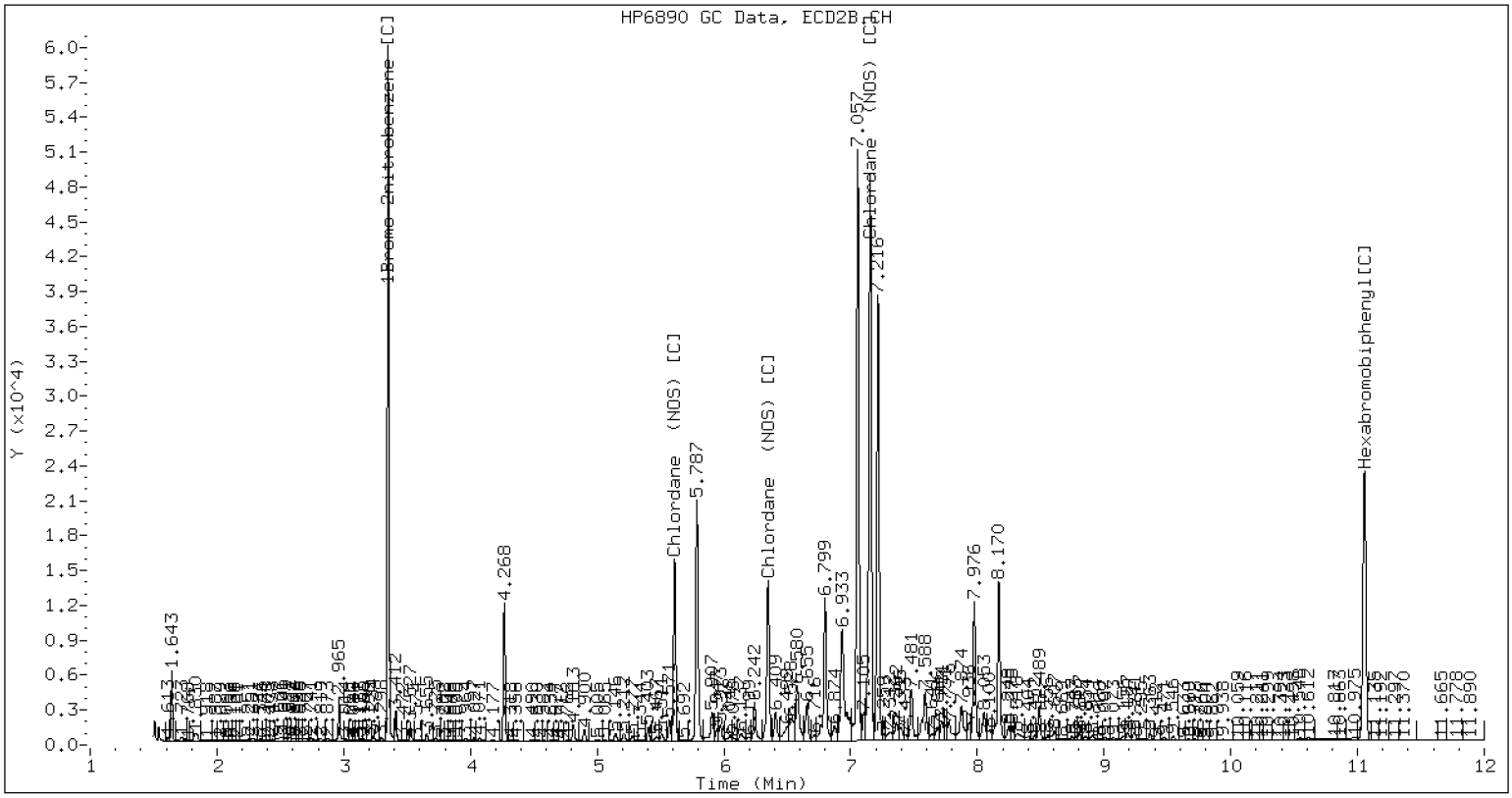
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Chlordane (NOS)	1	5.593	0.001	276980	715.3	1	5.612	0.000	398620	795.3	
Chlordane (NOS)	2	6.271	-0.000	961368	749.3	2	6.349	0.000	405170	719.7	
Chlordane (NOS)	3	6.399	-0.000	1631241	727.0	3	7.155	0.000	1462876	768.2	
Total STX-CLPAve (3 peaks): 730.539						Total CLP2Ave (3 peaks): 761.064				RPD = 4	
Corrected Ave (3 peaks): 730.539						Corrected Ave (3 peaks): 761.064				RPD = 4	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121427.D SEQ-CAL7A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121427.D
Data file 2: /20221214.b/B20221214.b/22121427.D
Method: \20221214.b\PEST.m
Compound Sublist: TECHCHLOR.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7A
Client ID:
Injection Date: 15-DEC-2022 03:11
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121428.D
Data file 2: /20221214.b/B20221214.b/22121428.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8A
Client ID:
Injection Date: 15-DEC-2022 03:29
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	0.000	8893	4.221	0.000	14795	0.95	0.98	4.0	Tetrachloro-m-xylene
9.355	0.000	15511	10.467	0.000	24896	2.54	2.86	11.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	691781	-2.7
Hexabromobiphenyl	641833	602865	-6.1

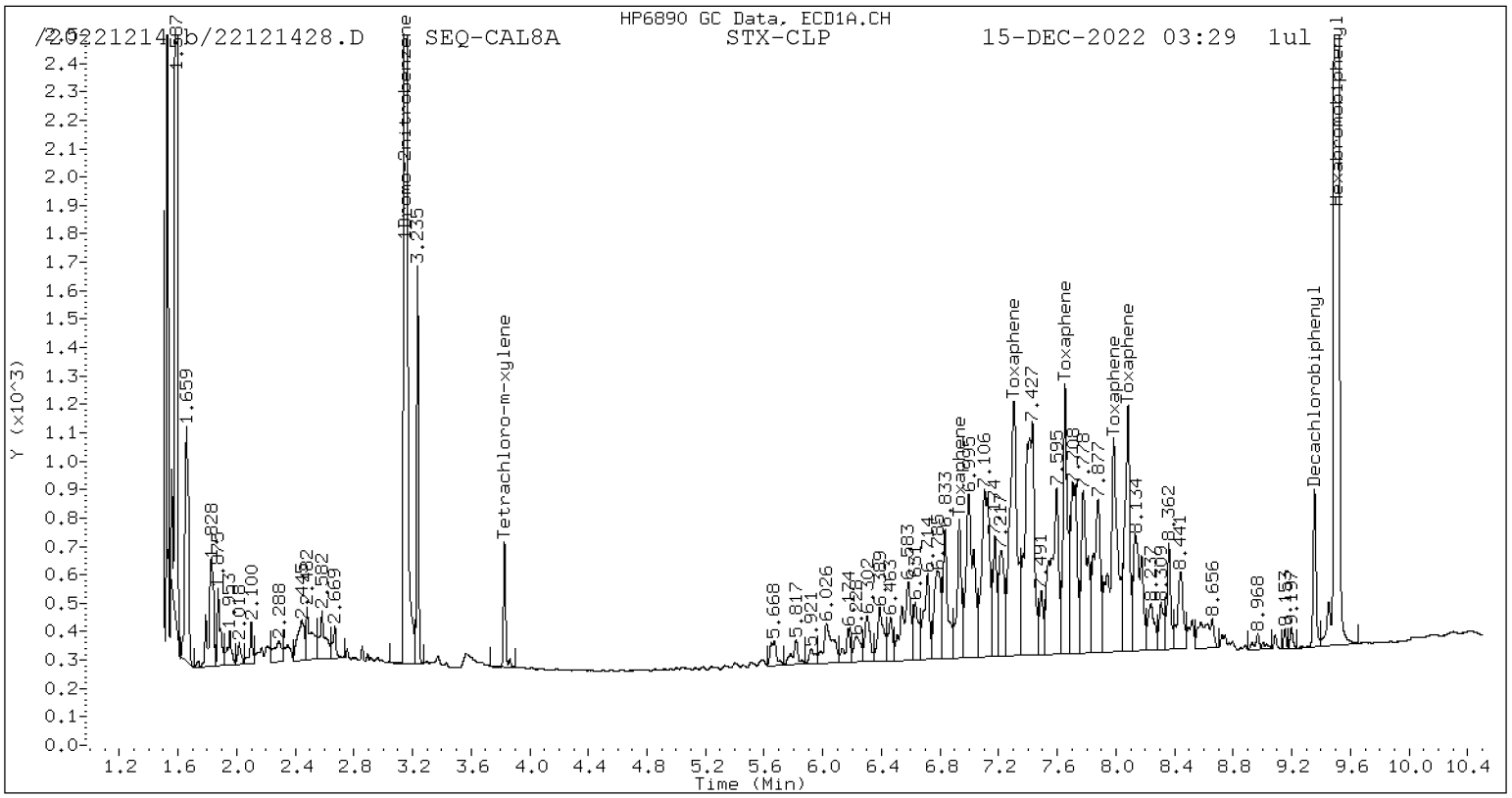
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1068328	0.9
Hexabromobiphenyl	797125	788806	-1.0

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

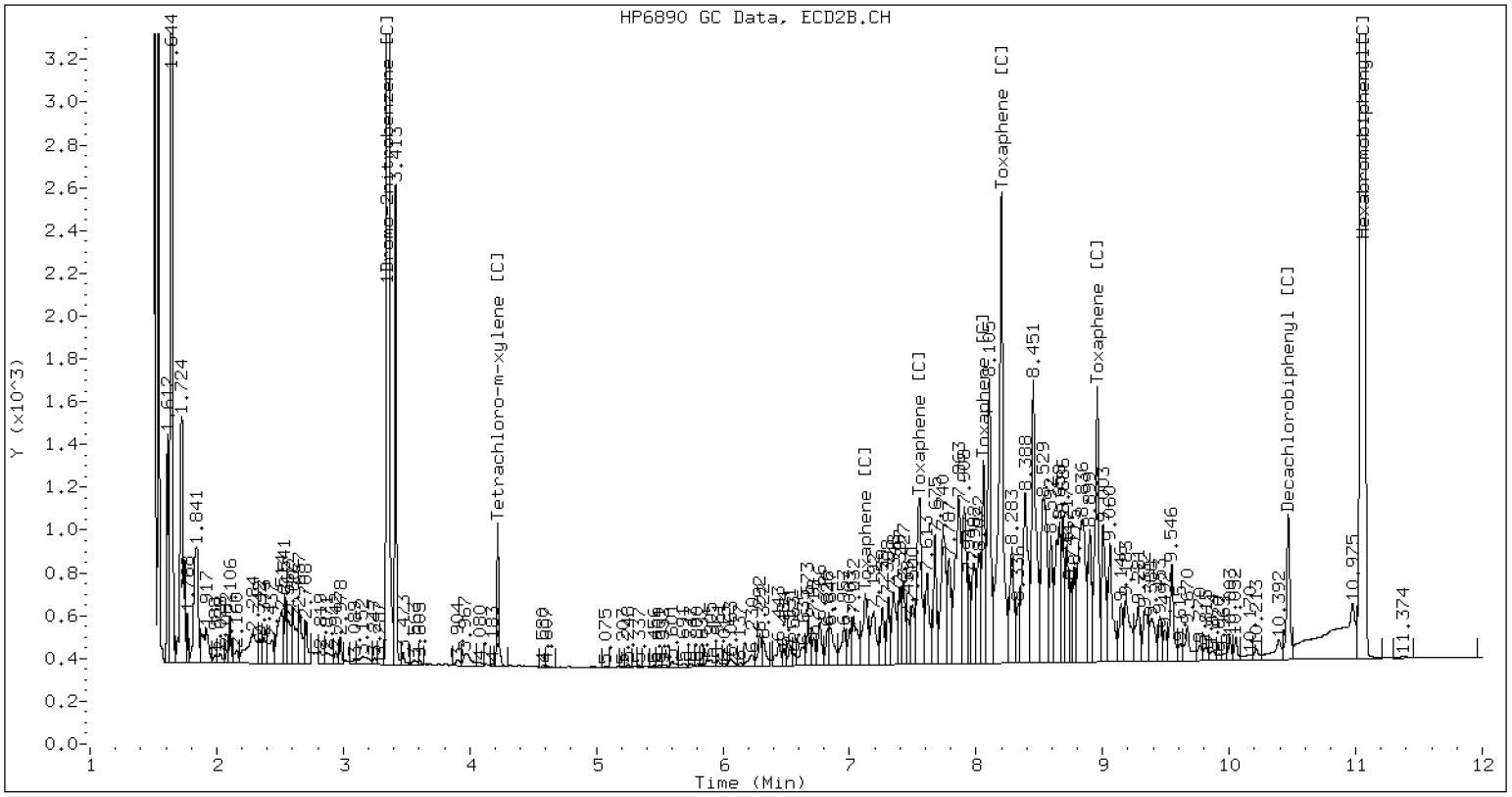
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	6.931	0.000	20939	118.9	1	7.125	-0.000	18390	124.1	
Toxaphene	2	7.304	0.000	62921	127.5	2	7.553	-0.000	43437	130.4	
Toxaphene	3	7.653	-0.000	40147	126.2	3	8.059	-0.001	32235	127.1	
Toxaphene	4	7.985	-0.001	56816	133.6	4	8.201	-0.001	109296	132.1	
Toxaphene	5	8.082	-0.000	39643	123.4	5	8.958	-0.001	50997	125.7	
Total STX-CLPAve (5 peaks): 125.907						Total CLP2Ave (5 peaks): 127.865					RPD = 2
Corrected Ave (5 peaks): 125.907						Corrected Ave (5 peaks): 127.865					RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121428.D SEQ-CAL8A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121428.D
Data file 2: /20221214.b/B20221214.b/22121428.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8A
Client ID:
Injection Date: 15-DEC-2022 03:29
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121429.D
Data file 2: /20221214.b/B20221214.b/22121429.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9A
Client ID:
Injection Date: 15-DEC-2022 03:46
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	18632	4.220	-0.000	29829	1.92	1.92	0.1	Tetrachloro-m-xylene
9.355	0.000	29179	10.467	0.000	44716	4.64	4.98	7.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	713620	0.4
Hexabromobiphenyl	641833	620026	-3.4

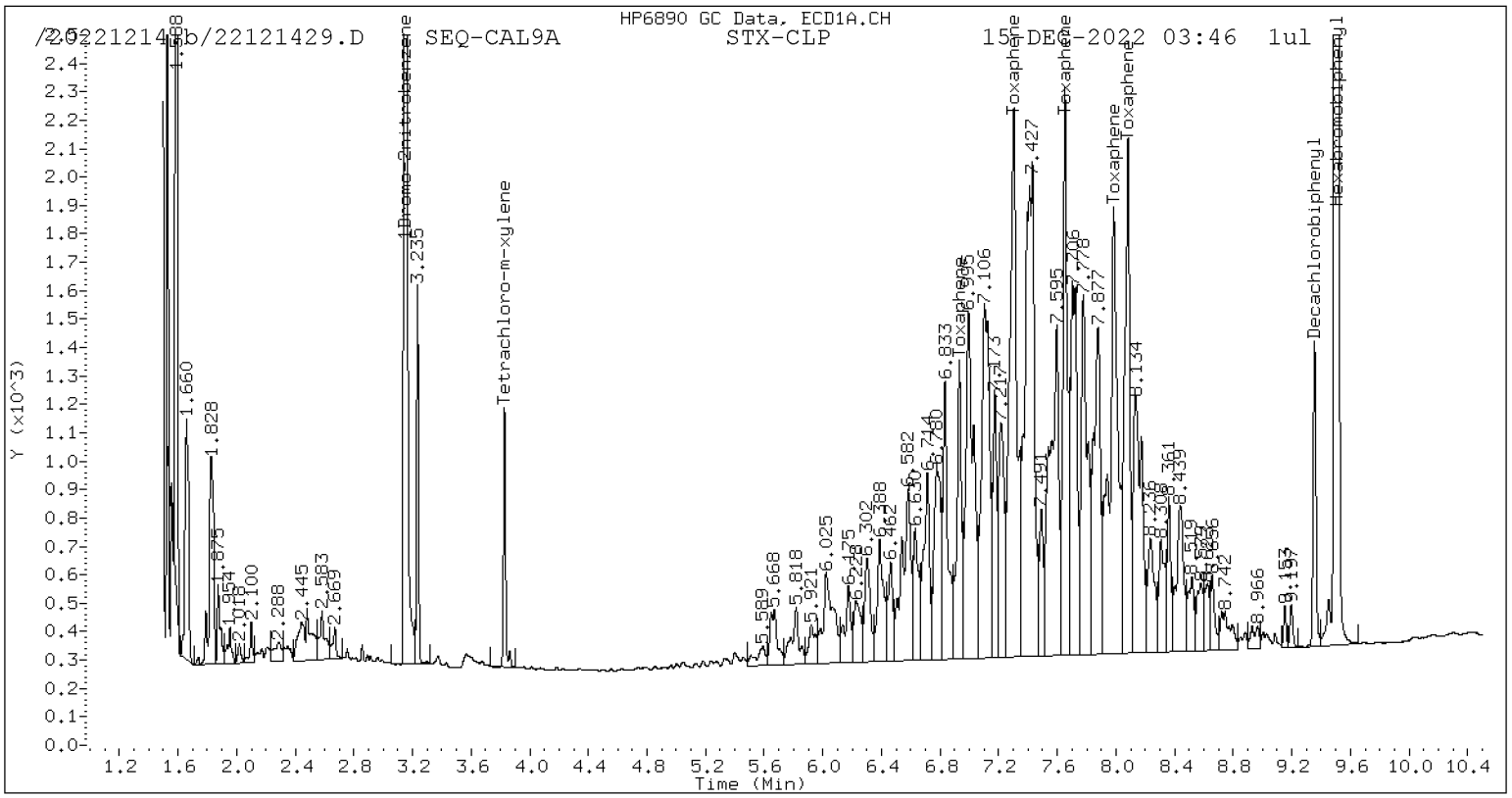
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1104488	4.3
Hexabromobiphenyl	797125	811719	1.8

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

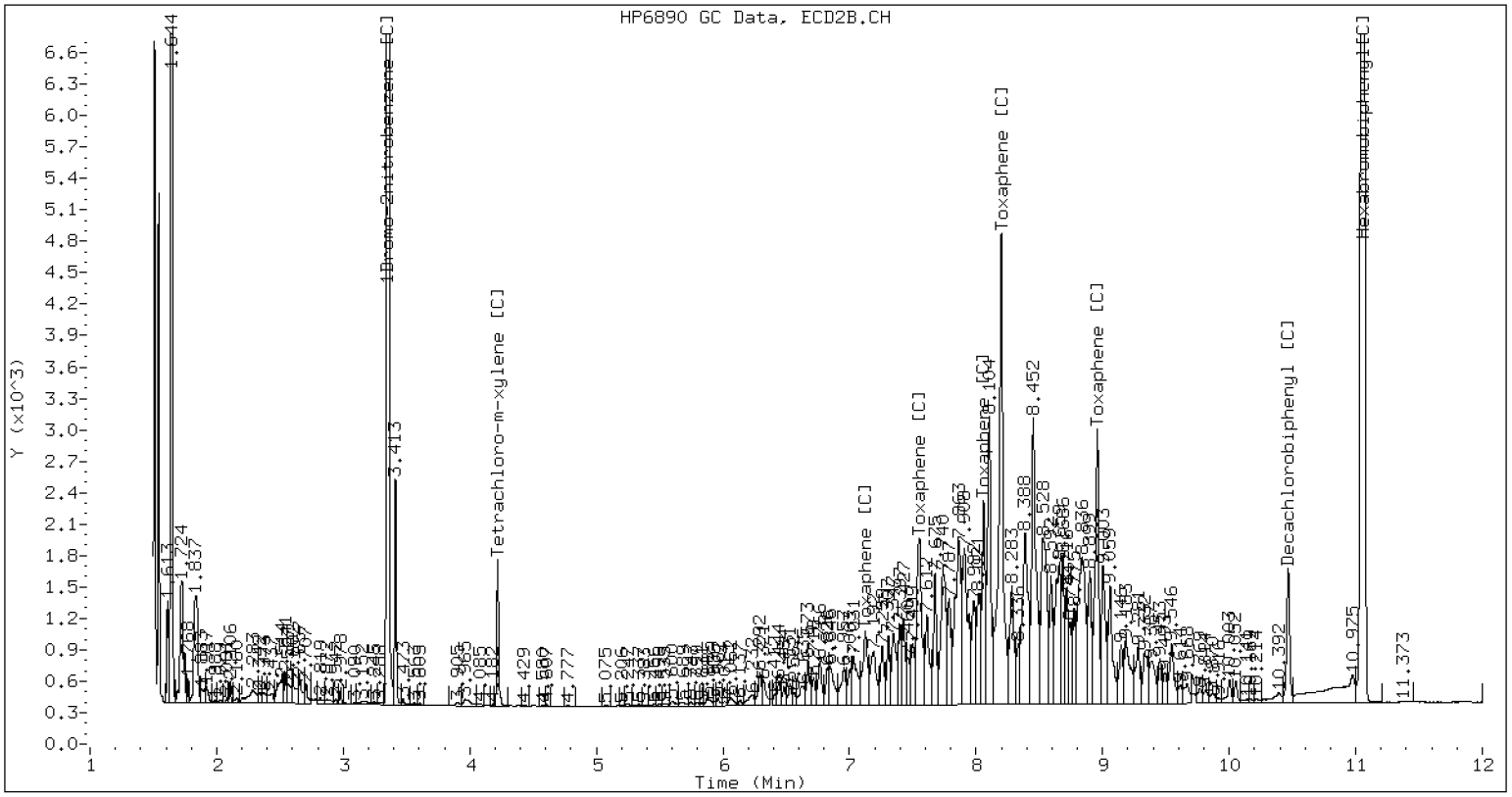
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	6.931	0.000	47415	261.8	1	7.125	-0.001	38790	254.4	
Toxaphene	2	7.302	-0.001	134642	265.2	2	7.552	-0.001	89754	261.8	
Toxaphene	3	7.652	-0.001	86679	264.9	3	8.059	-0.001	67442	258.4	
Toxaphene	4	7.985	-0.001	125891	287.7	4	8.200	-0.001	220426	258.9	
Toxaphene	5	8.081	-0.000	85903	260.0	5	8.958	-0.001	104601	250.5	
Total STX-CLPAve (5 peaks): 267.939						Total CLP2Ave (5 peaks): 256.784				RPD = 4	
Corrected Ave (5 peaks): 267.939						Corrected Ave (5 peaks): 256.784				RPD = 4	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121429.D SEQ-CAL9A CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121429.D
Data file 2: /20221214.b/B20221214.b/22121429.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9A
Client ID:
Injection Date: 15-DEC-2022 03:46
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121430.D
Data file 2: /20221214.b/B20221214.b/22121430.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAA
Client ID:
Injection Date: 15-DEC-2022 04:04
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	37717	4.220	0.000	60469	3.98	3.98	0.0	Tetrachloro-m-xylene
9.355	0.000	57106	10.467	0.000	82418	9.20	9.32	1.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	696179	-2.0
Hexabromobiphenyl	641833	612804	-4.5

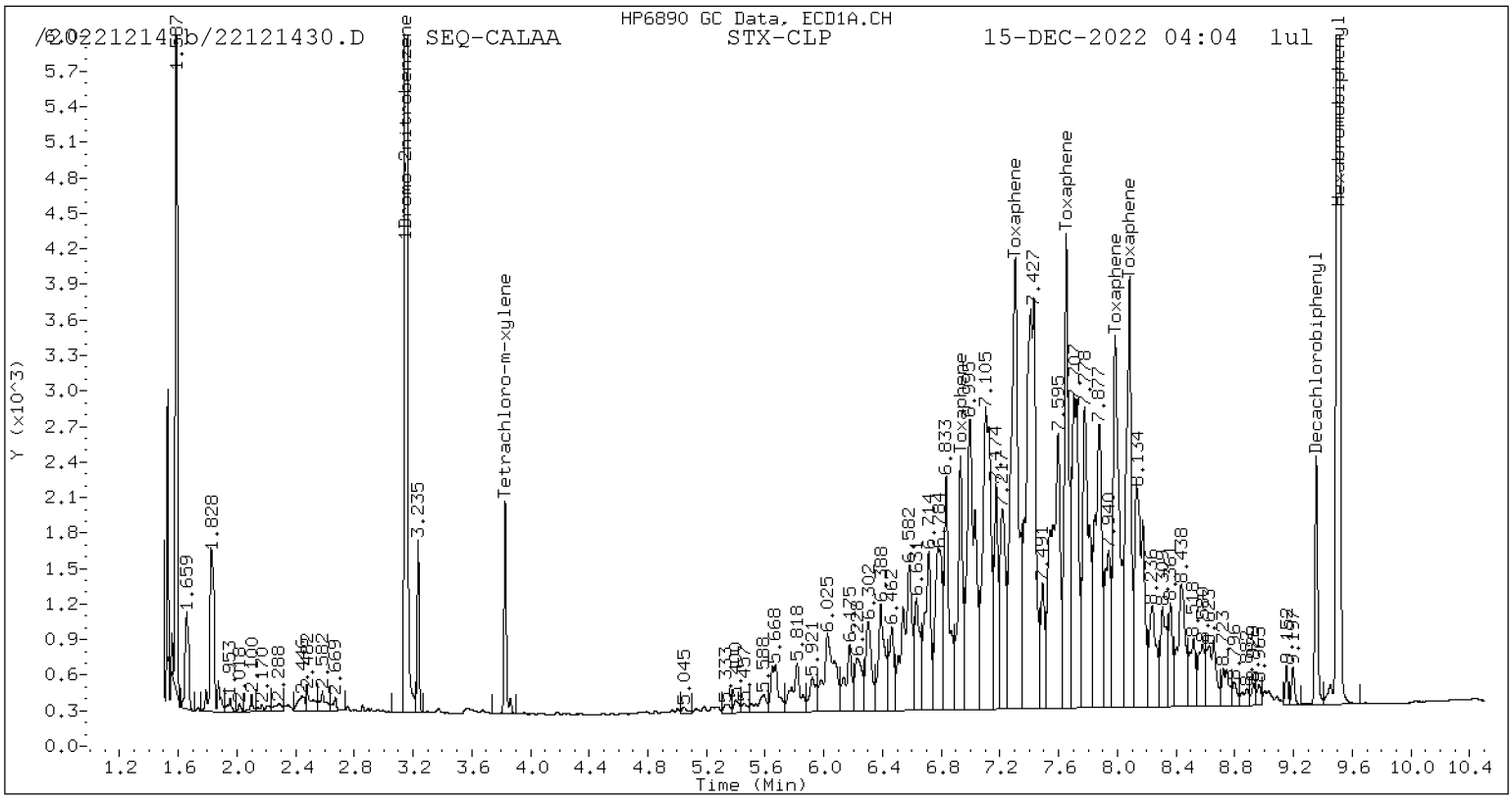
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1078803	1.9
Hexabromobiphenyl	797125	800071	0.4

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

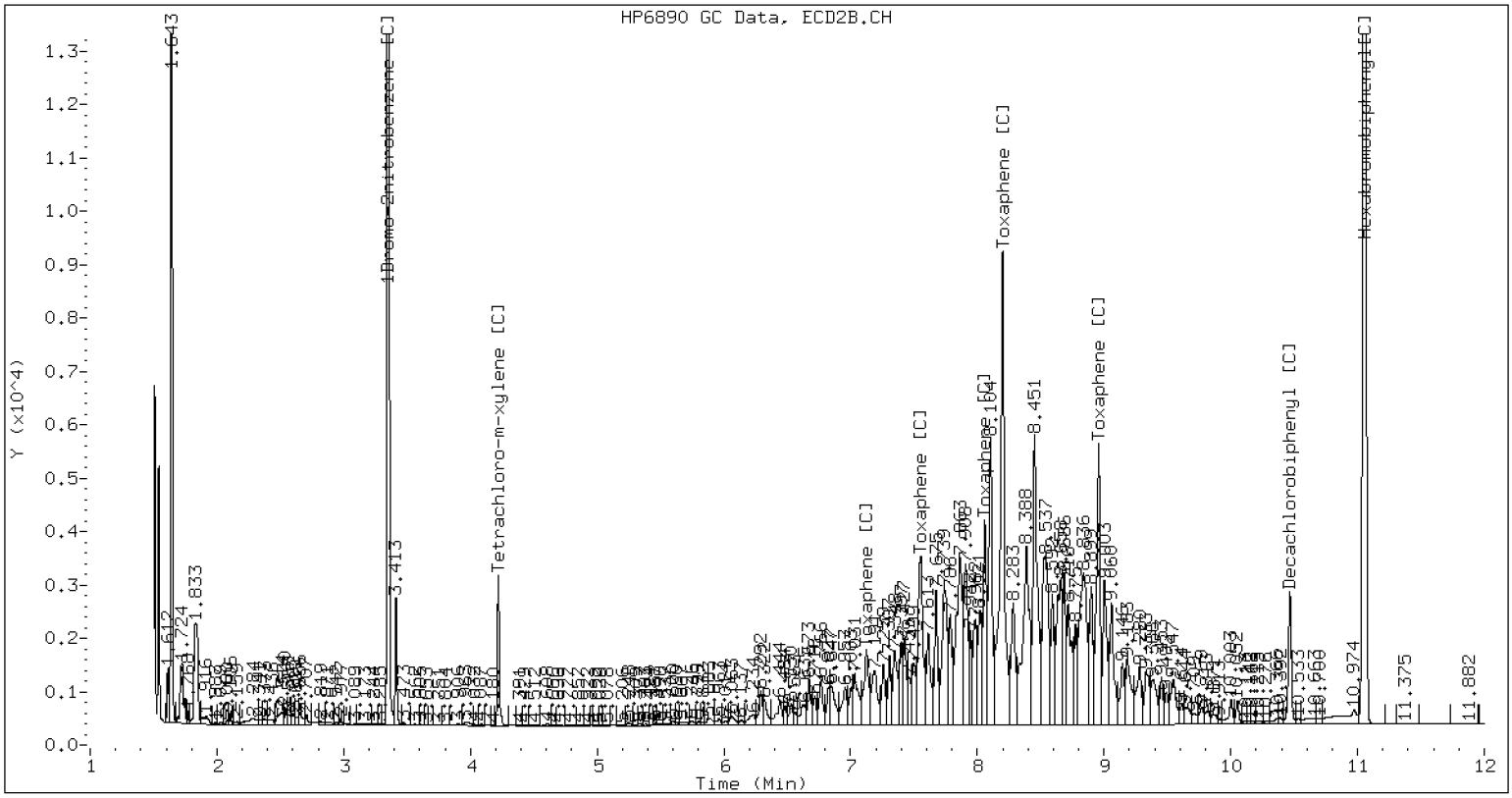
	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	-0.000	96535	539.4	1	7.125	-0.001	78635	523.1
Toxaphene	2	7.304	0.000	273576	545.2	2	7.553	-0.001	179081	529.9
Toxaphene	3	7.652	-0.001	177095	547.7	3	8.059	-0.001	133547	519.1
Toxaphene	4	7.985	-0.001	190443	440.4	4	8.200	-0.001	437035	520.8
Toxaphene	5	8.082	-0.000	175009	535.8	5	8.958	-0.001	209659	509.4
Total STX-CLPAve (5 peaks): 521.711						Total CLP2Ave (5 peaks): 520.468				RPD = 0
Corrected Ave (5 peaks): 521.711						Corrected Ave (5 peaks): 520.468				RPD = 0

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121430.D SEQ-CALAA CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121430.D
Data file 2: /20221214.b/B20221214.b/22121430.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAA
Client ID:
Injection Date: 15-DEC-2022 04:04
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121431.D
Data file 2: /20221214.b/B20221214.b/22121431.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAB
Client ID:
Injection Date: 15-DEC-2022 04:22
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	0.000	74347	4.221	0.000	119694	7.73	7.77	0.5	Tetrachloro-m-xylene
9.355	-0.000	107024	10.466	-0.000	151970	17.00	17.11	0.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	706924	-0.5
Hexabromobiphenyl	641833	621486	-3.2

Column 2

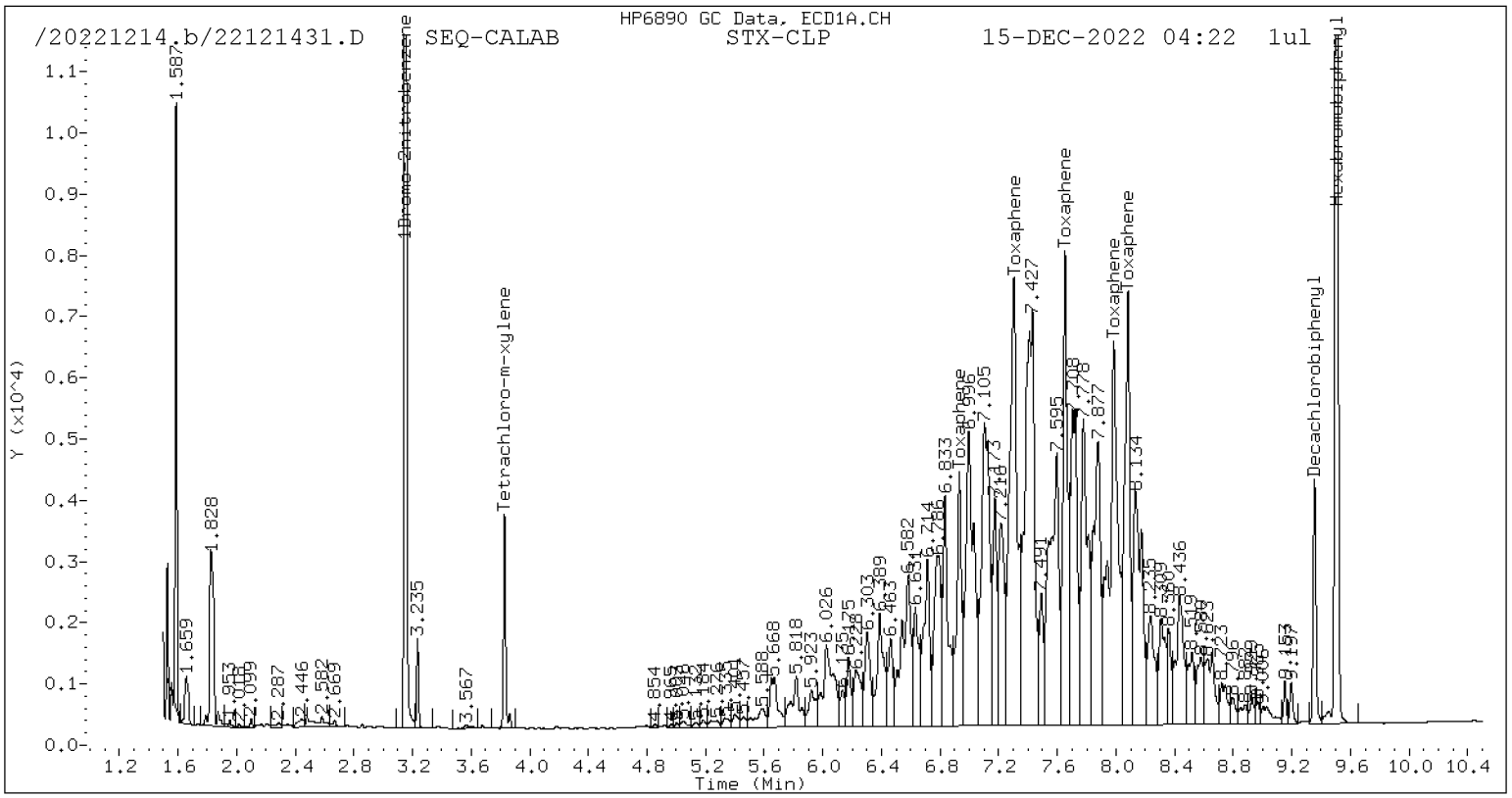
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1093936	3.3
Hexabromobiphenyl	797125	803782	0.8

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	0.000	192757	1062.0	1	7.125	-0.000	156515	1036.5
Toxaphene	2	7.303	-0.000	530863	1043.2	2	7.553	-0.001	349637	1029.8
Toxaphene	3	7.653	-0.000	344194	1049.6	3	8.059	-0.000	265296	1026.5
Toxaphene	4	7.986	-0.000	522105	1190.6	4	8.201	-0.001	854255	1013.3
Toxaphene	5	8.082	-0.000	345477	1043.0	5	8.958	-0.001	416452	1007.1

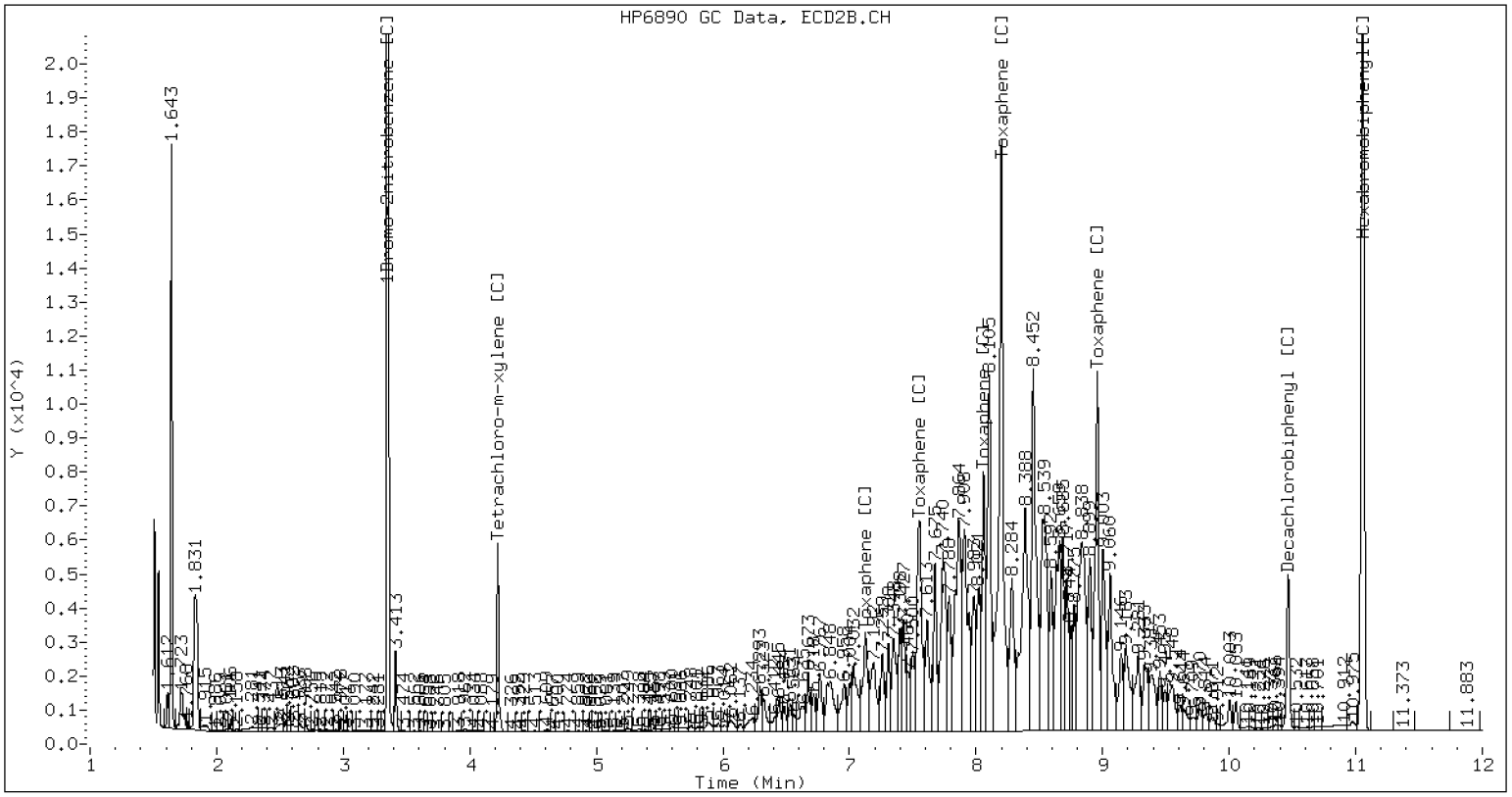
Total STX-CLPAve (5 peaks): 1077.665 Total CLP2Ave (5 peaks): 1022.630 RPD = 5
Corrected Ave (5 peaks): 1077.665 Corrected Ave (5 peaks): 1022.630 RPD = 5

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121431.D SEQ-CALAB CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121431.D
Data file 2: /20221214.b/B20221214.b/22121431.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAB
Client ID:
Injection Date: 15-DEC-2022 04:22
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121432.D
Data file 2: /20221214.b/B20221214.b/22121432.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAC
Client ID:
Injection Date: 15-DEC-2022 04:40
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	0.000	169388	4.221	0.000	273030	18.51	18.69	1.0	Tetrachloro-m-xylene
9.356	0.001	234532	10.466	-0.000	332716	40.53	40.11	1.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	672958	-5.3
Hexabromobiphenyl	641833	571112	-11.0

Column 2

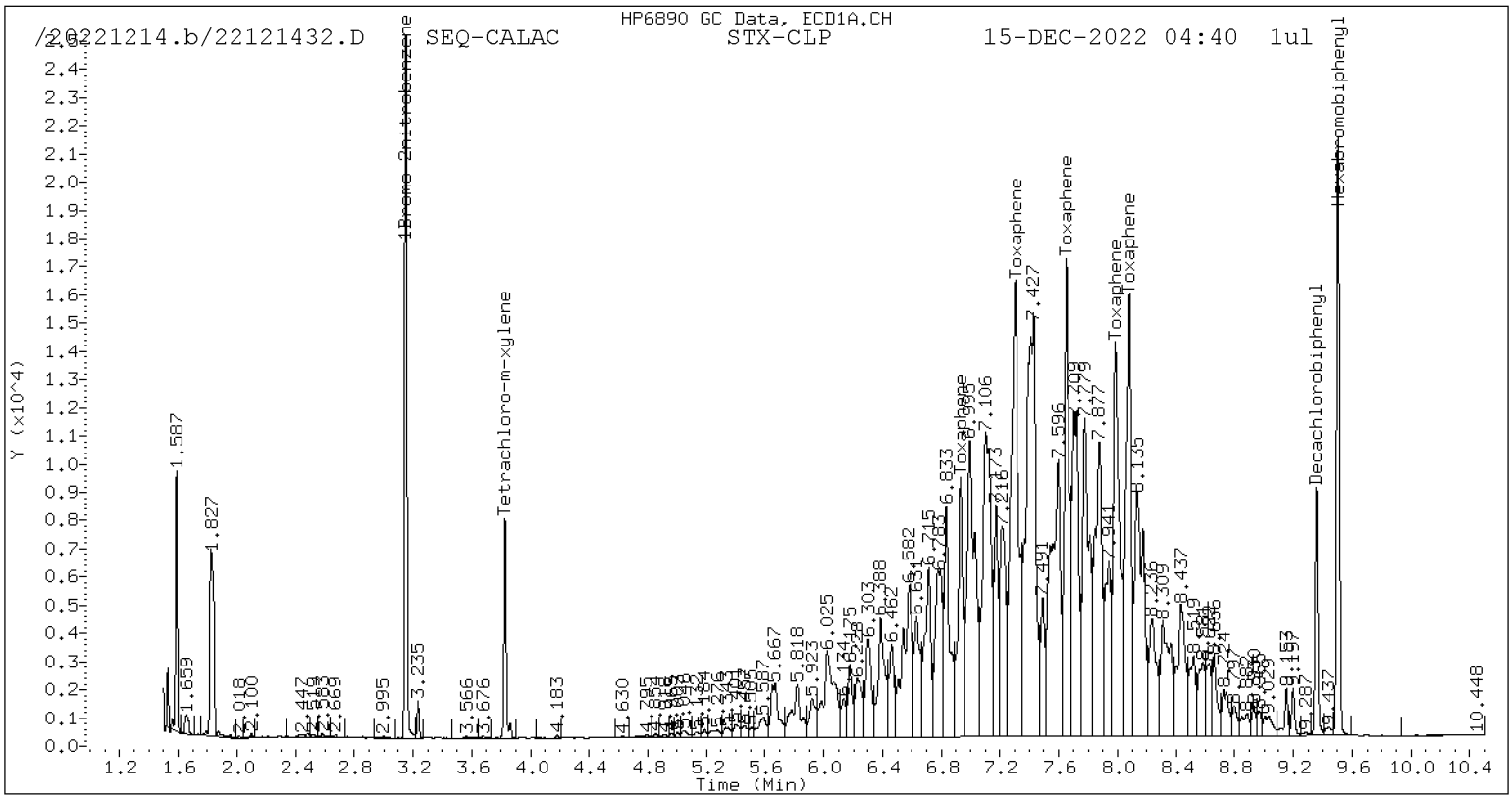
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1037593	-2.0
Hexabromobiphenyl	797125	750492	-5.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	0.000	432250	2591.5	1	7.126	-0.000	358061	2539.5
Toxaphene	2	7.303	0.000	1180375	2524.1	2	7.553	0.000	785942	2479.1
Toxaphene	3	7.653	0.000	762221	2529.4	3	8.059	-0.000	602985	2498.7
Toxaphene	4	7.986	0.000	863552	2142.9	4	8.201	-0.001	1929083	2450.8
Toxaphene	5	8.082	0.000	777497	2554.3	5	8.958	-0.001	962132	2492.0

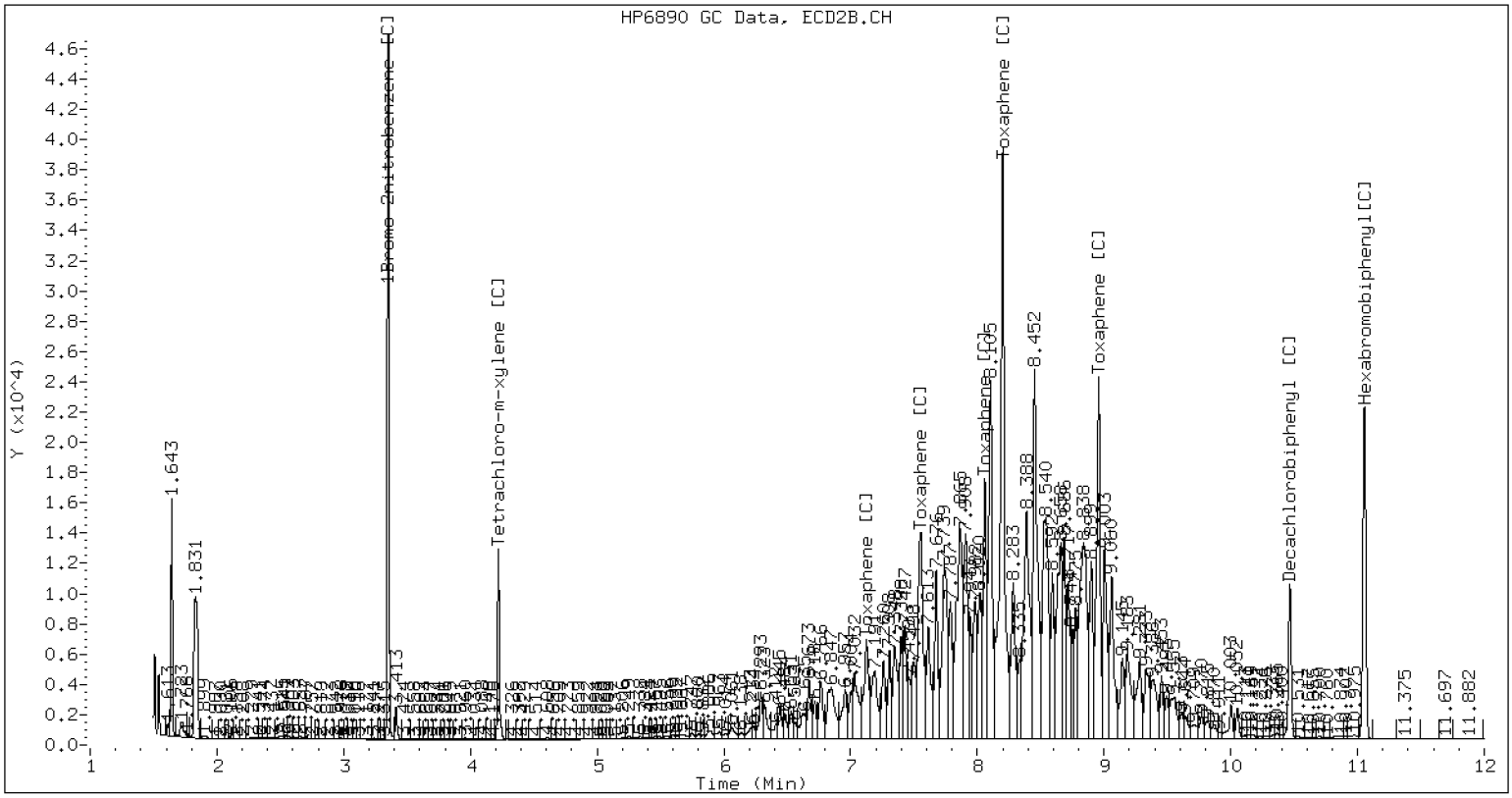
Total STX-CLPAve (5 peaks): 2468.427 Total CLP2Ave (5 peaks): 2492.024 RPD = 1
Corrected Ave (5 peaks): 2468.427 Corrected Ave (5 peaks): 2492.024 RPD = 1

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121432.D SEQ-CALAC CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121432.D
Data file 2: /20221214.b/B20221214.b/22121432.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAC
Client ID:
Injection Date: 15-DEC-2022 04:40
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121433.D
Data file 2: /20221214.b/B20221214.b/22121433.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAD
Client ID:
Injection Date: 15-DEC-2022 04:58
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	329284	4.221	0.000	536251	34.78	35.63	2.4	Tetrachloro-m-xylene
9.356	0.000	464116	10.466	-0.000	660536	76.95	77.19	0.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	696178	-2.0
Hexabromobiphenyl	641833	595287	-7.3

Column 2

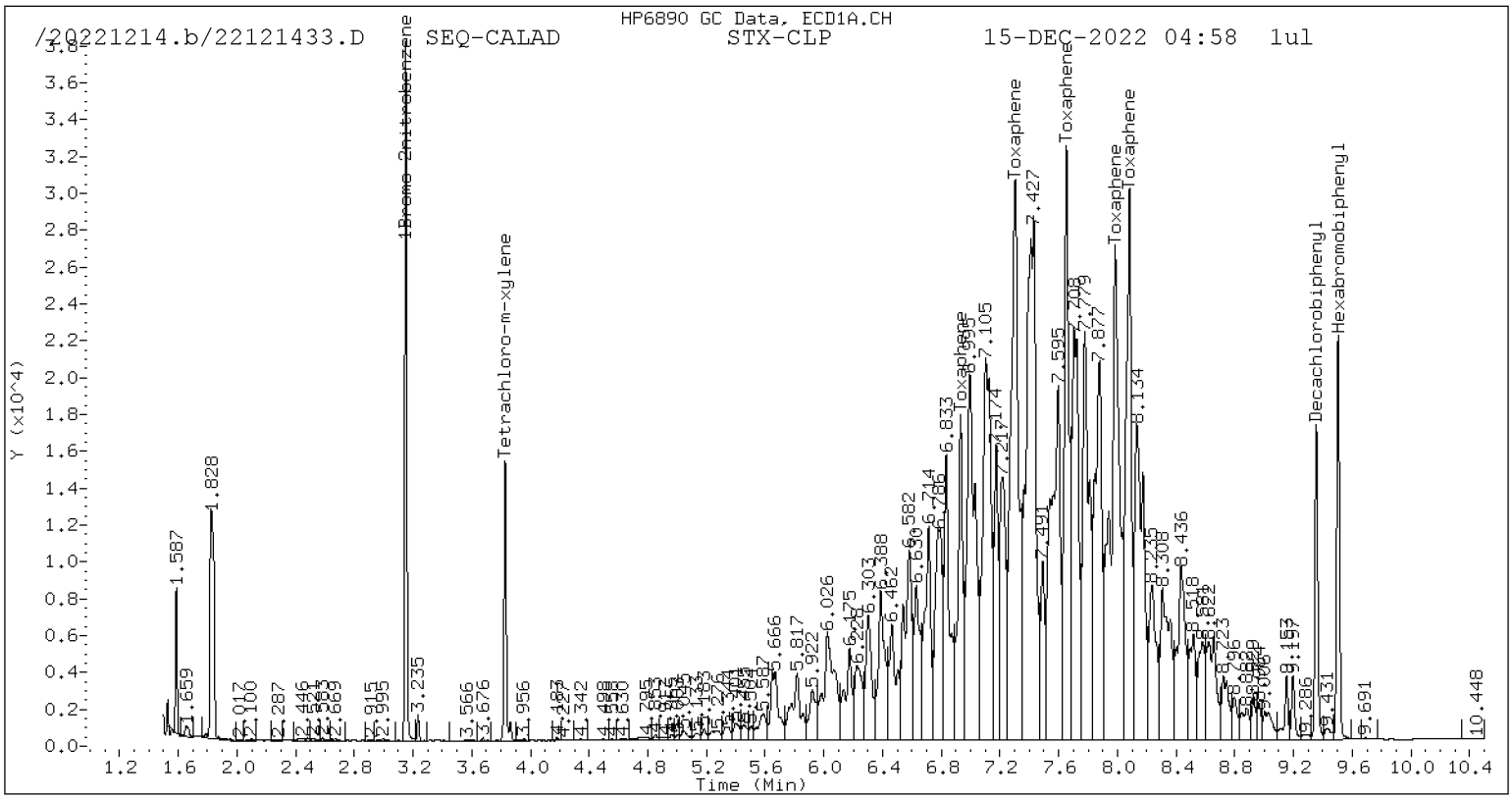
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1069205	1.0
Hexabromobiphenyl	797125	774218	-2.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.931	0.000	828531	4765.6	1	7.126	-0.000	704213	4841.5
Toxaphene	2	7.303	-0.000	2275106	4667.4	2	7.554	0.000	1533921	4690.3
Toxaphene	3	7.653	-0.000	1493693	4755.4	3	8.059	-0.001	1192086	4788.5
Toxaphene	4	7.986	0.000	2318449	5519.5	4	8.201	-0.001	3835448	4723.4
Toxaphene	5	8.081	-0.000	1509568	4758.0	5	8.958	-0.000	1957568	4914.8

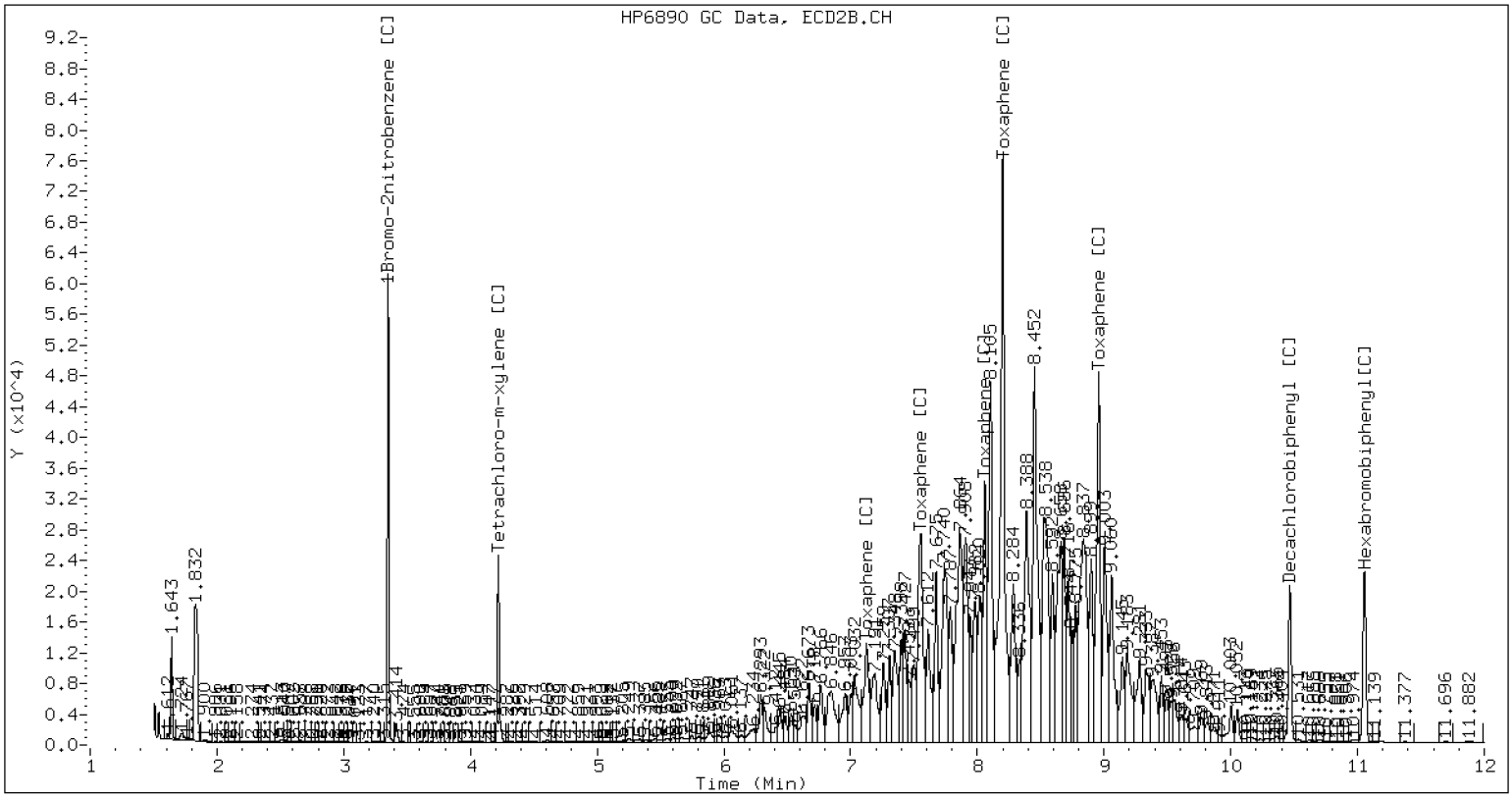
Total STX-CLPAve (5 peaks): 4893.192 Total CLP2Ave (5 peaks): 4791.694 RPD = 2
Corrected Ave (5 peaks): 4893.192 Corrected Ave (5 peaks): 4791.694 RPD = 2

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121433.D SEQ-CALAD CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121433.D
Data file 2: /20221214.b/B20221214.b/22121433.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAD
Client ID:
Injection Date: 15-DEC-2022 04:58
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121434.D
Data file 2: /20221214.b/B20221214.b/22121434.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAE
Client ID:
Injection Date: 15-DEC-2022 05:16
Report Date: 12/16/2022 15:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.828	-0.000	626937	4.221	0.000	1016753	65.66	67.54	2.8	Tetrachloro-m-xylene
9.355	0.000	899917	10.467	0.000	1293767	145.37	151.89	4.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	710650	702143	-1.2
Hexabromobiphenyl	641833	610983	-4.8

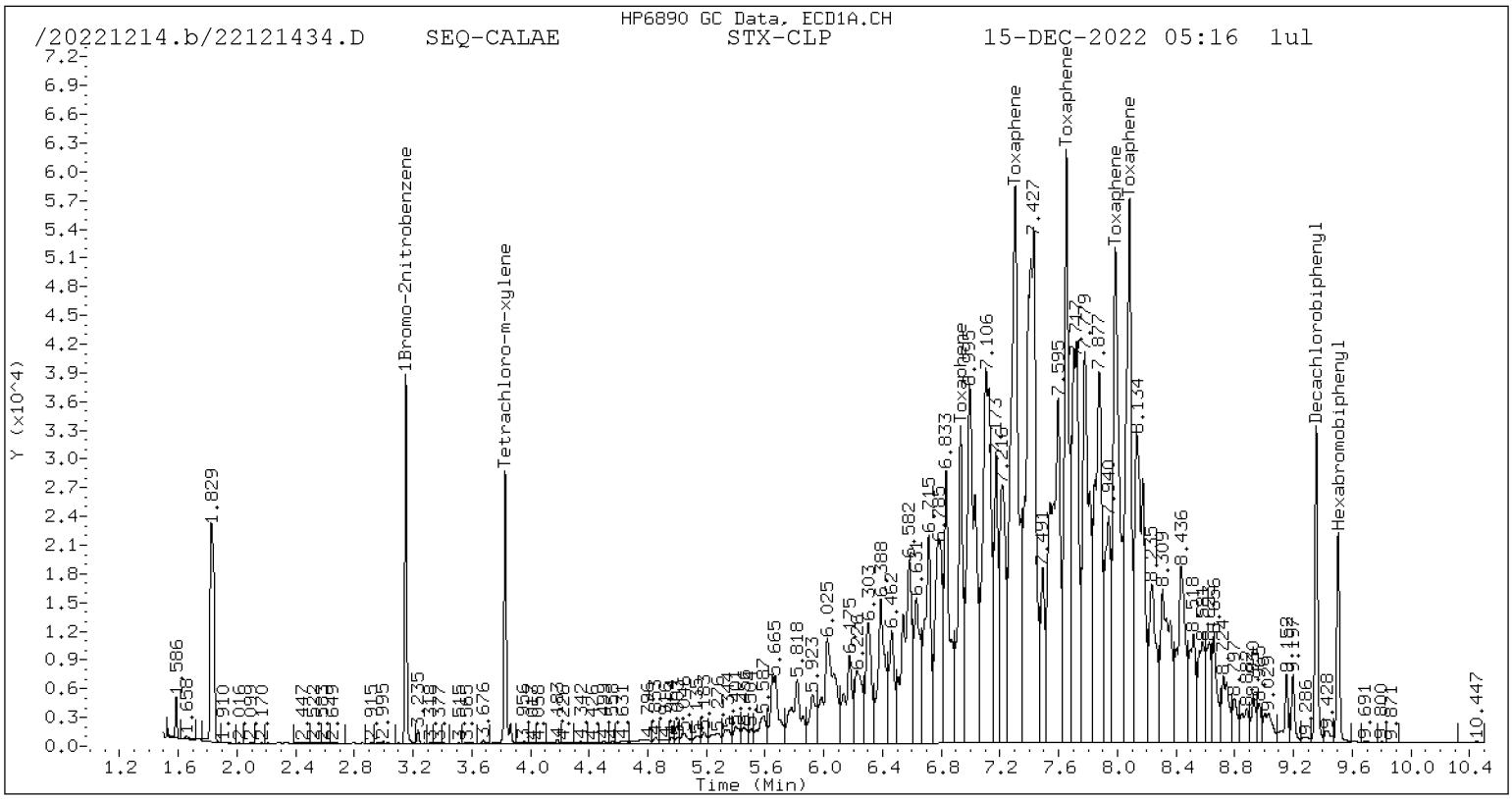
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1058848	1069521	1.0
Hexabromobiphenyl	797125	770702	-3.3

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

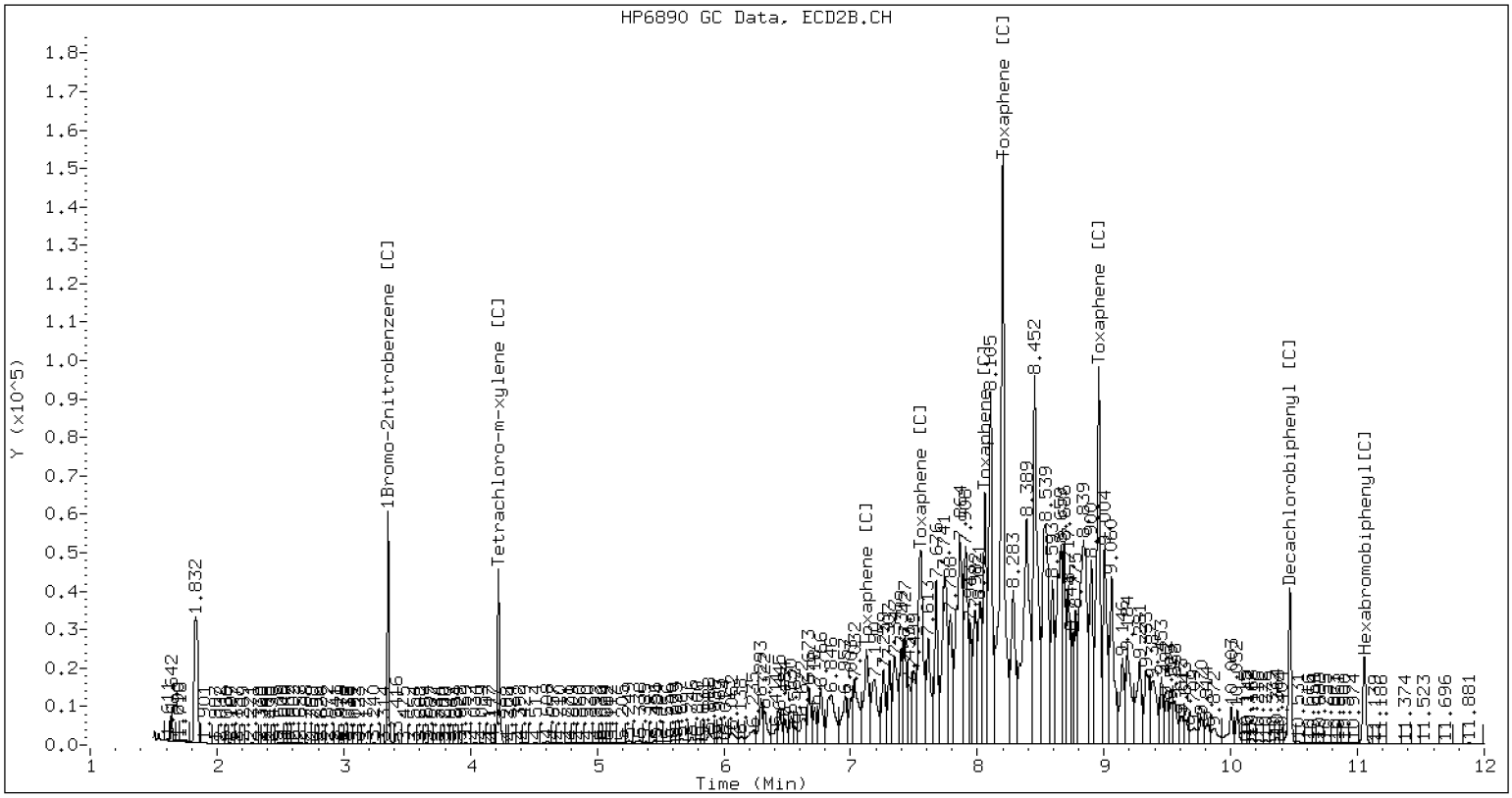
		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	6.931	0.000	1553785	8707.6	1	7.126	0.000	1336419	9229.8	
Toxaphene	2	7.303	-0.000	4216546	8428.1	2	7.553	0.000	2900195	8908.4	
Toxaphene	3	7.653	-0.000	2652265	8227.0	3	8.060	0.000	2299294	9278.2	
Toxaphene	4	7.987	0.001	3225164	7480.8	4	8.201	0.000	7496819	9274.6	
Toxaphene	5	8.082	-0.000	2882252	8851.2	5	8.959	0.000	3913616	9870.7	
Total STX-CLPAve (5 peaks): 8338.950						Total CLP2Ave (5 peaks): 9312.318				RPD = 11	
Corrected Ave (5 peaks): 8338.950						Corrected Ave (5 peaks): 9312.318				RPD = 11	

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20221214.b/B20221214.b/22121434.D SEQ-CALAE CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20221214.b/22121434.D
Data file 2: /20221214.b/B20221214.b/22121434.D
Method: \20221214.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALAE
Client ID:
Injection Date: 15-DEC-2022 05:16
Report Date: 12/15/2022 09:09
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23030103.D	Calibration Date:	12/14/2022
Sequence:	SLC0031	Injection Date:	03/01/23
Lab Sample ID:	SLC0031-ICV1	Injection Time:	12:59
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
alpha-BHC	A	20.000	21.2	1.5401480	1.6318530		6.0	+/-20
alpha-BHC [2C]	A	20.000	19.9	1.6032650	1.5956460		-0.5	+/-20
beta-BHC	A	20.000	20.9	0.5929524	0.6197912		4.5	+/-20
beta-BHC [2C]	A	20.000	19.6	0.6095359	0.5970997		-2.0	+/-20
gamma-BHC (Lindane)	A	20.000	21.2	1.3353400	1.4122990		6.0	+/-20
gamma-BHC (Lindane) [2C]	A	20.000	20.3	1.3606	1.3814490		1.5	+/-20
delta-BHC	A	20.000	22.4	1.2587440	1.4072820		12.0	+/-20
delta-BHC [2C]	A	20.000	20.4	1.3206240	1.3455400		2.0	+/-20
Heptachlor	A	20.000	21.8	1.1881510	1.2983900		9.0	+/-20
Heptachlor [2C]	A	20.000	19.7	1.2325020	1.2170940		-1.5	+/-20
Aldrin	A	20.000	20.7	1.3315350	1.3780100		3.5	+/-20
Aldrin [2C]	A	20.000	18.5	1.4072190	1.3022270		-7.5	+/-20
Heptachlor Epoxide	A	20.000	20.2	1.1545300	1.1658880		1.0	+/-20
Heptachlor Epoxide [2C]	A	20.000	17.5	1.1636450	1.0203590		-12.5	+/-20
trans-Chlordane (beta-Chlordane)	A	20.000	20.3	1.1726130	1.1912540		1.5	+/-20
trans-Chlordane (beta-Chlordane) [2C]	A	20.000	17.4	1.1604170	1.0070410		-13.0	+/-20
cis-Chlordane (alpha-chlordane)	A	20.000	20.0	1.1760380	1.1783370		0.0	+/-20
cis-Chlordane (alpha-chlordane) [2C]	A	20.000	17.4	1.1352300	0.9860312		-13.0	+/-20
Endosulfan I	A	20.000	20.2	1.0595170	1.0714400		1.0	+/-20
Endosulfan I [2C]	A	20.000	17.5	1.0256020	0.8975360		-12.5	+/-20
4,4'-DDE	A	40.000	41.0	1.0568430	1.0845830		2.5	+/-20
4,4'-DDE [2C]	A	40.000	35.6	1.0391680	0.9256080		-11.0	+/-20
Dieldrin	A	40.000	39.7	1.1382810	1.1297400		-0.8	+/-20
Dieldrin [2C]	A	40.000	34.1	1.1331770	0.9670424		-14.8	+/-20
Endrin	A	40.000	40.0	1.0488190	1.0481240		0.0	+/-20
Endrin [2C]	A	40.000	40.8	1.1374860	1.1590430		2.0	+/-20
Endosulfan II	A	40.000	46.8	0.9441550	1.1045250		17.0	+/-20
Endosulfan II [2C]	A	40.000	44.1	1.1659380	1.2852790		10.3	+/-20
4,4'-DDD	A	40.000	45.0	0.9449058	1.0641560		12.5	+/-20
4,4'-DDD [2C]	A	40.000	44.9	1.1064160	1.2427540		12.3	+/-20

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23030103.D	Calibration Date:	12/14/2022
Sequence:	SLC0031	Injection Date:	03/01/23
Lab Sample ID:	SLC0031-ICV1	Injection Time:	12:59
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Endrin Aldehyde	A	40.000	45.2	0.7530726	0.8513102		13.0	+/-20
Endrin Aldehyde [2C]	A	40.000	46.7	0.8224595	0.9606006		16.8	+/-20
4,4'-DDT	A	40.000	45.6	0.9548168	1.0897750		14.0	+/-20
4,4'-DDT [2C]	A	40.000	45.4	1.0678960	1.2120210		13.5	+/-20
Endosulfan Sulfate	A	40.000	43.0	0.8965158	0.9635986		7.5	+/-20
Endosulfan Sulfate [2C]	A	40.000	45.0	1.0238570	1.1529240		12.5	+/-20
Endrin Ketone	A	40.000	45.0	1.0270110	1.1550750		12.5	+/-20
Endrin Ketone [2C]	A	40.000	46.6	1.1058500	1.2873590		16.5	+/-20
Methoxychlor	A	200.00	220	0.4231113	0.4653710		10.0	+/-20
Methoxychlor [2C]	A	200.00	227	0.4725766	0.5372994		13.5	+/-20
Hexachlorobutadiene	A	20.000	18.7	1.6135150	1.5109460		-6.5	+/-20
Hexachlorobutadiene [2C]	A	20.000	17.6	1.5225100	1.3406060		-12.0	+/-20
Hexachlorobenzene	A	20.000	19.5	1.4298940	1.3928430		-2.5	+/-20
Hexachlorobenzene [2C]	A	20.000	18.5	1.4591090	1.3487500		-7.5	+/-20
Decachlorobiphenyl	A	40.000	36.5	0.8105886	0.7394753		-8.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.6	0.8841805	0.8100346		-8.5	+/-20
Tetrachlorometaxylene	A	40.000	37.2	1.0879510	1.0106810		-7.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.5	1.1261070	1.0282480		-8.8	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230301.b/23030103.D
Data file 2: /20230301.b/B20230301.b/23030103.D
Method: \20230301.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: INDA1
Client ID:
Injection Date: 01-MAR-2023 12:59
Report Date: 03/02/2023 13:13
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.394	0.001	334653	4.833	-0.000	504522	21.19	19.90	6.3	alpha-BHC
4.782	0.001	127104	5.306	0.000	188795	20.91	19.59	6.5	beta-BHC
4.969	0.000	288599	5.658	0.000	425442	22.36	20.38	9.3	delta-BHC
4.702	0.001	289628	5.228	0.001	436796	21.15	20.31	4.1	gamma-BHC (Lindane)
5.195	0.000	266268	5.755	0.001	384829	21.86	19.75	10.1	Heptachlor
5.523	0.000	282596	6.157	0.001	411747	20.70	18.51	11.2	Aldrin
6.203	0.001	239095	6.812	0.001	322624	20.20	17.54	14.1	Heptachlor epoxide b
6.644	0.001	219726	7.255	0.000	283789	20.23	17.50	14.4	Endosulfan I
6.904	0.000	463364	7.548	0.001	611532	39.70	34.14	15.1	Dieldrin
6.563	0.000	444843	7.336	0.001	585330	41.05	35.63	14.1	4,4'-DDE
7.154	0.000	358191	7.871	0.001	444046	39.97	40.76	1.9	Endrin
7.390	0.000	377466	8.081	-0.000	492409	46.79	44.09	5.9	Endosulfan II
7.209	0.000	363670	7.939	0.000	476117	45.05	44.93	0.3	4,4'-DDD
8.252	0.001	329305	8.677	0.001	441702	42.99	45.04	4.7	Endosulfan sulfate
7.503	0.001	372425	8.257	0.000	464343	45.65	45.40	0.6	4,4'-DDT
7.988	0.000	795191	8.895	0.001	1029236	219.98	227.39	3.3	Methoxychlor
8.526	0.000	394741	9.200	0.001	493206	44.99	46.57	3.4	Endrin ketone
7.818	0.001	290931	8.411	0.000	368020	45.22	46.72	3.3	Endrin aldehyde
6.343	0.000	244297	7.022	0.001	318413	20.32	17.36	15.7	trans-Chlordane
6.490	0.000	241648	7.181	0.001	311770	20.04	17.37	14.3	cis-Chlordane
2.348	0.000	309858	2.493	-0.002	423882	18.73	17.61	6.2	Hexachlorobutadiene
4.234	0.001	285638	4.692	-0.000	426457	19.48	18.49	5.2	Hexachlorobenzene
3.874	0.001	414532	4.198	-0.000	650237	37.16	36.52	1.7	Tetrachloro-m-xylene
9.439	-0.001	252712	10.407	0.001	310336	36.49	36.65	0.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

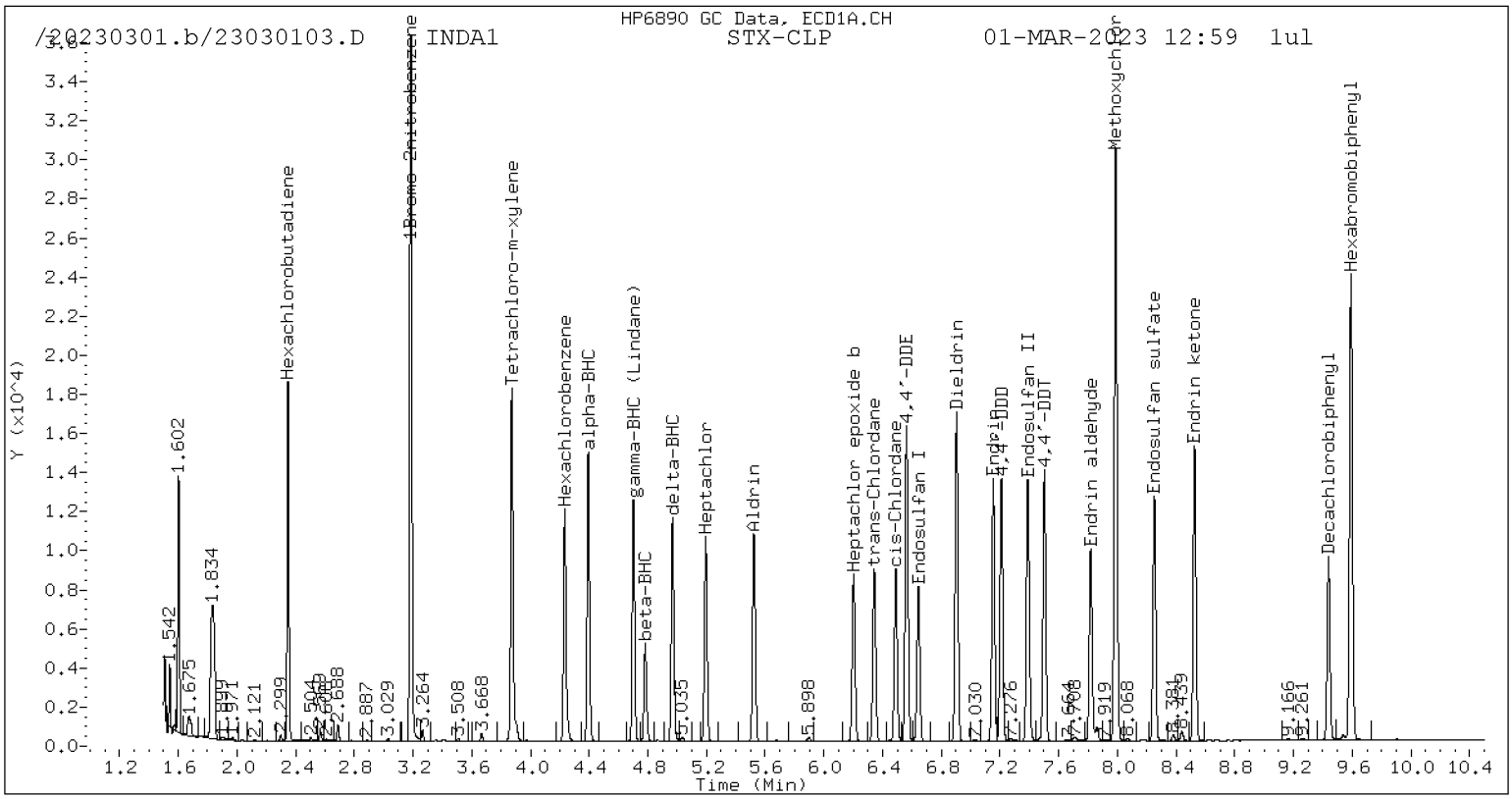
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	820302	22.0
Hexabromobiphenyl	609723	683490	12.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1264747	25.7
Hexabromobiphenyl	769764	766229	-0.5

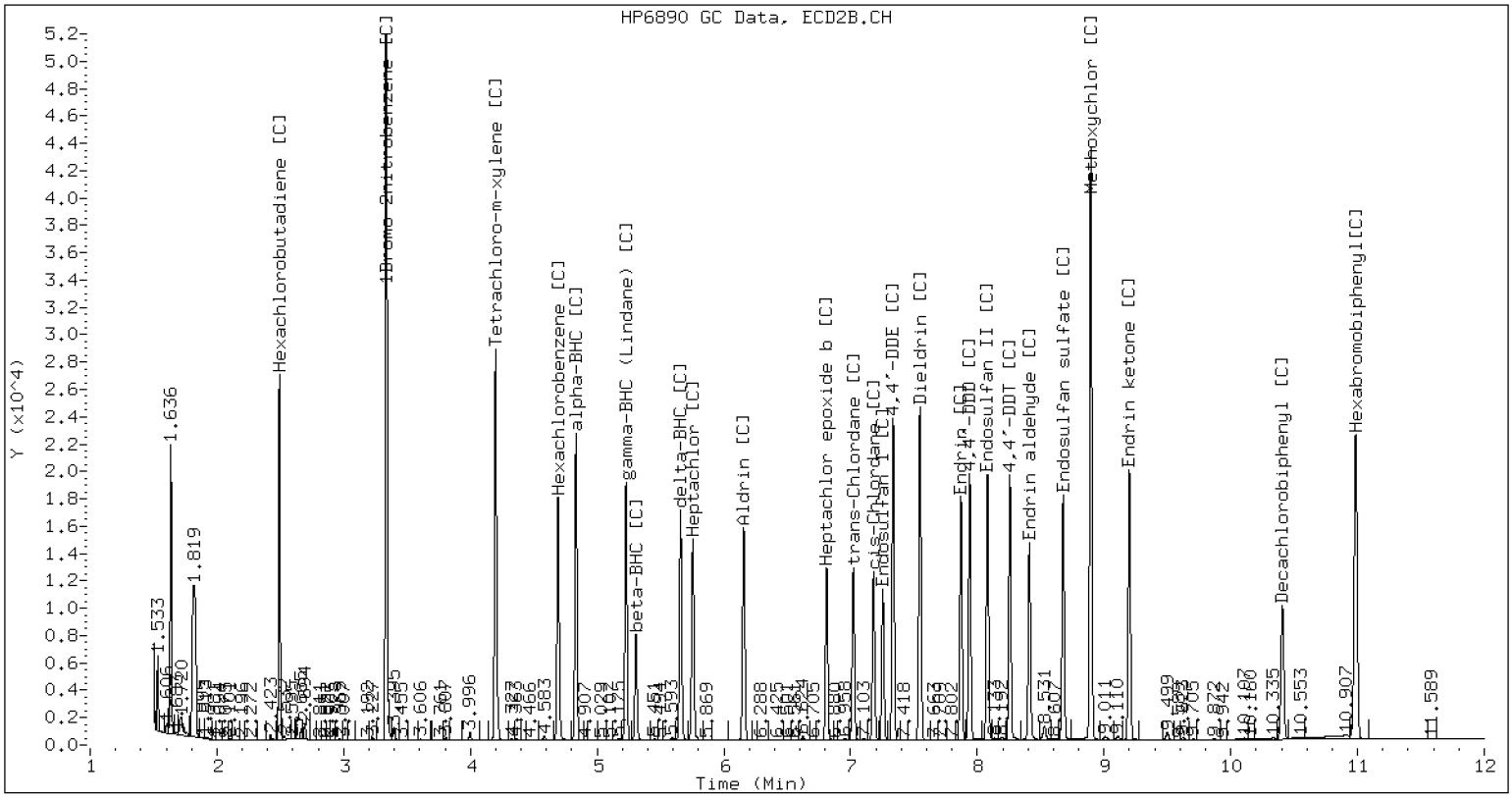
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230301.b/B20230301.b/23030103.D INDA1 CLP2



CLP-2 Manual Integration: NO

INITIAL CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23030104.D	Calibration Date:	12/14/2022
Sequence:	SLC0031	Injection Date:	03/01/23
Lab Sample ID:	SLC0031-ICV2	Injection Time:	13:17
Sequence Name:	WNDE		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
2,4'-DDE	A	40.000	39.8	0.7852778	0.7815957		-0.5	+/-20
2,4'-DDE [2C]	A	40.000	32.7	0.7295523	0.5965192		-18.3	+/-20
2,4'-DDD	A	40.000	41.5	0.6985950	0.7250025		3.8	+/-20
2,4'-DDD [2C]	A	40.000	42.5	0.8188656	0.8703159		6.3	+/-20
2,4'-DDT	A	40.000	44.1	0.7548286	0.8327695		10.3	+/-20
2,4'-DDT [2C]	A	40.000	44.5	0.8432439	0.9374197		11.3	+/-20
Oxychlordane	A	40.000	45.1	0.9511440	1.0726750		12.8	+/-20
Oxychlordane [2C]	A	40.000	36.4	0.8909094	0.8102844		-9.0	+/-20
cis-Nonachlor	A	40.000	43.0	1.2113910	1.3016410		7.5	+/-20
cis-Nonachlor [2C]	A	40.000	42.8	1.3610610	1.4557830		7.0	+/-20
trans-Nonachlor	A	40.000	40.7	1.2440250	1.2657440		1.8	+/-20
trans-Nonachlor [2C]	A	40.000	42.0	1.4315700	1.5019260		5.0	+/-20
Mirex	A	40.000	40.1	0.7535613	0.7550467		0.3	+/-20
Mirex [2C]	A	40.000	40.9	0.7915793	0.8096262		2.3	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230301.b/23030104.D
Data file 2: /20230301.b/B20230301.b/23030104.D
Method: \20230301.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: WND1
Client ID:
Injection Date: 01-MAR-2023 13:17
Report Date: 03/02/2023 13:13
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.088	0.000	363995	6.707	-0.001	511112	45.11	36.38	21.4	Oxychlordane
6.181	0.000	265222	7.002	-0.000	376273	39.81	32.71	19.6	2,4-DDE
6.471	0.000	429510	7.121	-0.000	579540	40.70	41.97	3.1	trans-Nonachlor
6.755	0.000	246018	7.555	-0.000	335824	41.51	42.51	2.4	2,4-DDD
7.031	0.000	282587	7.877	-0.001	361717	44.13	44.47	0.8	2,4-DDT
7.186	0.001	441691	7.939	-0.000	561735	42.98	42.78	0.5	cis-Nonachlor
8.160	0.000	256213	9.183	-0.001	312406	40.08	40.91	2.1	Mirex
----			4.197	-0.001	197	0.00	0.01	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

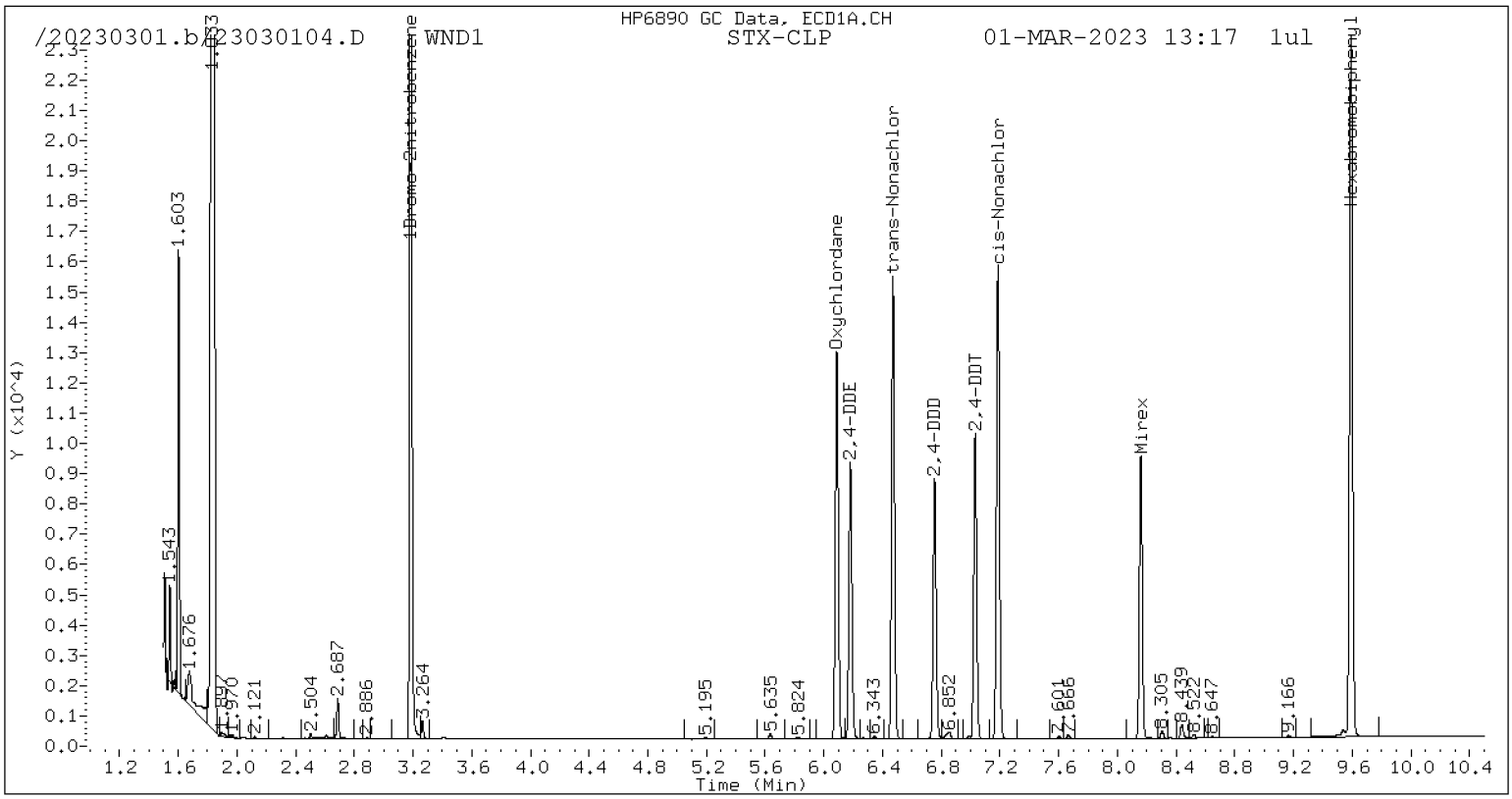
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	798734	18.8
Hexabromobiphenyl	609723	678668	11.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1261562	25.3
Hexabromobiphenyl	769764	771729	0.3

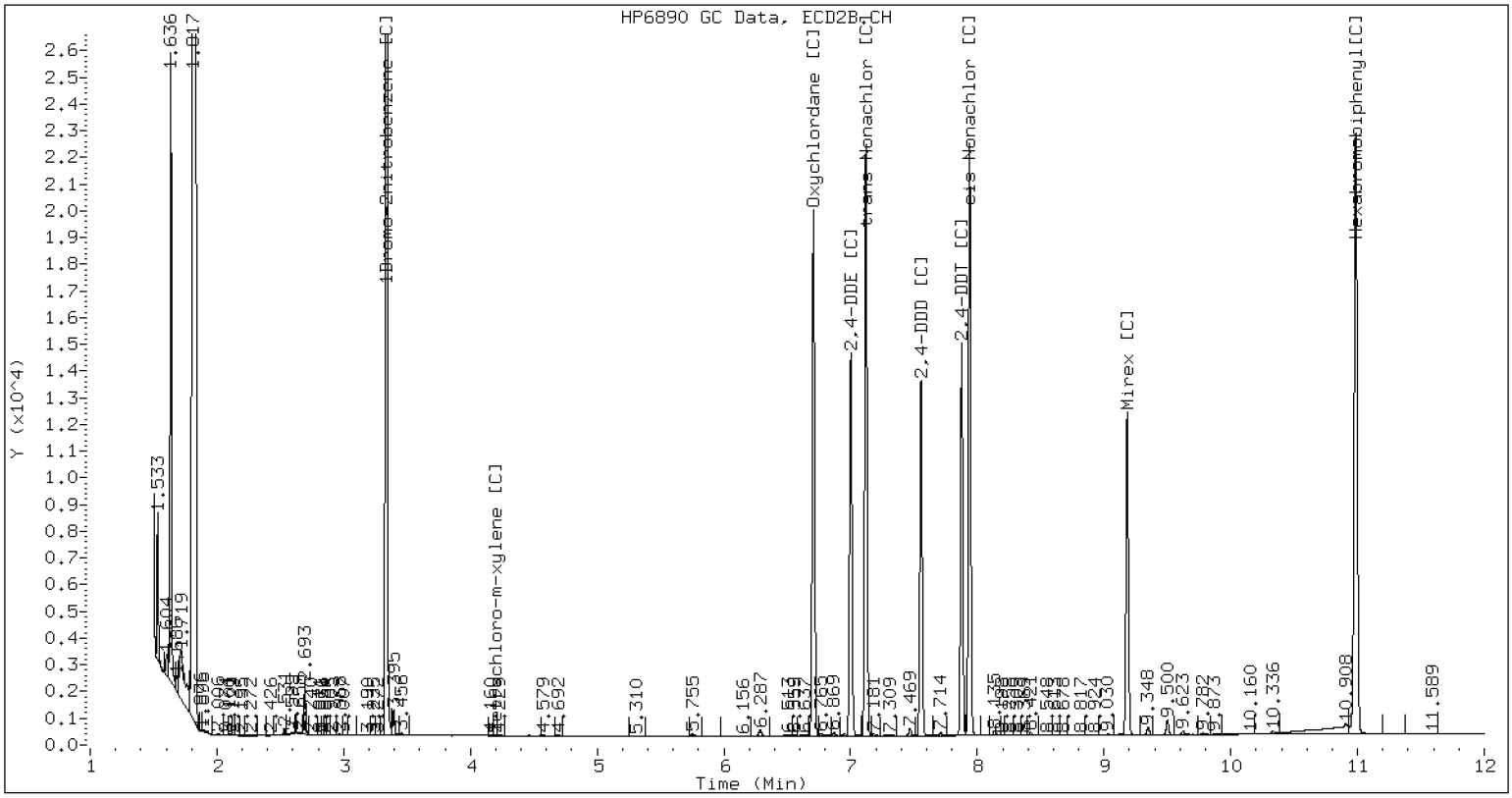
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230301.b/B20230301.b/23030104.D WND1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23C03073.D	Calibration Date:	12/14/2022
Sequence:	SLC0106	Injection Date:	03/07/23
Lab Sample ID:	SLC0106-ICV1	Injection Time:	09:35
Sequence Name:	INDAE1		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Hexachlorobenzene	A	20.000	19.7	1.4298940	1.4087490		-1.5	+/-20
Hexachlorobenzene [2C]	A	20.000	19.2	1.4591090	1.3981120		-4.0	+/-20
Decachlorobiphenyl	A	40.000	37.5	0.8105886	0.7599394		-6.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.8	0.8841805	0.8128448		-8.0	+/-20
Tetrachlorometaxylene	A	40.000	35.7	1.0879510	0.9702200		-10.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.8	1.1261070	1.0650870		-5.5	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230307.b/23C03073.D
Data file 2: /20230307.b/B20230307.b/23C03073.D
Method: \20230307.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA1
Client ID:
Injection Date: 07-MAR-2023 09:35
Report Date: 03/09/2023 13:37
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.378	0.000	325929	4.816	0.000	494898	21.10	20.60	2.4	alpha-BHC
4.766	0.000	126955	5.289	0.000	184681	21.35	20.22	5.4	beta-BHC
4.952	0.000	277905	5.641	0.000	371523	22.01	18.77	15.9	delta-BHC
4.684	0.000	282813	5.210	0.000	428139	21.12	21.00	0.6	gamma-BHC (Lindane)
5.176	0.000	258082	5.735	0.000	383099	21.66	20.74	4.3	Heptachlor
5.504	0.000	272577	6.137	0.000	402592	20.41	19.09	6.7	Aldrin
6.183	0.000	231421	6.793	0.000	324748	19.99	18.62	7.1	Heptachlor epoxide b
6.625	0.000	215572	7.236	0.000	282875	20.29	18.40	9.7	Endosulfan I
6.885	0.000	460870	7.530	0.000	611544	40.37	36.01	11.4	Dieldrin
6.546	0.000	428294	7.319	0.000	575872	40.41	36.98	8.9	4,4'-DDE
7.135	0.000	320148	7.853	0.000	408164	38.69	39.71	2.6	Endrin
7.372	0.000	372458	8.064	0.000	485545	50.00	46.09	8.1	Endosulfan II
7.192	0.000	341363	7.924	0.000	489488	45.79	48.96	6.7	4,4'-DDD
8.234	0.000	327223	8.660	0.000	435275	46.26	47.05	1.7	Endosulfan sulfate
7.485	0.000	368275	8.241	0.000	461337	48.88	47.81	2.2	4,4'-DDT
7.972	0.000	755666	8.880	0.000	990921	226.35	232.07	2.5	Methoxychlor
8.508	0.000	401738	9.182	0.000	485441	49.58	48.58	2.0	Endrin ketone
7.800	0.000	287029	8.394	0.000	358159	48.31	48.20	0.2	Endrin aldehyde
6.324	0.000	235537	7.004	0.000	319249	20.03	18.36	8.7	trans-Chlordane
6.471	0.000	231718	7.163	0.000	310912	19.64	18.28	7.2	cis-Chlordane
2.336	0.000	293527	2.482	0.000	326794	18.14	14.32	23.5	Hexachlorobutadiene
4.219	0.000	282589	4.676	0.000	419048	19.70	19.16	2.8	Hexachlorobenzene
3.859	0.000	389244	4.183	0.000	638465	35.67	37.83	5.9	Tetrachloro-m-xylene
9.421	0.000	239846	10.385	0.000	293780	37.50	36.77	2.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

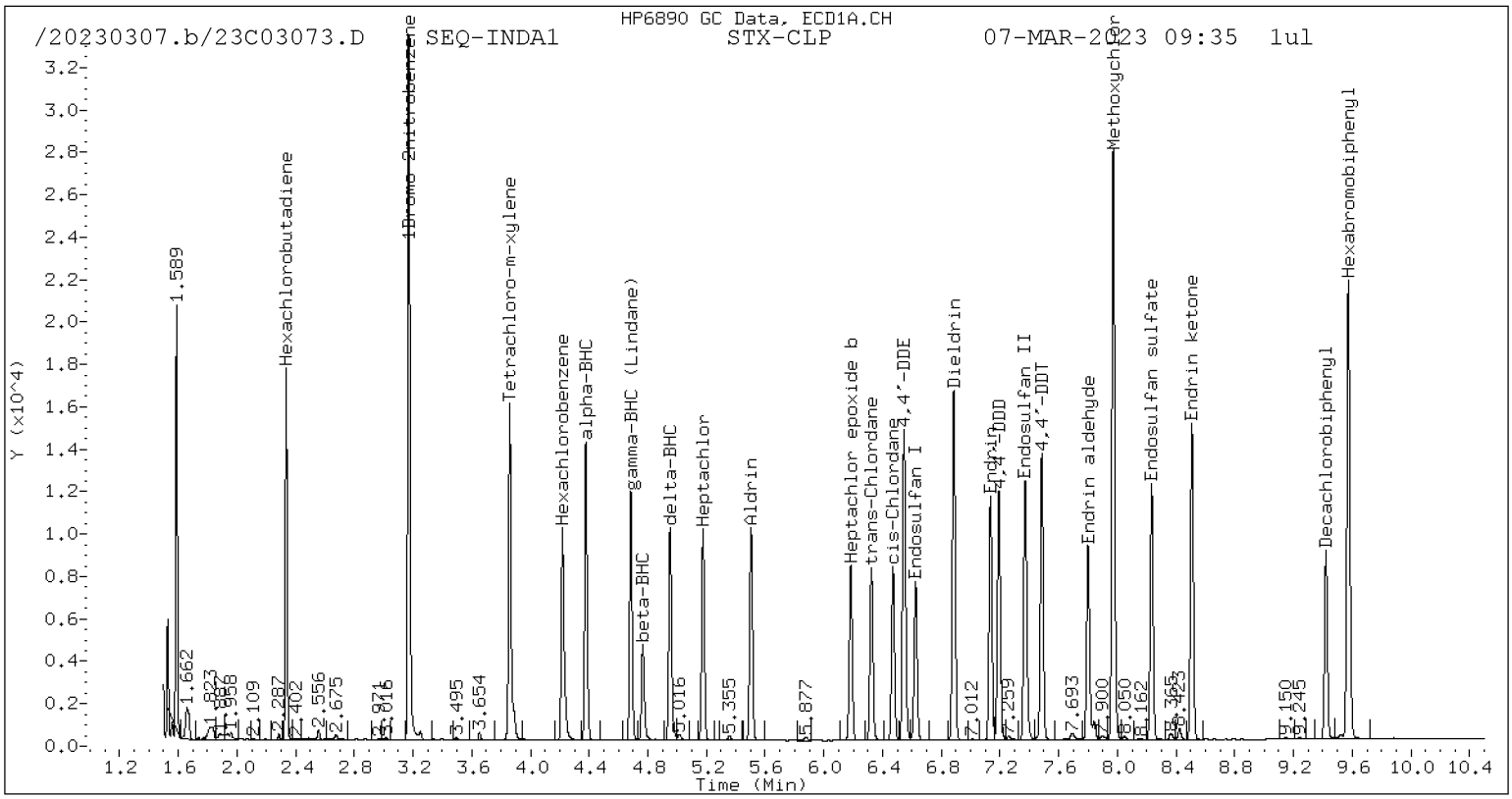
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	802383	19.3
Hexabromobiphenyl	609723	631224	3.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1198897	19.1
Hexabromobiphenyl	769764	722844	-6.1

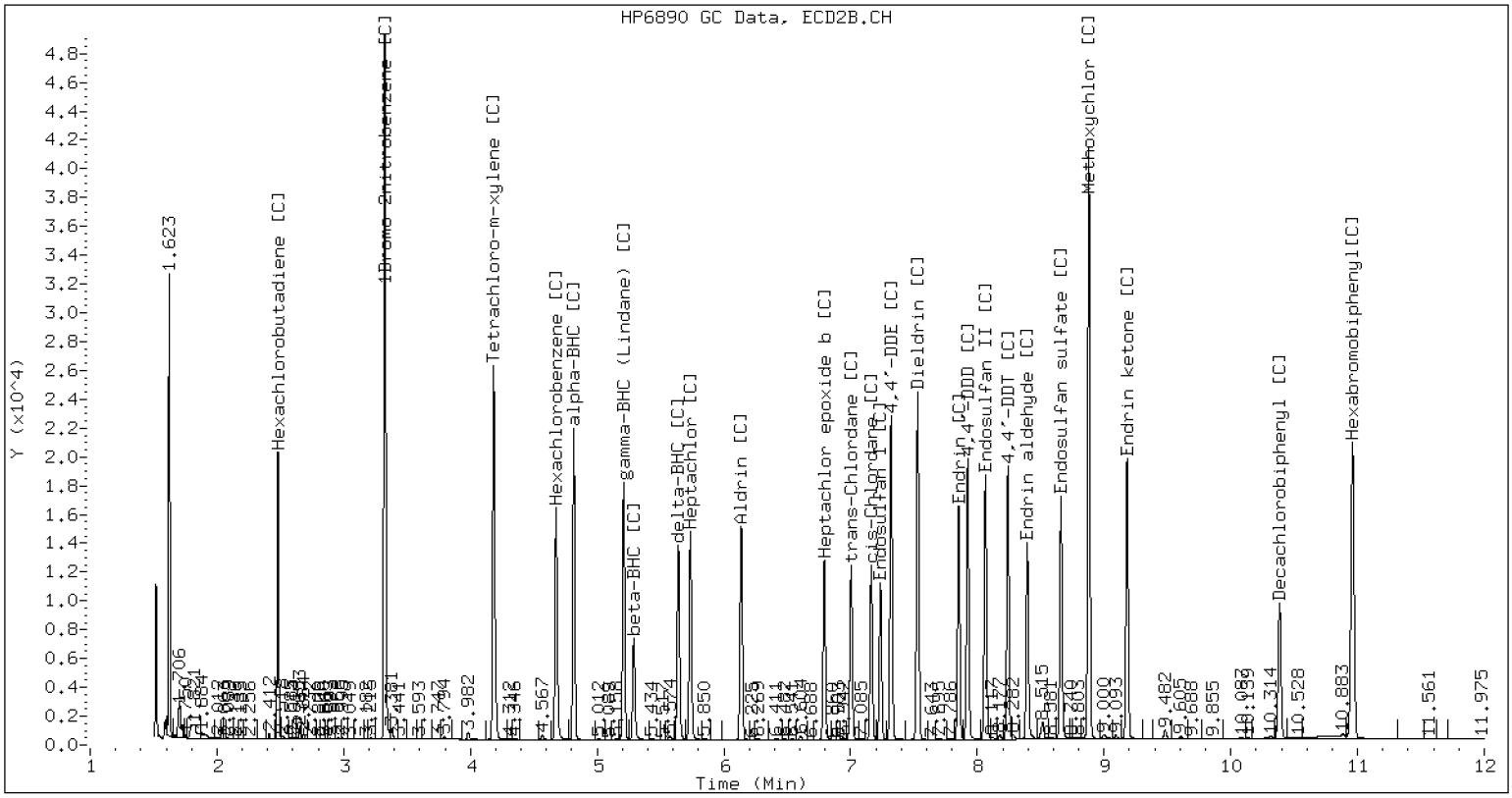
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

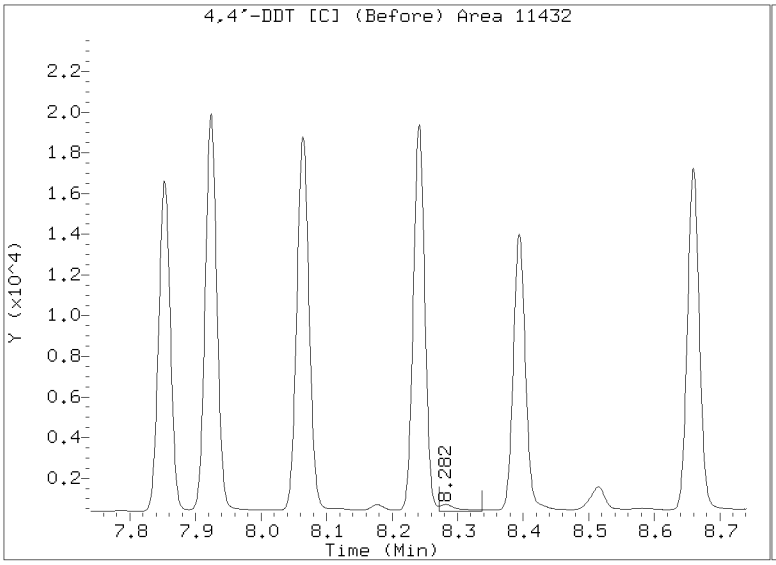
/20230307.b/B20230307.b/23C03073.D SEQ-INDA1 CLP2

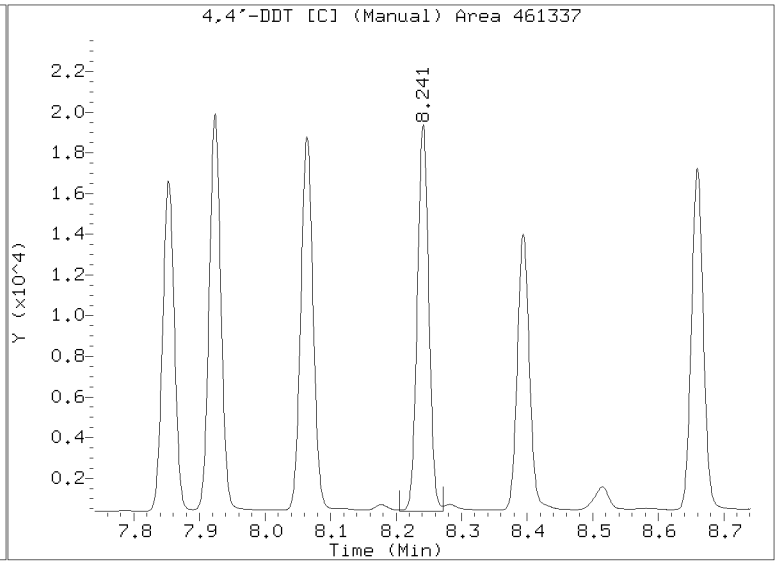


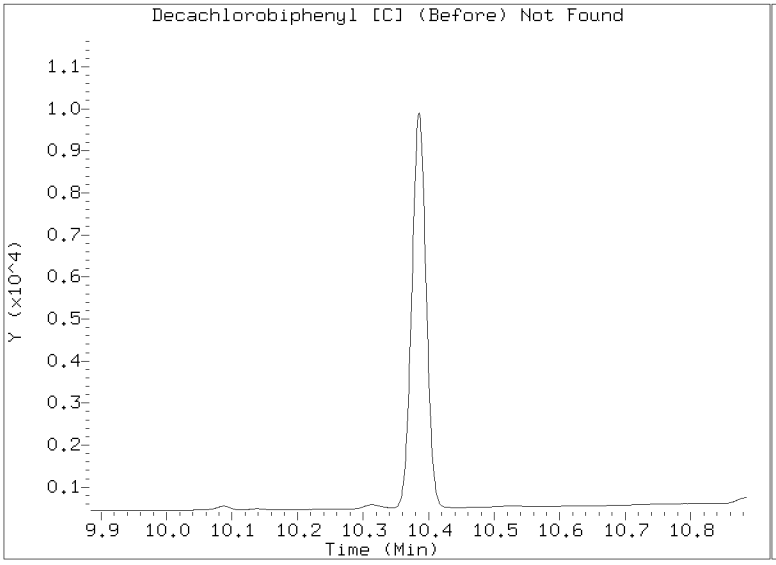
CLP-2 Manual Integration: NO

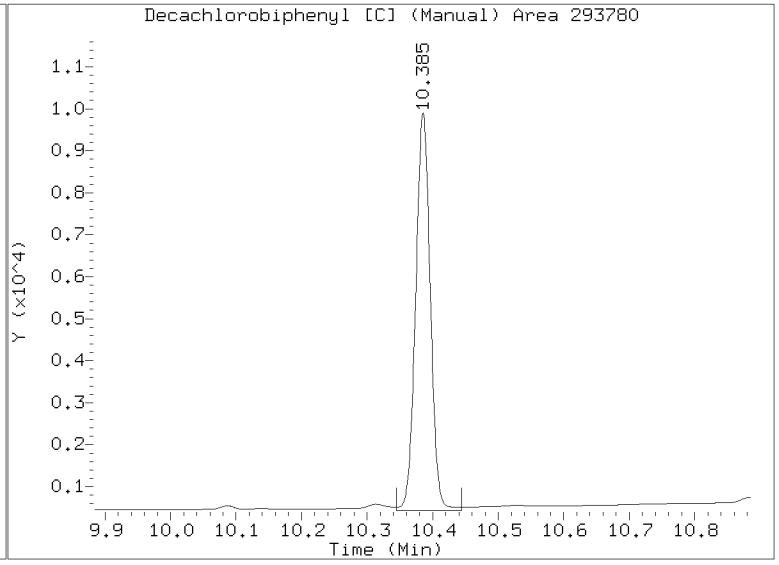
Manual Peak Adjustment Report, CLP-2

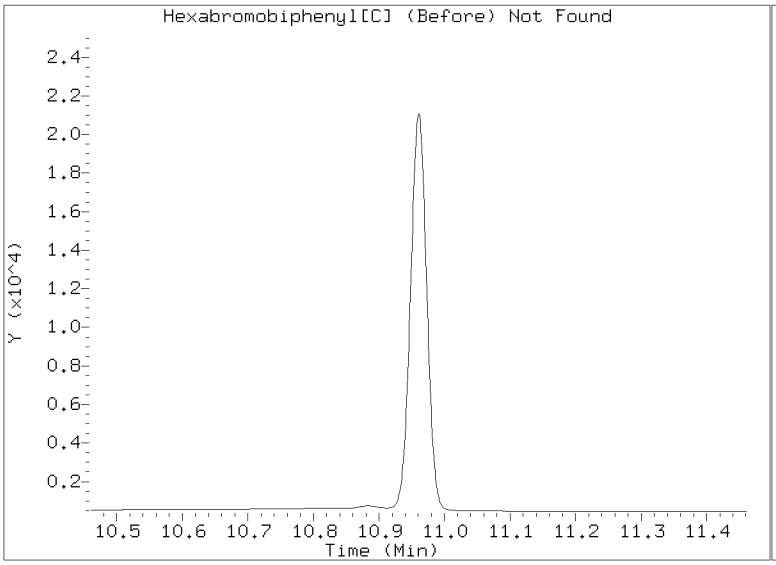
Datafile: /20230307.b/B20230307.b/23C03073.D
Injection Date: 07-MAR-2023 09:35
Lab ID:SEQ-INDA1 Client ID:

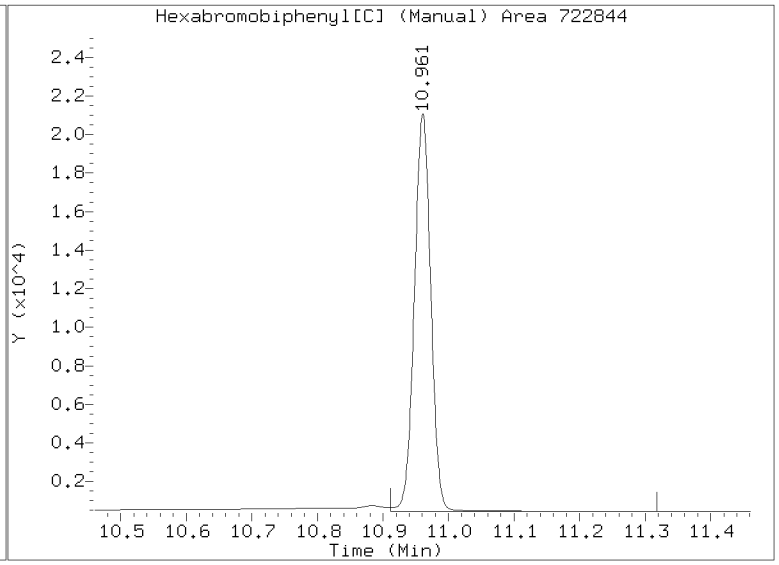












Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23030109.D	Calibration Date:	12/14/2022
Sequence:	SLC0031	Injection Date:	03/01/23
Lab Sample ID:	SLC0031-CCV1	Injection Time:	15:05
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
alpha-BHC	A	20.000	20.9	1.5401480	1.6097560		4.5	+/-20	
alpha-BHC [2C]	A	20.000	19.5	1.6032650	1.5664200		-2.5	+/-20	
beta-BHC	A	20.000	20.6	0.5929524	0.6095113		3.0	+/-20	
beta-BHC [2C]	A	20.000	19.2	0.6095359	0.5847685		-4.0	+/-20	
gamma-BHC (Lindane)	A	20.000	20.8	1.3353400	1.3919150		4.0	+/-20	
gamma-BHC (Lindane) [2C]	A	20.000	20.0	1.3606000	1.3584470		0.0	+/-20	
delta-BHC	A	20.000	22.3	1.2587440	1.4056360		11.5	+/-20	
delta-BHC [2C]	A	20.000	20.3	1.3206240	1.3400740		1.5	+/-20	
Heptachlor	A	20.000	21.6	1.1881510	1.2838980		8.0	+/-20	
Heptachlor [2C]	A	20.000	19.7	1.2325020	1.2124690		-1.5	+/-20	
Aldrin	A	20.000	20.2	1.3315350	1.3448540		1.0	+/-20	
Aldrin [2C]	A	20.000	18.1	1.4072190	1.2738930		-9.5	+/-20	
Heptachlor Epoxide	A	20.000	19.7	1.1545300	1.1351570		-1.5	+/-20	
Heptachlor Epoxide [2C]	A	20.000	17.0	1.1636450	0.9887762		-15.0	+/-20	
trans-Chlordane (beta-Chlordane)	A	20.000	19.7	1.1726130	1.1564240		-1.5	+/-20	
trans-Chlordane (beta-Chlordane) [2C]	A	20.000	16.8	1.1604170	0.9745008		-16.0	+/-20	
cis-Chlordane (alpha-chlordane)	A	20.000	19.3	1.1760380	1.1377620		-3.5	+/-20	
cis-Chlordane (alpha-chlordane) [2C]	A	20.000	16.8	1.1352300	0.9511902		-16.0	+/-20	
Endosulfan I	A	20.000	19.6	1.0595170	1.0389400		-2.0	+/-20	
Endosulfan I [2C]	A	20.000	17.0	1.0256020	0.8731345		-15.0	+/-20	
4,4'-DDE	A	40.000	39.9	1.0568430	1.0546250		-0.3	+/-20	
4,4'-DDE [2C]	A	40.000	34.2	1.0391680	0.8891748		-14.5	+/-20	
Dieldrin	A	40.000	38.3	1.1382810	1.0912210		-4.3	+/-20	
Dieldrin [2C]	A	40.000	32.8	1.1331770	0.9295587		-18.0	+/-20	
Endrin	A	40.000	43.0	1.0488190	1.1275190		7.5	+/-20	
Endrin [2C]	A	40.000	42.4	1.1374860	1.2060490		6.0	+/-20	
Endosulfan II	A	40.000	48.5	0.9441550	1.1449410		21.3	+/-20	*
Endosulfan II [2C]	A	40.000	45.4	1.1659380	1.3228790		13.5	+/-20	
4,4'-DDD	A	40.000	47.2	0.9449058	1.1151630		18.0	+/-20	
4,4'-DDD [2C]	A	40.000	46.0	1.1064160	1.2730710		15.0	+/-20	
Endrin Aldehyde	A	40.000	45.4	0.7530726	0.8557888		13.5	+/-20	
Endrin Aldehyde [2C]	A	40.000	47.1	0.8224595	0.9678041		17.8	+/-20	
4,4'-DDT	A	40.000	46.6	0.9548168	1.1117690		16.5	+/-20	

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23030109.D	Calibration Date:	12/14/2022
Sequence:	SLC0031	Injection Date:	03/01/23
Lab Sample ID:	SLC0031-CCV1	Injection Time:	15:05
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
4,4'-DDT [2C]	A	40.000	46.9	1.0678960	1.2529160		17.3	+/-20
Endosulfan Sulfate	A	40.000	44.5	0.8965158	0.9967210		11.3	+/-20
Endosulfan Sulfate [2C]	A	40.000	46.7	1.0238570	1.1953770		16.8	+/-20
Endrin Ketone	A	40.000	45.4	1.0270110	1.1649750		13.5	+/-20
Endrin Ketone [2C]	A	40.000	46.8	1.1058500	1.2947050		17.0	+/-20
Methoxychlor	A	200.00	233	0.4231113	0.4925418		16.5	+/-20
Methoxychlor [2C]	A	200.00	238	0.4725766	0.5631050		19.0	+/-20
Hexachlorobutadiene	A	20.000	18.8	1.6135150	1.5141840		-6.0	+/-20
Hexachlorobutadiene [2C]	A	20.000	17.6	1.5225100	1.3398800		-12.0	+/-20
Hexachlorobenzene	A	20.000	19.2	1.4298940	1.3737340		-4.0	+/-20
Hexachlorobenzene [2C]	A	20.000	18.0	1.4591090	1.3166230		-10.0	+/-20
Decachlorobiphenyl	A	40.000	36.4	0.8105886	0.7378142		-9.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.0	0.8841805	0.8395394		-5.0	+/-20
Tetrachlorometaxylene	A	40.000	36.8	1.0879510	0.9997655		-8.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	35.9	1.1261070	1.0107260		-10.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230301.b/23030109.D
Data file 2: /20230301.b/B20230301.b/23030109.D
Method: \20230301.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: INDA2
Client ID:
Injection Date: 01-MAR-2023 15:05
Report Date: 03/02/2023 13:13
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.394	0.000	324404	4.833	0.000	501900	20.90	19.54	6.7	alpha-BHC
4.782	0.000	122831	5.306	0.001	187367	20.56	19.19	6.9	beta-BHC
4.968	0.000	283269	5.659	0.001	429376	22.33	20.29	9.6	delta-BHC
4.701	0.000	280504	5.228	0.001	435263	20.85	19.97	4.3	gamma-BHC (Lindane)
5.195	0.000	258736	5.755	0.001	388490	21.61	19.67	9.4	Heptachlor
5.523	0.000	271020	6.157	0.001	408171	20.20	18.11	10.9	Aldrin
6.202	0.000	228761	6.812	0.002	316816	19.66	16.99	14.6	Heptachlor epoxide b
6.644	0.000	209371	7.255	0.001	279763	19.61	17.03	14.1	Endosulfan I
6.904	0.000	439814	7.548	0.001	595684	38.35	32.81	15.6	Dieldrin
6.563	0.000	425064	7.336	0.001	569805	39.92	34.23	15.3	4,4'-DDE
7.154	0.000	347475	7.871	0.001	439290	43.00	42.41	1.4	Endrin
7.389	0.000	352844	8.081	0.000	481844	48.51	45.38	6.7	Endosulfan II
7.209	0.000	343667	7.940	0.001	463702	47.21	46.03	2.5	4,4'-DDD
8.251	0.000	307166	8.677	0.001	435403	44.47	46.70	4.9	Endosulfan sulfate
7.502	0.000	342621	8.258	0.001	456361	46.58	46.93	0.8	4,4'-DDT
7.988	0.000	758949	8.896	0.002	1025524	232.82	238.31	2.3	Methoxychlor
8.526	0.000	359018	9.200	0.002	471582	45.37	46.83	3.2	Endrin ketone
7.818	0.000	263734	8.411	0.001	352512	45.46	47.07	3.5	Endrin aldehyde
6.343	0.000	233047	7.022	0.002	312242	19.72	16.80	16.0	trans-Chlordane
6.490	0.000	229286	7.182	0.001	304773	19.35	16.76	14.4	cis-Chlordane
2.348	0.000	305144	2.493	-0.002	429314	18.77	17.60	6.4	Hexachlorobutadiene
4.233	0.000	276840	4.692	-0.001	421862	19.21	18.05	6.3	Hexachlorobenzene
3.873	0.000	402953	4.198	-0.001	647698	36.76	35.90	2.4	Tetrachloro-m-xylene
9.440	0.000	227377	10.408	0.002	305793	36.41	37.98	4.2	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

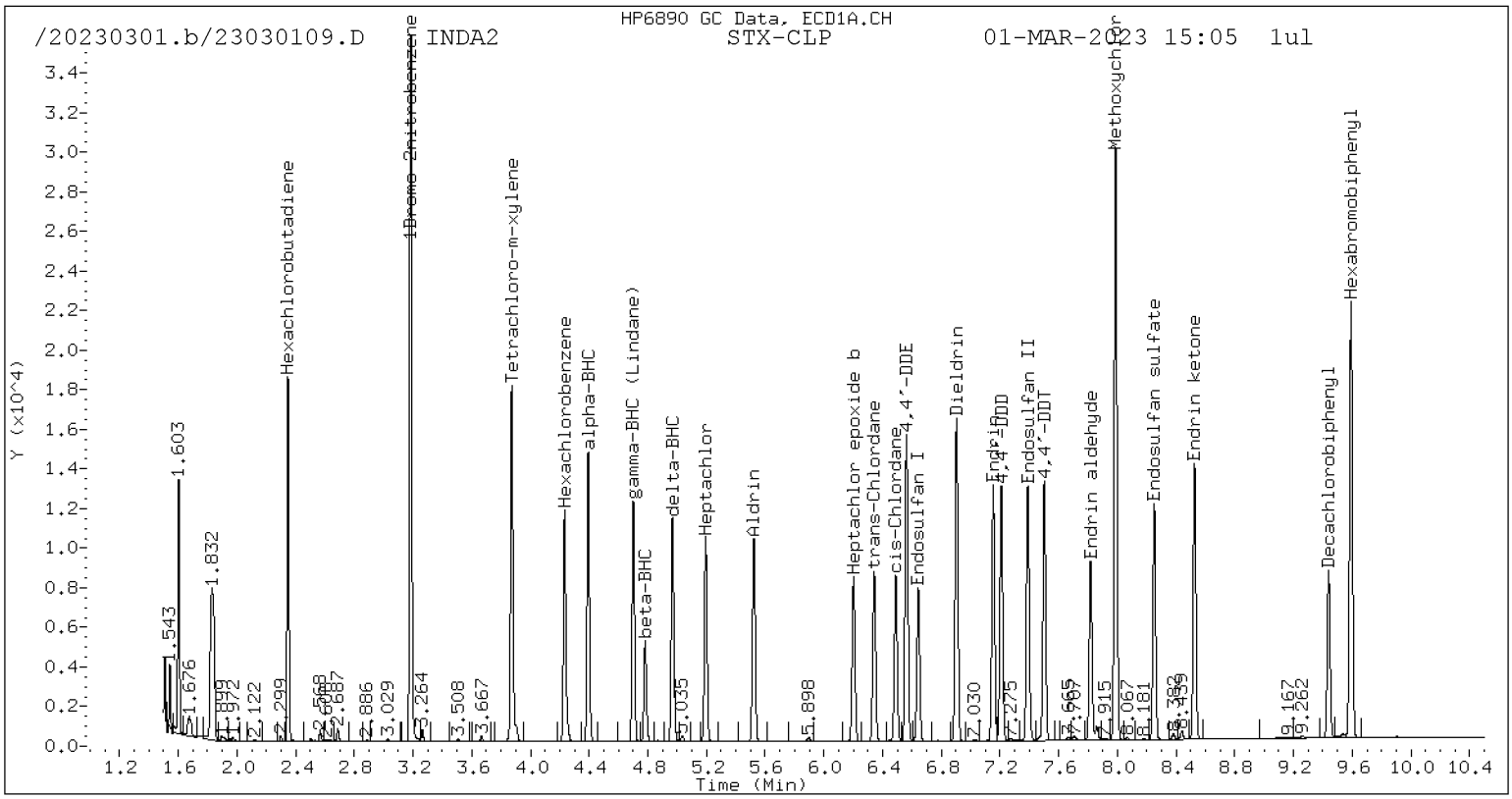
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	806095	19.9
Hexabromobiphenyl	609723	616353	1.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1281649	27.3
Hexabromobiphenyl	769764	728478	-5.4

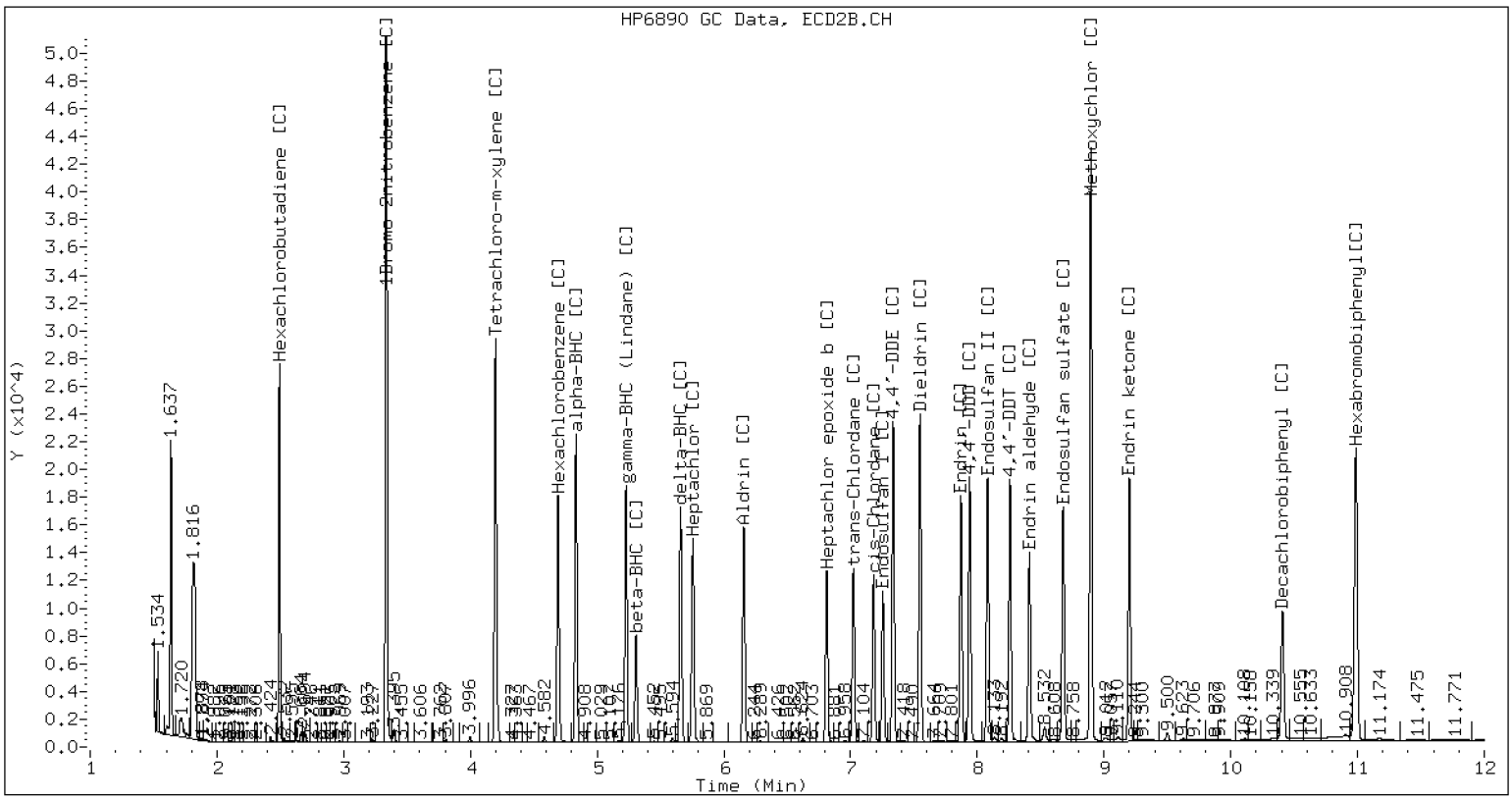
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230301.b/B20230301.b/23030109.D INDA2 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23030110.D	Calibration Date:	12/14/2022
Sequence:	SLC0031	Injection Date:	03/01/23
Lab Sample ID:	SLC0031-CCV2	Injection Time:	15:23
Sequence Name:	WNDE		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
2,4'-DDE	A	40.000	41.2	0.7852778	0.8084724		3.0	+/-20
2,4'-DDE [2C]	A	40.000	32.0	0.7295523	0.5842357		-20.0	+/-20
2,4'-DDD	A	40.000	42.6	0.6985950	0.7440462		6.5	+/-20
2,4'-DDD [2C]	A	40.000	43.5	0.8188656	0.8900370		8.8	+/-20
2,4'-DDT	A	40.000	44.9	0.7548286	0.8476394		12.3	+/-20
2,4'-DDT [2C]	A	40.000	45.4	0.8432439	0.9563695		13.5	+/-20
Oxychlordane	A	40.000	46.3	0.9511440	1.1014180		15.8	+/-20
Oxychlordane [2C]	A	40.000	35.9	0.8909094	0.7995809		-10.3	+/-20
cis-Nonachlor	A	40.000	43.7	1.2113910	1.3227200		9.3	+/-20
cis-Nonachlor [2C]	A	40.000	43.3	1.3610610	1.4746540		8.3	+/-20
trans-Nonachlor	A	40.000	41.5	1.2440250	1.2905310		3.8	+/-20
trans-Nonachlor [2C]	A	40.000	43.1	1.4315700	1.5437190		7.8	+/-20
Mirex	A	40.000	40.1	0.7535613	0.7553138		0.3	+/-20
Mirex [2C]	A	40.000	41.5	0.7915793	0.8221132		3.8	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230301.b/23030110.D
Data file 2: /20230301.b/B20230301.b/23030110.D
Method: \20230301.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: WND2
Client ID:
Injection Date: 01-MAR-2023 15:23
Report Date: 03/02/2023 13:13
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.088	0.000	355422	6.708	0.000	508264	46.32	35.90	25.3	Oxychlordane
6.180	0.000	260890	7.002	0.000	371377	41.18	32.03	25.0	2,4-DDE
6.471	0.000	416448	7.121	0.000	572316	41.50	43.13	3.9	trans-Nonachlor
6.754	0.000	240100	7.556	0.000	329971	42.60	43.48	2.0	2,4-DDD
7.031	0.000	273529	7.877	0.000	354563	44.92	45.37	1.0	2,4-DDT
7.185	0.000	426835	7.939	0.000	546711	43.68	43.34	0.8	cis-Nonachlor
8.159	0.000	243736	9.183	0.000	304789	40.09	41.54	3.6	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			10.405	-0.001	4315	0.00	0.53	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

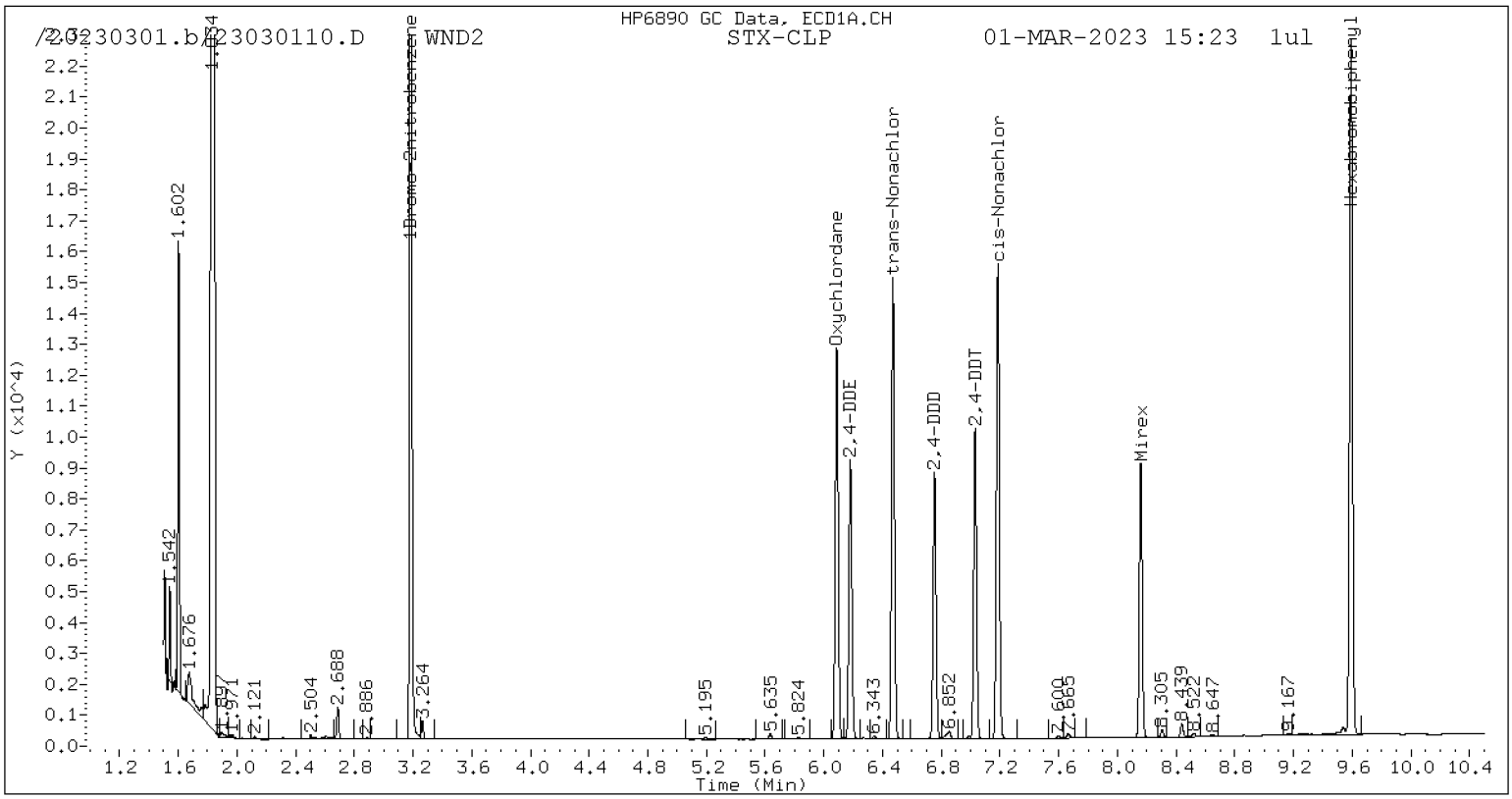
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	792495	17.9
Hexabromobiphenyl	609723	645390	5.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1271326	26.3
Hexabromobiphenyl	769764	741477	-3.7

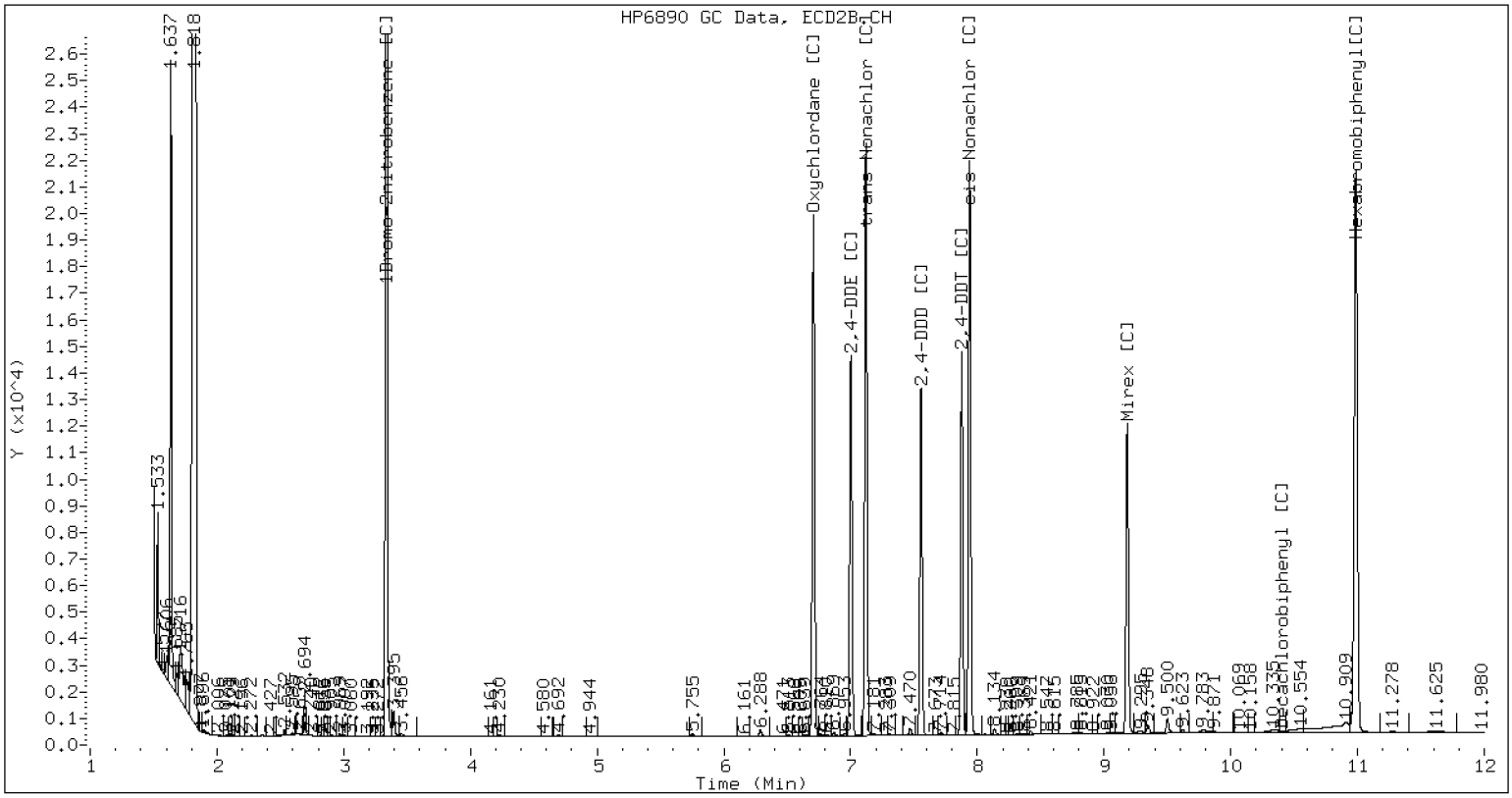
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230301.b/B20230301.b/23030110.D WND2 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23030127.D	Calibration Date:	12/14/2022
Sequence:	SLC0031	Injection Date:	03/01/23
Lab Sample ID:	SLC0031-CCV3	Injection Time:	21:49
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
alpha-BHC	A	20.000	20.1	1.5401480	1.5472070		0.5	+/-20
alpha-BHC [2C]	A	20.000	18.4	1.6032650	1.4742110		-8.0	+/-20
beta-BHC	A	20.000	20.2	0.5929524	0.5996368		1.0	+/-20
beta-BHC [2C]	A	20.000	18.7	0.6095359	0.5701565		-6.5	+/-20
gamma-BHC (Lindane)	A	20.000	20.2	1.3353400	1.3495580		1.0	+/-20
gamma-BHC (Lindane) [2C]	A	20.000	19.1	1.3606000	1.2979630		-4.5	+/-20
delta-BHC	A	20.000	21.4	1.2587440	1.3495230		7.0	+/-20
delta-BHC [2C]	A	20.000	19.1	1.3206240	1.2605780		-4.5	+/-20
Heptachlor	A	20.000	21.0	1.1881510	1.2488190		5.0	+/-20
Heptachlor [2C]	A	20.000	18.5	1.2325020	1.1396180		-7.5	+/-20
Aldrin	A	20.000	19.6	1.3315350	1.3067020		-2.0	+/-20
Aldrin [2C]	A	20.000	17.2	1.4072190	1.2092000		-14.0	+/-20
Heptachlor Epoxide	A	20.000	19.7	1.1545300	1.1386440		-1.5	+/-20
Heptachlor Epoxide [2C]	A	20.000	16.4	1.1636450	0.9573631		-18.0	+/-20
trans-Chlordane (beta-Chlordane)	A	20.000	19.1	1.1726130	1.1183320		-4.5	+/-20
trans-Chlordane (beta-Chlordane) [2C]	A	20.000	15.9	1.1604170	0.9224750		-20.5	+/-20 *
cis-Chlordane (alpha-chlordane)	A	20.000	18.8	1.1760380	1.1082060		-6.0	+/-20
cis-Chlordane (alpha-chlordane) [2C]	A	20.000	15.7	1.1352300	0.8893554		-21.5	+/-20 *
Endosulfan I	A	20.000	19.1	1.0595170	1.0144360		-4.5	+/-20
Endosulfan I [2C]	A	20.000	15.7	1.0256020	0.8053025		-21.5	+/-20 *
4,4'-DDE	A	40.000	39.3	1.0568430	1.0380220		-1.8	+/-20
4,4'-DDE [2C]	A	40.000	31.9	1.0391680	0.8290256		-20.3	+/-20 *
Dieldrin	A	40.000	38.0	1.1382810	1.0814100		-5.0	+/-20
Dieldrin [2C]	A	40.000	30.8	1.1331770	0.8737356		-23.0	+/-20 *
Endrin	A	40.000	32.2	1.0488190	0.8448621		-19.5	+/-20
Endrin [2C]	A	40.000	28.1	1.1374860	0.7991744		-29.8	+/-20 *
Endosulfan II	A	40.000	46.6	0.9441550	1.1005030		16.5	+/-20
Endosulfan II [2C]	A	40.000	42.1	1.1659380	1.2260740		5.3	+/-20
4,4'-DDD	A	40.000	44.6	0.9449058	1.0539810		11.5	+/-20
4,4'-DDD [2C]	A	40.000	42.2	1.1064160	1.1660700		5.5	+/-20
Endrin Aldehyde	A	40.000	47.6	0.7530726	0.8972028		19.0	+/-20
Endrin Aldehyde [2C]	A	40.000	48.2	0.8224595	0.9922424		20.5	+/-20 *
4,4'-DDT	A	40.000	44.3	0.9548168	1.0570070		10.8	+/-20
4,4'-DDT [2C]	A	40.000	42.4	1.0678960	1.1307790		6.0	+/-20

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23030127.D	Calibration Date:	12/14/2022
Sequence:	SLC0031	Injection Date:	03/01/23
Lab Sample ID:	SLC0031-CCV3	Injection Time:	21:49
Sequence Name:	INDAE		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Endosulfan Sulfate	A	40.000	42.9	0.8965158	0.9619803		7.3	+/-20
Endosulfan Sulfate [2C]	A	40.000	42.8	1.0238570	1.0954540		7.0	+/-20
Endrin Ketone	A	40.000	45.6	1.0270110	1.1712270		14.0	+/-20
Endrin Ketone [2C]	A	40.000	47.2	1.1058500	1.3062260		18.0	+/-20
Methoxychlor	A	200.00	221	0.4231113	0.4676750		10.5	+/-20
Methoxychlor [2C]	A	200.00	216	0.4725766	0.5111141		8.0	+/-20
Hexachlorobutadiene	A	20.000	18.4	1.6135150	1.4869870		-8.0	+/-20
Hexachlorobutadiene [2C]	A	20.000	17.4	1.5225100	1.3210880		-13.0	+/-20
Hexachlorobenzene	A	20.000	19.0	1.4298940	1.3614360		-5.0	+/-20
Hexachlorobenzene [2C]	A	20.000	17.6	1.4591090	1.2866900		-12.0	+/-20
Decachlorobiphenyl	A	40.000	37.0	0.8105886	0.7507330		-7.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.6	0.8841805	0.8090597		-8.5	+/-20
Tetrachlorometaxylene	A	40.000	36.7	1.0879510	0.9994484		-8.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	35.2	1.1261070	0.9895817		-12.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230301.b/23030127.D
Data file 2: /20230301.b/B20230301.b/23030127.D
Method: \20230301.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: INDA3
Client ID:
Injection Date: 01-MAR-2023 21:49
Report Date: 03/02/2023 13:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.395	0.001	177407	4.833	-0.000	265068	20.09	18.39	8.8	alpha-BHC
4.782	0.001	68756	5.306	-0.000	102516	20.23	18.71	7.8	beta-BHC
4.969	0.000	154740	5.658	0.001	226656	21.44	19.09	11.6	delta-BHC
4.702	0.000	154744	5.228	0.000	233378	20.21	19.08	5.8	gamma-BHC (Lindane)
5.195	-0.000	143193	5.754	0.001	204907	21.02	18.49	12.8	Heptachlor
5.522	-0.000	149830	6.156	0.000	217418	19.63	17.19	13.3	Aldrin
6.202	-0.000	130560	6.811	0.001	172137	19.72	16.45	18.1	Heptachlor epoxide b
6.643	-0.000	116318	7.254	0.000	144796	19.15	15.70	19.8	Endosulfan I
6.904	-0.000	247995	7.547	-0.000	314201	38.00	30.84	20.8	Dieldrin N
6.563	-0.000	238045	7.335	0.000	298123	39.29	31.91	20.7	4,4'-DDE
7.154	-0.000	152441	7.870	0.000	162821	32.22	28.10	13.7	Endrin N
7.390	0.001	198567	8.082	0.001	249796	46.62	42.06	10.3	Endosulfan II N
7.209	-0.000	190173	7.939	0.000	237571	44.62	42.16	5.7	4,4'-DDD N
8.251	-0.001	173573	8.677	0.001	223184	42.92	42.80	0.3	Endosulfan sulfate N
7.502	-0.000	190719	8.258	0.001	230381	44.28	42.36	4.4	4,4'-DDT N
7.987	-0.000	421920	8.896	0.001	520663	221.06	216.31	2.2	Methoxychlor N
8.526	-0.000	211328	9.199	0.001	266126	45.62	47.25	3.5	Endrin ketone N
7.817	-0.000	161885	8.411	0.001	202156	47.66	48.26	1.3	Endrin aldehyde N
6.343	-0.000	128231	7.022	0.001	165864	19.07	15.90	18.2	trans-Chlordane
6.490	-0.000	127070	7.181	0.001	159909	18.85	15.67	18.4	cis-Chlordane
2.349	0.001	170502	2.495	-0.000	237536	18.43	17.35	6.0	Hexachlorobutadiene
4.234	0.001	156106	4.692	-0.000	231351	19.04	17.64	7.7	Hexachlorobenzene
3.874	0.002	229199	4.198	-0.000	355860	36.75	35.15	4.4	Tetrachloro-m-xylene
9.439	-0.001	135457	10.408	0.002	164835	37.05	36.60	1.2	Decachlorobiphenyl N

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

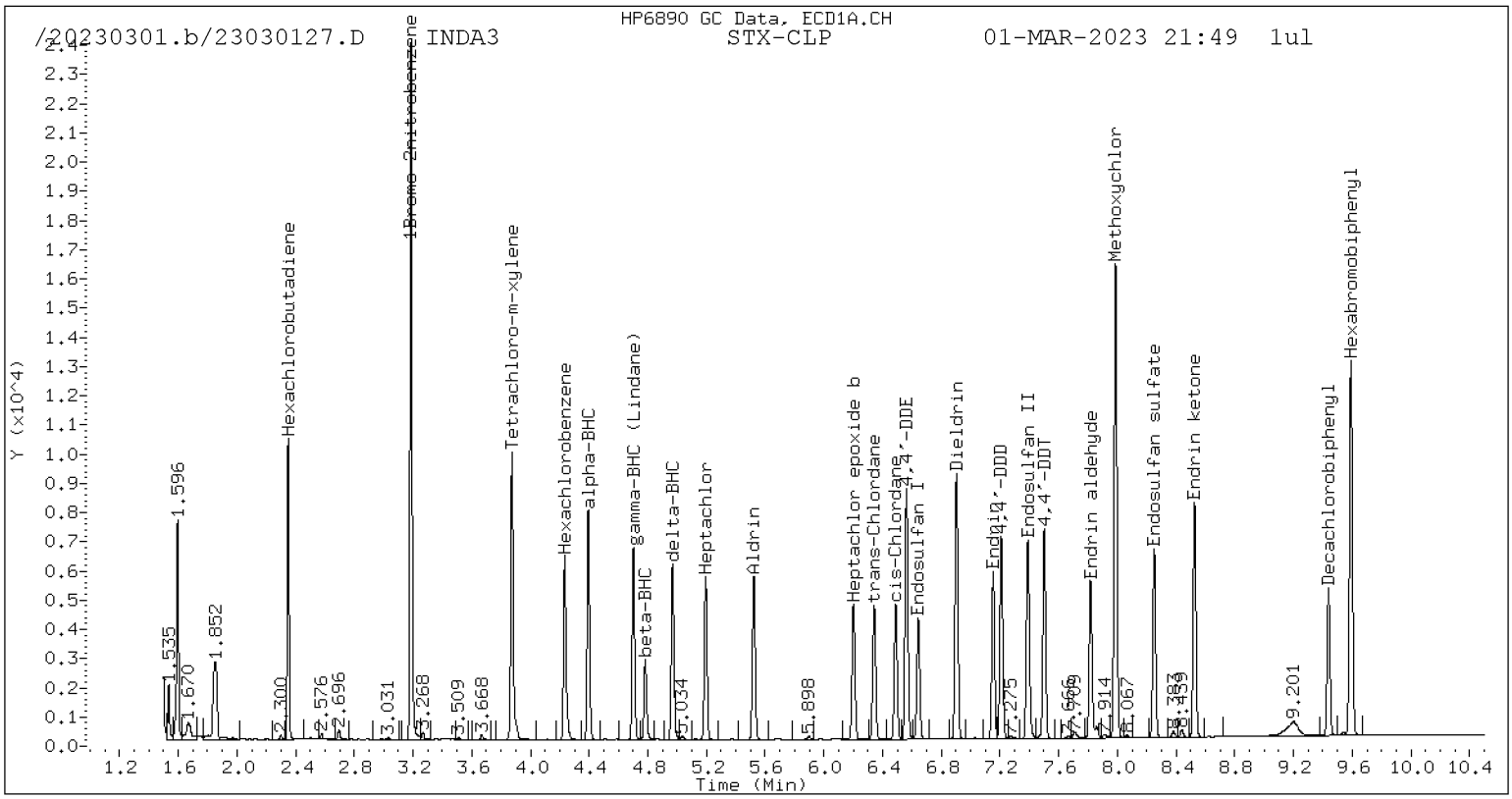
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	458651	-31.8
Hexabromobiphenyl	609723	360866	-40.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	719213	-28.5
Hexabromobiphenyl	769764	407473	-47.1

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

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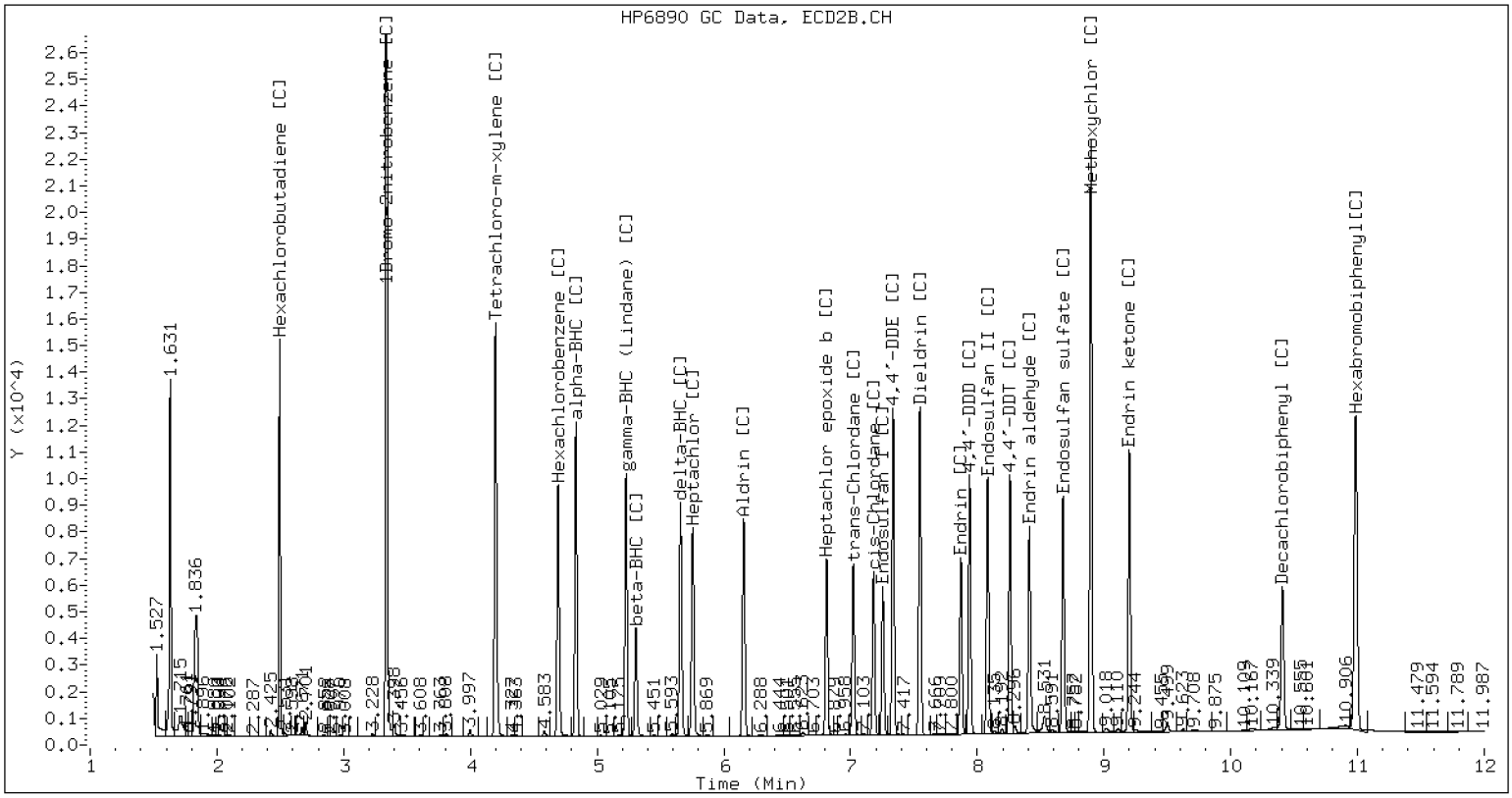
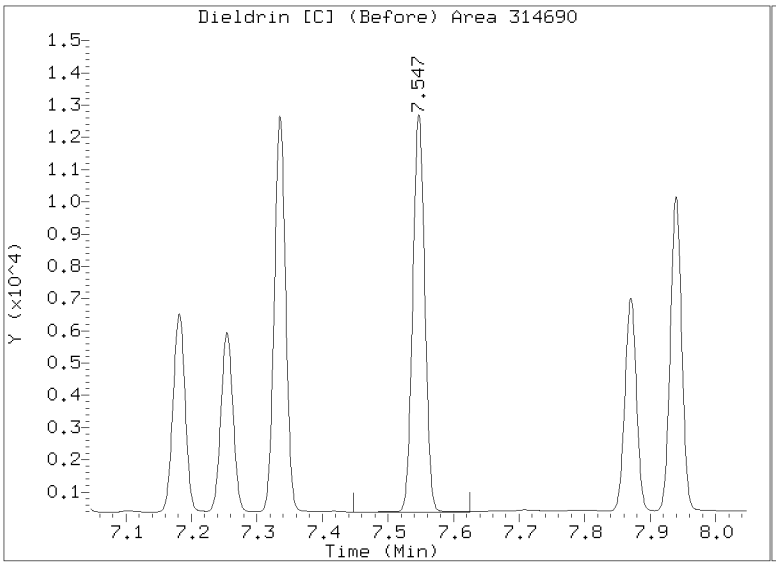
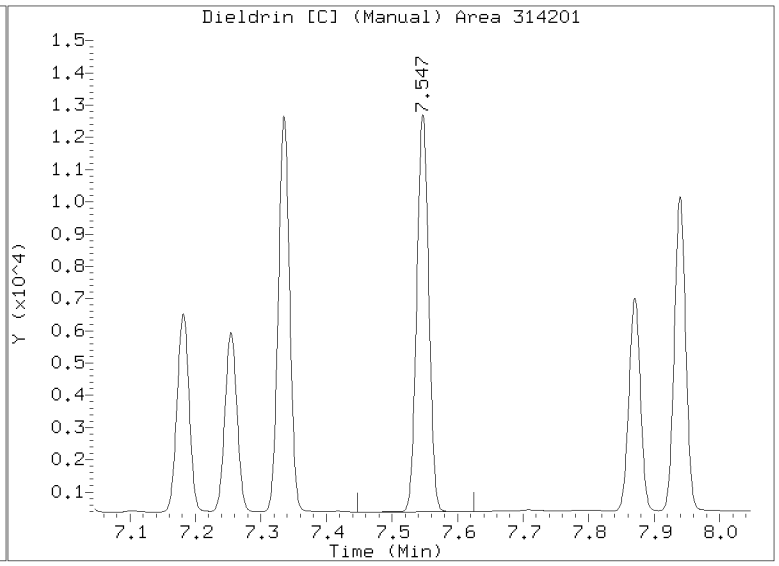


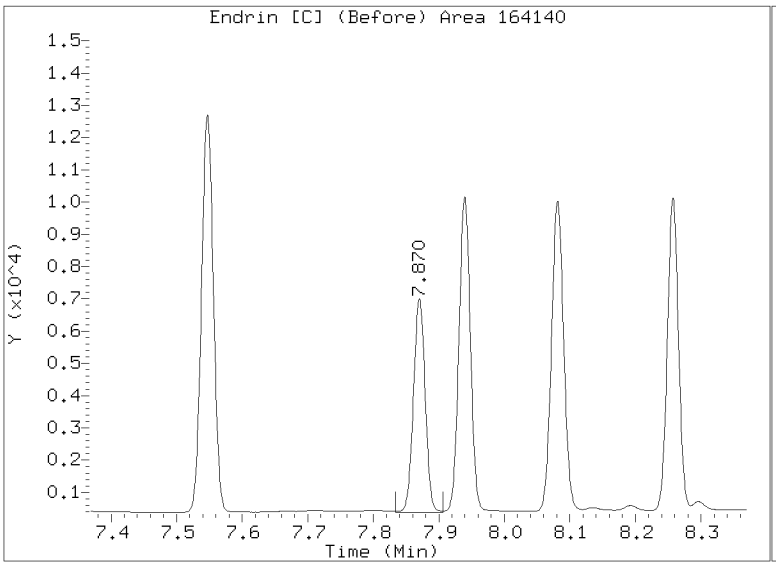
CLP-2 Manual Integration: YES

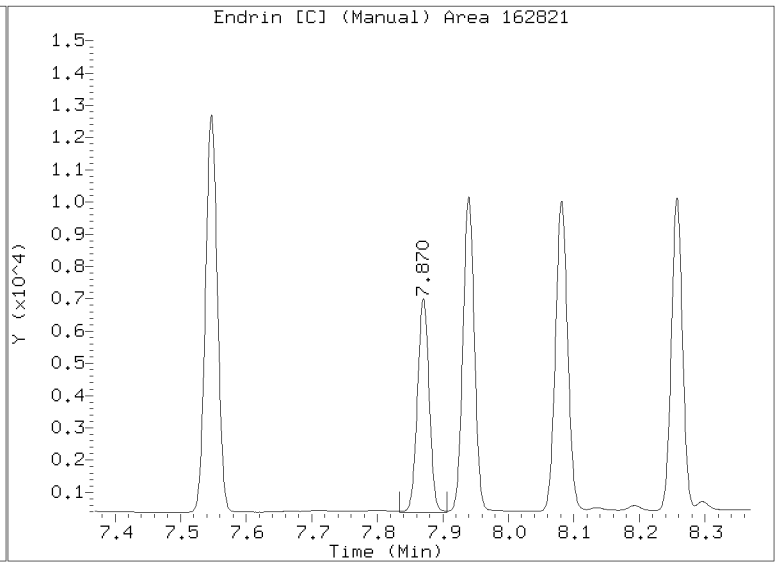
Manual Peak Adjustment Report, CLP-2

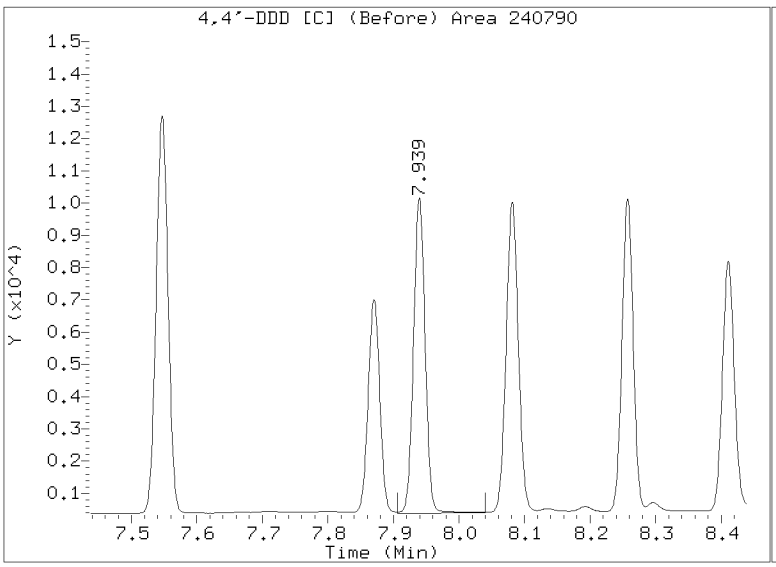
Datafile: /20230301.b/B20230301.b/23030127.D
Injection Date: 01-MAR-2023 21:49
Lab ID:INDA3 Client ID:

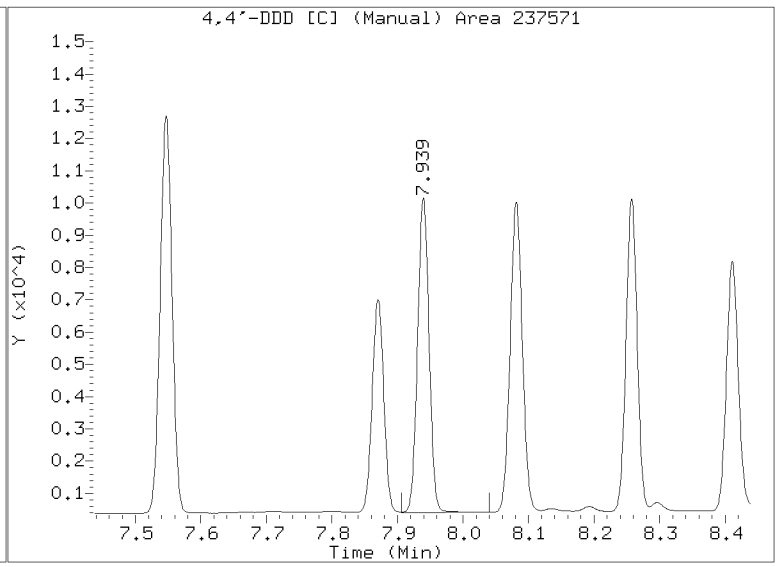












Manual Peak Adjustment Report, CLP-2

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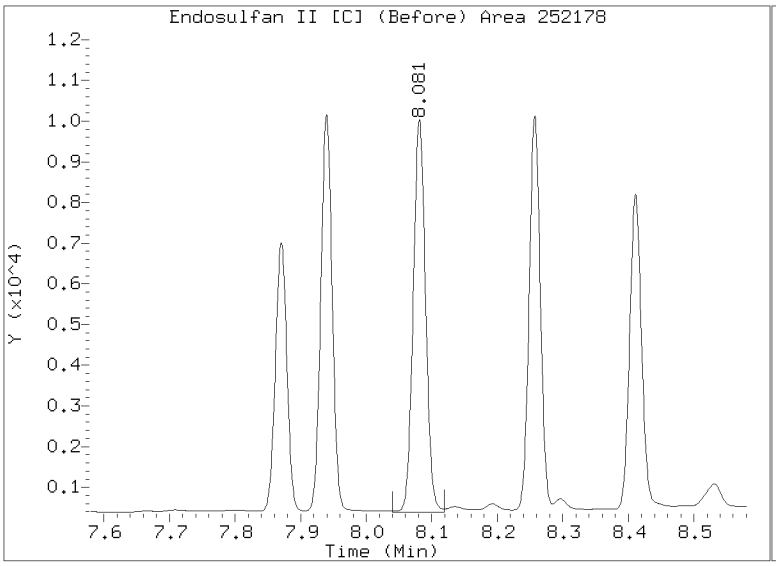
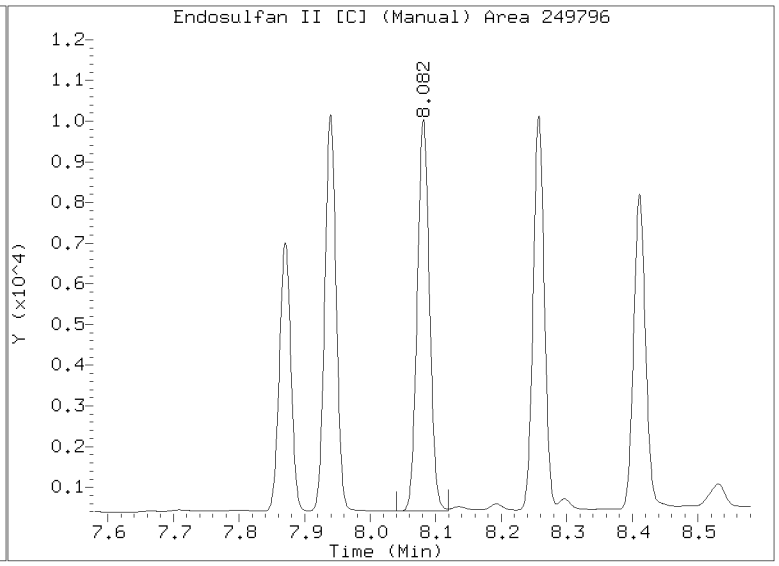
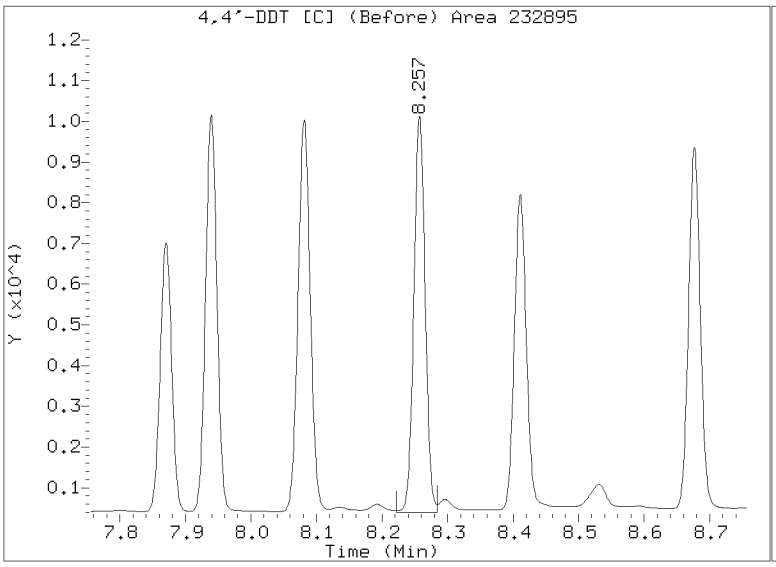
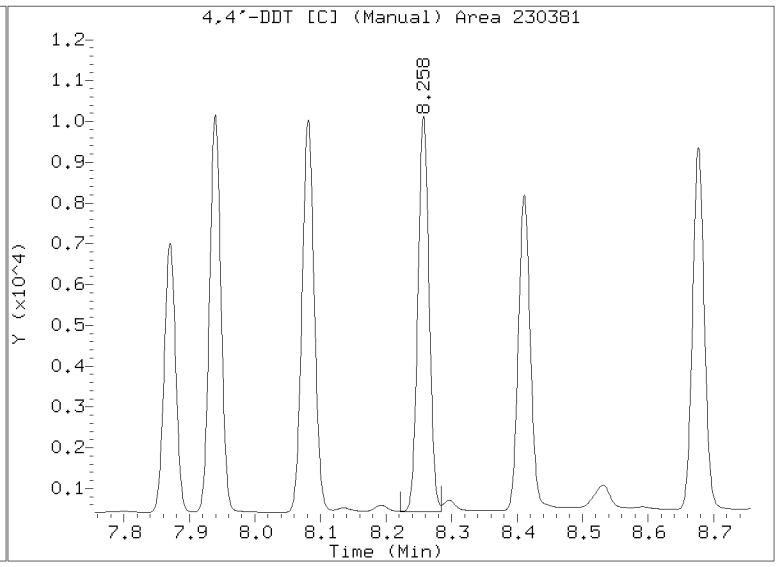
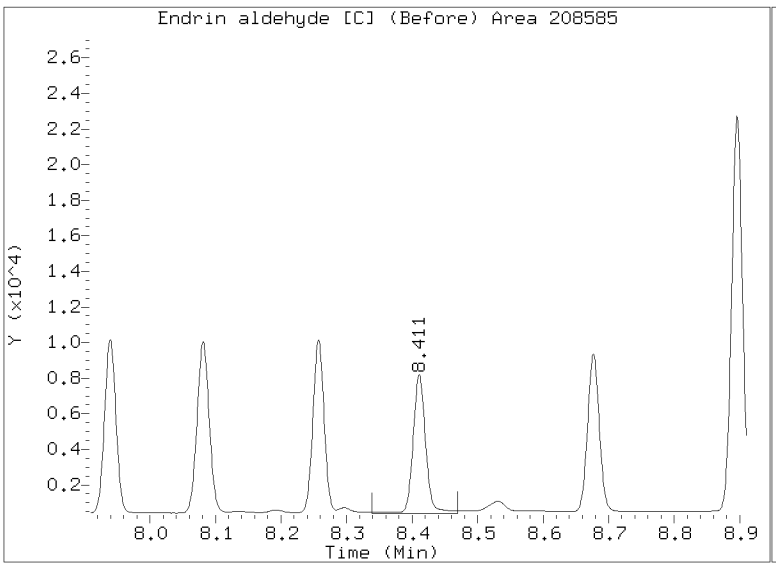
Injection Date: 01-MAR-2023 21:49
Lab ID:INDA3 Client ID:

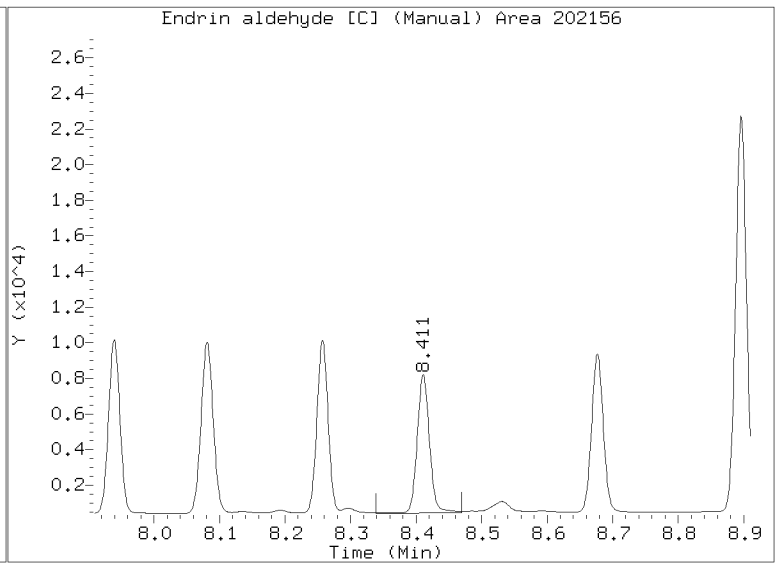












Manual Peak Adjustment Report, CLP-2

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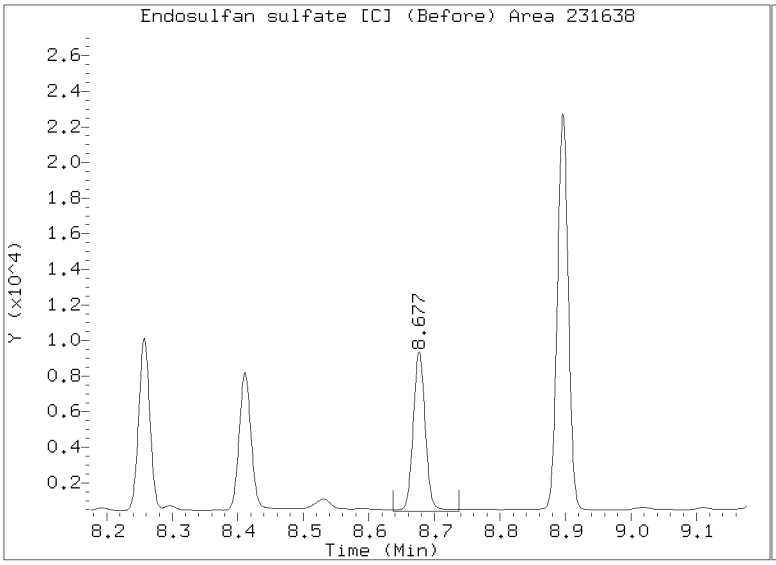
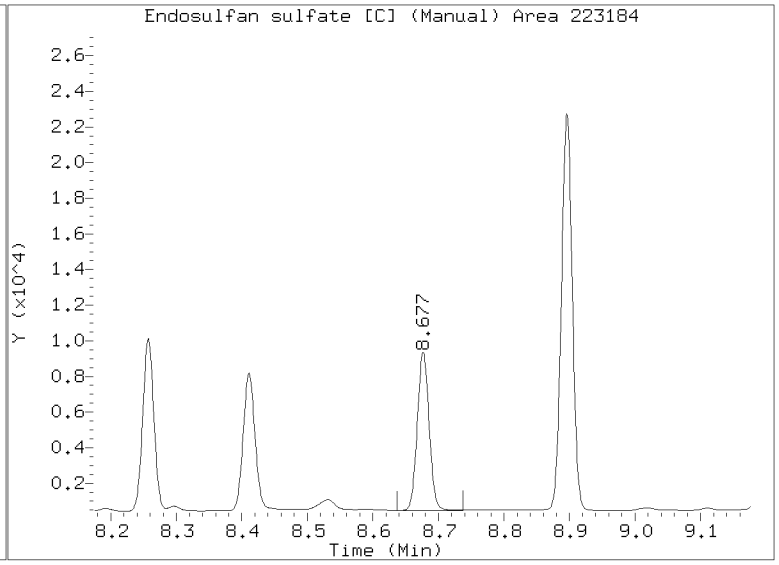
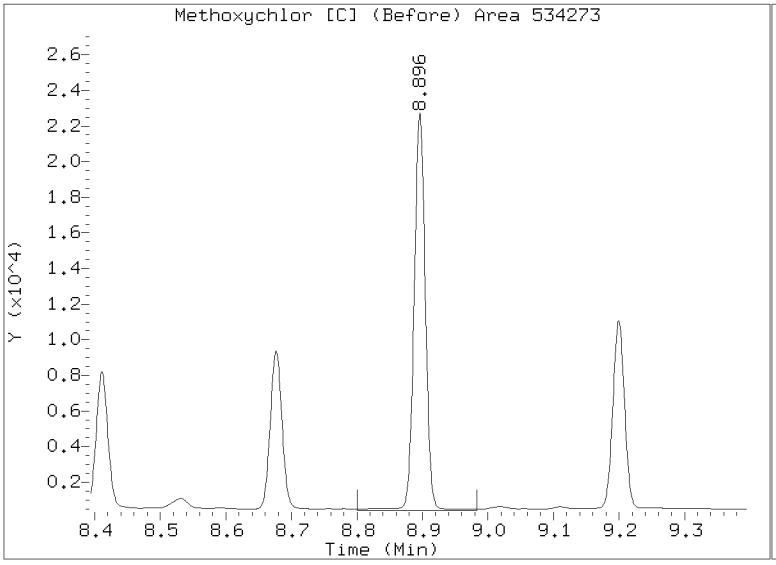
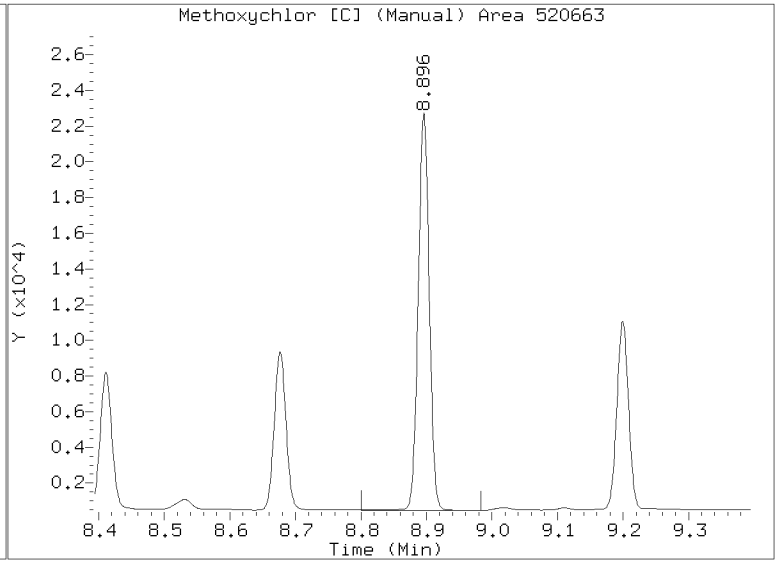
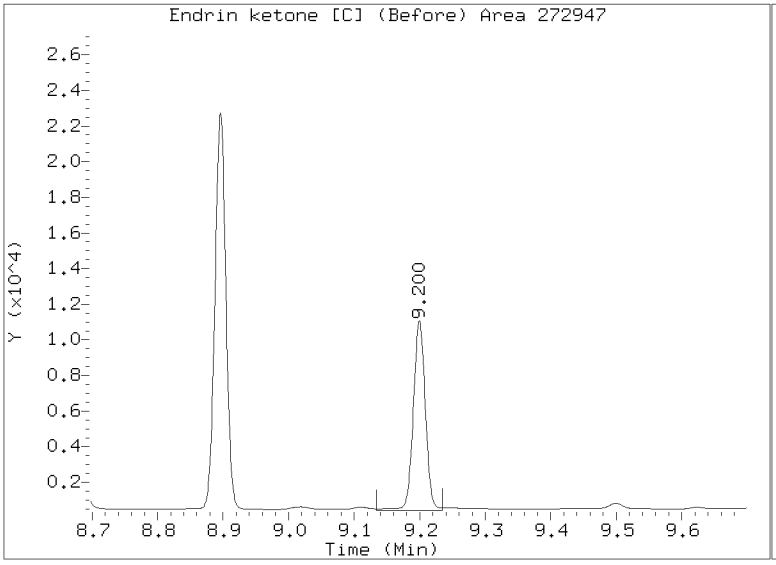
Injection Date: 01-MAR-2023 21:49
Lab ID:INDA3 Client ID:

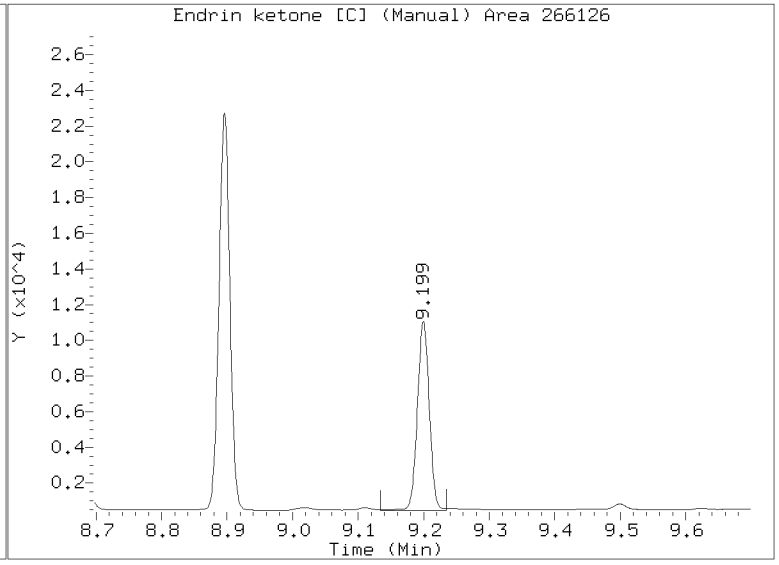












Manual Peak Adjustment Report, CLP-2

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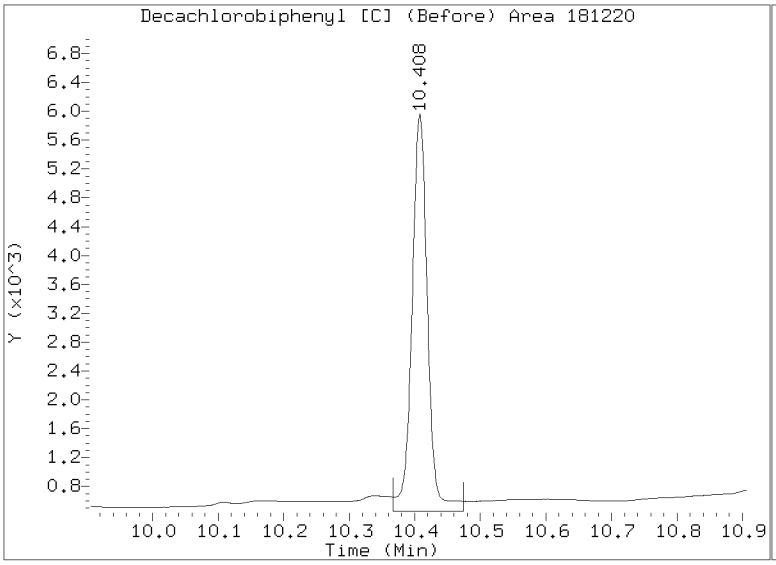
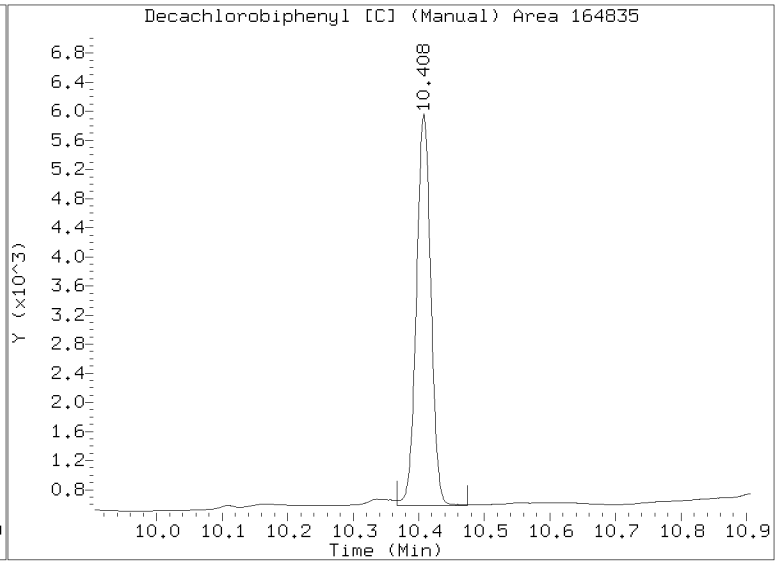
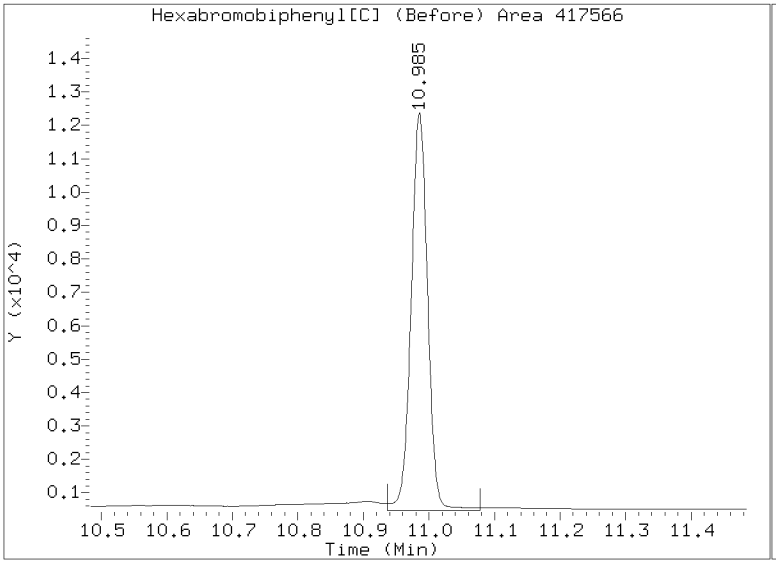
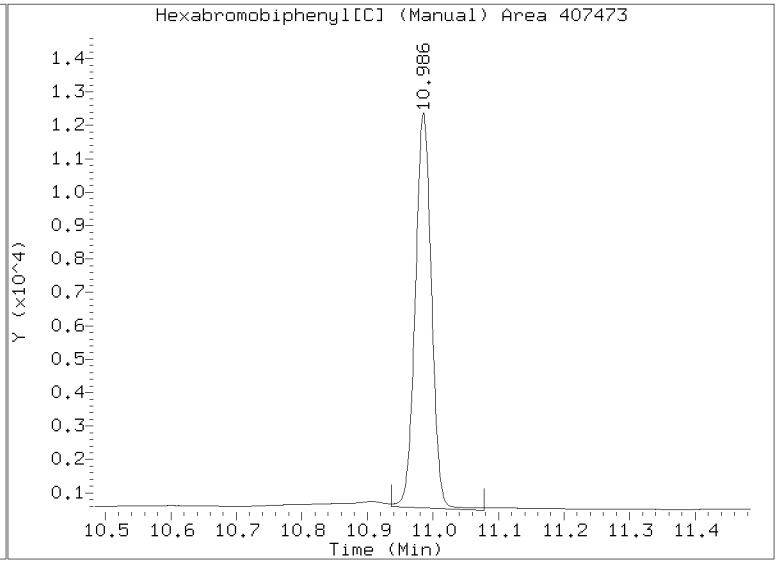
Injection Date: 01-MAR-2023 21:49
Lab ID:INDA3 Client ID:









Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23030138.D	Calibration Date:	12/14/2022
Sequence:	SLC0031	Injection Date:	03/02/23
Lab Sample ID:	SLC0031-CCV4	Injection Time:	01:06
Sequence Name:	INDAE3		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
alpha-BHC	A	20.000	20.6	1.5401480	1.5831580		3.0	+/-20
alpha-BHC [2C]	A	20.000	19.3	1.6032650	1.5509960		-3.5	+/-20
beta-BHC	A	20.000	20.6	0.5929524	0.6123547		3.0	+/-20
beta-BHC [2C]	A	20.000	19.4	0.6095359	0.5912766		-3.0	+/-20
gamma-BHC (Lindane)	A	20.000	20.6	1.3353400	1.3747930		3.0	+/-20
gamma-BHC (Lindane) [2C]	A	20.000	19.9	1.3606000	1.3512890		-0.5	+/-20
delta-BHC	A	20.000	21.8	1.2587440	1.3708830		9.0	+/-20
delta-BHC [2C]	A	20.000	19.8	1.3206240	1.3091100		-1.0	+/-20
Heptachlor	A	20.000	21.5	1.1881510	1.2781820		7.5	+/-20
Heptachlor [2C]	A	20.000	19.5	1.2325020	1.1994660		-2.5	+/-20
Aldrin	A	20.000	20.3	1.3315350	1.3497160		1.5	+/-20
Aldrin [2C]	A	20.000	18.1	1.4072190	1.2714870		-9.5	+/-20
Heptachlor Epoxide	A	20.000	20.9	1.1545300	1.2080190		4.5	+/-20
Heptachlor Epoxide [2C]	A	20.000	18.1	1.1636450	1.0527330		-9.5	+/-20
trans-Chlordane (beta-Chlordane)	A	20.000	20.2	1.1726130	1.1832720		1.0	+/-20
trans-Chlordane (beta-Chlordane) [2C]	A	20.000	17.0	1.1604170	0.9857852		-15.0	+/-20
cis-Chlordane (alpha-chlordane)	A	20.000	19.9	1.1760380	1.1699590		-0.5	+/-20
cis-Chlordane (alpha-chlordane) [2C]	A	20.000	17.0	1.1352300	0.9678191		-15.0	+/-20
Endosulfan I	A	20.000	20.3	1.0595170	1.0750480		1.5	+/-20
Endosulfan I [2C]	A	20.000	17.1	1.0256020	0.8794042		-14.5	+/-20
4,4'-DDE	A	40.000	41.1	1.0568430	1.0849930		2.8	+/-20
4,4'-DDE [2C]	A	40.000	34.8	1.0391680	0.9051998		-13.0	+/-20
Dieldrin	A	40.000	39.9	1.1382810	1.1363800		-0.3	+/-20
Dieldrin [2C]	A	40.000	33.4	1.1331770	0.9473323		-16.5	+/-20
Endrin	A	40.000	26.6	1.0488190	0.6986689		-33.5	+/-20 *
Endrin [2C]	A	40.000	27.0	1.1374860	0.7685206		-32.5	+/-20 *
Endosulfan II	A	40.000	47.8	0.9441550	1.1283460		19.5	+/-20
Endosulfan II [2C]	A	40.000	46.3	1.1659380	1.3505590		15.8	+/-20
4,4'-DDD	A	40.000	44.4	0.9449058	1.0477660		11.0	+/-20
4,4'-DDD [2C]	A	40.000	47.2	1.1064160	1.3046120		18.0	+/-20
Endrin Aldehyde	A	40.000	49.8	0.7530726	0.9373127		24.5	+/-20 *
Endrin Aldehyde [2C]	A	40.000	54.2	0.8224595	1.1155350		35.5	+/-20 *
4,4'-DDT	A	40.000	44.3	0.9548168	1.0582750		10.8	+/-20
4,4'-DDT [2C]	A	40.000	46.2	1.0678960	1.2345040		15.5	+/-20

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	23030138.D	Calibration Date:	12/14/2022
Sequence:	SLC0031	Injection Date:	03/02/23
Lab Sample ID:	SLC0031-CCV4	Injection Time:	01:06
Sequence Name:	INDAE3		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Endosulfan Sulfate	A	40.000	43.1	0.8965158	0.9658902		7.8	+/-20	
Endosulfan Sulfate [2C]	A	40.000	48.5	1.0238570	1.2419230		21.3	+/-20	*
Endrin Ketone	A	40.000	47.3	1.0270110	1.2143080		18.3	+/-20	
Endrin Ketone [2C]	A	40.000	51.7	1.1058500	1.4286250		29.3	+/-20	*
Methoxychlor	A	200.00	209	0.4231113	0.4429527		4.5	+/-20	
Methoxychlor [2C]	A	200.00	230	0.4725766	0.5430894		15.0	+/-20	
Hexachlorobutadiene	A	20.000	18.6	1.6135150	1.4998850		-7.0	+/-20	
Hexachlorobutadiene [2C]	A	20.000	17.4	1.5225100	1.3248120		-13.0	+/-20	
Hexachlorobenzene	A	20.000	19.5	1.4298940	1.3939380		-2.5	+/-20	
Hexachlorobenzene [2C]	A	20.000	18.4	1.4591090	1.3451830		-8.0	+/-20	
Decachlorobiphenyl	A	40.000	37.1	0.8105886	0.7527424		-7.3	+/-20	
Decachlorobiphenyl [2C]	A	40.000	39.3	0.8841805	0.8682016		-1.8	+/-20	
Tetrachlorometaxylene	A	40.000	37.4	1.0879510	1.0164090		-6.5	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	36.7	1.1261070	1.0336640		-8.3	+/-20	

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230301.b/23030138.D
Data file 2: /20230301.b/B20230301.b/23030138.D
Method: \20230301.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: INDA4
Client ID:
Injection Date: 02-MAR-2023 01:06
Report Date: 03/02/2023 13:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.395	0.001	187056	4.833	0.000	287044	20.56	19.35	6.1	alpha-BHC
4.782	0.000	72352	5.306	0.000	109428	20.65	19.40	6.3	beta-BHC
4.969	0.001	161975	5.658	0.000	242278	21.78	19.83	9.4	delta-BHC
4.702	0.001	162437	5.227	0.000	250084	20.59	19.86	3.6	gamma-BHC (Lindane)
5.195	0.000	151022	5.754	0.000	221986	21.52	19.46	10.0	Heptachlor
5.522	-0.001	159474	6.156	0.000	235315	20.27	18.07	11.5	Aldrin
6.202	-0.000	142732	6.810	0.000	194830	20.93	18.09	14.5	Heptachlor epoxide b
6.643	-0.000	127021	7.254	0.000	162752	20.29	17.15	16.8	Endosulfan I
6.903	-0.001	268535	7.547	0.000	350647	39.93	33.44	17.7	Dieldrin
6.563	0.000	256392	7.335	0.000	335052	41.07	34.84	16.4	4,4'-DDE
7.153	-0.001	139673	7.870	0.000	160572	26.65	27.03	1.4	Endrin
7.390	0.001	225571	8.081	0.000	282181	47.80	46.33	3.1	Endosulfan II
7.209	-0.000	209462	7.939	0.000	272581	44.35	47.17	6.1	4,4'-DDD
8.251	-0.000	193094	8.676	0.000	259483	43.10	48.52	11.8	Endosulfan sulfate
7.502	-0.000	211563	8.256	0.000	257933	44.33	46.24	4.2	4,4'-DDT
7.987	-0.000	442760	8.895	0.000	567356	209.38	229.84	9.3	Methoxychlor
8.526	-0.000	242756	9.199	0.000	298492	47.29	51.68	8.9	Endrin ketone
7.818	0.000	187381	8.410	0.000	233076	49.79	54.25	8.6	Endrin aldehyde
6.343	-0.000	139808	7.021	0.000	182440	20.18	16.99	17.2	trans-Chlordane
6.489	-0.001	138235	7.180	0.000	179115	19.90	17.05	15.4	cis-Chlordane
2.349	0.001	177217	2.495	0.000	245184	18.59	17.40	6.6	Hexachlorobutadiene
4.235	0.002	164699	4.692	0.000	248954	19.50	18.44	5.6	Hexachlorobenzene
3.875	0.002	240185	4.199	0.000	382602	37.37	36.72	1.8	Tetrachloro-m-xylene
9.439	-0.001	150483	10.406	0.000	181399	37.15	39.28	5.6	Decachlorobiphenyl N

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

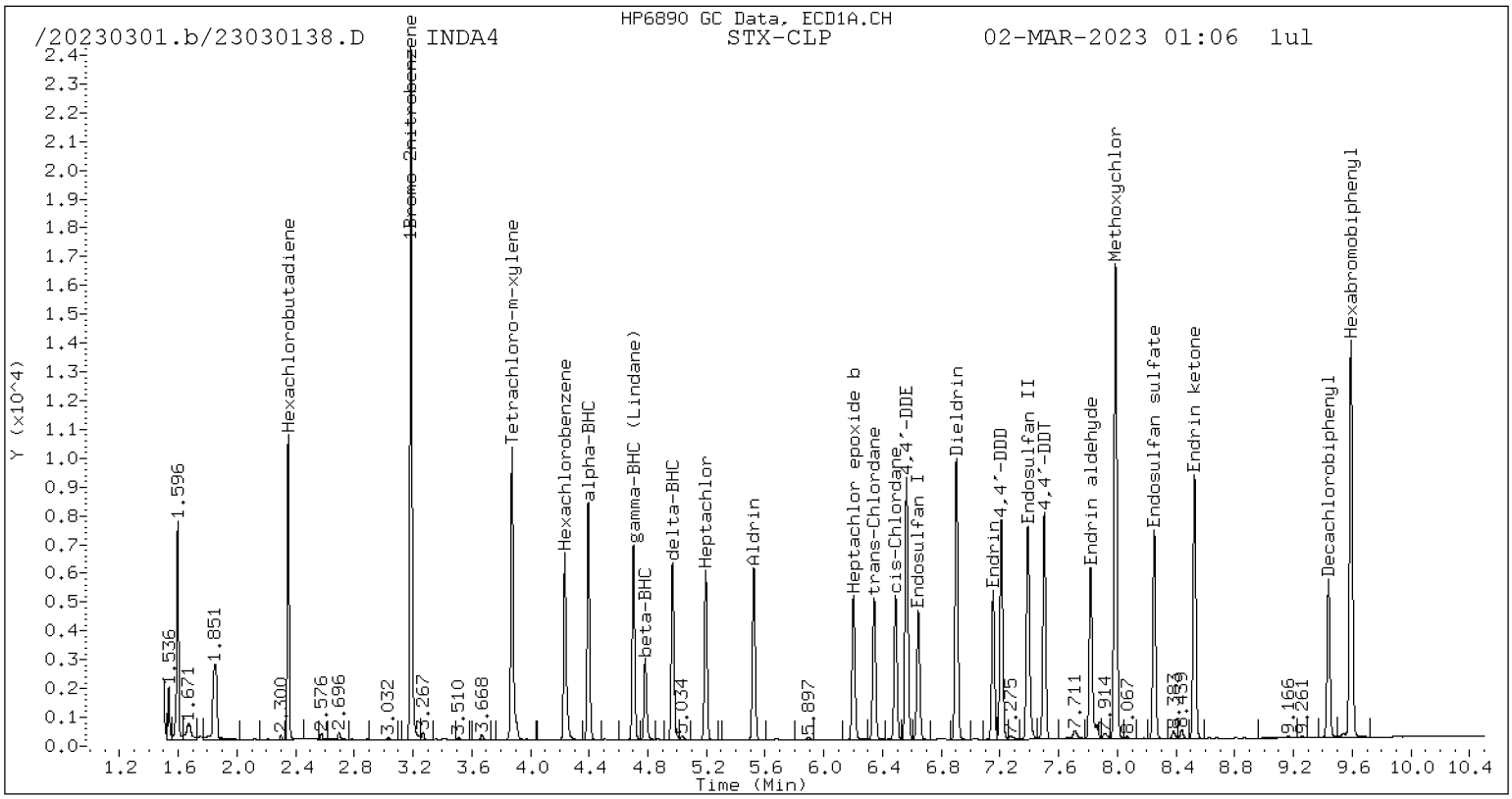
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	472615	-29.7
Hexabromobiphenyl	609723	399826	-34.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	740283	-26.4
Hexabromobiphenyl	769764	417873	-45.7

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

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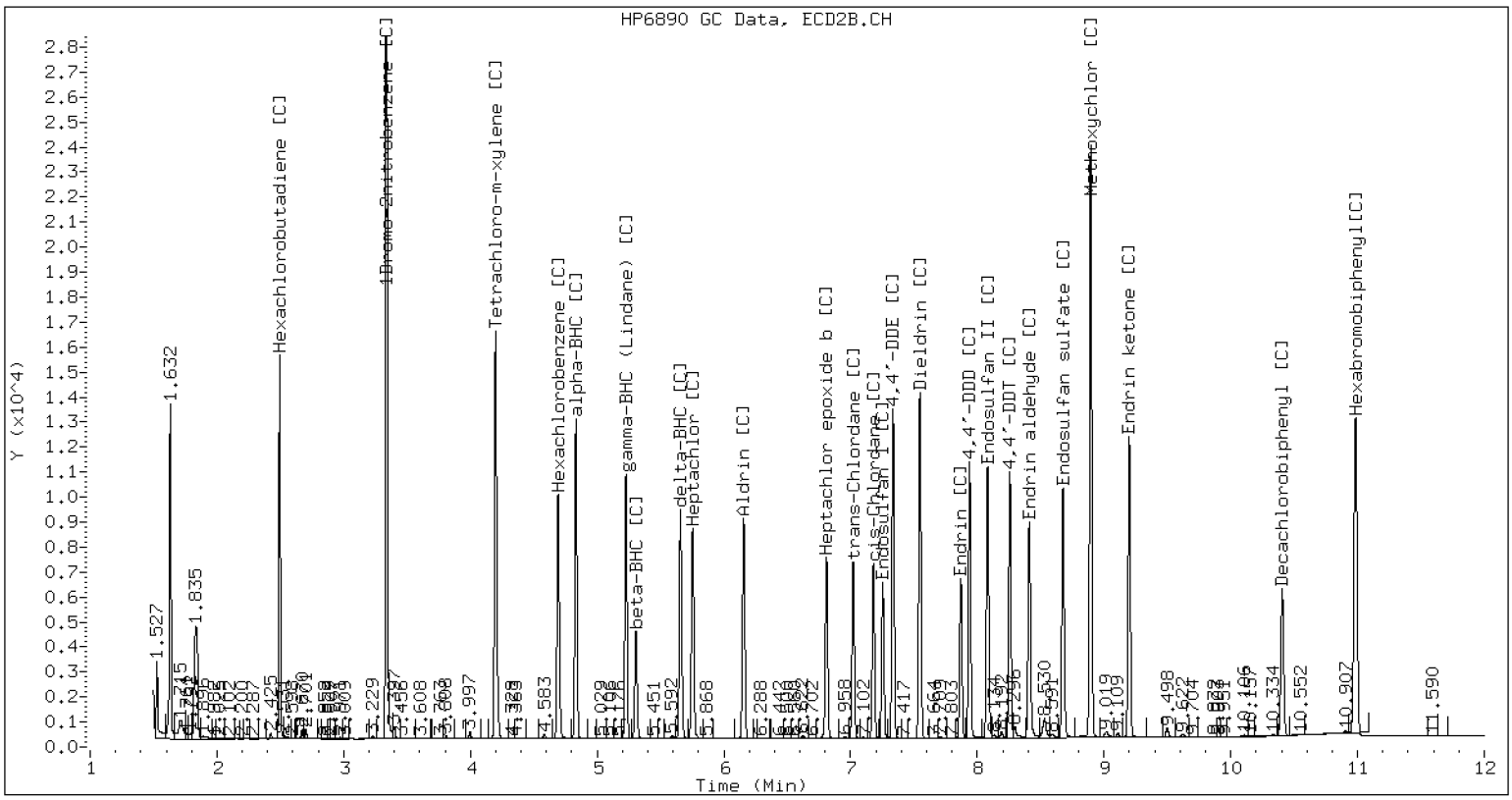

CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, CLP-2

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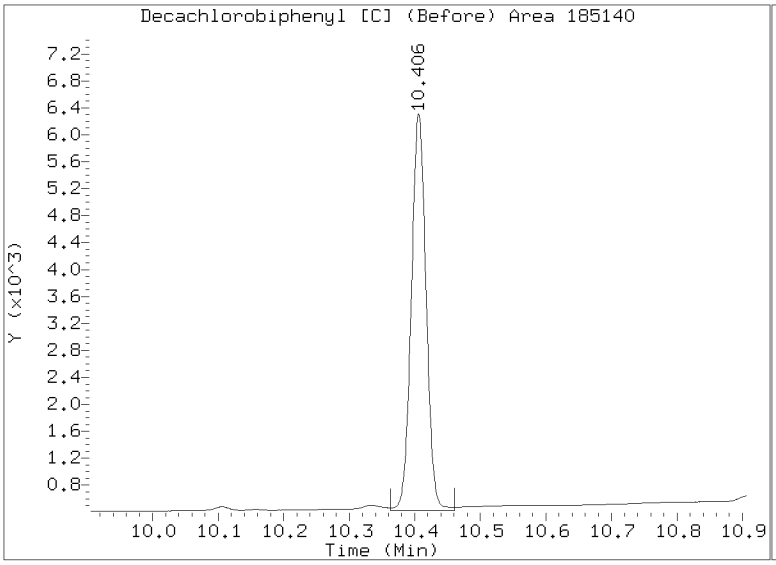
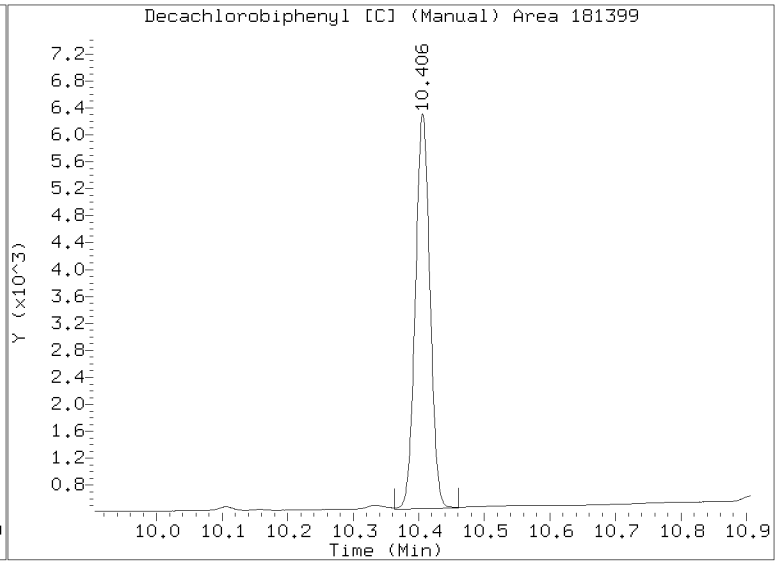
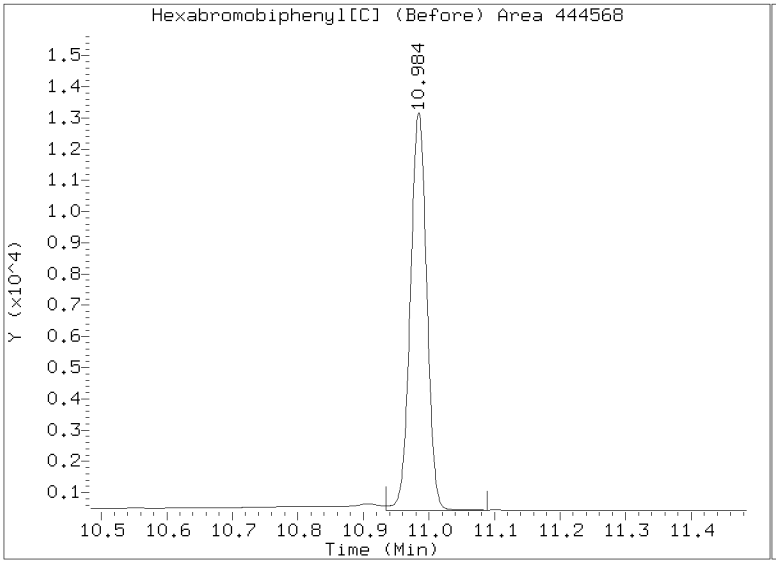
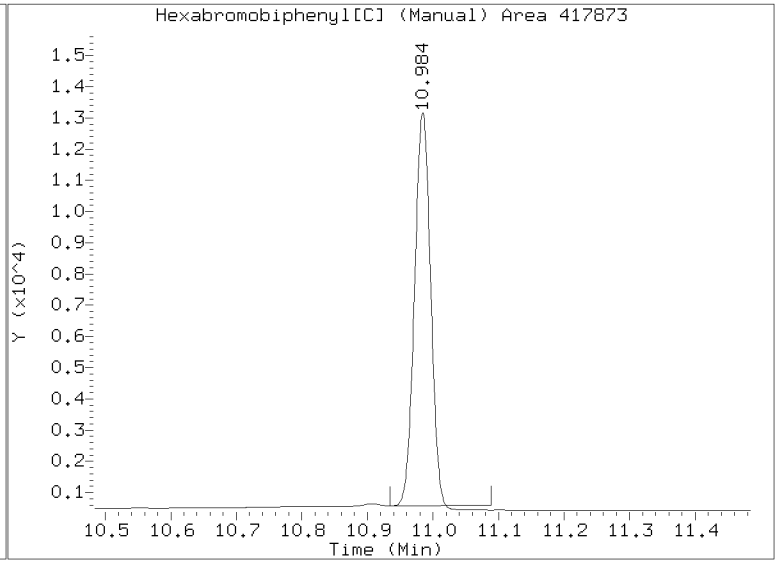
Injection Date: 02-MAR-2023 01:06
Lab ID:INDA4 Client ID:









Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	002F1601.D	Calibration Date:	12/14/2022
Sequence:	SLC0106	Injection Date:	03/07/23
Lab Sample ID:	SLC0106-CCV1	Injection Time:	13:29
Sequence Name:	INDAE2		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.7	1.4298940	1.4092350		-1.5	+/-20
Hexachlorobenzene [2C]	A	20.000	18.3	1.4591090	1.3381770		-8.5	+/-20
Decachlorobiphenyl	A	40.000	36.5	0.8105886	0.7388784		-8.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	37.7	0.8841805	0.8333868		-5.8	+/-20
Tetrachlorometaxylene	A	40.000	35.9	1.0879510	0.9766068		-10.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.7	1.1261070	1.0342220		-8.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230307.b/002F1601.D
Data file 2: /20230307.b/B20230307.b/002F1601.D
Method: \20230307.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA2
Client ID:
Injection Date: 07-MAR-2023 13:29
Report Date: 03/09/2023 13:37
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.378	-0.000	320553	4.816	-0.000	482298	21.19	19.70	7.3	alpha-BHC
4.766	0.000	121405	5.289	-0.000	181344	20.84	19.48	6.8	beta-BHC
4.952	-0.000	277506	5.640	-0.000	367860	22.44	18.24	20.7	delta-BHC
4.685	0.000	278205	5.210	0.000	420392	21.21	20.23	4.7	gamma-BHC (Lindane)
5.177	0.000	252486	5.735	-0.001	368629	21.63	19.58	10.0	Heptachlor
5.504	-0.000	262997	6.137	-0.000	379463	20.11	17.65	13.0	Aldrin
6.182	-0.001	223548	6.792	-0.001	304634	19.71	17.14	14.0	Heptachlor epoxide b
6.625	-0.000	204089	7.236	-0.000	254368	19.61	16.24	18.8	Endosulfan I
6.884	-0.001	433328	7.529	-0.001	559090	38.76	32.30	18.2	Dieldrin
6.545	-0.001	408330	7.318	-0.001	517727	39.33	32.62	18.7	4,4'-DDE
7.135	-0.001	282335	7.852	-0.001	340641	36.39	34.64	4.9	Endrin
7.371	-0.001	340308	8.062	-0.002	444173	48.72	44.06	10.0	Endosulfan II
7.192	-0.000	319954	7.923	-0.001	432495	45.77	45.21	1.2	4,4'-DDD
8.232	-0.001	299066	8.659	-0.001	395437	45.09	44.67	0.9	Endosulfan sulfate
7.484	-0.001	328944	8.240	-0.001	410518	46.57	44.46	4.6	4,4'-DDT
7.971	-0.001	702494	8.880	-0.001	915670	224.44	224.11	0.1	Methoxychlor
8.507	-0.001	361468	9.182	0.000	458683	47.58	47.98	0.8	Endrin ketone
7.799	-0.001	263235	8.393	-0.001	329555	47.25	46.35	1.9	Endrin aldehyde
6.323	-0.000	223432	7.003	-0.001	296469	19.40	16.73	14.8	trans-Chlordane
6.470	-0.001	218904	7.163	-0.000	281087	18.95	16.21	15.6	cis-Chlordane
2.336	0.000	291636	2.482	-0.000	337517	18.40	14.51	23.6	Hexachlorobutadiene
4.219	0.000	276853	4.676	0.000	408776	19.71	18.34	7.2	Hexachlorobenzene
3.859	0.000	383721	4.183	0.000	631852	35.91	36.74	2.3	Tetrachloro-m-xylene
9.421	-0.000	218633	10.384	-0.001	288206	36.46	37.70	3.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

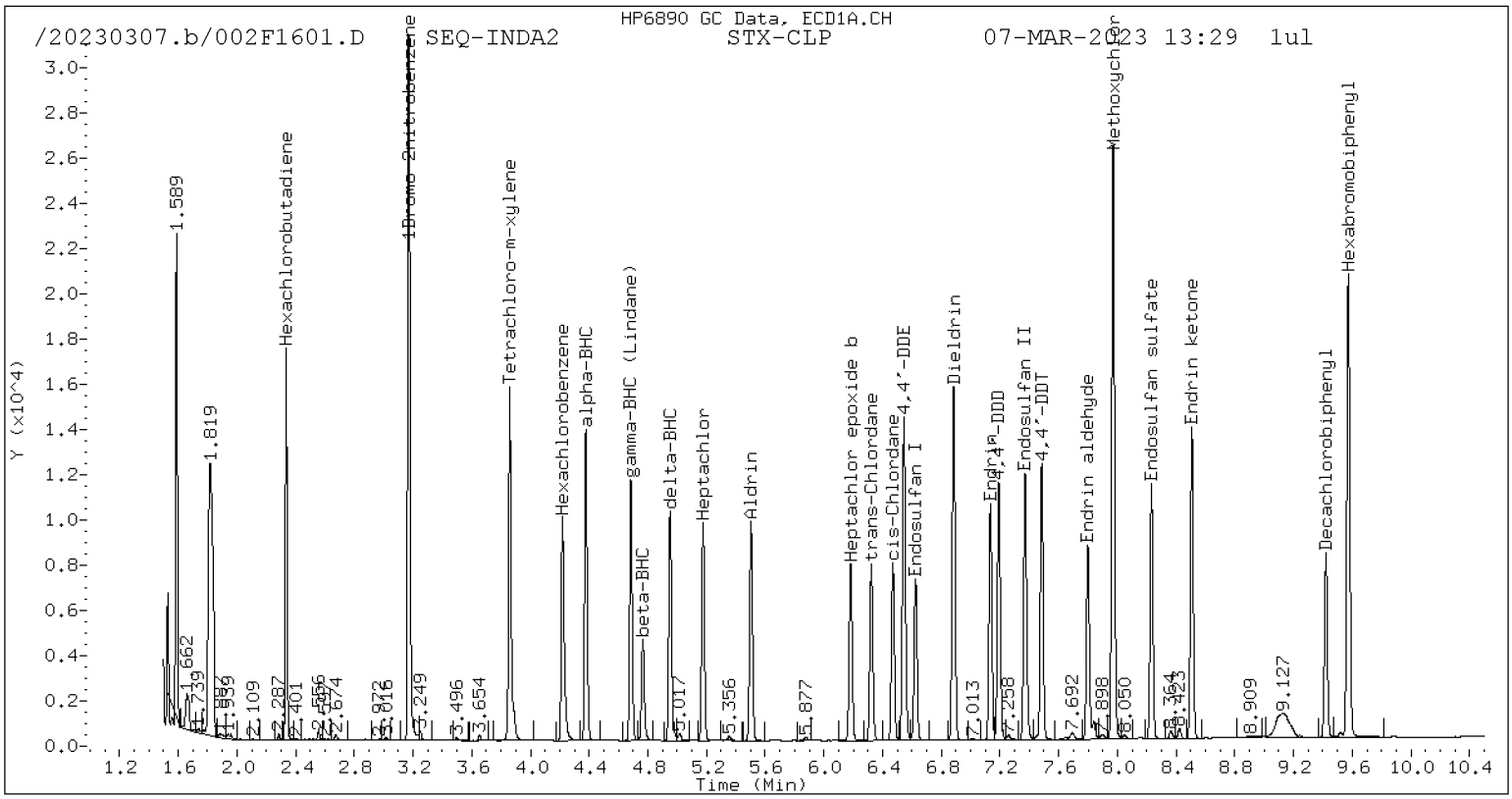
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	785825	16.9
Hexabromobiphenyl	609723	591797	-2.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1221889	21.4
Hexabromobiphenyl	769764	691650	-10.1

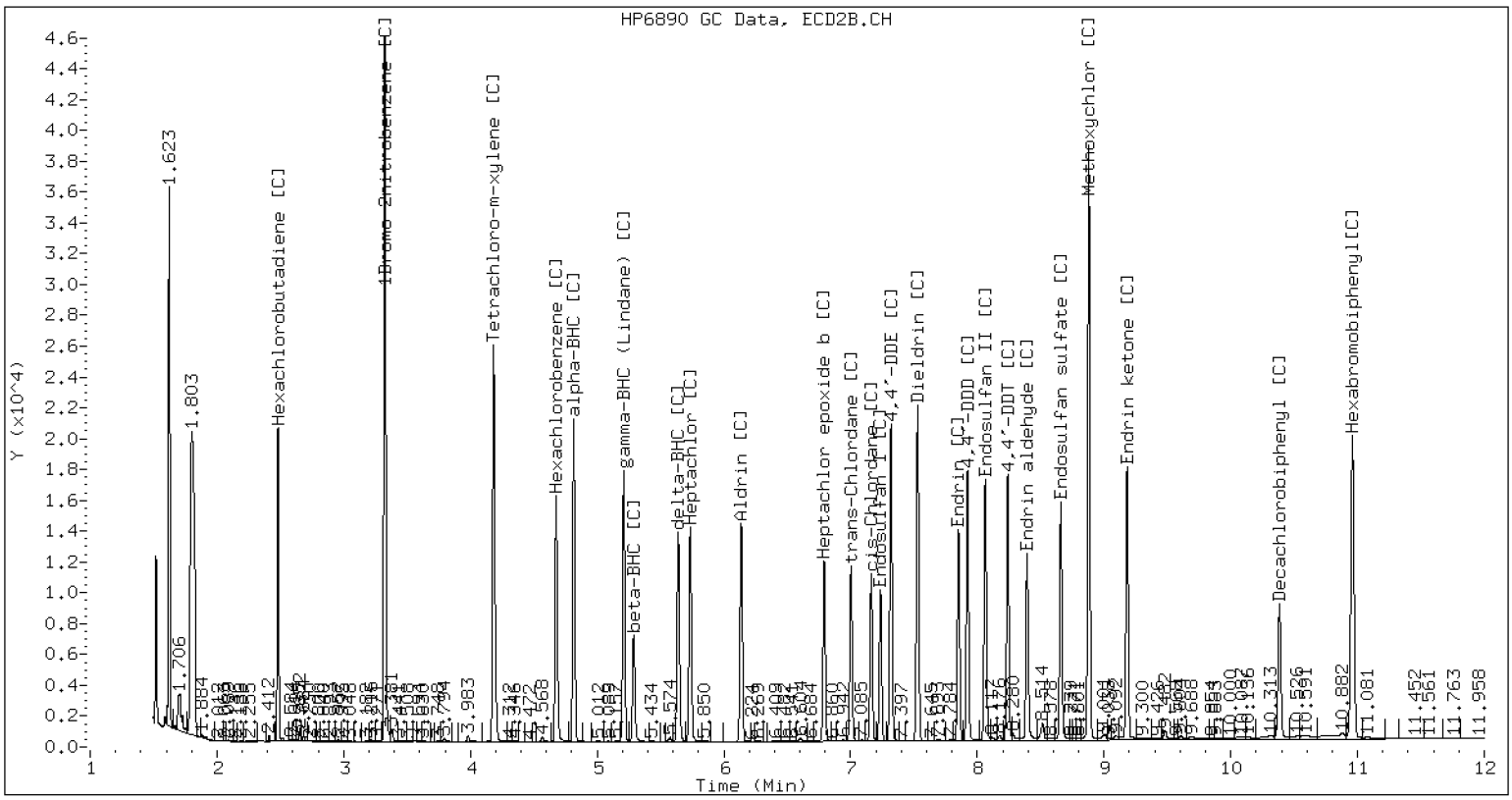
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230307.b/B20230307.b/002F1601.D SEQ-INDA2 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	002F3001.D	Calibration Date:	12/14/2022
Sequence:	SLC0106	Injection Date:	03/07/23
Lab Sample ID:	SLC0106-CCV2	Injection Time:	17:41
Sequence Name:	INDAE3		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.8	1.4298940	1.4178620		-1.0	+/-20
Hexachlorobenzene [2C]	A	20.000	18.5	1.4591090	1.3468270		-7.5	+/-20
Decachlorobiphenyl	A	40.000	36.1	0.8105886	0.7310366		-9.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.7	0.8841805	0.8122374		-8.3	+/-20
Tetrachlorometaxylene	A	40.000	36.1	1.0879510	0.9822595		-9.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.8	1.1261070	1.0371160		-8.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230307.b/002F3001.D
Data file 2: /20230307.b/B20230307.b/002F3001.D
Method: \20230307.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA3
Client ID:
Injection Date: 07-MAR-2023 17:41
Report Date: 03/09/2023 13:37
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.378	-0.000	331795	4.815	-0.001	506296	21.31	19.87	7.0	alpha-BHC
4.766	-0.000	127380	5.288	-0.001	190406	21.25	19.66	7.8	beta-BHC
4.951	-0.001	287040	5.639	-0.001	385433	22.56	18.37	20.5	delta-BHC
4.684	-0.000	288824	5.209	-0.000	440439	21.40	20.37	4.9	gamma-BHC (Lindane)
5.176	0.000	258476	5.734	-0.001	387759	21.52	19.80	8.3	Heptachlor
5.504	-0.000	272236	6.136	-0.001	402747	20.23	18.01	11.6	Aldrin
6.182	-0.001	230076	6.792	-0.001	317341	19.71	17.16	13.8	Heptachlor epoxide b
6.624	-0.001	208981	7.235	-0.001	267500	19.51	16.41	17.3	Endosulfan I
6.884	-0.001	441962	7.528	-0.002	584066	38.41	32.43	16.9	Dieldrin
6.545	-0.001	418514	7.318	-0.002	540799	39.18	32.75	17.9	4,4'-DDE
7.134	-0.001	268949	7.852	-0.001	328926	32.73	30.91	5.7	Endrin
7.371	-0.001	352294	8.063	-0.001	466834	47.63	42.80	10.7	Endosulfan II
7.191	-0.001	338673	7.922	-0.001	442618	45.75	42.76	6.8	4,4'-DDD
8.232	-0.002	315241	8.659	-0.001	414944	44.88	43.32	3.5	Endosulfan sulfate
7.484	-0.001	335219	8.239	-0.002	429256	44.81	42.97	4.2	4,4'-DDT
7.970	-0.002	714703	8.879	-0.001	937242	215.62	212.00	1.7	Methoxychlor
8.507	-0.001	385573	9.181	-0.001	486022	47.92	46.98	2.0	Endrin ketone
7.799	-0.001	279874	8.392	-0.002	345706	47.44	44.93	5.4	Endrin aldehyde
6.323	-0.001	230017	7.003	-0.001	309648	19.41	16.79	14.4	trans-Chlordane
6.470	-0.001	225040	7.162	-0.001	294815	18.93	16.34	14.7	cis-Chlordane
2.335	-0.000	300435	2.482	-0.000	349318	18.42	14.44	24.2	Hexachlorobutadiene
4.219	-0.000	286642	4.676	-0.000	428056	19.83	18.46	7.2	Hexachlorobenzene
3.859	0.000	397157	4.183	0.000	659244	36.11	36.84	2.0	Tetrachloro-m-xylene
9.420	-0.001	229082	10.384	-0.001	303936	36.07	36.75	1.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

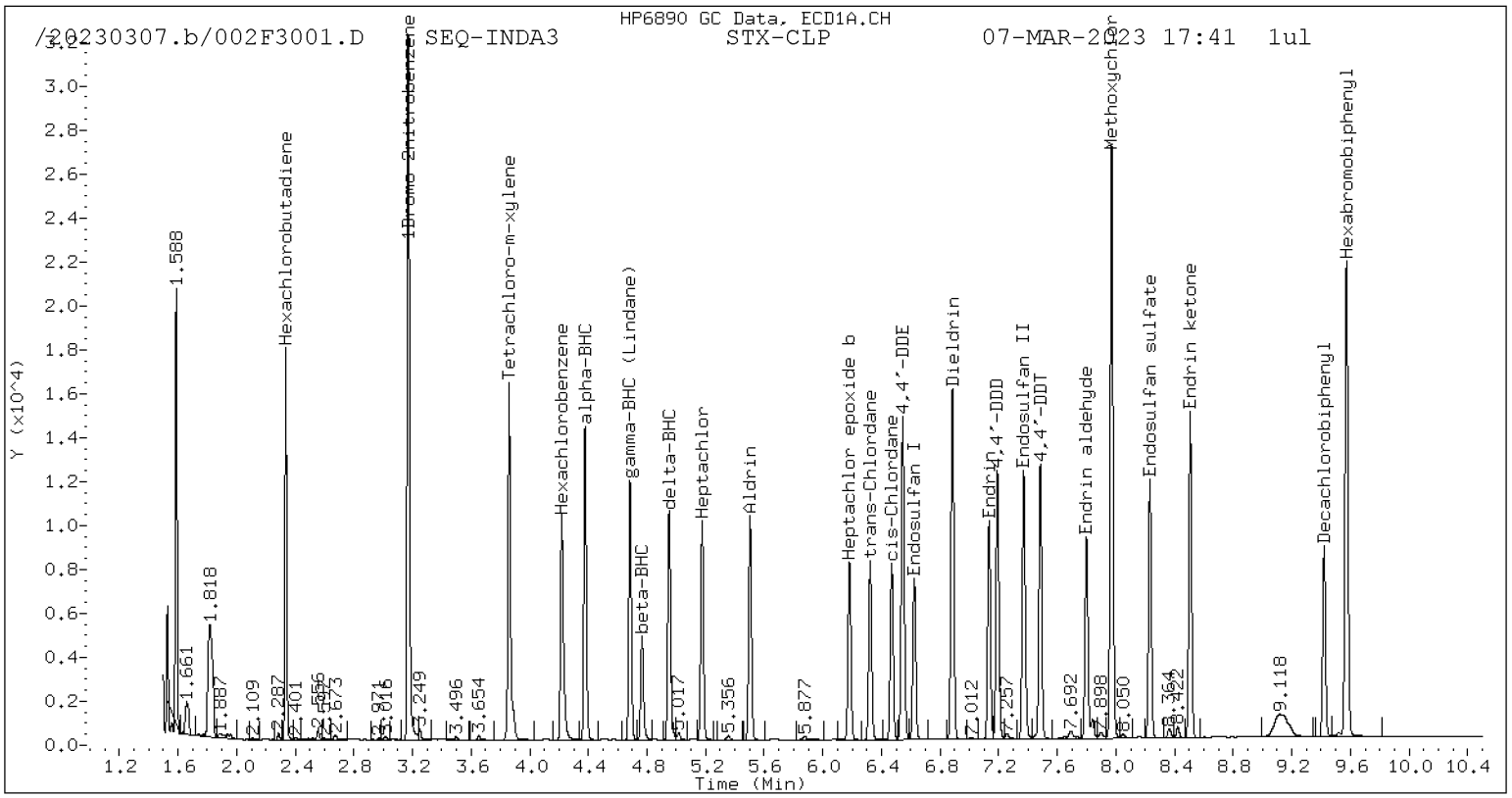
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	808660	20.3
Hexabromobiphenyl	609723	626732	2.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	1271302	26.3
Hexabromobiphenyl	769764	748392	-2.8

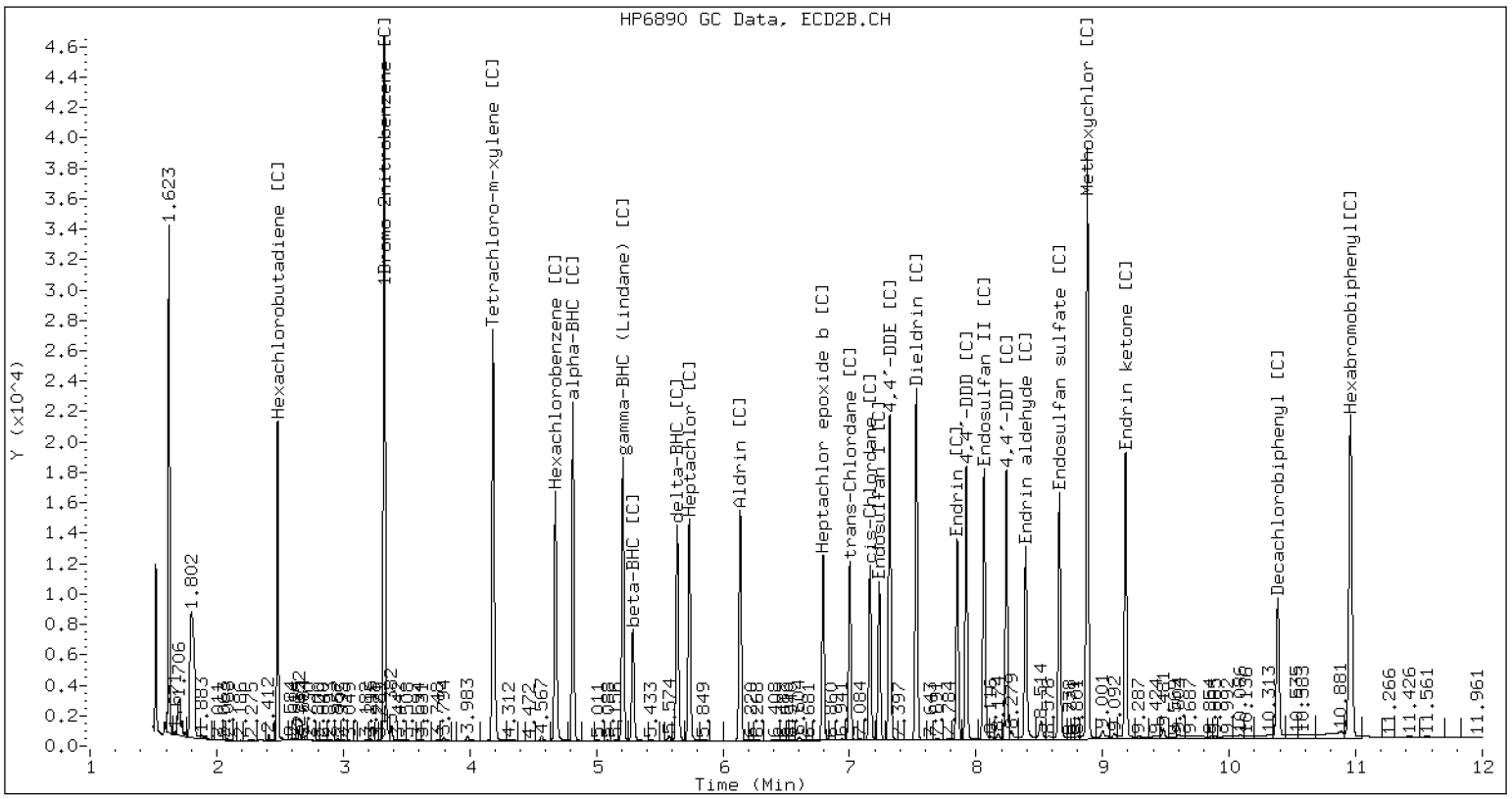
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230307.b/B20230307.b/002F3001.D SEQ-INDA3 CLP2



CLP-2 Manual Integration: NO

CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	FL00041
Lab File ID:	002F3401.D	Calibration Date:	12/14/2022
Sequence:	SLC0106	Injection Date:	03/07/23
Lab Sample ID:	SLC0106-CCV3	Injection Time:	18:53
Sequence Name:	INDAE4		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	19.6	1.4298940	1.4043550		-2.0	+/-20
Hexachlorobenzene [2C]	A	20.000	18.2	1.4591090	1.3292630		-9.0	+/-20
Decachlorobiphenyl	A	40.000	37.4	0.8105886	0.7583349		-6.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.4	0.8841805	0.8498141		-4.0	+/-20
Tetrachlorometaxylene	A	40.000	36.2	1.0879510	0.9840989		-9.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.8	1.1261070	1.0366350		-8.0	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230307.b/002F3401.D
Data file 2: /20230307.b/B20230307.b/002F3401.D
Method: \20230307.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: AA

ARI ID: SEQ-INDA4
Client ID:
Injection Date: 07-MAR-2023 18:53
Report Date: 03/09/2023 13:37
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.379	0.001	175125	4.816	0.000	261369	20.32	18.96	6.9	alpha-BHC
4.767	0.001	69842	5.289	-0.000	100875	21.05	19.25	9.0	beta-BHC
4.952	0.000	154645	5.640	-0.000	207029	21.96	18.23	18.6	delta-BHC
4.685	0.001	152912	5.210	0.001	229369	20.47	19.61	4.3	gamma-BHC (Lindane)
5.177	0.000	137979	5.735	-0.001	203047	20.76	19.16	8.0	Heptachlor
5.504	-0.000	146086	6.136	-0.001	215282	19.61	17.79	9.7	Aldrin
6.182	-0.001	125399	6.791	-0.002	170913	19.41	17.08	12.8	Heptachlor epoxide b
6.624	-0.001	115352	7.235	-0.001	143253	19.46	16.24	18.0	Endosulfan I
6.884	-0.000	247910	7.528	-0.002	313099	38.93	32.13	19.1	Dieldrin
6.545	-0.001	228676	7.318	-0.002	288440	38.68	32.28	18.0	4,4'-DDE
7.134	-0.001	134725	7.851	-0.002	160123	29.88	27.41	8.6	Endrin
7.372	-0.000	195347	8.063	-0.001	257965	48.13	43.08	11.1	Endosulfan II
7.192	-0.001	187650	7.922	-0.001	236067	46.20	41.54	10.6	4,4'-DDD
8.232	-0.001	173365	8.658	-0.002	232997	44.98	44.31	1.5	Endosulfan sulfate
7.484	-0.001	185008	8.240	-0.002	228490	45.07	41.66	7.9	4,4'-DDT
7.971	-0.001	392930	8.878	-0.002	508835	216.02	209.63	3.0	Methoxychlor
8.507	-0.001	212630	9.181	-0.001	282662	48.16	49.76	3.3	Endrin ketone
7.799	-0.001	164247	8.393	-0.001	201150	50.73	47.62	6.3	Endrin aldehyde
6.323	-0.000	124493	7.002	-0.001	165751	18.98	16.61	13.3	trans-Chlordane
6.470	-0.001	123136	7.162	-0.001	158806	18.71	16.27	14.0	cis-Chlordane
2.337	0.001	164716	2.483	0.002	200236	18.25	15.29	17.6	Hexachlorobutadiene
4.220	0.001	157140	4.677	0.001	228601	19.64	18.22	7.5	Hexachlorobenzene
3.861	0.002	220231	4.184	0.001	356552	36.18	36.82	1.8	Tetrachloro-m-xylene
9.421	-0.001	130401	10.385	-0.000	174596	37.42	38.45	2.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

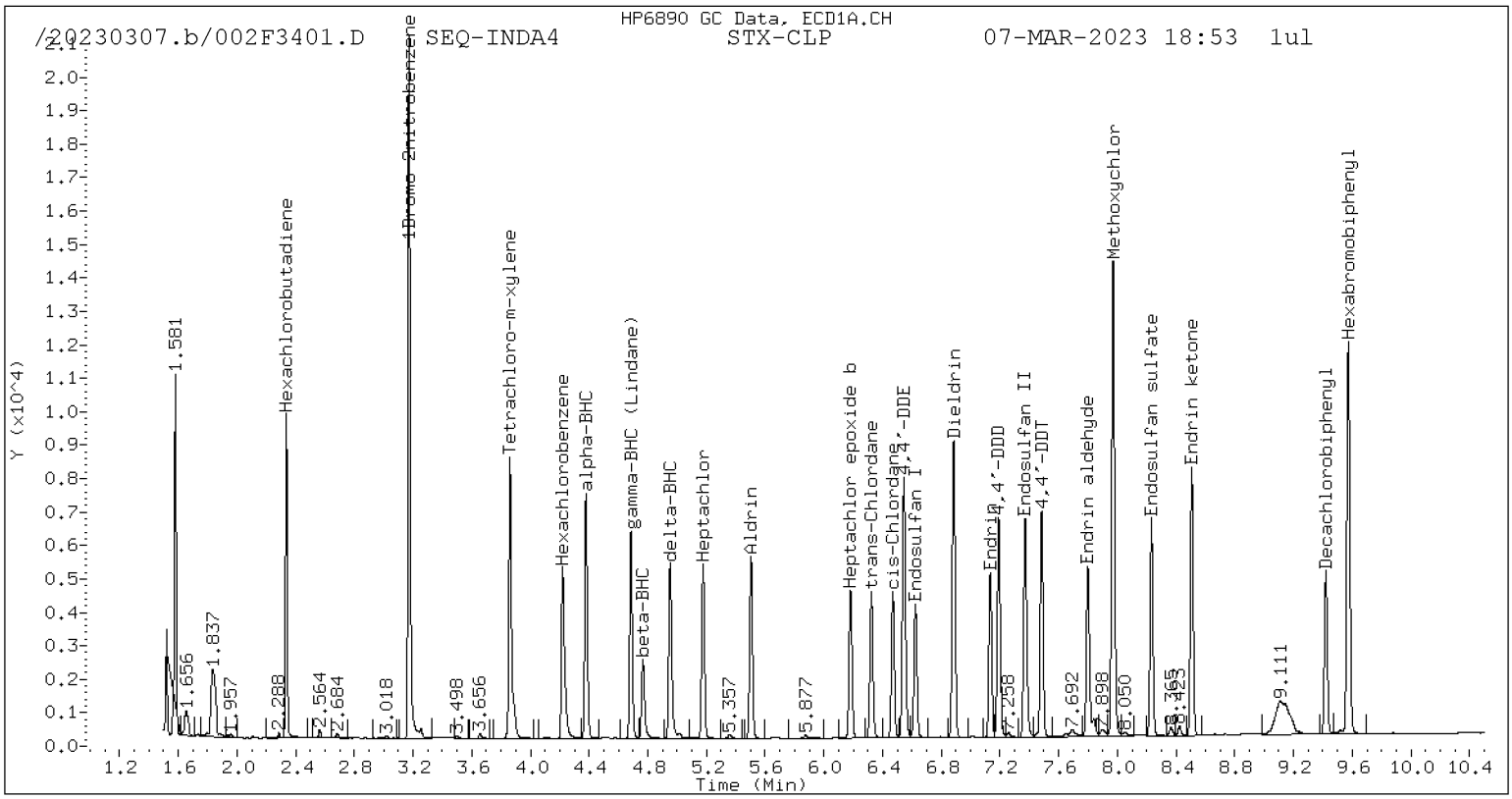
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	672426	447579	-33.4
Hexabromobiphenyl	609723	343914	-43.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1006482	687903	-31.7
Hexabromobiphenyl	769764	410904	-46.6

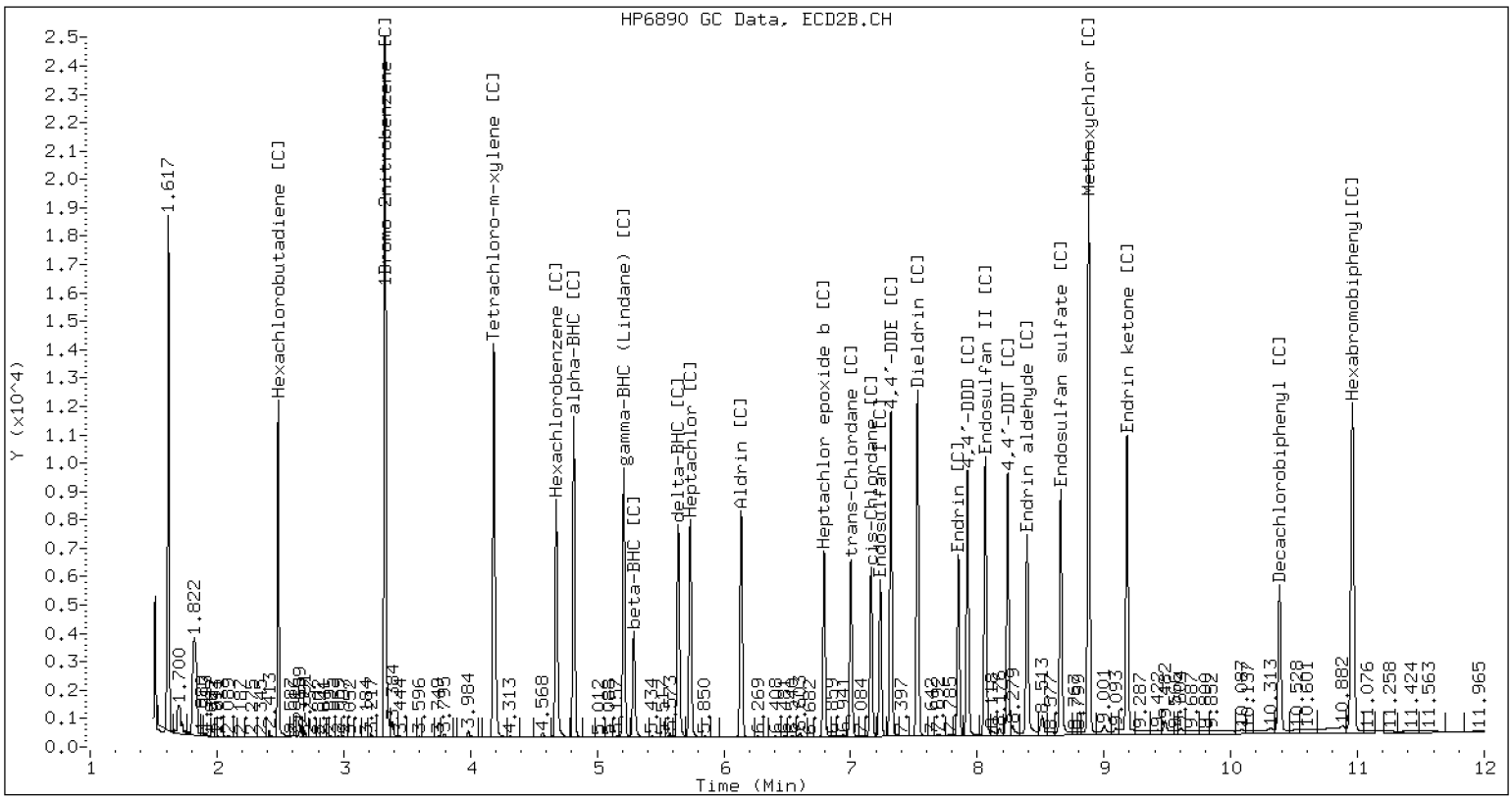
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 14-DEC-2022
<- Indicates standard response outside Limits (-50 to +100%)

Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230307.b/B20230307.b/002F3401.D SEQ-INDA4 CLP2



CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS1

EPA 8081B

Laboratory:	Analytical Resources, LLC	Laboratory ID:	SKL0233-PEM1	File ID:	22121404.D
Client:	Anchor QEA, LLC	Matrix:	Water	Instrument:	ECD6
Project:	AOC5 MR Phase 1	Analyzed:	12/14/2022	Sequence:	SKL0233
SDG:	23A0249	Calibration:	FL00041	Column:	1

PEM COMPOUND	RT	Response
4,4'-DDE	6.49	6258
Endrin	7.08	745471
4,4'-DDD	7.14	15566
Endrin Aldehyde	7.75	21328
4,4'-DDT	7.43	629664
Endrin Ketone	8.45	19276

4,4'-DDT %Breakdown (1): 3.3

Endrin %Breakdown (1): 5.2

Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS1

EPA 8081B

Laboratory: Analytical Resources, LLC
Laboratory ID: SKL0233-PEM1
File ID: 22121404.D
Client: Anchor QEA, LLC
Matrix: Water
Instrument: ECD6
Project: AOC5 MR Phase 1
Analyzed: 12/14/2022
Sequence: SKL0233
SDG: 23A0249
Calibration: FL00041
Column: 2

PEM COMPOUND	RT	Response
4,4'-DDE	7.37	11906
Endrin	7.91	1029194
4,4'-DDD	7.98	32697
Endrin Aldehyde	8.45	31426
4,4'-DDT	8.30	890195
Endrin Ketone	9.24	28268

4,4'-DDT %Breakdown (1): 4.8

Endrin %Breakdown (1): 5.5

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

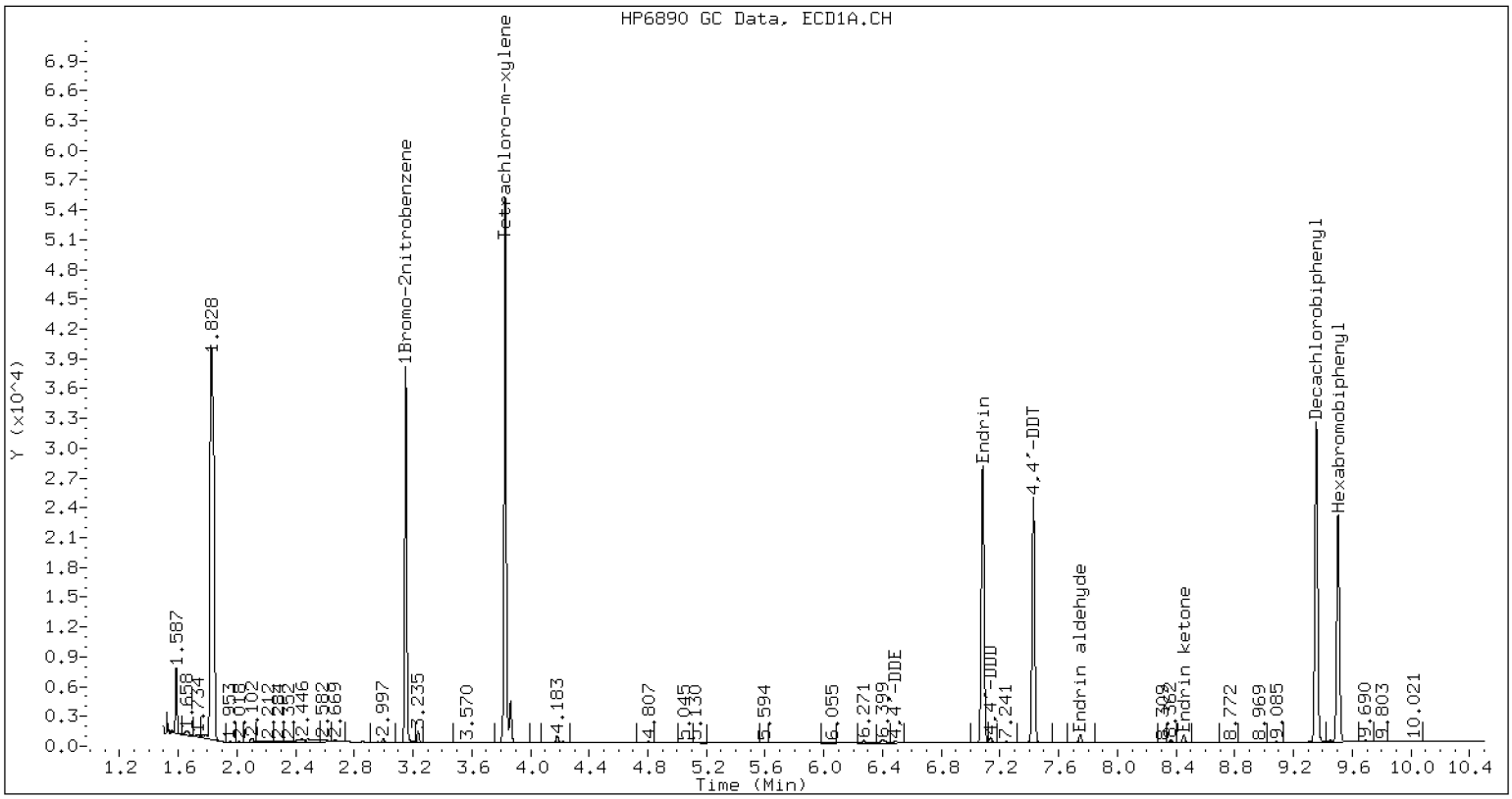
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene [C]	3.350	1005375
4,4'-DDE [C]	7.370	11906
Endrin [C]	7.907	1029194
4,4'-DDD [C]	7.977	32697
4,4'-DDT [C]	8.295	890195
Endrin ketone [C]	9.239	28268
Endrin aldehyde [C]	8.448	31426
Hexabromobiphenyl[C]	11.054	772586
Tetrachloro-m-xylene [C]	4.220	1890294
Decachlorobiphenyl [C]	10.467	1140978

DDT Percent Breakdown = 4.8 %
((11906+32697) * 100)/(11906+32697+890195)

Endrin Percent Breakdown = 5.5 %
((31426+28268) * 100)/(31426+28268+1029194)

/20221214.b/22121404.D SEQ-PEM1 STX-CLP 14-DEC-2022 20:20 1ul



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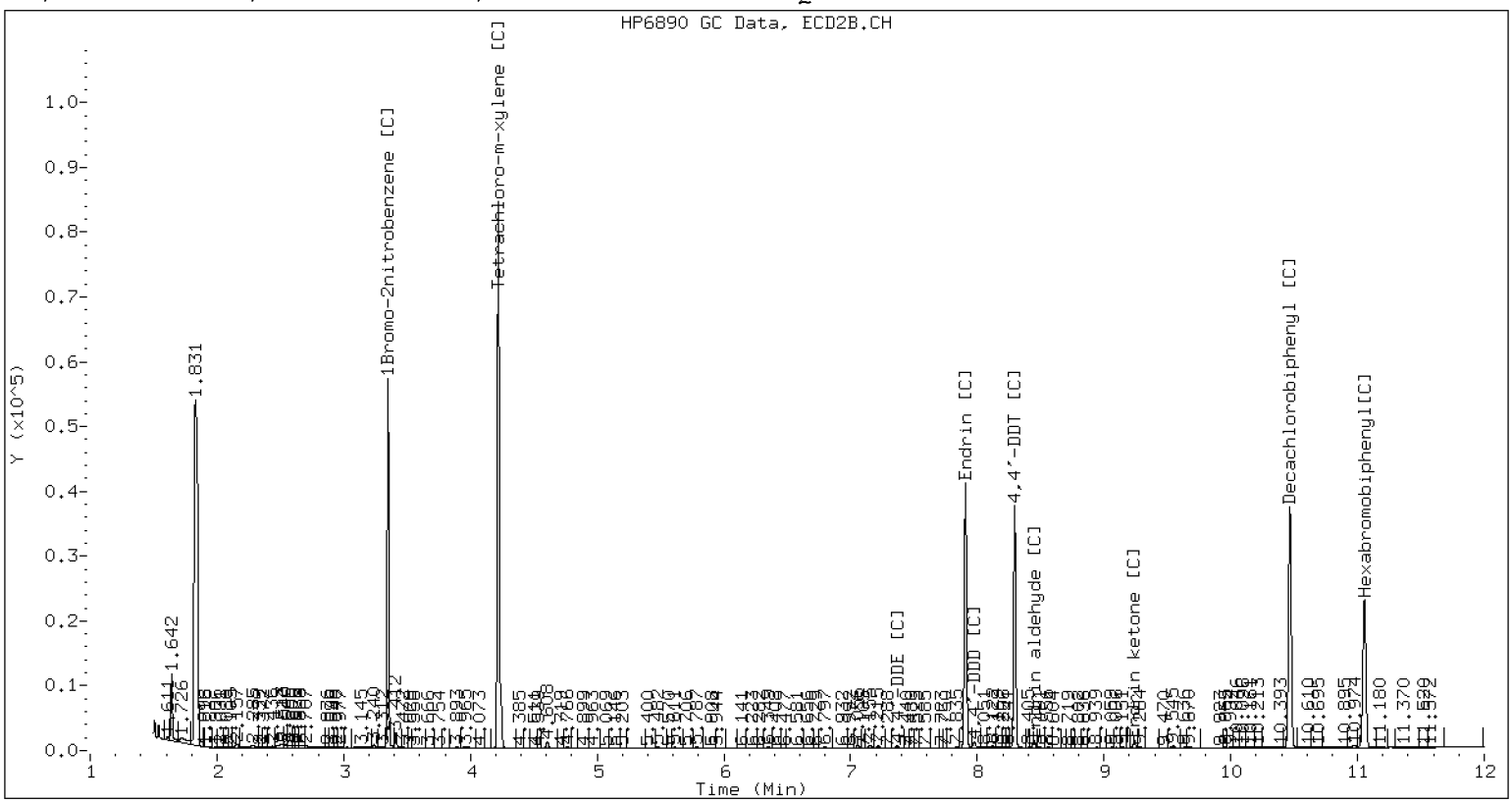


7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 22121404.D

Analysis Date: 14-DEC-2022 20:20 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.151	683485
4,4'-DDE	6.490	6258
Endrin	7.082	745471
4,4'-DDD	7.136	15566
4,4'-DDT	7.428	629664
Endrin ketone	8.453	19276
Endrin aldehyde	7.747	21328
Hexabromobiphenyl	9.504	619012
Tetrachloro-m-xylene	3.828	1161664
Decachlorobiphenyl	9.355	833312

DDT Percent Breakdown = 3.3 %
((6258+15566) * 100)/(6258+15566+629664)

Endrin Percent Breakdown = 5.2 %
((21328+19276) * 100)/(21328+19276+745471)

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312
Decachlorobiphenyl	9.355	833312

Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS1

EPA 8081B

Laboratory: Analytical Resources, LLC
Laboratory ID: SLC0031-PEM1
File ID: 23030102.D
Client: Anchor QEA, LLC
Matrix: Water
Instrument: ECD6
Project: AOC5 MR Phase 1
Analyzed: 03/01/2023
Sequence: SLC0031
SDG: 23A0249
Calibration: FL00041
Column: 1

PEM COMPOUND	RT	Response
4,4'-DDE	6.56	7820
Endrin	7.15	446040
4,4'-DDD	7.21	9598
Endrin Aldehyde	7.82	42688
4,4'-DDT	7.50	458169
Endrin Ketone	8.53	39954

4,4'-DDT %Breakdown (1): 3.7

Endrin %Breakdown (1): 15.6

Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS1

EPA 8081B

Laboratory: Analytical Resources, LLC
Laboratory ID: SLC0031-PEM1
File ID: 23030102.D
Client: Anchor QEA, LLC
Matrix: Water
Instrument: ECD6
Project: AOC5 MR Phase 1
Analyzed: 03/01/2023
Sequence: SLC0031
SDG: 23A0249
Calibration: FL00041
Column: 2

PEM COMPOUND	RT	Response
4,4'-DDE	7.34	10087
Endrin	7.87	546833
4,4'-DDD	7.94	23055
Endrin Aldehyde	8.41	54967
4,4'-DDT	8.26	566462
Endrin Ketone	9.20	51108

4,4'-DDT %Breakdown (1): 5.5

Endrin %Breakdown (1): 16.2

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: PEM1 InstID,Data File: ecd6.i, 23030102.D

Analysis Date: 01-MAR-2023 12:41 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.187	454993
4,4'-DDE	6.564	7820
Endrin	7.155	446040
4,4'-DDD	7.213	9598
4,4'-DDT	7.503	458169
Endrin ketone	8.528	39954
Endrin aldehyde	7.820	42688
Hexabromobiphenyl	9.592	370100
Tetrachloro-m-xylene	3.875	236285
Decachlorobiphenyl	9.440	143555

DDT Percent Breakdown = 3.7 %
((7820+9598) * 100)/(7820+9598+458169)

Endrin Percent Breakdown = 15.6 %
((42688+39954) * 100)/(42688+39954+446040)

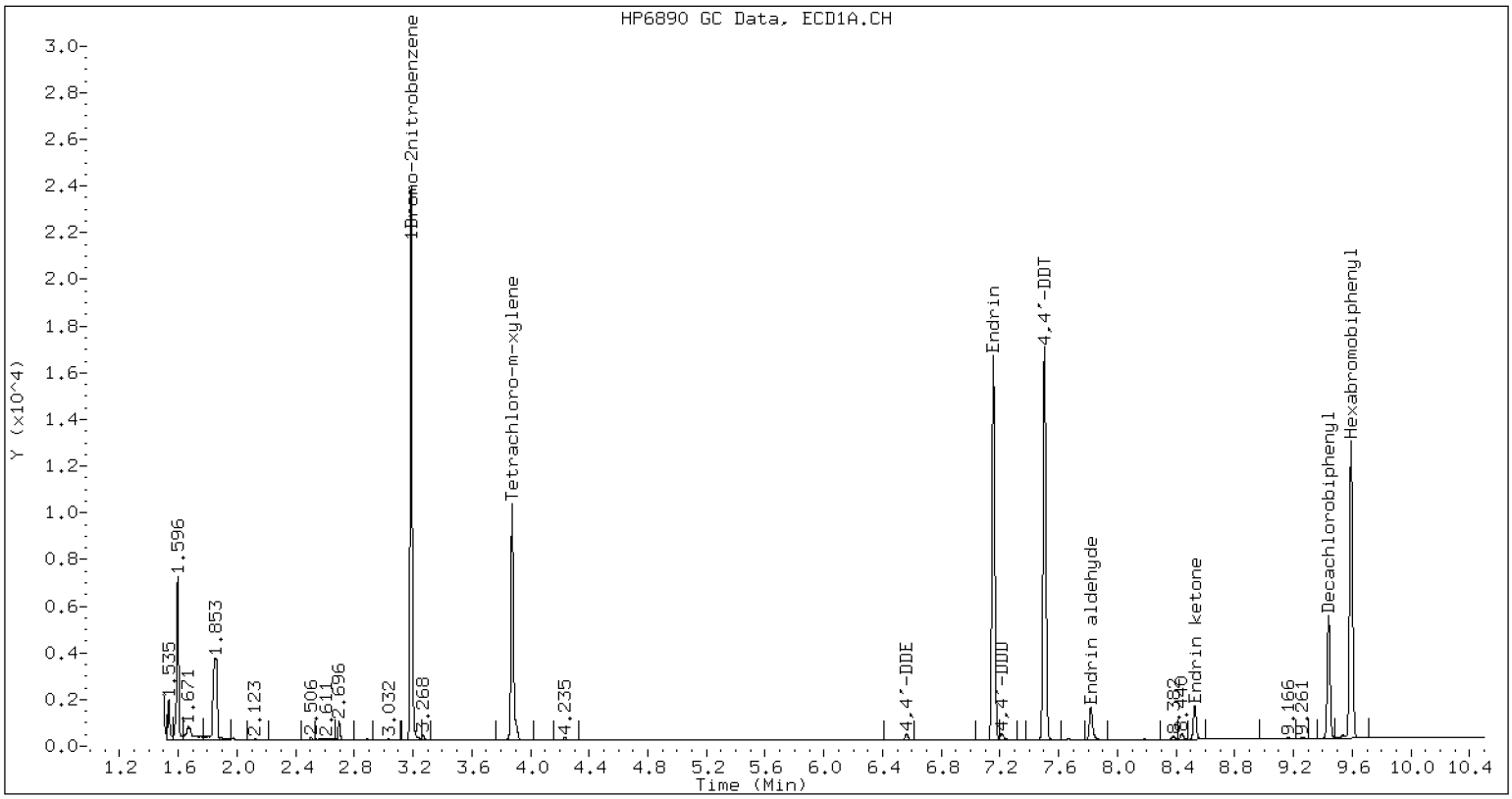
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene [C]	3.339	678366
4,4'-DDE [C]	7.336	10087
Endrin [C]	7.870	546833
4,4'-DDD [C]	7.941	23055
4,4'-DDT [C]	8.257	566462
Endrin ketone [C]	9.199	51108
Endrin aldehyde [C]	8.411	54967
Hexabromobiphenyl[C]	10.986	397384
Tetrachloro-m-xylene [C]	4.199	358585
Decachlorobiphenyl [C]	10.407	172643

DDT Percent Breakdown = 5.5 %
((10087+23055) * 100)/(10087+23055+566462)

Endrin Percent Breakdown = 16.2 %
((54967+51108) * 100)/(54967+51108+546833)

/20230301.b/23030102.D PEM1 STX-CLP 01-MAR-2023 12:41 1ul



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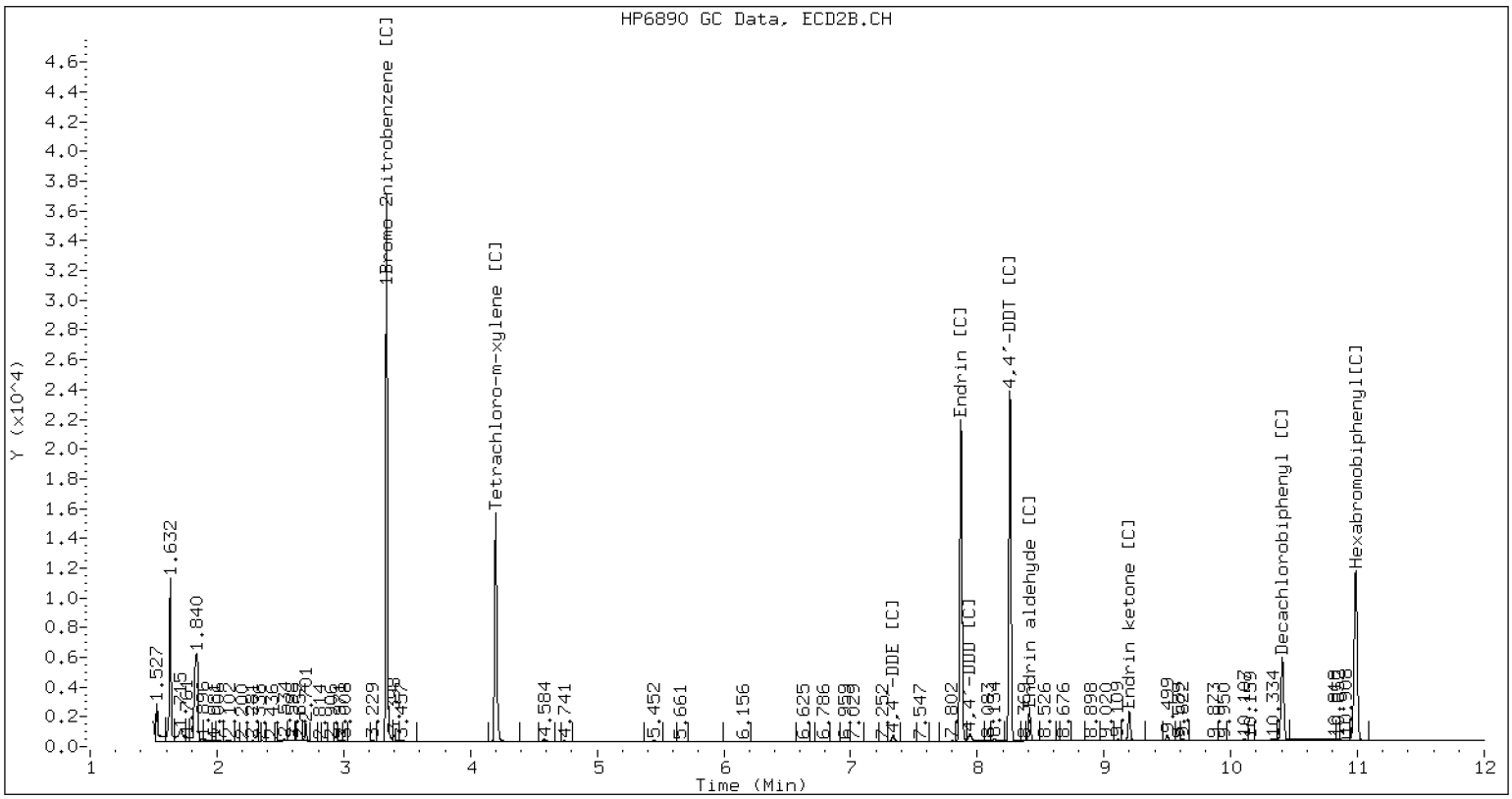


Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS2

EPA 8081B

Laboratory: Analytical Resources, LLC | Laboratory ID: SLC0031-PEM2 | File ID: 23030108.D

Client: Anchor QEA, LLC | Matrix: Water | Instrument: ECD6

Project: AOC5 MR Phase 1 | Analyzed: 03/01/2023 | Sequence: SLC0031

SDG: 23A0249 | Calibration: FL00041 | Column: 1

PEM COMPOUND	RT	Response
4,4'-DDE	6.56	4444
Endrin	7.15	417062
4,4'-DDD	7.21	9158
Endrin Aldehyde	7.82	28152
4,4'-DDT	7.50	397165
Endrin Ketone	8.53	26258

4,4'-DDT %Breakdown (1): 3.3

Endrin %Breakdown (1): 11.5

Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS2

EPA 8081B

Laboratory:	Analytical Resources, LLC	Laboratory ID:	SLC0031-PEM2	File ID:	23030108.D
Client:	Anchor QEA, LLC	Matrix:	Water	Instrument:	ECD6
Project:	AOC5 MR Phase 1	Analyzed:	03/01/2023	Sequence:	SLC0031
SDG:	23A0249	Calibration:	FL00041	Column:	2

PEM COMPOUND	RT	Response
4,4'-DDE	7.34	6351
Endrin	7.87	538542
4,4'-DDD	7.94	12666
Endrin Aldehyde	8.41	39460
4,4'-DDT	8.26	537232
Endrin Ketone	9.20	37212

4,4'-DDT %Breakdown (1): 3.4

Endrin %Breakdown (1): 12.5

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: PEM2 InstID,Data File: ecd6.i, 23030108.D

Analysis Date: 01-MAR-2023 14:47 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.186	422651
4,4'-DDE	6.563	4444
Endrin	7.154	417062
4,4'-DDD	7.211	9158
4,4'-DDT	7.502	397165
Endrin ketone	8.526	26258
Endrin aldehyde	7.819	28152
Hexabromobiphenyl	9.592	322484
Tetrachloro-m-xylene	3.875	217164
Decachlorobiphenyl	9.439	129249

DDT Percent Breakdown = 3.3 %
((4444+9158) * 100)/(4444+9158+397165)

Endrin Percent Breakdown = 11.5 %
((28152+26258) * 100)/(28152+26258+417062)

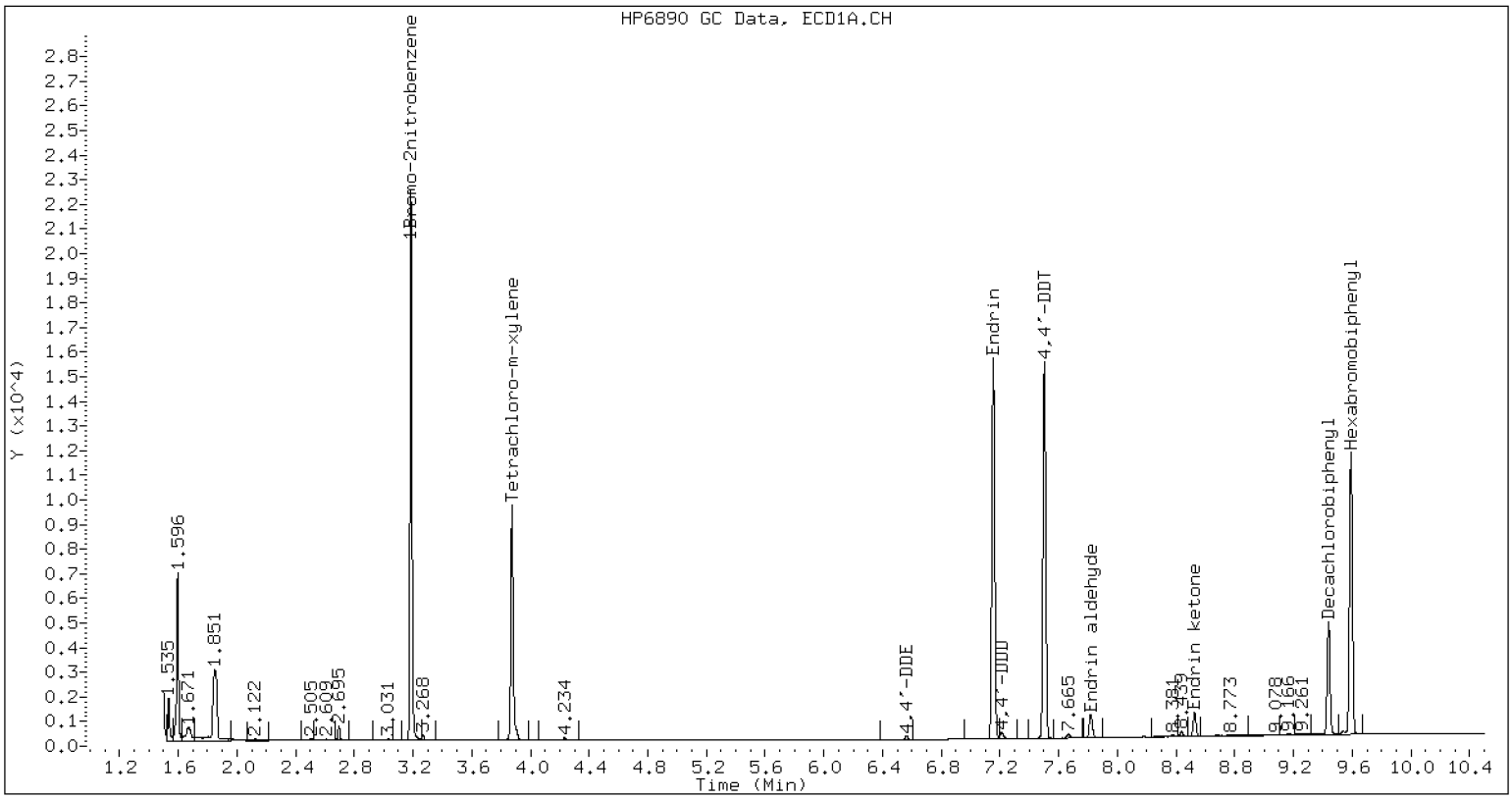
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene [C]	3.338	655713
4,4'-DDE [C]	7.336	6351
Endrin [C]	7.871	538542
4,4'-DDD [C]	7.940	12666
4,4'-DDT [C]	8.257	537232
Endrin ketone [C]	9.198	37212
Endrin aldehyde [C]	8.411	39460
Hexabromobiphenyl[C]	10.986	361931
Tetrachloro-m-xylene [C]	4.199	348640
Decachlorobiphenyl [C]	10.407	156795

DDT Percent Breakdown = 3.4 %
((6351+12666) * 100)/(6351+12666+537232)

Endrin Percent Breakdown = 12.5 %
((39460+37212) * 100)/(39460+37212+538542)

/20230301.b/23030108.D PEM2 STX-CLP 01-MAR-2023 14:47 1ul



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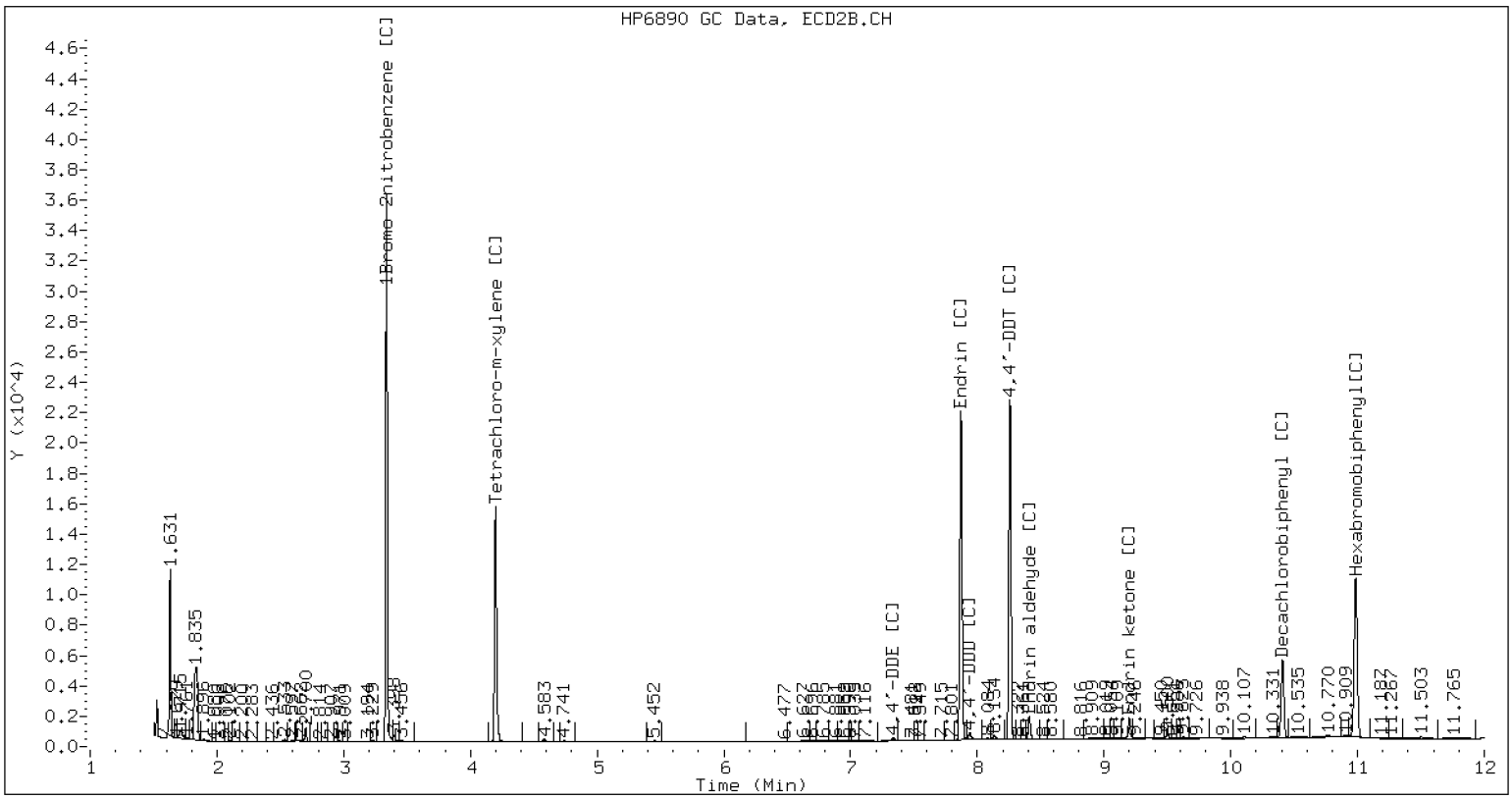
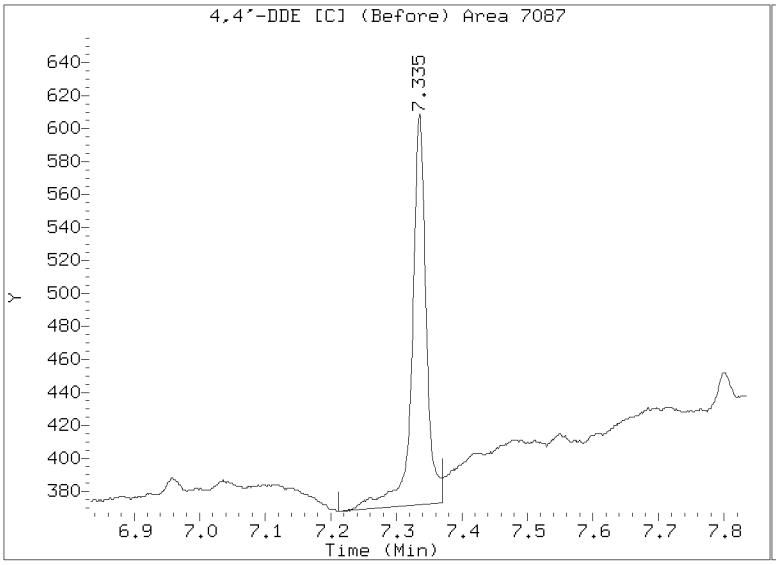
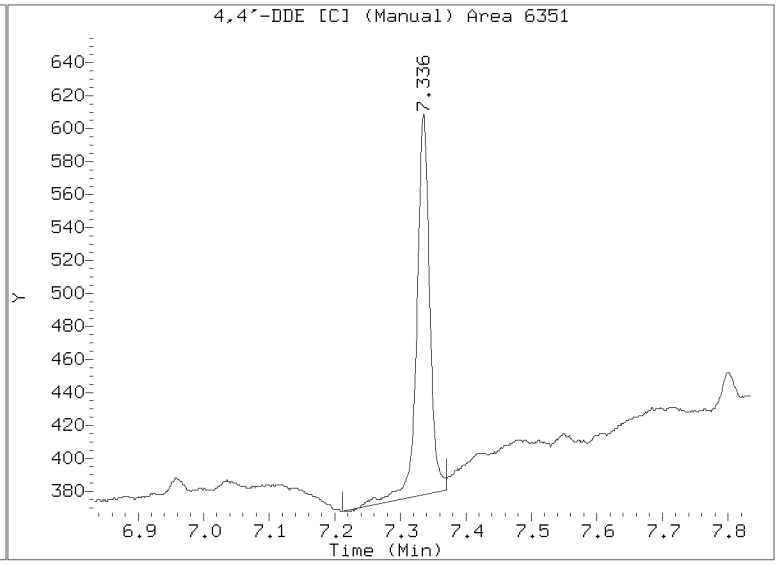
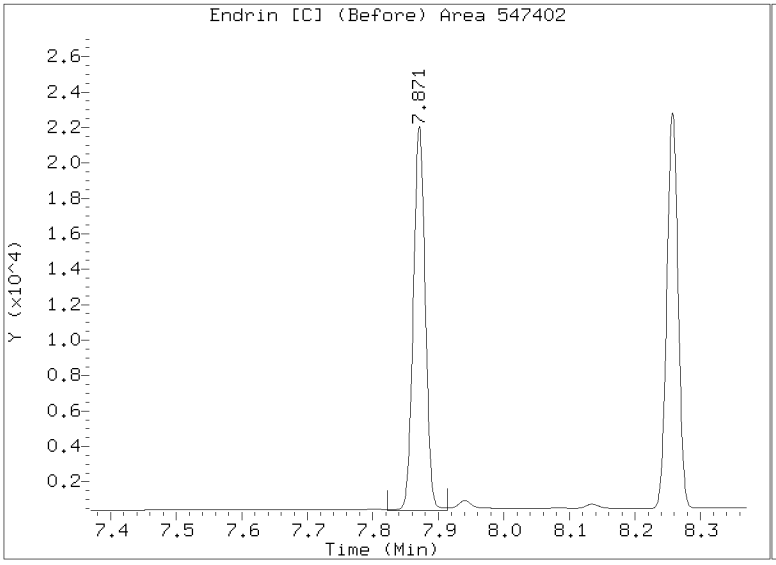


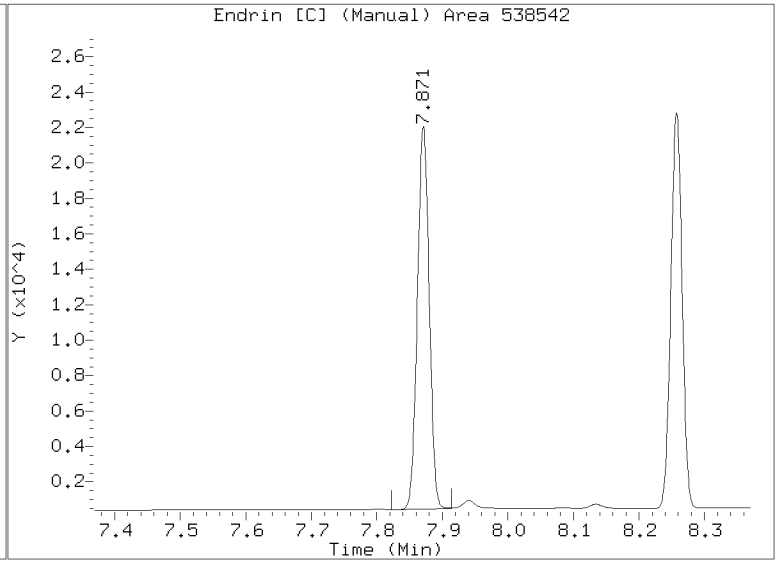
Manual Peak Adjustment Report, CLP-2

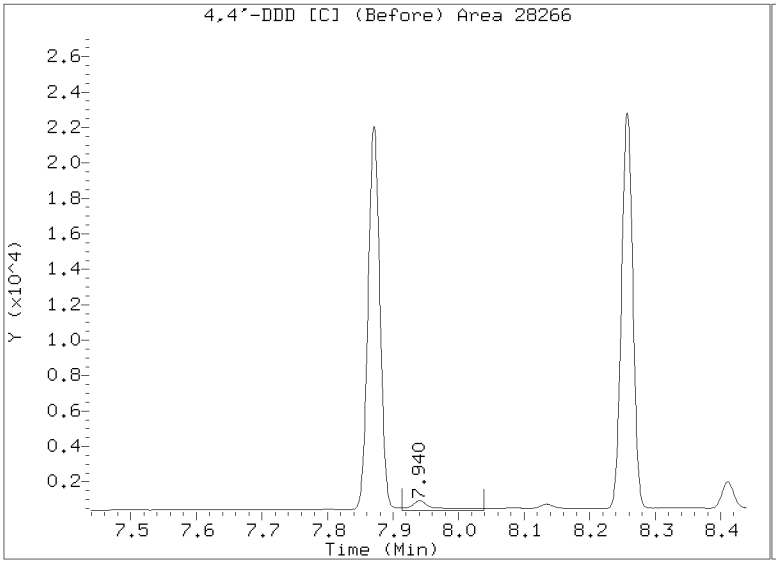
Datafile: /20230301.b/B20230301.b/23030108.D
Injection Date: 01-MAR-2023 14:47
Lab ID:PEM2 Client ID:

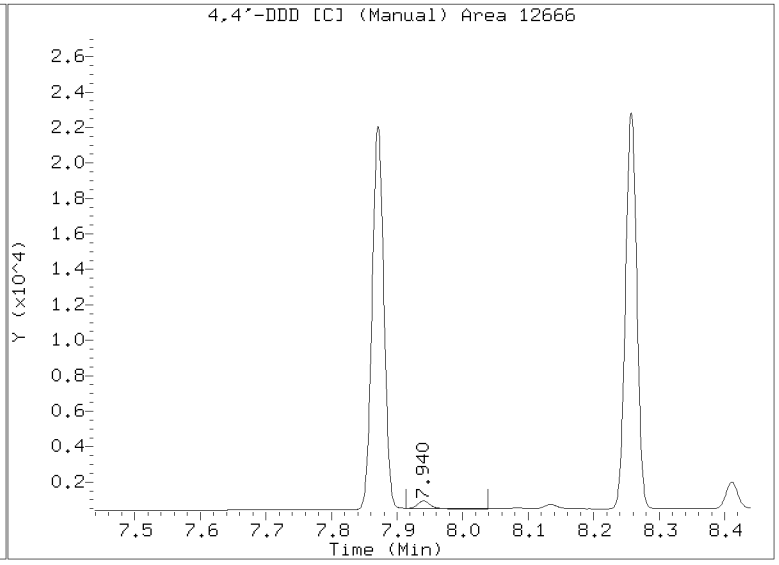












Manual Peak Adjustment Report, CLP-2

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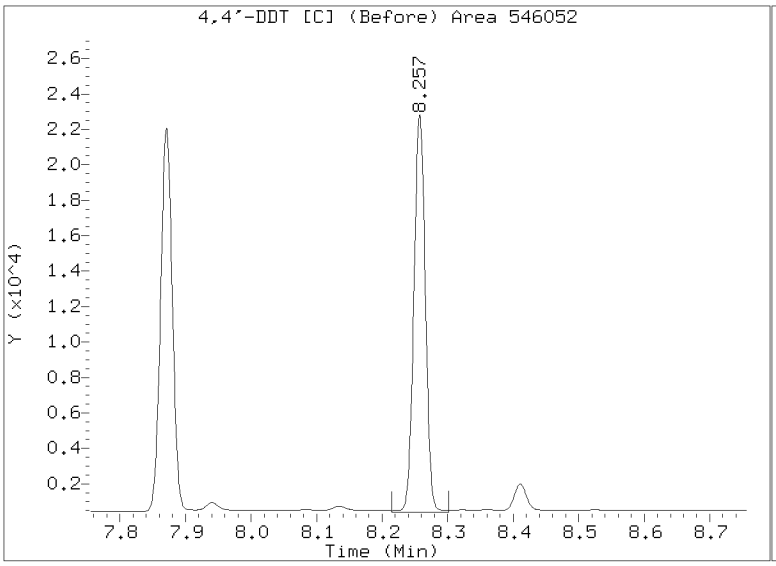
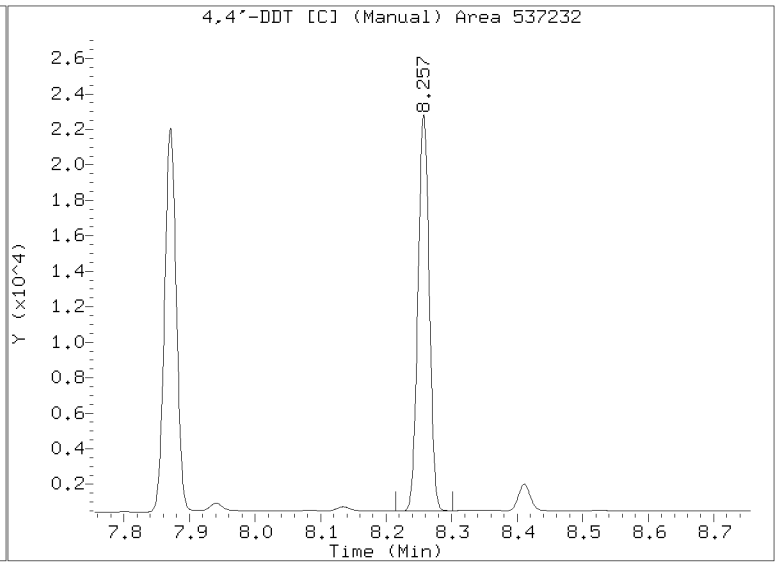
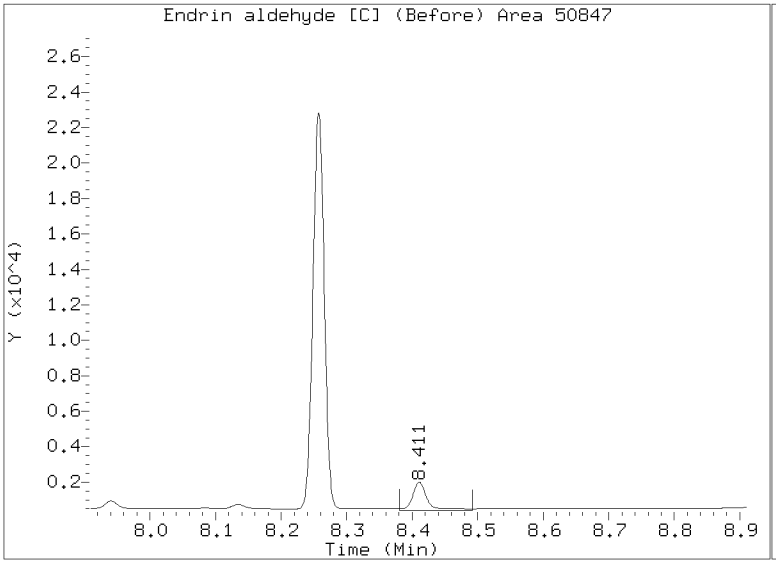
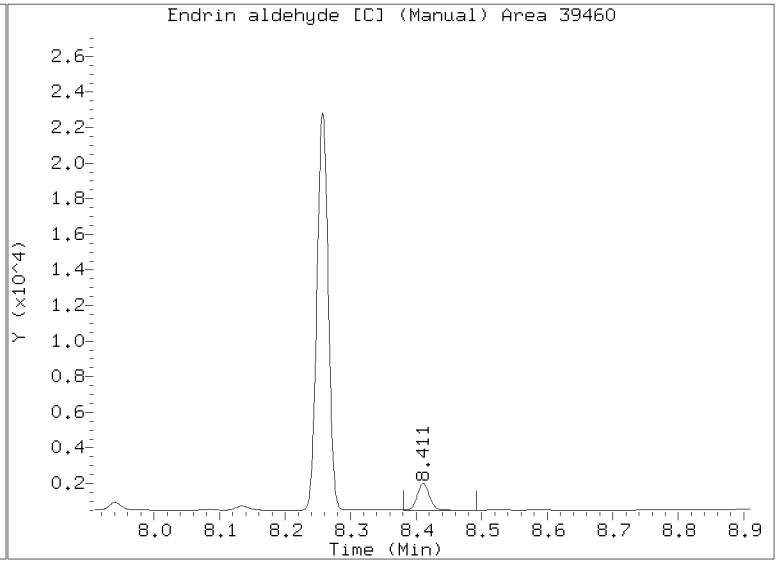
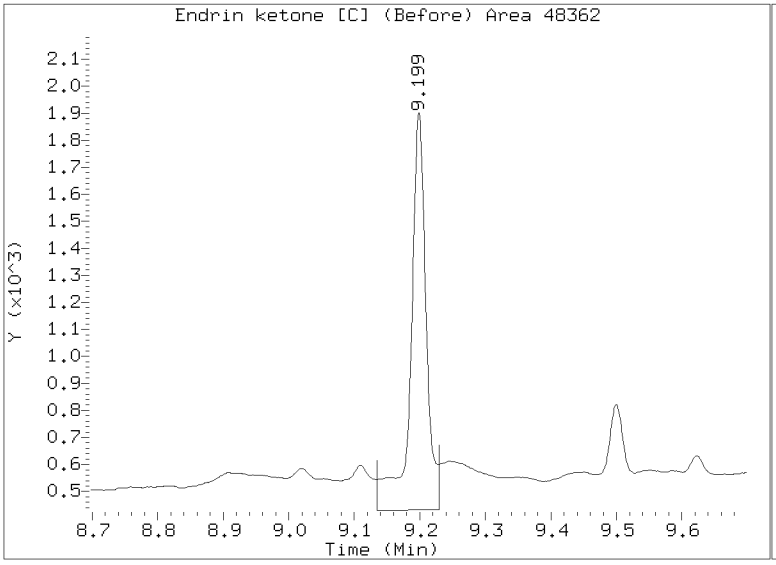
Injection Date: 01-MAR-2023 14:47
Lab ID:PEM2 Client ID:

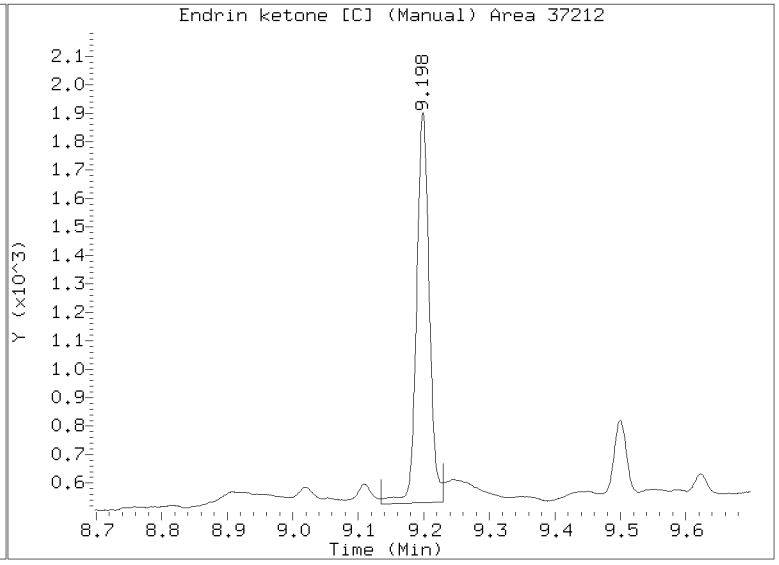






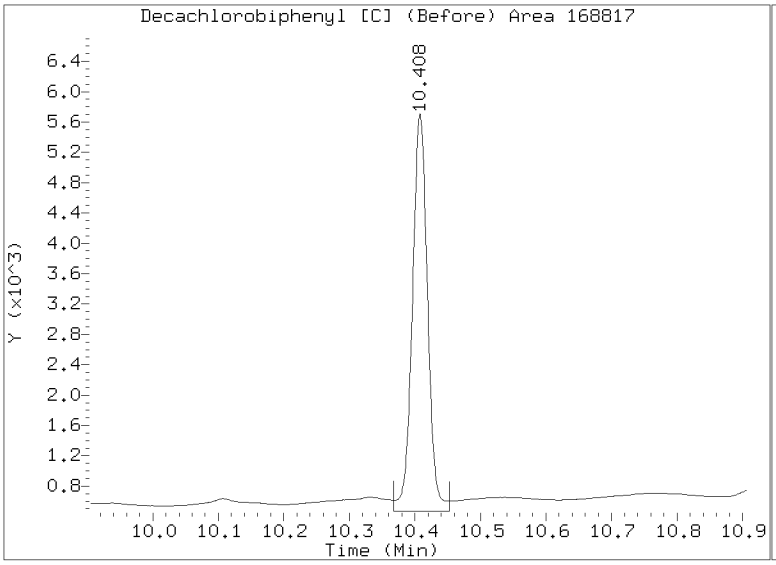


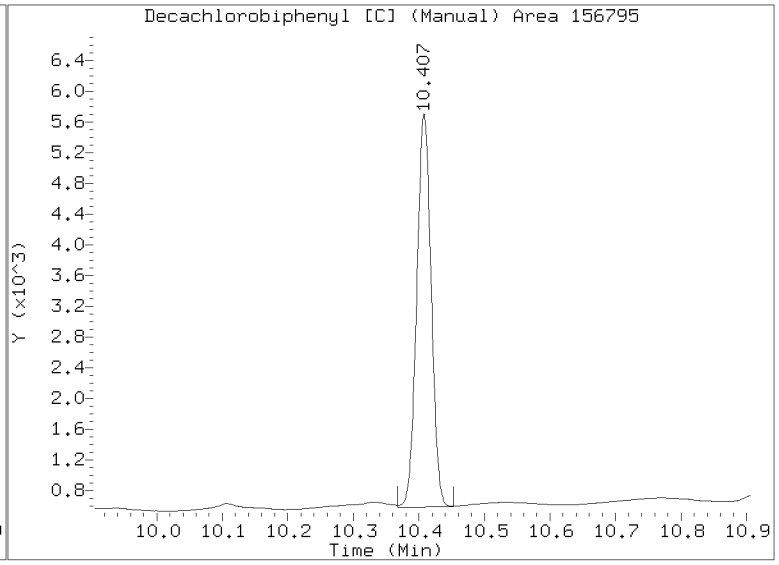


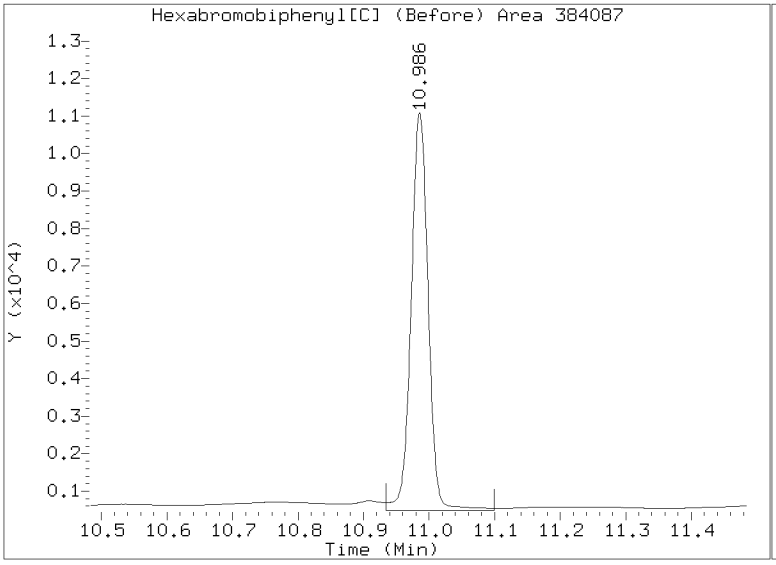


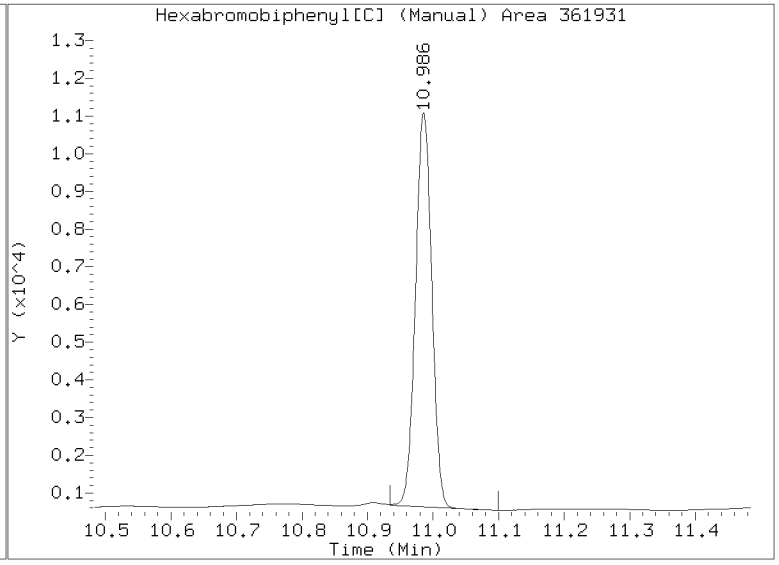
Manual Peak Adjustment Report, CLP-2

Datafile: /20230301.b/B20230301.b/23030108.D
Injection Date: 01-MAR-2023 14:47
Lab ID:PEM2 Client ID:









Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS3

EPA 8081B

Laboratory:	Analytical Resources, LLC	Laboratory ID:	SLC0031-PEM3	File ID:	23030126.D
Client:	Anchor QEA, LLC	Matrix:	Water	Instrument:	ECD6
Project:	AOC5 MR Phase 1	Analyzed:	03/01/2023	Sequence:	SLC0031
SDG:	23A0249	Calibration:	FL00041	Column:	1

PEM COMPOUND	RT	Response
4,4'-DDE	6.56	16303
Endrin	7.15	632432
4,4'-DDD	7.21	13107
Endrin Aldehyde	7.82	97613
4,4'-DDT	7.50	717185
Endrin Ketone	8.53	88770

4,4'-DDT %Breakdown (1): 3.9

Endrin %Breakdown (1): 22.8

Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS3

EPA 8081B

Laboratory: Analytical Resources, LLC
Laboratory ID: SLC0031-PEM3
File ID: 23030126.D
Client: Anchor QEA, LLC
Matrix: Water
Instrument: ECD6
Project: AOC5 MR Phase 1
Analyzed: 03/01/2023
Sequence: SLC0031
SDG: 23A0249
Calibration: FL00041
Column: 2

PEM COMPOUND	RT	Response
4,4'-DDE	7.33	25240
Endrin	7.87	745544
4,4'-DDD	7.94	16499
Endrin Aldehyde	8.41	146331
4,4'-DDT	8.26	975851
Endrin Ketone	9.20	112313

4,4'-DDT %Breakdown (1): 4.1

Endrin %Breakdown (1): 25.8

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: PEM3 InstID,Data File: ecd6.i, 23030126.D

Analysis Date: 01-MAR-2023 21:31 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.184	770372
4,4'-DDE	6.562	16303
Endrin	7.153	632432
4,4'-DDD	7.209	13107
4,4'-DDT	7.501	717185
Endrin ketone	8.525	88770
Endrin aldehyde	7.817	97613
Hexabromobiphenyl	9.592	609235
Tetrachloro-m-xylene	3.873	392630
Decachlorobiphenyl	9.439	226663

DDT Percent Breakdown = 3.9 %
((16303+13107) * 100)/(16303+13107+717185)

Endrin Percent Breakdown = 22.8 %
((97613+88770) * 100)/(97613+88770+632432)

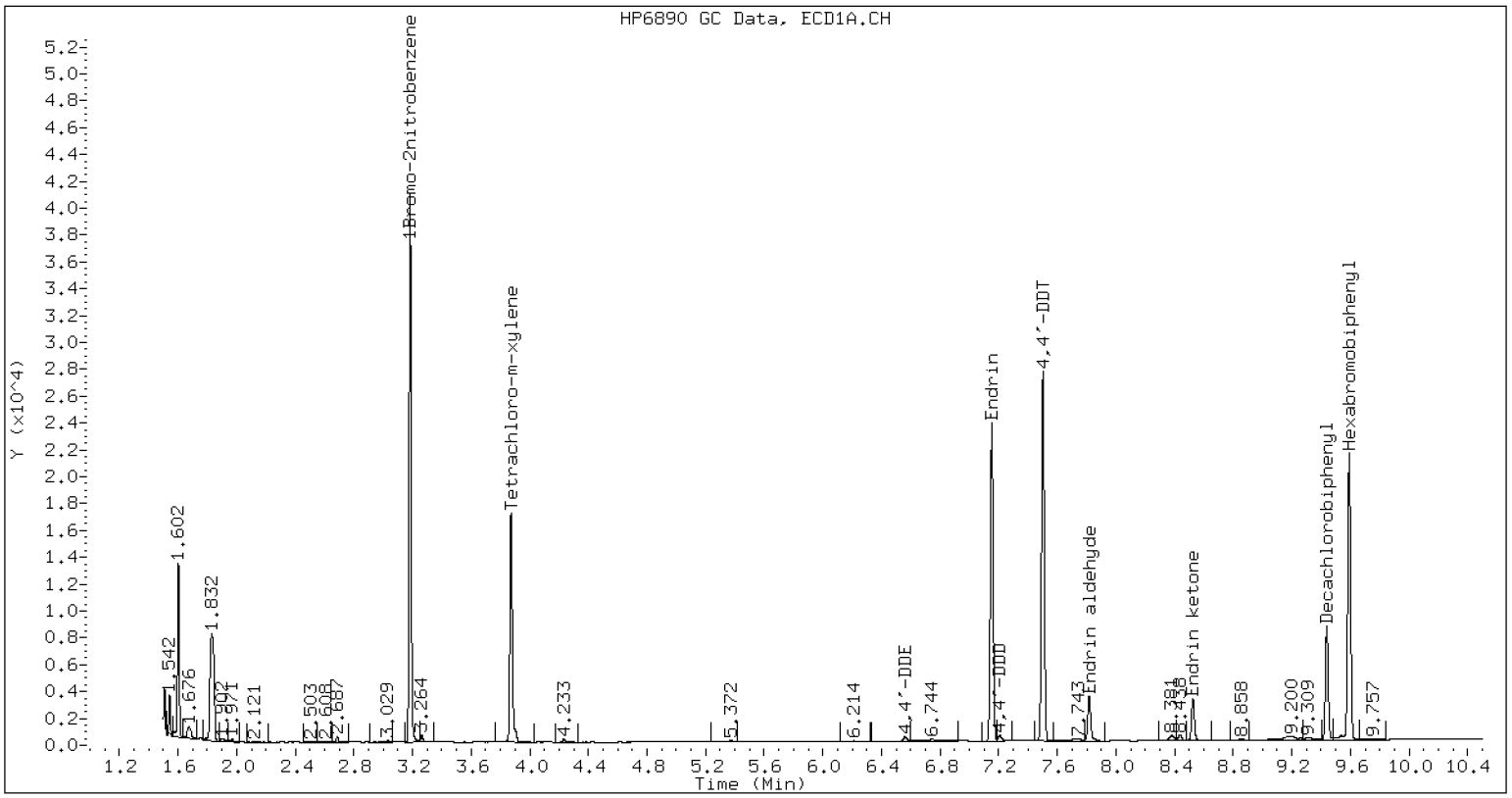
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene [C]	3.336	1195193
4,4'-DDE [C]	7.334	25240
Endrin [C]	7.869	745544
4,4'-DDD [C]	7.939	16499
4,4'-DDT [C]	8.257	975851
Endrin ketone [C]	9.199	112313
Endrin aldehyde [C]	8.410	146331
Hexabromobiphenyl[C]	10.984	644745
Tetrachloro-m-xylene [C]	4.197	633999
Decachlorobiphenyl [C]	10.406	313095

DDT Percent Breakdown = 4.1 %
((25240+16499) * 100)/(25240+16499+975851)

Endrin Percent Breakdown = 25.8 %
((146331+112313) * 100)/(146331+112313+745544)

/20230301.b/23030126.D PEM3 STX-CLP 01-MAR-2023 21:31 1ul



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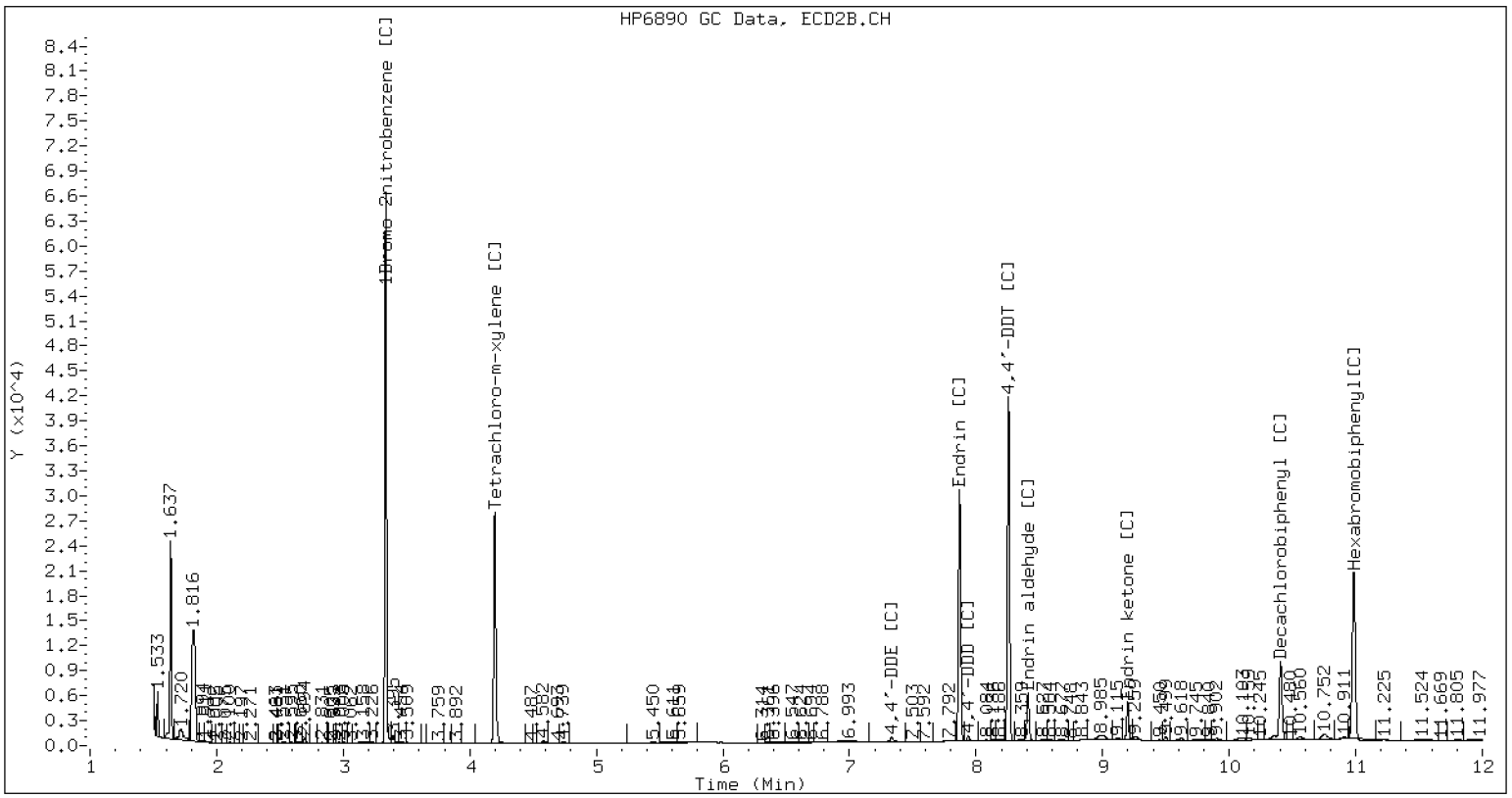

Manual Peak Adjustment Report, CLP-2

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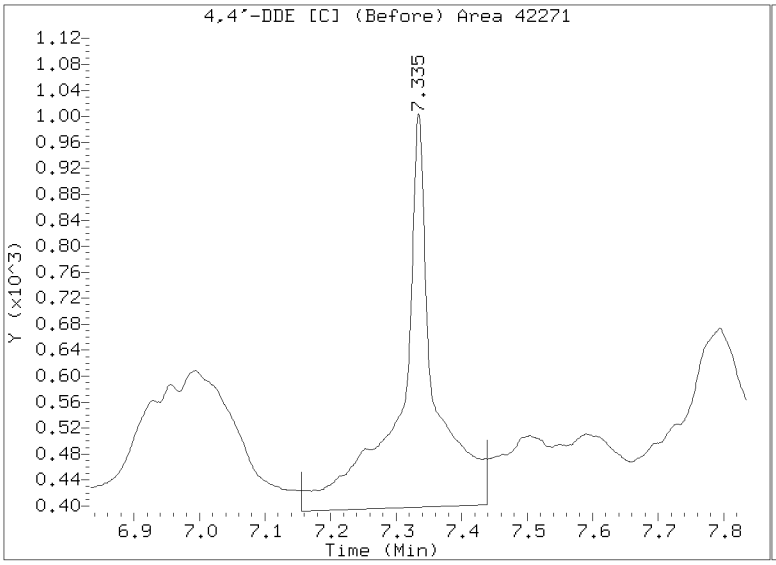
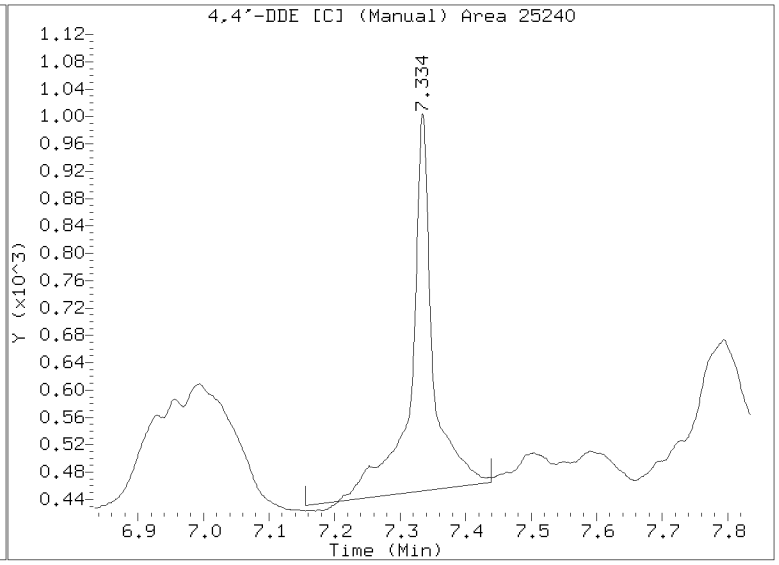
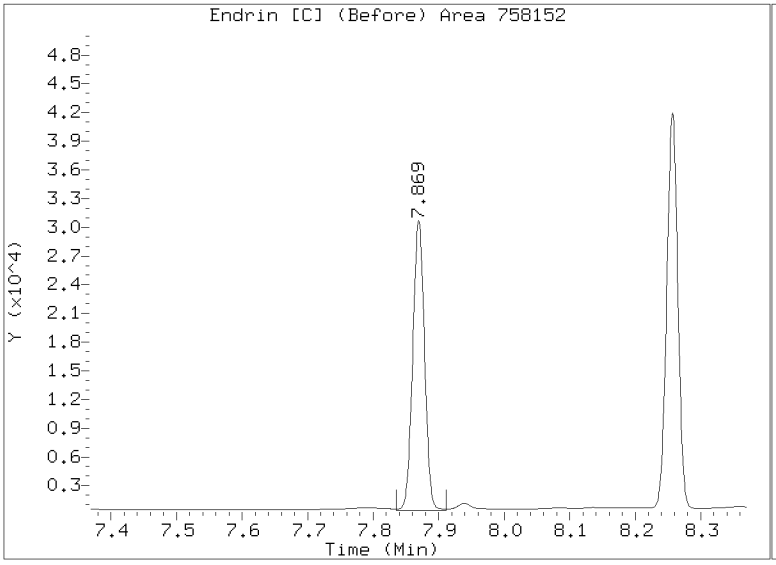
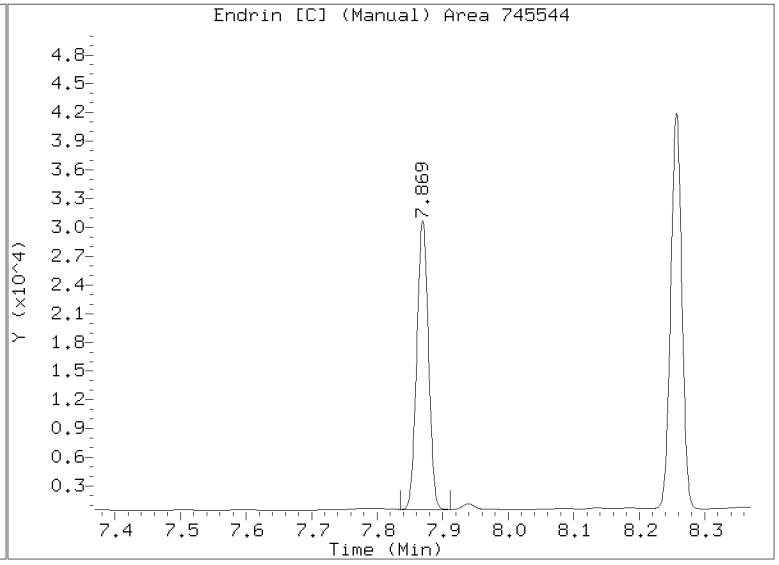
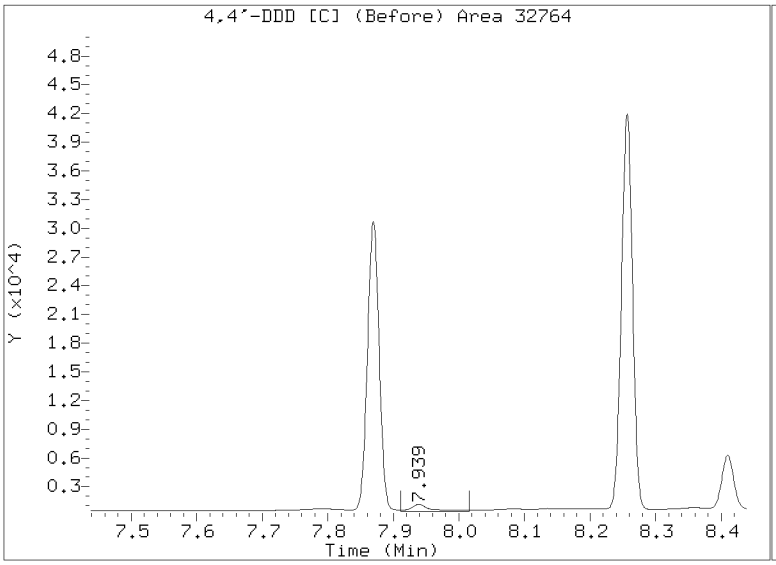
Injection Date: 01-MAR-2023 21:31
Lab ID:PEM3 Client ID:

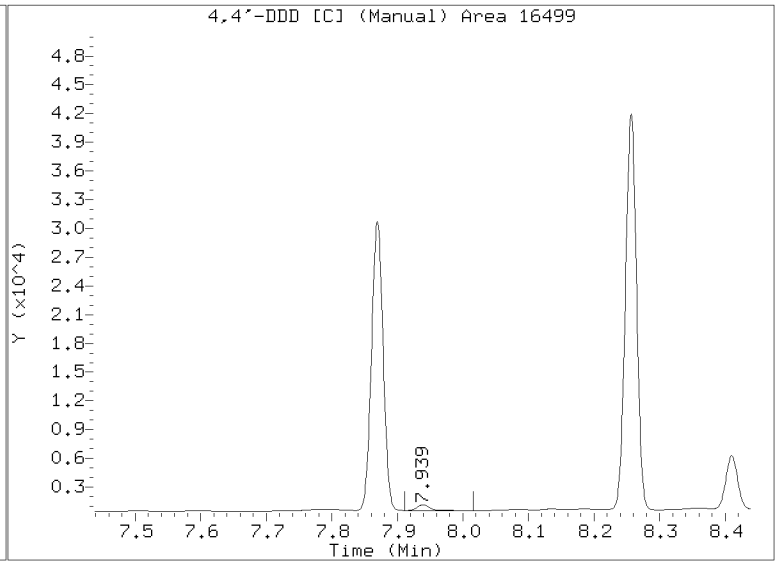






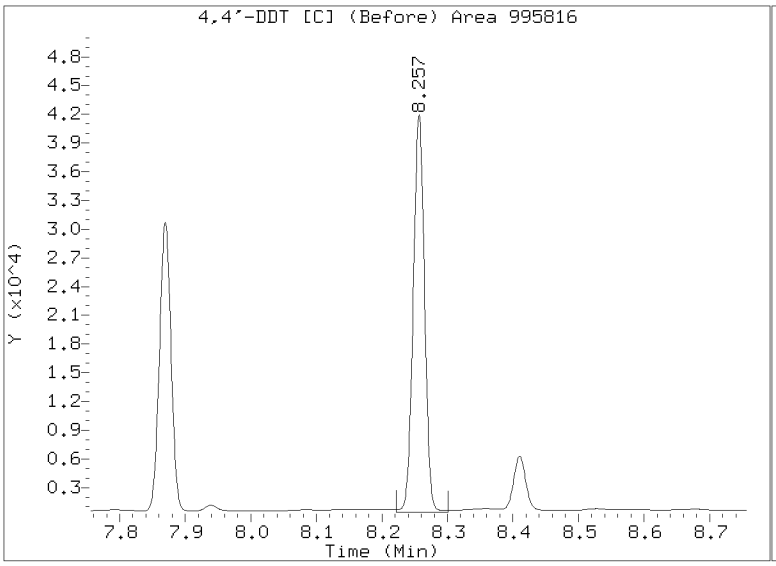


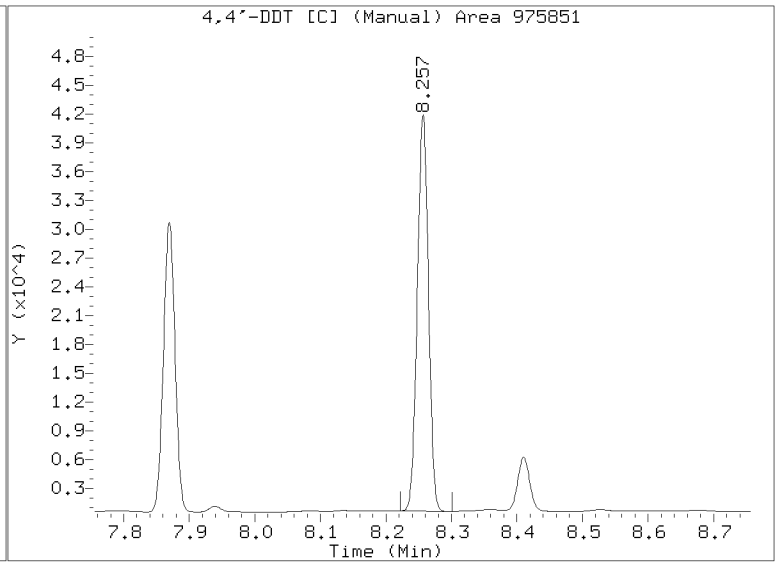


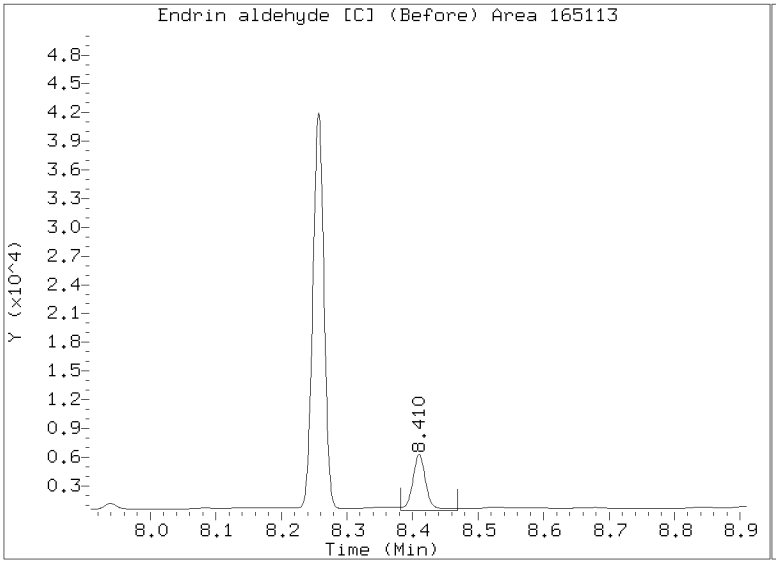


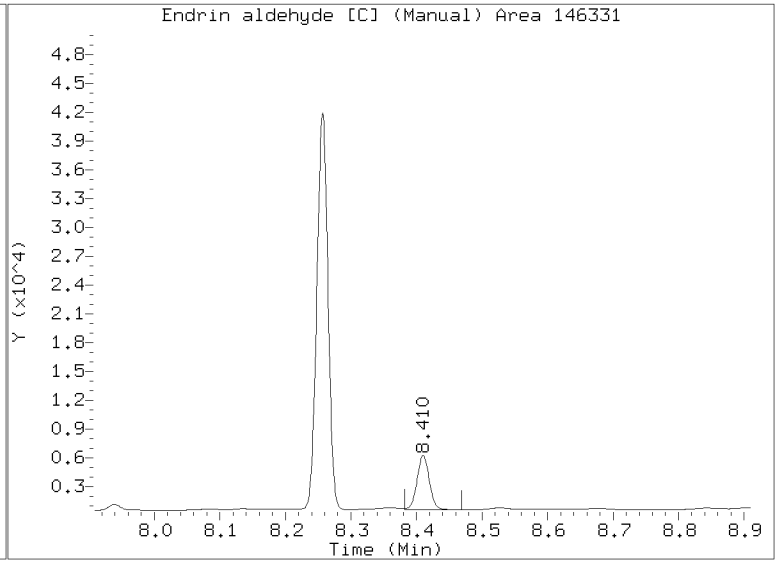
Manual Peak Adjustment Report, CLP-2

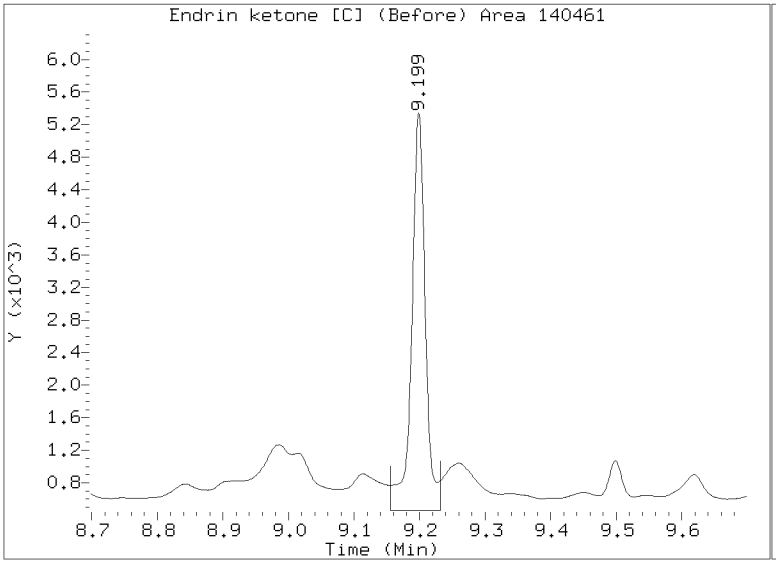
Datafile: /20230301.b/B20230301.b/23030126.D
Injection Date: 01-MAR-2023 21:31
Lab ID:PEM3 Client ID:

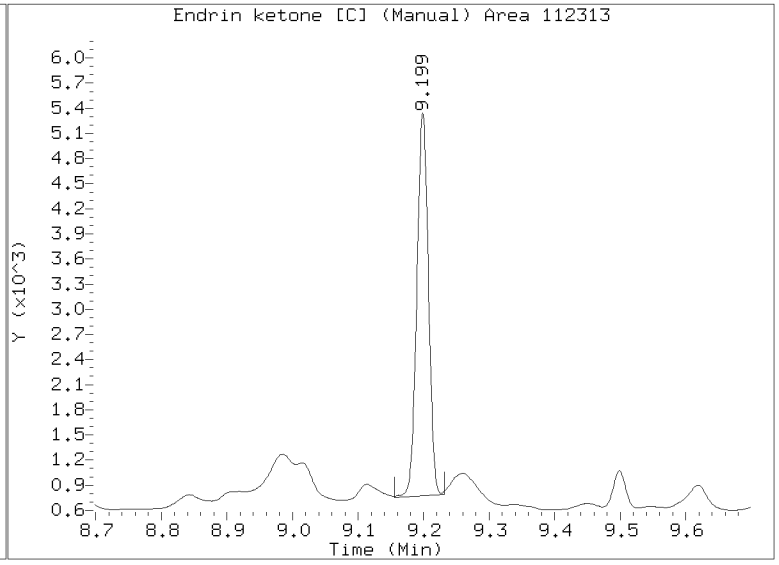






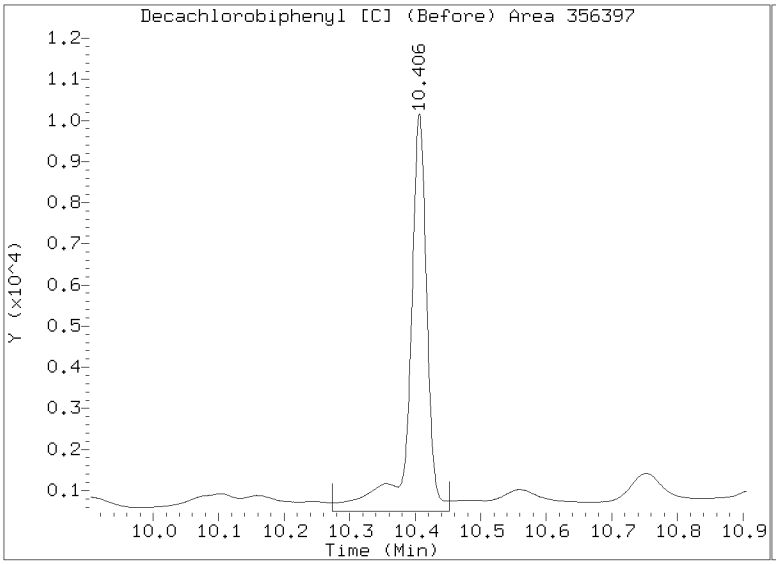


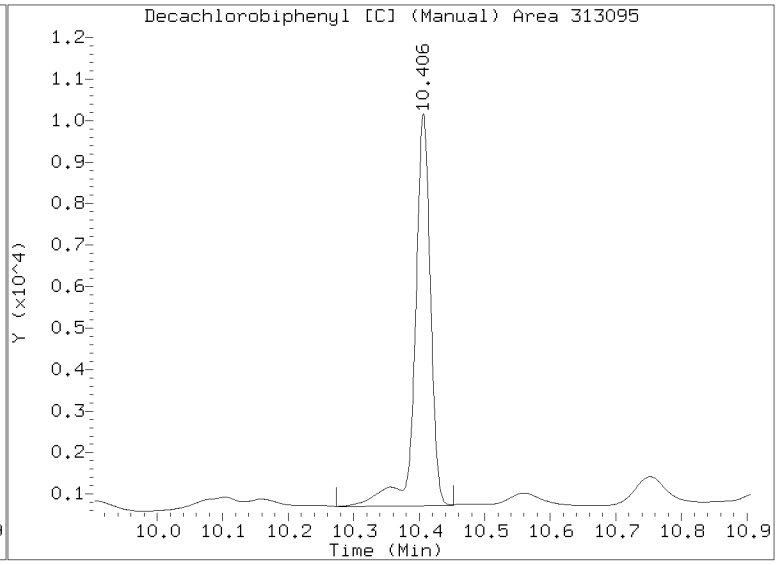


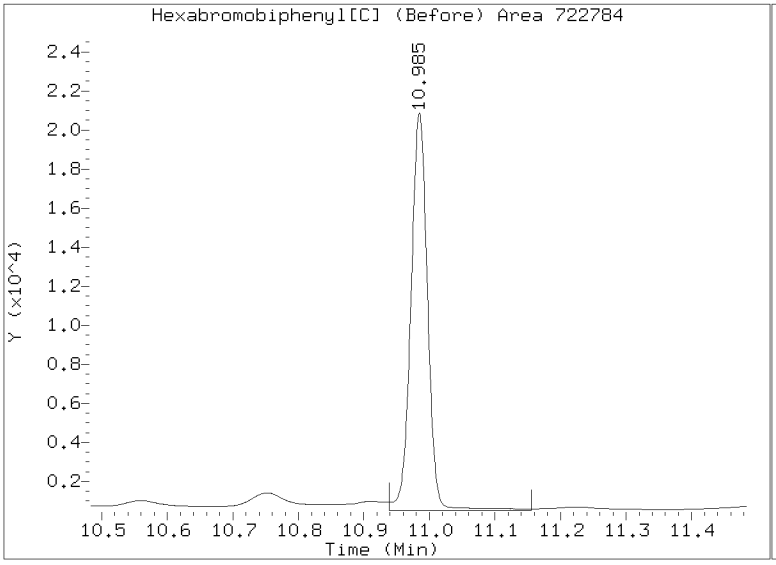


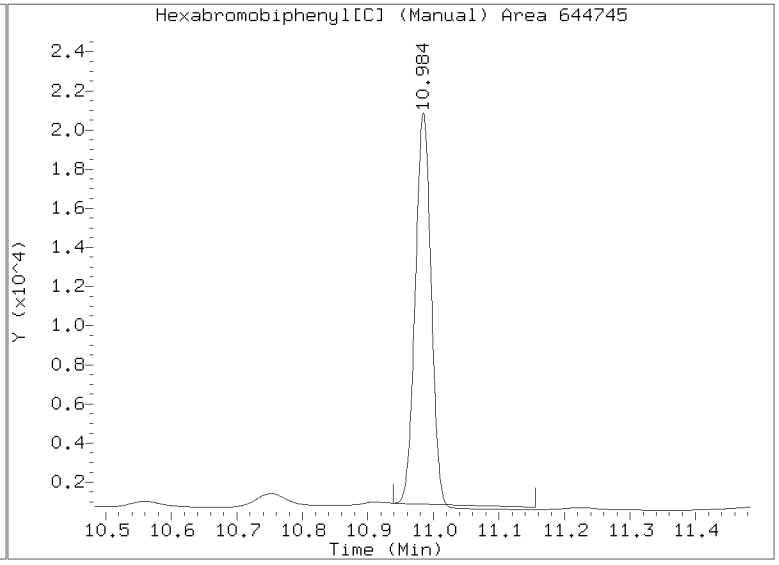
Manual Peak Adjustment Report, CLP-2

Datafile: /20230301.b/B20230301.b/23030126.D
Injection Date: 01-MAR-2023 21:31
Lab ID:PEM3 Client ID:









Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS4

EPA 8081B

Laboratory: Analytical Resources, LLC | Laboratory ID: SLC0031-PEM4 | File ID: 23030137.D

Client: Anchor QEA, LLC | Matrix: Water | Instrument: ECD6

Project: AOC5 MR Phase 1 | Analyzed: 03/02/2023 | Sequence: SLC0031

SDG: 23A0249 | Calibration: FL00041 | Column: 1

PEM COMPOUND	RT	Response
4,4'-DDE	6.56	6430
Endrin	7.15	323493
4,4'-DDD	7.21	11249
Endrin Aldehyde	7.82	100671
4,4'-DDT	7.50	460332
Endrin Ketone	8.53	84341

4,4'-DDT %Breakdown (1): 3.7

Endrin %Breakdown (1): 36.4

Analytical Resources, LLC
Analytical Chemists and Consultants

PERFORMANCE EVAUATION DATA SHEET

DS4

EPA 8081B

Laboratory: Analytical Resources, LLC | Laboratory ID: SLC0031-PEM4 | File ID: 23030137.D

Client: Anchor QEA, LLC | Matrix: Water | Instrument: ECD6

Project: AOC5 MR Phase 1 | Analyzed: 03/02/2023 | Sequence: SLC0031

SDG: 23A0249 | Calibration: FL00041 | Column: 2

PEM COMPOUND	RT	Response
4,4'-DDE	7.34	9354
Endrin	7.87	386331
4,4'-DDD	7.94	21072
Endrin Aldehyde	8.41	132549
4,4'-DDT	8.26	596167
Endrin Ketone	9.20	104455

4,4'-DDT %Breakdown (1): 4.9

Endrin %Breakdown (1): 38.0

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: PEM4 InstID,Data File: ecd6.i, 23030137.D

Analysis Date: 02-MAR-2023 00:48 Init. Calib. Date: 14-DEC-2022

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.186	455502
4,4'-DDE	6.563	6430
Endrin	7.153	323493
4,4'-DDD	7.211	11249
4,4'-DDT	7.502	460332
Endrin ketone	8.526	84341
Endrin aldehyde	7.819	100671
Hexabromobiphenyl	9.591	381463
Tetrachloro-m-xylene	3.875	237563
Decachlorobiphenyl	9.439	146290

DDT Percent Breakdown = 3.7 %
((6430+11249) * 100)/(6430+11249+460332)

Endrin Percent Breakdown = 36.4 %
((100671+84341) * 100)/(100671+84341+323493)

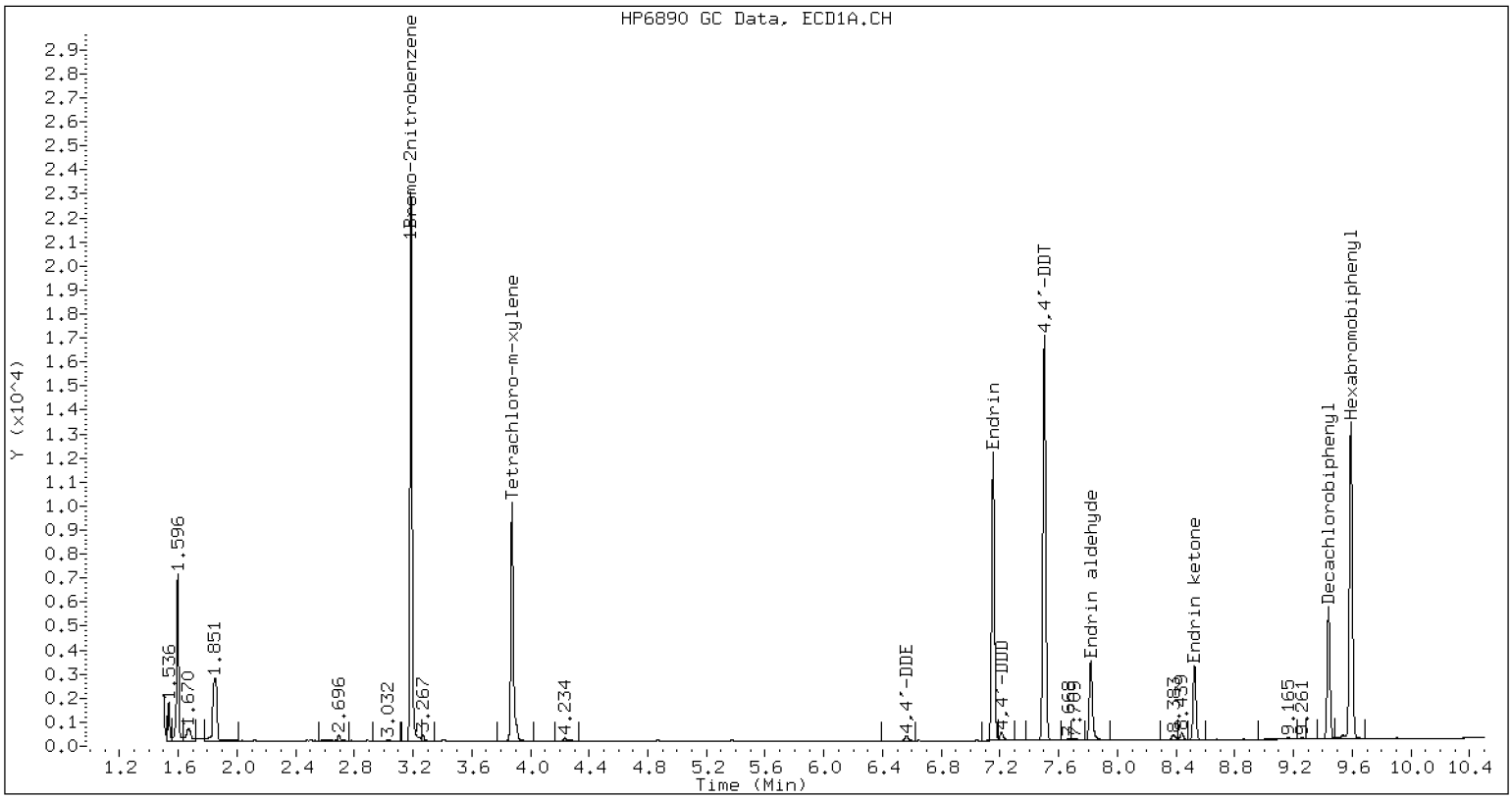
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene [C]	3.338	713644
4,4'-DDE [C]	7.335	9354
Endrin [C]	7.869	386331
4,4'-DDD [C]	7.939	21072
4,4'-DDT [C]	8.256	596167
Endrin ketone [C]	9.199	104455
Endrin aldehyde [C]	8.410	132549
Hexabromobiphenyl[C]	10.985	402780
Tetrachloro-m-xylene [C]	4.198	380097
Decachlorobiphenyl [C]	10.407	177449

DDT Percent Breakdown = 4.9 %
((9354+21072) * 100)/(9354+21072+596167)

Endrin Percent Breakdown = 38.0 %
((132549+104455) * 100)/(132549+104455+386331)

/20230301.b/23030137.D PEM4 STX-CLP 02-MAR-2023 00:48 1ul



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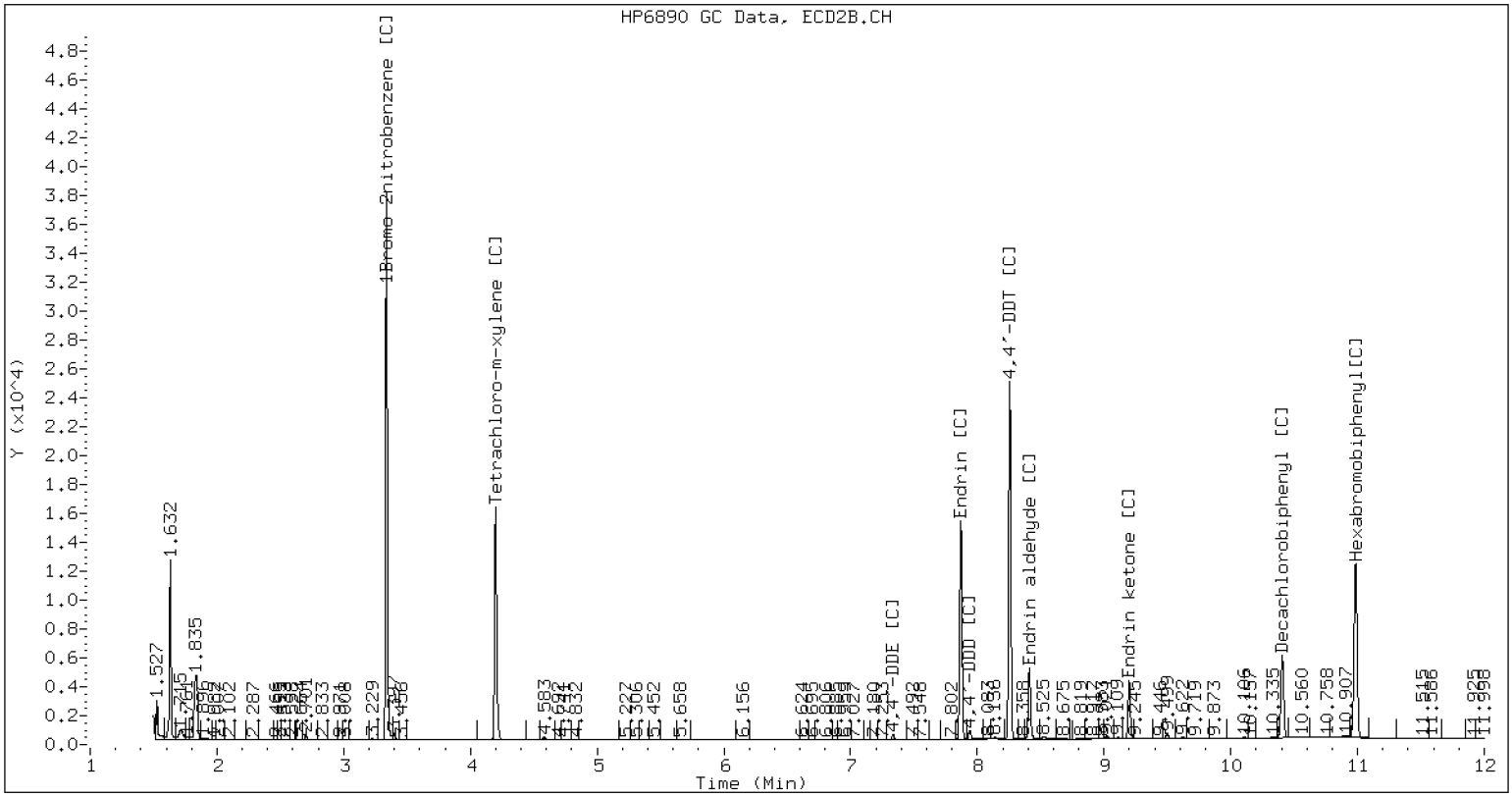
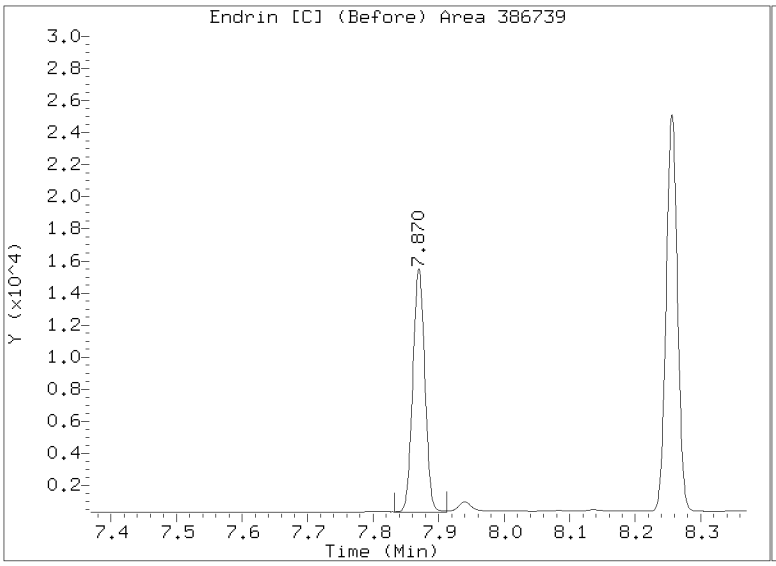
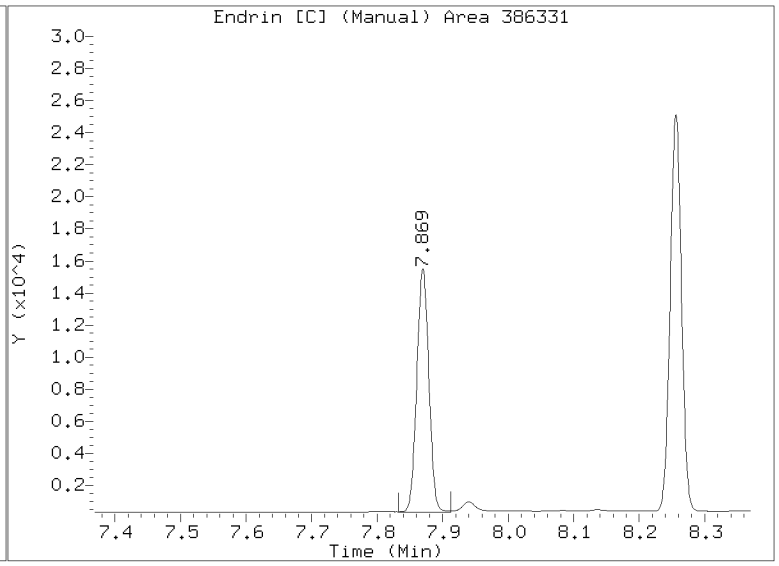
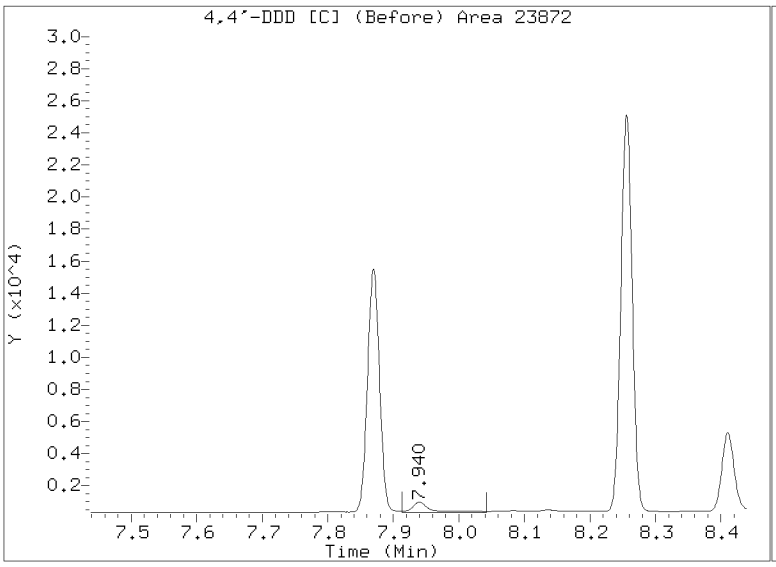


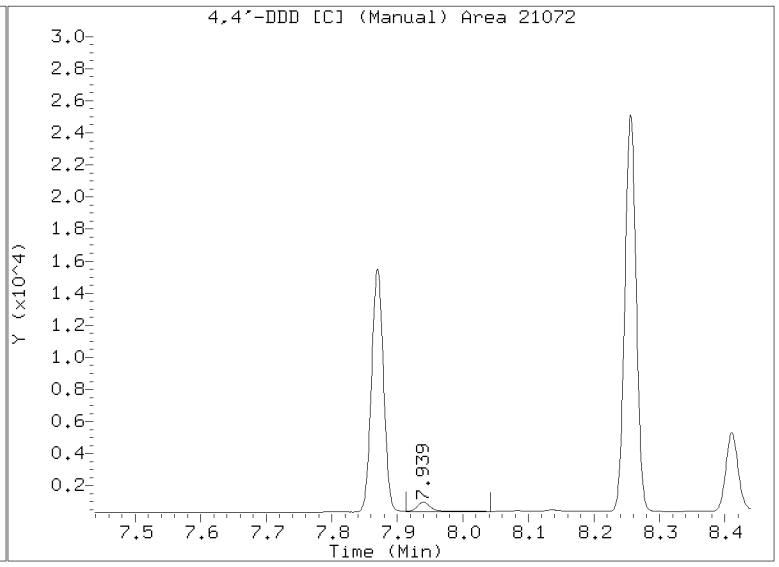
Manual Peak Adjustment Report, CLP-2

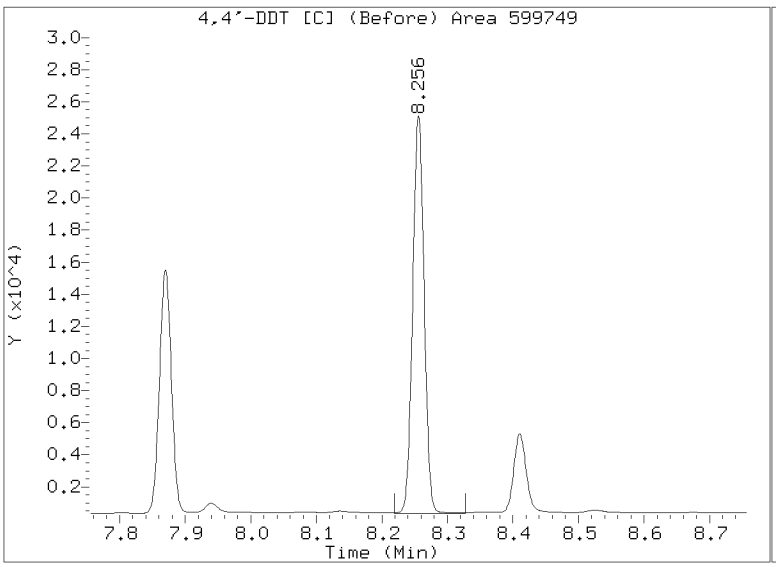
Datafile: /20230301.b/B20230301.b/23030137.D
Injection Date: 02-MAR-2023 00:48
Lab ID:PEM4 Client ID:

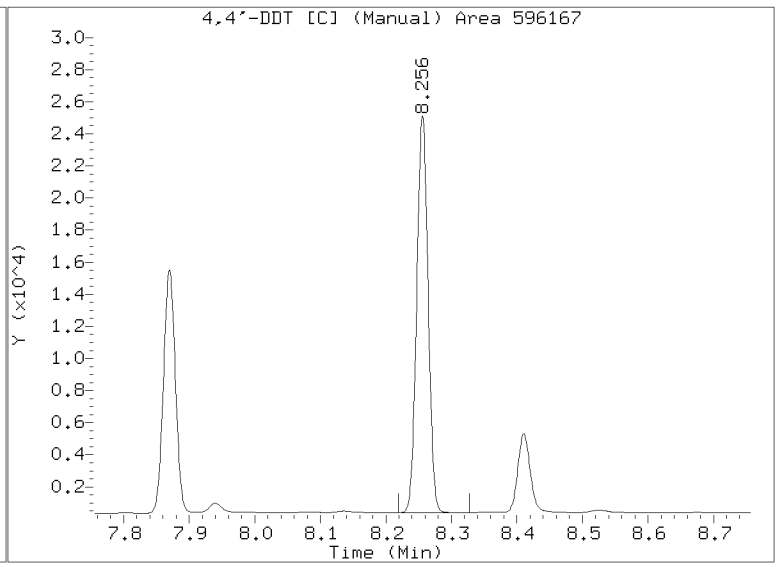












Manual Peak Adjustment Report, CLP-2

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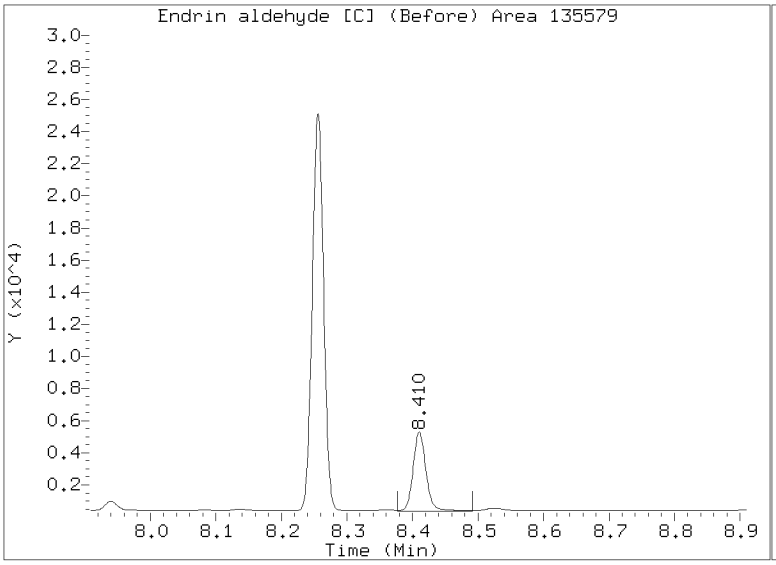
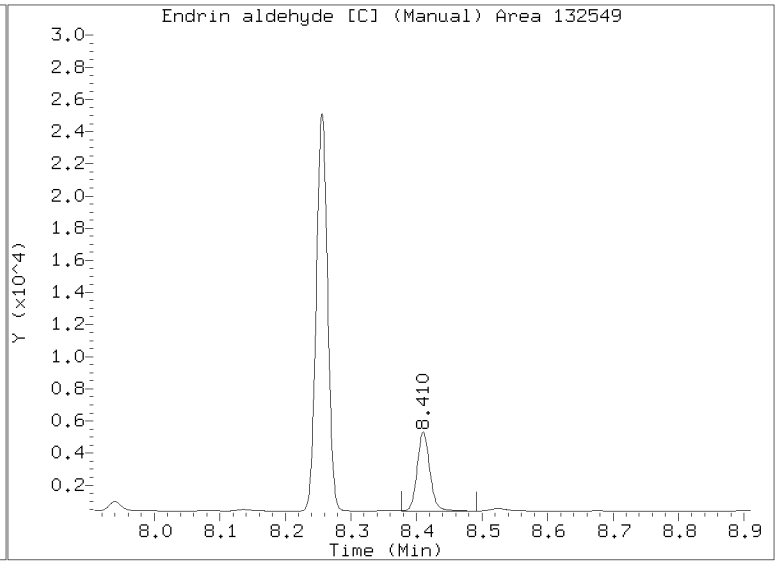
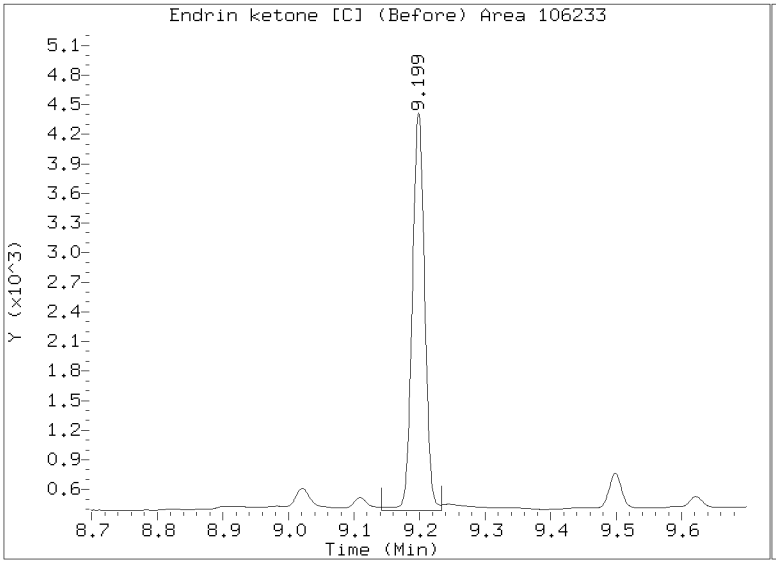
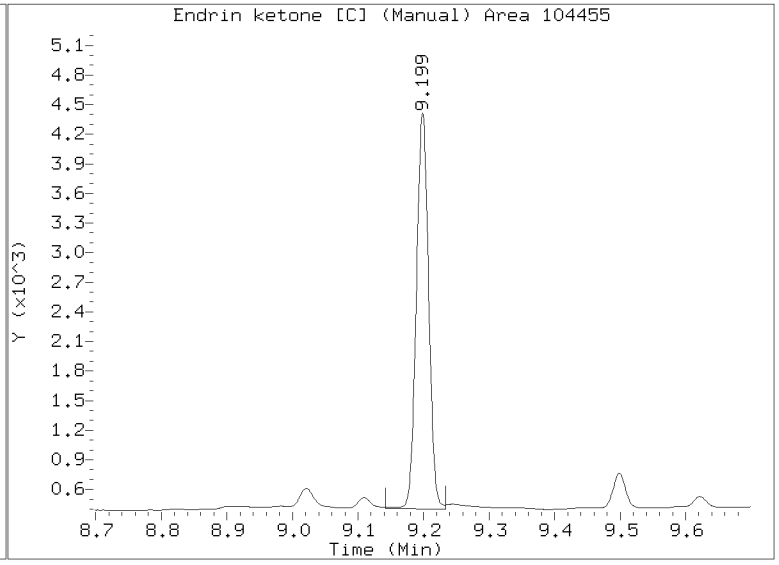
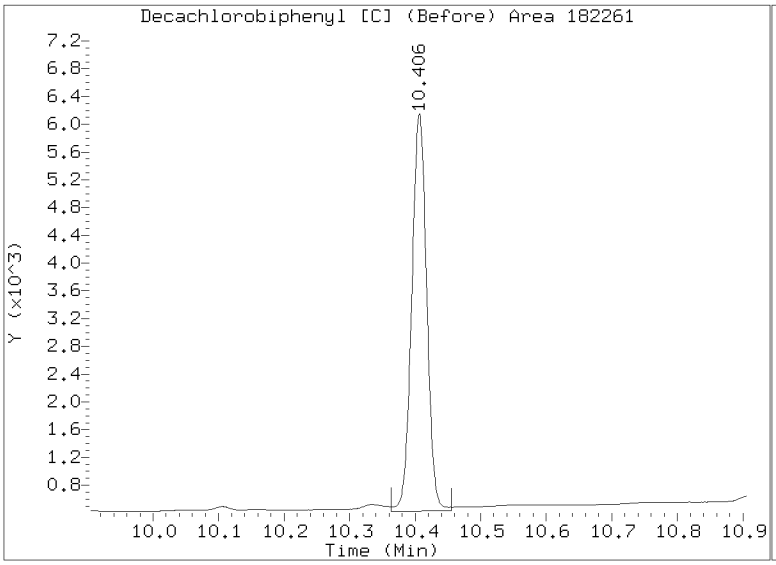
Injection Date: 02-MAR-2023 00:48
Lab ID:PEM4 Client ID:

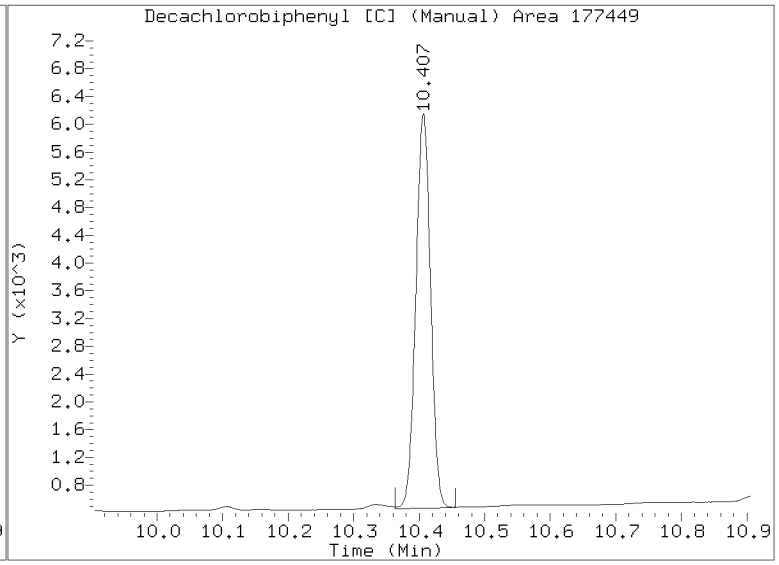












Manual Peak Adjustment Report, CLP-2

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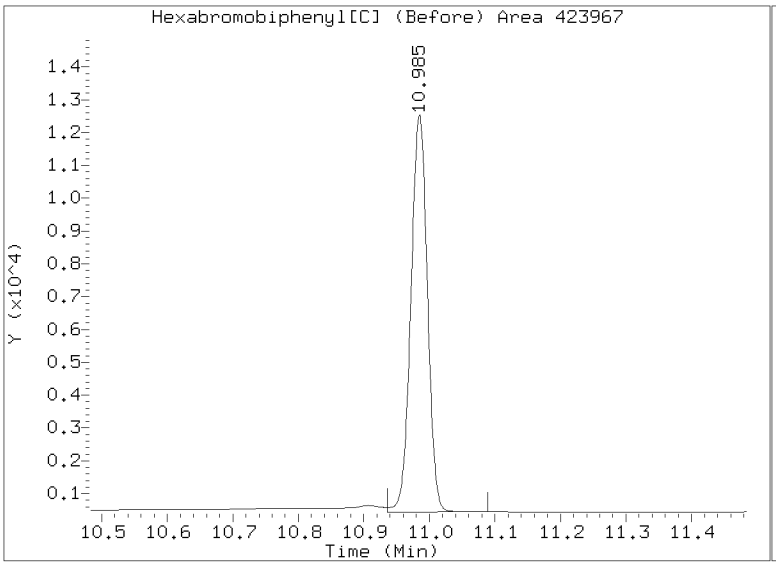
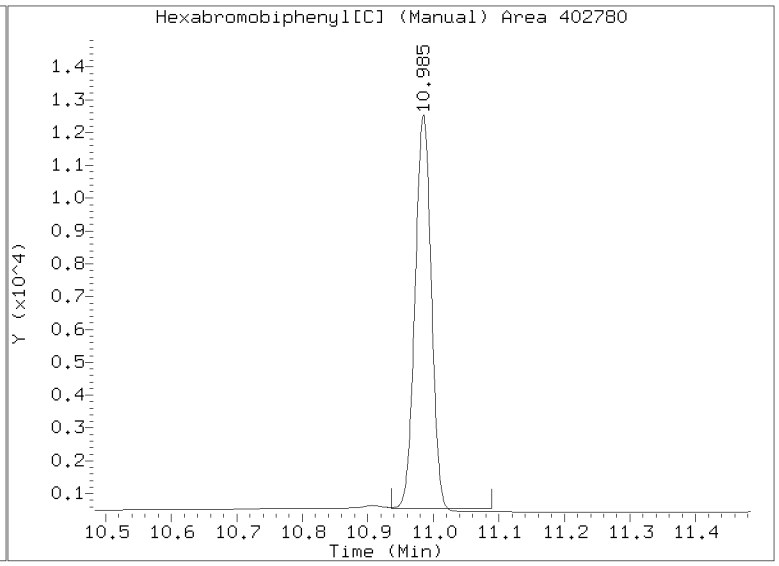
Injection Date: 02-MAR-2023 00:48
Lab ID:PEM4 Client ID:





Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SKL0233
Instrument: ECD6
Calibration: FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Performance Mix	SKL0233-PEM1	22121404.D	22121404.D	NA	12/14/22 20:20
Cal Standard	SKL0233-CAL1	22121405.D	22121405.D	NA	12/14/22 20:38
Cal Standard	SKL0233-CAL2	22121406.D	22121406.D	NA	12/14/22 20:56
Cal Standard	SKL0233-CAL3	22121407.D	22121407.D	NA	12/14/22 21:14
Cal Standard	SKL0233-CAL4	22121408.D	22121408.D	NA	12/14/22 21:31
Cal Standard	SKL0233-CAL5	22121409.D	22121409.D	NA	12/14/22 21:49
Cal Standard	SKL0233-CAL6	22121410.D	22121410.D	NA	12/14/22 22:07
Cal Standard	SKL0233-CAL7	22121411.D	22121411.D	NA	12/14/22 22:25
Cal Standard	SKL0233-CAL8	22121412.D	22121412.D	NA	12/14/22 22:43
Cal Standard	SKL0233-CAL9	22121413.D	22121413.D	NA	12/14/22 23:01
Cal Standard	SKL0233-CALA	22121414.D	22121414.D	NA	12/14/22 23:19
Cal Standard	SKL0233-CALB	22121415.D	22121415.D	NA	12/14/22 23:36
Cal Standard	SKL0233-CALC	22121416.D	22121416.D	NA	12/14/22 23:54
Cal Standard	SKL0233-CALD	22121417.D	22121417.D	NA	12/15/22 00:12
Cal Standard	SKL0233-CALE	22121418.D	22121418.D	NA	12/15/22 00:30

Printed: 12/17/2022 10:57:45AM

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-PEM1	DS1	QC		1	K007286	K006953		
SKL0233-CAL1	INDAA	QC		2	K011594	K006953		
SKL0233-CAL2	INDAB	QC		3	K011593	K006953		
SKL0233-CAL3	INDAC	QC		4	K011592	K006953		
SKL0233-CAL4	INDAD	QC		5	K011591	K006953		
SKL0233-CAL5	INDAE	QC		6	K011590	K006953		
SKL0233-CAL6	INDAF	QC		7	K011589	K006953		
SKL0233-CAL7	INDAG	QC		8	K011463	K006953		
SKL0233-CAL8	WNDA	QC		9	K011595	K006953		
SKL0233-CAL9	WNDB	QC		10	K007148	K006953		
SKL0233-CALA	WNDC	QC		11	K007147	K006953		
SKL0233-CALB	WNDD	QC		12	K007146	K006953		
SKL0233-CALC	WNDE	QC		13	K007145	K006953		
SKL0233-CALD	WNDF	QC		14	K007144	K006953		
SKL0233-CALE	WNDG	QC		15	K007093	K006953		
SKL0233-CALM	NOS1	QC		16	K007375	K006953		
SKL0233-CALN	NOS2	QC		17	K007374	K006953		
SKL0233-CALO	NOS3	QC		18	K007373	K006953		
SKL0233-CALP	NOS4	QC		19	K007372	K006953		
SKL0233-CALQ	NOS5	QC		20	K007371	K006953		
SKL0233-CALR	NOS6	QC		21	K007370	K006953		
SKL0233-CALS	NOS7	QC		22	K007287	K006953		

ANALYSIS SEQUENCE

SKL0233

Instrument: ECD6 Element Column ID:
Calibration ID: FL00041

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	Comments
SKL0233-CALF	TOXAPH1	QC		23	K011601	K006953		
SKL0233-CALG	TOXAPH2	QC		24	K011600	K006953		
SKL0233-CALH	TOXAPH3	QC		25	K011599	K006953		
SKL0233-CALI	TOXAPH4	QC		26	K011598	K006953		
SKL0233-CALJ	TOXAPH5	QC		27	K011597	K006953		
SKL0233-CALK	TOXAPH6	QC		28	K011596	K006953		
SKL0233-CALL	TOXAPH7	QC		29	K008546	K006953		

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	14-DEC-2022 19:27	22121401.D	1	RINSE	
2	14-DEC-2022 19:44	22121402.D	1	RINSE	
3	14-DEC-2022 20:02	22121403.D	1	SEQ-IBL1	
4	14-DEC-2022 20:20	22121404.D	1	SEQ-PEM1	
5	14-DEC-2022 20:38	22121405.D	1	SEQ-CAL1	
6	14-DEC-2022 20:56	22121406.D	1	SEQ-CAL2	
7	14-DEC-2022 21:14	22121407.D	1	SEQ-CAL3	
8	14-DEC-2022 21:31	22121408.D	1	SEQ-CAL4	
9	14-DEC-2022 21:49	22121409.D	1	SEQ-CAL5	
10	14-DEC-2022 22:07	22121410.D	1	SEQ-CAL6	
11	14-DEC-2022 22:25	22121411.D	1	SEQ-CAL7	
12	14-DEC-2022 22:43	22121412.D	1	SEQ-CAL8	
13	14-DEC-2022 23:01	22121413.D	1	SEQ-CAL9	
14	14-DEC-2022 23:19	22121414.D	1	SEQ-CALA	
15	14-DEC-2022 23:36	22121415.D	1	SEQ-CALB	
16	14-DEC-2022 23:54	22121416.D	1	SEQ-CALC	
17	15-DEC-2022 00:12	22121417.D	1	SEQ-CALD	
18	15-DEC-2022 00:30	22121418.D	1	SEQ-CALE	
19	15-DEC-2022 00:48	22121419.D	1	SEQ-SCV1	
20	15-DEC-2022 01:06	22121420.D	1	SEQ-SCV2	
21	15-DEC-2022 01:24	22121421.D	1	SEQ-CAL1A	
22	15-DEC-2022 01:42	22121422.D	1	SEQ-CAL2A	
23	15-DEC-2022 01:59	22121423.D	1	SEQ-CAL3A	
24	15-DEC-2022 02:17	22121424.D	1	SEQ-CAL4A	
25	15-DEC-2022 02:35	22121425.D	1	SEQ-CAL5A	
26	15-DEC-2022 02:53	22121426.D	1	SEQ-CAL6A	
27	15-DEC-2022 03:11	22121427.D	1	SEQ-CAL7A	
28	15-DEC-2022 03:29	22121428.D	1	SEQ-CAL8A	
29	15-DEC-2022 03:46	22121429.D	1	SEQ-CAL9A	
30	15-DEC-2022 04:04	22121430.D	1	SEQ-CALAA	
31	15-DEC-2022 04:22	22121431.D	1	SEQ-CALAB	
32	15-DEC-2022 04:40	22121432.D	1	SEQ-CALAC	
33	15-DEC-2022 04:58	22121433.D	1	SEQ-CALAD	
34	15-DEC-2022 05:16	22121434.D	1	SEQ-CALAE	
35	15-DEC-2022 05:33	22121435.D	1	SEQ-PEM2	
36	15-DEC-2022 05:51	22121436.D	1	SEQ-ICV1	
37	15-DEC-2022 06:09	22121437.D	1	SEQ-ICV2	
38	15-DEC-2022 06:27	22121438.D	1	SEQ-ICV3	
39	15-DEC-2022 06:45	22121439.D	1	SEQ-ICV4	
40	15-DEC-2022 07:03	22121440.D	1	BKK0688-BLK1	
41	15-DEC-2022 07:21	22121441.D	1	BKK0688-BS1	
42	15-DEC-2022 07:39	22121442.D	1	BKK0688-BS2	
43	15-DEC-2022 07:57	22121443.D	1	BKK0688-BS3	
44	15-DEC-2022 08:15	22121444.D	1	BKK0688-BSD1	
45	15-DEC-2022 08:32	22121445.D	1	BKK0142-BLK1	
46	15-DEC-2022 08:50	22121446.D	1	BKK0142-BS1	
47	15-DEC-2022 09:08	22121447.D	1	BKK0142-BS2	
48	15-DEC-2022 09:26	22121448.D	1	BKK0142-BSD1	
49	15-DEC-2022 09:44	22121449.D	1	BKK0142-MS1	
50	15-DEC-2022 10:02	22121450.D	1	BKK0142-MSD1	

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b p

	Inject Date/Time	Filename	DF	LabID	ClientID
51	15-DEC-2022 10:20	22121451.D	1	22J0513-01	
52	15-DEC-2022 10:38	22121452.D	1	22J0513-04	
53	15-DEC-2022 10:55	22121453.D	1	22J0535-01	
54	15-DEC-2022 11:13	22121454.D	1	22K0429-01	
55	15-DEC-2022 11:31	22121455.D	1	22K0429-02	
56	15-DEC-2022 11:49	22121456.D	1	22K0429-03	
57	15-DEC-2022 12:07	22121457.D	1	SEQ-PEM3	
58	15-DEC-2022 12:25	22121458.D	1	SEQ-CCV1	
59	15-DEC-2022 12:43	22121459.D	1	SEQ-CCV2	
60	15-DEC-2022 13:01	22121460.D	1	SEQ-CCV3	
61	15-DEC-2022 13:19	22121461.D	1	SEQ-CCV4	
62	15-DEC-2022 13:36	22121462.D	1	BKK0380-BLK1	
63	15-DEC-2022 13:54	22121463.D	1	BKK0380-BS1	
64	15-DEC-2022 14:12	22121464.D	1	BKK0380-BSD1	
65	15-DEC-2022 14:30	22121465.D	1	22K0157-01	
66	15-DEC-2022 14:48	22121466.D	1	22K0230-01	
67	15-DEC-2022 15:06	22121467.D	1	22K0231-01	
68	15-DEC-2022 15:24	22121468.D	1	BKK0382-BLK1	
69	15-DEC-2022 15:42	22121469.D	1	BKK0382-BS1	
70	15-DEC-2022 16:00	22121470.D	1	BKK0382-BS2	
71	15-DEC-2022 16:18	22121471.D	1	BKK0382-BSD1	
72	15-DEC-2022 16:35	22121472.D	1	22K0075-01	
73	15-DEC-2022 16:53	22121473.D	1	SEQ-PEM4	
74	15-DEC-2022 17:11	22121474.D	1	SEQ-CCV5	
75	15-DEC-2022 17:29	22121475.D	1	SEQ-CCV6	
76	15-DEC-2022 17:47	22121476.D	1	SEQ-CCV7	
77	15-DEC-2022 18:05	22121477.D	1	SEQ-CCV8	
78	15-DEC-2022 18:23	22121478.D	1	BKK0537-BLK1	
79	15-DEC-2022 18:40	22121479.D	1	BKK0537-BS1	
80	15-DEC-2022 18:58	22121480.D	1	BKK0537-BS2	
81	15-DEC-2022 19:16	22121481.D	1	22K0194-01	
82	15-DEC-2022 19:34	22121482.D	1	22K0194-01RE1	10
83	15-DEC-2022 19:52	22121483.D	1	SEQ-PEM5	
84	15-DEC-2022 20:09	22121484.D	1	SEQ-CCV9	
85	15-DEC-2022 20:27	22121485.D	1	SEQ-CCVA	
86	15-DEC-2022 20:45	22121486.D	1	SEQ-CCVB	
87	15-DEC-2022 21:03	22121487.D	1	SEQ-CCVC	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 14-DEC-2022

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1113	22121454.D	22K0429-01		1	Heptachlor epoxide b,
1131	22121455.D	22K0429-02		1	Heptachlor epoxide b,
1149	22121456.D	22K0429-03		1	Hexachlorobenzene,
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2009	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION
1927	22121401.D	RINSE		1	NO MANUAL INTEGRATION
1944	22121402.D	RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2002	22121403.D	SEQ-IBL1		1	NO MANUAL INTEGRATION
2020	22121404.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
2038	22121405.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
2056	22121406.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
2114	22121407.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
2131	22121408.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
2149	22121409.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
2207	22121410.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
2225	22121411.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
2243	22121412.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
2301	22121413.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
2319	22121414.D	SEQ-CALA		1	NO MANUAL INTEGRATION
2336	22121415.D	SEQ-CALB		1	NO MANUAL INTEGRATION
2354	22121416.D	SEQ-CALC		1	NO MANUAL INTEGRATION
0012	22121417.D	SEQ-CALD		1	NO MANUAL INTEGRATION
0030	22121418.D	SEQ-CALE		1	NO MANUAL INTEGRATION
0048	22121419.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
0106	22121420.D	SEQ-SCV2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0124	22121421.D	SEQ-CAL1A		1	NO MANUAL INTEGRATION
0142	22121422.D	SEQ-CAL2A		1	NO MANUAL INTEGRATION
0159	22121423.D	SEQ-CAL3A		1	NO MANUAL INTEGRATION
0217	22121424.D	SEQ-CAL4A		1	NO MANUAL INTEGRATION
0235	22121425.D	SEQ-CAL5A		1	NO MANUAL INTEGRATION
0253	22121426.D	SEQ-CAL6A		1	NO MANUAL INTEGRATION
0311	22121427.D	SEQ-CAL7A		1	NO MANUAL INTEGRATION
0329	22121428.D	SEQ-CAL8A		1	NO MANUAL INTEGRATION
0346	22121429.D	SEQ-CAL9A		1	NO MANUAL INTEGRATION
0404	22121430.D	SEQ-CALAA		1	NO MANUAL INTEGRATION
0422	22121431.D	SEQ-CALAB		1	NO MANUAL INTEGRATION
0440	22121432.D	SEQ-CALAC		1	NO MANUAL INTEGRATION
0458	22121433.D	SEQ-CALAD		1	NO MANUAL INTEGRATION
0516	22121434.D	SEQ-CALAE		1	NO MANUAL INTEGRATION
0533	22121435.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
0551	22121436.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
0609	22121437.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
0627	22121438.D	SEQ-ICV3		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0645	22121439.D	SEQ-ICV4		1	NO MANUAL INTEGRATION
0703	22121440.D	BKK0688-BLK1		1	NO MANUAL INTEGRATION
0721	22121441.D	BKK0688-BS1		1	NO MANUAL INTEGRATION
0739	22121442.D	BKK0688-BS2		1	NO MANUAL INTEGRATION
0757	22121443.D	BKK0688-BS3		1	NO MANUAL INTEGRATION
0815	22121444.D	BKK0688-BSD1		1	NO MANUAL INTEGRATION
0832	22121445.D	BKK0142-BLK1		1	NO MANUAL INTEGRATION
0850	22121446.D	BKK0142-BS1		1	NO MANUAL INTEGRATION
0908	22121447.D	BKK0142-BS2		1	NO MANUAL INTEGRATION
0926	22121448.D	BKK0142-BSD1		1	NO MANUAL INTEGRATION
0944	22121449.D	BKK0142-MS1		1	NO MANUAL INTEGRATION
1002	22121450.D	BKK0142-MSD1		1	NO MANUAL INTEGRATION
1020	22121451.D	22J0513-01		1	NO MANUAL INTEGRATION
1038	22121452.D	22J0513-04		1	NO MANUAL INTEGRATION
1055	22121453.D	22J0535-01		1	trans-Chlordane [C],
1113	22121454.D	22K0429-01		1	NO MANUAL INTEGRATION
1131	22121455.D	22K0429-02		1	Aldrin [C], Heptachlor epoxide b [C], trans-Chlordane [C],
1149	22121456.D	22K0429-03		1	Aldrin [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1207	22121457.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1225	22121458.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
1243	22121459.D	SEQ-CCV2		1	NO MANUAL INTEGRATION
1301	22121460.D	SEQ-CCV3		1	NO MANUAL INTEGRATION
1319	22121461.D	SEQ-CCV4		1	NO MANUAL INTEGRATION
1336	22121462.D	BKK0380-BLK1		1	NO MANUAL INTEGRATION
1354	22121463.D	BKK0380-BS1		1	NO MANUAL INTEGRATION
1412	22121464.D	BKK0380-BSD1		1	NO MANUAL INTEGRATION
1430	22121465.D	22K0157-01		1	NO MANUAL INTEGRATION
1448	22121466.D	22K0230-01		1	NO MANUAL INTEGRATION
1506	22121467.D	22K0231-01		1	NO MANUAL INTEGRATION
1524	22121468.D	BKK0382-BLK1		1	NO MANUAL INTEGRATION
1542	22121469.D	BKK0382-BS1		1	NO MANUAL INTEGRATION
1600	22121470.D	BKK0382-BS2		1	NO MANUAL INTEGRATION
1618	22121471.D	BKK0382-BSD1		1	NO MANUAL INTEGRATION
1635	22121472.D	22K0075-01		1	NO MANUAL INTEGRATION
1653	22121473.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1711	22121474.D	SEQ-CCV5		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20221214.b\B20221214.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1729	22121475.D	SEQ-CCV6		1	NO MANUAL INTEGRATION
1747	22121476.D	SEQ-CCV7		1	NO MANUAL INTEGRATION
1805	22121477.D	SEQ-CCV8		1	NO MANUAL INTEGRATION
1823	22121478.D	BKK0537-BLK1		1	NO MANUAL INTEGRATION
1840	22121479.D	BKK0537-BS1		1	NO MANUAL INTEGRATION
1858	22121480.D	BKK0537-BS2		1	NO MANUAL INTEGRATION
1916	22121481.D	22K0194-01		1	NO MANUAL INTEGRATION
1934	22121482.D	22K0194-01RE1	10	1	NO MANUAL INTEGRATION
1952	22121483.D	SEQ-PEM5		1	NO MANUAL INTEGRATION
2010	22121484.D	SEQ-CCV9		1	NO MANUAL INTEGRATION
2027	22121485.D	SEQ-CCVA		1	NO MANUAL INTEGRATION
2045	22121486.D	SEQ-CCVB		1	NO MANUAL INTEGRATION
2103	22121487.D	SEQ-CCVC		1	NO MANUAL INTEGRATION

Security Status Report

Date: 17-Dec-2022 10:57

22121401.D	Data Locked	jrains, 17-Dec-2022 10:57
22121402.D	Data Locked	jrains, 17-Dec-2022 10:57
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22121406.D	Data Locked	jrains, 17-Dec-2022 10:57
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22121408.D	Data Locked	jrains, 17-Dec-2022 10:57
22121409.D	Data Locked	jrains, 17-Dec-2022 10:57
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22121416.D	Data Locked	jrains, 17-Dec-2022 10:57
22121417.D	Data Locked	jrains, 17-Dec-2022 10:57
22121418.D	Data Locked	jrains, 17-Dec-2022 10:57
22121419.D	Data Locked	jrains, 17-Dec-2022 10:57
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22121427.D	Data Locked	jrains, 17-Dec-2022 10:57
22121428.D	Data Locked	jrains, 17-Dec-2022 10:57
22121429.D	Data Locked	jrains, 17-Dec-2022 10:57
22121430.D	Data Locked	jrains, 17-Dec-2022 10:57
22121431.D	Data Locked	jrains, 17-Dec-2022 10:57
22121432.D	Data Locked	jrains, 17-Dec-2022 10:57
22121433.D	Data Locked	jrains, 17-Dec-2022 10:57
22121434.D	Data Locked	jrains, 17-Dec-2022 10:57

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0031
Instrument: ECD6
Calibration: FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Performance Mix	SLC0031-PEM1	23030102.D	23030102.D	NA	03/01/23 12:41
Initial Cal Check	SLC0031-ICV1	23030103.D	23030103.D	NA	03/01/23 12:59
Initial Cal Check	SLC0031-ICV2	23030104.D	23030104.D	NA	03/01/23 13:17
Performance Mix	SLC0031-PEM2	23030108.D	23030108.D	NA	03/01/23 14:47
Calibration Check	SLC0031-CCV1	23030109.D	23030109.D	NA	03/01/23 15:05
Calibration Check	SLC0031-CCV2	23030110.D	23030110.D	NA	03/01/23 15:23
Blank	BLA0672-BLK1	23030113.D	23030113.D	Solid	03/01/23 17:38
LCS	BLA0672-BS1	23030114.D	23030114.D	Solid	03/01/23 17:56
LCS Dup	BLA0672-BSD1	23030115.D	23030115.D	Solid	03/01/23 18:14
LDW23-SC1083	23A0249-02	23030116.D	23030116.D	Solid	03/01/23 18:32
LDW23-SC1018	23A0249-03	23030117.D	23030117.D	Solid	03/01/23 18:50
LDW23-SC1084	23A0249-04	23030118.D	23030118.D	Solid	03/01/23 19:08
LDW23-SC1024	23A0249-08	23030120.D	23030120.D	Solid	03/01/23 19:43
LDW23-SC1020	23A0249-11	23030121.D	23030121.D	Solid	03/01/23 20:01
Performance Mix	SLC0031-PEM3	23030126.D	23030126.D	NA	03/01/23 21:31
Calibration Check	SLC0031-CCV3	23030127.D	23030127.D	NA	03/01/23 21:49
Performance Mix	SLC0031-PEM4	23030137.D	23030137.D	NA	03/02/23 00:48
Calibration Check	SLC0031-CCV4	23030138.D	23030138.D	NA	03/02/23 01:06

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLC0031

Instrument: ECD6
Calibration ID: FL00041

Printed: 3/2/2023 4:33:59PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0031-PEM1	QC		1		L002116	L000844		
SLC0031-ICV1	QC		2		L000845	L000844		
SLC0031-ICV2	QC		3		L000508	L000844		
BLB0334-BLK1	QC		4			L000844		
BLB0334-BS1	QC		5			L000844		
23B0128-01	8081B Pest (Low Level H2O)	D 01	6			L000844	CatchAll Environmental	
SLC0031-PEM2	QC		7		L002116	L000844		
SLC0031-CCV1	QC		8		L000845	L000844		
SLC0031-CCV2	QC		9		L000508	L000844		
BLA0672-BLK1	QC		10			L000844		
BLA0672-BS1	QC		11			L000844		
BLA0672-BSD1	QC		12			L000844		
23A0249-02	8081B Pest (PSDDA)	A 03	13			L000844	Anchor QEA, LLC	
23A0249-03	8081B Pest (PSDDA)	A 03	14			L000844	Anchor QEA, LLC	
23A0249-04	8081B Pest (PSDDA)	A 03	15			L000844	Anchor QEA, LLC	
23A0249-08	8081B Pest (PSDDA)	A 03	16			L000844	Anchor QEA, LLC	
23A0249-11	8081B Pest (PSDDA)	A 03	17			L000844	Anchor QEA, LLC	
23A0295-01	8081B Pest (PSDDA)	A 03	18			L000844	Anchor QEA, LLC	
23A0295-02	8081B Pest (PSDDA)	A 03	19			L000844	Anchor QEA, LLC	
23A0295-03	8081B Pest (PSDDA)	A 03	20			L000844	Anchor QEA, LLC	
SLC0031-PEM3	QC		21		L002116	L000844		

Samples Loaded By Date

Data Processed By Date

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLC0031

Instrument: ECD6
Calibration ID: FL00041

Printed: 3/2/2023 4:33:59PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0031-CCV3	QC		22		L000845	L000844		
23A0295-05	8081B Pest (PSDDA)	A 03	23			L000844	Anchor QEA, LLC	
23A0295-06	8081B Pest (PSDDA)	A 03	24			L000844	Anchor QEA, LLC	
23A0295-07	8081B Pest (PSDDA)	A 03	25			L000844	Anchor QEA, LLC	
23A0295-09	8081B Pest (PSDDA)	A 03	26			L000844	Anchor QEA, LLC	
23A0295-10	8081B Pest (PSDDA)	A 03	27			L000844	Anchor QEA, LLC	
BLA0672-MS1	QC		28			L000844		
BLA0672-MSD1	QC		29			L000844		
SLC0031-PEM4	QC		30		L002116	L000844		
SLC0031-CCV4	QC		31		L000845	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \ecd6.i\20230301.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	01-MAR-2023 12:23	23030101.D	1	RINSE	
2	01-MAR-2023 12:41	23030102.D	1	PEM1	
3	01-MAR-2023 12:59	23030103.D	1	INDA1	
4	01-MAR-2023 13:17	23030104.D	1	WND1	
5	01-MAR-2023 13:53	23030105.D	1	BLB0334-BLK1	
6	01-MAR-2023 14:11	23030106.D	1	BLB0334-BS1	
7	01-MAR-2023 14:29	23030107.D	1	23B0128-01	5
8	01-MAR-2023 14:47	23030108.D	1	PEM2	
9	01-MAR-2023 15:05	23030109.D	1	INDA2	
10	01-MAR-2023 15:23	23030110.D	1	WND2	
11	01-MAR-2023 17:02	23030111.D	1	PEM2	
12	01-MAR-2023 17:20	23030112.D	1	INDA2	
13	01-MAR-2023 17:38	23030113.D	1	BLA0672-BLK1	
14	01-MAR-2023 17:56	23030114.D	1	BLA0672-BS1	
15	01-MAR-2023 18:14	23030115.D	1	BLA0672-BSD1	
16	01-MAR-2023 18:32	23030116.D	1	23A0249-02	
17	01-MAR-2023 18:50	23030117.D	1	23A0249-03	
18	01-MAR-2023 19:08	23030118.D	1	23A0249-04	
19	01-MAR-2023 19:25	23030119.D	1	23A0249-05	
20	01-MAR-2023 19:43	23030120.D	1	23A0249-08	
21	01-MAR-2023 20:01	23030121.D	1	23A0249-11	
22	01-MAR-2023 20:19	23030122.D	1	23A0295-01	
23	01-MAR-2023 20:37	23030123.D	1	23A0295-02	
24	01-MAR-2023 20:55	23030124.D	1	23A0295-03	
25	01-MAR-2023 21:13	23030125.D	1	23A0295-04	
26	01-MAR-2023 21:31	23030126.D	1	PEM3	
27	01-MAR-2023 21:49	23030127.D	1	INDA3	
28	01-MAR-2023 22:07	23030128.D	1	23A0295-05	
29	01-MAR-2023 22:25	23030129.D	1	23A0295-06	
30	01-MAR-2023 22:43	23030130.D	1	23A0295-07	
31	01-MAR-2023 23:01	23030131.D	1	23A0295-09	
32	01-MAR-2023 23:18	23030132.D	1	23A0295-10	
33	01-MAR-2023 23:36	23030133.D	1	BLA0672-MS1	
34	01-MAR-2023 23:54	23030134.D	1	BLA0672-MSD1	
35	02-MAR-2023 00:12	23030135.D	1	23A0295-09	
36	02-MAR-2023 00:30	23030136.D	1	23A0295-09	
37	02-MAR-2023 00:48	23030137.D	1	PEM4	
38	02-MAR-2023 01:06	23030138.D	1	INDA4	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230301.b

ARI Job No.: RINS Method: PEST.m Instrument: ecd6.i Date: 01-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1223	23030101.D	RINSE		1	NO MANUAL INTEGRATION
1241	23030102.D	PEM1		1	NO MANUAL INTEGRATION
1259	23030103.D	INDA1		1	NO MANUAL INTEGRATION
1317	23030104.D	WND1		1	NO MANUAL INTEGRATION
1353	23030105.D	BLB0334-BLK1		1	NO MANUAL INTEGRATION
1411	23030106.D	BLB0334-BS1		1	NO MANUAL INTEGRATION
1429	23030107.D	23B0128-01 5		1	1Bromo-2nitrobenzene, Hexachlorobutadiene, Tetrachloro-m-xylene,
1447	23030108.D	PEM2		1	NO MANUAL INTEGRATION
1505	23030109.D	INDA2		1	NO MANUAL INTEGRATION
1523	23030110.D	WND2		1	NO MANUAL INTEGRATION
1702	23030111.D	PEM2		1	NO MANUAL INTEGRATION
1720	23030112.D	INDA2		1	NO MANUAL INTEGRATION
1738	23030113.D	BLA0672-BLK1		1	NO MANUAL INTEGRATION
1756	23030114.D	BLA0672-BS1		1	NO MANUAL INTEGRATION
1814	23030115.D	BLA0672-BSD1		1	NO MANUAL INTEGRATION
1832	23030116.D	23A0249-02		1	1Bromo-2nitrobenzene, Tetrachloro-m-xylene,
1850	23030117.D	23A0249-03		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230301.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1908	23030118.D	23A0249-04		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin aldehyde, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1925	23030119.D	23A0249-05		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Tetrachloro-m-xylene,
1943	23030120.D	23A0249-08		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin aldehyde, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
2001	23030121.D	23A0249-11		1	gamma-BHC (Lindane), Tetrachloro-m-xylene,
2019	23030122.D	23A0295-01		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Endrin ketone, Endrin aldehyde, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobi
2037	23030123.D	23A0295-02		1	1Bromo-2nitrobenzene, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Tetrachloro-m-xylene,
2055	23030124.D	23A0295-03		1	1Bromo-2nitrobenzene, alpha-BHC, gamma-BHC (Lindane), Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin ketone, Endrin aldehyde, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
2113	23030125.D	23A0295-04		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin ketone, Endrin aldehyde, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
2131	23030126.D	PEM3		1	NO MANUAL INTEGRATION
2149	23030127.D	INDA3		1	NO MANUAL INTEGRATION
2207	23030128.D	23A0295-05		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor epoxide b, Dieldrin, 4,4'-DDE, Endrin, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
2225	23030129.D	23A0295-06		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Dieldrin, 4,4'-DDE, Endrin, cis-Chlordane, Tetrachloro-m-xylene,
2243	23030130.D	23A0295-07		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, 4,4'-DDT, Endrin aldehyde, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
2301	23030131.D	23A0295-09		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Endrin aldehyde, Hexachlorobenzene,

				Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
2318	23030132.D	23A0295-10	1	alpha-BHC, Tetrachloro-m-xylene,
2336	23030133.D	BLA0672-MS1	1	alpha-BHC, Hexachlorobenzene, Tetrachloro-m-xylene,
2354	23030134.D	BLA0672-MSD1	1	alpha-BHC, Hexachlorobenzene, Tetrachloro-m-xylene,
0012	23030135.D	23A0295-09	1	1Bromo-2nitrobenzene, alpha-BHC, Hexachlorobenzene, Tetrachloro-m-xylene,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230301.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0030	23030136.D	23A0295-09		1	alpha-BHC, Hexachloroberzene, Tetrachloro-m-xylene,
0048	23030137.D	PEM4		1	NO MANUAL INTEGRATION
0106	23030138.D	INDA4		1	NO MANUAL INTEGRATION

Security Status Report

Date: 02-Mar-2023 16:34

23030101.D	Data Locked	alfonso, 02-Mar-2023 16:34
23030102.D	Data Locked	alfonso, 02-Mar-2023 16:34
23030103.D	Data Locked	alfonso, 02-Mar-2023 16:34
23030104.D	Data Locked	alfonso, 02-Mar-2023 16:34
23030105.D	Data Locked	alfonso, 02-Mar-2023 16:34
23030106.D	Data Locked	alfonso, 02-Mar-2023 16:34
23030107.D	Data Locked	alfonso, 02-Mar-2023 16:34
23030108.D	Data Locked	alfonso, 02-Mar-2023 16:34
23030109.D	Data Locked	alfonso, 02-Mar-2023 16:34
23030110.D	Data Locked	alfonso, 02-Mar-2023 16:34
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23030134.D	Data Locked	alfonso, 02-Mar-2023 16:34
23030135.D	Data Locked	alfonso, 02-Mar-2023 16:34
23030136.D	Data Locked	alfonso, 02-Mar-2023 16:34
23030137.D	Data Locked	alfonso, 02-Mar-2023 16:34
23030138.D	Data Locked	alfonso, 02-Mar-2023 16:34

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0106	Instrument:	ECD6
		Calibration:	FL00041

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLC0106-ICV1	23C03073.D	23C03073.D	NA	03/07/23 09:35
LDW23-SC1025	23A0249-05	23C03074.D	23C03074.D	Solid	03/07/23 09:53
Calibration Check	SLC0106-CCV1	002F1601.D	002F1601.D	NA	03/07/23 13:29
Calibration Check	SLC0106-CCV2	002F3001.D	002F3001.D	NA	03/07/23 17:41
Calibration Check	SLC0106-CCV3	002F3401.D	002F3401.D	NA	03/07/23 18:53

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLC0106

Instrument: ECD6
Calibration ID: FL00041

Printed: 3/9/2023 1:32:25PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLC0106-PEM2	QC		1		L002116	L000844		
SLC0106-PEM3	QC		2		L002116	L000844		
SLC0106-PEM4	QC		3		L002116	L000844		
SLC0106-CCV1	QC		4		L000845	L000844		
SLC0106-CCV2	QC		5		L000845	L000844		
SLC0106-CCV3	QC		6		L000845	L000844		
23A0417-04	8081B Pest (PSDDA)	A 04	7			L000844	Anchor QEA, LLC	
23A0417-05	8081B Pest (PSDDA)	A 04	8			L000844	Anchor QEA, LLC	
23A0417-06	8081B Pest (PSDDA)	A 04	9			L000844	Anchor QEA, LLC	
23A0417-07	8081B Pest (PSDDA)	A 04	10			L000844	Anchor QEA, LLC	
23A0417-08	8081B Pest (PSDDA)	A 04	11			L000844	Anchor QEA, LLC	
23A0417-09	8081B Pest (PSDDA)	A 04	12			L000844	Anchor QEA, LLC	
23A0417-10	8081B Pest (PSDDA)	A 04	13			L000844	Anchor QEA, LLC	
23A0417-11	8081B Pest (PSDDA)	A 04	14			L000844	Anchor QEA, LLC	
23A0417-13	8081B Pest (PSDDA)	A 04	15			L000844	Anchor QEA, LLC	
23A0417-15	8081B Pest (PSDDA)	A 04	16			L000844	Anchor QEA, LLC	
23A0419-02	8081B Pest (PSDDA)	A 04	17			L000844	Anchor QEA, LLC	
23A0419-08	8081B Pest (PSDDA)	A 04	18			L000844	Anchor QEA, LLC	
23A0419-09	8081B Pest (PSDDA)	A 04	19			L000844	Anchor QEA, LLC	
23A0419-12	8081B Pest (PSDDA)	A 04	20			L000844	Anchor QEA, LLC	
BLB0422-MS1	QC		21			L000844		

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SLC0106

Instrument: ECD6
Calibration ID: FL00041

Printed: 3/9/2023 1:32:25PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
BLB0422-MSD1	QC		22			L000844		
23B0229-03	8081B Pest (PSDDA)	A 02	23			L000844	Anchor QEA, LLC	
23B0229-05	8081B Pest (PSDDA)	A 02	24			L000844	Anchor QEA, LLC	
23B0229-08	8081B Pest (PSDDA)	A 02	25			L000844	Anchor QEA, LLC	
SLC0106-PEM1	QC		26		L002116	L000844		
SLC0106-ICV1	QC		27		L000845	L000844		
23A0249-05	8081B Pest (PSDDA)	A 03	28			L000844	Anchor QEA, LLC	
23A0295-04	8081B Pest (PSDDA)	A 04	29			L000844	Anchor QEA, LLC	
BLB0023-MS1	QC		30			L000844		
23A0417-01	8081B Pest (PSDDA)	A 04	31			L000844	Anchor QEA, LLC	
23A0417-02	8081B Pest (PSDDA)	A 04	32			L000844	Anchor QEA, LLC	
23A0417-03	8081B Pest (PSDDA)	A 04	33			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \ecd6.i\20230307.b\B20230307.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	07-MAR-2023 13:11	001F1501.D	1	SEQ-PEM2	
2	07-MAR-2023 17:23	001F2901.D	1	SEQ-PEM3	
3	07-MAR-2023 18:35	001F3301.D	1	SEQ-PEM4	
4	07-MAR-2023 13:29	002F1601.D	1	SEQ-INDA2	
5	07-MAR-2023 17:41	002F3001.D	1	SEQ-INDA3	
6	07-MAR-2023 18:53	002F3401.D	1	SEQ-INDA4	
7	07-MAR-2023 11:41	009F1001.D	1	23A0417-04	
8	07-MAR-2023 11:59	010F1101.D	1	23A0417-05	
9	07-MAR-2023 12:17	011F1201.D	1	23A0417-06	
10	07-MAR-2023 12:35	012F1301.D	1	23A0417-07	
11	07-MAR-2023 12:53	013F1401.D	1	23A0417-08	
12	07-MAR-2023 13:47	014F1701.D	1	23A0417-09	
13	07-MAR-2023 14:05	015F1801.D	1	23A0417-10	
14	07-MAR-2023 14:23	016F1901.D	1	23A0417-11	
15	07-MAR-2023 14:41	017F2001.D	1	23A0417-13	
16	07-MAR-2023 14:59	018F2101.D	1	23A0417-15	
17	07-MAR-2023 15:17	019F2201.D	1	23A0419-02	
18	07-MAR-2023 15:35	020F2301.D	1	23A0419-08	
19	07-MAR-2023 15:53	021F2401.D	1	23A0419-09	
20	07-MAR-2023 16:11	022F2501.D	1	23A0419-12	
21	07-MAR-2023 16:29	023F2601.D	1	BLB0422-MS1	
22	07-MAR-2023 16:47	024F2701.D	1	BLB0422-MSD1	
23	07-MAR-2023 17:05	025F2801.D	1	23B0229-03	
24	07-MAR-2023 17:59	026F3101.D	1	23B0229-05	
25	07-MAR-2023 18:17	027F3201.D	1	23B0229-08	
26	07-MAR-2023 08:59	23C03071.D	1	RINSE	
27	07-MAR-2023 09:17	23C03072.D	1	SEQ-PEM1	
28	07-MAR-2023 09:35	23C03073.D	1	SEQ-INDA1	
29	07-MAR-2023 09:53	23C03074.D	1	23A0249-05	
30	07-MAR-2023 10:11	23C03075.D	1	23A0295-04	
31	07-MAR-2023 10:29	23C03076.D	1	BLB0023-MS1	
32	07-MAR-2023 10:47	23C03077.D	1	23A0417-01	
33	07-MAR-2023 11:05	23C03078.D	1	23A0417-02	
34	07-MAR-2023 11:23	23C03079.D	1	23A0417-03	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230307.b

ARI Job No.: SEQ- Method: PEST.m Instrument: ecd6.i Date: 07-MAR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1311	001F1501.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
1723	001F2901.D	SEQ-PEM3		1	NO MANUAL INTEGRATION
1835	001F3301.D	SEQ-PEM4		1	NO MANUAL INTEGRATION
1329	002F1601.D	SEQ-INDA2		1	NO MANUAL INTEGRATION
1741	002F3001.D	SEQ-INDA3		1	NO MANUAL INTEGRATION
1853	002F3401.D	SEQ-INDA4		1	NO MANUAL INTEGRATION
1141	009F1001.D	23A0417-04		1	1Bromo-2nitrobenzene, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1159	010F1101.D	23A0417-05		1	1Bromo-2nitrobenzene, alpha-BHC, delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1217	011F1201.D	23A0417-06		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Heptachlor epoxide b, 4,4'-DDE, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1235	012F1301.D	23A0417-07		1	1Bromo-2nitrobenzene, alpha-BHC, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1253	013F1401.D	23A0417-08		1	1Bromo-2nitrobenzene, Heptachlor epoxide b, Endosulfan I, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1347	014F1701.D	23A0417-09		1	1Bromo-2nitrobenzene, Methoxychlor, Endrin aldehyde, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1405	015F1801.D	23A0417-10		1	1Bromo-2nitrobenzene, Tetrachloro-m-xylene,
1423	016F1901.D	23A0417-11		1	1Bromo-2nitrobenzene, Tetrachloro-m-xylene,
1441	017F2001.D	23A0417-13		1	NO MANUAL INTEGRATION

1459	018F2101.D	23A0417-15	1	1Bromo-2nitrobenzene,
1517	019F2201.D	23A0419-02	1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230307.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1535	020F2301.D	23A0419-08		1	delta-BHC, Heptachlor, Aldrin, Heptachlor epoxide b, Endosulfan I, 4,4'-DDE, Endrin, Endosulfan II, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexabromobiphenyl, Decachlorobiphenyl,
1553	021F2401.D	23A0419-09		1	1Bromo-2nitrobenzene, alpha-BHC, gamma-BHC (Lindane), Tetrachloro-m-xylene,
1611	022F2501.D	23A0419-12		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1629	023F2601.D	BLB0422-MS1		1	1Bromo-2nitrobenzene, alpha-BHC, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, Hexachlorobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1647	024F2701.D	BLB0422-MSD1		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan II, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobutadiene, Hexachlorobenzene, Hexabromobip
1705	025F2801.D	23B0229-03		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1759	026F3101.D	23B0229-05		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Endosulfan I, Dieldrin, 4,4'-DDE, Endosulfan sulfate, Methoxychlor, Endrin aldehyde, cis-Chlordane, Hexachlorobutadiene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1817	027F3201.D	23B0229-08		1	1Bromo-2nitrobenzene, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Tetrachloro-m-xylene,
0859	23C03071.D	RINSE		1	NO MANUAL INTEGRATION
0917	23C03072.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
0935	23C03073.D	SEQ-INDA1		1	NO MANUAL INTEGRATION
0953	23C03074.D	23A0249-05		1	1Bromo-2nitrobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1011	23C03075.D	23A0295-04		1	1Bromo-2nitrobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1029	23C03076.D	BLB0023-MS1		1	Hexabromobiphenyl, Decachlorobiphenyl,
1047	23C03077.D	23A0417-01		1	1Bromo-2nitrobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,

1105	23C03078.D 23A0417-02	1	1Bromo-2nitrobenzene, alpha-BHC, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1123	23C03079.D 23A0417-03	1	1Bromo-2nitrobenzene, Hexabromobiphenyl, Tetrachloro-m-xylene, Decachlorobiphenyl,
1311	001F1501.D SEQ-PEM2	1	4,4'-DDE [C], Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230307.b\B20230307.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1723	001F2901.D	SEQ-PEM3		1	Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
1835	001F3301.D	SEQ-PEM4		1	4,4'-DDE [C], Endrin [C], 4,4'-DDD [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
1329	002F1601.D	SEQ-INDA2		1	NO MANUAL INTEGRATION
1741	002F3001.D	SEQ-INDA3		1	NO MANUAL INTEGRATION
1853	002F3401.D	SEQ-INDA4		1	NO MANUAL INTEGRATION
1141	009F1001.D	23A0417-04		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetra
1159	010F1101.D	23A0417-05		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], De
1217	011F1201.D	23A0417-06		1	Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
1235	012F1301.D	23A0417-07		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Endrin ketone [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1253	013F1401.D	23A0417-08		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor epoxide b [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachlor
1347	014F1701.D	23A0417-09		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Endosulfan sulfate [C], Methoxychlor [C], Endrin ketone [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1405	015F1801.D	23A0417-10		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C
1423	016F1901.D	23A0417-11		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Endosulfan I [C],

			4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Tetrachlor
1441	017F2001.D 23A0417-13	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Heptachlor epoxide b [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[
1459	018F2101.D 23A0417-15	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], delta-BHC [C], gamma-BHC (Lindane) [C], Heptachlor [C], Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C],
1517	019F2201.D 23A0419-02	1	1Bromo-2nitrobenzene [C], alpha-BHC [C], beta-BHC [C], gamma-BHC (Lindane) [C], Endosulfan II [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1535	020F2301.D 23A0419-08	1	Aldrin [C], Heptachlor epoxide b [C], Endosulfan I [C], 4,4'-DDE [C], Endrin [C], Endosulfan II [C], 4,4'-DDD [C], Endosulfan sulfate [C], 4,4'-DDT [C], Methoxychlor [C], Endrin ketone [C], Endrin aldehyde [C], trans-Chlordane [C], cis-Chlordane [C], Hexabromobiphenyl[C], Decachlorobiphenyl [C],
1553	021F2401.D 23A0419-09	1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230307.b\B20230307.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1611	022F2501.D	23A0419-12		1	1Bromo-2nitrobenzene [C], alpha-BHC [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1629	023F2601.D	BLB0422-MS1		1	1Bromo-2nitrobenzene [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1647	024F2701.D	BLB0422-MSD1		1	1Bromo-2nitrobenzene [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1705	025F2801.D	23B0229-03		1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1759	026F3101.D	23B0229-05		1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1817	027F3201.D	23B0229-08		1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
0859	23C03071.D	RINSE		1	NO MANUAL INTEGRATION
0917	23C03072.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
0935	23C03073.D	SEQ-INDA1		1	NO MANUAL INTEGRATION
0953	23C03074.D	23A0249-05		1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1011	23C03075.D	23A0295-04		1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1029	23C03076.D	BLB0023-MS1		1	1Bromo-2nitrobenzene [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1047	23C03077.D	23A0417-01		1	1Bromo-2nitrobenzene [C], Hexachlorobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1105	23C03078.D	23A0417-02		1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],
1123	23C03079.D	23A0417-03		1	1Bromo-2nitrobenzene [C], Hexabromobiphenyl[C], Tetrachloro-m-xylene [C], Decachlorobiphenyl [C],

Security Status Report

Date: 09-Mar-2023 13:33

001F1501.D	Data Locked	alfonso, 09-Mar-2023 13:33
001F2901.D	Data Locked	alfonso, 09-Mar-2023 13:33
001F3301.D	Data Locked	alfonso, 09-Mar-2023 13:33
002F1601.D	Data Locked	alfonso, 09-Mar-2023 13:33
002F3001.D	Data Locked	alfonso, 09-Mar-2023 13:33
002F3401.D	Data Locked	alfonso, 09-Mar-2023 13:33
009F1001.D	Data Locked	alfonso, 09-Mar-2023 13:33
010F1101.D	Data Locked	alfonso, 09-Mar-2023 13:33
011F1201.D	Data Locked	alfonso, 09-Mar-2023 13:33
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013F1401.D	Data Locked	alfonso, 09-Mar-2023 13:33
014F1701.D	Data Locked	alfonso, 09-Mar-2023 13:33
015F1801.D	Data Locked	alfonso, 09-Mar-2023 13:33
016F1901.D	Data Locked	alfonso, 09-Mar-2023 13:33
017F2001.D	Data Locked	alfonso, 09-Mar-2023 13:33
018F2101.D	Data Locked	alfonso, 09-Mar-2023 13:33
019F2201.D	Data Locked	alfonso, 09-Mar-2023 13:33
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023F2601.D	Data Locked	alfonso, 09-Mar-2023 13:33
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025F2801.D	Data Locked	alfonso, 09-Mar-2023 13:33
026F3101.D	Data Locked	alfonso, 09-Mar-2023 13:33
027F3201.D	Data Locked	alfonso, 09-Mar-2023 13:33
23C03071.D	Data Locked	alfonso, 09-Mar-2023 13:33
23C03072.D	Data Locked	alfonso, 09-Mar-2023 13:33
23C03073.D	Data Locked	alfonso, 09-Mar-2023 13:33
23C03074.D	Data Locked	alfonso, 09-Mar-2023 13:33
23C03075.D	Data Locked	alfonso, 09-Mar-2023 13:33
23C03076.D	Data Locked	alfonso, 09-Mar-2023 13:33
23C03077.D	Data Locked	alfonso, 09-Mar-2023 13:33
23C03078.D	Data Locked	alfonso, 09-Mar-2023 13:33
23C03079.D	Data Locked	alfonso, 09-Mar-2023 13:33

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SKL0233	Instrument:	ECD6
Calibration:	FL00041	Calibration Date:	12/15/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SKL0233-PEM1 (Water)				Lab File ID: 22121404.D			Analyzed: 12/14/22 20:20	
Decachlorobiphenyl	160.00	83.0	0 - 200	9.355	9.354666	0.0003	+/-0.1	
Decachlorobiphenyl [2C]	160.00	83.5	0 - 200	10.466	10.4655	0.0005	+/-0.1	
Tetrachlorometaxylene	160.00	78.1	0 - 200	3.828	3.827833	0.0002	+/-0.1	
Tetrachlorometaxylene [2C]	160.00	83.5	0 - 200	4.22	4.219666	0.0003	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0031
Instrument: ECD6
Calibration: FL00041
Calibration Date: 12/15/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0031-PEM1 (Water)				Lab File ID: 23030102.D			Analyzed: 03/01/23 12:41	
Decachlorobiphenyl	40.000	95.7	0 - 200	9.439	9.354666	0.0843	+/-0.1	
Decachlorobiphenyl [2C]	40.000	98.3	0 - 200	10.407	10.4655	-0.0585	+/-0.1	
Tetrachlorometaxylene	40.000	95.5	0 - 200	3.875	3.827833	0.0472	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	93.9	0 - 200	4.199	4.219666	-0.0207	+/-0.1	
SLC0031-ICV1 (Water)				Lab File ID: 23030103.D			Analyzed: 03/01/23 12:59	
Decachlorobiphenyl	40.000	91.3	80 - 120	9.438	9.354666	0.0833	+/-0.1	
Decachlorobiphenyl [2C]	40.000	91.5	80 - 120	10.407	10.4655	-0.0585	+/-0.1	
Tetrachlorometaxylene	40.000	93.0	80 - 120	3.873	3.827833	0.0452	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	91.3	80 - 120	4.198	4.219666	-0.0217	+/-0.1	
SLC0031-PEM2 (Water)				Lab File ID: 23030108.D			Analyzed: 03/01/23 14:47	
Decachlorobiphenyl	40.000	98.9	0 - 200	9.439	9.354666	0.0843	+/-0.1	
Decachlorobiphenyl [2C]	40.000	98.0	0 - 200	10.407	10.4655	-0.0585	+/-0.1	
Tetrachlorometaxylene	40.000	94.5	0 - 200	3.874	3.827833	0.0462	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	94.4	0 - 200	4.198	4.219666	-0.0217	+/-0.1	
SLC0031-CCV1 (Water)				Lab File ID: 23030109.D			Analyzed: 03/01/23 15:05	
Decachlorobiphenyl	40.000	91.0	80 - 120	9.439	9.354666	0.0843	+/-0.1	
Decachlorobiphenyl [2C]	40.000	95.0	80 - 120	10.408	10.4655	-0.0575	+/-0.1	
Tetrachlorometaxylene	40.000	92.0	80 - 120	3.872	3.827833	0.0442	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	89.8	80 - 120	4.197	4.219666	-0.0227	+/-0.1	
BLA0672-BLK1 (Solid)				Lab File ID: 23030113.D			Analyzed: 03/01/23 17:38	
Decachlorobiphenyl	8.0000	76.0	30 - 160	9.44	9.354666	0.0853	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	82.3	30 - 160	10.408	10.4655	-0.0575	+/-0.1	
Tetrachlorometaxylene	8.0000	61.7	30 - 160	3.875	3.827833	0.0472	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	60.8	30 - 160	4.198	4.219666	-0.0217	+/-0.1	
BLA0672-BS1 (Solid)				Lab File ID: 23030114.D			Analyzed: 03/01/23 17:56	
Decachlorobiphenyl	8.0000	83.1	30 - 160	9.439	9.354666	0.0843	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	86.1	30 - 160	10.407	10.4655	-0.0585	+/-0.1	
Tetrachlorometaxylene	8.0000	64.4	30 - 160	3.874	3.827833	0.0462	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	63.7	30 - 160	4.198	4.219666	-0.0217	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0031	Instrument:	ECD6
Calibration:	FL00041	Calibration Date:	12/15/2022

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLA0672-BSD1 (Solid)				Lab File ID: 23030115.D			Analyzed: 03/01/23 18:14	
Decachlorobiphenyl	8.0000	81.8	30 - 160	9.438	9.354666	0.0833	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	86.3	30 - 160	10.406	10.4655	-0.0595	+/-0.1	
Tetrachlorometaxylene	8.0000	71.1	30 - 160	3.873	3.827833	0.0452	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	70.2	30 - 160	4.197	4.219666	-0.0227	+/-0.1	
23A0249-02 (Solid)				Lab File ID: 23030116.D			Analyzed: 03/01/23 18:32	
Decachlorobiphenyl	7.9308	88.6	30 - 160	9.439	9.354666	0.0843	+/-0.1	
Decachlorobiphenyl [2C]	7.9308	94.6	30 - 160	10.408	10.4655	-0.0575	+/-0.1	
Tetrachlorometaxylene	7.9308	60.4	30 - 160	3.873	3.827833	0.0452	+/-0.1	
Tetrachlorometaxylene [2C]	7.9308	65.5	30 - 160	4.197	4.219666	-0.0227	+/-0.1	
23A0249-03 (Solid)				Lab File ID: 23030117.D			Analyzed: 03/01/23 18:50	
Decachlorobiphenyl	7.7210	88.1	30 - 160	9.439	9.354666	0.0843	+/-0.1	
Decachlorobiphenyl [2C]	7.7210	106	30 - 160	10.408	10.4655	-0.0575	+/-0.1	
Tetrachlorometaxylene	7.7210	34.7	30 - 160	3.873	3.827833	0.0452	+/-0.1	
Tetrachlorometaxylene [2C]	7.7210	67.3	30 - 160	4.197	4.219666	-0.0227	+/-0.1	
23A0249-04 (Solid)				Lab File ID: 23030118.D			Analyzed: 03/01/23 19:08	
Decachlorobiphenyl	7.7819	90.6	30 - 160	9.44	9.354666	0.0853	+/-0.1	
Decachlorobiphenyl [2C]	7.7819	92.1	30 - 160	10.408	10.4655	-0.0575	+/-0.1	
Tetrachlorometaxylene	7.7819	44.3	30 - 160	3.873	3.827833	0.0452	+/-0.1	
Tetrachlorometaxylene [2C]	7.7819	66.0	30 - 160	4.196	4.219666	-0.0237	+/-0.1	
23A0249-08 (Solid)				Lab File ID: 23030120.D			Analyzed: 03/01/23 19:43	
Decachlorobiphenyl	7.8616	77.7	30 - 160	9.439	9.354666	0.0843	+/-0.1	
Decachlorobiphenyl [2C]	7.8616	81.7	30 - 160	10.407	10.4655	-0.0585	+/-0.1	
Tetrachlorometaxylene	7.8616	49.9	30 - 160	3.873	3.827833	0.0452	+/-0.1	
Tetrachlorometaxylene [2C]	7.8616	63.9	30 - 160	4.197	4.219666	-0.0227	+/-0.1	
23A0249-11 (Solid)				Lab File ID: 23030121.D			Analyzed: 03/01/23 20:01	
Decachlorobiphenyl	7.9222	86.1	30 - 160	9.437	9.354666	0.0823	+/-0.1	
Decachlorobiphenyl [2C]	7.9222	90.7	30 - 160	10.406	10.4655	-0.0595	+/-0.1	
Tetrachlorometaxylene	7.9222	65.5	30 - 160	3.873	3.827833	0.0452	+/-0.1	
Tetrachlorometaxylene [2C]	7.9222	67.7	30 - 160	4.198	4.219666	-0.0217	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0031
Instrument: ECD6
Calibration: FL00041
Calibration Date: 12/15/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0031-PEM3 (Water)				Lab File ID: 23030126.D			Analyzed: 03/01/23 21:31	
Decachlorobiphenyl	40.000	91.8	0 - 200	9.438	9.354666	0.0833	+/-0.1	
Decachlorobiphenyl [2C]	40.000	110	0 - 200	10.406	10.4655	-0.0595	+/-0.1	
Tetrachlorometaxylene	40.000	93.7	0 - 200	3.872	3.827833	0.0442	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	94.2	0 - 200	4.197	4.219666	-0.0227	+/-0.1	
SLC0031-CCV3 (Water)				Lab File ID: 23030127.D			Analyzed: 03/01/23 21:49	
Decachlorobiphenyl	40.000	92.5	80 - 120	9.438	9.354666	0.0833	+/-0.1	
Decachlorobiphenyl [2C]	40.000	91.5	80 - 120	10.407	10.4655	-0.0585	+/-0.1	
Tetrachlorometaxylene	40.000	91.8	80 - 120	3.874	3.827833	0.0462	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	88.0	80 - 120	4.198	4.219666	-0.0217	+/-0.1	
SLC0031-PEM4 (Water)				Lab File ID: 23030137.D			Analyzed: 03/02/23 00:48	
Decachlorobiphenyl	40.000	94.6	0 - 200	9.438	9.354666	0.0833	+/-0.1	
Decachlorobiphenyl [2C]	40.000	99.7	0 - 200	10.406	10.4655	-0.0595	+/-0.1	
Tetrachlorometaxylene	40.000	95.9	0 - 200	3.874	3.827833	0.0462	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	94.6	0 - 200	4.198	4.219666	-0.0217	+/-0.1	
SLC0031-CCV4 (Water)				Lab File ID: 23030138.D			Analyzed: 03/02/23 01:06	
Decachlorobiphenyl	40.000	92.8	80 - 120	9.438	9.354666	0.0833	+/-0.1	
Decachlorobiphenyl [2C]	40.000	98.3	80 - 120	10.405	10.4655	-0.0605	+/-0.1	
Tetrachlorometaxylene	40.000	93.5	80 - 120	3.874	3.827833	0.0462	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	91.8	80 - 120	4.198	4.219666	-0.0217	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0106
Instrument: ECD6
Calibration: FL00041
Calibration Date: 12/14/2022

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLC0106-ICV1 (Solid)				Lab File ID: 23C03073.D			Analyzed: 03/07/23 09:35	
Decachlorobiphenyl	40.000	93.8	80 - 120	9.421	9.354666	0.0663	+/-0.1	
Decachlorobiphenyl [2C]	40.000	92.0	80 - 120	10.385	10.4655	-0.0805	+/-0.1	
Tetrachlorometaxylene	40.000	89.3	80 - 120	3.859	3.827833	0.0312	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	94.5	80 - 120	4.183	4.219666	-0.0367	+/-0.1	
23A0249-05 (Solid)				Lab File ID: 23C03074.D			Analyzed: 03/07/23 09:53	
Decachlorobiphenyl	7.7135	87.2	30 - 160	9.432	9.354666	0.0773	+/-0.1	
Decachlorobiphenyl [2C]	7.7135	79.8	30 - 160	10.393	10.4655	-0.0725	+/-0.1	
Tetrachlorometaxylene	7.7135	33.8	30 - 160	3.857	3.827833	0.0292	+/-0.1	
Tetrachlorometaxylene [2C]	7.7135	57.2	30 - 160	4.182	4.219666	-0.0377	+/-0.1	
SLC0106-CCV1 (Solid)				Lab File ID: 002F1601.D			Analyzed: 03/07/23 13:29	
Decachlorobiphenyl	40.000	91.3	80 - 120	9.421	9.354666	0.0663	+/-0.1	
Decachlorobiphenyl [2C]	40.000	94.3	80 - 120	10.384	10.4655	-0.0815	+/-0.1	
Tetrachlorometaxylene	40.000	89.8	80 - 120	3.859	3.827833	0.0312	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	91.8	80 - 120	4.183	4.219666	-0.0367	+/-0.1	
SLC0106-CCV2 (Solid)				Lab File ID: 002F3001.D			Analyzed: 03/07/23 17:41	
Decachlorobiphenyl	40.000	90.3	80 - 120	9.42	9.354666	0.0653	+/-0.1	
Decachlorobiphenyl [2C]	40.000	91.8	80 - 120	10.383	10.4655	-0.0825	+/-0.1	
Tetrachlorometaxylene	40.000	90.3	80 - 120	3.859	3.827833	0.0312	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	92.0	80 - 120	4.183	4.219666	-0.0367	+/-0.1	
SLC0106-CCV3 (Solid)				Lab File ID: 002F3401.D			Analyzed: 03/07/23 18:53	
Decachlorobiphenyl	40.000	93.5	80 - 120	9.42	9.354666	0.0653	+/-0.1	
Decachlorobiphenyl [2C]	40.000	96.0	80 - 120	10.384	10.4655	-0.0815	+/-0.1	
Tetrachlorometaxylene	40.000	90.5	80 - 120	3.861	3.827833	0.0332	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	92.0	80 - 120	4.184	4.219666	-0.0357	+/-0.1	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SKL0233	Instrument:	ECD6
		Calibration:	FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Performance Mix (SKL0233-PEM1)		(Water)		Lab File ID: 22121404.D				Analyzed: 12/14/22 20:20	
1-Bromo-2-Nitrobenzene	683485	3.15	672426	3.15	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	619012	9.503	609723	9.504	102	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1005375	3.35	1006482	3.35	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	772586	11.054	769764	11.053	100	50 - 200	0.001	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0031
Instrument: ECD6
Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Performance Mix (SLC0031-PEM1)		(Water)		Lab File ID: 23030102.D				Analyzed: 03/01/23 12:41	
1-Bromo-2-Nitrobenzene	454993	3.187	820302	3.184	55	50 - 200	0.003	+/-0.50	
Hexabromobiphenyl	370100	9.592	683490	9.591	54	50 - 200	0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	678366	3.338	1264747	3.336	54	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl [2C]	397384	10.985	766229	10.985	52	50 - 200	0.000	+/-0.50	
Initial Cal Check (SLC0031-ICV1)		(Water)		Lab File ID: 23030103.D				Analyzed: 03/01/23 12:59	
1-Bromo-2-Nitrobenzene	820302	3.184	820302	3.184	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	683490	9.591	683490	9.591	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1264747	3.336	1264747	3.336	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	766229	10.985	766229	10.985	100	50 - 200	0.000	+/-0.50	
Initial Cal Check (SLC0031-ICV2)		(Water)		Lab File ID: 23030104.D				Analyzed: 03/01/23 13:17	
1-Bromo-2-Nitrobenzene	798734	3.184	798734	3.184	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	678668	9.592	678668	9.592	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1261562	3.336	1261562	3.336	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	771729	10.985	771729	10.985	100	50 - 200	0.000	+/-0.50	
Performance Mix (SLC0031-PEM2)		(Water)		Lab File ID: 23030108.D				Analyzed: 03/01/23 14:47	
1-Bromo-2-Nitrobenzene	422651	3.186	798734	3.184	53	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	322484	9.591	678668	9.592	48	50 - 200	-0.001	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	655713	3.338	1261562	3.336	52	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl [2C]	361931	10.985	771729	10.985	47	50 - 200	0.000	+/-0.50	*
Blank (BLA0672-BLK1)		(Solid)		Lab File ID: 23030113.D				Analyzed: 03/01/23 17:38	
1-Bromo-2-Nitrobenzene	491830	3.186	798734	3.184	62	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	401521	9.592	683490	9.591	59	50 - 200	0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	746375	3.338	1261562	3.336	59	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl [2C]	441550	10.985	766229	10.985	58	50 - 200	0.000	+/-0.50	
LCS (BLA0672-BS1)		(Solid)		Lab File ID: 23030114.D				Analyzed: 03/01/23 17:56	
1-Bromo-2-Nitrobenzene	475133	3.185	798734	3.184	59	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	393975	9.591	683490	9.591	58	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	733400	3.337	1261562	3.336	58	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	436774	10.985	766229	10.985	57	50 - 200	0.000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLC0031

SDG: 23A0249
Project: AOC5 MR Phase 1
Instrument: ECD6
Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (BLA0672-BSD1)		(Solid)		Lab File ID: 23030115.D			Analyzed: 03/01/23 18:14		
1-Bromo-2-Nitrobenzene	469818	3.185	798734	3.184	59	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	388412	9.591	683490	9.591	57	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	735020	3.337	1261562	3.336	58	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	439143	10.984	766229	10.985	57	50 - 200	-0.001	+/-0.50	
LDW23-SC1083 (23A0249-02)		(Solid)		Lab File ID: 23030116.D			Analyzed: 03/01/23 18:32		
1-Bromo-2-Nitrobenzene	509594	3.185	798734	3.184	64	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	345406	9.593	683490	9.591	51	50 - 200	0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	722915	3.337	1261562	3.336	57	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	410034	10.986	766229	10.985	54	50 - 200	0.001	+/-0.50	
LDW23-SC1018 (23A0249-03)		(Solid)		Lab File ID: 23030117.D			Analyzed: 03/01/23 18:50		
1-Bromo-2-Nitrobenzene	905555	3.185	798734	3.184	113	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	314860	9.594	683490	9.591	46	50 - 200	0.003	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	720342	3.337	1261562	3.336	57	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	412914	10.986	766229	10.985	54	50 - 200	0.001	+/-0.50	
LDW23-SC1084 (23A0249-04)		(Solid)		Lab File ID: 23030118.D			Analyzed: 03/01/23 19:08		
1-Bromo-2-Nitrobenzene	660442	3.185	798734	3.184	83	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	338099	9.593	683490	9.591	49	50 - 200	0.002	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	713028	3.336	1261562	3.336	57	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	401349	10.987	766229	10.985	52	50 - 200	0.002	+/-0.50	
LDW23-SC1024 (23A0249-08)		(Solid)		Lab File ID: 23030120.D			Analyzed: 03/01/23 19:43		
1-Bromo-2-Nitrobenzene	567459	3.185	798734	3.184	71	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	330829	9.593	683490	9.591	48	50 - 200	0.002	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	658086	3.337	1261562	3.336	52	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	374770	10.986	766229	10.985	49	50 - 200	0.001	+/-0.50	*
LDW23-SC1020 (23A0249-11)		(Solid)		Lab File ID: 23030121.D			Analyzed: 03/01/23 20:01		
1-Bromo-2-Nitrobenzene	469896	3.185	798734	3.184	59	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	327135	9.59	683490	9.591	48	50 - 200	-0.001	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	673209	3.337	1261562	3.336	53	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	389927	10.984	766229	10.985	51	50 - 200	-0.001	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLC0031
Instrument: ECD6
Calibration: FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Performance Mix (SLC0031-PEM3)		(Water)		Lab File ID: 23030126.D				Analyzed: 03/01/23 21:31	
1-Bromo-2-Nitrobenzene	770372	3.183	798734	3.184	96	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	609235	9.591	678668	9.592	90	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1195193	3.336	1261562	3.336	95	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	644745	10.984	771729	10.985	84	50 - 200	-0.001	+/-0.50	
Performance Mix (SLC0031-PEM4)		(Water)		Lab File ID: 23030137.D				Analyzed: 03/02/23 00:48	
1-Bromo-2-Nitrobenzene	455502	3.186	798734	3.184	57	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	381463	9.591	678668	9.592	56	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	713644	3.337	1261562	3.336	57	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	402780	10.985	771729	10.985	52	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLC0106	Instrument:	ECD6
		Calibration:	FL00041

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLC0106-ICV1)		(Solid)		Lab File ID: 23C03073.D				Analyzed: 03/07/23 09:35	
1-Bromo-2-Nitrobenzene	802383	3.171	802383	3.171	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	631224	9.574	631224	9.574	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1198897	3.324	1198897	3.324	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	722844	10.96	722844	10.96	100	50 - 200	0.000	+/-0.50	
LDW23-SC1025 (23A0249-05)		(Solid)		Lab File ID: 23C03074.D				Analyzed: 03/07/23 09:53	
1-Bromo-2-Nitrobenzene	1515925	3.17	802383	3.171	189	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	629352	9.602	631224	9.574	100	50 - 200	0.028	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1458599	3.324	1198897	3.324	122	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	814300	10.974	722844	10.96	113	50 - 200	0.014	+/-0.50	

HOLDING TIME SUMMARY

Analysis: EPA 8081B

Laboratory: Analytical Resources, LLC SDG: 23A0249

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1083 23A0249-02	01/12/23 08:38	01/12/23 16:38	01/31/23 13:36	19	365	03/01/23 18:32	29	40	
LDW23-SC1018 23A0249-03	01/12/23 10:21	01/12/23 16:38	01/31/23 13:36	19	365	03/01/23 18:50	29	40	
LDW23-SC1084 23A0249-04	01/12/23 09:47	01/12/23 16:38	01/31/23 13:36	19	365	03/01/23 19:08	29	40	
LDW23-SC1025 23A0249-05	01/12/23 11:28	01/12/23 16:38	01/31/23 13:36	19	365	03/07/23 09:53	35	40	
LDW23-SC1024 23A0249-08	01/12/23 13:35	01/12/23 16:38	01/31/23 13:36	19	365	03/01/23 19:43	29	40	
LDW23-SC1020 23A0249-11	01/12/23 15:23	01/12/23 16:38	01/31/23 13:36	18	365	03/01/23 20:01	29	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ECD6

Analyte	MDL	RL	Units
Hexachlorobenzene	0.15	0.50	ug/kg
Hexachlorobenzene [2C]	0.15	0.50	ug/kg

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CERTIFICATE OF ANALYSIS

Catalog No: S-279N
Description: Tetrachloro-m-xylene
Lot: 0052481B-1
Solvent: N/A
Hazards: *Refer to SDS for complete safety information*

Signal Word: Warning

Date Certified: Jul 28, 2005
Expiration: Jul 28, 2015
Sample Size: 100 mg
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

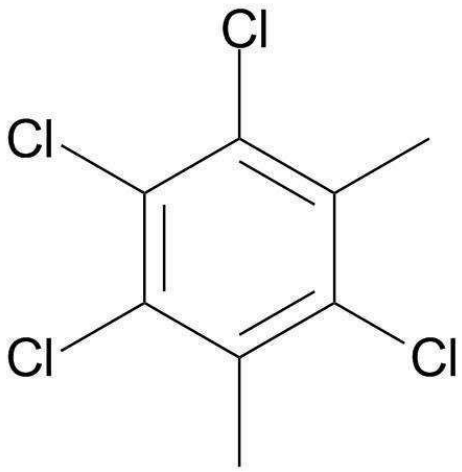
ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration	Certified Analyte Concentration[1]
Tetrachloro-meta-xylene	877-09-8	96.0	N/A	N/A

Identification:

Molecular formula: C8H6Cl4
Molecular weight: 243.94



C000147
tetrachlormetaxylene
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] The Uncertainty calculated for this product is ±2.4%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Metrological traceability is established through in-house validated methods.

Purity, if stated, is equal to 100% minus found impurity components. Impurity components have not been identified.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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CERTIFICATE OF PRODUCT DATA

PRODUCT: C-209N
DESCRIPTION: 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl
LOT #: 990521LB-AC
SOLVENT: N/A

EXPIRATION: Jul 28, 2015

This product is guaranteed accurate to ±0.5% of the Certified Analyte concentration through the Expiration Date on the Label.

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1]	Certified Analyte Concentration[2]
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	2051-24-3	100	N/A	N/A

C000148
decachlorbiphenyl
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

* I1768A

Certified by: R. Cooper

1. All weights are traceable through National Institute of Standards & Technology, Test No. 822/254480
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is ±4% which is the Combined Uncertainty uc(y). It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is Uc(y) *K where K is the coverage factor at the 95% confidence level (K=2).
3. A product with a suffix (-1A, -2B, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

Please note: AccuStandard follows the U.S. conventions in reporting numerical values, on both certificates and labels.

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

This product was manufactured in accordance to quality system requirements of ISO 9001:2000 and ISO 17025

* Recertified 2 4-6-09 JS

Analytical Standard Record

Standard ID: C000148 **Printed: 4/23/2015 11:54:44AM**

Description:	decachlorbiphenyl	Expires:	15-Jan-2020
Standard Type:	Other	Prepared:	15-Jan-2014
Solvent:	na/a	Prepared By:	Joshua Rains
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	27-Feb-2015 13:03 by JGR
Vendor:	Accustandard	Lot #:	990521lb-ac
Vendor Catalog #:			

Comments

see i1768a
SOM calibrations added 06/12/14 sdrd

Analyte	CAS Number	Concentration	Units
Decachlorobiphenyl [2C]	2051-24-3	1000000	ug/mL
Decachlorobiphenyl	2051-24-3	1000000	ug/mL
DCB 1660 [2C]	2051-24-3	1000000	ug/mL
DCB 1660	2051-24-3	1000000	ug/mL
DCB [2C]	2051-24-3	1000000	ug/mL
DCB (A) [2C]	2051-24-3	1000000	ug/mL
DCB (A)	2051-24-3	1000000	ug/mL
DCB	2051-24-3	1000000	ug/mL

Reviewed By Date

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CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 219051741-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jun 5, 2020
Expiration: Jun 5, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Mirex	2385-85-5	98.2	100.2	98.4

I007970
Mirex 2d source
Solvent / Lot: MeOH
Prep: 9/7/2020 by JR
Exp: 6/5/2024
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

Catalog No: P-026S
Description: o,p'-DDE
Lot: 218021093-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Feb 10, 2020
Expiration: Feb 10, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o,p'-DDE	3424-82-6	99.9	100.4	100.3

I7971

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 822-275872-11

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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CERTIFICATE OF ANALYSIS

Catalog No: P-184S
Description: trans-Nonachlor
Lot: 218011470
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jan 30, 2018
Expiration: Jan 30, 2028
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
trans-Nonachlor	39765-80-5	99.0	100.2	99.2

I 7974

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 822-275872-11

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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CERTIFICATE OF ANALYSIS

Catalog No: P-024S
Description: o,p'-DDD
Lot: 220051307
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: May 27, 2020
Expiration: Jun 27, 2022
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDD	53-19-0	100.0	100.2	100.2

I010773
o,p-DDD
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 6/27/2022
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this .

4 **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: P-331S
Description: Oxychlordane Isomer
Lot: 218101131
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Oct 8, 2018
Expiration: Nov 8, 2020
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Oxychlordane Isomer	27304-13-8	97.7	102.4*	100.0

I010795
Oxychlordane isomer
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 6/20/2022
Location:

* Weight compensated to 100% purity.

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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4 **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: P-297S
Description: cis-Nonachlor
Lot: 217121240
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Dec 13, 2017
Expiration: Dec 13, 2020
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
cis-Nonachlor	5103-73-1	98.6	100.4	99.0

I010796
cis-Nonochlor-Accustd-100ug/ml
Solvent / Lot: methanol
Prep: 11/20/2020 by VS
Exp: 11/27/2022
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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Rev. 5/18

1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 11.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: APP-9-112-D-20X
Description: Hexachlorobenzene in Dichloromethane
Lot: 219051389
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*

Signal Word: Warning

Date Certified: May 13, 2019
Expiration: May 13, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobenzene	118-74-1	99.0	2002	1982

J006504
Hexachlorobenzene
Solvent / Lot: Dichloromethane
Prep: 6/21/2021 by YZ
Exp: 5/13/2029
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

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1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this .

4 **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

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CERTIFICATE OF ANALYSIS

Catalog No: P-028S
Description: o,p'-DDT
Lot: 221071322
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jul 21, 2021
Expiration: Aug 21, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDT	789-02-6	99.9	100.1	100.0

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: P-024S
Description: o,p'-DDD
Lot: 220051307-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jul 6, 2021
Expiration: Aug 6, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o,p'-DDD	53-19-0	100.0	100.2	100.2

K 0448

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

Catalog No: P-331S
Description: Oxychlordane Isomer
Lot: 221051706
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: May 28, 2021
Expiration: Jun 28, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Oxychlordane Isomer	27304-13-8	99.2	100.1	99.3

K000449
Oxychlordane isomer
Solvent / Lot: methanol
Prep: 1/13/2022 by YZ
Exp: 6/28/2023
Location:

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: P-297S
Description: cis-Nonachlor
Lot: 221041461
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Apr 22, 2021
Expiration: Apr 22, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
cis-Nonachlor	5103-73-1	98.6	101.1	99.7

K 000450

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:
Larry Decker, Organic QC Manager

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CERTIFICATE OF ANALYSIS

Catalog No: P-184S
Description: trans-Nonachlor
Lot: 220091107
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Sep 11, 2020
Expiration: Sep 11, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB AR-1463 ANAB AT-1339 ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
trans-Nonachlor	39765-80-5	99.0	100.2	99.2

K 0045 1

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 219051741-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jun 5, 2020
Expiration: Jun 5, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED AR-1463 ANAB ACCREDITED AT-1339 ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Mirex	2385-85-5	98.2	100.2	98.4

K 000452

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

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K 000 452

CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 221121451
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Dec 27, 2021
Expiration: Dec 27, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Mirex	2385-85-5	98.2	100.0	98.2

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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CERTIFICATE OF ANALYSIS

Catalog No: M-8081-DS
Description: 4,4'-DDT & Endrin
Lot: 221031488-04
Solvent: Hexane
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Apr 8, 2022
Expiration: May 8, 2023
Sample Size: 1 mL
Components: 2
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
4,4'-DDT	50-29-3	100.0	200.9	200.9
Endrin	72-20-8	99.8	200.0	199.6

K7002

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32292 **Lot No.:** A0185477

Description : Organochlorine Pesticide Mix AB # 2

Organochlorine Pesticide Mix AB # 2 8-80 µg/mL, Hexane/Toluene(1:1), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	alpha-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-84-6 (Lot 12307600)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
2	gamma-BHC (Lindane)	8.0 µg/mL	+/- 0.0654 µg/mL	Gravimetric
	CAS # 58-89-9 (Lot 13087200)		+/- 0.3672 µg/mL	Unstressed
	Purity 99%		+/- 0.5281 µg/mL	Stressed
3	beta-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-85-7 (Lot 0588007-4)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
4	delta-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-86-8 (Lot 13112400)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
5	Heptachlor	8.0 µg/mL	+/- 0.0654 µg/mL	Gravimetric
	CAS # 76-44-8 (Lot 803759)		+/- 0.3672 µg/mL	Unstressed
	Purity 99%		+/- 0.5281 µg/mL	Stressed
6	Aldrin	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 309-00-2 (Lot 12983100)		+/- 0.3702 µg/mL	Unstressed
	Purity 96%		+/- 0.5323 µg/mL	Stressed
7	Heptachlor epoxide (isomer B)	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 1024-57-3 (Lot 13168200)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed

8	trans-Chlordane		8.0	µg/mL	+/-	0.0657	µg/mL	Gravimetric
	CAS # 5103-74-2	(Lot 32943)			+/-	0.3689	µg/mL	Unstressed
	Purity 98%				+/-	0.5305	µg/mL	Stressed
9	cis-Chlordane		8.0	µg/mL	+/-	0.0657	µg/mL	Gravimetric
	CAS # 5103-71-9	(Lot 31766)			+/-	0.3689	µg/mL	Unstressed
	Purity 98%				+/-	0.5305	µg/mL	Stressed
10	Endosulfan I		8.0	µg/mL	+/-	0.0654	µg/mL	Gravimetric
	CAS # 959-98-8	(Lot BCCF4060)			+/-	0.3672	µg/mL	Unstressed
	Purity 99%				+/-	0.5281	µg/mL	Stressed
11	4,4'-DDE		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 72-55-9	(Lot GHYQG)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed
12	Dieldrin		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 60-57-1	(Lot 11129900)			+/-	0.7408	µg/mL	Unstressed
	Purity 98%				+/-	1.0653	µg/mL	Stressed
13	Endrin		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 72-20-8	(Lot 13157400)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
14	4,4'-DDD		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 72-54-8	(Lot HAN02)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
15	Endosulfan II		16.0	µg/mL	+/-	0.1309	µg/mL	Gravimetric
	CAS # 33213-65-9	(Lot 12448900)			+/-	0.7345	µg/mL	Unstressed
	Purity 99%				+/-	1.0562	µg/mL	Stressed
16	4,4'-DDT		16.1	µg/mL	+/-	0.1315	µg/mL	Gravimetric
	CAS # 50-29-3	(Lot 220428JLM)			+/-	0.7378	µg/mL	Unstressed
	Purity 98%				+/-	1.0610	µg/mL	Stressed
17	Endrin aldehyde		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 7421-93-4	(Lot 30720)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed
18	Endosulfan sulfate		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 1031-07-8	(Lot BCCB0424)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
19	Methoxychlor		80.2	µg/mL	+/-	0.5781	µg/mL	Gravimetric
	CAS # 72-43-5	(Lot 13027000)			+/-	3.6697	µg/mL	Unstressed
	Purity 98%				+/-	5.2871	µg/mL	Stressed
20	Endrin ketone		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 53494-70-5	(Lot 13026800)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

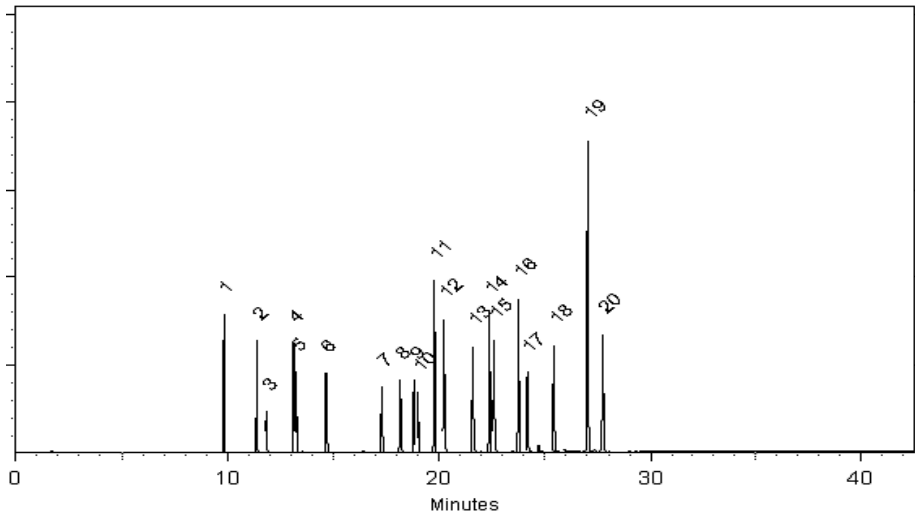
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

Date Mixed: 19-May-2022 **Balance:** B442140311

Fang-Yun Lo - QC Analyst

Date Passed: 26-May-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

125 Market Street
New Haven, CT 06513
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AccuStandard® Inc.

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CERTIFICATE OF ANALYSIS

Catalog No: M-502-36-10X
Description: Hexachlorobutadiene
Lot: 222031188
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Mar 11, 2022
Expiration: Apr 11, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobutadiene	87-68-3	98.0	2002	1962

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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CERTIFICATE OF ANALYSIS

Catalog No: M-502-36-10X
Description: Hexachlorobutadiene
Lot: 222031188
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Mar 11, 2022
Expiration: Apr 11, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobutadiene	87-68-3	98.0	2002	1962

K011468

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

Catalog No: P-066S
Description: Mirex
Lot: 221121451
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Dec 27, 2021
Expiration: Dec 27, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
Mirex	2385-85-5	98.2	100.0	98.2

L000343

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

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AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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Rev. 7/20

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CERTIFICATE OF ANALYSIS

Catalog No: P-184S
Description: trans-Nonachlor
Lot: 222031383
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Mar 29, 2022
Expiration: Mar 29, 2032
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
trans-Nonachlor	39765-80-5	100.0	100.3	100.3

L000344

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

Catalog No: P-331S
Description: Oxychlordane Isomer
Lot: 221051706-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jun 29, 2022
Expiration: Jul 29, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
Oxychlordane Isomer	27304-13-8	99.2	100.1	99.3

L000 345

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

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CERTIFICATE OF ANALYSIS

Catalog No: P-297S
Description: cis-Nonachlor
Lot: 222061106
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jun 8, 2022
Expiration: Jun 8, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity[3] %	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
cis-Nonachlor	5103-73-1	98.6	100.6	99.2

L 000346

This Certified Reference Material was verified in accordance with ISO/IEC 17025 (AT-1339) and ISO 17034 (AR-1463)

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[3] Purity/Identity determined by one or more of the following methods: GC/MS, LC/MS, NMR, FTIR, Melting Point.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

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CERTIFICATE OF ANALYSIS

Catalog No: P-024S
Description: o,p'-DDD
Lot: 220051307-02
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Aug 10, 2022
Expiration: Sep 10, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o,p'-DDD	53-19-0	100.0	100.2	100.2

L000747

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

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Tel (203)786-5290
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CERTIFICATE OF ANALYSIS

Catalog No: P-026S
Description: o,p'-DDE
Lot: 221081298
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Aug 19, 2021
Expiration: Aug 19, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o,p'-DDE	3424-82-6	98.9	100.2	99.1

L 000 348

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 7/20

125 Market Street
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USA

AccuStandard®

Tel (203)786-5290
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CERTIFICATE OF ANALYSIS

Catalog No: P-028S
Description: o,p'-DDT
Lot: 221071322-01
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Sep 26, 2022
Expiration: Oct 26, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o,p'-DDT	789-02-6	99.9	100.1	100.0

L000349

This Certified Reference Material was verified in accordance with ISO/IEC 17025 (AT-1339) and ISO 17034 (AR-1463)

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[3] Purity/Identity determined by one or more of the following methods: GC/MS, LC/MS, NMR, FTIR, Melting Point.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1083

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-02 A	File ID:	02092345ECD7.D
Sampled:	01/12/23 08:38	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 03:40
% Solids:	61.90	Preparation:	EPA 3546 (Microwave)	Initial/Final:	20.23 g Wet / 2.5 mL
Batch:	BLA0674	Sequence:	SLB0148	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	151	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	174	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	59.5	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9857*	*5.96*	*74.6*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9857*	*4.87*	*61.0*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9857*	*5.56*	*69.6*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9857*	*6.06*	*75.8*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092345ECD7.D
Data file 2: /230209.b/230209.b/02092345ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0249-02
Client ID:
Injection Date: 10-FEB-2023 03:40
Report Date: 02/10/2023 12:59
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.804	-0.005	129376	5.680	-0.005	125301	24.4	30.3	21.6	Tetrachloro-m-xylene
13.884	-0.008	121551	14.111	-0.003	161466	29.8	27.8	6.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	374919	-25.5
Hexabromobiphenyl	647433	380972	-41.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	305531	-9.3
Hexabromobiphenyl	382032	365315	-4.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.395	-0.010	108315	577.5	1	8.297	-0.005	132728	961.0
Aroclor-1248	2	8.562	-0.018	72296	302.2	2	8.703	-0.007	98647	663.6
Aroclor-1248	3	8.981	-0.017	270867	591.9	3	9.135	-0.017	117081	644.6
Aroclor-1248	4	9.285	-0.009	279605	1234.4	4	9.530	-0.046	169259	753.4
		Total Col1Ave (4 peaks):			676.5		Total Col2Ave (4 peaks):			755.7 RPD = 11
		Corrected Ave (3 peaks):			490.5		Corrected Ave (3 peaks):			687.2 RPD = 33
Aroclor-1254	1	9.285	-0.014	279605	731.8	1	9.436	-0.008	206452	931.4
Aroclor-1254	2	9.360	-0.018	132623	812.9	2	9.954	-0.010	83574	466.5
Aroclor-1254	3	9.656	-0.014	164340	671.3	3	10.102	-0.014	366901	938.8
Aroclor-1254	4	9.785	-0.023	387003	806.7	4	10.345	-0.022	401956	1028.5
Aroclor-1254	5	10.123	-0.054	173591	556.5	5	10.553	-0.011	214447	985.2
		Total Col1Ave (5 peaks):			715.8		Total Col2Ave (5 peaks):			870.1 RPD = 19
		Corrected Ave (4 peaks):			691.5		Corrected Ave (4 peaks):			830.5 RPD = 18
					753.175					
Aroclor-1260	1	11.032	-0.012	78404	366.8	1	11.642	-0.008	103871	394.1
Aroclor-1260	2	11.347	-0.013	58391	265.7	2	11.903	-0.011	163914	245.8
Aroclor-1260	3	11.717	-0.018	140247	242.5	3	12.422	-0.009	49762	299.4
Aroclor-1260	4	12.118	-0.022	76182	254.9	4	12.486	-0.011	109314	253.3
Aroclor-1260	5	12.233	-0.011	34044	261.3	NS	---			----
		Total Col1Ave (5 peaks):			278.2		Total Col2Ave (4 peaks):			298.2 RPD = 7
		Corrected Ave (4 peaks):			256.1		Corrected Ave (3 peaks):			266.2 RPD = 4
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.909 - 13.792) = 5302197 Col1 Total PCB = 1.2 ppm*

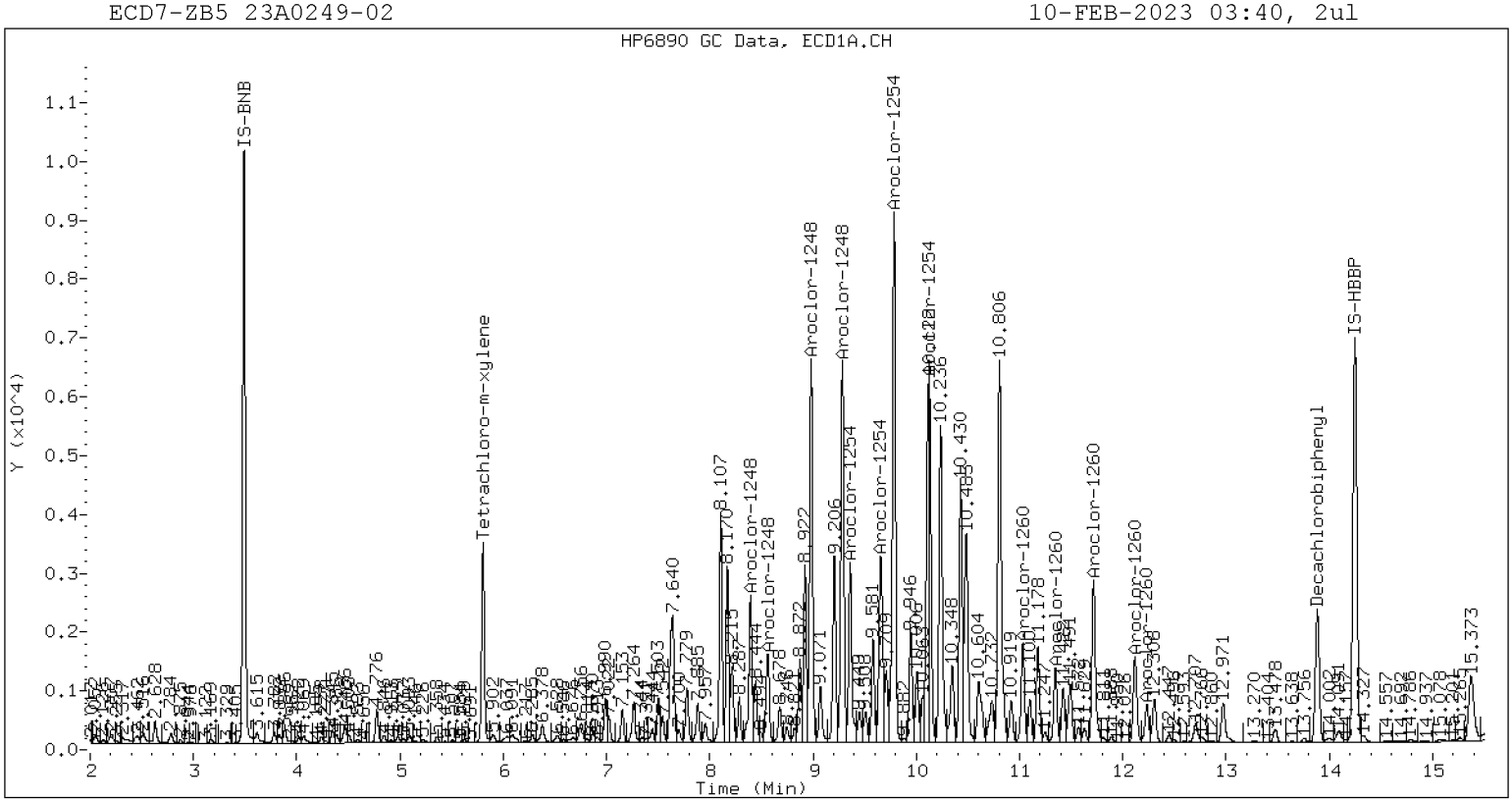
Total PCB Area Col2 (5.785 - 14.015) = 5038591 Col2 Total PCB = 1.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

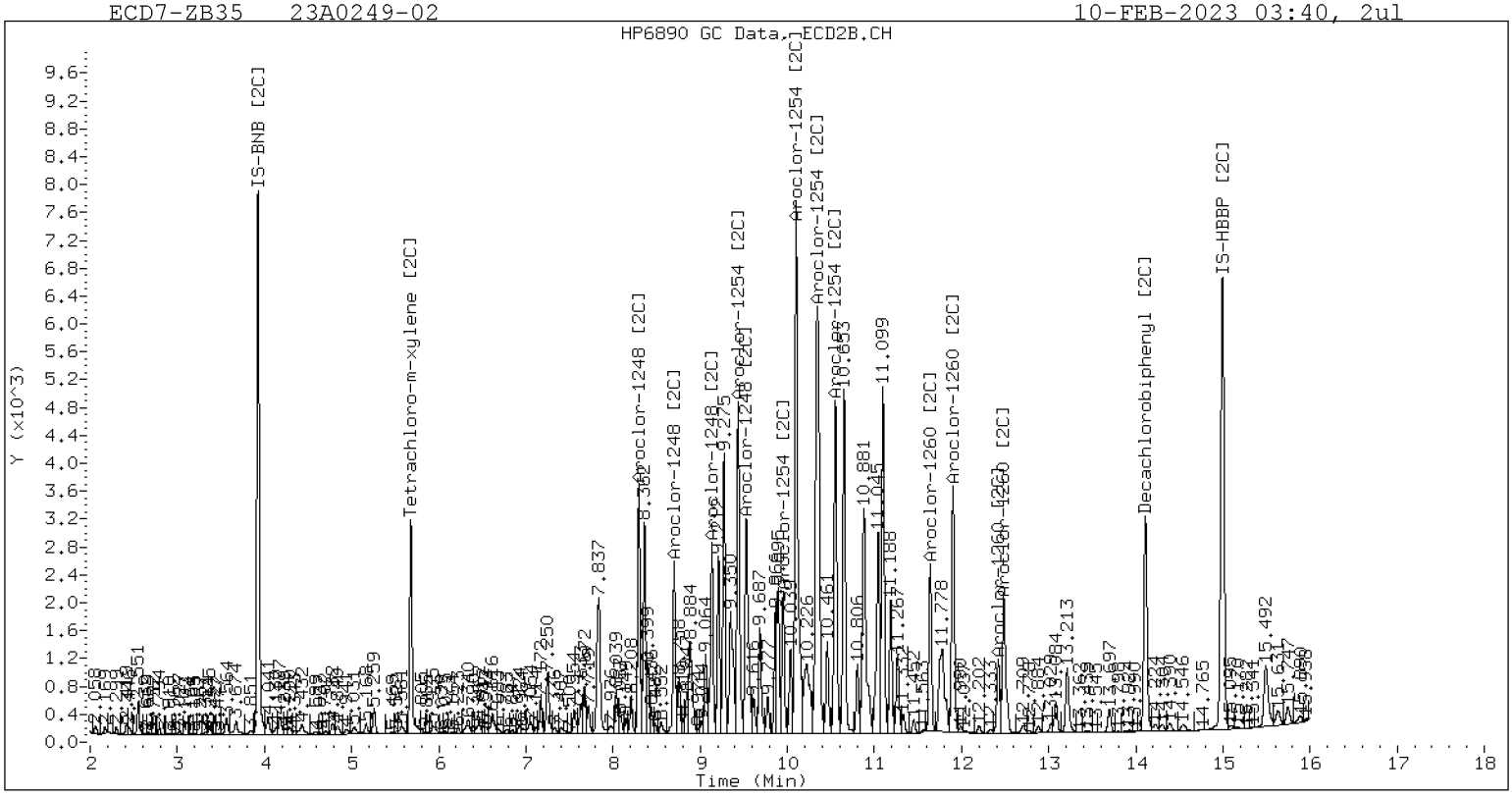
PCB Dual Column Chromatograms

ECD7-ZB5 23A0249-02 10-FEB-2023 03:40, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0249-02 10-FEB-2023 03:40, 2ul

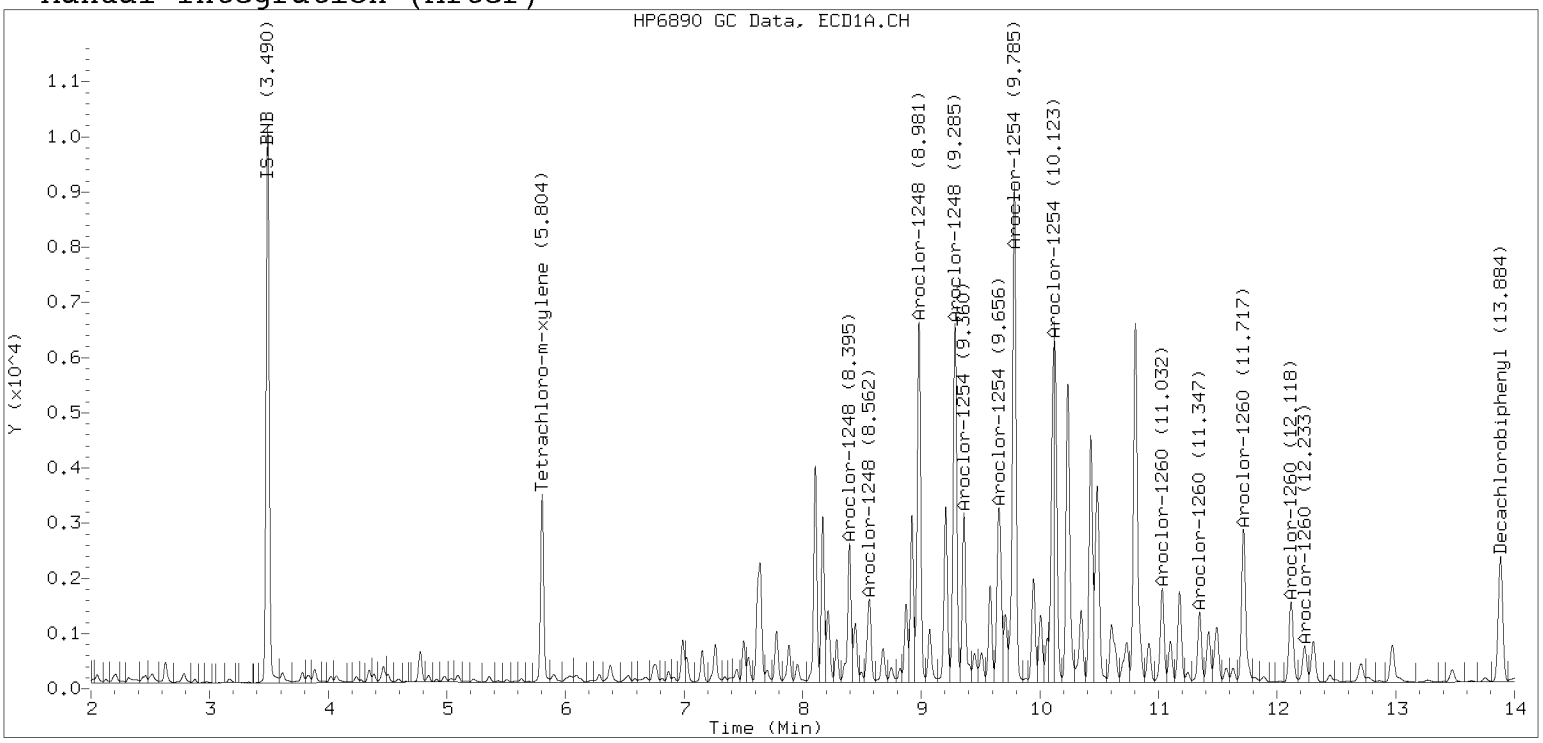


ZB-35 Manual Integration: YES

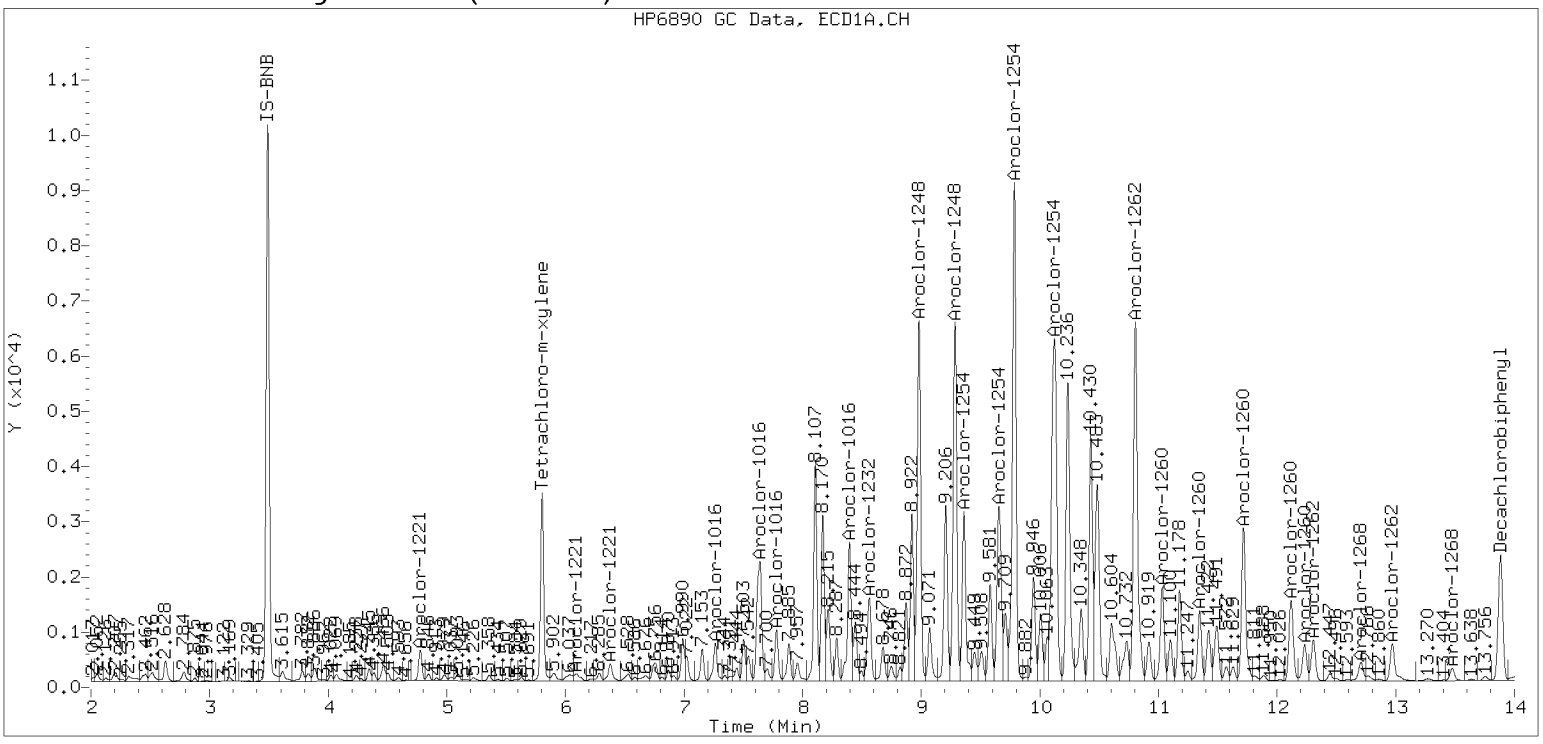
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230209.b/02092345ECD7.D Injection Date: 10-FEB-2023 03:40

Manual Integration (After)



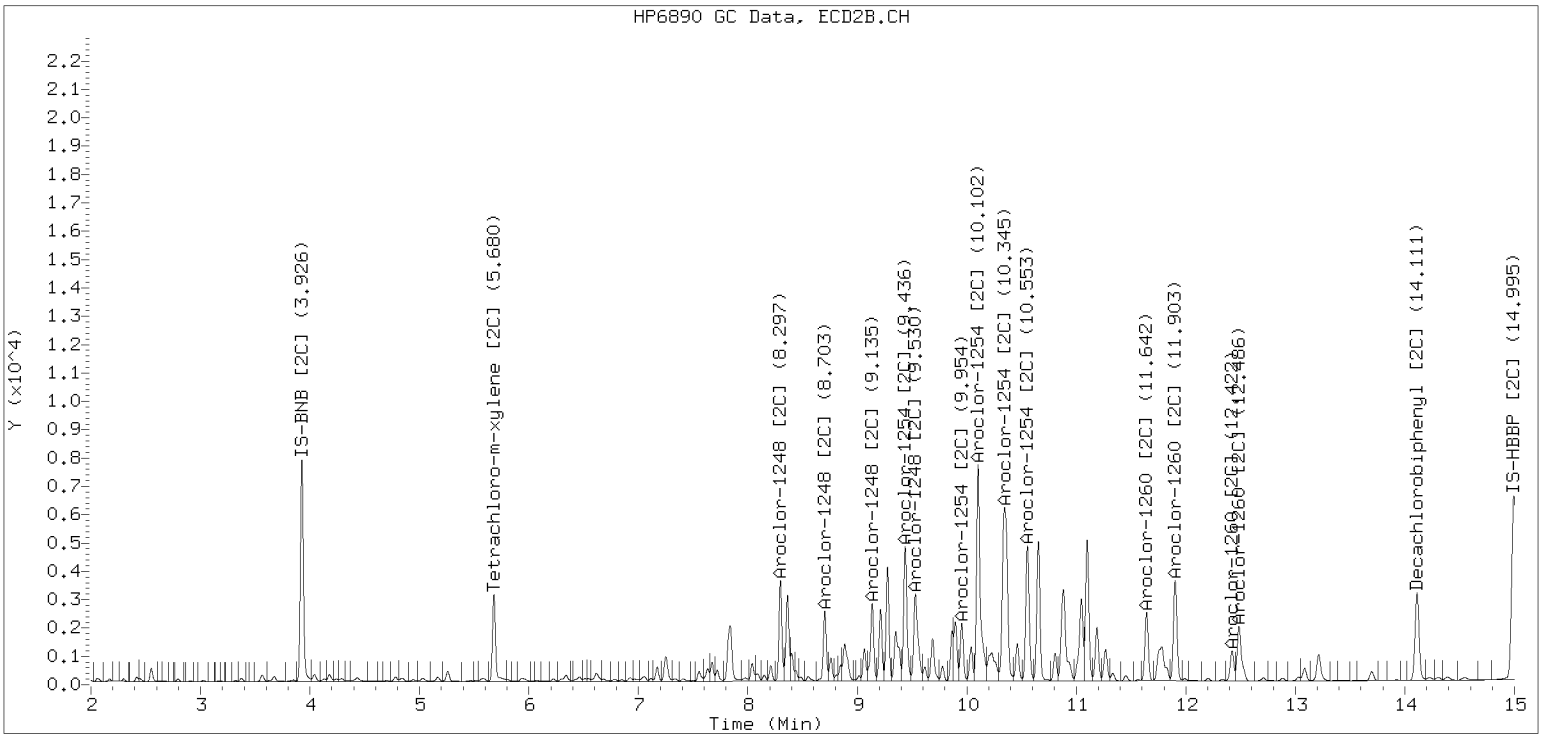
Processed Integration (Before)



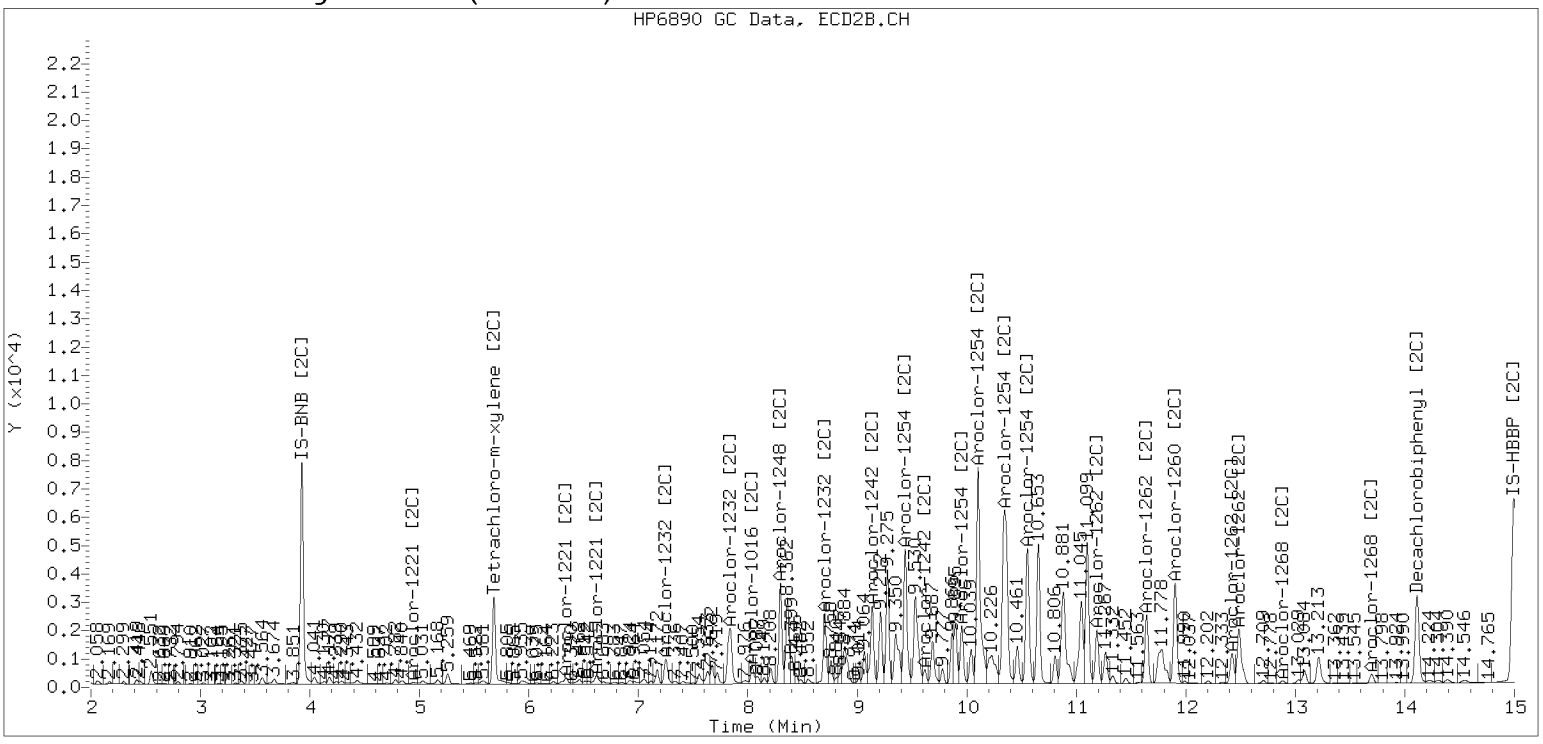
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230209.b/230209.b/02092345ECD7.D Injection Date: 10-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1018

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-03 A	File ID:	02092346ECD7.D
Sampled:	01/12/23 10:21	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 04:01
% Solids:	49.91	Preparation:	EPA 3546 (Microwave)	Initial/Final:	25.08 g Wet / 2.5 mL
Batch:	BLA0674	Sequence:	SLB0148	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	32.7	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	37.5	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	38.9	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9889*	*5.05*	*63.2*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9889*	*4.44*	*55.5*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9889*	*4.93*	*61.7*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9889*	*5.20*	*65.1*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092346ECD7.D
Data file 2: /230209.b/230209.b/02092346ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0249-03
Client ID:
Injection Date: 10-FEB-2023 04:01
Report Date: 02/10/2023 12:59
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.004	119703	5.682	-0.004	115246	22.2	26.0	15.9	Tetrachloro-m-xylene
13.883	-0.009	100481	14.111	-0.004	136819	25.3	24.7	2.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	381269	-24.2
Hexabromobiphenyl	647433	371543	-42.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	327345	-2.8
Hexabromobiphenyl	382032	349105	-8.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.394	-0.011	27880	146.2	1	8.297	-0.005	26439	178.7
Aroclor-1248	2	8.563	-0.017	24980	102.7	2	8.703	-0.006	29521	185.4
Aroclor-1248	3	8.982	-0.017	67890	145.9	3	9.136	-0.015	35451	182.2
Aroclor-1248	4	9.285	-0.009	69576	302.0	4	9.532	-0.044	26235	109.0
		Total Col1Ave (4 peaks):			174.2		Total Col2Ave (4 peaks):			163.8 RPD = 6
		Corrected Ave (3 peaks):			131.6		Corrected Ave (3 peaks):			156.6 RPD = 17
Aroclor-1254	1	9.285	-0.014	69576	179.1	1	9.436	-0.009	55357	233.1
Aroclor-1254	2	9.359	-0.019	26812	161.6	2	9.955	-0.009	34932	182.0
Aroclor-1254	3	9.656	-0.014	59460	238.8	3	10.103	-0.013	96269	229.9
Aroclor-1254	4	9.784	-0.024	97055	198.9	4	10.346	-0.020	127127	303.6
Aroclor-1254	5	10.122	-0.055	120838	380.9	5	10.552	-0.012	87765	376.3
		Total Col1Ave (5 peaks):			231.9		Total Col2Ave (5 peaks):			265.0 RPD = 13
		Corrected Ave (4 peaks):			194.6		Corrected Ave (4 peaks):			237.1 RPD = 20
Aroclor-1260	1	11.030	-0.014	34126	163.7	1	11.641	-0.008	48339	191.9
Aroclor-1260	2	11.346	-0.015	29795	139.0	2	11.902	-0.011	87787	137.8
Aroclor-1260	3	11.716	-0.018	97177	172.3	3	12.421	-0.010	71957	453.1
Aroclor-1260	4	12.117	-0.023	43105	147.9	4	12.486	-0.010	96636	234.3
Aroclor-1260	5	12.237	-0.007	26936	212.0	NS	---			----
		Total Col1Ave (5 peaks):			167.0		Total Col2Ave (4 peaks):			254.3 RPD = 41*
		Corrected Ave (4 peaks):			155.7		Corrected Ave (3 peaks):			188.0 RPD = 19
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.909 - 13.792) = 2662575 Col1 Total PCB = 0.6 ppm*

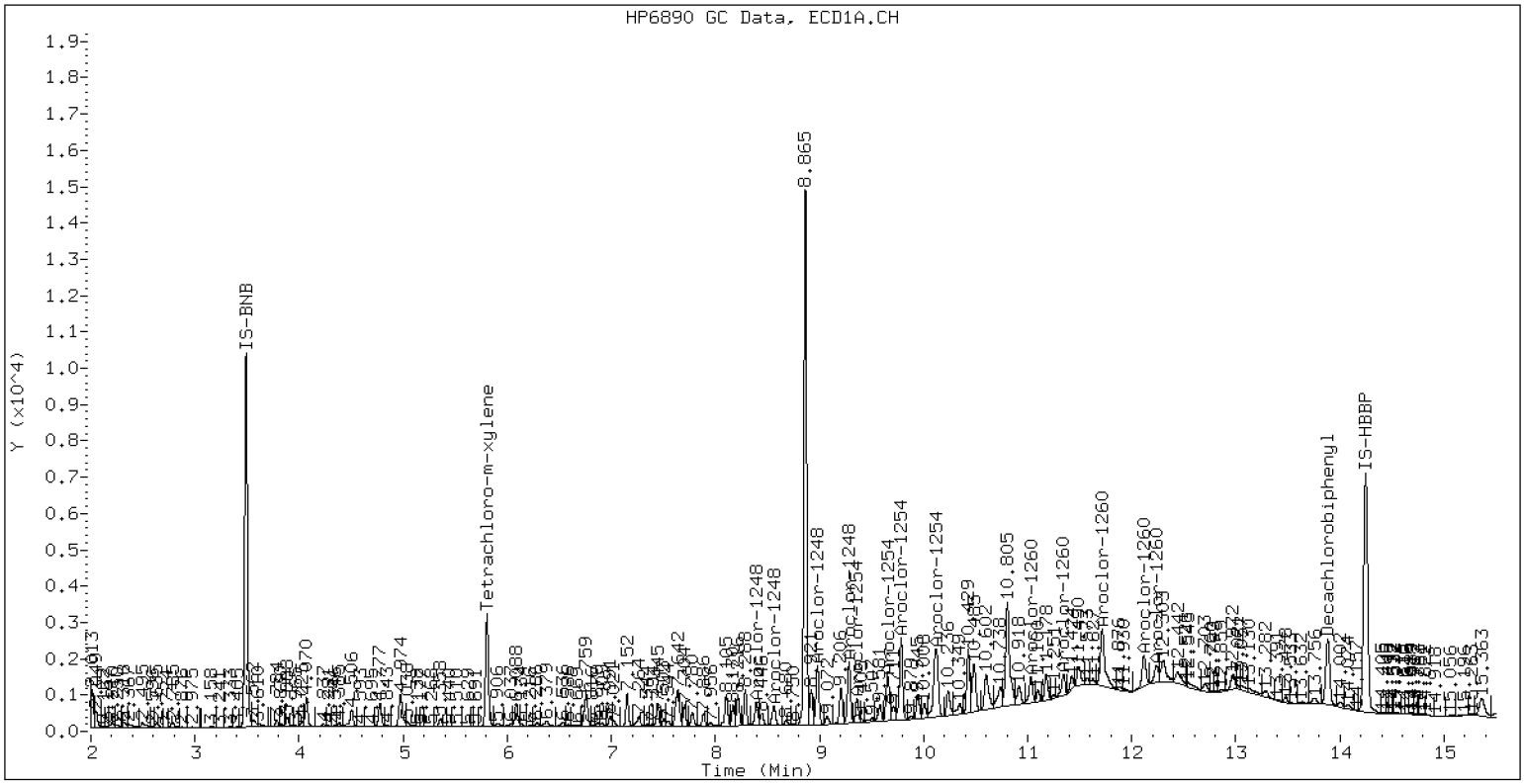
Total PCB Area Col2 (5.785 - 14.015) = 2422066 Col2 Total PCB = 0.7 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

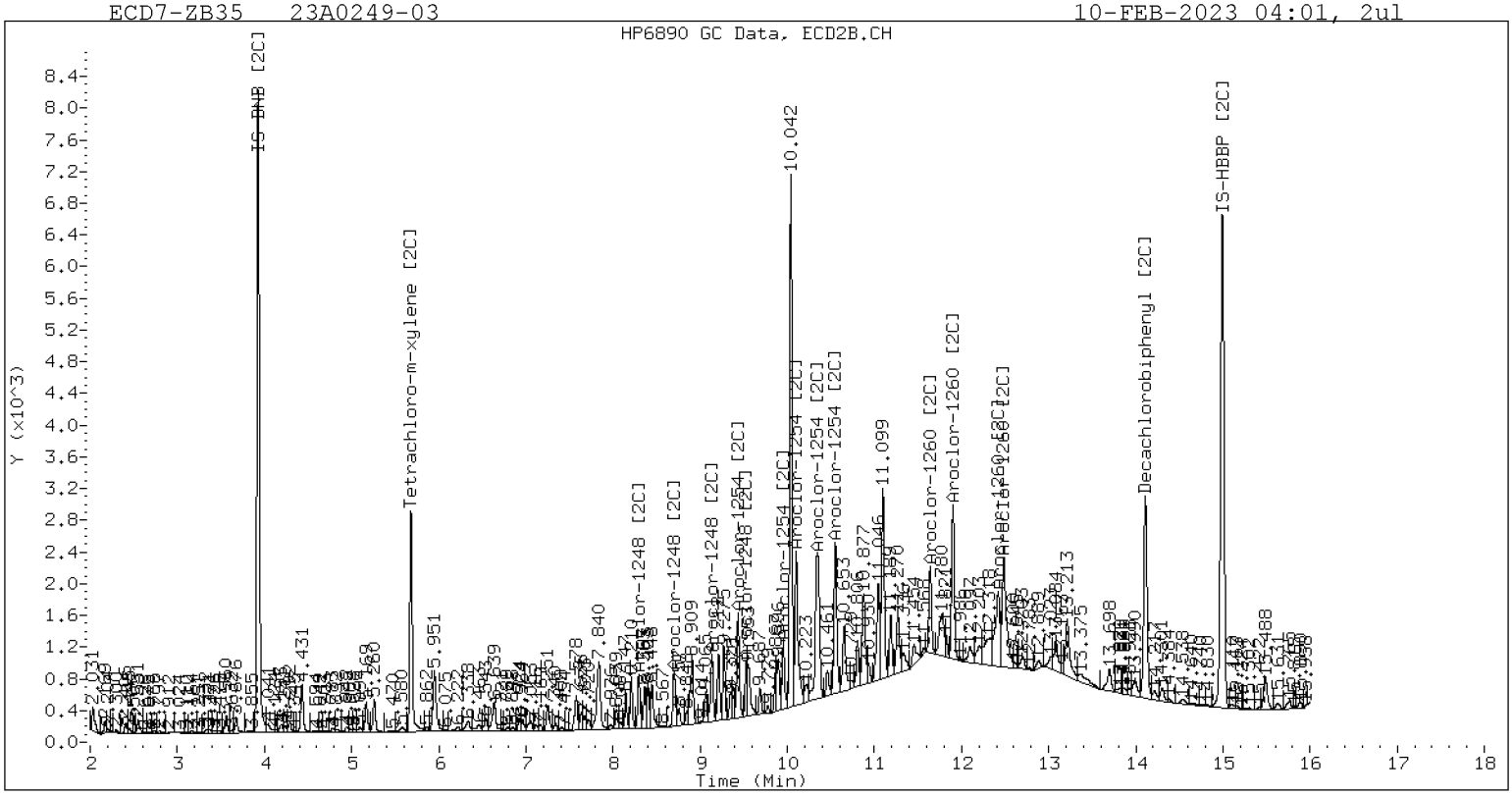
PCB Dual Column Chromatograms

ECD7-ZB5 23A0249-03 10-FEB-2023 04:01, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0249-03 10-FEB-2023 04:01, 2ul

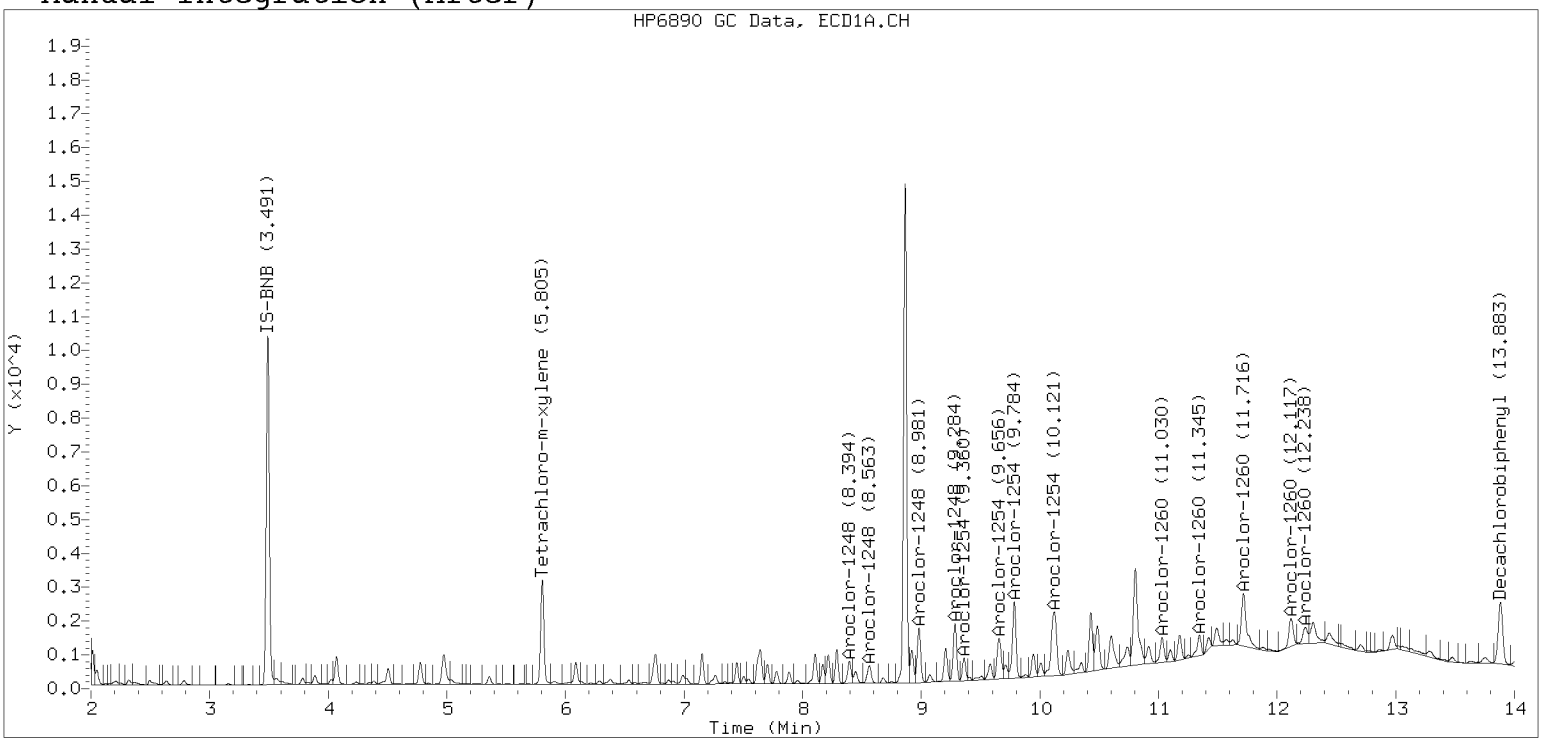


ZB-35 Manual Integration: YES

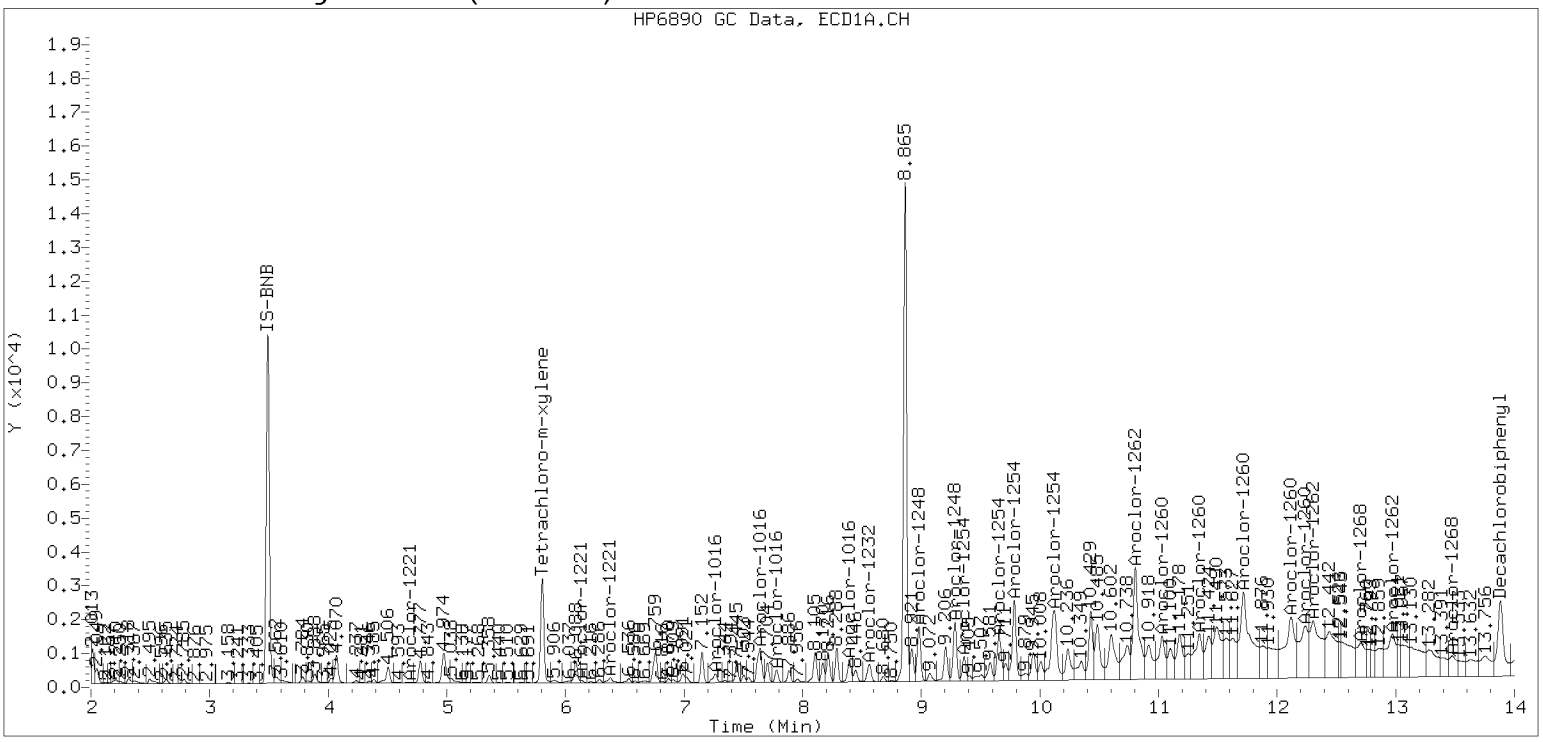
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230209.b/02092346ECD7.D Injection Date: 10-FEB-2023 04:01

Manual Integration (After)



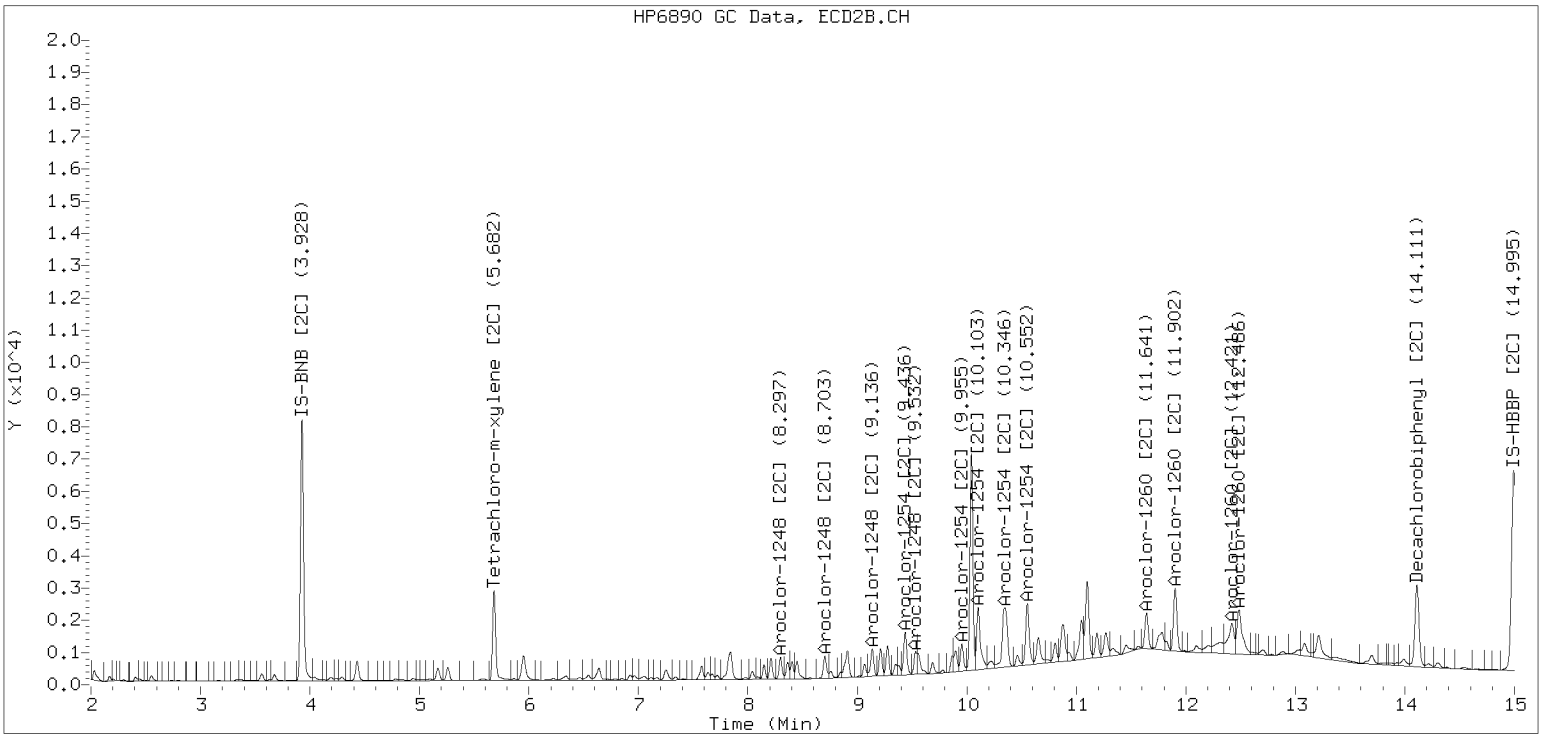
Processed Integration (Before)



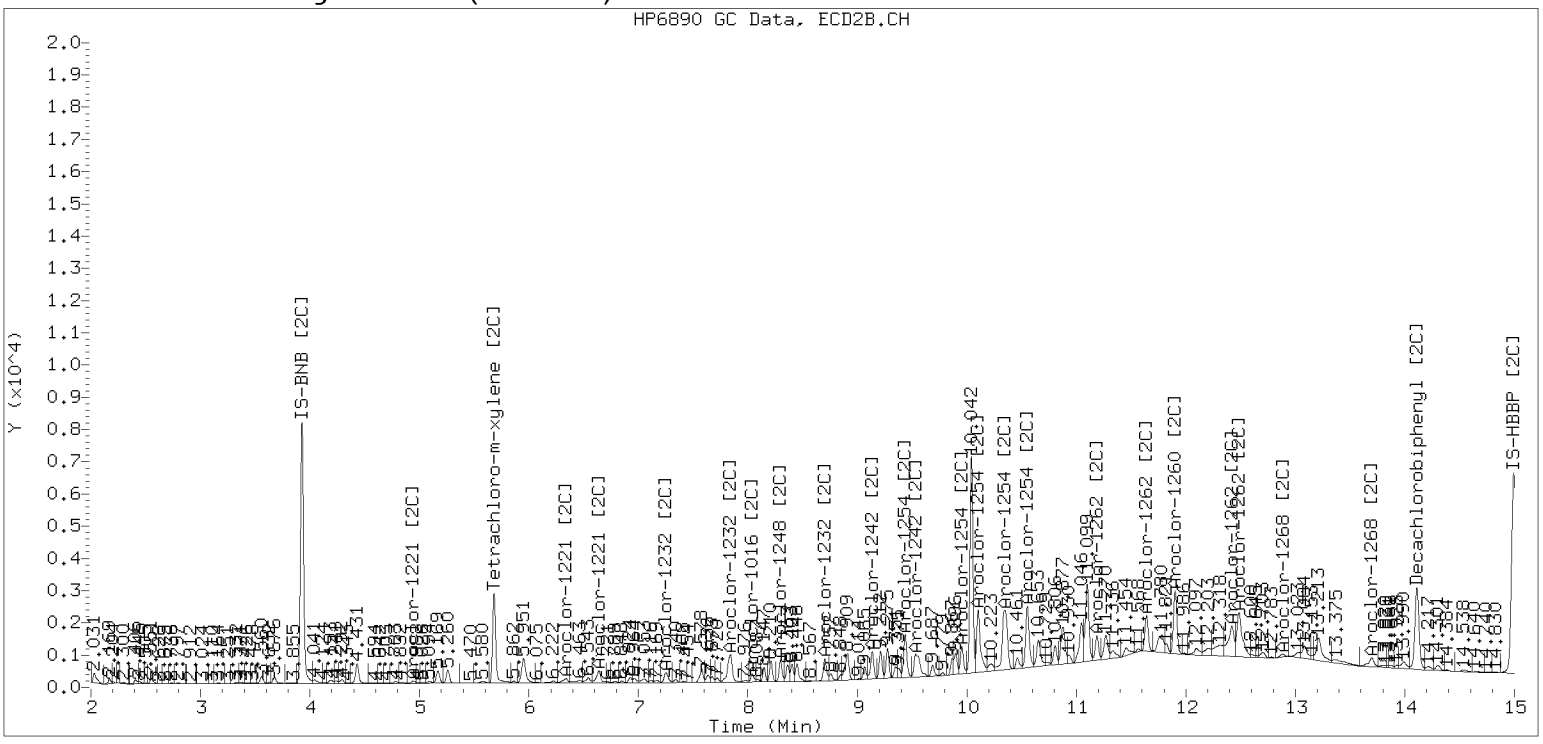
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230209.b/230209.b/02092346ECD7.D Injection Date: 10-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1084

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-04 A	File ID:	02092347ECD7.D
Sampled:	01/12/23 09:47	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 04:22
% Solids:	53.88	Preparation:	EPA 3546 (Microwave)	Initial/Final:	23.26 g Wet / 2.5 mL
Batch:	BLA0674	Sequence:	SLB0148	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	123	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	96.8	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	62.5	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9793*	*5.30*	*66.4*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9793*	*4.84*	*60.7*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9793*	*5.18*	*65.0*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9793*	*5.80*	*72.7*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092347ECD7.D
Data file 2: /230209.b/230209.b/02092347ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0249-04
Client ID:
Injection Date: 10-FEB-2023 04:22
Report Date: 02/10/2023 12:59
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.004	130801	5.681	-0.004	124368	24.3	29.1	18.0	Tetrachloro-m-xylene
13.883	-0.008	100151	14.112	-0.003	136971	26.6	26.0	2.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	381141	-24.3
Hexabromobiphenyl	647433	352557	-45.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	316369	-6.1
Hexabromobiphenyl	382032	332111	-13.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.394	-0.011	69920	366.7	1	8.298	-0.005	92805	649.0
Aroclor-1248	2	8.563	-0.017	64748	266.2	2	8.702	-0.007	94174	611.8
Aroclor-1248	3	8.981	-0.018	183357	394.1	3	9.136	-0.016	104813	557.3
Aroclor-1248	4	9.284	-0.010	178507	775.2	4	9.530	-0.046	149139	641.1
		Total Col1Ave (4 peaks):			450.6		Total Col2Ave (4 peaks):			614.8 RPD = 31
		Corrected Ave (3 peaks):			342.3		Corrected Ave (3 peaks):			603.4 RPD = 55*
Aroclor-1254	1	9.284	-0.015	178507	459.5	1	9.435	-0.009	167281	728.8
Aroclor-1254	2	9.360	-0.018	85455	515.2	2	9.954	-0.010	89743	483.7
Aroclor-1254	3	9.656	-0.013	117949	473.9	3	10.102	-0.014	258171	638.0
Aroclor-1254	4	9.785	-0.024	240353	492.8	4	10.346	-0.020	283001	699.3
Aroclor-1254	5	10.120	-0.057	258135	814.0	5	10.552	-0.012	170906	758.2
		Total Col1Ave (5 peaks):			551.1		Total Col2Ave (5 peaks):			661.6 RPD = 18
		Corrected Ave (4 peaks):			485.4		Corrected Ave (4 peaks):			637.5 RPD = 27
Aroclor-1260	1	11.032	-0.012	64938	328.3	1	11.641	-0.008	86810	362.3
Aroclor-1260	2	11.346	-0.014	52254	257.0	2	11.902	-0.011	157768	260.3
Aroclor-1260	3	11.716	-0.018	139160	260.0	3	12.422	-0.008	52717	348.9
Aroclor-1260	4	12.117	-0.022	77088	278.7	4	12.486	-0.010	110877	282.6
Aroclor-1260	5	12.231	-0.012	33569	278.4	NS	---			----
		Total Col1Ave (5 peaks):			280.5		Total Col2Ave (4 peaks):			313.5 RPD = 11
		Corrected Ave (4 peaks):			268.5		Corrected Ave (3 peaks):			297.3 RPD = 10
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.909 - 13.792) = 9551351 Col1 Total PCB = 2.2 ppm*

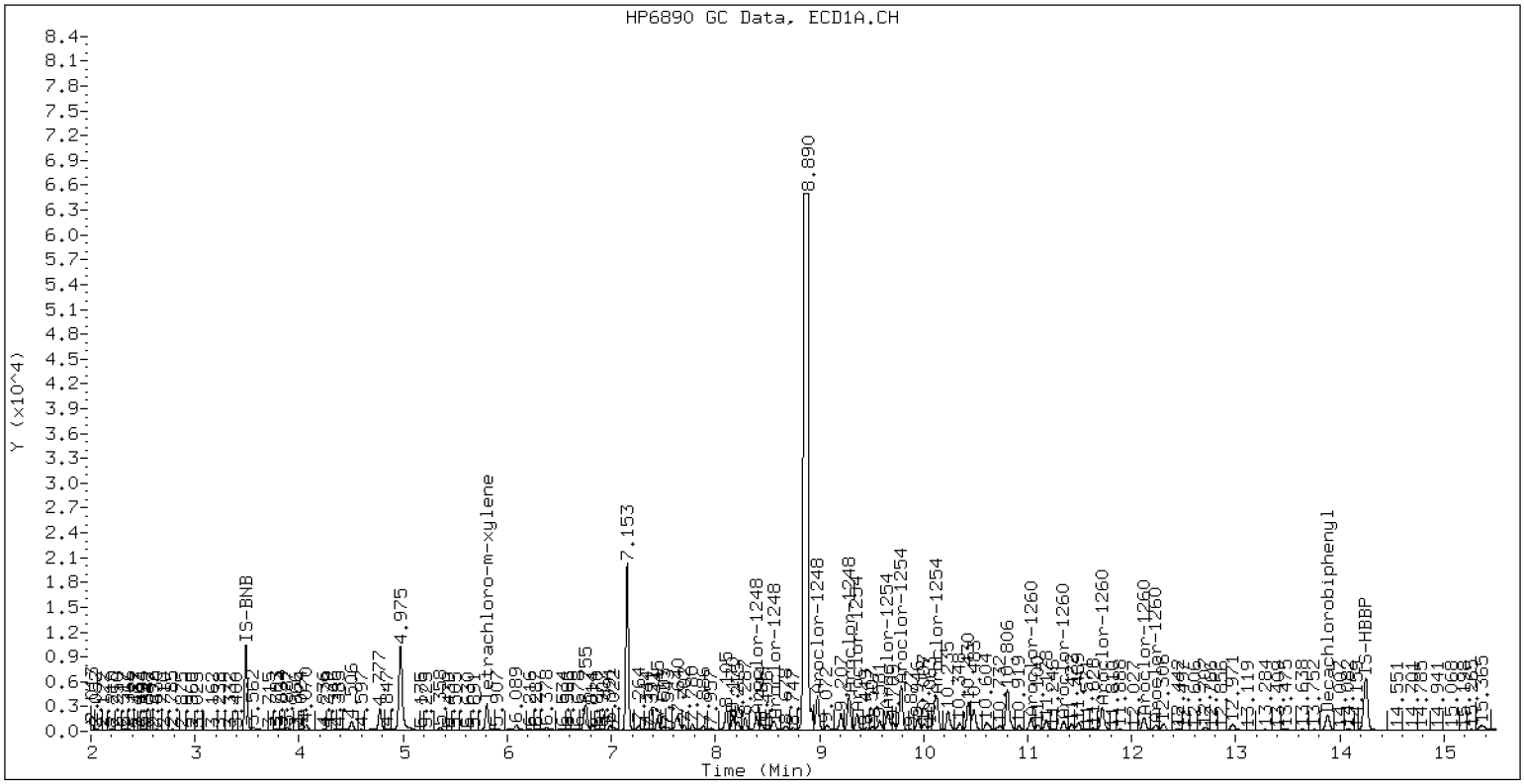
Total PCB Area Col2 (5.785 - 14.015) = 9063740 Col2 Total PCB = 2.7 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

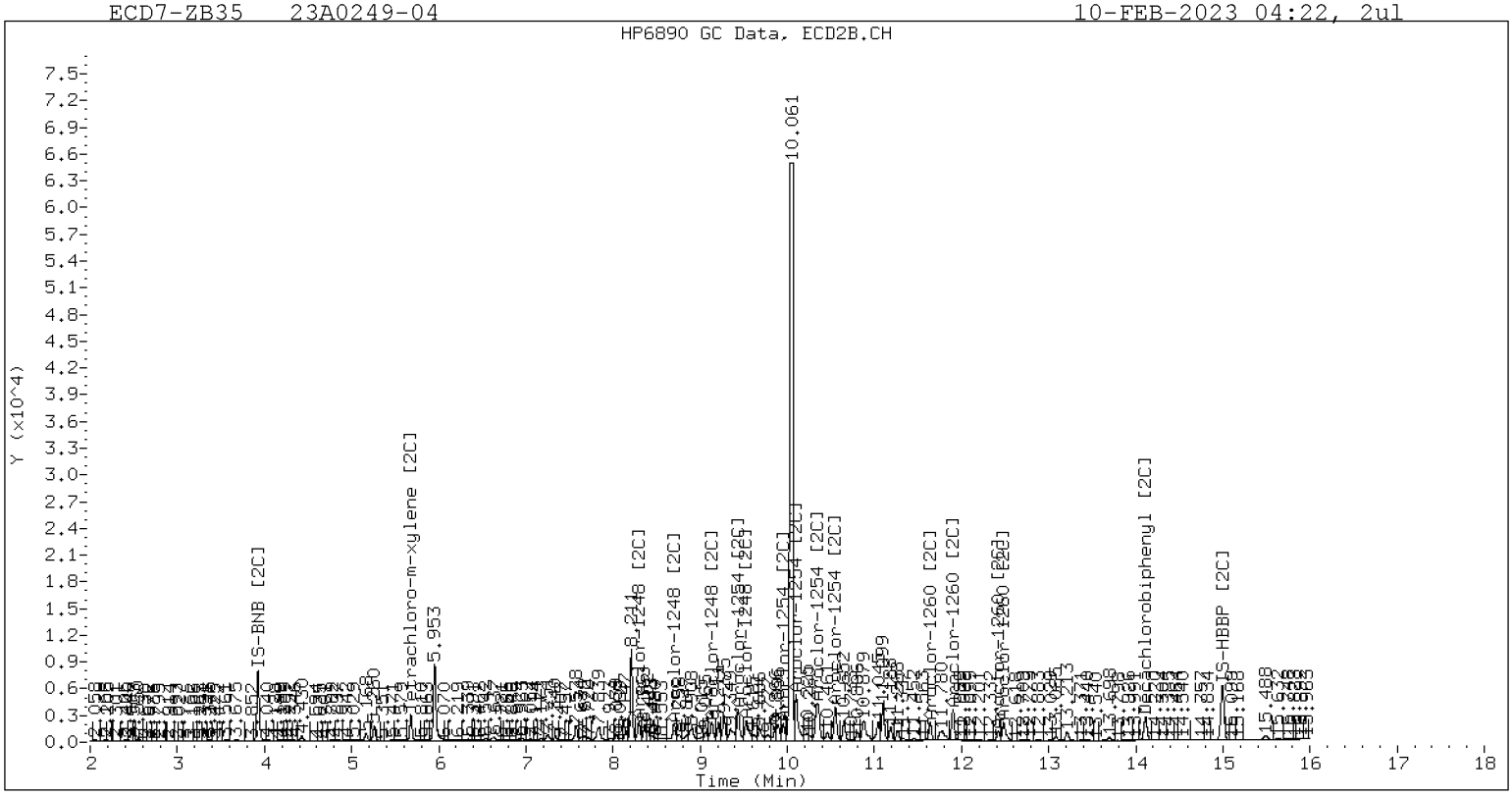
PCB Dual Column Chromatograms

ECD7-ZB5 23A0249-04 10-FEB-2023 04:22, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0249-04 10-FEB-2023 04:22, 2ul

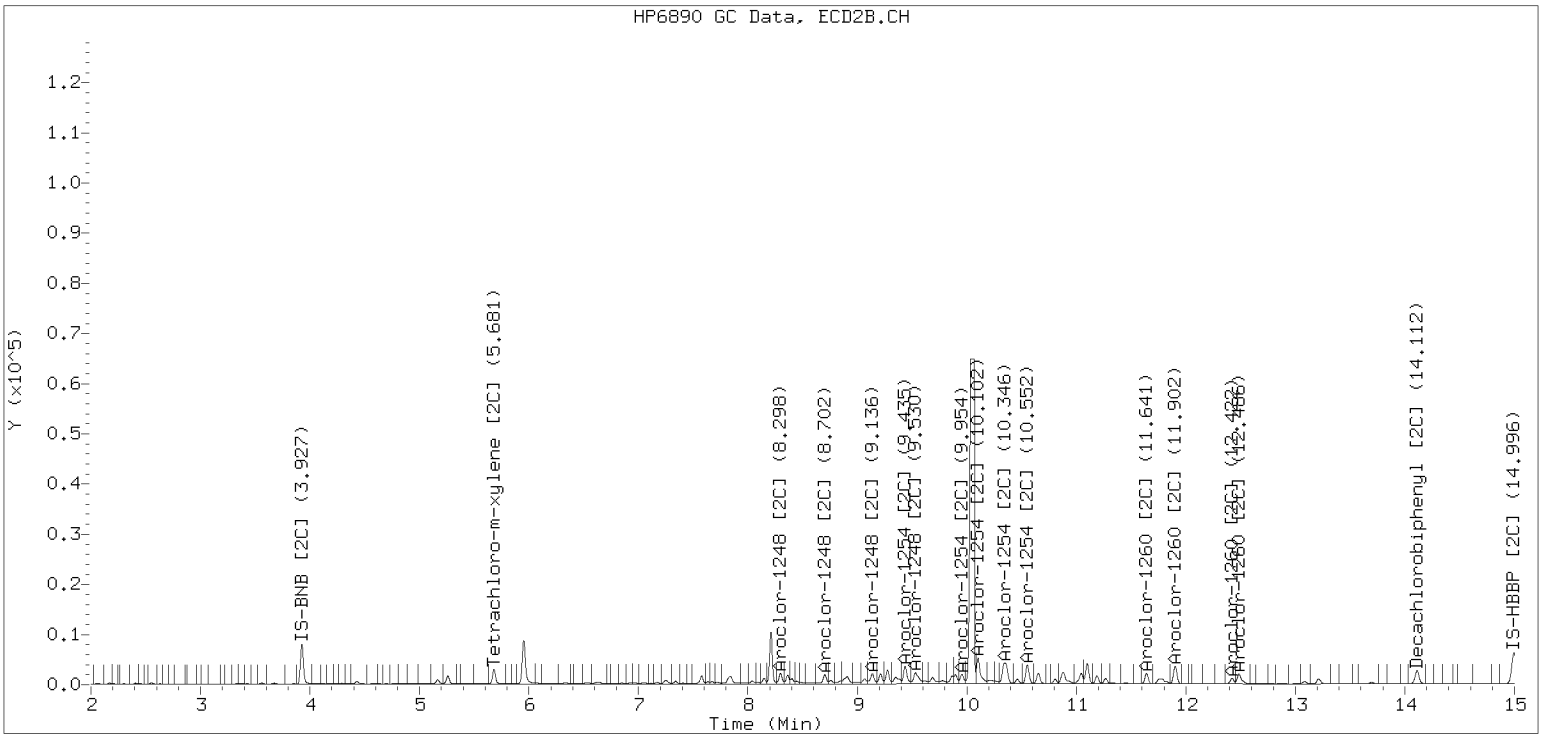


ZB-35 Manual Integration: YES

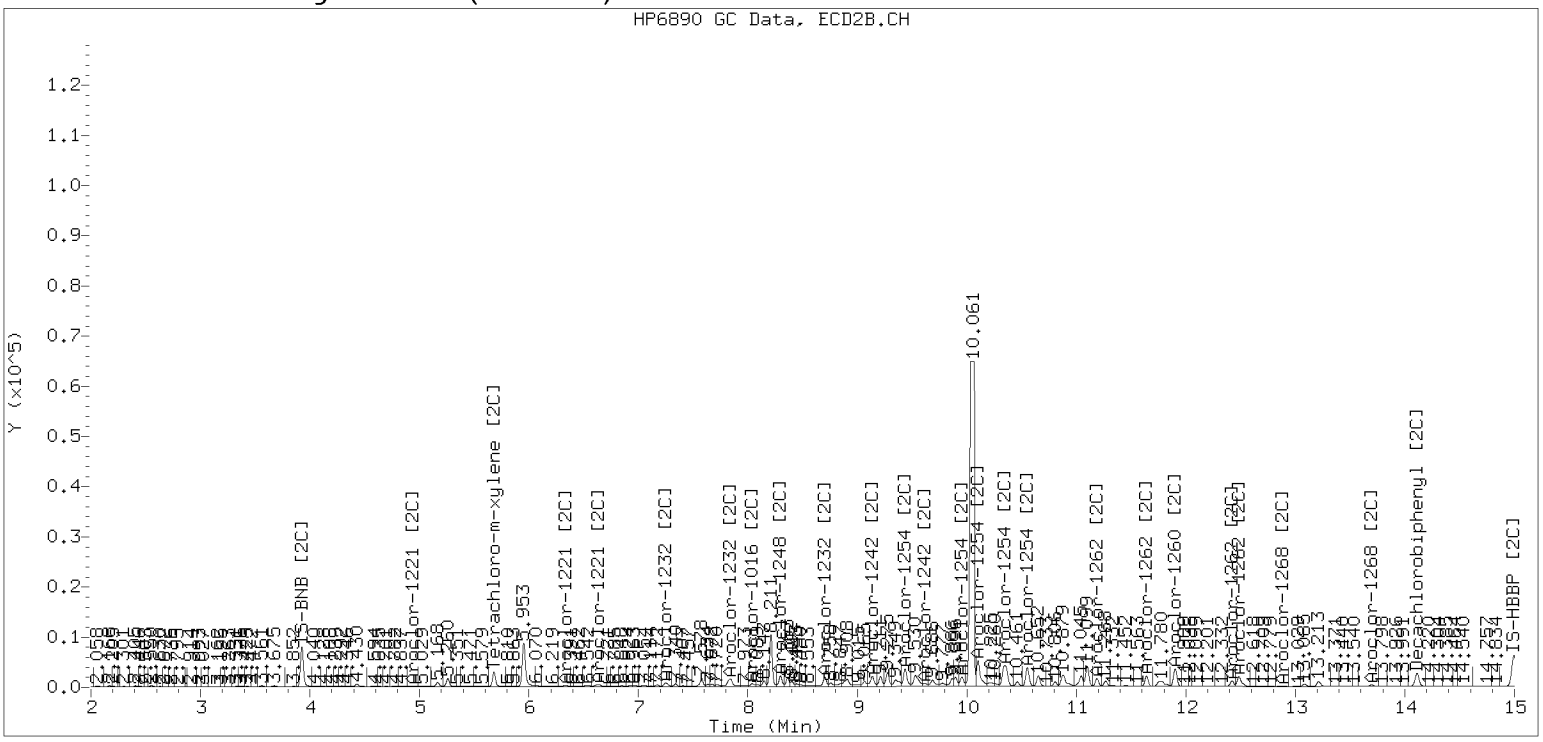
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230209.b/230209.b/02092347ECD7.D Injection Date: 10-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1025

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-05 A	File ID:	02092372ECD7.D
Sampled:	01/12/23 11:28	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 13:07
% Solids:	59.36	Preparation:	EPA 3546 (Microwave)	Initial/Final:	21.11 g Wet / 2.5 mL
Batch:	BLA0674	Sequence:	SLB0148	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	86.6	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	116	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	89.1	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9803*	*6.42*	*80.5*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9803*	*4.51*	*56.5*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9803*	*6.25*	*78.4*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9803*	*5.00*	*62.7*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092372ECD7.D
Data file 2: /230209.b/230209.b/02092372ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0249-05
Client ID:
Injection Date: 10-FEB-2023 13:07
Report Date: 02/10/2023 14:31
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.002	105205	5.682	-0.003	97229	22.6	25.1	10.3	Tetrachloro-m-xylene
13.884	-0.006	93628	14.112	-0.003	133384	32.2	31.3	2.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	329202	-34.6
Hexabromobiphenyl	647433	271972	-58.0 <-

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	286901	-14.8
Hexabromobiphenyl	382032	268100	-29.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.395	-0.007	62341	378.6	1	8.297	-0.005	59243	456.8
Aroclor-1248	2	8.563	-0.011	60955	290.2	2	8.703	-0.006	65896	472.1
Aroclor-1248	3	8.979	-0.014	157574	392.1	3	9.135	-0.017	90052	527.9
Aroclor-1248	4	9.284	-0.007	140872	708.3	4	9.532	-0.044	58812	278.8
		Total Col1Ave (4 peaks):			442.3		Total Col2Ave (4 peaks):			433.9 RPD = 2
		Corrected Ave (3 peaks):			353.6		Corrected Ave (3 peaks):			402.6 RPD = 13
Aroclor-1254	1	9.284	-0.010	140872	419.9	1	9.435	-0.009	114336	549.3
Aroclor-1254	2	9.359	-0.012	58471	408.2	2	9.954	-0.010	63344	376.5
Aroclor-1254	3	9.655	-0.007	100079	465.5	3	10.103	-0.014	204126	556.2
Aroclor-1254	4	9.784	-0.015	182161	432.4	4	10.345	-0.021	237493	647.1
Aroclor-1254	5	10.121	-0.040	216283	789.6	5	10.552	-0.011	158549	775.7
		Total Col1Ave (5 peaks):			503.1		Total Col2Ave (5 peaks):			581.0 RPD = 14
		Corrected Ave (4 peaks):			431.5		Corrected Ave (4 peaks):			532.3 RPD = 21
Aroclor-1260	1	11.032	-0.008	64077	419.9	1	11.641	-0.008	94924	490.8
Aroclor-1260	2	11.348	-0.008	59042	376.4	2	11.903	-0.011	188405	385.0
Aroclor-1260	3	11.717	-0.012	151544	367.0	3	12.423	-0.008	59715	489.6
Aroclor-1260	4	12.117	-0.016	84991	398.3	4	12.486	-0.011	133241	420.7
Aroclor-1260	5	12.233	-0.006	39057	419.9	NS	---			----
		Total Col1Ave (5 peaks):			396.3		Total Col2Ave (4 peaks):			446.5 RPD = 12
		Corrected Ave (4 peaks):			390.4		Corrected Ave (3 peaks):			431.8 RPD = 10
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.908 - 13.790) = 3477245 Col1 Total PCB = 0.9 ppm*

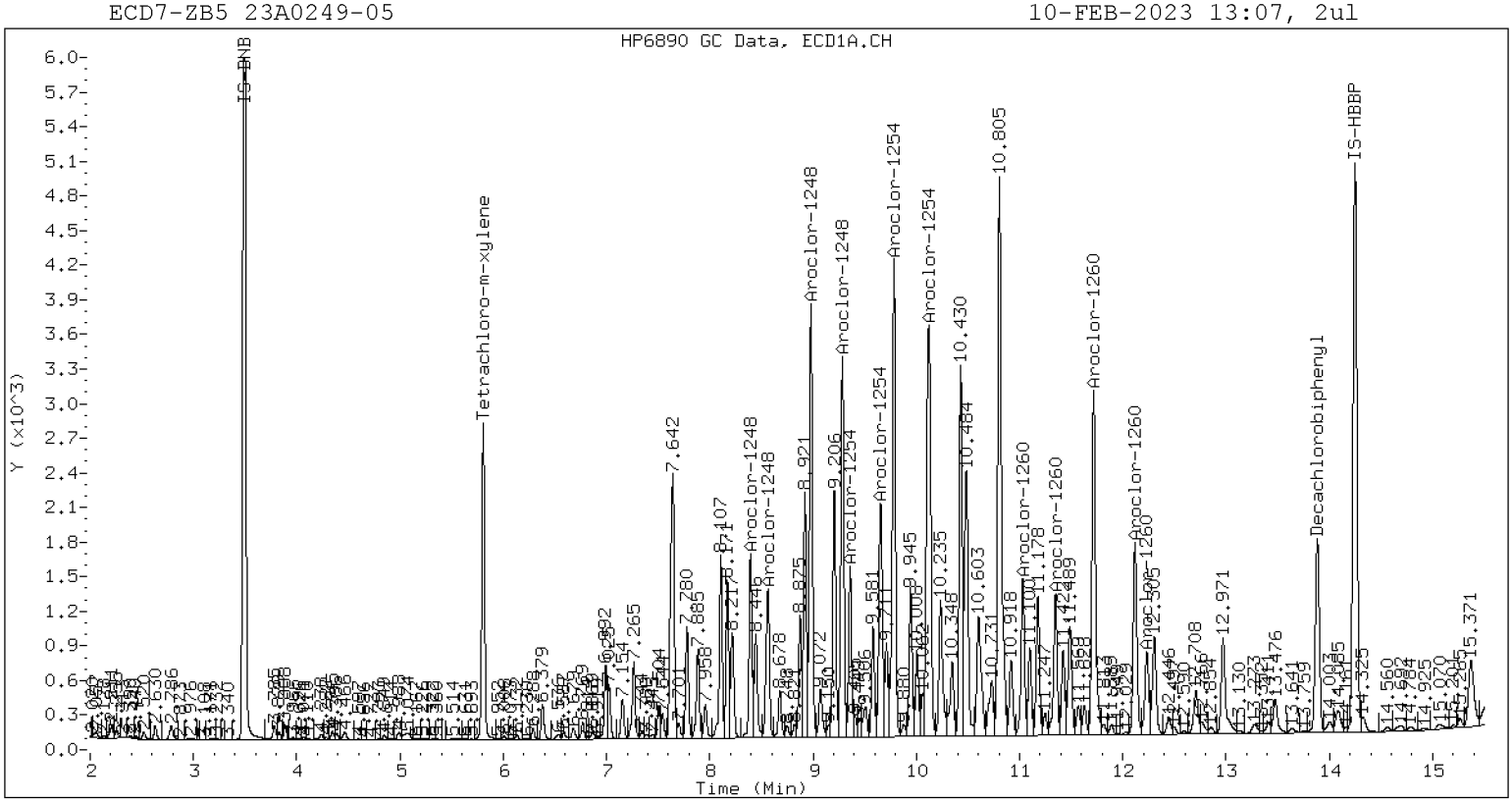
Total PCB Area Col2 (5.785 - 14.015) = 3548465 Col2 Total PCB = 1.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

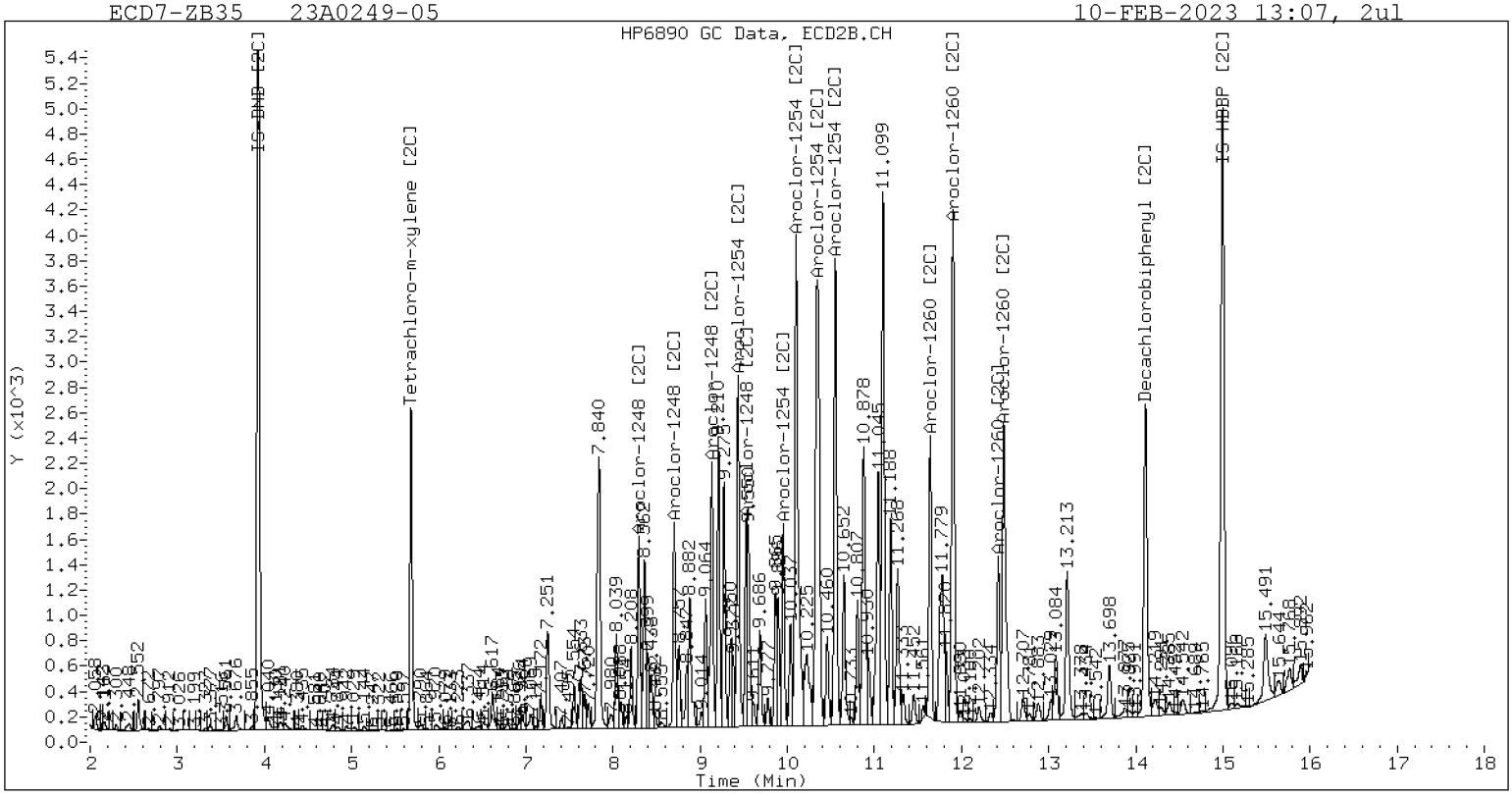
PCB Dual Column Chromatograms

ECD7-ZB5 23A0249-05 10-FEB-2023 13:07, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0249-05 10-FEB-2023 13:07, 2ul

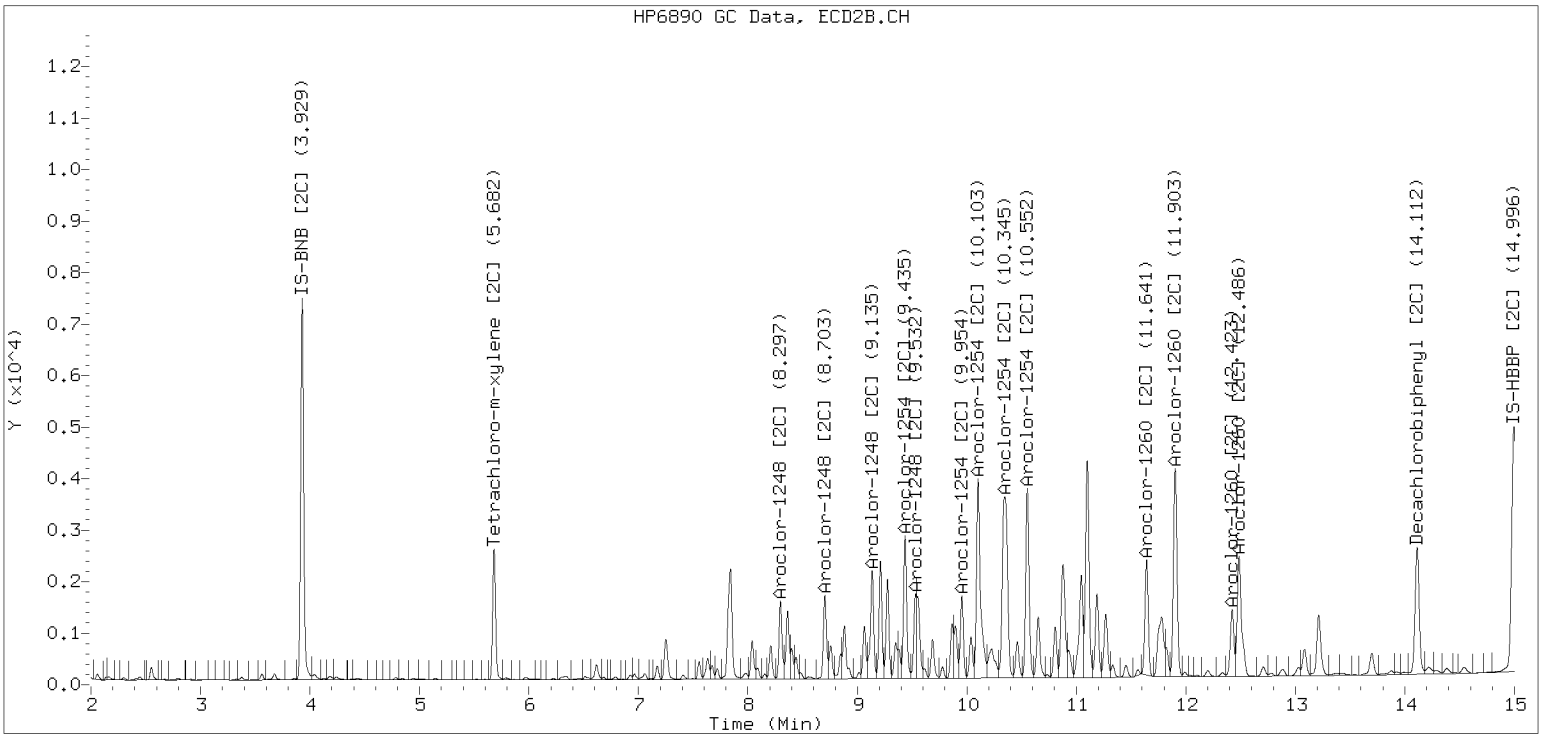


ZB-35 Manual Integration: YES

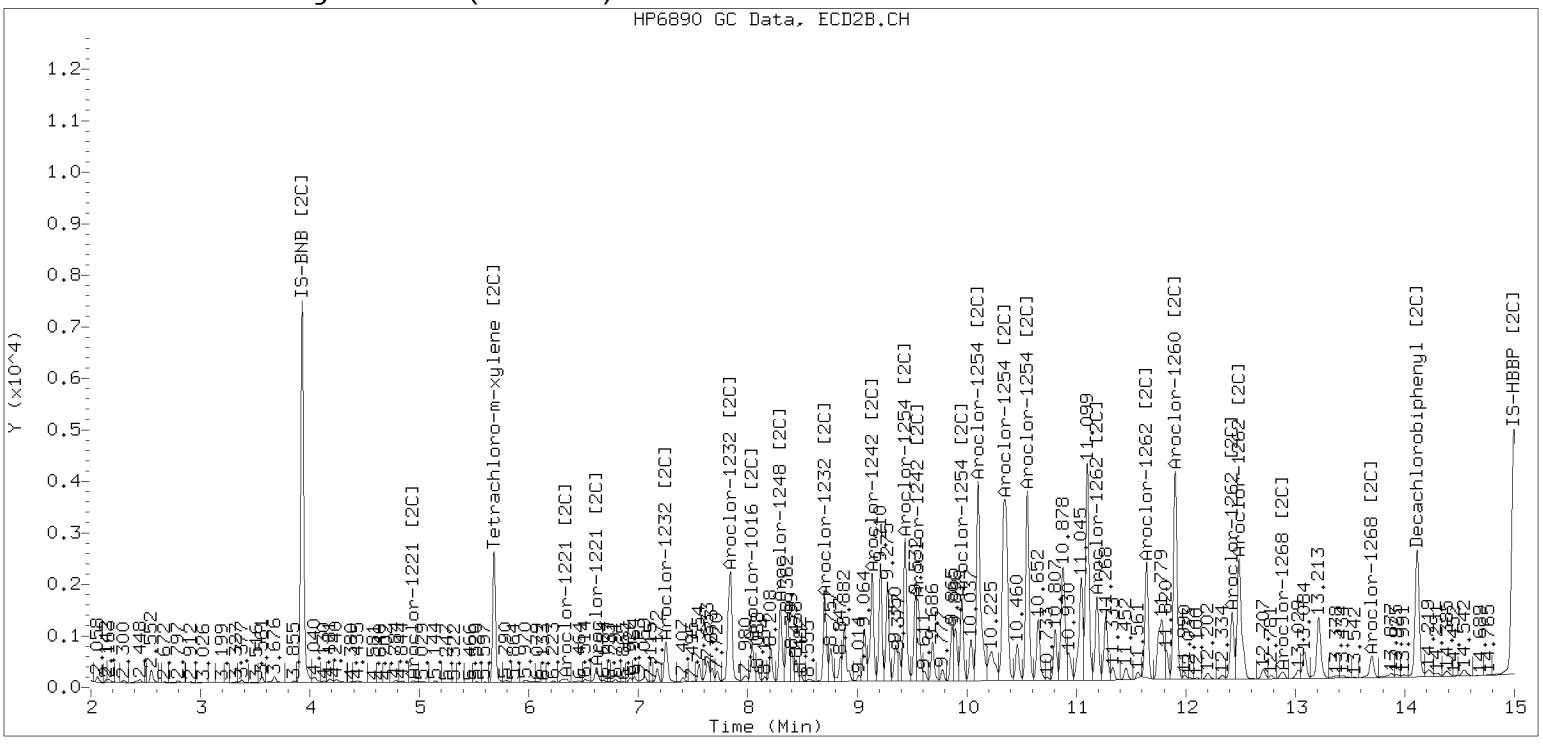
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230209.b/230209.b/02092372ECD7.D Injection Date: 10-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1033

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-06 A	File ID:	02092349ECD7.D
Sampled:	01/12/23 12:55	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 05:04
% Solids:	75.96	Preparation:	EPA 3546 (Microwave)	Initial/Final:	16.46 g Wet / 2.5 mL
Batch:	BLA0674	Sequence:	SLB0148	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	133	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	94.2	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	43.4	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9981*	*5.83*	*72.9*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9981*	*4.51*	*56.3*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9981*	*6.18*	*77.2*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9981*	*5.39*	*67.4*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092349ECD7.D
Data file 2: /230209.b/230209.b/02092349ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0249-06
Client ID:
Injection Date: 10-FEB-2023 05:04
Report Date: 02/10/2023 12:59
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.004	117886	5.681	-0.004	111225	22.5	27.0	17.9	Tetrachloro-m-xylene
13.883	-0.009	90498	14.111	-0.003	131384	29.2	30.9	5.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	370065	-26.5
Hexabromobiphenyl	647433	290237	-55.2 <-

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	304986	-9.5
Hexabromobiphenyl	382032	268039	-29.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.395	-0.010	92858	501.6	1	8.297	-0.006	88452	641.6
Aroclor-1248	2	8.564	-0.017	95714	405.3	2	8.703	-0.007	103506	697.5
Aroclor-1248	3	8.978	-0.020	182419	403.8	3	9.135	-0.017	123118	679.0
Aroclor-1248	4	9.284	-0.010	141524	633.0	4	9.553	-0.023	144136	642.8
		Total Col1Ave (4 peaks):			485.9		Total Col2Ave (4 peaks):			665.2 RPD = 31
		Corrected Ave (3 peaks):			436.9		Corrected Ave (3 peaks):			654.5 RPD = 40
Aroclor-1254	1	9.284	-0.015	141524	375.2	1	9.435	-0.009	107555	486.1
Aroclor-1254	2	9.359	-0.018	52829	328.1	2	9.954	-0.010	73314	409.9
Aroclor-1254	3	9.653	-0.017	105549	436.8	3	10.102	-0.014	188357	482.8
Aroclor-1254	4	9.783	-0.025	174698	368.9	4	10.338	-0.029	199268	510.8
Aroclor-1254	5	10.125	-0.052	177037	574.9	5	10.552	-0.012	101021	464.9
		Total Col1Ave (5 peaks):			416.8		Total Col2Ave (5 peaks):			470.9 RPD = 12
		Corrected Ave (4 peaks):			377.3		Corrected Ave (4 peaks):			460.9 RPD = 20
Aroclor-1260	1	11.031	-0.012	28151	172.9	1	11.641	-0.009	57805	298.9
Aroclor-1260	2	11.347	-0.013	28199	168.5	2	11.902	-0.011	86832	177.5
Aroclor-1260	3	11.716	-0.018	70283	159.5	3	12.423	-0.008	25146	206.2
Aroclor-1260	4	12.116	-0.023	42634	187.2	4	12.485	-0.011	58995	186.3
Aroclor-1260	5	12.232	-0.011	17073	172.0	NS	---			----
		Total Col1Ave (5 peaks):			172.0		Total Col2Ave (4 peaks):			217.2 RPD = 23
		Corrected Ave (4 peaks):			168.2		Corrected Ave (3 peaks):			190.0 RPD = 12
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.909 - 13.792) = 3376046 Col1 Total PCB = 0.8 ppm*

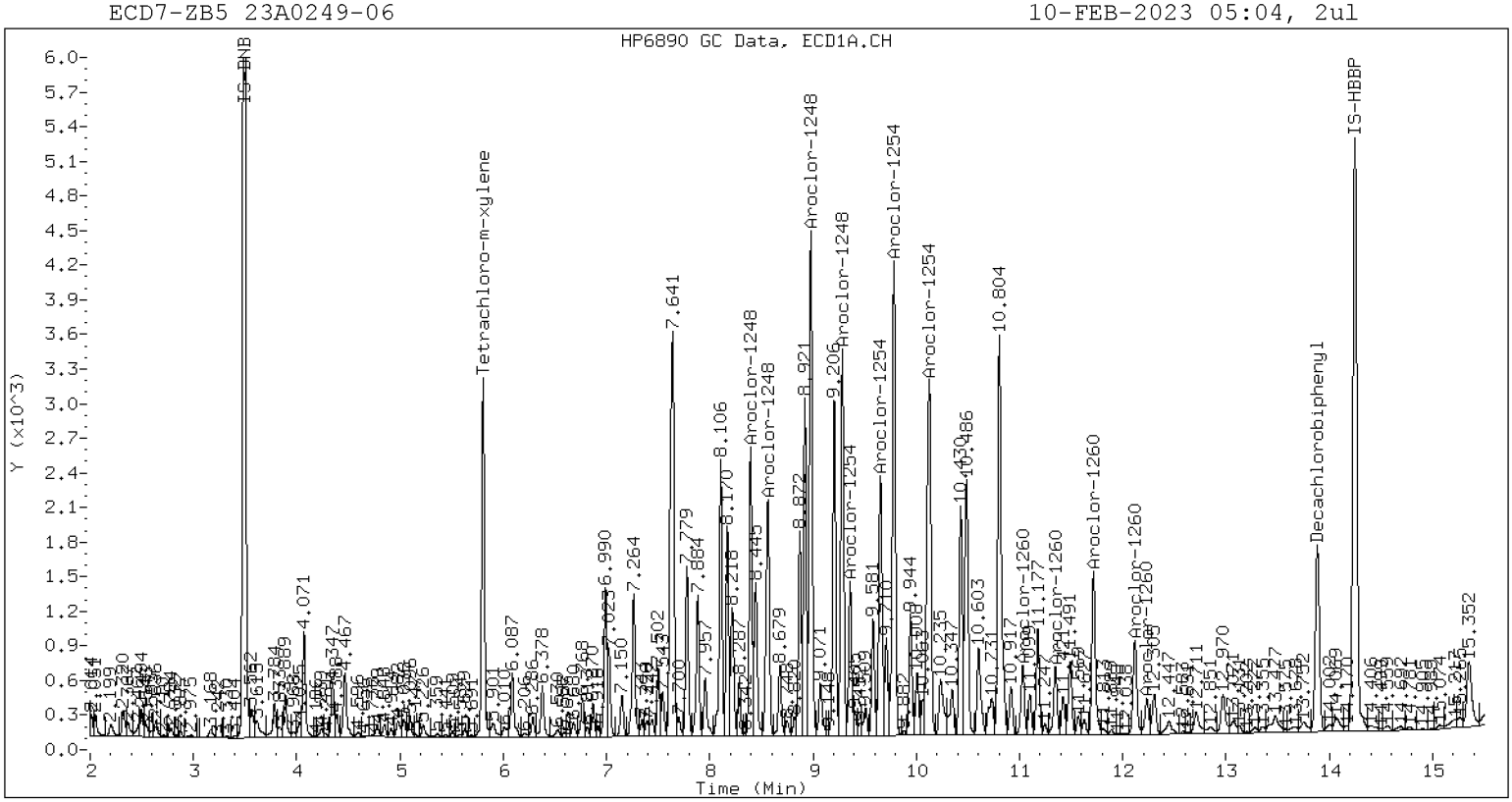
Total PCB Area Col2 (5.785 - 14.015) = 3312944 Col2 Total PCB = 1.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

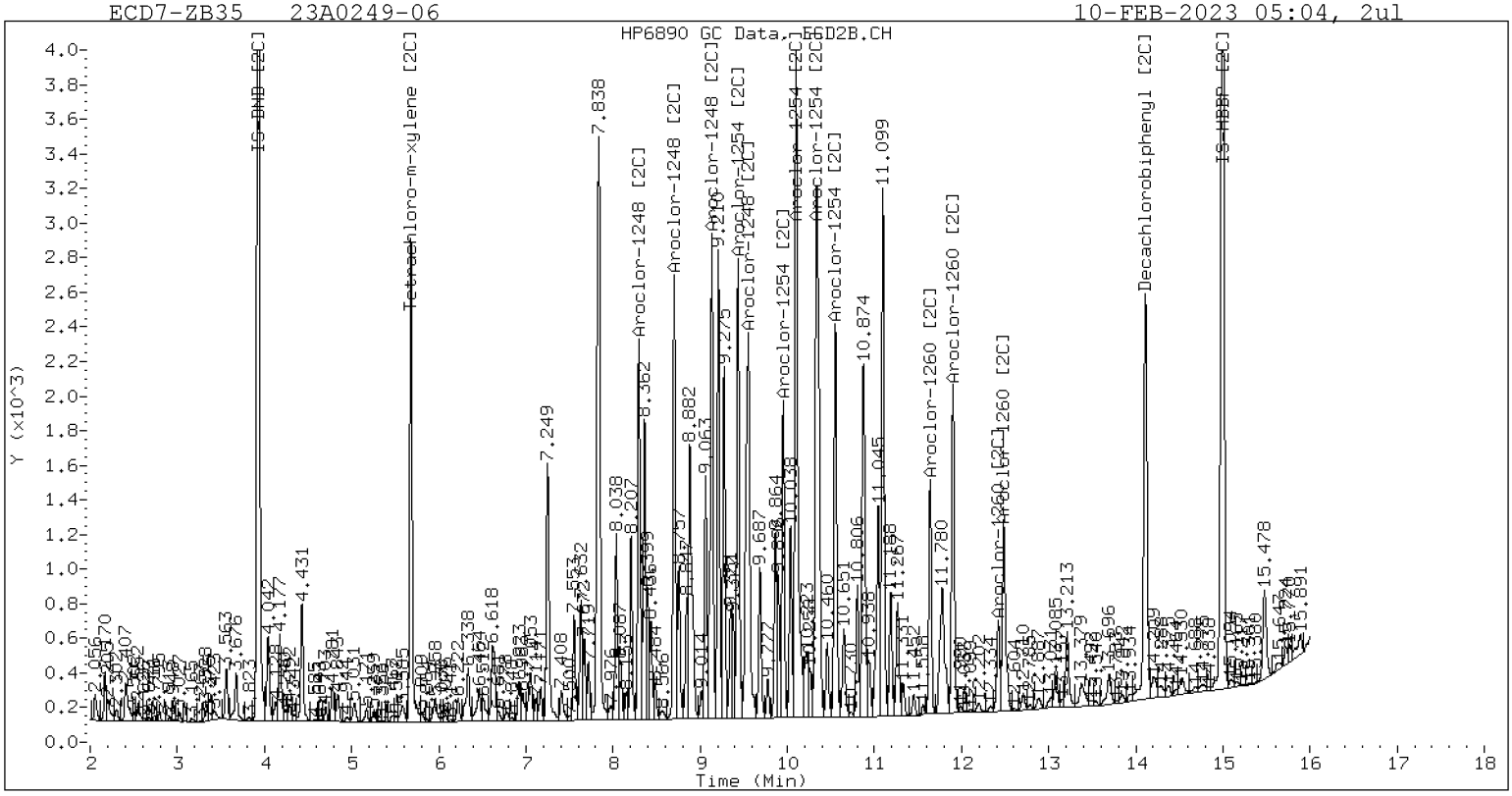
PCB Dual Column Chromatograms

ECD7-ZB5 23A0249-06 10-FEB-2023 05:04, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0249-06 10-FEB-2023 05:04, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-IT1034

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-07 A	File ID:	02092350ECD7.D
Sampled:	01/12/23 12:32	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 05:25
% Solids:	74.73	Preparation:	EPA 3546 (Microwave)	Initial/Final:	16.79 g Wet / 2.5 mL
Batch:	BLA0674	Sequence:	SLB0148	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	2	1	21.4	1.6	4.0	P1
11097-69-1	Aroclor 1254	2	1	86.1	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	76.8	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9699*	*6.14*	*77.0*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9699*	*5.53*	*69.3*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9699*	*6.10*	*76.6*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9699*	*6.21*	*78.0*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092350ECD7.D
Data file 2: /230209.b/230209.b/02092350ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0249-07
Client ID:
Injection Date: 10-FEB-2023 05:25
Report Date: 02/10/2023 12:59
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.003	145410	5.683	-0.002	140378	27.7	31.2	11.7	Tetrachloro-m-xylene
13.885	-0.007	97377	14.113	-0.002	135146	30.8	30.6	0.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	370893	-26.3
Hexabromobiphenyl	647433	295587	-54.3 <-

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	333014	-1.2
Hexabromobiphenyl	382032	278053	-27.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	8.397	-0.009	12802	69.0	1	8.298	-0.004	21718	144.3
Aroclor-1248	2	8.564	-0.016	18659	78.8	2	8.704	-0.005	11652	71.9
Aroclor-1248	3	8.986	-0.013	85840	189.6	3	9.139	-0.013	4615	23.3
Aroclor-1248	4	9.286	-0.008	122689	547.5	4	9.530	-0.046	46561	190.2
	Total Col1Ave (4 peaks):				221.2	Total Col2Ave (4 peaks):				107.4 RPD = 69*
	Corrected Ave (3 peaks):				112.5	Corrected Ave (3 peaks):				79.8 RPD = 34
Aroclor-1254	1	9.286	-0.013	122689	324.6	1	9.437	-0.008	96079	397.7
Aroclor-1254	2	9.362	-0.016	55996	347.0	2	9.956	-0.008	63759	326.5
Aroclor-1254	3	9.654	-0.016	78608	324.6	3	10.105	-0.012	200505	470.7
Aroclor-1254	4	9.786	-0.022	184293	388.3	4	10.357	-0.009	163316	383.4
Aroclor-1254	5	10.111	-0.066	149208	483.5	5	10.554	-0.010	138308	582.9
	Total Col1Ave (5 peaks):				373.6	Total Col2Ave (5 peaks):				432.2 RPD = 15
	Corrected Ave (4 peaks):				346.1	Corrected Ave (4 peaks):				394.6 RPD = 13
Aroclor-1260	1	11.033	-0.011	55353	333.8	1	11.643	-0.007	87851	438.0
Aroclor-1260	2	11.349	-0.011	67227	394.3	2	11.904	-0.009	161877	319.0
Aroclor-1260	3	11.719	-0.016	132926	296.2	3	12.423	-0.008	54679	432.3
Aroclor-1260	4	12.119	-0.020	68971	297.4	4	12.487	-0.010	115800	352.6
Aroclor-1260	5	12.235	-0.009	41633	411.9	NS	---			----
	Total Col1Ave (5 peaks):				346.7	Total Col2Ave (4 peaks):				385.4 RPD = 11
	Corrected Ave (4 peaks):				330.4	Corrected Ave (3 peaks):				367.9 RPD = 11
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 2513143 Col1 Total PCB = 0.6 ppm*

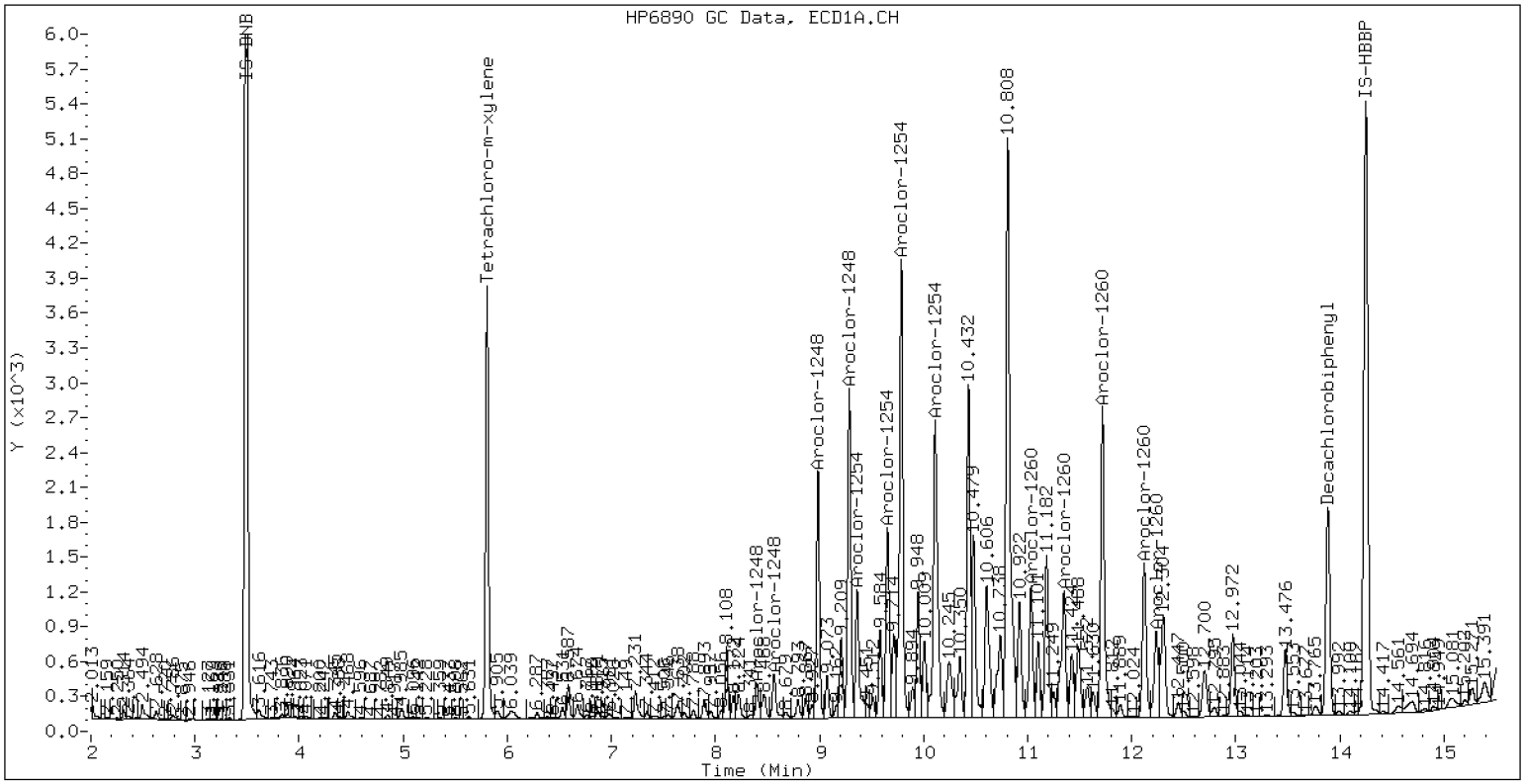
Total PCB Area Col2 (5.785 - 14.015) = 2511265 Col2 Total PCB = 0.7 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

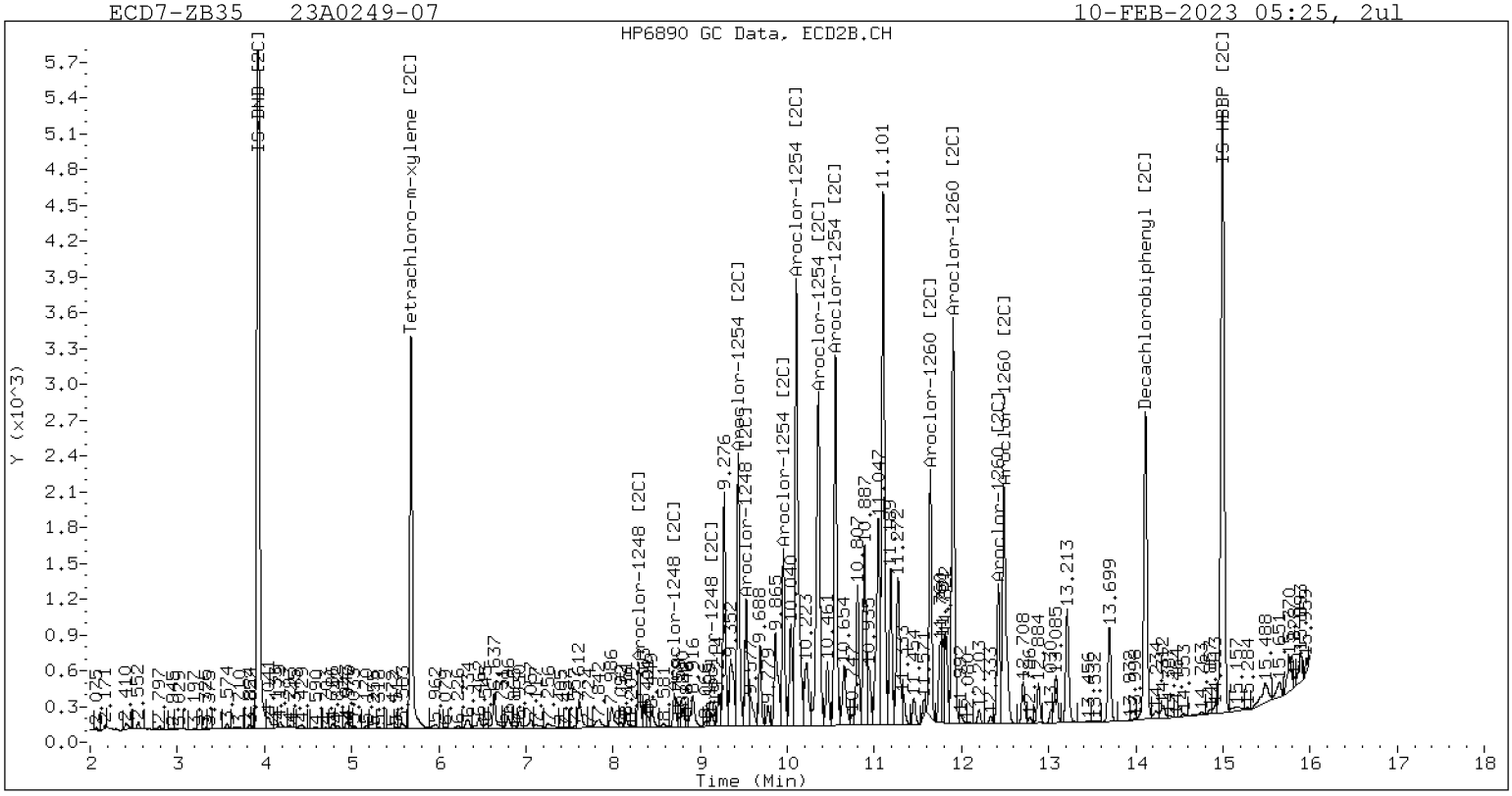
PCB Dual Column Chromatograms

ECD7-ZB5 23A0249-07 10-FEB-2023 05:25, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0249-07 10-FEB-2023 05:25, 2ul

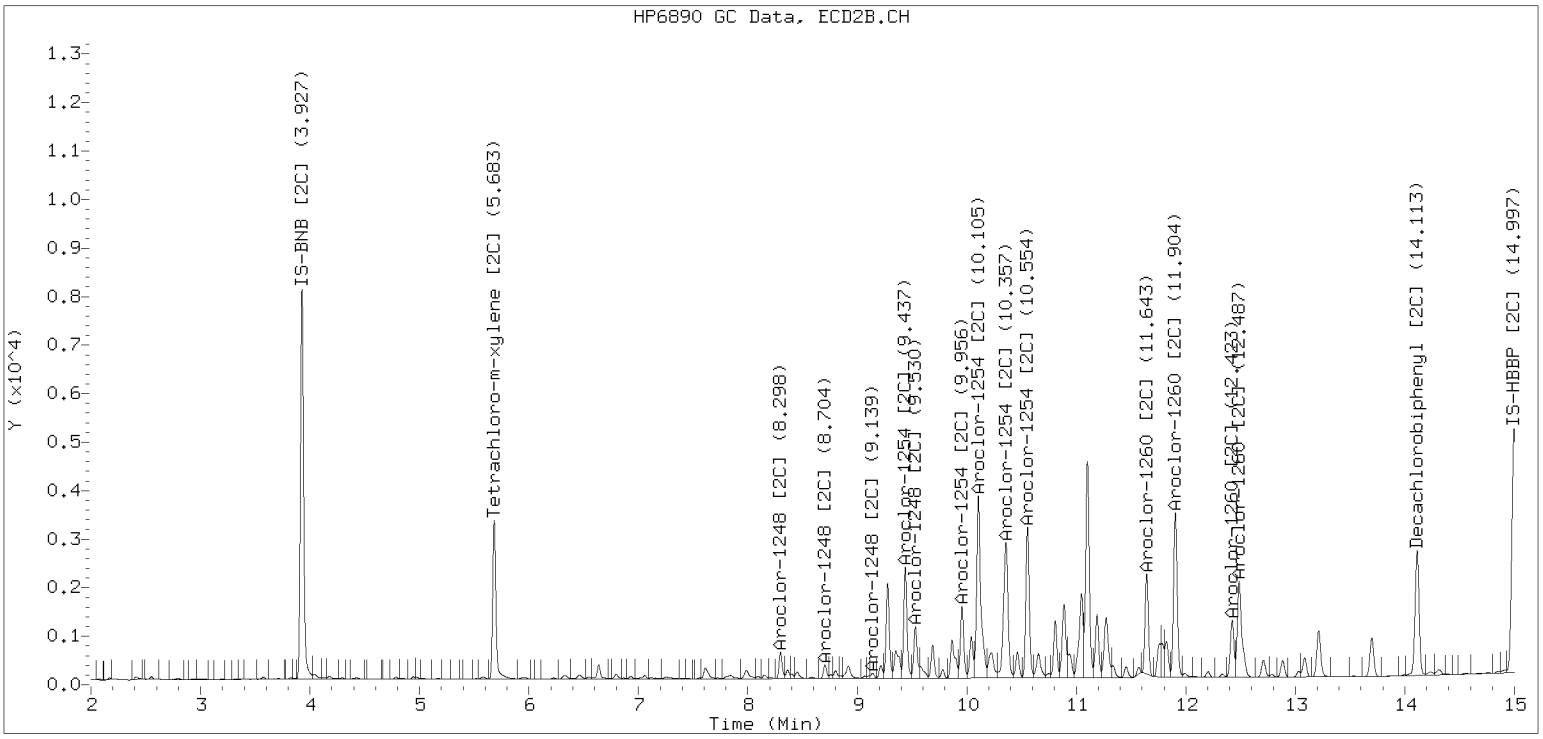


ZB-35 Manual Integration: YES

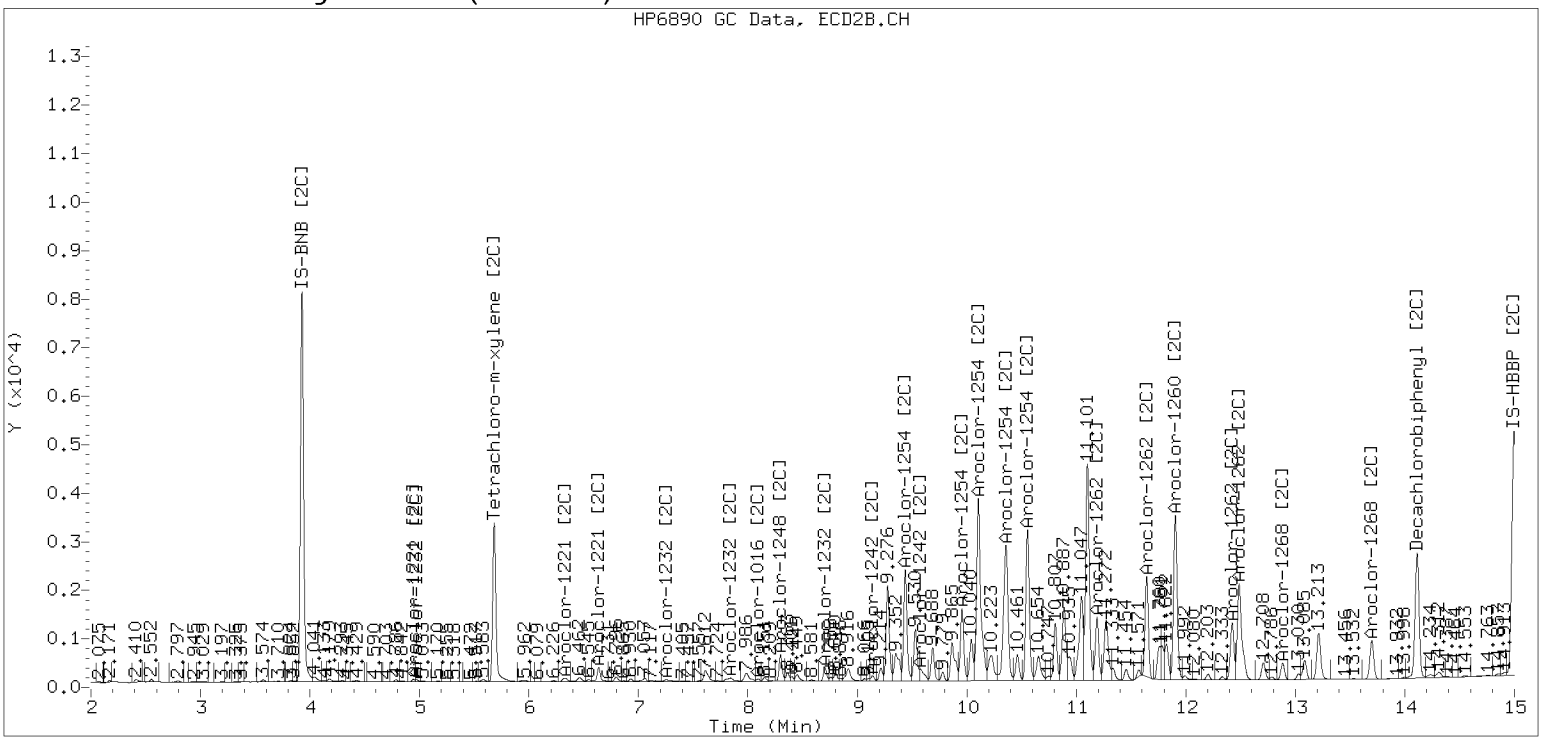
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230209.b/230209.b/02092350ECD7.D Injection Date: 10-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1024

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-08 A	File ID:	02092373ECD7.D
Sampled:	01/12/23 13:35	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 13:29
% Solids:	48.98	Preparation:	EPA 3546 (Microwave)	Initial/Final:	25.57 g Wet / 2.5 mL
Batch:	BLA0674	Sequence:	SLB0148	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	1	1	24.0	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	51.3	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	42.8	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9846*	*5.10*	*63.9*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9846*	*4.54*	*56.8*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9846*	*5.47*	*68.6*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9846*	*4.92*	*61.6*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092373ECD7.D
Data file 2: /230209.b/230209.b/02092373ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0249-08
Client ID:
Injection Date: 10-FEB-2023 13:29
Report Date: 02/10/2023 14:32
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.002	104283	5.682	-0.003	99095	22.7	24.6	8.1	Tetrachloro-m-xylene
13.885	-0.005	82949	14.111	-0.004	122774	25.5	27.4	7.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	324671	-35.5
Hexabromobiphenyl	647433	303660	-53.1 <-

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	297386	-11.7
Hexabromobiphenyl	382032	282062	-26.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	8.395	-0.007	21840	134.5	1	8.298	-0.005	21995	163.6
Aroclor-1248	2	8.564	-0.010	18101	87.4	2	8.704	-0.005	20403	141.0
Aroclor-1248	3	8.982	-0.011	54773	138.2	3	9.137	-0.015	28551	161.5
Aroclor-1248	4	9.285	-0.006	56154	286.3	4	9.531	-0.045	25783	117.9
		Total Col1Ave (4 peaks):			161.6		Total Col2Ave (4 peaks):			146.0 RPD = 10
		Corrected Ave (3 peaks):			120.0		Corrected Ave (3 peaks):			140.1 RPD = 15
Aroclor-1254	1	9.285	-0.009	56154	169.7	1	9.436	-0.008	48788	226.1
Aroclor-1254	2	9.361	-0.010	23670	167.5	2	9.955	-0.009	26281	150.7
Aroclor-1254	3	9.657	-0.005	44858	211.6	3	10.103	-0.013	87310	229.5
Aroclor-1254	4	9.785	-0.014	79648	191.7	4	10.351	-0.016	115757	304.3
Aroclor-1254	5	10.119	-0.042	102695	380.1	5	10.552	-0.011	79406	374.8
		Total Col1Ave (5 peaks):			224.1		Total Col2Ave (5 peaks):			257.1 RPD = 14
		Corrected Ave (4 peaks):			185.1		Corrected Ave (4 peaks):			227.7 RPD = 21
Aroclor-1260	1	11.032	-0.008	34316	201.4	1	11.642	-0.008	44069	216.6
Aroclor-1260	2	11.347	-0.009	28436	162.4	2	11.903	-0.010	85138	165.4
Aroclor-1260	3	11.718	-0.012	76003	164.8	3	12.422	-0.009	35414	276.0
Aroclor-1260	4	12.118	-0.015	43822	184.0	4	12.486	-0.010	66436	199.4
Aroclor-1260	5	12.233	-0.007	22071	212.5	NS	---			----
		Total Col1Ave (5 peaks):			185.0		Total Col2Ave (4 peaks):			214.3 RPD = 15
		Corrected Ave (4 peaks):			178.1		Corrected Ave (3 peaks):			193.8 RPD = 8
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.908 - 13.790) = 1569785 Col1 Total PCB = 0.4 ppm*

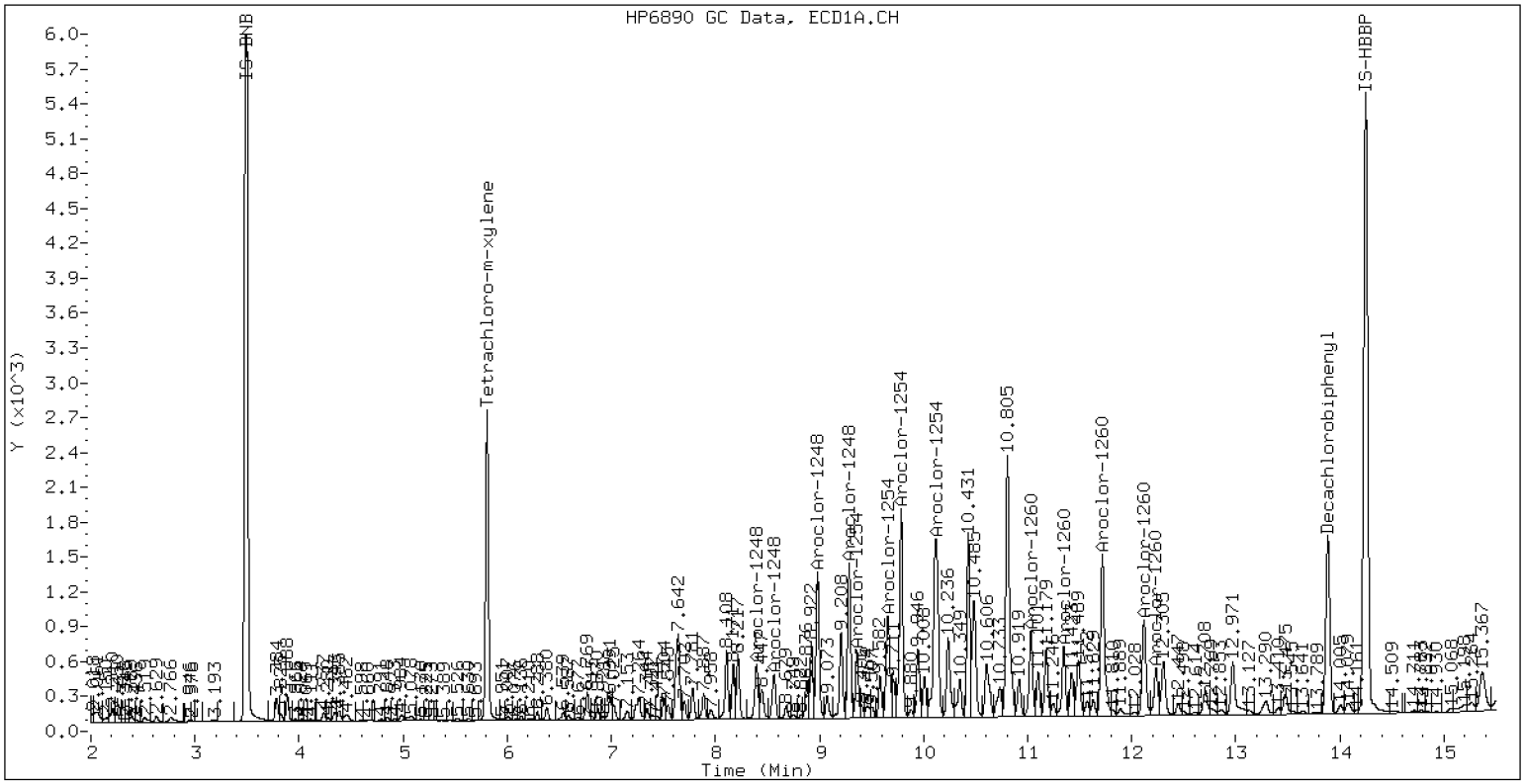
Total PCB Area Col2 (5.785 - 14.015) = 1594811 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

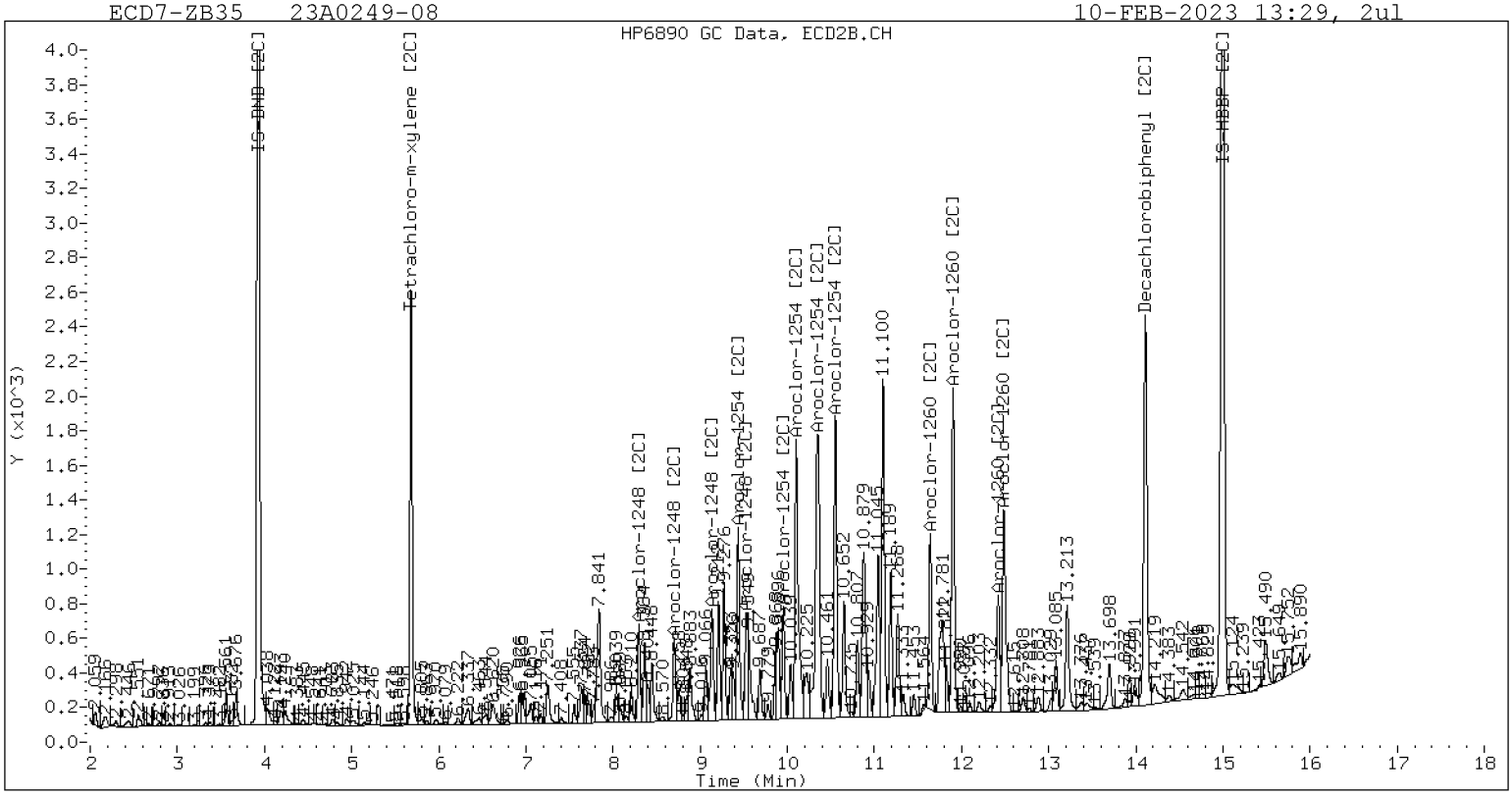
PCB Dual Column Chromatograms

ECD7-ZB5 23A0249-08 10-FEB-2023 13:29, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0249-08 10-FEB-2023 13:29, 2ul

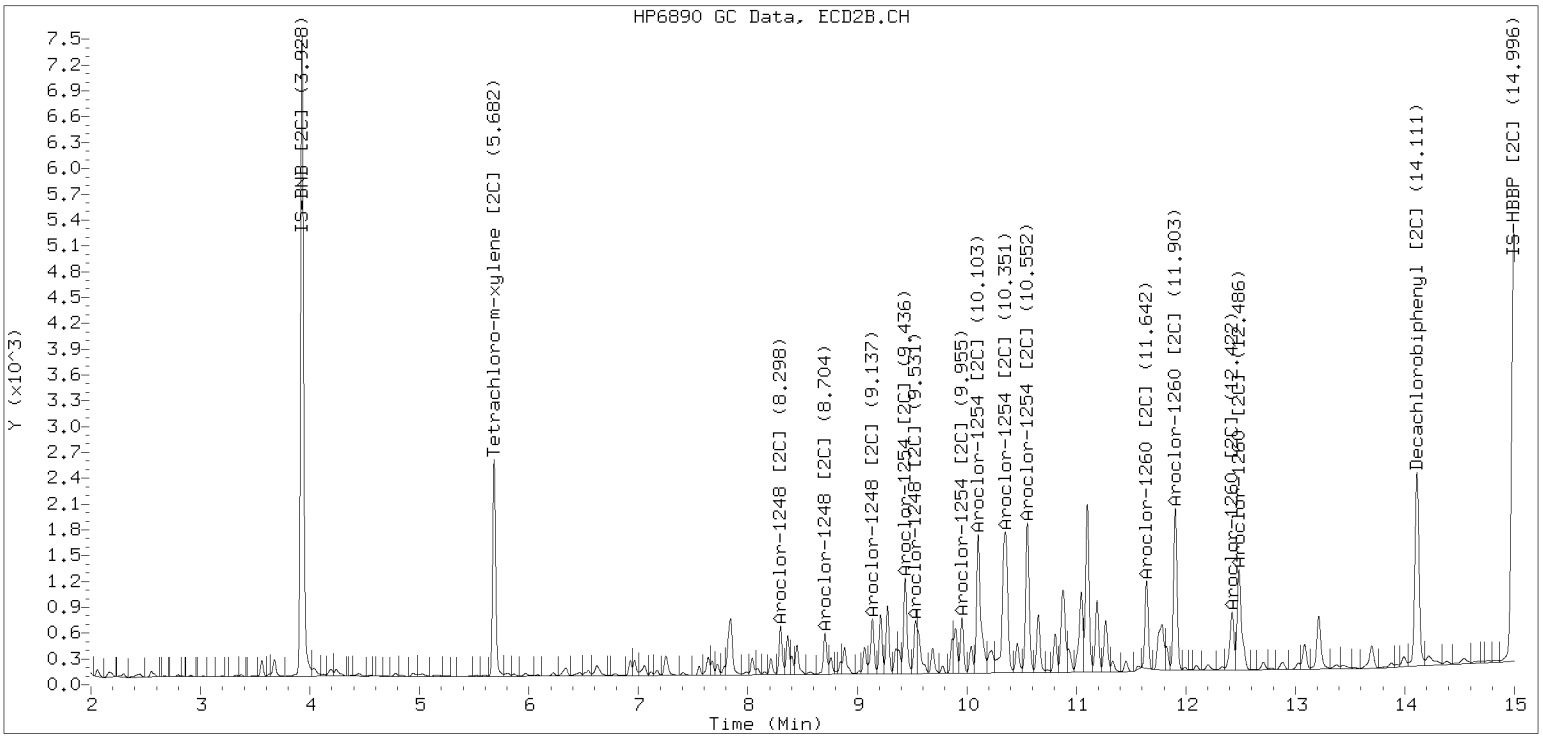


ZB-35 Manual Integration: YES

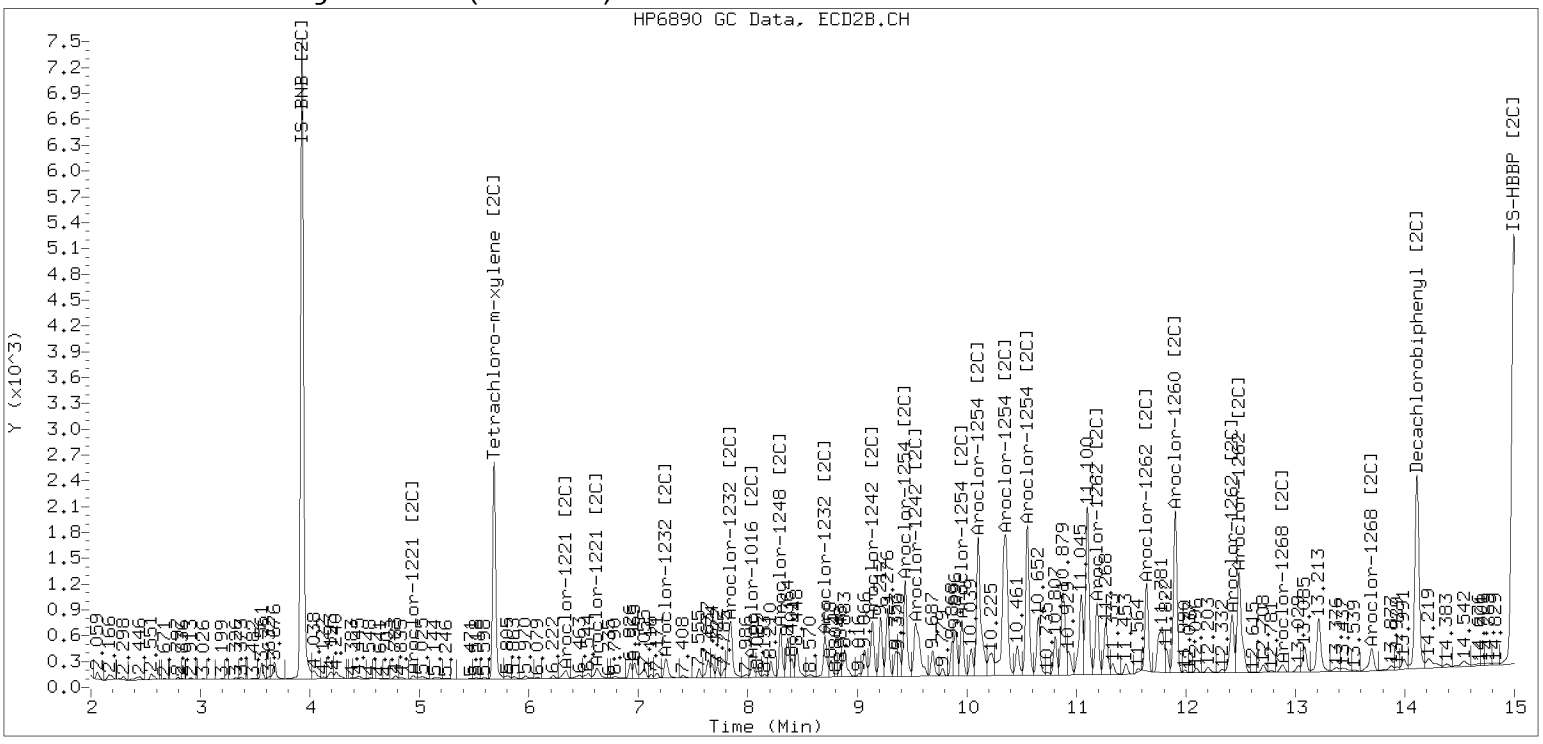
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230209.b/230209.b/02092373ECD7.D Injection Date: 10-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1040

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-09 A	File ID:	02092374ECD7.D
Sampled:	01/12/23 14:15	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 13:50
% Solids:	57.86	Preparation:	EPA 3546 (Microwave)	Initial/Final:	21.63 g Wet / 2.5 mL
Batch:	BLA0674	Sequence:	SLB0148	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	1	1	52.9	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	63.4	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	56.8	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9903*	*6.79*	*85.0*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9903*	*4.67*	*58.4*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9903*	*6.74*	*84.3*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9903*	*4.94*	*61.8*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092374ECD7.D
Data file 2: /230209.b/230209.b/02092374ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0249-09
Client ID:
Injection Date: 10-FEB-2023 13:50
Report Date: 02/10/2023 14:41
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.003	99215	5.682	-0.003	93236	23.4	24.7	5.6	Tetrachloro-m-xylene
13.884	-0.005	81082	14.112	-0.003	113658	34.0	33.7	0.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	300467	-40.3
Hexabromobiphenyl	647433	222918	-65.6 <-

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	279095	-17.2
Hexabromobiphenyl	382032	212375	-44.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.395	-0.007	36667	243.9	1	8.298	-0.005	36093	286.1
Aroclor-1248	2	8.563	-0.011	35866	187.1	2	8.704	-0.006	36278	267.2
Aroclor-1248	3	8.981	-0.013	83968	228.9	3	9.136	-0.016	49662	299.3
Aroclor-1248	4	9.284	-0.007	72528	399.5	4	9.533	-0.043	32062	156.2
		Total Col1Ave (4 peaks):			264.9		Total Col2Ave (4 peaks):			252.2 RPD = 5
		Corrected Ave (3 peaks):			220.0		Corrected Ave (3 peaks):			236.5 RPD = 7
Aroclor-1254	1	9.284	-0.010	72528	236.8	1	9.436	-0.009	59644	294.6
Aroclor-1254	2	9.360	-0.011	30434	232.8	2	9.955	-0.009	34279	209.5
Aroclor-1254	3	9.655	-0.007	55731	284.0	3	10.103	-0.013	108063	302.7
Aroclor-1254	4	9.785	-0.015	98672	256.6	4	10.346	-0.020	126749	355.0
Aroclor-1254	5	10.124	-0.037	58747	235.0	5	10.553	-0.011	84424	424.6
		Total Col1Ave (5 peaks):			249.1		Total Col2Ave (5 peaks):			317.3 RPD = 24
		Corrected Ave (4 peaks):			240.3		Corrected Ave (4 peaks):			290.4 RPD = 19
Aroclor-1260	1	11.031	-0.009	34675	277.2	1	11.641	-0.008	44987	293.6
Aroclor-1260	2	11.347	-0.009	30943	240.7	2	11.903	-0.010	90979	234.7
Aroclor-1260	3	11.717	-0.012	78375	231.6	3	12.422	-0.009	33293	344.6
Aroclor-1260	4	12.118	-0.015	42941	245.5	4	12.486	-0.010	66526	265.2
Aroclor-1260	5	12.234	-0.006	23154	303.7	NS	---			----
		Total Col1Ave (5 peaks):			259.7		Total Col2Ave (4 peaks):			284.5 RPD = 9
		Corrected Ave (4 peaks):			248.8		Corrected Ave (3 peaks):			264.5 RPD = 6
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.908 - 13.789) = 1942594 Col1 Total PCB = 0.6 ppm*

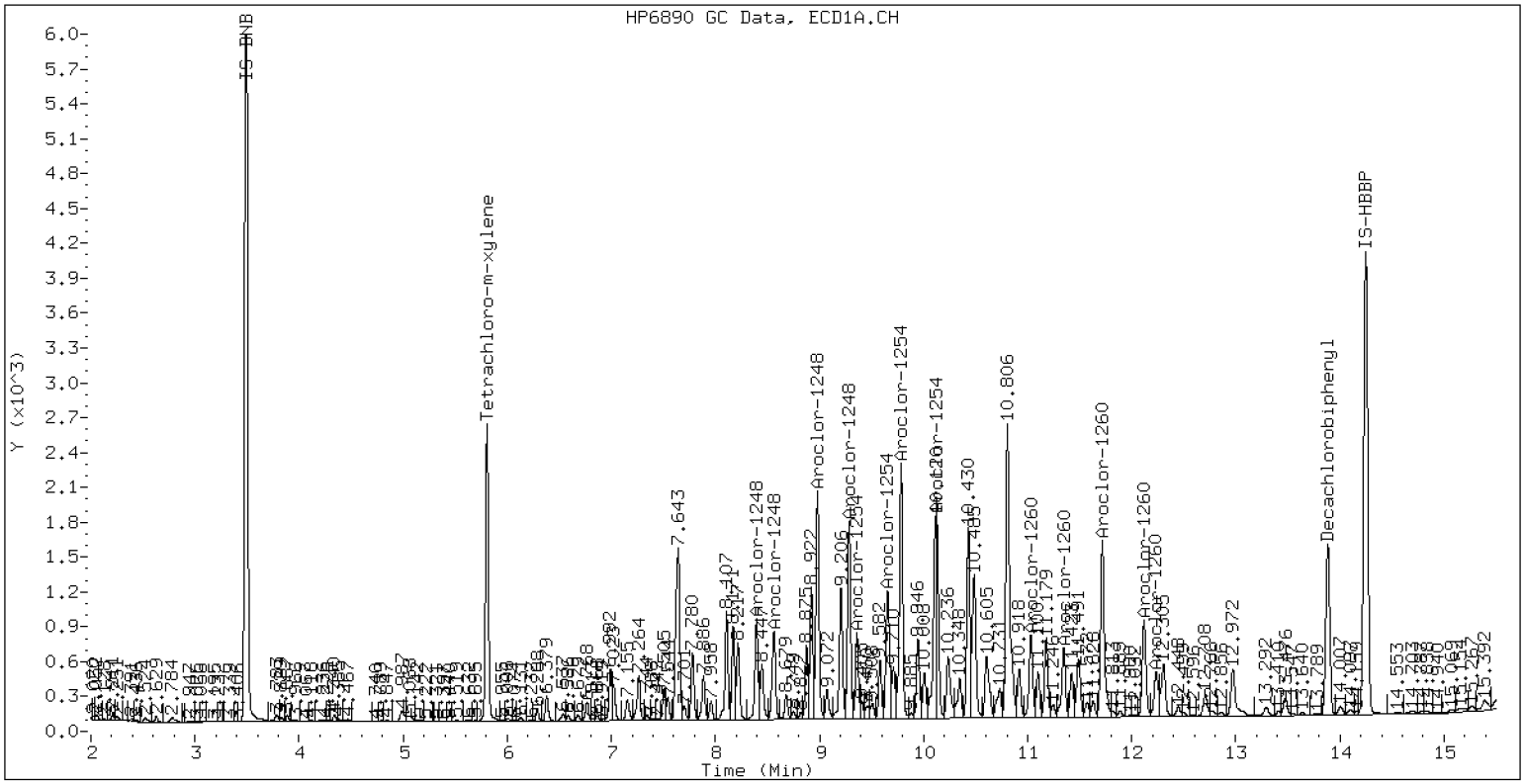
Total PCB Area Col2 (5.785 - 14.015) = 1950916 Col2 Total PCB = 0.7 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

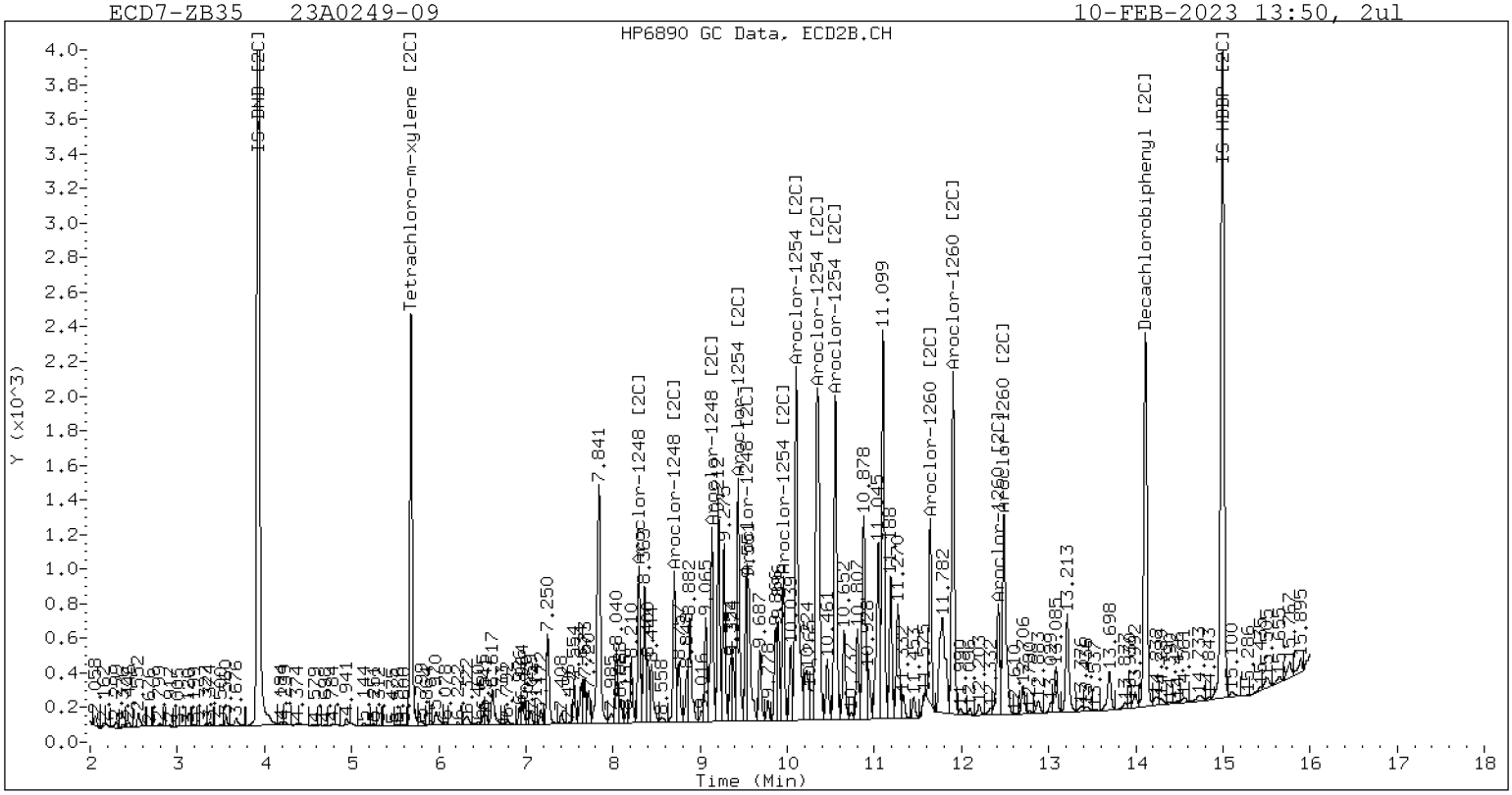
PCB Dual Column Chromatograms

ECD7-ZB5 23A0249-09 10-FEB-2023 13:50, 2ul



ZB-5 Manual Integration: YES

ECD7-ZB35 23A0249-09 10-FEB-2023 13:50, 2ul

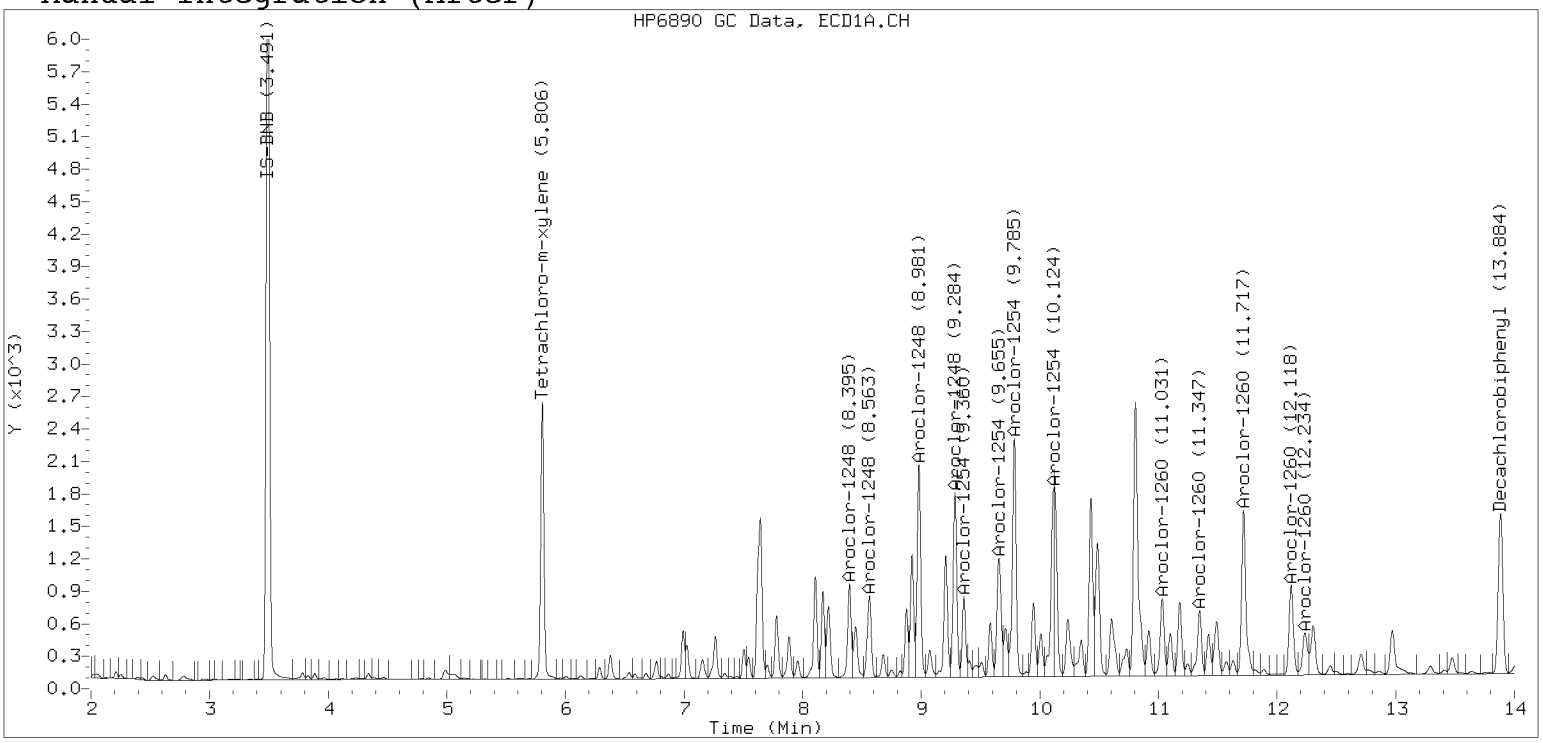


ZB-35 Manual Integration: YES

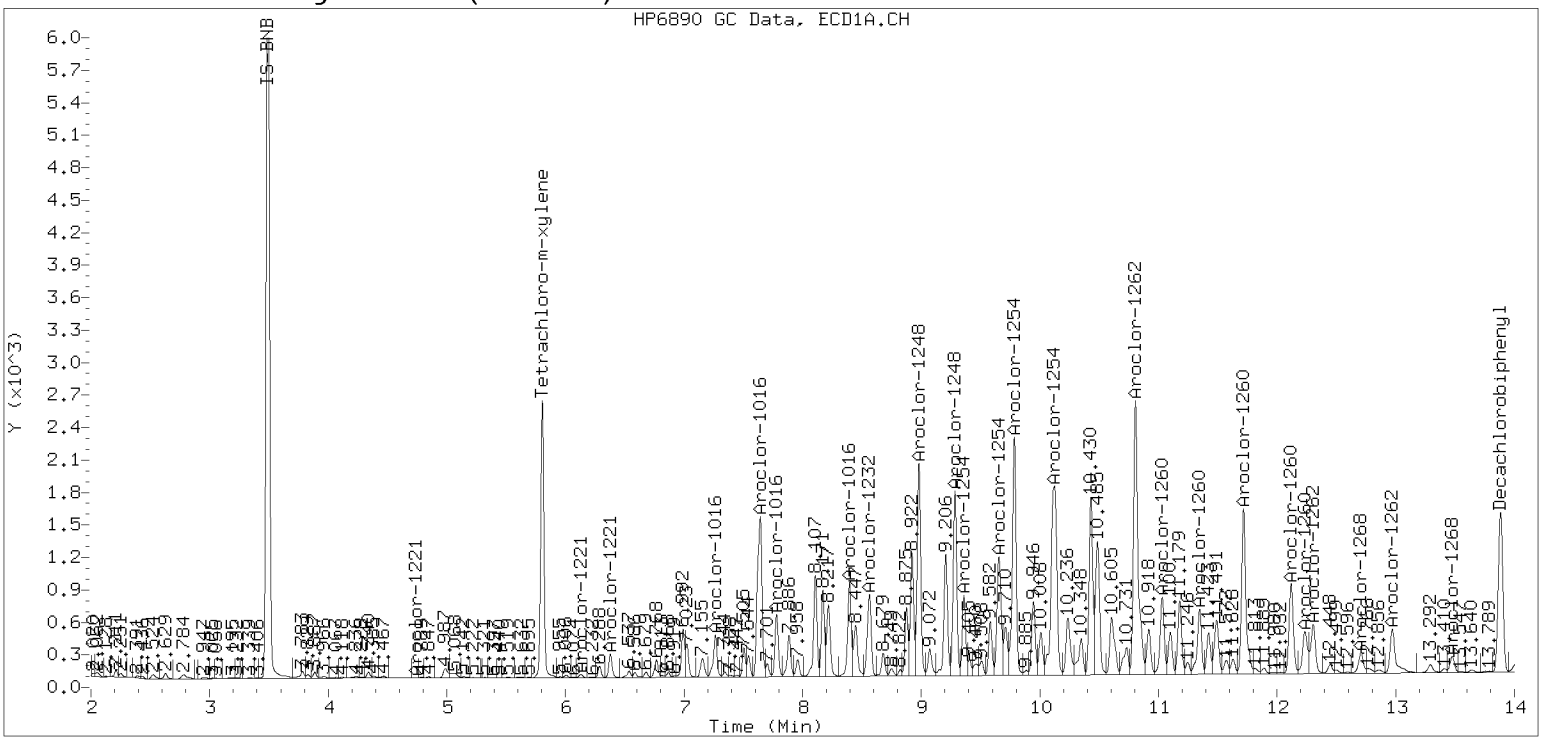
Manual Peak Adjustment, ZB-5

Datafile: ecd7.i/230209.b/02092374ECD7.D Injection Date: 10-FEB-2023 13:50

Manual Integration (After)



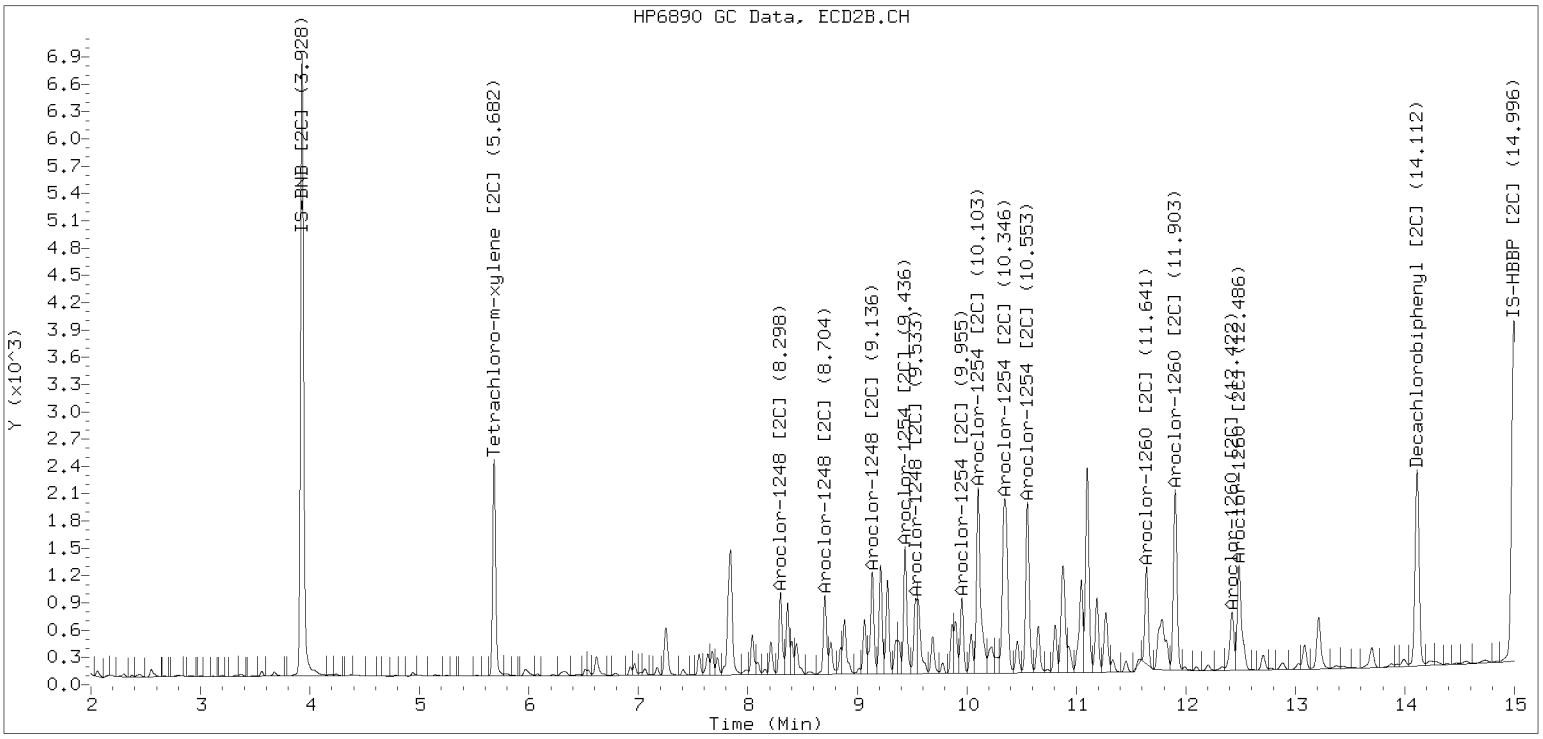
Processed Integration (Before)



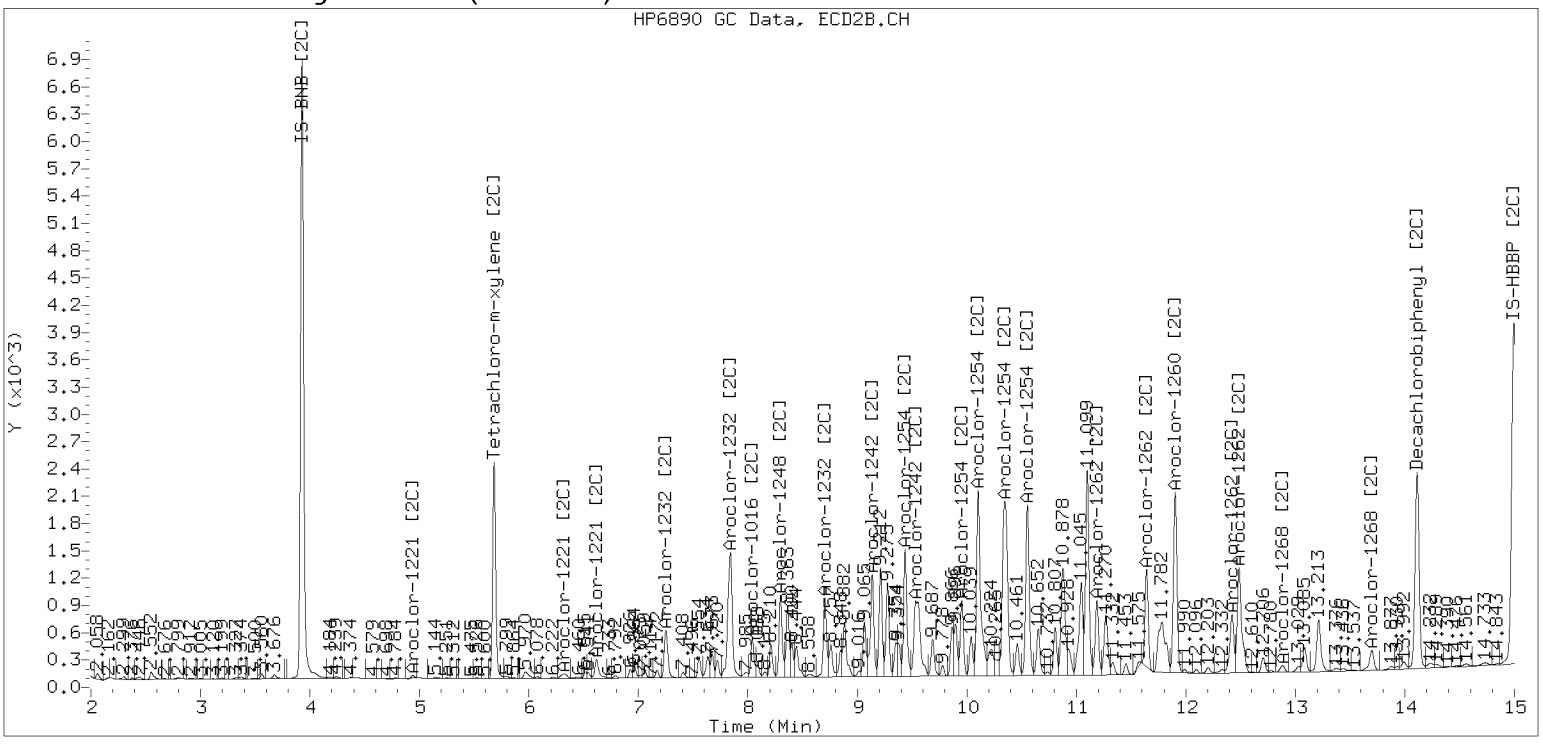
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230209.b/230209.b/02092374ECD7.D Injection Date: 10-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1030

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-10 A	File ID:	02092375ECD7.D
Sampled:	01/12/23 14:50	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 14:11
% Solids:	47.59	Preparation:	EPA 3546 (Microwave)	Initial/Final:	26.3 g Wet / 2.5 mL
Batch:	BLA0674	Sequence:	SLB0148	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	1	1	41.1	1.6	4.0	
11097-69-1	Aroclor 1254	2	1	70.3	1.6	4.0	
11096-82-5	Aroclor 1260	2	1	54.3	0.6	4.0	

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9897*	*5.85*	*73.2*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9897*	*4.65*	*58.2*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9897*	*5.76*	*72.1*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9897*	*5.19*	*64.9*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092375ECD7.D
Data file 2: /230209.b/230209.b/02092375ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0249-10
Client ID:
Injection Date: 10-FEB-2023 14:11
Report Date: 02/10/2023 14:41
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.001	103400	5.684	-0.002	97360	23.3	26.0	10.9	Tetrachloro-m-xylene
13.884	-0.005	89045	14.112	-0.003	123861	29.3	28.8	1.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	314094	-37.6
Hexabromobiphenyl	647433	284257	-56.1 <-

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	277371	-17.7
Hexabromobiphenyl	382032	270796	-29.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	8.395	-0.007	25651	163.3	1	8.298	-0.005	25354	202.2
Aroclor-1248	2	8.564	-0.011	20677	103.2	2	8.704	-0.005	24307	180.1
Aroclor-1248	3	8.982	-0.011	67625	176.4	3	9.137	-0.015	35784	217.0
Aroclor-1248	4	9.285	-0.006	72020	379.5	4	9.531	-0.045	34048	166.9
		Total Col1Ave (4 peaks):			205.6		Total Col2Ave (4 peaks):			191.6 RPD = 7
		Corrected Ave (3 peaks):			147.6		Corrected Ave (3 peaks):			183.1 RPD = 21
Aroclor-1254	1	9.285	-0.009	72020	225.0	1	9.437	-0.008	62933	312.7
Aroclor-1254	2	9.360	-0.011	29312	214.5	2	9.955	-0.009	37633	231.4
Aroclor-1254	3	9.655	-0.007	58234	283.9	3	10.103	-0.013	114063	321.5
Aroclor-1254	4	9.785	-0.015	103266	256.9	4	10.346	-0.021	144453	407.1
Aroclor-1254	5	10.120	-0.041	130459	499.2	5	10.552	-0.011	96422	487.9
		Total Col1Ave (5 peaks):			295.9		Total Col2Ave (5 peaks):			352.1 RPD = 17
		Corrected Ave (4 peaks):			245.1		Corrected Ave (4 peaks):			318.2 RPD = 26
Aroclor-1260	1	11.032	-0.009	36669	229.9	1	11.641	-0.008	55877	286.0
Aroclor-1260	2	11.347	-0.010	30781	187.7	2	11.903	-0.010	100982	204.3
Aroclor-1260	3	11.717	-0.012	94670	219.3	3	12.421	-0.010	43870	356.1
Aroclor-1260	4	12.118	-0.015	49562	222.3	4	12.486	-0.010	77264	241.5
Aroclor-1260	5	12.232	-0.008	24485	251.9	NS	---			----
		Total Col1Ave (5 peaks):			222.2		Total Col2Ave (4 peaks):			272.0 RPD = 20
		Corrected Ave (4 peaks):			214.8		Corrected Ave (3 peaks):			244.0 RPD = 13
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks				Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.908 - 13.789) = 1932770 Col1 Total PCB = 0.5 ppm*

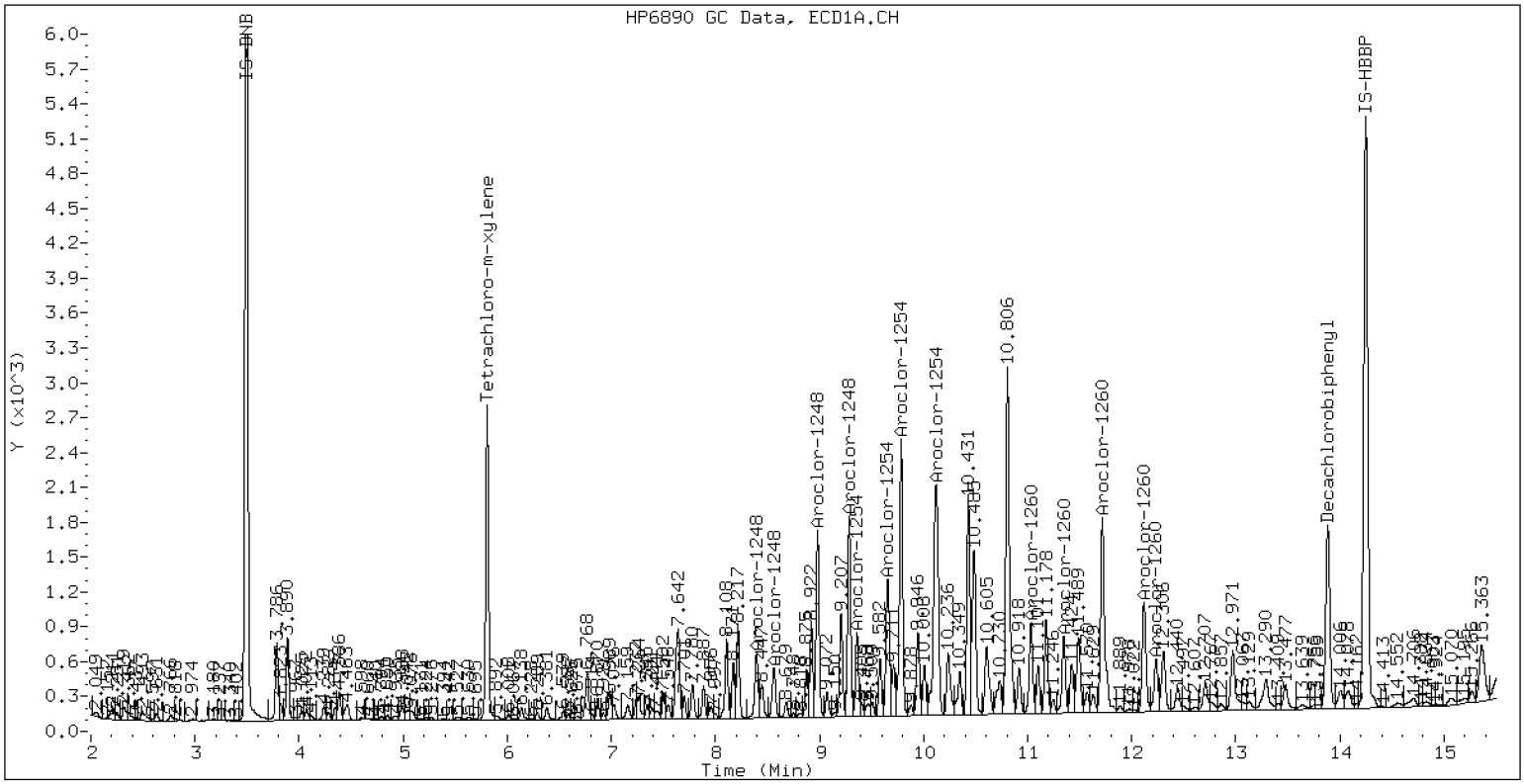
Total PCB Area Col2 (5.785 - 14.015) = 1980058 Col2 Total PCB = 0.7 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

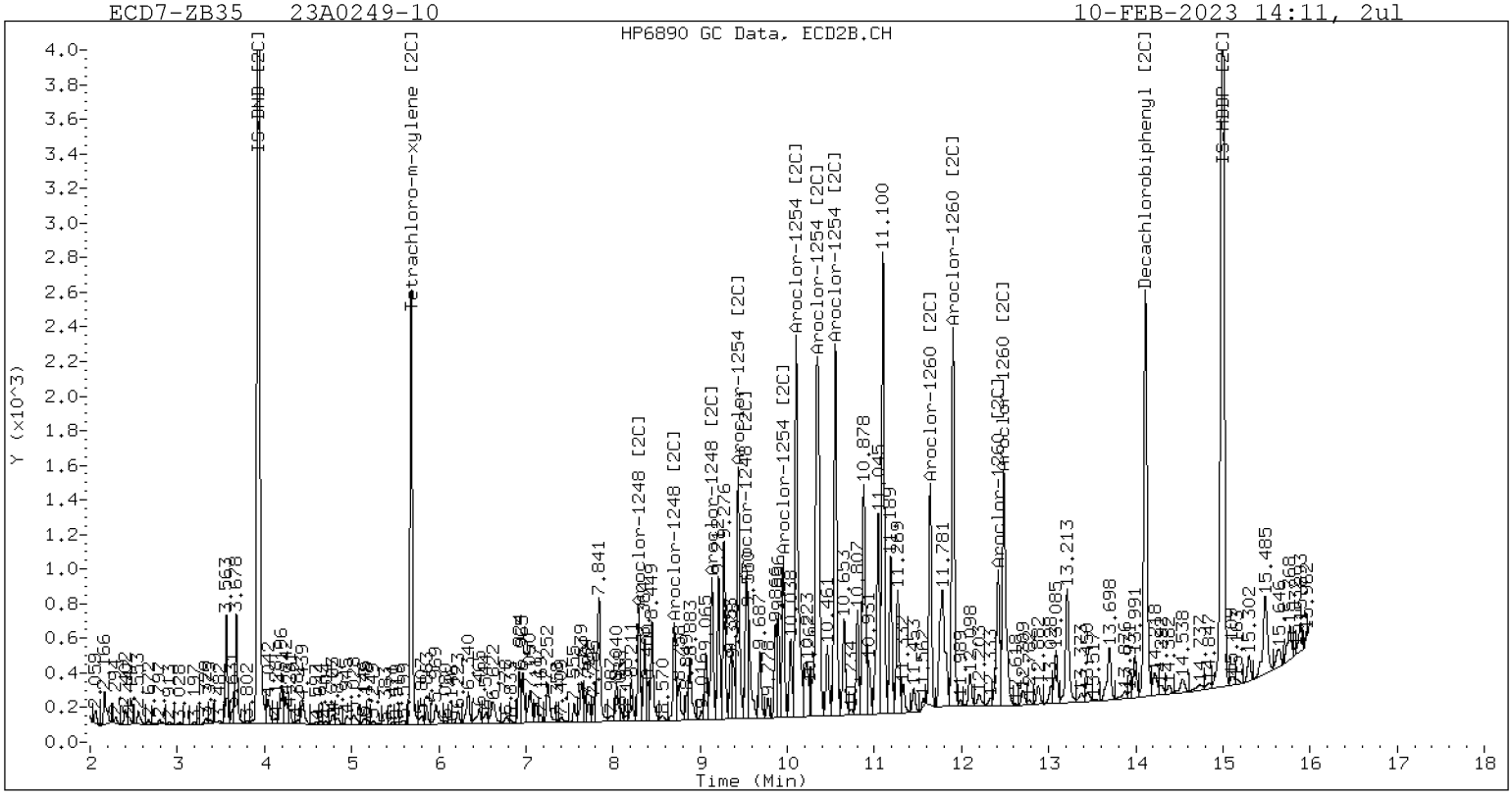
PCB Dual Column Chromatograms

ECD7-ZB5 23A0249-10 10-FEB-2023 14:11, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0249-10 10-FEB-2023 14:11, 2ul

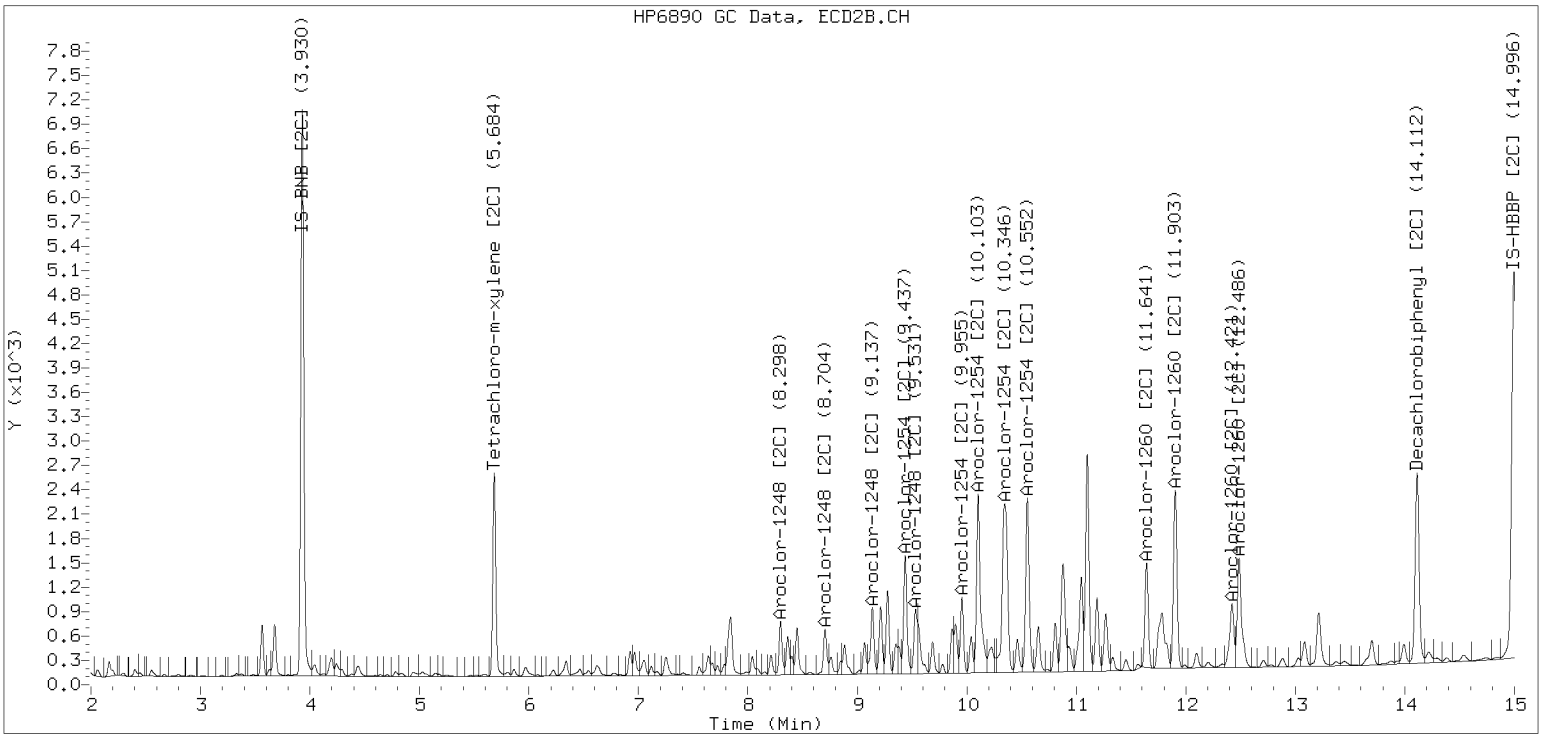


ZB-35 Manual Integration: YES

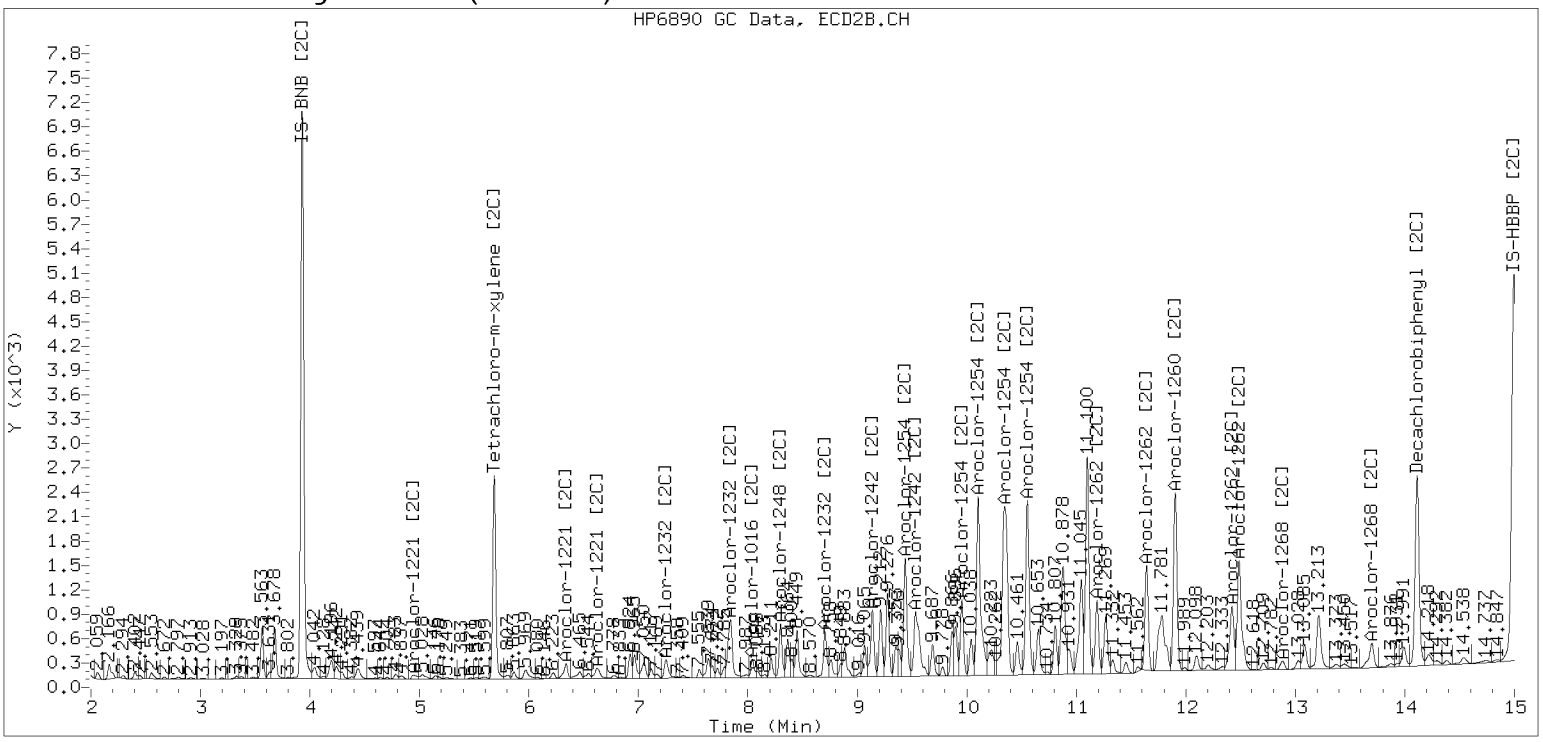
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230209.b/230209.b/02092375ECD7.D Injection Date: 10-FEB-2023

Manual Integration (After)



Processed Integration (Before)



Dual Column

LDW23-SC1020

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23A0249-11 A	File ID:	02092356ECD7.D
Sampled:	01/12/23 15:23	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 07:31
% Solids:	70.01	Preparation:	EPA 3546 (Microwave)	Initial/Final:	17.89 g Wet / 2.5 mL
Batch:	BLA0674	Sequence:	SLB0148	Calibration:	GA00061
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	1	4.0	1.6	4.0	U
11104-28-2	Aroclor 1221	1	1	4.0	1.6	4.0	U
11141-16-5	Aroclor 1232	1	1	4.0	1.6	4.0	U
53469-21-9	Aroclor 1242	1	1	4.0	1.6	4.0	U
12672-29-6	Aroclor 1248	1	1	4.0	1.6	4.0	U
11097-69-1	Aroclor 1254	1	1	4.0	1.6	4.0	U
11096-82-5	Aroclor 1260	1	1	4.0	0.6	4.0	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9842*	*5.89*	*73.7*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9842*	*5.81*	*72.8*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092356ECD7.D
Data file 2: /230209.b/230209.b/02092356ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23A0249-11
Client ID:
Injection Date: 10-FEB-2023 07:31
Report Date: 02/10/2023 12:59
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.003	150719	5.683	-0.002	147379	29.1	32.1	9.8	Tetrachloro-m-xylene
13.886	-0.006	110941	14.114	-0.001	158123	29.5	30.9	4.7	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	366289	-27.2
Hexabromobiphenyl	647433	351749	-45.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	339539	0.8
Hexabromobiphenyl	382032	322203	-15.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	---			0.0
Aroclor-1248	2	---			0.0	2	---			0.0
Aroclor-1248	3	---			0.0	3	---			0.0
Aroclor-1248	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	---			0.0
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	---			0.0	3	---			0.0
Aroclor-1254	4	---			0.0	4	---			0.0
Aroclor-1254	5	---			0.0	5	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	---			0.0	1	---			0.0
Aroclor-1260	2	---			0.0	2	---			0.0
Aroclor-1260	3	---			0.0	3	---			0.0
Aroclor-1260	4	---			0.0	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 156673 Col1 Total PCB = 0.0 ppm*

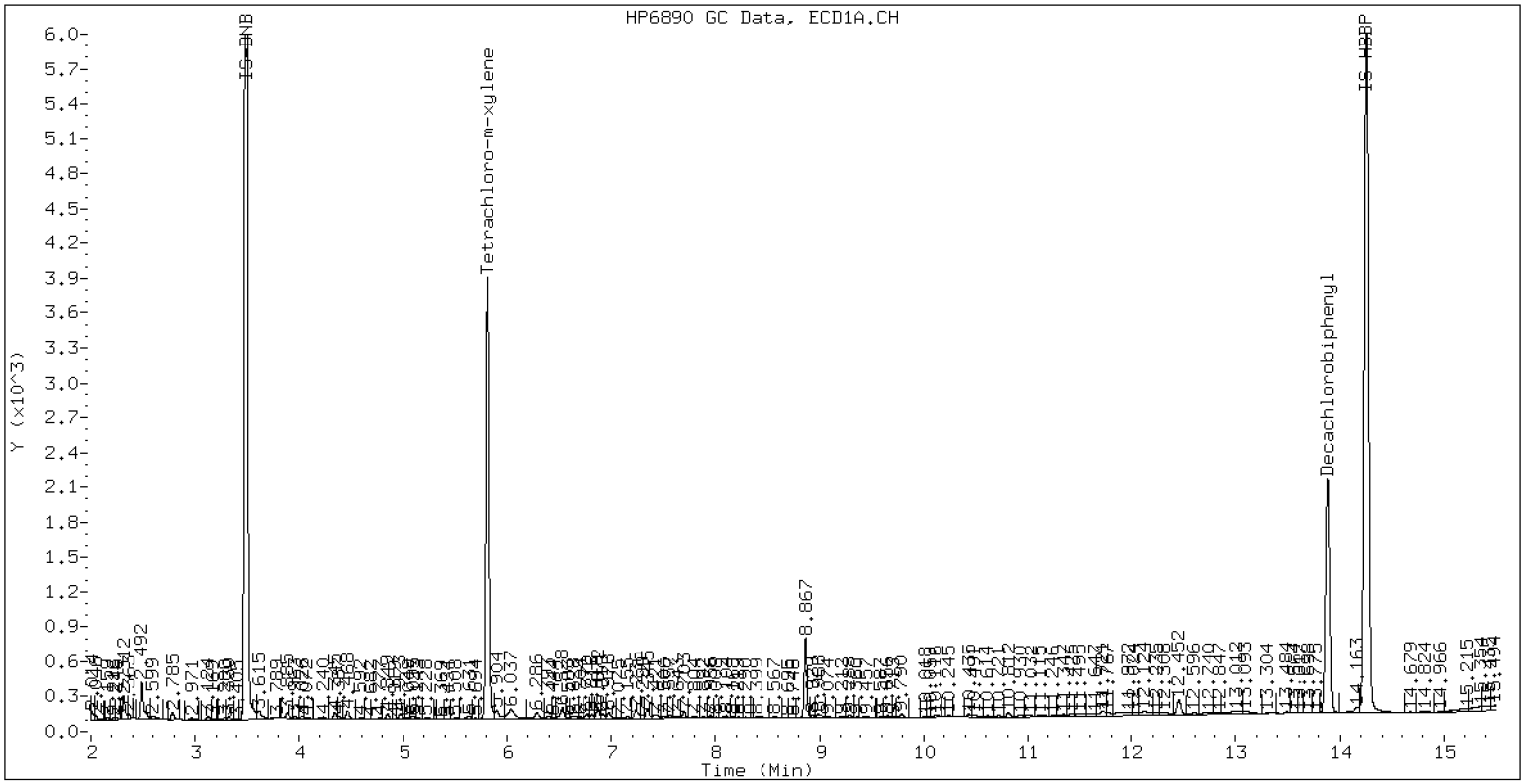
Total PCB Area Col2 (5.785 - 14.015) = 166523 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

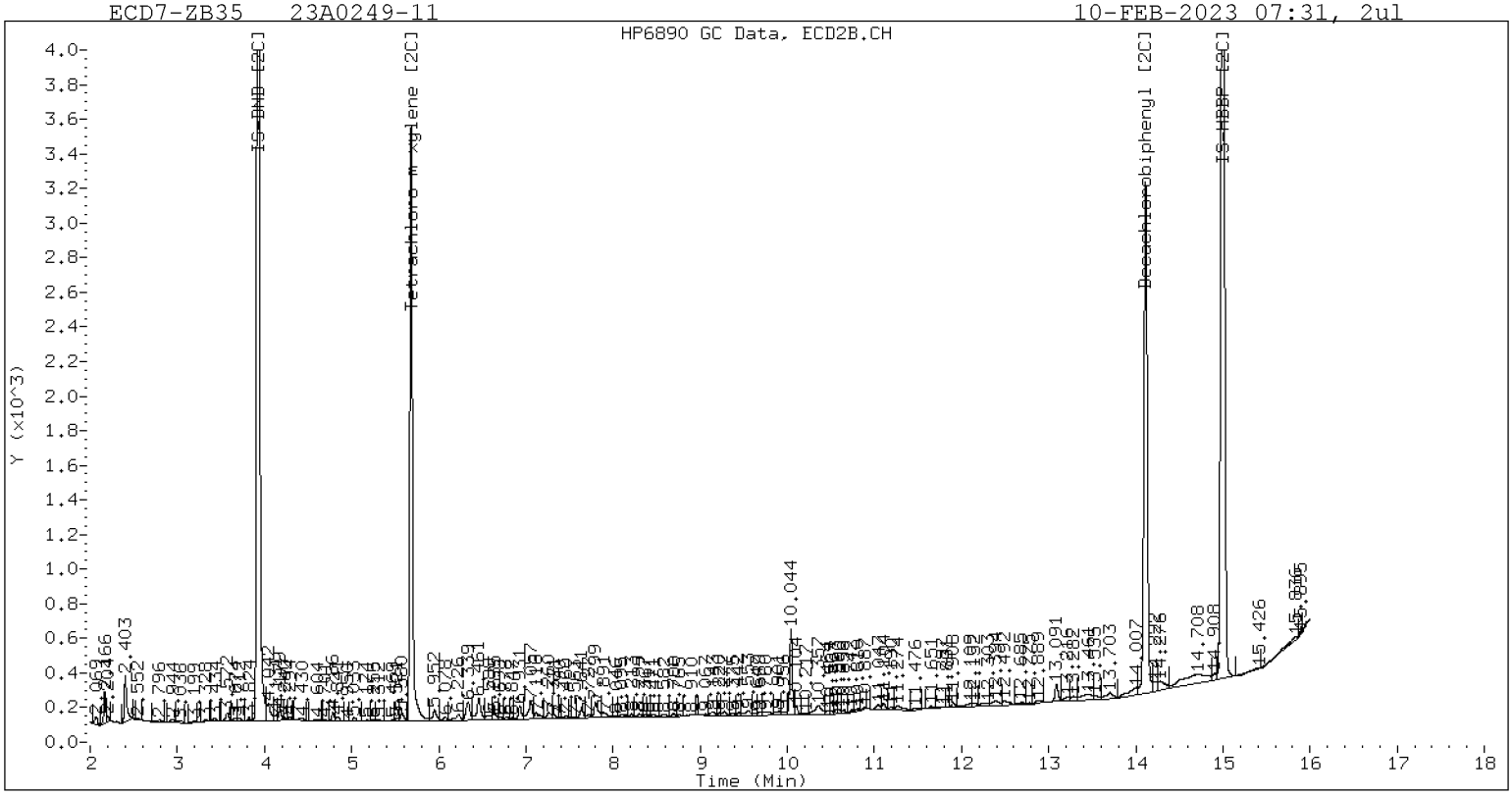
PCB Dual Column Chromatograms

ECD7-ZB5 23A0249-11 10-FEB-2023 07:31, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23A0249-11 10-FEB-2023 07:31, 2ul



ZB-35 Manual Integration: NO

PREPARATION BATCH SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23A0249

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

Batch: BLA0674 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1083	23A0249-02	02092345ECD7.D	01/31/23 11:15	
LDW23-SC1018	23A0249-03	02092346ECD7.D	01/31/23 11:15	
LDW23-SC1084	23A0249-04	02092347ECD7.D	01/31/23 11:15	
LDW23-SC1025	23A0249-05	02092372ECD7.D	01/31/23 11:15	
LDW23-SC1033	23A0249-06	02092349ECD7.D	01/31/23 11:15	
LDW23-IT1034	23A0249-07	02092350ECD7.D	01/31/23 11:15	
LDW23-SC1024	23A0249-08	02092373ECD7.D	01/31/23 11:15	
LDW23-SC1040	23A0249-09	02092374ECD7.D	01/31/23 11:15	
LDW23-SC1030	23A0249-10	02092375ECD7.D	01/31/23 11:15	
LDW23-SC1020	23A0249-11	02092356ECD7.D	01/31/23 11:15	
Blank	BLA0674-BLK1	02092341ECD7.D	01/31/23 11:50	
LCS	BLA0674-BS1	02092342ECD7.D	01/31/23 11:50	
LCS Dup	BLA0674-BSD1	02092343ECD7.D	01/31/23 11:50	
LDW23-IT1034	BLA0674-MS1	02092351ECD7.D	01/31/23 11:50	
LDW23-IT1034	BLA0674-MSD1	02092352ECD7.D	01/31/23 11:50	
Reference	BLA0674-SRM1	02092344ECD7.D	01/31/23 11:50	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0674

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:7 Aroclors)

WO Comments

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Analysis: 8082A PCB Solid 4

Lab Number & Container	% Solids	Initial (g) Target Dry: 12.5 (Wet) Actual	(REQ) Acid C/U (5mL)	(REQ) Sulfur C/U (5mL) 1 2 3	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23A0249-02 A	61.9	(20.19) 20.23	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0249-03 A	49.9	(25.05) 25.08	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0249-04 A	53.9	(23.20) 23.26	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0249-05 A	59.4	(21.06) 21.11	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0249-06 A	76.0	(16.46) 16.46	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0249-07 A	74.7	(16.73) 16.79	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0249-08 A	49.0	(25.52) 25.57	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0249-09 A	57.9	(21.60) 21.63	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0249-10 A	47.6	(26.27) 26.30	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0249-11 A	70.0	(17.86) 17.89	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0295-01 A	54.5	(22.95) 22.95	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0295-02 A	54.1	(23.13) 23.14	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0295-03 A	58.3	(21.43) 21.46	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0295-04 A	52.9	(23.62) 23.64	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0295-05 A	60.1	(20.79) 20.80	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0295-06 A	54.4	(23.00) 23.01	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0295-07 A	77.6	(16.11) 16.11	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0295-08 A	78.0	(16.02) 16.03	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0295-09 A	66.5	(18.79) 18.79	5mL	5mL	2mL	2.5 ____	1.0 ____	
23A0295-10 A	78.1	(16.01) 16.09	5mL	5mL	2mL	2.5 ____	1.0 ____	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 12.5 (Wet) Actual	(REQ) Acid C/U (5mL)	(REQ) Sulfur C/U (5mL) 1 2 3	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLA0674-BLK1	100.0	(12.50) 12.54	5mL	5mL	2mL	2.5 ____	1.0 ____	(10g Actual Wt.)
BLA0674-BS1	100.0	(12.50) 12.50	5mL	5mL	2mL	2.5 ____	1.0 ____	(10g Actual Wt.)
BLA0674-BSD1	100.0	(12.50) 12.50	5mL	5mL	2mL	2.5 ____	1.0 ____	(10g Actual Wt.)
BLA0674-MS1	74.7	(16.73) 16.74	5mL	5mL	2mL	2.5 ____	1.0 ____	Use 23A0249-07
BLA0674-MSD1	74.7	(16.73) 16.74	5mL	5mL	2mL	2.5 ____	1.0 ____	Use 23A0249-07
BLA0674-SRM1	100.0	~~(12.50)~~ (2.50) 2.50 +1g DI WATER	5mL	5mL	2mL	2.5 ____	1.0 ____	Use K011477

Client ID verified By	Date	Preparation Reviewed By	Date	Extraction Date and Time
✓	01/31/23	LJ	2/8/23	01/31/23 11:50

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0674

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:7 Aroclors)

WO Comments

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Steps

Microwave
1 2 3
01/31/23
CT
Analyst/Date

KD
100°C
Hexane Exchange
(2 X 20 mL)
1 2 3 4 5 6
TWC 2/6/23
Analyst/Date

TurboVap
Pre Cleanups
1 2 3 4 5
LJ 2/7/23
Analyst/Date

TurboVap
Post Cleanups
1 2 3 4 5
LJ 2/8/23
Analyst/Date

Vialing
LJ 2/8/23
Analyst/Date

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: CT/N Date: 01/31/23	
Neutral Glass Wool	L000350
1:1 Hexane/Acetone	L000879
Hexane	K000831
Anhydrous Sodium Sulfate	L000759
KD Analyst: TWC Date: 2/6/23	
Anhydrous Sodium Sulfate	K011573
Hexane	N/A
Vialing Analyst: LJ Date: 2/8/23	
Hexane	K011573
Concentrated Sulfuric Acid	L001033
Silica Gel (SPE) Darts	K011573
Sodium Sulfite	K010363
Tetrabutylammonium hydrogensulfate (TBAS)	L000840

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 2µg/mL	N L000773 (V) Exp Date: 7/21/2023	50µL	CT	
Spike 20µg/mL	1 K008150 (V) Exp Date: 3/5/2023	63µL	CT	

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0674

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:7 Aroclors)

Matrix: Solid **Date Prepared:** 01/31/23 **Balance ID:** B14646614 **Set Up By:** CRD 1/27/23

WO Comments

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
QLS 5	QLS Spike

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLA0674

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:7 Aroclors)

WO Comments

23A0249: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)
23A0295: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR J006840-43, 7935-36, K011477-79, Dup </H> Store in freezer (except GS)

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh soil/sed into beakers-lightly dry with sodium sulfate. 2. Transfer to microwave vessel(s). Note: (do not fill vessels more than 2/3rd full. Some samples may require two vessels). 3. Add 1:1 Hexane/Acetone until the solvent layer is 3 inches above the soil layer after homogenization. 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-Re-homogenize while hot then cool vessels in R-05 15 minutes. Re-homogenize while cool. 7. Decant 1:1 Hex/Ace into Erlenmeyer flask with sodium sulfate in bottom and funnel with neutral glasswool plug. 8. Re-homogenize and rinse with 1:1 Hexane/Acetone. 9. Let cool and decant solvent then empty the soil into the funnel and rinse with Hexane. 10. KD on 100° bath. 11. Exchange (2 X with 20mL) Hexane. 12. TurboVap. 13. Clean-ups. 14. TurboVap. 15. Vial with Hexane. A. Need Total Solids Y [N] B. Archive/Freeze [Y] / N	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: PCB Extraction Batch BLA0674

Total Solids Batch: BLA0590 Work Order(s): 23A0249

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 02-11	CR 1/26/23
☒ Standing Water Decanted (Not shared)= 03-06, 08, 10	CR 1/26/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 02-11	CR 1/26/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
295-03 got turbo vaped down to 0.5 mL	LJ 2/7/23
☒ Share Samples Y (N)	CR 1/26/23
☒ Multiple Jars Y (N)	CR 1/26/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: PUB Extraction Batch: BLA0674

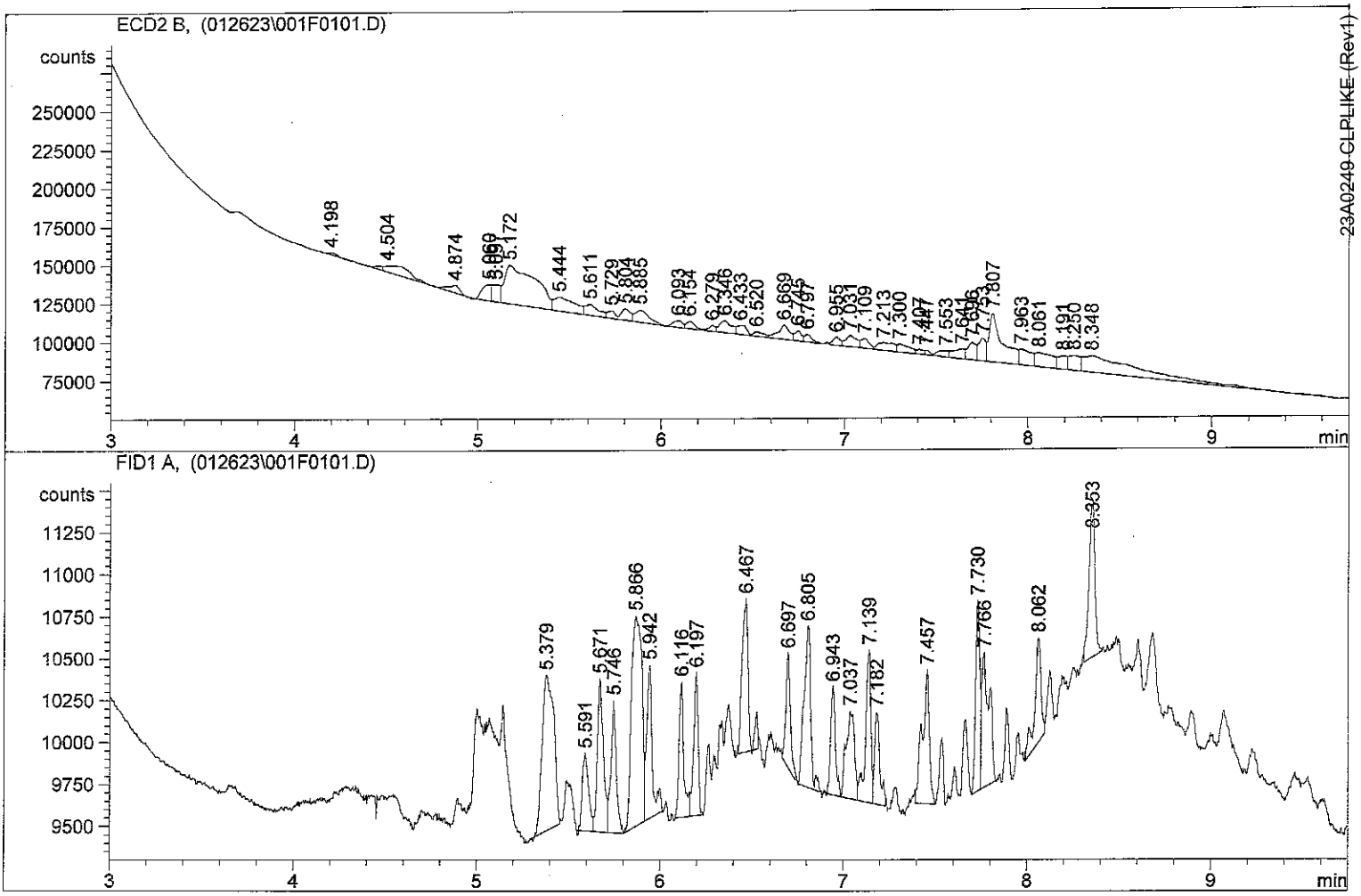
Total Solids Batch: BLA0590 Work Order(s): 23A0295

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-10	CR 1/26/23
☒ Standing Water Decanted (Not shared)= 01,02,04,06,07	CR 1/26/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 01-10	CR 1/26/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	CR 1/26/23
☒ Multiple Jars Y / (N)	CR 1/26/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Injection Date : 1/26/2023 4:23:39 PM
Sample Name : DCM RINSE
Acq. Operator : CRR

Seq. Line : 1
Location : Vial 1
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

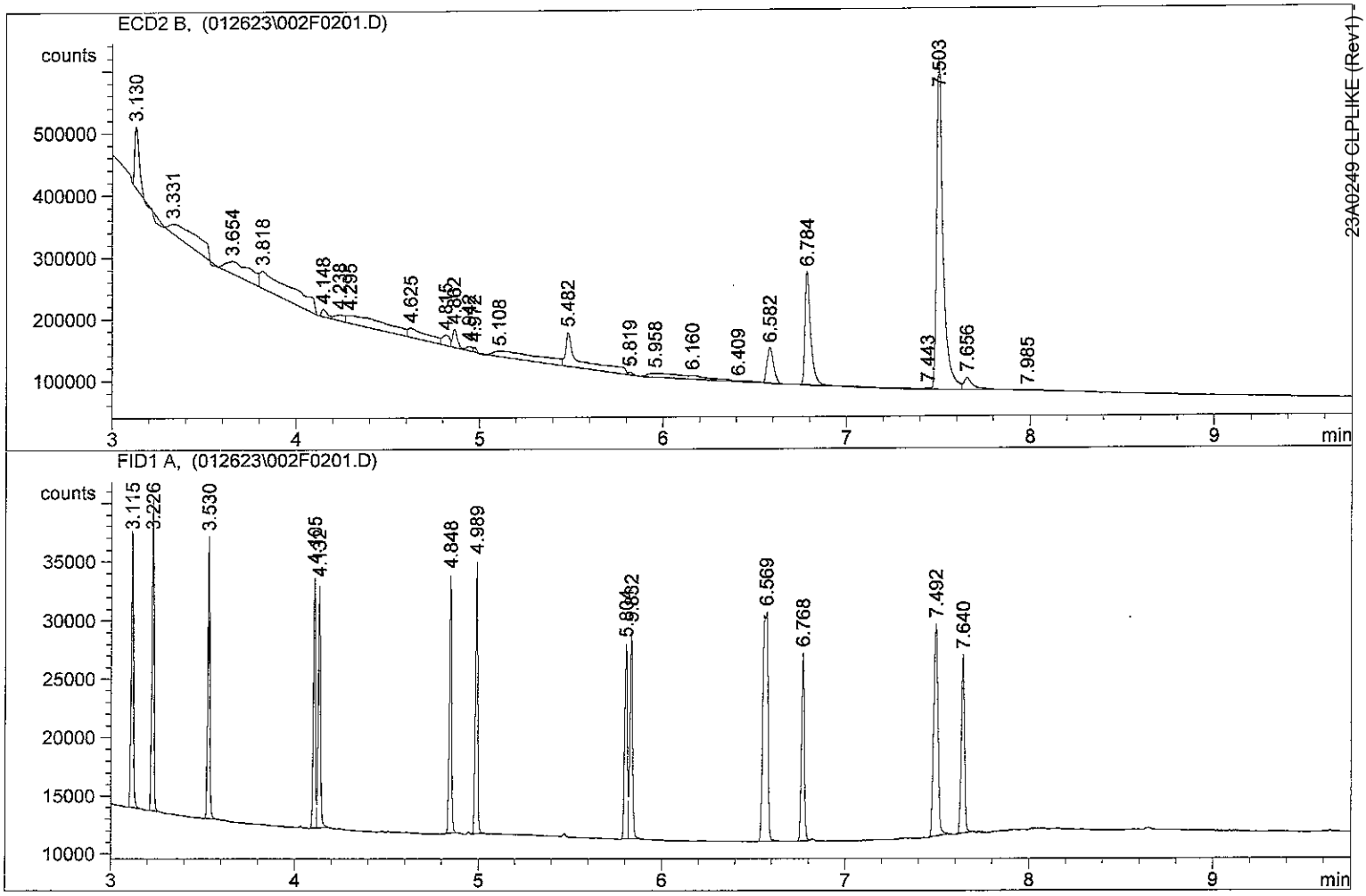


*** End of Report ***

Injection Date : 1/26/2023 4:37:14 PM
Sample Name : PNA STD 10PPM
Acq. Operator : CRR

Seq. Line : 2
Location : Vial 2
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

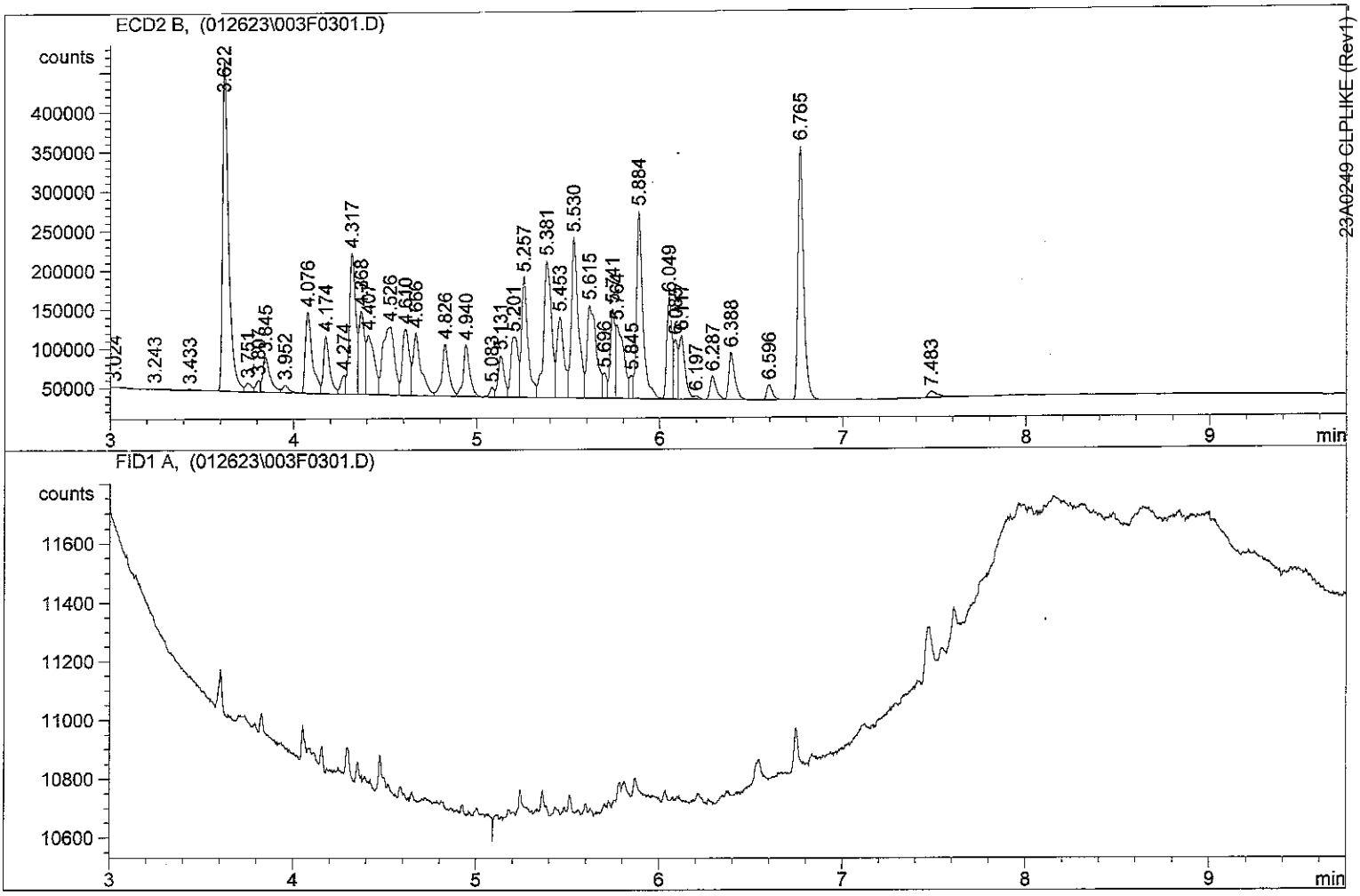


*** End of Report ***

Injection Date : 1/26/2023 4:51:38 PM
Sample Name : AR1660 1PPM
Acq. Operator : CRR

Seq. Line : 3
Location : Vial 3
Inj : 1
Inj Volume : 1 µl

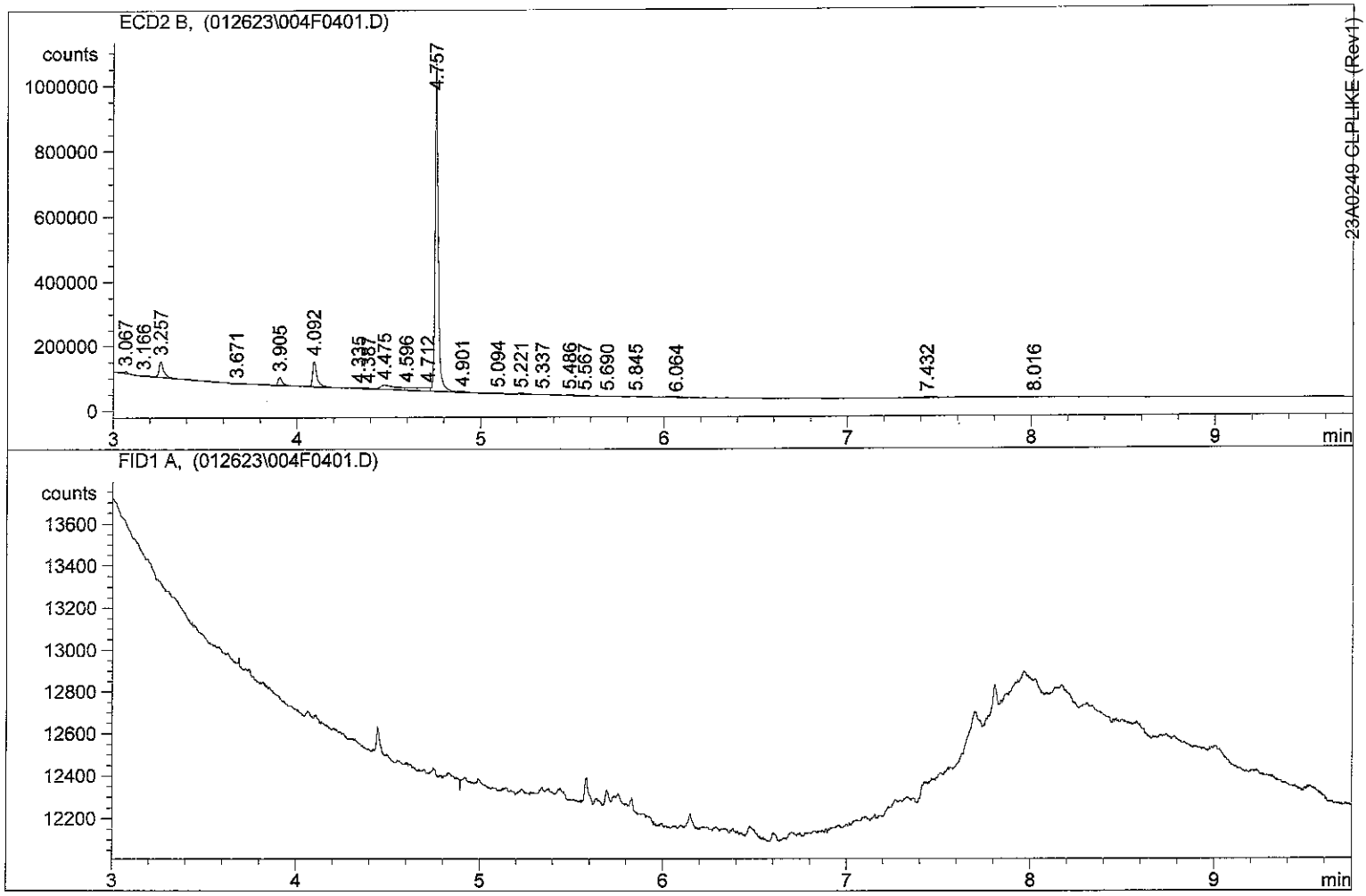
Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date	: 1/26/2023 5:05:37 PM	Seq. Line	: 4
Sample Name	: 23A0249 02	Location	: Vial 4
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

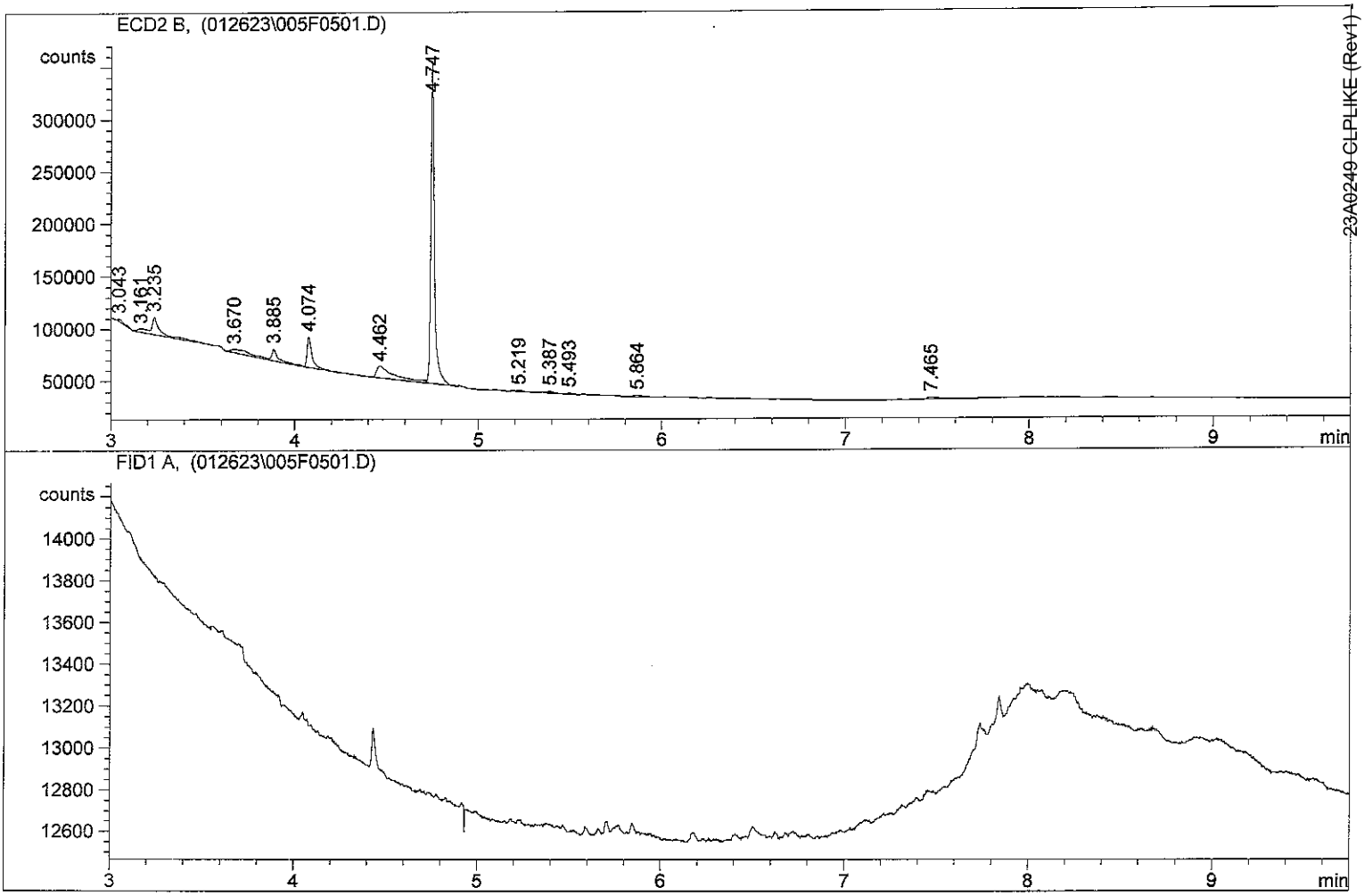


*** End of Report ***

Injection Date : 1/26/2023 5:20:10 PM
Sample Name : 23A0249 03
Acq. Operator : CRR

Seq. Line : 5
Location : Vial 5
Inj : 1
Inj Volume : 1 µl

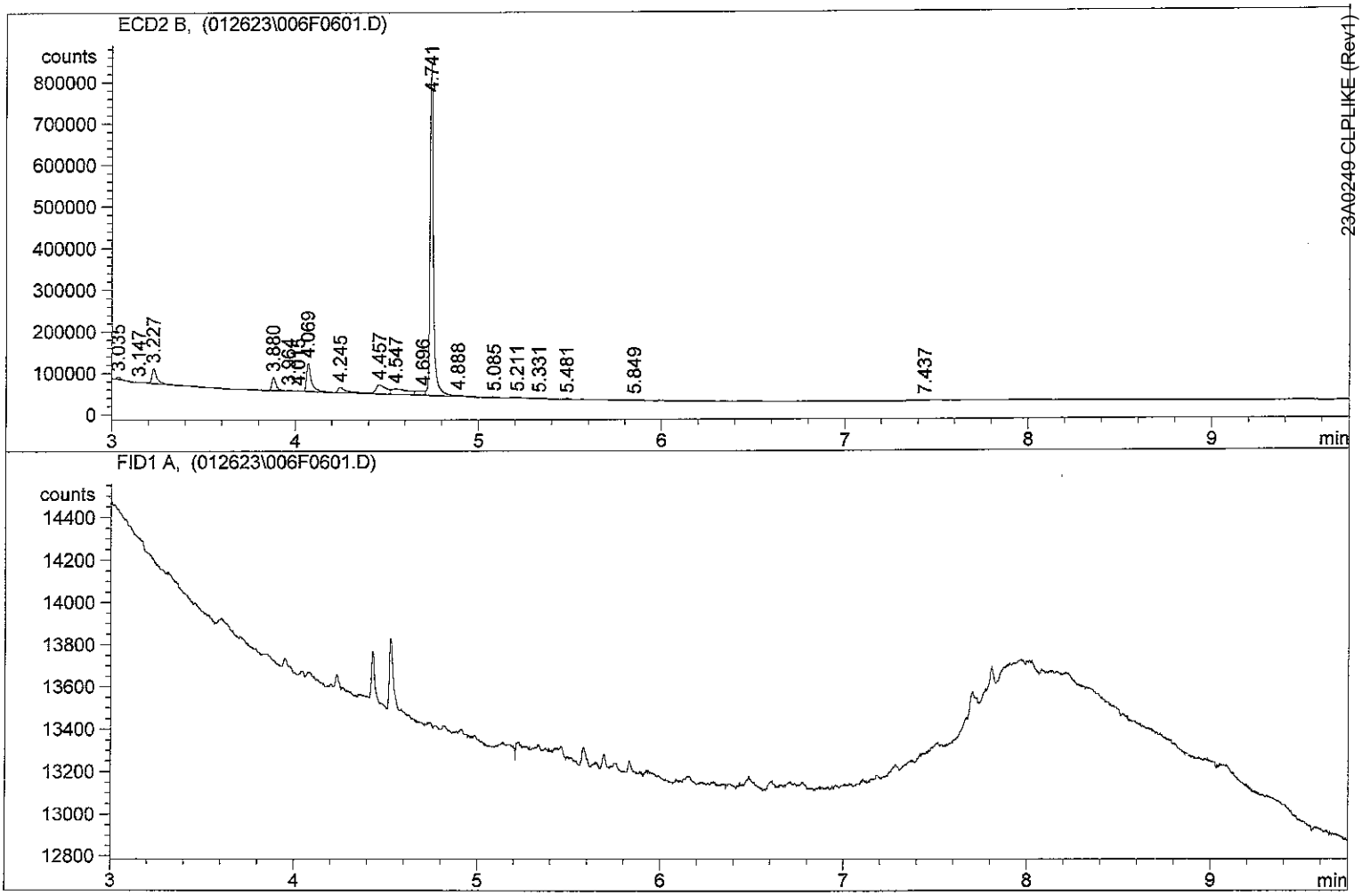
Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date : 1/26/2023 5:34:11 PM Seq. Line : 6
Sample Name : 23A0249 04 Location : Vial 6
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

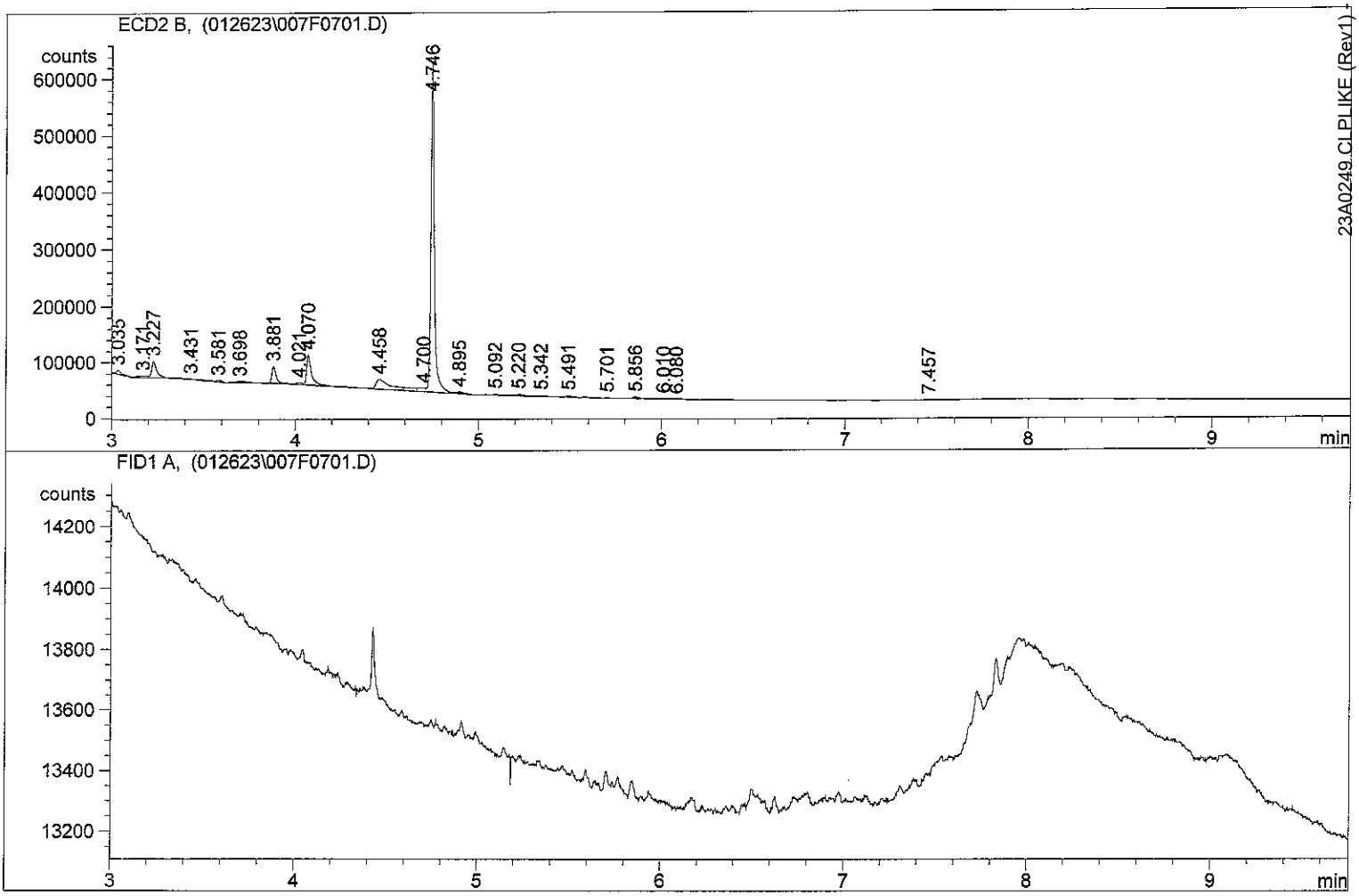


*** End of Report ***

Injection Date : 1/26/2023 5:48:43 PM
Sample Name : 23A0249 05
Acq. Operator : CRR

Seq. Line : 7
Location : Vial 7
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

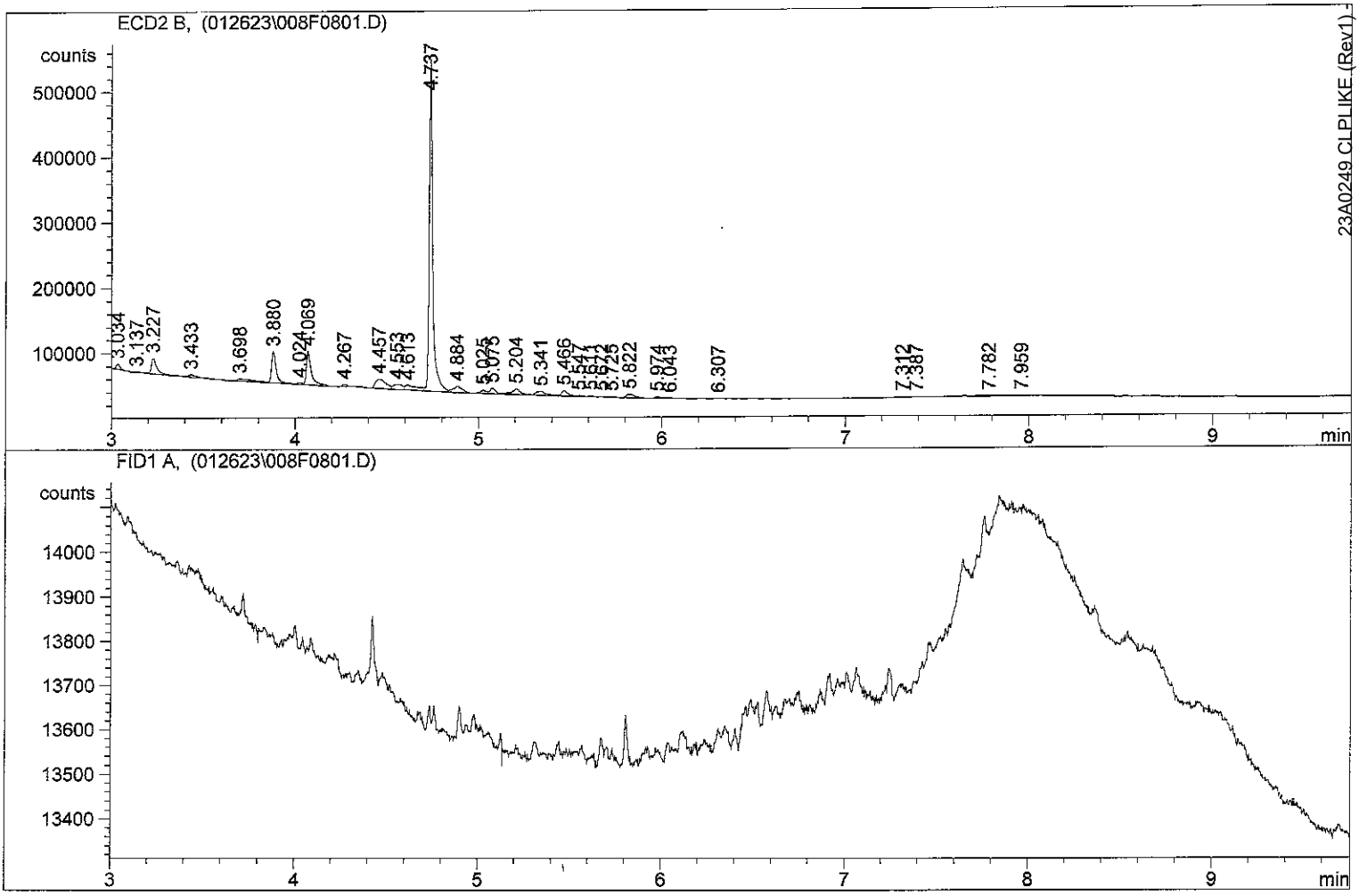


*** End of Report ***

Injection Date : 1/26/2023 6:02:44 PM
Sample Name : 23A0249 06
Acq. Operator : CRR

Seq. Line : 8
Location : Vial 8
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

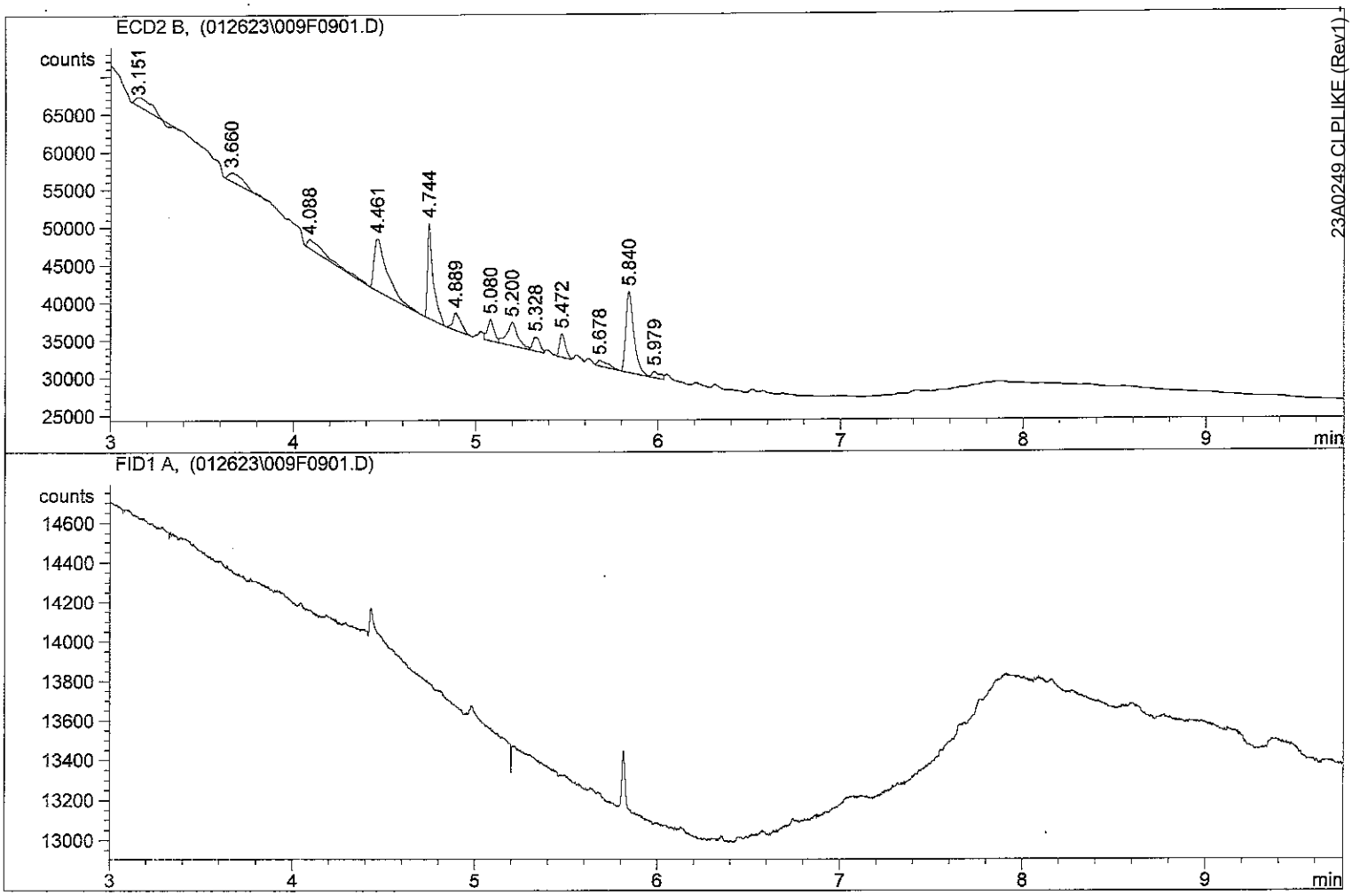


*** End of Report ***

Injection Date : 1/26/2023 6:17:20 PM
Sample Name : 23A0249 07
Acq. Operator : CRR

Seq. Line : 9
Location : Vial 9
Inj : 1
Inj Volume : 1 µl

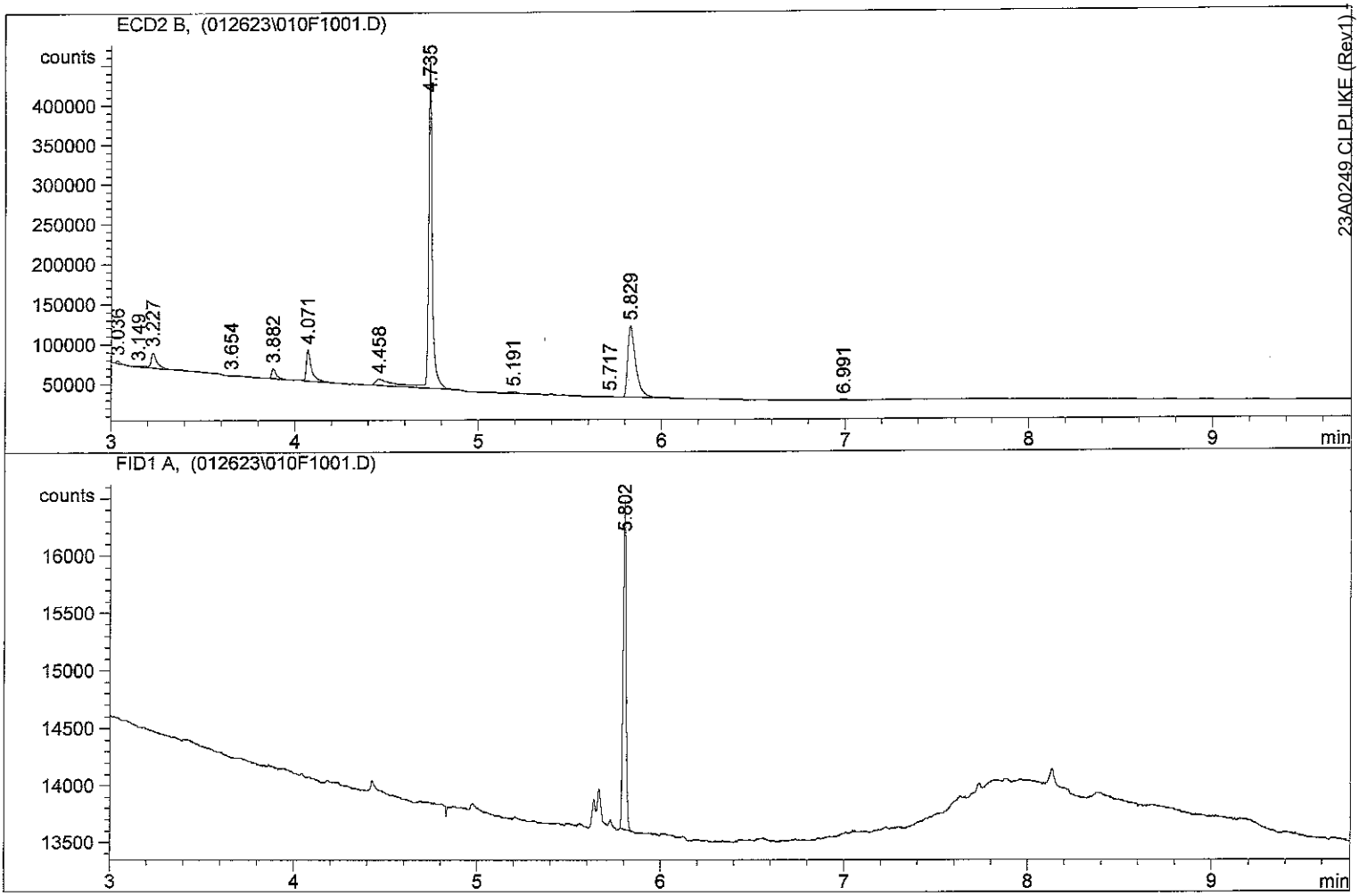
Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date	: 1/26/2023 6:31:21 PM	Seq. Line	: 10
Sample Name	: 23A0249 08	Location	: Vial 10
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\012623.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		

SCREEN METHOD

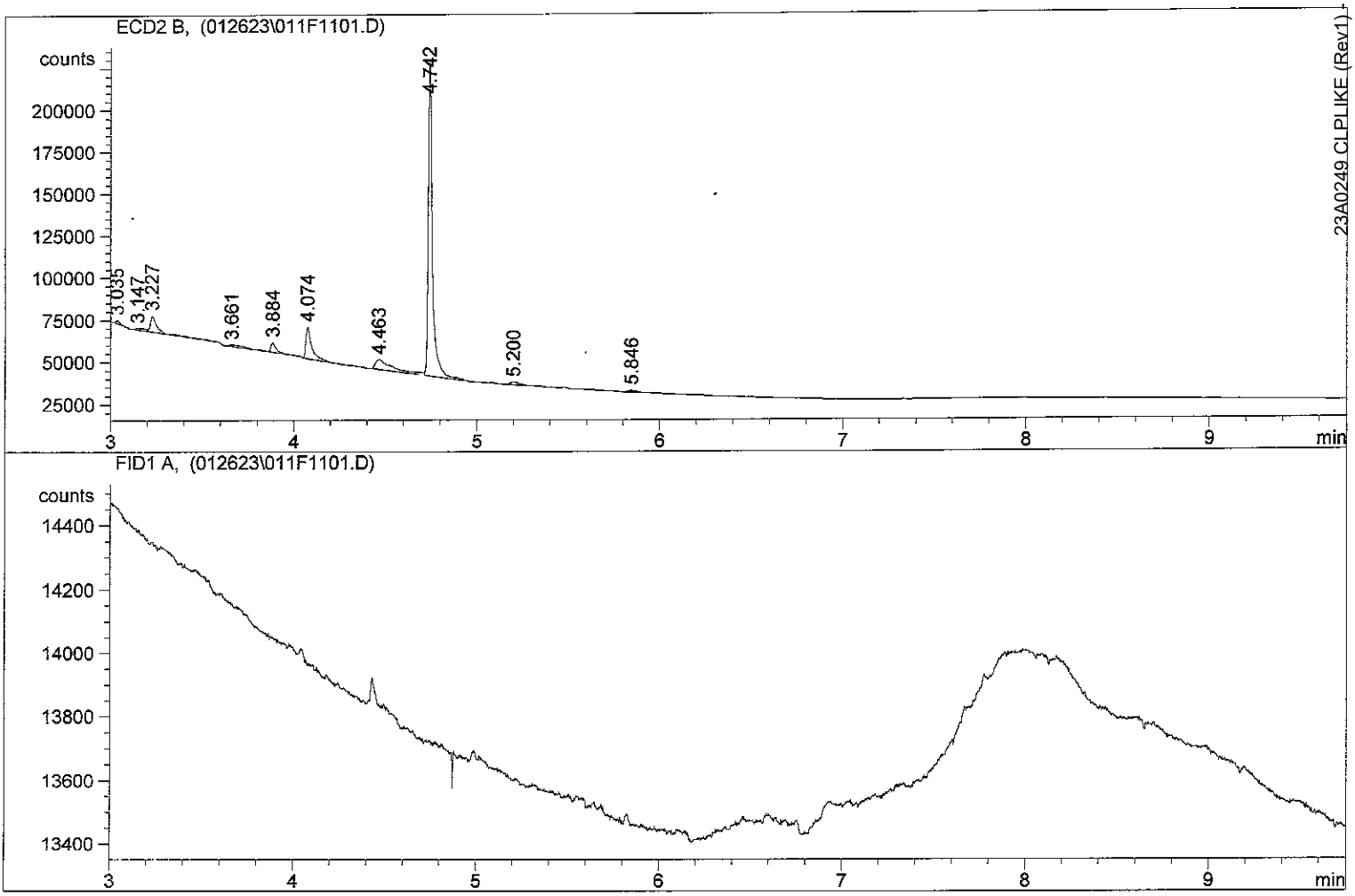


*** End of Report ***

Injection Date : 1/26/2023 6:45:53 PM
Sample Name : 23A0249 09
Acq. Operator : CRR

Seq. Line : 11
Location : Vial 11
Inj : 1
Inj Volume : 1 µl

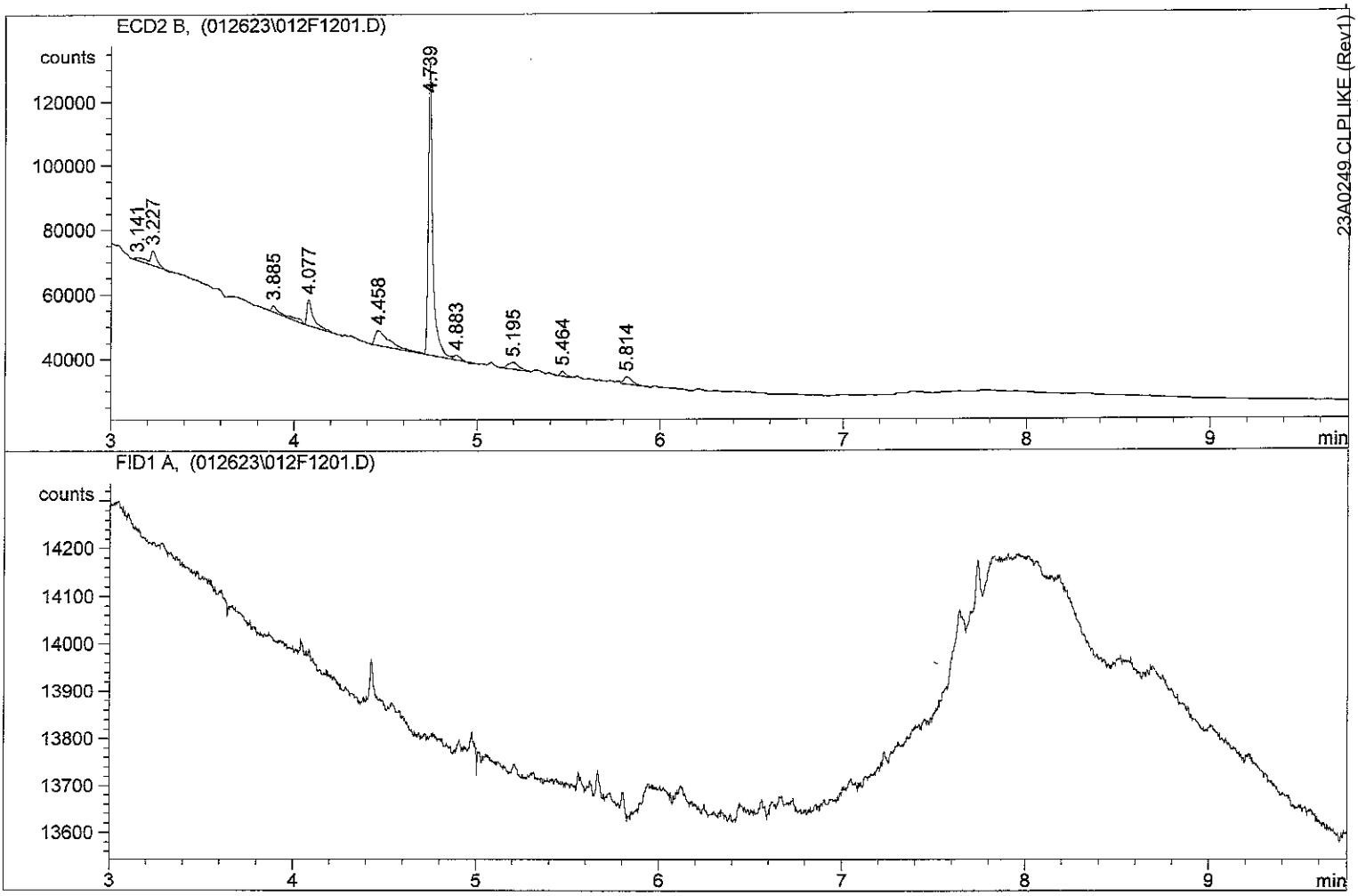
Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date	: 1/26/2023 6:59:54 PM	Seq. Line :	12
Sample Name	: 23A0249 10	Location :	Vial 12
Acq. Operator	: CRR	Inj :	1
		Inj Volume :	1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\012623.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		

SCREEN METHOD

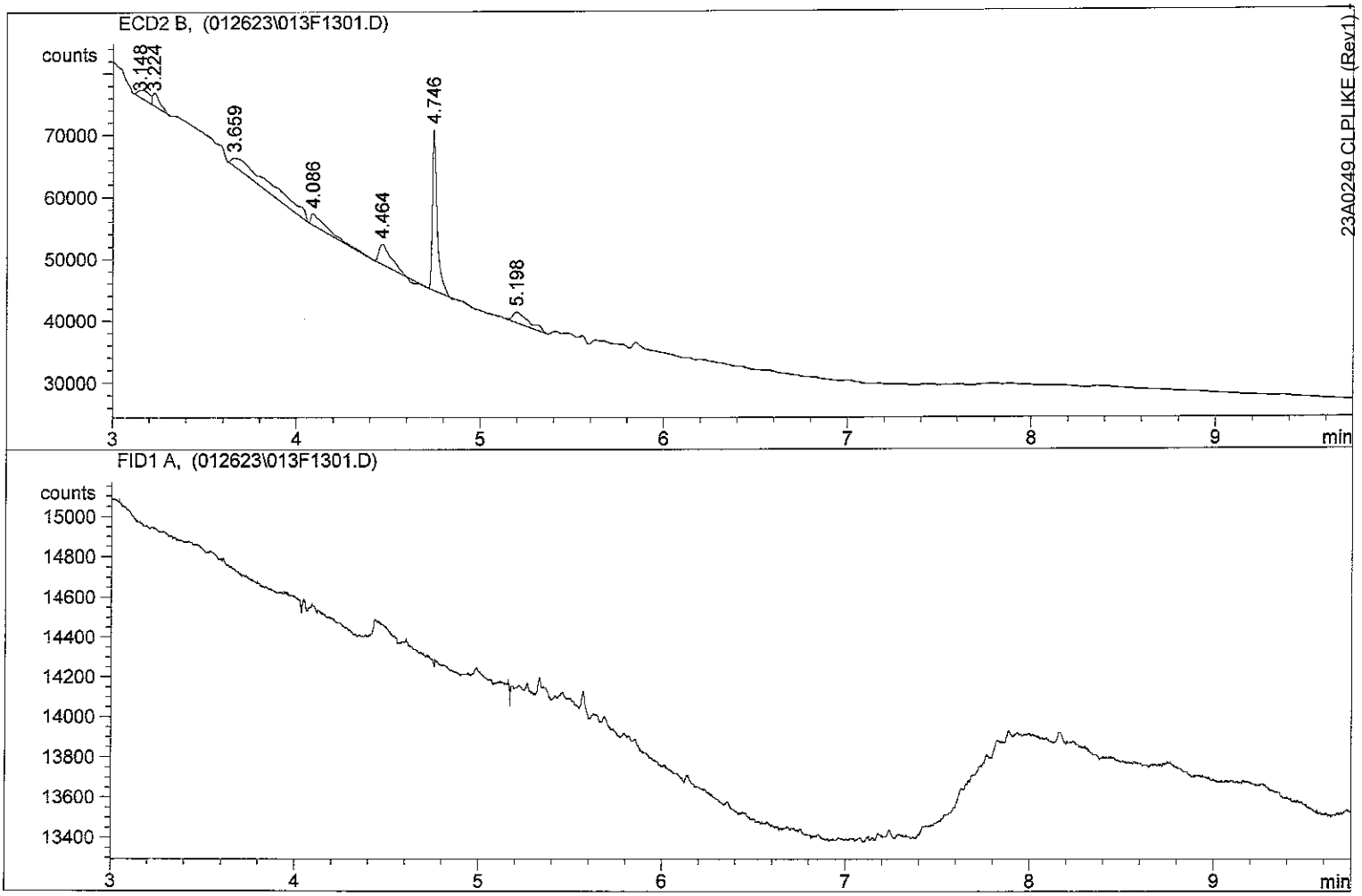


*** End of Report ***

Injection Date : 1/26/2023 7:14:26 PM
Sample Name : 23A0249 11
Acq. Operator : CRR

Seq. Line : 13
Location : Vial 13
Inj : 1
Inj Volume : 1 µl

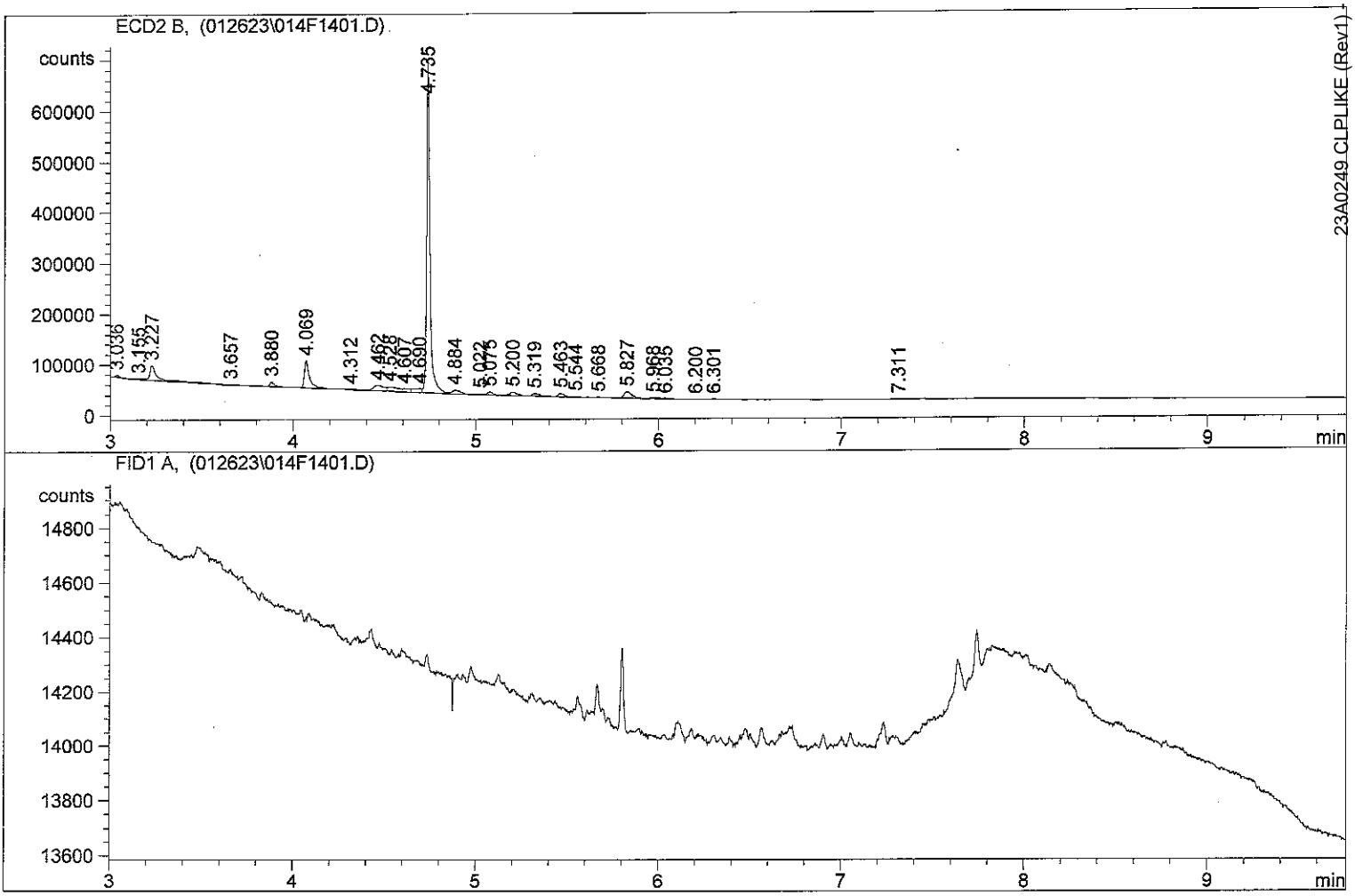
Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date : 1/26/2023 7:28:26 PM Seq. Line : 14
Sample Name : 23A0295 01 Location : Vial 14
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

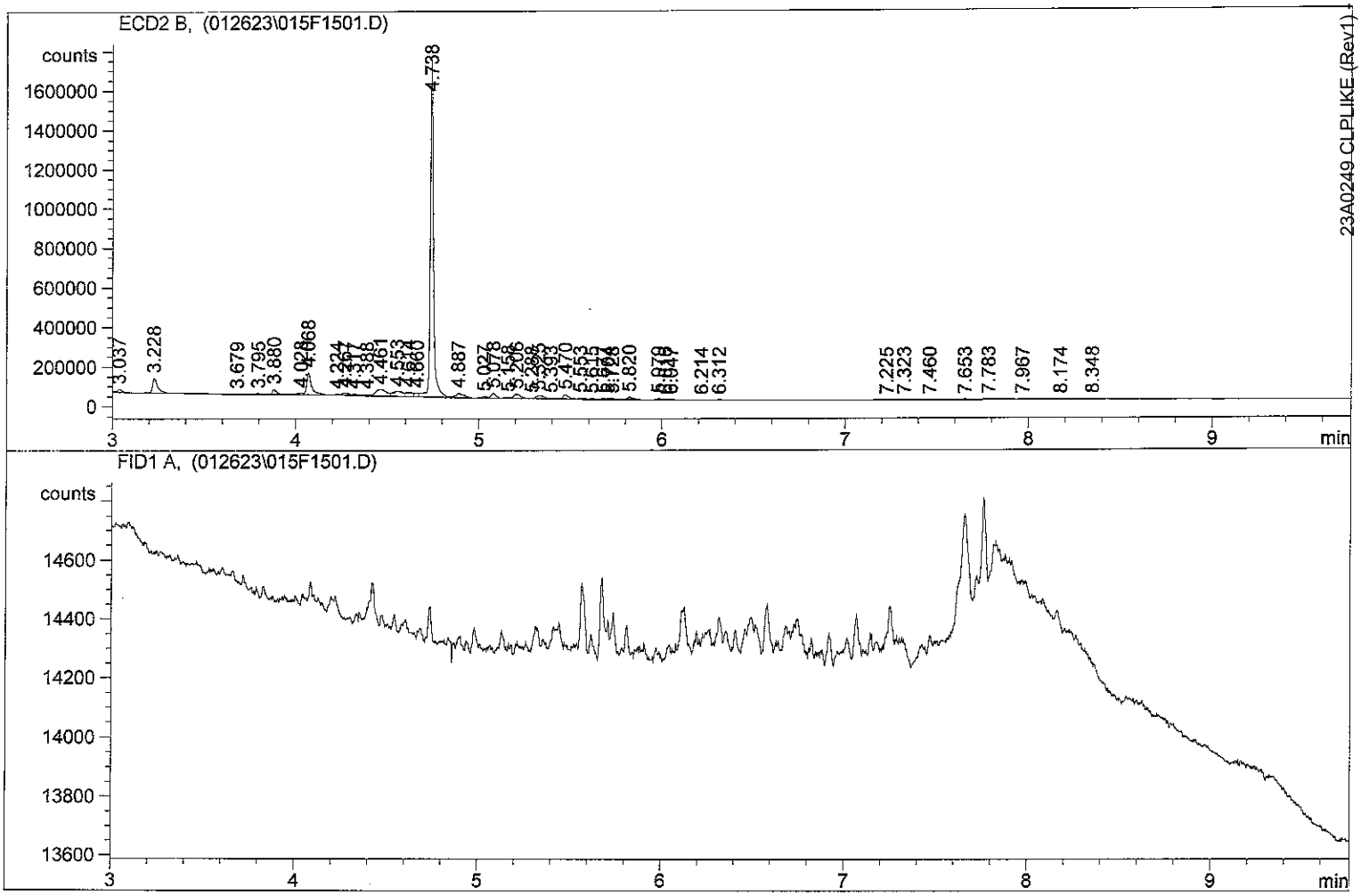
Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date	: 1/26/2023 7:42:59 PM	Seq. Line	: 15
Sample Name	: 23A0295 02	Location	: Vial 15
Acq. Operator	: CRR	Inj	: 1
		Inj Volume	: 1 µl
Sequence File	: C:\HPCHEM\1\SEQUENCE\012623.S		
Method	: C:\HPCHEM\1\METHODS\SCREEN.M		
Last changed	: 7/9/2021 3:37:33 AM by TW		

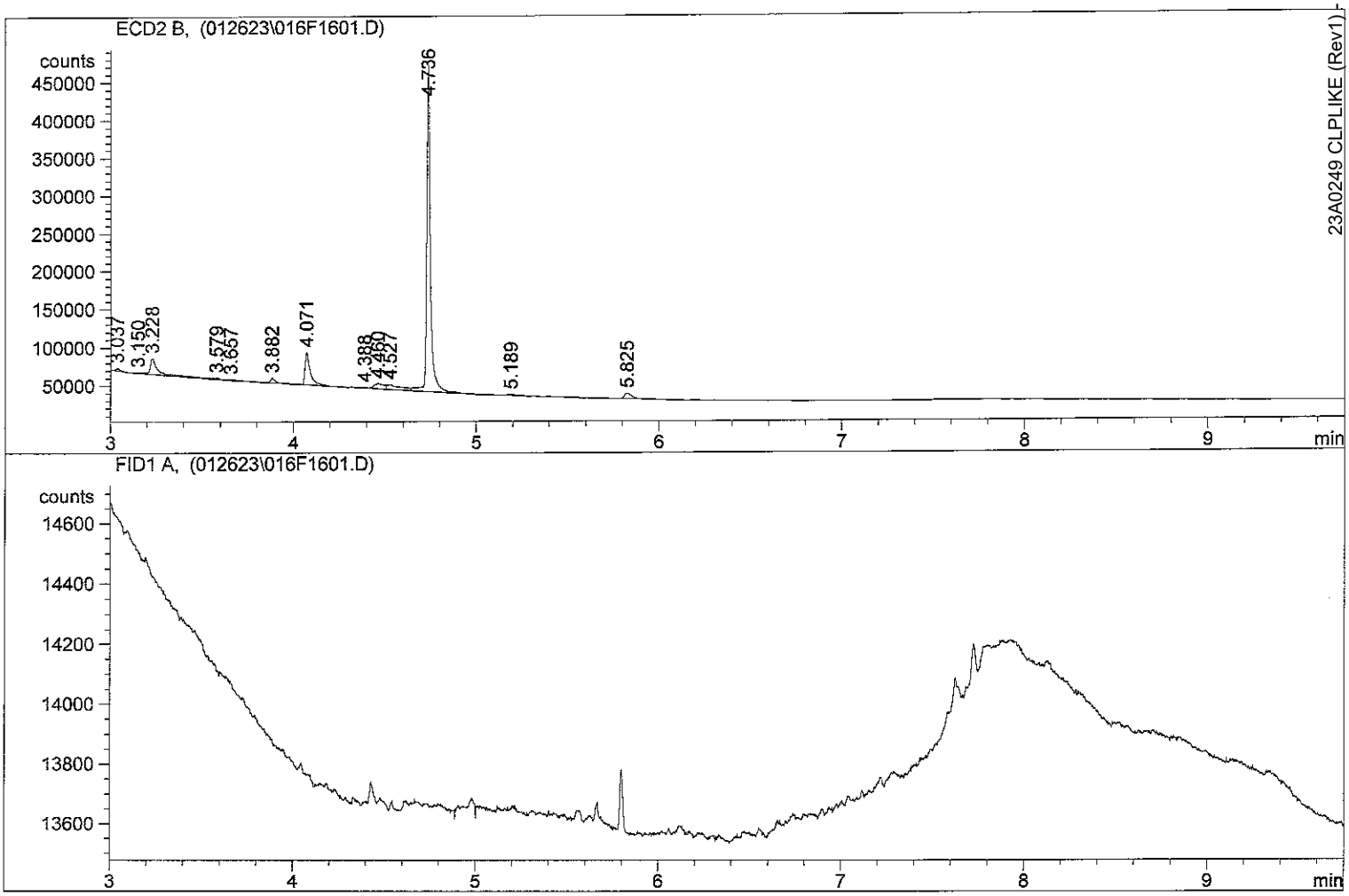
SCREEN METHOD



*** End of Report ***

Injection Date : 1/26/2023 7:57:01 PM Seq. Line : 16
Sample Name : 23A0295 03 Location : Vial 16
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

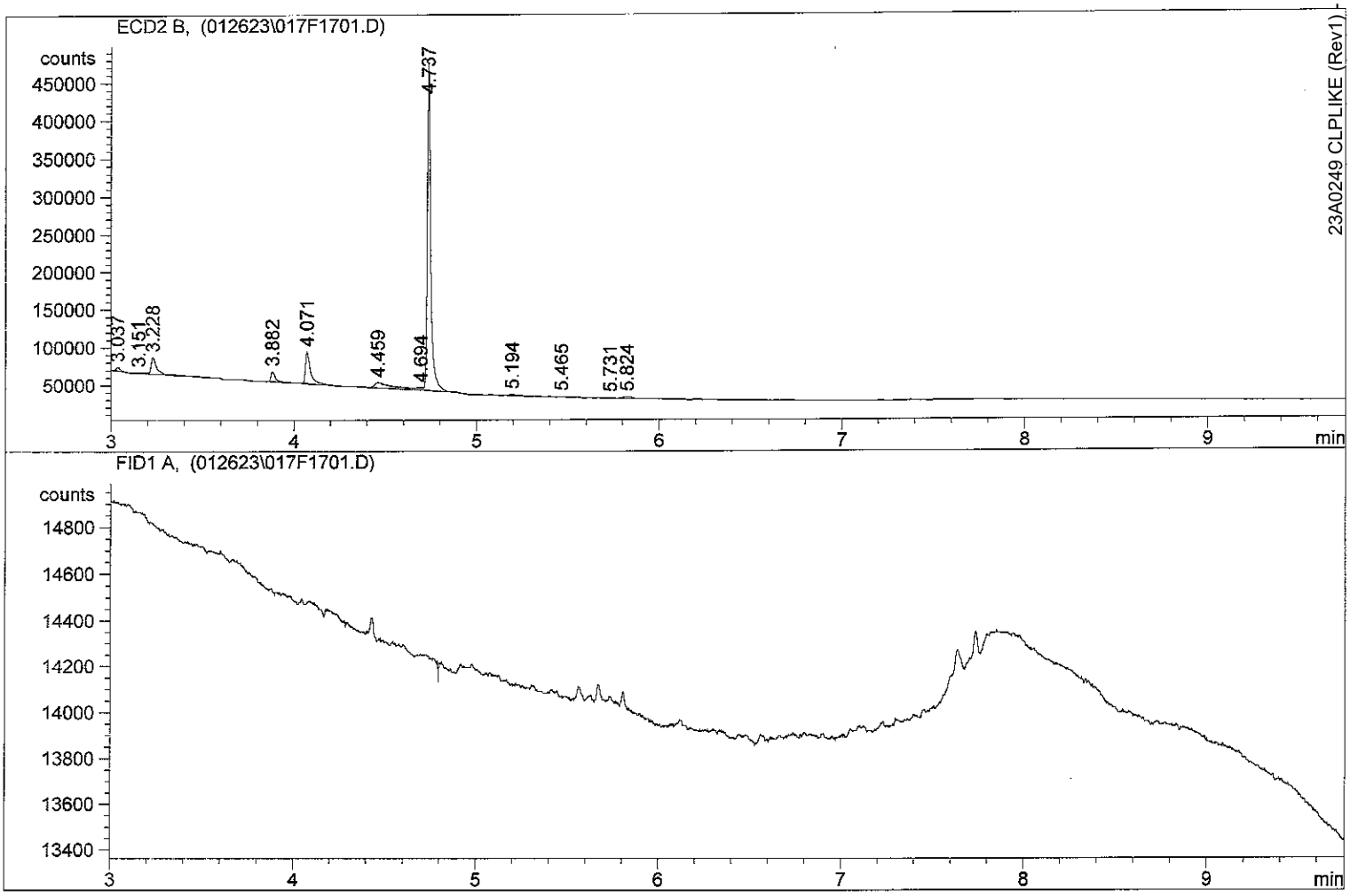


*** End of Report ***

Injection Date : 1/26/2023 8:11:33 PM
Sample Name : 23A0295 04
Acq. Operator : CRR

Seq. Line : 17
Location : Vial 17
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

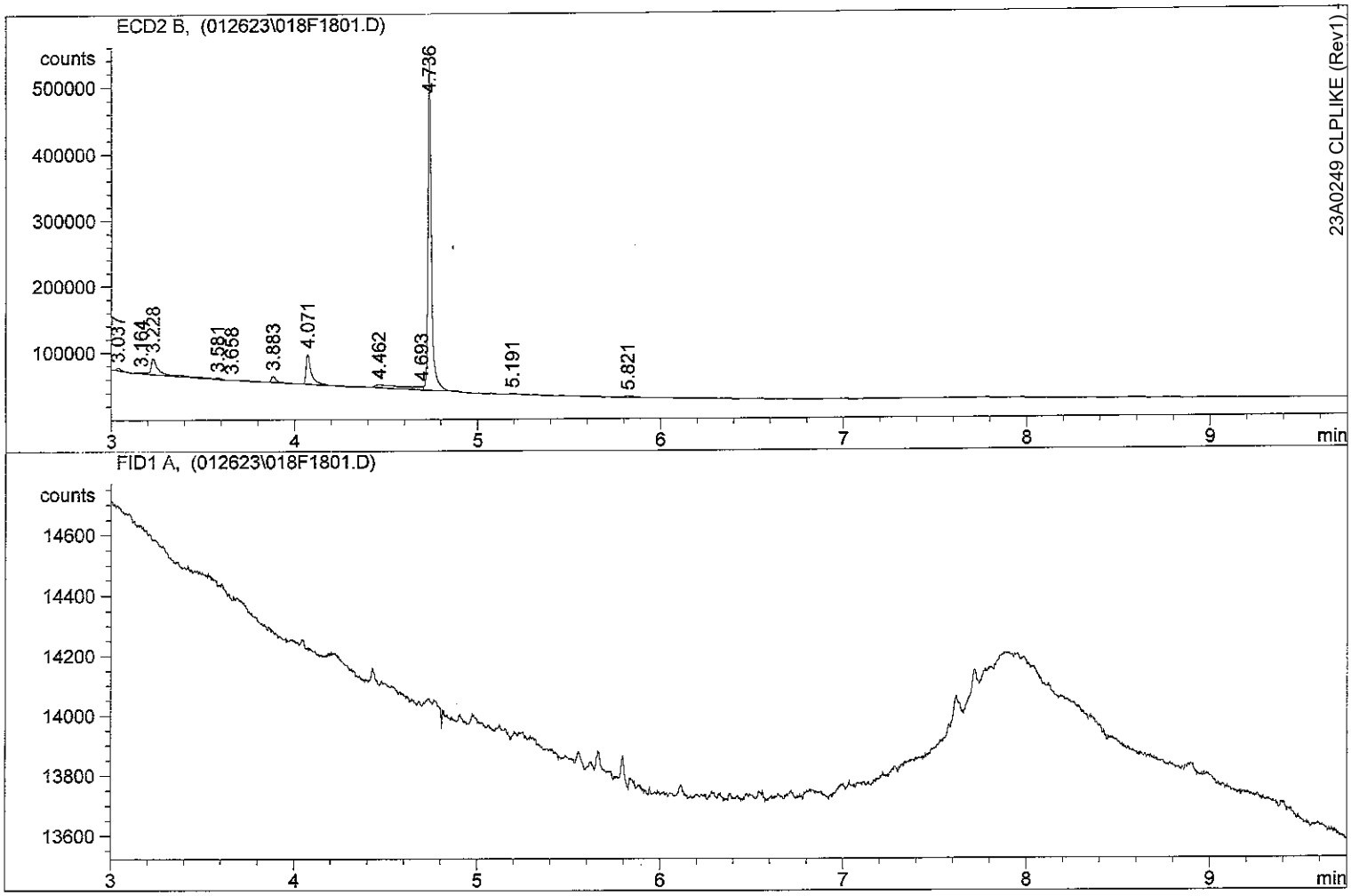


*** End of Report ***

Injection Date : 1/26/2023 8:25:33 PM
Sample Name : 23A0295 05
Acq. Operator : CRR

Seq. Line : 18
Location : Vial 18
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

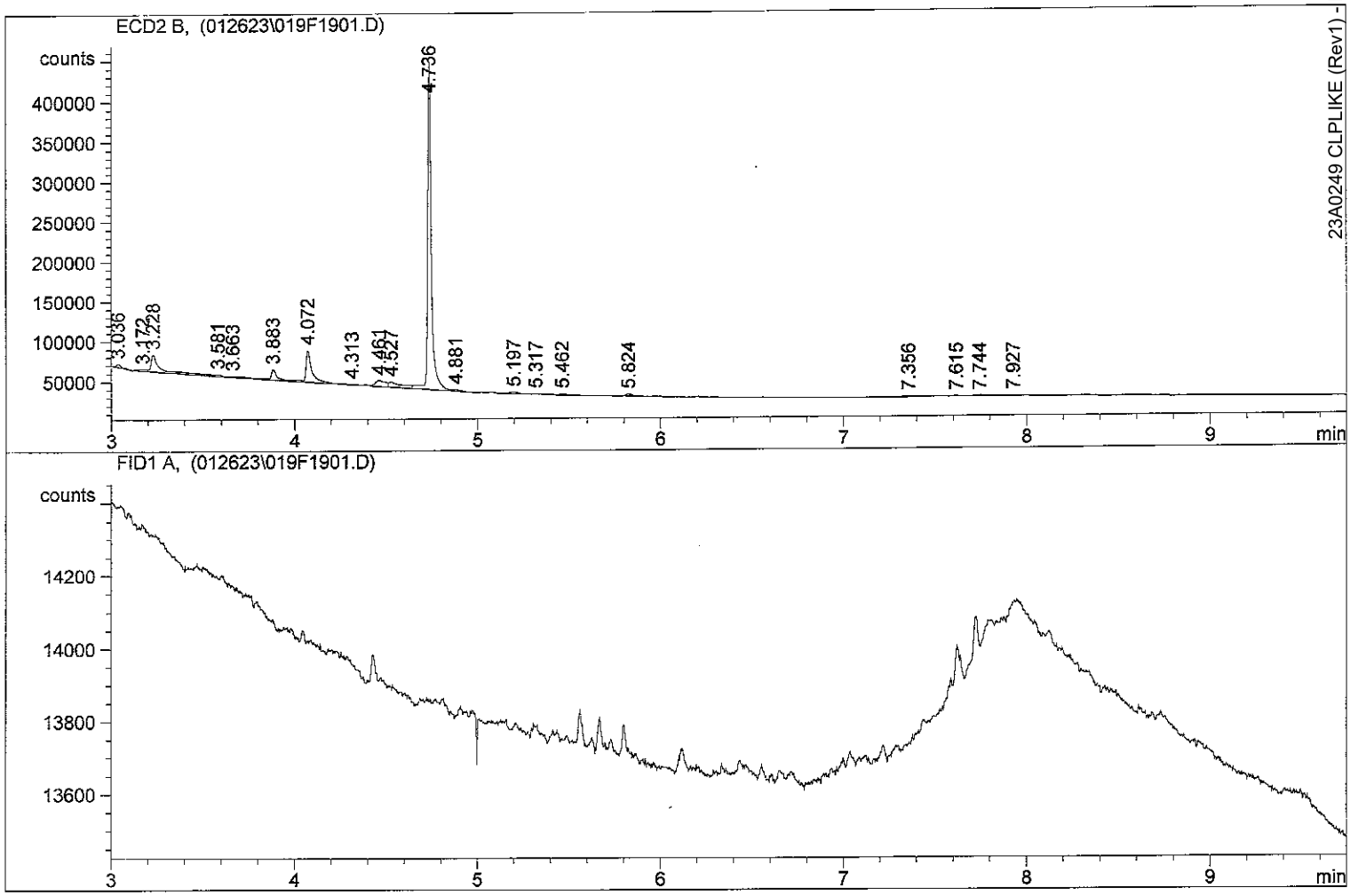


*** End of Report ***

Injection Date : 1/26/2023 8:40:01 PM
Sample Name : 23A0295 06
Acq. Operator : CRR

Seq. Line : 19
Location : Vial 19
Inj : 1
Inj Volume : 1 µl

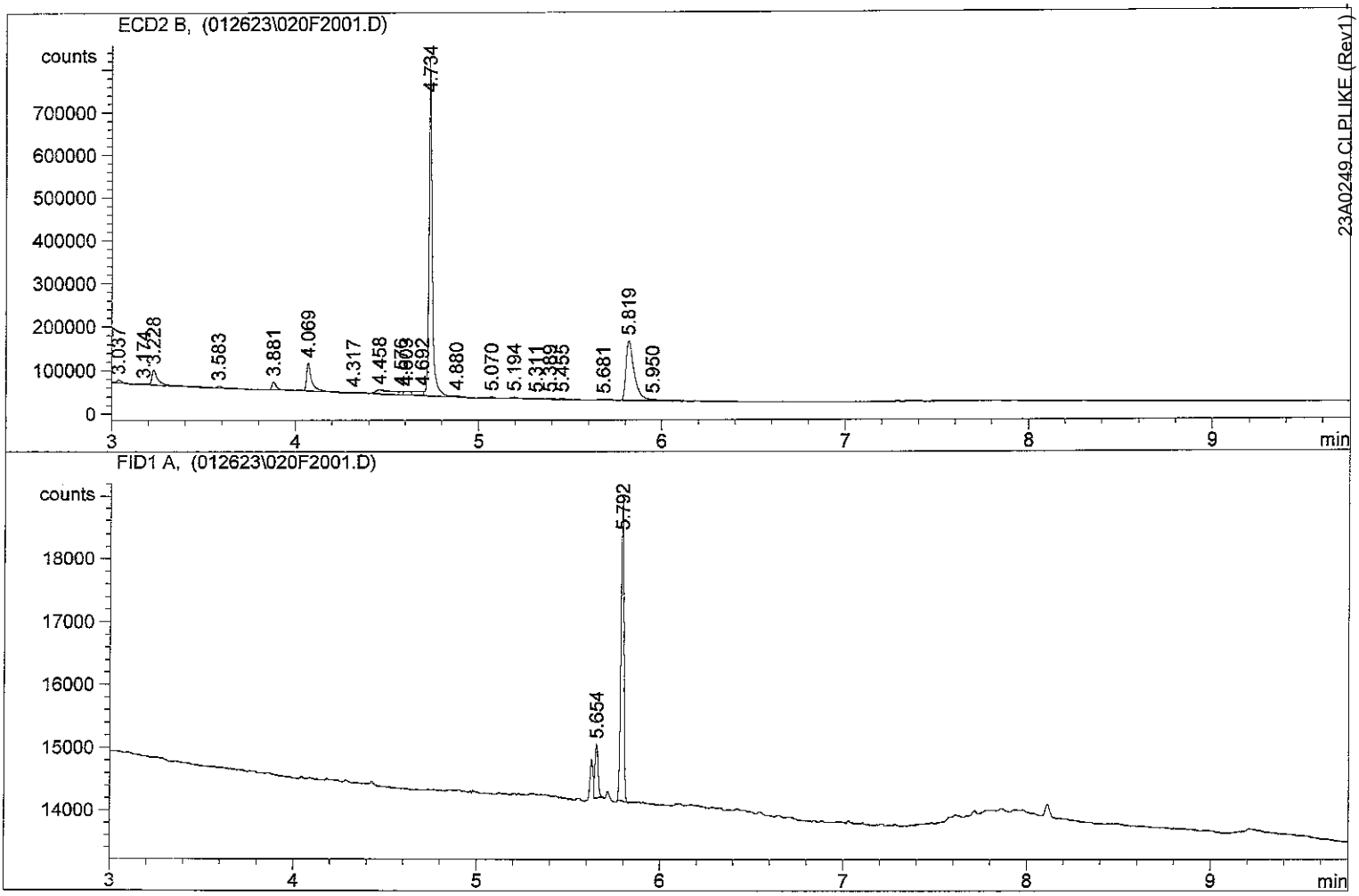
Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Injection Date : 1/26/2023 8:54:04 PM Seq. Line : 20
Sample Name : 23A0295 07 Location : Vial 20
Acq. Operator : CRR Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

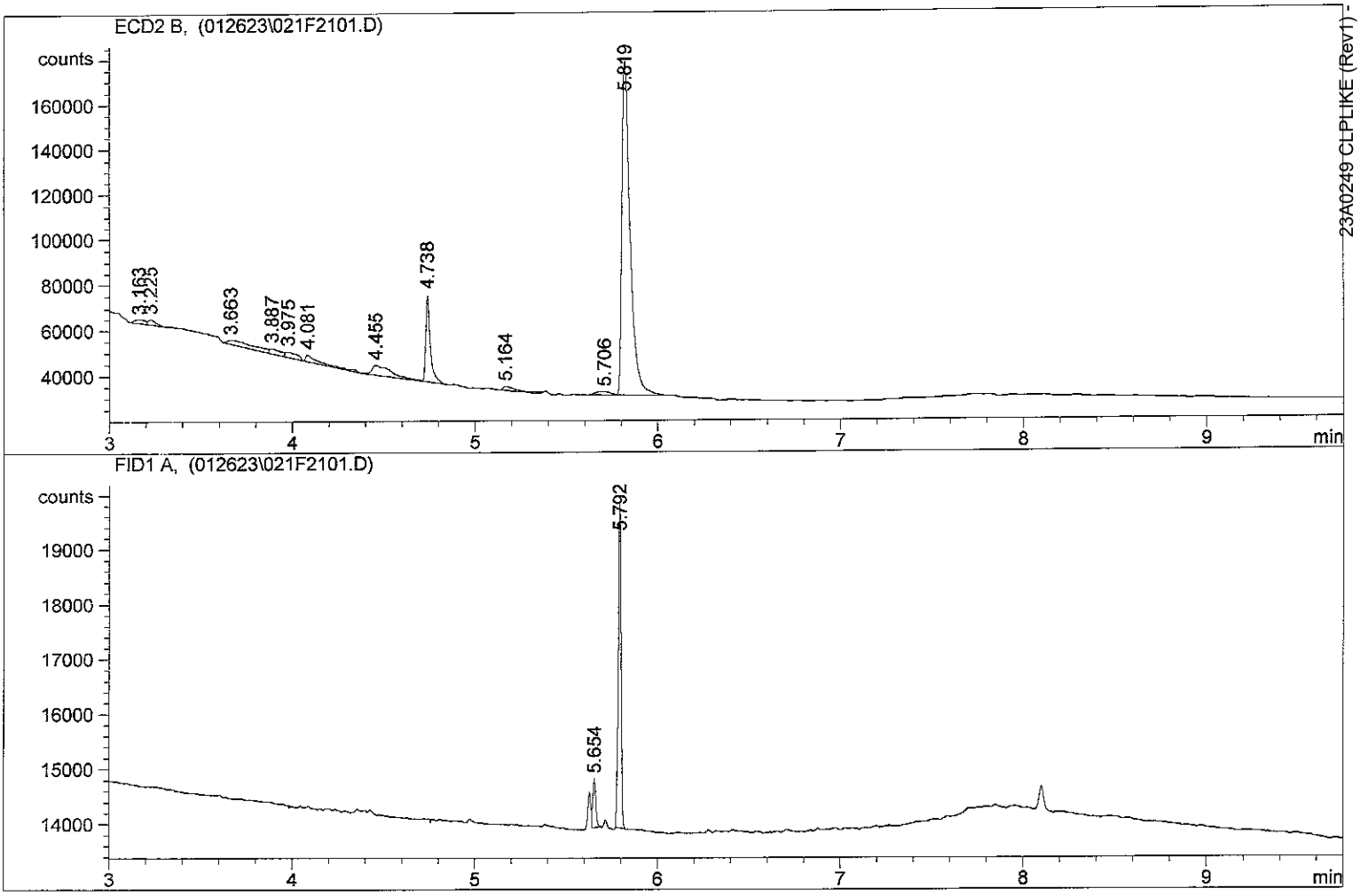


*** End of Report ***

Injection Date : 1/26/2023 9:08:36 PM
Sample Name : 23A0295 08
Acq. Operator : CRR

Seq. Line : 21
Location : Vial 21
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

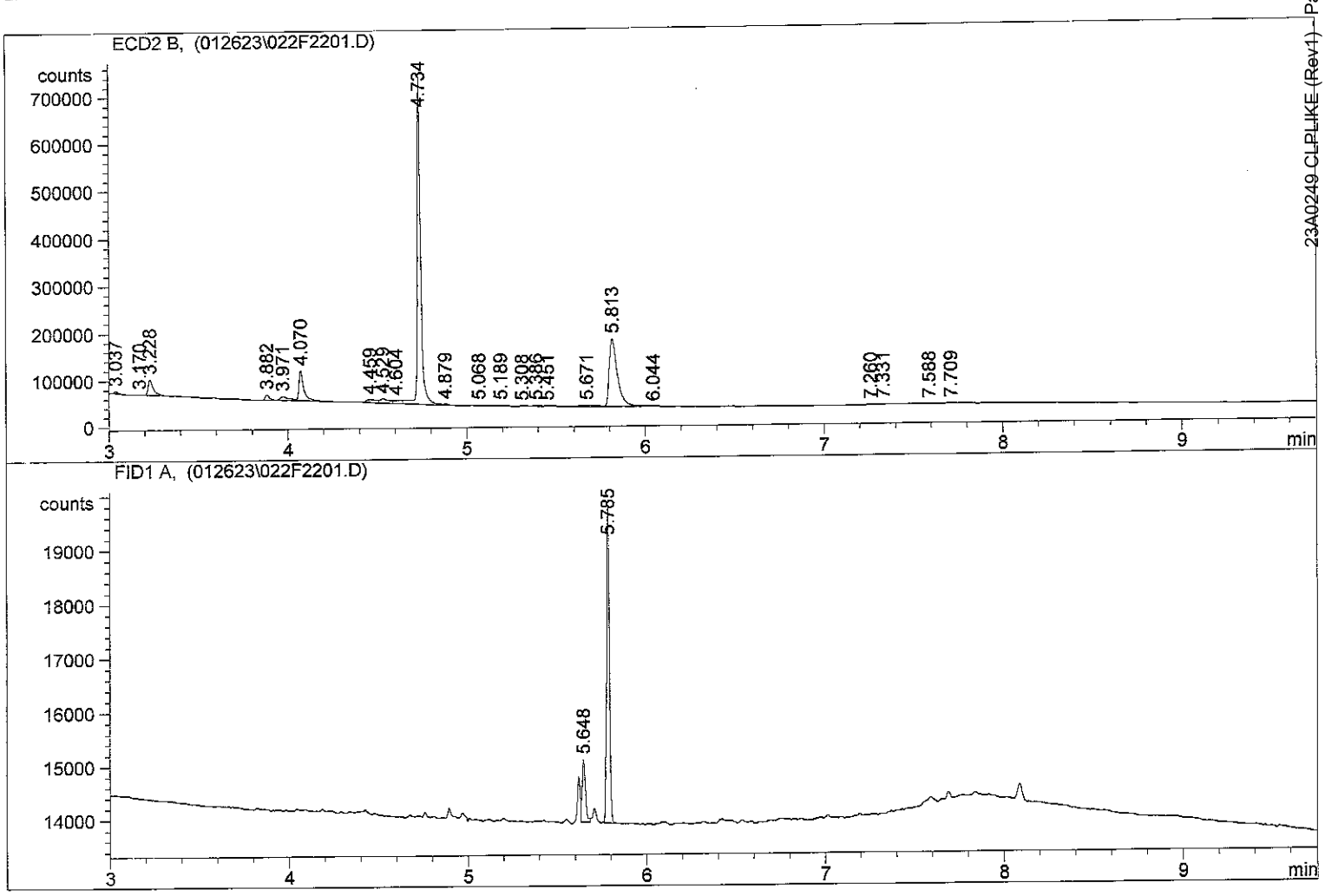


*** End of Report ***

Injection Date : 1/26/2023 9:22:37 PM
Sample Name : 23A0295 09
Acq. Operator : CRR

Seq. Line : 22
Location : Vial 22
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD

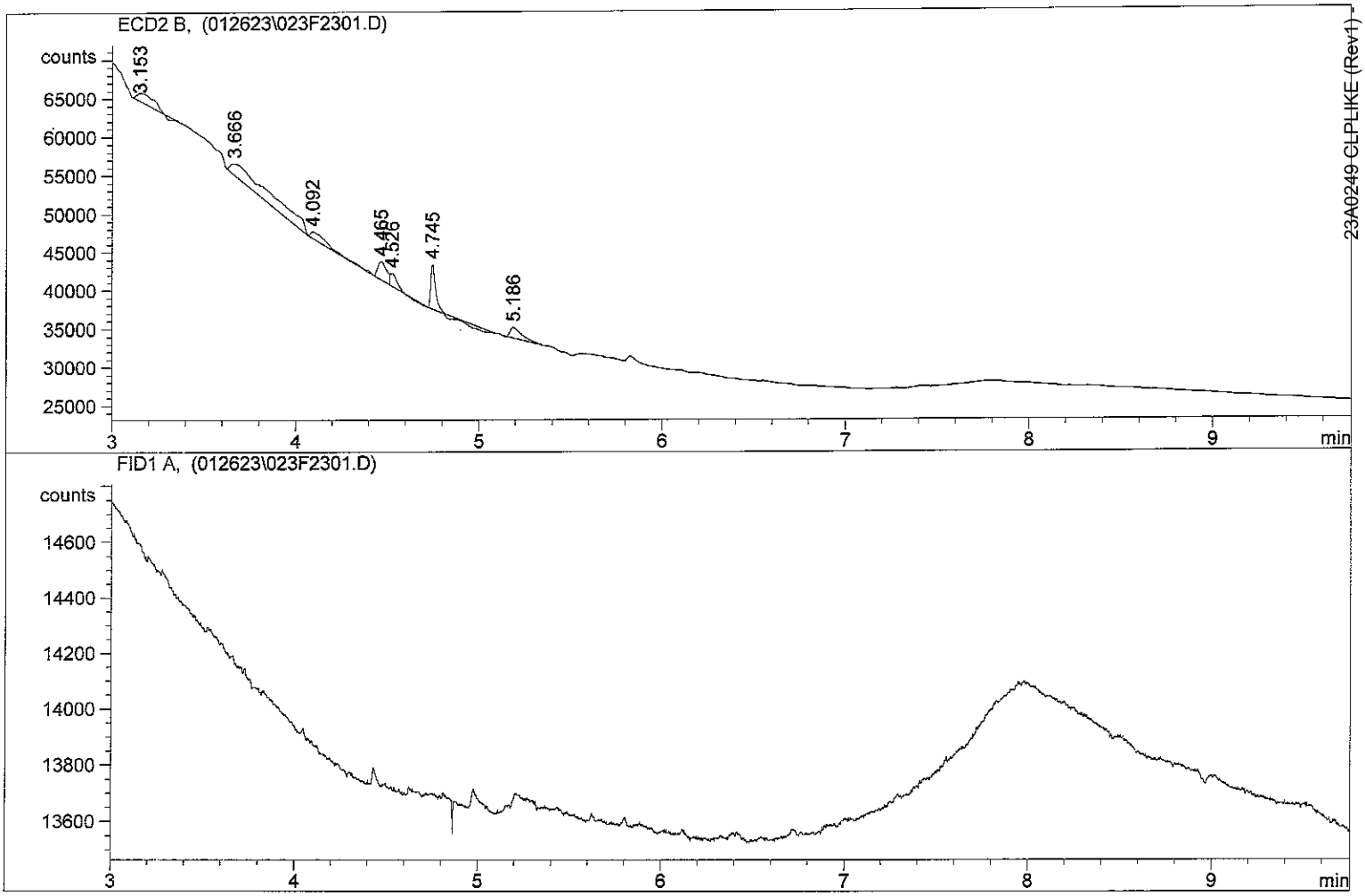


*** End of Report ***

Injection Date : 1/26/2023 9:37:13 PM
Sample Name : 23A0295 10
Acq. Operator : CRR

Seq. Line : 23
Location : Vial 23
Inj : 1
Inj Volume : 1 µl

Sequence File : C:\HPCHEM\1\SEQUENCE\012623.S
Method : C:\HPCHEM\1\METHODS\SCREEN.M
Last changed : 7/9/2021 3:37:33 AM by TW
SCREEN METHOD



*** End of Report ***

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0071	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Matrix Spike	BLA0674-MS1	02092351ECD7.D	02/08/2023	
LDW23-SC1083	23A0249-02	02092345ECD7.D	02/08/2023	
LDW23-SC1084	23A0249-04	02092347ECD7.D	02/08/2023	
LDW23-SC1025	23A0249-05	02092372ECD7.D	02/08/2023	
LDW23-SC1033	23A0249-06	02092349ECD7.D	02/08/2023	
Blank	BLA0674-BLK1	02092341ECD7.D	02/08/2023	
LDW23-SC1030	23A0249-10	02092375ECD7.D	02/08/2023	
LCS Dup	BLA0674-BSD1	02092343ECD7.D	02/08/2023	
LDW23-SC1024	23A0249-08	02092373ECD7.D	02/08/2023	
Matrix Spike Dup	BLA0674-MSD1	02092352ECD7.D	02/08/2023	
Reference	BLA0674-SRM1	02092344ECD7.D	02/08/2023	
LDW23-IT1034	23A0249-07	02092350ECD7.D	02/08/2023	
LDW23-SC1040	23A0249-09	02092374ECD7.D	02/08/2023	
LDW23-SC1018	23A0249-03	02092346ECD7.D	02/08/2023	
LDW23-SC1020	23A0249-11	02092356ECD7.D	02/08/2023	
LCS	BLA0674-BS1	02092342ECD7.D	02/08/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0071

Matrix: Solid **Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL** **Printed: 2/8/2023 5:27:00PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0249-02	A	LDW23-SC1083	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-03	A	LDW23-SC1018	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-04	A	LDW23-SC1084	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-05	A	LDW23-SC1025	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-06	A	LDW23-SC1033	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-07	A	LDW23-IT1034	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-08	A	LDW23-SC1024	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-09	A	LDW23-SC1040	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-10	A	LDW23-SC1030	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-11	A	LDW23-SC1020	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-01	A	LDW23-SC1074	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-02	A	LDW23-SC1075	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-03	A	LDW23-SC1038B	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-04	A	LDW23-SC1023B	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-05	A	LDW23-SC1022A	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-06	A	LDW23-SC1017B	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-07	A	LDW23-SC1019	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-08	A	LDW23-IT1027	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-09	A	LDW23-SC1026	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-10	A	LDW23-IT1041	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
BLA0674-BLK1	-	Blank	-	2.5	2.5	-	2/8/2023	LMJ	
BLA0674-BS1	-	LCS	-	2.5	2.5	-	2/8/2023	LMJ	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0071

Matrix: Solid **Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL** **Printed: 2/8/2023 5:27:00PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLA0674-BSD1	-	LCS Dup	-	2.5	2.5	-	2/8/2023	LMJ	
BLA0674-MS1	-	Matrix Spike	-	2.5	2.5	-	2/8/2023	LMJ	
BLA0674-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/8/2023	LMJ	
BLA0674-SRM1	-	Reference	-	2.5	2.5	-	2/8/2023	LMJ	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0072	Cleanup Type:	Sulfur
Cleanup Method:	EPA 3660B Sulfur Cleanup - uL	Analysis:	EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-IT1034	23A0249-07	02092350ECD7.D	02/08/2023	
LDW23-SC1083	23A0249-02	02092345ECD7.D	02/08/2023	
LDW23-SC1084	23A0249-04	02092347ECD7.D	02/08/2023	
LDW23-SC1030	23A0249-10	02092375ECD7.D	02/08/2023	
LDW23-SC1025	23A0249-05	02092372ECD7.D	02/08/2023	
LDW23-SC1024	23A0249-08	02092373ECD7.D	02/08/2023	
LDW23-SC1040	23A0249-09	02092374ECD7.D	02/08/2023	
LDW23-SC1018	23A0249-03	02092346ECD7.D	02/08/2023	
Blank	BLA0674-BLK1	02092341ECD7.D	02/08/2023	
LDW23-SC1033	23A0249-06	02092349ECD7.D	02/08/2023	
Matrix Spike Dup	BLA0674-MSD1	02092352ECD7.D	02/08/2023	
Reference	BLA0674-SRM1	02092344ECD7.D	02/08/2023	
Matrix Spike	BLA0674-MS1	02092351ECD7.D	02/08/2023	
LCS Dup	BLA0674-BSD1	02092343ECD7.D	02/08/2023	
LCS	BLA0674-BS1	02092342ECD7.D	02/08/2023	
LDW23-SC1020	23A0249-11	02092356ECD7.D	02/08/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0072

Matrix: Solid **Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL** **Printed: 2/8/2023 5:27:48PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0249-02	A	LDW23-SC1083	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-03	A	LDW23-SC1018	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-04	A	LDW23-SC1084	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-05	A	LDW23-SC1025	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-06	A	LDW23-SC1033	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-07	A	LDW23-IT1034	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-08	A	LDW23-SC1024	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-09	A	LDW23-SC1040	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-10	A	LDW23-SC1030	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-11	A	LDW23-SC1020	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-01	A	LDW23-SC1074	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-02	A	LDW23-SC1075	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-03	A	LDW23-SC1038B	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-04	A	LDW23-SC1023B	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-05	A	LDW23-SC1022A	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-06	A	LDW23-SC1017B	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-07	A	LDW23-SC1019	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-08	A	LDW23-IT1027	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-09	A	LDW23-SC1026	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-10	A	LDW23-IT1041	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
BLA0674-BLK1	-	Blank	-	2.5	2.5	-	2/8/2023	LMJ	
BLA0674-BS1	-	LCS	-	2.5	2.5	-	2/8/2023	LMJ	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0072

Matrix: Solid **Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL** **Printed: 2/8/2023 5:27:48PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLA0674-BSD1	-	LCS Dup	-	2.5	2.5	-	2/8/2023	LMJ	
BLA0674-MS1	-	Matrix Spike	-	2.5	2.5	-	2/8/2023	LMJ	
BLA0674-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/8/2023	LMJ	
BLA0674-SRM1	-	Reference	-	2.5	2.5	-	2/8/2023	LMJ	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLB0073	Cleanup Type:	Sulfuric Acid
Cleanup Method:	EPA 3665 Sulfuric Acid Cleanup - uL	Analysis:	EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Matrix Spike	BLA0674-MS1	02092351ECD7.D	02/08/2023	
LDW23-SC1084	23A0249-04	02092347ECD7.D	02/08/2023	
LDW23-SC1083	23A0249-02	02092345ECD7.D	02/08/2023	
LDW23-SC1040	23A0249-09	02092374ECD7.D	02/08/2023	
LDW23-SC1033	23A0249-06	02092349ECD7.D	02/08/2023	
Matrix Spike Dup	BLA0674-MSD1	02092352ECD7.D	02/08/2023	
Blank	BLA0674-BLK1	02092341ECD7.D	02/08/2023	
LCS Dup	BLA0674-BSD1	02092343ECD7.D	02/08/2023	
LDW23-SC1024	23A0249-08	02092373ECD7.D	02/08/2023	
LDW23-IT1034	23A0249-07	02092350ECD7.D	02/08/2023	
LDW23-SC1030	23A0249-10	02092375ECD7.D	02/08/2023	
LCS	BLA0674-BS1	02092342ECD7.D	02/08/2023	
Reference	BLA0674-SRM1	02092344ECD7.D	02/08/2023	
LDW23-SC1018	23A0249-03	02092346ECD7.D	02/08/2023	
LDW23-SC1020	23A0249-11	02092356ECD7.D	02/08/2023	
LDW23-SC1025	23A0249-05	02092372ECD7.D	02/08/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0073

Matrix: Solid **Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 2/8/2023 5:28:34PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23A0249-02	A	LDW23-SC1083	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-03	A	LDW23-SC1018	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-04	A	LDW23-SC1084	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-05	A	LDW23-SC1025	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-06	A	LDW23-SC1033	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-07	A	LDW23-IT1034	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-08	A	LDW23-SC1024	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-09	A	LDW23-SC1040	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-10	A	LDW23-SC1030	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0249-11	A	LDW23-SC1020	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-01	A	LDW23-SC1074	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-02	A	LDW23-SC1075	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-03	A	LDW23-SC1038B	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-04	A	LDW23-SC1023B	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-05	A	LDW23-SC1022A	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-06	A	LDW23-SC1017B	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-07	A	LDW23-SC1019	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-08	A	LDW23-IT1027	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-09	A	LDW23-SC1026	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
23A0295-10	A	LDW23-IT1041	A 03	2.5	2.5	8082A PCB Solid 4	2/8/2023	LMJ	
BLA0674-BLK1	-	Blank	-	2.5	2.5	-	2/8/2023	LMJ	
BLA0674-BS1	-	LCS	-	2.5	2.5	-	2/8/2023	LMJ	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLB0073

Matrix: Solid **Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 2/8/2023 5:28:34PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLA0674-BSD1	-	LCS Dup	-	2.5	2.5	-	2/8/2023	LMJ	
BLA0674-MS1	-	Matrix Spike	-	2.5	2.5	-	2/8/2023	LMJ	
BLA0674-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	2/8/2023	LMJ	
BLA0674-SRM1	-	Reference	-	2.5	2.5	-	2/8/2023	LMJ	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8082A

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLA0674-BLK1	File ID:	02092341ECD7.D
Sampled:	N/A	Prepared:	01/31/23 11:50	Analyzed:	02/10/23 02:16
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	12.5 g / 2.5 mL
Batch:	BLA0674	Sequence:	SLB0148	Calibration:	GA00061
Instrument:	ECD7	Column:	ZB5	Cleanups:	Silica Gel, Sulfur, Sulfuric Acid

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
12674-11-2	Aroclor 1016	1	4.0	U	1.6	4.0
11104-28-2	Aroclor 1221	1	4.0	U	1.6	4.0
11141-16-5	Aroclor 1232	1	4.0	U	1.6	4.0
53469-21-9	Aroclor 1242	1	4.0	U	1.6	4.0
12672-29-6	Aroclor 1248	1	4.0	U	1.6	4.0
11097-69-1	Aroclor 1254	1	4.0	U	1.6	4.0
11096-82-5	Aroclor 1260	1	4.0	U	0.6	4.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl	8.0000	6.34	79.2	40 - 126	
Tetrachlorometaxylene	8.0000	6.77	84.7	44 - 120	
Decachlorobiphenyl [2C]	8.0000	7.18	89.7	40 - 126	
Tetrachlorometaxylene [2C]	8.0000	6.78	84.7	44 - 120	

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092341ECD7.D
Data file 2: /230209.b/230209.b/02092341ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0674-BLK1
Client ID:
Injection Date: 10-FEB-2023 02:16
Report Date: 02/10/2023 12:58
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.002	184228	5.684	-0.001	159779	33.9	33.9	0.0	Tetrachloro-m-xylene
13.887	-0.005	222266	14.115	0.000	282210	31.7	35.9	12.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	384894	-23.5
Hexabromobiphenyl	647433	655891	1.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	348893	3.6
Hexabromobiphenyl	382032	495430	29.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	---			0.0
Aroclor-1248	2	---			0.0	2	---			0.0
Aroclor-1248	3	---			0.0	3	---			0.0
Aroclor-1248	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	---			0.0
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	---			0.0	3	---			0.0
Aroclor-1254	4	---			0.0	4	---			0.0
Aroclor-1254	5	---			0.0	5	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	---			0.0	1	---			0.0
Aroclor-1260	2	---			0.0	2	---			0.0
Aroclor-1260	3	---			0.0	3	---			0.0
Aroclor-1260	4	---			0.0	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 34445 Col1 Total PCB = 0.0 ppm*

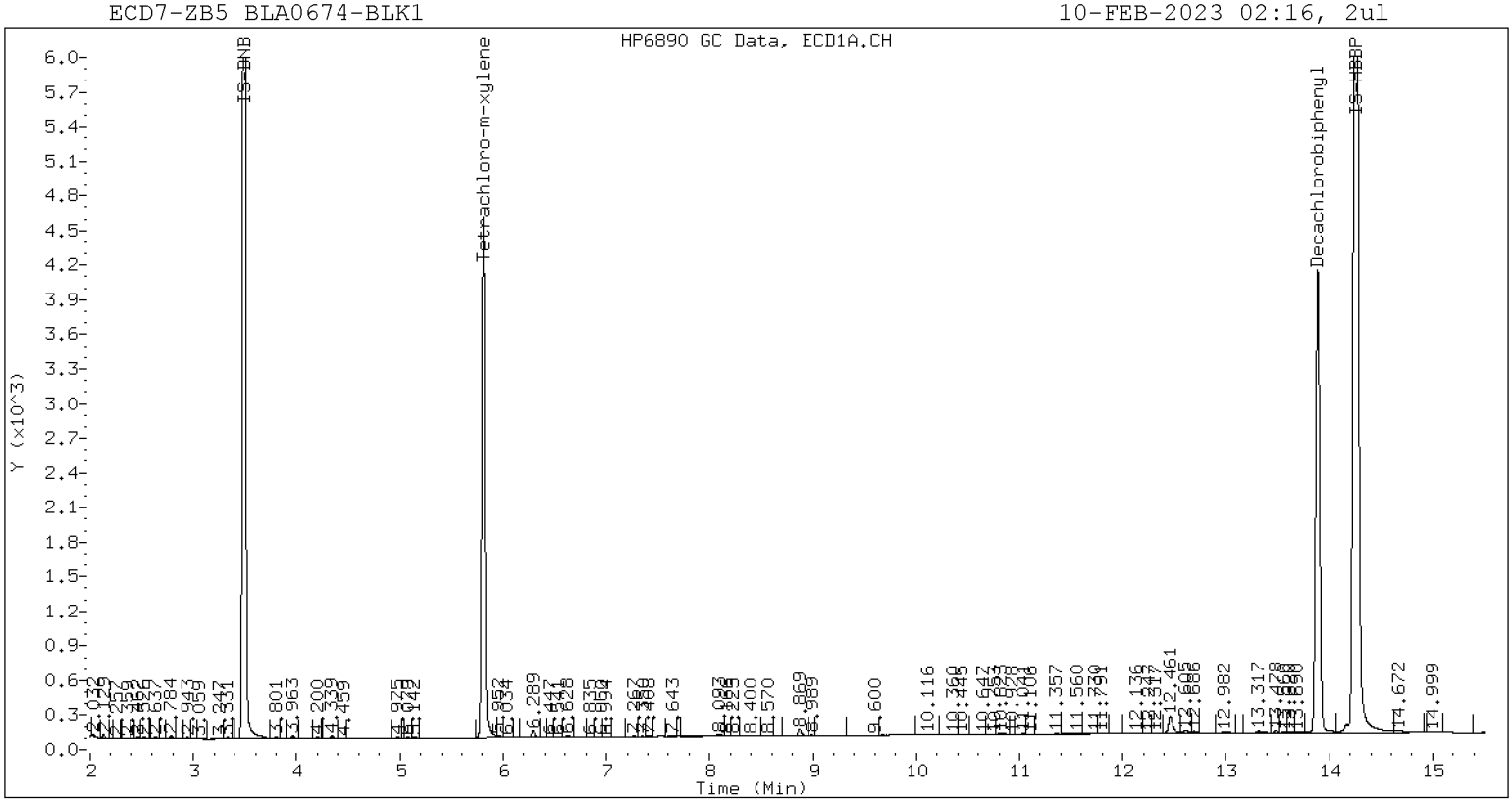
Total PCB Area Col2 (5.785 - 14.015) = 31536 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

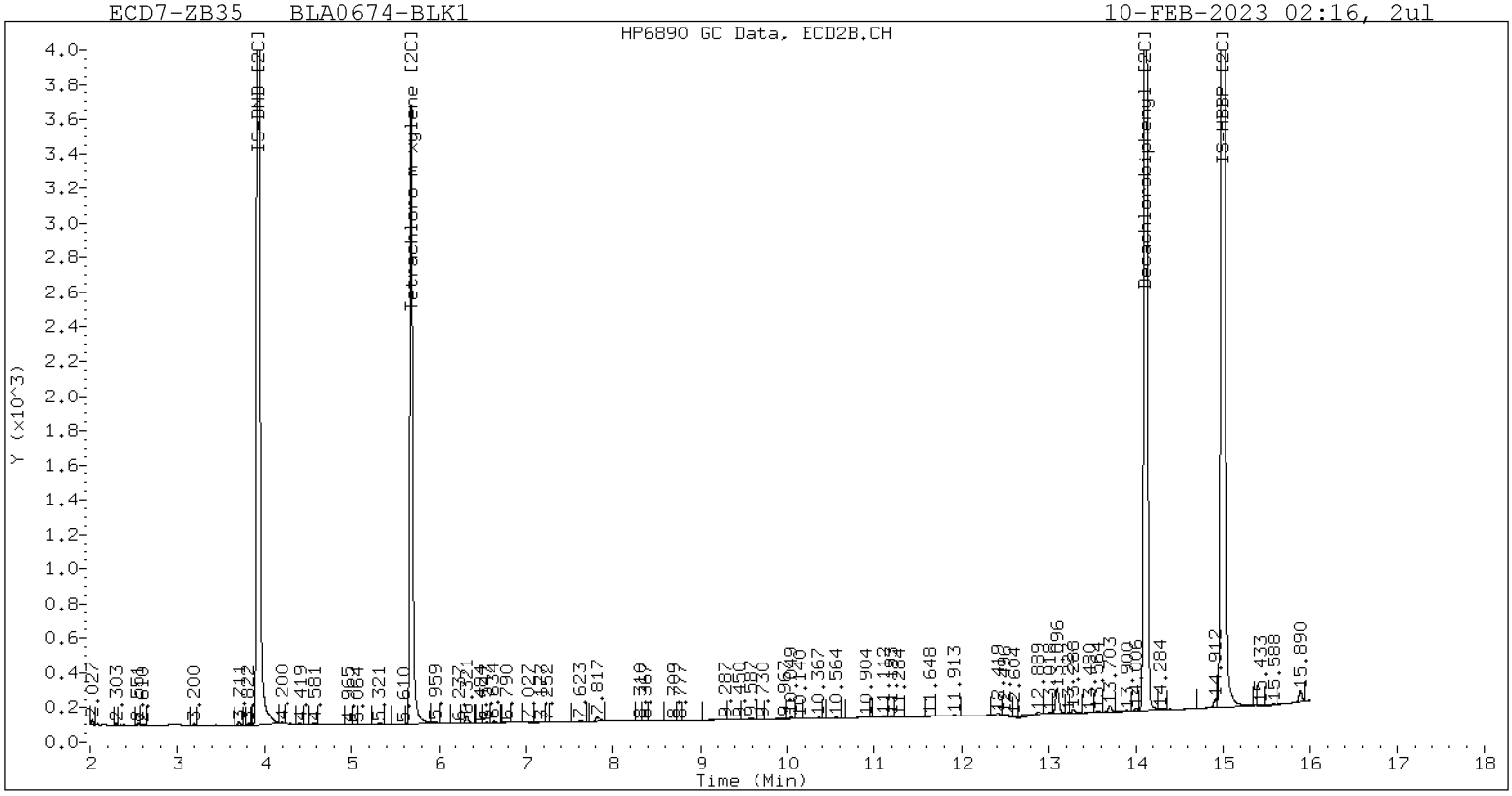
PCB Dual Column Chromatograms

ECD7-ZB5 BLA0674-BLK1 10-FEB-2023 02:16, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0674-BLK1 10-FEB-2023 02:16, 2ul



ZB-35 Manual Integration: NO

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/10/23 02:37
Batch:	BLA0674	Laboratory ID:	BLA0674-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	12.5 g / 2.5 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Aroclor 1016 [2C]	101	91.1		90.4	56 - 120
Aroclor 1260 [2C]	101	84.6		83.9	58 - 120

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Aroclor 1016 [2C]	101	93.9		93.2	3.01	30	56 - 120
Aroclor 1260 [2C]	101	82.3		81.7	2.70	30	58 - 120

* Indicates values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092342ECD7.D
Data file 2: /230209.b/230209.b/02092342ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0674-BS1
Client ID:
Injection Date: 10-FEB-2023 02:37
Report Date: 02/10/2023 12:58
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.002	186984	5.684	-0.001	155203	34.0	32.8	3.9	Tetrachloro-m-xylene
13.887	-0.004	222409	14.114	-0.001	281847	31.8	35.0	9.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	388506	-22.8
Hexabromobiphenyl	647433	654534	1.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	350489	4.0
Hexabromobiphenyl	382032	506770	32.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1016	1	7.267	-0.003	63572	440.3	1	7.251	-0.002	85019	447.2
Aroclor-1016	2	7.647	-0.004	216275	452.1	2	7.846	-0.004	196522	471.7
Aroclor-1016	3	7.784	-0.005	88246	401.0	3	8.045	-0.003	78973	464.6
Aroclor-1016	4	8.399	-0.005	66227	467.8	4	8.301	-0.003	58508	439.0
Total Col1Ave (4 peaks):					440.3	Total Col2Ave (4 peaks):				455.6 RPD = 3
Corrected Ave (3 peaks):					431.1	Corrected Ave (3 peaks):				450.3 RPD = 4
Aroclor-1221	1	4.732	-0.001	358	12.5	1	---			0.0
Aroclor-1221	2	6.130	-0.004	7235	123.2	2	6.295	-0.003	8120	144.2
Aroclor-1221	3	6.381	-0.003	39930	292.9	3	6.619	-0.004	35764	376.3
Total Col1Ave (3 peaks):					142.9	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.732	-0.001	358	20.0	1	---			0.0
Aroclor-1232	2	6.130	-0.004	7235	179.1	2	7.251	-0.006	85019	974.9
Aroclor-1232	3	7.647	-0.012	216275	1070.4	3	7.846	-0.008	196522	1106.4
Aroclor-1232	4	8.570	-0.014	80475	930.5	4	8.707	-0.006	60937	1234.7
Total Col1Ave (4 peaks):					550.0	Total Col2Ave (3 peaks):				1105.3 RPD = 67*
Corrected Ave (3 peaks):					376.5	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.267	-0.004	63572	534.4	1	7.251	-0.001	85019	554.6
Aroclor-1242	2	7.647	-0.009	216275	555.5	2	7.846	-0.003	196522	577.2
Aroclor-1242	3	8.399	-0.007	66227	572.5	3	9.146	-0.007	10541	98.9
Aroclor-1242	4	8.570	-0.011	80475	460.6	4	9.570	-0.010	5817	41.2
Total Col1Ave (4 peaks):					530.7	Total Col2Ave (4 peaks):				318.0 RPD = 50*
Corrected Ave (3 peaks):					516.8	Corrected Ave (3 peaks):				231.6 RPD = 76*
Aroclor-1248	1	8.399	-0.006	66227	340.8	1	8.301	-0.002	58508	369.3
Aroclor-1248	2	8.570	-0.010	80475	324.6	2	8.707	-0.002	60937	357.3
Aroclor-1248	3	8.988	-0.011	62303	131.4	3	9.146	-0.005	10541	50.6
Aroclor-1248	4	9.292	-0.001	66359	282.7	4	9.570	-0.005	5817	22.6
Total Col1Ave (4 peaks):					269.9	Total Col2Ave (4 peaks):				200.0 RPD = 30
Corrected Ave (3 peaks):					246.2	Corrected Ave (3 peaks):				143.5 RPD = 53*
Aroclor-1254	1	9.292	-0.006	66359	167.6	1	9.441	-0.003	51564	202.8
Aroclor-1254	2	---			0.0	2	9.962	-0.003	11614	56.5
Aroclor-1254	3	9.659	-0.011	12913	50.9	3	10.139	0.023	118876	265.2
Aroclor-1254	4	9.795	-0.014	38441	77.3	4	10.364	-0.003	151517	338.0
Aroclor-1254	5	10.112	-0.065	174590	540.1	5	10.558	-0.005	198443	794.7
Total Col1Ave (4 peaks):					209.0	Total Col2Ave (5 peaks):				331.4 RPD = 45*
Corrected Ave (3 peaks):					98.6	Corrected Ave (4 peaks):				215.6 RPD = 74*
Aroclor-1260	1	11.038	-0.006	141302	384.8	1	11.647	-0.003	152789	417.9
Aroclor-1260	2	11.353	-0.007	146695	388.6	2	11.910	-0.003	368534	398.4
Aroclor-1260	3	11.725	-0.009	360551	362.8	3	12.428	-0.003	106210	460.7
Aroclor-1260	4	12.128	-0.011	196998	383.7	4	12.492	-0.004	248339	414.9
Aroclor-1260	5	12.237	-0.007	78389	350.2	NS	---			----
Total Col1Ave (5 peaks):					374.0	Total Col2Ave (4 peaks):				423.0 RPD = 12
Corrected Ave (4 peaks):					370.4	Corrected Ave (3 peaks):				410.4 RPD = 10
Aroclor-1262	1	10.815	-0.017	279815	1057.1	1	11.193	-0.007	139965	282.2
Aroclor-1262	2	12.237	-0.008	78389	187.6	2	11.647	-0.006	152789	362.3
Aroclor-1262	3	12.311	-0.010	93600	206.4	3	12.428	-0.006	106210	236.5
Aroclor-1262	4	12.979	-0.010	86867	210.2	4	12.492	-0.011	248339	345.3
Total Col1Ave (4 peaks):					415.3	Total Col2Ave (4 peaks):				306.5 RPD = 30
Corrected Ave (3 peaks):					201.4	Corrected Ave (3 peaks):				288.0 RPD = 35
Aroclor-1268	1	12.237	-0.008	78389	72.5	1	12.428	-0.005	106210	89.7
Aroclor-1268	2	12.311	-0.007	93600	86.8	2	12.492	-0.009	248339	197.2
Aroclor-1268	3	12.715	0.016	42767	47.9	3	12.886	-0.007	6701	6.4
Aroclor-1268	4	13.481	-0.008	21553	8.1	4	13.702	-0.006	30359	9.4
Total Col1Ave (4 peaks):					53.8	Total Col2Ave (4 peaks):				75.7 RPD = 34
Corrected Ave (3 peaks):					42.8	Corrected Ave (3 peaks):				35.2 RPD = 20

Total PCB Area Col1 (5.909 - 13.792) = 3913162 Col1 Total PCB = 0.9 ppm*

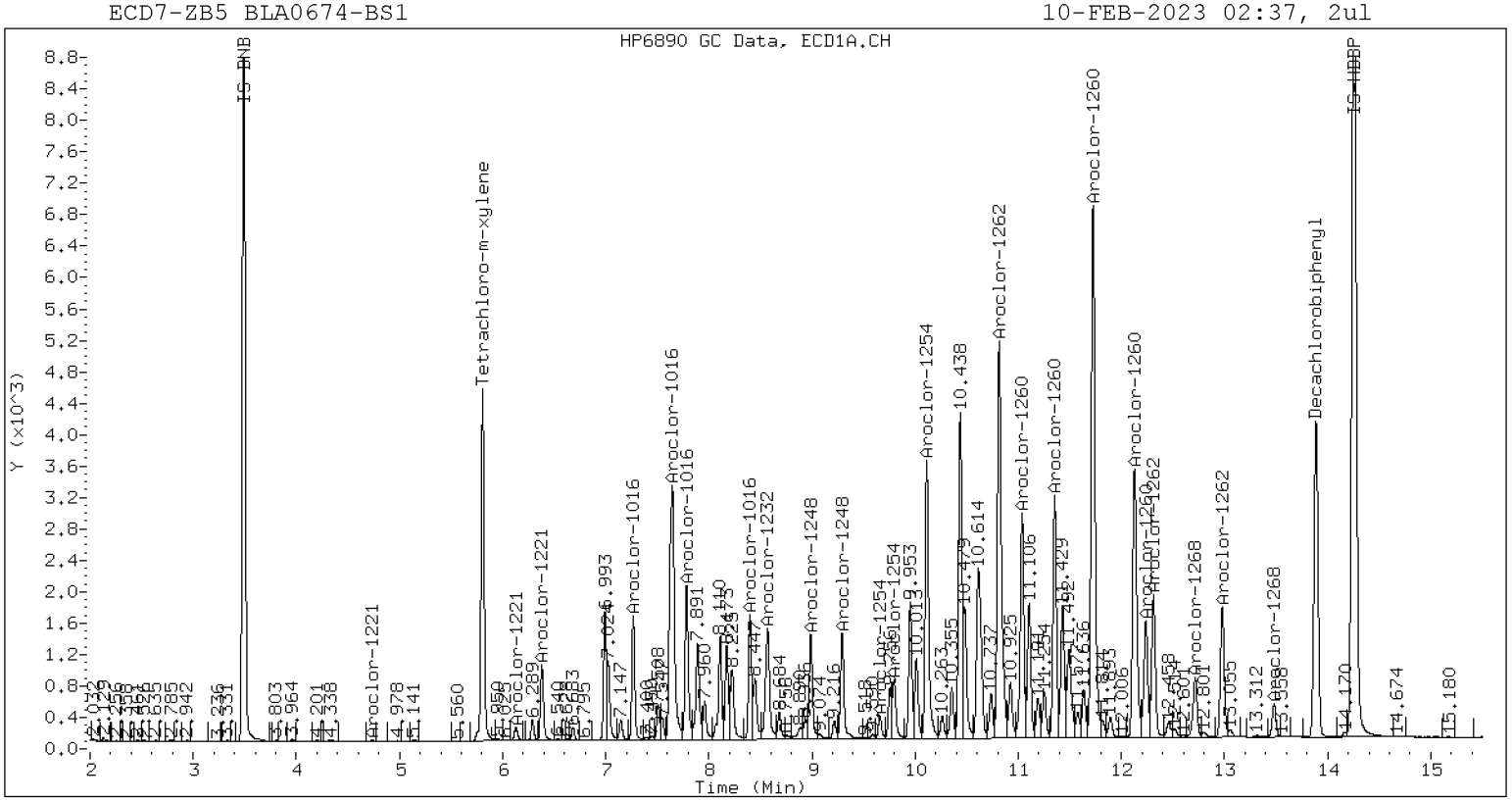
Total PCB Area Col2 (5.785 - 14.015) = 3596629 Col2 Total PCB = 1.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

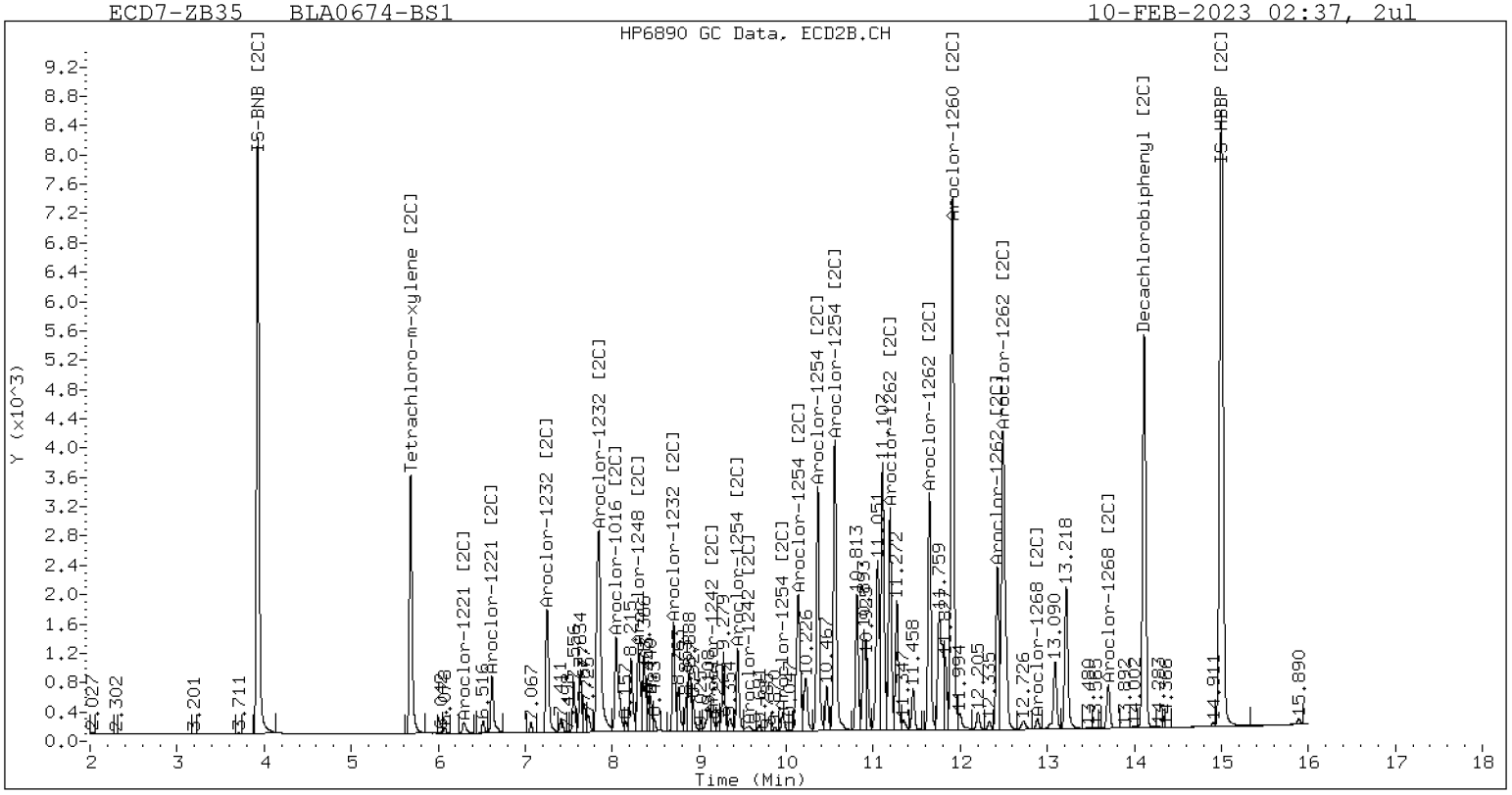
PCB Dual Column Chromatograms

ECD7-ZB5 BLA0674-BS1 10-FEB-2023 02:37, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0674-BS1 10-FEB-2023 02:37, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092343ECD7.D
Data file 2: /230209.b/230209.b/02092343ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0674-BSD1
Client ID:
Injection Date: 10-FEB-2023 02:58
Report Date: 02/10/2023 12:59
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.002	187149	5.685	-0.001	158027	33.2	32.3	2.7	Tetrachloro-m-xylene
13.889	-0.003	222556	14.116	0.001	283621	30.4	33.0	8.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	399009	-20.7
Hexabromobiphenyl	647433	683737	5.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	361740	7.4
Hexabromobiphenyl	382032	541485	41.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.268	-0.002	66322	447.3	1	7.252	-0.001	88619	451.7
Aroclor-1016	2	7.646	-0.004	225498	459.0	2	7.845	-0.005	208055	483.9
Aroclor-1016	3	7.784	-0.005	91688	405.6	3	8.046	-0.003	85252	485.9
Aroclor-1016	4	8.400	-0.004	69030	474.7	4	8.301	-0.002	62836	456.8
Total Col1Ave (4 peaks):					446.7	Total Col2Ave (4 peaks):				469.6 RPD = 5
Corrected Ave (3 peaks):					437.3	Corrected Ave (3 peaks):				464.1 RPD = 6
Aroclor-1221	1	4.733	0.001	352	11.9	1	4.955	-0.004	416	15.7
Aroclor-1221	2	6.130	-0.003	8157	135.3	2	6.296	-0.003	8589	147.8
Aroclor-1221	3	6.381	-0.003	42483	303.5	3	6.619	-0.004	38401	391.5
Total Col1Ave (3 peaks):					150.2	Total Col2Ave (3 peaks):				185.0 RPD = 21
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.733	0.000	352	19.1	1	4.955	-0.004	416	25.9
Aroclor-1232	2	6.130	-0.003	8157	196.6	2	7.252	-0.004	88619	984.5
Aroclor-1232	3	7.646	-0.012	225498	1086.7	3	7.845	-0.009	208055	1134.9
Aroclor-1232	4	8.571	-0.013	85510	962.7	4	8.707	-0.006	65577	1287.4
Total Col1Ave (4 peaks):					566.3	Total Col2Ave (4 peaks):				858.2 RPD = 41*
Corrected Ave (3 peaks):					392.8	Corrected Ave (3 peaks):				715.1 RPD = 58*
Aroclor-1242	1	7.268	-0.003	66322	542.8	1	7.252	-0.000	88619	560.2
Aroclor-1242	2	7.646	-0.009	225498	564.0	2	7.845	-0.005	208055	592.1
Aroclor-1242	3	8.400	-0.007	69030	581.1	3	9.147	-0.006	11261	102.3
Aroclor-1242	4	8.571	-0.010	85510	476.5	4	9.570	-0.010	6446	44.2
Total Col1Ave (4 peaks):					541.1	Total Col2Ave (4 peaks):				324.7 RPD = 50*
Corrected Ave (3 peaks):					527.8	Corrected Ave (3 peaks):				235.6 RPD = 77*
Aroclor-1248	1	8.400	-0.006	69030	345.8	1	8.301	-0.001	62836	384.3
Aroclor-1248	2	8.571	-0.009	85510	335.8	2	8.707	-0.002	65577	372.6
Aroclor-1248	3	8.989	-0.010	65400	134.3	3	9.147	-0.005	11261	52.4
Aroclor-1248	4	9.293	-0.001	69704	289.1	4	9.570	-0.006	6446	24.2
Total Col1Ave (4 peaks):					276.3	Total Col2Ave (4 peaks):				208.4 RPD = 28
Corrected Ave (3 peaks):					253.1	Corrected Ave (3 peaks):				149.7 RPD = 51*
Aroclor-1254	1	9.293	-0.006	69704	171.4	1	9.442	-0.002	54263	206.8
Aroclor-1254	2	---			0.0	2	9.962	-0.002	12039	56.8
Aroclor-1254	3	9.659	-0.010	13547	52.0	3	10.140	0.023	123239	266.3
Aroclor-1254	4	9.795	-0.013	39581	77.5	4	10.364	-0.002	156710	338.7
Aroclor-1254	5	10.114	-0.063	180686	544.2	5	10.560	-0.004	205726	798.2
Total Col1Ave (4 peaks):					211.3	Total Col2Ave (5 peaks):				333.4 RPD = 45*
Corrected Ave (3 peaks):					100.3	Corrected Ave (4 peaks):				217.1 RPD = 74*
Aroclor-1260	1	11.038	-0.006	146572	382.1	1	11.647	-0.002	158183	404.9
Aroclor-1260	2	11.355	-0.006	152212	386.0	2	11.911	-0.002	382682	387.2
Aroclor-1260	3	11.727	-0.007	374007	360.3	3	12.431	0.000	109515	444.6
Aroclor-1260	4	12.130	-0.009	204860	381.9	4	12.495	-0.001	262369	410.2
Aroclor-1260	5	12.239	-0.005	82217	351.6	NS	---			----
Total Col1Ave (5 peaks):					372.4	Total Col2Ave (4 peaks):				411.7 RPD = 10
Corrected Ave (4 peaks):					369.0	Corrected Ave (3 peaks):				400.8 RPD = 8
Aroclor-1262	1	10.816	-0.016	288705	1044.1	1	11.194	-0.006	145932	275.4
Aroclor-1262	2	12.239	-0.006	82217	188.4	2	11.647	-0.006	158183	351.0
Aroclor-1262	3	12.312	-0.008	98332	207.5	3	12.431	-0.003	109515	228.2
Aroclor-1262	4	12.981	-0.009	90272	209.1	4	12.495	-0.009	262369	341.4
Total Col1Ave (4 peaks):					412.3	Total Col2Ave (4 peaks):				299.0 RPD = 32
Corrected Ave (3 peaks):					201.7	Corrected Ave (3 peaks):				281.6 RPD = 33
Aroclor-1268	1	12.239	-0.006	82217	72.8	1	12.431	-0.002	109515	86.6
Aroclor-1268	2	12.312	-0.006	98332	87.3	2	12.495	-0.007	262369	195.0
Aroclor-1268	3	12.716	0.017	43613	46.7	3	12.889	-0.005	6576	5.9
Aroclor-1268	4	13.483	-0.006	28366	10.3	4	13.704	-0.005	31994	9.2
Total Col1Ave (4 peaks):					54.3	Total Col2Ave (4 peaks):				74.2 RPD = 31

Corrected Ave (3 peaks): 43.3 Corrected Ave (3 peaks): 33.9 RPD = 24

Total PCB Area Col1 (5.909 - 13.792) = 4082370 Col1 Total PCB = 0.9 ppm*

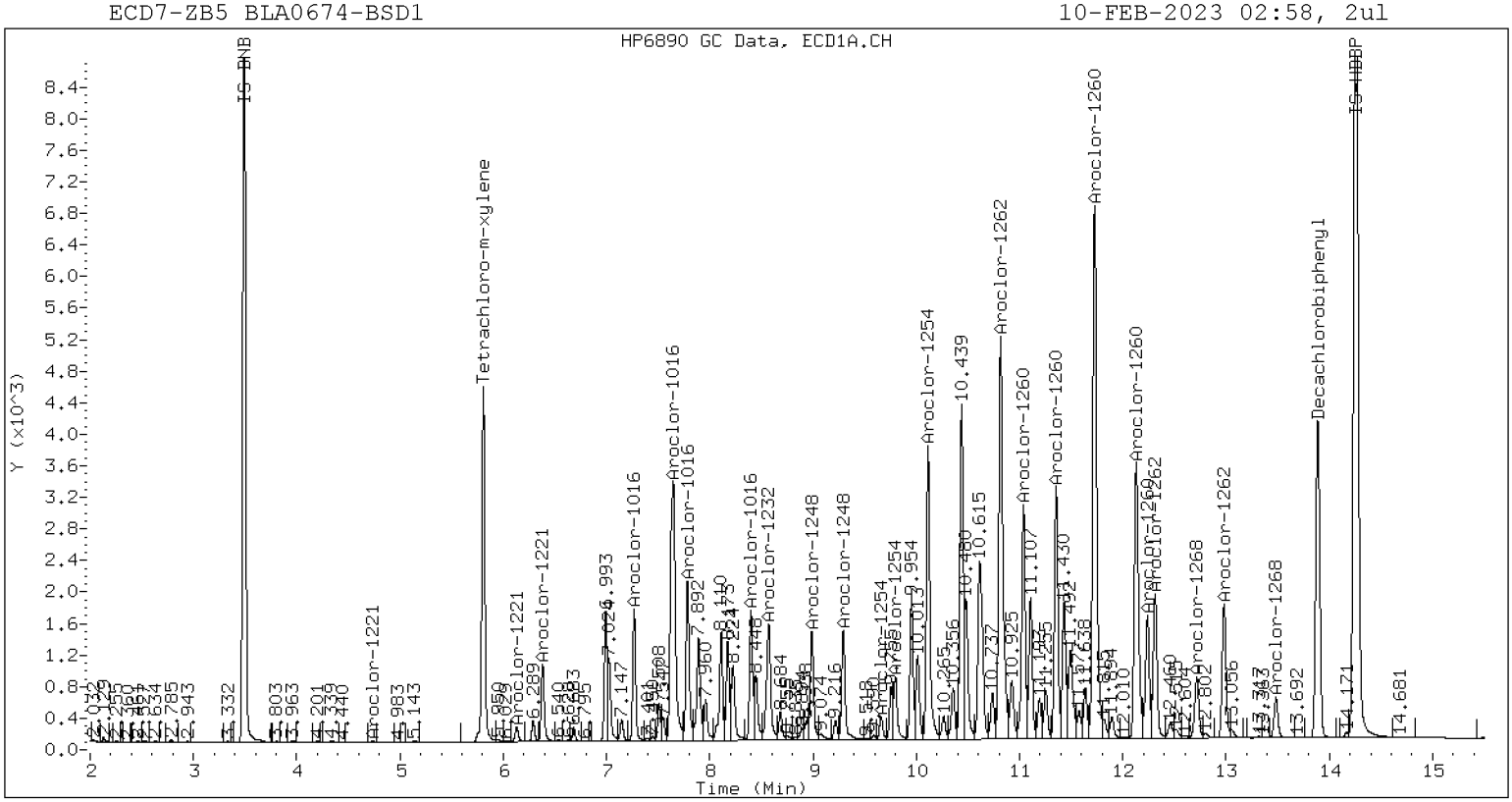
Total PCB Area Col2 (5.785 - 14.015) = 3774623 Col2 Total PCB = 1.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

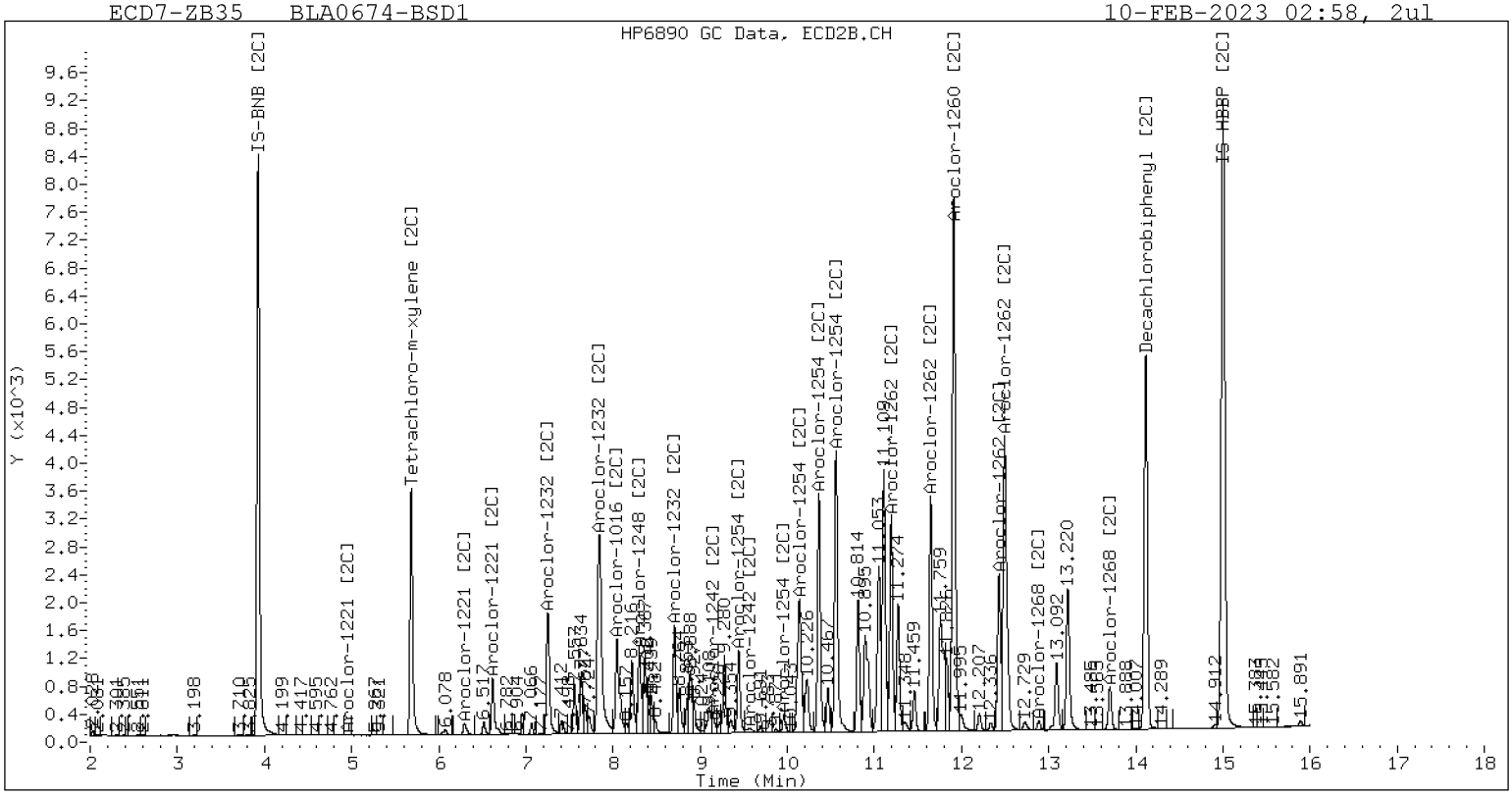
PCB Dual Column Chromatograms

ECD7-ZB5 BLA0674-BSD1 10-FEB-2023 02:58, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0674-BSD1 10-FEB-2023 02:58, 2ul



ZB-35 Manual Integration: NO

MS / MS DUPLICATE RECOVERY
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/10/23 05:46
Batch:	BLA0674	Laboratory ID:	BLA0674-MS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike
Initial/Final:	16.74 g / 2.5 mL	Source Sample:	LDW23-IT1034

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Aroclor 1016	101	ND	U	73.9		73.4	56 - 120
Aroclor 1260 [2C]	101	76.8		149		71.5	58 - 120

* Values outside of QC limits

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

MS / MS DUPLICATE RECOVERY
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	02/10/23 06:07
Batch:	BLA0674	Laboratory ID:	BLA0674-MSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike Dup
Initial/Final:	16.74 g / 2.5 mL	Source Sample:	LDW23-IT1034

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor 1016	101	84.4		83.8	13.3	30	56 - 120
Aroclor 1260 [2C]	101	150		72.5	0.380	30	58 - 120

* Values outside of QC limits

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092351ECD7.D
Data file 2: /230209.b/230209.b/02092351ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0674-MS1
Client ID:
Injection Date: 10-FEB-2023 05:46
Report Date: 02/10/2023 12:59
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.003	160813	5.683	-0.002	148767	28.1	30.7	8.9	Tetrachloro-m-xylene
13.885	-0.007	114915	14.112	-0.003	172573	29.6	33.3	11.7	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	405376	-19.5
Hexabromobiphenyl	647433	362576	-44.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	358591	6.4
Hexabromobiphenyl	382032	326345	-14.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1016	1	7.266	-0.004	63310	420.3	1	7.250	-0.003	73783	379.4
Aroclor-1016	2	7.642	-0.008	176191	353.0	2	7.841	-0.009	159687	374.7
Aroclor-1016	3	7.782	-0.007	66038	287.6	3	8.041	-0.007	64292	369.7
Aroclor-1016	4	8.397	-0.007	61745	418.0	4	8.299	-0.005	67389	494.2
Total Col1Ave (4 peaks):		369.7				Total Col2Ave (4 peaks):		404.5	RPD = 9	
Corrected Ave (3 peaks):		352.8				Corrected Ave (3 peaks):		374.6	RPD = 6	
Aroclor-1221	1	4.732	-0.001	551	18.4	1	4.944	-0.015	2742	104.3
Aroclor-1221	2	6.129	-0.005	6823	111.4	2	6.295	-0.003	7186	124.8
Aroclor-1221	3	6.380	-0.004	36746	258.3	3	6.620	-0.003	47316	486.7
Total Col1Ave (3 peaks):		129.4				Total Col2Ave (3 peaks):		238.6	RPD = 59*	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.732	-0.001	551	29.5	1	4.975	0.015	2260	141.8
Aroclor-1232	2	6.129	-0.005	6823	161.9	2	7.250	-0.006	73783	826.9
Aroclor-1232	3	7.642	-0.016	176191	835.7	3	7.841	-0.013	159687	878.7
Aroclor-1232	4	8.566	-0.018	70473	781.0	4	8.704	-0.010	58728	1163.1
Total Col1Ave (4 peaks):		452.0				Total Col2Ave (4 peaks):		752.6	RPD = 50*	
Corrected Ave (3 peaks):		324.1				Corrected Ave (3 peaks):		615.8	RPD = 62*	
Aroclor-1242	1	7.266	-0.004	63310	510.0	1	7.250	-0.002	73783	470.5
Aroclor-1242	2	7.642	-0.013	176191	433.7	2	7.841	-0.008	159687	458.4
Aroclor-1242	3	8.397	-0.010	61745	511.6	3	9.138	-0.016	12776	117.1
Aroclor-1242	4	8.566	-0.015	70473	386.5	4	9.531	-0.050	74138	512.8
Total Col1Ave (4 peaks):		460.5				Total Col2Ave (4 peaks):		389.7	RPD = 17	
Corrected Ave (3 peaks):		443.4				Corrected Ave (3 peaks):		348.7	RPD = 24	
Aroclor-1248	1	8.397	-0.008	61745	304.5	1	8.299	-0.004	67389	415.7
Aroclor-1248	2	8.566	-0.014	70473	272.4	2	8.704	-0.005	58728	336.6
Aroclor-1248	3	8.986	-0.013	143981	291.0	3	9.138	-0.014	12776	59.9
Aroclor-1248	4	9.287	-0.007	195965	800.1	4	9.531	-0.045	74138	281.2
Total Col1Ave (4 peaks):		417.0				Total Col2Ave (4 peaks):		273.4	RPD = 42*	
Corrected Ave (3 peaks):		289.3				Corrected Ave (3 peaks):		225.9	RPD = 25	
Aroclor-1254	1	9.287	-0.012	195965	474.3	1	9.438	-0.007	147923	568.6
Aroclor-1254	2	9.362	-0.016	62500	354.3	2	9.956	-0.008	84749	403.0
Aroclor-1254	3	9.654	-0.015	113944	430.4	3	10.106	-0.010	309003	673.7
Aroclor-1254	4	9.787	-0.022	276162	532.4	4	10.359	-0.008	290886	634.2
Aroclor-1254	5	10.111	-0.066	285276	845.8	5	10.554	-0.010	279858	1095.4
Total Col1Ave (5 peaks):		527.4				Total Col2Ave (5 peaks):		675.0	RPD = 25	
Corrected Ave (4 peaks):		447.9				Corrected Ave (4 peaks):		569.9	RPD = 24	
Aroclor-1260	1	11.033	-0.011	138617	681.4	1	11.643	-0.006	187638	797.0
Aroclor-1260	2	11.349	-0.011	156338	747.6	2	11.905	-0.008	395918	664.7
Aroclor-1260	3	11.719	-0.015	344915	626.5	3	12.424	-0.007	123693	833.2
Aroclor-1260	4	12.121	-0.019	180045	633.0	4	12.488	-0.009	268510	696.5
Aroclor-1260	5	12.235	-0.009	88148	710.9	NS	---			----
Total Col1Ave (5 peaks):		679.9				Total Col2Ave (4 peaks):		747.8	RPD = 10	
Corrected Ave (4 peaks):		663.0				Corrected Ave (3 peaks):		719.4	RPD = 8	
Aroclor-1262	1	10.808	-0.024	493607	3366.4	1	11.189	-0.011	146582	458.9
Aroclor-1262	2	12.235	-0.011	88148	380.9	2	11.643	-0.010	187638	690.8
Aroclor-1262	3	12.306	-0.015	105954	421.7	3	12.424	-0.011	123693	427.7
Aroclor-1262	4	12.972	-0.017	83770	365.9	4	12.488	-0.016	268510	579.7
Total Col1Ave (4 peaks):		1133.7				Total Col2Ave (4 peaks):		539.3	RPD = 71*	
Corrected Ave (3 peaks):		389.5				Corrected Ave (3 peaks):		488.8	RPD = 23	
Aroclor-1268	1	12.235	-0.010	88148	147.2	1	12.424	-0.010	123693	162.3
Aroclor-1268	2	12.306	-0.012	105954	177.4	2	12.488	-0.014	268510	331.1
Aroclor-1268	3	12.706	0.007	48682	98.4	3	12.884	-0.009	21405	31.7
Aroclor-1268	4	13.477	-0.012	45811	31.2	4	13.698	-0.011	62572	30.0
Total Col1Ave (4 peaks):		113.5				Total Col2Ave (4 peaks):		138.8	RPD = 20	

Corrected Ave (3 peaks): 92.3 Corrected Ave (3 peaks): 74.7 RPD = 21

Total PCB Area Col1 (5.909 - 13.792) = 5387051 Col1 Total PCB = 1.1 ppm*

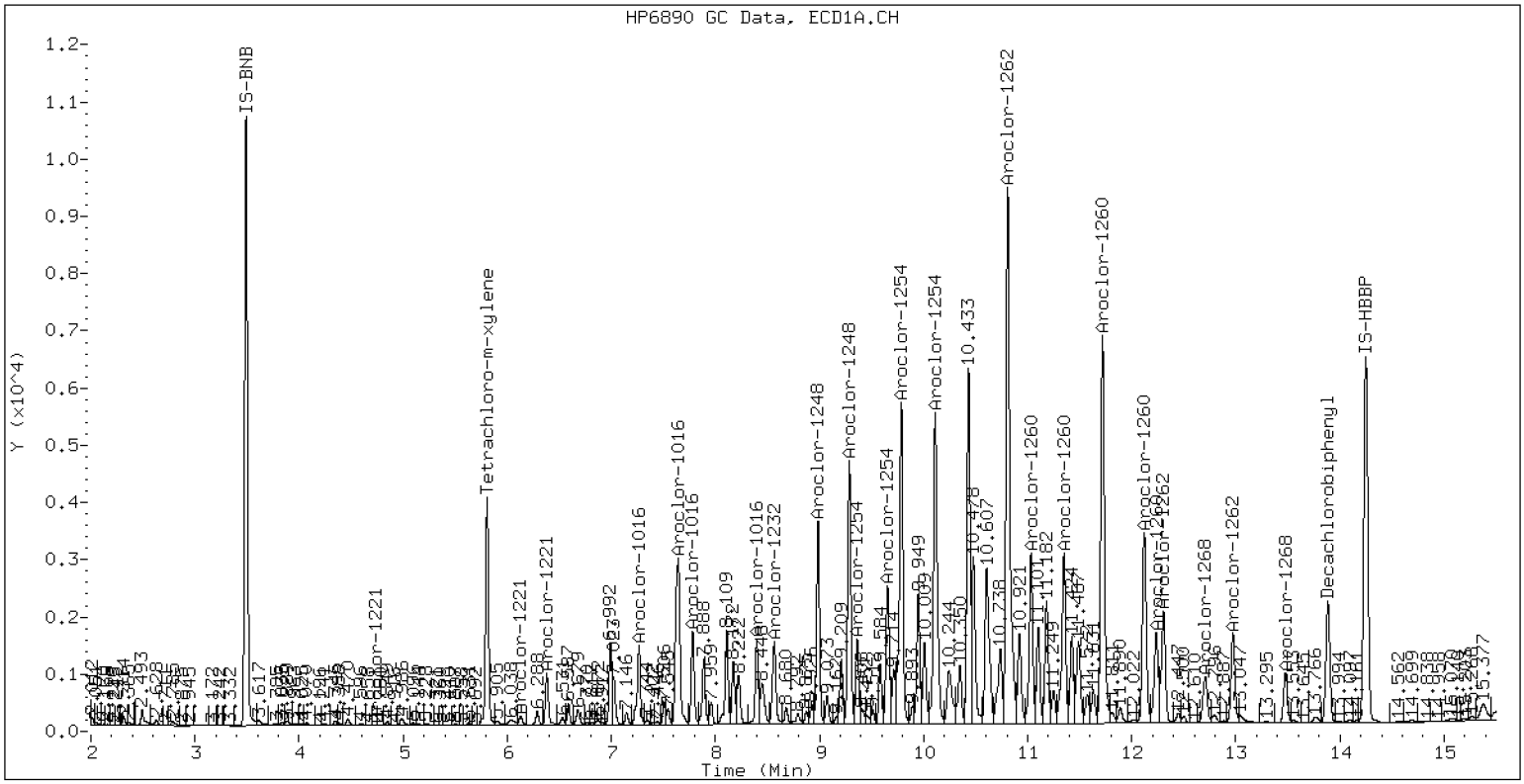
Total PCB Area Col2 (5.785 - 14.015) = 5236364 Col2 Total PCB = 1.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

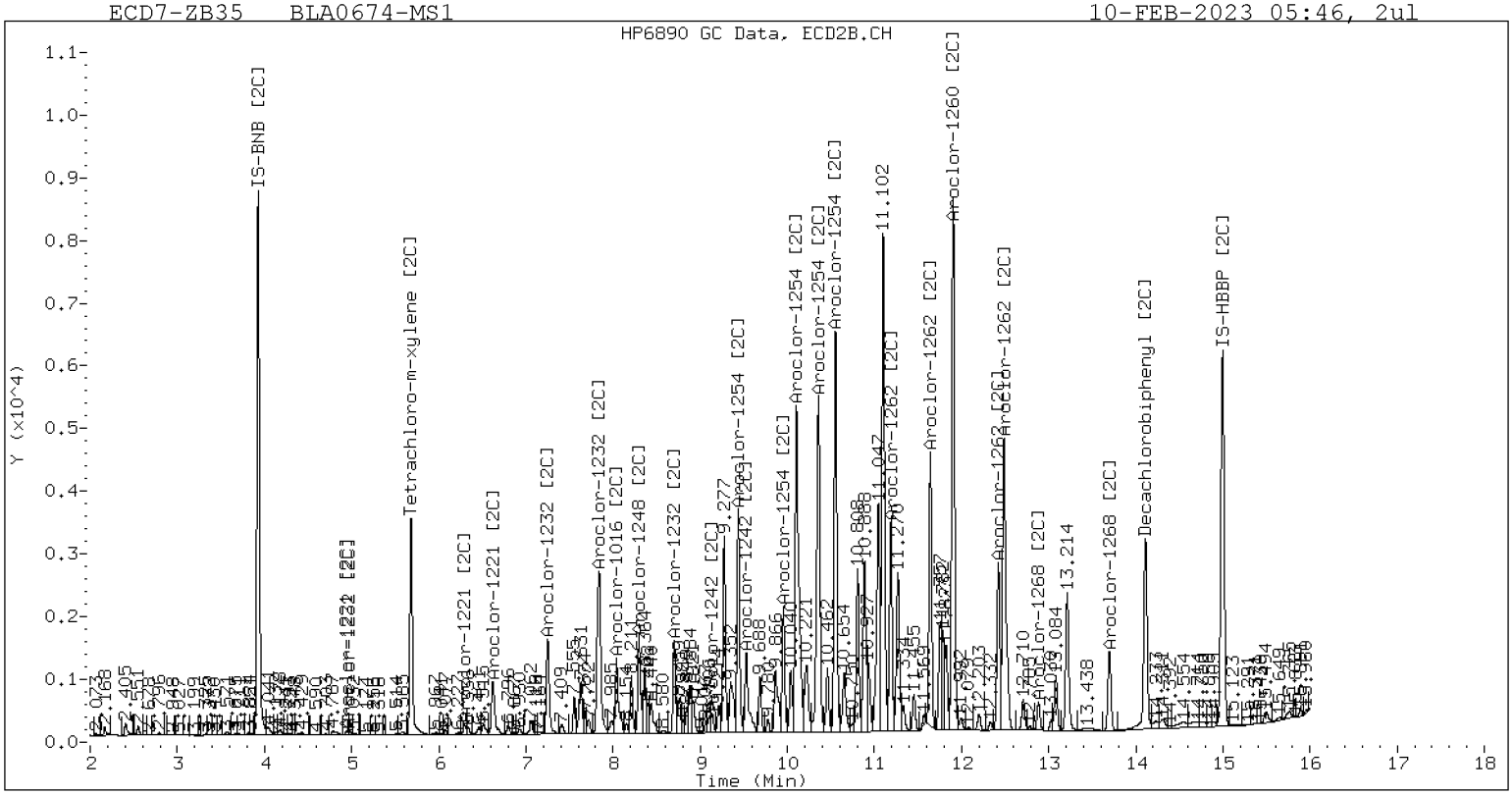
PCB Dual Column Chromatograms

ECD7-ZB5 BLA0674-MS1 10-FEB-2023 05:46, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0674-MS1 10-FEB-2023 05:46, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092352ECD7.D
Data file 2: /230209.b/230209.b/02092352ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0674-MSD1
Client ID:
Injection Date: 10-FEB-2023 06:07
Report Date: 02/10/2023 12:59
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.002	162004	5.684	-0.002	146544	30.7	31.7	3.4	Tetrachloro-m-xylene
13.886	-0.006	124251	14.112	-0.003	169194	31.9	32.3	1.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	373825	-25.7
Hexabromobiphenyl	647433	364695	-43.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	341908	1.5
Hexabromobiphenyl	382032	329663	-13.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.266	-0.003	64830	466.7	1	7.250	-0.003	73661	397.2
Aroclor-1016	2	7.643	-0.007	184346	400.5	2	7.842	-0.008	162183	399.1
Aroclor-1016	3	7.782	-0.007	70194	331.5	3	8.042	-0.006	67377	406.3
Aroclor-1016	4	8.397	-0.007	66829	490.6	4	8.299	-0.004	72933	561.0
Total Col1Ave (4 peaks):					422.3	Total Col2Ave (4 peaks):				440.9 RPD = 4
Corrected Ave (3 peaks):					399.6	Corrected Ave (3 peaks):				400.9 RPD = 0
Aroclor-1221	1	4.735	0.002	275	10.0	1	4.974	0.015	1888	75.3
Aroclor-1221	2	6.129	-0.004	6905	122.2	2	6.296	-0.003	9222	167.9
Aroclor-1221	3	6.380	-0.004	37228	283.8	3	6.620	-0.003	39692	428.2
Total Col1Ave (3 peaks):					138.7	Total Col2Ave (3 peaks):				223.8 RPD = 47*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.735	0.002	275	15.9	1	4.974	0.014	1888	124.2
Aroclor-1232	2	6.129	-0.004	6905	177.6	2	7.250	-0.006	73661	865.8
Aroclor-1232	3	7.643	-0.015	184346	948.2	3	7.842	-0.013	162183	936.0
Aroclor-1232	4	8.566	-0.018	76793	922.8	4	8.705	-0.009	61669	1280.9
Total Col1Ave (4 peaks):					516.2	Total Col2Ave (4 peaks):				801.7 RPD = 43*
Corrected Ave (3 peaks):					372.1	Corrected Ave (3 peaks):				642.0 RPD = 53*
Aroclor-1242	1	7.266	-0.004	64830	566.4	1	7.250	-0.002	73661	492.6
Aroclor-1242	2	7.643	-0.012	184346	492.1	2	7.842	-0.008	162183	488.3
Aroclor-1242	3	8.397	-0.010	66829	600.4	3	9.139	-0.015	13617	130.9
Aroclor-1242	4	8.566	-0.015	76793	456.7	4	9.530	-0.050	77321	560.9
Total Col1Ave (4 peaks):					528.9	Total Col2Ave (4 peaks):				418.2 RPD = 23
Corrected Ave (3 peaks):					505.1	Corrected Ave (3 peaks):				370.6 RPD = 31
Aroclor-1248	1	8.397	-0.008	66829	357.4	1	8.299	-0.003	72933	471.9
Aroclor-1248	2	8.566	-0.014	76793	321.9	2	8.705	-0.005	61669	370.7
Aroclor-1248	3	8.986	-0.013	146766	321.6	3	9.139	-0.013	13617	67.0
Aroclor-1248	4	9.287	-0.007	198812	880.3	4	9.530	-0.045	77321	307.6
Total Col1Ave (4 peaks):					470.3	Total Col2Ave (4 peaks):				304.3 RPD = 43*
Corrected Ave (3 peaks):					333.6	Corrected Ave (3 peaks):				248.4 RPD = 29
Aroclor-1254	1	9.287	-0.012	198812	521.8	1	9.437	-0.007	153910	620.5
Aroclor-1254	2	9.363	-0.015	73940	454.5	2	9.957	-0.007	90059	449.2
Aroclor-1254	3	9.654	-0.016	115557	473.4	3	10.106	-0.011	320896	733.7
Aroclor-1254	4	9.787	-0.021	287230	600.5	4	10.359	-0.008	298787	683.2
Aroclor-1254	5	10.111	-0.066	301567	969.5	5	10.554	-0.010	280547	1151.7
Total Col1Ave (5 peaks):					604.0	Total Col2Ave (5 peaks):				727.7 RPD = 19
Corrected Ave (4 peaks):					512.6	Corrected Ave (4 peaks):				621.6 RPD = 19
Aroclor-1260	1	11.033	-0.011	142033	694.1	1	11.643	-0.006	186194	782.9
Aroclor-1260	2	11.349	-0.012	160066	761.0	2	11.904	-0.009	397916	661.3
Aroclor-1260	3	11.719	-0.016	357265	645.2	3	12.423	-0.008	131015	873.6
Aroclor-1260	4	12.120	-0.019	180954	632.5	4	12.488	-0.009	266730	685.0
Aroclor-1260	5	12.234	-0.009	86387	692.7	NS	---			----
Total Col1Ave (5 peaks):					685.1	Total Col2Ave (4 peaks):				750.7 RPD = 9
Corrected Ave (4 peaks):					666.1	Corrected Ave (3 peaks):				709.7 RPD = 6
Aroclor-1262	1	10.809	-0.023	500524	3393.7	1	11.189	-0.011	144774	448.7
Aroclor-1262	2	12.234	-0.011	86387	371.1	2	11.643	-0.010	186194	678.6
Aroclor-1262	3	12.306	-0.015	105783	418.6	3	12.423	-0.011	131015	448.4
Aroclor-1262	4	12.972	-0.017	86028	373.6	4	12.488	-0.016	266730	570.0
Total Col1Ave (4 peaks):					1139.2	Total Col2Ave (4 peaks):				536.4 RPD = 72*
Corrected Ave (3 peaks):					387.7	Corrected Ave (3 peaks):				489.1 RPD = 23
Aroclor-1268	1	12.234	-0.010	86387	143.4	1	12.423	-0.010	131015	170.2
Aroclor-1268	2	12.306	-0.012	105783	176.1	2	12.488	-0.014	266730	325.6
Aroclor-1268	3	12.705	0.006	48863	98.2	3	12.884	-0.009	20827	30.5
Aroclor-1268	4	13.478	-0.011	44505	30.2	4	13.699	-0.009	65525	31.1
Total Col1Ave (4 peaks):					111.9	Total Col2Ave (4 peaks):				139.4 RPD = 22

Corrected Ave (3 peaks): 90.6 Corrected Ave (3 peaks): 77.3 RPD = 16

Total PCB Area Col1 (5.909 - 13.792) = 5543588 Col1 Total PCB = 1.3 ppm*

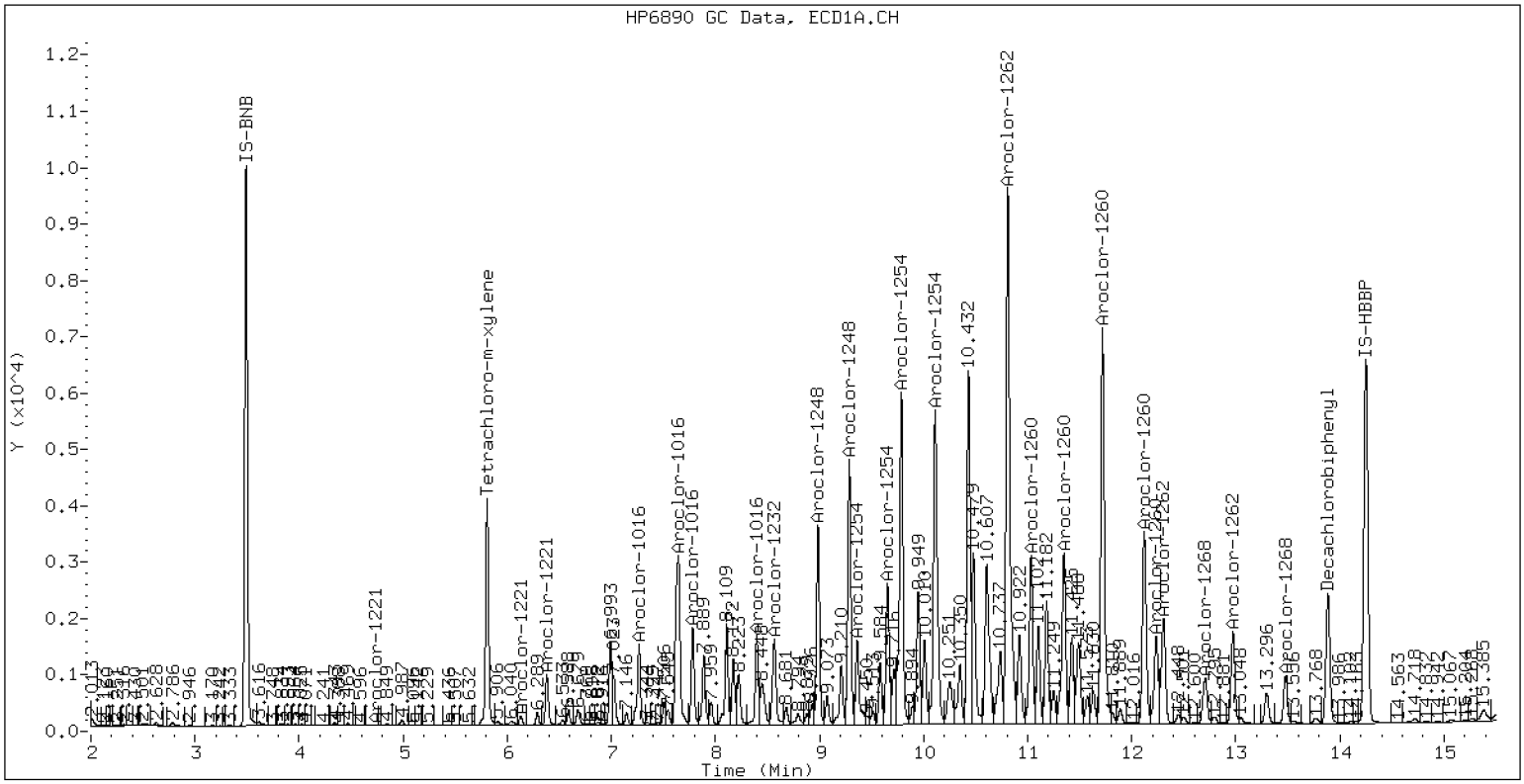
Total PCB Area Col2 (5.785 - 14.015) = 5259529 Col2 Total PCB = 1.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

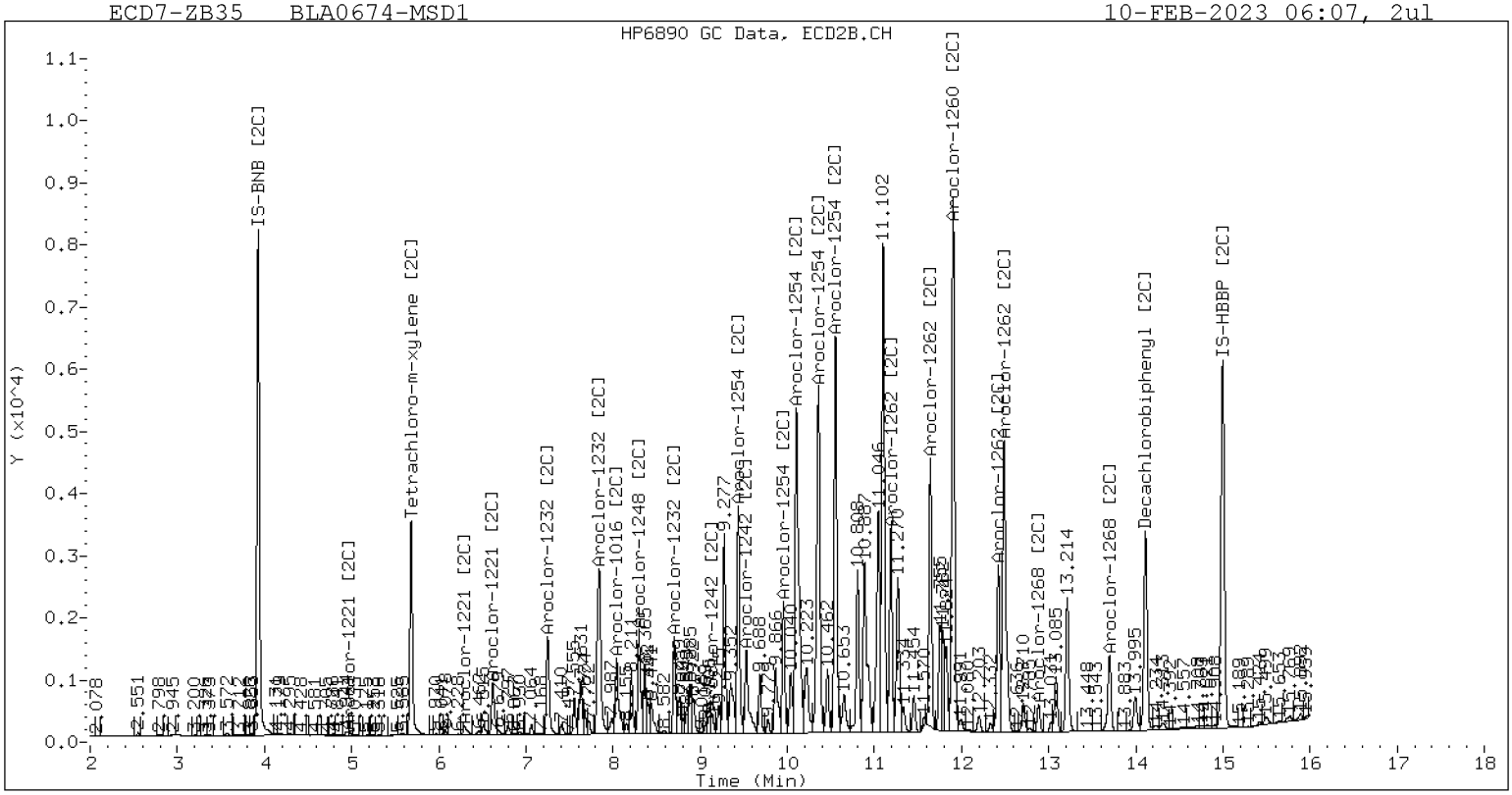
PCB Dual Column Chromatograms

ECD7-ZB5 BLA0674-MSD1 10-FEB-2023 06:07, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0674-MSD1 10-FEB-2023 06:07, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0674-SRM1
Batch: BLA0674
Initial/Final: 2.5 g / 2.5 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 02/10/2023 3:19
Standard ID: K011477
Expires: 06/11/2023
Standard Lot#: PSRM0168
Description: Puget Sound reference-SRM

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Aroclor 1260	108.00	84.6	2.9	20.0		78.4	38 - 167
Aroclor 1260 [2C]	108.00	95.9	2.9	20.0		88.8	38 - 167

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092344ECD7.D
Data file 2: /230209.b/230209.b/02092344ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLA0674-SRM1
Client ID:
Injection Date: 10-FEB-2023 03:19
Report Date: 02/10/2023 12:59
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.003	157396	5.683	-0.002	142646	28.1	30.0	6.4	Tetrachloro-m-xylene
13.885	-0.007	155420	14.113	-0.002	193605	27.2	26.2	3.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	395832	-21.4
Hexabromobiphenyl	647433	533938	-17.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	351723	4.4
Hexabromobiphenyl	382032	465626	21.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.302	0.032	787	5.4	1	7.255	0.002	4954	26.0
Aroclor-1016	2	7.644	-0.006	6174	12.7	2	7.843	-0.007	10440	25.0
Aroclor-1016	3	7.785	-0.004	2588	11.5	3	8.044	-0.004	2159	12.7
Aroclor-1016	4	8.398	-0.006	5111	35.4	4	8.300	-0.004	7003	52.4
Total Col1Ave (4 peaks):					16.2	Total Col2Ave (4 peaks):				29.0 RPD = 56*
Corrected Ave (3 peaks):					9.9	Corrected Ave (3 peaks):				21.2 RPD = 73*
Aroclor-1221	1	4.693	-0.039	100	3.4	1	4.943	-0.016	686	26.6
Aroclor-1221	2	6.039	-0.095	5844	97.7	2	6.336	0.038	5106	90.4
Aroclor-1221	3	6.387	0.002	1303	9.4	3	6.638	0.015	2639	27.7
Total Col1Ave (3 peaks):					36.8	Total Col2Ave (3 peaks):				48.2 RPD = 27
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.693	-0.040	100	5.5	1	4.943	-0.016	686	43.9
Aroclor-1232	2	6.039	-0.095	5844	142.0	2	7.255	-0.002	4954	56.6
Aroclor-1232	3	7.644	-0.014	6174	30.0	3	7.843	-0.011	10440	58.6
Aroclor-1232	4	8.566	-0.018	3896	44.2	4	8.706	-0.008	5556	112.2
Total Col1Ave (4 peaks):					55.4	Total Col2Ave (4 peaks):				67.8 RPD = 20
Corrected Ave (3 peaks):					26.6	Corrected Ave (3 peaks):				53.0 RPD = 66*
Aroclor-1242	1	7.302	0.031	787	6.5	1	7.255	0.003	4954	32.2
Aroclor-1242	2	7.644	-0.011	6174	15.6	2	7.843	-0.006	10440	30.6
Aroclor-1242	3	8.398	-0.009	5111	43.4	3	9.142	-0.012	7341	68.6
Aroclor-1242	4	8.566	-0.015	3896	21.9	4	9.534	-0.046	11929	84.1
Total Col1Ave (4 peaks):					21.8	Total Col2Ave (4 peaks):				53.9 RPD = 85*
Corrected Ave (3 peaks):					14.6	Corrected Ave (3 peaks):				43.8 RPD = 100*
Aroclor-1248	1	8.398	-0.008	5111	25.8	1	8.300	-0.003	7003	44.0
Aroclor-1248	2	8.566	-0.014	3896	15.4	2	8.706	-0.004	5556	32.5
Aroclor-1248	3	8.986	-0.013	16022	33.2	3	9.142	-0.010	7341	35.1
Aroclor-1248	4	9.287	-0.006	22041	92.2	4	9.534	-0.042	11929	46.1
Total Col1Ave (4 peaks):					41.6	Total Col2Ave (4 peaks):				39.4 RPD = 5
Corrected Ave (3 peaks):					24.8	Corrected Ave (3 peaks):				37.2 RPD = 40*
Aroclor-1254	1	9.287	-0.011	22041	54.6	1	9.438	-0.006	19444	76.2
Aroclor-1254	2	9.363	-0.014	7383	42.9	2	9.958	-0.007	9145	44.3
Aroclor-1254	3	9.658	-0.011	12798	49.5	3	10.109	-0.007	37198	82.7
Aroclor-1254	4	9.789	-0.020	29346	57.9	4	10.359	-0.007	47693	106.0
Aroclor-1254	5	10.243	0.066	12132	36.8	5	10.556	-0.008	47917	191.2
Total Col1Ave (5 peaks):					48.4	Total Col2Ave (5 peaks):				100.1 RPD = 70*
Corrected Ave (4 peaks):					46.0	Corrected Ave (4 peaks):				77.3 RPD = 51*
Aroclor-1260	1	11.034	-0.010	27757	92.7	1	11.644	-0.005	31307	93.2
Aroclor-1260	2	11.348	-0.013	23230	75.4	2	11.904	-0.009	74228	87.3
Aroclor-1260	3	11.719	-0.016	68786	84.8	3	12.424	-0.007	24281	114.6
Aroclor-1260	4	12.120	-0.019	36874	88.0	4	12.489	-0.007	48572	88.3
Aroclor-1260	5	12.233	-0.011	15016	82.2	NS	---			----
Total Col1Ave (5 peaks):					84.6	Total Col2Ave (4 peaks):				95.9 RPD = 12
Corrected Ave (4 peaks):					82.6	Corrected Ave (3 peaks):				89.6 RPD = 8
Aroclor-1262	1	10.809	-0.023	63589	294.5	1	11.190	-0.010	29303	64.3
Aroclor-1262	2	12.233	-0.012	15016	44.1	2	11.644	-0.009	31307	80.8
Aroclor-1262	3	12.307	-0.013	18210	49.2	3	12.424	-0.011	24281	58.8
Aroclor-1262	4	12.973	-0.016	17159	50.9	4	12.489	-0.015	48572	73.5
Total Col1Ave (4 peaks):					109.7	Total Col2Ave (4 peaks):				69.4 RPD = 45*
Corrected Ave (3 peaks):					48.1	Corrected Ave (3 peaks):				65.5 RPD = 31
Aroclor-1268	1	12.233	-0.012	15016	17.0	1	12.424	-0.010	24281	22.3
Aroclor-1268	2	12.307	-0.011	18210	20.7	2	12.489	-0.013	48572	42.0
Aroclor-1268	3	12.711	0.012	8720	12.0	3	12.884	-0.009	1607	1.7
Aroclor-1268	4	13.478	-0.010	4433	2.1	4	13.700	-0.009	7440	2.5
Total Col1Ave (4 peaks):					12.9	Total Col2Ave (4 peaks):				17.1 RPD = 28

Corrected Ave (3 peaks): 10.3 Corrected Ave (3 peaks): 8.8 RPD = 16

Total PCB Area Col1 (5.909 - 13.792) = 786783 Col1 Total PCB = 0.2 ppm*

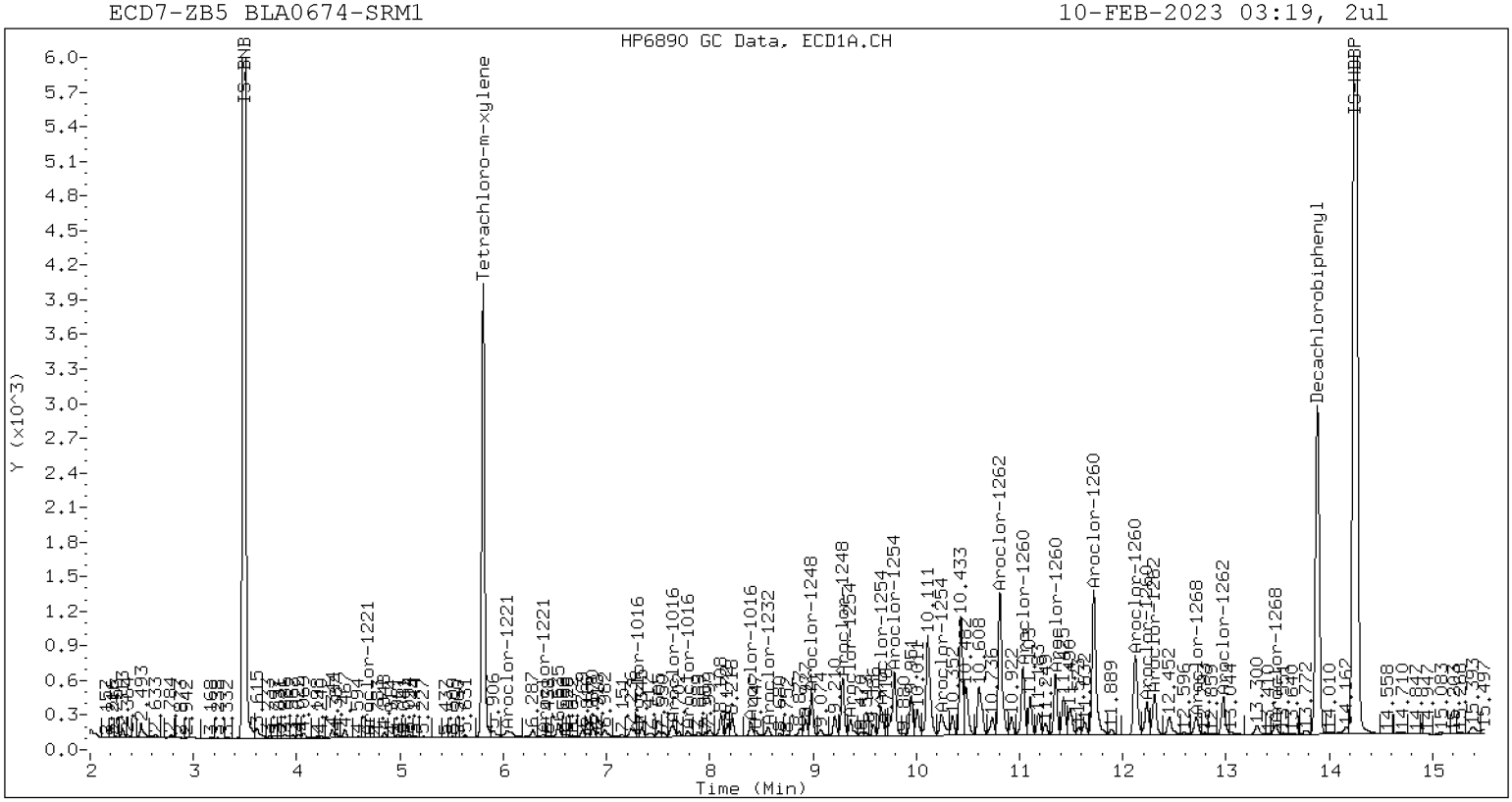
Total PCB Area Col2 (5.785 - 14.015) = 810513 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

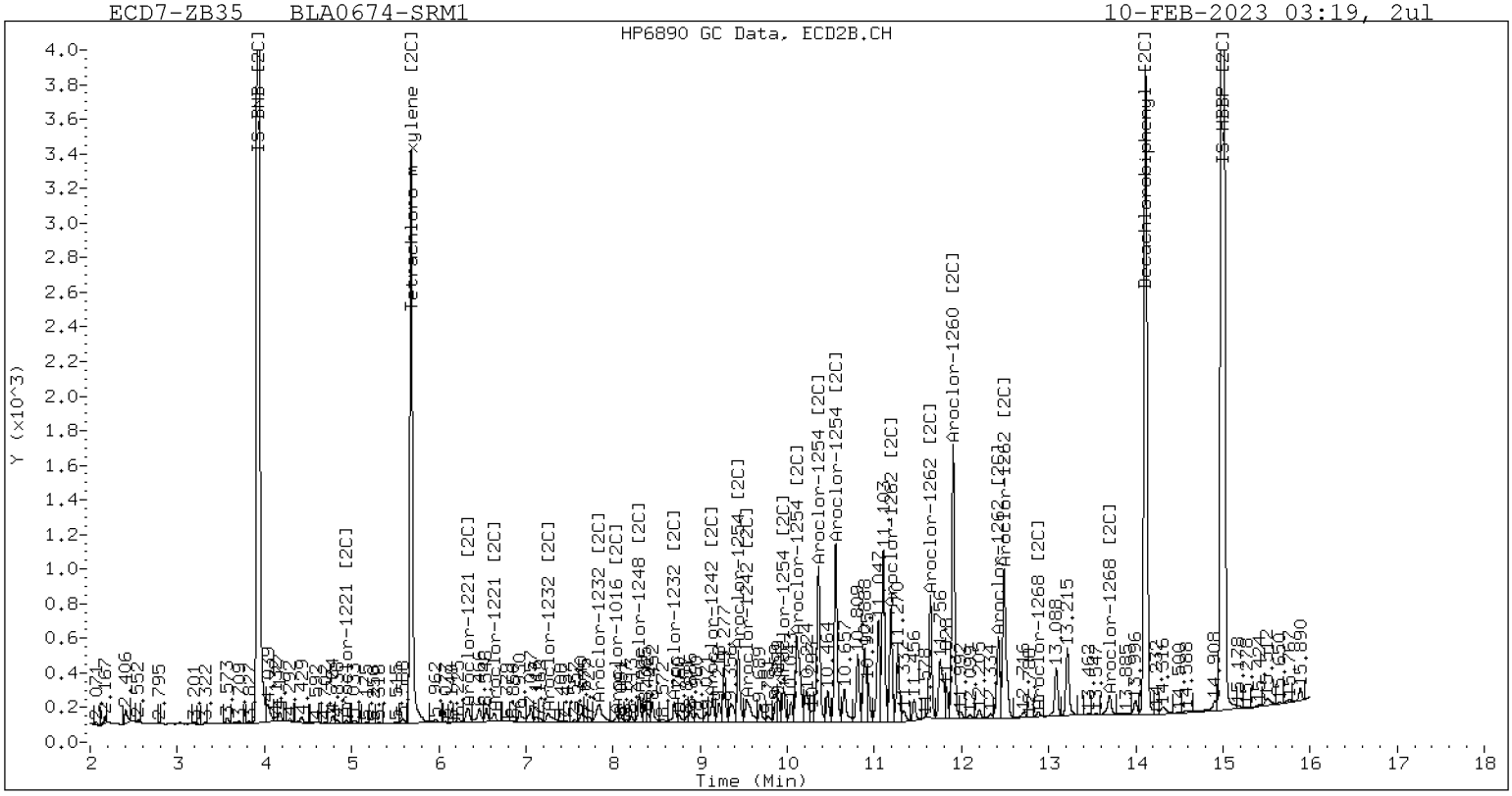
PCB Dual Column Chromatograms

ECD7-ZB5 BLA0674-SRM1 10-FEB-2023 03:19, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLA0674-SRM1 10-FEB-2023 03:19, 2ul



ZB-35 Manual Integration: NO

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (1):	ZB5

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1016	250	5.167707E-02	20	4.942809E-02	50	5.153925E-02	1000	4.662732E-02	100	5.549196E-02	500	4.928929E-02
Aroclor-1016 (1)	250	3.017861E-02	20	2.947465E-02	50	3.102226E-02	1000	2.635254E-02	100	3.309682E-02	500	2.824148E-02
Aroclor-1016 (2)	250	0.1020346	20	9.270426E-02	50	9.811961E-02	1000	9.356138E-02	100	0.1059789	500	0.0986114
Aroclor-1016 (3)	250	4.399859E-02	20	4.877736E-02	50	4.899883E-02	1000	3.795541E-02	100	0.0512744	500	4.091133E-02
Aroclor-1016 (4)	250	3.049651E-02	20	2.675607E-02	50	2.801628E-02	1000	2.863996E-02	100	3.161774E-02	500	2.939295E-02
Aroclor 1260	250	6.608884E-02	20	6.779653E-02	50	6.325495E-02	1000	5.469674E-02	100	5.850835E-02	500	5.278897E-02
Aroclor-1260 (1)	250	5.181373E-02	20	4.727423E-02	50	4.542797E-02	1000	0.0403981	100	0.0442757	500	0.0401323
Aroclor-1260 (2)	250	5.350015E-02	20	4.939797E-02	50	4.636355E-02	1000	4.208491E-02	100	4.449674E-02	500	4.100371E-02
Aroclor-1260 (3)	250	0.1331674	20	0.1373712	50	0.1282887	1000	0.1078965	100	0.1173998	500	0.1046798
Aroclor-1260 (4)	250	6.473121E-02	20	7.197922E-02	50	0.0663805	1000	5.863707E-02	100	5.997377E-02	500	5.485394E-02
Aroclor-1260 (5)	250	2.723173E-02	20	3.295998E-02	50	2.981405E-02	1000	2.446709E-02	100	2.639578E-02	500	2.327509E-02
Decachlorobiphenyl	40	0.8481341	3.2	0.8644195	8	0.9030151	160	0.7914512	16	0.9308139	80	0.7957625
Tetrachlorometaxylene	40	1.149655	3.2	1.100393	8	1.102173	160	1.094607	16	1.219974	80	1.117921

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (1):	ZB5

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1221							250	0.0153579				
Aroclor-1221 (1)							250	5.913051E-03				
Aroclor-1221 (2)							250	1.209121E-02				
Aroclor-1221 (3)							250	2.806945E-02				
Aroclor 1232									250	1.785602E-02		
Aroclor-1232 (1)									250	3.691407E-03		
Aroclor-1232 (2)									250	8.319285E-03		
Aroclor-1232 (3)									250	4.160486E-02		
Aroclor-1232 (4)									250	1.780851E-02		
Aroclor 1242	250	0.0411165										
Aroclor-1242 (1)	250	2.449677E-02										
Aroclor-1242 (2)	250	8.016926E-02										
Aroclor-1242 (3)	250	2.381903E-02										
Aroclor-1242 (4)	250	3.598092E-02										
Aroclor 1248			250	0.0592639								
Aroclor-1248 (1)			250	4.001993E-02								
Aroclor-1248 (2)			250	5.105008E-02								
Aroclor-1248 (3)			250	9.765126E-02								
Aroclor-1248 (4)			250	4.833435E-02								
Aroclor 1254					250	6.750332E-02						
Aroclor-1254 (1)					250	8.153293E-02						
Aroclor-1254 (2)					250	0.0348121						
Aroclor-1254 (3)					250	5.224052E-02						
Aroclor-1254 (4)					250	0.1023658						
Aroclor-1254 (5)					250	6.656523E-02						
Aroclor-1262 (1)							250	3.235265E-02				
Aroclor-1262 (2)							250	5.106336E-02				
Aroclor-1262 (3)							250	5.543866E-02				

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (1):	ZB5

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor-1262 (4)							250	5.051654E-02				
Aroclor-1268 (1)									250	0.132157		
Aroclor-1268 (2)									250	0.1317955		
Aroclor-1268 (3)									250	0.1091938		
Aroclor-1268 (4)									250	0.3237404		

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (1):	ZB5

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor 1016	0.0506755	5.9			RSD (20)	
Aroclor-1016 (1)	2.972773E-02	7.8			RSD (20)	
Aroclor-1016 (2)	9.850169E-02	5.1			RSD (20)	
Aroclor-1016 (3)	4.531932E-02	11.5			RSD (20)	
Aroclor-1016 (4)	2.915325E-02	6.0			RSD (20)	
Aroclor 1221		0.0			RSD (20)	
Aroclor-1221 (1)		0.0			RSD (20)	
Aroclor-1221 (2)		0.0			RSD (20)	
Aroclor-1221 (3)		0.0			RSD (20)	
Aroclor 1232		0.0			RSD (20)	
Aroclor-1232 (1)		0.0			RSD (20)	
Aroclor-1232 (2)		0.0			RSD (20)	
Aroclor-1232 (3)		0.0			RSD (20)	
Aroclor-1232 (4)		0.0			RSD (20)	
Aroclor 1242		0.0			RSD (20)	
Aroclor-1242 (1)		0.0			RSD (20)	
Aroclor-1242 (2)		0.0			RSD (20)	
Aroclor-1242 (3)		0.0			RSD (20)	
Aroclor-1242 (4)		0.0			RSD (20)	
Aroclor 1248		0.0			RSD (20)	
Aroclor-1248 (1)		0.0			RSD (20)	
Aroclor-1248 (2)		0.0			RSD (20)	
Aroclor-1248 (3)		0.0			RSD (20)	
Aroclor-1248 (4)		0.0			RSD (20)	
Aroclor 1254		0.0			RSD (20)	
Aroclor-1254 (1)		0.0			RSD (20)	
Aroclor-1254 (2)		0.0			RSD (20)	
Aroclor-1254 (3)		0.0			RSD (20)	
Aroclor-1254 (4)		0.0			RSD (20)	
Aroclor-1254 (5)		0.0			RSD (20)	
Aroclor 1260	0.0605224	10.2			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (1):	ZB5

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor-1260 (1)	0.044887	9.8			RSD (20)	
Aroclor-1260 (2)	4.614117E-02	10.2			RSD (20)	
Aroclor-1260 (3)	0.1214672	11.2			RSD (20)	
Aroclor-1260 (4)	6.275928E-02	9.8			RSD (20)	
Aroclor-1260 (5)	2.735729E-02	13.0			RSD (20)	
Aroclor-1262 (1)		0.0			RSD (20)	
Aroclor-1262 (2)		0.0			RSD (20)	
Aroclor-1262 (3)		0.0			RSD (20)	
Aroclor-1262 (4)		0.0			RSD (20)	
Aroclor-1268 (1)		0.0			RSD (20)	
Aroclor-1268 (2)		0.0			RSD (20)	
Aroclor-1268 (3)		0.0			RSD (20)	
Aroclor-1268 (4)		0.0			RSD (20)	
Decachlorobiphenyl	0.8555994	6.6			RSD (20)	
Tetrachlorometaxylene	1.130787	4.2			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
Aroclor 1016 [2C]	250	5.292579E-02	20	4.676037E-02	50	5.470557E-02	1000	4.853417E-02	100	5.747899E-02	500	5.114174E-02
Aroclor-1016 (1) [2C]	250	4.314113E-02	20	4.423802E-02	50	4.724251E-02	1000	3.795138E-02	100	4.677646E-02	500	4.099489E-02
Aroclor-1016 (2) [2C]	250	9.823746E-02	20	8.511696E-02	50	9.615173E-02	1000	9.129912E-02	100	0.1041709	500	9.554107E-02
Aroclor-1016 (3) [2C]	250	4.028886E-02	20	2.918885E-02	50	0.0416533	1000	3.764267E-02	100	4.478001E-02	500	3.925449E-02
Aroclor-1016 (4) [2C]	250	3.003571E-02	20	2.849763E-02	50	3.377476E-02	1000	2.724351E-02	100	3.418865E-02	500	0.0287764
Aroclor 1260 [2C]	250	0.0868269	20	8.456297E-02	50	8.682148E-02	1000	7.954321E-02	100	8.639013E-02	500	7.778218E-02
Aroclor-1260 (1) [2C]	250	6.129497E-02	20	6.075052E-02	50	5.973709E-02	1000	5.307059E-02	100	5.911734E-02	500	5.231082E-02
Aroclor-1260 (2) [2C]	250	0.1536701	20	0.147481	50	0.1510614	1000	0.1380864	100	0.1518107	500	0.1339581
Aroclor-1260 (3) [2C]	250	3.647192E-02	20	3.683006E-02	50	3.729426E-02	1000	3.693906E-02	100	3.582131E-02	500	3.500995E-02
Aroclor-1260 (4) [2C]	250	0.0958705	20	9.319031E-02	50	9.919317E-02	1000	9.007677E-02	100	9.881117E-02	500	8.984983E-02
Decachlorobiphenyl [2C]	40	1.292085	3.2	1.209146	8	1.271224	160	1.30389	16	1.311901	80	1.229614
Tetrachlorometaxylene [2C]	40	1.096753	3.2	1.043423	8	1.105211	160	1.038509	16	1.153217	80	1.051873

INITIAL CALIBRATION DATA
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1221 [2C]							250	1.346872E-02				
Aroclor-1221 (1) [2C]							250	5.864614E-03				
Aroclor-1221 (2) [2C]							250	1.285084E-02				
Aroclor-1221 (3) [2C]							250	2.169068E-02				
Aroclor 1232 [2C]									250	0.0188178		
Aroclor-1232 (1) [2C]									250	3.556924E-03		
Aroclor-1232 (2) [2C]									250	1.990636E-02		
Aroclor-1232 (3) [2C]									250	4.054321E-02		
Aroclor-1232 (4) [2C]									250	1.126471E-02		
Aroclor 1242 [2C]	250	4.232355E-02										
Aroclor-1242 (1) [2C]	250	3.498756E-02										
Aroclor-1242 (2) [2C]	250	7.771274E-02										
Aroclor-1242 (3) [2C]	250	2.433789E-02										
Aroclor-1242 (4) [2C]	250	3.225599E-02										
Aroclor 1248 [2C]			250	4.536727E-02								
Aroclor-1248 (1) [2C]			250	0.036162								
Aroclor-1248 (2) [2C]			250	3.892353E-02								
Aroclor-1248 (3) [2C]			250	4.756205E-02								
Aroclor-1248 (4) [2C]			250	5.882148E-02								
Aroclor 1254 [2C]					250	7.332193E-02						
Aroclor-1254 (1) [2C]					250	5.803883E-02						
Aroclor-1254 (2) [2C]					250	4.691175E-02						
Aroclor-1254 (3) [2C]					250	0.1023304						
Aroclor-1254 (4) [2C]					250	0.1023323						
Aroclor-1254 (5) [2C]					250	5.699633E-02						
Aroclor-1262 (1) [2C]							250	7.829705E-02				
Aroclor-1262 (2) [2C]							250	6.658267E-02				
Aroclor-1262 (3) [2C]							250	7.090313E-02				

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor-1262 (4) [2C]							250	0.1135497				
Aroclor-1268 (1) [2C]									250	0.1868176		
Aroclor-1268 (2) [2C]									250	0.1988025		
Aroclor-1268 (3) [2C]									250	0.1654822		
Aroclor-1268 (4) [2C]									250	0.5111759		

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor 1016 [2C]	5.192444E-02	7.6			RSD (20)	
Aroclor-1016 (1) [2C]	4.339073E-02	8.1			RSD (20)	
Aroclor-1016 (2) [2C]	9.508621E-02	6.8			RSD (20)	
Aroclor-1016 (3) [2C]	3.880136E-02	13.6			RSD (20)	
Aroclor-1016 (4) [2C]	3.041944E-02	9.5			RSD (20)	
Aroclor 1221 [2C]		0.0			RSD (20)	
Aroclor-1221 (1) [2C]		0.0			RSD (20)	
Aroclor-1221 (2) [2C]		0.0			RSD (20)	
Aroclor-1221 (3) [2C]		0.0			RSD (20)	
Aroclor 1232 [2C]		0.0			RSD (20)	
Aroclor-1232 (1) [2C]		0.0			RSD (20)	
Aroclor-1232 (2) [2C]		0.0			RSD (20)	
Aroclor-1232 (3) [2C]		0.0			RSD (20)	
Aroclor-1232 (4) [2C]		0.0			RSD (20)	
Aroclor 1242 [2C]		0.0			RSD (20)	
Aroclor-1242 (1) [2C]		0.0			RSD (20)	
Aroclor-1242 (2) [2C]		0.0			RSD (20)	
Aroclor-1242 (3) [2C]		0.0			RSD (20)	
Aroclor-1242 (4) [2C]		0.0			RSD (20)	
Aroclor 1248 [2C]		0.0			RSD (20)	
Aroclor-1248 (1) [2C]		0.0			RSD (20)	
Aroclor-1248 (2) [2C]		0.0			RSD (20)	
Aroclor-1248 (3) [2C]		0.0			RSD (20)	
Aroclor-1248 (4) [2C]		0.0			RSD (20)	
Aroclor 1254 [2C]		0.0			RSD (20)	
Aroclor-1254 (1) [2C]		0.0			RSD (20)	
Aroclor-1254 (2) [2C]		0.0			RSD (20)	
Aroclor-1254 (3) [2C]		0.0			RSD (20)	
Aroclor-1254 (4) [2C]		0.0			RSD (20)	
Aroclor-1254 (5) [2C]		0.0			RSD (20)	
Aroclor 1260 [2C]	8.365448E-02	4.8			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GA00061	Instrument:	ECD7
Calibration Date:	01/24/2023	Column (2):	ZB35

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor-1260 (1) [2C]	5.771356E-02	6.9			RSD (20)	
Aroclor-1260 (2) [2C]	0.1460113	5.5			RSD (20)	
Aroclor-1260 (3) [2C]	3.639443E-02	2.3			RSD (20)	
Aroclor-1260 (4) [2C]	9.449863E-02	4.4			RSD (20)	
Aroclor-1262 (1) [2C]		0.0			RSD (20)	
Aroclor-1262 (2) [2C]		0.0			RSD (20)	
Aroclor-1262 (3) [2C]		0.0			RSD (20)	
Aroclor-1262 (4) [2C]		0.0			RSD (20)	
Aroclor-1268 (1) [2C]		0.0			RSD (20)	
Aroclor-1268 (2) [2C]		0.0			RSD (20)	
Aroclor-1268 (3) [2C]		0.0			RSD (20)	
Aroclor-1268 (4) [2C]		0.0			RSD (20)	
Decachlorobiphenyl [2C]	1.269643	3.3			RSD (20)	
Tetrachlorometaxylene [2C]	1.081498	4.2			RSD (20)	

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLA0281

Instrument: ECD7
Calibration ID: GA00061

Printed: 1/26/2023 11:51:52AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLA0281-CAL1	QC		1		L000856	K006953		
SLA0281-CAL2	QC		2		L000859	K006953		
SLA0281-CAL3	QC		3		L000858	K006953		
SLA0281-CAL4	QC		4		L000731	K006953		
SLA0281-CAL5	QC		5		L000857	K006953		
SLA0281-CAL6	QC		6		L000855	K006953		
SLA0281-CAL7	QC		7		L000860	K006953		
SLA0281-CAL8	QC		8		L000861	K006953		
SLA0281-CAL9	QC		9		L000862	K006953		
SLA0281-CALA	QC		10		L000863	K006953		
SLA0281-CALB	QC		11		L000864	K006953		
SLA0281-SCV1	QC		12		K007655	K006953		
SLA0281-SCV2	QC		13		K007656	K006953		
SLA0281-SCV3	QC		14		K007657	K006953		
SLA0281-SCV4	QC		15		K007658	K006953		
SLA0281-SCV5	QC		16		K007659	K006953		
SLA0281-SCV6	QC		17		K007660	K006953		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230124.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	24-JAN-2023 15:39	01242312ECD7.D	1	IB	
2	24-JAN-2023 16:00	01242313ECD7.D	1	0.25PPM AR1660	
3	24-JAN-2023 16:21	01242314ECD7.D	1	0.02PPM AR1660	
4	24-JAN-2023 16:42	01242315ECD7.D	1	0.05PPM AR1660	
5	24-JAN-2023 17:03	01242316ECD7.D	1	1.0PPM AR1660	
6	24-JAN-2023 17:24	01242317ECD7.D	1	0.1PPM AR1660	
7	24-JAN-2023 17:45	01242318ECD7.D	1	0.5PPM AR1660	
8	24-JAN-2023 18:06	01242319ECD7.D	1	0.25PPM 1242	
9	24-JAN-2023 18:27	01242320ECD7.D	1	0.25PPM 1248	
10	24-JAN-2023 18:48	01242321ECD7.D	1	0.25PPM 1254	
11	24-JAN-2023 19:09	01242322ECD7.D	1	0.25PPM 2162	
12	24-JAN-2023 19:30	01242323ECD7.D	1	0.25PPM 3268	
13	24-JAN-2023 19:51	01242324ECD7.D	1	AR1660 SCV	
14	24-JAN-2023 20:12	01242325ECD7.D	1	AR1242 SCV	
15	24-JAN-2023 20:33	01242326ECD7.D	1	AR1248 SCV	
16	24-JAN-2023 20:54	01242327ECD7.D	1	AR1254 SCV	
17	24-JAN-2023 21:15	01242328ECD7.D	1	AR2162 SCV	
18	24-JAN-2023 21:36	01242329ECD7.D	1	AR3268 SCV	
19	24-JAN-2023 21:57	01242330ECD7.D	1	DDTS	
20	24-JAN-2023 22:18	01242331ECD7.D	1	DDT BD	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230124.b

ARI Job No.: IB Method: PCB.m Instrument: ecd7.i Date: 24-JAN-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1539	01242312ECD7.D	IB		1	NO MANUAL INTEGRATION
1600	01242313ECD7.D	0.25PPM	AR1660	1	NO MANUAL INTEGRATION
1621	01242314ECD7.D	0.02PPM	AR1660	1	NO MANUAL INTEGRATION
1642	01242315ECD7.D	0.05PPM	AR1660	1	NO MANUAL INTEGRATION
1703	01242316ECD7.D	1.0PPM	AR1660	1	NO MANUAL INTEGRATION
1724	01242317ECD7.D	0.1PPM	AR1660	1	NO MANUAL INTEGRATION
1745	01242318ECD7.D	0.5PPM	AR1660	1	NO MANUAL INTEGRATION
1806	01242319ECD7.D	0.25PPM	1242	1	NO MANUAL INTEGRATION
1827	01242320ECD7.D	0.25PPM	1248	1	NO MANUAL INTEGRATION
1848	01242321ECD7.D	0.25PPM	1254	1	NO MANUAL INTEGRATION
1909	01242322ECD7.D	0.25PPM	2162	1	NO MANUAL INTEGRATION
1930	01242323ECD7.D	0.25PPM	3268	1	NO MANUAL INTEGRATION
1951	01242324ECD7.D	AR1660	SCV	1	NO MANUAL INTEGRATION
2012	01242325ECD7.D	AR1242	SCV	1	NO MANUAL INTEGRATION
2033	01242326ECD7.D	AR1248	SCV	1	NO MANUAL INTEGRATION
2054	01242327ECD7.D	AR1254	SCV	1	NO MANUAL INTEGRATION
2115	01242328ECD7.D	AR2162	SCV	1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230124.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2136	01242329ECD7.D	AR3268 SCV		1	NO MANUAL INTEGRATION
2157	01242330ECD7.D	DDTS		1	NO MANUAL INTEGRATION
2218	01242331ECD7.D	DDT BD		1	NO MANUAL INTEGRATION

Security Status Report

Date: 26-Jan-2023 11:55

01242301ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242302ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242303ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242304ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242305ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242306ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242307ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242308ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242309ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242310ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242311ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242312ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242313ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242314ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242315ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242316ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242317ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242318ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242319ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242320ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242321ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242322ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242323ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242324ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242325ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242326ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242327ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242328ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242329ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242330ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242331ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
Last Edit : 25-Jan-2023 10:02 JoshuaR
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd7.i\230124.b\01242314ECD7.D
Level 2: \\target\share\chem4\ecd7.i\230124.b\01242315ECD7.D
Level 3: \\target\share\chem4\ecd7.i\230124.b\01242317ECD7.D
Level 4: \\target\share\chem4\ecd7.i\230124.b\01242313ECD7.D
Level 5: \\target\share\chem4\ecd7.i\230124.b\01242318ECD7.D
Level 6: \\target\share\chem4\ecd7.i\230124.b\01242316ECD7.D
Level 7: \\target\share\chem4\ecd7.i\230124.b\01242323ECD7.D
Level 8: \\target\share\chem4\ecd7.i\230124.b\01242330ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
2 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00591	+++++	0.00591	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01209	+++++	0.01209	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02807	+++++	0.02807	0.000
3 Aroclor-1242(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.02450	+++++	0.02450	0.000

(2)	+++++	+++++	+++++	+++++	+++++	+++++			
	0.08017	+++++					0.08017	0.000	
(3)	+++++	+++++	+++++	+++++	+++++	+++++			
	0.02382	+++++					0.02382	0.000	
(4)	+++++	+++++	+++++	+++++	+++++	+++++			
	0.03598	+++++					0.03598	0.000	
4 Aroclor-1232(1)	+++++	+++++	+++++	+++++	+++++	+++++			
	0.00369	+++++					0.00369	0.000	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
Last Edit : 25-Jan-2023 10:02 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.00832	+++++							0.00832	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.04160	+++++							0.04160	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.01781	+++++							0.01781	0.000
7 Aroclor-1016(1)	0.02947	0.03102	0.03310	0.03018	0.02824	0.02635				
	+++++	+++++							0.02973	7.802
(2)	0.09270	0.09812	0.10598	0.10203	0.09861	0.09356				
	+++++	+++++							0.09850	5.108
(3)	0.04878	0.04900	0.05127	0.04400	0.04091	0.03796				
	+++++	+++++							0.04532	11.523
(4)	0.02676	0.02802	0.03162	0.03050	0.02939	0.02864				
	+++++	+++++							0.02915	5.988
6 Aroclor-1248(1)	+++++	+++++	+++++	+++++	+++++	+++++				

	0.04002	+++++				0.04002	0.000	
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.05105	+++++				0.05105	0.000	
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.09765	+++++				0.09765	0.000	
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.04833	+++++				0.04833	0.000	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
Last Edit : 25-Jan-2023 10:02 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	250.000 Level 7	0.000e+00 Level 8						
8 Aroclor-1254(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.08153	+++++					0.08153	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03481	+++++					0.03481	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.05224	+++++					0.05224	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.10237	+++++					0.10237	0.000
(5)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.06657	+++++					0.06657	0.000
9 Aroclor-1260(1)	0.04727	0.04543	0.04428	0.05181	0.04013	0.04040		
	+++++	+++++					0.04489	9.818
(2)	0.04940	0.04636	0.04450	0.05350	0.04100	0.04208		
	+++++	+++++					0.04614	10.182
(3)	0.13737	0.12829	0.11740	0.13317	0.10468	0.10790		

	+++++	+++++					0.12147	11.161	
(4)	0.07198	0.06638	0.05997	0.06473	0.05485	0.05864			
	+++++	+++++					0.06276	9.803	
(5)	0.03296	0.02981	0.02640	0.02723	0.02328	0.02447			
	+++++	+++++					0.02736	13.015	
10 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++			
	0.03235	+++++					0.03235	0.000	

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
Last Edit : 25-Jan-2023 10:02 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.05106	+++++							0.05106	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.05544	+++++							0.05544	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.05052	+++++							0.05052	0.000
11 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.13216	+++++							0.13216	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.13180	+++++							0.13180	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.10919	+++++							0.10919	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.32374	+++++							0.32374	0.000
42 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++				

	+++++	904					904	0.000
43 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	1034					1034	0.000
44 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	2557					2557	0.000
46 4,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	1539					1539	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m
Last Edit : 25-Jan-2023 10:02 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1484	1484	0.000
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 1 Tetrachloro-m-xylene	1.10039	1.10217	1.21997	1.14965	1.11792	1.09461	+++++	+++++	1.13079	4.246
$ 13 Decachlorobiphenyl	0.86442	0.90302	0.93081	0.84813	0.79576	0.79145	+++++	+++++	0.85560	6.556

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Last Edit : 25-Jan-2023 09:58 JoshuaR
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242314ECD7.D
Level 2: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242315ECD7.D
Level 3: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242317ECD7.D
Level 4: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242313ECD7.D
Level 5: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242318ECD7.D
Level 6: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242316ECD7.D
Level 7: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242323ECD7.D
Level 8: \\target\share\chem4\ecd7.i\230124.b\230124.b\01242330ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
1 Aroclor-1221 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00586	+++++	0.00586	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01285	+++++	0.01285	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02169	+++++	0.02169	0.000
4 Aroclor-1232 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00356	+++++	0.00356	0.000

	(2)	+++++	+++++	+++++	+++++	+++++	+++++		
		0.01991	+++++					0.01991	0.000
	(3)	+++++	+++++	+++++	+++++	+++++	+++++		
		0.04054	+++++					0.04054	0.000
	(4)	+++++	+++++	+++++	+++++	+++++	+++++		
		0.01126	+++++					0.01126	0.000
3	Aroclor-1242 [2C]	(1)	+++++	+++++	+++++	+++++	+++++	+++++		
			0.03499	+++++					0.03499	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Last Edit : 25-Jan-2023 09:58 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	250.000 Level 7	0.000e+00 Level 8						
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.07771	+++++					0.07771	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.02434	+++++					0.02434	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03226	+++++					0.03226	0.000
6 Aroclor-1248 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03616	+++++					0.03616	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.03892	+++++					0.03892	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.04756	+++++					0.04756	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.05882	+++++					0.05882	0.000
7 Aroclor-1016 [2C](1)	0.04424	0.04724	0.04678	0.04314	0.04099	0.03795		

	+++++	+++++				0.04339		8.142
(2)	0.08512	0.09615	0.10417	0.09824	0.09554	0.09130		
	+++++	+++++				0.09509		6.775
(3)	0.02919	0.04165	0.04478	0.04029	0.03925	0.03764		
	+++++	+++++				0.03880		13.639
(4)	0.02850	0.03377	0.03419	0.03004	0.02878	0.02724		
	+++++	+++++				0.03042		9.538

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Last Edit : 25-Jan-2023 09:58 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	250.000 Level 7	0.000e+00 Level 8						
8 Aroclor-1254 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.05804	+++++					0.05804	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.04691	+++++					0.04691	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.10233	+++++					0.10233	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.10233	+++++					0.10233	0.000
(5)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.05700	+++++					0.05700	0.000
10 Aroclor-1262 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.07830	+++++					0.07830	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.06658	+++++					0.06658	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++		

	0.07090	+++++					0.07090	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	0.11355	+++++					0.11355	0.000
9 Aroclor-1260 [2C] (1)	0.06075	0.05974	0.05912	0.06129	0.05231	0.05307		
	+++++	+++++					0.05771	6.881
(2)	0.14748	0.15106	0.15181	0.15367	0.13396	0.13809		
	+++++	+++++					0.14601	5.547

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Last Edit : 25-Jan-2023 09:58 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	RRF	% RSD
	250.000 Level 7	0.000e+00 Level 8						
(3)	0.03683	0.03729	0.03582	0.03647	0.03501	0.03694		
	*****	*****					0.03639	2.314
(4)	0.09319	0.09919	0.09881	0.09587	0.08985	0.09008		
	*****	*****					0.09450	4.373
11 Aroclor-1268 [2C] (1)	*****	*****	*****	*****	*****	*****		
	0.18682	*****					0.18682	0.000
(2)	*****	*****	*****	*****	*****	*****		
	0.19880	*****					0.19880	0.000
(3)	*****	*****	*****	*****	*****	*****		
	0.16548	*****					0.16548	0.000
(4)	*****	*****	*****	*****	*****	*****		
	0.51118	*****					0.51118	0.000
41 2,4-DDE [2C]	*****	*****	*****	*****	*****	*****		
	*****	1528					1528	0.000
42 2,4-DDD [2C]	*****	*****	*****	*****	*****	*****		

	+++++	866					866	0.000
44 4,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	863					863	0.000
45 4,4-DDD/2,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	1162					1162	0.000
46 4,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	1277					1277	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2023 16:00
End Cal Date : 24-JAN-2023 21:57
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Last Edit : 25-Jan-2023 09:58 JoshuaR
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 2 Tetrachloro-m-xylene [2C]	1.04342	1.10521	1.15322	1.09675	1.05187	1.03851	+++++	+++++	1.08150	4.159
$ 13 Decachlorobiphenyl [2C]	1.20915	1.27122	1.31190	1.29209	1.22961	1.30389	+++++	+++++	1.26964	3.291

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230124.b
Inst ID: ecd7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	01242313ECD7	01242314ECD7	01242315ECD7	01242316ECD7	01242317ECD7	01242318ECD7
INJ.DATE:	24-JAN-2023	24-JAN-2023	24-JAN-2023	24-JAN-2023	24-JAN-2023	24-JAN-2023
INJ.TIME:	16:00	16:21	16:42	17:03	17:24	17:45

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 41 IS-BNB	3.493	3.492	3.492	3.492	3.492	3.493	3.492	3.392-3.592	3.492	0.000
$ 1 Tetrachloro-m-xylene	5.810	5.809	5.809	5.809	5.808	5.809	5.809	5.709-5.909	5.809	0.001
2 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	4.733	4.633-4.833	+++++	+++++
3 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	7.271	7.171-7.371	+++++	+++++
4 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	4.733	4.633-4.833	+++++	+++++
7 Aroclor-1016	7.272	7.272	7.271	7.270	7.271	7.270	7.270	7.170-7.370	7.271	0.001
6 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	8.406	8.306-8.505	+++++	+++++
8 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	9.299	9.199-9.399	+++++	+++++
9 Aroclor-1260	11.047	11.049	11.048	11.043	11.046	11.044	11.044	10.944-11.144	11.046	0.002
10 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	10.832	10.732-10.932	+++++	+++++
11 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	12.245	12.145-12.345	+++++	+++++
$ 13 Decachlorobiphenyl	13.894	13.892	13.893	13.892	13.892	13.891	13.892	13.792-13.992	13.892	0.001
* 12 IS-HBBP	14.267	14.265	14.265	14.264	14.264	14.264	14.266	14.166-14.366	14.265	0.001
42 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	9.263	9.213-9.313	+++++	+++++
43 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	9.805	9.755-9.855	+++++	+++++
44 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.296	10.246-10.346	+++++	+++++
46 4,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	9.687	9.587-9.787	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230124.b
Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	10.281	10.181-10.381	+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.758	10.658-10.858	+++++	+++++
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.842	1.742-1.942	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	6.708	6.608-6.808	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230124.b\230124.b
Inst ID: ecd7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	01242313ECD7	01242314ECD7	01242315ECD7	01242316ECD7	01242317ECD7	01242318ECD7
INJ.DATE:	24-JAN-2023	24-JAN-2023	24-JAN-2023	24-JAN-2023	24-JAN-2023	24-JAN-2023
INJ.TIME:	16:00	16:21	16:42	17:03	17:24	17:45

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 40 IS-BNB [2C]	3.928	3.929	3.929	3.929	3.928	3.929	3.929	3.829-4.029	3.929	0.001
$ 2 Tetrachloro-m-xylene [	5.685	5.686	5.687	5.685	5.686	5.686	5.687	5.587-5.787	5.686	0.001
1 Aroclor-1221 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	4.959	4.859-5.059	+++++	+++++
4 Aroclor-1232 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	4.960	4.860-5.060	+++++	+++++
3 Aroclor-1242 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	7.256	7.156-7.356	+++++	+++++
6 Aroclor-1248 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	8.305	8.205-8.405	+++++	+++++
7 Aroclor-1016 [2C]	7.255	7.257	7.256	7.254	7.255	7.254	7.255	7.155-7.355	7.255	0.001
8 Aroclor-1254 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	9.448	9.348-9.548	+++++	+++++
10 Aroclor-1262 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	11.200	11.100-11.300	+++++	+++++
9 Aroclor-1260 [2C]	11.653	11.655	11.655	11.653	11.655	11.653	11.653	11.553-11.753	11.654	0.001
11 Aroclor-1268 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	12.434	12.334-12.534	+++++	+++++
$ 13 Decachlorobiphenyl [2C	14.120	14.121	14.120	14.122	14.119	14.120	14.120	14.020-14.220	14.120	0.001
* 12 IS-HBBP [2C]	15.008	15.008	15.009	15.007	15.008	15.009	15.009	14.909-15.109	15.008	0.000
41 2,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++	9.912	9.862-9.962	+++++	+++++
42 2,4-DDD [2C]	+++++	+++++	+++++	+++++	+++++	+++++	9.538	9.488-9.588	+++++	+++++
44 4,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++	10.211	10.111-10.311	+++++	+++++
45 4,4-DDD/2,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	10.666	10.566-10.766	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230124.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230124.b\230124.b
Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
46 4,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	11.095	10.995-11.195	+++++	+++++
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.703	1.603-1.803	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	7.178	7.078-7.278	+++++	+++++

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242312ECD7.D
Data file 2: /230124.b/230124.b/01242312ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: IB
Client ID:
Injection Date: 24-JAN-2023 15:39
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.822	0.013	272340	5.680	-0.007	171573	36.5	36.4	0.1	Tetrachloro-m-xylene
13.900	0.008	252989	14.120	-0.000	223176	37.3	38.6	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	528068	4.9
Hexabromobiphenyl	647433	634177	-2.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	348301	3.4
Hexabromobiphenyl	382032	364259	-4.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	7.852	0.064	162	0.5	3	---			0.0
Aroclor-1016	4	8.431	0.027	495	2.6	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.317	0.019	1908	34.1
Aroclor-1221	3	---			0.0	3	6.630	0.007	299	3.2
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	7.208	-0.049	26	0.3
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	8.730	0.017	33	0.7
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	7.208	-0.048	26	0.2
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	8.431	0.024	495	3.1	3	9.151	-0.008	93	0.9
Aroclor-1242	4	8.630	0.049	1101	4.6	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	8.431	0.025	495	1.9	1	---			0.0
Aroclor-1248	2	8.630	0.050	1101	3.3	2	8.730	0.018	33	0.2
Aroclor-1248	3	---			0.0	3	9.151	-0.005	93	0.4
Aroclor-1248	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	9.474	0.026	9010	35.7
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	9.571	-0.099	114	0.3	3	---			0.0
Aroclor-1254	4	9.770	-0.038	104	0.2	4	---			0.0
Aroclor-1254	5	---			0.0	5	10.525	-0.044	482	1.9
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	11.066	0.023	262	0.7	1	11.703	0.050	189	0.7
Aroclor-1260	2	---			0.0	2	11.832	-0.086	97	0.1
Aroclor-1260	3	11.803	0.069	4470	4.6	3	12.414	-0.022	2209	13.3
Aroclor-1260	4	12.089	-0.051	661	1.3	4	---			0.0
Aroclor-1260	5	12.282	0.038	5183	23.9	NS	---			----
	Total Col1Ave (4 peaks):				7.7	Total Col2Ave (3 peaks):				4.7 RPD = 47*
	Corrected Ave (3 peaks):				2.2	Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.789	-0.043	941	3.7	1	---			0.0
Aroclor-1262	2	12.282	0.036	5183	12.8	2	11.703	0.051	189	0.6
Aroclor-1262	3	---			0.0	3	12.414	-0.020	2209	6.8
Aroclor-1262	4	12.982	-0.007	2811	7.0	4	---			0.0
	Total Col1Ave (3 peaks):				7.8	Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	12.282	0.037	5183	4.9	1	12.414	-0.020	2209	2.6
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.705	0.006	3092	3.6	3	12.894	0.001	724	1.0
Aroclor-1268	4	13.500	0.011	13310	5.2	4	13.708	-0.000	2974	1.3
	Total Col1Ave (3 peaks):				4.6	Total Col2Ave (3 peaks):				1.6 RPD = 96*
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 89790 Col1 Total PCB = 0.0 ppm*

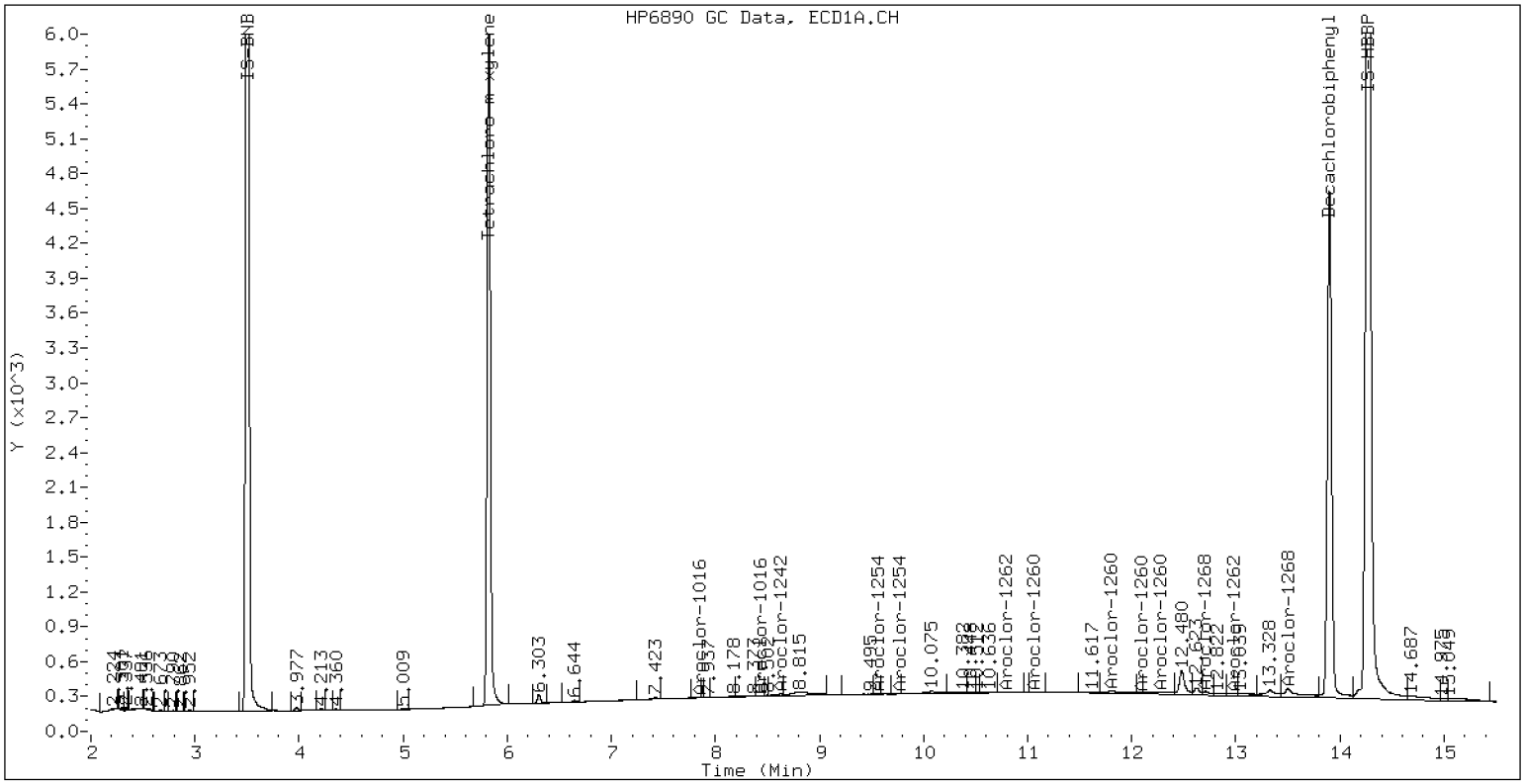
Total PCB Area Col2 (5.787 - 14.020) = 40020 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

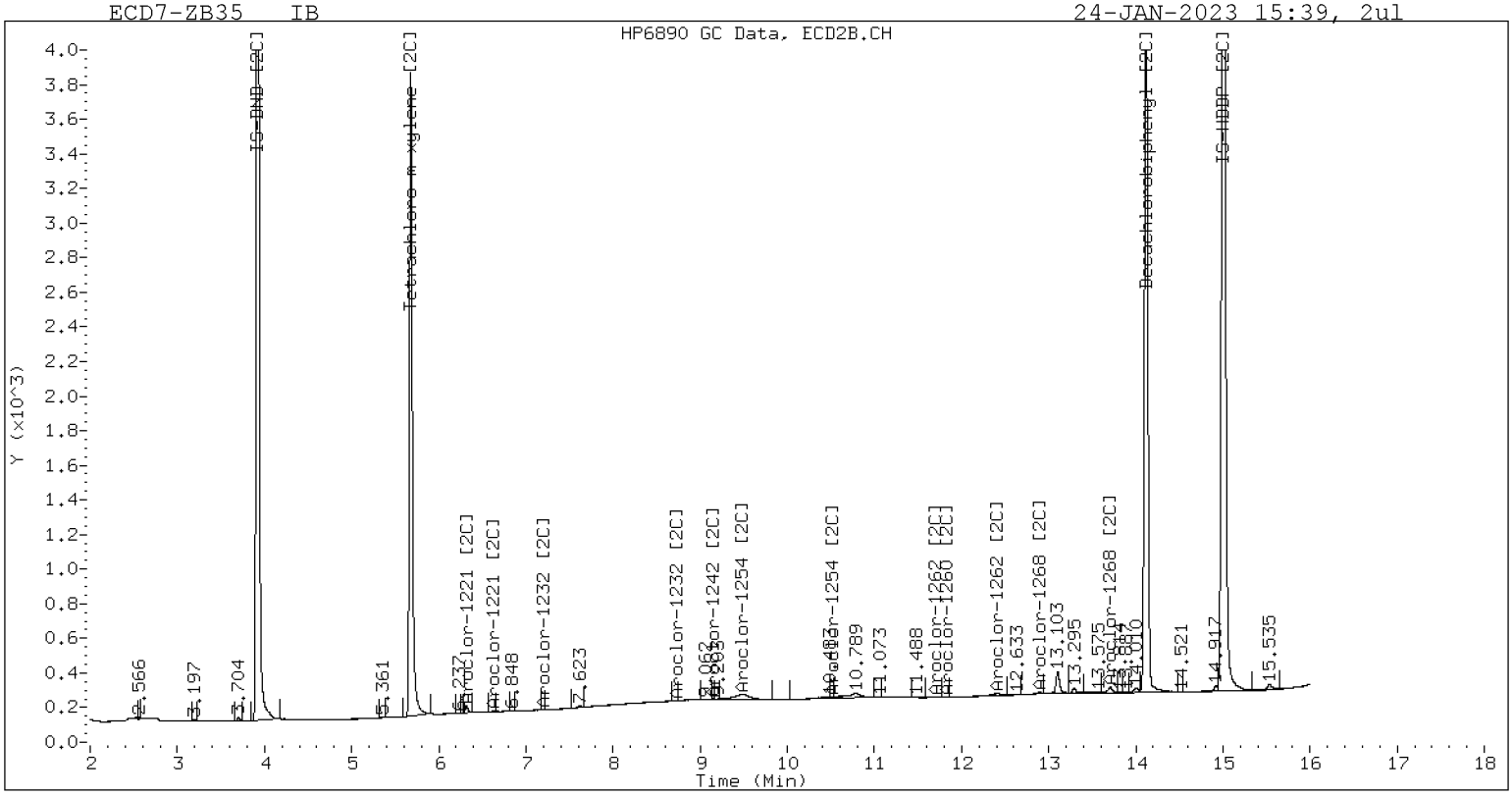
PCB Dual Column Chromatograms

ECD7-ZB5 IB 24-JAN-2023 15:39, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 IB 24-JAN-2023 15:39, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242313ECD7.D
Data file 2: /230124.b/230124.b/01242313ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 16:00
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.810	0.001	289321	5.685	-0.002	184754	40.7	40.6	0.3	Tetrachloro-m-xylene
13.894	0.002	274555	14.120	0.000	246809	39.7	40.7	2.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503318	0.0
Hexabromobiphenyl	647433	647433	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	336911	0.0
Hexabromobiphenyl	382032	382032	0.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	47467	253.8	1	7.255	0.000	45421	248.6
Aroclor-1016	2	7.654	0.004	160487	259.0	2	7.851	0.000	103429	258.3
Aroclor-1016	3	7.791	0.003	69204	242.7	3	8.050	0.000	42418	259.6
Aroclor-1016	4	8.406	0.003	47967	261.5	4	8.305	0.000	31623	246.8
	Total Col1Ave (4 peaks):				254.2	Total Col2Ave (4 peaks):				253.3 RPD = 0
	Corrected Ave (3 peaks):				251.8	Corrected Ave (3 peaks):				251.2 RPD = 0
		CalAmt %D:			1.7		CalAmt %D:			1.3
Aroclor-1260	1	11.047	0.003	104831	288.6	1	11.653	0.000	73177	265.5
Aroclor-1260	2	11.362	0.002	108243	289.9	2	11.918	0.000	183459	263.1
Aroclor-1260	3	11.738	0.004	269428	274.1	3	12.436	0.000	43542	250.5
Aroclor-1260	4	12.142	0.002	130966	257.9	4	12.502	0.000	114455	253.6
Aroclor-1260	5	12.246	0.002	55096	248.9	NS	---			----
	Total Col1Ave (5 peaks):				271.8	Total Col2Ave (4 peaks):				258.2 RPD = 5
	Corrected Ave (4 peaks):				267.3	Corrected Ave (3 peaks):				255.8 RPD = 4
		CalAmt %D:			8.7		CalAmt %D:			3.3

Total PCB Area Col1 (5.909 - 13.792) = 2930230 Col1 Total PCB = 0.5 ppm*

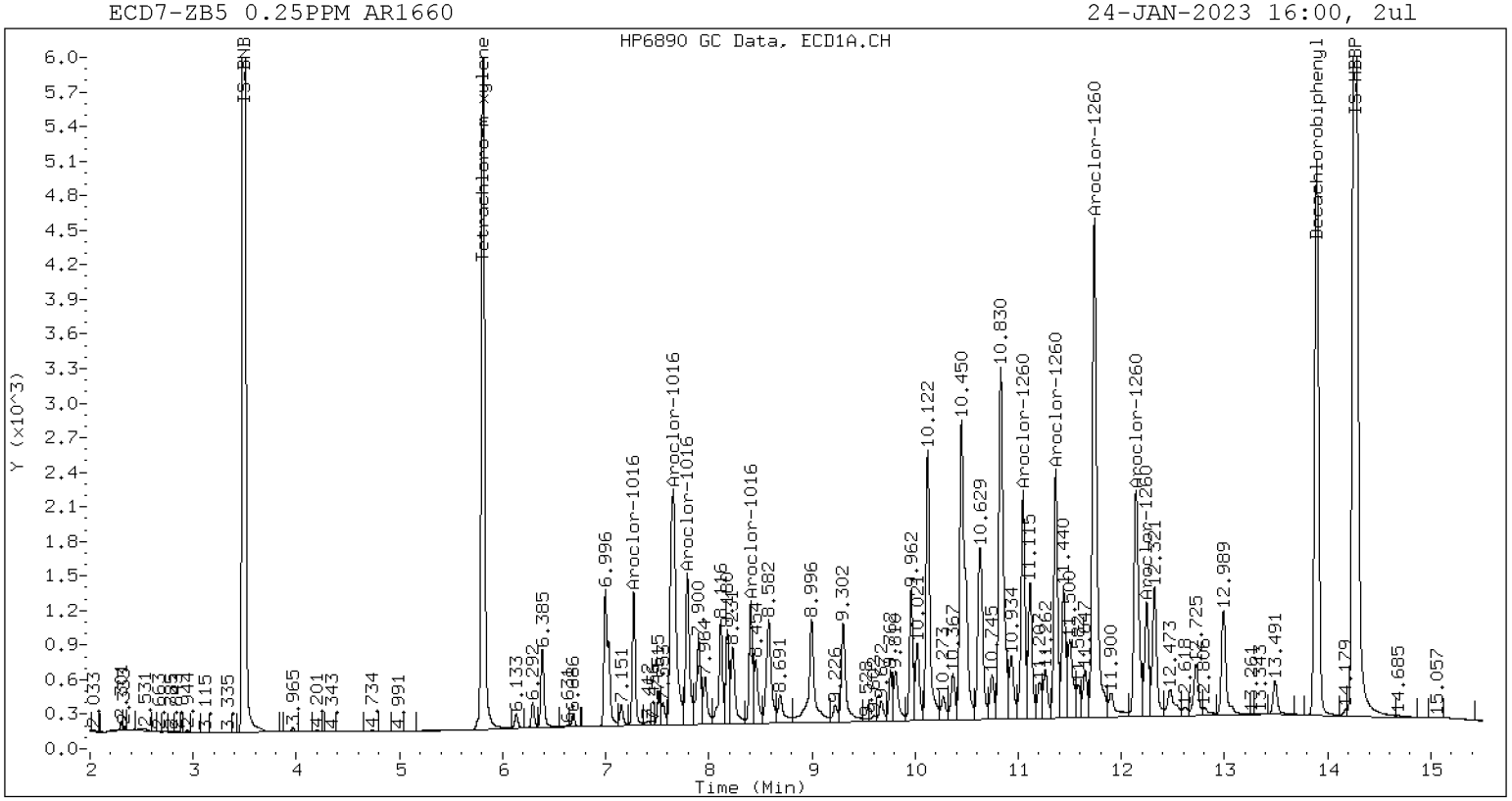
Total PCB Area Col2 (5.787 - 14.020) = 1777050 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

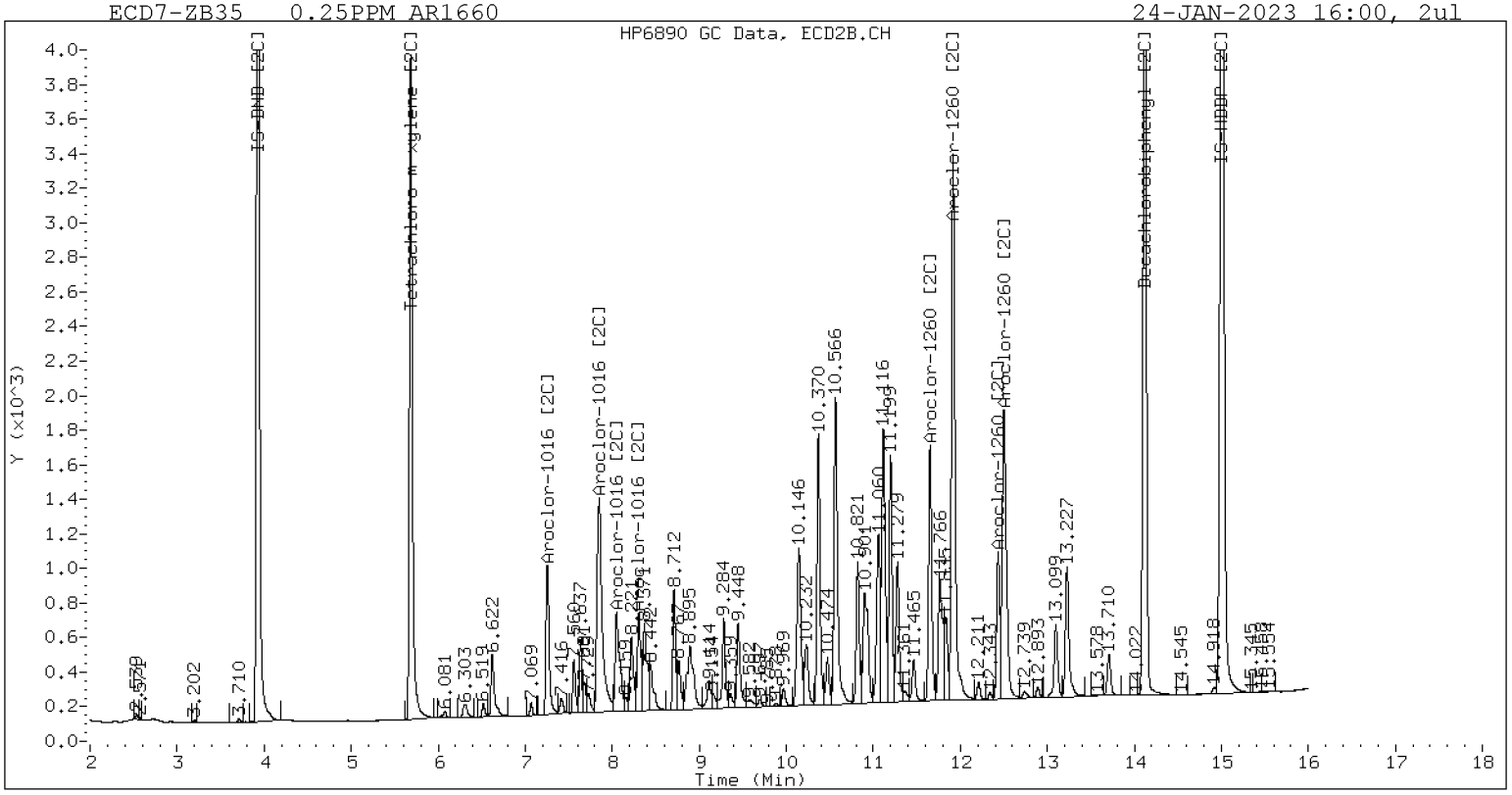
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM AR1660 24-JAN-2023 16:00, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM AR1660 24-JAN-2023 16:00, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242314ECD7.D
Data file 2: /230124.b/230124.b/01242314ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.02PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 16:21
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.000	21307	5.686	-0.000	13767	3.1	3.1	0.9	Tetrachloro-m-xylene
13.892	0.000	23054	14.121	0.001	19257	3.2	3.0	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	484077	-3.8
Hexabromobiphenyl	647433	666748	3.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	329852	-2.1
Hexabromobiphenyl	382032	398153	4.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	3567	19.8	1	7.257	0.002	3648	20.4
Aroclor-1016	2	7.663	0.012	11219	18.8	2	7.858	0.007	7019	17.9
Aroclor-1016	3	7.796	0.008	5903	21.5	3	8.058	0.007	2407	15.0
Aroclor-1016	4	8.410	0.006	3238	18.4	4	8.308	0.003	2350	18.7
Total Col1Ave (4 peaks):					19.6	Total Col2Ave (4 peaks):				18.0 RPD = 9
Corrected Ave (3 peaks):					19.0	Corrected Ave (3 peaks):				17.2 RPD = 10
CalAmt %D:					-1.8	CalAmt %D:				-9.9
Aroclor-1260	1	11.049	0.005	7880	21.1	1	11.655	0.002	6047	21.1
Aroclor-1260	2	11.365	0.005	8234	21.4	2	11.923	0.005	14680	20.2
Aroclor-1260	3	11.742	0.008	22898	22.6	3	12.438	0.002	3666	20.2
Aroclor-1260	4	12.149	0.009	11998	22.9	4	12.506	0.004	9276	19.7
Aroclor-1260	5	12.247	0.003	5494	24.1	NS	---			----
Total Col1Ave (5 peaks):					22.4	Total Col2Ave (4 peaks):				20.3 RPD = 10
Corrected Ave (4 peaks):					22.0	Corrected Ave (3 peaks):				20.1 RPD = 9
CalAmt %D:					12.1	CalAmt %D:				1.5

Total PCB Area Col1 (5.909 - 13.792) = 256211 Col1 Total PCB = 0.0 ppm*

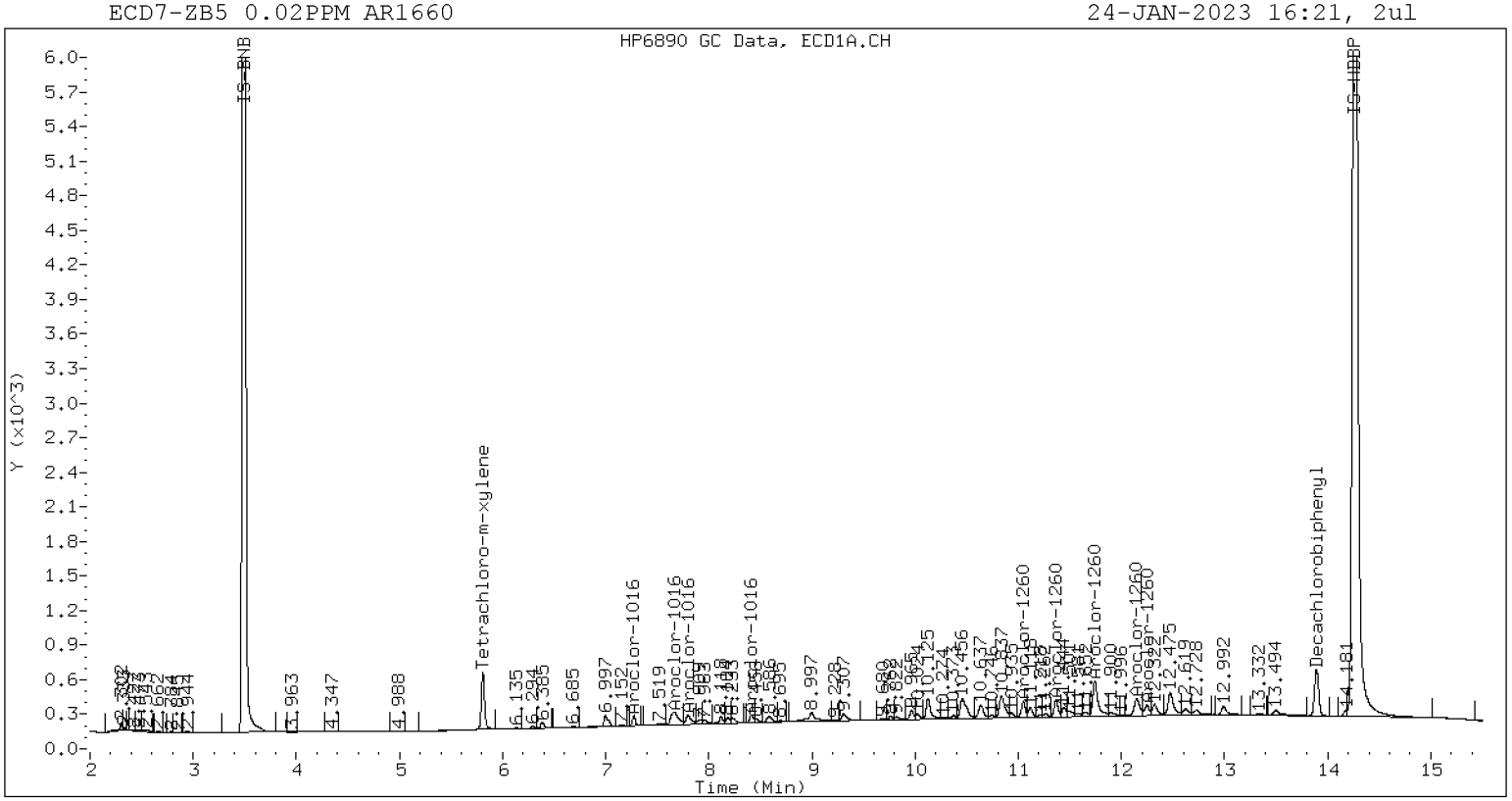
Total PCB Area Col2 (5.787 - 14.020) = 146434 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

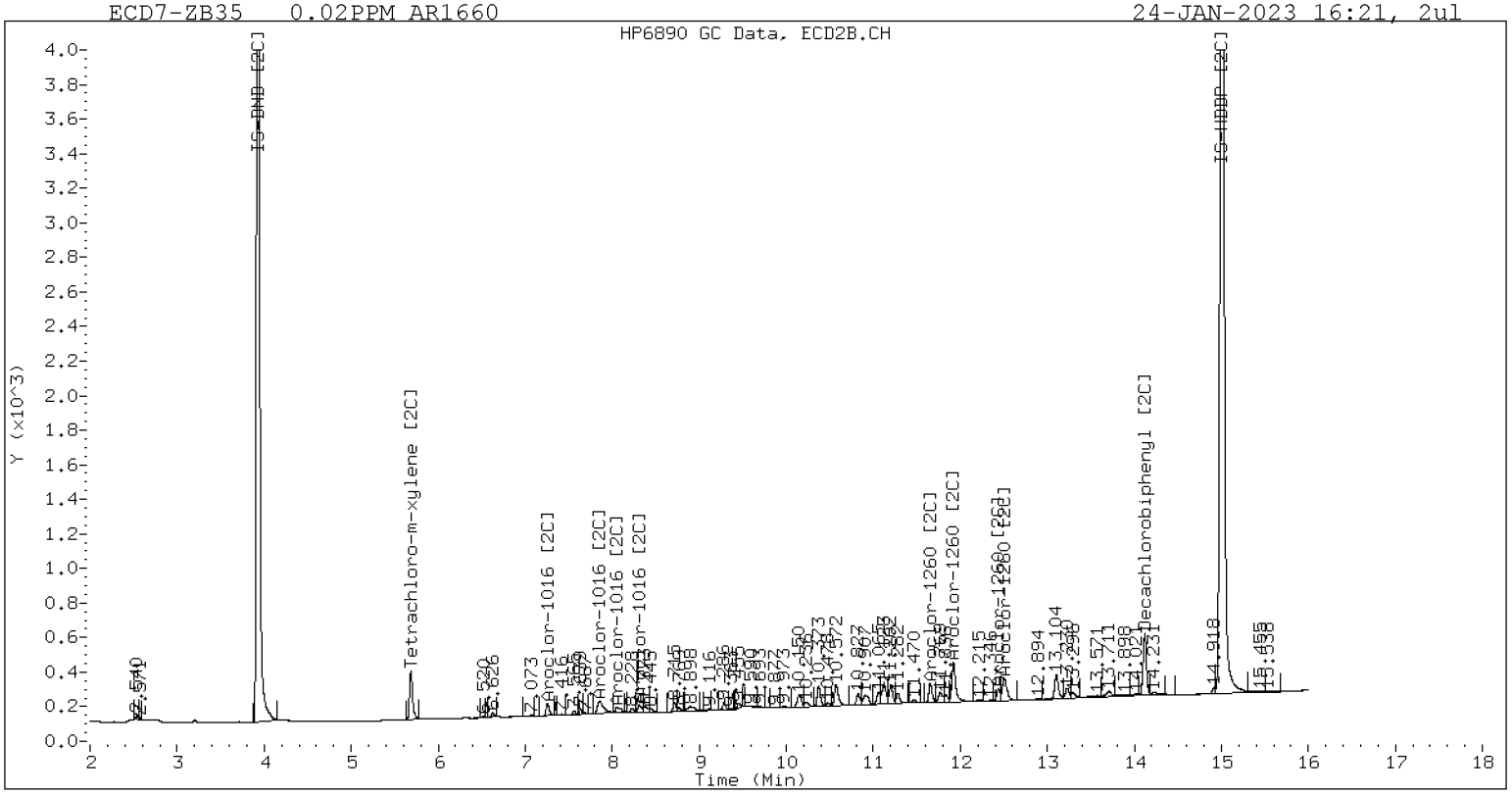
PCB Dual Column Chromatograms

ECD7-ZB5 0.02PPM AR1660 24-JAN-2023 16:21, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.02PPM AR1660 24-JAN-2023 16:21, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242315ECD7.D
Data file 2: /230124.b/230124.b/01242315ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.05PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 16:42
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	53503	5.687	-0.000	36922	7.8	8.2	4.7	Tetrachloro-m-xylene
13.893	0.001	62544	14.120	-0.000	52782	8.4	8.0	5.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	485432	-3.6
Hexabromobiphenyl	647433	692613	7.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	334072	-0.8
Hexabromobiphenyl	382032	415206	8.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.002	9412	52.2	1	7.256	0.001	9864	54.4
Aroclor-1016	2	7.657	0.007	29769	49.8	2	7.855	0.004	20076	50.6
Aroclor-1016	3	7.795	0.006	14866	54.1	3	8.055	0.004	8697	53.7
Aroclor-1016	4	8.409	0.005	8500	48.1	4	8.308	0.003	7052	55.5
Total Col1Ave (4 peaks):					51.0	Total Col2Ave (4 peaks):				53.5 RPD = 5
Corrected Ave (3 peaks):					50.0	Corrected Ave (3 peaks):				52.9 RPD = 6
CalAmt %D:					2.0	CalAmt %D:				7.1
Aroclor-1260	1	11.048	0.005	19665	50.6	1	11.655	0.002	15502	51.8
Aroclor-1260	2	11.364	0.003	20070	50.2	2	11.921	0.003	39201	51.7
Aroclor-1260	3	11.740	0.006	55534	52.8	3	12.439	0.003	9678	51.2
Aroclor-1260	4	12.145	0.006	28735	52.9	4	12.506	0.004	25741	52.5
Aroclor-1260	5	12.246	0.002	12906	54.5	NS	---			----
Total Col1Ave (5 peaks):					52.2	Total Col2Ave (4 peaks):				51.8 RPD = 1
Corrected Ave (4 peaks):					51.6	Corrected Ave (3 peaks):				51.6 RPD = 0
CalAmt %D:					4.4	CalAmt %D:				3.6

Total PCB Area Col1 (5.909 - 13.792) = 600311 Col1 Total PCB = 0.1 ppm*

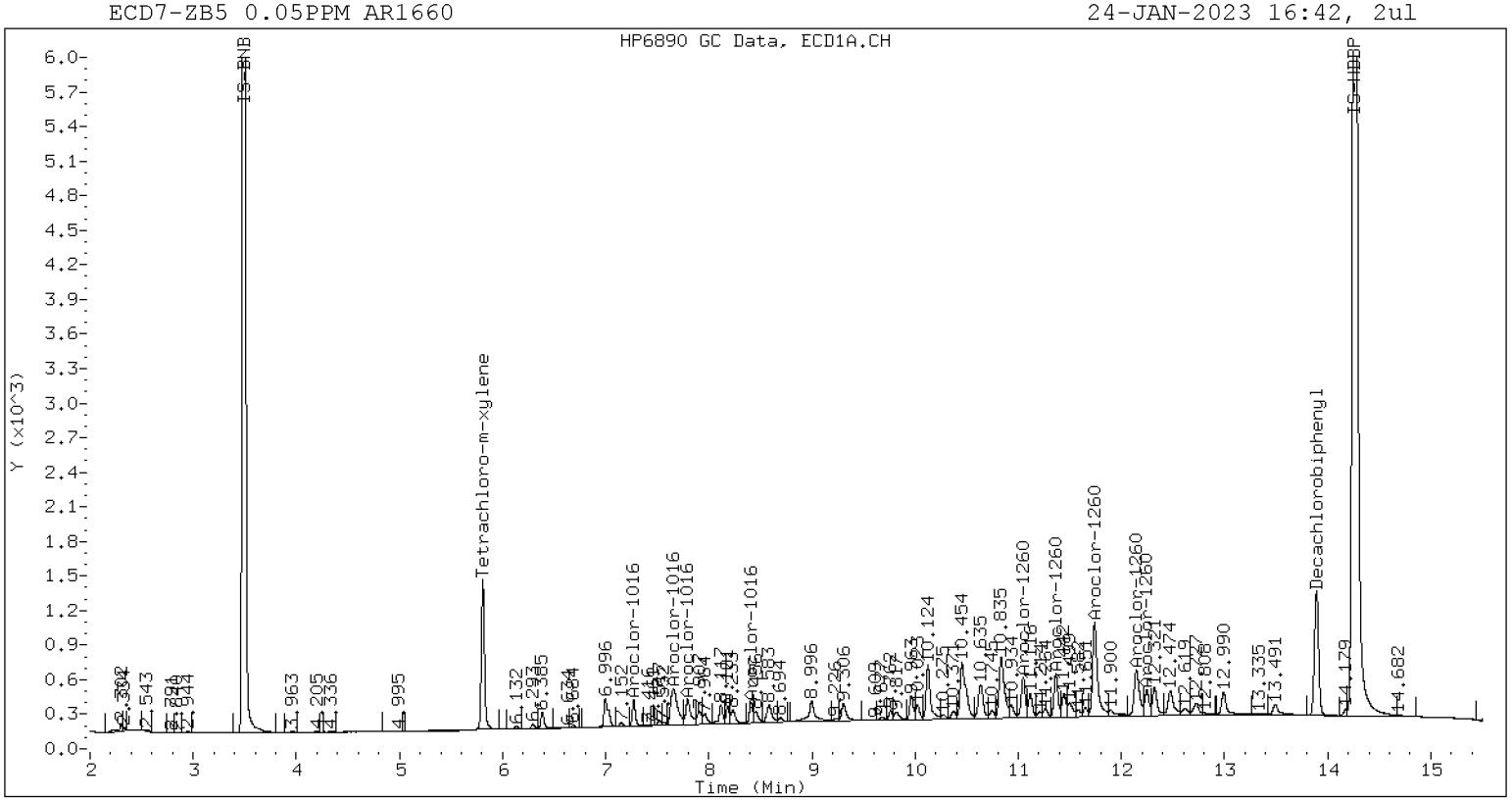
Total PCB Area Col2 (5.787 - 14.020) = 383666 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

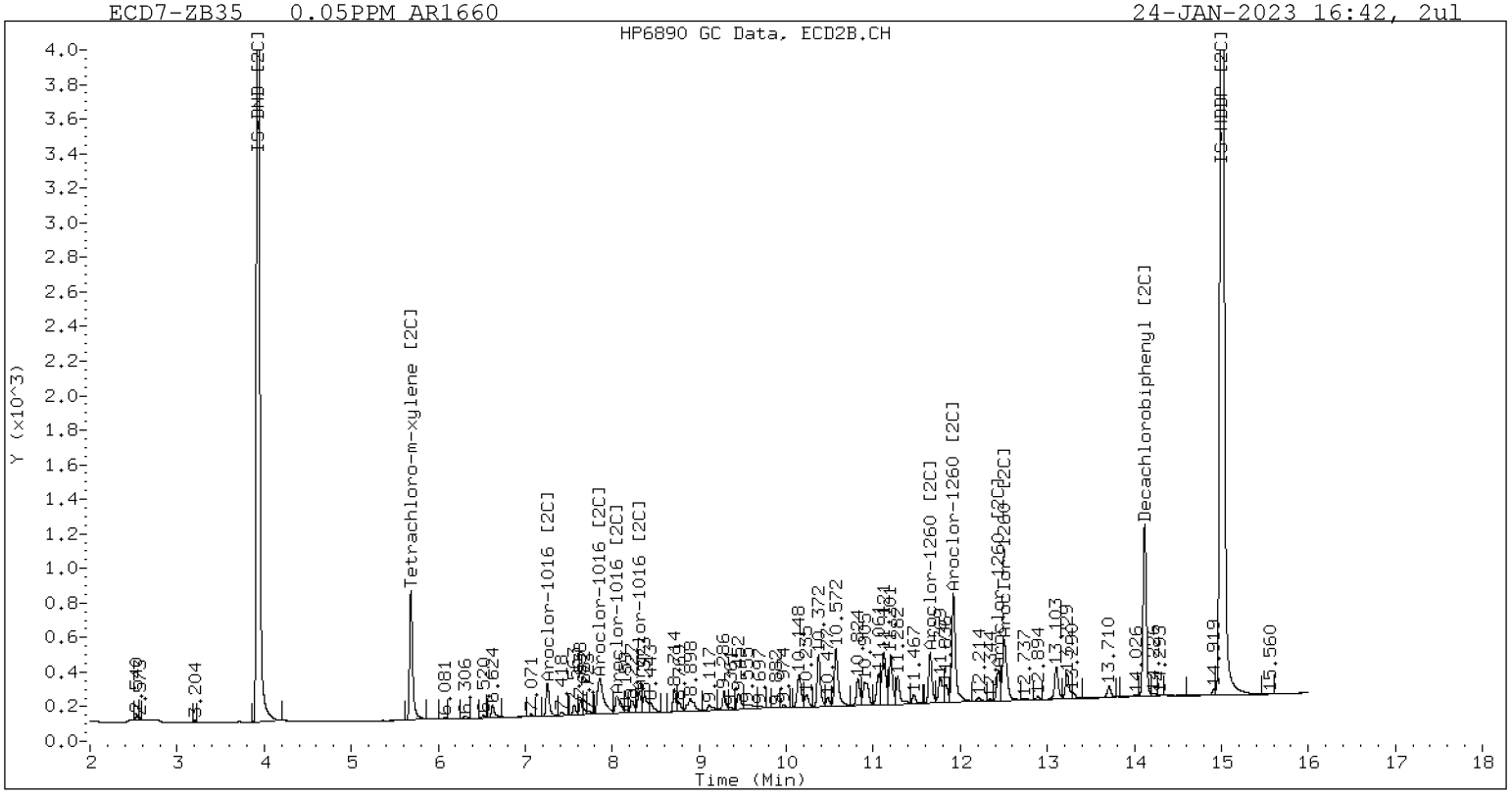
PCB Dual Column Chromatograms

ECD7-ZB5 0.05PPM AR1660 24-JAN-2023 16:42, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.05PPM AR1660 24-JAN-2023 16:42, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242316ECD7.D
Data file 2: /230124.b/230124.b/01242316ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 1.0PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 17:03
Report Date: 01/25/2023 11:34
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.000	1033475	5.685	-0.002	672800	154.9	153.6	0.8	Tetrachloro-m-xylene
13.892	0.000	1125556	14.122	0.002	1078539	148.0	164.3	10.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	472076	-6.2
Hexabromobiphenyl	647433	711071	9.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	323926	-3.9
Hexabromobiphenyl	382032	413585	8.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	-0.000	155505	886.5	1	7.254	-0.001	153668	874.6
Aroclor-1016	2	7.649	-0.001	552101	949.8	2	7.849	-0.002	369677	960.2
Aroclor-1016	3	7.786	-0.002	223973	837.5	3	8.048	-0.003	152418	970.1
Aroclor-1016	4	8.402	-0.001	169003	982.4	4	8.304	-0.001	110311	895.6
Total Col1Ave (4 peaks):					914.1	Total Col2Ave (4 peaks):				925.1 RPD = 1
Corrected Ave (3 peaks):					891.3	Corrected Ave (3 peaks):				910.1 RPD = 2
CalAmt %D:					-8.6	CalAmt %D:				-7.5
Aroclor-1260	1	11.043	-0.001	359074	900.0	1	11.653	-0.001	274365	919.6
Aroclor-1260	2	11.360	-0.000	374067	912.1	2	11.917	-0.000	713881	945.7
Aroclor-1260	3	11.733	-0.001	959026	888.3	3	12.436	-0.000	190968	1015.0
Aroclor-1260	4	12.137	-0.002	521189	934.3	4	12.502	-0.000	465680	953.2
Aroclor-1260	5	12.242	-0.002	217473	894.4	NS	---			----
Total Col1Ave (5 peaks):					905.8	Total Col2Ave (4 peaks):				958.4 RPD = 6
Corrected Ave (4 peaks):					898.7	Corrected Ave (3 peaks):				939.5 RPD = 4
CalAmt %D:					-9.4	CalAmt %D:				-4.2

Total PCB Area Col1 (5.909 - 13.792) = 10234908 Col1 Total PCB = 1.9 ppm*

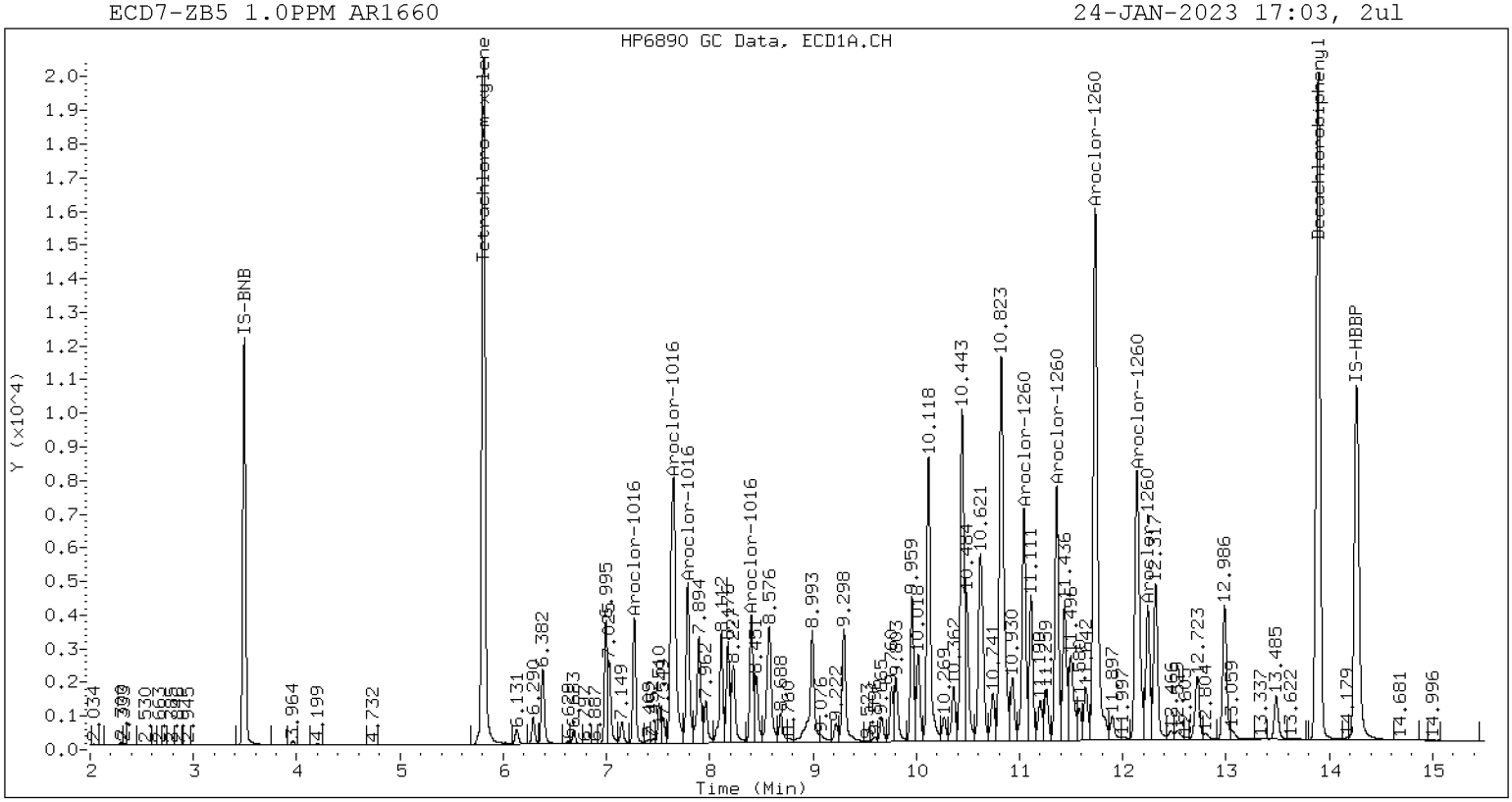
Total PCB Area Col2 (5.787 - 14.020) = 6685547 Col2 Total PCB = 2.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

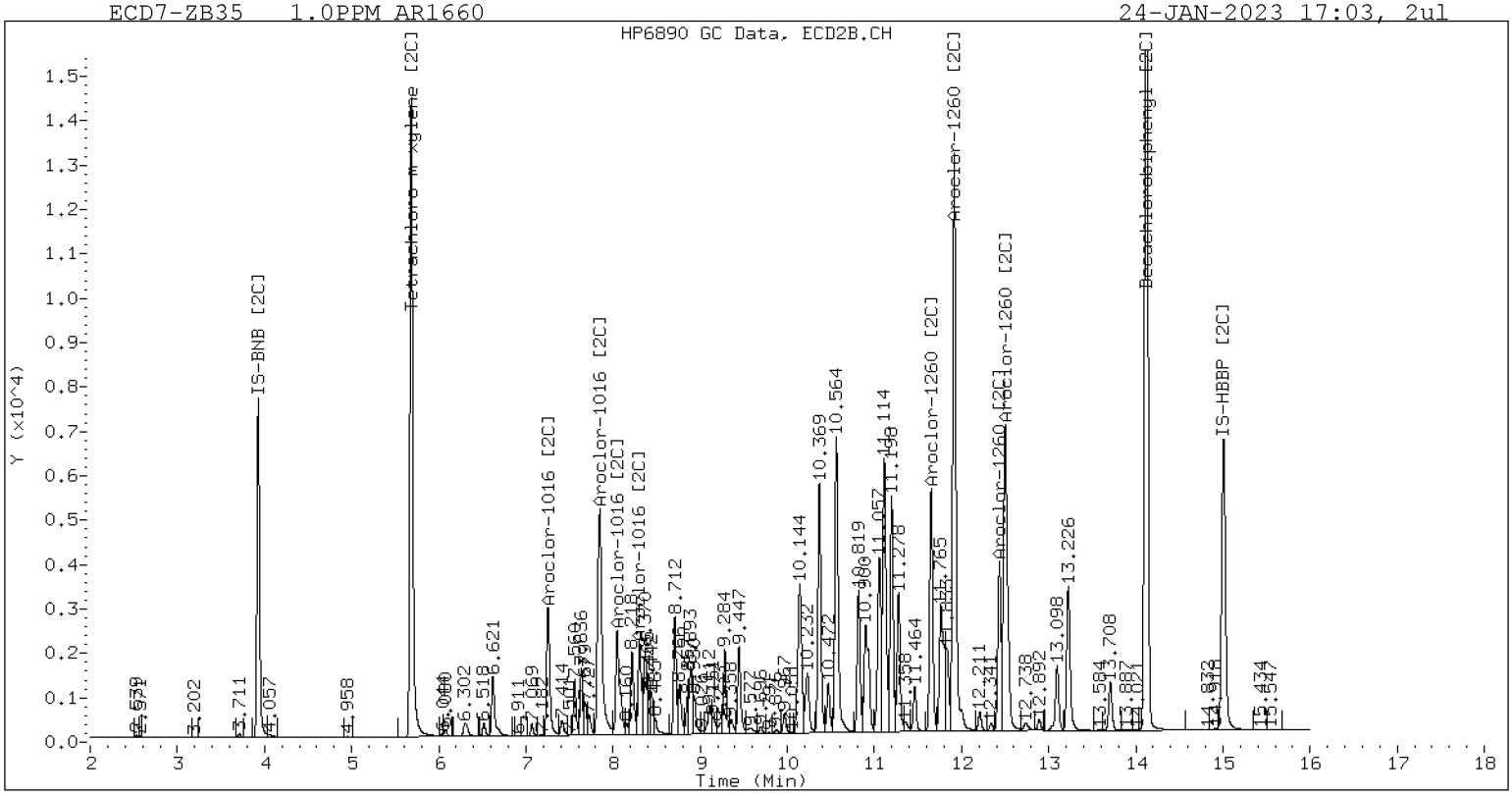
PCB Dual Column Chromatograms

ECD7-ZB5 1.0PPM AR1660 24-JAN-2023 17:03, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 1.0PPM AR1660 24-JAN-2023 17:03, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242317ECD7.D
Data file 2: /230124.b/230124.b/01242317ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.1PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 17:24
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.001	117058	5.686	-0.001	76340	17.3	17.1	1.2	Tetrachloro-m-xylene
13.892	0.000	140818	14.119	-0.001	113773	17.4	16.5	5.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	479756	-4.7
Hexabromobiphenyl	647433	756424	16.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	330987	-1.8
Hexabromobiphenyl	382032	433619	13.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	19848	111.3	1	7.255	0.000	19353	107.8
Aroclor-1016	2	7.656	0.005	63555	107.6	2	7.853	0.002	43099	109.6
Aroclor-1016	3	7.793	0.004	30749	113.1	3	8.053	0.003	18527	115.4
Aroclor-1016	4	8.406	0.003	18961	108.5	4	8.307	0.002	14145	112.4
Total Col1Ave (4 peaks):					110.1	Total Col2Ave (4 peaks):				111.3 RPD = 1
Corrected Ave (3 peaks):					109.1	Corrected Ave (3 peaks):				109.9 RPD = 1
CalAmt %D:					10.1	CalAmt %D:				11.3
Aroclor-1260	1	11.046	0.002	41864	98.6	1	11.655	0.001	32043	102.4
Aroclor-1260	2	11.362	0.001	42073	96.4	2	11.920	0.002	82285	104.0
Aroclor-1260	3	11.739	0.004	111005	96.7	3	12.437	0.001	19416	98.4
Aroclor-1260	4	12.144	0.004	56707	95.6	4	12.504	0.002	53558	104.6
Aroclor-1260	5	12.245	0.001	24958	96.5	NS	---			----
Total Col1Ave (5 peaks):					96.8	Total Col2Ave (4 peaks):				102.3 RPD = 6
Corrected Ave (4 peaks):					96.3	Corrected Ave (3 peaks):				101.6 RPD = 5
CalAmt %D:					-3.2	CalAmt %D:				2.3

Total PCB Area Col1 (5.909 - 13.792) = 1238855 Col1 Total PCB = 0.2 ppm*

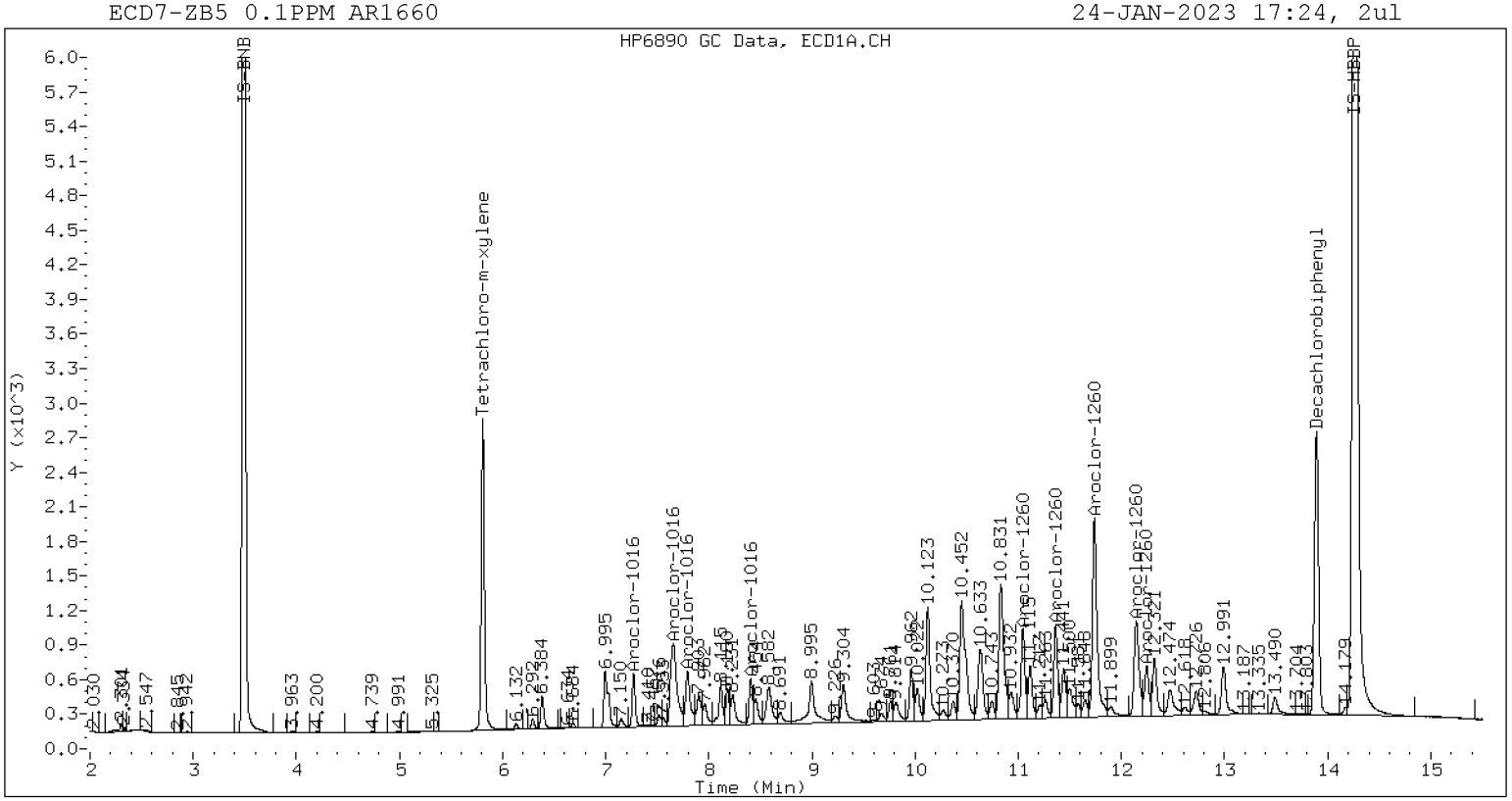
Total PCB Area Col2 (5.787 - 14.020) = 777713 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

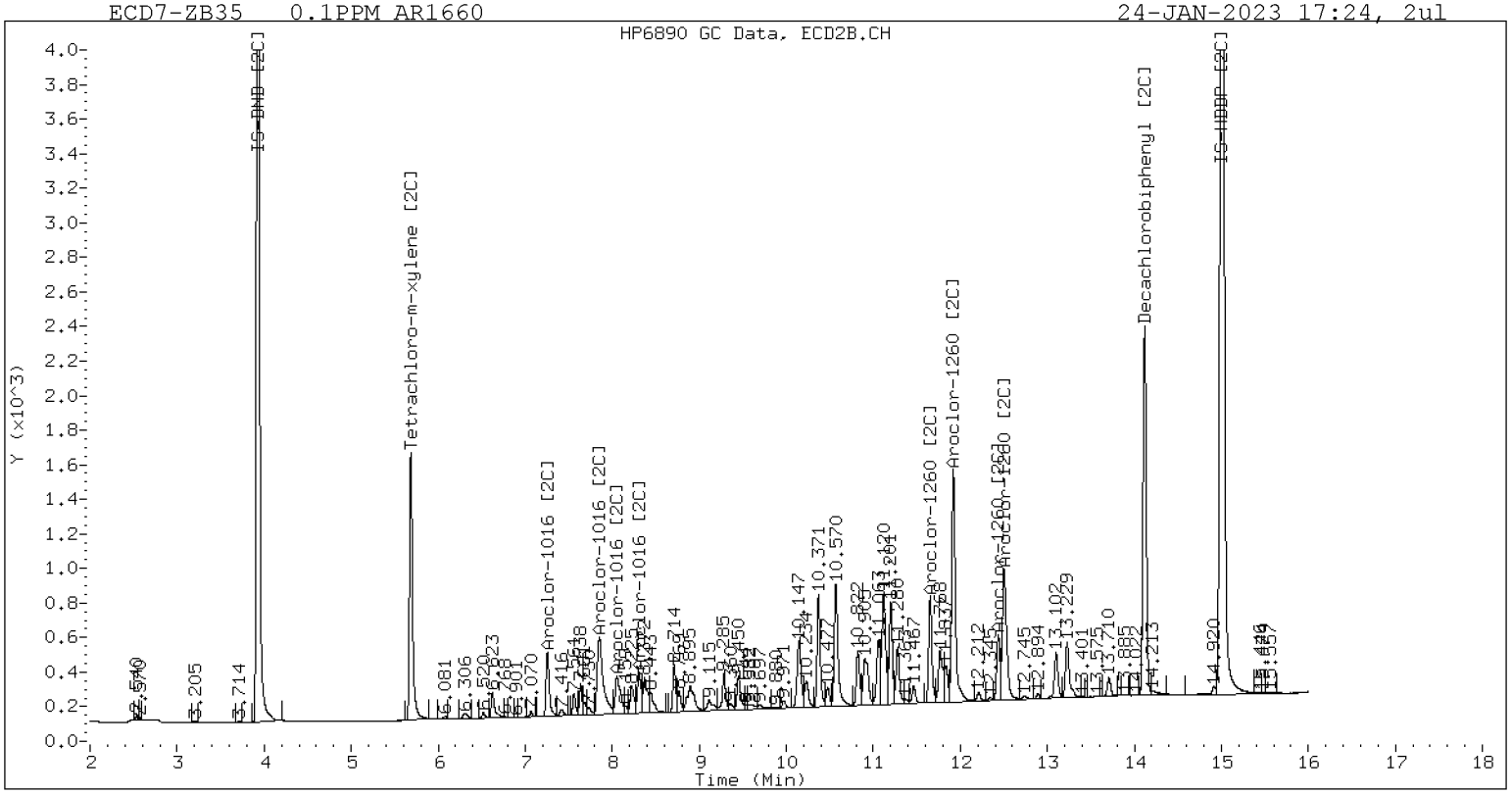
PCB Dual Column Chromatograms

ECD7-ZB5 0.1PPM AR1660 24-JAN-2023 17:24, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.1PPM AR1660 24-JAN-2023 17:24, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242318ECD7.D
Data file 2: /230124.b/230124.b/01242318ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.5PPM AR1660
Client ID:
Injection Date: 24-JAN-2023 17:45
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.000	534053	5.686	-0.000	348900	79.1	77.8	1.6	Tetrachloro-m-xylene
13.891	-0.001	614978	14.120	0.000	552784	74.4	77.5	4.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	477720	-5.1
Hexabromobiphenyl	647433	772816	19.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331694	-1.5
Hexabromobiphenyl	382032	449559	17.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.270	0.000	84322	475.0	1	7.254	-0.000	84986	472.4
Aroclor-1016	2	7.650	0.000	294429	500.6	2	7.850	-0.001	198065	502.4
Aroclor-1016	3	7.789	0.000	122151	451.4	3	8.050	-0.000	81378	505.8
Aroclor-1016	4	8.404	0.000	87760	504.1	4	8.305	-0.000	59656	473.0
Total Col1Ave (4 peaks):				482.8		Total Col2Ave (4 peaks):			488.4	RPD = 1
Corrected Ave (3 peaks):				475.6		Corrected Ave (3 peaks):			482.6	RPD = 1
CalAmt %D:				-3.4		CalAmt %D:			-2.3	
Aroclor-1260	1	11.044	0.000	193843	447.0	1	11.653	-0.000	146980	453.2
Aroclor-1260	2	11.361	0.000	198052	444.3	2	11.917	-0.001	376388	458.7
Aroclor-1260	3	11.734	0.000	505614	430.9	3	12.436	-0.000	98369	481.0
Aroclor-1260	4	12.139	0.000	264950	437.0	4	12.501	-0.001	252455	475.4
Aroclor-1260	5	12.244	0.000	112421	425.4	NS	---			----
Total Col1Ave (5 peaks):				436.9		Total Col2Ave (4 peaks):			467.1	RPD = 7
Corrected Ave (4 peaks):				434.4		Corrected Ave (3 peaks):			462.4	RPD = 6
CalAmt %D:				-12.6		CalAmt %D:			-6.6	

Total PCB Area Col1 (5.909 - 13.792) = 5412241 Col1 Total PCB = 1.0 ppm*

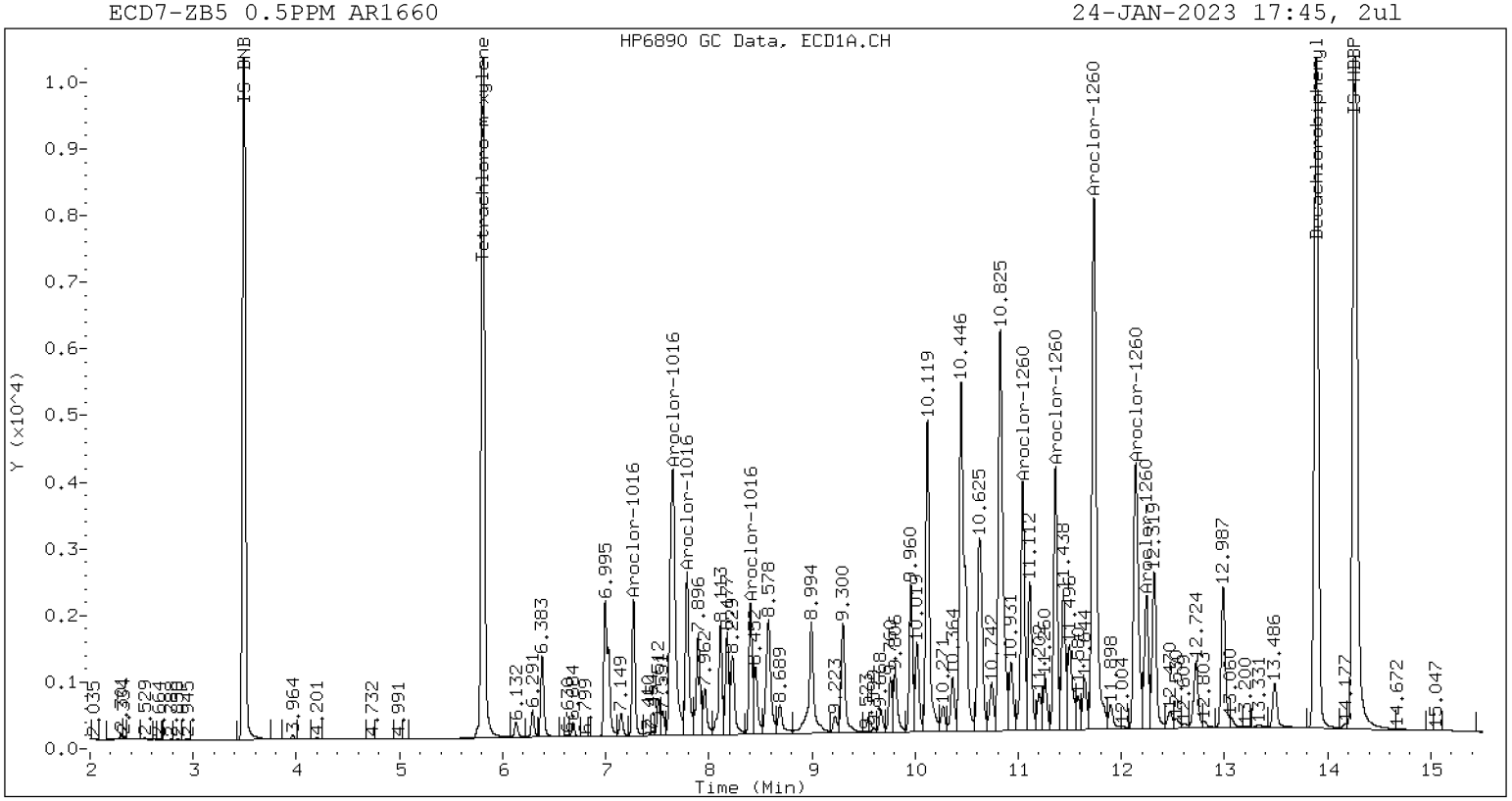
Total PCB Area Col2 (5.787 - 14.020) = 3551064 Col2 Total PCB = 1.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

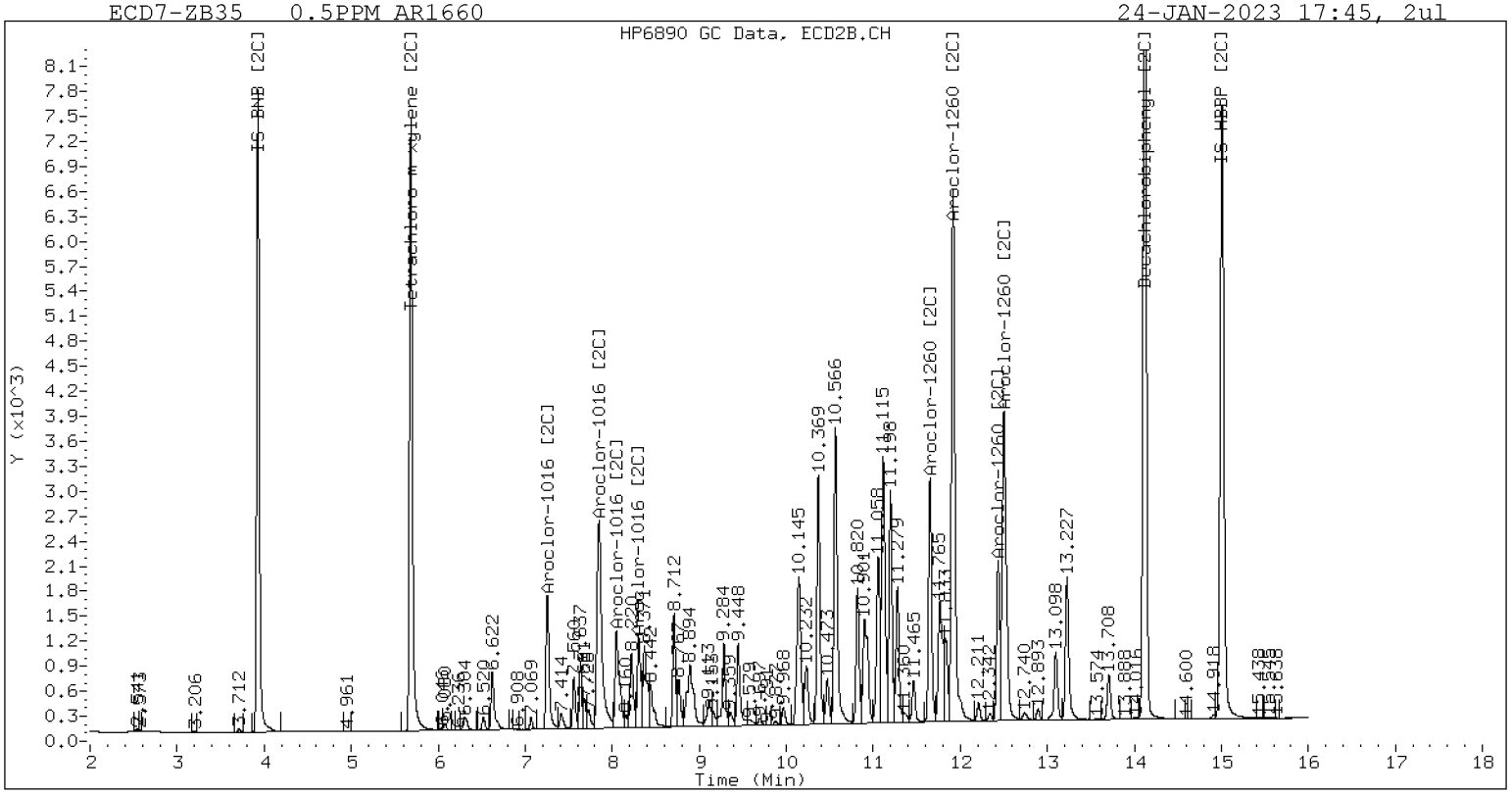
PCB Dual Column Chromatograms

ECD7-ZB5 0.5PPM AR1660 24-JAN-2023 17:45, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.5PPM AR1660 24-JAN-2023 17:45, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242319ECD7.D
Data file 2: /230124.b/230124.b/01242319ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM 1242
Client ID:
Injection Date: 24-JAN-2023 18:06
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	317773	5.686	-0.000	205627	47.7	46.6	2.2	Tetrachloro-m-xylene
13.892	-0.000	322814	14.121	0.001	269935	36.0	36.5	1.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	471690	-6.3
Hexabromobiphenyl	647433	839322	29.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	326260	-3.2
Hexabromobiphenyl	382032	466396	22.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	7.271	0.000	36109	250.0	1	7.256	0.000	35672	250.0
Aroclor-1242	2	7.655	0.000	118172	250.0	2	7.853	0.000	79233	250.0
Aroclor-1242	3	8.407	0.000	35110	250.0	3	9.160	0.000	24814	250.0
Aroclor-1242	4	8.581	0.000	53037	250.0	4	9.587	0.000	32887	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):			250.0	RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):			250.0	RPD = 0

Total PCB Area Col1 (5.909 - 13.792) = 930958 Col1 Total PCB = 0.2 ppm*

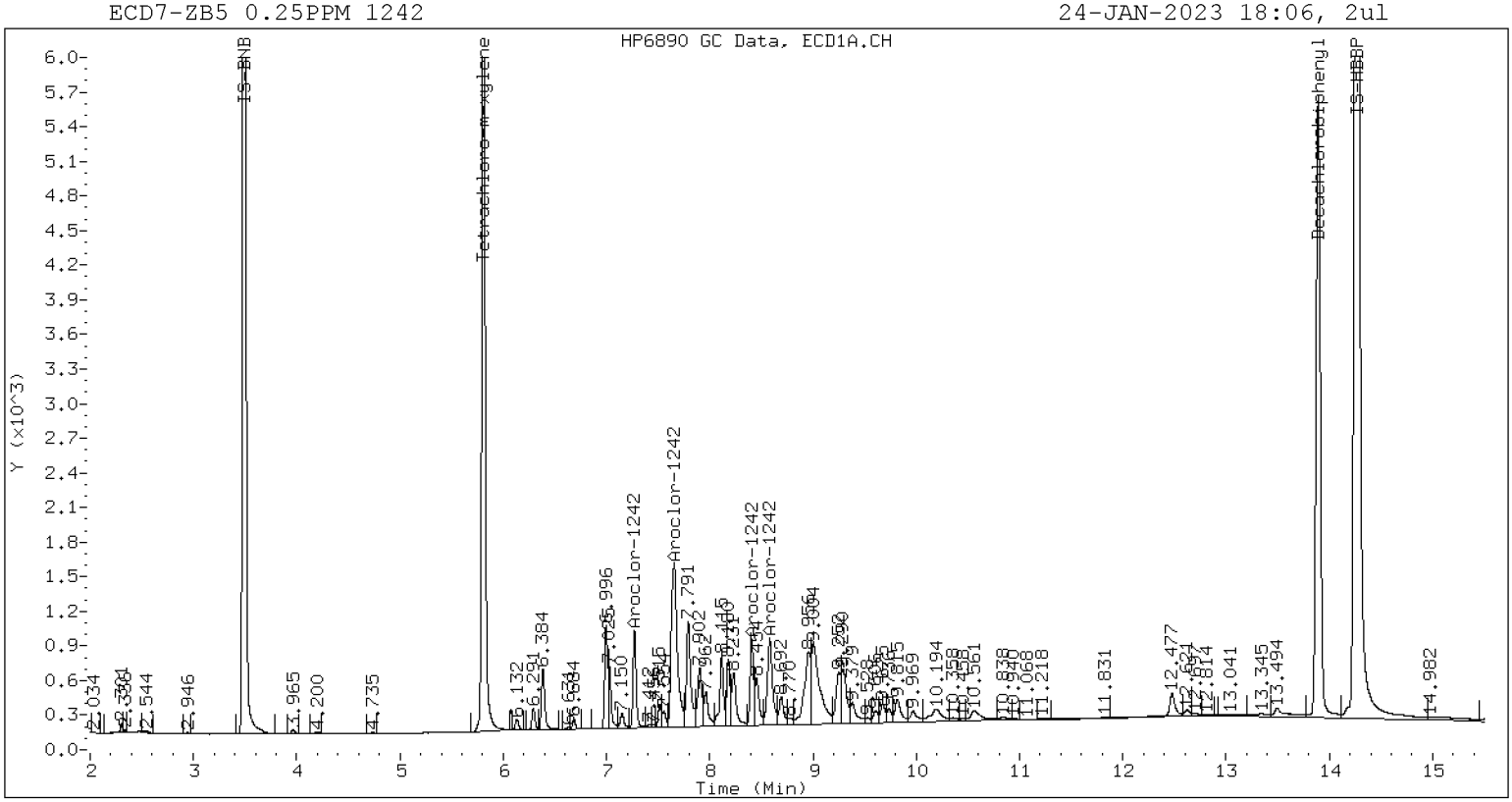
Total PCB Area Col2 (5.787 - 14.020) = 567613 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

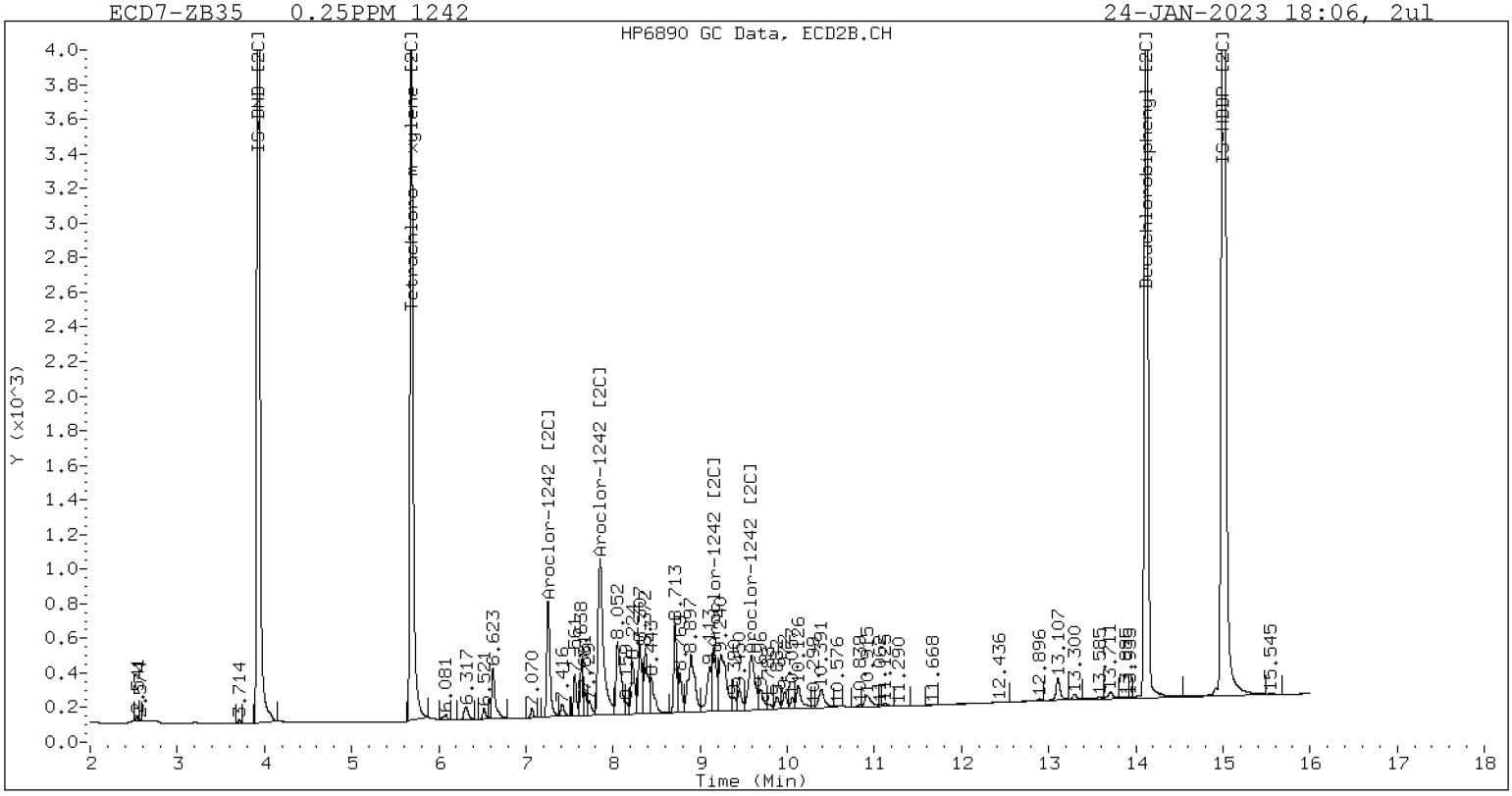
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM 1242 24-JAN-2023 18:06, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM 1242 24-JAN-2023 18:06, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242320ECD7.D
Data file 2: /230124.b/230124.b/01242320ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM 1248
Client ID:
Injection Date: 24-JAN-2023 18:27
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	266561	5.686	-0.001	171841	38.5	38.0	1.3	Tetrachloro-m-xylene
13.892	0.001	334524	14.120	0.000	281569	36.6	37.7	3.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	489828	-2.7
Hexabromobiphenyl	647433	855612	32.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	334539	-0.7
Hexabromobiphenyl	382032	470415	23.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.406	0.000	61259	250.0	1	8.305	0.000	37805	250.0
Aroclor-1248	2	8.580	0.000	78143	250.0	2	8.712	0.000	40692	250.0
Aroclor-1248	3	8.999	0.000	149476	250.0	3	9.156	0.000	49723	250.0
Aroclor-1248	4	9.294	0.000	73986	250.0	4	9.582	0.000	61494	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.909 - 13.792) = 1237662 Col1 Total PCB = 0.2 ppm*

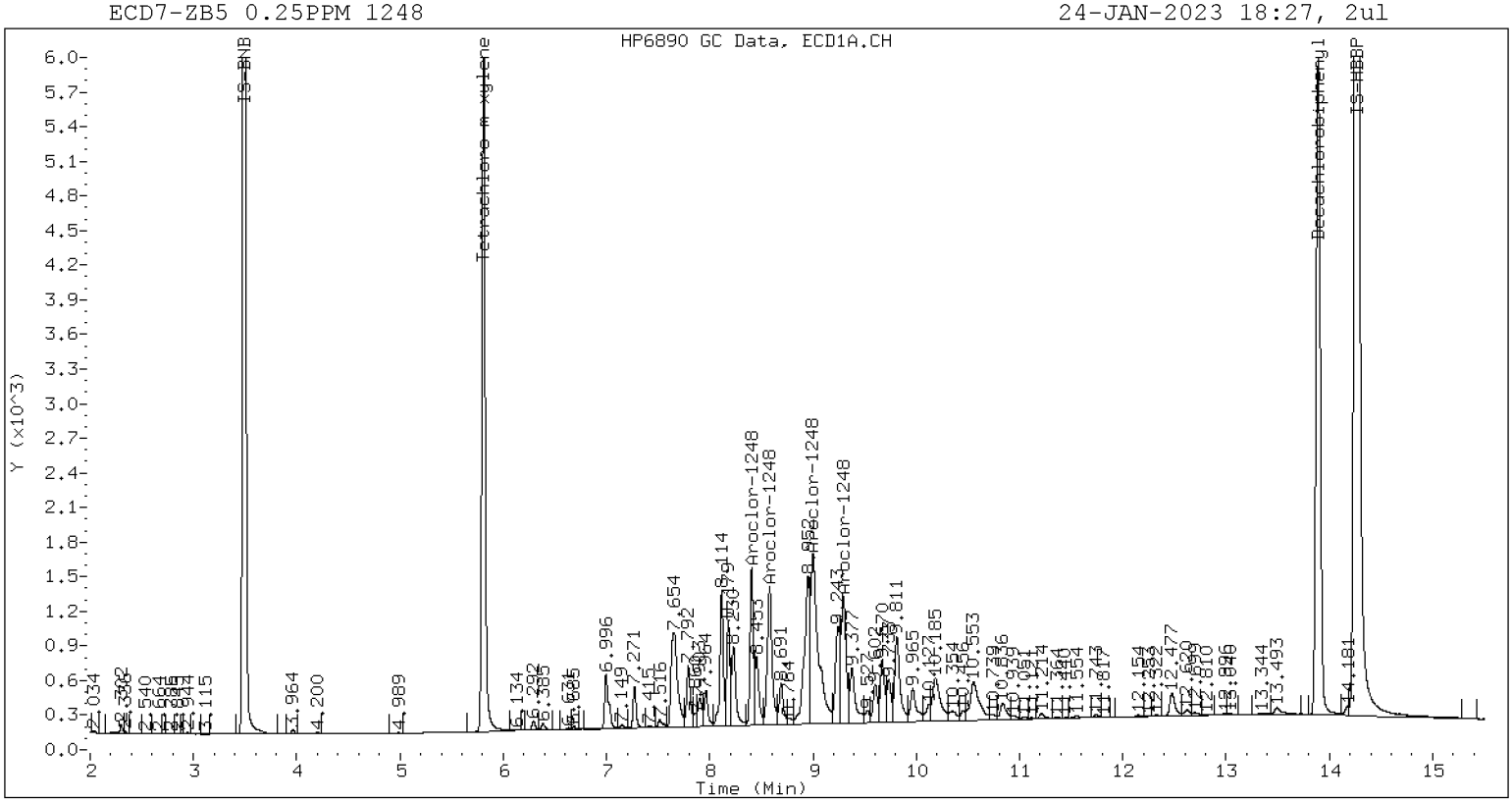
Total PCB Area Col2 (5.787 - 14.020) = 773955 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

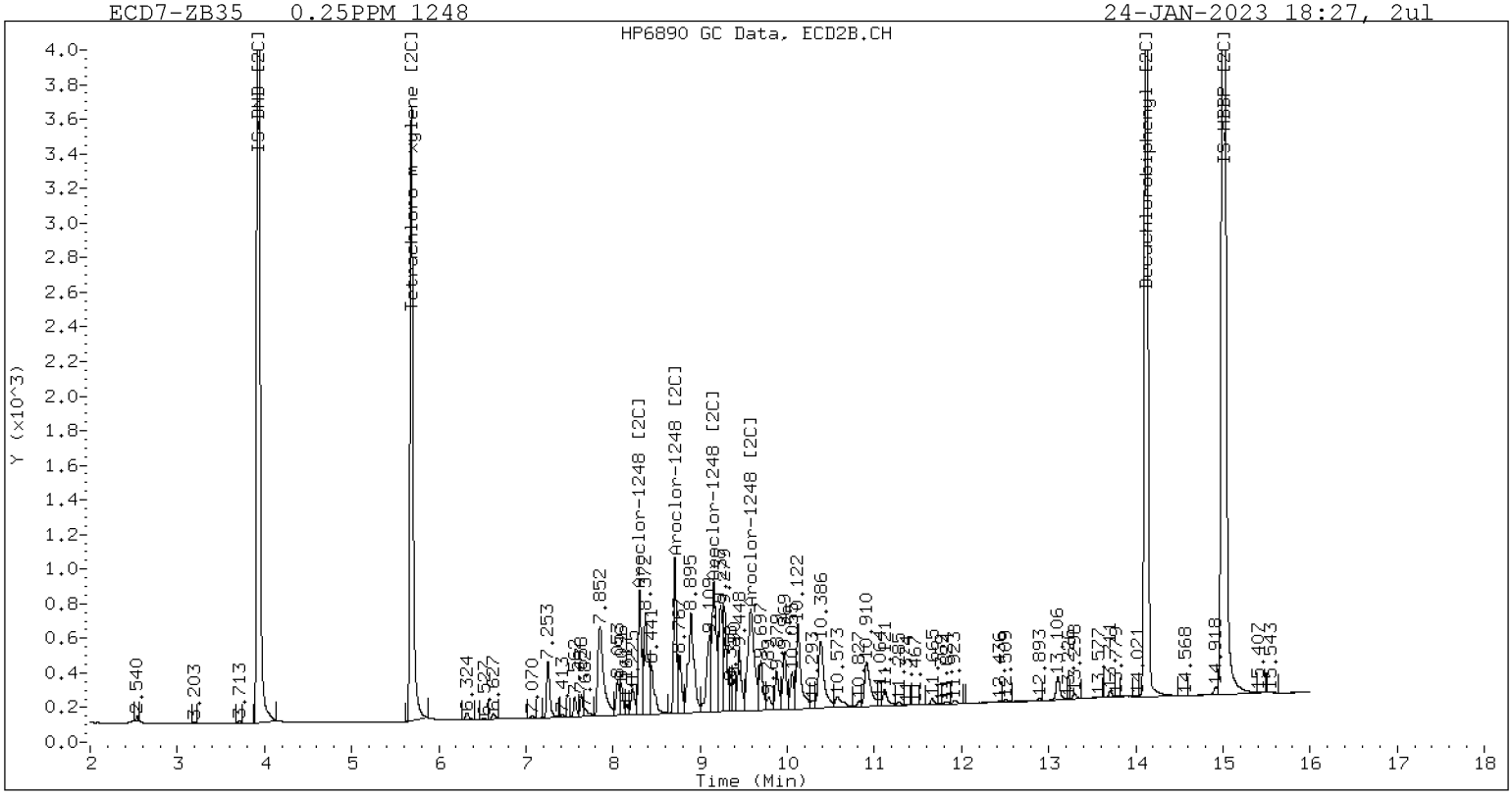
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM 1248 24-JAN-2023 18:27, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM 1248 24-JAN-2023 18:27, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242321ECD7.D
Data file 2: /230124.b/230124.b/01242321ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM 1254
Client ID:
Injection Date: 24-JAN-2023 18:48
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.001	258819	5.684	-0.002	171764	37.7	38.1	1.1	Tetrachloro-m-xylene
13.893	0.001	343162	14.119	-0.001	283996	36.8	37.9	2.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	486231	-3.4
Hexabromobiphenyl	647433	871523	34.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	333658	-1.0
Hexabromobiphenyl	382032	471925	23.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.299	0.000	123887	250.0	1	9.448	0.000	60516	250.0
Aroclor-1254	2	9.378	0.000	52896	250.0	2	9.969	0.000	48914	250.0
Aroclor-1254	3	9.669	0.000	79378	250.0	3	10.121	0.000	106698	250.0
Aroclor-1254	4	9.808	0.000	155542	250.0	4	10.372	0.000	106700	250.0
Aroclor-1254	5	10.177	0.000	101144	250.0	5	10.569	0.000	59429	250.0

Total Col1Ave (5 peaks): 250.0 Total Col2Ave (5 peaks): 250.0 RPD = 0

Corrected Ave (4 peaks): 250.0 Corrected Ave (4 peaks): 250.0 RPD = 0

Total PCB Area Col1 (5.909 - 13.792) = 1659821 Col1 Total PCB = 0.3 ppm*

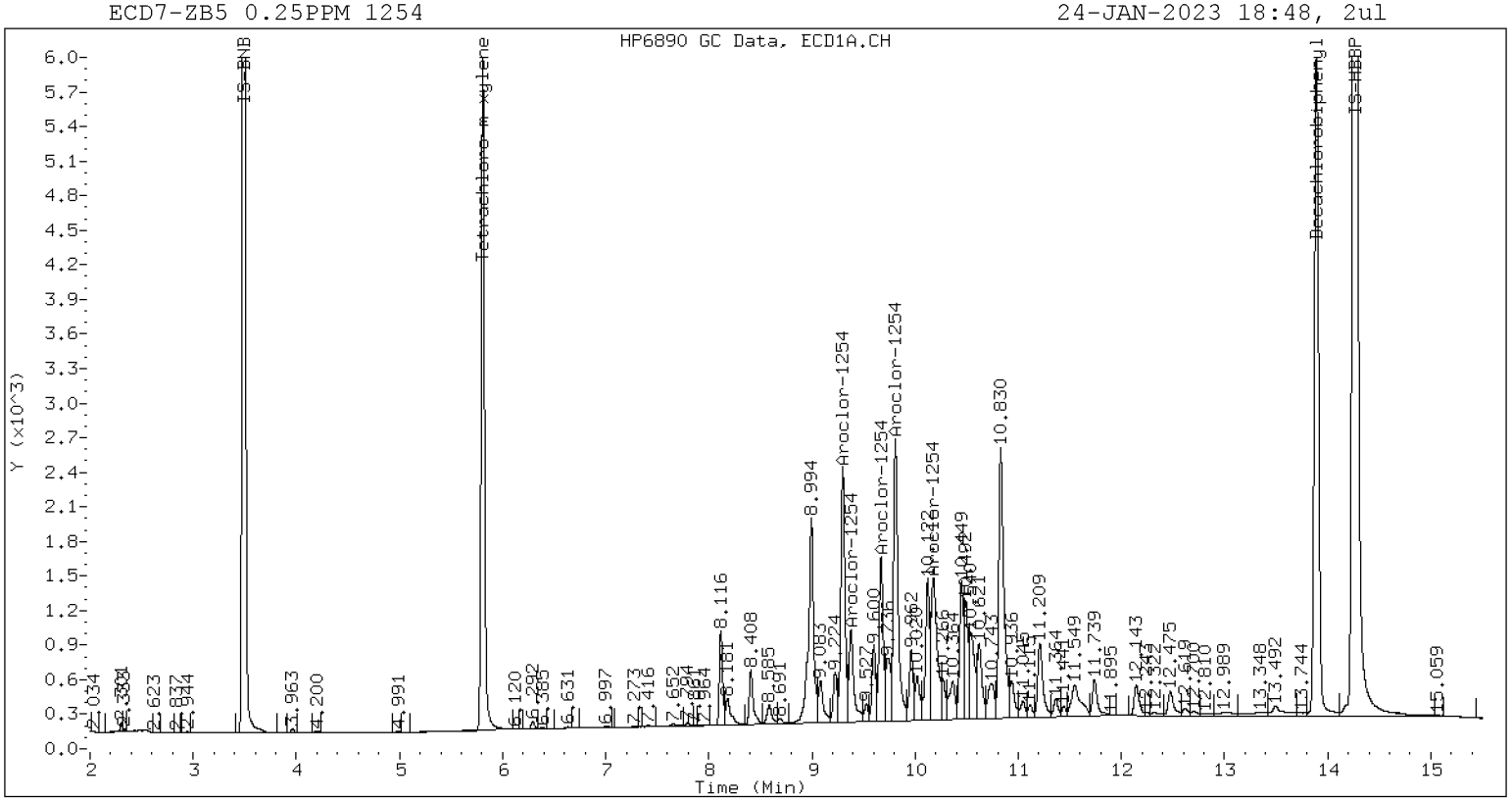
Total PCB Area Col2 (5.787 - 14.020) = 1016659 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

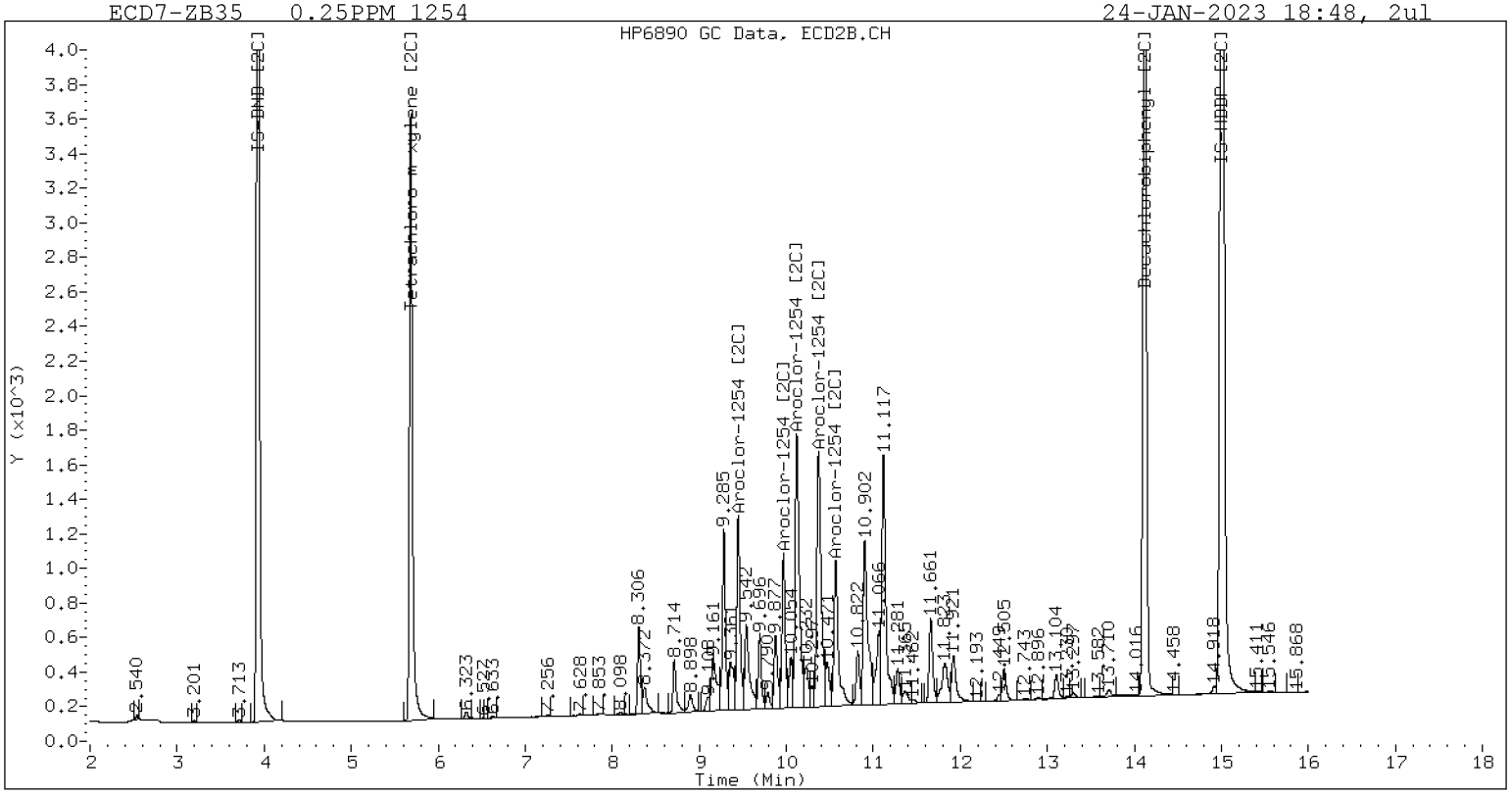
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM 1254 24-JAN-2023 18:48, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM 1254 24-JAN-2023 18:48, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242322ECD7.D
Data file 2: /230124.b/230124.b/01242322ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR2162.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM 2162
Client ID:
Injection Date: 24-JAN-2023 19:09
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	272296	5.686	-0.001	173237	39.1	38.6	1.3	Tetrachloro-m-xylene
13.893	0.001	347331	14.120	-0.000	282892	36.8	37.2	1.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	492470	-2.2
Hexabromobiphenyl	647433	883652	36.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331807	-1.5
Hexabromobiphenyl	382032	479356	25.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1221	1	4.733	0.000	9100	250.0	1	4.959	0.000	6081	250.0
Aroclor-1221	2	6.134	0.000	18608	250.0	2	6.298	0.000	13325	250.0
Aroclor-1221	3	6.384	0.000	43198	250.0	3	6.623	0.000	22491	250.0
Total Col1Ave (3 peaks):					250.0	Total Col2Ave (3 peaks):				250.0 RPD = 0
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.832	0.000	89339	250.0	1	11.200	0.000	117288	250.0
Aroclor-1262	2	12.246	0.000	141007	250.0	2	11.653	0.000	99740	250.0
Aroclor-1262	3	12.321	0.000	153089	250.0	3	12.434	0.000	106212	250.0
Aroclor-1262	4	12.989	0.000	139497	250.0	4	12.504	0.000	170096	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.909 - 13.792) = 2446612 Col1 Total PCB = 0.4 ppm*

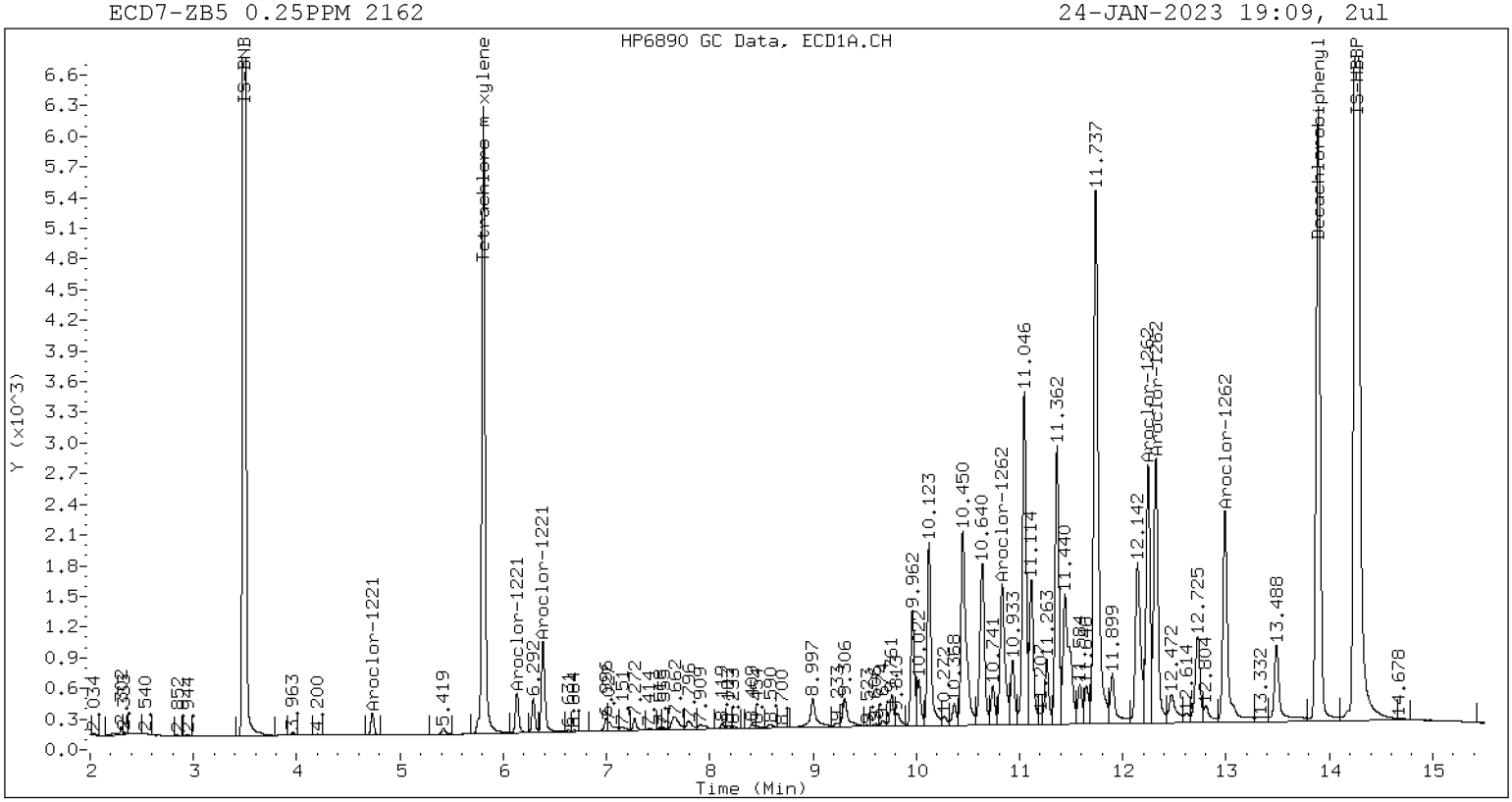
Total PCB Area Col2 (5.787 - 14.020) = 1558387 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

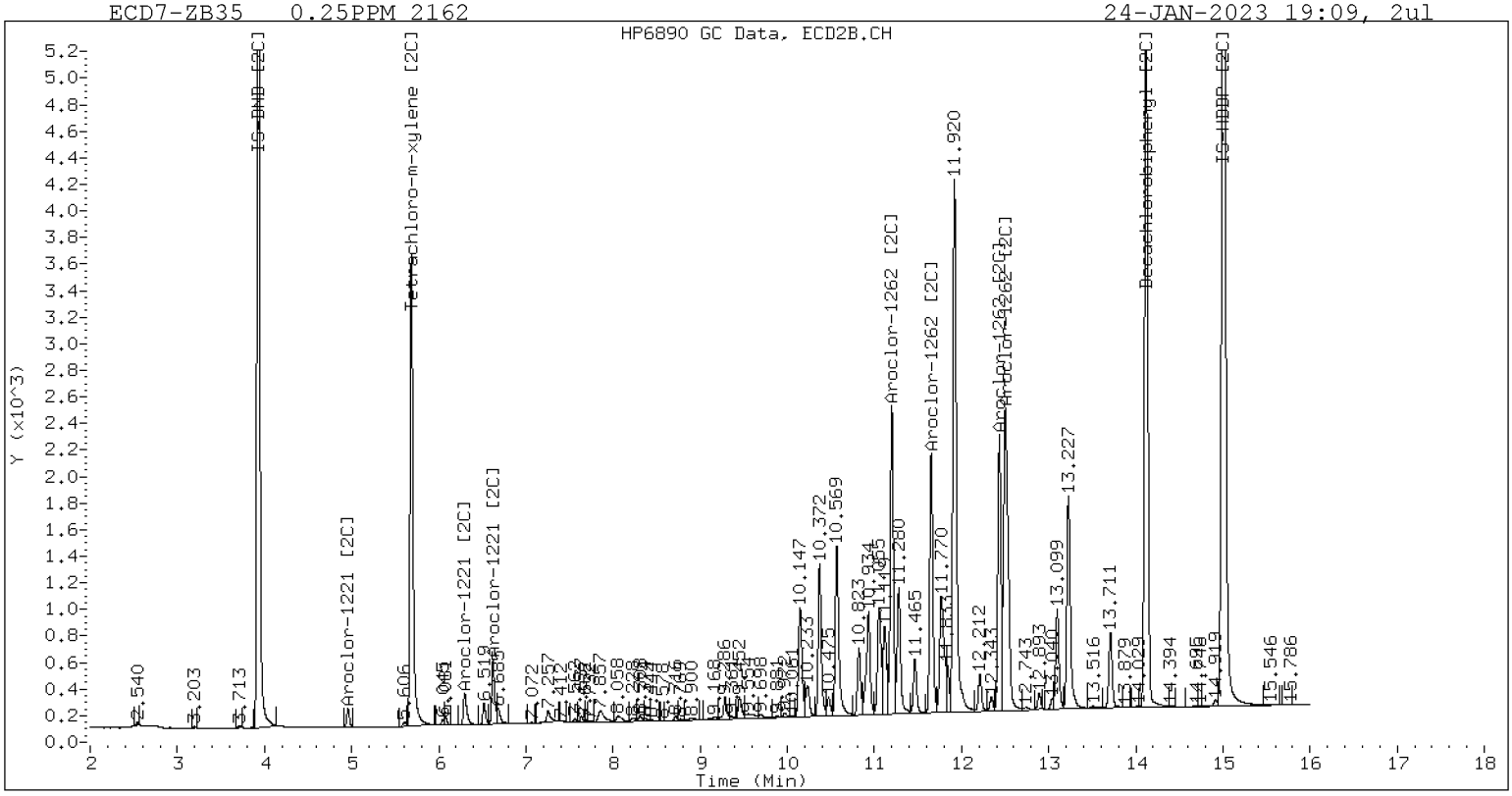
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM 2162 24-JAN-2023 19:09, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM 2162 24-JAN-2023 19:09, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242323ECD7.D
Data file 2: /230124.b/230124.b/01242323ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: AR3268.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPM 3268
Client ID:
Injection Date: 24-JAN-2023 19:30
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.000	277108	5.687	0.000	177359	39.7	39.1	1.5	Tetrachloro-m-xylene
13.892	0.000	525503	14.120	0.000	438987	53.8	57.7	7.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	493427	-2.0
Hexabromobiphenyl	647433	913614	41.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	335121	-0.5
Hexabromobiphenyl	382032	479458	25.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1232	1	4.733	0.000	5692	250.0	1	4.960	0.000	3725	250.0
Aroclor-1232	2	6.133	0.000	12828	250.0	2	7.257	0.000	20847	250.0
Aroclor-1232	3	7.658	0.000	64153	250.0	3	7.854	0.000	42459	250.0
Aroclor-1232	4	8.584	0.000	27460	250.0	4	8.714	0.000	11797	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0
Aroclor-1268	1	12.245	0.000	377314	250.0	1	12.434	0.000	279910	250.0
Aroclor-1268	2	12.318	0.000	376282	250.0	2	12.501	0.000	297867	250.0
Aroclor-1268	3	12.699	0.000	311753	250.0	3	12.893	0.000	247943	250.0
Aroclor-1268	4	13.489	0.000	924293	250.0	4	13.709	0.000	765898	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.909 - 13.792) = 3136879 Col1 Total PCB = 0.5 ppm*

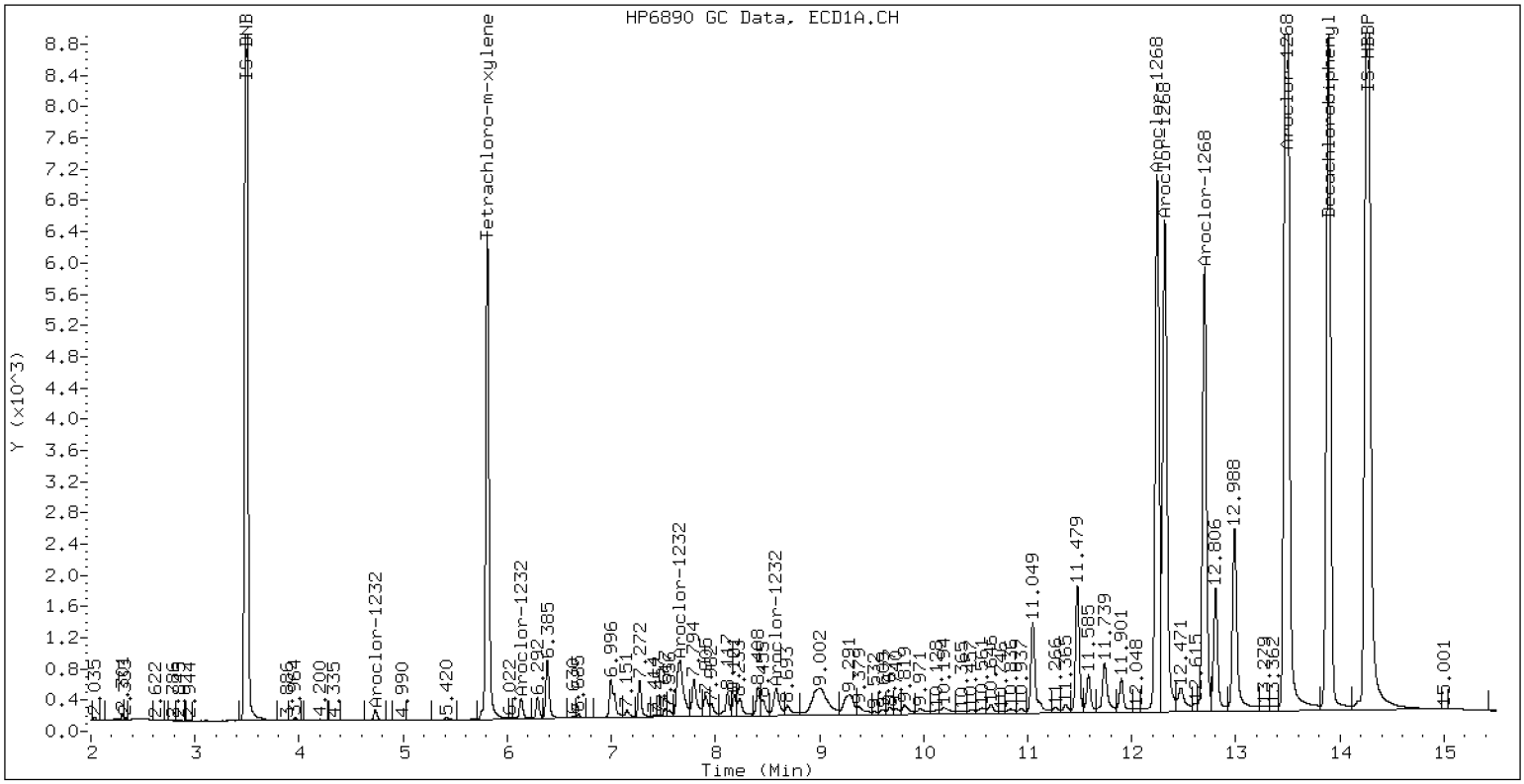
Total PCB Area Col2 (5.787 - 14.020) = 2269104 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

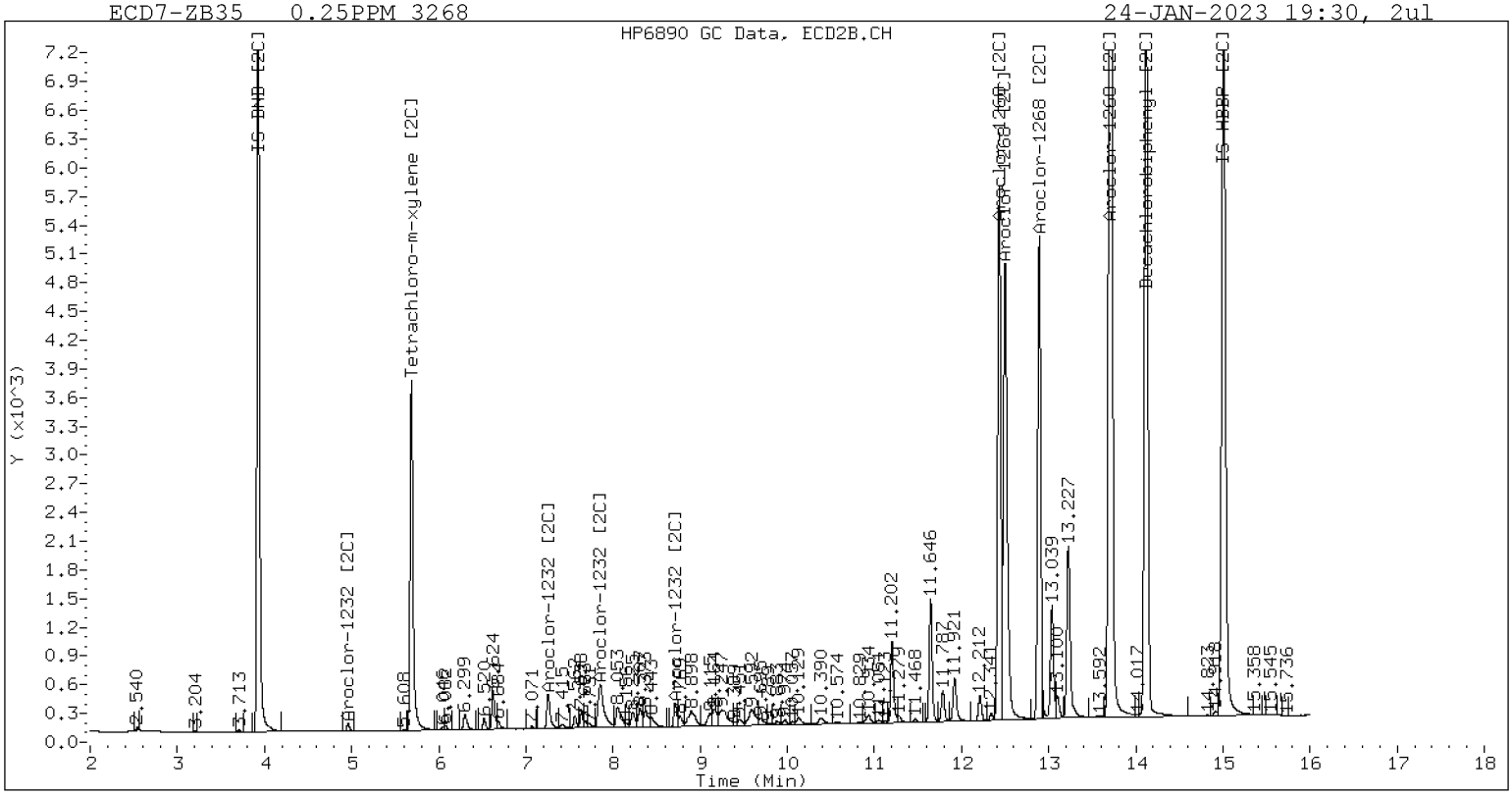
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPM 3268 24-JAN-2023 19:30, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPM 3268 24-JAN-2023 19:30, 2ul

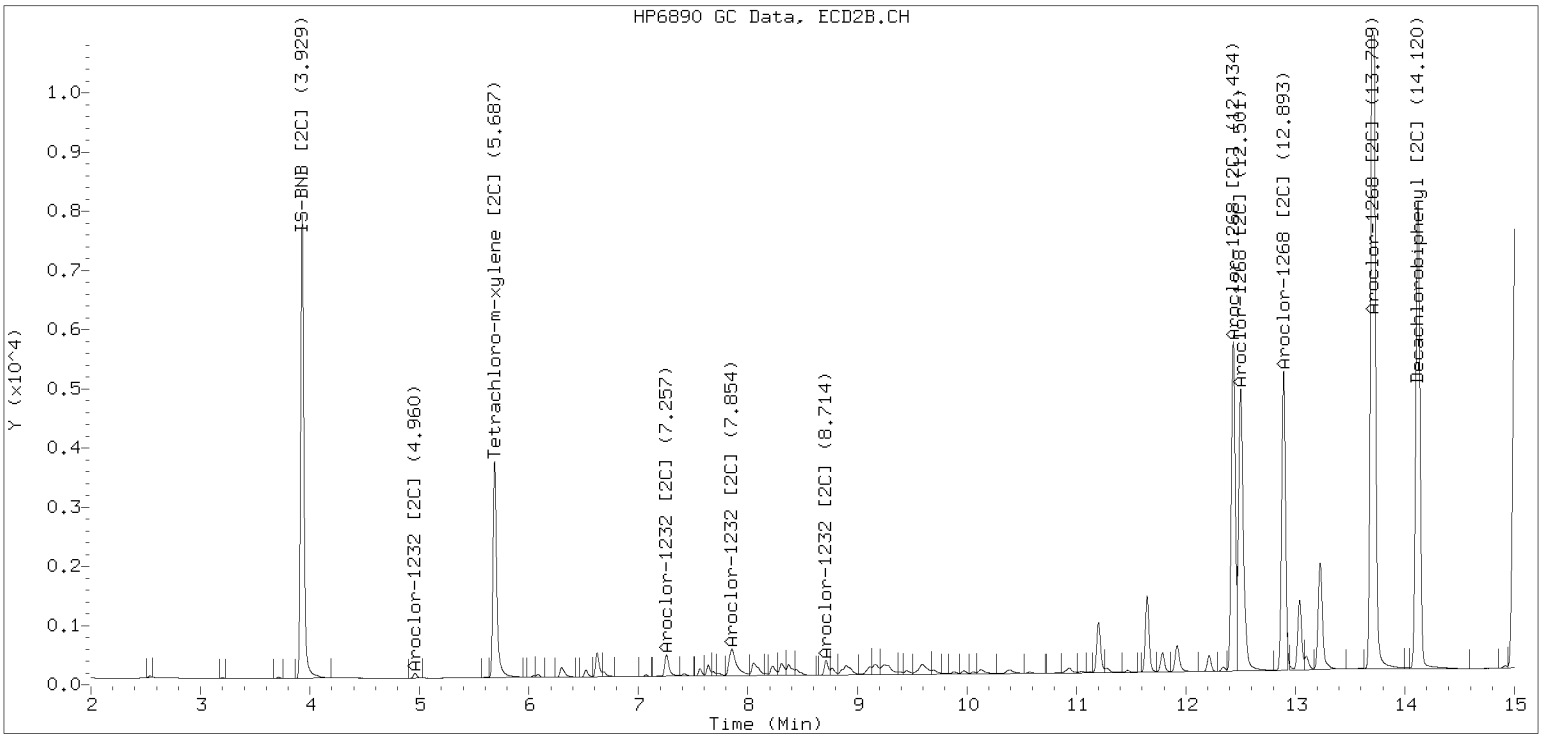


ZB-35 Manual Integration: YES

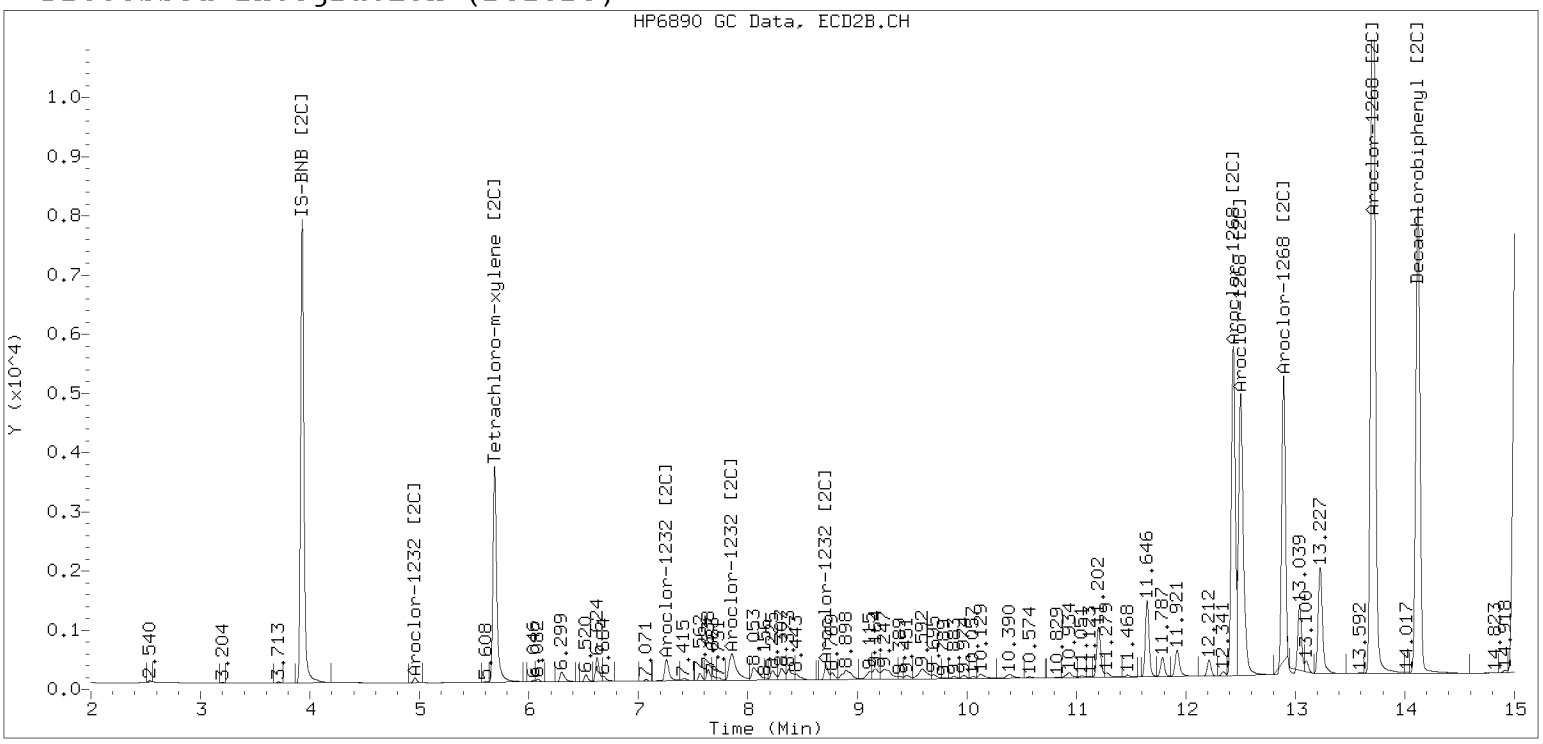
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230124.b/230124.b/01242323ECD7.D Injection Date: 24-JAN-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242324ECD7.D
Data file 2: /230124.b/230124.b/01242324ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 SCV
Client ID:
Injection Date: 24-JAN-2023 19:51
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	268739	5.686	-0.001	172961	37.5	37.3	0.6	Tetrachloro-m-xylene
13.891	-0.000	381489	14.121	0.001	320416	37.9	40.2	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	506576	0.6
Hexabromobiphenyl	647433	940129	45.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	343102	1.8
Hexabromobiphenyl	382032	501702	31.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	40958	217.6	1	7.255	0.001	40190	216.0
Aroclor-1016	2	7.655	0.004	135282	216.9	2	7.852	0.001	90338	221.5
Aroclor-1016	3	7.791	0.003	61557	214.5	3	8.052	0.002	37810	227.2
Aroclor-1016	4	8.406	0.002	40372	218.7	4	8.306	0.000	28171	215.9
Total Col1Ave (4 peaks):					216.9	Total Col2Ave (4 peaks):				220.2 RPD = 1
Corrected Ave (3 peaks):					216.3	Corrected Ave (3 peaks):				217.8 RPD = 1
Aroclor-1221	1	4.732	-0.001	256	6.8	1	---			0.0
Aroclor-1221	2	6.131	-0.002	4742	61.9	2	6.302	0.004	5037	91.4
Aroclor-1221	3	6.384	-0.000	27448	154.4	3	6.623	-0.000	18931	203.5
Total Col1Ave (3 peaks):					74.4	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.732	-0.001	256	11.0	1	---			0.0
Aroclor-1232	2	6.131	-0.002	4742	90.0	2	7.255	-0.001	40190	470.8
Aroclor-1232	3	7.655	-0.004	135282	513.5	3	7.852	-0.002	90338	519.5
Aroclor-1232	4	8.581	-0.003	56938	504.9	4	8.713	-0.001	27776	574.9
Total Col1Ave (4 peaks):					279.8	Total Col2Ave (3 peaks):				521.7 RPD = 60*
Corrected Ave (3 peaks):					202.0	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	-0.000	40958	264.0	1	7.255	-0.000	40190	267.8
Aroclor-1242	2	7.655	-0.001	135282	266.5	2	7.852	-0.001	90338	271.0
Aroclor-1242	3	8.406	-0.001	40372	267.7	3	9.115	-0.045	15827	151.6
Aroclor-1242	4	8.581	-0.000	56938	249.9	4	9.587	0.001	3186	23.0
Total Col1Ave (4 peaks):					262.0	Total Col2Ave (4 peaks):				178.4 RPD = 38
Corrected Ave (3 peaks):					260.1	Corrected Ave (3 peaks):				147.5 RPD = 55*
Aroclor-1248	1	8.406	0.000	40372	159.3	1	8.306	0.000	28171	181.6
Aroclor-1248	2	8.581	0.001	56938	176.1	2	8.713	0.000	27776	166.4
Aroclor-1248	3	8.995	-0.004	58213	94.1	3	9.115	-0.042	15827	77.6
Aroclor-1248	4	9.304	0.010	36620	119.6	4	9.587	0.006	3186	12.6
Total Col1Ave (4 peaks):					137.3	Total Col2Ave (4 peaks):				109.6 RPD = 22
Corrected Ave (3 peaks):					124.4	Corrected Ave (3 peaks):				85.5 RPD = 37
Aroclor-1254	1	9.304	0.005	36620	70.9	1	9.450	0.002	20792	83.5
Aroclor-1254	2	---			0.0	2	9.972	0.003	2640	13.1
Aroclor-1254	3	9.673	0.003	4075	12.3	3	10.148	0.027	52902	120.5
Aroclor-1254	4	9.813	0.004	14733	22.7	4	10.372	0.000	71680	163.3
Aroclor-1254	5	10.122	-0.055	119528	283.6	5	10.569	-0.000	98559	403.2
Total Col1Ave (4 peaks):					97.4	Total Col2Ave (5 peaks):				156.7 RPD = 47*
Corrected Ave (3 peaks):					35.3	Corrected Ave (4 peaks):				95.1 RPD = 92*
Aroclor-1260	1	11.045	0.002	116435	220.7	1	11.654	0.000	81795	226.0
Aroclor-1260	2	11.362	0.001	116918	215.6	2	11.920	0.002	217887	238.0
Aroclor-1260	3	11.738	0.003	303264	212.5	3	12.437	0.001	56212	246.3
Aroclor-1260	4	12.143	0.004	141534	191.9	4	12.502	0.000	142689	240.8
Aroclor-1260	5	12.246	0.002	68446	212.9	NS	---			----
Total Col1Ave (5 peaks):					210.7	Total Col2Ave (4 peaks):				237.8 RPD = 12
Corrected Ave (4 peaks):					208.2	Corrected Ave (3 peaks):				234.9 RPD = 12
Aroclor-1262	1	10.830	-0.002	169725	446.4	1	11.200	0.000	83995	171.1
Aroclor-1262	2	12.246	0.000	68446	114.1	2	11.654	0.001	81795	195.9
Aroclor-1262	3	12.320	-0.000	84201	129.2	3	12.437	0.003	56212	126.4
Aroclor-1262	4	12.989	-0.000	78065	131.5	4	12.502	-0.001	142689	200.4
Total Col1Ave (4 peaks):					205.3	Total Col2Ave (4 peaks):				173.4 RPD = 17
Corrected Ave (3 peaks):					124.9	Corrected Ave (3 peaks):				164.5 RPD = 27
Aroclor-1268	1	12.246	0.001	68446	44.1	1	12.437	0.003	56212	48.0
Aroclor-1268	2	12.320	0.002	84201	54.4	2	12.502	0.001	142689	114.4
Aroclor-1268	3	12.726	0.027	33020	25.7	3	12.894	0.001	1495	1.4
Aroclor-1268	4	13.490	0.001	16019	4.2	4	13.709	0.001	10120	3.2
Total Col1Ave (4 peaks):					32.1	Total Col2Ave (4 peaks):				41.8 RPD = 26
Corrected Ave (3 peaks):					24.7	Corrected Ave (3 peaks):				17.5 RPD = 34

Total PCB Area Col1 (5.909 - 13.792) = 2789370 Col1 Total PCB = 0.5 ppm*

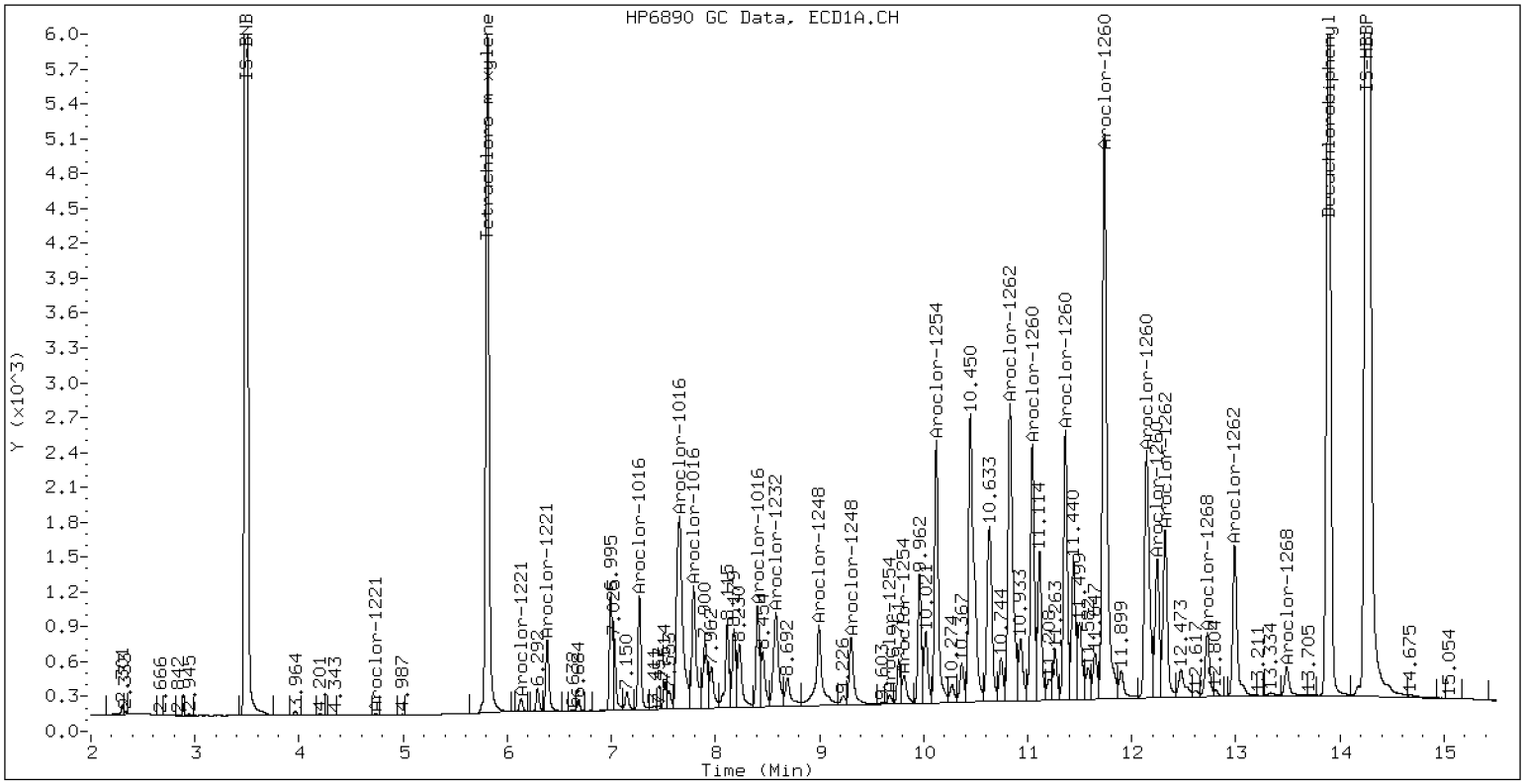
Total PCB Area Col2 (5.787 - 14.020) = 1810543 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

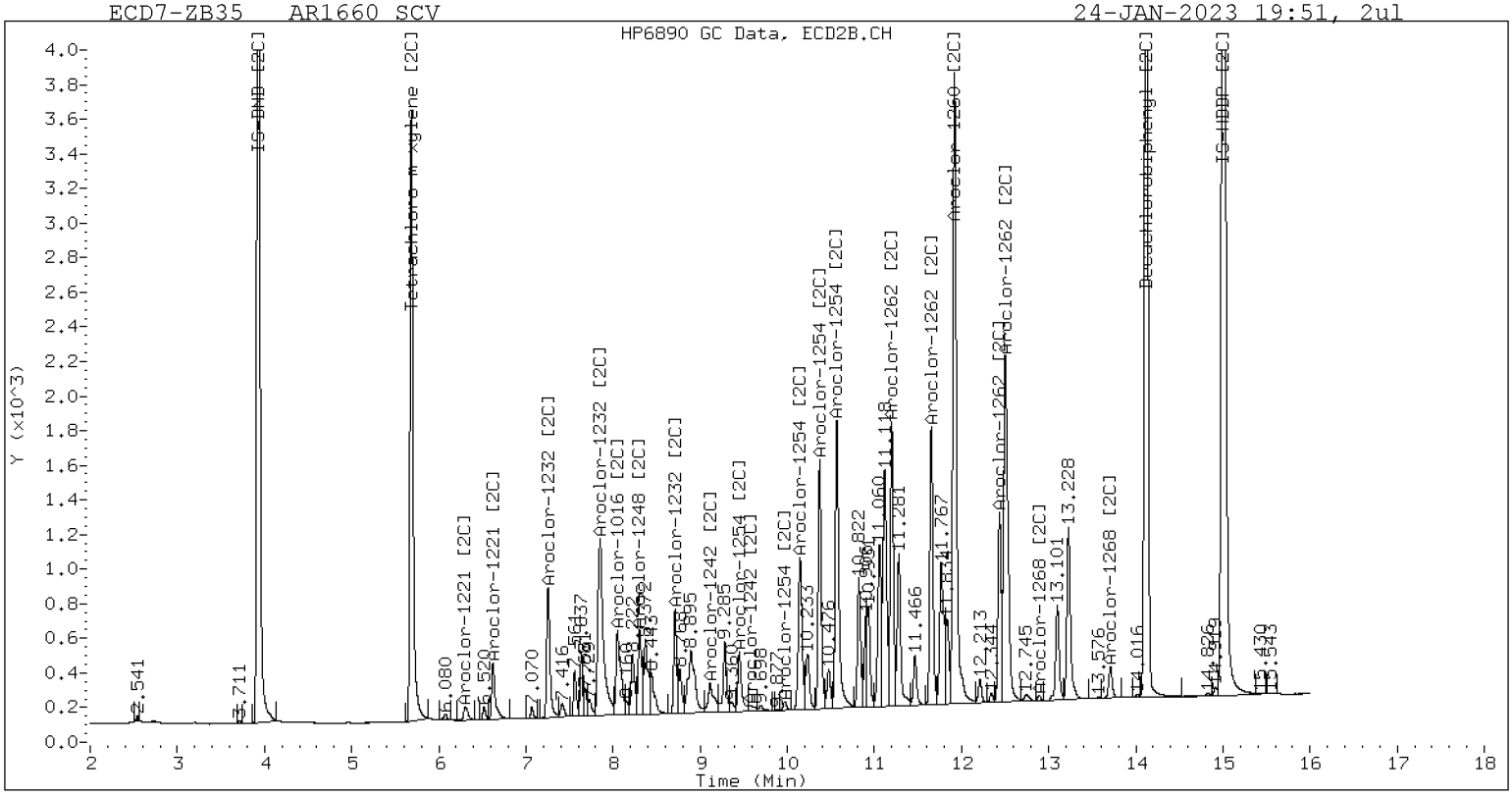
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660 SCV 24-JAN-2023 19:51, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660 SCV 24-JAN-2023 19:51, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242325ECD7.D
Data file 2: /230124.b/230124.b/01242325ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242 SCV
Client ID:
Injection Date: 24-JAN-2023 20:12
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	268580	5.686	-0.001	172592	37.8	37.4	1.1	Tetrachloro-m-xylene
13.892	0.001	392918	14.121	0.001	323869	38.5	40.3	4.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503089	-0.0
Hexabromobiphenyl	647433	953137	47.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	341704	1.4
Hexabromobiphenyl	382032	505860	32.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	29901	159.9	1	7.255	0.000	32077	173.1
Aroclor-1016	2	7.653	0.003	107333	173.3	2	7.851	-0.000	71438	175.9
Aroclor-1016	3	7.790	0.002	45013	157.9	3	8.051	0.001	29072	175.4
Aroclor-1016	4	8.406	0.002	32958	179.8	4	8.306	0.001	21761	167.5
Total Col1Ave (4 peaks):		167.7				Total Col2Ave (4 peaks):		173.0	RPD = 3	
Corrected Ave (3 peaks):		163.7				Corrected Ave (3 peaks):		172.0	RPD = 5	
Aroclor-1221	1	4.737	0.004	141	3.8	1	---			0.0
Aroclor-1221	2	6.133	-0.001	3649	48.0	2	6.317	0.018	4290	78.2
Aroclor-1221	3	6.384	-0.000	21189	120.0	3	6.624	0.001	14613	157.7
Total Col1Ave (3 peaks):		57.3				Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.737	0.003	141	6.1	1	---			0.0
Aroclor-1232	2	6.133	-0.001	3649	69.7	2	7.255	-0.002	32077	377.3
Aroclor-1232	3	7.653	-0.005	107333	410.2	3	7.851	-0.004	71438	412.5
Aroclor-1232	4	8.581	-0.003	59617	532.3	4	8.713	-0.000	22563	468.9
Total Col1Ave (4 peaks):		254.6				Total Col2Ave (3 peaks):		419.6	RPD = 49*	
Corrected Ave (3 peaks):		162.0				Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	29901	194.1	1	7.255	-0.001	32077	214.6
Aroclor-1242	2	7.653	-0.002	107333	212.9	2	7.851	-0.002	71438	215.2
Aroclor-1242	3	8.406	-0.000	32958	220.0	3	9.156	-0.004	27374	263.3
Aroclor-1242	4	8.581	-0.000	59617	263.5	4	9.581	-0.006	34156	247.9
Total Col1Ave (4 peaks):		222.6				Total Col2Ave (4 peaks):		235.3	RPD = 6	
Corrected Ave (3 peaks):		209.0				Corrected Ave (3 peaks):		225.9	RPD = 8	
Aroclor-1248	1	8.406	0.001	32958	131.0	1	8.306	0.001	21761	140.9
Aroclor-1248	2	8.581	0.001	59617	185.7	2	8.713	0.001	22563	135.7
Aroclor-1248	3	9.003	0.004	72557	118.2	3	9.156	-0.000	27374	134.7
Aroclor-1248	4	9.296	0.003	28122	92.5	4	9.581	-0.001	34156	135.9
Total Col1Ave (4 peaks):		131.8				Total Col2Ave (4 peaks):		136.8	RPD = 4	
Corrected Ave (3 peaks):		113.9				Corrected Ave (3 peaks):		135.5	RPD = 17	
Aroclor-1254	1	9.296	-0.002	28122	54.8	1	9.448	0.000	11650	47.0
Aroclor-1254	2	9.380	0.002	9292	42.4	2	9.968	-0.001	7642	38.1
Aroclor-1254	3	9.671	0.001	12871	39.2	3	10.120	-0.001	16012	36.6
Aroclor-1254	4	9.808	-0.000	22113	34.4	4	10.378	0.007	16300	37.3
Aroclor-1254	5	10.176	-0.001	17771	42.5	5	10.572	0.004	4439	18.2
Total Col1Ave (5 peaks):		42.7				Total Col2Ave (5 peaks):		35.5	RPD = 18	
Corrected Ave (4 peaks):		39.6				Corrected Ave (4 peaks):		32.6	RPD = 19	
Aroclor-1260	1	11.047	0.003	741	1.4	1	11.663	0.010	1794	4.9
Aroclor-1260	2	11.366	0.006	379	0.7	2	11.923	0.005	1208	1.3
Aroclor-1260	3	11.745	0.011	860	0.6	3	12.507	0.071	977	4.2
Aroclor-1260	4	12.154	0.014	1536	2.1	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
Total Col1Ave (4 peaks):		1.2				Total Col2Ave (3 peaks):		3.5	RPD = 99*	
Corrected Ave (3 peaks):		0.9				Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.836	0.004	10654	27.6	1	11.120	-0.080	8071	16.3
Aroclor-1262	2	12.154	-0.092	1536	2.5	2	11.663	0.010	1794	4.3
Aroclor-1262	3	---			0.0	3	12.507	0.073	977	2.2
Aroclor-1262	4	13.040	0.051	1739	2.9	4	---			0.0
Total Col1Ave (3 peaks):		11.0				Total Col2Ave (3 peaks):		7.6	RPD = 37	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.154	-0.091	1536	1.0	1	12.507	0.073	977	0.8
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.623	-0.076	5080	3.9	3	12.894	0.001	98	0.1
Aroclor-1268	4	13.501	0.012	2725	0.7	4	13.707	-0.001	1566	0.5
Total Col1Ave (3 peaks):		1.9				Total Col2Ave (3 peaks):		0.5	RPD = 120*	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 915887 Col1 Total PCB = 0.2 ppm*

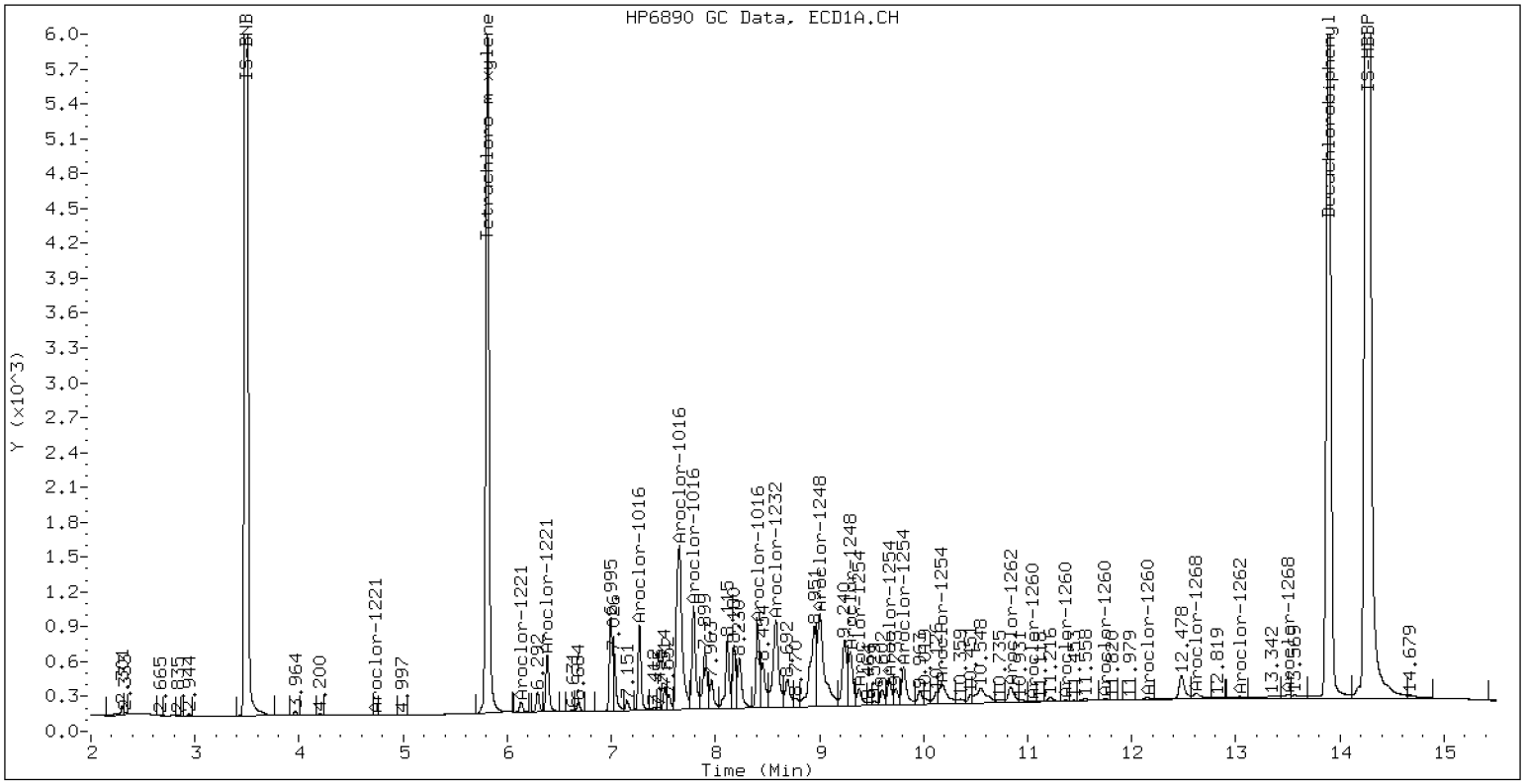
Total PCB Area Col2 (5.787 - 14.020) = 575897 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

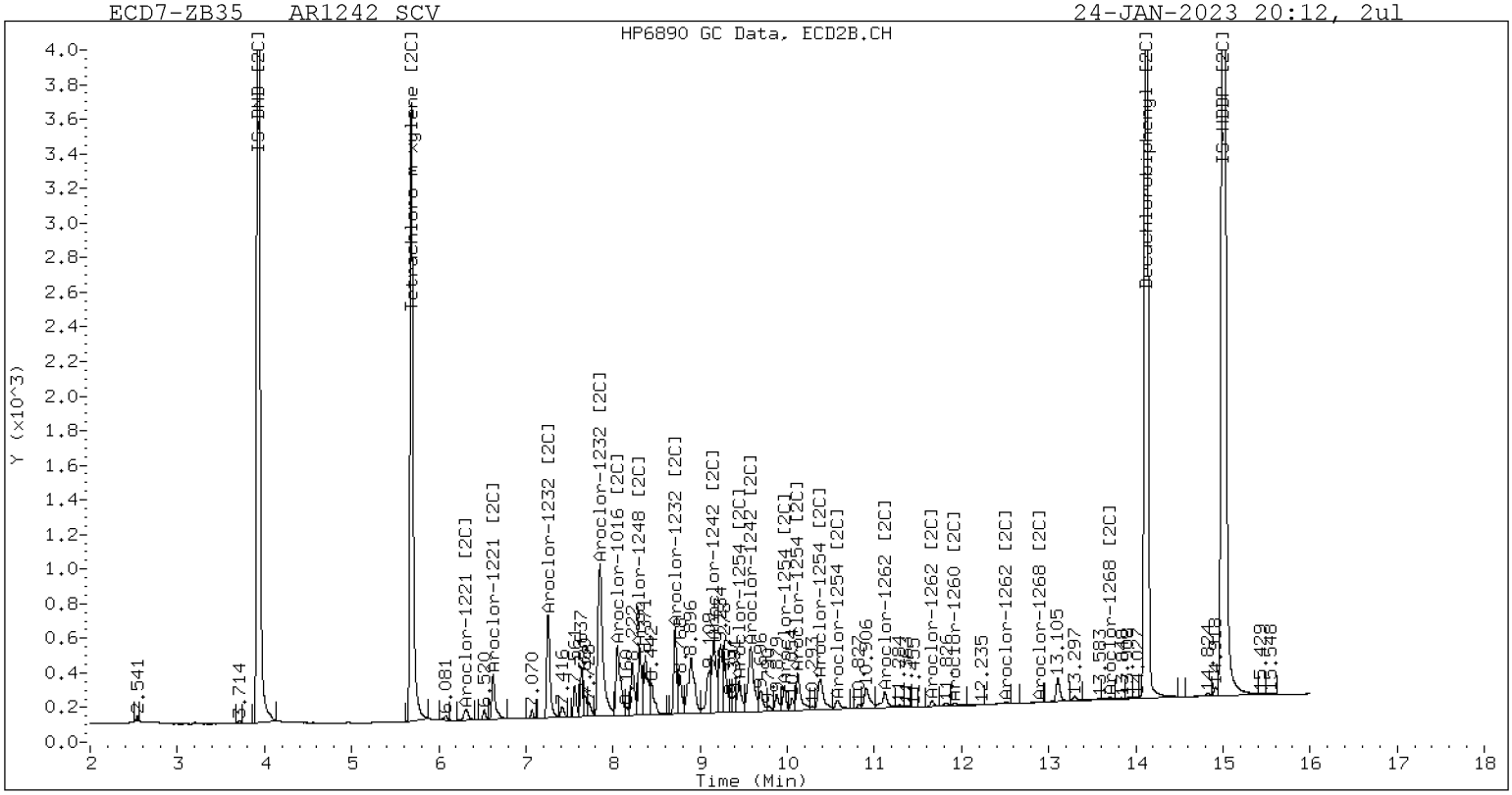
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242 SCV 24-JAN-2023 20:12, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242 SCV 24-JAN-2023 20:12, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242326ECD7.D
Data file 2: /230124.b/230124.b/01242326ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248 SCV
Client ID:
Injection Date: 24-JAN-2023 20:33
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.000	263982	5.686	-0.001	169991	36.8	36.5	0.6	Tetrachloro-m-xylene
13.892	0.001	400655	14.121	0.001	316171	38.3	39.6	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	508189	1.0
Hexabromobiphenyl	647433	979067	51.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	344105	2.1
Hexabromobiphenyl	382032	503378	31.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	14777	78.3	1	7.254	-0.001	16100	86.3
Aroclor-1016	2	7.655	0.004	70114	112.1	2	7.853	0.002	47184	115.4
Aroclor-1016	3	7.794	0.006	27212	94.5	3	8.053	0.003	9427	56.5
Aroclor-1016	4	8.406	0.003	59884	323.4	4	8.306	0.001	36680	280.3
Total Col1Ave (4 peaks):					152.0	Total Col2Ave (4 peaks):				134.6 RPD = 12
Corrected Ave (3 peaks):					94.9	Corrected Ave (3 peaks):				86.0 RPD = 10
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.133	-0.000	591	7.7	2	6.323	0.025	1820	32.9
Aroclor-1221	3	6.386	0.001	2453	13.8	3	6.627	0.004	1477	15.8
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.133	-0.000	591	11.2	2	7.254	-0.002	16100	188.0
Aroclor-1232	3	7.655	-0.004	70114	265.3	3	7.853	-0.001	47184	270.6
Aroclor-1232	4	8.581	-0.003	76286	674.3	4	8.714	0.000	39330	811.7
Total Col1Ave (3 peaks):					316.9	Total Col2Ave (3 peaks):				423.4 RPD = 29
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	14777	95.0	1	7.254	-0.002	16100	107.0
Aroclor-1242	2	7.655	-0.001	70114	137.7	2	7.853	0.000	47184	141.2
Aroclor-1242	3	8.406	-0.000	59884	395.8	3	9.159	-0.001	46988	448.9
Aroclor-1242	4	8.581	-0.000	76286	333.8	4	9.584	-0.003	56615	408.1
Total Col1Ave (4 peaks):					240.5	Total Col2Ave (4 peaks):				276.3 RPD = 14
Corrected Ave (3 peaks):					188.8	Corrected Ave (3 peaks):				218.7 RPD = 15
Aroclor-1248	1	8.406	0.001	59884	235.6	1	8.306	0.001	36680	235.8
Aroclor-1248	2	8.581	0.001	76286	235.2	2	8.714	0.002	39330	234.9
Aroclor-1248	3	9.000	0.001	148805	239.9	3	9.159	0.003	46988	229.7
Aroclor-1248	4	9.295	0.001	73114	238.1	4	9.584	0.002	56615	223.8
Total Col1Ave (4 peaks):					237.2	Total Col2Ave (4 peaks):				231.0 RPD = 3
Corrected Ave (3 peaks):					236.3	Corrected Ave (3 peaks):				229.5 RPD = 3
Aroclor-1254	1	9.295	-0.004	73114	141.2	1	9.449	0.001	20314	81.4
Aroclor-1254	2	9.378	0.000	36561	165.3	2	9.970	0.000	18678	92.6
Aroclor-1254	3	9.672	0.003	30736	92.6	3	10.124	0.003	35321	80.2
Aroclor-1254	4	9.813	0.004	53537	82.3	4	10.387	0.015	35188	79.9
Aroclor-1254	5	10.192	0.015	40119	94.9	5	10.575	0.006	7386	30.1
Total Col1Ave (5 peaks):					115.3	Total Col2Ave (5 peaks):				72.9 RPD = 45*
Corrected Ave (4 peaks):					102.7	Corrected Ave (4 peaks):				67.9 RPD = 41*
Aroclor-1260	1	11.054	0.010	1868	3.4	1	11.664	0.011	2055	5.7
Aroclor-1260	2	11.366	0.005	1375	2.4	2	11.926	0.009	1303	1.4
Aroclor-1260	3	11.745	0.010	2137	1.4	3	12.439	0.003	395	1.7
Aroclor-1260	4	12.147	0.008	1650	2.1	4	12.507	0.005	890	1.5
Aroclor-1260	5	12.255	0.011	558	1.7	NS	---			----
Total Col1Ave (5 peaks):					2.2	Total Col2Ave (4 peaks):				2.6 RPD = 15
Corrected Ave (4 peaks):					1.9	Corrected Ave (3 peaks):				1.5 RPD = 22
Aroclor-1262	1	10.837	0.005	12736	32.2	1	11.122	-0.078	7136	14.5
Aroclor-1262	2	12.255	0.010	558	0.9	2	11.664	0.011	2055	4.9
Aroclor-1262	3	12.327	0.006	596	0.9	3	12.439	0.004	395	0.9
Aroclor-1262	4	12.996	0.007	1113	1.8	4	12.507	0.003	890	1.2
Total Col1Ave (4 peaks):					8.9	Total Col2Ave (4 peaks):				5.4 RPD = 50*
Corrected Ave (3 peaks):					1.2	Corrected Ave (3 peaks):				2.3 RPD = 65*
Aroclor-1268	1	12.255	0.010	558	0.3	1	12.439	0.005	395	0.3
Aroclor-1268	2	12.327	0.009	596	0.4	2	12.507	0.005	890	0.7
Aroclor-1268	3	12.706	0.007	1161	0.9	3	12.896	0.003	166	0.2
Aroclor-1268	4	13.504	0.016	3330	0.8	4	13.717	0.009	469	0.1
Total Col1Ave (4 peaks):					0.6	Total Col2Ave (4 peaks):				0.3 RPD = 57*
Corrected Ave (3 peaks):					0.5	Corrected Ave (3 peaks):				0.2 RPD = 83*

Total PCB Area Col1 (5.909 - 13.792) = 1230760 Col1 Total PCB = 0.2 ppm*

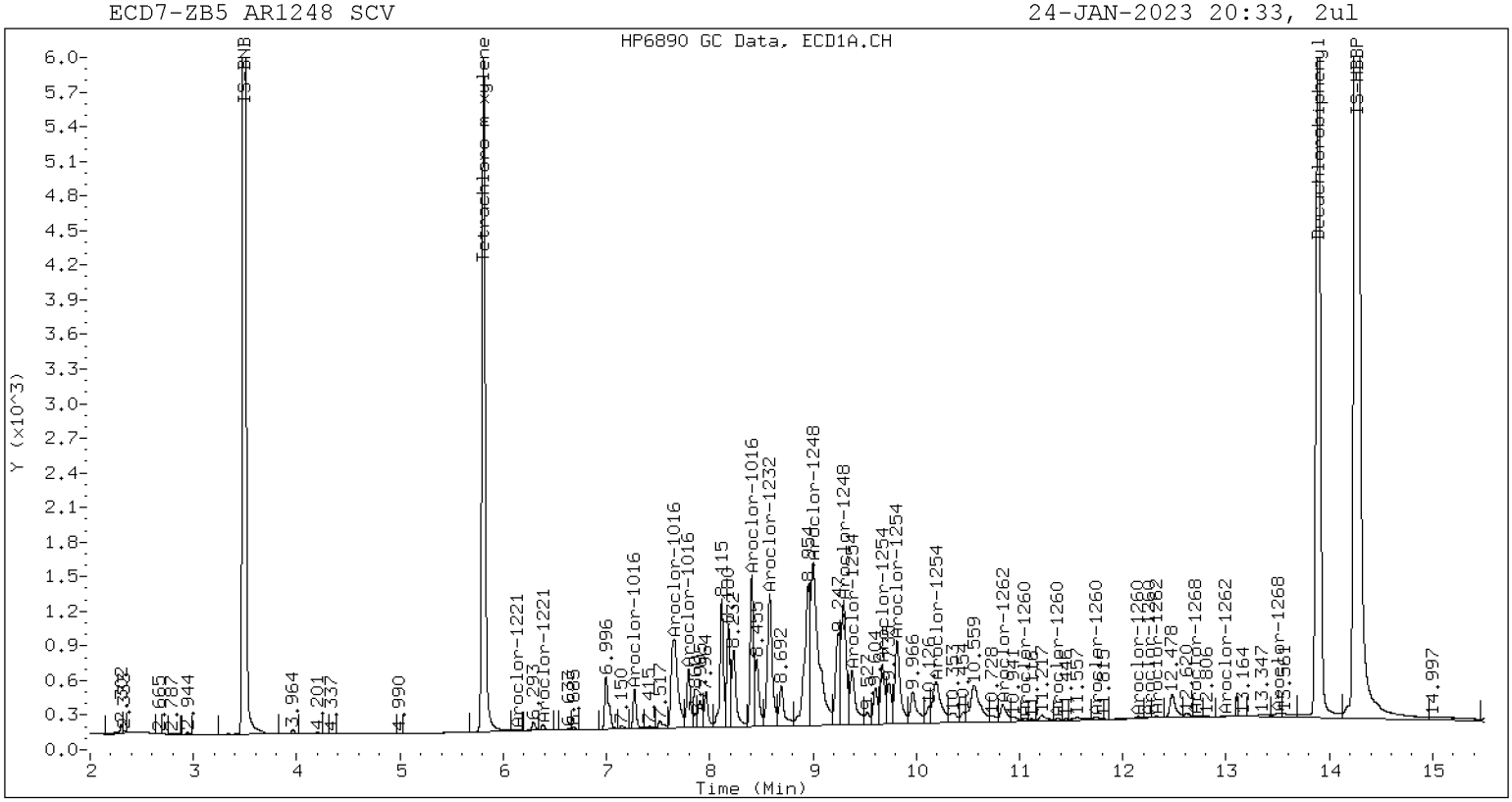
Total PCB Area Col2 (5.787 - 14.020) = 742749 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

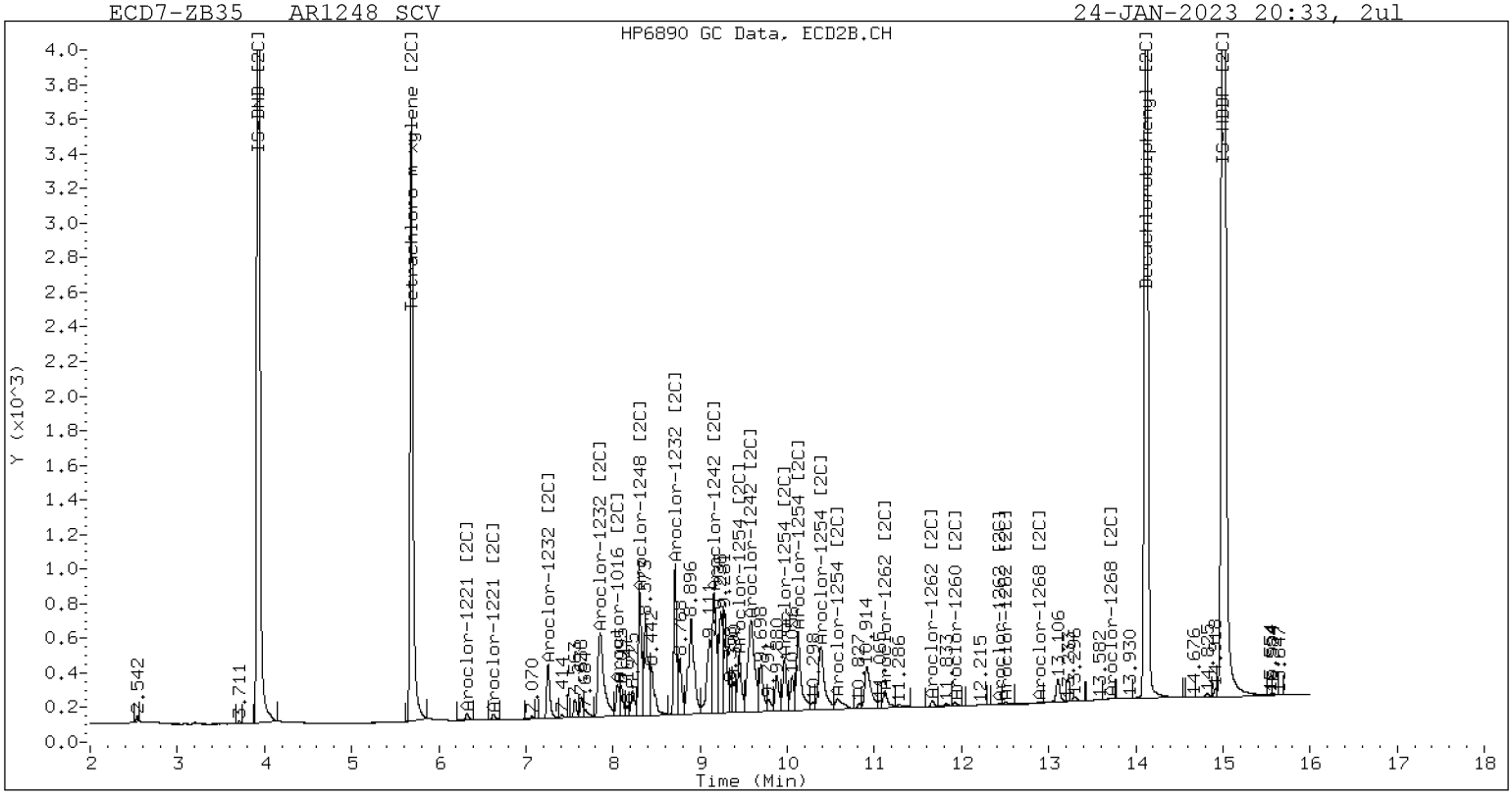
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248 SCV 24-JAN-2023 20:33, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248 SCV 24-JAN-2023 20:33, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242327ECD7.D
Data file 2: /230124.b/230124.b/01242327ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254 SCV
Client ID:
Injection Date: 24-JAN-2023 20:54
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	261398	5.686	-0.001	169839	36.7	36.6	0.1	Tetrachloro-m-xylene
13.892	0.001	383983	14.121	0.001	323233	37.1	39.5	6.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	504424	0.2
Hexabromobiphenyl	647433	968338	49.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	342969	1.8
Hexabromobiphenyl	382032	515045	34.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.273	0.003	320	1.7	1	7.258	0.003	332	1.8
Aroclor-1016	2	7.658	0.008	991	1.6	2	---			0.0
Aroclor-1016	3	7.795	0.007	662	2.3	3	8.097	0.047	515	3.1
Aroclor-1016	4	8.408	0.005	21378	116.3	4	8.307	0.002	20446	156.8
	Total Col1Ave (4 peaks):				30.5	Total Col2Ave (3 peaks):				53.9 RPD = 55*
	Corrected Ave (3 peaks):				1.9	Corrected Ave: < 3 Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.325	0.026	1749	31.7
Aroclor-1221	3	---			0.0	3	6.633	0.011	321	3.5
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	7.258	0.001	332	3.9
Aroclor-1232	3	7.658	-0.000	991	3.8	3	---			0.0
Aroclor-1232	4	8.587	0.003	8887	79.1	4	8.715	0.001	14030	290.5
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	7.273	0.002	320	2.1	1	7.258	0.002	332	2.2
Aroclor-1242	2	7.658	0.003	991	2.0	2	---			0.0
Aroclor-1242	3	8.408	0.002	21378	142.3	3	9.164	0.004	26593	254.9
Aroclor-1242	4	8.587	0.006	8887	39.2	4	9.543	-0.043	34385	248.7
	Total Col1Ave (4 peaks):				46.4	Total Col2Ave (3 peaks):				168.6 RPD = 114*
	Corrected Ave (3 peaks):				14.4	Corrected Ave: < 3 Peaks				
Aroclor-1248	1	8.408	0.003	21378	84.7	1	8.307	0.001	20446	131.9
Aroclor-1248	2	8.587	0.007	8887	27.6	2	8.715	0.003	14030	84.1
Aroclor-1248	3	8.995	-0.004	110289	179.1	3	9.164	0.007	26593	130.4
Aroclor-1248	4	9.300	0.007	113143	371.2	4	9.543	-0.038	34385	136.4
	Total Col1Ave (4 peaks):				165.7	Total Col2Ave (4 peaks):				120.7 RPD = 31
	Corrected Ave (3 peaks):				97.2	Corrected Ave (3 peaks):				115.5 RPD = 17
Aroclor-1254	1	9.300	0.002	113143	220.1	1	9.449	0.001	56453	226.9
Aroclor-1254	2	9.379	0.001	49468	225.4	2	9.970	0.001	45325	225.4
Aroclor-1254	3	9.671	0.002	72811	221.0	3	10.122	0.002	97044	221.2
Aroclor-1254	4	9.811	0.002	140530	217.7	4	10.374	0.002	98778	225.2
Aroclor-1254	5	10.182	0.005	92254	219.8	5	10.570	0.001	57171	234.0
	Total Col1Ave (5 peaks):				220.8	Total Col2Ave (5 peaks):				226.5 RPD = 3
	Corrected Ave (4 peaks):				219.7	Corrected Ave (4 peaks):				224.7 RPD = 2
Aroclor-1260	1	11.045	0.002	8960	16.5	1	11.661	0.008	26985	72.6
Aroclor-1260	2	11.364	0.004	9237	16.5	2	11.923	0.006	19882	21.2
Aroclor-1260	3	11.741	0.007	21268	14.5	3	12.505	0.069	13190	56.3
Aroclor-1260	4	12.146	0.007	19041	25.1	4	---			0.0
Aroclor-1260	5	12.321	0.077	1835	5.5	NS	---			----
	Total Col1Ave (5 peaks):				15.6	Total Col2Ave (3 peaks):				50.0 RPD = 105*
	Corrected Ave (4 peaks):				13.3	Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.832	0.000	157590	402.4	1	11.119	-0.081	92414	183.3
Aroclor-1262	2	12.321	0.075	1835	3.0	2	11.661	0.008	26985	63.0
Aroclor-1262	3	---			0.0	3	12.505	0.071	13190	28.9
Aroclor-1262	4	12.995	0.006	843	1.4	4	---			0.0
	Total Col1Ave (3 peaks):				135.6	Total Col2Ave (3 peaks):				91.7 RPD = 39
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.321	0.076	1835	1.1	1	12.505	0.072	13190	11.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.720	0.021	1314	1.0	3	12.891	-0.002	169	0.2
Aroclor-1268	4	13.504	0.016	1169	0.3	4	13.706	-0.002	1132	0.3
	Total Col1Ave (3 peaks):				0.8	Total Col2Ave (3 peaks):				3.8 RPD = 130*
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 1507519 Col1 Total PCB = 0.3 ppm*

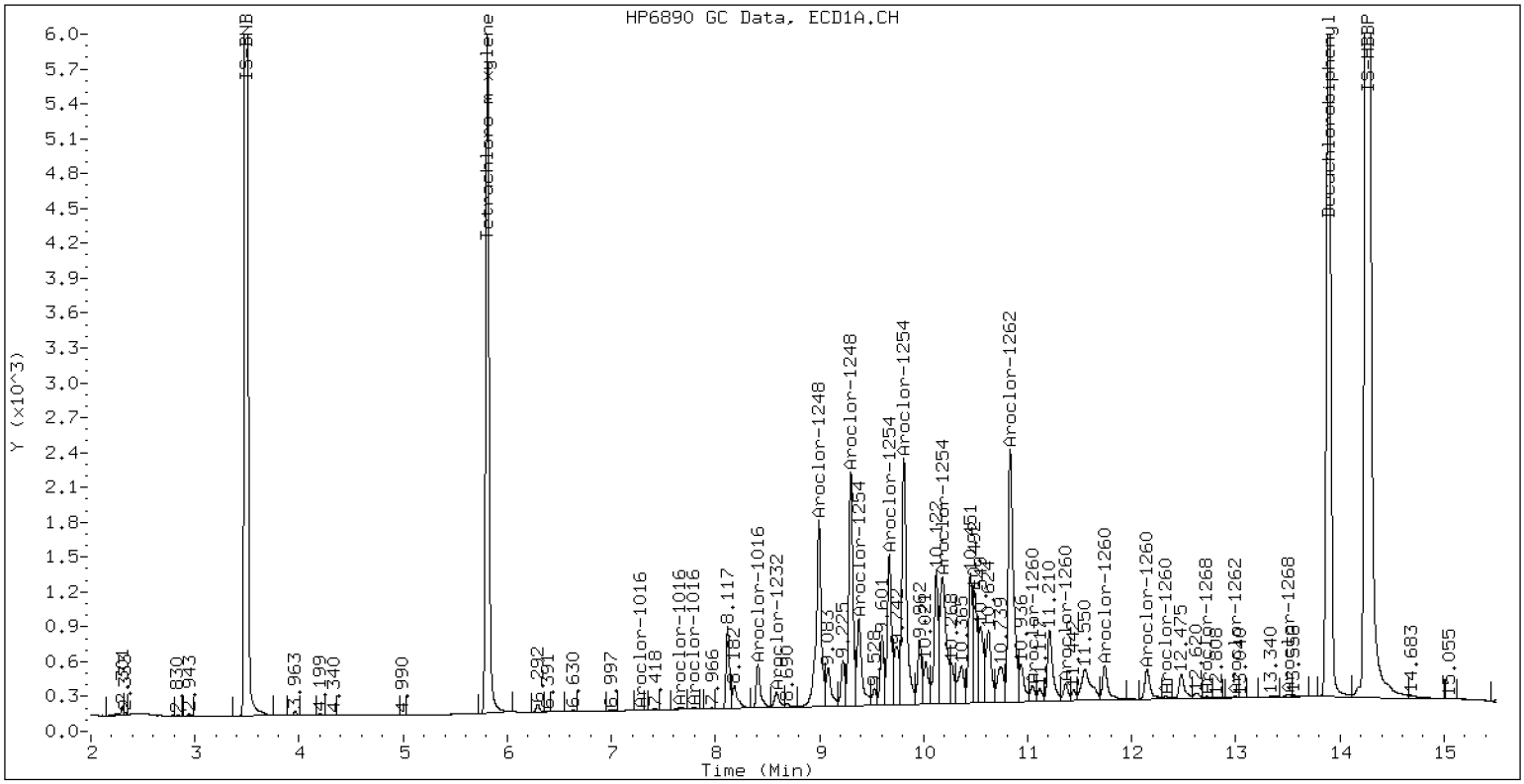
Total PCB Area Col2 (5.787 - 14.020) = 951047 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

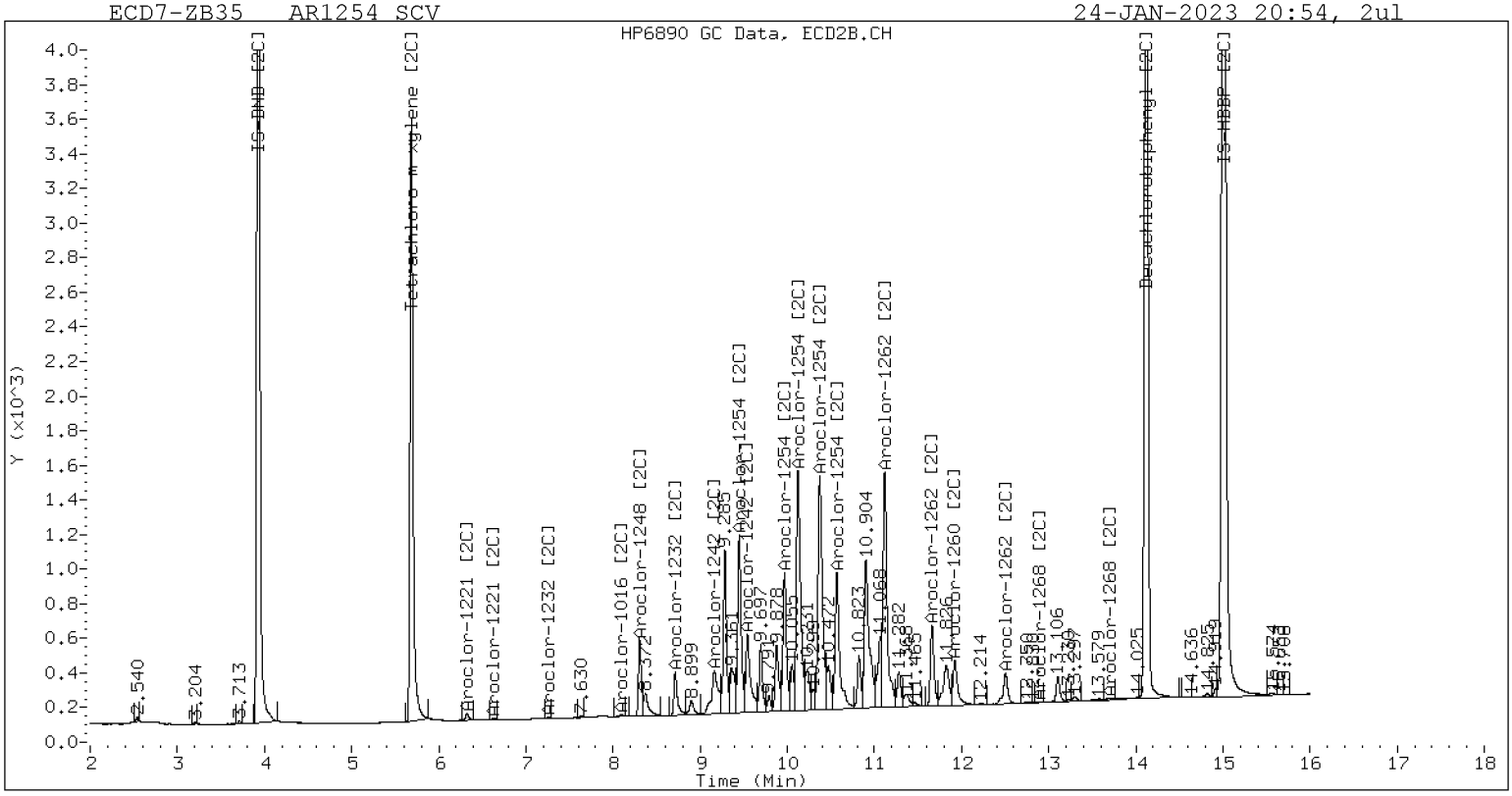
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254 SCV 24-JAN-2023 20:54, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254 SCV 24-JAN-2023 20:54, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242328ECD7.D
Data file 2: /230124.b/230124.b/01242328ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162 SCV
Client ID:
Injection Date: 24-JAN-2023 21:15
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	265357	5.685	-0.001	170984	37.3	37.2	0.3	Tetrachloro-m-xylene
13.891	-0.001	397332	14.119	-0.001	326981	37.5	39.5	5.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503473	0.0
Hexabromobiphenyl	647433	991997	53.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	340361	1.0
Hexabromobiphenyl	382032	521975	36.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	5326	28.5	1	7.257	0.002	6708	36.3
Aroclor-1016	2	7.664	0.013	11965	19.3	2	7.856	0.005	7233	17.9
Aroclor-1016	3	7.797	0.009	6015	21.1	3	8.058	0.008	2997	18.2
Aroclor-1016	4	8.410	0.006	3771	20.6	4	8.308	0.002	2065	16.0
Total Col1Ave (4 peaks):					22.4	Total Col2Ave (4 peaks):				22.1 RPD = 1
Corrected Ave (3 peaks):					20.3	Corrected Ave (3 peaks):				17.3 RPD = 16
Aroclor-1221	1	4.732	-0.000	9097	244.5	1	4.959	-0.000	6157	246.8
Aroclor-1221	2	6.133	-0.000	16114	211.8	2	6.297	-0.001	12807	234.2
Aroclor-1221	3	6.384	0.000	40299	228.1	3	6.622	-0.000	21707	235.2
Total Col1Ave (3 peaks):					228.1	Total Col2Ave (3 peaks):				238.7 RPD = 5
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.732	-0.001	9097	391.6	1	4.959	-0.001	6157	406.9
Aroclor-1232	2	6.133	0.000	16114	307.8	2	7.257	0.000	6708	79.2
Aroclor-1232	3	7.664	0.005	11965	45.7	3	7.856	0.001	7233	41.9
Aroclor-1232	4	8.589	0.004	2837	25.3	4	8.716	0.002	1869	39.0
Total Col1Ave (4 peaks):					192.6	Total Col2Ave (4 peaks):				141.7 RPD = 30
Corrected Ave (3 peaks):					126.3	Corrected Ave (3 peaks):				53.4 RPD = 81*
Aroclor-1242	1	7.272	0.001	5326	34.5	1	7.257	0.001	6708	45.1
Aroclor-1242	2	7.664	0.008	11965	23.7	2	7.856	0.003	7233	21.9
Aroclor-1242	3	8.410	0.004	3771	25.2	3	9.169	0.009	1956	18.9
Aroclor-1242	4	8.589	0.007	2837	12.5	4	9.544	-0.043	5978	43.6
Total Col1Ave (4 peaks):					24.0	Total Col2Ave (4 peaks):				32.3 RPD = 30
Corrected Ave (3 peaks):					20.5	Corrected Ave (3 peaks):				28.1 RPD = 31
Aroclor-1248	1	8.410	0.005	3771	15.0	1	8.308	0.002	2065	13.4
Aroclor-1248	2	8.589	0.008	2837	8.8	2	8.716	0.004	1869	11.3
Aroclor-1248	3	8.997	-0.002	36022	58.6	3	9.169	0.012	1956	9.7
Aroclor-1248	4	9.305	0.011	30853	101.4	4	9.544	-0.038	5978	23.9
Total Col1Ave (4 peaks):					46.0	Total Col2Ave (4 peaks):				14.6 RPD = 104*
Corrected Ave (3 peaks):					27.5	Corrected Ave (3 peaks):				11.5 RPD = 82*
Aroclor-1254	1	9.305	0.006	30853	60.1	1	9.451	0.003	17617	71.3
Aroclor-1254	2	9.376	-0.002	5370	24.5	2	9.970	0.001	2849	14.3
Aroclor-1254	3	9.673	0.003	5543	16.9	3	10.146	0.026	88151	202.5
Aroclor-1254	4	9.810	0.002	14544	22.6	4	10.370	-0.002	107074	245.9
Aroclor-1254	5	10.121	-0.056	180016	429.7	5	10.567	-0.002	141725	584.5
Total Col1Ave (5 peaks):					110.8	Total Col2Ave (5 peaks):				223.7 RPD = 68*
Corrected Ave (4 peaks):					31.0	Corrected Ave (4 peaks):				133.5 RPD = 125*
Aroclor-1260	1	11.044	0.001	310806	558.4	1	11.652	-0.001	187682	498.4
Aroclor-1260	2	11.361	0.000	263161	460.0	2	11.917	-0.000	450612	473.0
Aroclor-1260	3	11.735	0.000	629605	418.0	3	12.433	-0.003	206042	867.7
Aroclor-1260	4	12.141	0.001	210012	269.9	4	12.502	-0.000	326457	529.5
Aroclor-1260	5	12.244	-0.000	268425	791.3	NS	---			----
Total Col1Ave (5 peaks):					499.5	Total Col2Ave (4 peaks):				592.1 RPD = 17
Corrected Ave (4 peaks):					426.6	Corrected Ave (3 peaks):				500.3 RPD = 16
Aroclor-1262	1	10.828	-0.005	171094	426.5	1	11.200	0.000	219731	430.1
Aroclor-1262	2	12.244	-0.002	268425	423.9	2	11.652	-0.001	187682	432.0
Aroclor-1262	3	12.319	-0.002	291581	424.2	3	12.433	-0.001	206042	445.4
Aroclor-1262	4	12.988	-0.001	257735	411.5	4	12.502	-0.002	326457	440.6
Total Col1Ave (4 peaks):					421.5	Total Col2Ave (4 peaks):				437.0 RPD = 4
Corrected Ave (3 peaks):					419.8	Corrected Ave (3 peaks):				434.3 RPD = 3
Aroclor-1268	1	12.244	-0.001	268425	163.8	1	12.433	-0.000	206042	169.0
Aroclor-1268	2	12.319	0.001	291581	178.4	2	12.502	0.000	326457	251.7
Aroclor-1268	3	12.725	0.026	108693	80.3	3	12.892	-0.001	10062	9.3
Aroclor-1268	4	13.486	-0.003	95646	23.8	4	13.710	0.001	59437	17.8
Total Col1Ave (4 peaks):					111.6	Total Col2Ave (4 peaks):				112.0 RPD = 0

Corrected Ave (3 peaks): 89.3 Corrected Ave (3 peaks): 65.4 RPD = 31

Total PCB Area Col1 (5.909 - 13.792) = 4409992 Col1 Total PCB = 0.8 ppm*

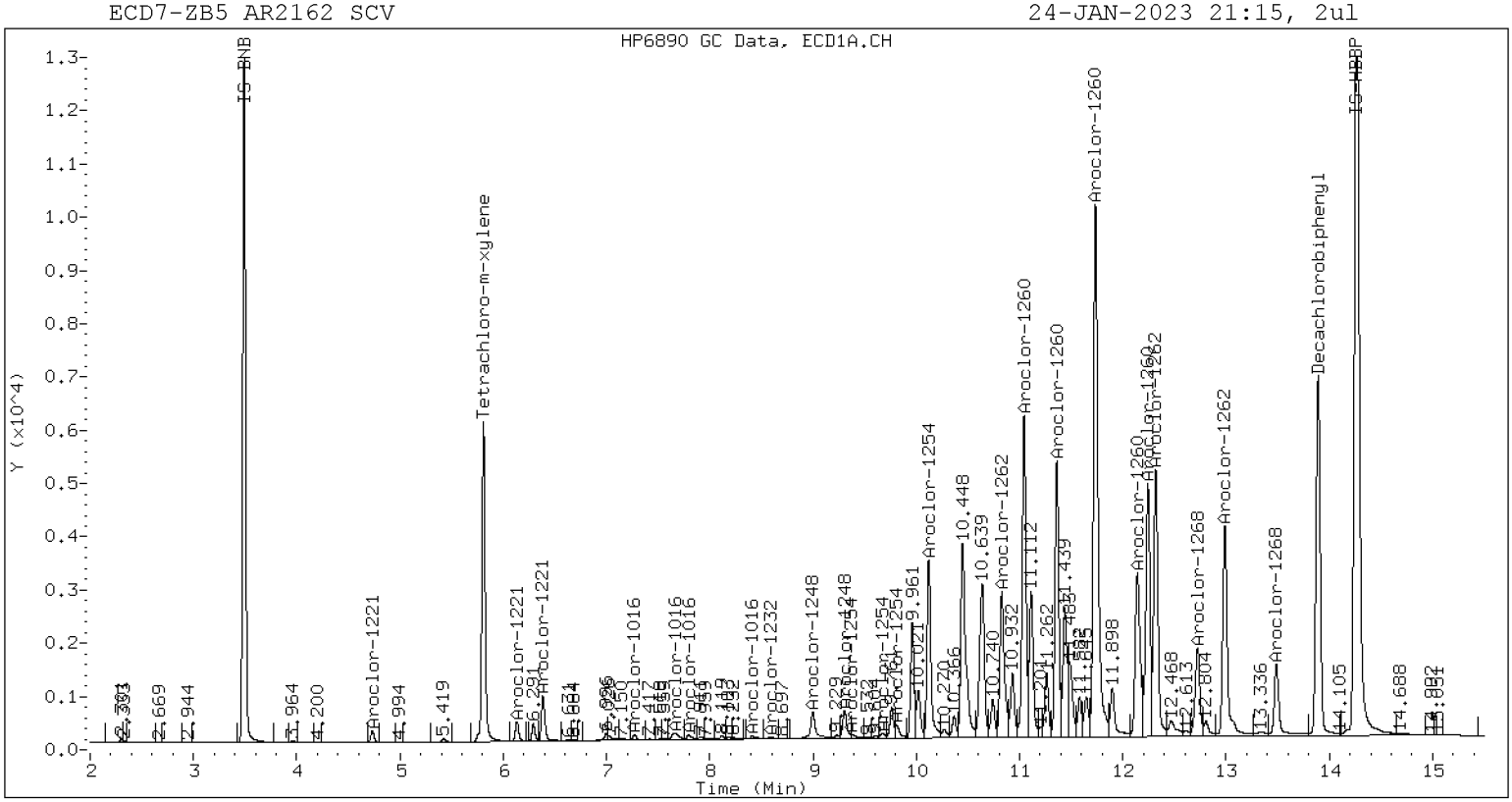
Total PCB Area Col2 (5.787 - 14.020) = 2874073 Col2 Total PCB = 0.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

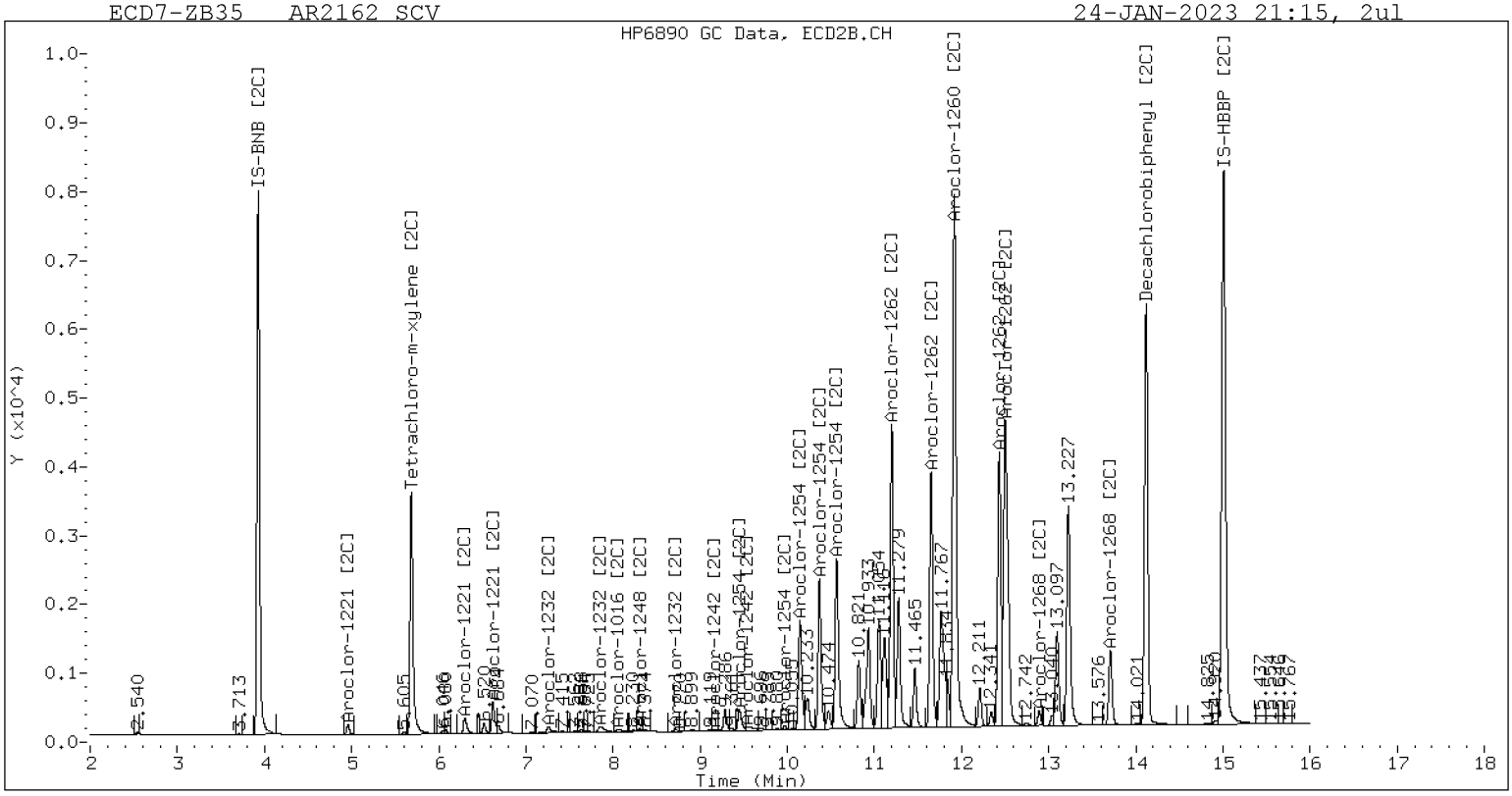
PCB Dual Column Chromatograms

ECD7-ZB5 AR2162 SCV 24-JAN-2023 21:15, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162 SCV 24-JAN-2023 21:15, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242329ECD7.D
Data file 2: /230124.b/230124.b/01242329ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268 SCV
Client ID:
Injection Date: 24-JAN-2023 21:36
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.810	0.001	250455	5.687	0.000	162795	36.4	36.3	0.2	Tetrachloro-m-xylene
13.892	0.000	551946	14.120	0.000	461901	54.6	57.9	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	487061	-3.2
Hexabromobiphenyl	647433	944934	46.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331721	-1.5
Hexabromobiphenyl	382032	502401	31.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016 1	7.272	0.002	19363	107.0	1	7.256	0.001	19791	110.0
Aroclor-1016 2	7.659	0.009	58630	97.8	2	7.856	0.005	40139	101.8
Aroclor-1016 3	7.794	0.006	28286	102.5	3	8.055	0.005	17412	108.2
Aroclor-1016 4	8.408	0.004	17373	97.9	4	8.308	0.003	11962	94.8
Total Col1Ave (4 peaks):				101.3	Total Col2Ave (4 peaks):				103.7 RPD = 2
Corrected Ave (3 peaks):				99.4	Corrected Ave (3 peaks):				101.6 RPD = 2
Aroclor-1221 1	4.735	0.002	5022	139.5	1	4.961	0.002	3409	140.2
Aroclor-1221 2	6.134	0.001	8987	122.1	2	6.299	0.001	7677	144.1
Aroclor-1221 3	6.385	0.001	29368	171.8	3	6.624	0.001	16198	180.1
Total Col1Ave (3 peaks):				144.5	Total Col2Ave (3 peaks):				154.8 RPD = 7
Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				
Aroclor-1232 1	4.735	0.002	5022	223.5	1	4.961	0.002	3409	231.1
Aroclor-1232 2	6.134	0.001	8987	177.4	2	7.256	-0.001	19791	239.8
Aroclor-1232 3	7.659	0.001	58630	231.5	3	7.856	0.001	40139	238.8
Aroclor-1232 4	8.585	0.000	24991	230.5	4	8.715	0.001	11476	245.7
Total Col1Ave (4 peaks):				215.7	Total Col2Ave (4 peaks):				238.8 RPD = 10
Corrected Ave (3 peaks):				210.5	Corrected Ave (3 peaks):				236.6 RPD = 12
Aroclor-1242 1	7.272	0.001	19363	129.8	1	7.256	0.000	19791	136.4
Aroclor-1242 2	7.659	0.004	58630	120.1	2	7.856	0.002	40139	124.6
Aroclor-1242 3	8.408	0.001	17373	119.8	3	9.166	0.006	11813	117.1
Aroclor-1242 4	8.585	0.003	24991	114.1	4	9.595	0.009	16549	123.7
Total Col1Ave (4 peaks):				121.0	Total Col2Ave (4 peaks):				125.4 RPD = 4
Corrected Ave (3 peaks):				118.0	Corrected Ave (3 peaks):				121.8 RPD = 3
Aroclor-1248 1	8.408	0.002	17373	71.3	1	8.308	0.003	11962	79.8
Aroclor-1248 2	8.585	0.005	24991	80.4	2	8.715	0.003	11476	71.1
Aroclor-1248 3	9.001	0.002	67631	113.8	3	9.166	0.009	11813	59.9
Aroclor-1248 4	9.293	-0.001	30983	105.3	4	9.595	0.014	16549	67.9
Total Col1Ave (4 peaks):				92.7	Total Col2Ave (4 peaks):				69.7 RPD = 28
Corrected Ave (3 peaks):				85.7	Corrected Ave (3 peaks):				66.3 RPD = 26
Aroclor-1254 1	9.293	-0.006	30983	62.4	1	9.451	0.003	3749	15.6
Aroclor-1254 2	9.381	0.003	9071	42.8	2	9.974	0.005	2452	12.6
Aroclor-1254 3	9.678	0.009	5199	16.3	3	10.131	0.010	4718	11.1
Aroclor-1254 4	9.820	0.012	8864	14.2	4	10.389	0.018	4224	10.0
Aroclor-1254 5	10.195	0.018	8085	19.9	5	10.573	0.004	1573	6.7
Total Col1Ave (5 peaks):				31.1	Total Col2Ave (5 peaks):				11.2 RPD = 94*
Corrected Ave (4 peaks):				23.3	Corrected Ave (4 peaks):				10.1 RPD = 79*
Aroclor-1260 1	11.050	0.006	66852	126.1	1	11.647	-0.006	57235	157.9
Aroclor-1260 2	11.366	0.006	6269	11.5	2	11.919	0.002	25368	27.7
Aroclor-1260 3	11.741	0.007	41446	28.9	3	12.434	-0.002	262014	1146.4
Aroclor-1260 4	12.052	-0.088	2691	3.6	4	12.502	-0.000	277060	466.9
Aroclor-1260 5	12.245	0.002	349286	1080.9	NS	---			----
Total Col1Ave (5 peaks):				250.2	Total Col2Ave (4 peaks):				449.7 RPD = 57*
Corrected Ave (4 peaks):				42.5	Corrected Ave (3 peaks):				217.5 RPD = 135*
Aroclor-1262 1	10.838	0.006	4520	11.8	1	11.203	0.003	40576	82.5
Aroclor-1262 2	12.245	-0.000	349286	579.1	2	11.647	-0.006	57235	136.9
Aroclor-1262 3	12.318	-0.002	349715	534.1	3	12.434	-0.001	262014	588.4
Aroclor-1262 4	12.988	-0.001	141905	237.8	4	12.502	-0.002	277060	388.5
Total Col1Ave (4 peaks):				340.7	Total Col2Ave (4 peaks):				299.1 RPD = 13
Corrected Ave (3 peaks):				261.2	Corrected Ave (3 peaks):				202.6 RPD = 25
Aroclor-1268 1	12.245	0.001	349286	223.8	1	12.434	0.000	262014	223.3
Aroclor-1268 2	12.318	0.000	349715	224.6	2	12.502	0.000	277060	221.9
Aroclor-1268 3	12.699	0.000	289328	224.3	3	12.893	-0.000	208928	201.0
Aroclor-1268 4	13.490	0.001	849299	222.1	4	13.710	0.002	725831	226.1
Total Col1Ave (4 peaks):				223.7	Total Col2Ave (4 peaks):				218.1 RPD = 3

Corrected Ave (3 peaks): 223.4 Corrected Ave (3 peaks): 215.4 RPD = 4

Total PCB Area Col1 (5.909 - 13.792) = 2866092 Col1 Total PCB = 0.5 ppm*

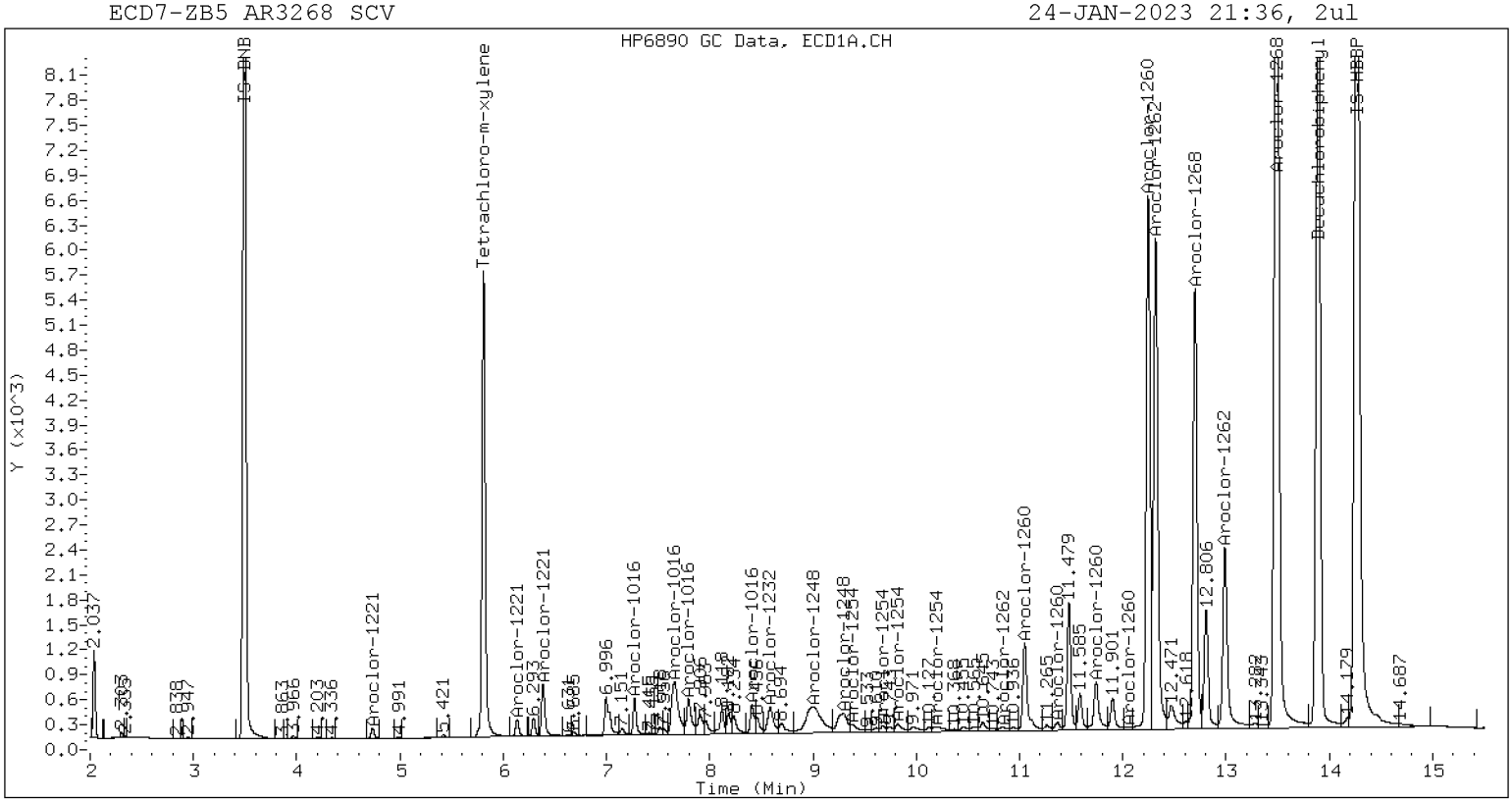
Total PCB Area Col2 (5.787 - 14.020) = 2084481 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

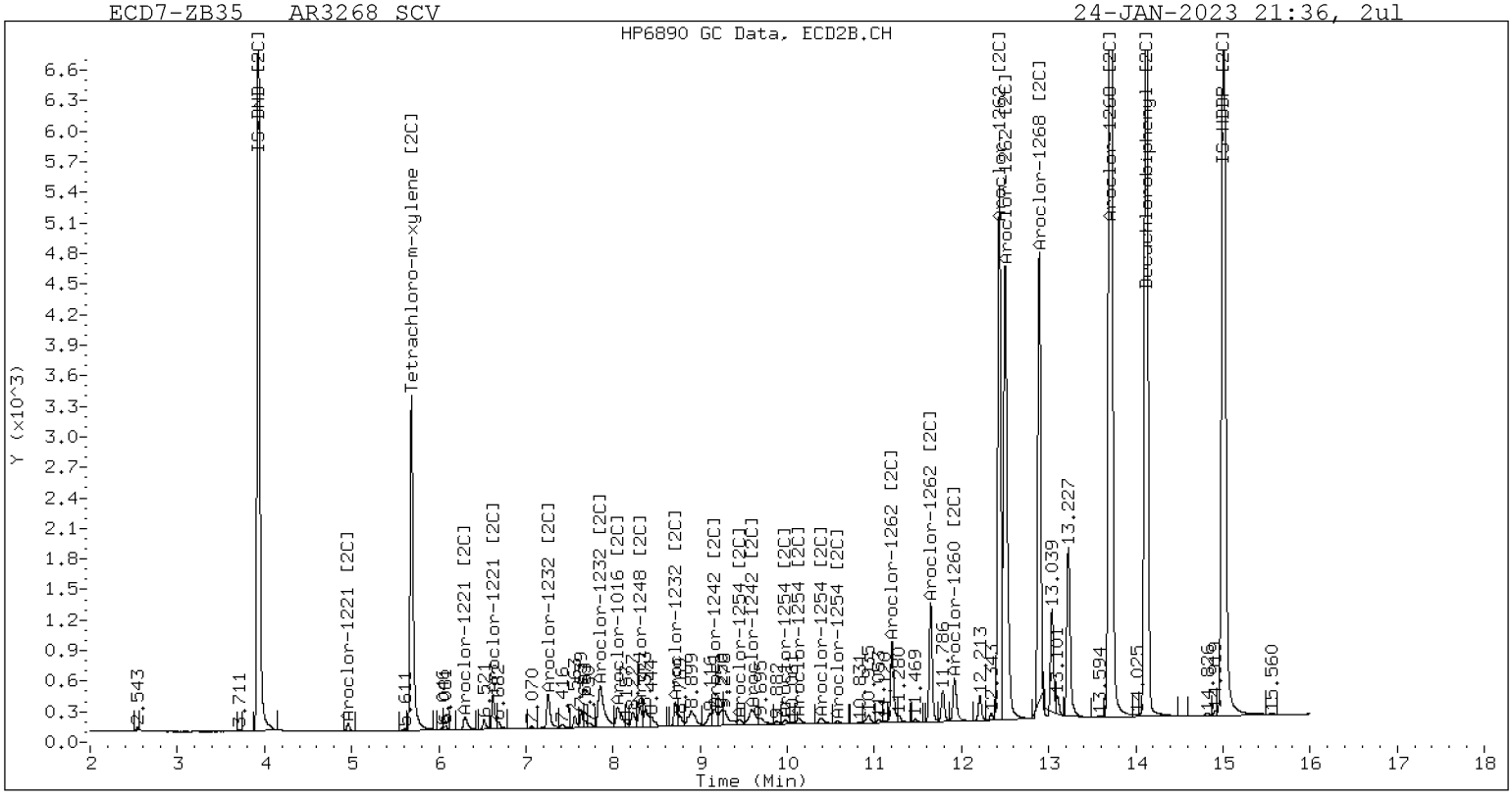
PCB Dual Column Chromatograms

ECD7-ZB5 AR3268 SCV 24-JAN-2023 21:36, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR3268 SCV 24-JAN-2023 21:36, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230124.b/01242330ECD7.D ARI ID: DDTS

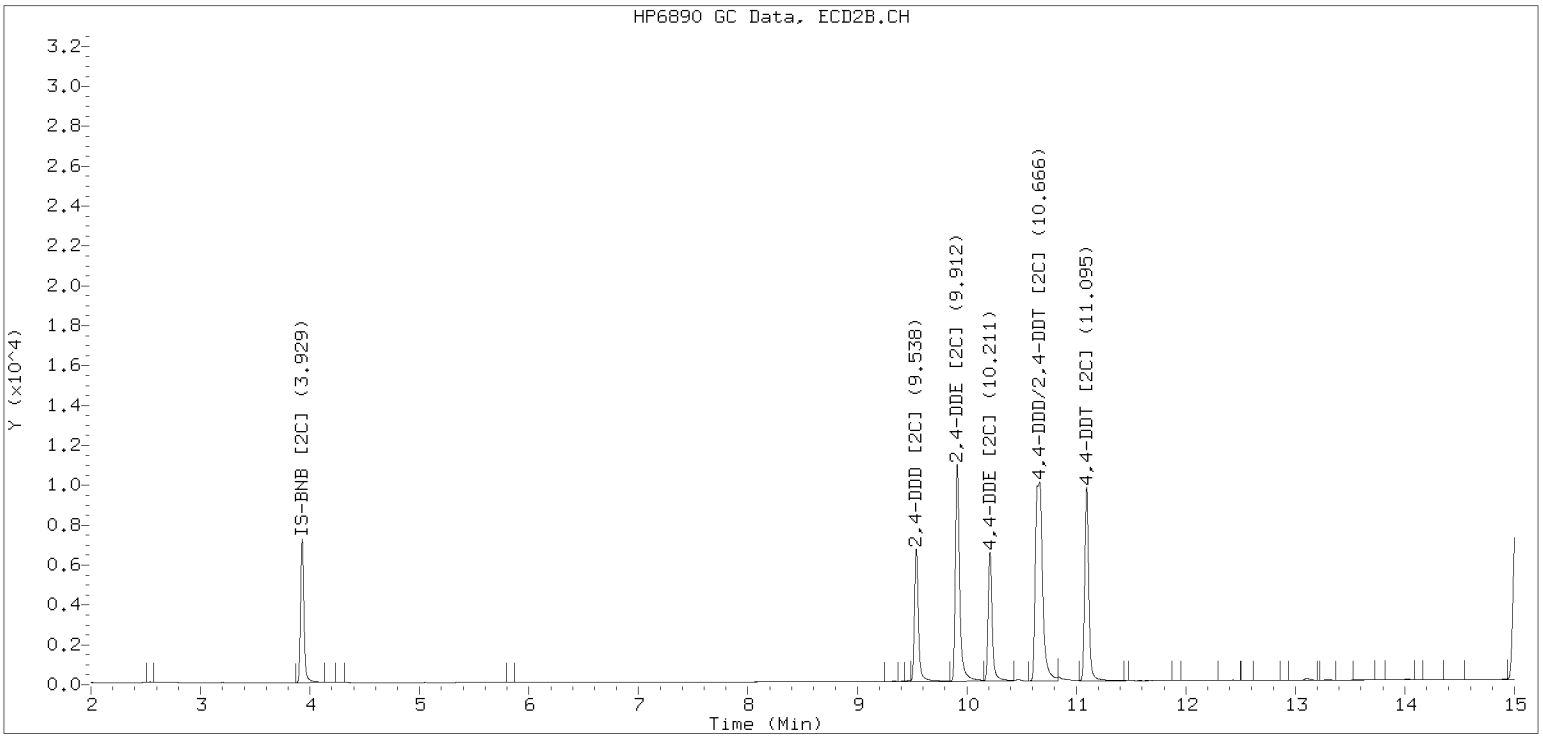
ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
9.263	0.000	519078	9.912	0.000	601473	0.100	0.100	0.0	2,4-DDE
10.296	0.000	1468204	10.666	0.000	915087	0.100	0.200#	66.7*	2,4-DDT
9.687	0.000	883988	10.211	0.000	339715	0.100	0.100	0.0	4,4-DDE
0.000	-10.281	0	10.666	0.000	915087	0.000	0.200#	----	4,4-DDD

\# Indicates value is from co-eluting peaks
* Indicates RPD > 40%

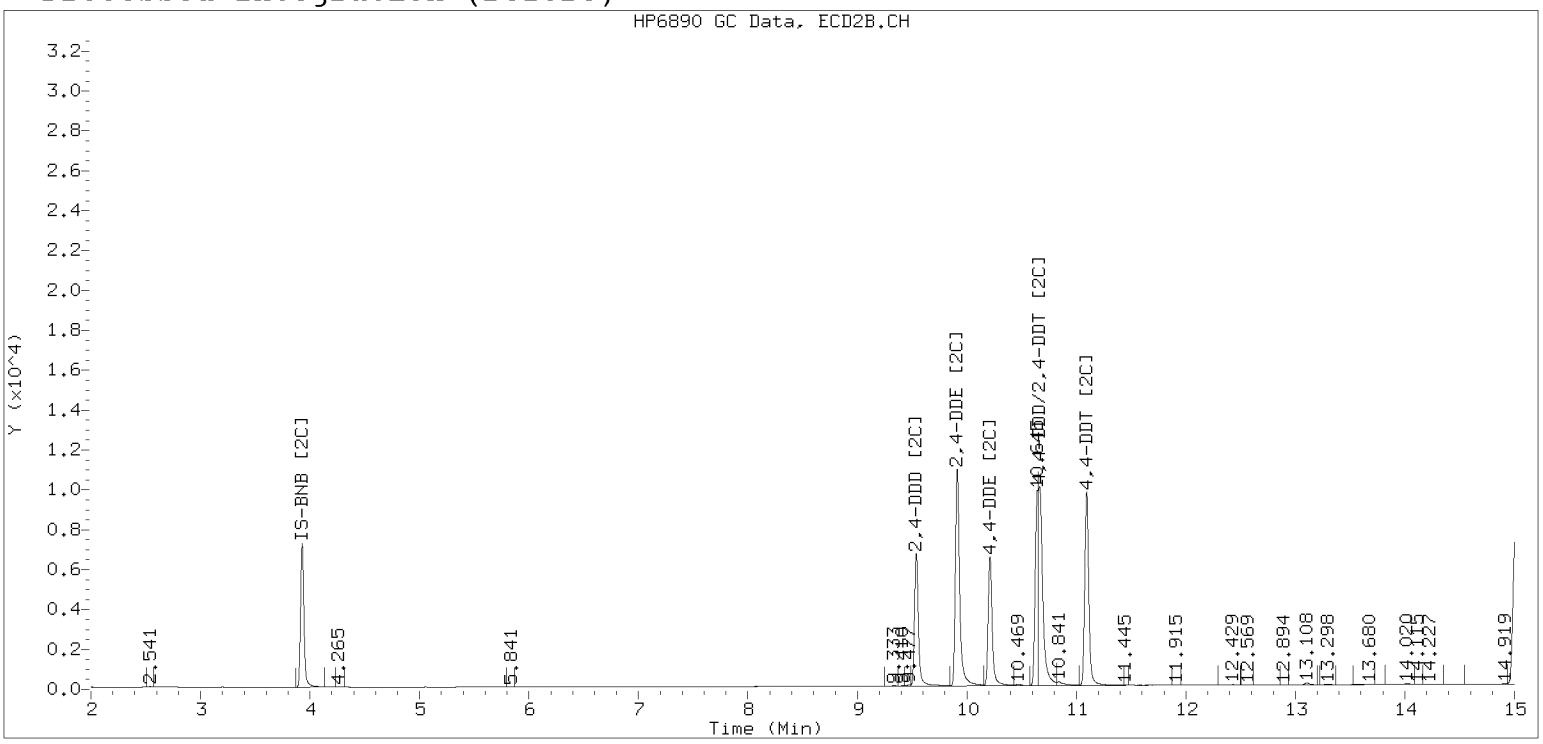
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230124.b/230124.b/01242330ECD7.D Injection Date: 24-JAN-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242331ECD7.D
Data file 2: /230124.b/230124.b/01242331ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: DDT BD
Client ID:
Injection Date: 24-JAN-2023 22:18
Report Date: 01/25/2023 10:54
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	249607	0.000	0.000	0	36.2	0.1	198.6*	Tetrachloro-m-xylene
13.893	0.001	342925	0.000	0.000	0	33.3	0.1	198.4*	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	488086	-3.0
Hexabromobiphenyl	647433	963404	48.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	334787	-0.6
Hexabromobiphenyl	382032	334787	-12.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	3.929	-0.000	334787	80.0
Aroclor-1016	2	---			0.0	NS	---			----
Aroclor-1016	3	---			0.0	NS	---			----
Aroclor-1016	4	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	9.924	0.012	8335	0.0
Aroclor-1221	2	---			0.0	NS	---			----
Aroclor-1221	3	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	NS	---			----
Aroclor-1232	3	---			0.0	NS	---			----
Aroclor-1232	4	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	NS	---			----
Aroclor-1242	3	---			0.0	NS	---			----
Aroclor-1242	4	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	10.681	0.016	29738	0.0
Aroclor-1248	2	---			0.0	NS	---			----
Aroclor-1248	3	8.973	-0.026	2304	3.9	NS	---			----
Aroclor-1248	4	9.235	-0.059	1484	5.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	9.235	-0.064	1484	3.0	1	11.098	0.003	696435	0.1
Aroclor-1254	2	9.378	-0.000	295	1.4	NS	---			----
Aroclor-1254	3	9.703	0.034	11396	35.8	NS	---			----
Aroclor-1254	4	---			0.0	NS	---			----
Aroclor-1254	5	10.272	0.095	32481	80.0	NS	---			----
	Total Col1Ave (4 peaks):				30.0	Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	11.115	0.071	9308	17.2	1	---			0.0
Aroclor-1260	2	11.344	-0.016	232461	418.4	NS	---			----
Aroclor-1260	3	11.698	-0.036	294	0.2	NS	---			----
Aroclor-1260	4	---			0.0	NS	---			----
Aroclor-1260	5	---			0.0	NS	---			----
	Total Col1Ave (3 peaks):				145.3	Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	10.763	-0.070	892438	2290.6	1	---			0.0
Aroclor-1262	2	---			0.0	NS	---			----
Aroclor-1262	3	---			0.0	NS	---			----
Aroclor-1262	4	12.990	0.001	748	1.2	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	NS	---			----
Aroclor-1268	3	12.620	-0.079	4678	3.6	NS	---			----
Aroclor-1268	4	13.510	0.021	3115	0.8	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 1961348 Col1 Total PCB = 0.3 ppm*

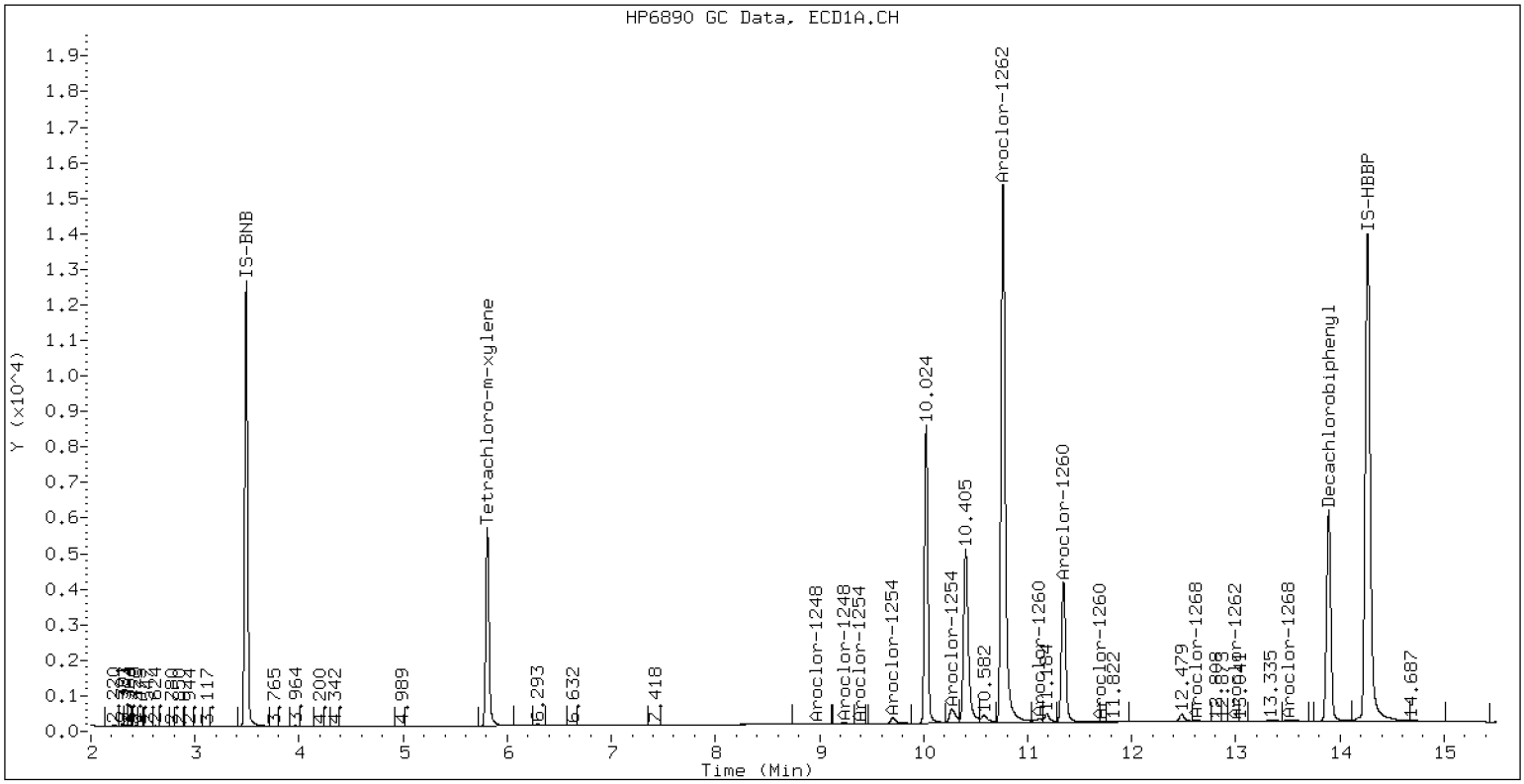
Total PCB Area Col2 (5.909 - 13.792) = 1177441 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

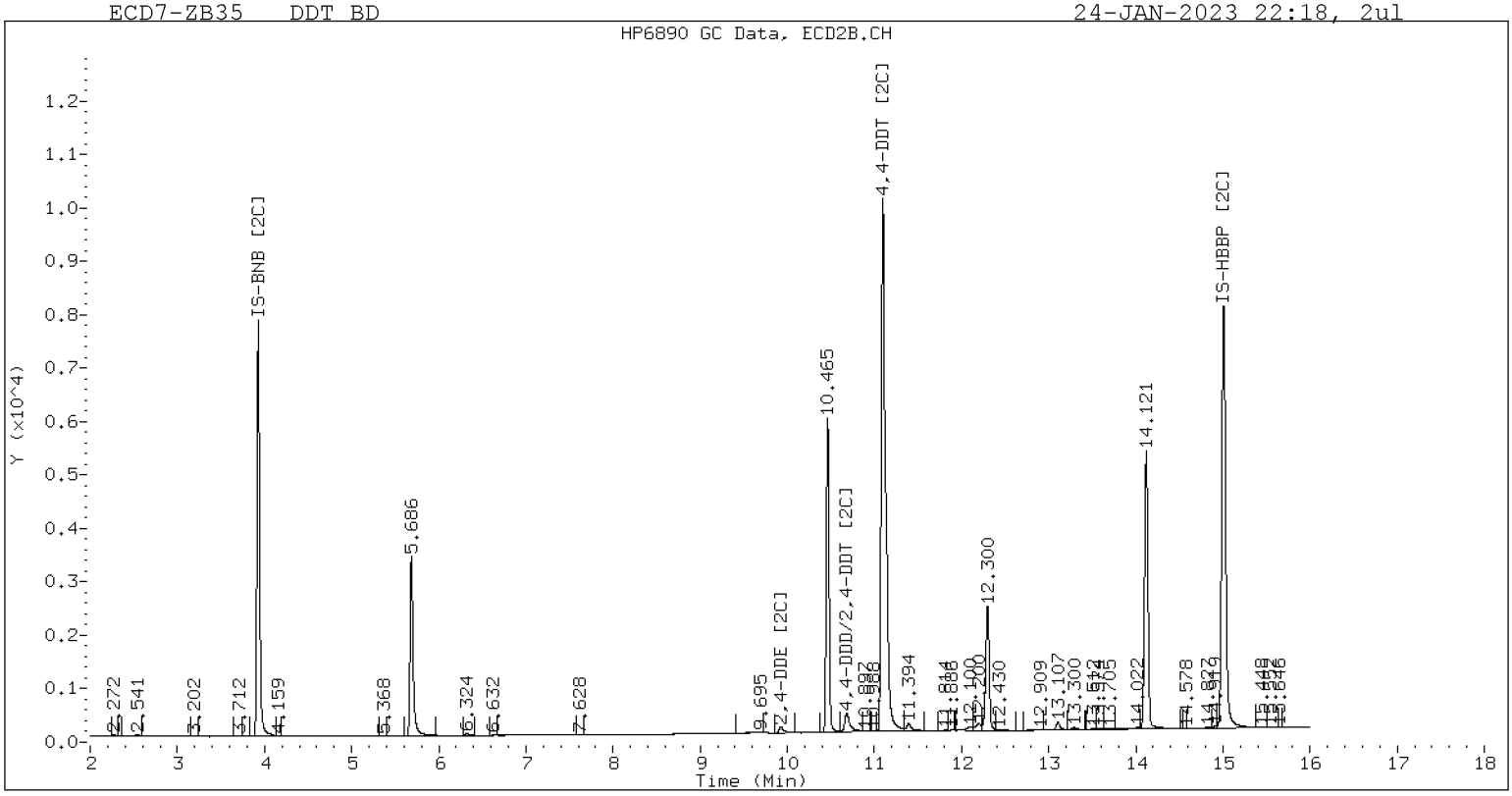
PCB Dual Column Chromatograms

ECD7-ZB5 DDT BD 24-JAN-2023 22:18, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 DDT BD 24-JAN-2023 22:18, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00061
Laboratory ID: SLA0281-SCV1
Sequence: SLA0281
Sequence Name: AR1660SCV1
Standard ID: K007655

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1016	250.00	217	-13.2	20.00
Aroclor 1016 [2C]	250.00	220	-11.9	20.00
Aroclor 1260	250.00	211	-15.7	20.00
Aroclor 1260 [2C]	250.00	238	-4.9	20.00
Decachlorobiphenyl	40.000	37.9	-5.1	20.00
Tetrachlorometaxylene	40.000	37.5	-6.2	20.00
Decachlorobiphenyl [2C]	40.000	40.2	0.6	20.00
Tetrachlorometaxylene [2C]	40.000	37.3	-6.8	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242324ECD7.D
Data file 2: /230124.b/230124.b/01242324ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 SCV
Client ID:
Injection Date: 24-JAN-2023 19:51
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	268739	5.686	-0.001	172961	37.5	37.3	0.6	Tetrachloro-m-xylene
13.891	-0.000	381489	14.121	0.001	320416	37.9	40.2	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	506576	0.6
Hexabromobiphenyl	647433	940129	45.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	343102	1.8
Hexabromobiphenyl	382032	501702	31.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	40958	217.6	1	7.255	0.001	40190	216.0
Aroclor-1016	2	7.655	0.004	135282	216.9	2	7.852	0.001	90338	221.5
Aroclor-1016	3	7.791	0.003	61557	214.5	3	8.052	0.002	37810	227.2
Aroclor-1016	4	8.406	0.002	40372	218.7	4	8.306	0.000	28171	215.9
Total Col1Ave (4 peaks):					216.9	Total Col2Ave (4 peaks):				220.2 RPD = 1
Corrected Ave (3 peaks):					216.3	Corrected Ave (3 peaks):				217.8 RPD = 1
Aroclor-1221	1	4.732	-0.001	256	6.8	1	---			0.0
Aroclor-1221	2	6.131	-0.002	4742	61.9	2	6.302	0.004	5037	91.4
Aroclor-1221	3	6.384	-0.000	27448	154.4	3	6.623	-0.000	18931	203.5
Total Col1Ave (3 peaks):					74.4	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.732	-0.001	256	11.0	1	---			0.0
Aroclor-1232	2	6.131	-0.002	4742	90.0	2	7.255	-0.001	40190	470.8
Aroclor-1232	3	7.655	-0.004	135282	513.5	3	7.852	-0.002	90338	519.5
Aroclor-1232	4	8.581	-0.003	56938	504.9	4	8.713	-0.001	27776	574.9
Total Col1Ave (4 peaks):					279.8	Total Col2Ave (3 peaks):				521.7 RPD = 60*
Corrected Ave (3 peaks):					202.0	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	-0.000	40958	264.0	1	7.255	-0.000	40190	267.8
Aroclor-1242	2	7.655	-0.001	135282	266.5	2	7.852	-0.001	90338	271.0
Aroclor-1242	3	8.406	-0.001	40372	267.7	3	9.115	-0.045	15827	151.6
Aroclor-1242	4	8.581	-0.000	56938	249.9	4	9.587	0.001	3186	23.0
Total Col1Ave (4 peaks):					262.0	Total Col2Ave (4 peaks):				178.4 RPD = 38
Corrected Ave (3 peaks):					260.1	Corrected Ave (3 peaks):				147.5 RPD = 55*
Aroclor-1248	1	8.406	0.000	40372	159.3	1	8.306	0.000	28171	181.6
Aroclor-1248	2	8.581	0.001	56938	176.1	2	8.713	0.000	27776	166.4
Aroclor-1248	3	8.995	-0.004	58213	94.1	3	9.115	-0.042	15827	77.6
Aroclor-1248	4	9.304	0.010	36620	119.6	4	9.587	0.006	3186	12.6
Total Col1Ave (4 peaks):					137.3	Total Col2Ave (4 peaks):				109.6 RPD = 22
Corrected Ave (3 peaks):					124.4	Corrected Ave (3 peaks):				85.5 RPD = 37
Aroclor-1254	1	9.304	0.005	36620	70.9	1	9.450	0.002	20792	83.5
Aroclor-1254	2	---			0.0	2	9.972	0.003	2640	13.1
Aroclor-1254	3	9.673	0.003	4075	12.3	3	10.148	0.027	52902	120.5
Aroclor-1254	4	9.813	0.004	14733	22.7	4	10.372	0.000	71680	163.3
Aroclor-1254	5	10.122	-0.055	119528	283.6	5	10.569	-0.000	98559	403.2
Total Col1Ave (4 peaks):					97.4	Total Col2Ave (5 peaks):				156.7 RPD = 47*
Corrected Ave (3 peaks):					35.3	Corrected Ave (4 peaks):				95.1 RPD = 92*
Aroclor-1260	1	11.045	0.002	116435	220.7	1	11.654	0.000	81795	226.0
Aroclor-1260	2	11.362	0.001	116918	215.6	2	11.920	0.002	217887	238.0
Aroclor-1260	3	11.738	0.003	303264	212.5	3	12.437	0.001	56212	246.3
Aroclor-1260	4	12.143	0.004	141534	191.9	4	12.502	0.000	142689	240.8
Aroclor-1260	5	12.246	0.002	68446	212.9	NS	---			----
Total Col1Ave (5 peaks):					210.7	Total Col2Ave (4 peaks):				237.8 RPD = 12
Corrected Ave (4 peaks):					208.2	Corrected Ave (3 peaks):				234.9 RPD = 12
Aroclor-1262	1	10.830	-0.002	169725	446.4	1	11.200	0.000	83995	171.1
Aroclor-1262	2	12.246	0.000	68446	114.1	2	11.654	0.001	81795	195.9
Aroclor-1262	3	12.320	-0.000	84201	129.2	3	12.437	0.003	56212	126.4
Aroclor-1262	4	12.989	-0.000	78065	131.5	4	12.502	-0.001	142689	200.4
Total Col1Ave (4 peaks):					205.3	Total Col2Ave (4 peaks):				173.4 RPD = 17
Corrected Ave (3 peaks):					124.9	Corrected Ave (3 peaks):				164.5 RPD = 27
Aroclor-1268	1	12.246	0.001	68446	44.1	1	12.437	0.003	56212	48.0
Aroclor-1268	2	12.320	0.002	84201	54.4	2	12.502	0.001	142689	114.4
Aroclor-1268	3	12.726	0.027	33020	25.7	3	12.894	0.001	1495	1.4
Aroclor-1268	4	13.490	0.001	16019	4.2	4	13.709	0.001	10120	3.2
Total Col1Ave (4 peaks):					32.1	Total Col2Ave (4 peaks):				41.8 RPD = 26
Corrected Ave (3 peaks):					24.7	Corrected Ave (3 peaks):				17.5 RPD = 34

Total PCB Area Col1 (5.909 - 13.792) = 2789370 Col1 Total PCB = 0.5 ppm*

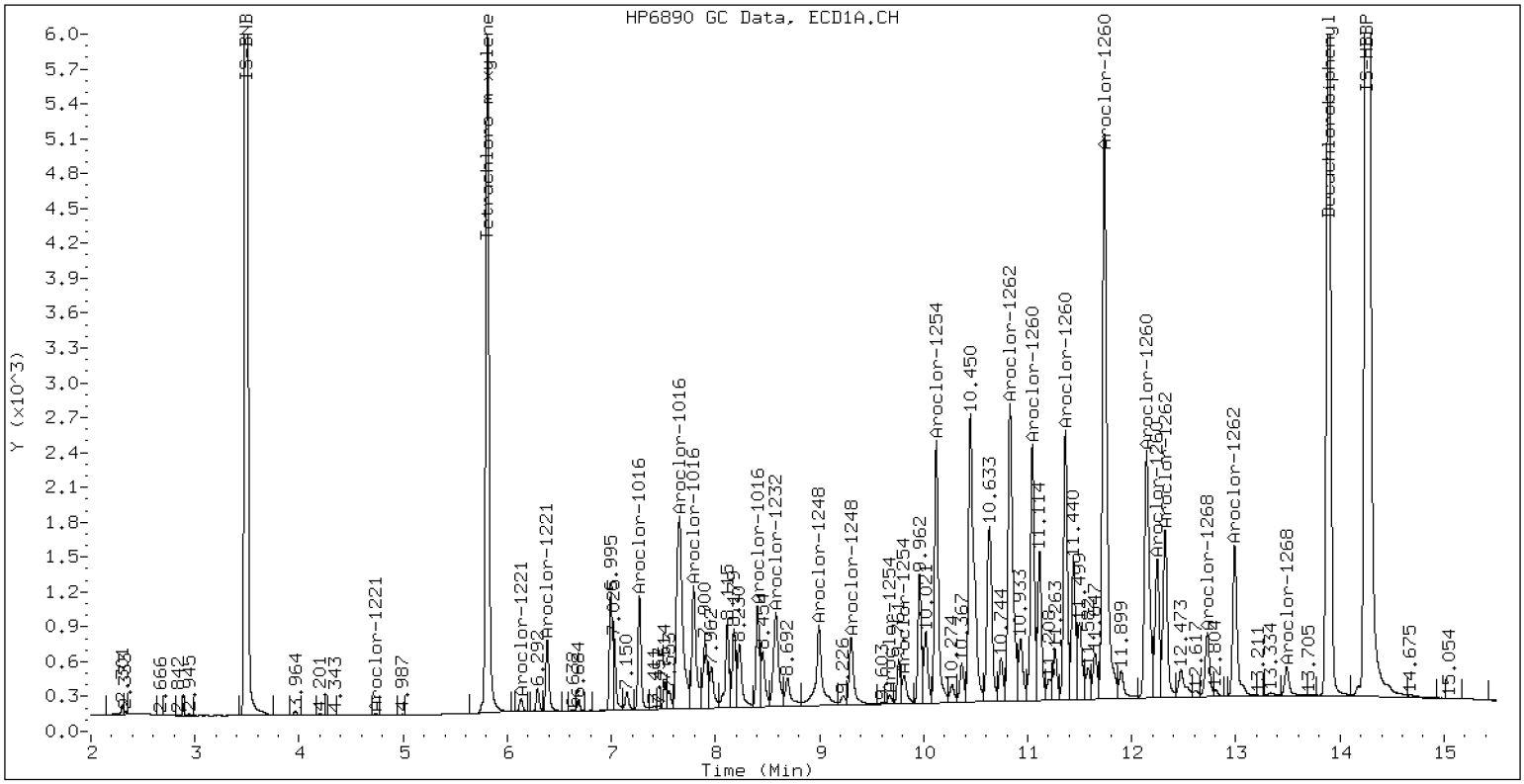
Total PCB Area Col2 (5.787 - 14.020) = 1810543 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

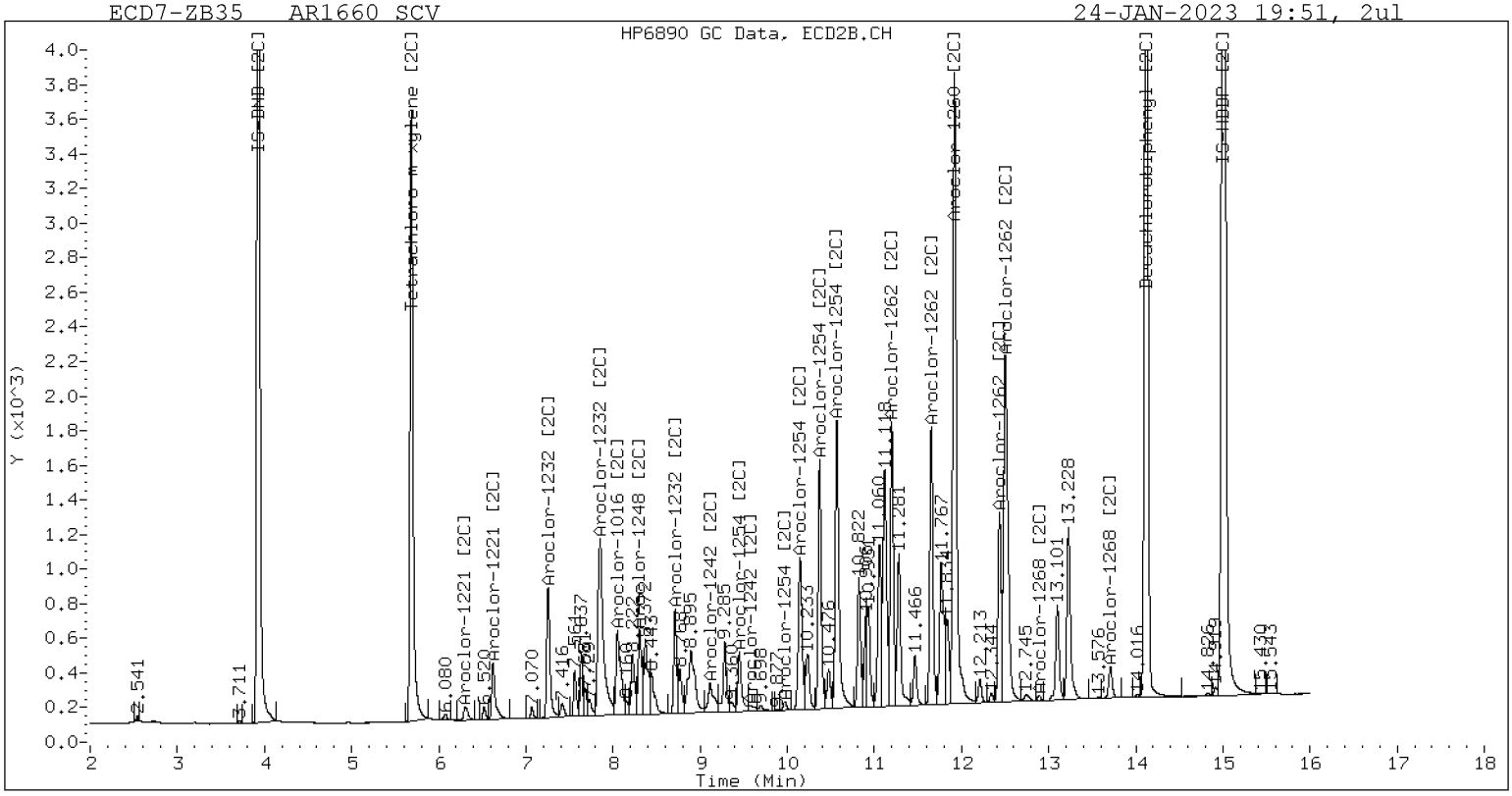
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660 SCV 24-JAN-2023 19:51, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660 SCV 24-JAN-2023 19:51, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00061
Laboratory ID: SLA0281-SCV2
Sequence: SLA0281
Sequence Name: AR1242SCV2
Standard ID: K007656

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1242	250.00	223	-10.9	20.00
Aroclor 1242 [2C]	250.00	235	-5.9	20.00
Decachlorobiphenyl	40.000	38.5	-3.6	20.00
Tetrachlorometaxylene	40.000	37.8	-5.6	20.00
Decachlorobiphenyl [2C]	40.000	40.3	0.9	20.00
Tetrachlorometaxylene [2C]	40.000	37.4	-6.6	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242325ECD7.D
Data file 2: /230124.b/230124.b/01242325ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242 SCV
Client ID:
Injection Date: 24-JAN-2023 20:12
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	268580	5.686	-0.001	172592	37.8	37.4	1.1	Tetrachloro-m-xylene
13.892	0.001	392918	14.121	0.001	323869	38.5	40.3	4.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503089	-0.0
Hexabromobiphenyl	647433	953137	47.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	341704	1.4
Hexabromobiphenyl	382032	505860	32.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	29901	159.9	1	7.255	0.000	32077	173.1
Aroclor-1016	2	7.653	0.003	107333	173.3	2	7.851	-0.000	71438	175.9
Aroclor-1016	3	7.790	0.002	45013	157.9	3	8.051	0.001	29072	175.4
Aroclor-1016	4	8.406	0.002	32958	179.8	4	8.306	0.001	21761	167.5
Total Col1Ave (4 peaks):					167.7	Total Col2Ave (4 peaks):				173.0 RPD = 3
Corrected Ave (3 peaks):					163.7	Corrected Ave (3 peaks):				172.0 RPD = 5
Aroclor-1221	1	4.737	0.004	141	3.8	1	---			0.0
Aroclor-1221	2	6.133	-0.001	3649	48.0	2	6.317	0.018	4290	78.2
Aroclor-1221	3	6.384	-0.000	21189	120.0	3	6.624	0.001	14613	157.7
Total Col1Ave (3 peaks):					57.3	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.737	0.003	141	6.1	1	---			0.0
Aroclor-1232	2	6.133	-0.001	3649	69.7	2	7.255	-0.002	32077	377.3
Aroclor-1232	3	7.653	-0.005	107333	410.2	3	7.851	-0.004	71438	412.5
Aroclor-1232	4	8.581	-0.003	59617	532.3	4	8.713	-0.000	22563	468.9
Total Col1Ave (4 peaks):					254.6	Total Col2Ave (3 peaks):				419.6 RPD = 49*
Corrected Ave (3 peaks):					162.0	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	29901	194.1	1	7.255	-0.001	32077	214.6
Aroclor-1242	2	7.653	-0.002	107333	212.9	2	7.851	-0.002	71438	215.2
Aroclor-1242	3	8.406	-0.000	32958	220.0	3	9.156	-0.004	27374	263.3
Aroclor-1242	4	8.581	-0.000	59617	263.5	4	9.581	-0.006	34156	247.9
Total Col1Ave (4 peaks):					222.6	Total Col2Ave (4 peaks):				235.3 RPD = 6
Corrected Ave (3 peaks):					209.0	Corrected Ave (3 peaks):				225.9 RPD = 8
Aroclor-1248	1	8.406	0.001	32958	131.0	1	8.306	0.001	21761	140.9
Aroclor-1248	2	8.581	0.001	59617	185.7	2	8.713	0.001	22563	135.7
Aroclor-1248	3	9.003	0.004	72557	118.2	3	9.156	-0.000	27374	134.7
Aroclor-1248	4	9.296	0.003	28122	92.5	4	9.581	-0.001	34156	135.9
Total Col1Ave (4 peaks):					131.8	Total Col2Ave (4 peaks):				136.8 RPD = 4
Corrected Ave (3 peaks):					113.9	Corrected Ave (3 peaks):				135.5 RPD = 17
Aroclor-1254	1	9.296	-0.002	28122	54.8	1	9.448	0.000	11650	47.0
Aroclor-1254	2	9.380	0.002	9292	42.4	2	9.968	-0.001	7642	38.1
Aroclor-1254	3	9.671	0.001	12871	39.2	3	10.120	-0.001	16012	36.6
Aroclor-1254	4	9.808	-0.000	22113	34.4	4	10.378	0.007	16300	37.3
Aroclor-1254	5	10.176	-0.001	17771	42.5	5	10.572	0.004	4439	18.2
Total Col1Ave (5 peaks):					42.7	Total Col2Ave (5 peaks):				35.5 RPD = 18
Corrected Ave (4 peaks):					39.6	Corrected Ave (4 peaks):				32.6 RPD = 19
Aroclor-1260	1	11.047	0.003	741	1.4	1	11.663	0.010	1794	4.9
Aroclor-1260	2	11.366	0.006	379	0.7	2	11.923	0.005	1208	1.3
Aroclor-1260	3	11.745	0.011	860	0.6	3	12.507	0.071	977	4.2
Aroclor-1260	4	12.154	0.014	1536	2.1	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
Total Col1Ave (4 peaks):					1.2	Total Col2Ave (3 peaks):				3.5 RPD = 99*
Corrected Ave (3 peaks):					0.9	Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.836	0.004	10654	27.6	1	11.120	-0.080	8071	16.3
Aroclor-1262	2	12.154	-0.092	1536	2.5	2	11.663	0.010	1794	4.3
Aroclor-1262	3	---			0.0	3	12.507	0.073	977	2.2
Aroclor-1262	4	13.040	0.051	1739	2.9	4	---			0.0
Total Col1Ave (3 peaks):					11.0	Total Col2Ave (3 peaks):				7.6 RPD = 37
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.154	-0.091	1536	1.0	1	12.507	0.073	977	0.8
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.623	-0.076	5080	3.9	3	12.894	0.001	98	0.1
Aroclor-1268	4	13.501	0.012	2725	0.7	4	13.707	-0.001	1566	0.5
Total Col1Ave (3 peaks):					1.9	Total Col2Ave (3 peaks):				0.5 RPD = 120*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 915887 Col1 Total PCB = 0.2 ppm*

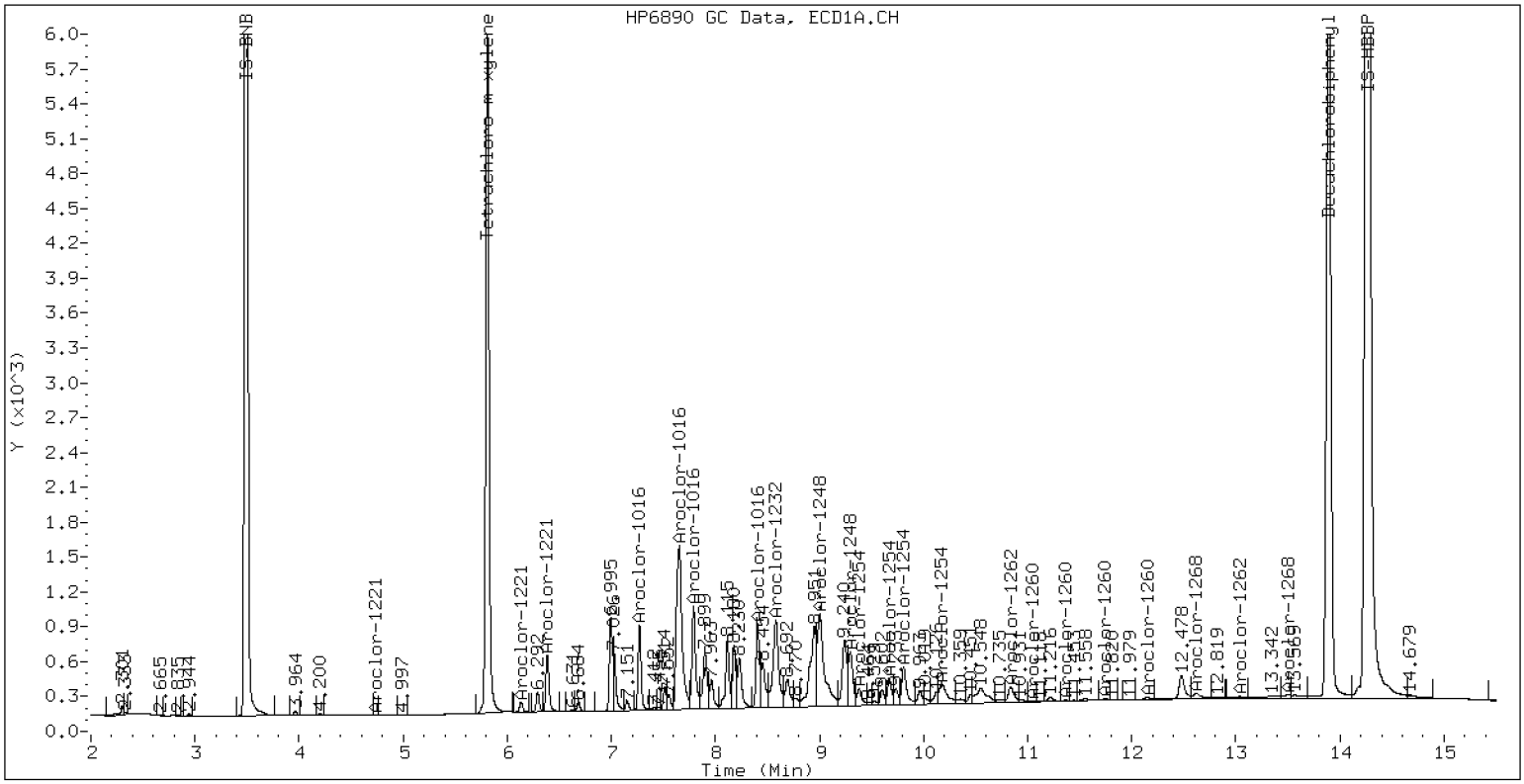
Total PCB Area Col2 (5.787 - 14.020) = 575897 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

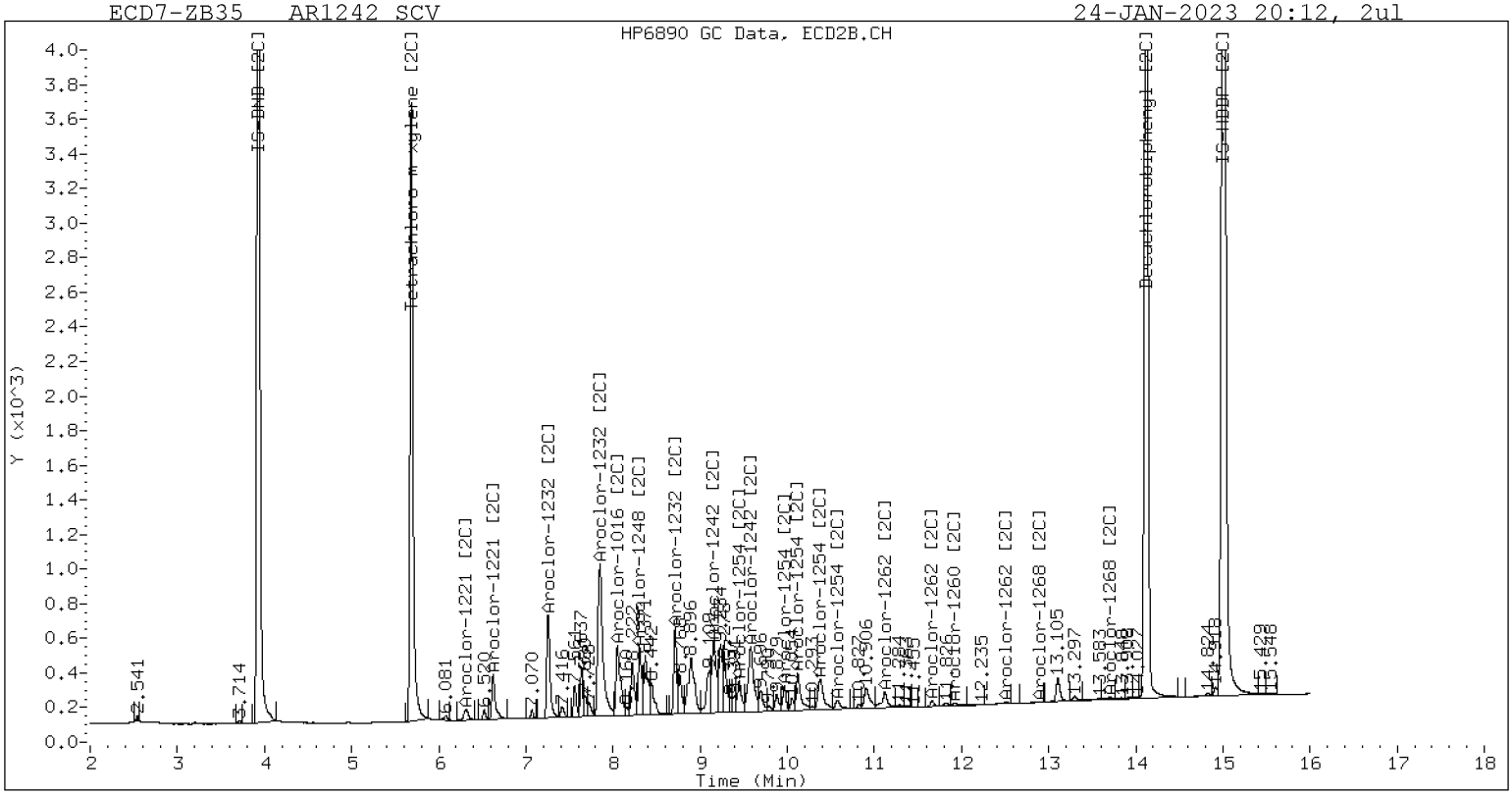
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242 SCV 24-JAN-2023 20:12, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242 SCV 24-JAN-2023 20:12, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00061
Laboratory ID: SLA0281-SCV3
Sequence: SLA0281
Sequence Name: AR1248SCV3
Standard ID: K007657

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1248	250.00	237	-5.1	20.00
Aroclor 1248 [2C]	250.00	231	-7.6	20.00
Decachlorobiphenyl	40.000	38.3	-4.3	20.00
Tetrachlorometaxylene	40.000	36.8	-8.1	20.00
Decachlorobiphenyl [2C]	40.000	39.6	-1.1	20.00
Tetrachlorometaxylene [2C]	40.000	36.5	-8.6	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242326ECD7.D
Data file 2: /230124.b/230124.b/01242326ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248 SCV
Client ID:
Injection Date: 24-JAN-2023 20:33
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.000	263982	5.686	-0.001	169991	36.8	36.5	0.6	Tetrachloro-m-xylene
13.892	0.001	400655	14.121	0.001	316171	38.3	39.6	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	508189	1.0
Hexabromobiphenyl	647433	979067	51.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	344105	2.1
Hexabromobiphenyl	382032	503378	31.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	14777	78.3	1	7.254	-0.001	16100	86.3
Aroclor-1016	2	7.655	0.004	70114	112.1	2	7.853	0.002	47184	115.4
Aroclor-1016	3	7.794	0.006	27212	94.5	3	8.053	0.003	9427	56.5
Aroclor-1016	4	8.406	0.003	59884	323.4	4	8.306	0.001	36680	280.3
Total Col1Ave (4 peaks):					152.0	Total Col2Ave (4 peaks):				134.6 RPD = 12
Corrected Ave (3 peaks):					94.9	Corrected Ave (3 peaks):				86.0 RPD = 10
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.133	-0.000	591	7.7	2	6.323	0.025	1820	32.9
Aroclor-1221	3	6.386	0.001	2453	13.8	3	6.627	0.004	1477	15.8
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.133	-0.000	591	11.2	2	7.254	-0.002	16100	188.0
Aroclor-1232	3	7.655	-0.004	70114	265.3	3	7.853	-0.001	47184	270.6
Aroclor-1232	4	8.581	-0.003	76286	674.3	4	8.714	0.000	39330	811.7
Total Col1Ave (3 peaks):					316.9	Total Col2Ave (3 peaks):				423.4 RPD = 29
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	14777	95.0	1	7.254	-0.002	16100	107.0
Aroclor-1242	2	7.655	-0.001	70114	137.7	2	7.853	0.000	47184	141.2
Aroclor-1242	3	8.406	-0.000	59884	395.8	3	9.159	-0.001	46988	448.9
Aroclor-1242	4	8.581	-0.000	76286	333.8	4	9.584	-0.003	56615	408.1
Total Col1Ave (4 peaks):					240.5	Total Col2Ave (4 peaks):				276.3 RPD = 14
Corrected Ave (3 peaks):					188.8	Corrected Ave (3 peaks):				218.7 RPD = 15
Aroclor-1248	1	8.406	0.001	59884	235.6	1	8.306	0.001	36680	235.8
Aroclor-1248	2	8.581	0.001	76286	235.2	2	8.714	0.002	39330	234.9
Aroclor-1248	3	9.000	0.001	148805	239.9	3	9.159	0.003	46988	229.7
Aroclor-1248	4	9.295	0.001	73114	238.1	4	9.584	0.002	56615	223.8
Total Col1Ave (4 peaks):					237.2	Total Col2Ave (4 peaks):				231.0 RPD = 3
Corrected Ave (3 peaks):					236.3	Corrected Ave (3 peaks):				229.5 RPD = 3
Aroclor-1254	1	9.295	-0.004	73114	141.2	1	9.449	0.001	20314	81.4
Aroclor-1254	2	9.378	0.000	36561	165.3	2	9.970	0.000	18678	92.6
Aroclor-1254	3	9.672	0.003	30736	92.6	3	10.124	0.003	35321	80.2
Aroclor-1254	4	9.813	0.004	53537	82.3	4	10.387	0.015	35188	79.9
Aroclor-1254	5	10.192	0.015	40119	94.9	5	10.575	0.006	7386	30.1
Total Col1Ave (5 peaks):					115.3	Total Col2Ave (5 peaks):				72.9 RPD = 45*
Corrected Ave (4 peaks):					102.7	Corrected Ave (4 peaks):				67.9 RPD = 41*
Aroclor-1260	1	11.054	0.010	1868	3.4	1	11.664	0.011	2055	5.7
Aroclor-1260	2	11.366	0.005	1375	2.4	2	11.926	0.009	1303	1.4
Aroclor-1260	3	11.745	0.010	2137	1.4	3	12.439	0.003	395	1.7
Aroclor-1260	4	12.147	0.008	1650	2.1	4	12.507	0.005	890	1.5
Aroclor-1260	5	12.255	0.011	558	1.7	NS	---			----
Total Col1Ave (5 peaks):					2.2	Total Col2Ave (4 peaks):				2.6 RPD = 15
Corrected Ave (4 peaks):					1.9	Corrected Ave (3 peaks):				1.5 RPD = 22
Aroclor-1262	1	10.837	0.005	12736	32.2	1	11.122	-0.078	7136	14.5
Aroclor-1262	2	12.255	0.010	558	0.9	2	11.664	0.011	2055	4.9
Aroclor-1262	3	12.327	0.006	596	0.9	3	12.439	0.004	395	0.9
Aroclor-1262	4	12.996	0.007	1113	1.8	4	12.507	0.003	890	1.2
Total Col1Ave (4 peaks):					8.9	Total Col2Ave (4 peaks):				5.4 RPD = 50*
Corrected Ave (3 peaks):					1.2	Corrected Ave (3 peaks):				2.3 RPD = 65*
Aroclor-1268	1	12.255	0.010	558	0.3	1	12.439	0.005	395	0.3
Aroclor-1268	2	12.327	0.009	596	0.4	2	12.507	0.005	890	0.7
Aroclor-1268	3	12.706	0.007	1161	0.9	3	12.896	0.003	166	0.2
Aroclor-1268	4	13.504	0.016	3330	0.8	4	13.717	0.009	469	0.1
Total Col1Ave (4 peaks):					0.6	Total Col2Ave (4 peaks):				0.3 RPD = 57*
Corrected Ave (3 peaks):					0.5	Corrected Ave (3 peaks):				0.2 RPD = 83*

Total PCB Area Col1 (5.909 - 13.792) = 1230760 Col1 Total PCB = 0.2 ppm*

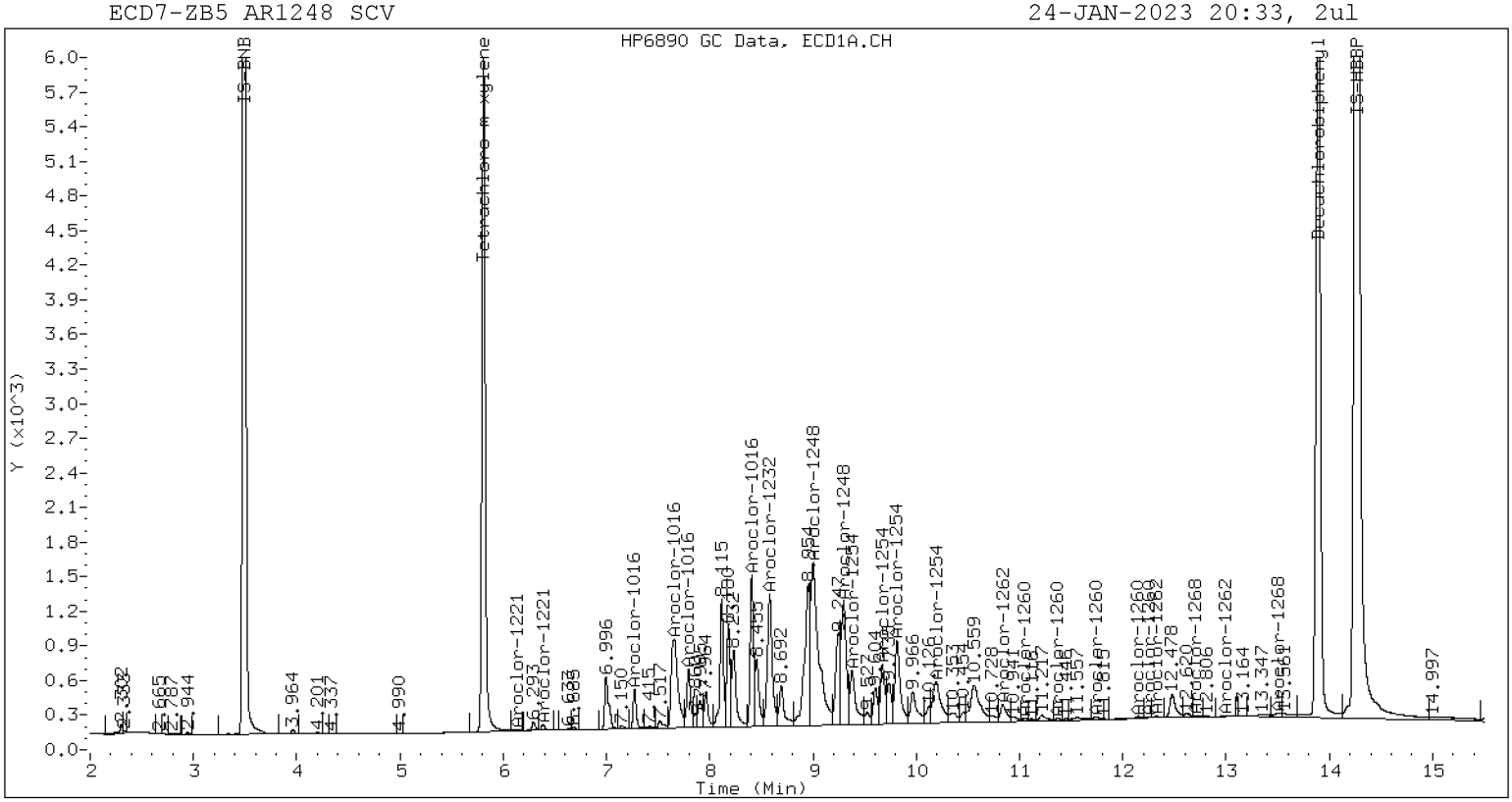
Total PCB Area Col2 (5.787 - 14.020) = 742749 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

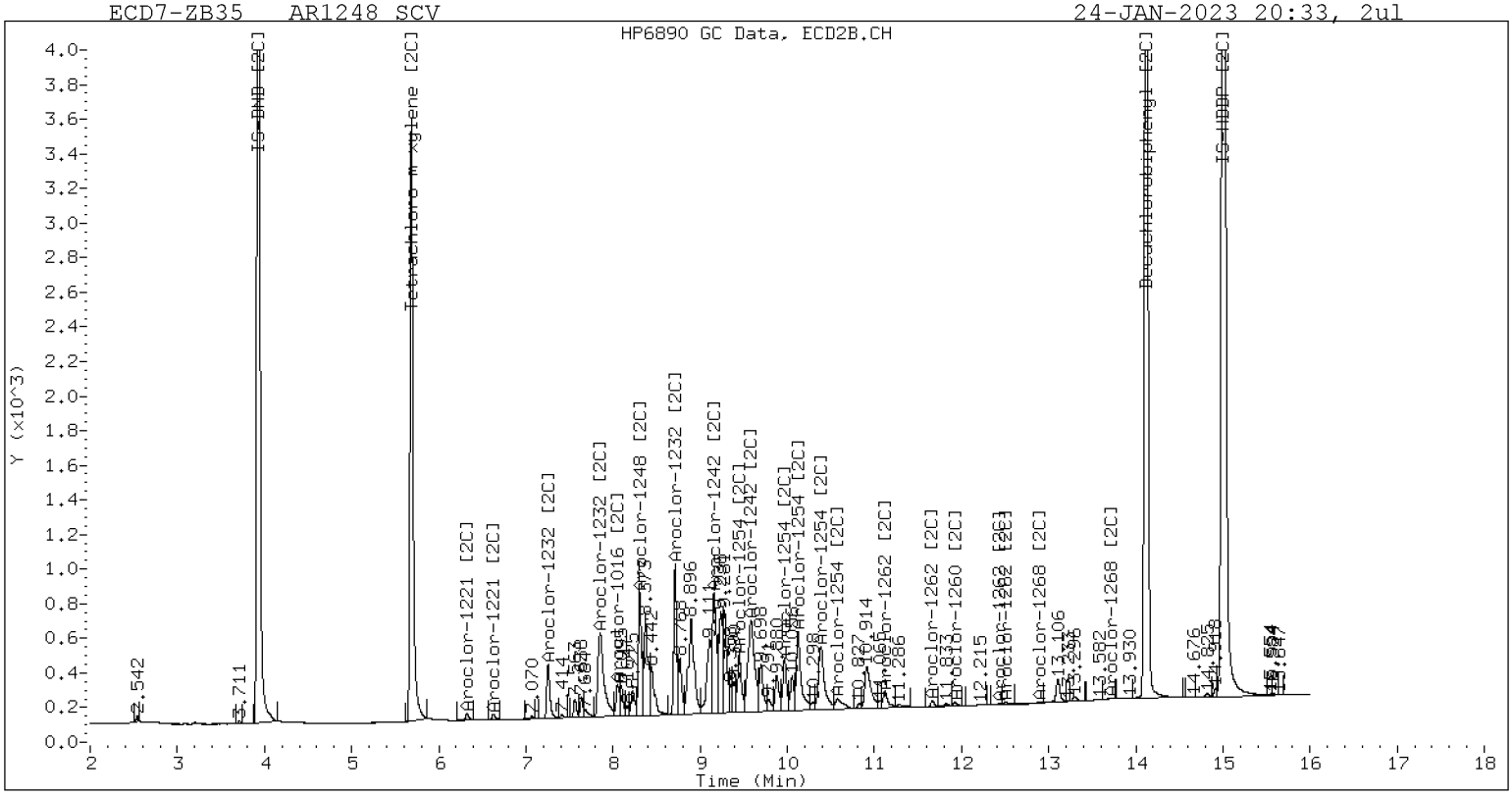
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248 SCV 24-JAN-2023 20:33, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248 SCV 24-JAN-2023 20:33, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00061
Laboratory ID: SLA0281-SCV4
Sequence: SLA0281
Sequence Name: AR1254SCV4
Standard ID: K007658

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1254	250.00	221	-11.7	20.00
Aroclor 1254 [2C]	250.00	227	-9.4	20.00
Decachlorobiphenyl	40.000	37.1	-7.3	20.00
Tetrachlorometaxylene	40.000	36.7	-8.3	20.00
Decachlorobiphenyl [2C]	40.000	39.5	-1.1	20.00
Tetrachlorometaxylene [2C]	40.000	36.6	-8.4	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242327ECD7.D
Data file 2: /230124.b/230124.b/01242327ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254 SCV
Client ID:
Injection Date: 24-JAN-2023 20:54
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	261398	5.686	-0.001	169839	36.7	36.6	0.1	Tetrachloro-m-xylene
13.892	0.001	383983	14.121	0.001	323233	37.1	39.5	6.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	504424	0.2
Hexabromobiphenyl	647433	968338	49.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	342969	1.8
Hexabromobiphenyl	382032	515045	34.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.273	0.003	320	1.7	1	7.258	0.003	332	1.8
Aroclor-1016	2	7.658	0.008	991	1.6	2	---			0.0
Aroclor-1016	3	7.795	0.007	662	2.3	3	8.097	0.047	515	3.1
Aroclor-1016	4	8.408	0.005	21378	116.3	4	8.307	0.002	20446	156.8
	Total Col1Ave (4 peaks):				30.5	Total Col2Ave (3 peaks):				53.9 RPD = 55*
	Corrected Ave (3 peaks):				1.9	Corrected Ave: < 3 Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.325	0.026	1749	31.7
Aroclor-1221	3	---			0.0	3	6.633	0.011	321	3.5
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	7.258	0.001	332	3.9
Aroclor-1232	3	7.658	-0.000	991	3.8	3	---			0.0
Aroclor-1232	4	8.587	0.003	8887	79.1	4	8.715	0.001	14030	290.5
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	7.273	0.002	320	2.1	1	7.258	0.002	332	2.2
Aroclor-1242	2	7.658	0.003	991	2.0	2	---			0.0
Aroclor-1242	3	8.408	0.002	21378	142.3	3	9.164	0.004	26593	254.9
Aroclor-1242	4	8.587	0.006	8887	39.2	4	9.543	-0.043	34385	248.7
	Total Col1Ave (4 peaks):				46.4	Total Col2Ave (3 peaks):				168.6 RPD = 114*
	Corrected Ave (3 peaks):				14.4	Corrected Ave: < 3 Peaks				
Aroclor-1248	1	8.408	0.003	21378	84.7	1	8.307	0.001	20446	131.9
Aroclor-1248	2	8.587	0.007	8887	27.6	2	8.715	0.003	14030	84.1
Aroclor-1248	3	8.995	-0.004	110289	179.1	3	9.164	0.007	26593	130.4
Aroclor-1248	4	9.300	0.007	113143	371.2	4	9.543	-0.038	34385	136.4
	Total Col1Ave (4 peaks):				165.7	Total Col2Ave (4 peaks):				120.7 RPD = 31
	Corrected Ave (3 peaks):				97.2	Corrected Ave (3 peaks):				115.5 RPD = 17
Aroclor-1254	1	9.300	0.002	113143	220.1	1	9.449	0.001	56453	226.9
Aroclor-1254	2	9.379	0.001	49468	225.4	2	9.970	0.001	45325	225.4
Aroclor-1254	3	9.671	0.002	72811	221.0	3	10.122	0.002	97044	221.2
Aroclor-1254	4	9.811	0.002	140530	217.7	4	10.374	0.002	98778	225.2
Aroclor-1254	5	10.182	0.005	92254	219.8	5	10.570	0.001	57171	234.0
	Total Col1Ave (5 peaks):				220.8	Total Col2Ave (5 peaks):				226.5 RPD = 3
	Corrected Ave (4 peaks):				219.7	Corrected Ave (4 peaks):				224.7 RPD = 2
Aroclor-1260	1	11.045	0.002	8960	16.5	1	11.661	0.008	26985	72.6
Aroclor-1260	2	11.364	0.004	9237	16.5	2	11.923	0.006	19882	21.2
Aroclor-1260	3	11.741	0.007	21268	14.5	3	12.505	0.069	13190	56.3
Aroclor-1260	4	12.146	0.007	19041	25.1	4	---			0.0
Aroclor-1260	5	12.321	0.077	1835	5.5	NS	---			----
	Total Col1Ave (5 peaks):				15.6	Total Col2Ave (3 peaks):				50.0 RPD = 105*
	Corrected Ave (4 peaks):				13.3	Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.832	0.000	157590	402.4	1	11.119	-0.081	92414	183.3
Aroclor-1262	2	12.321	0.075	1835	3.0	2	11.661	0.008	26985	63.0
Aroclor-1262	3	---			0.0	3	12.505	0.071	13190	28.9
Aroclor-1262	4	12.995	0.006	843	1.4	4	---			0.0
	Total Col1Ave (3 peaks):				135.6	Total Col2Ave (3 peaks):				91.7 RPD = 39
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.321	0.076	1835	1.1	1	12.505	0.072	13190	11.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.720	0.021	1314	1.0	3	12.891	-0.002	169	0.2
Aroclor-1268	4	13.504	0.016	1169	0.3	4	13.706	-0.002	1132	0.3
	Total Col1Ave (3 peaks):				0.8	Total Col2Ave (3 peaks):				3.8 RPD = 130*
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 1507519 Col1 Total PCB = 0.3 ppm*

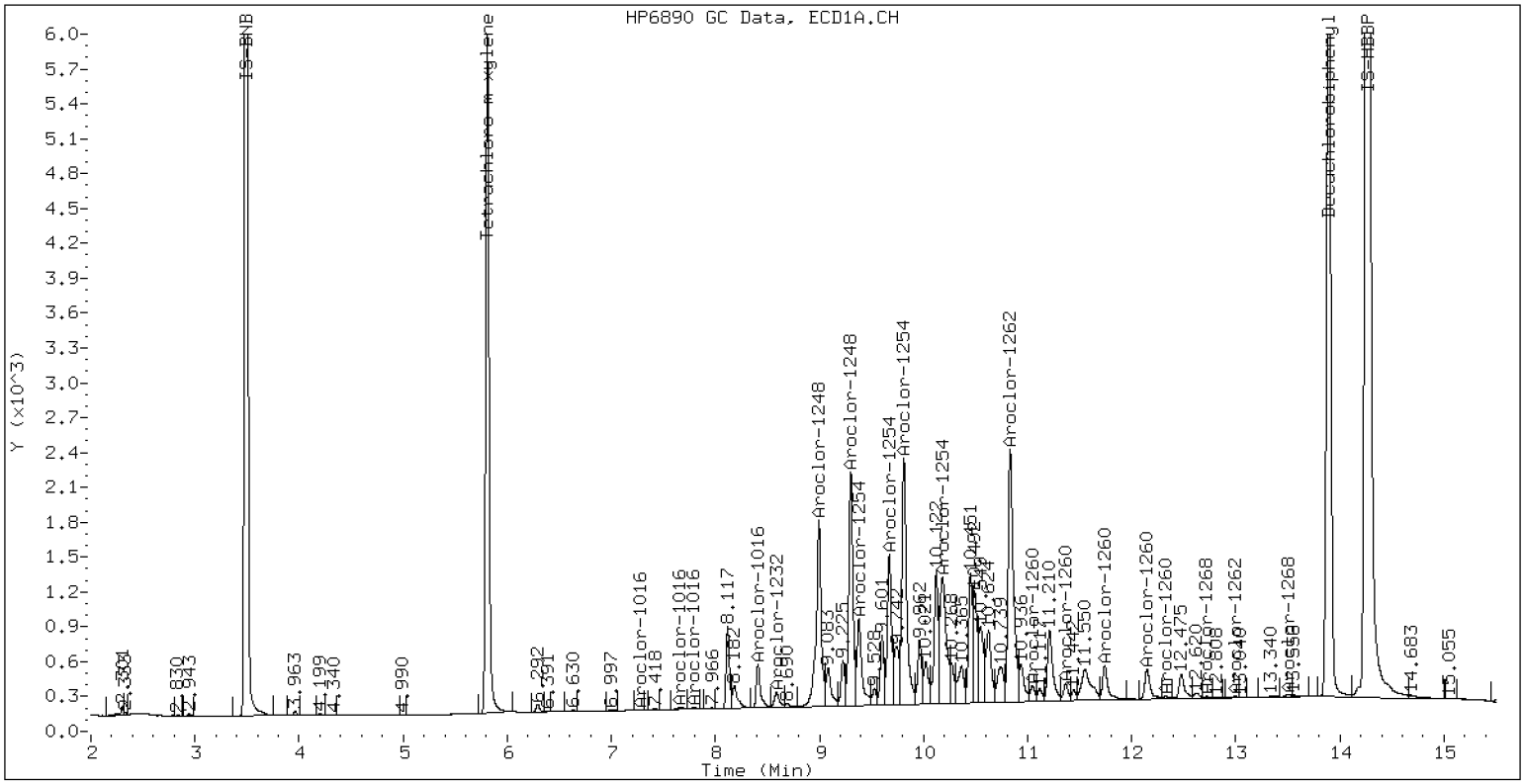
Total PCB Area Col2 (5.787 - 14.020) = 951047 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

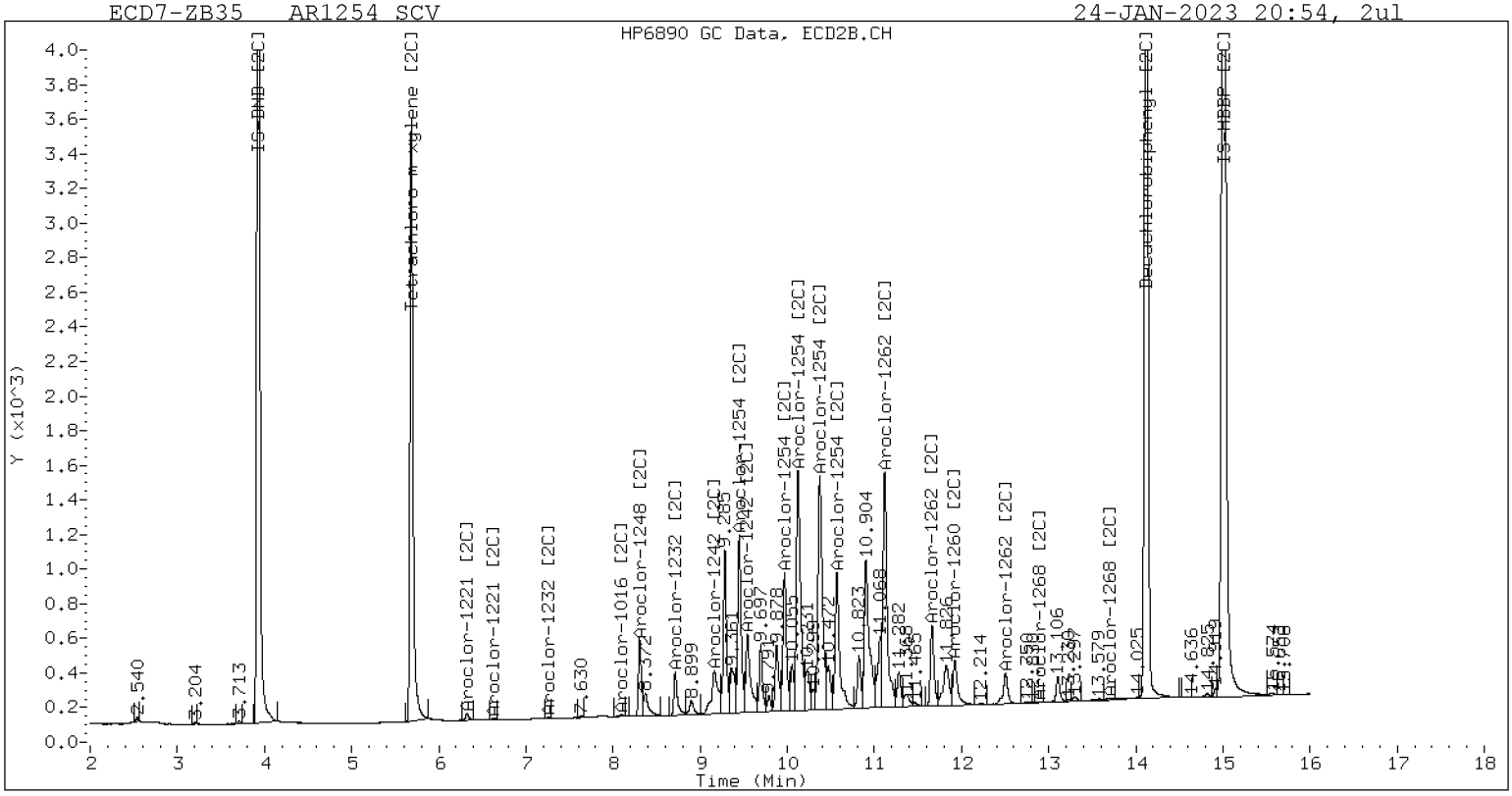
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254 SCV 24-JAN-2023 20:54, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254 SCV 24-JAN-2023 20:54, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Calibration: GA00061
Sequence: SLA0281

SDG: 23A0249
Project: AOC5 MR Phase 1
Laboratory ID: SLA0281-SCV5
Sequence Name: AR2162SCV5
Standard ID: K007659

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1221	250.00	228	-8.8	20.00
Aroclor 1221 [2C]	250.00	239	-4.5	20.00
Decachlorobiphenyl	40.000	37.5	-6.4	20.00
Tetrachlorometaxylene	40.000	37.3	-6.8	20.00
Decachlorobiphenyl [2C]	40.000	39.5	-1.3	20.00
Tetrachlorometaxylene [2C]	40.000	37.2	-7.1	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242328ECD7.D
Data file 2: /230124.b/230124.b/01242328ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162 SCV
Client ID:
Injection Date: 24-JAN-2023 21:15
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	265357	5.685	-0.001	170984	37.3	37.2	0.3	Tetrachloro-m-xylene
13.891	-0.001	397332	14.119	-0.001	326981	37.5	39.5	5.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503473	0.0
Hexabromobiphenyl	647433	991997	53.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	340361	1.0
Hexabromobiphenyl	382032	521975	36.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	5326	28.5	1	7.257	0.002	6708	36.3
Aroclor-1016	2	7.664	0.013	11965	19.3	2	7.856	0.005	7233	17.9
Aroclor-1016	3	7.797	0.009	6015	21.1	3	8.058	0.008	2997	18.2
Aroclor-1016	4	8.410	0.006	3771	20.6	4	8.308	0.002	2065	16.0
Total Col1Ave (4 peaks):					22.4	Total Col2Ave (4 peaks):				22.1 RPD = 1
Corrected Ave (3 peaks):					20.3	Corrected Ave (3 peaks):				17.3 RPD = 16
Aroclor-1221	1	4.732	-0.000	9097	244.5	1	4.959	-0.000	6157	246.8
Aroclor-1221	2	6.133	-0.000	16114	211.8	2	6.297	-0.001	12807	234.2
Aroclor-1221	3	6.384	0.000	40299	228.1	3	6.622	-0.000	21707	235.2
Total Col1Ave (3 peaks):					228.1	Total Col2Ave (3 peaks):				238.7 RPD = 5
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.732	-0.001	9097	391.6	1	4.959	-0.001	6157	406.9
Aroclor-1232	2	6.133	0.000	16114	307.8	2	7.257	0.000	6708	79.2
Aroclor-1232	3	7.664	0.005	11965	45.7	3	7.856	0.001	7233	41.9
Aroclor-1232	4	8.589	0.004	2837	25.3	4	8.716	0.002	1869	39.0
Total Col1Ave (4 peaks):					192.6	Total Col2Ave (4 peaks):				141.7 RPD = 30
Corrected Ave (3 peaks):					126.3	Corrected Ave (3 peaks):				53.4 RPD = 81*
Aroclor-1242	1	7.272	0.001	5326	34.5	1	7.257	0.001	6708	45.1
Aroclor-1242	2	7.664	0.008	11965	23.7	2	7.856	0.003	7233	21.9
Aroclor-1242	3	8.410	0.004	3771	25.2	3	9.169	0.009	1956	18.9
Aroclor-1242	4	8.589	0.007	2837	12.5	4	9.544	-0.043	5978	43.6
Total Col1Ave (4 peaks):					24.0	Total Col2Ave (4 peaks):				32.3 RPD = 30
Corrected Ave (3 peaks):					20.5	Corrected Ave (3 peaks):				28.1 RPD = 31
Aroclor-1248	1	8.410	0.005	3771	15.0	1	8.308	0.002	2065	13.4
Aroclor-1248	2	8.589	0.008	2837	8.8	2	8.716	0.004	1869	11.3
Aroclor-1248	3	8.997	-0.002	36022	58.6	3	9.169	0.012	1956	9.7
Aroclor-1248	4	9.305	0.011	30853	101.4	4	9.544	-0.038	5978	23.9
Total Col1Ave (4 peaks):					46.0	Total Col2Ave (4 peaks):				14.6 RPD = 104*
Corrected Ave (3 peaks):					27.5	Corrected Ave (3 peaks):				11.5 RPD = 82*
Aroclor-1254	1	9.305	0.006	30853	60.1	1	9.451	0.003	17617	71.3
Aroclor-1254	2	9.376	-0.002	5370	24.5	2	9.970	0.001	2849	14.3
Aroclor-1254	3	9.673	0.003	5543	16.9	3	10.146	0.026	88151	202.5
Aroclor-1254	4	9.810	0.002	14544	22.6	4	10.370	-0.002	107074	245.9
Aroclor-1254	5	10.121	-0.056	180016	429.7	5	10.567	-0.002	141725	584.5
Total Col1Ave (5 peaks):					110.8	Total Col2Ave (5 peaks):				223.7 RPD = 68*
Corrected Ave (4 peaks):					31.0	Corrected Ave (4 peaks):				133.5 RPD = 125*
Aroclor-1260	1	11.044	0.001	310806	558.4	1	11.652	-0.001	187682	498.4
Aroclor-1260	2	11.361	0.000	263161	460.0	2	11.917	-0.000	450612	473.0
Aroclor-1260	3	11.735	0.000	629605	418.0	3	12.433	-0.003	206042	867.7
Aroclor-1260	4	12.141	0.001	210012	269.9	4	12.502	-0.000	326457	529.5
Aroclor-1260	5	12.244	-0.000	268425	791.3	NS	---			----
Total Col1Ave (5 peaks):					499.5	Total Col2Ave (4 peaks):				592.1 RPD = 17
Corrected Ave (4 peaks):					426.6	Corrected Ave (3 peaks):				500.3 RPD = 16
Aroclor-1262	1	10.828	-0.005	171094	426.5	1	11.200	0.000	219731	430.1
Aroclor-1262	2	12.244	-0.002	268425	423.9	2	11.652	-0.001	187682	432.0
Aroclor-1262	3	12.319	-0.002	291581	424.2	3	12.433	-0.001	206042	445.4
Aroclor-1262	4	12.988	-0.001	257735	411.5	4	12.502	-0.002	326457	440.6
Total Col1Ave (4 peaks):					421.5	Total Col2Ave (4 peaks):				437.0 RPD = 4
Corrected Ave (3 peaks):					419.8	Corrected Ave (3 peaks):				434.3 RPD = 3
Aroclor-1268	1	12.244	-0.001	268425	163.8	1	12.433	-0.000	206042	169.0
Aroclor-1268	2	12.319	0.001	291581	178.4	2	12.502	0.000	326457	251.7
Aroclor-1268	3	12.725	0.026	108693	80.3	3	12.892	-0.001	10062	9.3
Aroclor-1268	4	13.486	-0.003	95646	23.8	4	13.710	0.001	59437	17.8
Total Col1Ave (4 peaks):					111.6	Total Col2Ave (4 peaks):				112.0 RPD = 0

Corrected Ave (3 peaks): 89.3 Corrected Ave (3 peaks): 65.4 RPD = 31

Total PCB Area Col1 (5.909 - 13.792) = 4409992 Col1 Total PCB = 0.8 ppm*

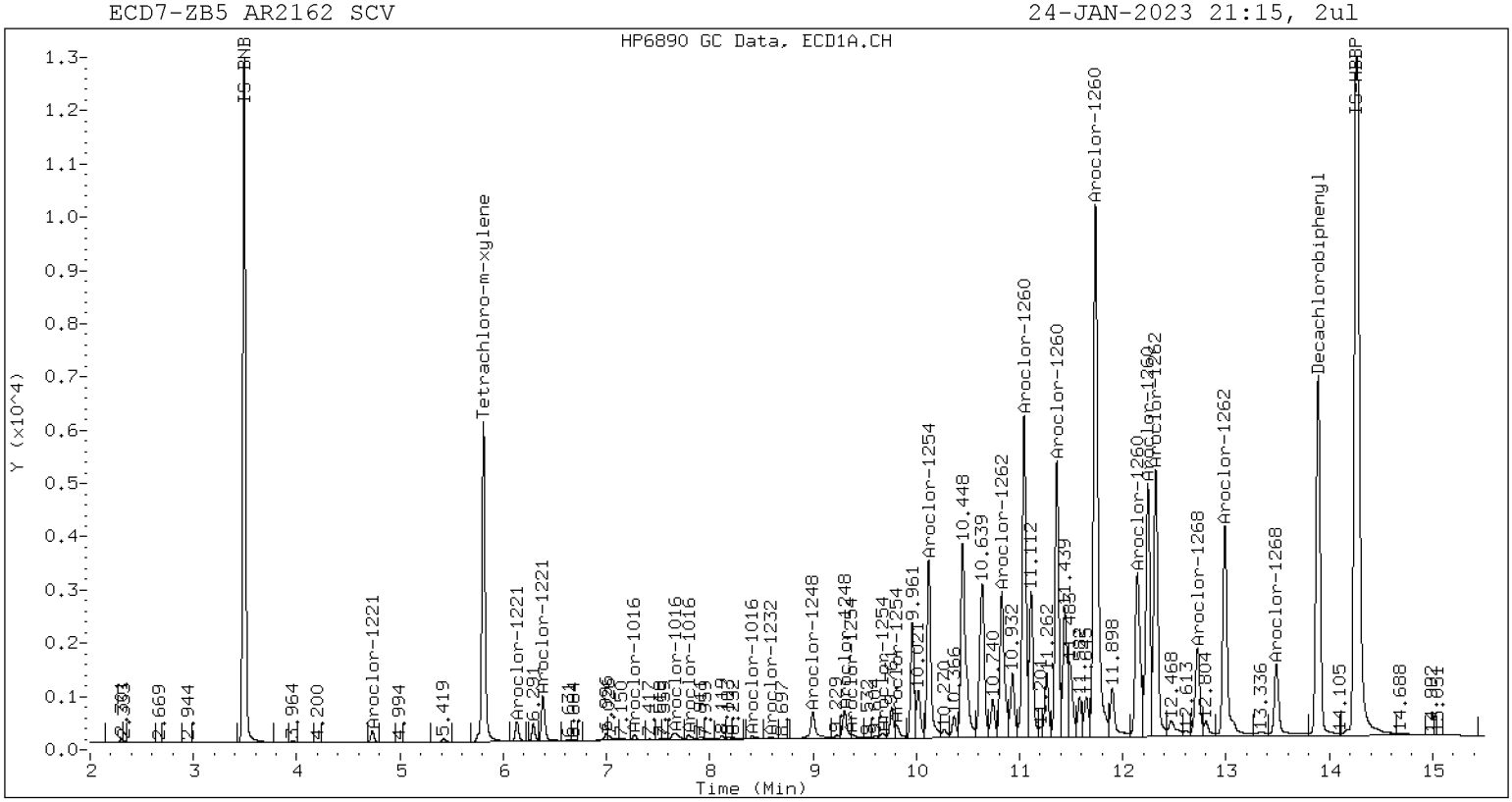
Total PCB Area Col2 (5.787 - 14.020) = 2874073 Col2 Total PCB = 0.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

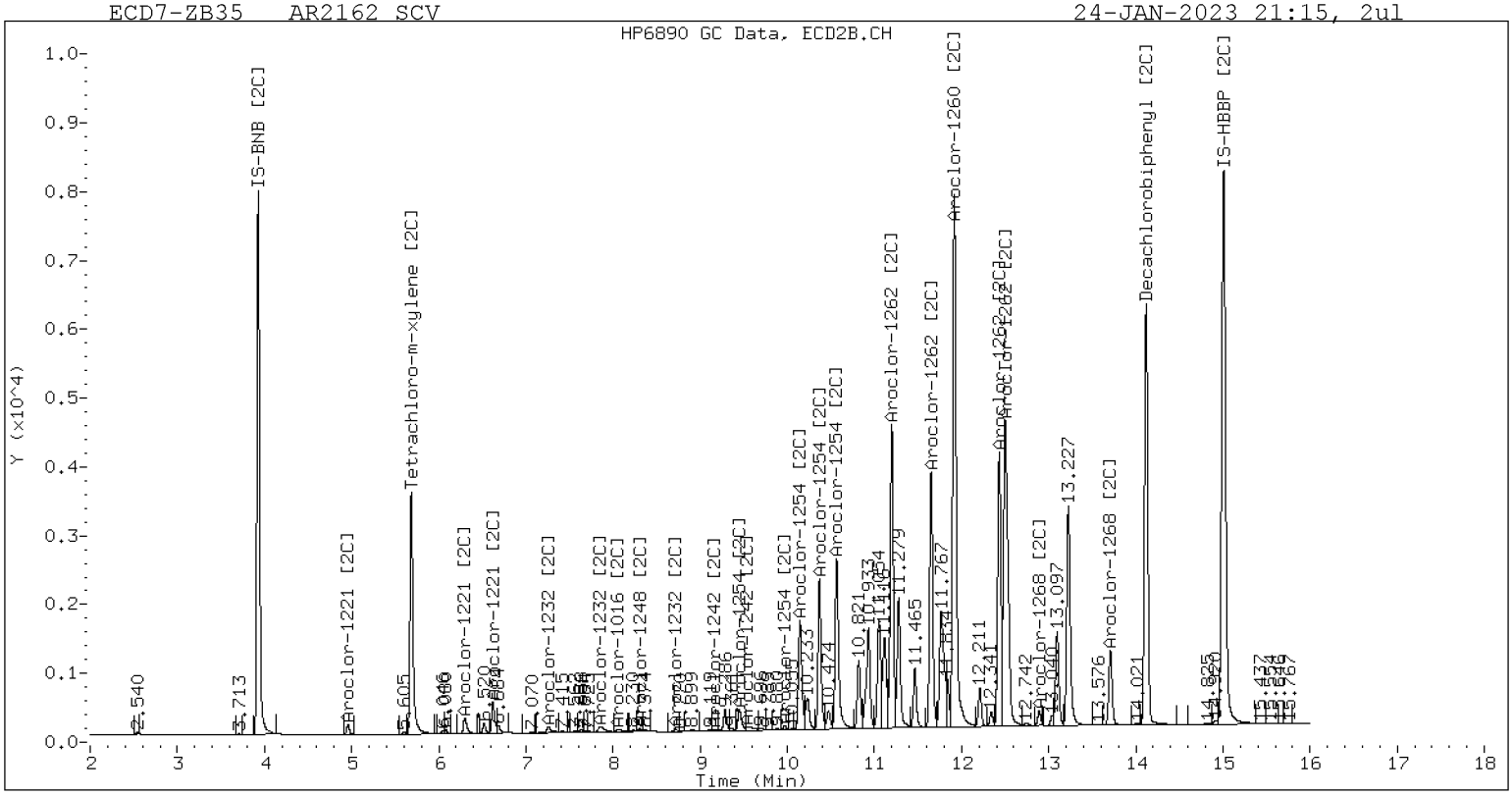
PCB Dual Column Chromatograms

ECD7-ZB5 AR2162 SCV 24-JAN-2023 21:15, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162 SCV 24-JAN-2023 21:15, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GA00061
Laboratory ID: SLA0281-SCV6
Sequence: SLA0281
Sequence Name: AR3268SCV6
Standard ID: K007660

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1232	250.00	216	-13.7	20.00
Aroclor 1232 [2C]	250.00	239	-4.5	20.00
Decachlorobiphenyl	40.000	54.6	36.5	20.00
Tetrachlorometaxylene	40.000	36.4	-9.1	20.00
Decachlorobiphenyl [2C]	40.000	57.9	44.8	20.00
Tetrachlorometaxylene [2C]	40.000	36.3	-9.2	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242329ECD7.D
Data file 2: /230124.b/230124.b/01242329ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268 SCV
Client ID:
Injection Date: 24-JAN-2023 21:36
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.810	0.001	250455	5.687	0.000	162795	36.4	36.3	0.2	Tetrachloro-m-xylene
13.892	0.000	551946	14.120	0.000	461901	54.6	57.9	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	487061	-3.2
Hexabromobiphenyl	647433	944934	46.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331721	-1.5
Hexabromobiphenyl	382032	502401	31.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	19363	107.0	1	7.256	0.001	19791	110.0
Aroclor-1016	2	7.659	0.009	58630	97.8	2	7.856	0.005	40139	101.8
Aroclor-1016	3	7.794	0.006	28286	102.5	3	8.055	0.005	17412	108.2
Aroclor-1016	4	8.408	0.004	17373	97.9	4	8.308	0.003	11962	94.8
Total Col1Ave (4 peaks):		101.3				Total Col2Ave (4 peaks):		103.7	RPD = 2	
Corrected Ave (3 peaks):		99.4				Corrected Ave (3 peaks):		101.6	RPD = 2	
Aroclor-1221	1	4.735	0.002	5022	139.5	1	4.961	0.002	3409	140.2
Aroclor-1221	2	6.134	0.001	8987	122.1	2	6.299	0.001	7677	144.1
Aroclor-1221	3	6.385	0.001	29368	171.8	3	6.624	0.001	16198	180.1
Total Col1Ave (3 peaks):		144.5				Total Col2Ave (3 peaks):		154.8	RPD = 7	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.735	0.002	5022	223.5	1	4.961	0.002	3409	231.1
Aroclor-1232	2	6.134	0.001	8987	177.4	2	7.256	-0.001	19791	239.8
Aroclor-1232	3	7.659	0.001	58630	231.5	3	7.856	0.001	40139	238.8
Aroclor-1232	4	8.585	0.000	24991	230.5	4	8.715	0.001	11476	245.7
Total Col1Ave (4 peaks):		215.7				Total Col2Ave (4 peaks):		238.8	RPD = 10	
Corrected Ave (3 peaks):		210.5				Corrected Ave (3 peaks):		236.6	RPD = 12	
Aroclor-1242	1	7.272	0.001	19363	129.8	1	7.256	0.000	19791	136.4
Aroclor-1242	2	7.659	0.004	58630	120.1	2	7.856	0.002	40139	124.6
Aroclor-1242	3	8.408	0.001	17373	119.8	3	9.166	0.006	11813	117.1
Aroclor-1242	4	8.585	0.003	24991	114.1	4	9.595	0.009	16549	123.7
Total Col1Ave (4 peaks):		121.0				Total Col2Ave (4 peaks):		125.4	RPD = 4	
Corrected Ave (3 peaks):		118.0				Corrected Ave (3 peaks):		121.8	RPD = 3	
Aroclor-1248	1	8.408	0.002	17373	71.3	1	8.308	0.003	11962	79.8
Aroclor-1248	2	8.585	0.005	24991	80.4	2	8.715	0.003	11476	71.1
Aroclor-1248	3	9.001	0.002	67631	113.8	3	9.166	0.009	11813	59.9
Aroclor-1248	4	9.293	-0.001	30983	105.3	4	9.595	0.014	16549	67.9
Total Col1Ave (4 peaks):		92.7				Total Col2Ave (4 peaks):		69.7	RPD = 28	
Corrected Ave (3 peaks):		85.7				Corrected Ave (3 peaks):		66.3	RPD = 26	
Aroclor-1254	1	9.293	-0.006	30983	62.4	1	9.451	0.003	3749	15.6
Aroclor-1254	2	9.381	0.003	9071	42.8	2	9.974	0.005	2452	12.6
Aroclor-1254	3	9.678	0.009	5199	16.3	3	10.131	0.010	4718	11.1
Aroclor-1254	4	9.820	0.012	8864	14.2	4	10.389	0.018	4224	10.0
Aroclor-1254	5	10.195	0.018	8085	19.9	5	10.573	0.004	1573	6.7
Total Col1Ave (5 peaks):		31.1				Total Col2Ave (5 peaks):		11.2	RPD = 94*	
Corrected Ave (4 peaks):		23.3				Corrected Ave (4 peaks):		10.1	RPD = 79*	
Aroclor-1260	1	11.050	0.006	66852	126.1	1	11.647	-0.006	57235	157.9
Aroclor-1260	2	11.366	0.006	6269	11.5	2	11.919	0.002	25368	27.7
Aroclor-1260	3	11.741	0.007	41446	28.9	3	12.434	-0.002	262014	1146.4
Aroclor-1260	4	12.052	-0.088	2691	3.6	4	12.502	-0.000	277060	466.9
Aroclor-1260	5	12.245	0.002	349286	1080.9	NS	---			----
Total Col1Ave (5 peaks):		250.2				Total Col2Ave (4 peaks):		449.7	RPD = 57*	
Corrected Ave (4 peaks):		42.5				Corrected Ave (3 peaks):		217.5	RPD = 135*	
Aroclor-1262	1	10.838	0.006	4520	11.8	1	11.203	0.003	40576	82.5
Aroclor-1262	2	12.245	-0.000	349286	579.1	2	11.647	-0.006	57235	136.9
Aroclor-1262	3	12.318	-0.002	349715	534.1	3	12.434	-0.001	262014	588.4
Aroclor-1262	4	12.988	-0.001	141905	237.8	4	12.502	-0.002	277060	388.5
Total Col1Ave (4 peaks):		340.7				Total Col2Ave (4 peaks):		299.1	RPD = 13	
Corrected Ave (3 peaks):		261.2				Corrected Ave (3 peaks):		202.6	RPD = 25	
Aroclor-1268	1	12.245	0.001	349286	223.8	1	12.434	0.000	262014	223.3
Aroclor-1268	2	12.318	0.000	349715	224.6	2	12.502	0.000	277060	221.9
Aroclor-1268	3	12.699	0.000	289328	224.3	3	12.893	-0.000	208928	201.0
Aroclor-1268	4	13.490	0.001	849299	222.1	4	13.710	0.002	725831	226.1
Total Col1Ave (4 peaks):		223.7				Total Col2Ave (4 peaks):		218.1	RPD = 3	

Corrected Ave (3 peaks): 223.4 Corrected Ave (3 peaks): 215.4 RPD = 4

Total PCB Area Col1 (5.909 - 13.792) = 2866092 Col1 Total PCB = 0.5 ppm*

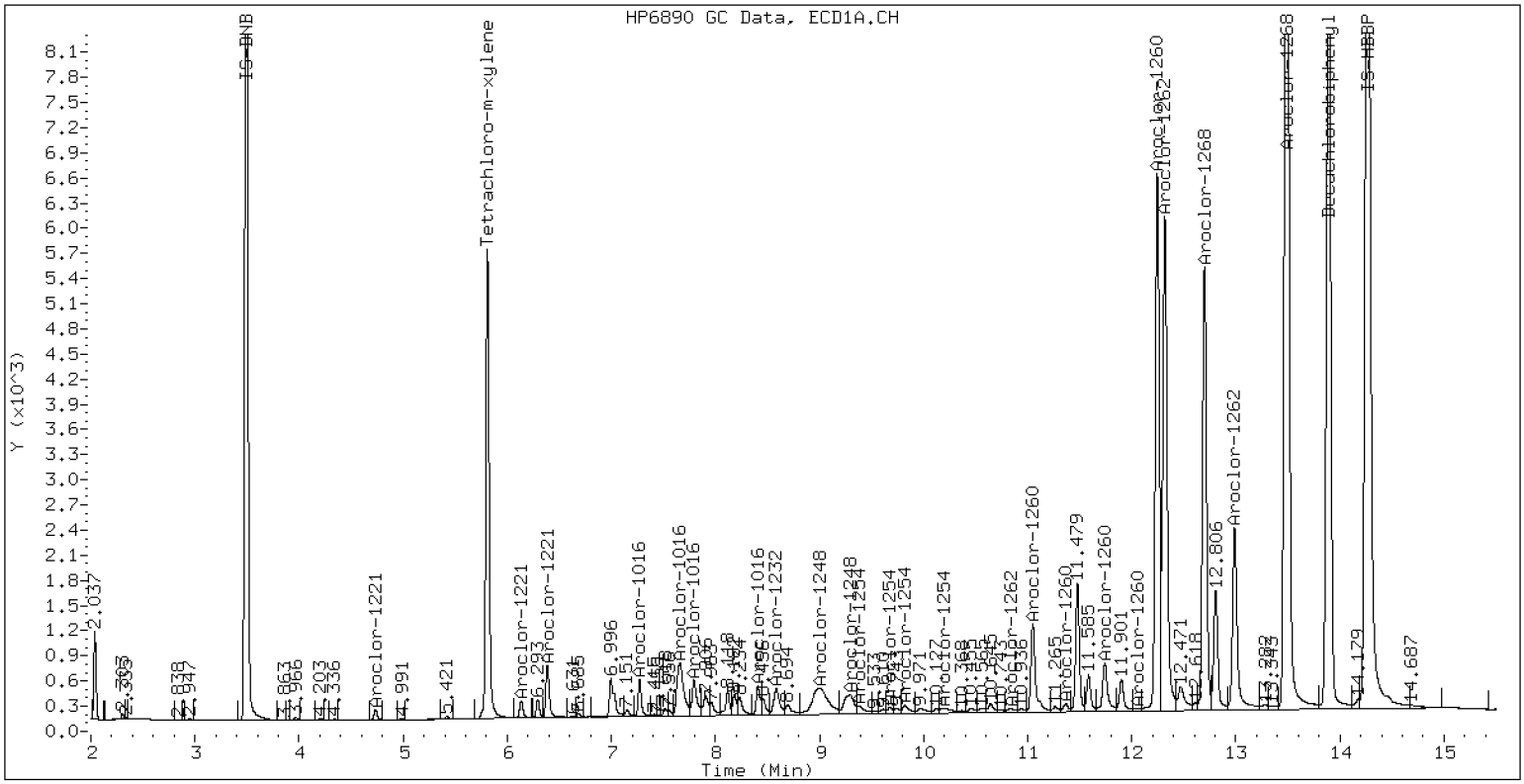
Total PCB Area Col2 (5.787 - 14.020) = 2084481 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

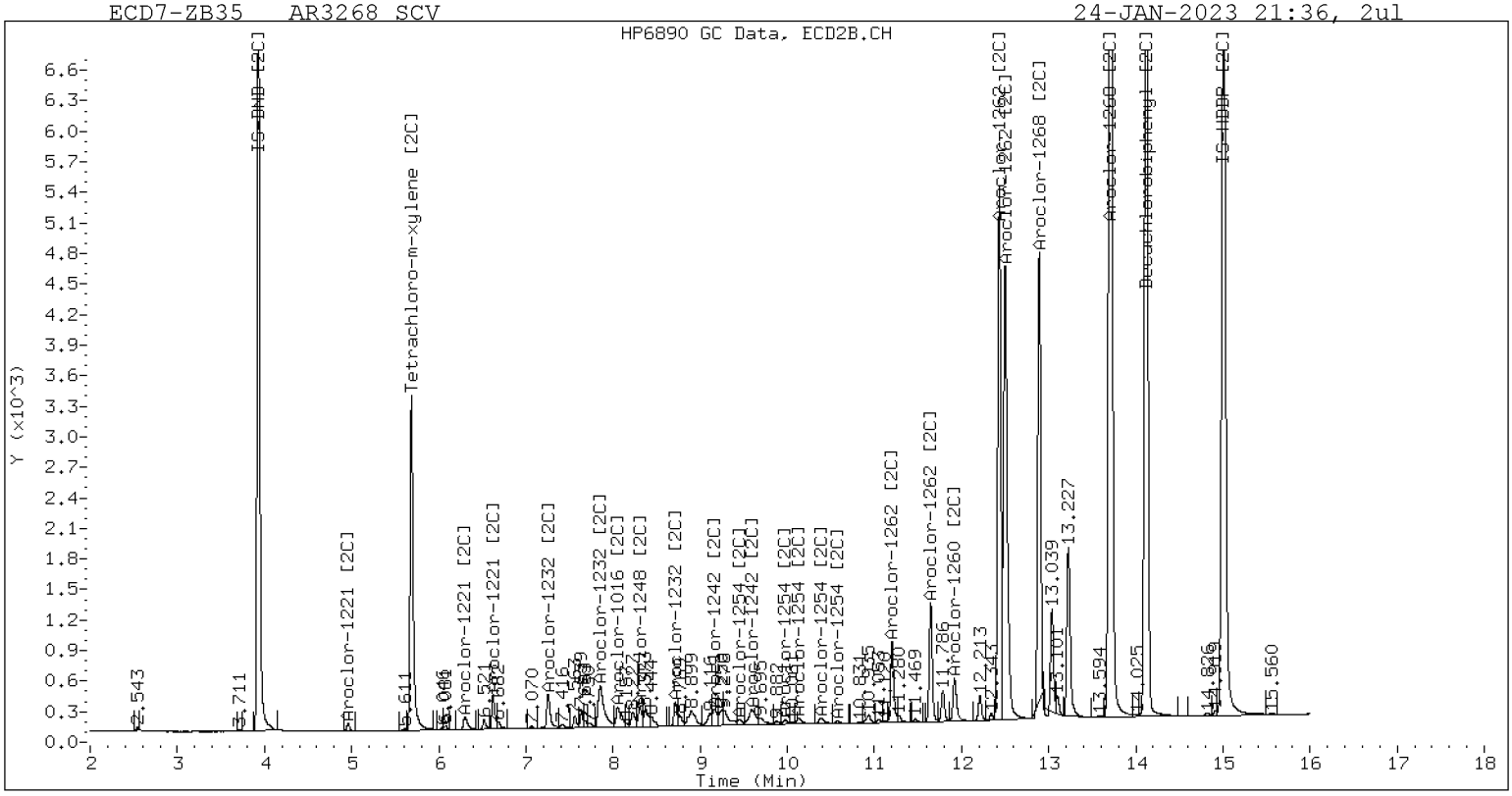
PCB Dual Column Chromatograms

ECD7-ZB5 AR3268 SCV 24-JAN-2023 21:36, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR3268 SCV 24-JAN-2023 21:36, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092306ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/09/23
Lab Sample ID:	SLB0148-ICV1	Injection Time:	13:59
Sequence Name:	AR1254ICV1		

		CONC. (ug/L)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Aroclor 1254	A	250.00	224	0.0675033	0.0609094		-10.5	+/-20
Aroclor-1254 (1)	A	250.00	228	0.0815329	0.0745149			
Aroclor-1254 (2)	A	250.00	213	0.0348121	0.0296052			
Aroclor-1254 (3)	A	250.00	228	0.0522405	0.0477492			
Aroclor-1254 (4)	A	250.00	229	0.1023658	0.0937434			
Aroclor-1254 (5)	A	250.00	221	0.0665652	0.0589343			
Aroclor 1254 [2C]	A	250.00	233	0.0733219	0.0684929		-7.0	+/-20
Aroclor-1254 (1) [2C]	A	250.00	239	0.0580388	0.0554127			
Aroclor-1254 (2) [2C]	A	250.00	239	0.0469118	0.0449159			
Aroclor-1254 (3) [2C]	A	250.00	234	0.1023304	0.0958714			
Aroclor-1254 (4) [2C]	A	250.00	239	0.1023323	0.0978462			
Aroclor-1254 (5) [2C]	A	250.00	212	0.0569963	0.0484183			
Decachlorobiphenyl	A	40.000	37.9	0.8555994	0.8099570		-5.3	+/-20
Tetrachlorometaxylene	A	40.000	38.0	1.1307870	1.0757870		-5.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	35.6	1.2696430	1.1307770		-11.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.9	1.0814980	1.0241290		-5.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092306ECD7.D
Data file 2: /230209.b/230209.b/02092306ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254ICV1
Client ID:
Injection Date: 09-FEB-2023 13:59
Report Date: 02/10/2023 12:57
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.003	198224	5.682	-0.003	173339	38.1	37.9	0.5	Tetrachloro-m-xylene
13.890	-0.002	207643	14.116	0.001	268806	37.9	35.6	6.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	368519	-26.8
Hexabromobiphenyl	647433	512726	-20.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	338510	0.5
Hexabromobiphenyl	382032	475436	24.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.293	-0.006	85813	228.5	1	9.444	-0.001	58618	238.7
Aroclor-1254	2	9.372	-0.006	34094	212.6	2	9.963	-0.001	47514	239.4
Aroclor-1254	3	9.662	-0.007	54989	228.5	3	10.115	-0.001	101417	234.2
Aroclor-1254	4	9.800	-0.009	107957	228.9	4	10.366	-0.001	103506	239.0
Aroclor-1254	5	10.162	-0.015	67870	221.3	5	10.563	-0.001	51219	212.4

Total Col1Ave (5 peaks): 224.0 Total Col2Ave (5 peaks): 232.7 RPD = 4

Corrected Ave (4 peaks): 222.7 Corrected Ave (4 peaks): 231.1 RPD = 4

CalAmt %D: -10.4 CalAmt %D: -6.9

Total PCB Area Col1 (5.909 - 13.792) = 1136674 Col1 Total PCB = 0.3 ppm*

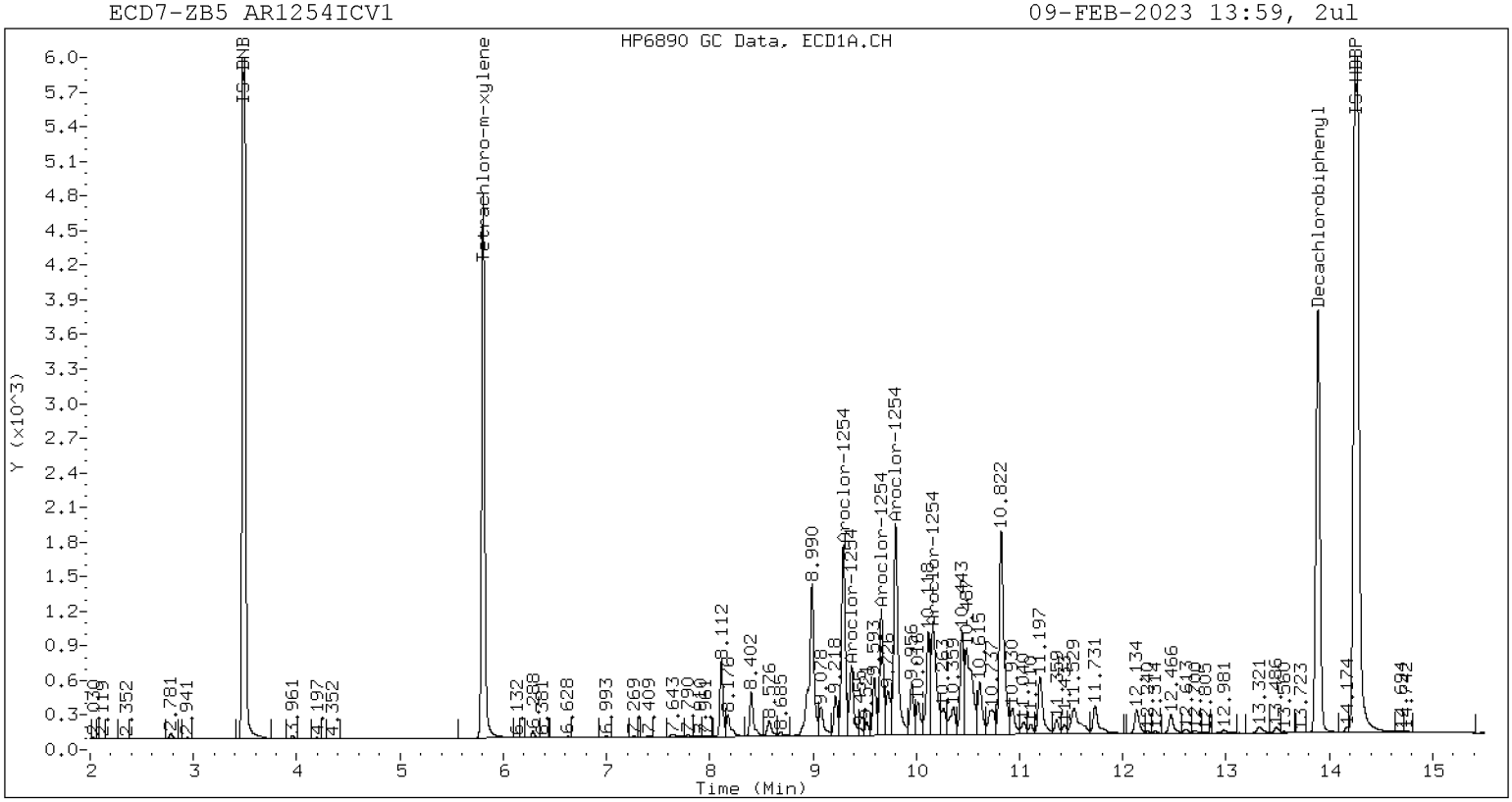
Total PCB Area Col2 (5.785 - 14.015) = 993557 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

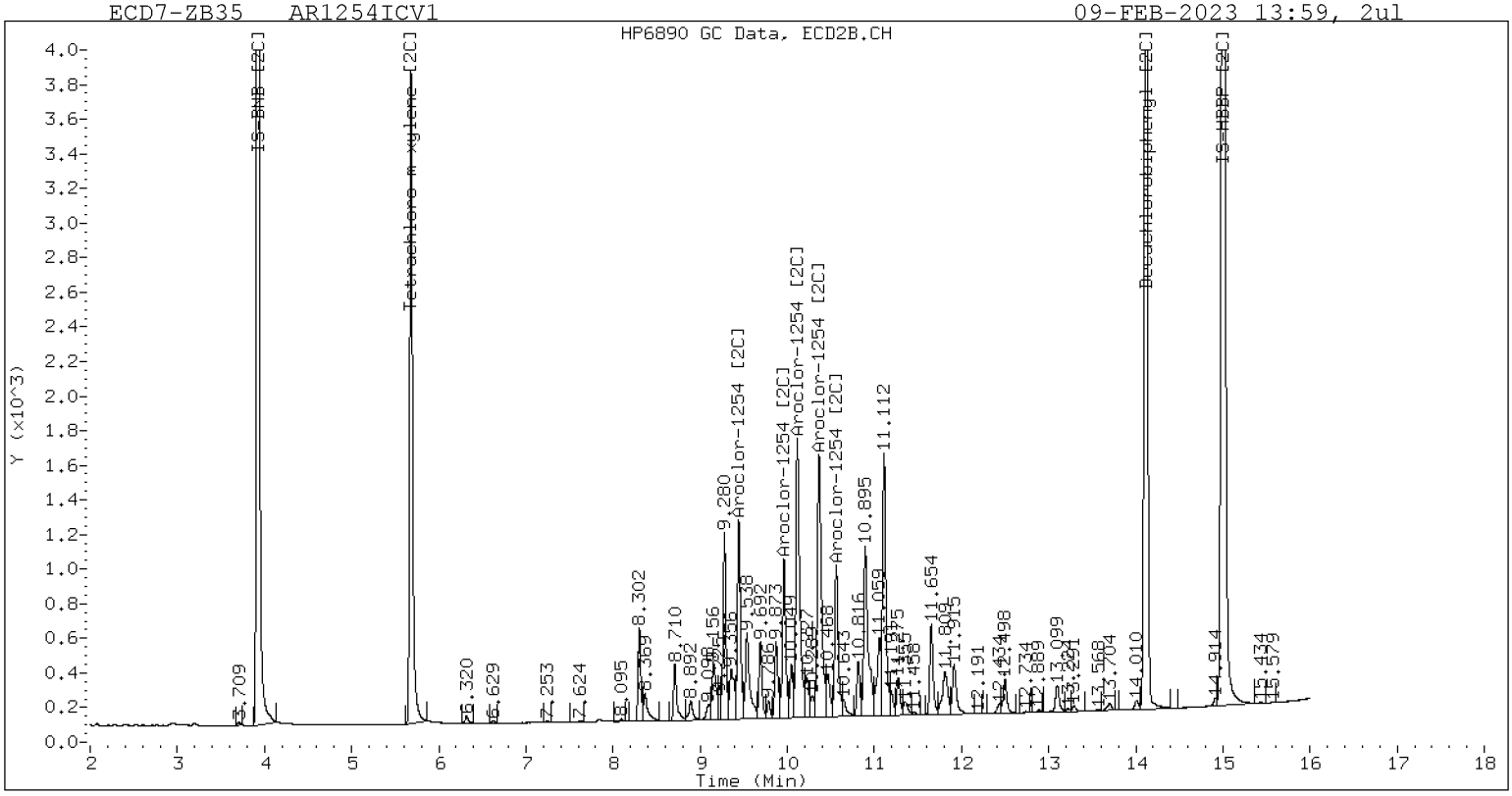
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254ICV1 09-FEB-2023 13:59, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254ICV1 09-FEB-2023 13:59, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092307ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/09/23
Lab Sample ID:	SLB0148-ICV2	Injection Time:	14:20
Sequence Name:	AR1660ICV2		

		CONC. (ug/L)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
Aroclor 1016	A	250.00	233	0.0506755	0.0472033		-6.8	+/-20	
Aroclor-1016 (1)	A	250.00	240	0.0297277	0.0285872		-4.0		
Aroclor-1016 (2)	A	250.00	235	0.0985017	0.0927611		-6.0		
Aroclor-1016 (3)	A	250.00	218	0.0453193	0.0396233		-12.8		
Aroclor-1016 (4)	A	250.00	239	0.0291533	0.0278418		-4.4		
Aroclor 1016 [2C]	A	250.00	245	0.0519244	0.0506971		-2.0	+/-20	
Aroclor-1016 (1) [2C]	A	250.00	242	0.0433907	0.0419321		-3.2		
Aroclor-1016 (2) [2C]	A	250.00	243	0.0950862	0.0922932		-2.8		
Aroclor-1016 (3) [2C]	A	250.00	251	0.0388014	0.0388997		0.4		
Aroclor-1016 (4) [2C]	A	250.00	244	0.0304194	0.0296635		-2.4		
Aroclor 1260	A	250.00	193	0.0605224	0.0471968		-22.6	+/-20	*
Aroclor-1260 (1)	A	250.00	198	0.0448870	0.0354910		-20.8		
Aroclor-1260 (2)	A	250.00	198	0.0461412	0.0366336		-20.8		
Aroclor-1260 (3)	A	250.00	197	0.1214672	0.0957022		-21.2		
Aroclor-1260 (4)	A	250.00	192	0.0627593	0.0482645		-23.2		
Aroclor-1260 (5)	A	250.00	182	0.0273573	0.0198928		-27.2		
Aroclor 1260 [2C]	A	250.00	213	0.0836545	0.0706119		-15.0	+/-20	
Aroclor-1260 (1) [2C]	A	250.00	208	0.0577136	0.0479563		-16.8		
Aroclor-1260 (2) [2C]	A	250.00	209	0.1460113	0.1222471		-16.4		
Aroclor-1260 (3) [2C]	A	250.00	222	0.0363944	0.0323908		-11.2		
Aroclor-1260 (4) [2C]	A	250.00	211	0.0944986	0.0798534		-15.6		
Decachlorobiphenyl	A	40.000	33.8	0.8555994	0.7232482		-15.5	+/-20	
Tetrachlorometaxylene	A	40.000	39.8	1.1307870	1.1243980		-0.5	+/-20	
Decachlorobiphenyl [2C]	A	40.000	36.0	1.2696430	1.1438630		-10.0	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	38.9	1.0814980	1.0528570		-2.8	+/-20	

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092307ECD7.D
Data file 2: /230209.b/230209.b/02092307ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660ICV2
Client ID:
Injection Date: 09-FEB-2023 14:20
Report Date: 02/10/2023 12:57
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.004	201274	5.684	-0.002	174491	39.8	38.9	2.1	Tetrachloro-m-xylene
13.889	-0.002	211472	14.117	0.003	272526	33.8	36.0	6.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	358012	-28.9
Hexabromobiphenyl	647433	584784	-9.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331462	-1.6
Hexabromobiphenyl	382032	476501	24.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.267	-0.003	31983	240.4	1	7.252	-0.001	43434	241.6
Aroclor-1016	2	7.649	-0.001	103780	235.4	2	7.850	-0.000	95599	242.7
Aroclor-1016	3	7.786	-0.002	44330	218.6	3	8.048	-0.000	40293	250.6
Aroclor-1016	4	8.401	-0.003	31149	238.8	4	8.302	-0.001	30726	243.8
Total Col1Ave (4 peaks):					233.3	Total Col2Ave (4 peaks):				244.7 RPD = 5
Corrected Ave (3 peaks):					230.9	Corrected Ave (3 peaks):				242.7 RPD = 5
CalAmt %D:					-6.7	CalAmt %D:				-2.1
Aroclor-1260	1	11.039	-0.004	64858	197.7	1	11.649	-0.001	71410	207.7
Aroclor-1260	2	11.356	-0.004	66946	198.5	2	11.913	-0.000	182034	209.3
Aroclor-1260	3	11.729	-0.006	174891	197.0	3	12.432	0.001	48232	222.5
Aroclor-1260	4	12.133	-0.007	88201	192.3	4	12.497	0.000	118907	211.3
Aroclor-1260	5	12.239	-0.005	36353	181.8	NS	---			----
Total Col1Ave (5 peaks):					193.4	Total Col2Ave (4 peaks):				212.7 RPD = 9
Corrected Ave (4 peaks):					192.2	Corrected Ave (3 peaks):				209.4 RPD = 9
CalAmt %D:					-22.6	CalAmt %D:				-14.9

Total PCB Area Col1 (5.909 - 13.792) = 1847926 Col1 Total PCB = 0.4 ppm*

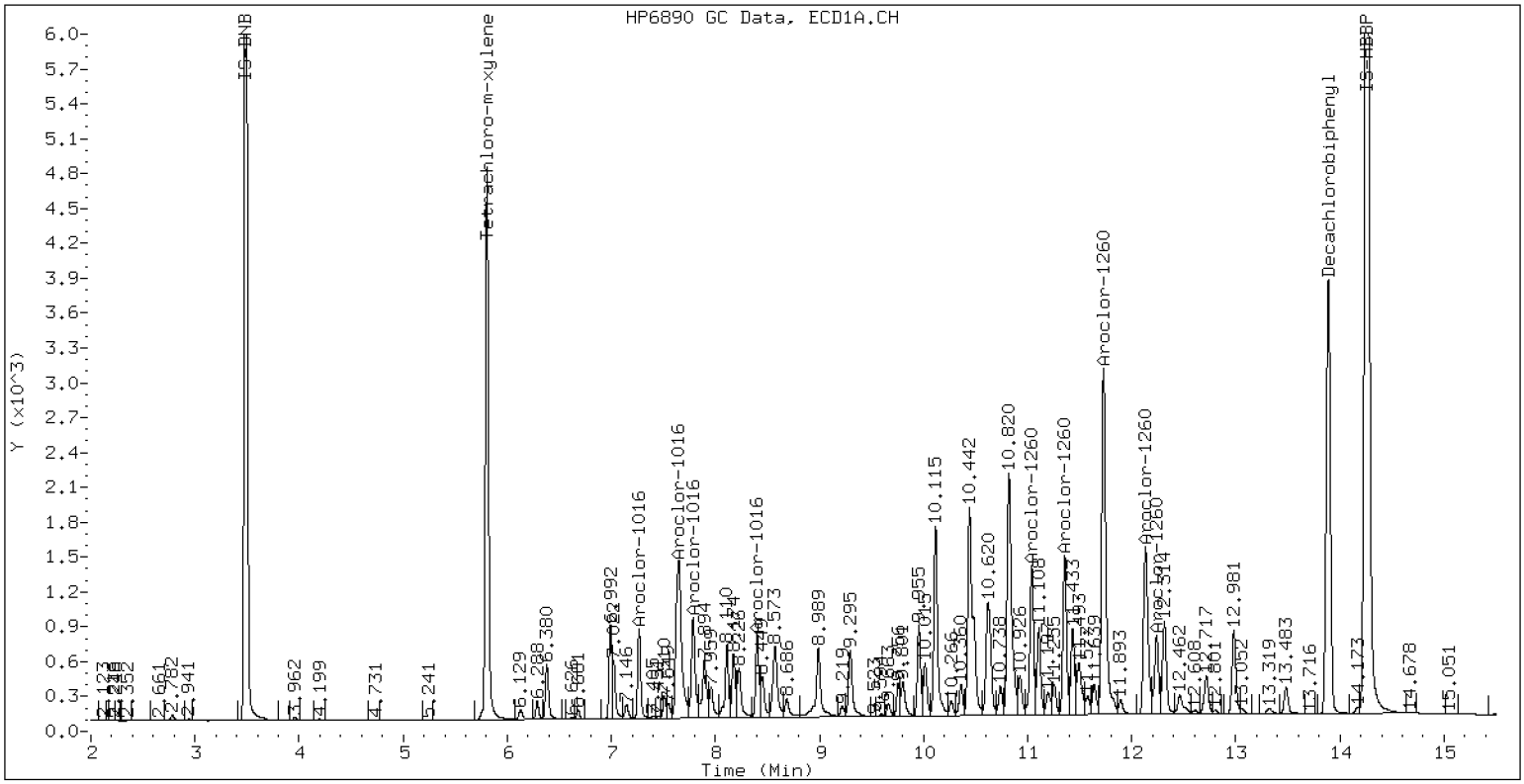
Total PCB Area Col2 (5.785 - 14.015) = 1719768 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

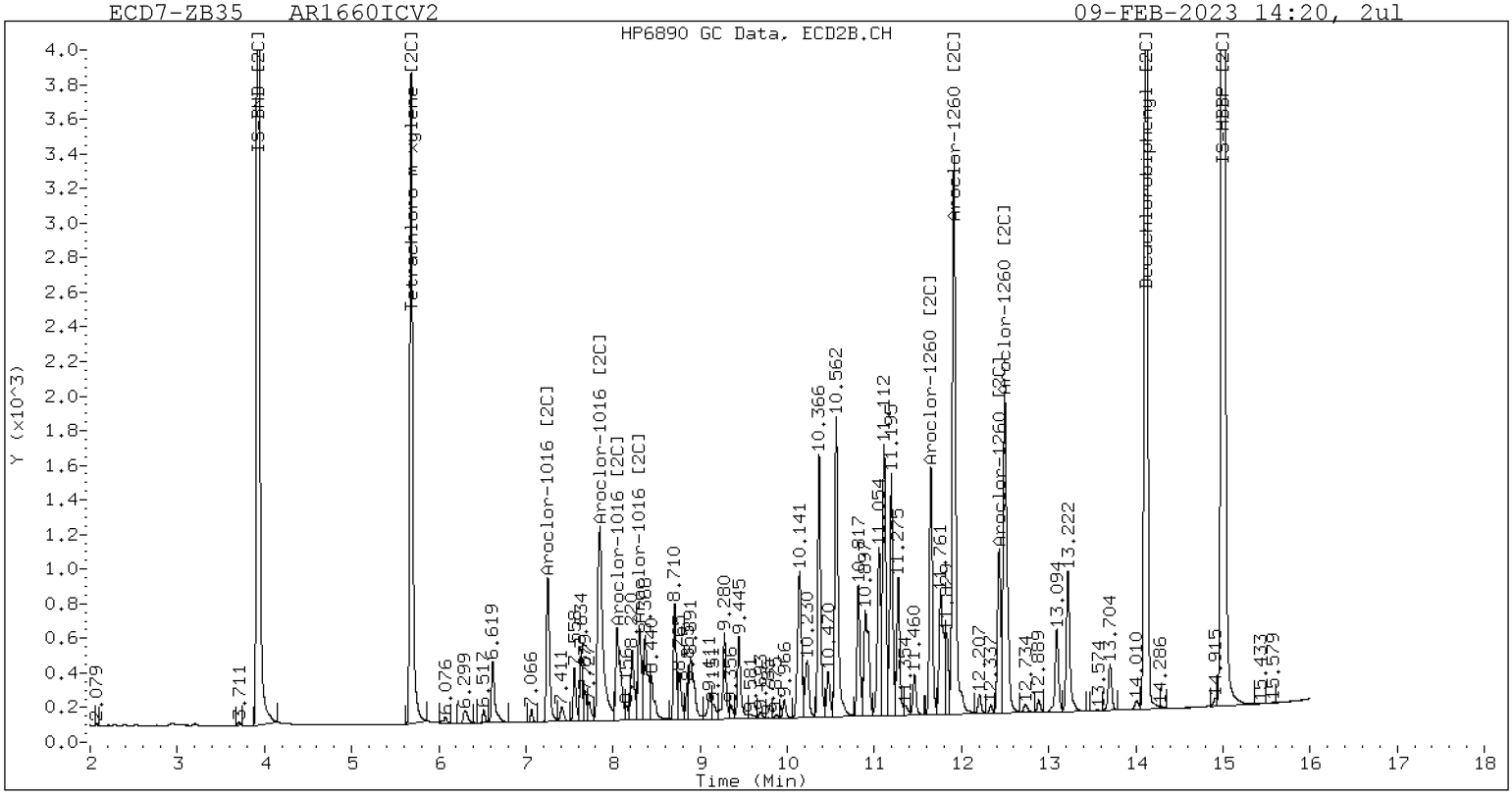
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660ICV2 09-FEB-2023 14:20, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660ICV2 09-FEB-2023 14:20, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	01242324ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLA0281	Injection Date:	01/24/23
Lab Sample ID:	SLA0281-SCV1	Injection Time:	19:51
Sequence Name:	AR1660SCV1		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	217	0.0506755	0.0439293		-13.2	+/-20
Aroclor 1016 [2C]	A	250.00	220	0.0519244	0.0458194		-11.9	+/-20
Aroclor 1260	A	250.00	211	0.0605224	0.0508252		-15.7	+/-20
Aroclor 1260 [2C]	A	250.00	238	0.0836545	0.0795027		-4.9	+/-20
Decachlorobiphenyl	A	40.000	37.9	0.8555994	0.8115673		-5.1	+/-20
Tetrachlorometaxylene	A	40.000	37.5	1.1307870	1.0610020		-6.2	+/-20
Decachlorobiphenyl [2C]	A	40.000	40.2	1.2696430	1.2773160		0.6	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.3	1.0814980	1.0082190		-6.8	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242324ECD7.D
Data file 2: /230124.b/230124.b/01242324ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660 SCV
Client ID:
Injection Date: 24-JAN-2023 19:51
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	268739	5.686	-0.001	172961	37.5	37.3	0.6	Tetrachloro-m-xylene
13.891	-0.000	381489	14.121	0.001	320416	37.9	40.2	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	506576	0.6
Hexabromobiphenyl	647433	940129	45.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	343102	1.8
Hexabromobiphenyl	382032	501702	31.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	40958	217.6	1	7.255	0.001	40190	216.0
Aroclor-1016	2	7.655	0.004	135282	216.9	2	7.852	0.001	90338	221.5
Aroclor-1016	3	7.791	0.003	61557	214.5	3	8.052	0.002	37810	227.2
Aroclor-1016	4	8.406	0.002	40372	218.7	4	8.306	0.000	28171	215.9
Total Col1Ave (4 peaks):					216.9	Total Col2Ave (4 peaks):				220.2 RPD = 1
Corrected Ave (3 peaks):					216.3	Corrected Ave (3 peaks):				217.8 RPD = 1
Aroclor-1221	1	4.732	-0.001	256	6.8	1	---			0.0
Aroclor-1221	2	6.131	-0.002	4742	61.9	2	6.302	0.004	5037	91.4
Aroclor-1221	3	6.384	-0.000	27448	154.4	3	6.623	-0.000	18931	203.5
Total Col1Ave (3 peaks):					74.4	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.732	-0.001	256	11.0	1	---			0.0
Aroclor-1232	2	6.131	-0.002	4742	90.0	2	7.255	-0.001	40190	470.8
Aroclor-1232	3	7.655	-0.004	135282	513.5	3	7.852	-0.002	90338	519.5
Aroclor-1232	4	8.581	-0.003	56938	504.9	4	8.713	-0.001	27776	574.9
Total Col1Ave (4 peaks):					279.8	Total Col2Ave (3 peaks):				521.7 RPD = 60*
Corrected Ave (3 peaks):					202.0	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	-0.000	40958	264.0	1	7.255	-0.000	40190	267.8
Aroclor-1242	2	7.655	-0.001	135282	266.5	2	7.852	-0.001	90338	271.0
Aroclor-1242	3	8.406	-0.001	40372	267.7	3	9.115	-0.045	15827	151.6
Aroclor-1242	4	8.581	-0.000	56938	249.9	4	9.587	0.001	3186	23.0
Total Col1Ave (4 peaks):					262.0	Total Col2Ave (4 peaks):				178.4 RPD = 38
Corrected Ave (3 peaks):					260.1	Corrected Ave (3 peaks):				147.5 RPD = 55*
Aroclor-1248	1	8.406	0.000	40372	159.3	1	8.306	0.000	28171	181.6
Aroclor-1248	2	8.581	0.001	56938	176.1	2	8.713	0.000	27776	166.4
Aroclor-1248	3	8.995	-0.004	58213	94.1	3	9.115	-0.042	15827	77.6
Aroclor-1248	4	9.304	0.010	36620	119.6	4	9.587	0.006	3186	12.6
Total Col1Ave (4 peaks):					137.3	Total Col2Ave (4 peaks):				109.6 RPD = 22
Corrected Ave (3 peaks):					124.4	Corrected Ave (3 peaks):				85.5 RPD = 37
Aroclor-1254	1	9.304	0.005	36620	70.9	1	9.450	0.002	20792	83.5
Aroclor-1254	2	---			0.0	2	9.972	0.003	2640	13.1
Aroclor-1254	3	9.673	0.003	4075	12.3	3	10.148	0.027	52902	120.5
Aroclor-1254	4	9.813	0.004	14733	22.7	4	10.372	0.000	71680	163.3
Aroclor-1254	5	10.122	-0.055	119528	283.6	5	10.569	-0.000	98559	403.2
Total Col1Ave (4 peaks):					97.4	Total Col2Ave (5 peaks):				156.7 RPD = 47*
Corrected Ave (3 peaks):					35.3	Corrected Ave (4 peaks):				95.1 RPD = 92*
Aroclor-1260	1	11.045	0.002	116435	220.7	1	11.654	0.000	81795	226.0
Aroclor-1260	2	11.362	0.001	116918	215.6	2	11.920	0.002	217887	238.0
Aroclor-1260	3	11.738	0.003	303264	212.5	3	12.437	0.001	56212	246.3
Aroclor-1260	4	12.143	0.004	141534	191.9	4	12.502	0.000	142689	240.8
Aroclor-1260	5	12.246	0.002	68446	212.9	NS	---			----
Total Col1Ave (5 peaks):					210.7	Total Col2Ave (4 peaks):				237.8 RPD = 12
Corrected Ave (4 peaks):					208.2	Corrected Ave (3 peaks):				234.9 RPD = 12
Aroclor-1262	1	10.830	-0.002	169725	446.4	1	11.200	0.000	83995	171.1
Aroclor-1262	2	12.246	0.000	68446	114.1	2	11.654	0.001	81795	195.9
Aroclor-1262	3	12.320	-0.000	84201	129.2	3	12.437	0.003	56212	126.4
Aroclor-1262	4	12.989	-0.000	78065	131.5	4	12.502	-0.001	142689	200.4
Total Col1Ave (4 peaks):					205.3	Total Col2Ave (4 peaks):				173.4 RPD = 17
Corrected Ave (3 peaks):					124.9	Corrected Ave (3 peaks):				164.5 RPD = 27
Aroclor-1268	1	12.246	0.001	68446	44.1	1	12.437	0.003	56212	48.0
Aroclor-1268	2	12.320	0.002	84201	54.4	2	12.502	0.001	142689	114.4
Aroclor-1268	3	12.726	0.027	33020	25.7	3	12.894	0.001	1495	1.4
Aroclor-1268	4	13.490	0.001	16019	4.2	4	13.709	0.001	10120	3.2
Total Col1Ave (4 peaks):					32.1	Total Col2Ave (4 peaks):				41.8 RPD = 26
Corrected Ave (3 peaks):					24.7	Corrected Ave (3 peaks):				17.5 RPD = 34

Total PCB Area Col1 (5.909 - 13.792) = 2789370 Col1 Total PCB = 0.5 ppm*

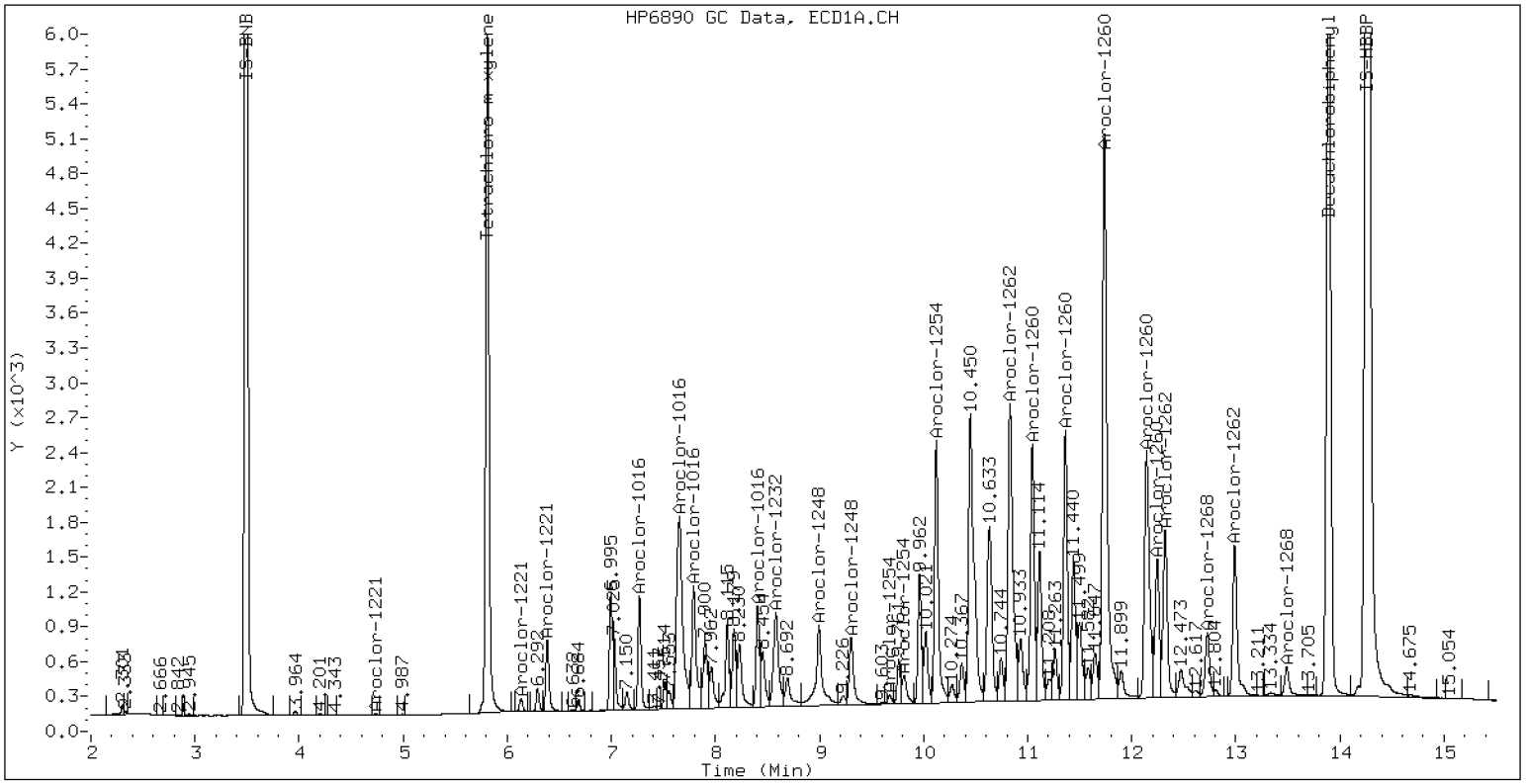
Total PCB Area Col2 (5.787 - 14.020) = 1810543 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

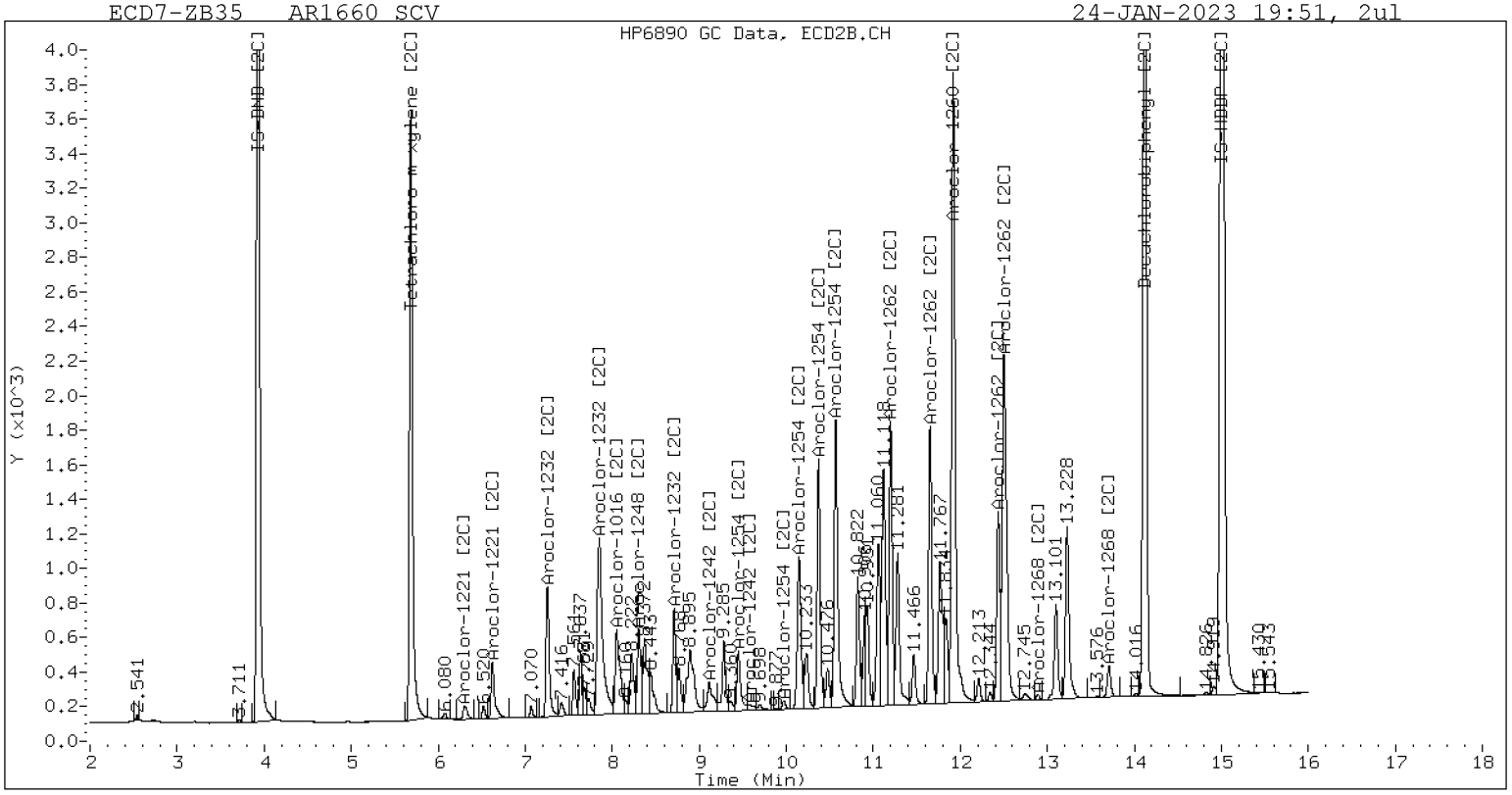
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660 SCV 24-JAN-2023 19:51, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660 SCV 24-JAN-2023 19:51, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	01242325ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLA0281	Injection Date:	01/24/23
Lab Sample ID:	SLA0281-SCV2	Injection Time:	20:12
Sequence Name:	AR1242SCV2		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	223	0.0411165	0.0365437		-10.9	+/-20
Aroclor 1242 [2C]	A	250.00	235	0.0423236	0.0386405		-5.9	+/-20
Decachlorobiphenyl	A	40.000	38.5	0.8555994	0.8244733		-3.6	+/-20
Tetrachlorometaxylene	A	40.000	37.8	1.1307870	1.0677240		-5.6	+/-20
Decachlorobiphenyl [2C]	A	40.000	40.3	1.2696430	1.2804690		0.9	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.4	1.0814980	1.0101840		-6.6	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242325ECD7.D
Data file 2: /230124.b/230124.b/01242325ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242 SCV
Client ID:
Injection Date: 24-JAN-2023 20:12
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	268580	5.686	-0.001	172592	37.8	37.4	1.1	Tetrachloro-m-xylene
13.892	0.001	392918	14.121	0.001	323869	38.5	40.3	4.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503089	-0.0
Hexabromobiphenyl	647433	953137	47.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	341704	1.4
Hexabromobiphenyl	382032	505860	32.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	29901	159.9	1	7.255	0.000	32077	173.1
Aroclor-1016	2	7.653	0.003	107333	173.3	2	7.851	-0.000	71438	175.9
Aroclor-1016	3	7.790	0.002	45013	157.9	3	8.051	0.001	29072	175.4
Aroclor-1016	4	8.406	0.002	32958	179.8	4	8.306	0.001	21761	167.5
Total Col1Ave (4 peaks):		167.7				Total Col2Ave (4 peaks):		173.0	RPD = 3	
Corrected Ave (3 peaks):		163.7				Corrected Ave (3 peaks):		172.0	RPD = 5	
Aroclor-1221	1	4.737	0.004	141	3.8	1	---			0.0
Aroclor-1221	2	6.133	-0.001	3649	48.0	2	6.317	0.018	4290	78.2
Aroclor-1221	3	6.384	-0.000	21189	120.0	3	6.624	0.001	14613	157.7
Total Col1Ave (3 peaks):		57.3				Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.737	0.003	141	6.1	1	---			0.0
Aroclor-1232	2	6.133	-0.001	3649	69.7	2	7.255	-0.002	32077	377.3
Aroclor-1232	3	7.653	-0.005	107333	410.2	3	7.851	-0.004	71438	412.5
Aroclor-1232	4	8.581	-0.003	59617	532.3	4	8.713	-0.000	22563	468.9
Total Col1Ave (4 peaks):		254.6				Total Col2Ave (3 peaks):		419.6	RPD = 49*	
Corrected Ave (3 peaks):		162.0				Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	29901	194.1	1	7.255	-0.001	32077	214.6
Aroclor-1242	2	7.653	-0.002	107333	212.9	2	7.851	-0.002	71438	215.2
Aroclor-1242	3	8.406	-0.000	32958	220.0	3	9.156	-0.004	27374	263.3
Aroclor-1242	4	8.581	-0.000	59617	263.5	4	9.581	-0.006	34156	247.9
Total Col1Ave (4 peaks):		222.6				Total Col2Ave (4 peaks):		235.3	RPD = 6	
Corrected Ave (3 peaks):		209.0				Corrected Ave (3 peaks):		225.9	RPD = 8	
Aroclor-1248	1	8.406	0.001	32958	131.0	1	8.306	0.001	21761	140.9
Aroclor-1248	2	8.581	0.001	59617	185.7	2	8.713	0.001	22563	135.7
Aroclor-1248	3	9.003	0.004	72557	118.2	3	9.156	-0.000	27374	134.7
Aroclor-1248	4	9.296	0.003	28122	92.5	4	9.581	-0.001	34156	135.9
Total Col1Ave (4 peaks):		131.8				Total Col2Ave (4 peaks):		136.8	RPD = 4	
Corrected Ave (3 peaks):		113.9				Corrected Ave (3 peaks):		135.5	RPD = 17	
Aroclor-1254	1	9.296	-0.002	28122	54.8	1	9.448	0.000	11650	47.0
Aroclor-1254	2	9.380	0.002	9292	42.4	2	9.968	-0.001	7642	38.1
Aroclor-1254	3	9.671	0.001	12871	39.2	3	10.120	-0.001	16012	36.6
Aroclor-1254	4	9.808	-0.000	22113	34.4	4	10.378	0.007	16300	37.3
Aroclor-1254	5	10.176	-0.001	17771	42.5	5	10.572	0.004	4439	18.2
Total Col1Ave (5 peaks):		42.7				Total Col2Ave (5 peaks):		35.5	RPD = 18	
Corrected Ave (4 peaks):		39.6				Corrected Ave (4 peaks):		32.6	RPD = 19	
Aroclor-1260	1	11.047	0.003	741	1.4	1	11.663	0.010	1794	4.9
Aroclor-1260	2	11.366	0.006	379	0.7	2	11.923	0.005	1208	1.3
Aroclor-1260	3	11.745	0.011	860	0.6	3	12.507	0.071	977	4.2
Aroclor-1260	4	12.154	0.014	1536	2.1	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
Total Col1Ave (4 peaks):		1.2				Total Col2Ave (3 peaks):		3.5	RPD = 99*	
Corrected Ave (3 peaks):		0.9				Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.836	0.004	10654	27.6	1	11.120	-0.080	8071	16.3
Aroclor-1262	2	12.154	-0.092	1536	2.5	2	11.663	0.010	1794	4.3
Aroclor-1262	3	---			0.0	3	12.507	0.073	977	2.2
Aroclor-1262	4	13.040	0.051	1739	2.9	4	---			0.0
Total Col1Ave (3 peaks):		11.0				Total Col2Ave (3 peaks):		7.6	RPD = 37	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.154	-0.091	1536	1.0	1	12.507	0.073	977	0.8
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.623	-0.076	5080	3.9	3	12.894	0.001	98	0.1
Aroclor-1268	4	13.501	0.012	2725	0.7	4	13.707	-0.001	1566	0.5
Total Col1Ave (3 peaks):		1.9				Total Col2Ave (3 peaks):		0.5	RPD = 120*	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 915887 Col1 Total PCB = 0.2 ppm*

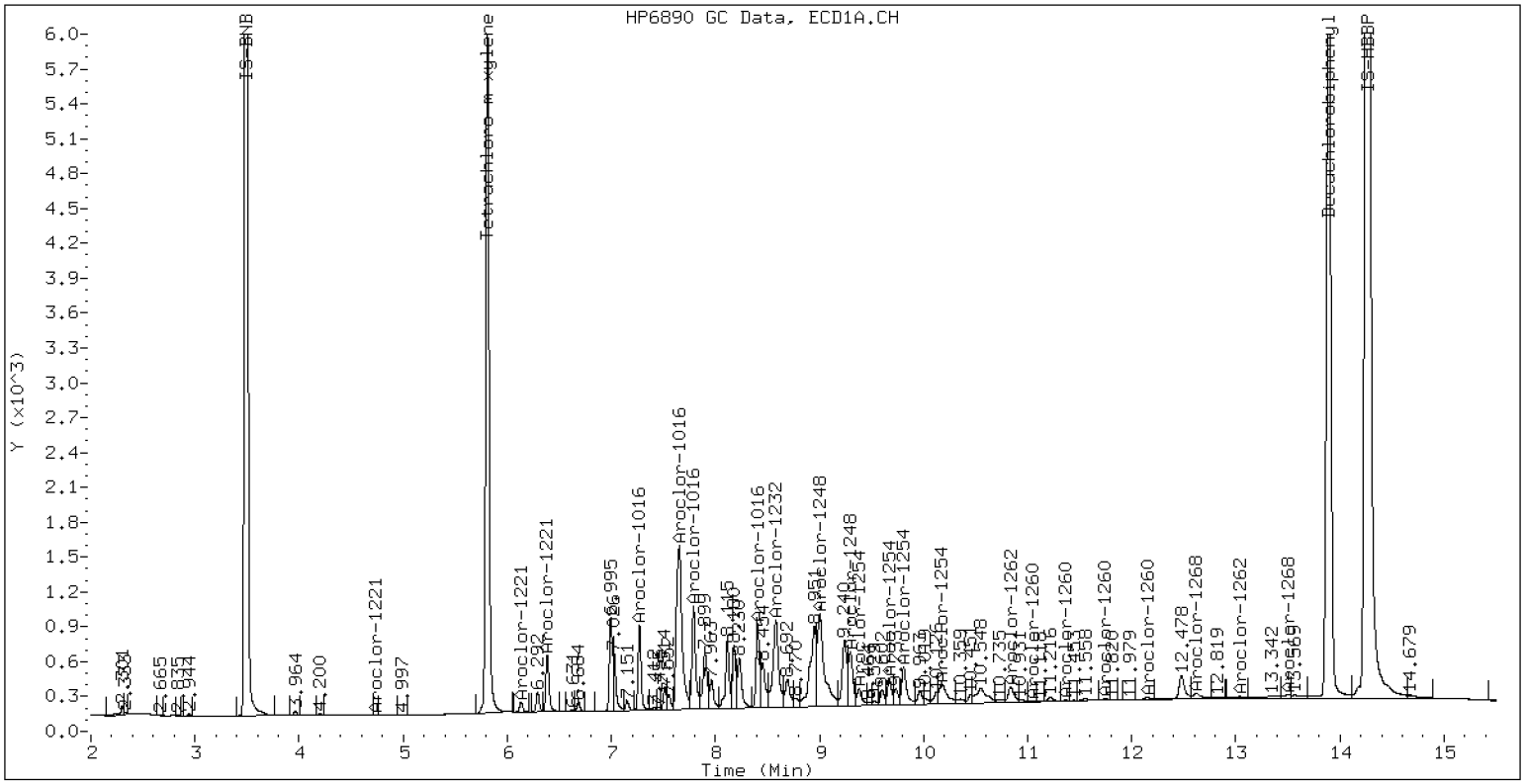
Total PCB Area Col2 (5.787 - 14.020) = 575897 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

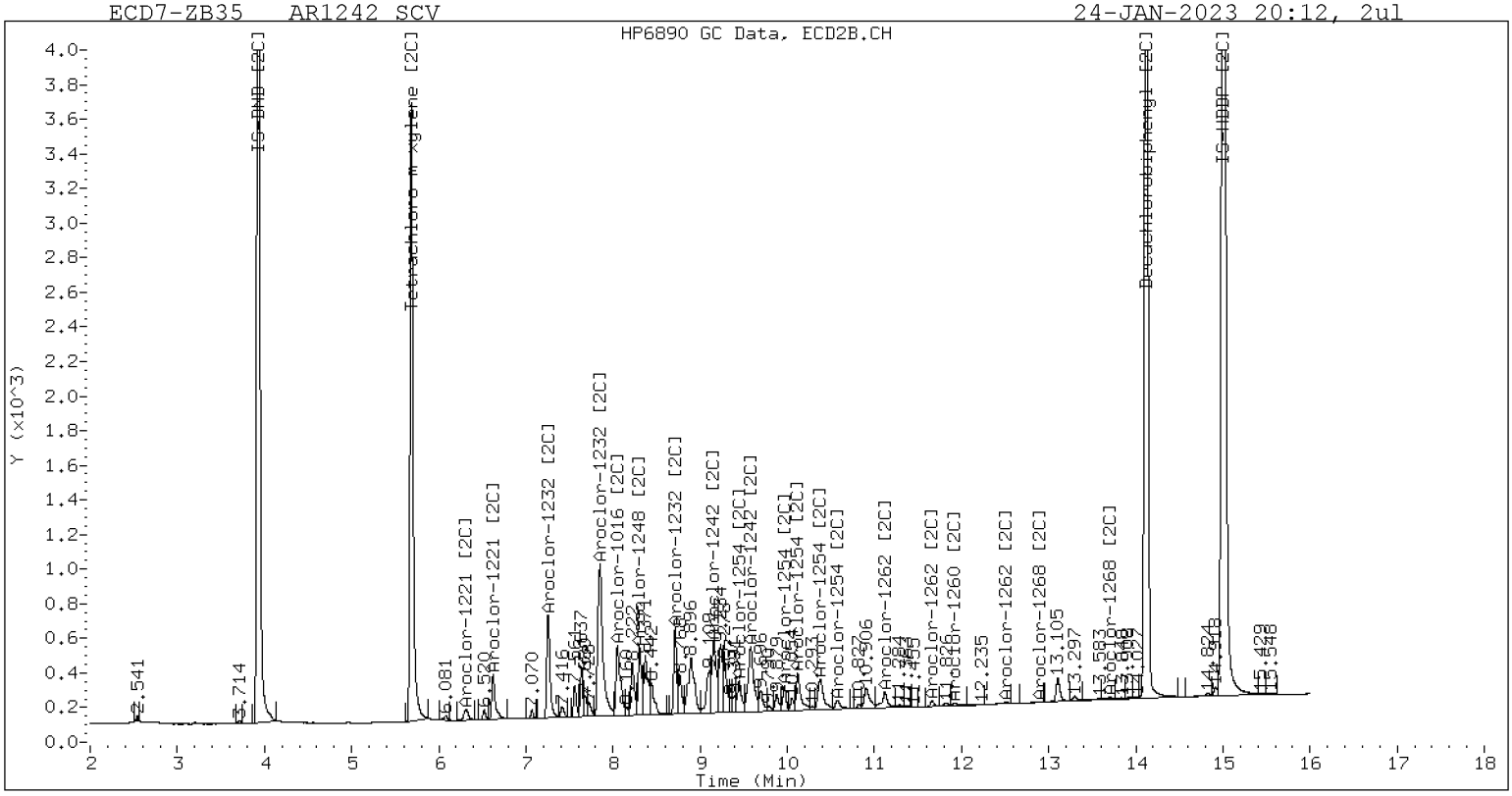
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242 SCV 24-JAN-2023 20:12, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242 SCV 24-JAN-2023 20:12, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	01242326ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLA0281	Injection Date:	01/24/23
Lab Sample ID:	SLA0281-SCV3	Injection Time:	20:33
Sequence Name:	AR1248SCV3		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	237	0.0592639	0.0563710		-5.1	+/-20
Aroclor 1248 [2C]	A	250.00	231	0.0453673	0.0417577		-7.6	+/-20
Decachlorobiphenyl	A	40.000	38.3	0.8555994	0.8184425		-4.3	+/-20
Tetrachlorometaxylene	A	40.000	36.8	1.1307870	1.0389130		-8.1	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.6	1.2696430	1.2561970		-1.1	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.5	1.0814980	0.9880182		-8.6	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242326ECD7.D
Data file 2: /230124.b/230124.b/01242326ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248 SCV
Client ID:
Injection Date: 24-JAN-2023 20:33
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	0.000	263982	5.686	-0.001	169991	36.8	36.5	0.6	Tetrachloro-m-xylene
13.892	0.001	400655	14.121	0.001	316171	38.3	39.6	3.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	508189	1.0
Hexabromobiphenyl	647433	979067	51.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	344105	2.1
Hexabromobiphenyl	382032	503378	31.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.271	0.001	14777	78.3	1	7.254	-0.001	16100	86.3
Aroclor-1016	2	7.655	0.004	70114	112.1	2	7.853	0.002	47184	115.4
Aroclor-1016	3	7.794	0.006	27212	94.5	3	8.053	0.003	9427	56.5
Aroclor-1016	4	8.406	0.003	59884	323.4	4	8.306	0.001	36680	280.3
Total Col1Ave (4 peaks):					152.0	Total Col2Ave (4 peaks):				134.6 RPD = 12
Corrected Ave (3 peaks):					94.9	Corrected Ave (3 peaks):				86.0 RPD = 10
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.133	-0.000	591	7.7	2	6.323	0.025	1820	32.9
Aroclor-1221	3	6.386	0.001	2453	13.8	3	6.627	0.004	1477	15.8
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.133	-0.000	591	11.2	2	7.254	-0.002	16100	188.0
Aroclor-1232	3	7.655	-0.004	70114	265.3	3	7.853	-0.001	47184	270.6
Aroclor-1232	4	8.581	-0.003	76286	674.3	4	8.714	0.000	39330	811.7
Total Col1Ave (3 peaks):					316.9	Total Col2Ave (3 peaks):				423.4 RPD = 29
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.271	0.000	14777	95.0	1	7.254	-0.002	16100	107.0
Aroclor-1242	2	7.655	-0.001	70114	137.7	2	7.853	0.000	47184	141.2
Aroclor-1242	3	8.406	-0.000	59884	395.8	3	9.159	-0.001	46988	448.9
Aroclor-1242	4	8.581	-0.000	76286	333.8	4	9.584	-0.003	56615	408.1
Total Col1Ave (4 peaks):					240.5	Total Col2Ave (4 peaks):				276.3 RPD = 14
Corrected Ave (3 peaks):					188.8	Corrected Ave (3 peaks):				218.7 RPD = 15
Aroclor-1248	1	8.406	0.001	59884	235.6	1	8.306	0.001	36680	235.8
Aroclor-1248	2	8.581	0.001	76286	235.2	2	8.714	0.002	39330	234.9
Aroclor-1248	3	9.000	0.001	148805	239.9	3	9.159	0.003	46988	229.7
Aroclor-1248	4	9.295	0.001	73114	238.1	4	9.584	0.002	56615	223.8
Total Col1Ave (4 peaks):					237.2	Total Col2Ave (4 peaks):				231.0 RPD = 3
Corrected Ave (3 peaks):					236.3	Corrected Ave (3 peaks):				229.5 RPD = 3
Aroclor-1254	1	9.295	-0.004	73114	141.2	1	9.449	0.001	20314	81.4
Aroclor-1254	2	9.378	0.000	36561	165.3	2	9.970	0.000	18678	92.6
Aroclor-1254	3	9.672	0.003	30736	92.6	3	10.124	0.003	35321	80.2
Aroclor-1254	4	9.813	0.004	53537	82.3	4	10.387	0.015	35188	79.9
Aroclor-1254	5	10.192	0.015	40119	94.9	5	10.575	0.006	7386	30.1
Total Col1Ave (5 peaks):					115.3	Total Col2Ave (5 peaks):				72.9 RPD = 45*
Corrected Ave (4 peaks):					102.7	Corrected Ave (4 peaks):				67.9 RPD = 41*
Aroclor-1260	1	11.054	0.010	1868	3.4	1	11.664	0.011	2055	5.7
Aroclor-1260	2	11.366	0.005	1375	2.4	2	11.926	0.009	1303	1.4
Aroclor-1260	3	11.745	0.010	2137	1.4	3	12.439	0.003	395	1.7
Aroclor-1260	4	12.147	0.008	1650	2.1	4	12.507	0.005	890	1.5
Aroclor-1260	5	12.255	0.011	558	1.7	NS	---			----
Total Col1Ave (5 peaks):					2.2	Total Col2Ave (4 peaks):				2.6 RPD = 15
Corrected Ave (4 peaks):					1.9	Corrected Ave (3 peaks):				1.5 RPD = 22
Aroclor-1262	1	10.837	0.005	12736	32.2	1	11.122	-0.078	7136	14.5
Aroclor-1262	2	12.255	0.010	558	0.9	2	11.664	0.011	2055	4.9
Aroclor-1262	3	12.327	0.006	596	0.9	3	12.439	0.004	395	0.9
Aroclor-1262	4	12.996	0.007	1113	1.8	4	12.507	0.003	890	1.2
Total Col1Ave (4 peaks):					8.9	Total Col2Ave (4 peaks):				5.4 RPD = 50*
Corrected Ave (3 peaks):					1.2	Corrected Ave (3 peaks):				2.3 RPD = 65*
Aroclor-1268	1	12.255	0.010	558	0.3	1	12.439	0.005	395	0.3
Aroclor-1268	2	12.327	0.009	596	0.4	2	12.507	0.005	890	0.7
Aroclor-1268	3	12.706	0.007	1161	0.9	3	12.896	0.003	166	0.2
Aroclor-1268	4	13.504	0.016	3330	0.8	4	13.717	0.009	469	0.1
Total Col1Ave (4 peaks):					0.6	Total Col2Ave (4 peaks):				0.3 RPD = 57*
Corrected Ave (3 peaks):					0.5	Corrected Ave (3 peaks):				0.2 RPD = 83*

Total PCB Area Col1 (5.909 - 13.792) = 1230760 Col1 Total PCB = 0.2 ppm*

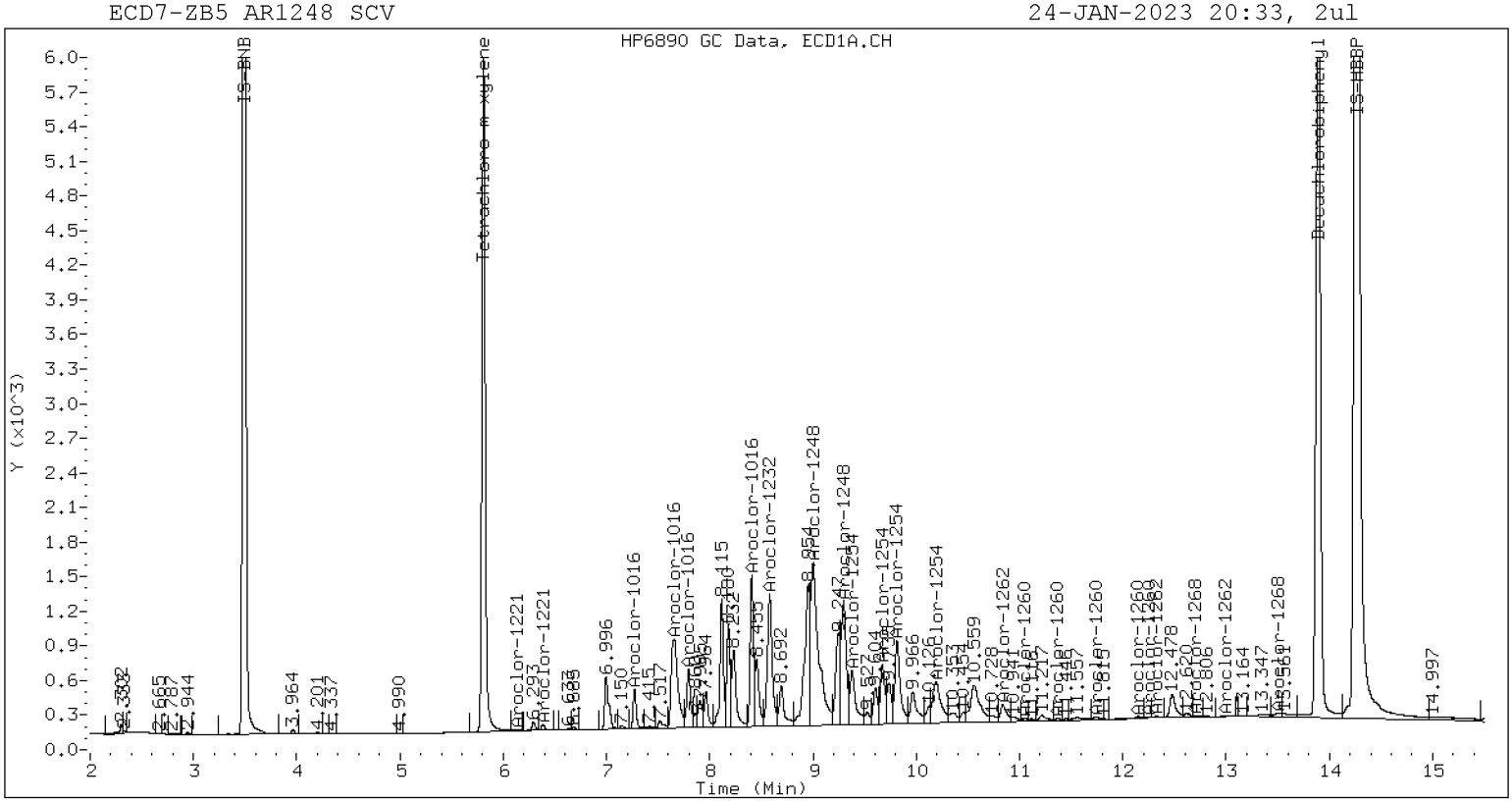
Total PCB Area Col2 (5.787 - 14.020) = 742749 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

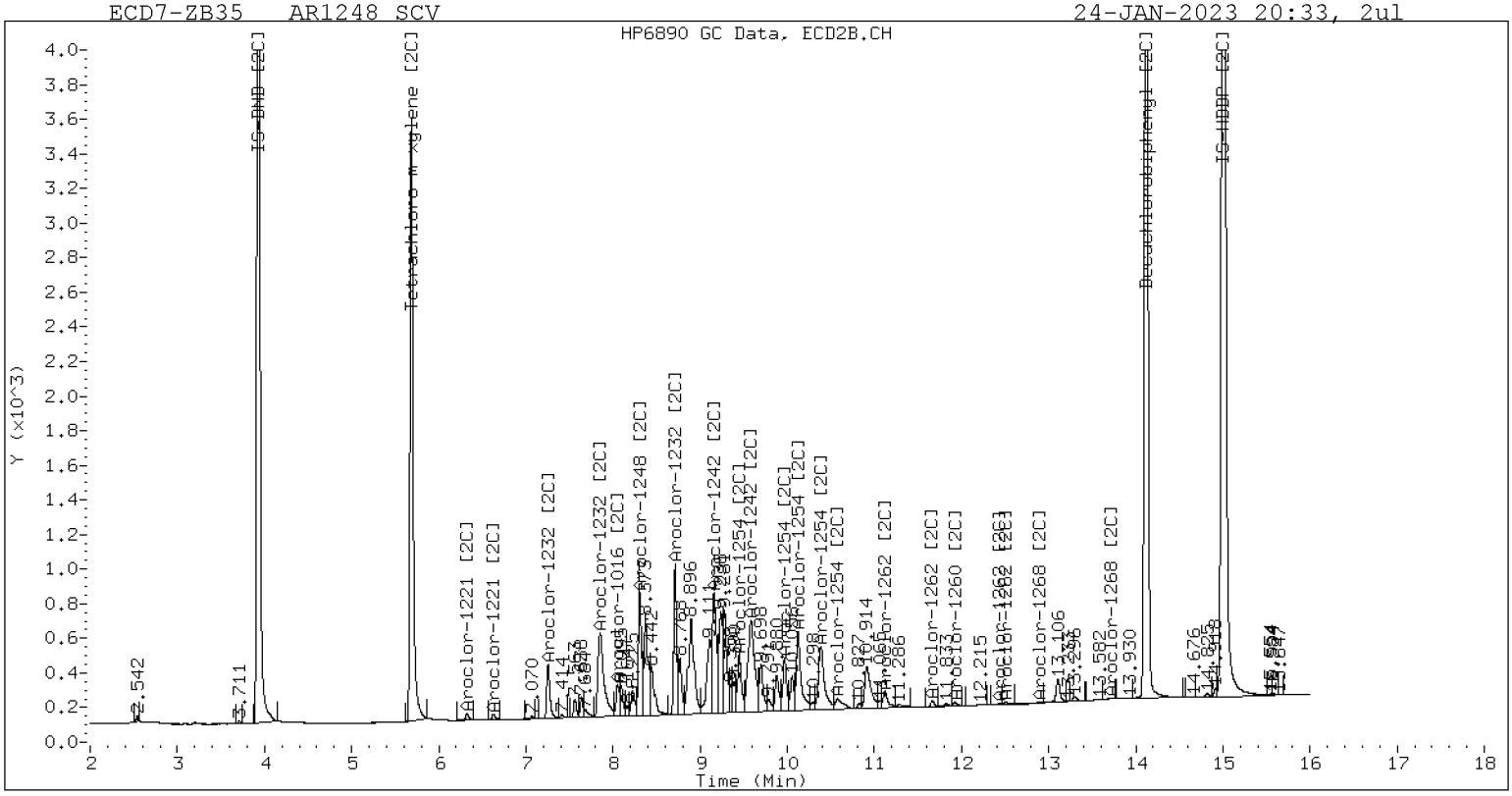
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248 SCV 24-JAN-2023 20:33, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248 SCV 24-JAN-2023 20:33, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	01242327ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLA0281	Injection Date:	01/24/23
Lab Sample ID:	SLA0281-SCV4	Injection Time:	20:54
Sequence Name:	AR1254SCV4		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1254	A	250.00	221	0.0675033	0.0594048		-11.7	+/-20
Aroclor 1254 [2C]	A	250.00	227	0.0733219	0.0662023		-9.4	+/-20
Decachlorobiphenyl	A	40.000	37.1	0.8555994	0.7930764		-7.3	+/-20
Tetrachlorometaxylene	A	40.000	36.7	1.1307870	1.0364220		-8.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.5	1.2696430	1.2551640		-1.1	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.6	1.0814980	0.9904044		-8.4	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242327ECD7.D
Data file 2: /230124.b/230124.b/01242327ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254 SCV
Client ID:
Injection Date: 24-JAN-2023 20:54
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	261398	5.686	-0.001	169839	36.7	36.6	0.1	Tetrachloro-m-xylene
13.892	0.001	383983	14.121	0.001	323233	37.1	39.5	6.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	504424	0.2
Hexabromobiphenyl	647433	968338	49.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	342969	1.8
Hexabromobiphenyl	382032	515045	34.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.273	0.003	320	1.7	1	7.258	0.003	332	1.8
Aroclor-1016	2	7.658	0.008	991	1.6	2	---			0.0
Aroclor-1016	3	7.795	0.007	662	2.3	3	8.097	0.047	515	3.1
Aroclor-1016	4	8.408	0.005	21378	116.3	4	8.307	0.002	20446	156.8
	Total Col1Ave (4 peaks):				30.5	Total Col2Ave (3 peaks):			53.9	RPD = 55*
	Corrected Ave (3 peaks):				1.9	Corrected Ave: < 3 Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.325	0.026	1749	31.7
Aroclor-1221	3	---			0.0	3	6.633	0.011	321	3.5
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	7.258	0.001	332	3.9
Aroclor-1232	3	7.658	-0.000	991	3.8	3	---			0.0
Aroclor-1232	4	8.587	0.003	8887	79.1	4	8.715	0.001	14030	290.5
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	7.273	0.002	320	2.1	1	7.258	0.002	332	2.2
Aroclor-1242	2	7.658	0.003	991	2.0	2	---			0.0
Aroclor-1242	3	8.408	0.002	21378	142.3	3	9.164	0.004	26593	254.9
Aroclor-1242	4	8.587	0.006	8887	39.2	4	9.543	-0.043	34385	248.7
	Total Col1Ave (4 peaks):				46.4	Total Col2Ave (3 peaks):			168.6	RPD = 114*
	Corrected Ave (3 peaks):				14.4	Corrected Ave: < 3 Peaks				
Aroclor-1248	1	8.408	0.003	21378	84.7	1	8.307	0.001	20446	131.9
Aroclor-1248	2	8.587	0.007	8887	27.6	2	8.715	0.003	14030	84.1
Aroclor-1248	3	8.995	-0.004	110289	179.1	3	9.164	0.007	26593	130.4
Aroclor-1248	4	9.300	0.007	113143	371.2	4	9.543	-0.038	34385	136.4
	Total Col1Ave (4 peaks):				165.7	Total Col2Ave (4 peaks):			120.7	RPD = 31
	Corrected Ave (3 peaks):				97.2	Corrected Ave (3 peaks):			115.5	RPD = 17
Aroclor-1254	1	9.300	0.002	113143	220.1	1	9.449	0.001	56453	226.9
Aroclor-1254	2	9.379	0.001	49468	225.4	2	9.970	0.001	45325	225.4
Aroclor-1254	3	9.671	0.002	72811	221.0	3	10.122	0.002	97044	221.2
Aroclor-1254	4	9.811	0.002	140530	217.7	4	10.374	0.002	98778	225.2
Aroclor-1254	5	10.182	0.005	92254	219.8	5	10.570	0.001	57171	234.0
	Total Col1Ave (5 peaks):				220.8	Total Col2Ave (5 peaks):			226.5	RPD = 3
	Corrected Ave (4 peaks):				219.7	Corrected Ave (4 peaks):			224.7	RPD = 2
Aroclor-1260	1	11.045	0.002	8960	16.5	1	11.661	0.008	26985	72.6
Aroclor-1260	2	11.364	0.004	9237	16.5	2	11.923	0.006	19882	21.2
Aroclor-1260	3	11.741	0.007	21268	14.5	3	12.505	0.069	13190	56.3
Aroclor-1260	4	12.146	0.007	19041	25.1	4	---			0.0
Aroclor-1260	5	12.321	0.077	1835	5.5	NS	---			----
	Total Col1Ave (5 peaks):				15.6	Total Col2Ave (3 peaks):			50.0	RPD = 105*
	Corrected Ave (4 peaks):				13.3	Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.832	0.000	157590	402.4	1	11.119	-0.081	92414	183.3
Aroclor-1262	2	12.321	0.075	1835	3.0	2	11.661	0.008	26985	63.0
Aroclor-1262	3	---			0.0	3	12.505	0.071	13190	28.9
Aroclor-1262	4	12.995	0.006	843	1.4	4	---			0.0
	Total Col1Ave (3 peaks):				135.6	Total Col2Ave (3 peaks):			91.7	RPD = 39
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.321	0.076	1835	1.1	1	12.505	0.072	13190	11.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.720	0.021	1314	1.0	3	12.891	-0.002	169	0.2
Aroclor-1268	4	13.504	0.016	1169	0.3	4	13.706	-0.002	1132	0.3
	Total Col1Ave (3 peaks):				0.8	Total Col2Ave (3 peaks):			3.8	RPD = 130*
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.909 - 13.792) = 1507519 Col1 Total PCB = 0.3 ppm*

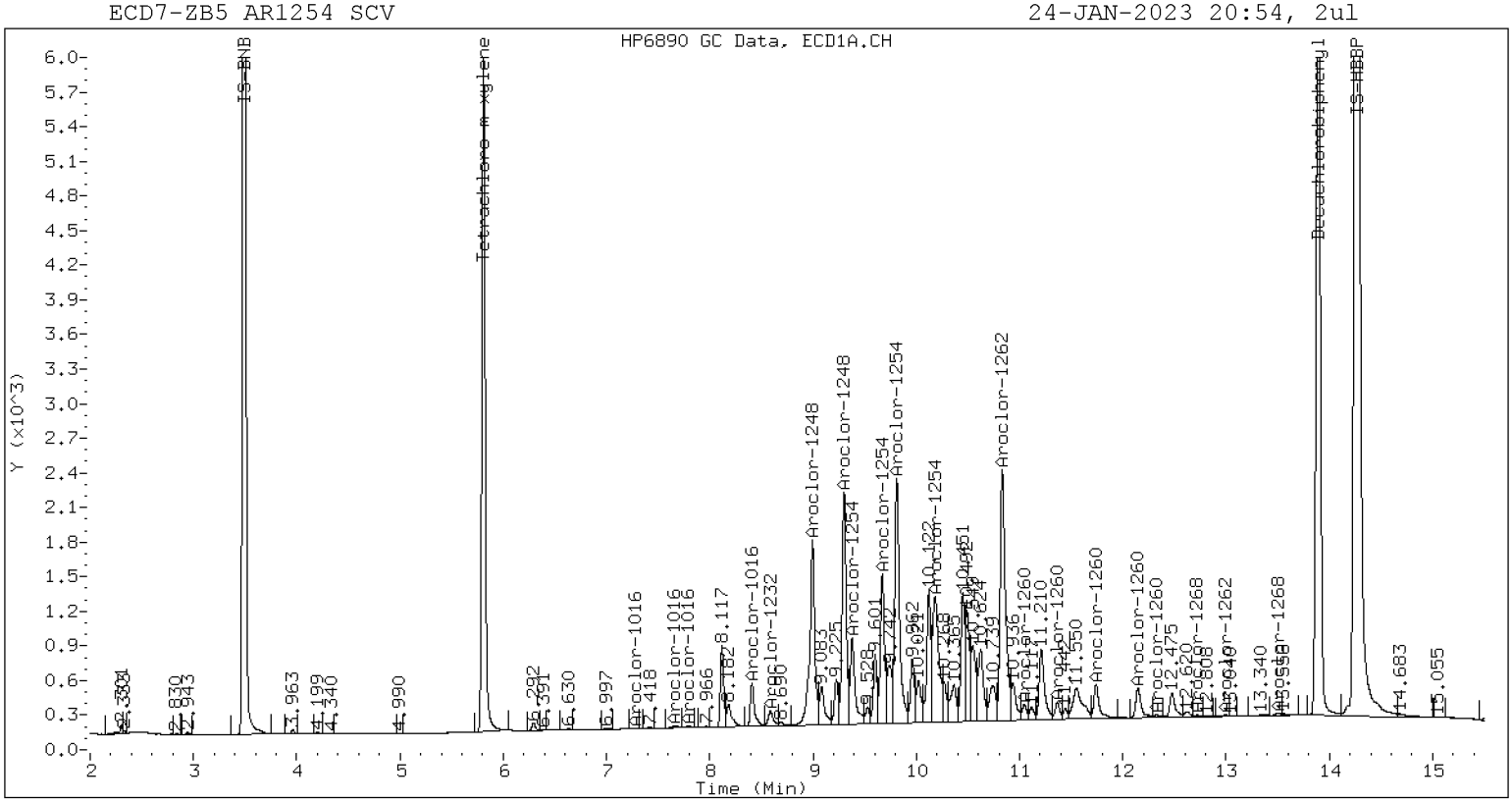
Total PCB Area Col2 (5.787 - 14.020) = 951047 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

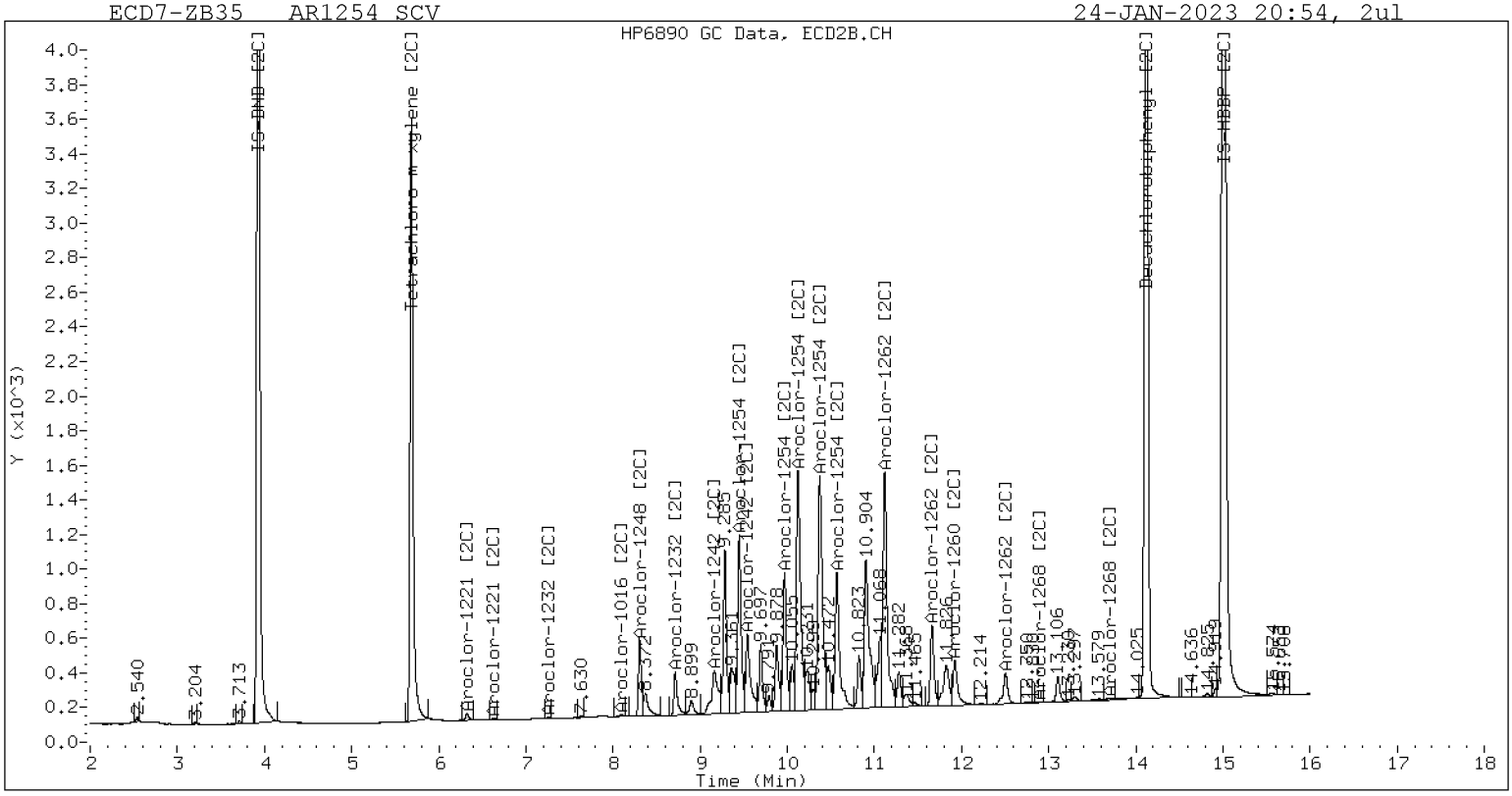
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254 SCV 24-JAN-2023 20:54, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254 SCV 24-JAN-2023 20:54, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	01242328ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLA0281	Injection Date:	01/24/23
Lab Sample ID:	SLA0281-SCV5	Injection Time:	21:15
Sequence Name:	AR2162SCV5		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1221	A	250.00	228	0.0153579	0.0138791		-8.8	+/-20
Aroclor 1221 [2C]	A	250.00	239	0.0134687	0.0127460		-4.5	+/-20
Decachlorobiphenyl	A	40.000	37.5	0.8555994	0.8010750		-6.4	+/-20
Tetrachlorometaxylene	A	40.000	37.3	1.1307870	1.0541060		-6.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.5	1.2696430	1.2528610		-1.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.2	1.0814980	1.0047210		-7.1	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242328ECD7.D
Data file 2: /230124.b/230124.b/01242328ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162 SCV
Client ID:
Injection Date: 24-JAN-2023 21:15
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.809	-0.000	265357	5.685	-0.001	170984	37.3	37.2	0.3	Tetrachloro-m-xylene
13.891	-0.001	397332	14.119	-0.001	326981	37.5	39.5	5.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	503473	0.0
Hexabromobiphenyl	647433	991997	53.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	340361	1.0
Hexabromobiphenyl	382032	521975	36.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	5326	28.5	1	7.257	0.002	6708	36.3
Aroclor-1016	2	7.664	0.013	11965	19.3	2	7.856	0.005	7233	17.9
Aroclor-1016	3	7.797	0.009	6015	21.1	3	8.058	0.008	2997	18.2
Aroclor-1016	4	8.410	0.006	3771	20.6	4	8.308	0.002	2065	16.0
Total Col1Ave (4 peaks):					22.4	Total Col2Ave (4 peaks):				22.1 RPD = 1
Corrected Ave (3 peaks):					20.3	Corrected Ave (3 peaks):				17.3 RPD = 16
Aroclor-1221	1	4.732	-0.000	9097	244.5	1	4.959	-0.000	6157	246.8
Aroclor-1221	2	6.133	-0.000	16114	211.8	2	6.297	-0.001	12807	234.2
Aroclor-1221	3	6.384	0.000	40299	228.1	3	6.622	-0.000	21707	235.2
Total Col1Ave (3 peaks):					228.1	Total Col2Ave (3 peaks):				238.7 RPD = 5
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.732	-0.001	9097	391.6	1	4.959	-0.001	6157	406.9
Aroclor-1232	2	6.133	0.000	16114	307.8	2	7.257	0.000	6708	79.2
Aroclor-1232	3	7.664	0.005	11965	45.7	3	7.856	0.001	7233	41.9
Aroclor-1232	4	8.589	0.004	2837	25.3	4	8.716	0.002	1869	39.0
Total Col1Ave (4 peaks):					192.6	Total Col2Ave (4 peaks):				141.7 RPD = 30
Corrected Ave (3 peaks):					126.3	Corrected Ave (3 peaks):				53.4 RPD = 81*
Aroclor-1242	1	7.272	0.001	5326	34.5	1	7.257	0.001	6708	45.1
Aroclor-1242	2	7.664	0.008	11965	23.7	2	7.856	0.003	7233	21.9
Aroclor-1242	3	8.410	0.004	3771	25.2	3	9.169	0.009	1956	18.9
Aroclor-1242	4	8.589	0.007	2837	12.5	4	9.544	-0.043	5978	43.6
Total Col1Ave (4 peaks):					24.0	Total Col2Ave (4 peaks):				32.3 RPD = 30
Corrected Ave (3 peaks):					20.5	Corrected Ave (3 peaks):				28.1 RPD = 31
Aroclor-1248	1	8.410	0.005	3771	15.0	1	8.308	0.002	2065	13.4
Aroclor-1248	2	8.589	0.008	2837	8.8	2	8.716	0.004	1869	11.3
Aroclor-1248	3	8.997	-0.002	36022	58.6	3	9.169	0.012	1956	9.7
Aroclor-1248	4	9.305	0.011	30853	101.4	4	9.544	-0.038	5978	23.9
Total Col1Ave (4 peaks):					46.0	Total Col2Ave (4 peaks):				14.6 RPD = 104*
Corrected Ave (3 peaks):					27.5	Corrected Ave (3 peaks):				11.5 RPD = 82*
Aroclor-1254	1	9.305	0.006	30853	60.1	1	9.451	0.003	17617	71.3
Aroclor-1254	2	9.376	-0.002	5370	24.5	2	9.970	0.001	2849	14.3
Aroclor-1254	3	9.673	0.003	5543	16.9	3	10.146	0.026	88151	202.5
Aroclor-1254	4	9.810	0.002	14544	22.6	4	10.370	-0.002	107074	245.9
Aroclor-1254	5	10.121	-0.056	180016	429.7	5	10.567	-0.002	141725	584.5
Total Col1Ave (5 peaks):					110.8	Total Col2Ave (5 peaks):				223.7 RPD = 68*
Corrected Ave (4 peaks):					31.0	Corrected Ave (4 peaks):				133.5 RPD = 125*
Aroclor-1260	1	11.044	0.001	310806	558.4	1	11.652	-0.001	187682	498.4
Aroclor-1260	2	11.361	0.000	263161	460.0	2	11.917	-0.000	450612	473.0
Aroclor-1260	3	11.735	0.000	629605	418.0	3	12.433	-0.003	206042	867.7
Aroclor-1260	4	12.141	0.001	210012	269.9	4	12.502	-0.000	326457	529.5
Aroclor-1260	5	12.244	-0.000	268425	791.3	NS	---			----
Total Col1Ave (5 peaks):					499.5	Total Col2Ave (4 peaks):				592.1 RPD = 17
Corrected Ave (4 peaks):					426.6	Corrected Ave (3 peaks):				500.3 RPD = 16
Aroclor-1262	1	10.828	-0.005	171094	426.5	1	11.200	0.000	219731	430.1
Aroclor-1262	2	12.244	-0.002	268425	423.9	2	11.652	-0.001	187682	432.0
Aroclor-1262	3	12.319	-0.002	291581	424.2	3	12.433	-0.001	206042	445.4
Aroclor-1262	4	12.988	-0.001	257735	411.5	4	12.502	-0.002	326457	440.6
Total Col1Ave (4 peaks):					421.5	Total Col2Ave (4 peaks):				437.0 RPD = 4
Corrected Ave (3 peaks):					419.8	Corrected Ave (3 peaks):				434.3 RPD = 3
Aroclor-1268	1	12.244	-0.001	268425	163.8	1	12.433	-0.000	206042	169.0
Aroclor-1268	2	12.319	0.001	291581	178.4	2	12.502	0.000	326457	251.7
Aroclor-1268	3	12.725	0.026	108693	80.3	3	12.892	-0.001	10062	9.3
Aroclor-1268	4	13.486	-0.003	95646	23.8	4	13.710	0.001	59437	17.8
Total Col1Ave (4 peaks):					111.6	Total Col2Ave (4 peaks):				112.0 RPD = 0

Corrected Ave (3 peaks): 89.3 Corrected Ave (3 peaks): 65.4 RPD = 31

Total PCB Area Col1 (5.909 - 13.792) = 4409992 Col1 Total PCB = 0.8 ppm*

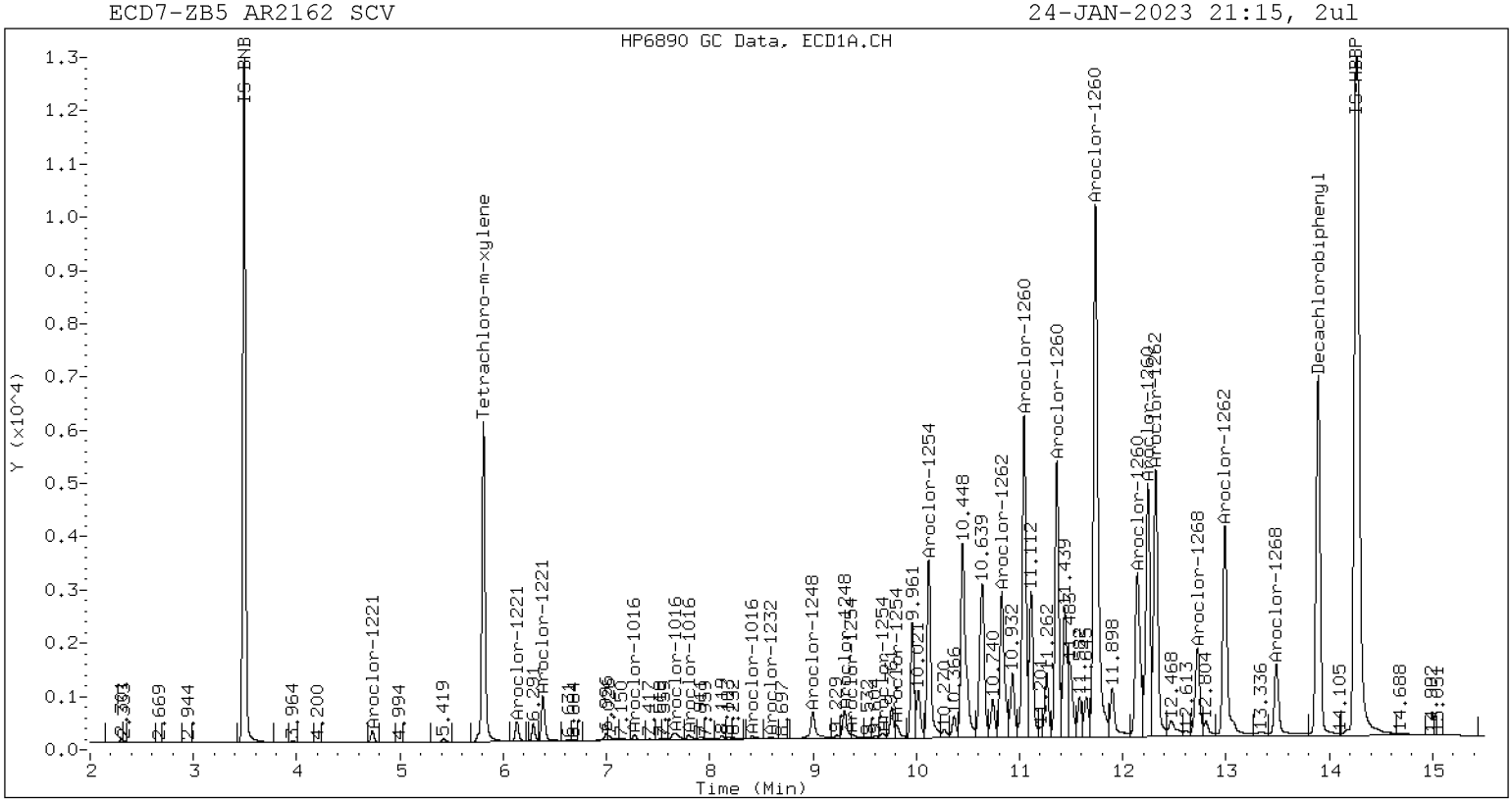
Total PCB Area Col2 (5.787 - 14.020) = 2874073 Col2 Total PCB = 0.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

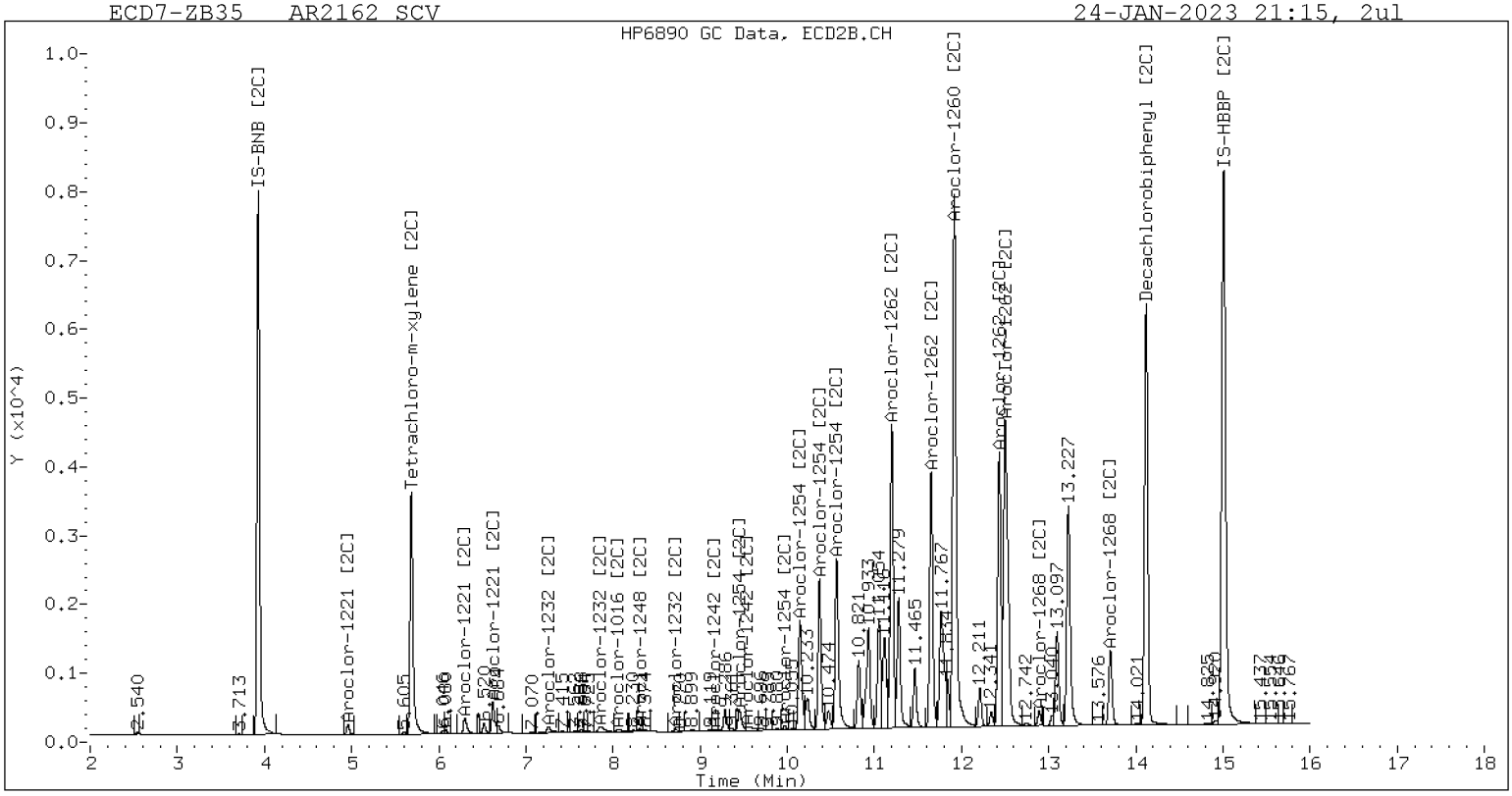
PCB Dual Column Chromatograms

ECD7-ZB5 AR2162 SCV 24-JAN-2023 21:15, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162 SCV 24-JAN-2023 21:15, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	01242329ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLA0281	Injection Date:	01/24/23
Lab Sample ID:	SLA0281-SCV6	Injection Time:	21:36
Sequence Name:	AR3268SCV6		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1232	A	250.00	216	0.0178560	0.0160358		-13.7	+/-20
Aroclor 1232 [2C]	A	250.00	239	0.0188178	0.0180429		-4.5	+/-20
Decachlorobiphenyl	A	40.000	54.6	0.8555994	1.1682210		36.5	+/-20
Tetrachlorometaxylene	A	40.000	36.4	1.1307870	1.0284340		-9.1	+/-20
Decachlorobiphenyl [2C]	A	40.000	57.9	1.2696430	1.8387740		44.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	36.3	1.0814980	0.9815176		-9.2	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230124.b/01242329ECD7.D
Data file 2: /230124.b/230124.b/01242329ECD7.D
Method: \\target\share\chem4\ecd7.i\230124.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268 SCV
Client ID:
Injection Date: 24-JAN-2023 21:36
Report Date: 01/25/2023 10:53
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.810	0.001	250455	5.687	0.000	162795	36.4	36.3	0.2	Tetrachloro-m-xylene
13.892	0.000	551946	14.120	0.000	461901	54.6	57.9	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	487061	-3.2
Hexabromobiphenyl	647433	944934	46.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	331721	-1.5
Hexabromobiphenyl	382032	502401	31.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.272	0.002	19363	107.0	1	7.256	0.001	19791	110.0
Aroclor-1016	2	7.659	0.009	58630	97.8	2	7.856	0.005	40139	101.8
Aroclor-1016	3	7.794	0.006	28286	102.5	3	8.055	0.005	17412	108.2
Aroclor-1016	4	8.408	0.004	17373	97.9	4	8.308	0.003	11962	94.8
Total Col1Ave (4 peaks):		101.3				Total Col2Ave (4 peaks):		103.7	RPD = 2	
Corrected Ave (3 peaks):		99.4				Corrected Ave (3 peaks):		101.6	RPD = 2	
Aroclor-1221	1	4.735	0.002	5022	139.5	1	4.961	0.002	3409	140.2
Aroclor-1221	2	6.134	0.001	8987	122.1	2	6.299	0.001	7677	144.1
Aroclor-1221	3	6.385	0.001	29368	171.8	3	6.624	0.001	16198	180.1
Total Col1Ave (3 peaks):		144.5				Total Col2Ave (3 peaks):		154.8	RPD = 7	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.735	0.002	5022	223.5	1	4.961	0.002	3409	231.1
Aroclor-1232	2	6.134	0.001	8987	177.4	2	7.256	-0.001	19791	239.8
Aroclor-1232	3	7.659	0.001	58630	231.5	3	7.856	0.001	40139	238.8
Aroclor-1232	4	8.585	0.000	24991	230.5	4	8.715	0.001	11476	245.7
Total Col1Ave (4 peaks):		215.7				Total Col2Ave (4 peaks):		238.8	RPD = 10	
Corrected Ave (3 peaks):		210.5				Corrected Ave (3 peaks):		236.6	RPD = 12	
Aroclor-1242	1	7.272	0.001	19363	129.8	1	7.256	0.000	19791	136.4
Aroclor-1242	2	7.659	0.004	58630	120.1	2	7.856	0.002	40139	124.6
Aroclor-1242	3	8.408	0.001	17373	119.8	3	9.166	0.006	11813	117.1
Aroclor-1242	4	8.585	0.003	24991	114.1	4	9.595	0.009	16549	123.7
Total Col1Ave (4 peaks):		121.0				Total Col2Ave (4 peaks):		125.4	RPD = 4	
Corrected Ave (3 peaks):		118.0				Corrected Ave (3 peaks):		121.8	RPD = 3	
Aroclor-1248	1	8.408	0.002	17373	71.3	1	8.308	0.003	11962	79.8
Aroclor-1248	2	8.585	0.005	24991	80.4	2	8.715	0.003	11476	71.1
Aroclor-1248	3	9.001	0.002	67631	113.8	3	9.166	0.009	11813	59.9
Aroclor-1248	4	9.293	-0.001	30983	105.3	4	9.595	0.014	16549	67.9
Total Col1Ave (4 peaks):		92.7				Total Col2Ave (4 peaks):		69.7	RPD = 28	
Corrected Ave (3 peaks):		85.7				Corrected Ave (3 peaks):		66.3	RPD = 26	
Aroclor-1254	1	9.293	-0.006	30983	62.4	1	9.451	0.003	3749	15.6
Aroclor-1254	2	9.381	0.003	9071	42.8	2	9.974	0.005	2452	12.6
Aroclor-1254	3	9.678	0.009	5199	16.3	3	10.131	0.010	4718	11.1
Aroclor-1254	4	9.820	0.012	8864	14.2	4	10.389	0.018	4224	10.0
Aroclor-1254	5	10.195	0.018	8085	19.9	5	10.573	0.004	1573	6.7
Total Col1Ave (5 peaks):		31.1				Total Col2Ave (5 peaks):		11.2	RPD = 94*	
Corrected Ave (4 peaks):		23.3				Corrected Ave (4 peaks):		10.1	RPD = 79*	
Aroclor-1260	1	11.050	0.006	66852	126.1	1	11.647	-0.006	57235	157.9
Aroclor-1260	2	11.366	0.006	6269	11.5	2	11.919	0.002	25368	27.7
Aroclor-1260	3	11.741	0.007	41446	28.9	3	12.434	-0.002	262014	1146.4
Aroclor-1260	4	12.052	-0.088	2691	3.6	4	12.502	-0.000	277060	466.9
Aroclor-1260	5	12.245	0.002	349286	1080.9	NS	---			----
Total Col1Ave (5 peaks):		250.2				Total Col2Ave (4 peaks):		449.7	RPD = 57*	
Corrected Ave (4 peaks):		42.5				Corrected Ave (3 peaks):		217.5	RPD = 135*	
Aroclor-1262	1	10.838	0.006	4520	11.8	1	11.203	0.003	40576	82.5
Aroclor-1262	2	12.245	-0.000	349286	579.1	2	11.647	-0.006	57235	136.9
Aroclor-1262	3	12.318	-0.002	349715	534.1	3	12.434	-0.001	262014	588.4
Aroclor-1262	4	12.988	-0.001	141905	237.8	4	12.502	-0.002	277060	388.5
Total Col1Ave (4 peaks):		340.7				Total Col2Ave (4 peaks):		299.1	RPD = 13	
Corrected Ave (3 peaks):		261.2				Corrected Ave (3 peaks):		202.6	RPD = 25	
Aroclor-1268	1	12.245	0.001	349286	223.8	1	12.434	0.000	262014	223.3
Aroclor-1268	2	12.318	0.000	349715	224.6	2	12.502	0.000	277060	221.9
Aroclor-1268	3	12.699	0.000	289328	224.3	3	12.893	-0.000	208928	201.0
Aroclor-1268	4	13.490	0.001	849299	222.1	4	13.710	0.002	725831	226.1
Total Col1Ave (4 peaks):		223.7				Total Col2Ave (4 peaks):		218.1	RPD = 3	

Corrected Ave (3 peaks): 223.4 Corrected Ave (3 peaks): 215.4 RPD = 4

Total PCB Area Col1 (5.909 - 13.792) = 2866092 Col1 Total PCB = 0.5 ppm*

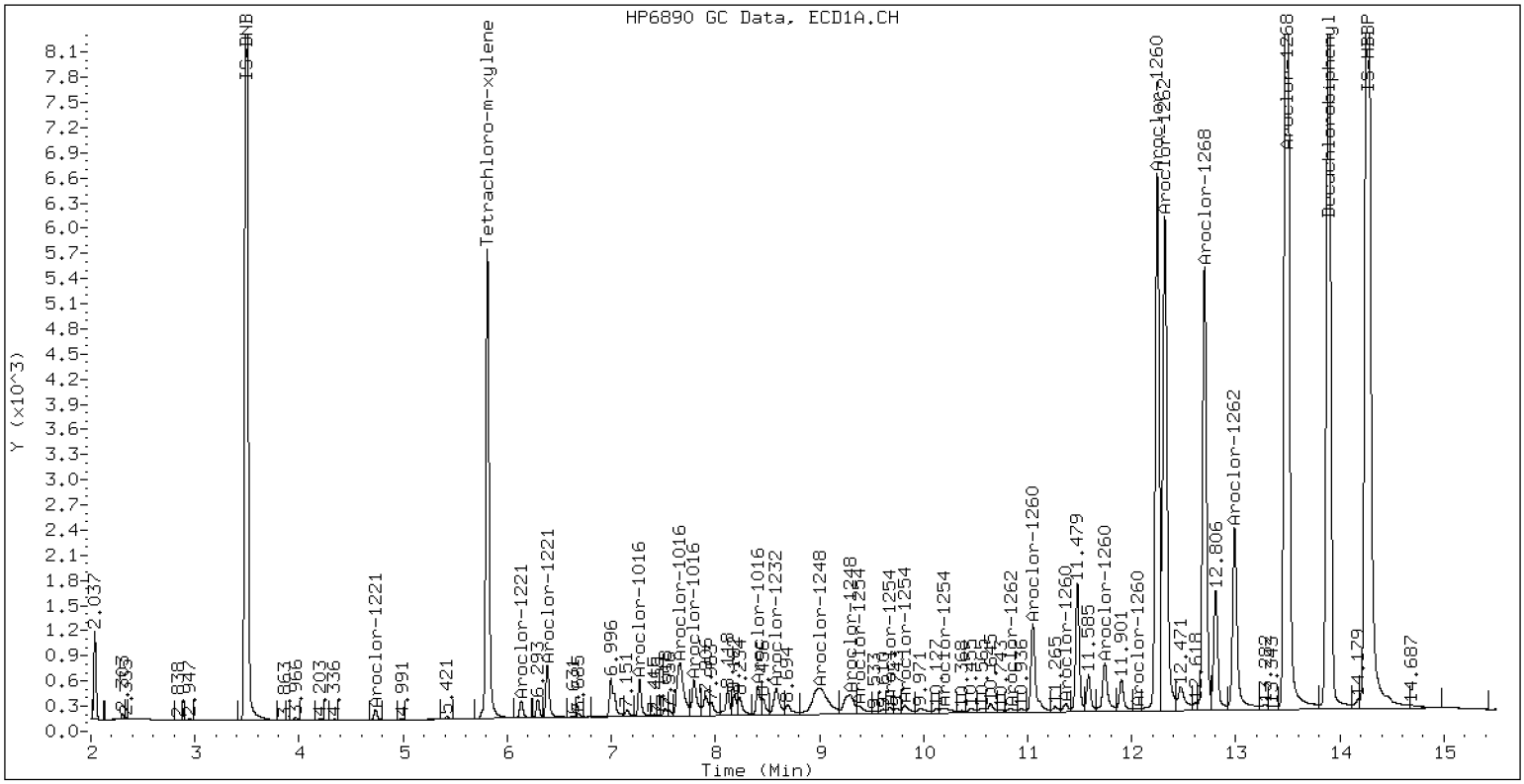
Total PCB Area Col2 (5.787 - 14.020) = 2084481 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

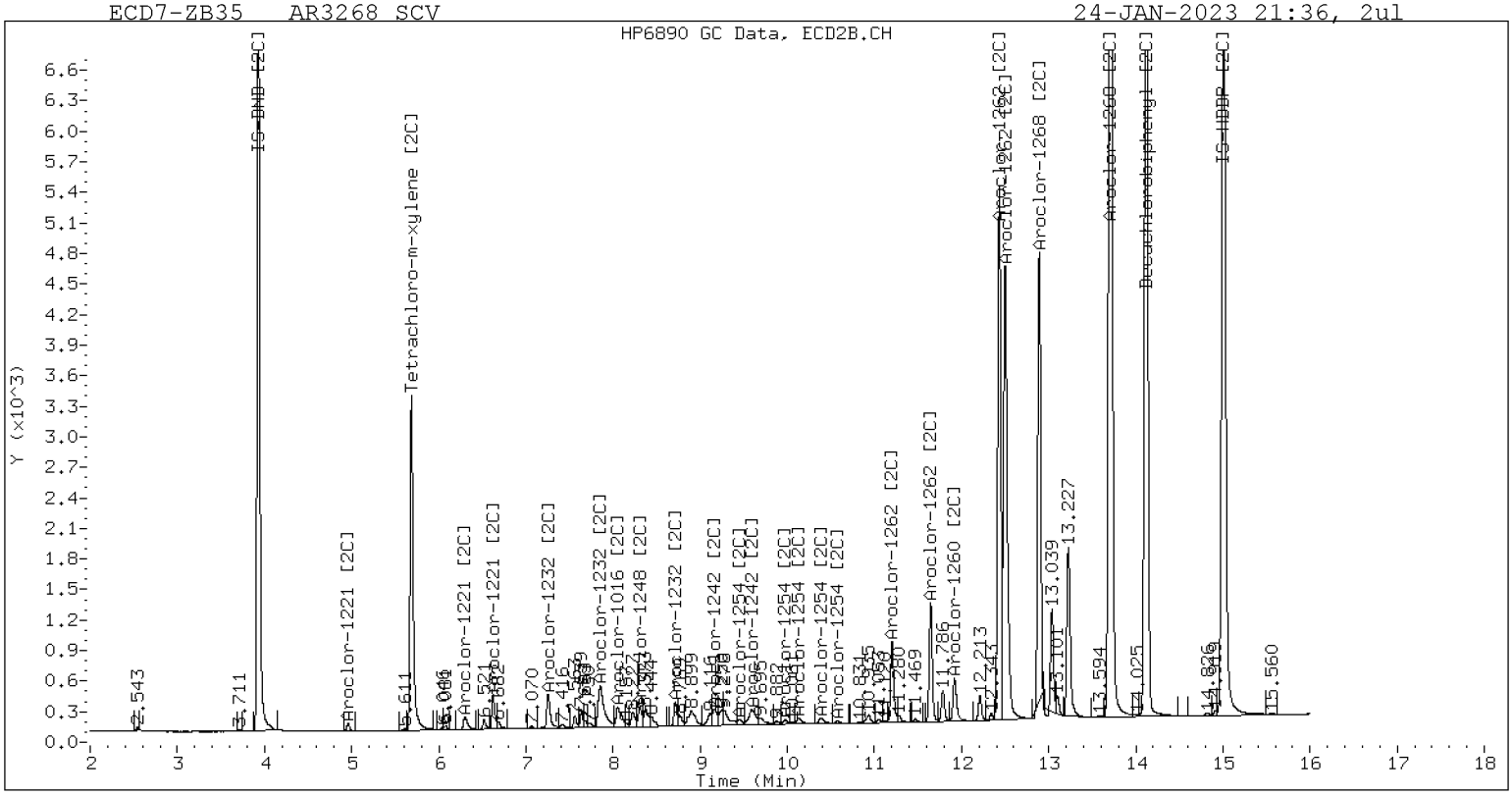
PCB Dual Column Chromatograms

ECD7-ZB5 AR3268 SCV 24-JAN-2023 21:36, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR3268 SCV 24-JAN-2023 21:36, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092317ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/09/23
Lab Sample ID:	SLB0148-CCV1	Injection Time:	17:51
Sequence Name:	AR1248CCV1		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Aroclor 1248	A	250.00	172	0.0592639	0.0389220		-31.1	+/-20	*
Aroclor-1248 (1)	A	250.00	203		0.0324482				
Aroclor-1248 (2)	A	250.00	196		0.0401208				
Aroclor-1248 (3)	A	250.00	138		0.0537376				
Aroclor-1248 (4)	A	250.00	152		0.0293812				
Aroclor 1248 [2C]	A	250.00	211	0.0453673	0.0378875		-15.8	+/-20	
Aroclor-1248 (1) [2C]	A	250.00	226		0.0327212				
Aroclor-1248 (2) [2C]	A	250.00	211		0.0329152				
Aroclor-1248 (3) [2C]	A	250.00	208		0.0395753				
Aroclor-1248 (4) [2C]	A	250.00	197		0.0463384				
Decachlorobiphenyl	A	40.000	32.1	0.8555994	0.6870908		-19.8	+/-20	
Tetrachlorometaxylene	A	40.000	36.3	1.1307870	1.0271480		-9.3	+/-20	
Decachlorobiphenyl [2C]	A	40.000	34.2	1.2696430	1.0848250		-14.5	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	36.6	1.0814980	0.9893007		-8.5	+/-20	

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092317ECD7.D
Data file 2: /230209.b/230209.b/02092317ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248CCV1
Client ID:
Injection Date: 09-FEB-2023 17:51
Report Date: 02/10/2023 12:58
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.805	-0.004	187869	5.682	-0.003	170550	36.3	36.6	0.7	Tetrachloro-m-xylene
13.889	-0.003	116376	14.117	0.002	165770	32.1	34.2	6.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	365807	-27.3
Hexabromobiphenyl	647433	338750	-47.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	344789	2.3
Hexabromobiphenyl	382032	305616	-20.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount	
Aroclor-1248	1	8.400	-0.005	37093	202.7	1	8.302	-0.001	35256	226.2	
Aroclor-1248	2	8.573	-0.007	45864	196.5	2	8.708	-0.001	35465	211.4	
Aroclor-1248	3	8.992	-0.006	61430	137.6	3	9.151	-0.001	42641	208.0	
Aroclor-1248	4	9.291	-0.003	33587	152.0	4	9.576	-0.000	49928	196.9	
Total Col1Ave (4 peaks):					172.2	Total Col2Ave (4 peaks):				210.6	RPD = 20
Corrected Ave (3 peaks):					162.0	Corrected Ave (3 peaks):				205.5	RPD = 24
CalAmt %D:					-31.1	CalAmt %D:				-15.7	

Total PCB Area Col1 (5.909 - 13.792) = 699031 Col1 Total PCB = 0.2 ppm*

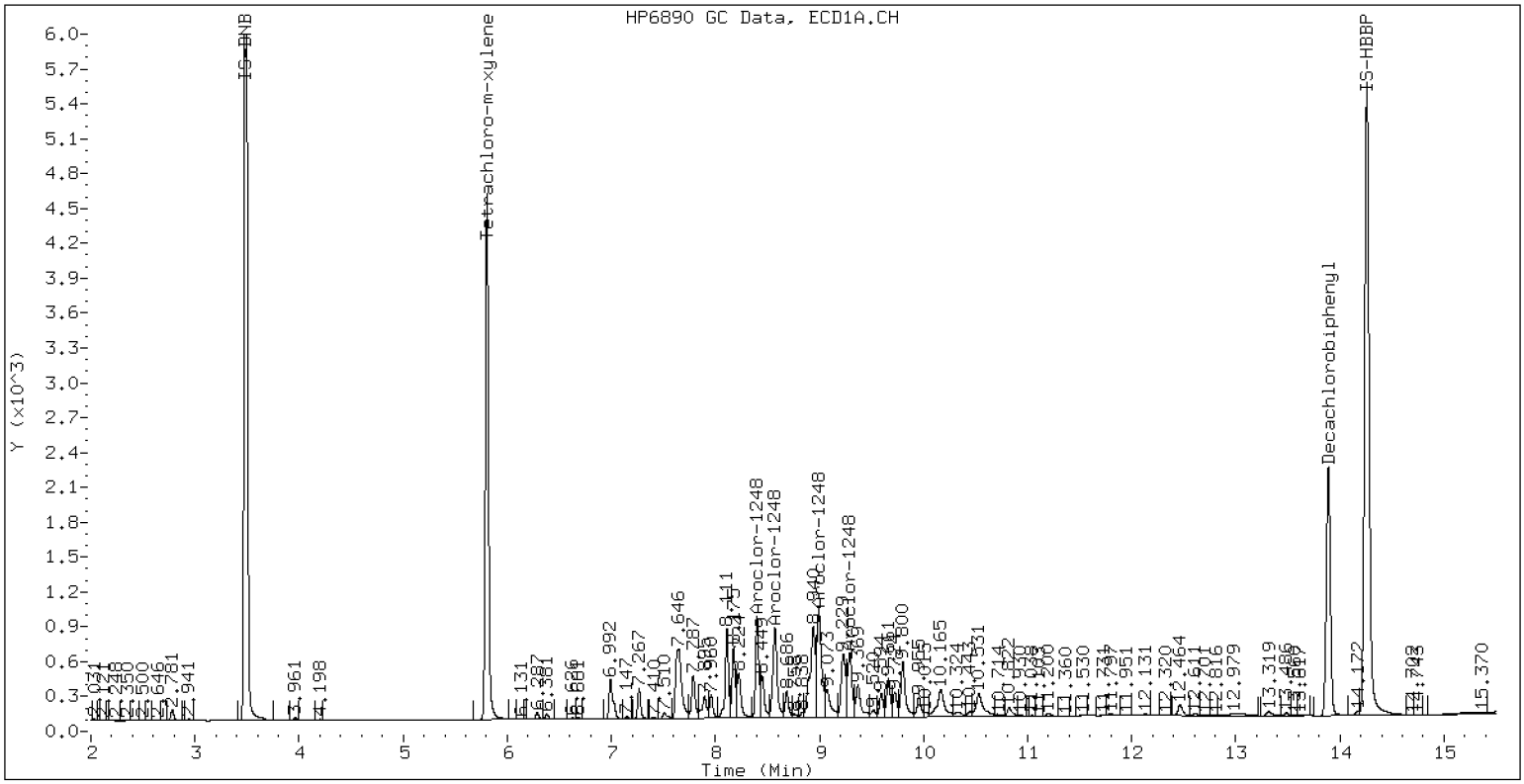
Total PCB Area Col2 (5.785 - 14.015) = 661379 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

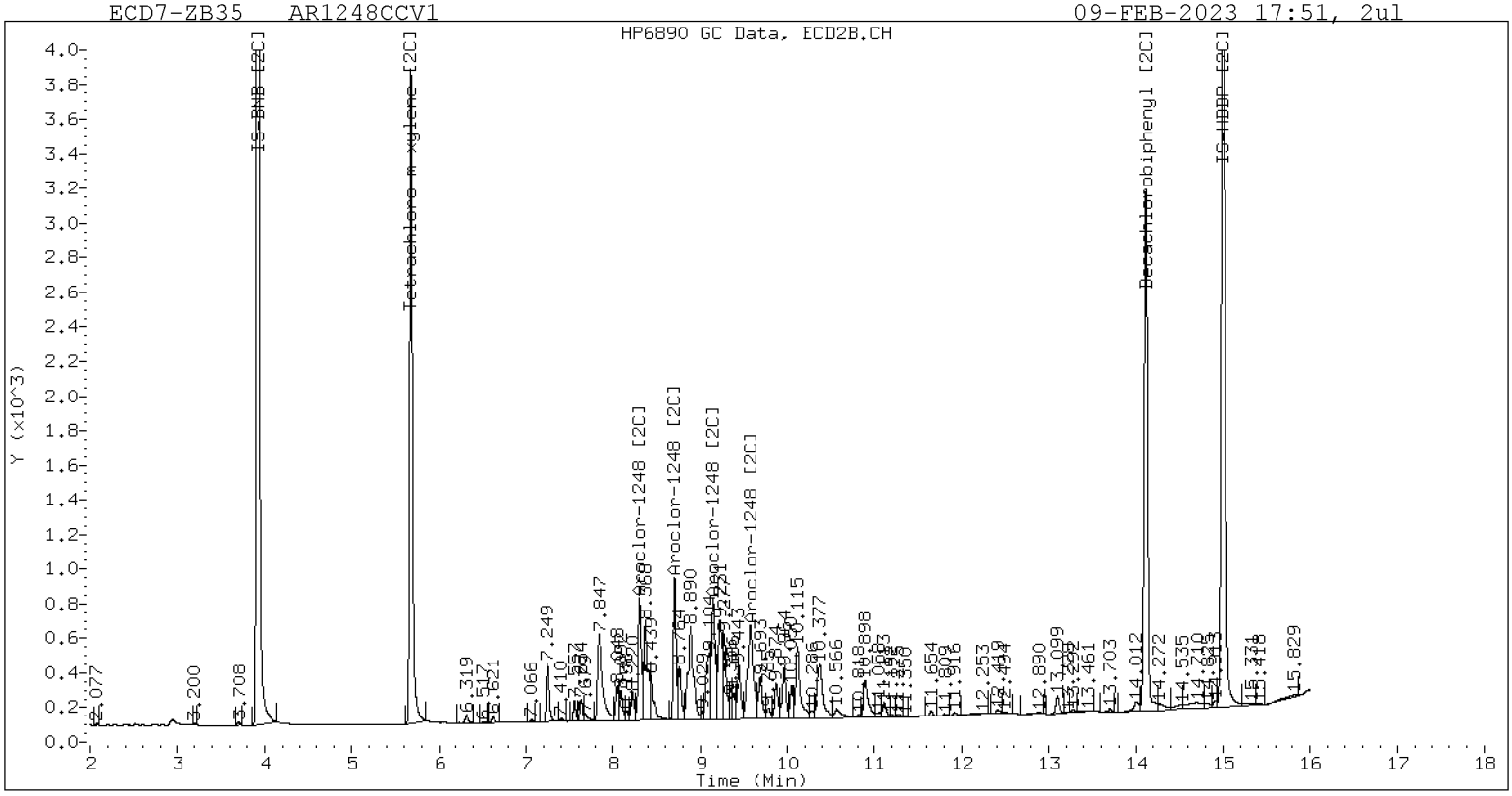
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248CCV1 09-FEB-2023 17:51, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248CCV1 09-FEB-2023 17:51, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092318ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/09/23
Lab Sample ID:	SLB0148-CCV2	Injection Time:	18:12
Sequence Name:	AR1660CCV2		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	229	0.0506755	0.0464747		-8.5	+/-20
Aroclor-1016 (1)	A	250.00	238	0.0297277	0.0282451		-4.8	
Aroclor-1016 (2)	A	250.00	234	0.0985017	0.0920981		-6.4	
Aroclor-1016 (3)	A	250.00	214	0.0453193	0.0388300		-14.4	
Aroclor-1016 (4)	A	250.00	229	0.0291533	0.0267256		-8.4	
Aroclor 1016 [2C]	A	250.00	241	0.0519244	0.0500523		-3.8	+/-20
Aroclor-1016 (1) [2C]	A	250.00	238	0.0433907	0.0413703		-4.8	
Aroclor-1016 (2) [2C]	A	250.00	241	0.0950862	0.0917404		-3.6	
Aroclor-1016 (3) [2C]	A	250.00	246	0.0388014	0.0382250		-1.6	
Aroclor-1016 (4) [2C]	A	250.00	237	0.0304194	0.0288736		-5.2	
Aroclor 1260	A	250.00	225	0.0605224	0.0547201		-10.1	+/-20
Aroclor-1260 (1)	A	250.00	252	0.0448870	0.0452657		0.8	
Aroclor-1260 (2)	A	250.00	236	0.0461412	0.0435570		-5.6	
Aroclor-1260 (3)	A	250.00	226	0.1214672	0.1099539		-9.6	
Aroclor-1260 (4)	A	250.00	212	0.0627593	0.0531370		-15.2	
Aroclor-1260 (5)	A	250.00	198	0.0273573	0.0216869		-20.8	
Aroclor 1260 [2C]	A	250.00	239	0.0836545	0.0788493		-4.3	+/-20
Aroclor-1260 (1) [2C]	A	250.00	230	0.0577136	0.0530333		-8.0	
Aroclor-1260 (2) [2C]	A	250.00	230	0.1460113	0.1343894		-8.0	
Aroclor-1260 (3) [2C]	A	250.00	258	0.0363944	0.0375230		3.2	
Aroclor-1260 (4) [2C]	A	250.00	239	0.0944986	0.0904513		-4.4	
Decachlorobiphenyl	A	40.000	34.8	0.8555994	0.7443062		-13.0	+/-20
Tetrachlorometaxylene	A	40.000	39.0	1.1307870	1.1034840		-2.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.6	1.2696430	1.1621620		-8.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	38.5	1.0814980	1.0399930		-3.8	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092318ECD7.D
Data file 2: /230209.b/230209.b/02092318ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV2
Client ID:
Injection Date: 09-FEB-2023 18:12
Report Date: 02/10/2023 12:58
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.806	-0.003	201479	5.683	-0.002	178440	39.0	38.5	1.5	Tetrachloro-m-xylene
13.888	-0.004	142944	14.116	0.001	191278	34.8	36.6	5.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	365169	-27.4
Hexabromobiphenyl	647433	384100	-40.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	343156	1.9
Hexabromobiphenyl	382032	329176	-13.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.267	-0.003	32232	237.5	1	7.251	-0.002	44364	238.4
Aroclor-1016	2	7.648	-0.002	105098	233.7	2	7.848	-0.002	98379	241.2
Aroclor-1016	3	7.786	-0.002	44311	214.2	3	8.048	-0.000	40991	246.3
Aroclor-1016	4	8.400	-0.003	30498	229.2	4	8.302	-0.001	30963	237.3
Total Col1Ave (4 peaks):					228.7	Total Col2Ave (4 peaks):				240.8 RPD = 5
Corrected Ave (3 peaks):					225.7	Corrected Ave (3 peaks):				239.0 RPD = 6
CalAmt %D:					-8.5	CalAmt %D:				-3.7
Aroclor-1260	1	11.039	-0.004	54333	252.1	1	11.648	-0.001	54554	229.7
Aroclor-1260	2	11.356	-0.005	52282	236.0	2	11.912	-0.002	138243	230.1
Aroclor-1260	3	11.729	-0.006	131979	226.3	3	12.430	-0.001	38599	257.8
Aroclor-1260	4	12.132	-0.007	63781	211.7	4	12.496	-0.001	93045	239.3
Aroclor-1260	5	12.239	-0.005	26031	198.2	NS	---			----
Total Col1Ave (5 peaks):					224.9	Total Col2Ave (4 peaks):				239.2 RPD = 6
Corrected Ave (4 peaks):					218.0	Corrected Ave (3 peaks):				233.0 RPD = 7
CalAmt %D:					-10.1	CalAmt %D:				-4.3

Total PCB Area Col1 (5.909 - 13.792) = 1598137 Col1 Total PCB = 0.4 ppm*

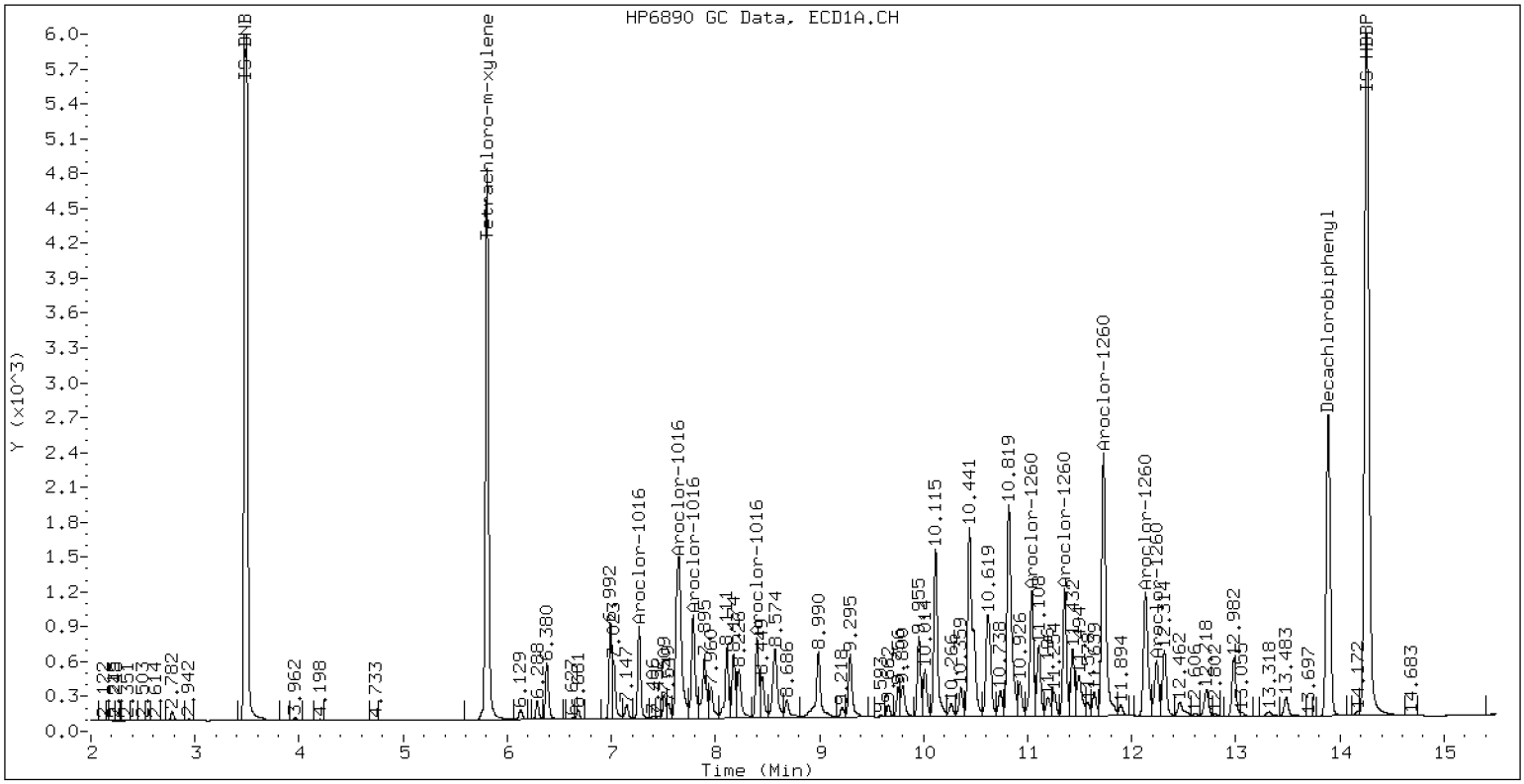
Total PCB Area Col2 (5.785 - 14.015) = 1509152 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

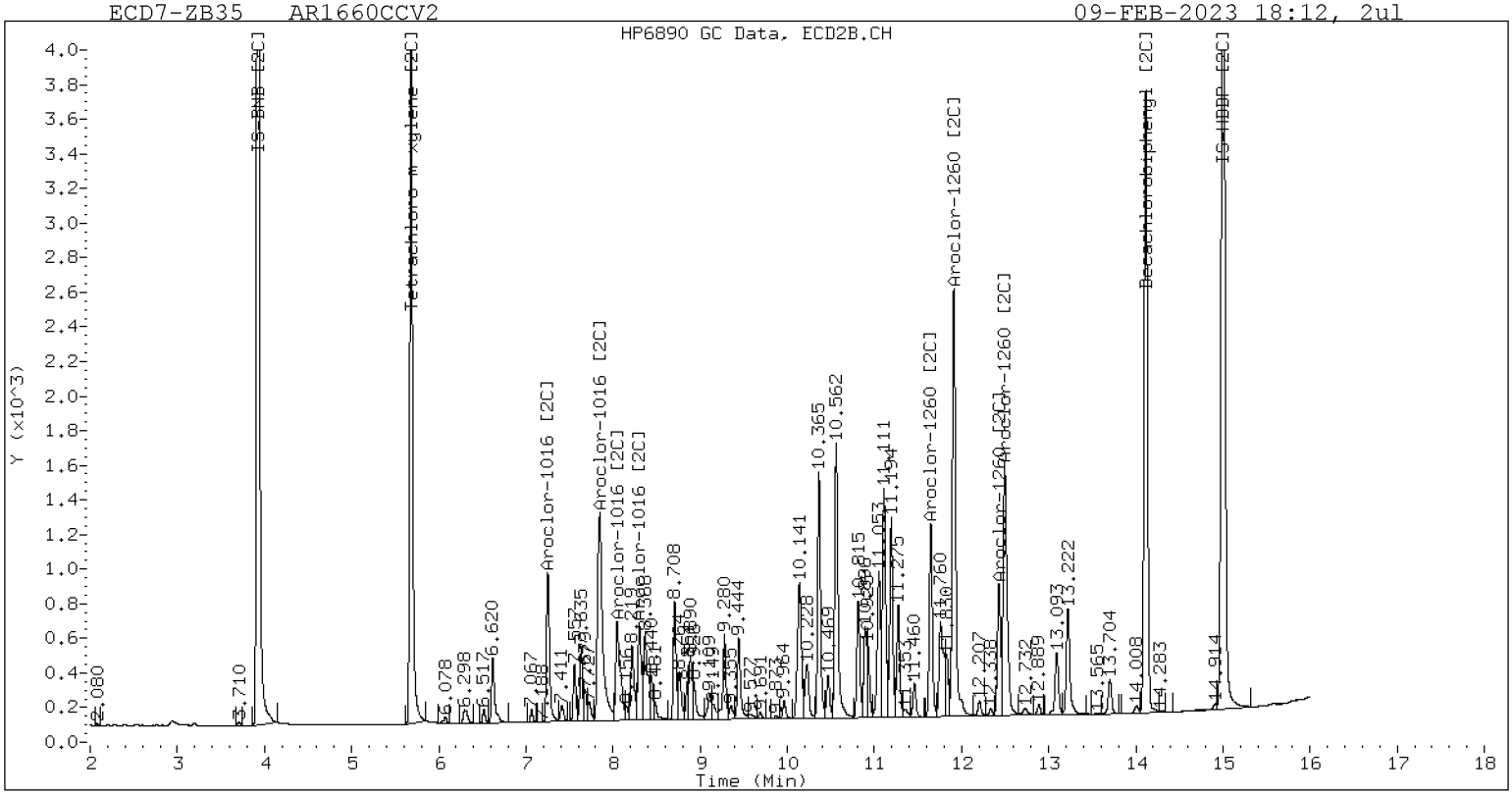
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV2 09-FEB-2023 18:12, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV2 09-FEB-2023 18:12, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092333ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/09/23
Lab Sample ID:	SLB0148-CCV3	Injection Time:	23:27
Sequence Name:	AR1242CCV3		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	228	0.0411165	0.0372608		-9.0	+/-20
Aroclor-1242 (1)	A	250.00	232		0.0226989			
Aroclor-1242 (2)	A	250.00	226		0.0725037			
Aroclor-1242 (3)	A	250.00	230		0.0219169			
Aroclor-1242 (4)	A	250.00	222		0.0319237			
Aroclor 1242 [2C]	A	250.00	231	0.0423236	0.0392141		-7.5	+/-20
Aroclor-1242 (1) [2C]	A	250.00	240		0.0335298			
Aroclor-1242 (2) [2C]	A	250.00	233		0.0723536			
Aroclor-1242 (3) [2C]	A	250.00	234		0.0227749			
Aroclor-1242 (4) [2C]	A	250.00	218		0.0281982			
Decachlorobiphenyl	A	40.000	32.1	0.8555994	0.6872062		-19.8	+/-20
Tetrachlorometaxylene	A	40.000	44.9	1.1307870	1.2695840		12.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	34.3	1.2696430	1.0898700		-14.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	44.9	1.0814980	1.2131990		12.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092333ECD7.D
Data file 2: /230209.b/230209.b/02092333ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242CCV3
Client ID:
Injection Date: 09-FEB-2023 23:27
Report Date: 02/10/2023 12:58
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.001	236917	5.685	-0.000	207417	44.9	44.9	0.1	Tetrachloro-m-xylene
13.889	-0.002	222449	14.117	0.002	258164	32.1	34.3	6.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	373220	-25.8
Hexabromobiphenyl	647433	647401	-0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	341934	1.5
Hexabromobiphenyl	382032	473752	24.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	7.269	-0.002	26474	231.7	1	7.253	0.001	35828	239.6
Aroclor-1242	2	7.651	-0.005	84562	226.1	2	7.850	0.001	77313	232.8
Aroclor-1242	3	8.402	-0.005	25562	230.0	3	9.155	0.001	24336	233.9
Aroclor-1242	4	8.575	-0.006	37233	221.8	4	9.579	-0.001	30131	218.6
Total Col1Ave (4 peaks):					227.4	Total Col2Ave (4 peaks):				231.2 RPD = 2
Corrected Ave (3 peaks):					226.0	Corrected Ave (3 peaks):				228.4 RPD = 1
CalAmt %D:					-9.0	CalAmt %D:				-7.5

Total PCB Area Col1 (5.909 - 13.792) = 635361 Col1 Total PCB = 0.1 ppm*

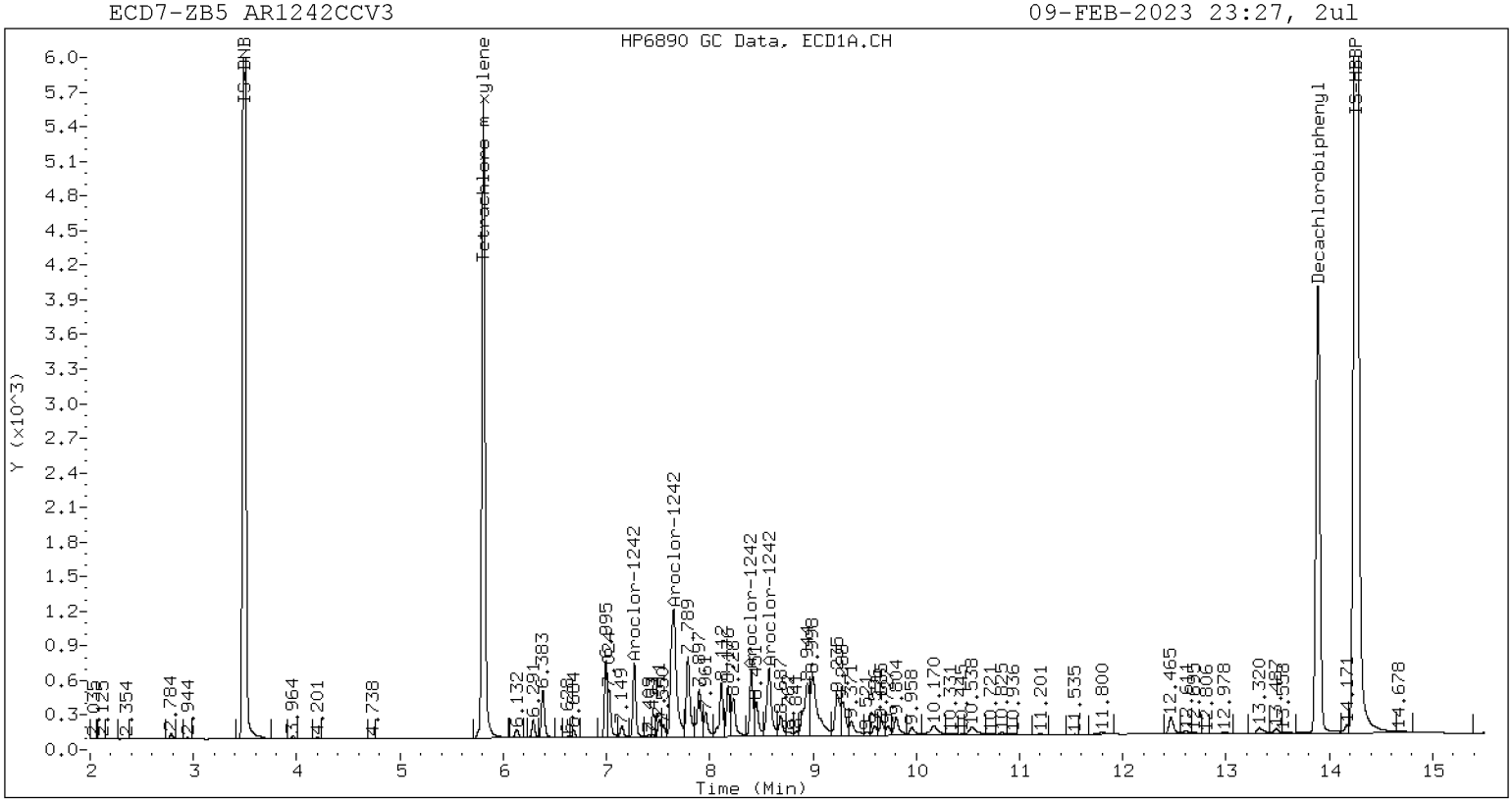
Total PCB Area Col2 (5.785 - 14.015) = 554766 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

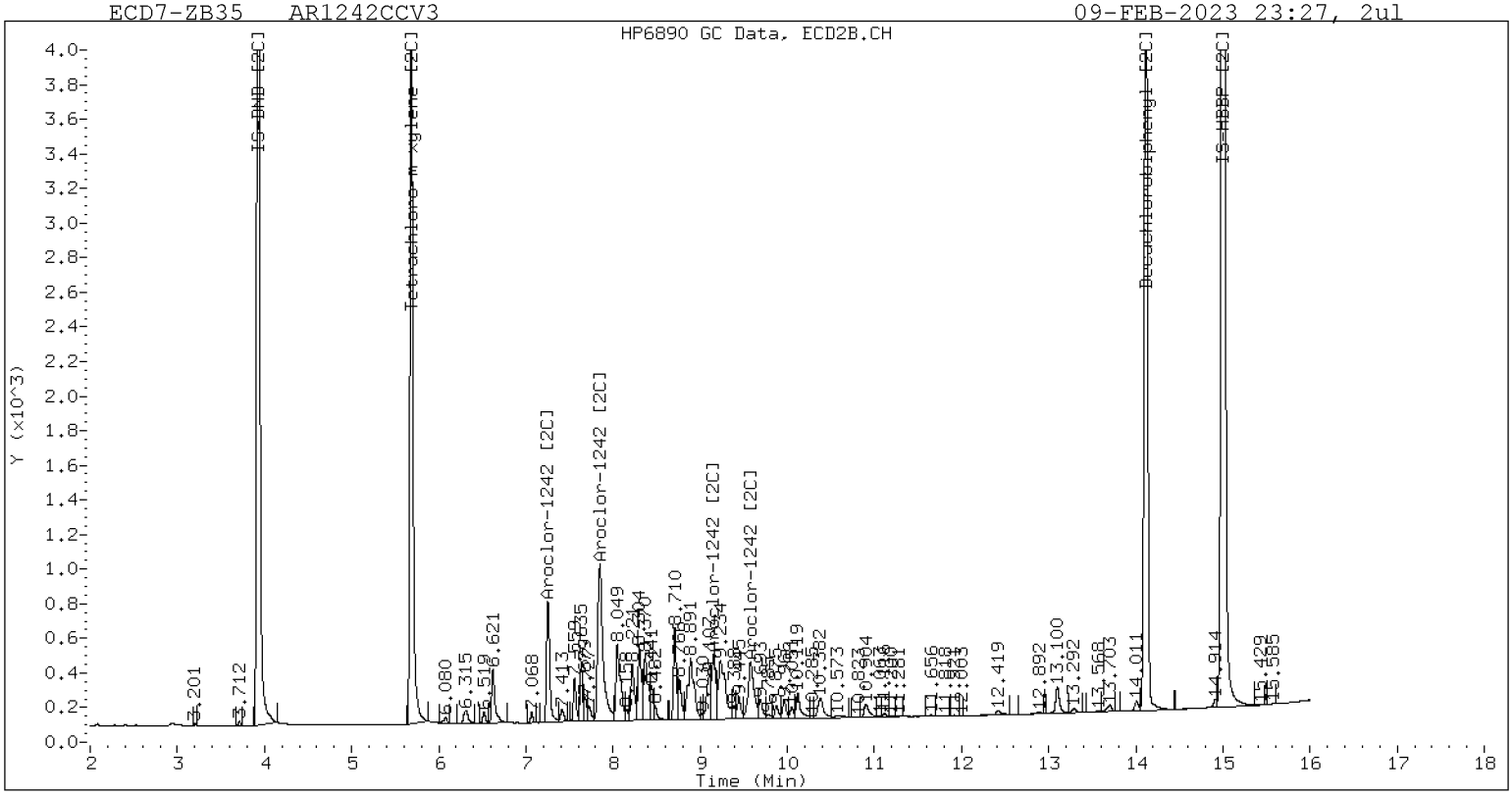
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242CCV3 09-FEB-2023 23:27, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242CCV3 09-FEB-2023 23:27, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092334ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/09/23
Lab Sample ID:	SLB0148-CCV4	Injection Time:	23:48
Sequence Name:	AR1660CCV4		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Aroclor 1016	A	250.00	231	0.0506755	0.0466777		-7.8	+/-20	
Aroclor-1016 (1)	A	250.00	237	0.0297277	0.0281490		-5.2		
Aroclor-1016 (2)	A	250.00	233	0.0985017	0.0919524		-6.8		
Aroclor-1016 (3)	A	250.00	215	0.0453193	0.0390053		-14.0		
Aroclor-1016 (4)	A	250.00	237	0.0291533	0.0276039		-5.2		
Aroclor 1016 [2C]	A	250.00	241	0.0519244	0.0499836		-3.8	+/-20	
Aroclor-1016 (1) [2C]	A	250.00	237	0.0433907	0.0412210		-5.2		
Aroclor-1016 (2) [2C]	A	250.00	240	0.0950862	0.0914284		-4.0		
Aroclor-1016 (3) [2C]	A	250.00	247	0.0388014	0.0383015		-1.2		
Aroclor-1016 (4) [2C]	A	250.00	238	0.0304194	0.0289832		-4.8		
Aroclor 1260	A	250.00	176	0.0605224	0.0428881		-29.5	+/-20	*
Aroclor-1260 (1)	A	250.00	183	0.0448870	0.0328900		-26.8		
Aroclor-1260 (2)	A	250.00	182	0.0461412	0.0335995		-27.2		
Aroclor-1260 (3)	A	250.00	178	0.1214672	0.0863229		-28.8		
Aroclor-1260 (4)	A	250.00	174	0.0627593	0.0436846		-30.4		
Aroclor-1260 (5)	A	250.00	164	0.0273573	0.0179434		-34.4		
Aroclor 1260 [2C]	A	250.00	215	0.0836545	0.0712942		-14.2	+/-20	
Aroclor-1260 (1) [2C]	A	250.00	211	0.0577136	0.0487914		-15.6		
Aroclor-1260 (2) [2C]	A	250.00	212	0.1460113	0.1239490		-15.2		
Aroclor-1260 (3) [2C]	A	250.00	224	0.0363944	0.0325395		-10.4		
Aroclor-1260 (4) [2C]	A	250.00	211	0.0944986	0.0798968		-15.6		
Decachlorobiphenyl	A	40.000	34.1	0.8555994	0.7285648		-14.8	+/-20	
Tetrachlorometaxylene	A	40.000	38.6	1.1307870	1.0925330		-3.5	+/-20	
Decachlorobiphenyl [2C]	A	40.000	37.3	1.2696430	1.1838700		-6.8	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	38.5	1.0814980	1.0405680		-3.8	+/-20	

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092334ECD7.D
Data file 2: /230209.b/230209.b/02092334ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV4
Client ID:
Injection Date: 09-FEB-2023 23:48
Report Date: 02/10/2023 12:58
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.001	204284	5.685	-0.000	178099	38.6	38.5	0.4	Tetrachloro-m-xylene
13.889	-0.003	238872	14.116	0.001	280937	34.1	37.3	9.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	373964	-25.7
Hexabromobiphenyl	647433	655733	1.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	342311	1.6
Hexabromobiphenyl	382032	474608	24.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.001	32896	236.7	1	7.253	0.000	44095	237.5
Aroclor-1016	2	7.650	-0.000	107459	233.4	2	7.849	-0.001	97803	240.4
Aroclor-1016	3	7.787	-0.001	45583	215.2	3	8.050	0.001	40972	246.8
Aroclor-1016	4	8.403	-0.001	32259	236.7	4	8.304	0.000	31004	238.2
Total Col1Ave (4 peaks):					230.5	Total Col2Ave (4 peaks):				240.7 RPD = 4
Corrected Ave (3 peaks):					228.4	Corrected Ave (3 peaks):				238.7 RPD = 4
CalAmt %D:					-7.8	CalAmt %D:				-3.7
Aroclor-1260	1	11.041	-0.003	67397	183.2	1	11.649	-0.000	72365	211.4
Aroclor-1260	2	11.357	-0.003	68851	182.0	2	11.913	-0.000	183835	212.2
Aroclor-1260	3	11.729	-0.005	176890	177.7	3	12.431	-0.000	48261	223.5
Aroclor-1260	4	12.134	-0.006	89517	174.0	4	12.497	0.001	118499	211.4
Aroclor-1260	5	12.241	-0.003	36769	164.0	NS	---			----
Total Col1Ave (5 peaks):					176.2	Total Col2Ave (4 peaks):				214.6 RPD = 20
Corrected Ave (4 peaks):					174.4	Corrected Ave (3 peaks):				211.6 RPD = 19
CalAmt %D:					-29.5	CalAmt %D:				-14.2

Total PCB Area Col1 (5.909 - 13.792) = 1918206 Col1 Total PCB = 0.4 ppm*

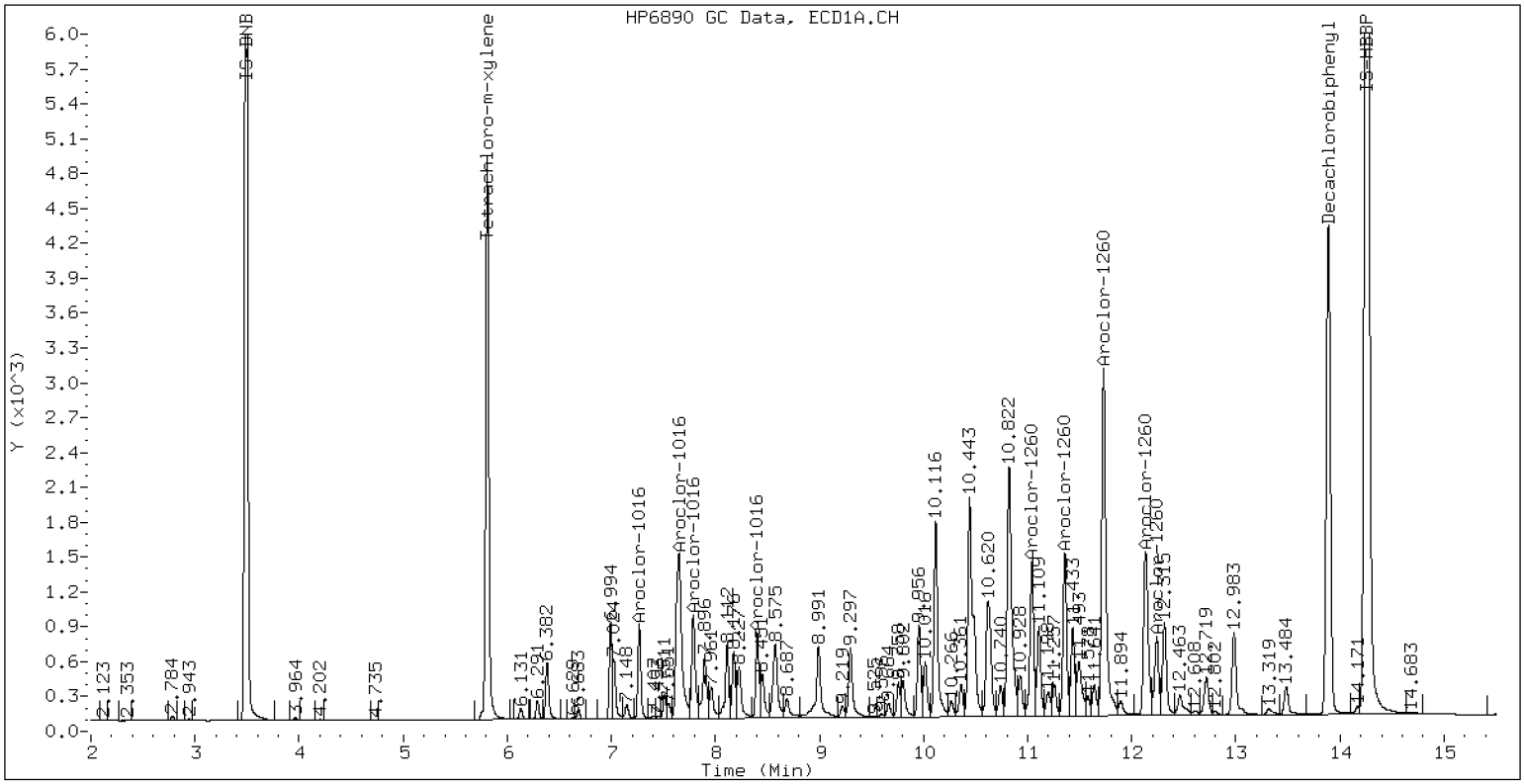
Total PCB Area Col2 (5.785 - 14.015) = 1747789 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

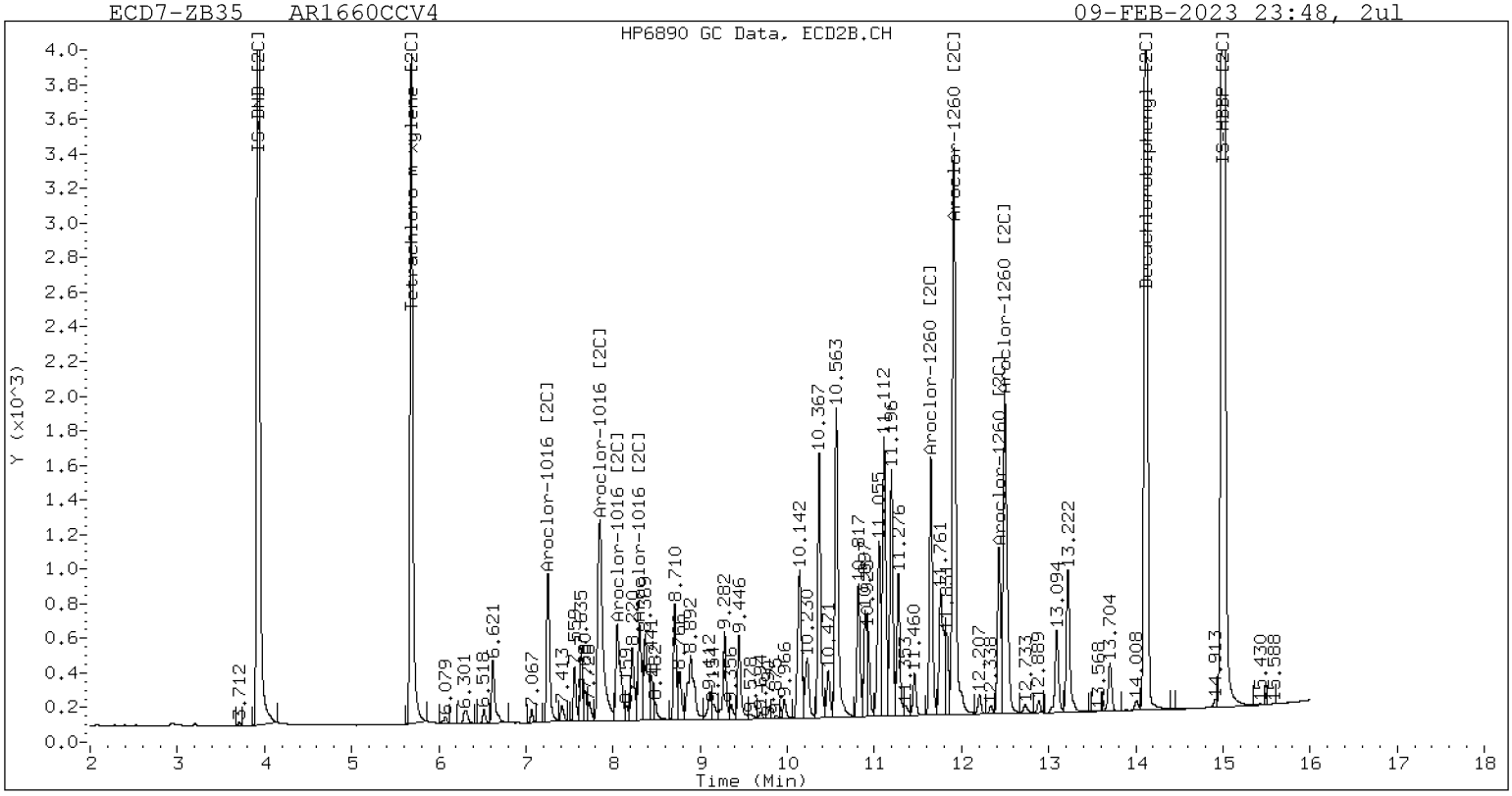
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV4 09-FEB-2023 23:48, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV4 09-FEB-2023 23:48, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092339ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/10/23
Lab Sample ID:	SLB0148-CCV5	Injection Time:	01:34
Sequence Name:	AR1254CCV5		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Aroclor 1254	A	250.00	211	0.0675033	0.0575565		-15.4	+/-20	
Aroclor-1254 (1)	A	250.00	220		0.0716728				
Aroclor-1254 (2)	A	250.00	201		0.0280088				
Aroclor-1254 (3)	A	250.00	216		0.0452387				
Aroclor-1254 (4)	A	250.00	215		0.0881637				
Aroclor-1254 (5)	A	250.00	205		0.0546985				
Aroclor 1254 [2C]	A	250.00	224	0.0733219	0.0659154		-10.5	+/-20	
Aroclor-1254 (1) [2C]	A	250.00	231		0.0537428				
Aroclor-1254 (2) [2C]	A	250.00	232		0.0434960				
Aroclor-1254 (3) [2C]	A	250.00	225		0.0922822				
Aroclor-1254 (4) [2C]	A	250.00	230		0.0942442				
Aroclor-1254 (5) [2C]	A	250.00	201		0.0458117				
Decachlorobiphenyl	A	40.000	31.2	0.8555994	0.6686030		-22.0	+/-20	*
Tetrachlorometaxylene	A	40.000	37.4	1.1307870	1.0588640		-6.5	+/-20	
Decachlorobiphenyl [2C]	A	40.000	35.8	1.2696430	1.1375630		-10.5	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	38.4	1.0814980	1.0380320		-4.0	+/-20	

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092339ECD7.D
Data file 2: /230209.b/230209.b/02092339ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254CCV5
Client ID:
Injection Date: 10-FEB-2023 01:34
Report Date: 02/10/2023 12:58
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.001	201514	5.686	0.000	181244	37.5	38.4	2.5	Tetrachloro-m-xylene
13.888	-0.004	204182	14.116	0.001	263864	31.3	35.8	13.7	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	380623	-24.4
Hexabromobiphenyl	647433	610772	-5.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	349207	3.6
Hexabromobiphenyl	382032	463911	21.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1254	1	9.294	-0.005	85251	219.8	1	9.445	0.000	58648	231.5
Aroclor-1254	2	9.371	-0.006	33315	201.1	2	9.964	0.000	47466	231.8
Aroclor-1254	3	9.662	-0.007	53809	216.5	3	10.116	0.000	100705	225.5
Aroclor-1254	4	9.800	-0.009	104866	215.3	4	10.366	0.000	102846	230.2
Aroclor-1254	5	10.161	-0.016	65061	205.4	5	10.564	0.000	49993	200.9
		Total Col1Ave (5 peaks):			211.6		Total Col2Ave (5 peaks):			224.0 RPD = 6
		Corrected Ave (4 peaks):			209.6		Corrected Ave (4 peaks):			222.0 RPD = 6
			CalAmt %D:		-15.3			CalAmt %D:		-10.4

Total PCB Area Col1 (5.909 - 13.792) = 1092394 Col1 Total PCB = 0.2 ppm*

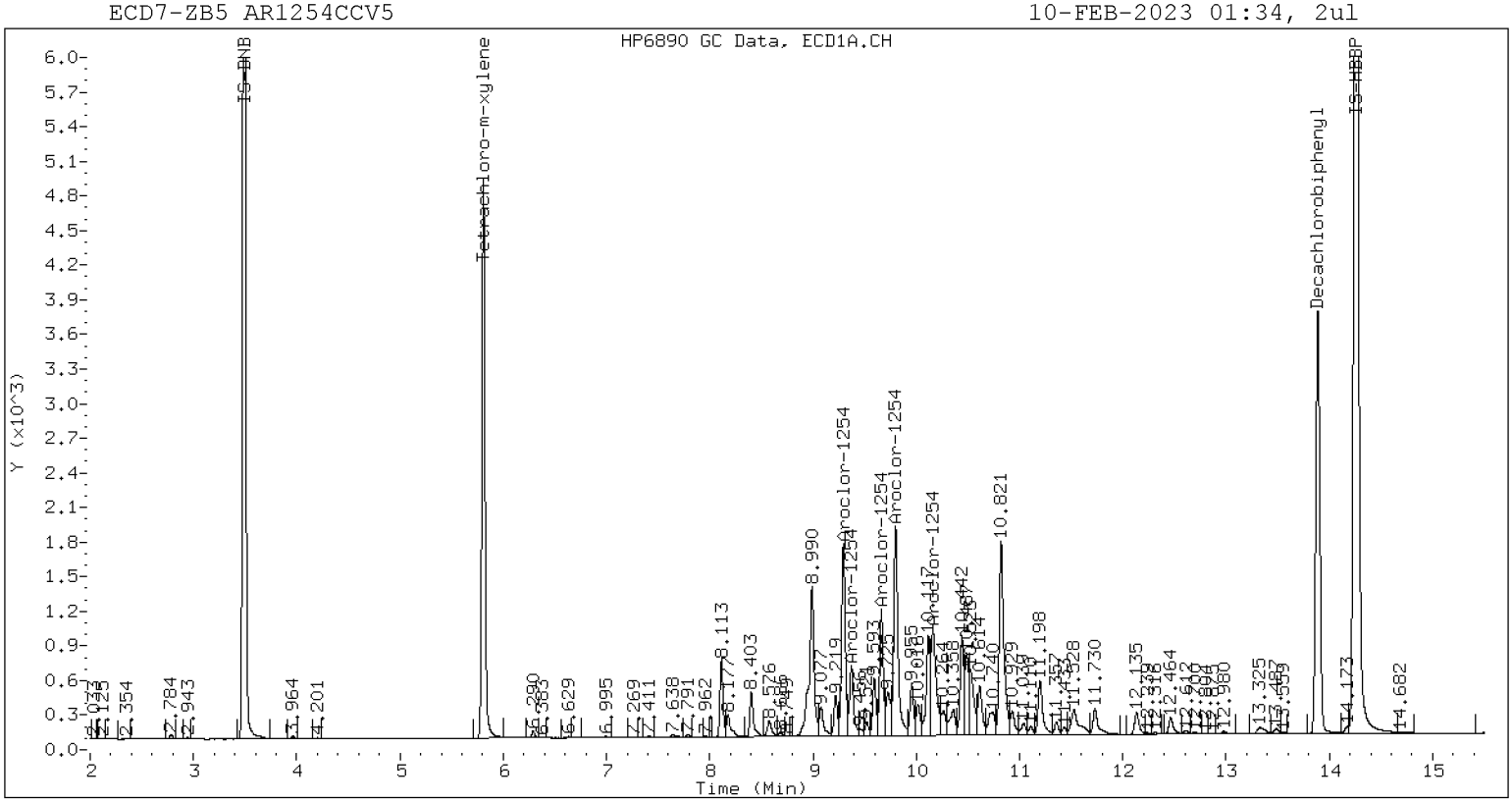
Total PCB Area Col2 (5.785 - 14.015) = 985256 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

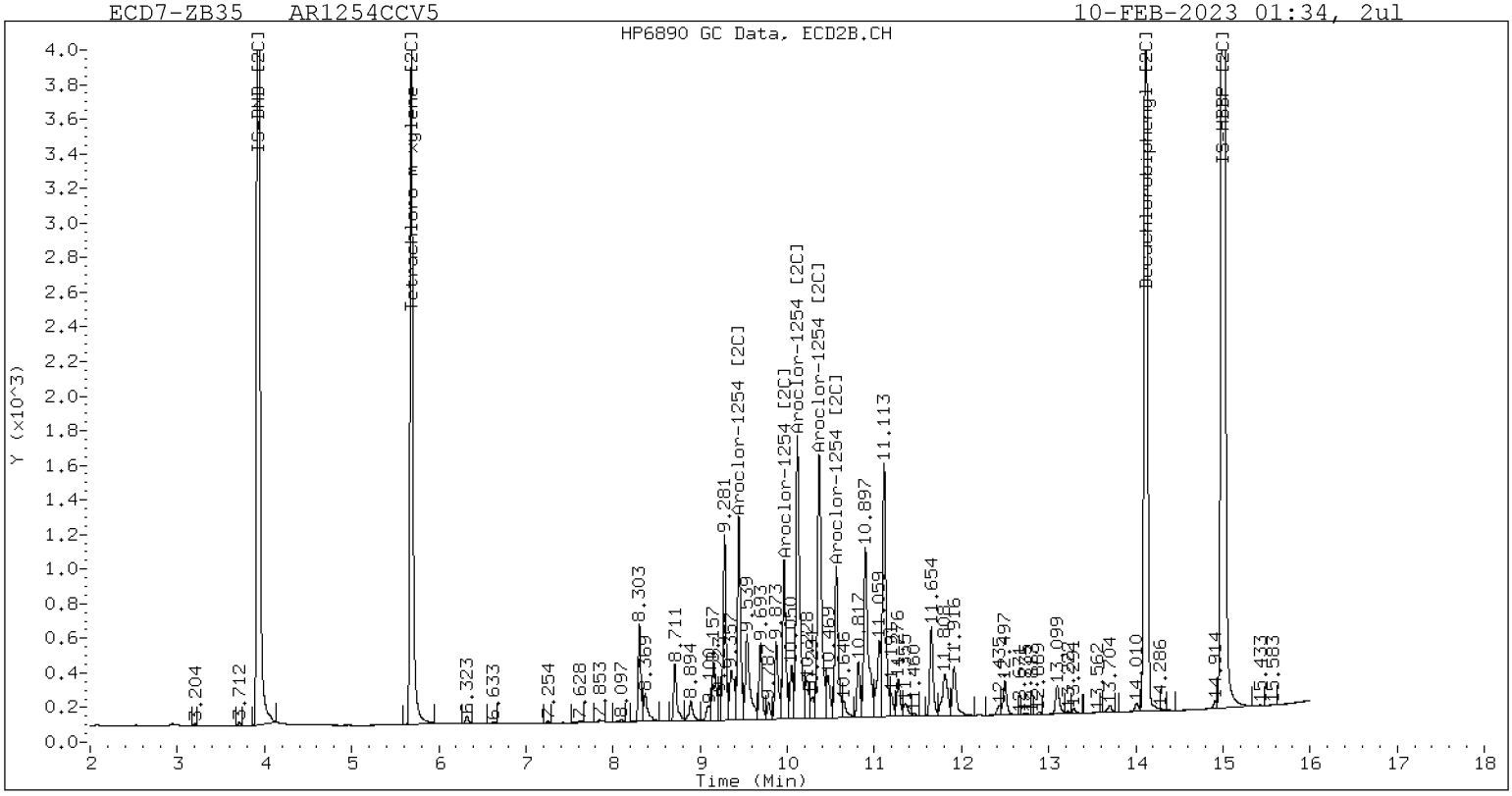
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254CCV5 10-FEB-2023 01:34, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254CCV5 10-FEB-2023 01:34, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092340ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/10/23
Lab Sample ID:	SLB0148-CCV6	Injection Time:	01:55
Sequence Name:	AR1660CCV6		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Aroclor 1016	A	250.00	230	0.0506755	0.0466399		-8.0	+/-20	
Aroclor-1016 (1)	A	250.00	237	0.0297277	0.0282369		-5.2		
Aroclor-1016 (2)	A	250.00	233	0.0985017	0.0918239		-6.8		
Aroclor-1016 (3)	A	250.00	215	0.0453193	0.0390615		-14.0		
Aroclor-1016 (4)	A	250.00	235	0.0291533	0.0274373		-6.0		
Aroclor 1016 [2C]	A	250.00	245	0.0519244	0.0509918		-1.9	+/-20	
Aroclor-1016 (1) [2C]	A	250.00	242	0.0433907	0.0420638		-3.2		
Aroclor-1016 (2) [2C]	A	250.00	245	0.0950862	0.0933147		-2.0		
Aroclor-1016 (3) [2C]	A	250.00	252	0.0388014	0.0391620		0.8		
Aroclor-1016 (4) [2C]	A	250.00	242	0.0304194	0.0294266		-3.2		
Aroclor 1260	A	250.00	178	0.0605224	0.0433932		-29.0	+/-20	*
Aroclor-1260 (1)	A	250.00	184	0.0448870	0.0330727		-26.4		
Aroclor-1260 (2)	A	250.00	184	0.0461412	0.0338905		-26.4		
Aroclor-1260 (3)	A	250.00	181	0.1214672	0.0880074		-27.6		
Aroclor-1260 (4)	A	250.00	175	0.0627593	0.0439948		-30.0		
Aroclor-1260 (5)	A	250.00	164	0.0273573	0.0180004		-34.4		
Aroclor 1260 [2C]	A	250.00	210	0.0836545	0.0698484		-16.0	+/-20	
Aroclor-1260 (1) [2C]	A	250.00	204	0.0577136	0.0472141		-18.4		
Aroclor-1260 (2) [2C]	A	250.00	207	0.1460113	0.1211670		-17.2		
Aroclor-1260 (3) [2C]	A	250.00	220	0.0363944	0.0320698		-12.0		
Aroclor-1260 (4) [2C]	A	250.00	209	0.0944986	0.0789427		-16.4		
Decachlorobiphenyl	A	40.000	32.1	0.8555994	0.6861333		-19.8	+/-20	
Tetrachlorometaxylene	A	40.000	39.1	1.1307870	1.1056930		-2.3	+/-20	
Decachlorobiphenyl [2C]	A	40.000	36.7	1.2696430	1.1660440		-8.3	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	38.8	1.0814980	1.0479890		-3.0	+/-20	

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092340ECD7.D
Data file 2: /230209.b/230209.b/02092340ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV6
Client ID:
Injection Date: 10-FEB-2023 01:55
Report Date: 02/10/2023 12:58
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.807	-0.002	209735	5.686	0.001	181037	39.1	38.8	0.9	Tetrachloro-m-xylene
13.890	-0.002	221772	14.116	0.001	284355	32.1	36.7	13.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	379373	-24.6
Hexabromobiphenyl	647433	646440	-0.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	345494	2.5
Hexabromobiphenyl	382032	487726	27.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.268	-0.001	33476	237.5	1	7.253	0.000	45415	242.4
Aroclor-1016	2	7.650	0.000	108861	233.1	2	7.851	0.001	100749	245.3
Aroclor-1016	3	7.787	-0.001	46309	215.5	3	8.050	0.001	42282	252.3
Aroclor-1016	4	8.402	-0.002	32528	235.3	4	8.304	0.000	31771	241.8
	Total Col1Ave (4 peaks):				230.3		Total Col2Ave (4 peaks):			245.5 RPD = 6
	Corrected Ave (3 peaks):				227.9		Corrected Ave (3 peaks):			243.2 RPD = 6
			CalAmt %D:		-7.9			CalAmt %D:		-1.8
Aroclor-1260	1	11.040	-0.003	66811	184.2	1	11.649	-0.000	71961	204.5
Aroclor-1260	2	11.356	-0.005	68463	183.6	2	11.914	0.000	184676	207.5
Aroclor-1260	3	11.729	-0.006	177786	181.1	3	12.431	0.000	48879	220.3
Aroclor-1260	4	12.132	-0.008	88875	175.3	4	12.497	0.000	120320	208.8
Aroclor-1260	5	12.239	-0.005	36363	164.5	NS	---			----
	Total Col1Ave (5 peaks):				177.7		Total Col2Ave (4 peaks):			210.3 RPD = 17
	Corrected Ave (4 peaks):				176.1		Corrected Ave (3 peaks):			206.9 RPD = 16
			CalAmt %D:		-28.9			CalAmt %D:		-15.9

Total PCB Area Col1 (5.909 - 13.792) = 1913242 Col1 Total PCB = 0.4 ppm*

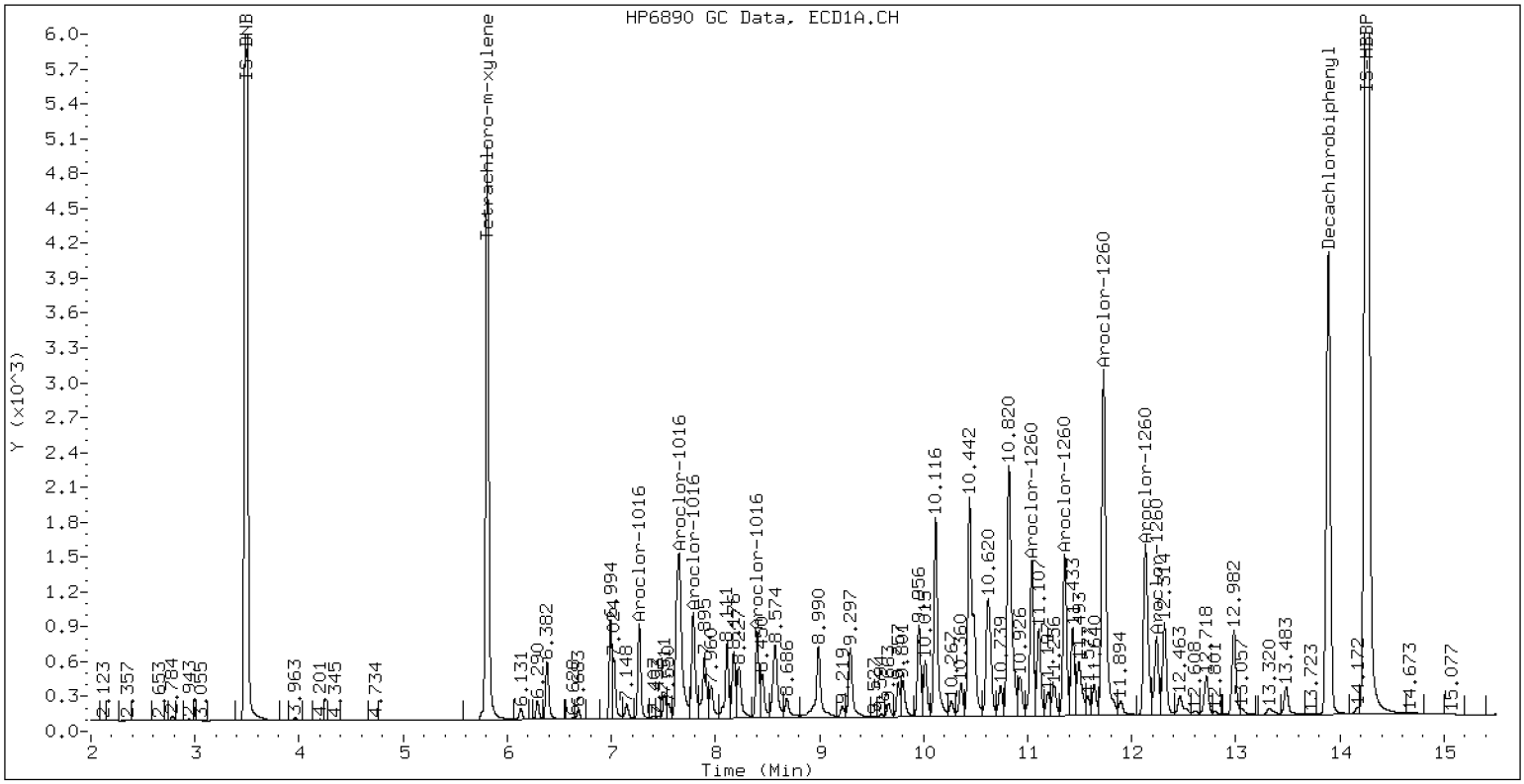
Total PCB Area Col2 (5.785 - 14.015) = 1762253 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

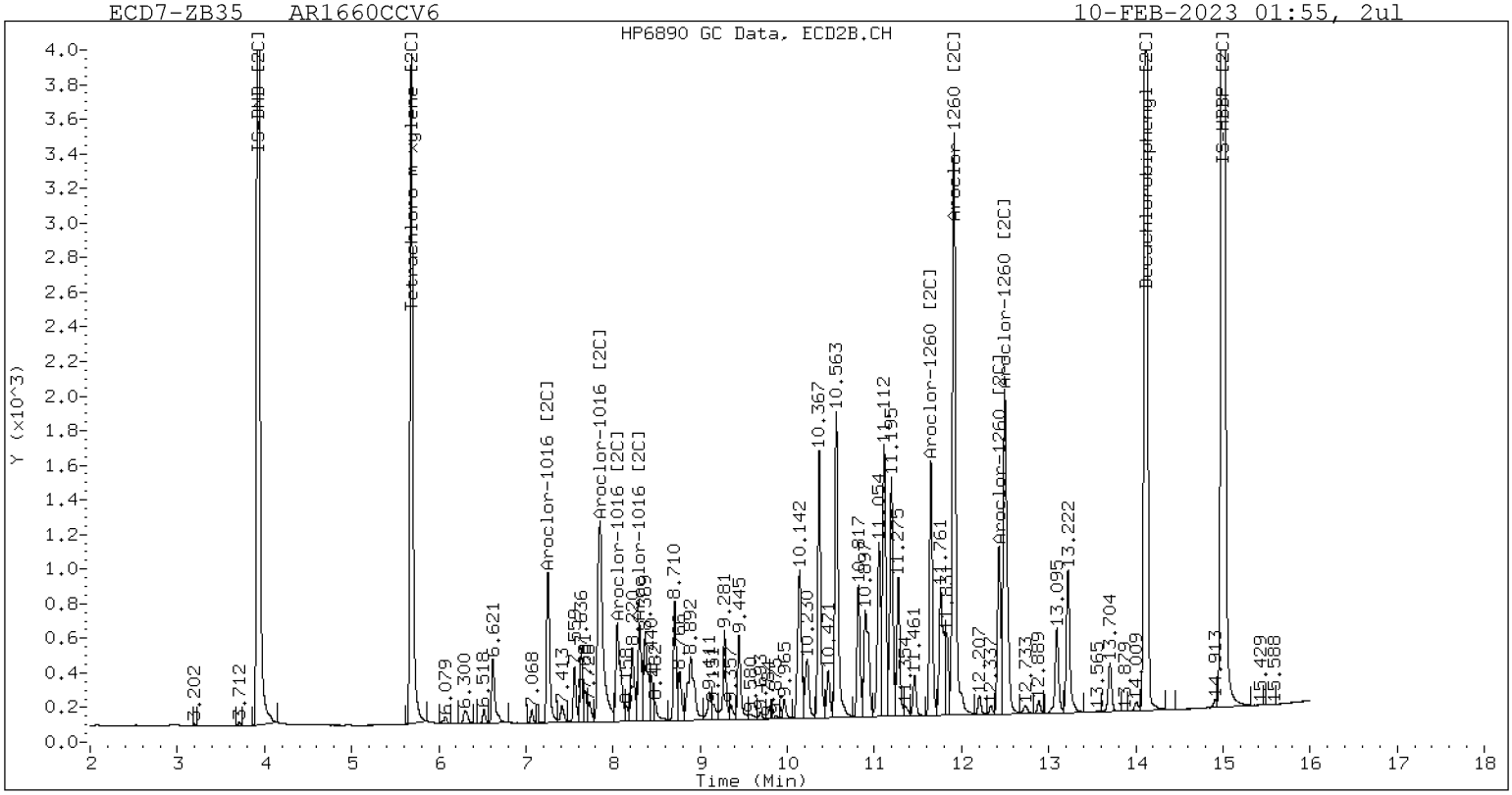
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV6 10-FEB-2023 01:55, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV6 10-FEB-2023 01:55, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092357ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/10/23
Lab Sample ID:	SLB0148-CCV7	Injection Time:	07:52
Sequence Name:	AR1248CCV7		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	193	0.0592639	0.0437568		-23.0	+/-20 *
Aroclor-1248 (1)	A	250.00	223		0.0357726			
Aroclor-1248 (2)	A	250.00	219		0.0446968			
Aroclor-1248 (3)	A	250.00	158		0.0616303			
Aroclor-1248 (4)	A	250.00	170		0.0329275			
Aroclor 1248 [2C]	A	250.00	222	0.0453673	0.0399082		-11.4	+/-20
Aroclor-1248 (1) [2C]	A	250.00	234		0.0338204			
Aroclor-1248 (2) [2C]	A	250.00	220		0.0342472			
Aroclor-1248 (3) [2C]	A	250.00	222		0.0421468			
Aroclor-1248 (4) [2C]	A	250.00	210		0.0494183			
Decachlorobiphenyl	A	40.000	33.2	0.8555994	0.7095181		-17.0	+/-20
Tetrachlorometaxylene	A	40.000	37.2	1.1307870	1.0520370		-7.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.0	1.2696430	1.1431620		-10.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.4	1.0814980	1.0123010		-6.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092357ECD7.D
Data file 2: /230209.b/230209.b/02092357ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248CCV7
Client ID:
Injection Date: 10-FEB-2023 07:52
Report Date: 02/10/2023 12:59
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.001	197784	5.685	-0.000	181003	37.2	37.4	0.6	Tetrachloro-m-xylene
13.890	-0.002	150150	14.116	0.001	203947	33.2	36.0	8.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	376002	-25.3
Hexabromobiphenyl	647433	423245	-34.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	357607	6.1
Hexabromobiphenyl	382032	356812	-6.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.402	-0.003	42033	223.5	1	8.302	0.000	37795	233.8
Aroclor-1248	2	8.574	-0.006	52519	218.9	2	8.709	0.000	38272	220.0
Aroclor-1248	3	8.993	-0.006	72416	157.8	3	9.152	0.000	47100	221.5
Aroclor-1248	4	9.291	-0.003	38690	170.3	4	9.576	0.000	55226	210.0
Total Col1Ave (4 peaks):					192.6	Total Col2Ave (4 peaks):				221.3 RPD = 14
Corrected Ave (3 peaks):					182.3	Corrected Ave (3 peaks):				217.2 RPD = 17
CalAmt %D:					-23.0	CalAmt %D:				-11.5

Total PCB Area Col1 (5.909 - 13.792) = 798026 Col1 Total PCB = 0.2 ppm*

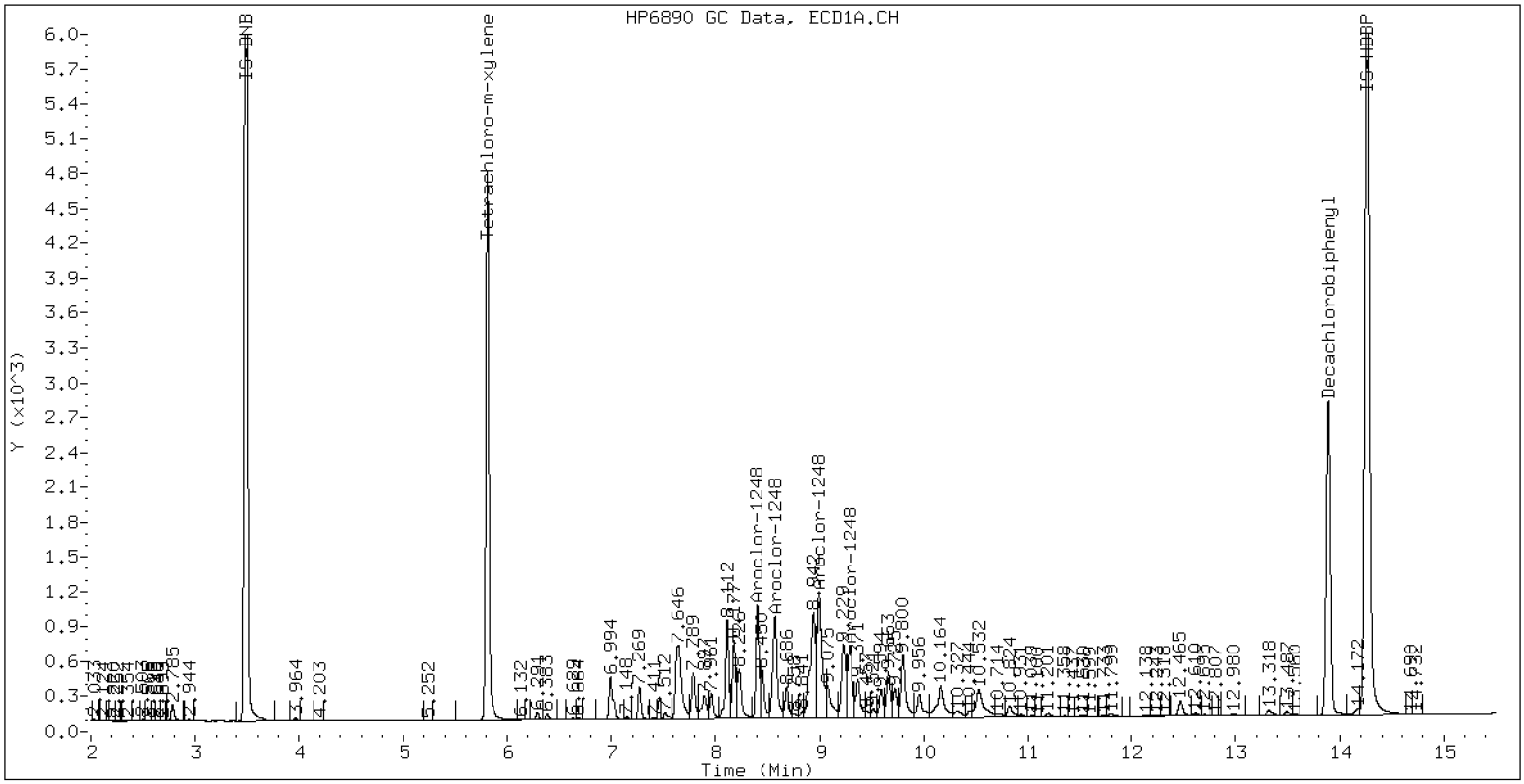
Total PCB Area Col2 (5.785 - 14.015) = 722431 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

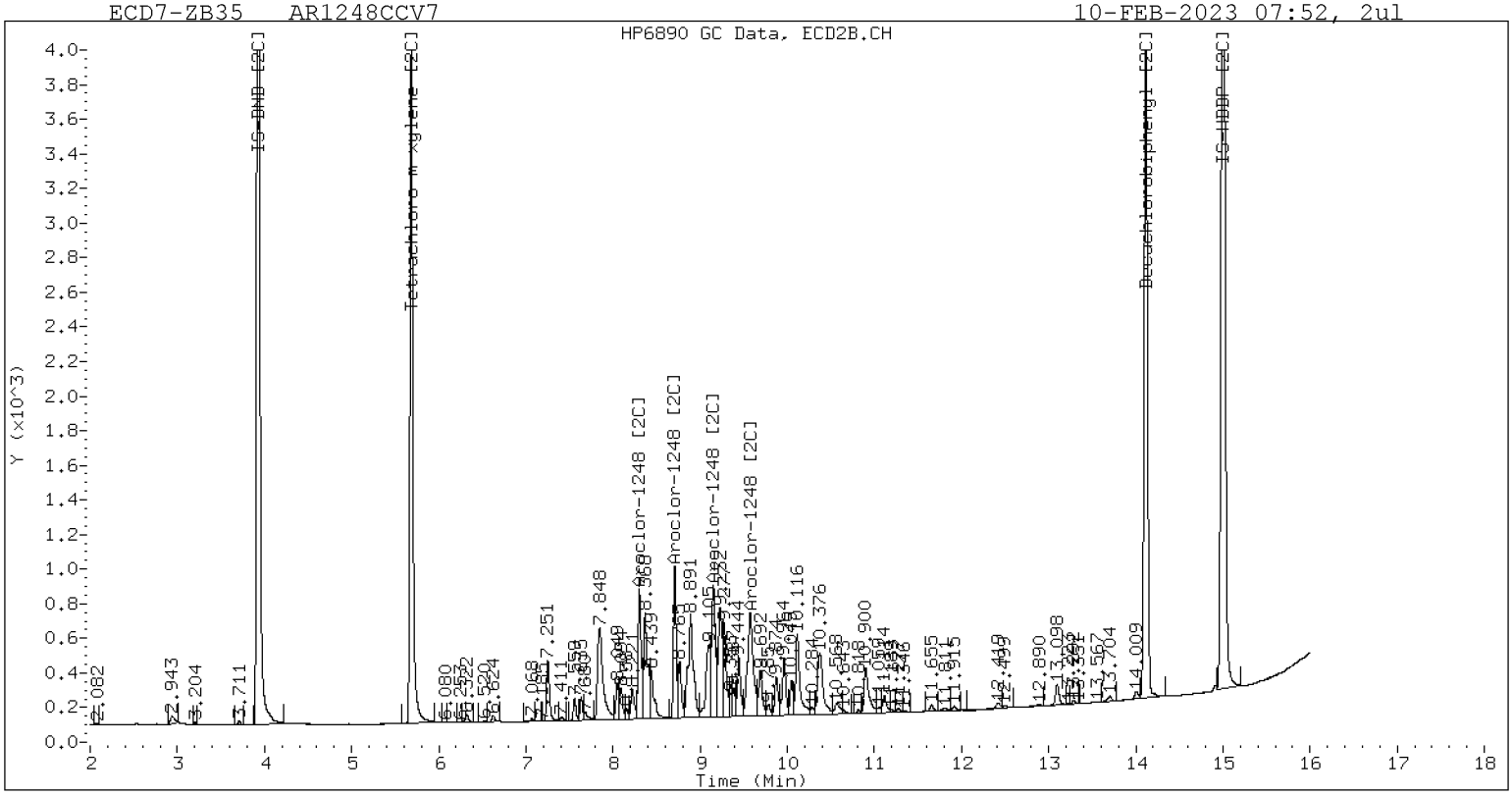
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248CCV7 10-FEB-2023 07:52, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248CCV7 10-FEB-2023 07:52, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092358ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/10/23
Lab Sample ID:	SLB0148-CCV8	Injection Time:	08:13
Sequence Name:	AR1660CCV8		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	233	0.0506755	0.0471628		-7.0	+/-20
Aroclor-1016 (1)	A	250.00	240	0.0297277	0.0284920		-4.0	
Aroclor-1016 (2)	A	250.00	236	0.0985017	0.0932170		-5.6	
Aroclor-1016 (3)	A	250.00	217	0.0453193	0.0392720		-13.2	
Aroclor-1016 (4)	A	250.00	237	0.0291533	0.0276702		-5.2	
Aroclor 1016 [2C]	A	250.00	241	0.0519244	0.0501073		-3.8	+/-20
Aroclor-1016 (1) [2C]	A	250.00	242	0.0433907	0.0419792		-3.2	
Aroclor-1016 (2) [2C]	A	250.00	242	0.0950862	0.0920676		-3.2	
Aroclor-1016 (3) [2C]	A	250.00	244	0.0388014	0.0379431		-2.4	
Aroclor-1016 (4) [2C]	A	250.00	234	0.0304194	0.0284393		-6.4	
Aroclor 1260	A	250.00	217	0.0605224	0.0527541		-13.0	+/-20
Aroclor-1260 (1)	A	250.00	230	0.0448870	0.0413709		-8.0	
Aroclor-1260 (2)	A	250.00	223	0.0461412	0.0412223		-10.8	
Aroclor-1260 (3)	A	250.00	216	0.1214672	0.1050820		-13.6	
Aroclor-1260 (4)	A	250.00	215	0.0627593	0.0539015		-14.0	
Aroclor-1260 (5)	A	250.00	203	0.0273573	0.0221938		-18.8	
Aroclor 1260 [2C]	A	250.00	237	0.0836545	0.0786624		-5.2	+/-20
Aroclor-1260 (1) [2C]	A	250.00	235	0.0577136	0.0541758		-6.0	
Aroclor-1260 (2) [2C]	A	250.00	235	0.1460113	0.1372854		-6.0	
Aroclor-1260 (3) [2C]	A	250.00	248	0.0363944	0.0361468		-0.8	
Aroclor-1260 (4) [2C]	A	250.00	230	0.0944986	0.0870416		-8.0	
Decachlorobiphenyl	A	40.000	35.4	0.8555994	0.7572282		-11.5	+/-20
Tetrachlorometaxylene	A	40.000	39.4	1.1307870	1.1148790		-1.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.9	1.2696430	1.1705950		-7.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.1	1.0814980	1.0579430		-2.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092358ECD7.D
Data file 2: /230209.b/230209.b/02092358ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV8
Client ID:
Injection Date: 10-FEB-2023 08:13
Report Date: 02/10/2023 12:59
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.001	209027	5.686	0.000	187887	39.4	39.1	0.8	Tetrachloro-m-xylene
13.890	-0.002	172096	14.116	0.001	225826	35.4	36.9	4.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	374977	-25.5
Hexabromobiphenyl	647433	454542	-29.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	355193	5.4
Hexabromobiphenyl	382032	385831	1.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1016	1	7.269	-0.001	33387	239.6	1	7.253	0.000	46596	241.9
Aroclor-1016	2	7.650	-0.001	109232	236.6	2	7.850	0.000	102193	242.1
Aroclor-1016	3	7.787	-0.002	46019	216.6	3	8.048	0.000	42116	244.5
Aroclor-1016	4	8.402	-0.002	32424	237.3	4	8.303	0.000	31567	233.7
Total Col1Ave (4 peaks):					232.5	Total Col2Ave (4 peaks):				240.5 RPD = 3
Corrected Ave (3 peaks):					230.2	Corrected Ave (3 peaks):				239.2 RPD = 4
CalAmt %D:					-7.0	CalAmt %D:				-3.8
Aroclor-1260	1	11.040	-0.004	58765	230.4	1	11.649	0.000	65321	234.7
Aroclor-1260	2	11.356	-0.004	58554	223.3	2	11.913	0.000	165528	235.1
Aroclor-1260	3	11.730	-0.005	149263	216.3	3	12.431	0.000	43583	248.3
Aroclor-1260	4	12.133	-0.006	76564	214.7	4	12.496	0.000	104948	230.3
Aroclor-1260	5	12.239	-0.005	31525	202.8	NS	---			----
Total Col1Ave (5 peaks):					217.5	Total Col2Ave (4 peaks):				237.1 RPD = 9
Corrected Ave (4 peaks):					214.3	Corrected Ave (3 peaks):				233.3 RPD = 9
CalAmt %D:					-13.0	CalAmt %D:				-5.2

Total PCB Area Col1 (5.909 - 13.792) = 1763561 Col1 Total PCB = 0.4 ppm*

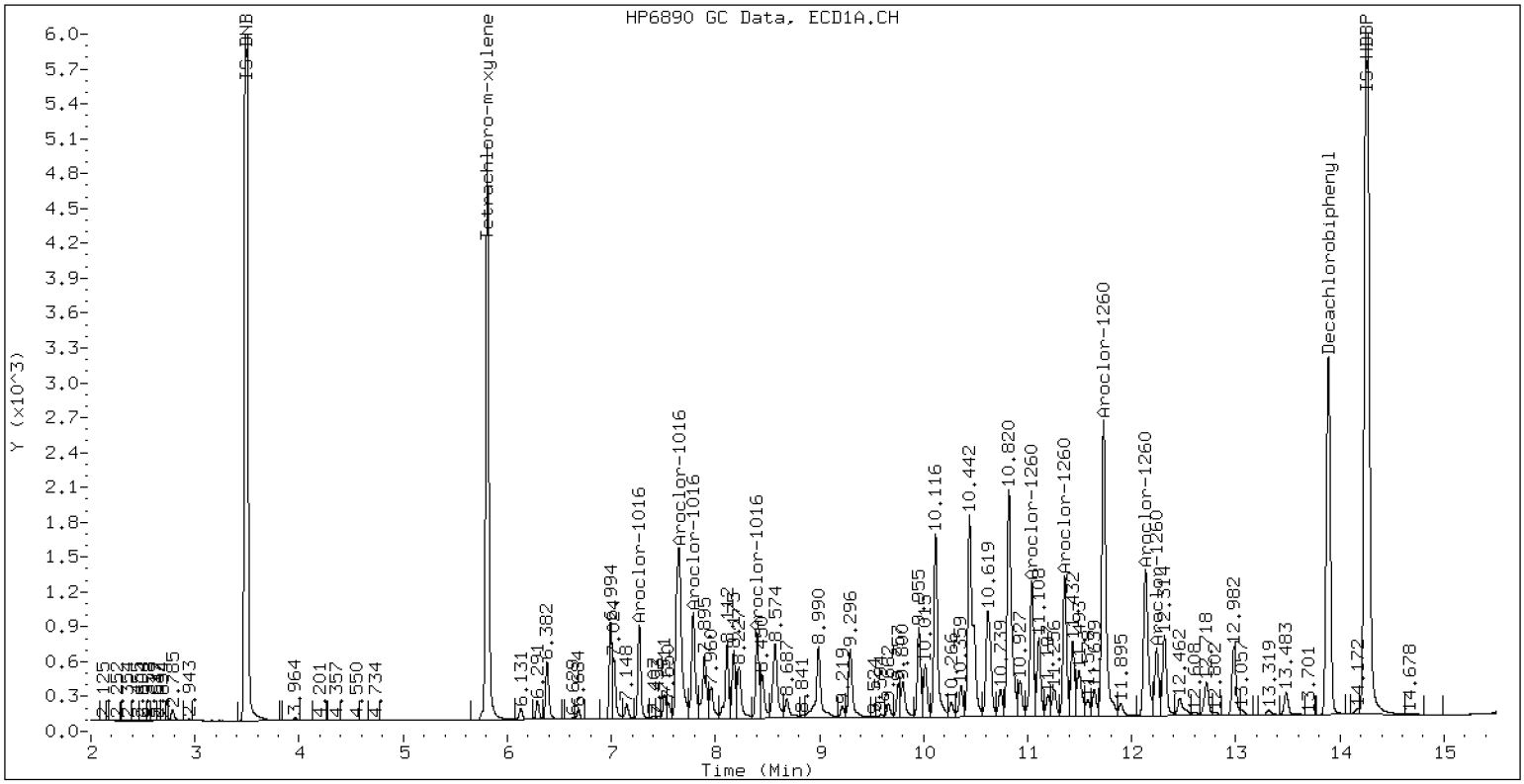
Total PCB Area Col2 (5.785 - 14.015) = 1649567 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

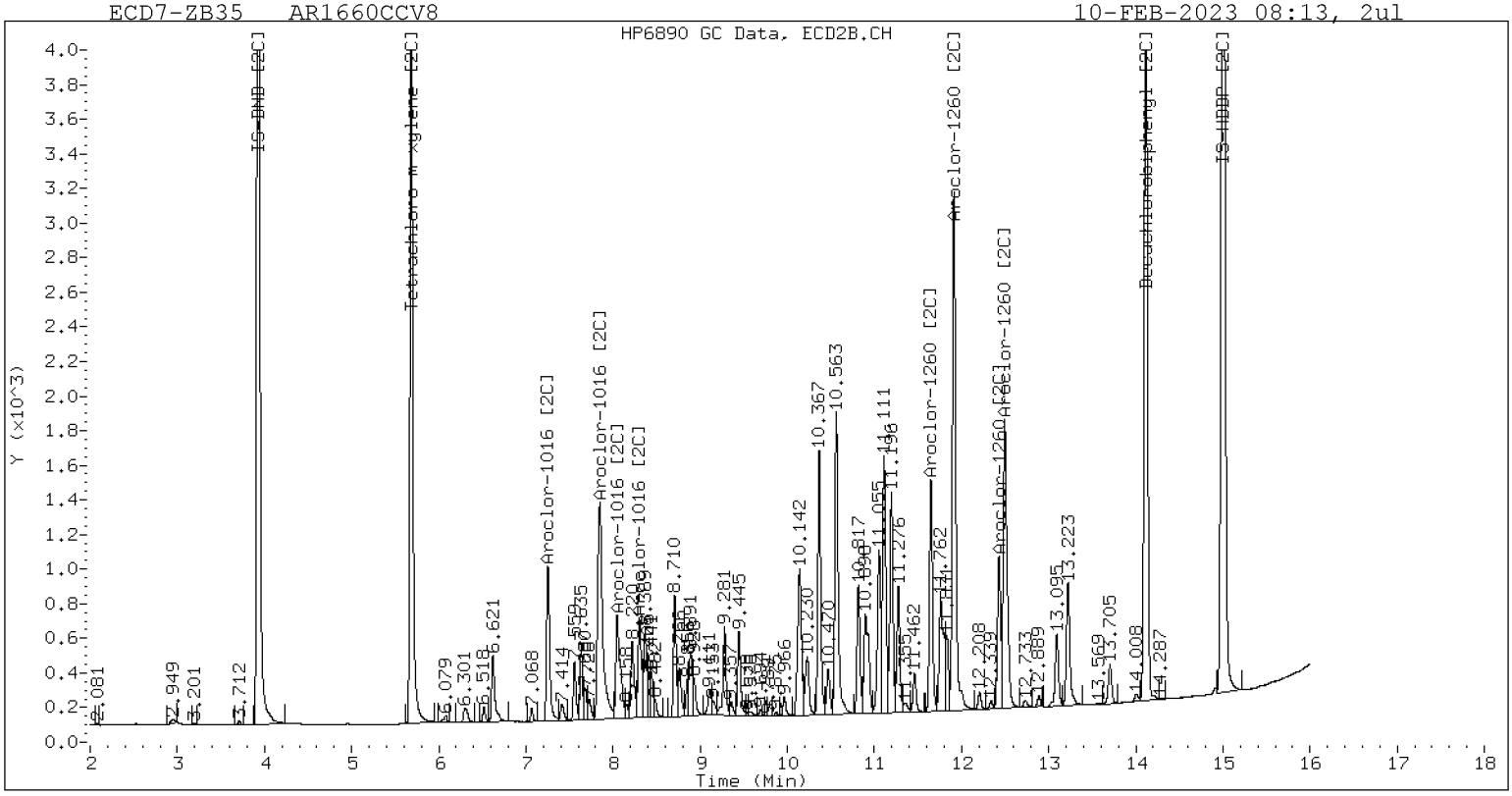
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV8 10-FEB-2023 08:13, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV8 10-FEB-2023 08:13, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092369ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/10/23
Lab Sample ID:	SLB0148-CCV9	Injection Time:	12:04
Sequence Name:	AR1242CCV9		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	226	0.0411165	0.0372043		-9.5	+/-20
Aroclor-1242 (1)	A	250.00	231		0.0226053			
Aroclor-1242 (2)	A	250.00	226		0.0726338			
Aroclor-1242 (3)	A	250.00	226		0.0215802			
Aroclor-1242 (4)	A	250.00	222		0.0319980			
Aroclor 1242 [2C]	A	250.00	229	0.0423236	0.0388297		-8.6	+/-20
Aroclor-1242 (1) [2C]	A	250.00	238		0.0333665			
Aroclor-1242 (2) [2C]	A	250.00	232		0.0720093			
Aroclor-1242 (3) [2C]	A	250.00	231		0.0225089			
Aroclor-1242 (4) [2C]	A	250.00	213		0.0274338			
Decachlorobiphenyl	A	40.000	32.2	0.8555994	0.6878324		-19.5	+/-20
Tetrachlorometaxylene	A	40.000	45.0	1.1307870	1.2731900		12.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	34.4	1.2696430	1.0936260		-14.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	45.1	1.0814980	1.2193430		12.8	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092369ECD7.D
Data file 2: /230209.b/230209.b/02092369ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242CCV9
Client ID:
Injection Date: 10-FEB-2023 12:04
Report Date: 02/10/2023 14:32
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.000	236898	5.685	0.000	218749	45.0	45.1	0.1	Tetrachloro-m-xylene
13.889	-0.001	166571	14.115	0.000	214851	32.2	34.5	6.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	372133	-26.1
Hexabromobiphenyl	647433	484336	-25.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	358798	6.5
Hexabromobiphenyl	382032	392915	2.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	7.268	-0.000	26288	230.7	1	7.252	0.000	37412	238.4
Aroclor-1242	2	7.651	0.000	84467	226.5	2	7.849	0.000	80740	231.7
Aroclor-1242	3	8.402	-0.000	25096	226.5	3	9.154	0.000	25238	231.2
Aroclor-1242	4	8.575	-0.001	37211	222.3	4	9.580	0.000	30760	212.6
Total Col1Ave (4 peaks):					226.5	Total Col2Ave (4 peaks):				228.5 RPD = 1
Corrected Ave (3 peaks):					225.1	Corrected Ave (3 peaks):				225.2 RPD = 0
CalAmt %D:					-9.4	CalAmt %D:				-8.6

Total PCB Area Col1 (5.908 - 13.790) = 624107 Col1 Total PCB = 0.1 ppm*

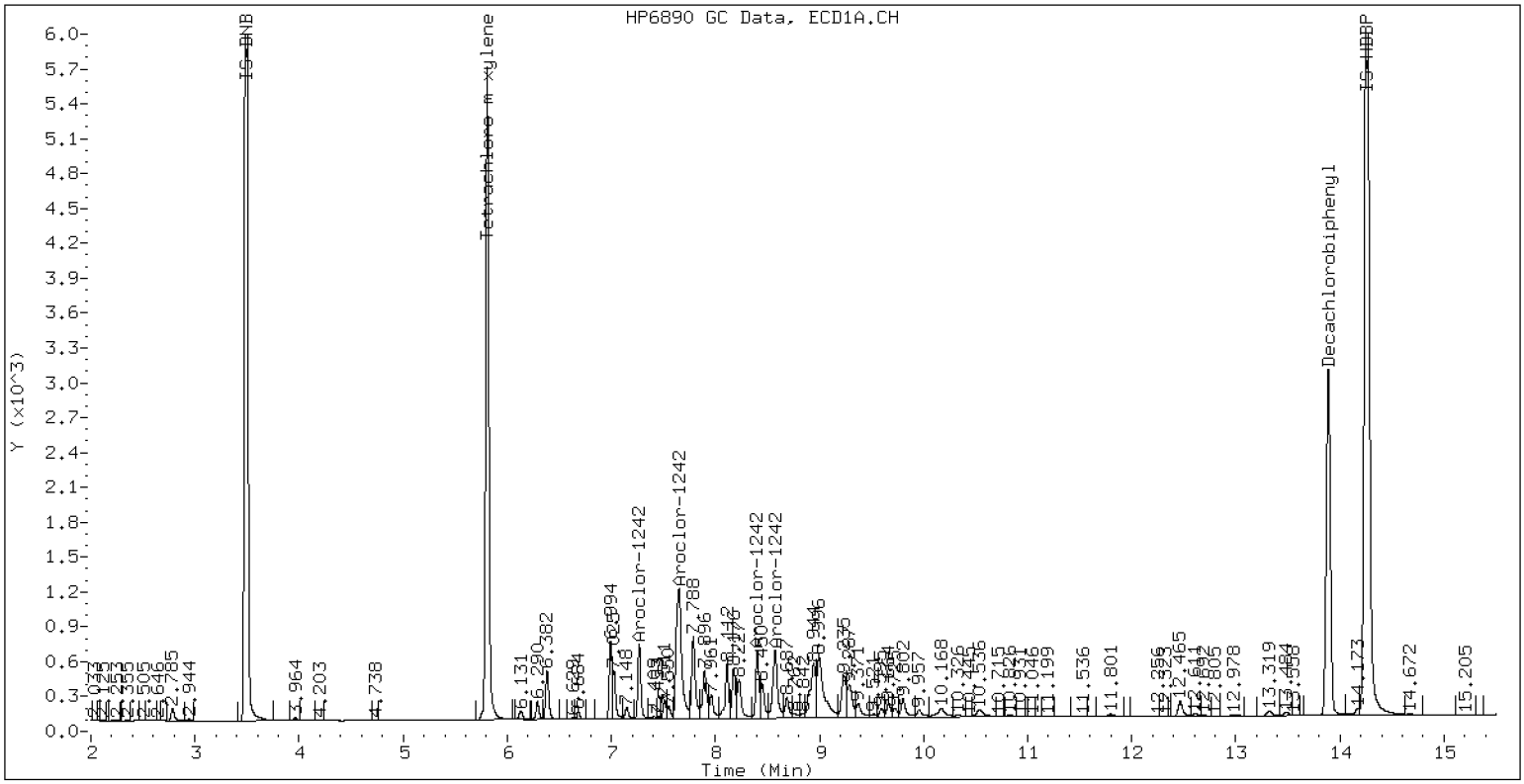
Total PCB Area Col2 (5.785 - 14.015) = 564529 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

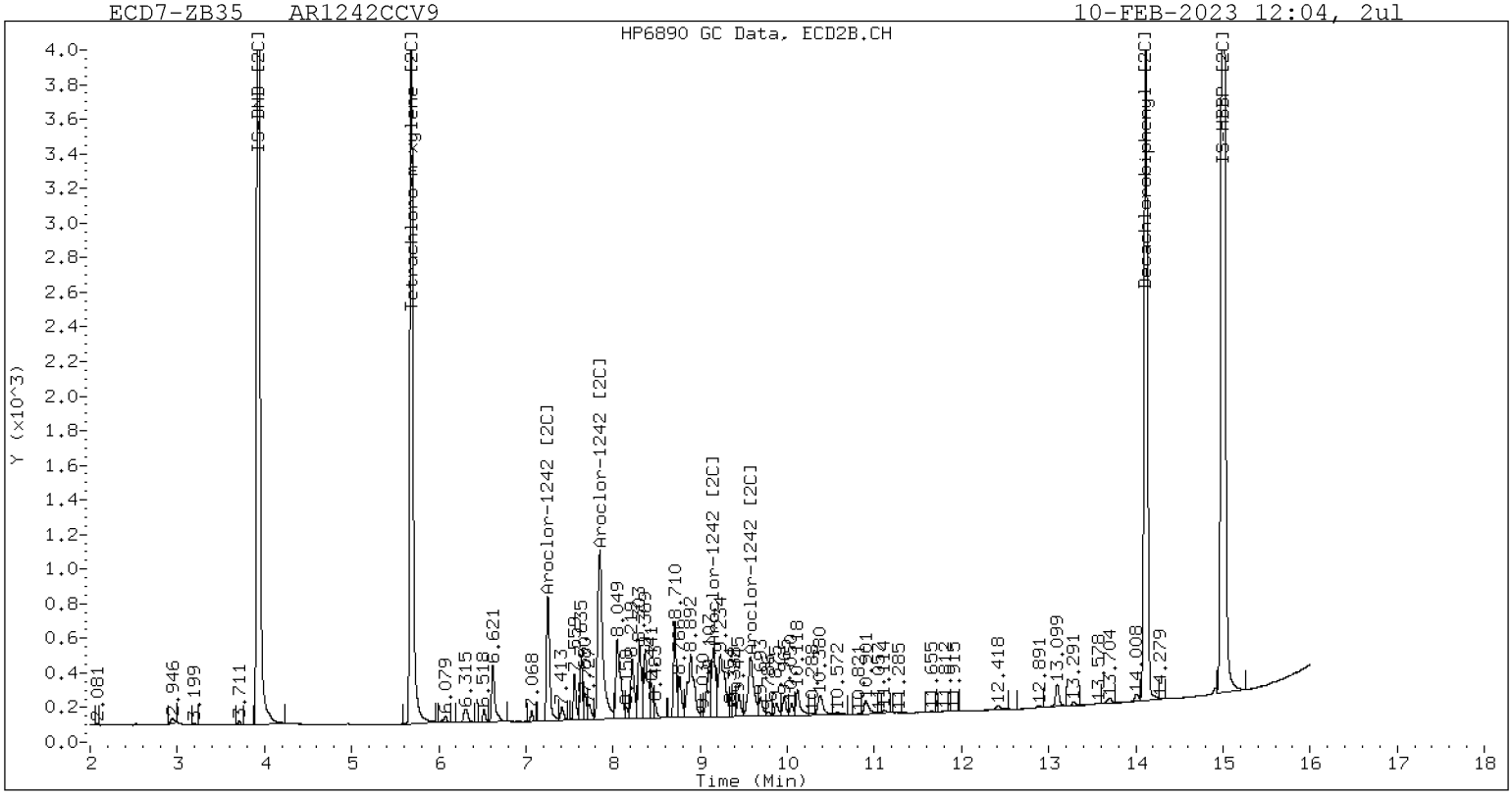
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242CCV9 10-FEB-2023 12:04, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242CCV9 10-FEB-2023 12:04, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092370ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/10/23
Lab Sample ID:	SLB0148-CCVA	Injection Time:	12:25
Sequence Name:	AR1660CCVA		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	232	0.0506755	0.0469565		-7.3	+/-20
Aroclor-1016 (1)	A	250.00	238	0.0297277	0.0282644		-4.8	
Aroclor-1016 (2)	A	250.00	236	0.0985017	0.0928469		-5.6	
Aroclor-1016 (3)	A	250.00	216	0.0453193	0.0391186		-13.6	
Aroclor-1016 (4)	A	250.00	237	0.0291533	0.0275962		-5.2	
Aroclor 1016 [2C]	A	250.00	246	0.0519244	0.0511188		-1.8	+/-20
Aroclor-1016 (1) [2C]	A	250.00	242	0.0433907	0.0420679		-3.2	
Aroclor-1016 (2) [2C]	A	250.00	247	0.0950862	0.0938336		-1.2	
Aroclor-1016 (3) [2C]	A	250.00	252	0.0388014	0.0391986		0.8	
Aroclor-1016 (4) [2C]	A	250.00	241	0.0304194	0.0293751		-3.6	
Aroclor 1260	A	250.00	200	0.0605224	0.0487281		-20.0	+/-20
Aroclor-1260 (1)	A	250.00	213	0.0448870	0.0382742		-14.8	
Aroclor-1260 (2)	A	250.00	209	0.0461412	0.0386046		-16.4	
Aroclor-1260 (3)	A	250.00	202	0.1214672	0.0980069		-19.2	
Aroclor-1260 (4)	A	250.00	195	0.0627593	0.0489153		-22.0	
Aroclor-1260 (5)	A	250.00	181	0.0273573	0.0198395		-27.6	
Aroclor 1260 [2C]	A	250.00	235	0.0836545	0.0781344		-6.0	+/-20
Aroclor-1260 (1) [2C]	A	250.00	234	0.0577136	0.0541531		-6.4	
Aroclor-1260 (2) [2C]	A	250.00	234	0.1460113	0.1369726		-6.4	
Aroclor-1260 (3) [2C]	A	250.00	245	0.0363944	0.0356233		-2.0	
Aroclor-1260 (4) [2C]	A	250.00	227	0.0944986	0.0857887		-9.2	
Decachlorobiphenyl	A	40.000	34.7	0.8555994	0.7431611		-13.3	+/-20
Tetrachlorometaxylene	A	40.000	39.0	1.1307870	1.1023980		-2.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	37.4	1.2696430	1.1871290		-6.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	38.6	1.0814980	1.0450140		-3.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092370ECD7.D
Data file 2: /230209.b/230209.b/02092370ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCVA
Client ID:
Injection Date: 10-FEB-2023 12:25
Report Date: 02/10/2023 14:32
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.000	207209	5.686	0.000	187465	39.0	38.7	0.9	Tetrachloro-m-xylene
13.889	-0.001	191471	14.115	0.001	247305	34.7	37.4	7.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	375924	-25.3
Hexabromobiphenyl	647433	515288	-20.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	358780	6.5
Hexabromobiphenyl	382032	416644	9.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	0.000	33204	237.7	1	7.254	0.000	47166	242.4
Aroclor-1016	2	7.650	0.001	109073	235.6	2	7.850	0.000	105205	246.7
Aroclor-1016	3	7.788	0.001	45955	215.8	3	8.049	0.001	43949	252.6
Aroclor-1016	4	8.402	0.001	32419	236.6	4	8.304	0.000	32935	241.4
Total Col1Ave (4 peaks):					231.4	Total Col2Ave (4 peaks):				245.8 RPD = 6
Corrected Ave (3 peaks):					229.4	Corrected Ave (3 peaks):				243.5 RPD = 6
CalAmt %D:					-7.4	CalAmt %D:				-1.7
Aroclor-1260	1	11.041	0.001	61632	213.2	1	11.649	-0.000	70508	234.6
Aroclor-1260	2	11.356	0.000	62164	209.2	2	11.914	0.000	178340	234.5
Aroclor-1260	3	11.729	-0.000	157818	201.7	3	12.432	0.001	46382	244.7
Aroclor-1260	4	12.133	0.000	78767	194.9	4	12.497	0.001	111698	227.0
Aroclor-1260	5	12.240	0.001	31947	181.3	NS	---			----
Total Col1Ave (5 peaks):					200.0	Total Col2Ave (4 peaks):				235.2 RPD = 16
Corrected Ave (4 peaks):					196.8	Corrected Ave (3 peaks):				232.0 RPD = 16
CalAmt %D:					-20.0	CalAmt %D:				-5.9

Total PCB Area Col1 (5.908 - 13.790) = 1797916 Col1 Total PCB = 0.4 ppm*

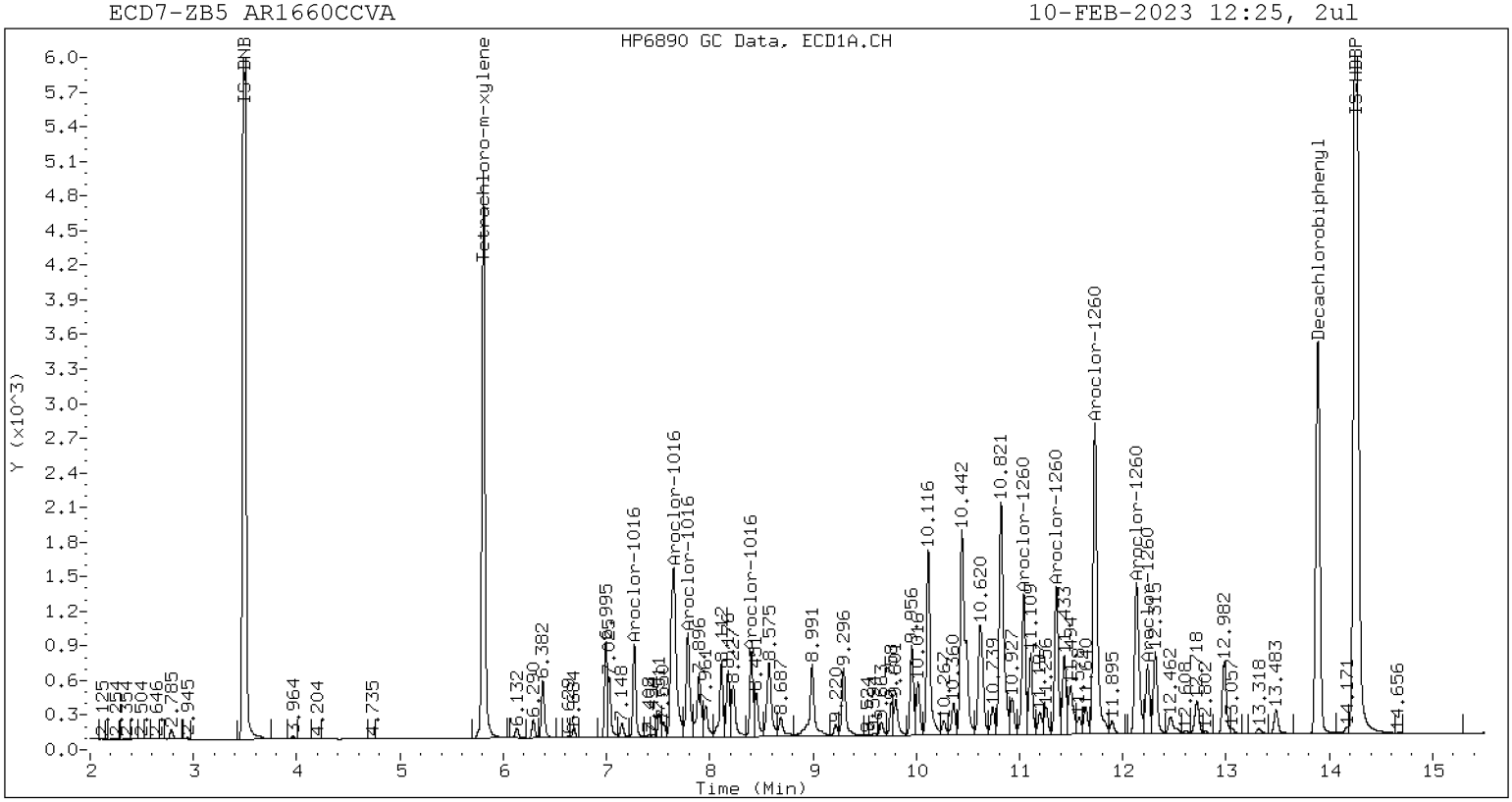
Total PCB Area Col2 (5.785 - 14.015) = 1759656 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

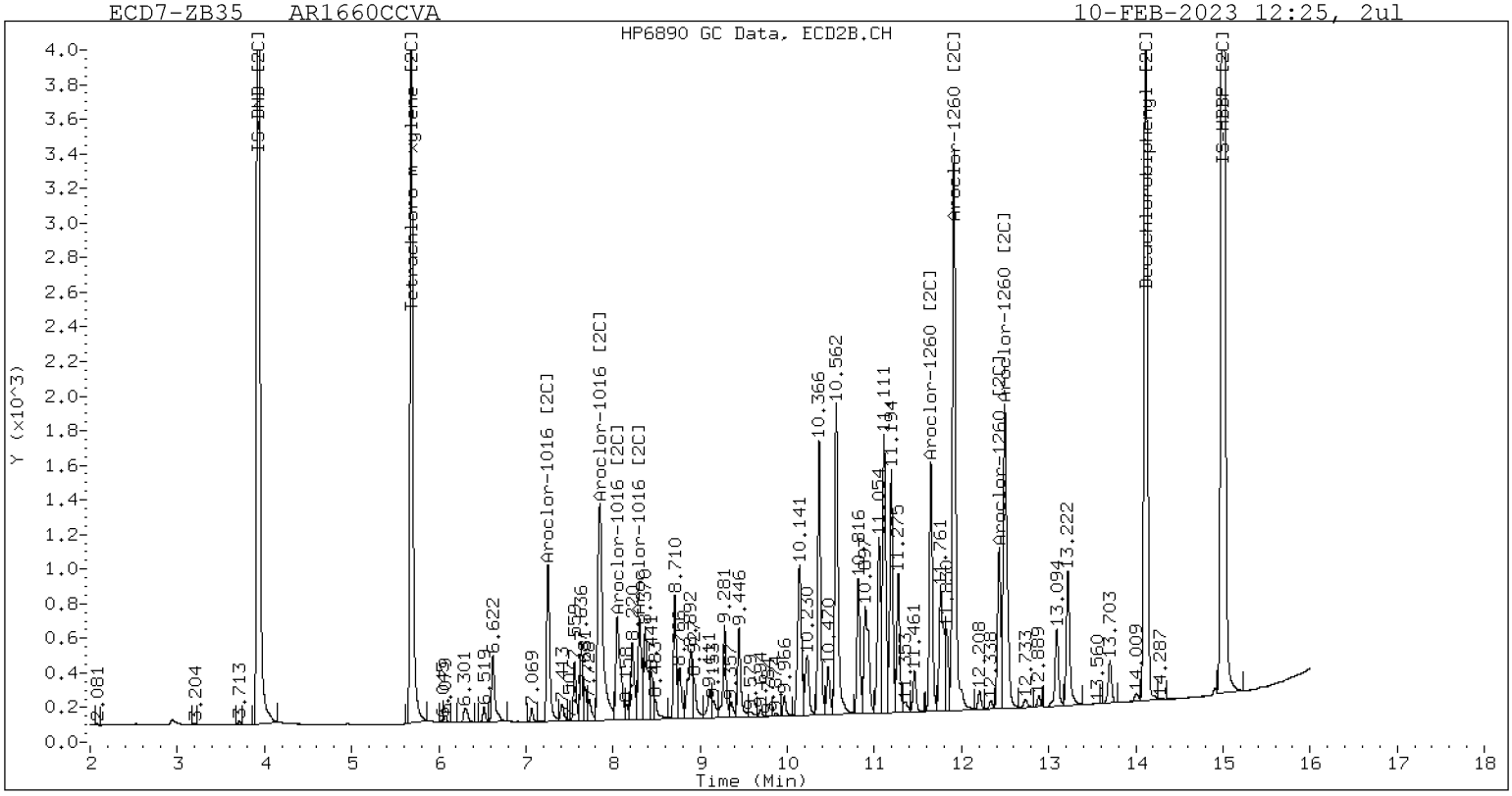
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCVA 10-FEB-2023 12:25, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCVA 10-FEB-2023 12:25, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092381ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/10/23
Lab Sample ID:	SLB0148-CCVB	Injection Time:	16:17
Sequence Name:	AR1254CCVB		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1254	A	250.00	189	0.0675033	0.0514221		-24.3	+/-20 *
Aroclor-1254 (1)	A	250.00	202		0.0658000			
Aroclor-1254 (2)	A	250.00	181		0.0252013			
Aroclor-1254 (3)	A	250.00	190		0.0396093			
Aroclor-1254 (4)	A	250.00	190		0.0776735			
Aroclor-1254 (5)	A	250.00	183		0.0488263			
Aroclor 1254 [2C]	A	250.00	205	0.0733219	0.0601935		-18.1	+/-20
Aroclor-1254 (1) [2C]	A	250.00	219		0.0508970			
Aroclor-1254 (2) [2C]	A	250.00	215		0.0403362			
Aroclor-1254 (3) [2C]	A	250.00	205		0.0840644			
Aroclor-1254 (4) [2C]	A	250.00	208		0.0852686			
Aroclor-1254 (5) [2C]	A	250.00	177		0.0404016			
Decachlorobiphenyl	A	40.000	32.4	0.8555994	0.6937162		-19.0	+/-20
Tetrachlorometaxylene	A	40.000	38.0	1.1307870	1.0742460		-5.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	35.9	1.2696430	1.1397600		-10.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	38.6	1.0814980	1.0445970		-3.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092381ECD7.D
Data file 2: /230209.b/230209.b/02092381ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254CCVB
Client ID:
Injection Date: 10-FEB-2023 16:17
Report Date: 02/10/2023 16:56
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	0.000	204458	5.685	0.000	191669	38.0	38.6	1.7	Tetrachloro-m-xylene
13.890	0.001	142225	14.116	0.000	204767	32.4	35.9	10.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	380654	-24.4
Hexabromobiphenyl	647433	410038	-36.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	366972	8.9
Hexabromobiphenyl	382032	359316	-5.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.293	-0.001	78272	201.8	1	9.444	0.000	58368	219.2
Aroclor-1254	2	9.371	-0.000	29978	181.0	2	9.965	0.000	46257	215.0
Aroclor-1254	3	9.662	-0.000	47117	189.6	3	10.116	0.000	96404	205.4
Aroclor-1254	4	9.800	0.000	92396	189.7	4	10.365	0.000	97785	208.3
Aroclor-1254	5	10.160	-0.001	58081	183.4	5	10.563	0.000	46332	177.2

Total Col1Ave (5 peaks): 189.1 Total Col2Ave (5 peaks): 205.0 RPD = 8

Corrected Ave (4 peaks): 185.9 Corrected Ave (4 peaks): 201.5 RPD = 8

CalAmt %D: -24.4 CalAmt %D: -18.0

Total PCB Area Col1 (5.908 - 13.789) = 943912 Col1 Total PCB = 0.2 ppm*

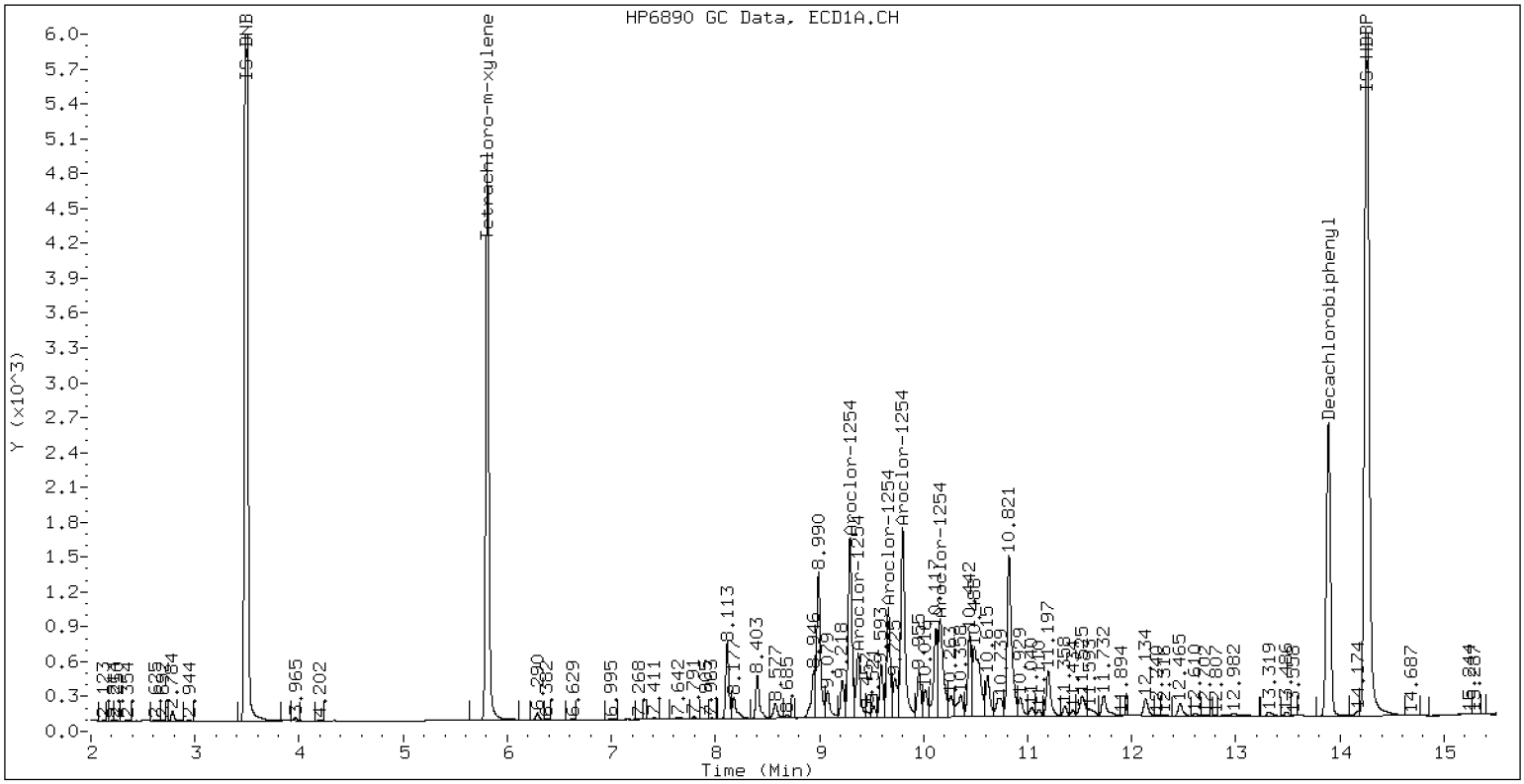
Total PCB Area Col2 (5.785 - 14.016) = 932790 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

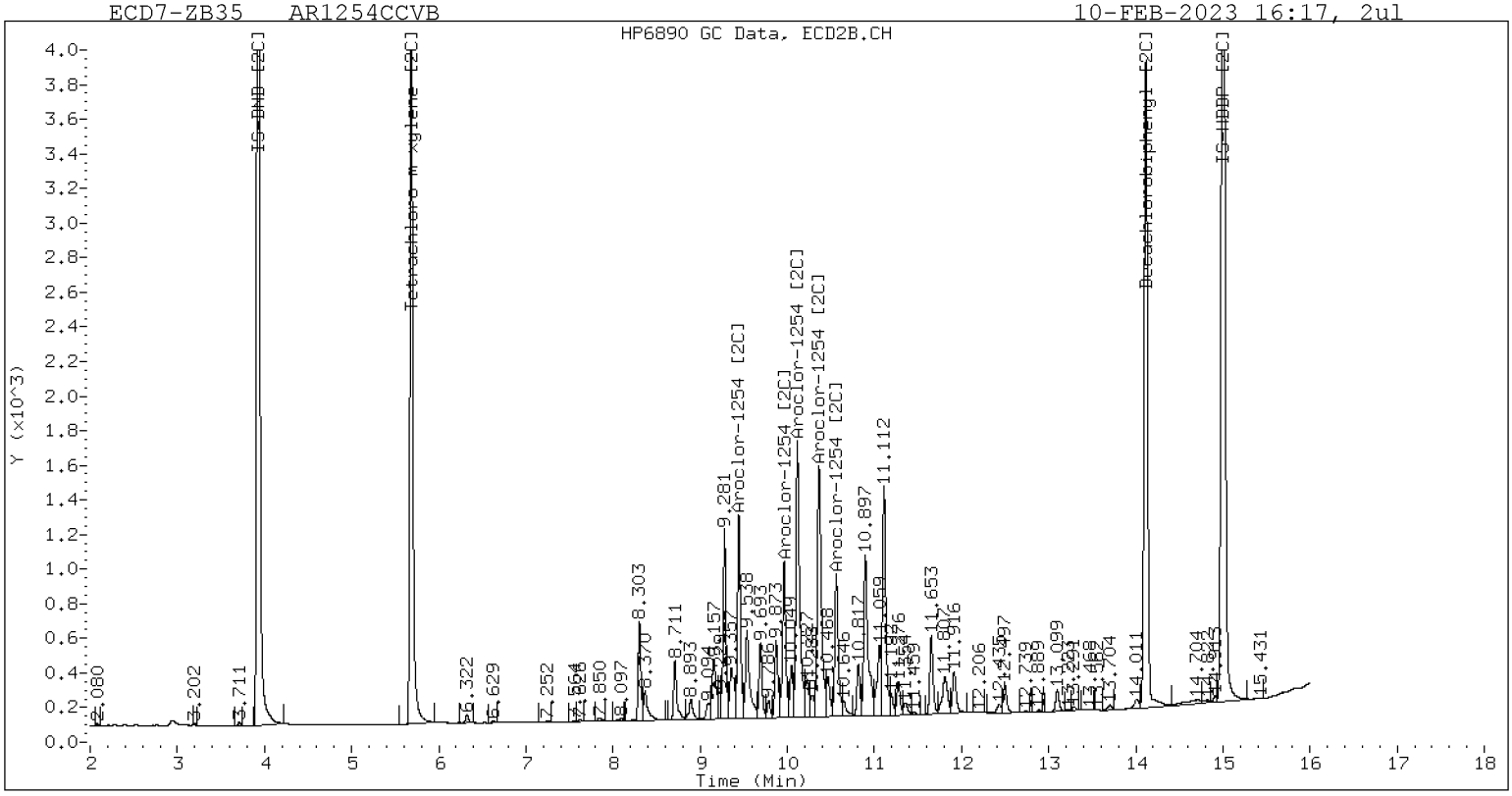
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254CCVB 10-FEB-2023 16:17, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254CCVB 10-FEB-2023 16:17, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092382ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/10/23
Lab Sample ID:	SLB0148-CCVC	Injection Time:	16:38
Sequence Name:	AR1660CCVC		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	230	0.0506755	0.0467373		-7.9	+/-20
Aroclor-1016 (1)	A	250.00	237	0.0297277	0.0281745		-5.2	
Aroclor-1016 (2)	A	250.00	235	0.0985017	0.0925543		-6.0	
Aroclor-1016 (3)	A	250.00	214	0.0453193	0.0387630		-14.4	
Aroclor-1016 (4)	A	250.00	235	0.0291533	0.0274572		-6.0	
Aroclor 1016 [2C]	A	250.00	247	0.0519244	0.0513336		-1.3	+/-20
Aroclor-1016 (1) [2C]	A	250.00	244	0.0433907	0.0424353		-2.4	
Aroclor-1016 (2) [2C]	A	250.00	248	0.0950862	0.0941725		-0.8	
Aroclor-1016 (3) [2C]	A	250.00	253	0.0388014	0.0392901		1.2	
Aroclor-1016 (4) [2C]	A	250.00	242	0.0304194	0.0294365		-3.2	
Aroclor 1260	A	250.00	212	0.0605224	0.0515890		-15.4	+/-20
Aroclor-1260 (1)	A	250.00	226	0.0448870	0.0406367		-9.6	
Aroclor-1260 (2)	A	250.00	222	0.0461412	0.0409774		-11.2	
Aroclor-1260 (3)	A	250.00	215	0.1214672	0.1042948		-14.0	
Aroclor-1260 (4)	A	250.00	204	0.0627593	0.0511549		-18.4	
Aroclor-1260 (5)	A	250.00	191	0.0273573	0.0208812		-23.6	
Aroclor 1260 [2C]	A	250.00	240	0.0836545	0.0795185		-4.1	+/-20
Aroclor-1260 (1) [2C]	A	250.00	240	0.0577136	0.0553727		-4.0	
Aroclor-1260 (2) [2C]	A	250.00	238	0.1460113	0.1388974		-4.8	
Aroclor-1260 (3) [2C]	A	250.00	250	0.0363944	0.0364418		0.0	
Aroclor-1260 (4) [2C]	A	250.00	231	0.0944986	0.0873621		-7.6	
Decachlorobiphenyl	A	40.000	34.2	0.8555994	0.7310562		-14.5	+/-20
Tetrachlorometaxylene	A	40.000	39.4	1.1307870	1.1142210		-1.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	37.1	1.2696430	1.1778000		-7.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	38.9	1.0814980	1.0524790		-2.8	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092382ECD7.D
Data file 2: /230209.b/230209.b/02092382ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCVC
Client ID:
Injection Date: 10-FEB-2023 16:38
Report Date: 02/10/2023 17:00
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.000	210492	5.686	0.001	189852	39.4	38.9	1.2	Tetrachloro-m-xylene
13.889	-0.002	170301	14.117	0.001	231691	34.2	37.1	8.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	377828	-24.9
Hexabromobiphenyl	647433	465904	-28.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	360771	7.1
Hexabromobiphenyl	382032	393430	3.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.000	33266	236.9	1	7.253	-0.000	47842	244.5
Aroclor-1016	2	7.650	-0.000	109280	234.9	2	7.850	0.000	106171	247.6
Aroclor-1016	3	7.787	-0.000	45768	213.8	3	8.049	0.001	44296	253.1
Aroclor-1016	4	8.402	-0.000	32419	235.5	4	8.304	0.000	33187	241.9
Total Col1Ave (4 peaks):					230.3	Total Col2Ave (4 peaks):				246.8 RPD = 7
Corrected Ave (3 peaks):					228.1	Corrected Ave (3 peaks):				244.7 RPD = 7
CalAmt %D:					-7.9	CalAmt %D:				-1.3
Aroclor-1260	1	11.040	-0.001	59165	226.3	1	11.650	0.000	68079	239.9
Aroclor-1260	2	11.356	0.000	59661	222.0	2	11.913	0.000	170770	237.8
Aroclor-1260	3	11.730	0.000	151848	214.7	3	12.432	0.001	44804	250.3
Aroclor-1260	4	12.133	0.000	74479	203.8	4	12.496	0.000	107409	231.1
Aroclor-1260	5	12.240	0.000	30402	190.8	NS	---			----
Total Col1Ave (5 peaks):					211.5	Total Col2Ave (4 peaks):				239.8 RPD = 13
Corrected Ave (4 peaks):					207.8	Corrected Ave (3 peaks):				236.3 RPD = 13
CalAmt %D:					-15.4	CalAmt %D:				-4.1

Total PCB Area Col1 (5.908 - 13.790) = 1751626 Col1 Total PCB = 0.4 ppm*

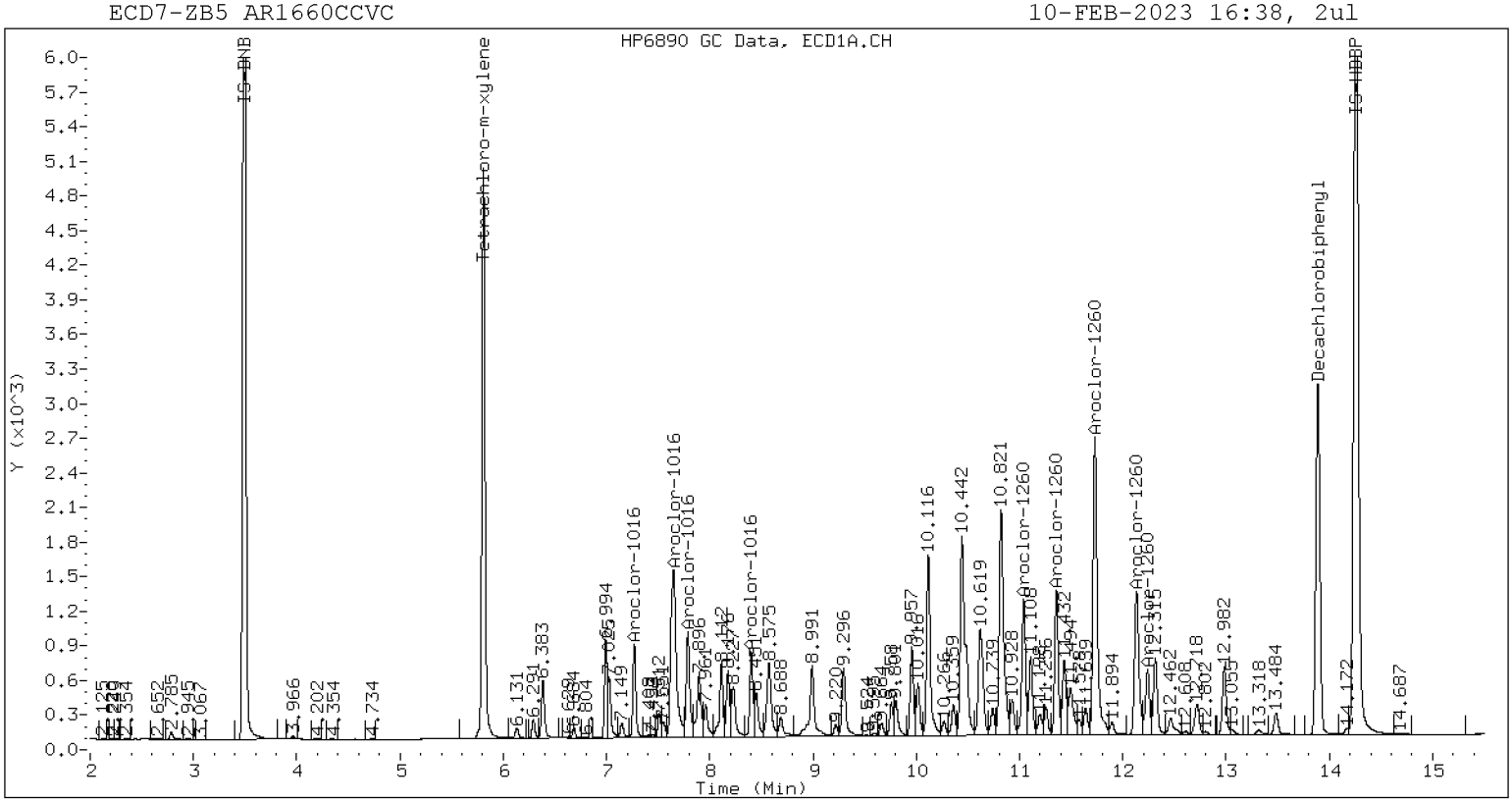
Total PCB Area Col2 (5.785 - 14.016) = 1724666 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

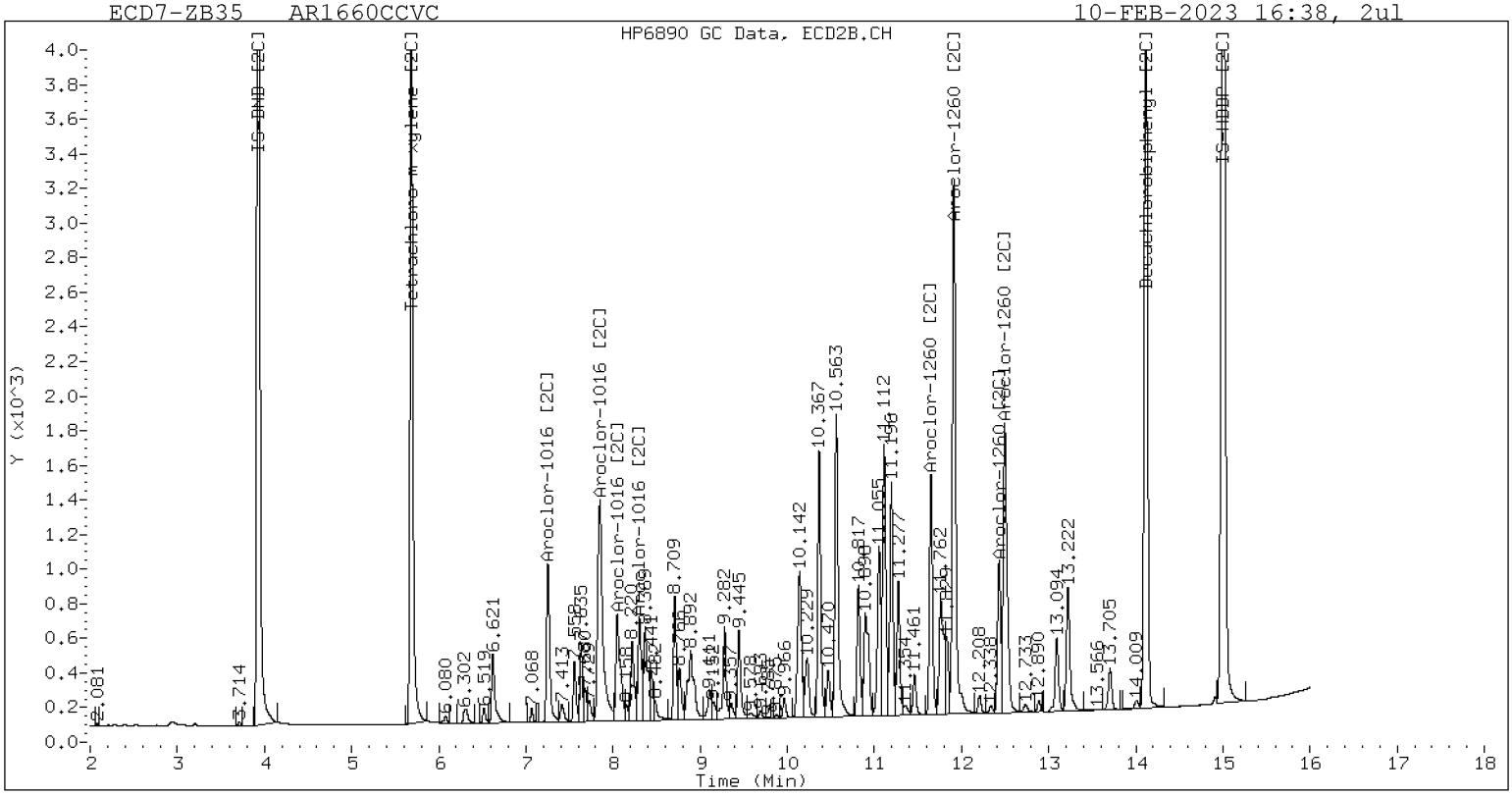
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCVC 10-FEB-2023 16:38, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCVC 10-FEB-2023 16:38, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092385ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/10/23
Lab Sample ID:	SLB0148-CCVD	Injection Time:	17:41
Sequence Name:	AR1248CCVD		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	195	0.0592639	0.0442892		-22.0	+/-20 *
Aroclor-1248 (1)	A	250.00	227		0.0363764			
Aroclor-1248 (2)	A	250.00	223		0.0455804			
Aroclor-1248 (3)	A	250.00	160		0.0624010			
Aroclor-1248 (4)	A	250.00	170		0.0327989			
Aroclor 1248 [2C]	A	250.00	224	0.0453673	0.0405441		-10.3	+/-20
Aroclor-1248 (1) [2C]	A	250.00	234		0.0339333			
Aroclor-1248 (2) [2C]	A	250.00	221		0.0344301			
Aroclor-1248 (3) [2C]	A	250.00	224		0.0425855			
Aroclor-1248 (4) [2C]	A	250.00	218		0.0512276			
Decachlorobiphenyl	A	40.000	32.1	0.8555994	0.6868434		-19.8	+/-20
Tetrachlorometaxylene	A	40.000	37.1	1.1307870	1.0484900		-7.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	34.6	1.2696430	1.0973150		-13.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.3	1.0814980	1.0093900		-6.8	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092385ECD7.D
Data file 2: /230209.b/230209.b/02092385ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248CCVD
Client ID:
Injection Date: 10-FEB-2023 17:41
Report Date: 02/13/2023 08:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.000	205342	5.685	-0.000	189515	37.1	37.3	0.7	Tetrachloro-m-xylene
13.890	-0.000	183857	14.116	-0.001	246514	32.1	34.6	7.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	391691	-22.2
Hexabromobiphenyl	647433	535368	-17.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	375504	11.5
Hexabromobiphenyl	382032	449304	17.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.402	0.000	44526	227.2	1	8.304	0.000	39819	234.6
Aroclor-1248	2	8.574	-0.000	55792	223.2	2	8.710	0.000	40402	221.1
Aroclor-1248	3	8.994	0.001	76381	159.8	3	9.154	0.000	49972	223.8
Aroclor-1248	4	9.292	0.001	40147	169.6	4	9.577	0.000	60113	217.7
Total Col1Ave (4 peaks):					195.0	Total Col2Ave (4 peaks):				224.3 RPD = 14
Corrected Ave (3 peaks):					184.2	Corrected Ave (3 peaks):				220.9 RPD = 18
CalAmt %D:					-22.0	CalAmt %D:				-10.3

Total PCB Area Col1 (5.908 - 13.790) = 843897 Col1 Total PCB = 0.2 ppm*

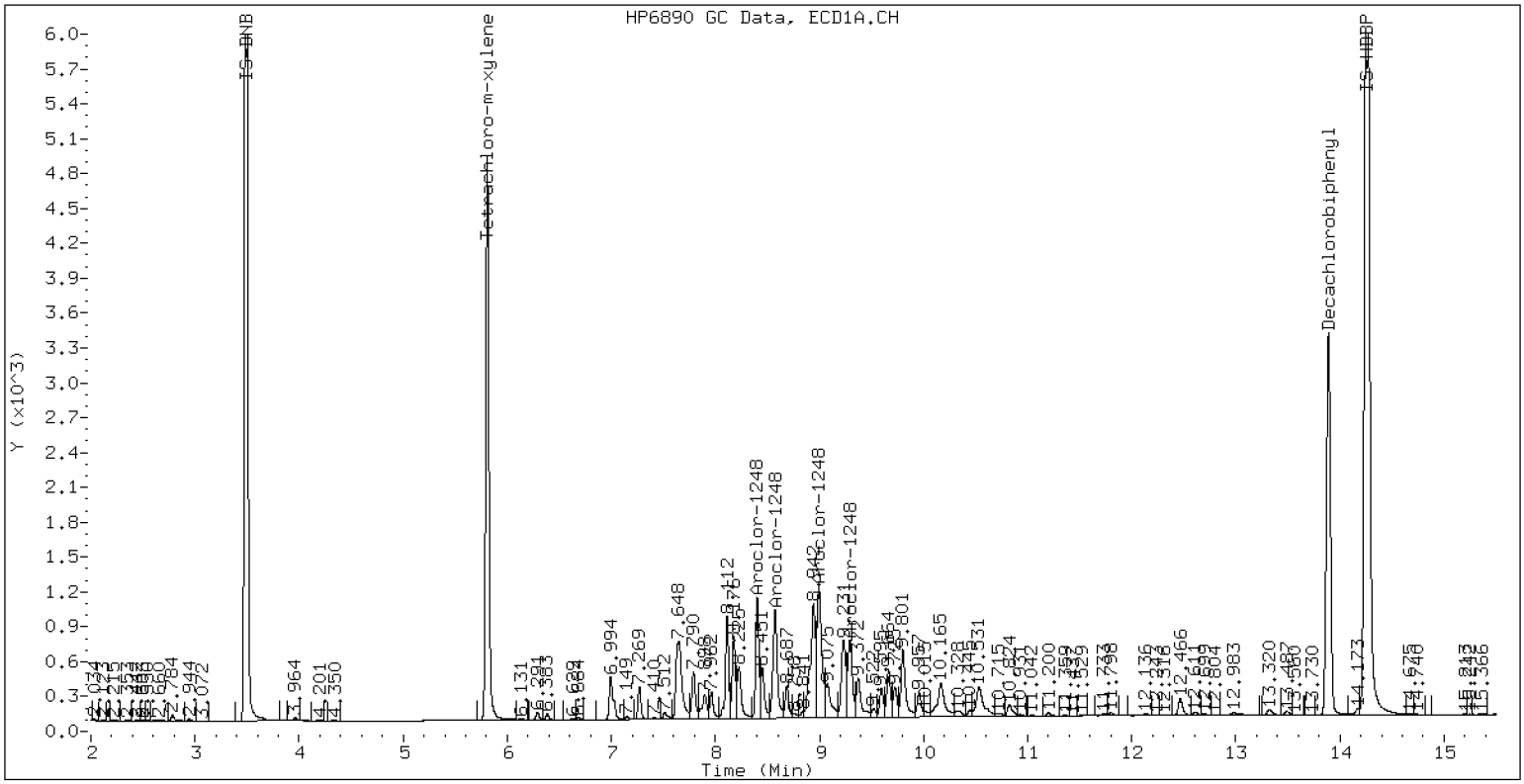
Total PCB Area Col2 (5.786 - 14.017) = 777787 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

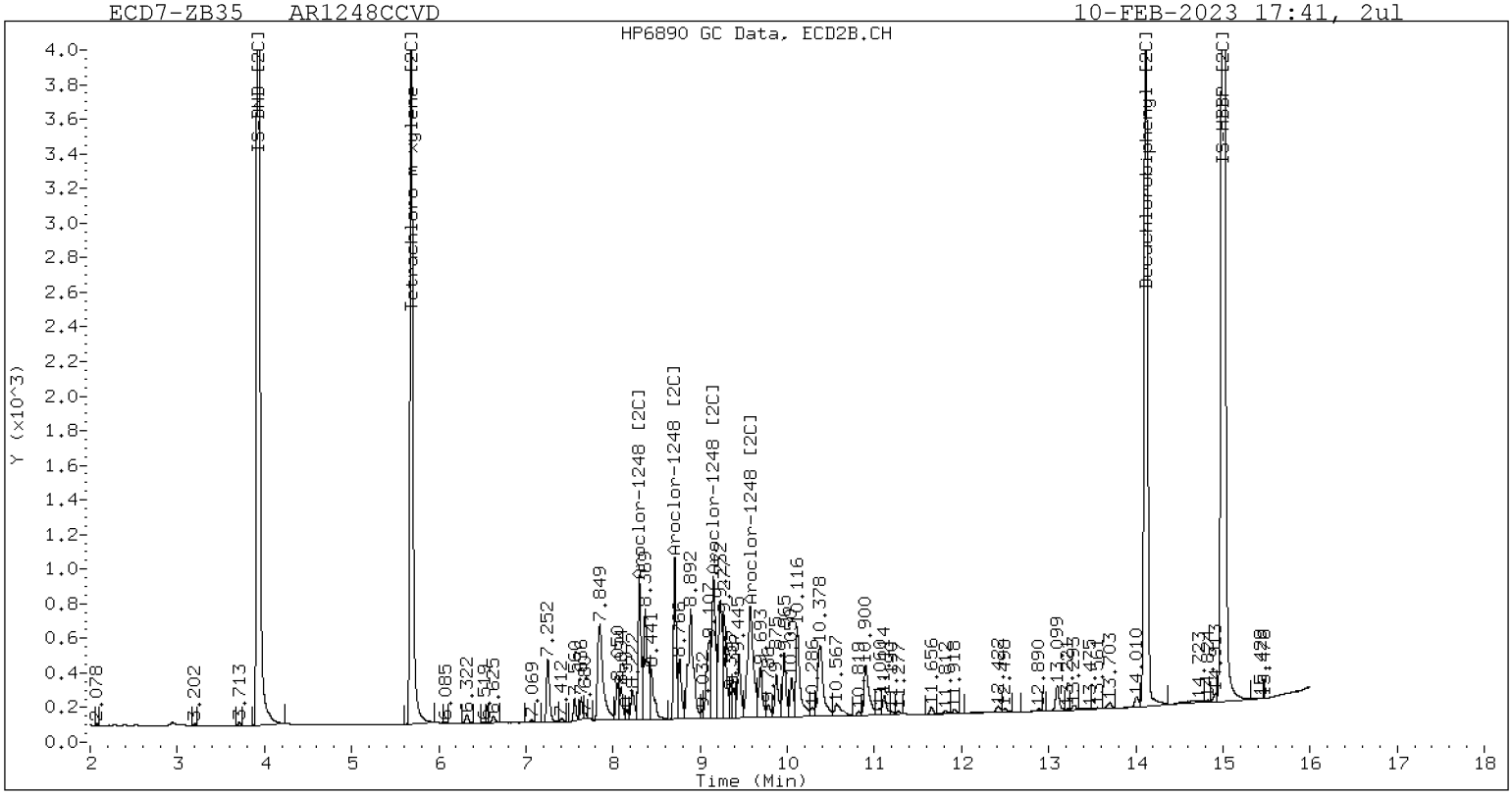
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248CCVD 10-FEB-2023 17:41, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248CCVD 10-FEB-2023 17:41, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GA00061
Lab File ID:	02092386ECD7.D	Calibration Date:	01/24/2023
Sequence:	SLB0148	Injection Date:	02/10/23
Lab Sample ID:	SLB0148-CCVE	Injection Time:	18:02
Sequence Name:	AR1660CCVE		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Aroclor 1016	A	250.00	232	0.0506755	0.0469060		-7.4	+/-20	
Aroclor-1016 (1)	A	250.00	238	0.0297277	0.0282654		-4.8		
Aroclor-1016 (2)	A	250.00	235	0.0985017	0.0925920		-6.0		
Aroclor-1016 (3)	A	250.00	216	0.0453193	0.0390933		-13.6		
Aroclor-1016 (4)	A	250.00	237	0.0291533	0.0276734		-5.2		
Aroclor 1016 [2C]	A	250.00	243	0.0519244	0.0505114		-2.9	+/-20	
Aroclor-1016 (1) [2C]	A	250.00	240	0.0433907	0.0417063		-4.0		
Aroclor-1016 (2) [2C]	A	250.00	243	0.0950862	0.0925077		-2.8		
Aroclor-1016 (3) [2C]	A	250.00	249	0.0388014	0.0386903		-0.4		
Aroclor-1016 (4) [2C]	A	250.00	239	0.0304194	0.0291412		-4.4		
Aroclor 1260	A	250.00	199	0.0605224	0.0485304		-20.3	+/-20	*
Aroclor-1260 (1)	A	250.00	208	0.0448870	0.0373919		-16.8		
Aroclor-1260 (2)	A	250.00	206	0.0461412	0.0379718		-17.6		
Aroclor-1260 (3)	A	250.00	201	0.1214672	0.0977558		-19.6		
Aroclor-1260 (4)	A	250.00	197	0.0627593	0.0493582		-21.2		
Aroclor-1260 (5)	A	250.00	184	0.0273573	0.0201745		-26.4		
Aroclor 1260 [2C]	A	250.00	226	0.0836545	0.0749746		-9.6	+/-20	
Aroclor-1260 (1) [2C]	A	250.00	223	0.0577136	0.0515378		-10.8		
Aroclor-1260 (2) [2C]	A	250.00	224	0.1460113	0.1306585		-10.4		
Aroclor-1260 (3) [2C]	A	250.00	237	0.0363944	0.0345505		-5.2		
Aroclor-1260 (4) [2C]	A	250.00	220	0.0944986	0.0831513		-12.0		
Decachlorobiphenyl	A	40.000	34.2	0.8555994	0.7310019		-14.5	+/-20	
Tetrachlorometaxylene	A	40.000	39.0	1.1307870	1.1023390		-2.5	+/-20	
Decachlorobiphenyl [2C]	A	40.000	35.9	1.2696430	1.1398760		-10.3	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	39.2	1.0814980	1.0597820		-2.0	+/-20	

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230209.b/02092386ECD7.D
Data file 2: /230209.b/230209.b/02092386ECD7.D
Method: \\target\share\chem4\ecd7.i\230209.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCVE
Client ID:
Injection Date: 10-FEB-2023 18:02
Report Date: 02/13/2023 08:47
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.808	-0.000	212439	5.686	0.000	194247	39.0	39.2	0.5	Tetrachloro-m-xylene
13.889	-0.001	200887	14.117	0.000	262856	34.2	35.9	5.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	503318	385433	-23.4
Hexabromobiphenyl	647433	549621	-15.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	336911	366579	8.8
Hexabromobiphenyl	382032	461201	20.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 24-JAN-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.269	-0.000	34045	237.7	1	7.254	0.000	47777	240.3
Aroclor-1016	2	7.651	0.001	111525	235.0	2	7.850	0.000	105973	243.2
Aroclor-1016	3	7.788	0.000	47087	215.7	3	8.049	0.000	44322	249.3
Aroclor-1016	4	8.403	0.000	33332	237.3	4	8.303	0.000	33383	239.5
Total Col1Ave (4 peaks):					231.4	Total Col2Ave (4 peaks):				243.1 RPD = 5
Corrected Ave (3 peaks):					229.3	Corrected Ave (3 peaks):				241.0 RPD = 5
CalAmt %D:					-7.4	CalAmt %D:				-2.8
Aroclor-1260	1	11.040	-0.001	64223	208.3	1	11.649	0.000	74279	223.2
Aroclor-1260	2	11.356	-0.000	65219	205.7	2	11.914	0.000	188312	223.7
Aroclor-1260	3	11.729	-0.000	167902	201.2	3	12.431	0.000	49796	237.3
Aroclor-1260	4	12.133	-0.000	84776	196.6	4	12.498	0.000	119842	220.0
Aroclor-1260	5	12.241	0.000	34651	184.4	NS	---			----
Total Col1Ave (5 peaks):					199.2	Total Col2Ave (4 peaks):				226.1 RPD = 13
Corrected Ave (4 peaks):					197.0	Corrected Ave (3 peaks):				222.3 RPD = 12
CalAmt %D:					-20.3	CalAmt %D:				-9.6

Total PCB Area Col1 (5.908 - 13.790) = 1876791 Col1 Total PCB = 0.4 ppm*

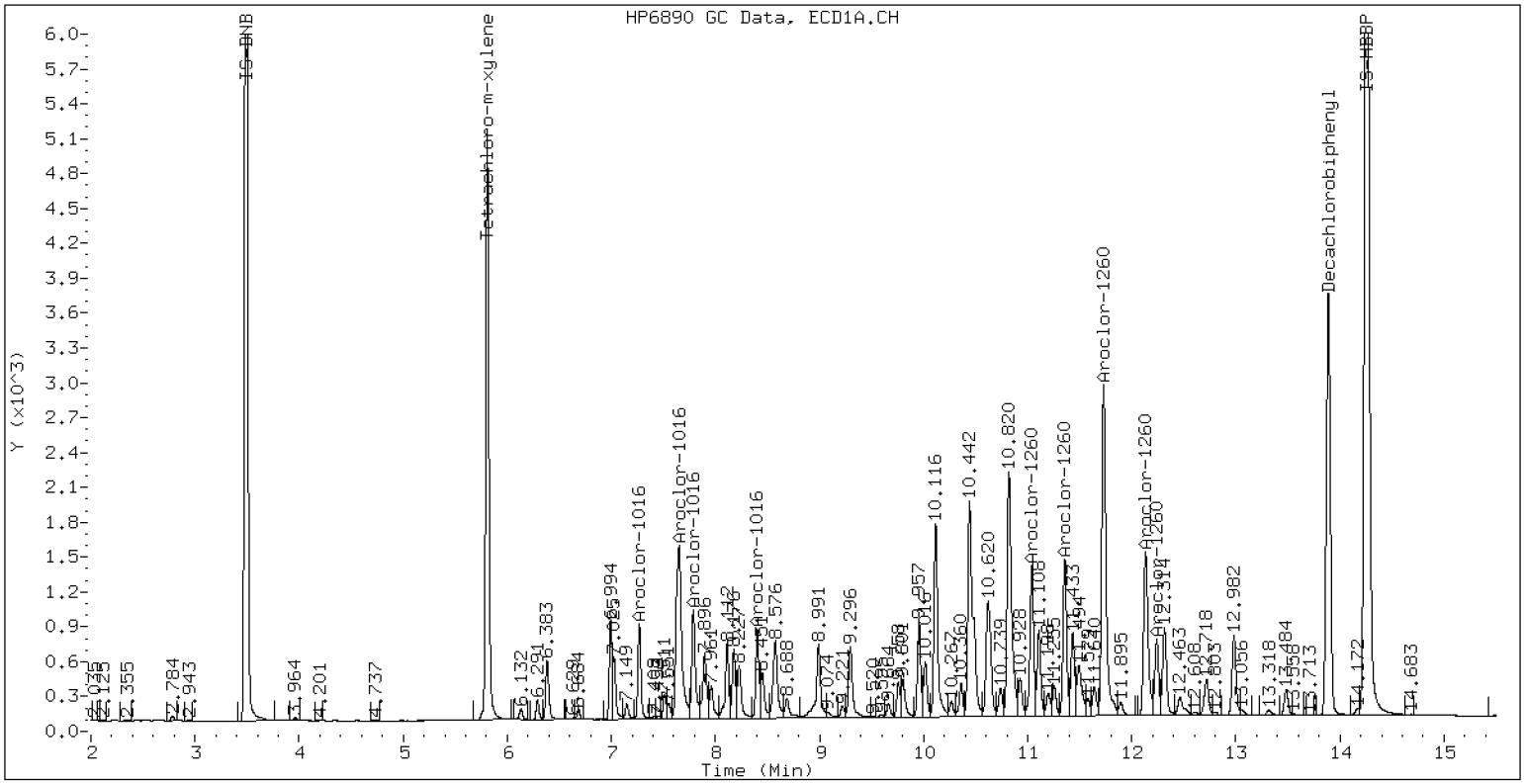
Total PCB Area Col2 (5.786 - 14.017) = 1828576 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

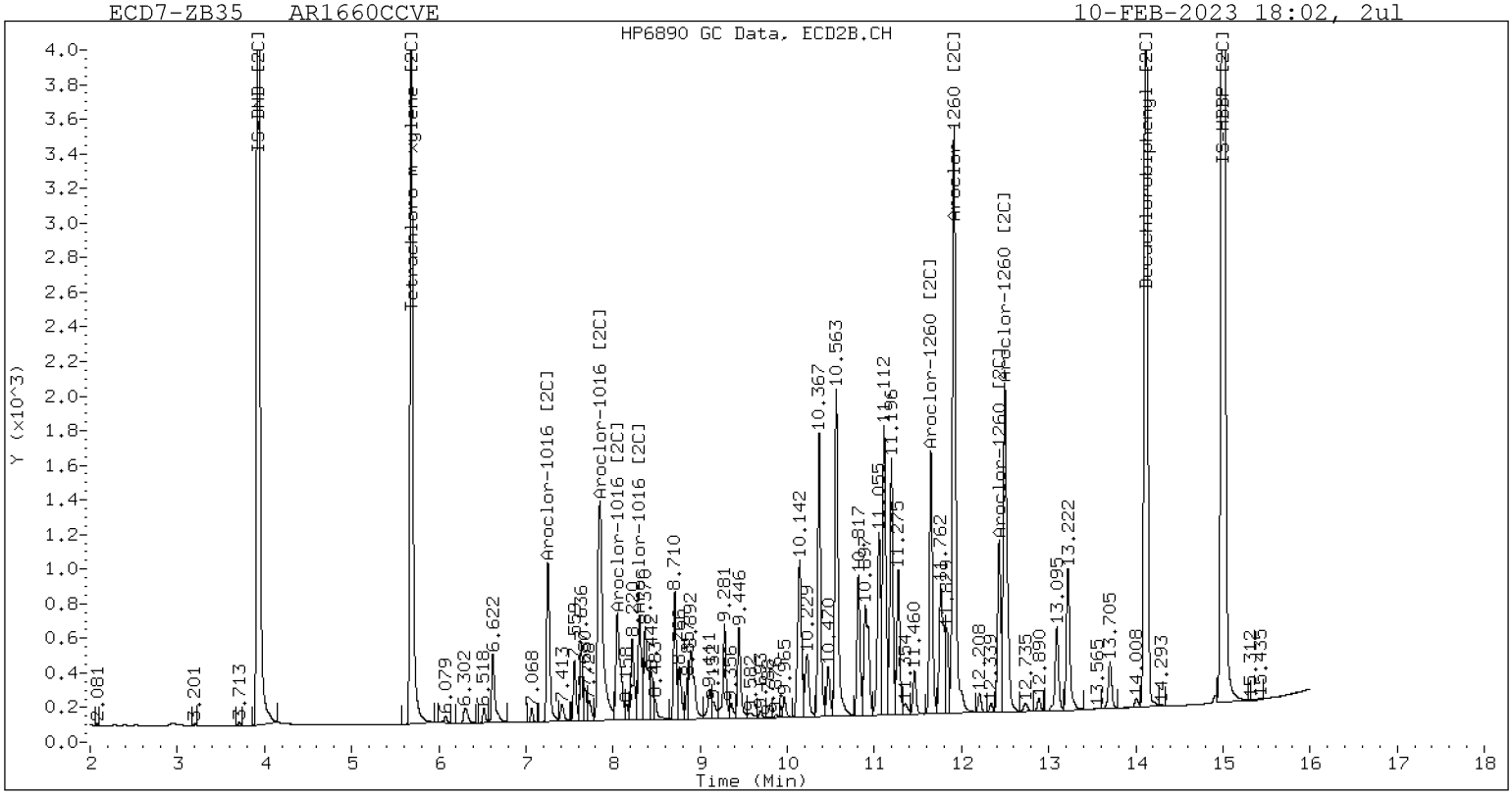
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCVE 10-FEB-2023 18:02, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCVE 10-FEB-2023 18:02, 2ul



ZB-35 Manual Integration: NO

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLA0281
Instrument: ECD7
Calibration: GA00061

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Cal Standard	SLA0281-CAL1	01242313ECD7.D	01242313ECD7.D	NA	01/24/23 16:00
Cal Standard	SLA0281-CAL2	01242314ECD7.D	01242314ECD7.D	NA	01/24/23 16:21
Cal Standard	SLA0281-CAL3	01242315ECD7.D	01242315ECD7.D	NA	01/24/23 16:42
Cal Standard	SLA0281-CAL4	01242316ECD7.D	01242316ECD7.D	NA	01/24/23 17:03
Cal Standard	SLA0281-CAL5	01242317ECD7.D	01242317ECD7.D	NA	01/24/23 17:24
Cal Standard	SLA0281-CAL6	01242318ECD7.D	01242318ECD7.D	NA	01/24/23 17:45
Cal Standard	SLA0281-CAL7	01242319ECD7.D	01242319ECD7.D	NA	01/24/23 18:06
Cal Standard	SLA0281-CAL8	01242320ECD7.D	01242320ECD7.D	NA	01/24/23 18:27
Cal Standard	SLA0281-CAL9	01242321ECD7.D	01242321ECD7.D	NA	01/24/23 18:48
Cal Standard	SLA0281-CALA	01242322ECD7.D	01242322ECD7.D	NA	01/24/23 19:09
Cal Standard	SLA0281-CALB	01242323ECD7.D	01242323ECD7.D	NA	01/24/23 19:30
Secondary Cal Check	SLA0281-SCV1	01242324ECD7.D	01242324ECD7.D	NA	01/24/23 19:51
Secondary Cal Check	SLA0281-SCV2	01242325ECD7.D	01242325ECD7.D	NA	01/24/23 20:12
Secondary Cal Check	SLA0281-SCV3	01242326ECD7.D	01242326ECD7.D	NA	01/24/23 20:33
Secondary Cal Check	SLA0281-SCV4	01242327ECD7.D	01242327ECD7.D	NA	01/24/23 20:54
Secondary Cal Check	SLA0281-SCV5	01242328ECD7.D	01242328ECD7.D	NA	01/24/23 21:15
Secondary Cal Check	SLA0281-SCV6	01242329ECD7.D	01242329ECD7.D	NA	01/24/23 21:36

Security Status Report

Date: 26-Jan-2023 15:41

01242330ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242331ECD7.D	Data Locked	richardl, 25-Jan-2023 12:44
01242332ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242333ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242334ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242335ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242336ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242337ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242338ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242339ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242340ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242341ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242342ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242343ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242344ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242345ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242346ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242347ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242348ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242349ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242350ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242351ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
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01242354ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242355ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242356ECD7.D	Data Locked	richardl, 26-Jan-2023 15:41
01242357ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
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01242359ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242360ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242361ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242362ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242363ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242364ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242365ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242366ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242367ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242368ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242369ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242370ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242371ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
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01242373ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19

01242374ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242375ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242376ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242377ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242378ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242379ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242380ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242381ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242382ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242383ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242384ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242385ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242386ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242387ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242388ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242389ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242390ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19
01242391ECD7.D	Data Locked	richardl, 26-Jan-2023 13:19

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0148	Instrument:	ECD7
		Calibration:	GA00061

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLB0148-ICV1	02092306ECD7.D	02092306ECD7.D	NA	02/09/23 13:59
Initial Cal Check	SLB0148-ICV2	02092307ECD7.D	02092307ECD7.D	NA	02/09/23 14:20
Calibration Check	SLB0148-CCV1	02092317ECD7.D	02092317ECD7.D	NA	02/09/23 17:51
Calibration Check	SLB0148-CCV2	02092318ECD7.D	02092318ECD7.D	NA	02/09/23 18:12
Calibration Check	SLB0148-CCV3	02092333ECD7.D	02092333ECD7.D	NA	02/09/23 23:27
Calibration Check	SLB0148-CCV4	02092334ECD7.D	02092334ECD7.D	NA	02/09/23 23:48
Calibration Check	SLB0148-CCV5	02092339ECD7.D	02092339ECD7.D	NA	02/10/23 01:34
Calibration Check	SLB0148-CCV6	02092340ECD7.D	02092340ECD7.D	NA	02/10/23 01:55
Blank	BLA0674-BLK1	02092341ECD7.D	02092341ECD7.D	Solid	02/10/23 02:16
LCS	BLA0674-BS1	02092342ECD7.D	02092342ECD7.D	Solid	02/10/23 02:37
LCS Dup	BLA0674-BSD1	02092343ECD7.D	02092343ECD7.D	Solid	02/10/23 02:58
Reference	BLA0674-SRM1	02092344ECD7.D	02092344ECD7.D	Solid	02/10/23 03:19
LDW23-SC1083	23A0249-02	02092345ECD7.D	02092345ECD7.D	Solid	02/10/23 03:40
LDW23-SC1018	23A0249-03	02092346ECD7.D	02092346ECD7.D	Solid	02/10/23 04:01
LDW23-SC1084	23A0249-04	02092347ECD7.D	02092347ECD7.D	Solid	02/10/23 04:22
LDW23-SC1033	23A0249-06	02092349ECD7.D	02092349ECD7.D	Solid	02/10/23 05:04
LDW23-IT1034	23A0249-07	02092350ECD7.D	02092350ECD7.D	Solid	02/10/23 05:25
LDW23-IT1034	BLA0674-MS1	02092351ECD7.D	02092351ECD7.D	Solid	02/10/23 05:46
LDW23-IT1034	BLA0674-MSD1	02092352ECD7.D	02092352ECD7.D	Solid	02/10/23 06:07
LDW23-SC1020	23A0249-11	02092356ECD7.D	02092356ECD7.D	Solid	02/10/23 07:31
Calibration Check	SLB0148-CCV7	02092357ECD7.D	02092357ECD7.D	NA	02/10/23 07:52
Calibration Check	SLB0148-CCV8	02092358ECD7.D	02092358ECD7.D	NA	02/10/23 08:13
Calibration Check	SLB0148-CCV9	02092369ECD7.D	02092369ECD7.D	NA	02/10/23 12:04
Calibration Check	SLB0148-CCVA	02092370ECD7.D	02092370ECD7.D	NA	02/10/23 12:25
LDW23-SC1025	23A0249-05	02092372ECD7.D	02092372ECD7.D	Solid	02/10/23 13:07
LDW23-SC1024	23A0249-08	02092373ECD7.D	02092373ECD7.D	Solid	02/10/23 13:29
LDW23-SC1040	23A0249-09	02092374ECD7.D	02092374ECD7.D	Solid	02/10/23 13:50
LDW23-SC1030	23A0249-10	02092375ECD7.D	02092375ECD7.D	Solid	02/10/23 14:11
Calibration Check	SLB0148-CCVB	02092381ECD7.D	02092381ECD7.D	NA	02/10/23 16:17

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0148	Instrument:	ECD7
		Calibration:	GA00061

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Calibration Check	SLB0148-CCVC	02092382ECD7.D	02092382ECD7.D	NA	02/10/23 16:38
Calibration Check	SLB0148-CCVD	02092385ECD7.D	02092385ECD7.D	NA	02/10/23 17:41
Calibration Check	SLB0148-CCVE	02092386ECD7.D	02092386ECD7.D	NA	02/10/23 18:02

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLB0148

Instrument: ECD7
Calibration ID: FL00010

Printed: 2/10/2023 5:27:44PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLB0148-ICV1	QC		1		L000862	L000844		
SLB0148-ICV2	QC		2		L000856	L000844		
23A0206-13	8082A PCB Solid 4	B 03	3			L000844	Anchor QEA, LLC	
23A0207-10	8082A PCB Solid 4	A 01	4			L000844	Anchor QEA, LLC	
23A0207-11	8082A PCB Solid 4	A 01	5			L000844	Anchor QEA, LLC	
23A0207-12	8082A PCB Solid 4	A 01	6			L000844	Anchor QEA, LLC	
23A0207-13	8082A PCB Solid 4	A 01	7			L000844	Anchor QEA, LLC	
23A0207-14	8082A PCB Solid 4	A 01	8			L000844	Anchor QEA, LLC	
23A0207-15	8082A PCB Solid 4	A 01	9			L000844	Anchor QEA, LLC	
23A0207-16	8082A PCB Solid 4	A 01	10			L000844	Anchor QEA, LLC	
23A0207-17	8082A PCB Solid 4	A 01	11			L000844	Anchor QEA, LLC	
SLB0148-CCV1	QC		12		L000861	L000844		
SLB0148-CCV2	QC		13		L000856	L000844		
BLB0100-BLK1	QC		14			L000844		
BLB0100-BS1	QC		15			L000844		
23B0067-02	8082A PCB	A 01	16			L000844	The Boeing Company [Auburn]	
23B0067-03	8082A PCB	A 01	17			L000844	The Boeing Company [Auburn]	
BLB0090-BLK1	QC		18			L000844		
BLB0090-BS1	QC		19			L000844		
23B0067-01	082A PCB Medium Level Oil	A 01	20			L000844	The Boeing Company [Auburn]	
23B0069-01	082A PCB Medium Level Oil	A 01	21			L000844	The Boeing Company [Auburn]	RL must be at or below 1 PPM

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SLB0148

Instrument: ECD7
Calibration ID: FL00010

Printed: 2/10/2023 5:27:44PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
BLB0126-BLK1	QC		22			L000844		
BLB0126-BS1	QC		23			L000844		
BLB0126-BSD1	QC		24			L000844		
23B0044-01	PCB (20 ug/kg) or (MTCA 0.	D 01	25			L000844	The Boeing Company [NBF - Central Puget S	
23B0096-01	PCB (20 ug/kg) or (MTCA 0.	A 01	26			L000844	The Boeing Company [NBF - Central Puget S	
SLB0148-CCV3	QC		27		L000860	L000844		
SLB0148-CCV4	QC		28		L000856	L000844		
BLB0188-BLK1	QC		29			L000844		
BLB0188-BS1	QC		30			L000844		
23B0112-01	082A PCB Medium Level Oil	A 01	31			L000844	Seattle Public Utilities [Solid Waste Field Op]	See Version Comment
SLB0148-CCV5	QC		32		L000862	L000844		
SLB0148-CCV6	QC		33		L000856	L000844		
BLA0674-BLK1	QC		34			L000844		
BLA0674-BS1	QC		35			L000844		
BLA0674-BSD1	QC		36			L000844		
BLA0674-SRM1	QC		37			L000844		
23A0249-02	8082A PCB Solid 4	A 03	38			L000844	Anchor QEA, LLC	
23A0249-03	8082A PCB Solid 4	A 03	39			L000844	Anchor QEA, LLC	
23A0249-04	8082A PCB Solid 4	A 03	40			L000844	Anchor QEA, LLC	
23A0249-06	8082A PCB Solid 4	A 03	41			L000844	Anchor QEA, LLC	
23A0249-07	8082A PCB Solid 4	A 03	42			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SLB0148

Instrument: ECD7
Calibration ID: FL00010

Printed: 2/10/2023 5:27:44PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
BLA0674-MS1	QC		43			L000844		
BLA0674-MSD1	QC		44			L000844		
23A0249-11	8082A PCB Solid 4	A 03	45			L000844	Anchor QEA, LLC	
SLB0148-CCV7	QC		46		L000861	L000844		
SLB0148-CCV8	QC		47		L000856	L000844		
23A0295-03	8082A PCB Solid 4	A 03	48			L000844	Anchor QEA, LLC	
23A0295-07	8082A PCB Solid 4	A 03	49			L000844	Anchor QEA, LLC	
23A0295-08	8082A PCB Solid 4	A 03	50			L000844	Anchor QEA, LLC	
23A0295-09	8082A PCB Solid 4	A 03	51			L000844	Anchor QEA, LLC	
23A0295-10	8082A PCB Solid 4	A 03	52			L000844	Anchor QEA, LLC	
SLB0148-CCV9	QC		53		L000860	L000844		
SLB0148-CCVA	QC		54		L000856	L000844		
23B0064-01	082A PCB Medium Level Oil	A 01	55			L000844	Seattle Public Utilities [Solid Waste Field Op]	See Version Comment
23A0249-05	8082A PCB Solid 4	A 03	56			L000844	Anchor QEA, LLC	
23A0249-08	8082A PCB Solid 4	A 03	57			L000844	Anchor QEA, LLC	
23A0249-09	8082A PCB Solid 4	A 03	58			L000844	Anchor QEA, LLC	
23A0249-10	8082A PCB Solid 4	A 03	59			L000844	Anchor QEA, LLC	
23A0295-04	8082A PCB Solid 4	A 03	60			L000844	Anchor QEA, LLC	
23A0295-05	8082A PCB Solid 4	A 03	61			L000844	Anchor QEA, LLC	
23A0295-06	8082A PCB Solid 4	A 03	62			L000844	Anchor QEA, LLC	
SLB0148-CCVB	QC		63		L000862	L000844		

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SLB0148

Instrument: ECD7
Calibration ID: FL00010

Printed: 2/10/2023 5:27:44PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLB0148-CCVC	QC		64		L000856	L000844		
23A0295-01	8082A PCB Solid 4	A 03	65			L000844	Anchor QEA, LLC	
23A0295-02	8082A PCB Solid 4	A 03	66			L000844	Anchor QEA, LLC	
SLB0148-CCVD	QC		67		L000861	L000844		
SLB0148-CCVE	QC		68		L000856	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230209.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	09-FEB-2023 11:58	02092301ECD7.D	1	DCM RINSE	
2	09-FEB-2023 12:19	02092302ECD7.D	1	AR1254TEST	
3	09-FEB-2023 12:40	02092303ECD7.D	1	AR1248TEST	
4	09-FEB-2023 13:01	02092304ECD7.D	1	AR1242TEST	
5	09-FEB-2023 13:38	02092305ECD7.D	1	DDTS	
6	09-FEB-2023 13:59	02092306ECD7.D	1	AR1254ICV1	
7	09-FEB-2023 14:20	02092307ECD7.D	1	AR1660ICV2	
8	09-FEB-2023 14:41	02092308ECD7.D	50	23A0206-13RE3	
9	09-FEB-2023 15:02	02092309ECD7.D	1	23A0207-10	
10	09-FEB-2023 15:23	02092310ECD7.D	1	23A0207-11	
11	09-FEB-2023 15:44	02092311ECD7.D	1	23A0207-12	
12	09-FEB-2023 16:05	02092312ECD7.D	1	23A0207-13	
13	09-FEB-2023 16:27	02092313ECD7.D	1	23A0207-14	
14	09-FEB-2023 16:48	02092314ECD7.D	1	23A0207-15	
15	09-FEB-2023 17:09	02092315ECD7.D	1	23A0207-16	
16	09-FEB-2023 17:30	02092316ECD7.D	5	23A0207-17RE1	
17	09-FEB-2023 17:51	02092317ECD7.D	1	AR1248CCV1	
18	09-FEB-2023 18:12	02092318ECD7.D	1	AR1660CCV2	
19	09-FEB-2023 18:33	02092319ECD7.D	1	BLB0100-BLK1	
20	09-FEB-2023 18:54	02092320ECD7.D	1	BLB0100-BS1	
21	09-FEB-2023 19:15	02092321ECD7.D	1	23B0067-02	
22	09-FEB-2023 19:36	02092322ECD7.D	1	23B0067-03	
23	09-FEB-2023 19:57	02092323ECD7.D	1	BLB0090-BLK1	
24	09-FEB-2023 20:18	02092324ECD7.D	1	BLB0090-BS1	
25	09-FEB-2023 20:39	02092325ECD7.D	5	23B0064-01RE1	
26	09-FEB-2023 21:00	02092326ECD7.D	5	23B0067-01RE1	
27	09-FEB-2023 21:21	02092327ECD7.D	5	23B0069-01RE1	
28	09-FEB-2023 21:42	02092328ECD7.D	1	BLB0126-BLK1	
29	09-FEB-2023 22:03	02092329ECD7.D	1	BLB0126-BS1	
30	09-FEB-2023 22:24	02092330ECD7.D	1	BLB0126-BSD1	
31	09-FEB-2023 22:45	02092331ECD7.D	1	23B0044-01	
32	09-FEB-2023 23:06	02092332ECD7.D	1	23B0096-01	
33	09-FEB-2023 23:27	02092333ECD7.D	1	AR1242CCV3	
34	09-FEB-2023 23:48	02092334ECD7.D	1	AR1660CCV4	
35	10-FEB-2023 00:09	02092335ECD7.D	1	BLB0188-BLK1	
36	10-FEB-2023 00:31	02092336ECD7.D	1	BLB0188-BS1	
37	10-FEB-2023 00:52	02092337ECD7.D	1	23B0112-01	
38	10-FEB-2023 01:13	02092338ECD7.D	5	23B0112-01RE1	
39	10-FEB-2023 01:34	02092339ECD7.D	1	AR1254CCV5	
40	10-FEB-2023 01:55	02092340ECD7.D	1	AR1660CCV6	
41	10-FEB-2023 02:16	02092341ECD7.D	1	BLA0674-BLK1	
42	10-FEB-2023 02:37	02092342ECD7.D	1	BLA0674-BS1	
43	10-FEB-2023 02:58	02092343ECD7.D	1	BLA0674-BSD1	
44	10-FEB-2023 03:19	02092344ECD7.D	1	BLA0674-SRM1	
45	10-FEB-2023 03:40	02092345ECD7.D	1	23A0249-02	
46	10-FEB-2023 04:01	02092346ECD7.D	1	23A0249-03	
47	10-FEB-2023 04:22	02092347ECD7.D	1	23A0249-04	
48	10-FEB-2023 04:43	02092348ECD7.D	1	23A0249-05	
49	10-FEB-2023 05:04	02092349ECD7.D	1	23A0249-06	
50	10-FEB-2023 05:25	02092350ECD7.D	1	23A0249-07	

	Inject Date/Time	Filename	DF	LabID	ClientID
51	10-FEB-2023 05:46	02092351ECD7.D	1	BLA0674-MS1	
52	10-FEB-2023 06:07	02092352ECD7.D	1	BLA0674-MSD1	
53	10-FEB-2023 06:28	02092353ECD7.D	1	23A0249-08	
54	10-FEB-2023 06:49	02092354ECD7.D	1	23A0249-09	
55	10-FEB-2023 07:10	02092355ECD7.D	1	23A0249-10	
56	10-FEB-2023 07:31	02092356ECD7.D	1	23A0249-11	
57	10-FEB-2023 07:52	02092357ECD7.D	1	AR1248CCV7	
58	10-FEB-2023 08:13	02092358ECD7.D	1	AR1660CCV8	
59	10-FEB-2023 08:34	02092359ECD7.D	1	23A0295-01	
60	10-FEB-2023 08:55	02092360ECD7.D	1	23A0295-02	
61	10-FEB-2023 09:16	02092361ECD7.D	1	23A0295-03	
62	10-FEB-2023 09:37	02092362ECD7.D	1	23A0295-04	
63	10-FEB-2023 09:58	02092363ECD7.D	1	23A0295-05	
64	10-FEB-2023 10:19	02092364ECD7.D	1	23A0295-06	
65	10-FEB-2023 10:40	02092365ECD7.D	1	23A0295-07	
66	10-FEB-2023 11:01	02092366ECD7.D	1	23A0295-08	
67	10-FEB-2023 11:22	02092367ECD7.D	1	23A0295-09	
68	10-FEB-2023 11:43	02092368ECD7.D	1	23A0295-10	
69	10-FEB-2023 12:04	02092369ECD7.D	1	AR1242CCV9	
70	10-FEB-2023 12:25	02092370ECD7.D	1	AR1660CCVA	
71	10-FEB-2023 12:46	02092371ECD7.D	1	23B0064-01	
72	10-FEB-2023 13:07	02092372ECD7.D	1	23A0249-05	
73	10-FEB-2023 13:29	02092373ECD7.D	1	23A0249-08	
74	10-FEB-2023 13:50	02092374ECD7.D	1	23A0249-09	
75	10-FEB-2023 14:11	02092375ECD7.D	1	23A0249-10	
76	10-FEB-2023 14:32	02092376ECD7.D	1	23A0295-01	
77	10-FEB-2023 14:53	02092377ECD7.D	1	23A0295-02	
78	10-FEB-2023 15:14	02092378ECD7.D	1	23A0295-04	
79	10-FEB-2023 15:35	02092379ECD7.D	1	23A0295-05	
80	10-FEB-2023 15:56	02092380ECD7.D	1	23A0295-06	
81	10-FEB-2023 16:17	02092381ECD7.D	1	AR1254CCVB	
82	10-FEB-2023 16:38	02092382ECD7.D	1	AR1660CCVC	
83	10-FEB-2023 16:59	02092383ECD7.D	5	23A0295-01RE1	
84	10-FEB-2023 17:20	02092384ECD7.D	5	23A0295-02RE1	
85	10-FEB-2023 17:41	02092385ECD7.D	1	AR1248CCVD	
86	10-FEB-2023 18:02	02092386ECD7.D	1	AR1660CCVE	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230209.b

ARI Job No.: DCM Method: PCB.m Instrument: ecd7.i Date: 09-FEB-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1158	02092301ECD7.D	DCM RINSE		1	NO MANUAL INTEGRATION
1219	02092302ECD7.D	AR1254TEST		1	NO MANUAL INTEGRATION
1240	02092303ECD7.D	AR1248TEST		1	NO MANUAL INTEGRATION
1301	02092304ECD7.D	AR1242TEST		1	NO MANUAL INTEGRATION
1338	02092305ECD7.D	DDTS		1	NO MANUAL INTEGRATION
1359	02092306ECD7.D	AR1254ICV1		1	NO MANUAL INTEGRATION
1420	02092307ECD7.D	AR1660ICV2		1	NO MANUAL INTEGRATION
1441	02092308ECD7.D	23A0206-13RE3		50	Aroclor-1254,
1502	02092309ECD7.D	23A0207-10		1	Aroclor-1260,
1523	02092310ECD7.D	23A0207-11		1	Aroclor-1254,
1544	02092311ECD7.D	23A0207-12		1	Aroclor-1254,
1605	02092312ECD7.D	23A0207-13		1	Aroclor-1254,
1627	02092313ECD7.D	23A0207-14		1	Aroclor-1254,
1648	02092314ECD7.D	23A0207-15		1	Aroclor-1254,
1709	02092315ECD7.D	23A0207-16		1	NO MANUAL INTEGRATION
1730	02092316ECD7.D	23A0207-17RE1		5	NO MANUAL INTEGRATION
1751	02092317ECD7.D	AR1248CCV1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230209.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1812	02092318ECD7.D	AR1660CCV2		1	NO MANUAL INTEGRATION
1833	02092319ECD7.D	BLB0100-BLK1		1	NO MANUAL INTEGRATION
1854	02092320ECD7.D	BLB0100-BS1		1	NO MANUAL INTEGRATION
1915	02092321ECD7.D	23B0067-02		1	NO MANUAL INTEGRATION
1936	02092322ECD7.D	23B0067-03		1	NO MANUAL INTEGRATION
1957	02092323ECD7.D	BLB0090-BLK1		1	NO MANUAL INTEGRATION
2018	02092324ECD7.D	BLB0090-BS1		1	NO MANUAL INTEGRATION
2039	02092325ECD7.D	23B0064-01RE1		5	NO MANUAL INTEGRATION
2100	02092326ECD7.D	23B0067-01RE1		5	IS-HBBP, Decachlorobiphenyl,
2121	02092327ECD7.D	23B0069-01RE1		5	NO MANUAL INTEGRATION
2142	02092328ECD7.D	BLB0126-BLK1		1	NO MANUAL INTEGRATION
2203	02092329ECD7.D	BLB0126-BS1		1	NO MANUAL INTEGRATION
2224	02092330ECD7.D	BLB0126-BSD1		1	NO MANUAL INTEGRATION
2245	02092331ECD7.D	23B0044-01		1	NO MANUAL INTEGRATION
2306	02092332ECD7.D	23B0096-01		1	NO MANUAL INTEGRATION
2327	02092333ECD7.D	AR1242CCV3		1	NO MANUAL INTEGRATION
2348	02092334ECD7.D	AR1660CCV4		1	NO MANUAL INTEGRATION
0009	02092335ECD7.D	BLB0188-BLK1		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230209.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0031	02092336ECD7.D	BLB0188-BS1		1	NO MANUAL INTEGRATION
0052	02092337ECD7.D	23B0112-01		1	NO MANUAL INTEGRATION
0113	02092338ECD7.D	23B0112-01RE1		5	NO MANUAL INTEGRATION
0134	02092339ECD7.D	AR1254CCV5		1	NO MANUAL INTEGRATION
0155	02092340ECD7.D	AR1660CCV6		1	NO MANUAL INTEGRATION
0216	02092341ECD7.D	BLA0674-BLK1		1	NO MANUAL INTEGRATION
0237	02092342ECD7.D	BLA0674-BS1		1	NO MANUAL INTEGRATION
0258	02092343ECD7.D	BLA0674-BSD1		1	NO MANUAL INTEGRATION
0319	02092344ECD7.D	BLA0674-SRM1		1	NO MANUAL INTEGRATION
0340	02092345ECD7.D	23A0249-02		1	Aroclor-1254,
0401	02092346ECD7.D	23A0249-03		1	Aroclor-1248, Aroclor-1254, Aroclor-1260, IS-HBBP, Decachlorobiphenyl,
0422	02092347ECD7.D	23A0249-04		1	NO MANUAL INTEGRATION
0443	02092348ECD7.D	23A0249-05		1	NO MANUAL INTEGRATION
0504	02092349ECD7.D	23A0249-06		1	NO MANUAL INTEGRATION
0525	02092350ECD7.D	23A0249-07		1	NO MANUAL INTEGRATION
0546	02092351ECD7.D	BLA0674-MS1		1	NO MANUAL INTEGRATION
0607	02092352ECD7.D	BLA0674-MSD1		1	NO MANUAL INTEGRATION
0628	02092353ECD7.D	23A0249-08		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230209.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0649	02092354ECD7.D	23A0249-09		1	NO MANUAL INTEGRATION
0710	02092355ECD7.D	23A0249-10		1	NO MANUAL INTEGRATION
0731	02092356ECD7.D	23A0249-11		1	NO MANUAL INTEGRATION
0752	02092357ECD7.D	AR1248CCV7		1	NO MANUAL INTEGRATION
0813	02092358ECD7.D	AR1660CCV8		1	NO MANUAL INTEGRATION
0834	02092359ECD7.D	23A0295-01		1	NO MANUAL INTEGRATION
0855	02092360ECD7.D	23A0295-02		1	NO MANUAL INTEGRATION
0916	02092361ECD7.D	23A0295-03		1	NO MANUAL INTEGRATION
0937	02092362ECD7.D	23A0295-04		1	NO MANUAL INTEGRATION
0958	02092363ECD7.D	23A0295-05		1	NO MANUAL INTEGRATION
1019	02092364ECD7.D	23A0295-06		1	NO MANUAL INTEGRATION
1040	02092365ECD7.D	23A0295-07		1	NO MANUAL INTEGRATION
1101	02092366ECD7.D	23A0295-08		1	Aroclor-1254,
1122	02092367ECD7.D	23A0295-09		1	NO MANUAL INTEGRATION
1143	02092368ECD7.D	23A0295-10		1	Aroclor-1254, Aroclor-1260,
1204	02092369ECD7.D	AR1242CCV9		1	NO MANUAL INTEGRATION
1225	02092370ECD7.D	AR1660CCVA		1	NO MANUAL INTEGRATION
1246	02092371ECD7.D	23B0064-01		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230209.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1307	02092372ECD7.D	23A0249-05		1	NO MANUAL INTEGRATION
1329	02092373ECD7.D	23A0249-08		1	NO MANUAL INTEGRATION
1350	02092374ECD7.D	23A0249-09		1	Aroclor-1254,
1411	02092375ECD7.D	23A0249-10		1	NO MANUAL INTEGRATION
1432	02092376ECD7.D	23A0295-01		1	NO MANUAL INTEGRATION
1453	02092377ECD7.D	23A0295-02		1	NO MANUAL INTEGRATION
1514	02092378ECD7.D	23A0295-04		1	Aroclor-1254,
1535	02092379ECD7.D	23A0295-05		1	NO MANUAL INTEGRATION
1556	02092380ECD7.D	23A0295-06		1	NO MANUAL INTEGRATION
1617	02092381ECD7.D	AR1254CCVB		1	NO MANUAL INTEGRATION
1638	02092382ECD7.D	AR1660CCVC		1	NO MANUAL INTEGRATION
1659	02092383ECD7.D	23A0295-01RE1		5	Aroclor-1254,
1720	02092384ECD7.D	23A0295-02RE1		5	Aroclor-1254, Aroclor-1260,
1741	02092385ECD7.D	AR1248CCVD		1	NO MANUAL INTEGRATION
1802	02092386ECD7.D	AR1660CCVE		1	NO MANUAL INTEGRATION
1158	02092301ECD7.D	DCM RINSE		1	NO MANUAL INTEGRATION
1219	02092302ECD7.D	AR1254TEST		1	NO MANUAL INTEGRATION
1240	02092303ECD7.D	AR1248TEST		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230209.b\230209.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1301	02092304ECD7.D	AR1242TEST		1	NO MANUAL INTEGRATION
1338	02092305ECD7.D	DDTS		1	NO MANUAL INTEGRATION
1359	02092306ECD7.D	AR1254ICV1		1	NO MANUAL INTEGRATION
1420	02092307ECD7.D	AR1660ICV2		1	NO MANUAL INTEGRATION
1441	02092308ECD7.D	23A0206-13RE3		50	NO MANUAL INTEGRATION
1502	02092309ECD7.D	23A0207-10		1	Aroclor-1248 [2C],
1523	02092310ECD7.D	23A0207-11		1	Aroclor-1248 [2C],
1544	02092311ECD7.D	23A0207-12		1	Aroclor-1248 [2C],
1605	02092312ECD7.D	23A0207-13		1	Aroclor-1248 [2C],
1627	02092313ECD7.D	23A0207-14		1	Aroclor-1248 [2C],
1648	02092314ECD7.D	23A0207-15		1	Aroclor-1248 [2C],
1709	02092315ECD7.D	23A0207-16		1	Aroclor-1248 [2C],
1730	02092316ECD7.D	23A0207-17RE1		5	Aroclor-1248 [2C], IS-HBBP [2C], Decachlorobiphenyl [2C],
1751	02092317ECD7.D	AR1248CCV1		1	NO MANUAL INTEGRATION
1812	02092318ECD7.D	AR1660CCV2		1	NO MANUAL INTEGRATION
1833	02092319ECD7.D	BLB0100-BLK1		1	NO MANUAL INTEGRATION
1854	02092320ECD7.D	BLB0100-BS1		1	NO MANUAL INTEGRATION
1915	02092321ECD7.D	23B0067-02		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230209.b\230209.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1936	02092322ECD7.D	23B0067-03		1	NO MANUAL INTEGRATION
1957	02092323ECD7.D	BLB0090-BLK1		1	NO MANUAL INTEGRATION
2018	02092324ECD7.D	BLB0090-BS1		1	NO MANUAL INTEGRATION
2039	02092325ECD7.D	23B0064-01RE1		5	NO MANUAL INTEGRATION
2100	02092326ECD7.D	23B0067-01RE1		5	NO MANUAL INTEGRATION
2121	02092327ECD7.D	23B0069-01RE1		5	NO MANUAL INTEGRATION
2142	02092328ECD7.D	BLB0126-BLK1		1	NO MANUAL INTEGRATION
2203	02092329ECD7.D	BLB0126-BS1		1	NO MANUAL INTEGRATION
2224	02092330ECD7.D	BLB0126-BSD1		1	NO MANUAL INTEGRATION
2245	02092331ECD7.D	23B0044-01		1	NO MANUAL INTEGRATION
2306	02092332ECD7.D	23B0096-01		1	NO MANUAL INTEGRATION
2327	02092333ECD7.D	AR1242CCV3		1	NO MANUAL INTEGRATION
2348	02092334ECD7.D	AR1660CCV4		1	NO MANUAL INTEGRATION
0009	02092335ECD7.D	BLB0188-BLK1		1	NO MANUAL INTEGRATION
0031	02092336ECD7.D	BLB0188-BS1		1	NO MANUAL INTEGRATION
0052	02092337ECD7.D	23B0112-01		1	NO MANUAL INTEGRATION
0113	02092338ECD7.D	23B0112-01RE1		5	NO MANUAL INTEGRATION
0134	02092339ECD7.D	AR1254CCV5		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230209.b\230209.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0155	02092340ECD7.D	AR1660CCV6		1	NO MANUAL INTEGRATION
0216	02092341ECD7.D	BLA0674-BLK1		1	NO MANUAL INTEGRATION
0237	02092342ECD7.D	BLA0674-BS1		1	NO MANUAL INTEGRATION
0258	02092343ECD7.D	BLA0674-BSD1		1	NO MANUAL INTEGRATION
0319	02092344ECD7.D	BLA0674-SRM1		1	NO MANUAL INTEGRATION
0340	02092345ECD7.D	23A0249-02		1	Aroclor-1248 [2C],
0401	02092346ECD7.D	23A0249-03		1	Aroclor-1248 [2C],
0422	02092347ECD7.D	23A0249-04		1	Aroclor-1248 [2C],
0443	02092348ECD7.D	23A0249-05		1	NO MANUAL INTEGRATION
0504	02092349ECD7.D	23A0249-06		1	NO MANUAL INTEGRATION
0525	02092350ECD7.D	23A0249-07		1	Aroclor-1248 [2C],
0546	02092351ECD7.D	BLA0674-MS1		1	NO MANUAL INTEGRATION
0607	02092352ECD7.D	BLA0674-MSD1		1	NO MANUAL INTEGRATION
0628	02092353ECD7.D	23A0249-08		1	NO MANUAL INTEGRATION
0649	02092354ECD7.D	23A0249-09		1	NO MANUAL INTEGRATION
0710	02092355ECD7.D	23A0249-10		1	NO MANUAL INTEGRATION
0731	02092356ECD7.D	23A0249-11		1	NO MANUAL INTEGRATION
0752	02092357ECD7.D	AR1248CCV7		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230209.b\230209.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0813	02092358ECD7.D	AR1660CCV8		1	NO MANUAL INTEGRATION
0834	02092359ECD7.D	23A0295-01		1	NO MANUAL INTEGRATION
0855	02092360ECD7.D	23A0295-02		1	NO MANUAL INTEGRATION
0916	02092361ECD7.D	23A0295-03		1	Aroclor-1248 [2C],
0937	02092362ECD7.D	23A0295-04		1	NO MANUAL INTEGRATION
0958	02092363ECD7.D	23A0295-05		1	NO MANUAL INTEGRATION
1019	02092364ECD7.D	23A0295-06		1	NO MANUAL INTEGRATION
1040	02092365ECD7.D	23A0295-07		1	Aroclor-1248 [2C],
1101	02092366ECD7.D	23A0295-08		1	NO MANUAL INTEGRATION
1122	02092367ECD7.D	23A0295-09		1	Aroclor-1248 [2C],
1143	02092368ECD7.D	23A0295-10		1	NO MANUAL INTEGRATION
1204	02092369ECD7.D	AR1242CCV9		1	NO MANUAL INTEGRATION
1225	02092370ECD7.D	AR1660CCVA		1	NO MANUAL INTEGRATION
1246	02092371ECD7.D	23B0064-01		1	NO MANUAL INTEGRATION
1307	02092372ECD7.D	23A0249-05		1	Aroclor-1248 [2C],
1329	02092373ECD7.D	23A0249-08		1	Aroclor-1248 [2C],
1350	02092374ECD7.D	23A0249-09		1	Aroclor-1248 [2C],
1411	02092375ECD7.D	23A0249-10		1	Aroclor-1248 [2C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230209.b\230209.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1432	02092376ECD7.D	23A0295-01		1	NO MANUAL INTEGRATION
1453	02092377ECD7.D	23A0295-02		1	NO MANUAL INTEGRATION
1514	02092378ECD7.D	23A0295-04		1	Aroclor-1248 [2C],
1535	02092379ECD7.D	23A0295-05		1	Aroclor-1248 [2C],
1556	02092380ECD7.D	23A0295-06		1	Aroclor-1248 [2C],
1617	02092381ECD7.D	AR1254CCVB		1	NO MANUAL INTEGRATION
1638	02092382ECD7.D	AR1660CCVC		1	NO MANUAL INTEGRATION
1659	02092383ECD7.D	23A0295-01RE1		5	Aroclor-1248 [2C],
1720	02092384ECD7.D	23A0295-02RE1		5	Aroclor-1248 [2C],
1741	02092385ECD7.D	AR1248CCVD		1	NO MANUAL INTEGRATION
1802	02092386ECD7.D	AR1660CCVE		1	NO MANUAL INTEGRATION
1823	02092387.D	AR1254		1	NO MANUAL INTEGRATION
1844	02092388.D	AR1660		1	NO MANUAL INTEGRATION
1905	02092389.D	AR1248		1	NO MANUAL INTEGRATION
1926	02092390.D	AR1660		1	NO MANUAL INTEGRATION
1947	02092391.D	AR1242		1	NO MANUAL INTEGRATION
2008	02092392.D	AR1660		1	NO MANUAL INTEGRATION

Security Status Report

Date: 13-Feb-2023 08:54

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SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLA0281
Instrument: ECD7
Calibration: GA00061
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLA0281-SCV1 (Solid)			Lab File ID: 01242324ECD7.D			Analyzed: 01/24/23 19:51		
Decachlorobiphenyl	40.000	94.9	80 - 120	13.891	13.892	-0.0010	N/A	
Tetrachlorometaxylene	40.000	93.8	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	101	80 - 120	14.12	14.12017	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	93.2	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV2 (Solid)			Lab File ID: 01242325ECD7.D			Analyzed: 01/24/23 20:12		
Decachlorobiphenyl	40.000	96.4	80 - 120	13.892	13.892	0.0000	N/A	
Tetrachlorometaxylene	40.000	94.4	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	101	80 - 120	14.121	14.12017	0.0008	N/A	
Tetrachlorometaxylene [2C]	40.000	93.4	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV3 (Solid)			Lab File ID: 01242326ECD7.D			Analyzed: 01/24/23 20:33		
Decachlorobiphenyl	40.000	95.7	80 - 120	13.892	13.892	0.0000	N/A	
Tetrachlorometaxylene	40.000	91.9	80 - 120	5.809	5.808667	0.0003	N/A	
Decachlorobiphenyl [2C]	40.000	98.9	80 - 120	14.12	14.12017	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	91.4	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV4 (Solid)			Lab File ID: 01242327ECD7.D			Analyzed: 01/24/23 20:54		
Decachlorobiphenyl	40.000	92.7	80 - 120	13.892	13.892	0.0000	N/A	
Tetrachlorometaxylene	40.000	91.7	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	98.9	80 - 120	14.121	14.12017	0.0008	N/A	
Tetrachlorometaxylene [2C]	40.000	91.6	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV5 (Solid)			Lab File ID: 01242328ECD7.D			Analyzed: 01/24/23 21:15		
Decachlorobiphenyl	40.000	93.6	80 - 120	13.89	13.892	-0.0020	N/A	
Tetrachlorometaxylene	40.000	93.2	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	98.7	80 - 120	14.119	14.12017	-0.0012	N/A	
Tetrachlorometaxylene [2C]	40.000	92.9	80 - 120	5.685	5.685333	-0.0003	N/A	
SLA0281-SCV6 (Solid)			Lab File ID: 01242329ECD7.D			Analyzed: 01/24/23 21:36		
Decachlorobiphenyl	40.000	137	80 - 120	13.892	13.892	0.0000	N/A	
Tetrachlorometaxylene	40.000	90.9	80 - 120	5.809	5.808667	0.0003	N/A	
Decachlorobiphenyl [2C]	40.000	145	80 - 120	14.12	14.12017	-0.0002	N/A	
Tetrachlorometaxylene [2C]	40.000	90.8	80 - 120	5.686	5.685333	0.0007	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0148
Instrument: ECD7
Calibration: GA00061
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0148-ICV1 (Solid)			Lab File ID: 02092306ECD7.D			Analyzed: 02/09/23 13:59		
Decachlorobiphenyl	40.000	94.8	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	95.0	80 - 120	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	40.000	89.0	80 - 120	14.116	14.12017	-0.0042	N/A	
Tetrachlorometaxylene [2C]	40.000	94.8	80 - 120	5.682	5.685333	-0.0033	N/A	
SLB0148-ICV2 (Solid)			Lab File ID: 02092307ECD7.D			Analyzed: 02/09/23 14:20		
Decachlorobiphenyl	40.000	84.5	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	99.5	80 - 120	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	40.000	90.0	80 - 120	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	97.3	80 - 120	5.683	5.685333	-0.0023	N/A	
SLB0148-CCV1 (Solid)			Lab File ID: 02092317ECD7.D			Analyzed: 02/09/23 17:51		
Decachlorobiphenyl	40.000	80.3	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	90.8	80 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	40.000	85.5	80 - 120	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	91.5	80 - 120	5.681	5.685333	-0.0043	N/A	
SLB0148-CCV2 (Solid)			Lab File ID: 02092318ECD7.D			Analyzed: 02/09/23 18:12		
Decachlorobiphenyl	40.000	87.0	80 - 120	13.888	13.892	-0.0040	N/A	
Tetrachlorometaxylene	40.000	97.5	80 - 120	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	40.000	91.5	80 - 120	14.115	14.12017	-0.0052	N/A	
Tetrachlorometaxylene [2C]	40.000	96.3	80 - 120	5.682	5.685333	-0.0033	N/A	
SLB0148-CCV3 (Solid)			Lab File ID: 02092333ECD7.D			Analyzed: 02/09/23 23:27		
Decachlorobiphenyl	40.000	80.3	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	112	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	85.8	80 - 120	14.116	14.12017	-0.0042	N/A	
Tetrachlorometaxylene [2C]	40.000	112	80 - 120	5.685	5.685333	-0.0003	N/A	
SLB0148-CCV4 (Solid)			Lab File ID: 02092334ECD7.D			Analyzed: 02/09/23 23:48		
Decachlorobiphenyl	40.000	85.3	80 - 120	13.888	13.892	-0.0040	N/A	
Tetrachlorometaxylene	40.000	96.5	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	93.3	80 - 120	14.115	14.12017	-0.0052	N/A	
Tetrachlorometaxylene [2C]	40.000	96.3	80 - 120	5.684	5.685333	-0.0013	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0148
Instrument: ECD7
Calibration: GA00061
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0148-CCV5 (Solid)			Lab File ID: 02092339ECD7.D				Analyzed: 02/10/23 01:34	
Decachlorobiphenyl	40.000	78.0	80 - 120	13.888	13.892	-0.0040	N/A	*
Tetrachlorometaxylene	40.000	93.5	80 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	89.5	80 - 120	14.115	14.12017	-0.0052	N/A	
Tetrachlorometaxylene [2C]	40.000	96.0	80 - 120	5.685	5.685333	-0.0003	N/A	
SLB0148-CCV6 (Solid)			Lab File ID: 02092340ECD7.D				Analyzed: 02/10/23 01:55	
Decachlorobiphenyl	40.000	80.3	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	97.8	80 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	91.8	80 - 120	14.116	14.12017	-0.0042	N/A	
Tetrachlorometaxylene [2C]	40.000	97.0	80 - 120	5.685	5.685333	-0.0003	N/A	
BLA0674-BLK1 (Solid)			Lab File ID: 02092341ECD7.D				Analyzed: 02/10/23 02:16	
Decachlorobiphenyl	8.0000	79.2	40 - 126	13.887	13.892	-0.0050	N/A	
Tetrachlorometaxylene	8.0000	84.7	44 - 120	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	8.0000	89.7	40 - 126	14.115	14.12017	-0.0052	N/A	
Tetrachlorometaxylene [2C]	8.0000	84.7	44 - 120	5.684	5.685333	-0.0013	N/A	
BLA0674-BS1 (Solid)			Lab File ID: 02092342ECD7.D				Analyzed: 02/10/23 02:37	
Decachlorobiphenyl	8.0000	79.4	40 - 126	13.887	13.892	-0.0050	N/A	
Tetrachlorometaxylene	8.0000	85.1	44 - 120	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	8.0000	87.6	40 - 126	14.114	14.12017	-0.0062	N/A	
Tetrachlorometaxylene [2C]	8.0000	81.9	44 - 120	5.683	5.685333	-0.0023	N/A	
BLA0674-BSD1 (Solid)			Lab File ID: 02092343ECD7.D				Analyzed: 02/10/23 02:58	
Decachlorobiphenyl	8.0000	76.1	40 - 126	13.888	13.892	-0.0040	N/A	
Tetrachlorometaxylene	8.0000	83.0	44 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	8.0000	82.5	40 - 126	14.116	14.12017	-0.0042	N/A	
Tetrachlorometaxylene [2C]	8.0000	80.8	44 - 120	5.684	5.685333	-0.0013	N/A	
BLA0674-SRM1 (Solid)			Lab File ID: 02092344ECD7.D				Analyzed: 02/10/23 03:19	
Decachlorobiphenyl	40.000	68.0	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	40.000	70.3	44 - 120	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	40.000	65.5	40 - 126	14.112	14.12017	-0.0082	N/A	
Tetrachlorometaxylene [2C]	40.000	75.0	44 - 120	5.682	5.685333	-0.0033	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0148
Instrument: ECD7
Calibration: GA00061
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0249-02 (Solid)			Lab File ID: 02092345ECD7.D			Analyzed: 02/10/23 03:40		
Decachlorobiphenyl	7.9857	74.6	40 - 126	13.883	13.892	-0.0090	N/A	
Tetrachlorometaxylene	7.9857	61.0	44 - 120	5.803	5.808667	-0.0057	N/A	
Decachlorobiphenyl [2C]	7.9857	69.6	40 - 126	14.111	14.12017	-0.0092	N/A	
Tetrachlorometaxylene [2C]	7.9857	75.8	44 - 120	5.68	5.685333	-0.0053	N/A	
23A0249-03 (Solid)			Lab File ID: 02092346ECD7.D			Analyzed: 02/10/23 04:01		
Decachlorobiphenyl	7.9889	63.2	40 - 126	13.882	13.892	-0.0100	N/A	
Tetrachlorometaxylene	7.9889	55.5	44 - 120	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	7.9889	61.7	40 - 126	14.11	14.12017	-0.0102	N/A	
Tetrachlorometaxylene [2C]	7.9889	65.1	44 - 120	5.681	5.685333	-0.0043	N/A	
23A0249-04 (Solid)			Lab File ID: 02092347ECD7.D			Analyzed: 02/10/23 04:22		
Decachlorobiphenyl	7.9793	66.4	40 - 126	13.883	13.892	-0.0090	N/A	
Tetrachlorometaxylene	7.9793	60.7	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	7.9793	65.0	40 - 126	14.112	14.12017	-0.0082	N/A	
Tetrachlorometaxylene [2C]	7.9793	72.7	44 - 120	5.681	5.685333	-0.0043	N/A	
23A0249-06 (Solid)			Lab File ID: 02092349ECD7.D			Analyzed: 02/10/23 05:04		
Decachlorobiphenyl	7.9981	72.9	40 - 126	13.883	13.892	-0.0090	N/A	
Tetrachlorometaxylene	7.9981	56.3	44 - 120	5.804	5.808667	-0.0047	N/A	
Decachlorobiphenyl [2C]	7.9981	77.2	40 - 126	14.111	14.12017	-0.0092	N/A	
Tetrachlorometaxylene [2C]	7.9981	67.4	44 - 120	5.681	5.685333	-0.0043	N/A	
23A0249-07 (Solid)			Lab File ID: 02092350ECD7.D			Analyzed: 02/10/23 05:25		
Decachlorobiphenyl	7.9699	77.0	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9699	69.3	44 - 120	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	7.9699	76.6	40 - 126	14.112	14.12017	-0.0082	N/A	
Tetrachlorometaxylene [2C]	7.9699	78.0	44 - 120	5.682	5.685333	-0.0033	N/A	
BLA0674-MS1 (Solid)			Lab File ID: 02092351ECD7.D			Analyzed: 02/10/23 05:46		
Decachlorobiphenyl	7.9937	74.1	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9937	70.2	44 - 120	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	7.9937	83.3	40 - 126	14.112	14.12017	-0.0082	N/A	
Tetrachlorometaxylene [2C]	7.9937	76.7	44 - 120	5.682	5.685333	-0.0033	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0148	Instrument:	ECD7
Calibration:	GA00061	Calibration Date:	01/24/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLA0674-MSD1 (Solid)			Lab File ID: 02092352ECD7.D			Analyzed: 02/10/23 06:07		
Decachlorobiphenyl	7.9937	79.6	40 - 126	13.885	13.892	-0.0070	N/A	
Tetrachlorometaxylene	7.9937	76.6	44 - 120	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	7.9937	80.8	40 - 126	14.112	14.12017	-0.0082	N/A	
Tetrachlorometaxylene [2C]	7.9937	79.3	44 - 120	5.683	5.685333	-0.0023	N/A	
23A0249-11 (Solid)			Lab File ID: 02092356ECD7.D			Analyzed: 02/10/23 07:31		
Decachlorobiphenyl	7.9842	73.7	40 - 126	13.885	13.892	-0.0070	N/A	
Tetrachlorometaxylene	7.9842	72.8	44 - 120	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	7.9842	77.3	40 - 126	14.113	14.12017	-0.0072	N/A	
Tetrachlorometaxylene [2C]	7.9842	80.3	44 - 120	5.683	5.685333	-0.0023	N/A	
SLB0148-CCV7 (Solid)			Lab File ID: 02092357ECD7.D			Analyzed: 02/10/23 07:52		
Decachlorobiphenyl	40.000	83.0	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	93.0	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	90.0	80 - 120	14.116	14.12017	-0.0042	N/A	
Tetrachlorometaxylene [2C]	40.000	93.5	80 - 120	5.685	5.685333	-0.0003	N/A	
SLB0148-CCV8 (Solid)			Lab File ID: 02092358ECD7.D			Analyzed: 02/10/23 08:13		
Decachlorobiphenyl	40.000	88.5	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	98.5	80 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	92.3	80 - 120	14.115	14.12017	-0.0052	N/A	
Tetrachlorometaxylene [2C]	40.000	97.8	80 - 120	5.685	5.685333	-0.0003	N/A	
SLB0148-CCV9 (Solid)			Lab File ID: 02092369ECD7.D			Analyzed: 02/10/23 12:04		
Decachlorobiphenyl	40.000	80.5	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	113	80 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	40.000	86.0	80 - 120	14.114	14.12017	-0.0062	N/A	
Tetrachlorometaxylene [2C]	40.000	113	80 - 120	5.685	5.685333	-0.0003	N/A	
SLB0148-CCVA (Solid)			Lab File ID: 02092370ECD7.D			Analyzed: 02/10/23 12:25		
Decachlorobiphenyl	40.000	86.8	80 - 120	13.888	13.892	-0.0040	N/A	
Tetrachlorometaxylene	40.000	97.5	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	93.5	80 - 120	14.115	14.12017	-0.0052	N/A	
Tetrachlorometaxylene [2C]	40.000	96.5	80 - 120	5.685	5.685333	-0.0003	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0148
Instrument: ECD7
Calibration: GA00061
Calibration Date: 01/24/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23A0249-05 (Solid)			Lab File ID: 02092372ECD7.D			Analyzed: 02/10/23 13:07		
Decachlorobiphenyl	7.9803	80.5	40 - 126	13.883	13.892	-0.0090	N/A	
Tetrachlorometaxylene	7.9803	56.5	44 - 120	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	7.9803	78.4	40 - 126	14.112	14.12017	-0.0082	N/A	
Tetrachlorometaxylene [2C]	7.9803	62.7	44 - 120	5.682	5.685333	-0.0033	N/A	
23A0249-08 (Solid)			Lab File ID: 02092373ECD7.D			Analyzed: 02/10/23 13:29		
Decachlorobiphenyl	7.9846	63.9	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9846	56.8	44 - 120	5.806	5.808667	-0.0027	N/A	
Decachlorobiphenyl [2C]	7.9846	68.6	40 - 126	14.11	14.12017	-0.0102	N/A	
Tetrachlorometaxylene [2C]	7.9846	61.6	44 - 120	5.682	5.685333	-0.0033	N/A	
23A0249-09 (Solid)			Lab File ID: 02092374ECD7.D			Analyzed: 02/10/23 13:50		
Decachlorobiphenyl	7.9903	85.0	40 - 126	13.884	13.892	-0.0080	N/A	
Tetrachlorometaxylene	7.9903	58.4	44 - 120	5.805	5.808667	-0.0037	N/A	
Decachlorobiphenyl [2C]	7.9903	84.3	40 - 126	14.111	14.12017	-0.0092	N/A	
Tetrachlorometaxylene [2C]	7.9903	61.8	44 - 120	5.682	5.685333	-0.0033	N/A	
23A0249-10 (Solid)			Lab File ID: 02092375ECD7.D			Analyzed: 02/10/23 14:11		
Decachlorobiphenyl	7.9897	73.2	40 - 126	13.883	13.892	-0.0090	N/A	
Tetrachlorometaxylene	7.9897	58.2	44 - 120	5.807	5.808667	-0.0017	N/A	
Decachlorobiphenyl [2C]	7.9897	72.1	40 - 126	14.111	14.12017	-0.0092	N/A	
Tetrachlorometaxylene [2C]	7.9897	64.9	44 - 120	5.683	5.685333	-0.0023	N/A	
SLB0148-CCVB (Solid)			Lab File ID: 02092381ECD7.D			Analyzed: 02/10/23 16:17		
Decachlorobiphenyl	40.000	81.0	80 - 120	13.89	13.892	-0.0020	N/A	
Tetrachlorometaxylene	40.000	95.0	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	89.8	80 - 120	14.116	14.12017	-0.0042	N/A	
Tetrachlorometaxylene [2C]	40.000	96.5	80 - 120	5.685	5.685333	-0.0003	N/A	
SLB0148-CCVC (Solid)			Lab File ID: 02092382ECD7.D			Analyzed: 02/10/23 16:38		
Decachlorobiphenyl	40.000	85.5	80 - 120	13.888	13.892	-0.0040	N/A	
Tetrachlorometaxylene	40.000	98.5	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	92.8	80 - 120	14.116	14.12017	-0.0042	N/A	
Tetrachlorometaxylene [2C]	40.000	97.3	80 - 120	5.686	5.685333	0.0007	N/A	

SURROGATE RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG/WO:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0148	Instrument:	ECD7
Calibration:	GA00061	Calibration Date:	01/24/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLB0148-CCVD (Solid)			Lab File ID: 02092385ECD7.D			Analyzed: 02/10/23 17:41		
Decachlorobiphenyl	40.000	80.3	80 - 120	13.89	13.892	-0.0020	N/A	
Tetrachlorometaxylene	40.000	92.8	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	86.5	80 - 120	14.116	14.12017	-0.0042	N/A	
Tetrachlorometaxylene [2C]	40.000	93.3	80 - 120	5.685	5.685333	-0.0003	N/A	
SLB0148-CCVE (Solid)			Lab File ID: 02092386ECD7.D			Analyzed: 02/10/23 18:02		
Decachlorobiphenyl	40.000	85.5	80 - 120	13.889	13.892	-0.0030	N/A	
Tetrachlorometaxylene	40.000	97.5	80 - 120	5.808	5.808667	-0.0007	N/A	
Decachlorobiphenyl [2C]	40.000	89.8	80 - 120	14.117	14.12017	-0.0032	N/A	
Tetrachlorometaxylene [2C]	40.000	98.0	80 - 120	5.685	5.685333	-0.0003	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLA0281
Instrument: ECD7
Calibration: GA00061

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLA0281-SCV1)		(Solid)	Lab File ID: 01242324ECD7.D				Analyzed: 01/24/23 19:51		
1-Bromo-2-Nitrobenzene	506576	3.491	503318	3.492	101	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	940129	14.264	647433	14.266	145	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	343102	3.928	336911	3.928	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	501702	15.008	382032	15.008	131	50 - 200	0.000	+/-0.50	
Secondary Cal Check (SLA0281-SCV2)		(Solid)	Lab File ID: 01242325ECD7.D				Analyzed: 01/24/23 20:12		
1-Bromo-2-Nitrobenzene	503089	3.492	503318	3.492	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	953137	14.265	647433	14.266	147	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	341704	3.929	336911	3.928	101	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	505860	15.007	382032	15.008	132	50 - 200	-0.001	+/-0.50	
Secondary Cal Check (SLA0281-SCV3)		(Solid)	Lab File ID: 01242326ECD7.D				Analyzed: 01/24/23 20:33		
1-Bromo-2-Nitrobenzene	508189	3.491	503318	3.492	101	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	979067	14.265	647433	14.266	151	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	344105	3.928	336911	3.928	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	503378	15.007	382032	15.008	132	50 - 200	-0.001	+/-0.50	
Secondary Cal Check (SLA0281-SCV4)		(Solid)	Lab File ID: 01242327ECD7.D				Analyzed: 01/24/23 20:54		
1-Bromo-2-Nitrobenzene	504424	3.491	503318	3.492	100	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	968338	14.265	647433	14.266	150	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	342969	3.928	336911	3.928	102	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	515045	15.01	382032	15.008	135	50 - 200	0.002	+/-0.50	
Secondary Cal Check (SLA0281-SCV5)		(Solid)	Lab File ID: 01242328ECD7.D				Analyzed: 01/24/23 21:15		
1-Bromo-2-Nitrobenzene	503473	3.491	503318	3.492	100	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	991997	14.264	647433	14.266	153	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	340361	3.928	336911	3.928	101	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	521975	15.008	382032	15.008	137	50 - 200	0.000	+/-0.50	
Secondary Cal Check (SLA0281-SCV6)		(Solid)	Lab File ID: 01242329ECD7.D				Analyzed: 01/24/23 21:36		
1-Bromo-2-Nitrobenzene	487061	3.494	503318	3.492	97	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	944934	14.266	647433	14.266	146	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	331721	3.93	336911	3.928	98	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl [2C]	502401	15.007	382032	15.008	132	50 - 200	-0.001	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLB0148
Instrument: ECD7
Calibration: GA00061

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLB0148-ICV1)		(Solid)	Lab File ID: 02092306ECD7.D				Analyzed: 02/09/23 13:59		
1-Bromo-2-Nitrobenzene	368519	3.488	368519	3.488	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	512726	14.259	512726	14.259	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	338510	3.924	338510	3.924	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	475436	15.003	475436	15.003	100	50 - 200	0.000	+/-0.50	
Initial Cal Check (SLB0148-ICV2)		(Solid)	Lab File ID: 02092307ECD7.D				Analyzed: 02/09/23 14:20		
1-Bromo-2-Nitrobenzene	358012	3.489	358012	3.489	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	584784	14.259	584784	14.259	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	331462	3.926	331462	3.926	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	476501	15.003	476501	15.003	100	50 - 200	0.000	+/-0.50	
Blank (BLA0674-BLK1)		(Solid)	Lab File ID: 02092341ECD7.D				Analyzed: 02/10/23 02:16		
1-Bromo-2-Nitrobenzene	384894	3.49	358012	3.489	108	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	655891	14.256	584784	14.259	112	50 - 200	-0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	348893	3.927	331462	3.926	105	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	495430	15	476501	15.003	104	50 - 200	-0.003	+/-0.50	
LCS (BLA0674-BS1)		(Solid)	Lab File ID: 02092342ECD7.D				Analyzed: 02/10/23 02:37		
1-Bromo-2-Nitrobenzene	388506	3.49	358012	3.489	109	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	654534	14.255	584784	14.259	112	50 - 200	-0.004	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	350489	3.926	331462	3.926	106	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	506770	15	476501	15.003	106	50 - 200	-0.003	+/-0.50	
LCS Dup (BLA0674-BSD1)		(Solid)	Lab File ID: 02092343ECD7.D				Analyzed: 02/10/23 02:58		
1-Bromo-2-Nitrobenzene	399009	3.491	358012	3.489	111	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	683737	14.256	584784	14.259	117	50 - 200	-0.003	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	361740	3.927	331462	3.926	109	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	541485	15.002	476501	15.003	114	50 - 200	-0.001	+/-0.50	
Reference (BLA0674-SRM1)		(Solid)	Lab File ID: 02092344ECD7.D				Analyzed: 02/10/23 03:19		
1-Bromo-2-Nitrobenzene	395832	3.49	358012	3.489	111	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	533938	14.251	584784	14.259	91	50 - 200	-0.008	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	351723	3.926	331462	3.926	106	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	465626	14.998	476501	15.003	98	50 - 200	-0.005	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0148	Instrument:	ECD7
		Calibration:	GA00061

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1083 (23A0249-02)		(Solid)		Lab File ID: 02092345ECD7.D				Analyzed: 02/10/23 03:40	
1-Bromo-2-Nitrobenzene	374919	3.489	358012	3.489	105	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	380972	14.247	584784	14.259	65	50 - 200	-0.012	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	305531	3.926	331462	3.926	92	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	365315	14.995	476501	15.003	77	50 - 200	-0.008	+/-0.50	
LDW23-SC1018 (23A0249-03)		(Solid)		Lab File ID: 02092346ECD7.D				Analyzed: 02/10/23 04:01	
1-Bromo-2-Nitrobenzene	381269	3.491	358012	3.489	106	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	371543	14.247	584784	14.259	64	50 - 200	-0.012	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	327345	3.927	331462	3.926	99	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	349105	14.994	476501	15.003	73	50 - 200	-0.009	+/-0.50	
LDW23-SC1084 (23A0249-04)		(Solid)		Lab File ID: 02092347ECD7.D				Analyzed: 02/10/23 04:22	
1-Bromo-2-Nitrobenzene	381141	3.49	358012	3.489	106	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	352557	14.247	584784	14.259	60	50 - 200	-0.012	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	316369	3.927	331462	3.926	95	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	332111	14.996	476501	15.003	70	50 - 200	-0.007	+/-0.50	
LDW23-SC1033 (23A0249-06)		(Solid)		Lab File ID: 02092349ECD7.D				Analyzed: 02/10/23 05:04	
1-Bromo-2-Nitrobenzene	370065	3.491	358012	3.489	103	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	290237	14.247	584784	14.259	50	50 - 200	-0.012	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	304986	3.927	331462	3.926	92	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	268039	14.996	476501	15.003	56	50 - 200	-0.007	+/-0.50	
LDW23-IT1034 (23A0249-07)		(Solid)		Lab File ID: 02092350ECD7.D				Analyzed: 02/10/23 05:25	
1-Bromo-2-Nitrobenzene	370893	3.491	358012	3.489	104	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	295587	14.249	584784	14.259	51	50 - 200	-0.010	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	333014	3.927	331462	3.926	100	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	278053	14.996	476501	15.003	58	50 - 200	-0.007	+/-0.50	
Matrix Spike (BLA0674-MS1)		(Solid)		Lab File ID: 02092351ECD7.D				Analyzed: 02/10/23 05:46	
1-Bromo-2-Nitrobenzene	405376	3.49	358012	3.489	113	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	362576	14.248	584784	14.259	62	50 - 200	-0.011	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	358591	3.927	331462	3.926	108	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	326345	14.997	476501	15.003	68	50 - 200	-0.006	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLB0148	Instrument:	ECD7
		Calibration:	GA00061

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Matrix Spike Dup (BLA0674-MSD1)		(Solid)	Lab File ID: 02092352ECD7.D				Analyzed: 02/10/23 06:07		
1-Bromo-2-Nitrobenzene	373825	3.491	358012	3.489	104	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	364695	14.249	584784	14.259	62	50 - 200	-0.010	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	341908	3.927	331462	3.926	103	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	329663	14.997	476501	15.003	69	50 - 200	-0.006	+/-0.50	
LDW23-SC1020 (23A0249-11)		(Solid)	Lab File ID: 02092356ECD7.D				Analyzed: 02/10/23 07:31		
1-Bromo-2-Nitrobenzene	366289	3.491	358012	3.489	102	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	351749	14.252	584784	14.259	60	50 - 200	-0.007	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	339539	3.927	331462	3.926	102	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	322203	14.998	476501	15.003	68	50 - 200	-0.005	+/-0.50	
LDW23-SC1025 (23A0249-05)		(Solid)	Lab File ID: 02092372ECD7.D				Analyzed: 02/10/23 13:07		
1-Bromo-2-Nitrobenzene	329202	3.492	358012	3.489	92	50 - 200	0.003	+/-0.50	
Hexabromobiphenyl	271972	14.248	584784	14.259	47	50 - 200	-0.011	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	286901	3.929	331462	3.926	87	50 - 200	0.003	+/-0.50	
Hexabromobiphenyl [2C]	268100	14.996	476501	15.003	56	50 - 200	-0.007	+/-0.50	
LDW23-SC1024 (23A0249-08)		(Solid)	Lab File ID: 02092373ECD7.D				Analyzed: 02/10/23 13:29		
1-Bromo-2-Nitrobenzene	324671	3.491	358012	3.489	91	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	303660	14.247	584784	14.259	52	50 - 200	-0.012	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	297386	3.928	331462	3.926	90	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl [2C]	282062	14.996	476501	15.003	59	50 - 200	-0.007	+/-0.50	
LDW23-SC1040 (23A0249-09)		(Solid)	Lab File ID: 02092374ECD7.D				Analyzed: 02/10/23 13:50		
1-Bromo-2-Nitrobenzene	300467	3.491	358012	3.489	84	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	222918	14.248	584784	14.259	38	50 - 200	-0.011	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	279095	3.927	331462	3.926	84	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	212375	14.996	476501	15.003	45	50 - 200	-0.007	+/-0.50	*
LDW23-SC1030 (23A0249-10)		(Solid)	Lab File ID: 02092375ECD7.D				Analyzed: 02/10/23 14:11		
1-Bromo-2-Nitrobenzene	314094	3.493	358012	3.489	88	50 - 200	0.004	+/-0.50	
Hexabromobiphenyl	284257	14.247	584784	14.259	49	50 - 200	-0.012	+/-0.50	*
1-Bromo-2-Nitrobenzene [2C]	277371	3.929	331462	3.926	84	50 - 200	0.003	+/-0.50	
Hexabromobiphenyl [2C]	270796	14.996	476501	15.003	57	50 - 200	-0.007	+/-0.50	

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0249-02	File ID:	02092345ECD7.D
Sampled:	01/12/23 08:38	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 03:40
Solids:	61.90	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0674	Sequence:	SLB0148		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.395	8.405	0.01	182770.8	135	11.2
	* 2	8.297	8.305	0.008	129428.8	151	
Aroclor 1254	1	9.284	9.298	0.014	227432.4	150	14.8
	* 2	9.436	9.447	0.011	254666	174	
Aroclor 1260	1	11.031	11.04533	0.0143	77453.6	55.5	7.
	* 2	11.641	11.65333	0.0123	106715.3	59.5	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0249-03	File ID:	02092346ECD7.D
Sampled:	01/12/23 10:21	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 04:01
Solids:	49.91	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0674	Sequence:	SLB0148		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.394	8.405	0.011	47581.5	34.8	6.2
	* 2	8.297	8.305	0.008	29411.5	32.7	
Aroclor 1254	1	9.285	9.298	0.013	74748.2	46.3	21.
	* 2	9.435	9.447	0.012	80290	37.5	
Aroclor 1260	1	11.03	11.04533	0.0153	46227.8	33.3	15.5
	* 2	11.641	11.65333	0.0123	76179.75	38.9	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0249-04	File ID:	02092347ECD7.D
Sampled:	01/12/23 09:47	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 04:22
Solids:	53.88	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0674	Sequence:	SLB0148		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.394	8.405	0.011	124133	89.9	31.1
	* 2	8.297	8.305	0.008	110232.8	123	
Aroclor 1254	1	9.283	9.298	0.015	176079.8	110	12.8
	* 2	9.435	9.447	0.012	193820.4	96.8	
Aroclor 1260	1	11.032	11.04533	0.0133	73401.8	55.9	11.1
	* 2	11.641	11.65333	0.0123	102043	62.5	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0249-05	File ID:	02092372ECD7.D
Sampled:	01/12/23 11:28	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 13:07
Solids:	59.36	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0674	Sequence:	SLB0148		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.394	8.405	0.011	105435.5	70.5	20.5
	* 2	8.297	8.305	0.008	68500.75	86.6	
Aroclor 1254	1	9.284	9.298	0.014	139573.2	100	14.8
	* 2	9.435	9.447	0.012	155569.6	116	
Aroclor 1260	1	11.031	11.04533	0.0143	79742.2	79.1	11.9
	* 2	11.641	11.65333	0.0123	119071.3	89.1	

* Column used for quantitation

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0249-06	File ID:	02092349ECD7.D
Sampled:	01/12/23 12:55	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 05:04
Solids:	75.96	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0674	Sequence:	SLB0148		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.395	8.405	0.01	128128.8	97.2	31.1
	* 2	8.296	8.305	0.009	114803	133	
Aroclor 1254	1	9.283	9.298	0.015	130327.4	75.4	22.2
	* 2	9.435	9.447	0.012	133903	94.2	
Aroclor 1260	1	11.031	11.04533	0.0143	37268	34.4	23.1
	* 2	11.64	11.65333	0.0133	57194.5	43.4	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0249-07	File ID:	02092350ECD7.D
Sampled:	01/12/23 12:32	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 05:25
Solids:	74.73	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0674	Sequence:	SLB0148		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	1	8.396	8.405	0.009	59997.5	44.1	69.3
	* 2	8.298	8.305	0.007	21136.5	21.4	
Aroclor 1254	1	9.285	9.298	0.013	118158.8	69.0	22.1
	* 2	9.436	9.447	0.011	132393.4	86.1	
Aroclor 1260	1	11.032	11.04533	0.0133	73222	69.1	10.6
	* 2	11.642	11.65333	0.0113	105051.8	76.8	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0249-08	File ID:	02092373ECD7.D
Sampled:	01/12/23 13:35	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 13:29
Solids:	48.98	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0674	Sequence:	SLB0148		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	* 1	8.395	8.405	0.01	37717	24.0	19.2
	2	8.297	8.305	0.008	24183	29.1	
Aroclor 1254	1	9.285	9.298	0.013	61405	44.7	13.8
	* 2	9.436	9.447	0.011	71508.4	51.3	
Aroclor 1260	1	11.031	11.04533	0.0143	40929.6	36.9	14.8
	* 2	11.641	11.65333	0.0123	57764.25	42.8	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0249-09	File ID:	02092374ECD7.D
Sampled:	01/12/23 14:15	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 13:50
Solids:	57.86	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0674	Sequence:	SLB0148		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	* 1	8.395	8.405	0.01	57257.25	52.9	4.8
	2	8.297	8.305	0.008	38523.75	50.4	
Aroclor 1254	1	9.284	9.298	0.014	63222.4	49.8	24.
	* 2	9.435	9.447	0.012	82631.8	63.4	
Aroclor 1260	1	11.031	11.04533	0.0143	42017.6	51.9	9.
	* 2	11.641	11.65333	0.0123	58946.25	56.8	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23A0249-10	File ID:	02092375ECD7.D
Sampled:	01/12/23 14:50	Prepared:	01/31/23 11:15	Analyzed:	02/10/23 14:11
Solids:	47.59	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLA0674	Sequence:	SLB0148		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	* 1	8.394	8.405	0.011	46493.25	41.1	7.1
	2	8.297	8.305	0.008	29873.25	38.3	
Aroclor 1254	1	9.285	9.298	0.013	78658.2	59.1	17.3
	* 2	9.436	9.447	0.011	91100.8	70.3	
Aroclor 1260	1	11.032	11.04533	0.0133	47233.4	44.4	20.1
	* 2	11.641	11.65333	0.0123	69498.25	54.3	

* Column used for quantitation

HOLDING TIME SUMMARY

Analysis: EPA 8082A

Laboratory: Analytical Resources, LLC SDG: 23A0249

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1083 23A0249-02	01/12/23 08:38	01/12/23 16:38	01/31/23 11:15	19	365	02/10/23 03:40	10	40	
LDW23-SC1018 23A0249-03	01/12/23 10:21	01/12/23 16:38	01/31/23 11:15	19	365	02/10/23 04:01	10	40	
LDW23-SC1084 23A0249-04	01/12/23 09:47	01/12/23 16:38	01/31/23 11:15	19	365	02/10/23 04:22	10	40	
LDW23-SC1025 23A0249-05	01/12/23 11:28	01/12/23 16:38	01/31/23 11:15	18	365	02/10/23 13:07	10	40	
LDW23-SC1033 23A0249-06	01/12/23 12:55	01/12/23 16:38	01/31/23 11:15	18	365	02/10/23 05:04	10	40	
LDW23-IT1034 23A0249-07	01/12/23 12:32	01/12/23 16:38	01/31/23 11:15	18	365	02/10/23 05:25	10	40	
LDW23-SC1024 23A0249-08	01/12/23 13:35	01/12/23 16:38	01/31/23 11:15	18	365	02/10/23 13:29	10	40	
LDW23-SC1040 23A0249-09	01/12/23 14:15	01/12/23 16:38	01/31/23 11:15	18	365	02/10/23 13:50	10	40	
LDW23-SC1030 23A0249-10	01/12/23 14:50	01/12/23 16:38	01/31/23 11:15	18	365	02/10/23 14:11	10	40	
LDW23-SC1020 23A0249-11	01/12/23 15:23	01/12/23 16:38	01/31/23 11:15	18	365	02/10/23 07:31	10	40	
Matrix Spike BLA0674-MS1	01/12/23 12:32	01/12/23 16:38	01/31/23 11:50	18	365	02/10/23 05:46	10	40	
Matrix Spike Dup BLA0674-MSD1	01/12/23 12:32	01/12/23 16:38	01/31/23 11:50	18	365	02/10/23 06:07	10	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ECD7

Analyte	MDL	RL	Units
Aroclor 1016	1.6	4.0	ug/kg
Aroclor 1016 [2C]	1.6	4.0	ug/kg
Aroclor 1221	1.6	4.0	ug/kg
Aroclor 1221 [2C]	1.6	4.0	ug/kg
Aroclor 1232	1.6	4.0	ug/kg
Aroclor 1232 [2C]	1.6	4.0	ug/kg
Aroclor 1242	1.6	4.0	ug/kg
Aroclor 1242 [2C]	1.6	4.0	ug/kg
Aroclor 1248	1.6	4.0	ug/kg
Aroclor 1248 [2C]	1.6	4.0	ug/kg
Aroclor 1254	1.6	4.0	ug/kg
Aroclor 1254 [2C]	1.6	4.0	ug/kg
Aroclor 1260	0.6	4.0	ug/kg
Aroclor 1260 [2C]	0.6	4.0	ug/kg

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

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Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: S-279N
Description: Tetrachloro-m-xylene
Lot: 0052481B-1
Solvent: N/A
Hazards: *Refer to SDS for complete safety information*

Signal Word: Warning

Date Certified: Jul 28, 2005
Expiration: Jul 28, 2015
Sample Size: 100 mg
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

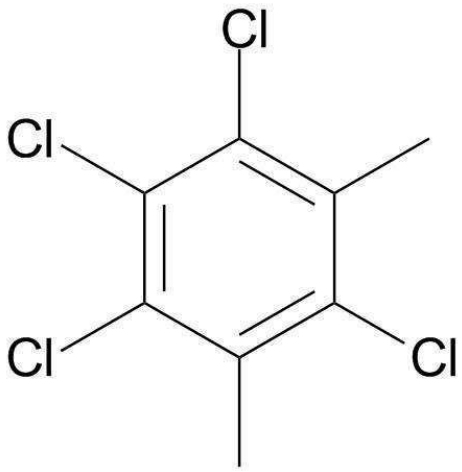
ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration	Certified Analyte Concentration[1]
Tetrachloro-meta-xylene	877-09-8	96.0	N/A	N/A

Identification:

Molecular formula: C8H6Cl4
Molecular weight: 243.94



C000147
tetrachlormetaxylene
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] The Uncertainty calculated for this product is ±2.4%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Metrological traceability is established through in-house validated methods.

Purity, if stated, is equal to 100% minus found impurity components. Impurity components have not been identified.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

AccuStandard
125 Market Street
New Haven, CT 06513
(203) 786-5290

CERTIFICATE OF PRODUCT DATA

PRODUCT: C-209N
DESCRIPTION: 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl
LOT #: 990521LB-AC
SOLVENT: N/A

EXPIRATION: Jul 28, 2015

This product is guaranteed accurate to ±0.5% of the Certified Analyte concentration through the Expiration Date on the Label.

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1]	Certified Analyte Concentration[2]
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	2051-24-3	100	N/A	N/A

C000148
decachlorbiphenyl
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

* I1768A

Certified by: R. Cooper

1. All weights are traceable through National Institute of Standards & Technology, Test No. 822/254480
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is ±4% which is the Combined Uncertainty uc(y). It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is Uc(y) *K where K is the coverage factor at the 95% confidence level (K=2).
3. A product with a suffix (-1A, -2B, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

Please note: AccuStandard follows the U.S. conventions in reporting numerical values, on both certificates and labels.

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

This product was manufactured in accordance to quality system requirements of ISO 9001:2000 and ISO 17025

* Recertified 2 4-6-09 JS

Analytical Standard Record

Standard ID: C000148 **Printed: 4/23/2015 11:54:44AM**

Description:	decachlorbiphenyl	Expires:	15-Jan-2020
Standard Type:	Other	Prepared:	15-Jan-2014
Solvent:	na/a	Prepared By:	Joshua Rains
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	27-Feb-2015 13:03 by JGR
Vendor:	Accustandard	Lot #:	990521lb-ac
Vendor Catalog #:			

Comments

see i1768a
SOM calibrations added 06/12/14 sdrd

Analyte	CAS Number	Concentration	Units
Decachlorobiphenyl [2C]	2051-24-3	1000000	ug/mL
Decachlorobiphenyl	2051-24-3	1000000	ug/mL
DCB 1660 [2C]	2051-24-3	1000000	ug/mL
DCB 1660	2051-24-3	1000000	ug/mL
DCB [2C]	2051-24-3	1000000	ug/mL
DCB (A) [2C]	2051-24-3	1000000	ug/mL
DCB (A)	2051-24-3	1000000	ug/mL
DCB	2051-24-3	1000000	ug/mL

Reviewed By Date

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Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101461
Description: Aroclor 1254
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Hexane

Lot Number: CL13053
Certification Date: November 29, 2018
Expiration Date: November 30, 2026

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1254	11097-69-1	1000	± 0.246%

I09808
Recd. JP
02/24/20

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Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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IL11110613_us

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101462
Description: Aroclor 1260
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Hexane

Lot Number: CL16516
Certification Date: March 4, 2021
Expiration Date: February 28, 2029

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1260	11096-82-5	1000	± 0.553%

J006465

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IL6491018_us

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101468
Description: Aroclor 1221
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL14017
Certification Date: August 20, 2019
Expiration Date: August 31, 2027

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1221	11104-28-2	1000	± 0.553%

J004466
Rec'd JK
06/18/21

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101469
Description: Aroclor 1232
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL14914
Certification Date: January 31, 2020
Expiration Date: January 31, 2028

Andrea L Gill
Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1232	11141-16-5	1000	± 0.738%

J006467 JR
read
06/18/21

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.:	AL0-101470	**Lot Number:**	CL14018
Description:	Aroclor 1242	**Certification Date:**	August 20, 2019
Storage:	4 °C	**Expiration Date:**	August 31, 2027
Provided As:	1 mL in 2 mL Ampoule in Isooctane		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1242	53469-21-9	1000	± 0.553%

J006468
Read JR
06/18/21

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2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.:	AL0-101471	**Lot Number:**	CL15384
Description:	Aroclor 1248	**Certification Date:**	June 19, 2020
Storage:	4 °C	**Expiration Date:**	June 30, 2028
Provided As:	1 mL in 2 mL Ampoule in Isooctane		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1248	12672-29-6	1000	± 0.520%

JJ06469
Reed, JR
06/18/21

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3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
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[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101474
Description: Aroclor 1262
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL11330
Certification Date: May 15, 2015
Expiration Date: April 30, 2023
Revision Date: April 2, 2018

Andrea L Gill
Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1262	37324-23-5	1000	± 0.516%

J 00647
Red JR
06/18/21

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Reference Material Producer
Certificate No. 2427.02

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2. Quality Standards: Phenova is accredited by A2LA to ISO Guide 34[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.

4. Instruction: Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.

12. Period of Validity: The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
[3] ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

Phenova Certified Reference Materials are sold by Phenomenex.
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Access your MSDS and digital C of A at **www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards**

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101475	**Lot Number:**	CL11331
Description:	Aroclor 1268	**Certification Date:**	May 15, 2015
Storage:	4 °C	**Expiration Date:**	April 30, 2023
Provided As:	1 mL in 2 mL Ampoule in Isooctane	**Revision Date:**	April 2, 2018

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1268	11100-14-4	1000	± 0.516%

J006472
Rec'd
06/18/21

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL11110613_us

Certificate of Analysis

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Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO Guide 34[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.

4. Instruction: Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.

12. Period of Validity: The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
[3] ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

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Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101467
Description: Aroclor 1016
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL16555
Certification Date: June 22, 2021
Expiration Date: February 28, 2029

J012591
AROCLOR 1016
Expires 2/28/2029
Prepared By Joshua Rains 11/26/2021

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1016	12674-11-2	1000	± 0.310%

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018_us

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Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

Agilent

Aroclor 1016 Solution

Product Number: PP-282 **Page:** 1 of 1

Lot Number: CR-0761 **Lot Issue Date:** 28-Feb-2017 **Expiration Date:** 31-Mar-2025

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1016	012674-11-2	NT01016	100.2 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1254 Reed JR 02/05/22

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

John Russo
President

Monica Bourgeois
Director of QA/RA

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

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Agilent

Certificate of Analysis

Product Name: Aroclor 1260 Standard

Product Number: PP-362-1 **Lot Issue Date:** 20-Jan-2021

Lot Number: 0006582048 **Expiration Date:** 28-Feb-2025

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1260	011096-82-5	NT01023	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K 1255

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

M Bourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

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Certificate of Analysis
ISO Guide 34

Aroclor 1242 Solution

Product Number: PP-312 **Page:** 1 of 1

Lot Number: CS-6293 **Lot Issue Date:** 04-Jan-2019 **Expiration Date:** 31-Jan-2023

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1242	053469-21-9	NT01020	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1256

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

M Bourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER
ISO Guide 34 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Management System

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No.
AT-1937

ISO 17034

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Reference Material Certificate

Product Name:	Aroclor 1248 Standard	**Lot Number:**	0006626997
Product Number:	PP-342-1	**Lot Issue Date:**	17-Aug-2021
Storage Conditions:	Store at Room Temperature (15° to 30°C).	**Expiration Date:**	30-Sep-2025

	CERTIFIED VALUES				
Component Name	Concentration		Expanded Uncertainty	CAS#	Analyte Lot
Aroclor 1248	100.3	±	0.5 µg/mL	012672-29-6	NT01582

Matrix: isooctane (2,2,4-trimethylpentane)

K1257

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:
The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Certificate of Analysis

Agilent

Aroclor 1254 Solution

Product Number: PP-352 **Page:** 1 of 1

Lot Number: CS-2321 **Lot Issue Date:** 04-May-2018 **Expiration Date:** 31-May-2026

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1254	011097-69-1	RM00922	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1258

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

John Russo
President

Monica Bourgeois
Director of QA/RA

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

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TUV USA, Inc.

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Certificate of Analysis

Product Name: Aroclor 1221 Standard

Product Number: PP-292-1 **Lot Issue Date:** 28-Apr-2020

Lot Number: 0006535333 **Expiration Date:** 31-May-2024

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1221	011104-28-2	RM04278	100.2 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K1259

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

MBourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 17025 Cert No. AT-1937

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Certificate of Analysis
ISO 17034

Aroclor 1262 Standard

Product Number: PP-372-1 **Page:** 1 of 1

Lot Number: 0006499800 **Lot Issue Date:** 04-Nov-2019 **Expiration Date:** 30-Nov-2023

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1262	037324-23-5	RM14263	100.0 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1260

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

Agilent

Certificate of Analysis
ISO 17034

Aroclor 1232 Standard

Product Number: PP-302-1 **Page:** 1 of 1

Lot Number: CF-2197A **Lot Issue Date:** 05-Jul-2016 **Expiration Date:** 31-Aug-2023

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1232	011141-16-5	NT01717	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1261

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

M Bourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No. AT-1937

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Certificate of Analysis

Product Name: Aroclor 1268 Standard

Product Number: PP-382-1 **Lot Issue Date:** 09-Feb-2021

Lot Number: 0006587800 **Expiration Date:** 31-Mar-2029

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1268	011100-14-4	RM00937	100.0 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K1262

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026
Page: 1 of 1
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CSD-QA-015.1

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ISO 17025 Cert No. AT-1937

Certificate of Analysis

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Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101467
Description: Aroclor 1016
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL12975
Certification Date: November 19, 2018
Expiration Date: October 31, 2026

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1016	12674-11-2	1000	± 0.553%

K 5829

IL11110613_us

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

Certificate of Analysis

Phenova Certified Reference Materials are sold by Phenomenex.
411 Madrid Ave., Torrance, CA 90501 USA ▪ Tel: 310-212-0555 ▪ Fax: 310-328-7768 ▪ info@phenomenex.com
Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO Guide 34[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.

4. Instruction: Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

   $$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.

12. Period of Validity: The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
[3] ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

ILT1116613_US

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101462
Description: Aroclor 1260
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Hexane

Lot Number: CL18021
Certification Date: February 14, 2022
Expiration Date: February 28, 2030

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1260	11096-82-5	1000	± 0.553%

K005830

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 15570

Order Number: CB014985

Date Shipped: 12/12/2022

AirBill No(s): 519204142631

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712

To: SUE DUNNIHOO
ANALYTICAL RESOURCES INC.
4611 S. 134TH PLACE SUITE 100
TUKWILA WA 98168
250-695-6207

	Sample ID	Sigma ID	Qty	Description/Remarks	→ Catalogue Number
K011477	PSRM0168	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
K011478	PSRM0169	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM
K011479	PSRM0171	SR0431	1	PUGET SOUND SEDIMENT RM	PS-SRM

12/12/2022

PUGET SOUND SRM FOR DUWAMISH AOC4 PROJECT.

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[signature]	(1400) 12/12/2022	Phillip [signature]	12/12/22 11:15
Custody Seal(s): Present/Absent (Present circled)	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

Report No. 00, 9/11/2014

SMP Version 3.3

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1083

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-02 D	SDG:	23A0249
Sampled:	01/12/23 08:38	Prepared:	04/13/23 15:30	File ID:	XDT_m2230418-067
% Solids:	59.34	Preparation:	SWN EPA 3050B	Analyzed:	04/18/23 19:00
Batch:	BLD0244	Sequence:	SLD0260	Initial/Final:	1.07 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00046

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	17.2	20	0.08	0.16	
7440-22-4	Silver	0.35	20	0.03	0.31	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1083

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-02 D	SDG:	23A0249
Sampled:	01/12/23 08:38	Prepared:	04/13/23 15:30	File ID:	XDT_m2230420-057
% Solids:	59.34	Preparation:	SWN EPA 3050B	Analyzed:	04/20/23 19:00
Batch:	BLD0244	Sequence:	SLD0292	Initial/Final:	1.07 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00059

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	25.7	50	1.02	1.97	D

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1018

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-03 D	SDG:	23A0249
Sampled:	01/12/23 10:21	Prepared:	04/13/23 15:30	File ID:	XDT_m2230418-120
% Solids:	49.11	Preparation:	SWN EPA 3050B	Analyzed:	04/18/23 23:32
Batch:	BLD0244	Sequence:	SLD0260	Initial/Final:	1.059 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00046

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	29.5	20	0.10	0.19	
7440-22-4	Silver	0.32	20	0.04	0.38	J

Form I
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EPA 6020B

Total Metals

LDW23-SC1018

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-03 D	SDG:	23A0249
Sampled:	01/12/23 10:21	Prepared:	04/13/23 15:30	File ID:	XDT_m2230420-047
% Solids:	49.11	Preparation:	SWN EPA 3050B	Analyzed:	04/20/23 18:07
Batch:	BLD0244	Sequence:	SLD0292	Initial/Final:	1.059 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00059

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	30.3	50	1.25	2.40	D

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1084

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-04 D	SDG:	23A0249
Sampled:	01/12/23 09:47	Prepared:	04/13/23 15:30	File ID:	XDT_m2230418-121
% Solids:	55.13	Preparation:	SWN EPA 3050B	Analyzed:	04/18/23 23:37
Batch:	BLD0244	Sequence:	SLD0260	Initial/Final:	1.013 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00046

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	21.9	20	0.09	0.18	
7440-22-4	Silver	0.28	20	0.04	0.36	J

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
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EPA 6020B

Total Metals

LDW23-SC1084

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-04 D	SDG:	23A0249
Sampled:	01/12/23 09:47	Prepared:	04/13/23 15:30	File ID:	XDT_m2230420-048
% Solids:	55.13	Preparation:	SWN EPA 3050B	Analyzed:	04/20/23 18:12
Batch:	BLD0244	Sequence:	SLD0292	Initial/Final:	1.013 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00059

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	28.5	50	1.16	2.24	D

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Analytical Chemists and Consultants

Form I
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EPA 6020B

Total Metals

LDW23-SC1025

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-05 D	SDG:	23A0249
Sampled:	01/12/23 11:28	Prepared:	04/13/23 15:30	File ID:	XDT_m2230418-066
% Solids:	59.20	Preparation:	SWN EPA 3050B	Analyzed:	04/18/23 18:55
Batch:	BLD0244	Sequence:	SLD0260	Initial/Final:	1.015 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00046

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	24.8	20	0.09	0.17	
7440-22-4	Silver	0.28	20	0.04	0.33	J

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1025

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-05 D	SDG:	23A0249
Sampled:	01/12/23 11:28	Prepared:	04/13/23 15:30	File ID:	XDT_m2230420-035
% Solids:	59.20	Preparation:	SWN EPA 3050B	Analyzed:	04/20/23 17:07
Batch:	BLD0244	Sequence:	SLD0292	Initial/Final:	1.015 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00059

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	27.2	50	1.08	2.08	D

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1024

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-08 D	SDG:	23A0249
Sampled:	01/12/23 13:35	Prepared:	04/13/23 15:30	File ID:	XDT_m2230418-078
% Solids:	50.46	Preparation:	SWN EPA 3050B	Analyzed:	04/18/23 20:04
Batch:	BLD0244	Sequence:	SLD0260	Initial/Final:	1.01 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00046

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-92-1	Lead	29.9	20	0.10	0.20	
7440-22-4	Silver	0.31	20	0.04	0.39	J

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Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SC1024

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-08 D	SDG:	23A0249
Sampled:	01/12/23 13:35	Prepared:	04/13/23 15:30	File ID:	XDT_m2230420-034
% Solids:	50.46	Preparation:	SWN EPA 3050B	Analyzed:	04/20/23 17:01
Batch:	BLD0244	Sequence:	SLD0292	Initial/Final:	1.01 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00059

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	29.9	50	1.28	2.45	D

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B
Total Metals

LDW23-SC1020

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-11 D	SDG:	23A0249
Sampled:	01/12/23 15:23	Prepared:	04/13/23 15:30	File ID:	XDT_m2230418-079
% Solids:	71.92	Preparation:	SWN EPA 3050B	Analyzed:	04/18/23 20:09
Batch:	BLD0244	Sequence:	SLD0260	Initial/Final:	1.045 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00046

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	12.8	20	0.35	0.67	
7439-92-1	Lead	3.28	20	0.07	0.13	
7440-22-4	Silver	0.07	20	0.03	0.27	J

PREPARATION BATCH SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLD0244
Batch Matrix: Solid
Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1083	23A0249-02	XDT_m2230420-057	04/13/23 15:30	
LDW23-SC1083	23A0249-02	XDT_m2230418-067	04/13/23 15:30	
LDW23-SC1018	23A0249-03	XDT_m2230418-120	04/13/23 15:30	
LDW23-SC1018	23A0249-03	XDT_m2230420-047	04/13/23 15:30	
LDW23-SC1084	23A0249-04	XDT_m2230420-048	04/13/23 15:30	
LDW23-SC1084	23A0249-04	XDT_m2230418-121	04/13/23 15:30	
LDW23-SC1025	23A0249-05	XDT_m2230420-035	04/13/23 15:30	
LDW23-SC1025	23A0249-05	XDT_m2230418-066	04/13/23 15:30	
LDW23-SC1024	23A0249-08	XDT_m2230418-078	04/13/23 15:30	
LDW23-SC1024	23A0249-08	XDT_m2230420-034	04/13/23 15:30	
LDW23-SC1020	23A0249-11	XDT_m2230418-079	04/13/23 15:30	
Blank	BLD0244-BLK1	XDT_m2230418-064	04/11/23 15:30	
LCS	BLD0244-BS1	XDT_m2230418-065	04/11/23 15:30	
LDW23-SC1083	BLD0244-DUP1	XDT_m2230418-068	04/11/23 15:30	
LDW23-SC1083	BLD0244-DUP2	XDT_m2230420-058	04/11/23 15:30	Added 4/24/2023 by SKD
LDW23-SC1083	BLD0244-MS1	XDT_m2230418-069	04/11/23 15:30	
LDW23-SC1083	BLD0244-MS2	XDT_m2230420-059	04/11/23 15:30	Added 4/24/2023 by SKD
LDW23-SC1083	BLD0244-MSD1	XDT_m2230418-070	04/11/23 15:30	
LDW23-SC1083	BLD0244-MSD2	XDT_m2230420-060	04/11/23 15:30	Added 4/24/2023 by SKD

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: AP Date: 04113123 Time: 1010-1530 Balance ID: BALIO

Matrix: Soil Block ID: 3 Block Temp: 95°C Thermometer: 20-2

ARI Sample ID	Btl #	pH<2	Prep Code: SWN Initial Wt (g) Vol (mL)	Prep Code: SWN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
23A249-02	D		1.070	50			
-03			1.059				
-04			1.013				
-05			1.015				
-06			1.064				
-07			1.012				
-08			1.010				
-11			1.045				
23A295-01	A		1.041				
-02			1.071				
-03			1.071				
-04	D		1.011				
-05	A		1.041				
-06			1.046				
-07	D		1.046				
-09	A		1.085				
-10			1.027				
RLD244-blk	—		—				23A249-02
-DS	—		—				
-DUP	—		1.074				
-MS	—		1.070				
-MSD	—		1.071				
			MI 04114123				

Chemical/Reagent ID:

HNO_3: L2678 1:1 HNO_3: L3305 HCl: — H_2O_2: K110516 BR ~~K1505~~

Tube Lot#: 221017 Boiling Chip Lot#: — (DoD Only)

5061F
Version 007

11/8/22

Form I

METHOD BLANK DATA SHEET

EPA 6020B

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0249

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

Batch: BLD0244 | Laboratory ID: BLD0244-BLK1 | Prepared: 04/11/23 15:30

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 04/18/23 18:46

Sequence: SLD0260 | Calibration: GD00046 | Instrument: ICPMS2

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium-52	ND	20	0.26	0.50	U
7439-92-1	Lead-208	ND	20	0.05	0.10	U
7440-22-4	Silver-107	ND	20	0.02	0.20	U

LCS / LCS DUPLICATE RECOVERY

EPA 6020B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	04/18/23 18:50
Batch:	BLD0244	Laboratory ID:	BLD0244-BS1
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Chromium-52	25.0	23.9		95.6	80 - 120
Lead-208	25.0	25.6		103	80 - 120
Silver-107	25.0	25.9		104	80 - 120

* Indicates values outside of QC limits

DUPLICATES

EPA 6020B

Total Metals

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLD0244-DUP1
Batch: BLD0244
Lab Source ID: 23A0249-02
Preparation: SWN EPA 3050B
Initial/Final: 1.074 g / 50 mL
Source Sample Name: LDW23-SC1083
% Solids: 59.34

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Lead-208	20	17.2	18.5	7.26	
Silver-107	20	0.35	0.34	4.94	

*: Values outside of QC limits
L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD

DUPLICATES

EPA 6020B

Total Metals

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLD0244-DUP2
Batch: BLD0244
Lab Source ID: 23A0249-02
Preparation: SWN EPA 3050B
Initial/Final: 1.074 g / 50 mL
Source Sample Name: LDW23-SC1083
% Solids: 59.34

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Chromium-52	20	25.7	25.0	2.82	

*: Values outside of QC limits
L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD

MS / MS DUPLICATE RECOVERY

EPA 6020B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	04/18/23 19:09
Batch:	BLD0244	Laboratory ID:	BLD0244-MS1
Preparation:	SWN EPA 3050B	Sequence Name:	Matrix Spike
Initial/Final:	1.07 g / 50 mL	Source Sample:	LDW23-SC1083

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	Q	MS CONCENTRATION (mg/kg dry)	Q	MS % REC. #		QC LIMITS REC.
Lead-208	39.4	17.2		58.9		106		75 - 125
Silver-107	39.4	0.35		22.3	*	55.9	*	75 - 125

* Values outside of QC limits

MS / MS DUPLICATE RECOVERY

EPA 6020B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	04/18/23 19:14
Batch:	BLD0244	Laboratory ID:	BLD0244-MSD1
Preparation:	SWN EPA 3050B	Sequence Name:	Matrix Spike Dup
Initial/Final:	1.071 g / 50 mL	Source Sample:	LDW23-SC1083

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	Q	MSD % REC. #		% RPD #	QC LIMITS RPD	QC LIMITS REC.
Lead-208	39.3	56.7		100		3.84	20	75 - 125
Silver-107	39.3	19.0	*	47.3	*	16.4	20	75 - 125

* Values outside of QC limits

* Values outside of QC limits

MS / MS DUPLICATE RECOVERY

EPA 6020B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	04/20/23 19:09
Batch:	BLD0244	Laboratory ID:	BLD0244-MS2
Preparation:	SWN EPA 3050B	Sequence Name:	Matrix Spike
Initial/Final:	1.07 g / 50 mL	Source Sample:	LDW23-SC1083

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	Q	MS CONCENTRATION (mg/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Chromium-52	39.4	25.7	D	62.1	D	92.4	75 - 125

* Values outside of QC limits

MS / MS DUPLICATE RECOVERY

EPA 6020B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	04/20/23 19:14
Batch:	BLD0244	Laboratory ID:	BLD0244-MSD2
Preparation:	SWN EPA 3050B	Sequence Name:	Matrix Spike Dup
Initial/Final:	1.071 g / 50 mL	Source Sample:	LDW23-SC1083

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Chromium-52	39.3	60.4	D	88.2	2.79	20	75 - 125

* Values outside of QC limits

POST DIGEST SPIKE SAMPLE RECOVERY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLD0244-PS1
Batch: BLD0244
Lab Source ID: 23A0249-02
Preparation: SWN EPA 3050B
Initial/Final: 1.07 g / 50 mL
Source Sample Name: LDW23-SC1083
% Solids: 59.34

Analyte	Control Limit %R	Spike Sample Result (SSR) (ug/L)	Sample Result (SR) (ug/L)	Spike Added (SA) (ug/L)	%R
Silver-107	80 - 120	484	0.35	500.00	95.9

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00046
Control Limt: +/- 10.00%
Sequence: SLD0260

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0260-ICV1	Chromium-52	50.000	51.0	102	ug/L	EPA 6020B
	Chromium-53	50.000	51.8	104	ug/L	EPA 6020B
	Lead-208	50.000	50.9	102	ug/L	EPA 6020B
	Silver-107	50.000	53.9	108	ug/L	EPA 6020B
SLD0260-CCV1	Chromium-52	50.000	47.6	95.2	ug/L	EPA 6020B
	Chromium-53	50.000	49.0	97.9	ug/L	EPA 6020B
	Lead-208	50.000	48.3	96.6	ug/L	EPA 6020B
	Silver-107	50.000	49.8	99.6	ug/L	EPA 6020B
SLD0260-CCV2	Chromium-52	50.000	47.9	95.8	ug/L	EPA 6020B
	Chromium-53	50.000	49.2	98.3	ug/L	EPA 6020B
	Lead-208	50.000	50.4	101	ug/L	EPA 6020B
	Silver-107	50.000	50.5	101	ug/L	EPA 6020B
SLD0260-CCV3	Chromium-52	50.000	48.1	96.2	ug/L	EPA 6020B
	Chromium-53	50.000	49.0	97.9	ug/L	EPA 6020B
	Lead-208	50.000	50.3	101	ug/L	EPA 6020B
	Silver-107	50.000	49.6	99.3	ug/L	EPA 6020B
SLD0260-CCV4	Chromium-52	50.000	47.7	95.4	ug/L	EPA 6020B
	Chromium-53	50.000	48.5	97.1	ug/L	EPA 6020B
	Lead-208	50.000	49.4	98.7	ug/L	EPA 6020B
	Silver-107	50.000	50.9	102	ug/L	EPA 6020B
SLD0260-CCV5	Chromium-52	50.000	47.5	95.0	ug/L	EPA 6020B
	Chromium-53	50.000	47.5	95.0	ug/L	EPA 6020B
	Lead-208	50.000	49.4	98.8	ug/L	EPA 6020B
	Silver-107	50.000	48.9	97.8	ug/L	EPA 6020B
SLD0260-CCV6	Chromium-52	50.000	47.2	94.4	ug/L	EPA 6020B
	Chromium-53	50.000	47.9	95.8	ug/L	EPA 6020B
	Lead-208	50.000	49.3	98.6	ug/L	EPA 6020B
	Silver-107	50.000	48.5	97.1	ug/L	EPA 6020B
SLD0260-CCV7	Chromium-52	50.000	49.1	98.1	ug/L	EPA 6020B
	Chromium-53	50.000	50.4	101	ug/L	EPA 6020B
	Lead-208	50.000	50.5	101	ug/L	EPA 6020B
	Silver-107	50.000	50.4	101	ug/L	EPA 6020B
SLD0260-CCV8	Chromium-52	50.000	46.5	93.1	ug/L	EPA 6020B
	Chromium-53	50.000	48.6	97.3	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00046
Control Limt: +/- 10.00%
Sequence: SLD0260

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0260-CCV8	Lead-208	50.000	49.4	98.7	ug/L	EPA 6020B
	Silver-107	50.000	49.4	98.8	ug/L	EPA 6020B
SLD0260-CCV9	Chromium-52	50.000	47.5	94.9	ug/L	EPA 6020B
	Chromium-53	50.000	48.2	96.3	ug/L	EPA 6020B
	Lead-208	50.000	49.6	99.3	ug/L	EPA 6020B
	Silver-107	50.000	50.2	100	ug/L	EPA 6020B
SLD0260-CCVA	Chromium-52	50.000	46.7	93.4	ug/L	EPA 6020B
	Chromium-53	50.000	47.8	95.6	ug/L	EPA 6020B
	Lead-208	50.000	50.2	100	ug/L	EPA 6020B
	Silver-107	50.000	48.8	97.6	ug/L	EPA 6020B
SLD0260-CCVB	Chromium-52	50.000	48.9	97.7	ug/L	EPA 6020B
	Chromium-53	50.000	50.1	100	ug/L	EPA 6020B
	Lead-208	50.000	51.1	102	ug/L	EPA 6020B
	Silver-107	50.000	51.6	103	ug/L	EPA 6020B
SLD0260-CCVC	Chromium-52	50.000	47.2	94.3	ug/L	EPA 6020B
	Chromium-53	50.000	47.8	95.6	ug/L	EPA 6020B
	Lead-208	50.000	48.6	97.1	ug/L	EPA 6020B
	Silver-107	50.000	50.2	100	ug/L	EPA 6020B

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00059
Control Limt: +/- 10.00%
Sequence: SLD0292

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0292-ICV1	Chromium-52	50.000	51.2	102	ug/L	EPA 6020B
	Chromium-53	50.000	51.5	103	ug/L	EPA 6020B
	Lead-208	50.000	50.6	101	ug/L	EPA 6020B
SLD0292-CCV1	Chromium-52	50.000	49.1	98.1	ug/L	EPA 6020B
	Chromium-53	50.000	49.4	98.9	ug/L	EPA 6020B
	Lead-208	50.000	49.0	98.1	ug/L	EPA 6020B
SLD0292-CCV2	Chromium-52	50.000	50.8	102	ug/L	EPA 6020B
	Chromium-53	50.000	50.6	101	ug/L	EPA 6020B
	Lead-208	50.000	52.7	105	ug/L	EPA 6020B
SLD0292-CCV3	Chromium-52	50.000	48.1	96.2	ug/L	EPA 6020B
	Chromium-53	50.000	48.5	96.9	ug/L	EPA 6020B
	Lead-208	50.000	51.0	102	ug/L	EPA 6020B
SLD0292-CCV4	Chromium-52	50.000	49.5	99.1	ug/L	EPA 6020B
	Chromium-53	50.000	49.7	99.4	ug/L	EPA 6020B
	Lead-208	50.000	50.2	100	ug/L	EPA 6020B
SLD0292-CCV5	Chromium-52	50.000	49.5	98.9	ug/L	EPA 6020B
	Chromium-53	50.000	49.2	98.4	ug/L	EPA 6020B
	Lead-208	50.000	49.7	99.5	ug/L	EPA 6020B
SLD0292-CCV6	Chromium-52	50.000	49.6	99.3	ug/L	EPA 6020B
	Chromium-53	50.000	52.6	105	ug/L	EPA 6020B
	Lead-208	50.000	49.3	98.6	ug/L	EPA 6020B
SLD0292-CCV7	Chromium-52	50.000	49.5	99.1	ug/L	EPA 6020B
	Chromium-53	50.000	50.4	101	ug/L	EPA 6020B
	Lead-208	50.000	48.7	97.4	ug/L	EPA 6020B
SLD0292-CCV8	Chromium-52	50.000	50.1	100	ug/L	EPA 6020B
	Chromium-53	50.000	50.2	100	ug/L	EPA 6020B
	Lead-208	50.000	52.3	105	ug/L	EPA 6020B
SLD0292-CCV9	Chromium-52	50.000	48.4	96.9	ug/L	EPA 6020B
	Chromium-53	50.000	48.4	96.7	ug/L	EPA 6020B
	Lead-208	50.000	56.2	112	ug/L	EPA 6020B
SLD0292-CCVA	Chromium-52	50.000	49.0	98.1	ug/L	EPA 6020B
	Chromium-53	50.000	49.9	99.8	ug/L	EPA 6020B
	Lead-208	50.000	53.9	108	ug/L	EPA 6020B
SLD0292-CCVB	Chromium-52	50.000	48.0	96.0	ug/L	EPA 6020B

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00059
Control Limt: +/- 10.00%
Sequence: SLD0292

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0292-CCVB	Chromium-53	50.000	48.9	97.9	ug/L	EPA 6020B
	Lead-208	50.000	57.6	115	ug/L	EPA 6020B

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0260

SDG: 23A0249
Project: AOC5 MR Phase 1
Calibration: GD00046
Date Analyzed: 04/18/23 13:47

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0260-IBL1	Chromium-52	0.00800	0.26	0.500	ug/L	
SLD0260-IBL1	Chromium-53	0.00200	0.239	0.500	ug/L	
SLD0260-IBL1	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0260-IBL1	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0260-ICB1	Chromium-52	-0.0100	0.26	0.500	ug/L	
SLD0260-ICB1	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLD0260-ICB1	Lead-208	0.00200	0.0513	0.100	ug/L	
SLD0260-ICB1	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0260-CCB1	Chromium-52	0.0460	0.26	0.500	ug/L	
SLD0260-CCB1	Chromium-53	-0.00800	0.239	0.500	ug/L	
SLD0260-CCB1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0260-CCB1	Silver-107	0.00100	0.022	0.200	ug/L	
SLD0260-IBL2	Chromium-52	0.00700	0.26	0.500	ug/L	
SLD0260-IBL2	Chromium-53	0.0540	0.239	0.500	ug/L	
SLD0260-IBL2	Lead-208	0.00700	0.0513	0.100	ug/L	
SLD0260-IBL2	Silver-107	0.00400	0.022	0.200	ug/L	
SLD0260-CCB2	Chromium-52	-0.00200	0.26	0.500	ug/L	
SLD0260-CCB2	Chromium-53	0.0160	0.239	0.500	ug/L	
SLD0260-CCB2	Lead-208	0.00200	0.0513	0.100	ug/L	
SLD0260-CCB2	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0260-IBL3	Chromium-52	0.00	0.26	0.500	ug/L	
SLD0260-IBL3	Chromium-53	0.0190	0.239	0.500	ug/L	
SLD0260-IBL3	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0260-IBL3	Silver-107	-0.00100	0.022	0.200	ug/L	
SLD0260-CCB3	Chromium-52	0.00100	0.26	0.500	ug/L	
SLD0260-CCB3	Chromium-53	0.00200	0.239	0.500	ug/L	
SLD0260-CCB3	Lead-208	0.00200	0.0513	0.100	ug/L	
SLD0260-CCB3	Silver-107	0.00400	0.022	0.200	ug/L	
SLD0260-IBL4	Chromium-52	-0.00500	0.26	0.500	ug/L	
SLD0260-IBL4	Chromium-53	0.0260	0.239	0.500	ug/L	
SLD0260-IBL4	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0260-IBL4	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0260-CCB4	Chromium-52	0.0180	0.26	0.500	ug/L	
SLD0260-CCB4	Chromium-53	0.0130	0.239	0.500	ug/L	
SLD0260-CCB4	Lead-208	0.00100	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0260

SDG: 23A0249
Project: AOC5 MR Phase 1
Calibration: GD00046
Date Analyzed: 04/18/23 17:25

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0260-CCB4	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0260-CCB5	Chromium-52	-0.0120	0.26	0.500	ug/L	
SLD0260-CCB5	Chromium-53	-0.00100	0.239	0.500	ug/L	
SLD0260-CCB5	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0260-CCB5	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0260-CCB6	Chromium-52	-0.0150	0.26	0.500	ug/L	
SLD0260-CCB6	Chromium-53	-0.0120	0.239	0.500	ug/L	
SLD0260-CCB6	Lead-208	0.00300	0.0513	0.100	ug/L	
SLD0260-CCB6	Silver-107	0.00100	0.022	0.200	ug/L	
SLD0260-CCB7	Chromium-52	0.00	0.26	0.500	ug/L	
SLD0260-CCB7	Chromium-53	0.00500	0.239	0.500	ug/L	
SLD0260-CCB7	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0260-CCB7	Silver-107	0.00100	0.022	0.200	ug/L	
SLD0260-CCB8	Chromium-52	0.0380	0.26	0.500	ug/L	
SLD0260-CCB8	Chromium-53	0.0100	0.239	0.500	ug/L	
SLD0260-CCB8	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0260-CCB8	Silver-107	0.00100	0.022	0.200	ug/L	
SLD0260-CCB9	Chromium-52	0.0200	0.26	0.500	ug/L	
SLD0260-CCB9	Chromium-53	-0.00100	0.239	0.500	ug/L	
SLD0260-CCB9	Lead-208	0.00300	0.0513	0.100	ug/L	
SLD0260-CCB9	Silver-107	0.00200	0.022	0.200	ug/L	
SLD0260-CCBA	Chromium-52	0.00100	0.26	0.500	ug/L	
SLD0260-CCBA	Chromium-53	0.00300	0.239	0.500	ug/L	
SLD0260-CCBA	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0260-CCBA	Silver-107	0.00	0.022	0.200	ug/L	
SLD0260-CCBB	Chromium-52	-0.00100	0.26	0.500	ug/L	
SLD0260-CCBB	Chromium-53	-0.00300	0.239	0.500	ug/L	
SLD0260-CCBB	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0260-CCBB	Silver-107	0.00	0.022	0.200	ug/L	
SLD0260-CCBC	Chromium-52	0.0160	0.26	0.500	ug/L	
SLD0260-CCBC	Chromium-53	0.0590	0.239	0.500	ug/L	
SLD0260-CCBC	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0260-CCBC	Silver-107	0.00200	0.022	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0292

SDG: 23A0249
Project: AOC5 MR Phase 1
Calibration: GD00059
Date Analyzed: 04/20/23 13:04

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0292-IBL1	Chromium-52	0.0310	0.26	0.500	ug/L	
SLD0292-IBL1	Chromium-53	-0.00600	0.239	0.500	ug/L	
SLD0292-IBL1	Lead-208	0.00200	0.0513	0.100	ug/L	
SLD0292-ICB1	Chromium-52	0.0180	0.26	0.500	ug/L	
SLD0292-ICB1	Chromium-53	-0.0140	0.239	0.500	ug/L	
SLD0292-ICB1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0292-CCB1	Chromium-52	0.0240	0.26	0.500	ug/L	
SLD0292-CCB1	Chromium-53	-0.0150	0.239	0.500	ug/L	
SLD0292-CCB1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0292-IBL2	Chromium-52	0.00100	0.26	0.500	ug/L	
SLD0292-IBL2	Chromium-53	0.0430	0.239	0.500	ug/L	
SLD0292-IBL2	Lead-208	0.00500	0.0513	0.100	ug/L	
SLD0292-IBL3	Chromium-52	0.0180	0.26	0.500	ug/L	
SLD0292-IBL3	Chromium-53	0.0300	0.239	0.500	ug/L	
SLD0292-IBL3	Lead-208	0.00400	0.0513	0.100	ug/L	
SLD0292-CCB2	Chromium-52	-0.0260	0.26	0.500	ug/L	
SLD0292-CCB2	Chromium-53	0.0160	0.239	0.500	ug/L	
SLD0292-CCB2	Lead-208	0.00200	0.0513	0.100	ug/L	
SLD0292-IBL4	Chromium-52	-0.0360	0.26	0.500	ug/L	
SLD0292-IBL4	Chromium-53	0.0100	0.239	0.500	ug/L	
SLD0292-IBL4	Lead-208	0.00200	0.0513	0.100	ug/L	
SLD0292-CCB3	Chromium-52	-0.0340	0.26	0.500	ug/L	
SLD0292-CCB3	Chromium-53	-0.00900	0.239	0.500	ug/L	
SLD0292-CCB3	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0292-IBL5	Chromium-52	0.00800	0.26	0.500	ug/L	
SLD0292-IBL5	Chromium-53	-0.0100	0.239	0.500	ug/L	
SLD0292-IBL5	Lead-208	0.00200	0.0513	0.100	ug/L	
SLD0292-CCB4	Chromium-52	-0.0160	0.26	0.500	ug/L	
SLD0292-CCB4	Chromium-53	-0.0100	0.239	0.500	ug/L	
SLD0292-CCB4	Lead-208	0.00200	0.0513	0.100	ug/L	
SLD0292-CCB5	Chromium-52	0.00600	0.26	0.500	ug/L	
SLD0292-CCB5	Chromium-53	-0.0100	0.239	0.500	ug/L	
SLD0292-CCB5	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0292-IBL6	Chromium-52	0.104	0.26	0.500	ug/L	
SLD0292-IBL6	Chromium-53	3.25	0.239	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0292

SDG: 23A0249
Project: AOC5 MR Phase 1
Calibration: GD00059
Date Analyzed: 04/20/23 20:16

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0292-IBL6	Lead-208	0.00500	0.0513	0.100	ug/L	
SLD0292-CCB6	Chromium-52	0.0390	0.26	0.500	ug/L	
SLD0292-CCB6	Chromium-53	1.84	0.239	0.500	ug/L	
SLD0292-CCB6	Lead-208	0.00200	0.0513	0.100	ug/L	
SLD0292-CCB7	Chromium-52	-0.00500	0.26	0.500	ug/L	
SLD0292-CCB7	Chromium-53	0.517	0.239	0.500	ug/L	
SLD0292-CCB7	Lead-208	0.00300	0.0513	0.100	ug/L	
SLD0292-IBL7	Chromium-52	-0.0140	0.26	0.500	ug/L	
SLD0292-IBL7	Chromium-53	0.294	0.239	0.500	ug/L	
SLD0292-IBL7	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0292-CCB8	Chromium-52	-0.0390	0.26	0.500	ug/L	
SLD0292-CCB8	Chromium-53	0.228	0.239	0.500	ug/L	
SLD0292-CCB8	Lead-208	0.00	0.0513	0.100	ug/L	
SLD0292-CCB9	Chromium-52	-0.0530	0.26	0.500	ug/L	
SLD0292-CCB9	Chromium-53	0.154	0.239	0.500	ug/L	
SLD0292-CCB9	Lead-208	0.0320	0.0513	0.100	ug/L	
SLD0292-CCBA	Chromium-52	-0.0250	0.26	0.500	ug/L	
SLD0292-CCBA	Chromium-53	0.281	0.239	0.500	ug/L	
SLD0292-CCBA	Lead-208	0.00100	0.0513	0.100	ug/L	
SLD0292-CCBB	Chromium-52	-0.0440	0.26	0.500	ug/L	
SLD0292-CCBB	Chromium-53	0.112	0.239	0.500	ug/L	
SLD0292-CCBB	Lead-208	0.00	0.0513	0.100	ug/L	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0260
Instrument: ICPMS2
Calibration: GD00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLD0260-CAL1	XDT_m2230418-006	NA	04/18/23 13:13
CAL 1 - LOW CHECK	SLD0260-CAL2	XDT_m2230418-007	NA	04/18/23 13:18
CAL 2	SLD0260-CAL3	XDT_m2230418-008	NA	04/18/23 13:22
CAL 3	SLD0260-CAL4	XDT_m2230418-009	NA	04/18/23 13:27
CAL 4	SLD0260-CAL5	XDT_m2230418-010	NA	04/18/23 13:33
CAL 5	SLD0260-CAL6	XDT_m2230418-011	NA	04/18/23 13:39
RINSE	SLD0260-IBL1	XDT_m2230418-012	NA	04/18/23 13:47
Initial Cal Check	SLD0260-ICV1	XDT_m2230418-014	NA	04/18/23 13:56
Initial Cal Blank	SLD0260-ICB1	XDT_m2230418-015	NA	04/18/23 14:03
Calibration Check	SLD0260-CCV1	XDT_m2230418-016	NA	04/18/23 14:13
Calibration Blank	SLD0260-CCB1	XDT_m2230418-017	NA	04/18/23 14:20
Instrument RL Check	SLD0260-CRL1	XDT_m2230418-018	NA	04/18/23 14:33
Interference Check A	SLD0260-IFA1	XDT_m2230418-019	NA	04/18/23 14:38
Interference Check B	SLD0260-IFB1	XDT_m2230418-020	NA	04/18/23 14:43
LR200	SLD0260-HCV1	XDT_m2230418-021	NA	04/18/23 14:52
LR300	SLD0260-HCV2	XDT_m2230418-022	NA	04/18/23 14:59
Instrument Blank	SLD0260-IBL2	XDT_m2230418-023	NA	04/18/23 15:07
Calibration Check	SLD0260-CCV2	XDT_m2230418-024	NA	04/18/23 15:13
Calibration Blank	SLD0260-CCB2	XDT_m2230418-025	NA	04/18/23 15:21
Instrument Blank	SLD0260-IBL3	XDT_m2230418-035	NA	04/18/23 16:11
Calibration Check	SLD0260-CCV3	XDT_m2230418-036	NA	04/18/23 16:16
Calibration Blank	SLD0260-CCB3	XDT_m2230418-037	NA	04/18/23 16:23
ZZZZZ	BLD0472-BLK1	XDT_m2230418-038	Water	04/18/23 16:30
ZZZZZ	BLD0472-BS1	XDT_m2230418-039	Water	04/18/23 16:35
Instrument Blank	SLD0260-IBL4	XDT_m2230418-047	NA	04/18/23 17:13
Calibration Check	SLD0260-CCV4	XDT_m2230418-048	NA	04/18/23 17:18
Calibration Blank	SLD0260-CCB4	XDT_m2230418-049	NA	04/18/23 17:25
Calibration Check	SLD0260-CCV5	XDT_m2230418-060	NA	04/18/23 18:20
Calibration Blank	SLD0260-CCB5	XDT_m2230418-061	NA	04/18/23 18:27

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0260
Instrument: ICPMS2
Calibration: GD00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Blank	BLD0244-BLK1	XDT_m2230418-064	Solid	04/18/23 18:46
LCS	BLD0244-BS1	XDT_m2230418-065	Solid	04/18/23 18:50
LDW23-SC1025	23A0249-05	XDT_m2230418-066	Solid	04/18/23 18:55
LDW23-SC1025	23A0249-05	XDT_m2230418-066	Solid	04/18/23 18:55
LDW23-SC1083	23A0249-02	XDT_m2230418-067	Solid	04/18/23 19:00
LDW23-SC1083	23A0249-02	XDT_m2230418-067	Solid	04/18/23 19:00
LDW23-SC1083	BLD0244-DUP1	XDT_m2230418-068	Solid	04/18/23 19:05
LDW23-SC1083	BLD0244-DUP1	XDT_m2230418-068	Solid	04/18/23 19:05
LDW23-SC1083	BLD0244-DUP1	XDT_m2230418-068	Solid	04/18/23 19:05
LDW23-SC1083	BLD0244-DUP1	XDT_m2230418-068	Solid	04/18/23 19:05
LDW23-SC1083	BLD0244-DUP1	XDT_m2230418-068	Solid	04/18/23 19:05
LDW23-SC1083	BLD0244-DUP1	XDT_m2230418-068	Solid	04/18/23 19:05
LDW23-SC1083	BLD0244-MS1	XDT_m2230418-069	Solid	04/18/23 19:09
LDW23-SC1083	BLD0244-MS1	XDT_m2230418-069	Solid	04/18/23 19:09
LDW23-SC1083	BLD0244-MS1	XDT_m2230418-069	Solid	04/18/23 19:09
LDW23-SC1083	BLD0244-MS1	XDT_m2230418-069	Solid	04/18/23 19:09
LDW23-SC1083	BLD0244-MS1	XDT_m2230418-069	Solid	04/18/23 19:09
LDW23-SC1083	BLD0244-MS1	XDT_m2230418-069	Solid	04/18/23 19:09
LDW23-SC1083	BLD0244-MSD1	XDT_m2230418-070	Solid	04/18/23 19:14
LDW23-SC1083	BLD0244-MSD1	XDT_m2230418-070	Solid	04/18/23 19:14
LDW23-SC1083	BLD0244-MSD1	XDT_m2230418-070	Solid	04/18/23 19:14
LDW23-SC1083	BLD0244-MSD1	XDT_m2230418-070	Solid	04/18/23 19:14
LDW23-SC1083	BLD0244-MSD1	XDT_m2230418-070	Solid	04/18/23 19:14
LDW23-SC1083	BLD0244-MSD1	XDT_m2230418-070	Solid	04/18/23 19:14
LDW23-SC1083	BLD0244-PS1	XDT_m2230418-071	Solid	04/18/23 19:19
LDW23-SC1083	BLD0244-PS1	XDT_m2230418-071	Solid	04/18/23 19:19
LDW23-SC1083	BLD0244-PS1	XDT_m2230418-071	Solid	04/18/23 19:19
LDW23-SC1083	BLD0244-PS1	XDT_m2230418-071	Solid	04/18/23 19:19
LDW23-SC1083	BLD0244-PS1	XDT_m2230418-071	Solid	04/18/23 19:19

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0260
Instrument: ICPMS2
Calibration: GD00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SC1083	BLD0244-PS1	XDT_m2230418-071	Solid	04/18/23 19:19
Calibration Check	SLD0260-CCV6	XDT_m2230418-072	NA	04/18/23 19:23
Calibration Blank	SLD0260-CCB6	XDT_m2230418-073	NA	04/18/23 19:31
Calibration Check	SLD0260-CCV7	XDT_m2230418-075	NA	04/18/23 19:47
Calibration Blank	SLD0260-CCB7	XDT_m2230418-076	NA	04/18/23 19:55
LDW23-SC1024	23A0249-08	XDT_m2230418-078	Solid	04/18/23 20:04
LDW23-SC1024	23A0249-08	XDT_m2230418-078	Solid	04/18/23 20:04
LDW23-SC1020	23A0249-11	XDT_m2230418-079	Solid	04/18/23 20:09
LDW23-SC1020	23A0249-11	XDT_m2230418-079	Solid	04/18/23 20:09
LDW23-SC1020	23A0249-11	XDT_m2230418-079	Solid	04/18/23 20:09
ZZZZZ	23A0295-01	XDT_m2230418-080	Solid	04/18/23 20:14
ZZZZZ	23A0295-01	XDT_m2230418-080	Solid	04/18/23 20:14
ZZZZZ	23A0295-02	XDT_m2230418-081	Solid	04/18/23 20:19
ZZZZZ	23A0295-02	XDT_m2230418-081	Solid	04/18/23 20:19
ZZZZZ	23A0295-03	XDT_m2230418-082	Solid	04/18/23 20:23
ZZZZZ	23A0295-03	XDT_m2230418-082	Solid	04/18/23 20:23
ZZZZZ	23A0295-04	XDT_m2230418-083	Solid	04/18/23 20:28
ZZZZZ	23A0295-04	XDT_m2230418-083	Solid	04/18/23 20:28
ZZZZZ	23A0295-05	XDT_m2230418-084	Solid	04/18/23 20:33
ZZZZZ	23A0295-05	XDT_m2230418-084	Solid	04/18/23 20:33
ZZZZZ	23A0295-06	XDT_m2230418-085	Solid	04/18/23 20:38
ZZZZZ	23A0295-06	XDT_m2230418-085	Solid	04/18/23 20:38
ZZZZZ	23A0295-07	XDT_m2230418-086	Solid	04/18/23 20:42
ZZZZZ	23A0295-07	XDT_m2230418-086	Solid	04/18/23 20:42
ZZZZZ	23A0295-07	XDT_m2230418-086	Solid	04/18/23 20:42
Calibration Check	SLD0260-CCV8	XDT_m2230418-087	NA	04/18/23 20:47
Calibration Blank	SLD0260-CCB8	XDT_m2230418-088	NA	04/18/23 20:55
ZZZZZ	BLD0289-BLK1	XDT_m2230418-089	Solid	04/18/23 20:59
ZZZZZ	BLD0289-BS1	XDT_m2230418-090	Solid	04/18/23 21:04

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0260
Instrument: ICPMS2
Calibration: GD00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0295-09	XDT_m2230418-091	Solid	04/18/23 21:09
ZZZZZ	23A0295-09	XDT_m2230418-091	Solid	04/18/23 21:09
ZZZZZ	23A0295-09	XDT_m2230418-091	Solid	04/18/23 21:09
ZZZZZ	23A0295-10	XDT_m2230418-092	Solid	04/18/23 21:14
ZZZZZ	23A0295-10	XDT_m2230418-092	Solid	04/18/23 21:14
ZZZZZ	23A0295-10	XDT_m2230418-092	Solid	04/18/23 21:14
ZZZZZ	23A0328-02	XDT_m2230418-094	Solid	04/18/23 21:23
ZZZZZ	23A0328-02	XDT_m2230418-094	Solid	04/18/23 21:23
ZZZZZ	BLD0289-DUP1	XDT_m2230418-095	Solid	04/18/23 21:28
ZZZZZ	BLD0289-MS1	XDT_m2230418-096	Solid	04/18/23 21:33
ZZZZZ	BLD0289-MSD1	XDT_m2230418-097	Solid	04/18/23 21:37
Calibration Check	SLD0260-CCV9	XDT_m2230418-099	NA	04/18/23 21:47
Calibration Blank	SLD0260-CCB9	XDT_m2230418-100	NA	04/18/23 21:54
ZZZZZ	23A0313-08	XDT_m2230418-102	Solid	04/18/23 22:04
ZZZZZ	23A0313-08	XDT_m2230418-102	Solid	04/18/23 22:04
ZZZZZ	23A0313-09	XDT_m2230418-103	Solid	04/18/23 22:08
ZZZZZ	23A0313-09	XDT_m2230418-103	Solid	04/18/23 22:08
ZZZZZ	23A0313-10	XDT_m2230418-104	Solid	04/18/23 22:13
ZZZZZ	23A0313-10	XDT_m2230418-104	Solid	04/18/23 22:13
ZZZZZ	23A0313-11	XDT_m2230418-105	Solid	04/18/23 22:18
ZZZZZ	23A0313-11	XDT_m2230418-105	Solid	04/18/23 22:18
ZZZZZ	23A0313-13	XDT_m2230418-107	Solid	04/18/23 22:27
ZZZZZ	23A0313-13	XDT_m2230418-107	Solid	04/18/23 22:27
ZZZZZ	23A0328-03	XDT_m2230418-108	Solid	04/18/23 22:32
ZZZZZ	23A0328-03	XDT_m2230418-108	Solid	04/18/23 22:32
ZZZZZ	23A0328-03	XDT_m2230418-108	Solid	04/18/23 22:32
ZZZZZ	23A0328-04	XDT_m2230418-109	Solid	04/18/23 22:37
ZZZZZ	23A0328-04	XDT_m2230418-109	Solid	04/18/23 22:37
ZZZZZ	23A0328-04	XDT_m2230418-109	Solid	04/18/23 22:37

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0260
Instrument: ICPMS2
Calibration: GD00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0328-05	XDT_m2230418-110	Solid	04/18/23 22:42
ZZZZZ	23A0328-05	XDT_m2230418-110	Solid	04/18/23 22:42
ZZZZZ	23A0328-05	XDT_m2230418-110	Solid	04/18/23 22:42
Calibration Check	SLD0260-CCVA	XDT_m2230418-111	NA	04/18/23 22:46
Calibration Blank	SLD0260-CCBA	XDT_m2230418-112	NA	04/18/23 22:54
ZZZZZ	23A0328-06	XDT_m2230418-113	Solid	04/18/23 22:59
ZZZZZ	23A0328-06	XDT_m2230418-113	Solid	04/18/23 22:59
ZZZZZ	23A0328-06	XDT_m2230418-113	Solid	04/18/23 22:59
ZZZZZ	23A0328-07	XDT_m2230418-114	Solid	04/18/23 23:03
ZZZZZ	23A0328-07	XDT_m2230418-114	Solid	04/18/23 23:03
ZZZZZ	23A0328-07	XDT_m2230418-114	Solid	04/18/23 23:03
ZZZZZ	23A0328-08	XDT_m2230418-115	Solid	04/18/23 23:08
ZZZZZ	23A0328-08	XDT_m2230418-115	Solid	04/18/23 23:08
ZZZZZ	23A0328-08	XDT_m2230418-115	Solid	04/18/23 23:08
ZZZZZ	23A0328-09	XDT_m2230418-116	Solid	04/18/23 23:13
ZZZZZ	23A0328-09	XDT_m2230418-116	Solid	04/18/23 23:13
ZZZZZ	23A0328-09	XDT_m2230418-116	Solid	04/18/23 23:13
ZZZZZ	23A0328-10	XDT_m2230418-117	Solid	04/18/23 23:18
ZZZZZ	23A0328-10	XDT_m2230418-117	Solid	04/18/23 23:18
ZZZZZ	23A0328-10	XDT_m2230418-117	Solid	04/18/23 23:18
ZZZZZ	23A0328-11	XDT_m2230418-118	Solid	04/18/23 23:22
ZZZZZ	23A0328-11	XDT_m2230418-118	Solid	04/18/23 23:22
ZZZZZ	23A0328-11	XDT_m2230418-118	Solid	04/18/23 23:22
ZZZZZ	23A0328-12	XDT_m2230418-119	Solid	04/18/23 23:27
ZZZZZ	23A0328-12	XDT_m2230418-119	Solid	04/18/23 23:27
ZZZZZ	23A0328-12	XDT_m2230418-119	Solid	04/18/23 23:27
LDW23-SC1018	23A0249-03	XDT_m2230418-120	Solid	04/18/23 23:32
LDW23-SC1018	23A0249-03	XDT_m2230418-120	Solid	04/18/23 23:32
LDW23-SC1084	23A0249-04	XDT_m2230418-121	Solid	04/18/23 23:37

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLD0260

SDG: 23A0249
Project: AOC5 MR Phase 1
Instrument: ICPMS2
Calibration: GD00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SC1084	23A0249-04	XDT_m2230418-121	Solid	04/18/23 23:37
ZZZZZ	BLD0346-PS1	XDT_m2230418-122	Water	04/18/23 23:41
Calibration Check	SLD0260-CCVB	XDT_m2230418-123	NA	04/18/23 23:46
Calibration Blank	SLD0260-CCBB	XDT_m2230418-124	NA	04/18/23 23:54
Calibration Check	SLD0260-CCVC	XDT_m2230418-135	NA	04/19/23 00:46
Calibration Blank	SLD0260-CCBC	XDT_m2230418-136	NA	04/19/23 00:53

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLD0292	Instrument:	ICPMS2
		Calibration:	GD00059

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLD0292-CAL1	XDT_m2230420-006	NA	04/20/23 12:31
CAL 1 - LOW CHECK	SLD0292-CAL2	XDT_m2230420-007	NA	04/20/23 12:35
CAL 2	SLD0292-CAL3	XDT_m2230420-008	NA	04/20/23 12:40
CAL 3	SLD0292-CAL4	XDT_m2230420-009	NA	04/20/23 12:45
CAL 4	SLD0292-CAL5	XDT_m2230420-010	NA	04/20/23 12:50
CAL 5	SLD0292-CAL6	XDT_m2230420-011	NA	04/20/23 12:56
RINSE	SLD0292-IBL1	XDT_m2230420-012	NA	04/20/23 13:04
Initial Cal Check	SLD0292-ICV1	XDT_m2230420-014	NA	04/20/23 14:54
Initial Cal Blank	SLD0292-ICB1	XDT_m2230420-015	NA	04/20/23 15:02
Calibration Check	SLD0292-CCV1	XDT_m2230420-016	NA	04/20/23 15:09
Calibration Blank	SLD0292-CCB1	XDT_m2230420-017	NA	04/20/23 15:16
Instrument RL Check	SLD0292-CRL1	XDT_m2230420-018	NA	04/20/23 15:22
Interference Check A	SLD0292-IFA1	XDT_m2230420-019	NA	04/20/23 15:27
Interference Check B	SLD0292-IFB1	XDT_m2230420-020	NA	04/20/23 15:32
LR200	SLD0292-HCV1	XDT_m2230420-021	NA	04/20/23 15:37
LR300	SLD0292-HCV2	XDT_m2230420-022	NA	04/20/23 15:41
Instrument Blank	SLD0292-IBL2	XDT_m2230420-023	NA	04/20/23 15:49
Instrument Blank	SLD0292-IBL3	XDT_m2230420-024	NA	04/20/23 15:56
Calibration Check	SLD0292-CCV2	XDT_m2230420-025	NA	04/20/23 16:03
Calibration Blank	SLD0292-CCB2	XDT_m2230420-026	NA	04/20/23 16:10
LDW23-SC1024	23A0249-08	XDT_m2230420-034	Solid	04/20/23 17:01
LDW23-SC1025	23A0249-05	XDT_m2230420-035	Solid	04/20/23 17:07
Instrument Blank	SLD0292-IBL4	XDT_m2230420-036	NA	04/20/23 17:11
Calibration Check	SLD0292-CCV3	XDT_m2230420-037	NA	04/20/23 17:16
Calibration Blank	SLD0292-CCB3	XDT_m2230420-039	NA	04/20/23 17:28
ZZZZZ	23A0295-01	XDT_m2230420-041	Solid	04/20/23 17:40
ZZZZZ	23A0295-02	XDT_m2230420-042	Solid	04/20/23 17:44
ZZZZZ	23A0295-03	XDT_m2230420-043	Solid	04/20/23 17:49
ZZZZZ	23A0295-04	XDT_m2230420-044	Solid	04/20/23 17:53

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0292
Instrument: ICPMS2
Calibration: GD00059

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0295-05	XDT_m2230420-045	Solid	04/20/23 17:58
ZZZZZ	23A0295-06	XDT_m2230420-046	Solid	04/20/23 18:03
LDW23-SC1018	23A0249-03	XDT_m2230420-047	Solid	04/20/23 18:07
LDW23-SC1084	23A0249-04	XDT_m2230420-048	Solid	04/20/23 18:12
Instrument Blank	SLD0292-IBL5	XDT_m2230420-049	NA	04/20/23 18:16
Calibration Check	SLD0292-CCV4	XDT_m2230420-050	NA	04/20/23 18:21
Calibration Blank	SLD0292-CCB4	XDT_m2230420-051	NA	04/20/23 18:28
ZZZZZ	23A0313-08	XDT_m2230420-052	Solid	04/20/23 18:38
ZZZZZ	23A0313-09	XDT_m2230420-053	Solid	04/20/23 18:42
ZZZZZ	23A0313-10	XDT_m2230420-054	Solid	04/20/23 18:47
ZZZZZ	23A0313-11	XDT_m2230420-055	Solid	04/20/23 18:51
ZZZZZ	23A0313-13	XDT_m2230420-056	Solid	04/20/23 18:56
LDW23-SC1083	23A0249-02	XDT_m2230420-057	Solid	04/20/23 19:00
LDW23-SC1083	BLD0244-DUP2	XDT_m2230420-058	Solid	04/20/23 19:05
LDW23-SC1083	BLD0244-MS2	XDT_m2230420-059	Solid	04/20/23 19:09
LDW23-SC1083	BLD0244-MSD2	XDT_m2230420-060	Solid	04/20/23 19:14
Calibration Check	SLD0292-CCV5	XDT_m2230420-062	NA	04/20/23 19:23
Calibration Blank	SLD0292-CCB5	XDT_m2230420-063	NA	04/20/23 19:30
ZZZZZ	BLD0472-BLK2	XDT_m2230420-064	Water	04/20/23 19:35
Instrument Blank	SLD0292-IBL6	XDT_m2230420-073	NA	04/20/23 20:16
Calibration Check	SLD0292-CCV6	XDT_m2230420-074	NA	04/20/23 20:20
Calibration Blank	SLD0292-CCB6	XDT_m2230420-075	NA	04/20/23 20:28
Calibration Check	SLD0292-CCV7	XDT_m2230420-086	NA	04/20/23 21:18
Calibration Blank	SLD0292-CCB7	XDT_m2230420-087	NA	04/20/23 21:25
Instrument Blank	SLD0292-IBL7	XDT_m2230420-097	NA	04/20/23 22:11
Calibration Check	SLD0292-CCV8	XDT_m2230420-098	NA	04/20/23 22:15
Calibration Blank	SLD0292-CCB8	XDT_m2230420-099	NA	04/20/23 22:23
Calibration Check	SLD0292-CCV9	XDT_m2230420-110	NA	04/20/23 23:13
Calibration Blank	SLD0292-CCB9	XDT_m2230420-111	NA	04/20/23 23:20

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLD0292

SDG: 23A0249
Project: AOC5 MR Phase 1
Instrument: ICPMS2
Calibration: GD00059

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Check	SLD0292-CCVA	XDT_m2230420-122	NA	04/21/23 00:10
Calibration Blank	SLD0292-CCBA	XDT_m2230420-123	NA	04/21/23 00:18
Calibration Check	SLD0292-CCVB	XDT_m2230420-134	NA	04/21/23 01:08
Calibration Blank	SLD0292-CCBB	XDT_m2230420-135	NA	04/21/23 01:15

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00046
Sequence: SLD0260
Standard ID: L003578

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0260-IFA1	Chromium-52	0	0.7280		ug/L
	Chromium-53	0	4.3530		ug/L
	Lead-208	0	0.0370		ug/L
	Silver-107	0	0.0110		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00046
Sequence: SLD0260
Standard ID: L003578

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0260-IFB1	Chromium-52	20.000	18.904	94.5	ug/L
	Chromium-53	20.000	22.903	115	ug/L
	Lead-208	0	0.0310		ug/L
	Silver-107	20.000	18.750	93.8	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00059
Sequence: SLD0292
Standard ID: L003578

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0292-IFA1	Chromium-52	0	0.7480		ug/L
	Chromium-53	0	3.8020		ug/L
	Lead-208	0	0.0370		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00059
Sequence: SLD0292
Standard ID: L003578

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0292-IFB1	Chromium-52	20.000	19.022	95.1	ug/L
	Chromium-53	20.000	22.364	112	ug/L
	Lead-208	0	0.0340		ug/L

* Indicates %R outside of QC limits
NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00046
Sequence: SLD0260
Lab Sample ID: SLD0260-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.491	98.2	ug/L	50 - 150
Chromium-53	0.50000	0.491	98.2	ug/L	50 - 150
Lead-208	0.10000	0.111	111	ug/L	50 - 150
Silver-107	0.20000	0.201	101	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00059
Sequence: SLD0292
Lab Sample ID: SLD0292-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.508	102	ug/L	50 - 150
Chromium-53	0.50000	0.480	96.0	ug/L	50 - 150
Lead-208	0.10000	0.111	111	ug/L	50 - 150

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00046
Laboratory ID: SLD0260-HCV1
Sequence: SLD0260
Standard ID: L003671

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	206	3.0	10.00
Chromium-53	200.00	190	-5.2	10.00
Lead-208	200.00	211	5.5	10.00
Silver-107	200.00	220	10.0	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00046
Laboratory ID: SLD0260-HCV2
Sequence: SLD0260
Standard ID: L003672

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	312	4.1	10.00
Chromium-53	300.00	284	-5.5	10.00
Lead-208	300.00	336	12.1	10.00
Silver-107	300.00	330	9.8	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00059
Laboratory ID: SLD0292-HCV1
Sequence: SLD0292
Standard ID: L003671

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	208	3.8	10.00
Chromium-53	200.00	191	-4.4	10.00
Lead-208	200.00	219	9.3	10.00

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00059
Laboratory ID: SLD0292-HCV2
Sequence: SLD0292
Standard ID: L003672

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	306	2.0	10.00
Chromium-53	300.00	288	-4.0	10.00
Lead-208	300.00	331	10.2	10.00

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 6020B

Laboratory: Analytical Resources, LLC SDG: 23A0249

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1083 23A0249-02	01/12/23 08:38	01/12/23 16:38	04/13/23 15:30	91	180	04/20/23 19:00	98	180	
LDW23-SC1083 23A0249-02	01/12/23 08:38	01/12/23 16:38	04/13/23 15:30	91	180	04/18/23 19:00	96	180	
LDW23-SC1018 23A0249-03	01/12/23 10:21	01/12/23 16:38	04/13/23 15:30	91	180	04/20/23 18:07	98	180	
LDW23-SC1018 23A0249-03	01/12/23 10:21	01/12/23 16:38	04/13/23 15:30	91	180	04/18/23 23:32	97	180	
LDW23-SC1084 23A0249-04	01/12/23 09:47	01/12/23 16:38	04/13/23 15:30	91	180	04/20/23 18:12	98	180	
LDW23-SC1084 23A0249-04	01/12/23 09:47	01/12/23 16:38	04/13/23 15:30	91	180	04/18/23 23:37	97	180	
LDW23-SC1025 23A0249-05	01/12/23 11:28	01/12/23 16:38	04/13/23 15:30	91	180	04/20/23 17:07	98	180	
LDW23-SC1025 23A0249-05	01/12/23 11:28	01/12/23 16:38	04/13/23 15:30	91	180	04/18/23 18:55	96	180	
LDW23-SC1024 23A0249-08	01/12/23 13:35	01/12/23 16:38	04/13/23 15:30	91	180	04/20/23 17:01	98	180	
LDW23-SC1024 23A0249-08	01/12/23 13:35	01/12/23 16:38	04/13/23 15:30	91	180	04/18/23 20:04	96	180	
LDW23-SC1020 23A0249-11	01/12/23 15:23	01/12/23 16:38	04/13/23 15:30	91	180	04/18/23 20:09	96	180	
Duplicate BLD0244-DUP1	01/12/23 08:38	01/12/23 16:38	04/11/23 15:30	89	180	04/18/23 19:05	96	180	
Duplicate BLD0244-DUP2	01/12/23 08:38	01/12/23 16:38	04/11/23 15:30	89	180	04/20/23 19:05	98	180	
Matrix Spike BLD0244-MS1	01/12/23 08:38	01/12/23 16:38	04/11/23 15:30	89	180	04/18/23 19:09	96	180	
Matrix Spike BLD0244-MS2	01/12/23 08:38	01/12/23 16:38	04/11/23 15:30	89	180	04/20/23 19:09	98	180	
Matrix Spike Dup BLD0244-MSD1	01/12/23 08:38	01/12/23 16:38	04/11/23 15:30	89	180	04/18/23 19:14	96	180	
Matrix Spike Dup BLD0244-MSD2	01/12/23 08:38	01/12/23 16:38	04/11/23 15:30	89	180	04/20/23 19:14	98	180	
Post Spike BLD0244-PS1	01/12/23 08:38	01/12/23 16:38	04/11/23 15:30	89	180	04/18/23 19:19	96	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ICPMS2

Analyte	MDL	RL	Units
Chromium-52	0.26	0.50	mg/kg
Chromium-53	0.24	0.50	mg/kg
Lead-208	0.05	0.10	mg/kg
Silver-107	0.02	0.20	mg/kg

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCU10
Lot Number:	P2-CU682108
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Copper
Starting Material:	Cu Metal
Starting Material Lot#:	2095
Starting Material Purity:	99.9996%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10013 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9977 ± 50 µg/mL**
ICP Assay NIST SRM 3114 Lot Number: 121207

Assay Method #2 **10024 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10007 ± 46 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.007542	M	Eu	<	0.000942	O	Na		0.001434	M	Se	<	0.016971	M	Zn	<	0.005657
O	Al	<	0.000609	O	Fe		0.008700	M	Nb	<	0.000942	O	Si		0.003052	M	Zr	<	0.000942
M	As	<	0.010371	M	Ga	<	0.000942	M	Nd	<	0.000942	M	Sm	<	0.000942				
M	Au	<	0.001885	M	Gd	<	0.000942	M	Ni		0.003781	M	Sn	<	0.005657				
O	B		0.003663	M	Ge	<	0.005657	M	Os	<	0.000942	M	Sr	<	0.000942				
M	Ba		0.004253	M	Hf	<	0.000942	O	P	<	0.031668	M	Ta	<	0.000942				
M	Be	<	0.000942	O	Hg	<	0.007064	M	Pb		0.005789	M	Tb	<	0.000942				
M	Bi	<	0.000942	M	Ho	<	0.000942	M	Pd	<	0.000942	M	Te	<	0.004714				
O	Ca		0.002304	M	In	<	0.000942	M	Pr	<	0.000942	M	Th	<	0.000942				
M	Cd	<	0.000942	M	Ir	<	0.000942	M	Pt	<	0.000942	O	Ti	<	0.002801				
M	Ce	<	0.000942	O	K		0.000763	M	Rb	<	0.000942	M	Tl	<	0.000942				
M	Co		0.001890	M	La	<	0.000942	M	Re	<	0.000942	M	Tm	<	0.000942				
M	Cr	<	0.005657	O	Li	<	0.000243	i	Rh	<		M	U	<	0.000942				
M	Cs	<	0.000942	M	Lu	<	0.000942	M	Ru	<	0.039588	M	V	<	0.003771				
s	Cu	<		O	Mg		0.000320	O	S		0.007174	M	W	<	0.005657				
M	Dy	<	0.000942	O	Mn		0.000793	M	Sb	<	0.001885	M	Y	<	0.000942				
M	Er	<	0.000942	M	Mo	<	0.005657	M	Sc	<	0.000942	M	Yb	<	0.000942				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.55 +2 6 $Cu(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cu Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 63 amu	10 ppt	n/a	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	Th, Ta, Nb, U, Hf
ICP-OES 224.700 nm	0.01/.001 µg/mL	1	Pb, Ir, Ni, W
ICP-OES 324.754 nm	0.06/.001 µg/mL		Nb, U, Th, Mo, Hf

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 24, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 24, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGPB10
Lot Number:	S2-PB713228
Matrix:	0.5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Lead
Starting Material:	Lead Nitrate
Starting Material Lot#:	2343
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10042 ± 31 µg/mL

Density: 1.015 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10024 ± 41 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

Assay Method #2 **10054 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	M	Na		0.001470	M	Se	<	0.009100	O	Zn	0.006155
O	Al		0.017098	O	Fe		0.002496	M	Nb	<	0.000310	O	Si		0.003761	O	Zr	< 0.001700
M	As	<	0.003100	M	Ga	<	0.000310	M	Nd	<	0.000310	M	Sm	<	0.000310			
M	Au	<	0.000910	M	Gd	<	0.000310	O	Ni		0.001709	M	Sn	<	0.001300			
O	B	<	0.005600	M	Ge	<	0.002200	M	Os	<	0.000310	O	Sr		0.000444			
O	Ba		0.007865	M	Hf	<	0.000310	O	P	<	0.038000	M	Ta	<	0.000310			
O	Be	<	0.000320	M	Hg	<	0.002200	s	Pb	<		M	Tb	<	0.000610			
M	Bi	<	0.028000	M	Ho	<	0.000310	M	Pd	<	0.000610	M	Te	<	0.000310			
O	Ca		0.019834	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.000310			
O	Cd	<	0.000630	M	Ir	<	0.000310	M	Pt	<	0.000910	O	Ti		0.005129			
M	Ce		0.004787	O	K		0.008207	M	Rb	<	0.006700	M	Tl	<	0.016000			
M	Co	<	0.000610	M	La	<	0.001900	M	Re	<	0.000310	M	Tm	<	0.000310			
O	Cr	<	0.001500	O	Li	<	0.000110	O	Rh	<	0.007700	M	U	<	0.000310			
M	Cs	<	0.006100	M	Lu	<	0.000310	M	Ru	<	0.001300	M	V	<	0.001600			
M	Cu	<	0.001600	O	Mg		0.003317	O	S	<	0.052000	M	W	<	0.000910			
M	Dy	<	0.000310	O	Mn	<	0.001600	O	Sb	<	0.015000	M	Y	<	0.000310			
M	Er	<	0.000310	M	Mo	<	0.000610	O	Sc	<	0.000630	M	Yb	<	0.000310			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 $Pb(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, HF and HNO_3. Avoid H_2SO_4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H_2O / HNO_3); Oxides (The many different Pb oxides are soluble in HNO_3 with the exception of PbO_2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H_2O / HNO_3); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

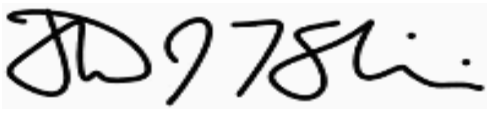
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGZN10
Lot Number:	S2-ZN711249
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Zinc
Starting Material:	Zinc Metal
Starting Material Lot#:	2349
Starting Material Purity:	99.9988%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9981 ± 56 µg/mL**
ICP Assay NIST SRM 3168a Lot Number: 120629

Assay Method #2 **9987 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10002 ± 32 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002000	M	Eu	<	0.000500	O	Na		0.008713	M	Se	<	0.048000	s	Zn	<
O	Al	<	0.011000	O	Fe		0.015467	M	Nb	<	0.000500	O	Si		0.007842	M	Zr	< 0.000500
O	As	<	0.012000	M	Ga	<	0.004900	M	Nd	<	0.000500	M	Sm	<	0.000500			
M	Au	<	0.006500	M	Gd	<	0.000500	O	Ni		0.003049	M	Sn		0.002614			
O	B	<	0.019000	M	Ge	<	0.009100	M	Os	<	0.000500	M	Sr	<	0.000500			
M	Ba	<	0.000500	M	Hf	<	0.000500	O	P	<	0.059000	M	Ta	<	0.000500			
O	Be	<	0.000230	O	Hg	<	0.003800	M	Pb		0.016774	M	Tb	<	0.000500			
M	Bi	<	0.002400	M	Ho	<	0.000500	M	Pd	<	0.001000	M	Te	<	0.017000			
O	Ca		0.052283	M	In	<	0.003500	M	Pr	<	0.000500	M	Th	<	0.000500			
O	Cd		0.000588	M	Ir	<	0.001000	M	Pt	<	0.000500	M	Ti	<	0.002000			
M	Ce	<	0.000500	O	K		0.017209	M	Rb	<	0.002500	M	Tl	<	0.000500			
M	Co		0.000653	M	La	<	0.000500	M	Re	<	0.000500	M	Tm	<	0.000500			
O	Cr		0.001089	O	Li	<	0.000230	M	Rh	<	0.000500	M	U	<	0.000500			
M	Cs	<	0.000500	M	Lu	<	0.000500	M	Ru	<	0.005000	M	V	<	0.000500			
O	Cu		0.001938	O	Mg		0.000871	O	S	<	0.048000	M	W	<	0.001000			
M	Dy	<	0.000500	O	Mn		0.000172	M	Sb	<	0.004300	M	Y	<	0.000500			
M	Er	<	0.000500	M	Mo	<	0.001500	O	Sc	<	0.000900	M	Yb	<	0.000500			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39 +2 4 Zn(OH)(aq)1+
Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media forming insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Zn Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3); Organic based (dry ash at 4500C and dissolve ash in HCl) (sulfuric/peroxide acid digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 66 amu	7 ppt	N/A	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2
ICP-OES 202.548 nm	0.004/0.0002 µg/mL	1	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006/0.0006 µg/mL	1	Sb, Ta, Bi, Os
ICP-OES 213.856 nm	0.002/0.0004 µg/mL	1	Ni, Cu, V

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 22, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

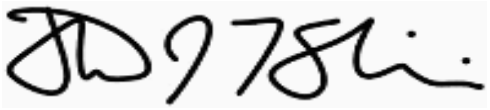
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

300 Technology Drive
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSE10
Lot Number:	S2-SE711004
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Selenium
Starting Material:	Se Metal
Starting Material Lot#:	1962
Starting Material Purity:	99.9991%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9955 ± 61 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9955 ± 50 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002242	M	Eu	<	0.000373	O	Na		0.013654	s	Se	<		O	Zn		0.002374
M	Al		0.004450	M	Fe		0.008478	O	Nb	<	0.002975	O	Si		0.006249	M	Zr	<	0.001868
O	As	<	0.022040	M	Ga	<	0.000373	M	Nd	<	0.000373	M	Sm	<	0.000373				
M	Au	<	0.000373	M	Gd	<	0.000373	O	Ni		0.001843	M	Sn		0.000847				
O	B	<	0.007714	M	Ge	<	0.002616	M	Os	<	0.000373	M	Sr	<	0.001121				
M	Ba	<	0.001495	M	Hf	<	0.000373	O	P	<	0.022040	M	Ta	<	0.000373				
M	Be	<	0.001495	M	Hg	<	0.002240	M	Pb		0.006358	M	Tb	<	0.006353				
M	Bi	<	0.000373	M	Ho	<	0.000373	M	Pd	<	0.000373	M	Te	<	0.012707				
O	Ca		0.006530	M	In	<	0.000373	M	Pr	<	0.001495	M	Th	<	0.002990				
M	Cd		0.001165	M	Ir	<	0.000373	M	Pt	<	0.000373	M	Ti	<	0.003363				
M	Ce	<	0.000373	O	K		0.001999	M	Rb	<	0.001868	M	Tl		0.008584				
M	Co	<	0.000373	M	La	<	0.001121	M	Re	<	0.000373	M	Tm	<	0.000373				
M	Cr		0.002861	O	Li		0.000062	M	Rh	<	0.000373	M	U	<	0.000373				
M	Cs	<	0.001121	M	Lu	<	0.000373	M	Ru	<	0.001493	M	V	<	0.000747				
M	Cu	<	0.000747	O	Mg		0.001156	O	S		0.024591	M	W	<	0.002242				
M	Dy	<	0.000373	M	Mn	<	0.000373	M	Sb	<	0.002242	M	Y	<	0.000373				
M	Er	<	0.000373	O	Mo	<	0.003195	M	Sc	<	0.001121	M	Yb	<	0.000373				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H_2SeO_3

Chemical Compatibility -Soluble in HCl, HNO_3,H_3PO_4, H_2SO_4 and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO_3or HNO_3 / HF); Organic Matrices (acid digestion with hot concentrated H_2SO_4 accompanied by the careful dropwise addition of H_2O_2 until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 17, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO10
Lot Number:	S2-MO706255
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	10 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10026 ± 47 µg/mL

Density: 1.011 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10032 ± 68 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

Assay Method #2 **10020 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.008739	M	Se	<	0.008000	M	Zn		0.005942
M	Al		0.005592	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.001747				
M	Ba		0.016778	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.062920	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Ti	<	0.032000				
M	Ce	<	0.008300	M	K		1.293372	M	Rb		0.045442	M	Tl		0.012584				
M	Co		0.005942	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.005243	O	Li		0.000594	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.005243	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.022371	M	Mg		0.005592	i	S	<		M	W		0.873900				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.015031	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br16O,190Os2+,190Pt2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 04, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 04, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL10
Lot Number:	T2-TL714687
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Thallium
Starting Material:	TlNO3
Starting Material Lot#:	2118
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10030 ± 42 µg/mL

Density: 1.036 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10040 ± 43 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 151215

Assay Method #2 **10010 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL(

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000200	O	Na		0.002489	M	Se	<	0.011019	O	Zn		0.002298
O	Al	<	0.004184	O	Fe	<	0.002824	M	Nb	<	0.000200	O	Si		0.003760	M	Zr	<	0.000200
M	As	<	0.002003	M	Ga	<	0.000200	M	Nd	<	0.000200	M	Sm	<	0.000200				
O	Au	<	0.002824	M	Gd	<	0.000200	M	Ni		0.001724	M	Sn	<	0.000601				
O	B	<	0.004184	M	Ge	<	0.000801	M	Os	<	0.000198	O	Sr	<	0.000313				
M	Ba	<	0.000400	M	Hf	<	0.000200	O	P	<	0.010460	M	Ta	<	0.000200				
O	Be	<	0.000104	M	Hg	<	0.000794	M	Pb		0.000811	M	Tb	<	0.000200				
M	Bi	<	0.005209	M	Ho	<	0.000200	M	Pd	<	0.000400	M	Te	<	0.005008				
O	Ca		0.002436	M	In	<	0.000200	M	Pr	<	0.000200	M	Th	<	0.000200				
M	Cd		0.001318	M	Ir	<	0.000198	M	Pt	<	0.000801	O	Ti	<	0.001255				
M	Ce	<	0.000200	O	K		0.006175	M	Rb	<	0.000200	s	Tl	<					
M	Co	<	0.000601	M	La	<	0.000200	M	Re	<	0.000200	M	Tm	<	0.000200				
M	Cr	<	0.000801	O	Li	<	0.000177	M	Rh	<	0.000200	M	U	<	0.000200				
M	Cs	<	0.003606	M	Lu	<	0.000200	M	Ru	<	0.000397	M	V	<	0.002203				
M	Cu	<	0.001001	O	Mg		0.000529	O	S	<	0.015690	M	W	<	0.000601				
M	Dy	<	0.000200	M	Mn	<	0.000801	M	Sb	<	0.000400	M	Y	<	0.000200				
M	Er	<	0.000200	M	Mo	<	0.001202	O	Sc	<	0.000711	M	Yb	<	0.000200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H2O)61+
Chemical Compatibility - Soluble in HCl, HNO3, and H2SO4. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Tl Containing Samples)Preparation and Solution) -Metal (Best dissolved in HNO3 which forms chiefly the Tl1+ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 08, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **February 08, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

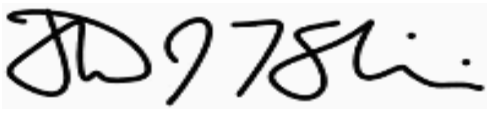
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCD10
Lot Number:	S2-CD710508
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cadmium
Starting Material:	Cd Metal
Starting Material Lot#:	1953
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10008 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10010 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 **10011 ± 30 µg/mL**
ICP Assay NIST SRM 3108 Lot Number: 130116

Assay Method #3 **10003 ± 30 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag	<	0.003200	O	Eu	<	0.002500	O	Na		0.005499	M	Se	<	0.005700	O	Zn	<	0.001100
O	Al		0.008903	O	Fe		0.000602	M	Nb	<	0.000400	O	Si		0.016758	O	Zr	<	0.002600
M	As	<	0.003600	M	Ga	<	0.001200	M	Nd	<	0.000800	M	Sm	<	0.000400				
M	Au	<	0.000810	M	Gd	<	0.000400	M	Ni	<	0.003600	M	Sn	<	0.003200				
O	B		0.004189	O	Ge	<	0.012000	M	Os	<	0.000810	O	Sr	<	0.000330				
M	Ba	<	0.002400	M	Hf	<	0.000400	O	P	<	0.022000	M	Ta	<	0.000800				
M	Be	<	0.000400	M	Hg	<	0.001700	M	Pb	<	0.002400	M	Tb	<	0.000400				
M	Bi	<	0.000400	M	Ho	<	0.000400	M	Pd	<	0.001200	M	Te	<	0.008000				
O	Ca		0.011259	O	In	<	0.013000	M	Pr	<	0.000400	M	Th	<	0.000400				
s	Cd	<		M	Ir	<	0.000410	M	Pt	<	0.000400	O	Ti		0.000602				
M	Ce	<	0.000400	O	K		0.005237	M	Rb	<	0.004400	M	Tl		0.000523				
M	Co	<	0.000400	M	La	<	0.000400	M	Re	<	0.000400	M	Tm	<	0.000400				
O	Cr	<	0.005100	O	Li	<	0.000054	M	Rh	<	0.000400	M	U	<	0.000400				
M	Cs	<	0.002400	M	Lu	<	0.000400	M	Ru	<	0.002500	M	V	<	0.002000				
O	Cu	<	0.004800	O	Mg		0.000288	O	S	<	0.022000	M	W	<	0.000400				
M	Dy	<	0.000400	O	Mn	<	0.000860	O	Sb	<	0.018000	M	Y	<	0.000400				
M	Er	<	0.000400	M	Mo	<	0.001600	O	Sc	<	0.000430	M	Yb	<	0.000400				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 112.41 +2 4 Cd2(OH) (aq)3+ and Cd(OH)(aq)

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 , and HF. Avoid basic media forming insoluble carbonate and hydroxide.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO3 / LDPE container.

Cd Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (soluble in HCl or HNO3); Ores (dissolve in HCl /HNO3 then take to fumes with H2SO4. The silica and lead sulfate are filtered off after the addition of water); Organic based (dry ash at 450°C and dissolve ash in HCl), (sulfuric / peroxide acid digestion).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 111 amu	11 ppt	n/a	95Mo16O
ICP-OES 214.438 nm	0.003 / 0.0003 µg/mL	1	Pt, Ir
ICP-OES 226.502 nm	0.003 / 0.0003 µg/mL	1	Ir
ICP-OES 228.802 nm	0.003 / 0.0003 µg/mL	1	Co, Ir, As, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 01, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 01, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMN10
Lot Number:	S2-MN704240
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Manganese
Starting Material:	Mn Metal
Starting Material Lot#:	2275
Starting Material Purity:	99.9909%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10011 ± 30 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9989 ± 69 µg/mL**
ICP Assay NIST SRM 3132 Lot Number: 050429

Assay Method #2 **10011 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10024 ± 47 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001500	M	Eu	<	0.000730	O	Na		0.176097	M	Se	<	0.006600	M	Zn		0.009925
O	Al		0.004322	M	Fe	<	0.650000	M	Nb	<	0.000730	O	Si		0.097654	M	Zr	<	0.000730
M	As	<	0.008000	M	Ga		0.004322	M	Nd	<	0.001500	M	Sm	<	0.000730				
M	Au	<	0.000730	M	Gd	<	0.000730	M	Ni		0.024013	M	Sn	<	0.002200				
M	B		0.068838	M	Ge	<	0.004400	M	Os	<	0.000730	O	Sr		0.000928				
M	Ba	<	0.001500	M	Hf	<	0.000730	i	P	<		M	Ta	<	0.000730				
M	Be	<	0.000730	M	Hg	<	0.002200	M	Pb		0.007364	M	Tb	<	0.000730				
M	Bi	<	0.003000	M	Ho	<	0.000730	M	Pd	<	0.000730	M	Te	<	0.019000				
O	Ca		0.062434	M	In	<	0.003000	M	Pr	<	0.000730	M	Th	<	0.000730				
M	Cd	<	0.001500	M	Ir	<	0.000730	M	Pt	<	0.000730	O	Ti	<	0.006500				
M	Ce	<	0.007300	O	K		0.006403	M	Rb	<	0.006600	M	Tl	<	0.000730				
O	Co		0.014728	M	La	<	0.003000	M	Re	<	0.000730	M	Tm	<	0.000730				
O	Cr		0.272151	O	Li		0.000416	M	Rh	<	0.003000	M	U	<	0.001500				
M	Cs	<	0.000730	M	Lu	<	0.000730	M	Ru	<	0.004400	M	V	<	0.000730				
O	Cu		0.007684	O	Mg		0.320177	i	S	<		M	W	<	0.004400				
M	Dy	<	0.001500	s	Mn	<		M	Sb	<	0.021000	O	Y		0.001360				
M	Er	<	0.001500	M	Mo		0.010245	O	Sc	<	0.004100	M	Yb	<	0.000730				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.94 +2 6 $Mn(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO_3/LDPE container.

Mn Containing Samples (Preparation and Solution) -Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H_2SO_4 and heat to SO_3 fumes - dense white fumes).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 55 amu	10 ppt	n/a	40Ar14N1H,39K16O,37Cl18O,40Ar15N,38Ar17O,36Ar18O1H ,38Ar16O1H,37Cl17O1H,23Na32S
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 17, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSB10
Lot Number:	R2-SB688559
Matrix:	3% (v/v) HNO3 3% (w/v) tartaric acid
Value / Analyte(s):	10 000 µg/mL ea: Antimony
Starting Material:	Antimony Metal
Starting Material Lot#:	1857
Starting Material Purity:	99.9894%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10003 ± 47 µg/mL

Density: 1.061 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10003 ± 41 µg/mL**
ICP Assay NIST SRM 3102a Lot Number: 140911

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000300	O	Na		0.140000	M	Se	<	0.007300	O	Zn		0.005000
M	Al		0.003200	O	Fe		0.060000	M	Nb	<	0.000100	O	Si		0.150000	O	Zr	<	0.006300
M	As	<	0.004400	M	Ga	<	0.000400	M	Nd	<	0.000100	M	Sm	<	0.000100				
M	Au	<	0.000210	M	Gd	<	0.000100	O	Ni		0.004800	M	Sn	<	0.001800				
M	B	<	0.011000	M	Ge	<	0.000600	M	Os	<	0.000110	O	Sr		0.000750				
O	Ba	<	0.004900	M	Hf	<	0.000100	O	P		0.540000	M	Ta		0.003300				
M	Be	<	0.000400	M	Hg	<	0.000110	M	Pb	<	0.000400	M	Tb	<	0.000100				
M	Bi	<	0.000200	M	Ho	<	0.000100	M	Pd	<	0.000210	M	Te	<	0.000600				
O	Ca		0.110000	M	In	<	0.000100	M	Pr	<	0.001600	M	Th	<	0.000100				
M	Cd	<	0.000200	M	Ir	<	0.000110	M	Pt	<	0.000600	M	Ti	<	0.002800				
M	Ce		0.006500	O	K		0.020000	M	Rb	<	0.001000	M	Tl	<	0.000100				
M	Co	<	0.000200	O	La	<	0.016000	M	Re	<	0.000100	M	Tm	<	0.000100				
M	Cr		0.006900	O	Li	<	0.000430	M	Rh	<	0.000300	M	U	<	0.000100				
M	Cs	<	0.000200	M	Lu	<	0.000100	M	Ru	<	0.000310	M	V	<	0.000800				
M	Cu	<	0.000600	O	Mg		0.021000	n	S	<		M	W	<	0.000200				
M	Dy	<	0.000100	O	Mn		0.001900	s	Sb	<		M	Y	<	0.000100				
M	Er	<	0.000100	M	Mo	<	0.000500	O	Sc	<	0.002300	M	Yb	<	0.000100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in Pt0 followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 30, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 30, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAS10
Lot Number:	T2-AS718260
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Arsenic
Starting Material:	As Metal
Starting Material Lot#:	2208
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10060 ± 40 µg/mL

Density: 1.037 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10062 ± 46 µg/mL**
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 **10055 ± 76 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.003200	M	Eu	< 0.000530	O	Na	0.032544	M	Se	< 0.006300	O	Zn	0.001952			
M	Al	0.007593	O	Fe	0.001475	O	Nb	< 0.012000	O	Si	0.238658	O	Zr	< 0.004100			
s	As	<	M	Ga	< 0.000530	M	Nd	< 0.000530	M	Sm	< 0.000530						
M	Au	< 0.003100	M	Gd	< 0.000530	M	Ni	< 0.002100	M	Sn	< 0.000530						
M	B	0.026035	M	Ge	< 0.001600	M	Os	< 0.000520	M	Sr	< 0.000530						
M	Ba	< 0.000530	M	Hf	< 0.000530	O	P	< 0.043000	M	Ta	< 0.000530						
O	Be	< 0.000360	M	Hg	< 0.001600	M	Pb	< 0.002100	M	Tb	< 0.000530						
M	Bi	< 0.000530	M	Ho	< 0.000530	M	Pd	< 0.001100	M	Te	< 0.004700						
O	Ca	0.004339	M	In	< 0.023000	M	Pr	< 0.005300	M	Th	< 0.000530						
M	Cd	< 0.001100	M	Ir	< 0.000520	M	Pt	< 0.000530	O	Ti	< 0.002300						
M	Ce	< 0.000530	O	K	0.002061	M	Rb	< 0.000530	M	Tl	< 0.000530						
M	Co	< 0.000530	M	La	< 0.001100	M	Re	< 0.000530	M	Tm	< 0.000530						
O	Cr	< 0.001800	O	Li	< 0.000120	M	Rh	< 0.000530	M	U	< 0.000530						
M	Cs	< 0.005300	M	Lu	< 0.000530	M	Ru	< 0.000520	M	V	< 0.002700						
M	Cu	< 0.001600	O	Mg	0.000154	O	S	0.028205	M	W	< 0.012000						
M	Dy	< 0.000530	O	Mn	0.000154	M	Sb	< 0.000530	M	Y	< 0.000530						
M	Er	< 0.000530	M	Mo	< 0.000530	O	Sc	< 0.001700	M	Yb	< 0.000530						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphic form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37Cl,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBA10
Lot Number:	R2-BA692576
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Barium
Starting Material:	Barium Nitrate
Starting Material Lot#:	1969
Starting Material Purity:	99.9982%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10018 ± 50 µg/mL** ICP Assay NIST SRM 3104a Lot Number: 140909
Assay Method #2	**10023 ± 31 µg/mL** Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #3	**10023 ± 30 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000410	O	Eu	<	0.005200	O	Na		0.004610	M	Se	<	0.003700	O	Zn		0.000658
M	Al	<	0.003100	O	Fe		0.015707	M	Nb	<	0.000210	O	Si		0.005573	M	Zr	<	0.001300
M	As	<	0.001300	M	Ga	<	0.000210	M	Nd	<	0.000210	O	Sm	<	0.021000				
M	Au	<	0.001300	M	Gd	<	0.000210	M	Ni	<	0.000810	M	Sn	<	0.000410				
O	B	<	0.005200	M	Ge	<	0.002500	M	Os	<	0.000410	O	Sr		0.003850				
s	Ba	<		M	Hf	<	0.000810	O	P	<	0.026000	M	Ta	<	0.000410				
O	Be	<	0.000320	M	Hg	<	0.000210	M	Pb	<	0.002300	M	Tb	<	0.000210				
M	Bi	<	0.000210	M	Ho	<	0.000210	M	Pd	<	0.000210	M	Te	<	0.001900				
O	Ca		0.007093	M	In	<	0.000210	M	Pr	<	0.000210	M	Th	<	0.000210				
M	Cd	<	0.000210	M	Ir	<	0.000210	M	Pt	<	0.000210	M	Ti	<	0.002100				
M	Ce	<	0.001300	O	K		0.035467	M	Rb	<	0.002100	M	Tl	<	0.000210				
M	Co	<	0.000410	O	La	<	0.005200	M	Re	<	0.000210	M	Tm	<	0.000410				
M	Cr	<	0.001700	O	Li	<	0.000630	M	Rh	<	0.000210	M	U	<	0.000210				
M	Cs	<	0.003300	M	Lu	<	0.001700	M	Ru	<	0.000210	O	V	<	0.005200				
M	Cu	<	0.001300	O	Mg		0.000861	O	S		0.268539	M	W	<	0.000410				
M	Dy	<	0.000210	M	Mn	<	0.000410	M	Sb	<	0.001300	O	Y	<	0.005200				
M	Er	<	0.001300	M	Mo	<	0.000410	M	Sc	<	0.000410	M	Yb	<	0.001300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33 +2 6 $Ba(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO_3 / LDPE container.

Ba Containing Samples (Preparation and Solution) -Metal(is best dissolved in diluted HNO_3); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent $BaSO_4$ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 138 amu	1 ppt	N/A	122Sn16O, 122Te16O
ICP-OES 230.424 nm	0.004/0.0005 µg/mL	1	Mo, Ir, Co
ICP-OES 233.527 nm	0.004/0.0003 µg/mL	1	
ICP-OES 455.403 nm	0.002/0.0001 µg/mL	1	Zr, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 11, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBE10
Lot Number:	R2-BE692992
Matrix:	6% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Beryllium
Starting Material:	Beryllium Acetate
Starting Material Lot#:	2281
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10032 ± 41 µg/mL

Density: 1.128 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10042 ± 67 µg/mL**
ICP Assay NIST SRM 3105a Lot Number: 090514

Assay Method #2 **10025 ± 51 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001100	M	Eu	<	0.000270	O	Na		0.040962	M	Se	<	0.005000	M	Zn		0.013054
O	Al		0.016205	O	Fe		0.015754	M	Nb	<	0.000270	O	Si		0.024307	O	Zr	<	0.001900
M	As	<	0.002900	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270				
M	Au	<	0.000520	M	Gd	<	0.000270	M	Ni	<	0.003700	M	Sn	<	0.000790				
M	B	<	0.091000	M	Ge	<	0.000270	M	Os	<	0.000260	M	Sr		0.000630				
M	Ba		0.002700	M	Hf	<	0.000270	O	P	<	0.066000	M	Ta	<	0.000270				
s	Be	<		M	Hg	<	0.000520	M	Pb	<	0.000270	M	Tb	<	0.000270				
M	Bi	<	0.000530	M	Ho	<	0.000270	M	Pd	<	0.000520	M	Te	<	0.003700				
O	Ca		0.072022	M	In	<	0.000790	M	Pr	<	0.000270	M	Th	<	0.000270				
M	Cd	<	0.000790	M	Ir	<	0.000260	M	Pt	<	0.000270	O	Ti	<	0.000400				
M	Ce	<	0.000270	O	K		0.045014	M	Rb	<	0.000270	M	Tl	<	0.000790				
O	Co	<	0.003200	M	La	<	0.000270	M	Re	<	0.000270	M	Tm	<	0.000270				
O	Cr	<	0.001800	O	Li	<	0.000660	M	Rh	<	0.001100	M	U	<	0.000270				
M	Cs		0.001440	M	Lu	<	0.000270	M	Ru	<	0.000260	M	V	<	0.000790				
M	Cu	<	0.002100	O	Mg		0.016205	i	S	<		M	W	<	0.000530				
M	Dy	<	0.000270	M	Mn		0.001215	M	Sb	<	0.000270	M	Y	<	0.000270				
M	Er	<	0.000270	M	Mo	<	0.000530	O	Sc	<	0.000930	M	Yb	<	0.000270				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 9.01 +2 4 $Be(H_2O)_4^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, H_2SO_4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1 % HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 5-10 % HNO_3 / LDPE container.

Be Containing Samples (Preparation and Solution) - Meta l(is best dissolved in diluted H_2SO_4); BeO (boiling nitric, hydrochloric, or sulfuric acids or KHSO4 fusion); Ores (H_2SO_4/HF digestion or carbonate fusion in Pt0); Organic Matrices (sulfuric/peroxide digestion or nitric/sulfuric/perchloric acid decomposition, or dry ash and dissolution according to the BeO procedure above).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 9 amu	4 ppt	N/A	
ICP-OES 234.861 nm	0.0003/0.00016 µg/mL	1	Fe, Ta, Mo
ICP-OES 313.042 nm	0.0003/0.00009 µg/mL	1	V, Ce, U
ICP-OES 313.107 nm	0.0007/0.0005 µg/mL	1	Ce, Th, Tm

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

11.1 Certification Issue Date

May 13, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 13, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.4 Revision Status

- Revision 1 - Revised on Thursday, Jan 14, 2021 by utruong. Revision was made for the following reason: Modified Section 7 Chemical Form in Solution.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCO10
Lot Number:	R2-CO695285
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cobalt
Starting Material:	Co Metal
Starting Material Lot#:	2326
Starting Material Purity:	99.9934%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10012 ± 31 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10031 ± 67 µg/mL**
ICP Assay NIST SRM 3113 Lot Number: 190630

Assay Method #2 **10019 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10000 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	0.014660	M	Eu	<	0.000590	O	Na	0.007534	M	Se	<	0.019000	M	Zn	0.003461	
M	Al	< 0.024000	M	Fe	0.050905	M	Nb	<	0.000590	O	Si	0.075340	M	Zr	<	0.001200	
i	As	<	M	Ga	<	0.000590	M	Nd	<	0.000590	M	Sm	<	0.000590			
M	Au	< 0.004100	M	Gd	<	0.000590	O	Ni	0.427608	M	Sn	<	0.001200				
M	B	< 0.031000	M	Ge	<	0.003000	M	Os	<	0.000590	O	Sr	<	0.000260			
M	Ba	< 0.000590	M	Hf	<	0.000590	n	P	<		M	Ta	<	0.001200			
O	Be	< 0.001300	M	Hg	<	0.001800	M	Pb	0.003257	M	Tb	<	0.000590				
M	Bi	< 0.003000	M	Ho	<	0.000590	M	Pd	<	0.000590	M	Te	<	0.005300			
O	Ca	0.010588	M	In	<	0.001200	M	Pr	<	0.000590	M	Th	<	0.000590			
M	Cd	< 0.004700	M	Ir	<	0.001200	M	Pt	<	0.002400	M	Ti	<	0.014000			
M	Ce	< 0.000590	O	K	0.008144	M	Rb	<	0.000590	M	Tl	0.002647					
s	Co	<	M	La	<	0.000590	M	Re	<	0.000590	M	Tm	<	0.000590			
M	Cr	< 0.021000	O	Li	<	0.000130	M	Rh	<	0.000590	M	U	<	0.000590			
M	Cs	< 0.002400	M	Lu	<	0.000590	M	Ru	<	0.007100	O	V	<	0.000880			
M	Cu	0.189369	O	Mg	0.001893	n	S	<		M	W	<	0.000590				
M	Dy	< 0.000590	M	Mn	<	0.001800	M	Sb	<	0.003600	M	Y	<	0.000590			
M	Er	< 0.000590	M	Mo	<	0.002400	O	Sc	<	0.001600	M	Yb	<	0.000590			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.93 +2 6 $Co(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Co Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 59 amu	2 ppt	n/a	42Ca16O1H , 40Ar18O1H , 36Ar23Na, 43Ca16O, 24Mg35Cl
ICP-OES 228.616 nm	0.01/0.001 µg/mL	1	
ICP-OES 237.862 nm	0.01/0.002 µg/mL	1	W, Re, Al, Ta
ICP-OES 238.892 nm	0.01/0.002 µg/mL	1	Fe, W, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 04, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAG10
Lot Number:	S2-AG712977
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Silver
Starting Material:	Ag Shot
Starting Material Lot#:	2289
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10051 ± 30 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10051 ± 52 µg/mL**
ICP Assay NIST SRM 3151 Lot Number: 160729

Assay Method #2 **10051 ± 19 µg/mL**
Volhard NIST SRM 999c Lot Number: 999c

Assay Method #3 **10049 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Ag	<		M	Eu	<	0.000260	O	Na		0.003811	M	Se	<	0.003900	O	Zn		0.048146
M	Al		0.002688	O	Fe		0.006419	M	Nb	<	0.000260	O	Si		0.005215	M	Zr	<	0.000260
M	As	<	0.001100	M	Ga	<	0.000260	M	Nd	<	0.000260	M	Sm	<	0.000260				
M	Au	<	0.000260	M	Gd	<	0.000260	O	Ni		0.001765	M	Sn		0.020060				
O	B	<	0.004300	M	Ge	<	0.002300	M	Os	<	0.001100	O	Sr	<	0.000110				
M	Ba	<	0.000520	M	Hf	<	0.000260	O	P	<	0.017000	M	Ta	<	0.000260				
O	Be	<	0.001100	M	Hg	<	0.000770	M	Pb	<	0.003600	M	Tb	<	0.000260				
M	Bi		0.004814	M	Ho	<	0.000260	M	Pd		0.044134	M	Te	<	0.009000				
O	Ca		0.005215	M	In		0.003691	M	Pr	<	0.000260	M	Th	<	0.000260				
M	Cd	<	0.000260	M	Ir	<	0.000520	M	Pt	<	0.001100	O	Ti	<	0.000440				
M	Ce	<	0.002100	O	K	<	0.008700	M	Rb	<	0.001100	M	Tl	<	0.004100				
O	Co	<	0.000330	M	La	<	0.000260	M	Re	<	0.000260	M	Tm	<	0.000260				
O	Cr	<	0.002500	O	Li	<	0.000110	M	Rh	<	0.000520	M	U	<	0.000260				
M	Cs	<	0.002600	M	Lu	<	0.000260	M	Ru	<	0.000260	M	V	<	0.000260				
O	Cu		0.357085	O	Mg		0.001203	O	S	<	0.017000	M	W	<	0.000260				
M	Dy	<	0.000260	O	Mn	<	0.000220	M	Sb	<	0.014000	M	Y	<	0.000260				
M	Er	<	0.000260	M	Mo	<	0.000260	O	Sc	<	0.000220	M	Yb	<	0.000260				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 $Ag(H_2O)_6^+$

Chemical Compatibility -Stable in HNO_3, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [$AgCl_{x1-x}$] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite , bromide, chloride, iodide, carbonate , chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.

Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Ag Containing Samples (Preparation and Solution) -Metal (Soluble in HNO_3); Oxides (Soluble in HNO_3); Ores (Digestion with conc. HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCR(3)10
Lot Number:	S2-CR709784
Matrix:	10% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Chromium
Starting Material:	Cr Metal
Starting Material Lot#:	2328
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10027 ± 41 µg/mL

Density: 1.072 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10027 ± 40 µg/mL**
ICP Assay NIST SRM 3112a Lot Number: 170630

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001700	M	Eu	<	0.003400	O	Na		0.090372	M	Se	<	0.012000	O	Zn	<	0.006100
M	Al		0.034916	O	Fe		0.246471	M	Nb	<	0.017000	n	Si	<		M	Zr	<	0.007800
M	As	<	0.028000	O	Ga	<	0.013000	M	Nd	<	0.013000	M	Sm	<	0.006900				
M	Au	<	0.001700	M	Gd	<	0.000560	M	Ni		0.016020	M	Sn		0.006983				
O	B	<	0.025000	O	Ge	<	0.014000	M	Os	<	0.000560	M	Sr		0.006367				
M	Ba	<	0.008900	M	Hf	<	0.000560	i	P	<		M	Ta	<	0.000560				
M	Be	<	0.013000	M	Hg	<	0.001700	M	Pb		0.010064	M	Tb	<	0.000560				
M	Bi	<	0.002300	M	Ho	<	0.000560	M	Pd	<	0.021000	M	Te	<	0.010000				
O	Ca		0.075995	M	In	<	0.000560	M	Pr	<	0.001700	M	Th	<	0.000560				
M	Cd	<	0.000560	M	Ir	<	0.000560	M	Pt	<	0.001200	O	Ti		0.013555				
M	Ce	<	0.001200	O	K		0.043132	i	Rb	<		M	Tl	<	0.000560				
M	Co	<	0.002600	M	La	<	0.001200	M	Re	<	0.001200	O	Tm	<	0.013000				
s	Cr	<		O	Li		0.000390	M	Rh	<	0.095000	M	U	<	0.000560				
M	Cs	<	0.007800	M	Lu	<	0.000560	M	Ru	<	0.087000	O	V		0.014993				
O	Cu		0.007599	O	Mg		0.000883	i	S	<		M	W	<	0.049000				
M	Dy	<	0.000560	M	Mn		0.008626	M	Sb	<	0.003400	M	Y	<	0.001700				
M	Er	<	0.019000	M	Mo	<	0.032000	M	Sc		0.003080	M	Yb	<	0.000560				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 52.00 +3 6 $Cr(H_2O)_6^{3+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cr3 Containing Samples (Preparation and Solution) -Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used: A. Fusion with $KHSO_4$ and extraction with hot KCl. The residue fused with Na_2CO_3 and $KClO_3$, 3:1. B. Fusion with $NaKSO_4$ and NaF 2:1, C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1. D. Fusion with Na_2O_2 or NaOH and KNO_3 or NaOH and Na_2O_2. Nickel, iron, copper, or silver crucibles should be used for D. Platinum may be used for A, <, C); Organic Matrices (ash at 4500C followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 52 amu	40 ppt	N/A	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.
ICP-OES 205.552 nm	0.006/0.0008 µg/mL	1	Os
ICP-OES 276.654 nm	0.01/0.001 µg/mL	1	Cu, Ta, V
ICP-OES 284.325 nm	0.008/0.0007 µg/mL	1	

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNI10
Lot Number:	P2-NI686384
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Nickel
Starting Material:	Ni Metal
Starting Material Lot#:	2277 and 2282
Starting Material Purity:	99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9979 ± 30 µg/mL

Density: 1.038 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9971 ± 54 µg/mL**
ICP Assay NIST SRM 3136 Lot Number: 120619

Assay Method #2 **9970 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **9993 ± 33 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.002606	M	Eu	<	0.001100	O	Na		0.004965	O	Se	<	0.067000	M	Zn		0.006578
M	Al	<	0.013000	O	Fe		0.018618	M	Nb	<	0.001100	O	Si		0.010923	M	Zr	<	0.001100
O	As	<	0.067000	M	Ga	<	0.001100	M	Nd	<	0.001100	M	Sm	<	0.001100				
M	Au	<	0.002100	M	Gd	<	0.001100	s	Ni	<		M	Sn	<	0.016000				
M	B	<	0.017000	M	Ge	<	0.004200	M	Os		0.002110	O	Sr	<	0.000940				
M	Ba	<	0.001100	M	Hf	<	0.001100	i	P	<		M	Ta	<	0.001100				
O	Be	<	0.000410	M	Hg		0.014895	M	Pb		0.006578	M	Tb	<	0.001100				
M	Bi	<	0.004200	M	Ho	<	0.001100	M	Pd	<	0.001100	M	Te	<	0.015000				
O	Ca		0.003351	M	In	<	0.001100	M	Pr	<	0.001100	M	Th	<	0.001100				
M	Cd		0.001365	M	Ir		0.004716	M	Pt	<	0.001100	M	Ti	<	0.004200				
M	Ce	<	0.001100	O	K		0.004716	M	Rb	<	0.001100	M	Tl	<	0.001100				
O	Co		0.017377	M	La	<	0.001100	M	Re		0.001737	M	Tm	<	0.001100				
O	Cr	<	0.006700	O	Li	<	0.000140	M	Rh	<	0.006300	M	U	<	0.001100				
M	Cs	<	0.007300	M	Lu	<	0.001100	M	Ru	<	0.019000	M	V	<	0.002100				
M	Cu		0.004096	O	Mg		0.000372	i	S	<		M	W	<	0.006300				
M	Dy	<	0.001100	O	Mn	<	0.001900	M	Sb		0.005833	O	Y	<	0.000540				
M	Er	<	0.001100	M	Mo	<	0.008400	M	Sc	<	0.002100	M	Yb	<	0.001100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69 +2 6 Ni(H2O)62+
Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Ni Containing Samples (Preparation and Solution) -Metal (Soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 60 amu	100 ppt	n/a	43Ca16O1H , 44Ca16O, 23Na37Cl
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	Si
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	Sb, Ta, Co
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	Cr, Re, Os, Nb, Ag, Pt, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 02, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 02, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGV10
Lot Number:	S2-V711005
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Vanadium
Starting Material:	Vanadium Pentoxide
Starting Material Lot#:	1782
Starting Material Purity:	99.9877%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10014 ± 30 µg/mL

Density: 1.104 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10017 ± 42 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **10013 ± 30 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000110	M	Eu	<	0.000110	O	Na		0.120000	M	Se	<	0.009400	M	Zn	0.009400
O	Al		0.120000	O	Fe		0.460000	M	Nb	<	0.001300	O	Si		0.270000	M	Zr	< 0.002900
M	As	<	0.000210	M	Ga	<	0.009300	M	Nd	<	0.000610	M	Sm	<	0.000110			
M	Au	<	0.004700	M	Gd	<	0.000110	M	Ni		0.012000	M	Sn		0.003900			
M	B		0.051000	M	Ge	<	0.000410	M	Os	<	0.000110	O	Sr		0.007100			
M	Ba		0.003600	M	Hf	<	0.000110	O	P	<	0.034000	M	Ta	<	0.000110			
O	Be	<	0.000560	M	Hg	<	0.000410	M	Pb		0.001400	M	Tb	<	0.000110			
M	Bi	<	0.000210	M	Ho	<	0.000110	M	Pd	<	0.000410	M	Te	<	0.000110			
O	Ca		0.730000	M	In	<	0.000110	M	Pr	<	0.000110	M	Th	<	0.000210			
M	Cd	<	0.000610	M	Ir	<	0.000110	M	Pt	<	0.000110	M	Ti		0.017000			
M	Ce	<	0.000610	M	K		0.052000	M	Rb	<	0.000310	M	Tl	<	0.000110			
M	Co	<	0.001300	M	La	<	0.000410	M	Re		0.001700	M	Tm	<	0.000110			
O	Cr		0.170000	M	Li	<	0.000810	M	Rh	<	0.000110	M	U	<	0.000410			
M	Cs		0.005600	M	Lu	<	0.000110	M	Ru	<	0.000110	s	V	<				
M	Cu	<	0.001300	M	Mg		0.053000	i	S	<		M	W		0.002000			
M	Dy	<	0.000110	M	Mn		0.007900	M	Sb		0.078000	M	Y	<	0.000110			
M	Er	<	0.000110	M	Mo		0.094000	M	Sc	<	0.000410	M	Yb	<	0.000110			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 H2V10O284-

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4, HF, H3PO4 and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in Ni0 or Na2CO3 / KNO3); Oxides (V2O3 - use HCl, V2O4 - use HCl or HNO3, V2O5 - use concentrated acids); Ores (Na2CO3 / KNO3 in Pt0 caution - nitrates attack Pto followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V2O5 above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

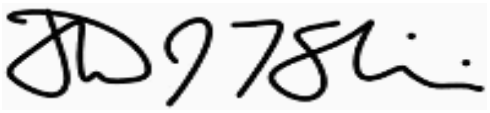
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAL10
Lot Number:	T2-AL716102
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Aluminum
Starting Material:	Aluminum Nitrate Nonahydrate
Starting Material Lot#:	2460
Starting Material Purity:	99.9938%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10049 ± 31 µg/mL

Density: 1.087 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10059 ± 40 µg/mL**
ICP Assay NIST SRM 3101a Lot Number: 140903

Assay Method #2 **10044 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10049 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002100	M	Eu	<	0.002100	O	Na		0.352819	M	Se	<	0.005200	M	Zn	0.006018
s	Al	<		O	Fe		0.074714	M	Nb	<	0.000520	O	Si		0.017848	O	Zr	0.004358
M	As		0.008716	O	Ga		0.112072	M	Nd	<	0.000520	M	Sm	<	0.000520			
M	Au	<	0.008400	M	Gd	<	0.001100	O	Ni	<	0.006000	M	Sn		0.000747			
O	B	<	0.014000	M	Ge	<	0.005200	M	Os	<	0.000650	O	Sr		0.000518			
O	Ba		0.012867	M	Hf	<	0.004100	n	P	<		M	Ta	<	0.000520			
O	Be	<	0.000270	M	Hg	<	0.002000	M	Pb		0.002282	M	Tb	<	0.000520			
M	Bi		0.001930	M	Ho	<	0.000520	M	Pd	<	0.000520	M	Te	<	0.001100			
O	Ca		0.076790	M	In	<	0.002100	M	Pr	<	0.000520	M	Th	<	0.000520			
M	Cd	<	0.000520	M	Ir	<	0.000650	M	Pt	<	0.000520	O	Ti		0.001930			
M	Ce	<	0.001100	O	K		0.043583	M	Rb	<	0.000520	M	Tl	<	0.000520			
O	Co	<	0.005400	M	La	<	0.002100	M	Re	<	0.000520	M	Tm	<	0.000520			
O	Cr		0.006018	O	Li		0.000112	M	Rh	<	0.000520	M	U	<	0.000520			
M	Cs		0.000643	M	Lu	<	0.000520	M	Ru	<	0.002000	M	V		0.001286			
O	Cu	<	0.008300	O	Mg		0.068488	i	S	<		M	W	<	0.009800			
M	Dy	<	0.002100	O	Mn		0.000913	M	Sb	<	0.003100	M	Y	<	0.001100			
M	Er	<	0.000520	M	Mo		0.005396	O	Sc	<	0.000950	M	Yb	<	0.000520			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H2O)6+3
Chemical Compatibility -Soluble in HCl, HNO3, v F and v 2SO4. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)4(H2O)21- species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); a- Al2O3 (Na2CO3 fusion in Pt0);
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 22, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

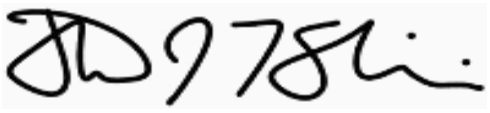
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGK10
Lot Number:	S2-K711973
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Potassium
Starting Material:	KNO3
Starting Material Lot#:	2313
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.024 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9987 ± 24 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **10004 ± 84 µg/mL**
ICP Assay NIST SRM 3141a Lot Number: 140813

Assay Method #3 **10007 ± 45 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001400	M	Eu	<	0.000660	O	Na		0.246220	M	Se	<	0.007900	O	Zn		0.018056
O	Al		0.001592	O	Fe		0.005909	M	Nb	<	0.000660	O	Si		0.011490	O	Zr	<	0.001600
M	As	<	0.005300	M	Ga	<	0.000660	M	Nd	<	0.000660	M	Sm	<	0.000660				
M	Au	<	0.002000	M	Gd	<	0.000660	O	Ni	<	0.004900	M	Sn	<	0.000660				
O	B	<	0.005600	M	Ge	<	0.002000	M	Os	<	0.003300	O	Sr		0.000055				
O	Ba	<	0.000860	M	Hf	<	0.000660	O	P	<	0.032000	M	Ta	<	0.000660				
O	Be	<	0.000082	M	Hg	<	0.002000	M	Pb	<	0.002300	M	Tb	<	0.000660				
M	Bi	<	0.006600	M	Ho	<	0.000660	M	Pd	<	0.000660	M	Te	<	0.017000				
O	Ca		0.031187	M	In	<	0.000660	M	Pr	<	0.000660	M	Th	<	0.000660				
O	Cd	<	0.000450	M	Ir	<	0.000660	M	Pt	<	0.002700	M	Ti	<	0.000660				
M	Ce	<	0.000660	s	K	<		M	Rb		0.476026	M	Tl	<	0.000660				
O	Co	<	0.000780	M	La	<	0.000660	M	Re	<	0.000660	M	Tm	<	0.000660				
O	Cr		0.000541	O	Li	<	0.000084	M	Rh	<	0.000660	M	U	<	0.000660				
M	Cs	<	0.000660	M	Lu	<	0.000660	M	Ru	<	0.000660	O	V	<	0.001100				
M	Cu	<	0.002700	O	Mg		0.006237	O	S		0.027905	M	W	<	0.000660				
M	Dy	<	0.000660	O	Mn		0.000476	M	Sb	<	0.000660	M	Y	<	0.000660				
M	Er	<	0.000660	M	Mo	<	0.000660	O	Sc	<	0.000340	O	Yb	<	0.000270				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.10 +1 (6) K+(aq)
Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Avoid use of HClO4 due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO4-.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 39 amu	10 ppt	n/a	38ArH, 23Na16O, 78Se
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	U, Ce
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 10, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 10, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

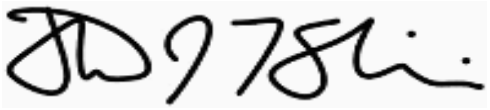
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

300 Technology Drive
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMG10
Lot Number:	S2-MG704239
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Magnesium
Starting Material:	Magnesium Metal
Starting Material Lot#:	2168
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10053 ± 30 µg/mL

Density: 1.053 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10022 ± 62 µg/mL**
ICP Assay NIST SRM 3131a Lot Number: 140110

Assay Method #2 **10078 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10033 ± 26 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.002106	M	Eu	<	0.000910	O	Na		0.071075	O	Se	<	0.048000	O	Zn		0.003299
M	Al		0.003553	M	Fe		0.002538	M	Nb	<	0.000460	O	Si	<	0.032000	O	Zr	<	0.002700
M	As	<	0.001400	M	Ga	<	0.000460	M	Nd	<	0.000910	M	Sm	<	0.000460				
M	Au	<	0.001400	M	Gd	<	0.000460	O	Ni	<	0.001600	M	Sn	<	0.002300				
O	B		0.006853	M	Ge	<	0.001400	M	Os	<	0.000460	O	Sr		0.000279				
O	Ba		0.000964	M	Hf	<	0.000460	O	P		0.015230	M	Ta	<	0.000460				
O	Be	<	0.000120	M	Hg	<	0.000460	M	Pb	<	0.000460	M	Tb	<	0.000460				
M	Bi	<	0.000460	M	Ho	<	0.000460	M	Pd	<	0.003200	M	Te	<	0.007300				
O	Ca		0.053306	M	In	<	0.000460	M	Pr	<	0.000460	M	Th	<	0.000460				
O	Cd	<	0.000360	M	Ir	<	0.000460	M	Pt	<	0.001900	O	Ti	<	0.001700				
M	Ce	<	0.002300	M	K		0.048229	M	Rb		0.002411	M	Tl		0.003046				
M	Co	<	0.000910	M	La	<	0.002800	M	Re	<	0.000460	M	Tm	<	0.000460				
M	Cr	<	0.002300	O	Li		0.027922	M	Rh	<	0.000460	M	U	<	0.000460				
M	Cs		0.001040	M	Lu	<	0.000460	M	Ru	<	0.000460	M	V	<	0.000460				
O	Cu	<	0.003000	s	Mg	<		O	S	<	0.190000	M	W	<	0.000460				
M	Dy	<	0.000460	O	Mn		0.015230	M	Sb		0.020814	O	Y	<	0.000720				
M	Er	<	0.000460	M	Mo	<	0.000910	O	Sc	<	0.000480	M	Yb	<	0.000460				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.31 +2 6 $Mg(H_2O)_6^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, and H_2SO_4 avoid HF, H_3PO_4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO_3 / LDPE container.

Mg Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 24 amu	42 ppt	n/a	7Li17O, 48Ti+2 , 48Ca+2
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	U, Hf, Cr, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 23, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 23, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCA10
Lot Number:	T2-CA716103
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Calcium
Starting Material:	CaCO3
Starting Material Lot#:	2472
Starting Material Purity:	99.9950%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10005 ± 30 µg/mL

Density: 1.039 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10005 ± 45 µg/mL**
ICP Assay NIST SRM 3109a Lot Number: 130213

Assay Method #2 **10005 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10005 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001200	M	Eu	<	0.001200	O	Na		0.006112	M	Se	<	0.024000	M	Zn		0.005362
M	Al		0.065419	O	Fe		0.009115	M	Nb	<	0.001200	O	Si		0.139417	O	Zr	<	0.006700
O	As	<	0.013000	M	Ga	<	0.015000	M	Nd	<	0.020000	M	Sm	<	0.001200				
M	Au	<	0.017000	M	Gd	<	0.004800	O	Ni		0.000793	M	Sn	<	0.003600				
O	B		0.001179	M	Ge	<	0.003600	M	Os	<	0.001200	M	Sr		0.081505				
O	Ba		0.002788	M	Hf	<	0.001200	O	P	<	0.041000	M	Ta	<	0.001200				
O	Be	<	0.000410	M	Hg	<	0.004800	M	Pb		0.001608	M	Tb	<	0.001200				
M	Bi		0.001608	M	Ho	<	0.001200	M	Pd	<	0.001200	M	Te	<	0.003600				
s	Ca	<		M	In	<	0.001200	M	Pr		0.000257	M	Th	<	0.001200				
O	Cd	<	0.001300	M	Ir	<	0.001200	M	Pt	<	0.003600	O	Ti	<	0.001900				
M	Ce		0.001029	O	K		0.009759	M	Rb	<	0.001200	M	Tl	<	0.001200				
O	Co		0.000418	M	La		0.001823	M	Re	<	0.001200	M	Tm	<	0.001200				
O	Cr		0.003324	O	Li	<	0.007300	M	Rh	<	0.001200	M	U		0.002144				
M	Cs		0.007399	M	Lu		0.000128	M	Ru	<	0.001200	M	V		0.001286				
O	Cu	<	0.011000	M	Mg		1.286934	O	S		0.055767	O	W	<	0.024000				
M	Dy	<	0.002400	O	Mn		0.004611	M	Sb	<	0.009600	O	Y		0.000536				
M	Er	<	0.002400	M	Mo		0.003539	O	Sc	<	0.001400	M	Yb	<	0.001200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.08 +2 6 Ca(H2O)6+2
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H2SO4, vF, v3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Ca Containing Samples)Preparation and Solution) -Metal (best dissolved in diluted HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO2). The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO3. The sulfates (gypsum, anhydrite, etc.), certain silicates, and complex compounds require fusion with Na2CO3 followed by HCl / water dissolution. Note that contamination is a very real problem when analyzing for trace levels.
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 44 amu	1200 ppt	n/a	16O212C, 28Si16O, 88Sr
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	Ge

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 14, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 14, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

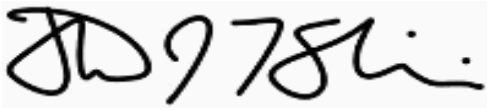
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNA10
Lot Number:	T2-NA717221
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Sodium
Starting Material:	Na2CO3
Starting Material Lot#:	2358 and 2453
Starting Material Purity:	99.9977%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9977 ± 30 µg/mL

Density: 1.033 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9974 ± 18 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **9977 ± 34 µg/mL**
ICP Assay NIST SRM 3152a Lot Number: 200413

Assay Method #3 **9987 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000930	M	Eu	<	0.000930	s	Na	<		M	Se	<	0.003800	O	Zn	0.000138
M	Al		0.004409	O	Fe		0.002393	M	Nb	<	0.000930	O	Si		0.056696	O	Zr	< 0.003200
O	As	<	0.023000	M	Ga	<	0.000930	M	Nd	<	0.000930	M	Sm	<	0.000930			
O	Au	<	0.004100	M	Gd	<	0.000930	O	Ni	<	0.003000	M	Sn	<	0.002800			
O	B		0.001385	M	Ge	<	0.004700	M	Os	<	0.000930	O	Sr		0.000251			
M	Ba		0.004031	M	Hf	<	0.000930	O	P		0.010205	M	Ta	<	0.000930			
O	Be	<	0.000130	M	Hg	<	0.000930	M	Pb	<	0.000930	M	Tb	<	0.000930			
M	Bi	<	0.000930	M	Ho	<	0.000930	M	Pd	<	0.000930	M	Te	<	0.001900			
O	Ca		0.176388	M	In	<	0.000930	M	Pr	<	0.000930	M	Th		0.000352			
O	Cd	<	0.000860	M	Ir	<	0.000930	M	Pt	<	0.000930	O	Ti		0.000592			
M	Ce	<	0.001900	O	K		0.302380	M	Rb	<	0.000930	M	Tl	<	0.000930			
O	Co	<	0.001800	O	La	<	0.002100	M	Re	<	0.000930	M	Tm	<	0.000930			
M	Cr	<	0.002800	O	Li		0.000031	M	Rh	<	0.000930	M	U	<	0.000930			
M	Cs	<	0.000930	M	Lu	<	0.000930	M	Ru	<	0.001900	O	V	<	0.001600			
O	Cu	<	0.003900	O	Mg		0.026458	O	S		0.040317	O	W	<	0.028000			
M	Dy	<	0.000930	O	Mn	<	0.000740	M	Sb	<	0.000930	O	Y	<	0.000860			
M	Er	<	0.000930	O	Mo	<	0.003600	O	Sc	<	0.000610	O	Yb	<	0.000250			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 20, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 20, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

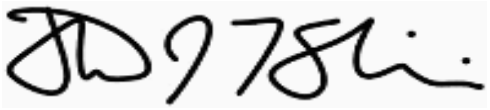
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGU1
Lot Number:	S2-U707914
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Uranium
Starting Material:	Uranyl Nitrate Hexahydrate
Starting Material Lot#:	P2-2322
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 5 µg/mL

Density: 1.010 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3164 Lot Number: 080521

Assay Method #2 **1001 ± 6 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000270	M	Eu	<	0.000270	M	Na	<	0.011000	M	Se	<	0.009300	M	Zn	0.002358
M	Al	<	0.011000	M	Fe		0.003222	M	Nb	<	0.000270	M	Si	<	0.160000	M	Zr	< 0.001100
M	As	<	0.002400	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270			
M	Au	<	0.000270	M	Gd	<	0.000270	M	Ni	<	0.020000	M	Sn	<	0.011000			
M	B	<	0.000270	M	Ge	<	0.000800	M	Os	<	0.001900	M	Sr	<	0.000270			
M	Ba	<	0.003800	M	Hf	<	0.000270	i	P	<		M	Ta	<	0.000270			
M	Be	<	0.000270	M	Hg	<	0.000540	M	Pb	<	0.002200	M	Tb	<	0.000270			
M	Bi	<	0.000270	M	Ho	<	0.000270	M	Pd	<	0.000540	M	Te	<	0.003800			
M	Ca	<	0.140000	M	In	<	0.000270	M	Pr	<	0.000270	M	Th		0.000129			
M	Cd	<	0.000270	M	Ir	<	0.000270	M	Pt	<	0.000270	M	Ti	<	0.002700			
M	Ce	<	0.000540	O	K	<	0.250000	M	Rb	<	0.000800	M	Tl	<	0.000270			
M	Co	<	0.000800	M	La		0.000117	M	Re	<	0.064000	M	Tm	<	0.000270			
M	Cr		0.000943	M	Li	<	0.003000	M	Rh	<	0.000270	s	U	<				
M	Cs		0.000106	M	Lu	<	0.000270	M	Ru	<	0.000540	M	V	<	0.000540			
M	Cu	<	0.001100	M	Mg	<	0.003000	i	S	<		M	W	<	0.000540			
M	Dy	<	0.000270	M	Mn	<	0.006900	M	Sb	<	0.000270	M	Y	<	0.000270			
M	Er	<	0.000270	M	Mo	<	0.006400	M	Sc	<	0.000540	M	Yb	<	0.000270			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 238.03 +6 8 UO22+(uranyl)
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H3PO4. H2SO4 and HF matrices should not be a problem depending upon [U]. Although the UO22+ ion is distinctly basic, any U+4 will precipitate in basic media. UO22+salts are generally soluble in water and UO22+ is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF4 and UF6 are water soluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO3); Oxide (Soluble in HNO3); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO3. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H2SO4.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-2
Lot Number:	T2-MEB719895
Matrix:	3% (v/v) HNO3 tr. HF
Value / Analyte(s):	2.5 µg/mL ea: Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**2.499 ± 0.015 µg/mL**	**Molybdenum, Mo**	**2.500 ± 0.017 µg/mL**

Density: 1.014 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

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10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

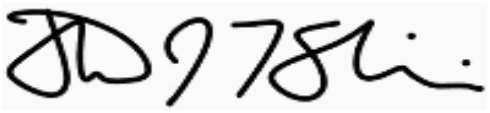
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-3
Lot Number:	T2-MEB719896
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	250 µg/mL ea:

Aluminum, Calcium,
Iron, Potassium,
Magnesium, Sodium,

4 µg/mL ea:
Selenium,

2.5 µg/mL ea:

Thorium,	Thallium,
Uranium,	Vanadium,
Zinc,	Manganese,
Cadmium,	Cobalt,
Chromium,	Copper,
Arsenic,	Barium,
Beryllium,	Nickel,
Lead,	Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250.0 ± 0.9 µg/mL	Arsenic, As	2.500 ± 0.018 µg/mL
Barium, Ba	2.501 ± 0.013 µg/mL	Beryllium, Be	2.501 ± 0.015 µg/mL
Cadmium, Cd	2.501 ± 0.013 µg/mL	Calcium, Ca	250.0 ± 1.3 µg/mL
Chromium, Cr	2.500 ± 0.015 µg/mL	Cobalt, Co	2.500 ± 0.014 µg/mL
Copper, Cu	2.500 ± 0.014 µg/mL	Iron, Fe	250.0 ± 1.0 µg/mL
Lead, Pb	2.500 ± 0.013 µg/mL	Magnesium, Mg	250.0 ± 1.3 µg/mL
Manganese, Mn	2.500 ± 0.014 µg/mL	Nickel, Ni	2.500 ± 0.014 µg/mL
Potassium, K	250.0 ± 1.2 µg/mL	Selenium, Se	4.002 ± 0.024 µg/mL
Silver, Ag	2.501 ± 0.017 µg/mL	Sodium, Na	250.0 ± 1.2 µg/mL
Thallium, Tl	2.500 ± 0.017 µg/mL	Thorium, Th	2.499 ± 0.013 µg/mL
Uranium, U	2.501 ± 0.015 µg/mL	Vanadium, V	2.500 ± 0.014 µg/mL
Zinc, Zn	2.500 ± 0.014 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2

V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

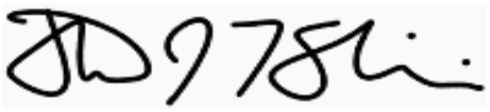
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-6020ICS-0A10
Lot Number:	T2-MEB719898
Matrix:	1.4% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Chloride,
	200 µg/mL ea: Carbon,
	100 µg/mL ea: Calcium, Aluminum, Iron, Potassium, Magnesium, Sodium, Phosphorus, Sulfur,
	2 µg/mL ea: Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**100.0 ± 0.4 µg/mL**	**Calcium, Ca**	**100.0 ± 0.5 µg/mL**
Carbon, C	**200.1 ± 0.5 µg/mL**	**Chloride, Cl**	**1 000 ± 5 µg/mL**
Iron, Fe	**100.0 ± 0.5 µg/mL**	**Magnesium, Mg**	**100.0 ± 0.5 µg/mL**
Molybdenum, Mo	**2.001 ± 0.014 µg/mL**	**Phosphorus, P**	**100.0 ± 0.6 µg/mL**
Potassium, K	**100.0 ± 0.5 µg/mL**	**Sodium, Na**	**100.0 ± 0.5 µg/mL**
Sulfur, S	**100.0 ± 0.5 µg/mL**	**Titanium, Ti**	**2.001 ± 0.015 µg/mL**

Density: 1.009 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 07, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 07, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

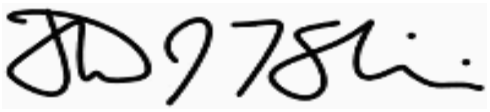
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SC1083

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-02 D	SDG:	23A0249
Sampled:	01/12/23 08:38	Prepared:	04/13/23 15:30	File ID:	XDT_m2230418-067
% Solids:	59.34	Preparation:	SWN EPA 3050B	Analyzed:	04/18/23 19:00
Batch:	BLD0244	Sequence:	SLD0260	Initial/Final:	1.07 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00046

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	9.79	20	0.06	0.31	
7440-43-9	Cadmium	0.46	20	0.05	0.16	
7440-50-8	Copper	39.6	20	0.27	0.79	
7440-66-6	Zinc	78.9	20	4.6	9.4	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SC1018

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-03 D	SDG:	23A0249
Sampled:	01/12/23 10:21	Prepared:	04/13/23 15:30	File ID:	XDT_m2230418-120
% Solids:	49.11	Preparation:	SWN EPA 3050B	Analyzed:	04/18/23 23:32
Batch:	BLD0244	Sequence:	SLD0260	Initial/Final:	1.059 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00046

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	13.0	20	0.07	0.38	
7440-43-9	Cadmium	0.38	20	0.06	0.19	
7440-50-8	Copper	60.1	20	0.33	0.96	
7440-66-6	Zinc	113	20	5.6	11.5	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SC1084

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-04 D	SDG:	23A0249
Sampled:	01/12/23 09:47	Prepared:	04/13/23 15:30	File ID:	XDT_m2230418-121
% Solids:	55.13	Preparation:	SWN EPA 3050B	Analyzed:	04/18/23 23:37
Batch:	BLD0244	Sequence:	SLD0260	Initial/Final:	1.013 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00046

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	10.0	20	0.07	0.36	
7440-43-9	Cadmium	0.37	20	0.05	0.18	
7440-50-8	Copper	50.5	20	0.31	0.90	
7440-66-6	Zinc	98.8	20	5.2	10.7	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SC1025

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-05 D	SDG:	23A0249
Sampled:	01/12/23 11:28	Prepared:	04/13/23 15:30	File ID:	XDT_m2230418-066
% Solids:	59.20	Preparation:	SWN EPA 3050B	Analyzed:	04/18/23 18:55
Batch:	BLD0244	Sequence:	SLD0260	Initial/Final:	1.015 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00046

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	10.6	20	0.06	0.33	
7440-43-9	Cadmium	0.34	20	0.05	0.17	
7440-50-8	Copper	53.3	20	0.29	0.83	
7440-66-6	Zinc	99.4	20	4.9	10.0	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-IT1034

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-07 D	SDG:	23A0249
Sampled:	01/12/23 12:32	Prepared:	04/13/23 15:30	File ID:	XDT_m2230418-077
% Solids:	76.56	Preparation:	SWN EPA 3050B	Analyzed:	04/18/23 20:00
Batch:	BLD0244	Sequence:	SLD0260	Initial/Final:	1.012 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00046

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	11.5	20	0.05	0.26	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SC1024

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-08 D	SDG:	23A0249
Sampled:	01/12/23 13:35	Prepared:	04/13/23 15:30	File ID:	XDT_m2230418-078
% Solids:	50.46	Preparation:	SWN EPA 3050B	Analyzed:	04/18/23 20:04
Batch:	BLD0244	Sequence:	SLD0260	Initial/Final:	1.01 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00046

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	12.2	20	0.07	0.39	
7440-43-9	Cadmium	0.36	20	0.06	0.20	
7440-50-8	Copper	64.8	20	0.34	0.98	
7440-66-6	Zinc	120	20	5.7	11.8	

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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SC1020

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-11 D	SDG:	23A0249
Sampled:	01/12/23 15:23	Prepared:	04/13/23 15:30	File ID:	XDT_m2230418-079
% Solids:	71.92	Preparation:	SWN EPA 3050B	Analyzed:	04/18/23 20:09
Batch:	BLD0244	Sequence:	SLD0260	Initial/Final:	1.045 g Wet / 50 mL
Instrument:	ICPMS2			Calibration:	GD00046

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	3.81	20	0.05	0.27	
7440-43-9	Cadmium	0.06	20	0.04	0.13	J
7440-50-8	Copper	22.6	20	0.23	0.67	
7440-66-6	Zinc	28.2	20	3.9	8.0	

PREPARATION BATCH SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLD0244 Batch Matrix: Solid
Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1083	23A0249-02	XDT_m2230418-067	04/13/23 15:30	
LDW23-SC1018	23A0249-03	XDT_m2230418-120	04/13/23 15:30	
LDW23-SC1084	23A0249-04	XDT_m2230418-121	04/13/23 15:30	
LDW23-SC1025	23A0249-05	XDT_m2230418-066	04/13/23 15:30	
LDW23-IT1034	23A0249-07	XDT_m2230418-077	04/13/23 15:30	
LDW23-SC1024	23A0249-08	XDT_m2230418-078	04/13/23 15:30	
LDW23-SC1020	23A0249-11	XDT_m2230418-079	04/13/23 15:30	
Blank	BLD0244-BLK1	XDT_m2230418-064	04/11/23 15:30	
LCS	BLD0244-BS1	XDT_m2230418-065	04/11/23 15:30	
LDW23-SC1083	BLD0244-DUP1	XDT_m2230418-068	04/11/23 15:30	
LDW23-SC1083	BLD0244-MS1	XDT_m2230418-069	04/11/23 15:30	
LDW23-SC1083	BLD0244-MSD1	XDT_m2230418-070	04/11/23 15:30	

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Digestion Log

Analyst: AP Date: 04113123 Time: 1010-1530 Balance ID: BALIO

Matrix: Soil Block ID: 3 Block Temp: 95°C Thermometer: 20-2

ARI Sample ID	Btl #	pH<2	Prep Code: SWN Initial Wt (g) Vol (mL)	Prep Code: SWN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
23A249-02	D		1.070	50			
-03			1.059				
-04			1.013				
-05			1.015				
-06			1.064				
-07			1.012				
-08			1.010				
-11			1.045				
23A295-01	A		1.041				
-02			1.071				
-03			1.071				
-04	D		1.011				
-05	A		1.041				
-06			1.046				
-07	D		1.046				
-09	A		1.085				
-10			1.027				
BLD244-blk	—		—				23A249-02
-DS	—		—				
-DUP	—		1.074				
-MS	—		1.070				
-MSD	—		1.071				
			MI 04114123				

Chemical/Reagent ID:

HNO_3: L2678 1:1 HNO_3: L3305 HCl: — H_2O_2: K110516 BR ~~K1505~~

Tube Lot#: 221017 Boiling Chip Lot#: — (DoD Only)

5061F
Version 007

11/8/22

Form I

METHOD BLANK DATA SHEET

EPA 6020B UCT-KED

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0249

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

Batch: BLD0244 | Laboratory ID: BLD0244-BLK1 | Prepared: 04/11/23 15:30

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 04/18/23 18:46

Sequence: SLD0260 | Calibration: GD00046 | Instrument: ICPMS2

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic-75a	ND	20	0.04	0.20	U
7440-43-9	Cadmium-111	ND	20	0.03	0.10	U
7440-50-8	Copper-63	ND	20	0.17	0.50	U
7440-66-6	Zinc-66	ND	20	2.9	6.0	U

LCS / LCS DUPLICATE RECOVERY

EPA 6020B UCT-KED

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	04/18/23 18:50
Batch:	BLD0244	Laboratory ID:	BLD0244-BS1
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Arsenic-75a	25.0	23.9		95.5	80 - 120
Cadmium-111	25.0	25.4		101	80 - 120
Copper-63	25.0	25.3		101	80 - 120
Zinc-66	80.0	76.7		95.9	80 - 120

* Indicates values outside of QC limits

DUPLICATES

EPA 6020B UCT-KED

Total Metals

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLD0244-DUP1
Batch: BLD0244
Lab Source ID: 23A0249-02
Preparation: SWN EPA 3050B
Initial/Final: 1.074 g / 50 mL
Source Sample Name: LDW23-SC1083
% Solids: 59.34

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Arsenic-75a	20	9.79	9.44	3.66	
Cadmium-111	20	0.46	0.52	10.9	
Copper-63	20	39.6	38.5	2.91	
Zinc-66	20	78.9	76.5	3.13	

*: Values outside of QC limits
L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD

MS / MS DUPLICATE RECOVERY

EPA 6020B UCT-KED

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	04/18/23 19:09
Batch:	BLD0244	Laboratory ID:	BLD0244-MS1
Preparation:	SWN EPA 3050B	Sequence Name:	Matrix Spike
Initial/Final:	1.07 g / 50 mL	Source Sample:	LDW23-SC1083

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	Q	MS CONCENTRATION (mg/kg dry)	Q	MS % REC. #	QC LIMITS REC.
Arsenic-75a	39.4	9.79		45.4		90.4	75 - 125
Cadmium-111	39.4	0.46		39.0		97.8	75 - 125
Copper-63	39.4	39.6		77.5		96.1	75 - 125
Zinc-66	126	78.9		195		92.3	75 - 125

* Values outside of QC limits

MS / MS DUPLICATE RECOVERY

EPA 6020B UCT-KED

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	04/18/23 19:14
Batch:	BLD0244	Laboratory ID:	BLD0244-MSD1
Preparation:	SWN EPA 3050B	Sequence Name:	Matrix Spike Dup
Initial/Final:	1.071 g / 50 mL	Source Sample:	LDW23-SC1083

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Arsenic-75a	39.3	44.9		89.1	1.21	20	75 - 125
Cadmium-111	39.3	38.4		96.4	1.50	20	75 - 125
Copper-63	39.3	79.0		100	1.90	20	75 - 125
Zinc-66	126	205		101	5.11	20	75 - 125

* Values outside of QC limits

POST DIGEST SPIKE SAMPLE RECOVERY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLD0244-PS1
Batch: BLD0244
Lab Source ID: 23A0249-02
Preparation: SWN EPA 3050B
Initial/Final: 1.07 g / 50 mL
Source Sample Name: LDW23-SC1083
% Solids: 59.34

Analyte	Control Limit %R	Spike Sample Result (SSR) (ug/L)	Sample Result (SR) (ug/L)	Spike Added (SA) (ug/L)	%R
Silver-107	80 - 120	484	0.35	500.00	95.9

* Values outside of QC limits

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00046	Instrument:	ICPMS2
Calibration Date:	04/18/2023 13:13		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Silver-107	0	0	0.2	14190	10	14368.8	20	13863.6	50	13330.32	100	13344.22
Chromium-52	0	0	0.5	61078	10	20799.6	20	19241.25	50	18247.86	100	18317.21
Chromium-53	0	0	0.5	2364	10	2192.7	20	2120.55	50	2014.66	100	2079.33
Lead-208	0	0	0.1	41540	10	39638	20	39002.7	50	37063.36	100	38903.98

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS2
Calibration: GD00046
Calibration Date: 4/18/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Silver-107	11516.16	49.1	0.9999		0.998	
Chromium-52	22947.32	88.1	0.9999		0.998	
Chromium-53	1795.207	49.4	0.9997		0.998	
Lead-208	32691.34	49.2	0.9994		0.998	

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00046	Instrument:	ICPMS2
Calibration Date:	04/18/2023 13:13		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Arsenic-75a	0	0	0.2	255	10	253.6	20	249.2	50	237.92	100	238.59
Cadmium-111	0	0	0.1	290	10	320.2	20	316.1	50	308.08	100	305.7
Cadmium-114	0	0	0.1	740	10	791.6	20	766.5	50	738.88	100	731.84
Copper-63	0	0	0.5	3562	10	3457	20	3451.6	50	3243.34	100	3271.94
Copper-65	0	0	0.5	1818	10	1800.1	20	1731.8	50	1621.52	100	1634.77
Zinc-66	0	0	6	497.5	10	491.5	20	499.75	50	468.54	100	449.18
Zinc-67	0	0	6	77.33334	10	82.4	20	82	50	78	100	76.05

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Instrument: ICPMS2
Calibration: GD00046
Calibration Date: 4/18/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Arsenic-75a	205.7183	49.1	0.9999		0.998	
Cadmium-111	256.68	49.2	0.9999		0.998	
Cadmium-114	628.1367	49.1	0.9999		0.998	
Copper-63	2830.98	49.2	0.9998		0.998	
Copper-65	1434.365	49.3	0.9998		0.998	
Zinc-66	401.0783	49.2	0.9993		0.998	
Zinc-67	65.96389	49.1	0.9997		0.998	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 4/18/23 **Analyst:** SD **Sequence:** SLD0260 **Cal:** GD00046

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CAL1	L3725		
		-CAL2	L3806		
		-CAL3	L3807		
		-CAL4	L3808		
		-CAL5	L3944		
		-CAL6	L3809		
		-IBL1	—		
		-ICV1	L3575		
		-ICB1	L3725		
		-CCV1	L3944		
		-CCB1	L3725		
		-CRL1	L3806		
		-IFA1	L3578		Cr^{53}↑
		-IFB1	L3579		
		-HCV1	L3671		
		-HCV2	L3672		$Pb^{}$↑ & Zn^{67}↓
		-IBL2			
		-CCV2			
		-CCB2			
		BLD0420-BLK1	REN		
		-BS1			
		23D0356-01		S	
		23D0349-01		2	Mn↑-NOT NEEDED
		23D0230-01		↓	

Analytical Resources, Incorporated
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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 4/18/23 **Analyst:** SD **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted. SD 4/18/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23D0230-02	REN	2	SC sl. noisy - %R analytes OK In noisy - NOT NEEDED
		↓ -03	↓	↓	
		↓ -04	↓	↓	
		23D0212-12	↓		
		SEQ-IBL3			
		↓ -ICV3			
		↓ -CCB3			
		BLD0472-BLK1	REN		Pb↑ - Re-run to confirm NO Pb
		↓ -BS1	↓		
		23D0210-01	↓		
		↓ -03	↓		
		↓ -05	↓		
		23D0284-01	↓	2	
		23D0212-01	↓		
		BLD0420-DUP1	↓		Pb RPD↑
		↓ -MS1	↓		Int sl. noisy - %R of analytes OK
		SEQ-IBL4			
		↓ -CCV4			
		↓ -CCB4			
		23D0212-13	REN		
		23D0199-01	↓		
		23D0212-02	↓		
		↓ -03	↓		
		↓ -04	↓		

Analytical Resources, Incorporated
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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 4/18/23 **Analyst:** SD **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted. SD 4/18/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23D0212-05	REN		
		-06			
		-07			
		-08			
		-09			
		SEQ-CCV5			Mn↓
		-CCB5			
		23D0212-10	REN		
		-11	SWN		
		BLD0244-BLK1		20	
		-BS1			
		23A0249-05			Sc↑ NoCr
		-02			
		BLD0244-DUP1			
		-MS1			Ag%R↓
		-MSD1			
		-PS1			
		SEQ-CCV6			Mn↓
		-CCB6			
	✓	-CAL1			
		-CCV7			
		-CCB7			
		23A0249-07	SWN	20	Pb↑-NOT NEEDED ~~No Pb~~
		-08			Sc↑ NoCr

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 4/18/23 **Analyst:** SD **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted. SD 4/18/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23A0249-11	SWN	20	
		23A0295-01			SCT NO Cr
		-02			
		-03			
		-04			
		-05			
		-06			
		-07			
		SEQ-CCV8			
		-CCB8			
		‡BLD0289-BLK1	SWN	20	
		-BS1			In-1 NOISY NO Cd
		23A0295-09			
		-10			
		23A0313-03			SCT - NOT NEEDED ~~NO Cr~~
		23A0328-02			NO Cr
		BLD0289-DUP1			SCT Ge sl. noisy Cu %R↑
		-MS1			
		-MSD1			SCT
		-PS1			
		SEQ-CCV9			
		-CCB9			
		23A0313-04	SWN	20	SCT
		-08			NO Cr

Analytical Resources, Incorporated
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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 4/18/23 **Analyst:** SD **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23A0313-09	SWN	20	SC↑ NoCr
		-10			↓ ↓
		-11			
		-12			
		-13			SC↑ NoCr
		23A0328-03			
		-04			
		-05			
		SEQ-CCVA			Mn↓
		↓ -CCBA			Ges. noisy
		23A0328-06	SWN	20	
		-07			
		-08			
		-09			
		-10			
		-11			
		-12			
		23A0249-03			SC↑ NoCr
		↓ -04			↓ ↓
		BLD0346-PS1	REN	10	Ni/Cr ONLY
		SEQ-CCVB			SC & In sl. noisy, Tb noisy — %R of analytes OK
		↓ -CCBB			
		23C0773-01	REN	10	Cu/Zn ONLY
		↓ -02	↓	↓	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 4/18/23 **Analyst:** SD **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
	✓	23C0775-01	REN	20	Re-run@5X
		23C0620-02	↓		
		↓ -04			
		-01		2	
		↓ -03			
		23C0691-01			
		23C0698-01			
		23C0708-01	↓		
		SEQ-CCVC			Mn↓
		↓ -CCBC			
		RINSE/DI			

SD 4/18/23

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Tuesday, April 18, 2023 12:10:05
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5696
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	4911.6	4903.959	96.791	2.0	Standard
	In	114.9	53687.7	-451405.356	536.504	0.1	Standard
	U	238.1	34595.7	34595.712	454.226	1.3	Standard
⌈	CeO	155.9	886.3	0.016	0.000	1.8	Standard
| >	Ce	139.9	56653.8	56653.810	993.433	1.8	Standard
⌊	Ce++	70.0	993.1	0.018	0.001	3.8	Standard
	Bkgd	220.0	0.4	0.433	0.224	51.6	Standard

Current Conditions File Data

Current Value	Description
1.04	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1750.00	Analog Stage Voltage
1650.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.04	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 4/18/2023 12:09:51 PM
End Time: 4/18/2023 12:16:41 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 4911.58
Obtained Intensity (In 115): 53687.70
Obtained Intensity (U 238): 34595.71
Obtained Intensity (Bkgd 220): 0.43
Obtained Formula (Ce++ 70 / Ce 140): 0.018 (=993.10 / 56653.81)
Obtained Formula (CeO 156 / Ce 140): 0.016 (=886.29 / 56653.81)
Obtained RSD (Be 9): 0.0197
Obtained RSD (In 115): 0.0012
Obtained RSD (U 238): 0.0131

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.45 mm	0.55 mm	61754.19

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 1.04
Obtained Intensity (In 115): 61843.57
Obtained Formula (CeO 156 / Ce 140): 0.0210 (=1216.05 / 58014.56)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.715)
Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.716)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.711)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.707)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.986; Intercept = -12.09

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 4/18/2023 12:09:51 PM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 1
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 4911.58
		Obtained Intensity (In 115): 53687.70
		Obtained Intensity (U 238): 34595.71
		Obtained Intensity (Bkgd 220): 0.43
		Obtained Formula (Ce++ 70 / Ce 140): 0.018 (=993.10 / 56653.81)
		Obtained Formula (CeO 156 / Ce 140): 0.016 (=886.29 / 56653.81)
		Obtained RSD (Be 9): 0.0197
		Obtained RSD (In 115): 0.0012
		Obtained RSD (U 238): 0.0131

[Passed] Optimum value(s): N/A

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	0.45 mm	0.55 mm	61754.19

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 1.02/1.06/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 61843.57
		Obtained Formula (CeO 156 / Ce 140): 0.0210 (=1216.05 / 58014.56)
[Passed] Optimum value(s): 1.04

Mass Calibration and Resolution
Optimization Settings:
Method: Tuning.mth.
MassCal File: Default.tun
Iterations: 6
Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
Peak height (%) for Res. Opt.: 10

Optimization Results:
Initial Try
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.715)
Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.716)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.711)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.707)
[Passed] Optimum value(s): N/A

QID STD/DRC
Optimization Settings:
Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 0.986; Intercept = -12.09

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-12.5	27763
Mg	24	41	-12.5	32240.3
In	115	41	-9.5	63508.9
Ce	140	41	-7.5	68459.6
Pb	208	41	-7	27566.6
U	238	41	-7	42146.1

End Time: 4/18/2023 12:16:41 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 4/18/2023 12:18:20 PM
End Time: 4/18/2023 12:19:26 PM

QID STD/DRC - Optimum value(s): Correlation Coefficient = 1.000; Intercept = -13.11

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 4/18/2023 12:18:20 PM

QID STD/DRC
Optimization Settings:
Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 1.000; Intercept = -13.11

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-13	26937.4
Mg	24	41	-12.5	31246.1
In	115	41	-9	68724.9
Ce	140	41	-8	66032.3
Pb	208	41	-7	26208
U	238	41	-7	43409.9

End Time: 4/18/2023 12:19:26 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 4/18/2023 12:19:39 PM
End Time: 4/18/2023 12:20:54 PM

KED Mode QID - Optimum value(s): Correlation Coefficient = 1.000; Intercept = -12.37

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 4/18/2023 12:19:39 PM

KED Mode QID
Optimization Settings:
Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 1.000; Intercept = -12.37

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-12.5	19677.5
Mg	24	41	-12.5	19240.9
In	115	41	-9	45099.1
Ce	140	41	-8	55592
Pb	208	41	-6	23695.6
U	238	41	-5	34926.6

End Time: 4/18/2023 12:20:54 PM

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Tuesday, April 18, 2023 12:21:05
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5704
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	6258.8	6258.838	145.288	2.3	Standard
	In	114.9	64566.7	64566.719	409.414	0.6	Standard
	U	238.1	42620.0	42619.952	360.807	0.8	Standard
⌈	CeO	155.9	1407.3	0.020	0.000	2.1	Standard
| >	Ce	139.9	69560.5	69560.550	518.658	0.7	Standard
⌊	Ce++	70.0	1393.9	0.020	0.000	2.4	Standard
	Bkgd	220.0	0.2	0.167	0.167	100.0	Standard

Current Conditions File Data

Current Value	Description
1.04	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1750.00	Analog Stage Voltage
1650.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.04	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 4/18/2023 12:21:04 PM
End Time: 4/18/2023 12:23:10 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 6258.84
Obtained Intensity (In 115): 64566.72
Obtained Intensity (U 238): 42619.95
Obtained Intensity (Bkgd 220): 0.17
Obtained Formula (Ce++ 70 / Ce 140): 0.020 (=1393.87 / 69560.55)
Obtained Formula (CeO 156 / Ce 140): 0.020 (=1407.27 / 69560.55)
Obtained RSD (Be 9): 0.0232
Obtained RSD (In 115): 0.0063
Obtained RSD (U 238): 0.0085

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 4/18/2023 12:21:04 PM

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 1
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 6258.84
Obtained Intensity (In 115): 64566.72
Obtained Intensity (U 238): 42619.95
Obtained Intensity (Bkgd 220): 0.17
Obtained Formula (Ce++ 70 / Ce 140): 0.020 (=1393.87 / 69560.55)
Obtained Formula (CeO 156 / Ce 140): 0.020 (=1407.27 / 69560.55)
Obtained RSD (Be 9): 0.0232
Obtained RSD (In 115): 0.0063
Obtained RSD (U 238): 0.0085

[Passed] Optimum value(s): N/A

End Time: 4/18/2023 12:23:10 PM

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 13:13:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	**13**		ug/L				27779	2	Standard
Cl	**37**		ug/L				5686581	1	Standard
Sc	**45**		ug/L				495415	2	Standard
Cr	**52**		ug/L				21583	0	Standard
Cr	**53**		ug/L				156	8	Standard
Mn	**55**		ug/L				712	1	Standard
Ge	**72**		ug/L				32261	0	KED
Ni	**60**		ug/L				6	45	KED
Ni	**62**		ug/L				3	69	KED
Cu	**63**		ug/L				47	38	KED
Cu	**65**		ug/L				19	11	KED
Zn	**66**		ug/L				19	36	KED
Zn	**67**		ug/L				4	49	KED
As	**75**		ug/L				6	38	KED
Se	**78**		ug/L				29	10	KED
Y	**89**		ug/L				269508	1	Standard
Kr	**83**		ug/L				48	8	Standard
In-1	**115**		ug/L				10448	1	KED
Cd	**111**		ug/L				1	132	KED
Cd	**114**		ug/L				1	176	KED
In	**115**		ug/L				386612	1	Standard
Ag	**107**		ug/L				30	10	Standard
Ba	**135**		ug/L				23	44	Standard
Ba	**137**		ug/L				36	24	Standard
Tb	**159**		ug/L				622192	1	Standard
Pb	**208**		ug/L				50	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 13:18:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	28184	2	Standard
	Cl	**37**		ug/L			5686581	5427445	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	500095	1	Standard
|	**Cr**	**52**	**0.500**	ug/L	0.023	4	21583	30539	1	Standard
|	**Cr**	**53**	**0.500**	ug/L	0.016	3	156	1182	1	Standard
⌊	**Mn**	**55**	**0.500**	ug/L	0.014	2	712	13535	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	32565	2	KED
|	**Ni**	**60**	**0.500**	ug/L	0.039	7	6	648	7	KED
|	**Ni**	**62**	**0.500**	ug/L	0.050	10	3	98	10	KED
|	**Cu**	**63**	**0.500**	ug/L	0.012	2	47	1781	0	KED
|	**Cu**	**65**	**0.500**	ug/L	0.021	4	19	909	1	KED
|	**Zn**	**66**	**6.000**	ug/L	0.127	2	19	2985	1	KED
|	**Zn**	**67**	**6.000**	ug/L	0.438	7	4	464	4	KED
|	**As**	**75**	**0.200**	ug/L	0.016	8	6	51	9	KED
⌊	**Se**	**78**	**0.500**	ug/L	0.098	19	29	42	4	KED
	Y	**89**		ug/L			269508	270255	2	Standard
	Kr	**83**		ug/L			48	43	26	Standard
⌈>	**In-1**	**115**		ug/L			10448	10466	3	KED
|	**Cd**	**111**	**0.100**	ug/L	0.021	20	1	29	16	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.017	16	1	74	14	KED
⌈>	**In**	**115**		ug/L			386612	388497	1	Standard
|	**Ag**	**107**	**0.200**	ug/L	0.002	1	30	2838	2	Standard
|	**Ba**	**135**	**0.500**	ug/L	0.017	3	23	2000	1	Standard
⌊	**Ba**	**137**	**0.500**	ug/L	0.016	3	36	3413	2	Standard
⌈>	**Tb**	**159**		ug/L			622192	625791	2	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.002	2	50	4154	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 13:22:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	32778	2	Standard
	Cl	**37**		ug/L			5686581	5602612	3	Standard
⌈>	**Sc**	**45**		ug/L			495415	516873	1	Standard
|	**Cr**	**52**	**10.001**	ug/L	0.144	1	21583	207996	1	Standard
|	**Cr**	**53**	**10.001**	ug/L	0.004	0	156	21927	1	Standard
⌊	**Mn**	**55**	**10.000**	ug/L	0.055	0	712	268923	0	Standard
⌈>	**Ge**	**72**		ug/L			32261	33288	1	KED
|	**Ni**	**60**	**9.998**	ug/L	0.381	3	6	12351	2	KED
|	**Ni**	**62**	**10.000**	ug/L	0.422	4	3	1928	2	KED
|	**Cu**	**63**	**9.999**	ug/L	0.063	0	47	34570	1	KED
|	**Cu**	**65**	**10.000**	ug/L	0.050	0	19	18001	1	KED
|	**Zn**	**66**	**9.915**	ug/L	0.188	1	19	4915	1	KED
|	**Zn**	**67**	**10.117**	ug/L	0.535	5	4	824	3	KED
|	**As**	**75**	**10.000**	ug/L	0.237	2	6	2536	1	KED
⌊	**Se**	**78**	**10.005**	ug/L	0.447	4	29	352	3	KED
	Y	**89**		ug/L			269508	283190	2	Standard
	Kr	**83**		ug/L			48	52	11	Standard
⌈>	**In-1**	**115**		ug/L			10448	10756	2	KED
|	**Cd**	**111**	**10.000**	ug/L	0.260	2	1	3202	0	KED
⌊	**Cd**	**114**	**10.000**	ug/L	0.231	2	1	7916	1	KED
⌈>	**In**	**115**		ug/L			386612	400427	1	Standard
|	**Ag**	**107**	**10.000**	ug/L	0.100	0	30	143688	1	Standard
|	**Ba**	**135**	**9.999**	ug/L	0.116	1	23	39117	0	Standard
⌊	**Ba**	**137**	**10.000**	ug/L	0.172	1	36	70177	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	661126	1	Standard
⌊	**Pb**	**208**	**10.000**	ug/L	0.176	1	50	396380	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 13:27:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	32377	3	Standard
	Cl	**37**		ug/L			5686581	5700609	0	Standard
⌈>	**Sc**	**45**		ug/L			495415	516669	2	Standard
|	**Cr**	**52**	**19.908**	ug/L	0.797	4	21583	384825	2	Standard
|	**Cr**	**53**	**19.883**	ug/L	0.728	3	156	42411	1	Standard
⌊	**Mn**	**55**	**19.902**	ug/L	0.507	2	712	523836	0	Standard
⌈>	**Ge**	**72**		ug/L			32261	33774	0	KED
|	**Ni**	**60**	**19.817**	ug/L	0.433	2	6	23961	1	KED
|	**Ni**	**62**	**20.116**	ug/L	0.559	2	3	4026	2	KED
|	**Cu**	**63**	**19.938**	ug/L	0.259	1	47	69032	1	KED
|	**Cu**	**65**	**19.785**	ug/L	0.319	1	19	34636	1	KED
|	**Zn**	**66**	**19.978**	ug/L	0.372	1	19	9995	1	KED
|	**Zn**	**67**	**19.973**	ug/L	0.542	2	4	1640	3	KED
|	**As**	**75**	**19.876**	ug/L	0.488	2	6	4984	2	KED
⌊	**Se**	**78**	**19.762**	ug/L	1.225	6	29	647	5	KED
	Y	**89**		ug/L			269508	286792	0	Standard
	Kr	**83**		ug/L			48	45	12	Standard
⌈>	**In-1**	**115**		ug/L			10448	10649	0	KED
|	**Cd**	**111**	**19.987**	ug/L	0.340	1	1	6322	1	KED
⌊	**Cd**	**114**	**19.910**	ug/L	0.341	1	1	15330	1	KED
⌈>	**In**	**115**		ug/L			386612	399445	2	Standard
|	**Ag**	**107**	**19.866**	ug/L	0.608	3	30	277272	2	Standard
|	**Ba**	**135**	**19.983**	ug/L	0.224	1	23	77686	1	Standard
⌊	**Ba**	**137**	**19.900**	ug/L	0.265	1	36	136556	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	665981	2	Standard
⌊	**Pb**	**208**	**19.907**	ug/L	0.457	2	50	780054	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 13:33:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	28800	1	Standard
	Cl	**37**		ug/L			5686581	5586237	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	495138	0	Standard
|	**Cr**	**52**	**50.173**	ug/L	0.145	0	21583	912393	0	Standard
|	**Cr**	**53**	**49.894**	ug/L	0.214	0	156	100733	0	Standard
⌊	**Mn**	**55**	**49.992**	ug/L	0.645	1	712	1259261	0	Standard
⌈>	**Ge**	**72**		ug/L			32261	32443	1	KED
|	**Ni**	**60**	**49.887**	ug/L	1.610	3	6	57272	2	KED
|	**Ni**	**62**	**49.834**	ug/L	0.743	1	3	9420	0	KED
|	**Cu**	**63**	**49.793**	ug/L	0.358	0	47	162167	1	KED
|	**Cu**	**65**	**49.697**	ug/L	1.388	2	19	81076	2	KED
|	**Zn**	**66**	**49.784**	ug/L	0.344	0	19	23427	1	KED
|	**Zn**	**67**	**49.918**	ug/L	1.669	3	4	3900	2	KED
|	**As**	**75**	**49.906**	ug/L	1.600	3	6	11896	1	KED
⌊	**Se**	**78**	**49.815**	ug/L	0.252	0	29	1494	1	KED
	Y	**89**		ug/L			269508	281715	0	Standard
	Kr	**83**		ug/L			48	52	14	Standard
⌈>	**In-1**	**115**		ug/L			10448	10535	2	KED
|	**Cd**	**111**	**49.874**	ug/L	1.126	2	1	15404	1	KED
⌊	**Cd**	**114**	**49.745**	ug/L	0.478	0	1	36944	2	KED
⌈>	**In**	**115**		ug/L			386612	394444	0	Standard
|	**Ag**	**107**	**49.718**	ug/L	0.579	1	30	666516	0	Standard
|	**Ba**	**135**	**49.738**	ug/L	0.724	1	23	186075	1	Standard
⌊	**Ba**	**137**	**49.795**	ug/L	0.359	0	36	330639	0	Standard
⌈>	**Tb**	**159**		ug/L			622192	661726	2	Standard
⌊	**Pb**	**208**	**49.584**	ug/L	1.260	2	50	1853168	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 13:39:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	29333	1	Standard
	Cl	**37**		ug/L			5686581	5692938	2	Standard
⌈>	**Sc**	**45**		ug/L			495415	497399	1	Standard
|	**Cr**	**52**	**100.342**	ug/L	2.152	2	21583	1831721	1	Standard
|	**Cr**	**53**	**100.592**	ug/L	1.449	1	156	207933	0	Standard
⌊	**Mn**	**55**	**102.587**	ug/L	0.663	0	712	2840054	0	Standard
⌈>	**Ge**	**72**		ug/L			32261	32138	0	KED
|	**Ni**	**60**	**99.889**	ug/L	2.110	2	6	113196	1	KED
|	**Ni**	**62**	**99.613**	ug/L	4.688	4	3	18411	4	KED
|	**Cu**	**63**	**100.329**	ug/L	2.440	2	47	327194	1	KED
|	**Cu**	**65**	**100.267**	ug/L	1.636	1	19	163477	1	KED
|	**Zn**	**66**	**99.138**	ug/L	1.648	1	19	44918	1	KED
|	**Zn**	**67**	**99.593**	ug/L	2.112	2	4	7605	2	KED
|	**As**	**75**	**100.239**	ug/L	0.955	0	6	23859	0	KED
⌊	**Se**	**78**	**100.048**	ug/L	1.975	1	29	2948	1	KED
	Y	**89**		ug/L			269508	278349	2	Standard
	Kr	**83**		ug/L			48	68	2	Standard
⌈>	**In-1**	**115**		ug/L			10448	10310	1	KED
|	**Cd**	**111**	**100.257**	ug/L	2.060	2	1	30570	1	KED
⌊	**Cd**	**114**	**100.158**	ug/L	1.643	1	1	73184	1	KED
⌈>	**In**	**115**		ug/L			386612	389802	0	Standard
|	**Ag**	**107**	**100.166**	ug/L	2.555	2	30	1334422	2	Standard
|	**Ba**	**135**	**100.866**	ug/L	1.306	1	23	383954	1	Standard
⌊	**Ba**	**137**	**100.662**	ug/L	1.524	1	36	675372	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	653903	1	Standard
⌊	**Pb**	**208**	**101.171**	ug/L	6.348	6	50	3890398	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 13:47:19
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	25432	1	Standard
	Cl	**37**		ug/L			5686581	5757125	2	Standard
⌈>	**Sc**	**45**		ug/L			495415	484766	1	Standard
|	**Cr**	**52**	**0.008**	ug/L	0.017	211	21583	21259	0	Standard
|	**Cr**	**53**	**0.002**	ug/L	0.003	105	156	158	2	Standard
⌊	**Mn**	**55**	**-0.003**	ug/L	0.001	26	712	621	3	Standard
⌈>	**Ge**	**72**		ug/L			32261	31589	2	KED
|	**Ni**	**60**	**-0.004**	ug/L	0.000	0	6	1		KED
|	**Ni**	**62**	**0.007**	ug/L	0.021	301	3	4	89	KED
|	**Cu**	**63**	**0.003**	ug/L	0.003	121	47	55	18	KED
|	**Cu**	**65**	**0.007**	ug/L	0.002	25	19	29	7	KED
|	**Zn**	**66**	**0.099**	ug/L	0.008	8	19	63	7	KED
|	**Zn**	**67**	**0.079**	ug/L	0.105	132	4	10	75	KED
|	**As**	**75**	**0.002**	ug/L	0.004	208	6	7	13	KED
⌊	**Se**	**78**	**-0.021**	ug/L	0.249	1196	29	28	23	KED
	Y	**89**		ug/L			269508	267687	0	Standard
	Kr	**83**		ug/L			48	46	14	Standard
⌈>	**In-1**	**115**		ug/L			10448	10216	2	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.002	219	1	1	34	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.001	12188	1	1	90	KED
⌈>	**In**	**115**		ug/L			386612	393367	3	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.000	8	30	53	2	Standard
|	**Ba**	**135**	**-0.001**	ug/L	0.002	157	23	18	51	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.002	304	36	42	37	Standard
⌈>	**Tb**	**159**		ug/L			622192	618061	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	6	50	65	1	Standard

Sample Information

Sample Date/Time: Tuesday, April 18, 2023 13:39:50
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED
Mass Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Sc	45							
Cr	52	**1.0000**	0.036	0.50	10	20	50	100
Cr	53	**0.9999**	0.004	0.50	10	20	50	100
Mn	55	**0.9989**	0.056	0.50	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.035	0.50	10	20	50	100
Ni	62	**1.0000**	0.006	0.50	10	20	50	100
Cu	63	**1.0000**	0.101	0.50	10	20	50	100
Cu	65	**1.0000**	0.051	0.50	10	20	50	100
Zn	66	**0.9999**	0.014	6.00	10	20	50	100
Zn	67	**1.0000**	0.002	6.00	10	20	50	100
As	75	**1.0000**	0.007	0.20	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Cd	111	**1.0000**	0.030	0.10	10	20	50	100
Cd	114	**1.0000**	0.071	0.10	10	20	50	100
In	115							
Ag	107	**1.0000**	0.034	0.20	10	20	50	100
Ba	135	**0.9999**	0.010	0.50	10	20	50	100
Ba	137	**0.9999**	0.017	0.50	10	20	50	100
Tb	159							
Pb	208	**0.9997**	0.059	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 13:56:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	28188	4	Standard
	Cl	**37**		ug/L			5686581	5643557	2	Standard
⌈>	**Sc**	**45**		ug/L			495415	496345	2	Standard
|	**Cr**	**52**	**51.044**	ug/L	0.690	1	21583	940472	1	Standard
|	**Cr**	**53**	**51.839**	ug/L	0.420	0	156	107024	2	Standard
⌊	**Mn**	**55**	**48.424**	ug/L	0.862	1	712	1337952	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	33211	0	KED
|	**Ni**	**60**	**52.040**	ug/L	1.193	2	6	60939	1	KED
|	**Ni**	**62**	**51.648**	ug/L	1.081	2	3	9867	1	KED
|	**Cu**	**63**	**52.062**	ug/L	0.874	1	47	175509	2	KED
|	**Cu**	**65**	**51.253**	ug/L	0.732	1	19	86368	1	KED
|	**Zn**	**66**	**49.695**	ug/L	0.546	1	19	23277	1	KED
|	**Zn**	**67**	**48.044**	ug/L	0.746	1	4	3794	2	KED
|	**As**	**75**	**47.463**	ug/L	0.253	0	6	11678	0	KED
⌊	**Se**	**78**	**77.197**	ug/L	0.494	0	29	2358	1	KED
	Y	**89**		ug/L			269508	281203	3	Standard
	Kr	**83**		ug/L			48	50	13	Standard
⌈>	**In-1**	**115**		ug/L			10448	10729	1	KED
|	**Cd**	**111**	**49.720**	ug/L	0.820	1	1	15777	0	KED
⌊	**Cd**	**114**	**50.937**	ug/L	1.319	2	1	38728	2	KED
⌈>	**In**	**115**		ug/L			386612	384198	2	Standard
|	**Ag**	**107**	**53.895**	ug/L	0.980	1	30	707465	0	Standard
|	**Ba**	**135**	**52.568**	ug/L	1.465	2	23	197147	0	Standard
⌊	**Ba**	**137**	**52.800**	ug/L	0.939	1	36	349120	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	653356	3	Standard
⌊	**Pb**	**208**	**50.850**	ug/L	1.073	2	50	1952649	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 14:03:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	26804	0	Standard
	Cl	**37**		ug/L			5686581	5713605	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	490955	2	Standard
|	**Cr**	**52**	**-0.010**	ug/L	0.031	314	21583	21205	1	Standard
|	**Cr**	**53**	**-0.005**	ug/L	0.007	144	156	144	12	Standard
⌊	**Mn**	**55**	**0.001**	ug/L	0.001	51	712	742	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	32306	4	KED
|	**Ni**	**60**	**0.001**	ug/L	0.001	207	6	6	15	KED
|	**Ni**	**62**	**-0.000**	ug/L	0.016	24329	3	3	91	KED
|	**Cu**	**63**	**0.001**	ug/L	0.002	163	47	52	18	KED
|	**Cu**	**65**	**0.007**	ug/L	0.003	46	19	30	16	KED
|	**Zn**	**66**	**0.016**	ug/L	0.018	114	19	27	35	KED
|	**Zn**	**67**	**0.007**	ug/L	0.060	875	4	5	94	KED
|	**As**	**75**	**-0.005**	ug/L	0.008	172	6	5	38	KED
⌊	**Se**	**78**	**0.086**	ug/L	0.120	138	29	32	7	KED
	Y	**89**		ug/L			269508	274753	2	Standard
	Kr	**83**		ug/L			48	38	17	Standard
⌈>	**In-1**	**115**		ug/L			10448	10550	0	KED
|	**Cd**	**111**	**0.005**	ug/L	0.002	34	1	3	15	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.003	57	1	4	43	KED
⌈>	**In**	**115**		ug/L			386612	389794	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	61	30	56	29	Standard
|	**Ba**	**135**	**-0.002**	ug/L	0.003	170	23	17	54	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.002	909	36	38	36	Standard
⌈>	**Tb**	**159**		ug/L			622192	626996	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.002	81	50	118	45	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 14:13:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	26995	1	Standard
	Cl	**37**		ug/L			5686581	5669616	2	Standard
⌈>	**Sc**	**45**		ug/L			495415	496052	1	Standard
|	**Cr**	**52**	**47.610**	ug/L	1.216	2	21583	878088	1	Standard
|	**Cr**	**53**	**48.972**	ug/L	0.894	1	156	101033	0	Standard
⌊	**Mn**	**55**	**45.158**	ug/L	0.133	0	712	1247251	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	32622	2	KED
|	**Ni**	**60**	**49.663**	ug/L	1.099	2	6	57130	2	KED
|	**Ni**	**62**	**49.219**	ug/L	1.114	2	3	9235	1	KED
|	**Cu**	**63**	**50.036**	ug/L	2.004	4	47	165597	2	KED
|	**Cu**	**65**	**49.015**	ug/L	1.424	2	19	81102	0	KED
|	**Zn**	**66**	**49.432**	ug/L	0.833	1	19	22743	2	KED
|	**Zn**	**67**	**49.833**	ug/L	0.512	1	4	3864	1	KED
|	**As**	**75**	**49.277**	ug/L	0.711	1	6	11908	1	KED
⌊	**Se**	**78**	**50.746**	ug/L	1.299	2	29	1532	0	KED
	Y	**89**		ug/L			269508	276101	2	Standard
	Kr	**83**		ug/L			48	47	34	Standard
⌈>	**In-1**	**115**		ug/L			10448	10313	1	KED
|	**Cd**	**111**	**50.034**	ug/L	0.612	1	1	15264	2	KED
⌊	**Cd**	**114**	**50.071**	ug/L	1.192	2	1	36594	1	KED
⌈>	**In**	**115**		ug/L			386612	388815	1	Standard
|	**Ag**	**107**	**49.785**	ug/L	1.709	3	30	661401	2	Standard
|	**Ba**	**135**	**49.374**	ug/L	0.984	1	23	187453	1	Standard
⌊	**Ba**	**137**	**49.244**	ug/L	1.708	3	36	329484	2	Standard
⌈>	**Tb**	**159**		ug/L			622192	652006	2	Standard
⌊	**Pb**	**208**	**48.315**	ug/L	0.746	1	50	1851990	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 14:20:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	26745	4	Standard
	Cl	**37**		ug/L			5686581	5592031	3	Standard
⌈>	**Sc**	**45**		ug/L			495415	471171	1	Standard
|	**Cr**	**52**	**0.046**	ug/L	0.030	64	21583	21303	0	Standard
|	**Cr**	**53**	**-0.008**	ug/L	0.006	74	156	133	7	Standard
⌊	**Mn**	**55**	**-0.000**	ug/L	0.001	127	712	665	3	Standard
⌈>	**Ge**	**72**		ug/L			32261	32361	1	KED
|	**Ni**	**60**	**0.000**	ug/L	0.006	1263	6	6	103	KED
|	**Ni**	**62**	**0.014**	ug/L	0.010	73	3	5	33	KED
|	**Cu**	**63**	**-0.003**	ug/L	0.001	34	47	38	10	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.005	1062	19	19	43	KED
|	**Zn**	**66**	**0.001**	ug/L	0.017	1278	19	20	37	KED
|	**Zn**	**67**	**-0.000**	ug/L	0.038	19606	4	4	65	KED
|	**As**	**75**	**-0.005**	ug/L	0.008	150	6	5	35	KED
⌊	**Se**	**78**	**0.116**	ug/L	0.128	110	29	33	11	KED
	Y	**89**		ug/L			269508	265532	3	Standard
	Kr	**83**		ug/L			48	45	25	Standard
⌈>	**In-1**	**115**		ug/L			10448	10170	3	KED
|	**Cd**	**111**	**0.000**	ug/L	0.003	2317	1	1	50	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.004	91	1	4	66	KED
⌈>	**In**	**115**		ug/L			386612	377441	1	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.000	32	30	43	10	Standard
|	**Ba**	**135**	**-0.003**	ug/L	0.001	51	23	13	37	Standard
⌊	**Ba**	**137**	**-0.002**	ug/L	0.000	26	36	24	12	Standard
⌈>	**Tb**	**159**		ug/L			622192	614461	2	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	19	50	91	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 14:33:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	24711	3	Standard
	Cl	**37**		ug/L			5686581	5594592	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	482466	2	Standard
|	**Cr**	**52**	**0.491**	ug/L	0.031	6	21583	29599	0	Standard
|	**Cr**	**53**	**0.491**	ug/L	0.006	1	156	1135	3	Standard
⌊	**Mn**	**55**	**0.482**	ug/L	0.009	1	712	13624	0	Standard
⌈>	**Ge**	**72**		ug/L			32261	32041	0	KED
|	**Ni**	**60**	**0.527**	ug/L	0.046	8	6	602	9	KED
|	**Ni**	**62**	**0.524**	ug/L	0.112	21	3	99	21	KED
|	**Cu**	**63**	**0.508**	ug/L	0.037	7	47	1697	6	KED
|	**Cu**	**65**	**0.533**	ug/L	0.048	9	19	885	7	KED
|	**Zn**	**66**	**6.247**	ug/L	0.380	6	19	2839	5	KED
|	**Zn**	**67**	**5.458**	ug/L	0.071	1	4	419	1	KED
|	**As**	**75**	**0.215**	ug/L	0.023	10	6	57	8	KED
⌊	**Se**	**78**	**0.565**	ug/L	0.185	32	29	45	10	KED
	Y	**89**		ug/L			269508	264293	1	Standard
	Kr	**83**		ug/L			48	36	24	Standard
⌈>	**In-1**	**115**		ug/L			10448	10431	3	KED
|	**Cd**	**111**	**0.087**	ug/L	0.011	12	1	28	14	KED
⌊	**Cd**	**114**	**0.109**	ug/L	0.011	9	1	81	12	KED
⌈>	**In**	**115**		ug/L			386612	392910	1	Standard
|	**Ag**	**107**	**0.201**	ug/L	0.012	5	30	2722	4	Standard
|	**Ba**	**135**	**0.468**	ug/L	0.020	4	23	1819	3	Standard
⌊	**Ba**	**137**	**0.471**	ug/L	0.007	1	36	3219	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	619661	2	Standard
⌊	**Pb**	**208**	**0.111**	ug/L	0.010	8	50	4078	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 14:38:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	111346	0	Standard
	Cl	**37**		ug/L			5686581	11377696	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	539688	1	Standard
|	**Cr**	**52**	**0.728**	ug/L	0.044	6	21583	37752	2	Standard
|	**Cr**	**53**	**4.353**	ug/L	0.075	1	156	9928	2	Standard
⌊	**Mn**	**55**	**0.072**	ug/L	0.002	2	712	2946	2	Standard
⌈>	**Ge**	**72**		ug/L			32261	30706	2	KED
|	**Ni**	**60**	**0.105**	ug/L	0.009	8	6	120	9	KED
|	**Ni**	**62**	**0.173**	ug/L	0.021	12	3	33	13	KED
|	**Cu**	**63**	**0.053**	ug/L	0.009	16	47	210	11	KED
|	**Cu**	**65**	**0.049**	ug/L	0.009	19	19	95	17	KED
|	**Zn**	**66**	**0.240**	ug/L	0.024	10	19	122	8	KED
|	**Zn**	**67**	**0.291**	ug/L	0.102	35	4	25	28	KED
|	**As**	**75**	**0.028**	ug/L	0.016	55	6	12	25	KED
⌊	**Se**	**78**	**-0.038**	ug/L	0.094	249	29	27	8	KED
	Y	**89**		ug/L			269508	279146	2	Standard
	Kr	**83**		ug/L			48	79	21	Standard
⌈>	**In-1**	**115**		ug/L			10448	9971	1	KED
|	**Cd**	**111**	**0.077**	ug/L	0.008	10	1	24	11	KED
⌊	**Cd**	**114**	**0.053**	ug/L	0.014	26	1	38	24	KED
⌈>	**In**	**115**		ug/L			386612	396255	1	Standard
|	**Ag**	**107**	**0.011**	ug/L	0.001	12	30	186	10	Standard
|	**Ba**	**135**	**0.127**	ug/L	0.008	6	23	516	4	Standard
⌊	**Ba**	**137**	**0.105**	ug/L	0.002	2	36	752	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	680264	1	Standard
⌊	**Pb**	**208**	**0.037**	ug/L	0.000	0	50	1525	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 14:43:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	116018	3	Standard
	Cl	**37**		ug/L			5686581	11137336	3	Standard
⌈>	**Sc**	**45**		ug/L			495415	540113	1	Standard
|	**Cr**	**52**	**18.904**	ug/L	0.280	1	21583	393839	0	Standard
|	**Cr**	**53**	**22.903**	ug/L	0.338	1	156	51545	1	Standard
⌊	**Mn**	**55**	**17.367**	ug/L	0.282	1	712	522775	2	Standard
⌈>	**Ge**	**72**		ug/L			32261	30367	1	KED
|	**Ni**	**60**	**20.558**	ug/L	0.349	1	6	22018	1	KED
|	**Ni**	**62**	**20.568**	ug/L	0.468	2	3	3594	1	KED
|	**Cu**	**63**	**19.938**	ug/L	0.273	1	47	61477	1	KED
|	**Cu**	**65**	**19.504**	ug/L	0.293	1	19	30067	2	KED
|	**Zn**	**66**	**18.775**	ug/L	0.088	0	19	8052	0	KED
|	**Zn**	**67**	**16.009**	ug/L	0.344	2	4	1158	2	KED
|	**As**	**75**	**18.639**	ug/L	0.163	0	6	4197	1	KED
⌊	**Se**	**78**	**0.003**	ug/L	0.106	3292	29	28	11	KED
	Y	**89**		ug/L			269508	279932	0	Standard
	Kr	**83**		ug/L			48	85	11	Standard
⌈>	**In-1**	**115**		ug/L			10448	9565	0	KED
|	**Cd**	**111**	**18.715**	ug/L	0.401	2	1	5295	1	KED
⌊	**Cd**	**114**	**18.985**	ug/L	0.544	2	1	12868	1	KED
⌈>	**In**	**115**		ug/L			386612	396614	1	Standard
|	**Ag**	**107**	**18.750**	ug/L	0.420	2	30	254137	1	Standard
|	**Ba**	**135**	**0.118**	ug/L	0.007	5	23	482	5	Standard
⌊	**Ba**	**137**	**0.106**	ug/L	0.006	5	36	761	3	Standard
⌈>	**Tb**	**159**		ug/L			622192	677611	1	Standard
⌊	**Pb**	**208**	**0.031**	ug/L	0.002	5	50	1278	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 14:52:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	30368	0	Standard
	Cl	**37**		ug/L			5686581	5487877	0	Standard
⌈>	**Sc**	**45**		ug/L			495415	499248	1	Standard
|	**Cr**	**52**	**205.947**	ug/L	2.658	1	21583	3750862	0	Standard
|	**Cr**	**53**	**189.585**	ug/L	5.029	2	156	393212	2	Standard
⌊	**Mn**	**55**	**192.656**	ug/L	2.653	1	712	5352653	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	29313	2	KED
|	**Ni**	**60**	**201.663**	ug/L	6.460	3	6	208368	1	KED
|	**Ni**	**62**	**199.590**	ug/L	4.496	2	3	33643	1	KED
|	**Cu**	**63**	**196.019**	ug/L	3.331	1	47	582965	0	KED
|	**Cu**	**65**	**197.843**	ug/L	2.914	1	19	294160	0	KED
|	**Zn**	**66**	**193.504**	ug/L	3.599	1	19	79929	0	KED
|	**Zn**	**67**	**186.331**	ug/L	6.279	3	4	12969	1	KED
|	**As**	**75**	**195.570**	ug/L	4.380	2	6	42441	0	KED
⌊	**Se**	**78**	**190.438**	ug/L	6.232	3	29	5093	1	KED
	Y	**89**		ug/L			269508	270760	3	Standard
	Kr	**83**		ug/L			48	91	21	Standard
⌈>	**In-1**	**115**		ug/L			10448	9634	1	KED
|	**Cd**	**111**	**191.080**	ug/L	4.203	2	1	54437	1	KED
⌊	**Cd**	**114**	**192.114**	ug/L	2.893	1	1	131164	1	KED
⌈>	**In**	**115**		ug/L			386612	377946	1	Standard
|	**Ag**	**107**	**219.983**	ug/L	2.348	1	30	2841453	1	Standard
|	**Ba**	**135**	**195.884**	ug/L	2.975	1	23	722904	1	Standard
⌊	**Ba**	**137**	**194.317**	ug/L	1.360	0	36	1264050	0	Standard
⌈>	**Tb**	**159**		ug/L			622192	651018	1	Standard
⌊	**Pb**	**208**	**211.048**	ug/L	3.962	1	50	8077489	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 14:59:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	30249	4	Standard
	Cl	**37**		ug/L			5686581	5393689	0	Standard
>	**Sc**	**45**		ug/L			495415	481689	2	Standard
	Cr	**52**	**312.262**	ug/L	4.820	1	21583	5475816	1	Standard
	Cr	**53**	**283.507**	ug/L	2.010	0	156	567276	1	Standard
	Mn	**55**	**285.329**	ug/L	2.997	1	712	7647841	1	Standard
>	**Ge**	**72**		ug/L			32261	28666	0	KED
	Ni	**60**	**302.959**	ug/L	7.798	2	6	306259	3	KED
	Ni	**62**	**292.791**	ug/L	1.036	0	3	48275	1	KED
	Cu	**63**	**286.344**	ug/L	1.852	0	47	832920	0	KED
	Cu	**65**	**286.569**	ug/L	1.551	0	19	416739	0	KED
	Zn	**66**	**271.854**	ug/L	2.563	0	19	109839	1	KED
	Zn	**67**	**265.675**	ug/L	6.170	2	4	18092	3	KED
	As	**75**	**288.904**	ug/L	3.578	1	6	61323	0	KED
	Se	**78**	**275.982**	ug/L	2.491	0	29	7209	1	KED
	Y	**89**		ug/L			269508	262742	3	Standard
	Kr	**83**		ug/L			48	130	8	Standard
>	**In-1**	**115**		ug/L			10448	9363	0	KED
	Cd	**111**	**280.956**	ug/L	1.664	0	1	77804	0	KED
	Cd	**114**	**286.220**	ug/L	4.765	1	1	189917	1	KED
>	**In**	**115**		ug/L			386612	362854	2	Standard
	Ag	**107**	**329.528**	ug/L	6.736	2	30	4085012	1	Standard
	Ba	**135**	**294.178**	ug/L	6.086	2	23	1041959	0	Standard
	Ba	**137**	**294.073**	ug/L	6.370	2	36	1836059	1	Standard
>	**Tb**	**159**		ug/L			622192	626383	1	Standard
	Pb	**208**	**336.159**	ug/L	5.583	1	50	12379026	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 15:07:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	31307	0	Standard
	Cl	**37**		ug/L			5686581	5621509	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	486725	2	Standard
|	**Cr**	**52**	**0.007**	ug/L	0.018	236	21583	21336	2	Standard
|	**Cr**	**53**	**0.054**	ug/L	0.005	8	156	263	1	Standard
⌊	**Mn**	**55**	**0.009**	ug/L	0.001	13	712	942	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	31371	1	KED
|	**Ni**	**60**	**0.009**	ug/L	0.008	87	6	15	54	KED
|	**Ni**	**62**	**0.032**	ug/L	0.030	94	3	8	61	KED
|	**Cu**	**63**	**0.018**	ug/L	0.005	27	47	103	16	KED
|	**Cu**	**65**	**0.018**	ug/L	0.004	23	19	46	12	KED
|	**Zn**	**66**	**0.108**	ug/L	0.017	15	19	66	10	KED
|	**Zn**	**67**	**0.155**	ug/L	0.038	24	4	15	18	KED
|	**As**	**75**	**0.001**	ug/L	0.004	503	6	6	14	KED
⌊	**Se**	**78**	**-0.132**	ug/L	0.056	42	29	25	5	KED
	Y	**89**		ug/L			269508	265646	2	Standard
	Kr	**83**		ug/L			48	48	27	Standard
⌈>	**In-1**	**115**		ug/L			10448	9929	0	KED
|	**Cd**	**111**	**0.007**	ug/L	0.009	127	1	3	66	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.000	9	1	1	2	KED
⌈>	**In**	**115**		ug/L			386612	389212	2	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.000	2	30	90	3	Standard
|	**Ba**	**135**	**0.012**	ug/L	0.005	39	23	67	23	Standard
⌊	**Ba**	**137**	**0.012**	ug/L	0.001	7	36	118	6	Standard
⌈>	**Tb**	**159**		ug/L			622192	624436	1	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.001	10	50	303	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 15:13:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	28916	2	Standard
	Cl	**37**		ug/L			5686581	5676710	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	501538	2	Standard
|	**Cr**	**52**	**47.923**	ug/L	0.574	1	21583	893518	1	Standard
|	**Cr**	**53**	**49.159**	ug/L	0.854	1	156	102526	0	Standard
⌊	**Mn**	**55**	**45.895**	ug/L	0.624	1	712	1281332	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	31764	3	KED
|	**Ni**	**60**	**50.155**	ug/L	2.579	5	6	56124	2	KED
|	**Ni**	**62**	**50.012**	ug/L	1.227	2	3	9136	2	KED
|	**Cu**	**63**	**50.175**	ug/L	0.739	1	47	161716	1	KED
|	**Cu**	**65**	**49.654**	ug/L	1.212	2	19	79989	0	KED
|	**Zn**	**66**	**49.819**	ug/L	1.742	3	19	22304	1	KED
|	**Zn**	**67**	**49.044**	ug/L	1.555	3	4	3702	3	KED
|	**As**	**75**	**48.732**	ug/L	1.119	2	6	11463	0	KED
⌊	**Se**	**78**	**48.882**	ug/L	0.849	1	29	1438	1	KED
	Y	**89**		ug/L			269508	273454	4	Standard
	Kr	**83**		ug/L			48	46	35	Standard
⌈>	**In-1**	**115**		ug/L			10448	9992	4	KED
|	**Cd**	**111**	**49.831**	ug/L	1.691	3	1	14713	1	KED
⌊	**Cd**	**114**	**50.385**	ug/L	1.642	3	1	35650	2	KED
⌈>	**In**	**115**		ug/L			386612	391440	2	Standard
|	**Ag**	**107**	**50.535**	ug/L	1.624	3	30	675769	2	Standard
|	**Ba**	**135**	**49.321**	ug/L	1.237	2	23	188456	0	Standard
⌊	**Ba**	**137**	**49.160**	ug/L	1.737	3	36	331035	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	651206	2	Standard
⌊	**Pb**	**208**	**50.353**	ug/L	1.120	2	50	1927410	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 15:21:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	26961	3	Standard
	Cl	**37**		ug/L			5686581	5655721	1	Standard
⎡>	**Sc**	**45**		ug/L			495415	473897	4	Standard
⎢	**Cr**	**52**	**-0.002**	ug/L	0.033	1338	21583	20587	2	Standard
⎢	**Cr**	**53**	**0.016**	ug/L	0.008	49	156	180	4	Standard
⎣	**Mn**	**55**	**0.012**	ug/L	0.004	28	712	1006	4	Standard
⎡>	**Ge**	**72**		ug/L			32261	30700	0	KED
⎢	**Ni**	**60**	**0.001**	ug/L	0.004	510	6	6	68	KED
⎢	**Ni**	**62**	**0.008**	ug/L	0.006	77	3	4	24	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.004	352	47	48	25	KED
⎢	**Cu**	**65**	**0.004**	ug/L	0.006	135	19	25	35	KED
⎢	**Zn**	**66**	**-0.001**	ug/L	0.016	2167	19	18	36	KED
⎢	**Zn**	**67**	**-0.006**	ug/L	0.026	458	4	3	50	KED
⎢	**As**	**75**	**0.004**	ug/L	0.009	247	6	7	27	KED
⎣	**Se**	**78**	**0.076**	ug/L	0.257	339	29	30	23	KED
	Y	**89**		ug/L			269508	261478	6	Standard
	Kr	**83**		ug/L			48	39	48	Standard
⎡>	**In-1**	**115**		ug/L			10448	10400	1	KED
⎢	**Cd**	**111**	**0.002**	ug/L	0.002	80	1	2	21	KED
⎣	**Cd**	**114**	**0.003**	ug/L	0.003	122	1	3	72	KED
⎡>	**In**	**115**		ug/L			386612	380244	3	Standard
⎢	**Ag**	**107**	**0.002**	ug/L	0.001	30	30	57	10	Standard
⎢	**Ba**	**135**	**-0.000**	ug/L	0.002	3712	23	22	33	Standard
⎣	**Ba**	**137**	**0.002**	ug/L	0.000	28	36	46	6	Standard
⎡>	**Tb**	**159**		ug/L			622192	604565	3	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.001	38	50	114	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0420-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 15:28:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27779	33871	2	Standard
	Cl	37		ug/L			5686581	5402701	2	Standard
>	Sc	45		ug/L			495415	489893	0	Standard
	Cr	52	0.073	ug/L	0.016	21	21583	22640	1	Standard
	Cr	53	0.086	ug/L	0.003	3	156	329	1	Standard
	Mn	55	0.043	ug/L	0.002	4	712	1866	2	Standard
>	Ge	72		ug/L			32261	31739	1	KED
	Ni	60	0.005	ug/L	0.003	66	6	12	32	KED
	Ni	62	0.004	ug/L	0.018	488	3	3	86	KED
	Cu	63	0.031	ug/L	0.010	32	47	146	21	KED
	Cu	65	0.034	ug/L	0.008	22	19	73	15	KED
	Zn	66	0.293	ug/L	0.025	8	19	150	8	KED
	Zn	67	0.313	ug/L	0.055	17	4	27	14	KED
	As	75	0.012	ug/L	0.005	42	6	9	13	KED
	Se	78	0.011	ug/L	0.129	1159	29	29	12	KED
	Y	89		ug/L			269508	265629	2	Standard
	Kr	83		ug/L			48	42	15	Standard
>	In-1	115		ug/L			10448	10430	1	KED
	Cd	111	0.005	ug/L	0.009	174	1	3	78	KED
	Cd	114	0.002	ug/L	0.005	289	1	2	153	KED
>	In	115		ug/L			386612	389021	1	Standard
	Ag	107	0.001	ug/L	0.001	114	30	40	28	Standard
	Ba	135	0.033	ug/L	0.001	4	23	148	5	Standard
	Ba	137	0.027	ug/L	0.004	15	36	219	11	Standard
>	Tb	159		ug/L			622192	623589	2	Standard
	Pb	208	0.008	ug/L	0.001	8	50	340	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0420-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 15:33:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27779	33994	2	Standard
	Cl	37		ug/L			5686581	5507981	2	Standard
>	Sc	45		ug/L			495415	487694	0	Standard
	Cr	52	24.960	ug/L	0.294	1	21583	462807	1	Standard
	Cr	53	25.460	ug/L	0.286	1	156	51725	1	Standard
	Mn	55	23.983	ug/L	0.734	3	712	651525	2	Standard
>	Ge	72		ug/L			32261	32440	0	KED
	Ni	60	25.250	ug/L	0.790	3	6	28888	3	KED
	Ni	62	25.047	ug/L	1.503	5	3	4675	5	KED
	Cu	63	25.065	ug/L	0.610	2	47	82556	2	KED
	Cu	65	25.957	ug/L	0.912	3	19	42731	3	KED
	Zn	66	80.823	ug/L	0.595	0	19	36966	0	KED
	Zn	67	76.162	ug/L	1.841	2	4	5871	2	KED
	As	75	24.610	ug/L	0.127	0	6	5918	0	KED
	Se	78	78.390	ug/L	2.799	3	29	2338	3	KED
	Y	89		ug/L			269508	265071	2	Standard
	Kr	83		ug/L			48	48	12	Standard
>	In-1	115		ug/L			10448	10129	1	KED
	Cd	111	25.980	ug/L	0.081	0	1	7784	1	KED
	Cd	114	25.921	ug/L	0.347	1	1	18606	0	KED
>	In	115		ug/L			386612	389507	0	Standard
	Ag	107	26.204	ug/L	0.237	0	30	348852	1	Standard
	Ba	135	25.171	ug/L	0.124	0	23	95758	0	Standard
	Ba	137	24.708	ug/L	0.446	1	36	165679	1	Standard
>	Tb	159		ug/L			622192	622001	0	Standard
	Pb	208	26.744	ug/L	0.471	1	50	978043	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0356-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, April 18, 2023 15:38:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27779	113028	1	Standard
	Cl	37		ug/L			5686581	5622877	2	Standard
>	Sc	45		ug/L			495415	523543	0	Standard
	Cr	52	23.434	ug/L	0.391	1	21583	467844	1	Standard
	Cr	53	23.693	ug/L	0.014	0	156	51682	0	Standard
	Mn	55	25.256	ug/L	0.410	1	712	736564	1	Standard
>	Ge	72		ug/L			32261	31234	0	KED
	Ni	60	3.764	ug/L	0.112	2	6	4150	2	KED
	Ni	62	3.804	ug/L	0.040	1	3	686	0	KED
	Cu	63	0.756	ug/L	0.042	5	47	2442	6	KED
	Cu	65	0.777	ug/L	0.025	3	19	1250	3	KED
	Zn	66	19.872	ug/L	0.275	1	19	8766	2	KED
	Zn	67	18.069	ug/L	0.646	3	4	1344	4	KED
	As	75	0.099	ug/L	0.005	4	6	29	4	KED
	Se	78	0.105	ug/L	0.125	119	29	31	10	KED
	Y	89		ug/L			269508	276257	3	Standard
	Kr	83		ug/L			48	39	35	Standard
>	In-1	115		ug/L			10448	9926	3	KED
	Cd	111	0.299	ug/L	0.002	0	1	89	3	KED
	Cd	114	0.319	ug/L	0.046	14	1	225	14	KED
>	In	115		ug/L			386612	385247	1	Standard
	Ag	107	0.025	ug/L	0.003	10	30	363	10	Standard
	Ba	135	4.057	ug/L	0.088	2	23	15282	1	Standard
	Ba	137	3.994	ug/L	0.089	2	36	26514	1	Standard
>	Tb	159		ug/L			622192	655203	3	Standard
	Pb	208	1.692	ug/L	0.074	4	50	65151	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0349-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, April 18, 2023 15:43:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27779	52364	1	Standard
	Cl	37		ug/L			5686581	6688442	3	Standard
>	Sc	45		ug/L			495415	525477	1	Standard
	Cr	52	0.351	ug/L	0.043	12	21583	29586	3	Standard
	Cr	53	1.257	ug/L	0.004	0	156	2908	0	Standard
	Mn	55	432.054	ug/L	11.914	2	712	12632151	1	Standard
>	Ge	72		ug/L			32261	29354	1	KED
	Ni	60	4.206	ug/L	0.135	3	6	4357	1	KED
	Ni	62	3.985	ug/L	0.112	2	3	675	3	KED
	Cu	63	4.038	ug/L	0.068	1	47	12074	3	KED
	Cu	65	4.095	ug/L	0.201	4	19	6111	3	KED
	Zn	66	71.866	ug/L	0.930	1	19	29740	0	KED
	Zn	67	66.941	ug/L	0.534	0	4	4670	2	KED
	As	75	0.564	ug/L	0.029	5	6	128	3	KED
	Se	78	0.083	ug/L	0.088	105	29	29	6	KED
	Y	89		ug/L			269508	273929	1	Standard
	Kr	83		ug/L			48	53	0	Standard
>	In-1	115		ug/L			10448	9366	1	KED
	Cd	111	0.168	ug/L	0.034	20	1	48	19	KED
	Cd	114	0.158	ug/L	0.015	9	1	106	10	KED
>	In	115		ug/L			386612	375946	1	Standard
	Ag	107	0.006	ug/L	0.001	11	30	104	7	Standard
	Ba	135	30.384	ug/L	0.339	1	23	111559	1	Standard
	Ba	137	30.179	ug/L	0.624	2	36	195287	1	Standard
>	Tb	159		ug/L			622192	649723	1	Standard
	Pb	208	0.217	ug/L	0.010	4	50	8353	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0230-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, April 18, 2023 15:47:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27779	41447	3	Standard
	Cl	37		ug/L			5686581	5473500	1	Standard
⌈>	Sc	45		ug/L			495415	509019	2	Standard
|	Cr	52	3.455	ug/L	0.163	4	21583	85954	3	Standard
|	Cr	53	3.722	ug/L	0.021	0	156	8029	1	Standard
⌊	Mn	55	4.441	ug/L	0.011	0	712	126510	1	Standard
⌈>	Ge	72		ug/L			32261	27947	1	KED
|	Ni	60	0.570	ug/L	0.062	10	6	566	9	KED
|	Ni	62	0.595	ug/L	0.020	3	3	98	2	KED
|	Cu	63	2.567	ug/L	0.040	1	47	7319	1	KED
|	Cu	65	2.498	ug/L	0.029	1	19	3558	1	KED
|	Zn	66	5.355	ug/L	0.006	0	19	2125	1	KED
|	Zn	67	4.791	ug/L	0.349	7	4	321	7	KED
|	As	75	0.071	ug/L	0.011	15	6	20	10	KED
⌊	Se	78	0.213	ug/L	0.103	48	29	31	8	KED
	Y	89		ug/L			269508	268601	0	Standard
	Kr	83		ug/L			48	58	11	Standard
⌈>	In-1	115		ug/L			10448	8637	2	KED
|	Cd	111	0.005	ug/L	0.004	78	1	2	33	KED
⌊	Cd	114	0.004	ug/L	0.006	149	1	3	104	KED
⌈>	In	115		ug/L			386612	368960	1	Standard
|	Ag	107	0.001	ug/L	0.001	62	30	43	21	Standard
|	Ba	135	0.718	ug/L	0.012	1	23	2610	1	Standard
⌊	Ba	137	0.736	ug/L	0.019	2	36	4709	0	Standard
⌈>	Tb	159		ug/L			622192	637733	1	Standard
⌊	Pb	208	0.019	ug/L	0.001	4	50	758	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0230-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, April 18, 2023 15:52:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27779	39067	2	Standard
	Cl	37		ug/L			5686581	5397028	1	Standard
>	Sc	45		ug/L			495415	477790	7	Standard
	Cr	52	6.400	ug/L	0.556	8	21583	131265	0	Standard
	Cr	53	6.606	ug/L	0.365	5	156	13226	2	Standard
	Mn	55	5.060	ug/L	0.383	7	712	134733	0	Standard
>	Ge	72		ug/L			32261	27431	1	KED
	Ni	60	0.575	ug/L	0.056	9	6	561	10	KED
	Ni	62	0.513	ug/L	0.121	23	3	83	23	KED
	Cu	63	2.335	ug/L	0.051	2	47	6541	3	KED
	Cu	65	2.324	ug/L	0.053	2	19	3249	2	KED
	Zn	66	3.903	ug/L	0.105	2	19	1525	3	KED
	Zn	67	3.924	ug/L	0.509	12	4	259	13	KED
	As	75	0.033	ug/L	0.009	28	6	12	15	KED
	Se	78	-0.037	ug/L	0.064	173	29	24	5	KED
	Y	89		ug/L			269508	256334	8	Standard
	Kr	83		ug/L			48	46	15	Standard
>	In-1	115		ug/L			10448	8744	1	KED
	Cd	111	-0.002	ug/L	0.004	149	1	0	100	KED
	Cd	114	0.012	ug/L	0.006	50	1	8	46	KED
>	In	115		ug/L			386612	350967	9	Standard
	Ag	107	0.002	ug/L	0.001	34	30	47	12	Standard
	Ba	135	0.796	ug/L	0.090	11	23	2732	2	Standard
	Ba	137	0.801	ug/L	0.071	8	36	4849	1	Standard
>	Tb	159		ug/L			622192	608257	5	Standard
	Pb	208	0.038	ug/L	0.002	5	50	1402	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0230-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, April 18, 2023 15:57:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27779	36397	1	Standard
	Cl	37		ug/L			5686581	5394306	0	Standard
⌈>	Sc	45		ug/L			495415	506118	1	Standard
|	Cr	52	4.459	ug/L	0.036	0	21583	103905	1	Standard
|	Cr	53	4.596	ug/L	0.028	0	156	9819	1	Standard
⌊	Mn	55	4.438	ug/L	0.057	1	712	125706	0	Standard
⌈>	Ge	72		ug/L			32261	27721	0	KED
|	Ni	60	0.433	ug/L	0.040	9	6	428	9	KED
|	Ni	62	0.421	ug/L	0.072	16	3	69	15	KED
|	Cu	63	2.094	ug/L	0.070	3	47	5929	3	KED
|	Cu	65	2.137	ug/L	0.055	2	19	3021	1	KED
|	Zn	66	5.227	ug/L	0.129	2	19	2058	2	KED
|	Zn	67	4.948	ug/L	0.100	2	4	329	2	KED
|	As	75	0.046	ug/L	0.015	32	6	15	20	KED
⌊	Se	78	0.092	ug/L	0.296	320	29	27	26	KED
	Y	89		ug/L			269508	271324	2	Standard
	Kr	83		ug/L			48	41	16	Standard
⌈>	In-1	115		ug/L			10448	9034	1	KED
|	Cd	111	0.006	ug/L	0.007	129	1	3	62	KED
⌊	Cd	114	0.006	ug/L	0.006	104	1	4	80	KED
⌈>	In	115		ug/L			386612	367471	0	Standard
|	Ag	107	0.001	ug/L	0.001	39	30	45	14	Standard
|	Ba	135	0.734	ug/L	0.010	1	23	2657	1	Standard
⌊	Ba	137	0.719	ug/L	0.013	1	36	4580	1	Standard
⌈>	Tb	159		ug/L			622192	639288	0	Standard
⌊	Pb	208	0.011	ug/L	0.001	9	50	454	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0230-04
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, April 18, 2023 16:02:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27779	36218	1	Standard
	Cl	37		ug/L			5686581	5325907	1	Standard
⌈>	Sc	45		ug/L			495415	511929	1	Standard
|	Cr	52	3.754	ug/L	0.021	0	21583	92000	1	Standard
|	Cr	53	4.037	ug/L	0.080	1	156	8743	1	Standard
⌊	Mn	55	4.345	ug/L	0.157	3	712	124453	1	Standard
⌈>	Ge	72		ug/L			32261	27900	1	KED
|	Ni	60	0.357	ug/L	0.008	2	6	356	1	KED
|	Ni	62	0.383	ug/L	0.073	18	3	64	17	KED
|	Cu	63	1.858	ug/L	0.080	4	47	5300	3	KED
|	Cu	65	1.871	ug/L	0.050	2	19	2665	3	KED
|	Zn	66	3.697	ug/L	0.060	1	19	1470	1	KED
|	Zn	67	3.297	ug/L	0.407	12	4	222	11	KED
|	As	75	0.041	ug/L	0.006	14	6	14	8	KED
⌊	Se	78	0.005	ug/L	0.214	4742	29	25	20	KED
	Y	89		ug/L			269508	270125	1	Standard
	Kr	83		ug/L			48	37	7	Standard
⌈>	In-1	115		ug/L			10448	8960	1	KED
|	Cd	111	0.006	ug/L	0.007	127	1	3	62	KED
⌊	Cd	114	0.002	ug/L	0.002	94	1	2	49	KED
⌈>	In	115		ug/L			386612	372249	0	Standard
|	Ag	107	0.000	ug/L	0.000	439	30	30	16	Standard
|	Ba	135	0.688	ug/L	0.019	2	23	2523	2	Standard
⌊	Ba	137	0.691	ug/L	0.002	0	36	4462	1	Standard
⌈>	Tb	159		ug/L			622192	645595	0	Standard
⌊	Pb	208	0.009	ug/L	0.001	10	50	386	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0212-12
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 16:06:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27779	47875	4	Standard
	Cl	37		ug/L			5686581	5897784	2	Standard
⌈>	Sc	45		ug/L			495415	523287	2	Standard
|	Cr	52	0.599	ug/L	0.033	5	21583	34161	2	Standard
|	Cr	53	1.043	ug/L	0.009	0	156	2432	2	Standard
⌊	Mn	55	23.441	ug/L	0.738	3	712	683015	1	Standard
⌈>	Ge	72		ug/L			32261	30748	1	KED
|	Ni	60	9.784	ug/L	0.108	1	6	10613	0	KED
|	Ni	62	9.767	ug/L	0.239	2	3	1730	2	KED
|	Cu	63	11.386	ug/L	0.162	1	47	35568	0	KED
|	Cu	65	11.202	ug/L	0.131	1	19	17493	2	KED
|	Zn	66	50.710	ug/L	0.283	0	19	21992	1	KED
|	Zn	67	46.593	ug/L	0.697	1	4	3406	0	KED
|	As	75	0.338	ug/L	0.002	0	6	83	0	KED
⌊	Se	78	0.126	ug/L	0.066	52	29	31	6	KED
	Y	89		ug/L			269508	280435	1	Standard
	Kr	83		ug/L			48	42	24	Standard
⌈>	In-1	115		ug/L			10448	9819	2	KED
|	Cd	111	0.032	ug/L	0.011	34	1	11	27	KED
⌊	Cd	114	0.035	ug/L	0.005	13	1	25	14	KED
⌈>	In	115		ug/L			386612	397126	0	Standard
|	Ag	107	0.003	ug/L	0.000	8	30	71	5	Standard
|	Ba	135	16.039	ug/L	0.301	1	23	62214	1	Standard
⌊	Ba	137	15.951	ug/L	0.380	2	36	109076	3	Standard
⌈>	Tb	159		ug/L			622192	662757	1	Standard
⌊	Pb	208	0.684	ug/L	0.013	1	50	26715	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 16:11:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	27381	1	Standard
	Cl	**37**		ug/L			5686581	5473473	2	Standard
⌈>	**Sc**	**45**		ug/L			495415	473950	6	Standard
|	**Cr**	**52**	**-0.000**	ug/L	0.058	19140	21583	20605	2	Standard
|	**Cr**	**53**	**0.019**	ug/L	0.004	23	156	187	10	Standard
⌊	**Mn**	**55**	**-0.002**	ug/L	0.002	118	712	632	2	Standard
⌈>	**Ge**	**72**		ug/L			32261	30179	1	KED
|	**Ni**	**60**	**-0.000**	ug/L	0.005	2921	6	5	88	KED
|	**Ni**	**62**	**-0.003**	ug/L	0.017	635	3	2	114	KED
|	**Cu**	**63**	**0.003**	ug/L	0.002	69	47	54	14	KED
|	**Cu**	**65**	**0.002**	ug/L	0.007	414	19	20	50	KED
|	**Zn**	**66**	**0.103**	ug/L	0.018	17	19	62	12	KED
|	**Zn**	**67**	**0.092**	ug/L	0.013	14	4	10	10	KED
|	**As**	**75**	**0.006**	ug/L	0.011	171	6	7	30	KED
⌊	**Se**	**78**	**-0.180**	ug/L	0.087	48	29	22	11	KED
	Y	**89**		ug/L			269508	255352	5	Standard
	Kr	**83**		ug/L			48	53	29	Standard
⌈>	**In-1**	**115**		ug/L			10448	9850	0	KED
|	**Cd**	**111**	**0.001**	ug/L	0.008	555	1	2	107	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.005	451	1	1	173	KED
⌈>	**In**	**115**		ug/L			386612	372432	4	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.001	60	30	17	48	Standard
|	**Ba**	**135**	**-0.001**	ug/L	0.002	159	23	18	33	Standard
⌊	**Ba**	**137**	**-0.000**	ug/L	0.002	850	36	33	42	Standard
⌈>	**Tb**	**159**		ug/L			622192	601942	6	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	40	50	63	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 16:16:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	27892	1	Standard
	Cl	**37**		ug/L			5686581	5419586	0	Standard
⌈>	**Sc**	**45**		ug/L			495415	496529	1	Standard
|	**Cr**	**52**	**48.112**	ug/L	0.080	0	21583	888135	1	Standard
|	**Cr**	**53**	**48.957**	ug/L	0.658	1	156	101101	0	Standard
⌊	**Mn**	**55**	**45.920**	ug/L	0.988	2	712	1269529	2	Standard
⌈>	**Ge**	**72**		ug/L			32261	30975	0	KED
|	**Ni**	**60**	**49.701**	ug/L	1.539	3	6	54283	2	KED
|	**Ni**	**62**	**48.541**	ug/L	1.357	2	3	8649	2	KED
|	**Cu**	**63**	**49.547**	ug/L	1.261	2	47	155759	1	KED
|	**Cu**	**65**	**50.580**	ug/L	1.840	3	19	79486	3	KED
|	**Zn**	**66**	**49.649**	ug/L	1.083	2	19	21688	1	KED
|	**Zn**	**67**	**50.262**	ug/L	0.756	1	4	3701	1	KED
|	**As**	**75**	**48.639**	ug/L	0.596	1	6	11161	0	KED
⌊	**Se**	**78**	**47.547**	ug/L	1.697	3	29	1365	2	KED
	Y	**89**		ug/L			269508	271936	2	Standard
	Kr	**83**		ug/L			48	45	10	Standard
⌈>	**In-1**	**115**		ug/L			10448	9988	2	KED
|	**Cd**	**111**	**49.846**	ug/L	1.606	3	1	14718	0	KED
⌊	**Cd**	**114**	**49.997**	ug/L	1.926	3	1	35370	1	KED
⌈>	**In**	**115**		ug/L			386612	394705	2	Standard
|	**Ag**	**107**	**49.637**	ug/L	0.852	1	30	669422	1	Standard
|	**Ba**	**135**	**48.466**	ug/L	1.085	2	23	186753	0	Standard
⌊	**Ba**	**137**	**48.308**	ug/L	0.374	0	36	328180	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	657823	2	Standard
⌊	**Pb**	**208**	**50.264**	ug/L	1.267	2	50	1943551	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 16:23:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	27489	1	Standard
	Cl	**37**		ug/L			5686581	5496219	0	Standard
⌈>	**Sc**	**45**		ug/L			495415	477556	2	Standard
|	**Cr**	**52**	**0.001**	ug/L	0.014	1079	21583	20823	1	Standard
|	**Cr**	**53**	**0.002**	ug/L	0.008	419	156	154	10	Standard
⌊	**Mn**	**55**	**-0.002**	ug/L	0.006	399	712	649	27	Standard
⌈>	**Ge**	**72**		ug/L			32261	30674	0	KED
|	**Ni**	**60**	**0.007**	ug/L	0.015	225	6	13	123	KED
|	**Ni**	**62**	**0.019**	ug/L	0.012	65	3	6	34	KED
|	**Cu**	**63**	**0.006**	ug/L	0.012	197	47	64	57	KED
|	**Cu**	**65**	**0.009**	ug/L	0.003	27	19	33	12	KED
|	**Zn**	**66**	**-0.007**	ug/L	0.009	138	19	15	24	KED
|	**Zn**	**67**	**0.012**	ug/L	0.030	255	4	5	43	KED
|	**As**	**75**	**0.004**	ug/L	0.009	206	6	7	26	KED
⌊	**Se**	**78**	**-0.056**	ug/L	0.123	218	29	26	12	KED
	Y	**89**		ug/L			269508	261314	0	Standard
	Kr	**83**		ug/L			48	33	8	Standard
⌈>	**In-1**	**115**		ug/L			10448	10028	2	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.006	185	1	0	173	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.003	78	1	3	54	KED
⌈>	**In**	**115**		ug/L			386612	387307	2	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.004	115	30	78	72	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.004	251	23	30	57	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.005	371	36	46	78	Standard
⌈>	**Tb**	**159**		ug/L			622192	617227	3	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.002	99	50	138	66	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0472-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 16:30:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27779	32742	3	Standard
	Cl	37		ug/L			5686581	5503300	0	Standard
>	Sc	45		ug/L			495415	483573	2	Standard
|	Cr	52	0.065	ug/L	0.024	36	21583	22210	1	Standard
|	Cr	53	0.061	ug/L	0.016	26	156	274	10	Standard
\	Mn	55	0.173	ug/L	0.001	0	712	5352	1	Standard
>	Ge	72		ug/L			32261	30873	1	KED
|	Ni	60	0.245	ug/L	0.020	8	6	273	9	KED
|	Ni	62	0.226	ug/L	0.085	37	3	43	35	KED
|	Cu	63	0.057	ug/L	0.006	9	47	222	9	KED
|	Cu	65	0.047	ug/L	0.007	15	19	92	13	KED
|	Zn	66	1.091	ug/L	0.083	7	19	493	8	KED
|	Zn	67	1.007	ug/L	0.102	10	4	78	10	KED
|	As	75	0.010	ug/L	0.015	160	6	8	41	KED
\	Se	78	0.005	ug/L	0.063	1294	29	28	7	KED
	Y	89		ug/L			269508	258958	2	Standard
	Kr	83		ug/L			48	37	21	Standard
>	In-1	115		ug/L			10448	10133	1	KED
|	Cd	111	0.000	ug/L	0.006	3717	1	1	100	KED
\	Cd	114	0.008	ug/L	0.005	64	1	6	51	KED
>	In	115		ug/L			386612	390316	0	Standard
|	Ag	107	0.000	ug/L	0.000	69	30	34	8	Standard
|	Ba	135	0.086	ug/L	0.010	11	23	350	11	Standard
\	Ba	137	0.079	ug/L	0.004	4	36	570	4	Standard
>	Tb	159		ug/L			622192	627228	0	Standard
\	Pb	208	0.138	ug/L	0.003	2	50	5145	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0472-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 16:35:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27779	33865	1	Standard
Cl	37		ug/L			5686581	5619832	0	Standard
Sc	45		ug/L			495415	503172	1	Standard
Cr	52	24.626	ug/L	0.329	1	21583	471422	2	Standard
Cr	53	25.045	ug/L	0.238	0	156	52497	1	Standard
Mn	55	23.366	ug/L	0.180	0	712	654970	1	Standard
Ge	72		ug/L			32261	31792	2	KED
Ni	60	25.513	ug/L	0.628	2	6	28596	0	KED
Ni	62	25.109	ug/L	0.233	0	3	4593	1	KED
Cu	63	25.382	ug/L	0.525	2	47	81903	0	KED
Cu	65	25.203	ug/L	0.823	3	19	40651	2	KED
Zn	66	82.124	ug/L	1.860	2	19	36800	1	KED
Zn	67	75.894	ug/L	3.238	4	4	5731	2	KED
As	75	24.481	ug/L	0.329	1	6	5768	1	KED
Se	78	78.466	ug/L	2.232	2	29	2293	2	KED
Y	89		ug/L			269508	280266	0	Standard
Kr	83		ug/L			48	46	8	Standard
In-1	115		ug/L			10448	9766	5	KED
Cd	111	26.343	ug/L	0.879	3	1	7602	2	KED
Cd	114	26.516	ug/L	1.203	4	1	18325	1	KED
In	115		ug/L			386612	397727	2	Standard
Ag	107	25.624	ug/L	0.485	1	30	348241	0	Standard
Ba	135	24.781	ug/L	0.932	3	23	96215	1	Standard
Ba	137	24.598	ug/L	0.551	2	36	168377	0	Standard
Tb	159		ug/L			622192	658996	0	Standard
Pb	208	25.494	ug/L	0.171	0	50	987856	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0210-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 16:40:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	41103	2	Standard
	Cl	**37**		ug/L			5686581	8793956	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	509667	0	Standard
|	**Cr**	**52**	**0.700**	ug/L	0.013	1	21583	35140	0	Standard
|	**Cr**	**53**	**4.027**	ug/L	0.095	2	156	8685	2	Standard
⌊	**Mn**	**55**	**23.208**	ug/L	0.381	1	712	658949	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	30161	0	KED
|	**Ni**	**60**	**0.409**	ug/L	0.028	6	6	441	6	KED
|	**Ni**	**62**	**0.448**	ug/L	0.031	7	3	80	6	KED
|	**Cu**	**63**	**3.274**	ug/L	0.025	0	47	10064	0	KED
|	**Cu**	**65**	**3.347**	ug/L	0.108	3	19	5139	3	KED
|	**Zn**	**66**	**31.360**	ug/L	0.978	3	19	13347	3	KED
|	**Zn**	**67**	**30.039**	ug/L	0.523	1	4	2155	1	KED
|	**As**	**75**	**0.502**	ug/L	0.021	4	6	118	3	KED
⌊	**Se**	**78**	**0.029**	ug/L	0.203	705	29	28	19	KED
	Y	**89**		ug/L			269508	273446	3	Standard
	Kr	**83**		ug/L			48	52	11	Standard
⌈>	**In-1**	**115**		ug/L			10448	9899	0	KED
|	**Cd**	**111**	**0.052**	ug/L	0.012	22	1	17	20	KED
⌊	**Cd**	**114**	**0.052**	ug/L	0.005	9	1	37	9	KED
⌈>	**In**	**115**		ug/L			386612	383579	0	Standard
|	**Ag**	**107**	**0.007**	ug/L	0.001	15	30	123	11	Standard
|	**Ba**	**135**	**8.397**	ug/L	0.141	1	23	31473	1	Standard
⌊	**Ba**	**137**	**8.367**	ug/L	0.143	1	36	55277	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	641274	2	Standard
⌊	**Pb**	**208**	**0.369**	ug/L	0.011	2	50	13960	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0210-03
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 16:45:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	37175	3	Standard
	Cl	**37**		ug/L			5686581	10892913	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	514543	1	Standard
|	**Cr**	**52**	**0.458**	ug/L	0.015	3	21583	30963	0	Standard
|	**Cr**	**53**	**5.730**	ug/L	0.022	0	156	12407	1	Standard
⌊	**Mn**	**55**	**2.820**	ug/L	0.037	1	712	81479	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	29373	0	KED
|	**Ni**	**60**	**0.445**	ug/L	0.040	9	6	466	8	KED
|	**Ni**	**62**	**0.493**	ug/L	0.120	24	3	86	24	KED
|	**Cu**	**63**	**0.818**	ug/L	0.023	2	47	2481	2	KED
|	**Cu**	**65**	**0.825**	ug/L	0.046	5	19	1247	5	KED
|	**Zn**	**66**	**0.848**	ug/L	0.077	9	19	368	8	KED
|	**Zn**	**67**	**1.634**	ug/L	0.169	10	4	118	10	KED
|	**As**	**75**	**1.198**	ug/L	0.075	6	6	266	5	KED
⌊	**Se**	**78**	**0.073**	ug/L	0.037	50	29	28	4	KED
	Y	**89**		ug/L			269508	270482	0	Standard
	Kr	**83**		ug/L			48	67	3	Standard
⌈>	**In-1**	**115**		ug/L			10448	9426	2	KED
|	**Cd**	**111**	**0.007**	ug/L	0.009	119	1	3	66	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.006	84	1	5	68	KED
⌈>	**In**	**115**		ug/L			386612	370609	1	Standard
|	**Ag**	**107**	**0.005**	ug/L	0.001	14	30	87	7	Standard
|	**Ba**	**135**	**10.479**	ug/L	0.223	2	23	37937	1	Standard
⌊	**Ba**	**137**	**10.284**	ug/L	0.260	2	36	65628	2	Standard
⌈>	**Tb**	**159**		ug/L			622192	634252	3	Standard
⌊	**Pb**	**208**	**0.070**	ug/L	0.003	4	50	2675	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0210-05
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 16:49:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	35057	2	Standard
	Cl	**37**		ug/L			5686581	5467961	2	Standard
⌈>	**Sc**	**45**		ug/L			495415	531463	2	Standard
|	**Cr**	**52**	**0.640**	ug/L	0.019	2	21583	35490	1	Standard
|	**Cr**	**53**	**0.902**	ug/L	0.027	2	156	2160	5	Standard
⌊	**Mn**	**55**	**0.787**	ug/L	0.019	2	712	24019	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	31580	1	KED
|	**Ni**	**60**	**0.059**	ug/L	0.007	12	6	72	9	KED
|	**Ni**	**62**	**0.088**	ug/L	0.012	13	3	19	10	KED
|	**Cu**	**63**	**2.338**	ug/L	0.005	0	47	7537	1	KED
|	**Cu**	**65**	**2.375**	ug/L	0.051	2	19	3825	3	KED
|	**Zn**	**66**	**0.457**	ug/L	0.060	13	19	222	13	KED
|	**Zn**	**67**	**0.712**	ug/L	0.122	17	4	57	16	KED
|	**As**	**75**	**0.115**	ug/L	0.013	11	6	33	9	KED
⌊	**Se**	**78**	**0.101**	ug/L	0.073	72	29	31	6	KED
	Y	**89**		ug/L			269508	277059	3	Standard
	Kr	**83**		ug/L			48	31	24	Standard
⌈>	**In-1**	**115**		ug/L			10448	10331	2	KED
|	**Cd**	**111**	**0.001**	ug/L	0.005	437	1	2	65	KED
⌊	**Cd**	**114**	**-0.014**	ug/L	0.017	118	1	-9	134	KED
⌈>	**In**	**115**		ug/L			386612	400244	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	45	30	65	24	Standard
|	**Ba**	**135**	**2.754**	ug/L	0.042	1	23	10786	2	Standard
⌊	**Ba**	**137**	**2.762**	ug/L	0.039	1	36	19062	0	Standard
⌈>	**Tb**	**159**		ug/L			622192	650261	3	Standard
⌊	**Pb**	**208**	**0.247**	ug/L	0.005	1	50	9481	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0284-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, April 18, 2023 16:54:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	32247	1	Standard
	Cl	**37**		ug/L			5686581	5539015	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	540841	0	Standard
|	**Cr**	**52**	**0.510**	ug/L	0.017	3	21583	33576	0	Standard
|	**Cr**	**53**	**0.862**	ug/L	0.011	1	156	2106	1	Standard
⌊	**Mn**	**55**	**0.866**	ug/L	0.012	1	712	26832	0	Standard
⌈>	**Ge**	**72**		ug/L			32261	31905	2	KED
|	**Ni**	**60**	**0.997**	ug/L	0.022	2	6	1128	2	KED
|	**Ni**	**62**	**0.939**	ug/L	0.065	6	3	175	4	KED
|	**Cu**	**63**	**3.246**	ug/L	0.093	2	47	10549	1	KED
|	**Cu**	**65**	**3.166**	ug/L	0.102	3	19	5140	0	KED
|	**Zn**	**66**	**2.129**	ug/L	0.150	7	19	975	6	KED
|	**Zn**	**67**	**1.949**	ug/L	0.373	19	4	152	20	KED
|	**As**	**75**	**0.276**	ug/L	0.017	6	6	71	4	KED
⌊	**Se**	**78**	**-0.018**	ug/L	0.208	1132	29	28	18	KED
	Y	**89**		ug/L			269508	278667	3	Standard
	Kr	**83**		ug/L			48	40	26	Standard
⌈>	**In-1**	**115**		ug/L			10448	10157	2	KED
|	**Cd**	**111**	**0.002**	ug/L	0.008	336	1	2	94	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	346	1	2	146	KED
⌈>	**In**	**115**		ug/L			386612	397732	0	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	42	30	52	17	Standard
|	**Ba**	**135**	**1.264**	ug/L	0.023	1	23	4931	1	Standard
⌊	**Ba**	**137**	**1.262**	ug/L	0.027	2	36	8675	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	653455	2	Standard
⌊	**Pb**	**208**	**0.032**	ug/L	0.001	3	50	1271	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0212-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 16:59:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27779	43596	2	Standard
	Cl	37		ug/L			5686581	5594418	1	Standard
>	Sc	45		ug/L			495415	535460	0	Standard
|	Cr	52	0.359	ug/L	0.036	9	21583	30298	1	Standard
|	Cr	53	0.507	ug/L	0.006	1	156	1296	0	Standard
\	Mn	55	3.707	ug/L	0.021	0	712	111229	0	Standard
>	Ge	72		ug/L			32261	32467	1	KED
|	Ni	60	10.707	ug/L	0.258	2	6	12261	1	KED
|	Ni	62	10.458	ug/L	0.191	1	3	1955	0	KED
|	Cu	63	4.804	ug/L	0.027	0	47	15872	1	KED
|	Cu	65	4.774	ug/L	0.050	1	19	7882	2	KED
|	Zn	66	9.490	ug/L	0.260	2	19	4360	1	KED
|	Zn	67	8.711	ug/L	0.502	5	4	676	6	KED
|	As	75	0.706	ug/L	0.036	5	6	176	4	KED
\	Se	78	0.024	ug/L	0.184	763	29	30	18	KED
	Y	89		ug/L			269508	282578	0	Standard
	Kr	83		ug/L			48	37	16	Standard
>	In-1	115		ug/L			10448	10478	0	KED
|	Cd	111	0.027	ug/L	0.013	47	1	10	39	KED
\	Cd	114	0.021	ug/L	0.000	0	1	16	1	KED
>	In	115		ug/L			386612	404073	2	Standard
|	Ag	107	0.006	ug/L	0.001	13	30	114	9	Standard
|	Ba	135	4.286	ug/L	0.187	4	23	16924	2	Standard
\	Ba	137	4.249	ug/L	0.171	4	36	29573	1	Standard
>	Tb	159		ug/L			622192	670494	1	Standard
\	Pb	208	0.321	ug/L	0.009	2	50	12691	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0420-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 17:04:05
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27779	43711	1	Standard
	Cl	37		ug/L			5686581	5583769	3	Standard
>	Sc	45		ug/L			495415	529743	3	Standard
	Cr	52	0.384	ug/L	0.061	15	21583	30440	1	Standard
	Cr	53	0.514	ug/L	0.006	1	156	1297	3	Standard
	Mn	55	3.461	ug/L	0.158	4	712	102690	1	Standard
>	Ge	72		ug/L			32261	32314	1	KED
	Ni	60	10.803	ug/L	0.364	3	6	12313	2	KED
	Ni	62	10.807	ug/L	0.361	3	3	2012	4	KED
	Cu	63	4.716	ug/L	0.097	2	47	15511	1	KED
	Cu	65	4.761	ug/L	0.099	2	19	7823	1	KED
	Zn	66	9.721	ug/L	0.313	3	19	4446	3	KED
	Zn	67	8.768	ug/L	0.296	3	4	677	4	KED
	As	75	0.783	ug/L	0.008	1	6	194	1	KED
	Se	78	-0.039	ug/L	0.100	258	29	28	10	KED
	Y	89		ug/L			269508	288187	1	Standard
	Kr	83		ug/L			48	32	25	Standard
>	In-1	115		ug/L			10448	10466	0	KED
	Cd	111	0.026	ug/L	0.007	25	1	9	20	KED
	Cd	114	0.018	ug/L	0.005	29	1	14	27	KED
>	In	115		ug/L			386612	403069	0	Standard
	Ag	107	0.005	ug/L	0.000	4	30	106	3	Standard
	Ba	135	4.335	ug/L	0.057	1	23	17086	0	Standard
	Ba	137	4.322	ug/L	0.056	1	36	30020	0	Standard
>	Tb	159		ug/L			622192	651190	2	Standard
	Pb	208	0.153	ug/L	0.003	1	50	5896	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0420-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 17:08:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27779	43158	0	Standard
Cl	37		ug/L			5686581	5546861	1	Standard
Sc	45		ug/L			495415	523820	3	Standard
Cr	52	24.302	ug/L	0.427	1	21583	484373	2	Standard
Cr	53	24.993	ug/L	0.694	2	156	54500	1	Standard
Mn	55	26.401	ug/L	0.705	2	712	769815	1	Standard
Ge	72		ug/L			32261	32091	1	KED
Ni	60	37.265	ug/L	0.225	0	6	42171	1	KED
Ni	62	36.466	ug/L	0.413	1	3	6733	2	KED
Cu	63	31.093	ug/L	1.304	4	47	101242	2	KED
Cu	65	30.941	ug/L	1.722	5	19	50355	3	KED
Zn	66	89.769	ug/L	1.275	1	19	40608	1	KED
Zn	67	84.264	ug/L	2.184	2	4	6424	2	KED
As	75	25.585	ug/L	0.458	1	6	6084	0	KED
Se	78	76.526	ug/L	3.353	4	29	2258	2	KED
Y	89		ug/L			269508	282219	1	Standard
Kr	83		ug/L			48	38	10	Standard
In-1	115		ug/L			10448	10365	6	KED
Cd	111	25.661	ug/L	1.987	7	1	7841	1	KED
Cd	114	25.596	ug/L	1.943	7	1	18740	0	KED
In	115		ug/L			386612	399896	0	Standard
Ag	107	26.649	ug/L	0.270	1	30	364248	1	Standard
Ba	135	30.050	ug/L	0.635	2	23	117361	1	Standard
Ba	137	29.431	ug/L	0.785	2	36	202582	2	Standard
Tb	159		ug/L			622192	658838	3	Standard
Pb	208	26.600	ug/L	0.502	1	50	1030148	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 17:13:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	27283	1	Standard
	Cl	**37**		ug/L			5686581	5452873	2	Standard
⌈>	**Sc**	**45**		ug/L			495415	472451	0	Standard
|	**Cr**	**52**	**-0.005**	ug/L	0.021	396	21583	20493	1	Standard
|	**Cr**	**53**	**0.026**	ug/L	0.005	19	156	199	5	Standard
⌊	**Mn**	**55**	**-0.004**	ug/L	0.000	3	712	582	0	Standard
⌈>	**Ge**	**72**		ug/L			32261	31508	1	KED
|	**Ni**	**60**	**0.012**	ug/L	0.023	194	6	19	130	KED
|	**Ni**	**62**	**0.022**	ug/L	0.016	75	3	6	41	KED
|	**Cu**	**63**	**0.012**	ug/L	0.022	176	47	85	80	KED
|	**Cu**	**65**	**0.013**	ug/L	0.019	150	19	39	76	KED
|	**Zn**	**66**	**0.138**	ug/L	0.081	58	19	80	44	KED
|	**Zn**	**67**	**0.231**	ug/L	0.174	75	4	21	60	KED
|	**As**	**75**	**0.003**	ug/L	0.021	751	6	7	65	KED
⌊	**Se**	**78**	**0.136**	ug/L	0.154	112	29	32	12	KED
	Y	**89**		ug/L			269508	256927	1	Standard
	Kr	**83**		ug/L			48	51	14	Standard
⌈>	**In-1**	**115**		ug/L			10448	10090	1	KED
|	**Cd**	**111**	**0.002**	ug/L	0.002	77	1	2	21	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.005	479	1	1	175	KED
⌈>	**In**	**115**		ug/L			386612	377566	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	34	30	57	15	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.001	88	23	28	17	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.001	89	36	43	15	Standard
⌈>	**Tb**	**159**		ug/L			622192	618525	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	74	50	97	35	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 17:18:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	26562	1	Standard
	Cl	**37**		ug/L			5686581	5600359	3	Standard
⌈>	**Sc**	**45**		ug/L			495415	491962	1	Standard
|	**Cr**	**52**	**47.715**	ug/L	0.420	0	21583	872853	0	Standard
|	**Cr**	**53**	**48.547**	ug/L	0.637	1	156	99338	0	Standard
⌊	**Mn**	**55**	**45.105**	ug/L	0.945	2	712	1235299	0	Standard
⌈>	**Ge**	**72**		ug/L			32261	31525	2	KED
|	**Ni**	**60**	**50.621**	ug/L	1.913	3	6	56238	1	KED
|	**Ni**	**62**	**49.260**	ug/L	0.643	1	3	8932	1	KED
|	**Cu**	**63**	**49.952**	ug/L	0.495	0	47	159820	2	KED
|	**Cu**	**65**	**48.859**	ug/L	0.764	1	19	78135	1	KED
|	**Zn**	**66**	**50.390**	ug/L	1.567	3	19	22392	1	KED
|	**Zn**	**67**	**48.414**	ug/L	1.694	3	4	3626	0	KED
|	**As**	**75**	**48.492**	ug/L	1.020	2	6	11322	1	KED
⌊	**Se**	**78**	**49.575**	ug/L	0.767	1	29	1447	1	KED
	Y	**89**		ug/L			269508	272097	2	Standard
	Kr	**83**		ug/L			48	46	22	Standard
⌈>	**In-1**	**115**		ug/L			10448	10111	1	KED
|	**Cd**	**111**	**49.631**	ug/L	0.795	1	1	14842	1	KED
⌊	**Cd**	**114**	**50.748**	ug/L	1.152	2	1	36360	1	KED
⌈>	**In**	**115**		ug/L			386612	386592	2	Standard
|	**Ag**	**107**	**50.890**	ug/L	1.917	3	30	672010	1	Standard
|	**Ba**	**135**	**48.985**	ug/L	0.803	1	23	184896	0	Standard
⌊	**Ba**	**137**	**48.328**	ug/L	1.291	2	36	321474	0	Standard
⌈>	**Tb**	**159**		ug/L			622192	643257	2	Standard
⌊	**Pb**	**208**	**49.366**	ug/L	1.335	2	50	1866540	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 17:25:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	25565	2	Standard
	Cl	**37**		ug/L			5686581	5588128	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	456015	2	Standard
|	**Cr**	**52**	**0.018**	ug/L	0.029	161	21583	20162	1	Standard
|	**Cr**	**53**	**0.013**	ug/L	0.003	24	156	169	5	Standard
⌊	**Mn**	**55**	**-0.004**	ug/L	0.000	7	712	544	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	30864	1	KED
|	**Ni**	**60**	**-0.002**	ug/L	0.004	235	6	4	89	KED
|	**Ni**	**62**	**-0.006**	ug/L	0.011	164	3	1	100	KED
|	**Cu**	**63**	**0.001**	ug/L	0.003	289	47	48	19	KED
|	**Cu**	**65**	**0.001**	ug/L	0.009	1760	19	19	73	KED
|	**Zn**	**66**	**-0.007**	ug/L	0.017	253	19	15	48	KED
|	**Zn**	**67**	**-0.006**	ug/L	0.045	786	4	3	86	KED
|	**As**	**75**	**-0.006**	ug/L	0.005	94	6	5	24	KED
⌊	**Se**	**78**	**0.127**	ug/L	0.206	162	29	31	16	KED
	Y	**89**		ug/L			269508	260290	3	Standard
	Kr	**83**		ug/L			48	38	21	Standard
⌈>	**In-1**	**115**		ug/L			10448	10124	1	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.004	406	1	1	69	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.006	216	1	3	131	KED
⌈>	**In**	**115**		ug/L			386612	381953	0	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	42	30	61	21	Standard
|	**Ba**	**135**	**-0.001**	ug/L	0.003	319	23	20	46	Standard
⌊	**Ba**	**137**	**-0.000**	ug/L	0.001	5338	36	36	24	Standard
⌈>	**Tb**	**159**		ug/L			622192	604170	2	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	49	50	94	23	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0212-13
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 17:33:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	46932	0	Standard
	Cl	**37**		ug/L			5686581	5565342	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	521367	3	Standard
|	**Cr**	**52**	**0.609**	ug/L	0.023	3	21583	34219	2	Standard
|	**Cr**	**53**	**0.661**	ug/L	0.021	3	156	1595	0	Standard
⌊	**Mn**	**55**	**33.451**	ug/L	1.370	4	712	970411	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	31595	2	KED
|	**Ni**	**60**	**10.209**	ug/L	0.174	1	6	11377	2	KED
|	**Ni**	**62**	**9.942**	ug/L	0.357	3	3	1810	6	KED
|	**Cu**	**63**	**4.645**	ug/L	0.060	1	47	14935	1	KED
|	**Cu**	**65**	**4.688**	ug/L	0.118	2	19	7530	2	KED
|	**Zn**	**66**	**2.083**	ug/L	0.084	4	19	946	1	KED
|	**Zn**	**67**	**2.066**	ug/L	0.064	3	4	159	3	KED
|	**As**	**75**	**0.595**	ug/L	0.008	1	6	145	3	KED
⌊	**Se**	**78**	**0.088**	ug/L	0.023	26	29	31	2	KED
	Y	**89**		ug/L			269508	272055	3	Standard
	Kr	**83**		ug/L			48	52	25	Standard
⌈>	**In-1**	**115**		ug/L			10448	10258	1	KED
|	**Cd**	**111**	**0.005**	ug/L	0.003	65	1	3	31	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.001	17	1	6	16	KED
⌈>	**In**	**115**		ug/L			386612	387570	1	Standard
|	**Ag**	**107**	**0.005**	ug/L	0.004	81	30	99	56	Standard
|	**Ba**	**135**	**5.989**	ug/L	0.064	1	23	22691	1	Standard
⌊	**Ba**	**137**	**5.883**	ug/L	0.027	0	36	39279	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	641887	3	Standard
⌊	**Pb**	**208**	**0.027**	ug/L	0.004	14	50	1060	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0199-01
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 17:37:47
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	38322	2	Standard
	Cl	**37**		ug/L			5686581	5684677	0	Standard
⌈>	**Sc**	**45**		ug/L			495415	486247	2	Standard
|	**Cr**	**52**	**0.416**	ug/L	0.070	16	21583	28501	1	Standard
|	**Cr**	**53**	**0.408**	ug/L	0.018	4	156	977	2	Standard
⌊	**Mn**	**55**	**1.283**	ug/L	0.054	4	712	35383	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	31637	2	KED
|	**Ni**	**60**	**0.117**	ug/L	0.019	15	6	137	14	KED
|	**Ni**	**62**	**0.102**	ug/L	0.041	40	3	21	33	KED
|	**Cu**	**63**	**2.476**	ug/L	0.080	3	47	7990	1	KED
|	**Cu**	**65**	**2.396**	ug/L	0.119	4	19	3862	3	KED
|	**Zn**	**66**	**35.499**	ug/L	1.184	3	19	15835	0	KED
|	**Zn**	**67**	**33.087**	ug/L	0.811	2	4	2489	0	KED
|	**As**	**75**	**0.036**	ug/L	0.014	37	6	15	17	KED
⌊	**Se**	**78**	**0.055**	ug/L	0.070	127	29	30	4	KED
	Y	**89**		ug/L			269508	266721	2	Standard
	Kr	**83**		ug/L			48	33	17	Standard
⌈>	**In-1**	**115**		ug/L			10448	10466	1	KED
|	**Cd**	**111**	**0.020**	ug/L	0.004	21	1	8	17	KED
⌊	**Cd**	**114**	**0.022**	ug/L	0.011	49	1	17	44	KED
⌈>	**In**	**115**		ug/L			386612	389412	3	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	60	30	48	21	Standard
|	**Ba**	**135**	**9.618**	ug/L	0.477	4	23	36548	1	Standard
⌊	**Ba**	**137**	**9.548**	ug/L	0.455	4	36	63953	0	Standard
⌈>	**Tb**	**159**		ug/L			622192	627246	1	Standard
⌊	**Pb**	**208**	**0.460**	ug/L	0.009	2	50	17023	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0212-02
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 17:42:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	45106	1	Standard
	Cl	**37**		ug/L			5686581	5603712	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	493682	2	Standard
|	**Cr**	**52**	**1.220**	ug/L	0.007	0	21583	43348	2	Standard
|	**Cr**	**53**	**1.372**	ug/L	0.083	6	156	2966	3	Standard
⌊	**Mn**	**55**	**26.839**	ug/L	0.849	3	712	737635	0	Standard
⌈>	**Ge**	**72**		ug/L			32261	32245	0	KED
|	**Ni**	**60**	**6.410**	ug/L	0.066	1	6	7294	0	KED
|	**Ni**	**62**	**6.234**	ug/L	0.331	5	3	1159	5	KED
|	**Cu**	**63**	**10.944**	ug/L	0.177	1	47	35853	1	KED
|	**Cu**	**65**	**11.109**	ug/L	0.179	1	19	18192	2	KED
|	**Zn**	**66**	**81.175**	ug/L	2.625	3	19	36902	2	KED
|	**Zn**	**67**	**70.590**	ug/L	1.907	2	4	5409	2	KED
|	**As**	**75**	**0.860**	ug/L	0.034	3	6	212	3	KED
⌊	**Se**	**78**	**-0.071**	ug/L	0.013	18	29	27	1	KED
	Y	**89**		ug/L			269508	279462	1	Standard
	Kr	**83**		ug/L			48	42	18	Standard
⌈>	**In-1**	**115**		ug/L			10448	10305	3	KED
|	**Cd**	**111**	**0.047**	ug/L	0.006	12	1	16	10	KED
⌊	**Cd**	**114**	**0.049**	ug/L	0.011	22	1	36	18	KED
⌈>	**In**	**115**		ug/L			386612	387046	0	Standard
|	**Ag**	**107**	**0.005**	ug/L	0.001	21	30	93	14	Standard
|	**Ba**	**135**	**11.640**	ug/L	0.179	1	23	44012	0	Standard
⌊	**Ba**	**137**	**11.458**	ug/L	0.101	0	36	76369	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	640772	2	Standard
⌊	**Pb**	**208**	**0.603**	ug/L	0.010	1	50	22783	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0212-03
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 17:47:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	41227	3	Standard
	Cl	**37**		ug/L			5686581	5917606	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	512399	1	Standard
|	**Cr**	**52**	**0.596**	ug/L	0.006	1	21583	33396	1	Standard
|	**Cr**	**53**	**1.114**	ug/L	0.020	1	156	2531	0	Standard
⌊	**Mn**	**55**	**22.926**	ug/L	0.425	1	712	654548	3	Standard
⌈>	**Ge**	**72**		ug/L			32261	31212	2	KED
|	**Ni**	**60**	**13.005**	ug/L	0.093	0	6	14320	2	KED
|	**Ni**	**62**	**12.877**	ug/L	0.849	6	3	2314	6	KED
|	**Cu**	**63**	**10.931**	ug/L	0.247	2	47	34676	4	KED
|	**Cu**	**65**	**10.932**	ug/L	0.138	1	19	17324	0	KED
|	**Zn**	**66**	**51.062**	ug/L	0.766	1	19	22473	0	KED
|	**Zn**	**67**	**46.244**	ug/L	0.729	1	4	3432	2	KED
|	**As**	**75**	**0.309**	ug/L	0.037	11	6	78	10	KED
⌊	**Se**	**78**	**0.133**	ug/L	0.078	58	29	32	8	KED
	Y	**89**		ug/L			269508	277149	2	Standard
	Kr	**83**		ug/L			48	45	12	Standard
⌈>	**In-1**	**115**		ug/L			10448	10369	5	KED
|	**Cd**	**111**	**0.047**	ug/L	0.010	20	1	16	17	KED
⌊	**Cd**	**114**	**0.031**	ug/L	0.017	56	1	23	48	KED
⌈>	**In**	**115**		ug/L			386612	387685	2	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.001	17	30	78	9	Standard
|	**Ba**	**135**	**16.019**	ug/L	0.450	2	23	60637	0	Standard
⌊	**Ba**	**137**	**15.931**	ug/L	0.474	2	36	106291	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	652285	1	Standard
⌊	**Pb**	**208**	**0.638**	ug/L	0.012	1	50	24502	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0212-04
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 17:51:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	43860	1	Standard
	Cl	**37**		ug/L			5686581	5621133	3	Standard
⌈>	**Sc**	**45**		ug/L			495415	495886	0	Standard
|	**Cr**	**52**	**0.580**	ug/L	0.017	2	21583	32040	0	Standard
|	**Cr**	**53**	**0.621**	ug/L	0.020	3	156	1434	2	Standard
⌊	**Mn**	**55**	**9.969**	ug/L	0.074	0	712	275803	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	31455	0	KED
|	**Ni**	**60**	**9.521**	ug/L	0.179	1	6	10565	1	KED
|	**Ni**	**62**	**9.867**	ug/L	0.525	5	3	1788	6	KED
|	**Cu**	**63**	**7.049**	ug/L	0.140	1	47	22544	1	KED
|	**Cu**	**65**	**7.092**	ug/L	0.271	3	19	11338	4	KED
|	**Zn**	**66**	**5.150**	ug/L	0.098	1	19	2301	1	KED
|	**Zn**	**67**	**5.791**	ug/L	0.221	3	4	436	2	KED
|	**As**	**75**	**0.556**	ug/L	0.029	5	6	136	4	KED
⌊	**Se**	**78**	**0.155**	ug/L	0.140	90	29	33	11	KED
	Y	**89**		ug/L			269508	273645	3	Standard
	Kr	**83**		ug/L			48	50	33	Standard
⌈>	**In-1**	**115**		ug/L			10448	10222	2	KED
|	**Cd**	**111**	**0.009**	ug/L	0.008	92	1	4	53	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.002	29	1	7	26	KED
⌈>	**In**	**115**		ug/L			386612	386871	1	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.001	28	30	72	16	Standard
|	**Ba**	**135**	**13.960**	ug/L	0.221	1	23	52755	1	Standard
⌊	**Ba**	**137**	**13.958**	ug/L	0.302	2	36	92963	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	639382	2	Standard
⌊	**Pb**	**208**	**0.051**	ug/L	0.002	4	50	1954	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0212-05
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 17:56:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	39129	1	Standard
	Cl	**37**		ug/L			5686581	5607293	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	528818	2	Standard
|	**Cr**	**52**	**0.115**	ug/L	0.007	6	21583	25241	1	Standard
|	**Cr**	**53**	**0.260**	ug/L	0.009	3	156	737	1	Standard
⌊	**Mn**	**55**	**16.996**	ug/L	0.259	1	712	500791	0	Standard
⌈>	**Ge**	**72**		ug/L			32261	31419	2	KED
|	**Ni**	**60**	**14.432**	ug/L	0.208	1	6	15992	1	KED
|	**Ni**	**62**	**13.592**	ug/L	0.313	2	3	2458	1	KED
|	**Cu**	**63**	**1.315**	ug/L	0.029	2	47	4239	4	KED
|	**Cu**	**65**	**1.257**	ug/L	0.029	2	19	2021	0	KED
|	**Zn**	**66**	**12.298**	ug/L	0.775	6	19	5459	4	KED
|	**Zn**	**67**	**11.921**	ug/L	0.312	2	4	893	4	KED
|	**As**	**75**	**0.355**	ug/L	0.014	3	6	89	5	KED
⌊	**Se**	**78**	**0.090**	ug/L	0.136	152	29	31	11	KED
	Y	**89**		ug/L			269508	268697	0	Standard
	Kr	**83**		ug/L			48	33	6	Standard
⌈>	**In-1**	**115**		ug/L			10448	10280	2	KED
|	**Cd**	**111**	**0.019**	ug/L	0.013	71	1	7	54	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.009	85	1	9	72	KED
⌈>	**In**	**115**		ug/L			386612	385354	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	37	30	53	15	Standard
|	**Ba**	**135**	**9.703**	ug/L	0.171	1	23	36531	1	Standard
⌊	**Ba**	**137**	**9.717**	ug/L	0.067	0	36	64481	0	Standard
⌈>	**Tb**	**159**		ug/L			622192	648671	3	Standard
⌊	**Pb**	**208**	**0.024**	ug/L	0.001	2	50	971	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0212-06
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 18:01:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	44040	4	Standard
	Cl	**37**		ug/L			5686581	5597140	0	Standard
⌈>	**Sc**	**45**		ug/L			495415	519751	3	Standard
|	**Cr**	**52**	**0.424**	ug/L	0.043	10	21583	30622	1	Standard
|	**Cr**	**53**	**0.562**	ug/L	0.036	6	156	1377	3	Standard
⌊	**Mn**	**55**	**64.560**	ug/L	2.155	3	712	1866638	0	Standard
⌈>	**Ge**	**72**		ug/L			32261	31133	5	KED
|	**Ni**	**60**	**27.229**	ug/L	1.684	6	6	29834	1	KED
|	**Ni**	**62**	**27.371**	ug/L	1.581	5	3	4894	0	KED
|	**Cu**	**63**	**9.682**	ug/L	0.504	5	47	30576	0	KED
|	**Cu**	**65**	**9.886**	ug/L	0.151	1	19	15625	4	KED
|	**Zn**	**66**	**6.288**	ug/L	0.176	2	19	2775	3	KED
|	**Zn**	**67**	**6.765**	ug/L	0.374	5	4	503	0	KED
|	**As**	**75**	**1.598**	ug/L	0.078	4	6	374	3	KED
⌊	**Se**	**78**	**-0.041**	ug/L	0.153	376	29	27	15	KED
	Y	**89**		ug/L			269508	279591	2	Standard
	Kr	**83**		ug/L			48	46	16	Standard
⌈>	**In-1**	**115**		ug/L			10448	10103	1	KED
|	**Cd**	**111**	**0.027**	ug/L	0.005	17	1	9	14	KED
⌊	**Cd**	**114**	**0.039**	ug/L	0.017	43	1	29	42	KED
⌈>	**In**	**115**		ug/L			386612	395208	2	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.000	10	30	86	8	Standard
|	**Ba**	**135**	**12.248**	ug/L	0.354	2	23	47271	0	Standard
⌊	**Ba**	**137**	**12.201**	ug/L	0.091	0	36	83033	2	Standard
⌈>	**Tb**	**159**		ug/L			622192	652497	2	Standard
⌊	**Pb**	**208**	**0.361**	ug/L	0.012	3	50	13896	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0212-07
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 18:06:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	46391	2	Standard
	Cl	**37**		ug/L			5686581	5611437	0	Standard
⌈>	**Sc**	**45**		ug/L			495415	512280	3	Standard
|	**Cr**	**52**	**0.744**	ug/L	0.068	9	21583	36135	3	Standard
|	**Cr**	**53**	**0.799**	ug/L	0.023	2	156	1861	2	Standard
⌊	**Mn**	**55**	**9.589**	ug/L	0.226	2	712	273928	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	30719	2	KED
|	**Ni**	**60**	**16.842**	ug/L	0.511	3	6	18245	2	KED
|	**Ni**	**62**	**16.881**	ug/L	0.816	4	3	2983	3	KED
|	**Cu**	**63**	**7.376**	ug/L	0.159	2	47	23031	0	KED
|	**Cu**	**65**	**7.542**	ug/L	0.144	1	19	11770	2	KED
|	**Zn**	**66**	**4.107**	ug/L	0.181	4	19	1795	2	KED
|	**Zn**	**67**	**4.511**	ug/L	0.566	12	4	332	10	KED
|	**As**	**75**	**0.457**	ug/L	0.057	12	6	110	13	KED
⌊	**Se**	**78**	**0.067**	ug/L	0.358	535	29	30	31	KED
	Y	**89**		ug/L			269508	278526	1	Standard
	Kr	**83**		ug/L			48	34	9	Standard
⌈>	**In-1**	**115**		ug/L			10448	10279	2	KED
|	**Cd**	**111**	**0.009**	ug/L	0.005	55	1	4	34	KED
⌊	**Cd**	**114**	**0.012**	ug/L	0.004	32	1	10	27	KED
⌈>	**In**	**115**		ug/L			386612	393772	0	Standard
|	**Ag**	**107**	**0.005**	ug/L	0.001	16	30	97	11	Standard
|	**Ba**	**135**	**10.464**	ug/L	0.205	1	23	40261	2	Standard
⌊	**Ba**	**137**	**10.361**	ug/L	0.071	0	36	70261	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	648453	2	Standard
⌊	**Pb**	**208**	**0.065**	ug/L	0.001	1	50	2515	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0212-08
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 18:10:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	46090	2	Standard
	Cl	**37**		ug/L			5686581	5597999	0	Standard
⌈>	**Sc**	**45**		ug/L			495415	513871	0	Standard
|	**Cr**	**52**	**0.563**	ug/L	0.026	4	21583	32884	1	Standard
|	**Cr**	**53**	**0.641**	ug/L	0.026	4	156	1529	3	Standard
⌊	**Mn**	**55**	**35.401**	ug/L	0.191	0	712	1013041	0	Standard
⌈>	**Ge**	**72**		ug/L			32261	31100	1	KED
|	**Ni**	**60**	**18.195**	ug/L	0.294	1	6	19958	1	KED
|	**Ni**	**62**	**17.893**	ug/L	0.632	3	3	3204	4	KED
|	**Cu**	**63**	**3.630**	ug/L	0.082	2	47	11500	2	KED
|	**Cu**	**65**	**3.695**	ug/L	0.139	3	19	5847	2	KED
|	**Zn**	**66**	**3.756**	ug/L	0.125	3	19	1664	2	KED
|	**Zn**	**67**	**4.207**	ug/L	0.282	6	4	314	6	KED
|	**As**	**75**	**0.542**	ug/L	0.012	2	6	131	1	KED
⌊	**Se**	**78**	**0.062**	ug/L	0.112	182	29	30	11	KED
	Y	**89**		ug/L			269508	279497	1	Standard
	Kr	**83**		ug/L			48	51	18	Standard
⌈>	**In-1**	**115**		ug/L			10448	10296	1	KED
|	**Cd**	**111**	**0.011**	ug/L	0.011	94	1	5	61	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.002	21	1	8	19	KED
⌈>	**In**	**115**		ug/L			386612	395311	2	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.000	7	30	74	6	Standard
|	**Ba**	**135**	**10.766**	ug/L	0.344	3	23	41563	1	Standard
⌊	**Ba**	**137**	**10.359**	ug/L	0.431	4	36	70483	2	Standard
⌈>	**Tb**	**159**		ug/L			622192	656083	1	Standard
⌊	**Pb**	**208**	**0.041**	ug/L	0.002	3	50	1641	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0212-09
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 18:15:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	47153	2	Standard
	Cl	**37**		ug/L			5686581	5491928	3	Standard
⌈>	**Sc**	**45**		ug/L			495415	515670	2	Standard
|	**Cr**	**52**	**0.599**	ug/L	0.032	5	21583	33665	0	Standard
|	**Cr**	**53**	**0.673**	ug/L	0.019	2	156	1605	3	Standard
⌊	**Mn**	**55**	**41.383**	ug/L	0.432	1	712	1188171	2	Standard
⌈>	**Ge**	**72**		ug/L			32261	30898	1	KED
|	**Ni**	**60**	**36.679**	ug/L	1.150	3	6	39960	2	KED
|	**Ni**	**62**	**36.850**	ug/L	0.565	1	3	6551	1	KED
|	**Cu**	**63**	**5.901**	ug/L	0.072	1	47	18544	0	KED
|	**Cu**	**65**	**5.681**	ug/L	0.112	1	19	8921	0	KED
|	**Zn**	**66**	**4.041**	ug/L	0.200	4	19	1779	6	KED
|	**Zn**	**67**	**4.545**	ug/L	0.098	2	4	337	2	KED
|	**As**	**75**	**0.467**	ug/L	0.059	12	6	113	10	KED
⌊	**Se**	**78**	**0.051**	ug/L	0.092	182	29	29	7	KED
	Y	**89**		ug/L			269508	277497	1	Standard
	Kr	**83**		ug/L			48	48	9	Standard
⌈>	**In-1**	**115**		ug/L			10448	10324	1	KED
|	**Cd**	**111**	**0.015**	ug/L	0.004	25	1	6	17	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.000	2	1	9	0	KED
⌈>	**In**	**115**		ug/L			386612	389350	1	Standard
|	**Ag**	**107**	**0.005**	ug/L	0.000	6	30	97	3	Standard
|	**Ba**	**135**	**8.115**	ug/L	0.124	1	23	30872	0	Standard
⌊	**Ba**	**137**	**8.034**	ug/L	0.092	1	36	53870	0	Standard
⌈>	**Tb**	**159**		ug/L			622192	650447	2	Standard
⌊	**Pb**	**208**	**0.035**	ug/L	0.002	4	50	1384	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 18:20:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	26076	3	Standard
	Cl	**37**		ug/L			5686581	5643289	1	Standard
⌈>	**Sc**	**45**		ug/L			495415	498046	2	Standard
|	**Cr**	**52**	**47.500**	ug/L	0.366	0	21583	879716	1	Standard
|	**Cr**	**53**	**47.505**	ug/L	0.772	1	156	98399	1	Standard
⌊	**Mn**	**55**	**44.686**	ug/L	0.832	1	712	1238941	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	30846	1	KED
|	**Ni**	**60**	**50.412**	ug/L	0.804	1	6	54831	0	KED
|	**Ni**	**62**	**49.921**	ug/L	0.737	1	3	8859	2	KED
|	**Cu**	**63**	**50.182**	ug/L	0.734	1	47	157097	0	KED
|	**Cu**	**65**	**50.033**	ug/L	1.475	2	19	78308	3	KED
|	**Zn**	**66**	**50.270**	ug/L	2.048	4	19	21866	3	KED
|	**Zn**	**67**	**48.865**	ug/L	1.115	2	4	3583	2	KED
|	**As**	**75**	**49.038**	ug/L	0.359	0	6	11206	0	KED
⌊	**Se**	**78**	**49.775**	ug/L	0.696	1	29	1422	1	KED
	Y	**89**		ug/L			269508	274244	1	Standard
	Kr	**83**		ug/L			48	52	11	Standard
⌈>	**In-1**	**115**		ug/L			10448	10260	2	KED
|	**Cd**	**111**	**48.711**	ug/L	1.696	3	1	14775	1	KED
⌊	**Cd**	**114**	**49.397**	ug/L	1.046	2	1	35912	1	KED
⌈>	**In**	**115**		ug/L			386612	396983	2	Standard
|	**Ag**	**107**	**48.915**	ug/L	1.208	2	30	663455	1	Standard
|	**Ba**	**135**	**47.597**	ug/L	1.065	2	23	184465	0	Standard
⌊	**Ba**	**137**	**48.090**	ug/L	0.502	1	36	328576	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	650355	1	Standard
⌊	**Pb**	**208**	**49.386**	ug/L	0.360	0	50	1888523	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 18:27:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	25710	0	Standard
	Cl	**37**		ug/L			5686581	5603149	2	Standard
⌈>	**Sc**	**45**		ug/L			495415	460101	2	Standard
|	**Cr**	**52**	**-0.012**	ug/L	0.014	113	21583	19837	1	Standard
|	**Cr**	**53**	**-0.001**	ug/L	0.005	985	156	144	9	Standard
⌊	**Mn**	**55**	**-0.004**	ug/L	0.002	38	712	546	6	Standard
⌈>	**Ge**	**72**		ug/L			32261	30628	1	KED
|	**Ni**	**60**	**-0.001**	ug/L	0.004	400	6	5	78	KED
|	**Ni**	**62**	**0.005**	ug/L	0.011	241	3	3	50	KED
|	**Cu**	**63**	**0.002**	ug/L	0.001	54	47	51	6	KED
|	**Cu**	**65**	**0.001**	ug/L	0.001	89	19	20	9	KED
|	**Zn**	**66**	**0.005**	ug/L	0.008	162	19	20	18	KED
|	**Zn**	**67**	**0.003**	ug/L	0.031	932	4	4	49	KED
|	**As**	**75**	**-0.008**	ug/L	0.013	158	6	4	66	KED
⌊	**Se**	**78**	**0.059**	ug/L	0.163	279	29	29	15	KED
	Y	**89**		ug/L			269508	259779	2	Standard
	Kr	**83**		ug/L			48	41	11	Standard
⌈>	**In-1**	**115**		ug/L			10448	10003	2	KED
|	**Cd**	**111**	**0.002**	ug/L	0.005	205	1	2	57	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.003	57	1	5	42	KED
⌈>	**In**	**115**		ug/L			386612	381220	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.000	20	30	52	7	Standard
|	**Ba**	**135**	**-0.002**	ug/L	0.002	123	23	15	55	Standard
⌊	**Ba**	**137**	**-0.000**	ug/L	0.001	534	36	34	20	Standard
⌈>	**Tb**	**159**		ug/L			622192	613423	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	17	50	100	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0212-10
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 18:36:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	45351	2	Standard
	Cl	**37**		ug/L			5686581	5510248	2	Standard
⌈>	**Sc**	**45**		ug/L			495415	506481	9	Standard
|	**Cr**	**52**	**0.647**	ug/L	0.130	20	21583	33801	2	Standard
|	**Cr**	**53**	**0.687**	ug/L	0.048	6	156	1600	4	Standard
⌊	**Mn**	**55**	**32.671**	ug/L	2.677	8	712	916926	1	Standard
⌈>	**Ge**	**72**		ug/L			32261	31014	1	KED
|	**Ni**	**60**	**11.830**	ug/L	0.103	0	6	12944	2	KED
|	**Ni**	**62**	**11.798**	ug/L	0.312	2	3	2106	0	KED
|	**Cu**	**63**	**4.780**	ug/L	0.263	5	47	15082	4	KED
|	**Cu**	**65**	**4.736**	ug/L	0.036	0	19	7470	2	KED
|	**Zn**	**66**	**2.337**	ug/L	0.022	0	19	1040	1	KED
|	**Zn**	**67**	**2.806**	ug/L	0.184	6	4	210	4	KED
|	**As**	**75**	**0.612**	ug/L	0.036	5	6	146	3	KED
⌊	**Se**	**78**	**0.167**	ug/L	0.186	111	29	33	14	KED
	Y	**89**		ug/L			269508	265380	6	Standard
	Kr	**83**		ug/L			48	42	22	Standard
⌈>	**In-1**	**115**		ug/L			10448	10227	1	KED
|	**Cd**	**111**	**0.007**	ug/L	0.002	21	1	4	13	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.005	122	1	4	90	KED
⌈>	**In**	**115**		ug/L			386612	383073	8	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.001	16	30	83	18	Standard
|	**Ba**	**135**	**5.962**	ug/L	0.549	9	23	22210	1	Standard
⌊	**Ba**	**137**	**5.854**	ug/L	0.422	7	36	38482	3	Standard
⌈>	**Tb**	**159**		ug/L			622192	623957	9	Standard
⌊	**Pb**	**208**	**0.032**	ug/L	0.004	12	50	1210	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0212-11
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 18:41:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27779	33515	2	Standard
	Cl	37		ug/L			5686581	5575293	1	Standard
⌈>	Sc	45		ug/L			495415	480528	0	Standard
|	Cr	52	0.165	ug/L	0.011	6	21583	23804	1	Standard
|	Cr	53	0.143	ug/L	0.011	7	156	437	5	Standard
⌊	Mn	55	0.029	ug/L	0.000	1	712	1477	1	Standard
⌈>	Ge	72		ug/L			32261	31406	1	KED
|	Ni	60	0.116	ug/L	0.029	25	6	134	25	KED
|	Ni	62	0.113	ug/L	0.021	18	3	23	16	KED
|	Cu	63	0.187	ug/L	0.011	5	47	643	6	KED
|	Cu	65	0.200	ug/L	0.018	8	19	337	8	KED
|	Zn	66	0.280	ug/L	0.057	20	19	142	17	KED
|	Zn	67	0.266	ug/L	0.100	37	4	24	29	KED
|	As	75	-0.006	ug/L	0.009	149	6	5	41	KED
⌊	Se	78	0.115	ug/L	0.086	74	29	32	6	KED
	Y	89		ug/L			269508	266582	0	Standard
	Kr	83		ug/L			48	41	27	Standard
⌈>	In-1	115		ug/L			10448	10306	3	KED
|	Cd	111	-0.001	ug/L	0.006	577	1	1	124	KED
⌊	Cd	114	0.001	ug/L	0.000	16	1	1	1	KED
⌈>	In	115		ug/L			386612	395615	2	Standard
|	Ag	107	0.000	ug/L	0.001	365	30	35	44	Standard
|	Ba	135	0.003	ug/L	0.002	78	23	36	24	Standard
⌊	Ba	137	0.004	ug/L	0.002	37	36	65	17	Standard
⌈>	Tb	159		ug/L			622192	628999	1	Standard
⌊	Pb	208	0.002	ug/L	0.000	23	50	124	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0244-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 18:46:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27779	32692	2	Standard
Cl	37		ug/L			5686581	5825255	1	Standard
Sc	45		ug/L			495415	490086	2	Standard
Cr	52	-0.019	ug/L	0.024	129	21583	21020	3	Standard
Cr	53	0.000	ug/L	0.005	1122	156	155	4	Standard
Mn	55	0.005	ug/L	0.001	13	712	847	0	Standard
Ge	72		ug/L			32261	31541	1	KED
Ni	60	-0.002	ug/L	0.003	162	6	3	100	KED
Ni	62	0.004	ug/L	0.011	271	3	3	50	KED
Cu	63	0.003	ug/L	0.005	141	47	57	26	KED
Cu	65	0.012	ug/L	0.005	39	19	38	20	KED
Zn	66	0.077	ug/L	0.013	16	19	53	10	KED
Zn	67	0.044	ug/L	0.076	173	4	7	75	KED
As	75	-0.002	ug/L	0.003	160	6	6	13	KED
Se	78	0.097	ug/L	0.235	241	29	31	20	KED
Y	89		ug/L			269508	263389	1	Standard
Kr	83		ug/L			48	39	26	Standard
In-1	115		ug/L			10448	10256	0	KED
Cd	111	0.003	ug/L	0.005	167	1	2	57	KED
Cd	114	0.002	ug/L	0.004	164	1	2	97	KED
In	115		ug/L			386612	391186	0	Standard
Ag	107	-0.000	ug/L	0.001	763	30	29	43	Standard
Ba	135	0.009	ug/L	0.003	36	23	59	21	Standard
Ba	137	0.010	ug/L	0.003	26	36	102	16	Standard
Tb	159		ug/L			622192	622281	1	Standard
Pb	208	0.004	ug/L	0.000	3	50	193	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0244-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 18:50:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27779	29315	2	Standard
Cl	37		ug/L			5686581	5723127	2	Standard
Sc	45		ug/L			495415	480720	0	Standard
Cr	52	23.903	ug/L	0.218	0	21583	437749	1	Standard
Cr	53	24.726	ug/L	0.352	1	156	49520	2	Standard
Mn	55	23.200	ug/L	0.205	0	712	621332	1	Standard
Ge	72		ug/L			32261	31485	0	KED
Ni	60	25.487	ug/L	0.414	1	6	28302	1	KED
Ni	62	25.116	ug/L	0.529	2	3	4550	1	KED
Cu	63	25.348	ug/L	0.790	3	47	81030	3	KED
Cu	65	25.801	ug/L	0.246	0	19	41227	0	KED
Zn	66	76.745	ug/L	2.017	2	19	34065	2	KED
Zn	67	72.554	ug/L	1.446	1	4	5429	2	KED
As	75	23.870	ug/L	0.281	1	6	5571	0	KED
Se	78	74.914	ug/L	1.530	2	29	2170	1	KED
Y	89		ug/L			269508	269933	1	Standard
Kr	83		ug/L			48	45	2	Standard
In-1	115		ug/L			10448	9952	3	KED
Cd	111	25.359	ug/L	1.200	4	1	7458	1	KED
Cd	114	25.723	ug/L	0.644	2	1	18133	0	KED
In	115		ug/L			386612	387233	1	Standard
Ag	107	25.905	ug/L	0.334	1	30	342819	0	Standard
Ba	135	24.305	ug/L	0.268	1	23	91928	1	Standard
Ba	137	24.486	ug/L	0.299	1	36	163238	2	Standard
Tb	159		ug/L			622192	631568	1	Standard
Pb	208	25.646	ug/L	0.619	2	50	952243	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0249-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 18:55:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27779	39137	3	Standard
Cl	37		ug/L			5686581	5554961	1	Standard
> Sc	45		ug/L			495415	639167	0	Standard
Cr	52	13.651	ug/L	0.028	0	21583	344329	0	Standard
Cr	53	14.247	ug/L	0.095	0	156	38020	0	Standard
Mn	55	169.647	ug/L	3.357	1	712	6034696	1	Standard
> Ge	72		ug/L			32261	31599	1	KED
Ni	60	14.950	ug/L	0.184	1	6	16663	1	KED
Ni	62	15.139	ug/L	0.432	2	3	2753	1	KED
Cu	63	32.015	ug/L	0.756	2	47	102684	1	KED
Cu	65	32.095	ug/L	0.703	2	19	51463	1	KED
Zn	66	59.703	ug/L	1.412	2	19	26608	3	KED
Zn	67	58.364	ug/L	1.374	2	4	4383	1	KED
As	75	6.371	ug/L	0.120	1	6	1497	0	KED
Se	78	0.795	ug/L	0.224	28	29	51	13	KED
Y	89		ug/L			269508	565577	3	Standard
Kr	83		ug/L			48	113	19	Standard
> In-1	115		ug/L			10448	9885	3	KED
Cd	111	0.205	ug/L	0.018	8	1	61	12	KED
Cd	114	0.195	ug/L	0.021	10	1	138	12	KED
> In	115		ug/L			386612	396820	0	Standard
Ag	107	0.168	ug/L	0.006	3	30	2306	2	Standard
Ba	135	50.995	ug/L	0.307	0	23	197619	0	Standard
Ba	137	51.220	ug/L	0.425	0	36	349884	1	Standard
> Tb	159		ug/L			622192	682013	2	Standard
Pb	208	14.919	ug/L	0.274	1	50	598197	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0249-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 19:00:19
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27779	40968	3	Standard
	Cl	37		ug/L			5686581	5526100	1	Standard
>	Sc	45		ug/L			495415	639828	2	Standard
	Cr	52	13.263	ug/L	0.263	1	21583	335623	1	Standard
	Cr	53	13.574	ug/L	0.130	0	156	36271	1	Standard
	Mn	55	186.391	ug/L	4.039	2	712	6636699	2	Standard
>	Ge	72		ug/L			32261	31464	1	KED
	Ni	60	14.052	ug/L	0.655	4	6	15590	3	KED
	Ni	62	14.181	ug/L	0.472	3	3	2569	4	KED
	Cu	63	25.162	ug/L	0.446	1	47	80384	2	KED
	Cu	65	25.084	ug/L	1.108	4	19	40041	3	KED
	Zn	66	50.095	ug/L	1.456	2	19	22224	1	KED
	Zn	67	49.204	ug/L	1.536	3	4	3679	1	KED
	As	75	6.218	ug/L	0.039	0	6	1455	0	KED
	Se	78	1.156	ug/L	0.140	12	29	61	5	KED
	Y	89		ug/L			269508	564363	1	Standard
	Kr	83		ug/L			48	102	9	Standard
>	In-1	115		ug/L			10448	10243	4	KED
	Cd	111	0.294	ug/L	0.053	18	1	90	13	KED
	Cd	114	0.280	ug/L	0.029	10	1	204	7	KED
>	In	115		ug/L			386612	395498	1	Standard
	Ag	107	0.224	ug/L	0.003	1	30	3059	2	Standard
	Ba	135	52.796	ug/L	0.906	1	23	203896	0	Standard
	Ba	137	52.604	ug/L	1.106	2	36	358088	1	Standard
>	Tb	159		ug/L			622192	689572	0	Standard
	Pb	208	10.932	ug/L	0.069	0	50	443306	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0244-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 19:05:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27779	40662	0	Standard
Cl	37		ug/L			5686581	5574368	1	Standard
> Sc	45		ug/L			495415	646227	2	Standard
Cr	52	12.916	ug/L	0.074	0	21583	330911	2	Standard
Cr	53	13.395	ug/L	0.355	2	156	36142	0	Standard
Mn	55	187.080	ug/L	3.199	1	712	6726790	0	Standard
> Ge	72		ug/L			32261	31537	2	KED
Ni	60	13.859	ug/L	0.418	3	6	15415	2	KED
Ni	62	14.181	ug/L	0.263	1	3	2574	1	KED
Cu	63	24.532	ug/L	0.173	0	47	78547	2	KED
Cu	65	24.656	ug/L	0.273	1	19	39467	2	KED
Zn	66	48.732	ug/L	0.333	0	19	21675	1	KED
Zn	67	49.586	ug/L	1.765	3	4	3717	4	KED
As	75	6.017	ug/L	0.027	0	6	1411	1	KED
Se	78	0.862	ug/L	0.120	13	29	53	7	KED
Y	89		ug/L			269508	569021	1	Standard
Kr	83		ug/L			48	109	5	Standard
> In-1	115		ug/L			10448	10092	0	KED
Cd	111	0.329	ug/L	0.020	5	1	100	6	KED
Cd	114	0.300	ug/L	0.053	17	1	215	18	KED
> In	115		ug/L			386612	387448	0	Standard
Ag	107	0.214	ug/L	0.011	4	30	2862	4	Standard
Ba	135	54.327	ug/L	0.701	1	23	205570	1	Standard
Ba	137	54.504	ug/L	0.672	1	36	363501	1	Standard
> Tb	159		ug/L			622192	677489	2	Standard
Pb	208	11.799	ug/L	0.340	2	50	469842	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0244-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 19:09:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27779	40191	0	Standard
Cl	37		ug/L			5686581	5578659	2	Standard
> Sc	45		ug/L			495415	641909	2	Standard
Cr	52	31.790	ug/L	0.484	1	21583	767995	0	Standard
Cr	53	32.837	ug/L	0.563	1	156	87723	0	Standard
Mn	55	213.634	ug/L	6.140	2	712	7629642	1	Standard
> Ge	72		ug/L			32261	31133	1	KED
Ni	60	38.701	ug/L	0.433	1	6	42485	0	KED
Ni	62	38.694	ug/L	0.713	1	3	6930	1	KED
Cu	63	49.188	ug/L	0.205	0	47	155427	1	KED
Cu	65	49.885	ug/L	1.072	2	19	78789	1	KED
Zn	66	123.959	ug/L	2.166	1	19	54392	0	KED
Zn	67	117.016	ug/L	1.102	0	4	8656	2	KED
As	75	28.828	ug/L	0.486	1	6	6650	0	KED
Se	78	71.246	ug/L	0.921	1	29	2042	1	KED
Y	89		ug/L			269508	572584	1	Standard
Kr	83		ug/L			48	116	26	Standard
> In-1	115		ug/L			10448	9896	0	KED
Cd	111	24.739	ug/L	0.146	0	1	7242	0	KED
Cd	114	25.110	ug/L	0.781	3	1	17611	2	KED
> In	115		ug/L			386612	387218	1	Standard
Ag	107	14.188	ug/L	0.341	2	30	187749	1	Standard
Ba	135	80.405	ug/L	0.538	0	23	304051	1	Standard
Ba	137	79.248	ug/L	0.864	1	36	528212	2	Standard
> Tb	159		ug/L			622192	673818	0	Standard
Pb	208	37.422	ug/L	0.077	0	50	1482726	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0244-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 19:14:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27779	39175	1	Standard
Cl	37		ug/L			5686581	5610994	2	Standard
> Sc	45		ug/L			495415	644119	2	Standard
Cr	52	31.229	ug/L	0.643	2	21583	757550	1	Standard
Cr	53	32.205	ug/L	0.806	2	156	86326	1	Standard
Mn	55	207.261	ug/L	4.241	2	712	7427539	0	Standard
> Ge	72		ug/L			32261	31215	2	KED
Ni	60	38.710	ug/L	1.628	4	6	42581	1	KED
Ni	62	38.238	ug/L	0.606	1	3	6865	1	KED
Cu	63	50.177	ug/L	2.024	4	47	158864	1	KED
Cu	65	49.979	ug/L	0.774	1	19	79139	1	KED
Zn	66	130.587	ug/L	3.719	2	19	57431	0	KED
Zn	67	123.467	ug/L	2.068	1	4	9154	1	KED
As	75	28.509	ug/L	0.567	1	6	6593	0	KED
Se	78	72.108	ug/L	1.704	2	29	2071	2	KED
Y	89		ug/L			269508	574621	1	Standard
Kr	83		ug/L			48	114	6	Standard
> In-1	115		ug/L			10448	10135	0	KED
Cd	111	24.394	ug/L	0.285	1	1	7313	0	KED
Cd	114	24.459	ug/L	0.347	1	1	17569	1	KED
> In	115		ug/L			386612	395356	1	Standard
Ag	107	12.048	ug/L	0.085	0	30	162811	0	Standard
Ba	135	79.102	ug/L	1.211	1	23	305361	0	Standard
Ba	137	78.290	ug/L	0.602	0	36	532790	1	Standard
> Tb	159		ug/L			622192	670342	0	Standard
Pb	208	36.045	ug/L	0.691	1	50	1420681	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0244-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 19:19:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27779	43274	0	Standard
Cl	37		ug/L			5686581	5635980	1	Standard
> Sc	45		ug/L			495415	665474	0	Standard
Cr	52	30.353	ug/L	0.067	0	21583	761661	0	Standard
Cr	53	31.142	ug/L	0.605	1	156	86282	2	Standard
Mn	55	201.484	ug/L	1.265	0	712	7462411	1	Standard
> Ge	72		ug/L			32261	31528	1	KED
Ni	60	39.731	ug/L	0.330	0	6	44179	2	KED
Ni	62	39.005	ug/L	0.516	1	3	7076	2	KED
Cu	63	50.004	ug/L	0.991	1	47	159998	1	KED
Cu	65	50.420	ug/L	1.227	2	19	80647	1	KED
Zn	66	124.549	ug/L	1.728	1	19	55360	2	KED
Zn	67	120.943	ug/L	1.846	1	4	9060	2	KED
As	75	30.046	ug/L	0.505	1	6	7020	0	KED
Se	78	74.465	ug/L	0.489	0	29	2160	0	KED
Y	89		ug/L			269508	578509	1	Standard
Kr	83		ug/L			48	129	25	Standard
> In-1	115		ug/L			10448	10316	1	KED
Cd	111	24.531	ug/L	0.808	3	1	7484	1	KED
Cd	114	25.071	ug/L	0.657	2	1	18328	2	KED
> In	115		ug/L			386612	403717	0	Standard
Ag	107	24.201	ug/L	0.356	1	30	333945	1	Standard
Ba	135	74.497	ug/L	1.845	2	23	293672	1	Standard
Ba	137	74.782	ug/L	0.814	1	36	519670	1	Standard
> Tb	159		ug/L			622192	689119	1	Standard
Pb	208	34.466	ug/L	0.522	1	50	1396437	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 19:23:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	26996	3	Standard
	Cl	**37**		ug/L			5686581	5611035	2	Standard
⌈>	**Sc**	**45**		ug/L			495415	496010	2	Standard
|	**Cr**	**52**	**47.204**	ug/L	1.170	2	21583	870589	1	Standard
|	**Cr**	**53**	**47.889**	ug/L	0.781	1	156	98788	1	Standard
⌊	**Mn**	**55**	**44.545**	ug/L	1.346	3	712	1229606	0	Standard
⌈>	**Ge**	**72**		ug/L			32261	31692	1	KED
|	**Ni**	**60**	**49.575**	ug/L	1.102	2	6	55396	1	KED
|	**Ni**	**62**	**49.421**	ug/L	1.840	3	3	9008	2	KED
|	**Cu**	**63**	**49.206**	ug/L	1.052	2	47	158317	3	KED
|	**Cu**	**65**	**49.361**	ug/L	1.265	2	19	79388	3	KED
|	**Zn**	**66**	**49.846**	ug/L	1.552	3	19	22276	2	KED
|	**Zn**	**67**	**48.852**	ug/L	1.434	2	4	3680	2	KED
|	**As**	**75**	**48.370**	ug/L	0.304	0	6	11357	1	KED
⌊	**Se**	**78**	**48.693**	ug/L	0.716	1	29	1430	2	KED
	Y	**89**		ug/L			269508	275366	1	Standard
	Kr	**83**		ug/L			48	34	11	Standard
⌈>	**In-1**	**115**		ug/L			10448	9864	5	KED
|	**Cd**	**111**	**51.550**	ug/L	3.600	6	1	15004	1	KED
⌊	**Cd**	**114**	**51.663**	ug/L	3.147	6	1	36040	0	KED
⌈>	**In**	**115**		ug/L			386612	399211	1	Standard
|	**Ag**	**107**	**48.528**	ug/L	1.886	3	30	661848	2	Standard
|	**Ba**	**135**	**47.310**	ug/L	1.179	2	23	184404	1	Standard
⌊	**Ba**	**137**	**46.950**	ug/L	1.340	2	36	322553	1	Standard
⌈>	**Tb**	**159**		ug/L			622192	651443	0	Standard
⌊	**Pb**	**208**	**49.302**	ug/L	0.484	0	50	1888443	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 19:31:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27779	25934	1	Standard
	Cl	**37**		ug/L			5686581	5690309	1	Standard
⎡>	**Sc**	**45**		ug/L			495415	472564	3	Standard
⎢	**Cr**	**52**	**-0.015**	ug/L	0.038	246	21583	20312	1	Standard
⎢	**Cr**	**53**	**-0.012**	ug/L	0.006	47	156	125	6	Standard
⎣	**Mn**	**55**	**-0.003**	ug/L	0.001	32	712	600	1	Standard
⎡>	**Ge**	**72**		ug/L			32261	30748	2	KED
⎢	**Ni**	**60**	**-0.001**	ug/L	0.003	331	6	5	57	KED
⎢	**Ni**	**62**	**0.001**	ug/L	0.007	687	3	3	34	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.003	325	47	48	17	KED
⎢	**Cu**	**65**	**0.004**	ug/L	0.008	176	19	25	45	KED
⎢	**Zn**	**66**	**0.305**	ug/L	0.054	17	19	150	13	KED
⎢	**Zn**	**67**	**0.290**	ug/L	0.023	8	4	25	8	KED
⎢	**As**	**75**	**0.000**	ug/L	0.009	8355	6	6	29	KED
⎣	**Se**	**78**	**0.109**	ug/L	0.196	180	29	31	18	KED
	Y	**89**		ug/L			269508	261190	0	Standard
	Kr	**83**		ug/L			48	33	16	Standard
⎡>	**In-1**	**115**		ug/L			10448	9898	4	KED
⎢	**Cd**	**111**	**-0.001**	ug/L	0.007	813	1	1	124	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.002	187	1	0	196	KED
⎡>	**In**	**115**		ug/L			386612	384712	1	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.000	61	30	38	15	Standard
⎢	**Ba**	**135**	**-0.000**	ug/L	0.001	1070	23	22	22	Standard
⎣	**Ba**	**137**	**0.000**	ug/L	0.003	916	36	38	53	Standard
⎡>	**Tb**	**159**		ug/L			622192	612390	1	Standard
⎣	**Pb**	**208**	**0.003**	ug/L	0.001	21	50	163	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 19:42:16

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				21153	4	Standard
	Cl	**37**		ug/L				5547089	2	Standard
⌈>	**Sc**	**45**		ug/L				468010	1	Standard
|	**Cr**	**52**		ug/L				19735	1	Standard
|	**Cr**	**53**		ug/L				125	0	Standard
⌊	**Mn**	**55**		ug/L				543	9	Standard
⌈>	**Ge**	**72**		ug/L				30322	2	KED
|	**Ni**	**60**		ug/L				1	173	KED
|	**Ni**	**62**		ug/L				3	50	KED
|	**Cu**	**63**		ug/L				37	23	KED
|	**Cu**	**65**		ug/L				22	30	KED
|	**Zn**	**66**		ug/L				57	26	KED
|	**Zn**	**67**		ug/L				12	18	KED
|	**As**	**75**		ug/L				6	39	KED
⌊	**Se**	**78**		ug/L				28	5	KED
	Y	**89**		ug/L				255916	3	Standard
	Kr	**83**		ug/L				40	20	Standard
⌈>	**In-1**	**115**		ug/L				10112	1	KED
|	**Cd**	**111**		ug/L				1	100	KED
⌊	**Cd**	**114**		ug/L				1	184	KED
⌈>	**In**	**115**		ug/L				377966	1	Standard
|	**Ag**	**107**		ug/L				31	24	Standard
|	**Ba**	**135**		ug/L				9	20	Standard
⌊	**Ba**	**137**		ug/L				24	27	Standard
⌈>	**Tb**	**159**		ug/L				603683	0	Standard
⌊	**Pb**	**208**		ug/L				66	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 19:47:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	26123	2	Standard
	Cl	**37**		ug/L			5547089	5551689	2	Standard
⌈>	**Sc**	**45**		ug/L			468010	466789	5	Standard
|	**Cr**	**52**	**49.064**	ug/L	2.262	4	19735	849120	1	Standard
|	**Cr**	**53**	**50.433**	ug/L	1.680	3	125	97804	3	Standard
⌊	**Mn**	**55**	**46.494**	ug/L	2.219	4	543	1206215	0	Standard
⌈>	**Ge**	**72**		ug/L			30322	31153	1	KED
|	**Ni**	**60**	**49.456**	ug/L	1.797	3	1	54311	2	KED
|	**Ni**	**62**	**48.325**	ug/L	1.444	2	3	8659	1	KED
|	**Cu**	**63**	**49.448**	ug/L	1.119	2	37	156308	0	KED
|	**Cu**	**65**	**49.120**	ug/L	1.323	2	22	77651	3	KED
|	**Zn**	**66**	**48.263**	ug/L	1.439	2	57	21245	3	KED
|	**Zn**	**67**	**47.697**	ug/L	0.447	0	12	3541	2	KED
|	**As**	**75**	**48.405**	ug/L	0.754	1	6	11173	2	KED
⌊	**Se**	**78**	**49.169**	ug/L	0.635	1	28	1419	2	KED
	Y	**89**		ug/L			255916	263327	6	Standard
	Kr	**83**		ug/L			40	46	37	Standard
⌈>	**In-1**	**115**		ug/L			10112	10165	0	KED
|	**Cd**	**111**	**49.257**	ug/L	0.221	0	1	14810	0	KED
⌊	**Cd**	**114**	**49.976**	ug/L	0.638	1	1	36002	0	KED
⌈>	**In**	**115**		ug/L			377966	374858	5	Standard
|	**Ag**	**107**	**50.448**	ug/L	2.152	4	31	645363	1	Standard
|	**Ba**	**135**	**49.689**	ug/L	1.645	3	9	181677	2	Standard
⌊	**Ba**	**137**	**49.717**	ug/L	2.589	5	24	320197	0	Standard
⌈>	**Tb**	**159**		ug/L			603683	623262	5	Standard
⌊	**Pb**	**208**	**50.469**	ug/L	2.949	5	66	1845386	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 19:55:24
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	21315	2	Standard
	Cl	**37**		ug/L			5547089	5524061	2	Standard
⌈>	**Sc**	**45**		ug/L			468010	461956	1	Standard
|	**Cr**	**52**	**0.000**	ug/L	0.012	7807	19735	19481	0	Standard
|	**Cr**	**53**	**0.005**	ug/L	0.006	107	125	133	8	Standard
⌊	**Mn**	**55**	**-0.001**	ug/L	0.001	118	543	503	6	Standard
⌈>	**Ge**	**72**		ug/L			30322	30363	1	KED
|	**Ni**	**60**	**0.001**	ug/L	0.001	88	1	3	34	KED
|	**Ni**	**62**	**-0.007**	ug/L	0.006	85	3	2	43	KED
|	**Cu**	**63**	**0.003**	ug/L	0.003	114	37	45	21	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.003	674	22	21	22	KED
|	**Zn**	**66**	**-0.011**	ug/L	0.019	178	57	53	16	KED
|	**Zn**	**67**	**-0.000**	ug/L	0.084	17208	12	12	50	KED
|	**As**	**75**	**-0.001**	ug/L	0.006	438	6	5	24	KED
⌊	**Se**	**78**	**-0.082**	ug/L	0.102	124	28	25	10	KED
	Y	**89**		ug/L			255916	259818	1	Standard
	Kr	**83**		ug/L			40	42	16	Standard
⌈>	**In-1**	**115**		ug/L			10112	9711	1	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.008	407	1	1	173	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.004	206	1	2	113	KED
⌈>	**In**	**115**		ug/L			377966	379995	3	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.000	36	31	46	10	Standard
|	**Ba**	**135**	**0.001**	ug/L	0.001	187	9	12	36	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.000	158	24	24	0	Standard
⌈>	**Tb**	**159**		ug/L			603683	610796	3	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	1780364	66	67	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0249-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 20:00:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	37316	1	Standard
	Cl	37		ug/L			5547089	5575695	2	Standard
>	Sc	45		ug/L			468010	572994	2	Standard
	Cr	52	11.816	ug/L	0.281	2	19735	269670	0	Standard
	Cr	53	12.354	ug/L	0.313	2	125	29541	0	Standard
	Mn	55	99.244	ug/L	1.946	1	543	3164337	0	Standard
>	Ge	72		ug/L			30322	31841	1	KED
	Ni	60	12.860	ug/L	0.658	5	1	14438	4	KED
	Ni	62	13.460	ug/L	0.658	4	3	2468	4	KED
	Cu	63	116.856	ug/L	2.877	2	37	377517	1	KED
	Cu	65	117.726	ug/L	2.115	1	22	190162	1	KED
	Zn	66	200.299	ug/L	4.055	2	57	89920	1	KED
	Zn	67	179.644	ug/L	3.105	1	12	13594	0	KED
	As	75	8.881	ug/L	0.169	1	6	2099	1	KED
	Se	78	0.640	ug/L	0.186	29	28	48	12	KED
	Y	89		ug/L			255916	463161	0	Standard
	Kr	83		ug/L			40	73	13	Standard
>	In-1	115		ug/L			10112	10347	2	KED
	Cd	111	0.295	ug/L	0.033	11	1	92	9	KED
	Cd	114	0.161	ug/L	0.007	4	1	119	6	KED
>	In	115		ug/L			377966	402421	0	Standard
	Ag	107	0.268	ug/L	0.007	2	31	3717	2	Standard
	Ba	135	28.514	ug/L	0.040	0	9	112058	0	Standard
	Ba	137	28.424	ug/L	0.308	1	24	196905	1	Standard
>	Tb	159		ug/L			603683	664996	2	Standard
	Pb	208	474.037	ug/L	18.082	3	66	18522220	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0249-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 20:04:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	40893	1	Standard
Cl	37		ug/L			5547089	5595410	3	Standard
> Sc	45		ug/L			468010	611207	2	Standard
Cr	52	13.098	ug/L	0.289	2	19735	316031	0	Standard
Cr	53	13.480	ug/L	0.255	1	125	34369	0	Standard
Mn	55	150.048	ug/L	2.458	1	543	5103504	2	Standard
> Ge	72		ug/L			30322	31232	1	KED
Ni	60	13.380	ug/L	0.366	2	1	14733	2	KED
Ni	62	13.115	ug/L	0.856	6	3	2358	5	KED
Cu	63	33.018	ug/L	0.542	1	37	104659	0	KED
Cu	65	33.025	ug/L	0.958	2	22	52334	2	KED
Zn	66	61.355	ug/L	1.005	1	57	27061	1	KED
Zn	67	58.685	ug/L	0.367	0	12	4365	1	KED
As	75	6.193	ug/L	0.164	2	6	1438	1	KED
Se	78	0.812	ug/L	0.260	32	28	52	14	KED
Y	89		ug/L			255916	506692	5	Standard
Kr	83		ug/L			40	99	2	Standard
> In-1	115		ug/L			10112	9909	0	KED
Cd	111	0.184	ug/L	0.031	16	1	55	16	KED
Cd	114	0.202	ug/L	0.033	16	1	143	16	KED
> In	115		ug/L			377966	388146	1	Standard
Ag	107	0.157	ug/L	0.009	5	31	2110	6	Standard
Ba	135	42.870	ug/L	0.578	1	9	162504	2	Standard
Ba	137	42.810	ug/L	0.689	1	24	286050	2	Standard
> Tb	159		ug/L			603683	665544	3	Standard
Pb	208	15.246	ug/L	0.539	3	66	596271	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0249-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 20:09:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	39357	5	Standard
	Cl	37		ug/L			5547089	5527280	1	Standard
>	Sc	45		ug/L			468010	573362	3	Standard
	Cr	52	9.641	ug/L	0.255	2	19735	224597	2	Standard
	Cr	53	9.910	ug/L	0.173	1	125	23742	1	Standard
	Mn	55	91.991	ug/L	2.828	3	543	2933835	0	Standard
>	Ge	72		ug/L			30322	31836	1	KED
	Ni	60	9.139	ug/L	0.109	1	1	10259	0	KED
	Ni	62	9.192	ug/L	0.510	5	3	1686	4	KED
	Cu	63	17.014	ug/L	0.771	4	37	54995	4	KED
	Cu	65	16.904	ug/L	0.366	2	22	27319	1	KED
	Zn	66	21.176	ug/L	0.364	1	57	9559	0	KED
	Zn	67	21.205	ug/L	0.807	3	12	1615	2	KED
	As	75	2.864	ug/L	0.083	2	6	681	2	KED
	Se	78	0.574	ug/L	0.088	15	28	46	5	KED
	Y	89		ug/L			255916	481529	2	Standard
	Kr	83		ug/L			40	86	25	Standard
>	In-1	115		ug/L			10112	10078	0	KED
	Cd	111	0.048	ug/L	0.014	29	1	16	25	KED
	Cd	114	0.052	ug/L	0.014	26	1	38	25	KED
>	In	115		ug/L			377966	392147	1	Standard
	Ag	107	0.055	ug/L	0.001	1	31	772	0	Standard
	Ba	135	22.201	ug/L	0.229	1	9	85024	2	Standard
	Ba	137	22.209	ug/L	0.649	2	24	149891	1	Standard
>	Tb	159		ug/L			603683	670777	1	Standard
	Pb	208	2.464	ug/L	0.024	0	66	97231	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 20:14:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	39109	2	Standard
	Cl	37		ug/L			5547089	5520413	2	Standard
>	Sc	45		ug/L			468010	653734	2	Standard
	Cr	52	17.057	ug/L	0.175	1	19735	431982	1	Standard
	Cr	53	17.432	ug/L	0.451	2	125	47504	3	Standard
	Mn	55	171.015	ug/L	4.452	2	543	6219490	0	Standard
>	Ge	72		ug/L			30322	31251	0	KED
	Ni	60	16.175	ug/L	0.306	1	1	17826	2	KED
	Ni	62	16.351	ug/L	0.506	3	3	2942	2	KED
	Cu	63	33.498	ug/L	0.287	0	37	106262	1	KED
	Cu	65	33.820	ug/L	0.924	2	22	53631	2	KED
	Zn	66	63.077	ug/L	1.355	2	57	27834	1	KED
	Zn	67	60.187	ug/L	1.326	2	12	4478	1	KED
	As	75	7.602	ug/L	0.209	2	6	1765	2	KED
	Se	78	1.182	ug/L	0.140	11	28	62	6	KED
	Y	89		ug/L			255916	580835	1	Standard
	Kr	83		ug/L			40	134	6	Standard
>	In-1	115		ug/L			10112	10179	2	KED
	Cd	111	0.545	ug/L	0.105	19	1	165	17	KED
	Cd	114	0.575	ug/L	0.042	7	1	415	5	KED
>	In	115		ug/L			377966	384261	0	Standard
	Ag	107	0.567	ug/L	0.027	4	31	7481	4	Standard
	Ba	135	55.520	ug/L	0.480	0	9	208338	1	Standard
	Ba	137	55.415	ug/L	0.704	1	24	366513	0	Standard
>	Tb	159		ug/L			603683	681052	2	Standard
	Pb	208	19.699	ug/L	0.515	2	66	788570	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 20:19:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	39951	4	Standard
Cl	37		ug/L			5547089	5396599	1	Standard
> Sc	45		ug/L			468010	632651	3	Standard
Cr	52	16.402	ug/L	0.446	2	19735	402824	1	Standard
Cr	53	16.910	ug/L	0.904	5	125	44557	3	Standard
Mn	55	150.896	ug/L	5.225	3	543	5308586	0	Standard
> Ge	72		ug/L			30322	31329	1	KED
Ni	60	13.782	ug/L	0.252	1	1	15227	2	KED
Ni	62	13.790	ug/L	0.282	2	3	2488	1	KED
Cu	63	31.409	ug/L	0.455	1	37	99898	2	KED
Cu	65	31.326	ug/L	0.780	2	22	49811	2	KED
Zn	66	64.612	ug/L	1.316	2	57	28580	1	KED
Zn	67	60.913	ug/L	1.023	1	12	4544	1	KED
As	75	7.484	ug/L	0.060	0	6	1742	0	KED
Se	78	0.978	ug/L	0.077	7	28	56	2	KED
Y	89		ug/L			255916	564874	0	Standard
Kr	83		ug/L			40	106	8	Standard
> In-1	115		ug/L			10112	10094	0	KED
Cd	111	0.519	ug/L	0.072	13	1	156	13	KED
Cd	114	0.507	ug/L	0.010	2	1	363	1	KED
> In	115		ug/L			377966	384263	0	Standard
Ag	107	0.448	ug/L	0.013	2	31	5917	3	Standard
Ba	135	47.267	ug/L	0.953	2	9	177348	1	Standard
Ba	137	46.660	ug/L	0.994	2	24	308605	1	Standard
> Tb	159		ug/L			603683	673414	0	Standard
Pb	208	18.676	ug/L	0.112	0	66	739550	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 20:23:52
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	40925	1	Standard
Cl	37		ug/L			5547089	5489460	0	Standard
> Sc	45		ug/L			468010	641078	0	Standard
Cr	52	15.180	ug/L	0.367	2	19735	380018	2	Standard
Cr	53	15.677	ug/L	0.092	0	125	41912	0	Standard
Mn	55	218.455	ug/L	3.069	1	543	7793472	0	Standard
> Ge	72		ug/L			30322	30896	0	KED
Ni	60	18.031	ug/L	0.484	2	1	19647	3	KED
Ni	62	18.015	ug/L	0.411	2	3	3205	3	KED
Cu	63	35.824	ug/L	0.641	1	37	112343	1	KED
Cu	65	36.278	ug/L	0.509	1	22	56880	0	KED
Zn	66	69.117	ug/L	1.236	1	57	30148	0	KED
Zn	67	67.632	ug/L	2.556	3	12	4973	2	KED
As	75	7.520	ug/L	0.146	1	6	1726	1	KED
Se	78	1.018	ug/L	0.138	13	28	57	7	KED
Y	89		ug/L			255916	563543	0	Standard
Kr	83		ug/L			40	127	13	Standard
> In-1	115		ug/L			10112	10138	2	KED
Cd	111	0.278	ug/L	0.026	9	1	85	7	KED
Cd	114	0.269	ug/L	0.034	12	1	194	12	KED
> In	115		ug/L			377966	392028	1	Standard
Ag	107	0.250	ug/L	0.002	0	31	3388	2	Standard
Ba	135	62.188	ug/L	1.835	2	9	238009	1	Standard
Ba	137	61.724	ug/L	0.626	1	24	416472	0	Standard
> Tb	159		ug/L			603683	668065	1	Standard
Pb	208	22.663	ug/L	0.219	0	66	890225	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 20:28:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	39355	1	Standard
Cl	37		ug/L			5547089	5598173	1	Standard
> Sc	45		ug/L			468010	639644	1	Standard
Cr	52	13.437	ug/L	0.064	0	19735	338718	1	Standard
Cr	53	14.279	ug/L	0.147	1	125	38100	0	Standard
Mn	55	166.656	ug/L	0.169	0	543	5932772	1	Standard
> Ge	72		ug/L			30322	31071	1	KED
Ni	60	14.836	ug/L	0.155	1	1	16254	0	KED
Ni	62	15.022	ug/L	0.953	6	3	2687	5	KED
Cu	63	31.935	ug/L	0.623	1	37	100726	2	KED
Cu	65	31.408	ug/L	0.255	0	22	49530	1	KED
Zn	66	59.157	ug/L	1.852	3	57	25955	2	KED
Zn	67	56.256	ug/L	2.850	5	12	4161	4	KED
As	75	6.098	ug/L	0.164	2	6	1409	2	KED
Se	78	0.966	ug/L	0.073	7	28	56	2	KED
Y	89		ug/L			255916	540472	0	Standard
Kr	83		ug/L			40	111	11	Standard
> In-1	115		ug/L			10112	9793	4	KED
Cd	111	0.201	ug/L	0.047	23	1	60	24	KED
Cd	114	0.222	ug/L	0.019	8	1	155	5	KED
> In	115		ug/L			377966	385352	2	Standard
Ag	107	0.164	ug/L	0.007	4	31	2192	6	Standard
Ba	135	51.856	ug/L	0.567	1	9	195110	1	Standard
Ba	137	50.976	ug/L	1.035	2	24	338047	1	Standard
> Tb	159		ug/L			603683	667597	3	Standard
Pb	208	15.698	ug/L	0.694	4	66	615614	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 20:33:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	43150	2	Standard
Cl	37		ug/L			5547089	5548028	1	Standard
> Sc	45		ug/L			468010	625577	1	Standard
Cr	52	14.658	ug/L	0.119	0	19735	358959	1	Standard
Cr	53	15.290	ug/L	0.367	2	125	39882	1	Standard
Mn	55	198.569	ug/L	4.175	2	543	6911618	0	Standard
> Ge	72		ug/L			30322	30711	0	KED
Ni	60	16.491	ug/L	0.403	2	1	17858	1	KED
Ni	62	16.514	ug/L	0.508	3	3	2920	2	KED
Cu	63	43.677	ug/L	0.340	0	37	136144	0	KED
Cu	65	43.993	ug/L	1.153	2	22	68562	2	KED
Zn	66	76.198	ug/L	1.991	2	57	33029	1	KED
Zn	67	73.361	ug/L	1.228	1	12	5362	2	KED
As	75	7.750	ug/L	0.130	1	6	1768	0	KED
Se	78	1.082	ug/L	0.097	9	28	58	4	KED
Y	89		ug/L			255916	548294	4	Standard
Kr	83		ug/L			40	106	10	Standard
> In-1	115		ug/L			10112	10096	1	KED
Cd	111	0.293	ug/L	0.005	1	1	89	1	KED
Cd	114	0.326	ug/L	0.033	10	1	234	8	KED
> In	115		ug/L			377966	383967	1	Standard
Ag	107	0.260	ug/L	0.004	1	31	3448	2	Standard
Ba	135	62.653	ug/L	1.412	2	9	234871	0	Standard
Ba	137	62.898	ug/L	0.825	1	24	415656	0	Standard
> Tb	159		ug/L			603683	661777	1	Standard
Pb	208	27.938	ug/L	0.569	2	66	1086941	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 20:38:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	44368	2	Standard
Cl	37		ug/L			5547089	5615581	1	Standard
> Sc	45		ug/L			468010	624147	0	Standard
Cr	52	13.340	ug/L	0.058	0	19735	328331	0	Standard
Cr	53	13.651	ug/L	0.057	0	125	35554	0	Standard
Mn	55	158.441	ug/L	2.860	1	543	5503574	1	Standard
> Ge	72		ug/L			30322	31343	1	KED
Ni	60	13.914	ug/L	0.450	3	1	15374	1	KED
Ni	62	14.371	ug/L	0.345	2	3	2595	4	KED
Cu	63	34.101	ug/L	1.216	3	37	108457	2	KED
Cu	65	33.596	ug/L	1.056	3	22	53422	1	KED
Zn	66	64.161	ug/L	2.346	3	57	28386	1	KED
Zn	67	61.422	ug/L	0.700	1	12	4584	1	KED
As	75	6.157	ug/L	0.018	0	6	1435	1	KED
Se	78	0.857	ug/L	0.175	20	28	53	10	KED
Y	89		ug/L			255916	519754	0	Standard
Kr	83		ug/L			40	88	27	Standard
> In-1	115		ug/L			10112	9856	2	KED
Cd	111	0.230	ug/L	0.005	2	1	68	3	KED
Cd	114	0.189	ug/L	0.016	8	1	132	6	KED
> In	115		ug/L			377966	393297	1	Standard
Ag	107	0.187	ug/L	0.010	5	31	2544	3	Standard
Ba	135	49.244	ug/L	0.634	1	9	189101	1	Standard
Ba	137	48.116	ug/L	0.795	1	24	325684	1	Standard
> Tb	159		ug/L			603683	662751	2	Standard
Pb	208	18.236	ug/L	0.551	3	66	710367	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 20:42:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	35055	4	Standard
	Cl	37		ug/L			5547089	5517852	1	Standard
⌈>	Sc	45		ug/L			468010	537281	2	Standard
|	Cr	52	8.971	ug/L	0.171	1	19735	197453	2	Standard
|	Cr	53	9.298	ug/L	0.177	1	125	20887	2	Standard
⌊	Mn	55	81.169	ug/L	1.550	1	543	2426560	1	Standard
⌈>	Ge	72		ug/L			30322	31269	0	KED
|	Ni	60	7.572	ug/L	0.081	1	1	8350	1	KED
|	Ni	62	7.328	ug/L	0.366	4	3	1321	5	KED
|	Cu	63	15.573	ug/L	0.238	1	37	49448	1	KED
|	Cu	65	15.690	ug/L	0.202	1	22	24912	1	KED
|	Zn	66	32.899	ug/L	0.882	2	57	14555	2	KED
|	Zn	67	33.122	ug/L	1.844	5	12	2471	5	KED
|	As	75	3.014	ug/L	0.036	1	6	704	0	KED
⌊	Se	78	0.528	ug/L	0.172	32	28	44	11	KED
	Y	89		ug/L			255916	409777	3	Standard
	Kr	83		ug/L			40	61	21	Standard
⌈>	In-1	115		ug/L			10112	10049	1	KED
|	Cd	111	0.107	ug/L	0.026	24	1	33	23	KED
⌊	Cd	114	0.081	ug/L	0.009	10	1	59	11	KED
⌈>	In	115		ug/L			377966	388872	3	Standard
|	Ag	107	0.095	ug/L	0.005	4	31	1297	3	Standard
|	Ba	135	35.723	ug/L	1.146	3	9	135559	0	Standard
⌊	Ba	137	35.913	ug/L	1.026	2	24	240263	1	Standard
⌈>	Tb	159		ug/L			603683	651518	1	Standard
⌊	Pb	208	9.393	ug/L	0.187	1	66	359872	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 20:47:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	26880	2	Standard
	Cl	**37**		ug/L			5547089	5614682	1	Standard
⌈>	**Sc**	**45**		ug/L			468010	484921	2	Standard
|	**Cr**	**52**	**46.533**	ug/L	1.159	2	19735	838607	0	Standard
|	**Cr**	**53**	**48.639**	ug/L	1.234	2	125	98058	1	Standard
⌊	**Mn**	**55**	**45.085**	ug/L	0.909	2	543	1216822	1	Standard
⌈>	**Ge**	**72**		ug/L			30322	30516	1	KED
|	**Ni**	**60**	**49.704**	ug/L	1.061	2	1	53474	0	KED
|	**Ni**	**62**	**49.146**	ug/L	1.004	2	3	8630	3	KED
|	**Cu**	**63**	**48.275**	ug/L	0.341	0	37	149511	0	KED
|	**Cu**	**65**	**48.883**	ug/L	1.740	3	22	75687	3	KED
|	**Zn**	**66**	**49.987**	ug/L	1.186	2	57	21557	3	KED
|	**Zn**	**67**	**48.250**	ug/L	1.103	2	12	3508	1	KED
|	**As**	**75**	**48.566**	ug/L	0.935	1	6	10978	0	KED
⌊	**Se**	**78**	**47.893**	ug/L	0.687	1	28	1355	1	KED
	Y	**89**		ug/L			255916	265856	3	Standard
	Kr	**83**		ug/L			40	46	22	Standard
⌈>	**In-1**	**115**		ug/L			10112	10037	1	KED
|	**Cd**	**111**	**48.790**	ug/L	0.818	1	1	14485	1	KED
⌊	**Cd**	**114**	**50.294**	ug/L	0.205	0	1	35778	1	KED
⌈>	**In**	**115**		ug/L			377966	387715	1	Standard
|	**Ag**	**107**	**49.412**	ug/L	1.379	2	31	654618	1	Standard
|	**Ba**	**135**	**48.422**	ug/L	0.777	1	9	183338	2	Standard
⌊	**Ba**	**137**	**46.923**	ug/L	0.390	0	24	313129	0	Standard
⌈>	**Tb**	**159**		ug/L			603683	639611	2	Standard
⌊	**Pb**	**208**	**49.360**	ug/L	0.975	1	66	1855926	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 20:55:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	22509	1	Standard
	Cl	**37**		ug/L			5547089	5437517	1	Standard
⎡>	**Sc**	**45**		ug/L			468010	447252	1	Standard
⎢	**Cr**	**52**	**0.038**	ug/L	0.016	40	19735	19478	0	Standard
⎢	**Cr**	**53**	**0.010**	ug/L	0.008	76	125	139	12	Standard
⎣	**Mn**	**55**	**0.002**	ug/L	0.001	69	543	566	7	Standard
⎡>	**Ge**	**72**		ug/L			30322	30025	1	KED
⎢	**Ni**	**60**	**0.005**	ug/L	0.003	58	1	6	41	KED
⎢	**Ni**	**62**	**0.004**	ug/L	0.016	433	3	4	65	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.003	281	37	33	26	KED
⎢	**Cu**	**65**	**-0.003**	ug/L	0.002	75	22	17	22	KED
⎢	**Zn**	**66**	**-0.006**	ug/L	0.020	333	57	54	14	KED
⎢	**Zn**	**67**	**-0.035**	ug/L	0.051	148	12	9	40	KED
⎢	**As**	**75**	**-0.006**	ug/L	0.008	153	6	4	39	KED
⎣	**Se**	**78**	**0.025**	ug/L	0.132	534	28	28	14	KED
	Y	**89**		ug/L			255916	251098	2	Standard
	Kr	**83**		ug/L			40	42	22	Standard
⎡>	**In-1**	**115**		ug/L			10112	9589	1	KED
⎢	**Cd**	**111**	**0.003**	ug/L	0.004	147	1	2	43	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.003	295	1	1	110	KED
⎡>	**In**	**115**		ug/L			377966	367356	1	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.001	85	31	45	28	Standard
⎢	**Ba**	**135**	**0.002**	ug/L	0.001	49	9	17	22	Standard
⎣	**Ba**	**137**	**0.001**	ug/L	0.001	172	24	26	21	Standard
⎡>	**Tb**	**159**		ug/L			603683	595865	1	Standard
⎣	**Pb**	**208**	**0.000**	ug/L	0.000	109	66	78	16	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0289-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 20:59:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	33700	3	Standard
	Cl	37		ug/L			5547089	5556021	1	Standard
>	Sc	45		ug/L			468010	468813	1	Standard
	Cr	52	0.071	ug/L	0.031	43	19735	20967	2	Standard
	Cr	53	0.014	ug/L	0.005	37	125	153	6	Standard
	Mn	55	0.004	ug/L	0.001	26	543	655	4	Standard
>	Ge	72		ug/L			30322	30670	2	KED
	Ni	60	0.002	ug/L	0.004	159	1	4	89	KED
	Ni	62	-0.011	ug/L	0.011	98	3	1	100	KED
	Cu	63	0.003	ug/L	0.000	11	37	47	0	KED
	Cu	65	0.005	ug/L	0.004	69	22	30	16	KED
	Zn	66	-0.015	ug/L	0.027	188	57	52	21	KED
	Zn	67	-0.063	ug/L	0.002	3	12	7	0	KED
	As	75	-0.002	ug/L	0.003	108	6	5	8	KED
	Se	78	-0.029	ug/L	0.115	401	28	27	9	KED
	Y	89		ug/L			255916	257315	1	Standard
	Kr	83		ug/L			40	36	0	Standard
>	In-1	115		ug/L			10112	10170	1	KED
	Cd	111	0.001	ug/L	0.004	363	1	2	49	KED
	Cd	114	0.001	ug/L	0.003	310	1	1	108	KED
>	In	115		ug/L			377966	382104	0	Standard
	Ag	107	-0.001	ug/L	0.001	116	31	25	30	Standard
	Ba	135	0.006	ug/L	0.002	32	9	30	21	Standard
	Ba	137	0.003	ug/L	0.001	21	24	46	10	Standard
>	Tb	159		ug/L			603683	616297	4	Standard
	Pb	208	0.001	ug/L	0.000	34	66	102	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0289-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 21:04:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	29738	3	Standard
	Cl	37		ug/L			5547089	5564416	1	Standard
>	Sc	45		ug/L			468010	478007	2	Standard
	Cr	52	24.179	ug/L	0.440	1	19735	439268	0	Standard
	Cr	53	24.148	ug/L	0.524	2	125	48057	1	Standard
	Mn	55	23.124	ug/L	0.390	1	543	615528	1	Standard
>	Ge	72		ug/L			30322	31032	2	KED
	Ni	60	25.383	ug/L	0.797	3	1	27764	1	KED
	Ni	62	25.720	ug/L	0.215	0	3	4593	1	KED
	Cu	63	25.471	ug/L	0.697	2	37	80213	1	KED
	Cu	65	25.400	ug/L	0.079	0	22	40010	2	KED
	Zn	66	78.630	ug/L	2.821	3	57	34424	1	KED
	Zn	67	73.410	ug/L	2.530	3	12	5419	1	KED
	As	75	23.748	ug/L	0.553	2	6	5461	0	KED
	Se	78	74.608	ug/L	2.850	3	28	2131	4	KED
	Y	89		ug/L			255916	259458	3	Standard
	Kr	83		ug/L			40	42	18	Standard
>	In-1	115		ug/L			10112	9389	14	KED
	Cd	111	26.616	ug/L	3.455	12	1	7300	2	KED
	Cd	114	27.259	ug/L	3.889	14	1	17891	2	KED
>	In	115		ug/L			377966	395086	2	Standard
	Ag	107	24.877	ug/L	0.536	2	31	335854	1	Standard
	Ba	135	24.179	ug/L	0.213	0	9	93284	1	Standard
	Ba	137	23.490	ug/L	0.287	1	24	159742	1	Standard
>	Tb	159		ug/L			603683	623867	1	Standard
	Pb	208	26.109	ug/L	0.594	2	66	957607	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 21:09:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	42259	2	Standard
	Cl	37		ug/L			5547089	5498727	2	Standard
>	Sc	45		ug/L			468010	579288	1	Standard
	Cr	52	14.119	ug/L	0.038	0	19735	321104	1	Standard
	Cr	53	14.622	ug/L	0.235	1	125	35326	0	Standard
	Mn	55	137.407	ug/L	2.467	1	543	4429498	1	Standard
>	Ge	72		ug/L			30322	30165	1	KED
	Ni	60	16.077	ug/L	0.320	1	1	17098	0	KED
	Ni	62	15.837	ug/L	0.368	2	3	2750	0	KED
	Cu	63	43.457	ug/L	0.932	2	37	133022	0	KED
	Cu	65	43.083	ug/L	1.335	3	22	65931	1	KED
	Zn	66	140.856	ug/L	3.266	2	57	59918	0	KED
	Zn	67	133.435	ug/L	4.268	3	12	9568	2	KED
	As	75	7.533	ug/L	0.253	3	6	1688	2	KED
	Se	78	1.204	ug/L	0.110	9	28	60	3	KED
	Y	89		ug/L			255916	489891	0	Standard
	Kr	83		ug/L			40	103	8	Standard
>	In-1	115		ug/L			10112	9608	1	KED
	Cd	111	0.279	ug/L	0.011	4	1	80	3	KED
	Cd	114	0.291	ug/L	0.020	6	1	199	8	KED
>	In	115		ug/L			377966	382862	0	Standard
	Ag	107	0.143	ug/L	0.002	1	31	1908	1	Standard
	Ba	135	49.178	ug/L	0.523	1	9	183856	0	Standard
	Ba	137	48.358	ug/L	0.606	1	24	318699	1	Standard
>	Tb	159		ug/L			603683	656944	1	Standard
	Pb	208	22.272	ug/L	0.282	1	66	860271	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 21:14:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	33590	3	Standard
	Cl	37		ug/L			5547089	5472132	3	Standard
>	Sc	45		ug/L			468010	527365	2	Standard
	Cr	52	6.557	ug/L	0.196	2	19735	147630	1	Standard
	Cr	53	6.865	ug/L	0.220	3	125	15171	1	Standard
	Mn	55	82.404	ug/L	1.422	1	543	2418330	0	Standard
>	Ge	72		ug/L			30322	31299	0	KED
	Ni	60	6.203	ug/L	0.066	1	1	6847	1	KED
	Ni	62	6.330	ug/L	0.541	8	3	1142	7	KED
	Cu	63	6.866	ug/L	0.100	1	37	21846	1	KED
	Cu	65	6.923	ug/L	0.142	2	22	11015	2	KED
	Zn	66	16.482	ug/L	0.609	3	57	7327	2	KED
	Zn	67	17.335	ug/L	0.515	2	12	1301	3	KED
	As	75	2.673	ug/L	0.030	1	6	625	0	KED
	Se	78	0.381	ug/L	0.235	61	28	39	16	KED
	Y	89		ug/L			255916	385502	2	Standard
	Kr	83		ug/L			40	61	24	Standard
>	In-1	115		ug/L			10112	10296	0	KED
	Cd	111	0.008	ug/L	0.004	43	1	4	24	KED
	Cd	114	0.018	ug/L	0.006	34	1	14	32	KED
>	In	115		ug/L			377966	391640	0	Standard
	Ag	107	0.021	ug/L	0.003	12	31	318	10	Standard
	Ba	135	34.440	ug/L	0.578	1	9	131711	1	Standard
	Ba	137	34.625	ug/L	0.714	2	24	233410	1	Standard
>	Tb	159		ug/L			603683	656823	1	Standard
	Pb	208	2.715	ug/L	0.025	0	66	104921	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0313-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 21:18:47
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	48020	4	Standard
Cl	37		ug/L			5547089	5467948	0	Standard
> Sc	45		ug/L			468010	661546	1	Standard
Cr	52	16.749	ug/L	0.451	2	19735	429712	1	Standard
Cr	53	17.507	ug/L	0.249	1	125	48273	1	Standard
Mn	55	163.568	ug/L	3.852	2	543	6020506	0	Standard
> Ge	72		ug/L			30322	30135	3	KED
Ni	60	15.154	ug/L	0.406	2	1	16094	1	KED
Ni	62	14.949	ug/L	0.238	1	3	2594	3	KED
Cu	63	34.540	ug/L	0.742	2	37	105601	1	KED
Cu	65	33.897	ug/L	1.493	4	22	51788	1	KED
Zn	66	72.316	ug/L	3.654	5	57	30728	1	KED
Zn	67	71.677	ug/L	1.393	1	12	5139	2	KED
As	75	7.529	ug/L	0.261	3	6	1684	0	KED
Se	78	1.298	ug/L	0.123	9	28	63	3	KED
Y	89		ug/L			255916	608016	0	Standard
Kr	83		ug/L			40	119	7	Standard
> In-1	115		ug/L			10112	9995	2	KED
Cd	111	0.423	ug/L	0.070	16	1	126	16	KED
Cd	114	0.435	ug/L	0.025	5	1	309	6	KED
> In	115		ug/L			377966	385578	0	Standard
Ag	107	0.425	ug/L	0.002	0	31	5634	0	Standard
Ba	135	67.774	ug/L	1.667	2	9	255163	1	Standard
Ba	137	66.506	ug/L	0.115	0	24	441392	0	Standard
> Tb	159		ug/L			603683	673132	1	Standard
Pb	208	45.123	ug/L	0.887	1	66	1785752	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0328-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 21:23:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	44478	1	Standard
	Cl	37		ug/L			5547089	5420673	0	Standard
>	Sc	45		ug/L			468010	576922	0	Standard
	Cr	52	14.701	ug/L	0.145	0	19735	331967	0	Standard
	Cr	53	15.172	ug/L	0.101	0	125	36506	0	Standard
	Mn	55	134.033	ug/L	1.859	1	543	4303653	1	Standard
>	Ge	72		ug/L			30322	30712	2	KED
	Ni	60	11.388	ug/L	0.284	2	1	12332	2	KED
	Ni	62	11.306	ug/L	0.116	1	3	2000	1	KED
	Cu	63	30.612	ug/L	0.808	2	37	95403	0	KED
	Cu	65	30.152	ug/L	0.771	2	22	46983	0	KED
	Zn	66	68.235	ug/L	1.045	1	57	29591	2	KED
	Zn	67	65.862	ug/L	1.165	1	12	4814	0	KED
	As	75	7.524	ug/L	0.112	1	6	1716	1	KED
	Se	78	0.557	ug/L	0.029	5	28	44	2	KED
	Y	89		ug/L			255916	465819	1	Standard
	Kr	83		ug/L			40	77	5	Standard
>	In-1	115		ug/L			10112	10071	2	KED
	Cd	111	0.287	ug/L	0.028	9	1	87	11	KED
	Cd	114	0.272	ug/L	0.023	8	1	194	8	KED
>	In	115		ug/L			377966	393262	0	Standard
	Ag	107	0.392	ug/L	0.002	0	31	5302	1	Standard
	Ba	135	34.378	ug/L	1.068	3	9	132006	2	Standard
	Ba	137	33.791	ug/L	0.558	1	24	228760	2	Standard
>	Tb	159		ug/L			603683	660303	1	Standard
	Pb	208	34.118	ug/L	0.829	2	66	1324520	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0289-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 21:28:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	52971	3	Standard
Cl	37		ug/L			5547089	5470255	2	Standard
> Sc	45		ug/L			468010	599517	2	Standard
Cr	52	14.211	ug/L	0.370	2	19735	334219	2	Standard
Cr	53	14.558	ug/L	0.099	0	125	36405	2	Standard
Mn	55	131.697	ug/L	4.014	3	543	4393049	2	Standard
> Ge	72		ug/L			30322	29509	6	KED
Ni	60	11.765	ug/L	0.648	5	1	12212	1	KED
Ni	62	11.687	ug/L	0.846	7	3	1980	0	KED
Cu	63	30.039	ug/L	1.931	6	37	89714	0	KED
Cu	65	30.011	ug/L	2.752	9	22	44758	2	KED
Zn	66	76.253	ug/L	5.091	6	57	31669	1	KED
Zn	67	71.251	ug/L	4.748	6	12	4989	0	KED
As	75	8.148	ug/L	0.508	6	6	1781	2	KED
Se	78	0.588	ug/L	0.203	34	28	43	15	KED
Y	89		ug/L			255916	472964	1	Standard
Kr	83		ug/L			40	80	18	Standard
> In-1	115		ug/L			10112	10155	1	KED
Cd	111	0.299	ug/L	0.027	9	1	91	8	KED
Cd	114	0.313	ug/L	0.023	7	1	226	6	KED
> In	115		ug/L			377966	393017	0	Standard
Ag	107	0.417	ug/L	0.010	2	31	5634	1	Standard
Ba	135	35.165	ug/L	0.261	0	9	134964	1	Standard
Ba	137	34.487	ug/L	0.450	1	24	233307	1	Standard
> Tb	159		ug/L			603683	667940	1	Standard
Pb	208	35.806	ug/L	0.297	0	66	1406193	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0289-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 21:33:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	42813	0	Standard
	Cl	37		ug/L			5547089	5480903	1	Standard
>	Sc	45		ug/L			468010	581531	2	Standard
	Cr	52	35.067	ug/L	0.287	0	19735	764254	2	Standard
	Cr	53	35.763	ug/L	0.412	1	125	86517	0	Standard
	Mn	55	157.676	ug/L	2.501	1	543	5102061	0	Standard
>	Ge	72		ug/L			30322	30103	1	KED
	Ni	60	37.938	ug/L	1.347	3	1	40270	3	KED
	Ni	62	37.178	ug/L	0.955	2	3	6438	1	KED
	Cu	63	62.756	ug/L	0.567	0	37	191716	0	KED
	Cu	65	61.446	ug/L	1.325	2	22	93839	0	KED
	Zn	66	154.235	ug/L	5.066	3	57	65474	2	KED
	Zn	67	144.436	ug/L	2.301	1	12	10335	0	KED
	As	75	31.938	ug/L	0.373	1	6	7124	1	KED
	Se	78	74.566	ug/L	2.124	2	28	2065	1	KED
	Y	89		ug/L			255916	464268	0	Standard
	Kr	83		ug/L			40	87	9	Standard
>	In-1	115		ug/L			10112	9996	1	KED
	Cd	111	24.782	ug/L	0.471	1	1	7327	1	KED
	Cd	114	24.825	ug/L	0.645	2	1	17583	1	KED
>	In	115		ug/L			377966	385356	1	Standard
	Ag	107	25.196	ug/L	0.456	1	31	331799	0	Standard
	Ba	135	58.210	ug/L	1.007	1	9	219012	0	Standard
	Ba	137	57.403	ug/L	1.495	2	24	380659	1	Standard
>	Tb	159		ug/L			603683	663290	2	Standard
	Pb	208	61.168	ug/L	1.648	2	66	2384584	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0289-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 21:37:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	44846	1	Standard
Cl	37		ug/L			5547089	5599259	0	Standard
> Sc	45		ug/L			468010	591781	2	Standard
Cr	52	35.143	ug/L	0.325	0	19735	779217	1	Standard
Cr	53	36.091	ug/L	0.666	1	125	88861	2	Standard
Mn	55	160.083	ug/L	4.199	2	543	5271120	2	Standard
> Ge	72		ug/L			30322	30452	0	KED
Ni	60	38.506	ug/L	0.995	2	1	41349	2	KED
Ni	62	37.933	ug/L	1.381	3	3	6647	3	KED
Cu	63	58.304	ug/L	0.853	1	37	180192	1	KED
Cu	65	56.956	ug/L	0.396	0	22	88008	0	KED
Zn	66	152.083	ug/L	2.113	1	57	65319	1	KED
Zn	67	142.126	ug/L	2.600	1	12	10290	1	KED
As	75	31.191	ug/L	0.126	0	6	7039	0	KED
Se	78	73.718	ug/L	1.179	1	28	2066	1	KED
Y	89		ug/L			255916	459057	3	Standard
Kr	83		ug/L			40	86	26	Standard
> In-1	115		ug/L			10112	9862	1	KED
Cd	111	25.191	ug/L	0.774	3	1	7348	2	KED
Cd	114	25.739	ug/L	0.677	2	1	17988	1	KED
> In	115		ug/L			377966	391600	0	Standard
Ag	107	25.047	ug/L	0.532	2	31	335270	2	Standard
Ba	135	58.326	ug/L	0.504	0	9	223049	1	Standard
Ba	137	57.976	ug/L	0.855	1	24	390766	0	Standard
> Tb	159		ug/L			603683	662600	2	Standard
Pb	208	60.786	ug/L	1.988	3	66	2367085	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0289-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 21:42:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	47391	1	Standard
Cl	37		ug/L			5547089	5528125	0	Standard
> Sc	45		ug/L			468010	586198	4	Standard
Cr	52	34.243	ug/L	1.014	2	19735	752235	1	Standard
Cr	53	35.496	ug/L	0.705	1	125	86525	2	Standard
Mn	55	156.831	ug/L	5.610	3	543	5111429	1	Standard
> Ge	72		ug/L			30322	30754	3	KED
Ni	60	36.491	ug/L	1.064	2	1	39549	1	KED
Ni	62	36.821	ug/L	1.411	3	3	6511	1	KED
Cu	63	55.416	ug/L	1.019	1	37	172910	1	KED
Cu	65	55.284	ug/L	1.253	2	22	86236	1	KED
Zn	66	144.779	ug/L	3.332	2	57	62773	1	KED
Zn	67	134.315	ug/L	4.063	3	12	9815	0	KED
As	75	30.740	ug/L	0.725	2	6	7002	1	KED
Se	78	71.765	ug/L	3.709	5	28	2030	1	KED
Y	89		ug/L			255916	478164	1	Standard
Kr	83		ug/L			40	89	16	Standard
> In-1	115		ug/L			10112	9977	2	KED
Cd	111	24.096	ug/L	0.169	0	1	7112	2	KED
Cd	114	24.612	ug/L	0.551	2	1	17399	0	KED
> In	115		ug/L			377966	392804	0	Standard
Ag	107	24.939	ug/L	0.437	1	31	334809	1	Standard
Ba	135	58.101	ug/L	1.458	2	9	222840	1	Standard
Ba	137	57.617	ug/L	1.351	2	24	389525	1	Standard
> Tb	159		ug/L			603683	665739	2	Standard
Pb	208	59.428	ug/L	1.332	2	66	2325654	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 21:47:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	27903	0	Standard
	Cl	**37**		ug/L			5547089	5532926	1	Standard
⌈>	**Sc**	**45**		ug/L			468010	478395	3	Standard
|	**Cr**	**52**	**47.455**	ug/L	1.727	3	19735	843034	1	Standard
|	**Cr**	**53**	**48.170**	ug/L	1.360	2	125	95778	0	Standard
⌊	**Mn**	**55**	**45.079**	ug/L	1.439	3	543	1199814	0	Standard
⌈>	**Ge**	**72**		ug/L			30322	28815	4	KED
|	**Ni**	**60**	**51.582**	ug/L	2.629	5	1	52339	0	KED
|	**Ni**	**62**	**52.274**	ug/L	1.510	2	3	8661	2	KED
|	**Cu**	**63**	**51.756**	ug/L	1.583	3	37	151240	1	KED
|	**Cu**	**65**	**51.230**	ug/L	3.224	6	22	74800	3	KED
|	**Zn**	**66**	**51.735**	ug/L	1.518	2	57	21045	1	KED
|	**Zn**	**67**	**50.576**	ug/L	1.505	2	12	3470	2	KED
|	**As**	**75**	**50.410**	ug/L	1.606	3	6	10752	1	KED
⌊	**Se**	**78**	**49.202**	ug/L	0.450	0	28	1314	4	KED
	Y	**89**		ug/L			255916	270748	1	Standard
	Kr	**83**		ug/L			40	45	11	Standard
⌈>	**In-1**	**115**		ug/L			10112	9779	2	KED
|	**Cd**	**111**	**49.051**	ug/L	1.595	3	1	14182	1	KED
⌊	**Cd**	**114**	**49.813**	ug/L	1.783	3	1	34510	2	KED
⌈>	**In**	**115**		ug/L			377966	383627	0	Standard
|	**Ag**	**107**	**50.201**	ug/L	1.665	3	31	658097	2	Standard
|	**Ba**	**135**	**48.502**	ug/L	0.395	0	9	181707	1	Standard
⌊	**Ba**	**137**	**47.711**	ug/L	0.959	2	24	315023	1	Standard
⌈>	**Tb**	**159**		ug/L			603683	635879	1	Standard
⌊	**Pb**	**208**	**49.640**	ug/L	0.874	1	66	1855652	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 21:54:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	23522	2	Standard
	Cl	**37**		ug/L			5547089	5463925	2	Standard
⌈>	**Sc**	**45**		ug/L			468010	451940	0	Standard
|	**Cr**	**52**	**0.020**	ug/L	0.012	57	19735	19389	0	Standard
|	**Cr**	**53**	**-0.001**	ug/L	0.003	365	125	119	6	Standard
⌊	**Mn**	**55**	**0.004**	ug/L	0.002	50	543	632	8	Standard
⌈>	**Ge**	**72**		ug/L			30322	29302	0	KED
|	**Ni**	**60**	**0.003**	ug/L	0.004	121	1	5	78	KED
|	**Ni**	**62**	**0.001**	ug/L	0.011	1555	3	3	50	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.002	247	37	33	19	KED
|	**Cu**	**65**	**0.000**	ug/L	0.006	5983	22	21	39	KED
|	**Zn**	**66**	**-0.001**	ug/L	0.012	842	57	55	9	KED
|	**Zn**	**67**	**0.024**	ug/L	0.095	393	12	13	49	KED
|	**As**	**75**	**-0.004**	ug/L	0.003	77	6	5	14	KED
⌊	**Se**	**78**	**0.090**	ug/L	0.227	253	28	29	19	KED
	Y	**89**		ug/L			255916	254253	1	Standard
	Kr	**83**		ug/L			40	41	2	Standard
⌈>	**In-1**	**115**		ug/L			10112	9516	3	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.005	595	1	1	91	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.005	91	1	4	66	KED
⌈>	**In**	**115**		ug/L			377966	368122	0	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.003	111	31	59	54	Standard
|	**Ba**	**135**	**0.004**	ug/L	0.007	170	9	24	105	Standard
⌊	**Ba**	**137**	**0.002**	ug/L	0.003	149	24	37	56	Standard
⌈>	**Tb**	**159**		ug/L			603683	589393	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.005	144	66	178	90	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0313-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 21:59:29
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	44793	3	Standard
Cl	37		ug/L			5547089	5467130	1	Standard
> Sc	45		ug/L			468010	610017	1	Standard
Cr	52	17.381	ug/L	0.163	0	19735	410346	2	Standard
Cr	53	17.897	ug/L	0.137	0	125	45503	0	Standard
Mn	55	153.902	ug/L	2.310	1	543	5224300	0	Standard
> Ge	72		ug/L			30322	30120	0	KED
Ni	60	13.345	ug/L	0.113	0	1	14175	0	KED
Ni	62	13.540	ug/L	0.107	0	3	2349	0	KED
Cu	63	28.424	ug/L	0.364	1	37	86909	1	KED
Cu	65	28.510	ug/L	0.309	1	22	43584	0	KED
Zn	66	71.452	ug/L	1.551	2	57	30384	2	KED
Zn	67	67.943	ug/L	2.758	4	12	4871	3	KED
As	75	7.171	ug/L	0.070	0	6	1605	0	KED
Se	78	0.950	ug/L	0.097	10	28	53	4	KED
Y	89		ug/L			255916	543356	2	Standard
Kr	83		ug/L			40	95	11	Standard
> In-1	115		ug/L			10112	9900	2	KED
Cd	111	0.378	ug/L	0.019	5	1	112	3	KED
Cd	114	0.376	ug/L	0.012	3	1	264	1	KED
> In	115		ug/L			377966	382755	3	Standard
Ag	107	0.388	ug/L	0.023	5	31	5102	3	Standard
Ba	135	47.196	ug/L	1.304	2	9	176293	0	Standard
Ba	137	46.198	ug/L	1.215	2	24	304188	0	Standard
> Tb	159		ug/L			603683	657311	1	Standard
Pb	208	52.628	ug/L	0.725	1	66	2033951	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0313-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 22:04:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	45824	4	Standard
Cl	37		ug/L			5547089	5569513	1	Standard
> Sc	45		ug/L			468010	617851	3	Standard
Cr	52	13.726	ug/L	0.282	2	19735	333525	2	Standard
Cr	53	14.210	ug/L	0.361	2	125	36607	1	Standard
Mn	55	189.820	ug/L	8.166	4	543	6520547	1	Standard
> Ge	72		ug/L			30322	30454	1	KED
Ni	60	14.615	ug/L	0.314	2	1	15692	0	KED
Ni	62	14.876	ug/L	0.723	4	3	2609	4	KED
Cu	63	29.516	ug/L	0.286	0	37	91254	2	KED
Cu	65	28.861	ug/L	0.212	0	22	44607	1	KED
Zn	66	63.947	ug/L	1.464	2	57	27495	1	KED
Zn	67	61.250	ug/L	1.079	1	12	4441	1	KED
As	75	6.744	ug/L	0.151	2	6	1526	1	KED
Se	78	0.924	ug/L	0.145	15	28	53	6	KED
Y	89		ug/L			255916	523360	2	Standard
Kr	83		ug/L			40	91	20	Standard
> In-1	115		ug/L			10112	9845	0	KED
Cd	111	0.201	ug/L	0.024	11	1	60	11	KED
Cd	114	0.245	ug/L	0.018	7	1	171	7	KED
> In	115		ug/L			377966	385922	1	Standard
Ag	107	0.177	ug/L	0.008	4	31	2364	3	Standard
Ba	135	47.581	ug/L	0.633	1	9	179315	1	Standard
Ba	137	47.052	ug/L	0.854	1	24	312531	1	Standard
> Tb	159		ug/L			603683	653342	3	Standard
Pb	208	12.933	ug/L	0.176	1	66	496758	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0313-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 22:08:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	42095	2	Standard
Cl	37		ug/L			5547089	5416569	0	Standard
> Sc	45		ug/L			468010	617825	1	Standard
Cr	52	13.525	ug/L	0.313	2	19735	329093	1	Standard
Cr	53	13.831	ug/L	0.334	2	125	35648	1	Standard
Mn	55	188.638	ug/L	4.823	2	543	6484812	1	Standard
> Ge	72		ug/L			30322	30072	0	KED
Ni	60	14.643	ug/L	0.204	1	1	15529	1	KED
Ni	62	14.470	ug/L	0.426	2	3	2506	2	KED
Cu	63	33.688	ug/L	0.724	2	37	102839	2	KED
Cu	65	34.156	ug/L	0.428	1	22	52127	1	KED
Zn	66	69.712	ug/L	0.841	1	57	29600	1	KED
Zn	67	66.916	ug/L	1.585	2	12	4790	2	KED
As	75	7.282	ug/L	0.170	2	6	1627	2	KED
Se	78	0.872	ug/L	0.306	35	28	51	16	KED
Y	89		ug/L			255916	526701	2	Standard
Kr	83		ug/L			40	108	16	Standard
> In-1	115		ug/L			10112	9538	3	KED
Cd	111	0.184	ug/L	0.020	10	1	53	8	KED
Cd	114	0.162	ug/L	0.030	18	1	110	16	KED
> In	115		ug/L			377966	380189	3	Standard
Ag	107	0.127	ug/L	0.002	1	31	1678	3	Standard
Ba	135	49.199	ug/L	1.509	3	9	182541	0	Standard
Ba	137	48.636	ug/L	2.185	4	24	317982	1	Standard
> Tb	159		ug/L			603683	650390	0	Standard
Pb	208	12.838	ug/L	0.069	0	66	491013	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0313-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 22:13:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	47227	1	Standard
Cl	37		ug/L			5547089	5518187	0	Standard
> Sc	45		ug/L			468010	609336	3	Standard
Cr	52	14.057	ug/L	0.320	2	19735	336235	1	Standard
Cr	53	14.231	ug/L	0.118	0	125	36182	4	Standard
Mn	55	181.499	ug/L	6.280	3	543	6150028	0	Standard
> Ge	72		ug/L			30322	29847	2	KED
Ni	60	14.715	ug/L	0.496	3	1	15483	2	KED
Ni	62	14.635	ug/L	0.242	1	3	2516	3	KED
Cu	63	31.980	ug/L	0.323	1	37	96878	1	KED
Cu	65	32.240	ug/L	0.604	1	22	48825	0	KED
Zn	66	62.238	ug/L	1.762	2	57	26224	0	KED
Zn	67	61.210	ug/L	0.386	0	12	4350	2	KED
As	75	7.012	ug/L	0.034	0	6	1555	2	KED
Se	78	0.824	ug/L	0.117	14	28	49	4	KED
Y	89		ug/L			255916	530153	2	Standard
Kr	83		ug/L			40	107	6	Standard
> In-1	115		ug/L			10112	9714	0	KED
Cd	111	0.178	ug/L	0.028	15	1	53	14	KED
Cd	114	0.182	ug/L	0.018	10	1	126	10	KED
> In	115		ug/L			377966	381565	3	Standard
Ag	107	0.150	ug/L	0.011	7	31	1983	3	Standard
Ba	135	49.862	ug/L	1.742	3	9	185673	1	Standard
Ba	137	50.551	ug/L	1.303	2	24	331843	0	Standard
> Tb	159		ug/L			603683	658987	2	Standard
Pb	208	14.171	ug/L	0.429	3	66	548907	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0313-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 22:18:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	45317	2	Standard
	Cl	37		ug/L			5547089	5569835	0	Standard
>	Sc	45		ug/L			468010	633159	2	Standard
	Cr	52	14.716	ug/L	0.498	3	19735	364475	0	Standard
	Cr	53	15.346	ug/L	0.277	1	125	40519	2	Standard
	Mn	55	163.854	ug/L	3.769	2	543	5772781	2	Standard
>	Ge	72		ug/L			30322	30277	2	KED
	Ni	60	16.785	ug/L	0.590	3	1	17912	1	KED
	Ni	62	16.775	ug/L	0.622	3	3	2923	2	KED
	Cu	63	34.873	ug/L	0.739	2	37	107138	0	KED
	Cu	65	34.601	ug/L	0.858	2	22	53152	1	KED
	Zn	66	64.576	ug/L	2.658	4	57	27592	1	KED
	Zn	67	61.704	ug/L	1.374	2	12	4447	0	KED
	As	75	6.725	ug/L	0.030	0	6	1513	2	KED
	Se	78	1.008	ug/L	0.147	14	28	55	8	KED
	Y	89		ug/L			255916	535574	3	Standard
	Kr	83		ug/L			40	97	10	Standard
>	In-1	115		ug/L			10112	9740	1	KED
	Cd	111	0.223	ug/L	0.028	12	1	66	13	KED
	Cd	114	0.216	ug/L	0.021	9	1	150	10	KED
>	In	115		ug/L			377966	388895	0	Standard
	Ag	107	0.192	ug/L	0.006	3	31	2586	4	Standard
	Ba	135	50.598	ug/L	0.623	1	9	192159	1	Standard
	Ba	137	50.687	ug/L	1.359	2	24	339259	2	Standard
>	Tb	159		ug/L			603683	660423	2	Standard
	Pb	208	16.718	ug/L	0.434	2	66	648996	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0313-12
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 22:23:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	41735	0	Standard
	Cl	**37**		ug/L			5547089	5613663	0	Standard
⌈>	**Sc**	**45**		ug/L			468010	544185	2	Standard
|	**Cr**	**52**	**7.600**	ug/L	0.197	2	19735	172908	0	Standard
|	**Cr**	**53**	**7.865**	ug/L	0.141	1	125	17916	0	Standard
⌊	**Mn**	**55**	**122.901**	ug/L	3.011	2	543	3721131	1	Standard
⌈>	**Ge**	**72**		ug/L			30322	30061	0	KED
|	**Ni**	**60**	**7.687**	ug/L	0.137	1	1	8150	2	KED
|	**Ni**	**62**	**7.525**	ug/L	0.865	11	3	1304	11	KED
|	**Cu**	**63**	**12.993**	ug/L	0.163	1	37	39670	1	KED
|	**Cu**	**65**	**12.946**	ug/L	0.057	0	22	19764	0	KED
|	**Zn**	**66**	**30.801**	ug/L	0.253	0	57	13105	1	KED
|	**Zn**	**67**	**29.435**	ug/L	0.508	1	12	2113	1	KED
|	**As**	**75**	**3.774**	ug/L	0.118	3	6	846	3	KED
⌊	**Se**	**78**	**0.615**	ug/L	0.186	30	28	44	10	KED
	Y	**89**		ug/L			255916	435727	3	Standard
	Kr	**83**		ug/L			40	61	20	Standard
⌈>	**In-1**	**115**		ug/L			10112	9995	1	KED
|	**Cd**	**111**	**0.030**	ug/L	0.008	26	1	10	22	KED
⌊	**Cd**	**114**	**0.017**	ug/L	0.005	29	1	13	29	KED
⌈>	**In**	**115**		ug/L			377966	390275	2	Standard
|	**Ag**	**107**	**0.031**	ug/L	0.002	7	31	441	5	Standard
|	**Ba**	**135**	**17.764**	ug/L	0.399	2	9	67681	0	Standard
⌊	**Ba**	**137**	**17.697**	ug/L	0.829	4	24	118810	2	Standard
⌈>	**Tb**	**159**		ug/L			603683	663109	2	Standard
⌊	**Pb**	**208**	**6.307**	ug/L	0.190	3	66	245852	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0313-13
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 22:27:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	44784	1	Standard
Cl	37		ug/L			5547089	5487207	1	Standard
Sc	45		ug/L			468010	595506	1	Standard
Cr	52	13.642	ug/L	0.094	0	19735	319794	1	Standard
Cr	53	14.166	ug/L	0.141	0	125	35194	0	Standard
Mn	55	140.499	ug/L	0.464	0	543	4656460	1	Standard
Ge	72		ug/L			30322	30184	1	KED
Ni	60	14.034	ug/L	0.099	0	1	14939	1	KED
Ni	62	13.954	ug/L	0.770	5	3	2425	4	KED
Cu	63	36.748	ug/L	0.292	0	37	112581	0	KED
Cu	65	37.397	ug/L	0.454	1	22	57280	0	KED
Zn	66	66.736	ug/L	0.862	1	57	28446	2	KED
Zn	67	63.635	ug/L	2.328	3	12	4572	3	KED
As	75	6.287	ug/L	0.131	2	6	1411	2	KED
Se	78	0.747	ug/L	0.051	6	28	48	1	KED
Y	89		ug/L			255916	503733	2	Standard
Kr	83		ug/L			40	81	5	Standard
In-1	115		ug/L			10112	9589	2	KED
Cd	111	0.202	ug/L	0.020	10	1	59	7	KED
Cd	114	0.185	ug/L	0.044	23	1	127	26	KED
In	115		ug/L			377966	381786	0	Standard
Ag	107	0.131	ug/L	0.003	2	31	1746	1	Standard
Ba	135	38.856	ug/L	0.373	0	9	144859	0	Standard
Ba	137	38.745	ug/L	0.664	1	24	254613	1	Standard
Tb	159		ug/L			603683	661002	1	Standard
Pb	208	13.272	ug/L	0.313	2	66	515770	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0328-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 22:32:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	46419	0	Standard
	Cl	37		ug/L			5547089	5608030	0	Standard
>	Sc	45		ug/L			468010	579573	1	Standard
	Cr	52	13.039	ug/L	0.372	2	19735	298648	4	Standard
	Cr	53	13.442	ug/L	0.287	2	125	32518	3	Standard
	Mn	55	138.498	ug/L	1.110	0	543	4467821	2	Standard
>	Ge	72		ug/L			30322	30420	1	KED
	Ni	60	12.572	ug/L	0.475	3	1	13485	3	KED
	Ni	62	12.709	ug/L	0.539	4	3	2226	2	KED
	Cu	63	30.504	ug/L	0.791	2	37	94167	0	KED
	Cu	65	30.576	ug/L	0.965	3	22	47190	1	KED
	Zn	66	59.277	ug/L	0.982	1	57	25467	2	KED
	Zn	67	57.197	ug/L	4.522	7	12	4140	6	KED
	As	75	6.762	ug/L	0.046	0	6	1529	1	KED
	Se	78	0.806	ug/L	0.182	22	28	50	9	KED
	Y	89		ug/L			255916	469359	0	Standard
	Kr	83		ug/L			40	69	11	Standard
>	In-1	115		ug/L			10112	9808	1	KED
	Cd	111	0.185	ug/L	0.005	2	1	55	3	KED
	Cd	114	0.176	ug/L	0.029	16	1	123	16	KED
>	In	115		ug/L			377966	380017	2	Standard
	Ag	107	0.130	ug/L	0.008	6	31	1714	3	Standard
	Ba	135	34.482	ug/L	1.566	4	9	127876	2	Standard
	Ba	137	34.213	ug/L	0.904	2	24	223708	1	Standard
>	Tb	159		ug/L			603683	650104	1	Standard
	Pb	208	13.183	ug/L	0.293	2	66	503890	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0328-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 22:37:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	41799	4	Standard
	Cl	37		ug/L			5547089	5518053	1	Standard
>	Sc	45		ug/L			468010	578975	0	Standard
	Cr	52	18.106	ug/L	0.130	0	19735	404648	0	Standard
	Cr	53	18.513	ug/L	0.237	1	125	44668	0	Standard
	Mn	55	170.442	ug/L	0.797	0	543	5491903	0	Standard
>	Ge	72		ug/L			30322	30569	1	KED
	Ni	60	13.948	ug/L	0.329	2	1	15034	1	KED
	Ni	62	14.254	ug/L	0.247	1	3	2510	2	KED
	Cu	63	29.629	ug/L	0.774	2	37	91933	2	KED
	Cu	65	29.453	ug/L	0.599	2	22	45691	1	KED
	Zn	66	105.824	ug/L	2.621	2	57	45637	1	KED
	Zn	67	100.635	ug/L	0.964	0	12	7317	0	KED
	As	75	7.119	ug/L	0.062	0	6	1617	0	KED
	Se	78	0.804	ug/L	0.019	2	28	50	2	KED
	Y	89		ug/L			255916	468711	0	Standard
	Kr	83		ug/L			40	85	7	Standard
>	In-1	115		ug/L			10112	9671	3	KED
	Cd	111	0.221	ug/L	0.013	5	1	65	3	KED
	Cd	114	0.199	ug/L	0.009	4	1	137	1	KED
>	In	115		ug/L			377966	387097	2	Standard
	Ag	107	0.167	ug/L	0.006	3	31	2243	1	Standard
	Ba	135	35.028	ug/L	1.093	3	9	132333	0	Standard
	Ba	137	34.652	ug/L	1.009	2	24	230801	2	Standard
>	Tb	159		ug/L			603683	656040	1	Standard
	Pb	208	53.405	ug/L	0.903	1	66	2059894	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0328-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 22:42:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	43060	0	Standard
	Cl	37		ug/L			5547089	5576433	0	Standard
>	Sc	45		ug/L			468010	584160	1	Standard
	Cr	52	11.551	ug/L	0.130	1	19735	269358	0	Standard
	Cr	53	11.923	ug/L	0.325	2	125	29081	2	Standard
	Mn	55	146.068	ug/L	1.593	1	543	4748739	1	Standard
>	Ge	72		ug/L			30322	30695	3	KED
	Ni	60	11.326	ug/L	0.272	2	1	12254	2	KED
	Ni	62	11.166	ug/L	0.322	2	3	1974	2	KED
	Cu	63	24.306	ug/L	0.636	2	37	75694	0	KED
	Cu	65	24.297	ug/L	0.662	2	22	37831	0	KED
	Zn	66	49.792	ug/L	1.537	3	57	21583	2	KED
	Zn	67	46.783	ug/L	1.397	2	12	3420	2	KED
	As	75	6.774	ug/L	0.116	1	6	1545	2	KED
	Se	78	0.523	ug/L	0.173	33	28	42	8	KED
	Y	89		ug/L			255916	457971	0	Standard
	Kr	83		ug/L			40	90	14	Standard
>	In-1	115		ug/L			10112	9386	2	KED
	Cd	111	0.169	ug/L	0.020	11	1	48	11	KED
	Cd	114	0.176	ug/L	0.018	9	1	117	9	KED
>	In	115		ug/L			377966	383065	0	Standard
	Ag	107	0.104	ug/L	0.007	6	31	1395	6	Standard
	Ba	135	34.276	ug/L	0.426	1	9	128226	1	Standard
	Ba	137	34.445	ug/L	0.080	0	24	227123	0	Standard
>	Tb	159		ug/L			603683	665874	1	Standard
	Pb	208	9.680	ug/L	0.215	2	66	378995	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 22:46:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	26491	1	Standard
	Cl	**37**		ug/L			5547089	5565892	1	Standard
⌈>	**Sc**	**45**		ug/L			468010	476255	1	Standard
|	**Cr**	**52**	**46.705**	ug/L	0.565	1	19735	826834	0	Standard
|	**Cr**	**53**	**47.776**	ug/L	0.393	0	125	94625	1	Standard
⌊	**Mn**	**55**	**44.828**	ug/L	0.379	0	543	1188605	1	Standard
⌈>	**Ge**	**72**		ug/L			30322	29762	1	KED
|	**Ni**	**60**	**49.680**	ug/L	0.461	0	1	52133	0	KED
|	**Ni**	**62**	**50.147**	ug/L	0.341	0	3	8587	1	KED
|	**Cu**	**63**	**49.553**	ug/L	1.000	2	37	149680	2	KED
|	**Cu**	**65**	**49.384**	ug/L	0.833	1	22	74569	0	KED
|	**Zn**	**66**	**50.279**	ug/L	0.958	1	57	21139	0	KED
|	**Zn**	**67**	**49.654**	ug/L	1.767	3	12	3522	4	KED
|	**As**	**75**	**48.897**	ug/L	0.574	1	6	10781	1	KED
⌊	**Se**	**78**	**47.993**	ug/L	1.046	2	28	1324	2	KED
	Y	**89**		ug/L			255916	259930	2	Standard
	Kr	**83**		ug/L			40	41	16	Standard
⌈>	**In-1**	**115**		ug/L			10112	9680	3	KED
|	**Cd**	**111**	**48.720**	ug/L	1.759	3	1	13938	0	KED
⌊	**Cd**	**114**	**49.508**	ug/L	1.677	3	1	33939	0	KED
⌈>	**In**	**115**		ug/L			377966	385306	2	Standard
|	**Ag**	**107**	**48.791**	ug/L	1.151	2	31	642330	1	Standard
|	**Ba**	**135**	**47.979**	ug/L	0.278	0	9	180538	2	Standard
⌊	**Ba**	**137**	**46.623**	ug/L	0.669	1	24	309167	1	Standard
⌈>	**Tb**	**159**		ug/L			603683	620279	2	Standard
⌊	**Pb**	**208**	**50.188**	ug/L	1.486	2	66	1829771	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 22:54:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	23734	4	Standard
	Cl	**37**		ug/L			5547089	5614253	0	Standard
⌈>	**Sc**	**45**		ug/L			468010	450504	3	Standard
|	**Cr**	**52**	**0.001**	ug/L	0.057	4719	19735	18994	1	Standard
|	**Cr**	**53**	**0.003**	ug/L	0.004	110	125	126	6	Standard
⌊	**Mn**	**55**	**0.003**	ug/L	0.002	56	543	601	5	Standard
⌈>	**Ge**	**72**		ug/L			30322	28665	6	KED
|	**Ni**	**60**	**0.004**	ug/L	0.004	93	1	5	66	KED
|	**Ni**	**62**	**-0.007**	ug/L	0.006	89	3	2	43	KED
|	**Cu**	**63**	**0.001**	ug/L	0.002	149	37	39	20	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.007	451	22	19	55	KED
|	**Zn**	**66**	**-0.020**	ug/L	0.008	38	57	46	9	KED
|	**Zn**	**67**	**-0.031**	ug/L	0.093	299	12	9	72	KED
|	**As**	**75**	**-0.001**	ug/L	0.005	720	6	5	22	KED
⌊	**Se**	**78**	**0.029**	ug/L	0.152	529	28	27	7	KED
	Y	**89**		ug/L			255916	246768	4	Standard
	Kr	**83**		ug/L			40	43	44	Standard
⌈>	**In-1**	**115**		ug/L			10112	9539	0	KED
|	**Cd**	**111**	**0.000**	ug/L	0.006	1532	1	1	86	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	203	1	0	180	KED
⌈>	**In**	**115**		ug/L			377966	364440	2	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.000	158	31	32	10	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.001	43	9	15	18	Standard
⌊	**Ba**	**137**	**-0.000**	ug/L	0.001	1155	24	22	25	Standard
⌈>	**Tb**	**159**		ug/L			603683	592361	3	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	78	66	55	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0328-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 22:59:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	46351	3	Standard
	Cl	37		ug/L			5547089	5512581	0	Standard
>	Sc	45		ug/L			468010	564492	1	Standard
	Cr	52	11.332	ug/L	0.149	1	19735	255808	0	Standard
	Cr	53	11.988	ug/L	0.218	1	125	28253	1	Standard
	Mn	55	128.740	ug/L	1.238	0	543	4044440	0	Standard
>	Ge	72		ug/L			30322	30293	2	KED
	Ni	60	10.908	ug/L	0.197	1	1	11651	1	KED
	Ni	62	10.837	ug/L	0.543	5	3	1890	2	KED
	Cu	63	27.439	ug/L	0.247	0	37	84369	1	KED
	Cu	65	27.216	ug/L	0.957	3	22	41819	0	KED
	Zn	66	52.504	ug/L	1.684	3	57	22458	1	KED
	Zn	67	49.501	ug/L	2.597	5	12	3569	2	KED
	As	75	7.110	ug/L	0.247	3	6	1600	0	KED
	Se	78	0.608	ug/L	0.162	26	28	44	12	KED
	Y	89		ug/L			255916	442805	1	Standard
	Kr	83		ug/L			40	68	18	Standard
>	In-1	115		ug/L			10112	9850	1	KED
	Cd	111	0.166	ug/L	0.008	4	1	50	6	KED
	Cd	114	0.168	ug/L	0.030	17	1	118	17	KED
>	In	115		ug/L			377966	379906	5	Standard
	Ag	107	0.109	ug/L	0.003	3	31	1446	5	Standard
	Ba	135	31.804	ug/L	1.530	4	9	117805	1	Standard
	Ba	137	31.554	ug/L	1.451	4	24	206037	0	Standard
>	Tb	159		ug/L			603683	646109	0	Standard
	Pb	208	11.344	ug/L	0.104	0	66	431016	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0328-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 23:03:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	41281	1	Standard
	Cl	37		ug/L			5547089	5516457	2	Standard
>	Sc	45		ug/L			468010	569692	0	Standard
	Cr	52	12.564	ug/L	0.448	3	19735	283610	2	Standard
	Cr	53	13.107	ug/L	0.232	1	125	31161	0	Standard
	Mn	55	121.286	ug/L	2.648	2	543	3845319	1	Standard
>	Ge	72		ug/L			30322	30057	0	KED
	Ni	60	11.655	ug/L	0.141	1	1	12353	0	KED
	Ni	62	11.189	ug/L	0.183	1	3	1937	0	KED
	Cu	63	26.322	ug/L	0.695	2	37	80316	2	KED
	Cu	65	26.548	ug/L	0.678	2	22	40496	1	KED
	Zn	66	50.965	ug/L	0.671	1	57	21643	0	KED
	Zn	67	47.917	ug/L	1.377	2	12	3432	3	KED
	As	75	4.921	ug/L	0.130	2	6	1101	1	KED
	Se	78	0.659	ug/L	0.131	19	28	45	6	KED
	Y	89		ug/L			255916	446838	1	Standard
	Kr	83		ug/L			40	70	4	Standard
>	In-1	115		ug/L			10112	9664	2	KED
	Cd	111	0.112	ug/L	0.022	19	1	33	16	KED
	Cd	114	0.118	ug/L	0.009	7	1	81	4	KED
>	In	115		ug/L			377966	380120	1	Standard
	Ag	107	0.098	ug/L	0.006	5	31	1300	3	Standard
	Ba	135	26.990	ug/L	0.963	3	9	100146	1	Standard
	Ba	137	27.234	ug/L	0.468	1	24	178182	1	Standard
>	Tb	159		ug/L			603683	648626	0	Standard
	Pb	208	10.115	ug/L	0.097	0	66	385840	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0328-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 23:08:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	43206	1	Standard
	Cl	37		ug/L			5547089	5528380	1	Standard
>	Sc	45		ug/L			468010	567117	3	Standard
	Cr	52	11.504	ug/L	0.328	2	19735	260398	1	Standard
	Cr	53	12.238	ug/L	0.363	2	125	28955	0	Standard
	Mn	55	111.278	ug/L	0.861	0	543	3512124	3	Standard
>	Ge	72		ug/L			30322	29903	0	KED
	Ni	60	10.650	ug/L	0.297	2	1	11229	2	KED
	Ni	62	10.755	ug/L	0.804	7	3	1852	6	KED
	Cu	63	27.924	ug/L	0.445	1	37	84769	2	KED
	Cu	65	28.205	ug/L	0.591	2	22	42804	1	KED
	Zn	66	58.050	ug/L	1.455	2	57	24520	3	KED
	Zn	67	54.908	ug/L	2.804	5	12	3911	5	KED
	As	75	6.676	ug/L	0.117	1	6	1484	1	KED
	Se	78	0.677	ug/L	0.154	22	28	46	8	KED
	Y	89		ug/L			255916	454245	3	Standard
	Kr	83		ug/L			40	72	15	Standard
>	In-1	115		ug/L			10112	10030	1	KED
	Cd	111	0.093	ug/L	0.015	16	1	29	17	KED
	Cd	114	0.094	ug/L	0.011	11	1	68	10	KED
>	In	115		ug/L			377966	378794	1	Standard
	Ag	107	0.096	ug/L	0.004	4	31	1271	3	Standard
	Ba	135	29.662	ug/L	0.478	1	9	109711	0	Standard
	Ba	137	29.532	ug/L	0.860	2	24	192531	2	Standard
>	Tb	159		ug/L			603683	653073	1	Standard
	Pb	208	14.850	ug/L	0.342	2	66	570184	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0328-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 23:13:24
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	45055	1	Standard
	Cl	37		ug/L			5547089	5475432	1	Standard
⌈>	Sc	45		ug/L			468010	570223	2	Standard
|	Cr	52	12.038	ug/L	0.030	0	19735	273041	2	Standard
|	Cr	53	12.390	ug/L	0.209	1	125	29488	0	Standard
⌊	Mn	55	128.679	ug/L	2.324	1	543	4082599	0	Standard
⌈>	Ge	72		ug/L			30322	29822	0	KED
|	Ni	60	11.661	ug/L	0.305	2	1	12263	2	KED
|	Ni	62	11.669	ug/L	0.092	0	3	2005	1	KED
|	Cu	63	27.971	ug/L	0.189	0	37	84678	0	KED
|	Cu	65	28.499	ug/L	0.440	1	22	43133	0	KED
|	Zn	66	58.651	ug/L	0.262	0	57	24705	1	KED
|	Zn	67	53.224	ug/L	1.375	2	12	3780	1	KED
|	As	75	7.266	ug/L	0.093	1	6	1610	1	KED
⌊	Se	78	0.627	ug/L	0.243	38	28	44	13	KED
	Y	89		ug/L			255916	461102	0	Standard
	Kr	83		ug/L			40	72	23	Standard
⌈>	In-1	115		ug/L			10112	9808	1	KED
|	Cd	111	0.168	ug/L	0.007	4	1	50	3	KED
⌊	Cd	114	0.169	ug/L	0.021	12	1	118	11	KED
⌈>	In	115		ug/L			377966	380968	0	Standard
|	Ag	107	0.118	ug/L	0.001	1	31	1563	0	Standard
|	Ba	135	34.157	ug/L	0.602	1	9	127071	1	Standard
⌊	Ba	137	33.173	ug/L	0.363	1	24	217548	1	Standard
⌈>	Tb	159		ug/L			603683	643113	2	Standard
⌊	Pb	208	12.753	ug/L	0.291	2	66	482136	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0328-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 23:18:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	43981	1	Standard
	Cl	37		ug/L			5547089	5561868	3	Standard
>	Sc	45		ug/L			468010	576392	0	Standard
	Cr	52	10.868	ug/L	0.042	0	19735	251533	1	Standard
	Cr	53	11.234	ug/L	0.012	0	125	27046	0	Standard
	Mn	55	144.996	ug/L	4.314	2	543	4650514	2	Standard
>	Ge	72		ug/L			30322	30224	0	KED
	Ni	60	11.089	ug/L	0.298	2	1	11818	2	KED
	Ni	62	10.727	ug/L	0.497	4	3	1868	4	KED
	Cu	63	27.875	ug/L	0.382	1	37	85523	1	KED
	Cu	65	27.444	ug/L	0.326	1	22	42101	1	KED
	Zn	66	51.923	ug/L	1.456	2	57	22174	3	KED
	Zn	67	49.503	ug/L	1.225	2	12	3565	3	KED
	As	75	6.012	ug/L	0.050	0	6	1351	0	KED
	Se	78	0.756	ug/L	0.029	3	28	48	0	KED
	Y	89		ug/L			255916	451907	2	Standard
	Kr	83		ug/L			40	86	3	Standard
>	In-1	115		ug/L			10112	9781	0	KED
	Cd	111	0.140	ug/L	0.018	12	1	42	11	KED
	Cd	114	0.149	ug/L	0.015	9	1	104	10	KED
>	In	115		ug/L			377966	378987	1	Standard
	Ag	107	0.108	ug/L	0.002	1	31	1424	0	Standard
	Ba	135	32.840	ug/L	0.089	0	9	121542	1	Standard
	Ba	137	32.885	ug/L	0.768	2	24	214502	1	Standard
>	Tb	159		ug/L			603683	656164	2	Standard
	Pb	208	10.627	ug/L	0.312	2	66	409868	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0328-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 23:22:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	42824	0	Standard
	Cl	37		ug/L			5547089	5540075	0	Standard
>	Sc	45		ug/L			468010	573569	3	Standard
	Cr	52	11.268	ug/L	0.144	1	19735	258640	3	Standard
	Cr	53	11.749	ug/L	0.454	3	125	28119	0	Standard
	Mn	55	134.374	ug/L	4.358	3	543	4287051	1	Standard
>	Ge	72		ug/L			30322	30501	0	KED
	Ni	60	10.699	ug/L	0.249	2	1	11508	2	KED
	Ni	62	10.956	ug/L	0.160	1	3	1925	1	KED
	Cu	63	26.691	ug/L	0.265	0	37	82646	0	KED
	Cu	65	26.498	ug/L	1.002	3	22	41020	3	KED
	Zn	66	51.742	ug/L	1.051	2	57	22297	1	KED
	Zn	67	49.950	ug/L	1.732	3	12	3630	3	KED
	As	75	5.391	ug/L	0.035	0	6	1223	0	KED
	Se	78	0.638	ug/L	0.138	21	28	45	8	KED
	Y	89		ug/L			255916	452057	2	Standard
	Kr	83		ug/L			40	84	7	Standard
>	In-1	115		ug/L			10112	9773	1	KED
	Cd	111	0.159	ug/L	0.018	11	1	47	11	KED
	Cd	114	0.185	ug/L	0.020	11	1	129	11	KED
>	In	115		ug/L			377966	384469	1	Standard
	Ag	107	0.111	ug/L	0.003	2	31	1485	0	Standard
	Ba	135	32.039	ug/L	0.398	1	9	120277	1	Standard
	Ba	137	32.269	ug/L	0.199	0	24	213575	2	Standard
>	Tb	159		ug/L			603683	636933	2	Standard
	Pb	208	11.084	ug/L	0.299	2	66	415003	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0328-12
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 23:27:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21153	43532	2	Standard
	Cl	37		ug/L			5547089	5534831	0	Standard
⌈>	Sc	45		ug/L			468010	561942	1	Standard
|	Cr	52	11.383	ug/L	0.226	1	19735	255677	1	Standard
|	Cr	53	11.784	ug/L	0.177	1	125	27650	1	Standard
⌊	Mn	55	133.683	ug/L	3.186	2	543	4180187	1	Standard
⌈>	Ge	72		ug/L			30322	30324	1	KED
|	Ni	60	10.300	ug/L	0.165	1	1	11013	1	KED
|	Ni	62	10.695	ug/L	0.187	1	3	1868	1	KED
|	Cu	63	27.031	ug/L	0.849	3	37	83186	1	KED
|	Cu	65	26.709	ug/L	0.675	2	22	41101	1	KED
|	Zn	66	65.141	ug/L	0.377	0	57	27891	1	KED
|	Zn	67	60.875	ug/L	1.272	2	12	4396	3	KED
|	As	75	6.563	ug/L	0.145	2	6	1479	2	KED
⌊	Se	78	0.725	ug/L	0.213	29	28	48	13	KED
	Y	89		ug/L			255916	434386	0	Standard
	Kr	83		ug/L			40	82	5	Standard
⌈>	In-1	115		ug/L			10112	9773	1	KED
|	Cd	111	0.166	ug/L	0.015	8	1	49	6	KED
⌊	Cd	114	0.177	ug/L	0.022	12	1	123	11	KED
⌈>	In	115		ug/L			377966	383056	1	Standard
|	Ag	107	0.144	ug/L	0.005	3	31	1920	4	Standard
|	Ba	135	30.576	ug/L	0.331	1	9	114370	0	Standard
⌊	Ba	137	30.157	ug/L	0.331	1	24	198833	0	Standard
⌈>	Tb	159		ug/L			603683	636636	2	Standard
⌊	Pb	208	12.089	ug/L	0.345	2	66	452359	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0249-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 23:32:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	40890	2	Standard
Cl	37		ug/L			5547089	5435854	1	Standard
> Sc	45		ug/L			468010	593940	2	Standard
Cr	52	12.893	ug/L	0.170	1	19735	302847	3	Standard
Cr	53	13.394	ug/L	0.300	2	125	33192	2	Standard
Mn	55	170.368	ug/L	1.462	0	543	5631129	2	Standard
> Ge	72		ug/L			30322	29466	3	KED
Ni	60	12.664	ug/L	0.497	3	1	13152	2	KED
Ni	62	12.764	ug/L	0.483	3	3	2165	1	KED
Cu	63	31.259	ug/L	0.647	2	37	93462	1	KED
Cu	65	31.393	ug/L	1.387	4	22	46904	1	KED
Zn	66	59.017	ug/L	2.153	3	57	24544	1	KED
Zn	67	56.785	ug/L	2.856	5	12	3981	2	KED
As	75	6.754	ug/L	0.332	4	6	1478	1	KED
Se	78	1.058	ug/L	0.128	12	28	55	7	KED
Y	89		ug/L			255916	518409	3	Standard
Kr	83		ug/L			40	97	5	Standard
> In-1	115		ug/L			10112	9625	2	KED
Cd	111	0.197	ug/L	0.024	12	1	57	10	KED
Cd	114	0.208	ug/L	0.002	1	1	142	3	KED
> In	115		ug/L			377966	374703	0	Standard
Ag	107	0.169	ug/L	0.008	4	31	2201	4	Standard
Ba	135	51.143	ug/L	1.370	2	9	187138	2	Standard
Ba	137	50.367	ug/L	0.670	1	24	324841	0	Standard
> Tb	159		ug/L			603683	644066	2	Standard
Pb	208	15.353	ug/L	0.355	2	66	581238	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0249-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, April 18, 2023 23:37:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			21153	38849	2	Standard
Cl	37		ug/L			5547089	5483599	2	Standard
> Sc	45		ug/L			468010	599377	0	Standard
Cr	52	13.028	ug/L	0.129	0	19735	308512	1	Standard
Cr	53	13.567	ug/L	0.197	1	125	33933	1	Standard
Mn	55	139.061	ug/L	1.494	1	543	4638760	0	Standard
> Ge	72		ug/L			30322	28689	5	KED
Ni	60	13.866	ug/L	0.825	5	1	13997	0	KED
Ni	62	13.609	ug/L	1.015	7	3	2242	1	KED
Cu	63	28.228	ug/L	1.732	6	37	82030	2	KED
Cu	65	28.317	ug/L	1.472	5	22	41153	1	KED
Zn	66	55.190	ug/L	3.038	5	57	22320	0	KED
Zn	67	51.589	ug/L	3.739	7	12	3516	1	KED
As	75	5.608	ug/L	0.301	5	6	1194	1	KED
Se	78	1.132	ug/L	0.109	9	28	56	2	KED
Y	89		ug/L			255916	501685	1	Standard
Kr	83		ug/L			40	95	12	Standard
> In-1	115		ug/L			10112	9482	2	KED
Cd	111	0.209	ug/L	0.006	2	1	60	4	KED
Cd	114	0.252	ug/L	0.011	4	1	170	6	KED
> In	115		ug/L			377966	380760	1	Standard
Ag	107	0.154	ug/L	0.004	2	31	2038	2	Standard
Ba	135	40.598	ug/L	0.095	0	9	150950	1	Standard
Ba	137	39.663	ug/L	1.297	3	24	259869	1	Standard
> Tb	159		ug/L			603683	644106	0	Standard
Pb	208	12.220	ug/L	0.043	0	66	462856	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0346-PS1
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, April 18, 2023 23:41:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	32616	1	Standard
	Cl	**37**		ug/L			5547089	5500135	2	Standard
⌈>	**Sc**	**45**		ug/L			468010	472440	2	Standard
|	**Cr**	**52**	**29.139**	ug/L	0.853	2	19735	519088	1	Standard
|	**Cr**	**53**	**29.624**	ug/L	0.676	2	125	58234	1	Standard
⌊	**Mn**	**55**	**98.892**	ug/L	2.698	2	543	2599382	1	Standard
⌈>	**Ge**	**72**		ug/L			30322	29654	2	KED
|	**Ni**	**60**	**33.484**	ug/L	0.390	1	1	35012	2	KED
|	**Ni**	**62**	**32.916**	ug/L	0.439	1	3	5616	1	KED
|	**Cu**	**63**	**73.566**	ug/L	3.117	4	37	221226	1	KED
|	**Cu**	**65**	**72.786**	ug/L	0.928	1	22	109493	1	KED
|	**Zn**	**66**	**545.249**	ug/L	12.545	2	57	227822	1	KED
|	**Zn**	**67**	**480.144**	ug/L	12.773	2	12	33808	0	KED
|	**As**	**75**	**25.282**	ug/L	0.411	1	6	5555	1	KED
⌊	**Se**	**78**	**74.885**	ug/L	3.701	4	28	2042	3	KED
	Y	**89**		ug/L			255916	277265	2	Standard
	Kr	**83**		ug/L			40	43	23	Standard
⌈>	**In-1**	**115**		ug/L			10112	9590	0	KED
|	**Cd**	**111**	**25.581**	ug/L	0.282	1	1	7257	0	KED
⌊	**Cd**	**114**	**26.250**	ug/L	0.300	1	1	17842	0	KED
⌈>	**In**	**115**		ug/L			377966	387758	1	Standard
|	**Ag**	**107**	**24.597**	ug/L	0.344	1	31	325996	1	Standard
|	**Ba**	**135**	**51.184**	ug/L	0.721	1	9	193815	1	Standard
⌊	**Ba**	**137**	**50.031**	ug/L	1.365	2	24	333863	1	Standard
⌈>	**Tb**	**159**		ug/L			603683	629133	2	Standard
⌊	**Pb**	**208**	**115.565**	ug/L	2.999	2	66	4273187	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 23:46:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	26257	3	Standard
	Cl	**37**		ug/L			5547089	5560768	0	Standard
>	**Sc**	**45**		ug/L			468010	449160	6	Standard
	Cr	**52**	**48.854**	ug/L	2.644	5	19735	812958	2	Standard
	Cr	**53**	**50.076**	ug/L	2.396	4	125	93335	2	Standard
	Mn	**55**	**45.637**	ug/L	1.439	3	543	1139716	4	Standard
>	**Ge**	**72**		ug/L			30322	28965	4	KED
	Ni	**60**	**49.868**	ug/L	2.367	4	1	50861	0	KED
	Ni	**62**	**49.244**	ug/L	2.474	5	3	8197	3	KED
	Cu	**63**	**50.142**	ug/L	1.846	3	37	147247	0	KED
	Cu	**65**	**49.376**	ug/L	0.885	1	22	72538	2	KED
	Zn	**66**	**49.292**	ug/L	0.960	1	57	20164	3	KED
	Zn	**67**	**50.479**	ug/L	2.255	4	12	3480	3	KED
	As	**75**	**49.274**	ug/L	1.933	3	6	10561	0	KED
	Se	**78**	**49.071**	ug/L	1.897	3	28	1316	1	KED
	Y	**89**		ug/L			255916	248130	7	Standard
	Kr	**83**		ug/L			40	56	25	Standard
>	**In-1**	**115**		ug/L			10112	9666	0	KED
	Cd	**111**	**49.090**	ug/L	0.969	1	1	14035	1	KED
	Cd	**114**	**49.893**	ug/L	1.321	2	1	34182	2	KED
>	**In**	**115**		ug/L			377966	355286	6	Standard
	Ag	**107**	**51.573**	ug/L	2.635	5	31	624999	2	Standard
	Ba	**135**	**50.505**	ug/L	2.894	5	9	174837	2	Standard
	Ba	**137**	**50.746**	ug/L	2.367	4	24	309745	1	Standard
>	**Tb**	**159**		ug/L			603683	596037	8	Standard
	Pb	**208**	**51.125**	ug/L	3.781	7	66	1784750	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, April 18, 2023 23:54:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	24147	3	Standard
	Cl	**37**		ug/L			5547089	5547692	2	Standard
⌈>	**Sc**	**45**		ug/L			468010	447844	1	Standard
|	**Cr**	**52**	**-0.001**	ug/L	0.027	2120	19735	18862	2	Standard
|	**Cr**	**53**	**-0.003**	ug/L	0.003	89	125	114	5	Standard
⌊	**Mn**	**55**	**0.004**	ug/L	0.001	33	543	619	4	Standard
⌈>	**Ge**	**72**		ug/L			30322	28901	2	KED
|	**Ni**	**60**	**0.001**	ug/L	0.002	312	1	2	86	KED
|	**Ni**	**62**	**0.009**	ug/L	0.029	323	3	5	94	KED
|	**Cu**	**63**	**0.002**	ug/L	0.003	164	37	41	25	KED
|	**Cu**	**65**	**0.001**	ug/L	0.005	740	22	22	34	KED
|	**Zn**	**66**	**-0.004**	ug/L	0.034	801	57	53	25	KED
|	**Zn**	**67**	**-0.047**	ug/L	0.016	32	12	8	13	KED
|	**As**	**75**	**-0.002**	ug/L	0.003	127	6	5	10	KED
⌊	**Se**	**78**	**0.005**	ug/L	0.128	2706	28	26	14	KED
	Y	**89**		ug/L			255916	247044	2	Standard
	Kr	**83**		ug/L			40	28	6	Standard
⌈>	**In-1**	**115**		ug/L			10112	9434	1	KED
|	**Cd**	**111**	**0.006**	ug/L	0.005	83	1	3	41	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.003	72	1	3	50	KED
⌈>	**In**	**115**		ug/L			377966	367592	0	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.001	377	31	33	31	Standard
|	**Ba**	**135**	**0.001**	ug/L	0.002	129	9	13	43	Standard
⌊	**Ba**	**137**	**-0.000**	ug/L	0.000	158	24	21	13	Standard
⌈>	**Tb**	**159**		ug/L			603683	585416	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	105	66	80	21	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0773-01
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, April 18, 2023 23:58:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	28102	2	Standard
	Cl	**37**		ug/L			5547089	5323681	2	Standard
>	**Sc**	**45**		ug/L			468010	467460	2	Standard
	Cr	**52**	**1.408**	ug/L	0.059	4	19735	43559	0	Standard
	Cr	**53**	**1.480**	ug/L	0.029	1	125	2997	1	Standard
	Mn	**55**	**12.506**	ug/L	0.341	2	543	325728	1	Standard
>	**Ge**	**72**		ug/L			30322	29631	1	KED
	Ni	**60**	**47.315**	ug/L	0.970	2	1	49432	1	KED
	Ni	**62**	**46.330**	ug/L	0.739	1	3	7898	0	KED
	Cu	**63**	**65.384**	ug/L	1.266	1	37	196651	3	KED
	Cu	**65**	**65.638**	ug/L	1.530	2	22	98666	0	KED
	Zn	**66**	**30.279**	ug/L	0.584	1	57	12697	1	KED
	Zn	**67**	**26.801**	ug/L	0.341	1	12	1897	2	KED
	As	**75**	**0.342**	ug/L	0.031	9	6	81	7	KED
	Se	**78**	**0.206**	ug/L	0.116	56	28	33	9	KED
	Y	**89**		ug/L			255916	258257	1	Standard
	Kr	**83**		ug/L			40	30	10	Standard
>	**In-1**	**115**		ug/L			10112	9875	1	KED
	Cd	**111**	**0.218**	ug/L	0.033	15	1	65	15	KED
	Cd	**114**	**0.216**	ug/L	0.014	6	1	152	6	KED
>	**In**	**115**		ug/L			377966	375141	1	Standard
	Ag	**107**	**0.007**	ug/L	0.003	38	31	121	28	Standard
	Ba	**135**	**4.202**	ug/L	0.075	1	9	15399	0	Standard
	Ba	**137**	**4.187**	ug/L	0.144	3	24	27054	2	Standard
>	**Tb**	**159**		ug/L			603683	610198	1	Standard
	Pb	**208**	**9.554**	ug/L	0.199	2	66	342772	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0773-02
Sample Dil Factor: 10
Comments:
Sample Date/Time: Wednesday, April 19, 2023 00:03:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	28598	3	Standard
	Cl	**37**		ug/L			5547089	5383188	1	Standard
⌈>	**Sc**	**45**		ug/L			468010	471671	1	Standard
|	**Cr**	**52**	**3.038**	ug/L	0.059	1	19735	71866	1	Standard
|	**Cr**	**53**	**3.155**	ug/L	0.036	1	125	6307	1	Standard
⌊	**Mn**	**55**	**18.324**	ug/L	0.277	1	543	481507	1	Standard
⌈>	**Ge**	**72**		ug/L			30322	29866	2	KED
|	**Ni**	**60**	**85.324**	ug/L	1.821	2	1	89823	0	KED
|	**Ni**	**62**	**83.220**	ug/L	2.922	3	3	14290	2	KED
|	**Cu**	**63**	**106.871**	ug/L	2.392	2	37	323810	1	KED
|	**Cu**	**65**	**106.289**	ug/L	4.137	3	22	160971	2	KED
|	**Zn**	**66**	**45.979**	ug/L	1.310	2	57	19399	1	KED
|	**Zn**	**67**	**42.563**	ug/L	1.176	2	12	3029	1	KED
|	**As**	**75**	**0.384**	ug/L	0.006	1	6	91	2	KED
⌊	**Se**	**78**	**0.038**	ug/L	0.261	694	28	28	24	KED
	Y	**89**		ug/L			255916	254806	2	Standard
	Kr	**83**		ug/L			40	44	12	Standard
⌈>	**In-1**	**115**		ug/L			10112	9747	2	KED
|	**Cd**	**111**	**0.372**	ug/L	0.067	18	1	108	16	KED
⌊	**Cd**	**114**	**0.349**	ug/L	0.029	8	1	242	10	KED
⌈>	**In**	**115**		ug/L			377966	380532	0	Standard
|	**Ag**	**107**	**0.024**	ug/L	0.003	13	31	346	11	Standard
|	**Ba**	**135**	**6.908**	ug/L	0.098	1	9	25675	0	Standard
⌊	**Ba**	**137**	**6.833**	ug/L	0.212	3	24	44772	2	Standard
⌈>	**Tb**	**159**		ug/L			603683	616202	1	Standard
⌊	**Pb**	**208**	**13.548**	ug/L	0.040	0	66	490944	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0775-01
Sample Dil Factor: 20
Comments:

DEL

Sample Date/Time: Wednesday, April 19, 2023 00:08:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	34207	2	Standard
	Cl	**37**		ug/L			5547089	8079355	1	Standard
⌈>	**Sc**	**45**		ug/L			468010	467810	1	Standard
|	**Cr**	**52**	**0.192**	ug/L	0.031	16	19735	22972	0	Standard
|	**Cr**	**53**	**2.862**	ug/L	0.093	3	125	5683	1	Standard
⌊	**Mn**	**55**	**189.871**	ug/L	4.551	2	543	4941918	0	Standard
⌈>	**Ge**	**72**		ug/L			30322	29009	1	KED
|	**Ni**	**60**	**3.222**	ug/L	0.078	2	1	3296	1	KED
|	**Ni**	**62**	**3.239**	ug/L	0.071	2	3	544	3	KED
|	**Cu**	**63**	**0.639**	ug/L	0.035	5	37	1915	5	KED
|	**Cu**	**65**	**0.637**	ug/L	0.024	3	22	959	4	KED
|	**Zn**	**66**	**6.243**	ug/L	0.091	1	57	2607	1	KED
|	**Zn**	**67**	**6.174**	ug/L	0.270	4	12	436	3	KED
|	**As**	**75**	**0.041**	ug/L	0.024	58	6	14	34	KED
⌊	**Se**	**78**	**0.083**	ug/L	0.168	203	28	29	14	KED
	Y	**89**		ug/L			255916	260655	1	Standard
	Kr	**83**		ug/L			40	47	27	Standard
⌈>	**In-1**	**115**		ug/L			10112	9409	1	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.002	113	1	1	43	KED
⌊	**Cd**	**114**	**0.010**	ug/L	0.003	32	1	8	28	KED
⌈>	**In**	**115**		ug/L			377966	374999	2	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	85	31	50	30	Standard
|	**Ba**	**135**	**6.006**	ug/L	0.223	3	9	21999	3	Standard
⌊	**Ba**	**137**	**6.112**	ug/L	0.099	1	24	39463	0	Standard
⌈>	**Tb**	**159**		ug/L			603683	613710	1	Standard
⌊	**Pb**	**208**	**0.034**	ug/L	0.001	1	66	1294	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0620-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 19, 2023 00:13:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	43654	5	Standard
	Cl	**37**		ug/L			5547089	7725857	5	Standard
⌈>	**Sc**	**45**		ug/L			468010	480985	1	Standard
|	**Cr**	**52**	**13.731**	ug/L	0.319	2	19735	259807	0	Standard
|	**Cr**	**53**	**16.176**	ug/L	0.203	1	125	32439	0	Standard
⌊	**Mn**	**55**	**22.976**	ug/L	0.468	2	543	615450	1	Standard
⌈>	**Ge**	**72**		ug/L			30322	28917	0	KED
|	**Ni**	**60**	**2.241**	ug/L	0.093	4	1	2285	3	KED
|	**Ni**	**62**	**2.201**	ug/L	0.091	4	3	369	3	KED
|	**Cu**	**63**	**11.456**	ug/L	0.130	1	37	33649	0	KED
|	**Cu**	**65**	**11.494**	ug/L	0.102	0	22	16882	1	KED
|	**Zn**	**66**	**35.517**	ug/L	0.286	0	57	14528	1	KED
|	**Zn**	**67**	**35.541**	ug/L	1.286	3	12	2451	2	KED
|	**As**	**75**	**0.944**	ug/L	0.022	2	6	208	2	KED
⌊	**Se**	**78**	**0.048**	ug/L	0.200	413	28	28	19	KED
	Y	**89**		ug/L			255916	256123	1	Standard
	Kr	**83**		ug/L			40	44	17	Standard
⌈>	**In-1**	**115**		ug/L			10112	9461	0	KED
|	**Cd**	**111**	**0.024**	ug/L	0.007	28	1	8	22	KED
⌊	**Cd**	**114**	**0.044**	ug/L	0.005	11	1	30	11	KED
⌈>	**In**	**115**		ug/L			377966	364801	1	Standard
|	**Ag**	**107**	**0.006**	ug/L	0.002	25	31	109	18	Standard
|	**Ba**	**135**	**29.545**	ug/L	0.546	1	9	105243	1	Standard
⌊	**Ba**	**137**	**29.157**	ug/L	0.193	0	24	183095	1	Standard
⌈>	**Tb**	**159**		ug/L			603683	613825	1	Standard
⌊	**Pb**	**208**	**0.684**	ug/L	0.017	2	66	24753	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0620-04
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 19, 2023 00:17:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	43122	1	Standard
	Cl	**37**		ug/L			5547089	8016281	2	Standard
⌈>	**Sc**	**45**		ug/L			468010	479885	3	Standard
|	**Cr**	**52**	**4.045**	ug/L	0.162	4	19735	90587	0	Standard
|	**Cr**	**53**	**6.270**	ug/L	0.129	2	125	12620	1	Standard
⌊	**Mn**	**55**	**49.208**	ug/L	1.327	2	543	1313905	0	Standard
⌈>	**Ge**	**72**		ug/L			30322	29033	1	KED
|	**Ni**	**60**	**3.935**	ug/L	0.040	1	1	4030	2	KED
|	**Ni**	**62**	**3.835**	ug/L	0.145	3	3	643	2	KED
|	**Cu**	**63**	**5.869**	ug/L	0.106	1	37	17325	2	KED
|	**Cu**	**65**	**5.922**	ug/L	0.075	1	22	8742	0	KED
|	**Zn**	**66**	**12.650**	ug/L	0.281	2	57	5230	1	KED
|	**Zn**	**67**	**13.489**	ug/L	0.663	4	12	941	5	KED
|	**As**	**75**	**0.263**	ug/L	0.002	0	6	62	0	KED
⌊	**Se**	**78**	**-0.131**	ug/L	0.113	85	28	23	13	KED
	Y	**89**		ug/L			255916	258023	1	Standard
	Kr	**83**		ug/L			40	42	18	Standard
⌈>	**In-1**	**115**		ug/L			10112	9559	0	KED
|	**Cd**	**111**	**0.011**	ug/L	0.012	116	1	4	72	KED
⌊	**Cd**	**114**	**0.018**	ug/L	0.002	9	1	13	8	KED
⌈>	**In**	**115**		ug/L			377966	366857	0	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.000	3	31	85	2	Standard
|	**Ba**	**135**	**27.121**	ug/L	0.193	0	9	97162	0	Standard
⌊	**Ba**	**137**	**26.789**	ug/L	0.400	1	24	169164	0	Standard
⌈>	**Tb**	**159**		ug/L			603683	608689	2	Standard
⌊	**Pb**	**208**	**0.536**	ug/L	0.009	1	66	19231	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0620-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, April 19, 2023 00:22:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	38064	2	Standard
	Cl	**37**		ug/L			5547089	6831622	1	Standard
⌈>	**Sc**	**45**		ug/L			468010	483830	1	Standard
|	**Cr**	**52**	**10.469**	ug/L	0.095	0	19735	204153	2	Standard
|	**Cr**	**53**	**12.149**	ug/L	0.236	1	125	24538	1	Standard
⌊	**Mn**	**55**	**58.902**	ug/L	1.897	3	543	1585898	1	Standard
⌈>	**Ge**	**72**		ug/L			30322	29238	0	KED
|	**Ni**	**60**	**2.776**	ug/L	0.159	5	1	2863	5	KED
|	**Ni**	**62**	**2.991**	ug/L	0.128	4	3	506	5	KED
|	**Cu**	**63**	**17.793**	ug/L	0.167	0	37	52821	1	KED
|	**Cu**	**65**	**17.830**	ug/L	0.627	3	22	26463	2	KED
|	**Zn**	**66**	**71.551**	ug/L	1.458	2	57	29532	1	KED
|	**Zn**	**67**	**69.313**	ug/L	0.820	1	12	4824	1	KED
|	**As**	**75**	**1.154**	ug/L	0.015	1	6	255	1	KED
⌊	**Se**	**78**	**0.063**	ug/L	0.233	369	28	28	20	KED
	Y	**89**		ug/L			255916	267973	0	Standard
	Kr	**83**		ug/L			40	50	18	Standard
⌈>	**In-1**	**115**		ug/L			10112	9734	4	KED
|	**Cd**	**111**	**0.074**	ug/L	0.007	9	1	23	10	KED
⌊	**Cd**	**114**	**0.079**	ug/L	0.022	27	1	55	22	KED
⌈>	**In**	**115**		ug/L			377966	376323	1	Standard
|	**Ag**	**107**	**0.030**	ug/L	0.001	2	31	416	4	Standard
|	**Ba**	**135**	**33.777**	ug/L	0.579	1	9	124116	1	Standard
⌊	**Ba**	**137**	**34.440**	ug/L	0.575	1	24	223052	0	Standard
⌈>	**Tb**	**159**		ug/L			603683	617550	2	Standard
⌊	**Pb**	**208**	**6.187**	ug/L	0.165	2	66	224599	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0620-03
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 19, 2023 00:27:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	45523	1	Standard
	Cl	**37**		ug/L			5547089	8372985	1	Standard
⌈>	**Sc**	**45**		ug/L			468010	502672	1	Standard
|	**Cr**	**52**	**5.501**	ug/L	0.113	2	19735	121471	1	Standard
|	**Cr**	**53**	**7.855**	ug/L	0.088	1	125	16531	0	Standard
⌊	**Mn**	**55**	**59.018**	ug/L	0.387	0	543	1651321	1	Standard
⌈>	**Ge**	**72**		ug/L			30322	29247	0	KED
|	**Ni**	**60**	**4.847**	ug/L	0.129	2	1	5001	3	KED
|	**Ni**	**62**	**4.697**	ug/L	0.310	6	3	793	6	KED
|	**Cu**	**63**	**8.781**	ug/L	0.155	1	37	26093	0	KED
|	**Cu**	**65**	**8.821**	ug/L	0.198	2	22	13110	3	KED
|	**Zn**	**66**	**19.641**	ug/L	0.413	2	57	8149	1	KED
|	**Zn**	**67**	**20.328**	ug/L	0.421	2	12	1423	2	KED
|	**As**	**75**	**0.397**	ug/L	0.023	5	6	91	4	KED
⌊	**Se**	**78**	**0.000**	ug/L	0.070	19638	28	27	7	KED
	Y	**89**		ug/L			255916	275995	1	Standard
	Kr	**83**		ug/L			40	52	11	Standard
⌈>	**In-1**	**115**		ug/L			10112	9388	0	KED
|	**Cd**	**111**	**0.020**	ug/L	0.014	71	1	7	54	KED
⌊	**Cd**	**114**	**0.014**	ug/L	0.006	41	1	10	37	KED
⌈>	**In**	**115**		ug/L			377966	377250	0	Standard
|	**Ag**	**107**	**0.010**	ug/L	0.001	10	31	159	8	Standard
|	**Ba**	**135**	**32.929**	ug/L	0.129	0	9	121312	0	Standard
⌊	**Ba**	**137**	**32.899**	ug/L	0.668	2	24	213626	1	Standard
⌈>	**Tb**	**159**		ug/L			603683	635064	2	Standard
⌊	**Pb**	**208**	**1.611**	ug/L	0.051	3	66	60185	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0691-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 19, 2023 00:32:02
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	43015	2	Standard
	Cl	**37**		ug/L			5547089	5850563	1	Standard
⌈>	**Sc**	**45**		ug/L			468010	473281	1	Standard
|	**Cr**	**52**	**0.891**	ug/L	0.026	2	19735	35250	2	Standard
|	**Cr**	**53**	**1.396**	ug/L	0.010	0	125	2872	2	Standard
⌊	**Mn**	**55**	**36.357**	ug/L	0.188	0	543	958024	1	Standard
⌈>	**Ge**	**72**		ug/L			30322	29738	0	KED
|	**Ni**	**60**	**3.173**	ug/L	0.110	3	1	3329	3	KED
|	**Ni**	**62**	**3.267**	ug/L	0.151	4	3	562	4	KED
|	**Cu**	**63**	**12.323**	ug/L	0.105	0	37	37221	0	KED
|	**Cu**	**65**	**12.323**	ug/L	0.168	1	22	18612	1	KED
|	**Zn**	**66**	**97.495**	ug/L	1.553	1	57	40914	1	KED
|	**Zn**	**67**	**87.327**	ug/L	0.666	0	12	6179	0	KED
|	**As**	**75**	**0.936**	ug/L	0.003	0	6	212	0	KED
⌊	**Se**	**78**	**0.080**	ug/L	0.178	222	28	29	16	KED
	Y	**89**		ug/L			255916	263290	1	Standard
	Kr	**83**		ug/L			40	33	18	Standard
⌈>	**In-1**	**115**		ug/L			10112	9640	1	KED
|	**Cd**	**111**	**0.187**	ug/L	0.029	15	1	54	13	KED
⌊	**Cd**	**114**	**0.214**	ug/L	0.019	9	1	147	10	KED
⌈>	**In**	**115**		ug/L			377966	376221	1	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.001	16	31	86	8	Standard
|	**Ba**	**135**	**20.064**	ug/L	0.376	1	9	73706	1	Standard
⌊	**Ba**	**137**	**20.043**	ug/L	0.586	2	24	129776	1	Standard
⌈>	**Tb**	**159**		ug/L			603683	615826	2	Standard
⌊	**Pb**	**208**	**0.558**	ug/L	0.020	3	66	20263	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0698-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 19, 2023 00:36:47
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	40264	1	Standard
	Cl	**37**		ug/L			5547089	5709783	2	Standard
>	**Sc**	**45**		ug/L			468010	477673	1	Standard
	Cr	**52**	**0.109**	ug/L	0.034	31	19735	22025	1	Standard
	Cr	**53**	**0.310**	ug/L	0.023	7	125	741	5	Standard
	Mn	**55**	**109.958**	ug/L	0.346	0	543	2923421	1	Standard
>	**Ge**	**72**		ug/L			30322	29483	0	KED
	Ni	**60**	**1.111**	ug/L	0.051	4	1	1156	3	KED
	Ni	**62**	**1.057**	ug/L	0.028	2	3	182	2	KED
	Cu	**63**	**1.033**	ug/L	0.011	1	37	3127	0	KED
	Cu	**65**	**1.047**	ug/L	0.045	4	22	1588	3	KED
	Zn	**66**	**8.202**	ug/L	0.218	2	57	3463	2	KED
	Zn	**67**	**9.879**	ug/L	0.215	2	12	703	2	KED
	As	**75**	**0.084**	ug/L	0.006	7	6	24	5	KED
	Se	**78**	**0.071**	ug/L	0.151	214	28	29	13	KED
	Y	**89**		ug/L			255916	256000	1	Standard
	Kr	**83**		ug/L			40	45	7	Standard
>	**In-1**	**115**		ug/L			10112	9617	1	KED
	Cd	**111**	**0.003**	ug/L	0.007	271	1	2	78	KED
	Cd	**114**	**0.006**	ug/L	0.002	43	1	4	34	KED
>	**In**	**115**		ug/L			377966	371330	1	Standard
	Ag	**107**	**-0.000**	ug/L	0.001	332	31	27	49	Standard
	Ba	**135**	**24.563**	ug/L	0.328	1	9	89074	1	Standard
	Ba	**137**	**24.834**	ug/L	0.312	1	24	158742	1	Standard
>	**Tb**	**159**		ug/L			603683	625840	2	Standard
	Pb	**208**	**0.575**	ug/L	0.023	4	66	21210	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0708-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 19, 2023 00:41:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	40043	3	Standard
	Cl	**37**		ug/L			5547089	5900105	2	Standard
⌈>	**Sc**	**45**		ug/L			468010	509148	0	Standard
|	**Cr**	**52**	**0.391**	ug/L	0.026	6	19735	28692	1	Standard
|	**Cr**	**53**	**0.815**	ug/L	0.003	0	125	1859	0	Standard
⌊	**Mn**	**55**	**269.178**	ug/L	8.476	3	543	7626312	2	Standard
⌈>	**Ge**	**72**		ug/L			30322	29607	1	KED
|	**Ni**	**60**	**0.860**	ug/L	0.074	8	1	899	8	KED
|	**Ni**	**62**	**0.873**	ug/L	0.155	17	3	152	17	KED
|	**Cu**	**63**	**5.094**	ug/L	0.123	2	37	15340	3	KED
|	**Cu**	**65**	**4.987**	ug/L	0.119	2	22	7509	0	KED
|	**Zn**	**66**	**10.681**	ug/L	0.342	3	57	4511	1	KED
|	**Zn**	**67**	**10.397**	ug/L	0.280	2	12	742	3	KED
|	**As**	**75**	**0.290**	ug/L	0.024	8	6	69	5	KED
⌊	**Se**	**78**	**0.146**	ug/L	0.172	117	28	31	14	KED
	Y	**89**		ug/L			255916	262171	0	Standard
	Kr	**83**		ug/L			40	48	21	Standard
⌈>	**In-1**	**115**		ug/L			10112	9597	0	KED
|	**Cd**	**111**	**0.001**	ug/L	0.004	265	1	2	49	KED
⌊	**Cd**	**114**	**0.013**	ug/L	0.010	74	1	10	66	KED
⌈>	**In**	**115**		ug/L			377966	374159	2	Standard
|	**Ag**	**107**	**0.019**	ug/L	0.002	10	31	269	7	Standard
|	**Ba**	**135**	**8.664**	ug/L	0.255	2	9	31646	0	Standard
⌊	**Ba**	**137**	**8.770**	ug/L	0.169	1	24	56489	2	Standard
⌈>	**Tb**	**159**		ug/L			603683	631799	2	Standard
⌊	**Pb**	**208**	**0.250**	ug/L	0.007	2	66	9356	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 19, 2023 00:46:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	26227	2	Standard
	Cl	**37**		ug/L			5547089	5634612	1	Standard
⌈>	**Sc**	**45**		ug/L			468010	464144	1	Standard
|	**Cr**	**52**	**47.154**	ug/L	0.356	0	19735	813392	0	Standard
|	**Cr**	**53**	**47.811**	ug/L	0.120	0	125	92286	1	Standard
⌊	**Mn**	**55**	**44.839**	ug/L	0.639	1	543	1158592	1	Standard
⌈>	**Ge**	**72**		ug/L			30322	29495	0	KED
|	**Ni**	**60**	**48.375**	ug/L	1.163	2	1	50310	2	KED
|	**Ni**	**62**	**49.822**	ug/L	0.565	1	3	8455	1	KED
|	**Cu**	**63**	**49.523**	ug/L	0.600	1	37	148250	1	KED
|	**Cu**	**65**	**49.670**	ug/L	0.956	1	22	74338	1	KED
|	**Zn**	**66**	**48.914**	ug/L	0.283	0	57	20386	0	KED
|	**Zn**	**67**	**49.922**	ug/L	2.122	4	12	3508	4	KED
|	**As**	**75**	**48.913**	ug/L	0.615	1	6	10688	0	KED
⌊	**Se**	**78**	**48.499**	ug/L	0.496	1	28	1326	1	KED
	Y	**89**		ug/L			255916	260133	2	Standard
	Kr	**83**		ug/L			40	47	16	Standard
⌈>	**In-1**	**115**		ug/L			10112	9833	2	KED
|	**Cd**	**111**	**49.039**	ug/L	1.251	2	1	14259	1	KED
⌊	**Cd**	**114**	**49.908**	ug/L	0.950	1	1	34773	0	KED
⌈>	**In**	**115**		ug/L			377966	373490	1	Standard
|	**Ag**	**107**	**50.219**	ug/L	1.317	2	31	640927	1	Standard
|	**Ba**	**135**	**48.624**	ug/L	0.454	0	9	177342	1	Standard
⌊	**Ba**	**137**	**47.831**	ug/L	0.919	1	24	307469	1	Standard
⌈>	**Tb**	**159**		ug/L			603683	627863	0	Standard
⌊	**Pb**	**208**	**48.559**	ug/L	0.446	0	66	1792668	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 19, 2023 00:53:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	23894	1	Standard
	Cl	**37**		ug/L			5547089	5492987	1	Standard
⌈>	**Sc**	**45**		ug/L			468010	435391	4	Standard
|	**Cr**	**52**	**0.016**	ug/L	0.010	59	19735	18617	4	Standard
|	**Cr**	**53**	**0.059**	ug/L	0.009	15	125	224	11	Standard
⌊	**Mn**	**55**	**0.003**	ug/L	0.001	25	543	574	7	Standard
⌈>	**Ge**	**72**		ug/L			30322	28469	1	KED
|	**Ni**	**60**	**0.000**	ug/L	0.002	1675	1	1	100	KED
|	**Ni**	**62**	**0.001**	ug/L	0.023	1835	3	3	100	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.004	538	37	33	33	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.002	177	22	19	17	KED
|	**Zn**	**66**	**0.015**	ug/L	0.011	71	57	60	6	KED
|	**Zn**	**67**	**-0.036**	ug/L	0.015	42	12	8	12	KED
|	**As**	**75**	**-0.003**	ug/L	0.001	35	6	5	5	KED
⌊	**Se**	**78**	**0.017**	ug/L	0.175	1034	28	26	15	KED
	Y	**89**		ug/L			255916	247035	1	Standard
	Kr	**83**		ug/L			40	31	28	Standard
⌈>	**In-1**	**115**		ug/L			10112	9356	1	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.004	98	1	0	173	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.002	914	1	1	90	KED
⌈>	**In**	**115**		ug/L			377966	357950	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.000	16	31	51	6	Standard
|	**Ba**	**135**	**0.001**	ug/L	0.002	196	9	12	56	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.002	13780	24	22	62	Standard
⌈>	**Tb**	**159**		ug/L			603683	587275	3	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	103	66	86	28	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 19, 2023 00:58:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	36995	1	Standard
	Cl	**37**		ug/L			5547089	5947782	0	Standard
⌈>	**Sc**	**45**		ug/L			468010	533893	1	Standard
|	**Cr**	**52**	**0.084**	ug/L	0.010	11	19735	24145	1	Standard
|	**Cr**	**53**	**0.053**	ug/L	0.013	24	125	260	9	Standard
⌊	**Mn**	**55**	**0.032**	ug/L	0.003	8	543	1581	6	Standard
⌈>	**Ge**	**72**		ug/L			30322	31619	1	KED
|	**Ni**	**60**	**0.007**	ug/L	0.005	67	1	9	52	KED
|	**Ni**	**62**	**-0.015**	ug/L	0.012	79	3	1	173	KED
|	**Cu**	**63**	**0.005**	ug/L	0.003	64	37	55	20	KED
|	**Cu**	**65**	**0.007**	ug/L	0.002	28	22	33	8	KED
|	**Zn**	**66**	**-0.091**	ug/L	0.014	15	57	19	29	KED
|	**Zn**	**67**	**-0.117**	ug/L	0.050	42	12	3	100	KED
|	**As**	**75**	**-0.002**	ug/L	0.007	399	6	6	25	KED
⌊	**Se**	**78**	**-0.043**	ug/L	0.089	206	28	28	8	KED
	Y	**89**		ug/L			255916	297842	1	Standard
	Kr	**83**		ug/L			40	29	13	Standard
⌈>	**In-1**	**115**		ug/L			10112	11020	1	KED
|	**Cd**	**111**	**0.001**	ug/L	0.002	113	1	2	21	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.000	3	1	1	2	KED
⌈>	**In**	**115**		ug/L			377966	423301	0	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	150	31	43	26	Standard
|	**Ba**	**135**	**0.003**	ug/L	0.001	31	9	22	16	Standard
⌊	**Ba**	**137**	**0.002**	ug/L	0.001	65	24	40	22	Standard
⌈>	**Tb**	**159**		ug/L			603683	668256	2	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.001	332	66	83	36	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 19, 2023 01:03:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	36457	2	Standard
	Cl	**37**		ug/L			5547089	5888235	3	Standard
⎡>	**Sc**	**45**		ug/L			468010	528455	0	Standard
⎢	**Cr**	**52**	**0.095**	ug/L	0.015	16	19735	24099	1	Standard
⎢	**Cr**	**53**	**0.054**	ug/L	0.009	16	125	260	6	Standard
⎣	**Mn**	**55**	**0.031**	ug/L	0.001	2	543	1514	1	Standard
⎡>	**Ge**	**72**		ug/L			30322	31843	2	KED
⎢	**Ni**	**60**	**0.001**	ug/L	0.002	184	1	3	69	KED
⎢	**Ni**	**62**	**-0.001**	ug/L	0.001	48	3	3	0	KED
⎢	**Cu**	**63**	**0.008**	ug/L	0.005	63	37	65	23	KED
⎢	**Cu**	**65**	**0.002**	ug/L	0.005	286	22	26	29	KED
⎢	**Zn**	**66**	**-0.083**	ug/L	0.008	9	57	23	12	KED
⎢	**Zn**	**67**	**-0.100**	ug/L	0.029	28	12	5	43	KED
⎢	**As**	**75**	**-0.009**	ug/L	0.008	87	6	4	43	KED
⎣	**Se**	**78**	**-0.072**	ug/L	0.088	123	28	27	10	KED
	Y	**89**		ug/L			255916	283404	1	Standard
	Kr	**83**		ug/L			40	46	36	Standard
⎡>	**In-1**	**115**		ug/L			10112	10781	1	KED
⎢	**Cd**	**111**	**0.001**	ug/L	0.002	296	1	2	24	KED
⎣	**Cd**	**114**	**0.002**	ug/L	0.001	54	1	3	33	KED
⎡>	**In**	**115**		ug/L			377966	411979	1	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.001	83	31	24	33	Standard
⎢	**Ba**	**135**	**0.002**	ug/L	0.001	28	9	19	14	Standard
⎣	**Ba**	**137**	**0.001**	ug/L	0.000	41	24	31	7	Standard
⎡>	**Tb**	**159**		ug/L			603683	672416	0	Standard
⎣	**Pb**	**208**	**-0.000**	ug/L	0.000	31	66	63	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 19, 2023 01:08:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	35895	4	Standard
	Cl	**37**		ug/L			5547089	5705397	3	Standard
⌈>	**Sc**	**45**		ug/L			468010	519945	2	Standard
|	**Cr**	**52**	**0.075**	ug/L	0.031	41	19735	23322	0	Standard
|	**Cr**	**53**	**0.049**	ug/L	0.011	22	125	244	7	Standard
⌊	**Mn**	**55**	**0.031**	ug/L	0.003	9	543	1486	5	Standard
⌈>	**Ge**	**72**		ug/L			30322	31370	1	KED
|	**Ni**	**60**	**0.002**	ug/L	0.002	89	1	4	49	KED
|	**Ni**	**62**	**-0.004**	ug/L	0.006	148	3	3	34	KED
|	**Cu**	**63**	**0.004**	ug/L	0.002	41	37	52	11	KED
|	**Cu**	**65**	**0.001**	ug/L	0.003	173	22	25	17	KED
|	**Zn**	**66**	**-0.094**	ug/L	0.003	3	57	18	5	KED
|	**Zn**	**67**	**-0.134**	ug/L	0.014	10	12	2	43	KED
|	**As**	**75**	**-0.004**	ug/L	0.005	131	6	5	17	KED
⌊	**Se**	**78**	**-0.009**	ug/L	0.110	1170	28	28	12	KED
	Y	**89**		ug/L			255916	285302	1	Standard
	Kr	**83**		ug/L			40	44	21	Standard
⌈>	**In-1**	**115**		ug/L			10112	10776	1	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.008	1693	1	1	132	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.003	78	1	3	51	KED
⌈>	**In**	**115**		ug/L			377966	404240	1	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	76	31	28	13	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.001	60	9	18	26	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.001	158	24	32	32	Standard
⌈>	**Tb**	**159**		ug/L			603683	662515	1	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	70	66	61	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 19, 2023 01:12:45
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	24513	5	Standard
	Cl	**37**		ug/L			5547089	5142949	0	Standard
⎡>	**Sc**	**45**		ug/L			468010	383686	4	Standard
⎢	**Cr**	**52**	**0.075**	ug/L	0.065	87	19735	17191	0	Standard
⎢	**Cr**	**53**	**0.046**	ug/L	0.007	14	125	175	6	Standard
⎣	**Mn**	**55**	**0.027**	ug/L	0.003	10	543	1014	5	Standard
⎡>	**Ge**	**72**		ug/L			30322	27378	1	KED
⎢	**Ni**	**60**	**0.001**	ug/L	0.003	346	1	2	114	KED
⎢	**Ni**	**62**	**-0.006**	ug/L	0.007	114	3	2	43	KED
⎢	**Cu**	**63**	**-0.004**	ug/L	0.002	59	37	23	28	KED
⎢	**Cu**	**65**	**-0.003**	ug/L	0.003	78	22	15	25	KED
⎢	**Zn**	**66**	**-0.094**	ug/L	0.010	10	57	15	24	KED
⎢	**Zn**	**67**	**-0.090**	ug/L	0.016	17	12	5	21	KED
⎢	**As**	**75**	**-0.011**	ug/L	0.015	144	6	3	90	KED
⎣	**Se**	**78**	**-0.012**	ug/L	0.074	607	28	25	8	KED
	Y	**89**		ug/L			255916	214035	3	Standard
	Kr	**83**		ug/L			40	44	19	Standard
⎡>	**In-1**	**115**		ug/L			10112	8796	0	KED
⎢	**Cd**	**111**	**0.001**	ug/L	0.007	791	1	1	100	KED
⎣	**Cd**	**114**	**0.001**	ug/L	0.000	5	1	1	1	KED
⎡>	**In**	**115**		ug/L			377966	326819	5	Standard
⎢	**Ag**	**107**	**-0.000**	ug/L	0.000	188	31	25	18	Standard
⎢	**Ba**	**135**	**0.002**	ug/L	0.001	77	9	13	28	Standard
⎣	**Ba**	**137**	**-0.001**	ug/L	0.001	91	24	15	34	Standard
⎡>	**Tb**	**159**		ug/L			603683	516028	6	Standard
⎣	**Pb**	**208**	**-0.001**	ug/L	0.000	17	66	30	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 19, 2023 01:17:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	24486	1	Standard
	Cl	**37**		ug/L			5547089	5126801	0	Standard
⌈>	**Sc**	**45**		ug/L			468010	395526	1	Standard
|	**Cr**	**52**	**0.059**	ug/L	0.007	11	19735	17528	1	Standard
|	**Cr**	**53**	**0.056**	ug/L	0.008	14	125	198	8	Standard
⌊	**Mn**	**55**	**0.022**	ug/L	0.002	7	543	946	5	Standard
⌈>	**Ge**	**72**		ug/L			30322	27278	3	KED
|	**Ni**	**60**	**0.002**	ug/L	0.004	154	1	3	86	KED
|	**Ni**	**62**	**-0.002**	ug/L	0.013	683	3	3	69	KED
|	**Cu**	**63**	**-0.003**	ug/L	0.001	36	37	26	12	KED
|	**Cu**	**65**	**-0.005**	ug/L	0.002	33	22	13	14	KED
|	**Zn**	**66**	**-0.098**	ug/L	0.013	13	57	14	37	KED
|	**Zn**	**67**	**-0.118**	ug/L	0.034	28	12	3	69	KED
|	**As**	**75**	**0.004**	ug/L	0.006	170	6	6	24	KED
⌊	**Se**	**78**	**0.073**	ug/L	0.050	68	28	27	5	KED
	Y	**89**		ug/L			255916	222106	0	Standard
	Kr	**83**		ug/L			40	40	21	Standard
⌈>	**In-1**	**115**		ug/L			10112	9089	2	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.004	730	1	1	69	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.000	14	1	1	3	KED
⌈>	**In**	**115**		ug/L			377966	328689	0	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	75	31	22	17	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.001	65	9	13	24	Standard
⌊	**Ba**	**137**	**-0.000**	ug/L	0.002	1407	24	20	47	Standard
⌈>	**Tb**	**159**		ug/L			603683	532831	2	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	13	66	29	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, April 19, 2023 01:22:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\041823A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21153	24459	3	Standard
	Cl	**37**		ug/L			5547089	5202884	2	Standard
⌈>	**Sc**	**45**		ug/L			468010	397596	2	Standard
|	**Cr**	**52**	**0.061**	ug/L	0.005	7	19735	17638	2	Standard
|	**Cr**	**53**	**0.035**	ug/L	0.004	12	125	165	4	Standard
⌊	**Mn**	**55**	**0.018**	ug/L	0.002	11	543	866	4	Standard
⌈>	**Ge**	**72**		ug/L			30322	28161	1	KED
|	**Ni**	**60**	**0.000**	ug/L	0.002	1295	1	1	100	KED
|	**Ni**	**62**	**-0.006**	ug/L	0.007	107	3	2	43	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.002	133	37	29	22	KED
|	**Cu**	**65**	**0.000**	ug/L	0.003	1195	22	20	18	KED
|	**Zn**	**66**	**-0.098**	ug/L	0.010	10	57	14	27	KED
|	**Zn**	**67**	**-0.129**	ug/L	0.017	13	12	2	43	KED
|	**As**	**75**	**-0.000**	ug/L	0.015	5586	6	5	54	KED
⌊	**Se**	**78**	**-0.035**	ug/L	0.104	294	28	25	11	KED
	Y	**89**		ug/L			255916	224808	1	Standard
	Kr	**83**		ug/L			40	40	29	Standard
⌈>	**In-1**	**115**		ug/L			10112	9087	2	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.006	232	1	0	173	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.002	623	1	1	86	KED
⌈>	**In**	**115**		ug/L			377966	337339	0	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.000	180	31	30	12	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.003	191	9	13	75	Standard
⌊	**Ba**	**137**	**-0.001**	ug/L	0.001	131	24	18	21	Standard
⌈>	**Tb**	**159**		ug/L			603683	537424	1	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	47	66	29	49	Standard

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00059	Instrument:	ICPMS2
Calibration Date:	04/20/2023 12:31		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Chromium-52	0	0	0.5	56110	10	19711.9	20	18008.6	50	17053.96	100	16953.69
Chromium-53	0	0	0.5	2250	10	2068.5	20	2016.6	50	1949.74	100	1944.14
Lead-208	0	0	0.1	41010	10	39919.7	20	39507.15	50	38815.06	100	38563.32

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS2
Calibration: GD00059
Calibration Date: 4/20/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Chromium-52	21306.36	86.9	0.9999		0.998	
Chromium-53	1704.83	49.4	0.9999		0.998	
Lead-208	32969.21	49.1	1.0000		0.998	

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00059	Instrument:	ICPMS2
Calibration Date:	04/20/2023 12:31		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Cadmium-111	0	0	0.1	330	10	291.1	20	282.3	50	278.48	100	272.42
Cadmium-114	0	0	0.1	750	10	721.7	20	692.7	50	680.42	100	660.04

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC

Instrument: ICPMS2

Calibration: GD00059

Calibration Date: 4/20/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Cadmium-111	242.3833	49.7	0.9998		0.998	
Cadmium-114	584.1433	49.3	0.9997		0.998	

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 4/20/23 **Analyst:** SD **Sequence:** SLD0292 **Cal:** GD000059

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CAL1	L3725		
		-CAL2	L3806		
		-CAL3	L3807		
		-CAL4	L3808		
		-CAL5	L3944		
		-CAL6	L3809		
		-IBL1	—		
		-ICV1	L3575		
		-ICB1	L3725		
		-CCV1	L3944		
		-CCB1	L3725		
		-CRL1	L3806		
		-IFA1	L3578		Cr^{53}↑
		-IFB1	L3579		
		-HCV1	L3671		Ag↑
		-HCV2	L3672		Pb↑
		-IBL2			
		-IBL3			
		-CCV2			
		-CCB2			
		BLD0506-BLK1	REN		
		↓ -BS1	↓		Int's sl. noisy
		BLD0559-BLK1			
		↓ -BS1	↓		

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 4/20/23 **Analyst:** SD **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23D0426-01	REN		
		23D0484-01	↓	2	
		23D0485-01	↓	5	
		23A0249-08	SWN	50	Cr ONLY
		↓ -05	↓	↓	↓
		SEQ-IBL4			
		-CCV3			
	✓	-CCB3			In-INOISY
		↓ -CCB3			
		BLD0289-BS2	SWN	20	Cd ONLY
		23A0295-01	↓	50	Cr ONLY
		-02	↓	↓	↓
		-03	↓	↓	↓
		-04	↓	↓	↓
		-05	↓	↓	↓
		↓ -06	↓	↓	↓
		23A0249-03	↓	↓	↓
		↓ -04	↓	↓	↓
		SEQ-IBL5			
		-CCV4			
		↓ -CCB4			
		23A0313-08	SWN	50	Cr ONLY
		↓ -09	↓	↓	↓
		↓ -10	↓	↓	↓

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 4/20/23 **Analyst:** SD **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23A0313-11	SWN	50	Cr ONLY
		↓ -13	↓	↓	↓
		23A0249-02			
		BLD0244-DUP2			
		-MS2			
		-MSD2			
		-PS2	↓	↓	
		SEQ-CCV5			
		↓ -CCB5			
	✓	BLD0472-BLK2	REN		PBT
		23D0013-01	↓		
		23D0017-01			
	✓	23D0018-01			ALL INT. STDs ↓
		23C0713-01			
	✓	23C0714-01			ALL INT. STDs ↓
		23C0716-01			SCT-NOT NEEDED
		23D0081-04			Cu/Zn ONLY NO Pb
		23C0775-01	↓	5	
		SEQ-ICBL6			
		-CCVL6			
		↓ -CCBL6			Cr^{53} & Ni^{62} ↑
		23D0003-03	REN		
		-05	↓		
		↓ -07			

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 4/20/23 **Analyst:** SD **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23D0005-01	REN	2	
		↓ -03	↓	↓	
		23D0006-01			
		↓ -02			
		23D0003-01			No Cr/Ni
		BLD0401-DUP1			↓
		↓ -MS1			
		SEQ-CCV7			
		↓ -CCB7			Cr53↑ Ge noisy - %R + analytes OK
		23D0117-01	REN		
		23D0019-01			
		23D0020-01			
		23D0022-01			Zn↑ Cu ONLY
		23D0023-01			
		23D0048-01			
		23D0050-01			
		↓ -02			
		23D0044-01	↓	5	No Cr
		SEQ-IBL7			
		↓ -CCV8			Ge sl. noisy
		↓ -CCB8			
		23D0177-04	REN		No Pb
		↓ -06	↓		↓
		↓ -08			

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ICP/MS 02 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 81DN1050201

Analysis Date: 4/20/23 **Analyst:** SD **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted. SD 4/20/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23D0213-02	REN		
		↓ -04			
		23C0706-01			No Pb
		23D0111-01			
		23D0177-02			
		BLD0403-DUP1			
		↓ -MS1	↓		↓
		SEQ-CCV9			Pb↑
		↓ -CCB9			
		23D0117-02	REN		
		23D0123-01			Zn↑ No Zn
		23D0124-01			↓ No Pb/Zn
		↓ -03			No Pb
		23D0125-01			
	✓	23D1K26-01			Ge, In↑, In, ~~Tb~~↓
		↓ -02			
		23D0116-01			No Pb/Zn
		BLD0506-DUP1			
		↓ -MS1	↓		Zn↑ ↓
		SEQ-CCV10			
		↓ -CCB10			
	✓	23D0126-03	REN		
	↓	23D0127-01	↓		
		23D0135-01	↓		~~No Pb Cd ONG~~

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ICP/MS 02 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 4/20/23 **Analyst:** SD **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted. SD 4/20/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23D0135-03	PEN		~~No PB Cal ONLY~~
		-05			
		-07			
		-09			
		-11			
		-13			
		-15			
		SEQ-CCVB			PbT
		-CCBB			Ge noisy - %R of analytes OK
		RINSE/DI			

SD 4/20/23

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Thursday, April 20, 2023 11:21:55
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5705
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	4093.1	4093.120	77.504	1.9	Standard
	In	114.9	47652.7	-330314.290	379.907	0.1	Standard
	U	238.1	32037.6	32037.554	352.894	1.1	Standard
⌈	CeO	155.9	747.7	0.014	0.000	3.2	Standard
| >	Ce	139.9	54306.1	54306.096	435.208	0.8	Standard
⌊	Ce++	70.0	747.1	0.014	0.000	1.9	Standard
	Bkgd	220.0	0.3	0.300	0.183	60.9	Standard

Current Conditions File Data

Current Value	Description
1.04	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1750.00	Analog Stage Voltage
1650.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.04	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Thursday, April 20, 2023 11:29:49
Sample Description:
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\STD Performance Check.mth
Dataset File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\DataSet\Default\STD Performance Check.5711
MassCal File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	5976.3	5976.251	171.134	2.9	Standard
	In	114.9	59015.4	59015.388	502.041	0.9	Standard
	U	238.1	42701.3	42701.268	634.442	1.5	Standard
⌈	CeO	155.9	1275.5	0.019	0.000	2.3	Standard
| >	Ce	139.9	68405.6	68405.591	454.659	0.7	Standard
⌊	Ce++	70.0	1249.3	0.018	0.000	1.3	Standard
	Bkgd	220.0	0.2	0.167	0.167	100.0	Standard

Current Conditions File Data

Current Value	Description
1.05	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-11.25	Deflector Voltage
1600.00	ICP RF Power
-1750.00	Analog Stage Voltage
1650.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-8.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.05	DRC Mode NEB
-10.00	DRC Mode QRO
-3.00	DRC Mode CRO
-7.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-16.50	KED Mode CRO
-12.00	KED Mode QRO
-4.00	KED Mode Cell Entrance Voltage
-39.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
5.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Start Time: 4/20/2023 11:21:53 AM
End Time: 4/20/2023 11:31:54 AM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 4093.12
Obtained Intensity (In 115): 47652.68
Obtained Intensity (U 238): 32037.55
Obtained Intensity (Bkgd 220): 0.30
Obtained Formula (Ce++ 70 / Ce 140): 0.014 (=747.09 / 54306.10)
Obtained Formula (CeO 156 / Ce 140): 0.014 (=747.69 / 54306.10)
Obtained RSD (Be 9): 0.0189
Obtained RSD (In 115): 0.0012
Obtained RSD (U 238): 0.0110

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.62 mm	0.54 mm	52656.87

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 1.05
Obtained Intensity (In 115): 61750.17
Obtained Formula (CeO 156 / Ce 140): 0.0181 (=1084.04 / 59840.07)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.704)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.717)
Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.717)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.714)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.999; Intercept = -12.22

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.999; Intercept = -12.97

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 5976.25
Obtained Intensity (In 115): 59015.39
Obtained Intensity (U 238): 42701.27
Obtained Intensity (Bkgd 220): 0.17
Obtained Formula (Ce++ 70 / Ce 140): 0.018 (=1249.25 / 68405.59)
Obtained Formula (CeO 156 / Ce 140): 0.019 (=1275.46 / 68405.59)
Obtained RSD (Be 9): 0.0286
Obtained RSD (In 115): 0.0085
Obtained RSD (U 238): 0.0149

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Wizard\SmartTune\ARIdaily_UCT.swz

Optimization Status

Start Time: 4/20/2023 11:21:53 AM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 1
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 4093.12
		Obtained Intensity (In 115): 47652.68
		Obtained Intensity (U 238): 32037.55
		Obtained Intensity (Bkgd 220): 0.30
		Obtained Formula (Ce++ 70 / Ce 140): 0.014 (=747.09 / 54306.10)
		Obtained Formula (CeO 156 / Ce 140): 0.014 (=747.69 / 54306.10)
		Obtained RSD (Be 9): 0.0189
		Obtained RSD (In 115): 0.0012
		Obtained RSD (U 238): 0.0110

[Passed] Optimum value(s): N/A

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	0.62 mm	0.54 mm	52656.87

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 1.02/1.06/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 61750.17
		Obtained Formula (CeO 156 / Ce 140): 0.0181 (=1084.04 / 59840.07)
[Passed] Optimum value(s): 1.05

Mass Calibration and Resolution
Optimization Settings:
Method: Tuning.mth.
MassCal File: Default.tun
Iterations: 6
Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
Peak height (%) for Res. Opt.: 10

Optimization Results:
Initial Try
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.704)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.717)
Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.717)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.714)
[Passed] Optimum value(s): N/A

QID STD/DRC
Optimization Settings:
Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 0.999; Intercept = -12.22

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-12.5	27458.4
Mg	24	41	-12.5	29875.2
In	115	41	-8.5	62379.9
Ce	140	41	-7.5	66868.1
Pb	208	41	-7.5	25859.4
U	238	41	-7	42278.5

KED Mode QID
Optimization Settings:
Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 0.999; Intercept = -12.97

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-13	18828.4
Mg	24	41	-13	18047.4
In	115	41	-9	41656.6
Ce	140	41	-8	54206.6
Pb	208	41	-5.5	24440.9
U	238	41	-5.5	34196.9

STD Performance Check
Optimization Settings:
Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000

```
            Intensity Criterion: U 238 > 30000
            Intensity Criterion: Bkgd 220 <= 1
            Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
            Formula Criterion: CeO 156 / Ce 140 <= 0.025
            RSD Criterion: Be 9.0122 < 0.05
            RSD Criterion: In 114.904 < 0.05
            RSD Criterion: U 238.05 < 0.05

        Optimization Results:
        Initial Try
                Obtained Intensity (Be 9): 5976.25
                Obtained Intensity (In 115): 59015.39
                Obtained Intensity (U 238): 42701.27
                Obtained Intensity (Bkgd 220): 0.17
                Obtained Formula (Ce++ 70 / Ce 140): 0.018 (=1249.25 / 68405.59)
                Obtained Formula (CeO 156 / Ce 140): 0.019 (=1275.46 / 68405.59)
                Obtained RSD (Be 9): 0.0286
                Obtained RSD (In 115): 0.0085
                Obtained RSD (U 238): 0.0149

[Passed]  Optimum value(s): N/A

End Time: 4/20/2023 11:31:54 AM
```

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 12:31:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	**13**		ug/L				25789	2	Standard
Cl	**37**		ug/L				5434030	2	Standard
Sc	**45**		ug/L				479414	1	Standard
Cr	**52**		ug/L				20356	1	Standard
Cr	**53**		ug/L				160	1	Standard
Fe	**54**		ug/L				67040	0	Standard
Fe	**57**		ug/L				19150	2	Standard
Mn	**55**		ug/L				667	5	Standard
Ge	**72**		ug/L				31347	2	KED
Ni	**60**		ug/L				4	89	KED
Ni	**62**		ug/L				3	100	KED
Cu	**63**		ug/L				53	16	KED
Cu	**65**		ug/L				21	25	KED
Zn	**66**		ug/L				18	15	KED
Zn	**67**		ug/L				5	21	KED
As	**75**		ug/L				5	32	KED
Y	**89**		ug/L				275831	2	Standard
Kr	**83**		ug/L				40	12	Standard
In-1	**115**		ug/L				9714	0	KED
Cd	**111**		ug/L				2	114	KED
Cd	**114**		ug/L				3	94	KED
In	**115**		ug/L				369046	0	Standard
Ag	**107**		ug/L				22	8	Standard
Tb	**159**		ug/L				669567	0	Standard
Pb	**208**		ug/L				60	36	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 12:35:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	25956	1	Standard
	Cl	**37**		ug/L			5434030	5407342	0	Standard
⌈>	**Sc**	**45**		ug/L			479414	485631	1	Standard
|	**Cr**	**52**	**0.500**	ug/L	0.032	6	20356	28055	1	Standard
|	**Cr**	**53**	**0.500**	ug/L	0.012	2	160	1125	0	Standard
|	**Fe**	**54**	**36.000**	ug/L	1.004	2	67040	113642	2	Standard
|	**Fe**	**57**	**36.000**	ug/L	2.283	6	19150	37273	2	Standard
⌊	**Mn**	**55**	**0.500**	ug/L	0.008	1	667	14954	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	31540	1	KED
|	**Ni**	**60**	**0.500**	ug/L	0.033	6	4	605	6	KED
|	**Ni**	**62**	**0.500**	ug/L	0.096	19	3	86	17	KED
|	**Cu**	**63**	**0.500**	ug/L	0.016	3	53	1641	4	KED
|	**Cu**	**65**	**0.500**	ug/L	0.014	2	21	886	3	KED
|	**Zn**	**66**	**6.000**	ug/L	0.428	7	18	2686	6	KED
|	**Zn**	**67**	**6.000**	ug/L	0.228	3	5	426	4	KED
⌊	**As**	**75**	**0.200**	ug/L	0.033	16	5	49	14	KED
	Y	**89**		ug/L			275831	268490	3	Standard
	Kr	**83**		ug/L			40	46	6	Standard
⌈>	**In-1**	**115**		ug/L			9714	9626	0	KED
|	**Cd**	**111**	**0.100**	ug/L	0.028	27	2	33	25	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.017	16	3	75	15	KED
⌈>	**In**	**115**		ug/L			369046	364929	1	Standard
⌊	**Ag**	**107**	**0.200**	ug/L	0.007	3	22	2562	4	Standard
⌈>	**Tb**	**159**		ug/L			669567	668115	0	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.001	1	60	4101	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 12:40:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	34568	3	Standard
	Cl	**37**		ug/L			5434030	5418634	3	Standard
⌈>	**Sc**	**45**		ug/L			479414	491573	0	Standard
|	**Cr**	**52**	**10.004**	ug/L	0.243	2	20356	197119	1	Standard
|	**Cr**	**53**	**10.001**	ug/L	0.209	2	160	20685	1	Standard
|	**Fe**	**54**	**1000.018**	ug/L	26.894	2	67040	1372587	1	Standard
|	**Fe**	**57**	**1000.060**	ug/L	24.630	2	19150	546661	1	Standard
⌊	**Mn**	**55**	**9.997**	ug/L	0.114	1	667	257338	2	Standard
⌈>	**Ge**	**72**		ug/L			31347	31857	1	KED
|	**Ni**	**60**	**9.998**	ug/L	0.231	2	4	11402	0	KED
|	**Ni**	**62**	**10.002**	ug/L	0.323	3	3	1862	4	KED
|	**Cu**	**63**	**10.001**	ug/L	0.189	1	53	33024	0	KED
|	**Cu**	**65**	**9.999**	ug/L	0.221	2	21	16998	2	KED
|	**Zn**	**66**	**9.997**	ug/L	0.177	1	18	4506	2	KED
|	**Zn**	**67**	**10.263**	ug/L	0.552	5	5	791	6	KED
⌊	**As**	**75**	**10.000**	ug/L	0.139	1	5	2333	0	KED
	Y	**89**		ug/L			275831	281676	0	Standard
	Kr	**83**		ug/L			40	49	35	Standard
⌈>	**In-1**	**115**		ug/L			9714	10051	3	KED
|	**Cd**	**111**	**10.000**	ug/L	0.389	3	2	2911	1	KED
⌊	**Cd**	**114**	**10.000**	ug/L	0.068	0	3	7217	2	KED
⌈>	**In**	**115**		ug/L			369046	378058	1	Standard
⌊	**Ag**	**107**	**10.000**	ug/L	0.250	2	22	132737	2	Standard
⌈>	**Tb**	**159**		ug/L			669567	693629	0	Standard
⌊	**Pb**	**208**	**10.000**	ug/L	0.131	1	60	399197	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 12:45:18
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	33447	2	Standard
	Cl	**37**		ug/L			5434030	5516484	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	502119	2	Standard
|	**Cr**	**52**	**19.755**	ug/L	0.520	2	20356	360172	0	Standard
|	**Cr**	**53**	**19.828**	ug/L	0.472	2	160	40332	0	Standard
|	**Fe**	**54**	**2011.493**	ug/L	80.015	3	67040	2810458	1	Standard
|	**Fe**	**57**	**1993.768**	ug/L	43.090	2	19150	1080032	2	Standard
⌊	**Mn**	**55**	**19.907**	ug/L	0.660	3	667	512846	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	31839	2	KED
|	**Ni**	**60**	**19.998**	ug/L	0.419	2	4	22780	1	KED
|	**Ni**	**62**	**19.990**	ug/L	0.691	3	3	3708	5	KED
|	**Cu**	**63**	**19.891**	ug/L	0.659	3	53	64182	1	KED
|	**Cu**	**65**	**19.791**	ug/L	0.390	1	21	32254	0	KED
|	**Zn**	**66**	**19.912**	ug/L	0.705	3	18	8834	1	KED
|	**Zn**	**67**	**19.857**	ug/L	0.836	4	5	1492	2	KED
⌊	**As**	**75**	**19.917**	ug/L	0.391	1	5	4562	1	KED
	Y	**89**		ug/L			275831	282310	2	Standard
	Kr	**83**		ug/L			40	45	9	Standard
⌈>	**In-1**	**115**		ug/L			9714	9735	0	KED
|	**Cd**	**111**	**20.004**	ug/L	0.225	1	2	5646	0	KED
⌊	**Cd**	**114**	**19.964**	ug/L	0.413	2	3	13854	1	KED
⌈>	**In**	**115**		ug/L			369046	381657	2	Standard
⌊	**Ag**	**107**	**19.845**	ug/L	0.633	3	22	257770	0	Standard
⌈>	**Tb**	**159**		ug/L			669567	700892	2	Standard
⌊	**Pb**	**208**	**19.918**	ug/L	0.334	1	60	790143	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 12:50:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	24091	0	Standard
	Cl	**37**		ug/L			5434030	5480447	3	Standard
⎡>	**Sc**	**45**		ug/L			479414	488069	1	Standard
⎢	**Cr**	**52**	**49.979**	ug/L	0.050	0	20356	852698	1	Standard
⎢	**Cr**	**53**	**49.902**	ug/L	1.343	2	160	97487	1	Standard
⎢	**Fe**	**54**	**4998.552**	ug/L	69.570	1	67040	6681875	0	Standard
⎢	**Fe**	**57**	**5053.349**	ug/L	13.374	0	19150	2778620	1	Standard
⎣	**Mn**	**55**	**49.886**	ug/L	0.706	1	667	1234981	2	Standard
⎡>	**Ge**	**72**		ug/L			31347	31778	1	KED
⎢	**Ni**	**60**	**49.679**	ug/L	0.882	1	4	54718	0	KED
⎢	**Ni**	**62**	**49.478**	ug/L	1.415	2	3	8696	1	KED
⎢	**Cu**	**63**	**49.776**	ug/L	0.988	1	53	156757	0	KED
⎢	**Cu**	**65**	**49.822**	ug/L	1.393	2	21	79582	0	KED
⎢	**Zn**	**66**	**49.701**	ug/L	1.181	2	18	21389	0	KED
⎢	**Zn**	**67**	**49.333**	ug/L	1.500	3	5	3477	3	KED
⎣	**As**	**75**	**49.821**	ug/L	0.907	1	5	11183	1	KED
	Y	**89**		ug/L			275831	281252	1	Standard
	Kr	**83**		ug/L			40	41	25	Standard
⎡>	**In-1**	**115**		ug/L			9714	9736	1	KED
⎢	**Cd**	**111**	**49.889**	ug/L	0.335	0	2	13924	1	KED
⎣	**Cd**	**114**	**49.835**	ug/L	1.410	2	3	34021	2	KED
⎡>	**In**	**115**		ug/L			369046	374500	1	Standard
⎣	**Ag**	**107**	**49.741**	ug/L	0.053	0	22	618299	1	Standard
⎡>	**Tb**	**159**		ug/L			669567	682102	2	Standard
⎣	**Pb**	**208**	**50.046**	ug/L	1.149	2	60	1940753	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 12:56:51
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	29792	1	Standard
	Cl	**37**		ug/L			5434030	5410171	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	477018	1	Standard
|	**Cr**	**52**	**100.670**	ug/L	1.066	1	20356	1695369	0	Standard
|	**Cr**	**53**	**100.432**	ug/L	1.367	1	160	194414	0	Standard
|	**Fe**	**54**	**10039.717**	ug/L	95.701	0	67040	13224638	1	Standard
|	**Fe**	**57**	**10049.020**	ug/L	202.815	2	19150	5470075	1	Standard
⌊	**Mn**	**55**	**102.211**	ug/L	2.207	2	667	2668544	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	30520	1	KED
|	**Ni**	**60**	**99.769**	ug/L	2.465	2	4	104742	2	KED
|	**Ni**	**62**	**100.707**	ug/L	3.337	3	3	17411	3	KED
|	**Cu**	**63**	**100.345**	ug/L	1.207	1	53	307024	0	KED
|	**Cu**	**65**	**99.792**	ug/L	0.469	0	21	152059	0	KED
|	**Zn**	**66**	**99.600**	ug/L	0.363	0	18	40626	1	KED
|	**Zn**	**67**	**100.526**	ug/L	0.679	0	5	6921	1	KED
⌊	**As**	**75**	**100.381**	ug/L	1.544	1	5	21915	0	KED
	Y	**89**		ug/L			275831	280351	1	Standard
	Kr	**83**		ug/L			40	58	13	Standard
⌈>	**In-1**	**115**		ug/L			9714	9481	0	KED
|	**Cd**	**111**	**100.054**	ug/L	0.611	0	2	27242	0	KED
⌊	**Cd**	**114**	**99.832**	ug/L	0.620	0	3	66004	0	KED
⌈>	**In**	**115**		ug/L			369046	370005	1	Standard
⌊	**Ag**	**107**	**100.197**	ug/L	0.845	0	22	1238571	0	Standard
⌈>	**Tb**	**159**		ug/L			669567	682772	2	Standard
⌊	**Pb**	**208**	**99.852**	ug/L	6.986	6	60	3856332	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 13:04:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	26750	1	Standard
	Cl	**37**		ug/L			5434030	5341961	3	Standard
⌈>	**Sc**	**45**		ug/L			479414	457898	7	Standard
|	**Cr**	**52**	**0.031**	ug/L	0.089	282	20356	19872	0	Standard
|	**Cr**	**53**	**-0.006**	ug/L	0.002	26	160	142	9	Standard
|	**Fe**	**54**	**2.893**	ug/L	5.190	179	67040	67334	1	Standard
|	**Fe**	**57**	**0.827**	ug/L	3.266	394	19150	18633	1	Standard
⌊	**Mn**	**55**	**0.001**	ug/L	0.003	247	667	660	3	Standard
⌈>	**Ge**	**72**		ug/L			31347	30859	0	KED
|	**Ni**	**60**	**0.001**	ug/L	0.002	311	4	5	43	KED
|	**Ni**	**62**	**0.004**	ug/L	0.006	156	3	4	24	KED
|	**Cu**	**63**	**0.003**	ug/L	0.005	170	53	61	24	KED
|	**Cu**	**65**	**0.010**	ug/L	0.011	112	21	36	45	KED
|	**Zn**	**66**	**0.059**	ug/L	0.038	63	18	42	36	KED
|	**Zn**	**67**	**0.038**	ug/L	0.072	192	5	7	66	KED
⌊	**As**	**75**	**0.001**	ug/L	0.013	1231	5	5	53	KED
	Y	**89**		ug/L			275831	264873	4	Standard
	Kr	**83**		ug/L			40	34	36	Standard
⌈>	**In-1**	**115**		ug/L			9714	9576	1	KED
|	**Cd**	**111**	**0.006**	ug/L	0.014	244	2	4	96	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.000	6	3	5	0	KED
⌈>	**In**	**115**		ug/L			369046	362319	6	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	53	22	45	19	Standard
⌈>	**Tb**	**159**		ug/L			669567	650196	7	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	20	60	129	4	Standard

Sample Information

Sample Date/Time: Thursday, April 20, 2023 12:56:51
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED
Mass Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Conditions File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Sc	45							
Cr	52	**0.9999**	0.035	0.50	10	20	50	100
Cr	53	**1.0000**	0.004	0.50	10	20	50	100
Fe	54	**1.0000**	0.003	36.00	1000	2000	5000	10000
Fe	57	**0.9999**	0.001	36.00	1000	2000	5000	10000
Mn	55	**0.9992**	0.055	0.50	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.034	0.50	10	20	50	100
Ni	62	**0.9999**	0.006	0.50	10	20	50	100
Cu	63	**1.0000**	0.100	0.50	10	20	50	100
Cu	65	**1.0000**	0.050	0.50	10	20	50	100
Zn	66	**1.0000**	0.013	6.00	10	20	50	100
Zn	67	**0.9998**	0.002	6.00	10	20	50	100
As	75	**1.0000**	0.007	0.20	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Cd	111	**1.0000**	0.029	0.10	10	20	50	100
Cd	114	**1.0000**	0.070	0.10	10	20	50	100
In	115							
Ag	107	**1.0000**	0.033	0.20	10	20	50	100
Tb	159							
Pb	208	**1.0000**	0.057	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 14:54:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	26165	2	Standard
	Cl	**37**		ug/L			5434030	5389411	1	Standard
⎡>	**Sc**	**45**		ug/L			479414	492292	0	Standard
⎢	**Cr**	**52**	**51.200**	ug/L	0.387	0	20356	900238	1	Standard
⎢	**Cr**	**53**	**51.487**	ug/L	0.871	1	160	102950	1	Standard
⎢	**Fe**	**54**	**5050.899**	ug/L	103.253	2	67040	6899969	1	Standard
⎢	**Fe**	**57**	**5222.642**	ug/L	64.353	1	19150	2943647	1	Standard
⎣	**Mn**	**55**	**48.207**	ug/L	0.445	0	667	1299397	1	Standard
⎡>	**Ge**	**72**		ug/L			31347	32420	3	KED
⎢	**Ni**	**60**	**51.059**	ug/L	0.930	1	4	56927	1	KED
⎢	**Ni**	**62**	**51.015**	ug/L	1.479	2	3	9364	0	KED
⎢	**Cu**	**63**	**52.337**	ug/L	2.597	4	53	169984	2	KED
⎢	**Cu**	**65**	**50.875**	ug/L	1.096	2	21	82324	1	KED
⎢	**Zn**	**66**	**49.522**	ug/L	0.777	1	18	21459	1	KED
⎢	**Zn**	**67**	**50.488**	ug/L	3.337	6	5	3690	3	KED
⎣	**As**	**75**	**47.170**	ug/L	0.976	2	5	10938	1	KED
	Y	**89**		ug/L			275831	288889	1	Standard
	Kr	**83**		ug/L			40	38	8	Standard
⎡>	**In-1**	**115**		ug/L			9714	10112	1	KED
⎢	**Cd**	**111**	**49.677**	ug/L	1.196	2	2	14423	0	KED
⎣	**Cd**	**114**	**50.184**	ug/L	0.746	1	3	35384	0	KED
⎡>	**In**	**115**		ug/L			369046	388283	0	Standard
⎣	**Ag**	**107**	**52.918**	ug/L	0.452	0	22	686513	0	Standard
⎡>	**Tb**	**159**		ug/L			669567	702184	2	Standard
⎣	**Pb**	**208**	**50.642**	ug/L	0.227	0	60	2012424	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 15:02:09
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	24325	4	Standard
	Cl	**37**		ug/L			5434030	5379821	1	Standard
⎡>	**Sc**	**45**		ug/L			479414	474599	0	Standard
⎢	**Cr**	**52**	**0.018**	ug/L	0.008	47	20356	20444	0	Standard
⎢	**Cr**	**53**	**-0.014**	ug/L	0.002	14	160	133	2	Standard
⎢	**Fe**	**54**	**0.667**	ug/L	0.199	29	67040	67237	0	Standard
⎢	**Fe**	**57**	**2.178**	ug/L	1.485	68	19150	20133	3	Standard
⎣	**Mn**	**55**	**-0.000**	ug/L	0.001	726	667	655	5	Standard
⎡>	**Ge**	**72**		ug/L			31347	31496	1	KED
⎢	**Ni**	**60**	**0.001**	ug/L	0.003	481	4	5	57	KED
⎢	**Ni**	**62**	**-0.014**	ug/L	0.012	87	3	1	173	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.004	449	53	50	25	KED
⎢	**Cu**	**65**	**-0.000**	ug/L	0.001	204	21	20	9	KED
⎢	**Zn**	**66**	**-0.001**	ug/L	0.021	1426	18	17	48	KED
⎢	**Zn**	**67**	**-0.018**	ug/L	0.028	154	5	3	50	KED
⎣	**As**	**75**	**-0.002**	ug/L	0.008	346	5	4	34	KED
	Y	**89**		ug/L			275831	278075	1	Standard
	Kr	**83**		ug/L			40	47	31	Standard
⎡>	**In-1**	**115**		ug/L			9714	9568	0	KED
⎢	**Cd**	**111**	**0.001**	ug/L	0.006	465	2	2	57	KED
⎣	**Cd**	**114**	**-0.000**	ug/L	0.006	17261	3	3	133	KED
⎡>	**In**	**115**		ug/L			369046	381372	1	Standard
⎣	**Ag**	**107**	**0.002**	ug/L	0.001	41	22	43	18	Standard
⎡>	**Tb**	**159**		ug/L			669567	674110	1	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	10	60	86	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 15:09:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	23481	1	Standard
	Cl	**37**		ug/L			5434030	5541161	1	Standard
⎡>	**Sc**	**45**		ug/L			479414	486921	1	Standard
⎢	**Cr**	**52**	**49.062**	ug/L	0.424	0	20356	854066	1	Standard
⎢	**Cr**	**53**	**49.426**	ug/L	0.756	1	160	97741	0	Standard
⎢	**Fe**	**54**	**4936.993**	ug/L	71.556	1	67040	6672260	1	Standard
⎢	**Fe**	**57**	**5035.826**	ug/L	83.538	1	19150	2807605	0	Standard
⎣	**Mn**	**55**	**46.675**	ug/L	0.957	2	667	1244124	0	Standard
⎡>	**Ge**	**72**		ug/L			31347	31651	2	KED
⎢	**Ni**	**60**	**49.887**	ug/L	2.601	5	4	54271	2	KED
⎢	**Ni**	**62**	**48.999**	ug/L	1.296	2	3	8783	0	KED
⎢	**Cu**	**63**	**49.048**	ug/L	0.396	0	53	155684	3	KED
⎢	**Cu**	**65**	**49.801**	ug/L	0.906	1	21	78685	0	KED
⎢	**Zn**	**66**	**51.518**	ug/L	1.370	2	18	21791	0	KED
⎢	**Zn**	**67**	**49.922**	ug/L	0.289	0	5	3567	2	KED
⎣	**As**	**75**	**49.701**	ug/L	1.179	2	5	11252	1	KED
	Y	**89**		ug/L			275831	277420	0	Standard
	Kr	**83**		ug/L			40	41	19	Standard
⎡>	**In-1**	**115**		ug/L			9714	9780	1	KED
⎢	**Cd**	**111**	**50.000**	ug/L	0.886	1	2	14041	0	KED
⎣	**Cd**	**114**	**51.183**	ug/L	1.011	1	3	34906	2	KED
⎡>	**In**	**115**		ug/L			369046	384684	1	Standard
⎣	**Ag**	**107**	**50.460**	ug/L	0.961	1	22	648445	0	Standard
⎡>	**Tb**	**159**		ug/L			669567	697923	1	Standard
⎣	**Pb**	**208**	**49.033**	ug/L	0.361	0	60	1936631	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 15:16:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	24333	1	Standard
	Cl	**37**		ug/L			5434030	5301230	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	468138	6	Standard
|	**Cr**	**52**	**0.024**	ug/L	0.027	111	20356	20258	4	Standard
|	**Cr**	**53**	**-0.015**	ug/L	0.004	27	160	127	5	Standard
|	**Fe**	**54**	**2.263**	ug/L	3.809	168	67040	68165	0	Standard
|	**Fe**	**57**	**1.524**	ug/L	1.159	76	19150	19487	4	Standard
⌊	**Mn**	**55**	**-0.001**	ug/L	0.002	375	667	632	3	Standard
⌈>	**Ge**	**72**		ug/L			31347	30610	2	KED
|	**Ni**	**60**	**-0.000**	ug/L	0.003	672	4	3	86	KED
|	**Ni**	**62**	**-0.010**	ug/L	0.011	110	3	1	100	KED
|	**Cu**	**63**	**0.001**	ug/L	0.003	324	53	55	18	KED
|	**Cu**	**65**	**0.002**	ug/L	0.003	204	21	23	18	KED
|	**Zn**	**66**	**0.020**	ug/L	0.009	46	18	26	15	KED
|	**Zn**	**67**	**-0.017**	ug/L	0.027	162	5	3	50	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.004	1833	5	5	21	KED
	Y	**89**		ug/L			275831	268659	3	Standard
	Kr	**83**		ug/L			40	39	26	Standard
⌈>	**In-1**	**115**		ug/L			9714	9657	3	KED
|	**Cd**	**111**	**0.001**	ug/L	0.007	582	2	2	66	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.002	57	3	1	90	KED
⌈>	**In**	**115**		ug/L			369046	372927	3	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	23	22	46	8	Standard
⌈>	**Tb**	**159**		ug/L			669567	648504	6	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	25	60	90	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 15:22:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	26446	1	Standard
	Cl	**37**		ug/L			5434030	5399791	2	Standard
⎡>	**Sc**	**45**		ug/L			479414	475700	2	Standard
⎢	**Cr**	**52**	**0.508**	ug/L	0.055	10	20356	28607	1	Standard
⎢	**Cr**	**53**	**0.480**	ug/L	0.049	10	160	1084	7	Standard
⎢	**Fe**	**54**	**35.469**	ug/L	2.577	7	67040	112825	1	Standard
⎢	**Fe**	**57**	**35.499**	ug/L	2.559	7	19150	38187	2	Standard
⎣	**Mn**	**55**	**0.475**	ug/L	0.011	2	667	13031	0	Standard
⎡>	**Ge**	**72**		ug/L			31347	31998	0	KED
⎢	**Ni**	**60**	**0.499**	ug/L	0.022	4	4	554	4	KED
⎢	**Ni**	**62**	**0.476**	ug/L	0.059	12	3	90	11	KED
⎢	**Cu**	**63**	**0.480**	ug/L	0.021	4	53	1595	4	KED
⎢	**Cu**	**65**	**0.540**	ug/L	0.033	6	21	884	6	KED
⎢	**Zn**	**66**	**6.335**	ug/L	0.109	1	18	2726	1	KED
⎢	**Zn**	**67**	**5.973**	ug/L	0.736	12	5	436	12	KED
⎣	**As**	**75**	**0.192**	ug/L	0.023	12	5	49	10	KED
	Y	**89**		ug/L			275831	278146	2	Standard
	Kr	**83**		ug/L			40	38	5	Standard
⎡>	**In-1**	**115**		ug/L			9714	9913	2	KED
⎢	**Cd**	**111**	**0.089**	ug/L	0.013	14	2	27	13	KED
⎣	**Cd**	**114**	**0.098**	ug/L	0.023	23	3	70	24	KED
⎡>	**In**	**115**		ug/L			369046	384987	1	Standard
⎣	**Ag**	**107**	**0.204**	ug/L	0.002	0	22	2644	1	Standard
⎡>	**Tb**	**159**		ug/L			669567	672893	0	Standard
⎣	**Pb**	**208**	**0.111**	ug/L	0.003	2	60	4287	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 15:27:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	103540	1	Standard
	Cl	**37**		ug/L			5434030	11216303	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	532421	1	Standard
|	**Cr**	**52**	**0.748**	ug/L	0.041	5	20356	36506	1	Standard
|	**Cr**	**53**	**3.802**	ug/L	0.075	1	160	8389	3	Standard
|	**Fe**	**54**	**18296.835**	ug/L	253.391	1	67040	26843249	2	Standard
|	**Fe**	**57**	**18620.315**	ug/L	346.164	1	19150	11294134	0	Standard
⌊	**Mn**	**55**	**0.070**	ug/L	0.004	5	667	2779	5	Standard
⌈>	**Ge**	**72**		ug/L			31347	30810	1	KED
|	**Ni**	**60**	**0.116**	ug/L	0.015	13	4	127	11	KED
|	**Ni**	**62**	**0.187**	ug/L	0.114	61	3	36	53	KED
|	**Cu**	**63**	**0.046**	ug/L	0.003	5	53	194	3	KED
|	**Cu**	**65**	**0.056**	ug/L	0.009	15	21	107	13	KED
|	**Zn**	**66**	**0.215**	ug/L	0.065	30	18	106	25	KED
|	**Zn**	**67**	**0.102**	ug/L	0.131	128	5	12	74	KED
⌊	**As**	**75**	**0.044**	ug/L	0.013	29	5	14	21	KED
	Y	**89**		ug/L			275831	282715	0	Standard
	Kr	**83**		ug/L			40	102	8	Standard
⌈>	**In-1**	**115**		ug/L			9714	9340	1	KED
|	**Cd**	**111**	**0.058**	ug/L	0.007	12	2	18	10	KED
⌊	**Cd**	**114**	**0.048**	ug/L	0.009	19	3	34	19	KED
⌈>	**In**	**115**		ug/L			369046	359193	0	Standard
⌊	**Ag**	**107**	**0.011**	ug/L	0.001	10	22	149	9	Standard
⌈>	**Tb**	**159**		ug/L			669567	705380	1	Standard
⌊	**Pb**	**208**	**0.037**	ug/L	0.001	2	60	1556	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 15:32:38
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	103094	0	Standard
	Cl	**37**		ug/L			5434030	10946357	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	535162	0	Standard
|	**Cr**	**52**	**19.022**	ug/L	0.328	1	20356	377828	1	Standard
|	**Cr**	**53**	**22.364**	ug/L	0.324	1	160	48710	0	Standard
|	**Fe**	**54**	**18421.712**	ug/L	253.342	1	67040	27161657	1	Standard
|	**Fe**	**57**	**18471.628**	ug/L	185.782	1	19150	11263630	1	Standard
⌊	**Mn**	**55**	**17.270**	ug/L	0.135	0	667	506502	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	29612	1	KED
|	**Ni**	**60**	**21.056**	ug/L	0.508	2	4	21447	1	KED
|	**Ni**	**62**	**20.811**	ug/L	1.059	5	3	3491	3	KED
|	**Cu**	**63**	**19.903**	ug/L	0.095	0	53	59132	1	KED
|	**Cu**	**65**	**20.542**	ug/L	0.522	2	21	30380	1	KED
|	**Zn**	**66**	**19.276**	ug/L	0.485	2	18	7642	2	KED
|	**Zn**	**67**	**17.153**	ug/L	0.295	1	5	1149	2	KED
⌊	**As**	**75**	**19.139**	ug/L	0.205	1	5	4058	1	KED
	Y	**89**		ug/L			275831	276138	1	Standard
	Kr	**83**		ug/L			40	93	24	Standard
⌈>	**In-1**	**115**		ug/L			9714	9059	1	KED
|	**Cd**	**111**	**18.974**	ug/L	0.171	0	2	4937	1	KED
⌊	**Cd**	**114**	**19.102**	ug/L	0.302	1	3	12070	2	KED
⌈>	**In**	**115**		ug/L			369046	352085	1	Standard
⌊	**Ag**	**107**	**18.803**	ug/L	0.354	1	22	221198	2	Standard
⌈>	**Tb**	**159**		ug/L			669567	696273	1	Standard
⌊	**Pb**	**208**	**0.034**	ug/L	0.002	5	60	1391	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 15:37:12
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	29237	1	Standard
	Cl	**37**		ug/L			5434030	5510207	0	Standard
>	**Sc**	**45**		ug/L			479414	509481	1	Standard
	Cr	**52**	**207.633**	ug/L	4.702	2	20356	3711526	1	Standard
	Cr	**53**	**191.286**	ug/L	4.917	2	160	395389	3	Standard
	Fe	**54**	**18999.291**	ug/L	477.309	2	67040	26662440	2	Standard
	Fe	**57**	**19310.599**	ug/L	312.592	1	19150	11207500	0	Standard
	Mn	**55**	**193.147**	ug/L	5.036	2	667	5384692	1	Standard
>	**Ge**	**72**		ug/L			31347	29380	2	KED
	Ni	**60**	**209.178**	ug/L	8.424	4	4	211303	2	KED
	Ni	**62**	**205.376**	ug/L	6.767	3	3	34156	0	KED
	Cu	**63**	**199.148**	ug/L	6.962	3	53	586213	1	KED
	Cu	**65**	**198.337**	ug/L	5.930	2	21	290784	1	KED
	Zn	**66**	**201.578**	ug/L	6.425	3	18	79088	0	KED
	Zn	**67**	**194.420**	ug/L	2.292	1	5	12881	2	KED
	As	**75**	**195.276**	ug/L	6.102	3	5	41017	0	KED
	Y	**89**		ug/L			275831	281561	1	Standard
	Kr	**83**		ug/L			40	90	6	Standard
>	**In-1**	**115**		ug/L			9714	8941	2	KED
	Cd	**111**	**196.173**	ug/L	4.399	2	2	50347	0	KED
	Cd	**114**	**198.884**	ug/L	2.793	1	3	123968	1	KED
>	**In**	**115**		ug/L			369046	360597	1	Standard
	Ag	**107**	**220.094**	ug/L	4.920	2	22	2651581	2	Standard
>	**Tb**	**159**		ug/L			669567	697590	2	Standard
	Pb	**208**	**218.686**	ug/L	7.016	3	60	8630817	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 15:41:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	29094	2	Standard
	Cl	**37**		ug/L			5434030	5369401	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	490458	1	Standard
|	**Cr**	**52**	**305.860**	ug/L	5.017	1	20356	5253140	0	Standard
|	**Cr**	**53**	**288.098**	ug/L	6.588	2	160	573017	0	Standard
|	**Fe**	**54**	**28263.914**	ug/L	145.750	0	67040	38153719	1	Standard
|	**Fe**	**57**	**28801.203**	ug/L	91.862	0	19150	16084120	1	Standard
⌊	**Mn**	**55**	**297.119**	ug/L	4.807	1	667	7973940	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	28638	2	KED
|	**Ni**	**60**	**303.014**	ug/L	10.209	3	4	298389	1	KED
|	**Ni**	**62**	**297.553**	ug/L	10.398	3	3	48240	1	KED
|	**Cu**	**63**	**292.839**	ug/L	13.583	4	53	840182	2	KED
|	**Cu**	**65**	**293.480**	ug/L	5.838	1	21	419482	0	KED
|	**Zn**	**66**	**281.020**	ug/L	8.492	3	18	107480	0	KED
|	**Zn**	**67**	**273.298**	ug/L	6.969	2	5	17643	1	KED
⌊	**As**	**75**	**286.828**	ug/L	6.130	2	5	58739	0	KED
	Y	**89**		ug/L			275831	269865	1	Standard
	Kr	**83**		ug/L			40	135	12	Standard
⌈>	**In-1**	**115**		ug/L			9714	8716	0	KED
|	**Cd**	**111**	**287.712**	ug/L	3.858	1	2	72007	0	KED
⌊	**Cd**	**114**	**288.978**	ug/L	4.472	1	3	175629	0	KED
⌈>	**In**	**115**		ug/L			369046	350783	1	Standard
⌊	**Ag**	**107**	**326.836**	ug/L	5.291	1	22	3830142	1	Standard
⌈>	**Tb**	**159**		ug/L			669567	673024	2	Standard
⌊	**Pb**	**208**	**330.557**	ug/L	8.866	2	60	12586045	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 15:49:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	30510	1	Standard
	Cl	**37**		ug/L			5434030	5553969	4	Standard
⎡>	**Sc**	**45**		ug/L			479414	491550	1	Standard
⎢	**Cr**	**52**	**0.001**	ug/L	0.013	966	20356	20892	0	Standard
⎢	**Cr**	**53**	**0.043**	ug/L	0.013	30	160	250	12	Standard
⎢	**Fe**	**54**	**1.746**	ug/L	1.712	98	67040	71072	1	Standard
⎢	**Fe**	**57**	**1.108**	ug/L	1.462	131	19150	20257	4	Standard
⎣	**Mn**	**55**	**0.010**	ug/L	0.002	19	667	956	4	Standard
⎡>	**Ge**	**72**		ug/L			31347	31605	2	KED
⎢	**Ni**	**60**	**0.009**	ug/L	0.007	75	4	13	51	KED
⎢	**Ni**	**62**	**0.035**	ug/L	0.031	87	3	10	54	KED
⎢	**Cu**	**63**	**0.009**	ug/L	0.005	52	53	82	20	KED
⎢	**Cu**	**65**	**0.018**	ug/L	0.005	25	21	50	17	KED
⎢	**Zn**	**66**	**0.089**	ug/L	0.014	16	18	55	8	KED
⎢	**Zn**	**67**	**0.099**	ug/L	0.126	126	5	12	71	KED
⎣	**As**	**75**	**0.015**	ug/L	0.009	59	5	8	20	KED
	Y	**89**		ug/L			275831	272942	2	Standard
	Kr	**83**		ug/L			40	38	7	Standard
⎡>	**In-1**	**115**		ug/L			9714	9807	1	KED
⎢	**Cd**	**111**	**0.002**	ug/L	0.007	323	2	3	62	KED
⎣	**Cd**	**114**	**0.006**	ug/L	0.003	63	3	6	33	KED
⎡>	**In**	**115**		ug/L			369046	377496	0	Standard
⎣	**Ag**	**107**	**0.005**	ug/L	0.001	23	22	87	17	Standard
⎡>	**Tb**	**159**		ug/L			669567	669444	2	Standard
⎣	**Pb**	**208**	**0.005**	ug/L	0.000	0	60	253	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 15:56:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	30717	0	Standard
	Cl	**37**		ug/L			5434030	5553942	0	Standard
⎡>	**Sc**	**45**		ug/L			479414	497659	1	Standard
⎢	**Cr**	**52**	**0.018**	ug/L	0.022	120	20356	21444	2	Standard
⎢	**Cr**	**53**	**0.030**	ug/L	0.005	17	160	226	3	Standard
⎢	**Fe**	**54**	**0.613**	ug/L	0.937	152	67040	70423	1	Standard
⎢	**Fe**	**57**	**0.758**	ug/L	1.607	212	19150	20307	4	Standard
⎣	**Mn**	**55**	**0.006**	ug/L	0.001	18	667	867	4	Standard
⎡>	**Ge**	**72**		ug/L			31347	30828	2	KED
⎢	**Ni**	**60**	**0.014**	ug/L	0.009	66	4	19	50	KED
⎢	**Ni**	**62**	**-0.003**	ug/L	0.006	182	3	3	34	KED
⎢	**Cu**	**63**	**0.008**	ug/L	0.003	33	53	77	9	KED
⎢	**Cu**	**65**	**0.013**	ug/L	0.005	35	21	41	15	KED
⎢	**Zn**	**66**	**0.109**	ug/L	0.015	14	18	62	8	KED
⎢	**Zn**	**67**	**0.092**	ug/L	0.079	86	5	11	50	KED
⎣	**As**	**75**	**0.013**	ug/L	0.013	98	5	7	33	KED
	Y	**89**		ug/L			275831	271654	1	Standard
	Kr	**83**		ug/L			40	30	22	Standard
⎡>	**In-1**	**115**		ug/L			9714	9383	1	KED
⎢	**Cd**	**111**	**0.000**	ug/L	0.005	1716	2	2	57	KED
⎣	**Cd**	**114**	**-0.001**	ug/L	0.003	362	3	2	94	KED
⎡>	**In**	**115**		ug/L			369046	375158	1	Standard
⎣	**Ag**	**107**	**0.002**	ug/L	0.000	8	22	44	4	Standard
⎡>	**Tb**	**159**		ug/L			669567	673059	1	Standard
⎣	**Pb**	**208**	**0.004**	ug/L	0.001	12	60	217	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 16:03:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	24360	0	Standard
	Cl	**37**		ug/L			5434030	5568963	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	502410	3	Standard
|	**Cr**	**52**	**50.788**	ug/L	1.679	3	20356	910808	1	Standard
|	**Cr**	**53**	**50.621**	ug/L	1.304	2	160	103235	1	Standard
|	**Fe**	**54**	**5025.290**	ug/L	135.065	2	67040	7002515	1	Standard
|	**Fe**	**57**	**5063.129**	ug/L	227.011	4	19150	2910145	2	Standard
⌊	**Mn**	**55**	**47.269**	ug/L	1.520	3	667	1299292	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	31606	2	KED
|	**Ni**	**60**	**52.010**	ug/L	1.892	3	4	56518	1	KED
|	**Ni**	**62**	**49.091**	ug/L	0.178	0	3	8790	2	KED
|	**Cu**	**63**	**50.421**	ug/L	0.902	1	53	159757	1	KED
|	**Cu**	**65**	**52.333**	ug/L	0.286	0	21	82593	2	KED
|	**Zn**	**66**	**51.996**	ug/L	2.000	3	18	21962	2	KED
|	**Zn**	**67**	**50.222**	ug/L	1.922	3	5	3581	1	KED
⌊	**As**	**75**	**49.733**	ug/L	1.154	2	5	11244	1	KED
	Y	**89**		ug/L			275831	277338	3	Standard
	Kr	**83**		ug/L			40	53	15	Standard
⌈>	**In-1**	**115**		ug/L			9714	9758	0	KED
|	**Cd**	**111**	**50.195**	ug/L	0.337	0	2	14066	0	KED
⌊	**Cd**	**114**	**50.328**	ug/L	1.269	2	3	34243	1	KED
⌈>	**In**	**115**		ug/L			369046	378604	5	Standard
⌊	**Ag**	**107**	**52.616**	ug/L	2.571	4	22	664525	1	Standard
⌈>	**Tb**	**159**		ug/L			669567	692985	4	Standard
⌊	**Pb**	**208**	**52.681**	ug/L	1.604	3	60	2064371	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 16:10:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	25646	2	Standard
	Cl	**37**		ug/L			5434030	5605750	0	Standard
⌈>	**Sc**	**45**		ug/L			479414	493717	1	Standard
|	**Cr**	**52**	**-0.026**	ug/L	0.019	72	20356	20515	1	Standard
|	**Cr**	**53**	**0.016**	ug/L	0.007	43	160	198	7	Standard
|	**Fe**	**54**	**0.927**	ug/L	0.781	84	67040	70296	1	Standard
|	**Fe**	**57**	**1.109**	ug/L	1.791	161	19150	20352	6	Standard
⌊	**Mn**	**55**	**0.012**	ug/L	0.002	14	667	1015	5	Standard
⌈>	**Ge**	**72**		ug/L			31347	30907	1	KED
|	**Ni**	**60**	**0.002**	ug/L	0.001	38	4	6	15	KED
|	**Ni**	**62**	**-0.003**	ug/L	0.006	192	3	3	34	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.001	29	53	46	2	KED
|	**Cu**	**65**	**0.006**	ug/L	0.005	82	21	29	22	KED
|	**Zn**	**66**	**0.022**	ug/L	0.014	63	18	27	21	KED
|	**Zn**	**67**	**0.000**	ug/L	0.068	15031	5	5	94	KED
⌊	**As**	**75**	**0.007**	ug/L	0.008	116	5	6	25	KED
	Y	**89**		ug/L			275831	280626	2	Standard
	Kr	**83**		ug/L			40	45	8	Standard
⌈>	**In-1**	**115**		ug/L			9714	9489	2	KED
|	**Cd**	**111**	**0.003**	ug/L	0.010	381	2	3	86	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.003	338	3	2	92	KED
⌈>	**In**	**115**		ug/L			369046	385454	1	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.002	39	22	77	28	Standard
⌈>	**Tb**	**159**		ug/L			669567	681676	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.001	49	60	129	24	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0506-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 16:23:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	32180	1	Standard
	Cl	37		ug/L			5434030	5493926	1	Standard
⌈>	Sc	45		ug/L			479414	507296	1	Standard
|	Cr	52	0.056	ug/L	0.024	43	20356	22528	1	Standard
|	Cr	53	0.045	ug/L	0.005	11	160	262	5	Standard
|	Fe	54	0.809	ug/L	0.708	87	67040	72060	0	Standard
|	Fe	57	2.763	ug/L	1.448	52	19150	21855	3	Standard
⌊	Mn	55	0.279	ug/L	0.005	1	667	8457	1	Standard
⌈>	Ge	72		ug/L			31347	31846	0	KED
|	Ni	60	0.022	ug/L	0.008	37	4	28	30	KED
|	Ni	62	0.028	ug/L	0.022	79	3	8	44	KED
|	Cu	63	0.022	ug/L	0.005	25	53	123	13	KED
|	Cu	65	0.029	ug/L	0.007	24	21	67	15	KED
|	Zn	66	0.399	ug/L	0.021	5	18	188	5	KED
|	Zn	67	0.379	ug/L	0.139	36	5	32	31	KED
⌊	As	75	0.008	ug/L	0.008	101	5	7	26	KED
	Y	89		ug/L			275831	284297	2	Standard
	Kr	83		ug/L			40	38	5	Standard
⌈>	In-1	115		ug/L			9714	9813	0	KED
|	Cd	111	-0.003	ug/L	0.002	55	2	1	34	KED
⌊	Cd	114	0.001	ug/L	0.002	267	3	3	43	KED
⌈>	In	115		ug/L			369046	385658	1	Standard
⌊	Ag	107	0.002	ug/L	0.000	22	22	46	10	Standard
⌈>	Tb	159		ug/L			669567	691632	1	Standard
⌊	Pb	208	0.005	ug/L	0.001	10	60	266	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0506-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 16:28:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	32893	4	Standard
	Cl	37		ug/L			5434030	5485597	2	Standard
>	Sc	45		ug/L			479414	508662	0	Standard
	Cr	52	26.190	ug/L	0.216	0	20356	486327	0	Standard
	Cr	53	26.138	ug/L	0.449	1	160	54082	1	Standard
	Fe	54	1.048	ug/L	1.011	96	67040	72591	1	Standard
	Fe	57	3.180	ug/L	0.758	23	19150	22157	1	Standard
	Mn	55	25.164	ug/L	0.342	1	667	701176	1	Standard
>	Ge	72		ug/L			31347	32245	2	KED
	Ni	60	27.797	ug/L	0.753	2	4	30826	1	KED
	Ni	62	27.527	ug/L	1.208	4	3	5029	3	KED
	Cu	63	28.439	ug/L	0.696	2	53	91955	1	KED
	Cu	65	28.799	ug/L	0.882	3	21	46384	3	KED
	Zn	66	90.521	ug/L	3.578	3	18	38990	1	KED
	Zn	67	83.259	ug/L	3.509	4	5	6053	2	KED
	As	75	25.888	ug/L	0.408	1	5	5974	1	KED
	Y	89		ug/L			275831	276879	1	Standard
	Kr	83		ug/L			40	45	8	Standard
>	In-1	115		ug/L			9714	9666	6	KED
	Cd	111	27.562	ug/L	1.303	4	2	7637	1	KED
	Cd	114	27.635	ug/L	1.727	6	3	18583	1	KED
>	In	115		ug/L			369046	394215	1	Standard
	Ag	107	26.826	ug/L	0.449	1	22	353276	0	Standard
>	Tb	159		ug/L			669567	696961	1	Standard
	Pb	208	27.772	ug/L	0.658	2	60	1095195	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0559-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 16:32:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	31184	1	Standard
	Cl	37		ug/L			5434030	5432958	1	Standard
>	Sc	45		ug/L			479414	503408	1	Standard
	Cr	52	0.015	ug/L	0.007	47	20356	21643	1	Standard
	Cr	53	0.013	ug/L	0.012	95	160	194	14	Standard
	Fe	54	-1.722	ug/L	0.860	49	67040	68003	1	Standard
	Fe	57	1.759	ug/L	2.060	117	19150	21109	5	Standard
	Mn	55	0.139	ug/L	0.003	2	667	4528	0	Standard
>	Ge	72		ug/L			31347	31483	1	KED
	Ni	60	0.013	ug/L	0.006	45	4	18	33	KED
	Ni	62	0.022	ug/L	0.048	219	3	7	108	KED
	Cu	63	0.061	ug/L	0.011	18	53	245	13	KED
	Cu	65	0.064	ug/L	0.011	17	21	122	14	KED
	Zn	66	0.211	ug/L	0.018	8	18	107	5	KED
	Zn	67	0.233	ug/L	0.091	39	5	21	28	KED
	As	75	0.005	ug/L	0.009	188	5	6	31	KED
	Y	89		ug/L			275831	276804	1	Standard
	Kr	83		ug/L			40	41	9	Standard
>	In-1	115		ug/L			9714	9945	1	KED
	Cd	111	-0.005	ug/L	0.002	40	2	1	43	KED
	Cd	114	-0.001	ug/L	0.004	294	3	2	137	KED
>	In	115		ug/L			369046	391157	1	Standard
	Ag	107	0.002	ug/L	0.001	36	22	51	19	Standard
>	Tb	159		ug/L			669567	677488	1	Standard
	Pb	208	0.005	ug/L	0.000	5	60	266	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0559-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 16:37:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	33071	0	Standard
	Cl	37		ug/L			5434030	5602411	3	Standard
>	Sc	45		ug/L			479414	509514	1	Standard
	Cr	52	26.191	ug/L	0.092	0	20356	487163	1	Standard
	Cr	53	26.520	ug/L	0.426	1	160	54972	2	Standard
	Fe	54	4959.577	ug/L	48.402	0	67040	7013783	0	Standard
	Fe	57	5111.321	ug/L	81.871	1	19150	2981730	0	Standard
	Mn	55	24.789	ug/L	0.090	0	667	691912	1	Standard
>	Ge	72		ug/L			31347	31606	2	KED
	Ni	60	27.351	ug/L	0.602	2	4	29734	1	KED
	Ni	62	27.548	ug/L	0.167	0	3	4934	2	KED
	Cu	63	26.632	ug/L	0.789	2	53	84415	2	KED
	Cu	65	27.059	ug/L	0.474	1	21	42706	0	KED
	Zn	66	88.609	ug/L	2.286	2	18	37417	0	KED
	Zn	67	81.105	ug/L	3.717	4	5	5780	2	KED
	As	75	26.336	ug/L	0.520	1	5	5957	0	KED
	Y	89		ug/L			275831	286926	1	Standard
	Kr	83		ug/L			40	58	8	Standard
>	In-1	115		ug/L			9714	9644	4	KED
	Cd	111	27.259	ug/L	0.964	3	2	7543	1	KED
	Cd	114	27.305	ug/L	1.312	4	3	18341	1	KED
>	In	115		ug/L			369046	385534	1	Standard
	Ag	107	26.964	ug/L	0.495	1	22	347351	2	Standard
>	Tb	159		ug/L			669567	707015	1	Standard
	Pb	208	26.552	ug/L	0.325	1	60	1062372	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0426-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 16:41:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	47368	3	Standard
	Cl	37		ug/L			5434030	5884816	0	Standard
>	Sc	45		ug/L			479414	539882	1	Standard
	Cr	52	0.686	ug/L	0.042	6	20356	35832	1	Standard
	Cr	53	0.863	ug/L	0.023	2	160	2069	1	Standard
	Fe	54	536.315	ug/L	10.457	1	67040	870965	1	Standard
	Fe	57	592.392	ug/L	10.178	1	19150	385277	1	Standard
	Mn	55	25.484	ug/L	0.074	0	667	753660	1	Standard
>	Ge	72		ug/L			31347	31767	1	KED
	Ni	60	13.645	ug/L	0.590	4	4	14912	3	KED
	Ni	62	12.911	ug/L	0.358	2	3	2327	3	KED
	Cu	63	6.496	ug/L	0.128	1	53	20736	1	KED
	Cu	65	6.684	ug/L	0.214	3	21	10619	1	KED
	Zn	66	212.210	ug/L	1.798	0	18	90069	0	KED
	Zn	67	189.491	ug/L	1.587	0	5	13577	2	KED
	As	75	0.384	ug/L	0.023	6	5	92	4	KED
	Y	89		ug/L			275831	288684	1	Standard
	Kr	83		ug/L			40	45	26	Standard
>	In-1	115		ug/L			9714	9890	2	KED
	Cd	111	0.299	ug/L	0.050	16	2	87	16	KED
	Cd	114	0.317	ug/L	0.022	6	3	221	8	KED
>	In	115		ug/L			369046	382064	2	Standard
	Ag	107	0.005	ug/L	0.000	6	22	89	5	Standard
>	Tb	159		ug/L			669567	690943	3	Standard
	Pb	208	0.332	ug/L	0.010	3	60	13049	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0484-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, April 20, 2023 16:50:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	40228	3	Standard
	Cl	37		ug/L			5434030	7380391	3	Standard
>	Sc	45		ug/L			479414	528457	1	Standard
	Cr	52	0.734	ug/L	0.028	3	20356	35969	1	Standard
	Cr	53	1.313	ug/L	0.010	0	160	2989	0	Standard
	Fe	54	1518.616	ug/L	46.817	3	67040	2279007	3	Standard
	Fe	57	1441.624	ug/L	8.947	0	19150	887524	1	Standard
	Mn	55	190.844	ug/L	2.765	1	667	5519639	1	Standard
>	Ge	72		ug/L			31347	31080	2	KED
	Ni	60	1.581	ug/L	0.060	3	4	1693	1	KED
	Ni	62	1.622	ug/L	0.110	6	3	288	4	KED
	Cu	63	0.748	ug/L	0.022	2	53	2382	0	KED
	Cu	65	0.736	ug/L	0.070	9	21	1161	7	KED
	Zn	66	10.176	ug/L	0.560	5	18	4240	4	KED
	Zn	67	12.293	ug/L	0.257	2	5	866	0	KED
	As	75	0.988	ug/L	0.023	2	5	224	3	KED
	Y	89		ug/L			275831	286185	1	Standard
	Kr	83		ug/L			40	49	23	Standard
>	In-1	115		ug/L			9714	9680	1	KED
	Cd	111	0.039	ug/L	0.021	53	2	13	44	KED
	Cd	114	0.037	ug/L	0.011	30	3	28	25	KED
>	In	115		ug/L			369046	385738	1	Standard
	Ag	107	0.003	ug/L	0.000	2	22	64	1	Standard
>	Tb	159		ug/L			669567	702077	1	Standard
	Pb	208	0.776	ug/L	0.013	1	60	30885	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0485-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, April 20, 2023 16:55:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	158232	2	Standard
	Cl	37		ug/L			5434030	5652704	1	Standard
>	Sc	45		ug/L			479414	539095	1	Standard
	Cr	52	1.723	ug/L	0.009	0	20356	55305	2	Standard
	Cr	53	1.290	ug/L	0.042	3	160	2999	1	Standard
	Fe	54	136.335	ug/L	6.102	4	67040	277210	1	Standard
	Fe	57	290.877	ug/L	1.872	0	19150	199861	1	Standard
	Mn	55	16.054	ug/L	0.199	1	667	474302	0	Standard
>	Ge	72		ug/L			31347	31573	1	KED
	Ni	60	1.447	ug/L	0.075	5	4	1575	3	KED
	Ni	62	1.303	ug/L	0.047	3	3	236	4	KED
	Cu	63	0.109	ug/L	0.004	3	53	399	3	KED
	Cu	65	0.095	ug/L	0.002	2	21	172	1	KED
	Zn	66	0.957	ug/L	0.043	4	18	422	4	KED
	Zn	67	1.070	ug/L	0.089	8	5	81	7	KED
	As	75	0.061	ug/L	0.021	34	5	19	24	KED
	Y	89		ug/L			275831	283902	1	Standard
	Kr	83		ug/L			40	55	17	Standard
>	In-1	115		ug/L			9714	9435	0	KED
	Cd	111	0.010	ug/L	0.011	112	2	5	57	KED
	Cd	114	0.002	ug/L	0.008	439	3	4	131	KED
>	In	115		ug/L			369046	373940	1	Standard
	Ag	107	0.001	ug/L	0.000	36	22	33	12	Standard
>	Tb	159		ug/L			669567	703328	1	Standard
	Pb	208	0.023	ug/L	0.001	3	60	974	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0249-08
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 17:01:56
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	35948	0	Standard
	Cl	37		ug/L			5434030	5558797	1	Standard
>	Sc	45		ug/L			479414	582170	2	Standard
	Cr	52	6.101	ug/L	0.131	2	20356	148597	1	Standard
	Cr	53	6.337	ug/L	0.161	2	160	15151	0	Standard
	Fe	54	6774.090	ug/L	175.705	2	67040	10913091	0	Standard
	Fe	57	6768.229	ug/L	220.168	3	19150	4502547	1	Standard
	Mn	55	72.204	ug/L	2.704	3	667	2300041	1	Standard
>	Ge	72		ug/L			31347	31837	1	KED
	Ni	60	5.345	ug/L	0.080	1	4	5857	0	KED
	Ni	62	5.254	ug/L	0.111	2	3	951	1	KED
	Cu	63	13.251	ug/L	0.148	1	53	42342	0	KED
	Cu	65	13.103	ug/L	0.091	0	21	20849	1	KED
	Zn	66	25.645	ug/L	0.447	1	18	10926	2	KED
	Zn	67	24.085	ug/L	1.164	4	5	1733	4	KED
	As	75	2.482	ug/L	0.054	2	5	570	2	KED
	Y	89		ug/L			275831	390604	0	Standard
	Kr	83		ug/L			40	52	18	Standard
>	In-1	115		ug/L			9714	9936	2	KED
	Cd	111	0.082	ug/L	0.015	17	2	26	14	KED
	Cd	114	0.088	ug/L	0.009	10	3	64	11	KED
>	In	115		ug/L			369046	394552	1	Standard
	Ag	107	0.067	ug/L	0.001	1	22	907	3	Standard
>	Tb	159		ug/L			669567	720195	1	Standard
	Pb	208	6.771	ug/L	0.033	0	60	276044	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0249-05
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 17:07:24
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	51692	6	Standard
	Cl	37		ug/L			5434030	5619524	3	Standard
>	Sc	45		ug/L			479414	597988	1	Standard
	Cr	52	6.542	ug/L	0.154	2	20356	161851	2	Standard
	Cr	53	6.653	ug/L	0.294	4	160	16324	2	Standard
	Fe	54	7028.434	ug/L	82.269	1	67040	11629675	0	Standard
	Fe	57	7248.467	ug/L	150.418	2	19150	4952073	0	Standard
	Mn	55	81.697	ug/L	1.395	1	667	2673732	0	Standard
>	Ge	72		ug/L			31347	32478	2	KED
	Ni	60	6.517	ug/L	0.096	1	4	7284	0	KED
	Ni	62	6.512	ug/L	0.491	7	3	1201	6	KED
	Cu	63	13.593	ug/L	0.370	2	53	44292	0	KED
	Cu	65	13.734	ug/L	0.469	3	21	22282	2	KED
	Zn	66	27.251	ug/L	0.932	3	18	11837	1	KED
	Zn	67	26.668	ug/L	1.522	5	5	1956	3	KED
	As	75	2.666	ug/L	0.063	2	5	624	0	KED
	Y	89		ug/L			275831	405731	1	Standard
	Kr	83		ug/L			40	61	29	Standard
>	In-1	115		ug/L			9714	10201	1	KED
	Cd	111	0.082	ug/L	0.017	21	2	26	17	KED
	Cd	114	0.077	ug/L	0.013	16	3	58	14	KED
>	In	115		ug/L			369046	392794	1	Standard
	Ag	107	0.074	ug/L	0.004	5	22	990	3	Standard
>	Tb	159		ug/L			669567	741446	0	Standard
	Pb	208	6.592	ug/L	0.114	1	60	276682	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 17:11:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	27718	2	Standard
	Cl	**37**		ug/L			5434030	5494355	0	Standard
⌈>	**Sc**	**45**		ug/L			479414	504685	0	Standard
|	**Cr**	**52**	**-0.036**	ug/L	0.023	63	20356	20790	1	Standard
|	**Cr**	**53**	**0.010**	ug/L	0.021	217	160	188	22	Standard
|	**Fe**	**54**	**1.125**	ug/L	0.932	82	67040	72134	1	Standard
|	**Fe**	**57**	**2.559**	ug/L	0.621	24	19150	21626	0	Standard
⌊	**Mn**	**55**	**0.006**	ug/L	0.007	114	667	875	23	Standard
⌈>	**Ge**	**72**		ug/L			31347	31054	0	KED
|	**Ni**	**60**	**0.000**	ug/L	0.004	12452	4	4	107	KED
|	**Ni**	**62**	**0.007**	ug/L	0.006	84	3	5	21	KED
|	**Cu**	**63**	**0.006**	ug/L	0.003	46	53	73	12	KED
|	**Cu**	**65**	**0.006**	ug/L	0.001	21	21	30	6	KED
|	**Zn**	**66**	**0.059**	ug/L	0.012	19	18	42	11	KED
|	**Zn**	**67**	**0.028**	ug/L	0.063	225	5	6	62	KED
⌊	**As**	**75**	**0.006**	ug/L	0.007	110	5	6	22	KED
	Y	**89**		ug/L			275831	286958	0	Standard
	Kr	**83**		ug/L			40	38	39	Standard
⌈>	**In-1**	**115**		ug/L			9714	9890	2	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.003	146	2	1	50	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.003	120	3	1	112	KED
⌈>	**In**	**115**		ug/L			369046	383209	0	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	73	22	31	17	Standard
⌈>	**Tb**	**159**		ug/L			669567	688445	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.001	71	60	139	38	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 17:16:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	25473	2	Standard
	Cl	**37**		ug/L			5434030	5685562	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	516025	1	Standard
|	**Cr**	**52**	**48.088**	ug/L	1.045	2	20356	887423	1	Standard
|	**Cr**	**53**	**48.462**	ug/L	0.790	1	160	101568	0	Standard
|	**Fe**	**54**	**4862.019**	ug/L	98.416	2	67040	6964168	0	Standard
|	**Fe**	**57**	**4993.184**	ug/L	94.046	1	19150	2950375	0	Standard
⌊	**Mn**	**55**	**46.564**	ug/L	1.008	2	667	1315384	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	31205	1	KED
|	**Ni**	**60**	**52.446**	ug/L	0.896	1	4	56299	2	KED
|	**Ni**	**62**	**51.809**	ug/L	2.151	4	3	9155	2	KED
|	**Cu**	**63**	**52.304**	ug/L	1.003	1	53	163624	0	KED
|	**Cu**	**65**	**53.088**	ug/L	1.613	3	21	82701	2	KED
|	**Zn**	**66**	**53.241**	ug/L	1.297	2	18	22205	0	KED
|	**Zn**	**67**	**52.484**	ug/L	1.037	1	5	3697	3	KED
⌊	**As**	**75**	**50.657**	ug/L	0.470	0	5	11310	1	KED
	Y	**89**		ug/L			275831	292836	2	Standard
	Kr	**83**		ug/L			40	46	20	Standard
⌈>	**In-1**	**115**		ug/L			9714	10072	1	KED
|	**Cd**	**111**	**49.073**	ug/L	0.927	1	2	14192	1	KED
⌊	**Cd**	**114**	**49.205**	ug/L	0.811	1	3	34555	1	KED
⌈>	**In**	**115**		ug/L			369046	390409	0	Standard
⌊	**Ag**	**107**	**49.783**	ug/L	0.505	1	22	649349	0	Standard
⌈>	**Tb**	**159**		ug/L			669567	709452	0	Standard
⌊	**Pb**	**208**	**50.951**	ug/L	0.150	0	60	2045795	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 17:23:48

DEL

Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	26461	6	Standard
	Cl	**37**		ug/L			5434030	5503099	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	491707	0	Standard
|	**Cr**	**52**	**-0.037**	ug/L	0.026	71	20356	20249	1	Standard
|	**Cr**	**53**	**-0.006**	ug/L	0.003	58	160	153	4	Standard
|	**Fe**	**54**	**-0.268**	ug/L	0.328	122	67040	68396	0	Standard
|	**Fe**	**57**	**2.507**	ug/L	1.415	56	19150	21041	3	Standard
⌊	**Mn**	**55**	**-0.000**	ug/L	0.001	394	667	676	3	Standard
⌈>	**Ge**	**72**		ug/L			31347	30744	2	KED
|	**Ni**	**60**	**-0.001**	ug/L	0.001	85	4	3	34	KED
|	**Ni**	**62**	**0.004**	ug/L	0.027	682	3	4	107	KED
|	**Cu**	**63**	**0.002**	ug/L	0.007	298	53	59	34	KED
|	**Cu**	**65**	**0.001**	ug/L	0.005	666	21	22	32	KED
|	**Zn**	**66**	**0.021**	ug/L	0.014	66	18	26	18	KED
|	**Zn**	**67**	**-0.007**	ug/L	0.058	846	5	4	89	KED
⌊	**As**	**75**	**0.003**	ug/L	0.007	279	5	5	28	KED
	Y	**89**		ug/L			275831	276279	0	Standard
	Kr	**83**		ug/L			40	37	14	Standard
⌈>	**In-1**	**115**		ug/L			9714	8690	18	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.002	8441	2	2	24	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.001	222	3	2	46	KED
⌈>	**In**	**115**		ug/L			369046	382743	0	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	34	22	41	14	Standard
⌈>	**Tb**	**159**		ug/L			669567	678835	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	36	60	117	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 17:28:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	26033	3	Standard
	Cl	**37**		ug/L			5434030	5647312	1	Standard
⎡>	**Sc**	**45**		ug/L			479414	496825	2	Standard
⎢	**Cr**	**52**	**-0.034**	ug/L	0.023	65	20356	20503	3	Standard
⎢	**Cr**	**53**	**-0.009**	ug/L	0.001	13	160	147	0	Standard
⎢	**Fe**	**54**	**-0.082**	ug/L	1.154	1406	67040	69342	1	Standard
⎢	**Fe**	**57**	**0.615**	ug/L	1.141	185	19150	20186	2	Standard
⎣	**Mn**	**55**	**0.002**	ug/L	0.000	22	667	736	3	Standard
⎡>	**Ge**	**72**		ug/L			31347	31134	2	KED
⎢	**Ni**	**60**	**0.002**	ug/L	0.004	250	4	6	75	KED
⎢	**Ni**	**62**	**-0.014**	ug/L	0.012	84	3	1	173	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.003	295	53	50	14	KED
⎢	**Cu**	**65**	**0.009**	ug/L	0.004	47	21	35	17	KED
⎢	**Zn**	**66**	**0.020**	ug/L	0.008	39	18	26	14	KED
⎢	**Zn**	**67**	**0.010**	ug/L	0.049	484	5	5	57	KED
⎣	**As**	**75**	**0.001**	ug/L	0.009	951	5	5	36	KED
	Y	**89**		ug/L			275831	276445	1	Standard
	Kr	**83**		ug/L			40	38	14	Standard
⎡>	**In-1**	**115**		ug/L			9714	9709	0	KED
⎢	**Cd**	**111**	**0.001**	ug/L	0.003	299	2	2	33	KED
⎣	**Cd**	**114**	**-0.000**	ug/L	0.003	22465	3	3	72	KED
⎡>	**In**	**115**		ug/L			369046	382513	2	Standard
⎣	**Ag**	**107**	**0.000**	ug/L	0.001	339	22	27	51	Standard
⎡>	**Tb**	**159**		ug/L			669567	678559	0	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.001	51	60	100	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0289-BS2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, April 20, 2023 17:35:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	33178	1	Standard
	Cl	37		ug/L			5434030	5532846	2	Standard
>	Sc	45		ug/L			479414	505432	1	Standard
	Cr	52	25.302	ug/L	0.658	2	20356	467562	2	Standard
	Cr	53	25.243	ug/L	0.473	1	160	51912	2	Standard
	Fe	54	11.975	ug/L	1.141	9	67040	87296	1	Standard
	Fe	57	1.292	ug/L	0.964	74	19150	20931	2	Standard
	Mn	55	24.138	ug/L	0.365	1	667	668270	0	Standard
>	Ge	72		ug/L			31347	32183	0	KED
	Ni	60	25.916	ug/L	0.706	2	4	28692	2	KED
	Ni	62	26.304	ug/L	0.750	2	3	4797	2	KED
	Cu	63	26.122	ug/L	0.335	1	53	84322	0	KED
	Cu	65	25.981	ug/L	0.971	3	21	41757	3	KED
	Zn	66	79.260	ug/L	2.131	2	18	34095	2	KED
	Zn	67	74.447	ug/L	2.150	2	5	5407	3	KED
	As	75	23.513	ug/L	0.415	1	5	5417	1	KED
	Y	89		ug/L			275831	283938	2	Standard
	Kr	83		ug/L			40	44	17	Standard
>	In-1	115		ug/L			9714	10002	2	KED
	Cd	111	25.054	ug/L	0.733	2	2	7194	0	KED
	Cd	114	25.273	ug/L	0.320	1	3	17626	1	KED
>	In	115		ug/L			369046	400571	0	Standard
	Ag	107	25.743	ug/L	0.282	1	22	344544	0	Standard
>	Tb	159		ug/L			669567	702257	2	Standard
	Pb	208	26.270	ug/L	0.265	1	60	1043999	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-01
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 17:40:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	34466	4	Standard
	Cl	**37**		ug/L			5434030	5583045	0	Standard
>	**Sc**	**45**		ug/L			479414	587277	0	Standard
	Cr	**52**	**8.463**	ug/L	0.123	1	20356	198327	2	Standard
	Cr	**53**	**8.589**	ug/L	0.169	1	160	20649	1	Standard
	Fe	**54**	**7416.984**	ug/L	193.881	2	67040	12048568	2	Standard
	Fe	**57**	**7602.120**	ug/L	136.580	1	19150	5100328	0	Standard
	Mn	**55**	**84.634**	ug/L	2.641	3	667	2720315	2	Standard
>	**Ge**	**72**		ug/L			31347	32830	1	KED
	Ni	**60**	**6.464**	ug/L	0.140	2	4	7303	1	KED
	Ni	**62**	**6.319**	ug/L	0.139	2	3	1179	3	KED
	Cu	**63**	**13.807**	ug/L	0.213	1	53	45497	2	KED
	Cu	**65**	**13.726**	ug/L	0.202	1	21	22518	1	KED
	Zn	**66**	**27.587**	ug/L	1.149	4	18	12114	3	KED
	Zn	**67**	**26.644**	ug/L	0.228	0	5	1977	0	KED
	As	**75**	**2.999**	ug/L	0.149	4	5	709	3	KED
	Y	**89**		ug/L			275831	426994	1	Standard
	Kr	**83**		ug/L			40	78	4	Standard
>	**In-1**	**115**		ug/L			9714	10121	1	KED
	Cd	**111**	**0.228**	ug/L	0.007	3	2	68	3	KED
	Cd	**114**	**0.226**	ug/L	0.017	7	3	162	7	KED
>	**In**	**115**		ug/L			369046	400141	1	Standard
	Ag	**107**	**0.232**	ug/L	0.005	2	22	3122	3	Standard
>	**Tb**	**159**		ug/L			669567	726363	2	Standard
	Pb	**208**	**8.586**	ug/L	0.190	2	60	352894	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-02
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 17:44:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	34298	0	Standard
	Cl	**37**		ug/L			5434030	5661488	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	577819	0	Standard
|	**Cr**	**52**	**7.767**	ug/L	0.218	2	20356	181074	1	Standard
|	**Cr**	**53**	**7.897**	ug/L	0.073	0	160	18697	0	Standard
|	**Fe**	**54**	**6649.225**	ug/L	116.453	1	67040	10636183	1	Standard
|	**Fe**	**57**	**6844.788**	ug/L	90.289	1	19150	4520839	0	Standard
⌊	**Mn**	**55**	**71.929**	ug/L	2.101	2	667	2274950	2	Standard
⌈>	**Ge**	**72**		ug/L			31347	31993	1	KED
|	**Ni**	**60**	**5.898**	ug/L	0.111	1	4	6496	2	KED
|	**Ni**	**62**	**5.896**	ug/L	0.422	7	3	1071	6	KED
|	**Cu**	**63**	**13.290**	ug/L	0.247	1	53	42672	1	KED
|	**Cu**	**65**	**13.280**	ug/L	0.187	1	21	21230	0	KED
|	**Zn**	**66**	**28.734**	ug/L	0.567	1	18	12299	2	KED
|	**Zn**	**67**	**27.355**	ug/L	1.667	6	5	1977	4	KED
⌊	**As**	**75**	**3.208**	ug/L	0.059	1	5	739	3	KED
	Y	**89**		ug/L			275831	408245	2	Standard
	Kr	**83**		ug/L			40	71	8	Standard
⌈>	**In-1**	**115**		ug/L			9714	9662	1	KED
|	**Cd**	**111**	**0.221**	ug/L	0.026	11	2	63	11	KED
⌊	**Cd**	**114**	**0.219**	ug/L	0.026	11	3	150	12	KED
⌈>	**In**	**115**		ug/L			369046	393985	1	Standard
⌊	**Ag**	**107**	**0.185**	ug/L	0.004	2	22	2464	1	Standard
⌈>	**Tb**	**159**		ug/L			669567	727446	1	Standard
⌊	**Pb**	**208**	**7.946**	ug/L	0.210	2	60	327071	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-03
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 17:49:26
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	34175	1	Standard
	Cl	37		ug/L			5434030	5637375	1	Standard
>	Sc	45		ug/L			479414	594335	1	Standard
	Cr	52	7.153	ug/L	0.304	4	20356	173481	1	Standard
	Cr	53	7.399	ug/L	0.060	0	160	18030	1	Standard
	Fe	54	7188.145	ug/L	218.764	3	67040	11817796	1	Standard
	Fe	57	7325.590	ug/L	32.526	0	19150	4975063	1	Standard
	Mn	55	102.974	ug/L	1.925	1	667	3349333	0	Standard
>	Ge	72		ug/L			31347	32452	2	KED
	Ni	60	7.436	ug/L	0.426	5	4	8298	3	KED
	Ni	62	7.220	ug/L	0.232	3	3	1330	1	KED
	Cu	63	14.865	ug/L	0.389	2	53	48392	0	KED
	Cu	65	14.939	ug/L	0.512	3	21	24213	1	KED
	Zn	66	29.560	ug/L	0.303	1	18	12833	2	KED
	Zn	67	29.716	ug/L	1.676	5	5	2177	3	KED
	As	75	3.037	ug/L	0.044	1	5	710	2	KED
	Y	89		ug/L			275831	416066	0	Standard
	Kr	83		ug/L			40	67	9	Standard
>	In-1	115		ug/L			9714	10031	1	KED
	Cd	111	0.107	ug/L	0.015	14	2	33	12	KED
	Cd	114	0.107	ug/L	0.021	20	3	77	19	KED
>	In	115		ug/L			369046	407182	1	Standard
	Ag	107	0.101	ug/L	0.005	5	22	1403	5	Standard
>	Tb	159		ug/L			669567	732111	0	Standard
	Pb	208	9.571	ug/L	0.077	0	60	396624	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-04
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 17:53:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	34320	2	Standard
	Cl	**37**		ug/L			5434030	5602585	3	Standard
⌈>	**Sc**	**45**		ug/L			479414	587487	0	Standard
|	**Cr**	**52**	**6.498**	ug/L	0.115	1	20356	158112	1	Standard
|	**Cr**	**53**	**6.558**	ug/L	0.069	1	160	15821	1	Standard
|	**Fe**	**54**	**6879.397**	ug/L	237.394	3	67040	11184609	2	Standard
|	**Fe**	**57**	**7150.528**	ug/L	94.077	1	19150	4800794	1	Standard
⌊	**Mn**	**55**	**79.465**	ug/L	2.196	2	667	2555269	2	Standard
⌈>	**Ge**	**72**		ug/L			31347	32771	2	KED
|	**Ni**	**60**	**6.219**	ug/L	0.258	4	4	7011	2	KED
|	**Ni**	**62**	**6.126**	ug/L	0.417	6	3	1139	4	KED
|	**Cu**	**63**	**13.009**	ug/L	0.301	2	53	42777	0	KED
|	**Cu**	**65**	**12.966**	ug/L	0.137	1	21	21231	1	KED
|	**Zn**	**66**	**25.281**	ug/L	0.808	3	18	11081	1	KED
|	**Zn**	**67**	**25.209**	ug/L	0.394	1	5	1867	1	KED
⌊	**As**	**75**	**2.574**	ug/L	0.065	2	5	608	0	KED
	Y	**89**		ug/L			275831	415935	0	Standard
	Kr	**83**		ug/L			40	69	17	Standard
⌈>	**In-1**	**115**		ug/L			9714	10092	1	KED
|	**Cd**	**111**	**0.082**	ug/L	0.024	28	2	26	24	KED
⌊	**Cd**	**114**	**0.091**	ug/L	0.017	18	3	67	16	KED
⌈>	**In**	**115**		ug/L			369046	403075	1	Standard
⌊	**Ag**	**107**	**0.063**	ug/L	0.005	7	22	867	7	Standard
⌈>	**Tb**	**159**		ug/L			669567	732372	0	Standard
⌊	**Pb**	**208**	**6.544**	ug/L	0.035	0	60	271317	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-05
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 17:58:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	35751	2	Standard
	Cl	37		ug/L			5434030	5546257	1	Standard
>	Sc	45		ug/L			479414	582302	1	Standard
	Cr	52	7.152	ug/L	0.303	4	20356	169968	2	Standard
	Cr	53	7.207	ug/L	0.057	0	160	17213	1	Standard
	Fe	54	7135.587	ug/L	156.935	2	67040	11495385	0	Standard
	Fe	57	7213.598	ug/L	26.144	0	19150	4800242	1	Standard
	Mn	55	93.625	ug/L	0.904	0	667	2984064	0	Standard
>	Ge	72		ug/L			31347	32680	2	KED
	Ni	60	6.744	ug/L	0.157	2	4	7583	1	KED
	Ni	62	6.724	ug/L	0.226	3	3	1247	1	KED
	Cu	63	17.545	ug/L	0.865	4	53	57488	3	KED
	Cu	65	17.715	ug/L	0.332	1	21	28915	1	KED
	Zn	66	32.924	ug/L	0.918	2	18	14385	0	KED
	Zn	67	32.319	ug/L	0.672	2	5	2386	3	KED
	As	75	3.149	ug/L	0.130	4	5	741	3	KED
	Y	89		ug/L			275831	412371	0	Standard
	Kr	83		ug/L			40	67	10	Standard
>	In-1	115		ug/L			9714	9926	1	KED
	Cd	111	0.140	ug/L	0.002	1	2	42	2	KED
	Cd	114	0.129	ug/L	0.012	9	3	92	10	KED
>	In	115		ug/L			369046	396698	3	Standard
	Ag	107	0.104	ug/L	0.005	4	22	1400	3	Standard
>	Tb	159		ug/L			669567	724072	0	Standard
	Pb	208	11.862	ug/L	0.022	0	60	486129	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0295-06
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 18:03:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	35655	2	Standard
	Cl	37		ug/L			5434030	5525912	2	Standard
>	Sc	45		ug/L			479414	575944	1	Standard
	Cr	52	6.442	ug/L	0.125	1	20356	153888	1	Standard
	Cr	53	6.477	ug/L	0.049	0	160	15320	0	Standard
	Fe	54	6611.168	ug/L	81.458	1	67040	10541254	0	Standard
	Fe	57	6671.305	ug/L	39.185	0	19150	4392566	0	Standard
	Mn	55	76.051	ug/L	0.503	0	667	2397655	0	Standard
>	Ge	72		ug/L			31347	32317	0	KED
	Ni	60	6.120	ug/L	0.159	2	4	6807	1	KED
	Ni	62	5.750	ug/L	0.158	2	3	1056	3	KED
	Cu	63	14.462	ug/L	0.320	2	53	46913	3	KED
	Cu	65	14.745	ug/L	0.303	2	21	23810	1	KED
	Zn	66	27.654	ug/L	0.703	2	18	11956	1	KED
	Zn	67	27.686	ug/L	0.698	2	5	2022	2	KED
	As	75	2.642	ug/L	0.016	0	5	616	0	KED
	Y	89		ug/L			275831	396339	0	Standard
	Kr	83		ug/L			40	57	29	Standard
>	In-1	115		ug/L			9714	10011	2	KED
	Cd	111	0.088	ug/L	0.015	17	2	27	17	KED
	Cd	114	0.086	ug/L	0.011	12	3	63	9	KED
>	In	115		ug/L			369046	396020	1	Standard
	Ag	107	0.075	ug/L	0.002	2	22	1013	1	Standard
>	Tb	159		ug/L			669567	720096	0	Standard
	Pb	208	7.751	ug/L	0.105	1	60	315963	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0249-03
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 18:07:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	49820	2	Standard
	Cl	37		ug/L			5434030	5626324	0	Standard
>	Sc	45		ug/L			479414	569608	2	Standard
	Cr	52	6.300	ug/L	0.152	2	20356	149338	2	Standard
	Cr	53	6.405	ug/L	0.187	2	160	14978	0	Standard
	Fe	54	6341.476	ug/L	177.053	2	67040	9999080	0	Standard
	Fe	57	6400.531	ug/L	74.147	1	19150	4168236	1	Standard
	Mn	55	82.813	ug/L	2.647	3	667	2580897	1	Standard
>	Ge	72		ug/L			31347	32162	1	KED
	Ni	60	5.275	ug/L	0.161	3	4	5838	1	KED
	Ni	62	5.102	ug/L	0.201	3	3	932	2	KED
	Cu	63	13.078	ug/L	0.168	1	53	42222	2	KED
	Cu	65	13.113	ug/L	0.223	1	21	21072	1	KED
	Zn	66	26.308	ug/L	0.756	2	18	11320	2	KED
	Zn	67	24.781	ug/L	0.962	3	5	1802	4	KED
	As	75	2.764	ug/L	0.046	1	5	641	0	KED
	Y	89		ug/L			275831	409351	3	Standard
	Kr	83		ug/L			40	62	12	Standard
>	In-1	115		ug/L			9714	9949	1	KED
	Cd	111	0.092	ug/L	0.004	4	2	28	5	KED
	Cd	114	0.083	ug/L	0.036	43	3	60	40	KED
>	In	115		ug/L			369046	395421	1	Standard
	Ag	107	0.072	ug/L	0.005	6	22	970	5	Standard
>	Tb	159		ug/L			669567	727128	2	Standard
	Pb	208	6.549	ug/L	0.030	0	60	269560	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0249-04
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 18:12:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	51210	1	Standard
	Cl	**37**		ug/L			5434030	5593305	0	Standard
⌈>	**Sc**	**45**		ug/L			479414	568861	1	Standard
|	**Cr**	**52**	**6.371**	ug/L	0.127	1	20356	150565	0	Standard
|	**Cr**	**53**	**6.427**	ug/L	0.084	1	160	15014	1	Standard
|	**Fe**	**54**	**6555.608**	ug/L	176.480	2	67040	10323593	2	Standard
|	**Fe**	**57**	**6518.344**	ug/L	58.757	0	19150	4240193	2	Standard
⌊	**Mn**	**55**	**62.034**	ug/L	0.655	1	667	1931713	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	32497	1	KED
|	**Ni**	**60**	**5.444**	ug/L	0.115	2	4	6089	1	KED
|	**Ni**	**62**	**5.377**	ug/L	0.255	4	3	993	3	KED
|	**Cu**	**63**	**11.434**	ug/L	0.159	1	53	37305	2	KED
|	**Cu**	**65**	**11.535**	ug/L	0.465	4	21	18726	2	KED
|	**Zn**	**66**	**24.056**	ug/L	0.419	1	18	10460	1	KED
|	**Zn**	**67**	**23.211**	ug/L	0.466	2	5	1705	1	KED
⌊	**As**	**75**	**2.210**	ug/L	0.047	2	5	519	3	KED
	Y	**89**		ug/L			275831	398290	1	Standard
	Kr	**83**		ug/L			40	59	7	Standard
⌈>	**In-1**	**115**		ug/L			9714	10099	0	KED
|	**Cd**	**111**	**0.095**	ug/L	0.013	14	2	30	12	KED
⌊	**Cd**	**114**	**0.093**	ug/L	0.011	11	3	68	12	KED
⌈>	**In**	**115**		ug/L			369046	407956	1	Standard
⌊	**Ag**	**107**	**0.065**	ug/L	0.002	2	22	917	1	Standard
⌈>	**Tb**	**159**		ug/L			669567	719334	0	Standard
⌊	**Pb**	**208**	**5.213**	ug/L	0.042	0	60	212299	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 18:16:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	26817	0	Standard
	Cl	**37**		ug/L			5434030	5390819	0	Standard
⎡>	**Sc**	**45**		ug/L			479414	493481	1	Standard
⎢	**Cr**	**52**	**0.008**	ug/L	0.016	195	20356	21097	2	Standard
⎢	**Cr**	**53**	**-0.010**	ug/L	0.011	111	160	145	14	Standard
⎢	**Fe**	**54**	**1.556**	ug/L	0.748	48	67040	71109	0	Standard
⎢	**Fe**	**57**	**5.460**	ug/L	1.965	35	19150	22780	5	Standard
⎣	**Mn**	**55**	**0.004**	ug/L	0.000	3	667	790	1	Standard
⎡>	**Ge**	**72**		ug/L			31347	31546	0	KED
⎢	**Ni**	**60**	**0.001**	ug/L	0.006	552	4	5	120	KED
⎢	**Ni**	**62**	**-0.011**	ug/L	0.011	97	3	1	100	KED
⎢	**Cu**	**63**	**0.001**	ug/L	0.004	378	53	57	23	KED
⎢	**Cu**	**65**	**0.008**	ug/L	0.003	42	21	34	14	KED
⎢	**Zn**	**66**	**0.043**	ug/L	0.006	12	18	36	5	KED
⎢	**Zn**	**67**	**0.035**	ug/L	0.047	132	5	7	43	KED
⎣	**As**	**75**	**0.003**	ug/L	0.003	97	5	6	12	KED
	Y	**89**		ug/L			275831	273268	1	Standard
	Kr	**83**		ug/L			40	35	26	Standard
⎡>	**In-1**	**115**		ug/L			9714	9775	0	KED
⎢	**Cd**	**111**	**0.004**	ug/L	0.003	76	2	3	25	KED
⎣	**Cd**	**114**	**-0.003**	ug/L	0.002	55	3	1	94	KED
⎡>	**In**	**115**		ug/L			369046	381873	0	Standard
⎣	**Ag**	**107**	**0.000**	ug/L	0.001	360	22	26	32	Standard
⎡>	**Tb**	**159**		ug/L			669567	684511	2	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.000	10	60	128	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 18:21:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	26445	1	Standard
	Cl	**37**		ug/L			5434030	5664345	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	509712	1	Standard
|	**Cr**	**52**	**49.528**	ug/L	0.236	0	20356	902358	1	Standard
|	**Cr**	**53**	**49.724**	ug/L	0.305	0	160	102944	0	Standard
|	**Fe**	**54**	**4973.579**	ug/L	93.325	1	67040	7035411	0	Standard
|	**Fe**	**57**	**5222.048**	ug/L	173.089	3	19150	3046523	1	Standard
⌊	**Mn**	**55**	**46.966**	ug/L	1.113	2	667	1310511	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	31829	1	KED
|	**Ni**	**60**	**51.261**	ug/L	1.345	2	4	56124	2	KED
|	**Ni**	**62**	**50.611**	ug/L	0.458	0	3	9127	1	KED
|	**Cu**	**63**	**50.723**	ug/L	0.106	0	53	161891	1	KED
|	**Cu**	**65**	**50.642**	ug/L	1.713	3	21	80469	2	KED
|	**Zn**	**66**	**51.584**	ug/L	1.992	3	18	21945	2	KED
|	**Zn**	**67**	**50.583**	ug/L	1.433	2	5	3634	2	KED
⌊	**As**	**75**	**49.625**	ug/L	0.811	1	5	11301	0	KED
	Y	**89**		ug/L			275831	287002	0	Standard
	Kr	**83**		ug/L			40	45	18	Standard
⌈>	**In-1**	**115**		ug/L			9714	10167	0	KED
|	**Cd**	**111**	**48.734**	ug/L	0.153	0	2	14230	0	KED
⌊	**Cd**	**114**	**49.291**	ug/L	0.768	1	3	34948	1	KED
⌈>	**In**	**115**		ug/L			369046	392976	0	Standard
⌊	**Ag**	**107**	**51.033**	ug/L	1.512	2	22	670100	3	Standard
⌈>	**Tb**	**159**		ug/L			669567	713494	1	Standard
⌊	**Pb**	**208**	**50.157**	ug/L	0.695	1	60	2025223	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 18:28:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	24897	1	Standard
	Cl	**37**		ug/L			5434030	5568963	1	Standard
⎡>	**Sc**	**45**		ug/L			479414	490604	2	Standard
⎢	**Cr**	**52**	**-0.016**	ug/L	0.035	218	20356	20553	2	Standard
⎢	**Cr**	**53**	**-0.010**	ug/L	0.008	79	160	145	12	Standard
⎢	**Fe**	**54**	**0.840**	ug/L	0.699	83	67040	69727	1	Standard
⎢	**Fe**	**57**	**3.244**	ug/L	1.509	46	19150	21395	1	Standard
⎣	**Mn**	**55**	**0.003**	ug/L	0.002	68	667	752	7	Standard
⎡>	**Ge**	**72**		ug/L			31347	30583	2	KED
⎢	**Ni**	**60**	**0.002**	ug/L	0.001	47	4	6	17	KED
⎢	**Ni**	**62**	**0.000**	ug/L	0.011	2284	3	3	50	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.002	213	53	49	10	KED
⎢	**Cu**	**65**	**0.005**	ug/L	0.003	60	21	28	17	KED
⎢	**Zn**	**66**	**0.012**	ug/L	0.012	101	18	22	22	KED
⎢	**Zn**	**67**	**-0.026**	ug/L	0.043	168	5	3	91	KED
⎣	**As**	**75**	**0.003**	ug/L	0.008	249	5	5	33	KED
	Y	**89**		ug/L			275831	275551	2	Standard
	Kr	**83**		ug/L			40	40	17	Standard
⎡>	**In-1**	**115**		ug/L			9714	9621	0	KED
⎢	**Cd**	**111**	**0.000**	ug/L	0.005	4553	2	2	57	KED
⎣	**Cd**	**114**	**0.002**	ug/L	0.006	333	3	4	95	KED
⎡>	**In**	**115**		ug/L			369046	391091	0	Standard
⎣	**Ag**	**107**	**0.002**	ug/L	0.002	111	22	45	51	Standard
⎡>	**Tb**	**159**		ug/L			669567	664459	1	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.003	104	60	150	62	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0313-08
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 18:38:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	51279	1	Standard
	Cl	**37**		ug/L			5434030	5616708	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	579682	1	Standard
|	**Cr**	**52**	**6.665**	ug/L	0.138	2	20356	159389	1	Standard
|	**Cr**	**53**	**6.709**	ug/L	0.078	1	160	15964	0	Standard
|	**Fe**	**54**	**7018.365**	ug/L	121.646	1	67040	11257154	0	Standard
|	**Fe**	**57**	**6987.292**	ug/L	87.444	1	19150	4628960	0	Standard
⌊	**Mn**	**55**	**91.759**	ug/L	1.088	1	667	2911592	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	31680	0	KED
|	**Ni**	**60**	**5.896**	ug/L	0.054	0	4	6430	1	KED
|	**Ni**	**62**	**5.762**	ug/L	0.210	3	3	1037	2	KED
|	**Cu**	**63**	**12.031**	ug/L	0.215	1	53	38264	2	KED
|	**Cu**	**65**	**12.459**	ug/L	0.182	1	21	19725	1	KED
|	**Zn**	**66**	**28.231**	ug/L	0.376	1	18	11965	0	KED
|	**Zn**	**67**	**26.925**	ug/L	0.583	2	5	1928	2	KED
⌊	**As**	**75**	**2.878**	ug/L	0.101	3	5	657	3	KED
	Y	**89**		ug/L			275831	404222	1	Standard
	Kr	**83**		ug/L			40	59	9	Standard
⌈>	**In-1**	**115**		ug/L			9714	9857	1	KED
|	**Cd**	**111**	**0.112**	ug/L	0.037	32	2	34	29	KED
⌊	**Cd**	**114**	**0.080**	ug/L	0.012	14	3	58	15	KED
⌈>	**In**	**115**		ug/L			369046	396248	0	Standard
⌊	**Ag**	**107**	**0.080**	ug/L	0.004	5	22	1083	5	Standard
⌈>	**Tb**	**159**		ug/L			669567	724606	0	Standard
⌊	**Pb**	**208**	**5.401**	ug/L	0.082	1	60	221541	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0313-09
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 18:42:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	50035	1	Standard
	Cl	37		ug/L			5434030	5618840	0	Standard
>	Sc	45		ug/L			479414	575490	0	Standard
	Cr	52	6.472	ug/L	0.127	1	20356	154358	1	Standard
	Cr	53	6.761	ug/L	0.112	1	160	15970	1	Standard
	Fe	54	6985.863	ug/L	65.660	0	67040	11126729	1	Standard
	Fe	57	7225.760	ug/L	143.443	1	19150	4751977	1	Standard
	Mn	55	92.311	ug/L	0.861	0	667	2907896	0	Standard
>	Ge	72		ug/L			31347	32450	1	KED
	Ni	60	6.356	ug/L	0.194	3	4	7098	3	KED
	Ni	62	6.127	ug/L	0.426	6	3	1129	6	KED
	Cu	63	14.013	ug/L	0.157	1	53	45641	2	KED
	Cu	65	14.459	ug/L	0.371	2	21	23449	3	KED
	Zn	66	30.748	ug/L	1.152	3	18	13345	3	KED
	Zn	67	29.405	ug/L	0.407	1	5	2156	1	KED
	As	75	3.012	ug/L	0.040	1	5	704	2	KED
	Y	89		ug/L			275831	402617	0	Standard
	Kr	83		ug/L			40	55	36	Standard
>	In-1	115		ug/L			9714	9945	1	KED
	Cd	111	0.074	ug/L	0.016	22	2	23	20	KED
	Cd	114	0.080	ug/L	0.013	16	3	58	16	KED
>	In	115		ug/L			369046	397731	1	Standard
	Ag	107	0.054	ug/L	0.003	5	22	743	5	Standard
>	Tb	159		ug/L			669567	726715	1	Standard
	Pb	208	5.422	ug/L	0.055	1	60	223043	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0313-10
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 18:47:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	53224	3	Standard
	Cl	**37**		ug/L			5434030	5592782	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	568229	1	Standard
|	**Cr**	**52**	**6.752**	ug/L	0.135	1	20356	157949	1	Standard
|	**Cr**	**53**	**6.887**	ug/L	0.070	1	160	16058	0	Standard
|	**Fe**	**54**	**7347.410**	ug/L	228.811	3	67040	11547108	1	Standard
|	**Fe**	**57**	**7552.331**	ug/L	162.453	2	19150	4902857	2	Standard
⌊	**Mn**	**55**	**87.789**	ug/L	1.403	1	667	2730270	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	31988	1	KED
|	**Ni**	**60**	**6.303**	ug/L	0.158	2	4	6940	2	KED
|	**Ni**	**62**	**6.355**	ug/L	0.277	4	3	1154	3	KED
|	**Cu**	**63**	**13.619**	ug/L	0.108	0	53	43722	0	KED
|	**Cu**	**65**	**13.486**	ug/L	0.407	3	21	21562	4	KED
|	**Zn**	**66**	**27.610**	ug/L	0.652	2	18	11815	0	KED
|	**Zn**	**67**	**26.608**	ug/L	0.168	0	5	1923	0	KED
⌊	**As**	**75**	**2.960**	ug/L	0.065	2	5	682	3	KED
	Y	**89**		ug/L			275831	406138	0	Standard
	Kr	**83**		ug/L			40	58	23	Standard
⌈>	**In-1**	**115**		ug/L			9714	10041	0	KED
|	**Cd**	**111**	**0.073**	ug/L	0.012	16	2	23	14	KED
⌊	**Cd**	**114**	**0.078**	ug/L	0.014	18	3	57	16	KED
⌈>	**In**	**115**		ug/L			369046	398678	1	Standard
⌊	**Ag**	**107**	**0.061**	ug/L	0.004	7	22	841	6	Standard
⌈>	**Tb**	**159**		ug/L			669567	723667	0	Standard
⌊	**Pb**	**208**	**6.017**	ug/L	0.056	0	60	246514	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0313-11
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 18:51:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	52902	3	Standard
	Cl	37		ug/L			5434030	5686957	0	Standard
>	Sc	45		ug/L			479414	590084	1	Standard
	Cr	52	7.217	ug/L	0.113	1	20356	173604	0	Standard
	Cr	53	7.334	ug/L	0.097	1	160	17746	0	Standard
	Fe	54	7099.703	ug/L	134.821	1	67040	11591172	0	Standard
	Fe	57	7124.306	ug/L	52.576	0	19150	4804918	2	Standard
	Mn	55	79.459	ug/L	0.481	0	667	2566598	1	Standard
>	Ge	72		ug/L			31347	31335	1	KED
	Ni	60	7.145	ug/L	0.028	0	4	7706	1	KED
	Ni	62	6.998	ug/L	0.224	3	3	1245	3	KED
	Cu	63	14.678	ug/L	0.279	1	53	46155	1	KED
	Cu	65	15.004	ug/L	0.412	2	21	23486	1	KED
	Zn	66	29.393	ug/L	1.081	3	18	12318	2	KED
	Zn	67	28.542	ug/L	0.680	2	5	2021	1	KED
	As	75	2.940	ug/L	0.137	4	5	663	3	KED
	Y	89		ug/L			275831	413559	1	Standard
	Kr	83		ug/L			40	59	5	Standard
>	In-1	115		ug/L			9714	9827	0	KED
	Cd	111	0.100	ug/L	0.028	27	2	30	25	KED
	Cd	114	0.091	ug/L	0.028	30	3	65	28	KED
>	In	115		ug/L			369046	394520	1	Standard
	Ag	107	0.083	ug/L	0.001	1	22	1124	2	Standard
>	Tb	159		ug/L			669567	721875	1	Standard
	Pb	208	7.188	ug/L	0.150	2	60	293633	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0313-13
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 18:56:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	54158	2	Standard
	Cl	**37**		ug/L			5434030	5603859	0	Standard
⌈>	**Sc**	**45**		ug/L			479414	569807	1	Standard
|	**Cr**	**52**	**6.582**	ug/L	0.098	1	20356	155009	0	Standard
|	**Cr**	**53**	**6.638**	ug/L	0.201	3	160	15525	2	Standard
|	**Fe**	**54**	**6895.991**	ug/L	116.627	1	67040	10873470	0	Standard
|	**Fe**	**57**	**6926.981**	ug/L	185.959	2	19150	4510146	1	Standard
⌊	**Mn**	**55**	**59.268**	ug/L	0.673	1	667	1848647	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	32416	1	KED
|	**Ni**	**60**	**5.432**	ug/L	0.047	0	4	6062	0	KED
|	**Ni**	**62**	**5.527**	ug/L	0.121	2	3	1018	1	KED
|	**Cu**	**63**	**15.015**	ug/L	0.443	2	53	48837	2	KED
|	**Cu**	**65**	**14.988**	ug/L	0.206	1	21	24276	1	KED
|	**Zn**	**66**	**29.229**	ug/L	0.582	1	18	12676	2	KED
|	**Zn**	**67**	**26.545**	ug/L	0.990	3	5	1945	4	KED
⌊	**As**	**75**	**2.654**	ug/L	0.105	3	5	620	2	KED
	Y	**89**		ug/L			275831	390370	1	Standard
	Kr	**83**		ug/L			40	52	9	Standard
⌈>	**In-1**	**115**		ug/L			9714	10175	3	KED
|	**Cd**	**111**	**0.076**	ug/L	0.016	21	2	24	19	KED
⌊	**Cd**	**114**	**0.071**	ug/L	0.014	18	3	53	14	KED
⌈>	**In**	**115**		ug/L			369046	406676	0	Standard
⌊	**Ag**	**107**	**0.053**	ug/L	0.005	8	22	748	9	Standard
⌈>	**Tb**	**159**		ug/L			669567	722072	0	Standard
⌊	**Pb**	**208**	**5.705**	ug/L	0.073	1	60	233189	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0249-02
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 19:00:46
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	50747	2	Standard
	Cl	**37**		ug/L			5434030	5600185	0	Standard
⌈>	**Sc**	**45**		ug/L			479414	575386	2	Standard
|	**Cr**	**52**	**6.528**	ug/L	0.161	2	20356	155424	0	Standard
|	**Cr**	**53**	**6.523**	ug/L	0.090	1	160	15410	1	Standard
|	**Fe**	**54**	**6691.329**	ug/L	194.682	2	67040	10654368	1	Standard
|	**Fe**	**57**	**6867.973**	ug/L	427.552	6	19150	4513043	3	Standard
⌊	**Mn**	**55**	**91.260**	ug/L	2.914	3	667	2872977	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	31771	1	KED
|	**Ni**	**60**	**5.849**	ug/L	0.085	1	4	6396	2	KED
|	**Ni**	**62**	**5.801**	ug/L	0.094	1	3	1047	2	KED
|	**Cu**	**63**	**10.550**	ug/L	0.477	4	53	33633	2	KED
|	**Cu**	**65**	**10.662**	ug/L	0.111	1	21	16935	2	KED
|	**Zn**	**66**	**22.671**	ug/L	0.080	0	18	9640	1	KED
|	**Zn**	**67**	**21.980**	ug/L	1.217	5	5	1579	5	KED
⌊	**As**	**75**	**2.552**	ug/L	0.083	3	5	584	1	KED
	Y	**89**		ug/L			275831	415772	2	Standard
	Kr	**83**		ug/L			40	65	16	Standard
⌈>	**In-1**	**115**		ug/L			9714	10030	1	KED
|	**Cd**	**111**	**0.122**	ug/L	0.010	8	2	37	8	KED
⌊	**Cd**	**114**	**0.137**	ug/L	0.033	24	3	98	22	KED
⌈>	**In**	**115**		ug/L			369046	394623	0	Standard
⌊	**Ag**	**107**	**0.094**	ug/L	0.006	6	22	1264	5	Standard
⌈>	**Tb**	**159**		ug/L			669567	726951	0	Standard
⌊	**Pb**	**208**	**4.794**	ug/L	0.067	1	60	197291	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0244-DUP2
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 19:05:19
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	50433	1	Standard
	Cl	**37**		ug/L			5434030	5595678	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	570183	2	Standard
|	**Cr**	**52**	**6.370**	ug/L	0.216	3	20356	150846	0	Standard
|	**Cr**	**53**	**6.522**	ug/L	0.259	3	160	15262	1	Standard
|	**Fe**	**54**	**6645.833**	ug/L	242.639	3	67040	10485148	1	Standard
|	**Fe**	**57**	**6852.008**	ug/L	186.165	2	19150	4464539	1	Standard
⌊	**Mn**	**55**	**92.411**	ug/L	1.444	1	667	2883823	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	32105	1	KED
|	**Ni**	**60**	**5.931**	ug/L	0.142	2	4	6553	1	KED
|	**Ni**	**62**	**5.663**	ug/L	0.531	9	3	1033	8	KED
|	**Cu**	**63**	**10.354**	ug/L	0.202	1	53	33372	1	KED
|	**Cu**	**65**	**10.608**	ug/L	0.259	2	21	17026	3	KED
|	**Zn**	**66**	**22.438**	ug/L	0.112	0	18	9641	0	KED
|	**Zn**	**67**	**21.963**	ug/L	1.061	4	5	1594	3	KED
⌊	**As**	**75**	**2.506**	ug/L	0.064	2	5	580	1	KED
	Y	**89**		ug/L			275831	426254	1	Standard
	Kr	**83**		ug/L			40	55	23	Standard
⌈>	**In-1**	**115**		ug/L			9714	9837	0	KED
|	**Cd**	**111**	**0.132**	ug/L	0.049	37	2	39	34	KED
⌊	**Cd**	**114**	**0.130**	ug/L	0.016	12	3	92	12	KED
⌈>	**In**	**115**		ug/L			369046	397429	0	Standard
⌊	**Ag**	**107**	**0.087**	ug/L	0.001	0	22	1175	0	Standard
⌈>	**Tb**	**159**		ug/L			669567	723237	1	Standard
⌊	**Pb**	**208**	**5.039**	ug/L	0.042	0	60	206300	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0244-MS2
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 19:09:52
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	49726	1	Standard
	Cl	**37**		ug/L			5434030	5472722	1	Standard
>	**Sc**	**45**		ug/L			479414	573051	1	Standard
	Cr	**52**	**15.771**	ug/L	0.189	1	20356	339595	1	Standard
	Cr	**53**	**15.781**	ug/L	0.267	1	160	36860	0	Standard
	Fe	**54**	**6896.172**	ug/L	140.548	2	67040	10936843	1	Standard
	Fe	**57**	**6956.347**	ug/L	88.641	1	19150	4556116	0	Standard
	Mn	**55**	**105.117**	ug/L	2.128	2	667	3296786	1	Standard
>	**Ge**	**72**		ug/L			31347	32098	2	KED
	Ni	**60**	**15.866**	ug/L	0.554	3	4	17512	1	KED
	Ni	**62**	**15.688**	ug/L	0.159	1	3	2856	3	KED
	Cu	**63**	**20.684**	ug/L	0.249	1	53	66605	3	KED
	Cu	**65**	**20.851**	ug/L	1.040	4	21	33403	2	KED
	Zn	**66**	**55.511**	ug/L	0.953	1	18	23816	2	KED
	Zn	**67**	**51.880**	ug/L	1.757	3	5	3757	2	KED
	As	**75**	**12.256**	ug/L	0.041	0	5	2819	2	KED
	Y	**89**		ug/L			275831	416905	1	Standard
	Kr	**83**		ug/L			40	81	8	Standard
>	**In-1**	**115**		ug/L			9714	9905	1	KED
	Cd	**111**	**10.589**	ug/L	0.539	5	2	3012	3	KED
	Cd	**114**	**10.511**	ug/L	0.092	0	3	7263	2	KED
>	**In**	**115**		ug/L			369046	394600	1	Standard
	Ag	**107**	**5.843**	ug/L	0.108	1	22	77042	0	Standard
>	**Tb**	**159**		ug/L			669567	714477	1	Standard
	Pb	**208**	**16.183**	ug/L	0.339	2	60	654305	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0244-MSD2
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 19:14:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	51816	1	Standard
	Cl	**37**		ug/L			5434030	5707999	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	581742	1	Standard
|	**Cr**	**52**	**15.351**	ug/L	0.069	0	20356	336267	2	Standard
|	**Cr**	**53**	**15.452**	ug/L	0.094	0	160	36649	2	Standard
|	**Fe**	**54**	**6752.304**	ug/L	173.579	2	67040	10871615	1	Standard
|	**Fe**	**57**	**6766.765**	ug/L	124.483	1	19150	4499071	0	Standard
⌊	**Mn**	**55**	**99.663**	ug/L	2.325	2	667	3172669	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	32380	1	KED
|	**Ni**	**60**	**15.695**	ug/L	0.179	1	4	17486	0	KED
|	**Ni**	**62**	**15.432**	ug/L	0.046	0	3	2833	1	KED
|	**Cu**	**63**	**20.242**	ug/L	0.241	1	53	65761	2	KED
|	**Cu**	**65**	**20.519**	ug/L	0.185	0	21	33188	0	KED
|	**Zn**	**66**	**58.718**	ug/L	1.235	2	18	25417	2	KED
|	**Zn**	**67**	**56.870**	ug/L	1.790	3	5	4157	4	KED
⌊	**As**	**75**	**11.586**	ug/L	0.134	1	5	2688	1	KED
	Y	**89**		ug/L			275831	406965	1	Standard
	Kr	**83**		ug/L			40	59	25	Standard
⌈>	**In-1**	**115**		ug/L			9714	9810	3	KED
|	**Cd**	**111**	**10.151**	ug/L	0.651	6	2	2858	3	KED
⌊	**Cd**	**114**	**10.274**	ug/L	0.106	1	3	7030	2	KED
⌈>	**In**	**115**		ug/L			369046	388676	0	Standard
⌊	**Ag**	**107**	**5.003**	ug/L	0.077	1	22	64988	0	Standard
⌈>	**Tb**	**159**		ug/L			669567	704718	1	Standard
⌊	**Pb**	**208**	**15.655**	ug/L	0.296	1	60	624340	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0244-PS2
Sample Dil Factor: 50
Comments:
Sample Date/Time: Thursday, April 20, 2023 19:18:59
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	49958	1	Standard
	Cl	**37**		ug/L			5434030	5653079	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	586537	2	Standard
|	**Cr**	**52**	**28.392**	ug/L	0.433	1	20356	605722	1	Standard
|	**Cr**	**53**	**28.676**	ug/L	0.695	2	160	68376	1	Standard
|	**Fe**	**54**	**6420.242**	ug/L	222.742	3	67040	10422232	0	Standard
|	**Fe**	**57**	**6607.806**	ug/L	123.884	1	19150	4430245	2	Standard
⌊	**Mn**	**55**	**110.828**	ug/L	3.350	3	667	3556774	2	Standard
⌈>	**Ge**	**72**		ug/L			31347	32264	0	KED
|	**Ni**	**60**	**32.370**	ug/L	0.520	1	4	35933	2	KED
|	**Ni**	**62**	**31.848**	ug/L	0.888	2	3	5823	2	KED
|	**Cu**	**63**	**36.610**	ug/L	0.510	1	53	118462	1	KED
|	**Cu**	**65**	**37.692**	ug/L	0.256	0	21	60732	1	KED
|	**Zn**	**66**	**105.167**	ug/L	0.316	0	18	45347	0	KED
|	**Zn**	**67**	**98.669**	ug/L	2.048	2	5	7181	1	KED
⌊	**As**	**75**	**27.505**	ug/L	0.214	0	5	6352	0	KED
	Y	**89**		ug/L			275831	415917	0	Standard
	Kr	**83**		ug/L			40	74	12	Standard
⌈>	**In-1**	**115**		ug/L			9714	10024	1	KED
|	**Cd**	**111**	**25.585**	ug/L	0.148	0	2	7366	1	KED
⌊	**Cd**	**114**	**25.757**	ug/L	0.520	2	3	18003	0	KED
⌈>	**In**	**115**		ug/L			369046	397296	1	Standard
⌊	**Ag**	**107**	**26.096**	ug/L	0.651	2	22	346331	1	Standard
⌈>	**Tb**	**159**		ug/L			669567	727240	2	Standard
⌊	**Pb**	**208**	**30.496**	ug/L	0.531	1	60	1255083	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 19:23:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	26006	4	Standard
	Cl	**37**		ug/L			5434030	5743352	1	Standard
⎡>	**Sc**	**45**		ug/L			479414	506456	1	Standard
⎢	**Cr**	**52**	**49.473**	ug/L	1.378	2	20356	895295	0	Standard
⎢	**Cr**	**53**	**49.204**	ug/L	1.284	2	160	101192	0	Standard
⎢	**Fe**	**54**	**4984.079**	ug/L	86.514	1	67040	7004703	0	Standard
⎢	**Fe**	**57**	**5004.803**	ug/L	50.573	1	19150	2902562	1	Standard
⎣	**Mn**	**55**	**46.232**	ug/L	0.923	1	667	1281786	1	Standard
⎡>	**Ge**	**72**		ug/L			31347	31564	0	KED
⎢	**Ni**	**60**	**50.979**	ug/L	1.406	2	4	55357	2	KED
⎢	**Ni**	**62**	**49.679**	ug/L	0.831	1	3	8885	2	KED
⎢	**Cu**	**63**	**51.049**	ug/L	0.444	0	53	161581	1	KED
⎢	**Cu**	**65**	**51.672**	ug/L	1.127	2	21	81437	1	KED
⎢	**Zn**	**66**	**52.060**	ug/L	1.360	2	18	21969	2	KED
⎢	**Zn**	**67**	**50.292**	ug/L	0.759	1	5	3583	1	KED
⎣	**As**	**75**	**49.865**	ug/L	0.619	1	5	11263	1	KED
	Y	**89**		ug/L			275831	280198	0	Standard
	Kr	**83**		ug/L			40	48	8	Standard
⎡>	**In-1**	**115**		ug/L			9714	9800	3	KED
⎢	**Cd**	**111**	**50.483**	ug/L	1.761	3	2	14197	0	KED
⎣	**Cd**	**114**	**51.109**	ug/L	1.830	3	3	34902	0	KED
⎡>	**In**	**115**		ug/L			369046	386274	2	Standard
⎣	**Ag**	**107**	**50.775**	ug/L	0.826	1	22	655157	0	Standard
⎡>	**Tb**	**159**		ug/L			669567	698990	0	Standard
⎣	**Pb**	**208**	**49.728**	ug/L	0.517	1	60	1967300	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 19:30:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	22614	2	Standard
	Cl	**37**		ug/L			5434030	5560366	2	Standard
⎡>	**Sc**	**45**		ug/L			479414	479190	2	Standard
⎢	**Cr**	**52**	**0.006**	ug/L	0.041	657	20356	20438	0	Standard
⎢	**Cr**	**53**	**-0.010**	ug/L	0.008	78	160	141	7	Standard
⎢	**Fe**	**54**	**0.553**	ug/L	1.558	281	67040	67709	1	Standard
⎢	**Fe**	**57**	**4.315**	ug/L	0.495	11	19150	21488	1	Standard
⎣	**Mn**	**55**	**0.003**	ug/L	0.001	20	667	741	2	Standard
⎡>	**Ge**	**72**		ug/L			31347	30420	2	KED
⎢	**Ni**	**60**	**0.001**	ug/L	0.004	511	4	5	78	KED
⎢	**Ni**	**62**	**0.000**	ug/L	0.010	2138	3	3	50	KED
⎢	**Cu**	**63**	**-0.002**	ug/L	0.003	168	53	46	22	KED
⎢	**Cu**	**65**	**0.000**	ug/L	0.005	6308	21	20	32	KED
⎢	**Zn**	**66**	**-0.022**	ug/L	0.008	34	18	8	32	KED
⎢	**Zn**	**67**	**-0.007**	ug/L	0.033	509	5	4	49	KED
⎣	**As**	**75**	**0.001**	ug/L	0.006	772	5	5	24	KED
	Y	**89**		ug/L			275831	274092	2	Standard
	Kr	**83**		ug/L			40	46	14	Standard
⎡>	**In-1**	**115**		ug/L			9714	9564	0	KED
⎢	**Cd**	**111**	**0.002**	ug/L	0.005	218	2	3	45	KED
⎣	**Cd**	**114**	**-0.002**	ug/L	0.003	168	3	1	102	KED
⎡>	**In**	**115**		ug/L			369046	378407	0	Standard
⎣	**Ag**	**107**	**0.001**	ug/L	0.000	10	22	34	3	Standard
⎡>	**Tb**	**159**		ug/L			669567	663528	0	Standard
⎣	**Pb**	**208**	**0.000**	ug/L	0.000	97	60	70	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0472-BLK2
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Thursday, April 20, 2023 19:35:24
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	34521	1	Standard
	Cl	**37**		ug/L			5434030	5549248	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	484800	1	Standard
|	**Cr**	**52**	**0.092**	ug/L	0.021	22	20356	22143	3	Standard
|	**Cr**	**53**	**0.036**	ug/L	0.005	14	160	233	4	Standard
|	**Fe**	**54**	**6.537**	ug/L	0.644	9	67040	76496	1	Standard
|	**Fe**	**57**	**6.753**	ug/L	1.612	23	19150	23078	2	Standard
⌊	**Mn**	**55**	**0.107**	ug/L	0.001	1	667	3524	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	31002	1	KED
|	**Ni**	**60**	**0.035**	ug/L	0.016	44	4	41	39	KED
|	**Ni**	**62**	**0.037**	ug/L	0.034	91	3	10	57	KED
|	**Cu**	**63**	**0.033**	ug/L	0.011	32	53	154	20	KED
|	**Cu**	**65**	**0.037**	ug/L	0.010	26	21	78	19	KED
|	**Zn**	**66**	**0.587**	ug/L	0.110	18	18	260	16	KED
|	**Zn**	**67**	**0.428**	ug/L	0.066	15	5	34	12	KED
⌊	**As**	**75**	**0.012**	ug/L	0.007	53	5	7	19	KED
	Y	**89**		ug/L			275831	274022	1	Standard
	Kr	**83**		ug/L			40	38	10	Standard
⌈>	**In-1**	**115**		ug/L			9714	9700	3	KED
|	**Cd**	**111**	**0.001**	ug/L	0.003	287	2	2	33	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.001	214	3	2	35	KED
⌈>	**In**	**115**		ug/L			369046	389783	0	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	30	22	43	13	Standard
⌈>	**Tb**	**159**		ug/L			669567	681792	0	Standard
⌊	**Pb**	**208**	**0.111**	ug/L	0.003	2	60	4348	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0013-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 19:39:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	39368	1	Standard
	Cl	**37**		ug/L			5434030	6624872	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	512420	1	Standard
|	**Cr**	**52**	**0.239**	ug/L	0.011	4	20356	26032	0	Standard
|	**Cr**	**53**	**1.192**	ug/L	0.015	1	160	2649	2	Standard
|	**Fe**	**54**	**43.227**	ug/L	1.631	3	67040	132520	2	Standard
|	**Fe**	**57**	**67.202**	ug/L	1.489	2	19150	59624	0	Standard
⌊	**Mn**	**55**	**0.805**	ug/L	0.007	0	667	23298	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	31475	2	KED
|	**Ni**	**60**	**0.384**	ug/L	0.043	11	4	420	12	KED
|	**Ni**	**62**	**0.410**	ug/L	0.024	5	3	76	5	KED
|	**Cu**	**63**	**0.885**	ug/L	0.034	3	53	2844	1	KED
|	**Cu**	**65**	**0.843**	ug/L	0.015	1	21	1345	2	KED
|	**Zn**	**66**	**24.472**	ug/L	0.642	2	18	10303	0	KED
|	**Zn**	**67**	**26.301**	ug/L	1.227	4	5	1869	2	KED
⌊	**As**	**75**	**0.061**	ug/L	0.003	5	5	19	6	KED
	Y	**89**		ug/L			275831	283602	2	Standard
	Kr	**83**		ug/L			40	45	4	Standard
⌈>	**In-1**	**115**		ug/L			9714	9815	2	KED
|	**Cd**	**111**	**0.020**	ug/L	0.009	45	2	8	29	KED
⌊	**Cd**	**114**	**0.012**	ug/L	0.006	52	3	11	35	KED
⌈>	**In**	**115**		ug/L			369046	384465	0	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	78	22	38	30	Standard
⌈>	**Tb**	**159**		ug/L			669567	678898	1	Standard
⌊	**Pb**	**208**	**0.128**	ug/L	0.002	1	60	4970	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0017-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 19:44:31
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	48464	5	Standard
	Cl	**37**		ug/L			5434030	6472826	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	527074	2	Standard
|	**Cr**	**52**	**1.190**	ug/L	0.054	4	20356	44245	1	Standard
|	**Cr**	**53**	**1.907**	ug/L	0.028	1	160	4251	1	Standard
|	**Fe**	**54**	**2497.876**	ug/L	58.308	2	67040	3689547	1	Standard
|	**Fe**	**57**	**2329.041**	ug/L	70.077	3	19150	1416347	0	Standard
⌊	**Mn**	**55**	**46.231**	ug/L	1.156	2	667	1333587	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	31636	2	KED
|	**Ni**	**60**	**3.672**	ug/L	0.059	1	4	4001	2	KED
|	**Ni**	**62**	**3.635**	ug/L	0.202	5	3	654	3	KED
|	**Cu**	**63**	**11.409**	ug/L	0.398	3	53	36232	3	KED
|	**Cu**	**65**	**11.475**	ug/L	0.365	3	21	18135	1	KED
|	**Zn**	**66**	**148.795**	ug/L	4.886	3	18	62873	1	KED
|	**Zn**	**67**	**135.578**	ug/L	2.270	1	5	9675	3	KED
⌊	**As**	**75**	**0.766**	ug/L	0.028	3	5	178	1	KED
	Y	**89**		ug/L			275831	299660	0	Standard
	Kr	**83**		ug/L			40	41	12	Standard
⌈>	**In-1**	**115**		ug/L			9714	9711	1	KED
|	**Cd**	**111**	**0.056**	ug/L	0.011	20	2	18	18	KED
⌊	**Cd**	**114**	**0.034**	ug/L	0.003	9	3	26	10	KED
⌈>	**In**	**115**		ug/L			369046	387783	1	Standard
⌊	**Ag**	**107**	**0.016**	ug/L	0.001	3	22	225	4	Standard
⌈>	**Tb**	**159**		ug/L			669567	710505	0	Standard
⌊	**Pb**	**208**	**1.729**	ug/L	0.015	0	60	69607	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0018-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 19:49:04
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25789	21589	0	Standard
Cl	37		ug/L			5434030	162476718	1	Standard
> Sc	45		ug/L			479414	227872	1	Standard
Cr	52	**1.409**	ug/L	0.036	2	20356	20875	2	Standard
Cr	53	**87.832**	ug/L	1.133	1	160	81247	2	Standard
Fe	54	**47.500**	ug/L	0.814	1	67040	61598	1	Standard
Fe	57	**737.900**	ug/L	8.237	1	19150	200323	1	Standard
Mn	55	**15.810**	ug/L	0.178	1	667	197452	1	Standard
> Ge	72		ug/L			31347	8321	3	KED
Ni	60	**1.112**	ug/L	0.087	7	4	318	4	KED
Ni	62	**3.245**	ug/L	0.260	8	3	153	4	KED
Cu	63	**4.805**	ug/L	0.202	4	53	4018	1	KED
Cu	65	**3.993**	ug/L	0.094	2	21	1663	1	KED
Zn	66	**29.575**	ug/L	1.203	4	18	3289	1	KED
Zn	67	**27.839**	ug/L	1.194	4	5	523	3	KED
As	75	**2.021**	ug/L	0.086	4	5	121	2	KED
Y	89		ug/L			275831	132422	1	Standard
Kr	83		ug/L			40	63709	3	Standard
> In-1	115		ug/L			9714	3320	3	KED
Cd	111	**0.070**	ug/L	0.025	35	2	7	33	KED
Cd	114	**0.076**	ug/L	0.027	35	3	18	36	KED
> In	115		ug/L			369046	136206	1	Standard
Ag	107	**0.017**	ug/L	0.001	3	22	84	3	Standard
> Tb	159		ug/L			669567	275645	1	Standard
Pb	208	**0.118**	ug/L	0.002	2	60	1868	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0713-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 19:53:37
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	49356	2	Standard
	Cl	37		ug/L			5434030	12425477	1	Standard
>	Sc	45		ug/L			479414	552922	3	Standard
	Cr	52	**0.945**	ug/L	0.100	10	20356	41708	5	Standard
	Cr	53	**27.439**	ug/L	1.129	4	160	61715	5	Standard
	Fe	54	**259.521**	ug/L	0.092	0	67040	471583	3	Standard
	Fe	57	**267.323**	ug/L	3.938	1	19150	190192	3	Standard
	Mn	55	**5.723**	ug/L	0.190	3	667	173827	1	Standard
>	Ge	72		ug/L			31347	36983	2	KED
	Ni	60	**0.571**	ug/L	0.040	6	4	731	6	KED
	Ni	62	**0.808**	ug/L	0.176	21	3	173	19	KED
	Cu	63	**2.943**	ug/L	0.075	2	53	10971	1	KED
	Cu	65	**2.937**	ug/L	0.103	3	21	5445	2	KED
	Zn	66	**38.481**	ug/L	0.957	2	18	19027	0	KED
	Zn	67	**36.345**	ug/L	0.350	0	5	3036	2	KED
	As	75	**0.360**	ug/L	0.015	4	5	101	2	KED
	Y	89		ug/L			275831	309158	4	Standard
	Kr	83		ug/L			40	92	21	Standard
>	In-1	115		ug/L			9714	11170	1	KED
	Cd	111	**0.022**	ug/L	0.012	57	2	9	39	KED
	Cd	114	**0.011**	ug/L	0.008	70	3	12	51	KED
>	In	115		ug/L			369046	394403	1	Standard
	Ag	107	**0.004**	ug/L	0.000	10	22	81	7	Standard
>	Tb	159		ug/L			669567	731930	0	Standard
	Pb	208	**0.741**	ug/L	0.005	0	60	30771	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0714-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 19:58:11
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25789	29710	0	Standard
Cl	37		ug/L			5434030	150795830	3	Standard
> Sc	45		ug/L			479414	303739	1	Standard
Cr	52	**2.414**	ug/L	0.080	3	20356	38483	3	Standard
Cr	53	**105.404**	ug/L	2.310	2	160	129957	3	Standard
Fe	54	**1261.274**	ug/L	9.101	0	67040	1095030	1	Standard
Fe	57	**1713.739**	ug/L	26.911	1	19150	604036	0	Standard
Mn	55	**110.182**	ug/L	0.205	0	667	1831853	1	Standard
> Ge	72		ug/L			31347	11371	0	KED
Ni	60	**1.543**	ug/L	0.083	5	4	605	5	KED
Ni	62	**4.091**	ug/L	0.365	8	3	264	8	KED
Cu	63	**1.719**	ug/L	0.036	2	53	1978	2	KED
Cu	65	**1.085**	ug/L	0.046	4	21	623	4	KED
Zn	66	**20.361**	ug/L	0.560	2	18	3099	2	KED
Zn	67	**19.645**	ug/L	1.816	9	5	505	9	KED
As	75	**0.847**	ug/L	0.102	11	5	70	11	KED
Y	89		ug/L			275831	158282	0	Standard
Kr	83		ug/L			40	14329	0	Standard
> In-1	115		ug/L			9714	4310	1	KED
Cd	111	**0.042**	ug/L	0.016	37	2	6	31	KED
Cd	114	**0.032**	ug/L	0.006	17	3	11	16	KED
> In	115		ug/L			369046	165114	0	Standard
Ag	107	**0.011**	ug/L	0.002	21	22	72	18	Standard
> Tb	159		ug/L			669567	341413	1	Standard
Pb	208	**0.344**	ug/L	0.002	0	60	6677	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0716-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 20:02:44
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25789	54687	1	Standard
Cl	37		ug/L			5434030	12439452	3	Standard
> Sc	45		ug/L			479414	623236	0	Standard
Cr	52	1.577	ug/L	0.012	0	20356	60743	0	Standard
Cr	53	11.465	ug/L	0.315	2	160	29185	2	Standard
Fe	54	5539.271	ug/L	48.025	0	67040	9572532	1	Standard
Fe	57	5690.233	ug/L	181.814	3	19150	4057952	3	Standard
Mn	55	333.074	ug/L	0.714	0	667	11360747	0	Standard
> Ge	72		ug/L			31347	35760	3	KED
Ni	60	9.391	ug/L	0.327	3	4	11550	1	KED
Ni	62	11.410	ug/L	0.393	3	3	2315	4	KED
Cu	63	7.436	ug/L	0.284	3	53	26711	4	KED
Cu	65	7.399	ug/L	0.199	2	21	13225	0	KED
Zn	66	8.138	ug/L	0.435	5	18	3904	2	KED
Zn	67	7.836	ug/L	0.206	2	5	637	3	KED
As	75	0.350	ug/L	0.005	1	5	95	2	KED
Y	89		ug/L			275831	302099	1	Standard
Kr	83		ug/L			40	2553	1	Standard
> In-1	115		ug/L			9714	10599	1	KED
Cd	111	0.078	ug/L	0.008	9	2	26	9	KED
Cd	114	0.048	ug/L	0.017	34	3	38	33	KED
> In	115		ug/L			369046	366829	0	Standard
Ag	107	0.005	ug/L	0.001	30	22	78	21	Standard
> Tb	159		ug/L			669567	725305	1	Standard
Pb	208	3.202	ug/L	0.027	0	60	131514	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0081-04
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 20:07:17
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	42494	2	Standard
	Cl	**37**		ug/L			5434030	6788625	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	540842	1	Standard
|	**Cr**	**52**	**0.447**	ug/L	0.005	1	20356	31390	2	Standard
|	**Cr**	**53**	**7.441**	ug/L	0.144	1	160	16503	3	Standard
|	**Fe**	**54**	**181.548**	ug/L	2.766	1	67040	345357	0	Standard
|	**Fe**	**57**	**166.238**	ug/L	2.945	1	19150	123834	1	Standard
⌊	**Mn**	**55**	**6.046**	ug/L	0.116	1	667	179655	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	34339	0	KED
|	**Ni**	**60**	**0.404**	ug/L	0.026	6	4	481	6	KED
|	**Ni**	**62**	**1.669**	ug/L	0.104	6	3	328	6	KED
|	**Cu**	**63**	**2.854**	ug/L	0.033	1	53	9883	0	KED
|	**Cu**	**65**	**2.782**	ug/L	0.077	2	21	4792	2	KED
|	**Zn**	**66**	**26.941**	ug/L	0.607	2	18	12379	2	KED
|	**Zn**	**67**	**24.538**	ug/L	0.859	3	5	1904	2	KED
⌊	**As**	**75**	**3.248**	ug/L	0.033	1	5	803	0	KED
	Y	**89**		ug/L			275831	298227	2	Standard
	Kr	**83**		ug/L			40	1802	0	Standard
⌈>	**In-1**	**115**		ug/L			9714	10271	1	KED
|	**Cd**	**111**	**0.054**	ug/L	0.011	19	2	18	17	KED
⌊	**Cd**	**114**	**0.051**	ug/L	0.008	14	3	39	14	KED
⌈>	**In**	**115**		ug/L			369046	371986	0	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.001	15	22	90	10	Standard
⌈>	**Tb**	**159**		ug/L			669567	694988	1	Standard
⌊	**Pb**	**208**	**0.254**	ug/L	0.005	2	60	10054	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0775-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, April 20, 2023 20:11:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	68210	4	Standard
	Cl	37		ug/L			5434030	17318062	1	Standard
>	Sc	45		ug/L			479414	544964	2	Standard
	Cr	52	0.761	ug/L	0.056	7	20356	37590	1	Standard
	Cr	53	13.669	ug/L	0.389	2	160	30376	0	Standard
	Fe	54	1459.807	ug/L	70.484	4	67040	2260171	2	Standard
	Fe	57	1389.776	ug/L	78.983	5	19150	882289	3	Standard
	Mn	55	690.393	ug/L	23.490	3	667	20578288	0	Standard
>	Ge	72		ug/L			31347	29977	1	KED
	Ni	60	13.651	ug/L	0.189	1	4	14080	1	KED
	Ni	62	14.916	ug/L	0.584	3	3	2534	2	KED
	Cu	63	2.526	ug/L	0.091	3	53	7638	2	KED
	Cu	65	2.434	ug/L	0.003	0	21	3663	1	KED
	Zn	66	24.246	ug/L	0.383	1	18	9726	2	KED
	Zn	67	22.910	ug/L	0.777	3	5	1552	1	KED
	As	75	0.259	ug/L	0.035	13	5	60	10	KED
	Y	89		ug/L			275831	277802	2	Standard
	Kr	83		ug/L			40	1064	7	Standard
>	In-1	115		ug/L			9714	9136	1	KED
	Cd	111	0.021	ug/L	0.002	7	2	7	6	KED
	Cd	114	0.022	ug/L	0.016	74	3	16	60	KED
>	In	115		ug/L			369046	343300	2	Standard
	Ag	107	0.006	ug/L	0.002	32	22	86	21	Standard
>	Tb	159		ug/L			669567	676832	0	Standard
	Pb	208	0.104	ug/L	0.000	0	60	4028	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 20:16:24
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	27863	3	Standard
	Cl	**37**		ug/L			5434030	5948037	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	483168	1	Standard
|	**Cr**	**52**	**0.104**	ug/L	0.018	17	20356	22267	2	Standard
|	**Cr**	**53**	**3.250**	ug/L	0.037	1	160	6529	1	Standard
|	**Fe**	**54**	**2.848**	ug/L	1.669	58	67040	71321	1	Standard
|	**Fe**	**57**	**6.165**	ug/L	1.416	22	19150	22693	4	Standard
⌊	**Mn**	**55**	**0.024**	ug/L	0.003	11	667	1304	6	Standard
⌈>	**Ge**	**72**		ug/L			31347	32318	1	KED
|	**Ni**	**60**	**0.004**	ug/L	0.006	141	4	9	72	KED
|	**Ni**	**62**	**0.908**	ug/L	0.046	5	3	170	6	KED
|	**Cu**	**63**	**0.036**	ug/L	0.008	22	53	171	14	KED
|	**Cu**	**65**	**0.020**	ug/L	0.007	36	21	53	20	KED
|	**Zn**	**66**	**0.006**	ug/L	0.014	226	18	21	26	KED
|	**Zn**	**67**	**0.033**	ug/L	0.071	213	5	7	66	KED
⌊	**As**	**75**	**0.007**	ug/L	0.008	120	5	6	27	KED
	Y	**89**		ug/L			275831	282940	1	Standard
	Kr	**83**		ug/L			40	545	7	Standard
⌈>	**In-1**	**115**		ug/L			9714	10147	2	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.002	112	2	2	24	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.002	42	3	0	188	KED
⌈>	**In**	**115**		ug/L			369046	372929	2	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.000	22	22	29	7	Standard
⌈>	**Tb**	**159**		ug/L			669567	657254	1	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.001	16	60	261	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 20:20:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	25292	3	Standard
	Cl	**37**		ug/L			5434030	5751653	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	486028	2	Standard
|	**Cr**	**52**	**49.632**	ug/L	0.956	1	20356	861928	0	Standard
|	**Cr**	**53**	**52.558**	ug/L	1.128	2	160	103736	2	Standard
|	**Fe**	**54**	**5000.133**	ug/L	65.367	1	67040	6745319	2	Standard
|	**Fe**	**57**	**5120.805**	ug/L	95.595	1	19150	2849152	0	Standard
⌊	**Mn**	**55**	**46.645**	ug/L	0.776	1	667	1241030	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	32389	1	KED
|	**Ni**	**60**	**50.443**	ug/L	0.874	1	4	56213	2	KED
|	**Ni**	**62**	**51.135**	ug/L	0.607	1	3	9383	0	KED
|	**Cu**	**63**	**49.893**	ug/L	0.688	1	53	162042	1	KED
|	**Cu**	**65**	**49.385**	ug/L	0.360	0	21	79877	1	KED
|	**Zn**	**66**	**51.086**	ug/L	1.099	2	18	22119	1	KED
|	**Zn**	**67**	**50.872**	ug/L	1.443	2	5	3719	1	KED
⌊	**As**	**75**	**49.950**	ug/L	0.310	0	5	11576	0	KED
	Y	**89**		ug/L			275831	287838	2	Standard
	Kr	**83**		ug/L			40	366	6	Standard
⌈>	**In-1**	**115**		ug/L			9714	10424	1	KED
|	**Cd**	**111**	**47.749**	ug/L	1.847	3	2	14289	2	KED
⌊	**Cd**	**114**	**48.763**	ug/L	1.200	2	3	35439	1	KED
⌈>	**In**	**115**		ug/L			369046	372981	1	Standard
⌊	**Ag**	**107**	**51.463**	ug/L	1.296	2	22	641214	1	Standard
⌈>	**Tb**	**159**		ug/L			669567	672970	0	Standard
⌊	**Pb**	**208**	**49.303**	ug/L	0.450	0	60	1877807	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 20:28:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	23091	5	Standard
	Cl	**37**		ug/L			5434030	5668087	3	Standard
⌈>	**Sc**	**45**		ug/L			479414	458759	1	Standard
|	**Cr**	**52**	**0.039**	ug/L	0.019	49	20356	20112	2	Standard
|	**Cr**	**53**	**1.837**	ug/L	0.083	4	160	3569	3	Standard
|	**Fe**	**54**	**2.373**	ug/L	1.072	45	67040	67132	0	Standard
|	**Fe**	**57**	**3.629**	ug/L	0.553	15	19150	20221	2	Standard
⌊	**Mn**	**55**	**0.010**	ug/L	0.001	9	667	887	2	Standard
⌈>	**Ge**	**72**		ug/L			31347	31027	2	KED
|	**Ni**	**60**	**-0.001**	ug/L	0.003	253	4	3	91	KED
|	**Ni**	**62**	**0.562**	ug/L	0.105	18	3	102	15	KED
|	**Cu**	**63**	**0.015**	ug/L	0.006	42	53	99	20	KED
|	**Cu**	**65**	**0.006**	ug/L	0.004	65	21	30	21	KED
|	**Zn**	**66**	**-0.013**	ug/L	0.006	46	18	12	22	KED
|	**Zn**	**67**	**-0.025**	ug/L	0.059	230	5	3	124	KED
⌊	**As**	**75**	**0.004**	ug/L	0.011	241	5	6	39	KED
	Y	**89**		ug/L			275831	272438	1	Standard
	Kr	**83**		ug/L			40	133	12	Standard
⌈>	**In-1**	**115**		ug/L			9714	9596	1	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.005	114	2	1	114	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.010	256	3	5	117	KED
⌈>	**In**	**115**		ug/L			369046	364558	3	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	50	22	38	18	Standard
⌈>	**Tb**	**159**		ug/L			669567	642932	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	18	60	139	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0003-03
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 20:32:50
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	41686	1	Standard
	Cl	37		ug/L			5434030	5668690	0	Standard
⌈>	Sc	45		ug/L			479414	514789	1	Standard
|	Cr	52	3.719	ug/L	0.118	3	20356	88659	3	Standard
|	Cr	53	5.201	ug/L	0.107	2	160	11029	1	Standard
|	Fe	54	1521.803	ug/L	6.627	0	67040	2224379	0	Standard
|	Fe	57	1379.364	ug/L	20.457	1	19150	828092	1	Standard
⌊	Mn	55	38.291	ug/L	0.481	1	667	1079353	0	Standard
⌈>	Ge	72		ug/L			31347	32893	2	KED
|	Ni	60	3.195	ug/L	0.147	4	4	3617	3	KED
|	Ni	62	3.976	ug/L	0.136	3	3	744	4	KED
|	Cu	63	109.994	ug/L	1.611	1	53	362659	1	KED
|	Cu	65	110.925	ug/L	2.508	2	21	182103	0	KED
|	Zn	66	115.032	ug/L	6.862	5	18	50526	4	KED
|	Zn	67	103.232	ug/L	4.821	4	5	7654	2	KED
⌊	As	75	1.303	ug/L	0.059	4	5	312	5	KED
	Y	89		ug/L			275831	299110	2	Standard
	Kr	83		ug/L			40	135	17	Standard
⌈>	In-1	115		ug/L			9714	10233	3	KED
|	Cd	111	0.027	ug/L	0.010	35	2	10	24	KED
⌊	Cd	114	0.025	ug/L	0.011	42	3	20	34	KED
⌈>	In	115		ug/L			369046	387586	0	Standard
⌊	Ag	107	0.009	ug/L	0.001	6	22	146	6	Standard
⌈>	Tb	159		ug/L			669567	694773	2	Standard
⌊	Pb	208	0.903	ug/L	0.009	1	60	35567	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0003-05
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 20:37:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	39312	2	Standard
	Cl	37		ug/L			5434030	5529292	3	Standard
>	Sc	45		ug/L			479414	500399	2	Standard
	Cr	52	3.725	ug/L	0.087	2	20356	86248	0	Standard
	Cr	53	4.988	ug/L	0.240	4	160	10282	2	Standard
	Fe	54	1544.267	ug/L	63.038	4	67040	2191941	1	Standard
	Fe	57	1422.179	ug/L	27.836	1	19150	829114	0	Standard
	Mn	55	37.185	ug/L	0.647	1	667	1018703	0	Standard
>	Ge	72		ug/L			31347	32094	0	KED
	Ni	60	3.181	ug/L	0.099	3	4	3516	3	KED
	Ni	62	3.634	ug/L	0.487	13	3	664	14	KED
	Cu	63	105.402	ug/L	1.267	1	53	339158	1	KED
	Cu	65	109.555	ug/L	1.054	0	21	175560	1	KED
	Zn	66	109.496	ug/L	1.196	1	18	46966	1	KED
	Zn	67	101.247	ug/L	2.718	2	5	7332	3	KED
	As	75	1.273	ug/L	0.040	3	5	297	3	KED
	Y	89		ug/L			275831	289781	1	Standard
	Kr	83		ug/L			40	99	5	Standard
>	In-1	115		ug/L			9714	10466	1	KED
	Cd	111	0.037	ug/L	0.015	39	2	13	32	KED
	Cd	114	0.027	ug/L	0.009	34	3	22	29	KED
>	In	115		ug/L			369046	384307	1	Standard
	Ag	107	0.010	ug/L	0.002	18	22	151	14	Standard
>	Tb	159		ug/L			669567	683648	2	Standard
	Pb	208	0.867	ug/L	0.021	2	60	33576	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0003-07
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 20:41:57
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	37523	1	Standard
	Cl	37		ug/L			5434030	5484283	3	Standard
>	Sc	45		ug/L			479414	488133	1	Standard
	Cr	52	6.691	ug/L	0.018	0	20356	134659	1	Standard
	Cr	53	7.741	ug/L	0.229	2	160	15490	4	Standard
	Fe	54	2979.500	ug/L	30.300	1	67040	4064206	1	Standard
	Fe	57	2749.932	ug/L	81.315	2	19150	1546032	3	Standard
	Mn	55	48.173	ug/L	0.560	1	667	1287426	0	Standard
>	Ge	72		ug/L			31347	31858	1	KED
	Ni	60	5.237	ug/L	0.224	4	4	5740	2	KED
	Ni	62	6.038	ug/L	0.038	0	3	1093	2	KED
	Cu	63	180.498	ug/L	3.872	2	53	576385	1	KED
	Cu	65	183.062	ug/L	2.029	1	21	291142	1	KED
	Zn	66	132.183	ug/L	3.056	2	18	56259	0	KED
	Zn	67	121.726	ug/L	1.942	1	5	8749	3	KED
	As	75	0.937	ug/L	0.040	4	5	218	2	KED
	Y	89		ug/L			275831	294978	0	Standard
	Kr	83		ug/L			40	86	12	Standard
>	In-1	115		ug/L			9714	10152	2	KED
	Cd	111	0.502	ug/L	0.033	6	2	148	5	KED
	Cd	114	0.521	ug/L	0.014	2	3	372	2	KED
>	In	115		ug/L			369046	374210	0	Standard
	Ag	107	0.036	ug/L	0.003	8	22	469	8	Standard
>	Tb	159		ug/L			669567	654784	1	Standard
	Pb	208	1.674	ug/L	0.020	1	60	62069	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0005-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, April 20, 2023 20:46:30
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	42439	1	Standard
	Cl	**37**		ug/L			5434030	6465517	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	479505	2	Standard
|	**Cr**	**52**	**7.145**	ug/L	0.038	0	20356	139880	1	Standard
|	**Cr**	**53**	**8.872**	ug/L	0.075	0	160	17410	1	Standard
|	**Fe**	**54**	**1024.967**	ug/L	2.293	0	67040	1417374	1	Standard
|	**Fe**	**57**	**1016.687**	ug/L	28.057	2	19150	573558	3	Standard
⌊	**Mn**	**55**	**56.740**	ug/L	1.411	2	667	1489088	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	30998	0	KED
|	**Ni**	**60**	**2.864**	ug/L	0.095	3	4	3058	3	KED
|	**Ni**	**62**	**3.009**	ug/L	0.034	1	3	532	1	KED
|	**Cu**	**63**	**16.950**	ug/L	0.510	3	53	52717	2	KED
|	**Cu**	**65**	**16.740**	ug/L	0.338	2	21	25927	2	KED
|	**Zn**	**66**	**70.800**	ug/L	0.654	0	18	29337	1	KED
|	**Zn**	**67**	**67.249**	ug/L	2.063	3	5	4704	2	KED
⌊	**As**	**75**	**1.295**	ug/L	0.036	2	5	292	3	KED
	Y	**89**		ug/L			275831	286836	0	Standard
	Kr	**83**		ug/L			40	83	17	Standard
⌈>	**In-1**	**115**		ug/L			9714	9708	1	KED
|	**Cd**	**111**	**0.056**	ug/L	0.006	11	2	18	9	KED
⌊	**Cd**	**114**	**0.057**	ug/L	0.011	19	3	41	17	KED
⌈>	**In**	**115**		ug/L			369046	362422	0	Standard
⌊	**Ag**	**107**	**0.020**	ug/L	0.002	9	22	263	8	Standard
⌈>	**Tb**	**159**		ug/L			669567	650224	0	Standard
⌊	**Pb**	**208**	**4.556**	ug/L	0.075	1	60	167715	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0005-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, April 20, 2023 20:51:03
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	39393	2	Standard
	Cl	37		ug/L			5434030	6442114	0	Standard
>	Sc	45		ug/L			479414	473174	1	Standard
	Cr	52	2.806	ug/L	0.091	3	20356	66390	1	Standard
	Cr	53	4.858	ug/L	0.064	1	160	9479	0	Standard
	Fe	54	306.425	ug/L	9.216	3	67040	464423	1	Standard
	Fe	57	339.947	ug/L	4.482	1	19150	201824	1	Standard
	Mn	55	26.738	ug/L	0.929	3	667	692773	2	Standard
>	Ge	72		ug/L			31347	30301	1	KED
	Ni	60	7.588	ug/L	0.049	0	4	7912	1	KED
	Ni	62	7.922	ug/L	0.271	3	3	1363	3	KED
	Cu	63	6.763	ug/L	0.087	1	53	20590	0	KED
	Cu	65	6.855	ug/L	0.071	1	21	10391	2	KED
	Zn	66	16.730	ug/L	0.154	0	18	6789	1	KED
	Zn	67	17.514	ug/L	0.089	0	5	1201	1	KED
	As	75	0.344	ug/L	0.006	1	5	79	3	KED
	Y	89		ug/L			275831	272978	1	Standard
	Kr	83		ug/L			40	74	5	Standard
>	In-1	115		ug/L			9714	9560	2	KED
	Cd	111	0.021	ug/L	0.013	64	2	8	43	KED
	Cd	114	0.010	ug/L	0.005	50	3	9	33	KED
>	In	115		ug/L			369046	363212	0	Standard
	Ag	107	0.008	ug/L	0.001	14	22	114	12	Standard
>	Tb	159		ug/L			669567	662265	1	Standard
	Pb	208	0.964	ug/L	0.012	1	60	36185	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0006-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, April 20, 2023 20:55:36
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	41799	1	Standard
	Cl	37		ug/L			5434030	6223950	0	Standard
⌈>	Sc	45		ug/L			479414	479856	2	Standard
|	Cr	52	8.611	ug/L	0.257	2	20356	164479	1	Standard
|	Cr	53	10.118	ug/L	0.066	0	160	19847	1	Standard
|	Fe	54	1058.541	ug/L	31.716	2	67040	1462154	0	Standard
|	Fe	57	1054.707	ug/L	2.340	0	19150	594739	1	Standard
⌊	Mn	55	51.991	ug/L	2.016	3	667	1365315	2	Standard
⌈>	Ge	72		ug/L			31347	30375	1	KED
|	Ni	60	4.683	ug/L	0.200	4	4	4896	3	KED
|	Ni	62	5.191	ug/L	0.285	5	3	897	7	KED
|	Cu	63	20.075	ug/L	0.467	2	53	61159	0	KED
|	Cu	65	20.639	ug/L	0.449	2	21	31311	1	KED
|	Zn	66	89.696	ug/L	3.132	3	18	36399	1	KED
|	Zn	67	83.295	ug/L	0.708	0	5	5708	1	KED
⌊	As	75	1.331	ug/L	0.039	2	5	294	1	KED
	Y	89		ug/L			275831	281774	2	Standard
	Kr	83		ug/L			40	59	5	Standard
⌈>	In-1	115		ug/L			9714	9578	0	KED
|	Cd	111	0.086	ug/L	0.014	16	2	26	14	KED
⌊	Cd	114	0.086	ug/L	0.041	47	3	60	44	KED
⌈>	In	115		ug/L			369046	363665	1	Standard
⌊	Ag	107	0.020	ug/L	0.002	10	22	259	9	Standard
⌈>	Tb	159		ug/L			669567	655193	1	Standard
⌊	Pb	208	5.209	ug/L	0.045	0	60	193199	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0006-02
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 21:00:10
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	40371	2	Standard
	Cl	37		ug/L			5434030	6937707	2	Standard
⌈>	Sc	45		ug/L			479414	477086	2	Standard
|	Cr	52	13.371	ug/L	0.320	2	20356	242727	1	Standard
|	Cr	53	15.423	ug/L	0.263	1	160	29990	1	Standard
|	Fe	54	682.436	ug/L	13.021	1	67040	961022	1	Standard
|	Fe	57	714.970	ug/L	12.599	1	19150	406879	0	Standard
⌊	Mn	55	30.685	ug/L	0.893	2	667	801545	2	Standard
⌈>	Ge	72		ug/L			31347	29682	0	KED
|	Ni	60	7.285	ug/L	0.125	1	4	7442	1	KED
|	Ni	62	7.860	ug/L	0.251	3	3	1325	4	KED
|	Cu	63	19.850	ug/L	0.462	2	53	59117	2	KED
|	Cu	65	19.978	ug/L	0.399	1	21	29624	2	KED
|	Zn	66	79.404	ug/L	0.310	0	18	31502	0	KED
|	Zn	67	73.914	ug/L	2.330	3	5	4950	2	KED
⌊	As	75	1.834	ug/L	0.053	2	5	394	2	KED
	Y	89		ug/L			275831	277691	5	Standard
	Kr	83		ug/L			40	81	15	Standard
⌈>	In-1	115		ug/L			9714	9109	1	KED
|	Cd	111	0.061	ug/L	0.012	19	2	18	16	KED
⌊	Cd	114	0.055	ug/L	0.017	31	3	37	30	KED
⌈>	In	115		ug/L			369046	352439	1	Standard
⌊	Ag	107	0.020	ug/L	0.000	2	22	253	0	Standard
⌈>	Tb	159		ug/L			669567	642608	1	Standard
⌊	Pb	208	2.677	ug/L	0.024	0	60	97389	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0003-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 21:04:43
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	36810	2	Standard
	Cl	37		ug/L			5434030	5465816	1	Standard
⌈>	Sc	45		ug/L			479414	486192	2	Standard
|	Cr	52	3.038	ug/L	0.151	4	20356	72139	1	Standard
|	Cr	53	3.761	ug/L	0.108	2	160	7575	1	Standard
|	Fe	54	1087.177	ug/L	18.126	1	67040	1519994	1	Standard
|	Fe	57	1106.830	ug/L	14.545	1	19150	631318	1	Standard
⌊	Mn	55	32.951	ug/L	0.576	1	667	877215	1	Standard
⌈>	Ge	72		ug/L			31347	31215	2	KED
|	Ni	60	2.941	ug/L	0.126	4	4	3160	3	KED
|	Ni	62	3.496	ug/L	0.115	3	3	621	2	KED
|	Cu	63	89.947	ug/L	2.263	2	53	281399	1	KED
|	Cu	65	91.304	ug/L	2.911	3	21	142231	1	KED
|	Zn	66	77.658	ug/L	1.267	1	18	32396	1	KED
|	Zn	67	71.327	ug/L	1.881	2	5	5022	0	KED
⌊	As	75	0.543	ug/L	0.027	4	5	126	5	KED
	Y	89		ug/L			275831	278718	2	Standard
	Kr	83		ug/L			40	60	15	Standard
⌈>	In-1	115		ug/L			9714	9860	1	KED
|	Cd	111	0.017	ug/L	0.016	97	2	7	61	KED
⌊	Cd	114	0.017	ug/L	0.007	39	3	15	31	KED
⌈>	In	115		ug/L			369046	375861	1	Standard
⌊	Ag	107	0.007	ug/L	0.001	17	22	117	15	Standard
⌈>	Tb	159		ug/L			669567	668600	0	Standard
⌊	Pb	208	1.011	ug/L	0.012	1	60	38317	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0401-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 21:09:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25789	36051	3	Standard
Cl	37		ug/L			5434030	5491995	1	Standard
> Sc	45		ug/L			479414	488508	1	Standard
Cr	52	2.872	ug/L	0.058	2	20356	69679	0	Standard
Cr	53	3.587	ug/L	0.064	1	160	7268	1	Standard
Fe	54	1058.075	ug/L	45.484	4	67040	1487750	2	Standard
Fe	57	1053.864	ug/L	25.013	2	19150	604871	1	Standard
Mn	55	31.796	ug/L	0.634	1	667	850556	1	Standard
> Ge	72		ug/L			31347	31279	1	KED
Ni	60	2.715	ug/L	0.102	3	4	2924	2	KED
Ni	62	3.121	ug/L	0.269	8	3	556	9	KED
Cu	63	86.543	ug/L	0.902	1	53	271413	1	KED
Cu	65	87.554	ug/L	1.756	2	21	136717	1	KED
Zn	66	73.399	ug/L	2.727	3	18	30678	2	KED
Zn	67	66.472	ug/L	2.785	4	5	4694	5	KED
As	75	0.520	ug/L	0.034	6	5	121	5	KED
Y	89		ug/L			275831	283017	1	Standard
Kr	83		ug/L			40	53	3	Standard
> In-1	115		ug/L			9714	10193	3	KED
Cd	111	0.012	ug/L	0.008	61	2	6	37	KED
Cd	114	0.014	ug/L	0.005	33	3	13	26	KED
> In	115		ug/L			369046	378043	1	Standard
Ag	107	0.007	ug/L	0.000	6	22	107	5	Standard
> Tb	159		ug/L			669567	660808	1	Standard
Pb	208	0.986	ug/L	0.014	1	60	36936	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0401-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 21:13:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	37213	1	Standard
	Cl	37		ug/L			5434030	5480810	2	Standard
>	Sc	45		ug/L			479414	477763	2	Standard
	Cr	52	27.585	ug/L	0.708	2	20356	479925	1	Standard
	Cr	53	28.561	ug/L	0.891	3	160	55471	1	Standard
	Fe	54	6026.878	ug/L	166.550	2	67040	7974799	0	Standard
	Fe	57	6245.781	ug/L	226.979	3	19150	3410945	1	Standard
	Mn	55	54.919	ug/L	1.187	2	667	1436197	1	Standard
>	Ge	72		ug/L			31347	30554	1	KED
	Ni	60	28.394	ug/L	1.151	4	4	29849	4	KED
	Ni	62	27.379	ug/L	1.123	4	3	4742	4	KED
	Cu	63	110.164	ug/L	1.407	1	53	337429	0	KED
	Cu	65	111.223	ug/L	2.131	1	21	169646	0	KED
	Zn	66	153.427	ug/L	3.100	2	18	62640	2	KED
	Zn	67	143.982	ug/L	3.530	2	5	9920	1	KED
	As	75	25.545	ug/L	0.673	2	5	5586	1	KED
	Y	89		ug/L			275831	284166	0	Standard
	Kr	83		ug/L			40	72	6	Standard
>	In-1	115		ug/L			9714	9877	3	KED
	Cd	111	24.187	ug/L	1.002	4	2	6856	1	KED
	Cd	114	24.082	ug/L	0.796	3	3	16577	0	KED
>	In	115		ug/L			369046	364032	2	Standard
	Ag	107	25.998	ug/L	0.759	2	22	316076	1	Standard
>	Tb	159		ug/L			669567	658626	2	Standard
	Pb	208	25.748	ug/L	0.203	0	60	959697	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 21:18:23
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	24374	3	Standard
	Cl	**37**		ug/L			5434030	5500819	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	473898	1	Standard
|	**Cr**	**52**	**49.539**	ug/L	0.201	0	20356	839145	1	Standard
|	**Cr**	**53**	**50.371**	ug/L	0.722	1	160	96946	0	Standard
|	**Fe**	**54**	**4919.858**	ug/L	101.285	2	67040	6470900	0	Standard
|	**Fe**	**57**	**5090.983**	ug/L	113.001	2	19150	2762114	0	Standard
⌊	**Mn**	**55**	**46.457**	ug/L	0.626	1	667	1205300	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	31213	0	KED
|	**Ni**	**60**	**50.092**	ug/L	1.830	3	4	53788	3	KED
|	**Ni**	**62**	**50.063**	ug/L	1.784	3	3	8855	4	KED
|	**Cu**	**63**	**49.966**	ug/L	0.495	0	53	156387	1	KED
|	**Cu**	**65**	**50.264**	ug/L	0.743	1	21	78345	1	KED
|	**Zn**	**66**	**52.437**	ug/L	1.364	2	18	21885	3	KED
|	**Zn**	**67**	**51.565**	ug/L	1.325	2	5	3634	3	KED
⌊	**As**	**75**	**50.414**	ug/L	0.159	0	5	11260	0	KED
	Y	**89**		ug/L			275831	279666	1	Standard
	Kr	**83**		ug/L			40	50	9	Standard
⌈>	**In-1**	**115**		ug/L			9714	10017	0	KED
|	**Cd**	**111**	**48.816**	ug/L	0.569	1	2	14044	1	KED
⌊	**Cd**	**114**	**49.597**	ug/L	0.308	0	3	34647	0	KED
⌈>	**In**	**115**		ug/L			369046	370956	0	Standard
⌊	**Ag**	**107**	**51.996**	ug/L	0.886	1	22	644474	1	Standard
⌈>	**Tb**	**159**		ug/L			669567	672043	0	Standard
⌊	**Pb**	**208**	**48.703**	ug/L	0.211	0	60	1852393	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 21:25:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	24110	0	Standard
	Cl	**37**		ug/L			5434030	5527441	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	462589	1	Standard
|	**Cr**	**52**	**-0.005**	ug/L	0.018	334	20356	19551	0	Standard
|	**Cr**	**53**	**0.517**	ug/L	0.030	5	160	1124	4	Standard
|	**Fe**	**54**	**1.832**	ug/L	0.971	52	67040	67006	1	Standard
|	**Fe**	**57**	**2.351**	ug/L	1.981	84	19150	19706	4	Standard
⌊	**Mn**	**55**	**0.014**	ug/L	0.007	45	667	1002	15	Standard
⌈>	**Ge**	**72**		ug/L			31347	29081	8	KED
|	**Ni**	**60**	**0.000**	ug/L	0.003	835	4	4	65	KED
|	**Ni**	**62**	**0.211**	ug/L	0.022	10	3	38	5	KED
|	**Cu**	**63**	**-0.000**	ug/L	0.003	826	53	48	25	KED
|	**Cu**	**65**	**0.003**	ug/L	0.005	152	21	24	30	KED
|	**Zn**	**66**	**-0.009**	ug/L	0.015	166	18	13	37	KED
|	**Zn**	**67**	**-0.024**	ug/L	0.032	131	5	3	69	KED
⌊	**As**	**75**	**0.011**	ug/L	0.012	101	5	7	29	KED
	Y	**89**		ug/L			275831	269446	2	Standard
	Kr	**83**		ug/L			40	50	5	Standard
⌈>	**In-1**	**115**		ug/L			9714	9663	3	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.007	207	2	1	124	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.006	10469	3	3	128	KED
⌈>	**In**	**115**		ug/L			369046	367708	0	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.005	131	22	69	88	Standard
⌈>	**Tb**	**159**		ug/L			669567	642463	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.004	131	60	172	86	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0117-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 21:30:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	42798	2	Standard
	Cl	**37**		ug/L			5434030	5608473	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	488043	0	Standard
|	**Cr**	**52**	**0.774**	ug/L	0.028	3	20356	33897	1	Standard
|	**Cr**	**53**	**1.277**	ug/L	0.036	2	160	2691	2	Standard
|	**Fe**	**54**	**184.880**	ug/L	2.733	1	67040	316160	1	Standard
|	**Fe**	**57**	**232.328**	ug/L	5.774	2	19150	148444	2	Standard
⌊	**Mn**	**55**	**6.643**	ug/L	0.139	2	667	178116	2	Standard
⌈>	**Ge**	**72**		ug/L			31347	31460	1	KED
|	**Ni**	**60**	**1.078**	ug/L	0.057	5	4	1171	6	KED
|	**Ni**	**62**	**1.236**	ug/L	0.080	6	3	224	7	KED
|	**Cu**	**63**	**6.717**	ug/L	0.166	2	53	21236	3	KED
|	**Cu**	**65**	**6.626**	ug/L	0.232	3	21	10425	2	KED
|	**Zn**	**66**	**34.280**	ug/L	0.078	0	18	14425	1	KED
|	**Zn**	**67**	**33.938**	ug/L	0.585	1	5	2412	2	KED
⌊	**As**	**75**	**1.748**	ug/L	0.065	3	5	398	3	KED
	Y	**89**		ug/L			275831	279227	0	Standard
	Kr	**83**		ug/L			40	48	16	Standard
⌈>	**In-1**	**115**		ug/L			9714	9736	1	KED
|	**Cd**	**111**	**0.006**	ug/L	0.005	95	2	4	35	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.005	79	3	7	49	KED
⌈>	**In**	**115**		ug/L			369046	374643	1	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.001	19	22	63	13	Standard
⌈>	**Tb**	**159**		ug/L			669567	669474	1	Standard
⌊	**Pb**	**208**	**0.353**	ug/L	0.009	2	60	13415	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0019-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 21:34:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	38653	3	Standard
	Cl	**37**		ug/L			5434030	5733575	0	Standard
⌈>	**Sc**	**45**		ug/L			479414	532091	1	Standard
|	**Cr**	**52**	**0.355**	ug/L	0.018	4	20356	29180	1	Standard
|	**Cr**	**53**	**1.046**	ug/L	0.018	1	160	2435	2	Standard
|	**Fe**	**54**	**3950.355**	ug/L	116.063	2	67040	5848033	2	Standard
|	**Fe**	**57**	**4075.753**	ug/L	87.209	2	19150	2486941	0	Standard
⌊	**Mn**	**55**	**883.120**	ug/L	25.451	2	667	25705993	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	30293	0	KED
|	**Ni**	**60**	**1.018**	ug/L	0.049	4	4	1064	4	KED
|	**Ni**	**62**	**1.130**	ug/L	0.134	11	3	197	11	KED
|	**Cu**	**63**	**3.205**	ug/L	0.081	2	53	9782	2	KED
|	**Cu**	**65**	**3.259**	ug/L	0.143	4	21	4948	3	KED
|	**Zn**	**66**	**12.593**	ug/L	0.187	1	18	5113	1	KED
|	**Zn**	**67**	**12.705**	ug/L	1.127	8	5	872	8	KED
⌊	**As**	**75**	**3.884**	ug/L	0.218	5	5	846	5	KED
	Y	**89**		ug/L			275831	293812	1	Standard
	Kr	**83**		ug/L			40	65	17	Standard
⌈>	**In-1**	**115**		ug/L			9714	9804	1	KED
|	**Cd**	**111**	**0.001**	ug/L	0.006	571	2	2	57	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.003	26	3	10	18	KED
⌈>	**In**	**115**		ug/L			369046	371250	2	Standard
⌊	**Ag**	**107**	**0.007**	ug/L	0.001	9	22	114	6	Standard
⌈>	**Tb**	**159**		ug/L			669567	671435	2	Standard
⌊	**Pb**	**208**	**0.132**	ug/L	0.004	3	60	5072	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0020-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 21:39:22
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	40734	2	Standard
	Cl	37		ug/L			5434030	5828635	0	Standard
>	Sc	45		ug/L			479414	532018	0	Standard
	Cr	52	0.262	ug/L	0.042	16	20356	27455	2	Standard
	Cr	53	0.861	ug/L	0.033	3	160	2036	3	Standard
	Fe	54	3213.345	ug/L	56.774	1	67040	4771000	0	Standard
	Fe	57	2997.755	ug/L	121.615	4	19150	1834605	3	Standard
	Mn	55	975.743	ug/L	15.997	1	667	28406291	0	Standard
>	Ge	72		ug/L			31347	30812	1	KED
	Ni	60	1.036	ug/L	0.110	10	4	1103	11	KED
	Ni	62	1.238	ug/L	0.093	7	3	219	6	KED
	Cu	63	2.654	ug/L	0.022	0	53	8249	1	KED
	Cu	65	2.689	ug/L	0.025	0	21	4158	1	KED
	Zn	66	9.914	ug/L	0.064	0	18	4099	1	KED
	Zn	67	9.583	ug/L	0.755	7	5	670	7	KED
	As	75	3.601	ug/L	0.184	5	5	798	4	KED
	Y	89		ug/L			275831	294450	1	Standard
	Kr	83		ug/L			40	53	23	Standard
>	In-1	115		ug/L			9714	10043	1	KED
	Cd	111	0.033	ug/L	0.010	31	2	12	22	KED
	Cd	114	0.021	ug/L	0.002	7	3	17	6	KED
>	In	115		ug/L			369046	371389	0	Standard
	Ag	107	0.008	ug/L	0.001	13	22	119	10	Standard
>	Tb	159		ug/L			669567	678466	1	Standard
	Pb	208	0.075	ug/L	0.003	4	60	2922	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0022-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 21:43:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	40632	1	Standard
	Cl	37		ug/L			5434030	5438604	0	Standard
>	Sc	45		ug/L			479414	498663	3	Standard
	Cr	52	0.829	ug/L	0.057	6	20356	35578	0	Standard
	Cr	53	1.202	ug/L	0.095	7	160	2593	4	Standard
	Fe	54	137.485	ug/L	7.713	5	67040	257873	1	Standard
	Fe	57	206.520	ug/L	13.114	6	19150	136873	2	Standard
	Mn	55	2.987	ug/L	0.101	3	667	82145	0	Standard
>	Ge	72		ug/L			31347	31010	1	KED
	Ni	60	0.975	ug/L	0.098	10	4	1043	8	KED
	Ni	62	1.179	ug/L	0.075	6	3	210	4	KED
	Cu	63	6.087	ug/L	0.102	1	53	18972	1	KED
	Cu	65	5.962	ug/L	0.059	0	21	9251	1	KED
	Zn	66	1103.079	ug/L	27.724	2	18	456849	0	KED
	Zn	67	991.364	ug/L	19.318	1	5	69326	3	KED
	As	75	0.271	ug/L	0.017	6	5	65	6	KED
	Y	89		ug/L			275831	275000	1	Standard
	Kr	83		ug/L			40	51	3	Standard
>	In-1	115		ug/L			9714	9956	1	KED
	Cd	111	0.134	ug/L	0.014	10	2	40	10	KED
	Cd	114	0.139	ug/L	0.028	19	3	99	17	KED
>	In	115		ug/L			369046	365854	0	Standard
	Ag	107	0.493	ug/L	0.011	2	22	6047	1	Standard
>	Tb	159		ug/L			669567	663628	1	Standard
	Pb	208	1.880	ug/L	0.014	0	60	70647	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0023-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 21:48:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	37418	2	Standard
	Cl	**37**		ug/L			5434030	5684033	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	487209	1	Standard
|	**Cr**	**52**	**0.144**	ug/L	0.019	13	20356	23140	2	Standard
|	**Cr**	**53**	**0.498**	ug/L	0.023	4	160	1147	3	Standard
|	**Fe**	**54**	**8569.684**	ug/L	53.467	0	67040	11539253	0	Standard
|	**Fe**	**57**	**8589.626**	ug/L	315.531	3	19150	4777608	2	Standard
⌊	**Mn**	**55**	**644.931**	ug/L	2.114	0	667	17196232	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	31280	2	KED
|	**Ni**	**60**	**0.723**	ug/L	0.012	1	4	782	3	KED
|	**Ni**	**62**	**0.839**	ug/L	0.071	8	3	152	8	KED
|	**Cu**	**63**	**0.334**	ug/L	0.013	3	53	1100	3	KED
|	**Cu**	**65**	**0.343**	ug/L	0.045	13	21	558	13	KED
|	**Zn**	**66**	**20.689**	ug/L	0.146	0	18	8662	1	KED
|	**Zn**	**67**	**19.317**	ug/L	0.439	2	5	1367	4	KED
⌊	**As**	**75**	**0.320**	ug/L	0.017	5	5	76	5	KED
	Y	**89**		ug/L			275831	278831	1	Standard
	Kr	**83**		ug/L			40	44	17	Standard
⌈>	**In-1**	**115**		ug/L			9714	9824	0	KED
|	**Cd**	**111**	**0.004**	ug/L	0.006	133	2	3	43	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.004	181	3	4	60	KED
⌈>	**In**	**115**		ug/L			369046	379249	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	98	22	35	32	Standard
⌈>	**Tb**	**159**		ug/L			669567	675214	1	Standard
⌊	**Pb**	**208**	**0.102**	ug/L	0.001	0	60	3966	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0048-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 21:53:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	48797	1	Standard
	Cl	37		ug/L			5434030	5399684	2	Standard
>	Sc	45		ug/L			479414	502214	1	Standard
	Cr	52	0.787	ug/L	0.013	1	20356	35116	1	Standard
	Cr	53	1.067	ug/L	0.009	0	160	2341	1	Standard
	Fe	54	257.857	ug/L	5.309	2	67040	425974	0	Standard
	Fe	57	257.379	ug/L	6.484	2	19150	167030	0	Standard
	Mn	55	10.691	ug/L	0.046	0	667	294526	1	Standard
>	Ge	72		ug/L			31347	31659	0	KED
	Ni	60	1.053	ug/L	0.049	4	4	1151	4	KED
	Ni	62	1.239	ug/L	0.065	5	3	226	5	KED
	Cu	63	17.620	ug/L	0.358	2	53	55973	2	KED
	Cu	65	17.722	ug/L	0.321	1	21	28031	1	KED
	Zn	66	68.624	ug/L	0.468	0	18	29042	0	KED
	Zn	67	62.768	ug/L	0.152	0	5	4485	0	KED
	As	75	0.604	ug/L	0.021	3	5	142	3	KED
	Y	89		ug/L			275831	285816	1	Standard
	Kr	83		ug/L			40	40	4	Standard
>	In-1	115		ug/L			9714	9805	1	KED
	Cd	111	0.312	ug/L	0.009	2	2	90	2	KED
	Cd	114	0.287	ug/L	0.034	11	3	199	10	KED
>	In	115		ug/L			369046	378327	0	Standard
	Ag	107	0.024	ug/L	0.001	3	22	321	3	Standard
>	Tb	159		ug/L			669567	687196	1	Standard
	Pb	208	1.568	ug/L	0.027	1	60	61020	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0050-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 21:57:35
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	47540	2	Standard
	Cl	**37**		ug/L			5434030	7390598	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	520490	1	Standard
|	**Cr**	**52**	**0.430**	ug/L	0.037	8	20356	29909	0	Standard
|	**Cr**	**53**	**2.049**	ug/L	0.013	0	160	4498	1	Standard
|	**Fe**	**54**	**1037.884**	ug/L	22.153	2	67040	1556691	0	Standard
|	**Fe**	**57**	**1030.191**	ug/L	8.974	0	19150	630574	1	Standard
⌊	**Mn**	**55**	**116.945**	ug/L	1.096	0	667	3331388	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	28965	2	KED
|	**Ni**	**60**	**3.377**	ug/L	0.099	2	4	3368	3	KED
|	**Ni**	**62**	**3.708**	ug/L	0.168	4	3	611	3	KED
|	**Cu**	**63**	**3.663**	ug/L	0.066	1	53	10682	0	KED
|	**Cu**	**65**	**3.632**	ug/L	0.086	2	21	5270	1	KED
|	**Zn**	**66**	**81.306**	ug/L	1.079	1	18	31473	1	KED
|	**Zn**	**67**	**75.869**	ug/L	1.545	2	5	4957	1	KED
⌊	**As**	**75**	**0.694**	ug/L	0.038	5	5	148	6	KED
	Y	**89**		ug/L			275831	273297	2	Standard
	Kr	**83**		ug/L			40	64	38	Standard
⌈>	**In-1**	**115**		ug/L			9714	9209	0	KED
|	**Cd**	**111**	**0.090**	ug/L	0.008	9	2	26	9	KED
⌊	**Cd**	**114**	**0.077**	ug/L	0.008	10	3	52	9	KED
⌈>	**In**	**115**		ug/L			369046	360313	0	Standard
⌊	**Ag**	**107**	**0.037**	ug/L	0.003	9	22	463	7	Standard
⌈>	**Tb**	**159**		ug/L			669567	671506	1	Standard
⌊	**Pb**	**208**	**0.454**	ug/L	0.003	0	60	17332	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0050-02
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 22:02:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	42911	0	Standard
	Cl	37		ug/L			5434030	7171347	1	Standard
>	Sc	45		ug/L			479414	528374	1	Standard
	Cr	52	0.252	ug/L	0.026	10	20356	27074	1	Standard
	Cr	53	2.407	ug/L	0.046	1	160	5334	2	Standard
	Fe	54	805.541	ug/L	4.482	0	67040	1243272	0	Standard
	Fe	57	774.014	ug/L	8.071	1	19150	486251	2	Standard
	Mn	55	185.829	ug/L	3.182	1	667	5373332	0	Standard
>	Ge	72		ug/L			31347	29273	0	KED
	Ni	60	1.640	ug/L	0.026	1	4	1655	1	KED
	Ni	62	1.921	ug/L	0.207	10	3	321	10	KED
	Cu	63	1.711	ug/L	0.068	3	53	5072	4	KED
	Cu	65	1.807	ug/L	0.119	6	21	2661	6	KED
	Zn	66	75.912	ug/L	1.250	1	18	29702	1	KED
	Zn	67	68.416	ug/L	2.267	3	5	4519	2	KED
	As	75	1.351	ug/L	0.044	3	5	287	3	KED
	Y	89		ug/L			275831	274338	0	Standard
	Kr	83		ug/L			40	50	11	Standard
>	In-1	115		ug/L			9714	9421	2	KED
	Cd	111	0.018	ug/L	0.008	43	2	7	27	KED
	Cd	114	0.015	ug/L	0.003	22	3	12	14	KED
>	In	115		ug/L			369046	352826	1	Standard
	Ag	107	0.014	ug/L	0.003	23	22	180	20	Standard
>	Tb	159		ug/L			669567	665547	1	Standard
	Pb	208	0.120	ug/L	0.002	1	60	4597	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0044-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, April 20, 2023 22:06:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	120837	2	Standard
	Cl	37		ug/L			5434030	5616506	1	Standard
⌈>	Sc	45		ug/L			479414	528003	2	Standard
|	Cr	52	180.788	ug/L	5.220	2	20356	3351123	0	Standard
|	Cr	53	164.147	ug/L	2.835	1	160	351562	0	Standard
|	Fe	54	5551.272	ug/L	110.563	1	67040	8125367	1	Standard
|	Fe	57	5613.891	ug/L	263.538	4	19150	3389937	2	Standard
⌊	Mn	55	128.548	ug/L	2.940	2	667	3714661	2	Standard
⌈>	Ge	72		ug/L			31347	30796	1	KED
|	Ni	60	5.254	ug/L	0.069	1	4	5570	2	KED
|	Ni	62	5.181	ug/L	0.248	4	3	907	4	KED
|	Cu	63	6.077	ug/L	0.122	2	53	18812	2	KED
|	Cu	65	6.064	ug/L	0.048	0	21	9344	1	KED
|	Zn	66	235.461	ug/L	4.628	1	18	96869	0	KED
|	Zn	67	208.867	ug/L	7.096	3	5	14501	2	KED
⌊	As	75	0.392	ug/L	0.017	4	5	91	5	KED
	Y	89		ug/L			275831	281135	4	Standard
	Kr	83		ug/L			40	51	29	Standard
⌈>	In-1	115		ug/L			9714	9523	2	KED
|	Cd	111	2.225	ug/L	0.117	5	2	610	5	KED
⌊	Cd	114	2.259	ug/L	0.136	6	3	1502	4	KED
⌈>	In	115		ug/L			369046	368740	1	Standard
⌊	Ag	107	0.084	ug/L	0.002	2	22	1052	3	Standard
⌈>	Tb	159		ug/L			669567	687461	0	Standard
⌊	Pb	208	0.378	ug/L	0.003	0	60	14759	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 22:11:16
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	28595	1	Standard
	Cl	**37**		ug/L			5434030	5530472	1	Standard
⎡>	**Sc**	**45**		ug/L			479414	477962	1	Standard
⎢	**Cr**	**52**	**-0.014**	ug/L	0.014	104	20356	20068	0	Standard
⎢	**Cr**	**53**	**0.294**	ug/L	0.008	2	160	729	1	Standard
⎢	**Fe**	**54**	**0.611**	ug/L	0.528	86	67040	67636	0	Standard
⎢	**Fe**	**57**	**0.356**	ug/L	1.561	438	19150	19280	3	Standard
⎣	**Mn**	**55**	**0.006**	ug/L	0.001	25	667	813	3	Standard
⎡>	**Ge**	**72**		ug/L			31347	29360	1	KED
⎢	**Ni**	**60**	**0.002**	ug/L	0.006	280	4	6	96	KED
⎢	**Ni**	**62**	**0.120**	ug/L	0.042	34	3	23	28	KED
⎢	**Cu**	**63**	**0.007**	ug/L	0.005	62	53	71	17	KED
⎢	**Cu**	**65**	**0.004**	ug/L	0.006	159	21	26	36	KED
⎢	**Zn**	**66**	**0.006**	ug/L	0.019	313	18	19	39	KED
⎢	**Zn**	**67**	**0.043**	ug/L	0.002	3	5	7	0	KED
⎣	**As**	**75**	**-0.002**	ug/L	0.007	337	5	4	32	KED
	Y	**89**		ug/L			275831	260958	1	Standard
	Kr	**83**		ug/L			40	34	17	Standard
⎡>	**In-1**	**115**		ug/L			9714	9392	1	KED
⎢	**Cd**	**111**	**-0.004**	ug/L	0.005	124	2	1	114	KED
⎣	**Cd**	**114**	**-0.002**	ug/L	0.005	281	3	1	188	KED
⎡>	**In**	**115**		ug/L			369046	354526	1	Standard
⎣	**Ag**	**107**	**-0.001**	ug/L	0.000	77	22	15	33	Standard
⎡>	**Tb**	**159**		ug/L			669567	643705	0	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	43	60	80	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 22:15:49
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	26675	0	Standard
	Cl	**37**		ug/L			5434030	5528219	0	Standard
⌈>	**Sc**	**45**		ug/L			479414	493810	1	Standard
|	**Cr**	**52**	**50.117**	ug/L	0.665	1	20356	884215	0	Standard
|	**Cr**	**53**	**50.202**	ug/L	0.930	1	160	100675	0	Standard
|	**Fe**	**54**	**5016.594**	ug/L	124.038	2	67040	6874010	1	Standard
|	**Fe**	**57**	**5150.113**	ug/L	101.540	1	19150	2911447	0	Standard
⌊	**Mn**	**55**	**46.739**	ug/L	0.951	2	667	1263485	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	29457	6	KED
|	**Ni**	**60**	**52.304**	ug/L	2.514	4	4	52903	1	KED
|	**Ni**	**62**	**51.779**	ug/L	2.442	4	3	8625	1	KED
|	**Cu**	**63**	**52.568**	ug/L	1.919	3	53	155046	2	KED
|	**Cu**	**65**	**52.715**	ug/L	3.062	5	21	77356	0	KED
|	**Zn**	**66**	**53.200**	ug/L	1.005	1	18	20939	4	KED
|	**Zn**	**67**	**51.794**	ug/L	3.595	6	5	3434	0	KED
⌊	**As**	**75**	**50.633**	ug/L	2.310	4	5	10653	1	KED
	Y	**89**		ug/L			275831	279521	1	Standard
	Kr	**83**		ug/L			40	60	41	Standard
⌈>	**In-1**	**115**		ug/L			9714	9515	0	KED
|	**Cd**	**111**	**50.014**	ug/L	0.140	0	2	13667	0	KED
⌊	**Cd**	**114**	**50.278**	ug/L	0.859	1	3	33362	1	KED
⌈>	**In**	**115**		ug/L			369046	363137	1	Standard
⌊	**Ag**	**107**	**51.848**	ug/L	0.291	0	22	629054	0	Standard
⌈>	**Tb**	**159**		ug/L			669567	680417	0	Standard
⌊	**Pb**	**208**	**52.309**	ug/L	0.087	0	60	2014368	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 22:23:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	25335	0	Standard
	Cl	**37**		ug/L			5434030	5596590	1	Standard
⎡>	**Sc**	**45**		ug/L			479414	482062	2	Standard
⎢	**Cr**	**52**	**-0.039**	ug/L	0.034	86	20356	19795	0	Standard
⎢	**Cr**	**53**	**0.228**	ug/L	0.030	13	160	606	7	Standard
⎢	**Fe**	**54**	**0.610**	ug/L	0.262	42	67040	68216	2	Standard
⎢	**Fe**	**57**	**-0.012**	ug/L	1.084	9093	19150	19244	2	Standard
⎣	**Mn**	**55**	**0.006**	ug/L	0.001	24	667	822	5	Standard
⎡>	**Ge**	**72**		ug/L			31347	29364	5	KED
⎢	**Ni**	**60**	**-0.002**	ug/L	0.001	63	4	2	43	KED
⎢	**Ni**	**62**	**0.077**	ug/L	0.055	70	3	16	58	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.004	281	53	53	17	KED
⎢	**Cu**	**65**	**0.004**	ug/L	0.003	87	21	25	15	KED
⎢	**Zn**	**66**	**-0.015**	ug/L	0.008	54	18	11	33	KED
⎢	**Zn**	**67**	**-0.034**	ug/L	0.043	127	5	2	114	KED
⎣	**As**	**75**	**0.012**	ug/L	0.009	74	5	7	19	KED
	Y	**89**		ug/L			275831	264150	1	Standard
	Kr	**83**		ug/L			40	39	26	Standard
⎡>	**In-1**	**115**		ug/L			9714	9122	1	KED
⎢	**Cd**	**111**	**-0.003**	ug/L	0.005	178	2	1	91	KED
⎣	**Cd**	**114**	**0.002**	ug/L	0.002	72	3	4	23	KED
⎡>	**In**	**115**		ug/L			369046	356328	1	Standard
⎣	**Ag**	**107**	**0.000**	ug/L	0.001	259	22	27	49	Standard
⎡>	**Tb**	**159**		ug/L			669567	650328	0	Standard
⎣	**Pb**	**208**	**0.000**	ug/L	0.000	87	60	64	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0177-04
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 22:27:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	41055	2	Standard
	Cl	37		ug/L			5434030	5461752	0	Standard
>	Sc	45		ug/L			479414	528838	2	Standard
	Cr	52	0.573	ug/L	0.054	9	20356	33015	2	Standard
	Cr	53	0.830	ug/L	0.018	2	160	1957	3	Standard
	Fe	54	87.424	ug/L	0.961	1	67040	200967	1	Standard
	Fe	57	109.349	ug/L	1.170	1	19150	86880	1	Standard
	Mn	55	5.941	ug/L	0.090	1	667	172635	1	Standard
>	Ge	72		ug/L			31347	30364	1	KED
	Ni	60	1.406	ug/L	0.079	5	4	1473	5	KED
	Ni	62	1.470	ug/L	0.234	15	3	256	15	KED
	Cu	63	34.830	ug/L	0.775	2	53	106037	0	KED
	Cu	65	35.247	ug/L	0.963	2	21	53433	1	KED
	Zn	66	29.607	ug/L	0.572	1	18	12024	0	KED
	Zn	67	27.905	ug/L	0.646	2	5	1915	2	KED
	As	75	0.398	ug/L	0.026	6	5	91	7	KED
	Y	89		ug/L			275831	275068	0	Standard
	Kr	83		ug/L			40	46	6	Standard
>	In-1	115		ug/L			9714	9269	2	KED
	Cd	111	-0.001	ug/L	0.004	570	2	2	49	KED
	Cd	114	-0.001	ug/L	0.003	273	3	2	103	KED
>	In	115		ug/L			369046	364257	0	Standard
	Ag	107	0.004	ug/L	0.001	35	22	69	24	Standard
>	Tb	159		ug/L			669567	671232	2	Standard
	Pb	208	0.042	ug/L	0.002	4	60	1641	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0177-06
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 22:32:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	41780	2	Standard
	Cl	37		ug/L			5434030	5639748	0	Standard
>	Sc	45		ug/L			479414	520243	1	Standard
	Cr	52	0.656	ug/L	0.030	4	20356	33991	1	Standard
	Cr	53	0.909	ug/L	0.030	3	160	2092	2	Standard
	Fe	54	92.382	ug/L	1.365	1	67040	204789	1	Standard
	Fe	57	113.923	ug/L	5.635	4	19150	88158	2	Standard
	Mn	55	6.424	ug/L	0.066	1	667	183587	0	Standard
>	Ge	72		ug/L			31347	31098	1	KED
	Ni	60	1.374	ug/L	0.034	2	4	1474	1	KED
	Ni	62	1.650	ug/L	0.077	4	3	294	6	KED
	Cu	63	34.313	ug/L	0.128	0	53	107017	1	KED
	Cu	65	34.908	ug/L	0.153	0	21	54216	1	KED
	Zn	66	30.632	ug/L	0.479	1	18	12744	2	KED
	Zn	67	28.759	ug/L	0.572	1	5	2021	3	KED
	As	75	0.422	ug/L	0.024	5	5	99	5	KED
	Y	89		ug/L			275831	271492	1	Standard
	Kr	83		ug/L			40	38	13	Standard
>	In-1	115		ug/L			9714	9542	0	KED
	Cd	111	0.000	ug/L	0.007	4906	2	2	78	KED
	Cd	114	0.005	ug/L	0.005	117	3	6	59	KED
>	In	115		ug/L			369046	365208	1	Standard
	Ag	107	0.004	ug/L	0.001	17	22	66	13	Standard
>	Tb	159		ug/L			669567	668389	0	Standard
	Pb	208	0.044	ug/L	0.001	1	60	1709	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0177-08
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 22:36:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	41845	1	Standard
	Cl	**37**		ug/L			5434030	5619779	0	Standard
>	**Sc**	**45**		ug/L			479414	520770	0	Standard
	Cr	**52**	**0.416**	ug/L	0.016	3	20356	29668	1	Standard
	Cr	**53**	**0.663**	ug/L	0.007	1	160	1573	1	Standard
	Fe	**54**	**20.505**	ug/L	0.565	2	67040	102167	1	Standard
	Fe	**57**	**52.724**	ug/L	1.701	3	19150	52024	1	Standard
	Mn	**55**	**5.774**	ug/L	0.095	1	667	165257	1	Standard
>	**Ge**	**72**		ug/L			31347	30295	1	KED
	Ni	**60**	**1.241**	ug/L	0.055	4	4	1296	2	KED
	Ni	**62**	**1.377**	ug/L	0.066	4	3	240	4	KED
	Cu	**63**	**23.834**	ug/L	0.906	3	53	72421	3	KED
	Cu	**65**	**23.772**	ug/L	0.128	0	21	35976	2	KED
	Zn	**66**	**18.025**	ug/L	0.405	2	18	7311	2	KED
	Zn	**67**	**16.800**	ug/L	0.704	4	5	1151	2	KED
	As	**75**	**0.425**	ug/L	0.007	1	5	97	3	KED
	Y	**89**		ug/L			275831	275781	1	Standard
	Kr	**83**		ug/L			40	30	10	Standard
>	**In-1**	**115**		ug/L			9714	9425	2	KED
	Cd	**111**	**0.083**	ug/L	0.025	29	2	24	25	KED
	Cd	**114**	**0.060**	ug/L	0.004	5	3	42	6	KED
>	**In**	**115**		ug/L			369046	361306	1	Standard
	Ag	**107**	**0.003**	ug/L	0.001	28	22	53	16	Standard
>	**Tb**	**159**		ug/L			669567	675218	1	Standard
	Pb	**208**	**0.013**	ug/L	0.002	17	60	570	16	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0213-02
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 22:41:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	45270	0	Standard
	Cl	**37**		ug/L			5434030	6423057	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	535282	1	Standard
|	**Cr**	**52**	**0.185**	ug/L	0.009	5	20356	26182	2	Standard
|	**Cr**	**53**	**1.055**	ug/L	0.017	1	160	2469	1	Standard
|	**Fe**	**54**	**910.585**	ug/L	4.967	0	67040	1414010	1	Standard
|	**Fe**	**57**	**901.959**	ug/L	27.005	2	19150	570275	1	Standard
⌊	**Mn**	**55**	**143.121**	ug/L	1.223	0	667	4192770	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	29742	1	KED
|	**Ni**	**60**	**0.923**	ug/L	0.046	5	4	947	3	KED
|	**Ni**	**62**	**0.978**	ug/L	0.077	7	3	168	7	KED
|	**Cu**	**63**	**1.965**	ug/L	0.094	4	53	5907	3	KED
|	**Cu**	**65**	**1.933**	ug/L	0.090	4	21	2888	2	KED
|	**Zn**	**66**	**3.457**	ug/L	0.213	6	18	1390	5	KED
|	**Zn**	**67**	**3.455**	ug/L	0.427	12	5	236	10	KED
⌊	**As**	**75**	**0.779**	ug/L	0.093	11	5	170	9	KED
	Y	**89**		ug/L			275831	273983	1	Standard
	Kr	**83**		ug/L			40	28	37	Standard
⌈>	**In-1**	**115**		ug/L			9714	9042	2	KED
|	**Cd**	**111**	**0.007**	ug/L	0.008	113	2	4	48	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.003	38	3	8	24	KED
⌈>	**In**	**115**		ug/L			369046	352016	0	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.001	23	22	81	16	Standard
⌈>	**Tb**	**159**		ug/L			669567	676307	1	Standard
⌊	**Pb**	**208**	**0.110**	ug/L	0.005	4	60	4277	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0213-04
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 22:45:55
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	46795	1	Standard
	Cl	**37**		ug/L			5434030	7554244	3	Standard
⌈>	**Sc**	**45**		ug/L			479414	532062	0	Standard
|	**Cr**	**52**	**0.141**	ug/L	0.004	2	20356	25208	0	Standard
|	**Cr**	**53**	**1.699**	ug/L	0.064	3	160	3844	4	Standard
|	**Fe**	**54**	**923.045**	ug/L	1.198	0	67040	1423766	0	Standard
|	**Fe**	**57**	**929.955**	ug/L	34.471	3	19150	583927	3	Standard
⌊	**Mn**	**55**	**264.435**	ug/L	0.956	0	667	7700131	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	28385	2	KED
|	**Ni**	**60**	**0.786**	ug/L	0.016	2	4	770	0	KED
|	**Ni**	**62**	**1.030**	ug/L	0.068	6	3	168	4	KED
|	**Cu**	**63**	**0.845**	ug/L	0.053	6	53	2450	4	KED
|	**Cu**	**65**	**0.884**	ug/L	0.037	4	21	1272	3	KED
|	**Zn**	**66**	**3.754**	ug/L	0.173	4	18	1439	2	KED
|	**Zn**	**67**	**3.790**	ug/L	0.174	4	5	246	3	KED
⌊	**As**	**75**	**0.625**	ug/L	0.007	1	5	131	1	KED
	Y	**89**		ug/L			275831	263611	1	Standard
	Kr	**83**		ug/L			40	41	9	Standard
⌈>	**In-1**	**115**		ug/L			9714	8829	1	KED
|	**Cd**	**111**	**0.003**	ug/L	0.002	57	2	3	17	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.005	52	3	8	35	KED
⌈>	**In**	**115**		ug/L			369046	340935	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	141	22	31	45	Standard
⌈>	**Tb**	**159**		ug/L			669567	664859	0	Standard
⌊	**Pb**	**208**	**0.053**	ug/L	0.002	3	60	2067	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0706-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 22:50:28
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	42720	0	Standard
	Cl	37		ug/L			5434030	6365226	2	Standard
>	Sc	45		ug/L			479414	555488	1	Standard
	Cr	52	-0.002	ug/L	0.011	636	20356	23553	1	Standard
	Cr	53	0.937	ug/L	0.017	1	160	2295	0	Standard
	Fe	54	161.945	ug/L	1.685	1	67040	324846	1	Standard
	Fe	57	246.840	ug/L	2.404	0	19150	178131	1	Standard
	Mn	55	204.686	ug/L	2.491	1	667	6222382	0	Standard
>	Ge	72		ug/L			31347	28443	0	KED
	Ni	60	2.759	ug/L	0.087	3	4	2703	2	KED
	Ni	62	2.749	ug/L	0.060	2	3	446	2	KED
	Cu	63	0.539	ug/L	0.005	0	53	1584	0	KED
	Cu	65	0.532	ug/L	0.019	3	21	775	3	KED
	Zn	66	2.501	ug/L	0.042	1	18	967	1	KED
	Zn	67	3.492	ug/L	0.227	6	5	228	6	KED
	As	75	0.525	ug/L	0.030	5	5	111	4	KED
	Y	89		ug/L			275831	266637	1	Standard
	Kr	83		ug/L			40	50	9	Standard
>	In-1	115		ug/L			9714	8809	3	KED
	Cd	111	0.020	ug/L	0.013	64	2	7	45	KED
	Cd	114	0.021	ug/L	0.012	57	3	15	44	KED
>	In	115		ug/L			369046	340380	1	Standard
	Ag	107	0.002	ug/L	0.001	49	22	46	26	Standard
>	Tb	159		ug/L			669567	657318	0	Standard
	Pb	208	0.014	ug/L	0.000	1	60	597	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0111-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 22:55:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	59884	3	Standard
	Cl	37		ug/L			5434030	5669777	0	Standard
>	Sc	45		ug/L			479414	516358	2	Standard
	Cr	52	1.245	ug/L	0.055	4	20356	44344	1	Standard
	Cr	53	1.467	ug/L	0.029	1	160	3244	1	Standard
	Fe	54	355.807	ug/L	11.652	3	67040	576717	0	Standard
	Fe	57	352.045	ug/L	2.845	0	19150	227341	2	Standard
	Mn	55	9.616	ug/L	0.187	1	667	272349	0	Standard
>	Ge	72		ug/L			31347	29980	1	KED
	Ni	60	1.149	ug/L	0.046	3	4	1189	4	KED
	Ni	62	1.097	ug/L	0.029	2	3	189	2	KED
	Cu	63	8.960	ug/L	0.041	0	53	26978	0	KED
	Cu	65	8.895	ug/L	0.164	1	21	13335	2	KED
	Zn	66	47.324	ug/L	0.333	0	18	18971	1	KED
	Zn	67	42.941	ug/L	0.551	1	5	2906	0	KED
	As	75	0.218	ug/L	0.012	5	5	51	5	KED
	Y	89		ug/L			275831	268504	1	Standard
	Kr	83		ug/L			40	36	24	Standard
>	In-1	115		ug/L			9714	9333	2	KED
	Cd	111	0.015	ug/L	0.011	75	2	6	43	KED
	Cd	114	0.016	ug/L	0.010	60	3	13	49	KED
>	In	115		ug/L			369046	352520	1	Standard
	Ag	107	0.006	ug/L	0.001	9	22	96	7	Standard
>	Tb	159		ug/L			669567	665207	1	Standard
	Pb	208	0.506	ug/L	0.002	0	60	19093	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0177-02
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 22:59:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	41404	0	Standard
	Cl	**37**		ug/L			5434030	5651618	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	521973	1	Standard
|	**Cr**	**52**	**0.910**	ug/L	0.018	1	20356	38728	0	Standard
|	**Cr**	**53**	**1.121**	ug/L	0.017	1	160	2547	0	Standard
|	**Fe**	**54**	**30.643**	ug/L	3.096	10	67040	116913	2	Standard
|	**Fe**	**57**	**52.108**	ug/L	1.203	2	19150	51782	1	Standard
⌊	**Mn**	**55**	**7.451**	ug/L	0.114	1	667	213537	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	29920	1	KED
|	**Ni**	**60**	**1.007**	ug/L	0.053	5	4	1040	6	KED
|	**Ni**	**62**	**1.271**	ug/L	0.150	11	3	219	11	KED
|	**Cu**	**63**	**29.578**	ug/L	0.326	1	53	88768	1	KED
|	**Cu**	**65**	**30.487**	ug/L	0.357	1	21	45555	0	KED
|	**Zn**	**66**	**27.008**	ug/L	0.343	1	18	10812	0	KED
|	**Zn**	**67**	**24.660**	ug/L	0.587	2	5	1668	1	KED
⌊	**As**	**75**	**0.268**	ug/L	0.035	12	5	62	11	KED
	Y	**89**		ug/L			275831	272326	1	Standard
	Kr	**83**		ug/L			40	38	22	Standard
⌈>	**In-1**	**115**		ug/L			9714	9295	1	KED
|	**Cd**	**111**	**0.006**	ug/L	0.011	178	2	4	74	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.002	89	3	1	54	KED
⌈>	**In**	**115**		ug/L			369046	355571	0	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.001	29	22	57	17	Standard
⌈>	**Tb**	**159**		ug/L			669567	675424	1	Standard
⌊	**Pb**	**208**	**0.030**	ug/L	0.001	3	60	1193	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0403-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 23:04:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	41060	2	Standard
	Cl	37		ug/L			5434030	5654756	0	Standard
>	Sc	45		ug/L			479414	513491	3	Standard
	Cr	52	0.925	ug/L	0.085	9	20356	38349	1	Standard
	Cr	53	1.120	ug/L	0.065	5	160	2502	4	Standard
	Fe	54	34.276	ug/L	1.702	4	67040	120119	1	Standard
	Fe	57	56.278	ug/L	2.495	4	19150	53355	2	Standard
	Mn	55	7.773	ug/L	0.268	3	667	218992	0	Standard
>	Ge	72		ug/L			31347	30175	0	KED
	Ni	60	1.035	ug/L	0.032	3	4	1078	2	KED
	Ni	62	1.015	ug/L	0.179	17	3	177	17	KED
	Cu	63	30.120	ug/L	0.361	1	53	91154	0	KED
	Cu	65	30.267	ug/L	0.375	1	21	45614	1	KED
	Zn	66	27.111	ug/L	0.513	1	18	10947	2	KED
	Zn	67	24.794	ug/L	0.662	2	5	1691	2	KED
	As	75	0.247	ug/L	0.037	14	5	58	13	KED
	Y	89		ug/L			275831	268667	1	Standard
	Kr	83		ug/L			40	34	43	Standard
>	In-1	115		ug/L			9714	9320	2	KED
	Cd	111	0.002	ug/L	0.004	222	2	2	33	KED
	Cd	114	0.004	ug/L	0.004	83	3	5	39	KED
>	In	115		ug/L			369046	353492	1	Standard
	Ag	107	0.003	ug/L	0.001	27	22	53	15	Standard
>	Tb	159		ug/L			669567	668525	1	Standard
	Pb	208	0.027	ug/L	0.001	3	60	1090	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0403-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 23:08:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	40721	2	Standard
	Cl	**37**		ug/L			5434030	5748086	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	527702	1	Standard
|	**Cr**	**52**	**24.493**	ug/L	0.259	1	20356	473346	2	Standard
|	**Cr**	**53**	**24.966**	ug/L	0.560	2	160	53588	0	Standard
|	**Fe**	**54**	**32.686**	ug/L	1.187	3	67040	121166	0	Standard
|	**Fe**	**57**	**54.834**	ug/L	1.959	3	19150	53974	1	Standard
⌊	**Mn**	**55**	**30.282**	ug/L	0.567	1	667	875044	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	29484	2	KED
|	**Ni**	**60**	**29.475**	ug/L	0.649	2	4	29892	1	KED
|	**Ni**	**62**	**28.601**	ug/L	0.642	2	3	4777	1	KED
|	**Cu**	**63**	**58.306**	ug/L	1.021	1	53	172330	0	KED
|	**Cu**	**65**	**59.482**	ug/L	2.531	4	21	87516	2	KED
|	**Zn**	**66**	**113.716**	ug/L	3.322	2	18	44787	0	KED
|	**Zn**	**67**	**106.061**	ug/L	0.360	0	5	7055	2	KED
⌊	**As**	**75**	**25.495**	ug/L	0.221	0	5	5381	1	KED
	Y	**89**		ug/L			275831	266524	1	Standard
	Kr	**83**		ug/L			40	39	21	Standard
⌈>	**In-1**	**115**		ug/L			9714	9097	0	KED
|	**Cd**	**111**	**25.338**	ug/L	1.120	4	2	6619	3	KED
⌊	**Cd**	**114**	**25.986**	ug/L	0.827	3	3	16484	2	KED
⌈>	**In**	**115**		ug/L			369046	353457	1	Standard
⌊	**Ag**	**107**	**26.331**	ug/L	0.720	2	22	310919	1	Standard
⌈>	**Tb**	**159**		ug/L			669567	669949	0	Standard
⌊	**Pb**	**208**	**28.680**	ug/L	0.348	1	60	1087529	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 23:13:15
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	26755	0	Standard
	Cl	**37**		ug/L			5434030	5625358	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	508098	1	Standard
|	**Cr**	**52**	**48.436**	ug/L	1.067	2	20356	880006	1	Standard
|	**Cr**	**53**	**48.369**	ug/L	0.128	0	160	99833	1	Standard
|	**Fe**	**54**	**4928.241**	ug/L	107.931	2	67040	6950522	1	Standard
|	**Fe**	**57**	**5049.062**	ug/L	52.717	1	19150	2937658	0	Standard
⌊	**Mn**	**55**	**46.541**	ug/L	0.558	1	667	1294734	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	29638	1	KED
|	**Ni**	**60**	**53.118**	ug/L	1.249	2	4	54152	1	KED
|	**Ni**	**62**	**52.615**	ug/L	1.678	3	3	8832	1	KED
|	**Cu**	**63**	**51.192**	ug/L	1.652	3	53	152096	1	KED
|	**Cu**	**65**	**52.326**	ug/L	0.497	0	21	77441	1	KED
|	**Zn**	**66**	**53.267**	ug/L	1.689	3	18	21103	2	KED
|	**Zn**	**67**	**51.023**	ug/L	1.482	2	5	3413	1	KED
⌊	**As**	**75**	**49.186**	ug/L	1.492	3	5	10428	1	KED
	Y	**89**		ug/L			275831	269186	2	Standard
	Kr	**83**		ug/L			40	36	34	Standard
⌈>	**In-1**	**115**		ug/L			9714	9188	1	KED
|	**Cd**	**111**	**50.869**	ug/L	0.739	1	2	13422	1	KED
⌊	**Cd**	**114**	**51.182**	ug/L	1.387	2	3	32787	1	KED
⌈>	**In**	**115**		ug/L			369046	345696	1	Standard
⌊	**Ag**	**107**	**52.314**	ug/L	0.568	1	22	604185	0	Standard
⌈>	**Tb**	**159**		ug/L			669567	667953	1	Standard
⌊	**Pb**	**208**	**56.231**	ug/L	0.919	1	60	2125422	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 23:20:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	25737	4	Standard
	Cl	**37**		ug/L			5434030	5713940	0	Standard
⌈>	**Sc**	**45**		ug/L			479414	492012	1	Standard
|	**Cr**	**52**	**-0.053**	ug/L	0.031	59	20356	19988	2	Standard
|	**Cr**	**53**	**0.154**	ug/L	0.035	22	160	471	15	Standard
|	**Fe**	**54**	**0.613**	ug/L	2.197	358	67040	69638	4	Standard
|	**Fe**	**57**	**1.321**	ug/L	1.246	94	19150	20395	4	Standard
⌊	**Mn**	**55**	**0.029**	ug/L	0.035	120	667	1463	64	Standard
⌈>	**Ge**	**72**		ug/L			31347	28736	2	KED
|	**Ni**	**60**	**0.002**	ug/L	0.000	10	4	5	0	KED
|	**Ni**	**62**	**0.033**	ug/L	0.031	91	3	8	53	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.004	448	53	46	26	KED
|	**Cu**	**65**	**0.000**	ug/L	0.001	291	21	20	5	KED
|	**Zn**	**66**	**-0.014**	ug/L	0.005	32	18	11	16	KED
|	**Zn**	**67**	**0.047**	ug/L	0.053	114	5	7	43	KED
⌊	**As**	**75**	**-0.003**	ug/L	0.010	391	5	4	50	KED
	Y	**89**		ug/L			275831	255189	1	Standard
	Kr	**83**		ug/L			40	42	6	Standard
⌈>	**In-1**	**115**		ug/L			9714	8836	2	KED
|	**Cd**	**111**	**0.006**	ug/L	0.013	228	2	3	90	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.000	12	3	1	4	KED
⌈>	**In**	**115**		ug/L			369046	346381	0	Standard
⌊	**Ag**	**107**	**0.031**	ug/L	0.028	90	22	375	85	Standard
⌈>	**Tb**	**159**		ug/L			669567	637419	1	Standard
⌊	**Pb**	**208**	**0.032**	ug/L	0.028	86	60	1236	82	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0117-02
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 23:25:08
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	48752	2	Standard
	Cl	37		ug/L			5434030	11772609	3	Standard
>	Sc	45		ug/L			479414	521596	1	Standard
	Cr	52	1.310	ug/L	0.038	2	20356	45978	2	Standard
	Cr	53	7.517	ug/L	0.127	1	160	16071	0	Standard
	Fe	54	528.156	ug/L	15.138	2	67040	829626	1	Standard
	Fe	57	522.616	ug/L	13.703	2	19150	330764	1	Standard
	Mn	55	15.726	ug/L	0.467	2	667	449470	1	Standard
>	Ge	72		ug/L			31347	28279	1	KED
	Ni	60	1.426	ug/L	0.008	0	4	1391	1	KED
	Ni	62	1.533	ug/L	0.131	8	3	248	7	KED
	Cu	63	10.418	ug/L	0.178	1	53	29581	2	KED
	Cu	65	10.465	ug/L	0.082	0	21	14792	0	KED
	Zn	66	62.942	ug/L	0.559	0	18	23793	0	KED
	Zn	67	56.083	ug/L	0.367	0	5	3580	1	KED
	As	75	1.060	ug/L	0.052	4	5	219	4	KED
	Y	89		ug/L			275831	270670	0	Standard
	Kr	83		ug/L			40	66	7	Standard
>	In-1	115		ug/L			9714	8705	2	KED
	Cd	111	0.036	ug/L	0.017	45	2	11	38	KED
	Cd	114	0.035	ug/L	0.013	36	3	24	33	KED
>	In	115		ug/L			369046	331910	1	Standard
	Ag	107	0.010	ug/L	0.002	24	22	132	21	Standard
>	Tb	159		ug/L			669567	667344	0	Standard
	Pb	208	1.781	ug/L	0.018	1	60	67330	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0123-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 23:29:41
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	43612	1	Standard
	Cl	37		ug/L			5434030	6004124	0	Standard
>	Sc	45		ug/L			479414	523533	0	Standard
	Cr	52	1.296	ug/L	0.029	2	20356	45908	1	Standard
	Cr	53	1.860	ug/L	0.024	1	160	4124	0	Standard
	Fe	54	146.110	ug/L	1.238	0	67040	283370	0	Standard
	Fe	57	146.153	ug/L	3.909	2	19150	107929	2	Standard
	Mn	55	59.417	ug/L	1.395	2	667	1702854	1	Standard
>	Ge	72		ug/L			31347	30443	0	KED
	Ni	60	1.106	ug/L	0.082	7	4	1161	7	KED
	Ni	62	1.161	ug/L	0.141	12	3	203	11	KED
	Cu	63	24.794	ug/L	0.346	1	53	75710	0	KED
	Cu	65	25.490	ug/L	0.156	0	21	38759	0	KED
	Zn	66	270.624	ug/L	2.132	0	18	110074	0	KED
	Zn	67	237.882	ug/L	0.751	0	5	16331	1	KED
	As	75	3.339	ug/L	0.043	1	5	732	1	KED
	Y	89		ug/L			275831	270341	1	Standard
	Kr	83		ug/L			40	31	13	Standard
>	In-1	115		ug/L			9714	9270	1	KED
	Cd	111	0.307	ug/L	0.021	6	2	84	6	KED
	Cd	114	0.318	ug/L	0.031	9	3	208	8	KED
>	In	115		ug/L			369046	355567	1	Standard
	Ag	107	0.010	ug/L	0.001	9	22	141	9	Standard
>	Tb	159		ug/L			669567	678690	0	Standard
	Pb	208	3.749	ug/L	0.045	1	60	144043	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0124-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 23:34:14
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	52921	0	Standard
	Cl	37		ug/L			5434030	5722872	1	Standard
>	Sc	45		ug/L			479414	517584	0	Standard
	Cr	52	6.017	ug/L	0.086	1	20356	130633	2	Standard
	Cr	53	6.307	ug/L	0.047	0	160	13409	0	Standard
	Fe	54	139.948	ug/L	0.825	0	67040	271390	0	Standard
	Fe	57	204.732	ug/L	3.798	1	19150	141174	0	Standard
	Mn	55	3.998	ug/L	0.039	0	667	113963	1	Standard
>	Ge	72		ug/L			31347	29378	2	KED
	Ni	60	1.528	ug/L	0.064	4	4	1548	2	KED
	Ni	62	1.613	ug/L	0.111	6	3	271	5	KED
	Cu	63	28.719	ug/L	0.570	1	53	84605	0	KED
	Cu	65	29.633	ug/L	1.195	4	21	43456	1	KED
	Zn	66	331.569	ug/L	10.146	3	18	130097	1	KED
	Zn	67	302.409	ug/L	14.935	4	5	20025	4	KED
	As	75	1.042	ug/L	0.043	4	5	223	5	KED
	Y	89		ug/L			275831	267002	1	Standard
	Kr	83		ug/L			40	53	19	Standard
>	In-1	115		ug/L			9714	8900	1	KED
	Cd	111	0.007	ug/L	0.006	83	2	4	35	KED
	Cd	114	0.013	ug/L	0.006	44	3	10	31	KED
>	In	115		ug/L			369046	342215	1	Standard
	Ag	107	0.030	ug/L	0.003	10	22	359	8	Standard
>	Tb	159		ug/L			669567	664090	0	Standard
	Pb	208	0.290	ug/L	0.000	0	60	10944	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0124-03
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 23:38:48
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	46449	0	Standard
	Cl	37		ug/L			5434030	5624312	2	Standard
>	Sc	45		ug/L			479414	522242	2	Standard
	Cr	52	2.938	ug/L	0.125	4	20356	75661	0	Standard
	Cr	53	3.100	ug/L	0.080	2	160	6737	0	Standard
	Fe	54	68.330	ug/L	3.983	5	67040	170966	0	Standard
	Fe	57	114.740	ug/L	5.270	4	19150	88949	0	Standard
	Mn	55	2.360	ug/L	0.096	4	667	68130	1	Standard
>	Ge	72		ug/L			31347	29107	0	KED
	Ni	60	0.990	ug/L	0.059	5	4	994	5	KED
	Ni	62	1.176	ug/L	0.094	8	3	197	8	KED
	Cu	63	27.086	ug/L	0.289	1	53	79081	1	KED
	Cu	65	27.629	ug/L	0.801	2	21	40172	3	KED
	Zn	66	26.052	ug/L	0.586	2	18	10146	1	KED
	Zn	67	25.290	ug/L	0.308	1	5	1664	0	KED
	As	75	0.853	ug/L	0.074	8	5	182	8	KED
	Y	89		ug/L			275831	268458	1	Standard
	Kr	83		ug/L			40	34	14	Standard
>	In-1	115		ug/L			9714	8889	3	KED
	Cd	111	0.002	ug/L	0.010	438	2	2	88	KED
	Cd	114	0.002	ug/L	0.007	457	3	3	117	KED
>	In	115		ug/L			369046	350807	0	Standard
	Ag	107	0.020	ug/L	0.003	14	22	260	12	Standard
>	Tb	159		ug/L			669567	671441	1	Standard
	Pb	208	0.156	ug/L	0.004	2	60	5982	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0125-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 23:43:21
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	44306	0	Standard
	Cl	37		ug/L			5434030	5596121	1	Standard
>	Sc	45		ug/L			479414	498257	1	Standard
	Cr	52	8.936	ug/L	0.164	1	20356	176438	0	Standard
	Cr	53	9.278	ug/L	0.292	3	160	18907	1	Standard
	Fe	54	280.422	ug/L	9.232	3	67040	453464	2	Standard
	Fe	57	276.177	ug/L	17.331	6	19150	176277	3	Standard
	Mn	55	21.233	ug/L	0.463	2	667	579528	1	Standard
>	Ge	72		ug/L			31347	29922	2	KED
	Ni	60	0.266	ug/L	0.011	4	4	277	3	KED
	Ni	62	0.350	ug/L	0.063	18	3	62	16	KED
	Cu	63	22.970	ug/L	0.398	1	53	68932	1	KED
	Cu	65	23.466	ug/L	0.087	0	21	35071	2	KED
	Zn	66	291.784	ug/L	10.373	3	18	116586	1	KED
	Zn	67	252.431	ug/L	5.288	2	5	17030	2	KED
	As	75	3.402	ug/L	0.108	3	5	732	0	KED
	Y	89		ug/L			275831	261585	0	Standard
	Kr	83		ug/L			40	44	17	Standard
>	In-1	115		ug/L			9714	9224	0	KED
	Cd	111	0.008	ug/L	0.008	98	2	4	44	KED
	Cd	114	0.015	ug/L	0.003	19	3	12	15	KED
>	In	115		ug/L			369046	344304	1	Standard
	Ag	107	0.003	ug/L	0.000	16	22	52	10	Standard
>	Tb	159		ug/L			669567	655164	1	Standard
	Pb	208	0.155	ug/L	0.004	2	60	5811	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0126-01
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Thursday, April 20, 2023 23:47:54
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25789	37902	0	Standard
Cl	37		ug/L			5434030	86882668	1	Standard
Sc	45		ug/L			479414	385531	0	Standard
Cr	52	**1.398**	ug/L	0.039	2	20356	35169	0	Standard
Cr	53	**53.576**	ug/L	1.136	2	160	83882	1	Standard
Fe	54	**309.005**	ug/L	5.136	1	67040	381211	0	Standard
Fe	57	**526.076**	ug/L	8.626	1	19150	246048	1	Standard
Mn	55	**13.093**	ug/L	0.365	2	667	276738	2	Standard
Ge	72		ug/L			31347	15678	1	KED
Ni	60	**1.025**	ug/L	0.053	5	4	554	5	KED
Ni	62	**3.045**	ug/L	0.153	5	3	272	6	KED
Cu	63	**3.805**	ug/L	0.148	3	53	6003	2	KED
Cu	65	**3.420**	ug/L	0.145	4	21	2686	2	KED
Zn	66	**7.315**	ug/L	0.141	1	18	1541	1	KED
Zn	67	**7.544**	ug/L	0.164	2	5	269	3	KED
As	75	**1.040**	ug/L	0.115	11	5	119	10	KED
Y	89		ug/L			275831	195487	1	Standard
Kr	83		ug/L			40	3338	2	Standard
In-1	115		ug/L			9714	5514	0	KED
Cd	111	**0.025**	ug/L	0.017	69	2	5	50	KED
Cd	114	**0.023**	ug/L	0.021	91	3	10	75	KED
In	115		ug/L			369046	212648	0	Standard
Ag	107	**0.011**	ug/L	0.000	3	22	88	3	Standard
Tb	159		ug/L			669567	457815	0	Standard
Pb	208	**0.819**	ug/L	0.013	1	60	21248	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0126-02
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 23:52:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	49745	3	Standard
	Cl	**37**		ug/L			5434030	6240715	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	494668	0	Standard
|	**Cr**	**52**	**0.405**	ug/L	0.020	4	20356	27995	1	Standard
|	**Cr**	**53**	**2.195**	ug/L	0.091	4	160	4568	4	Standard
|	**Fe**	**54**	**25.784**	ug/L	0.690	2	67040	104216	0	Standard
|	**Fe**	**57**	**32.582**	ug/L	0.677	2	19150	38088	0	Standard
⌊	**Mn**	**55**	**3.680**	ug/L	0.047	1	667	100298	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	30595	5	KED
|	**Ni**	**60**	**0.173**	ug/L	0.021	12	4	187	15	KED
|	**Ni**	**62**	**1.456**	ug/L	0.227	15	3	257	19	KED
|	**Cu**	**63**	**1.990**	ug/L	0.044	2	53	6149	3	KED
|	**Cu**	**65**	**1.989**	ug/L	0.087	4	21	3053	1	KED
|	**Zn**	**66**	**52.958**	ug/L	0.548	1	18	21659	4	KED
|	**Zn**	**67**	**48.788**	ug/L	3.646	7	5	3362	4	KED
⌊	**As**	**75**	**0.208**	ug/L	0.015	7	5	50	4	KED
	Y	**89**		ug/L			275831	272031	0	Standard
	Kr	**83**		ug/L			40	99	8	Standard
⌈>	**In-1**	**115**		ug/L			9714	9526	2	KED
|	**Cd**	**111**	**0.051**	ug/L	0.014	28	2	16	21	KED
⌊	**Cd**	**114**	**0.045**	ug/L	0.003	7	3	33	7	KED
⌈>	**In**	**115**		ug/L			369046	360378	0	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.001	28	22	61	17	Standard
⌈>	**Tb**	**159**		ug/L			669567	661396	1	Standard
⌊	**Pb**	**208**	**0.194**	ug/L	0.001	0	60	7309	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0116-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, April 20, 2023 23:57:01
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	43996	0	Standard
	Cl	**37**		ug/L			5434030	5790600	0	Standard
⌈>	**Sc**	**45**		ug/L			479414	486303	3	Standard
|	**Cr**	**52**	**2.053**	ug/L	0.101	4	20356	55441	0	Standard
|	**Cr**	**53**	**3.053**	ug/L	0.105	3	160	6178	1	Standard
|	**Fe**	**54**	**1133.457**	ug/L	25.717	2	67040	1581637	1	Standard
|	**Fe**	**57**	**1129.538**	ug/L	21.190	1	19150	643893	2	Standard
⌊	**Mn**	**55**	**39.297**	ug/L	0.769	1	667	1046065	2	Standard
⌈>	**Ge**	**72**		ug/L			31347	30882	2	KED
|	**Ni**	**60**	**2.919**	ug/L	0.094	3	4	3105	4	KED
|	**Ni**	**62**	**3.517**	ug/L	0.086	2	3	619	4	KED
|	**Cu**	**63**	**14.885**	ug/L	0.230	1	53	46139	3	KED
|	**Cu**	**65**	**15.078**	ug/L	0.283	1	21	23262	1	KED
|	**Zn**	**66**	**213.106**	ug/L	2.913	1	18	87923	1	KED
|	**Zn**	**67**	**191.469**	ug/L	4.192	2	5	13331	0	KED
⌊	**As**	**75**	**1.851**	ug/L	0.118	6	5	413	4	KED
	Y	**89**		ug/L			275831	271640	3	Standard
	Kr	**83**		ug/L			40	72	26	Standard
⌈>	**In-1**	**115**		ug/L			9714	9494	2	KED
|	**Cd**	**111**	**0.040**	ug/L	0.007	16	2	13	12	KED
⌊	**Cd**	**114**	**0.038**	ug/L	0.011	27	3	28	23	KED
⌈>	**In**	**115**		ug/L			369046	346765	4	Standard
⌊	**Ag**	**107**	**0.012**	ug/L	0.002	18	22	163	14	Standard
⌈>	**Tb**	**159**		ug/L			669567	661704	3	Standard
⌊	**Pb**	**208**	**2.747**	ug/L	0.154	5	60	102795	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0506-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 00:01:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	40613	2	Standard
	Cl	37		ug/L			5434030	5834053	1	Standard
>	Sc	45		ug/L			479414	497231	1	Standard
	Cr	52	1.689	ug/L	0.014	0	20356	50416	2	Standard
	Cr	53	2.478	ug/L	0.026	1	160	5163	1	Standard
	Fe	54	996.432	ug/L	18.318	1	67040	1430625	1	Standard
	Fe	57	959.881	ug/L	23.014	2	19150	562512	0	Standard
	Mn	55	35.497	ug/L	0.384	1	667	966461	1	Standard
>	Ge	72		ug/L			31347	30426	1	KED
	Ni	60	2.752	ug/L	0.088	3	4	2885	4	KED
	Ni	62	3.272	ug/L	0.128	3	3	567	4	KED
	Cu	63	14.233	ug/L	0.644	4	53	43440	2	KED
	Cu	65	14.508	ug/L	0.310	2	21	22054	1	KED
	Zn	66	206.231	ug/L	1.465	0	18	83848	2	KED
	Zn	67	184.128	ug/L	5.539	3	5	12631	1	KED
	As	75	1.671	ug/L	0.109	6	5	368	4	KED
	Y	89		ug/L			275831	273901	1	Standard
	Kr	83		ug/L			40	55	16	Standard
>	In-1	115		ug/L			9714	9470	1	KED
	Cd	111	0.034	ug/L	0.006	17	2	11	12	KED
	Cd	114	0.041	ug/L	0.009	21	3	29	18	KED
>	In	115		ug/L			369046	353334	0	Standard
	Ag	107	0.010	ug/L	0.001	9	22	134	6	Standard
>	Tb	159		ug/L			669567	661668	2	Standard
	Pb	208	2.503	ug/L	0.024	0	60	93797	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0506-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 00:06:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			25789	39651	1	Standard
Cl	37		ug/L			5434030	5671668	1	Standard
> Sc	45		ug/L			479414	496215	1	Standard
Cr	52	27.347	ug/L	0.651	2	20356	494364	0	Standard
Cr	53	27.963	ug/L	0.603	2	160	56427	1	Standard
Fe	54	974.278	ug/L	27.780	2	67040	1397922	3	Standard
Fe	57	944.510	ug/L	7.570	0	19150	552874	2	Standard
Mn	55	61.020	ug/L	0.962	1	667	1657631	1	Standard
> Ge	72		ug/L			31347	30119	1	KED
Ni	60	30.313	ug/L	0.680	2	4	31405	1	KED
Ni	62	29.996	ug/L	0.429	1	3	5119	0	KED
Cu	63	41.293	ug/L	0.643	1	53	124710	1	KED
Cu	65	41.115	ug/L	0.459	1	21	61846	2	KED
Zn	66	295.016	ug/L	2.718	0	18	118717	1	KED
Zn	67	267.812	ug/L	7.281	2	5	18185	1	KED
As	75	27.138	ug/L	0.512	1	5	5850	1	KED
Y	89		ug/L			275831	270950	2	Standard
Kr	83		ug/L			40	71	20	Standard
> In-1	115		ug/L			9714	9370	1	KED
Cd	111	26.208	ug/L	0.747	2	2	7052	1	KED
Cd	114	26.295	ug/L	0.219	0	3	17182	1	KED
> In	115		ug/L			369046	352401	0	Standard
Ag	107	27.151	ug/L	0.337	1	22	319706	1	Standard
> Tb	159		ug/L			669567	663236	1	Standard
Pb	208	31.507	ug/L	0.346	1	60	1182602	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 00:10:42
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	27268	0	Standard
	Cl	**37**		ug/L			5434030	5477805	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	484217	1	Standard
|	**Cr**	**52**	**49.029**	ug/L	0.896	1	20356	848628	0	Standard
|	**Cr**	**53**	**49.909**	ug/L	1.325	2	160	98141	1	Standard
|	**Fe**	**54**	**5040.686**	ug/L	80.618	1	67040	6773187	1	Standard
|	**Fe**	**57**	**5048.213**	ug/L	85.878	1	19150	2799187	1	Standard
⌊	**Mn**	**55**	**46.736**	ug/L	0.290	0	667	1239127	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	29357	1	KED
|	**Ni**	**60**	**52.695**	ug/L	0.755	1	4	53211	0	KED
|	**Ni**	**62**	**50.978**	ug/L	1.110	2	3	8477	0	KED
|	**Cu**	**63**	**52.290**	ug/L	0.475	0	53	153924	1	KED
|	**Cu**	**65**	**52.784**	ug/L	0.445	0	21	77385	2	KED
|	**Zn**	**66**	**53.957**	ug/L	1.404	2	18	21171	0	KED
|	**Zn**	**67**	**51.987**	ug/L	1.881	3	5	3446	4	KED
⌊	**As**	**75**	**50.006**	ug/L	0.493	0	5	10504	0	KED
	Y	**89**		ug/L			275831	263623	1	Standard
	Kr	**83**		ug/L			40	53	20	Standard
⌈>	**In-1**	**115**		ug/L			9714	9232	1	KED
|	**Cd**	**111**	**51.213**	ug/L	0.636	1	2	13577	0	KED
⌊	**Cd**	**114**	**50.858**	ug/L	0.830	1	3	32740	0	KED
⌈>	**In**	**115**		ug/L			369046	349917	0	Standard
⌊	**Ag**	**107**	**50.555**	ug/L	0.986	1	22	591086	2	Standard
⌈>	**Tb**	**159**		ug/L			669567	661974	0	Standard
⌊	**Pb**	**208**	**53.879**	ug/L	0.648	1	60	2018451	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 00:18:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	26376	1	Standard
	Cl	**37**		ug/L			5434030	5586411	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	467883	0	Standard
|	**Cr**	**52**	**-0.025**	ug/L	0.020	81	20356	19464	1	Standard
|	**Cr**	**53**	**0.281**	ug/L	0.018	6	160	690	5	Standard
|	**Fe**	**54**	**1.085**	ug/L	1.115	102	67040	66827	2	Standard
|	**Fe**	**57**	**0.193**	ug/L	0.772	399	19150	18793	2	Standard
⌊	**Mn**	**55**	**0.003**	ug/L	0.001	25	667	720	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	28682	1	KED
|	**Ni**	**60**	**0.000**	ug/L	0.002	561	4	4	49	KED
|	**Ni**	**62**	**0.171**	ug/L	0.072	42	3	31	36	KED
|	**Cu**	**63**	**0.005**	ug/L	0.004	68	53	63	15	KED
|	**Cu**	**65**	**0.002**	ug/L	0.003	157	21	22	17	KED
|	**Zn**	**66**	**-0.014**	ug/L	0.013	88	18	11	44	KED
|	**Zn**	**67**	**-0.042**	ug/L	0.029	69	5	1	100	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.005	3892	5	4	20	KED
	Y	**89**		ug/L			275831	252127	1	Standard
	Kr	**83**		ug/L			40	40	25	Standard
⌈>	**In-1**	**115**		ug/L			9714	8842	0	KED
|	**Cd**	**111**	**0.001**	ug/L	0.006	638	2	2	57	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	360	3	2	46	KED
⌈>	**In**	**115**		ug/L			369046	335251	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	37	22	27	10	Standard
⌈>	**Tb**	**159**		ug/L			669567	627614	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	59	60	86	20	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0126-03
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 00:22:34
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	51091	3	Standard
	Cl	**37**		ug/L			5434030	5916788	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	510655	3	Standard
|	**Cr**	**52**	**0.610**	ug/L	0.063	10	20356	32523	0	Standard
|	**Cr**	**53**	**1.032**	ug/L	0.043	4	160	2305	0	Standard
|	**Fe**	**54**	**2354.343**	ug/L	67.568	2	67040	3372355	0	Standard
|	**Fe**	**57**	**2178.998**	ug/L	62.616	2	19150	1284967	0	Standard
⌊	**Mn**	**55**	**39.330**	ug/L	0.240	0	667	1099673	3	Standard
⌈>	**Ge**	**72**		ug/L			31347	29689	3	KED
|	**Ni**	**60**	**0.970**	ug/L	0.065	6	4	994	5	KED
|	**Ni**	**62**	**1.216**	ug/L	0.094	7	3	207	3	KED
|	**Cu**	**63**	**5.796**	ug/L	0.280	4	53	17278	1	KED
|	**Cu**	**65**	**5.719**	ug/L	0.171	2	21	8490	1	KED
|	**Zn**	**66**	**33.499**	ug/L	0.698	2	18	13296	1	KED
|	**Zn**	**67**	**29.870**	ug/L	0.815	2	5	2002	1	KED
⌊	**As**	**75**	**0.650**	ug/L	0.010	1	5	143	4	KED
	Y	**89**		ug/L			275831	264176	1	Standard
	Kr	**83**		ug/L			40	43	27	Standard
⌈>	**In-1**	**115**		ug/L			9714	9085	1	KED
|	**Cd**	**111**	**0.021**	ug/L	0.005	24	2	7	18	KED
⌊	**Cd**	**114**	**0.032**	ug/L	0.009	27	3	23	22	KED
⌈>	**In**	**115**		ug/L			369046	345241	1	Standard
⌊	**Ag**	**107**	**0.008**	ug/L	0.003	33	22	114	25	Standard
⌈>	**Tb**	**159**		ug/L			669567	662634	1	Standard
⌊	**Pb**	**208**	**0.370**	ug/L	0.009	2	60	13920	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0127-01
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 00:27:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	58204	2	Standard
	Cl	**37**		ug/L			5434030	5601754	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	498174	0	Standard
|	**Cr**	**52**	**0.667**	ug/L	0.034	5	20356	32739	1	Standard
|	**Cr**	**53**	**0.829**	ug/L	0.028	3	160	1840	3	Standard
|	**Fe**	**54**	**123.962**	ug/L	2.285	1	67040	239323	0	Standard
|	**Fe**	**57**	**129.030**	ug/L	2.132	1	19150	92999	0	Standard
⌊	**Mn**	**55**	**8.829**	ug/L	0.040	0	667	241388	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	29558	1	KED
|	**Ni**	**60**	**1.036**	ug/L	0.045	4	4	1057	2	KED
|	**Ni**	**62**	**1.107**	ug/L	0.204	18	3	189	19	KED
|	**Cu**	**63**	**3.987**	ug/L	0.144	3	53	11862	3	KED
|	**Cu**	**65**	**3.916**	ug/L	0.127	3	21	5798	3	KED
|	**Zn**	**66**	**240.310**	ug/L	3.701	1	18	94907	2	KED
|	**Zn**	**67**	**217.707**	ug/L	3.289	1	5	14510	0	KED
⌊	**As**	**75**	**0.374**	ug/L	0.017	4	5	84	5	KED
	Y	**89**		ug/L			275831	258971	2	Standard
	Kr	**83**		ug/L			40	57	35	Standard
⌈>	**In-1**	**115**		ug/L			9714	9154	1	KED
|	**Cd**	**111**	**0.054**	ug/L	0.011	20	2	16	18	KED
⌊	**Cd**	**114**	**0.054**	ug/L	0.004	7	3	37	6	KED
⌈>	**In**	**115**		ug/L			369046	344894	1	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.001	20	22	73	15	Standard
⌈>	**Tb**	**159**		ug/L			669567	650624	0	Standard
⌊	**Pb**	**208**	**0.577**	ug/L	0.001	0	60	21323	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0135-01
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 00:31:40
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	40114	1	Standard
	Cl	**37**		ug/L			5434030	5815720	0	Standard
⌈>	**Sc**	**45**		ug/L			479414	581732	0	Standard
|	**Cr**	**52**	**0.353**	ug/L	0.009	2	20356	31860	0	Standard
|	**Cr**	**53**	**1.091**	ug/L	0.027	2	160	2769	2	Standard
|	**Fe**	**54**	**426.675**	ug/L	11.330	2	67040	763306	2	Standard
|	**Fe**	**57**	**452.487**	ug/L	4.400	0	19150	322601	1	Standard
⌊	**Mn**	**55**	**30.902**	ug/L	0.246	0	667	984581	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	29180	2	KED
|	**Ni**	**60**	**0.379**	ug/L	0.036	9	4	384	7	KED
|	**Ni**	**62**	**0.498**	ug/L	0.116	23	3	85	21	KED
|	**Cu**	**63**	**0.614**	ug/L	0.017	2	53	1846	2	KED
|	**Cu**	**65**	**0.628**	ug/L	0.032	5	21	934	3	KED
|	**Zn**	**66**	**1.457**	ug/L	0.104	7	18	584	6	KED
|	**Zn**	**67**	**1.584**	ug/L	0.331	20	5	109	22	KED
⌊	**As**	**75**	**0.907**	ug/L	0.084	9	5	194	8	KED
	Y	**89**		ug/L			275831	267182	0	Standard
	Kr	**83**		ug/L			40	45	25	Standard
⌈>	**In-1**	**115**		ug/L			9714	9023	0	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.006	366	2	1	86	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.004	92	3	5	46	KED
⌈>	**In**	**115**		ug/L			369046	342234	0	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	20	22	48	11	Standard
⌈>	**Tb**	**159**		ug/L			669567	670303	0	Standard
⌊	**Pb**	**208**	**0.217**	ug/L	0.005	2	60	8286	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0135-03
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 00:36:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	42864	2	Standard
	Cl	37		ug/L			5434030	5784578	0	Standard
>	Sc	45		ug/L			479414	578821	1	Standard
	Cr	52	0.226	ug/L	0.003	1	20356	29132	2	Standard
	Cr	53	0.913	ug/L	0.030	3	160	2337	4	Standard
	Fe	54	1473.417	ug/L	5.132	0	67040	2424092	1	Standard
	Fe	57	1367.353	ug/L	15.048	1	19150	923331	2	Standard
	Mn	55	55.864	ug/L	0.484	0	667	1770309	1	Standard
>	Ge	72		ug/L			31347	28819	2	KED
	Ni	60	0.691	ug/L	0.042	6	4	689	6	KED
	Ni	62	0.629	ug/L	0.072	11	3	106	9	KED
	Cu	63	0.789	ug/L	0.032	4	53	2326	3	KED
	Cu	65	0.872	ug/L	0.050	5	21	1274	7	KED
	Zn	66	1.109	ug/L	0.105	9	18	443	8	KED
	Zn	67	1.470	ug/L	0.361	24	5	100	24	KED
	As	75	0.902	ug/L	0.058	6	5	190	7	KED
	Y	89		ug/L			275831	266688	1	Standard
	Kr	83		ug/L			40	45	8	Standard
>	In-1	115		ug/L			9714	9255	3	KED
	Cd	111	-0.002	ug/L	0.003	173	2	1	50	KED
	Cd	114	0.003	ug/L	0.006	177	3	5	75	KED
>	In	115		ug/L			369046	340047	0	Standard
	Ag	107	0.002	ug/L	0.001	29	22	46	16	Standard
>	Tb	159		ug/L			669567	677659	0	Standard
	Pb	208	0.093	ug/L	0.003	3	60	3620	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0135-05
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 00:40:47
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	42208	3	Standard
	Cl	37		ug/L			5434030	5739825	1	Standard
>	Sc	45		ug/L			479414	564759	0	Standard
	Cr	52	0.495	ug/L	0.031	6	20356	33725	1	Standard
	Cr	53	1.123	ug/L	0.025	2	160	2760	2	Standard
	Fe	54	167.819	ug/L	5.347	3	67040	339373	2	Standard
	Fe	57	205.905	ug/L	6.710	3	19150	154811	2	Standard
	Mn	55	11.753	ug/L	0.108	0	667	364009	0	Standard
>	Ge	72		ug/L			31347	29177	1	KED
	Ni	60	0.411	ug/L	0.048	11	4	415	10	KED
	Ni	62	0.378	ug/L	0.038	10	3	66	8	KED
	Cu	63	0.475	ug/L	0.021	4	53	1438	5	KED
	Cu	65	0.493	ug/L	0.021	4	21	738	5	KED
	Zn	66	0.958	ug/L	0.191	19	18	389	17	KED
	Zn	67	1.424	ug/L	0.058	4	5	98	4	KED
	As	75	0.607	ug/L	0.021	3	5	131	1	KED
	Y	89		ug/L			275831	263590	2	Standard
	Kr	83		ug/L			40	44	34	Standard
>	In-1	115		ug/L			9714	9142	2	KED
	Cd	111	-0.004	ug/L	0.005	122	2	1	114	KED
	Cd	114	-0.001	ug/L	0.005	434	3	2	137	KED
>	In	115		ug/L			369046	336269	1	Standard
	Ag	107	0.002	ug/L	0.002	104	22	40	50	Standard
>	Tb	159		ug/L			669567	662417	0	Standard
	Pb	208	0.098	ug/L	0.004	3	60	3718	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0135-07
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 00:45:20
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	41074	2	Standard
	Cl	**37**		ug/L			5434030	5703010	0	Standard
⌈>	**Sc**	**45**		ug/L			479414	580856	0	Standard
|	**Cr**	**52**	**0.185**	ug/L	0.011	6	20356	28404	0	Standard
|	**Cr**	**53**	**0.850**	ug/L	0.007	0	160	2196	0	Standard
|	**Fe**	**54**	**393.804**	ug/L	4.937	1	67040	709724	1	Standard
|	**Fe**	**57**	**430.080**	ug/L	6.151	1	19150	307302	1	Standard
⌊	**Mn**	**55**	**31.549**	ug/L	0.183	0	667	1003647	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	28989	0	KED
|	**Ni**	**60**	**0.489**	ug/L	0.048	9	4	492	10	KED
|	**Ni**	**62**	**0.470**	ug/L	0.063	13	3	80	13	KED
|	**Cu**	**63**	**0.592**	ug/L	0.019	3	53	1770	3	KED
|	**Cu**	**65**	**0.596**	ug/L	0.045	7	21	882	6	KED
|	**Zn**	**66**	**1.184**	ug/L	0.081	6	18	475	6	KED
|	**Zn**	**67**	**1.346**	ug/L	0.127	9	5	92	9	KED
⌊	**As**	**75**	**0.936**	ug/L	0.048	5	5	198	4	KED
	Y	**89**		ug/L			275831	262586	2	Standard
	Kr	**83**		ug/L			40	46	31	Standard
⌈>	**In-1**	**115**		ug/L			9714	8834	2	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.006	2112	2	2	65	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.003	87	3	5	39	KED
⌈>	**In**	**115**		ug/L			369046	334195	0	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	67	22	40	33	Standard
⌈>	**Tb**	**159**		ug/L			669567	666936	0	Standard
⌊	**Pb**	**208**	**0.094**	ug/L	0.002	2	60	3606	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0135-09
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 00:49:53
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	41799	1	Standard
	Cl	37		ug/L			5434030	5704418	2	Standard
⌈>	Sc	45		ug/L			479414	583878	2	Standard
|	Cr	52	1.013	ug/L	0.065	6	20356	45412	1	Standard
|	Cr	53	1.639	ug/L	0.036	2	160	4076	4	Standard
|	Fe	54	2822.425	ug/L	64.736	2	67040	4607650	1	Standard
|	Fe	57	2615.425	ug/L	59.327	2	19150	1759387	1	Standard
⌊	Mn	55	103.698	ug/L	3.077	2	667	3312379	0	Standard
⌈>	Ge	72		ug/L			31347	27979	2	KED
|	Ni	60	1.216	ug/L	0.053	4	4	1175	7	KED
|	Ni	62	1.124	ug/L	0.106	9	3	181	10	KED
|	Cu	63	1.975	ug/L	0.077	3	53	5583	1	KED
|	Cu	65	1.994	ug/L	0.106	5	21	2802	4	KED
|	Zn	66	6.437	ug/L	0.259	4	18	2420	1	KED
|	Zn	67	6.885	ug/L	0.072	1	5	438	1	KED
⌊	As	75	1.598	ug/L	0.072	4	5	324	2	KED
	Y	89		ug/L			275831	274803	1	Standard
	Kr	83		ug/L			40	42	22	Standard
⌈>	In-1	115		ug/L			9714	8669	4	KED
|	Cd	111	0.014	ug/L	0.009	68	2	5	44	KED
⌊	Cd	114	0.013	ug/L	0.007	55	3	10	44	KED
⌈>	In	115		ug/L			369046	336216	1	Standard
⌊	Ag	107	0.007	ug/L	0.002	27	22	99	22	Standard
⌈>	Tb	159		ug/L			669567	670063	1	Standard
⌊	Pb	208	1.081	ug/L	0.015	1	60	41059	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0135-11
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 00:54:27
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	40864	2	Standard
	Cl	37		ug/L			5434030	5648667	0	Standard
>	Sc	45		ug/L			479414	590688	0	Standard
	Cr	52	0.246	ug/L	0.013	5	20356	30157	0	Standard
	Cr	53	0.936	ug/L	0.026	2	160	2438	1	Standard
	Fe	54	2495.632	ug/L	64.165	2	67040	4132334	1	Standard
	Fe	57	2315.805	ug/L	34.035	1	19150	1579216	1	Standard
	Mn	55	169.483	ug/L	2.534	1	667	5478923	0	Standard
>	Ge	72		ug/L			31347	29028	1	KED
	Ni	60	0.644	ug/L	0.027	4	4	647	4	KED
	Ni	62	0.689	ug/L	0.112	16	3	116	15	KED
	Cu	63	0.811	ug/L	0.023	2	53	2410	3	KED
	Cu	65	0.832	ug/L	0.062	7	21	1224	6	KED
	Zn	66	2.694	ug/L	0.143	5	18	1061	4	KED
	Zn	67	3.083	ug/L	0.249	8	5	206	6	KED
	As	75	0.887	ug/L	0.068	7	5	188	6	KED
	Y	89		ug/L			275831	262527	0	Standard
	Kr	83		ug/L			40	50	22	Standard
>	In-1	115		ug/L			9714	8931	3	KED
	Cd	111	0.006	ug/L	0.008	134	2	3	50	KED
	Cd	114	0.011	ug/L	0.003	31	3	9	22	KED
>	In	115		ug/L			369046	335481	0	Standard
	Ag	107	0.001	ug/L	0.001	51	22	37	22	Standard
>	Tb	159		ug/L			669567	671670	1	Standard
	Pb	208	0.322	ug/L	0.010	3	60	12290	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0135-13
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 00:59:00
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	42848	0	Standard
	Cl	**37**		ug/L			5434030	5845413	0	Standard
⌈>	**Sc**	**45**		ug/L			479414	558052	1	Standard
|	**Cr**	**52**	**0.959**	ug/L	0.031	3	20356	42353	1	Standard
|	**Cr**	**53**	**1.627**	ug/L	0.026	1	160	3868	1	Standard
|	**Fe**	**54**	**967.232**	ug/L	29.041	3	67040	1560494	0	Standard
|	**Fe**	**57**	**1015.933**	ug/L	32.415	3	19150	666908	2	Standard
⌊	**Mn**	**55**	**62.737**	ug/L	1.303	2	667	1916180	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	28000	0	KED
|	**Ni**	**60**	**2.200**	ug/L	0.031	1	4	2123	1	KED
|	**Ni**	**62**	**2.040**	ug/L	0.150	7	3	326	7	KED
|	**Cu**	**63**	**4.162**	ug/L	0.060	1	53	11727	1	KED
|	**Cu**	**65**	**4.213**	ug/L	0.132	3	21	5908	3	KED
|	**Zn**	**66**	**11.370**	ug/L	0.176	1	18	4269	1	KED
|	**Zn**	**67**	**11.013**	ug/L	0.355	3	5	699	3	KED
⌊	**As**	**75**	**0.853**	ug/L	0.032	3	5	175	3	KED
	Y	**89**		ug/L			275831	269083	3	Standard
	Kr	**83**		ug/L			40	51	12	Standard
⌈>	**In-1**	**115**		ug/L			9714	8682	1	KED
|	**Cd**	**111**	**0.035**	ug/L	0.003	8	2	11	4	KED
⌊	**Cd**	**114**	**0.029**	ug/L	0.000	1	3	20	1	KED
⌈>	**In**	**115**		ug/L			369046	332068	3	Standard
⌊	**Ag**	**107**	**0.007**	ug/L	0.001	17	22	102	17	Standard
⌈>	**Tb**	**159**		ug/L			669567	661082	0	Standard
⌊	**Pb**	**208**	**1.832**	ug/L	0.017	0	60	68604	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0135-15
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 01:03:33
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			25789	42786	2	Standard
	Cl	37		ug/L			5434030	5706940	0	Standard
>	Sc	45		ug/L			479414	573174	3	Standard
	Cr	52	0.344	ug/L	0.054	15	20356	31194	0	Standard
	Cr	53	0.992	ug/L	0.017	1	160	2497	2	Standard
	Fe	54	1414.421	ug/L	41.625	2	67040	2306177	0	Standard
	Fe	57	1353.189	ug/L	30.113	2	19150	904555	1	Standard
	Mn	55	110.935	ug/L	1.922	1	667	3479122	1	Standard
>	Ge	72		ug/L			31347	28423	1	KED
	Ni	60	0.586	ug/L	0.003	0	4	577	1	KED
	Ni	62	0.527	ug/L	0.023	4	3	88	3	KED
	Cu	63	0.861	ug/L	0.032	3	53	2501	3	KED
	Cu	65	0.908	ug/L	0.033	3	21	1307	2	KED
	Zn	66	2.513	ug/L	0.037	1	18	970	2	KED
	Zn	67	3.039	ug/L	0.296	9	5	199	9	KED
	As	75	1.046	ug/L	0.026	2	5	217	2	KED
	Y	89		ug/L			275831	264268	2	Standard
	Kr	83		ug/L			40	41	15	Standard
>	In-1	115		ug/L			9714	8791	1	KED
	Cd	111	0.011	ug/L	0.017	155	2	5	84	KED
	Cd	114	0.004	ug/L	0.002	46	3	5	24	KED
>	In	115		ug/L			369046	331586	1	Standard
	Ag	107	0.002	ug/L	0.001	27	22	43	14	Standard
>	Tb	159		ug/L			669567	662964	0	Standard
	Pb	208	0.332	ug/L	0.008	2	60	12501	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 01:08:07
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	27389	0	Standard
	Cl	**37**		ug/L			5434030	5467586	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	498022	1	Standard
|	**Cr**	**52**	**48.011**	ug/L	0.160	0	20356	855292	1	Standard
|	**Cr**	**53**	**48.945**	ug/L	1.180	2	160	98999	1	Standard
|	**Fe**	**54**	**4950.302**	ug/L	62.556	1	67040	6842689	0	Standard
|	**Fe**	**57**	**5111.592**	ug/L	71.223	1	19150	2914732	0	Standard
⌊	**Mn**	**55**	**46.174**	ug/L	0.614	1	667	1259081	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	28375	2	KED
|	**Ni**	**60**	**54.999**	ug/L	1.830	3	4	53668	1	KED
|	**Ni**	**62**	**54.062**	ug/L	1.118	2	3	8688	0	KED
|	**Cu**	**63**	**53.711**	ug/L	1.315	2	53	152801	2	KED
|	**Cu**	**65**	**54.094**	ug/L	2.256	4	21	76603	2	KED
|	**Zn**	**66**	**54.563**	ug/L	1.167	2	18	20694	1	KED
|	**Zn**	**67**	**51.937**	ug/L	2.180	4	5	3326	3	KED
⌊	**As**	**75**	**50.497**	ug/L	1.184	2	5	10250	0	KED
	Y	**89**		ug/L			275831	256036	1	Standard
	Kr	**83**		ug/L			40	46	13	Standard
⌈>	**In-1**	**115**		ug/L			9714	8784	2	KED
|	**Cd**	**111**	**51.595**	ug/L	1.072	2	2	13011	0	KED
⌊	**Cd**	**114**	**51.451**	ug/L	1.991	3	3	31497	1	KED
⌈>	**In**	**115**		ug/L			369046	334149	1	Standard
⌊	**Ag**	**107**	**51.133**	ug/L	0.266	0	22	570899	1	Standard
⌈>	**Tb**	**159**		ug/L			669567	661769	0	Standard
⌊	**Pb**	**208**	**57.640**	ug/L	1.003	1	60	2158672	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 01:15:25
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	27237	0	Standard
	Cl	**37**		ug/L			5434030	5536923	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	472270	2	Standard
|	**Cr**	**52**	**-0.044**	ug/L	0.034	77	20356	19325	0	Standard
|	**Cr**	**53**	**0.112**	ug/L	0.001	1	160	373	2	Standard
|	**Fe**	**54**	**-1.042**	ug/L	1.147	110	67040	64683	3	Standard
|	**Fe**	**57**	**1.495**	ug/L	0.255	17	19150	19666	2	Standard
⌊	**Mn**	**55**	**-0.001**	ug/L	0.001	80	667	635	1	Standard
⌈>	**Ge**	**72**		ug/L			31347	26198	10	KED
|	**Ni**	**60**	**-0.001**	ug/L	0.002	338	4	3	69	KED
|	**Ni**	**62**	**0.035**	ug/L	0.014	40	3	8	13	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.006	691	53	41	40	KED
|	**Cu**	**65**	**-0.004**	ug/L	0.005	125	21	12	52	KED
|	**Zn**	**66**	**0.001**	ug/L	0.015	2915	18	15	42	KED
|	**Zn**	**67**	**-0.027**	ug/L	0.039	143	5	2	86	KED
⌊	**As**	**75**	**0.005**	ug/L	0.004	80	5	5	9	KED
	Y	**89**		ug/L			275831	248402	0	Standard
	Kr	**83**		ug/L			40	38	31	Standard
⌈>	**In-1**	**115**		ug/L			9714	8577	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.006	227	2	1	91	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.004	133	3	4	49	KED
⌈>	**In**	**115**		ug/L			369046	323373	0	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	24	22	34	9	Standard
⌈>	**Tb**	**159**		ug/L			669567	624109	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	151	60	66	20	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 01:19:58
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	39112	2	Standard
	Cl	**37**		ug/L			5434030	5823002	2	Standard
⎡>	**Sc**	**45**		ug/L			479414	568485	0	Standard
⎢	**Cr**	**52**	**0.014**	ug/L	0.035	253	20356	24415	2	Standard
⎢	**Cr**	**53**	**0.120**	ug/L	0.018	14	160	466	8	Standard
⎢	**Fe**	**54**	**114.466**	ug/L	0.450	0	67040	258288	0	Standard
⎢	**Fe**	**57**	**2.290**	ug/L	0.570	24	19150	24189	1	Standard
⎣	**Mn**	**55**	**0.030**	ug/L	0.000	1	667	1715	1	Standard
⎡>	**Ge**	**72**		ug/L			31347	31013	1	KED
⎢	**Ni**	**60**	**0.021**	ug/L	0.039	184	4	27	155	KED
⎢	**Ni**	**62**	**0.043**	ug/L	0.049	112	3	11	76	KED
⎢	**Cu**	**63**	**0.028**	ug/L	0.046	165	53	140	104	KED
⎢	**Cu**	**65**	**0.026**	ug/L	0.038	146	21	62	96	KED
⎢	**Zn**	**66**	**0.006**	ug/L	0.020	317	18	20	41	KED
⎢	**Zn**	**67**	**-0.027**	ug/L	0.015	57	5	3	34	KED
⎣	**As**	**75**	**0.011**	ug/L	0.027	233	5	7	78	KED
	Y	**89**		ug/L			275831	283658	0	Standard
	Kr	**83**		ug/L			40	41	12	Standard
⎡>	**In-1**	**115**		ug/L			9714	9519	0	KED
⎢	**Cd**	**111**	**-0.002**	ug/L	0.006	278	2	1	86	KED
⎣	**Cd**	**114**	**0.000**	ug/L	0.004	4355	3	3	92	KED
⎡>	**In**	**115**		ug/L			369046	365465	1	Standard
⎣	**Ag**	**107**	**0.001**	ug/L	0.001	122	22	31	33	Standard
⎡>	**Tb**	**159**		ug/L			669567	715751	0	Standard
⎣	**Pb**	**208**	**0.001**	ug/L	0.000	36	60	85	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 01:24:32
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	39038	0	Standard
	Cl	**37**		ug/L			5434030	5791821	2	Standard
⌈>	**Sc**	**45**		ug/L			479414	573095	0	Standard
|	**Cr**	**52**	**-0.013**	ug/L	0.027	212	20356	24081	1	Standard
|	**Cr**	**53**	**0.105**	ug/L	0.010	9	160	435	4	Standard
|	**Fe**	**54**	**113.197**	ug/L	3.185	2	67040	258395	2	Standard
|	**Fe**	**57**	**2.454**	ug/L	1.012	41	19150	24490	2	Standard
⌊	**Mn**	**55**	**0.027**	ug/L	0.001	1	667	1653	0	Standard
⌈>	**Ge**	**72**		ug/L			31347	31223	0	KED
|	**Ni**	**60**	**0.004**	ug/L	0.004	89	4	8	44	KED
|	**Ni**	**62**	**0.011**	ug/L	0.011	99	3	5	33	KED
|	**Cu**	**63**	**0.001**	ug/L	0.002	245	53	55	9	KED
|	**Cu**	**65**	**0.008**	ug/L	0.003	40	21	33	14	KED
|	**Zn**	**66**	**0.006**	ug/L	0.004	70	18	20	9	KED
|	**Zn**	**67**	**0.018**	ug/L	0.041	225	5	6	45	KED
⌊	**As**	**75**	**0.004**	ug/L	0.013	297	5	6	46	KED
	Y	**89**		ug/L			275831	286548	1	Standard
	Kr	**83**		ug/L			40	33	21	Standard
⌈>	**In-1**	**115**		ug/L			9714	9781	1	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.003	58	2	0	100	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.003	360	3	2	88	KED
⌈>	**In**	**115**		ug/L			369046	367116	3	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.000	479	22	23	16	Standard
⌈>	**Tb**	**159**		ug/L			669567	718715	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	109	60	70	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 01:29:06
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	39564	1	Standard
	Cl	**37**		ug/L			5434030	5720177	2	Standard
⎡>	**Sc**	**45**		ug/L			479414	567841	1	Standard
⎢	**Cr**	**52**	**-0.011**	ug/L	0.026	231	20356	23880	0	Standard
⎢	**Cr**	**53**	**0.095**	ug/L	0.012	12	160	409	8	Standard
⎢	**Fe**	**54**	**113.762**	ug/L	3.744	3	67040	256828	0	Standard
⎢	**Fe**	**57**	**0.067**	ug/L	0.609	905	19150	22721	0	Standard
⎣	**Mn**	**55**	**0.030**	ug/L	0.001	3	667	1712	1	Standard
⎡>	**Ge**	**72**		ug/L			31347	31188	1	KED
⎢	**Ni**	**60**	**0.002**	ug/L	0.001	63	4	6	17	KED
⎢	**Ni**	**62**	**0.007**	ug/L	0.006	79	3	5	21	KED
⎢	**Cu**	**63**	**0.002**	ug/L	0.002	93	53	58	8	KED
⎢	**Cu**	**65**	**0.007**	ug/L	0.006	87	21	31	29	KED
⎢	**Zn**	**66**	**0.005**	ug/L	0.027	593	18	20	56	KED
⎢	**Zn**	**67**	**-0.027**	ug/L	0.031	113	5	3	69	KED
⎣	**As**	**75**	**0.002**	ug/L	0.007	337	5	5	30	KED
	Y	**89**		ug/L			275831	283500	2	Standard
	Kr	**83**		ug/L			40	42	29	Standard
⎡>	**In-1**	**115**		ug/L			9714	9779	2	KED
⎢	**Cd**	**111**	**-0.005**	ug/L	0.005	118	2	1	114	KED
⎣	**Cd**	**114**	**-0.002**	ug/L	0.003	149	3	1	100	KED
⎡>	**In**	**115**		ug/L			369046	365799	1	Standard
⎣	**Ag**	**107**	**0.000**	ug/L	0.000	259	22	24	16	Standard
⎡>	**Tb**	**159**		ug/L			669567	719655	0	Standard
⎣	**Pb**	**208**	**0.000**	ug/L	0.000	34	60	76	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 01:33:39
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	27279	0	Standard
	Cl	**37**		ug/L			5434030	5159244	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	438355	1	Standard
|	**Cr**	**52**	**-0.070**	ug/L	0.042	59	20356	17535	3	Standard
|	**Cr**	**53**	**0.096**	ug/L	0.017	18	160	317	8	Standard
|	**Fe**	**54**	**-31.170**	ug/L	0.435	1	67040	23755	1	Standard
|	**Fe**	**57**	**-1.342**	ug/L	1.038	77	19150	16837	2	Standard
⌊	**Mn**	**55**	**0.025**	ug/L	0.003	10	667	1212	4	Standard
⌈>	**Ge**	**72**		ug/L			31347	27108	0	KED
|	**Ni**	**60**	**-0.002**	ug/L	0.000	0	4	1		KED
|	**Ni**	**62**	**0.036**	ug/L	0.014	39	3	8	24	KED
|	**Cu**	**63**	**-0.006**	ug/L	0.002	32	53	31	15	KED
|	**Cu**	**65**	**0.004**	ug/L	0.002	51	21	24	12	KED
|	**Zn**	**66**	**0.026**	ug/L	0.017	63	18	25	22	KED
|	**Zn**	**67**	**0.053**	ug/L	0.001	1	5	7	0	KED
⌊	**As**	**75**	**-0.008**	ug/L	0.009	112	5	3	55	KED
	Y	**89**		ug/L			275831	231269	1	Standard
	Kr	**83**		ug/L			40	36	18	Standard
⌈>	**In-1**	**115**		ug/L			9714	8101	1	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.005	73	2	0	173	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.005	547	3	3	93	KED
⌈>	**In**	**115**		ug/L			369046	309318	2	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.001	588	22	17	52	Standard
⌈>	**Tb**	**159**		ug/L			669567	584475	1	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	41	60	38	18	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 01:38:13
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	26489	1	Standard
	Cl	**37**		ug/L			5434030	5174787	3	Standard
⌈>	**Sc**	**45**		ug/L			479414	432773	1	Standard
|	**Cr**	**52**	**-0.067**	ug/L	0.009	12	20356	17361	1	Standard
|	**Cr**	**53**	**0.090**	ug/L	0.002	2	160	302	2	Standard
|	**Fe**	**54**	**-31.296**	ug/L	0.613	1	67040	23298	1	Standard
|	**Fe**	**57**	**0.022**	ug/L	1.632	7374	19150	17303	5	Standard
⌊	**Mn**	**55**	**0.021**	ug/L	0.003	12	667	1101	4	Standard
⌈>	**Ge**	**72**		ug/L			31347	26182	1	KED
|	**Ni**	**60**	**-0.001**	ug/L	0.001	96	4	2	43	KED
|	**Ni**	**62**	**0.051**	ug/L	0.045	87	3	10	61	KED
|	**Cu**	**63**	**-0.006**	ug/L	0.002	29	53	29	15	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.004	172	21	14	39	KED
|	**Zn**	**66**	**0.005**	ug/L	0.006	116	18	17	11	KED
|	**Zn**	**67**	**0.046**	ug/L	0.074	160	5	6	62	KED
⌊	**As**	**75**	**0.000**	ug/L	0.010	3299	5	4	44	KED
	Y	**89**		ug/L			275831	226751	1	Standard
	Kr	**83**		ug/L			40	29	29	Standard
⌈>	**In-1**	**115**		ug/L			9714	7995	2	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.003	70	2	1	43	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.002	83	3	1	94	KED
⌈>	**In**	**115**		ug/L			369046	302033	1	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.000	90	22	19	5	Standard
⌈>	**Tb**	**159**		ug/L			669567	578427	0	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	0	60	32	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, April 21, 2023 01:42:47
Number of Replicates: 3
Method File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Method\200.8_DailyMethod_KED+UCT.mth
Tuning File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\MassCal\Default.tun
Optimization File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\Conditions\Default.dac
Calibration File: C:\Users\metals\Documents\PerkinElmer Syngistix\ICPMS_metals\System\042023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			25789	27291	2	Standard
	Cl	**37**		ug/L			5434030	5054152	1	Standard
⌈>	**Sc**	**45**		ug/L			479414	421411	1	Standard
|	**Cr**	**52**	**-0.024**	ug/L	0.026	107	20356	17531	0	Standard
|	**Cr**	**53**	**0.098**	ug/L	0.009	9	160	308	4	Standard
|	**Fe**	**54**	**-30.698**	ug/L	0.768	2	67040	23377	2	Standard
|	**Fe**	**57**	**1.011**	ug/L	0.723	71	19150	17315	1	Standard
⌊	**Mn**	**55**	**0.018**	ug/L	0.002	10	667	993	2	Standard
⌈>	**Ge**	**72**		ug/L			31347	25839	0	KED
|	**Ni**	**60**	**0.001**	ug/L	0.005	608	4	4	107	KED
|	**Ni**	**62**	**0.013**	ug/L	0.033	246	3	5	94	KED
|	**Cu**	**63**	**-0.004**	ug/L	0.001	20	53	33	6	KED
|	**Cu**	**65**	**-0.005**	ug/L	0.004	89	21	11	50	KED
|	**Zn**	**66**	**0.022**	ug/L	0.035	155	18	22	52	KED
|	**Zn**	**67**	**0.048**	ug/L	0.094	196	5	6	78	KED
⌊	**As**	**75**	**0.002**	ug/L	0.003	110	5	4	10	KED
	Y	**89**		ug/L			275831	227189	0	Standard
	Kr	**83**		ug/L			40	34	14	Standard
⌈>	**In-1**	**115**		ug/L			9714	7889	1	KED
|	**Cd**	**111**	**0.003**	ug/L	0.008	238	2	2	66	KED
⌊	**Cd**	**114**	**-0.005**	ug/L	0.000	1	3	0	43	KED
⌈>	**In**	**115**		ug/L			369046	301898	1	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	108	22	23	23	Standard
⌈>	**Tb**	**159**		ug/L			669567	575110	1	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	8	60	33	3	Standard

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00046
Control Limt: +/- 10.00%
Sequence: SLD0260

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0260-ICV1	Arsenic-75a	50.000	47.5	94.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.1	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	48.0	96.1	ug/L	PA 6020B UCT-KE
SLD0260-CCV1	Arsenic-75a	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.0	98.0	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.4	98.9	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
SLD0260-CCV2	Arsenic-75a	50.000	48.7	97.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.7	99.3	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.0	98.1	ug/L	PA 6020B UCT-KE
SLD0260-CCV3	Arsenic-75a	50.000	48.6	97.3	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.5	99.1	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.6	99.3	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.3	101	ug/L	PA 6020B UCT-KE
SLD0260-CCV4	Arsenic-75a	50.000	48.5	97.0	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.6	99.3	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.9	97.7	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.4	101	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00046
Control Limt: +/- 10.00%
Sequence: SLD0260

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0260-CCV4	Zinc-67	50.000	48.4	96.8	ug/L	PA 6020B UCT-KE
SLD0260-CCV5	Arsenic-75a	50.000	49.0	98.1	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	48.9	97.7	ug/L	PA 6020B UCT-KE
SLD0260-CCV6	Arsenic-75a	50.000	48.4	96.7	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.4	98.7	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	48.9	97.7	ug/L	PA 6020B UCT-KE
SLD0260-CCV7	Arsenic-75a	50.000	48.4	96.8	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.3	98.5	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.4	98.9	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.1	98.2	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.3	96.5	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	47.7	95.4	ug/L	PA 6020B UCT-KE
SLD0260-CCV8	Arsenic-75a	50.000	48.6	97.1	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.8	97.6	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	48.3	96.6	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	48.3	96.5	ug/L	PA 6020B UCT-KE
SLD0260-CCV9	Arsenic-75a	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.1	98.1	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.2	102	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00046
Control Limt: +/- 10.00%
Sequence: SLD0260

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0260-CCV9	Zinc-66	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.6	101	ug/L	PA 6020B UCT-KE
SLD0260-CCVA	Arsenic-75a	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.5	99.0	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.6	99.1	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.7	99.3	ug/L	PA 6020B UCT-KE
SLD0260-CCVB	Arsenic-75a	50.000	49.3	98.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.1	98.2	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.5	101	ug/L	PA 6020B UCT-KE
SLD0260-CCVC	Arsenic-75a	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.0	98.1	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.5	99.0	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.7	99.3	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00059
Control Limt: +/- 10.00%
Sequence: SLD0292

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0292-ICV1	Cadmium-111	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.2	100	ug/L	PA 6020B UCT-KE
SLD0292-CCV1	Cadmium-111	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.2	102	ug/L	PA 6020B UCT-KE
SLD0292-CCV2	Cadmium-111	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.3	101	ug/L	PA 6020B UCT-KE
SLD0292-CCV3	Cadmium-111	50.000	49.1	98.1	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
SLD0292-CCV4	Cadmium-111	50.000	48.7	97.5	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
SLD0292-CCV5	Cadmium-111	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.1	102	ug/L	PA 6020B UCT-KE
SLD0292-CCV6	Cadmium-111	50.000	47.7	95.5	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.8	97.5	ug/L	PA 6020B UCT-KE
SLD0292-CCV7	Cadmium-111	50.000	48.8	97.6	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
SLD0292-CCV8	Cadmium-111	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.3	101	ug/L	PA 6020B UCT-KE
SLD0292-CCV9	Cadmium-111	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.2	102	ug/L	PA 6020B UCT-KE
SLD0292-CCVA	Cadmium-111	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.9	102	ug/L	PA 6020B UCT-KE
SLD0292-CCVB	Cadmium-111	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.5	103	ug/L	PA 6020B UCT-KE

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0260

SDG: 23A0249
Project: AOC5 MR Phase 1
Calibration: GD00046
Date Analyzed: 04/18/23 13:47

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0260-IBL1	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLD0260-IBL1	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLD0260-IBL1	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0260-IBL1	Copper-63	0.00300	0.173	0.500	ug/L	
SLD0260-IBL1	Copper-65	0.00700	0.35	0.500	ug/L	
SLD0260-IBL1	Zinc-66	0.0990	2.92	6.00	ug/L	
SLD0260-IBL1	Zinc-67	0.0790	0.94	6.00	ug/L	
SLD0260-ICB1	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLD0260-ICB1	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLD0260-ICB1	Cadmium-114	0.00500	0.04	0.100	ug/L	
SLD0260-ICB1	Copper-63	0.00100	0.173	0.500	ug/L	
SLD0260-ICB1	Copper-65	0.00700	0.35	0.500	ug/L	
SLD0260-ICB1	Zinc-66	0.0160	2.92	6.00	ug/L	
SLD0260-ICB1	Zinc-67	0.0070	0.94	6.00	ug/L	
SLD0260-CCB1	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLD0260-CCB1	Cadmium-111	0.00	0.03	0.100	ug/L	
SLD0260-CCB1	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLD0260-CCB1	Copper-63	-0.00300	0.173	0.500	ug/L	
SLD0260-CCB1	Copper-65	0.00	0.35	0.500	ug/L	
SLD0260-CCB1	Zinc-66	0.0010	2.92	6.00	ug/L	
SLD0260-CCB1	Zinc-67	0.00	0.94	6.00	ug/L	
SLD0260-IBL2	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLD0260-IBL2	Cadmium-111	0.00700	0.03	0.100	ug/L	
SLD0260-IBL2	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLD0260-IBL2	Copper-63	0.0180	0.173	0.500	ug/L	
SLD0260-IBL2	Copper-65	0.0180	0.35	0.500	ug/L	
SLD0260-IBL2	Zinc-66	0.108	2.92	6.00	ug/L	
SLD0260-IBL2	Zinc-67	0.155	0.94	6.00	ug/L	
SLD0260-CCB2	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLD0260-CCB2	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLD0260-CCB2	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLD0260-CCB2	Copper-63	0.00100	0.173	0.500	ug/L	
SLD0260-CCB2	Copper-65	0.00400	0.35	0.500	ug/L	
SLD0260-CCB2	Zinc-66	-0.0010	2.92	6.00	ug/L	
SLD0260-CCB2	Zinc-67	-0.0060	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0260

SDG: 23A0249
Project: AOC5 MR Phase 1
Calibration: GD00046
Date Analyzed: 04/18/23 16:11

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0260-IBL3	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLD0260-IBL3	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLD0260-IBL3	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLD0260-IBL3	Copper-63	0.00300	0.173	0.500	ug/L	
SLD0260-IBL3	Copper-65	0.00200	0.35	0.500	ug/L	
SLD0260-IBL3	Zinc-66	0.103	2.92	6.00	ug/L	
SLD0260-IBL3	Zinc-67	0.0920	0.94	6.00	ug/L	
SLD0260-CCB3	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLD0260-CCB3	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLD0260-CCB3	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLD0260-CCB3	Copper-63	0.00600	0.173	0.500	ug/L	
SLD0260-CCB3	Copper-65	0.00900	0.35	0.500	ug/L	
SLD0260-CCB3	Zinc-66	-0.0070	2.92	6.00	ug/L	
SLD0260-CCB3	Zinc-67	0.0120	0.94	6.00	ug/L	
SLD0260-IBL4	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLD0260-IBL4	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLD0260-IBL4	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLD0260-IBL4	Copper-63	0.0120	0.173	0.500	ug/L	
SLD0260-IBL4	Copper-65	0.0130	0.35	0.500	ug/L	
SLD0260-IBL4	Zinc-66	0.138	2.92	6.00	ug/L	
SLD0260-IBL4	Zinc-67	0.231	0.94	6.00	ug/L	
SLD0260-CCB4	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLD0260-CCB4	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLD0260-CCB4	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLD0260-CCB4	Copper-63	0.00100	0.173	0.500	ug/L	
SLD0260-CCB4	Copper-65	0.00100	0.35	0.500	ug/L	
SLD0260-CCB4	Zinc-66	-0.0070	2.92	6.00	ug/L	
SLD0260-CCB4	Zinc-67	-0.0060	0.94	6.00	ug/L	
SLD0260-CCB5	Arsenic-75a	-0.00800	0.0373	0.200	ug/L	
SLD0260-CCB5	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLD0260-CCB5	Cadmium-114	0.00500	0.04	0.100	ug/L	
SLD0260-CCB5	Copper-63	0.00200	0.173	0.500	ug/L	
SLD0260-CCB5	Copper-65	0.00100	0.35	0.500	ug/L	
SLD0260-CCB5	Zinc-66	0.0050	2.92	6.00	ug/L	
SLD0260-CCB5	Zinc-67	0.0030	0.94	6.00	ug/L	
SLD0260-CCB6	Arsenic-75a	0.00	0.0373	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0260

SDG: 23A0249
Project: AOC5 MR Phase 1
Calibration: GD00046
Date Analyzed: 04/18/23 19:31

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0260-CCB6	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLD0260-CCB6	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLD0260-CCB6	Copper-63	0.00100	0.173	0.500	ug/L	
SLD0260-CCB6	Copper-65	0.00400	0.35	0.500	ug/L	
SLD0260-CCB6	Zinc-66	0.305	2.92	6.00	ug/L	
SLD0260-CCB6	Zinc-67	0.290	0.94	6.00	ug/L	
SLD0260-CCB7	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLD0260-CCB7	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLD0260-CCB7	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0260-CCB7	Copper-63	0.00300	0.173	0.500	ug/L	
SLD0260-CCB7	Copper-65	0.00	0.35	0.500	ug/L	
SLD0260-CCB7	Zinc-66	-0.0110	2.92	6.00	ug/L	
SLD0260-CCB7	Zinc-67	0.00	0.94	6.00	ug/L	
SLD0260-CCB8	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLD0260-CCB8	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLD0260-CCB8	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLD0260-CCB8	Copper-63	-0.00100	0.173	0.500	ug/L	
SLD0260-CCB8	Copper-65	-0.00300	0.35	0.500	ug/L	
SLD0260-CCB8	Zinc-66	-0.0060	2.92	6.00	ug/L	
SLD0260-CCB8	Zinc-67	-0.0350	0.94	6.00	ug/L	
SLD0260-CCB9	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLD0260-CCB9	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLD0260-CCB9	Cadmium-114	0.00500	0.04	0.100	ug/L	
SLD0260-CCB9	Copper-63	-0.00100	0.173	0.500	ug/L	
SLD0260-CCB9	Copper-65	0.00	0.35	0.500	ug/L	
SLD0260-CCB9	Zinc-66	-0.0010	2.92	6.00	ug/L	
SLD0260-CCB9	Zinc-67	0.0240	0.94	6.00	ug/L	
SLD0260-CCBA	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLD0260-CCBA	Cadmium-111	0.00	0.03	0.100	ug/L	
SLD0260-CCBA	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLD0260-CCBA	Copper-63	0.00100	0.173	0.500	ug/L	
SLD0260-CCBA	Copper-65	-0.00200	0.35	0.500	ug/L	
SLD0260-CCBA	Zinc-66	-0.0200	2.92	6.00	ug/L	
SLD0260-CCBA	Zinc-67	-0.0310	0.94	6.00	ug/L	
SLD0260-CCBB	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLD0260-CCBB	Cadmium-111	0.00600	0.03	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0260

SDG: 23A0249
Project: AOC5 MR Phase 1
Calibration: GD00046
Date Analyzed: 04/18/23 23:54

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0260-CCBB	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLD0260-CCBB	Copper-63	0.00200	0.173	0.500	ug/L	
SLD0260-CCBB	Copper-65	0.00100	0.35	0.500	ug/L	
SLD0260-CCBB	Zinc-66	-0.0040	2.92	6.00	ug/L	
SLD0260-CCBB	Zinc-67	-0.0470	0.94	6.00	ug/L	
SLD0260-CCBC	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLD0260-CCBC	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLD0260-CCBC	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0260-CCBC	Copper-63	-0.00100	0.173	0.500	ug/L	
SLD0260-CCBC	Copper-65	-0.00100	0.35	0.500	ug/L	
SLD0260-CCBC	Zinc-66	0.0150	2.92	6.00	ug/L	
SLD0260-CCBC	Zinc-67	-0.0360	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0292

SDG: 23A0249
Project: AOC5 MR Phase 1
Calibration: GD00059
Date Analyzed: 04/20/23 13:04

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0292-IBL1	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLD0292-IBL1	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLD0292-ICB1	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLD0292-ICB1	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0292-CCB1	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLD0292-CCB1	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLD0292-IBL2	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLD0292-IBL2	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLD0292-IBL3	Cadmium-111	0.00	0.03	0.100	ug/L	
SLD0292-IBL3	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLD0292-CCB2	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLD0292-CCB2	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLD0292-IBL4	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLD0292-IBL4	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLD0292-CCB3	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLD0292-CCB3	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0292-IBL5	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLD0292-IBL5	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLD0292-CCB4	Cadmium-111	0.00	0.03	0.100	ug/L	
SLD0292-CCB4	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0292-CCB5	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLD0292-CCB5	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLD0292-IBL6	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLD0292-IBL6	Cadmium-114	-0.00400	0.04	0.100	ug/L	
SLD0292-CCB6	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLD0292-CCB6	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLD0292-CCB7	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLD0292-CCB7	Cadmium-114	0.00	0.04	0.100	ug/L	
SLD0292-IBL7	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLD0292-IBL7	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLD0292-CCB8	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLD0292-CCB8	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLD0292-CCB9	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLD0292-CCB9	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLD0292-CCBA	Cadmium-111	0.00100	0.03	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS2
Sequence: SLD0292

SDG: 23A0249
Project: AOC5 MR Phase 1
Calibration: GD00059
Date Analyzed: 04/21/23 00:18

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0292-CCBA	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLD0292-CCBB	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLD0292-CCBB	Cadmium-114	0.00300	0.04	0.100	ug/L	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0260
Instrument: ICPMS2
Calibration: GD00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLD0260-CAL1	XDT_m2230418-006	NA	04/18/23 13:13
CAL 1 - LOW CHECK	SLD0260-CAL2	XDT_m2230418-007	NA	04/18/23 13:18
CAL 2	SLD0260-CAL3	XDT_m2230418-008	NA	04/18/23 13:22
CAL 3	SLD0260-CAL4	XDT_m2230418-009	NA	04/18/23 13:27
CAL 4	SLD0260-CAL5	XDT_m2230418-010	NA	04/18/23 13:33
CAL 5	SLD0260-CAL6	XDT_m2230418-011	NA	04/18/23 13:39
RINSE	SLD0260-IBL1	XDT_m2230418-012	NA	04/18/23 13:47
Initial Cal Check	SLD0260-ICV1	XDT_m2230418-014	NA	04/18/23 13:56
Initial Cal Blank	SLD0260-ICB1	XDT_m2230418-015	NA	04/18/23 14:03
Calibration Check	SLD0260-CCV1	XDT_m2230418-016	NA	04/18/23 14:13
Calibration Blank	SLD0260-CCB1	XDT_m2230418-017	NA	04/18/23 14:20
Instrument RL Check	SLD0260-CRL1	XDT_m2230418-018	NA	04/18/23 14:33
Interference Check A	SLD0260-IFA1	XDT_m2230418-019	NA	04/18/23 14:38
Interference Check B	SLD0260-IFB1	XDT_m2230418-020	NA	04/18/23 14:43
LR200	SLD0260-HCV1	XDT_m2230418-021	NA	04/18/23 14:52
LR300	SLD0260-HCV2	XDT_m2230418-022	NA	04/18/23 14:59
Instrument Blank	SLD0260-IBL2	XDT_m2230418-023	NA	04/18/23 15:07
Calibration Check	SLD0260-CCV2	XDT_m2230418-024	NA	04/18/23 15:13
Calibration Blank	SLD0260-CCB2	XDT_m2230418-025	NA	04/18/23 15:21
Instrument Blank	SLD0260-IBL3	XDT_m2230418-035	NA	04/18/23 16:11
Calibration Check	SLD0260-CCV3	XDT_m2230418-036	NA	04/18/23 16:16
Calibration Blank	SLD0260-CCB3	XDT_m2230418-037	NA	04/18/23 16:23
ZZZZZ	BLD0472-BLK1	XDT_m2230418-038	Water	04/18/23 16:30
ZZZZZ	BLD0472-BS1	XDT_m2230418-039	Water	04/18/23 16:35
Instrument Blank	SLD0260-IBL4	XDT_m2230418-047	NA	04/18/23 17:13
Calibration Check	SLD0260-CCV4	XDT_m2230418-048	NA	04/18/23 17:18
Calibration Blank	SLD0260-CCB4	XDT_m2230418-049	NA	04/18/23 17:25
Calibration Check	SLD0260-CCV5	XDT_m2230418-060	NA	04/18/23 18:20
Calibration Blank	SLD0260-CCB5	XDT_m2230418-061	NA	04/18/23 18:27

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0260
Instrument: ICPMS2
Calibration: GD00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Blank	BLD0244-BLK1	XDT_m2230418-064	Solid	04/18/23 18:46
LCS	BLD0244-BS1	XDT_m2230418-065	Solid	04/18/23 18:50
LDW23-SC1025	23A0249-05	XDT_m2230418-066	Solid	04/18/23 18:55
LDW23-SC1025	23A0249-05	XDT_m2230418-066	Solid	04/18/23 18:55
LDW23-SC1025	23A0249-05	XDT_m2230418-066	Solid	04/18/23 18:55
LDW23-SC1025	23A0249-05	XDT_m2230418-066	Solid	04/18/23 18:55
LDW23-SC1083	23A0249-02	XDT_m2230418-067	Solid	04/18/23 19:00
LDW23-SC1083	23A0249-02	XDT_m2230418-067	Solid	04/18/23 19:00
LDW23-SC1083	23A0249-02	XDT_m2230418-067	Solid	04/18/23 19:00
LDW23-SC1083	23A0249-02	XDT_m2230418-067	Solid	04/18/23 19:00
LDW23-SC1083	BLD0244-DUP1	XDT_m2230418-068	Solid	04/18/23 19:05
LDW23-SC1083	BLD0244-DUP1	XDT_m2230418-068	Solid	04/18/23 19:05
LDW23-SC1083	BLD0244-DUP1	XDT_m2230418-068	Solid	04/18/23 19:05
LDW23-SC1083	BLD0244-DUP1	XDT_m2230418-068	Solid	04/18/23 19:05
LDW23-SC1083	BLD0244-DUP1	XDT_m2230418-068	Solid	04/18/23 19:05
LDW23-SC1083	BLD0244-DUP1	XDT_m2230418-068	Solid	04/18/23 19:05
LDW23-SC1083	BLD0244-MS1	XDT_m2230418-069	Solid	04/18/23 19:09
LDW23-SC1083	BLD0244-MS1	XDT_m2230418-069	Solid	04/18/23 19:09
LDW23-SC1083	BLD0244-MS1	XDT_m2230418-069	Solid	04/18/23 19:09
LDW23-SC1083	BLD0244-MS1	XDT_m2230418-069	Solid	04/18/23 19:09
LDW23-SC1083	BLD0244-MS1	XDT_m2230418-069	Solid	04/18/23 19:09
LDW23-SC1083	BLD0244-MS1	XDT_m2230418-069	Solid	04/18/23 19:09
LDW23-SC1083	BLD0244-MSD1	XDT_m2230418-070	Solid	04/18/23 19:14
LDW23-SC1083	BLD0244-MSD1	XDT_m2230418-070	Solid	04/18/23 19:14
LDW23-SC1083	BLD0244-MSD1	XDT_m2230418-070	Solid	04/18/23 19:14
LDW23-SC1083	BLD0244-MSD1	XDT_m2230418-070	Solid	04/18/23 19:14
LDW23-SC1083	BLD0244-MSD1	XDT_m2230418-070	Solid	04/18/23 19:14
LDW23-SC1083	BLD0244-MSD1	XDT_m2230418-070	Solid	04/18/23 19:14
Calibration Check	SLD0260-CCV6	XDT_m2230418-072	NA	04/18/23 19:23

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0260
Instrument: ICPMS2
Calibration: GD00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLD0260-CCB6	XDT_m2230418-073	NA	04/18/23 19:31
Calibration Check	SLD0260-CCV7	XDT_m2230418-075	NA	04/18/23 19:47
Calibration Blank	SLD0260-CCB7	XDT_m2230418-076	NA	04/18/23 19:55
LDW23-IT1034	23A0249-07	XDT_m2230418-077	Solid	04/18/23 20:00
LDW23-SC1024	23A0249-08	XDT_m2230418-078	Solid	04/18/23 20:04
LDW23-SC1024	23A0249-08	XDT_m2230418-078	Solid	04/18/23 20:04
LDW23-SC1024	23A0249-08	XDT_m2230418-078	Solid	04/18/23 20:04
LDW23-SC1024	23A0249-08	XDT_m2230418-078	Solid	04/18/23 20:04
LDW23-SC1020	23A0249-11	XDT_m2230418-079	Solid	04/18/23 20:09
LDW23-SC1020	23A0249-11	XDT_m2230418-079	Solid	04/18/23 20:09
LDW23-SC1020	23A0249-11	XDT_m2230418-079	Solid	04/18/23 20:09
LDW23-SC1020	23A0249-11	XDT_m2230418-079	Solid	04/18/23 20:09
ZZZZZ	23A0295-01	XDT_m2230418-080	Solid	04/18/23 20:14
ZZZZZ	23A0295-01	XDT_m2230418-080	Solid	04/18/23 20:14
ZZZZZ	23A0295-01	XDT_m2230418-080	Solid	04/18/23 20:14
ZZZZZ	23A0295-01	XDT_m2230418-080	Solid	04/18/23 20:14
ZZZZZ	23A0295-02	XDT_m2230418-081	Solid	04/18/23 20:19
ZZZZZ	23A0295-02	XDT_m2230418-081	Solid	04/18/23 20:19
ZZZZZ	23A0295-02	XDT_m2230418-081	Solid	04/18/23 20:19
ZZZZZ	23A0295-02	XDT_m2230418-081	Solid	04/18/23 20:19
ZZZZZ	23A0295-03	XDT_m2230418-082	Solid	04/18/23 20:23
ZZZZZ	23A0295-03	XDT_m2230418-082	Solid	04/18/23 20:23
ZZZZZ	23A0295-03	XDT_m2230418-082	Solid	04/18/23 20:23
ZZZZZ	23A0295-03	XDT_m2230418-082	Solid	04/18/23 20:23
ZZZZZ	23A0295-04	XDT_m2230418-083	Solid	04/18/23 20:28
ZZZZZ	23A0295-04	XDT_m2230418-083	Solid	04/18/23 20:28
ZZZZZ	23A0295-04	XDT_m2230418-083	Solid	04/18/23 20:28
ZZZZZ	23A0295-04	XDT_m2230418-083	Solid	04/18/23 20:28
ZZZZZ	23A0295-05	XDT_m2230418-084	Solid	04/18/23 20:33

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0260
Instrument: ICPMS2
Calibration: GD00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0295-05	XDT_m2230418-084	Solid	04/18/23 20:33
ZZZZZ	23A0295-05	XDT_m2230418-084	Solid	04/18/23 20:33
ZZZZZ	23A0295-05	XDT_m2230418-084	Solid	04/18/23 20:33
ZZZZZ	23A0295-06	XDT_m2230418-085	Solid	04/18/23 20:38
ZZZZZ	23A0295-06	XDT_m2230418-085	Solid	04/18/23 20:38
ZZZZZ	23A0295-06	XDT_m2230418-085	Solid	04/18/23 20:38
ZZZZZ	23A0295-06	XDT_m2230418-085	Solid	04/18/23 20:38
ZZZZZ	23A0295-07	XDT_m2230418-086	Solid	04/18/23 20:42
ZZZZZ	23A0295-07	XDT_m2230418-086	Solid	04/18/23 20:42
ZZZZZ	23A0295-07	XDT_m2230418-086	Solid	04/18/23 20:42
ZZZZZ	23A0295-07	XDT_m2230418-086	Solid	04/18/23 20:42
Calibration Check	SLD0260-CCV8	XDT_m2230418-087	NA	04/18/23 20:47
Calibration Blank	SLD0260-CCB8	XDT_m2230418-088	NA	04/18/23 20:55
ZZZZZ	BLD0289-BLK1	XDT_m2230418-089	Solid	04/18/23 20:59
ZZZZZ	BLD0289-BS1	XDT_m2230418-090	Solid	04/18/23 21:04
ZZZZZ	23A0295-09	XDT_m2230418-091	Solid	04/18/23 21:09
ZZZZZ	23A0295-09	XDT_m2230418-091	Solid	04/18/23 21:09
ZZZZZ	23A0295-09	XDT_m2230418-091	Solid	04/18/23 21:09
ZZZZZ	23A0295-09	XDT_m2230418-091	Solid	04/18/23 21:09
ZZZZZ	23A0295-10	XDT_m2230418-092	Solid	04/18/23 21:14
ZZZZZ	23A0295-10	XDT_m2230418-092	Solid	04/18/23 21:14
ZZZZZ	23A0295-10	XDT_m2230418-092	Solid	04/18/23 21:14
ZZZZZ	23A0295-10	XDT_m2230418-092	Solid	04/18/23 21:14
ZZZZZ	23A0313-03	XDT_m2230418-093	Solid	04/18/23 21:18
ZZZZZ	23A0328-02	XDT_m2230418-094	Solid	04/18/23 21:23
ZZZZZ	23A0328-02	XDT_m2230418-094	Solid	04/18/23 21:23
ZZZZZ	23A0328-02	XDT_m2230418-094	Solid	04/18/23 21:23
ZZZZZ	23A0328-02	XDT_m2230418-094	Solid	04/18/23 21:23
ZZZZZ	BLD0289-DUP1	XDT_m2230418-095	Solid	04/18/23 21:28

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0260
Instrument: ICPMS2
Calibration: GD00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	BLD0289-MS1	XDT_m2230418-096	Solid	04/18/23 21:33
ZZZZZ	BLD0289-MSD1	XDT_m2230418-097	Solid	04/18/23 21:37
ZZZZZ	BLD0289-PS1	XDT_m2230418-098	Solid	04/18/23 21:42
Calibration Check	SLD0260-CCV9	XDT_m2230418-099	NA	04/18/23 21:47
Calibration Blank	SLD0260-CCB9	XDT_m2230418-100	NA	04/18/23 21:54
ZZZZZ	23A0313-04	XDT_m2230418-101	Solid	04/18/23 21:59
ZZZZZ	23A0313-08	XDT_m2230418-102	Solid	04/18/23 22:04
ZZZZZ	23A0313-08	XDT_m2230418-102	Solid	04/18/23 22:04
ZZZZZ	23A0313-08	XDT_m2230418-102	Solid	04/18/23 22:04
ZZZZZ	23A0313-08	XDT_m2230418-102	Solid	04/18/23 22:04
ZZZZZ	23A0313-09	XDT_m2230418-103	Solid	04/18/23 22:08
ZZZZZ	23A0313-09	XDT_m2230418-103	Solid	04/18/23 22:08
ZZZZZ	23A0313-09	XDT_m2230418-103	Solid	04/18/23 22:08
ZZZZZ	23A0313-09	XDT_m2230418-103	Solid	04/18/23 22:08
ZZZZZ	23A0313-10	XDT_m2230418-104	Solid	04/18/23 22:13
ZZZZZ	23A0313-10	XDT_m2230418-104	Solid	04/18/23 22:13
ZZZZZ	23A0313-10	XDT_m2230418-104	Solid	04/18/23 22:13
ZZZZZ	23A0313-10	XDT_m2230418-104	Solid	04/18/23 22:13
ZZZZZ	23A0313-11	XDT_m2230418-105	Solid	04/18/23 22:18
ZZZZZ	23A0313-11	XDT_m2230418-105	Solid	04/18/23 22:18
ZZZZZ	23A0313-11	XDT_m2230418-105	Solid	04/18/23 22:18
ZZZZZ	23A0313-11	XDT_m2230418-105	Solid	04/18/23 22:18
ZZZZZ	23A0313-12	XDT_m2230418-106	Solid	04/18/23 22:23
ZZZZZ	23A0313-13	XDT_m2230418-107	Solid	04/18/23 22:27
ZZZZZ	23A0313-13	XDT_m2230418-107	Solid	04/18/23 22:27
ZZZZZ	23A0313-13	XDT_m2230418-107	Solid	04/18/23 22:27
ZZZZZ	23A0313-13	XDT_m2230418-107	Solid	04/18/23 22:27
ZZZZZ	23A0328-03	XDT_m2230418-108	Solid	04/18/23 22:32
ZZZZZ	23A0328-03	XDT_m2230418-108	Solid	04/18/23 22:32

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0260
Instrument: ICPMS2
Calibration: GD00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0328-03	XDT_m2230418-108	Solid	04/18/23 22:32
ZZZZZ	23A0328-03	XDT_m2230418-108	Solid	04/18/23 22:32
ZZZZZ	23A0328-04	XDT_m2230418-109	Solid	04/18/23 22:37
ZZZZZ	23A0328-04	XDT_m2230418-109	Solid	04/18/23 22:37
ZZZZZ	23A0328-04	XDT_m2230418-109	Solid	04/18/23 22:37
ZZZZZ	23A0328-04	XDT_m2230418-109	Solid	04/18/23 22:37
ZZZZZ	23A0328-05	XDT_m2230418-110	Solid	04/18/23 22:42
ZZZZZ	23A0328-05	XDT_m2230418-110	Solid	04/18/23 22:42
ZZZZZ	23A0328-05	XDT_m2230418-110	Solid	04/18/23 22:42
ZZZZZ	23A0328-05	XDT_m2230418-110	Solid	04/18/23 22:42
Calibration Check	SLD0260-CCVA	XDT_m2230418-111	NA	04/18/23 22:46
Calibration Blank	SLD0260-CCBA	XDT_m2230418-112	NA	04/18/23 22:54
ZZZZZ	23A0328-06	XDT_m2230418-113	Solid	04/18/23 22:59
ZZZZZ	23A0328-06	XDT_m2230418-113	Solid	04/18/23 22:59
ZZZZZ	23A0328-06	XDT_m2230418-113	Solid	04/18/23 22:59
ZZZZZ	23A0328-06	XDT_m2230418-113	Solid	04/18/23 22:59
ZZZZZ	23A0328-07	XDT_m2230418-114	Solid	04/18/23 23:03
ZZZZZ	23A0328-07	XDT_m2230418-114	Solid	04/18/23 23:03
ZZZZZ	23A0328-07	XDT_m2230418-114	Solid	04/18/23 23:03
ZZZZZ	23A0328-07	XDT_m2230418-114	Solid	04/18/23 23:03
ZZZZZ	23A0328-08	XDT_m2230418-115	Solid	04/18/23 23:08
ZZZZZ	23A0328-08	XDT_m2230418-115	Solid	04/18/23 23:08
ZZZZZ	23A0328-08	XDT_m2230418-115	Solid	04/18/23 23:08
ZZZZZ	23A0328-08	XDT_m2230418-115	Solid	04/18/23 23:08
ZZZZZ	23A0328-09	XDT_m2230418-116	Solid	04/18/23 23:13
ZZZZZ	23A0328-09	XDT_m2230418-116	Solid	04/18/23 23:13
ZZZZZ	23A0328-09	XDT_m2230418-116	Solid	04/18/23 23:13
ZZZZZ	23A0328-09	XDT_m2230418-116	Solid	04/18/23 23:13
ZZZZZ	23A0328-10	XDT_m2230418-117	Solid	04/18/23 23:18

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLD0260

SDG: 23A0249
Project: AOC5 MR Phase 1
Instrument: ICPMS2
Calibration: GD00046

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0328-10	XDT_m2230418-117	Solid	04/18/23 23:18
ZZZZZ	23A0328-10	XDT_m2230418-117	Solid	04/18/23 23:18
ZZZZZ	23A0328-10	XDT_m2230418-117	Solid	04/18/23 23:18
ZZZZZ	23A0328-11	XDT_m2230418-118	Solid	04/18/23 23:22
ZZZZZ	23A0328-11	XDT_m2230418-118	Solid	04/18/23 23:22
ZZZZZ	23A0328-11	XDT_m2230418-118	Solid	04/18/23 23:22
ZZZZZ	23A0328-11	XDT_m2230418-118	Solid	04/18/23 23:22
ZZZZZ	23A0328-12	XDT_m2230418-119	Solid	04/18/23 23:27
ZZZZZ	23A0328-12	XDT_m2230418-119	Solid	04/18/23 23:27
ZZZZZ	23A0328-12	XDT_m2230418-119	Solid	04/18/23 23:27
ZZZZZ	23A0328-12	XDT_m2230418-119	Solid	04/18/23 23:27
LDW23-SC1018	23A0249-03	XDT_m2230418-120	Solid	04/18/23 23:32
LDW23-SC1018	23A0249-03	XDT_m2230418-120	Solid	04/18/23 23:32
LDW23-SC1018	23A0249-03	XDT_m2230418-120	Solid	04/18/23 23:32
LDW23-SC1018	23A0249-03	XDT_m2230418-120	Solid	04/18/23 23:32
LDW23-SC1084	23A0249-04	XDT_m2230418-121	Solid	04/18/23 23:37
LDW23-SC1084	23A0249-04	XDT_m2230418-121	Solid	04/18/23 23:37
LDW23-SC1084	23A0249-04	XDT_m2230418-121	Solid	04/18/23 23:37
LDW23-SC1084	23A0249-04	XDT_m2230418-121	Solid	04/18/23 23:37
Calibration Check	SLD0260-CCVB	XDT_m2230418-123	NA	04/18/23 23:46
Calibration Blank	SLD0260-CCBB	XDT_m2230418-124	NA	04/18/23 23:54
Calibration Check	SLD0260-CCVC	XDT_m2230418-135	NA	04/19/23 00:46
Calibration Blank	SLD0260-CCBC	XDT_m2230418-136	NA	04/19/23 00:53

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLD0292	Instrument:	ICPMS2
		Calibration:	GD00059

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLD0292-CAL1	XDT_m2230420-006	NA	04/20/23 12:31
CAL 1 - LOW CHECK	SLD0292-CAL2	XDT_m2230420-007	NA	04/20/23 12:35
CAL 2	SLD0292-CAL3	XDT_m2230420-008	NA	04/20/23 12:40
CAL 3	SLD0292-CAL4	XDT_m2230420-009	NA	04/20/23 12:45
CAL 4	SLD0292-CAL5	XDT_m2230420-010	NA	04/20/23 12:50
CAL 5	SLD0292-CAL6	XDT_m2230420-011	NA	04/20/23 12:56
RINSE	SLD0292-IBL1	XDT_m2230420-012	NA	04/20/23 13:04
Initial Cal Check	SLD0292-ICV1	XDT_m2230420-014	NA	04/20/23 14:54
Initial Cal Blank	SLD0292-ICB1	XDT_m2230420-015	NA	04/20/23 15:02
Calibration Check	SLD0292-CCV1	XDT_m2230420-016	NA	04/20/23 15:09
Calibration Blank	SLD0292-CCB1	XDT_m2230420-017	NA	04/20/23 15:16
Instrument RL Check	SLD0292-CRL1	XDT_m2230420-018	NA	04/20/23 15:22
Interference Check A	SLD0292-IFA1	XDT_m2230420-019	NA	04/20/23 15:27
Interference Check B	SLD0292-IFB1	XDT_m2230420-020	NA	04/20/23 15:32
LR200	SLD0292-HCV1	XDT_m2230420-021	NA	04/20/23 15:37
LR300	SLD0292-HCV2	XDT_m2230420-022	NA	04/20/23 15:41
Instrument Blank	SLD0292-IBL2	XDT_m2230420-023	NA	04/20/23 15:49
Instrument Blank	SLD0292-IBL3	XDT_m2230420-024	NA	04/20/23 15:56
Calibration Check	SLD0292-CCV2	XDT_m2230420-025	NA	04/20/23 16:03
Calibration Blank	SLD0292-CCB2	XDT_m2230420-026	NA	04/20/23 16:10
Instrument Blank	SLD0292-IBL4	XDT_m2230420-036	NA	04/20/23 17:11
Calibration Check	SLD0292-CCV3	XDT_m2230420-037	NA	04/20/23 17:16
Calibration Blank	SLD0292-CCB3	XDT_m2230420-039	NA	04/20/23 17:28
ZZZZZ	BLD0289-BS2	XDT_m2230420-040	Solid	04/20/23 17:35
Instrument Blank	SLD0292-IBL5	XDT_m2230420-049	NA	04/20/23 18:16
Calibration Check	SLD0292-CCV4	XDT_m2230420-050	NA	04/20/23 18:21
Calibration Blank	SLD0292-CCB4	XDT_m2230420-051	NA	04/20/23 18:28
Calibration Check	SLD0292-CCV5	XDT_m2230420-062	NA	04/20/23 19:23
Calibration Blank	SLD0292-CCB5	XDT_m2230420-063	NA	04/20/23 19:30

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLD0292	Instrument:	ICPMS2
		Calibration:	GD00059

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLD0292-IBL6	XDT_m2230420-073	NA	04/20/23 20:16
Calibration Check	SLD0292-CCV6	XDT_m2230420-074	NA	04/20/23 20:20
Calibration Blank	SLD0292-CCB6	XDT_m2230420-075	NA	04/20/23 20:28
Calibration Check	SLD0292-CCV7	XDT_m2230420-086	NA	04/20/23 21:18
Calibration Blank	SLD0292-CCB7	XDT_m2230420-087	NA	04/20/23 21:25
Instrument Blank	SLD0292-IBL7	XDT_m2230420-097	NA	04/20/23 22:11
Calibration Check	SLD0292-CCV8	XDT_m2230420-098	NA	04/20/23 22:15
Calibration Blank	SLD0292-CCB8	XDT_m2230420-099	NA	04/20/23 22:23
Calibration Check	SLD0292-CCV9	XDT_m2230420-110	NA	04/20/23 23:13
Calibration Blank	SLD0292-CCB9	XDT_m2230420-111	NA	04/20/23 23:20
Calibration Check	SLD0292-CCVA	XDT_m2230420-122	NA	04/21/23 00:10
Calibration Blank	SLD0292-CCBA	XDT_m2230420-123	NA	04/21/23 00:18
Calibration Check	SLD0292-CCVB	XDT_m2230420-134	NA	04/21/23 01:08
Calibration Blank	SLD0292-CCBB	XDT_m2230420-135	NA	04/21/23 01:15

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00046
Sequence: SLD0260
Standard ID: L003578

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0260-IFA1	Arsenic-75a	0	0.0280		ug/L
	Cadmium-111	0	0.0770		ug/L
	Cadmium-114	0	0.0530		ug/L
	Copper-63	0	0.0530		ug/L
	Copper-65	0	0.0490		ug/L
	Zinc-66	0	0.2400		ug/L
	Zinc-67	0	0.2910		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00046
Sequence: SLD0260
Standard ID: L003578

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0260-IFB1	Arsenic-75a	20.000	18.639	93.2	ug/L
	Cadmium-111	20.000	18.715	93.6	ug/L
	Cadmium-114	20.000	18.985	94.9	ug/L
	Copper-63	20.000	19.938	99.7	ug/L
	Copper-65	20.000	19.504	97.5	ug/L
	Zinc-66	20.000	18.775	93.9	ug/L
	Zinc-67	20.000	16.009	80.0	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00059
Sequence: SLD0292
Standard ID: L003578

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0292-IFA1	Cadmium-111	0	0.0580		ug/L
	Cadmium-114	0	0.0480		ug/L

* Indicates %R outside of QC limits
NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00059
Sequence: SLD0292
Standard ID: L003578

Lab Sample ID	Analyte	True	Found	%R	Units
SLD0292-IFB1	Cadmium-111	20.000	18.974	94.9	ug/L
	Cadmium-114	20.000	19.102	95.5	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

DETECTION LEVEL STANDARD
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00046
Sequence: SLD0260
Lab Sample ID: SLD0260-CRL1

Analyte	True	Found	%R	Units	QC Limts
Arsenic-75a	0.20000	0.215	108	ug/L	50 - 150
Cadmium-111	0.10000	0.0870	87.0	ug/L	50 - 150
Cadmium-114	0.10000	0.109	109	ug/L	50 - 150
Copper-63	0.50000	0.508	102	ug/L	50 - 150
Copper-65	0.50000	0.533	107	ug/L	50 - 150
Zinc-66	6.0000	6.25	104	ug/L	50 - 150
Zinc-67	6.0000	5.46	91.0	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS2
Calibration: GD00059
Sequence: SLD0292
Lab Sample ID: SLD0292-CRL1

Analyte	True	Found	%R	Units	QC Limts
Cadmium-111	0.10000	0.0890	89.0	ug/L	50 - 150
Cadmium-114	0.10000	0.0980	98.0	ug/L	50 - 150

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00046
Laboratory ID: SLD0260-HCV1
Sequence: SLD0260
Standard ID: L003671

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	200.00	196	-2.2	10.00
Cadmium-111	200.00	191	-4.5	10.00
Cadmium-114	200.00	192	-3.9	10.00
Copper-63	200.00	196	-2.0	10.00
Copper-65	200.00	198	-1.1	10.00
Zinc-66	200.00	194	-3.2	10.00
Zinc-67	200.00	186	-6.8	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00046
Laboratory ID: SLD0260-HCV2
Sequence: SLD0260
Standard ID: L003672

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	300.00	289	-3.7	10.00
Cadmium-111	300.00	281	-6.3	10.00
Cadmium-114	300.00	286	-4.6	10.00
Copper-63	300.00	286	-4.6	10.00
Copper-65	300.00	287	-4.5	10.00
Zinc-66	300.00	272	-9.4	10.00
Zinc-67	300.00	266	-11.4	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00059
Laboratory ID: SLD0292-HCV1
Sequence: SLD0292
Standard ID: L003671

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Cadmium-111	200.00	196	-1.9	10.00
Cadmium-114	200.00	199	-0.6	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GD00059
Laboratory ID: SLD0292-HCV2
Sequence: SLD0292
Standard ID: L003672

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Cadmium-111	300.00	288	-4.1	10.00
Cadmium-114	300.00	289	-3.7	10.00

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1083 23A0249-02	01/12/23 08:38	01/12/23 16:38	04/13/23 15:30	91	180	04/18/23 19:00	96	180	
LDW23-SC1018 23A0249-03	01/12/23 10:21	01/12/23 16:38	04/13/23 15:30	91	180	04/18/23 23:32	97	180	
LDW23-SC1084 23A0249-04	01/12/23 09:47	01/12/23 16:38	04/13/23 15:30	91	180	04/18/23 23:37	97	180	
LDW23-SC1025 23A0249-05	01/12/23 11:28	01/12/23 16:38	04/13/23 15:30	91	180	04/18/23 18:55	96	180	
LDW23-IT1034 23A0249-07	01/12/23 12:32	01/12/23 16:38	04/13/23 15:30	91	180	04/18/23 20:00	96	180	
LDW23-SC1024 23A0249-08	01/12/23 13:35	01/12/23 16:38	04/13/23 15:30	91	180	04/18/23 20:04	96	180	
LDW23-SC1020 23A0249-11	01/12/23 15:23	01/12/23 16:38	04/13/23 15:30	91	180	04/18/23 20:09	96	180	
Duplicate BLD0244-DUP1	01/12/23 08:38	01/12/23 16:38	04/11/23 15:30	89	180	04/18/23 19:05	96	180	
Matrix Spike BLD0244-MS1	01/12/23 08:38	01/12/23 16:38	04/11/23 15:30	89	180	04/18/23 19:09	96	180	
Matrix Spike Dup BLD0244-MSD1	01/12/23 08:38	01/12/23 16:38	04/11/23 15:30	89	180	04/18/23 19:14	96	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ICPMS2

Analyte	MDL	RL	Units
Arsenic-75a	0.04	0.20	mg/kg
Cadmium-111	0.03	0.10	mg/kg
Cadmium-114	0.04	0.10	mg/kg
Copper-63	0.17	0.50	mg/kg
Copper-65	0.35	0.50	mg/kg
Zinc-66	2.9	6.0	mg/kg
Zinc-67	0.9	6.0	mg/kg

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCU10
Lot Number:	P2-CU682108
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Copper
Starting Material:	Cu Metal
Starting Material Lot#:	2095
Starting Material Purity:	99.9996%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10013 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9977 ± 50 µg/mL**
ICP Assay NIST SRM 3114 Lot Number: 121207

Assay Method #2 **10024 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10007 ± 46 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.007542	M	Eu	<	0.000942	O	Na		0.001434	M	Se	<	0.016971	M	Zn	<	0.005657
O	Al	<	0.000609	O	Fe		0.008700	M	Nb	<	0.000942	O	Si		0.003052	M	Zr	<	0.000942
M	As	<	0.010371	M	Ga	<	0.000942	M	Nd	<	0.000942	M	Sm	<	0.000942				
M	Au	<	0.001885	M	Gd	<	0.000942	M	Ni		0.003781	M	Sn	<	0.005657				
O	B		0.003663	M	Ge	<	0.005657	M	Os	<	0.000942	M	Sr	<	0.000942				
M	Ba		0.004253	M	Hf	<	0.000942	O	P	<	0.031668	M	Ta	<	0.000942				
M	Be	<	0.000942	O	Hg	<	0.007064	M	Pb		0.005789	M	Tb	<	0.000942				
M	Bi	<	0.000942	M	Ho	<	0.000942	M	Pd	<	0.000942	M	Te	<	0.004714				
O	Ca		0.002304	M	In	<	0.000942	M	Pr	<	0.000942	M	Th	<	0.000942				
M	Cd	<	0.000942	M	Ir	<	0.000942	M	Pt	<	0.000942	O	Ti	<	0.002801				
M	Ce	<	0.000942	O	K		0.000763	M	Rb	<	0.000942	M	Tl	<	0.000942				
M	Co		0.001890	M	La	<	0.000942	M	Re	<	0.000942	M	Tm	<	0.000942				
M	Cr	<	0.005657	O	Li	<	0.000243	i	Rh	<		M	U	<	0.000942				
M	Cs	<	0.000942	M	Lu	<	0.000942	M	Ru	<	0.039588	M	V	<	0.003771				
s	Cu	<		O	Mg		0.000320	O	S		0.007174	M	W	<	0.005657				
M	Dy	<	0.000942	O	Mn		0.000793	M	Sb	<	0.001885	M	Y	<	0.000942				
M	Er	<	0.000942	M	Mo	<	0.005657	M	Sc	<	0.000942	M	Yb	<	0.000942				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.55 +2 6 $Cu(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cu Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 63 amu	10 ppt	n/a	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	Th, Ta, Nb, U, Hf
ICP-OES 224.700 nm	0.01/.001 µg/mL	1	Pb, Ir, Ni, W
ICP-OES 324.754 nm	0.06/.001 µg/mL		Nb, U, Th, Mo, Hf

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 24, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 24, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGPB10
Lot Number:	S2-PB713228
Matrix:	0.5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Lead
Starting Material:	Lead Nitrate
Starting Material Lot#:	2343
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10042 ± 31 µg/mL

Density: 1.015 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10024 ± 41 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

Assay Method #2 **10054 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	M	Na		0.001470	M	Se	<	0.009100	O	Zn	0.006155
O	Al		0.017098	O	Fe		0.002496	M	Nb	<	0.000310	O	Si		0.003761	O	Zr	< 0.001700
M	As	<	0.003100	M	Ga	<	0.000310	M	Nd	<	0.000310	M	Sm	<	0.000310			
M	Au	<	0.000910	M	Gd	<	0.000310	O	Ni		0.001709	M	Sn	<	0.001300			
O	B	<	0.005600	M	Ge	<	0.002200	M	Os	<	0.000310	O	Sr		0.000444			
O	Ba		0.007865	M	Hf	<	0.000310	O	P	<	0.038000	M	Ta	<	0.000310			
O	Be	<	0.000320	M	Hg	<	0.002200	s	Pb	<		M	Tb	<	0.000610			
M	Bi	<	0.028000	M	Ho	<	0.000310	M	Pd	<	0.000610	M	Te	<	0.000310			
O	Ca		0.019834	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.000310			
O	Cd	<	0.000630	M	Ir	<	0.000310	M	Pt	<	0.000910	O	Ti		0.005129			
M	Ce		0.004787	O	K		0.008207	M	Rb	<	0.006700	M	Tl	<	0.016000			
M	Co	<	0.000610	M	La	<	0.001900	M	Re	<	0.000310	M	Tm	<	0.000310			
O	Cr	<	0.001500	O	Li	<	0.000110	O	Rh	<	0.007700	M	U	<	0.000310			
M	Cs	<	0.006100	M	Lu	<	0.000310	M	Ru	<	0.001300	M	V	<	0.001600			
M	Cu	<	0.001600	O	Mg		0.003317	O	S	<	0.052000	M	W	<	0.000910			
M	Dy	<	0.000310	O	Mn	<	0.001600	O	Sb	<	0.015000	M	Y	<	0.000310			
M	Er	<	0.000310	M	Mo	<	0.000610	O	Sc	<	0.000630	M	Yb	<	0.000310			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 $Pb(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, HF and HNO_3. Avoid H_2SO_4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H_2O / HNO_3); Oxides (The many different Pb oxides are soluble in HNO_3 with the exception of PbO_2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H_2O / HNO_3); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

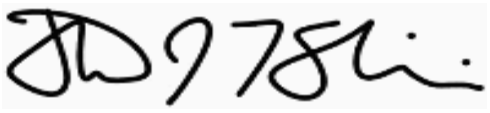
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGZN10
Lot Number:	S2-ZN711249
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Zinc
Starting Material:	Zinc Metal
Starting Material Lot#:	2349
Starting Material Purity:	99.9988%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9981 ± 56 µg/mL**
ICP Assay NIST SRM 3168a Lot Number: 120629

Assay Method #2 **9987 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10002 ± 32 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002000	M	Eu	<	0.000500	O	Na		0.008713	M	Se	<	0.048000	s	Zn	<
O	Al	<	0.011000	O	Fe		0.015467	M	Nb	<	0.000500	O	Si		0.007842	M	Zr	< 0.000500
O	As	<	0.012000	M	Ga	<	0.004900	M	Nd	<	0.000500	M	Sm	<	0.000500			
M	Au	<	0.006500	M	Gd	<	0.000500	O	Ni		0.003049	M	Sn		0.002614			
O	B	<	0.019000	M	Ge	<	0.009100	M	Os	<	0.000500	M	Sr	<	0.000500			
M	Ba	<	0.000500	M	Hf	<	0.000500	O	P	<	0.059000	M	Ta	<	0.000500			
O	Be	<	0.000230	O	Hg	<	0.003800	M	Pb		0.016774	M	Tb	<	0.000500			
M	Bi	<	0.002400	M	Ho	<	0.000500	M	Pd	<	0.001000	M	Te	<	0.017000			
O	Ca		0.052283	M	In	<	0.003500	M	Pr	<	0.000500	M	Th	<	0.000500			
O	Cd		0.000588	M	Ir	<	0.001000	M	Pt	<	0.000500	M	Ti	<	0.002000			
M	Ce	<	0.000500	O	K		0.017209	M	Rb	<	0.002500	M	Tl	<	0.000500			
M	Co		0.000653	M	La	<	0.000500	M	Re	<	0.000500	M	Tm	<	0.000500			
O	Cr		0.001089	O	Li	<	0.000230	M	Rh	<	0.000500	M	U	<	0.000500			
M	Cs	<	0.000500	M	Lu	<	0.000500	M	Ru	<	0.005000	M	V	<	0.000500			
O	Cu		0.001938	O	Mg		0.000871	O	S	<	0.048000	M	W	<	0.001000			
M	Dy	<	0.000500	O	Mn		0.000172	M	Sb	<	0.004300	M	Y	<	0.000500			
M	Er	<	0.000500	M	Mo	<	0.001500	O	Sc	<	0.000900	M	Yb	<	0.000500			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39 +2 4 Zn(OH)(aq)1+
Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media forming insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Zn Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3); Organic based (dry ash at 4500C and dissolve ash in HCl) (sulfuric/peroxide acid digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 66 amu	7 ppt	N/A	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2
ICP-OES 202.548 nm	0.004/0.0002 µg/mL	1	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006/0.0006 µg/mL	1	Sb, Ta, Bi, Os
ICP-OES 213.856 nm	0.002/0.0004 µg/mL	1	Ni, Cu, V

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 22, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

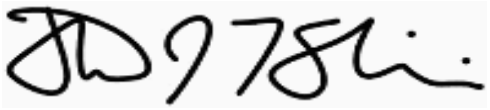
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSE10
Lot Number:	S2-SE711004
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Selenium
Starting Material:	Se Metal
Starting Material Lot#:	1962
Starting Material Purity:	99.9991%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9955 ± 61 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9955 ± 50 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002242	M	Eu	<	0.000373	O	Na		0.013654	s	Se	<		O	Zn		0.002374
M	Al		0.004450	M	Fe		0.008478	O	Nb	<	0.002975	O	Si		0.006249	M	Zr	<	0.001868
O	As	<	0.022040	M	Ga	<	0.000373	M	Nd	<	0.000373	M	Sm	<	0.000373				
M	Au	<	0.000373	M	Gd	<	0.000373	O	Ni		0.001843	M	Sn		0.000847				
O	B	<	0.007714	M	Ge	<	0.002616	M	Os	<	0.000373	M	Sr	<	0.001121				
M	Ba	<	0.001495	M	Hf	<	0.000373	O	P	<	0.022040	M	Ta	<	0.000373				
M	Be	<	0.001495	M	Hg	<	0.002240	M	Pb		0.006358	M	Tb	<	0.006353				
M	Bi	<	0.000373	M	Ho	<	0.000373	M	Pd	<	0.000373	M	Te	<	0.012707				
O	Ca		0.006530	M	In	<	0.000373	M	Pr	<	0.001495	M	Th	<	0.002990				
M	Cd		0.001165	M	Ir	<	0.000373	M	Pt	<	0.000373	M	Ti	<	0.003363				
M	Ce	<	0.000373	O	K		0.001999	M	Rb	<	0.001868	M	Tl		0.008584				
M	Co	<	0.000373	M	La	<	0.001121	M	Re	<	0.000373	M	Tm	<	0.000373				
M	Cr		0.002861	O	Li		0.000062	M	Rh	<	0.000373	M	U	<	0.000373				
M	Cs	<	0.001121	M	Lu	<	0.000373	M	Ru	<	0.001493	M	V	<	0.000747				
M	Cu	<	0.000747	O	Mg		0.001156	O	S		0.024591	M	W	<	0.002242				
M	Dy	<	0.000373	M	Mn	<	0.000373	M	Sb	<	0.002242	M	Y	<	0.000373				
M	Er	<	0.000373	O	Mo	<	0.003195	M	Sc	<	0.001121	M	Yb	<	0.000373				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H_2SeO_3

Chemical Compatibility -Soluble in HCl, HNO_3,H_3PO_4, H_2SO_4 and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO_3or HNO_3 / HF); Organic Matrices (acid digestion with hot concentrated H_2SO_4 accompanied by the careful dropwise addition of H_2O_2 until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 17, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO10
Lot Number:	S2-MO706255
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	10 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10026 ± 47 µg/mL

Density: 1.011 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10032 ± 68 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

Assay Method #2 **10020 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.008739	M	Se	<	0.008000	M	Zn		0.005942
M	Al		0.005592	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.001747				
M	Ba		0.016778	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.062920	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Ti	<	0.032000				
M	Ce	<	0.008300	M	K		1.293372	M	Rb		0.045442	M	Tl		0.012584				
M	Co		0.005942	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.005243	O	Li		0.000594	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.005243	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.022371	M	Mg		0.005592	i	S	<		M	W		0.873900				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.015031	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br16O,190Os2+,190Pt2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 04, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 04, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL10
Lot Number:	T2-TL714687
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Thallium
Starting Material:	TlNO3
Starting Material Lot#:	2118
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10030 ± 42 µg/mL

Density: 1.036 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10040 ± 43 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 151215

Assay Method #2 **10010 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL(

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000200	O	Na		0.002489	M	Se	<	0.011019	O	Zn		0.002298
O	Al	<	0.004184	O	Fe	<	0.002824	M	Nb	<	0.000200	O	Si		0.003760	M	Zr	<	0.000200
M	As	<	0.002003	M	Ga	<	0.000200	M	Nd	<	0.000200	M	Sm	<	0.000200				
O	Au	<	0.002824	M	Gd	<	0.000200	M	Ni		0.001724	M	Sn	<	0.000601				
O	B	<	0.004184	M	Ge	<	0.000801	M	Os	<	0.000198	O	Sr	<	0.000313				
M	Ba	<	0.000400	M	Hf	<	0.000200	O	P	<	0.010460	M	Ta	<	0.000200				
O	Be	<	0.000104	M	Hg	<	0.000794	M	Pb		0.000811	M	Tb	<	0.000200				
M	Bi	<	0.005209	M	Ho	<	0.000200	M	Pd	<	0.000400	M	Te	<	0.005008				
O	Ca		0.002436	M	In	<	0.000200	M	Pr	<	0.000200	M	Th	<	0.000200				
M	Cd		0.001318	M	Ir	<	0.000198	M	Pt	<	0.000801	O	Ti	<	0.001255				
M	Ce	<	0.000200	O	K		0.006175	M	Rb	<	0.000200	s	Tl	<					
M	Co	<	0.000601	M	La	<	0.000200	M	Re	<	0.000200	M	Tm	<	0.000200				
M	Cr	<	0.000801	O	Li	<	0.000177	M	Rh	<	0.000200	M	U	<	0.000200				
M	Cs	<	0.003606	M	Lu	<	0.000200	M	Ru	<	0.000397	M	V	<	0.002203				
M	Cu	<	0.001001	O	Mg		0.000529	O	S	<	0.015690	M	W	<	0.000601				
M	Dy	<	0.000200	M	Mn	<	0.000801	M	Sb	<	0.000400	M	Y	<	0.000200				
M	Er	<	0.000200	M	Mo	<	0.001202	O	Sc	<	0.000711	M	Yb	<	0.000200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H2O)61+
Chemical Compatibility - Soluble in HCl, HNO3, and H2SO4. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Tl Containing Samples)Preparation and Solution) -Metal (Best dissolved in HNO3 which forms chiefly the Tl1+ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 08, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **February 08, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

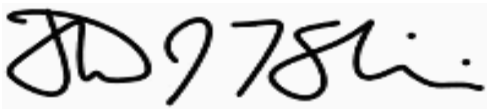
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCD10
Lot Number:	S2-CD710508
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cadmium
Starting Material:	Cd Metal
Starting Material Lot#:	1953
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10008 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10010 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 **10011 ± 30 µg/mL**
ICP Assay NIST SRM 3108 Lot Number: 130116

Assay Method #3 **10003 ± 30 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag	<	0.003200	O	Eu	<	0.002500	O	Na		0.005499	M	Se	<	0.005700	O	Zn	<	0.001100
O	Al		0.008903	O	Fe		0.000602	M	Nb	<	0.000400	O	Si		0.016758	O	Zr	<	0.002600
M	As	<	0.003600	M	Ga	<	0.001200	M	Nd	<	0.000800	M	Sm	<	0.000400				
M	Au	<	0.000810	M	Gd	<	0.000400	M	Ni	<	0.003600	M	Sn	<	0.003200				
O	B		0.004189	O	Ge	<	0.012000	M	Os	<	0.000810	O	Sr	<	0.000330				
M	Ba	<	0.002400	M	Hf	<	0.000400	O	P	<	0.022000	M	Ta	<	0.000800				
M	Be	<	0.000400	M	Hg	<	0.001700	M	Pb	<	0.002400	M	Tb	<	0.000400				
M	Bi	<	0.000400	M	Ho	<	0.000400	M	Pd	<	0.001200	M	Te	<	0.008000				
O	Ca		0.011259	O	In	<	0.013000	M	Pr	<	0.000400	M	Th	<	0.000400				
s	Cd	<		M	Ir	<	0.000410	M	Pt	<	0.000400	O	Ti		0.000602				
M	Ce	<	0.000400	O	K		0.005237	M	Rb	<	0.004400	M	Tl		0.000523				
M	Co	<	0.000400	M	La	<	0.000400	M	Re	<	0.000400	M	Tm	<	0.000400				
O	Cr	<	0.005100	O	Li	<	0.000054	M	Rh	<	0.000400	M	U	<	0.000400				
M	Cs	<	0.002400	M	Lu	<	0.000400	M	Ru	<	0.002500	M	V	<	0.002000				
O	Cu	<	0.004800	O	Mg		0.000288	O	S	<	0.022000	M	W	<	0.000400				
M	Dy	<	0.000400	O	Mn	<	0.000860	O	Sb	<	0.018000	M	Y	<	0.000400				
M	Er	<	0.000400	M	Mo	<	0.001600	O	Sc	<	0.000430	M	Yb	<	0.000400				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 112.41 +2 4 Cd2(OH) (aq)3+ and Cd(OH)(aq)

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 , and HF. Avoid basic media forming insoluble carbonate and hydroxide.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO3 / LDPE container.

Cd Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (soluble in HCl or HNO3); Ores (dissolve in HCl /HNO3 then take to fumes with H2SO4. The silica and lead sulfate are filtered off after the addition of water); Organic based (dry ash at 450°C and dissolve ash in HCl), (sulfuric / peroxide acid digestion).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 111 amu	11 ppt	n/a	95Mo16O
ICP-OES 214.438 nm	0.003 / 0.0003 µg/mL	1	Pt, Ir
ICP-OES 226.502 nm	0.003 / 0.0003 µg/mL	1	Ir
ICP-OES 228.802 nm	0.003 / 0.0003 µg/mL	1	Co, Ir, As, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 01, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 01, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Refine your results. Redefine your industry.

Certificate of Analysis

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMN10
Lot Number:	S2-MN704240
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Manganese
Starting Material:	Mn Metal
Starting Material Lot#:	2275
Starting Material Purity:	99.9909%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10011 ± 30 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9989 ± 69 µg/mL**
ICP Assay NIST SRM 3132 Lot Number: 050429

Assay Method #2 **10011 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10024 ± 47 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001500	M	Eu	<	0.000730	O	Na		0.176097	M	Se	<	0.006600	M	Zn		0.009925
O	Al		0.004322	M	Fe	<	0.650000	M	Nb	<	0.000730	O	Si		0.097654	M	Zr	<	0.000730
M	As	<	0.008000	M	Ga		0.004322	M	Nd	<	0.001500	M	Sm	<	0.000730				
M	Au	<	0.000730	M	Gd	<	0.000730	M	Ni		0.024013	M	Sn	<	0.002200				
M	B		0.068838	M	Ge	<	0.004400	M	Os	<	0.000730	O	Sr		0.000928				
M	Ba	<	0.001500	M	Hf	<	0.000730	i	P	<		M	Ta	<	0.000730				
M	Be	<	0.000730	M	Hg	<	0.002200	M	Pb		0.007364	M	Tb	<	0.000730				
M	Bi	<	0.003000	M	Ho	<	0.000730	M	Pd	<	0.000730	M	Te	<	0.019000				
O	Ca		0.062434	M	In	<	0.003000	M	Pr	<	0.000730	M	Th	<	0.000730				
M	Cd	<	0.001500	M	Ir	<	0.000730	M	Pt	<	0.000730	O	Ti	<	0.006500				
M	Ce	<	0.007300	O	K		0.006403	M	Rb	<	0.006600	M	Tl	<	0.000730				
O	Co		0.014728	M	La	<	0.003000	M	Re	<	0.000730	M	Tm	<	0.000730				
O	Cr		0.272151	O	Li		0.000416	M	Rh	<	0.003000	M	U	<	0.001500				
M	Cs	<	0.000730	M	Lu	<	0.000730	M	Ru	<	0.004400	M	V	<	0.000730				
O	Cu		0.007684	O	Mg		0.320177	i	S	<		M	W	<	0.004400				
M	Dy	<	0.001500	s	Mn	<		M	Sb	<	0.021000	O	Y		0.001360				
M	Er	<	0.001500	M	Mo		0.010245	O	Sc	<	0.004100	M	Yb	<	0.000730				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.94 +2 6 $Mn(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO_3/LDPE container.

Mn Containing Samples (Preparation and Solution) -Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H_2SO_4 and heat to SO_3 fumes - dense white fumes).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 55 amu	10 ppt	n/a	40Ar14N1H,39K16O,37Cl18O,40Ar15N,38Ar17O,36Ar18O1H ,38Ar16O1H,37Cl17O1H,23Na32S
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 17, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSB10
Lot Number:	R2-SB688559
Matrix:	3% (v/v) HNO3 3% (w/v) tartaric acid
Value / Analyte(s):	10 000 µg/mL ea: Antimony
Starting Material:	Antimony Metal
Starting Material Lot#:	1857
Starting Material Purity:	99.9894%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10003 ± 47 µg/mL

Density: 1.061 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10003 ± 41 µg/mL**
ICP Assay NIST SRM 3102a Lot Number: 140911

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000300	O	Na		0.140000	M	Se	<	0.007300	O	Zn		0.005000
M	Al		0.003200	O	Fe		0.060000	M	Nb	<	0.000100	O	Si		0.150000	O	Zr	<	0.006300
M	As	<	0.004400	M	Ga	<	0.000400	M	Nd	<	0.000100	M	Sm	<	0.000100				
M	Au	<	0.000210	M	Gd	<	0.000100	O	Ni		0.004800	M	Sn	<	0.001800				
M	B	<	0.011000	M	Ge	<	0.000600	M	Os	<	0.000110	O	Sr		0.000750				
O	Ba	<	0.004900	M	Hf	<	0.000100	O	P		0.540000	M	Ta		0.003300				
M	Be	<	0.000400	M	Hg	<	0.000110	M	Pb	<	0.000400	M	Tb	<	0.000100				
M	Bi	<	0.000200	M	Ho	<	0.000100	M	Pd	<	0.000210	M	Te	<	0.000600				
O	Ca		0.110000	M	In	<	0.000100	M	Pr	<	0.001600	M	Th	<	0.000100				
M	Cd	<	0.000200	M	Ir	<	0.000110	M	Pt	<	0.000600	M	Ti	<	0.002800				
M	Ce		0.006500	O	K		0.020000	M	Rb	<	0.001000	M	Tl	<	0.000100				
M	Co	<	0.000200	O	La	<	0.016000	M	Re	<	0.000100	M	Tm	<	0.000100				
M	Cr		0.006900	O	Li	<	0.000430	M	Rh	<	0.000300	M	U	<	0.000100				
M	Cs	<	0.000200	M	Lu	<	0.000100	M	Ru	<	0.000310	M	V	<	0.000800				
M	Cu	<	0.000600	O	Mg		0.021000	n	S	<		M	W	<	0.000200				
M	Dy	<	0.000100	O	Mn		0.001900	s	Sb	<		M	Y	<	0.000100				
M	Er	<	0.000100	M	Mo	<	0.000500	O	Sc	<	0.002300	M	Yb	<	0.000100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in Pt0 followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 30, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 30, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAS10
Lot Number:	T2-AS718260
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Arsenic
Starting Material:	As Metal
Starting Material Lot#:	2208
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10060 ± 40 µg/mL

Density: 1.037 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10062 ± 46 µg/mL**
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 **10055 ± 76 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.003200	M	Eu	< 0.000530	O	Na	0.032544	M	Se	< 0.006300	O	Zn	0.001952			
M	Al	0.007593	O	Fe	0.001475	O	Nb	< 0.012000	O	Si	0.238658	O	Zr	< 0.004100			
s	As	<	M	Ga	< 0.000530	M	Nd	< 0.000530	M	Sm	< 0.000530						
M	Au	< 0.003100	M	Gd	< 0.000530	M	Ni	< 0.002100	M	Sn	< 0.000530						
M	B	0.026035	M	Ge	< 0.001600	M	Os	< 0.000520	M	Sr	< 0.000530						
M	Ba	< 0.000530	M	Hf	< 0.000530	O	P	< 0.043000	M	Ta	< 0.000530						
O	Be	< 0.000360	M	Hg	< 0.001600	M	Pb	< 0.002100	M	Tb	< 0.000530						
M	Bi	< 0.000530	M	Ho	< 0.000530	M	Pd	< 0.001100	M	Te	< 0.004700						
O	Ca	0.004339	M	In	< 0.023000	M	Pr	< 0.005300	M	Th	< 0.000530						
M	Cd	< 0.001100	M	Ir	< 0.000520	M	Pt	< 0.000530	O	Ti	< 0.002300						
M	Ce	< 0.000530	O	K	0.002061	M	Rb	< 0.000530	M	Tl	< 0.000530						
M	Co	< 0.000530	M	La	< 0.001100	M	Re	< 0.000530	M	Tm	< 0.000530						
O	Cr	< 0.001800	O	Li	< 0.000120	M	Rh	< 0.000530	M	U	< 0.000530						
M	Cs	< 0.005300	M	Lu	< 0.000530	M	Ru	< 0.000520	M	V	< 0.002700						
M	Cu	< 0.001600	O	Mg	0.000154	O	S	0.028205	M	W	< 0.012000						
M	Dy	< 0.000530	O	Mn	0.000154	M	Sb	< 0.000530	M	Y	< 0.000530						
M	Er	< 0.000530	M	Mo	< 0.000530	O	Sc	< 0.001700	M	Yb	< 0.000530						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphic form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37Cl,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBA10
Lot Number:	R2-BA692576
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Barium
Starting Material:	Barium Nitrate
Starting Material Lot#:	1969
Starting Material Purity:	99.9982%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10018 ± 50 µg/mL** ICP Assay NIST SRM 3104a Lot Number: 140909
Assay Method #2	**10023 ± 31 µg/mL** Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #3	**10023 ± 30 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000410	O	Eu	<	0.005200	O	Na		0.004610	M	Se	<	0.003700	O	Zn		0.000658
M	Al	<	0.003100	O	Fe		0.015707	M	Nb	<	0.000210	O	Si		0.005573	M	Zr	<	0.001300
M	As	<	0.001300	M	Ga	<	0.000210	M	Nd	<	0.000210	O	Sm	<	0.021000				
M	Au	<	0.001300	M	Gd	<	0.000210	M	Ni	<	0.000810	M	Sn	<	0.000410				
O	B	<	0.005200	M	Ge	<	0.002500	M	Os	<	0.000410	O	Sr		0.003850				
s	Ba	<		M	Hf	<	0.000810	O	P	<	0.026000	M	Ta	<	0.000410				
O	Be	<	0.000320	M	Hg	<	0.000210	M	Pb	<	0.002300	M	Tb	<	0.000210				
M	Bi	<	0.000210	M	Ho	<	0.000210	M	Pd	<	0.000210	M	Te	<	0.001900				
O	Ca		0.007093	M	In	<	0.000210	M	Pr	<	0.000210	M	Th	<	0.000210				
M	Cd	<	0.000210	M	Ir	<	0.000210	M	Pt	<	0.000210	M	Ti	<	0.002100				
M	Ce	<	0.001300	O	K		0.035467	M	Rb	<	0.002100	M	Tl	<	0.000210				
M	Co	<	0.000410	O	La	<	0.005200	M	Re	<	0.000210	M	Tm	<	0.000410				
M	Cr	<	0.001700	O	Li	<	0.000630	M	Rh	<	0.000210	M	U	<	0.000210				
M	Cs	<	0.003300	M	Lu	<	0.001700	M	Ru	<	0.000210	O	V	<	0.005200				
M	Cu	<	0.001300	O	Mg		0.000861	O	S		0.268539	M	W	<	0.000410				
M	Dy	<	0.000210	M	Mn	<	0.000410	M	Sb	<	0.001300	O	Y	<	0.005200				
M	Er	<	0.001300	M	Mo	<	0.000410	M	Sc	<	0.000410	M	Yb	<	0.001300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33 +2 6 $Ba(H_2O)_6^{+2}$
Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO_3 / LDPE container.
Ba Containing Samples (Preparation and Solution) -Metal(is best dissolved in diluted HNO_3); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent $BaSO_4$ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 138 amu	1 ppt	N/A	122Sn16O, 122Te16O
ICP-OES 230.424 nm	0.004/0.0005 µg/mL	1	Mo, Ir, Co
ICP-OES 233.527 nm	0.004/0.0003 µg/mL	1	
ICP-OES 455.403 nm	0.002/0.0001 µg/mL	1	Zr, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 11, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBE10
Lot Number:	R2-BE692992
Matrix:	6% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Beryllium
Starting Material:	Beryllium Acetate
Starting Material Lot#:	2281
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10032 ± 41 µg/mL

Density: 1.128 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10042 ± 67 µg/mL**
ICP Assay NIST SRM 3105a Lot Number: 090514

Assay Method #2 **10025 ± 51 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

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Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.001100	M	Eu	< 0.000270	O	Na	0.040962	M	Se	< 0.005000	M	Zn	0.013054			
O	Al	0.016205	O	Fe	0.015754	M	Nb	< 0.000270	O	Si	0.024307	O	Zr	< 0.001900			
M	As	< 0.002900	M	Ga	< 0.000270	M	Nd	< 0.000270	M	Sm	< 0.000270						
M	Au	< 0.000520	M	Gd	< 0.000270	M	Ni	< 0.003700	M	Sn	< 0.000790						
M	B	< 0.091000	M	Ge	< 0.000270	M	Os	< 0.000260	M	Sr	0.000630						
M	Ba	0.002700	M	Hf	< 0.000270	O	P	< 0.066000	M	Ta	< 0.000270						
s	Be	<	M	Hg	< 0.000520	M	Pb	< 0.000270	M	Tb	< 0.000270						
M	Bi	< 0.000530	M	Ho	< 0.000270	M	Pd	< 0.000520	M	Te	< 0.003700						
O	Ca	0.072022	M	In	< 0.000790	M	Pr	< 0.000270	M	Th	< 0.000270						
M	Cd	< 0.000790	M	Ir	< 0.000260	M	Pt	< 0.000270	O	Ti	< 0.000400						
M	Ce	< 0.000270	O	K	0.045014	M	Rb	< 0.000270	M	Tl	< 0.000790						
O	Co	< 0.003200	M	La	< 0.000270	M	Re	< 0.000270	M	Tm	< 0.000270						
O	Cr	< 0.001800	O	Li	< 0.000660	M	Rh	< 0.001100	M	U	< 0.000270						
M	Cs	0.001440	M	Lu	< 0.000270	M	Ru	< 0.000260	M	V	< 0.000790						
M	Cu	< 0.002100	O	Mg	0.016205	i	S	<	M	W	< 0.000530						
M	Dy	< 0.000270	M	Mn	0.001215	M	Sb	< 0.000270	M	Y	< 0.000270						
M	Er	< 0.000270	M	Mo	< 0.000530	O	Sc	< 0.000930	M	Yb	< 0.000270						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 9.01 +2 4 $Be(H_2O)_4^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, H_2SO_4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1 % HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 5-10 % HNO_3 / LDPE container.

Be Containing Samples (Preparation and Solution) - Meta l(is best dissolved in diluted H_2SO_4); BeO (boiling nitric, hydrochloric, or sulfuric acids or KHSO4 fusion); Ores (H_2SO_4/HF digestion or carbonate fusion in Pt0); Organic Matrices (sulfuric/peroxide digestion or nitric/sulfuric/perchloric acid decomposition, or dry ash and dissolution according to the BeO procedure above).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 9 amu	4 ppt	N/A	
ICP-OES 234.861 nm	0.0003/0.00016 µg/mL	1	Fe, Ta, Mo
ICP-OES 313.042 nm	0.0003/0.00009 µg/mL	1	V, Ce, U
ICP-OES 313.107 nm	0.0007/0.0005 µg/mL	1	Ce, Th, Tm

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

11.1 Certification Issue Date

May 13, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 13, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.4 Revision Status

- Revision 1 - Revised on Thursday, Jan 14, 2021 by utruong. Revision was made for the following reason: Modified Section 7 Chemical Form in Solution.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCO10
Lot Number:	R2-CO695285
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cobalt
Starting Material:	Co Metal
Starting Material Lot#:	2326
Starting Material Purity:	99.9934%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10012 ± 31 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10031 ± 67 µg/mL**
ICP Assay NIST SRM 3113 Lot Number: 190630

Assay Method #2 **10019 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10000 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	0.014660	M	Eu	<	0.000590	O	Na	0.007534	M	Se	<	0.019000	M	Zn	0.003461	
M	Al	< 0.024000	M	Fe	0.050905	M	Nb	<	0.000590	O	Si	0.075340	M	Zr	<	0.001200	
i	As	<	M	Ga	<	0.000590	M	Nd	<	0.000590	M	Sm	<	0.000590			
M	Au	< 0.004100	M	Gd	<	0.000590	O	Ni	0.427608	M	Sn	<	0.001200				
M	B	< 0.031000	M	Ge	<	0.003000	M	Os	<	0.000590	O	Sr	<	0.000260			
M	Ba	< 0.000590	M	Hf	<	0.000590	n	P	<		M	Ta	<	0.001200			
O	Be	< 0.001300	M	Hg	<	0.001800	M	Pb	0.003257	M	Tb	<	0.000590				
M	Bi	< 0.003000	M	Ho	<	0.000590	M	Pd	<	0.000590	M	Te	<	0.005300			
O	Ca	0.010588	M	In	<	0.001200	M	Pr	<	0.000590	M	Th	<	0.000590			
M	Cd	< 0.004700	M	Ir	<	0.001200	M	Pt	<	0.002400	M	Ti	<	0.014000			
M	Ce	< 0.000590	O	K	0.008144	M	Rb	<	0.000590	M	Tl	0.002647					
s	Co	<	M	La	<	0.000590	M	Re	<	0.000590	M	Tm	<	0.000590			
M	Cr	< 0.021000	O	Li	<	0.000130	M	Rh	<	0.000590	M	U	<	0.000590			
M	Cs	< 0.002400	M	Lu	<	0.000590	M	Ru	<	0.007100	O	V	<	0.000880			
M	Cu	0.189369	O	Mg	0.001893	n	S	<		M	W	<	0.000590				
M	Dy	< 0.000590	M	Mn	<	0.001800	M	Sb	<	0.003600	M	Y	<	0.000590			
M	Er	< 0.000590	M	Mo	<	0.002400	O	Sc	<	0.001600	M	Yb	<	0.000590			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.93 +2 6 $Co(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Co Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 59 amu	2 ppt	n/a	42Ca16O1H , 40Ar18O1H , 36Ar23Na, 43Ca16O, 24Mg35Cl
ICP-OES 228.616 nm	0.01/0.001 µg/mL	1	
ICP-OES 237.862 nm	0.01/0.002 µg/mL	1	W, Re, Al, Ta
ICP-OES 238.892 nm	0.01/0.002 µg/mL	1	Fe, W, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 04, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAG10
Lot Number:	S2-AG712977
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Silver
Starting Material:	Ag Shot
Starting Material Lot#:	2289
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10051 ± 30 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10051 ± 52 µg/mL** ICP Assay NIST SRM 3151 Lot Number: 160729
Assay Method #2	**10051 ± 19 µg/mL** Volhard NIST SRM 999c Lot Number: 999c
Assay Method #3	**10049 ± 31 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Ag	<		M	Eu	<	0.000260	O	Na		0.003811	M	Se	<	0.003900	O	Zn		0.048146
M	Al		0.002688	O	Fe		0.006419	M	Nb	<	0.000260	O	Si		0.005215	M	Zr	<	0.000260
M	As	<	0.001100	M	Ga	<	0.000260	M	Nd	<	0.000260	M	Sm	<	0.000260				
M	Au	<	0.000260	M	Gd	<	0.000260	O	Ni		0.001765	M	Sn		0.020060				
O	B	<	0.004300	M	Ge	<	0.002300	M	Os	<	0.001100	O	Sr	<	0.000110				
M	Ba	<	0.000520	M	Hf	<	0.000260	O	P	<	0.017000	M	Ta	<	0.000260				
O	Be	<	0.001100	M	Hg	<	0.000770	M	Pb	<	0.003600	M	Tb	<	0.000260				
M	Bi		0.004814	M	Ho	<	0.000260	M	Pd		0.044134	M	Te	<	0.009000				
O	Ca		0.005215	M	In		0.003691	M	Pr	<	0.000260	M	Th	<	0.000260				
M	Cd	<	0.000260	M	Ir	<	0.000520	M	Pt	<	0.001100	O	Ti	<	0.000440				
M	Ce	<	0.002100	O	K	<	0.008700	M	Rb	<	0.001100	M	Tl	<	0.004100				
O	Co	<	0.000330	M	La	<	0.000260	M	Re	<	0.000260	M	Tm	<	0.000260				
O	Cr	<	0.002500	O	Li	<	0.000110	M	Rh	<	0.000520	M	U	<	0.000260				
M	Cs	<	0.002600	M	Lu	<	0.000260	M	Ru	<	0.000260	M	V	<	0.000260				
O	Cu		0.357085	O	Mg		0.001203	O	S	<	0.017000	M	W	<	0.000260				
M	Dy	<	0.000260	O	Mn	<	0.000220	M	Sb	<	0.014000	M	Y	<	0.000260				
M	Er	<	0.000260	M	Mo	<	0.000260	O	Sc	<	0.000220	M	Yb	<	0.000260				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 $Ag(H_2O)_6^+$

Chemical Compatibility -Stable in HNO_3, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [$AgCl_{x1-x}$] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite , bromide, chloride, iodide, carbonate , chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.

Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Ag Containing Samples (Preparation and Solution) -Metal (Soluble in HNO_3); Oxides (Soluble in HNO_3); Ores (Digestion with conc. HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCR(3)10
Lot Number:	S2-CR709784
Matrix:	10% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Chromium
Starting Material:	Cr Metal
Starting Material Lot#:	2328
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10027 ± 41 µg/mL

Density: 1.072 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10027 ± 40 µg/mL**
ICP Assay NIST SRM 3112a Lot Number: 170630

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001700	M	Eu	<	0.003400	O	Na		0.090372	M	Se	<	0.012000	O	Zn	<	0.006100
M	Al		0.034916	O	Fe		0.246471	M	Nb	<	0.017000	n	Si	<		M	Zr	<	0.007800
M	As	<	0.028000	O	Ga	<	0.013000	M	Nd	<	0.013000	M	Sm	<	0.006900				
M	Au	<	0.001700	M	Gd	<	0.000560	M	Ni		0.016020	M	Sn		0.006983				
O	B	<	0.025000	O	Ge	<	0.014000	M	Os	<	0.000560	M	Sr		0.006367				
M	Ba	<	0.008900	M	Hf	<	0.000560	i	P	<		M	Ta	<	0.000560				
M	Be	<	0.013000	M	Hg	<	0.001700	M	Pb		0.010064	M	Tb	<	0.000560				
M	Bi	<	0.002300	M	Ho	<	0.000560	M	Pd	<	0.021000	M	Te	<	0.010000				
O	Ca		0.075995	M	In	<	0.000560	M	Pr	<	0.001700	M	Th	<	0.000560				
M	Cd	<	0.000560	M	Ir	<	0.000560	M	Pt	<	0.001200	O	Ti		0.013555				
M	Ce	<	0.001200	O	K		0.043132	i	Rb	<		M	Tl	<	0.000560				
M	Co	<	0.002600	M	La	<	0.001200	M	Re	<	0.001200	O	Tm	<	0.013000				
s	Cr	<		O	Li		0.000390	M	Rh	<	0.095000	M	U	<	0.000560				
M	Cs	<	0.007800	M	Lu	<	0.000560	M	Ru	<	0.087000	O	V		0.014993				
O	Cu		0.007599	O	Mg		0.000883	i	S	<		M	W	<	0.049000				
M	Dy	<	0.000560	M	Mn		0.008626	M	Sb	<	0.003400	M	Y	<	0.001700				
M	Er	<	0.019000	M	Mo	<	0.032000	M	Sc		0.003080	M	Yb	<	0.000560				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 52.00 +3 6 $Cr(H_2O)_6^{3+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cr3 Containing Samples (Preparation and Solution) -Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used: A. Fusion with $KHSO_4$ and extraction with hot KCl. The residue fused with Na_2CO_3 and $KClO_3$, 3:1. B. Fusion with $NaKSO_4$ and NaF 2:1, C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1. D. Fusion with Na_2O_2 or NaOH and KNO_3 or NaOH and Na_2O_2. Nickel, iron, copper, or silver crucibles should be used for D. Platinum may be used for A, <, C); Organic Matrices (ash at 4500C followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 52 amu	40 ppt	N/A	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.
ICP-OES 205.552 nm	0.006/0.0008 µg/mL	1	Os
ICP-OES 276.654 nm	0.01/0.001 µg/mL	1	Cu, Ta, V
ICP-OES 284.325 nm	0.008/0.0007 µg/mL	1	

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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300 Technology Drive
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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNI10
Lot Number:	P2-NI686384
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Nickel
Starting Material:	Ni Metal
Starting Material Lot#:	2277 and 2282
Starting Material Purity:	99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9979 ± 30 µg/mL

Density: 1.038 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9971 ± 54 µg/mL**
ICP Assay NIST SRM 3136 Lot Number: 120619

Assay Method #2 **9970 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **9993 ± 33 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.002606	M	Eu	<	0.001100	O	Na		0.004965	O	Se	<	0.067000	M	Zn		0.006578
M	Al	<	0.013000	O	Fe		0.018618	M	Nb	<	0.001100	O	Si		0.010923	M	Zr	<	0.001100
O	As	<	0.067000	M	Ga	<	0.001100	M	Nd	<	0.001100	M	Sm	<	0.001100				
M	Au	<	0.002100	M	Gd	<	0.001100	s	Ni	<		M	Sn	<	0.016000				
M	B	<	0.017000	M	Ge	<	0.004200	M	Os		0.002110	O	Sr	<	0.000940				
M	Ba	<	0.001100	M	Hf	<	0.001100	i	P	<		M	Ta	<	0.001100				
O	Be	<	0.000410	M	Hg		0.014895	M	Pb		0.006578	M	Tb	<	0.001100				
M	Bi	<	0.004200	M	Ho	<	0.001100	M	Pd	<	0.001100	M	Te	<	0.015000				
O	Ca		0.003351	M	In	<	0.001100	M	Pr	<	0.001100	M	Th	<	0.001100				
M	Cd		0.001365	M	Ir		0.004716	M	Pt	<	0.001100	M	Ti	<	0.004200				
M	Ce	<	0.001100	O	K		0.004716	M	Rb	<	0.001100	M	Tl	<	0.001100				
O	Co		0.017377	M	La	<	0.001100	M	Re		0.001737	M	Tm	<	0.001100				
O	Cr	<	0.006700	O	Li	<	0.000140	M	Rh	<	0.006300	M	U	<	0.001100				
M	Cs	<	0.007300	M	Lu	<	0.001100	M	Ru	<	0.019000	M	V	<	0.002100				
M	Cu		0.004096	O	Mg		0.000372	i	S	<		M	W	<	0.006300				
M	Dy	<	0.001100	O	Mn	<	0.001900	M	Sb		0.005833	O	Y	<	0.000540				
M	Er	<	0.001100	M	Mo	<	0.008400	M	Sc	<	0.002100	M	Yb	<	0.001100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69 +2 6 Ni(H2O)62+
Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Ni Containing Samples (Preparation and Solution) -Metal (Soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 60 amu	100 ppt	n/a	43Ca16O1H , 44Ca16O, 23Na37Cl
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	Si
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	Sb, Ta, Co
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	Cr, Re, Os, Nb, Ag, Pt, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 02, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 02, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
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P: 800-669-6799/540-585-3030
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGV10
Lot Number:	S2-V711005
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Vanadium
Starting Material:	Vanadium Pentoxide
Starting Material Lot#:	1782
Starting Material Purity:	99.9877%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10014 ± 30 µg/mL

Density: 1.104 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10017 ± 42 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **10013 ± 30 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000110	M	Eu	<	0.000110	O	Na		0.120000	M	Se	<	0.009400	M	Zn		0.009400
O	Al		0.120000	O	Fe		0.460000	M	Nb	<	0.001300	O	Si		0.270000	M	Zr	<	0.002900
M	As	<	0.000210	M	Ga	<	0.009300	M	Nd	<	0.000610	M	Sm	<	0.000110				
M	Au	<	0.004700	M	Gd	<	0.000110	M	Ni		0.012000	M	Sn		0.003900				
M	B		0.051000	M	Ge	<	0.000410	M	Os	<	0.000110	O	Sr		0.007100				
M	Ba		0.003600	M	Hf	<	0.000110	O	P	<	0.034000	M	Ta	<	0.000110				
O	Be	<	0.000560	M	Hg	<	0.000410	M	Pb		0.001400	M	Tb	<	0.000110				
M	Bi	<	0.000210	M	Ho	<	0.000110	M	Pd	<	0.000410	M	Te	<	0.000110				
O	Ca		0.730000	M	In	<	0.000110	M	Pr	<	0.000110	M	Th	<	0.000210				
M	Cd	<	0.000610	M	Ir	<	0.000110	M	Pt	<	0.000110	M	Ti		0.017000				
M	Ce	<	0.000610	M	K		0.052000	M	Rb	<	0.000310	M	Tl	<	0.000110				
M	Co	<	0.001300	M	La	<	0.000410	M	Re		0.001700	M	Tm	<	0.000110				
O	Cr		0.170000	M	Li	<	0.000810	M	Rh	<	0.000110	M	U	<	0.000410				
M	Cs		0.005600	M	Lu	<	0.000110	M	Ru	<	0.000110	s	V	<					
M	Cu	<	0.001300	M	Mg		0.053000	i	S	<		M	W		0.002000				
M	Dy	<	0.000110	M	Mn		0.007900	M	Sb		0.078000	M	Y	<	0.000110				
M	Er	<	0.000110	M	Mo		0.094000	M	Sc	<	0.000410	M	Yb	<	0.000110				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 H2V10O284-

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4, HF, H3PO4 and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in Ni0 or Na2CO3 / KNO3); Oxides (V2O3 - use HCl, V2O4 - use HCl or HNO3, V2O5 - use concentrated acids); Ores (Na2CO3 / KNO3 in Pt0 caution - nitrates attack Pto followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V2O5 above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

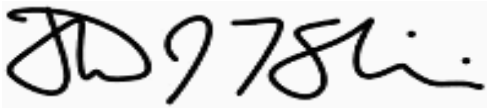
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAL10
Lot Number:	T2-AL716102
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Aluminum
Starting Material:	Aluminum Nitrate Nonahydrate
Starting Material Lot#:	2460
Starting Material Purity:	99.9938%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10049 ± 31 µg/mL

Density: 1.087 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10059 ± 40 µg/mL** ICP Assay NIST SRM 3101a Lot Number: 140903
Assay Method #2	**10044 ± 26 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10049 ± 35 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002100	M	Eu	<	0.002100	O	Na		0.352819	M	Se	<	0.005200	M	Zn	0.006018
s	Al	<		O	Fe		0.074714	M	Nb	<	0.000520	O	Si		0.017848	O	Zr	0.004358
M	As		0.008716	O	Ga		0.112072	M	Nd	<	0.000520	M	Sm	<	0.000520			
M	Au	<	0.008400	M	Gd	<	0.001100	O	Ni	<	0.006000	M	Sn		0.000747			
O	B	<	0.014000	M	Ge	<	0.005200	M	Os	<	0.000650	O	Sr		0.000518			
O	Ba		0.012867	M	Hf	<	0.004100	n	P	<		M	Ta	<	0.000520			
O	Be	<	0.000270	M	Hg	<	0.002000	M	Pb		0.002282	M	Tb	<	0.000520			
M	Bi		0.001930	M	Ho	<	0.000520	M	Pd	<	0.000520	M	Te	<	0.001100			
O	Ca		0.076790	M	In	<	0.002100	M	Pr	<	0.000520	M	Th	<	0.000520			
M	Cd	<	0.000520	M	Ir	<	0.000650	M	Pt	<	0.000520	O	Ti		0.001930			
M	Ce	<	0.001100	O	K		0.043583	M	Rb	<	0.000520	M	Tl	<	0.000520			
O	Co	<	0.005400	M	La	<	0.002100	M	Re	<	0.000520	M	Tm	<	0.000520			
O	Cr		0.006018	O	Li		0.000112	M	Rh	<	0.000520	M	U	<	0.000520			
M	Cs		0.000643	M	Lu	<	0.000520	M	Ru	<	0.002000	M	V		0.001286			
O	Cu	<	0.008300	O	Mg		0.068488	i	S	<		M	W	<	0.009800			
M	Dy	<	0.002100	O	Mn		0.000913	M	Sb	<	0.003100	M	Y	<	0.001100			
M	Er	<	0.000520	M	Mo		0.005396	O	Sc	<	0.000950	M	Yb	<	0.000520			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H2O)6+3
Chemical Compatibility -Soluble in HCl, HNO3, v F and v 2SO4. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)4(H2O)21- species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); a- Al2O3 (Na2CO3 fusion in Pt0);
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 22, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

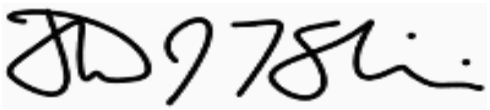
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGK10
Lot Number:	S2-K711973
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Potassium
Starting Material:	KNO3
Starting Material Lot#:	2313
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.024 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9987 ± 24 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **10004 ± 84 µg/mL**
ICP Assay NIST SRM 3141a Lot Number: 140813

Assay Method #3 **10007 ± 45 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001400	M	Eu	<	0.000660	O	Na		0.246220	M	Se	<	0.007900	O	Zn		0.018056
O	Al		0.001592	O	Fe		0.005909	M	Nb	<	0.000660	O	Si		0.011490	O	Zr	<	0.001600
M	As	<	0.005300	M	Ga	<	0.000660	M	Nd	<	0.000660	M	Sm	<	0.000660				
M	Au	<	0.002000	M	Gd	<	0.000660	O	Ni	<	0.004900	M	Sn	<	0.000660				
O	B	<	0.005600	M	Ge	<	0.002000	M	Os	<	0.003300	O	Sr		0.000055				
O	Ba	<	0.000860	M	Hf	<	0.000660	O	P	<	0.032000	M	Ta	<	0.000660				
O	Be	<	0.000082	M	Hg	<	0.002000	M	Pb	<	0.002300	M	Tb	<	0.000660				
M	Bi	<	0.006600	M	Ho	<	0.000660	M	Pd	<	0.000660	M	Te	<	0.017000				
O	Ca		0.031187	M	In	<	0.000660	M	Pr	<	0.000660	M	Th	<	0.000660				
O	Cd	<	0.000450	M	Ir	<	0.000660	M	Pt	<	0.002700	M	Ti	<	0.000660				
M	Ce	<	0.000660	s	K	<		M	Rb		0.476026	M	Tl	<	0.000660				
O	Co	<	0.000780	M	La	<	0.000660	M	Re	<	0.000660	M	Tm	<	0.000660				
O	Cr		0.000541	O	Li	<	0.000084	M	Rh	<	0.000660	M	U	<	0.000660				
M	Cs	<	0.000660	M	Lu	<	0.000660	M	Ru	<	0.000660	O	V	<	0.001100				
M	Cu	<	0.002700	O	Mg		0.006237	O	S		0.027905	M	W	<	0.000660				
M	Dy	<	0.000660	O	Mn		0.000476	M	Sb	<	0.000660	M	Y	<	0.000660				
M	Er	<	0.000660	M	Mo	<	0.000660	O	Sc	<	0.000340	O	Yb	<	0.000270				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.10 +1 (6) K+(aq)
Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Avoid use of HClO4 due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO4-.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 39 amu	10 ppt	n/a	38ArH, 23Na16O, 78Se
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	U, Ce
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 10, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 10, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

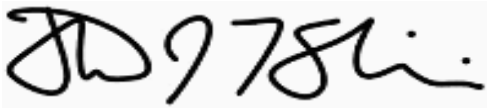
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMG10
Lot Number:	S2-MG704239
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Magnesium
Starting Material:	Magnesium Metal
Starting Material Lot#:	2168
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10053 ± 30 µg/mL

Density: 1.053 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10022 ± 62 µg/mL**
ICP Assay NIST SRM 3131a Lot Number: 140110

Assay Method #2 **10078 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10033 ± 26 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.002106	M	Eu	<	0.000910	O	Na		0.071075	O	Se	<	0.048000	O	Zn		0.003299
M	Al		0.003553	M	Fe		0.002538	M	Nb	<	0.000460	O	Si	<	0.032000	O	Zr	<	0.002700
M	As	<	0.001400	M	Ga	<	0.000460	M	Nd	<	0.000910	M	Sm	<	0.000460				
M	Au	<	0.001400	M	Gd	<	0.000460	O	Ni	<	0.001600	M	Sn	<	0.002300				
O	B		0.006853	M	Ge	<	0.001400	M	Os	<	0.000460	O	Sr		0.000279				
O	Ba		0.000964	M	Hf	<	0.000460	O	P		0.015230	M	Ta	<	0.000460				
O	Be	<	0.000120	M	Hg	<	0.000460	M	Pb	<	0.000460	M	Tb	<	0.000460				
M	Bi	<	0.000460	M	Ho	<	0.000460	M	Pd	<	0.003200	M	Te	<	0.007300				
O	Ca		0.053306	M	In	<	0.000460	M	Pr	<	0.000460	M	Th	<	0.000460				
O	Cd	<	0.000360	M	Ir	<	0.000460	M	Pt	<	0.001900	O	Ti	<	0.001700				
M	Ce	<	0.002300	M	K		0.048229	M	Rb		0.002411	M	Tl		0.003046				
M	Co	<	0.000910	M	La	<	0.002800	M	Re	<	0.000460	M	Tm	<	0.000460				
M	Cr	<	0.002300	O	Li		0.027922	M	Rh	<	0.000460	M	U	<	0.000460				
M	Cs		0.001040	M	Lu	<	0.000460	M	Ru	<	0.000460	M	V	<	0.000460				
O	Cu	<	0.003000	s	Mg	<		O	S	<	0.190000	M	W	<	0.000460				
M	Dy	<	0.000460	O	Mn		0.015230	M	Sb		0.020814	O	Y	<	0.000720				
M	Er	<	0.000460	M	Mo	<	0.000910	O	Sc	<	0.000480	M	Yb	<	0.000460				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.31 +2 6 $Mg(H_2O)_6^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, and H_2SO_4 avoid HF, H_3PO_4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO_3 / LDPE container.

Mg Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 24 amu	42 ppt	n/a	7Li17O, 48Ti+2 , 48Ca+2
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	U, Hf, Cr, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 23, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 23, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCA10
Lot Number:	T2-CA716103
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Calcium
Starting Material:	CaCO3
Starting Material Lot#:	2472
Starting Material Purity:	99.9950%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10005 ± 30 µg/mL

Density: 1.039 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10005 ± 45 µg/mL**
ICP Assay NIST SRM 3109a Lot Number: 130213

Assay Method #2 **10005 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10005 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001200	M	Eu	<	0.001200	O	Na		0.006112	M	Se	<	0.024000	M	Zn		0.005362
M	Al		0.065419	O	Fe		0.009115	M	Nb	<	0.001200	O	Si		0.139417	O	Zr	<	0.006700
O	As	<	0.013000	M	Ga	<	0.015000	M	Nd	<	0.020000	M	Sm	<	0.001200				
M	Au	<	0.017000	M	Gd	<	0.004800	O	Ni		0.000793	M	Sn	<	0.003600				
O	B		0.001179	M	Ge	<	0.003600	M	Os	<	0.001200	M	Sr		0.081505				
O	Ba		0.002788	M	Hf	<	0.001200	O	P	<	0.041000	M	Ta	<	0.001200				
O	Be	<	0.000410	M	Hg	<	0.004800	M	Pb		0.001608	M	Tb	<	0.001200				
M	Bi		0.001608	M	Ho	<	0.001200	M	Pd	<	0.001200	M	Te	<	0.003600				
s	Ca	<		M	In	<	0.001200	M	Pr		0.000257	M	Th	<	0.001200				
O	Cd	<	0.001300	M	Ir	<	0.001200	M	Pt	<	0.003600	O	Ti	<	0.001900				
M	Ce		0.001029	O	K		0.009759	M	Rb	<	0.001200	M	Tl	<	0.001200				
O	Co		0.000418	M	La		0.001823	M	Re	<	0.001200	M	Tm	<	0.001200				
O	Cr		0.003324	O	Li	<	0.007300	M	Rh	<	0.001200	M	U		0.002144				
M	Cs		0.007399	M	Lu		0.000128	M	Ru	<	0.001200	M	V		0.001286				
O	Cu	<	0.011000	M	Mg		1.286934	O	S		0.055767	O	W	<	0.024000				
M	Dy	<	0.002400	O	Mn		0.004611	M	Sb	<	0.009600	O	Y		0.000536				
M	Er	<	0.002400	M	Mo		0.003539	O	Sc	<	0.001400	M	Yb	<	0.001200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.08 +2 6 Ca(H2O)6+2
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H2SO4, vF, v3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Ca Containing Samples)Preparation and Solution) -Metal (best dissolved in diluted HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO2). The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO3. The sulfates (gypsum, anhydrite, etc.), certain silicates, and complex compounds require fusion with Na2CO3 followed by HCl / water dissolution. Note that contamination is a very real problem when analyzing for trace levels.
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 44 amu	1200 ppt	n/a	16O212C, 28Si16O, 88Sr
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	Ge

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 14, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 14, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

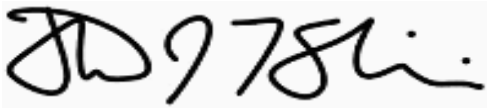
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNA10
Lot Number:	T2-NA717221
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Sodium
Starting Material:	Na2CO3
Starting Material Lot#:	2358 and 2453
Starting Material Purity:	99.9977%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9977 ± 30 µg/mL

Density: 1.033 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9974 ± 18 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **9977 ± 34 µg/mL**
ICP Assay NIST SRM 3152a Lot Number: 200413

Assay Method #3 **9987 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000930	M	Eu	<	0.000930	s	Na	<		M	Se	<	0.003800	O	Zn		0.000138
M	Al		0.004409	O	Fe		0.002393	M	Nb	<	0.000930	O	Si		0.056696	O	Zr	<	0.003200
O	As	<	0.023000	M	Ga	<	0.000930	M	Nd	<	0.000930	M	Sm	<	0.000930				
O	Au	<	0.004100	M	Gd	<	0.000930	O	Ni	<	0.003000	M	Sn	<	0.002800				
O	B		0.001385	M	Ge	<	0.004700	M	Os	<	0.000930	O	Sr		0.000251				
M	Ba		0.004031	M	Hf	<	0.000930	O	P		0.010205	M	Ta	<	0.000930				
O	Be	<	0.000130	M	Hg	<	0.000930	M	Pb	<	0.000930	M	Tb	<	0.000930				
M	Bi	<	0.000930	M	Ho	<	0.000930	M	Pd	<	0.000930	M	Te	<	0.001900				
O	Ca		0.176388	M	In	<	0.000930	M	Pr	<	0.000930	M	Th		0.000352				
O	Cd	<	0.000860	M	Ir	<	0.000930	M	Pt	<	0.000930	O	Ti		0.000592				
M	Ce	<	0.001900	O	K		0.302380	M	Rb	<	0.000930	M	Tl	<	0.000930				
O	Co	<	0.001800	O	La	<	0.002100	M	Re	<	0.000930	M	Tm	<	0.000930				
M	Cr	<	0.002800	O	Li		0.000031	M	Rh	<	0.000930	M	U	<	0.000930				
M	Cs	<	0.000930	M	Lu	<	0.000930	M	Ru	<	0.001900	O	V	<	0.001600				
O	Cu	<	0.003900	O	Mg		0.026458	O	S		0.040317	O	W	<	0.028000				
M	Dy	<	0.000930	O	Mn	<	0.000740	M	Sb	<	0.000930	O	Y	<	0.000860				
M	Er	<	0.000930	O	Mo	<	0.003600	O	Sc	<	0.000610	O	Yb	<	0.000250				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 20, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 20, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

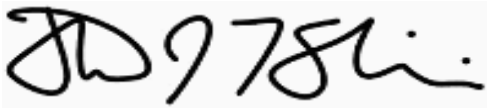
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGU1
Lot Number:	S2-U707914
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Uranium
Starting Material:	Uranyl Nitrate Hexahydrate
Starting Material Lot#:	P2-2322
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 5 µg/mL

Density: 1.010 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3164 Lot Number: 080521

Assay Method #2 **1001 ± 6 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000270	M	Eu	<	0.000270	M	Na	<	0.011000	M	Se	<	0.009300	M	Zn	0.002358
M	Al	<	0.011000	M	Fe		0.003222	M	Nb	<	0.000270	M	Si	<	0.160000	M	Zr	< 0.001100
M	As	<	0.002400	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270			
M	Au	<	0.000270	M	Gd	<	0.000270	M	Ni	<	0.020000	M	Sn	<	0.011000			
M	B	<	0.000270	M	Ge	<	0.000800	M	Os	<	0.001900	M	Sr	<	0.000270			
M	Ba	<	0.003800	M	Hf	<	0.000270	i	P	<		M	Ta	<	0.000270			
M	Be	<	0.000270	M	Hg	<	0.000540	M	Pb	<	0.002200	M	Tb	<	0.000270			
M	Bi	<	0.000270	M	Ho	<	0.000270	M	Pd	<	0.000540	M	Te	<	0.003800			
M	Ca	<	0.140000	M	In	<	0.000270	M	Pr	<	0.000270	M	Th		0.000129			
M	Cd	<	0.000270	M	Ir	<	0.000270	M	Pt	<	0.000270	M	Ti	<	0.002700			
M	Ce	<	0.000540	O	K	<	0.250000	M	Rb	<	0.000800	M	Tl	<	0.000270			
M	Co	<	0.000800	M	La		0.000117	M	Re	<	0.064000	M	Tm	<	0.000270			
M	Cr		0.000943	M	Li	<	0.003000	M	Rh	<	0.000270	s	U	<				
M	Cs		0.000106	M	Lu	<	0.000270	M	Ru	<	0.000540	M	V	<	0.000540			
M	Cu	<	0.001100	M	Mg	<	0.003000	i	S	<		M	W	<	0.000540			
M	Dy	<	0.000270	M	Mn	<	0.006900	M	Sb	<	0.000270	M	Y	<	0.000270			
M	Er	<	0.000270	M	Mo	<	0.006400	M	Sc	<	0.000540	M	Yb	<	0.000270			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 238.03 +6 8 UO_2^{2+}(uranyl)

Chemical Compatibility - Soluble in HCl and HNO_3. Avoid H_3PO_4. H_2SO_4 and HF matrices should not be a problem depending upon [U]. Although the UO_2^{2+} ion is distinctly basic, any U^{+4} will precipitate in basic media. UO_2^{2+}salts are generally soluble in water and UO_2^{2+} is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF_4 and UF_6 are water soluble.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.

U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO_3); Oxide (Soluble in HNO_3); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO_3. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H_2SO_4.)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-2
Lot Number:	T2-MEB719895
Matrix:	3% (v/v) HNO3 tr. HF
Value / Analyte(s):	2.5 µg/mL ea: Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**2.499 ± 0.015 µg/mL**	**Molybdenum, Mo**	**2.500 ± 0.017 µg/mL**

Density: 1.014 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

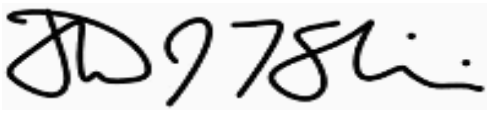
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-3
Lot Number:	T2-MEB719896
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	250 µg/mL ea:

Aluminum, Calcium,
Iron, Potassium,
Magnesium, Sodium,

4 µg/mL ea:
Selenium,

2.5 µg/mL ea:

Thorium,	Thallium,
Uranium,	Vanadium,
Zinc,	Manganese,
Cadmium,	Cobalt,
Chromium,	Copper,
Arsenic,	Barium,
Beryllium,	Nickel,
Lead,	Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250.0 ± 0.9 µg/mL	Arsenic, As	2.500 ± 0.018 µg/mL
Barium, Ba	2.501 ± 0.013 µg/mL	Beryllium, Be	2.501 ± 0.015 µg/mL
Cadmium, Cd	2.501 ± 0.013 µg/mL	Calcium, Ca	250.0 ± 1.3 µg/mL
Chromium, Cr	2.500 ± 0.015 µg/mL	Cobalt, Co	2.500 ± 0.014 µg/mL
Copper, Cu	2.500 ± 0.014 µg/mL	Iron, Fe	250.0 ± 1.0 µg/mL
Lead, Pb	2.500 ± 0.013 µg/mL	Magnesium, Mg	250.0 ± 1.3 µg/mL
Manganese, Mn	2.500 ± 0.014 µg/mL	Nickel, Ni	2.500 ± 0.014 µg/mL
Potassium, K	250.0 ± 1.2 µg/mL	Selenium, Se	4.002 ± 0.024 µg/mL
Silver, Ag	2.501 ± 0.017 µg/mL	Sodium, Na	250.0 ± 1.2 µg/mL
Thallium, Tl	2.500 ± 0.017 µg/mL	Thorium, Th	2.499 ± 0.013 µg/mL
Uranium, U	2.501 ± 0.015 µg/mL	Vanadium, V	2.500 ± 0.014 µg/mL
Zinc, Zn	2.500 ± 0.014 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2

V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

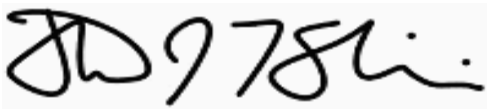
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-6020ICS-0A10
Lot Number:	T2-MEB719898
Matrix:	1.4% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Chloride,
	200 µg/mL ea: Carbon,
	100 µg/mL ea: Calcium, Aluminum, Iron, Potassium, Magnesium, Sodium, Phosphorus, Sulfur,
	2 µg/mL ea: Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**100.0 ± 0.4 µg/mL**	**Calcium, Ca**	**100.0 ± 0.5 µg/mL**
Carbon, C	**200.1 ± 0.5 µg/mL**	**Chloride, Cl**	**1 000 ± 5 µg/mL**
Iron, Fe	**100.0 ± 0.5 µg/mL**	**Magnesium, Mg**	**100.0 ± 0.5 µg/mL**
Molybdenum, Mo	**2.001 ± 0.014 µg/mL**	**Phosphorus, P**	**100.0 ± 0.6 µg/mL**
Potassium, K	**100.0 ± 0.5 µg/mL**	**Sodium, Na**	**100.0 ± 0.5 µg/mL**
Sulfur, S	**100.0 ± 0.5 µg/mL**	**Titanium, Ti**	**2.001 ± 0.015 µg/mL**

Density: 1.009 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 07, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 07, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

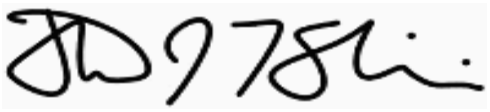
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SC1083

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-02 D	SDG:	23A0249
Sampled:	01/12/23 08:38	Prepared:	04/13/23 13:49	File ID:	SMM 04-14-23-030
% Solids:	59.34	Preparation:	SMM EPA 7471B	Analyzed:	04/14/23 14:07
Batch:	BLD0245	Sequence:	SLD0197	Initial/Final:	0.232 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GD00038

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.197	1	0.00763	0.0363	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SC1018

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-03 D	SDG:	23A0249
Sampled:	01/12/23 10:21	Prepared:	04/13/23 13:49	File ID:	SMM 04-14-23-034
% Solids:	49.11	Preparation:	SMM EPA 7471B	Analyzed:	04/14/23 14:16
Batch:	BLD0245	Sequence:	SLD0197	Initial/Final:	0.255 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GD00038

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.219	1	0.00838	0.0399	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SC1084

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-04 D	SDG:	23A0249
Sampled:	01/12/23 09:47	Prepared:	04/13/23 13:49	File ID:	SMM 04-14-23-035
% Solids:	55.13	Preparation:	SMM EPA 7471B	Analyzed:	04/14/23 14:18
Batch:	BLD0245	Sequence:	SLD0197	Initial/Final:	0.204 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GD00038

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.184	1	0.00934	0.0445	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SC1025

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-05 D	SDG:	23A0249
Sampled:	01/12/23 11:28	Prepared:	04/13/23 13:49	File ID:	SMM 04-14-23-036
% Solids:	59.20	Preparation:	SMM EPA 7471B	Analyzed:	04/14/23 14:21
Batch:	BLD0245	Sequence:	SLD0197	Initial/Final:	0.277 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GD00038

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.182	1	0.00640	0.0305	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SC1024

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-08 D	SDG:	23A0249
Sampled:	01/12/23 13:35	Prepared:	04/13/23 13:49	File ID:	SMM 04-14-23-039
% Solids:	50.46	Preparation:	SMM EPA 7471B	Analyzed:	04/14/23 14:28
Batch:	BLD0245	Sequence:	SLD0197	Initial/Final:	0.213 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GD00038

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.187	1	0.00977	0.0465	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SC1020

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-11 D	SDG:	23A0249
Sampled:	01/12/23 15:23	Prepared:	04/13/23 13:49	File ID:	SMM 04-14-23-040
% Solids:	71.92	Preparation:	SMM EPA 7471B	Analyzed:	04/14/23 14:30
Batch:	BLD0245	Sequence:	SLD0197	Initial/Final:	0.23 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GD00038

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.0414	1	0.00635	0.0302	

PREPARATION BATCH SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLD0245 Batch Matrix: Solid
Preparation: SMM EPA 7471B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1083	23A0249-02	SMM 04-14-23-030	04/13/23 13:49	Store frozen; FROZEN VOLUME USED
LDW23-SC1018	23A0249-03	SMM 04-14-23-034	04/13/23 13:49	Store frozen; FROZEN VOLUME USED
LDW23-SC1084	23A0249-04	SMM 04-14-23-035	04/13/23 13:49	Store frozen; FROZEN VOLUME USED
LDW23-SC1025	23A0249-05	SMM 04-14-23-036	04/13/23 13:49	Store frozen; FROZEN VOLUME USED
LDW23-SC1024	23A0249-08	SMM 04-14-23-039	04/13/23 13:49	Store frozen; FROZEN VOLUME USED
LDW23-SC1020	23A0249-11	SMM 04-14-23-040	04/13/23 13:49	Store frozen; FROZEN VOLUME USED
Blank	BLD0245-BLK1	SMM 04-14-23-028	04/13/23 13:49	
LCS	BLD0245-BS1	SMM 04-14-23-029	04/13/23 13:49	
LDW23-SC1083	BLD0245-DUP1	SMM 04-14-23-031	04/13/23 13:49	
LDW23-SC1083	BLD0245-MS1	SMM 04-14-23-032	04/13/23 13:49	
LDW23-SC1083	BLD0245-MSD1	SMM 04-14-23-033	04/13/23 13:49	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: SW7471 Balance ID: BALIO Matrix: Soil
Analyst: AR Block ID: 9 Date: 04/13/23
Bath Temp: 94° Start Time: 1254 End Time: 1349

ARI Sample ID	Sample Bottle #	pH<2	Initial Weight (g) Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
23A249-02	D		0.232	50	1		
-03			0.255				
-04			0.204				
-05			0.277				
~~-06~~			0.215				MC 04/18/23
~~-07~~			0.248				ML 04/14/23
-08			0.213				
-11			0.230				
23A295-01	A		0.281				
-02			0.241				
-03			0.284				
-04	D		0.289				
-05	A		0.265				
-06			0.213				
-07	D		0.257				
-09	A		0.269				
-10			0.265				
~~BD~~ BLD295WA	—		—				23A249-02
-LCS	—		—				
-DUP	—		0.234				
-MS	—		0.229				
-MSD	—		0.234				
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—

Chemical/Reagent ID:

HNO_3: L2678 H_2SO_4: L922 HCl: —
5% $K_2S_2O_8$: L3350 5% $KMnO_4$: K1727 Digest Tube Lot: 221491

Form I

METHOD BLANK DATA SHEET

EPA 7471B

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23A0249

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

Batch: BLD0245 | Laboratory ID: BLD0245-BLK1 | Prepared: 04/13/23 13:49

Matrix: Solid | Preparation: SMM EPA 7471B | Analyzed: 04/14/23 14:02

Sequence: SLD0197 | Calibration: GD00038 | Instrument: HYDRA

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	ND	1	0.00525	0.0250	U

LCS / LCS DUPLICATE RECOVERY

EPA 7471B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	04/14/23 14:04
Batch:	BLD0245	Laboratory ID:	BLD0245-BS1
Preparation:	SMM EPA 7471B	Sequence Name:	LCS
Initial/Final:	0.2 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Mercury	0.500	0.436		87.2	80 - 120

* Indicates values outside of QC limits

DUPLICATES

EPA 7471B

Total Metals

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLD0245-DUP1
Batch: BLD0245
Lab Source ID: 23A0249-02
Preparation: SMM EPA 7471B
Initial/Final: 0.234 g / 50 mL
Source Sample Name: LDW23-SC1083
% Solids: 59.34

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Mercury	20	0.197	0.245	21.8	*

*: Values outside of QC limits
L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD

MS / MS DUPLICATE RECOVERY
EPA 7471B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	04/14/23 14:11
Batch:	BLD0245	Laboratory ID:	BLD0245-MS1
Preparation:	SMM EPA 7471B	Sequence Name:	Matrix Spike
Initial/Final:	0.229 g / 50 mL	Source Sample:	LDW23-SC1083

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	Q	MS CONCENTRATION (mg/kg dry)	Q	MS % REC. #		QC LIMITS REC.
Mercury	0.368	0.197		0.663	*	127	*	75 - 125

* Values outside of QC limits

MS / MS DUPLICATE RECOVERY
EPA 7471B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	04/14/23 14:14
Batch:	BLD0245	Laboratory ID:	BLD0245-MSD1
Preparation:	SMM EPA 7471B	Sequence Name:	Matrix Spike Dup
Initial/Final:	0.234 g / 50 mL	Source Sample:	LDW23-SC1083

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Mercury	0.360	0.608		114	8.64	20	75 - 125

* Values outside of QC limits

POST DIGEST SPIKE SAMPLE RECOVERY

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLD0245-PS1
Batch: BLD0245
Lab Source ID: 23A0249-02
Preparation: SMM EPA 7471B
Initial/Final: 0.0464 g / 10 mL
Source Sample Name: LDW23-SC1083
% Solids: 59.34

Analyte	Control Limit %R	Spike Sample Result (SSR) (mg/L)	Sample Result (SR) (mg/L)	Spike Added (SA) (mg/L)	%R
Mercury	0 - 200	0.00167	0.197	0.0010000	113

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 7471B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00038	Instrument:	HYDRA
Calibration Date:	04/14/2023 16:16		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Mercury	0	0	0.0001	6610000	0.0005	6442000	0.001	5966000	0.002	6389500	0.005	6231000

INITIAL CALIBRATION DATA

EPA 7471B

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00038	Instrument:	HYDRA
Calibration Date:	04/14/2023 16:16		

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Mercury	5273083	49.2	0.9997		0.99	

SMM 04-14-23

SLD0197 GD00038

Method: ARI 5 ppb (NO 0.05) Operator: Admin Date of Analysis: 14 Apr 2023 11:34:23

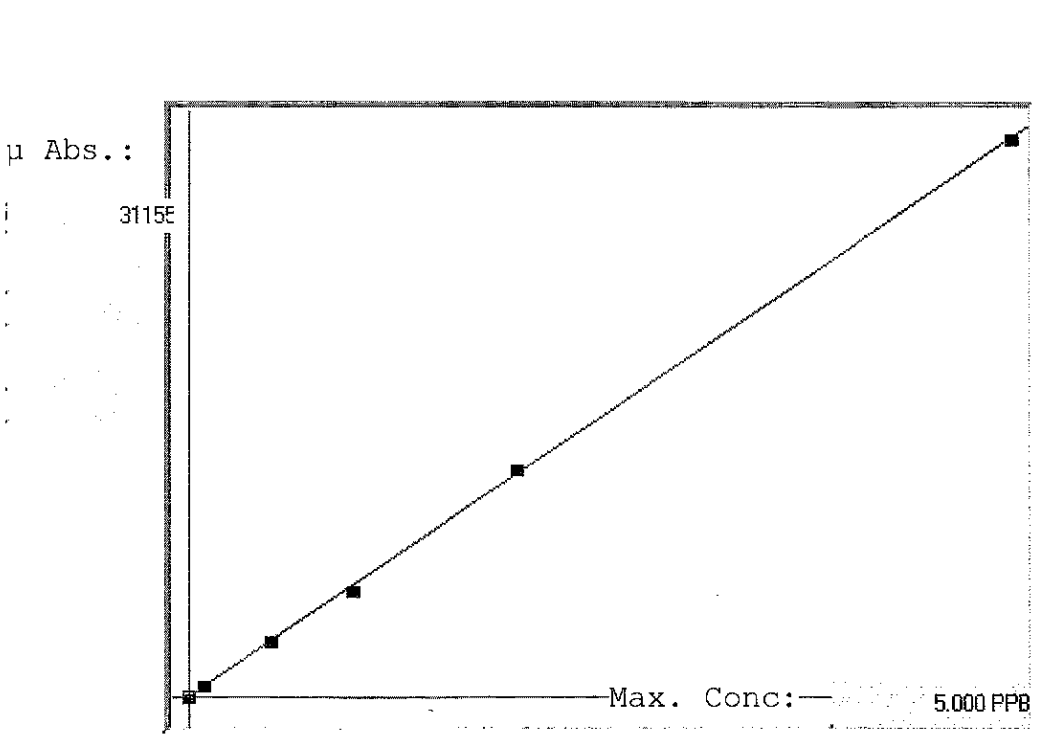
Sample ID	Mean	Units		Date	Method
SEQ-CAL1	27	PPB		14 Apr 2023 11:34:38	ARI 5 ppb (NO 0.05)
SEQ-CAL2	661	PPB		14 Apr 2023 11:36:59	ARI 5 ppb (NO 0.05)
SEQ-CAL3	3221	PPB		14 Apr 2023 11:39:20	ARI 5 ppb (NO 0.05)
SEQ-CAL4	5966	PPB		14 Apr 2023 11:41:40	ARI 5 ppb (NO 0.05)
SEQ-CAL5	12779	PPB		14 Apr 2023 11:44:01	ARI 5 ppb (NO 0.05)
SEQ-CAL6	31155	PPB		14 Apr 2023 11:46:20	ARI 5 ppb (NO 0.05)
SEQ-ICV	95.5% 3.8203	PPB	✓	14 Apr 2023 12:43:41	ARI 5 ppb (NO 0.05)
SEQ-ICB	-0.0048	PPB	✓	14 Apr 2023 12:45:59	ARI 5 ppb (NO 0.05)
SEQ-CRL	99.0% 0.0990	PPB	✓	14 Apr 2023 12:48:21	ARI 5 ppb (NO 0.05)
SEQ-CCV	95.4% 3.8164	PPB	✓	14 Apr 2023 12:50:41	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0051	PPB	✓	14 Apr 2023 12:53:00	ARI 5 ppb (NO 0.05)
~~SEQ-CCV~~	~~(L)-0.1% -0.0042~~	~~PPB~~		14 Apr 2023 12:55:21	ARI 5 ppb (NO 0.05)
SEQ-CCV	93.6% 3.7456	PPB	✓	14 Apr 2023 13:27:34	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0055	PPB	✓	14 Apr 2023 13:29:52	ARI 5 ppb (NO 0.05)
BLD0167-BLK1	-0.0000	PPB		14 Apr 2023 13:32:13	ARI 5 ppb (NO 0.05)
BLD0167-BS1	1.7977	PPB	✓	14 Apr 2023 13:34:32	ARI 5 ppb (NO 0.05)
23C0673-01	0.0643	PPB		14 Apr 2023 13:36:52	ARI 5 ppb (NO 0.05)
BLD0167-DUP1	0.0842	PPB		14 Apr 2023 13:39:11	ARI 5 ppb (NO 0.05)
BLD0167-MS1	1.1219	PPB	✓	14 Apr 2023 13:41:30	ARI 5 ppb (NO 0.05)
23C0673-02	0.1172	PPB		14 Apr 2023 13:43:49	ARI 5 ppb (NO 0.05)
23C0681-01	0.0109	PPB		14 Apr 2023 13:46:08	ARI 5 ppb (NO 0.05)
23C0702-01	0.1123	PPB		14 Apr 2023 13:48:27	ARI 5 ppb (NO 0.05)
23C0723-01	0.1184	PPB		14 Apr 2023 13:50:47	ARI 5 ppb (NO 0.05)
23D0061-01	0.0152	PPB		14 Apr 2023 13:53:08	ARI 5 ppb (NO 0.05)
SEQ-CCV	92.9% 3.7178	PPB	✓	14 Apr 2023 13:55:28	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0075	PPB	✓	14 Apr 2023 13:57:46	ARI 5 ppb (NO 0.05)
23D0061-02	0.0079	PPB		14 Apr 2023 14:00:08	ARI 5 ppb (NO 0.05)
BLD0245-BLK1	-0.0036	PPB		14 Apr 2023 14:02:28	ARI 5 ppb (NO 0.05)
BLD0245-BS1	1.7448	PPB	✓	14 Apr 2023 14:04:50	ARI 5 ppb (NO 0.05)
23A0249-02	0.5422	PPB		14 Apr 2023 14:07:09	ARI 5 ppb (NO 0.05)
BLD0245-DUP1	0.6809	PPB		14 Apr 2023 14:09:27	ARI 5 ppb (NO 0.05)
BLD0245-MS1	1.8024	PPB	✗	14 Apr 2023 14:11:46	ARI 5 ppb (NO 0.05)
BLD0245-MSD1	1.6893	PPB	✓	14 Apr 2023 14:14:05	ARI 5 ppb (NO 0.05)
23A0249-03	0.5484	PPB		14 Apr 2023 14:16:28	ARI 5 ppb (NO 0.05)
23A0249-04	0.4144	PPB		14 Apr 2023 14:18:47	ARI 5 ppb (NO 0.05)
23A0249-05	0.5959	PPB		14 Apr 2023 14:21:07	ARI 5 ppb (NO 0.05)
SEQ-CCV	94.4% 3.7775	PPB	✓	14 Apr 2023 14:23:27	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0048	PPB	✓	14 Apr 2023 14:25:45	ARI 5 ppb (NO 0.05)
23A0249-08	0.4022	PPB		14 Apr 2023 14:28:06	ARI 5 ppb (NO 0.05)
23A0249-11	0.1369	PPB		14 Apr 2023 14:30:26	ARI 5 ppb (NO 0.05)
23A0295-01	1.2941	PPB		14 Apr 2023 14:32:46	ARI 5 ppb (NO 0.05)
23A0295-02	1.0695	PPB		14 Apr 2023 14:35:07	ARI 5 ppb (NO 0.05)
23A0295-03	0.6062	PPB		14 Apr 2023 14:37:27	ARI 5 ppb (NO 0.05)
23A0295-04	0.5355	PPB		14 Apr 2023 14:39:47	ARI 5 ppb (NO 0.05)
23A0295-05	0.8756	PPB		14 Apr 2023 14:42:06	ARI 5 ppb (NO 0.05)
23A0295-06	0.5058	PPB		14 Apr 2023 14:44:25	ARI 5 ppb (NO 0.05)
23A0295-07	0.1121	PPB		14 Apr 2023 14:46:45	ARI 5 ppb (NO 0.05)
23A0295-09	0.6083	PPB		14 Apr 2023 14:49:05	ARI 5 ppb (NO 0.05)
SEQ-CCV	93.9% 3.7576	PPB	✓	14 Apr 2023 14:51:24	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0051	PPB	✓	14 Apr 2023 14:53:43	ARI 5 ppb (NO 0.05)
23A0295-10	0.0330	PPB		14 Apr 2023 14:56:04	ARI 5 ppb (NO 0.05)
BLD0245-PS1	1.6687	PPB	✓	14 Apr 2023 14:58:24	ARI 5 ppb (NO 0.05)
BLD0290-BLK1	-0.0019	PPB		14 Apr 2023 15:00:44	ARI 5 ppb (NO 0.05)
BLD0290-BS1	1.7068	PPB	✓	14 Apr 2023 15:03:04	ARI 5 ppb (NO 0.05)
23A0328-02	0.4496	PPB		14 Apr 2023 15:05:25	ARI 5 ppb (NO 0.05)
BLD0290-DUP1	0.4920	PPB		14 Apr 2023 15:07:46	ARI 5 ppb (NO 0.05)
BLD0290-MS1	1.7686	PPB	✗	14 Apr 2023 15:10:07	ARI 5 ppb (NO 0.05)
BLD0290-MSD1	1.5354	PPB	✓	14 Apr 2023 15:12:26	ARI 5 ppb (NO 0.05)
23A0313-08	0.4753	PPB		14 Apr 2023 15:14:46	ARI 5 ppb (NO 0.05)
23A0313-09	0.4213	PPB		14 Apr 2023 15:17:06	ARI 5 ppb (NO 0.05)
SEQ-CCV	92.0% 3.6819	PPB	✓	14 Apr 2023 15:19:26	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0059	PPB	✓	14 Apr 2023 15:21:44	ARI 5 ppb (NO 0.05)
23A0313-10	0.8094	PPB		14 Apr 2023 15:24:05	ARI 5 ppb (NO 0.05)
23A0313-11	0.5056	PPB		14 Apr 2023 15:26:24	ARI 5 ppb (NO 0.05)
23A0313-13	0.4179	PPB		14 Apr 2023 15:28:44	ARI 5 ppb (NO 0.05)
23A0328-03	0.3879	PPB		14 Apr 2023 15:31:04	ARI 5 ppb (NO 0.05)
23A0328-04	1.8632	PPB		14 Apr 2023 15:33:24	ARI 5 ppb (NO 0.05)

SMM 04-14-23

Method: ARI 5 ppb (NO 0.05) Operator: Admin Date of Analysis: 14 Apr 2023 11:34:23

Sample ID	Mean	Units		Date	Method
23A0328-05	0.4847	PPB		14 Apr 2023 15:35:45	ARI 5 ppb (NO 0.05)
23A0328-06	0.4100	PPB		14 Apr 2023 15:38:05	ARI 5 ppb (NO 0.05)
23A0328-07	0.2932	PPB		14 Apr 2023 15:40:25	ARI 5 ppb (NO 0.05)
23A0328-09	0.4555	PPB		14 Apr 2023 15:42:47	ARI 5 ppb (NO 0.05)
23A0328-10	0.3732	PPB		14 Apr 2023 15:45:06	ARI 5 ppb (NO 0.05)
SEQ-CCV	91.7% 3.6673	PPB	✓	14 Apr 2023 15:47:26	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0054	PPB	✓	14 Apr 2023 15:49:44	ARI 5 ppb (NO 0.05)
23A0328-11	0.3614	PPB		14 Apr 2023 15:52:05	ARI 5 ppb (NO 0.05)
23A0328-12	0.3343	PPB		14 Apr 2023 15:54:25	ARI 5 ppb (NO 0.05)
BLD0290-PS1	0.3559	PPB	X	14 Apr 2023 15:56:44	ARI 5 ppb (NO 0.05)
SEQ-CCV	91.4% 3.6549	PPB	✓	14 Apr 2023 15:59:04	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0054	PPB	✓	14 Apr 2023 16:01:23	ARI 5 ppb (NO 0.05)

ARI 5 ppb (NO 0.05)



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
SEQ-CAL1 - Blank	0.000	0.000	0.000	27	0.943	26	28	28		
SEQ-CAL2 - 0.1 PPB	0.100	0.102	0.002	661	0.7 %	667	656	661		
SEQ-CAL3 - 0.5 PPB	0.500	0.512	0.012	3220	0.4 %	3221	3237	3204		
SEQ-CAL4 - 1.0 PPB	1.000	0.952	-0.048	5965	0.6 %	5936	5944	6017		
SEQ-CAL5 - 2.0 PPB	2.000	2.044	0.044	12778	0.6 %	12679	12816	12841		
SEQ-CAL6 - 5.0 PPB	5.000	4.990	-0.010	31155	0.8 %	30869	31475	31122		

Mercury Analysis Log

Analyst: ML
Instrument: HYDRA

Date: 04/14/23
Page: 1 of 3

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
SEQ -cal1	5mm	1x		
-cal2				
-cal3				
-cal4				
-cal5				
-cal6				
-ICV			✓ 3.82	
-ICB			✓ -0.004	
-CRL			✓ 0.099	
-CCV			✓ 3.81	
-CCB			✓ -0.005	
-CCV				no res; seq brok; del
-CCV			✓ 3.74	
-CCB			✓ -0.005	
BLD0167 -BLK1				
-BS1			✓ 1.797	89.8 %R
23C0673 -01				
BLD0167 -DUP1				RPD = 26.80
-MS1			✓ 1.121	105.7 %R
23C0673 -02				
23C0681 -01				
23C0702 -01				
23C0723 -01				
23D0061 -01				
SEQ -CCV			✓ 3.71	
-CCB			✓ -0.007	
23D0061 -02				
BLD0245 -BLK1				
-BS1			✓ 1.744	87.2 %R
23A0249 -02				

Chemical/Reagent ID:
10% $SnCl_2$: L3991
14% NH_2OH/NaCl: 23351

Standard ID:
Standard: L4066-L4071
ICV/CCV: L4063

Mercury Analysis Log

Analyst: — Date: —

Instrument: — Page: 2 of 3

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
BLD0245 -DUP1				RPD = 22.68
-MS1			X 1.802	126 %R
↓ -MSD1			✓ 1.689	114 %R
23A0249 -03				
-04				
↓ -05				
SEQ -CCV			✓ 3.77	
↓ -CCB			✓ -0.004	
23A0249 -08				
↓ -11				
23A0295 -01				
-02				
-03				
-04				
-05				
-06				
-07				
↓ -09				
STD -CCV			✓ 3.75	
↓ -CCB			✓ -0.005	
23A0295 -10				
BLD0245 -PS1			✓ 1.668	112.6 %R
BLD0290 -BLK1				
↓ -BS1			✓ 1.706	85.3 %R
23A0328 -02				
BLD0290 -DUP1				RPD = 9.00
-MS1			X 1.768	131.9 %R
↓ -MSD1			✓ 1.535	108.5 %R
23A0313 -08				
↓ -09				

Chemical/Reagent ID:

10% $SnCl_2$: — 14% NH_2OH/NaCl: —

Standard ID:

Standard: — ICV/CCV: —

Mercury Analysis Log

Analyst: —
Instrument: —
Date: —
Page: 3 of 3

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
SEQ -CCV			√3.68	
↓ -CCB			√-0.005	
23A0313 -10				
-11				
↓ -13				
23A0328 -03				
-04				
-05				
-06				
-07				
-09				
↓ -10				
SEQ -CCV			√3.66	
↓ -CCB			√-0.005	
23A0328 -11				
↓ -12				
BLD0290 -PS1			X 0.355	
SEQ -CCV			√3.65	
↓ -CCB	↓	↓	√-0.005	

MM 04/14/23

Chemical/Reagent ID:
10% $SnCl_2$: —
14% NH_2OH/NaCl: —
Standard ID:
Standard: —
ICV/CCV: —

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: HYDRA
Calibration: GD00038
Control Limt: +/- 20.00%
Sequence: SLD0197

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLD0197-ICV1	Mercury	0.0040000	0.00382	95.5	mg/L	EPA 7471B
SLD0197-CCV1	Mercury	0.0040000	0.00382	95.4	mg/L	EPA 7471B
SLD0197-CCV2	Mercury	0.0040000	0.00375	93.6	mg/L	EPA 7471B
SLD0197-CCV3	Mercury	0.0040000	0.00372	92.9	mg/L	EPA 7471B
SLD0197-CCV4	Mercury	0.0040000	0.00378	94.4	mg/L	EPA 7471B
SLD0197-CCV5	Mercury	0.0040000	0.00376	93.9	mg/L	EPA 7471B
SLD0197-CCV6	Mercury	0.0040000	0.00368	92.0	mg/L	EPA 7471B
SLD0197-CCV7	Mercury	0.0040000	0.00367	91.7	mg/L	EPA 7471B
SLD0197-CCV8	Mercury	0.0040000	0.00365	91.4	mg/L	EPA 7471B

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INSTRUMENT BLANKS
EPA 7471B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: HYDRA
Sequence: SLD0197

SDG: 23A0249
Project: AOC5 MR Phase 1
Calibration: GD00038
Date Analyzed: 04/14/23 12:45

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLD0197-ICB1	Mercury	-0.000005	0.000021	0.000100	mg/L	
SLD0197-CCB1	Mercury	-0.000005	0.000021	0.000100	mg/L	
SLD0197-CCB2	Mercury	-0.000006	0.000021	0.000100	mg/L	
SLD0197-CCB3	Mercury	-0.000008	0.000021	0.000100	mg/L	
SLD0197-CCB4	Mercury	-0.000005	0.000021	0.000100	mg/L	
SLD0197-CCB5	Mercury	-0.000005	0.000021	0.000100	mg/L	
SLD0197-CCB6	Mercury	-0.000006	0.000021	0.000100	mg/L	
SLD0197-CCB7	Mercury	-0.000005	0.000021	0.000100	mg/L	
SLD0197-CCB8	Mercury	-0.000005	0.000021	0.000100	mg/L	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLD0197
Instrument: HYDRA
Calibration: GD00038

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SLD0197-CAL1	SMM 04-14-23-001	NA	04/14/23 11:34
Cal Standard	SLD0197-CAL2	SMM 04-14-23-002	NA	04/14/23 11:36
Cal Standard	SLD0197-CAL3	SMM 04-14-23-003	NA	04/14/23 11:39
Cal Standard	SLD0197-CAL4	SMM 04-14-23-004	NA	04/14/23 11:41
Cal Standard	SLD0197-CAL5	SMM 04-14-23-005	NA	04/14/23 11:44
Cal Standard	SLD0197-CAL6	SMM 04-14-23-006	NA	04/14/23 11:46
Initial Cal Check	SLD0197-ICV1	SMM 04-14-23-007	NA	04/14/23 12:43
Initial Cal Blank	SLD0197-ICB1	SMM 04-14-23-008	NA	04/14/23 12:45
Instrument RL Check	SLD0197-CRL1	SMM 04-14-23-009	NA	04/14/23 12:48
Calibration Check	SLD0197-CCV1	SMM 04-14-23-010	NA	04/14/23 12:50
Calibration Blank	SLD0197-CCB1	SMM 04-14-23-011	NA	04/14/23 12:53
Calibration Check	SLD0197-CCV2	SMM 04-14-23-013	NA	04/14/23 13:27
Calibration Blank	SLD0197-CCB2	SMM 04-14-23-014	NA	04/14/23 13:29
Calibration Check	SLD0197-CCV3	SMM 04-14-23-025	NA	04/14/23 13:55
Calibration Blank	SLD0197-CCB3	SMM 04-14-23-026	NA	04/14/23 13:57
Blank	BLD0245-BLK1	SMM 04-14-23-028	Solid	04/14/23 14:02
LCS	BLD0245-BS1	SMM 04-14-23-029	Solid	04/14/23 14:04
LDW23-SC1083	23A0249-02	SMM 04-14-23-030	Solid	04/14/23 14:07
LDW23-SC1083	BLD0245-DUP1	SMM 04-14-23-031	Solid	04/14/23 14:09
LDW23-SC1083	BLD0245-MS1	SMM 04-14-23-032	Solid	04/14/23 14:11
LDW23-SC1083	BLD0245-MSD1	SMM 04-14-23-033	Solid	04/14/23 14:14
LDW23-SC1018	23A0249-03	SMM 04-14-23-034	Solid	04/14/23 14:16
LDW23-SC1084	23A0249-04	SMM 04-14-23-035	Solid	04/14/23 14:18
LDW23-SC1025	23A0249-05	SMM 04-14-23-036	Solid	04/14/23 14:21
Calibration Check	SLD0197-CCV4	SMM 04-14-23-037	NA	04/14/23 14:23
Calibration Blank	SLD0197-CCB4	SMM 04-14-23-038	NA	04/14/23 14:25
LDW23-SC1024	23A0249-08	SMM 04-14-23-039	Solid	04/14/23 14:28
LDW23-SC1020	23A0249-11	SMM 04-14-23-040	Solid	04/14/23 14:30
Calibration Check	SLD0197-CCV5	SMM 04-14-23-049	NA	04/14/23 14:51

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLD0197

SDG: 23A0249
Project: AOC5 MR Phase 1
Instrument: HYDRA
Calibration: GD00038

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLD0197-CCB5	SMM 04-14-23-050	NA	04/14/23 14:53
LDW23-SC1083	BLD0245-PS1	SMM 04-14-23-052	Solid	04/14/23 14:58
Calibration Check	SLD0197-CCV6	SMM 04-14-23-061	NA	04/14/23 15:19
Calibration Blank	SLD0197-CCB6	SMM 04-14-23-062	NA	04/14/23 15:21
Calibration Check	SLD0197-CCV7	SMM 04-14-23-073	NA	04/14/23 15:47
Calibration Blank	SLD0197-CCB7	SMM 04-14-23-074	NA	04/14/23 15:49
Calibration Check	SLD0197-CCV8	SMM 04-14-23-078	NA	04/14/23 15:59
Calibration Blank	SLD0197-CCB8	SMM 04-14-23-079	NA	04/14/23 16:01

DETECTION LEVEL STANDARD
EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: HYDRA
Calibration: GD00038
Sequence: SLD0197
Lab Sample ID: SLD0197-CRL1

Analyte	True	Found	%R	Units	QC Limts
Mercury	0.000100	0.000099	99.0	mg/L	70 - 130

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 7471B

Laboratory: Analytical Resources, LLC SDG: 23A0249

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1083 23A0249-02	01/12/23 08:38	01/12/23 16:38	04/13/23 13:49	91	180	04/14/23 14:07	92	180	
LDW23-SC1018 23A0249-03	01/12/23 10:21	01/12/23 16:38	04/13/23 13:49	91	180	04/14/23 14:16	92	180	
LDW23-SC1084 23A0249-04	01/12/23 09:47	01/12/23 16:38	04/13/23 13:49	91	180	04/14/23 14:18	92	180	
LDW23-SC1025 23A0249-05	01/12/23 11:28	01/12/23 16:38	04/13/23 13:49	91	180	04/14/23 14:21	92	180	
LDW23-SC1024 23A0249-08	01/12/23 13:35	01/12/23 16:38	04/13/23 13:49	91	180	04/14/23 14:28	92	180	
LDW23-SC1020 23A0249-11	01/12/23 15:23	01/12/23 16:38	04/13/23 13:49	90	180	04/14/23 14:30	92	180	
Duplicate BLD0245-DUP1	01/12/23 08:38	01/12/23 16:38	04/13/23 13:49	91	180	04/14/23 14:09	92	180	
Matrix Spike BLD0245-MS1	01/12/23 08:38	01/12/23 16:38	04/13/23 13:49	91	180	04/14/23 14:11	92	180	
Matrix Spike Dup BLD0245-MSD1	01/12/23 08:38	01/12/23 16:38	04/13/23 13:49	91	180	04/14/23 14:14	92	180	
Post Spike BLD0245-PS1	01/12/23 08:38	01/12/23 16:38	04/13/23 13:49	91	180	04/14/23 14:58	92	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: HYDRA

Analyte	MDL	RL	Units
Mercury	0.00525	0.0250	mg/kg

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGHG1
Lot Number:	S2-HG711246
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Mercury
Starting Material:	Hg Metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1000 ± 3 µg/mL

Density: 1.026 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **1004 ± 6 µg/mL**
ICP Assay NIST SRM 3133 Lot Number: 160921

Assay Method #2 **998 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **1001 ± 3 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.000210	M	Eu	< 0.000210	O	Na	0.000626	M	Se	< 0.008100	M	Zn	< 0.000810			
M	Al	0.000161	O	Fe	< 0.001600	M	Nb	< 0.000410	O	Si	0.000626	M	Zr	< 0.000410			
M	As	< 0.002500	M	Ga	< 0.000210	M	Nd	< 0.000210	M	Sm	< 0.000210						
O	Au	< 0.001700	M	Gd	< 0.000210	O	Ni	< 0.001400	M	Sn	< 0.000410						
M	B	< 0.008500	M	Ge	< 0.000410	M	Os	< 0.003900	O	Sr	< 0.000110						
M	Ba	< 0.000210	M	Hf	< 0.000210	O	P	< 0.029000	M	Ta	< 0.000210						
O	Be	< 0.000110	s	Hg	<	M	Pb	< 0.000210	M	Tb	< 0.000210						
M	Bi	< 0.001100	M	Ho	< 0.000210	M	Pd	< 0.003500	M	Te	< 0.005700						
O	Ca	0.004754	M	In	< 0.000210	M	Pr	< 0.000210	M	Th	< 0.000210						
M	Cd	< 0.000210	M	Ir	< 0.000210	M	Pt	< 0.000210	O	Ti	< 0.000430						
M	Ce	< 0.000210	O	K	0.000731	M	Rb	< 0.000210	O	Tl	< 0.005400						
M	Co	< 0.000210	M	La	< 0.000210	M	Re	< 0.000210	M	Tm	< 0.000210						
O	Cr	< 0.003300	O	Li	< 0.000110	M	Rh	< 0.001100	M	U	< 0.000410						
M	Cs	< 0.000410	M	Lu	< 0.000210	M	Ru	< 0.000810	M	V	< 0.000210						
M	Cu	< 0.000810	O	Mg	0.000104	O	S	< 0.022000	M	W	< 0.001100						
M	Dy	< 0.000210	O	Mn	< 0.000430	M	Sb	< 0.000210	M	Y	< 0.000210						
M	Er	< 0.000210	M	Mo	< 0.000210	M	Sc	< 0.000210	M	Yb	< 0.000210						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+
Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.
Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.
Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 18, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 18, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	QCP-QCS-4
Lot Number:	R2-MEB695951
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	5 µg/mL ea: Mercury

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Mercury, Hg	**5.011 ± 0.023 µg/mL**		

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	061204
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The follow ing equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 20, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 20, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1083

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-02 D	SDG:	23A0249
Sampled:	01/12/23 08:38	Prepared:	01/13/23 15:33	File ID:	
% Solids:	59.34	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 15:35
Batch:	BLA0351	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	59.34	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1018

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-03 D	SDG:	23A0249
Sampled:	01/12/23 10:21	Prepared:	01/13/23 15:33	File ID:	
% Solids:	49.11	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 15:35
Batch:	BLA0351	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	49.11	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1084

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-04 D	SDG:	23A0249
Sampled:	01/12/23 09:47	Prepared:	01/13/23 15:33	File ID:	
% Solids:	55.13	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 15:35
Batch:	BLA0351	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	55.13	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1025

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-05 D	SDG:	23A0249
Sampled:	01/12/23 11:28	Prepared:	01/13/23 15:33	File ID:	
% Solids:	59.20	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 15:35
Batch:	BLA0351	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	59.20	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1033

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-06 C	SDG:	23A0249
Sampled:	01/12/23 12:55	Prepared:	01/13/23 15:33	File ID:	
% Solids:	78.39	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 15:35
Batch:	BLA0351	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	78.39	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-IT1034

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-07 D	SDG:	23A0249
Sampled:	01/12/23 12:32	Prepared:	01/13/23 15:33	File ID:	
% Solids:	76.56	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 15:35
Batch:	BLA0351	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	76.56	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1024

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-08 D	SDG:	23A0249
Sampled:	01/12/23 13:35	Prepared:	01/13/23 15:33	File ID:	
% Solids:	50.46	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 15:35
Batch:	BLA0351	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	50.46	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1040

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-09 C	SDG:	23A0249
Sampled:	01/12/23 14:15	Prepared:	01/13/23 15:33	File ID:	
% Solids:	59.16	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 15:35
Batch:	BLA0351	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	59.16	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1030

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-10 C	SDG:	23A0249
Sampled:	01/12/23 14:50	Prepared:	01/13/23 15:33	File ID:	
% Solids:	47.97	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 15:35
Batch:	BLA0351	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	47.97	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1020

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-11 D	SDG:	23A0249
Sampled:	01/12/23 15:23	Prepared:	01/13/23 15:33	File ID:	
% Solids:	71.92	Preparation:	No Prep Wet Chem	Analyzed:	01/13/23 15:35
Batch:	BLA0351	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	71.92	1	0.04	0.04	

PREPARATION BATCH SUMMARY

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0351 Batch Matrix: Solid
Preparation: No Prep Wet Chem

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1083	23A0249-02		01/13/23 15:33	
LDW23-SC1018	23A0249-03		01/13/23 15:33	
LDW23-SC1084	23A0249-04		01/13/23 15:33	
LDW23-SC1025	23A0249-05		01/13/23 15:33	
LDW23-SC1033	23A0249-06		01/13/23 15:33	
LDW23-IT1034	23A0249-07		01/13/23 15:33	
LDW23-SC1024	23A0249-08		01/13/23 15:33	
LDW23-SC1040	23A0249-09		01/13/23 15:33	
LDW23-SC1030	23A0249-10		01/13/23 15:33	
LDW23-SC1020	23A0249-11		01/13/23 15:33	
Blank	BLA0351-BLK1		01/13/23 15:33	
LDW23-SC1082X	BLA0351-DUP1		01/13/23 15:33	
LDW23-SC1082X	BLA0351-DUP2		01/13/23 15:33	

TOTAL SOLIDS/VOLATILE SOLIDS (TS / TVS) BENCHSHEET for Solid samples

Method: PSEP 1986, SM2540, EPA 160.1

(dry at 104 (12-24 hr) then combust at 550 (30 min))

Batch:	BLA0351
Date:	1/13/2023 15:35
Analyst:	UW

Instrumentation

Drying Ovens:	12	**Analytical Balance:**	BAL2
Muffle Furnace:	2		

Batch drying time

record times as mm/dd/yy hh:mm

date/time in oven:	1/13/2023 16:00	
date/time out:	1/14/2023 14:50	
elapsed hrs =	22.8	OK

TS (%) calculated as:
Final dry wt (g) = (Dry Wt - Tare Wt)
TS = (Final Dry Wt)/ (grams Sample-Tare)

Oven Temps, °C	
Start Temp	103
Dry Cycle 1	105
Dry Cycle 2	
Dry Cycle 3	

TVS (mg/kg dry wt) calculated as:
Final ash wt (g) = (min ash wt - tare wt)
TVS (mg/kg) = [(Dry wt-Ash wt)/ (dry weight)] *1,000,000
if ash wt > dry wt, "Chk for Err"
if dry wt-ash wt < 0.001 g, "< (1/dry wt)*1,000,000

Balance Calibration Check

Record weights to 4 places

Cal Weight ID:	CV-02	CV-02	CV-02	CV-02	CV-02		CV-02	CV-02	CV-02	
Date & Time:	1/13/23 15:35	1/13/23 15:40	1/14/23 15:17							
Cal Wt (g): 10.0000	10.0000	10.0000	10.0000							
	Cal OK!	Cal OK!	Cal OK!							

Sample ID	Dish #	Tare Wt. (g)	Dish & Sample (g)	Dry Wt 104C (grams) 1	2	3	dry Wt (g)	TS (%)	Notes	ASH WT 550C (grams) 1	2	3	Ash Wt (g)	TVS (mg/kg)	TVS (%)	Notes
BLA0351-BLK1	61	0.8100	0.0000	0.8097			-0.0003	0.04%								
23A0249-01	62	0.8090	7.1678	4.5670			3.7580	59.10%								
BLA0351-DUP1	63	0.8260	6.4225	4.1337			3.3077	59.10%	RPD=0							
BLA0351-DUP2	64	0.7985	8.1435	5.1314			4.3329	58.99%	RSD=0.1							
23A0249-02	65	0.8259	6.8337	4.3909			3.5650	59.34%								
23A0249-03	66	0.8062	7.6844	4.1839			3.3777	49.11%								
23A0249-04	67	0.7945	8.3770	4.9751			4.1806	55.13%								
23A0249-05	68	0.8193	7.6191	4.8449			4.0256	59.20%								
23A0249-06	69	0.8006	8.9141	7.1611			6.3605	78.39%								
23A0249-07	70	0.8011	8.1654	6.4393			5.6382	76.56%								
23A0249-08	71	0.8246	7.0647	3.9735			3.1489	50.46%								
23A0249-09	72	0.7978	8.7538	5.5049			4.7071	59.16%								
23A0249-10	73	0.8018	8.6771	4.5798			3.7780	47.97%								
23A0249-11	74	0.7996	9.6457	7.1617			6.3621	71.92%								

Form I

METHOD BLANK DATA SHEET

SM 2540 G-97

TotalAnalytes

Blank

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0351
Laboratory ID: BLA0351-BLK1
Prepared: 01/13/23 15:33
Matrix: Solid
Preparation: No Prep Wet Chem
Analyzed: 01/13/23 15:35
Sequence:
Calibration:
Instrument: BAL2

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	ND	1	0.04	0.04	U

DUPLICATES

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0351-DUP1
Batch: BLA0351
Lab Source ID: 23A0249-01
Preparation: No Prep Wet Chem
Initial/Final: 5 g / 5 g
Source Sample Name: LDW23-SC1082X
% Solids: 59.10

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Total Solids	20	59.10	59.10	0.00644	

*: Values outside of QC limits
L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD

DUPLICATES

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0351-DUP2
Batch: BLA0351
Lab Source ID: 23A0249-01
Preparation: No Prep Wet Chem
Initial/Final: 5 g / 5 g
Source Sample Name: LDW23-SC1082X
% Solids: 59.10

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Total Solids	20	59.10	58.99	0.183	

*: Values outside of QC limits
L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD

HOLDING TIME SUMMARY

Analysis: SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1082X 23A0249-01	01/12/23 09:08	01/12/23 16:38	01/13/23 15:33	1	180	01/13/23 15:35	1	180	
LDW23-SC1083 23A0249-02	01/12/23 08:38	01/12/23 16:38	01/13/23 15:33	1	180	01/13/23 15:35	1	180	
LDW23-SC1018 23A0249-03	01/12/23 10:21	01/12/23 16:38	01/13/23 15:33	1	180	01/13/23 15:35	1	180	
LDW23-SC1084 23A0249-04	01/12/23 09:47	01/12/23 16:38	01/13/23 15:33	1	180	01/13/23 15:35	1	180	
LDW23-SC1025 23A0249-05	01/12/23 11:28	01/12/23 16:38	01/13/23 15:33	1	180	01/13/23 15:35	1	180	
LDW23-SC1033 23A0249-06	01/12/23 12:55	01/12/23 16:38	01/13/23 15:33	1	180	01/13/23 15:35	1	180	
LDW23-IT1034 23A0249-07	01/12/23 12:32	01/12/23 16:38	01/13/23 15:33	1	180	01/13/23 15:35	1	180	
LDW23-SC1024 23A0249-08	01/12/23 13:35	01/12/23 16:38	01/13/23 15:33	1	180	01/13/23 15:35	1	180	
LDW23-SC1040 23A0249-09	01/12/23 14:15	01/12/23 16:38	01/13/23 15:33	1	180	01/13/23 15:35	1	180	
LDW23-SC1030 23A0249-10	01/12/23 14:50	01/12/23 16:38	01/13/23 15:33	1	180	01/13/23 15:35	1	180	
LDW23-SC1020 23A0249-11	01/12/23 15:23	01/12/23 16:38	01/13/23 15:33	1	180	01/13/23 15:35	1	180	
Duplicate BLA0351-DUP1	01/12/23 09:08	01/12/23 16:38	01/13/23 15:33	1	180	01/13/23 15:35	1	180	
Duplicate BLA0351-DUP2	01/12/23 09:08	01/12/23 16:38	01/13/23 15:33	1	180	01/13/23 15:35	1	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument:

Analyte	MDL	RL	Units
Total Solids	0.04	0.04	%

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1083

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-02 D	SDG:	23A0249
Sampled:	01/12/23 08:38	Prepared:	01/16/23 10:35	File ID:	CubeData_01182023@1339-155
% Solids:	59.34	Preparation:	Plumb 1981	Analyzed:	01/18/23 03:00
Batch:	BLA0360	Sequence:	SLA0148	Initial/Final:	0.5034 g Wet / 0.5034 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.72	1	0.02	0.02	

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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1018

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-03 D	SDG:	23A0249
Sampled:	01/12/23 10:21	Prepared:	01/16/23 10:35	File ID:	CubeData_01182023@1339-156
% Solids:	49.11	Preparation:	Plumb 1981	Analyzed:	01/18/23 03:30
Batch:	BLA0360	Sequence:	SLA0148	Initial/Final:	0.5537 g Wet / 0.5537 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.58	1	0.02	0.02	

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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1084

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-04 D	SDG:	23A0249
Sampled:	01/12/23 09:47	Prepared:	01/16/23 10:35	File ID:	CubeData_01182023@1339-157
% Solids:	55.13	Preparation:	Plumb 1981	Analyzed:	01/18/23 04:00
Batch:	BLA0360	Sequence:	SLA0148	Initial/Final:	0.5488 g Wet / 0.5488 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.16	1	0.02	0.02	

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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1025

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-05 D	SDG:	23A0249
Sampled:	01/12/23 11:28	Prepared:	01/16/23 10:35	File ID:	CubeData_01182023@1339-158
% Solids:	59.20	Preparation:	Plumb 1981	Analyzed:	01/18/23 04:31
Batch:	BLA0360	Sequence:	SLA0148	Initial/Final:	0.5259 g Wet / 0.5259 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.50	1	0.02	0.02	

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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1033

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-06 C	SDG:	23A0249
Sampled:	01/12/23 12:55	Prepared:	01/16/23 10:35	File ID:	CubeData_01182023@1339-159
% Solids:	78.39	Preparation:	Plumb 1981	Analyzed:	01/18/23 05:01
Batch:	BLA0360	Sequence:	SLA0148	Initial/Final:	0.6034 g Wet / 0.6034 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	0.48	1	0.02	0.02	

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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-IT1034

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-07 D	SDG:	23A0249
Sampled:	01/12/23 12:32	Prepared:	01/16/23 10:35	File ID:	CubeData_01182023@1339-001
% Solids:	76.56	Preparation:	Plumb 1981	Analyzed:	01/18/23 06:32
Batch:	BLA0360	Sequence:	SLA0148	Initial/Final:	0.5308 g Wet / 0.5308 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	0.71	1	0.02	0.02	

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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1024

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-08 D	SDG:	23A0249
Sampled:	01/12/23 13:35	Prepared:	01/16/23 10:35	File ID:	CubeData_01182023@1339-007
% Solids:	50.46	Preparation:	Plumb 1981	Analyzed:	01/18/23 07:02
Batch:	BLA0360	Sequence:	SLA0148	Initial/Final:	0.5038 g Wet / 0.5038 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.20	1	0.02	0.02	

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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1040

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-09 C	SDG:	23A0249
Sampled:	01/12/23 14:15	Prepared:	01/16/23 10:35	File ID:	CubeData_01182023@1339-013
% Solids:	59.16	Preparation:	Plumb 1981	Analyzed:	01/18/23 07:33
Batch:	BLA0360	Sequence:	SLA0148	Initial/Final:	0.5311 g Wet / 0.5311 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.95	1	0.02	0.02	

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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1030

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-10 C	SDG:	23A0249
Sampled:	01/12/23 14:50	Prepared:	01/16/23 10:35	File ID:	CubeData_01182023@1339-018
% Solids:	47.97	Preparation:	Plumb 1981	Analyzed:	01/18/23 08:03
Batch:	BLA0360	Sequence:	SLA0148	Initial/Final:	0.583 g Wet / 0.583 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	3.02	1	0.02	0.02	

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Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1020

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23A0249-11 D	SDG:	23A0249
Sampled:	01/12/23 15:23	Prepared:	01/16/23 10:35	File ID:	CubeData_01182023@1339-025
% Solids:	71.92	Preparation:	Plumb 1981	Analyzed:	01/18/23 08:33
Batch:	BLA0360	Sequence:	SLA0148	Initial/Final:	0.524 g Wet / 0.524 g
Instrument:	TOC Cube			Calibration:	FD00070

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	1.02	1	0.02	0.02	

PREPARATION BATCH SUMMARY

EPA 9060A m

Laboratory:	Analytical Resources, LLC			SDG:	23A0249
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Batch:	BLA0360	Batch Matrix:	Solid	Preparation:	Plumb 1981

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1083	23A0249-02	eData_01182023@1339-	01/16/23 10:35	
LDW23-SC1018	23A0249-03	eData_01182023@1339-	01/16/23 10:35	
LDW23-SC1084	23A0249-04	eData_01182023@1339-	01/16/23 10:35	
LDW23-SC1025	23A0249-05	eData_01182023@1339-	01/16/23 10:35	
LDW23-SC1033	23A0249-06	eData_01182023@1339-	01/16/23 10:35	
LDW23-IT1034	23A0249-07	eData_01182023@1339-	01/16/23 10:35	
LDW23-SC1024	23A0249-08	eData_01182023@1339-	01/16/23 10:35	
LDW23-SC1040	23A0249-09	eData_01182023@1339-	01/16/23 10:35	
LDW23-SC1030	23A0249-10	eData_01182023@1339-	01/16/23 10:35	
LDW23-SC1020	23A0249-11	eData_01182023@1339-	01/16/23 10:35	
Blank	BLA0360-BLK1	eData_01182023@1339-	01/16/23 10:35	
LCS	BLA0360-BS1	eData_01182023@1339-	01/16/23 10:35	
MRL Check	BLA0360-MRL1	eData_01182023@1339-	01/16/23 10:35	
Reference	BLA0360-SRM1	eData_01182023@1339-	01/16/23 10:35	

Form I

METHOD BLANK DATA SHEET

EPA 9060A m

TotalAnalytes

Blank

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLA0360
Laboratory ID: BLA0360-BLK1
Prepared: 01/16/23 10:35
Matrix: Solid
Preparation: Plumb 1981
Analyzed: 01/17/23 21:25
Sequence: SLA0148
Calibration: FD00070
Instrument: TOC Cube

CAS NO.	Analyte	Concentration (% wet)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	ND	1	0.02	0.02	U

LCS / LCS DUPLICATE RECOVERY

EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	01/17/23 21:55
Batch:	BLA0360	Laboratory ID:	BLA0360-BS1
Preparation:	Plumb 1981	Sequence Name:	LCS
Initial/Final:	0.0192 g / 0.0192 g		

COMPOUND	SPIKE ADDED (% wet)	LCS CONCENTRATION (% wet)	Q	LCS % REC. #	QC LIMITS REC.
Total Organic Carbon	44.4	45.6		103	80 - 120

* Indicates values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SKD0371	Instrument:	TOC Cube
		Calibration:	FD00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SKD0371-CAL1	CubeData_04272022@1136-001	NA	04/26/22 12:30
Cal Standard	SKD0371-CAL2	CubeData_04272022@1136-002	NA	04/26/22 13:00
Cal Standard	SKD0371-CAL3	CubeData_04272022@1136-003	NA	04/26/22 13:30
Cal Standard	SKD0371-CAL4	CubeData_04272022@1136-004	NA	04/26/22 14:00
Cal Standard	SKD0371-CAL5	CubeData_04272022@1136-005	NA	04/26/22 14:30
Cal Standard	SKD0371-CAL6	CubeData_04272022@1136-006	NA	04/26/22 15:00
Cal Standard	SKD0371-CAL7	CubeData_04272022@1136-007	NA	04/26/22 15:30
Cal Standard	SKD0371-CAL8	CubeData_04272022@1136-008	NA	04/26/22 16:00
Cal Standard	SKD0371-CAL9	CubeData_04272022@1136-009	NA	04/26/22 16:30
Cal Standard	SKD0371-CALA	CubeData_04272022@1136-010	NA	04/26/22 17:00
Cal Standard	SKD0371-CALB	CubeData_04272022@1136-011	NA	04/26/22 17:30
Cal Standard	SKD0371-CALC	CubeData_04272022@1136-012	NA	04/26/22 18:00
Cal Standard	SKD0371-CALD	CubeData_04272022@1136-013	NA	04/26/22 18:30
Cal Standard	SKD0371-CALE	CubeData_04272022@1136-014	NA	04/26/22 19:00
Cal Standard	SKD0371-CALF	CubeData_04272022@1136-015	NA	04/26/22 19:31
Cal Standard	SKD0371-CALG	CubeData_04272022@1136-016	NA	04/26/22 20:01
Cal Standard	SKD0371-CALH	CubeData_04272022@1136-017	NA	04/26/22 20:31
Cal Standard	SKD0371-CALI	CubeData_04272022@1136-018	NA	04/26/22 21:01
Cal Standard	SKD0371-CALJ	CubeData_04272022@1136-019	NA	04/26/22 21:31
Cal Standard	SKD0371-CALK	CubeData_04272022@1136-020	NA	04/26/22 22:01
Initial Cal Check	SKD0371-ICV1	CubeData_04272022@1136-027	NA	04/27/22 02:03
Initial Cal Blank	SKD0371-ICB1	CubeData_04272022@1136-028	NA	04/27/22 02:33
Cal Standard	SKD0371-CALL	CubeData_04272022@1136-021	NA	04/27/22 11:08
Cal Standard	SKD0371-CALM	CubeData_04272022@1136-022	NA	04/27/22 11:08
Cal Standard	SKD0371-CALN	CubeData_04272022@1136-023	NA	04/27/22 11:09
Cal Standard	SKD0371-CALO	CubeData_04272022@1136-024	NA	04/27/22 11:09

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0148	Instrument:	TOC Cube
		Calibration:	FD00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLA0148-ICV1	CubeData_01182023@1339-019	NA	01/16/23 11:02
Initial Cal Blank	SLA0148-ICB1	CubeData_01182023@1339-026	NA	01/16/23 11:32
Calibration Check	SLA0148-CCV1	CubeData_01182023@1339-089	NA	01/16/23 17:06
Calibration Blank	SLA0148-CCB1	CubeData_01182023@1339-090	NA	01/16/23 17:36
Calibration Check	SLA0148-CCV2	CubeData_01182023@1339-101	NA	01/16/23 23:10
Calibration Blank	SLA0148-CCB2	CubeData_01182023@1339-102	NA	01/16/23 23:40
Calibration Check	SLA0148-CCV3	CubeData_01182023@1339-113	NA	01/17/23 05:15
Calibration Blank	SLA0148-CCB3	CubeData_01182023@1339-114	NA	01/17/23 05:45
Calibration Check	SLA0148-CCV4	CubeData_01182023@1339-124	NA	01/17/23 11:19
Calibration Blank	SLA0148-CCB4	CubeData_01182023@1339-125	NA	01/17/23 11:49
Calibration Check	SLA0148-CCV5	CubeData_01182023@1339-136	NA	01/17/23 17:22
Calibration Blank	SLA0148-CCB5	CubeData_01182023@1339-137	NA	01/17/23 17:52
MRL Check	BLA0360-MRL1	CubeData_01182023@1339-143	Solid	01/17/23 20:55
Blank	BLA0360-BLK1	CubeData_01182023@1339-144	Solid	01/17/23 21:25
LCS	BLA0360-BS1	CubeData_01182023@1339-145	Solid	01/17/23 21:55
Reference	BLA0360-SRM1	CubeData_01182023@1339-146	Solid	01/17/23 22:26
Calibration Check	SLA0148-CCV6	CubeData_01182023@1339-148	NA	01/17/23 23:27
Calibration Blank	SLA0148-CCB6	CubeData_01182023@1339-149	NA	01/17/23 23:57
LDW23-SC1082X	23A0249-01	CubeData_01182023@1339-154	Solid	01/18/23 02:29
LDW23-SC1083	23A0249-02	CubeData_01182023@1339-155	Solid	01/18/23 03:00
LDW23-SC1018	23A0249-03	CubeData_01182023@1339-156	Solid	01/18/23 03:30
LDW23-SC1084	23A0249-04	CubeData_01182023@1339-157	Solid	01/18/23 04:00
LDW23-SC1025	23A0249-05	CubeData_01182023@1339-158	Solid	01/18/23 04:31
LDW23-SC1033	23A0249-06	CubeData_01182023@1339-159	Solid	01/18/23 05:01
Calibration Check	SLA0148-CCV7	CubeData_01182023@1339-160	NA	01/18/23 05:31
Calibration Blank	SLA0148-CCB7	CubeData_01182023@1339-161	NA	01/18/23 06:02
LDW23-IT1034	23A0249-07	CubeData_01182023@1339-001	Solid	01/18/23 06:32
LDW23-SC1024	23A0249-08	CubeData_01182023@1339-007	Solid	01/18/23 07:02
LDW23-SC1040	23A0249-09	CubeData_01182023@1339-013	Solid	01/18/23 07:33

ANALYSIS BATCH (SEQUENCE) SUMMARY

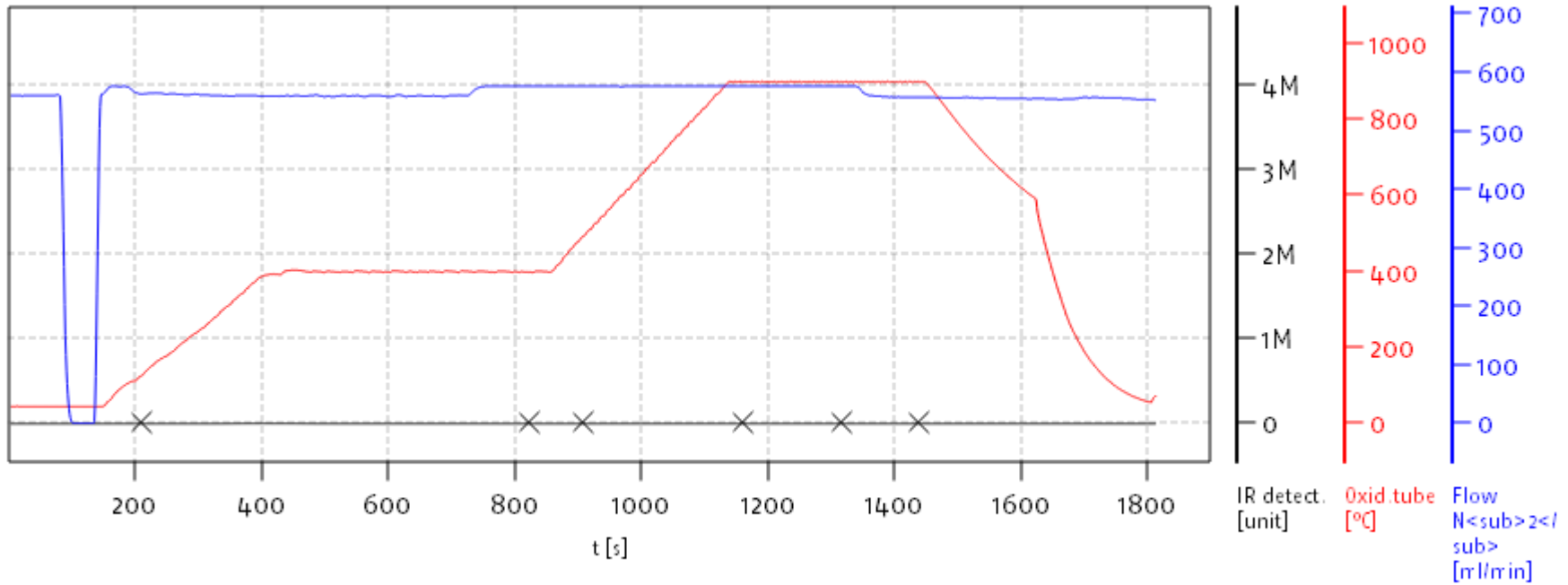
EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLA0148	Instrument:	TOC Cube
		Calibration:	FD00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
LDW23-SC1030	23A0249-10	CubeData_01182023@1339-018	Solid	01/18/23 08:03
LDW23-SC1020	23A0249-11	CubeData_01182023@1339-025	Solid	01/18/23 08:33
Calibration Check	SLA0148-CCV8	CubeData_01182023@1339-064	NA	01/18/23 11:35
Calibration Blank	SLA0148-CCB8	CubeData_01182023@1339-070	NA	01/18/23 12:05
Calibration Check	SLA0148-CCV9	CubeData_01182023@1339-082	NA	01/18/23 13:06
Calibration Blank	SLA0148-CCB9	CubeData_01182023@1339-088	NA	01/18/23 13:36

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
1	1	BLANK	1.00		CARBON	1/ 16/2023 9:31 AM	bl	0.000	15 236	0.000	0.000	1 307	2 043	0.000	0.000	1.0000	1.0000



Name:

Access: soliTOC superuser

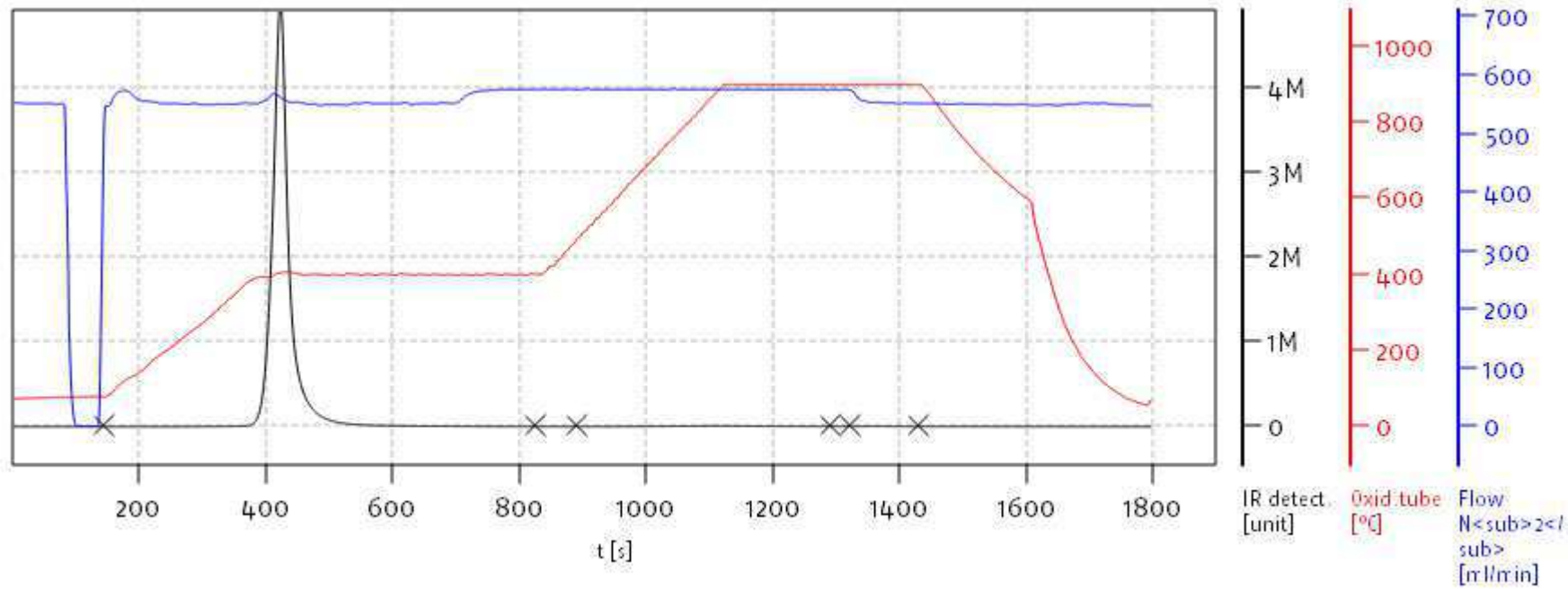
Date: Wed Jan 18 13:37:19 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
2	2	Dfactor	18.70		CARBON	1/16/2023 10:01 AM	bl	44.446	5 710 410	44.766	0.000	12 695	65 222	44.446	0.320	0.9446	1.0000



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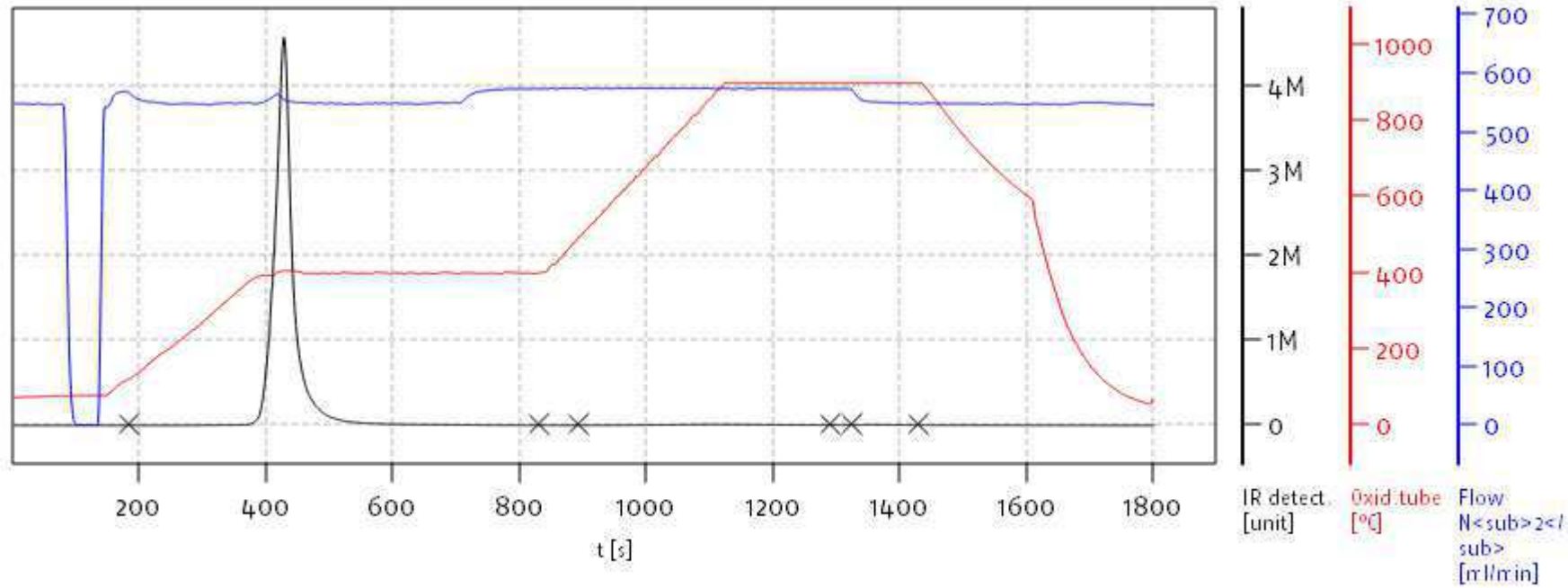
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
3	3	Dfactor	19.40		CARBON	1/16/2023 10:32 AM	bl	44.446	5 756 476	44.952	0.000	22 589	90 023	44.446	0.507	0.9721	1.0000



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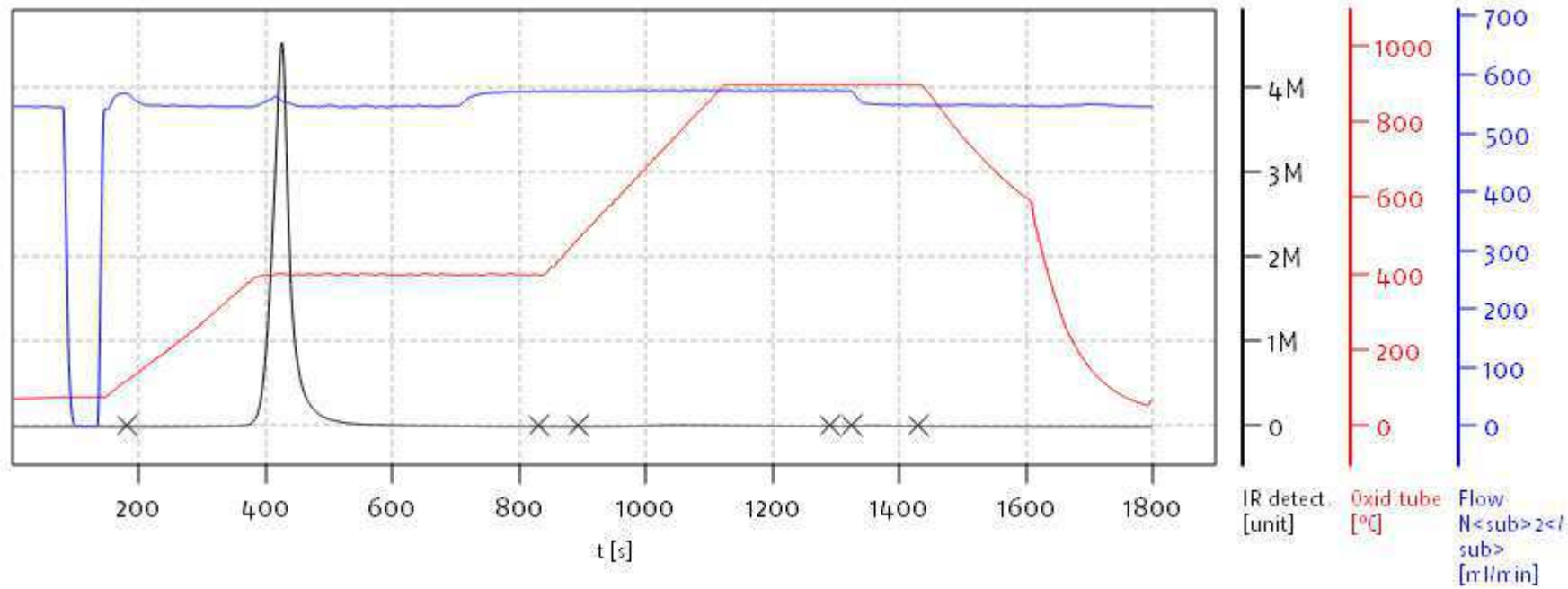
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
4	4	SLA0148-ICV1	19.10		CARBON	1/16/2023 11:02 AM	bl	44.090	5 702 940	44.849	0.000	26 450	120 201	44.090	0.759	0.9583	1.0000



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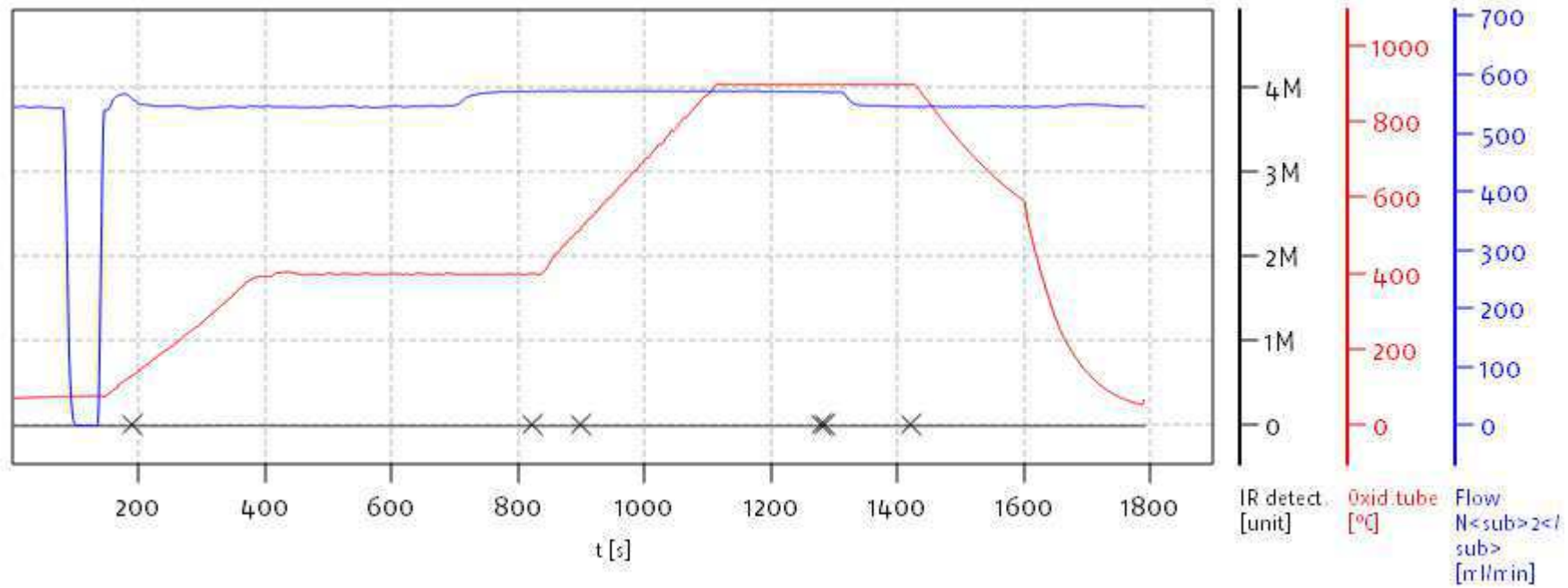
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
5	5	SLA0148-ICB1	504.80		CARBON	1/16/2023 11:32 AM	bl,C3u,C2u	0.000	9 918	0.000	0.000	1 077	150	0.000	0.000	0.9583	1.0000



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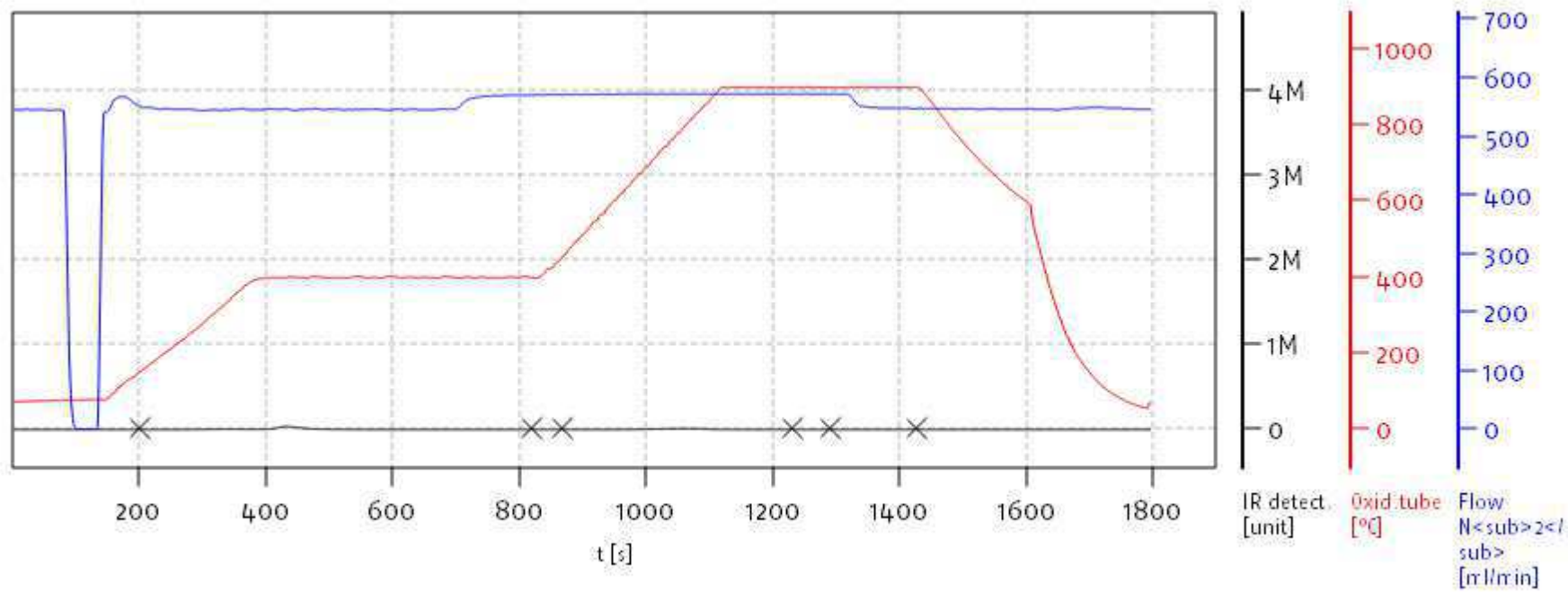
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
6	6	BLA0320-MRL1	517.50		CARBON	1/16/2023 12:03 PM	bl,C2u	0.014	76 742	0.017	0.000	1 087	35 567	0.014	0.003	0.9583	1.0000



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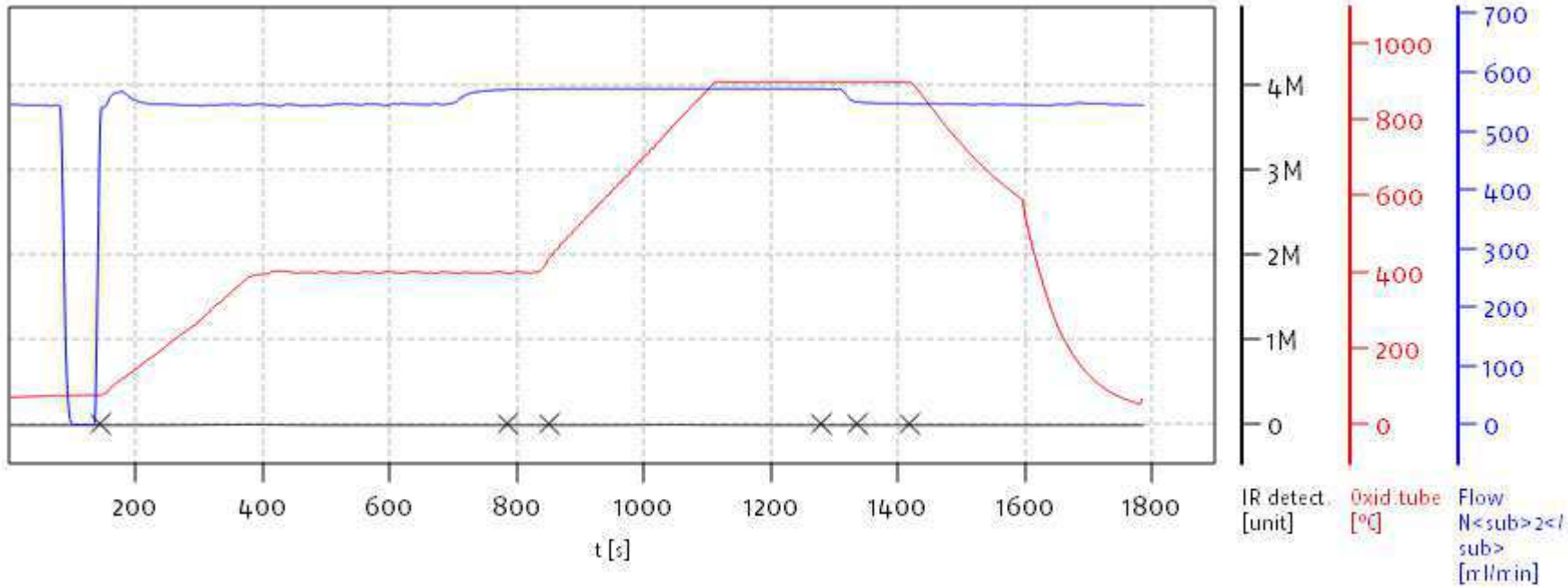
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
7	7	BLA0320-BLK1	506.00		CARBON	1/16/2023 12:33 PM	bl,C2u	0.002	32 730	0.002	0.000	631	23 200	0.002	0.000	0.9583	1.0000



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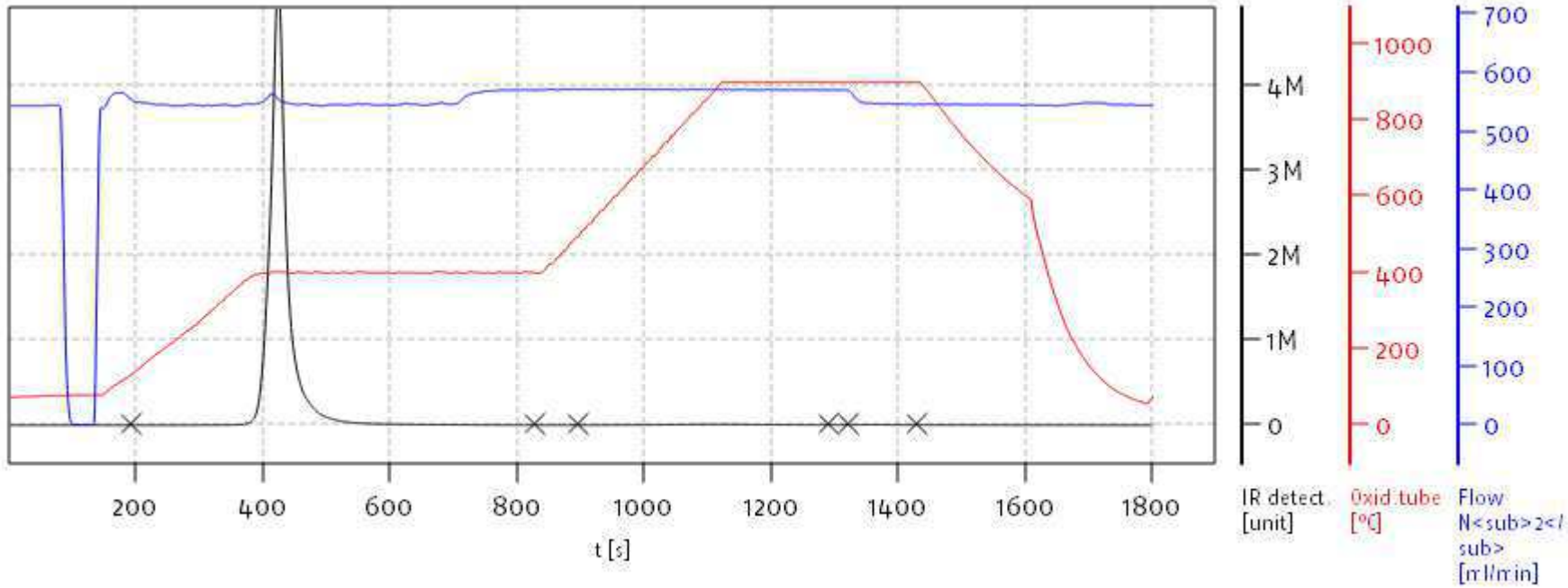
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
8	8	BLA0320-BS1	19.70		CARBON	1/16/2023 1:03 PM	bl	44.897	5 988 412	45.292	0.000	17 663	76 812	44.897	0.395	0.9583	1.0000



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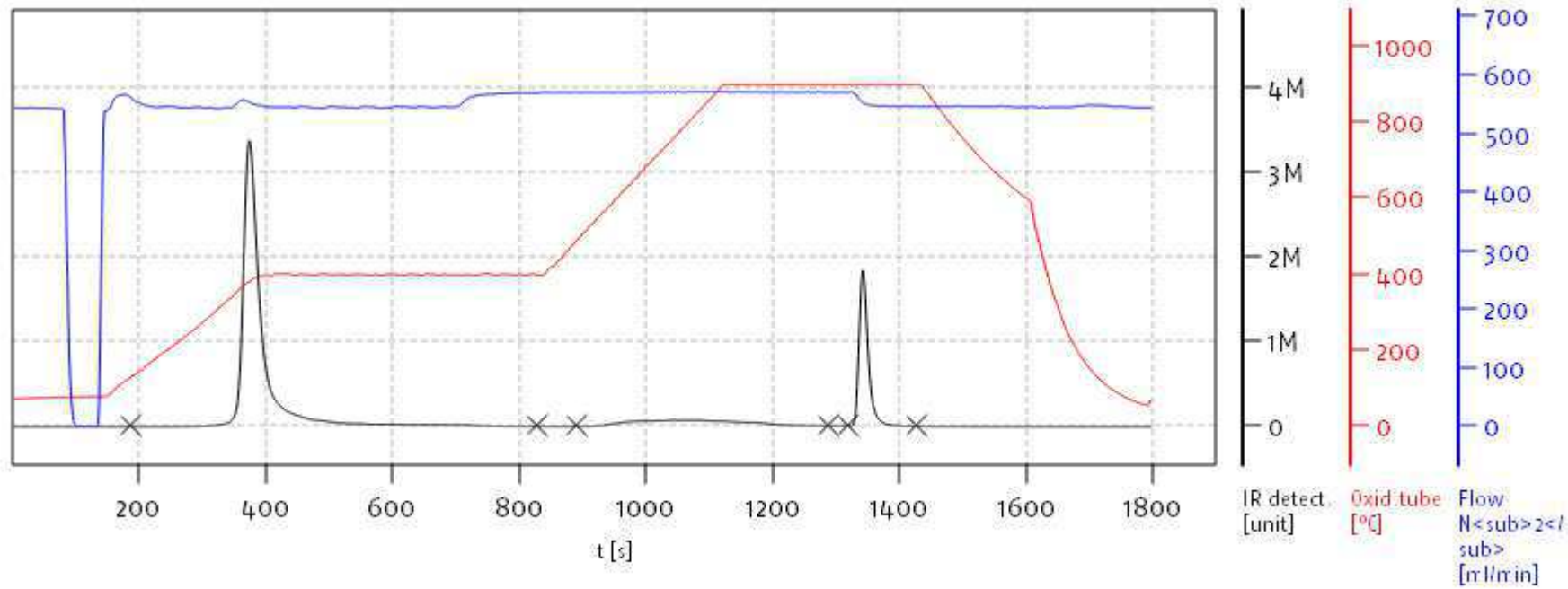
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
9	9	BLA0320-SRM1	273.40		CARBON	1/16/2023 1:34 PM	bl	2.944	4 256 130	3.297	0.648	1 171 743	650 313	2.295	0.353	0.9583	1.0000



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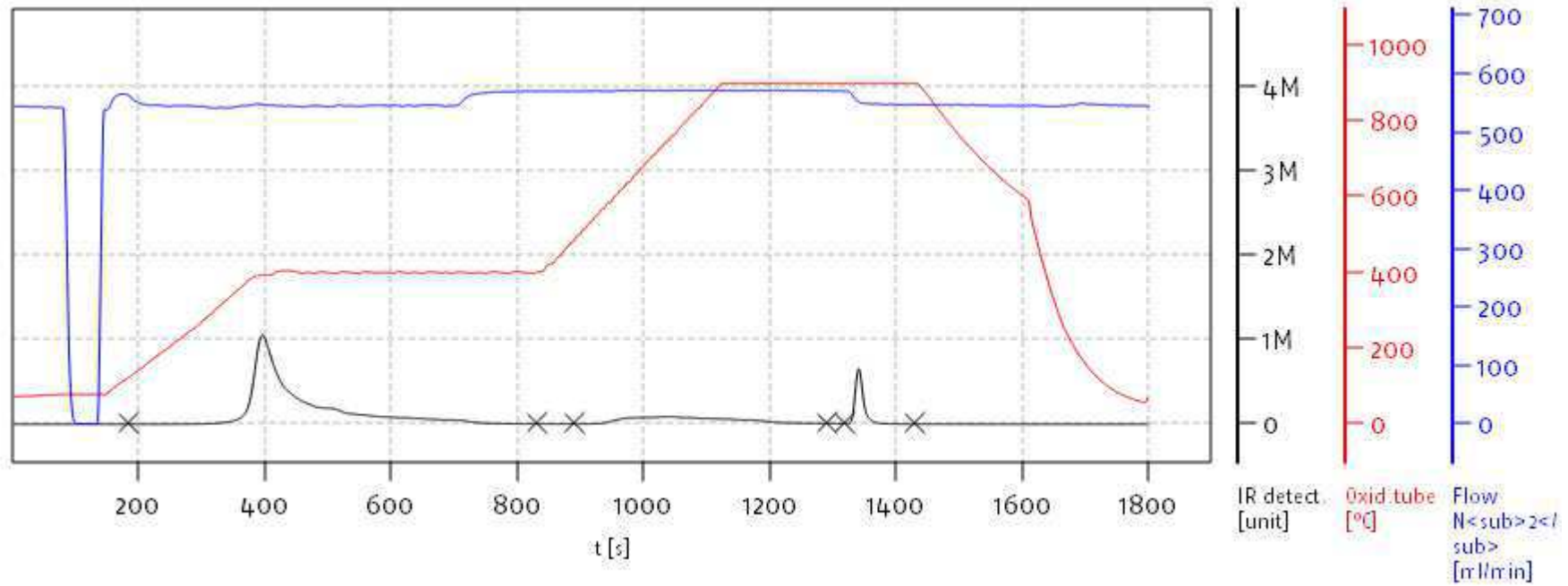
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
10	10	23A0179-01	550.40		CARBON	1/16/2023 2:04 PM	bl	0.930	3 107 756	1.119	0.099	380 052	699 448	0.831	0.189	0.9583	1.0000



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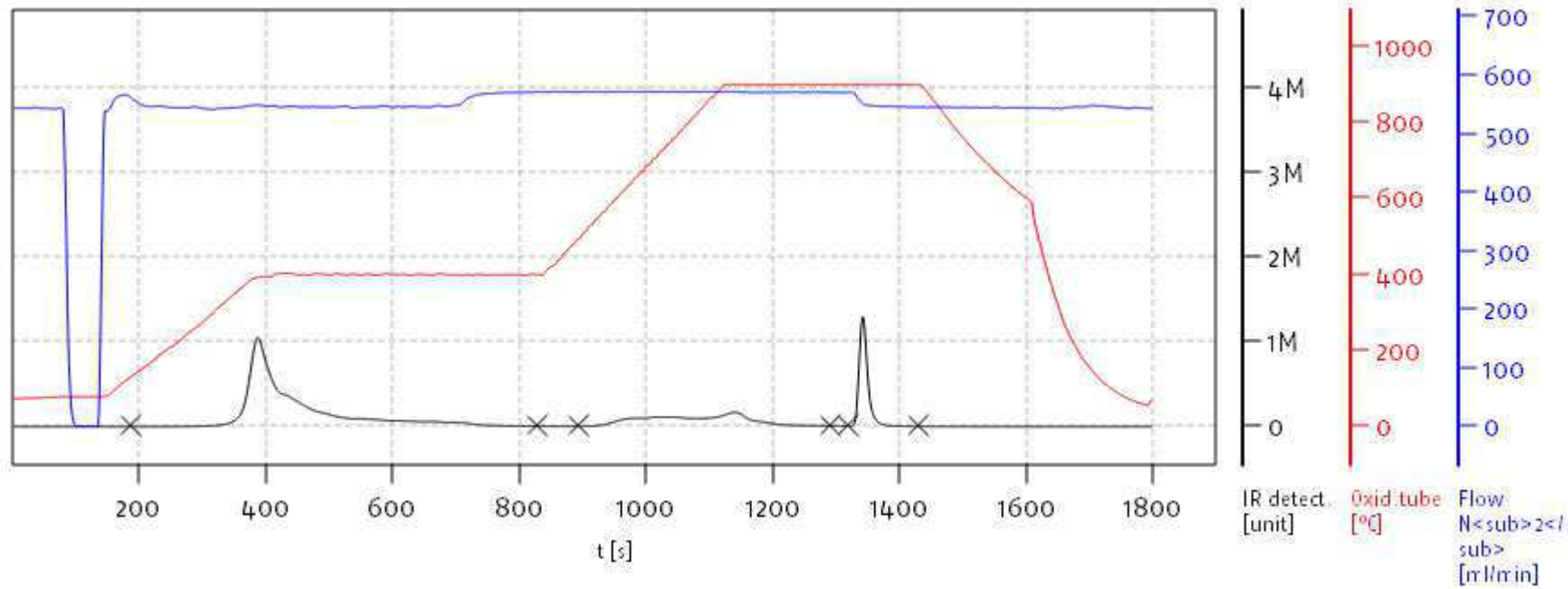
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
11	11	BLA0320-DUP1	573.80		CARBON	1/16/2023 2:35 PM	bl	0.968	2 987 709	1.243	0.202	775 319	1 048 083	0.766	0.276	0.9583	1.0000



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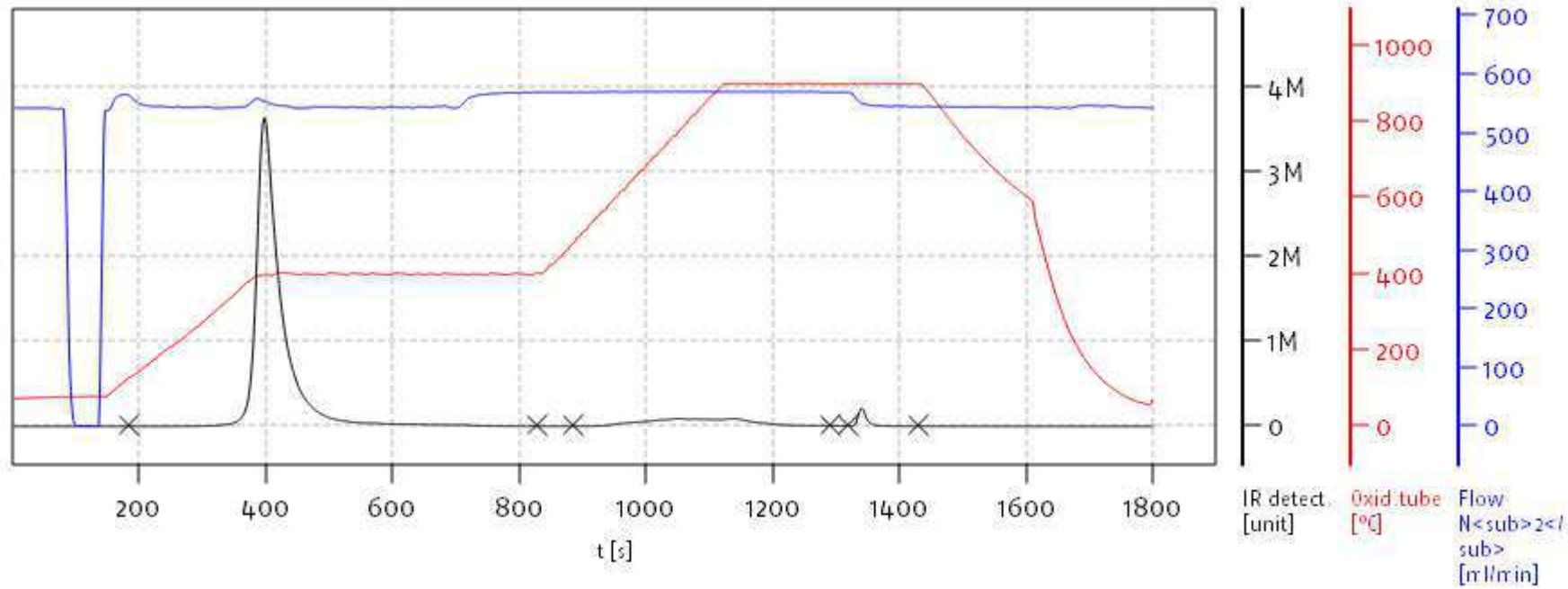
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
12	12	BLA0320-MS1	561.00	0.0085	CARBON	1/16/2023 3:05 PM	bl	1.640	6 120 581	1.823	0.029	129 963	688 573	1.612	0.183	0.9583	1.0000



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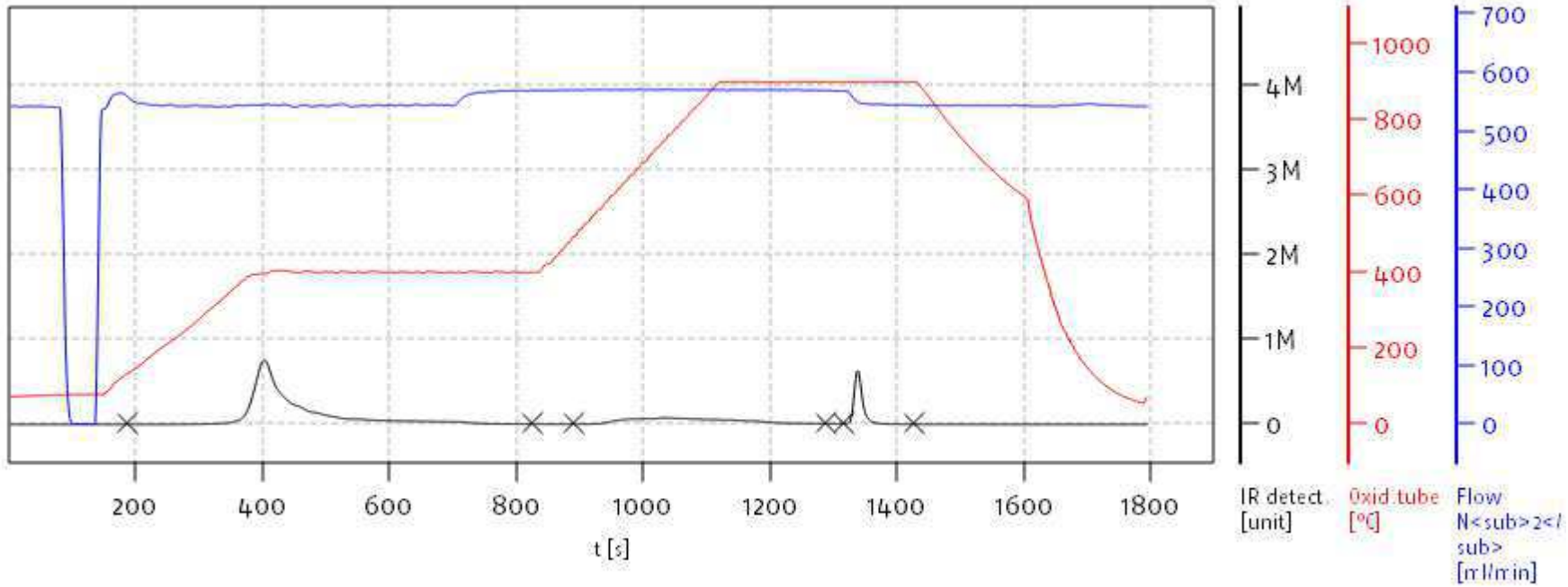
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
13	13	23A0179-02	511.60		CARBON	1/16/2023 3:35 PM	bl	0.698	2 074 463	0.872	0.104	371 323	602 218	0.594	0.174	0.9583	1.0000



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soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
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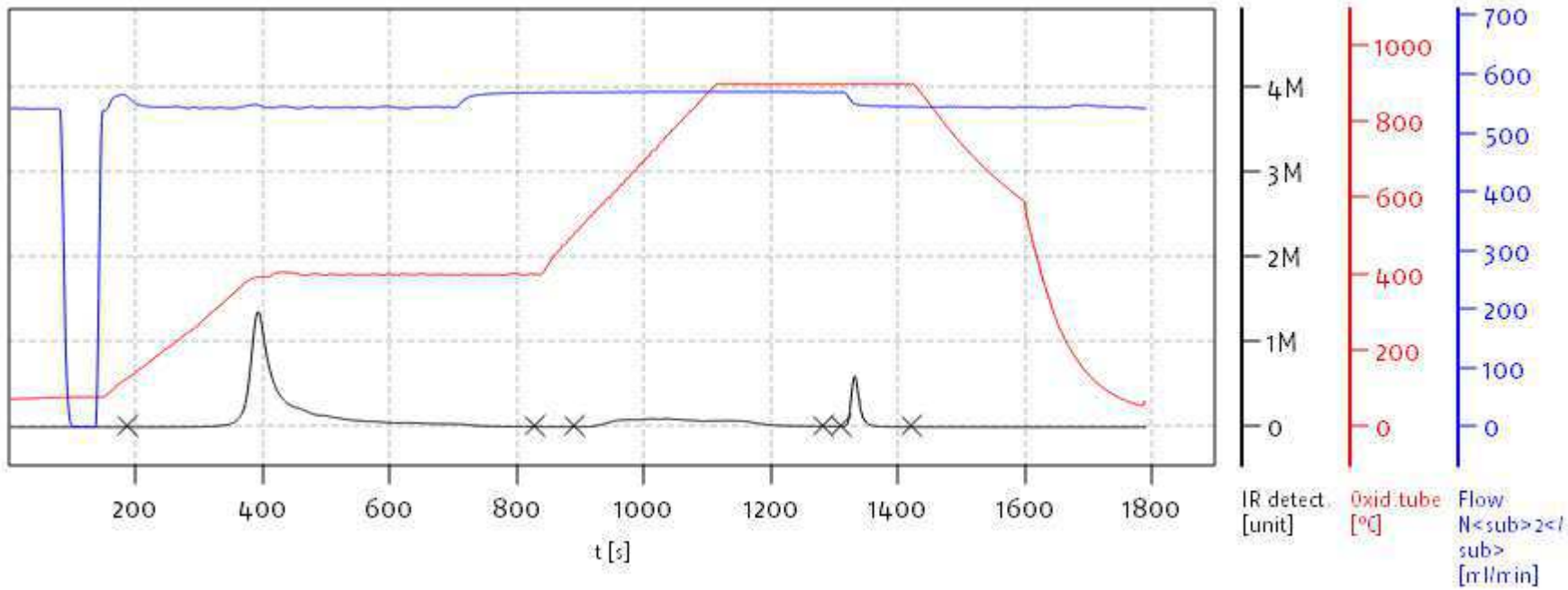
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
14	14	23A0179-03	538.20		CARBON	1/16/2023 4:06 PM	bl	0.889	2 906 309	1.113	0.095	355 802	807 719	0.794	0.225	0.9583	1.0000



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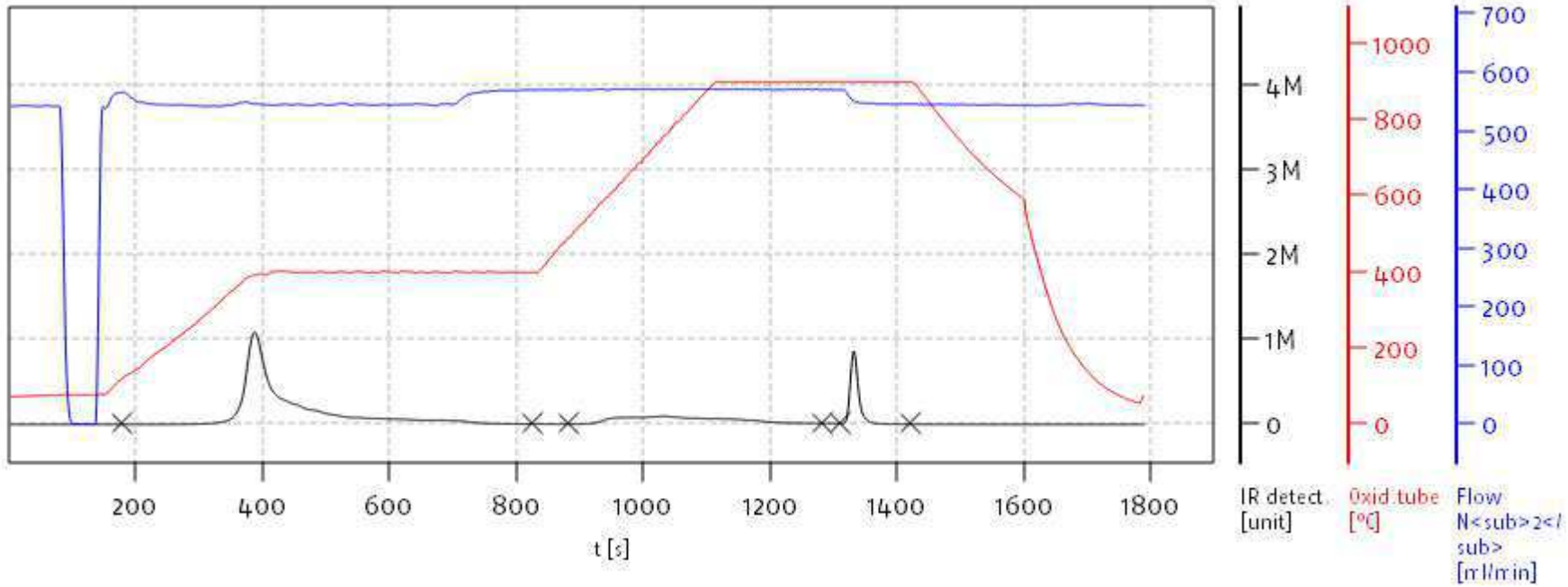
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
15	15	23A0179-04	524.30		CARBON	1/16/2023 4:36 PM	bl	0.922	2 791 519	1.144	0.139	498 729	778 093	0.782	0.222	0.9583	1.0000



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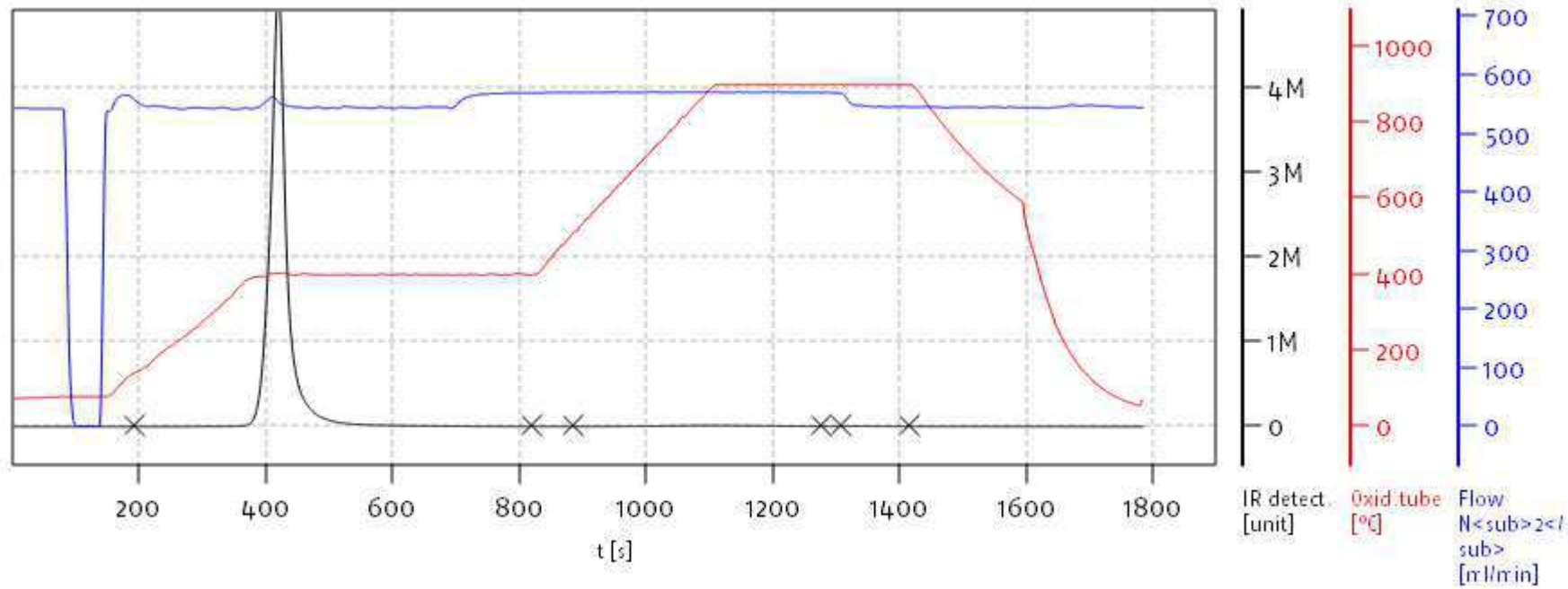
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
16	16	SLA0148-CCV1	19.70		CARBON	1/16/2023 5:06 PM	bl	44.513	5 937 466	45.114	0.000	15 484	103 025	44.513	0.601	0.9583	1.0000



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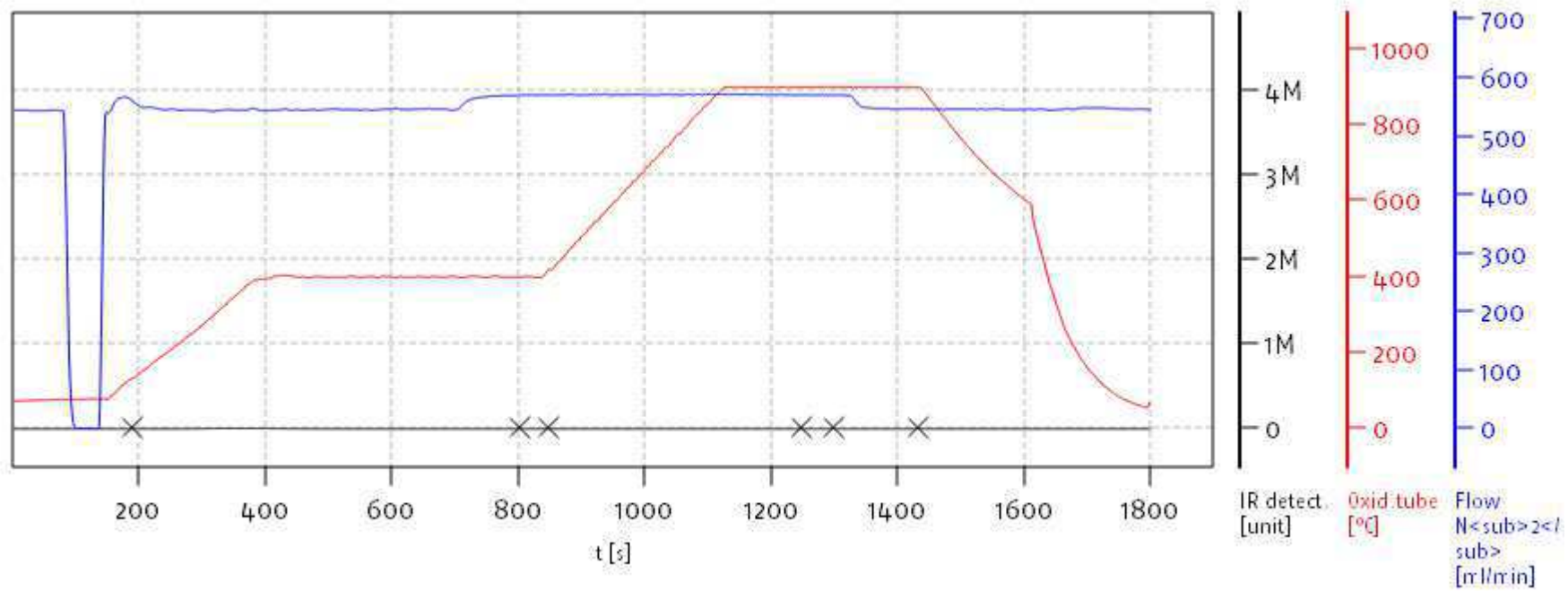
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
17	17	SLA0148-CCB1	537.30		CARBON	1/16/2023 5:36 PM	bl,C2u	0.001	29 984	0.001	0.000	667	3 187	0.001	0.000	0.9583	1.0000



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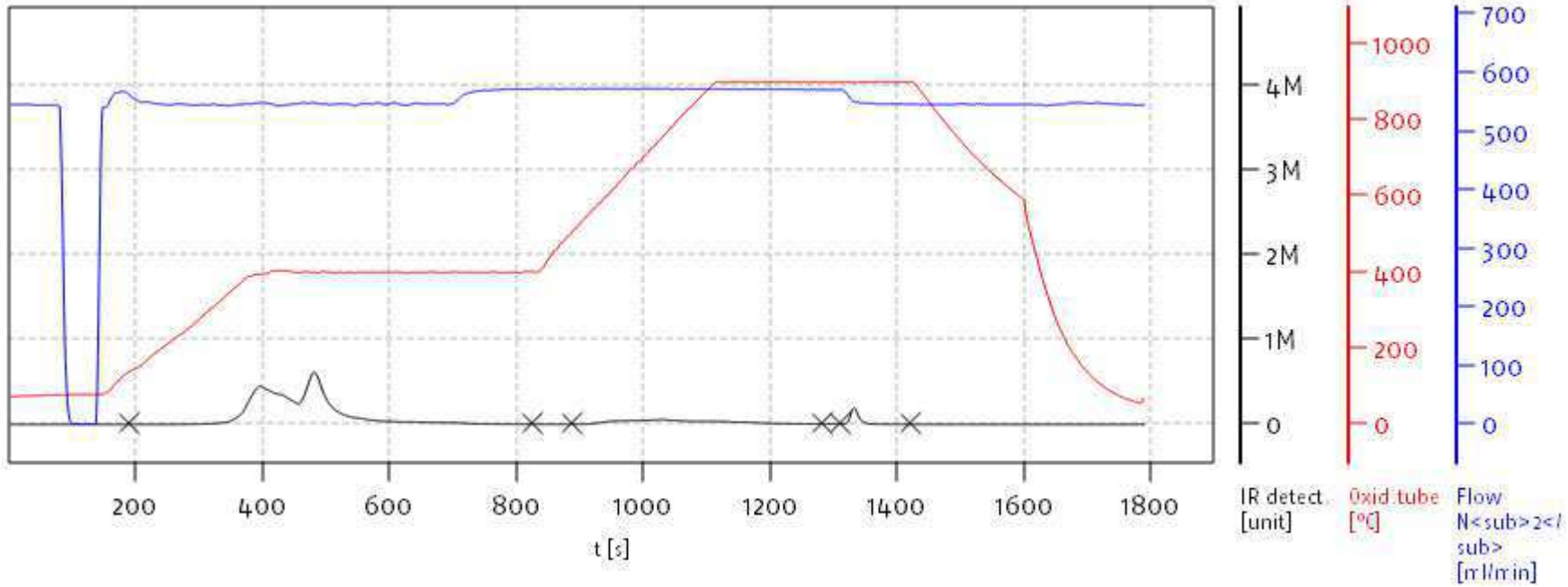
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
18	18	23A0179-05	586.50		CARBON	1/16/2023 6:06 PM	bl	0.635	2 440 609	0.736	0.024	117 833	411 090	0.611	0.102	0.9583	1.0000



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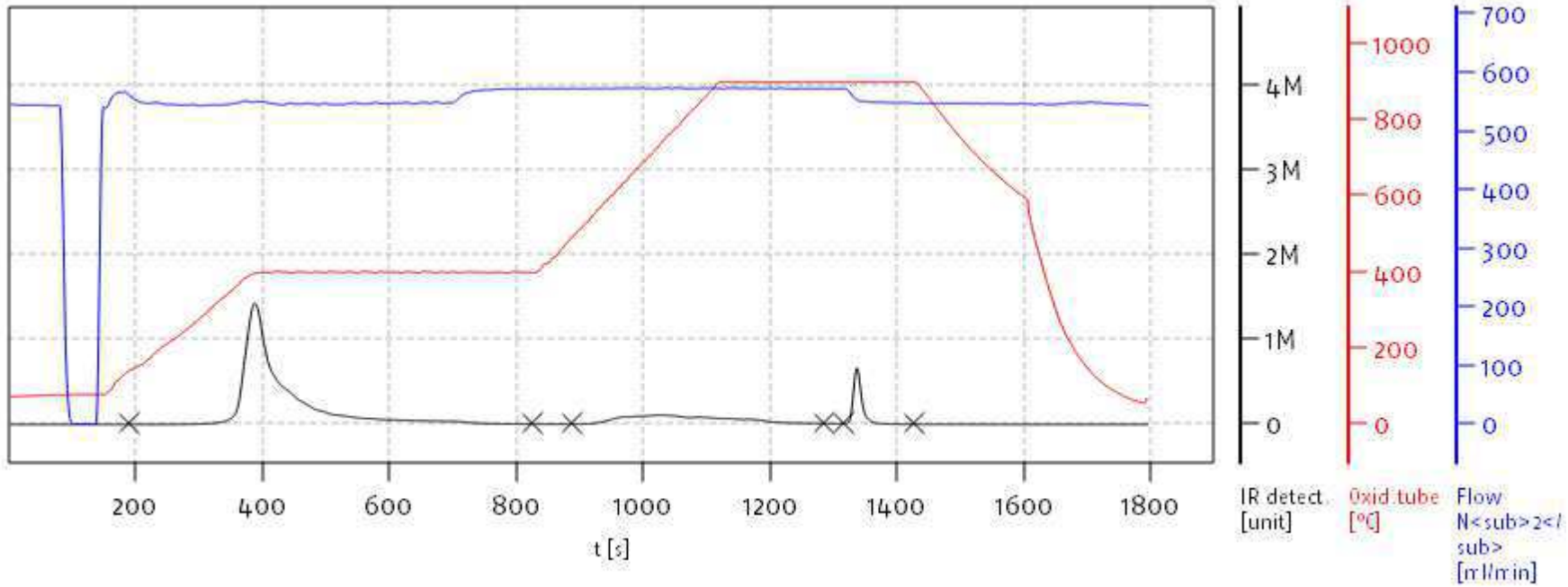
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
19	19	23A0179-06	537.40		CARBON	1/16/2023 6:37 PM	bl	1.084	3 573 030	1.321	0.105	390 098	851 677	0.979	0.238	0.9583	1.0000



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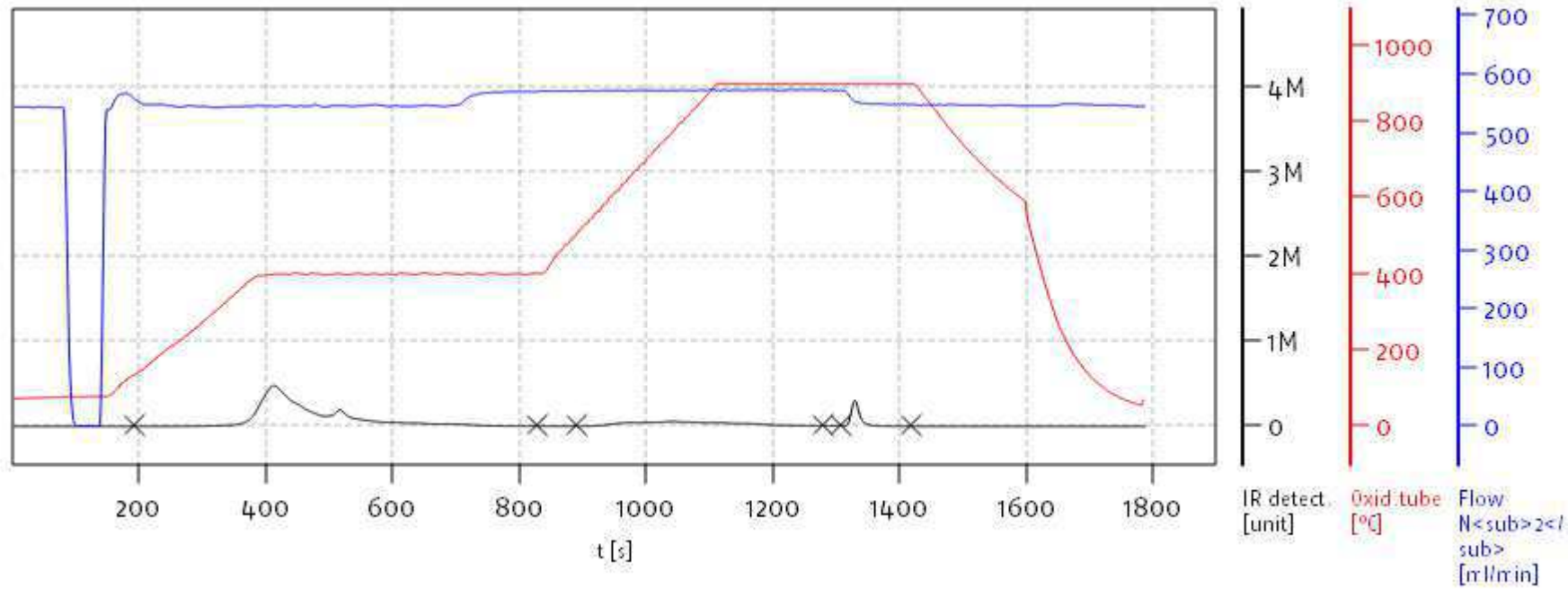
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
20	20	23A0179-07	546.00		CARBON	1/16/2023 7:07 PM	bl	0.536	1 836 701	0.653	0.044	181 543	439 951	0.492	0.117	0.9583	1.0000



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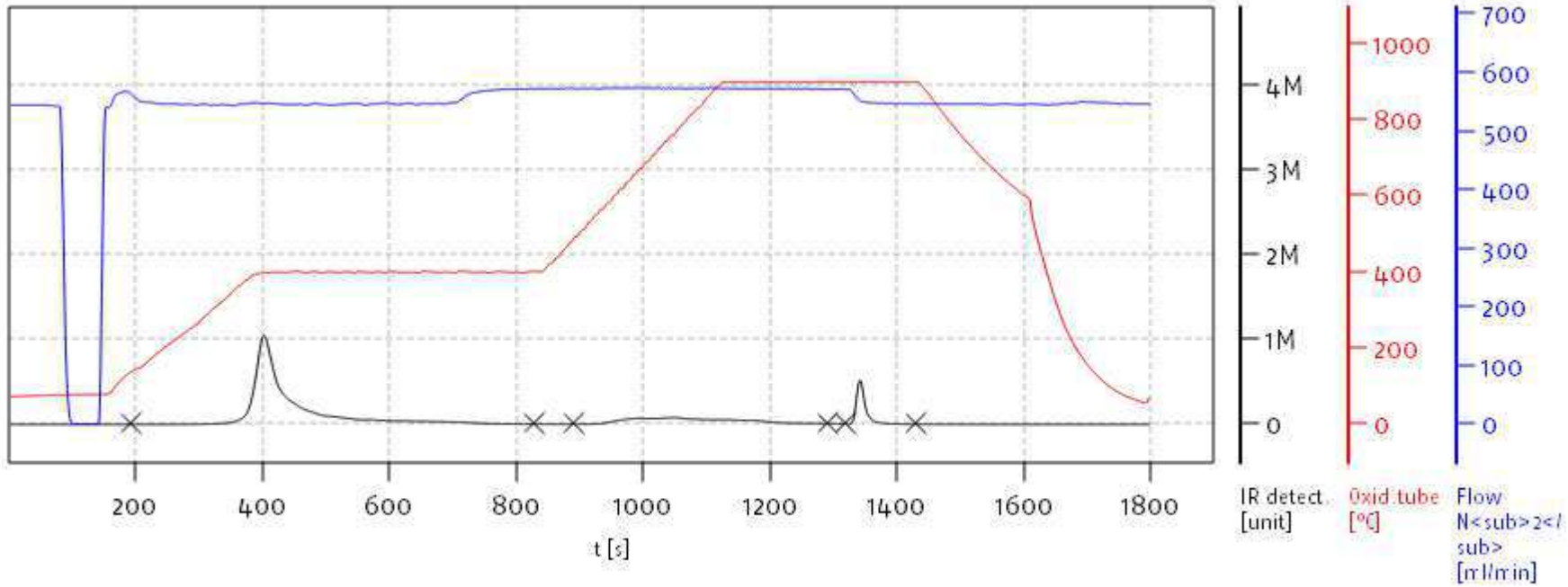
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
21	21	23A0179-08	523.50		CARBON	1/16/2023 7:37 PM	bl	0.745	2 344 092	0.923	0.088	325 497	628 081	0.657	0.178	0.9583	1.0000



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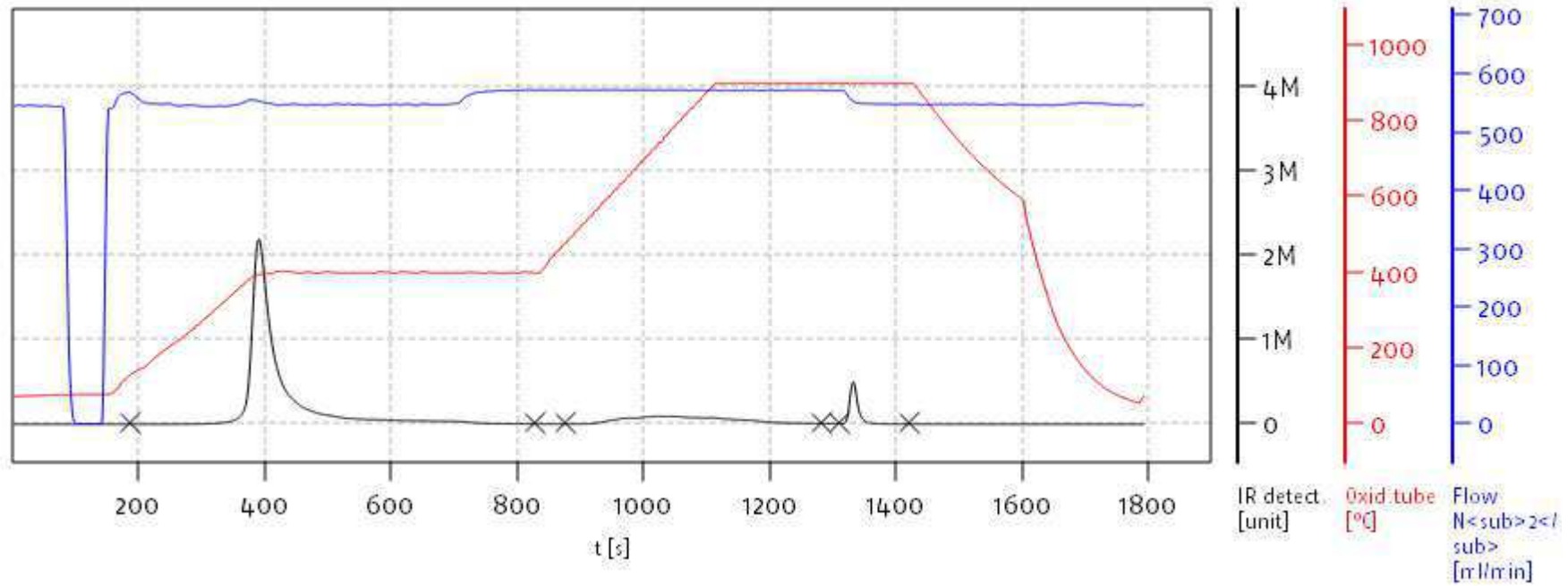
Access: soliTOC superuser

Date: Wed Jan 18 13:37:19 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
22	22	23A0179-09	533.30		CARBON	1/16/2023 8:08 PM	bl	1.117	3 775 743	1.320	0.074	283 141	726 044	1.043	0.203	0.9583	1.0000



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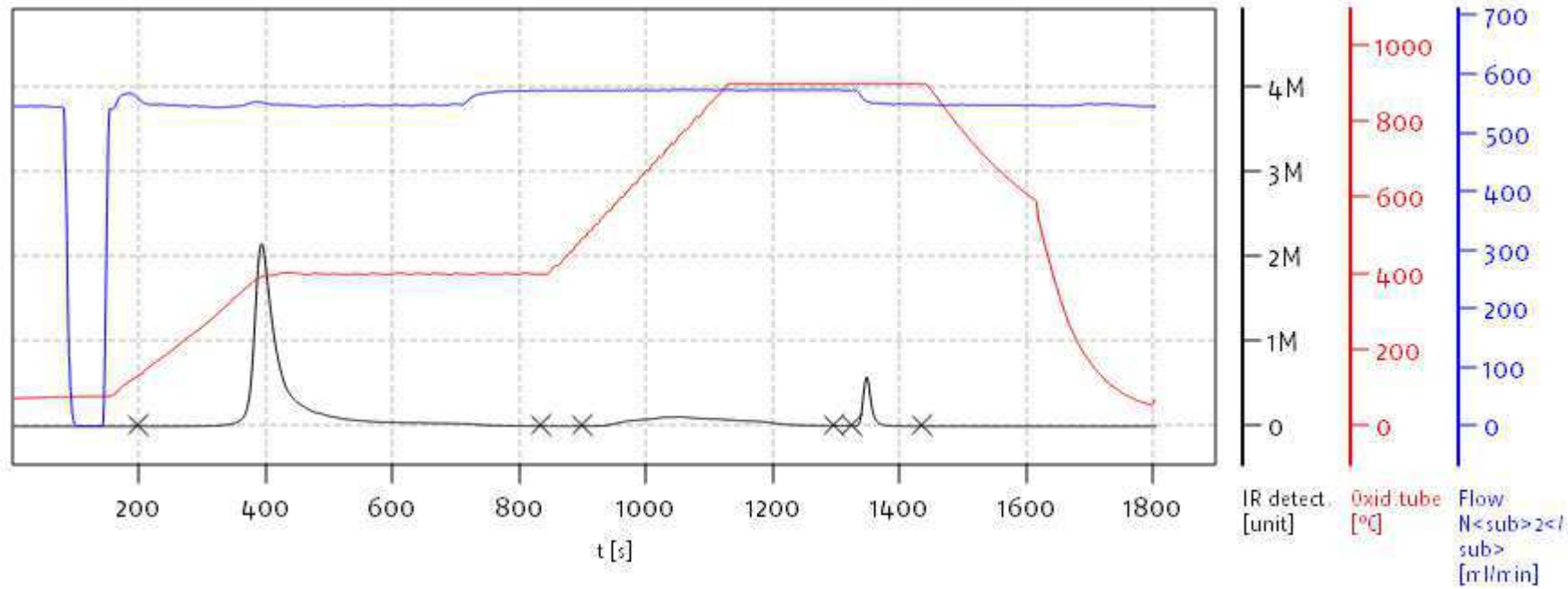
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
23	23	23A0179-10	539.70		CARBON	1/16/2023 8:38 PM	bl	1.151	3 895 653	1.379	0.088	331 906	822 198	1.064	0.228	0.9583	1.0000



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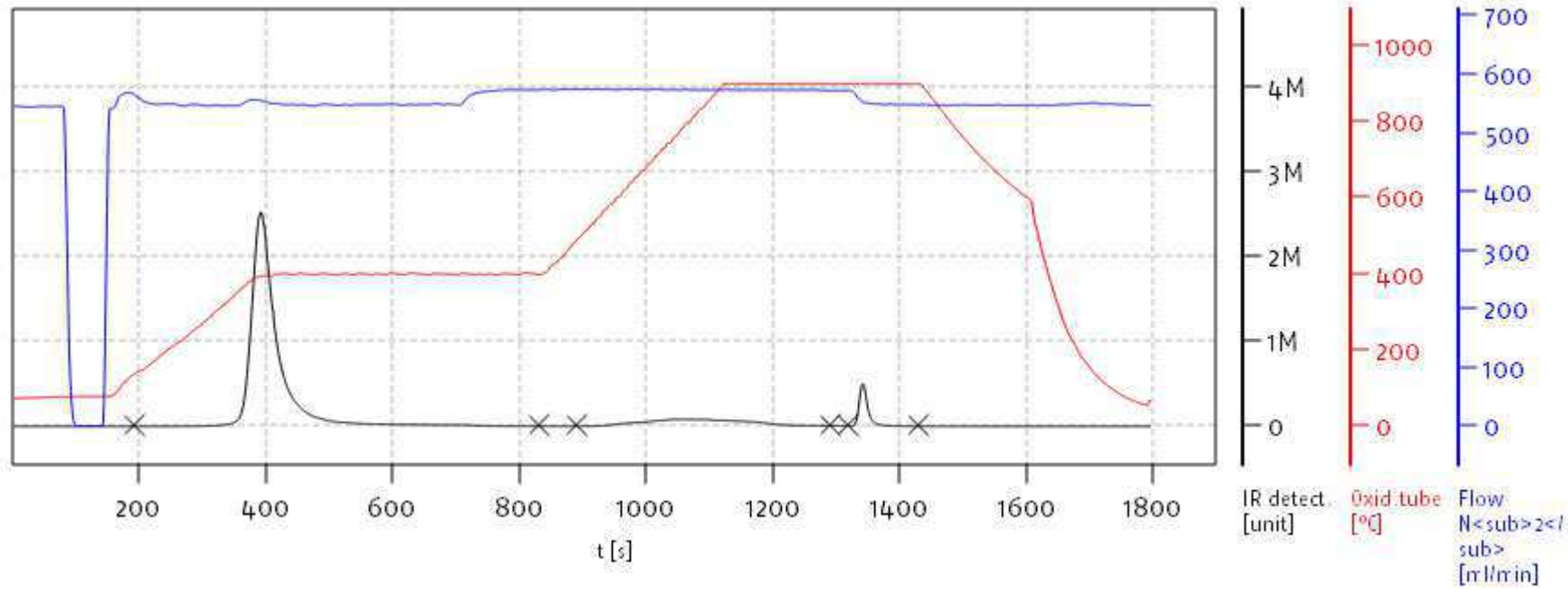
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
24	24	23A0179-11	533.30		CARBON	1/16/2023 9:08 PM	bl	1.297	4 402 925	1.473	0.080	301 709	632 226	1.217	0.176	0.9583	1.0000



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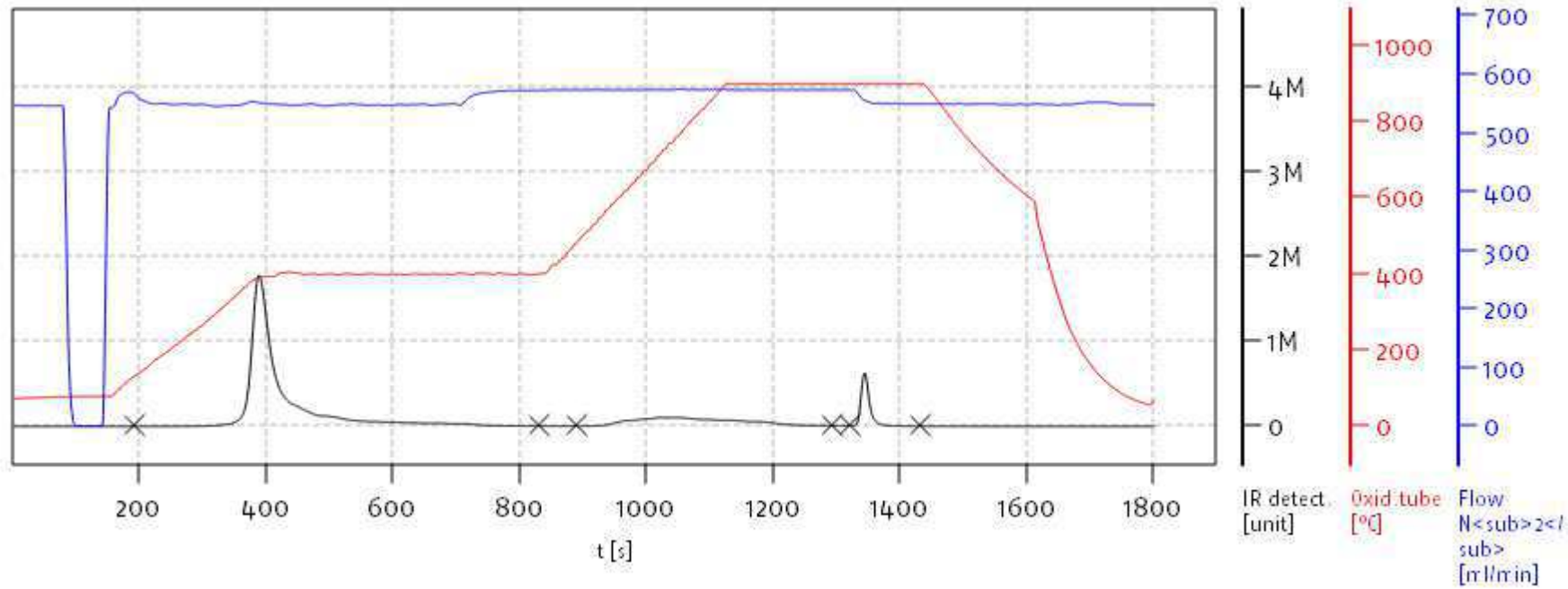
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
25	25	23A0179-12	507.00		CARBON	1/16/2023 9:39 PM	bl	1.069	3 319 753	1.307	0.106	373 163	805 635	0.964	0.238	0.9583	1.0000



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Serial No: 0300.181017
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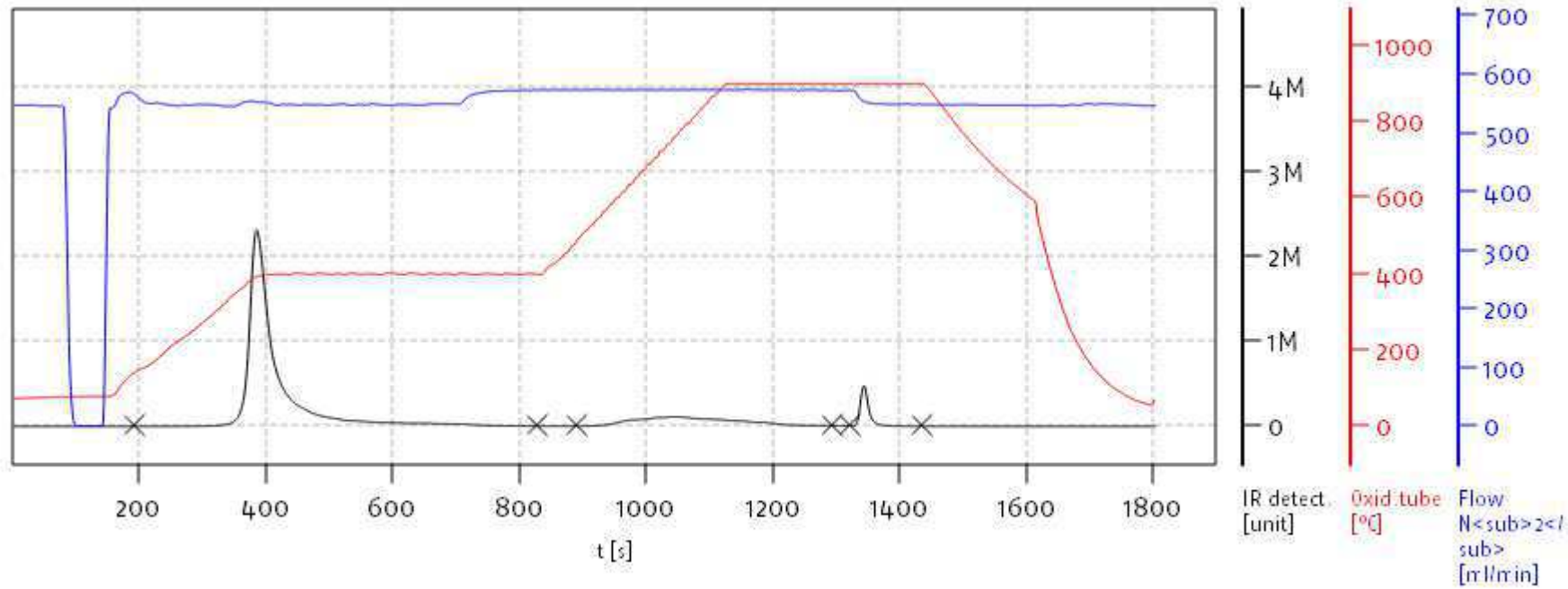
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
26	26	23A0206-01	538.90		CARBON	1/16/2023 10:09 PM	bl	1.185	4 065 661	1.411	0.073	281 380	811 312	1.112	0.225	0.9583	1.0000



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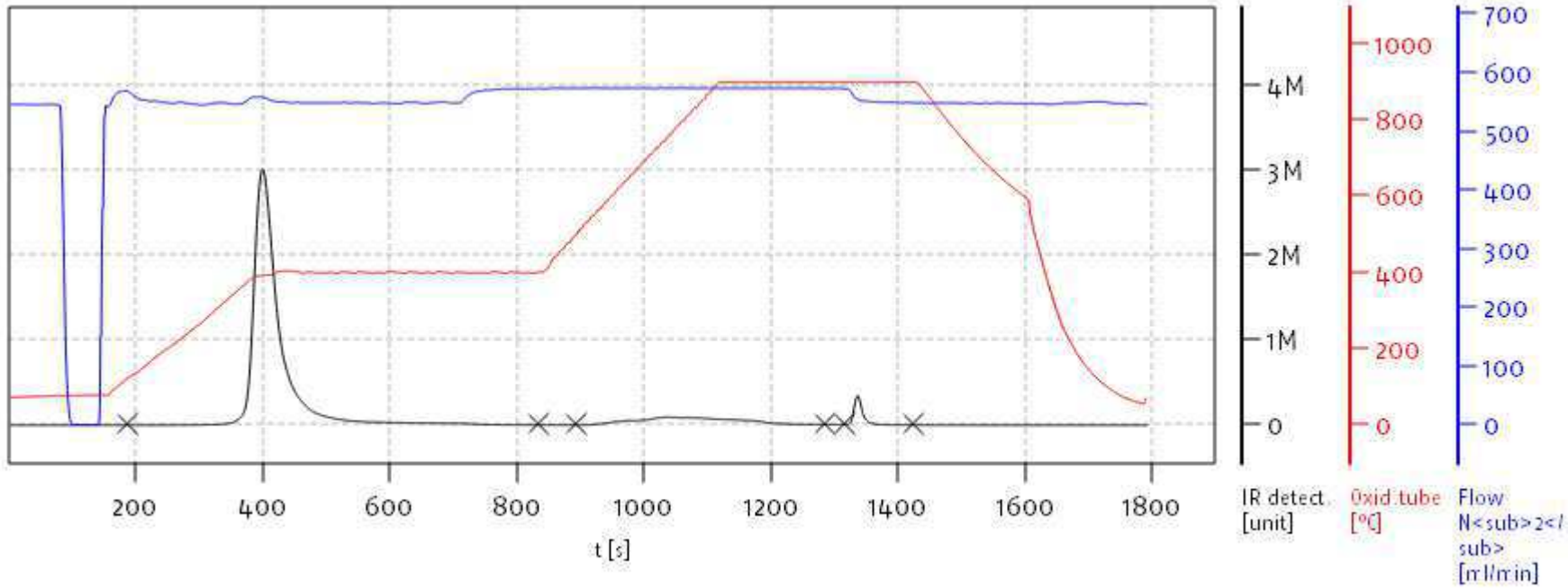
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
27	27	23A0206-02	595.70		CARBON	1/16/2023 10:40 PM	bl	1.331	5 179 834	1.503	0.047	208 772	687 920	1.283	0.172	0.9583	1.0000



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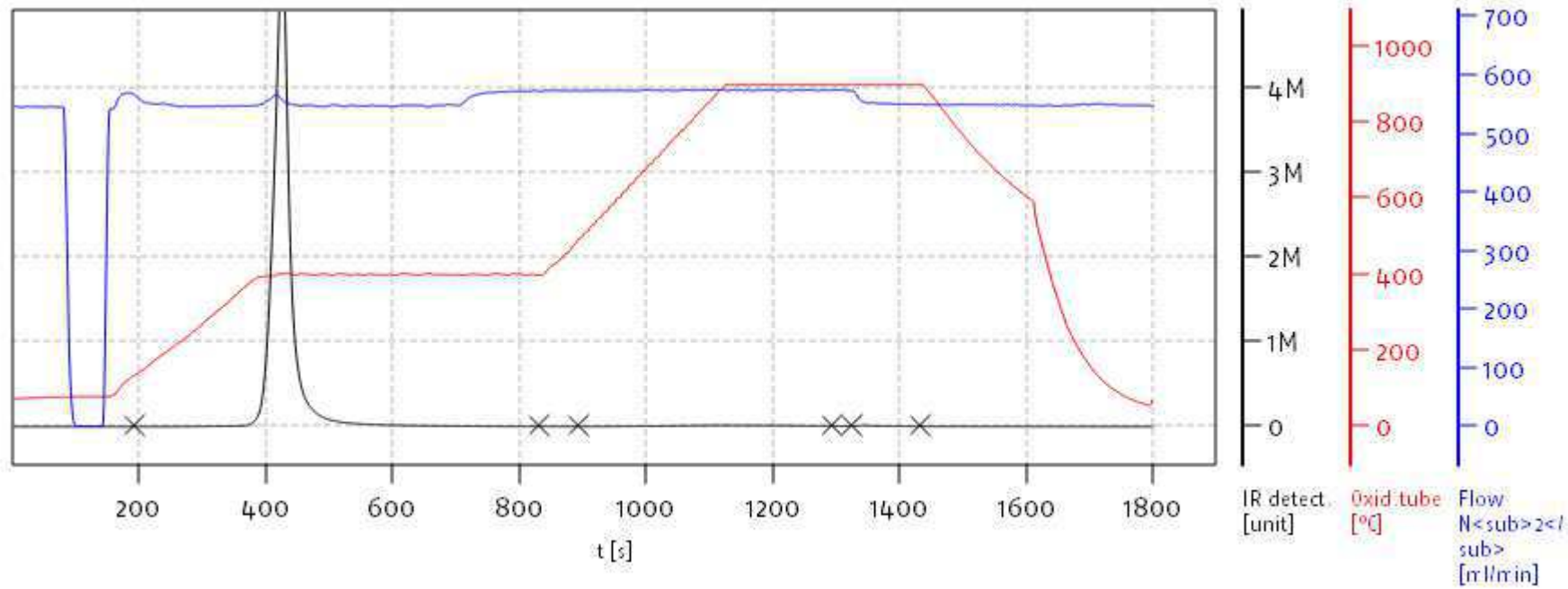
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
28	28	SLA0148-CCV2	21.20		CARBON	1/16/2023 11:10 PM	bl	44.489	6 382 964	45.293	0.008	27 673	136 581	44.481	0.804	0.9583	1.0000



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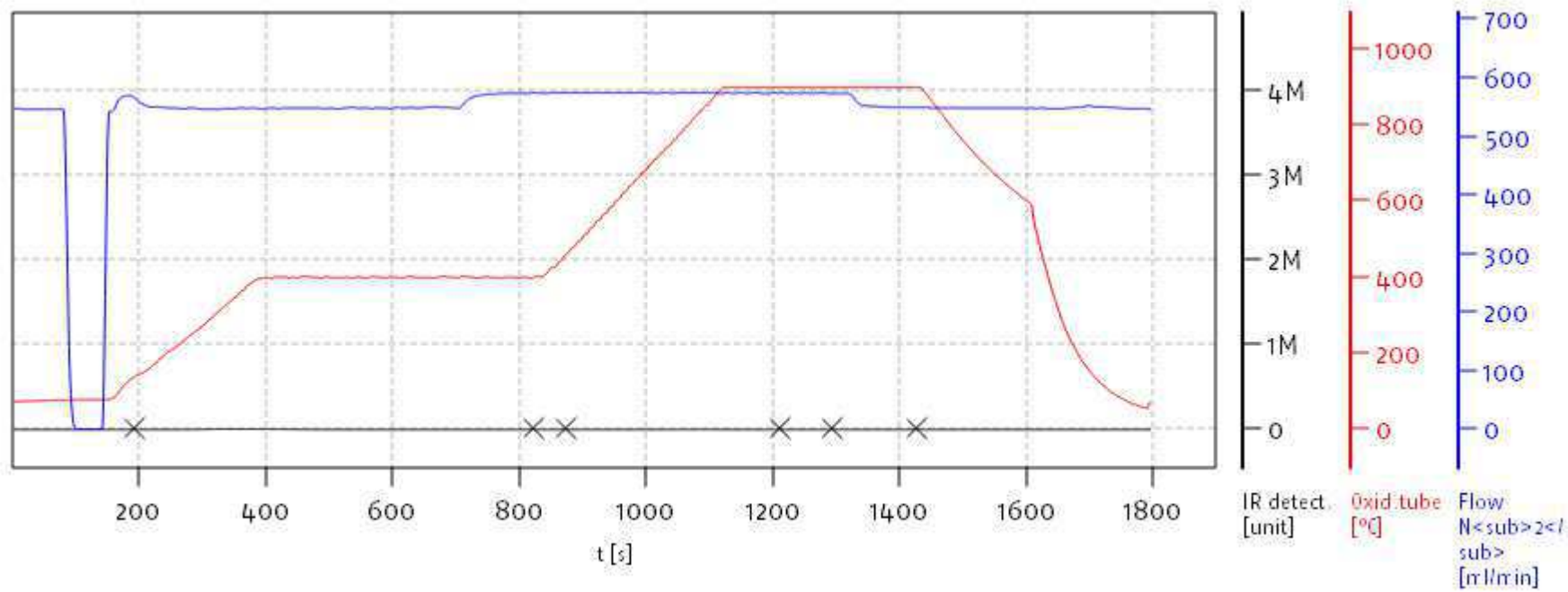
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
29	29	SLA0148-CCB2	509.10		CARBON	1/16/2023 11:40 PM	bl,C2u	0.001	29 959	0.001	0.000	569	4 288	0.001	0.000	0.9583	1.0000



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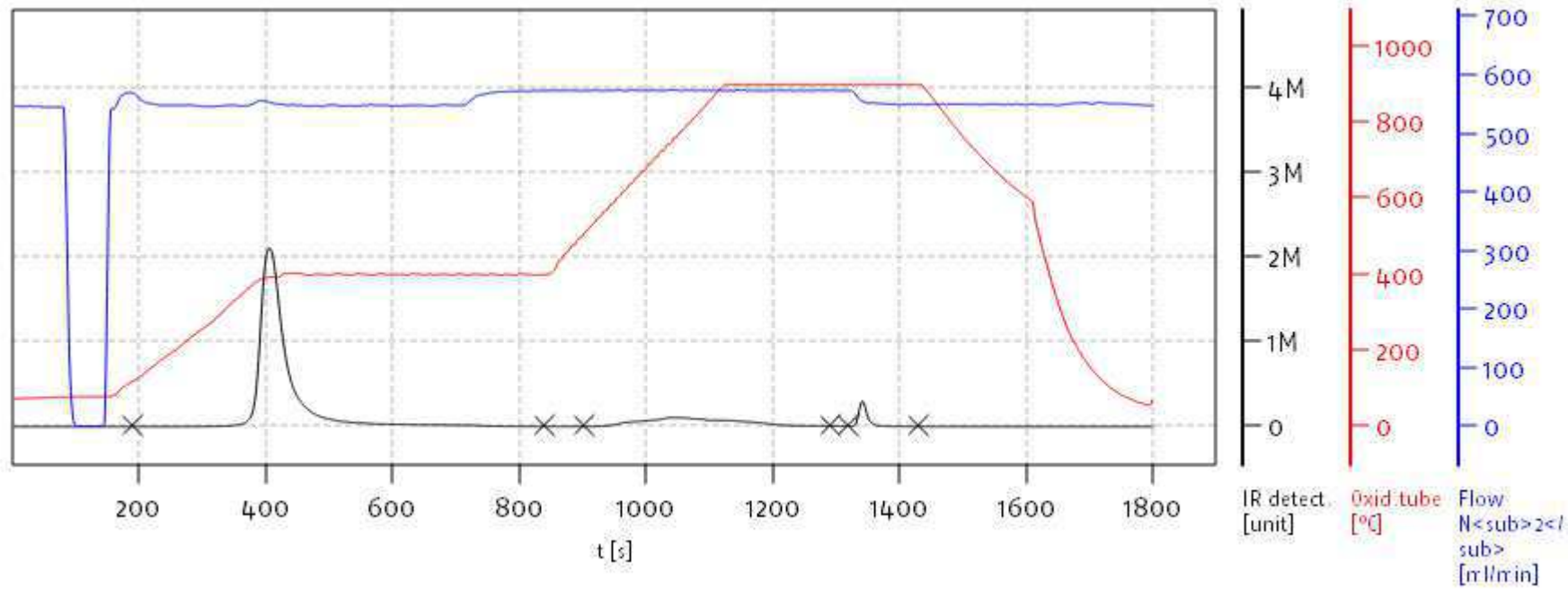
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
30	30	23A0206-03	527.60		CARBON	1/17/2023 12:11 AM	bl	1.101	3 783 421	1.304	0.045	179 081	717 491	1.056	0.203	0.9583	1.0000



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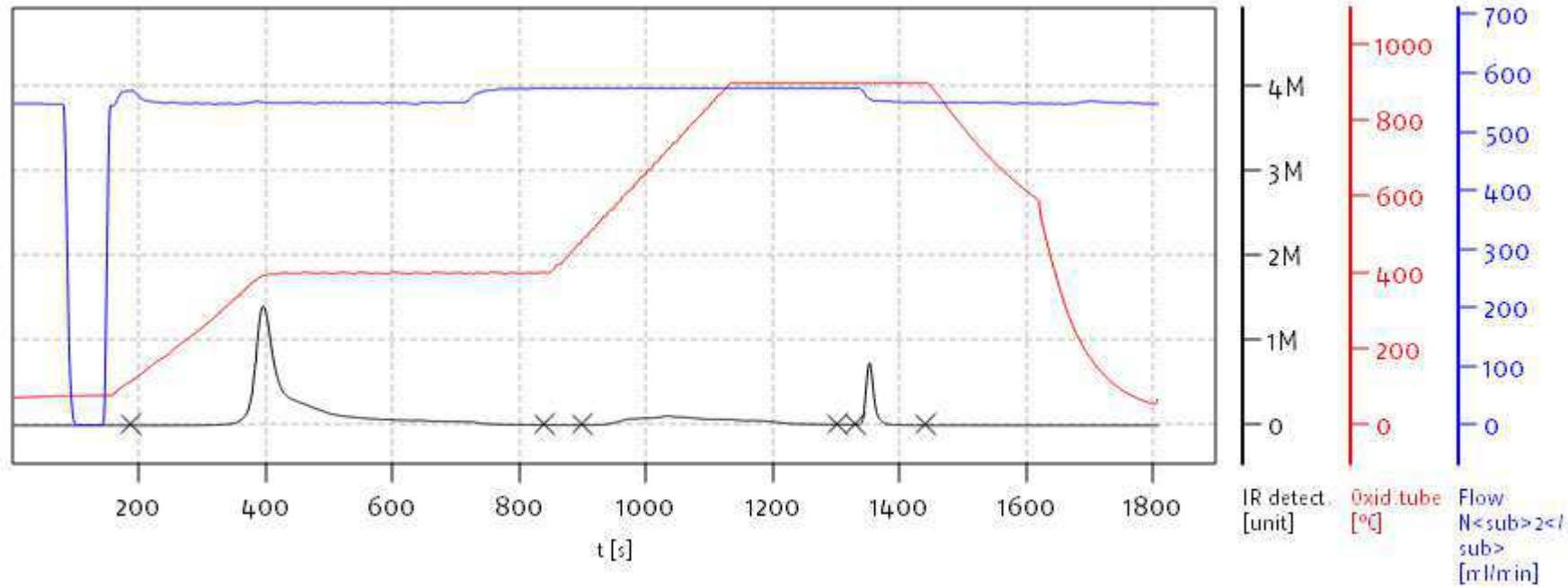
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
31	31	23A0206-04	565.50		CARBON	1/17/2023 12:41 AM	bl	0.919	3 121 037	1.128	0.107	416 415	790 792	0.812	0.209	0.9583	1.0000



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elementar
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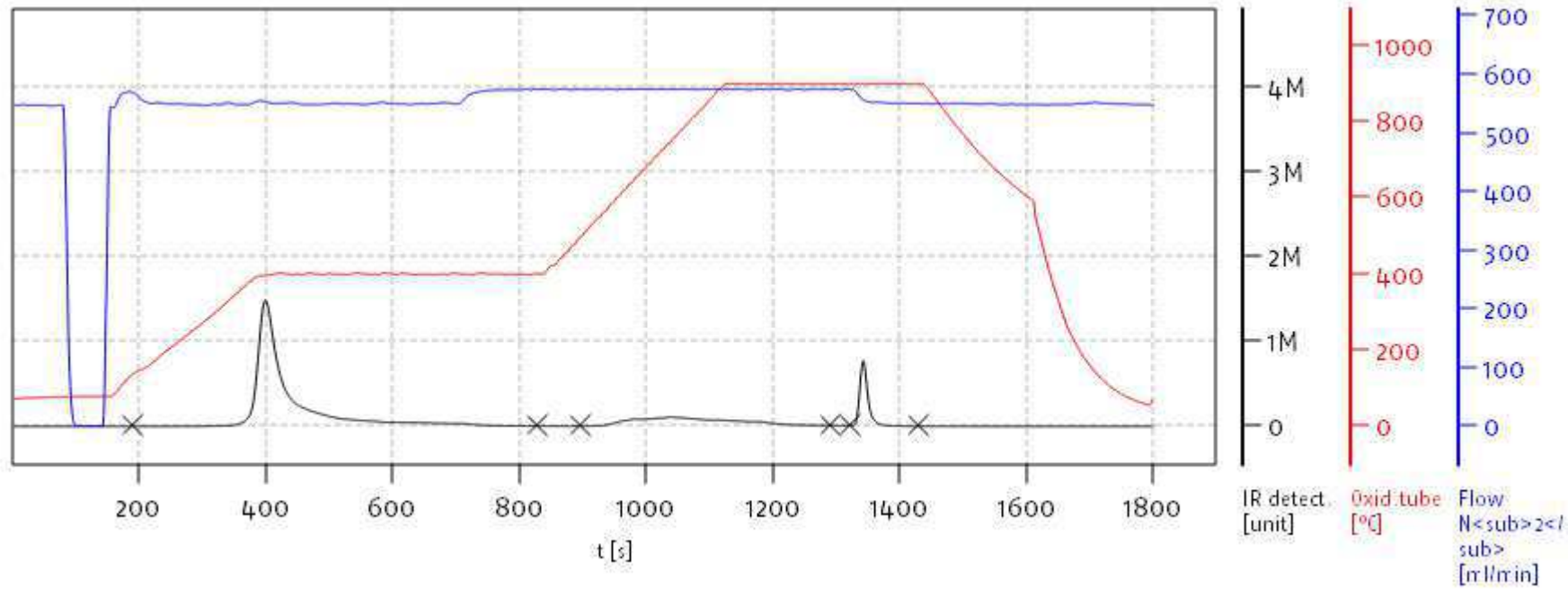
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
32	32	23A0206-05	534.60		CARBON	1/17/2023 1:12 AM	bl	0.927	2 930 701	1.152	0.121	445 880	801 402	0.806	0.224	0.9583	1.0000



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Soli TOC Cube, Carbon
Balance: BAL3
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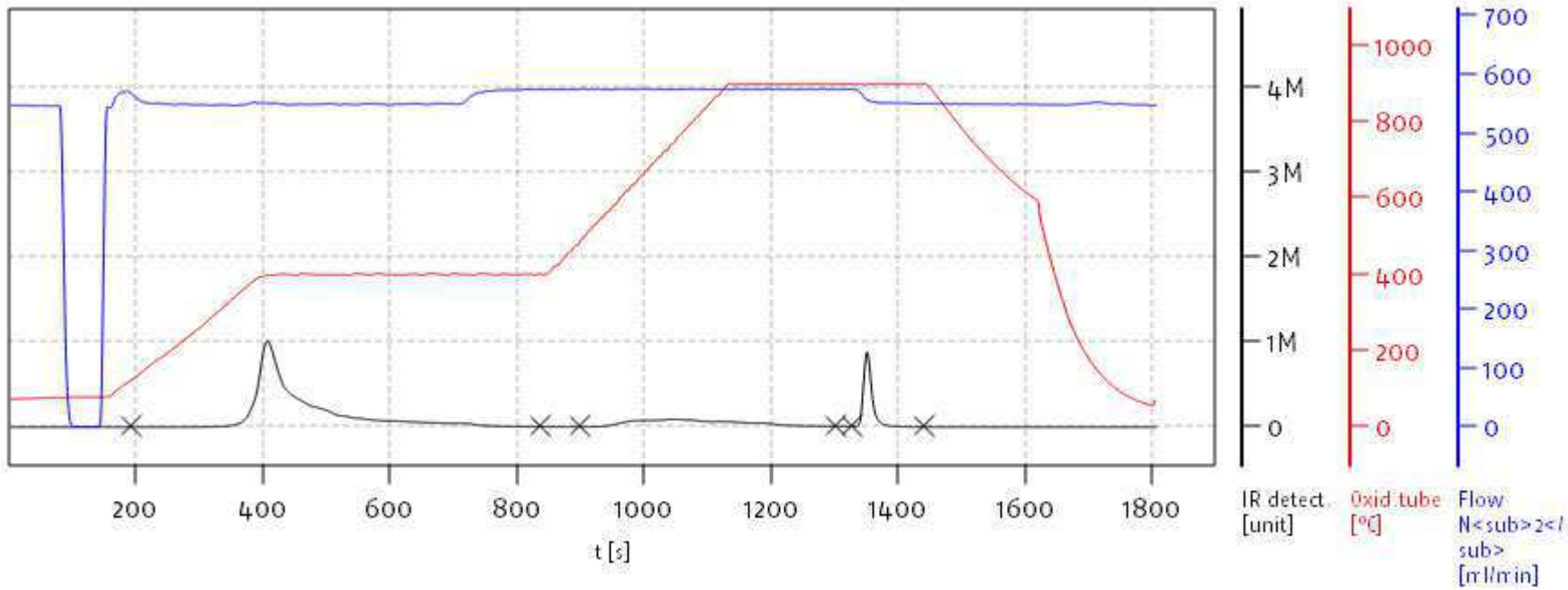
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
33	33	23A0206-06	546.00		CARBON	1/17/2023 1:42 AM	bl	0.919	2 897 945	1.113	0.139	517 584	708 789	0.780	0.193	0.9583	1.0000



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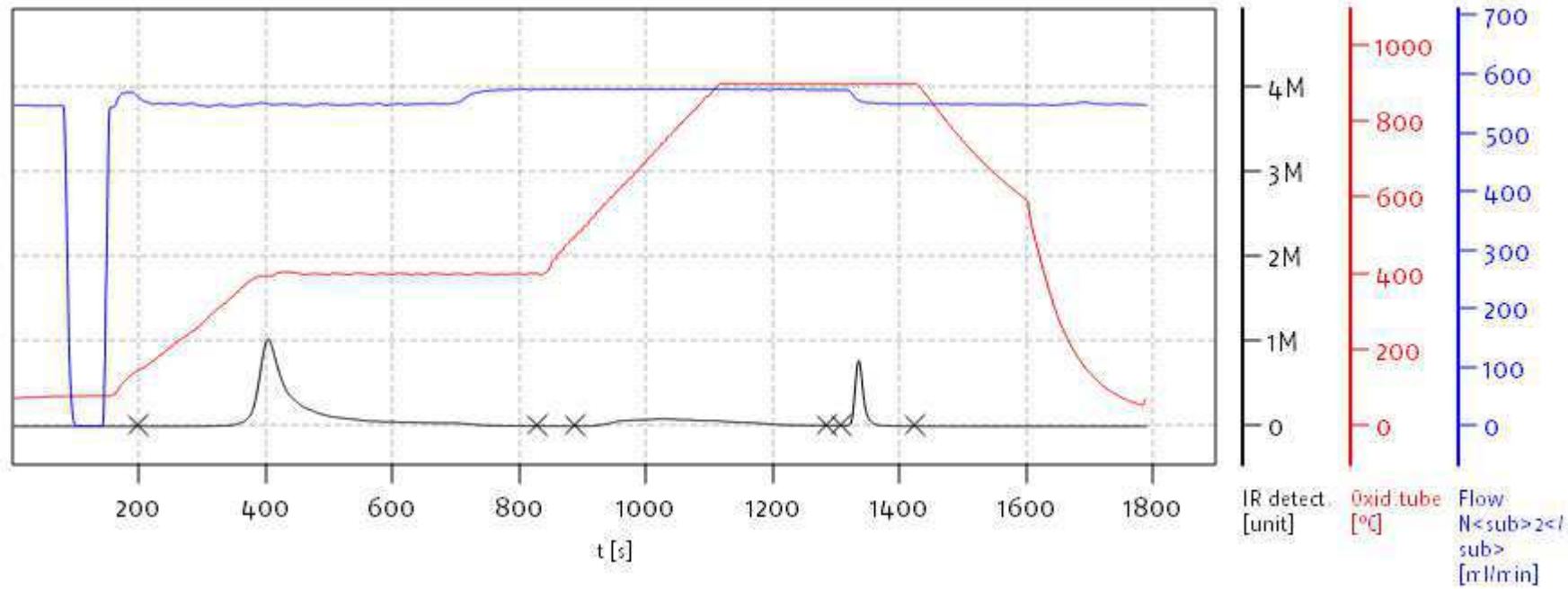
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
34	34	23A0206-07	541.40		CARBON	1/17/2023 2:12 AM	bl	0.816	2 552 373	1.004	0.123	458 212	683 862	0.692	0.188	0.9583	1.0000



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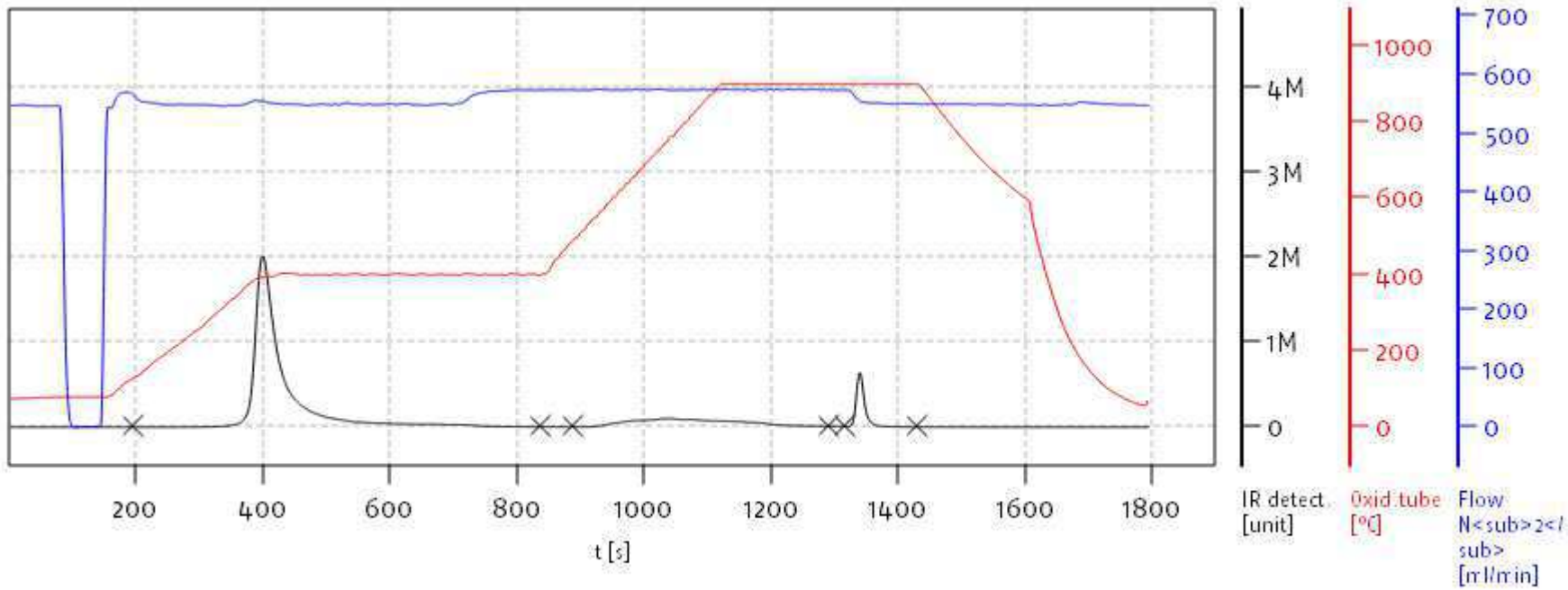
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
35	35	23A0206-08	542.60		CARBON	1/17/2023 2:43 AM	bl	1.095	3 672 818	1.308	0.098	371 616	771 677	0.997	0.213	0.9583	1.0000



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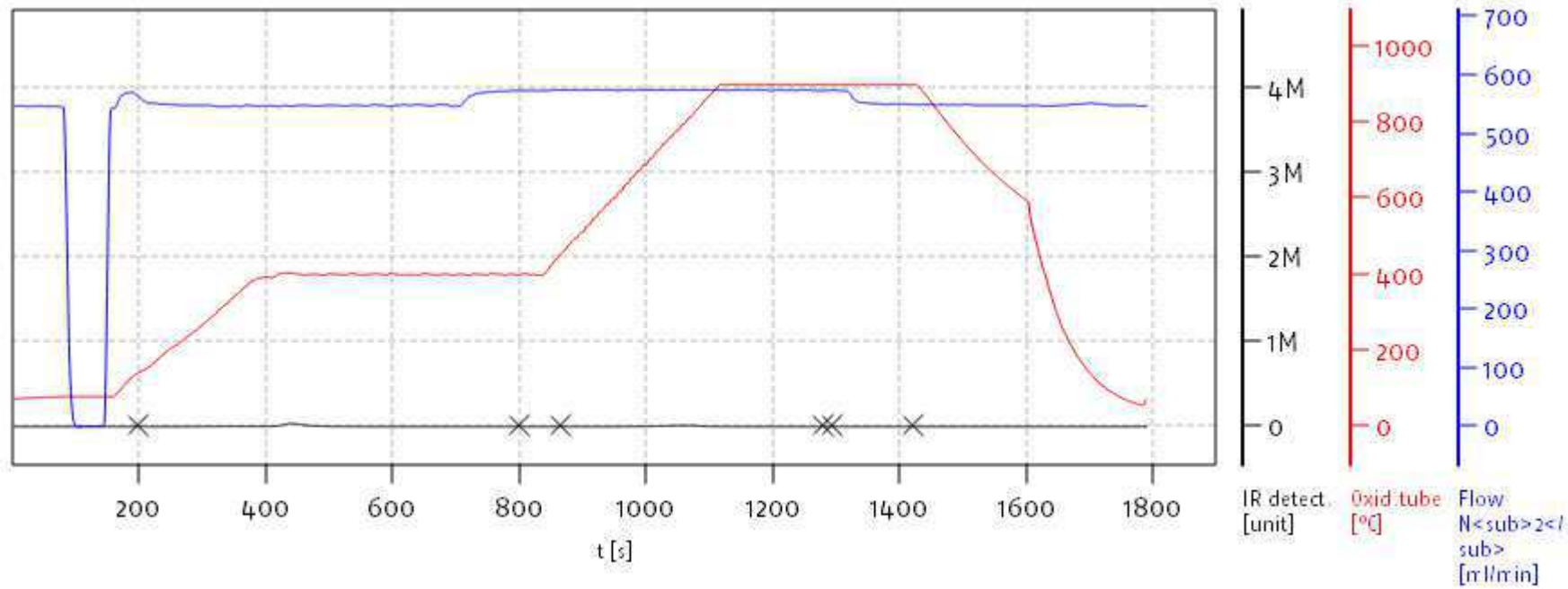
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
36	36	BLA0321-MRL1	551.00		CARBON	1/17/2023 3:13 AM	bl,C2u	0.013	73 850	0.016	0.000	351	37 528	0.013	0.003	0.9583	1.0000



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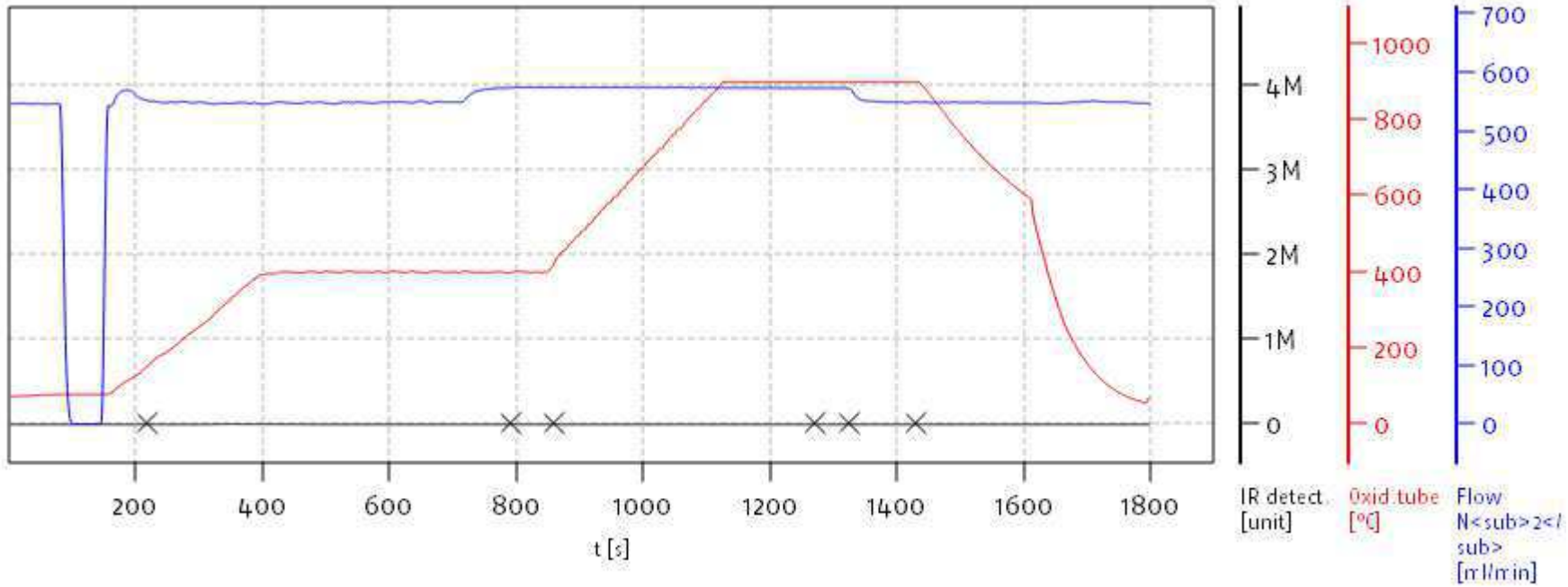
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
37	37	BLA0321-BLK1	507.90		CARBON	1/17/2023 3:43 AM	bl,C2u	0.000	16 938	0.000	0.000	340	2 891	0.000	0.000	0.9583	1.0000



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Balance: BAL3
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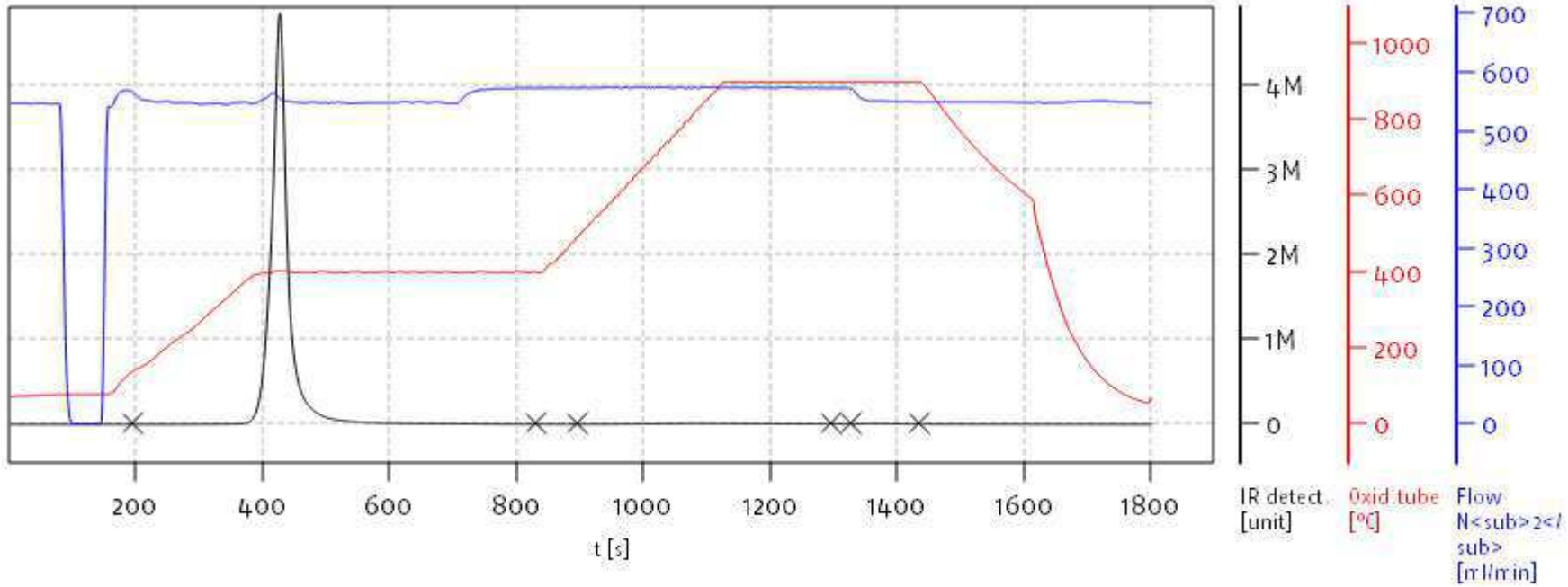
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
38	38	BLA0321-BS1	18.50		CARBON	1/17/2023 4:14 AM	bl	43.915	5 502 834	44.504	0.000	22 858	96 952	43.915	0.589	0.9583	1.0000



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Soli TOC Cube, Carbon
Balance: BAL3
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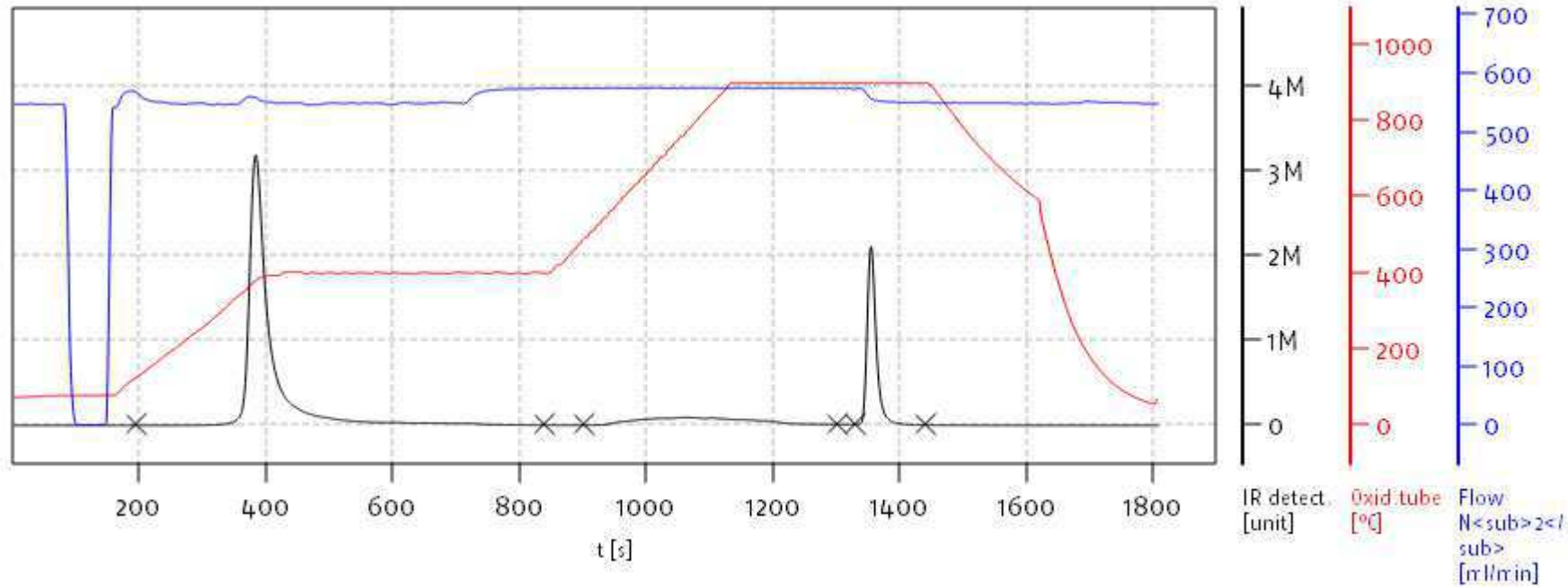
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
39	39	BLA0321-SRM1	294.00		CARBON	1/17/2023 4:44 AM	bl	2.898	4 412 704	3.287	0.684	1 326 301	765 392	2.213	0.389	0.9583	1.0000



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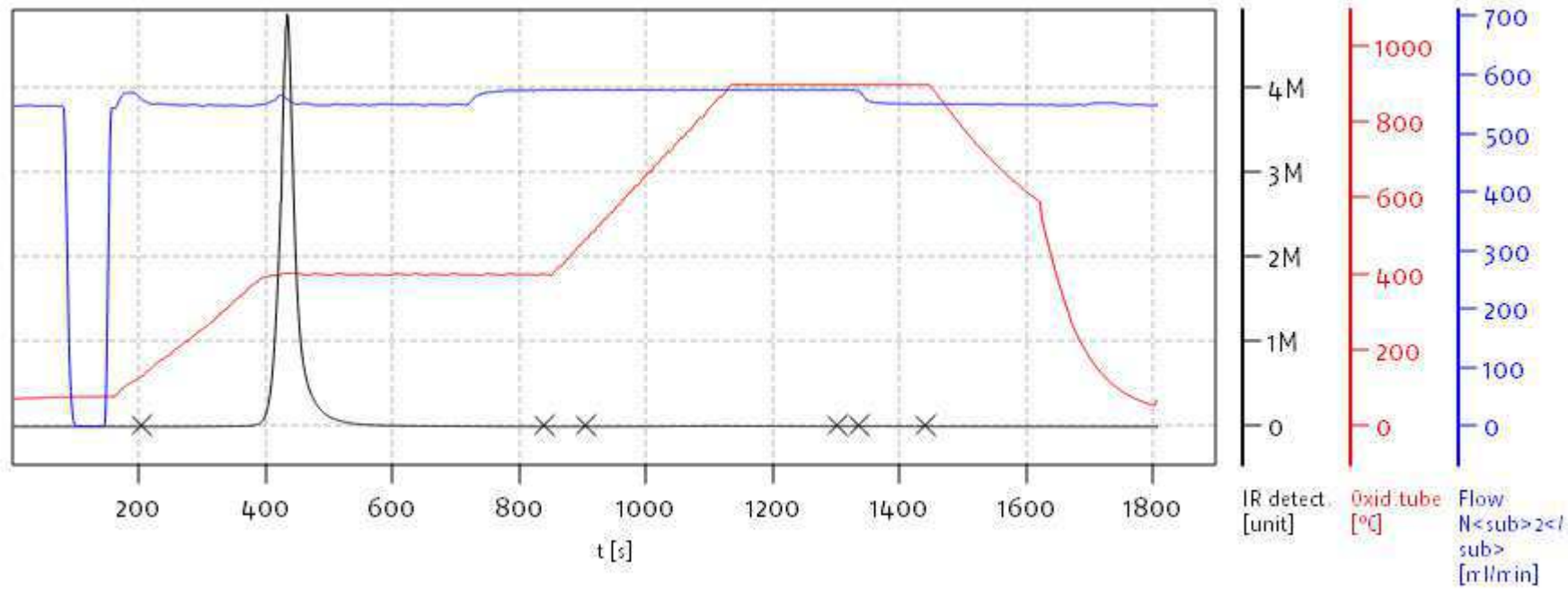
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
40	40	SLA0148-CCV3	18.20		CARBON	1/17/2023 5:15 AM	bl	44.338	5 465 921	44.656	0.000	13 304	63 966	44.338	0.318	0.9583	1.0000



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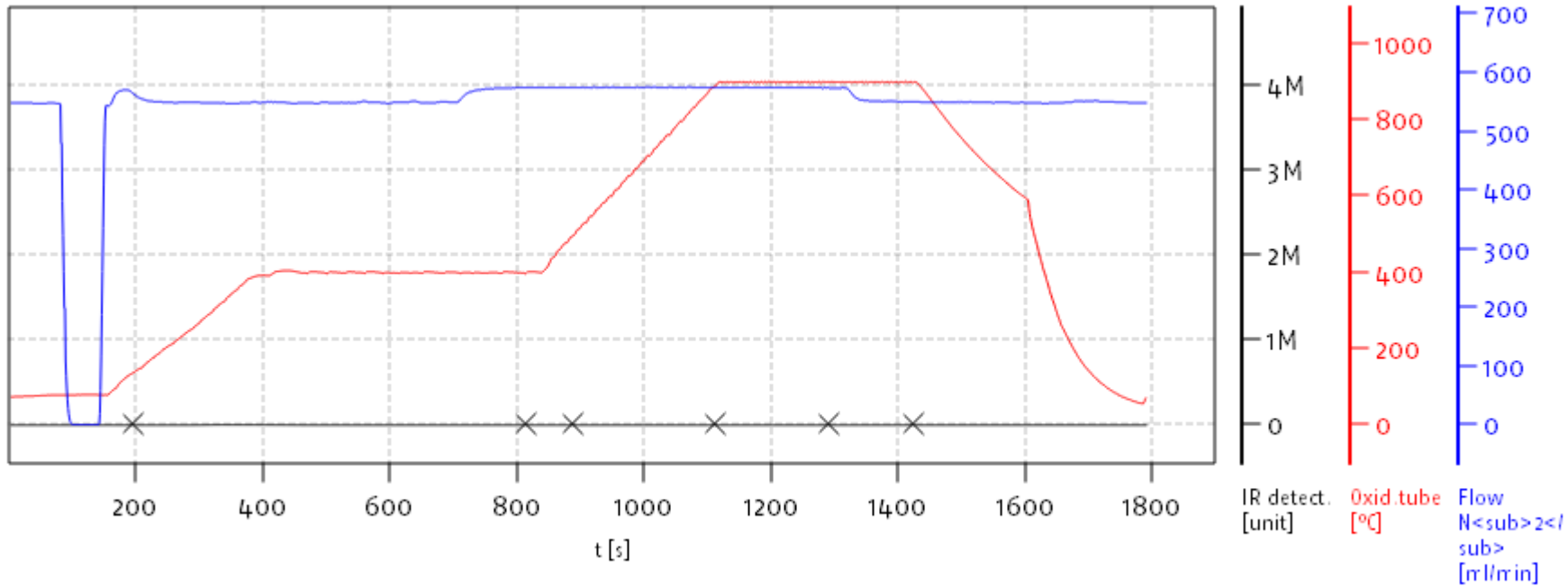
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
41	41	SLA0148-CCB3	512.60		CARBON	1/17/2023 5:45 AM	bl,C3u,C2u	0.000	16 219	0.000	0.000	695	406	0.000	0.000	0.9583	1.0000



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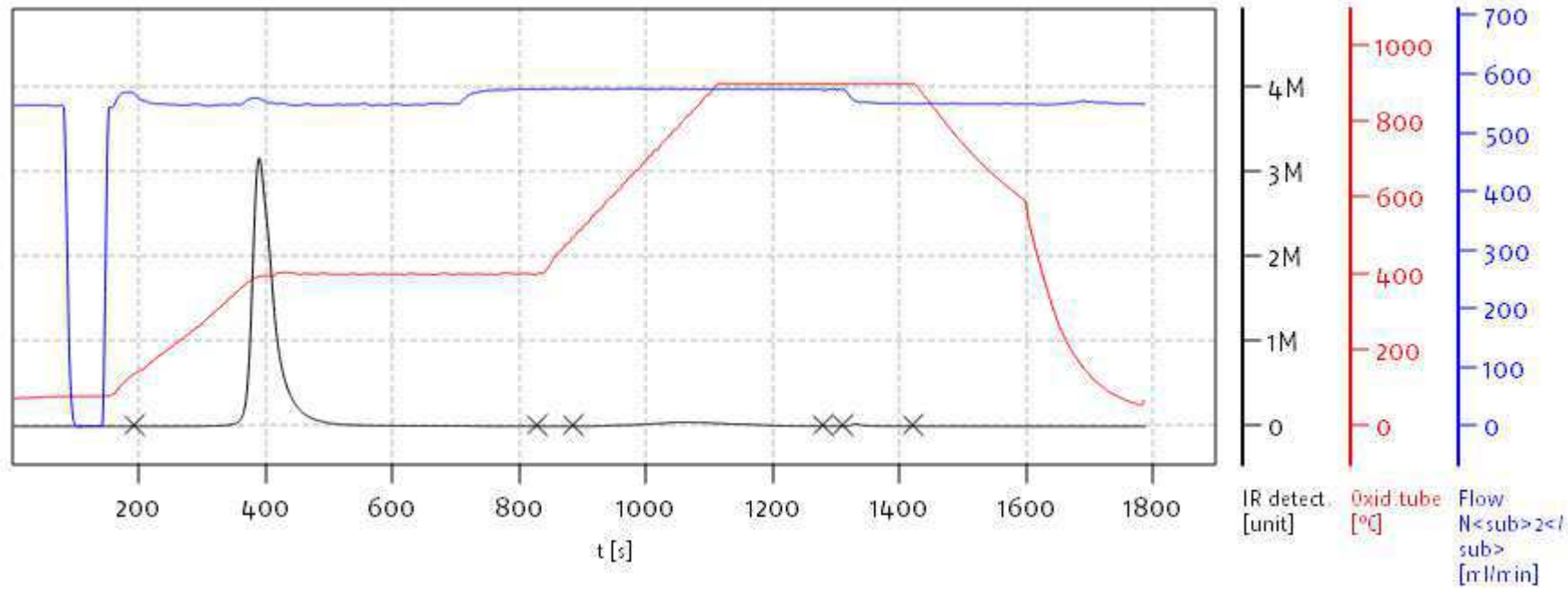
Date: Wed Jan 18 13:37:19 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
42	42	23A0206-09	535.50		CARBON	1/17/2023 6:15 AM	bl	1.301	4 722 741	1.381	0.000	25 580	301 825	1.301	0.080	0.9583	1.0000



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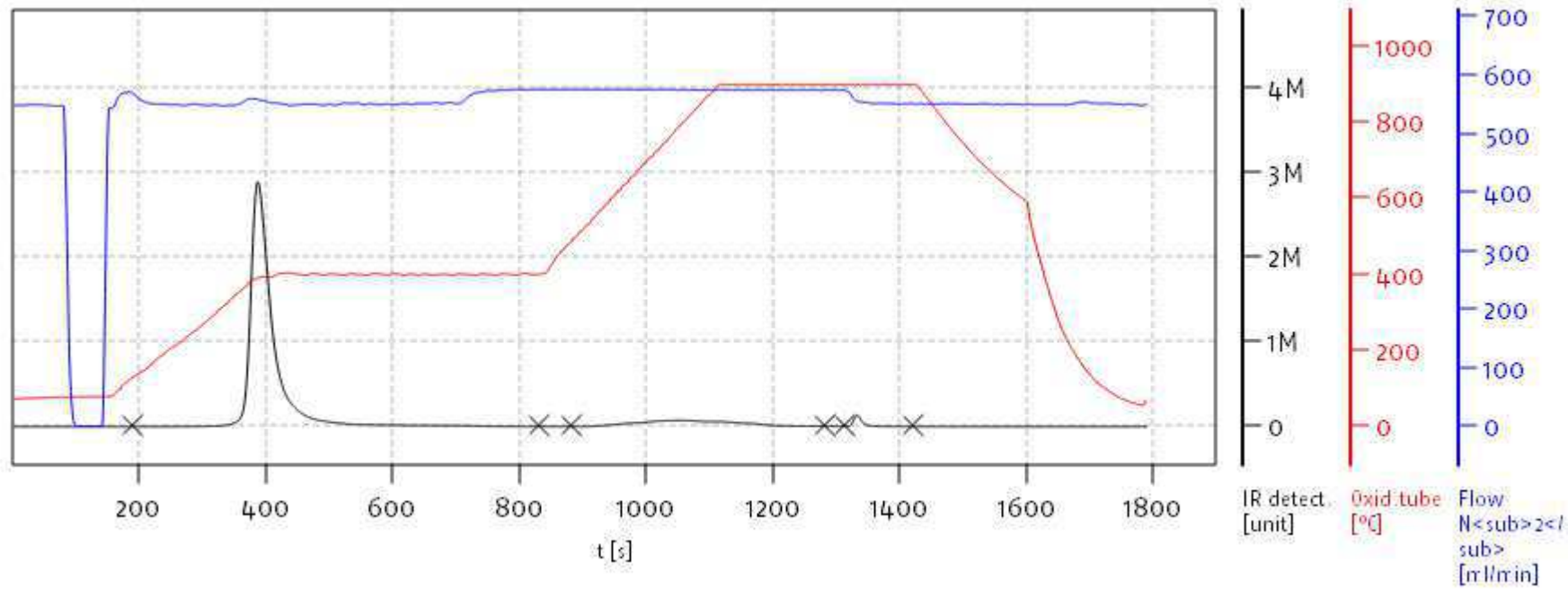
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
43	43	BLA0321-DUP1	540.40		CARBON	1/17/2023 6:45 AM	bl	1.192	4 311 721	1.335	0.016	81 914	525 701	1.176	0.143	0.9583	1.0000



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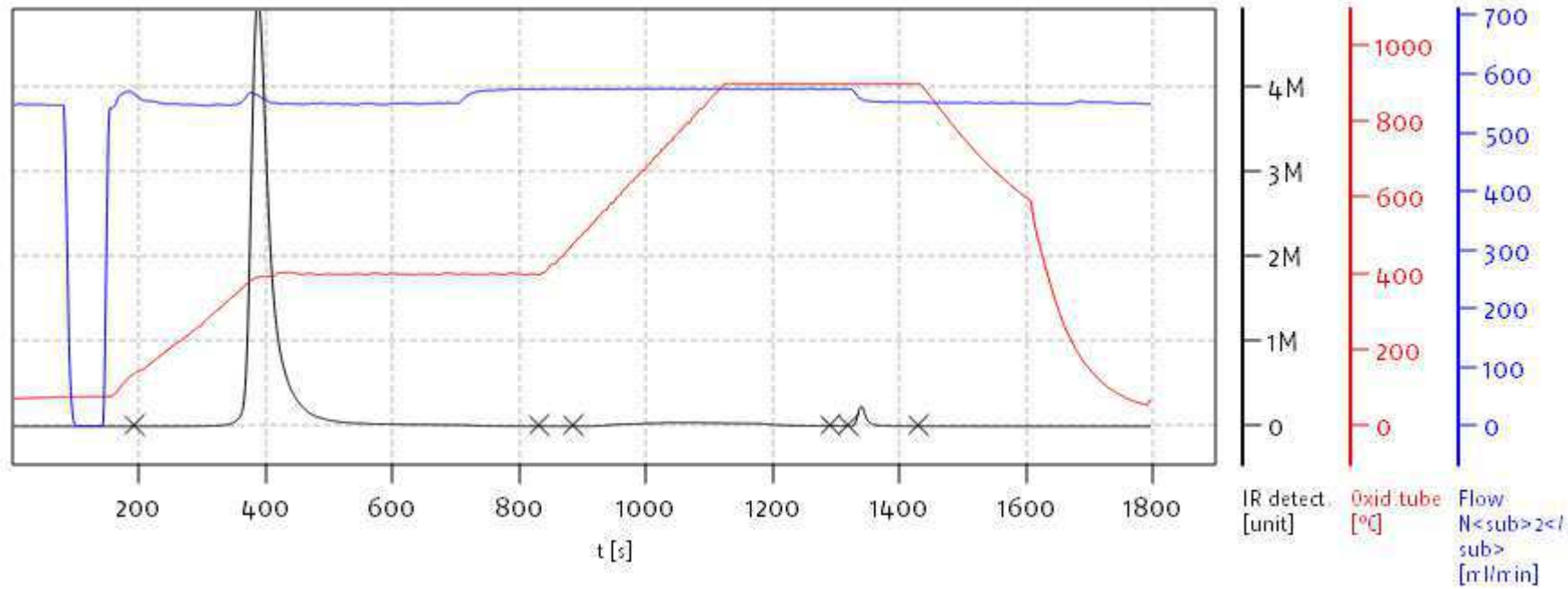
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
44	44	BLA0321-MS1	531.20	0.0086	CARBON	1/17/2023 7:16 AM	bl	1.979	6 987 269	2.082	0.035	145 757	381 087	1.944	0.103	0.9583	1.0000



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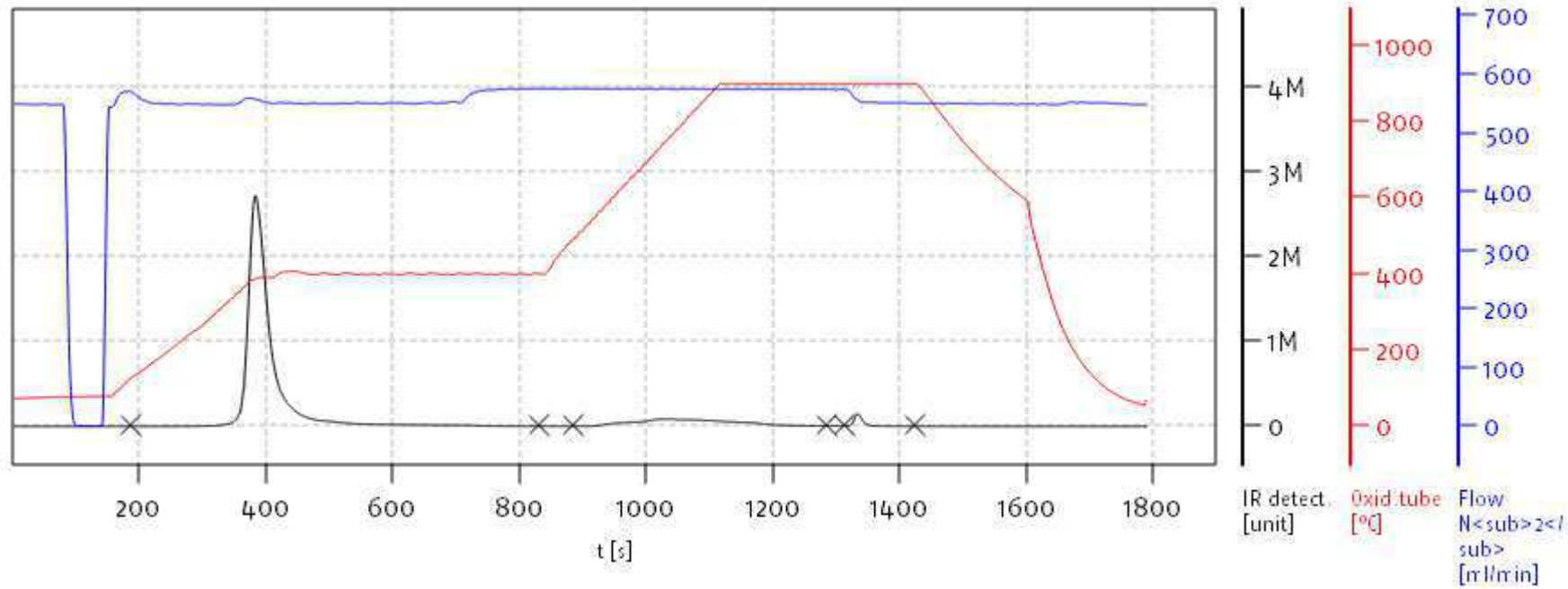
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
45	45	23A0206-10	530.00		CARBON	1/17/2023 7:46 AM	bl	1.160	4 102 333	1.332	0.019	91 444	614 819	1.141	0.172	0.9583	1.0000



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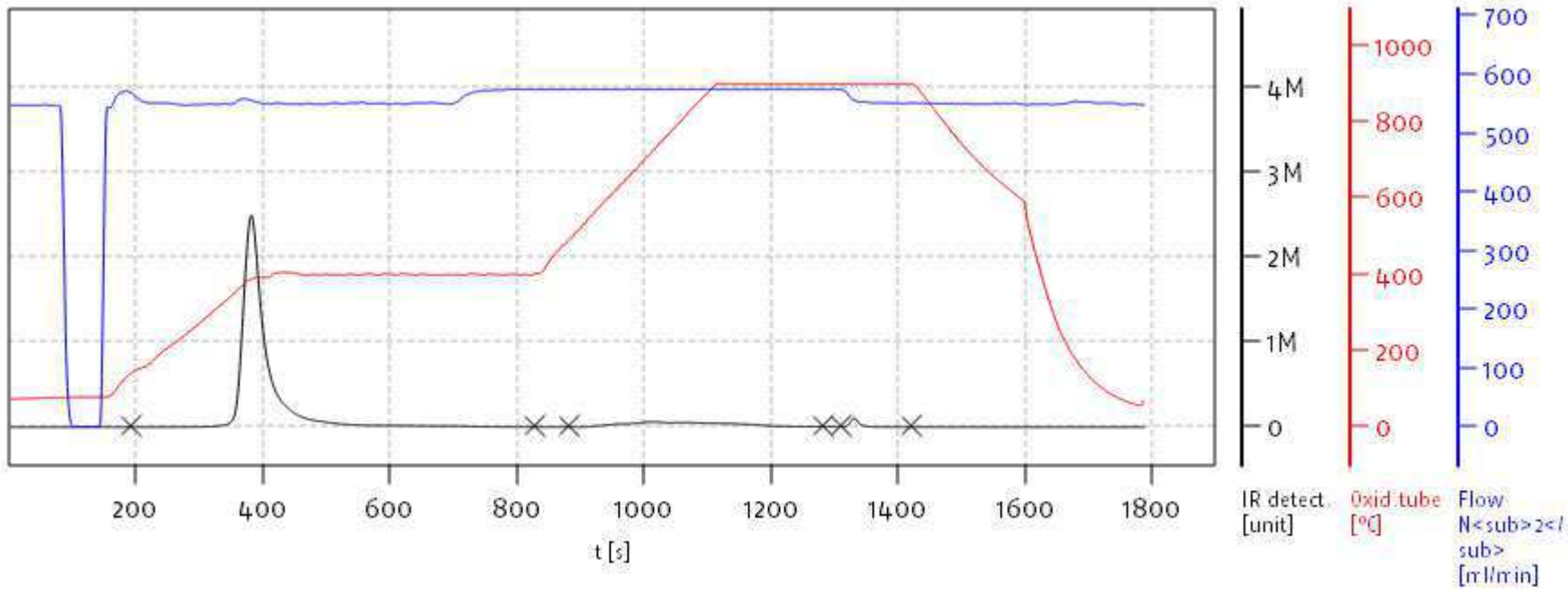
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
46	46	23A0206-11	503.00		CARBON	1/17/2023 8:16 AM	bl	1.139	3 847 919	1.272	0.012	65 258	459 603	1.127	0.133	0.9583	1.0000



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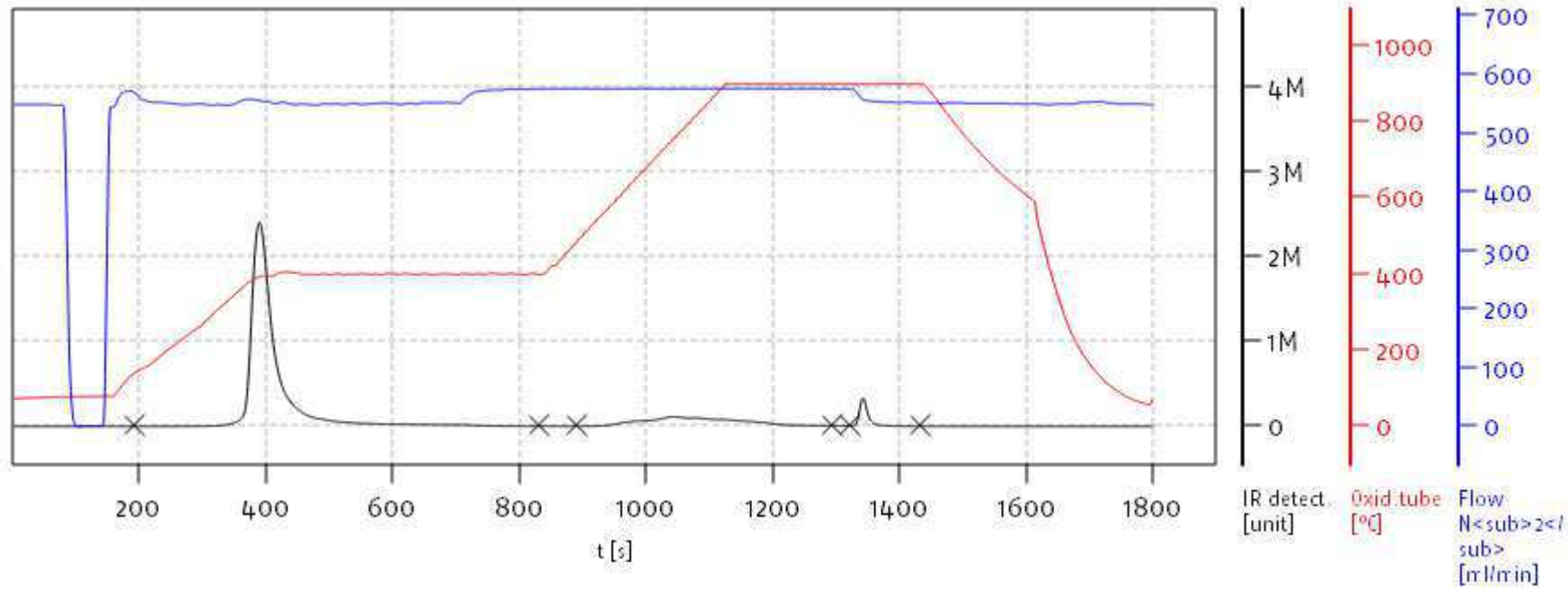
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
47	47	23A0206-12	521.90		CARBON	1/17/2023 8:47 AM	bl	1.141	3 858 454	1.356	0.051	199 526	752 031	1.089	0.215	0.9583	1.0000



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Balance: BAL3
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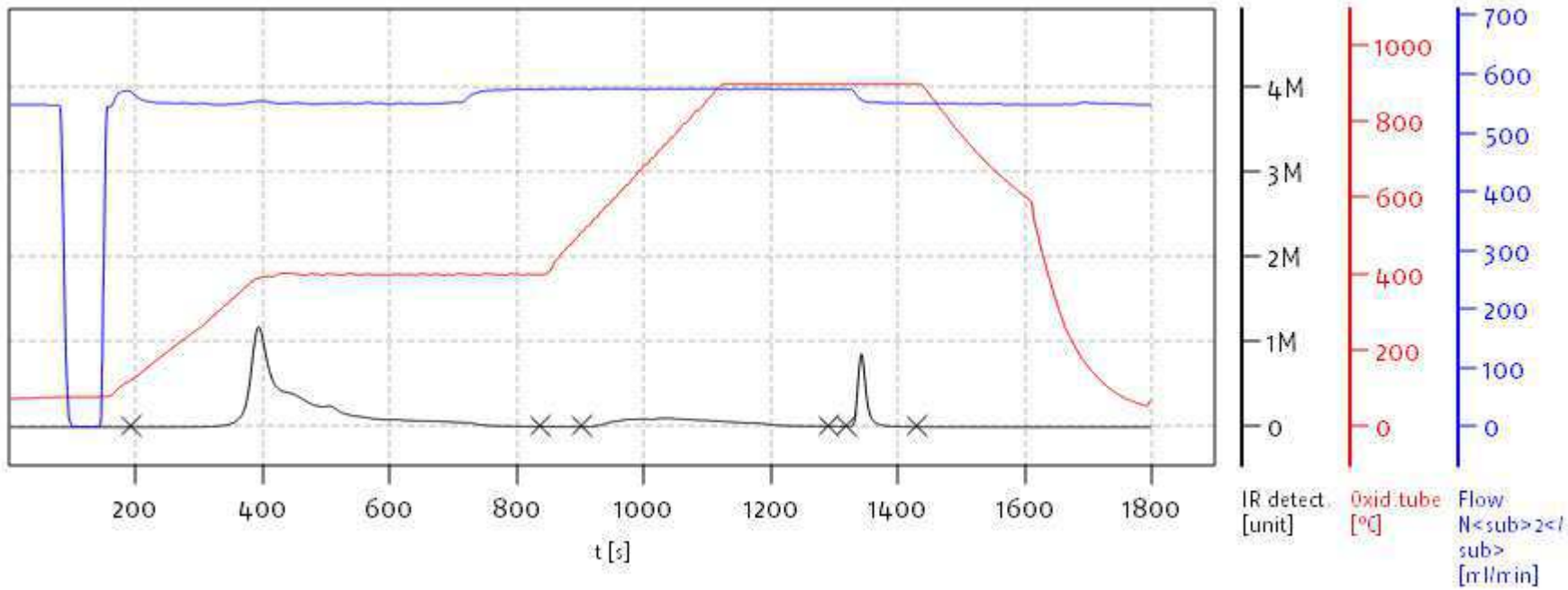
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
48	48	23A0206-13	594.10		CARBON	1/17/2023 9:17 AM	bl	0.981	3 446 021	1.183	0.127	512 506	803 767	0.854	0.203	0.9583	1.0000



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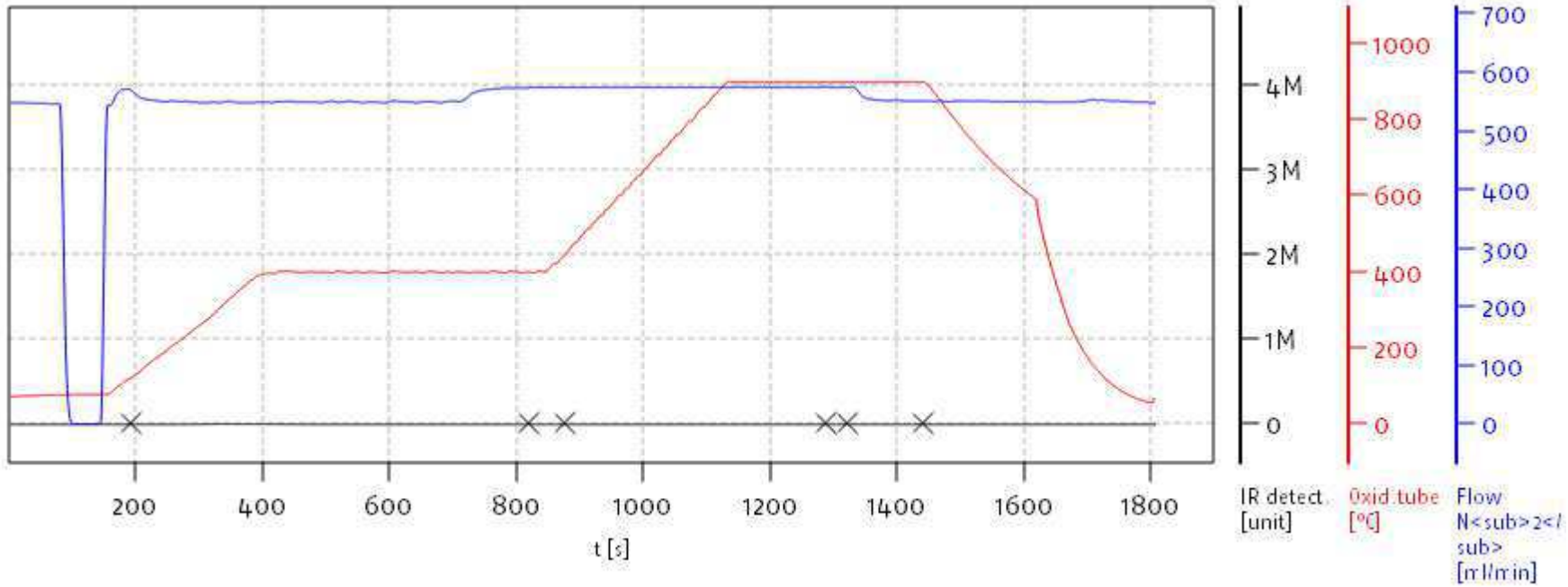
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
49	49	BLANK	1.00		CARBON	1/ 17/2023 9:48 AM	bl	0.000	22 067	0.000	0.000	258	1 144	0.000	0.000	0.9583	1.0000



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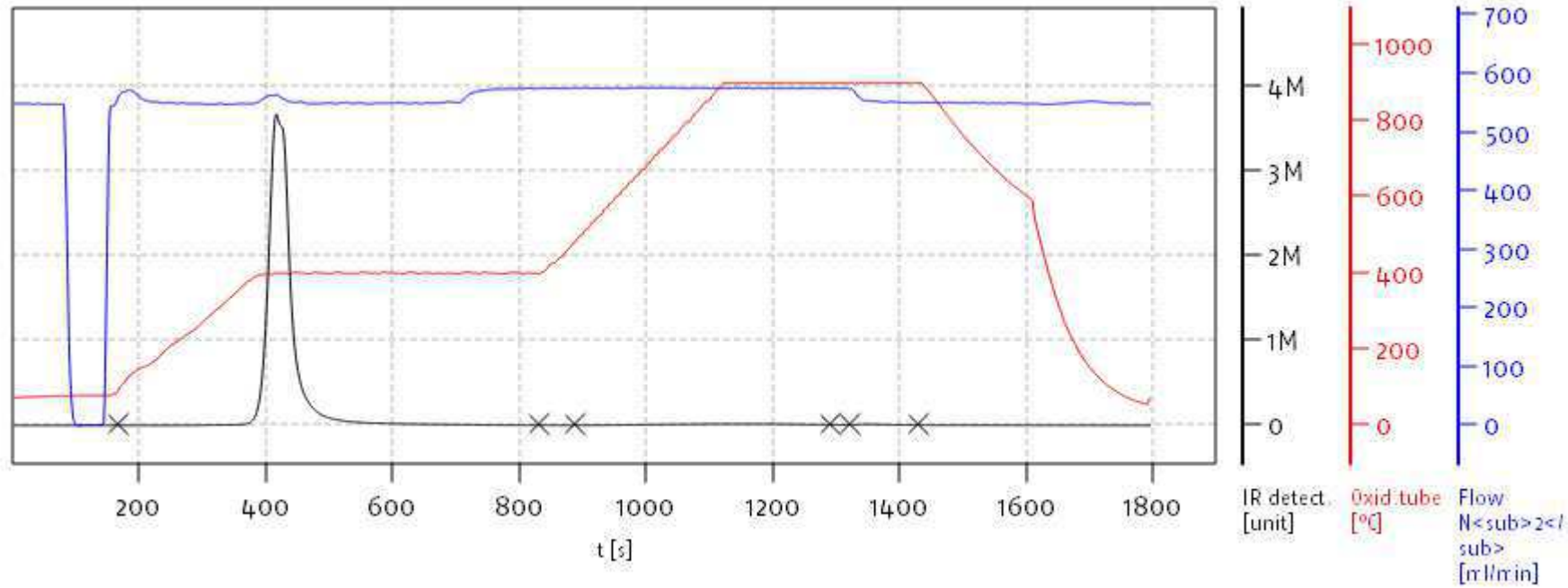
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
50	50	Dfactor	19.70		CARBON	1/17/2023 10:18 AM	bl	44.505	5 734 193	45.613	0.059	34 072	167 607	44.446	1.109	0.9910	1.0000



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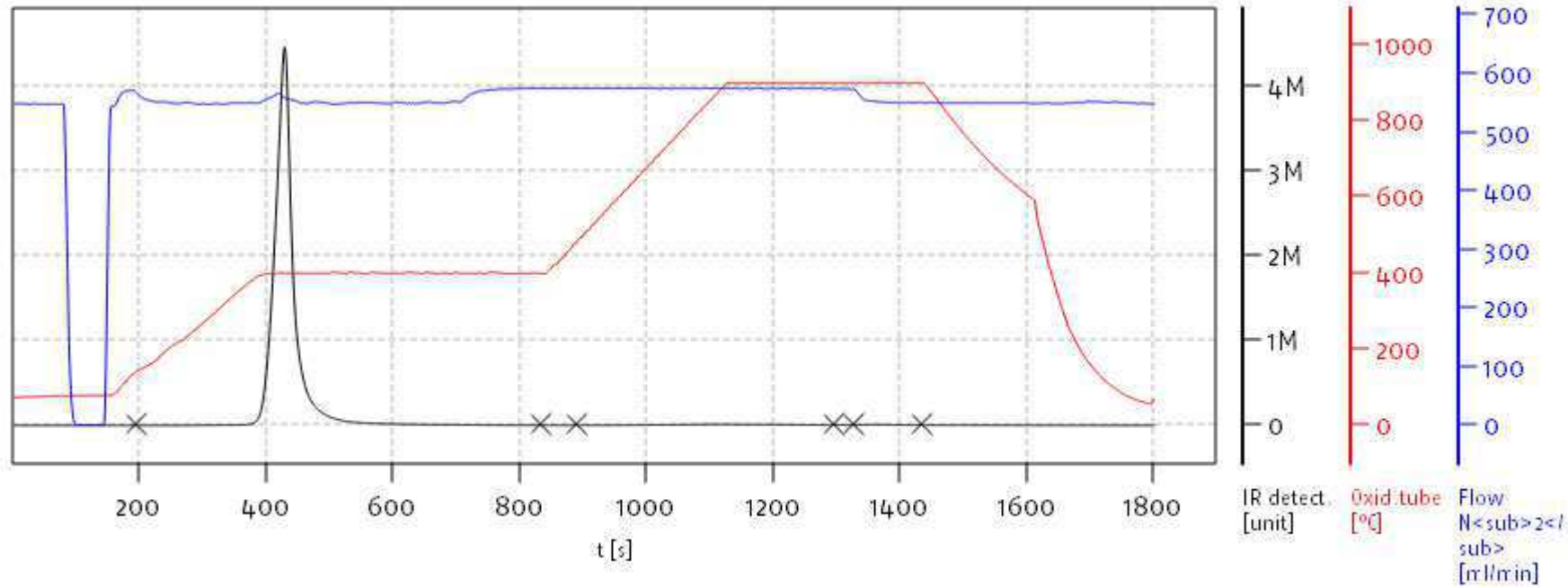
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
51	51	Dfactor	19.10		CARBON	1/17/2023 10:48 AM	bl	44.446	5 655 417	45.088	0.000	24 705	105 786	44.446	0.642	0.9742	1.0000



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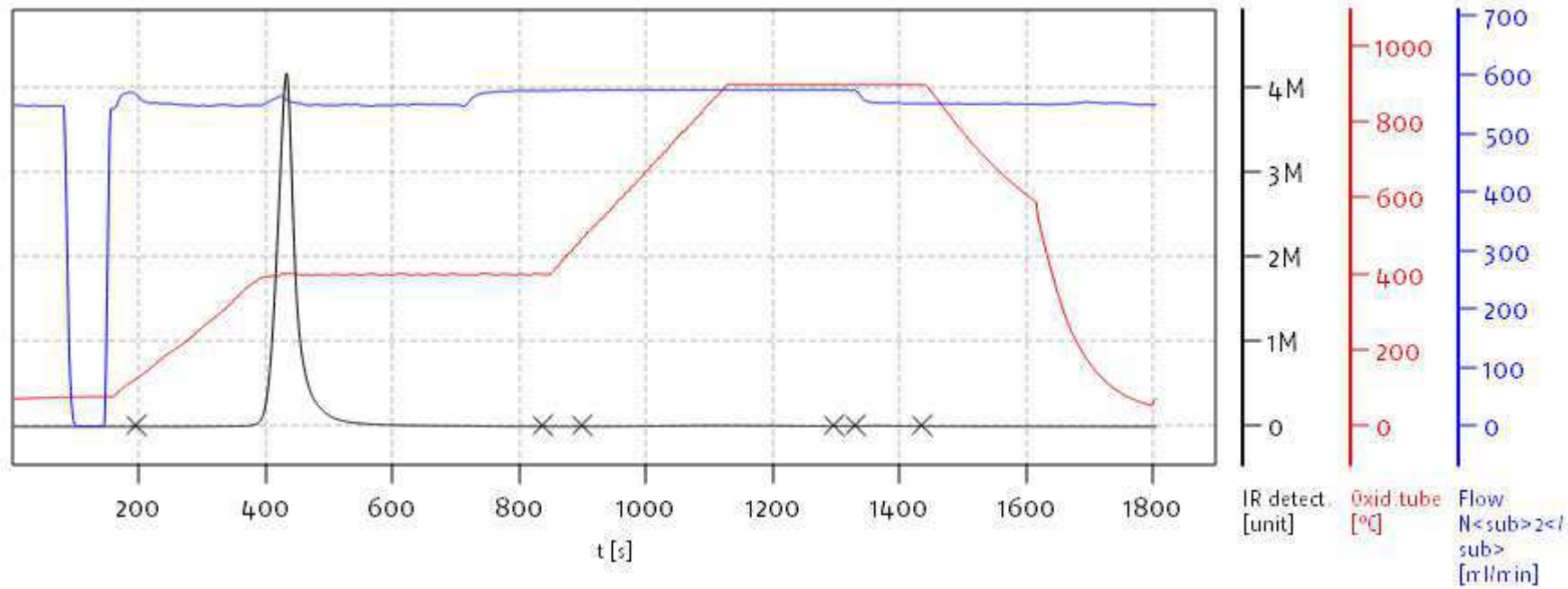
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
52	52	SLA0148-CCV4	18.90		CARBON	1/17/2023 11:19 AM	bl	44.605	5 568 819	45.299	0.000	26 421	111 248	44.605	0.694	0.9826	1.0000



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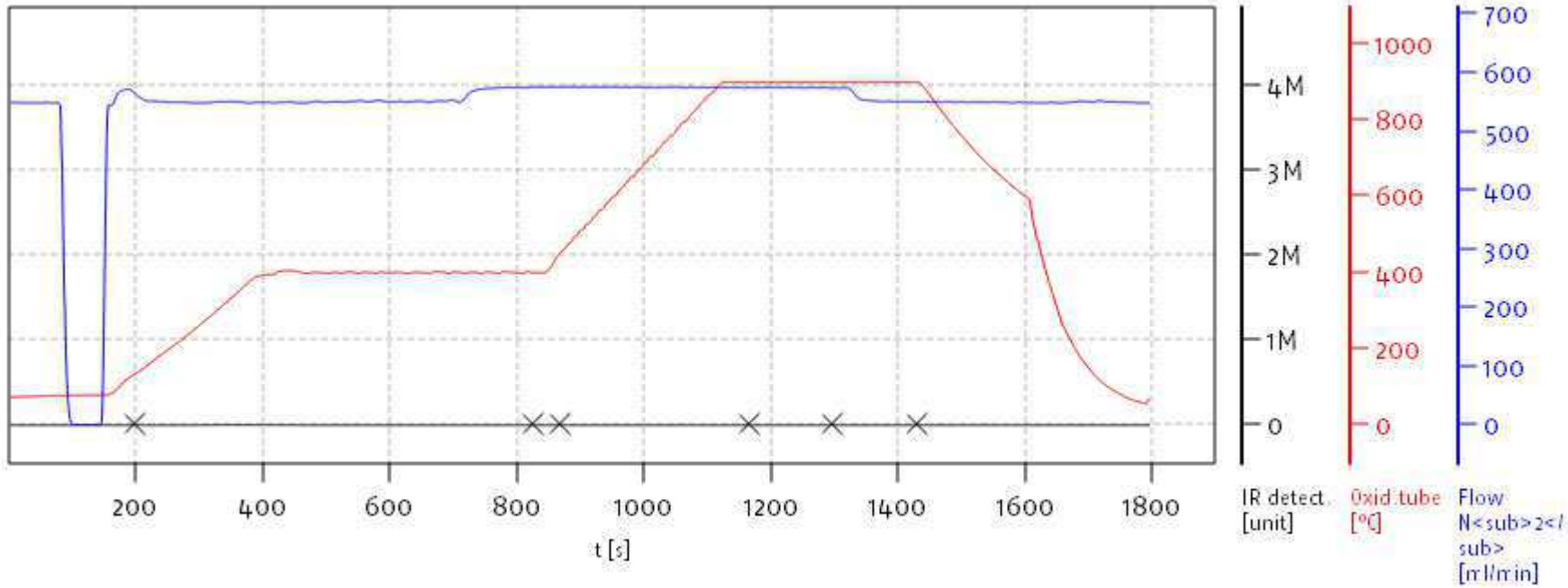
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
53	53	SLA0148-CCB4	509.70		CARBON	1/17/2023 11:49 AM	bl,C3u,C2u	0.000	14 661	0.000	0.000	1 210	1 349	0.000	0.000	0.9826	1.0000



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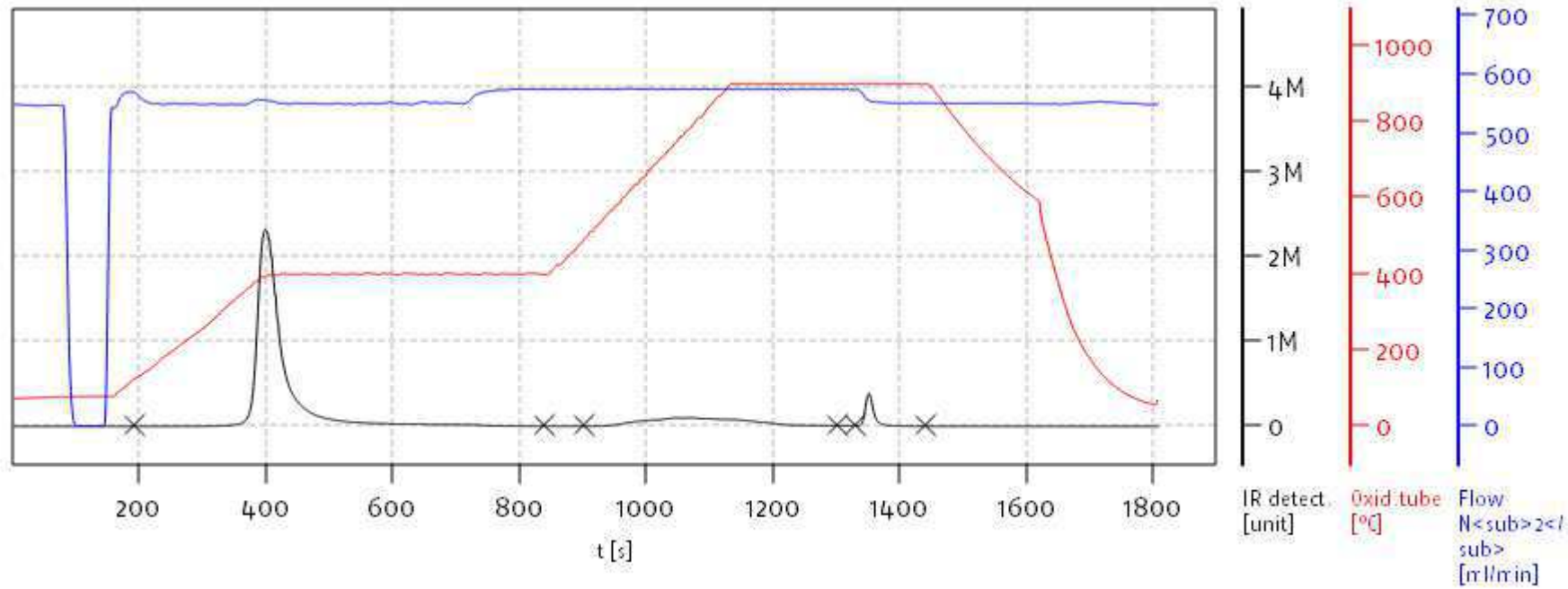
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
54	54	23A0206-14	505.80		CARBON	1/17/2023 12:20 PM	bl	1.246	3 962 404	1.465	0.062	228 979	743 918	1.184	0.220	0.9826	1.0000



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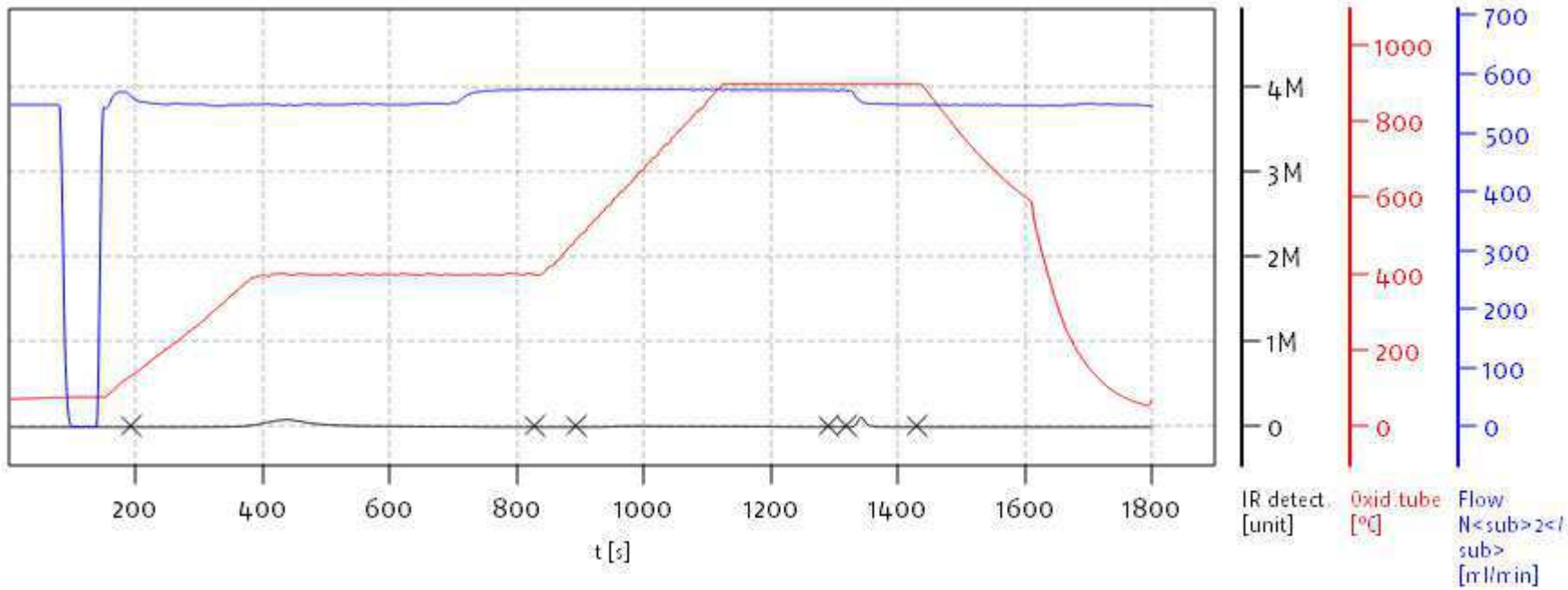
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
55	55	23A0207-01	524.80		CARBON	1/17/2023 12:50 PM	bl	0.108	360 901	0.126	0.011	64 298	88 542	0.097	0.018	0.9826	1.0000



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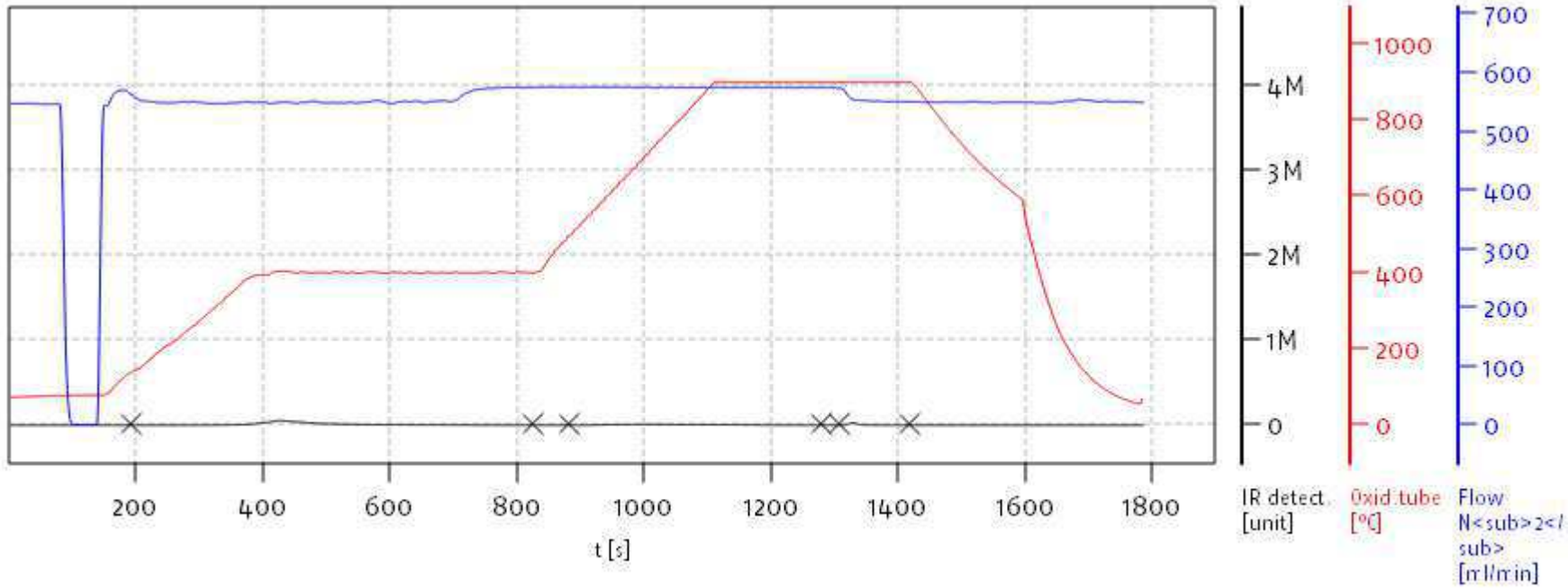
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
56	56	23A0207-02	505.10		CARBON	1/17/2023 1:20 PM	bl	0.057	214 540	0.069	0.000	17 142	66 276	0.057	0.012	0.9826	1.0000



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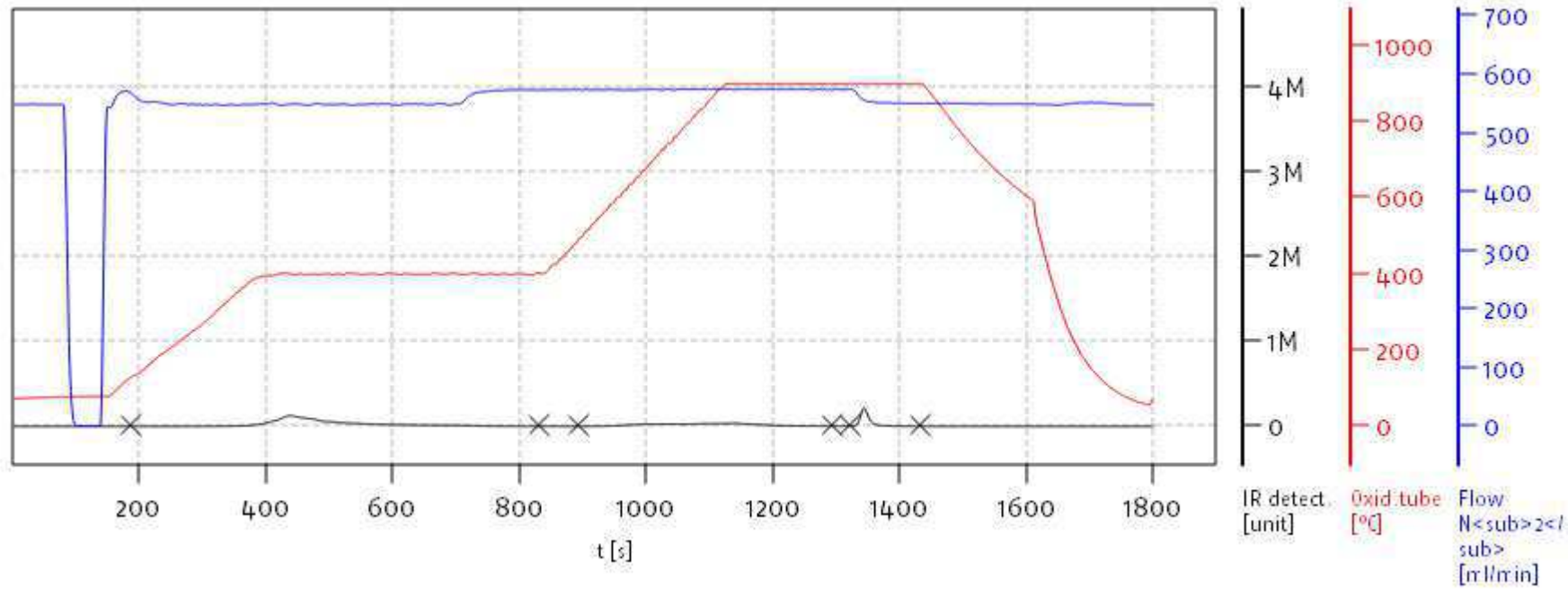
57	57	23A0207-03	514.70		CARBON	1/17/2023 1:51 PM	bl	0.190	558 944	0.261	0.032	133 457	262 697	0.157	0.071	0.9826	1.0000



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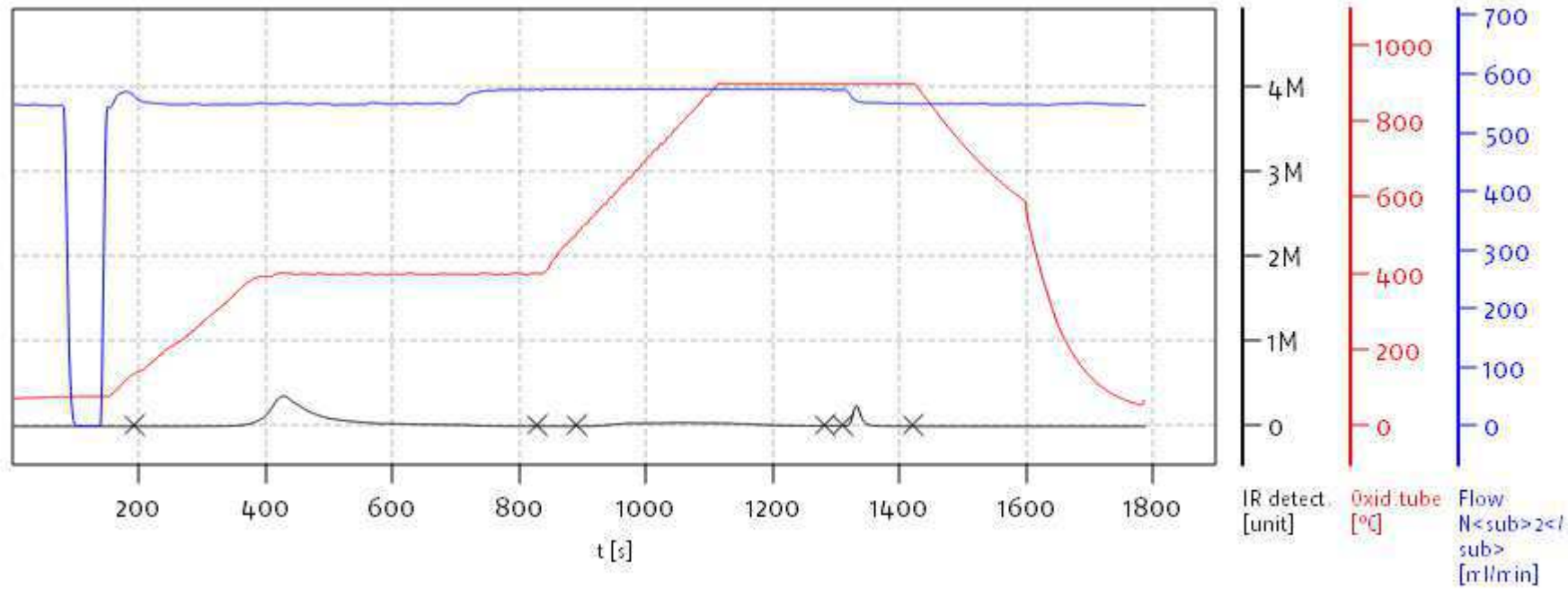
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
58	58	23A0207-04	567.50		CARBON	1/17/2023 2:21 PM	bl	0.359	1 242 170	0.449	0.033	146 774	358 056	0.326	0.090	0.9826	1.0000



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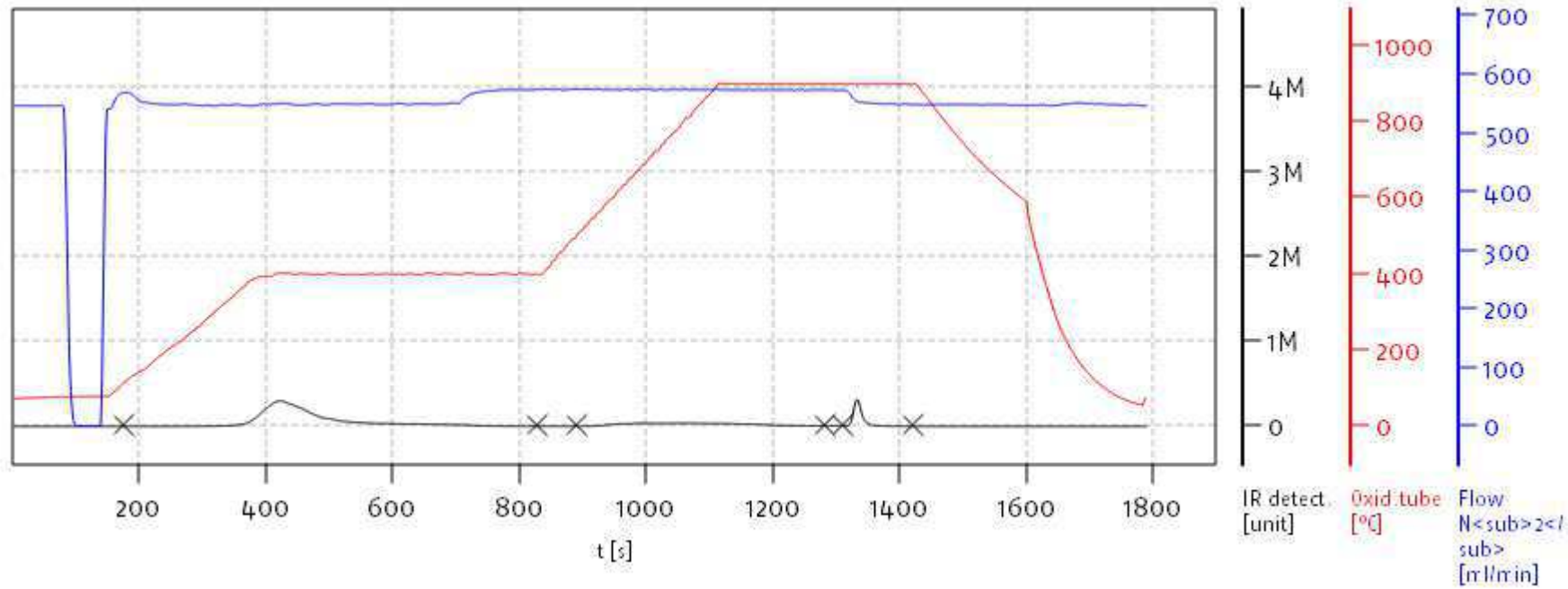
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
59	59	23A0207-05	556.90		CARBON	1/17/2023 2:51 PM	bl	0.381	1 252 552	0.469	0.046	190 843	345 102	0.335	0.089	0.9826	1.0000



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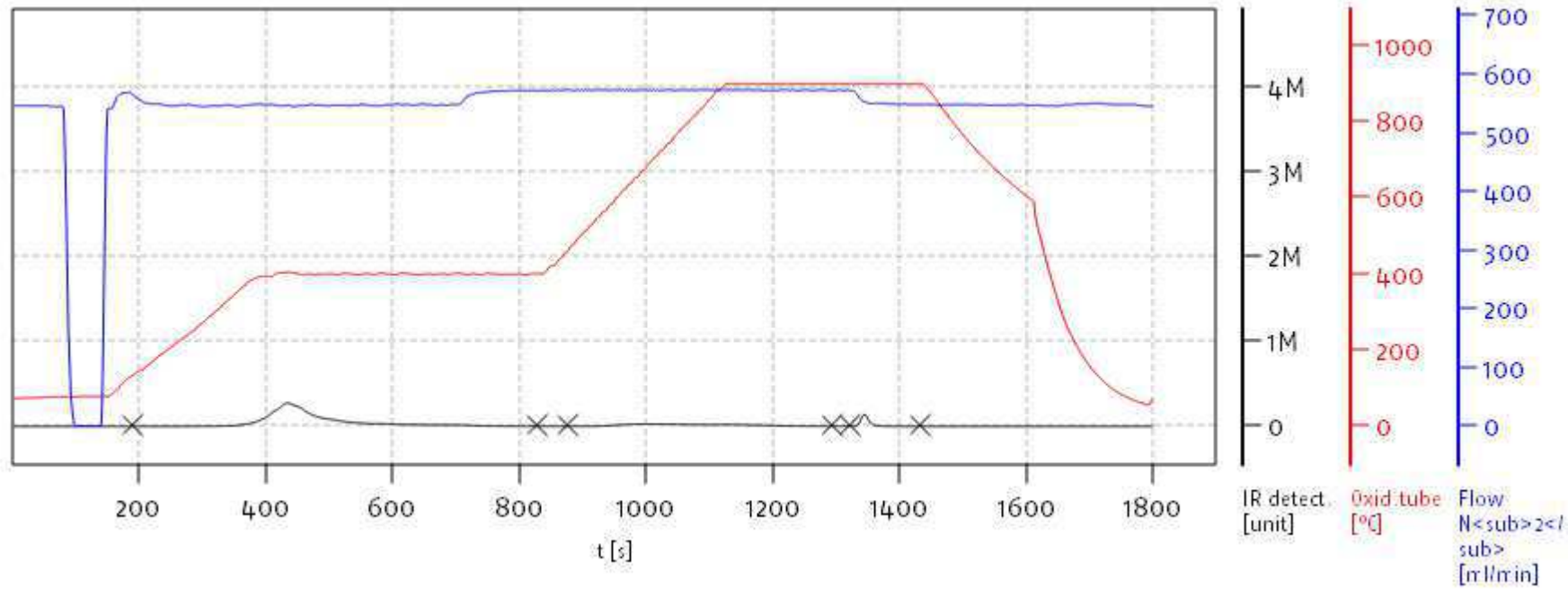
60	60	23A0207-06	593.30		CARBON	1/17/2023 3:21 PM	bl	0.271	1 028 931	0.322	0.014	79 257	221 719	0.257	0.051	0.9826	1.0000



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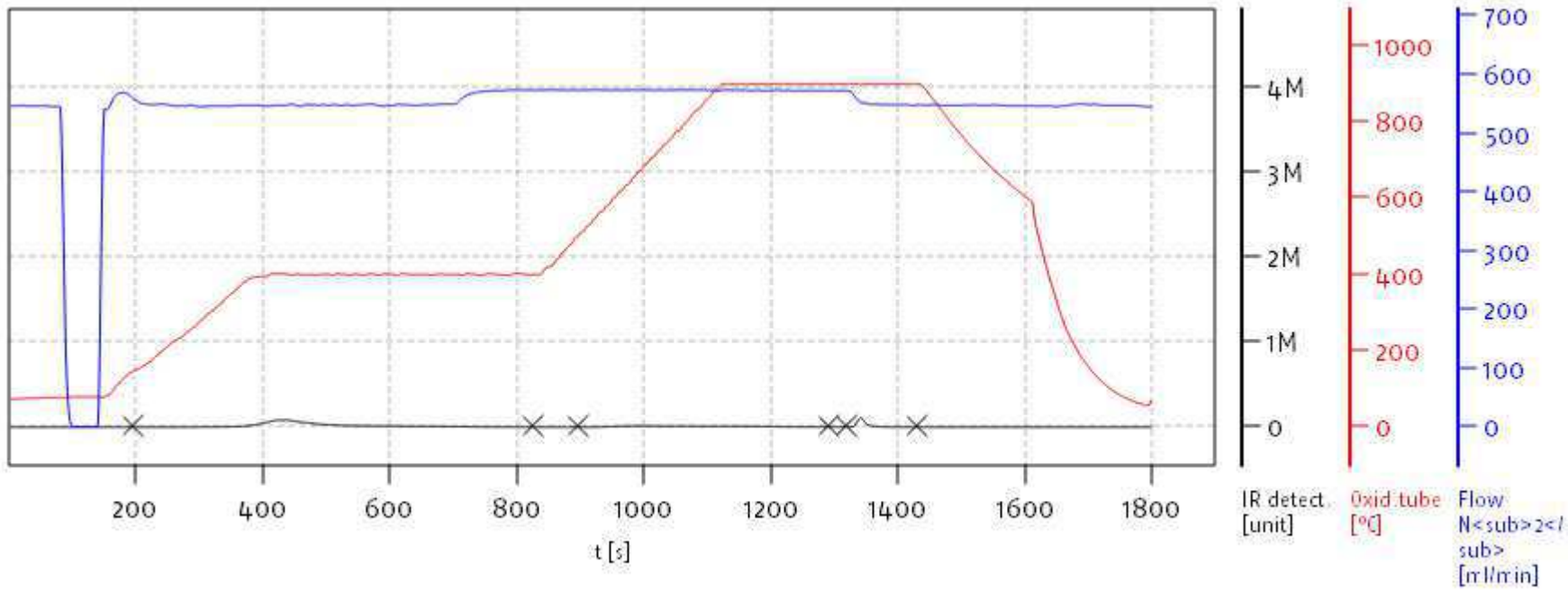
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
61	61	23A0207-07	574.00		CARBON	1/17/2023 3:52 PM	bl	0.102	372 439	0.125	0.011	66 241	109 758	0.092	0.022	0.9826	1.0000



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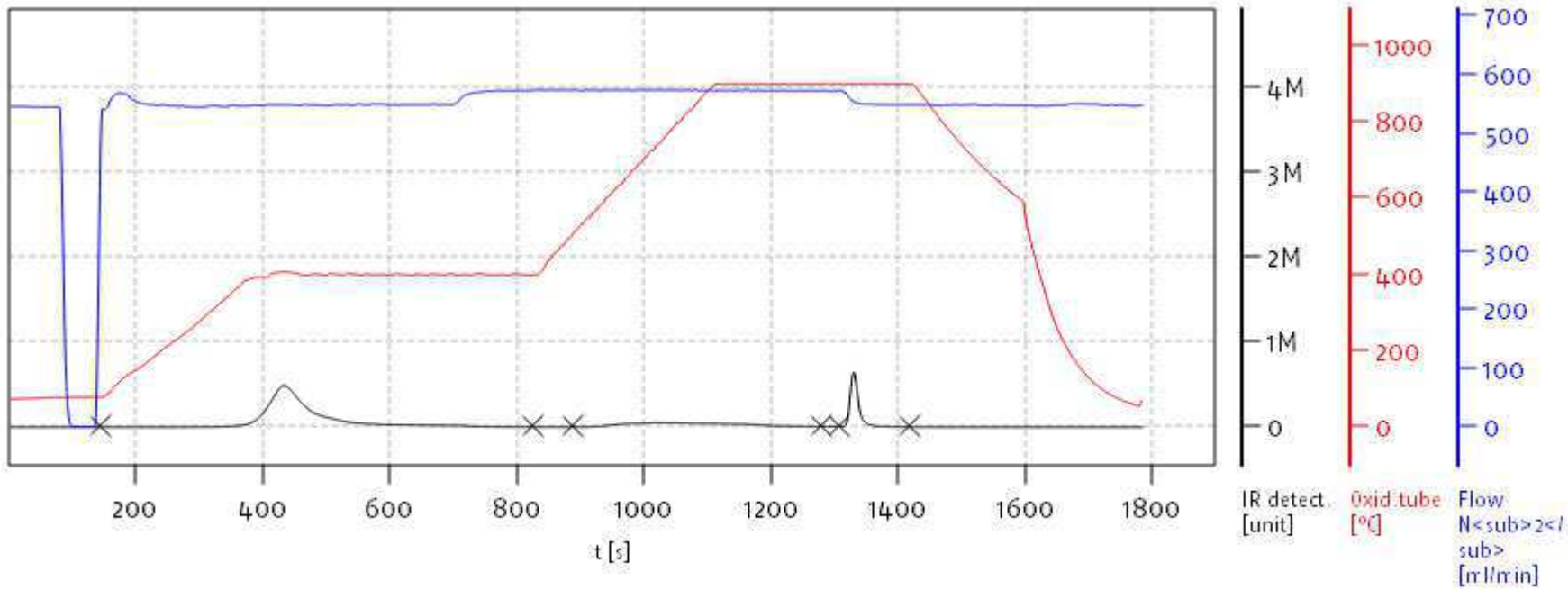
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
62	62	23A0207-08	506.60		CARBON	1/17/2023 4:22 PM	bl	0.561	1 537 159	0.681	0.107	377 546	420 971	0.454	0.121	0.9826	1.0000



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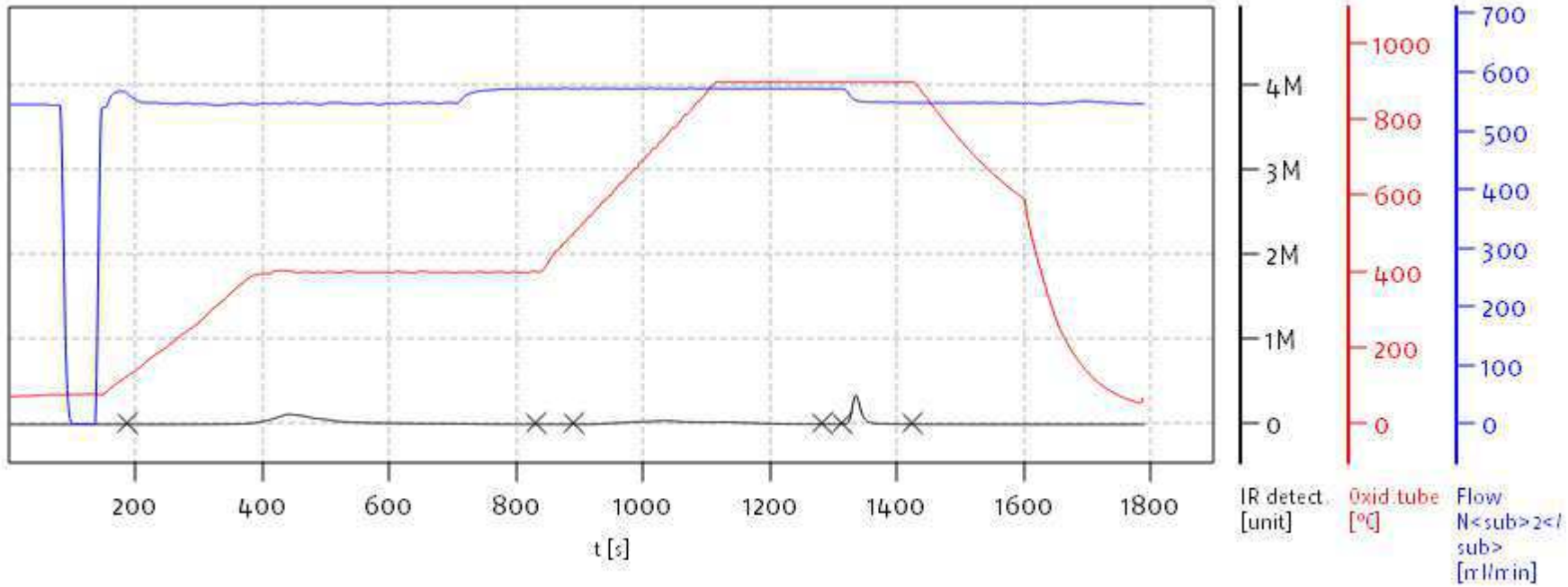
Access: soliTOC superuser

Date: Wed Jan 18 13:37:19 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
63	63	23A0207-09	519.50		CARBON	1/17/2023 4:52 PM	bl	0.197	503 753	0.270	0.057	219 352	271 907	0.140	0.073	0.9826	1.0000



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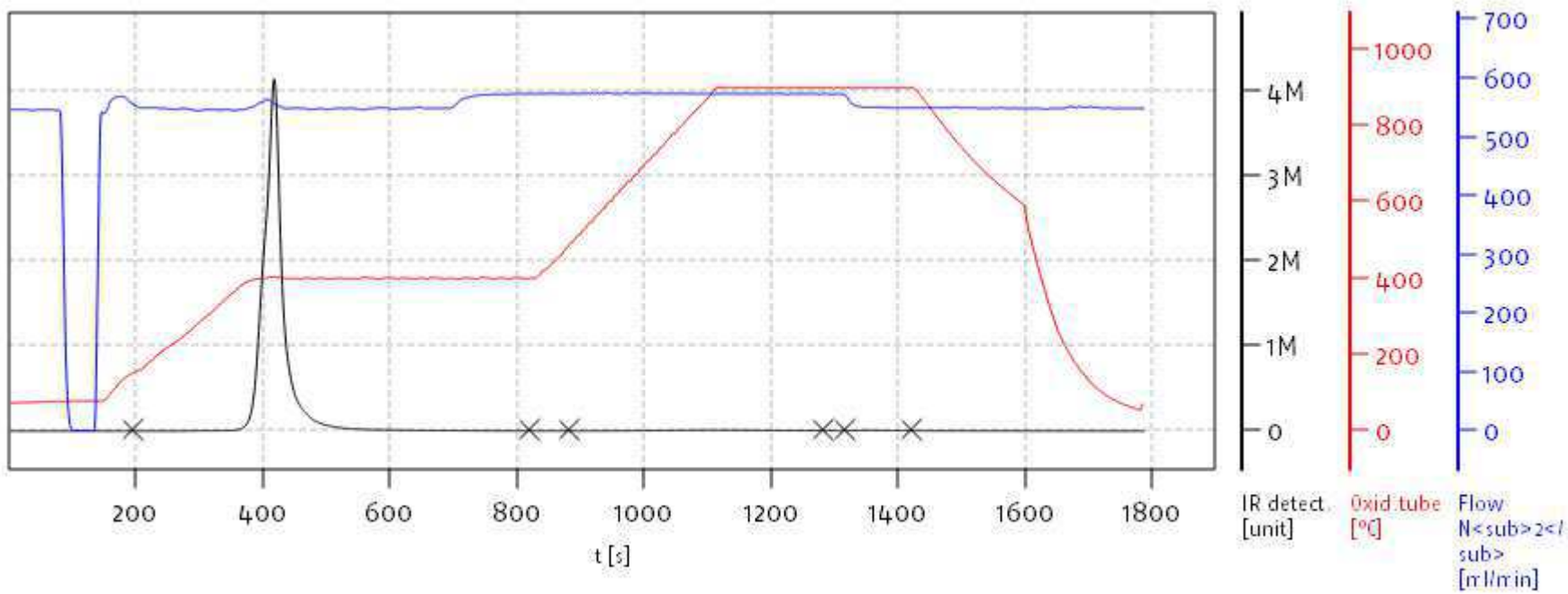
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
64	64	SLA0148-CCV5	18.10		CARBON	1/17/2023 5:22 PM	bl	44.630	5 337 249	45.204	0.000	24 950	93 670	44.630	0.574	0.9826	1.0000



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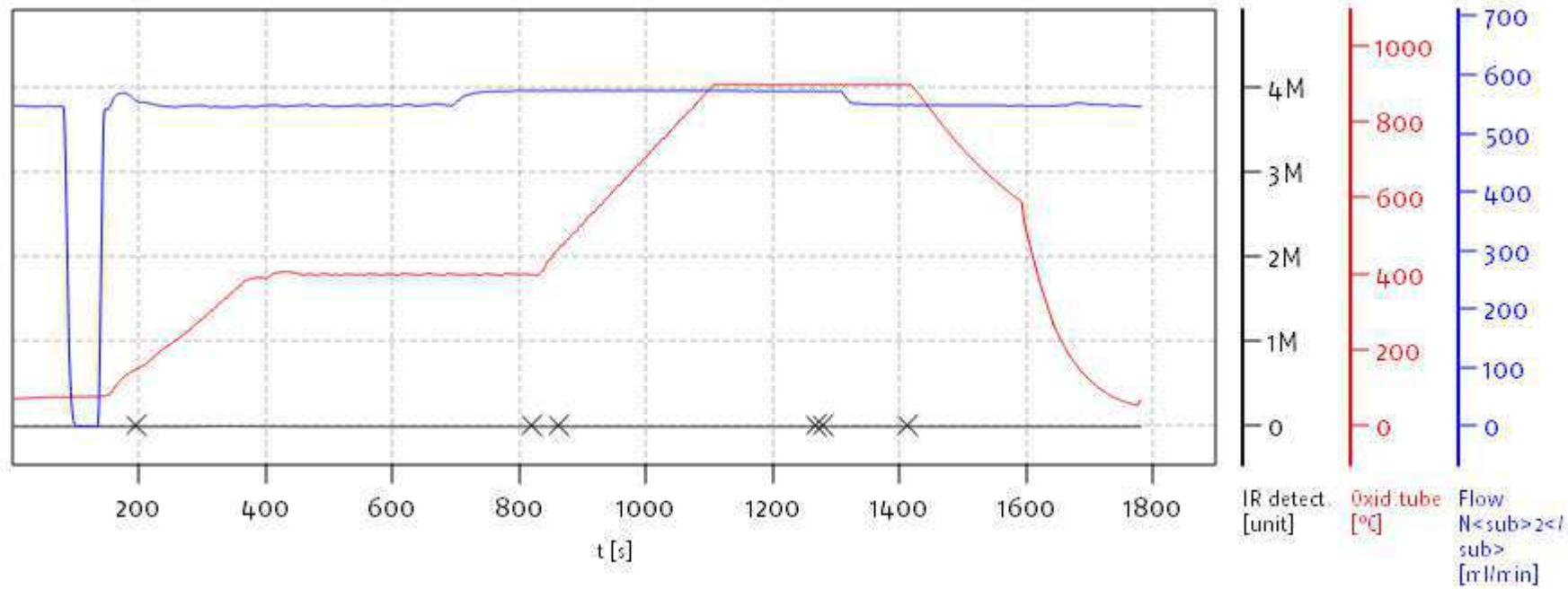
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
65	65	SLA0148-CCB5	501.60		CARBON	1/17/2023 5:52 PM	bl,C3u,C2u	0.000	16 009	0.000	0.000	699	45	0.000	0.000	0.9826	1.0000



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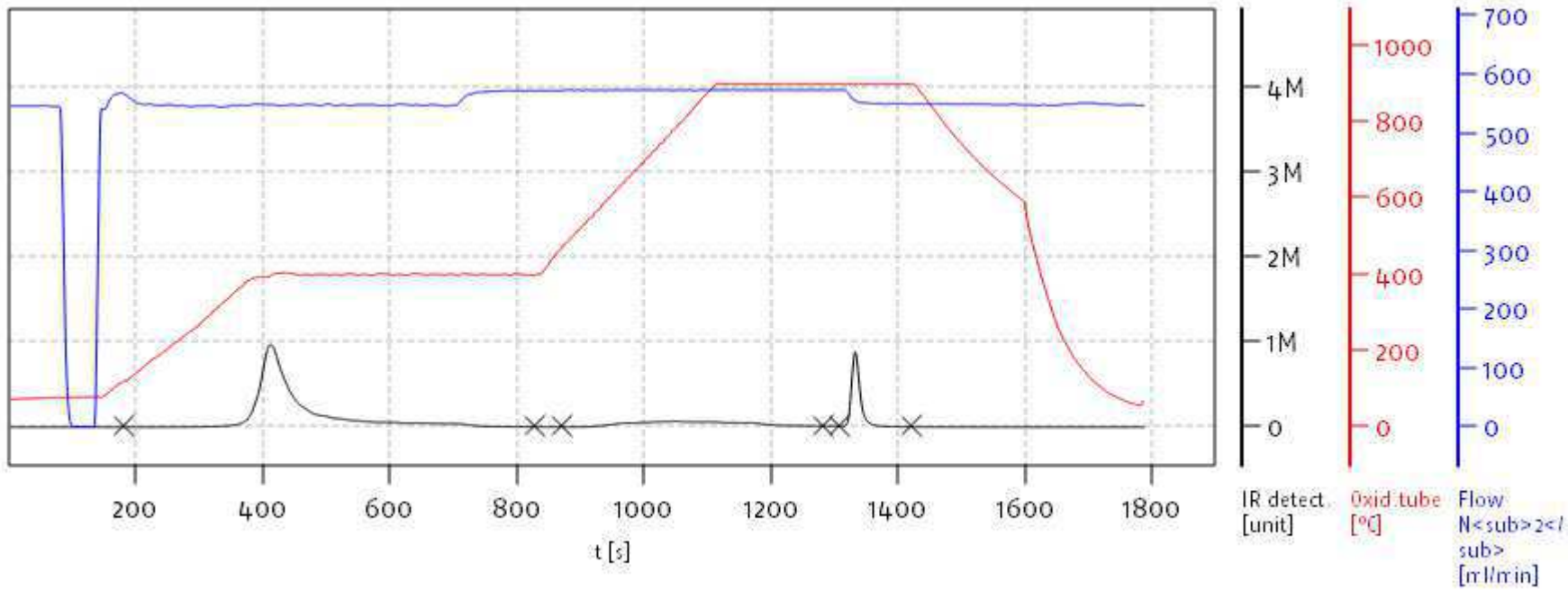
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
66	66	23A0207-10	519.30		CARBON	1/17/2023 6:23 PM	bl	0.886	2 535 122	1.050	0.151	533 436	577 676	0.735	0.164	0.9826	1.0000



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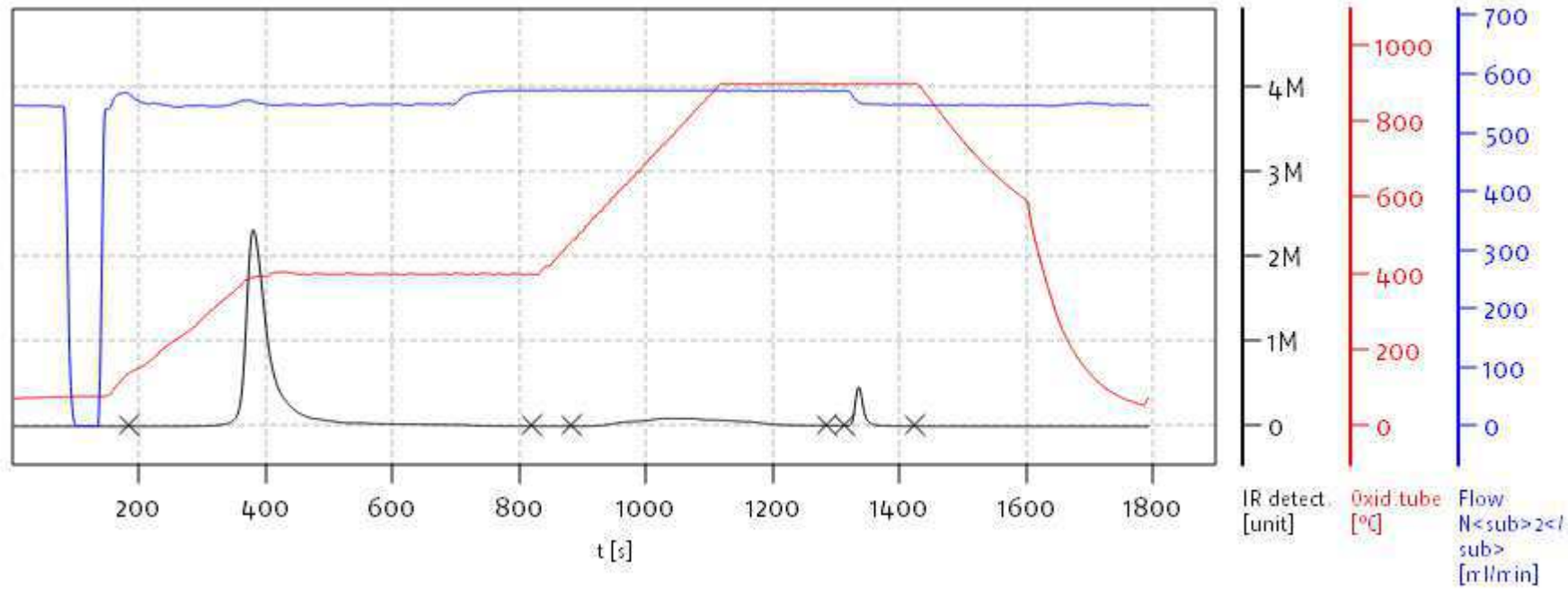
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
67	67	23A0207-11	505.20		CARBON	1/17/2023 6:53 PM	bl	1.224	3 842 570	1.432	0.075	272 685	704 277	1.149	0.208	0.9826	1.0000



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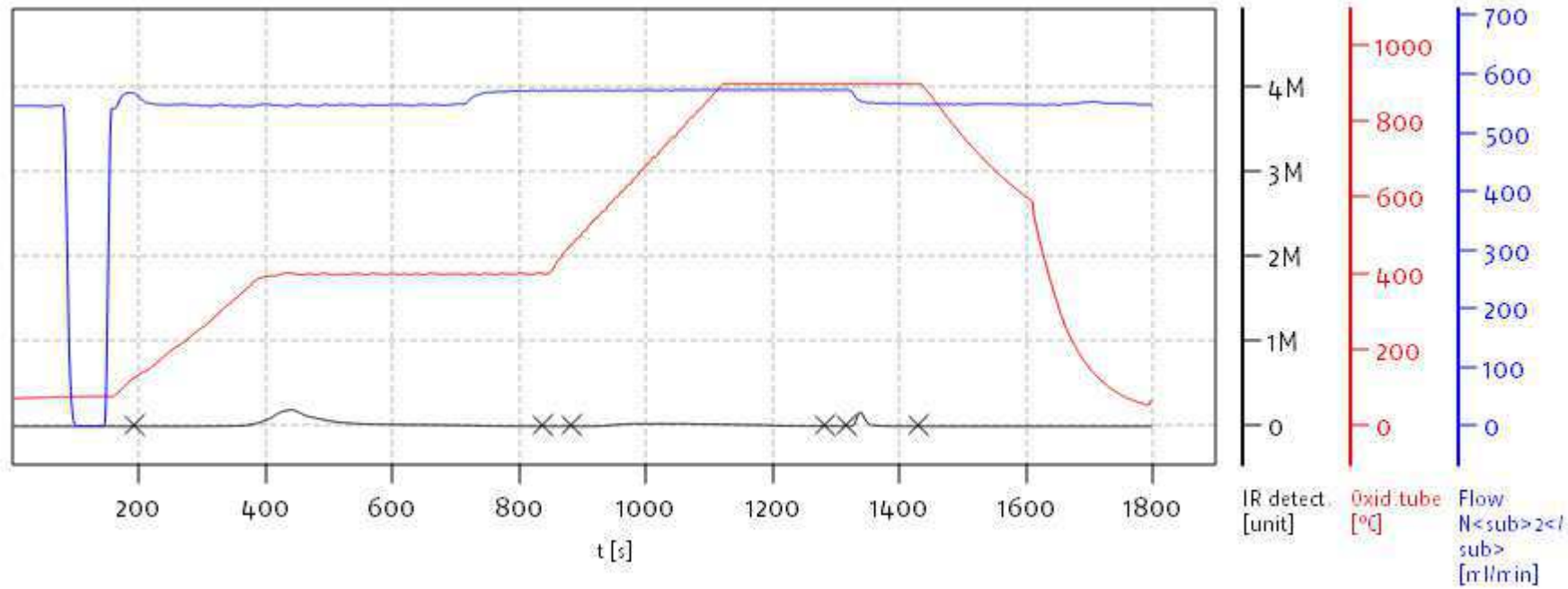
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
68	68	23A0207-12	537.60		CARBON	1/17/2023 7:23 PM	bl	0.231	768 347	0.299	0.022	101 528	259 991	0.210	0.067	0.9826	1.0000



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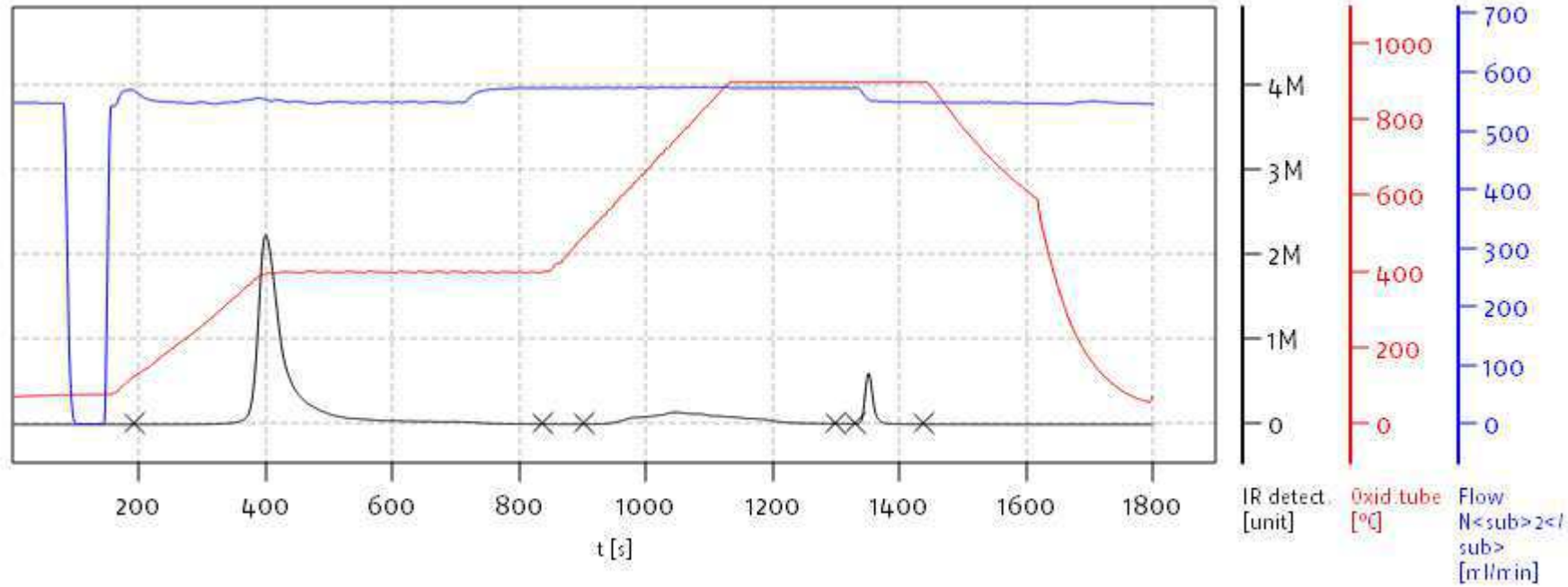
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
69	69	23A0207-13	572.60		CARBON	1/17/2023 7:54 PM	bl	1.178	4 140 946	1.428	0.085	341 935	949 075	1.093	0.249	0.9826	1.0000



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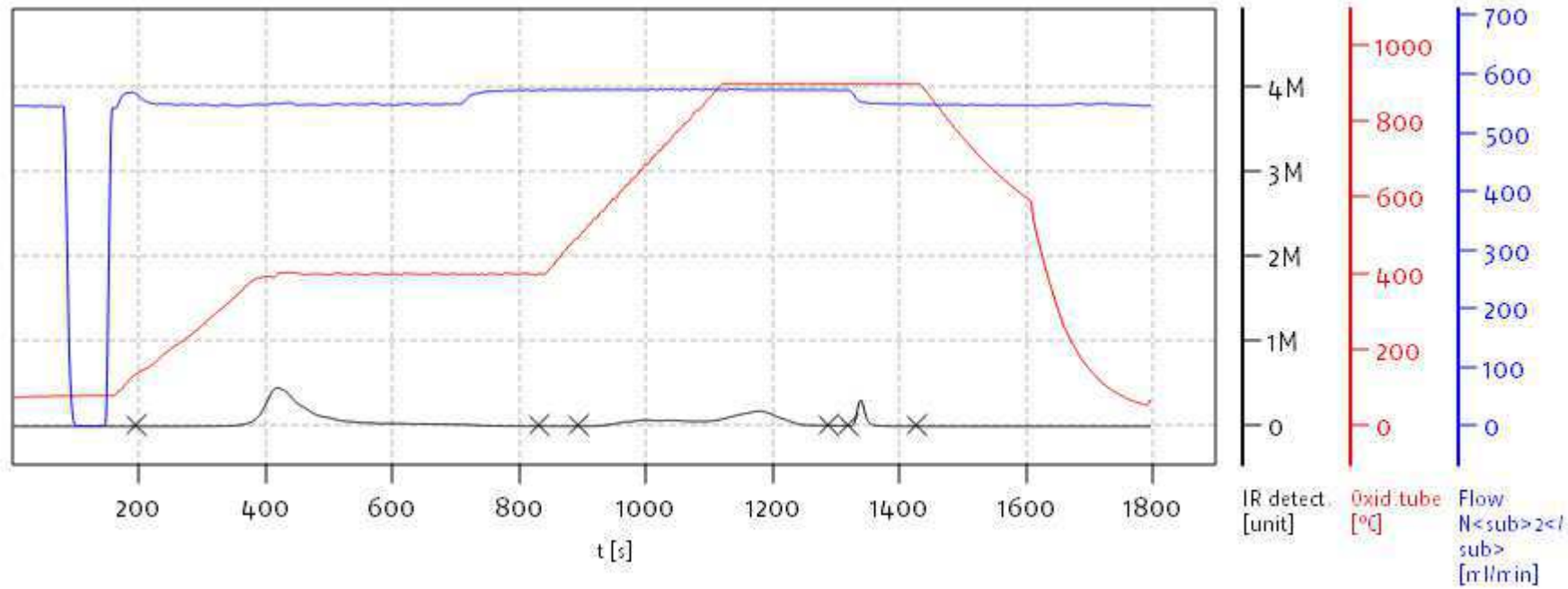
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
70	70	23A0207-14	535.80		CARBON	1/17/2023 8:24 PM	bl	0.468	1 521 378	0.750	0.043	176 963	1 003 228	0.424	0.282	0.9826	1.0000



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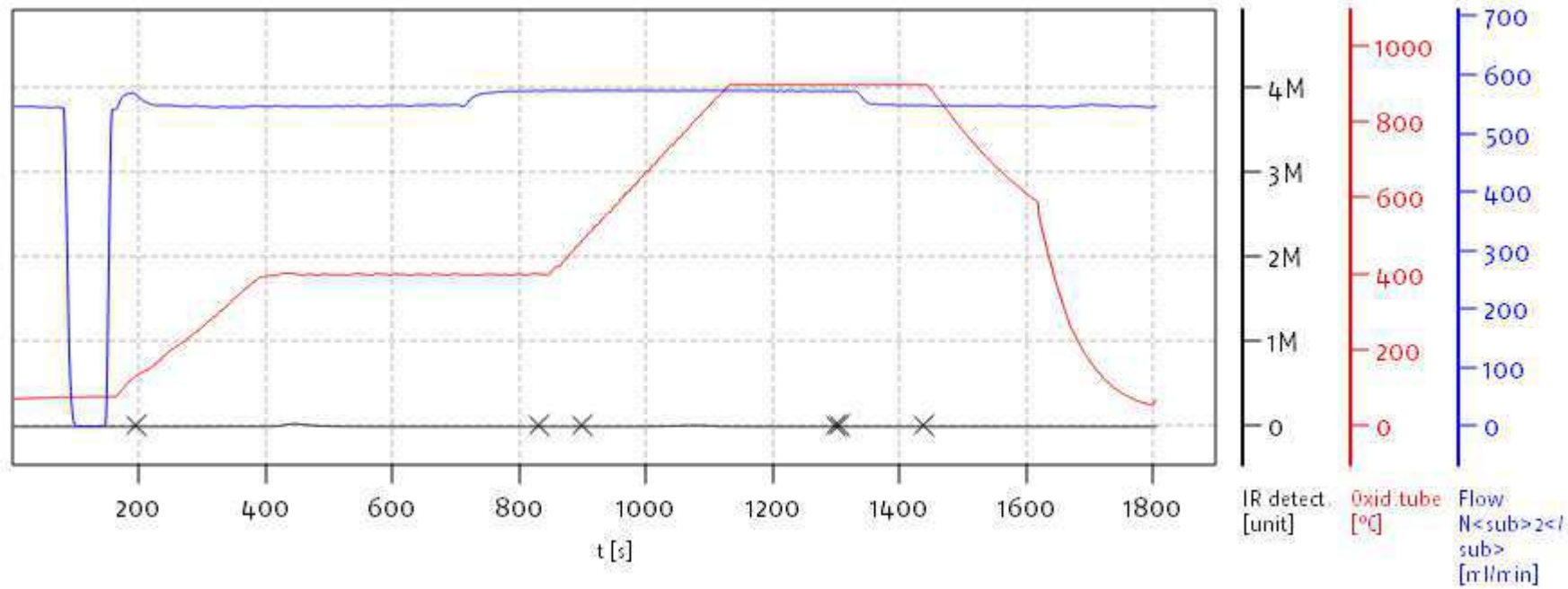
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
71	71	BLA0360-MRL1	534.50		CARBON	1/17/2023 8:55 PM	bl,C2u	0.011	66 244	0.014	0.000	420	36 334	0.011	0.003	0.9826	1.0000



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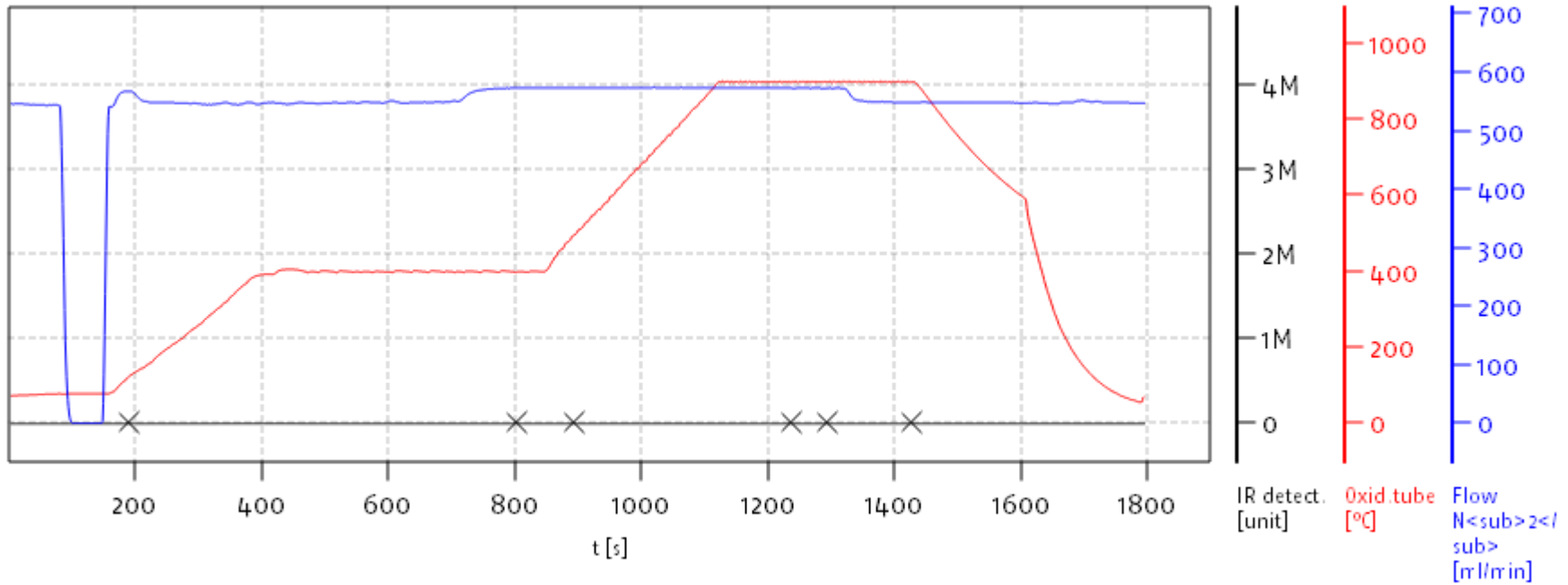
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
72	72	BLA0360-BLK1	514.60		CARBON	1/17/2023 9:25 PM	bl,C3u,C2u	0.000	8 477	0.000	0.000	417	1 320	0.000	0.000	0.9826	1.0000



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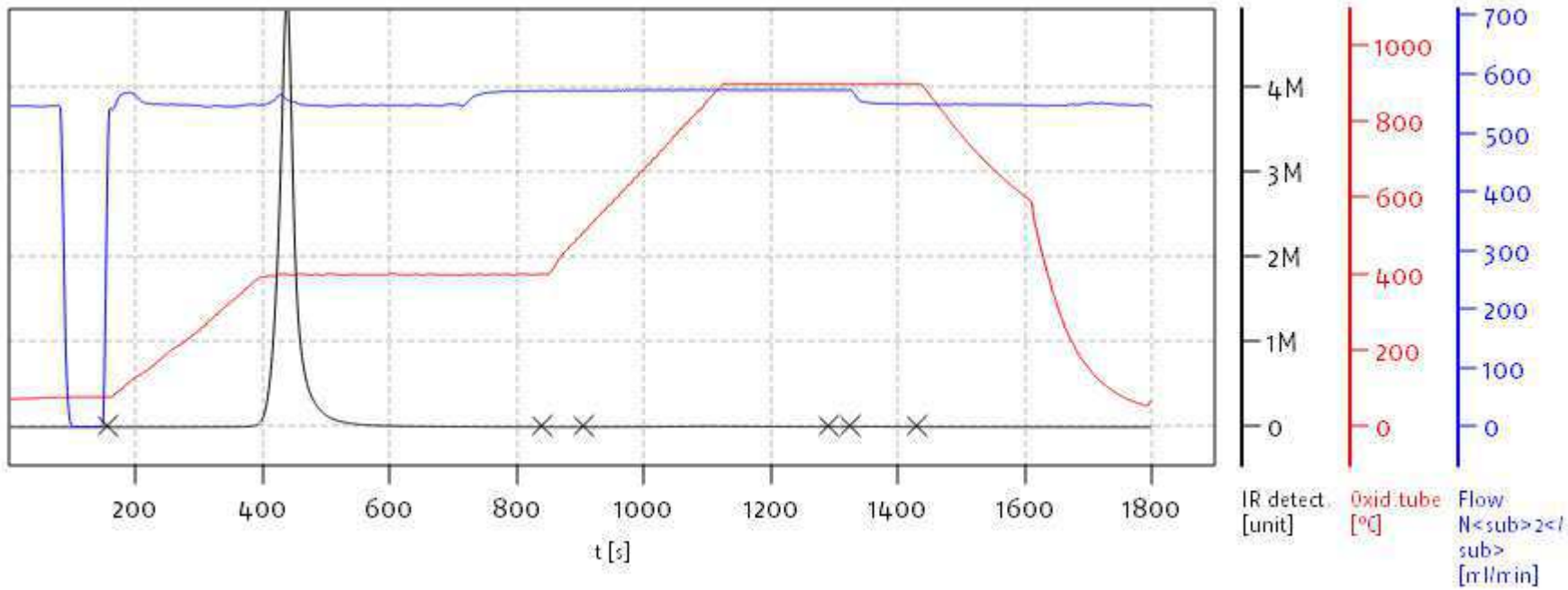
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
73	73	BLA0360-BS1	19.20		CARBON	1/17/2023 9:55 PM	bl	45.589	5 781 031	46.003	0.000	16 504	77 894	45.589	0.414	0.9826	1.0000



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Soli TOC Cube, Carbon
Balance: BAL3
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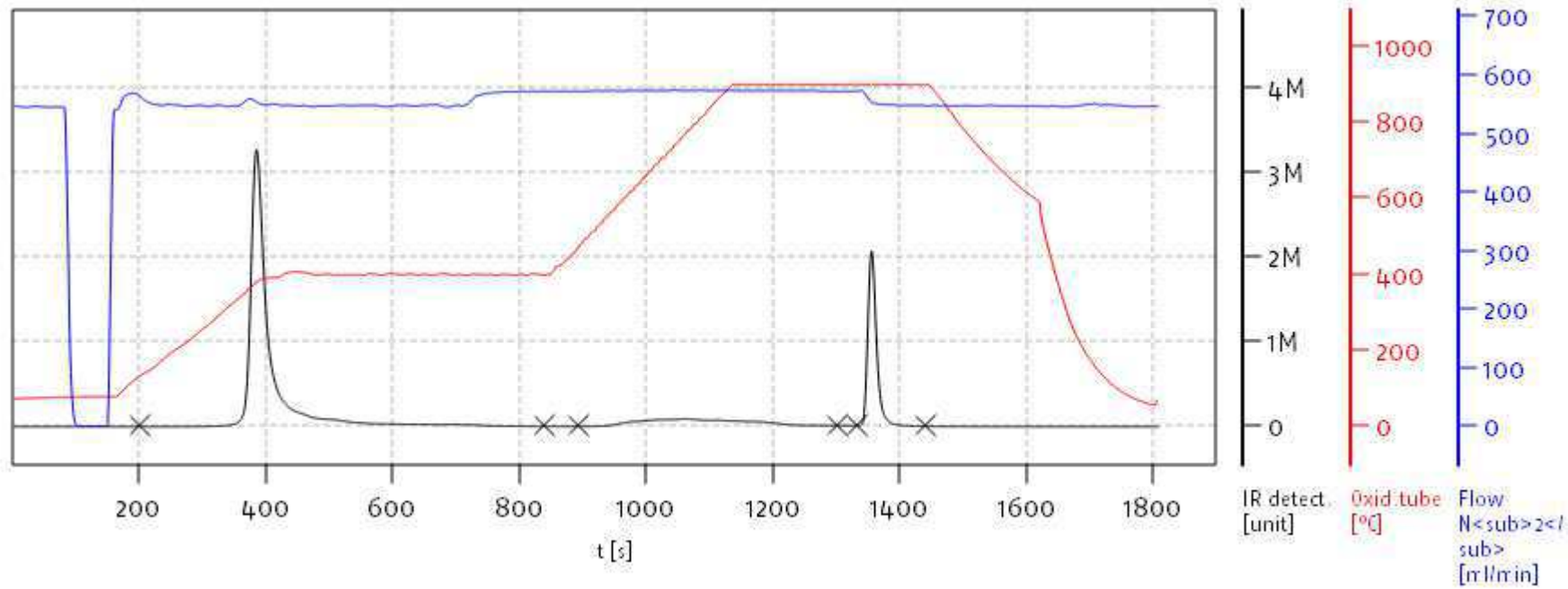
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
74	74	BLA0360-SRM1	271.60		CARBON	1/17/2023 10:26 PM	bl	2.929	3 997 719	3.331	0.704	1 262 519	732 188	2.224	0.402	0.9826	1.0000



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Balance: BAL3
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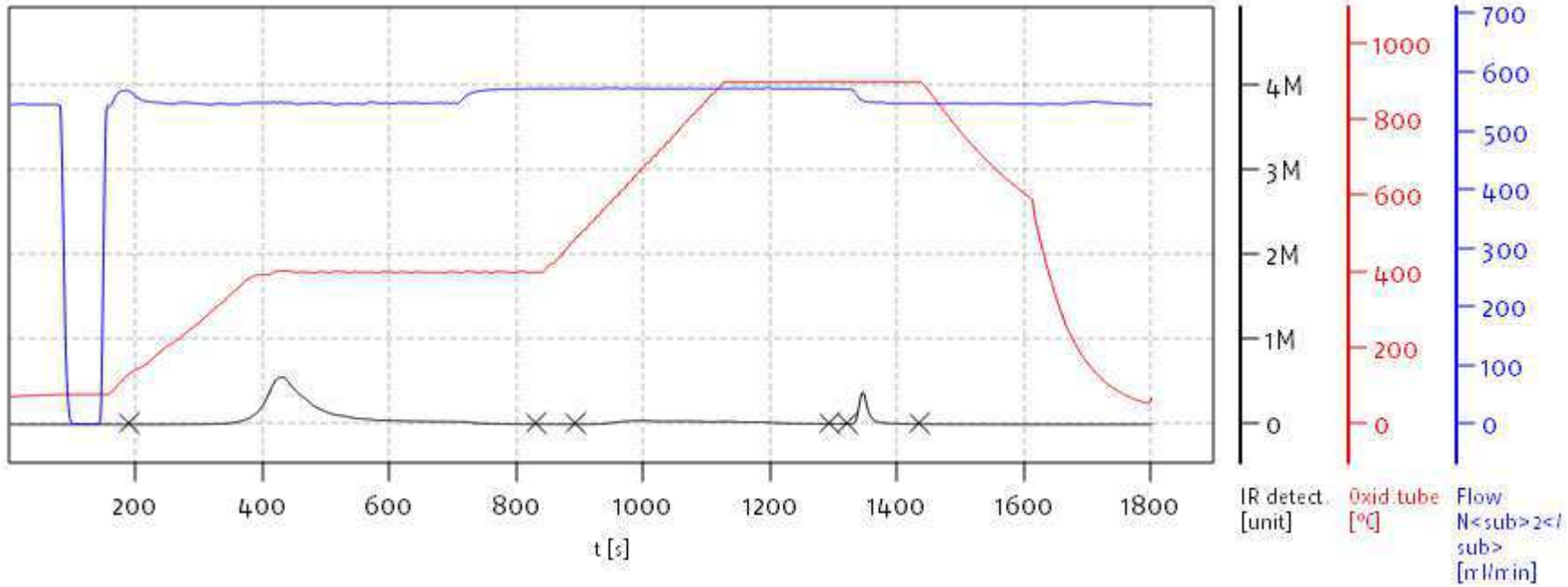
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
75	75	23A0207-15	502.00		CARBON	1/17/2023 10:56 PM	bl	0.673	2 012 825	0.778	0.071	256 058	367 456	0.602	0.105	0.9826	1.0000



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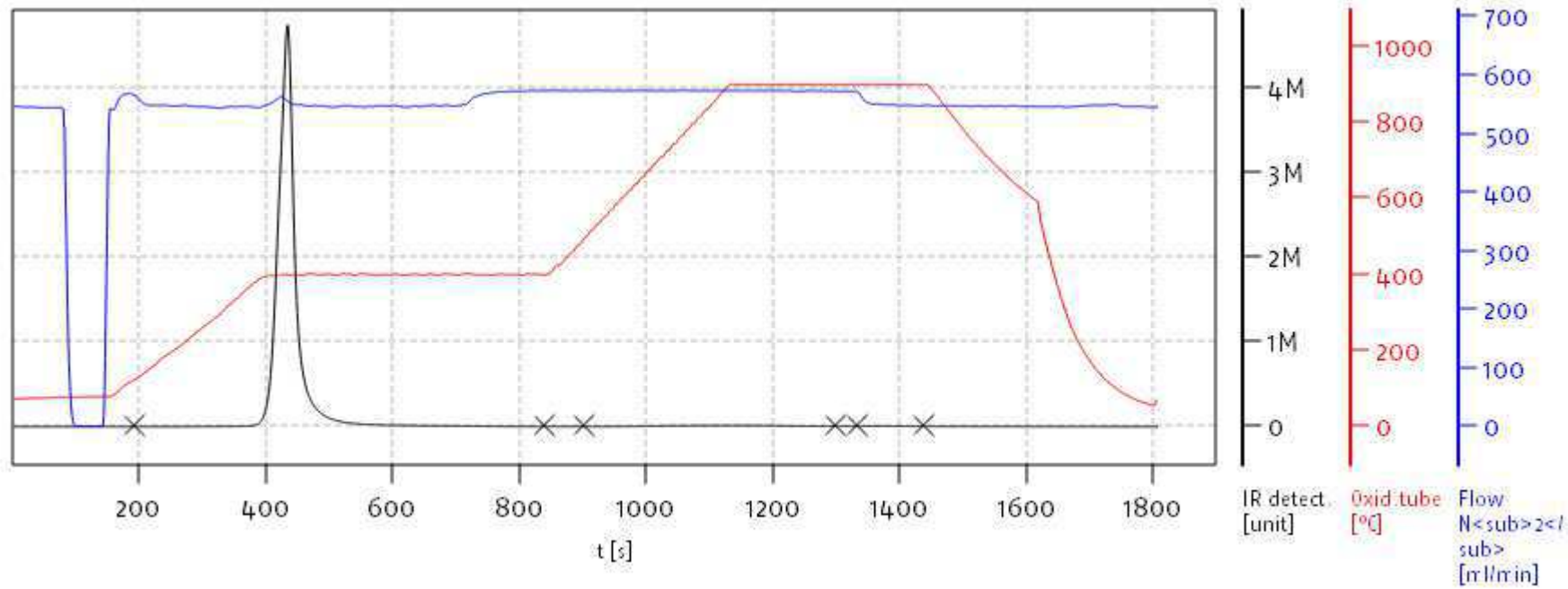
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
76	76	SLA0148-CCV6	18.90		CARBON	1/17/2023 11:27 PM	bl	44.706	5 581 413	45.464	0.000	22 229	119 103	44.706	0.758	0.9826	1.0000



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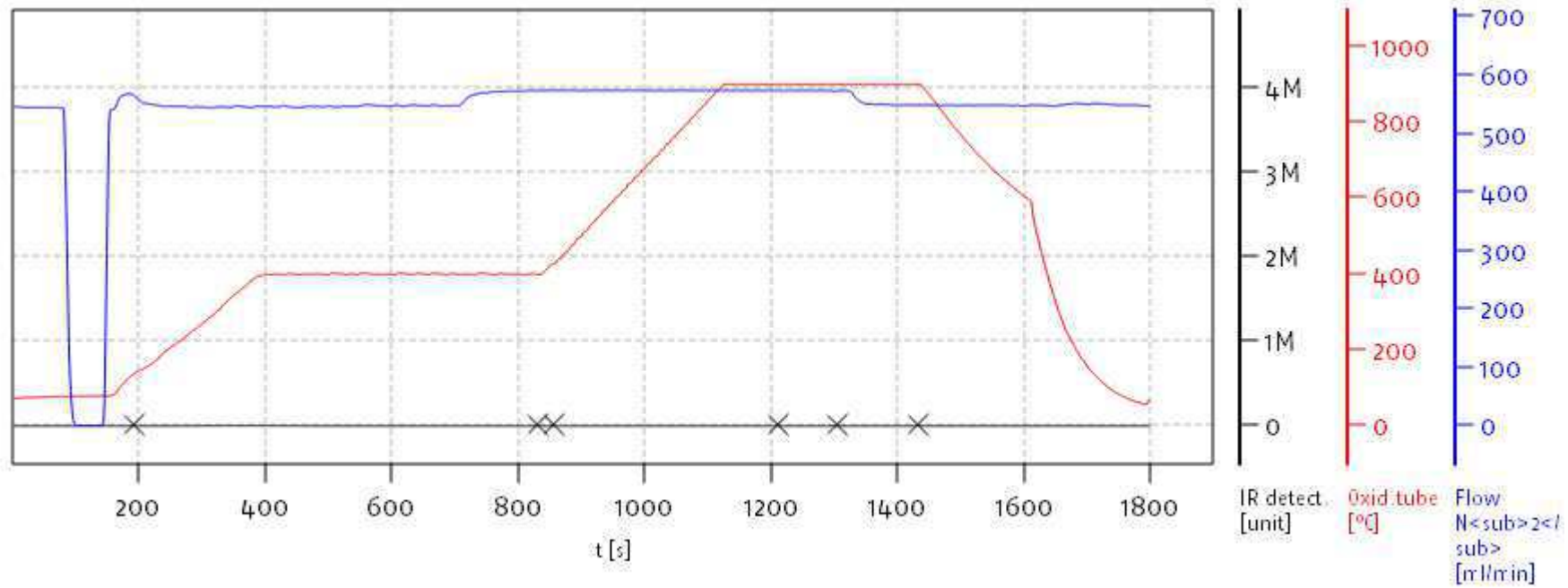
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
77	77	SLA0148-CCB6	504.70		CARBON	1/17/2023 11:57 PM	bl,C3u,C2u	0.000	18 696	0.000	0.000	767	1 023	0.000	0.000	0.9826	1.0000



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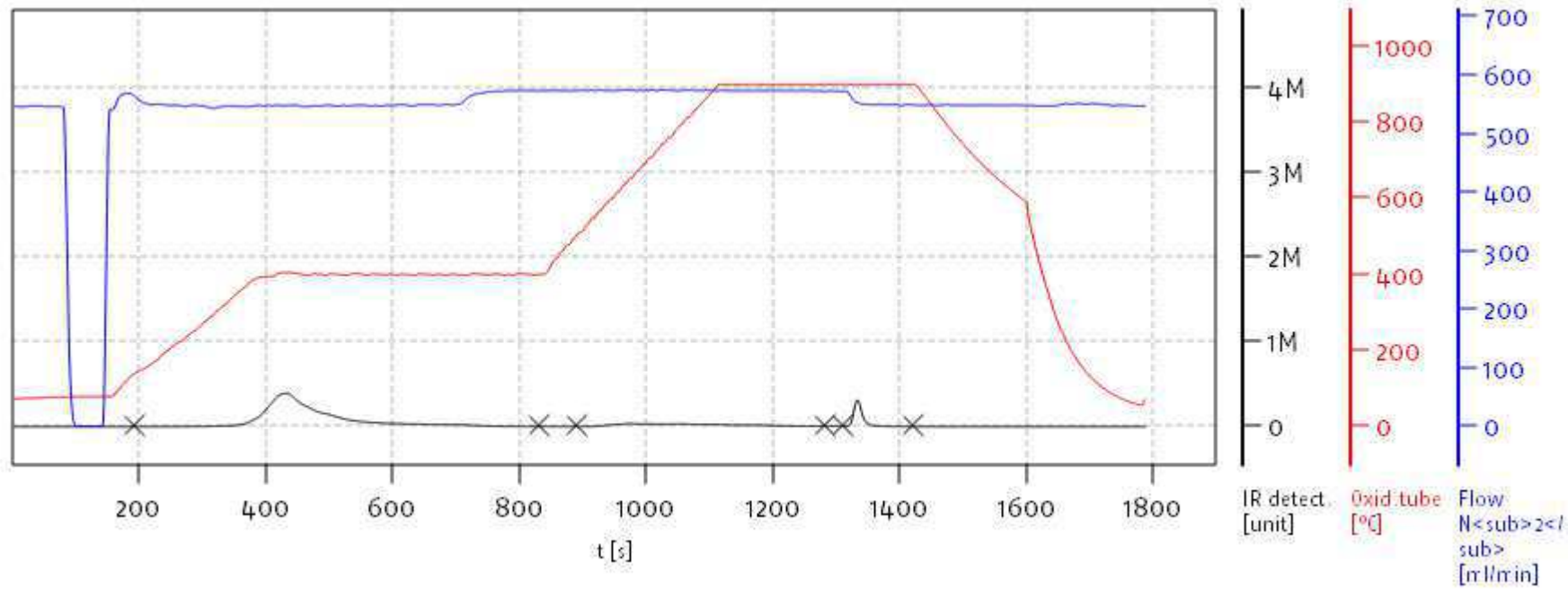
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
78	78	BLA0360-DUP1	523.70		CARBON	1/18/2023 12:27 AM	bl	0.499	1 578 973	0.574	0.048	189 635	281 124	0.451	0.075	0.9826	1.0000



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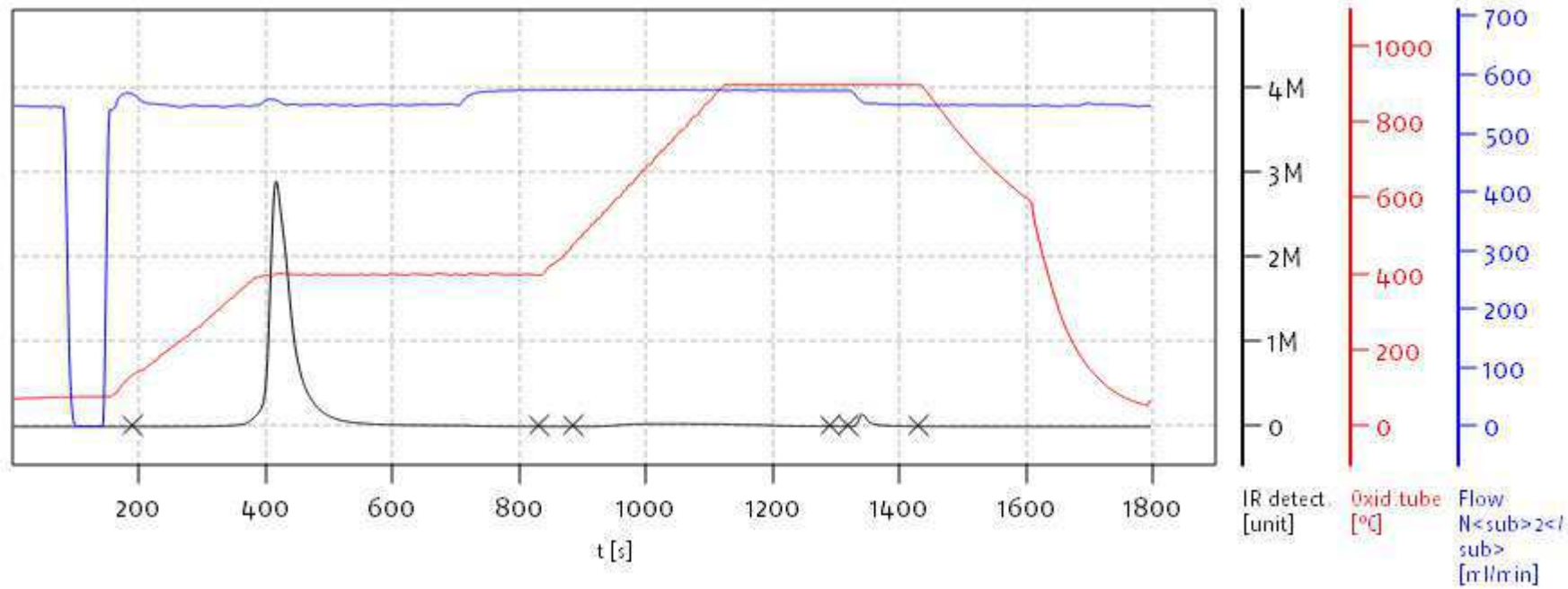
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
79	79	BLA0360-MS1	521.60	0.0089	CARBON	1/18/2023 12:58 AM	bl	1.360	4 600 108	1.436	0.026	113 939	285 145	1.334	0.077	0.9826	1.0000



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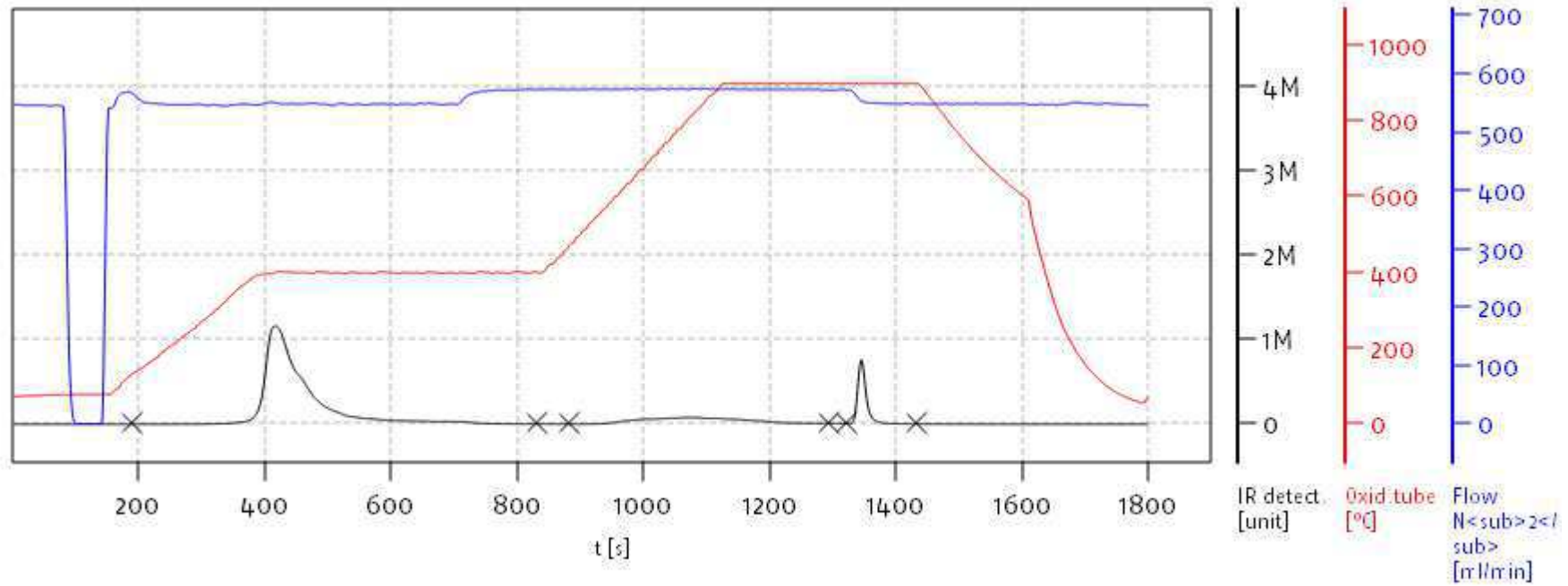
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
80	80	23A0207-16	552.40		CARBON	1/18/2023 1:28 AM	bl	0.991	3 189 056	1.153	0.120	456 012	604 548	0.871	0.162	0.9826	1.0000



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Soli TOC Cube, Carbon
Balance: BAL3
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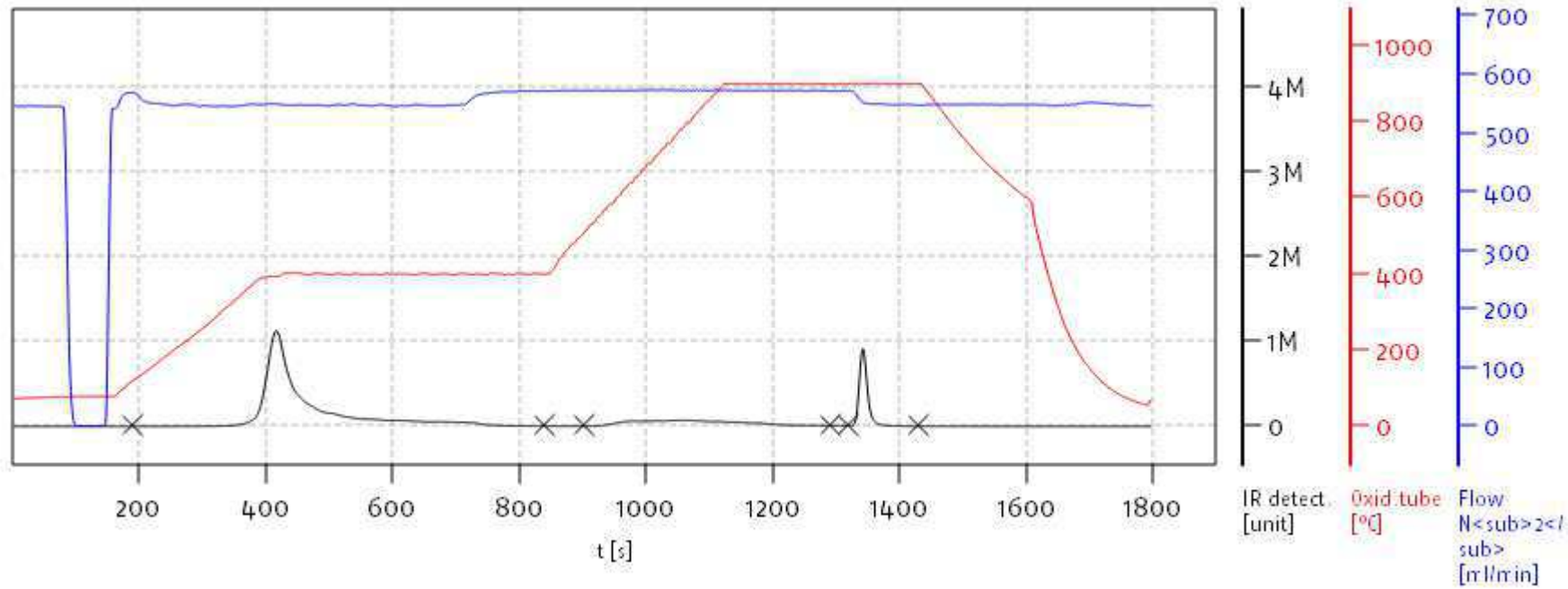
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
81	81	23A0207-17	516.00		CARBON	1/18/2023 1:58 AM	bl	0.972	2 816 461	1.141	0.150	525 981	589 173	0.822	0.169	0.9826	1.0000



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Soli TOC Cube, Carbon
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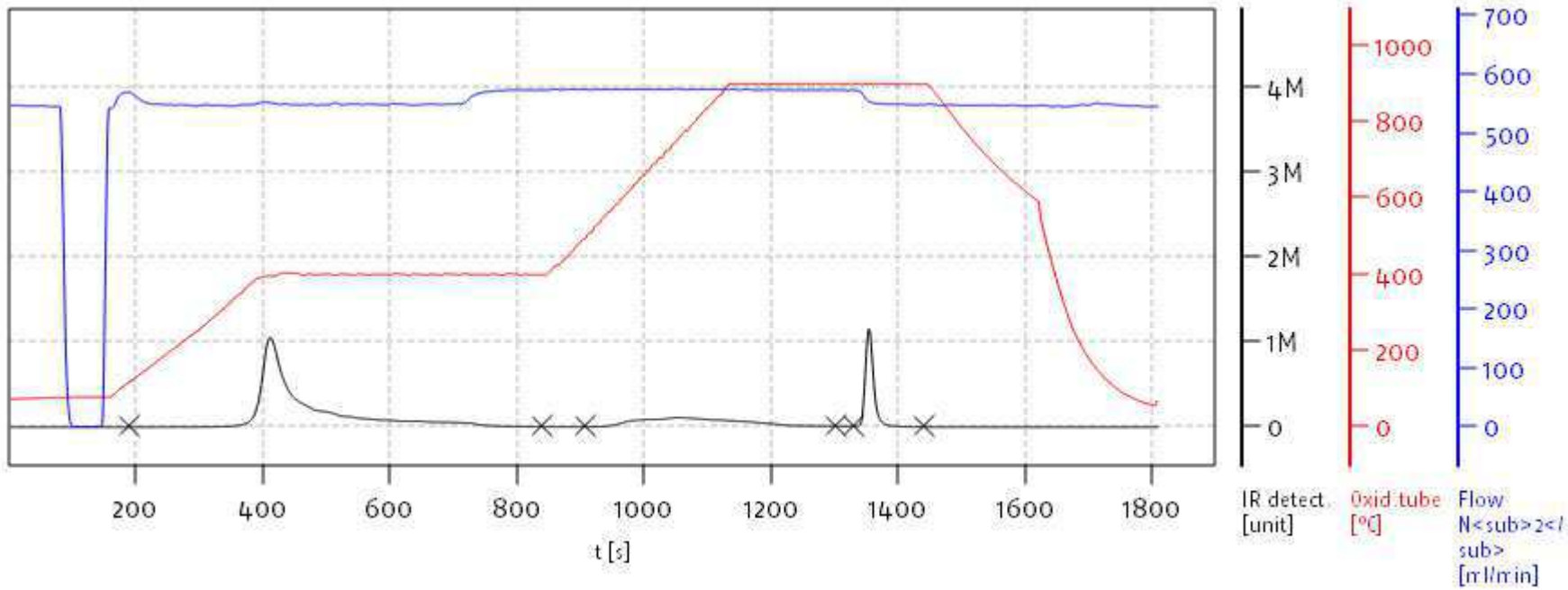
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
82	82	23A0249-01	549.00		CARBON	1/18/2023 2:29 AM	bl	0.948	2 794 266	1.172	0.181	667 249	823 322	0.767	0.225	0.9826	1.0000



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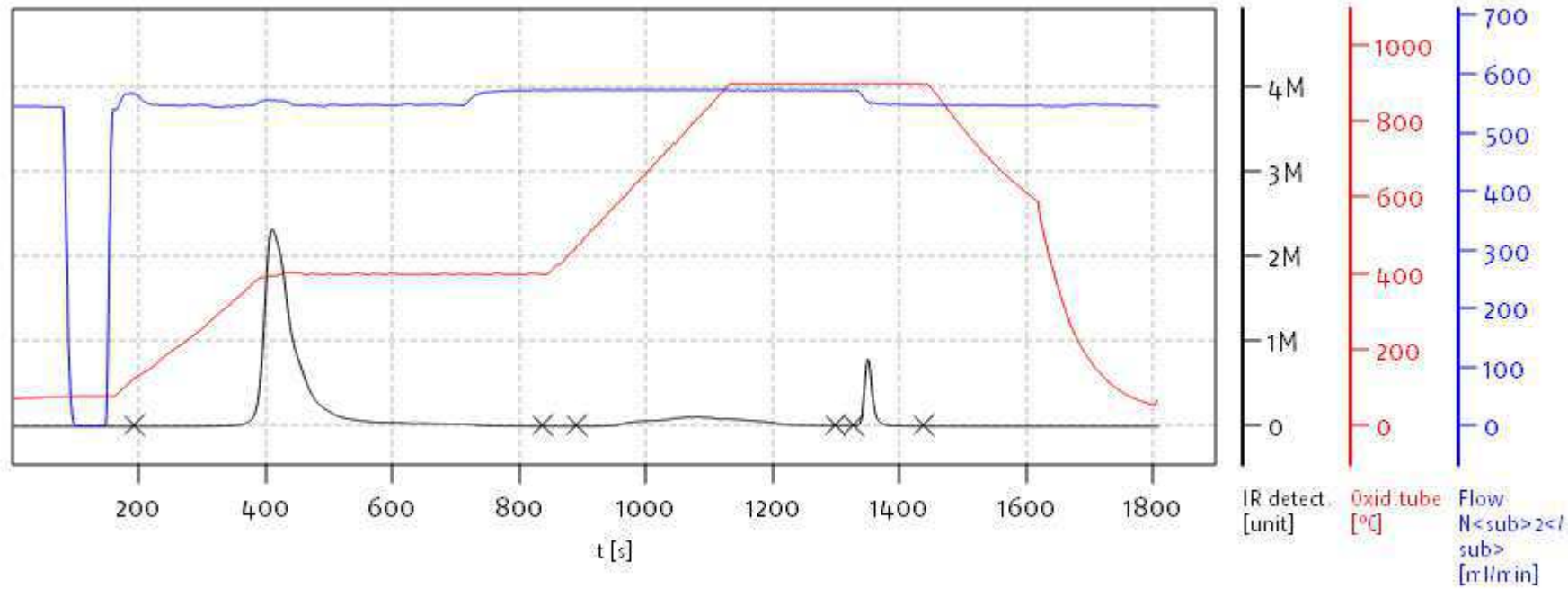
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
83	83	23A0249-02	503.40		CARBON	1/18/2023 3:00 AM	bl	1.616	4 944 138	1.847	0.130	449 280	779 060	1.486	0.231	0.9826	1.0000



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Serial No: 0300.181017
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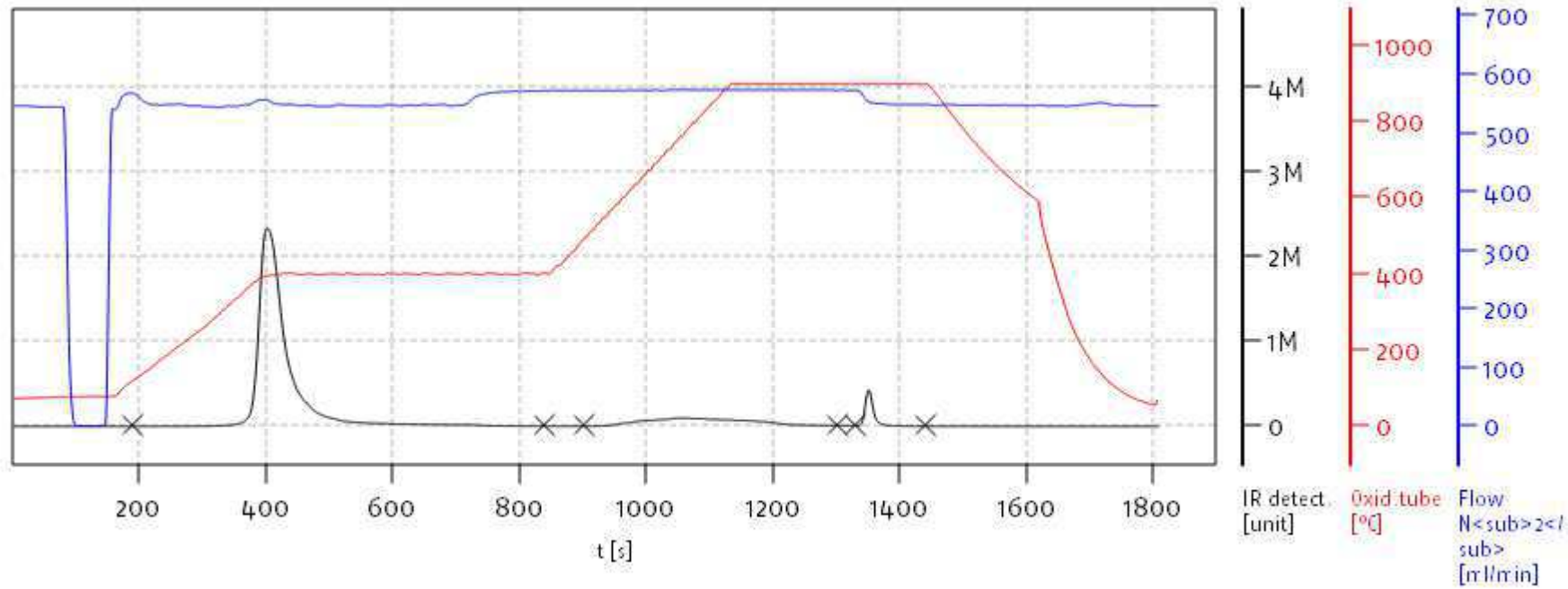
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
84	84	23A0249-03	553.70		CARBON	1/18/2023 3:30 AM	bl	1.267	4 411 510	1.469	0.062	248 732	750 566	1.205	0.202	0.9826	1.0000



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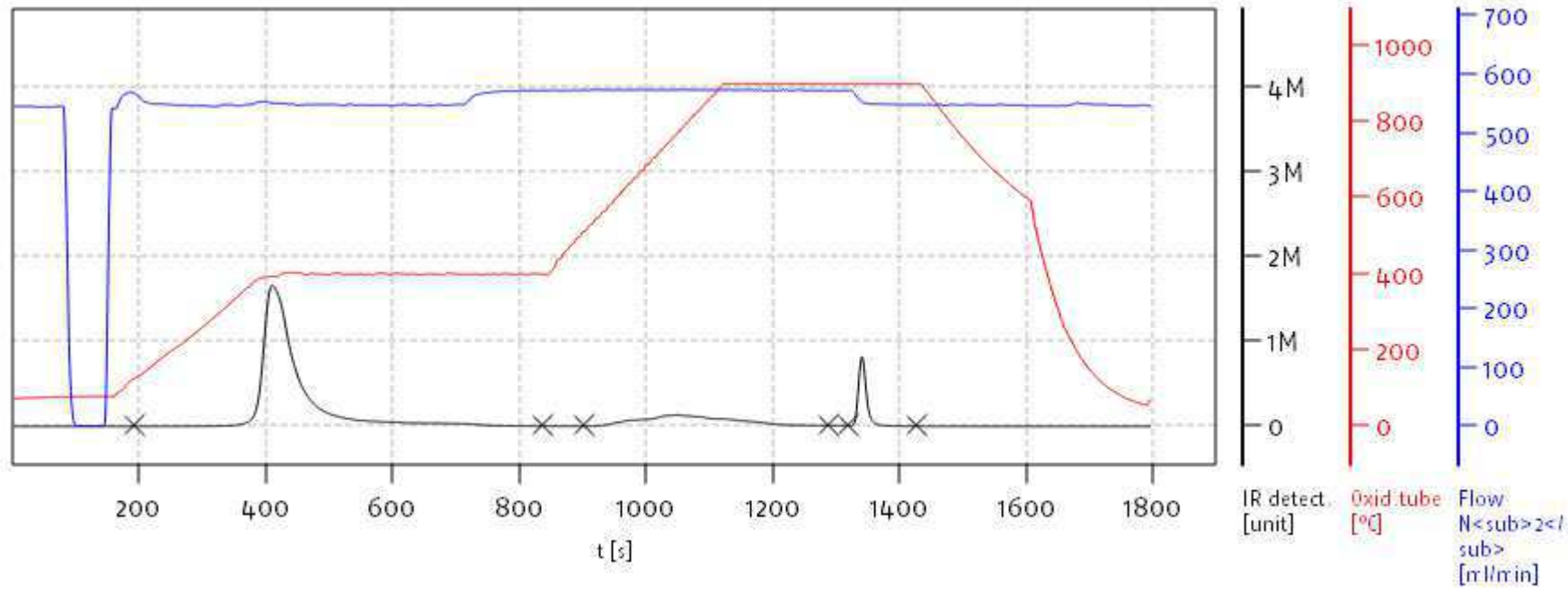
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
85	85	23A0249-04	548.80		CARBON	1/18/2023 4:00 AM	bl	1.190	3 882 005	1.430	0.122	458 638	876 354	1.069	0.240	0.9826	1.0000



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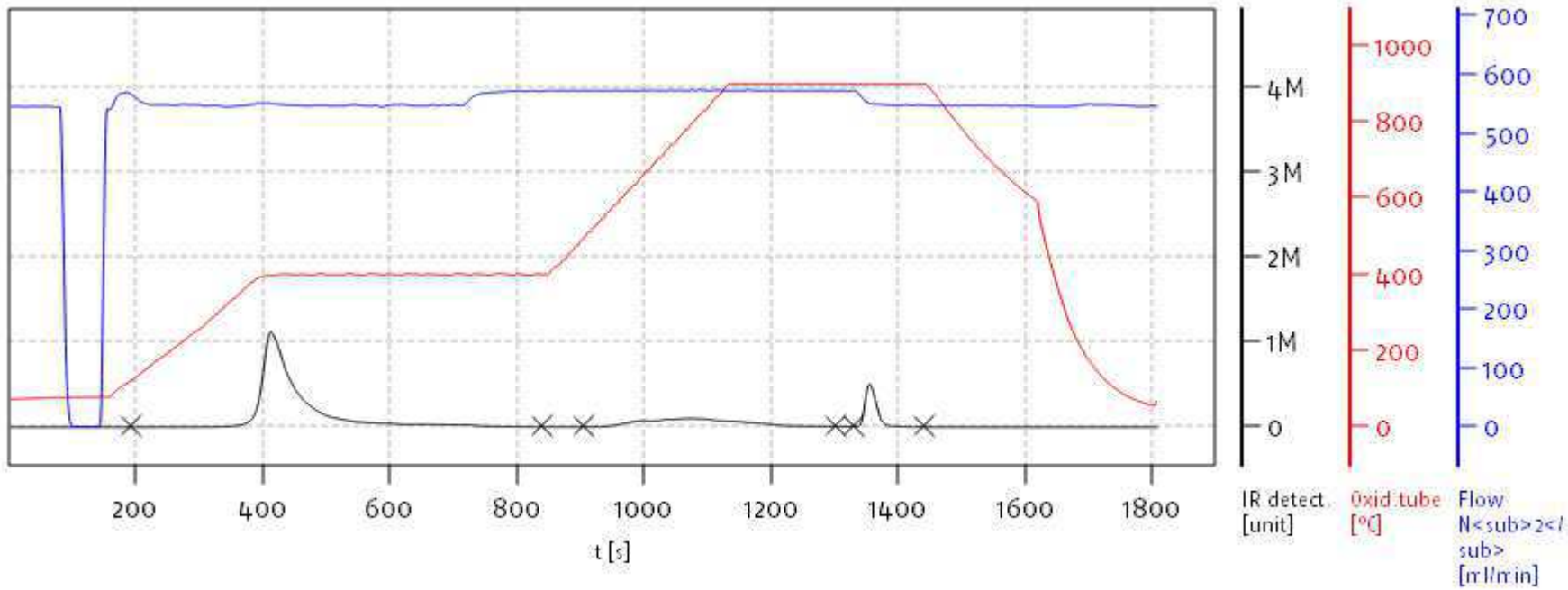
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
86	86	23A0249-05	525.90		CARBON	1/18/2023 4:31 AM	bl	0.887	2 713 600	1.091	0.110	399 743	720 763	0.777	0.204	0.9826	1.0000



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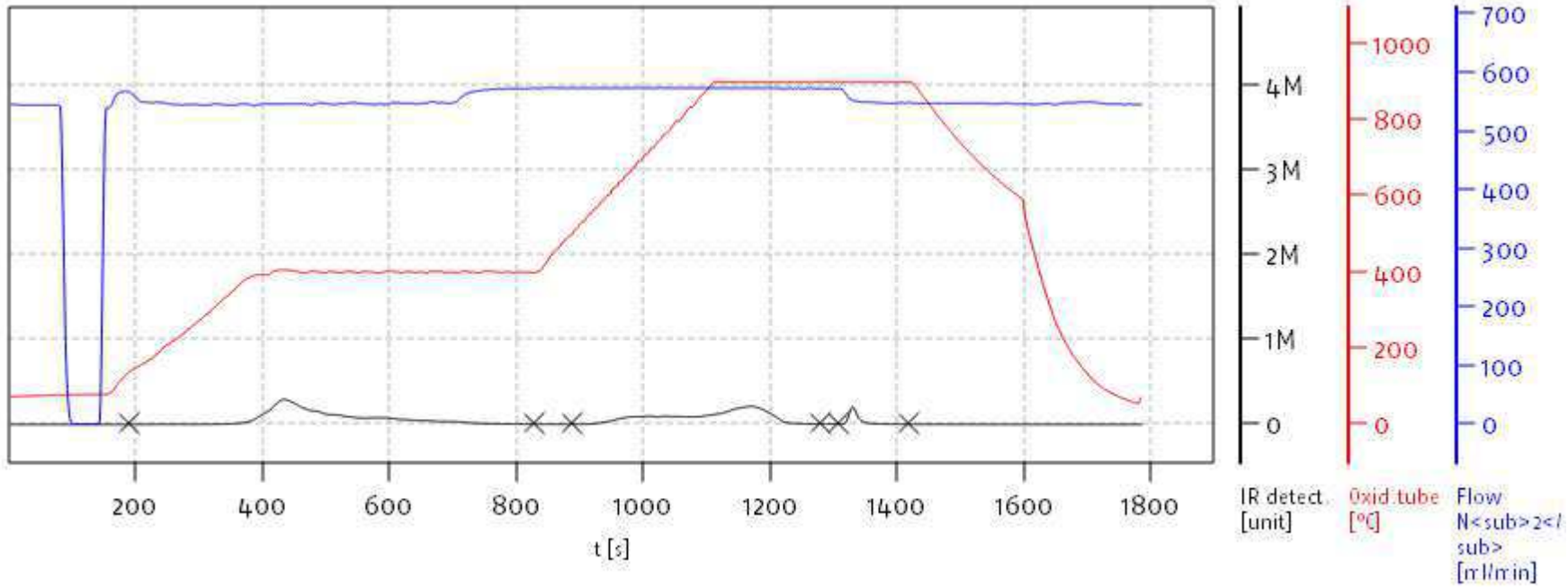
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
87	87	23A0249-06	603.40		CARBON	1/18/2023 5:01 AM	bl	0.380	1 421 243	0.691	0.028	137 203	1 240 470	0.352	0.311	0.9826	1.0000



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Balance: BAL3
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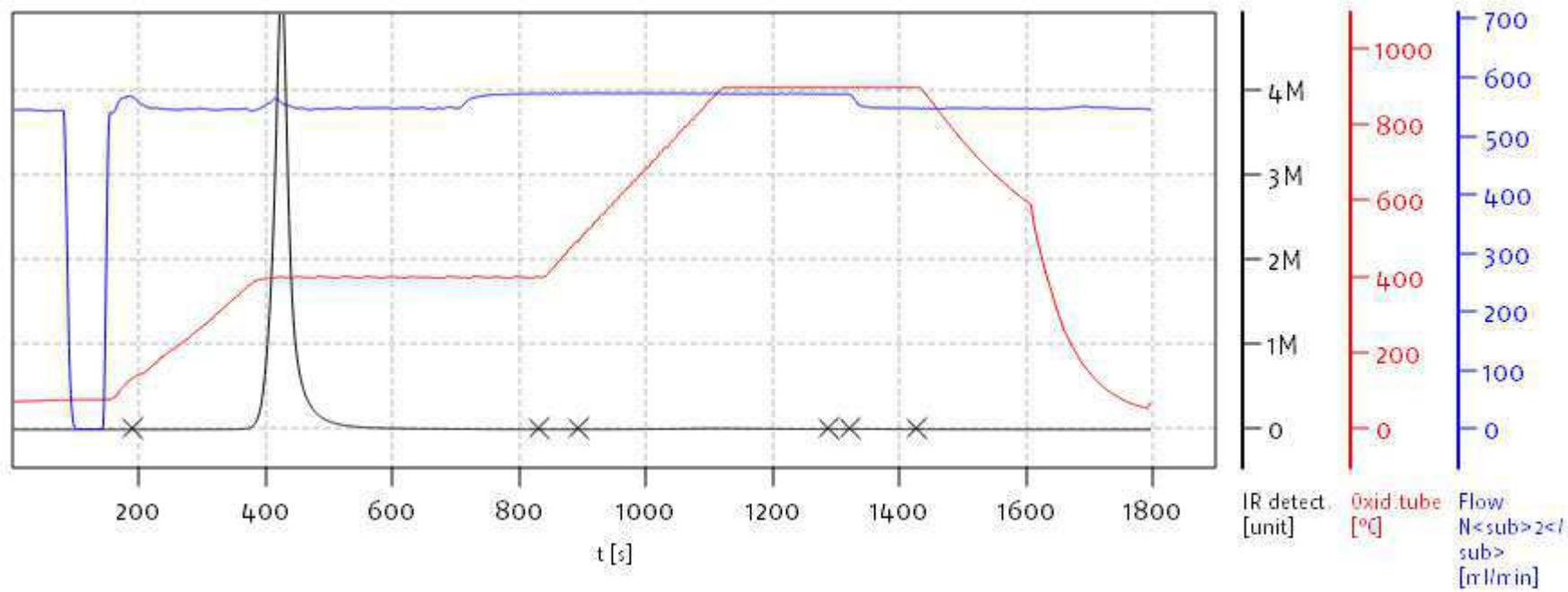
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
88	88	SLA0148-CCV7	20.30		CARBON	1/18/2023 5:31 AM	bl	45.456	6 092 914	46.004	0.000	18 355	98 462	45.456	0.549	0.9826	1.0000



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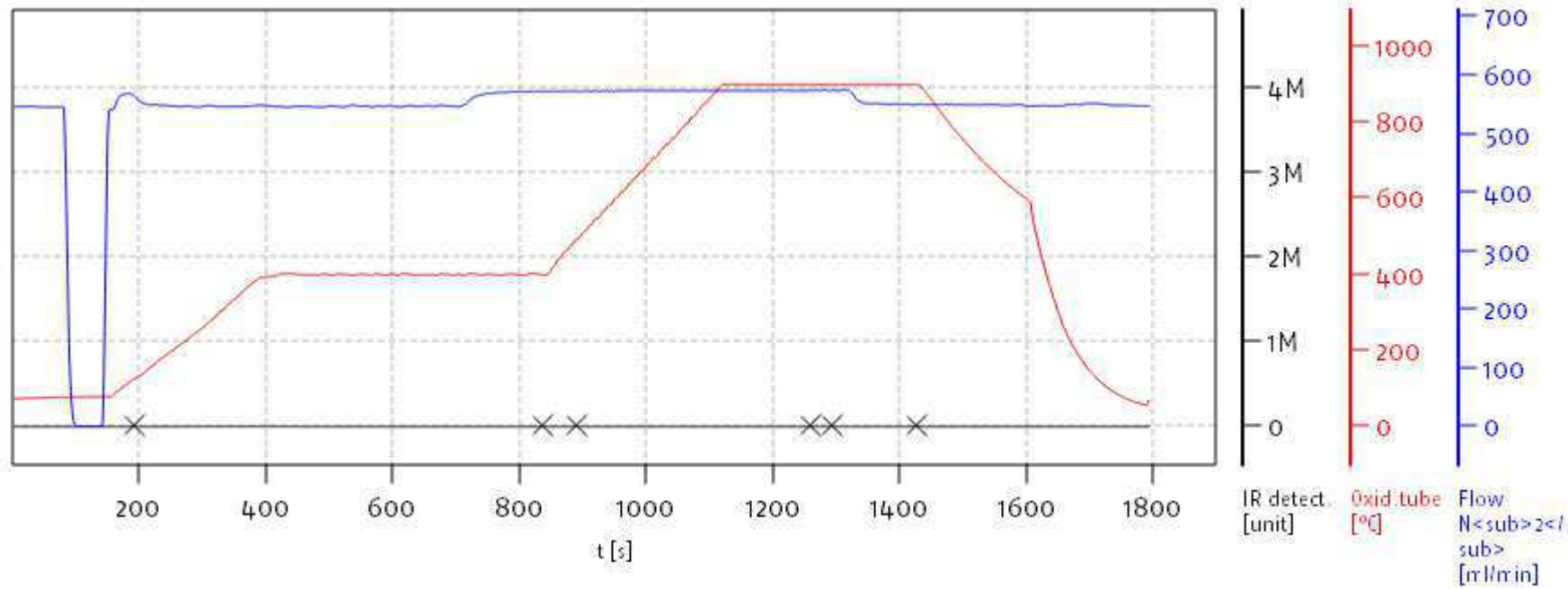
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
89	89	SLA0148-CCB7	508.10		CARBON	1/18/2023 6:02 AM	bl,C2u	0.000	12 368	0.000	0.000	577	3 053	0.000	0.000	0.9826	1.0000



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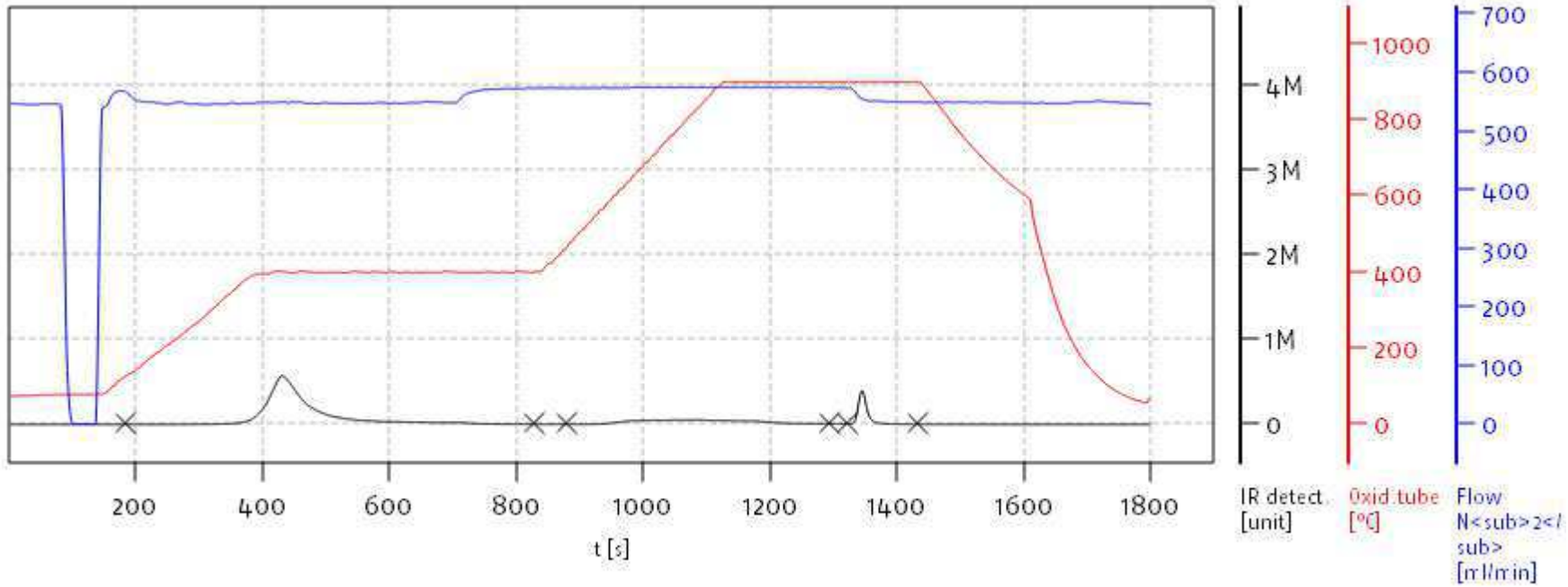
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
90	1	23A0249-07	530.80		CARBON	1/18/2023 6:32 AM	bl	0.547	1 712 352	0.675	0.064	244 419	465 390	0.483	0.128	0.9826	1.0000



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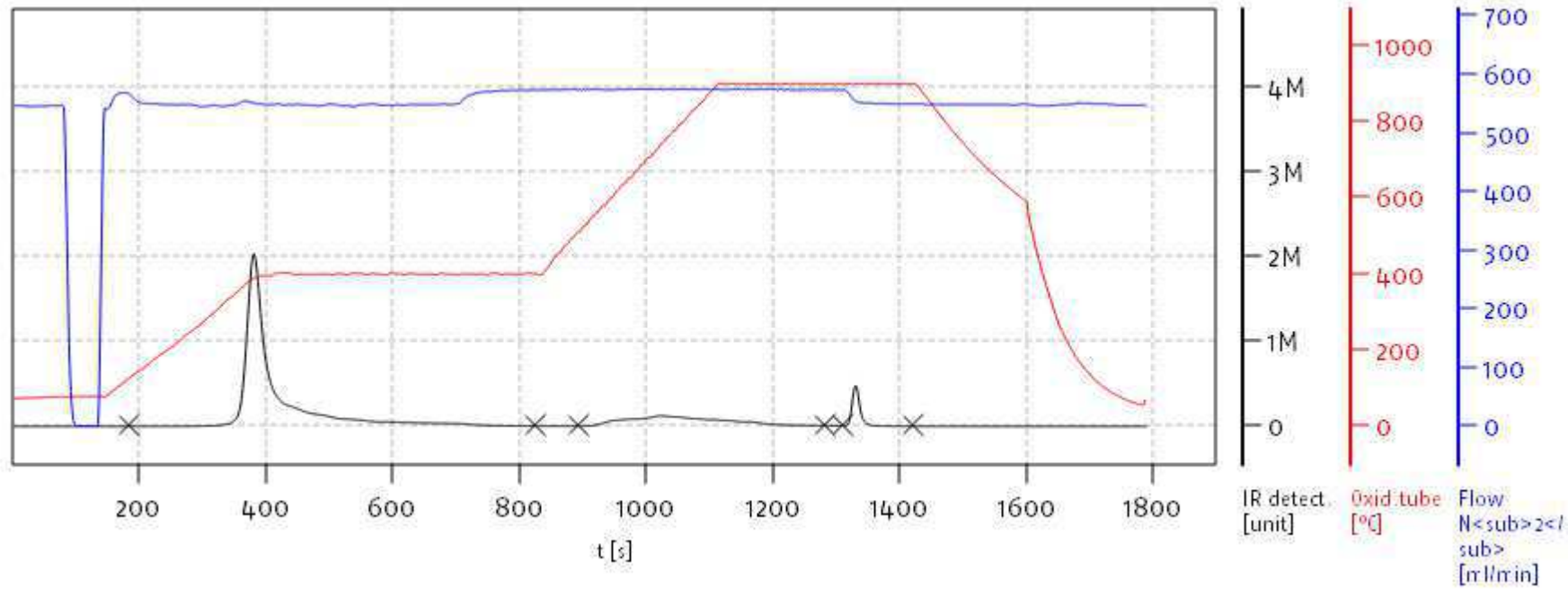
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
91	2	23A0249-08	503.80		CARBON	1/18/2023 7:02 AM	bl	1.111	3 461 887	1.364	0.073	265 564	852 300	1.037	0.254	0.9826	1.0000



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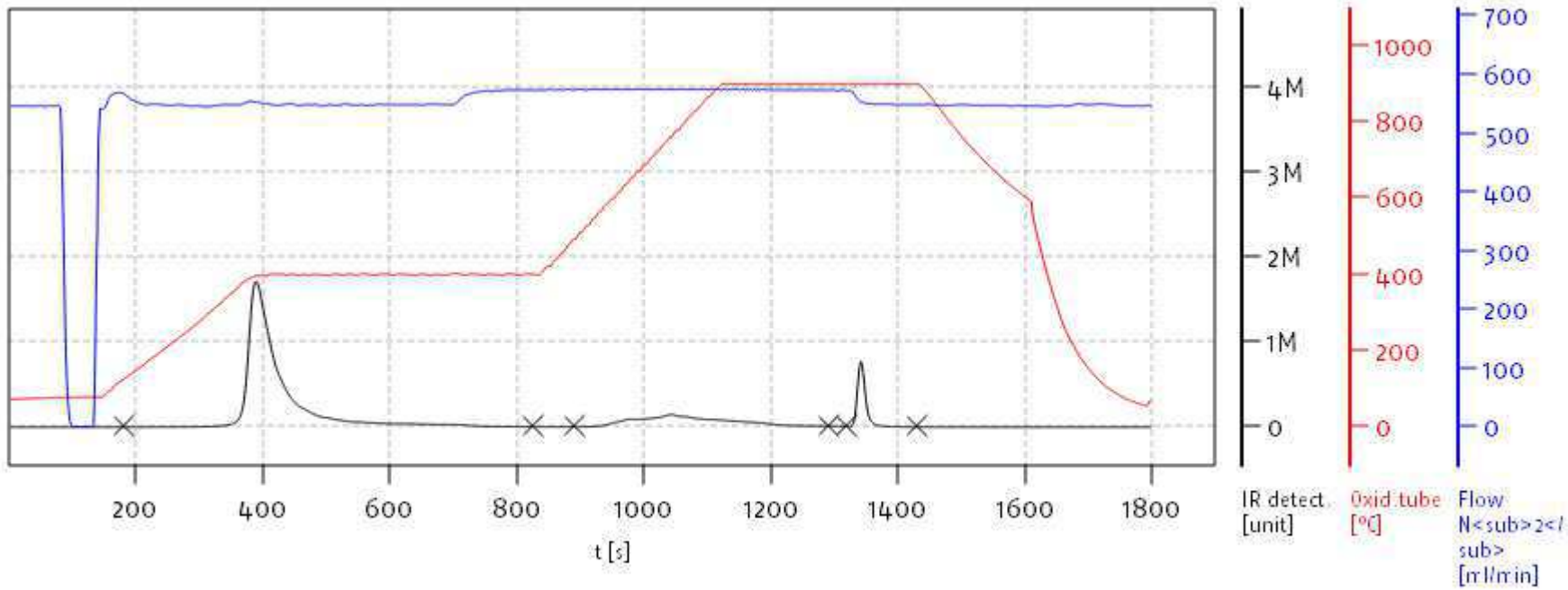
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
92	3	23A0249-09	531.10		CARBON	1/18/2023 7:33 AM	bl	1.154	3 638 181	1.415	0.120	436 539	922 718	1.034	0.261	0.9826	1.0000



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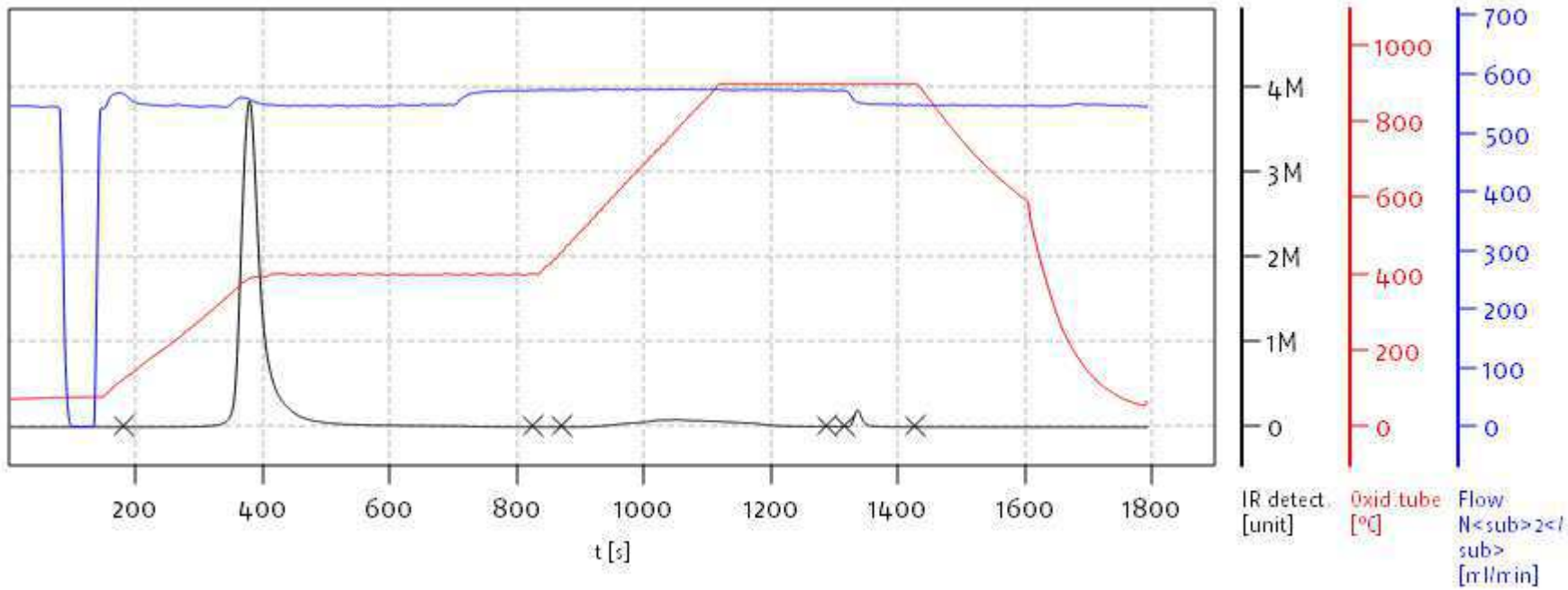
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
93	4	23A0249-10	583.00		CARBON	1/18/2023 8:03 AM	bl	1.448	5 478 862	1.604	0.025	120 951	615 614	1.423	0.156	0.9826	1.0000



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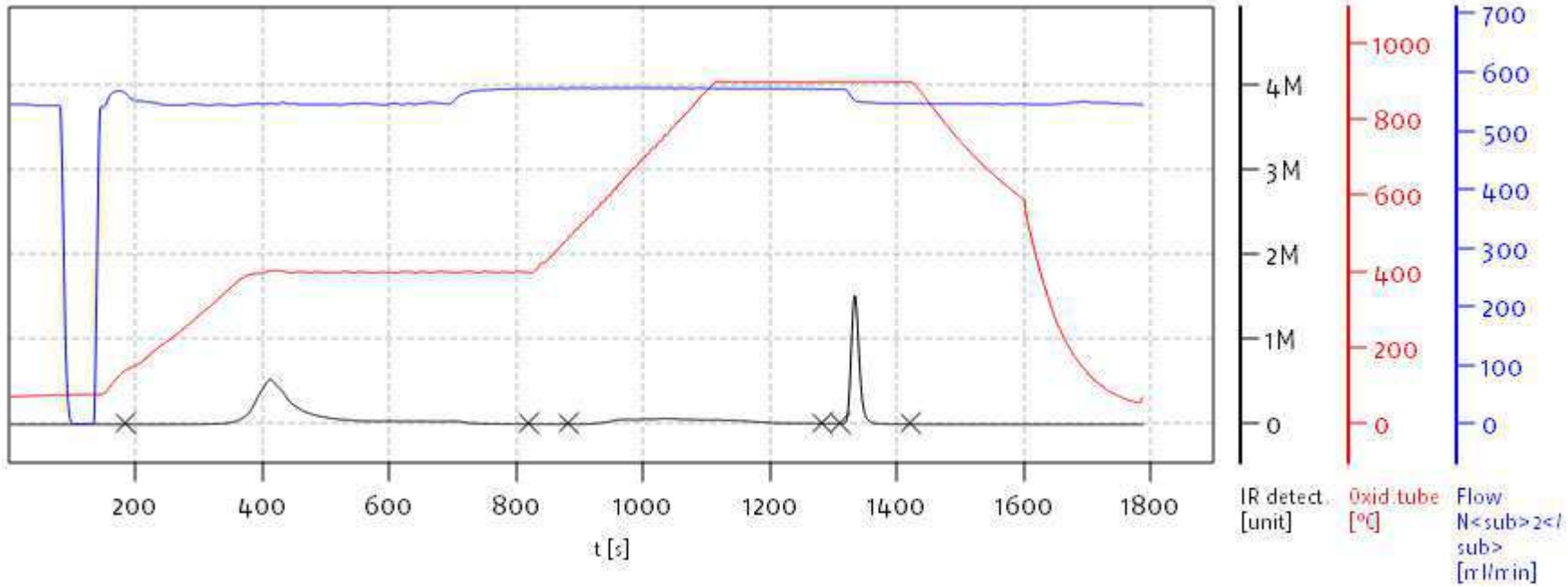
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
94	5	23A0249-11	524.00		CARBON	1/18/2023 8:33 AM	bl	0.731	1 699 797	0.888	0.246	857 558	556 790	0.486	0.157	0.9826	1.0000



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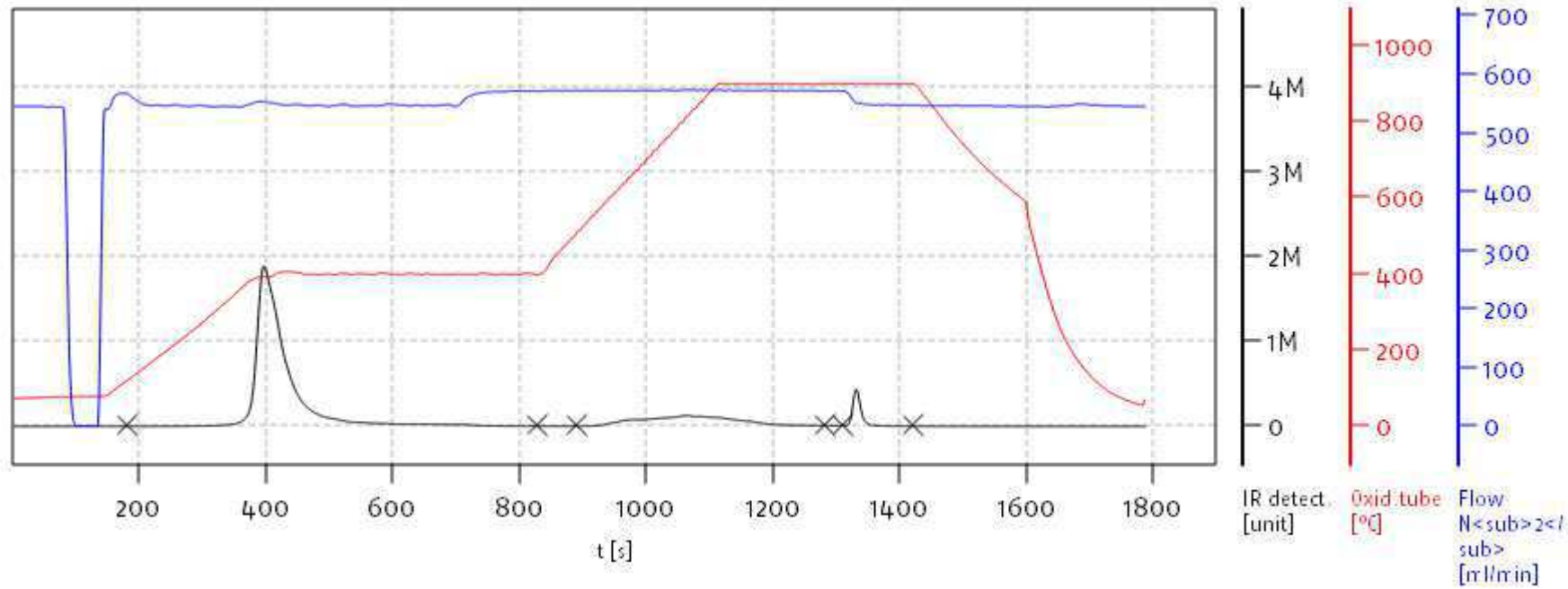
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
95	6	23A0295-01	524.00		CARBON	1/18/2023 9:04 AM	bl	1.161	3 797 129	1.411	0.067	252 003	872 036	1.095	0.250	0.9826	1.0000



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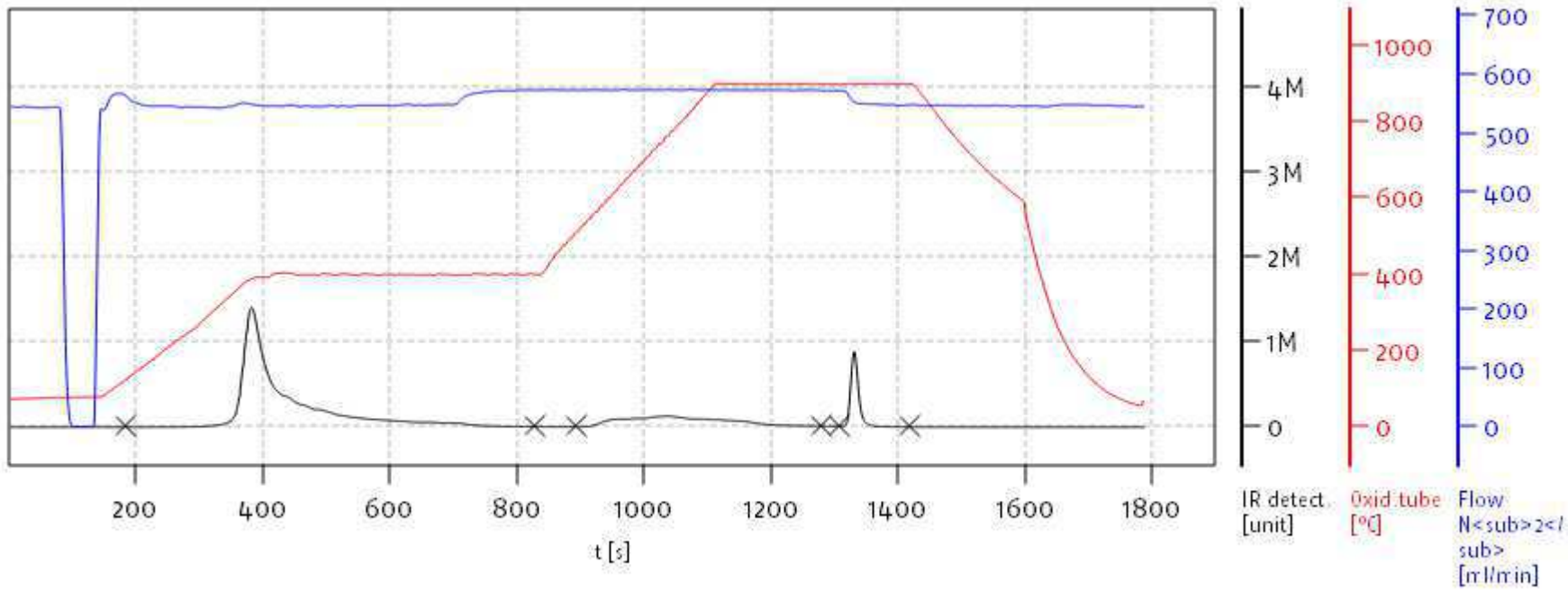
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
96	7	23A0295-02	501.00		CARBON	1/18/2023 9:34 AM	bl	1.237	3 629 491	1.527	0.143	488 245	965 817	1.094	0.290	0.9826	1.0000



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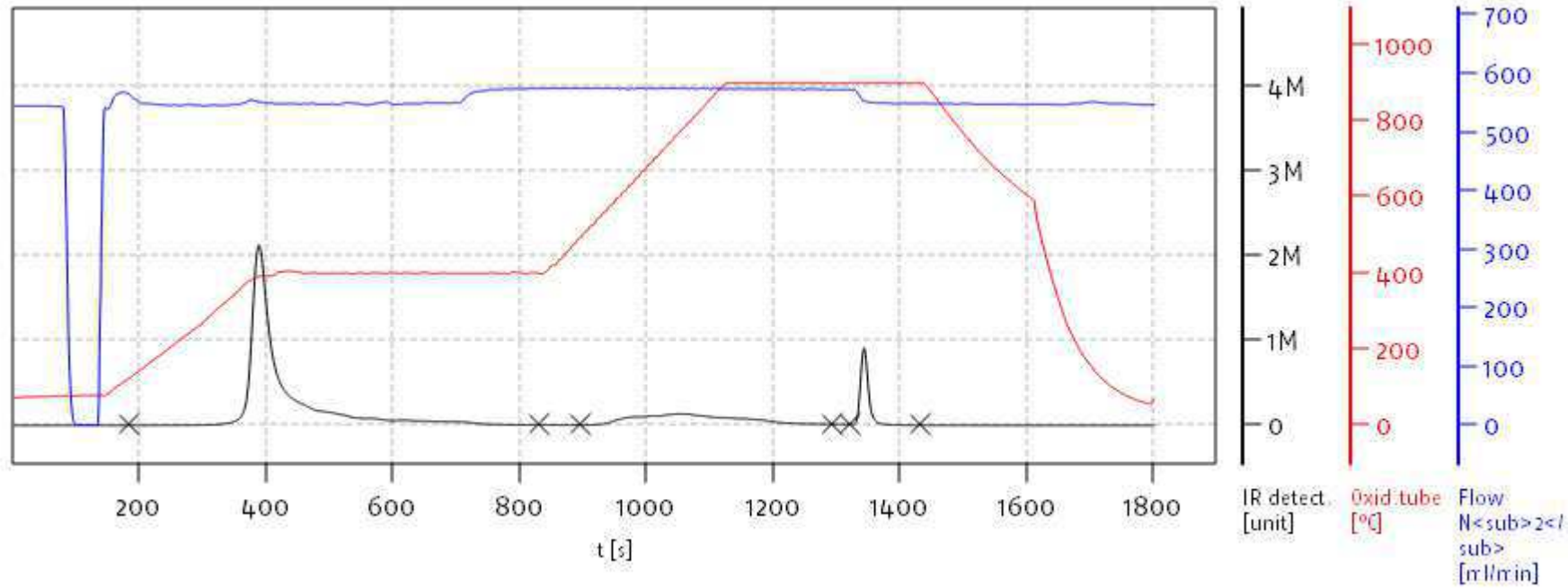
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
97	8	23A0295-03	576.30		CARBON	1/18/2023 10:04 AM	bl	1.163	3 947 697	1.431	0.128	502 821	1 026 471	1.035	0.269	0.9826	1.0000



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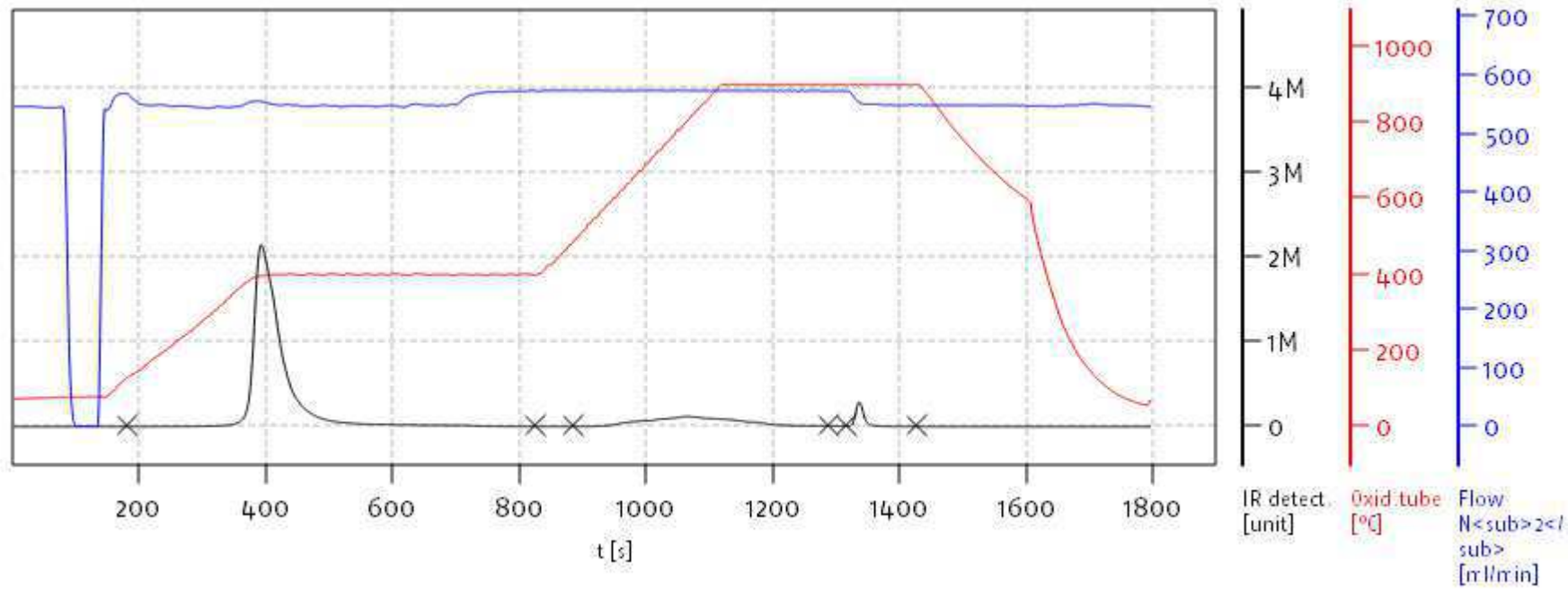
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
98	9	23A0295-04	541.70		CARBON	1/18/2023 10:35 AM	bl	1.170	4 048 563	1.382	0.040	167 018	770 100	1.129	0.212	0.9826	1.0000



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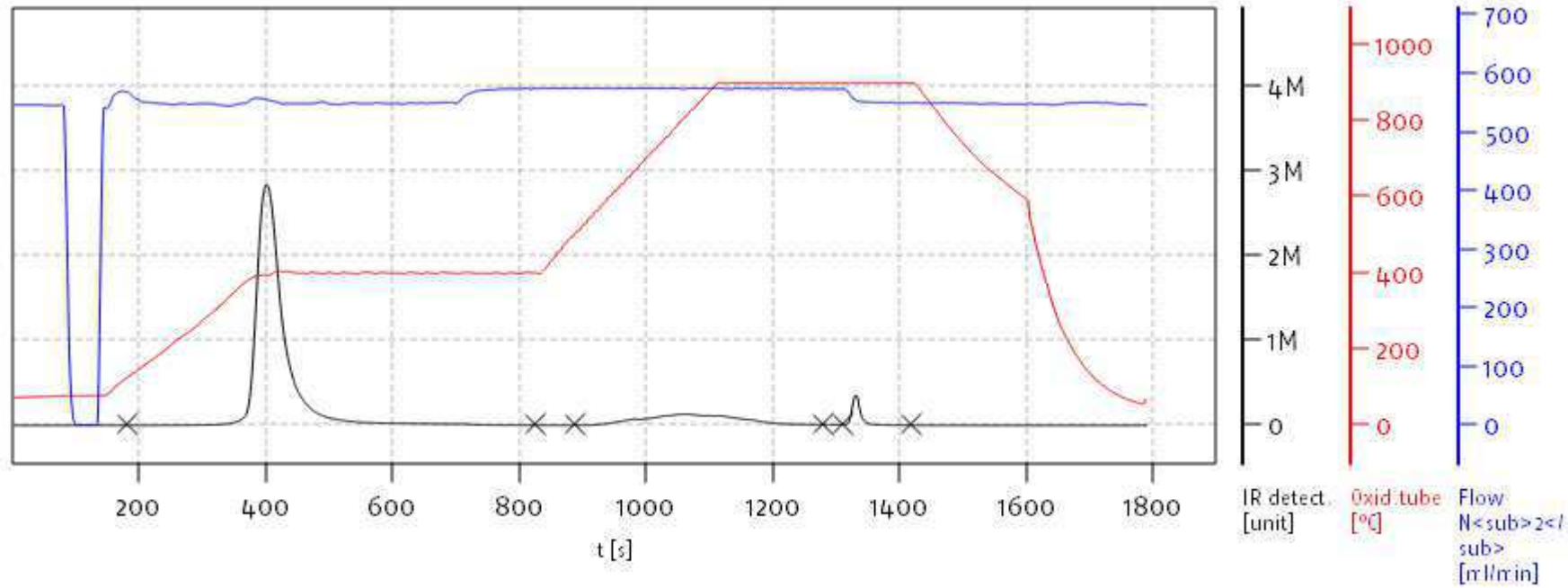
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
99	10	23A0295-05	621.70		CARBON	1/18/2023 11:05 AM	bl	1.319	5 229 677	1.538	0.046	212 594	904 753	1.273	0.219	0.9826	1.0000



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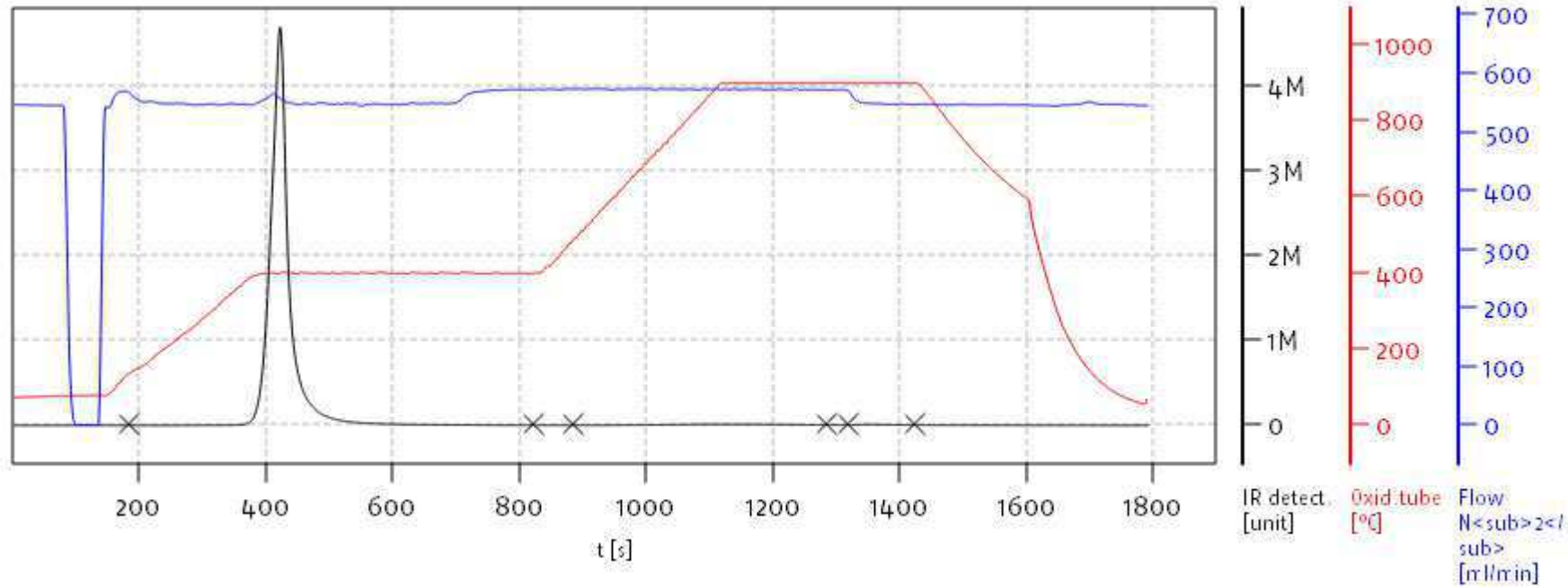
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
100	11	SLA0148-CCV8	20.10		CARBON	1/18/2023 11:35 AM	bl	44.008	5 840 196	44.686	0.013	28 194	114 551	43.995	0.678	0.9826	1.0000



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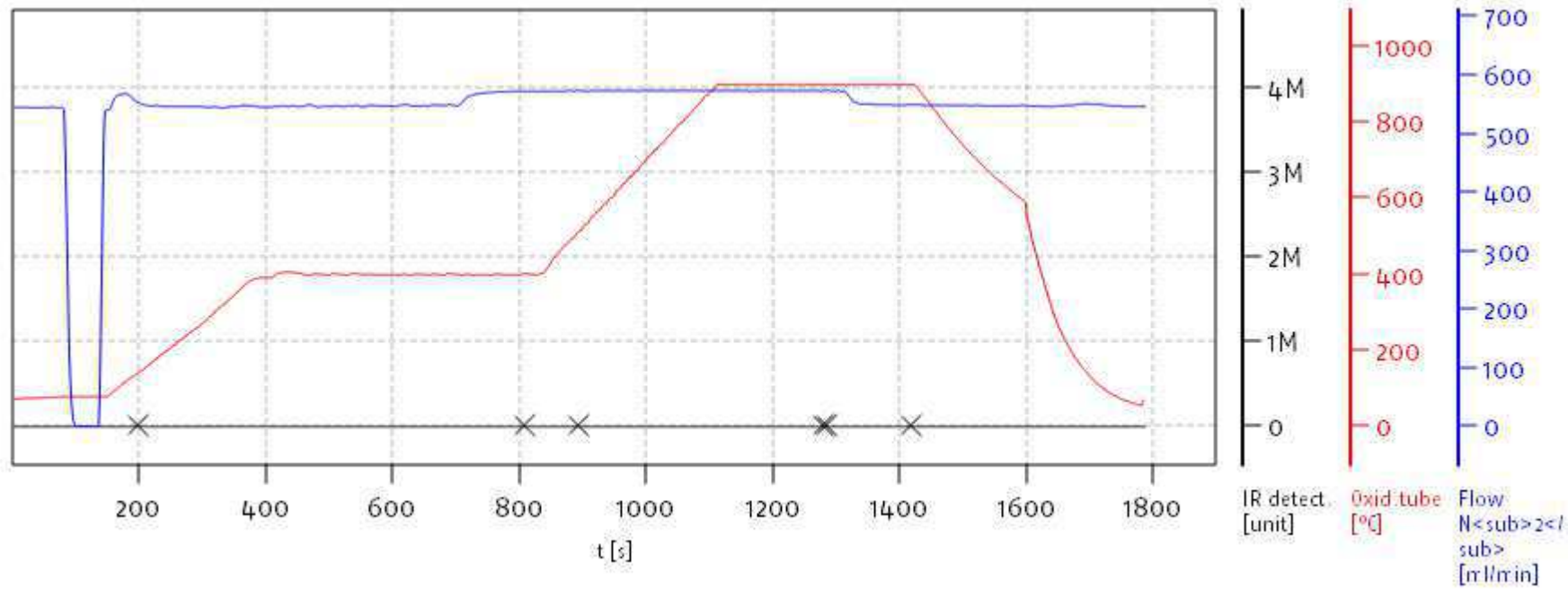
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
101	12	SLA0148-CCB8	505.00		CARBON	1/18/2023 12:05 PM	bl,C3u,C2u	0.000	5 004	0.000	0.000	633	30	0.000	0.000	0.9826	1.0000



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Balance: BAL3
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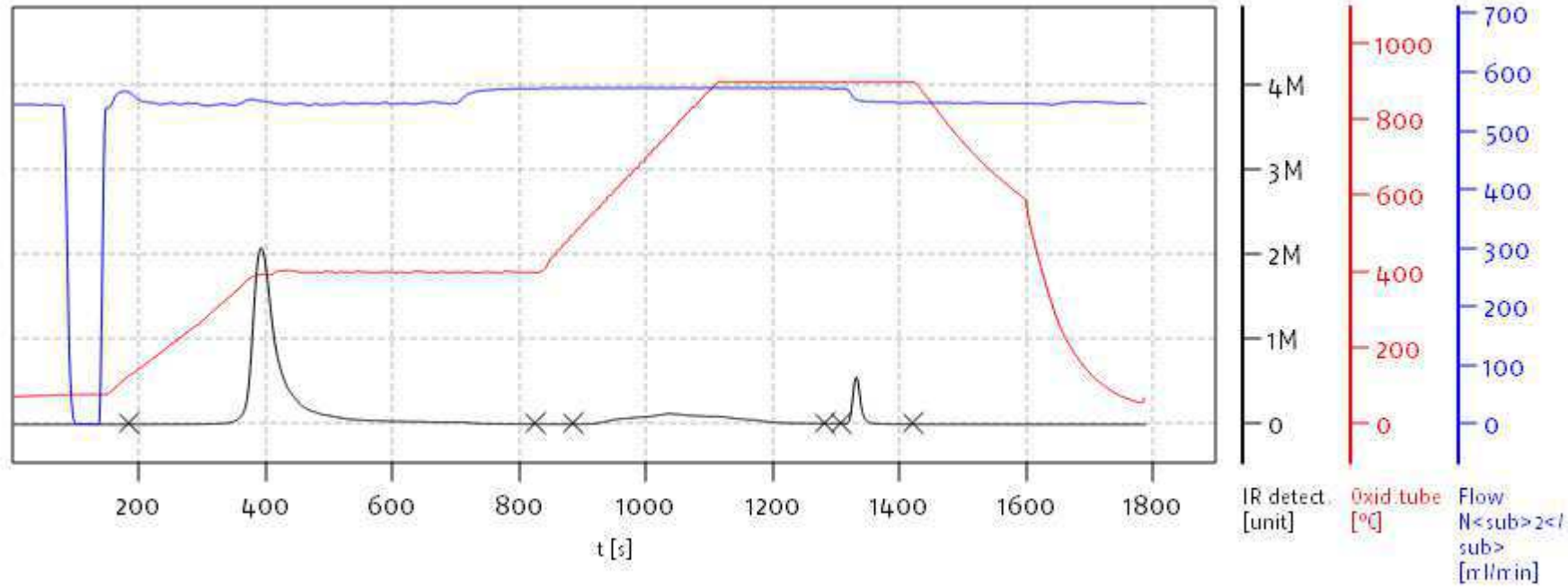
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
102	13	23A0295-06	555.40		CARBON	1/18/2023 12:36 PM	bl	1.136	3 888 213	1.373	0.079	309 500	875 917	1.058	0.237	0.9826	1.0000



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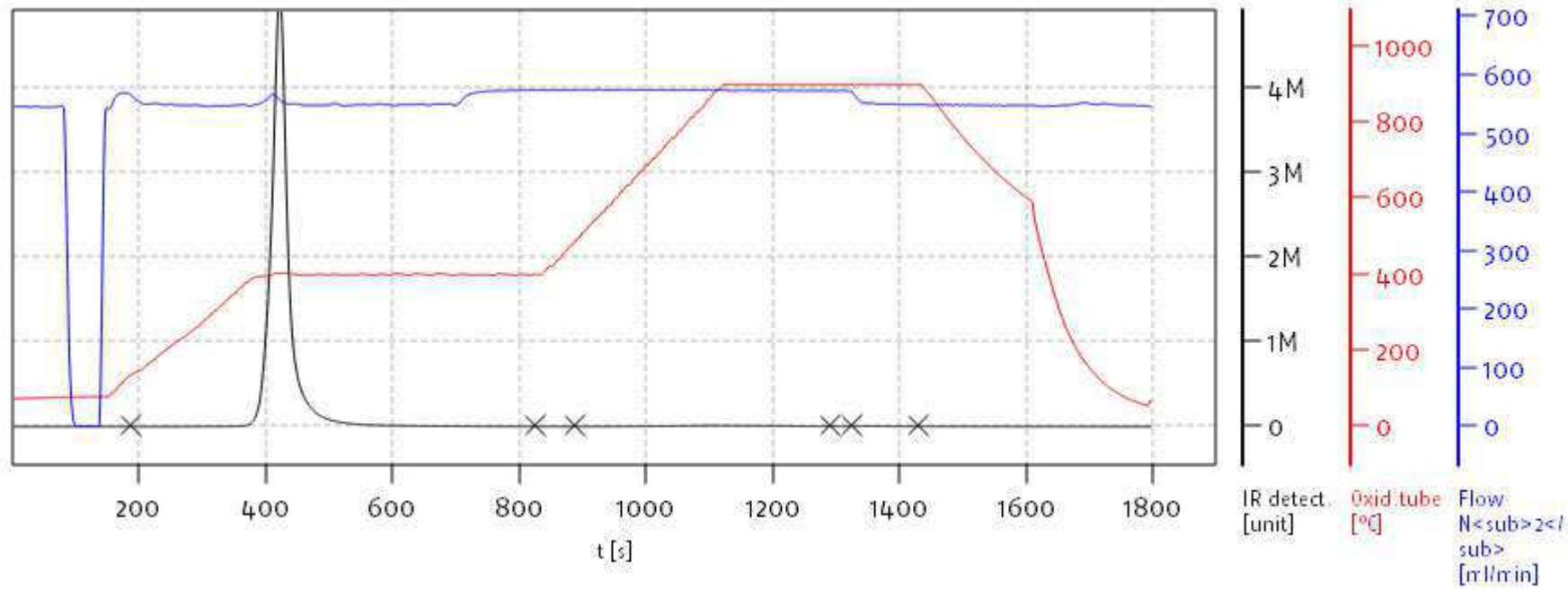
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
103	14	SLA0148-CCV9	20.00		CARBON	1/18/2023 1:06 PM	bl	45.115	5 958 512	45.683	0.000	17 179	99 849	45.115	0.567	0.9826	1.0000



Name:

Access: soliTOC superuser

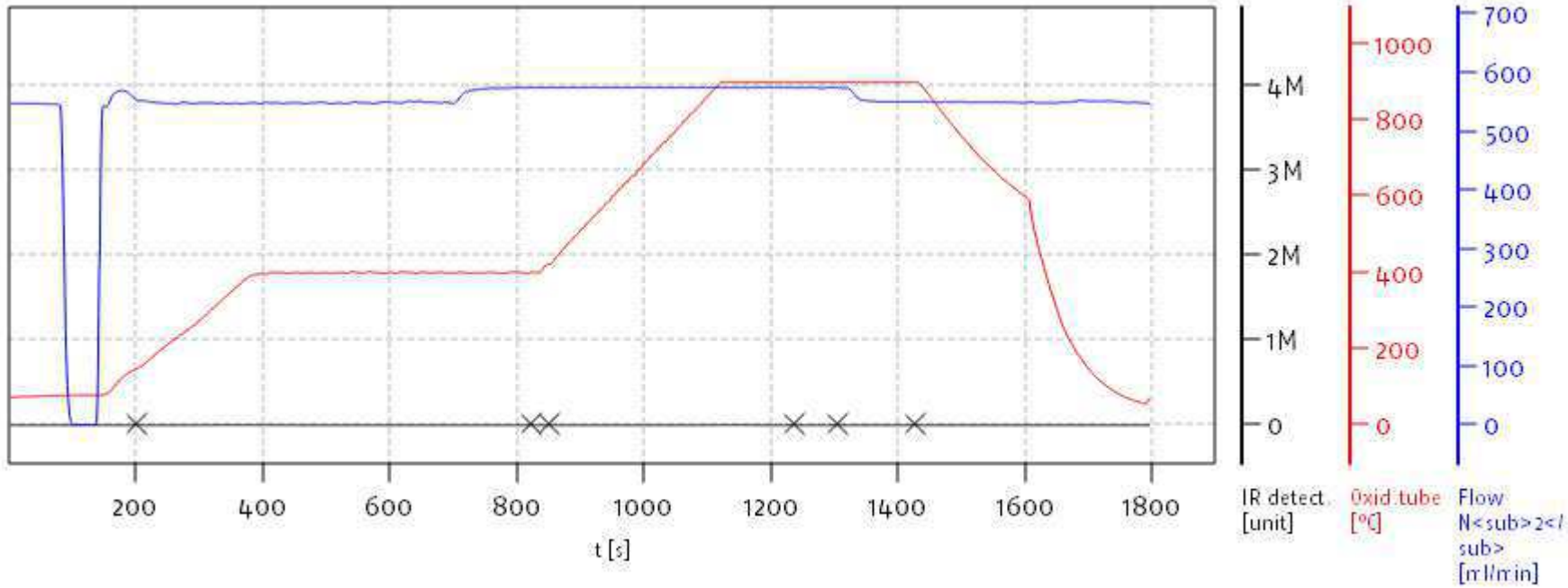
Date: Wed Jan 18 13:37:19 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
104	15	SLA0148-CCB9	519.50		CARBON	1/18/2023 1:36 PM	bl,C2u	0.000	9 182	0.000	0.000	690	5 961	0.000	0.000	0.9826	1.0000



Name:

Access: soliTOC superuser

Date: Wed Jan 18 13:37:19 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FD00070	Instrument:	TOC Cube
Calibration Date:	04/26/2022 11:29		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
Total Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
Total Inorganic Carbon	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085
% Soot	0.0080973	1449743	0.014695	1300238	0.021293	1292913	0.02939	1293535	0.044385	2094063	0.05878	1400085

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: FD00070
Instrument: TOC Cube
Calibration Date: 04/26/2022 11:29

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
Total Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
Total Inorganic Carbon	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135
% Soot	0.074075	1370638	0.08937	1351930	0.12056	2158544	0.14995	1559046	0.24	1346463	0.288	1430135

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: FD00070
Instrument: TOC Cube
Calibration Date: 04/26/2022 11:29

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
Total Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
Total Inorganic Carbon	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882
% Soot	0.414	1337053	0.606	1385937	0.894	1382774	1.188	1379790	1.5	1375927	1.818	1372882

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: FD00070
Instrument: TOC Cube
Calibration Date: 04/26/2022 11:29

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
Total Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
Total Inorganic Carbon	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408
% Soot	2.49	1398606	2.982	1376871	4.188	1256057	4.818	1279542	5.406	1283358	7.2	1301408

INITIAL CALIBRATION DATA

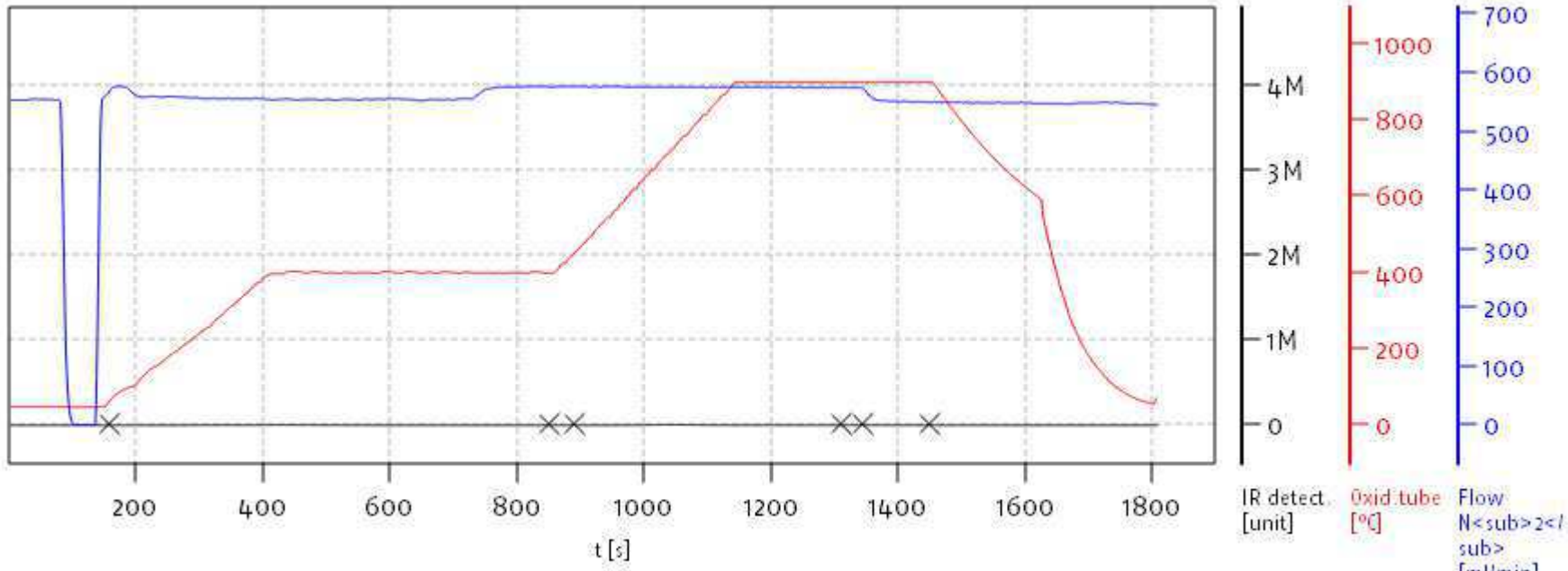
EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23A0249
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	FD00070	Instrument:	TOC Cube
Calibration Date:	04/26/2022 11:29		

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Total Organic Carbon	1424064	15.9	0.9988			
Total Carbon	1424064	15.9	0.9988			
Total Inorganic Carbon	1424064	15.9	0.9988			
% Soot	1424064	15.9	0.9988			

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
1	1	BLANK	1.00		1.00	CARBON	4/26/2022 11:29 AM	0.000	0.000	0.000	bl	29 049	30 612	3 899	1.0000	1.0000



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:07:12 2022

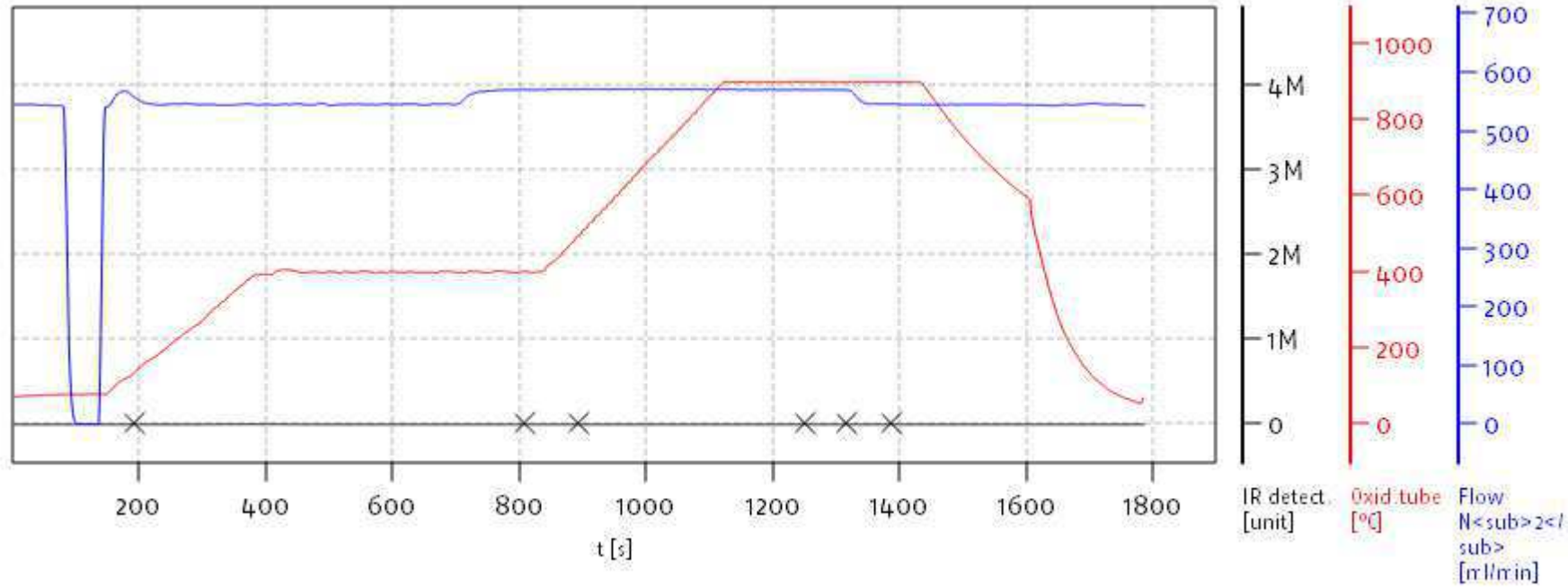
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: 4/27/2022 11:05 AM

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
2	2	BLANK	1.00		1.00	CARBON	4/26/2022 12:00 PM	0.000	0.000	0.000	bl	11 115	60	8	1.0000	1.0000



Name:

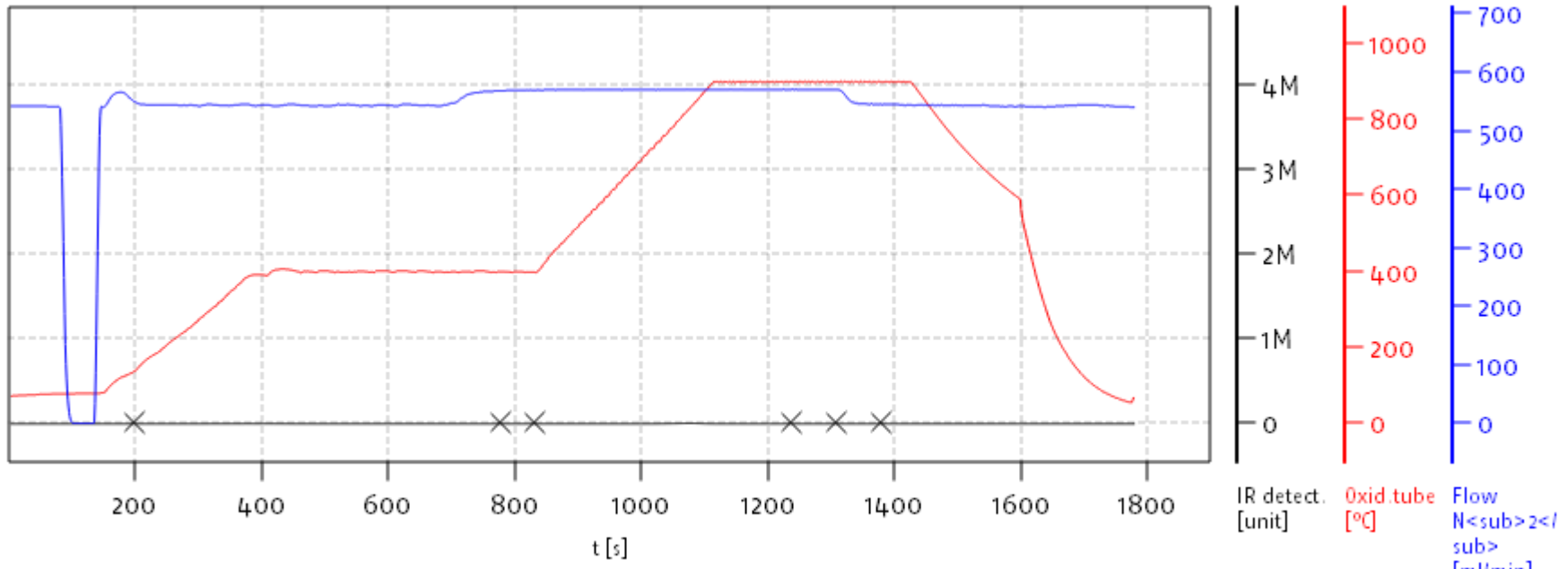
Access: soliTOC superuser

Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
3	3	SEQ-CAL1	200.00	0.0027	1.00	CARBON	4/26/2022 12:30 PM	0.010	0.008	0.018	bl,C1u,C2u	7 294	11 739	22	1.0000	0.7425



Name:

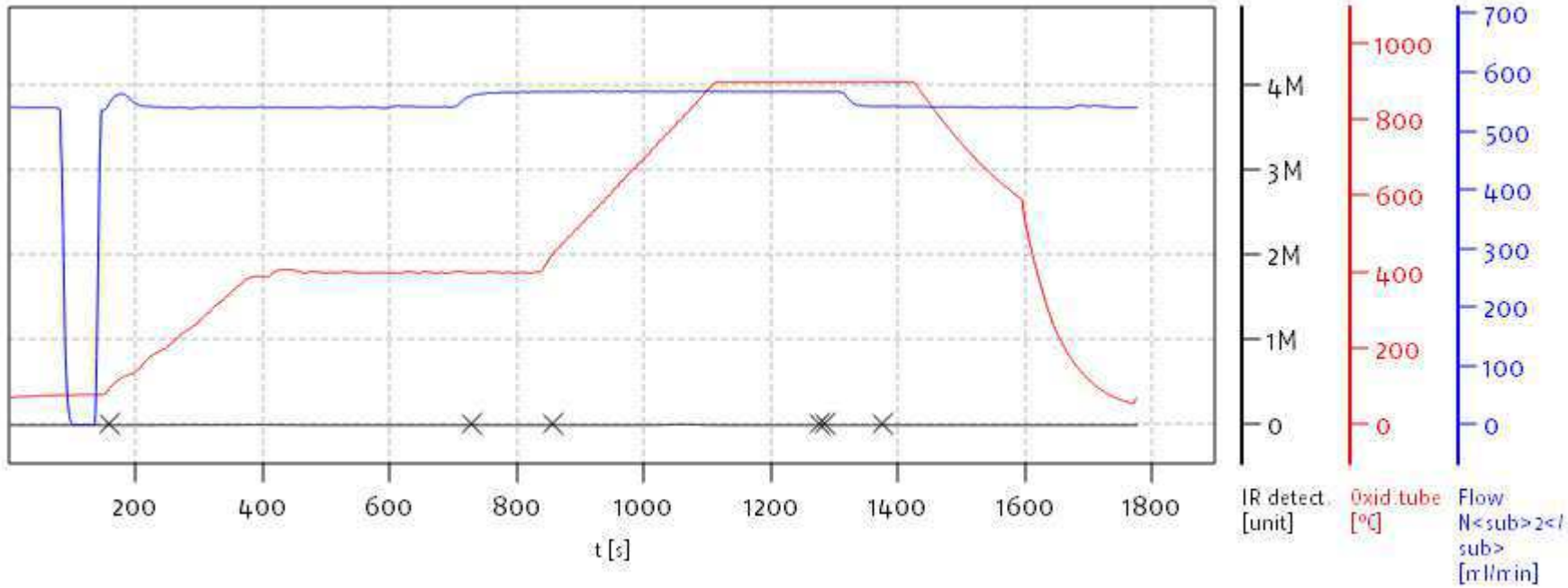
Access: soliTOC superuser

Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
4	4	SEQ-CAL2	200.00	0.0049	1.00	CARBON	4/26/2022 1:00 PM	0.023	0.015	0.038	bl,C2u	23 296	19 107	47	1.0000	0.8936



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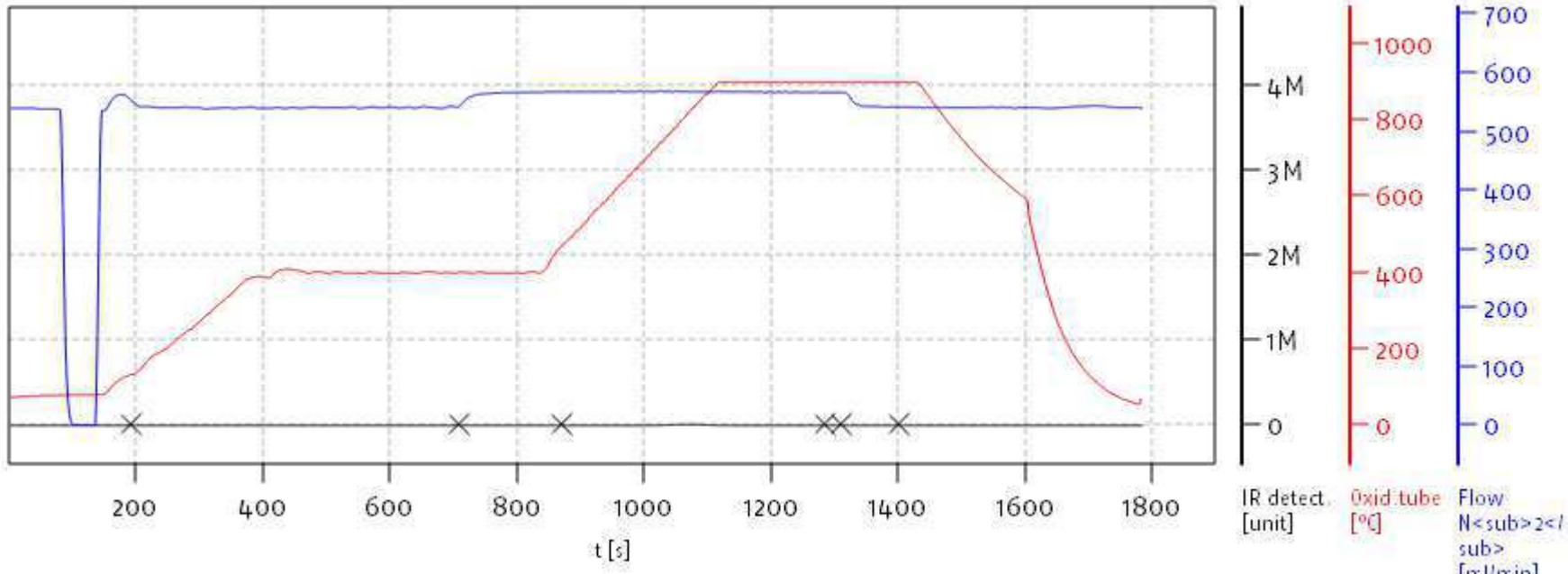
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
5	5	SEQ-CAL3	200.00	0.0071	1.00	CARBON	4/26/2022 1:30 PM	0.006	0.022	0.028	bl,C1u,C2u	2 319	27 530	170	1.0000	0.9343



Name:

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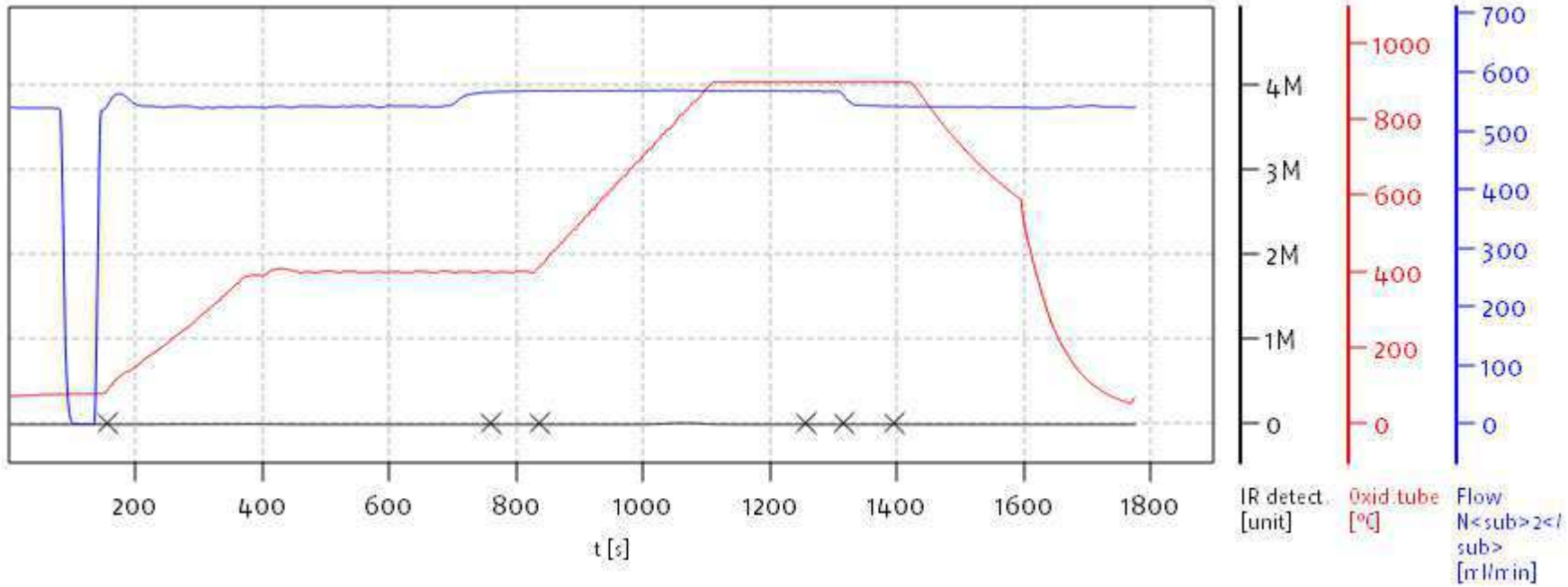
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
6	6	SEQ-CAL4	200.00	0.0098	1.00	CARBON	4/26/2022 2:00 PM	0.020	0.030	0.050	bl,C2u	19 746	38 017	109	1.0000	0.9461



Name:

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Date: Wed Apr 27 11:07:12 2022

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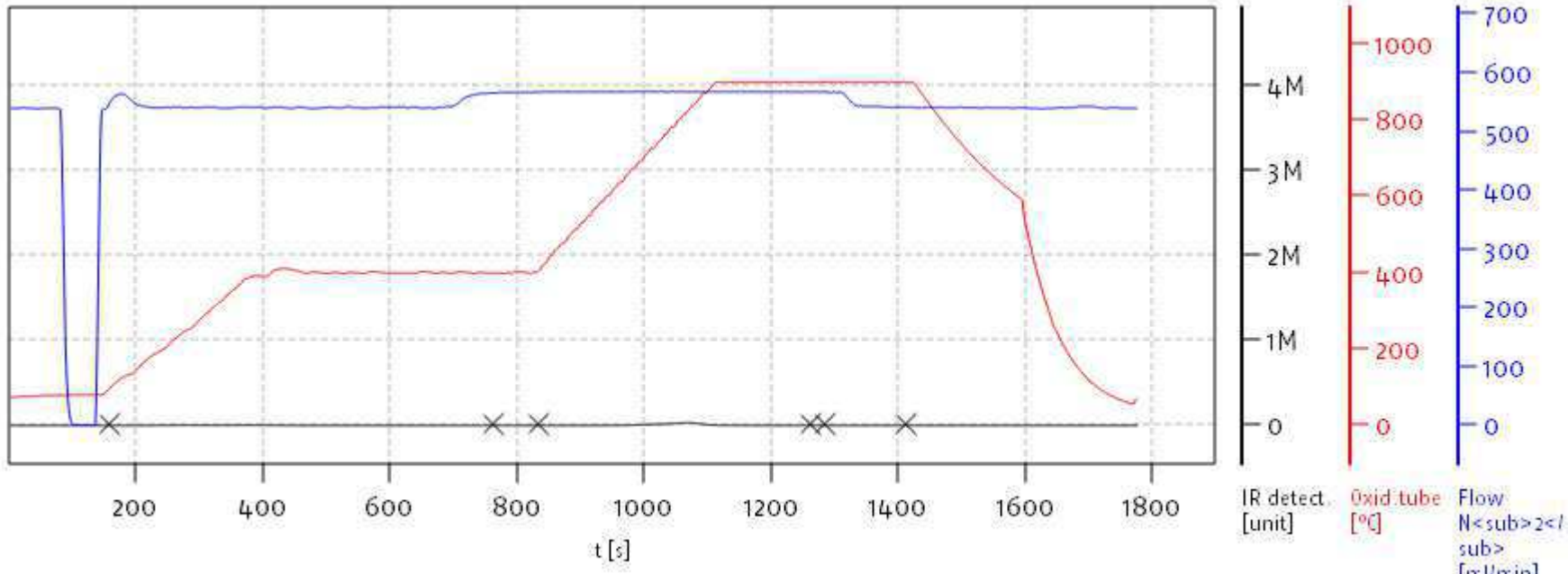
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
7	7	SEQ-CAL5	200.00	0.0148	1.00	CARBON	4/26/2022 2:30 PM	0.021	0.045	0.066	bl,C2u	20 951	92 945	236	1.0000	0.5975



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Date: Wed Apr 27 11:07:12 2022

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Serial No: 0300.181017
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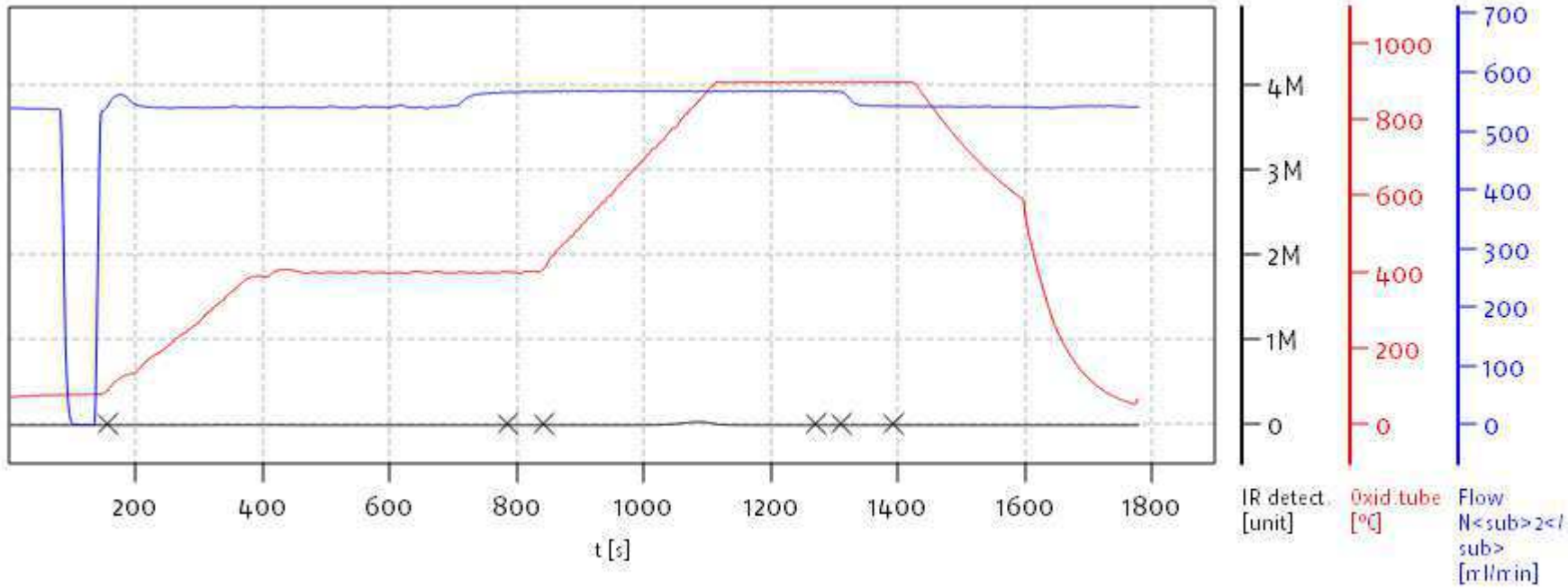
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
8	8	SEQ-CAL6	200.00	0.0196	1.00	CARBON	4/26/2022 3:00 PM	0.012	0.061	0.073	bl,C2u	10 118	82 297	59	1.0000	0.9144



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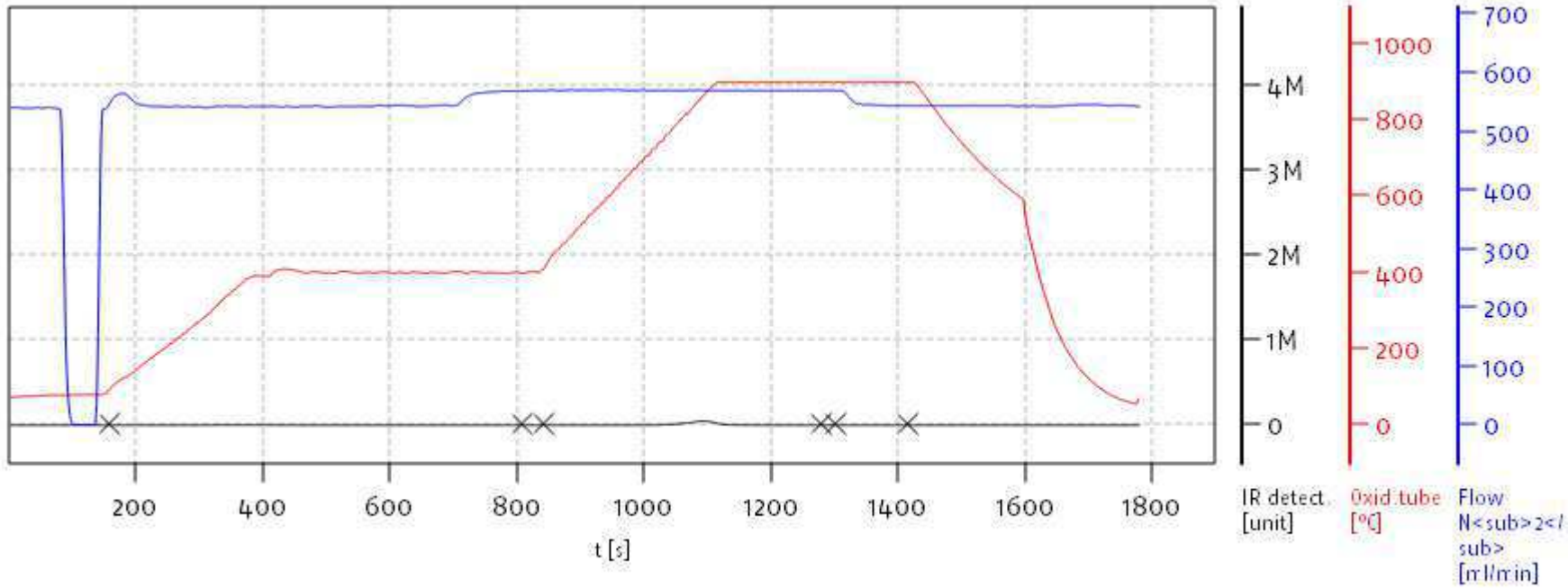
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
9	9	SEQ-CAL7	200.00	0.0247	1.00	CARBON	4/26/2022 3:30 PM	0.013	0.075	0.088	bl,C2u	10 555	101 530	292	1.0000	0.9173



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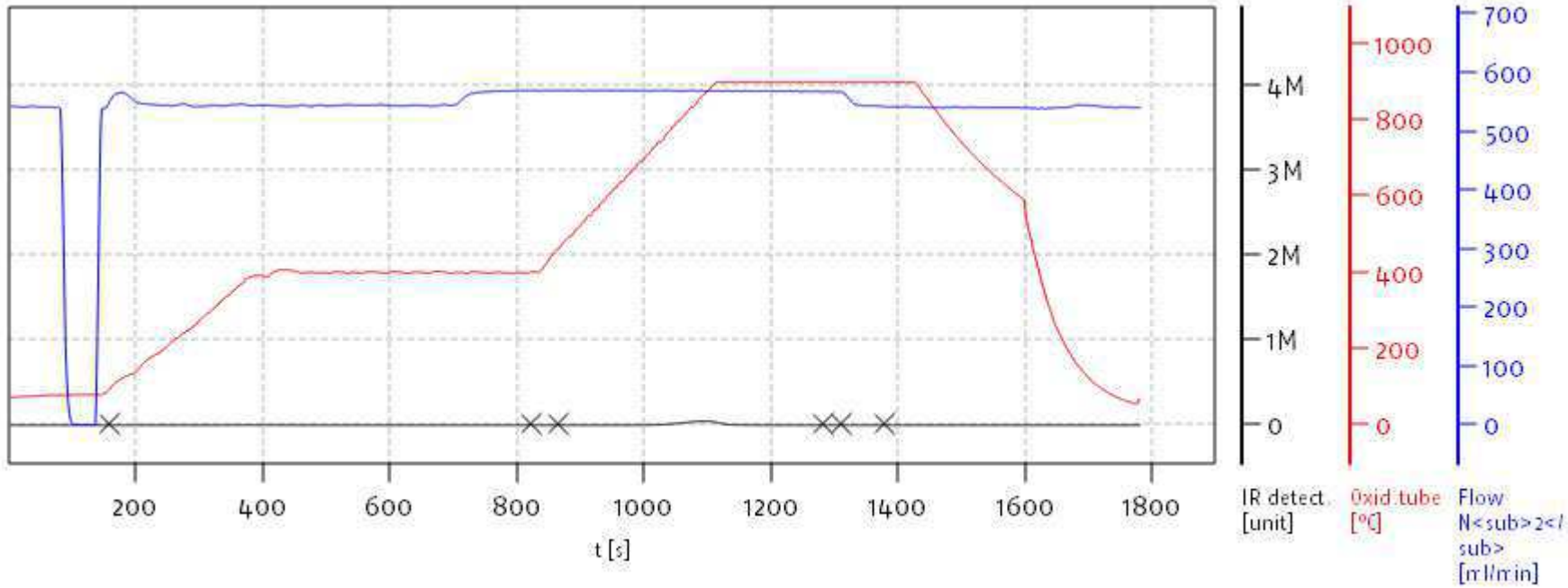
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
10	10	SEQ-CAL8	200.00	0.0298	1.00	CARBON	4/26/2022 4:00 PM	0.009	0.091	0.100	bl,C1u,C2u	6 668	120 822	116	1.0000	0.9312



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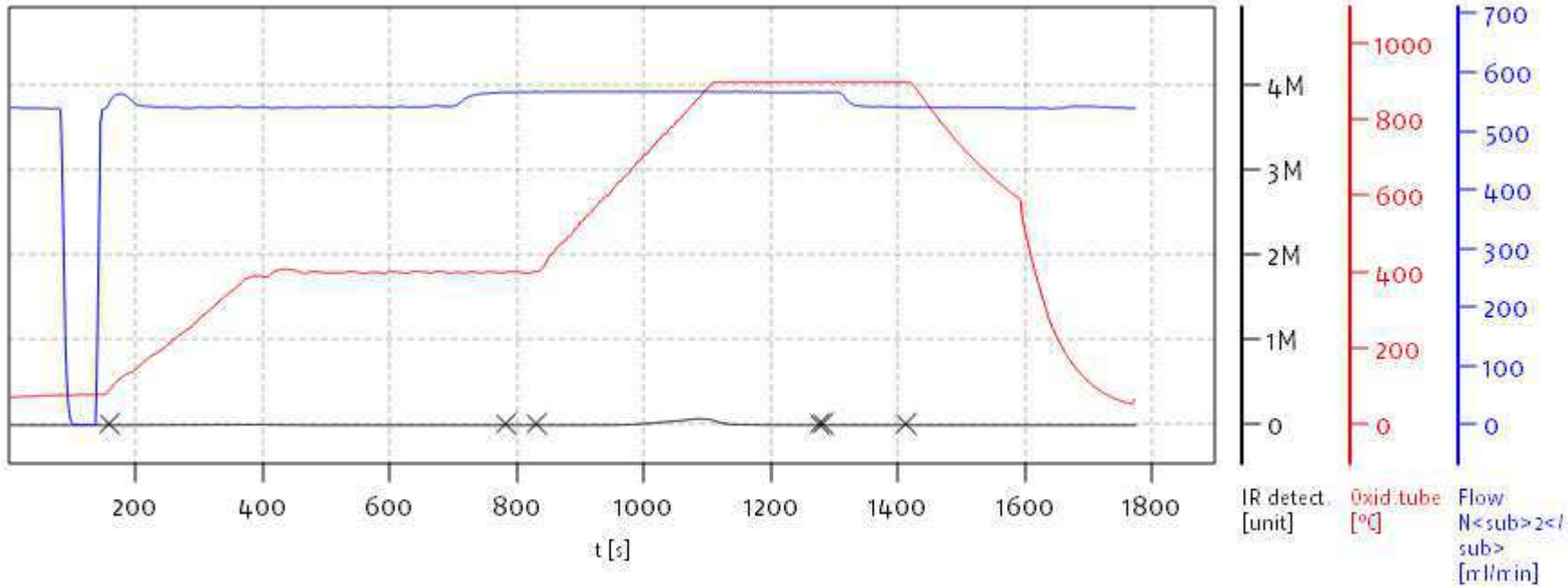
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
11	11	SEQ-CAL9	200.00	0.0402	1.00	CARBON	4/26/2022 4:30 PM	0.031	0.120	0.151	bl,C2u	32 999	260 234	1 044	1.0000	0.5792



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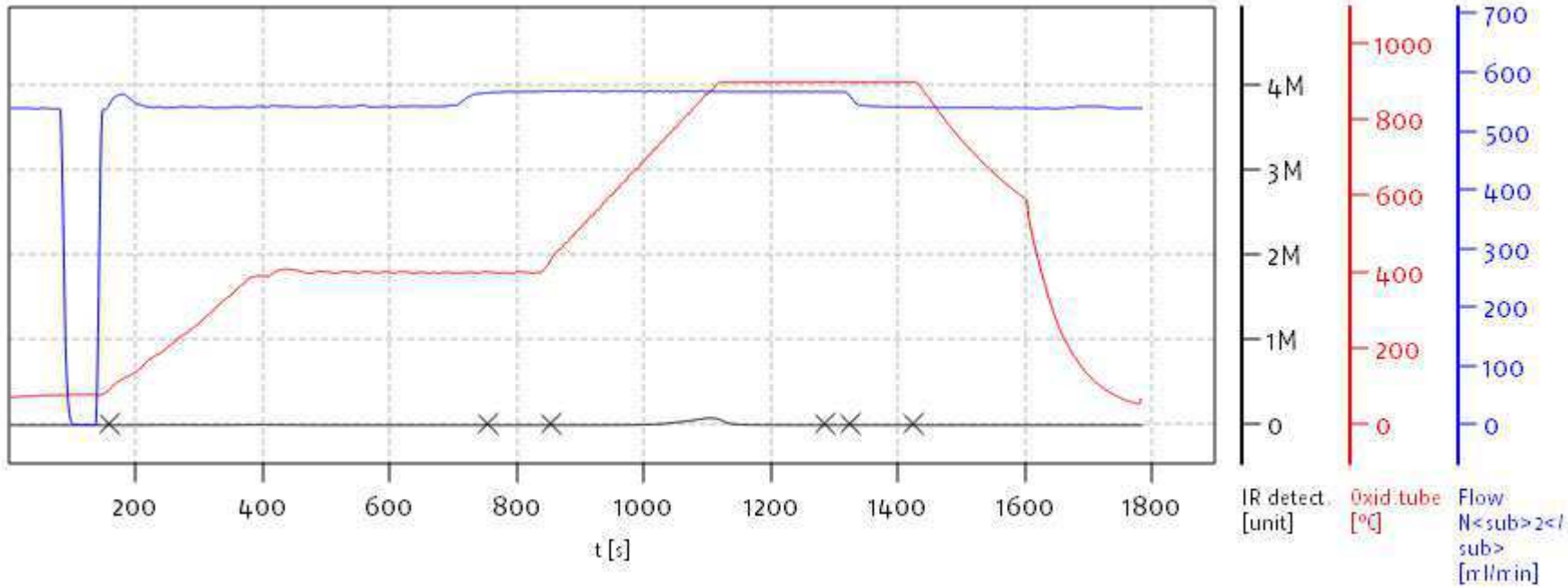
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
12	12	SEQ-CALA	200.00	0.0500	1.00	CARBON	4/26/2022 5:00 PM	0.021	0.151	0.172	bl,C2u	20 147	233 779	913	1.0000	0.8099



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Serial No: 0300.181017
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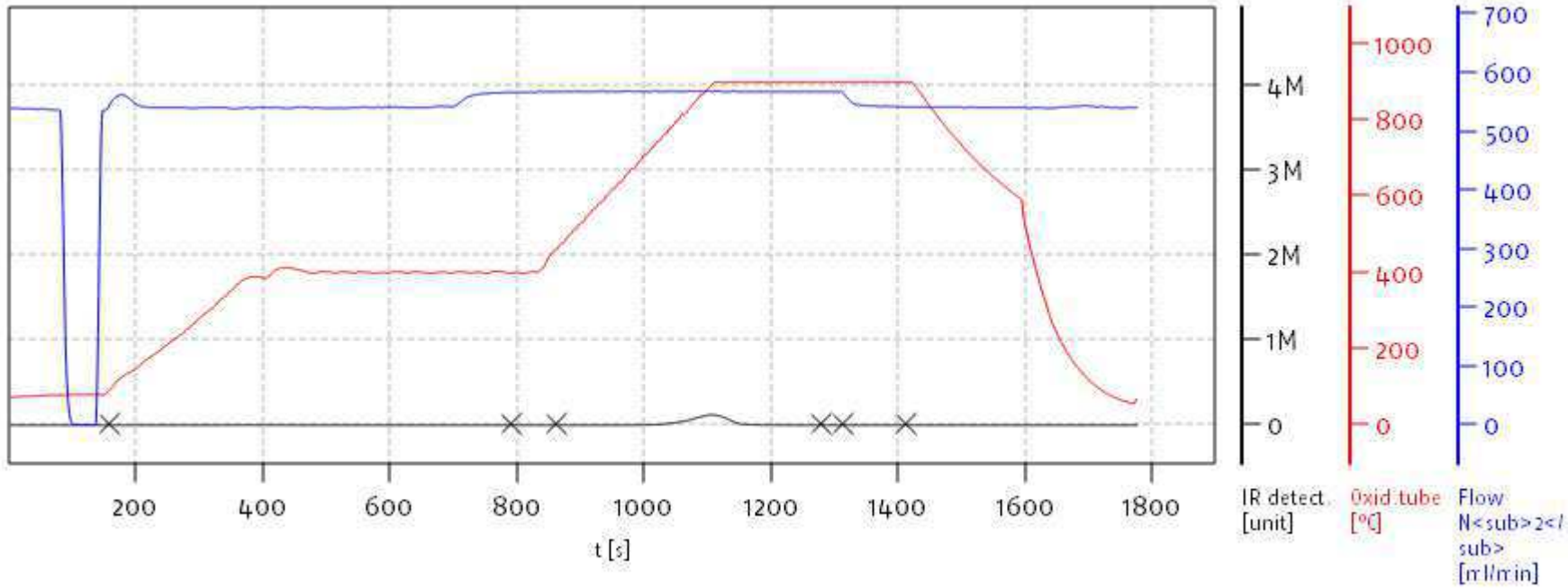
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
13	13	SEQ-CALB	200.00	0.0040	1.00	CARBON	4/26/2022 5:30 PM	0.010	0.258	0.268	bl,C1u,C2u	7 070	323 151	663	1.0000	1.0048



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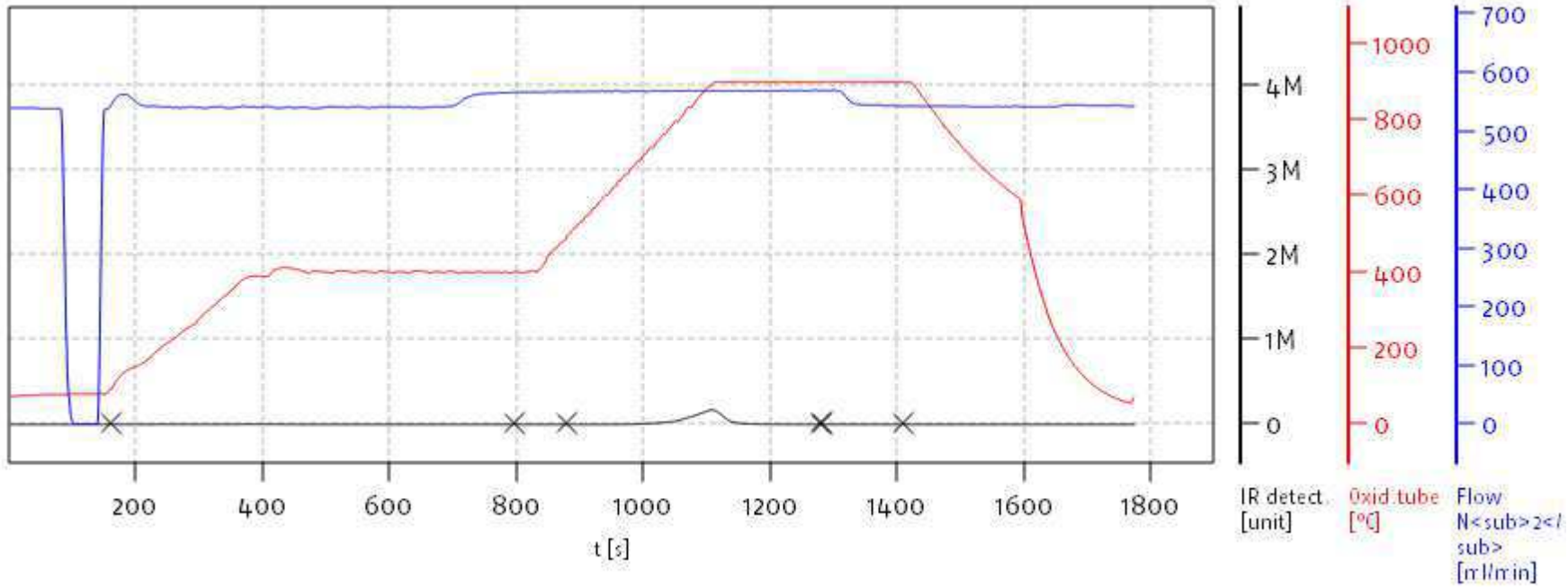
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
14	14	SEQ-CALC	200.00	0.0048	1.00	CARBON	4/26/2022 6:00 PM	0.015	0.324	0.339	bl,C2u	13 785	411 879	575	1.0000	0.9917



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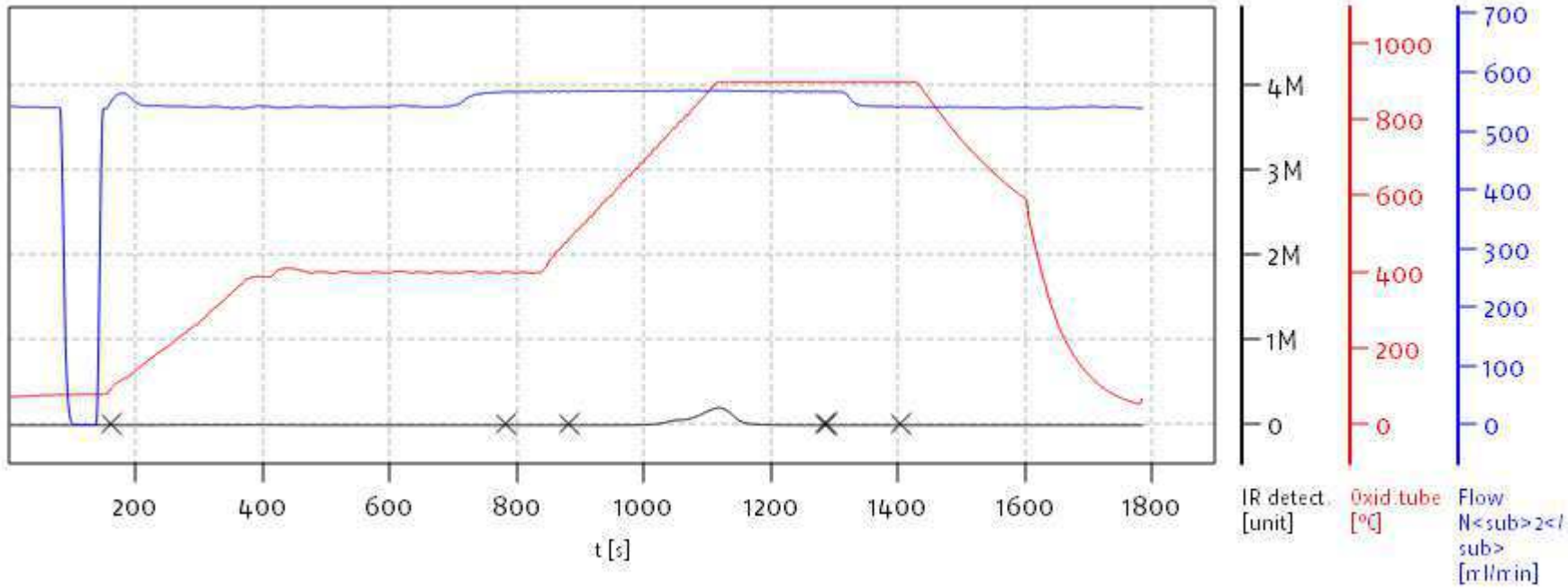
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
15	15	SEQ-CALD	200.00	0.0069	1.00	CARBON	4/26/2022 6:30 PM	0.019	0.444	0.463	bl,C2u	18 465	553 540	263	1.0000	1.0129



Name:

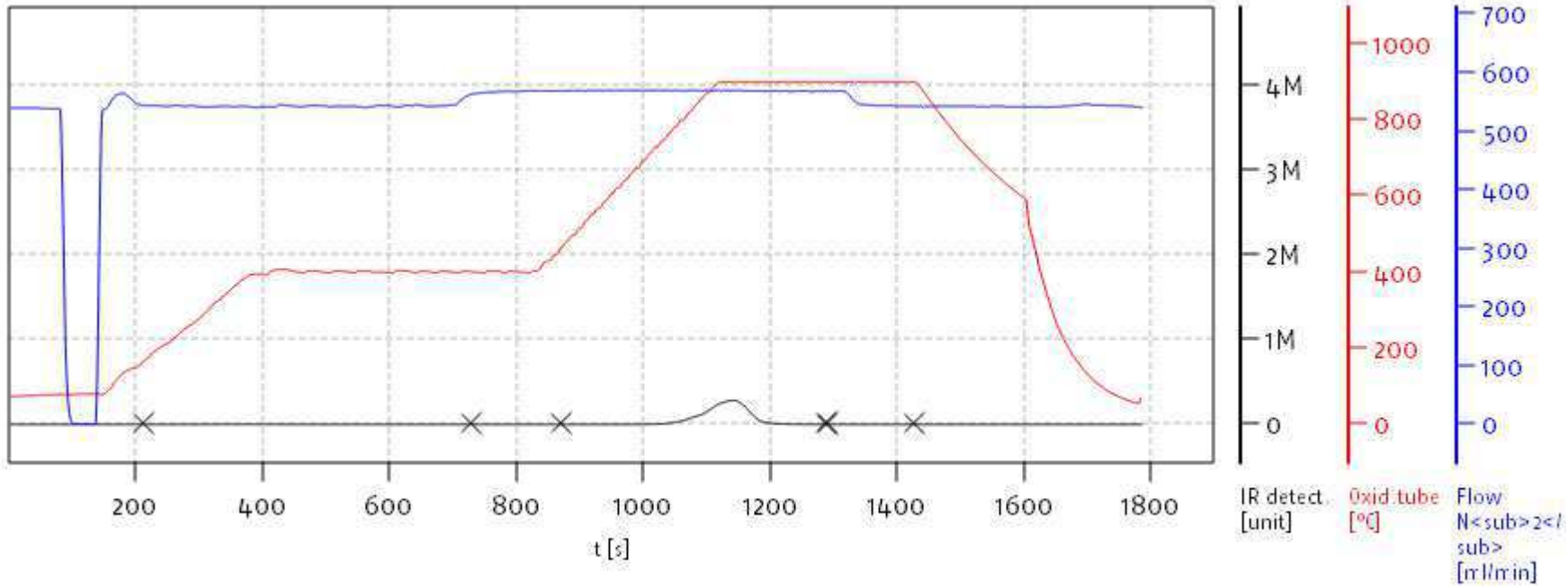
Access: soliTOC superuser

Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
16	16	SEQ-CALE	200.00	0.0101	1.00	CARBON	4/26/2022 7:00 PM	0.009	0.600	0.609	bl,C1u,C2u	5 485	839 878	536	1.0000	0.9036



Name:

Access: soliTOC superuser

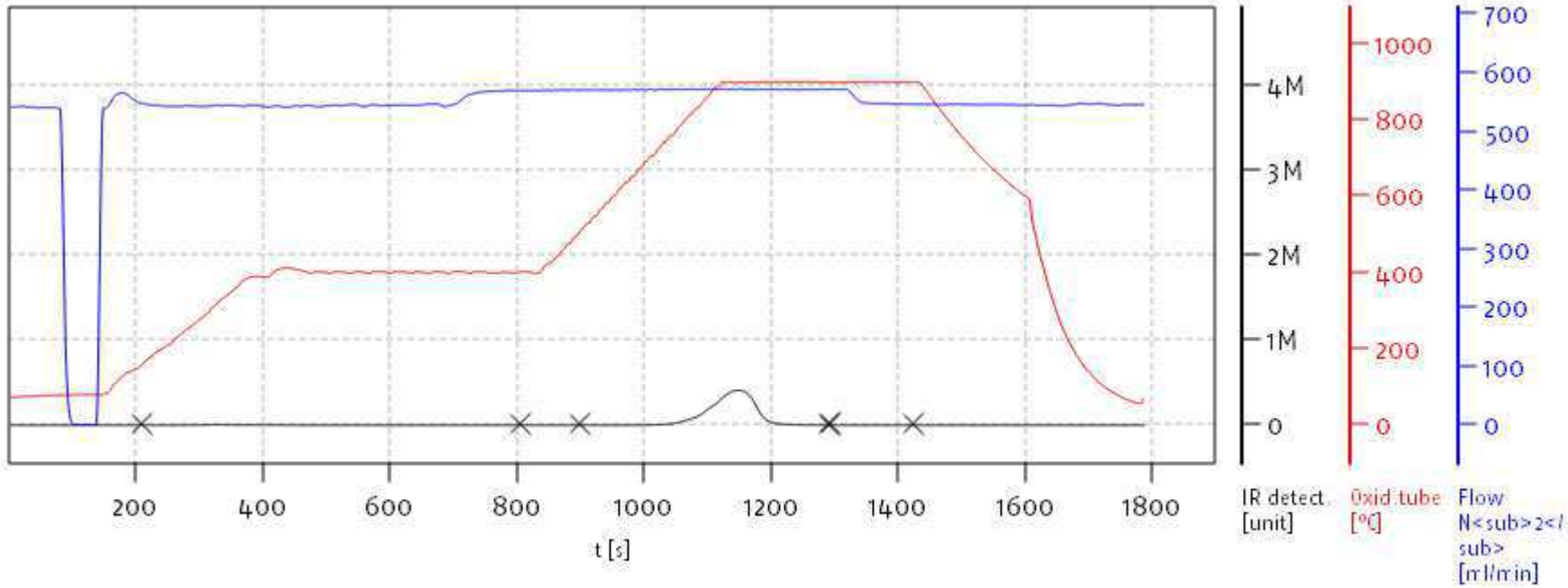
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
17	17	SEQ-CALF	200.00	0.0149	1.00	CARBON	4/26/2022 7:31 PM	0.019	0.906	0.925	bl,C2u	17 439	1 236 200	814	1.0000	0.9279



Name:

Access: soliTOC superuser

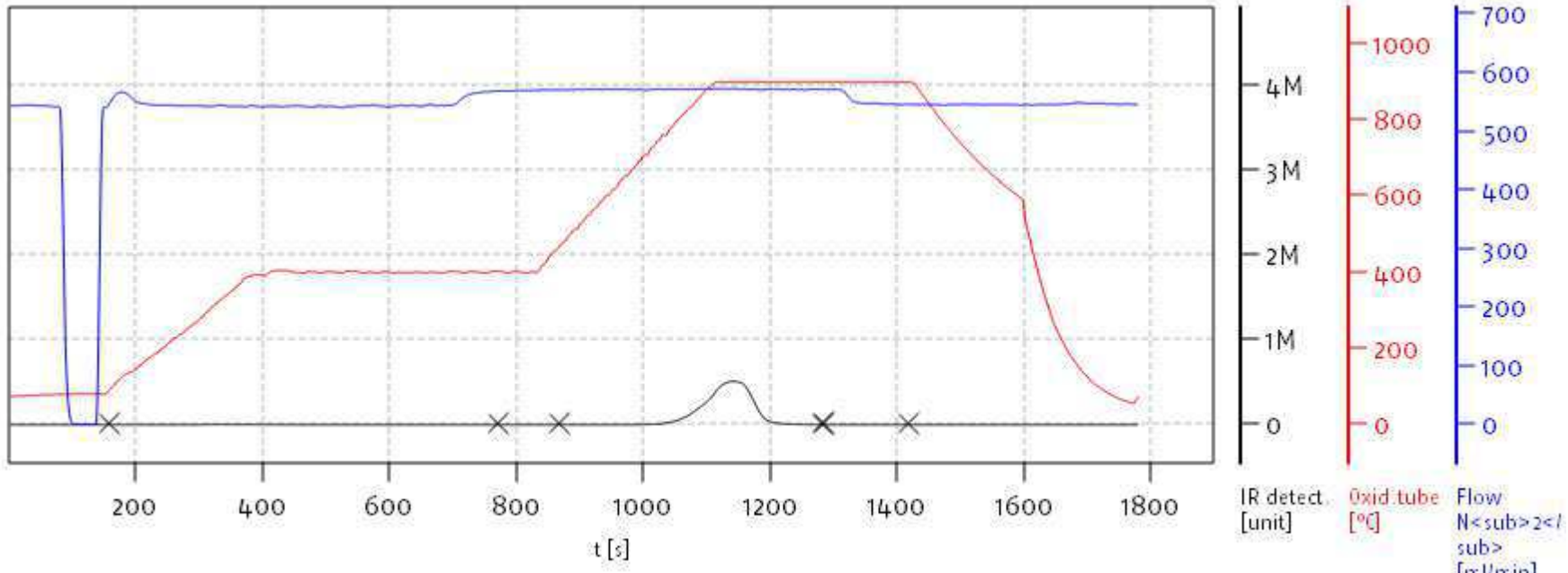
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
18	18	SEQ-CALG	200.00	0.0198	1.00	CARBON	4/26/2022 8:01 PM	0.015	1.206	1.221	bl,C2u	12 557	1 639 190	1 295	1.0000	0.9320



Name:

Access: soliTOC superuser

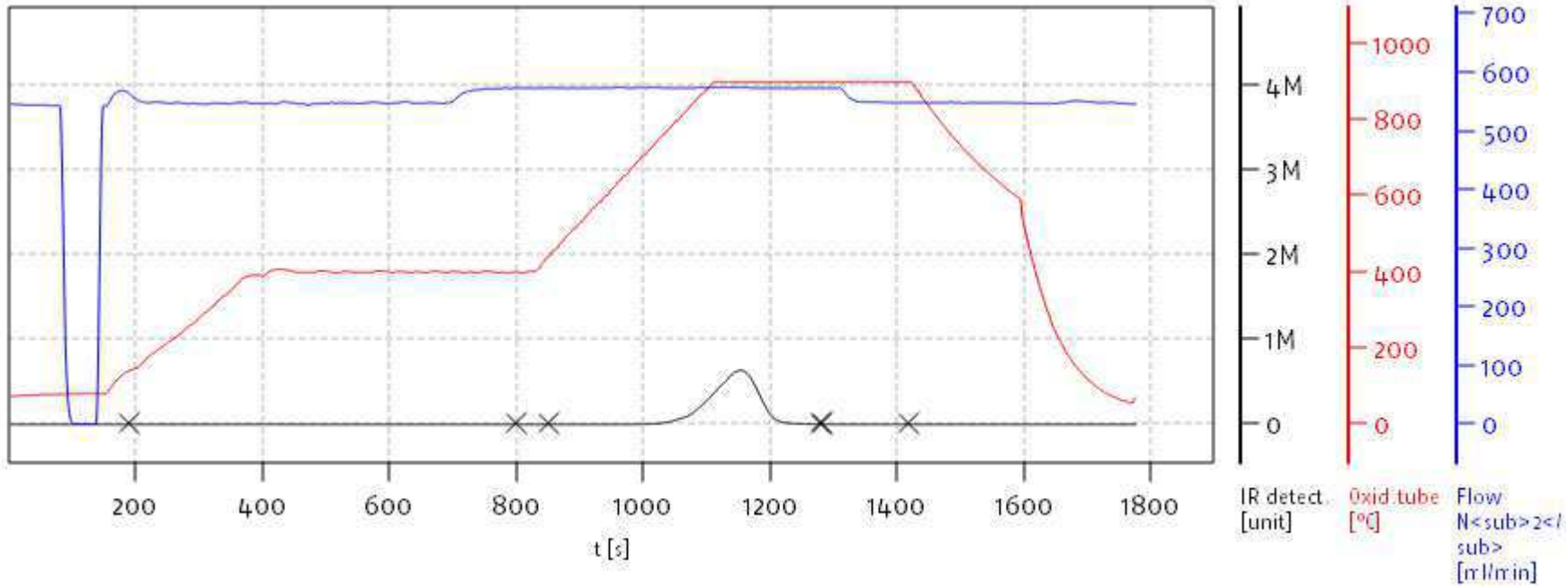
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
19	19	SEQ-CALH	200.00	0.0250	1.00	CARBON	4/26/2022 8:31 PM	0.009	1.524	1.533	bl,C1u,C2u	4 029	2 063 890	2 225	1.0000	0.9357



Name:

Access: soliTOC superuser

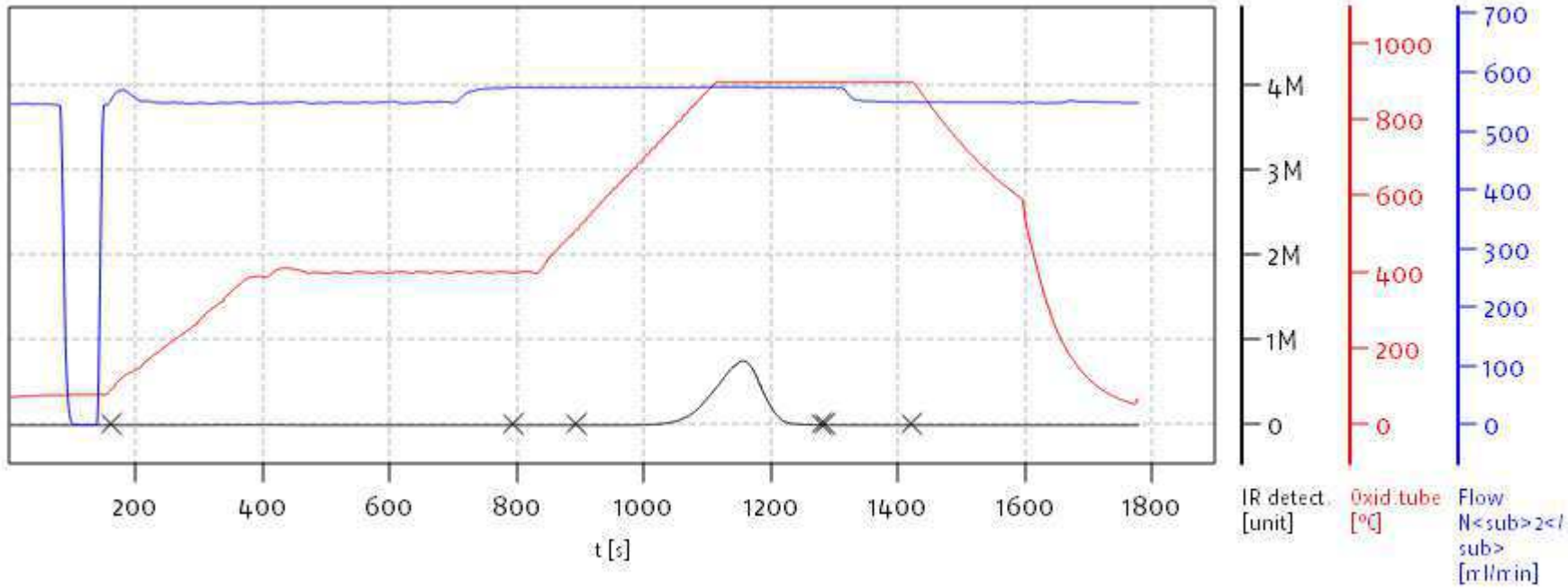
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
20	20	SEQ-CALI	200.00	0.0303	1.00	CARBON	4/26/2022 9:01 PM	0.017	1.800	1.817	bl,C2u	13 926	2 495 900	2 903	1.0000	0.9140



Name:

Access: soliTOC superuser

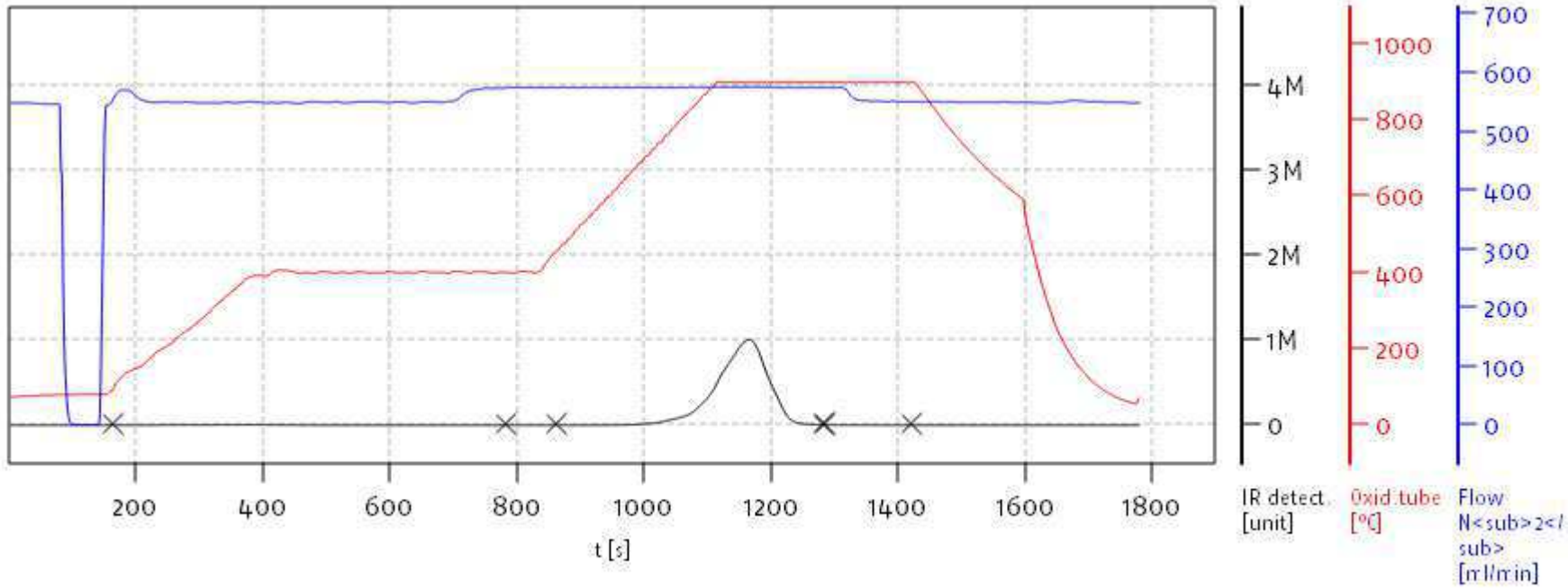
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
21	21	SEQ-CALJ	200.00	0.0415	1.00	CARBON	4/26/2022 9:31 PM	0.031	2.400	2.431	bl,C2u	28 786	3 482 530	5 351	1.0000	0.8737



Name:

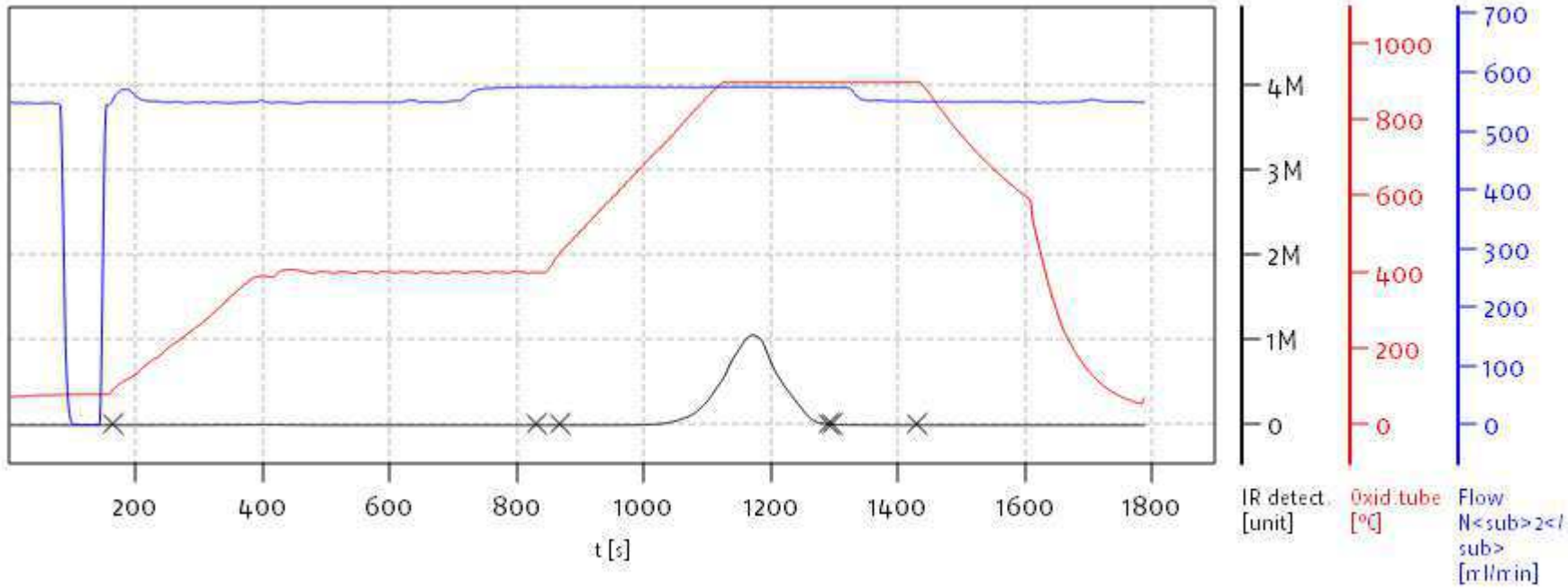
Access: soliTOC superuser

Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
22	22	SEQ-CALK	200.00	0.0497	1.00	CARBON	4/26/2022 10:01 PM	0.031	3.012	3.043	bl	23 732	4 105 830	9 736	1.0000	0.9301



Name:

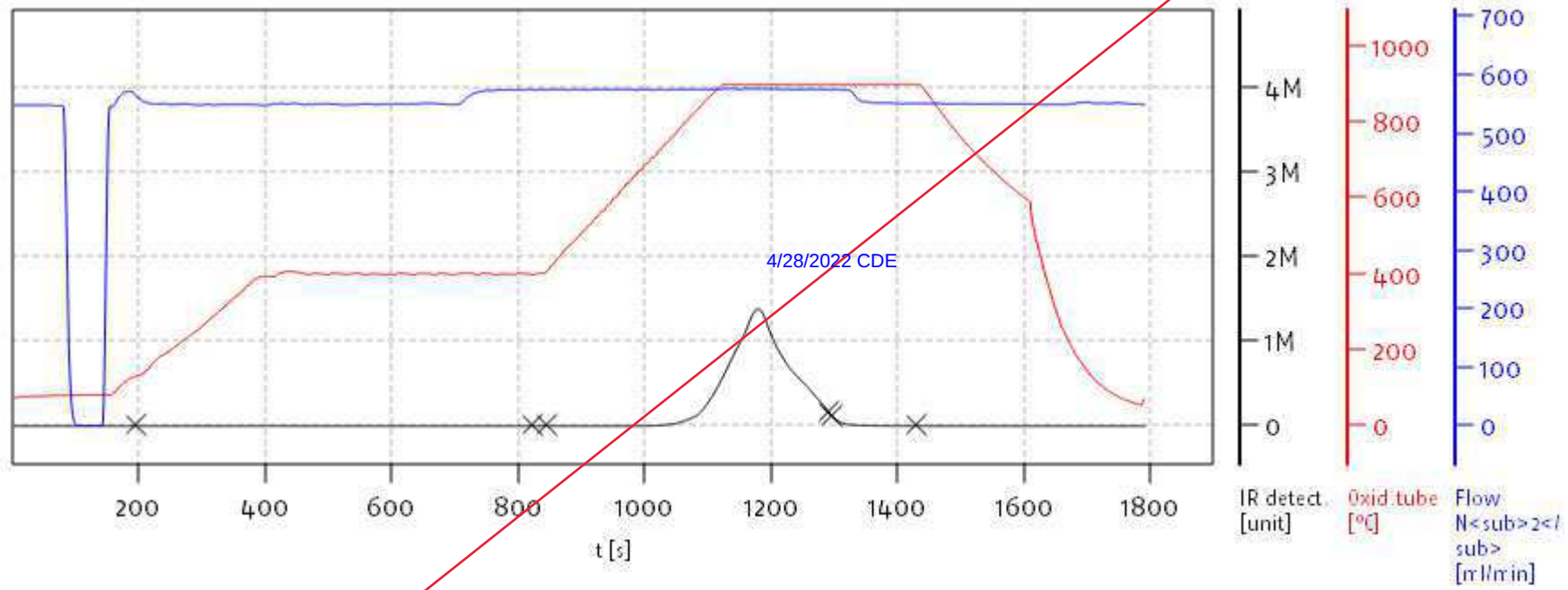
Access: soliTOC superuser

Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
23	23	SEQ-CALL	200.00	0.0698	1.00	CARBON	4/26/2022 10:31 PM	0.005	3.805	3.810	bl,C1u	3 605	5 648 620	71 970	1.0000	0.9443



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:07:12 2022

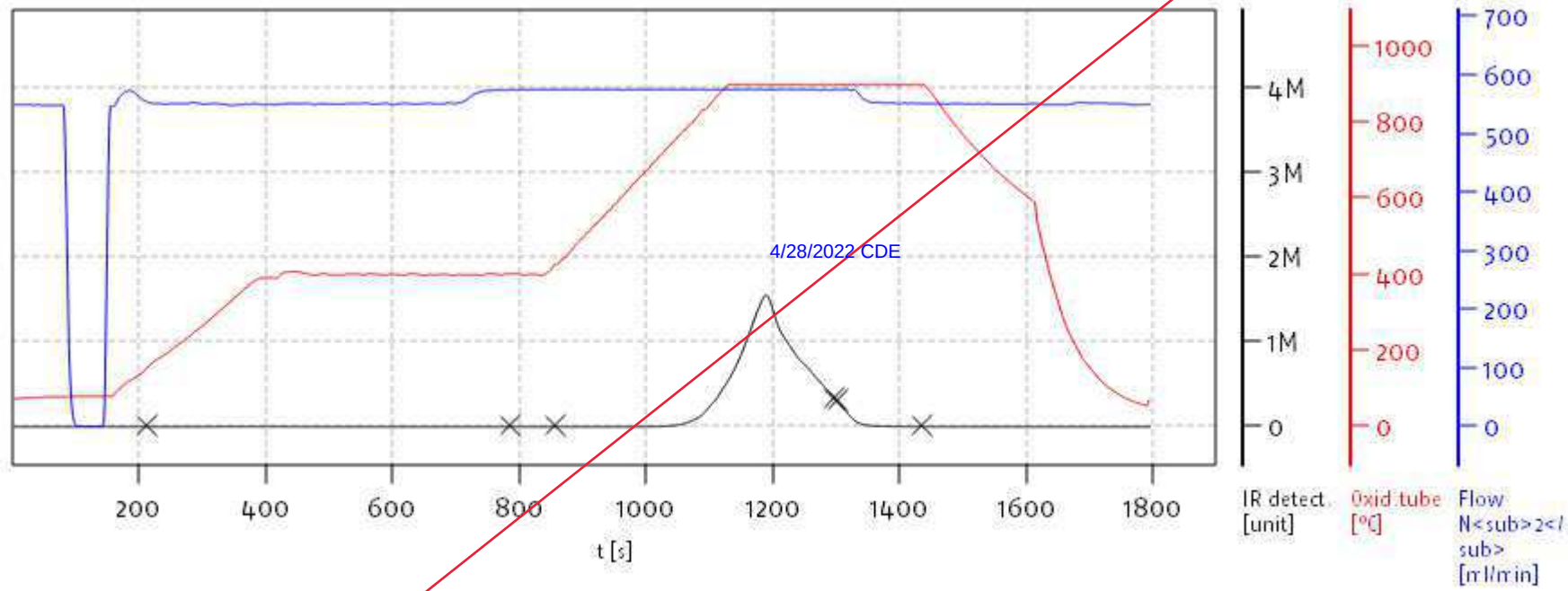
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

Analytical Resources, Incorporated
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
24	24	SEQ-CALM	200.00	0.0803	1.00	CARBON	4/26/2022 11:02 PM	0.010	4.637	4.647	bl	10 023	6 397 530	228 171	1.0000	0.9539



Name:

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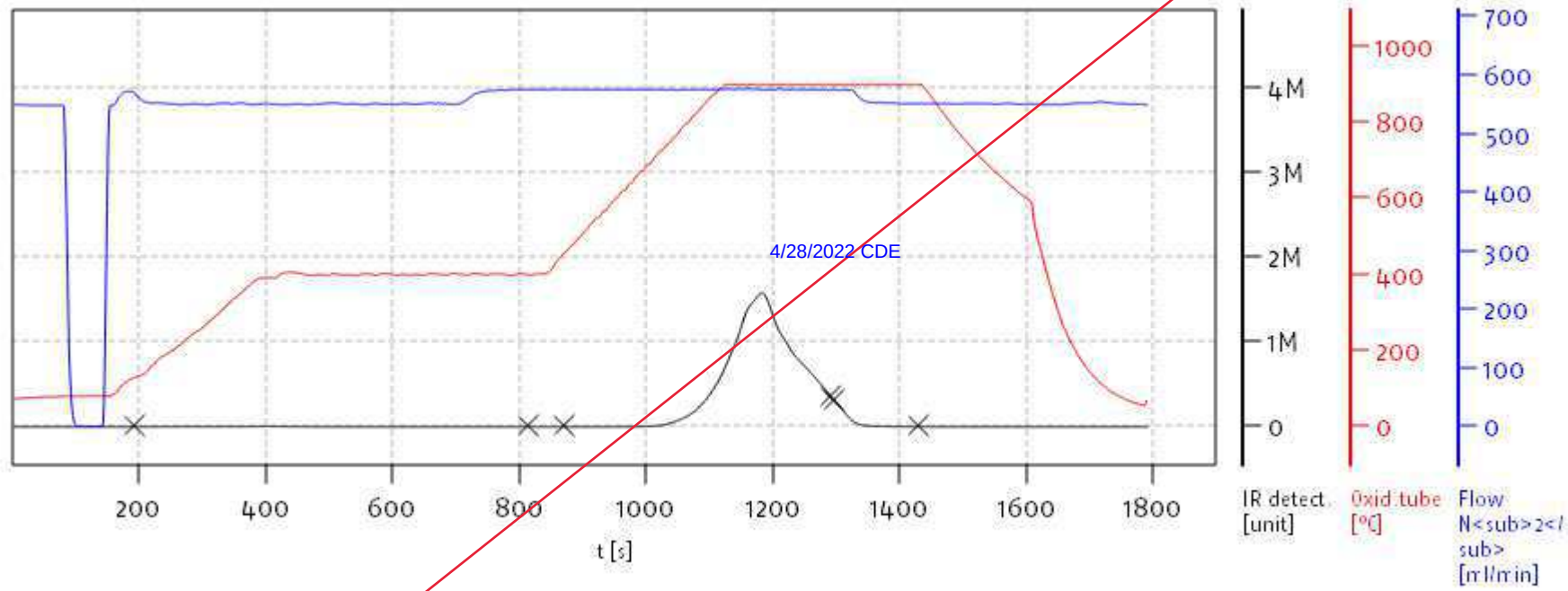
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

Analytical Resources, Incorporated
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
25	25	SEQ-CALN	200.00	0.0901	1.00	CARBON	4/26/2022 11:32 PM	0.020	5.219	5.239	bl	23 354	7 186 580	239 986	1.0000	0.9540



Name:

Access: soliTOC superuser

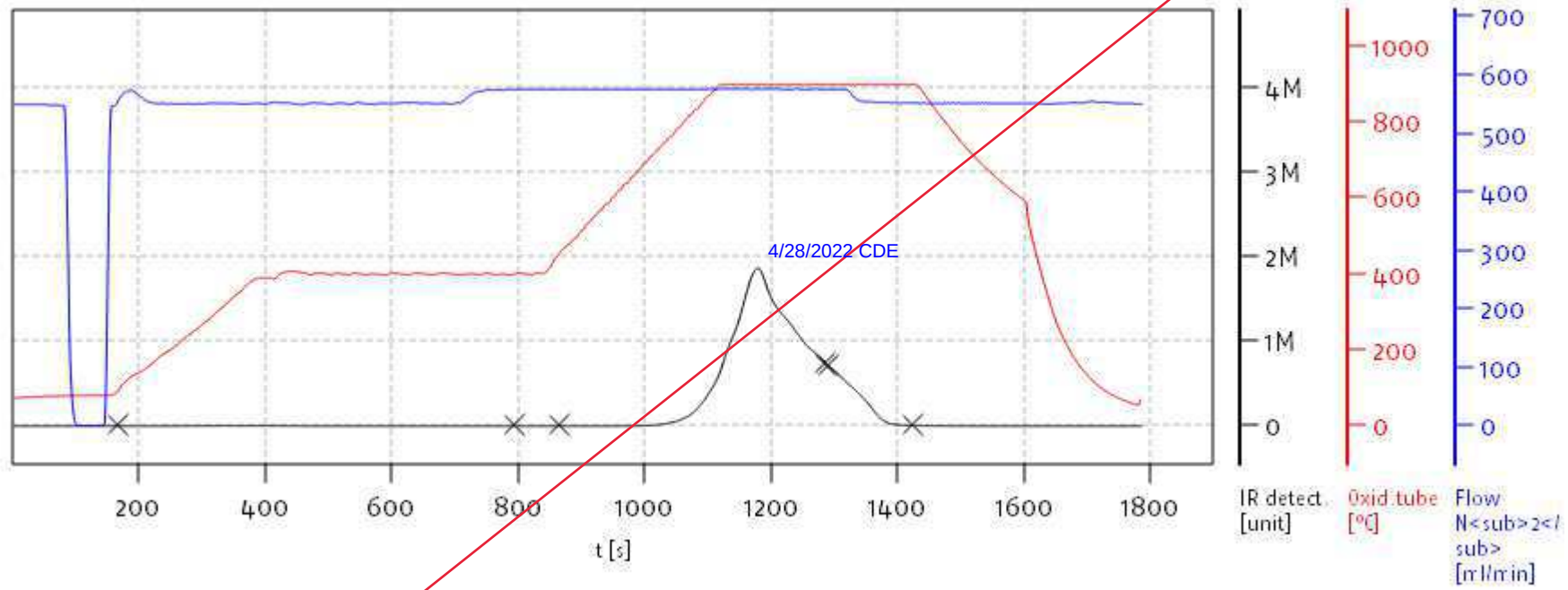
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
26	26	SEQ-CALO	200.00	0.1200	1.00	CARBON	4/27/2022 12:02 AM	0.019	7.915	7.934	bl,C3o	21 248	8 544 610	1 334 580	1.0000	1.0714



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Access: soliTOC superuser

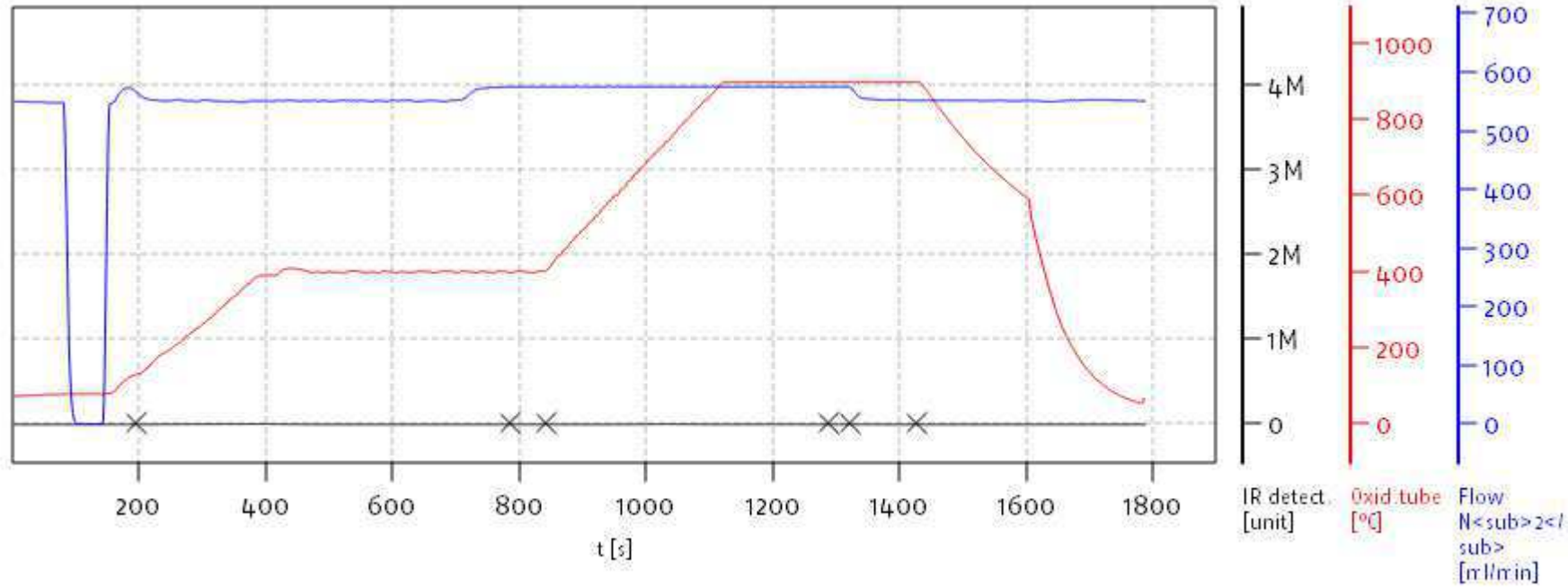
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
27	27	BLANK	1.00		1.00	CARBON	4/27/2022 12:32 AM	0.000	0.000	0.000	bl	29 766	19 596	1 205	1.0000	0.9007



Name:

Access: soliTOC superuser

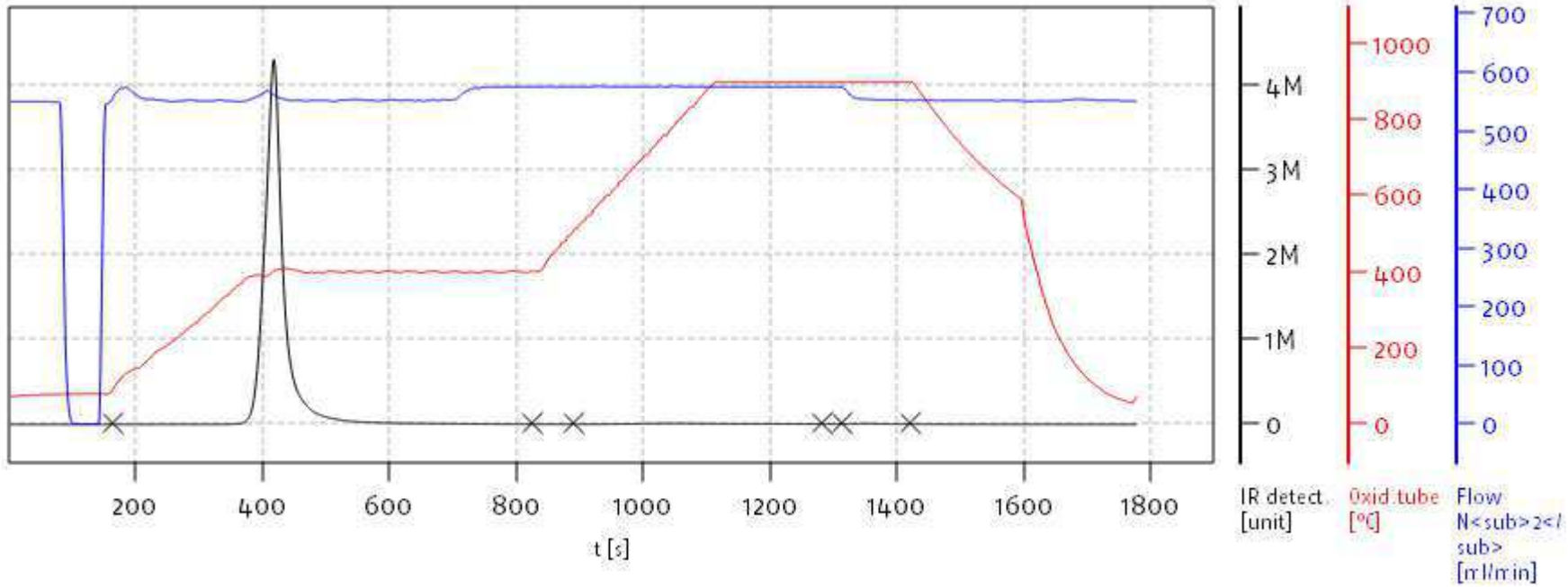
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
28	28	Dfactor	19.00		1.00	CARBON	4/27/2022 1:02 AM	44.678	0.893	45.571	bl	5 588 680	104 999	25 384	0.9581	1.0000



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:07:12 2022

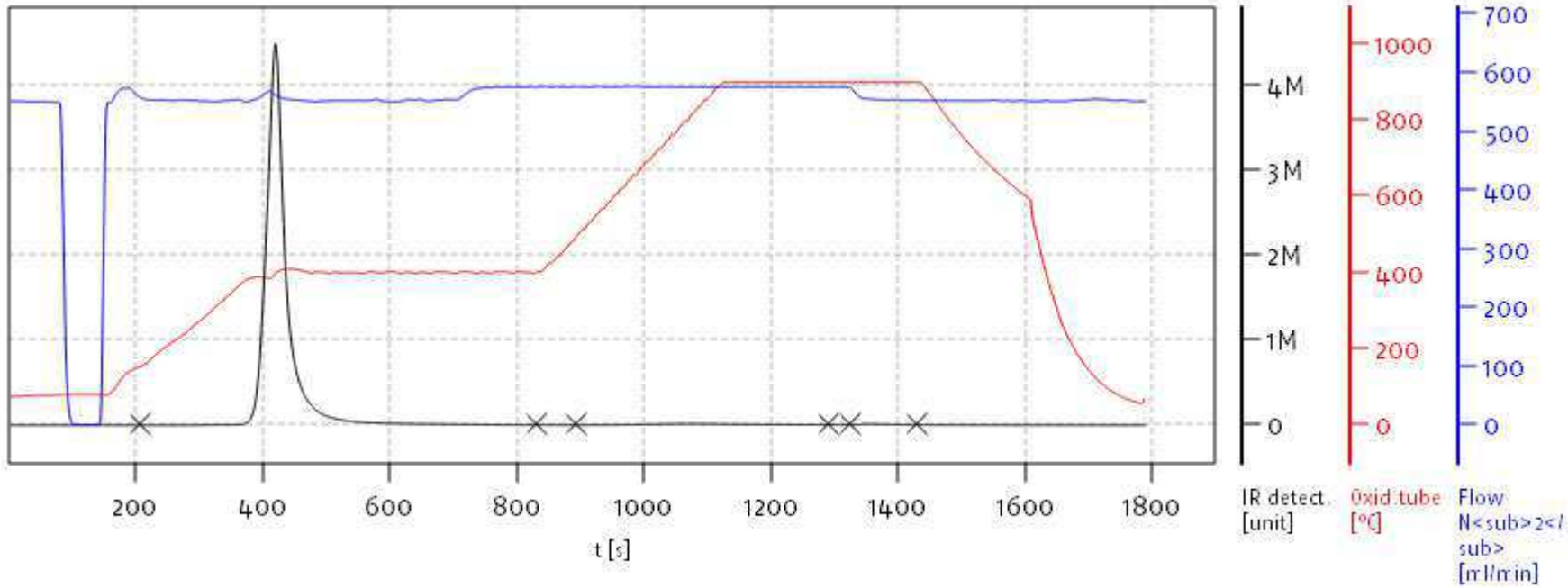
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: 4/27/2022 11:05 AM

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
29	29	Dfactor	20.80		1.00	CARBON	4/27/2022 1:32 AM	44.694	0.937	45.631	bl	6 076 750	120 961	30 224	0.9647	1.0000



Name:

Access: soliTOC superuser

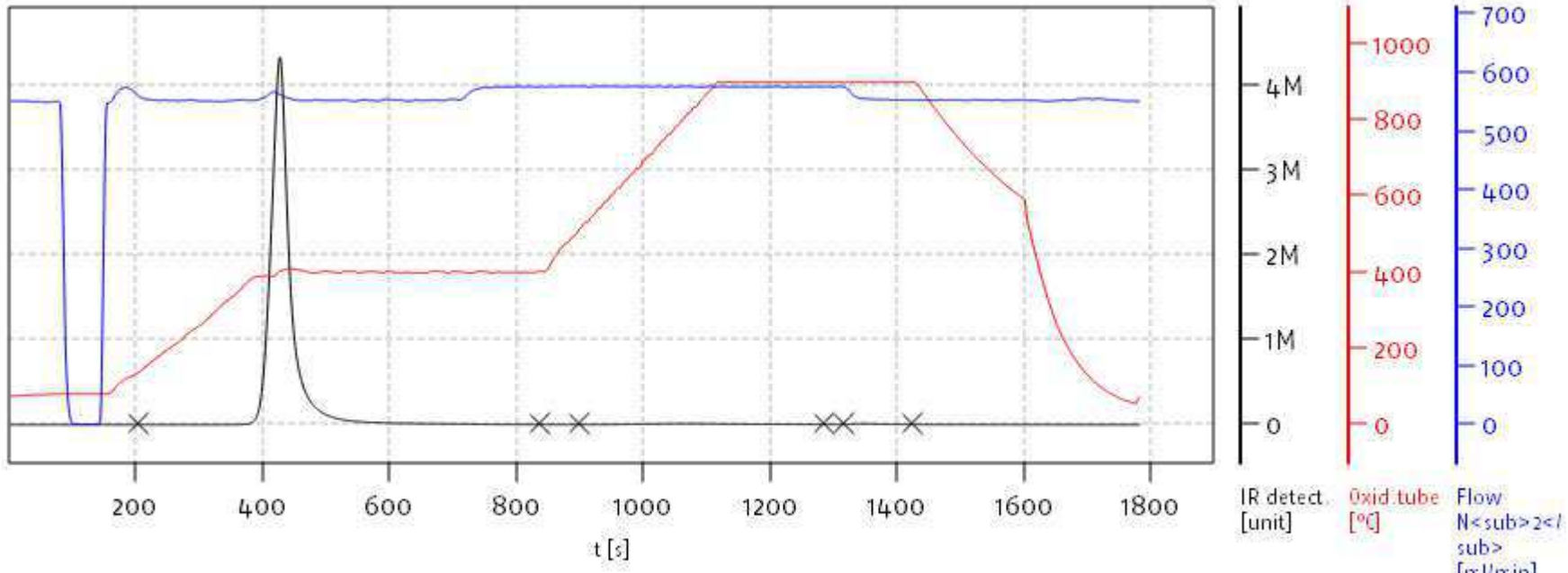
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
30	30	SEQ-ICV1	19.40		1.00	CARBON	4/27/2022 2:03 AM	44.964	0.742	45.706	bl	5 722 450	98 735	27 054	0.9614	0.9007



Name:

Access: soliTOC superuser

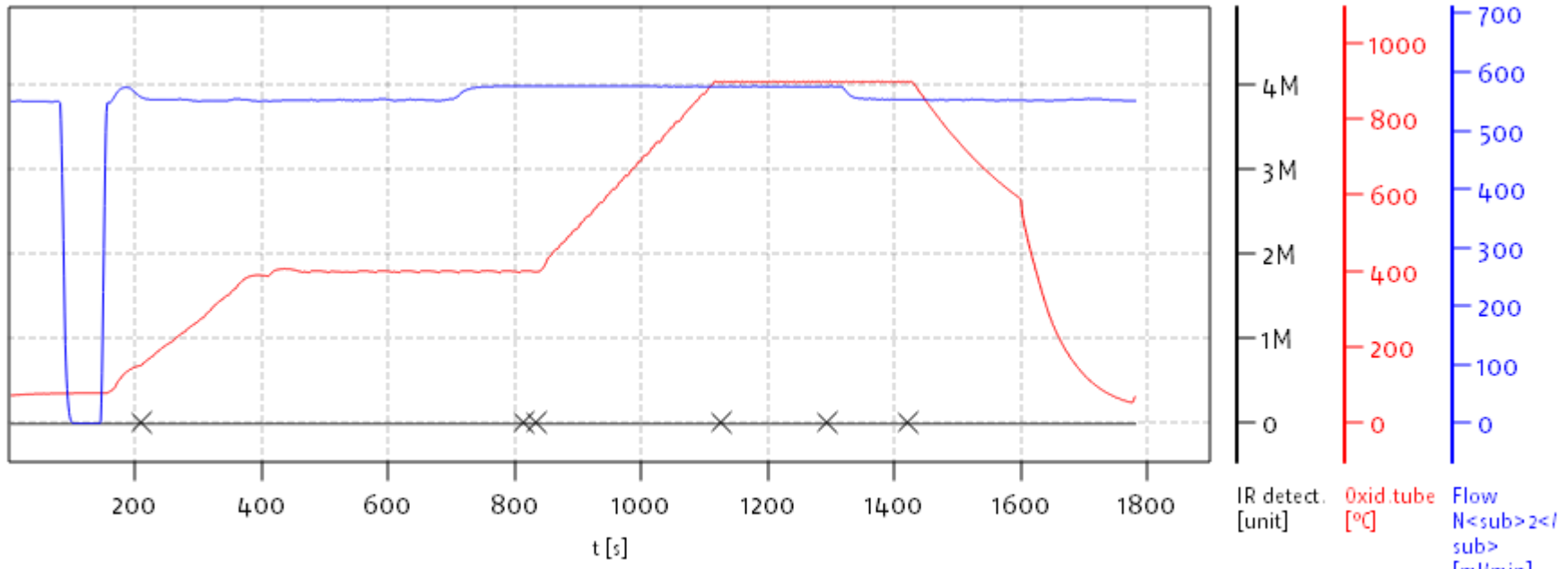
Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
31	31	SEQ-ICB1	501.10		1.00	CARBON	4/27/2022 2:33 AM	0.002	0.001	0.003	bl,C1u,C3u,C2u	2 158	225	165	0.9614	0.9007



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:07:12 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

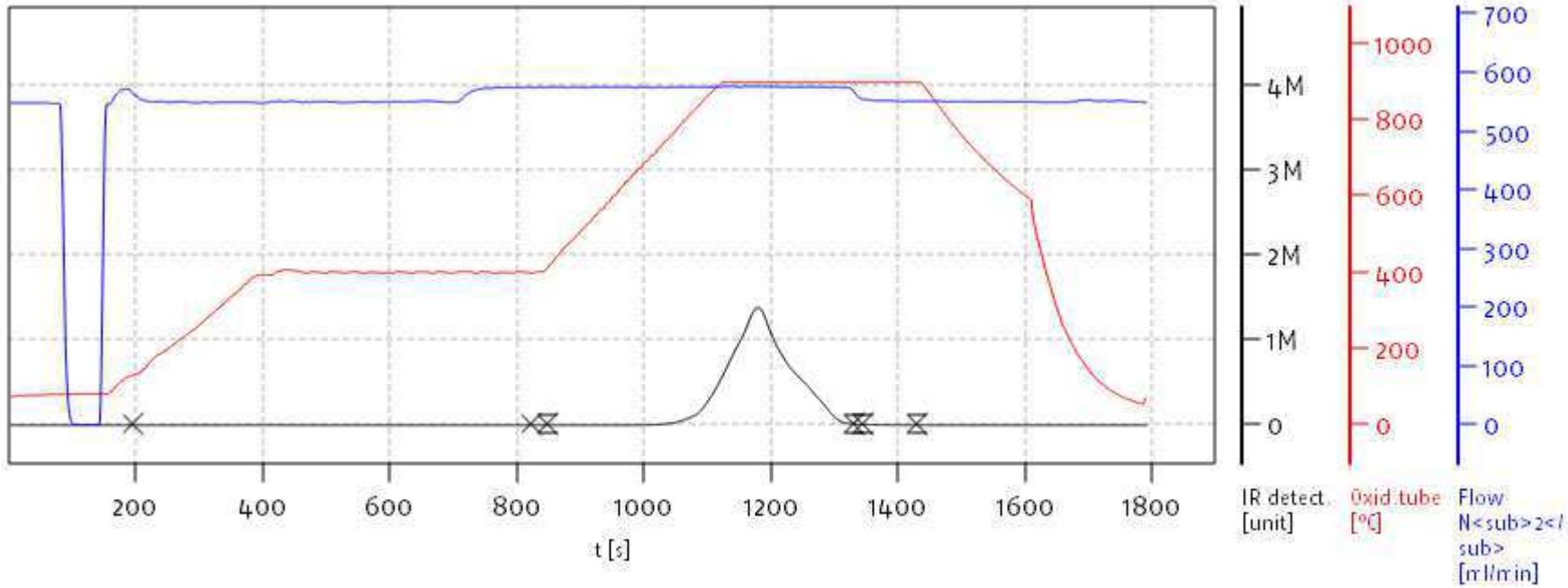
elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: 4/27/2022 11:05 AM

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

Analytical Resources, Incorporated
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
23	23	SEQ-CALL	200.00	0.0698	1.00	CARBON	4/27/2022 11:08 AM	0.005	3.917	3.922	bl,C1u	3 605	**5 260 365**	**0**	1.0000	0.9443



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:10:16 2022

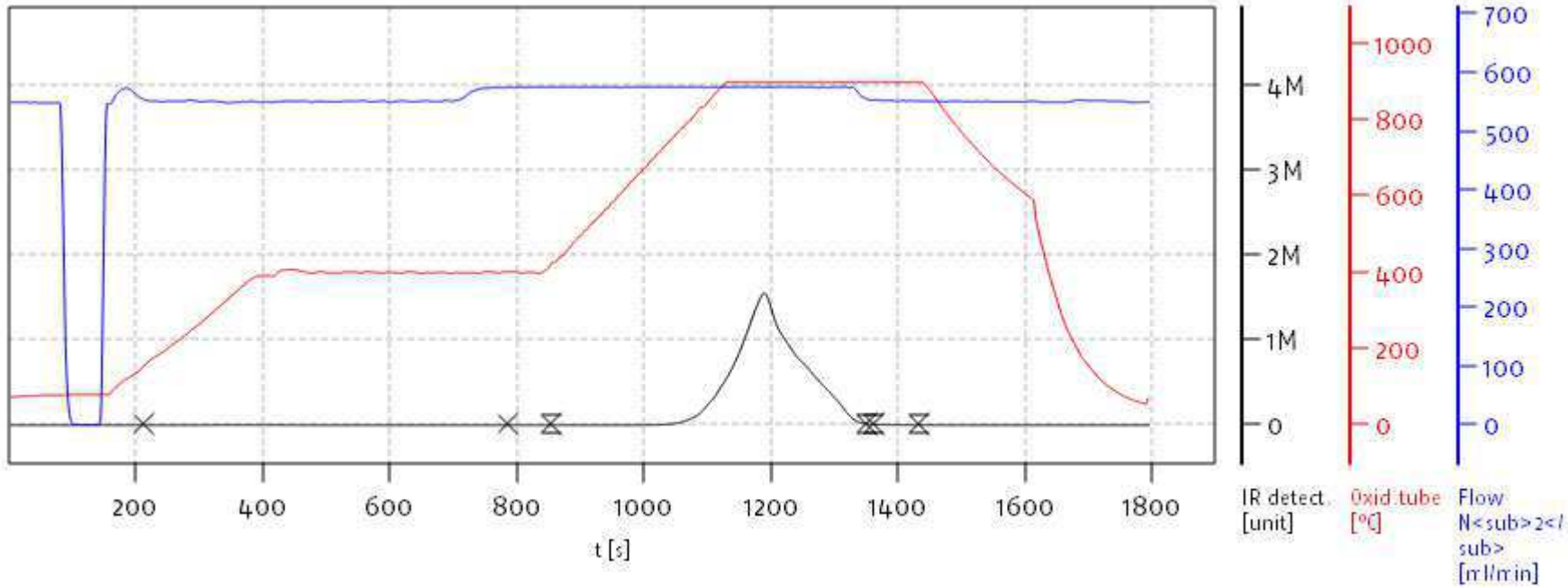
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
24	24	SEQ-CALM	200.00	0.0803	1.00	CARBON	4/27/2022 11:08 AM	0.010	4.637	4.647	bl	10 023	**6 164 833**	**0**	1.0000	0.9539



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:10:16 2022

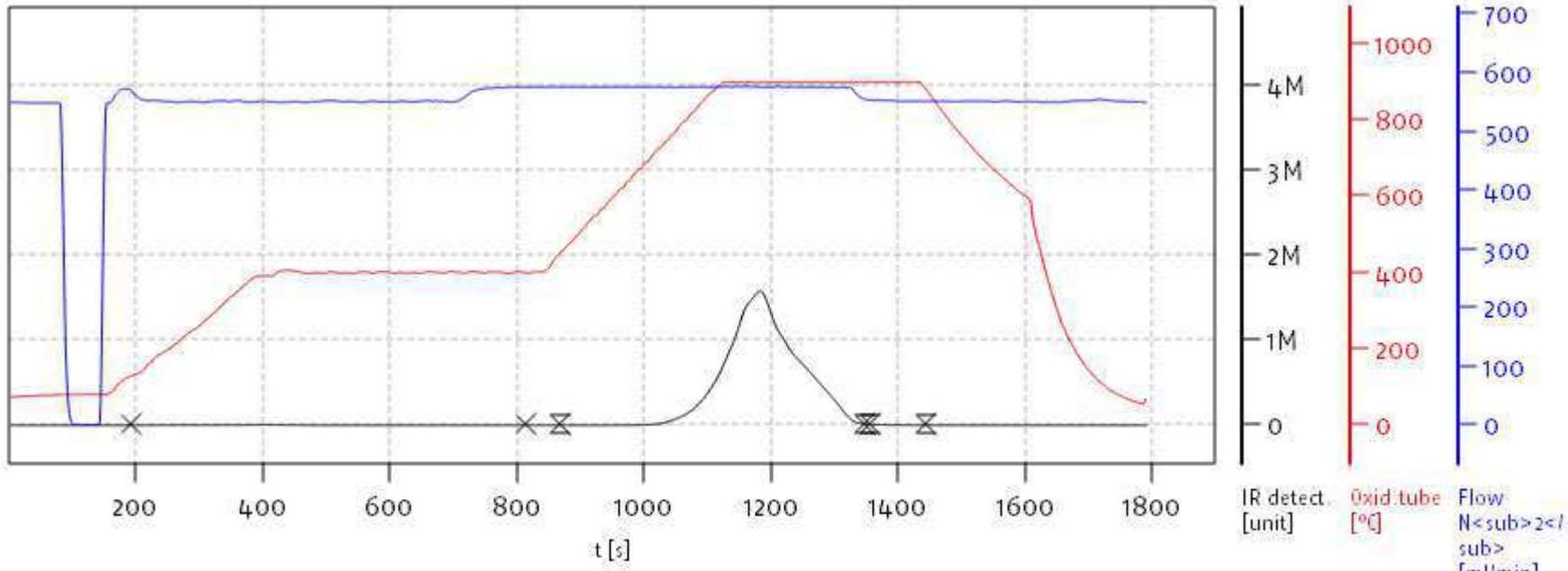
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
25	25	SEQ-CALN	200.00	0.0901	1.00	CARBON	4/27/2022 11:09 AM	0.020	5.219	5.239	bl	23 354	**6 937 833**	**0**	1.0000	0.9540



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:10:16 2022

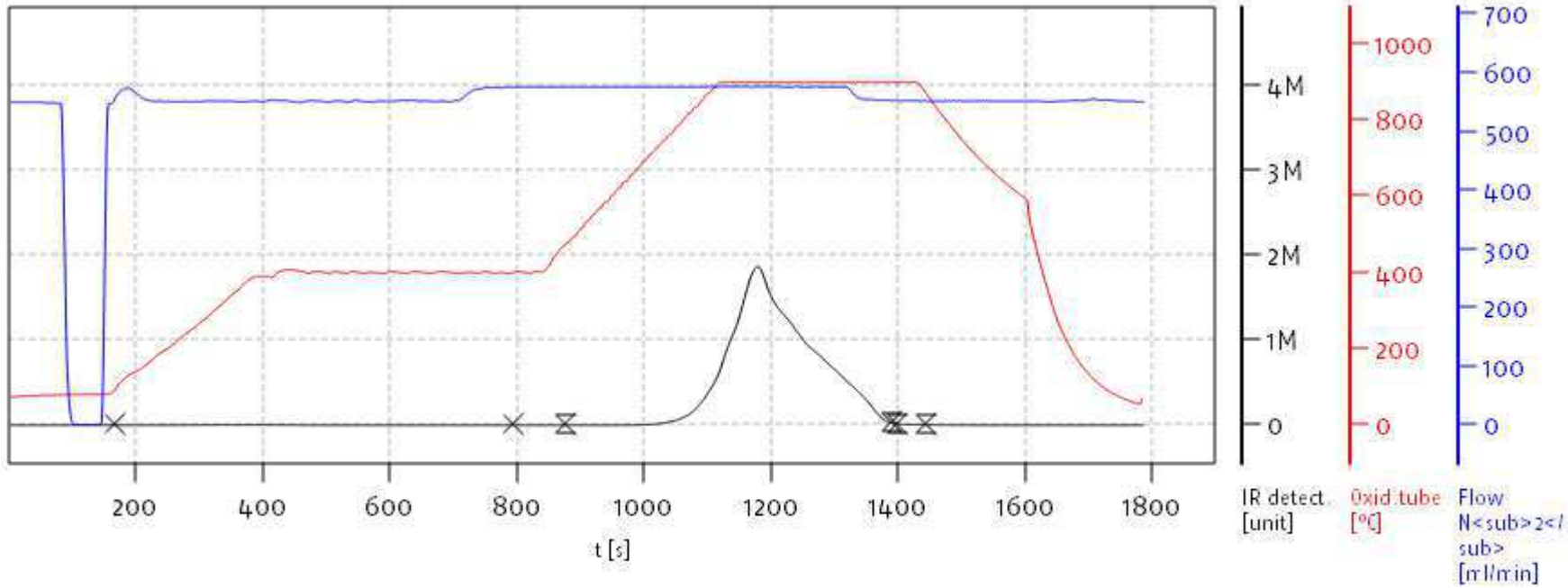
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: DOE

	Pos.	Name	Weight [mg]	Memo	Dilut. Factor	Method	Date Time	TOC [%]	TIC900 [%]	TC [%]	Info	TOC400 Area	TIC900 Area	ROC Area	TOC400 Factor	TIC900 Factor
26	26	SEQ-CALO	200.00	0.1200	1.00	CARBON	4/27/2022 11:09 AM	0.019	7.915	7.934	bl,C3o	21 248	9 370 139	0	1.0000	1.0714



Name:

Access: soliTOC superuser

Date: Wed Apr 27 11:10:16 2022

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

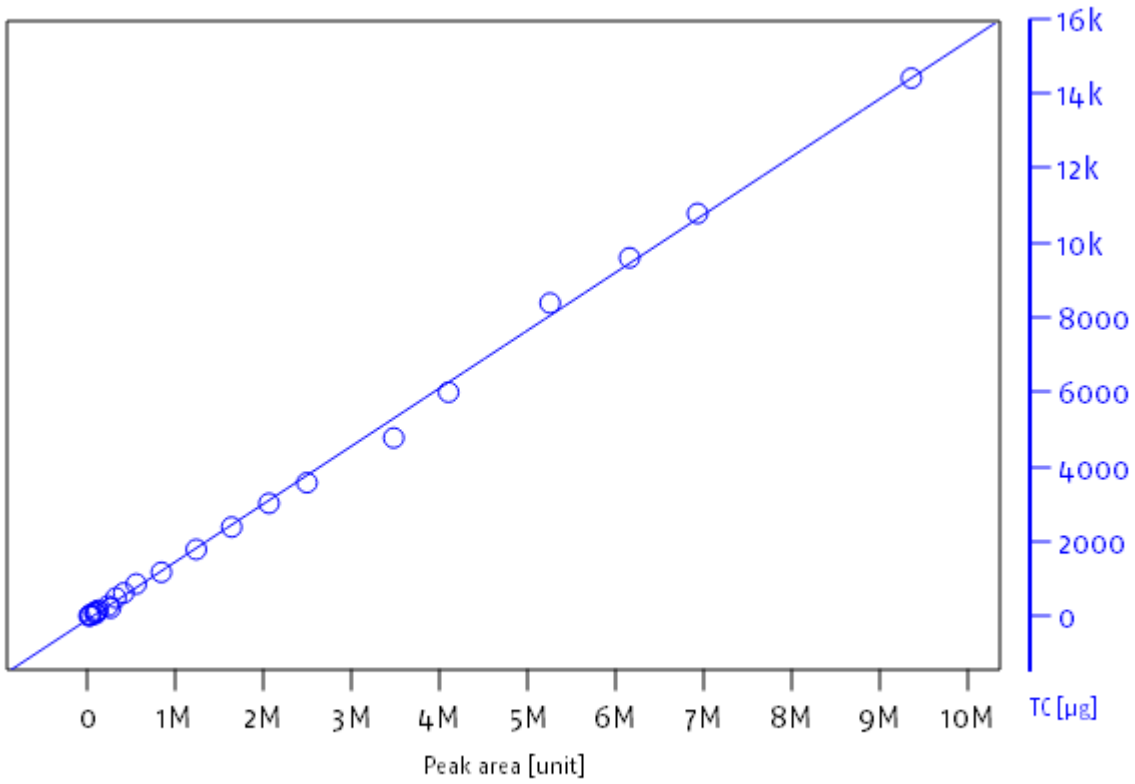
elementar
EXCELLENCE IN ELEMENTS

Document: 042622 DOE CALIBRATION from: --.--.-- (modified)

Calibration parameters TC, Whole range

a	-4.107546e-02
b	+1.548032e-06
c	+0.000000e+00
d	+0.000000e+00
e	+0.000000e+00
r	0.998372
r_old	0.998372
Proc.-SD	166.070255 µg

Calibration graph TC, Whole range



INSTRUMENT BLANKS
EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: TOC Cube
Calibration: FD00070
Sequence: SKD0371
Date Analyzed: 04/27/22 02:33

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SKD0371-ICB1	Total Organic Carbon	0.00	0.02	0.02	%	

INSTRUMENT BLANKS
EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: TOC Cube
Calibration: FD00070
Sequence: SLA0148
Date Analyzed: 01/16/23 11:32

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLA0148-ICB1	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0148-CCB1	Total Organic Carbon	0.001	0.02	0.02	%	
SLA0148-CCB2	Total Organic Carbon	0.001	0.02	0.02	%	
SLA0148-CCB3	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0148-CCB4	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0148-CCB5	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0148-CCB6	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0148-CCB7	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0148-CCB8	Total Organic Carbon	0.00	0.02	0.02	%	
SLA0148-CCB9	Total Organic Carbon	0.00	0.02	0.02	%	

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: TOC Cube
Calibration: FD00070
Control Limt: +/- 10.00%
Sequence: SKD0371

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SKD0371-ICV1	Total Organic Carbon	44.446	43.7	98.3	%	EPA 9060A m
	Total Carbon	44.446	44.1	99.2	%	EPA 9060A m
	Total Inorganic Carbon	0.0000	0.40		%	EPA 9060A m
	% Soot	0.0000	0.004		%	EPA 9060A m

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: TOC Cube
Calibration: FD00070
Control Limt: +/- 10.00%
Sequence: SLA0148

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLA0148-ICV1	Total Organic Carbon	44.446	44.1	99.2	%	EPA 9060A m
SLA0148-CCV1	Total Organic Carbon	44.446	44.5	100	%	EPA 9060A m
SLA0148-CCV2	Total Organic Carbon	44.446	44.5	100	%	EPA 9060A m
SLA0148-CCV3	Total Organic Carbon	44.446	44.3	99.8	%	EPA 9060A m
SLA0148-CCV4	Total Organic Carbon	44.446	44.6	100	%	EPA 9060A m
SLA0148-CCV5	Total Organic Carbon	44.446	44.6	100	%	EPA 9060A m
SLA0148-CCV6	Total Organic Carbon	44.446	44.7	101	%	EPA 9060A m
SLA0148-CCV7	Total Organic Carbon	44.446	45.5	102	%	EPA 9060A m
SLA0148-CCV8	Total Organic Carbon	44.446	44.0	99.0	%	EPA 9060A m
SLA0148-CCV9	Total Organic Carbon	44.446	45.1	102	%	EPA 9060A m

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLA0360-SRM1
Batch: BLA0360
Initial/Final: 0.2716 g / 0.2716 g
Preparation: Plumb 1981
Analyzed: 01/17/2023 22:26
Standard ID: L000299
Expires: 01/11/2024
Standard Lot#: NA
Description: 1941B - Organics in Marine Sediment (Conv

ANALYTE	TRUE (% wet)	FOUND (% wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Total Organic Carbon	2.9900	2.93	0.02	0.02		98.0	80 - 120

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1082X 23A0249-01	01/12/23 09:08	01/12/23 16:38	01/16/23 10:35	4	180	01/18/23 02:29			
LDW23-SC1083 23A0249-02	01/12/23 08:38	01/12/23 16:38	01/16/23 10:35	4	180	01/18/23 03:00			
LDW23-SC1018 23A0249-03	01/12/23 10:21	01/12/23 16:38	01/16/23 10:35	4	180	01/18/23 03:30			
LDW23-SC1084 23A0249-04	01/12/23 09:47	01/12/23 16:38	01/16/23 10:35	4	180	01/18/23 04:00			
LDW23-SC1025 23A0249-05	01/12/23 11:28	01/12/23 16:38	01/16/23 10:35	3	180	01/18/23 04:31			
LDW23-SC1033 23A0249-06	01/12/23 12:55	01/12/23 16:38	01/16/23 10:35	3	180	01/18/23 05:01			
LDW23-IT1034 23A0249-07	01/12/23 12:32	01/12/23 16:38	01/16/23 10:35	3	180	01/18/23 06:32			
LDW23-SC1024 23A0249-08	01/12/23 13:35	01/12/23 16:38	01/16/23 10:35	3	180	01/18/23 07:02			
LDW23-SC1040 23A0249-09	01/12/23 14:15	01/12/23 16:38	01/16/23 10:35	3	180	01/18/23 07:33			
LDW23-SC1030 23A0249-10	01/12/23 14:50	01/12/23 16:38	01/16/23 10:35	3	180	01/18/23 08:03			
LDW23-SC1020 23A0249-11	01/12/23 15:23	01/12/23 16:38	01/16/23 10:35	3	180	01/18/23 08:33			

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23A0249
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: TOC Cube

Analyte	MDL	RL	Units
Total Organic Carbon	0.02	0.02	%

National Institute of Standards & Technology

Certificate of Analysis

Standard Reference Material® 1941b

Organics in Marine Sediment

This Standard Reference Material (SRM) is marine sediment collected at the mouth of the Baltimore (MD) Harbor. SRM 1941b is intended for use in evaluating analytical methods for the determination of selected polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and chlorinated pesticides in marine sediment and similar matrices. Information values are also provided for total organic carbon (TOC), total carbon, hydrogen, and nitrogen. All of the constituents for which certified, reference, and information values are provided in SRM 1941b were naturally present in the sediment before processing. A unit of SRM 1941b consists of a bottle containing 50 g of radiation-sterilized, freeze-dried sediment.

Certified Mass Fraction Values: Certified mass fraction values for PAHs, PCB congeners, and chlorinated pesticides are provided in Table 1 through Table 3. The certified values for the PAHs, PCB congeners, and chlorinated pesticides are based on the agreement of results obtained at NIST from two or more chemically independent analytical techniques along with results from an interlaboratory comparison study [1]. A NIST certified value is a value for which NIST has the highest confidence in its accuracy in that all known or suspected sources of bias have been investigated or taken into account [1].

Reference Mass Fraction Values: Reference mass fraction values for additional PAHs (some in combination), additional PCB congeners, and additional chlorinated pesticides are provided in Table 4 through Table 7. Reference values for alkylated PAH groups are provided in Table 8 and for selected hopanes and steranes in Table 9. A reference value for total organic carbon is provided in Table 10. Reference values are noncertified values that are the best estimate of the true value; however, the values do not meet the NIST criteria for certification and are provided with associated uncertainties that may reflect only measurement precision, may not include all sources of uncertainty, or may reflect a lack of sufficient statistical agreement among multiple analytical methods [1].

Information Mass Fraction Values: Information mass fraction values are provided in Table 11 for carbon, hydrogen, and nitrogen. An information value is considered to be a value that will be of use to the SRM user, but insufficient information is available to assess the uncertainty associated with the value [1]. Information values cannot be used to establish metrological traceability.

Expiration of Certification: The certification of **SRM 1941b** is valid, within the measurement uncertainty specified, until **01 October 2020**, provided the SRM is handled and stored in accordance with the instructions given in this certificate (see "Instructions for Handling, Storage, and Use"). This certification is nullified if the SRM is damaged, contaminated, or otherwise modified.

Maintenance of SRM Certification: NIST will monitor this SRM over the period of its certification. If substantive technical changes occur that affect the certification before the expiration of this certificate, NIST will notify the purchaser. Registration (see attached sheet or register online) will facilitate notification.

Coordination of the technical measurements leading to the certification of this material was under the leadership of M.M. Schantz and S.A. Wise of the NIST Chemical Sciences Division.

Analytical measurements for the certification of SRM 1941b were performed at NIST by J.R. Kucklick, B.J. Porter, D.L. Poster, M.M. Schantz, P. Schubert, S. Tutschku, and L.L. Yu of the NIST Chemical Sciences Division.

Carlos A. Gonzalez, Chief
Chemical Sciences Division

Gaithersburg, MD 20899
Certificate Issue Date: 16 January 2015

Robert L. Watters, Jr., Director
Office of Reference Materials

Measurements for TOC were provided by a commercial laboratory and T.L. Wade of the Geochemical and Environmental Research Group, Texas A&M University (College Station, TX). The carbon, hydrogen, and nitrogen data were provided by a commercial laboratory. Results for the PAHs, PCBs, and chlorinated pesticides from 38 laboratories (see Appendix A) that participated in an interlaboratory comparison exercise coordinated by NIST were used. Results for the alkylated PAH groups, hopanes, and steranes from 33 laboratories (see Appendix B) that participated in another interlaboratory comparison exercise coordinated by NIST were also used.

Collection and preparation of SRM 1941b were performed by M.P. Cronise and C.N. Fales of the NIST Office of Reference Materials and B.J. Porter and M.M. Schantz of the NIST Chemical Sciences Division. The sediment material was collected with the assistance of G.G. Lauenstein, J. Collier, and J. Lewis (National Oceanic and Atmospheric Administration, Silver Spring, MD).

Consultation on the statistical design of the experimental work and evaluation of the data were provided by S.D. Leigh and J.H. Yen of the NIST Statistical Engineering Division.

Support aspects involved in the issuance of this SRM were coordinated through the NIST Office of Reference Materials.

INSTRUCTIONS FOR HANDLING, STORAGE, AND USE

Handling: This material is naturally occurring marine sediment from an urban area and may contain constituents of unknown toxicities; therefore, caution and care should be exercised during its handling and use.

Storage: SRM 1941b must be stored in its original bottle at temperatures less than 30 °C and away from direct sunlight.

Use: Prior to removal of subsamples for analysis, the contents of the bottle should be mixed. The mass fractions of constituents in SRM 1941b are reported on a dry-mass basis. The SRM, as received, contains a mass fraction of approximately 2.4 % moisture (see "Conversion to Dry-Mass Basis"). The sediment sample should be dried to a constant mass before weighing for analysis; or a separate subsample of the sediment should be removed from the bottle at the time of analysis and dried to determine the mass fraction on a dry-mass basis. If the constituents of interest are volatile, then the moisture must be determined with a separate subsample.

PREPARATION AND ANALYSIS[(1)]

Sample Collection and Preparation: The sediment used to prepare this SRM was collected from the Chesapeake Bay at the mouth of the Baltimore (MD) Harbor near the Francis Scott Key Bridge (39°12.3'N and 76°31.4'W). This location is very near the site where SRM 1941 and SRM 1941a were collected. The sediment was collected using a Kynar-coated modified Van Veen-type grab sampler. A total of approximately 3300 kg of wet sediment was collected from the site. The sediment was freeze-dried, sieved at 150 µm (100 % passing), homogenized in a cone blender, radiation sterilized (^{60}Co), and then packaged in screw-capped amber glass bottles each containing approximately 50 g.

Conversion to Dry-Mass Basis: The results for the constituents in SRM 1941b are reported on a dry-mass basis; however, the material "as received" contains residual moisture. The amount of moisture in SRM 1941b was determined by measuring the mass loss after freeze-drying subsamples of 1.1 g to 1.3 g for four days at 1 Pa with a –10 °C shelf temperature and a –50 °C condenser temperature. The moisture content in SRM 1941b at the time of the certification analyses was 2.39 % ± 0.08 % (95 % confidence level). Analytical results for the organic constituents were determined on an as-received basis and then converted to a dry-mass basis by dividing by the conversion factor of 0.9761 (gram dry mass per gram as-received mass).

Polycyclic Aromatic Hydrocarbons: The general approach used for the value assignment of the PAHs in SRM 1941b was similar to that reported in detail elsewhere [2]. The approach consisted of combining results from analyses using various combinations of different extraction techniques and solvents, clean-up/isolation procedures, and chromatographic separation and detection techniques: Soxhlet extraction and pressurized-fluid extraction (PFE) using dichloromethane (DCM) or a hexane/acetone mixture, cleanup of the extracts using solid-phase extraction (SPE) or normal-phase liquid chromatography (LC), followed by analysis using the following techniques: (1) reversed-phase liquid chromatography with fluorescence detection (LC-FL) analysis of the total PAH fraction, (2) reversed-phase

(1) Certain commercial equipment, instruments or materials are identified in this certificate to adequately specify the experimental procedure. Such identification does not imply recommendation or endorsement by the National Institute of Standards

LC-FL analysis of isomeric PAH fractions isolated by normal-phase LC (i.e., multidimensional LC), (3) gas chromatography/mass spectrometry (GC/MS) analysis of the PAH fraction on three stationary phases of different selectivity, i.e., a 5 % (all column compositions are given as mole fractions in %) phenyl-substituted methylpolysiloxane phase, a 50 % phenyl-substituted methylpolysiloxane phase, and a relatively non-polar proprietary phase.

Three sets of GC/MS results, designated as GC/MS (I), GC/MS (II), and GC/MS (III), were obtained using three columns with different selectivities for the separation of PAHs. For GC/MS (I) analyses, duplicate subsamples of approximately 1 g from ten bottles of SRM 1941b were extracted using PFE with DCM. Copper powder was added to the extract to remove elemental sulfur. The concentrated extract was passed through an aminopropyl SPE cartridge and eluted with 2 % DCM in hexane (all solvent concentrations are given as volume fractions in %). The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5 MS, J&W Scientific, Folsom, CA). The GC/MS (II) analyses were performed using 5 g subsamples from six bottles of SRM 1941b. These samples were extracted using PFE with DCM. The high molecular mass compounds were removed from the extracts using size exclusion chromatography (SEC) with a preparative-scale divinylbenzene-polystyrene column (10 μm particle size with 10 nm diameter pores), and the sulfur was removed from the extracts by adding copper powder. The concentrated extract was passed through an aminopropyl SPE cartridge and eluted with 10 % DCM in hexane. The analysis was by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 50 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-17 MS, J&W Scientific). For the GC/MS (III), 9 g subsamples from six bottles of SRM 1941b were Soxhlet-extracted for 18 h with 250 mL of a mixture of 50 % hexane/50 % acetone. Copper powder was added to the extract to remove elemental sulfur, and the concentrated extract was passed through a silica SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a relatively non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific).

Two sets of LC-FL results, designated as LC-FL (total) and LC-FL (isomer), were used in the certification process. For the LC-FL (total), subsamples of approximately 1 g from six bottles of SRM 1941b were extracted using PFE with a mixture of 50 % hexane/50 % acetone. The extracts were concentrated and then processed through an aminopropylsilane SPE cartridge using 2 % DCM in hexane to obtain the total PAH fraction. For the LC-FL (isomer), a 5 g subsample from the six bottles was extracted using PFE with DCM and processed through an aminopropylsilane SPE cartridge using 10 % DCM in hexane; the PAH fraction was then fractionated further on a semi-preparative aminopropylsilane column (μBondapak NH_2, 9 mm i.d. × 30 cm, Waters Associates, Milford, MA) to isolate isomeric PAH fractions as described previously [3–6]. The total PAH fraction and the isomeric PAH fractions were analyzed using a 5 μm particle-size polymeric octadecylsilane (C_{18}) column (4.6 mm i.d. × 25 cm, Hypersil-PAH, Keystone Scientific, Inc., Bellefonte, PA) with wavelength-programmed fluorescence detection [4,5].

For the GC/MS and LC-FL measurements described above, selected perdeuterated PAHs were added to the sediment prior to solvent extraction for use as internal standards for quantification purposes.

In addition to the analyses performed at NIST, SRM 1941b was used in an interlaboratory comparison exercise in 1999 as part of the NIST Intercomparison Exercise Program for Organic Contaminants in the Marine Environment [7]. Results from 38 laboratories that participated in this exercise were used as the sixth data set in the determination of the certified values for PAHs in SRM 1941b. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest.

Homogeneity Assessment for PAHs: The homogeneity of SRM 1941b was assessed by analyzing duplicate samples of approximately 1 g from ten bottles selected by stratified random sampling. Samples were extracted, processed, and analyzed as described above for GC/MS (I). No statistically significant differences among bottles were observed for the PAHs at this sample size.

PAH Isomers of Molecular Mass 300 and 302: For the determination of the molecular mass 300 and 302 isomers, three subsamples of approximately 5 g each were extracted using PFE with DCM. The extracts were then concentrated with a solvent change to hexane and passed through an aminopropyl SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 50 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-17MS, J&W Scientific). Perdeuterated dibenzo[*a,i*]pyrene was added to the sediment prior to extraction for use as an internal standard [8].

PCBs and Chlorinated Pesticides: The general approach used for the determination of PCBs and chlorinated pesticides in SRM 1941b consisted of combining results from analyses using various combinations of different extraction techniques and solvents, cleanup/isolation procedures, and chromatographic separation and detection techniques. Techniques and solvents included Soxhlet extraction and PFE using DCM or a hexane/acetone mixture,

clean-up/isolation using SPE or LC, followed by analysis using GC/MS and gas chromatography with electron capture detection (GC-ECD) on two columns with different selectivity for the separation of PCBs and chlorinated pesticides. The analytical methods are described in detail elsewhere [2].

Six sets of results were obtained and designated as GC-ECD (I) A and B, GC/MS (I) A and B, GC/MS (II), and Interlaboratory Comparison Exercise. For the GC-ECD (I) analyses, approximately 10 g subsamples from six bottles of SRM 1941b were extracted using PFE with DCM. Copper powder was added to the extract to remove elemental sulfur, and SEC, as described above, was used to remove the high molecular mass compounds. The concentrated extract was then fractionated on a semi-preparative aminopropylsilane column to isolate two fractions containing: (1) the PCBs and lower-polarity pesticides and (2) the more polar pesticides. GC-ECD analyses of the two fractions were performed on two columns of different selectivities for PCB separations: 0.25 mm × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5, J&W Scientific), and a 0.25 mm × 60 m fused silica capillary column with a non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific). The results from the 5 % phenyl phase are designated as GC-ECD (IA) and the results from the proprietary phase are designated as GC-ECD (IB). For the GC-ECD analyses, two PCB congeners that are not significantly present in the sediment extract (PCB 103 and PCB 198 [9,10]) and endosulfan I-d_4, 4,4'-DDE-d_8, 4,4'-DD-d_8, and 4,4'-DDT-d_8 were added to the sediment prior to extraction for use as internal standards for quantification purposes.

Two sets of results were obtained by GC/MS. For GC/MS (I), approximately 9 g subsamples from six bottles were Soxhlet- extracted with a mixture of 50 % hexane/50 % acetone for approximately 18 h. Copper powder was added to the extract to remove elemental sulfur, and the concentrated extract was passed through a silica SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS with two ionization modes, electron impact (EI) and negative ion chemical ionization (NICI). The GC/MS EI method, GC/MS (IA), used a 0.25 mm i.d. × 60 m fused silica capillary column with a relatively non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific). The GC/MS NICI method, GC/MS (IB), used a 0.25 mm i.d. × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5MS, J&W Scientific). The GC/MS (II) results were obtained in the same manner as the GC/MS (IA) analyses except that three subsamples were Soxhlet-extracted with DCM for approximately 18 h. For the GC/MS analyses, selected carbon-13 labeled PCB congeners and chlorinated pesticides were added to the sediment prior to extraction for use as internal standards for quantification purposes.

In addition to the analyses performed at NIST, SRM 1941b was used in an interlaboratory comparison exercise in 1999 as part of the NIST Intercomparison Exercise Program for Organic Contaminants in the Marine Environment [7]. Results from 38 laboratories that participated in this exercise were used as the sixth data set in the determination of the certified values for PCB congeners and chlorinated pesticides in SRM 1941b. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest.

The reference value for PCB 77 was determined from a separate fraction. The samples were extracted and processed as for GC-ECD (I) above. The first (PCB and lower-polarity pesticide) fraction from the semi-preparative aminopropylsilane column was further fractionated using a Cosmosil PYE (pyrenylethyl group bonded) column (5 μm particle size, 4.6 mm i.d. × 25 cm ; Phenomenex, Torrance, CA) [11]. Three fractions were collected: the first fraction contained the pesticides and multi-*ortho* PCBs, the second fraction contained the polychlorinated naphthalenes, non-*ortho* PCB congeners, and some mono-*ortho* PCB congeners, and the third fraction removed the residual planar compounds from the column. The second fraction was analyzed by GC/MS NICI using the same column as GC/MS (IB) above. Carbon-13 labeled PCB 77 was used as an internal standard for quantification purposes.

Alkylated PAH Groups, Hopanes, and Steranes: SRM 1941b was used in an interlaboratory comparison exercise in 2011 [12]. Results from 33 laboratories that participated in this exercise were used in the determination of the reference values for alkylated PAH groups, hopanes, and steranes in SRM 1941b. Note that not all laboratories returned data for each analyte. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest. For the alkylated PAHs, the majority of the laboratories (>90 %) used the parent PAH for determination of the response factor for the corresponding alkylated group.

Total Organic Carbon (TOC): Two laboratories provided results for TOC using similar procedures. Briefly, subsamples of approximately 200 mg were reacted with 6 mol/L hydrochloric acid and rinsed with deionized water prior to combustion in a gas fusion furnace. The carbon monoxide and carbon dioxide produced were measured and compared to a blank for calculation of the percent TOC. Each laboratory analyzed subsamples from three bottles of SRM 1941b. One of the laboratories also analyzed three subsamples from three bottles of SRM 1941b for carbon, hydrogen, and nitrogen.

Table 1. Certified Mass Fraction Values for PAHs in SRM 1941b

PAHs	Mass Fractions[a] (µg/kg)		
Naphthalene[b,c,d,e,f,g]	848	±	95[h]
Fluorene[b,c,d,e,f,g]	85	±	15[h]
Phenanthrene[b,c,d,e,f,g]	406	±	44[h]
Anthracene[b,c,d,e,f,g]	184	±	18[h]
3-Methylphenanthrene[b,c,d]	105	±	13[h]
2-Methylphenathrene[b,c,d]	128	±	14[h]
1-Methylphenanthrene[b,c,d,g]	73.2	±	5.9[h]
Fluoranthene[b,c,d,e,f,g]	651	±	50[h]
Pyrene[b,c,d,e,f,g]	581	±	39[h]
Benz[*a*]anthracene[b,c,d,e,f,g]	335	±	25[h]
Chrysene[d,f]	291	±	31[h]
Triphenylene[d,f]	108	±	5[i]
Benzo[*b*]fluoranthene[c,e]	453	±	21[h]
Benzo[*k*]fluoranthene[b,c,d,e]	225	±	18[h]
Benzo[*e*]pyrene[b,c,d,g]	325	±	25[h]
Benzo[*a*]pyrene[b,c,d,f,g]	358	±	17[h]
Perylene[b,c,d,f,g]	397	±	45[h]
Benzo[*ghi*]perylene[b,c,d,f,g]	307	±	45[h]
Indeno[1,2,3-*cd*]pyrene[b,c,d,f,g]	341	±	57[h]
Dibenz[*a,j*]anthracene[b,c,d,f]	48.9	±	4.6[h]
Dibenz[*a,c*]anthracene[c,f]	36.7	±	5.2[h]
Dibenz[*a,h*]anthracene[c,f]	53	±	10[h]
Benzo[*b*]chrysene[b,c,d,f]	53	±	12[h]
Picene[b,c,d]	46.6	±	4.7[h]

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] GC/MS (I) on 5 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.
[c] GC/MS (II) on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.
[d] GC/MS (III) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.
[e] LC-FL (total) of total PAH fraction after PFE with DCM.
[f] LC-FL (isomer) of isomeric PAH fractions after PFE with DCM.
[g] 1999 Interlaboratory Comparison Study [7] with 21 to 29 laboratories submitting data for each PAH.
[h] Certified values are weighted means of the results from two to six analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[i] The certified value is an unweighted mean of the results from two analytical methods. The uncertainty listed with the value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the value is metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 2. Certified Mass Fraction Values for PCB Congeners[a] in SRM 1941b

PCB Congeners			Mass Fractions[b] (µg/kg)		
PCB	8	(2,4'-Dichlorobiphenyl)[c,d,e,f,g]	1.65	±	0.19[h]
PCB	18	(2,2',5-Trichlorobiphenyl)[c,d,e,f,g]	2.39	±	0.29[h]
PCB	28	(2,4,4'-Trichlorobiphenyl)[c,d,e,f,g]	4.52	±	0.57[h]
PCB	31	(2,4',5-Trichlorobiphenyl)[c,e,f]	3.18	±	0.41[h]
PCB	44	(2,2'3,5'-Tetrachlorobiphenyl)[c,d,e,f,g]	3.85	±	0.20[i]
PCB	49	(2,2'4,5'-Tetrachlorobiphenyl)[c,d,e,f]	4.34	±	0.28[i]
PCB	52	(2,2',5,5'-Tetrachlorobiphenyl)[c,d,e,f,g]	5.24	±	0.28[i]
PCB	66	(2,3',4,4'-Tetrachlorobiphenyl)[c,e,f,g,j]	4.96	±	0.53[i]
PCB	87	(2,2',3,4,5'-Pentachlorobiphenyl)[c,d,f,j]	1.14	±	0.16[h]
PCB	95	(2,2',3,5',6-Pentachlorobiphenyl)[c,e,f,g]	3.93	±	0.62[i]
PCB	99	(2,2',4,4',5-Pentachlorobiphenyl)[c,d,e,f,g]	2.90	±	0.36[i]
PCB	101	(2,2',4,5,5'-Pentachlorobiphenyl)[c,e,f,g,j]	5.11	±	0.34[i]
PCB	105	(2,3,3',4,4'-Pentachlorobiphenyl)[c,d,e,f,g,j]	1.43	±	0.10[i]
PCB	110	(2,3,3',4',6-Pentachlorobiphenyl)[c,e,f,j]	4.62	±	0.36[i]
PCB	118	(2,3',4,4',5-Pentachlorobiphenyl)[c,d,e,f,g,j]	4.23	±	0.19[i]
PCB	128	(2,2',3,3',4,4'-Hexachlorobiphenyl)[c,d,e,f,g,j]	0.696	±	0.044[i]
PCB	138	(2,2',3,4,4',5'-Hexachlorobiphenyl)[c,e,f,j]	3.60	±	0.28[i]
PCB	149	(2,2',3,4',5',6-Hexachlorobiphenyl)[c,d,e,j]	4.35	±	0.26[h]
PCB	153	(2,2',4,4',5,5'-Hexachlorobiphenyl)[c,d,e,f,g,j]	5.47	±	0.32[i]
PCB	156	(2,3,3',4,4',5-Hexachlorobiphenyl)[c,d,e,f,j]	0.507	±	0.090[h]
PCB	170	(2,2',3,3',4,4',5-Heptachlorobiphenyl)[c,d,e,f,g,j]	1.35	±	0.09[i]
PCB	180	(2,2',3,4,4',5,5'-Heptachlorobiphenyl)[c,d,e,f,g,j]	3.24	±	0.51[i]
PCB	183	(2,2',3,4,4',5',6-Heptachlorobiphenyl)[c,d,e,j]	0.979	±	0.087[h]
PCB	187	(2,2',3,4',5,5',6-Heptachlorobiphenyl)[c,d,e,f,g,j]	2.17	±	0.22[i]
PCB	194	(2,2',3,3',4,4',5,5'-Octachlorobiphenyl)[c,d,e,j]	1.04	±	0.06[h]
PCB	195	(2,2',3,3',4,4',5,6-Octachlorbiphenyl)[c,e,g,j]	0.645	±	0.060[i]
PCB	201	(2,2',3,3',4,5',6,6'-Octachlorobiphenyl)[c,e,j]	0.777	±	0.034[h]
PCB	206	(2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl)[c,e,f,g,j]	2.42	±	0.19[i]
PCB	209	Decachlorobiphenyl[c,d,e,f,g,j]	4.86	±	0.45[i]

[a] PCB congeners are numbered according to the scheme proposed by Ballschmiter and Zell [9] and later revised by Schulte and Malisch [10] to conform to IUPAC rules, except PCB 201. Under the Ballschmiter and Zell numbering system, the IUPAC PCB 201 is listed as PCB 200.

[b] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[c] GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

[d] GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.

[e] GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).

[f] GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.

[g] 1999 Interlaboratory Comparison Study [7] with 13 to 31 laboratories submitting data for each PCB congener.

[h] Certified values are unweighted means of the results from three to five analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[i] Certified values are weighted means of the results from three to six analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[j] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

Table 3. Certified Mass Fraction Values for Chlorinated Pesticides in SRM 1941b

Chlorinated Pesticides	Mass Fractions[a] (µg/kg)
Hexachlorobenzene[b,c,d,e]	5.83 ± 0.38[f]
cis-Chlordane[b,c,d,e,g]	0.85 ± 0.11[h]
trans-Chlordane[b,c,e]	0.566 ± 0.093[f]
cis-Nonachlor[b,e,g]	0.378 ± 0.053[h]
trans-Nonachlor[b,c,d,e,g]	0.438 ± 0.073[f]
4,4'-DDE[b,d,e,g]	3.22 ± 0.28[h]
4,4'-DDD[b,d,e,g]	4.66 ± 0.46[h]

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.
[c] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).
[d] GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.
[e] 1999 Interlaboratory Comparison Study [7] with 13 to 31 laboratories submitting data for each pesticide.
[f] Certified values are unweighted means of the results from three to five analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[g] GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.
[h] Certified values are weighted means of the results from three to five analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the chlorinated pesticides listed and the values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 4. Reference Mass Fraction Values for PAHs in SRM 1941b

PAHs	Mass Fractions[a] (µg/kg)		
1-Methylnaphthalene[b,c,d,e]	127	±	14[f]
2-Methylnaphthalene[b,c,d,e]	276	±	53[f]
2,6-Dimethylnaphthalene[b,c,d,e]	75.9	±	4.5[f]
2,3,5-Trimethylnaphthalene[b,c,d,e]	25.5	±	5.1[f]
Biphenyl[b,c,d,e]	74.0	±	8.0[f]
Acenaphthylene[b,c,d,e]	53.3	±	6.4[f]
Acenaphthene[b,c,d,e]	38.4	±	5.2[f]
9-Methylphenanthrene[c]	63.5	±	2.5[g]
4-Methylphenanthrene and 9-Methylphenanthrene[b,d]	80.1	±	4.8[f]
2-Methylanthracene[c,d]	36	±	15[f]
8-Methylfluoranthene[b]	49.5	±	2.7[g]
7-Methylfluoranthene[b]	45.4	±	1.5[g]
1-Methylfluoranthene[b]	42.4	±	2.1[g]
3-Methylfluoranthene[b]	28.8	±	1.3[g]
2-Methylpyrene[b]	78.7	±	4.0[g]
4-Methylpyrene[b]	66.4	±	2.6[g]
1-Methylpyrene[b]	52.5	±	2.3[g]
Acephenanthrene[d]	30.5	±	1.9[g]
Benzo[*c*]phenanthrene[b,c,d]	58	±	15[f]
Benzo[*a*]fluoranthene[b,c,d]	73	±	18[f]
Benzo[*j*]fluoranthene[c]	217	±	5[g]
Indeno[1,2,3-*cd*]fluoranthene[d]	9.63	±	0.34[g]
Pentaphene[d]	25.3	±	1.0[g]

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] GC/MS (I) on 5 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.
[c] GC/MS (II) on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.
[d] GC/MS (III) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.
[e] 1999 Interlaboratory Comparison Study [7] with 14 to 26 laboratories submitting data for each PAH.
[f] Reference values are weighted means of the results from two to four analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of PAHs listed as determined by the methods indicted. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[g] Reference values are the means of results obtained by NIST using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k, is determined from the Student's t-distribution for the associated degrees of freedom (19 for footnote b and 5 for footnotes c and d) and 95 % confidence level for each analyte. The measurand is the total mass fraction of the PAHs listed as determined by the method indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 5. Reference Mass Fraction Values for PAHs of Molecular Mass 300 and 302 in SRM 1941b

PAHs of Molecular Mass 300 and 302	Mass Fractions[a,b,c] (µg/kg)		
Coronene	72.6	±	4.7
Dibenzo[*b,e*]fluoranthene	10.3	±	0.3
Naphtho[1,2-*b*]fluoranthene	91.0	±	3.1
Naphtho[1,2-*k*]fluoranthene and Naphtho[2,3-*j*]fluoranthene	79.8	±	2.5
Naphtho[2,3-*b*]fluoranthene	23.5	±	0.3
Dibenzo[*b,k*]fluoranthene	95.6	±	3.1
Dibenzo[*a,k*]fluoranthene	26.6	±	0.4
Dibenzo[*j,l*]fluoranthene	63.8	±	1.8
Dibenzo[*a,l*]pyrene	11.1	±	1.0
Naphtho[2,3-*k*]fluoranthene	10.7	±	0.6
Naphtho[1,2-*a*]pyrene	16.7	±	1.4
Naphtho[2,3-*e*]pyrene	33.2	±	2.3
Dibenzo[*a,e*]pyrene	76.1	±	3.6
Naphtho[2,1-*a*]pyrene	59.2	±	1.8
Dibenzo[*e,i*]pyrene	35.0	±	2.4
Naphtho[2,3-*a*]pyrene	16.5	±	0.6
Benzo[*b*]perylene	38.2	±	1.2
Dibenzo[*a,i*]pyrene	25.5	±	1.0
Dibenzo[*a,h*]pyrene	6.94	±	0.29

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[b] Reference values are the means of results obtained by NIST using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k, is determined from the Student's t-distribution for two degrees of freedom and 95 % confidence level for each analyte. The measurand is the total mass fraction of the constituent listed as determined by the method indicted. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[c] GC/MS on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM [8].

Table 6. Reference Mass Fraction Values for PCB Congeners[a] in SRM 1941b

PCB Congeners			Mass Fractions[b,c] (µg/kg)		
PCB	45	(2,2',3,6-Tetrachlorobiphenyl)[d,e]	0.73	±	0.12
PCB	56	(2,3,3',4'-Tetrachlorobiphenyl)[d,f,g]	1.21	±	0.11
PCB	63	(2,3,4',5-Tetrachlorobiphenyl)[e,f,g]	0.213	±	0.040
PCB	70	(2,3',4',5-Tetrachlorobiphenyl)[e,f,g]	4.99	±	0.29
PCB	74	(2,4,4',5-Tetrachlorobiphenyl)[e,f,g]	2.04	±	0.15
PCB	77	(3,3',4,4'-Tetrachlorobiphenyl)[h]	0.31	±	0.03
PCB	107	(2,3,3',4',5-Pentachlorobiphenyl)[d,e,f,g]	0.628	±	0.028
PCB	132	(2,2',3,3',4,6'-Hexachlorobiphenyl)[d,f,g]	1.28	±	0.27
PCB	146	(2,2',3,4',5,5'-Hexachlorobiphenyl)[e,f,g]	1.22	±	0.12
PCB	158	(2,3,3',4,4',6-Hexachlorobiphenyl)[d,e,f,g]	0.65	±	0.15
PCB	163	(2,3,3',4',5,6-Hexachlorobiphenyl)[e,f,g]	1.28	±	0.06
PCB	174	(2,2',3,3',4,5,6'-Heptachlorobiphenyl)[d,e,f,g]	1.51	±	0.39
PCB	193	(2,3,3',4',5,5',6-Heptachlorobiphenyl)[d,e,f,g]	0.292	±	0.075

[a] PCB congeners are numbered according to the scheme proposed by Ballschmiter and Zell [9] and later revised by Schulte and Malisch [10] to conform with IUPAC rules, except PCB 107. Under the Ballschmiter and Zell numbering system, the IUPAC PCB 107 is listed as PCB 108.

[b] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[c] For these PCB congeners except PCB 77, the reference values are unweighted means of the results from two to four analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled within-method variance following the ISO/JCGM Guide [14,15]. For PCB 77, the reference value is the mean of results obtained by NIST using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k, is determined from the Student's t-distribution corresponding to two degrees of freedom and 95 % confidence level for PCB 77. The measurand is the total mass fraction of the PCB Congeners listed as determined by the method or methods indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as microgram per kilogram on a dry-mass basis.

[d] GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.

[e] GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).

[f] GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

[g] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

[h] GC/MS NICI on a 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC-ECD (I) fractionated using a PYE column.

Table 7. Reference Mass Fraction Values for Selected Chlorinated Pesticides in SRM 1941b

Chlorinated Pesticides	Mass Fractions[a,b] (µg/kg)		
2,4'-DDE[c,d]	0.38	±	0.12
4,4'-DDT[e,f]	1.12	±	0.42

[a] Mass Fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] The reference values are unweighted means of the results from two analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the chlorinated pesticides listed as determined by the methods indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[c] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).
[d] GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).
[e] GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.
[f] 1999 Interlaboratory Comparison Study [7] with 10 laboratories submitting data for 4,4'-DDT.

Table 8. Reference Mass Fraction Values for Alkylated PAH Groups in SRM 1941b

Alkylated PAH Group	Mass Fraction[a,b] (µg/kg)		
C2-decalins	18	±	5
C4-decalins	41	±	4
C2-naphthalenes	187	±	53
C3-naphthalenes	158	±	42
C1-benzothiophenes	25	±	14
C2-benzothiophenes	20	±	11
C3-benzothiophenes	22	±	13
C4-benzothiophenes	18	±	5
C1-fluorenes	57	±	18
C2-fluorenes	122	±	43
C3-fluorenes	128	±	31
C1-phenanthrenes/anthracenes	313	±	99
C2-phenanthrenes/anthracenes	247	±	62
C3-phenanthrenes/anthracenes	165	±	46
C4-phenanthrenes/anthracenes	87	±	36
C1-dibenzothiophenes	54	±	13
C2-dibenzothiophenes	91	±	18
C3-dibenzothiophenes	84	±	15
C4-dibenzothiophenes	57	±	13
C1-fluoranthenes/pyrenes	252	±	48
C2-fluoranthenes/pyrenes	205	±	38
C3-fluoranthenes/pyrenes	102	±	22
C4-fluoranthenes/pyrenes	121	±	59
C1-benzanthraces/chrysenes/triphenylenes	208	±	43
C2-benzanthraces/chrysenes/triphenylenes	120	±	24
C3-benzanthraces/chrysenes/triphenylenes	73	±	31
C4-benzanthraces/chrysenes/triphenylenes	41	±	11

[a] The reference mass fraction value reported on a dry-mass basis is the median of results using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the median, and the coverage factor, $k = 2$. The measurand is the total mass fraction of the alkylated PAH groups listed as determined by the interlaboratory study methods. The values listed are metrologically traceable to the SI unit of mass fraction, expressed as micrograms per kilogram on a dry-mass basis.
[b] Data from the interlaboratory study [12].

Table 9. Reference Mass Fraction Values for Hopanes and Steranes in SRM 1941b

Hopane or Sterane	Mass Fraction[a,b] (µg/kg)
17α(H)-22,29,30-Trisnorhopane	54 ± 18
17α(H)-21β(H)-30-Norhopane	137 ± 21
17α(H)-21β(H)-30-Hopane	215 ± 44
17α(H)-21β(H)-22R-Homohopane	44 ± 10
17α(H)-21β(H)-22S-Homohopane	48 ± 13
5α(H)-14α(H),17α(H)-Cholestane 20R	41 ± 11
5α(H)-14β(H),17β(H)-Cholestane 20R	27 ± 6
5α(H)-14β(H),17β(H)-24-Methylcholestane 20R	21 ± 8
5α(H)-14α(H),17α(H)-24-Ethylcholestane 20R	19 ± 5
5α(H)-14β(H),17β(H)-24-Ethylcholestane 20R	41 ± 9

[a] The reference mass fraction value reported on a dry-mass basis is the median of results using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the median, and the coverage factor, $k = 2$. The measurand is the total mass fraction of the constituent listed as determined by the methods used during the interlaboratory study. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[b] Data from the interlaboratory study [12].

Table 10. Reference Mass Fraction Value for Total Organic Carbon in SRM 1941b

Total Organic Carbon (TOC)	2.99 % ± 0.24 %[a,b]

[a] Mass fraction is reported on a dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] The reference value for total organic carbon is a weighted mean value from routine measurements made by two laboratories [21]. The uncertainty listed is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance. The reporting follows the ISO/JCGM Guides [2]. The measurand is the total mass fraction of TOC listed as determined by the methods indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as a percent on a dry-mass basis.

Table 11. Information Mass Fraction Values for Carbon, Hydrogen, and Nitrogen in SRM 1941b

Elements	Mass Fractions[a] (%)
Carbon	3.3
Hydrogen	1.2
Nitrogen	<0.5

[a] Mass fraction is reported on a dry-mass basis; material as received contains approximately 2.4 % moisture.

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Certificate Revision History: 16 January 2015 (Corrected IUPAC name for PCB-56 and PCB-107; editorial changes); 10 June 2014 (Units corrected from mg/kg to µg/kg in Tables 8 and 9; editorial changes); 10 April 2012 (Reference value added for alkylated PAH groups, hopanes, and steranes; extension of certification period; editorial changes); 16 August 2004 (Reference values for the butyl tins removed; editorial changes); 15 July 2002 (Original certificate date).

Users of this SRM should ensure that the Certificate of Analysis in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail srminfo@nist.gov; or via the Internet at http://www.nist.gov/srm.

APPENDIX A

The laboratories listed below performed measurements that contributed to the certification of PAHs, PCBs, and chlorinated pesticides in SRM 1941b Organics in Marine Sediment.

Arthur D. Little, Inc; Cambridge, MA
Axys Analytical Services; Sidney, BC, Canada
B & B Laboratories; College Station, TX
Battelle Ocean Sciences; Duxbury, MA
Bedford Institute of Oceanography; Dartmouth, NS, Canada
California Department of Fish and Game; Rancho Cordova, CA
Central Contra Costa Sanitary District; Martinez, CA
Chesapeake Biological Laboratory; Solomons, MD
Centro de Investigacionies Energeticas Medioambientales y Tecnologicas; Madrid, Spain
City of Los Angeles Environmental Monitoring Division; Playa del Rey, CA
City of San Jose Environmental Services Department; San Jose, CA
Columbia Analytical Services; Kelso, WA
East Bay Municipal Utility District; Oakland, CA
Florida Department of Environmental Protection; Tallahassee, FL
Manchester Environmental Laboratory; Port Orchard, WA
Murray State University; Murray, KY
Massachusetts Water Resources Authority Central Lab; Winthrop, MA
National Research Council of Canada; Ottawa, Ontario, Canada
National Oceanic and Atmospheric Association (NOAA), National Marine Fisheries Service (NMFS), Auke Bay Laboratory; Juneau, AK
NOAA, National Ocean Service/Center for Coastal Environmental Health and Biomolecular Research; Charleston, SC
NOAA, NMFS, Sandy Hook Marine Laboratory; Highlands, NJ
NOAA, NMFS, Northwest Fisheries Science Center; Seattle, WA
Orange County Sanitation District; Fountain Valley, CA
Philip Analytical Services; Burlington, Ontario, Canada
Serv de Hidrografia Naval; Buenos Aires, Argentina
Skidaway Institute of Technology; Savannah, GA
Southwest Laboratory of Oklahoma; Broken Arrow, OK
Severn Trent Knoxville Laboratory; Knoxville, TN
Texas A&M University, Geochemical and Environmental Research Group; College Station, TX
Texas Parks and Wildlife Department; San Marcos, TX
University of California at Los Angeles, Institute of Geophysics and Planetary Physics; Los Angeles, CA
University of Connecticut, Environmental Research Institute; Storrs, CT
University of Rhode Island, Graduate School of Oceanography; Narragansett, RI
US Department of Agriculture, Environmental Chemistry Laboratory; Beltsville, MD
US Environmental Protection Agency, Atlantic Ecology Division; Narragansett, RI
US Geological Survey, National Water Quality Laboratory; Denver, CO
Woods Hole Group Environmental Lab; Raynham, MA
Wright State University; Dayton, OH

APPENDIX B

The laboratories listed below performed measurements that contributed to the certification of alkylated PAH groups, hopanes, and steranes in SRM 1941b Organics in Marine Sediment.

Alpha Analytical, Inc.; Mansfield, MA
Analytical Resources, Inc.; Tukwila, WA
Axys Analytical Services; Sydney, BC, Canada
Battelle Analytical & Environmental Chemistry Laboratory; Duxbury, MA
Center for Laboratory Sciences; Pasco, WA
Columbia Analytical Services; Jacksonville, FL
Columbia Analytical Services; Rochester, NY
Columbia Analytical Services, Kelso, WA
Florida Department of Environmental Protection; Tallahassee, FL
Florida International University; North Miami, FL
Michigan Department of Natural Resources and Environment; Lansing, MI
Mississippi State Chemical Laboratory; Mississippi State, MS
NIST; Charleston, SC
NIST; Gaithersburg, MD
NOAA/NCCOS/NOS; Charleston, SC
NOAA/NMFS/Alaska Fisheries Science Center; Juneau, AK
NY State Department of Health; Albany, NY
Pace Analytical Services, Inc. Minneapolis; Minneapolis, MN
RJ Lee Group, Inc; Monroeville, PA
TDI/B&B Laboratories, Inc.; College Station, TX
TestAmerica Laboratories; Mobile, AL
TestAmerica Laboratories; West Sacramento, CA
TestAmerica Laboratories; University Park, IL
TestAmerica Laboratories; Schriever, LA
TestAmerica Laboratories; Edison, NJ
TestAmerica Laboratories; Knoxville, TN
TestAmerica Laboratories; Pittsburgh, PA
TestAmerica Laboratories; South Burlington, VT
TestAmerica Laboratories; Tacoma, WA
US Army Engineer Research and Development Center; Vicksburg, MS
USGS Columbia Environmental Research Center; Columbia, MO
University of Iowa, State Hygienic Laboratory; Iowa City, IO
Washington State Public Health Laboratories; Shoreline, WA

NIST

Date of Issue:
31 March 2014

SAFETY DATA SHEET

1. Substance and Source Identification

Product Identifier

SRM Number: 1941b
SRM Name: Organics in Marine Sediment
Other Means of Identification: Not applicable.

Recommended Use of This Material and Restrictions of Use

This Standard Reference Material (SRM) is marine sediment collected at the mouth of the Baltimore (MD) Harbor. SRM 1941b is intended for use in evaluating analytical methods for the determination of selected polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and chlorinated pesticides in marine sediment and similar matrices. All of the constituents for which certified, reference, and information values are provided in SRM 1941b were naturally present in the sediment before processing. A unit of SRM 1941b consists of a bottle containing 50 g of radiation-sterilized, freeze-dried sediment.

Company Information

National Institute of Standards and Technology
Standard Reference Materials Program
100 Bureau Drive, Stop 2300
Gaithersburg, Maryland 20899-2300

Telephone: 301-975-2200
FAX: 301-948-3730
E-mail: SRMMSDS@nist.gov
Website: http://www.nist.gov/srm

Emergency Telephone ChemTrec:
1-800-424-9300 (North America)
+1-703-527-3887 (International)

2. Hazards Identification

Classification

Physical Hazard: Not classified.
Health Hazard: Not classified.

Label Elements
Symbol
No Symbol/Pictogram

Signal Word
Not applicable.

Hazard Statement(s): Not applicable.

Precautionary Statement(s): Not applicable.

Hazards Not Otherwise Classified: Not applicable.

Ingredients(s) with Unknown Acute Toxicity: Not applicable.

3. Composition and Information on Hazardous Ingredients

Substance: Marine sediment

Other Designations: Sediment.

This material is naturally occurring marine sediment from an urban area. The material contains trace amounts of polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and should be handled with care. Components are listed in compliance with OSHA's 29 CFR 1910.1200; for the actual values see the Certificate of Analysis.

Hazardous Component(s)	CAS Number	EC Number (EINECS)	Nominal Mass Concentration (%)
Marine Sediment	Not available	Not available	100

4. First Aid Measures

Description of First Aid Measures:

Inhalation: If adverse effects occur, remove to uncontaminated area. If not breathing, give artificial respiration or oxygen by qualified personnel. Seek immediate medical attention.

Skin Contact: Wash skin with soap and water.

Eye Contact: Flush eyes with water for at least 15 minutes. If necessary, seek medical attention.

Ingestion: If adverse effects occur after ingestion, seek medical treatment.

Most Important Symptoms/Effects, Acute and Delayed: May cause irritation.

Indication of any immediate medical attention and special treatment needed, if necessary: If any of the above symptoms are present, seek medical attention if needed.

5. Fire Fighting Measures

Fire and Explosion Hazards: Negligible fire hazard. Avoid generating dust. See Section 9, "Physical and Chemical Properties" for flammability properties.

Extinguishing Media:
Suitable: Use extinguishing media appropriate for surrounding fire.
Unsuitable: None listed.

Specific Hazards Arising from the Chemical: None listed.

Special Protective Equipment and Precautions for Fire-Fighters: Avoid inhalation of material or combustion byproducts. Wear full protective clothing and NIOSH approved self-contained breathing apparatus (SCBA).

NFPA Ratings (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe)

Health = 1 Fire = 0 Reactivity = 0

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Any accumulated material on surfaces should be removed and properly disposed of. Use suitable protective equipment; see Section 8, "Exposure Controls and Personal Protection".

Methods and Materials for Containment and Clean up: Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers. Keep unnecessary people away, isolate hazard area and deny entry.

7. Handling and Storage

Safe Handling Precautions: Minimize dust generation and accumulation on surfaces. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. See Section 8, "Exposure Controls and Personal Protection".

Storage: Store and handling in accordance with all current regulations and standards.

8. Exposure Controls and Personal Protection

Exposure Limits: No occupational exposure limits have been established for marine sediment. This material is a particulate matter and adequate inhalation/respiratory protection should be used to minimize exposure. The exposure limits for Particulates Not Otherwise Regulated (PNOR) are applicable.

OSHA (PEL): 15 mg/m^3 (TWA, total particulates not otherwise regulated)
OSHA (PEL) 5 mg/m^3 (TWA, respirable particulates not otherwise regulated)

NIOSH (REL): 10 mg/m^3 (TWA, total particulates not otherwise regulated, 8 h)
NIOSH (REL): 5 mg/m^3 (TWA, respirable particulates not otherwise regulated)

Engineering Controls: Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

Personal Protection: In accordance with OSHA 29 CFR 1910.132, subpart I, wear appropriate Personal Protective Equipment (PPE) to minimize exposure to this material.

Respiratory Protection: If workplace conditions warrant a respirator, a respiratory protection program that meets OSHA 29CFR 1910.134 must be followed. Refer to NIOSH 42 CFR 84 for applicable certified respirators.

Eye/Face Protection: Wear splash resistant safety goggles with a face shield. An eye wash station should be readily available near areas of use.

Skin and Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Chemical-resistant gloves should be worn at all times when handling chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

Descriptive Properties:

Appearance (physical state, color, etc.):	amorphous powder
Molecular Formula:	not applicable
Molar Mass (g/mol):	not applicable
Odor:	not available
Odor threshold:	not available
pH:	not available
Evaporation rate:	not applicable
Melting point/freezing point (°C):	not available
Specific Gravity (water=1)	not available
Vapor Pressure (mmHg):	not applicable
Vapor Density (air = 1):	not applicable
Viscosity (cP):	not applicable
Solubility(ies):	not available
Partition coefficient (n-octanol/water):	not available
Particle Size:	<150 µm

Thermal Stability Properties:

Autoignition Temperature (°C):	not available
Thermal Decomposition (°C):	not available
Initial boiling point and boiling range (°C):	not available
Explosive Limits, LEL (Volume %):	not available
Explosive Limits, UEL (Volume %):	not available
Flash Point (°C):	not available
Flammability (solid, gas):	not available

10. STABILITY AND REACTIVITY

Reactivity: Stable at normal temperatures and pressure.

Stability: X Stable _____ Unstable

Possible Hazardous Reactions: None listed.

Conditions to Avoid: Avoid generating dust.

Incompatible Materials: None listed.

Fire/Explosion Information: See Section 5, "Fire Fighting Measures".

Hazardous Decomposition: Thermal decomposition will produce oxides of carbon.

Hazardous Polymerization: _____ Will Occur X Will Not Occur

11. TOXICOLOGICAL INFORMATION

Route of Exposure: __X__ Inhalation __X__ Skin _____ Ingestion

Symptoms Related to the Physical, Chemical and Toxicological Characteristics: Generated dust may cause irritation if inhaled.

Potential Health Effects (Acute, Chronic and Delayed):

Inhalation: Generated dust may cause irritation.

Skin Contact: May cause mechanical irritation.

Eye Contact: May cause mechanical irritation.

Ingestion: No data available.

Numerical Measures of Toxicity:

Acute Toxicity: Not classified; no data available.

Skin Corrosion/Irritation: Not classified; no data available.

Serious Eye damage/ Eye irritation: Not classified; no data available.

Respiratory Sensitization: Not classified; no data available.

Skin Sensitization: Not classified; no data available.

Germ Cell Mutagenicity: Not classified; no data available.

Carcinogenicity: Not classified.

Listed as a Carcinogen/Potential Carcinogen _____ Yes __X__ No
Marine sediment is not listed by NTP, IARC or OSHA as a carcinogen.

Reproductive Toxicity: Not classified; no data available.

Specific Target Organ Toxicity, Single Exposure: Not classified; no data available.

Specific Target Organ Toxicity, Repeated Exposure: Not classified; no data available.

Aspiration Hazard: Not classified; no data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Data: No data available.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other Adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of waste in accordance with all applicable federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT and IATA: Not regulated by DOT or IATA.

15. REGULATORY INFORMATION

U.S. Regulations:

CERCLA Sections 102a/103 (40 CFR 302.4): Not regulated.

SARA Title III Section 302 (40 CFR 355.30): Not regulated.

SARA Title III Section 304 (40 CFR 355.40): Not regulated.

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21):

ACUTE HEALTH:	No.
CHRONIC HEALTH:	No.
FIRE:	No.
REACTIVE:	No.
PRESSURE:	No.

State Regulations:
California Proposition 65: Not listed.

U.S. TSCA Inventory: Not listed.

TSCA 12(b), Export Notification: Not listed.

Canadian Regulations:
WHMIS Information: Not provided for this material.

16. OTHER INFORMATION

Issue Date: 31 March 2014

Sources: 29 CFR Occupational Health and Safety Office (OSHA) 1910.1000, *Limits for Air Contaminants*, Table Z-1; available at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9992 (accessed Mar 2014).

Center for Disease Control (CDC) NIOSH Pocket Guide to Chemical Hazards, *Particulates not otherwise regulated*; available at http://www.cdc.gov/niosh/npg/npgd0480.html (accessed Mar 2014).

Key of Acronyms:

ACGIH	American Conference of Governmental Industrial Hygienists	NRC	Nuclear Regulatory Commission
ALI	Annual Limit on Intake	NTP	National Toxicology Program
CAS	Chemical Abstracts Service	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
CFR	Code of Federal Regulations	RCRA	Resource Conservation and Recovery Act
DOT	Department of Transportation	REL	Recommended Exposure Limit
EC50	Effective Concentration, 50 %	RM	Reference Material
EINECS	European Inventory of Existing Commercial Chemical Substances	RQ	Reportable Quantity
EPCRA	Emergency Planning and Community Right-to-Know Act	RTECS	Registry of Toxic Effects of Chemical Substances
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments and Reauthorization Act
IATA	International Air Transportation Agency	SCBA	Self-Contained Breathing Apparatus
IDLH	Immediately Dangerous to Life and Health	SRM	Standard Reference Material
LC50	Lethal Concentration, 50 %	STEL	Short Term Exposure Limit
LD50	Lethal Dose, 50 %	TLV	Threshold Limit Value
LEL	Lower Explosive Limit	TPQ	Threshold Planning Quantity
MSDS	Material Safety Data Sheet	TSCA	Toxic Substances Control Act
NFPA	National Fire Protection Association	TWA	Time Weighted Average
NIOSH	National Institute for Occupational Safety and Health	UEL	Upper Explosive Limit
NIST	National Institute of Standards and Technology	WHMIS	Workplace Hazardous Materials Information System

Disclaimer: Physical and chemical data contained in this SDS are provided only for use in assessing the hazardous nature of the material. The SDS was prepared carefully, using current references; however, NIST does not certify the data in the SDS. The certified values for this material are given in the NIST Certificate of Analysis.

Users of this SRM should ensure that the SDS in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail srminfo@nist.gov; or via the Internet at http://www.nist.gov/srm.

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Ship via	UPS Ground	Description		Ship from	
Salesmen	MCMIDM2	Instructions		Blanket	
Contact	DAVE MITCHELL	Pro#		Truck#	

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Order	UOM	Ship	UOM	B/O	UOM	Item	Description
1	EACH	1	EACH	0	EACH	1941B	Organics in Marine Sediment
						Total qty:	1 / EACH
							NOT FOR HUMAN CONSUMPTION, LABORATORY USE ONLY.

9/21/16
04:04 PM

1700101

Picked by	
Packed by	
# of pieces	
Weight	

MP Biomedicals, LLC

29525 Fountain Parkway
Solon, Ohio 44139

Telephone: 440/337-1200
Toll Free: 800/854-0530

Fax: 440/337-1180
web: www.mpbio.com

Certificate of Analysis

Product Description: Microcrystalline Cellulose Powder_
Catalog Number: 191499_
Lot: Q9483_

Formula: $(C_6H_{10}O_5)n$	**Formula Weight:** N/A
CAS #: 9004-34-6	**Storage:** 15 - 30°C
Physical Description: White Powder	

Test	Specification	Result
Identity Test	Passes	Passes
Purity	97.0 - 102.0%	97.0 - 102.0%
Moisture	<5.0%	3.4%
Particle Size/Mesh +60 mesh +200 mesh	Wt % <8% >45%	 <1% 55%
pH	5 - 7	6.73
Residue on Ignition	<0.05%	<0.05%
Water Soluble Substances	<12.0 mg/5 g	4.5 mg/5 g
Heavy Metals	<10 ppm	<10 ppm

H001822
Microcrystalline Cellulose Powder (TOC)
Expires 11/30/2022
Prepared By Casey English 2/22/2019

Identification A & B: Passes
Bulk Density: 0.29 g/ml
Bulk Density (graduated cylinder): 0.31 g/ml
Conductivity: 18 µS/cm
Starch: Negative
Ether Soluble Substances: 0.01%
Total Aerobic microbial Count: 100 cfu/g
Total Mold and Yeast Count: 20 cfu/g
Staphylococcus aureus: Absent/1 g
Pseudomonas aeruginosa: Absent/1 g
E. coli: Absent/1 g
Salmonella: Absent/10 g
Particle size:

- 450 mesh: 77%
- d10: 37 um
- d50: 139 um
- d90: 271 um

TUP: <9/600 cm^2
Degree of brightness: >88%
Powder flow-angle of repose: <42°
Recommended Retest Date: 11/30/2022

07/26/2018 - *John Huang, PhD*
MP Biomedicals, LLC.
Quality Control Manager

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CAS #: 9004-34-6	**Storage:** 15 - 30°C
Physical Description: White Powder	

Test	Specification	Result
Identity Test	Passes	Passes
Purity	97.0 - 102.0%	97.0 - 102.0%
Moisture	<5.0%	3.4%
Particle Size/Mesh +60 mesh +200 mesh	Wt % <8% >45%	 <1% 55%
pH	5 - 7	6.73
Residue on Ignition	<0.05%	<0.05%
Water Soluble Substances	<12.0 mg/5 g	4.5 mg/5 g
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Microcrystalline Cellulose Powder (TOC)
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Prepared By Casey English 2/22/2019

Identification A & B: Passes
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Bulk Density (graduated cylinder): 0.31 g/ml
Conductivity: 18 µS/cm
Starch: Negative
Ether Soluble Substances: 0.01%
Total Aerobic microbial Count: 100 cfu/g
Total Mold and Yeast Count: 20 cfu/g
Staphylococcus aureus: Absent/1 g
Pseudomonas aeruginosa: Absent/1 g
E. coli: Absent/1 g
Salmonella: Absent/10 g
Particle size:

- 450 mesh: 77%
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TUP: <9/600 cm^2
Degree of brightness: >88%
Powder flow-angle of repose: <42°
Recommended Retest Date: 11/30/2022

07/26/2018 - *John Huang, PhD*
MP Biomedicals, LLC.
Quality Control Manager

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Identity Test	Passes	Passes
Purity	97.0 - 102.0%	97.0 - 102.0%
Moisture	<5.0%	3.4%
Particle Size/Mesh +60 mesh +200 mesh	Wt % <8% >45%	 <1% 55%
pH	5 - 7	6.73
Residue on Ignition	<0.05%	<0.05%
Water Soluble Substances	<12.0 mg/5 g	4.5 mg/5 g
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H001822
Microcrystalline Cellulose Powder (TOC)
Expires 11/30/2022
Prepared By Casey English 2/22/2019

Identification A & B: Passes
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Ether Soluble Substances: 0.01%
Total Aerobic microbial Count: 100 cfu/g
Total Mold and Yeast Count: 20 cfu/g
Staphylococcus aureus: Absent/1 g
Pseudomonas aeruginosa: Absent/1 g
E. coli: Absent/1 g
Salmonella: Absent/10 g
Particle size:

- 450 mesh: 77%
- d10: 37 um
- d50: 139 um
- d90: 271 um

TUP: <9/600 cm^2
Degree of brightness: >88%
Powder flow-angle of repose: <42°
Recommended Retest Date: 11/30/2022

07/26/2018 - *John Huang, PhD*
MP Biomedicals, LLC.
Quality Control Manager

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TOTAL SOLIDS BENCHSHEET

Method: PSEP 1986

(dry at 103-105 C)

Instrumentation

Batch:	BLA0590
Date:	1/25/2023 9:23
Analyst:	CR
Drying Oven:	15
Analytical Balance:	B139298002

Batch drying time		
Record times as mm/dd/yy hh:mm		
Date/time in oven:	1/26/2023 15:27	
Date/time out:	1/27/2023 11:18	
Elapsed hrs:	19.8	

Oven Temp, C	**TS (%) calculated as:**
105	Final dry wt (g) = (Dry Wt - Tare Wt)
100	TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)

Oven Temps, °C	
Start Temp:	105
End Temp:	100

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0249-02	0.7900	11.0800	7.1600	6.37	**61.90%**	No
23A0249-03	0.8400	11.8600	6.3400	5.50	**49.91%**	Yes
23A0249-04	0.8100	11.1100	6.3600	5.55	**53.88%**	Yes
23A0249-05	0.8100	11.1700	6.9600	6.15	**59.36%**	Yes
23A0249-06	0.8100	11.5000	8.9300	8.12	**75.96%**	Yes
23A0249-07	0.7900	11.1600	8.5400	7.75	**74.73%**	No
23A0249-08	0.8000	11.5600	6.0700	5.27	**48.98%**	Yes
23A0249-09	0.7900	11.5400	7.0100	6.22	**57.86%**	No
23A0249-10	0.8000	11.5800	5.9300	5.13	**47.59%**	Yes
23A0249-11	0.7900	11.3600	8.1900	7.40	**70.01%**	No
23A0295-01	0.7800	11.6300	6.6900	5.91	**54.47%**	Yes
23A0295-02	0.8000	11.7900	6.7400	5.94	**54.05%**	Yes
23A0295-03	0.8100	11.4200	7.0000	6.19	**58.34%**	No
23A0295-04	0.8100	11.4300	6.4300	5.62	**52.92%**	Yes
23A0295-05	0.7900	11.2500	7.0800	6.29	**60.13%**	No
23A0295-06	0.7900	11.3500	6.5300	5.74	**54.36%**	Yes
23A0295-07	0.7900	11.6900	9.2500	8.46	**77.61%**	Yes
23A0295-08	0.8300	11.1100	8.8500	8.02	**78.02%**	No
23A0295-09	0.8300	11.3200	7.8100	6.98	**66.54%**	No
23A0295-10	0.8000	11.6000	9.2300	8.43	**78.06%**	No

TOTAL SOLIDS BENCHSHEET							Batch:	BLA0590
Method: PSEP 1986							Date:	1/25/2023 9:23
(dry at 103-105 C)							Analyst:	CR
Instrumentation							Drying Oven:	Ø15
							Analytical Balance:	B13929 8002

Batch drying time			Oven Temp, C	TS (%) calculated as:	Oven Temps, °C	
Record times as mm/dd/yy hh:mm					Start Temp:	105
Date/time in oven:	1/26/23	15:27	105	Final dry wt (g) = (Dry Wt - Tare Wt)	End Temp:	104
Date/time out:	1/27/23	11:17	104	TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)		
Elapsed hrs:	0.0					

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23A0249-02 A	Ø.79	11.08	7.16			No
23A0249-03	Ø.84	11.26	6.34			No yes
23A0249-04	Ø.81	11.11	6.36			No yes
23A0249-05	Ø.81	11.17	6.96			No yes
23A0249-06	Ø.81	11.50	8.93			No yes
23A0249-07	Ø.79	11.16	7.54			No
23A0249-08	Ø.80	11.56	6.07			No yes
23A0249-09	Ø.79	11.54	7.01			No
23A0249-10	Ø.80	11.58	5.93			No yes
23A0249-11	Ø.79	11.36	8.19			No
23A0295-01	Ø.78	11.63	6.69			No yes
23A0295-02	Ø.80	11.29	6.74			No yes
23A0295-03	Ø.81	11.42	7.04			No
23A0295-04	Ø.81	11.43	6.42			No yes
23A0295-05	Ø.79	11.25	7.02			No
23A0295-06	Ø.79	11.35	6.53			No yes
23A0295-07	Ø.79	11.69	9.25			No yes
23A0295-08	Ø.83	11.41	8.85 1/26/23			No
23A0295-09	Ø.83	11.32	7.81			No
23A0295-10 A	Ø.80	11.68	9.23			No

T/S + Screens
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